

COLUMBIA COUNTY DEPARTMENT OF LAND DEVELOPMENT SERVICES
COLUMBIA COUNTY COURTHOUSE
230 Strand, St. Helens, Oregon

**INVITATION TO BID
FOR THE CONSTRUCTION OF THE
COLUMBIA COUNTY EMERGENCY OPERATIONS CENTER**

TO ALL INTERESTED PERSONS:

1. The Columbia County Department of Land Development Services is requesting bids for the construction of the Columbia County Emergency Operations Center and associated site work in St. Helens, Oregon (the "Project"). The Project is to supply, transport and install a manufactured office building, conduct all site work, and connect to city services. Site work will include foundation, underground utilities, parking, landscaping and 2 ground anchored radio antennas with protective bollards.
2. Bids will be received until 2:00 p.m., March 28, 2013. Bill Potter, Building Services Manager, is the person designated for receipt of bids. Bids must be mailed or delivered to and received by the designated time at the Department of Land Development Services, Columbia County Courthouse Room 158, 230 Strand Street, St. Helens, Oregon 97051. The bids must be in sealed packages marked "Bid for Columbia County EOC", or equivalent. All bids received will be opened at a public bid opening the same day, March 28, 2013, at 2:00 pm.
3. The complete set of Procurement Documents for this Invitation to Bid may be reviewed at, and copies obtained from, the Department of Land Development Services, Columbia County Courthouse Room 158, 230 Strand Street, St. Helens, Oregon, 97051; telephone number 503-397-7213. Electronic copies will be sent free of charge upon request sent to Bill Potter, Building Services Manager, at bill.potter@co.columbia.or.us, and will be posted on the Columbia County website at <http://www.co.columbia.or.us/departments/land-development-services/lds-home>. Hard copies are available to purchase for \$50.00 by contacting Bill Potter. Payment must be received in advance.
4. The Project will be funded in part with a grant from the Department of Homeland Security FEMA, and administered by the Oregon State Department of Emergency Management EOC Grant #10-076 and Columbia County. Contractors that developed or drafted specifications, requirements, statement of work for this procurement are excluded from bidding to compete for the award of the procurement.
5. The Project is a public works project subject to ORS 279C.800 to 279C.870 and the Davis-Bacon Act (40 U.S.C 3141 et seq).
6. The County reserves the right to waive minor informalities in the bids received. The County may also reject any bid not in compliance with all prescribed requirements and may, for good cause, reject any or all bids upon a finding by the County that it is in the public interest to do so.
7. Columbia County is an equal opportunity, affirmative action employer, does not discriminate on the basis of race, religion, color, sex, national origin, marital status, age, if the individual is 18 years of age or older, or disability, and invites proposals from minorities, women and emerging small businesses.

COLUMBIA COUNTY DEPARTMENT OF
LAND DEVELOPMENT SERVICES

By: _____
Bill Potter, Building Services Manager

Daily Journal of Commerce and The Chronicle: please publish Wednesday, February 27, 2013.

INVITATION TO BID
FOR THE CONSTRUCTION OF THE
COLUMBIA COUNTY EMERGENCY
OPERATIONS CENTER

PROCUREMENT DOCUMENTS

TABLE OF CONTENTS

1.	PROJECT DESCRIPTION/SITE LOCATION.....	1
2.	PROCUREMENT DOCUMENTS/CONTENTS.....	1
3.	PROPOSED PROJECT TIME-LINE	2
4.	INSTRUCTIONS TO BIDDERS.....	2
	4.1. MANDATORY PRE-BID CONFERENCE	2
	4.2. PROJECT START DATE	2
	4.3. SUBSTANTIAL COMPLETION	2
	4.4. FINAL COMPLETION	3
	4.5. LIQUIDATED DAMAGES	3
	4.6. WORK TO BE DONE	3
	4.7. PROJECT MANAGER/CONTRACT REPRESENTATIVE	4
	4.8. TIME AND PLACE OF RECEIVING AND OPENING BIDS (“BID CLOSING”).	4
	4.9. TIME AND PLACE OF RECEIVING FIRST TIER SUBCONTRACTOR DISCLOSURE.....	4
	4.10 FORM OF BID.	4
	4.11 PREQUALIFICATION APPLICATIONS.	4
	4.12 PUBLIC WORKS CONTRACT	4
	4.13 ASBESTOS.	5
	4.14 CONSTRUCTION CONTRACTORS BOARD	5
	4.15 NON-DISCRIMINATION CERTIFICATION	5
	4.16 RESIDENT BIDDER	5
	4.17 ENVIRONMENTAL AND NATURAL RESOURCES LAWS; REMEDIES	5
	4.18 BID SECURITY	5
	4.19 PRE-CLOSING MODIFICATION OR WITHDRAWAL OF OFFERS	5
	4.20 LATE BIDS, LATE WITHDRAWALS AND LATE MODIFICATIONS	6
	4.21 CONTRACT AWARD.....	6
	4.22 OFFER EVALUATION AND AWARD; DETERMINATION OF RESPONSIBILITY	6
	4.23 PERFORMANCE/PAYMENT SECURITY	9
	4.24 RIGHT TO WAIVE INFORMALITIES AND/OR REJECT BID PROPOSALS	9
	4.25 ADDENDA.	9
	4.26 PROTEST PROCEDURES.....	10
	4.27 PREPARATION COSTS.....	10
	4.28 FIRST-TIER SUBCONTRACTOR DISCLOSURE.	10
	4.29 REQUEST FOR CLARIFICATION OR CHANGE; SOLICITATION PROTESTS.....	10
5.	BID FORM.....	12
6.	FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM	16
7.	OREGON BID BOND	17
8.	OREGON PERFORMANCE BOND	18
9.	OREGON PAYMENT BOND	20
10.	GENERAL PROVISIONS [ATTACHED AT THE END OF THE ITB].....	22

11. SPECIAL PROVISIONS.....	23
SECTION 1. STANDARD OF WORKMANSHIP.....	23
SECTION 2. MATERIALS.	23
SECTION 3. EXAMINATION OF LOCATION AND CONDITIONS.	23
SECTION 4. ORDER AND PROGRESS OF WORK.....	23
SECTION 5. SCOPE OF WORK	23
SECTION 6. COMMENCEMENT OF WORK.....	23
SECTION 7. INSURANCE.....	24
SECTION 8. INSPECTION	25
SECTION 9. ALTERATIONS IN DETAIL	25
SECTION 10. DISCHARGE OF EMPLOYEES.	25
SECTION 11. PUBLIC CONVENIENCE.	25
SECTION 12. PROTECTION OF PROPERTY AND PERSONS.....	25
SECTION 13. CLEANING UP.	26
SECTION 14. EXTENSION OF TIME.	26
SECTION 15. ADJUSTMENT OF CONTRACT.	26
SECTION 16. CAUSES BEYOND CONTROL.....	27
SECTION 17. DEFAULT.	27
SECTION 18. SUBCONTRACTING.....	27
SECTION 19. LIABILITY OF PUBLIC OFFICIALS.	28
SECTION 20. LAWS, REGULATIONS AND ORDERS.	28
SECTION 21. SUSPENSION OF ACTIVITIES.	28
SECTION 22. ADVANCE PAYMENTS TO CONTRACTOR.	28
SECTION 23. NON-DISCRIMINATION.	28
SECTION 24. LIQUIDATED DAMAGES.....	28
SECTION 25. TIME OF ESSENCE.....	29
12. GRANT REQUIREMENTS	30

**INVITATION TO BID
FOR THE CONSTRUCTION OF THE
COLUMBIA COUNTY EMERGENCY OPERATIONS CENTER**

PROCUREMENT DOCUMENTS

Columbia County, by and through its Board of County Commissioners hereby invites bids from general contractors for the construction of the Columbia County Emergency Operations Center in St. Helens, Oregon.

1. PROJECT DESCRIPTION/SITE LOCATION.

The purpose of the ITB is to establish a Contract for construction of the Columbia County Emergency Operations Center (EOC) in St. Helens, Oregon, including site work, fabrication and placement of a manufactured office building. The EOC will be sited on property adjacent to the Lee Broadbent Training Center located at 58577 McNulty Way. The site is described as Lot # 8 of McNulty Creek Industrial Park - Tax lot 4108-AD-900, St. Helens, Oregon. The work contemplated under the Contract includes all labor, materials, transportation, equipment and services for, and incidental to, the completion of all construction work in connection with the project described in these Procurement Documents.

The existing site is already paved. During construction the parking area will continue to be used for the training activities of the Lee Broadbent Training Center. The existing paved area will be striped to direct parking during meetings or during emergency activations. The Project involves the addition of a modular EOC building, HAM radio towers and associated walkways, landscaping, and screened area for emergency generator and trash storage area. There are existing streets and sidewalks, and existing water, sewer, electric and other utilities to the site. There are adequate public facilities to support this occupant load and the anticipated occupant load during an emergency event.

Adjacent uses will continue during construction.

Additional Information regarding the Project is provided in Section 4.6 Work to be Done, and other Procurement Documents. Bidders shall carefully review all Procurement Documents, including but not limited to the Sample Contract, before submitting a bid.

The Project is funded in part by a grant from FEMA, Department of Homeland Security, EOC Grant #10-1076, administered by the Oregon State Department of Emergency Management and Columbia County (the "Grant"). Contractors that developed or drafted specifications, and/or requirement, statements of work for the procurement are excluded from bidding to compete for the award of the procurement. Other Grant requirements are included in the procurement documents.

The following range is an estimate of the cost of the Project for bonding purposes: \$200,000- \$300,000.

2. PROCUREMENT DOCUMENTS/CONTENTS.

1. Project Description/Site Location
2. Procurement Documents/Contents
3. Proposed Project Time-Line
4. Instructions to Bidders
5. Bid form
6. First-tier Subcontractor Disclosure Form
7. Oregon Bid Bond
8. Oregon Performance

9. Payment Bonds
10. General Provisions
11. Special Provisions
12. Grant Requirements

Attachment A: Oregon & Federal Prevailing Wage Rates

Attachment B: Specifications and Drawings

Attachment C: Sample Contract

3. PROPOSED PROJECT TIME-LINE.

Invitation to Bid – Publish	27, Feb 2013
Mandatory Pre-Bid Meeting (1:30 pm)	12, March 2013*
Request for Clarification or Change/Protests (5:00 pm)	18, March, 2013
Bid Closing (2:00 pm)	28, March 2013*
Notice to Proceed	25, April 2013
Substantial Completion	August 30, 2013*
Final Completion	September 20, 2013*

With the exception of the dates marked with an asterix (), the dates provided are estimated and may change in the County's sole discretion. Bidders are responsible for determining all applicable deadlines.

4. INSTRUCTIONS TO BIDDERS.

4.1. MANDATORY PRE-BID CONFERENCE.

A mandatory pre-bid conference will be held on **March 12, 2013**, in the Main Conference Room on the first floor of the Columbia County Courthouse Annex~ 230 Strand Street, St. Helens, Oregon 97051(next to the historical courthouse). Any statements made at this conference will not change the Procurement Documents unless an Addendum has been issued by Columbia County and posted on the County's website at <http://www.co.columbia.or.us/departments/land-development-services/lds-home>.

BIDDERS OR THEIR REPRESENTATIVE ARE REQUIRED TO ATTEND THIS MANDATORY PRE-BID CONFERENCE. BIDS WILL ONLY BE EVALUATED FROM BIDDERS OR THEIR REPRESENTATIVE WHO REGISTERED AND ATTENDED THE MANDATORY PRE-BID CONFERENCE, AND ALL OTHER BIDS WILL BE CONSIDERED NON-RESPONSIVE.

4.2. PROJECT START DATE.

The project start date will be **seven (7)** calendar days from issuance of Notice to Proceed or as instructed in the Notice to Proceed.

4.3. SUBSTANTIAL COMPLETION.

The Project must be substantially complete no later than August 30, 2013. Time is of the essence for performance of the Project. All Grant funding must be expended no later than September 30, 2013.

4.4. FINAL COMPLETION.

The Project must be finally complete no later than September 20, 2013. Time is of the essence for performance of the Project. All Grant funding must be expended no later than September 30, 2013.

4.5 LIQUIDATED DAMAGES.

Due to the strict deadline for obligating Grant funds for the Project, the contract will include liquidated damages in the amount of **\$1000 per calendar day** for failure to meet the final completion date.

4.6. WORK TO BE DONE.

Columbia County intends to contract for site work, landscaping, supply and placement of a pre-fabricated modular office building per the attached specifications and drawings. The following summarizes the work included and shall be used for information only. All work shall be done according to the procurement documents. Work of this Project is described as the fabrication and installation of a new modular one story facility which will be used as the Columbia County EOC. The building is classified as Occupancy Category – IV – a Critical Facility. The work includes but is not limited to:

4.6.1 The design and fabrication of a modular building including all HVAC, electrical, plumbing, and fire protection and any other elements as required by the building code as an essential facility.

4.6.2 Supply and installation of an appropriately sized emergency generator and automatic transfer switch for the building.

4.6.3 Site work, including excavation and installation of footings and hold-downs designed for the modular building; an ADA ramp and stairs, underground connections to public utilities adjacent to the site including power, sewer, water and telecom; installation of concrete walkways and curbs; parking striping and accessories; fencing; and, landscaping.

4.6.4 Installation of (2) radio towers and protective bollards.

4.6.5 Contractor shall be responsible for providing all design documentation by a designated registered design professional as required by the Oregon Structural Specialty Code, and applicable sections of the Oregon Revised Statutes, including, but not limited to ORS Chapters 445, 446, 671, and 672, Oregon Administrative Rules, and local ordinances.

4.6.6 The modular building shall be fabricated by a licensed pre-fabricated structure fabricator and inspected as required by the Oregon Structural Specialty Code for Prefabricated Structures and ORS Chapter 455.

4.6.7 The modular building shall be installed on site in St. Helens Oregon.

4.6.8 Except as otherwise specified, the Contractor shall furnish all labor, tools, implements, machinery, supplies, materials and incidentals, and shall do all things necessary to perform and complete the work to be done under the contract according to the Procurement Documents. This shall be understood to include, in addition to the work specifically called for in the Specifications, the performance of such additional and extra work as may appear to the County Representative to be necessary for the completion of the work contemplated in a substantial and workmanlike manner.

4.7. PROJECT MANAGER/CONTRACT REPRESENTATIVE.

Project Manager/Contract Representative:
Bill Potter, Building Services Manager
Department of Land Development Services
Building Services Division
Email: bill.potter@co.columbia.or.us
Phone: 503-397-7213
Fax: 503-397-7248

4.8. TIME AND PLACE OF RECEIVING AND OPENING BIDS ("Bid Closing").

Bids for the work described above will be received by Columbia County's Department of Land Development Services, 230 Strand St. Helens, Oregon 97051 until March 28, 2013 at 2:00 p.m. Pacific Time, ("Bid Closing") according to the clock in the reception area of the Department of Land Development Services. Bids received after this date and time will be returned unopened. Bids will be publicly opened and read immediately following bid closing in the Department of Land Development Services. Bill Potter, Building Services Manager, is the person designated for the receipt of Bids.

4.9 TIME AND PLACE OF RECEIVING FIRST TIER SUBCONTRACTOR DISCLOSURE.

Bidders shall submit a list of first-tier subcontractors no later than 4:00 p.m. on March 28, 2013, on the form provided. The County may not award a contract to a bidder who does not comply with this requirement.

4.10 FORM OF BID.

All bids must be written in the space provided, either typed or in ink, on the Bid Form provided herein, or re-typed with exact information. No facsimile or other electronically submitted bids will be accepted. A bid is subject to and incorporates by reference all of the procurement documents for the Project. A bid must be signed by an authorized representative or representatives of the bidder. A bid must be presented in a sealed envelope to the Department of Land Development Services for Columbia **County, 230 Strand, St. Helens, Oregon, 97051, at or before Bid Closing and shall be marked with the words "BID FOR COLUMBIA COUNTY EOC FACILITY" or equivalent.** A bidder must fill in all required information on the Bid Form included in the Procurement Documents.

4.11 PREQUALIFICATION APPLICATIONS.

Prequalification applications subject to ORS 279C.430 are not required.

4.12 PUBLIC WORKS CONTRACT.

This project is a public works project and is subject to ORS 279C.800 through ORS 279C.870 and the Davis-Bacon Act, 40 U.S.C. 3141 to 3148. No Bid will be considered unless the Bid contains a statement by the Bidder that the Bidder will comply with ORS 279C.838, ORS 279C.840 and 40 U.S.C. 3141 to 3148. The existing State and Federal prevailing rates of wage that must be paid to workers in each trade or occupation by the successful Bidder and each Subcontractor or other person doing or contracting to do the whole or any part of the work contemplated by the Contract are included in the Procurement Documents, attached as Exhibit A and incorporated herein by this reference. Attachment "A" also shows which prevailing rate of wage is higher for workers in each trade or occupation in each locality, as determined by the Commissioner of the Bureau of Labor and Industries under ORS 279C.815(2)(b). A fee is required to be paid to the Commissioner of the Bureau of Labor and Industries as provided in ORS 279C.825(1). The successful Bidder and any subcontractor must have a public works bond filed with the Construction Contractors Board before starting work on the Project, unless exempt under ORS 279C.836(4), (7) or (8).

4.13 ASBESTOS.

Bidders are not required to be licensed under ORS 468A.720, to be eligible for the contract.

4.14 CONSTRUCTION CONTRACTORS BOARD

No Bid shall be considered unless the Bidder is licensed by the Construction Contractors Board as required by ORS 701.035, or is licensed by the State Landscape Contractor's Board, as specified in OAR 137-049-0230

4.15 NON-DISCRIMINATION CERTIFICATION.

Each Bidder shall certify by Bid Form signature that the Bidder has not discriminated and will not discriminate, in violation of ORS 279A.110, against any minority, women or emerging small business enterprise, certified under ORS 200.005, or any business enterprise that is owned or controlled by or employs a disabled veteran as defined in ORS 408.225, in obtaining any required subcontracts. Failure to do so may be grounds for disqualification.

4.16 RESIDENT BIDDER.

Each bid must identify whether the bidder is a resident bidder as defined in ORS 279A.120.

4.17 ENVIRONMENTAL AND NATURAL RESOURCES LAWS; REMEDIES.

Provisions concerning environmental and natural resources laws and remedies are included in Section L of the General Provisions.

4.18 BID SECURITY.

Each Bid shall be accompanied by a surety bond, irrevocable letter of credit issued by an insured institution as defined in ORS 706.008, cashier's check or certified check in the amount of 10% of the total amount stated in the Bid as bid security. The full amount of the bid security shall be forfeited in the event the successful Bidder fails to execute a satisfactory Contract and submit required bonds within ten (10) days following the date of receipt of the Contract prepared and ready for execution. The bid security shall be taken and considered as liquidated damages and not as a penalty for failure of the Bidder to execute the Contract and submit bonds. The Bid security of all unsuccessful Bidders shall be returned after a Contract is executed, when all Bids have been rejected, or when a Bid has been properly withdrawn as provided in 4.19, below. The County will return the Bid security of the successful Bidder after the Bidder executes the Contract and delivers a good and sufficient performance bond, a good and sufficient payment bond and proof of insurance.

4.19 PRE-CLOSING MODIFICATION OR WITHDRAWAL OF OFFERS.

4.19.1. Modifications. A Bidder may modify its bid by written notice submitted on the Bidder's letterhead, signed by an authorized representative of the Bidder, delivered to Bill Potter, Columbia County Building Services Manager, and received by the County prior to Closing. A Bidder shall prepare and submit any modification to its bid to the County in accordance with OAR 137-049-0280. Any modification must include the Bidder's statement that the modification amends and supersedes the prior bid. The Bidder shall mark the submitted modification as follows:

- a. Bid modification; and
- b. Columbia County EOC Project

4.19.2. Withdrawals.

- a. A Bidder may withdraw its bid by written notice submitted on the Bidder's letterhead, signed by an authorized representative of the Bidder, delivered to Bill Potter, Columbia County Building Services Manager, and received by the County prior to Closing. The Bidder or authorized representative of the Bidder may also withdraw its bid in person prior to Closing, upon presentation of appropriate identification and satisfactory evidence of authority.
- b. The County may release an unopened bid withdrawn under 2(a), to the Bidder or its authorized representative, after voiding any date and time stamp mark.
- c. A Bidder shall mark the written request to withdraw a bid as follows:
 - i. Bid withdrawal; and
 - ii. Columbia County EOC Project.

4.20 LATE BIDS, LATE WITHDRAWALS AND LATE MODIFICATIONS.

Any bid received after the Bid Closing date and time is late. A Bidder's request for withdrawal or modification of a bid received after Bid Closing is late. The County will not consider late bids, withdrawals, or modifications except as permitted by OAR 137-049-0350.

4.21 CONTRACT AWARD.

After bids are opened and a determination is made that a public improvement contract is to be awarded, the County shall award the contract to the lowest responsible Bidder. The Contract will be awarded as a whole to one Bidder. The Contract will be prepared by the Columbia County Counsel and will consist of duplicate originals, including a copy of the accepted bid. The Contract will be delivered or made available to the successful Bidder for execution. Two duplicate originals of the Contract shall be signed by the Contractor and returned to the County within ten (10) calendar days of mailing by the County or upon receipt by bidder, whichever is sooner, along with the required Certificates of Insurance, Additional Insured Endorsement(s), W-9, and performance and payment bond for final approval, dating and execution by the County. The Contract will not be effective until finally approved, dated and executed by the County. After execution by the County, an originally signed original of the Contract will be delivered or made available to the Contractor and the Bid security will be returned. A Sample Contract is included in the Procurement Documents. The Sample Contract will be modified in the discretion of the County to reflect the procurement documents, to comply with Grant requirements, or to comply with Oregon and Federal laws. Terms and conditions set forth in the Sample Contract are subject to pre-bid protest restrictions.

4.22 OFFER EVALUATION AND AWARD; DETERMINATION OF RESPONSIBILITY.

- 4.22.1. The County will be evaluating bids on a low bid lump sum basis with one deductive alternative for the sprinkler system. The total bid price will be calculated by deducting from the base bid the alternative for the purpose of comparing bids. The County reserves the right to exercise the alternate in its sole discretion. The County may reject any bid not in compliance with all public contracting procedures and requirements, including the requirement to demonstrate the Bidder's responsibility under ORS 279C.375(3)(b), and may reject for good cause all bids after finding that doing so is in the public interest.
- 4.22.2. If awarded, the County will award the Contract to the Responsible Bidder submitting the lowest Responsive Bid, provided that such Bidder is not listed by the Construction Contractors Board as being disqualified to hold a Public Improvement Contract, See ORS 279C.375(3)(a). Furthermore, a

contractor may not be debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from contracting by any Federal agency, as shown on the Excluded Parties List (<http://www.eppls.gov>).

4.22.3. Bidders are required to demonstrate their ability to perform satisfactorily under a contract. Before awarding a contract, the County must have information that indicates that the Bidder meets the standards of responsibility. To be a Responsible Bidder, the County must determine that the Bidder:

- a. Has available the appropriate financial, material, equipment, facility and personnel resources and expertise, or ability to obtain the resources and expertise, necessary to meet all contractual responsibilities;
- b. Holds current licenses that businesses or service professionals operating in Oregon must hold in order to perform the work specified in the contract;
- c. Is covered by liability insurance and other insurance in the amounts the County requires in the Contract Documents;
- d. Qualifies as a carrier-insured employer or a self-insured employer under ORS 656.407 or has elected coverage under ORS 656.128;
- e. Has made the first-tier subcontractor disclosure, required by 4.28, below;
- f. Has a satisfactory record of contract performance. The County may review the Bidders' performance on both private and public contracts in determining the Bidders' record of contract performance;
- g. Has a satisfactory record of integrity. A Bidder may lack integrity if the County determines the Bidder demonstrates a lack of business ethics such as a violation of state environmental laws or false certifications made to a Contracting Agency. The County may find a Bidder not responsible based on the lack of integrity of any person having influence or control over the Bidder (such as a key employee of the Bidder that has the authority to significantly influence the Bidder's performance of the Contract or a parent company, predecessor or successor person);
- h. Is qualified legally to contract with the County; and
- i. Has supplied all necessary information in connection with the inquiry concerning responsibility. If the Bidder fails to promptly supply information requested by the County concerning responsibility, the County will base the determination of responsibility upon any available information, or may find the Bidder not responsible.

4.22.4. The County may require a Bidder to submit Product Samples, Descriptive Literature, technical data, or other material and may also require any of the following prior to Award:

- a. Demonstration, inspection or testing of a product for characteristics such as compatibility, or quality of workmanship;
- b. Examination of such elements as appearance or finish; or
- c. Other examinations to determine whether the product conforms to Specifications.

4.22.5. The County will seek information from a Bidder only to clarify the Bidder's Bid. Such clarification may not vary, contradict or supplement the Bid. A Bidder must submit written and signed

clarifications and such clarifications will become part of the Bidder's Bid.

4.22.6. References.

a. The County will perform reference checks on the apparent low bidder. Bidder shall provide a list of three (3) different project references that Bidder has worked on within the last three (3) years of comparable size and scope. Only Contractors that have demonstrated experience on projects similar both in size and complexity within the last three (3) years will be considered for this project. Bidder shall include the following information for each reference:

- Name of Project
- Project Location
- Project Date
- Firm Name for Contact Person #1
- Name of Contact Person #1
- Telephone Number for Contact Person #1
- Fax number for Contact Person #1
- Firm Name for Contact Person #2
- Name of Contact Person #2
- Telephone Number for Contact Person #2
- Fax number for Contact Person #2

The references will be checked to determine if they are supportive of the Bidder's ability to meet the requirements of this ITB.

Bidder must provide references that can be contacted regarding the quality of workmanship and service provided to current and past customers.

The County reserves the right to choose and investigate any reference whether or not furnished by the Bidder, and to investigate past performance of any Bidder with respect to its successful performance of similar projects, compliance with specifications and contractual obligations, its completion or delivery of service on schedule, and its lawful payment of suppliers, subcontractors, and employees.

The County may postpone the award or execution of the Contract after the announcement of the apparent successful Bidder in order to complete its investigation. The County may reject a bid if, in the opinion of the County, overall reference responses indicate inadequate performance.

The County will make three attempts to contact the references from the list provided by the Bidder.

Each reference contacted will be asked the same questions, including but not limited to the above factors, including: (1) quality of service; (2) delivery; (3) responsiveness to reported problems, including orders and billing; (4) how well Bidder met the terms of the contract; and (5) whether the reference would choose to hire the Bidder again.

b. Bidder's supervisor who will be overseeing the work shall have experience on projects similar in both size and complexity and submit with the bid, references for three projects that were performed within the last three (3) years. References provided for the Bidder's supervisor may be the same three (3) references that are provided for the Bidder. Bidder must provide references with the bid that can be contacted regarding the quality of workmanship and service that the Bidder's supervisor provided on current and past projects of similar size and complexity

The list of supervisor's references will include the following information:

- Name of Project
- Project Location
- Project Date
- Firm Name for Contact Person #1
- Name of Contact Person #1
- Telephone Number for Contact Person #1
- Fax number for Contact Person #1
- Firm Name for Contact Person #2
- Name of Contact Person #2
- Telephone Number for Contact Person #2
- Fax number for Contact Person #2

4.23 PERFORMANCE/PAYMENT SECURITY.

The successful Bidder shall promptly acquire and deliver, along with the executed Contract, to the County a good and sufficient performance bond, subject to approval by the County, in a sum equal to 100% of the Contract price to secure faithful performance of the Contract. In lieu of a surety bond, the successful bidder may propose, and the County may permit, the bidder to submit a cashier's check, certified check or cash in the amount of 100% of the contract price. The performance bond must be solely for the protection of the County. The County may permit the successful Bidder to submit a cashier's check or certified check in lieu of all or a portion of the required performance bond.

The successful Bidder shall promptly acquire and deliver a payment bond in an amount equal to the full contract price, solely for the protection of claimants under ORS 279C.600.

Each performance bond and each payment bond must be executed solely by a surety company or companies holding a certificate of authority to transact surety business in this state. The bonds may not constitute the surety obligation of an individual or individuals. The performance and payment bonds must be payable to the County and shall be in a form approved by the County.

4.24 RIGHT TO WAIVE INFORMALITIES AND/OR REJECT BID PROPOSALS.

The County reserves the right to waive minor informalities in the bids received. The County may also reject any Bid not in compliance with all prescribed public contracting procedures and requirements, including the requirement to demonstrate the Bidder's responsibility under 4.22, above, and may reject for good cause any or all bids upon a finding by the County that it is in the public interest to do so, in accordance with OAR 137-049-0440.

4.25 ADDENDA.

4.25.1. The County may change the procurement documents by written Addenda. A Bidder shall provide written acknowledgment of receipt of all issued Addenda with its bid on the Bid Form, unless the County otherwise specified in the Addenda.

4.25.2. The County shall notify prospective Bidders of Addenda. The County will notify bidders of an addendum by posting by EMAIL to all prospective Bidders who have contacted the County and were added to the County's potential contractor list that an addendum has been issued and is available on the County's website. The County will not mail notice of Addenda.

4.25.3. The County shall issue any Addendum within a reasonable time to allow prospective Bidders to consider the Addendum in preparing their bids. The County may extend the Closing if the County determines prospective Bidders need additional time to review and respond to an Addendum. Except

to the extent required by public interest, the County shall not issue an Addendum less than 72 hours before the Bid Closing unless the Addendum extends the Closing.

- 4.25.4. Unless a different deadline is set forth in the Addendum, a Bidder may submit a written request for change or protest to the Addendum, as provided in OAR 137-049-0260, by the close of the County's next business day after issuance of the Addendum, or up to the last day allowed to submit a request for change or protest under OAR 137-049-0260, whichever is later. The County shall consider only a Bidder's request for change or protest to the Addendum. The County shall not consider a request for change or protest to matters not added or modified by the Addendum, unless the Bidder submits the request for change or protest before the deadline for the County's receipt of request for change or protests as set forth in OAR 137-049-0260(2) and (3).

4.26 PROTEST PROCEDURES.

An adversely affected or aggrieved Bidder may submit a written protest of the County's intent to award within seven (7) days after issuance of the notice of intent to award the contract. The Bidder's protest must be in writing and must specify the grounds upon which the protest is based. A Bidder is adversely affected or aggrieved only if the Bidder is eligible for award of the contract as the responsible Bidder submitting the lowest Responsive Bid and is next in line for award, in accordance with OAR 137-049-0450. The County will not consider a protest submitted after the time period for protests is up. The Board of County Commissioners, or its designee, may settle or resolve a written protest submitted in accordance with the requirements of this section. If a protest is not settled, the Board of County Commissioners, or its designee, shall promptly issue a written decision on the protest. Judicial review of this decision will be available if provided by statute. The successful Bidder shall promptly execute the Contract after the award is final. The County shall execute the Contract only after it has obtained all applicable required documents and approvals.

4.27 PREPARATION COSTS.

All costs associated with Bid preparation shall be at the Bidder's sole cost and expense.

4.28 FIRST-TIER SUBCONTRACTOR DISCLOSURE.

Within two working hours after the Bid Closing, all Bidders shall submit to the person authorized to receive bids, a first-tier subcontractor disclosure on the form provided, identifying any first-tier subcontractors that will be furnishing labor or labor and materials on the Contract, if awarded, whose subcontract value would be equal to or greater than:

1. Five percent (5%) of the total Contract price, but at least \$15,000; or
2. \$350,000, regardless of the percentage of the total Contract Price.

4.29 REQUEST FOR CLARIFICATION OR CHANGE; SOLICITATION PROTESTS

- 4.29.1. Clarification. Prior to the deadline for submitting a written request for change or protest, a Bidder may request that the County clarify any provision of the Procurement Documents. The County's clarification to a Bidder, whether orally or in writing, does not change the Procurement Document and is not binding on the County unless the County amends the Procurement Document by Addendum.
- 4.29.2. Request for Change. A Bidder may request in writing a change to the specifications or Contract terms and conditions. A Bidder must deliver the written request for change to the County not less than ten (10) days prior to Closing. The Request for Change must include a statement of the requested change(s) to the Contract terms and conditions, including any Specifications, together

with the reason for the requested change. The Bidder shall mark the Request for Change with “Contract Provision Request for Change-Columbia County EOC Project”.

- 4.29.3. Solicitation Protests. A Bidder may protest Specifications or Contract terms and conditions by delivering a written protest to the County not less than ten (10) days prior to Closing. The Protest shall include a detailed statement of the legal and factual grounds for the Protest, a description of the resulting prejudice to Bidder and a statement of the desired changes to the Contract terms and conditions, including Specifications. The Bidder shall mark the Protest with “Contract Provision Protest-Columbia County EOC Project”.

5. BID FORM

COLUMBIA COUNTY EOC PROJECT

The undersigned and Bidder declare(s), propose(s) and agree(s) as follows:

1. The undersigned has authority to complete and sign this Bid on behalf of the person, firm, business or corporation named herein as Bidder.
2. The full legal name(s) of the Bidder is

3. The only persons, firms, businesses or corporations interested in this Bid as principals are named as Bidders above or as officers, partners, joint venturers or parties below.
4. This Bid is made without collusion with any person, firm, business or corporation other than those named herein.
5. The Bidder has carefully examined all Solicitation Documents (including, but not limited to the , Description of the Project, Instructions to Bidders, Bid Form, First-Tier Subcontractor Disclosure Form, Sample Contract, Special Provisions, Specifications, Oregon Bid Bond, Oregon Performance and Payment Bonds, Drawings and Davis Bacon/Oregon Prevailing Wage Rates), and the site(s) of the proposed work.
6. ADDENDA ACKNOWLEDGEMENT (1) the County reserves the right to make changes to the Invitation to Bid and the resulting Contract, by written Addenda, prior to the closing time and date. Addenda will be sent to all prospective bidders via email and posted on the County's website. The COUNTY is not responsible for a bidder's failure to receive notice of Addenda if such are advertised in the foregoing manner. Addenda shall only be issued by the COUNTY and upon issuance are incorporated into the Invitation to Bid or the resulting Contract. If required by the Addendum, Bidders shall sign and return the Addendum prior to the Closing time/date.

By Bidder's signature on this Bid Form Bidder ACKNOWLEDGES, AGREES and CERTIFIES TO THE FOLLOWING:

(a) If any Addenda are issued in connection with this ITB, Offeror has received and duly considered such Addenda, and has completed the blanks below identifying all Addenda issued, and acknowledging and agreeing to the terms of all such Addenda as those terms revise the terms, conditions, Plans and Specifications of this ITB.

ADDENDA: No. ____ to No. ____ inclusive.

(b) IN ADDITION to completing the blanks above to identify all Addenda, if any, issued under this ITB, Bidder assigned and returned any Addendum that states that it must be signed and returned.

7. Bidder understands and agrees that this Bid is subject to all of the terms and conditions of the Procurement Documents, and any addenda thereto, and the same are incorporated herein by this reference.

8. If this Bid is accepted, Bidder will:

- a) execute the Contract prepared and ready for signature, with Columbia County;

b) provide the performance security, if any, specified in the Contract Documents;

c) provide all the necessary labor, machinery, tools, apparatus and other means of construction to do all the work required;

d) furnish all the materials necessary; and

e) do all of the foregoing in the manner and time prescribed in, and according to the requirements set forth in, the Contract Documents.

9. If this Bid is accepted and the Bidder fails to or neglects to execute and return the Contract, prepared and ready for execution, and provide performance and payment security, if required, together with all other required documentation, within ten (10) days from the date of mailing by the County or receipt by the Bidder, whichever is sooner, the County may, at its option, determine that the bidder has abandoned the Contract, declare the bid security described in the Procurement Documents, if any, forfeited, and award the Contract to the next lowest responsible bidder.

10. Bidder will make all the payments to workers, suppliers and agencies required under the Contract in the manner described in the Contract Documents; Bidder will comply with all other applicable provisions of Oregon Law, Columbia County Ordinances and rules relating to public contracting including the provisions of ORS 279C.840 and the Davis Bacon Act (40 U.S.C 3141 to 31487).

11. The Bidder by whom this Bid is submitted, and by whom the contract will be entered into in case award is made to the bidder, is a(n):

Individual / sole proprietorship / partnership / corporation / other _____
(strike out all but correct title).

12. The names, addresses, titles and phone numbers of the president, secretary - treasurer and manager of the bidding corporation or names, addresses, titles and phone numbers of all officers, partners, joint venturers or other parties interested in this Bid are as follows:

(a) Name: _____ Title: _____

Address: _____

Phone: _____

(b) Name: _____ Title: _____

Address: _____

Phone: _____

(c) Name: _____ Title: _____

Address: _____

Phone: _____

(Attach additional sheets if necessary.)

13. The undersigned Bidder certifies that Bidder has not discriminated and will not discriminate against minority, women, or emerging small business enterprises, or a business enterprise that is owned or controlled

by or that employs a disabled veteran in obtaining any required subcontracts. Failure of a Bidder not to so discriminate shall be grounds for disqualification.

14. The undersigned Bidder certifies that Bidder (is / is not) a resident bidder as defined in ORS 279A.120. (Mark out the incorrect certification).

15. The Bidder's Base Bid and Alternates to include all work described in this Procurement Documents, including but not limited to the, Plans, Specifications, sample contract and any issued Addenda:

BASE BID – LUMP SUM: \$_____

DEDUCTIVE ALTERNATE 1: Delete building sprinkler system.

LUMP SUM: \$_____

16. CCB REQUIREMENTS

(a) Bidder shall be licensed with the State of Oregon Construction Contractors Board (CCB) prior to bidding on Public Improvement Contract(s). FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL RESULT IN BID REJECTION.

(b) All subcontractors participating in the project shall be similarly registered with the Construction Contractors Board at the time they propose to engage in subcontract work. The CCB registration requirements apply to all public works contracts unless superseded by federal law.

17. Bidder SHALL provide its Construction Contractors Board (ORS 701.055) registration number below:

CONSTRUCTION CONTRACTORS BOARD REGISTRATION NO.: _____

EXPIRATION DATE OF CCB NO.: _____

18. JOINT VENTURE/PARTNERSHIP DISCLOSURE

The Bidder shall disclose whether the bid is submitted by either a partnership or joint venture.

NO: _____ YES: _____

If yes, the Bidder shall provide the name of the contact person for the partnership or joint venturer.

DATED: _____

BIDDER: _____
(Business Name)

BUSINESS ADDRESS: _____

BY: _____
(Signature of Authorized Representative)

Name: _____
(Printed Name of Signator)

Title: _____

Phone: _____ Fax: _____

BY: _____
(Signature of Second Representative if required)

Name: _____
(Printed Name of Signator)

Title: _____

Federal Tax I.D. No.: _____

(Unless indicated otherwise below, all business communications regarding this Bid and Contract will be made to the business address and phone number shown above.)

If other than above, all communications should be made to:

Alternate Address: _____

Phone: _____

6. FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM.

PROJECT NAME: **Columbia County EOC Project**

BID CLOSING: Date: March 28, 2013 Time: 2:00 p.m. Pacific Time

This form must be submitted at the location specified in the Invitation to Bid on bid closing date and within two working hours after the advertised bid closing.

Instructions for First-Tier Subcontractor Disclosure: Bidders are required to disclose information about certain first-tier subcontractors when the contract value for a Public Improvement is greater than \$100,000.00 (see ORS 279C.370). Specifically, when the contract amount of a first-tier subcontractor furnishing labor or labor and materials would be greater than or equal to:

- (a) Five (5%) of the project bid, but at least \$15,000.00; or
- (b) \$350,000.00, regardless of the percentage of the total bid.

The disclosure of first-tier subcontractors shall include:

- (a) The subcontractor's name;
- (b) The category of work that the subcontractor would be performing; and
- (c) The dollar value of the subcontract.

If the Bidder will not be using any subcontractors that are subject to the above disclosure requirements, the Bidder is required to indicate "None" on the form, below. **THE COUNTY MUST REJECT A BID IF THE BIDDER FAILS TO SUBMIT THE DISCLOSURE FORM WITH THIS INFORMATION BY THE STATED DEADLINE (See OAR 137-049-0360)**

List below the name of each subcontractor that will be furnishing labor or will be furnishing labor and materials and that is required to be disclosed, the category of work that the subcontractor will be performing and the dollar value of the subcontract. Enter "NONE" if there are no subcontractors that need to be disclosed. (ATTACH ADDITIONAL SHEETS IF NEEDED.)

NAME	DOLLAR VALUE	CATEGORY OF WORK
1) _____	\$ _____	_____
2) _____	\$ _____	_____
3) _____	\$ _____	_____
4) _____	\$ _____	_____

Failure to submit this form by the disclosure deadline will result in a nonresponsive bid. A nonresponsive bid will not be considered for award.

Form submitted by (bidder name): _____

Contact name: _____

Phone no.: _____

7. OREGON BID BOND

BOND NO. _____

AMOUNT: \$_____

KNOW ALL MEN BY THESE PRESENTS, that _____
hereinafter called the PRINCIPAL, and _____
a corporation duly organized under the laws of the State of _____, having its principal place
of business at _____, in the State of
_____ and authorized to do business in the State of Oregon, as SURETY, are held and firmly
bound unto Columbia County hereinafter called the OBLIGEE, in the sum of _____
_____ DOLLARS (\$_____), for the payment of which we bind
ourselves, our heirs, executors, administrators,
successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS BOND IS SUCH THAT:

WHEREAS, the PRINCIPAL is herewith submitting his or its Bid Proposal for the Columbia County EOC
Project, said Bid Proposal, by reference thereto, being hereby made a part hereof.

NOW, THEREFORE, if the Bid Proposal submitted by the PRINCIPAL is accepted, and the Contract
awarded to the PRINCIPAL, and if the PRINCIPAL shall execute the proposed Contract and shall furnish
such Performance and Payment Bond as required by the Contract Documents within the time fixed by the
Documents, then this obligation shall be void, if the PRINCIPAL shall fail to execute the proposed Contract
and furnish the bond, the SURETY hereby agrees to pay to the OBLIGEE the said sum as liquidated
damages.

Signed and sealed this _____ day of _____, 2013.

PRINCIPAL

By _____

SURETY

By _____

Attorney-in-Fact

8. OREGON PERFORMANCE BOND

BOND NO. _____ AMOUNT: \$ _____

KNOW ALL BY THESE PRESENT, that _____ as CONTRACTOR (Principal), and _____ a corporation, duly authorized to do a general surety business in the State of Oregon, as SURETY, are jointly and severally held and bound unto **Columbia County, Oregon**, a political subdivision of the State of Oregon the OWNER (Obligee) herein, in the sum of _____ DOLLARS (\$ _____), for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

This bond is executed under the authority of ORS Chapter 279C, of the State of Oregon, the provisions of which are hereby incorporated into this bond and made a part hereof.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, _____ the CONTRACTOR entered into a certain Contract with Columbia County, Oregon for the **Columbia County EOC Project**.

IN WITNESS;

NOW, THEREFORE, if the CONTRACTOR shall faithfully perform all the provisions of such Contract for the duration thereof, including the guarantee period, and promptly pay all laborers, mechanics, subcontractors, material men, and all persons who shall supply such work and services, and save harmless the OWNER, its officers, agents, and employees from all claims therefore, or from any claim for damages or injury to property or persons arising by reason of the work; and shall, in time and manner, faithfully do, perform, and furnish all matters and things as by them in the Contract undertaken, and as by law, local, state, and federal, prescribed, then this obligation shall be void; otherwise it shall remain in full force and effect.

PROVIDED, HOWEVER:

In no event shall the SURETY be liable for a greater sum than the obligation of this bond.

The SURETY for the value received, hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the Contract, or to the work to be performed thereunder, or the Specifications accompanying the same, shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration, or addition to the terms of the Contract, or to the work, or to the Contract Documents.

Signed and sealed this _____ day of _____, 2013.

_____ (SEAL)

CONTRACTOR

SURETY

By: _____
Attorney-In-Fact

Approved as to Form: _____, 2013

_____, OWNER

By _____

9. OREGON PAYMENT BOND

BOND NO. _____

AMOUNT: \$_____

KNOW ALL BY THESE PRESENT, that _____ as CONTRACTOR (Principal), and _____, a corporation, duly authorized to do a general surety business in the State of Oregon, as SURETY, are jointly and severally held and bound unto **Columbia County**, a political subdivision of the State of Oregon, the OWNER (Obligee) herein, in the sum of _____ DOLLARS (\$_____), for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

This bond is executed under the authority of ORS Chapter 279C, of the State of Oregon, the provisions of which are hereby incorporated into this bond and made a part hereof.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, _____ the CONTRACTOR entered into a certain Contract with **Columbia County, Oregon**, for the Columbia County EOC Project;

IN WITNESS;

NOW, THEREFORE, if the CONTRACTOR shall faithfully perform all the provisions of such Contract for the duration thereof, including the guarantee period, and promptly pay all laborers, mechanics, subcontractors, material men, and all persons who shall supply such work and services, and save harmless the OWNER, its officers, agents, and employees from all claims therefore, or from any claim for damages or injury to property or persons arising by reason of the work; and shall, in time and manner, faithfully do, perform, and furnish all matters and things as by them in the Contract undertaken, and as by law, local, state, and federal, prescribed, then this obligation shall be void; otherwise it shall remain in full force and effect.

PROVIDED, HOWEVER:

In no event shall the SURETY be liable for a greater sum than the obligation of this bond.

The SURETY for the value received, hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the Contract, or to the work to be performed thereunder, or the Specifications accompanying the same, shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration, or addition to the terms of the Contract, or to the work, or to the Contract Documents.

Signed and sealed this _____ day of _____, 2013.

_____ (SEAL)

CONTRACTOR

SURETY

By: _____

Attorney-In-Fact

Approved as to Form: _____, 2013.

_____, OWNER

By: _____

10. GENERAL PROVISIONS [attached at the end of the ITB].

11. SPECIAL PROVISIONS.

(For purposes of these Special Provisions, “Bidder” is referred to herein as “CONTRACTOR”, and “Project” is referred to as “Contract”).

SECTION 1. STANDARD OF WORKMANSHIP.

The standard of workmanship for this Contract shall meet or exceed those provided by the Procurement Documents for this Contract.

SECTION 2. MATERIALS.

The materials used in this Contract shall meet or exceed those stated in the Procurement Documents. However, prior approval by the County Representative must be obtained before deviating from the materials, if any, prescribed in the Specifications.

SECTION 3. EXAMINATION OF LOCATION AND CONDITIONS.

It is understood that CONTRACTOR, prior to signing this Contract, has made a careful examination of the contents of the Procurement Documents and has obtained complete information as to the quantity, locality and character of work to be performed hereunder. CONTRACTOR has, by careful examination, satisfied himself/herself as to the nature and location of the work, the confirmation of the ground, the character of equipment, and facilities needed preliminary to and during the prosecution of the work, the general and local conditions, and all other matters which can in any way affect the work under this Contract. COUNTY in no case will be responsible for any loss or cost that may be suffered by CONTRACTOR as a consequence of the failure by CONTRACTOR to be so informed.

SECTION 4. ORDER AND PROGRESS OF WORK

The work under this Contract shall be planned and conducted in such a manner and with such forces as to secure completion within the time allotted. The order and sequence of the work and its general conduct shall be subject to approval of the County Representative, which shall, however, not affect or diminish the full responsibility of the CONTRACTOR for the work.

SECTION 5. SCOPE OF WORK.

The intent of this Contract is to provide for the execution and completion in every detail of the work described herein. Except as herein otherwise specified, the CONTRACTOR shall furnish all labor, tools, implements, machinery, supplies, materials and incidentals, and shall do all things necessary to perform and complete, according to the Specifications, the work to be done under this Contract. This shall be understood to include, in addition to the work specifically called for in the Specifications, the performance of such additional and extra work as may appear to the County Representative to be necessary for the completion of the work contemplated in a substantial and workmanlike manner.

SECTION 6. COMMENCEMENT OF WORK.

Upon award of the Contract by COUNTY, the CONTRACTOR shall furnish COUNTY the following:

- a. Duplicate originals of this Contract duly executed by CONTRACTOR.
- b. Evidence of having secured any permits or licenses, payment of any fees or charges and posting of any notices as may be required by law.

c. A list of proposed subcontractors, if any, subject to County approval pursuant to Section 18 below.

d. The Payment Bond, Performance Bond and Certificates of Insurance required by Sections 7, 14 and 22 of the Contract.

Upon receipt of the above, the COUNTY will determine whether to approve the Contract. No work shall commence until the COUNTY has approved, dated and executed the duplicate original Contracts and authorized CONTRACTOR to begin work with a notice to proceed. The COUNTY shall not be responsible for delay by CONTRACTOR in supplying the necessary items described above in this section and any such delay shall not be grounds for extension of the completion date specified herein.

SECTION 7. INSURANCE.

a. CONTRACTOR, and any subcontractors, shall secure and maintain during the entire course of this Contract, and any extension hereof, **commercial general liability insurance coverage** from an insurance company authorized to do business in Oregon. The policy shall name the State of Oregon, Oregon Emergency Management, and their officers, employees, agents, and members as well as Columbia County, its officers, agents and employees as additional named insureds. The insurance limits shall be not less than \$2,000,000 per occurrence for bodily injury and property damage.

b. CONTRACTOR, and any subcontractors shall secure and maintain during the entire course of this Contract, and any extension hereof, **liability insurance covering each automobile** utilized in performance of the agreement from an insurance company authorized to do business in the State of Oregon. The policy shall name the State of Oregon, Oregon Emergency Management, and their officers, employees, agents, and members as well as Columbia County, its officers, agents and employees as additional named insured. Unless otherwise provided in the Special Provisions, the insurance limits shall be not less than \$2,000,000 per occurrence for bodily injury and property damage.

c. CONTRACTOR, and any subcontractors, shall secure and maintain during the entire course of this Contract, and any extension hereof, **workers' compensation insurance** from an insurance company authorized to do business in the State of Oregon. CONTRACTOR shall carry on work to be done under this Contract in accordance with the Workers' Compensation and Employer's liability laws of the State of Oregon during the effective period of this Contract. (ORS 656.126(2))

d. Prior to commencing work, the CONTRACTOR, and any subcontractors, shall **furnish certificates of insurance**, including workers' compensation insurance, as evidence of the insurance coverage required by this Contract. The policy shall name Columbia County, its officers, agents and employees as additional named insured. Contractor agrees to provide County at least thirty (30) days prior written notice of cancellation, non-renewal or a material change of the insurance. With the exception of policies for workers' compensation, certificates of insurance shall be accompanied by additional insured endorsements, evidencing coverage is extended to Columbia County as an additional insured. The additional insured endorsement shall not be limited to on-going operations nor shall it exclude claims brought by an additional insured. The additional insured endorsement shall be primary and non-contributory to any other insurance available to the additional insured.

e. Coverage shall be carried for the duration of the applicable statute of repose in Oregon.

f. All of CONTRACTOR's and subcontractor's liability insurance policies, with the exception of worker's compensation, shall contain a waiver of subrogation against the County.

SECTION 8. INSPECTION.

This Contract is to be executed under the supervision of the County Representative, who will act under instruction of the Board of County Commissioners. The County Representative may provide for the inspection, by assistants and inspectors under his/her direction, of all materials used and all work done under this project. No deviation from the specifications for this project shall be made by the CONTRACTOR without first obtaining the consent and approval of the County Representative. The County Representative and his/her inspectors shall have free access to all information relating to the work and materials for the project which the County Representative may deem necessary or pertinent and with such samples as may be required. The CONTRACTOR shall, at his/her own expense, supply the inspectors with such labor assistance as may be necessary in handling of materials for proper inspection and, in case the CONTRACTOR neglects or refuses to do so, such labor as may be necessary shall be employed by the County Representative and the expense so incurred shall be deducted from the money then due, or which may become thereafter due the CONTRACTOR. Inspectors shall have authority to reject defective material and to suspend any work that is being done improperly, subject to final decision of the County Representative. Inspectors shall have no authority to permit deviations from, or to relax, any of the provisions of these Specifications nor to delay the CONTRACTOR by failure to inspect materials and work with reasonable promptness. The County Representative during the actual progress of the work, shall furnish the CONTRACTOR with such detailed drawing as may be necessary to more fully illustrate the work, and all such drawings shall be considered a part of the Specifications of the project.

The payment of compensation, whatever may be its character or form, or the giving of any gratuity, or the granting of any valuable favor by the CONTRACTOR to any inspector, directly or indirectly, is directly prohibited, and any such act on the part of the CONTRACTOR will constitute a violation of this Contract.

SECTION 9. ALTERATIONS IN DETAIL.

COUNTY reserves the right to make, at any time during the progress of the work to be done, such changes or alterations as may be found to be necessary or desirable; provided, however, such changes or alterations shall not change the character of the work to be done, nor increase the cost thereof unless the change and cost increase is approved in writing by the CONTRACTOR prior to the execution of the additional work. Any changes or alterations so made shall not invalidate this Contract nor release the surety of CONTRACTOR on the Performance Bond, and CONTRACTOR agrees to do the work as changed or altered as if it had been a part of the original Contract.

SECTION 10. DISCHARGE OF EMPLOYEES.

Any employee of the CONTRACTOR whose work is unsatisfactory to the County Representative shall be discharged or reassigned by CONTRACTOR and not allowed to work on the job again without written consent of the County Representative.

SECTION 11. PUBLIC CONVENIENCE.

The project is located in a campus situation which includes a 911 Emergency Facility and a Fire Service Training Facility. During the progress of the work, the convenience of the official personnel must be provided for as far as practical. Due to the role of the County, City, Fire District and 911 District, there is a need for personnel to access the site for official purposes. The CONTRACTOR shall accommodate any need for access, and circulation for any official act by these agencies.

SECTION 12. PROTECTION OF PROPERTY AND PERSONS.

a. The CONTRACTOR shall, at his/her own expense, provide, erect and maintain at all times during the progress of the work, suitable barricades, fences, signs, or other adequate protection, and shall

provide and maintain such lights, signals and flaggers as may be necessary or as may be ordered by the County Representative to insure the safety of the public, and the protection of the work and those engaged in connection with the work.

b. The CONTRACTOR shall continuously maintain adequate protection of all areas near the work from damage and shall protect the COUNTY'S property from unintended loss arising in connection with this agreement. CONTRACTOR shall adequately protect adjacent property as provided by law, regulations and industry practice. The CONTRACTOR shall make good any such damage, injury or loss, except such as may be directly caused by agents or employees of the COUNTY.

c. The CONTRACTOR shall protect from damage to all buildings, trees, shrubs, lawns and all landscape work indicated or directed to remain. Any such property damaged shall be repaired or replaced at the CONTRACTOR'S expense.

SECTION 13. CLEANING UP.

The CONTRACTOR shall remove all debris and excess materials from the work site.

Upon the completion of the work, and before acceptance and final payment shall be made, the CONTRACTOR shall clean up and remove from the work site, all surplus and discarded materials, rubbish and debris of all kind. CONTRACTOR shall restore in an acceptable manner all property, both public and private which has been damaged during the prosecution of the work, and shall leave the work site in a neat and orderly condition to the satisfaction of the County Representative.

SECTION 14. EXTENSION OF TIME.

With reference to the Contract time originally given in the proposal and Contract, the CONTRACTOR can request the COUNTY to extend the original time limit. If the COUNTY agrees that an extension should be granted because of an unforeseen reason, the original time limit will be extended by the amount of days the CONTRACTOR is prevented from performing work under the Contract for one or another of the following causes or reasons:

a. Acts of God, such as an earthquake, flood, cloudburst, tornado, hurricane or other phenomenon of nature of catastrophic proportions or intensity.

b. Epidemics, quarantine restrictions, strikes, labor disputes, freight embargoes and acts of public enemy.

c. Periods when the work is temporarily suspended upon written order of the County Representative.

SECTION 15. ADJUSTMENT OF CONTRACT.

Notwithstanding any other provisions of this Contract, COUNTY may, pursuant to Oregon law, make adjustments in the Contract when material effect upon the work to be done under the Contract is caused by major catastrophes or disasters resulting from acts of God, windstorms, floods, fire, or other acts of nature, which are beyond the control of the CONTRACTOR and in no way connected with negligent acts or omissions of CONTRACTOR or the representatives, employees or assignees of CONTRACTOR. Such adjustments may be made to place the parties in their original status under the Contract, insofar as possible, provided, however, that any loss or cost to CONTRACTOR is in no way recoverable from third parties through action or otherwise by CONTRACTOR, and provided further that CONTRACTOR make written application to COUNTY within thirty (30) days after the event.

SECTION 16. CAUSES BEYOND CONTROL.

In the event CONTRACTOR is prevented by cause or causes beyond control of CONTRACTOR from performing any obligation of this Contract, such non-performance shall not be deemed to be a breach of this Contract such as to render CONTRACTOR liable for damages therefor or to give rise to the cancellation thereof; provided, that if and when such cause or causes shall cease to prevent such performance, CONTRACTOR shall exercise all reasonable diligence to resume and complete performance of such obligation with the least possible delay. By "cause or causes beyond control" as used in this section is meant any one or more of the following causes affecting operations of CONTRACTOR: fire or other casualties and accidents; strikes, riots and civil commotions; wars and acts of public enemies; storms, floods and other unusual climatic conditions, including droughts and low humidity, or orders of duly constituted public, authorities; and acts of God and other similar circumstances beyond the control of the CONTRACTOR.

SECTION 17. DEFAULT.

If at any time the CONTRACTOR shall violate any of the provisions of this Contract, or shall neglect or refuse to prosecute the work with reasonable diligence, or should refuse or neglect to perform the work according to the Contract Documents, COUNTY may give CONTRACTOR a written notice setting forth with reasonable particularity the default, deficiency or failure to comply with the Contract or this clause. In addition, the COUNTY may suspend any further operations of CONTRACTOR under this Contract, except such operations as may be necessary to remedy any violations. If the CONTRACTOR fails to correct such deficiency within a period of ten (10) calendar days after receipt of such notice, or, in the event corrective work shall take a longer period of time, to begin corrective measures within ten (10) calendar days and proceed thereafter with due diligence, the CONTRACTOR shall be in default. COUNTY shall thereafter have the right, without further notice to the CONTRACTOR, and without voiding the Contract to take possession of all materials, to complete work, and to charge the cost of so doing against CONTRACTOR. If such expenses shall exceed the balance due the CONTRACTOR, CONTRACTOR and Surety on its bond provided for herein agree to pay the excess to COUNTY. The determination by the County Representative of a question as to whether any of the terms of the Contract or Specifications have been violated, or have not been performed satisfactorily, shall be appealable to the Board of County Commissioners whose decision shall be conclusive upon the CONTRACTOR and his or her surety, and any and all other parties who may have any interest in the Contract or any portion thereof.

The foregoing provisions of this section shall be in addition to all other rights and remedies available to the COUNTY under law.

SECTION 18. SUBCONTRACTING.

With the exception of the fabrication, supply and delivery of the manufactured structure, no portion of the Contract shall be sublet, subcontracted or performed by others than the CONTRACTOR'S own organization except with the written consent of the COUNTY. Requests for permission to sublet or subcontract any portion of the Contract or to have any of the work performed by others than his/her own organization shall be in writing and accompanied by a showing that the organization, which will perform the work, is particularly experienced and equipped for such work. The CONTRACTOR shall perform with his/her own organization contract work amounting to not less than fifty (50%) percent of the amount of the Contract as awarded. The term "CONTRACTOR'S OWN_ORGANIZATION" shall be construed to include only workers employed and paid directly by CONTRACTOR and equipment owned or rented by him/her. The CONTRACTOR shall, prior to commencing work; notify the County Representative in writing of the names of any subcontractors and supplier of materials for the project. If subcontractors are to be used on this Contract, such subcontractors shall be bound by all of the provisions of this Contract including the requirement to supply certificates of insurance as provided in Section 7 above. Other subcontracting provisions are found in ORS 279C.370 and are listed below

SECTION 19. LIABILITY OF PUBLIC OFFICIALS.

In carrying out of any of the provisions of this Contract, or in exercising any power of authority granted under this Contract, there will be no liability on the Columbia County Board of Commissioners, members of said board and its officers, agents, employees and authorized representatives of the Board, either personally or as officials of the COUNTY, it always being understood that in such matters they act solely as agents and representatives of Columbia County.

SECTION 20. LAWS, REGULATIONS AND ORDERS.

CONTRACTOR at all times shall observe and comply with all federal and state laws, administrative rules and regulations issued there under, and local ordinances, orders, rules and regulations, which in any manner affect the activities of CONTRACTOR under this Contract, and further, shall observe and comply with all orders or decrees as exist at present and those which may be enacted later by bodies of tribunals having any jurisdiction or authority over such activities of CONTRACTOR.

Payment for work under this Contract after June 30 of any given year is subject to funds being budgeted by the Columbia County Budget Committee. This Contract is subject to the provisions of ORS Chapter 279C (Public Contracting), ORS Chapter 294 (Local Budget Law), Article XI, Section 10 of the Oregon Constitution and any and all Oregon statutes and Columbia County ordinances and rules relating to public contracting.

SECTION 21. SUSPENSION OF ACTIVITIES.

COUNTY shall have the authority to suspend, wholly or in part, the activities of CONTRACTOR and assignees of CONTRACTOR under this contract for such period or periods of time as COUNTY may deem necessary to protect the public interest.

SECTION 22. ADVANCE PAYMENTS TO CONTRACTOR.

Upon request by CONTRACTOR to be paid for completion of part of the total work to be done hereunder, COUNTY may make such payment, if in the sole opinion of COUNTY the work has been satisfactorily completed and the quantity of work can be verified.

The request from CONTRACTOR for such advance payment must be in writing and include a statement showing the quantity of work completed and the amount payable for such work at the contract unit price.

SECTION 23. NON-DISCRIMINATION.

The CONTRACTOR shall comply with the provisions of Chapter 659, Oregon Revised Statutes, which prohibits unlawful employment practices and discrimination by employers against any employee or applicant for employment because of race, religion, color, sex, national origin, marital status or age, or because of an expunged juvenile record. Particular reference is made to ORS 659.030 which states that it is an unlawful employment practice for an employer, because of race, religion, color, sex, national origin, marital status or age if the individual is 18 years of age or older, or because of an expunged juvenile record, to refuse to hire or employ, or to bar or discharge from employment such individual or to discriminate against such individual in compensation or in terms, conditions, or privileges of employment.

SECTION 24. LIQUIDATED DAMAGES.

In the event all of the work required under this Contract is not completed within the time specified in the Contract or any lawful extension thereof, CONTRACTOR agrees that damage will be sustained by

COUNTY as a result, but to definitely determine and ascertain the actual amount of damages either before or after the occurrence thereof would be difficult and impractical. The sum stated herein for liquidated damages for each and every calendar day that completion of the work is delayed beyond the prescribed final completion date or lawful extension thereof is hereby stipulated as being the nearest and most exact measure of such damage that can be fixed at this or any subsequent time. When assessed by the COUNTY, CONTRACTOR shall become liable for and pay to the COUNTY as liquidated damages and not as a penalty said sum per day for each and every calendar day of delay. It is agreed by the parties to the Contract, that the amount of liquidated damages shall be One Thousand Dollars (\$1000) per day for each and every calendar day of such delay. The amount of such liquidated damages may be deducted by the contracting agency from any compensation due or that may become due under this Contract and the CONTRACTOR and his or her surety shall be liable for any excess damages due.

In the event CONTRACTOR is directed to perform extra or additional work, the number of calendar days specified in the Contract shall be extended by an amount determined by application to the original number of calendar days of the ratio that the value of the extra additional work bears to the original contract value.

Liquidated damages shall not be assessed for any delays caused by the default, act or omission of COUNTY, the State, public enemy or act of God, or as provided in Sections 14, 16, and/or 21 of the Special Provisions, providing CONTRACTOR shall within ten (10) days subsequent to the beginning of any such delay, file a written report as to the cause thereof with the County Representative, whose findings in connection therewith shall be final and conclusive.

SECTION 25. TIME OF ESSENCE.

The parties agree that time is of the essence in this agreement. Work shall take place beginning upon notice to proceed and ending no later than September 20, 2013.

12. GRANT REQUIREMENTS.

a. The Project will be funding in part with a grant from the Department of Homeland Security, FEMA, and administered by the Oregon State Department of Emergency Management EOC Grant #10-1-76 and Columbia County (the “Grant”).

b. The successful bidder will be required to comply with the following Grant requirements and to ensure that all subcontractors comply with the following Grant requirements.

i. Access to Records. OEM, Oregon Secretary of State, Office of Inspector General (OIG), Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA), or any of their authorized representatives, shall have the right of access to any pertinent books, documents, papers, or other records of the County, and any of its contractors or subcontractors, which are pertinent to the Grant, in order to make audits, examinations, excerpts, and transcripts. The right of access is not limited to the required retention period but shall last as long as the records are retained.

ii. Procurement Standards. The successful bidder shall agree to the extent it uses subcontractors, it will use small, minority, women owned or disadvantaged business concerns and subcontractors to the extent practicable.

iii. Indemnification. The successful bidder will be required to defend, save, hold harmless and indemnify the State of Oregon, OEM, and their officers, employees, agents, and members, from all claims, suits or actions of whatsoever nature resulting from or arising out of the activities of Contractor. The successful bidder shall require any subcontractors to provide the same indemnification. The successful bidder and its subcontractors shall provide liability insurance that names the State of Oregon, OEM, and their officers, agents, employees and members as Additional Insureds with respect to their work on the Project.

iv. Non-discrimination. The successful bidder and all of its subcontractors shall certify that no person shall be excluded from participation in, denied the benefits of, subjected to discrimination under, or denied employment in connection with any activity funded under the Grant on the basis of race, color, age, religion, national origin, disability, or gender. The successful bidder and all of its subcontractors shall assure compliance with all applicable nondiscrimination laws, including but not limited to:

- * Nondiscrimination Regulation 44 CFR Part 7;
- * Title II of the Americans with Disabilities Act (ADA) of 1990;

In the event that a Federal or State court or administrative agency makes a finding of discrimination after a due process hearing on the grounds of race, color, age, religion, national origin, disability or gender against the successful bidder or subcontractor, the successful bidder shall immediately forward a copy of the finding to the County.

v. The successful bidder and any of its subcontractors shall certify that an equal employment opportunity program (“Program”) will be in effect on or before the effective date of the contract. A copy of the Program shall be submitted to the County with the executed contracts.

vi. Human Trafficking. The successful bidder and its employees may not engage in severe forms of trafficking in persons during the period of time the Grant is in effect; procure a commercial sex act during the same period, or use forced labor in the performance of the Project or subcontracts. The successful bidder shall be required to notify the County immediately of any information the successful bidder receives from any source alleging a violation of any of the above prohibitions. The County’s right to terminate unilaterally is in addition to all other remedies under the Contract. The successful bidder must include these requirements in any subcontract made in the performance of the Project.

COLUMBIA COUNTY EMERGENCY OPERATIONS CENTER

TABLE OF CONTENTS

02/27/2013

DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS – See County Request for Bid.

DIVISION 01 - GENERAL REQUIREMENTS – See County General Conditions

01 1100 Summary of Work

DIVISION 03 - CONCRETE

03 3000 Cast-in-Place Concrete (Limited Applications)
03 4816 Precast Concrete Splash Blocks

DIVISION 05 - METALS

05 5110 Stainless Steel Handrails

DIVISION 06 - WOOD, PLASTICS AND COMPOSITES

06 1100 Framing and Sheathing
06 4100 Architectural Wood Casework
06 4600 Wood Trim

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

07 2115 Batt Insulation
07 2600 Vapor Retarders
07 2800 Moisture Barriers
07 3113 Asphalt Shingles
07 4646 Mineral-Fiber Cement Siding
07 6200 Sheet Metal Flashing and Trim
07 6500 Flexible Flashings
07 9200 Joint Sealers

DIVISION 08 - OPENINGS

08 1113 Hollow Metal Doors and Frames
08 1416 Flush Wood Doors
08 5300 Plastic Windows
08 7100 Door Hardware
08 8000 Glazing

DIVISION 09 - FINISHES

09 2900 Gypsum Board
09 5100 Acoustical Ceilings
09 6513 Resilient Base
09 6516 Resilient Sheet Flooring
09 6816 Sheet Carpeting
09 7733 Sanitary Wall Panels
09 9100 Painting

TABLE OF CONTENTS

02/27/2013

DIVISION 10 - SPECIALTIES

10 1100	Visual Display Boards
10 1423	Signage
10 2813	Toilet Accessories
10 4413	Fire Extinguishers and Cabinets
10 5113	Metal Lockers
10 7500	Flagpoles

DIVISION 11 - EQUIPMENT

11 3100	Appliances

DIVISION 12 - FURNISHINGS

12 2113	Blinds & Shades

DIVISION 22 - PLUMBING

22 1000	Plumbing
22 4000	Plumbing Fixture Schedule

DIVISION 31 - EARTHWORK

31 2200	Grading
31 2300	Excavation and Fill

DIVISION 32 - EXTERIOR IMPROVEMENTS

32 1216	Asphalt Paving
32 1313	Concrete Paving
32 1713	Parking Bumpers
32 1723	Pavement Markings
32 3113	Chain Link Fences and Gates
32 9300	Trees, Shrubs, and Ground Cover

END OF TABLE OF CONTENTS

**SECTION 01 1100
SUMMARY OF WORK**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Project description.
 - 2. Work by Others.
 - 3. Contractor's use of site and premises.
 - 4. Owner furnished Products.

1.2 PROJECT DESCRIPTION

- A. Work of this Project is described as the fabrication and installation of a new prefabricated modular one story facility entitled Columbia County Emergency Operations Center located on McNulty Way adjacent to the Lee Broadbent Training Center and the Columbia County 911 Center at 58611 McNulty Way, St Helens Oregon 97051. The building is classified as Occupancy Category – IV – a Critical Facility.
- B. The work includes but is not limited to:
 - 1. The design, fabrication, and installation of a pre-fabricated modular building including all HVAC, electrical, plumbing, and fire protection and any other elements as required by the building code as an Essential Facility.
 - 2. Supply and installation of an appropriately sized emergency generator, automatic transfer switch, and related controls for the building.
 - 3. Site Work including excavation and installation of footings and hold-downs designed for the modular building, an ADA ramp and stairs, underground connections to public utilities adjacent to the site including power, sewer, water and telecom, installation of concrete walkways and curbs, parking striping and accessories, fencing, and landscaping.
 - 4. Installation of one rooftop radio antenna and (2) self-supporting radio towers, including footings, HAM radio antennas, cabling, and protective bollards.
 - 5. Contractor shall be responsible for providing all design documentation by a designated registered design professional as required by the Oregon Structural Specialty Code, and applicable sections of the Oregon Revised Statutes including but not limited to ORS 445, ORS 446, ORS 671, and ORS 672, and local ordinances.
 - 6. The modular building shall be fabricated by a licensed prefabricated structure fabricator and inspected as required by the Oregon Structural Specialty Code for PreFabricated Structures and ORS 445.
 - 7. The modular building shall be installed in St Helens Oregon.
- C. The Project will be constructed under a single contract.

1.3 WORK BY OTHERS

- A. Separate Contracts:
 - 1. The Owner may execute contracts for additional work at the site, that is excluded from the work of this Contract, and that includes:
 - a. None at this time, if the Owner does execute separate contracts for additional work the Owner will notify the Contractor in writing.
 - 2. Work under separate contract may be concurrent with Work of this Contract.
 - 3. Cooperate with the Owner and separate contractors to accommodate this requirement.

1.4 CONTRACTOR'S USE OF SITE AND PREMISES

- A. Contractor will conform to Owner's Security Requirements for access to the construction area.
- B. Contractor shall have complete and exclusive use of construction area for execution of the Work.
- C. Confine operations to construction area.
- D. Limit use of site and premises to allow for:
 - 1. Use of adjacent premises by employees and visitors to adjacent property.
 - 2. Work by separate contractors.
- E. Assume full responsibility for protection and safekeeping of products under this Contract stored on site.
- F. Obtain and pay for use of any additional storage or work areas needed for operations.
- G. Do not use or store hazardous or flammable materials on premises without Owner's approval; follow requirements of governing authorities having jurisdiction over the work.
- H. Prohibit smoking within interior spaces.

1.5 OWNER FURNISHED PRODUCTS

- A. Products that will be furnished and paid for by Owner are as follows:
 - 1. Radio Antennas, See Drawings.
- B. Owner's Responsibilities:
 - 1. Arrange for and deliver necessary Shop Drawings, Product Data and Samples to Contractor.
 - 2. Arrange and pay for product delivery to site, in accordance with Progress Schedule.
 - 3. Deliver supplier's bill of materials to Contractor.
 - 4. Inspect deliveries jointly with Contractor.
 - 5. Submit claims for transportation damage.
 - 6. Arrange for replacement of damaged, defective, and missing items.
 - 7. Arrange for manufacturers' warranties, service, and inspections, as required.
- C. Contractor's Responsibilities:
 - 1. Designate delivery date for each product in Progress Schedule.
 - 2. Review Shop Drawings, Product Data and Samples. Submit to Architect with notification of any discrepancies or problems anticipated in use of product.
 - 3. Receive and unload products at site.
 - 4. Promptly inspect products jointly with Owner; record shortages, damage, and defective items.
 - 5. Handle products at site, including uncrating and storage.
 - 6. Protect products from exposure to elements and from damage.
 - 7. Assemble, install, connect, adjust, and finish products, as stipulated in respective specification section.
 - 8. Repair or replace any items damaged by Contractor.

PART 2 PRODUCTS

Not used

PART 3 EXECUTION

Not used

END OF SECTION

SECTION 0 3000
CAST-IN-PLACE CONCRETE
(LIMITED APPLICATIONS)

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section specifies cast-in-place concrete, including reinforcement, concrete materials, mixture design, placement procedures, and finishes, for noncritical applications of concrete and for projects using small quantities of concrete.
- B. Related Sections include the following:
 - 1. Section 32 2300 Excavation & Fill.
 - 2. Section 32 1313 Concrete Paving.

1.3 SUBMITTALS

- A. General: In addition to the following, comply with submittal requirements in ACI 301.
- B. Foundation Design Documentation by delegated design professional.
- C. Product Data: For each type of product indicated.
- D. Design Mixtures: For each concrete mixture.

1.4 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.
- B. Source Limitations: Obtain each type of cement of the same brand from the same manufacturer's plant, obtain aggregate from one source, and obtain admixtures through one source from a single manufacturer.
- C. Comply with ACI 301, "Specification for Structural Concrete," including the following sections, unless modified by requirements in the Contract Documents:
 - 1. "General Requirements."
 - 2. "Formwork and Formwork Accessories."

3. "Reinforcement and Reinforcement Supports."
4. "Concrete Mixtures."
5. "Handling, Placing, and Constructing."

D. Comply with ACI 117, "Specifications for Tolerances for Concrete Construction and Materials."

PART 2 - PRODUCTS

2.1 FORMWORK

- A. Furnish formwork and formwork accessories according to ACI 301.

2.2 STEEL REINFORCEMENT

- A. Reinforcing Bars: ASTM A 615/A 615M, Grade 60 (Grade 420), deformed.
- B. Plain-Steel Wire: ASTM A 82, as drawn.
- C. Plain-Steel Welded Wire Reinforcement: ASTM A 185, fabricated from as-drawn steel wire into flat sheets.
- D. Deformed-Steel Welded Wire Reinforcement: ASTM A 497, flat sheet.

2.3 CONCRETE MATERIALS

- A. Cementitious Material: Use the following cementitious materials, of the same type, brand, and source throughout Project:
1. Portland Cement: ASTM C 150, Type I, II, or III and may be Supplemented with the following:
 - a. Fly Ash: ASTM C 618, Class C, F, or N conforming with AASHTO M 295
- B. Normal-Weight Aggregate: ASTM C 33, graded, 1-1/2-inch (38-mm) nominal maximum aggregate size.
- C. Water: **potable**.

2.4 ADMIXTURES

- A. Air-Entraining Admixture: ASTM C 260.
- B. Chemical Admixtures: Provide admixtures certified by manufacturer to be compatible with other admixtures and that will not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride.
1. Water-Reducing Admixture: ASTM C 494/C 494M, Type A.
 2. Retarding Admixture: ASTM C 494/C 494M, Type B.

CAST-IN-PLACE CONCRETE
(LIMITED APPLICATIONS)
03 3000 - Page 2 of 7

3. Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type D.
4. High-Range, Water-Reducing Admixture: ASTM C 494/C 494M, Type F.
5. High-Range, Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type G.
6. Plasticizing and Retarding Admixture: ASTM C 1017/C 1017M, Type II.

2.5 RELATED MATERIALS

- A. Vapor Retarder: Multi-ply reinforced polyethylene sheet, ASTM E 1745, Class C, or polyethylene sheet, ASTM D 4397, not less than 10 mils (0.25 mm) thick.
- B. Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber, or ASTM D 1752, cork or self-expanding cork.

2.6 CURING MATERIALS

- A. Evaporation Retarder: Waterborne, monomolecular film forming; manufactured for application to fresh concrete.
- B. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.
- C. Water: Potable.
- D. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B.
- E. Clear, Waterborne, Membrane-Forming Curing and Sealing Compound: ASTM C 1315, Type 1, Class A.

2.7 CONCRETE MIXTURES

- A. Comply with ACI 301 requirements for concrete mixtures.
- B. Normal-Weight Concrete: Prepare design mixes, proportioned according to ACI 301, as follows:
 1. Minimum Compressive Strength: 3000 psi (24.1 MPa) at 28 days.
 2. Maximum Water-Cementitious Materials Ratio: 0.50.
 3. Slump Limit: 5 inches or less.
 4. Air Content: Maintain within range permitted by ACI 301. Do not allow air content of floor slabs to receive troweled finishes to exceed 3 percent.

2.8 CONCRETE MIXING

- A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94/C 94M, and furnish batch ticket information.
 1. When air temperature is above 90 deg F (32 deg C), reduce mixing and delivery time to 60 minutes.

- B. Project-Site Mixing: Measure, batch, and mix concrete materials and concrete according to ASTM C 94/C 94M. Mix concrete materials in appropriate drum-type batch machine mixer.
 - 1. For mixer capacity of 1 cu. yd. (0.76 cu. m) or smaller, continue mixing at least 1-1/2 minutes, but not more than 5 minutes after ingredients are in mixer, before any part of batch is released.

PART 3 - EXECUTION

3.1 FORMWORK

- A. Design, construct, erect, brace, and maintain formwork according to ACI 301.

3.2 VAPOR RETARDERS

- A. Install, protect, and repair vapor retarders according to ASTM E 1643; place sheets in position with longest dimension parallel with direction of pour.
 - 1. Lap joints 6 inches (150 mm) and seal with manufacturer's recommended adhesive or joint tape.

3.3 STEEL REINFORCEMENT

- A. Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.
 - 1. Do not cut or puncture vapor retarder. Repair damage and reseal vapor retarder before placing concrete.

3.4 JOINTS

- A. General: Construct joints true to line with faces perpendicular to surface plane of concrete.
- B. Construction Joints: Locate and install so strength and appearance of concrete are not impaired, at locations indicated or as approved by Architect.
- C. Contraction Joints in Slabs-on-Grade: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of concrete thickness, as follows:
 - 1. Grooved Joints: Form contraction joints after initial floating by grooving and finishing each edge of joint with groover tool to a radius of 1/8 inch (3.2 mm). Repeat grooving of contraction joints after applying surface finishes. Eliminate groover marks on concrete surfaces.
 - 2. Sawed Joints: Form contraction joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 1/8-inch- (3.2-mm-) wide joints into concrete when cutting action will not tear, abrade, or otherwise damage surface and before concrete develops random contraction cracks.

- D. Isolation Joints: Install joint-filler strips at junctions with slabs-on-grade and vertical surfaces, such as column pedestals, foundation walls, grade beams, and other locations, as indicated.
 - 1. Extend joint fillers full width and depth of joint, terminating flush with finished concrete surface, unless otherwise indicated.

3.5 CONCRETE PLACEMENT

- A. Comply with ACI 301 for measuring, batching, mixing, transporting, and placing concrete.
- B. Before test sampling and placing concrete, water may be added at Project site, subject to limitations of ACI 301.
- C. Do not add water to concrete during delivery, at Project site, or during placement.
- D. Consolidate concrete with mechanical vibrating equipment.

3.6 FINISHING FORMED SURFACES

- A. Rough-Formed Finish: As-cast concrete texture imparted by form-facing material with tie holes and defective areas repaired and patched. Remove fins and other projections exceeding **1/2 inch (13 mm)**.
 - 1. Apply to concrete surfaces not exposed to public view.
- B. Smooth-Formed Finish: As-cast concrete texture imparted by form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams. Repair and patch tie holes and defective areas. Remove fins and other projections exceeding **1/8 inch (3 mm)**.
 - 1. Apply to concrete surfaces exposed to public view.
- C. Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces, unless otherwise indicated.

3.7 FINISHING UNFORMED SURFACES

- A. General: Comply with ACI 302.1R for screeding, restraightening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.
- B. Screed surfaces with a straightedge and strike off. Begin initial floating using bull floats or darbies to form a uniform and open-textured surface plane before excess moisture or bleedwater appears on surface.
 - 1. Do not further disturb surfaces before starting finishing operations.
- C. Trowel Finish: Apply a hard trowel finish to surfaces indicated and to floor and slab surfaces exposed to view or to be covered with resilient flooring, carpet, ceramic or quarry tile set over a cleavage membrane, paint, or another thin film-finish coating system.

- D. Nonslip Broom Finish: Apply a nonslip broom finish to surfaces indicated and to exterior concrete platforms, steps, and ramps. Immediately after float finishing, slightly roughen trafficked surface by brooming with fiber-bristle broom perpendicular to main traffic route.

3.8 CONCRETE PROTECTING AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and with ACI 301 for hot-weather protection during curing.
- B. Evaporation Retarder: Apply evaporation retarder to concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h (1 kg/sq. m x h) before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.
- C. Begin curing after finishing concrete but not before free water has disappeared from concrete surface.
- D. Curing Methods: Cure formed and unformed concrete for at least seven days by one or a combination of the following methods:
 - 1. Moisture Curing: Keep surfaces continuously moist for not less than seven days with the following materials:
 - a. Water.
 - b. Continuous water-fog spray.
 - c. Absorptive cover, water saturated and kept continuously wet. Cover concrete surfaces and edges with 12-inch (300-mm) lap over adjacent absorptive covers.
 - 2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches (300 mm), and sealed by waterproof tape or adhesive. Cure for not less than seven days. Immediately repair any holes or tears during curing period using cover material and waterproof tape.
 - 3. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating and repair damage during curing period.
 - 4. Curing and Sealing Compound: Apply uniformly to floors and slabs indicated in a continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Repeat process 24 hours later and apply a second coat. Maintain continuity of coating and repair damage during curing period.

3.9 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified independent testing and inspecting agency to sample materials, perform tests, and submit test reports during concrete placement according to requirements specified in this Article.
- B. Tests: Perform according to ACI 301.

1. Testing Frequency: One composite sample shall be obtained for each 50 cu. yd. (76 cu. m) or fraction thereof of each concrete mix placed each day.

3.10 REPAIRS

- A. Remove and replace concrete that does not comply with requirements in this Section.

END OF SECTION

SECTION 03 4816

PRECAST CONCRETE SPLASH BLOCKS

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Precast concrete splash blocks for downspouts.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 SUBMITTALS

- A. Submittals for Review:
 - 1. Manufacturer's Product Data including unit configuration and dimensions.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Concrete Mix:
 - 1. Minimum 5000 psi compressive strength at 28 days, air entrained to 5 to 7 percent.

2.2 FABRICATION

- A. Use rigid molds, constructed to maintain precast units uniform in shape, size and finish. Maintain consistent quality during manufacture.
- B. Cure units to develop concrete quality, and to minimize appearance blemishes including non uniformity, staining, and surface cracking.
- C. Minor patching in plant is acceptable, providing appearance of units is not impaired.
- D. Nominal Size: 4 inches high x 16 inches wide x 30 inches long.
- E. Provide raised lip at sides and rear edge.
- F. Finish: Manufacturer's standard.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Place splash blocks under each downspout.
- B. Set level, on firm bearing.

END OF SECTION

SECTION 0 5110

STAINLESS STEEL PIPE AND TUBE RAILINGS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Stainless-steel pipe and tube railings.
- B. Related Sections include the following:
 - 1. Division 6 Rough Carpentry for wood blocking for anchoring railings.

1.3 PERFORMANCE REQUIREMENTS

- A. General: In engineering railings to withstand structural loads indicated, determine allowable design working stresses of railing materials based on the Oregon Structural Specialty Code (latest edition)
- B. Structural Performance: Provide railings capable of withstanding the effects of gravity loads and other loads indicated for railing within the limits of those specified in the Oregon Structural Specialty Code (latest edition).
- C. Control of Corrosion: Prevent galvanic action and other forms of corrosion by insulating metals and other materials from direct contact with incompatible materials.

1.4 SUBMITTALS

- A. Product Data: For the following:
 - 1. Manufacturer's product lines of mechanically connected railings.
 - 2. Grout, anchoring cement, and paint products.
- B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.
 - 1. For installed products indicated to comply with design loads, include structural analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
- C. Samples for Initial Selection: For products involving selection of color, texture, or design, including mechanical finishes on stainless steel.

D. Samples for Verification: For each type of exposed finish required.

1. Sections of each distinctly different linear railing member, including handrails, top rails, posts, and balusters.
2. Fittings and brackets.
3. Assembled Sample of railing system, made from full-size components, including top rail, post, handrail, and infill. Sample need not be full height.
 - a. Show method of connecting members at intersections.

1.5 QUALITY ASSURANCE

- A. Source Limitations: Obtain each type of railing through one source from a single manufacturer.
- B. Welding: Qualify procedures and personnel according to the following:
 1. AWS D1.6, "Structural Welding Code--Stainless Steel."

1.6 PROJECT CONDITIONS

- A. Field Measurements: Verify actual locations of walls and other construction contiguous with railings by field measurements before fabrication and indicate measurements on Shop Drawings.

1.7 COORDINATION AND SCHEDULING

- A. Coordinate installation of anchorages for railings. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.
- B. Schedule installation so wall attachments are made only to completed walls. Do not support railings temporarily by any means that do not satisfy structural performance requirements.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 1. Stainless-Steel Pipe and Tube Railings:
 - a. Blum, Julius & Co., Inc.
 - b. Paragon Aquatics; Division of Pentair Pool Products, Inc.
 - c. Pisor Industries, Inc.
 - d. Stainless Fabricators, Inc.
 - e. Sterling Dula Architectural Products, Inc.
 - f. Tubular Specialties Manufacturing, Inc.
 - g. Tuttle Aluminum & Bronze.

- h. Wagner, R & B, Inc.; a division of the Wagner Companies.

2.2 METALS, GENERAL

- A. Metal Surfaces, General: Provide materials with smooth surfaces, without seam marks, roller marks, rolled trade names, stains, discolorations, or blemishes.
- B. Brackets, Flanges, and Anchors: Cast or formed metal of same type of material and finish as supported rails, unless otherwise indicated.

2.3 STAINLESS STEEL

- A. Tubing: ASTM A 554, Grade MT 304.
- B. Pipe: ASTM A 312/A 312M, Grade TP 304.
- C. Castings: ASTM A 743/A 743M, Grade CF 8 or CF 20]
- D. Plate and Sheet: ASTM A 666, Type 304.
- E. General: Provide the following:
 - 1. Stainless-Steel Railings: Type 304 stainless-steel fasteners.
- F. Fasteners for Anchoring Railings to Other Construction: Select fasteners of type, grade, and class required to produce connections suitable for anchoring railings to other types of construction indicated.
- G. Fasteners for Interconnecting Railing Components:
 - 1. Provide concealed fasteners for interconnecting railing components and for attaching them to other work, unless exposed fasteners are unavoidable or are the standard fastening method for railings indicated.

2.4 MISCELLANEOUS MATERIALS

- A. Welding Rods and Bare Electrodes: Select according to AWS specifications for metal alloy welded.
- B. Nonshrink, Nonmetallic Grout: Factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107. Provide grout specifically recommended by manufacturer for interior and exterior applications.
- C. Anchoring Cement: Factory-packaged, nonshrink, nonstaining, hydraulic-controlled expansion cement formulation for mixing with water at Project site to create pourable anchoring, patching, and grouting compound.
 - 1. Water-Resistant Product: At exterior locations provide formulation that is resistant to erosion from water exposure without needing protection by a sealer or waterproof coating and that is recommended by manufacturer for exterior use.

2.5 FABRICATION

- A. General: Fabricate railings to comply with requirements indicated for design, dimensions, member sizes and spacing, details, finish, and anchorage, but not less than that required to support structural loads.
- B. Assemble railings in the shop to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordinated installation. Use connections that maintain structural value of joined pieces.
- C. Cut, drill, and punch metals cleanly and accurately. Remove burrs and ease edges to a radius of approximately **1/32 inch (1 mm)**, unless otherwise indicated. Remove sharp or rough areas on exposed surfaces.
- D. Form work true to line and level with accurate angles and surfaces.
- E. Fabricate connections that will be exposed to weather in a manner to exclude water. Provide weep holes where water may accumulate.
- F. Cut, reinforce, drill, and tap as indicated to receive finish hardware, screws, and similar items.
- G. Connections: Fabricate railings with welded connections, unless otherwise indicated.
- H. Welded Connections: Cope components at connections to provide close fit, or use fittings designed for this purpose. Weld all around at connections, including at fittings.
 - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
 - 2. Obtain fusion without undercut or overlap.
 - 3. Remove flux immediately.
 - 4. At exposed connections, finish exposed surfaces smooth and blended so no roughness shows after finishing and welded surface matches contours of adjoining surfaces.
- I. Form changes in direction as follows:
 - 1. By bending or by inserting prefabricated elbow fittings.
- J. Form simple and compound curves by bending members in jigs to produce uniform curvature for each repetitive configuration required; maintain cross section of member throughout entire bend without buckling, twisting, cracking, or otherwise deforming exposed surfaces of components.
- K. Close exposed ends of railing members with prefabricated end fittings.
- L. Provide wall returns at ends of wall-mounted handrails, unless otherwise indicated. Close ends of returns unless clearance between end of rail and wall is **1/4 inch (6 mm)** or less.
- M. Brackets, Flanges, Fittings, and Anchors: Provide wall brackets, flanges, miscellaneous fittings, and anchors to interconnect railing members to other work, unless otherwise indicated.
 - 1. At brackets and fittings fastened to plaster or gypsum board partitions, provide fillers made from crush-resistant material, or other means to transfer wall loads through wall finishes to structural supports and prevent bracket or fitting rotation and crushing of substrate.

- N. Provide inserts and other anchorage devices for connecting railings to concrete or masonry work. Fabricate anchorage devices capable of withstanding loads imposed by railings. Coordinate anchorage devices with supporting structure.
- O. For railing posts set in concrete, provide steel sleeves not less than 6 inches (150 mm) long with inside dimensions not less than 1/2 inch (13 mm) greater than outside dimensions of post, with steel plate forming bottom closure.

2.6 FINISHES, GENERAL

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.
- D. Provide exposed fasteners with finish matching appearance, including color and texture, of railings.

2.7 STAINLESS-STEEL FINISHES

- A. Remove tool and die marks and stretch lines or blend into finish.
- B. Grind and polish surfaces to produce uniform, directionally textured, polished finish indicated, free of cross scratches. Run grain with long dimension of each piece.
- C. Directional Satin Finish: No. 4.
- D. When polishing is completed, passivate and rinse surfaces. Remove embedded foreign matter and leave surfaces chemically clean.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine plaster and gypsum board assemblies, where reinforced to receive anchors, to verify that locations of concealed reinforcements have been clearly marked for Installer. Locate reinforcements and mark locations if not already done.

3.2 INSTALLATION, GENERAL

- A. Fit exposed connections together to form tight, hairline joints.

- B. Perform cutting, drilling, and fitting required for installing railings. Set railings accurately in location, alignment, and elevation; measured from established lines and levels and free of rack.
- C. Adjust railings before anchoring to ensure matching alignment at abutting joints.
- D. Fastening to In-Place Construction: Use anchorage devices and fasteners where necessary for securing railings and for properly transferring loads to in-place construction.

3.3 RAILING CONNECTIONS

- A. Welded Connections: Use fully welded joints for permanently connecting railing components. Comply with requirements for welded connections in Part 2 "Fabrication" Article whether welding is performed in the shop or in the field.
- B. Expansion Joints: Install expansion joints at locations indicated but not farther apart than required to accommodate thermal movement. Provide slip-joint internal sleeve extending **2 inches (50 mm)** beyond joint on either side, fasten internal sleeve securely to 1 side, and locate joint within **6 inches (150 mm)** of post.

3.4 ANCHORING POSTS

- A. Use steel pipe sleeves preset and anchored into concrete for installing posts. After posts have been inserted into sleeves, fill annular space between post and sleeve with nonshrink, nonmetallic grout or anchoring cement, mixed and placed to comply with anchoring material manufacturer's written instructions.

3.5 ANCHORING RAILING ENDS

- A. Anchor railing ends to concrete and masonry with round flanges connected to railing ends and anchored to wall construction with anchors appropriate for wall construction.

3.6 ATTACHING HANDRAILS TO WALLS

- A. Attach handrails to wall with wall brackets. Provide brackets with **1-1/2-inch (38-mm)** clearance from inside face of handrail and finished wall surface.
 - 1. Use type of bracket with flange tapped for concealed anchorage to threaded hanger bolt.
- B. Locate brackets as indicated or, if not indicated, at spacing required to support structural loads.
- C. Secure wall brackets to building construction as follows:
 - 1. For concrete and solid masonry anchorage, use drilled-in expansion shields and hanger or lag bolts.
 - 2. For wood stud partitions, use hanger or lag bolts set into wood backing between studs. Coordinate with carpentry work to locate backing members.

3.7 ADJUSTING AND CLEANING

- A. Clean stainless steel by washing thoroughly with clean water and soap and rinsing with clean water.

3.8 PROTECTION

- A. Protect finishes of railings from damage during construction period with temporary protective coverings approved by railing manufacturer. Remove protective coverings at time of Substantial Completion.
- B. Restore finishes damaged during installation and construction period so no evidence remains of correction work. Return items that cannot be refinished in the field to the shop; make required alterations and refinish entire unit, or provide new units.

END OF SECTION 05521

SECTION 06 1100
ROUGH CARPENTRY, FRAMING, AND SHEATHING

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Floor, roof, and wall framing.
 - 2. Floor decking.
 - 3. Roof and wall sheathing.
 - 4. Wood blocking and furring.
 - 5. Telephone and electrical panel backboards.
 - 6. Roof curbs.
 - 7. Preservative and fire retardant treatment of wood.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

- A. American Wood Protection Association (AWPA) U1 - Use Category System - User Specification for Treated Wood.
- B. ASTM International (ASTM):
 - 1. A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
 - 2. A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy Coated (Galvannealed) by the Hot-Dip Process.
 - 3. E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
 - 4. F593 - Standard Specification for Stainless Steel Bolts, Hex Cap Screws and Studs.
 - 5. F1554 - Standard Specification for Anchor Bolts, Steel, 36, 55 and 105 KSI Yield Strength.
- C. Engineered Wood Association (APA) PRP-108 - Performance Standards and Qualification Policy for Structural-Use Panels.
- D. National Institute of Standards and Technology (NIST) - Product Standard PS 20 - American Softwood Lumber Standard.
- E. National Lumber Grades Authority (NLGA) - Standard Grading Rules for Canadian Lumber.
- F. West Coast Lumber Inspection Bureau (WCLIB) - Standard Grading Rules for West Coast Lumber.
- G. Western Wood Products Association (WWPA) G-5 - Western Lumber Grading Rules.

1.3 SUBMITTALS

- A. Delegated Design: Provide Engineering Design Data including Plans, Sections, Details, Engineering Calculations that meet Oregon Structural Specialty Code and stamped by a Licensed Design Professional.
 - 1. Include vertical and lateral design of all framing, sheathing, connections, hold-downs, fastening and any other requirements to meet the Oregon Structural Specialty Code and local ordinances.

1.4 QUALITY ASSURANCE

- A. Lumber Grading Agency: Certified to NIST PS 20.
- B. Identify lumber and sheet products by official grade mark.
- C. Fire Retardant Treated Products: Bear label of recognized independent testing laboratory indicating flame spread rating of 25 or less, tested to ASTM E84.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Store materials minimum 6 inches above ground on framework or blocking and cover with protective waterproof covering providing for adequate air circulation.
- B. Do not store seasoned or treated materials in damp location.
- C. Protect edges and corners of sheet materials from damage.

1.6 WARRANTIES

- A. Provide manufacturer's 20 year warranty against rot and termite damage for composite wood.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers - Laminated Veneer Lumber:
 - 1. Boise Cascade Corporation. (www.bc.com)
 - 2. Georgia-Pacific Corporation. (www.gp.com)
 - 3. LP Corp. (www.lpcorp.com)
- B. Acceptable Manufacturers - Prefabricated Wood I Joists:
 - 1. Boise Cascade Corporation. (www.bc.com)
 - 2. Georgia-Pacific Corporation. (www.gp.com)
 - 3. LP Corp. (www.lpcorp.com)
 - 4. Western Wood Structures, Inc. (www.westernwoodstructures.com)
 - 5. Weyerhaeuser. (www.weyerhaeuser.com)
- C. Acceptable Manufacturers - Composite Wood:
 - 1. CertainTeed Corp. (www.certainteed.com)
 - 2. Trex Co. (www.trex.com)
- D. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Dimension Lumber:
 - 1. Grading rules: WWPA.
 - 2. Species: Douglas Fir
 - 3. Grade: No 2 or better or as indicated
 - 4. Surfacing: Surfaced four sides (S4S) unless otherwise indicated.
 - 5. Maximum moisture content: 19 percent.
- B. Laminated Veneer Lumber:
 - 1. Fabricated by laminating wood veneers under pressure using exterior type adhesive with grain of veneers parallel with length.

2. Veneer: Douglas Fir or Southern Pine.
- C. Prefabricated Wood I Joists:
 1. Fabricated by bonding stress graded lumber flanges to webs with exterior type adhesive.
 2. Flange & Web material: Laminated veneer lumber, dimension lumber, or manufacturer's standard.
 3. Manufactured using low-emitting, urea formaldehyde-free binders.
- D. Composite Joists and Headers:
 1. Fabricated by laminating wood veneers to narrow oriented strand board to produce rectangular members with veneers making up not less than 32 percent of total cross section.
 2. Manufactured using low-emitting, urea formaldehyde-free adhesives.
- E. Sheet Products:
 1. Type: APA Plywood, or Oriented Strand Board.
 2. Panel grade:
 - a. Floor wall and roof sheathing: APA [Rated Sheathing.
 - b. Combination subfloor/underlayment: APA Sturd-I-Floor.
 - c. Underlayment: APA Underlayment.
 3. Exposure:
 - a. Exterior applications: Exterior.
 - b. Interior applications: Exposure 1

2.3 ACCESSORIES

- A. Anchor Bolts: ASTM F1554.
- B. Fasteners:
 1. Type and size: As required by conditions of use.
 2. Exterior locations, in concrete in contact with ground, and in contact with treated products: Hot-dip galvanized steel, ASTM A153/A153M or Stainless steel, ASTM F593, Type 304 or 316.
 3. Other interior locations: Plain steel.
- C. Metal Connectors & Joist Hangers:
 1. Galvanized steel, ASTM A653/A653M,
 2. Size and shape: To suit framing conditions.
- D. Subflooring Adhesive:
 1. Waterproof, water based, air cure type, in cartridge dispensers.
- E. Sill Gasket: 1/4 inch thick, plate width, closed cell polyethylene or urethane foam from continuous rolls.
- F. Termite Shield: Galvanized sheet steel, minimum 26 gage.

2.4 FABRICATION

- A. Preservative Treatment:
 1. Treat lumber and sheet products in accordance with AWWA U1:
 - a. Interior locations protected from moisture sources: Category UC1 - Interior/Dry.
 - b. Interior locations subject to sources of moisture: Category UC2 - Interior/Damp.
 - c. Exterior locations above ground: Category UC3B - Above Ground/Exposed.
 - d. Exterior locations in contact with ground: Category UC4B - Ground Contact/Heavy Duty.
 2. Treatment process: Type CCA - Chromated Copper Arsenate.

- B. Fire Retardant Treatment; treat lumber and sheet products in accordance with AWPA U1:
 - 1. Interior locations: Category UCFA - Fire Retardant/Interior.
 - 2. Exterior locations: Category UCFB - Fire Retardant/Exterior.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Set members level, plumb, and rigid.
- B. Make provisions for erection loads, and for temporary bracing to maintain structure safe, plumb, and in true alignment until completion of erection and installation of permanent bracing.
- C. Place beams, joists, and rafters with crown edge up.
- D. Construct load bearing framing members full length without splices.
- E. Sills:
 - 1. Place full width continuous sill flashings under framed walls on cementitious foundations. Lap flashing joint 4 inches.
 - 2. Place sill gasket directly on sill flashing. Fit tight to protruding foundation anchor bolts.
 - 3. Anchor sills to foundation with anchor bolts expansion fasteners, or as otherwise indicated.
- F. Joist Framing:
 - 1. Provide minimum 1-1/2 inches of bearing.
 - 2. Lap members framing from opposite sides minimum 4 inches.
 - 3. Construct double joist headers at floor and ceiling openings and under wall stud partitions that are parallel to floor joists. Frame rigidly into joists.
 - 4. Bridge joists at mid span for spans in excess of 8 feet.
- G. Stud Framing:
 - 1. Provide single bottom plate and double top plates for load bearing partitions.
 - 2. Provide single bottom and top plates for non load bearing partitions.
 - 3. Anchor bottom plates to concrete structure with anchor bolts expansion fasteners or as indicated.
 - 4. Triple studs at corners and partition intersections.
 - 5. Anchor studs abutting masonry or concrete with toggle or expansion bolts.
 - 6. Frame openings with double studs and headers. Space short studs over and under opening to stud spacing.
- H. Rafter Framing:
 - 1. Notch to fit exterior wall plates.
 - 2. Double rafters at roof openings; support with metal hangers.
 - 3. At ridge, place rafters directly opposite each other and secure to ridge member.
 - 4. At hips and valleys, bevel ends for bearing against hip or valley rafter.
 - 5. Locate collar ties at every third pair of rafters, one third of the distance to ceiling joists; cut ends to fit slope and secure to rafters.
- I. Beams:
 - 1. Provide minimum end bearing of 4 inches.
 - 2. Nail built-up members with two rows of nails spaced 6 inches on center maximum.
- J. Decking:
 - 1. Place decking to span two or more supports, with ends occurring over supports.
 - 2. Stagger end joints in adjacent rows.
 - 3. Secure to each support with 2 fasteners.

- K. Roof Sheathing:
 - 1. Place panels perpendicular to framing members with ends staggered and sheet ends over firm bearing.
 - 2. [If tongue-and-groove panels are not used,] Install sheathing clips between adjacent sheets between roof framing members.
 - 3. Leave 1/8 inch expansion space at panel ends and edges.
 - 4. Secure to supports with fasteners spaced maximum 6 inches on center along edges and maximum 12 inches on center in field of panels.
- L. Wall Sheathing:
 - 1. Place panels [parallel] [perpendicular] to framing members, with ends over firm bearing [and staggered].
 - 2. [If diagonal corner braces are not installed,] At corners, place sheathing for a horizontal distance of 48 inches.
 - 3. Leave 1/8 inch expansion space at panel ends and edges.
 - 4. Secure to supports with fasteners spaced maximum 6 inches on center along edges and maximum 12 inches on center in field of panels.
- M. Floor Decking:
 - 1. Place panels perpendicular to framing members, with ends over firm bearing and staggered.
 - 2. Leave 1/8 inch expansion space at panel ends and edges.
 - 3. Secure to supports with fasteners spaced maximum 12 inches on center along edges and in field of panels.
- N. Subflooring:
 - 1. Install flooring underlayment after dust and dirt generating activities have ceased and prior to application of finished flooring.
 - 2. Install building felt between floor decking and subflooring.
 - 3. Apply perpendicular to decking; stagger joints of underlayment in adjacent rows.
 - 4. Leave 1/8 inch expansion space at panel ends and edges.
 - 5. Secure to supports with adhesive and fasteners spaced maximum 6 inches on center along edges and maximum 12 inches on center in field of panels.
- O. Provide blocking, nailers, grounds, furring, and other similar items required to receive and support work.
- P. Curb roof openings except where prefabricated curbs are provided. Form corners by alternating lapping side members.
- Q. Install telephone and electrical panel backboards where indicated: Oversize panel by 12 inches on all sides.

3.2 TOLERANCES

- A. Framing Members: 1/4 inch from true position, maximum.
- B. Surface Flatness of Floor: 1/4 inch in 10 feet maximum.

END OF SECTION

SECTION 06 4100
ARCHITECTURAL WOOD CASEWORK

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Special fabricated cabinet units.
 - 2. Plastic laminate countertops.
 - 3. Shop finishing.
 - 4. Cabinet hardware.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.
 - 2. Section 07 9200 - Joint Sealers.

1.2 REFERENCES

- A. Architectural Woodwork Institute (AWI) - Architectural Woodwork Quality Standards.
- B. Association of Electrical and Medical Imaging Equipment Manufacturers (NEMA) LD-3 - High Pressure Decorative Laminates.
- C. ICC/ANSI A117.1 American National Standard Accessible and Usable Buildings and Facilities

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Shop Drawings:
 - a. Include dimensioned plan, sections, elevations, and details, including interface with adjacent work.
 - b. Designate wood species and finishes.
 - 2. Samples:
 - a. 3 x 3 inch plastic laminate samples showing available colors and finishes.
 - b. Each hardware component.
 - c. 12 x 12 inch panel product samples.

1.4 QUALITY ASSURANCE

- A. Fabricator Qualifications:
 - 1. Minimum 5 years experience in work of this Section.
 - 2. Certified under AWI Quality Certification Program.
- B. Pre-Installation Conference:
 - 1. Convene 2 weeks prior to beginning work of this Section.
 - 2. Attendance: Architect, Owner, Contractor, installer, and related trades.
 - 3. Review, discuss and resolve:
 - a. Critical dimensions.
 - b. Product delivery and storage.
 - c. Staging and sequencing.
 - d. Protection of completed work.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Do not deliver materials until proper protection can be provided, and until needed for installation.

1.6 PROJECT CONDITIONS

- A. Environmental Requirements: HVAC system complete and operational for minimum 7 days prior to installation of cabinets.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers - Plastic Laminate:
 - 1. Formica Corp. (www.formica.com)
 - 2. Nevamar Co. (www.nevamar.com)
 - 3. Wilsonart International, Inc. (www.wilsonart.com)
- B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Panel Products:
 - 1. Graded in accordance with AWI Section 200 requirements for quality grade specified.
 - 2. Closed grain hardwood, of quality suitable for opaque finish.
 - 3. Panel core: Plywood at kitchens and wet areas, Particleboard, manufactured using low-emitting, urea formaldehyde-free binders. at other locations.
- B. Hardboard: Pressed wood fiber with resin binder; standard grade, 1/4 inch thick, smooth on exposed sides.
- C. Plastic Laminate: NEMA LD-3.
 - 1. Horizontal surfaces:
 - a. Backing sheet: Grade BGF.
 - b. Postformed surfaces: Grade HGP.
 - c. Acid resisting: Grade LGP.
 - d. Other surfaces: Grade HGS.
 - 2. Vertical surfaces:
 - a. Backing sheet: Grade BLF.
 - b. Cabinet liner: Grade CLS.
 - c. Other surfaces: Grade VGP.
 - 3. Melamine laminate: Grade VGL.
 - 4. Colors and Finish: To be selected from manufacturer's full color range.
- D. Lumber:
 - 1. Graded in accordance with AWI Section 100 requirements for quality grade specified, average moisture content of 6 percent.
 - 2. Closed grain hardwood, of quality suitable for opaque finish.

2.3 ACCESSORIES

- A. Fasteners: Type and size as required by conditions of use.

- B. Adhesives:
 - 1. Waterproof, compatible with backing and laminate materials.
- C. Cabinet Hardware:
 - 1. General: Manufacturer's standard units complying with BHMA A156.9, of type, size, style, material, and finish as selected by Architect from manufacturer's full range.
 - 2. Pulls: Back-mounted decorative pulls with backing plates.
 - 3. Hinges: Concealed European-style self-closing hinges.
 - 4. Drawer Guides: Epoxy-coated-metal, self-closing drawer guides; designed to prevent rebound when drawers are closed; with nylon-tired, ball-bearing rollers; and complying with BHMA A156.9, Type B05011 or B05091.
- D. Joint Sealers: Specified in Section 07 9200.

2.4 FABRICATION

- A. General: Cabinets shall be designed to comply with the applicable accessibility code for commercial buildings (latest editions).
- B. Cabinets - Plastic Laminate Finish:
 - 1. Quality: AWI Section 400, Custom Grade.
 - 2. Type: Flush overlay.
 - 3. Semi-exposed surfaces: Plastic laminate.
 - 4. Interior Surfaces (excluding doors and drawer faces) : White Melamine
 - 5. Fit exposed and semi-exposed panel edges with matching edging.
 - 6. Fabricate drawer bodies to full depth of drawer fronts less 1/2 inch.
- C. Plastic Laminate Countertops:
 - 1. Quality: AWI Section 400, Custom Grade.
 - 2. Fabricate from panel product with lumber fronts.
 - 3. Locate end joints centered or symmetrical. Join sections with concealed clamp fasteners. Locate plastic laminate butt joints minimum 2 feet away from sinks.
 - 4. Provide holes and cutouts for mounting of sinks, trim, and accessories.
- D. Shop assemble for delivery to project site in units easily handled.
- E. Prior to fabrication, field verify dimensions to ensure correct fit.
- F. Apply plastic laminate in full uninterrupted sheets; fit corners and joints to hairline. Slightly bevel arises. Apply laminate backing sheet to reverse side of laminate faced surfaces.
- G. Where field fitting is required, provide ample allowance for cutting. Provide trim for scribing and site conditions.
- H. Provide cutouts and reinforcement for plumbing, electrical, appliances, and accessories. Prime paint surfaces of cut edges.

PART 3 EXECUTION

3.1 PREPARATION

- A. Prior to installation, condition cabinets to average humidity that will prevail after installation.

3.2 INSTALLATION

- A. Install in accordance with AWI Section 1700, Custom Grade requirements.
- B. Set plumb, rigid and level.
- C. Scribe to adjacent construction with maximum 1/8 inch gaps.
- D. Adhere countertops, splashes, and skirts with beads of adhesive.
- E. Fill joints between tops and splashes with sealant as specified in Section 07 9200; finish flush.

END OF SECTION

**SECTION 06 4600
WOOD TRIM**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Interior and exterior wood trim.
 - 2. Shop finishing.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

- A. American Wood Protection Association (AWPA) U1 - Use Category System - User Specification for Treated Wood.
- B. Architectural Woodwork Institute/Architectural Woodwork Manufacturers of Canada/Woodwork Institute (AWI/AWMAC/WI) - Architectural Woodwork Standards.
- C. ASTM International (ASTM) E84 - Standard Test Method for Surface Burning Characteristics of Materials.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Shop Drawings:
 - a. Include dimensioned plans, sections, elevations, and details, including interface with adjacent work.
 - b. Designate wood species and finishes.
 - 2. Samples: 6 inch long samples of each profile.

1.4 QUALITY ASSURANCE

- A. Fabricator Qualifications:
 - 1. Minimum 5 experience in work of this Section.
 - 2. Certified under AWI/AWMAC/WI Quality Certification Program.
- B. Pre-Installation Conference:
 - 1. Convene 2 weeks prior to beginning work of this Section.
 - 2. Attendance: Architect, Owner, Contractor, Installer, and related trades.
 - 3. Review, discuss and resolve:
 - a. Critical dimensions.
 - b. Product delivery and storage.
 - c. Staging and sequencing.
 - d. Protection of completed work.
- C. Fire Retardant Treated Products: Bear label of recognized independent testing laboratory indicating flame spread rating of 25 or less, tested to ASTM E84.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Do not deliver materials until proper protection can be provided, and until needed for installation.

1.6 PROJECT CONDITIONS

- A. Environmental Requirements: Maintain following conditions in building for minimum 7 days prior to, during, and after installation of interior trim:
 - 1. Temperature: 60 to 80 degrees F.
 - 2. Humidity: 43 to 70 percent.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Interior Trim:
 - 1. Graded in accordance with AWI/AWMAC/WI Architectural Woodwork Standards, Section 3 requirements for quality grade specified, average moisture content of 6 percent.
 - 2. Closed grain hardwood, of quality suitable for clear finish.
- B. Exterior Trim:
 - 1. Species: Douglas Fir
 - 2. Finish: Smooth.
 - 3. Average moisture content: 12 percent.

2.2 ACCESSORIES

- A. Fasteners: Type and size as required by conditions of use; plain steel for interior use; hot dip galvanized steel for exterior use.
- B. Adhesives:
 - 1. Waterproof, compatible with trim and substrate materials.

2.3 FABRICATION

- A. Quality: AWI/AWMAC/WI Architectural Woodwork Standards, Section 6, Custom Grade.
- B. Where field fitting is required, provide ample allowance for cutting.
- C. Groove back of trim applied to flat substrate, except do not groove exposed ends.
- D. Preservative Treatment:
 - 1. Treat wood in accordance with AWP A U1:
 - a. Interior locations protected from moisture sources: Category UC1 - Interior/Dry.
 - b. Interior locations in contact subject to sources of moisture: Category UC2 - Interior/Damp.
 - c. Exterior locations above ground: Category UC3B - Above Ground/Exposed.
 - d. Exterior locations in contact with ground: Category UC4A - Ground Contact/General Use.
 - 2. Treatment process: Type ACQ - Ammoniacal Copper Quaternary (ACQ); free from arsenic, chromium, and other EPA classified hazardous preservatives.
- E. Fire Retardant Treatment; treat wood in accordance with AWP A U1:
 - 1. Interior locations: Category UCFA - Fire Retardant/Interior.
 - 2. Exterior locations: Category UCFB - Fire Retardant/Exterior.

2.4 FINISHES

- A. Factory Finishing:
 - 1. Primed

PART 3 EXECUTION

3.1 PREPARATION

- A. Prior to installation, condition wood to average humidity that will prevail after installation.
- B. Back prime exterior wood and wood installed against masonry or cementitious materials prior to installation.

3.2 INSTALLATION

- A. Install in accordance with AWI/AWMAC/WI Architectural Woodwork Standards.
- B. Install in longest practical lengths.
- C. Set plumb and level.
- D. Miter ends, corners, and intersections.
- E. Scribe to adjacent construction with maximum 1/ 8 inch gaps.
- F. Fasten and adhere to supporting construction.

END OF SECTION

SECTION 07 2115

BATT INSULATION

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Batt insulation in exterior wall, floor, ceiling, and roof assemblies.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.
 - 2. 07 2600 Vapor Retarders

1.2 REFERENCES

- A. ASTM International (ASTM):
 - 1. C665 - Standard Specification for Mineral Fiber Blanket Thermal Insulation for Wood Frame and Light Construction Buildings.
 - 2. E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
 - 3. E136 - Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C.

1.3 SUBMITTALS

- A. Quality Control Submittals:
 - 1. Certificates of Compliance: Certification from an independent testing laboratory that insulation meets fire hazard classification requirements.

1.4 QUALITY ASSURANCE

- A. Fire Hazard Classification:
 - 1. Noncombustible, tested to ASTM E136.
 - 2. Flame spread/smoke developed rating of 25/50 or less, tested to ASTM E84.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Store insulation in clean, dry, sheltered area, off ground or floor, until used. Protect against wetting and moisture absorption.

1.6 PROJECT CONDITIONS

- A. Do not install until insulation until building is substantially water and weather tight.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers:
 - 1. Johns Manville. (www.jm.com)
 - 2. Knauf Insulation. (www.knaufusa.com)
 - 3. Owens Corning. (www.owenscorning.com)

- B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Thermal Batt Insulation:
 - 1. Type: ASTM C665, glass fiber composition.
 - 2. Facing: Unfaced. Install vinyl vapor barrier/retarder on interior side.
 - 3. Minimum Thermal resistance:
 - a. Floor: R-value of 30.00.
 - b. Wall: R-value of 19.00.
 - c. Ceiling: R-value of 38.00.

2.3 ACCESSORIES

- A. Tape: Minimum 2inches wide, compatible with vapor barrier, pressure sensitive, waterproof..
- B. Fasteners: Hot-dip galvanized steel type best suited to application, minimum 5/8 inch penetration into framing.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Friction fit between framing members.
- B. Butt insulation to adjacent construction. Butt ends and edges.
- C. Carry insulation around pipes, wiring, boxes, and other components.
- D. Ensure complete enclosure of spaces without voids.
- E. Apply with vapor barrier facing towards interior of structure.
- F. Tape seal lapped flanges, butt ends, penetrations, and tears and holes in facings.

END OF SECTION

**SECTION 07 2600
VAPOR RETARDERS**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Materials for controlling vapor diffusion.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

- A. ASTM International (ASTM):
 - 1. D882 - Standard Test Method for Tensile Properties of Thin Plastic Sheeting.
 - 2. D1709 - Standard Test Method for Impact Resistance of Plastic Film by the Free-Falling Dart Method.
 - 3. E96/E96M - Standard Test Method for Water Vapor Transmission of Materials.
 - 4. E154 - Standard Test Method for Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs, on Walls, or as Ground Cover.
 - 5. E1643 - Standard Practice for Selection, Design, Installation, and Inspection of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs.
 - 6. E1745 - Standard Test Method for Water Vapor Retarders Used in Contact with Soil or Granular Fill Under Concrete Slabs.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Product Data: Include product description and performance characteristics.
 - 2. Samples: 12 x 12 inch vapor retarder samples.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers:
 - 1. Griffolyn, Division of Reef Industries. (www.reefindustries.com)
 - 2. Raven Industries. (www.rufco.com)
 - 3. W.R. Meadows, Inc. (www.wrmeadows.com)
- B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Vapor Retarder: ASTM E1745, Class C, minimum 10 mil thick polyethylene film.

2.3 ACCESSORIES

- A. Adhesive:
 - 1. Compatible with vapor retarder and substrate, permanently non hardening.
- B. Joint Tape: Minimum 2 inches wide, pressure sensitive, waterproof, compatible with vapor retarder.

PART 3 EXECUTION

3.1 INSTALLATION - WALLS AND ROOFS

- A. Install in accordance with manufacturer's instructions.
- B. Provide complete and continuous vapor retarder at exterior walls except where interrupted by glazing or other openings.
- C. Locate vapor retarder on interior side of insulation.
- D. Apply adhesive to substrate in accordance with manufacturer's instructions for application and coverage.
- E. Install vapor retarder without tears, voids, and holes.
- F. Lap ends and edges minimum 2 inches over adjacent sheets. Seal laps with tape.
- G. Extend vapor retarder to full perimeter of adjacent door frames, window frames and to utility and other penetrations interrupting plane of membrane.
- H. Tape seal lapped joints, tears, holes, perimeter, and penetrations through vapor retarder.

3.2 INSTALLATION – IN CRAWL SPACES & UNDER SLABS ON GRADE

- A. Install in accordance with manufacturer's instructions and ASTM E1643.
- B. Remove sharp rocks and objects that could puncture vapor retarder.
- C. Install vapor retarder without tears, voids, and holes.
- D. Lap ends and edges minimum 6 inches over adjacent sheets.
- E. Tape seal lapped joints, tears, holes, perimeter, and penetrations through vapor retarder.

3.3 REPAIR

- A. Inspect vapor retarder for damage just prior to covering.
- B. Clean damaged areas and cover with additional vapor retarder material cut minimum 6 inches larger than damaged area on all sides. Seal to main vapor retarder with continuous tape.

END OF SECTION

SECTION 07 2800
MOISTURE- AIR BARRIERS

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Sheet materials for controlling moisture and air movement at exterior wall assemblies.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.
 - 2. 07 6500 Flexible Flashings

1.2 REFERENCES

- A. ASTM International (ASTM):
 - 1. D41 - Standard Test Method for Rubber Properties in Tension.
 - 2. D226 - Standard Specification for Asphalt Saturated Organic Felt Used in Roofing and Waterproofing.
 - 3. D412 - Standard Test Method for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers - Tension.
 - 4. D1970 - Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection.
 - 5. E96/E96M - Standard Test Method for Water Vapor Transmission of Materials.
 - 6. E2178 - Standard Test Method for Air Permeance of Building Materials.
 - 7. E2357 - Standard Test Method for Determining Air Leakage of Air Barrier Assemblies.

1.3 QUALITY ASSURANCE

- A. Provide continuous barrier to moisture infiltration and water vapor transmission, flashed to discharge incidental condensation and water penetration.

1.4 SUBMITTALS

- A. Submittals for Review:
 - 1. Product Data: Manufacturer's descriptive data.
 - 2. Samples: 12 x 12 inch moisture barrier samples.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers - Sheet Moisture Barriers:
 - 1. DuPont. (www.tyvek.com)
 - 2. Griffolyn, Division of Reef Industries. (www.reefindustries.com)
 - 3. Raven Industries. (www.rufco.com)
- B. Acceptable Manufacturers - Rubberized Sheet Moisture Barriers:
 - 1. Grace Construction Products. (www.graceconstruction.com)
 - 2. W.R. Meadows, Inc. (www.wrmeadows.com)
 - 3. Polyguard Products, Inc. (www.polyguardproducts.com)
- C. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Moisture Barrier: Asphalt impregnated felt, ASTM D226, No. 30, non perforated.

- B. Sheet Moisture Barrier: Commercial Wrap by DuPont, Drainwrap by Dupont or approved substitute.

2.3 ACCESSORIES

- A. Fasteners: Hot-dip galvanized or fluoropolymer coated steel fasteners with 1inch diameter plastic washers, minimum 5/8 inch penetration into framing.
- B. Joint Tape: Minimum 2 inches wide, pressure sensitive, waterproof, of type recommended by manufacturer.
- C. Flashing Sheet: Self adhering, rubberized asphalt laminated to HPDE facing, minimum 30 mil thick as recommended by moisture barrier manufacturer.
- D. Primer: Type recommended by moisture barrier manufacturer.
- E. Patching Compound: Type recommended by manufacturer.

PART 3 EXECUTION

3.1 PREPARATION

- A. Clean surfaces to receive moisture barrier; remove loose and foreign matter that could impair adhesion or performance.
- B. Protect adjacent and underlying surfaces.
- C. Fill voids, holes, and cracks over 1/16 inch in width with patching compound; finish flush with adjacent surfaces. Apply one coat of moisture barrier over patched areas and allow to dry.
- D. Apply joint tape centered over sheathing joints. Lap ends 2 inches minimum Press to full bond with substrate without voids, wrinkles, bridging, or fishmouths.

1.1 INSTALLATION - SHEET MOISTURE BARRIERS

- A. Provide complete and continuous barrier.
- B. Apply primer when required by moisture barrier manufacturer.
- C. Install moisture barrier without tears, voids, and holes.
- D. Begin application at low point; weatherlap succeeding courses minimum 4 inches.
- E. Lap ends 6 inches minimum. Tape seal lapped ends and edges.
- F. Fasten at maximum 12 inches on center.
- G. Seal to door and window frames, around penetrations, and at perimeter with flashing sheet. Press to full bond with substrate without voids, wrinkles, bridging, or fishmouths.
- H. Seal to door and window frames, around penetrations, and at perimeter.

1.2 FIELD QUALITY CONTROL

- A. Inspect moisture barrier for damage just prior to covering.

- B. Clean damaged areas and cover with additional moisture barrier material minimum 6 inches larger than damaged area on all sides. Seal to main moisture barrier with continuous tape.

END OF SECTION

SECTION 07 3113

ASPHALT SHINGLES

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Granular surfaced asphalt shingle roofing.
 - 2. Underlayment and ice dam protection.
 - 3. Metal flashings and accessories.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.
 - 2. Section 07 6200 - Sheet Metal Flashing and Trim.

1.2 REFERENCES

- A. ASTM International (ASTM):
 - 1. C1549 - Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer.
 - 2. D225 - Standard Specification for Asphalt Shingles (Organic Felt) Surfaced with Mineral Granules.
 - 3. D226 - Standard Specification for Asphalt Saturated Organic Felt Used in Roofing and Waterproofing.
 - 4. D412 - Standard Test Method for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers - Tension.
 - 5. D1970 - Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection.
 - 6. D2822 - Standard Specification for Asphalt Roof Cement.
 - 7. D3018 - Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules.
 - 8. D3161 - Standard Test Method for Wind-Resistance of Asphalt Shingles (Fan-Induced Method).
 - 9. D3462 - Standard Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules.
 - 10. D4869 - Standard Specification for Asphalt-Saturated Organic Felt Underlayment Used in Steep Slope Roofing.
 - 11. D6757 - Standard Specification for Underlayment Felt Containing Inorganic Fibers Used in Steep-Slope Roofing.
 - 12. D6380 - Standard Specification for Asphalt Roll Roofing (Organic Felt).
 - 13. D6381 - Standard Test Method for Measurement of Asphalt Shingle Mechanical Uplift Resistance.
 - 14. D7158 - Standard Test Method for Wind Resistance of Sealed Asphalt Shingles (Uplift Force/Uplift Resistance Method).
 - 15. E1980 - Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low-Sloped Opaque Surfaces.
- B. National Roofing Contractors Association (NRCA) - Steep Roofing Manual.
- C. Underwriters Laboratories (UL):
 - 1. 790 - Standard for Standard Test Methods for Tests of Roof Coverings.
 - 2. 997 - Standard for Wind Resistance of Prepared Roof Covering Materials.
 - 3. 2390 - Standard for Tests for Wind Resistant Asphalt Shingles with Sealed Tabs.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Product Data: Manufacturer's product description and installation instructions.
 - 2. Samples: Shingle samples showing available colors.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum 5 years experience in work of this Section.
- B. Shingles:
 - 1. Wind uplift resistance: Class [], tested to [UL [997.] [2390.]] [ASTM [D3161.] [D6381.]] [D7158.]
 - 2. Fire hazard classification Class C tested to UL 790.
 - 3. Energy Star certified.
 - 4. Solar Reflectance Index: Minimum [29,] [78,] tested to ASTM C1549 and calculated in accordance with ASTM E1980.
- C. Perform work in accordance with NRCA Manual.

1.5 PROJECT CONDITIONS

- A. Do not install underlayment or shingles at ambient or surface temperatures less than 45 degrees F or on wet or frozen substrate.

1.6 WARRANTIES

- A. Furnish manufacturer's 20 year warranty providing coverage against water leakage through shingles.
- B. Provide manufacturer's 10 warranty providing coverage against shingle discoloration due to algae growth.
- C. Provide manufacturer's 5 year warranty providing coverage shingle damage due to winds up to 100 MPH.

1.7 MAINTENANCE

- A. Extra Materials: [] square feet of extra shingles.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers:
 - 1. CertainTeed Corp. (www.certainteed.com)
 - 2. GAF Materials Corp. (www.gaf.com)
 - 3. Owens Corning (www.owenscorning.com)
 - 4. Tamco Roofing Products, Inc. (www.tamko.com)
- B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Asphalt Shingles:

1. ASTM D3462, glass fiber mat base, mineral granule surfaced, self sealing, fungus and algae resistant.
 2. Product: Timberline Cool Series Lifetime Shingles by GAF, or approved equal
 3. Color: To be selected from manufacturer's full color range.
 4. Provide matching hip and ridge shingles as required.
 5. Energy Star certified.
- B. Roll Roofing: ASTM D6380, 83 pounds per square, asphalt saturated roofing felt surfaced one side with mineral granules, same color as shingles. color.

2.3 ACCESSORIES

- A. Underlayment: ASTM D226, No. [15,] [30,] non perforated.
- B. Ice Dam Protection:
1. Description: ASTM D1970; minimum 40 mil thick polymer modified asphalt laminated to slip-resistant polyethylene film, self adhering with release paper facing.
 2. Elongation: Minimum 250 percent, tested to ASTM D412.
 3. Tensile strength: Minimum 250 PSI, tested to ASTM D412.
- C. Fasteners: Hot-dip galvanized or Stainless steel nails, minimum 3/8 inch head diameter, length to penetrate minimum 3/4 inch into sheathing.
- D. Ridge Vents: Cobra RidgidVent-3 by GAF or approved substitute.
- E. Plastic Cement: ASTM D2822, Type II, non running, heavy body material composed of asphalt and other mineral ingredients.
- F. Metal Flashings: Specified in Section 07 6200.
- G. Flashing Boots: Preformed EPDM or equivalent synthetic rubber material, sized to fit penetration being flashed, with minimum 4 inch wide deck flange and stainless steel draw band at top.

PART 3 EXECUTION

3.1 INSTALLATION OF ICE DAM PROTECTION

- A. Starting from eave edge of roof apply one ply modified bitumen underlayment horizontally on roof. Weatherlap each sheet 4 inches over preceding sheet. Lap ends 6 inches minimum.
- B. Press to full bond with substrate without voids, wrinkles, bridging, or fishmouths. Seal ends and edges.
- C. Extend ice dam protection minimum 24 inches beyond interior face of exterior walls.

3.2 INSTALLATION OF UNDERLAYMENT

- A. Starting at low edge, apply one ply of underlayment horizontally over substrate including previously installed ice dam protection.
- B. Weather lap each strip 6 inches minimum over previous strip.

- C. Apply following strips full 36 inch width; weatherlap preceding strip by 19 inches so that not less than two plies cover substrate at any point.
- D. Lap ends 6 inches minimum.
- E. Fasten top of each strip under overlapping strip to hold strip in position until shingles are installed.
- F. Provide 18 inch weave pattern at valleys.
- G. Lap underlayment minimum 12 inches over hips and ridges from both sides. Apply 36 inch wide strip centered lengthwise over ridge. Nail at 12 inches on center on each side.
- H. Extend minimum 4 inches up abutting vertical surfaces.
- I. Press to full bond with substrate without voids, wrinkles, bridging, or fishmouths. Seal ends and edges.
- J. Lap underlayment minimum 12 inches over hips and ridges from both sides. Apply 36 inch wide strip centered lengthwise over ridge.
- K. Extend minimum 4 inches up abutting vertical surfaces.

3.3 FLASHINGS

- A. Rake Edges:
 - 1. Install metal drip edge at rake edges with top flange on top of underlayment.
 - 2. Weather lap ends 2 inches minimum and seal with plastic cement.
 - 3. Nail top flange to decking at 8 inches on center maximum.
 - 4. Apply plastic cement to cover nail heads and at edge of flashings for entire length of metal.
- B. Drip Edges:
 - 1. Apply drip edge at eave with top flange directly on deck; extend underlayment to outer face of drip edge.
 - 2. Lap ends 2 inches minimum and seal with plastic cement.
 - 3. Nail in place at 8 inches on center maximum.
 - 4. Apply plastic cement to cover nail heads and at edge of flashings for entire length of metal.
- C. Valleys:
 - 1. Apply one layer of 18 inch wide roll roofing, face down, and one layer of 36 inch wide roll roofing, face up, centered over valleys. Weather lap joints 12 inches minimum.
 - 2. Nail at 18 inches on center, with nails located within 1 inch of edges.
 - 3. Apply one layer of 24 inch wide galvanized metal with 1 inch high V-crimp at midpoint, centered over valleys. Weather lap joints 6 inches minimum. Cleat at 24 inches on center on both sides. Nail cleats only.
- D. Stepped Flashings:
 - 1. Install 4 inch high x 2 inch wide x 7 inch long tins concurrent with shingles. Place with ends slightly above with shingle butt ends.

2. Place stepped counterflashing over tins at masonry.

E. Round Penetrations:

1. Place preformed flashing boot over penetration.
2. Fasten flange to deck with minimum of four fasteners.
3. Tighten draw band to watertight condition.

F. Other Flashings:

1. Weather lap ends 2 inches minimum and seal with plastic cement.
2. Nail in place at 8 inches on center maximum.
3. Apply plastic cement to cover nail heads and at edge of flashings for entire length of metal.

3.4 INSTALLATION OF ROOF DETAIL SHEET

- A. Apply one layer 18 inch wide roof detail sheet centered over hips and ridges.
- B. Apply one layer 9 inch wide roof detail sheet along rake edges drip edges and around penetrations through roof.

3.5 INSTALLATION OF RIDGE VENTS

- A. Cut 1 inch wide slot through sheathing under ridge vents, extending to within 6 inches of ends of vents.
- B. Center ridge vent over slot; fasten at maximum 12 inches on center with 3 inch nails.
- C. Apply shingles over vent; fasten with 3 inch nails.

3.6 INSTALLATION OF SHINGLES

- A. Install shingles in accordance with manufacturer's instructions.
- B. Place shingles in coursing pattern, in straight horizontal lines square with building lines.
- C. Remove foreign matter between shingles to ensure uniform contact.
- D. Cut shingles at perimeter and around penetrations. Do not use damaged shingles.
- E. Provide double] course of shingles at eaves. Extend shingles 3/8 inch beyond metal drip edges.
- F. Extend shingles on one slope across valley and fasten. Trim shingles from other slope 2 inches from valley center line to achieve closed cut valley, concealing the valley protection.
- G. Fasten shingles along nailing guide line with minimum of four fasteners per shingle.
- H. Cap hips and ridges with individual shingles, maintaining same exposure as shingles.

END OF SECTION

**SECTION 07 4646
MINERAL-FIBER CEMENT SIDING**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Mineral-fiber cement siding, and trim.
 - 2. Trim, anchorage, and accessories.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.
 - 2. Section 07 6200 - Sheet Metal Flashing and Trim.
 - 3. Section 07 9200 - Joint Sealers.

1.2 REFERENCES

- A. ASTM International (ASTM):
 - 1. C1186 - Standard Specification for Flat, Non-Asbestos, Fiber-Cement Sheets.
 - 2. E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Product Data: Indicate profiles, sizes, fastening methods, surface texture, and finish.
 - 2. Samples: 12 inch siding samples.
 - 3. Warranty: Sample warranty form.
- B. Quality Control Submittals:
 - 1. Certificates of Compliance: Certification from an independent testing laboratory that siding meets fire hazard classification requirements.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum 5 years experience in work of this Section.

1.5 WARRANTIES

- A. Furnish manufacturer's 25 year warranty providing coverage against cracking, rotting, or delamination of siding.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers:
 - 1. CertainTeed Corp. (www.certainteed.com)
 - 2. James Hardie Building Products. (www.jameshardie.com)
- B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Mineral-Fiber Cement Siding:
 - 1. ASTM C1186, Grade II, Type A; formulated from portland cement, ground sand, cellulose fibers, additives, and water; formed under pressure to required profile.
 - 2. Finish: Factory prime painted.
 - 3. Fire hazard classification: Class A, tested to ASTM E84.
 - 4. Board siding:
 - a. Size: 48 inches wide x maximum practical length.
 - b. Thickness: 5/16 inch.
 - c. Surface texture: Stucco.
 - 5. Soffits:
 - a. Size: Soffit width x maximum practical length.
 - b. Thickness: 1/4 inch.
 - c. Surface texture: Smooth
 - d. Venting: Vented.
 - 6. Trim:
 - a. Size: 4 inches wide x maximum practical length.
 - b. Thickness: 3/4 inch
 - c. Surface texture: To be selected by architect from manufacturer's full range.

2.3 ACCESSORIES

- A. Fasteners: Type recommended by siding manufacturer; [hot-dip galvanized] [stainless] steel.
- B. Sheet Metal Flashings and Trim: Specified in Section 07 6200.
- C. Joint Sealers: Specified in Section 07 9200.

PART 3 EXECUTION

3.1 INSTALLATION - BOARD SIDING AND SOFFITS

- A. Install in accordance with manufacturer's instructions.
- B. Install sheets vertically with edges and ends over firm bearing.
- C. Butt joints tight.
- D. Set plumb and level.
- E. Cut siding to fit at perimeter and around penetrations with maximum 1/4 inch gaps. Smooth cut edges.
- F. Install corner strips, closures, [battens,] and trim.
- G. Fasten at maximum 12 inches on center in a regular fastening pattern.
- H. Install metal flashings at internal and external corners, sills, and heads of wall openings. Fasten at 12 inches on center maximum.
- I. Apply joint sealer between siding and trim and adjacent surfaces as recommended by manufacturer..

3.2 INSTALLATION - TRIM

- A. Install in accordance with manufacturer's instructions.
- B. Butt joints tight.
- C. Set plumb and level.
- D. Cut to fit at perimeter and around penetrations with maximum 1/4 inch gaps. Smooth cut edges.
- E. Fasten at maximum 16 inches on center.

END OF SECTION

SECTION 07 6200
SHEET METAL FLASHING AND TRIM

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Copings.
 - 2. Edge flashings.
 - 3. Gutters and downspouts.
 - 4. Roof Flashings at shingle roofing.
 - 5. Counterflashings over membrane roof base flashings.
 - 6. Counterflashings at roof mounted equipment and utility penetrations.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.
 - 2. Section 07 9200 - Joint Sealers.

1.2 REFERENCES

- A. American Architectural Manufacturers Association (AAMA):
 - 1. 611 - Voluntary Specification for Anodized Architectural Aluminum.
 - 2. 620 - Voluntary Specifications for High Performance Organic Coatings on Coil Coated Architectural Aluminum Substrates.
 - 3. 621 - Voluntary Specifications for High Performance Organic Coatings on Coil Coated Architectural Hot Dipped Galvanized (HDG) and Zinc-Aluminum Coated Steel Substrates.
 - 4. 2603 - Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Architectural Extrusions and Panels.
 - 5. 2604 - Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Architectural Extrusions and Panels.
 - 6. 2605 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Architectural Extrusions and Panels.
- B. American National Standards Institute/Single Ply Roofing Institute (ANSI/SPRI) ES-1 - Wind Design Standard for Edge Systems Used with Low Slope Roofing Systems.
- C. ASTM International (ASTM):
 - 1. A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy Coated (Galvannealed) by the Hot-Dip Process.
 - 2. A792/A792M - Standard Specification for Steel Sheet, 55% Aluminum-Zinc Alloy-Coated by the Hot-Dip Process.
 - 3. B32 - Standard Specification for Solder Metal.
 - 4. B209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
- D. Sheet Metal and Air Conditioning Manufacturer's Association International (SMACNA) - Architectural Sheet Metal Manual.

1.3 SUBMITTALS

- A. Submittals for Review:

1. Shop Drawings: Show locations, types and thicknesses of metal, profiles, dimensions, fastening methods, provisions for expansion and contraction, and joint details.
2. Samples:
 - a. Each flashing and trim profile, minimum 12 inches long. Include corners where applicable.
 - b. 3 x 3 inch prefinished metal samples showing available colors.

1.4 QUALITY ASSURANCE

- A. Fabricator and Installer] Qualifications: Minimum 5 years experience in work of this Section.
- B. Design, fabricate, and install flashings] in accordance with ANSI/SPRI ES-1.
- C. Conform to SMACNA Manual for nominal sizing of gutters and downspouts for rainfall intensity determined by a storm occurrence of 1 in 10 years.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Galvanized Steel Sheet:
 1. ASTM A653/A653M, Structural Quality, 26 minimum gage core steel unless noted otherwise.
 2. Where sheet metal is to be painted, apply phosphate film at factory.
- B. Precoated Galvanized Steel Sheet:
 1. ASTM A653/A653M, Structural Quality, 26 gage core steel unless noted otherwise.
 2. Finish: Precoated with fluoropolymer coating, color to be selected from manufacturer's full color range.
- C. Aluminum Sheet:
 1. ASTM B209, alloy 3003, temper H14, 0.026 inch thick minimum.
 2. Finish: Precoated with fluoropolymer coating, AAMA 2605, to be selected from manufacturer's full color range.

2.2 ACCESSORIES

- A. Fasteners: Hot-dip galvanized steel, Stainless steel, or same material and finish as sheet metal, with neoprene gasketed washers.
- B. Joint Sealers: Specified in Section 07 9200.

2.3 FABRICATION

- A. Fabricate components in accordance with SMACNA Manual.
- B. Profiles:
 1. Gutters: Style Fascia.
 2. Downspouts: Style Corrugated.
 3. Fabricate end caps, downspout outlets and headers, straps, brackets, and downspout strainers in profile to suit gutters and downspouts.
- C. Solder shop formed joints except at prefinished metal. After soldering, remove flux and wash clean.

- D. Fabricate corners in single units with minimum 18 inch long legs.
- E. Fabricate vertical faces with bottom edge formed outward 1/4 inch and hemmed to form drip.
- F. Form sections accurate to size and shape, square and free from distortion and defects.
- G. Provide for thermal expansion and contraction in sheet metal:
 - 1. Gutters:
 - a. Place expansion joints at maximum 50 feet on center.
 - b. Locate expansion joints between downspouts; prevent water flow over joint.
 - 2. Other sheet metal:
 - a. Provide expansion joints in sheet metal exceeding 15 feet in running length.
 - b. Place expansion joints at 10 feet on center maximum and maximum 2 feet from corners and intersections.
 - 3. Joint width: Consistent with types and sizes of materials, minimum width 1/4 inch.
- H. Fabricate expansion joints with cover plates formed to flashing profile and minimum 4 inches long.
- I. Unless otherwise indicated, provide minimum 3/4 inch wide flat lock seams; lap in direction of water flow.
- J. Fabricate cleats and starter strips of same material as sheet metal.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install flashing and sheet metal in accordance with SMACNA Manual and as indicated.
- B. Install cleats and starter strips before starting installation of sheet metal.
- C. Expansion Joints:
 - 1. Seal expansion space between ends of flashing sections.
 - 2. Apply continuous bead of joint sealer between cover plate and flashing sections at each end.
- D. Secure flashings with concealed fasteners where possible.
- E. Apply plastic cement between metal and bituminous flashings.
- F. Fit flashings tight, with square corners and surfaces true and straight.
- G. Seam and seal field joints.
- H. Separate dissimilar metals with bituminous coating or non-absorptive gaskets.
- I. Reglets:
 - 1. Install reglets true to line and level. Seal top of surface mounted reglet with joint sealer.
 - 2. Install flashings into reglets to form tight fit. Secure with lead or plastic wedges at 9 inches on center maximum. Seal remaining space with joint sealer.
- J. Gutters: Secure with straps spaced maximum 36 inches on center and within 12 inches of ends.

K. Downspouts:

1. Secure with straps spaced maximum 8 feet on center and within 2 feet of ends and elbows.
2. Flash downspouts minimum 3 inches into gutters or conductor heads and fasten.
3. Flash upper sections into lower sections minimum 2 inches at joints; fasten sections together.

L. Apply joint sealers as specified in Section 07 9200.

3.2 CLEANING

- A. Clean sheet metal; remove slag, flux, stains, spots, and minor abrasions without etching surfaces.

END OF SECTION

**SECTION 07 6500
FLEXIBLE FLASHINGS**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Rubberized asphalt sheet for concealed wall flashings
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.
 - 2. 07 2800 Moisture Air Barriers

1.2 REFERENCES

- A. ASTM International (ASTM) D1970 - Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Product Data: Manufacturer's descriptive data and installation instructions.

1.4 PROJECT CONDITIONS

- A. Do not apply flashings at ambient or surface temperatures less than 40 degrees F.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers:
 - 1. Grace Construction Products. (www.graceconstruction.com)
 - 2. W.R. Meadows, Inc. (www.wrmeadows.com)
 - 3. Polyguard Products, Inc. (www.polyguardproducts.com)
 - 4. Same manufacturer as specified in 07 2800 Moisture Air Barriers
- B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Rubberized Asphalt Flashings:
 - 1. Description: ASTM D1970; minimum 32 mil thick butyl rubber modified asphalt laminated to 8 mil thick cross-laminated HDPE film, release paper facing, self adhering.
 - 2. Source: Same as moisture-air barrier (Section 07 2800) or approved equal.

2.3 ACCESSORIES

- A. Termination Mastic: Type recommended by flashing manufacturer.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Provide flexible flashings in exterior wall assemblies at:
 - 1. Base of walls.
 - 2. Top of walls under copings.
 - 3. Transitions between materials.
 - 4. Around all openings and penetrations through walls.
- B. Lap ends 4 inches minimum.
- C. Press to full bond with substrate without voids, wrinkles, bridging, or fishmouths.
- D. Roll ends and edges with hand held roller; ensure tight seal.
- E. Apply trowel coat of mastic along flashing at top edge, seams, cuts, and penetrations.

END OF SECTION

**SECTION 07 9200
JOINT SEALERS**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Joint backup materials.
 - 2. Joint sealers.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

- A. ASTM International (ASTM):
 - 1. C510 - Standard Test Method for Staining and Color Change of Single- or Multicomponent Joint Sealants.
 - 2. C719 - Standard Test Method for Adhesion and Cohesion of Elastomeric Joint Sealants Under Cyclic Movement (Hockman Cycle).
 - 3. C794 - Standard Test Method for Adhesion-In-Peel of Elastomeric Joint Sealants.
 - 4. C834 - Standard Specification for Latex Sealing Compounds.
 - 5. C919 - Standard Practice for Use of Sealants in Acoustical Applications.
 - 6. C920 - Standard Specification for Elastomeric Joint Sealants.
 - 7. C1193 - Standard Guide for Use of Joint Sealants.
 - 8. C1248 - Standard Test Method for Staining of Porous Substrate by Joint Sealants.
 - 9. C1330 - Standard Specification for Cylindrical Sealant Backing for Use with Cold Liquid Applied Sealants.
 - 10. D2203 - Standard Test Method for Staining from Sealants.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Product Data: Indicate sealers, primers, backup materials, bond breakers, and accessories proposed for use.
 - 2. Manufacturers Color Chart.
 - 3. Warranty: Sample warranty form.

1.4 PROJECT CONDITIONS

- A. Do not apply sealers at temperatures below 45 degrees F unless approved by sealer manufacturer.

1.5 WARRANTIES

- A. Furnish manufacturer's 10 year warranty providing coverage for sealers and accessories that fail to provide air and water tight seal, exhibit loss of adhesion or cohesion, or do not cure.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers:
 - 1. BASF Building Systems. (www.buildingsystems.basf.com)
 - 2. Dow Corning Corp. (www.dowcorning.com)

3. GE Silicones. (www.siliconeforbuilding.com)
4. Pecora Corp. (www.pecora.com)
5. Sika Corp. (www.sikausa.com)
6. Tremco, Inc. (www.tremcosealants.com)

B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Joint Sealer Type 1
 1. ASTM C920, Grade P, multiple component polyurethane type, self-leveling grade.
 2. Movement capability: Plus or minus 25 percent.
 3. Color: To be selected from manufacturer's full color range.
- B. Joint Sealer Type 2:
 1. ASTM C920, Grade NS, single component polyurethane type, non sag.
 2. Movement capability: Plus or minus 25 percent.
 3. Color: To be selected from manufacturer's full color range.
- C. Joint Sealer Type 3:
 1. ASTM C920, Grade NS, single component butyl rubber type, non sag.
 2. Movement capability: Plus or minus 12-1/2 percent.
 3. Color: To be selected from manufacturer's full color range.
- D. Joint Sealer Type 4:
 1. ASTM C834, single component acrylic latex, non sag.
 2. Movement capability: Plus or minus 7-1/2 percent.
 3. Color: White, Paintable
- E. Joint Sealer Type 5:
 1. ASTM C920, Grade NS, single component silicone, non sag, mildew resistant.
 2. Movement capability: Plus or minus 25 percent.
 3. Color: To be selected from manufacturer's full color range.
- F. Joint Sealer Type 6:
 1. ASTM C920, Grade NS, single component polyurethane type, non sag, recommended by manufacturer for continuous water immersion.
 2. Movement capability: Plus or minus 25 percent.
 3. Color: To be selected from manufacturer's full color range.
- G. Joint Sealer Type 7:
 1. ASTM C834, single component acrylic latex, non sag, non-hardening, recommended by manufacturer for acoustical applications.
 2. Movement capability: Plus or minus 7-1/2 percent.
 3. Color: White.

2.3 ACCESSORIES

- A. Primers, Bondbreakers, and Solvents: As recommended by sealer manufacturer.
- B. Joint Backing:
 1. ASTM C1330, closed cell polyethylene foam, preformed round joint filler, non absorbing, non staining, resilient, compatible with sealer and primer, recommended by sealer manufacturer for each sealer type.
 2. Size: Minimum 1.25 times joint width.

2.4 MIXES

- A. Mix multiple component sealers in accordance with manufacturer's instructions.
 - 1. Mix with mechanical mixer; prevent air entrainment and overheating.
 - 2. Continue mixing until color is uniform.

PART 3 EXECUTION

3.1 PREPARATION

- A. Remove loose and foreign matter that could impair adhesion. If surface has been subject to chemical contamination, contact sealer manufacturer for recommendation.
- B. Clean and prime joints in accordance with manufacturer's instructions.
- C. Protect adjacent surfaces with masking tape or protective coverings.
- D. Sealer Dimensions:
 - 1. Joints 1/4 to 1/2 inch wide: Depth equal to width.
 - 2. Joints over 1/2 inch wide: Depth equal to one half of width.

3.2 APPLICATION

- A. Apply products in accordance with manufacturer's instructions.
- B. Install sealers and accessories in accordance with ASTM C1193.
- C. Install acoustical sealers and accessories in accordance with ASTM C919.
- D. Install joint backing to maintain required sealer dimensions. Compress backing approximately 25 percent without puncturing skin. Do not twist or stretch.
- E. Use bondbreaker tape where joint backing is not installed.
- F. Fill joints full without air pockets, embedded materials, ridges, and sags.
- G. Tool sealer to smooth profile.
- H. Apply sealer within manufacturer's recommended temperature range.

3.3 CLEANING

- A. Remove masking tape and protective coverings after sealer has cured.
- B. Clean adjacent surfaces.

3.4 SCHEDULE

JOINT LOCATION OR TYPE	SEALER TYPE
Exterior Joints:	
Joints in horizontal surfaces subject to pedestrian or vehicular, traffic	1
Joints in fountains or water features	6
Joints in above-grade surfaces	2
Interior Joints:	
Joints in horizontal surfaces subject to pedestrian or vehicular. traffic	1
Joints in toilet rooms, countertops, kitchens.	5
Joints in acoustical assemblies	7
Other joints	4

END OF SECTION

**SECTION 08 1113
HOLLOW METAL DOORS AND FRAMES**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Hollow steel doors and frames.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.
 - 2. Section 08 1416 – Flush Wood Doors
 - 3. Section 08 7100 - Door Hardware.
 - 4. Section 08 8000 - Glazing.

1.2 REFERENCES

- A. American National Standards Institute (ANSI)/Steel Door Institute (SDI):
 - 1. A250.3 - Test Procedure and Acceptance Criteria for Factory Applied Finished Painted Steel for Steel Doors and Frames.
 - 2. A250.4 - Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors, Frames, Frame Anchors and Hardware Reinforcings.
 - 3. A250.8 - Recommended Specifications for Standard Steel Doors and Frames.
 - 4. A250.10 - Test Procedure and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames.
 - 5. A250.11 - Recommended Erection Instructions for Steel Frames.
- B. ASTM International (ASTM):
 - 1. A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy Coated (Galvannealed) by the Hot-Dip Process.
 - 2. A924 - Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process.
 - 3. A1008/A1008M - Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability.
 - 4. C518 - Standard Test Method for Steady State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus.
 - 5. E413 - Classification for Rating Sound Insulation.
- C. National Fire Protection Association (NFPA) 80 - Standard for Fire Doors and Fire Windows.
- D. Steel Door Institute (SDI) 117 - Manufacturing Tolerances for Standard Steel Doors and Frames.
- E. Underwriters Laboratories (UL):
 - 1. 10B - Standard for Fire Tests of Door Assemblies.
 - 2. 10C - Standard for Positive Pressure Fire Tests of Door Assemblies.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Shop Drawings: Show locations, elevations, dimensions, model designations, fire thermal acoustical ratings, preparation for hardware, and anchoring details.
 - 2. Product Data: Show elevations, dimensions, gages of metal, hardware reinforcing gages and locations, and anchor types.

- B. Quality Control Submittals:
 - 1. Certificates of Compliance: Certification that products furnished comply with ANSI/SDI A250.3, ANSI/SDI 250.4, and ANSI/SDI A250.10.

1.4 QUALITY ASSURANCE

- A. Doors: ANSI/SDI A250.8.
 - 1. Grade: I - Standard Duty.
 - 2. Model: Full Flush.
 - 3. Exterior doors: Maximum thermal transmittance (U-value) per applicable building code, tested to ASTM C518.
- B. Frames: ANSI/SDI A250.8, Grade I - Standard Duty.
- C. Fire Door and Frame Construction: Conform to UL 10B.
- D. Installed Fire Rated Door and Frame Assemblies: Conform to NFPA 80.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Ship door frames with removable angle spreader; do not remove until frame is installed.
- B. Store doors upright in protected, dry area, off ground or floor, with at least 1/4 inch space between individual units.
- C. Do not cover with non vented coverings that create excessive humidity.
- D. Remove wet coverings immediately.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers:
 - 1. Ceco Door. (www.cecodoor.com)
 - 2. Curries. (www.curries.com)
 - 3. Pioneer Industries, Inc. (www.pioneerindustries.com)
 - 4. Steelcraft. (www.steelcraft.com)
- B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Steel Sheet:
 - 1. ASTM A1008/1008M, cold rolled.
- B. Galvanized Steel Sheet:
 - 1. ASTM A653/A653M, hot dipped, Structural Quality, Class G40 galvanized.
- C. Door Core:
 - 1. Exterior doors: Foamed-in-place polyurethane insulation or rigid polystyrene insulation manufactured using low-emitting, urea formaldehyde-free binders.
 - 2. Interior temperature-rise rated doors: Rigid mineral fiberboard manufactured using low-emitting, urea formaldehyde-free binders.

- D. Batt Insulation: Mineral wool type.

2.3 ACCESSORIES

- A. Glass, Glazing Sealers, and Accessories: Specified in Section 08 8000.
- B. Primer: Zinc rich type.

2.4 FABRICATION

- A. Fabricate doors and frames in accordance with ANSI/SDI A250.8.
- B. Fabricate exterior doors and frames from galvanized steel sheet.
- C. Doors:
 - 1. Fabricate from minimum 18 gage sheets.
 - 2. Close top and bottom edges of doors with steel channel, minimum 16 gage, extending full width of door, and spot welded to both faces, with top channel flush and bottom channel recessed.
 - 3. Fill voids between vertical steel stiffeners with batt insulation.
 - 4. Fabricate vertical door edges as vertical seam edge filled, dressed smooth, intermittently welded seams, edge filled, dressed smooth, or continuously welded seam, dressed smooth.
- D. Frames:
 - 1. Fabricate from minimum 16 gage sheets.
 - 2. Close corner joints tight with trim faces mitered and face welded, full profile welded, or continuously welded and ground smooth.
 - 3. Anchors:
 - a. Provide one anchor at each jamb for each 30 inches of door height.
 - b. Design anchors to provide positive fastenings to adjacent construction.
 - c. Provide one floor anchor welded to each jamb.
 - 4. Terminate stops 6 inches above finished floor. Cut bottom edge of stop at 45 degree angle and close.
 - 5. Where frames will be filled with concrete or grout, install silencers in frames before erection.
 - 6. Mullions for paired doors: Removable type, of same profiles as jambs.
- E. Accurately form to required sizes and profiles.
- F. Grind and dress exposed welds to form smooth, flush surfaces.
- G. Do not use metallic filler to conceal manufacturing defects.
- H. Fabricate with internal reinforcement for hardware specified in Section 08 7100; weld in place.
- I. Glazing Stops:
 - 1. Manufacturer's standard, screw on type with mitered corners.
 - 2. Locate screws within 1 inch of ends of stops and maximum 8 inches on center.
 - 3. Install glazing stops on secure side of frames.
- J. Design Clearances:
 - 1. Between door and frame: Maximum 1/8 inch.
 - 2. Between meeting edges of pairs of doors:
 - a. Non-fire rated doors: 3/16 inch plus or minus 1/16 inch.
 - b. Fire-rated doors: 1/8 inch plus or minus 1/16 inch.
 - 3. Undercut:

- a. Non-fire rated doors: Maximum 3/4 inch.
- b. Fire-rated doors: Comply with NFPA 80.
- 4. Between face of door and stop: 1/16 to 3/32 inch.

K. Manufacturing Tolerances: In accordance with SDI-117.

2.5 FINISHES

- A. Dress tool marks and surface imperfections to smooth surfaces.
- B. Clean and chemically treat steel surfaces.
- C. Touch up damaged metallic coatings.
- D. Apply manufacturer's standard rust inhibiting primer paint, air-dried or baked on, meeting requirements of ANSI/SDI A25010.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install doors and frames in accordance with ANSI/SDI A250.11.
- B. Set plumb and level.
- C. Secure to adjacent construction using fastener type best suited to application.
- D. Install glass as specified in Section 08 8000.
- E. Install hardware in accordance with Section 08 7100.

3.2 ADJUSTING

- A. Touch up minor scratches and abrasions in primer paint to match factory finish.

END OF SECTION

**SECTION 08 1416
FLUSH WOOD DOORS**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. [Wood veneer] [Fiberboard] faced flush doors.
 - 2. Factory finishing.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.
 - 2. Section 081113 – Hollow Metal doors and frames
 - 3. Section 08 7100 - Door Hardware.
 - 4. Section 08 8000 - Glazing.

1.2 REFERENCES

- A. ASTM International (ASTM) E90 - Standard Test Method for Measurement of Airborne-Sound Transmission Loss of Building Partitions.
- B. National Fire Protection Association (NFPA) 80 - Standard for Fire Doors and Fire Windows.
- C. Underwriters Laboratories (UL):
 - 1. 10B - Standard for Fire Tests of Door Assemblies.
 - 2. 10C - Standard for Positive Pressure Fire Tests of Door Assemblies.
- D. Window and Door Manufacturers Association (WDMA) - I.S.1A - Industry Standard for Architectural Flush Wood Doors.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Shop Drawings: Show locations, elevations, dimensions, fire acoustical ratings, and preparation for hardware.
 - 2. Samples:
 - a. 6 x 6 inch door samples showing edges, core, and faces.
 - 3. Warranty: Sample warranty form.
- B. Quality Control Submittals:
 - 1. Certificates of Compliance: Manufacturer's certification that doors comply with specified acoustical requirements.

1.4 QUALITY ASSURANCE

- A. Fire Door Construction: Conform to UL 10B.
- B. Installed Fire Rated Door Assembly: Conform to NFPA 80.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Package doors in heavy plastic with identifying marks; slit plastic wrap on site to permit ventilation, but do not remove from plastic until ready to install.

- B. Do not deliver doors until building is substantially water and weather tight.
- C. Store doors flat and level, with spacers between doors to allow for air circulation, in protected, dry area.
- D. Environmental Requirements: Maintain following conditions in building for minimum 7 days prior to, during, and after installation of doors:
 - 1. Temperature: 60 to 80 degrees F.
 - 2. Humidity: 43 to 70] percent.

1.6 WARRANTIES

- A. Furnish manufacturer's 5 year warranty providing coverage against defects in materials and workmanship and warpage beyond specified amount.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers:
 - 1. Algoma Hardwoods, Inc. (www.algomahardwoods.com)
 - 2. Eggers Industries. (www.eggersindustries.com)
 - 3. Marshfield Door Systems, Inc. (www.marshfielddoors.com)
 - 4. Oshkosh Door Co. (www.oshkoshdoor.com)
 - 5. VT Industries, Inc. (www.vtindustries.com)
- B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Flush Wood Doors:
 - 1. WDMA I.S.1A.
 - 2. Core type: Manufacturers standard for rating specified.
 - 3. Core manufactured using low-emitting, urea formaldehyde-free glues and binders.
 - 4. Wood veneer faces:
 - a. Maple, of quality suitable for transparent finish.
 - 5. Fiberboard faces: Minimum 1/8 inch thick high density fiberboard, [flush.] [paneled profile.]
 - 6. Adhesives: Waterproof.
 - 7. Glazing beads: Solid wood of species and cut to match face veneers, or formed metal.

2.3 ACCESSORIES

- A. Glass and Glazing Accessories: Specified in Section 08 8000.

2.4 FABRICATION

- A. Fabricate doors in accordance with WDMA I.S.1A.
 - 1. Performance duty level: Standard Duty.
 - 2. Number of plies: 7.
 - 3. Veneer matching:
 - a. Piece match: Book.
 - b. Face match: Balance.
 - c. Appearance of pairs, sets, and transoms: Matched.

- B. Prefitting; fit doors to frames at factory with following clearances:
 - 1. Fire and Acoustic rated doors:
 - a. Width: Cut lock edge only; 3/16 inch maximum.
 - b. Height: Cut bottom edge only; 3/4 inch maximum.
 - 2. Non-rated doors:
 - a. Width: Cut hinge and lock edges equally.
 - b. Height: Cut bottom edge only; maximum 3/4 inch.
 - 3. Edge clearances:
 - a. Jambs and head: 1/8 inch maximum between door and frame.
 - b. Sills without thresholds: 1/8 inch maximum between door and top of finish floor.
 - c. Sills with thresholds: 1/4 inch maximum between door and top of threshold.
 - d. Meeting stiles of pairs: 1/8 inch maximum between doors.
 - 4. Lock edge: Bevel 1/8 inch in 2 inches.

- C. Premachining: Machine doors at factory to receive hardware specified in Section 08 7100.

2.5 FINISHES

- A. Factory Finishing:
 - 1. Factory finish doors in accordance with AWI/AWMAC/WI Architectural Woodwork Standards, Section 5.
 - 2. Finish system: Clear Polyurethane
 - 3. Sheen: As selected by architect.

PART 3 EXECUTION

3.1 PREPARATION

- A. Condition doors to average humidity that will be encountered after installation.

3.2 INSTALLATION

- A. Install doors in accordance with WDMA I.S.1A.
- B. Install doors plumb and level.
- C. Field Fitting to Frames:
 - 1. Do not cut field cut doors down to opening sizes smaller than those for which they were manufactured.
- D. If field cutting for height is necessary, cut bottom edge only, 3/4 inch maximum.
- E. Seal field cut surfaces with same finish as door faces.
- F. Install door hardware in accordance with Section 08 7100.
- G. Install glass as specified in Section 08 8000.
- H. Installation Tolerances:
 - 1. Warp: Maximum 1/4 inch in any 3'-0" x 7'-0" portion of door, measured with taut string or straight edge on concave face of door.

END OF SECTION

**SECTION 08 5300
PLASTIC WINDOWS**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Tubular extruded plastic windows with fixed and operating sash.
 - 2. Shop glazing.
 - 3. Operating hardware and insect screens.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.
 - 2. Section 08 8000 - Glazing.

1.2 REFERENCES

- A. American Architectural Manufacturers Association (AAMA):
 - 1. 303 - Voluntary Specification for Poly (Vinyl Chloride) (PVC) Exterior Profile Extrusions.
 - 2. 1503 - Voluntary Test Method for Thermal Transmittance and Condensation Resistance of Windows, Doors and Glazed Wall Sections.
- B. American Architectural Manufacturers Association/Window and Doors Manufacturers Association/Canadian Standards Association (AAMA/WDMA/CSA) 101/I.S.2/A440 - Standard/Specification for Windows, Doors and Unit Skylights.
- C. American Society of Civil Engineers (ASCE) 7 - Minimum Design Loads for Buildings and Other Structures.
- D. ASTM International (ASTM):
 - 1. D3656 - Standard Specification for Insect Screening and Louver Cloth Woven from Vinyl-Coated Glass Yarns.
 - 2. E2112 - Standard Practice for Installation of Exterior Windows, Doors and Skylights.
 - 3. F588 - Standard Test Method for Resistance of Window Assemblies to Forced Entry Excluding Glazing.
- E. Energy Star (www.energystar.gov) - Qualified Products.
- F. National Fenestration Rating Council (NFRC) 100 - Procedures for Determining Fenestration Products U-Factors.

1.3 SYSTEM DESCRIPTION

- A. Windows and Glass Doors: AAMA/WDMA/CSA 101/I.S.2/A440.
 - 1. Product type:
 - a. Sliding windows: HS - Horizontal Sliding.
 - b. Compression seal windows: AP - Awning, Hopper, or Projected. C - Casement.
 - c. Fixed windows: F - Fixed.
 - 2. Performance requirements: Grade [R15 Residential]. [R20 Residential.] [C20 Commercial.] [C30 Commercial.] [HC40 Heavy Commercial.]
 - 3. Thermal transmittance of window assembly: Maximum U-value as required by the Oregon Structural Speciality Code and Oregon Energy Specialty Code latest edition.
 - 4. Forced entrance resistance: Conform to ASTM F588.

- B. Design Requirements; design windows and glass doors to withstand:
 - 1. Wind loads in accordance with ASCE 7 and Oregon Structural Specialty Code.
 - 2. Movement caused by an ambient temperature range of 120degrees F and a surface temperature range of 160 degrees F.

1.4 SUBMITTALS

- A. Submittals for Review:
 - 1. Manufacturer's product information including warrantee.
 - 2. Shop Drawings: Include locations, elevations, sections, materials, finishes, and attachments.
 - 3. Samples:
 - a. 3 x 3inch vinyl samples showing available colors.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum 5 years experience in work of this Section.
- B. Conform to applicable accessibility code for locating hardware.
- C. Energy Star qualified for project location; bear Energy Star label.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers:
 - 1. Certainteed Corp. (www.certainteed.com)
 - 2. Jeld-Wen Windows and Doors. (www.jeldwen.com)
 - 3. Milgard Windows & Doors (www.milgard.com)
- B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Extruded PVC: AAMA 303; hollow, multi-chambered sections of extruded polyvinyl chloride (PVC), with integral ultraviolet inhibitors.
- B. Glass and Glazing Accessories: Specified in Section 08 8000.
- C. Operating Hardware:
 - 1. Aluminum, stainless steel, or other noncorroding material..
 - 2. Horizontal sliding windows: Extruded PVC interfacing tracks and cam type lock.
 - 3. Casement & Awning windows: Manufacturer's standard operator, with limit stops, and cam type lock.

2.3 ACCESSORIES

- A. Fasteners: Stainless steel, hot-dip galvanized steel, or fluoropolymer coated steel; type best suite to application.
- B. Weatherstripping: Manufacturer's standard, permanently resilient, profiled for weather seal.
- C. Insect Screens: Manufacturer's Standard

- D. Limit Stops: Resilient rubber.

2.4 FABRICATION

- A. Fabricate to AAMA/WDMA/CSA 101/I.S.2/A440.
- B. Fabricate with minimum clearances and shim spaces around perimeter, yet enabling installation and dynamic movement.
- C. Fabricate framing, mullions and sash members with fusion welded corners and joints, in rigid jig. Supplement frame sections with internal reinforcement where required for rigidity.
- D. Form sills and stools in one piece. Slope sills for wash.
- E. Accurately fit and secure joints and intersections. Make joints flush, hairline, and weathertight.
- F. Fabricate in largest practical units.
- G. Weatherstrip operable sash.
- H. Conceal fasteners and attachments from view.
- I. Provide internal drainage weep holes and channels to route moisture to exterior.
- J. Form snap-in glass stops, closure molds, weather stops, and flashings of extruded PVC for tight fit into window frame section.
- K. Form weather stop flange to perimeter of unit.
- L. Mount screens in removable, rewireable aluminum frame.

2.5 FINISHES

- A. Exterior Surfaces: Color to be selected from manufacturer's full color range.
- B. Interior Surfaces: Color to be selected from manufacturer's full color range.
- C. Screens: Color to be selected from manufacturer's full color range.
- D. Hardware: To be selected from manufacturer's full color range.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install windows and glass doors in accordance with ASTM E2112, manufacturer's instructions, and approved Shop Drawings.
- B. Set plumb, level, and rigid, free from warpage.
- C. Anchor to supporting construction.
- D. Installation Tolerances:

1. Maximum variation from plumb or level: $\frac{1}{8}$ inch in 3 feet or $\frac{1}{4}$ inch in any 10 feet, whichever is less.
2. Maximum misalignment of members abutting end to end: $\frac{1}{32}$ inch.

3.2 ADJUSTING

- A. Adjust for smooth operation.

END OF SECTION

**SECTION 08 7100
DOOR HARDWARE**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Hardware for doors.
 - 2. Weatherstripping and thresholds.
 - 3. Hardware for other sections referencing this section.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

- A. American National Standards Institute/Builders Hardware Manufacturers Association (ANSI/BHMA):
 - 1. A156.1 - Butts and Hinges.
 - 2. A156.2 - Bored and Preamsembled Locks and Latches.
 - 3. A156.3 - Exit Devices.
 - 4. A156.4 - Door Controls - Closers.
 - 5. A156.5 - Auxiliary Locks and Associated Products.
 - 6. A156.13 - Mortise Locks and Latches.
 - 7. A156.18 - Materials and Finishes.
 - 8. A156.31 - Electric Strikes.
- B. National Fire Protection Association (NFPA):
 - 1. 80 - Standard for Fire Doors and Windows.
 - 2. 105 - Installation of Smoke Control Door Assemblies.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Shop Drawings: Schedule hardware by door type and location; show door size, hand, thickness, edge bevel, hardware components and quantities, keying, and finishes.
 - 2. Product Data: Manufacturer's descriptive data for each component.
 - 3. Samples: One sample of each hardware item, if requested. Samples will be returned for installation on Project.
 - 4. Warranty: Sample warranty form.
- B. Closeout Submittals:
 - 1. Copy of approved hardware schedule.
 - 2. Keying list.
 - 3. Keys; tag with mark corresponding to keying schedule.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum 5 years experience in work of this Section.
- B. Provide hardware labeled by recognized independent testing laboratory and meeting requirements of NFPA 80 for fire rated doors.
- C. Provide smoke gasketing at fire rated doors in accordance with NFPA 105.

- D. Conform to applicable accessibility code for locating hardware and for door opening force requirements.
- E. Pre-Installation Conference:
 - 1. Convene at site prior to ordering permanent cylinders for Project.
 - 2. Attendance: Architect, Owner, Contractor, and hardware supplier.
 - 3. Review, discuss, and finalize Owner's keying requirements.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Pack hardware items separately, with fasteners, installation instructions, and templates.
- B. Mark containers with item number corresponding to hardware schedule.

1.6 WARRANTIES

- A. Furnish manufacturer's 5 year warranty.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers - Butt Hinges:
 - 1. Bommer Industries, Inc. (www.bommer.com)
 - 2. Hager Companies. (www.hagerco.com)
 - 3. McKinney Products Co. (www.mckinneyhinge.com)
 - 4. Stanley Hardware. (www.stanleyworks.com)
- B. Acceptable Manufacturers - Continuous Hinges:
 - 1. Hager Companies. (www.hagerco.com)
 - 2. McKinney Products Co. (www.mckinneyhinge.com)
 - 3. Pemko Manufacturing Co. (www.pemko.com)
 - 4. Stanley Hardware. (www.stanleyhardware.com)
- C. Acceptable Manufacturers - Locksets, Latchsets, Deadbolts, and Cylinders:
 - 1. Best Access Systems. (www.bestaccess.com)
 - 2. Corbin Russwin Architectural Hardware. (www.corbin-russwin.com)
 - 3. Schlage Lock Co. (www.schlage.com)
 - 4. Sargent Mfg. (www.sargentlock.com)
 - 5. Yale Security, Inc. (www.yalelocks.com)
- D. Acceptable Manufacturers - Closers:
 - 1. Corbin Russwin Architectural Hardware. (www.corbin-russwin.com)
 - 2. Dorma Door Controls, Ltd. (www.dorma-usa.com)
 - 3. LCN Closers. (www.lcnclosers.com)
 - 4. Sargent Mfg. (www.sargentlock.com)
 - 5. Yale Security, Inc. (www.yalelocks.com)
- E. Acceptable Manufacturers - Exit Devices:
 - 1. Corbin Russwin Architectural Hardware. (www.corbin-russwin.com)
 - 2. Sargent Mfg. (www.sargentlock.com)
 - 3. Von Duprin. (www.vonduprin.com)
 - 4. Yale Security, Inc. (www.yalelocks.com)
 - 5. SDC Security Door Controls (www.sdcsecurity.com)

- F. Acceptable Manufacturers - Door Seals:
1. Hager Companies. (www.hagerco.com)
 2. National Guard Products, Inc. (www.ngpinc.com)
 3. Pemko Manufacturing Co. (www.pemko.com)
 4. Reese Enterprises, Inc. (www.reeseusa.com)
- G. Electromagnet Door Locks
1. SDC Security Door Controls (www.sdcsecurity.com)
 2. Rutherford Controls (rutherfordcontrols.com)
- H. Substitutions: Under provisions of Division 01.

2.2 MANUFACTURED UNITS

- A. Butt Hinges:
1. Description: ANSI/BHMA A156.1, full mortise type, five knuckle, non rising pin, hole in bottom tip for pin removal.
 2. Exterior outswinging doors: Provide set screw in barrel making hinge non-removable when door is closed.
 3. Weight: Standard weight.
 4. Bearing type: Ball bearing.
 5. Size: 4-1/2 x 4-1/2 inches.
- B. Electric Butt Hinges:
1. Same construction, weight, bearing type, and size as butt hinges.
 2. Operation: Circuit type; permit passage of constant flow of current from jamb to door regardless of position of door.
- C. Locksets, Latchsets, Deadbolts, and Cylinders:
1. Locksets and latchsets:
 - a. Type: ANSI/BHMA A156.2, Grade 2, cylindrical, Lever handles.
 - b. Lever design: To be selected from manufacturer's full range of selections. Provide tactile contact surfaces on doors into hazardous areas.
 2. Electromechanical locksets:
 - a. Same manufacturer and construction as locksets.
 - b. Solenoid activated locking device.
 3. Deadbolts:
 - a. Type: ANSI/BHMA A156.5, cylindrical type with 1 inch bolt throw.
 - b. Functions: As scheduled.
 4. Strike plates: Curved lip, minimum lip projection necessary to protect door frame and trim and to conceal edges of strike cutout.
 5. Strike boxes: Steel.
 6. Cylinders: Six pin, removable core type.
 7. Keys: Solid brass or nickel silver.
 8. Keying:
 - a. Key as directed by Owner.
 - b. Provide four keys for each lock and 6 master keys.
 - c. Inscribe keys with lock manufacturer.
- D. Electric Strikes:
1. Type: ANSI/BHMA A156.31.
 2. Operation: Fail safe; in locked position, strike is energized. Release occurs by switching device or power failure.

- E. Closers:
 - 1. Description: ANSI/BHMA A156.4, overhead exposed, metal cover, sized or adjustable to door conditions.
 - 2. Construction: Cast aluminum or iron body, rack and pinion operation with compression spring, fully hydraulic.
 - 3. Closing and latching speeds and backcheck: Controlled by independently adjustable concealed valves.
 - 4. Mounting: Surface mounted, non handed with universal regular or parallel arm. Suitable for mounting on 1-3/4inch minimum door top rail or transom bar without drop plate.
 - 5. Adjustable opening force and delayed closing in accordance with applicable accessibility code.
- F. Exit Devices:
 - 1. Description: ANSI/BHMA A156.3, Grade 2, push pad type.
 - 2. Outside trim: To be selected from manufacturer's full range of selections.
 - 3. Cylinders: Same as specified above for locksets.
- G. Door Stops: Wall or Floor mounted, aluminum or stainless steel housing with resilient bumper.
- H. Electromagnetic Door locks and Holders: Wall, 120 volts AC operation with interior motion detection release and exterior access control by push button controllers located per owner.
- I. Overhead Holders: Glynn-Johnson 450 series or approved substitute equal.
- J. Push & Pull Plates: 16 gage, beveled edges, 4 x 16 inches, secured with through bolts.
- K. Kick Plates:
 - 1. Type: 16 gage, beveled edges, secured with flathead countersunk screws.
 - 2. Size: 8 inches high x door width less 2 inches.
- L. Threshold: Complying with applicable accessibility code.
- M. Rain Drip: 2 1/2" Aluminum, CR Laurence 155A or approved equal.
- N. Key Control System:
 - 1. Cabinet: Sheet steel with baked enamel finish, piano hinged door, and lock keyed to building system.
 - 2. Capacity: 150 percent of locks required for project.
 - 3. Horizontal metal strips for key hook labeling with plastic strip cover over paper labels.

2.3 FINISHES

- A. Finishes: To ANSI/BHMA A156.18.
- B. All finishes shall be 630-satin stainless steel, or approved equal.
- C. Aluminum materials shall be clear anodized.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install hardware in accordance with approved hardware schedule and manufacturer's instructions.
- B. Install mortise items flush with adjacent surfaces.

- C. Install locksets, closers, and trim after finish painting.
- D. Set thresholds in mastic and secure.
- E. Mount closers so that closers and closer arms are not visible on corridor or public side of doors or on exterior of building.
- F. Mounting Heights - Finished Floor to Center Line of:
 - 1. Locksets: 36 inches.
 - 2. Dead locks: 42 inches.
 - 3. Push pad exit devices: 36 inches.
 - 4. Cross bar exit devices: 36 inches.
 - 5. Top hinge: Maximum 10inches from frame head.
 - 6. Bottom hinge: Maximum 12-1/2inches from floor.
 - 7. Intermediate hinges: Equally spaced.
- G. Connect electric hardware to power supply, security system, and fire alarm and detection system as directed by owner.
- H. Set key cabinet in place, place keys in cabinets, label and index.

3.2 PROTECTION

- A. Remove or protect hardware until painting is completed.

3.3 ADJUSTING

- A. Test and adjust hardware for quiet, smooth operation, free from binding and rattling.
- B. Adjust doors to operate with maximum opening forces in accordance with applicable accessibility code.

3.4 HARDWARE SCHEDULE

ROOM	LOCKSET	DEADBOLT	HINGE	EXIT	CLOSER	NOTES
TYPE	ANSI# / Description	(IF ANY)	SET	Device		
ENTRY	A / Entrance	1	1	YES	YES	Electromagnetic lockset
EXIT	A / Entrance		1	YES	YES	
OFFICE	F82 / Office		1			
MEETING	F84 / Classroom		1			
STORAGE	F84 / Classroom		1			
SERVER	F84 / Classroom		1			
KITCHEN	F84 / Classroom		1			
RESTROOM	F76/Privacy		2			
ELECTRIC	F84 / Classroom		1			
JANITOR	F84 / Classroom		1			
Passage	F75 / Passage		1			

Descriptions

Hinges

#	DESCRIPTION
1	(3) 5 KNUCKLE CONSEALED BEARING HINGES (STANLEY CB191-32D OR APPROVED EQUAL)
2	SPRING HINGES (STANLEY 2060R-32D OR APPROVED EQUAL)

Locksets

STANLEY BEST 5K SERIES, (OR APPROVED EQUAL)

Closers

STANLEY CLOSER D3550 (OR APPROVED EQUAL)

Exit Devices

Von Duprin – 22 Series

Deadbolts

#	DESCRIPTION
1	RESTROOM INDICATOR DEADBOLT, INGERSOLL RAND FALCON -D271 (OR APPROVED EQUAL)

Electromagnetic Door lock

SDC Security Door Controls
Series 1500 (or approved equal)

END OF SECTION

**SECTION 08 8000
GLAZING**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Glass for other sections referencing this Section.
 - 2. [Framed] [Unframed] mirrors.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

- A. American Architectural Manufacturers Association (AAMA) 800 - Voluntary Specifications and Test Methods for Sealants.
- B. American National Standards Institute (ANSI) Z97.1 - Safety Performance Specifications and Methods of Test for Safety Glazing Material Used in Buildings.
- C. American Society of Civil Engineers (ASCE) 7 - Minimum Design Loads for Buildings and Other Structures.
- D. ASTM International (ASTM):
 - 1. C509 - Standard Specification for Elastomeric Cellular Preformed Gasket and Sealing Material.
 - 2. C794 - Standard Test Method for Adhesion-In-Peel of Elastomeric Joint Sealants.
 - 3. C864 - Standard Specification for Dense Elastomeric Compression Seal Gaskets, Setting Blocks, and Spacers.
 - 4. C920 - Standard Specification for Elastomeric Joint Sealants.
 - 5. C1036 - Standard Specification for Flat Glass.
 - 6. C1048 - Standard Specification for Heat-Treated Flat Glass-Kind HS, Kind FT, Coated and Uncoated Glass.
 - 7. C1115 - Standard Specification for Dense Elastomeric Silicone Rubber Gaskets and Accessories.
 - 8. C1172 - Standard Specification for Laminated Architectural Flat Glass.
 - 9. C1184 - Standard Specification for Structural Silicone Sealants.
 - 10. C1281 - Standard Specification for Preformed Tape Sealants for Glazing Applications.
 - 11. C1294 - Standard Test Method for Compatibility of Insulating Glass Edge Sealants with Liquid-Applied Glazing Materials.
 - 12. C1330 - Standard Specification for Cylindrical Sealant Backing for Use with Cold Liquid Applied Sealants.
 - 13. E119 - Standard Test Method for Fire Tests of Building Construction and Materials.
 - 14. E152 - Standard Test Method for Fire Test of Door Assemblies.
 - 15. E163 - Standard Test Method for Fire Tests of Window Assemblies.
 - 16. E330 - Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors By Uniform Static Air Pressure Difference.
 - 17. E1300 - Standard Practice for Determining Load Resistance of Glass in Buildings.
 - 18. E2190 - Standard Specification for Insulating Glass Unit Performance and Evaluation.
 - 19. F1233 - Standard Specification for Security Glazing Materials and Systems.
- E. Consumer Product Safety Commission (CPSC) 16 CFR 1201 - Safety Standard for Architectural Glazing Materials.

- F. Glass Association of North America (GANA):
 - 1. Engineering Standards Manual.
 - 2. Glazing Manual.
- G. Insulating Glass Manufacturers Alliance (IGMA):
 - 1. IGMA TB-3001 - Sloped Glazing Guidelines.
 - 2. SIGMA TM-3000 - Glazing Guidelines for Sealed Insulating Glass Units.
- H. National Fenestration Rating Council (NFRC):
 - 1. 100 - Procedure for Determining Fenestration Product Thermal Properties.
 - 2. 200 - Procedure for Determining Fenestration Product Solar Heat Gain Coefficients at Normal Incidence.
 - 3. 300 - Procedures for Determining Solar Optical Properties of Simple Fenestration Products.
- I. Underwriters Laboratories (UL) 752 - Standard for Safety Bullet-Resisting Equipment.

1.3 SYSTEM DESCRIPTION

- A. Glass Thicknesses:
 - 1. Provide glass in thicknesses, strengths, size and thermal performance properties in accordance with ASCE 7, the Oregon Structural Specialty Code, and Oregon Energy Specialty Code.

1.4 SUBMITTALS

- A. Submittals for Review:
 - 1. Product Data: Manufacturers descriptive data and performance attributes for insulated glass.
 - 2. Warranty: Sample warranty form.
- B. Quality Control Submittals:
 - 1. Test Report: Preconstruction adhesion and compatibility test report from glazing sealant manufacturer, based on submitted samples or acceptable data from previous testing of current formulations with similar products.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum 5years experience in work of this Section.
- B. Regulatory Requirements:
 - 1. Provide safety glass for locations subject to human impact as required by Building Code.
 - 2. Safety glass: Tested and labeled to CPSC 16 CFR 1201.
- C. Perform Work in accordance with GANA Glazing Manual.
- D. Fire Rated Glass Assemblies: Conform to ASTM E119.

1.6 PROJECT CONDITIONS

- A. Perform glazing when ambient temperature is above 40 degrees F.
- B. Perform glazing on dry surfaces.

1.7 WARRANTIES

- A. Insulating Glass Units: Provide manufacturer's 10 year warranty against material obstruction of vision through unit due to:
 - 1. Intrusion of dust or moisture.
 - 2. Internal condensation.
 - 3. Film formation on internal glass surfaces caused by failure of hermetic seal except failure caused in whole or in part by breakage or fracturing of any portion of glass surface.
- B. Glass Coatings: Provide manufacturer's 10 year warranty against peeling, cracking, or deterioration of coating under normal conditions.
- C. Mirrors: Provide manufacturer's 10 year warranty against silver spoilage resulting from manufacturing defects.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers - Glass:
 - 1. Guardian Industries Corp. (www.guardian.com)
 - 2. Oldcastle BuildingEnvelope. (www.oldcastlebe.com)
 - 3. Pilkington Architectural. (www.pilkington.com)
 - 4. PPG Industries, Inc. (www.ppgglazing.com)
 - 5. Viracon, Inc. (www.viracon.com)
- B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS - GLASS

- A. Clear Glass: ASTM C1036, Type 1 transparent flat, Class 1 clear.
- B. Clear Tempered Glass: ASTM C1048, Type 1 transparent flat, Class 1 clear, FT fully tempered.
- C. Clear Heat Strengthened Glass: ASTM C1048, Type 1 transparent flat, Class 1 clear, HS heat strengthened.
- D. Patterned Glass: ASTM C1036, Type II – pattern - manufacturer's standard privacy pattern.
- E. Mirror Glass: ASTM C1036, Type I transparent flat, Class 1 clear, Quality q1 mirror select.

2.3 MATERIALS - FIRE-RATED GLASS

- A. Fire Rated [Safety] Glass:
 - 1. Type: Two layers clear tempered glass separated by stainless steel spacer, clear intumescent gel filler, thickness as required to achieve fire resistance ratings indicated.

2.4 ACCESSORIES

- A. Setting Blocks, Spacesrs, Gaskets, Primers, Sealants, Glazing Tape and Glazing Compound as recommended by glazing manufacturer and compatible with substrate.

2.5 FABRICATION

- A. Annealed Glass: Comply with ASTM C1036.

- B. Heat Strengthened and Tempered Glass:
 - 1. Comply with ASTM C1048.
 - 2. Process in horizontal position so that inherent roller distortion will run parallel to building floor lines after installation.
- C. Sealed Insulating Glass:
 - 1. Comply with ASTM E2190.
 - 2. Fabricate spacer bar frame of tubular aluminum filled with desiccant.
 - 3. Bond spacer bar frame to glass panes with twin primary seals.
 - 4. Fill space outside frame to glass edge with elastomeric sealant.
- D. Low-E Coated Glass: Apply low-emissivity coating to scheduled glass surface.
- E. Mirror Glass:
 - 1. Apply one coat of silver, one coat of electroplated copper, and one coat of organic mirror backing compound to back surface of glass.
 - 2. Arise and polish edges.
 - 3. Isolate glass from frame with resilient, waterproof padding.
- F. Fabrication Tolerances: ASTM C1036 and ASTM C1048.
- G. Glass Identification:
 - 1. Apply manufacturer's label indicating type and thickness to each light of glass. Show position of exterior face when installed, where applicable.
 - 2. Etch manufacturer's label on each light of tempered glass.
- H. Source Quality Control:
 - 1. Preconstruction adhesion and compatibility testing:
 - a. Perform adhesion test including ultraviolet exposure through glass on production samples of metals and glass in accordance with ASTM C794.
 - b. Test glass units, glazing materials, and glass framing members with specified finish for sealant compatibility, priming, and preparation requirements for optimum adhesion and performance.

PART 3 EXECUTION

3.1 PREPARATION

- A. Clean glazing rabbets; remove loose and foreign matter.
- B. Remove protective coatings on metal surfaces.
- C. Clean glass just prior to installation.

3.2 INSTALLATION - GENERAL

- A. Install glass in accordance with glass manufacturer's instructions.
- B. Maintain manufacturer's recommended edge and face clearances between glass and frame members.

3.3 INSTALLATION - MIRRORS

- A. Apply mirror adhesive in accordance with manufacturer's instructions to cover maximum 25 percent of back of mirror. Set mirror and press against substrate to ensure adhesive bond.

- B. Support mirrors on concealed hanger brackets. Anchor rigidly to wall construction.
- C. Place plumb and level without distortion.

3.4 PROTECTION

- A. After installation, mark glass with an 'X' using removable plastic tape.

END OF SECTION

**SECTION 09 2900
GYPSUM BOARD**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Acoustical insulation.
 - 2. Gypsum board.
 - 3. Cementitious panels.
 - 4. Taping and bedding of gypsum board.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.
 - 2. Section 07 9200 - Joint Sealers.

1.2 REFERENCES

- A. American National Standards Institute (ANSI):
 - 1. A108.11 - Interior Installation of Cementitious Backer Units.
 - 2. A118.9 - Test Methods and Specifications for Cementitious Backer Units.
- B. ASTM International (ASTM):
 - 1. C475 - Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board.
 - 2. C514 - Standard Specification for Nails for the Application of Gypsum Wallboard.
 - 3. C665 - Standard Specification for Mineral Fiber Blanket Thermal Insulation for Wood Frame and Light Construction Buildings.
 - 4. C1002 - Standard Specification for Steel Drill Screws for the Application of Gypsum Board.
 - 5. C1047 - Standard Specifications for Accessories for Gypsum Wallboard and Gypsum Veneer Base.
 - 6. C1396 - Standard Specification for Gypsum Board.
 - 7. 43 D3273 - Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber.
- C. Gypsum Association (GA):
 - 1. GA-214 - Levels of Gypsum Board Finish.
 - 2. GA-216 - Recommended Specifications for the Application and Finishing of Gypsum Board.
 - 3. GA-600 - Fire Resistance Design Manual.
- D. Underwriters Laboratories, Inc. (UL) - Fire Resistance Directory.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Product Data: Illustrate panel product types, thicknesses, and locations; acoustical insulation; and accessories.

1.4 QUALITY ASSURANCE

- A. Fire Resistance Ratings:
 - 1. Construct assemblies to achieve fire resistance ratings indicated on Drawings, in accordance with applicable referenced GA or UL design number.

2. If requirements of assembly numbers referenced conflict with Contract Document requirements, conform to assembly requirements.

1.5 PROJECT CONDITIONS

- A. Do not install gypsum board until building is substantially weathertight.
- B. Maintain temperature in spaces in which work is being performed above 50 degrees F during and after installation.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers - Gypsum Panels:
 1. CertainTeed Gypsum, Inc. (www.certainteed.com)
 2. GP Gypsum Corporation. (www.gp.com)
 3. National Gypsum Co. (www.nationalgypsum.com)
 4. USG Corporation. (www.usg.com)
- B. Acceptable Manufacturers - Cementitious Panels:
 1. James Hardie Building Products, Inc. (www.jameshardie.com)
- C. Substitutions: Under provisions of Division 01.

2.2 MATERIALS - GYPSUM PANELS

- A. Regular Gypsum Board: ASTM C1396; 48 inches wide x 5/8 inch thick, maximum practical length, tapered edge.
- B. Fire Resistant Gypsum Board: ASTM C1396, Type X; 48 inches wide x 5/8 inch thick, maximum practical length, tapered edge; apply to fire rated assemblies.
- C. Water Resistant Gypsum Board: ASTM C1396; 48 inches wide x 5/8 inch thick, maximum practical length, water resistant; apply to fire rated walls to receive tile, sanitary wall panels, and walls wet locations.
- D. Fire Resistant, Water Resistant Gypsum Board: ASTM C1396, Type X; 48 inches wide x 5/8 inch thick, maximum practical length, water resistant; apply to fire rated walls to receive tile, sanitary wall panels, and walls wet locations.

2.3 MATERIALS - CEMENTITIOUS PANELS

- A. Cementitious Panels: ANSI A 118.9, high density, cementitious with glass fiber reinforcing, 5/8 inch thick x 48 inches wide, maximum practical length, ends and edges square cut; apply to shower and bathtub walls.

2.4 ACCESSORIES

- A. Fasteners: ASTM C1002, 5/8 inch minimum penetration into framing.
- B. Acoustical Insulation:
 1. ASTM C665, Type I, glass fiber composition, unfaced.
 2. Free from urea-formaldehyde resins, phenol, acrylics, and artificial colors.

- C. Adhesive:
 - 1. Type recommended by gypsum panel manufacturer.
- D. Trim Accessories: ASTM C1047.
 - 1. Material: [Formed steel, minimum 26 gage core steel, hot dip galvanized finish, expanded flanges.
 - 2. Corner reinforcement: GA-216, Type CB-100 x 100.
 - 3. Casing: GA-216, Type LC.
 - 4. Control joint.
- E. Acoustical Sealer: Specified in Section 07 9200.
- F. Joint Treatment Materials:
 - 1. Reinforcing tape and joint compound; ASTM C475.

PART 3 EXECUTION

3.1 INSTALLATION OF GYPSUM PANELS

- A. Install panels and accessories in accordance with ASTM C754, GA-216, and manufacturer's instructions.
- B. Accurately cut panels to fit around openings and projections. Do not tear face paper or break gypsum core.
- C. Apply panels [at non fire-rated assemblies] in most economical manner, with ends and edges occurring over supports.
- D. Apply panels at fire-rated assemblies as required by design assembly.
- E. Stagger joints on opposite sides of partitions.
- F. Do not locate joints to align with edges of openings unless a control joint is installed.
- G. Mechanically fasten panels to framing. Place fasteners minimum 3/8 inch from edges of panels; drive heads slightly below surface. Stagger fasteners at abutting edges.
- H. Apply face layer of double layer applications with joints offset from those in base layer; secure with mechanical fasteners to framing or with adhesive to base layer.
- I. At deflection compensating head tracks, cut panels 1/2 inch short of structure at head; do not secure panels to top runner channel.
- J. Treat cut edges and holes in moisture resistant gypsum board with joint sealer.
- K. Where recessed items occur in fire rated partitions, box item on all sides with gypsum board as required to maintain continuity of fire rating.

3.2 INSTALLATION OF ACOUSTICAL PARTITIONS

- A. Extend acoustical partitions past intersecting non-acoustical partitions.
- B. Install acoustical insulation:

1. Butt to framing members and adjacent construction.
 2. Carry around pipes, wiring, outlets, and other construction without voids.
 3. Press against one gypsum board surface to form slight air space on opposite side.
- C. Seal acoustical partitions at perimeter and around penetrations:
1. Apply continuous bead of sealer between gypsum panel edges and adjacent construction.
 2. Seal space between gypsum panels at control joints, prior to installing metal control joint.
 3. Apply sealer to penetrations through partitions.

3.3 INSTALLATION OF ACOUSTICAL INSULATION ABOVE CEILINGS

- A. Install acoustical insulation in continuous layer. Butt tightly to adjacent insulation and to other construction.
- B. Carry over pipes, wiring, boxes, and other construction without voids.

3.4 INSTALLATION OF CEMENTITIOUS PANELS

- A. Install in accordance with ANSI A108.11 and manufacturer's instructions.
- B. Apply panels horizontally, with ends occurring over supports. Stagger end joints in adjacent rows.
- C. Cut panels to fit around openings and projections.
- D. Mechanically fasten panels to framing at maximum 8 inches on center.

3.5 INSTALLATION OF ACCESSORIES

- A. Install in accordance with manufacturer's instructions.
- B. Install corner reinforcement at outside corners. Use single lengths where length of corner does not exceed standard length.
- C. Install casings where indicated and where gypsum board abuts dissimilar materials or stops with edge exposed.
- D. Install control joints at ceilings:
1. At maximum 50 feet on center.
 2. Where ceiling framing changes direction.
- E. Install control joints at walls and partitions:
1. At changes in backup material.
 2. At maximum 30 feet on center.
 3. Above both jambs of openings in partitions.

3.6 JOINT TREATMENT

- A. Treat joints and fasteners in gypsum board in accordance with GA-214.
- B. Levels of Finish:
1. Surfaces in plenums, service corridors: Level 1 finish.
 2. Surfaces in Janitor closets and to receive tile or stone: Level 2 finish.
 3. Surfaces to receive flat, eggshell paints, or [wall coverings: Level 4 finish.
 4. Surfaces to receive semigloss and gloss paints: Level 5 finish.

END OF SECTION

SECTION 09 5100

ACOUSTICAL CEILINGS

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Suspended metal ceiling grid system.
 - 2. Acoustical panels.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

- A. ASTM International (ASTM):
 - 1. A641 - Standard Specification for Zinc-Coated Carbon Steel Wire.
 - 2. C635 - Standard Specification for Metal Suspension Systems for Acoustical Tile and Lay-In Panel Ceilings.
 - 3. C636 - Standard Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-In Panels.
 - 4. E1264 - Standard Classification of Acoustical Ceiling Products.
- B. Ceiling and Interior Systems Construction Association (CISCA) - Ceiling Systems Handbook.
 - 1. Recommendations for Ceilings installed in Seismic Zones D, E, & F and Occupancy Category IV (Essential Facilities).
- C. Underwriters Laboratories, Inc. (UL) - Fire Resistance Directory.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Manufacturers Product Information.
 - 2. Samples:
 - a. 6 x 6 inch acoustical panel samples.
 - b. 6 inch long suspension system samples showing each profile.
- B. Quality Control Submittals:
 - 1. Certificates of Compliance: Certification from an independent testing laboratory that acoustical panels meet fire hazard classification requirements.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum 5 years [documented] experience in work of this Section.
- B. Fire Hazard Classification: Class A rated, tested to ASTM E1264.

1.5 PROJECT CONDITIONS

- A. Environmental Requirements: Install in approximately same conditions of temperature and humidity as will prevail after installation.

1.6 MAINTENANCE

- A. Extra Materials: 2 unopened cartons.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers - Suspension System:
1. Chicago Metallic Corporation. (www.chicago-metallic.com)
 2. USG Corporation. (www.usg.com)
 3. Armstrong World Industries (www.armstrong.com)
- B. Acceptable Manufacturers - Acoustical Units:
1. Certainteed Corporation (www.certainteed.com)
 2. USG Corporation. (www.usg.com)
 3. Armstrong World Industries (www.armstrong.com)
- C. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Suspension Grid System:
1. Source: Prelude XL – Fireguard, by Armstrong or approved substitute.
 2. ASTM C635, intermediate duty, die cut, interlocking ends.
 3. Grid type: Exposed T.
 4. Material: Galvanized steel or Cold rolled aluminum.
 5. Runners: 1-1/2 inches high, 15/16 inch exposed width, flush profile.
 6. Perimeter Wall Molding: Angle minimum 2" shape.
 7. Finish: Factory applied enamel, color to match acoustical panels.
 8. Accessories: Stabilizer bars, clips, splices, and expansion joints.
- B. Acoustical Panels:
1. Source: Fine Fisured High NRC by Armstrong or approved substitute.
 2. Size: 24 x 48 inches x 15/16 inch thick.
 3. Edge configuration: Square.
 4. Performance requirements: Tested in accordance with ASTM E1264.
 - a. NRC: 75
 - b. CAC: 35.
 - c. Light reflectance: LR-86

2.3 ACCESSORIES

- A. Support Channels: Galvanized steel; size and type to suit application.
- B. Hanger Wire:
1. ASTM A641, minimum 12 gage galvanized steel.
- C. Hold Down Clips: Minimum 24 gage spring steel, manufacturer's standard profile.
- D. Impact Clips: Minimum [24 gage spring steel, manufacturer's standard profile.
- E. Touch-Up Paint: Color to match acoustical panels and suspension grid.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install ceilings in accordance with ASTM C635, ASTM C636 and C and CISCA Handbook.
 - 1. Conform to CISCS recommendations for ACT ceilings in Seismic Category D, E, & F.
- B. Minimize panels less than one half size.
- C. Install molding around perimeters and abutting surfaces. Miter molding at exterior corners; cut flanges and bend web to form interior corners.
- D. Space hanger wires maximum 48 inches on center. Install additional hangers where required to support light fixtures and ceiling supported equipment.
- E. Do not suspend hangers directly from metal deck. Attach steel channel horizontally to adjacent framing members; place hanger at regular spacing.
- F. Hang suspension system independent of walls, columns, ducts, pipes, and conduit.
- G. Where ducts or other equipment prevent regular spacing of hangers:
 - 1. Reinforce nearest related hangers to span extra distance, or:
 - 2. Suspend steel channel horizontally beneath duct or equipment; place hanger at regular spacing.
- H. Install main tees at maximum 48 inches on center.
- I. Install cross tees. Lock cross tees to main tees.
- J. Support ends of tees on flange of perimeter molding.
- K. Place acoustical panels with edges resting flat on suspension grid.
- L. Cutting Acoustic Units:
 - 1. Cut to fit irregular grid and perimeter edge trim and around penetrations.
 - 2. Locate cuts to be concealed.
 - 3. Cut and field paint exposed edges of reveal edge units to match factory edge.
- M. Place hold down clips over cross tees at mid point of each module.
- N. Place impact clips over cross tees at mid point of each module.
- O. Lighting Fixture Protection: Form trapezoidal, five sided box of acoustical panels cut to size over each light fixture; conform to UL requirements.
- P. Installation Tolerances: Ceilings level to 1/8 inch in 12 feet measured in any direction.

3.2 ADJUSTING

- A. Protect from damage during construction.
- B. Touch up minor scratches and abrasions to match factory finish.
- C. Replace damaged tiles with new tiles.

END OF SECTION

**SECTION 09 6513
RESILIENT BASE**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Resilient wall base.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

- A. ASTM International (ASTM) F1861 - Standard Specification for Resilient Wall Base.
- B. Resilient Floor Covering Institute (RFCI) - FloorScore Certification Program.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Manufacturers Product Data
 - 2. Samples: 4 inch long samples showing in each color.

1.4 MAINTENANCE

- A. Extra Materials: One unopened carton of each profile and color.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers - Base:
 - 1. Allstate Rubber Corp. (www.allstaterubber.com)
 - 2. Armstrong World Industries. (www.armstrong.com)
 - 3. Burke Flooring. (www.burkeflooring.com)
 - 4. Johnsonite, Inc. (www.johnsonite.com)
 - 5. Roppe Corp. (www.roppe.com)
- B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Resilient Base:
 - 1. Thickness: 0.125 inch.
 - 2. Profile: Straight at carpeted areas, coved at areas to receive sheet flooring not receiving coved sheet flooring.
 - 3. Height: 4 inches minimum..
 - 4. Length: Longest practical length
 - 5. Color: To be selected from manufacturer's full color range.
 - 6. End units and outside corners: Preformed; profile, size, and color to match base.

2.3 ACCESSORIES

- A. Adhesive:
 - 1. Water based, waterproof, recommended by base manufacturer.

PART 3 EXECUTION

3.1 PREPARATION

- A. Prepare surfaces to receive base:
 - 1. Remove materials that could interfere with adhesion.
 - 2. Fill low spots with patching compound; finish flush with adjacent surface.
 - 3. Remove high spots, ridges and nibs.

3.2 INSTALLATION

- A. Apply adhesive continuously to back of base.
- B. Maintain top edge true to line and bottom edge in continuous contact with floor. Butt joints tight; butt base tight to adjacent construction.
- C. Do not install pieces less than 12 inches long.
- D. Miter and butt inside corners.
- E. At outside corners install preformed corner pieces.
- F. At exposed ends, install premolded units.
- G. Scribe to door frames and other interruptions.

END OF SECTION

**SECTION 09 6516
RESILIENT SHEET FLOORING**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Resilient vinyl sheet flooring.
 - 2. Edgings, Cap strips.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

- A. ASTM International (ASTM):
 - 1. D2047 - Standard Test Method for Static Coefficient of Friction of Polish-Coated Flooring Surfaces as Measured by the James Machine.
 - 2. E648 - Standard Test Method for Flooring Radiant Panel Test.
 - 3. F710 - Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring.
 - 4. F970 - Standard Test Method for Static Load Limit.
 - 5. F1869 - Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.
 - 6. F1913 - Standard Specification for Vinyl Sheet Floor Covering Without Backing
 - 7. F2034 - Standard Specification for Sheet Linoleum Floor Covering.
- B. Resilient Floor Covering Institute (RFCI) - FloorScore Certification Program.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Shop Drawings: Indicate room or space dimensions, flooring layout, and locations of seams.
 - 2. Product Data: Provide data on specified products, describing physical and performance characteristics.
 - 3. Samples:
 - a. Flooring: 6 x 6 inch samples showing available colors.
 - b. Edgings: 4 inch long samples showing available colors.
- B. Quality Control Submittals:
 - 1. Certificates of Compliance: Certification from an independent testing laboratory that flooring meets fire hazard classification requirements.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum 5 years experience in work of this Section.
- B. Fire Hazard Classification: Class I rated, tested to ASTM E648.
- C. Static Coefficient of Friction: Minimum 0.5, tested to ASTM D2047.

1.5 PROJECT CONDITIONS

- A. Maintain temperature in spaces to receive flooring between 65 and 80 degrees F for 24 hours before, during, and for minimum 48 hours after installation.
- B. Maintain minimum temperature of 55 degrees F after flooring is installed, except as otherwise specified.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers - Sheet Vinyl Flooring:
 - 1. Armstrong World Industries. (www.armstrong.com)
 - 2. Congoleum Corp. (www.congoleum.com)
 - 3. Forbo Flooring. (www.forboflooringna.com)
 - 4. Mannington Resilient Floors. (www.mannington.com)
 - 5. Tarkett, Inc. (www.tarkett.com)
- B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Sheet Vinyl Flooring:
 - 1. Conform to ASTM F1913.
 - 2. Manufacturer: Armstrong
 - 3. Pattern: Safeguard
 - 4. Color: To be selected from manufacturer's full color range.

2.3 ACCESSORIES

- A. Leveling Compound: White, premixed, latex based.
- B. Adhesive:
 - 1. Water based, waterproof, recommended by flooring manufacturer.
- C. Edgings: Preformed metal, or approved substitute, profile required to suit conditions, color[to be selected from manufacturer's full color range, or to match flooring.
- D. Cap Strip: Preformed, prefinished metal, fabricated specifically for capping resilient sheet flooring cove base, color to be selected from manufacturer's full color range.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that concrete floors have cured a minimum 28 days and do not exhibit negative alkalinity, carbonization, or dusting.

3.2 PREPARATION

- A. Clean substrate to ASTM F710. remove loose and foreign matter that could impede adhesion or performance of flooring.
- B. Fill cracks, voids, and depressions in substrate with leveling compound.

- C. Grind off high spots and projections in substrate; leave smooth and level to 1/4 inch in 10 feet.
- D. Test substrate for moisture content to ASTM F1869; do not install flooring until moisture emission level is acceptable to flooring manufacturer.

3.3 INSTALLATION

- A. Install flooring in accordance with manufacturer's instructions.
- B. Lay out flooring to minimize seams, located as inconspicuously as possible.
- C. Spread only enough adhesive to permit installation of materials before initial set.
- D. Lay flooring with seams parallel to building lines.
- E. Continuously weld seams per manufacturers' written specifications.
- F. Roll flooring with floor roller to eliminate entrapped air and ensure bond with adhesive. Work toward edges of sheets. Hand roll seams on both sides, working toward seams.
- G. Scribe flooring to walls, columns, cabinets, and other appurtenances to produce tight joints. Ensure that base, trim, plates, or escutcheons will completely cover cut edges.
- H. Extend flooring into recesses and under equipment.
- I. Terminate flooring at centerline of door openings where adjacent floor finish is dissimilar.
- J. Install cove strip at juncture of flooring and partitions and fixed objects. Run flooring continuously up cove and onto wall to a minimum 4 inch height. Apply cap strip to top edge.

3.4 INSTALLATION OF EDGINGS

- A. Install strips where flooring abuts dissimilar flooring materials; secure to subfloor.
- B. Center strips under doors where flooring terminates at door openings.
- C. Install in longest practical lengths; butt ends tight.
- D. Scribe to abutting surfaces.

3.5 PROTECTION

- A. Do not allow traffic on flooring until adhesives have set. Cover areas subject to traffic with protective covering.

END OF SECTION

**SECTION 09 6816
SHEET CARPETING**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Sheet carpet.
 - 2. Edgings & Transition strips.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

- A. ASTM International (ASTM):
 - 1. D2859 - Standard Test Method for Flammability of Finished Textile Floor Covering Materials.
 - 2. D4258 - Standard Practice for Surface Cleaning Concrete for Coating.
 - 3. E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
 - 4. E648 - Standard Test Method for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source.
 - 5. E662 - Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials.
 - 6. F1869 - Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.
- B. Carpet and Rug Institute (CRI):
 - 1. 104 - Standard for Installation of Commercial Carpet.
 - 2. 105 - Standard for Installation of Residential Carpet.
 - 3. Indoor Air Quality Testing Program.
- C. National Fire Protection Association (NFPA) 253 - Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Shop Drawings: Indicate carpet locations, dye lot limitations, seaming plan, method of joining seams, direction of carpet in each room or area, and type and location of edgings.
 - 2. Samples:
 - a. Carpet: 12 x 12 inch samples in each color and pattern.
 - b. Edgings & Transition strips: 4 inch long samples showing available colors.
 - 3. Warranty: Sample warranty form.
- B. Quality Control Submittals:
 - 1. Certificates of Compliance: Certification from an independent testing laboratory that carpet meets fire hazard classification requirements.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum 5years experience in work of this Section.
- B. Fire Hazard Classification: Maximum smoke density rating of 450, tested to ASTM E662.

1.5 PROJECT CONDITIONS

- A. Do not begin installation until painting and finishing work have been completed.
- B. Environmental Requirements:
 - 1. Temperature of spaces and subfloor between 65 and 90 degrees F.
 - 2. Humidity in spaces to receive carpet between 20 and 65 percent.

1.6 WARRANTIES

- A. Furnish manufacturer's lifetime warranty providing coverage against defective materials and workmanship.

1.7 MAINTENANCE

- A. Extra Materials: 2 percent of each color and pattern.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers - Carpet:
 - 1. Bigelow Commercial Carpet. (www.bigelowcommercial.com)
 - 2. Karastan Contract. (www.karastan.com)
 - 3. Mohawk International (www.mohawkinternational.com)
 - 4. Shaw. (www.shawcontract.com)
- B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Carpet: As selected by architect from GSA Contract – GS-27F-0031N, (Mohawk Lees) or GSA Contract – GS-27F8440A (Mohawk Bigelow) meeting the below criteria, or approved equal.
 - 1. Face yarn type: Nylon.
 - 2. Face yarn weight: 28 ounces minimum per square yard.
 - 3. Construction: Tufted multicolored loop.
 - 4. CRI Foot Traffic Rating - Severe
 - 5. Bear CRI Green Label Plus for indoor air quality.

2.3 ACCESSORIES

- A. Seaming Materials: As recommended by carpet manufacturer.
- B. Adhesive:
 - 1. Waterproof, latex based cement formulated specifically for installing carpet; recommended by carpet manufacturer.

2. **Meet CRI Green Label requirements.**

- C. Gripper Strip: As recommended by carpet manufacturer for carpet thickness, water resistant plywood with angular pins.
- D. Edgings and Transition strips: preformed rubber, metal, or approved substitute, profile required to suit conditions, color [to be selected from manufacturer's full color range.
- E. Leveling Compound: Premixed, latex based as recommended by carpet manufacturer.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that concrete floors have cured a minimum 28 days and do not exhibit negative alkalinity, carbonization, or dusting.

3.2 PREPARATION

- A. Clean substrate to ASTM D4258. remove loose and foreign matter that could impede adhesion or performance of flooring.
- B. Fill cracks, voids, and depressions with leveling compound.
- C. Grind ridges and high spots smooth.
- D. Test substrate for moisture content to ASTM F1869; do not install carpet until moisture emission level is acceptable to carpet manufacturer.

3.3 INSTALLATION OF CARPET

- A. Install in accordance with CRI 104.
- B. Install carpet and adhesive in accordance with manufacturer's instructions.
- C. Lay out carpet so that seams will be minimized and as inconspicuous as possible.
- D. Longitudinal seams not permitted where width of room or space is less than width of carpet.
- E. Do not change run of pile in any room where carpet is continued through a wall opening into another room.
- F. Verify carpet match before cutting to ensure minimal variation between dye lots.
- G. Lay carpet tight and flat on subfloor, well fastened at edges, with uniform appearance. Provide monolithic color, pattern, and texture match within any one room or area.
- H. Adhere carpet over full area without voids. Roll out bubbles toward edges.
- I. Join seams with hot seaming tape. Form seams straight and free of ridges or gaps.

- J. Fit carpet tight to abutting surfaces and penetrations without gaps. Ensure coverage of carpet edges by wall base, trim, escutcheons, and cover plates.
- K. Provide monolithic color, pattern, and texture within each area.
- L. Bind cut edges where not concealed by edge strips.
- M. Stairs:
 - 1. Install carpet continuously for full stair width; fit tight to stringers.
 - 2. Adhere carpet over full area.

3.4 INSTALLATION OF EDGINGS

- A. Install strips where carpet abuts dissimilar flooring materials; secure to subfloor.
- B. Center strips under doors where carpet terminates at door openings.
- C. Install in longest practical lengths; butt ends tight.
- D. Scribe to abutting surfaces.

3.5 CLEANING

- A. Clean spots as recommended by carpet manufacturer.
- B. Cut off loose threads flush with top surface.
- C. Clean with commercial vacuum cleaner.

END OF SECTION

**SECTION 09 7733
SANITARY WALL PANELS**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Prefinished sanitary wall panels.
 - 2. Trim.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.
 - 2. Section 07 9200 - Joint Sealers.

1.2 REFERENCES

- A. ASTM International (ASTM) E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Samples:
 - a. 6 x 6 inch panel samples showing available colors.
 - b. 6 inch long trim samples.
- B. Quality Control Submittals:
 - 1. Certificates of Compliance: Certification from an independent testing laboratory that panels meet fire hazard classification requirements.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum 5 years experience in work of this Section.
- B. Fire Hazard Classification: Tested to ASTM E84.
 - 1. Flame spread: Maximum 25.
 - 2. Smoke density: Maximum 450.

1.5 PROJECT CONDITIONS

- A. Do not install products if temperature, humidity, and ventilation requirements are outside limits recommended by manufacturer.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers:
 - 1. Crane Composites. (www.cranecomposites.com)
 - 2. Nudo Products, Inc. (www.nudo.com)
 - 3. Marlite. (www.marlite.com)
 - 4. Panolam Industries International, Inc. (www.panolam.com)

- B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Sanitary Wall Panels:
1. Type: Glass fiber reinforced plastic, USDA approved for incidental food contact.
 2. Size: 3/32 inch thick minimum x 48 inches wide x maximum practical length.
 3. Color and Texture: To be selected from manufacturer's full range of color, patterns and textures.

2.3 ACCESSORIES

- A. Trim:
1. Material: Extruded Aluminum.
 2. Inside and outside corners, division bar, and J-molding.
 3. Color: To be selected from manufacturer's full color range.
- B. Adhesive:
1. Compatible with panels and substrate; recommended by panel manufacturer.
- C. Joint Sealer: Specified in Section 07 9200.
- D. Patching Compound: White latex type.

PART 3 EXECUTION

3.1 PREPARATION

- A. Prepare substrate to receive panels:
1. Remove high spots.
 2. Fill low spots with patching compound; sand smooth.
 3. Remove loose and foreign matter that could impair adhesion.

3.2 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install trim:
1. Panel-to-panel joints: Division bar.
 2. Internal and external corners.
 3. Exposed edges: J molding.
 4. Secure to substrate.
- C. Cut panels to fit at perimeter and around penetrations. Ensure that trim will completely cover cut edges.
- D. Maintain 1/8 to 3/16 inch expansion space at perimeter and around penetrations.
- E. Adhere panels to substrate with full-bed of adhesive.
- F. Install continuous bead of joint sealer between panels and trim and between trim and adjacent construction.

END OF SECTION

**SECTION 09 9100
PAINTING**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Texturing of gypsum board.
 - 2. Surface preparation and field application of paints.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

- A. ASTM International (ASTM):
 - 1. D4442 - Standard Test Method for Direct Moisture Content Measurement of Wood and Wood-Base Materials.
 - 2. D6886 - Standard Test Method for Speciation of the Volatile Organic Compounds (VOCs) in Low VOC Content Waterborne Air-Dry Coatings by Gas Chromatography.
- B. Green Seal, Inc. (GS) 11 - Standard for Paints and Coatings.
- C. Master Painters Institute (MPI) - Architectural Painting Specification Manual.
- D. Society for Protective Coatings (SSPC) - Painting Manual.
- E. South Coast Air Quality Management District (SCAQMD) Rule 1113 - Architectural Coatings.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Product Data: Manufacturer's data on materials proposed for use including:
 - a. Product designation and grade.
 - b. Product analysis and performance characteristics.
 - c. Standards compliance.
 - d. Material content.
 - e. Mixing and application procedures.
 - 2. Paint Schedule: Indicate types and locations of each surface, paint materials, and number of coats to be applied.
 - 3. Samples:
 - a. Drawdown Samples: 8 x 8 inch samples of each coating system on representative substrate. Step back successive coats so that all coats remain exposed. Indicate type of material used for each coat.

1.4 QUALITY ASSURANCE

- A. Applicator Qualifications: Minimum 5 years experience in work of this Section.
- B. Materials, Preparation, and Workmanship: Conform to MPI Painting Manual.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Container Labels: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage rates, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.
- B. Paint Materials: Store at ambient temperature from 50 to 90 degrees F in ventilated area, or as required by manufacturer's instructions.

1.6 PROJECT CONDITIONS

- A. Do not apply materials when surface and ambient temperatures or relative humidity are outside ranges required by paint manufacturer.
- B. Maintain ambient and substrate temperatures above manufacturer's minimum requirements for 24 hours before, during, and after paint application.
- C. Do not apply materials when relative humidity is above 85 percent or when dew point is less than 5 degrees F different than ambient or surface temperature.
- D. Provide lighting level of 30 footcandles at substrate surface.

1.7 MAINTENANCE

- A. Extra Materials: 1 gallon of each color and sheen.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers:
 - 1. Benjamin Moore and Co. (www.benjaminmoore.com)
 - 2. Devoe Paint Co. (www.devoepaint.com)
 - 3. Glidden. (www.gliddenprofessional.com)
 - 4. Kelly-Moore Paints. (www.kellymoore.com)
 - 5. PPG Architectural Finishes, Inc. (www.pittsburghpaints.com)
 - 6. Pratt and Lambert Paints. (www.prattandlambert.com)
 - 7. Sherwin Williams. (www.sherwin-williams.com)
- B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Paints:
 - 1. As scheduled at end of Section, or approved substitute.
 - 2. Free from all forms of lead and mercury.

2.3 ACCESSORIES

- A. Accessory Materials: Paint thinners and other materials required to achieve specified finishes; commercial quality.
- B. Patching Materials: Latex filler.

- C. Fastener Head Cover Materials: Latex filler.

2.4 MIXES

- A. Deliver paints pre-mixed and pre-tinted.
- B. Uniformly mix to thoroughly disperse pigments.
- C. Do not thin in excess of manufacturer's recommendations.
- D. Re-mix paint during application; ensure complete dispersion of settled pigment and uniformity of color and gloss.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Test shop applied primer for compatibility with subsequent coatings.
- B. Measure moisture content of surfaces using electronic moisture meter. Do not apply coatings unless moisture content of surfaces are below following maximums:
 - 1. Gypsum board and plaster]: 12 percent.
 - 2. Masonry and concrete: 12 percent.
 - 3. Wood: 15 percent, measured to ASTM D4442.
 - 4. Concrete floors: 8 percent.

3.2 PREPARATION

- A. General:
 - 1. Protect adjacent and underlying surfaces.
 - 2. Remove [or mask] electrical plates, hardware, light fixture trim, escutcheons, and fittings prior to preparing surfaces or finishing.
 - 3. Correct defects and clean surfaces capable of affecting work of this section.
 - 4. Seal marks that may bleed through surface finishes with shellac.
- B. Impervious Surfaces: Remove mildew by scrubbing with solution of trisodium phosphate and bleach. Rinse with clean water and allow to dry.
- C. Gypsum Board:
 - 1. Fill minor defects with filler compound. Spot prime defects after repair.
 - 2. Finish per Section 09 2900 and in accordance manufacturer's instructions.
- D. Concrete and Masonry :
 - 1. Remove dirt, loose mortar, scale, salt and alkali powder, and other foreign matter.
 - 2. Remove oil and grease with solution of trisodium phosphate; rinse and allow to dry.
 - 3. Remove stains caused by weathering of corroding metals with solution of sodium metasilicate after thoroughly wetting with water. Allow to dry.
- E. Concrete Floors:
 - 1. Remove contamination, acid etch, and rinse floors with clear water. Allow to dry.
 - 2. Verify that required acid-alkali balance has been achieved.
- F. Plaster:

1. Fill hairline cracks, small holes, and imperfections with latex patching plaster. Finish smooth and flush with adjacent surfaces.
 2. Wash and neutralize high alkali surfaces.
- G. Galvanized Steel: SSPC Method SP1 - Solvent Cleaning.
- H. Aluminum: SSPC Method SP1 - Solvent Cleaning.
- I. Uncoated Ferrous Metals: SSPC Method SP2 - Hand Tool Cleaning or Method SP3 - Power Tool Cleaning.
- J. Shop Primed Ferrous Metals:
1. SSPC Method SP2 - Hand Tool Cleaning or Method SP3 - Power Tool Cleaning.
 2. Feather edges to make patches inconspicuous.
 3. Prime bare steel surfaces.
- K. Interior Wood:
1. Wipe off dust and grit.
 2. Seal knots, pitch streaks, and sappy sections with sealer.
 3. Fill nail holes and cracks after primer has dried; sand between coats.
- L. Exterior Wood:
1. Remove dust, grit, and foreign matter.
 2. Seal knots, pitch streaks, and sappy sections.
- M. Existing Surfaces:
1. Remove loose, flaking, powdery, and peeling paints.
 2. Lightly sand glossy painted surfaces.
 3. Fill holes, cracks, depressions and other imperfections with patching compound; sand flush with surface.
 4. Remove oil, grease, and wax by scraping; solvent wash and thoroughly rinse.
 5. Remove rust by wire brushing to expose base metal.

3.3 APPLICATION

- A. Apply paints in accordance with MPI Painting Manual, Custom Grade finish requirements.
- B. Apply primer or first coat closely following surface preparation to prevent recontamination.
- C. Do not apply finishes to surfaces that are not dry.
- D. Apply coatings to minimum dry film thickness recommended by manufacturer.
- E. Apply each coat of paint slightly darker than preceding coat unless specified otherwise.
- F. Apply coatings to uniform appearance without laps, sags, curtains, holidays, and brush marks.
- G. Allow applied coats to dry before next coat is applied.
- H. When required on deep and bright colors apply an additional finish coat to ensure color consistency.
- I. Continue paint finishes behind wall-mounted accessories.

- J. Sand between coats on interior wood and metal surfaces.
- K. Match final coat to approved color samples.
- L. Where clear finishes are specified, tint fillers to match wood. Work fillers into grain before set. Wipe excess from surface.
- M. Prime concealed surfaces of exterior wood and interior wood in contact with masonry or cementitious materials with one coat primer paint.
- N. Mechanical and Electrical Components:
 - 1. Paint factory primed equipment.
 - 2. Remove unfinished and primed louvers, grilles, covers, and access panels; paint separately.
 - 3. Paint exposed and insulated pipes, conduit, boxes, ducts, hangers, brackets, collars, and supports unless factory finished.
 - 4. Do not paint name tags or identifying markings.
 - 5. Paint exposed conduit and electrical equipment in finished areas.
 - 6. Paint duct work behind louvers, grills, and diffusers flat black to minimum of 18 inches or beyond sight line.
- O. Do not Paint:
 - 1. Surfaces indicated on Drawings or specified to be unpainted or unfinished.
 - 2. Surfaces with factory applied finish coat or integral finish.
 - 3. Architectural metals, including brass, bronze, stainless steel, and chrome plating.

3.4 ADJUSTING

- A. Touch up or refinish disfigured surfaces.

3.5 CLEANING

- A. Remove paint from adjacent surfaces.

3.6 PAINT SCHEDULE

- A. Basis of Design Products: Types of paint listed herein are set forth as standard of quality and type of coating required for each type of surface. Provide product specified or approved equal as described in Division 1
 - 1. Exposed surfaces of type listed in following schedule are to be painted.
 - 2. Other exposed surfaces not specifically listed shall receive not less than two coats of the appropriate type of coating.
- B. Interior Prime Coat on all exterior walls and ceilings shall be a latex primer sealer and vapor barrier for interior walls and ceilings with a perm rating of 1.0 or less.
- C. Prime Coat on shop primed surfaces shall consist of touch up only.

SUBSTRATE	MANUFACTURER	PRIMER	TOP COATS (2 min.)
Exterior Surfaces:			
Ferrous and Galvanized Metals	Sherwin Williams™	(where not shop painted) Pro-Cryl Universal Acrylic Primer	Pro Industrial 100™
Siding and Trim	Sherwin Williams™	Exterior Latex Based Primer	Resilience™ Exterior Acrylic Latex
Exterior Wood	Sherwin Williams™	Exterior Oil (Alkyd) Based Primer	Porch & Floor Enamel
Interior Surfaces:			
Plaster, Gypsum Board, Latex Finish	Benjamin Moore™	Super Spec Latex Vapor Barrier Primer Sealer 260	Eco Spec™ WB Interior Latex
Wood, Opaque, Latex Enamel Finish	Benjamin Moore™	Super Spec Latex Vapor Barrier Primer Sealer 260	Eco Spec™ WB Interior Latex

COLORS:

- A. Colors and sheen shall be selected by architect from manufacturer's full range.
- B. Assume a minimum of three (3) colors per room for all occupied rooms: wall color, trim color, and an accent color.
- C. Assume a minimum of (2) exterior colors: wall color, and trim color.

END OF SECTION

SECTION 10 1100
VISUAL DISPLAY BOARDS

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Marker boards.
 - 2. Tack boards.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

- A. American National Standards Institute (ANSI):
 - 1. A135.4 - Basic Hardboard.
 - 2. A208.1 - Mat Formed Wood Particleboard.
- B. ASTM International (ASTM):
 - 1. A424 - Standard Specification for Steel Sheets for Porcelain Enameling.
 - 2. A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
 - 3. B209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
 - 4. B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
 - 5. E84 - Standard Test Method for Surface Burning Characteristics for Building Materials.
- C. Porcelain Enamel Institute (PEI) - Performance Specifications for Porcelain Enamel Chalkboards.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Product Data: Descriptive data on display boards, including [chalk] [marker] board surface, tack boards, frame, trim, and accessories.

1.4 QUALITY ASSURANCE

- A. Fabric: Fire hazard classification of 25 or less, tested to ASTM E84.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers:
 - 1. Aywon, Inc. (www.aywon.com)
 - 2. Best-Rite Mfg. (www.bestrite.com)
 - 3. Claridge Products and Equipment, Inc. (www.claridgeproducts.com)
- B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Steel Sheet:
 - 1. ASTM A424, Type 1, Commercial Quality.
- B. Aluminum:
 - 1. Sheet: ASTM B209, 6063-T52 alloy and temper.
 - 2. Extrusions: ASTM B221, 6061 or 6063 alloy, temper best suited to application.
- C. Hardboard: ANSI A135.4, tempered.
- D. Particleboard: ANSI A208.1, waterproof resin binder, sanded faces.
- E. Fabric: Manufacturer's standard fabric.
- F. Cork: Natural cork.

2.3 ACCESSORIES

- A. Fasteners: Type best suited to application.
- B. Adhesive:
 - 1. Type recommended by marker board manufacturer; compatible with substrate materials.

2.4 FABRICATION

- A. Marker Boards:
 - 1. Facing: Porcelain enamel on steel sheet, manufacturer's standard gage.
 - 2. Core: Manufacturer's standard particleboard, or Hardboard, 1/4 inch minimum thickness.
 - 3. Backing: Manufacturer's standard
- B. Tack Boards:
 - 1. Facing: Fabric.
 - 2. Cork: 3/8" inch thick min..
 - 3. Backing: Manufacturer's standard.
- C. Frame and Trim:
 - 1. Frame: Extruded aluminum, manufacturer's standard profile, concealed fasteners , with map rail with cork insert.
 - 2. Chalk rail: Extruded aluminum, manufacturer's standard profile, full width of marker board, closed ends.
 - 3. Map/display rail: Extruded aluminum, manufacturer' standard profile, full width of marker board, 1 inch high minimum cork insert.
 - 4. Map supports: Formed aluminum, sliding, to fit map rail; provide two hooks minimum per 3 feet of map/display rail or fraction thereof.

2.5 FINISHES

- A. Porcelain Enamel: Glass fibered enamel baked to vitreous surface, PEI Type A, special low gloss finish for use as projection surface and with liquid markers, white color.
- B. Fabric: color to be selected from manufacturer's full color range.
- C. Aluminum Frame and Trim: Anodized, clear.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install visual display boards in accordance with manufacturer's instructions.
- B. Set plumb and level.
- C. Secure with [concealed] [exposed] fasteners.

3.2 PROTECTION

- A. Cover [chalk] [marker] board surfaces with temporary protective cover taped to frame.

END OF SECTION

SECTION 10 1423
INTERIOR PANEL SIGNS

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Plastic interior panel signs.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 SUBMITTALS

- A. Submittals for Review:
 - 1. Shop Drawings: Include sign locations, sizes, mounting heights, and content.
 - 2. Samples:
 - a. 3 x 3 inch sign samples showing available colors.
 - b. After color selection, submit Typical sign illustrating pictograms, characters, and Braille indications.

1.3 QUALITY ASSURANCE

- A. Conform to applicable accessibility code for sign design, construction, location, and mounting heights.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers:
 - 1. APCO Graphics, Inc. (www.apcosigns.com)
 - 2. Best Sign Systems, Inc. (www.bestsigns.com)
 - 3. Seton Identification Products. (www.seton.com)
 - 4. Jessup Globright (www.globritesystem.com)
- B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Signs:
 - 1. Type: Melamine plastic laminate with contrasting color core, non static, fire retardant, self extinguishing, matte finish.
 - 2. Thickness: 1/8 inch minimum.
 - 3. Face and core colors: To be selected from manufacturer's full color range.
- B. Photoluminescent Exit Signs:
 - 1. Type: ABS Plastic sheet with a non-glare photo-luminescent coating, single piece construction, with field installed chevrons.
 - 2. Thickness: 3/8 inch.
 - 3. Color: To be selected from manufacturer's full color range.
- C. Frame: Extruded aluminum profile, clear anodized finish.

2.3 ACCESSORIES

- A. Adhesive:
 - 1. Type recommended by sign manufacturer.
- B. Fasteners: Stainless steel screws.

2.4 FABRICATION

- A. Fabricate signs by reverse engraving process to produce characters and graphics in contrasting color, raised 1/32 inch minimum.
- B. Characters: per applicable accessibility code.
- C. Pictograms: Universal accessibility symbols..
- D. Provide Braille indications for each character.
- E. Corners: 1/4 inch radius, minimum
- F. Frames:
 - 1. Miter corners; fit to hairline joint.
 - 2. Secure frame to sign with adhesive.

PART 3 EXECUTION

3.1 PREPARATION

- A. Clean surfaces of loose and foreign matter.

3.2 INSTALLATION

- A. Install in accordance with manufacturer's instructions and approved Shop Drawings.
- B. Locate signs on at locations indicated determined by designated design professional or as required by building official.

3.3 SCHEDULE

LOCATION	SIGN SIZE	CONTENT
Men's Toilets	6 x 9 inches	"MEN" and male pictogram
Women's Toilets	6 x 9 inches	"WOMEN" and female pictogram
Unisex / Shower	6 x 9 inches	"RESTROOM" and male, female, and wheelchair pictograms
Exit Signs	9 x 15 inches	"EXIT" with removable chevrons.
Occupancy	as required	Maximum Occupancy ____ persons Occupancy to be determined by designated design professional.

END OF SECTION

Interior Panel Signs
10 1423-2

**SECTION 10 2813
TOILET ACCESSORIES**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Toilet bath and shower accessories.
 - 2. Framed mirrors.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

- A. ASTM International (ASTM):
 - 1. A123/A123M - Standard Specification for Zinc (Hot-Galvanized) Coatings on Iron and Steel Products.
 - 2. A269 - Standard Specification for Seamless and Welded Austenitic Stainless Steel Tubing for General Service.
 - 3. A666 - Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar.
 - 4. A1008/A1008M - Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability.
 - 5. B456 - Standard Specification for Electrodeposited Coatings of Copper Plus Nickel Plus Chromium and Nickel Plus Chromium.
 - 6. C1036 - Standard Specification for Flat Glass.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Product Data:
 - a. Schedule accessories by room; show plans and elevations, and identify room name and number, type and quantity of accessories, and mounting heights.
 - b. Include manufacturer's brochures showing sizes, details of function, finishes, and attachment methods.
 - 2. Samples: One of each accessory, if requested.
 - 3. Warranty: Sample warranty form.

1.4 QUALITY ASSURANCE

- A. Conform to applicable accessibility code for locating accessories.

1.5 WARRANTIES

- A. Furnish manufacturer's 10 year warranty providing coverage against mirror silver spoilage.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers:

1. A and J Washroom Accessories. (www.ajwashroom.com)
2. American Specialties, Inc. (www.americanspecialties.com)
3. Bobrick Washroom Equipment, Inc. (www.bobrick.com)
4. Bradley Corp. (www.bradleycorp.com)
5. GAMCO. (www.gamcousa.com)

B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Stainless Steel:
1. Sheet: ASTM A666, Type 304, rollable temper.
 2. Tubing: ASTM A269.
- B. Galvanized Steel:
1. ASTM A1008/A1008M.
- C. Mirror Glass: ASTM C1036, Type I, Class 1, Quality q1, 3/16 inch thick.

2.3 ACCESSORIES

- A. Fasteners: Stainless steel where exposed, hot dip galvanized where concealed; type best suited to substrate conditions.

2.4 FABRICATION

- A. Use stainless steel for exposed surfaces; galvanized steel may be used in concealed locations.
- B. Form exposed surfaces from single sheet of stock, free from joints, and flat, without distortion.
- C. Weld joints of fabricated components and grind smooth.
- D. Fabricate grab bars of tubing, free of visible joints, return to wall with end attachment flanges. [Peen grip surfaces.]
- E. Fabricate soap dispensers to operate with less than 5 pound force.
- F. Provide hangers, adapters, anchor plates, and accessories required for installation.
- G. Key locks alike; furnish six keys.
- H. Mirrors:
1. Frame: One piece, roll formed stainless steel channel, 1/2 x 1/2 inch, with corners mitered and welded.
 2. Mirror: Apply one coat of silver, one coat of electroplated copper, and one coat of organic mirror backing compound to back surface of glass.
 3. Backing: Galvanized steel sheet.
 4. Isolate glass from frame and backing with resilient, waterproof padding.
- I. Shop assemble units and package complete with anchors and fittings.

2.5 FINISHES

- A. Stainless Steel: No. 4 - satin.
- B. Galvanizing: ASTM A123/A123M to 1.25 ounces per square foot.
- C. Chrome Plating: ASTM B456, Type SC 2, satin
- D. Polyethylene: White.
- E. Enamel: White.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Coordinate power outlet locations and requirements with other trades.
- B. Install at heights and locations in accordance with applicable accessibility code (latest edition).
- C. Install in accordance with manufacturer's instructions.
- D. Set plumb, level, square, and rigid.
- E. Install wiring between power supply and accessories as required.

3.2 SCHEDULE

- A. Provide designated accessory or approved equal.

MARK	DESCRIPTION	MANUFACTURER	MODEL NO.	FINISH
A	Towel Dispenser and Waste Receptacle	Bobrick	B3944	Stainless
B	Touchless Towel Dispenser	Bobrick	B3961-50	
C	Toilet Tissue Dispenser	Bobrick	B669	Stainless
D	Grab Bars	Bobrick		Stainless
E	Robe Hook	Bobrick	B2116	Stainless
F	Mop Holder	Bobrick	B223-24	
G	Foldable ADA shower seat	Bobrick	5181	
H	Mirrors	Bobrick	B165-2436	Stainless
I	Shower Curtain Rod	Bobrick	B207	Stainless
J	Underlavatory Guard	Truebro	Lavguard-2 piping covers	White
K				
L				
M				
N				

END OF SECTION

SECTION 10 4413
FIRE EXTINGUISHERS AND CABINETS

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Portable fire extinguishers.
 - 2. Fire extinguishers cabinets.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

- A. ASTM International (ASTM) E814 - Standard Test Method for Fire Tests of Through-Penetration Firestops.
- B. National Fire Protection Association (NFPA) 10 - Portable Fire Extinguishers.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Shop Drawings: Indicate locations and mounting heights.
 - 2. Product Data: Include data on extinguishers, cabinets, cabinet dimensions, brackets, operational features, materials, finishes, and anchorage.
- B. Closeout Submittals:
 - 1. Maintenance Data: Include test, refill, or recharge schedules and re-certification requirements.

1.4 QUALITY ASSURANCE

- A. Provide fire extinguishers complying with UL 711 and NFPA 10.
- B. Cabinets in Fire Rated Partitions: Tested in accordance with ASTM E814 with fire resistance rating equivalent to adjacent construction.
- C. Conform to applicable accessibility code for locating extinguishers.

1.5 PROJECT CONDITIONS

- A. Do not install extinguishers when ambient temperature may cause freezing of extinguisher ingredients.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers:
 - 1. Ansul Incorporated. (www.ansul.com)
 - 2. JL Industries. (www.jlindustries.com)

3. Larsen's Mfg. Co. (www.larsensmfg.com)
4. Nystrom, Inc. (www.nystrom.com)
5. Potter Roemer. (www.potterroemer.com)

B. Substitutions: Under provisions of Division 01.

2.2 COMPONENTS

A. Extinguishers:

1. Multi-purpose dry chemical type, UL 299, cast steel tank, Class 5 pound nominal capacity.
2. Free from CFCs, HCFCs, and Halons.

B. Cabinets:

1. Formed steel sheet, 18 gage minimum.
2. Configuration: Semi-recessed, sized to accommodate extinguishers.
3. Trim: Returned to wall surface.
4. Door:
 - a. Vertical glass style, equipped with recessed pull handle.
 - b. Hinge doors for 180 degree opening with continuous piano hinge.
 - c. Glazing: Clear tempered glass.
 - d. Graphics: Letter FIRE EXTINGUISHER vertically on door in die-cut vinyl pressure sensitive letters.

C. Brackets: Formed steel, sized to accommodate extinguisher.

2.3 ACCESSORIES

A. Mounting Hardware: Type best suited to application.

2.4 FINISHES

A. Cabinet:

1. Exterior and door: Baked enamel, color to be selected from manufacturer's full color range.
2. Interior: Baked enamel, color to be selected from manufacturer's full color range.

B. Brackets: Baked enamel, color to be selected from manufacturer's full color range.

C. Extinguishers: Baked enamel, red color.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install cabinets and extinguisher brackets in accordance with manufacturer's instructions.
- B. Set plumb, level, and rigid.
- C. Place an extinguisher in each cabinet on each bracket.

END OF SECTION

SECTION 10 5113

METAL LOCKERS

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Metal locker units with hinged doors.
 - 2. Metal bases tops and filler panels.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

- A. ASTM International (ASTM):
 - 1. A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy Coated (Galvannealed) by the Hot-Dip Process.
 - 2. A1008/A1008M - Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Shop Drawings: Include dimensioned layout, elevations, trim, closures, and accessories.
 - 2. Product Data: Manufacturer's descriptive data.
 - 3. Samples: 3 x 3 inch paint samples showing available colors.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers:
 - 1. Interior Steel Products Co. (www.interior-steel.com)
 - 2. List Industries Inc. (www.listindustries.com)
 - 3. Lyon Workspace Products. (www.lyonworkspace.com)
 - 4. Penco Products, Inc. (www.pencoproducts.com)
 - 5. Republic Storage Systems Co., Inc. (www.republicstorage.com)
- B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Galvanized Steel Sheet: ASTM A653/A653M, Structural Quality, G90 coating class.

2.3 COMPONENTS

- A. Lockers:
 - 1. Type: Standard louver,
 - 2. Configuration: Double Tier.
 - 3. Size: 15 inches wide x 18 inches deep x 36 inches high.
 - 4. Mounting: Surface mounted

5. Class: Conventional.
6. Fabrication:
 - a. Frame and door: Minimum 16 gage galvanized steel, welded joints.
 - b. Sides , tops, and back: Minimum 24gage galvanized steel.
 - c. Ends , sloped tops, and filler panels: Minimum 20 gage [galvanized] steel.
7. Locks: Padlock provisions.
8. Latching device: Tamper proof automatic three point latch, with "pre-locking" device to allow locking prior to shutting door without damaging latching mechanism.
9. Accessories:
 - a. For each locker: Prong hooks, coat hanger bar, hat shelf, metal number plate, and rubber bumpers.
 - b. 6 inch high closed base.
 - c. End and filler panels as required.

2.4 FINISHES

- A. Steel: Baked enamel, to be selected from manufacturer's full color range.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install in accordance with manufacturer's instructions and approved Shop Drawings.
- B. Set on prepared locker base.
- C. Set plumb, level, and aligned.
- D. Attach lockers to supporting construction with anchors best suited to substrate conditions.
- E. Bolt adjacent locker units together to provide rigid installation.
- F. Install end panels filler panels and bases as required.

3.2 ADJUSTING

- A. Adjust doors and latches to operate correctly.
- B. Touch up minor scratches and abrasions to match factory finish.

END OF SECTION

SECTION 10 7500

FLAGPOLES

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Aluminum flagpole
 - 2. Flagpole Lightning.
 - 3. Concrete base.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.
 - 2. Section 03 3000 - Cast-In-Place Concrete.
 - 3. Section 07 9200 - Joint Sealers.

1.2 REFERENCES

- A. American Architectural Manufacturers Association (AAMA) 611 - Voluntary Specification for Anodized Architectural Aluminum.
- B. ASTM International (ASTM):
 - 1. A312 - Standard Specification for Seamless and Austenitic Stainless Steel Pipe.
 - 2. B241 - Standard Specification for Aluminum-Alloy Seamless Pipe and Seamless Extruded Tube.
 - 3. C94 - Standard Specification for Ready-Mixed Concrete.
 - 4. E527 - Standard Practice for Numbering Metals and Alloys.
- C. National Association of Architectural Metal Manufacturers (NAAMM) AMP 503 - Finishes for Stainless Steel.
- D. American National Standards Institute/National Association of Architectural Metal Manufacturers (ANSI/NAAMM) FP 100197 - Guide Specifications for Design of Metal Flagpoles Manual.

1.3 SYSTEM DESCRIPTION

- A. Design Requirements:
 - 1. Design flagpole and anchorage devices in accordance with ANSI/NAAMM FP 100197.
 - 2. Minimum design wind speed: 100 MPH.
- B. Pole Description:
 - 1. Type: Ground set,
 - 2. Pole: Tapered.
 - 3. Dimensions:
 - a. Exposed height: 20 ft.
 - b. Butt diameter: 3 inches.
 - c. Taper 7'
 - d. Top diameter 2"
 - e. Wall thickness: 0.125 inch minimum.
 - f. Ball diameter: 3 inches.

1.4 SUBMITTALS

- A. Submittals for Review:
 - 1. Shop Drawings: Include pole and base, dimensions, materials, finishes, lighting system, and accessories. Provide footing installation details and information to show engineering conformance with codes based on local wind loads.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum 5 years experience in work of this Section.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Wrap poles and accessories in heavy paper to prevent damage during shipping and handling.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers:
 - 1. American Flagpole, Inc. (www.americanflagpole.com)
 - 2. Baartol Co., Inc. (www.baartol.com)
 - 3. Concord Industries, Inc. (www.concordindustries.com)
 - 4. Ewing International Corp. (www.ewingflagpole.com)
 - 5. Pole-Tech Co., Inc. (www.polettech.com)
- B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Aluminum:
 - 1. ASTM B241, seamless 6063-T6 aluminum alloy.
- B. Concrete: Specified in Section 03 3000.

2.3 COMPONENTS

- A. Pole: Seamless aluminum pipe.
- B. Fittings:
 - 1. Ball: Spun aluminum.
 - 2. Truck: Revolving, non fouling, cast aluminum or stainless steel.
 - 3. Halyard: External type, 3/8 inch diameter braided nylon rope with two stainless steel swivel snap hooks.
 - 4. Cleat: 9 inch long cast aluminum or stainless steel.
 - 5. Collar: Cast aluminum, [minimum 1 inch larger in diameter than foundation sleeve.
 - 6. Foundation sleeve: 16 gage, 10 inch diameter, galvanized, corrugated steel with 3/8inch base plate. Provide minimum 12 inch long lightning rod with setting plate and one set each steel and hardwood centering wedges.
- C. Lighting Mechanism:

1. 120 v. ac Pole Mounted LED flag lighting system with LED flood lights and automatic daylight sensor set to turn off lights during daylight hours.

2.4 ACCESSORIES

- A. Grout: Cement based, non shrink.
- B. Joint Sealer: Specified in Section 07 9200.

2.5 FINISHES

- A. Aluminum: AAMA 611, Architectural Class I anodized to 0.0007 inch minimum thickness, clear.
- B. Apply bituminous coating to that part of flagpole to be set in base, inside and out.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install flagpoles and accessories in accordance with manufacturer's instructions and approved Shop Drawings.
- B. Install foundation sleeve in concrete footing.
- C. Center pole in sleeve using steel wedges; plumb with hardwood wedges. Fill sleeve with clean, dry sand; top off with grout.
- D. Install collar to conceal sleeve.
- E. Apply joint sealer around pole at top of grout and collar.
- F. Connect Lighting mechanism to power supply.
- G. Electrically ground flagpole installation.

**SECTION 11310
APPLIANCES**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Disposers.
 - 2. Microwave ovens.
 - 3. Dishwashers.
 - 4. Refrigerators.
 - 5. Connection to utilities.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.
 - 2. Connections to Plumbing systems.
 - 3. Connection to Electrical systems

1.2 SUBMITTALS

- A. Submittals for Review:
 - 1. Shop Drawings: Show locations of appliances, dimensions, required clearances, rough-in requirements, power requirements, and wiring diagrams.
 - 2. Product Data: Provide product data on appliances showing materials, finishes, characteristics, limitations, and electrical characteristics.
- B. Closeout Submittals:
 - 1. Operation and Maintenance Data

1.3 QUALITY ASSURANCE

- A. Appliances: Energy Star rated.

1.4 DELIVERY, STORAGE AND HANDLING

- A. Deliver appliances with manufacturer's protective coverings in place; do not remove until just prior to installation.

1.5 WARRANTIES

- A. Furnish manufacturer's standard warranty.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers:
 - 1. Amana Appliances;
 - 2. BOSCH, Thermotechnology Corporation;
 - 3. Dacor;
 - 4. Dynamic Cooking Systems, Inc.;
 - 5. Dynasty Range, Jade Products Co., Inc.;
 - 6. Electrolux Home Products;

7. Excel Dryer Inc.
8. Fisher & Paykel;
9. Gaggenau;
10. General Electric Company;
11. Hotpoint;
12. InSinkErator
13. Jenn-Air;
14. KitchenAid;
15. Kenmore
16. Maytag;
17. Miele, Inc.;
18. Thermador;
19. True Food Service Equipment Inc.
20. Viking Range Corporation;
21. Whirlpool Corporation;
22. Wolf Range Co., Affiliate of Sub-Zero Inc.

B. Substitutions: Under provisions of Division 01.

C. Basis-of-Design Product: The design for each appliance is based on the product named. Subject to compliance with requirements, provide either the named product or a comparable product by one of the other manufacturers specified.

2.2 MANUFACTURED UNITS

A. Basis of Design products scheduled at end of Section. .

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install appliances in accordance with manufacturer's instructions and approved shop Drawings.
- B. Set plumb, level, and aligned.
- C. Connect to domestic water, sanitary waste, natural gas, and ventilation, systems with accessories in accordance with manufacturer's instructions and local code.
- D. Connect to power supply.

3.2 ADJUSTING

- A. Adjust appliances for proper operation.

3.3 SCHEDULE

- A. Basis of design products: provide designated item or Approved Equal as described under provisions of Division 01

APPLIANCE DESCRIPTION	MANUFACTURER	MODEL	FINISH
Kitchen Appliances			
Disposal	General Electric 3/4 hp.	GFB670B	Manuf. Standard
Dishwasher	General Electric - Profile **ADA height	PDWT180RSS	Stainless
Refrigerator/ Freezer	General Electric - Profile	PSHS6PGZSS	Stainless
Microwave Oven	General Electric - Profile	PEB2060SMSS	Stainless

Other Appliances

END OF SECTION

SECTION 12 2113

Horizontal Louver Blinds & Roller Shades

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Horizontal slat louver blinds.
 - 2. Roller Shades.
 - 3. Operating hardware.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 SUBMITTALS

- A. Submittals for Review:
 - 1. Product Data: Describe blind construction and finishes.
 - 2. Samples: 3 inch long slat samples showing available colors.

1.3 PROJECT CONDITIONS

- A. Do not install blinds until painting and finishing work is complete.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers:
 - 1. Hunter Douglas, Inc. (www.hunterdouglas.com)
 - 2. Levolor Contract. (www.levolor.com)
 - 3. Springs Window Fashions Division, Inc. (www.springs.com)
- B. Substitutions: Under provisions of Division 01.

2.2 LOUVER BLIND COMPONENTS

- A. Louver Slats: 1 inch inches inches wide, extruded PVC horizontal slats with radiused corners.
- B. Slat Support: Woven polypropylene ladders.
- C. Head Rail: Prefinished, formed aluminum or steel box, internally fitted for hardware, pulleys, and bearings for blind operation.
- D. Cord: Braided nylon or polypropylene.
- E. Control Wand: Hollow extruded plastic, height of window opening less 12 inches.
- F. Support Brackets: Suitable for wall or soffit mounting, formed metal to match head rail, allowing removal of head rail for maintenance without removing bracket.

- G. Operation: Full range lift locking.

2.3 ROLLER BLIND COMPONENTS

- A. Fabric: Manufacturer's standard.
- B. Roller: designed for smooth operation with equal tension throughout entire length of opening and designed to stop anywhere in the opening without creeping up or down.
- C. Support Brackets: Suitable for wall or soffit mounting, formed metal to match head rail, allowing removal of head rail for maintenance without removing bracket.
- D. Cord: Manufacturers' standard nylon cord or chain.

2.4 FABRICATION

- A. Fabricate blinds to fit openings with uniform edge clearance of 1/4 inch.
- B. At openings requiring multiple blind units, provide separate blind assemblies with space of 1/4 inch between assemblies, occurring at window mullion centers.

2.5 FINISHES

- A. Slats: Integrally colored, color to be selected from manufacturer's full color range.
- B. Fabric: Manufacturer's standard solid fabric colors with black out backing, color to be selected from manufacturer's full color range.
- C. Head Rails and Brackets: Baked enamel, color to be selected from manufacturer's full color range.
- D. Ladders and cords: Dyed to closely match slats or shades.
- E. Control Wands: Clear.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install blinds in accordance with manufacturer's instructions.
- B. Secure with concealed fasteners.
- C. Place intermediate head supports at maximum 36 inches on center.
- D. Installation Tolerances:
 - 1. Maximum gap at window opening perimeter: 1/4 inch.
 - 2. Maximum offset from level: 1/8 inch.

3.2 ADJUSTING

- A. Adjust blinds for proper operation.

END OF SECTION

Horizontal Louver & Roller Blinds
12 2113-2

**22 1000
Plumbing**

PART 1 - GENERAL

1.01 DESCRIPTION

A. Provide plumbing design and installation as generally indicated on the preliminary floor plan and plumbing schedule.

1.02 QUALITY ASSURANCE

A. All systems' design and installation shall conform to all applicable local and state codes and all federal, state and other applicable laws and regulations.

B. Codes and Standards: Comply with the provisions of the current edition of the following referenced codes, standards and specifications:

1. American National Standards Institute (ANSI)
2. Oregon Plumbing Specialty Code (OPSC)
3. Oregon Mechanical Specialty Code (OMSC)
4. Oregon Structural Specialty Code (OSSC)
5. Oregon Uniform Fire Code (UFC)
7. All local amendments of the above codes.

C. All products shall in all cases be listed and labeled as an assembly by an approved nationally recognized safety testing organization.

D. The contractor shall submit the drawings for plan review by the authority having jurisdiction, pay any and all plan review fees, and respond to review comments and revise the drawings as required.

1.03 COORDINATION

A. The contractor shall coordinate all aspects of the design and installation of the various plumbing systems including but not limited to connections to utilities, scheduling, space allocation, interfacing of systems, submission of drawings and equipment submittals, and the successful operation of the completed systems.

B. The contractor shall coordinate the plumbing systems with other systems.

PART 2 - PRODUCTS

2.01 FIXTURES:

A. Basis of Design Fixtures: As scheduled in 22 4000 Plumbing Fixture Schedule.

PART 3 - EXECUTION

3.01 DESIGN CRITERIA

A. Scope: Provide complete designs for the plumbing system including domestic water

pipng, water heating equipment, sanitary waste and vent piping, and roof drainage system.

B. Detailed Requirements:

1. Domestic water piping shall be sized in accordance with the OPSC.
 - a. Minimum available water pressure at the most remote fixture shall not be less than 20 psi.
 - b. Maximum water velocity shall not exceed 8 feet per second in 1" and larger lines and 6 feet per second in ½" and ¾" lines. No fixture branches smaller than ½" permitted.
2. The waste and vent piping system shall be sized in accordance with the Code requirements. All waste piping below the floor shall be minimum 2" size. Allow for future expansion and provide stubs for future connections where appropriate. Locate cleanouts inconspicuously and where obstruction by furniture would not be anticipated.
3. Size all roof drainage piping in accordance with local requirements and the Code. Locate roof drains at roof low points. Provide roof overflow drains where scuppers are not provided and coordinate discharge point. No underground piping less than 2" allowed.
4. Water heater: Size based on manufacturer guidelines for fixtures based on industry practice.

C. Seismic Restraint: The contractor is responsible for the design of seismic restraint systems for all portions of the plumbing systems and equipment in accordance with the requirements of the Building Code.

3.02 INSTALLATION

- A. Plumbing shall be installed as indicated on the approved plans.
- B. Plumbing shall be installed following local and state codes and all federal, state and other applicable laws and regulations.
- C. Plumbing shall be installed following manufacturer's written specifications and installation instructions.

END OF SECTION

22 4000

Plumbing Fixtures and Accessories Schedule

BASIS OF DESIGN PRODUCTS: provide designated item or Approved Equal as described under provisions of Division 01

DESCRIPTION	MANUFACTURER	MODEL	FINISH
Restroom Fixtures			
Toilet (ADA height)	Gerber	DF-21-318 Dual Flush Pressure Assist	White
Sink	American Standard	Lucerne (wall hung)	White
Restroom Faucets	American Standard	Innsbrook Selectronic 6059.205	Chrome
ADA Shower Surround	Sterling	62060106-0	Manufacture's Full Range of colors and textures.
ADA Shower Fixture	American Standard	FloWise 1662.224	Chrome
Shower Room Faucet	American Standard	Monterray 5500.174	Chrome
Kitchen Fixtures			
Kitchen Sink	Elkay	DLR191910	Stainless
Kitchen Sink Faucet	Elkay	LK810HA10T4	Chrome
Other Fixtures			
Mop Sink	Zurn	Z1996-24	Manuf. Std.
Mop Sink Faucet	Zurn	Z843M1	Chrome
Drinking Fountain	Elkay	EDFP217C	Stainless

**SECTION 31 2200
GRADING**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Cutting and grading of site.
 - 2. Topsoil placement.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.
 - 2. Section 31 2300 Excavation & Fill
 - 3. Section 32 9300 Trees, Shrubs, & Ground Cover

PART 2 PRODUCTS

2.1 MATERIALS

- A. Topsoil:
 - 1. Off site materials: Natural friable loam of region, free of clay, toxic substances, large or matted roots, debris, excess weeds, and rocks over 1 inch in any dimension, with acidity range of 5.5 to 7.5.

PART 3 EXECUTION

3.1 CUTTING AND GRADING

- A. Excavate existing fill materials from areas of structures and paving.
- B. Excavate subsoil to permit placement of structures, paving, and site improvements, and from areas to be regraded.
- C. Uniformly grade areas to smooth surface at required grades and elevations. Adjust contours to eliminate water ponding and provide positive drainage. Make grade changes gradually. Blend slopes into level areas.
- D. Leave areas to receive planting beds 18 inches below final required grade.
- E. Tolerances: Within plus or minus 1 inch of required subgrade elevation.

3.2 TOPSOIL PLACEMENT

- A. Place topsoil to 4 inch depth over areas modified by work of this Contract that are not covered by planting beds, structures or paving.
- B. Uniformly distribute to required grades; feather back to where grades remain unchanged.
- C. Uniformly grade areas to smooth surface at required grades and elevations. Adjust contours to eliminate water ponding and provide positive drainage. Make grade changes gradually. Blend slopes into level areas.

- D. Remove rubbish, debris, vegetation, and concentrations of rocks. Rake areas smooth; leave suitable for seeding or sodding.

3.3 CLEANING

- A. Remove surplus materials and those not suitable for reuse from site.

3.4 PROTECTION

- A. Protect graded areas from traffic and erosion; keep free of trash and debris.
- B. Repair settled, eroded, or rutted areas.

END OF SECTION

**SECTION 31 2300
EXCAVATION AND FILL**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Excavating for structures and site components.
 - 2. Filling.
 - 3. Trenching.
 - 4. Backfilling.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.
 - 2. Section 31 2200 Grading
 - 3. Section 32 9300 Trees, Shrubs & Ground Cover

1.2 REFERENCES

- A. : Oregon Department of Transportation (ODOT)
 - 1. ODOT Standard Specifications for Construction
- B. ASTM International (ASTM)
 - 1. D698 - Standard Test Methods for Laboratory Compaction Characteristics of Soil.
 - 2. D2922 - Standard Test Methods for Density of Soil and Soil Aggregate in Place by Nuclear Methods (Shallow Depth).
 - 3. D4318 - Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.

1.3 SYSTEM DESCRIPTION

- A. Limits of Work: Do not extend earthwork beyond areas of excavation or construction shown on Drawings or reasonably necessary for performance of Work.
- B. Contractor is responsible for design of temporary earth retention systems.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Crushed stone free of clay, friable material, and debris, graded in accordance with ODOT Standard Specifications for Construction.
 - 1. Crushed stone 3/4" minus
 - 2. Crushed stone 1 1/2" minus
- B. Common Fill: Reused site or imported soils free from trash, debris, roots, rocks over 1 inches in diameter, topsoil, and other deleterious matter.

PART 3 EXECUTION

3.1 EXCAVATING

- A. Excavate to grades and subgrades indicated. Make excavations large enough to permit placing and inspection of work.
- B. Stockpile excavated materials that are suitable for reuse separately from subgrade material.
- C. Remove and dispose of excavated material that is unsuitable or not required for backfilling. Remove underground obstructions.
- D. Brace sides of excavations where necessary; maintain until permanent construction is in place. Remove temporary shoring and bracing as backfill is placed.
- E. Excavation for Structures:
 - 1. Form bottoms of excavations reasonably level.
 - 2. Maintain moisture level in excavations as near their natural level as possible.
- F. Correct over-excavation under footings by use of lean concrete or $\frac{3}{4}$ " minus compacted crushed stone.
- G. Keep excavations free of water.

3.2 FILLING

- A. Prior to placing fill on existing subsoils:
 - 1. Proof roll to detect soft and weak zones. Remove soft and spongy soils down to firm subsoil.
- B. Fill low areas outside of structures with Common Fill to achieve required grades and elevations.
 - 1. Place fill in maximum 8 inch deep loose, even, horizontal lifts.
 - 2. Compact each lift to 90 percent Proctor maximum dry density.
- C. Fill under structures and paving with Crushed Stone.
 - 1. Place fill in maximum 6 inch deep loose, even, horizontal lifts.
 - 2. Compact each lift to 95 percent of ASTM D698 standard.
- D. Do not fill over porous, wet, frozen, or soft subgrades.
- E. Bench fill into slopes.
- F. When moisture must be added to aid in compaction, uniformly apply water to surface, but do not flood. Free water shall not appear on surface during or after compaction operations.
- G. Scarify soil too wet for proper compaction and allow to dry. Replace and recompact.
- H. Uniformly grade areas to smooth surface at required grades and elevations. Adjust contours to eliminate water ponding and provide positive drainage. Make grade changes gradually. Blend slopes into level grades.
- I. Tolerances: Within plus or minus $\frac{1}{2}$ inch of required subgrade elevation.

3.3 TRENCHING

- A. Cut trenches sufficiently wide to allow for installation of utilities and for inspection of work.
- B. Hand trim excavations; remove loose matter.

- C. Remove rocks and obstructions.
- D. Correct over-excavation by use of lean concrete or pipe bedding material.
- E. Keep trenches free of water.

3.4 BACKFILLING

- A. Backfill under structures, in trenches and paved areas with Crushed Stone or Gravel Fill.
 - 1. Place utilities in trench at required elevations.
 - 2. Cover utilities with 3/4" crushed stone.
 - 3. Place backfill in loose, even, horizontal lifts maximum 6 inches deep.
 - 4. Compact each lift to 90 Proctor maximum dry density.

3.5 FIELD QUALITY CONTROL

- A. Testing and Inspection Services: Perform field in place density tests, ASTM D2922, at following rates; minimum of three tests for each lift or area:
 - 1. Under structures: One test for each 1500 square feet, per lift.
 - 2. Under paving: One test for each 5000 square feet, per lift.
 - 3. Trenches One test for each 100 linear feet, per lift.

3.6 CLEANING

- A. Remove surplus materials and those not suitable for reuse from site.

3.7 PROTECTION

- A. Protect graded areas from traffic and erosion; keep free of trash and debris.

END OF SECTION

**SECTION 32 1216
ASPHALT PAVING**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Aggregate base and sub-base courses.
 - 2. Asphalt concrete binder and surface courses
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

- A. Oregon Department of Transportation (ODOT)
 - 1. ODOT Standard Specifications for Construction
- B. Asphalt Institute (AI):
 - 1. MS-2 - Mix Design Methods for Asphalt Concrete and Other Hot Mix Types.
 - 2. MS-3 - Asphalt Plant Manual.
 - 3. MS-8 - Asphalt Paving Manual.
 - 4. MS-19 - Basic Asphalt Emulsion Manual.
- C. ASTM International (ASTM)
 - 1. C136 - Standard Test Method for Sieve Analysis of Fine and Coarse Aggregate.
 - 2. D946 - Standard Test Method for Penetration-Graded Asphalt Cement for Use in Pavement Construction.
 - 3. D1188 - Standard Test Method for Bulk Specific Gravity of Compacted Bituminous Mixtures Using Paraffin-Coated Specimens.
 - 4. D2172 - Standard Test Method for Quantitative Extraction of Bitumen from Bituminous Paving Mixtures.
 - 5. D2922 - Standard Test Methods for Determining the Density of Soil and Soil Aggregate in Place by Nuclear Methods (Shallow Depth).

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Mix Designs: Indicate composition of each type asphaltic concrete.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum 5 years experience in work of this Section.
- B. Perform work in accordance with AI MS-8.
- C. Mixing Plant: AI MS-3.
- D. Obtain materials from same source throughout work.

1.5 PROJECT CONDITIONS

- A. Do not place asphalt when base surface temperature is less than 40 degrees F, or surface is wet or frozen.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Crushed stone free of clay, friable material, and debris, graded in accordance with ASTM C136.
 - 1. Base Course: Crushed stone 3/4" minus
 - 2. Sub-Base Course; Crushed stone 1 1/2" minus
- B. Asphalt Cement: per ODOT Standard Specifications for Construction.
 - 1. Binder Course; 2 1/2" Class 'B'
 - 2. Surface Course: 1 1/2" Class 'C'
- C. Primer: AI MS-19, homogenous, medium curing, cut back liquid asphalt.
- D. Tack Coat: AI MS-19, homogenous, rapid curing, cut back liquid asphalt.

PART 3 EXECUTION

3.1 CONSTRUCTION

- A. Aggregate Base Courses:
 - 1. Roller compact to minimum 95 percent. Add small quantities of fine aggregate if necessary to aid compaction.
 - 2. Uniformly grade areas to smooth surface at required grades and elevations. Make grade changes gradually. Blend slopes into level grades.
 - 3. Tolerances: Within plus or minus 1/2" inch of required elevation.
- B. Primer: Apply to base course and contact surfaces of curbs and abutments at minimum rate of 1/3 gallon per square yard.
- C. Asphaltic Concrete:
 - 1. Place within 24 hours after applying primer.
 - 2. Compact with pneumatic roller, then with steel roller. Do not displace or extrude asphaltic concrete from position. Hand compact in areas inaccessible to rolling equipment.
 - 3. Roll with consecutive passes to achieve uniform, smooth surface, free from roller marks.
 - 4. Construction joints:
 - a. Place mixture as nearly continuous as possible. Roll unprotected edge of freshly laid mixture only when laying is discontinued for such length of time as will allow cooling of mixture.
 - b. When resuming work, cut back previously laid material to produce slightly beveled edge for full depth of course; place fresh mixture against fresh cut.
 - c. Hot smoothing irons may be used for sealing joints; use care to avoid burning surface.
 - d. Construct joints either parallel to or at right angles to longitudinal axis of work.
- D. Installation Tolerances:
 - 1. Maximum surface deviation: Plus or minus 1/4 inch in 10 feet, measured parallel to line of drainage.
 - 2. Maximum deviation from specified thickness: Plus or minus 1/4 inch.

END OF SECTION

**SECTION 32 1313
CONCRETE PAVING**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Concrete curbs, gutters, walks, ramps, stairs, and paving.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.
 - 2. Section 03 3000 - Cast-In-Place Concrete.
 - 3. Section 07 9200 - Joint Sealers.

1.2 REFERENCES

- A. American Concrete Institute (ACI)
 - 1. 301 - Structural Concrete for Buildings.
 - 2. 305R - Hot Weather Concreting.
 - 3. 306R - Cold Weather Concreting.
 - 4. 308 - Standard Practice for Curing Concrete.
 - 5. 318 - Building Code Requirements for Structural Concrete.
- B. ASTM International (ASTM) D1752 - Standard Specification for Preformed Sponge Rubber and Cork Expansion Joint Fillers for Concrete Paving and Structural Construction.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Formwork:
 - 1. Metal Forms: Free of deformities, furnished in maximum practical lengths.
 - 2. Wood Forms: Good grade lumber, sound and free of warp, minimum 2 inch nominal thickness except where extremely short radii of curves require thinner forms.
- B. Reinforcement:
 - 1. Dowels: Plain round bar dowels, conforming to reinforcing steel requirements.
- C. Concrete Materials: Specified in Section 03 3000.

2.2 ACCESSORIES

- A. Joint Filler: Asphaltic type, ASTM D1752 with removable strip providing recess for joint sealer.
- B. Joint Sealers: Specified in Section 07 9200.

PART 3 EXECUTION

3.1 CONSTRUCTION OF FORMS

- A. Set forms accurately to required grades and alignment.

- B. Ensure that walkways slope away from building.
- C. Brace forms to withstand loads applied during concrete placement.
- D. Install flexible or curved forms of wood or metal for curves with radius of 300 feet or less.
- E. Leave forms in place for minimum 12 hours after completion of finishing operation.
- F. Provide expansion joints where paving abuts other construction, and at [maximum 30 feet on center unless otherwise indicated on Drawings.
 - 1. Shape joint filler to concrete cross section and fasten in place.
 - 2. Provide holes for dowel bars maximum 1/8 inch larger than bar diameter.
 - 3. Use removable strips to provide recess for sealant.

3.2 PLACING REINFORCING

- A. Place reinforcing in middle third of flatwork.
- B. Stop alternate bars of reinforcing steel at control joints.
- C. Provide dowels at maximum 12 inches on center at expansion joints. Wrap one end of dowel in building paper or felt. Stop reinforcement on both sides of joint.

3.3 PLACING CONCRETE

- A. Place concrete in accordance with Section 03 3000.
- B. Place concrete continuously between predetermined expansion and control joints. Do not interrupt successive placement such that cold joints occur.
- C. Shape curbs and gutters to cross section indicated on Drawings.
- D. Strike off flatwork with screed, then float to uniform surface.
- E. Finish concrete slab surfaces in accordance with ACI 301.
 - 1. Steel trowel and broom finish surfaces unless otherwise indicated.
- F. Tool expansion joint edges and other exposed edges to smooth, dense surface with 1/8 inch radius.
- G. Provide tooled control joints at maximum 5 feet on center inless otherwise indicated Drawings.
- H. Installation Tolerances: Surfaces true to plane, in longitudinal direction to required grade, within plus or minus 1/4 inch in 10 feet, noncumulative.
- I. Cover with plastic or other material in accordance with ACI 301.
- J. Protect from damage until sufficiently cured.
- K. Seal control and expansion joints as specified in Section 07 9200.

END OF SECTION

Concrete Paving
32 1313-2

**SECTION 32 1713
PARKING BUMPERS**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Precast concrete parking bumpers.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 SUBMITTALS

- A. Submittals for Review:
 - 1. Product Data: Provide unit configuration and dimensions.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Concrete Mix: Minimum 3500 PSI, 28 day strength, air entrained to 5 to 7 percent.

2.2 ACCESSORIES

- A. Reinforcing Bars: No. 3 deformed steel.
- B. Dowels: Steel, 1/2 inch minimum diameter x 24 inches long, pointed tip.

2.3 FABRICATION

- A. Use rigid molds, constructed to maintain precast units uniform in shape, size and finish. Maintain consistent quality during manufacture.
- B. Embed two (2) longitudinal reinforcing bars.
- C. Cure units to develop concrete quality, and to minimize appearance blemishes including non uniformity, staining, and surface cracking.
- D. Nominal Size: 6 inches high x 6 inches deep x 6 feet long.
- E. Provide two (2) vertical fastening holes per unit.
- F. Profile: Rectangular cross section with rounded or canted top, square ends.
- G. Finish: Manufacturer's standard.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Set units in place without damage to shape or finish.
- B. Align adjacent units.
- C. Secure to paving with minimum (2) two dowels per unit.

END OF SECTION

**SECTION 32 1723
PAVEMENT MARKINGS**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Painted striping, directional arrows, and letters applied to asphaltic and concrete paving.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 SUBMITTALS

- A. Submittals for Review:
 - 1. Product Data: Include product attributes, performance characteristics, and application instructions.
 - 2. Samples: 3 x 3inch samples showing available colors.

1.3 PROJECT CONDITIONS

- A. Environmental Requirements: Do not apply paint during rain or at ambient temperatures below 50 degrees F, nor when such conditions are anticipated within 8 hours after application.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers:
 - 1. Benjamin Moore and Co. (www.benjaminmoore.com)
 - 2. Kelly-Moore Paints. (www.kellymoore.com)
 - 3. PPG Architectural Finishes, Inc. (www.pittsburghpaints.com)
 - 4. Sherwin Williams. (www.sherwin-williams.com)
- B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Striping Paint:
 - 1. Type: Manufacturer's high performance non-bleeding, formulated specifically for painting in vehicular traffic areas for the type of surface indicated.
 - 2. Colors:
 - a. Parking stall striping, directional markings, and restricted parking zone markings: Yellow or to match existing striping paint.
 - b. Accessible parking emblems and paths: In accordance with applicable accessibility code, or white with blue background..
 - c. Fire lane designations: Red with white copy.

2.3 EQUIPMENT

- A. Application Equipment: Pressurized, self contained, capable of applying straight line from 2 to 6 inches wide with consistent coverage.

2.4 MIXES

- A. Mix materials in accordance with manufacturer's instructions.

PART 3 EXECUTION

3.1 PREPARATION

- A. Allow paving to cure the minimum time recommended by paint manufacturer prior to applying paint.
- B. Clean paving of grease, oil, and loose and foreign matter that could impair adhesion.
- C. Remove curing compound from new concrete by lightly sandblasting. Minimize sandblasting of surfaces not receiving paint.
- D. Locate markings according to drawings, using guide lines and templates.

3.2 APPLICATION

- A. Apply paint by machine at rates recommended by manufacturer.
- B. Apply paint in two coats.
- C. Provide 4 inch wide parking stall stripes.

3.3 PROTECTION

- A. Close areas to traffic until paint is cured.

END OF SECTION

**SECTION 32 3113
CHAIN LINK FENCES AND GATES**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Fence framework, fabric, and accessories.
 - 2. Excavation for posts.
 - 3. Concrete post foundations.
 - 4. Gates and hardware.
 - 5. Barbed wire.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.
 - 2. Section 03 3000 - Cast-In-Place Concrete.

1.2 REFERENCES

- A. ASTM International (ASTM):
 - 1. A121 - Standard Specification for Metallic-Coated Carbon Steel Barbed Wire.
 - 2. A392 - Standard Specification for Zinc-Coated Steel Chain-Link Fence Fabric.
 - 3. A780 - Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings.
 - 4. A824 - Standard Specification for Metallic-Coated Steel Marcellled Tension Wire for Use With Chain Link.
 - 5. C94 - Standard Specification for Ready-Mixed Concrete.
 - 6. F567 - Standard Practice for Installation of Chain Link Fence.
 - 7. F626 - Standard Specification for Fence Fittings.
 - 8. F900 - Standard Specification for Industrial and Commercial Swing Gates.
 - 9. F1043 - Standard Specification for Strength and Protective Coatings of Metal Industrial Chain Link Fence Framework.
 - 10. F1083 - Standard Specification for Pipe, Steel, Hot-Dipped Zinc-Coated (Galvanized) Welded, for Fence Structures.
 - 11. F1345 - Standard Specification for Zinc-5% Aluminum-Mischmetal Alloy-Coated Steel Chain-Link Fence Fabric.
 - 12. F1664 - Standard Specification for Poly (Vinyl Chloride) (PVC) and Other Conforming Organic Polymer-Coated Steel Tension Wire Used with Chain-Link Fence.
 - 13. F1665 - Standard Specification for Poly (Vinyl Chloride) (PVC) and Other Conforming Organic
- B. Chain Link Fence Manufacturers Institute (CLFMI) - Product Manual.

1.3 SYSTEM DESCRIPTION

- A. Fence Height: As indicated on Drawings, or to match existing fencing.

1.4 SUBMITTALS

- A. Submittals for Review:
 - 1. Shop Drawings: Include layout, spacing of components, post foundation dimensions, hardware, and schedule of components.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers:
 - 1. Master-Halco, Inc. (www.fenceonline.com)
 - 2. Merchants Metals. (www.merchantsmetals.com)
 - 3. Perfection Fence Corp. (www.perfectionfence.com)
 - 4. Southwestern Wire, Inc. (www.southwesternwire.com)
 - 5. Hoover Fence Co. (www.hooverfence.com)
- B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Materials and Components: Conform to CLFMI Product Manual.
- B. Chain Link Fabric:
 - 1. Zinc-coated steel fabric: ASTM A392, hot dipped galvanized before or after weaving, Class [2 - 2.0 ounces per square foot.
 - 2. Wire gage: 9 unless otherwise indicated.
 - 3. Mesh size: 1 3/4 inches unless otherwise indicated.
 - 4. Fabric selvage:
 - a. 72 inches high and over: Knuckle finish one end, twist finish opposite end.
 - b. Fabric less than 72 inches high: Knuckle finish top and bottom.
- C. PVC slats: Polyvinylchloride slats sized to fit tightly into chain link fabric. Secured with vinyl "wings" "top lock" or other accessories to keep slats from sagging. Color to be selected from manufacturer's full range of colors.
- D. Framework:
 - 1. Round steel pipe and rail, ASTM F1043, Group IA - Heavy Industrial Fence Framework, Schedule 40 galvanized pipe per ASTM F1083.
 - 2. Grade: Regular.
 - 3. Finish: Exterior zinc coating Type A, interior zinc coating Type A.
 - 4. Sizes:
 - a. Line posts: 2 inch OD unless otherwise indicated
 - b. End, corner, pull posts: 3 inch OD. unless otherwise indicated
 - c. Top, brace, bottom, and intermediate rails, 1.660 inches OD.
- E. Tension Wire: Metallic coated steel marcelled tension wire: 7 gage, ASTM A824, Type II - Zinc-Coated Class 5 - 2.0 ounces per square foot.
- F. Barbed Wire: Metallic coated steel barbed wire: ASTM A121, Design Number 12-4-5-14R, double 12-1/2 gage twisted strand wire, with 4 point, 14 gage round barbs spaced 5 inches on center, [coating to match chain link fabric.
- G. Fittings:

1. Tension and brace bands: Pressed galvanized steel, ASTM F626, minimum 12 gage, minimum 3/4 inch width, minimum zinc coating of 1.20 ounces per square foot, with 5/16 3/8 inch galvanized steel carriage bolts.
 2. Terminal post caps, line post loop tops, rail and brace ends, boulevard clamps, and rail sleeves: ASTM F626, pressed steel galvanized after fabrication, a minimum zinc coating of 1.20 ounces per square foot.
 3. Truss rod assembly: ASTM F626, 3/8 inch diameter steel truss rod with pressed steel tightener, minimum zinc coating of 1.2 ounces per square foot, capable of withstanding 2000 pound tension.
 4. Tension bars: ASTM F626, galvanized steel, single piece length 2 inches less than fabric height, minimum zinc coating thickness of 1.2 ounces per square foot.
 - a. Bars for 2 and 1-3/4 inch mesh: Minimum cross section of 3/16 x 3/4 inch.
 - b. Bars for 1 inch mesh: Minimum cross section of 1/4 x 3/8 inch.
 - c. Bars for 3/8, 1/2, and 5/8 inch mesh: Attached to terminal post using galvanized steel strap having minimum cross section of 2 x 3/16 inch with holes spaced 15 inches on center to accommodate 5/16 inch carriage bolts.
 5. Barbed wire arms: ASTM F626, pressed steel galvanized after fabrication, minimum zinc coating of 1.20 ounces per square foot, capable of supporting vertical 250 pound load, Type I - three strand 45 degree arm.
- H. Tie Wire and Hog Rings: ASTM F626, minimum zinc coating of 1.20 ounces per square foot, 9 gage galvanized steel.
- I. Swing Gates:
1. ASTM F900, galvanized steel, welded fabrication, 1.900 inch OD frame members, ASTM F1043, Group IA, ASTM F1083 Schedule 40 pipe, spaced maximum 8 feet apart vertically and horizontally.
 2. Welded joints protected with zinc-rich paint in accordance with ASTM A780.
 3. Positive locking gate latch fabricated from 5/16 inch thick x 1-3/4 inch pressed steel galvanized after fabrication.
 4. Galvanized malleable iron or heavy gage pressed steel post and frame hinges.
 5. Fabric to match fencing.
 6. Gate posts: ASTM F1043, Group IA, ASTM F1083 Schedule 40 pipe.
 7. Electrically operated gates: ASTM F2200 and UL325.
- J. Concrete: Specified in Section 03 3000.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Framework:
1. Drill post holes into undisturbed or compacted soil.
 2. Set posts in concrete footings in accordance with ASTM F567.
 3. Minimum footing depth: 24 inches plus an additional 3 inches for each 1 foot increase in fence height over 4 feet.
 4. Minimum footing diameter: Four times largest cross section of post up to 4.000 inches and three times largest cross section of posts greater than 4.000 inches.
 5. Gate post footings: Comply with minimum requirements listed in ASTM F567.
 6. Place concrete around posts in continuous pour, tamp and dome top away from post. Check for vertical and top alignment; brace posts until concrete has set.
 7. Locate top of footing at grade.
 8. Install line posts at maximum 10 feet on center.

9. Top rail: Install 21 foot lengths continuous through barbed wire arm loop top. Splice rail using minimum 6 inch long sleeves. Secure rail to terminal posts with brace band and rail end.
10. Field cut intermediate rail and secure to line posts with boulevard bands or rail ends and brace bands.
11. Brace and truss end, corner in accordance with ASTM F567.
12. Tension wire:
 - a. Install tension wire 4 inches up from bottom of fabric.
 - b. Stretch wire taut, independently and prior to fabric, between terminal posts and secure to terminal post using brace band.
 - c. Secure wire to chain link fabric with 9 gage hog rings spaced maximum 18 inches on center and to each line post with tie wire.
 - d. Install top tension wire through barbed wire arm loop for fences having barbed wire and no top rail.

B. Fabric:

1. Install fabric to outside of framework.
2. Attach fabric to terminal post by threading tension bar through fabric; secure tension bar to terminal post with tension bands and 5/16 inch carriage bolts spaced maximum 12 inches on center.
3. For small mesh fabric less than 1 inch, attach to terminal post by sandwiching mesh between post and vertical 2 inch wide x 3/16 inch steel bar using carriage bolts through bar, mesh and post, spaced maximum 15 inches on center.
4. Stretch fabric taut, without sag. Secure fabric to line posts with tie wires spaced maximum 12 inches on center and to rails at maximum 18 inches on center.
5. Secure fabric to tension wire with hog rings spaced maximum 18 inches on center.
6. Wrap tie wire around post or rail and attached to fabric wire picket on each side by twisting tie wire around fabric wire picket two full turns. Cut off excess wire and bend over.
7. Installed fabric ground clearance: Maximum 2 inches.

C. Barbed Wire:

1. Install single sloped arms sloped to outside of fence.
2. Stretched barbed wire taut between terminal posts and secure in slots on line arms.
3. Attach each strand of barbed wire to terminal post with brace band.

D. Swing Gates:

1. Install in accordance with ASTM F567, with gates plumb in closed position and having 3 inch bottom clearance, grade permitting.
2. Maximum hinge and latch offset opening space from gate frame to post: 3 inches in closed position.
3. Set double leaf gate drop bar receivers in concrete footing minimum 6 inch diameter x 24 inches deep.
4. Install gate leaf holdbacks for double leaf gates.

3.2 INSTALLATION TOLERANCES

- A. Maximum Variation from Plumb: 1/4inch in 10 feet.
- B. Maximum Offset from True Position: 1 inch.

END OF SECTION

SECTION 32 9300
TREES, SHRUBS AND GROUND COVER

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Bed preparation.
 - 2. Planting Bed Material.
 - 3. Plant materials.
- B. Related Sections:
 - 1. Division 01 - Administrative, procedural, and temporary work requirements.
 - 2. Section 31 2200 - Grading.

1.2 REFERENCES

- A. American National Standards Institute (ANSI) Z60.1 - Nursery Stock.

1.3 QUALITY ASSURANCE

- A. Nursery Qualifications: Company specializing in growing and cultivating plants specified in this Section with minimum three years experience.
- B. Installer Qualifications: Company specializing in installing plants specified in this Section with minimum three years experience.
- C. Maintenance Services: Performed by installer.
- D. Regulatory Requirements: Comply with requirements of authorities having jurisdiction for fertilizer and plant materials.
- E. Plant Materials: Described by ANSI Z60.1.

1.4 DELIVERY, STORAGE AND HANDLING

- A. Deliver plant materials immediately prior to installation; keep moist and protect from damage until planted.

1.5 PROJECT CONDITIONS

- A. Environmental Requirements:
 - 1. Do not install plant materials at ambient temperatures below 35 degrees F or above 95 degrees F.
 - 2. Do not install plants when wind velocity exceeds 30 MPH.

1.6 MAINTENANCE

- A. Maintenance Service:

1. Maintain plant life immediately after placement until plants are well established and exhibit vigorous growing condition. Include fertilization, weeding, pruning, and insect and disease control.
2. Replace dead or dying plants with plants of same size and species specified; plant in next growing season.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Trees, Shrubs, and Ground Cover:
 1. Species and size as indicated in plant schedule; grown in climatic conditions similar to those at site.
 2. Free of disease, hazardous insects, and defects including weak or broken limbs, crotches, and damaged trunks, roots, or leaves
- B. Planting Bed Material: Planting Bed Material shall be a sandy loam mixed with compost or a sand/soil/compost blend. It shall be roughly one-third compost by volume, free draining, and support plant growth. The compost shall be derived from plant material; animal waste is not allowed.
- C. Organic Mulch: Decomposed organic shredded hardwood, ground or shredded bark, Pine straw, threshed straw, wood and bark chips, and yard trimmings of uniform texture, free of chips, stones, sticks, soil, or toxic materials free from growth or germination inhibiting ingredients and free from deleterious materials and suitable as a top dressing of trees and shrubs.
- D. Herbicides:
 1. Translocating type.
 2. Pre-emergent type.
- E. Bracing Materials:
 1. Stakes: Softwood lumber.
 2. Wires: Non-corrosive material.
 3. Protectors: Rubber or other suitable material.

PART 3 EXECUTION

3.1 PREPARATION

- A. Bed Preparation:
 1. Apply translocating herbicide to grass in areas to be planted.
 2. Remove foreign materials, large rocks, and lumps.
 3. Apply pre-emergent herbicide.
 4. Till to 6 inch depth, then fine grade to lines and levels indicated.
 5. Request approval of bed preparation and location by Architect.
- B. Plant Materials:
 1. Remove synthetic and treated cloths, twines, and pots.
 2. Untreated organic cloths may be left in place; loosen from root collar to prevent girdling.
 3. Locate plants and request approval of location by Architect.

3.2 INSTALLATION

- A. Dig pits and beds 6 inches larger than plant root system.

- B. Set plants vertically; place for best appearance.
- C. Set plants in pits or beds, on prepared topsoil mixture. Lay bare-rooted plants so roots lie in natural position.
- D. Place prepared topsoil mix around plant; settle with water when hole is half full and again when full; remove air pockets.
- E. Brace plants against wind damage:
- F. Install guy wires with protectors where wires contact trees. Stake in position.
- G. Position to prevent hazards to pedestrians where possible.
- H. Do not restrict plant movement under light wind loads or damage bark.
- I. Cover bare soil with minimum 4 inch layer of mulch.

END OF SECTION

58611 McNulty Way, St Helens, Oregon, 97051

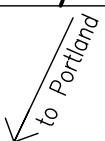
101 ST HELENS ST
ST HELENS, OR 97051
T: 503 366 3050 F: 503 366 3055

LOCATION MAP

NOT TO SCALE

PAR	Parallel
PRE	Precast
PRF	Pounds per cubic foot
PERF	Perforated
PERM	Perimeter
PEN	Perpendicular
PLA	Plate
PAM	Plastic laminate
PLA	Plaster
PAN	Pan
PWF	Pounds per linear foot
PWF	Premolded filter
PAN	Pan
PEN	Point(ed)
PRO	Project
PRO	Pressure Treated
PIN	Pounds per square foot
PIN	Pounds per square inch
PIN	Portion
PMT	Polystyrene
PMT	Pavement
PWR	Plywood
QTR	Quarry tile
QTR	Quarter
RBR	Riser
RBR	Rubber
RAB	Rabbet
RAB	Rubber Cove Base
RAB	Roof drain
RAB	Reference
REF	Refinished
REF	Refrigerator
REF	Reglet
REF	Reinforcing(ment)
REF	Require
RES	Resilient
RES	Revised (t) (ion)
RES	Roofing
RES	Resistor
RES	Register
RES	Right hand
RES	Rolling
RES	Room
RES	Removable (able)
RES	Rough opening
RES	Reference point
RES	Return
RES	Reveal
RVL	South
RVL	Resistant Attenuating Bolts
RVL	Setting bed
RVL	Solid core
RVL	Schedule
RVL	Section
RVL	Self Composite Panel
RVL	Screen
RVL	Section
RVL	Carved fireproofing
RVL	Square foot
RVL	Shelf
RVL	Shelving
RVL	Sheet
RVL	Similar
RVL	Sight
RVL	Sill
RVL	Sealant
RVL	Sleeve
RVL	Slab
RVL	Specification(s)
RVL	Sprinkler
RVL	Stair
RVL	Surface
RVL	Stainless steel
RVL	Stagger
RVL	Standard
RVL	Stairfront
RVL	Steel
RVL	Store
RVL	Structural
RVL	Storage
RVL	Switch
RVL	Symmetrical
RVL	System
RVL	Stone
RVL	Tread
RVL	Trough and groove
RVL	Trough base
RVL	Terra cotta
RVL	Telephone
RVL	Temporary
RVL	Thick(ness)
RVL	Threshold
RVL	Trough
RVL	Trackboard
RVL	Top of
RVL	Top of steel
RVL	Top partition
RVL	Transparent
RVL	Typical
RVL	Unless otherwise noted
RVL	Utility
RVL	Vapor barrier
RVL	Very by field measurement
RVL	Vinyl composition tile
RVL	Verifying
RVL	Vinyl
RVL	Veneer
RVL	Vertical
RVL	Volume
RVL	West
RVL	With
RVL	Without
RVL	Wood
RVL	Window
RVL	Wide flange
RVL	Wide flange
RVL	Waterproofing
RVL	Water stop
RVL	Weight
RVL	Yard

NOT TO SCALE

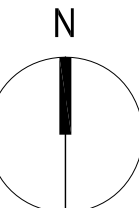
BUILD
BUILD
BUILD

THE PROJECT IS FUNDED IN PART BY A GRANT FROM FEMA, DEPARTMENT OF HOMELAND SECURITY, EOC GRANT #10-1076, ADMINISTERED BY THE OREGON STATE DEPARTMENT OF EMERGENCY MANAGEMENT AND COLUMBIA COUNTY (THE "GRANT").

THE EOC WILL BE SITED ON PROPERTY ADJACENT TO THE LEE BROADBENT TRAINING CENTER LOCATED AT 58577 MCNULTY WAY. THE SITE IS DESCRIBED AS LOT # 8 OF MCNULTY CREEK INDUSTRIAL PARK - TAX LOT 4108-AD-900 ST. HELENS, OREGON.

AKKAN ARCHITECTURE + DESIGN LLC DEVELOPED THESE PRELIMINARY DRAWINGS AND OUTLINE SPECIFICATIONS TO ASSIST COLUMBIA COUNTY IN THE PURCHASING AND INSTALLATION OF A PREFABRICATED STRUCTURE. AKAAN WAS NOT HIRED TO DESIGN, ENGINEER, OR DOCUMENT THIS FACILITY.

CONTRACTOR SHALL INDEMNIFY, DEFEND, AND HOLD AKAAN ARCHITECTURE + DESIGN LLC HARMLESS FOR ANY ERRORS OR OMISSIONS IN THE DESIGN AND CONSTRUCTION OF THIS FACILITY.



58611 McNULTY WAY, SAINT HELENS, OR 97051

AS NOTED
KP
AP
SITEPLAN-B
FEB 27, 2013

CONTENTS:

SITE PLAN &
GENERAL NOTES

SHEET NO:

SITE PLAN & GENERAL NOTES

CS1.0

BID REVIEW SET

GENERAL NOTES

1. DELEGATED DESIGN: THESE DRAWINGS AND SPECIFICATIONS GENERALLY DESCRIBE THE SCOPE OF SERVICES REQUIRED. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE DESIGN AND FABRICATION OF THE PREFABRICATED MODULAR BUILDING. CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF THE PREFABRICATED STRUCTURE INCLUDING DESIGN AND CONSTRUCTION OF FOUNDATIONS AND HOLD-DOWNS. CONTRACTOR IS RESPONSIBLE FOR CONNECTIONS TO PUBLIC UTILITIES INCLUDING SANITARY SEWER, POWER, WATER, AND STORM DRAINAGE, AS WELL AS CONNECTIONS TO PRIVATE UTILITIES INCLUDING TELEPHONE AND DATA.

2. DESIGN LOADS: LOADS AND CODE RESTRICTIONS FOR ALL DESIGN CONSIDERATIONS SHALL TO CONFORM TO ALL ORDINANCES AND STATE AND LOCAL BUILDING CODES (LATEST EDITION) FOR THIS OCCUPANCY CATEGORY - IV - CRITICAL FACILITY.

3. RELATED DOCUMENTS: DRAWINGS AND GENERAL PROVISIONS OF CONTRACT INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS APPLY TO THIS SECTION AND ALL SECTIONS OF THE SPECIFICATIONS.

4. GEOTECHNICAL TESTING HAS NOT BEEN PERFORMED AND IS NOT ANTICIPATED. FOUNDATION DESIGN SHALL FOLLOW STANDARD PRESCRIBED METHODS. IF UNEXPECTED SITE CONDITIONS ARE ENCOUNTERED, CONTRACTOR SHALL NOTIFY THE OWNER AND ARCHITECT IN WRITING.

5. INTENT: DRAWINGS AND SPECIFICATIONS ARE INTENDED TO PROVIDE THE BASIS FOR PROPER COMPLETION OF THE WORK SUITABLE FOR THE INTENDED USE OF OWNER. ANYTHING NOT EXPRESSLY SET FORTH BUT WHICH IS REASONABLY IMPLIED OR NECESSARY FOR PROPER PERFORMANCE OF THE PROJECT SHALL BE INCLUDED.

6. THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, DEVICES AND SUPERVISION REQUIRED FOR PROPER EXECUTION AND COMPLETION OF THE WORK DESCRIBED ON THE DRAWINGS AND SPECIFIED. PRIOR TO BIDDING AND COMMENCEMENT OF THE WORK THE CONTRACTOR SHALL FAMILIARIZE HIMSELF, THE SUBCONTRACTORS, MATERIAL SUPPLIERS AND TRADES-PEOPLE WITH ALL CONSTRUCTION DOCUMENTS, FIELD CONDITIONS AND EXISTING DIMENSIONS AND SHALL CONFIRM THAT THE WORK MAY BE COMPLETED AS SHOWN. THE CONTRACTOR SHALL OBTAIN NECESSARY CLARIFICATIONS FROM THE ARCHITECT. BY SUBMITTING A BID THE CONTRACTOR ACKNOWLEDGES THAT THE CONTRACTOR HAS SUFFICIENT INFORMATION TO ENABLE THE CONTRACTOR TO DETERMINE THE COST AND PERFORM THE WORK.

7. EXISTING SITE CONDITIONS AND RESTRICTIONS: CONDUCT ALL DEMOLITION, EXCAVATION, AND CONSTRUCTION ACTIVITIES IN COOPERATION OWNER. COORDINATE TEMPORARY UTILITIES INCLUDING POTABLE WATER, POWER, WATER, HEATING & COOLING, WITH OWNER. USE SANITARY FACILITIES AS DESIGNATED BY OWNER. USE OF DESIGNATED SPACE MAY BE PERMITTED FOR CONTRACTORS FIELD OFFICE AND TEMPORARY MATERIALS STORAGE. CONTRACTOR SHALL PROVIDE TELEPHONE SERVICE, OFFICE EQUIPMENT, AND SECURE LOCKUP. WHERE EXISTING SERVICE IS INADEQUATE FOR CONSTRUCTION ACTIVITIES, CONTRACTOR SHALL COORDINATE WITH THE OWNER AND ARRANGE AND PAY FOR TEMPORARY UTILITIES.

8. CONTRACTOR SHALL SUPPLY REQUIRED FIRE EXTINGUISHERS, TEMPORARY BARRICADES, WARNING SIGNAGE, AND ANY TEMPORARY LIGHTING AS REQUIRED.

9. VEHICULAR ACCESS AND PARKING: AS DETERMINED BY OWNER.

10. PERMITS AND FEES: THE CONTRACTOR SHALL APPLY FOR, OBTAIN, AND PAY FOR PERMITS, CERTIFICATE OF OCCUPANCY, FEES, LICENSES, AND UTILITY COMPANY CHARGES REQUIRED TO PERFORM THE WORK. SUBMIT COPIES TO OWNER AND ARCHITECT.

11. CODES: COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS OF AUTHORITIES HAVING JURISDICTION INCLUDING BUT NOT LIMITED TO CITY OF ST HELENS BUILDING CODES DIVISION, CITY OF ST HELENS ENGINEERING STANDARDS AND PUBLIC WORKS, OREGON STRUCTURAL SPECIALTY CODE (LATEST EDITION), O.S.H.A. HEALTH AND SAFETY REGULATIONS, POLICE, FIRE DEPARTMENT AND RESCUE SQUAD RULES, ENVIRONMENTAL PROTECTION REGULATIONS, AND UTILITY COMPANY RESTRICTIONS. SUBMIT COPIES OF INSPECTION REPORTS, NOTICES AND SIMILAR COMMUNICATIONS TO OWNER.

12. MOUNTING HEIGHTS: WHERE MOUNTING HEIGHTS ARE NOT INDICATED, INSTALL INDIVIDUAL COMPONENTS AT STANDARD MOUNTING HEIGHTS RECOGNIZED WITHIN THE INDUSTRY FOR THE PARTICULAR APPLICATION INDICATED AND COMPLYING WITH LATEST BARRIER FREE ACCESSIBILITY CODE. REFER QUESTIONABLE MOUNTING HEIGHT DECISIONS TO THE ARCHITECT FOR FINAL DECISION.

13. MANUFACTURER'S AND INDUSTRY STANDARDS: INSTALL ALL MATERIALS, MANUFACTURED ITEMS AND EQUIPMENT IN STRICT ACCORDANCE WITH MANUFACTURER'S OR APPLICABLE INDUSTRY AGENCY'S LATEST PUBLISHED RECOMMENDED SPECIFICATIONS OR THOSE REFERENCED HEREIN. IN THE EVENT OF CONFLICT BETWEEN SPECIFICATIONS AND DRAWINGS NOTIFY THE OWNER/ARCHITECT IN WRITING BEFORE PROCEEDING WITH THE WORK. THE MANUFACTURER'S OR INDUSTRY AGENCY'S SPECIFICATIONS OR RECOMMENDATIONS SHALL GOVERN UNLESS THE OWNER/ARCHITECT ORDERS IN WRITING A DEVIATION SUBSEQUENT TO SUCH NOTICE.

14. EXISTING CONDITIONS: BEFORE DOING ANY WORK THE CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AND CONDITIONS AND NOTIFY ARCHITECT OF EXISTING CONDITIONS DIFFERING FROM THOSE INDICATED ON DRAWINGS. RESULTING ERRORS CAUSED BY THE FAILURE TO EXERCISE SUCH PRECAUTIONS SHALL NOT BE CONSIDERED SUBSEQUENTLY AS A BASIS FOR ADDITIONAL COMPENSATION.

12. DIMENSIONS: VERIFY DIMENSIONS INDICATED ON DRAWINGS WITH FIELD DIMENSIONS BEFORE FABRICATION OR ORDERING OF MATERIALS. DO NOT SCALE DRAWINGS.

20. RESTORE ITEMS DAMAGED DURING INSTALLATION. REPLACE ITEMS WHICH CANNOT BE RESTORED AT NO ADDITIONAL EXPENSE TO THE OWNER.

21. CLEAN AND PROVIDE MAINTENANCE ON COMPLETED CONSTRUCTION AS FREQUENTLY AS NECESSARY THROUGHOUT THE REMAINDER OF THE CONSTRUCTION PERIOD. ADJUST AND LUBRICATE OPERABLE COMPONENTS TO ASSURE OPERABILITY WITHOUT DAMAGING EFFECTS.

24. TEMPORARY TRASH STORAGE AND REMOVAL: CONTRACTOR SHALL MAKE PROVISIONS AND COORDINATE WITH THE OWNER TO PROVIDE ARRANGEMENTS FOR THE STORAGE AND REMOVAL OF ALL CONSTRUCTION DEBRIS AND SHALL PAY FOR ALL ASSOCIATED COSTS.

26. THROUGHOUT CONSTRUCTION KEEP THE PROJECT SITE CLEAN AND NEAT. DO NOT ALLOW HAZARDOUS, DANGEROUS, OR UNSANITARY CONDITIONS OR PUBLIC NUISANCES TO DEVELOP OR PERSIST ON THE SITE.

27. SUBMITTALS: SUBMIT MANUFACTURER'S PRODUCT DATA FOR ALL PRODUCTS. COORDINATE SEPARATE SUBMITTALS WITH RELATED WORK SO PROCESSING WILL NOT BE DELAYED. ALLOW (2) WEEKS FOR INITIAL REVIEW, ALLOW ADDITIONAL TIME IF THE ARCHITECT MUST POSTPONE PROCESSING TIME TO PERMIT COORDINATION WITH SUBSEQUENT SUBMITTALS. PROVIDE REQUIRED RESUBMITTALS IF ORIGINAL SUBMITTALS ARE NOT APPROVED. PROVIDE DISTRIBUTION OF APPROVED COPIES INCLUDING MODIFICATIONS AFTER SUBMITTALS HAVE BEEN APPROVED. SHOP DRAWINGS SHALL INCLUDE DIMENSIONS AND DETAILS INCLUDING ADJACENT CONSTRUCTION AND RELATED WORK. NOTE SPECIAL COORDINATION REQUIRED AND ANY DEVIATIONS FROM REQUIREMENTS OF CONTRACT DOCUMENTS. SUBMIT SAMPLES AND PRODUCT DATA AS INDICATED.

28. BY MAKING A SUBMITTAL THE CONTRACTOR REPRESENTS THAT HE HAS REVIEWED THE SUBMITTAL, VERIFIED DIMENSIONS AND ITS APPLICABILITY TO THE WORK. SUBMITTALS REVIEWED BY THE ARCHITECT DO NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR DEVIATION FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. NO PORTION OF THE WORK SHALL BE COMMENCED UNTIL SUBMITTALS HAVE BEEN APPROVED BY THE ARCHITECT.

29. APPROVAL OF WORK: PRESENCE OF THE ARCHITECT ON THE JOB DOES NOT IMPLY APPROVAL OR ACCEPTANCE OF THE WORK. CALL SPECIFIC ITEMS TO ARCHITECT'S ATTENTION IF APPROVAL OF THOSE ITEMS IS REQUESTED.

30. PRIOR TO SUBSTANTIAL COMPLETION CONTRACTOR SHALL PROVIDE ALL WARRANTIES, CERTIFICATIONS, AND SUPPORTING DOCUMENTATION. WARRANTIES SHALL NOT LIMIT LENGTH OF TIME FOR REMEDY OF DAMAGES OWNER MAY HAVE BY LEGAL STATUTE. WARRANTIES SHALL BE SIGNED BY CONTRACTOR, SUPPLIER, OR INSTALLER FOR PERFORMANCE OF WARRANTY. CONTRACTOR SHALL STARTUP AND TEST ALL SYSTEMS. CONTRACTOR SHALL COORDINATE THE CHANGE OVER OF LOCKS WITH THE OWNER.

31. SUBSTANTIAL COMPLETION: UPON COMPLETION OF ABOVE PREREQUISITES CONTRACTOR SHALL PREPARE A PUNCH LIST AND NOTIFY ARCHITECT TO PROCEED WITH AN INSPECTION. ALL WORK INDICATED IN THE PUNCH LIST SHALL BE COMPLETED PRIOR TO FINAL ACCEPTANCE.

32. AT COMPLETION OF THE PROJECT AND PRIOR TO FINAL ACCEPTANCE THE CONTRACTOR SHALL PROVIDE THE OWNER WITH THREE COMPLETE SETS OF OPERATING MANUALS AND MAINTENANCE INSTRUCTIONS, INCLUDING EMERGENCY INSTRUCTIONS, SPARE PARTS LISTS, WIRING DIAGRAMS, INSPECTION PROCEDURES, SHOP DRAWINGS AND PRODUCT DATA. CONTRACTOR SHALL DEMONSTRATE OPERATION AND MAINTENANCE PROCEDURES TO THE OWNER OF ALL EQUIPMENT.

33. FINAL CLEANING: EMPLOY EXPERIENCED WORKERS OR PROFESSIONAL CLEANERS FOR FINAL CLEANING. CLEAN EACH SURFACE OR UNIT TO THE CONDITION EXPECTED IN A NORMAL COMMERCIAL BUILDING MAINTENANCE PROGRAM. COMPLETE THE FOLLOWING: REMOVE LABELS, CLEAN TRANSPARENT MATERIALS INCLUDING MIRRORS, GLASS IN DOORS AND WINDOWS, REMOVE GLAZING COMPOUNDS, REPLACE CHIPPED OR BROKEN GLASS. CLEAN EXPOSED HARD SURFACES TO A DUST FREE CONDITION, FREE OF STAINS, FILMS, AND OTHER SIMILAR FOREIGN SUBSTANCES VACUUM CARPET SURFACES. WIPE SURFACES OF MECHANICAL AND ELECTRICAL EQUIPMENT. REMOVE EXCESS LUBRICATION AND OTHER SUBSTANCES. CLEAN PLUMBING FIXTURES TO A SANITARY CONDITION. CLEAN LAMPS AND LIGHT FIXTURES.

DOOR LEGEND

WIDTH - $\frac{3}{8} \times 7/8$ - HEIGHT
STYLE - F - W - MATERIAL

ABBREVIATIONS:
F - FLUSH
WD - WOOD
MTL - METAL
W/ LT - WITH LITE

ROOM FINISH LEGEND

CEILING - GPDW
WALL - GPDW PTD
FLOOR - VNL COVE - BASE

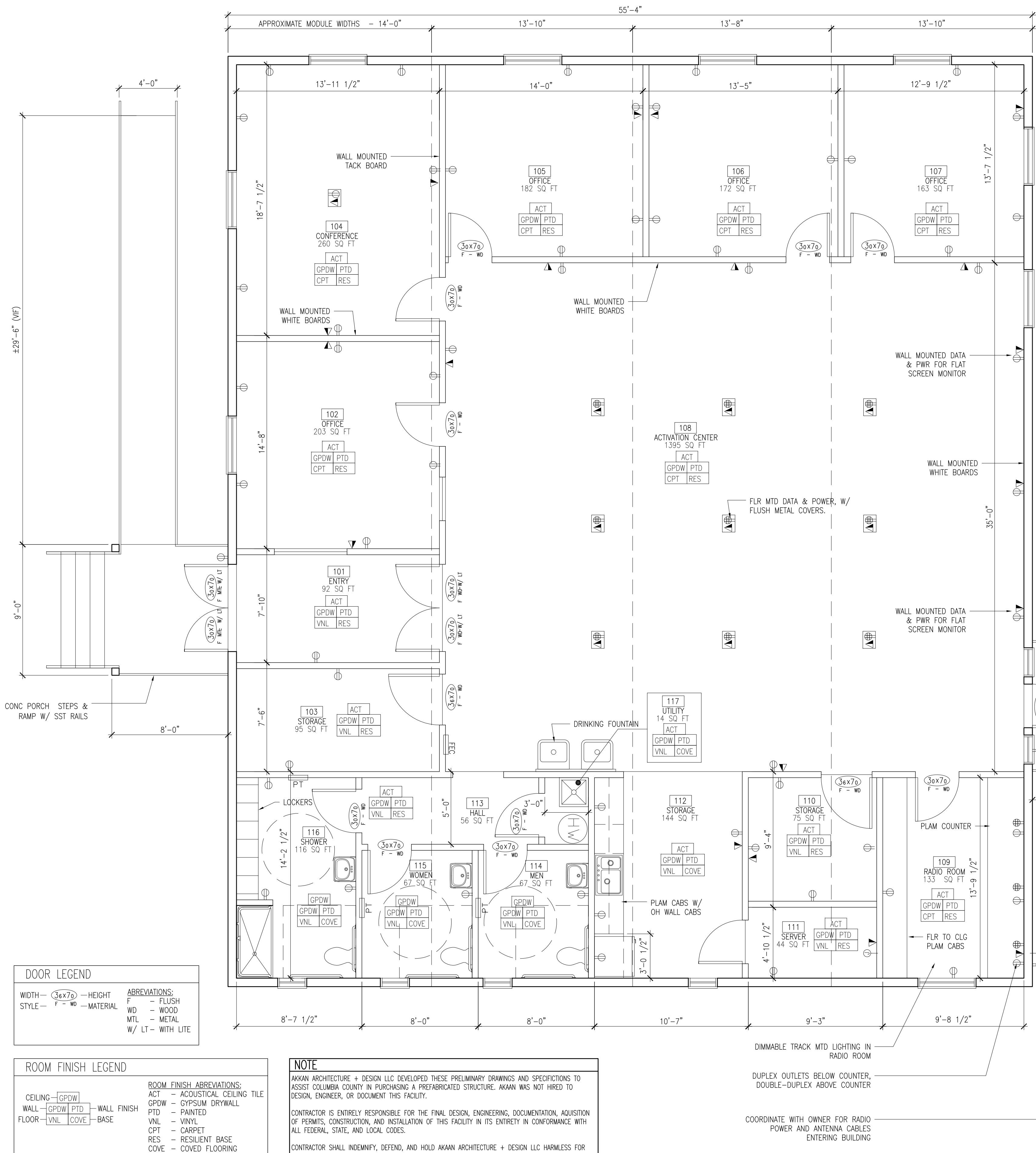
ROOM FINISH ABBREVIATIONS:
ACT - ACoustICAL CEILING TILE
GPDW - GYPSUM DRYWALL
PTD - PAINTED
VNL - VINYL
CPT - CARPET
RES - RESILIENT BASE
COVE - COVED FLOORING

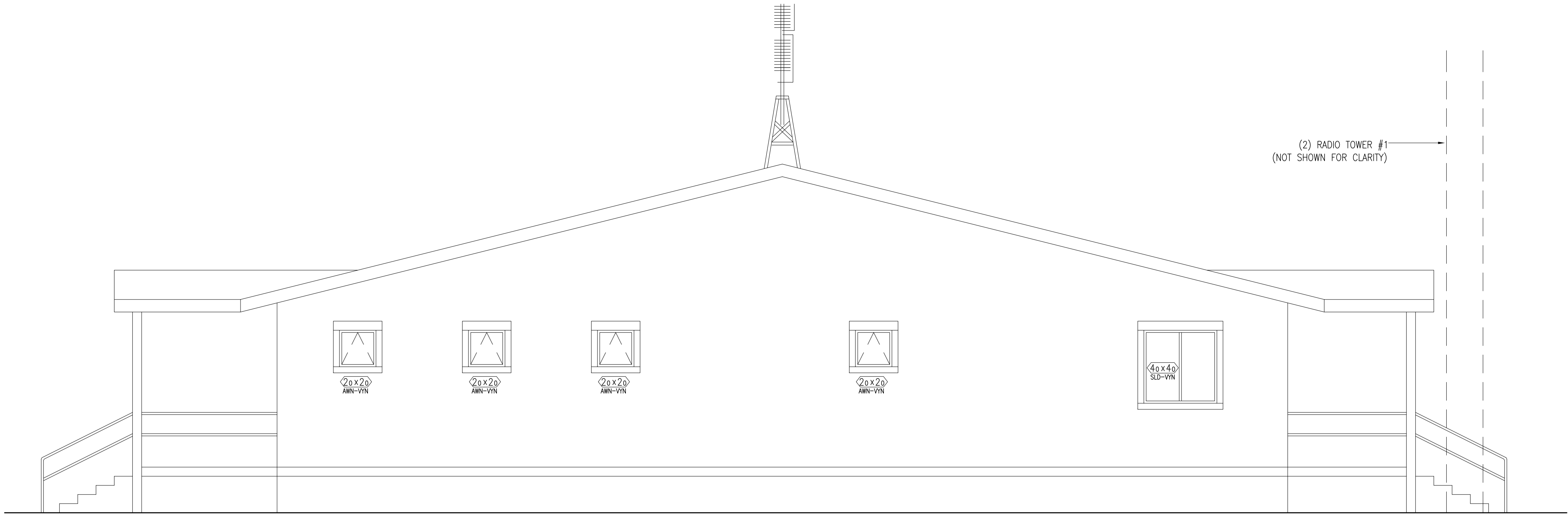
NOTE

AKKAN ARCHITECTURE + DESIGN LLC DEVELOPED THESE PRELIMINARY DRAWINGS AND SPECIFICATIONS TO ASSIST COLUMBIA COUNTY IN PURCHASING A PREFABRICATED STRUCTURE. AKKAN WAS NOT HIRED TO DESIGN, ENGINEER, OR DOCUMENT THIS FACILITY.

CONTRACTOR IS ENTIRELY RESPONSIBLE FOR THE FINAL DESIGN, ENGINEERING, DOCUMENTATION, ACQUISITION OF PERMITS, CONSTRUCTION, AND INSTALLATION OF THIS FACILITY IN ITS ENTIRETY IN CONFORMANCE WITH ALL FEDERAL, STATE, AND LOCAL CODES.

CONTRACTOR SHALL INDEMNIFY, DEFEND, AND HOLD AKKAN ARCHITECTURE + DESIGN LLC HARMLESS FOR ANY ERRORS OR OMISSIONS IN THE DESIGN AND CONSTRUCTION OF THIS FACILITY.



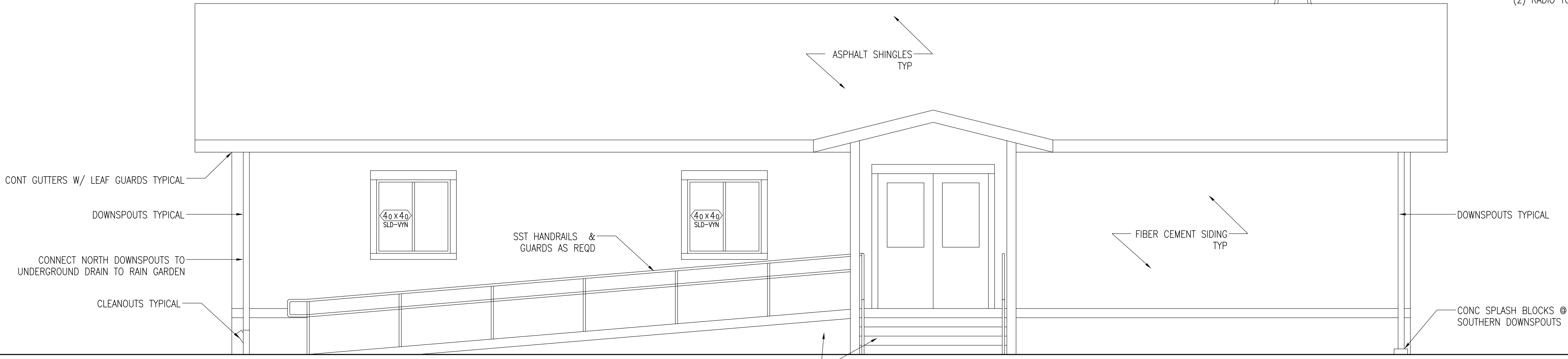


2 SIDE ELEVATION
A2.0 1/4" = 1'-0"

RADIO TOWER NOTES: 1. CONTRACTOR SHALL PROVIDE SPECIFIED TOWER AND EQUIPMENT OR APPROVED EQUAL. 2. DELEGATED DESIGN - CONTRACTOR SHALL PROVIDE ENGINEERING DESIGN BY A DELEGATED DESIGN PROFESSIONAL LICENCED TO PRACTICE IN THE JURISDICTION WHERE THE TOWER IS TO BE INSTALLED. 3. ENGINEERING DESIGN SHALL BE PROVIDED FOR TOWERS FOOTINGS, CONNECTIONS ETC AS REQUIRED BY LOCAL CODE. DESIGN LOADS 100 MPH - EXPOSURE C. 4. PROVIDE ANTENNA MOUNTING HARDWARE AS REQUIRED.		LIGHTNING PROTECTION: BOTH TOWERS SHALL BE APPRPRIATELY GROUNDED FOR LIGHTENING PROTECTION. PROVIDE POLYPHASER EIGHT (8) PORT EARTHED ENTRANCE PORTS WITH GROUNDING STRAPS AND ACCESSORIES AT ENTRY TO BUILDING. A MINIMUM OF 10 ANTENEA CABLES WILL ENTER BUILDING. PROVIDE TRENCHING, BACKFILL AND NEW ASPHALT FROM RADIO ROOM TO BOTH RADIO TOWERS AS REQD. MINIMUM SEPARATION BETWEEN TWO TOWERS IS 138', VERIFY LOCATIONS WITH OWNER.	TOWER #1: HEIGHTS ALUMINUM TOWERS; 48" FOLD OVER TOWER WITH GEARMOTER MEDIUM TORQUE KIT, WITH HEAVY DUTY FOLD-OVER BASE STAND, AND (2) DOUBLE ANTENNA STANDOFFS WITH MASTS. TOWER #2 HEIGHTS ALUMINUM TOWERS; 48" SELF SUPPORTING TOWER (NO GUY WIRES) WITH (2) FLAG POLE STYLE STAINLESS STEEL LANYARDS TO ATTACH MOVEABLE PULLEY AND WIRE ANTENNA.
ANTENNA SCHEDULE (OWNED BY COUNTY TO BE INSTALLED BY CONTRACTOR)		NOTES: 1. MOVE INDICATES AN EXISTING ANTENNA EXISTS AT THE COLUMBIA COUNTY COURTHOUSE AND IS TO BE MOVED TO THE NEW EOC. EXISTING INDICATES THE ANTENNA EXISTS IN INVENTORY, TO BE INSTALLED BY CONTRACTOR. 2. NEW FEED LINES SHALL BE PROVIDED FOR ALL ANTENNAS. ITEMS 2, 3, AND 6 REQUIRE LMR-600 OR EQUIVALENT. ALL OTHERS SHALL BE RG-213 OR EQUIVALENT.	
ITEM	DESCRIPTION	MOVE / EXISTING	LOCATION
1	2M/440 DUAL BAND VERTICAL	MOVE	TOWER #1
2	2M/440 DUAL BAND VERTICAL	EXISTING	TOWER #1
3	1.25 M VERTICAL	EXISTING	TOWER #1
4	10M VERTICAL	EXISTING	TOWER #1
5	6M VERTICAL	EXISTING	TOWER #1
6	2M VERTICAL BEAM	MOVE	ROOF TOWER
7	(NOT USED)		
8	HF WIRE	MOVE	BETWEEN TOWERS #1 AND #2
9	PUBLIC SAFETY VERTICAL	MOVE	ROOF MOUNT
10	(NOT USED)		
11	ANTENNA MATCHING UNIT	MOVE	ROOF MOUNT FOR ITEM #7

ROOF MOUNTED ANTENNA:
BUTTERNUT HF8VX WITH COUNTERPOISE KIT AND POST MOUNTING SLEEVE AND GLEN MARTIN RT-424 ROOF MOUNTED TOWER INCLUDING HYGAIN T-2X ROTOR, AND CONTROL CABLE TO RADIO ROOM, MAST CLAMPS AND OTHER ACCESSORIES FOR ROOF MOUNTED APPLICATION, OR APPROVED EQUAL

ANTENNAS SUPPLIED BY COUNTY
INSTALLED AND CONNECTED BY
CONTRACTOR, SEE RADIO TOWER NOTES



WINDOW SYMBOL LEGEND		
40x40	SIZE	
SLD-VIN	MATERIAL	
	TYPE	

1 FRONT ELEVATION
A2.0 1/4" = 1'-0"

BID REVIEW SET

AKAAN
architecture + design llc

Columbia County
Emergency Operations Center
McNULTY WAY, SAINT HELENS, OR 97051

SCALE: AS NOTED
DRAWN BY: KP
CHECKED BY: AP
CAD FILE: EOC-Bldg-Elevations
DATE: FEB 27, 2013

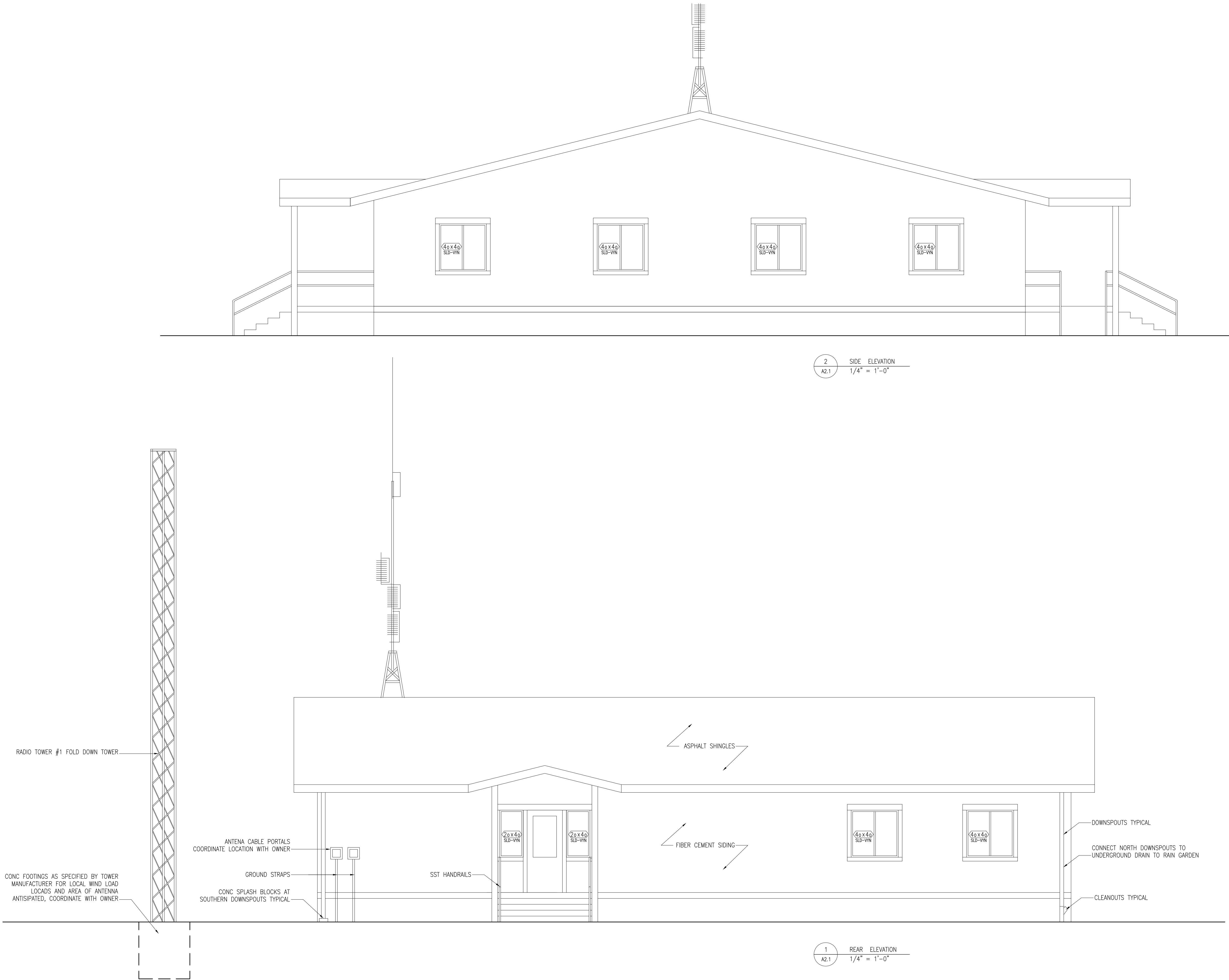
REVISIONS		
△	DATE	DESCRIPTION

CONTENTS:
Elevations

SHEET NO:

A2.0

101 ST HELENS ST
ST HELENS, OR 97051
T: 503 366 3050 F: 503 366 3055



Columbia County
Emergency Operations Center
McNULTY WAY, SAINT HELENS, OR 97051

SCALE: AS NOTED
DRAWN BY: KP
CHECKED BY: AP
CAD FILE: EOC-Bldg-Elevations
DATE: FEB 27, 2013

REVISIONS		
△	DATE	DESCRIPTION

CONTENTS:
Elevations

SHEET NO:

A2.1

BID REVIEW SET

SCALE: AS NOTED
DRAWN BY: KP
CHECKED BY: AP
CAD FILE: EOC-Details
DATE: FEB 27, 2013

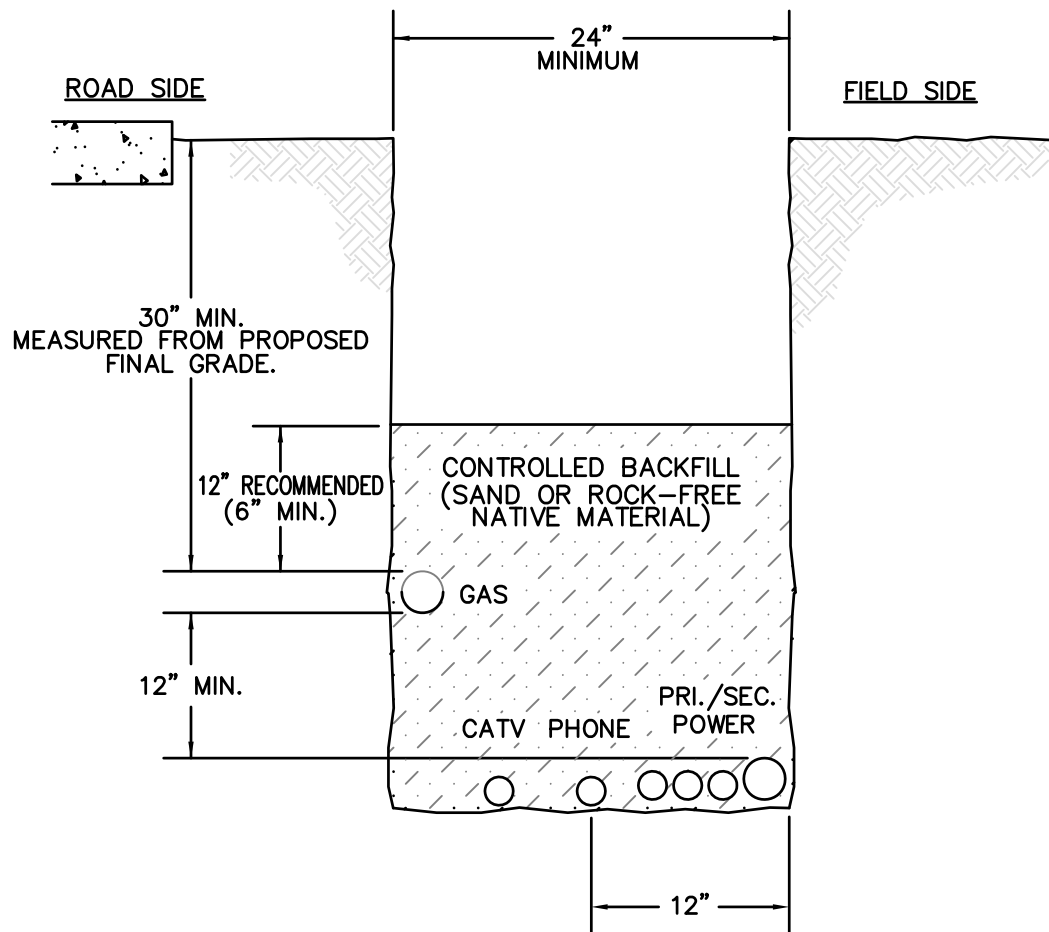
REVISIONS		
△	DATE	DESCRIPTION

CONTENTS:
MISC
DETAILS

SHEET NO:

A3.1

BID REVIEW SET

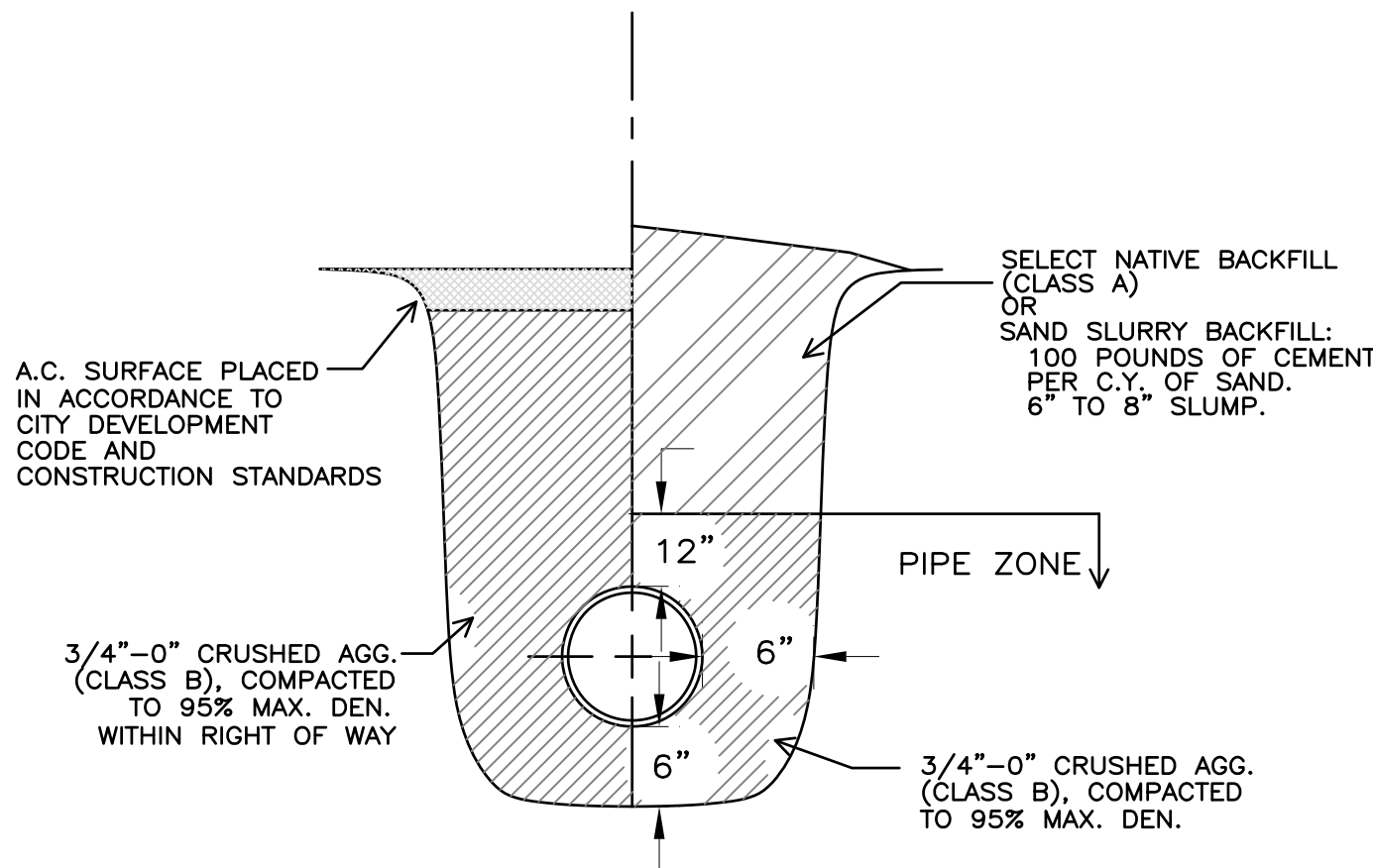


TRENCH REQUIREMENTS FOR JOINT UTILITY USE

MAIN EXTENSION

OREGON

DRAWN BY:	T. KOLLN	CITY OF ST.HELENS	REVISION:
CHECKED BY:		265 THE STRAND, ST.HELENS, OR 97051	
DATE:		PH (503)397-6272 FAX (503)397-4016	
SCALE:		TITLE: JOINT UTILITY TRENCH	DRAWING NO: 301



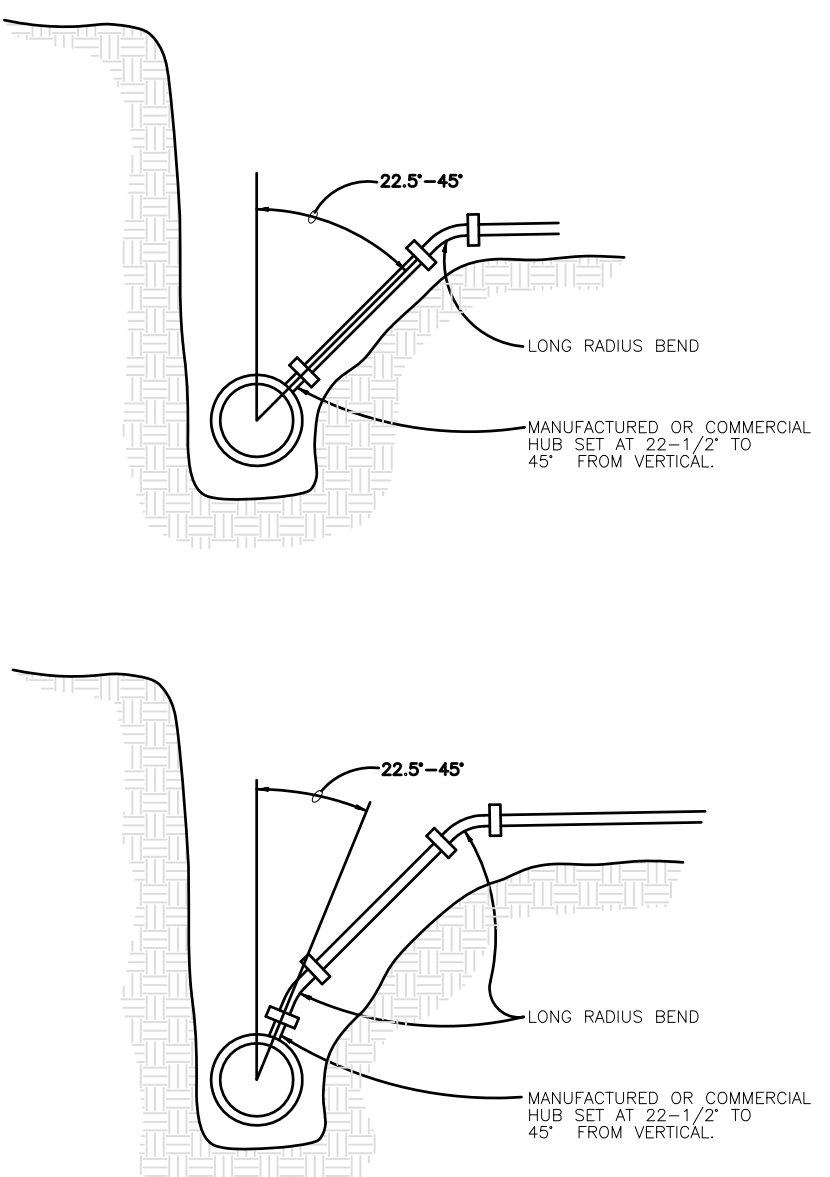
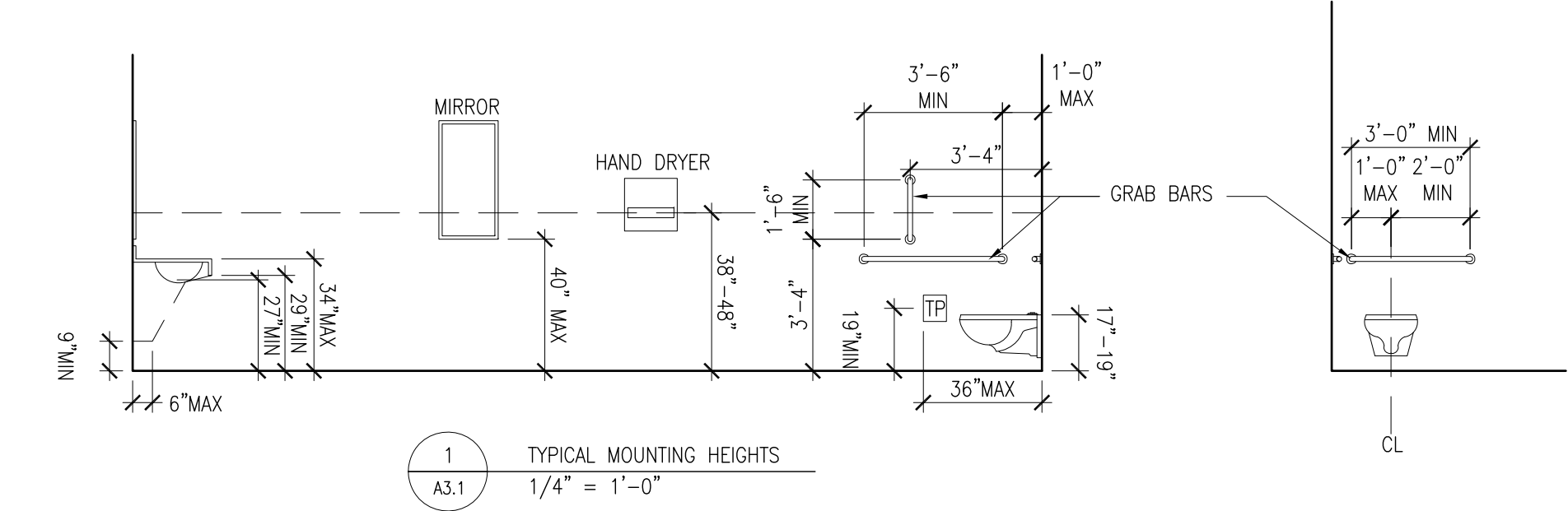
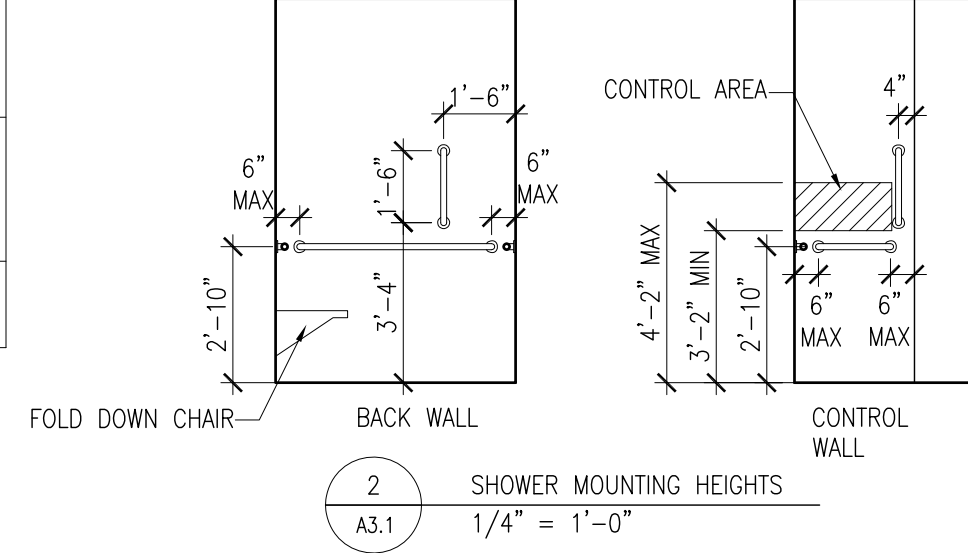
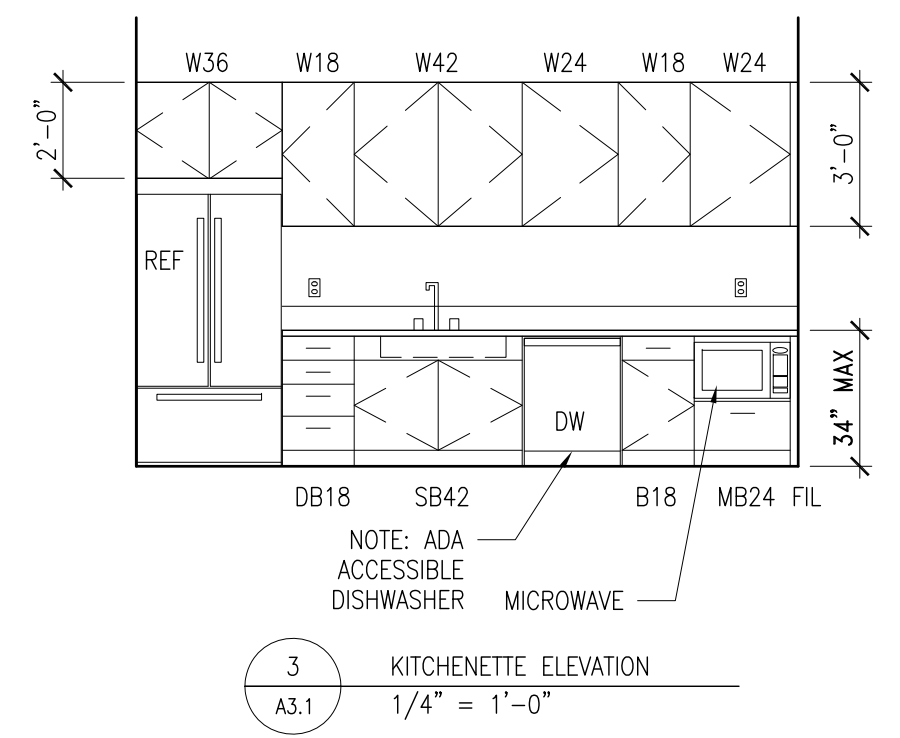
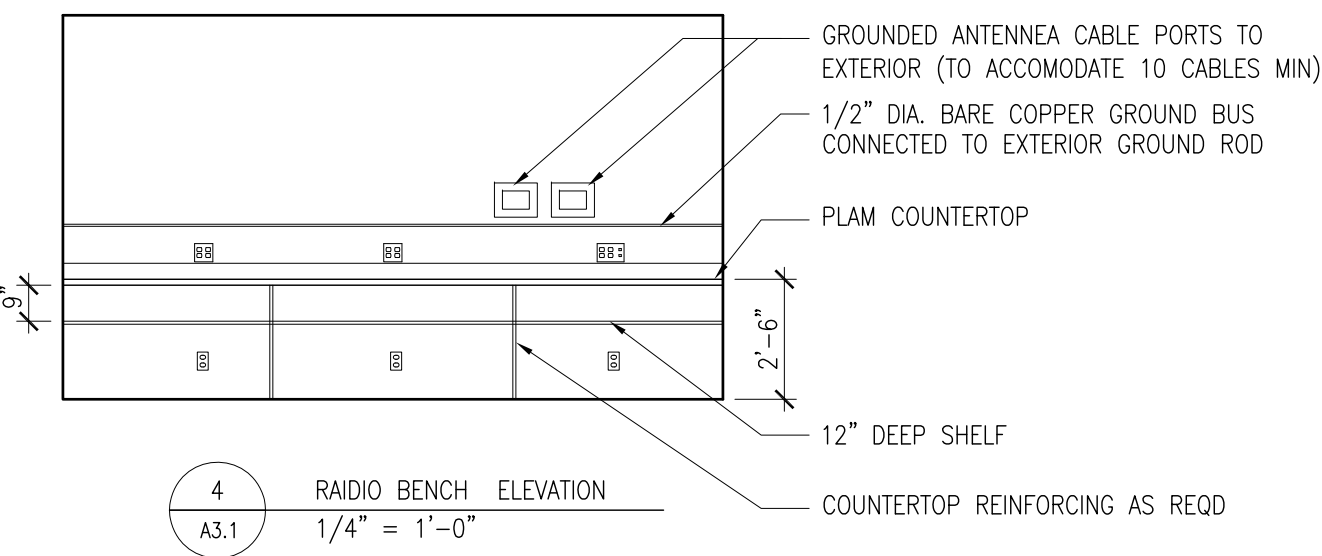
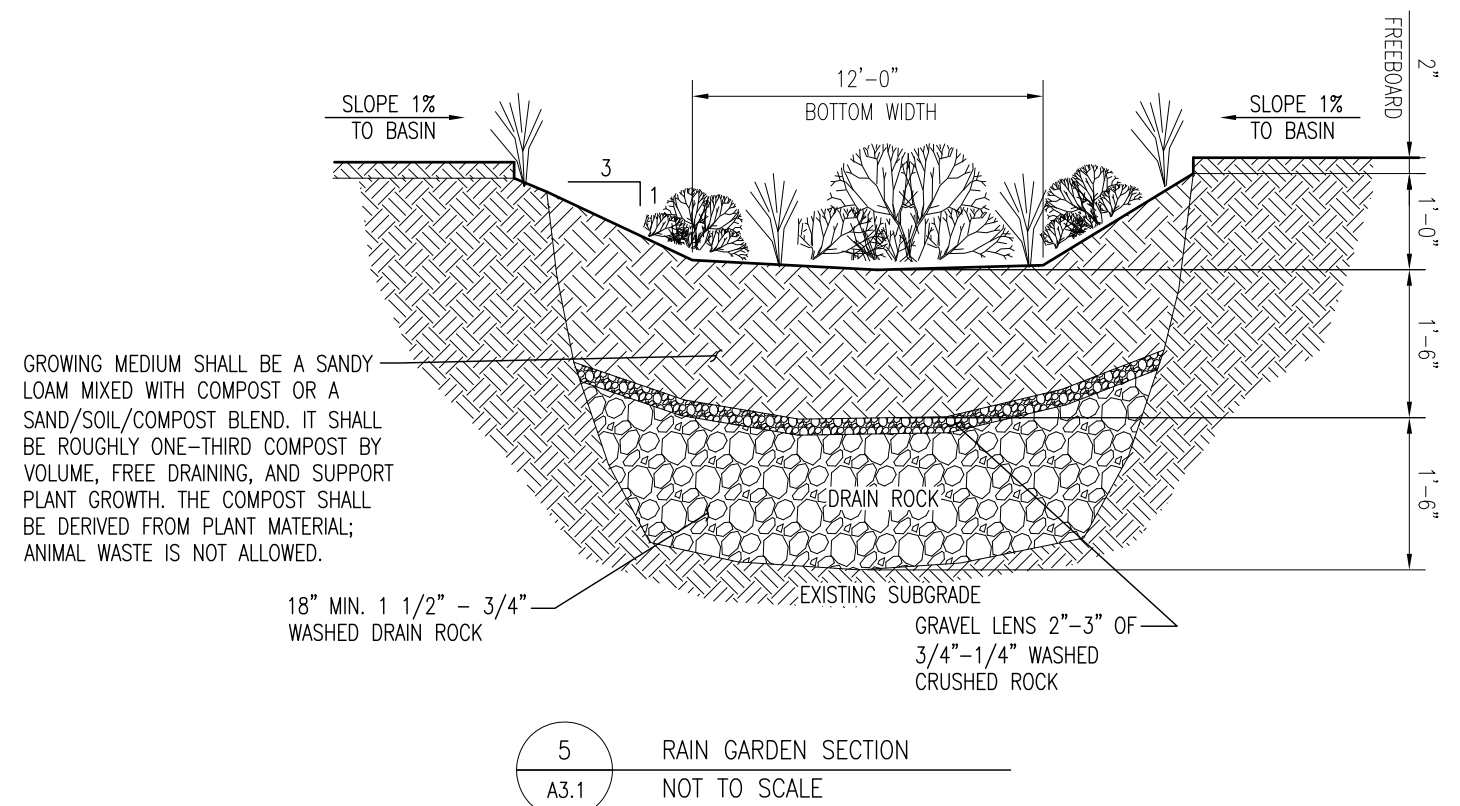
NOTES:

1. MINIMUM TRENCH WIDTH IS 24-INCHES (SEE APWA SEC 301.3)

DRAWN BY:		CITY OF ST.HELENS	REVISION:
CHECKED BY:		265 THE STRAND, ST.HELENS, OR 97051	
DATE:		PH (503)397-6272 FAX (503)397-4016	
SCALE:		TITLE: TYPICAL TRENCH DETAIL	DRAWING NO: 300

UTILITY DETAILS:

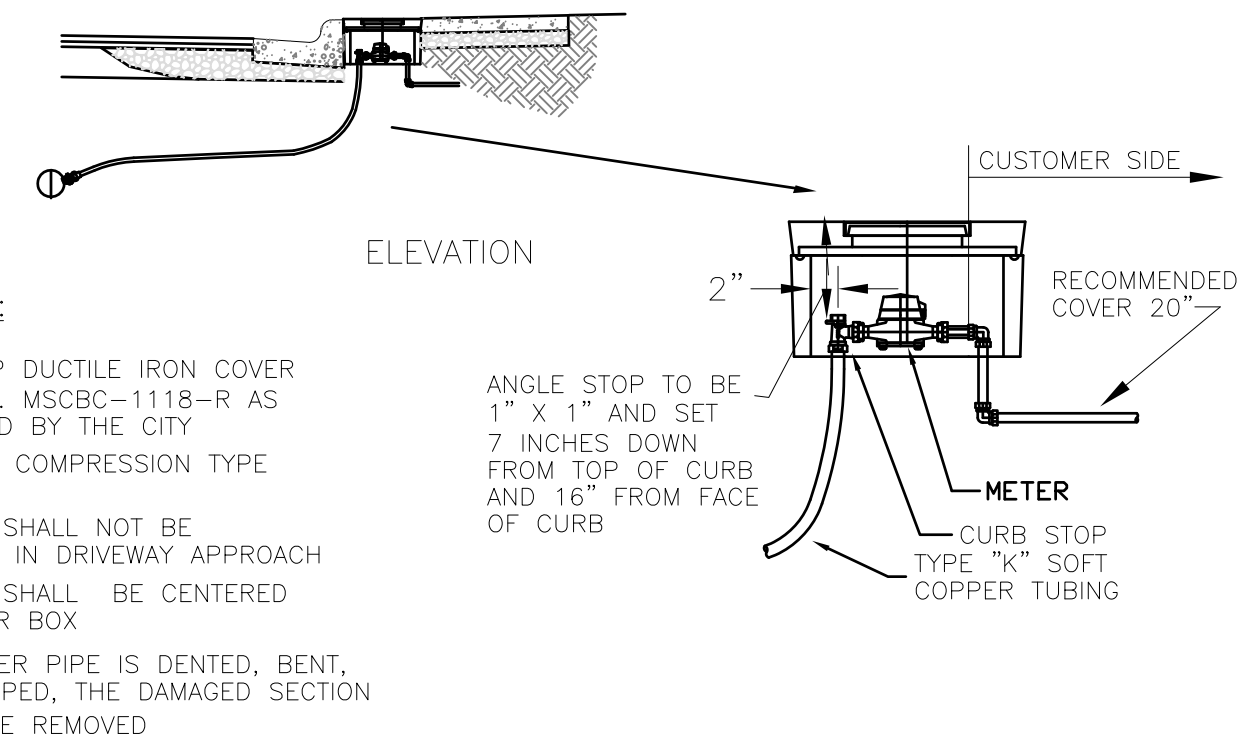
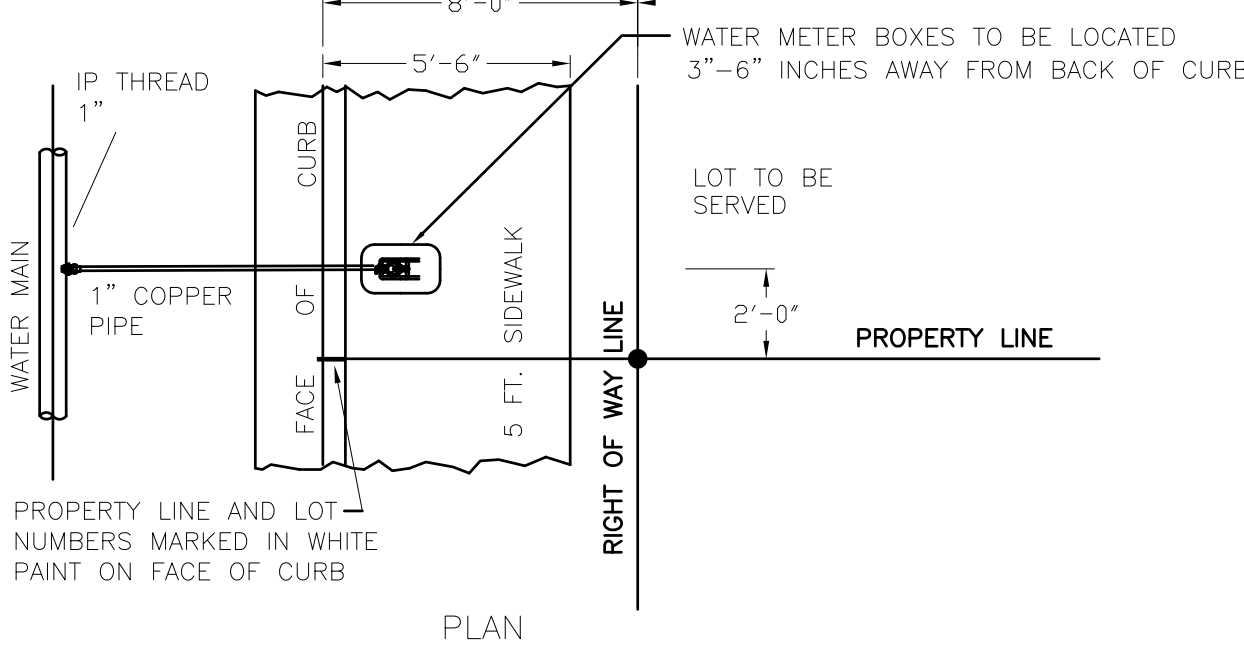
1. ALL UTILITY WORK SHALL BE DONE IN ACCORDANCE WITH APPLICABLE CITY OF ST HELENS STANDARDS. DETAILS SHOWN ARE ANTICIPATED DETAILS BUT DO NOT REPRESENT THE ONLY DETAILS THAT MAY BE REQUIRED IN THE COMPLETION OF THE WORK. CONTRACTOR SHALL COORDINATE WITH CITY PUBLIC WORKS DEPARTMENT AND PRIVATE UTILITIES TO DETERMINE APPROPRIATE CONNECTION POINTS, MATERIALS, CONNECTION DETAILS, AND CONSTRUCTION METHODS ACCEPTABLE TO CITY, REGULATING AGENCY, OR UTILITY COMPANY.



NOTES:

1. PIPE AND FITTINGS SHALL BE COMPATIBLE. ONLY MANUFACTURED FITTINGS SHALL BE USED.
2. MINIMUM DEPTH AT RIGHT OF WAY OR EASEMENT LINE SHALL BE 4 FEET.
3. PLUGGING, BLOCKING, AND MARKING OF UNCONNECTED SERVICES SHALL CONFORM TO SHALLOW TRENCH SERVICE CONNECTION DRAWING.
4. VERTICAL TRENCH WALLS ARE REQUIRED. IF IT IS NOT POSSIBLE TO MAINTAIN VERTICAL TRENCH WALLS, USE ALTERNATE CONNECTION METHOD TO MAINTAIN 6" MAXIMUM DISTANCE BETWEEN RISER PIPE AND TRENCH WALLS. REPLACE ALL EXCAVATED OR DISTURBED MATERIAL WITH FULL DEPTH GRANULAR BACKFILL, COMPACTED TO 95% RELATIVE DENSITY.
5. WHERE DEEP CONNECTION IS AT AN ANGLE LESS THAN 45° FROM VERTICAL, DUCTILE IRON PIPE AND FITTINGS SHOULD BE USED.

DRAWN BY:	T. KOLLN	CITY OF ST.HELENS	REVISION:
CHECKED BY:		265 THE STRAND, ST.HELENS, OR 97051	
DATE:		PH (503)397-6272 FAX (503)397-4016	
SCALE:		TITLE: TYPICAL DEEP TRENCH SERVICE CONNECT DETAIL	DRAWING NO: 336



DRAWN BY:	T. KOLLN	CITY OF ST.HELENS	REVISION:
CHECKED BY:		265 THE STRAND, ST.HELENS, OR 97051	
DATE:		PH (503)397-6272 FAX (503)397-4016	
SCALE:		TITLE: SINGLE WATER SERVICE INSTALLATION	DRAWING NO: 405

**10. GENERAL CONDITIONS FOR PUBLIC IMPROVEMENT CONTRACTS
COLUMBIA COUNTY EMERGENCY OPERATIONS CENTER PROJECT**

TABLE OF SECTIONS

SECTION A.	GENERAL PROVISIONS.	1
A.1	DEFINITION OF TERMS.	1
A.2	INTERPRETATION OF CONTRACT DOCUMENTS.	3
A.3	EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE.	4
SECTION B.	ADMINISTRATION OF THE CONTRACT.	4
B.1	OWNER'S ADMINISTRATION OF THE CONTRACT.	4
B.2	CONTRACTOR'S MEANS AND METHODS; MITIGATION OF IMPACTS.	5
B.3	MATERIALS AND WORKMANSHIP.	5
B.4	PERMITS.	6
B.5	COMPLIANCE WITH GOVERNMENT LAWS AND REGULATIONS.	6
B.6	SUPERINTENDENCE.	6
B.7	INSPECTION.	7
B.8	ACCESS TO RECORDS.	7
B.9	SUBCONTRACTS AND ASSIGNMENT.	8
B.10	SUCCESSORS IN INTEREST.	8
B.11	OWNER'S RIGHT TO DO WORK.	8
B.12	OTHER CONTRACTS.	8
B.13	ALLOWANCES.	8
B.14	SUBMITTALS, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.	9
B.15	SUBSTITUTIONS.	10
B.16	USE OF PLANS AND SPECIFICATIONS.	10
SECTION C.	WAGES AND LABOR.	10
C.1	MINIMUM WAGE RATES ON PUBLIC WORKS.	10
SECTION D.	CHANGES IN THE WORK.	10
D.1	CHANGES IN WORK.	10
D.2	DELAYS.	13
D.3	CLAIMS REVIEW PROCESS.	14
SECTION E.	PAYMENTS.	16
E.1	SCHEDULE OF VALUES.	16
E.2	APPLICATIONS FOR PAYMENT.	16
E.3	PAYROLL CERTIFICATION REQUIREMENT.	18
E.4	DUAL PAYMENT SOURCES.	18
E.5	RETAINAGE.	18
E.6	FINAL PAYMENT.	20
SECTION F.	JOB SITE CONDITIONS.	20
F.1	USE OF PREMISES.	20
F.2	PROTECTION OF WORKERS, PROPERTY, AND THE PUBLIC.	21
F.3	CUTTING AND PATCHING.	21
F.4	CLEANING UP.	21
F.5	ENVIRONMENTAL CONTAMINATION.	22
F.6	ENVIRONMENTAL CLEAN-UP.	23
F.7	FORCE MAJEURE.	23
SECTION G.	INDEMNITY, BONDING, AND INSURANCE.	23
G.1	PERFORMANCE AND PAYMENT SECURITY; PUBLIC WORKS BOND.	23
G.2	BUILDERS RISK INSURANCE.	23

SECTION H.	SCHEDULE OF WORK.....	24
H.1	CONTRACT PERIOD.	24
H.2	SCHEDULE.	24
H.3	PARTIAL OCCUPANCY OR USE.	24
SECTION I.	CORRECTION OF WORK.....	25
I.1	CORRECTION OF WORK BEFORE FINAL PAYMENT.	25
I.2	WARRANTY WORK.....	25
SECTION J.	SUSPENSION AND/OR TERMINATION OF THE WORK.....	26
J.1	OWNER'S RIGHT TO SUSPEND THE WORK.	26
J.2	CONTRACTOR'S RESPONSIBILITIES.....	26
J.3	COMPENSATION FOR SUSPENSION.	26
J.4	OWNER'S RIGHT TO TERMINATE CONTRACT.	27
J.5	TERMINATION FOR CONVENIENCE.	27
J.6	ACTION UPON TERMINATION.	27
SECTION K.	CONTRACT CLOSE OUT.	28
K.1	RECORD DOCUMENTS.....	28
K.2	OPERATION AND MAINTENANCE MANUALS.....	28
K.3	AFFIDAVIT/RELEASE OF LIENS AND CLAIMS.	28
K.4	COMPLETION NOTICES.	28
K.5	TRAINING.	28
K.6	EXTRA MATERIALS.	29
K.7	ENVIRONMENTAL CLEAN-UP.	29
K.8	CERTIFICATE OF OCCUPANCY.	29
K.9	OTHER CONTRACTOR RESPONSIBILITIES.	29
K.10	SURVIVAL.....	29
SECTION L.	LEGAL RELATIONS & RESPONSIBILITIES/MITIGATION MEASURES.....	29
L.1	LAWS TO BE OBSERVED.	29
L.2	FEDERAL AGENCIES.....	29
L.3	STATE AGENCIES.	30
L.4	LOCAL AGENCIES.....	30
L.5	KNOWN CONDITIONS.....	30
L.6	MITIGATION MEASURES.....	31

GENERAL CONDITIONS FOR PUBLIC IMPROVEMENT CONTRACTS

SECTION A. GENERAL PROVISIONS.

A.1 DEFINITION OF TERMS

In the Contract Documents the following terms shall be as defined below:

ARCHITECT/ENGINEER means the Person appointed by the Owner to make drawings and specifications and, to provide contract administration of the Work contemplated by the Contract to the extent provided herein or by supplemental instruction of Owner (under which Owner may delegate responsibilities of the Owner's Authorized Representative to the Architect/Engineer), in accordance with ORS Chapter 671 (Architects) or ORS Chapter 672 (Engineers) and administrative rules adopted thereunder.

CHANGE ORDER means a written order issued by the Owner's Authorized Representative to the Contractor requiring a change in the Work within the general scope of the Contract Documents, issued under the changes provisions of Section D.1 in administering the Contract, including Owner's written change directives as well as changes reflected in a writing executed by the parties to this Contract and, if applicable, establishing a Contract Price or Contract Time adjustment for the changed Work.

CLAIM, means a demand by Contractor pursuant to Section D.3 for review of the denial of Contractor's initial request for an adjustment of Contract terms, payment of money, extension of Contract Time or other relief, submitted in accordance with the requirements and within the time limits established for review of Claims in these General Conditions.

CONTRACT means the written agreement between the Owner and the Contractor comprised of the Contract Documents which describe the Work to be done and the obligations between the parties.

CONTRACT DOCUMENTS means the Solicitation Document and addenda thereto, Columbia County Public Improvement Agreement Form, General Conditions, Supplemental General Conditions, if any, the accepted Offer, Plans, Specifications, amendments and Change Orders.

CONTRACT PERIOD as set forth in the Contract Documents, means the total period of time beginning with the issuance of the Notice to Proceed and concluding upon Final Completion.

CONTRACT PRICE means the total of the awarded Offer amount, as increased or decreased by the price of approved alternates and Change Orders.

CONTRACT TIME means any incremental period of time allowed under the Contract to complete any portion of the Work as reflected in the project schedule.

CONTRACTOR means the Person awarded the Contract for the Work contemplated.

DAYS are calendar days, including weekdays, weekends and holidays, unless otherwise specified.

DIRECT COSTS means, unless otherwise provided in the Contract Documents, the cost of materials, including sales tax, cost of delivery; cost of labor, including social security, old age and unemployment insurance, and fringe benefits required by agreement or custom; workers compensation insurance; project specific insurance (including, without limitation, Builder's Risk Insurance and Builder's Risk Installation Floater); bond premiums, rental cost of equipment, and machinery required for execution of the work; and the additional costs of field personnel directly attributable to the Work.

FINAL COMPLETION means the final completion of all requirements under the Contract, including Contract Closeout as described in Section K but excluding Warranty Work as described in Section I.2, and the final payment and release of all retainage, if any, released.

FORCE MAJEURE means an act, event or occurrence caused by fire, riot, war, acts of God, nature, sovereign, or public enemy, strikes, freight embargoes or any other act, event or occurrence that is beyond the control of the party to this Contract who is asserting Force Majeure.

NOTICE TO PROCEED means the official written notice from the Owner stating that the Contractor is to proceed with the Work defined in the Contract Documents. Notwithstanding the Notice to Proceed, Contractor shall not be authorized to proceed with the Work until all initial Contract requirements, including the Contract, performance bond and payment bond, and certificates of insurance, have been fully executed and submitted to Owner in a suitable form.

OFFER means a bid in connection with an invitation to bid and a proposal in connection with a request for proposals.

OFFEROR means a bidder in connection with an invitation to bid and a proposer in connection with a request for proposals.

OVERHEAD means those items which may be included in the Contractor's markup (general and administrative expenses and profit) and that shall not be charged as Direct Cost of the Work, including without limitation such Overhead expenses as wages or salary of personnel above the level of foreman (i.e., superintendents and project managers), and expenses of Contractor's offices at the job site (e.g. job trailer) including expenses of personnel staffing the job site office, and Commercial General Liability Insurance and Automobile Liability Insurance.

OWNER means Columbia County acting by and through the governmental entity identified in the Solicitation Document.

OWNER'S AUTHORIZED REPRESENTATIVE means those individuals identified in writing by the Owner to act on behalf of the Owner for this project. Owner may elect, by written notice to Contractor, to delegate certain duties of the Owner's Authorized Representative to more than one party, including without limitation, to an Architect/Engineer. However, nothing in these General Conditions is intended to abrogate the separate design professional responsibilities of Architects under ORS Chapter 671 or of Engineers under ORS Chapter 672.

PERSON means an entity doing business as a sole proprietorship, a partnership, a joint venture, a corporation, a limited liability company or partnership, or any other entity possessing the legal capacity to contract.

PLANS means the drawings which show the location, type, dimensions, and details of the Work to be done under the Contract.

PUNCHLIST means the list of Work yet to be completed or deficiencies which need to be corrected in order to achieve Final Completion of the Contract.

RECORD DOCUMENT means the as-built Plans, Specifications, testing and inspection records, product data, samples, manufacturer and distributor/supplier warranties evidencing transfer to Owner, operational and maintenance manuals, shop drawings, Change Orders, correspondence, certificate(s) of occupancy, and other documents listed in Subsection B.8 of these General Conditions, recording all Services performed.

SOLICITATION DOCUMENT means an invitation to bid or request for proposal or request for quotes. Solicitation Document(s) is also referred to as "Procurement Document(s)"

SPECIFICATION means any description of the physical or functional characteristics of the Work, or of the nature of a supply, service or construction item. Specifications may include a description of any requirement for inspecting, testing or preparing a supply, service or construction item for delivery and the quantities or qualities of materials to be furnished under the Contract. Specifications generally will state the results or products to be obtained and may, on occasion, describe the method and manner of doing the work to be performed. Specifications may be incorporated by reference and/or may be attached to the Contract.

SUBCONTRACTOR means a Person having a direct contract with the Contractor, or another Subcontractor, to perform one or more items of the Work.

SUBSTANTIAL COMPLETION means the date when the Owner accepts in writing the construction, alteration or repair of the improvement to real property or any designated portion thereof as having reached that state of completion when it may be used or occupied for its intended purpose. Substantial Completion of facilities with operating systems occurs only after thirty (30) continuous Days of successful, trouble-free operation of the operating systems as provided in Section K.4.2.

SUBSTITUTIONS means items that in function, performance, reliability, quality, and general configuration are the same or better than the product(s) specified. Approval of any substitute item shall be solely determined by the Owner's Authorized Representative. The decision of the Owner's Authorized Representative is final.

SUPPLEMENTAL GENERAL CONDITIONS means those conditions that remove from, add to, or modify these General Conditions. Supplemental General Conditions may be included in the Solicitation Document or may be a separate attachment to the Contract.

WORK means the furnishing of all materials, equipment, labor, transportation, services and incidentals necessary to successfully complete any individual item or the entire Contract and the carrying out of duties and obligations imposed by the Contract Documents.

A.2 INTERPRETATION OF CONTRACT DOCUMENTS.

A.2.1 Unless otherwise specifically defined in the Contract Documents, words which have well-known technical meanings or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings. Contract Documents are intended to be complementary. Whatever is called for in one, is interpreted to be called for in all. However, in the event of conflicts or discrepancies among the Contract Documents, interpretations will be based on the following descending order of precedence:

- (a) Contract amendments and Change Orders, with those of later date having precedence over those of an earlier date;
- (b) The Supplemental General Conditions;
- (c) The Columbia County Public Improvement Agreement Form;
- (d) The General Conditions;
- (e) The Plans and Specifications;
- (f) The Solicitation Document and any addenda thereto;
- (g) The accepted Offer.

A.2.2 In the case of an inconsistency between Plans and Specifications or within either document not clarified by addendum, the better quality or greater quantity of Work shall be provided in accordance with the Owner or Owners Authorized Representative's interpretation in writing.

A.2.3 If the Contractor finds discrepancies in, or omissions from the Contract Documents, or if the Contractor is in doubt as to their meaning, the Contractor shall at once notify the Owner or Owner's Authorized Representative. Matters concerning performance under, and interpretation of requirements of, the Contract Documents will be decided by the Owner's Authorized Representative, who may delegate that duty in some instances to the Architect/Engineer. Responses to Contractor's requests for interpretation of Contract Documents will be made in writing by Owners Authorized Representative (or the Architect/Engineer) within any time limits agreed upon or otherwise with reasonable promptness. Interpretations and decisions of the Owner's Authorized Representative (or Architect/Engineer) will be consistent with the intent of and reasonably inferable from the Contract Documents. Contractor shall not proceed without direction in writing from the Owner's Authorized Representative (or Architect/Engineer).

- A.2.4 References to standard specifications, manuals, codes of any technical society, organization or association, to the laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code, laws or regulations in effect in the jurisdiction where the project is occurring on the first published date of the Solicitation Document, except as may be otherwise specifically stated.

A.3 EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE.

- .3.1 It is understood that the Contractor, before submitting an Offer, has made a careful examination of the Contract Documents; has become fully informed as to the quality and quantity of materials and the character of the Work required; and has made a careful examination of the location and conditions of the Work and the sources of supply for materials. The Owner will in no case be responsible for any loss or for any unanticipated costs that may be suffered by the Contractor as a result of the Contractor's failure to acquire full information in advance in regard to all conditions pertaining to the Work. No oral agreement or conversation with any officer, agent, or personnel of the Owner, or with the Architect/Engineer either before or after the execution of this Contract, shall affect or modify any of the terms or obligations herein contained.
- A.3.2 Should the Plans or Specifications fail to particularly describe the materials, kind of goods, or details of construction of any aspect of the Work, Contractor shall have the duty to make inquiry of the Owner and Architect/Engineer as to what is required prior to performance of the Work. Absent Specifications to the contrary, the materials or processes that would normally be used to produce first quality finished Work shall be considered a part of the Contract requirements.
- A.3.3 Any design errors or omissions noted by the Contractor shall be reported promptly to the Owner's Authorized Representative, including without limitation, any nonconformity with applicable laws, statutes, ordinances, building codes, rules and regulations.
- A.3.4 If the Contractor believes that additional cost or Contract Time is involved because of clarifications or instructions issued by the Owner's Authorized Representative (or Architect/Engineer) in response to the Contractor's notices or requests for information, the Contractor must submit a written request to the Owner's Authorized Representative, setting forth the nature and specific extent of the request, including all time and cost impacts against the Contract as soon as possible, but no later than thirty (30) Days after receipt by Contractor of the clarifications or instructions issued. If the Owner's Authorized Representative denies Contractor's request for additional compensation, additional Contract Time, or other relief that Contractor believes results from the clarifications or instructions, the Contractor may proceed to file a Claim under Section D.3, Claims Review Process. If the Contractor fails to perform the obligations of Sections Sections A.3.1 to A.3.4, the Contractor shall pay such costs and damages to the Owner as would have been avoided if the Contractor had performed such obligations.

SECTION B. ADMINISTRATION OF THE CONTRACT.

B.1 OWNER'S ADMINISTRATION OF THE CONTRACT

- B.1.1 The Owner's Authorized Representative will provide administration of the Contract as described in the Contract Documents (1) during construction (2) until final payment is due and (3) during the one-year period for correction of Work. The Owner's Authorized Representative will act on behalf of the Owner to the extent provided in the Contract Documents, unless modified in writing in accordance with other provisions of the Contract. In performing these tasks, the Owner's Authorized Representative may rely on the Architect/Engineer or other consultants to perform some or all of these tasks.
- B.1.2 The Owner's Authorized Representative will visit the site at intervals appropriate to the stage of the Contractor's operations (1) to become generally familiar with and to keep the Owner informed about the progress and quality of the portion of the Work completed, (2) to endeavor to guard the Owner against defects and deficiencies in the Work, and (3) to determine in general if Work is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. The Owner's Authorized Representative will not make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. The Owner's

Authorized Representative will neither have control over or charge of, nor be responsible for the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work.

- B.1.3 Except as otherwise provided in the Contract Documents or when direct communications have been specifically authorized, the Owner and Contractor shall endeavor to communicate with each other through the Owner's Authorized Representative or designee about matters arising out of or relating to the Contract. Communications by and with the Architect/Engineer's consultants shall be through the Architect/Engineer. Communications by and with Subcontractors and material suppliers shall be through the Contractor. Communications by and with separate contractors shall be through the Owner's Authorized Representative.
- B.1.4 Based upon the Architect/Engineer's evaluations of the Contractor's Application for Payment, or unless otherwise stipulated by the Owner's Authorized Representative, the Architect/Engineer will review and certify the amounts due the Contractor and will issue Certificates for Payment in such amounts.

B.2 CONTRACTOR'S MEANS AND METHODS; MITIGATION OF IMPACTS

- B.2.1 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract, unless the Contract Documents give other specific instructions concerning these matters. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences or procedures, the Contractor shall evaluate the jobsite safety thereof and, except as stated below, shall be fully and solely responsible for the jobsite safety of such means, methods, techniques, sequences or procedures.
- B.2.2 The Contractor is responsible to protect and maintain the Work during the course of construction and to mitigate any adverse impacts to the project, including those caused by authorized changes, which may affect cost, schedule, or quality.
- B.2.3 The Contractor is responsible for the actions of all its personnel, laborers, suppliers, and Subcontractors on the project. The Contractor shall enforce strict discipline and good order among Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of persons who are unfit or unskilled for the tasks assigned to them.

B.3 MATERIALS AND WORKMANSHIP

- B.3.1 The intent of the Contract Documents is to provide for the construction and completion in every detail of the Work described. All Work shall be performed in a professional manner and unless the means or methods of performing a task are specified elsewhere in the Contract Documents, Contractor shall employ methods that are generally accepted and used by the industry, in accordance with industry standards.
- B.3.2 The Contractor is responsible to perform the Work as required by the Contract Documents. Defective Work shall be corrected at the Contractor's expense.
- B.3.3 Work done and materials furnished shall be subject to inspection and/or observation and testing by the Owner's Authorized Representative to determine if they conform to the Contract Documents. Inspection of the Work by the Owners Authorized Representative does not relieve the Contractor of responsibility for the Work in accordance with the Contract Documents.
- B.3.4 Contractor shall furnish adequate facilities, as required, for the Owner's Authorized Representative to have safe access to the Work including without limitation walkways, railings, ladders, tunnels, and platforms. Producers, suppliers, and fabricators shall also provide proper facilities and access to their facilities.
- B.3.5 The Contractor shall furnish Samples of materials for testing by the Owner's Authorized Representative and include the cost of the Samples in the Contract Price.

B.4 PERMITS

Contractor shall obtain and pay for all necessary permits and licenses, except for those specifically excluded in the Supplemental General Conditions, for the construction of the Work, for temporary obstructions, enclosures, opening of streets for pipes, walls, utilities, environmental Work, etc., as required for the project. Contractor shall be responsible for all violations of the law, in connection with the construction or caused by obstructing streets, sidewalks or otherwise. Contractor shall give all requisite notices to public authorities. The Contractor shall pay all royalties and license fees. The Contractor shall defend all suits or claims for infringement of any patent or other proprietary rights and save harmless and blameless from loss, on account thereof, the Columbia County, and its departments, divisions, members and employees.

B.5 COMPLIANCE WITH GOVERNMENT LAWS AND REGULATIONS

- B.5.1 Contractor shall comply with all federal, state and local laws, codes, regulations and ordinances applicable to the Work and the Contract. Failure to comply with such requirements shall constitute a breach of Contract and shall be grounds for Contract termination. Without limiting the generality of the foregoing, Contractor expressly agrees to comply with the following as applicable: i) Title VI and VII of Civil Rights Act of 1964, as amended; (ii) Section 503 and 504 of the Rehabilitation Act of 1973, as amended; (iii) the Health Insurance Portability and Accountability Act of 1996; (iv) the Americans with Disabilities Act of 1990, as amended; (v) ORS Chapter 659A; as amended (vi) all regulations and administrative rules established pursuant to the foregoing laws; and (vii) all other applicable requirements of federal and state civil rights and rehabilitation statutes, rules and regulations. Owner's performance under the Contract is conditioned upon Contractors compliance with the provisions of ORS 279C.505, 279C.510, 279C.515, 279C.520, and 279C.530, which are incorporated by reference herein.
- B.5.2 Contractor shall comply with all applicable requirements of federal and state civil rights and rehabilitation statutes, rules and regulations; and
- (a) Contractor shall not discriminate against Disadvantaged, Minority, Women or Emerging Small Business enterprises, as those terms are defined in ORS 200.005, or a business enterprise that is owned or controlled by or that employs a disabled veteran, as that term is defined in ORS 408.225, in the awarding of subcontracts (ORS 279A.110).
 - (b) Contractor shall maintain, in current and valid form, all licenses and certificates required by law, regulation, or this Contract when performing the Work.
- B.5.3 Unless contrary to federal law, Contractor shall certify that it shall not accept a bid from Subcontractors to perform Work as described in ORS 701.005 under this Contract unless such Subcontractors are registered with the Construction Contractors Board in accordance with ORS 701.035 to 701.055 at the time they submit their bids to the Contractor.
- B.5.4 Unless contrary to federal law, Contractor shall certify that each landscape contractor, as defined in ORS 671.520(2), performing Work under this Contract holds a valid landscape contractors license issued pursuant to ORS 671.560.
- B.5.5 The following notice is applicable to Contractors who perform excavation Work. ATTENTION: Oregon law requires you to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth in OAR 952-001-0010 through OAR 952-001-0090. You may obtain copies of the rules by calling the center at (503)232-1987.
- B.5.6 Failure to comply with any or all of the requirements of B.5.1 through B.5.5 shall be a breach of Contract and constitute grounds for Contract termination. Damages or costs resulting from such noncompliance shall be the responsibility of Contractor.

B.6 SUPERINTENDENCE

Contractor shall keep on the site, during the progress of the Work, a competent superintendent and any necessary assistants who shall be satisfactory to the Owner and who shall represent the Contractor on the site. Directions given to the

superintendent by the Owner's Authorized Representative shall be confirmed in writing to the Contractor.

B.7 INSPECTION

- B.7.1 Owners Authorized Representative shall have access to the Work at all times.
- B.7.2 Inspection of the Work will be made by the Owner's Authorized Representative at its discretion. The Owner's Authorized Representative will have authority to reject Work that does not conform to the Contract Documents. Any Work found to be not in conformance with the Contract Documents, in the discretion of the Owner's Authorized Representative, shall be removed and replaced at the Contractor's expense.
- B.7.3 Contractor shall make or obtain at the appropriate time all tests, inspections and approvals of portions of the Work required by the Contract Documents or by laws, ordinances, rules, regulations or orders of public authorities having jurisdiction. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections and approvals. Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work. The Contractor shall give the Owner's Authorized Representative timely notice of when and where tests and inspections are to be made so that the Owner's Authorized Representative may be present for such procedures. Required certificates of testing, inspection or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Owner's Authorized Representative.
- B.7.4 As required by the Contract Documents, Work done or material used without inspection or testing by the Owner's Authorized Representative may be ordered removed at the Contractor's expense.
- B.7.5 If directed to do so any time before the Work is accepted, the Contractor shall uncover portions of the completed Work for inspection. After inspection, the Contractor shall restore such portions of Work to the standard required by the Contract. If the Work uncovered is unacceptable or was done without sufficient notice to the Owner's Authorized Representative, the uncovering and restoration shall be done at the Contractor's expense. If the Work uncovered is acceptable and was done with sufficient notice to the Owner's Authorized Representative, the uncovering and restoration will be paid for as a Change Order.
- B.7.6 If any testing or inspection reveals failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure, including those of repeated procedures and compensation for the Owner's Authorized Representative's and Architect/Engineer's services and expenses, shall be at the Contractor's expense.
- B.7.7 When the United States government participates in the cost of the Work, or the Owner has an agreement with other public or private organizations, or if any portion of the Work is being performed for a third party or in close proximity to third party facilities, representatives of these organizations have the right to inspect the Work affecting their interests or property. Their right to inspect shall not make them a party to the Contract and shall not interfere with the rights of the parties of the Contract. Instructions or orders of such parties shall be transmitted to the Contractor, through the Owner's Authorized Representative.

B.8 ACCESS TO RECORDS

- B.8.1 Contractor shall keep, at all times on the Work site, one record copy of the complete Contract Documents, including the Plans, Specifications, Change Orders and addenda, in good order and marked currently to record field changes and selections made during construction, and one record copy of Shop Drawings, Product Data, Samples and similar submittals, and shall at all times give the Owner's Authorized Representative access thereto.
- B.8.2 Contractor shall retain and the Owner and its duly authorized representatives shall have access to, for a period not less than six (6) years, all Record Documents, financial and accounting records, and other books, documents, papers and records of Contractor which are pertinent to the Contract including records pertaining to Overhead and indirect costs, for the purpose of making audit, examination, excerpts and transcripts. If for any reason, any part of the Contract is involved in litigation, Contractor shall retain all such records until all litigation is resolved. The Owner

and/or its agents shall continue to be provided full access to the records during litigation.

B.9 SUBCONTRACTS AND ASSIGNMENT

- B.9.1 Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound by the terms and conditions of these General Conditions, and to assume toward the Contractor all of the obligations and responsibilities which the Contractor assumes toward the Owner thereunder, unless (1) the same are clearly inapplicable to the subcontract at issue because of legal requirements or industry practices, or (2) specific exceptions are requested by Contractor and approved in writing by Owner. Where appropriate, Contractor shall require each Subcontractor to enter into similar agreements with sub-subcontractors at any level.
- B.9.2 At Owner's request, Contractor shall submit to Owner prior to their execution either Contractor's form of subcontract, or the subcontract to be executed with any particular Subcontractor. If Owner disapproves such form, Contractor shall not execute the form until the matters disapproved are resolved to Owner's satisfaction. Owner's review, comment upon or approval of any such form shall not relieve Contractor of its obligations under this Agreement or be deemed a waiver of such obligations of Contractor.
- B.9.3 Contractor shall not assign, sell, or transfer its rights, or delegate its responsibilities under this Contract, in whole or in part, without the prior written approval of the Owner. No such written approval shall relieve Contractor of any obligations of this Contract, and any transferee shall be considered the agent of the Contractor and bound to perform in accordance with the Contract Documents. Contractor shall remain liable as between the original parties to the Contract as if no assignment had occurred.

B.10 SUCCESSORS IN INTEREST

The provisions of this Contract shall be binding upon and shall accrue to the benefit of the parties to the Contract and their respective permitted successors and assigns.

B.11 OWNER'S RIGHT TO DO WORK

Owner reserves the right to perform other or additional work at or near the project site with other forces than those of the Contractor. If such work takes place within or next to the project site, Contractor will coordinate work with the other contractors or forces, cooperate with all other contractors or forces, carry out the Work in a way that will minimize interference and delay for all forces involved, place and dispose of materials being used so as not to interfere with the operations of another, and join the Work with the work of the others in an acceptable manner and perform it in proper sequence to that of the others. The Owner's Authorized Representative will resolve any disagreements that may arise between or among Contractor and the other contractors over the method or order of doing all work (including the Work). In case of unavoidable interference, the Owner's Authorized Representative will establish work priority (including the Work) which generally will be in the sequence that the contracts were awarded.

B.12 OTHER CONTRACTS

In all cases and at any time, the Owner has the right to execute other contracts related to or unrelated to the Work of this Contract. The Contractor of this Contract will fully cooperate with any and all other contractors without additional cost to the Owner in the manner described in Section B.11.

B.13 ALLOWANCES

- B.13.1 The Contractor shall include in the Contract Price all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct.
- B.13.2 Unless otherwise provided in the Contract Documents:
- (a) when finally reconciled, allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;

- (b) Contractor's costs for unloading and handling at the site, labor, installation costs, Overhead, profit and other expenses contemplated for stated allowance amounts shall be included in the Contract Price but not in the allowances;
- (c) whenever costs are more than or less than allowances, the Contract Price shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect the difference between actual costs and the allowances under Section B.13.
- (d) Unless Owner requests otherwise, Contractor shall provide to Owner a proposed fixed price for any allowance work prior to its performance.

B.14 SUBMITTALS, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

- B.14.1 The Contractor shall prepare and keep current, for the Architect's/Engineer's approval (or for the approval of Owner's Authorized Representative if approval authority has not been delegated to the Architect/Engineer), a schedule and list of submittals which is coordinated with the Contractor's construction schedule and allows the Architect/Engineer reasonable time to review submittals. Owner reserves the right to finally approve the schedule and list of submittals. Submittals include, without limitation, Shop Drawings, Product Data, and Samples which are described below:
- (a) Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or a Subcontractor (including any sub-subcontractor), manufacturer, supplier or distributor to illustrate some portion of the Work.
 - (b) Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.
 - (c) Samples are physical examples which illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.
- B.14.2 Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents. The purpose of their submittal is to demonstrate for those portions of the Work for which submittals are required by the Contract Documents the way by which the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents. Review of submittals by the Architect/Engineer is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, or for approval of safety precautions or, unless otherwise specifically stated by the Architect/Engineer, of any construction means, methods, techniques, sequences or procedures, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Architect/Engineer's review of the Contractor's submittals shall not relieve the Contractor of its obligations under the Contract Documents. The Architect/Engineer's approval of a specific item shall not indicate approval of an assembly of which the item is a component. Informational submittals upon which the Architect/Engineer is not expected to take responsive action may be so identified in the Contract Documents. Submittals which are not required by the Contract Documents may be returned by the Architect/Engineer without action.
- B.14.3 The Contractor shall review for compliance with the Contract Documents, approve and submit to the Architect/Engineer Shop Drawings, Product Data, Samples and similar submittals required by the Contract Documents with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of separate contractors. Submittals which are not marked as reviewed for compliance with the Contract Documents and approved by the Contractor may be returned by the Architect/Engineer without action.
- B.14.4 By approving and submitting Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents that the Contractor has determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

- B.14.5 The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples or similar submittals until the respective submittal has been approved by the Architect/Engineer.
- B.14.6 The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the Architect/Engineer's review or approval of Shop Drawings, Product Data, Samples or similar submittals unless the Contractor has specifically informed the Architect/Engineer in writing of such deviation at the time of submittal and (i) the Architect/Engineer has given written approval to the specific deviation as a minor change in the Work, or (ii) a Change Order has been executed by Owner authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples or similar submittals by the Architect/Engineer's review or approval thereof.
- B.14.7 In the event that Owner elects not to have the obligations and duties described under this Section B.14 performed by the Architect/Engineer, or in the event no Architect/Engineer is employed by Owner on the project, all obligations and duties assigned to the Architect/Engineer hereunder shall be performed by the Owners Authorized Representative.

B.15 SUBSTITUTIONS

The Contractor may make Substitutions only with the consent of the Owner, after evaluation by the Owner's Authorized Representative and only in accordance with a Change Order. Substitutions shall be subject to the requirements of the bid documents. By making requests for Substitutions, the Contractor represents that the Contractor has personally investigated the proposed substitute product; represents that the Contractor will provide the same warranty for the Substitution that the Contractor would for the product originally specified unless approved otherwise; certifies that the cost data presented is complete and includes all related costs under this Contract including redesign costs, and waives all claims for additional costs related to the Substitution which subsequently become apparent; and will coordinate the installation of the accepted Substitution, making such changes as may be required for the Work to be completed in all respects.

B.16 USE OF PLANS AND SPECIFICATIONS

Plans, Specifications and related Contract Documents furnished to Contractor by Owner or Owner's Architect/Engineer shall be used solely for the performance of the Work under this Contract. Contractor and its Subcontractors and suppliers are authorized to use and reproduce applicable portions of such documents appropriate to the execution of the Work, but shall not claim any ownership or other interest in them beyond the scope of this Contract, and no such interest shall attach. Unless otherwise indicated, all common law, statutory and other reserved rights, in addition to copyrights, are retained by Owner.

SECTION C. WAGES AND LABOR.

C.1 MINIMUM WAGE RATES ON PUBLIC WORKS

Contractor shall comply fully with the provisions of ORS 279C.800 through 279C.870. Documents establishing those conditions, as determined by the Commissioner of the Bureau of Labor and Industries (BOLI), are included as attachments to or are incorporated by reference in the Contract Documents. Contractor shall pay workers at not less than the specified minimum hourly rate of wage, and shall include that requirement in all subcontracts.

SECTION D. CHANGES IN THE WORK.

D.1 CHANGES IN WORK

- D.1.1 The terms of this Contract shall not be waived, altered, modified, supplemented or amended in any manner whatsoever without prior written approval of the Owner's Authorized Representative, and then only in a manner

consistent with the Change Order provisions of this Section D.1 and after any necessary approvals required by public contracting laws have been obtained. Otherwise, a formal contract amendment is required, which shall not be effective until its execution by the parties to this Contract and all approvals required by public contracting laws have been obtained.

D.1.2 It is mutually agreed that changes in Plans, quantities, or details of construction are inherent in the nature of construction and may be necessary or desirable during the course of construction. Within the general scope of this Contract, the Owner's Authorized Representative may at any time, without notice to the sureties and without impairing the Contract, require changes consistent with this Section D.1. All Change Order Work shall be executed under the conditions of the Contract Documents. Such changes may include, but are not limited to:

- (a) Modification of specifications and design.
- (b) Increases or decreases in quantities.
- (c) Increases or decreases to the amount of Work.
- (d) Addition or elimination of any Work item.
- (e) Change in the duration of the project.
- (f) Acceleration or delay in performance of Work.
- (g) Deductive changes.

Deductive changes are those that reduce the scope of the Work, and shall be made by mutual agreement whenever feasible. In cases of suspension or partial termination under Section J, Owner reserves the right to unilaterally impose a deductive change and to self perform such Work, for which the provisions of B.11 (Owner's Right to Do Work) shall then apply.

Adjustments in compensation shall be made under the provisions of D.1.3, in which costs for deductive changes shall be based upon a Direct Costs adjustment together with the related percentage markup specified for profit, Overhead and other indirect costs, unless otherwise agreed to by Owner.

D.1.3 The Owner and Contractor agree that Change Order Work shall be administered and compensated according to the following:

- (a) *Unit pricing* may be utilized at the Owner's option when unit prices or solicitation alternates were provided that established the cost for additional Work, and a binding obligation exists under the Contract on the parties covering the terms and conditions of the additional Work.
- (b) If the Owner elects not to utilize unit pricing, or in the event that unit pricing is not available or appropriate, *fixed pricing* may be used for Change Order Work. In fixed pricing the basis of payments or total price shall be agreed upon in writing between the parties to the Contract, and shall be established before the Work is done whenever feasible. The mark-ups set forth in D.1.3(c) shall be utilized by the parties as a guide in establishing fixed pricing, and will not be exceeded by Owner without adequate justification. Cost and price data relating to Change Orders shall be supplied by Contractor to Owner upon request, but Owner shall be under no obligation to make such requests.
- (c) In the event that unit pricing and fixed pricing are not utilized, then Change Order Work shall be performed on a *cost reimbursement* basis for Direct Costs. Such Work shall be compensated on the basis of the actual, reasonable and allowable cost of labor, equipment, and material furnished on the Work performed. In addition, the following markups shall be added to the Contractor's or Subcontractor's Direct Costs as full compensation for profit, Overhead and other indirect costs for Work directly performed with the Contractor's or Subcontractor's own forces:

On Labor 15%
On Equipment 10%
On Materials 10%

When Change Order Work under D.1.3(c) is invoiced by an authorized Subcontractor at any level, each ascending tier Subcontractor or Contractor will be allowed a supplemental mark-up on each piece of subcontract Work covered by such Change Order as follows:

\$0.00 - \$5,000.00 10%, and then
Over \$5,000.00 5%

Payments made to the Contractor shall be complete compensation for Overhead, profit, and all costs that were incurred by the Contractor or by other forces furnished by the Contractor, including Subcontractors, for Change Order Work. Owner may establish a maximum cost for Change Order Work under this Section D.1.3(c), which shall not be exceeded for reimbursement without additional written authorization from Owner. Contractor shall not be required to complete such Change Order Work without additional authorization.

- D.1.4 Any necessary adjustment of Contract Time that may be required as a result of a Change Order must be agreed upon by the parties before the start of the Change Order Work unless Owner's Authorized Representative authorizes Contractor to start the Work before agreement on Contract Time adjustment. Contractor shall submit any request for additional compensation (and additional Contract Time if Contractor was authorized to start Work before an adjustment of Contract Time was approved) as soon as possible but no later than thirty (30) Days after receipt of the Change Order. If Contractor's request for additional compensation or adjustment of Contract Time is not made within the thirty (30) day time limit, Contractor's requests pertaining to that Change Order are barred. The thirty (30) day time limit for making requests shall not be extended for any reason, including without limitation Contractor's claimed inability to determine the amount of additional compensation or adjustment of Contract Time, unless an extension is granted in writing by Owner. If the Owner's Authorized Representative denies Contractor's request for additional compensation or adjustment of Contract Time, Contractor may proceed to file a Claim under Section D.3, Claims Review Process. No other reimbursement, compensation, or payment will be made, except as provided in Section D.1.5 for impact claims.
- D.1.5 If any Change Order Work under Section D.1.3 causes an increase or decrease in the Contractor's cost of, or the Contract Time required for the performance of, any other part of the Work under this Contract, the Contractor must submit a written request to the Owner's Authorized Representative, setting forth the nature and specific extent of the request, including all time and cost impacts against the Contract as soon as possible, but no later than thirty (30) Days after receipt of the Change Order by Contractor.

The thirty (30) day time limit applies to claims of Subcontractors, suppliers, or manufacturers that may be affected by the Change Order and that request additional compensation or an extension of Contract Time to perform; Contractor has responsibility for contacting its Subcontractors, suppliers, or manufacturers within the thirty (30) day time limit, and including their requests with Contractor's requests. If the request involves Work to be completed by Subcontractors, or materials to be furnished by suppliers or manufacturers, such requests shall be submitted to the Contractor in writing with full analysis and justification for the compensation and additional Contract Time requested. The Contractor will analyze and evaluate the merits of the requests submitted by Subcontractors, suppliers, and manufacturers to Contractor prior to including those requests and Contractor's analysis and evaluation of those requests with Contractor's requests for additional compensation or Contract Time that Contractor submits to the Owner's Authorized Representative. Failure of Subcontractors, suppliers, manufacturers or others to submit their requests to Contractor for inclusion with Contractor's requests submitted to Owner's Authorized Representative within the time period and by the means described in this section shall constitute a waiver of these Subcontractor claims. The Owner's Authorized Representative and the Owner will not consider direct requests or claims from Subcontractors, suppliers, manufacturers or others not a party to this Contract. The consideration of such requests and claims under this section does not give any person, not a party to the Contract the right to bring a claim against the State of Oregon, whether in this claims process, in litigation, or in any dispute resolution process.

If the Owner's Authorized Representative denies the Contractor's request for additional compensation or an extension of Contract Time, the Contractor may proceed to file a Claim under Section D.3, Claims Review Process.

D.1.6 No request or Claim by the Contractor for additional costs or an extension of Contract Time shall be allowed if made after receipt of final payment application under this Contract. Contractor agrees to submit its final payment application within ninety (90) Days after Substantial Completion, unless written extension is granted by Owner. Contractor shall not delay final payment application for any reason, including without limitation nonpayment of Subcontractors, suppliers, manufacturers or others not a party to this Contract, or lack of resolution of a dispute with Owner or any other person of matters arising out of or relating to the Contract. If Contractor fails to submit its final payment application within ninety (90) Days after Substantial Completion, and Contractor has not obtained written extension by Owner, all requests or Claims for additional costs or an extension of Contract Time shall be waived.

D.1.7 It is understood that changes in the Work are inherent in construction of this type. The number of changes, the scope of those changes, and the effect they have on the progress of the original Work cannot be defined at this time. The Contractor is notified that numerous changes may be required and that there will be no compensation made to the Contractor directly related to the number of changes. Each change will be evaluated for extension of Contract Time and increase or decrease in compensation based on its own merit.

D.2 DELAYS

D.2.1 Delays in construction include "Avoidable Delays", which are defined in Section D.2.1.1, and "Unavoidable Delays", which are defined in Section D.2.1.2. The effect of Avoidable Delays is described in Section D.2.2 and the effect of Unavoidable Delays is described in Section D.2.3.

D.2.1.1 Avoidable Delays include any delays other than Unavoidable Delays, and include delays that otherwise would be considered Unavoidable Delays but that:

- (a) Could have been avoided by the exercise of care, prudence, foresight, and diligence on the part of the Contractor or its Subcontractors.
- (b) Affect only a portion of the Work and do not necessarily prevent or delay the prosecution of other parts of the Work nor the completion of the whole Work within the Contract Time.
- (c) Do not impact activities on the accepted critical path schedule.
- (d) Are associated with the reasonable interference of other contractors employed by the Owner that do not necessarily prevent the completion of the whole Work within the Contract Time.

D.2.1.2 Unavoidable Delays include delays other than Avoidable Delays that are:

- (a) Caused by any actions of the Owner, Owner's Authorized Representative, or any other employee or agent of the Owner, or by separate contractor employed by the Owner.
- (b) Caused by any site conditions which differ materially from what was represented in the Contract Documents or from conditions that would normally be expected to exist and be inherent to the construction activities defined in the Contract Documents. The Contractor shall notify the Owner's Authorized Representative immediately of differing site conditions before the area has been disturbed. The Owner's Authorized Representative will investigate the area and make a determination as to whether or not the conditions differ materially from either the conditions stated in the Contract Documents or those which could reasonably be expected in execution of this particular Contract. If Contractor and the Owner's Authorized Representative agree that a differing site condition exists, any additional compensation or additional Contract Time will be determined based on the process set forth in Section D.1.5 for Change Order Work. If the Owner's Authorized Representative disagrees that a differing site condition exists and denies Contractor's request for additional compensation or Contract Time, Contractor may proceed to file a Claim under Section D.3, Claims Review Process.

- (c) Caused by Force Majeure acts, events or occurrences that could not have been avoided by the exercise of care, prudence, foresight, and diligence on the part of the Contractor or its Subcontractors.
- (d) Caused by adverse weather conditions. Any adverse weather conditions must be substantiated by documentary evidence that weather conditions were abnormal for the specific time period claimed, could not have been anticipated by the Contractor, and adversely impacted the project in a manner that could not be avoided by rescheduling the Work or by implementing measures to protect against the weather so that the Work could proceed. A rain, windstorm, high water, or other natural phenomenon for the specific locality of the Work, which might reasonably have been anticipated from the previous 10-year historical records of the general locality of the Work, shall not be construed as abnormal. The parties agree that rainfall greater than the following levels cannot be reasonably anticipated:
 - i) Daily rainfall equal to, or greater than, 0.50 inch during a month when the monthly rainfall exceeds the normal monthly average by twenty-five percent (25 %) or more.
 - ii) daily rainfall equal to, or greater than, 0.75 inch at any time.

The Office of the Environmental Data Service of the National Oceanic and Atmospheric Administration of the U.S. Department of Commerce nearest the project site shall be considered the official agency of record for weather information.

D.2.2 Except as otherwise provided in ORS 279C.315, Contractor shall not be entitled to additional compensation or additional Contract Time for Avoidable Delays.

D.2.3 In the event of Unavoidable Delays, based on principles of equitable adjustment, Contractor may be entitled to the following:

- (a) Contractor may be entitled to additional compensation or additional Contract Time, or both, for Unavoidable Delays described in Section D.2.1.2 (a) and (b).
- (b) Contractor may be entitled to additional Contract Time for Unavoidable Delays described in Section D.2.1.2(c) and (d).

In the event of any requests for additional compensation or additional Contract Time, or both, as applicable, arising under this Section D.2.3 for Unavoidable Delays, other than requests for additional compensation or additional Contract Time for differing site conditions for which a review process is established under Section D.2.1.2, Contractor shall submit a written notification of the delay to the Owner's Authorized Representative within two (2) Days of the occurrence of the cause of the delay. This written notification shall state the cause of the potential delay, the project components impacted by the delay, and the anticipated additional Contract Time or the additional compensation, or both, as applicable, resulting from the delay. Within seven (7) Days after the cause of the delay has been mitigated, or in no case more than thirty (30) Days after the initial written notification, the Contractor shall submit to the Owner's Authorized Representative, a complete and detailed request for additional compensation or additional Contract Time, or both, as applicable, resulting from the delay. If the Owner's Authorized Representative denies Contractor's request for additional compensation or adjustment of Contract Time, the Contractor may proceed to file a Claim under Section D.3, Claims Review Process.

If Contractor does not timely submit the notices required under this Section D.2., then unless otherwise prohibited by law, Contractor's Claim shall be barred.

D.3 CLAIMS REVIEW PROCESS

D.3.1 All Contractor Claims shall be referred to the Owner's Authorized Representative for review. Contractor's Claims, including Claims for additional compensation or additional Contract Time, shall be submitted in writing by Contractor to the Owner's Authorized Representative within five (5) Days after a denial of Contractor's initial request for an adjustment of Contract terms, payment of money, extension of Contract Time or other relief, provided that such initial request has been submitted in accordance with the requirements and within the time limits

established in these General Conditions. Within thirty (30) Days after the initial Claim, Contractor shall submit to the Owner's Authorized Representative, a complete and detailed description of the Claim (the "Detailed Notice") that includes all information required by Section D.3.2. Unless the Claim is made in accordance with these time requirements, it shall be waived.

- D.3.2 The Detailed Notice of the Claim shall be submitted in writing by Contractor and shall include a detailed, factual statement of the basis of the Claim, pertinent dates, Contract provisions which support or allow the Claim, reference to or copies of any documents which support the Claim, the dollar value of the Claim, and the Contract Time extension requested for the Claim. If the Claim involves Work to be completed by Subcontractors, the Contractor will analyze and evaluate the merits of the Subcontractor claim prior to forwarding it and that analysis and evaluation to the Owner's Authorized Representative. The Owner's Authorized Representative and the Owner will not consider direct claims from Subcontractors, suppliers, manufacturers, or others not a party to this Contract. Contractor agrees that it will make no agreement, covenant, or assignment, nor will it commit any other act that will permit or assist any Subcontractor, supplier, manufacturer, or other to directly or indirectly make a claim against Owner.
- D.3.3 The Owner's Authorized Representative will review all Claims and take one or more of the following preliminary actions within ten (10) Days of receipt of the Detailed Notice of a Claim: (1) request additional supporting information from the Contractor; (2) inform the Contractor and Owner in writing of the time required for adequate review and response; (3) reject the Claim in whole or in part and identify the reasons for rejection; (4) based on principles of equitable adjustment, recommend approval of all or part of the Claim; or (5) propose an alternate resolution.
- D.3.4 The Owner's Authorized Representative's decision shall be final and binding on the Contractor unless appealed by written notice to the Owner within fifteen (15) Days of receipt of the decision. The Contractor must present written documentation supporting the Claim within fifteen (15) Days of the notice of appeal. After receiving the appeal documentation, the Owner shall review the materials and render a decision within thirty (30) Days after receiving the appeal documents.
- D.3.5 The decision of the Owner shall be final and binding unless the Contractor delivers to the Owner its requests for mediation, which shall be a non-binding process, within fifteen (15) Days of the date of the Owners decision. The mediation process will be considered to have commenced as of the date the Contractor delivers the request. Both parties acknowledge and agree that participation in mediation is a prerequisite to commencement of litigation of any disputes relating to the Contract. Both parties further agree to exercise their best efforts in good faith to resolve all disputes within sixty (60) Days of the commencement of the mediation through the mediation process set forth herein. In the event that a lawsuit must be filed within this sixty (60) day period in order to preserve a cause of action, the parties agree that notwithstanding the filing, they shall proceed diligently with the mediation to its conclusion prior to actively prosecuting the lawsuit, and shall seek from the Court in which the lawsuit is pending such stays or extensions, including the filing of an answer, as may be necessary to facilitate the mediation process. Further, in the event settlements are reached on any issues through mediation, the parties agree to promptly submit the appropriate motions and orders documenting the settlement to the Court for its signature and filing.
- D.3.6 The mediator shall be an individual mutually acceptable to both parties, but in the absence of agreement each party shall select a temporary mediator and the temporary mediators shall jointly select the permanent mediator. Each party shall pay its own costs for the time and effort involved in mediation. The cost of the mediator shall be split equally between the two parties. Both parties agree to exercise their best effort in good faith to resolve all disputes in mediation. Participation in mediation is a mandatory requirement of both the Owner and the Contractor. The schedule, time and place for mediation will be mutually acceptable, or, failing mutual agreement, shall be as established by the mediator. The parties agree to comply with Owner's administrative rules governing the confidentiality of mediation, if any, and shall execute all necessary documents to give effect to such confidentiality rules. In any event, the parties shall not subpoena the mediator or otherwise require the mediator to produce records, notes or work product, or to testify in any future proceedings as to information disclosed or representations made in the course of mediation, except to the extent disclosure is required by law.
- D.3.7 Owner may at any time and at its discretion issue a construction change directive adding to, modifying or reducing the scope of Work. Contractor and Owner shall negotiate the need for any additional compensation or additional

Contract Time related to the change, subject to the procedures for submitting requests or Claims for additional compensation or additional Contract Time established in this Section D. Unless otherwise directed by Owner's Authorized Representative, Contractor shall proceed with the Work while any request or Claim is pending, including but not limited to, a request or Claim for additional compensation or additional Contract Time resulting from Work under a Change Order or construction change directive. Regardless of the review period or the final decision of the Owner's Authorized Representative, the Contractor shall continue to diligently pursue the Work as identified in the Contract Documents. In no case is the Contractor justified or allowed to cease Work without a written stop work order from the Owner or Owner's Authorized Representative.

SECTION E. PAYMENTS.

E.1 SCHEDULE OF VALUES

The Contractor shall submit, at least ten (10) Days prior to submission of its first application for progress payment, a schedule of values ("Schedule of Values") for the contracted Work. This schedule will provide a breakdown of values for the contracted Work and will be the basis for progress payments. The breakdown will demonstrate reasonable, identifiable, and measurable components of the Work. Unless objected to by the Owner's Authorized Representative, this schedule shall be used as the basis for reviewing Contractor's applications for payment. If objected to by Owner's Authorized Representative, Contractor shall revise the schedule of values and resubmit the same for approval of Owner's Authorized Representative.

E.2 APPLICATIONS FOR PAYMENT

E.2.1 Owner shall make progress payments on the Contract monthly as Work progresses. Payments shall be based upon estimates of Work completed and the Schedule of Values. All payments shall be approved by the Owner's Authorized Representative. A progress payment shall not be considered acceptance or approval of any Work or waiver of any defects therein. Owner shall pay to Contractor interest on the progress payment, not including retainage, due the Contractor. The interest shall commence thirty (30) Days after the receipt of invoice ("application for payment") from the Contractor or fifteen (15) Days after the payment is approved by the Owner's Authorized Representative, whichever is the earlier date. The rate of interest shall equal three times the discount rate on 90-day commercial paper in effect at the Federal Reserve Bank in the Federal Reserve district that includes Oregon on the date that is thirty (30) Days after receipt of the application for payment from the Contractor or fifteen (15) Days after the payment is approved by the Owner, whichever is the earlier date, but the rate of interest shall not exceed thirty (30) percent. Notwithstanding the foregoing, in instances when an application for payment is filled out incorrectly, or when there is any defect or impropriety in any submitted application or when there is a good faith dispute, Owner shall so notify the Contractor within fifteen (15) Days stating the reason or reasons the application for payment is defective or improper or the reasons for the dispute. A defective or improper application for payment, if corrected by the Contractor within seven (7) Days of being notified by the Owner, shall not cause a payment to be made later than specified in this section unless interest is also paid. Accrual of interest will be postponed when payment on the principal is delayed because of disagreement between the Owner and the Contractor.

Owner reserves the right, instead of requiring the Contractor to correct or resubmit a defective or improper application for payment, to reject the defective or improper portion of the application for payment and pay the remainder of the application for payment that is correct and proper.

Owner, upon written notice to the Contractor, may elect to make payments to the Contractor only by means of Electronic Funds Transfers (EFT) through Automated Clearing House (ACH) payments. If Owner makes this election, the Contractor will be required to arrange to receive EFT/ACH payments.

E.2.2 Contractor shall submit to the Owner's Authorized Representative, an application for each payment and, if required, receipts or other vouchers showing payments for materials and labor, including payments to Subcontractors. Contractor shall include, in its application for payment, a schedule of the percentages of the various parts of the Work completed, based on the Schedule of Values which shall aggregate to the payment application total, and shall include, on the face of each copy thereof, a certificate in substantially the following form:

"I, the undersigned, hereby certify that the above bill is true and correct, and the payment therefore, has not been received.

Signed: _____ ‘’

E.2.3 Generally, applications for payment will be accepted only for materials that have been installed. However, an application for pre-fabricated modular structure shall be accepted when the modular structure is completed and stored. In addition, under special conditions, applications for payment for other stored materials will be accepted at Owner's sole discretion. Such a payment, if made, will be subject to the following conditions:

- (a) The request for stored material shall be submitted at least thirty (30) Days in advance of the application for payment on which it appears. Applications for payment shall be entertained for major equipment, components or expenditures only.
- (b) The Contractor shall submit applications for payment showing the quantity and cost of the material stored.
- (c) The material shall be stored in a bonded warehouse and Owner's Authorized Representative shall be granted the right to access the material for the purpose of removal or inspection at any time during the Contract Period.
- (d) The Contractor shall name the Owner as co-insured on the insurance policy covering the full value of the property while in the care and custody of the Contractor until it is installed. A certificate noting this coverage shall be issued to the Owner.
- (e) Payments shall be made for materials only. The submitted amount of the application for payment shall be reduced by the cost of transportation and for the cost of an inspector to check the delivery at out of town storage sites. The cost of said inspection shall be borne solely by the Contractor.
- (f) Within sixty (60) Days of the application for payment, the Contractor shall submit evidence of payment covering the material stored.
- (g) Payment for stored materials shall in no way indicate acceptance of the materials or waive any rights under this Contract for the rejection of the Work or materials not in conformance with the Contract Documents.
- (h) All required documentation must be submitted with the respective application for payment.

E.2.4 The Owner reserves the right to withhold all or part of a payment, or may nullify in whole or part any payment previously made, to such extent as may be necessary in the Owner's opinion to protect the Owner from loss because of:

- (a) Work that is defective and not remedied, or that has been demonstrated or identified as failing to conform with the Contract Documents,
- (b) third party claims filed or evidence reasonably indicating that such claims will likely be filed unless security acceptable to the Owner is provided by the Contractor;
- (c) failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment (in which case Owner may issue checks made payable jointly to Owner and such unpaid persons under this provision, or directly to Subcontractors and suppliers at any level;
- (d) reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Price;
- (e) damage to the Owner or another contractor;
- (f) reasonable evidence that the Work will not be completed within the Contract Time required by the Contract, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the

anticipated delay;

- (g) failure to carry out the Work in accordance with the Contract Documents; or
- (h) assessment of liquidated damages, when withholding is made for offset purposes.

E.2.5 Subject to the provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

- (a) Take that portion of the Contract Price properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the total Contract Price allocated to that portion of the Work in the Schedule of Values, less retainage as provided in Section E.5. Pending final determination of cost to the Owner of changes in the Work, amounts not in the dispute may be included even though the Contract Price has not yet been adjusted by Change Order;
- (b) Add that portion of the Contract Price properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction (or, if approved in advance by the Owner pursuant to Section E.2.3, suitably stored off the site at a location agreed upon in writing), less retainage as provided in Section E.5;
- (c) Subtract the aggregate of previous payments made by the Owner; and
- (d) Subtract any amounts for which the Owner's Authorized Representative has withheld or nullified payment as provided in the Contract Documents.

E.2.6 Contractor's applications for payment may not include requests for payment for portions of the Work for which the Contractor does not intend to pay to a Subcontractor or material supplier.

E.2.7 The Contractor warrants to Owner that title to all Work covered by an application for payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an application for payment all Work for which payments are received from the Owner shall be free and clear of liens, claims, security interests or encumbrances in favor of the Contractor, Subcontractors, material suppliers, or other persons or entities making a claim by reason of having provided labor, materials and equipment relating to the Work.

E.2.8 If Contractor disputes any determination by Owner's Authorized Representative with regard to any application for payment, Contractor nevertheless shall continue to prosecute expeditiously the Work. No payment made hereunder shall be or be construed to be final acceptance or approval of that portion of the Work to which such partial payment relates or shall relieve Contractor of any of its obligations hereunder.

E.3 PAYROLL CERTIFICATION REQUIREMENT

Payroll certification is required before payments are made on the Contract.

E.4 DUAL PAYMENT SOURCES

Contractor shall not be compensated for Work performed under this Contract from any state agency other than the agency that is a party to this Contract.

E.5 RETAINAGE

E.5.1 Retainage shall be withheld and released in accordance with ORS 279C.550 to 279C.580:

E.5.1.1 Owner may reserve as retainage from any progress payment an amount not to exceed five percent of the payment. As Work progresses, Owner may reduce the amount of the retainage and may eliminate retainage on any remaining monthly Contract payments after 50 percent of the Work under the Contract is completed if, in the Owner's opinion, such Work is progressing satisfactorily. Elimination or reduction of retainage shall be allowed only upon written

application by the Contractor, which application shall include written approval of Contractor's surety; except that when the Work is 97-1/2 percent completed the Owner may, at its discretion and without application by the Contractor, reduce the retained amount to 100 percent of the value of the Work remaining to be done. Upon receipt of written application by the Contractor, Owner shall respond in writing within a reasonable time.

E.5.1.2 In accordance with the provisions of ORS 279C.560 and any applicable administrative rules, unless the Owner finds in writing that accepting a bond, security or other instrument described in options (a) or (c) below poses an extraordinary risk that is not typically associated with the bond, security or instrument, the Owner will approve the Contractor's written request:

- (a) to be paid amounts which would otherwise have been retained from progress payments where Contractor has deposited acceptable bonds, securities or other instruments of equal value with Owner or in a custodial account or other mutually-agreed account satisfactory to Owner, with an approved bank or trust company to be held in lieu of the cash retainage for the benefit of Owner. Interest or earnings on the bonds, securities or other instruments shall accrue to the Contractor. The Contractor shall execute and provide such documentation and instructions respecting the bonds, securities and other instruments as the Owner may require to protect its interests. To be permissible the bonds, securities and other instruments must be of a character approved by the Director of the Oregon Department of Administrative Services, including but not limited to:
 - i) Bills, certificates, notes or bonds of the United States.
 - ii) Other obligations of the United States or agencies of the United States.
 - iii) Obligations of a corporation wholly owned by the federal government.
 - iv) Indebtedness of the Federal National Mortgage Association.
 - v) General obligation bonds of Columbia County or a political subdivision of Columbia County.
 - vi) Irrevocable letters of credit issued by an insured institution, as defined in ORS 706.008.
- (b) that retainage be deposited in an interest bearing account, established through the State Treasurer for state agencies, in a bank, savings bank, trust company or savings association for the benefit of Owner, with interest from such account accruing to the Contractor; or
- (c) that the Contractor be allowed, with the approval of the Owner, to deposit a surety bond for the benefit of Owner, in a form acceptable to Owner, in lieu of all or a portion of funds retained, or to be retained. Such bond and any proceeds therefrom shall be made subject to all claims and liens in the manner and priority as set forth for retainage under ORS 279C.550 to ORS 279C.625.

Where the Owner has accepted the Contractor's election of any of the options above, Owner may recover from Contractor any additional costs incurred through such election by reducing Contractor's final payment. Where the Owner has agreed to Contractor's request to deposit a surety bond under option (c), Contractor shall accept like bonds from Subcontractors and suppliers on the project from which Contractor has required retainage.

E.5.1.3 The retainage held by Owner shall be included in and paid to the Contractor as part of the final payment of the Contract Price. The Owner shall pay to Contractor interest at the rate of one and one-half percent per month on the final payment due Contractor, interest to commence thirty (30) Days after the Work under the Contract has been completed and accepted and to run until the date Contractor shall notify Owner in writing when the Contractor considers the Work complete and Owner shall, within fifteen (15) Days after receiving the written notice, either accept the Work or notify the Contractor of Work yet to be performed on the Contract. If Owner does not within the time allowed notify the Contractor of Work yet to be performed to fulfill contractual obligations, the interest provided by this subsection shall commence to run thirty (30) Days after the end of the 15-Day period.

E.5.1.4 In accordance with the provisions of ORS 279C.560, if the Owner accepts bonds, securities or other instruments

deposited as provided in paragraphs (a) and (c) of subsection E.5.1.2, the Owner shall reduce the moneys held as retainage in an amount equal to the value of the bonds, securities and other instruments and pay the amount of the reduction to the Contractor in accordance with ORS 279C.570.

E.5.1.5 Contractor agrees that if Contractor elects to reserve a retainage from any progress payment due to any Subcontractor or supplier, such retainage shall not exceed five percent of the payment, and such retainage withheld from Subcontractors and suppliers shall be subject to the same terms and conditions stated in Subsection E.5 as apply to Owner's retainage from any progress payment due to Contractor. Provided, however, if in accordance with the provisions of ORS 279C.560 the Contractor has deposited bonds, securities or other instruments or has elected to have the Owner deposit accumulated retainage in an interest-bearing account, the Contractor shall comply with the provisions of ORS 701.435 respecting the deposit of bonds, securities or other instruments by Subcontractors and suppliers and the sharing of interest earnings with Subcontractors and suppliers.

E.5.2 Additional retainage in the amount of 25% of amounts earned shall be withheld and released in accordance with ORS 279C.845(7) when the Contractor fails to file certified payroll statements.

E.6 FINAL PAYMENT

E.6.1 Upon completion of all the Work under this Contract, the Contractor shall notify the Owner's Authorized Representative, in writing, that Contractor has completed Contractor's part of the Contract and shall request final payment. Upon receipt of such notice the Owner's Authorized Representative will inspect the Work, and if acceptable, submit to the Owner a recommendation as to acceptance of the completed Work and as to the final estimate of the amount due the Contractor. If the Work is not acceptable, Owner will notify Contractor within fifteen (15) Days of Contractor's request for final payment. Upon approval of this final estimate by the Owner and compliance by the Contractor with provisions in Section K. 3 Affidavit/Release of Liens and Claims, and other provisions as may be applicable, the Owner shall pay to the Contractor all monies due under the provisions of these Contract Documents.

E.6.2 Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Owner's Authorized Representative (1) a notarized affidavit/release of liens and claims in a form satisfactory to Owner that states that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be canceled or allowed to expire until at least thirty (30) Days' prior written notice has been given to the Owner, (3) a written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment and (5), if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien. If such lien remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging such lien, including all costs and reasonable attorneys' fees.

E.6.3 Acceptance of final payment by the Contractor, a Subcontractor or material supplier shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final application for payment.

SECTION F. JOB SITE CONDITIONS.

F.1 USE OF PREMISES

Contractor shall confine equipment, storage of materials and operation of Work to the limits indicated by Contract Documents, law, ordinances, permits or directions of the Owner's Authorized Representative. Contractor shall follow the

Owner's Authorized Representative's instructions regarding use of premises, if any.

F.2 PROTECTION OF WORKERS, PROPERTY, AND THE PUBLIC

- F.2.1 Contractor shall maintain continuous and adequate protection of all of the Work from damage, and shall protect the Owner's Authorized Representative, Owner's workers and property from injury or loss arising in connection with this Contract. Contractor shall remedy acceptably to the Owner, any damage, injury, or loss, except such as may be directly due to errors in the Contract Documents or caused by authorized representatives or personnel of the Owner. Contractor shall adequately protect adjacent property as provided by law and the Contract Documents.
- F.2.2 Contractor shall take all necessary precautions for the safety of all personnel on the job site, and shall comply with the Contract Documents and all applicable provisions of federal, state and municipal safety laws and building codes to prevent accidents or injury to persons on, about or adjacent to the premises where the Work is being performed. Contractor shall erect and properly maintain at all times, as required by the conditions and progress of the Work, all necessary safeguards for protection of workers and the public against any hazards created by construction. Contractor shall designate a responsible employee or associate on the Work site, whose duty shall be the prevention of accidents. The name and position of the person designated shall be reported to the Owner's Authorized Representative. The Owner's Authorized Representative has no responsibility for Work site safety. Work site safety is the responsibility of the Contractor.
- F.2.3 Contractor shall not enter upon private property without first obtaining permission from the property owner or its duly authorized representative. Contractor shall be responsible for the preservation of all public and private property along and adjacent to the Work contemplated under the Contract and shall use every precaution necessary to prevent damage thereto. In the event the Contractor damages any property, the Contractor shall at once notify the property owner and make, or arrange to make, full restitution. Contractor shall report, immediately in writing, to the Owner's Authorized Representative, all pertinent facts relating to such property damage and the ultimate disposition of the claim for damage.
- F.2.4 Contractor is responsible for protection of adjacent work areas including impacts brought about by activities, equipment, labor, utilities, and materials on the site.
- F.2.5 Contractor shall at all times direct its activities in such a manner as to minimize adverse effects on the environment. Handling of all materials will be conducted so no release will occur that may pollute or become hazardous.
- F.2.6 In an emergency affecting the safety of life or of the Work or of adjoining property, the Contractor, without special instruction or authorization from the Owner's Authorized Representative, shall act reasonably to prevent threatened loss or injury, and shall so act, without appeal, if instructed by the Owner's Authorized Representative. Any compensation claimed by the Contractor on account of emergency work shall be determined in accordance with Section D.

F.3 CUTTING AND PATCHING

- F.3.1 Contractor shall be responsible for coordinating all cutting, fitting, or patching of the Work to make its several parts come together properly and fit to receive or be received by work of other contractors or Subcontractors shown upon, or reasonably implied by, the Contract Documents.
- F.3.2 Contractor shall be responsible for restoring all cut, fitted, or patched surfaces to an original condition; provided, however, that if a different condition is specified in the Contract Documents, then Contractor shall be responsible for restoring such surfaces to the condition specified in the Contract Documents.

F.4 CLEANING UP

From time to time as may be ordered by the Owner the Contractor shall, at its own expense, clean up and remove all refuse and unused materials of any kind resulting from the Work. If Contractor fails to do so within twenty-four hours after notification by the Owner the work may be done by others and the cost charged to the Contractor and deducted from payment due the Contractor.

F.5 ENVIRONMENTAL CONTAMINATION

- F.5.1 Contractor will be held responsible for and shall indemnify, defend (with counsel of Owner's choice) and hold harmless Owner from and against any costs, expenses, damages, claims, and causes of action, (including attorney fees), or any of them, resulting from all spills, releases, discharges, leaks and disposal of environmental pollution, including storage, transportation, and handling during the performance of the Contract which occur as a result of, or are contributed by, the negligence or actions of Contractor or its personnel, agents, or Subcontractors or any failure to perform in accordance with the Contract Documents (except to the extent otherwise void under ORS 30.140). Nothing in this section F.5.1 shall limit Contractor's responsibility for obtaining insurance coverages required under Section G.3 of these General Conditions, and Contractor shall take no action that would void or impair such coverages.
- F.5.1.1 Contractor agrees to promptly dispose of such spills, releases, discharge or leaks to the satisfaction of Owner and proper regulatory agencies in a manner that complies with applicable federal, state, and local laws and regulations. Cleanup shall be at no cost to the Owner and be performed by properly qualified personnel.
- F.5.1.2 Contractor shall obtain the Owner's written consent prior to bringing onto the Work site any (i) environmental pollutants or (ii) hazardous substances or materials, as the same or reasonably similar terms are used in any applicable federal, state, or local statutes, rules or ordinances. Notwithstanding such written consent from the Owner, the Contractor, at all times, shall:
- (a) properly handle, use and dispose of all environmental pollutants and hazardous substances or materials brought onto the Work site, in accordance with all applicable federal, state, or local statutes, rules, or ordinances;
 - (b) be responsible for any and all spills, releases, discharges, or leaks of (or from) environmental pollutants or hazardous substances or materials which Contractor has brought onto the Work site; and
 - (c) promptly clean up, without cost to the Owner, such spills, releases, discharges, or leaks to the Owner's satisfaction and in compliance with all applicable federal, state, or local statutes, rules or ordinances.
- F.5.2 Contractor shall report all reportable quantity releases to applicable federal, state, and local regulatory and emergency response agencies. Reportable quantities are found in 40 CFR Part 302, Table 302.4 for hazardous substances and in OAR 340-142-0050 for all products addressed therein. Upon discovery, regardless of quantity, Contractor must telephonically report all releases to the Owner. A written follow-up report shall be submitted to Owner within 48 hours of the telephonic report. Such written report shall contain, as a minimum:
- (a) Description of items released (identity, quantity, manifest no., and all other documentation required by law.)
 - (b) Whether amount of items released is EPA/DEQ reportable, and, if so, when it was reported.
 - (c) Exact time and location of release, including a description of the area involved.
 - (d) Containment procedures initiated.
 - (e) Summary of communications about the release Contractor has had with members of the press or State officials other than Owner.
 - (f) Description of cleanup procedures employed or to be employed at the site, including disposal location of spill residue.
 - (g) Personnel injuries, if any, resulting from, or aggravated by, the release.

F.6 ENVIRONMENTAL CLEAN-UP

- F.6.1 Unless disposition of environmental pollution is specifically a part of this Contract, or was caused by the Contractor (reference F.5 Environmental Contamination), Contractor shall immediately notify Owner of any hazardous substance(s) which Contractor discovers or encounters during performance of the Work required by this Contract. "Hazardous substance(s)" means any hazardous, toxic and radioactive materials and those substances defined as "hazardous substances," "hazardous materials," "hazardous wastes," "toxic substances," or other similar designations in any federal, state, or local law, regulation, or ordinance, including without limitation asbestos, polychlorinated biphenyl (PCB), or petroleum, and any substances, materials or wastes regulated in 40 CFR, Part 261 and defined as hazardous in 40 CFR S 261.3. In addition to notifying Owner of any hazardous substance(s) discovered or encountered, Contractor shall immediately cease working in any particular area of the project where a hazardous substance(s) has been discovered or encountered if continued work in such area would present a risk or danger to the health or well being of Contractors or any Subcontractors work force.
- F.6.2 Upon being notified by Contractor of the presence of hazardous substance(s) on the project site, Owner shall arrange for the proper disposition of such hazardous substance(s).

F.7 FORCE MAJEURE

A party to this Contract shall not be held responsible for delay or default due to Force Majeure acts, events or occurrences unless they could have been avoided by the exercise of reasonable care, prudence, foresight, and diligence by that party. The Owner may terminate this Contract upon written notice after determining that delay or default caused by Force Majeure acts, events or occurrences will reasonably prevent successful performance of the Contract.

SECTION G. INDEMNITY, BONDING, AND INSURANCE.

G.1 PERFORMANCE AND PAYMENT SECURITY; PUBLIC WORKS BOND

- G.1.1 When the Contract Price is \$100,000 or more (or \$50,000 or more in the case of Contracts for highways, bridges and other transportation projects) the Contractor shall furnish and maintain in effect at all times during the Contract Period, a performance bond in a sum equal to the Contract Price, and a separate payment bond also in a sum equal to the Contract Price. The bonds may be required if the Contract Price is less than the above thresholds, if required by the Contract Documents.
- G.1.2 Bond forms furnished by the Owner and notarized by awarded Contractor's surety company authorized to do business in Oregon are the only acceptable forms of performance and payment security, unless otherwise specified in the Contract Documents.
- G.1.3 Before starting Work the Contractor shall file with the Construction Contractors Board, and maintain in full force and effect, the separate public works bond required by Oregon Laws 2005, Chapter 360, and OAR 839-025-0015, unless otherwise exempt under those provisions. The Contractor shall also include in every subcontract a provision requiring the Subcontractor to have a public works bond filed with the Construction Contractors Board before starting Work, unless otherwise exempt, and shall verify that the Subcontractor has filed a public works bond before permitting the Subcontractor to start Work.

G.2 BUILDERS RISK INSURANCE

- G.2.1 Builders Risk Insurance:
- G.2.2 Builders Risk: During the term of this Contract, for new construction the Contractor shall obtain and keep in effect Builders Risk insurance on an all risk form, including earthquake and flood, for an amount equal to the full amount of the Contract. Any deductible shall not exceed \$50,000 for each loss, except the earthquake and flood deductible shall not exceed 2 percent of each loss or \$50,000, whichever is more. The policy will include as loss payees the Owner, the Contractor and its Subcontractors as their interests may appear.

- G.2.3 Builders Risk Installation Floater: For other than new construction the Contractor shall obtain and keep in effect during the term of this Contract, a Builders Risk Installation Floater for coverage of the Contractor's labor, materials and equipment to be used for completion of the Work performed under this Contract. The minimum amount of coverage to be carried shall be equal to the full amount of the Contract. This insurance shall include as loss payees Columbia County, the Owner, the Contractor and its Subcontractors as their interests may appear.
- G.2.4 Such insurance shall be maintained until Owner has occupied the facility.
- G.2.5 A loss insured under the Builder's Risk insurance shall be adjusted by the Owner and made payable to the Owner for the insureds, as their interests may appear. The Contractor shall pay Subcontractors their just shares of insurance proceeds received by the Contractor, and by appropriate agreements, written where legally required for validity, shall require Subcontractors to make payments to their Sub-subcontractors in similar manner. The Owner shall have power to adjust and settle a loss with insurers.

SECTION H. SCHEDULE OF WORK.

H.1 CONTRACT PERIOD

- H.1.1 **Time is of the essence on this Contract.** The Contractor shall at all times carry on the Work diligently, without delay and punctually fulfill all requirements herein. Contractor shall commence Work on the site within fifteen (15) Days of Notice to Proceed, unless directed otherwise.
- H.1.2 Unless specifically extended by Change Order, all Work shall be complete by the date contained in the Contract Documents. The Owner shall have the right to accelerate the completion date of the Work, which may require the use of overtime. Such accelerated Work schedule shall be an acceleration in performance of Work under Section D.1.2 (f) and shall be subject to the Change Order process of Section D.1.
- H.1.3 The Owner shall not waive any rights under the Contract by permitting the Contractor to continue or complete the Work or any part of it after the date described in Section H.1.2 above.

H.2 SCHEDULE

- H.2.1 Contractor shall provide, by or before the pre-construction conference, a detailed schedule for review and acceptance by the Owner. The submitted schedule must illustrate Work by significant project components, significant labor trades, long lead items, broken down by building and/or floor where applicable. Each schedule item shall account for no greater than 5 % of the monetary value of the project or 5 % of the available Contract Time. Schedules with activities of less than one day or valued at less than 1% of the Contract will be considered too detailed and will not be accepted. Schedules lacking adequate detail, or unreasonably detailed, will be rejected. Included within the schedule are the following: Notice to Proceed, Substantial Completion, and Final Completion. Schedules will be updated monthly and submitted with the monthly payment application. Acceptance of the Schedule by the Owner does not constitute agreement by the Owner, as to the Contractor's sequencing, means, methods, or allocated Contract Time. Any positive difference between the Contractor's scheduled completion and the Contract completion date is float owned by the Owner. Owner reserves the right to negotiate the float if it is deemed to be in Owner's best interest to do so. In no case shall the Contractor make a request for additional compensation for delays if the Work is completed within the Contract Time but after Contractor's scheduled completion.

H.3 PARTIAL OCCUPANCY OR USE

- H.3.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage, provided such occupancy or use is consented to by public authorities having jurisdiction over the Work. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have reasonably accepted in writing the responsibilities assigned to each of them for payments, retainage, if any, security, insurance or self-insurance, maintenance, heat, utilities, and damage to the Work, and

have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents with respect to such portion of the Work. Approval by the Contractor to partial occupancy or use shall not be unreasonably withheld. Immediately prior to such partial occupancy or use, the Owner and Contractor shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work. Partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

SECTION I. CORRECTION OF WORK.

I.1 CORRECTION OF WORK BEFORE FINAL PAYMENT

The Contractor warrants to the Owner that materials and equipment furnished under the Contract will be of good quality and new unless otherwise required or permitted by the Contract Documents, that the Work will be free from defects, and that the Work will conform to the requirements of the Contract Documents. Work failing to conform to these requirements shall be deemed defective. Contractor shall promptly remove from the premises and replace all defective materials and equipment as determined by the Owner's Authorized Representative, whether incorporated in the Work or not. Removal and replacement shall be without loss or expense to the Owner, and Contractor shall bear the cost of repairing all Work destroyed or damaged by such removal or replacement. Contractor shall be allowed a period of no longer than sixty (60) days for completion of defective (punch list) work, unless otherwise agreed. At the end of that period, or earlier if requested by the Contractor, Owner shall arrange for inspection of the Work by the Architect/Engineer. Should the Work not be complete, and all corrections made, the costs for all subsequent re-inspections shall be borne by the Contractor. If Contractor fails to complete the punch list work within the above time period, without affecting Contractor's obligations Owner may perform such work and Contractor shall reimburse Owner all costs of the same within thirty (30) days after demand.

I.2 WARRANTY WORK

I.2.1 Neither the final certificate of payment nor any provision of the Contract Documents shall relieve the Contractor from responsibility for defective Work and, unless a longer period is specified, Contractor shall correct all defects that appear in the Work within a period of one year from the date of issuance of the written notice of Substantial Completion by the Owner except for latent defects which will be remedied by the Contractor at any time they become apparent.

The Owner shall give Contractor notice of defects with reasonable promptness. Contractor shall perform such warranty work within a reasonable time after Owner's demand. If Contractor fails to complete the warranty work within such period as Owner determines reasonable, or at any time in the event of warranty work consisting of emergency repairs, without affecting Contractor's obligations, Owner may perform such work and Contractor shall reimburse Owner all costs of the same within thirty (30) days after demand.

I.2.2 This provision does not negate guarantees or warranties for periods longer than one year including without limitation such guarantees or warranties required by other sections of the Contract Documents for specific installations, materials, processes, equipment or fixtures.

I.2.3 In addition to Contractor's warranty, manufacturer's warranties shall pass to the Owner and shall not take effect until affected Work has been accepted in writing by the Owner's Authorized Representative.

I.2.4 The one-year period for correction of Work shall be extended with respect to portions of Work performed after Substantial Completion by the period of time between Substantial Completion and the actual performance of the Work, and shall be extended by corrective Work performed by the Contractor pursuant to this Section, as to the Work corrected. The Contractor shall remove from the site portions of the Work which are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

I.2.5 Nothing contained in this Section I.2 shall be construed to establish a period of limitation with respect to other obligations which the Contractor might have under the Contract Documents. Establishment of the period for correction of Work as described in this Section I.2 relates only to the specific obligation of the Contractor to correct

the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

- I.2.6 If the Owner prefers to accept Work which is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Price will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

SECTION J. SUSPENSION AND/OR TERMINATION OF THE WORK.

J.1 OWNER'S RIGHT TO SUSPEND THE WORK

- J.1.1 The Owner and/or the Owner's Authorized Representative has the authority to suspend portions or all of the Work due to the following causes:

- (a) Failure of the Contractor to correct unsafe conditions;
- (b) Failure of the Contractor to carry out any provision of the Contract;
- (c) Failure of the Contractor to carry out orders;
- (d) Conditions, in the opinion of the Owner's Authorized Representative, which are unsuitable for performing the Work;
- (e) Time required to investigate differing site conditions;
- (f) Any reason considered to be in the public interest.

- J.1.2 The Owner shall notify Contractor and the Contractor's Surety in writing of the effective date and time of the suspension and shall notify Contractor and its surety in writing to resume Work.

J.2 CONTRACTOR'S RESPONSIBILITIES

- J.2.1 During the period of the suspension, Contractor is responsible to continue maintenance at the project just as if the Work were in progress. This includes, but is not limited to, protection of completed Work, maintenance of access, protection of stored materials, temporary facilities, and clean-up.
- J.2.2 When the Work is recommenced after the suspension, the Contractor shall replace or renew any Work damaged during the suspension, remove any materials or facilities used as part of temporary maintenance, and complete the project in every respect as though its prosecution had been continuous and without suspension.

J.3 COMPENSATION FOR SUSPENSION

- J.3.1 Depending on the reason for suspension of the Work, the Contractor or the Owner may be due compensation by the other party. If the suspension was required due to acts or omissions of Contractor, the Owner may assess the Contractor actual costs of the suspension in terms of administration, remedial work by the Owner's forces or another contractor to correct the problem associated with the suspension, rent of temporary facilities, and other actual costs related to the suspension. If the suspension was caused by acts or omissions of the Owner, the Contractor shall be due compensation which shall be defined using Section D, Changes in Work. If the suspension was required through no fault of the Contractor or the Owner, neither party owes the other for the impact.

J.4 OWNER'S RIGHT TO TERMINATE CONTRACT

J.4.1 The Owner may, without prejudice to any other right or remedy, and after giving Contractor seven (7) Days' written notice and an opportunity to cure, terminate the Contract in whole or in part under the following conditions:

- (a) If Contractor should voluntarily or involuntarily, seek protection under the United States Bankruptcy Code and Contractor as debtor-in-possession or the Trustee for the estate fails to assume the Contract within a reasonable time;
- (b) If Contractor should make a general assignment for the benefit of Contractor's creditors;
- (c) If a receiver should be appointed on account of Contractor's insolvency;
- (d) If Contractor should repeatedly refuse or fail to supply an adequate number of skilled workers or proper materials to carry on the Work as required by the Contract Documents, or otherwise fail to perform the Work in a timely manner;
- (e) If Contractor should repeatedly fail to make prompt payment to Subcontractors or for material or labor, or should disregard laws, ordinances or the instructions of the Owner or its Authorized Representative; or
- (f) If Contractor is otherwise in material breach of any part of the Contract.

J.4.2 At any time that any of the above occurs, Owner may exercise all rights and remedies available to Owner at law or in equity, and in addition, Owner may take possession of the premises and of all materials and appliances and finish the Work by whatever method it may deem expedient. In such case, the Contractor shall not be entitled to receive further payment until the Work is completed. If the Owner's cost of finishing the Work exceeds the unpaid balance of the Contract Price, Contractor shall pay the difference to the Owner.

J.5 TERMINATION FOR CONVENIENCE

J.5.1 Owner may terminate the Contract in whole or in part whenever Owner determines that termination of the Contract is in the best interest of the public.

J.5.2 The Owner will provide the Contractor with seven (7) Days' prior written notice of a termination for public convenience. After such notice, the Contractor shall provide the Owner with immediate and peaceful possession of the premises and materials located on and off the premises for which the Contractor received progress payment under Section E. Compensation for Work terminated by the Owner under this provision will be according to Section E. In no circumstance shall Contractor be entitled to lost profits for Work not performed due to termination.

J.6 ACTION UPON TERMINATION

J.6.1 Upon receiving a notice of termination, and except as directed otherwise by the Owner, Contractor shall immediately cease placing further subcontracts or orders for materials, services, or facilities. In addition, Contractor shall terminate all subcontracts or orders to the extent they relate to the Work terminated and, with the prior written approval of the Owner, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts and orders.

J.6.2 As directed by the Owner, Contractor shall upon termination transfer title and deliver to the Owner all Record Documents, information, and other property that, if the Contract had been completed, would have been required to be furnished to the Owner.

SECTION K. CONTRACT CLOSE OUT

K.1 RECORD DOCUMENTS

As a condition of final payment (refer also to Section E.6), Contractor shall comply with the following: Contractor shall provide to Owner's Authorized Representative, Record Documents of the entire project. Record Documents shall depict the project as constructed and shall reflect each and every change, modification, and deletion made during the construction. Record Documents are part of the Work and shall be provided prior to the Owner's issuance of final payment. Record Documents include all modifications to the Contract Documents unless otherwise directed.

K.2 OPERATION AND MAINTENANCE MANUALS

As part of the Work, Contractor shall submit two completed operation and maintenance manuals ("O & M Manuals") for review by the Owner's Authorized Representative prior to submission of any pay request for more than 75% of the Work. No payments beyond 75% will be made by the Owner until the O & M Manuals have been received. The O & M Manuals shall contain a complete set of all submittals, all product data as required by the specifications, training information, phone list of consultants, manufacturers, installer and suppliers, manufacturer's printed data, record and shop drawings, schematic diagrams of systems, appropriate equipment indices, warranties and bonds. The Owner's Authorized Representative shall review and return one O & M Manual for any modifications or additions required. Prior to submission of its final pay request, Contractor shall deliver three (3) complete and approved sets of O & M Manuals to the Owner's Authorized Representative.

K.3 AFFIDAVIT/RELEASE OF LIENS AND CLAIMS

As a condition of final payment, the Contractor shall submit to the Owner's Authorized Representative a notarized affidavit/release of liens and claims form, in a form satisfactory to Owner, which states that all Subcontractors and suppliers have been paid in full, all disputes with property owners have been resolved, all obligations on the project have been satisfied, all monetary claims and indebtedness have been paid, and that, to the best of the Contractor's knowledge, there are no claims of any kind outstanding against the project. The Contractor shall indemnify, defend (with counsel of Owner's choice) and hold harmless the Owner from all claims for labor and materials finished under this Contract. The Contractor shall furnish complete and valid releases or waivers, satisfactory to the Owner, of all liens arising out of or filed in connection with the Work.

K.4 COMPLETION NOTICES

K.4.1 Contractor shall provide Owner notice of both Substantial and Final Completion. The certificate of Substantial Completion shall state the date of Substantial Completion, the responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance, and the time within which the Contractor shall finish all items on the punchlist accompanying the Certificate. Both completion notices must be signed by the Contractor and the Owner to be valid. The Owner shall provide the final signature on the notices. The notices shall take effect on the date they are signed by the Owner.

K.4.2 Substantial Completion of a facility with operating systems (e.g., mechanical, electrical, HVAC) shall be that degree of completion that has provided a minimum of thirty (30) continuous Days of successful, trouble-free operation, which period shall begin after all performance and acceptance testing has been successfully demonstrated to the Owner's Authorized Representative. All equipment contained in the Work, plus all other components necessary to enable the Owner to operate the facility in the manner that was intended, shall be complete on the Substantial Completion date. The Contractor may request that a punch list be prepared by the Owner's Authorized Representative with submission of the request for the Substantial Completion notice.

K.5 TRAINING

As part of the Work, and prior to submission of the request for final payment, the Contractor shall schedule with the Owner's Authorized Representative, training sessions for all equipment and systems, as required in the individual specifications sections. Contractor shall schedule training sessions at least two weeks in advance of the date of training to allow Owner personnel adequate notice. The O & M Manual shall be used as a basis for training. Training shall be a formal session, held after the equipment and/or system is completely installed and operational in its normal operating environment.

K.6 EXTRA MATERIALS

As part of the Work, Contractor shall provide spare parts, extra maintenance materials, and other materials or products in the quantities specified in the specifications, prior to final payment. Delivery point for extra materials shall be designated by the Owner's Authorized Representative.

K.7 ENVIRONMENTAL CLEAN-UP

As part of the Final Completion notice, or as a separate written notice submitted with or before the notice of Final Completion, the Contractor shall notify the Owner that all environmental pollution clean-up which was performed as a part of this Contract has been disposed of in accordance with all applicable rules, regulations, laws, and statutes of all agencies having jurisdiction over such environmental pollution. The notice shall reaffirm the indemnification given under Section F.5.1 above.

K.8 CERTIFICATE OF OCCUPANCY

The Contractor shall not be granted Final Completion or receive final payment if the Owner has not received an unconditioned certificate of occupancy from the appropriate state and/or local building officials, unless failure to obtain an unconditional certificate of occupancy is due to the fault or neglect of Owner.

K.9 OTHER CONTRACTOR RESPONSIBILITIES

The Contractor shall be responsible for returning to the Owner all items issued during construction such as keys, security passes, site admittance badges, and all other pertinent items. The Contractor shall be responsible for notifying the appropriate utility companies to transfer utility charges from the Contractor to the Owner. The utility transfer date shall not be before Substantial Completion and may not be until Final Completion, if the Owner does not take beneficial use of the facility and the Contractor's forces continue with the Work.

K.10 SURVIVAL

All warranty and indemnification provisions of this Contract, and all of Contractor's other obligations under this Contract that are not fully performed by the time of Final Completion or termination, shall survive Final Completion or any termination of the Contract.

SECTION L. LEGAL RELATIONS & RESPONSIBILITIES/MITIGATION MEASURES.

L.1 LAWS TO BE OBSERVED

In compliance with ORS 279C.525, Sections L.2 through L.4 contain lists of federal, state and local agencies of which the Owner has knowledge that have enacted ordinances or regulations relating to environmental pollution and the preservation of natural resources that may affect the performance of the Contract:

L.2 FEDERAL AGENCIES

Agriculture, Department of
Forest Service
Soil Conservation Service
Coast Guard
Defense, Department of
Army Corps of Engineers
Energy, Department of
Federal Energy Regulatory Commission

Environmental Protection Agency
Health and Human Services, Department of
Housing and Urban Development, Department of
Solar Energy and Energy Conservation Bank
Interior, Department of
Bureau of Land Management Bureau of Indian Affairs
Bureau of Mines
Bureau of Reclamation
Geological Survey
Minerals Management Service
U.S. Fish and Wildlife Service
Labor, Department of
Mine Safety and Health Administration
Occupation Safety and Health Administration
Transportation, Department of
Federal Highway Administration
Water Resources Council

L.3 STATE AGENCIES

Administrative Services, Department of
Agriculture, Department of
Soil and Water Conservation Commission
Columbia River Gorge Commission
Energy, Department of
Environmental Quality, Department of
Fish and Wildlife, Department of
Forestry, Department of
Geology and Mineral Industries, Department of
Human Resources, Department of
Consumer and Business Services, Department of
Land Conservation and Development Commission
Parks and Recreation, Department of
State Lands, Division of
Water Resources Department of

L.4 LOCAL AGENCIES

City Councils
County Courts
County Commissioner, Board of
Design Commissions
Historical Preservation Commission
Planning Commissions

L.5 KNOWN CONDITIONS: None.

L.6 MITIGATION MEASURES

Programmatic Environmental Assessment Mitigation Measures are a condition of project implementation, as follows:

1. Follow applicable State, Territory, Tribal, and local permitting requirements for construction;
2. Water down construction site two to three times per day if dust emissions become a problem;
3. Enclose or water down exposed dirt storage piles;
4. Minimize the disturbed area and preserve vegetation to the maximum extent possible;
5. Maintain topsoil whenever possible;
6. Phase construction activities to the extent possible;
7. Control stormwater flowing to and through the project site;
8. Protect slopes by using measures such as erosion control blankets, bonded fiber matrices, turf reinforcement mats, silt fences (for moderate slopes), etc.;
9. Temporarily protect storm drain inlets until site is stabilized;
10. Retain sediment on-site and control dewatering practices by using sediment traps or basins for large areas (> 1 acre) when appropriate;
11. Establish stabilized construction entrances/exits (e.g. large crushed rocks, stone pads, steel wash racks, hose-down systems, pads);
12. Limit construction activities, including operation of heavy machinery, to normal business hours (M-F 7am-5pm);
13. Avoid engaging in construction activities within 200 feet of noise-sensitive receptors such as schools, hospitals, residential areas, nursing homes, etc.
14. Ensure adequate maintenance of equipment, including proper engine maintenance, adequate tire inflation, and proper maintenance of pollution control devices;
15. Ensure equipment at the project site uses the manufacturer's standard noise control devices (i.e., mufflers, baffling, and/or engine enclosures);
16. Reduce construction equipment idling to the maximum extent practicable;
17. Implement plans to eliminate and minimize oil or fuel spills from construction equipment;
18. Minimize the impacts of equipment staging areas;
19. Stabilize slopes promptly through temporary and permanent cover best management practices (BMPs). Following construction all remaining disturbed areas must be revegetated with locally acquired sources of native seeds and plants in a manner that returns the site to its pre-construction condition or better. Plantings are done during the optimum season for the species being planted. Any seeding carried out during the revegetation program is completed with commercially available seeds certified to be free of noxious weed seeds and other invasive species. If necessary, an irrigation system is installed to ensure establishment of the planted vegetation. The target for new plantings is an 80 percent survival rate at the end of 3 years. Invasive exotic plant species are controlled to the maximum extent practical to accomplish

the revegetation effort. If the application of a chemical is required to control an invasive exotic plant species, the chemical is applied by a certified pesticide or herbicide applicator per labeled directions and in compliance with all Federal, State, and local laws and regulations.

20. When applicable adopt measures to minimize traffic impacts during construction such as providing warning signage, limit the use of public right-of-ways for staging of equipment or materials, use of flagpersons when needed, and coordinate detours if traffic access points will be obstructed.
21. Avoid engaging in construction activities within 660 feet of a bald or golden eagle nest during nesting and fledging, as nesting eagles are quite sensitive to human activities during these times.
22. Establish an inspection and maintenance approach to ensure these measures are working adequately.
23. To the extent possible, adopt other feasible measures under the EPA Guidance Potential for Reducing Greenhouse Gas Emissions in the Construction Sector.
24. Avoid archaeological sites by shifting ground disturbance in a particular area, when possible.

Excavated soil and waste material will be managed and disposed of in accordance with applicable local, state, and federal regulations. If hazardous wastes or contaminated materials are discovered during construction activities, the site work will cease until appropriate procedures and permits are implemented including characterization, handling, transport and disposal.

If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.

PREVAILING WAGE RATES

for

Public Works Contracts in Oregon



OREGON BUREAU OF LABOR AND INDUSTRIES

**Brad Avakian
Commissioner
Bureau of Labor and Industries**

Effective: January 1, 2013

BRAD AVAKIAN
COMMISSIONER



CHRISTIE HAMMOND
DEPUTY COMMISSIONER

BUREAU OF LABOR AND INDUSTRIES

January 1, 2013

In January and July of each year, the Bureau of Labor and Industries publishes the prevailing wage rates that are required to be paid to workers on non-residential public works projects in the state of Oregon. Quarterly updates are published in April and October.

A separate publication, entitled "*Definitions of Covered Occupations for Public Works Contracts in Oregon*," provides occupational definitions used to classify the duties performed on public works projects.

These publications are available electronically on the bureau's website at www.oregon.gov/boli. In order to contain costs and preserve limited budget resources, BOLI is no longer automatically mailing copies of these publications to contracting agencies, contractors, and other interested parties. Those on the agency's mailing list will receive a postcard notification whenever the publications are amended in the future. One complimentary hard copy of each PWR publication is available upon request by emailing BOLI at pwremail@boli.state.or.us or calling 971-673-0838. Additional copies are available at cost, plus postage.

Also available on the bureau's website is a link to the federal Davis-Bacon rates. This link is posted in order to assist contractors and public agencies in determining which rates to pay on projects in Oregon subject to BOTH the state PWR and federal Davis-Bacon Act. The higher of the wage rates must be paid on such projects.

Unless specifically exempted by state law, prevailing wage rates are the minimum wages that must be paid to all workers employed on all public works. These rates are determined using data collected from a statewide construction industry wage survey of occupations and crafts performing commercial building and heavy and highway construction in 14 geographic regions of the state.

ORS 279C.830 requires that the applicable wage rates be incorporated into all bid specifications for public works contracts subject to the PWR law. A statement incorporating the applicable prevailing wage rate publication and any amendments thereto or Davis-Bacon wage rate determination into the specifications *by reference* will satisfy these requirements. Such reference must include the title of the applicable wage rates publication or determination and the date of the publication or determination as well as the date of any applicable amendments. A provision that prevailing wage rates must be paid must also appear in the contract.

Generally, the rates in effect at the time the bid specifications are first advertised are those that apply for the duration of the project. There are some exceptions to this rule. For example, if during the bidding process, the prevailing wage rates change, the public agency has the option of amending the bid specifications to reflect such changes. If a Construction Manager/General Contractor (CM/GC) is used on the project, the rates in effect at the time the CM/GC contract becomes a public works contract are the applicable rates to be used for the duration of the project. (See OAR 839-025-0020 for more information.) Note that the applicable rates for purposes of compliance with the federal Davis-Bacon Act may be different than the applicable rates for purposes of compliance with Oregon's prevailing wage rate laws. The effective federal rates will be those as determined under 29 CFR 1.6.

If you have any questions regarding application of the state PWR law or the applicable rates to be paid on any project, contact the bureau's Prevailing Wage Coordinator in Portland at (971) 673-0839.

Brad Avakian
Commissioner
Bureau of Labor and Industries

TABLE OF CONTENTS

JANUARY 1, 2013

How to Look up a Rate/BOLI Offices.....	1
Public Works Bonds.....	2
PWR Survey Wage Rate Appeal Process.....	3
PWR Required Postings.....	4
Map of Prevailing Wage Rate Regions.....	5
 Occupations by Regions	
Region 1 - Clatsop, Columbia and Tillamook Counties.....	6-7
Region 2 - Clackamas, Multnomah and Washington Counties.....	8-9
Region 3 - Polk, Marion and Yamhill Counties.....	10-11
Region 4 - Benton, Lincoln and Linn Counties.....	12-13
Region 5 - Lane County.....	14-15
Region 6 - Douglas County.....	16-17
Region 7 - Coos and Curry Counties.....	18-19
Region 8 - Jackson and Josephine Counties.....	20-21
Region 9 - Hood River, Sherman and Wasco Counties.....	22-23
Region 10 - Crook, Deschutes and Jefferson Counties.....	24-25
Region 11 - Klamath and Lake Counties.....	26-27
Region 12 - Gilliam, Grant, Morrow, Umatilla and Wheeler Counties.....	28-29
Region 13 - Baker, Union and Wallowa Counties.....	30-31
Region 14 - Harney and Malheur Counties.....	32-33
 APPENDIX	 35-49
 List of Ineligible Contractors.....	 51-56
 Forms.....	 57

BOLI forms necessary to comply with ORS 279C.800 through ORS 279C.870 may be found in the back of this booklet. Contractors are encouraged to use and keep on file the forms provided as master copies for use on future prevailing wage rate projects.

All of the information in this booklet can be accessed and printed from the Internet at: www.oregon.gov/BOLI

Pursuant to ORS 279C.800 to ORS 279C.870, the prevailing wage rates contained in this booklet have been adopted for use on public works contracts in Oregon. Additional copies of this booklet are available at cost, plus postage.

HOW TO LOOK UP A RATE

1. When was the project first advertised for bid?

For purposes of compliance with Oregon's prevailing wage rate laws, the rates in effect at the time the bid specifications are first advertised are those that apply for the duration of the project. (See OAR 839-025-0020(6) for information about projects using a CM/GC.)

2. What type of work is being performed by the employee?

Using the booklet, [Definitions of Covered Occupations](#) find the definition that most closely matches the actual work being performed by the worker. If you have any questions about work classifications, contact BOLI at the number below.

3. Where is the work being performed – what region?

Find the occupation in the correct region pages associated with the county where the project construction is taking place.

4. Is there a rate listed next to the classification?

If so, use it. The prevailing wage rate is made up of an hourly base rate and an hourly fringe rate; it is the combination of these two amounts that must be paid to the worker.

5. If the book directs you to "See Appendix," go to the back of the book and use the rate listed in the Appendix pages.

It may include a group number and/or zone pay. Zone pay is added to the base rate.

6. Apprentices must be paid the full fringe rate in those regions where the appendix rate does not apply.

However, if the book directs you to "See Appendix," and the worker is registered in a bona fide apprenticeship program, **you may contact BOLI at (971) 673-0839** for the applicable hourly fringe rate.

7. If you still don't know CALL BOLI at (971) 673-0839.

For specific information or questions regarding the prevailing wage law, you may obtain a "Prevailing Wage Rate Laws" handbook by contacting the nearest Oregon Bureau of Labor and Industries office listed below. An order form is in the back of this booklet.

BOLI Office Locations

Eugene	1400 Executive Parkway, Suite 200 Eugene, OR 97401	(541) 686-7623
Portland	800 NE Oregon St., #1045 Portland, OR 97232	(971) 673-0761
Salem	3865 Wolverine St. NE, Bldg. E-1 Salem, OR 97305	(503) 378-3292

PUBLIC WORKS BONDS

EVERY CONTRACTOR AND SUBCONTRACTOR who works on public works projects subject to the prevailing wage rate (PWR) law is required to file a **\$30,000 "PUBLIC WORKS BOND"** with the Construction Contractor's Board (CCB). (ORS 279C.836) This includes flagging and landscaping companies, temporary employment agencies, and sometimes sole proprietors.

- This bond is to be **USED EXCLUSIVELY FOR UNPAID WAGES** determined to be due by the Bureau of Labor and Industries (BOLI).
- The bond **MUST** be filed **BEFORE STARTING WORK** on a prevailing wage rate project.
- The bond is in effect **CONTINUOUSLY** (do not have to have one per project).
- **BEFORE PERMITTING A SUBCONTRACTOR TO START WORK** on a public works project, **CONTRACTORS MUST VERIFY** their subcontractors have either filed the bond, or have elected not to file a public works bond due to a bona fide exemption.
- A public works bond is in addition to any other required bond the contractor or subcontractor is required to obtain.

Exemptions:

- Allowed for contractors that are certified disadvantaged, minority, women or emerging small business enterprises, for the first FOUR years of certification;
 - Exempt contractor must still file written verification of certification with the CCB, and give the CCB written notice that they elect not to file a bond.
- For projects with a total project cost of \$100,000 or less, a public works bond is not required. (Note this is the total project cost, not an individual contract amount.)
 - The Prime Contractor must give written notice to the public agency that they elect not to file a public works bond.
 - Subcontractors must give written notice to the prime contractor that they elect not to file a public works bond.
- Emergency projects, as defined in ORS 279A.010(f).

ORS 279C.830(3) and (4) require:

That the **specifications** for every contract for public works shall contain a provision stating that the contractor and every subcontractor must have a public works bond filed with the CCB before starting work on the project, unless otherwise exempt.

Every contract awarded by a contracting agency shall contain a provision requiring the contractor:

- To have a public works bond filed with the CCB before starting work on the project, unless otherwise exempt;
- To include in every subcontract a provision requiring the subcontractor to have a public works bond filed with the CCB before starting work on the project unless otherwise exempt.

PWR SURVEY WAGE RATE APPEAL PROCESS

- 1) Anyone wishing to challenge or appeal a survey rate determination should submit their request in writing to the commissioner.
- 2) The appeal should include:
 - a) a complete description of the “problem,” including the affected trade(s), and documentation or evidence (if available) supporting why the rate determination is incorrect
 - b) recommendations for how the rate could be more accurately determined.
- 3) The written appeal will be reviewed by the Wage and Hour Division which will recommend to the commissioner a course of action and proposed time frame for addressing the issue (such as a recommendation that further information be obtained, an investigation or study of the matter be conducted, a rate amendment or correction be issued, the next survey be modified, etc.).
- 4) The commissioner will review the division’s recommendation and either approve, disapprove or modify the recommendation. (The PWR Advisory Committee may be consulted in some matters as deemed appropriate by the commissioner.)
- 5) The requesting party will be notified of the commissioner's decision.

PWR REQUIRED POSTINGS

ALL CONTRACTORS AND SUBCONTRACTORS

PREVAILING WAGE RATES

Each and every contractor and subcontractor engaged in work on a public works must post the applicable prevailing wage rates for that project in a conspicuous place at the work site so workers have ready access to the information. ORS 279C.840(4); OAR 839-025-0033(1).

DETAILS OF FRINGE BENEFIT PROGRAMS

When a contractor or subcontractor provides for or contributes to a health and welfare plan or a pension plan, or both, for the contractor or subcontractor's employees who are working on a public works project, the details of all fringe benefit plans or programs must be posted on the work site. The posting must include a description of the plan or plans, information about how and where claims can be made and where to obtain more information. The notice must be posted in a conspicuous place at the work site in the same location as the prevailing wage rates (see above). ORS 279C.840(5); OAR 839-025-0033(2)

WORK SCHEDULE

Contractors and subcontractors must give workers the regular work schedule (days of the week and number of hours per day) in writing, before beginning work on the project. Contractors and subcontractors may provide the schedule at the time of hire, prior to starting work on the contract, or by posting the schedule in a location frequented by employees, along with the prevailing wage rate information and any fringe benefit information. If an employer fails to give written notice of the worker's schedule, the work schedule will be presumed to be a five-day schedule. The schedule may only be changed if the change is intended to be permanent and is not designed to evade the PWR overtime requirements. ORS 279C.540(2); OAR 839-025-0034.

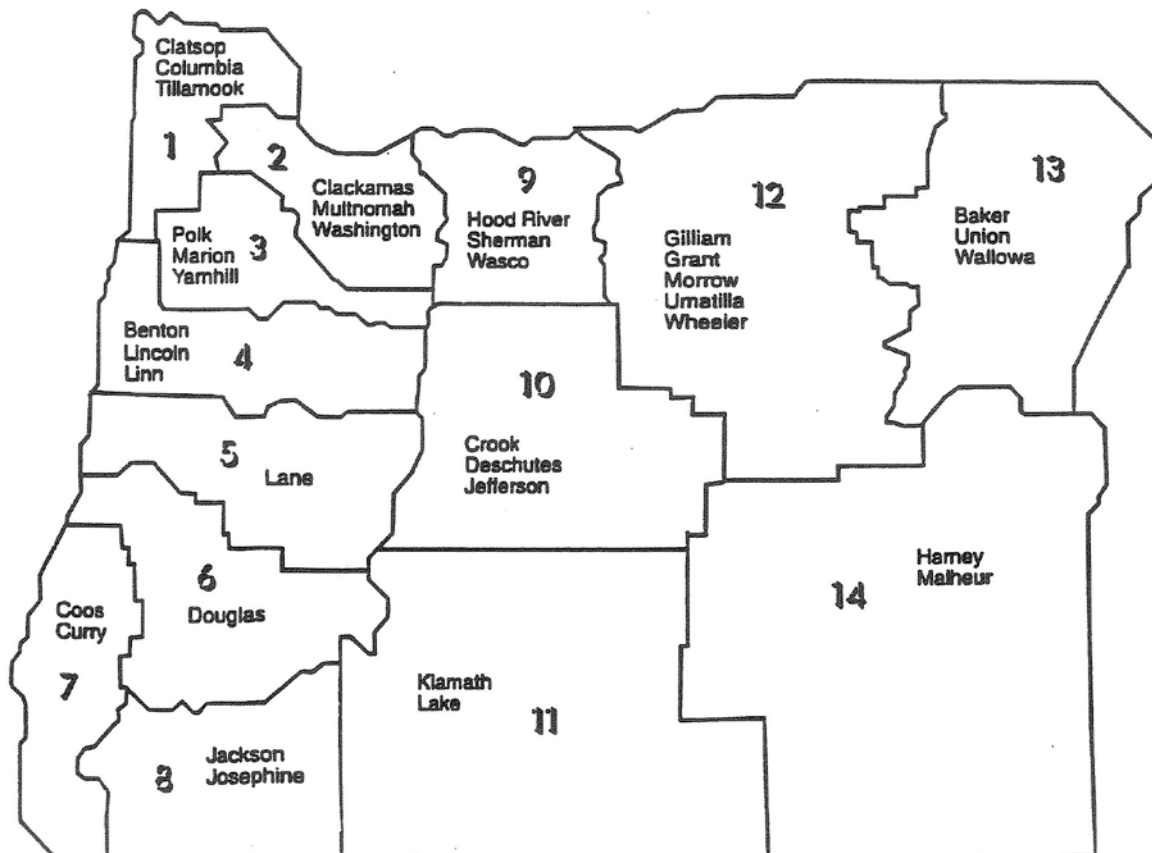
PREVAILING WAGE RATES

OCCUPATIONS

BY

REGIONS

PREVAILING WAGE RATE REGIONS



REGION #1
Clatsop, Columbia and Tillamook Counties

Using the booklet, [Definitions of Covered Occupations](#), find the definition that most closely matches the actual work being performed by the worker.

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Asbestos Worker/Insulator	See Appendix	See Appendix
Boilermaker	See Appendix	See Appendix
Bricklayer/Stonemason	See Appendix	See Appendix
Bridge and Highway Carpenter (See Carpenter Group 5)	See Appendix	See Appendix
Carpenter Group 1 & 2	See Appendix	See Appendix
Cement Mason	See Appendix	See Appendix
Diver	See Appendix	See Appendix
Divers' Tender	See Appendix	See Appendix
Dredger	See Appendix	See Appendix
Drywall, Lather, Acoustical Carpenter & Ceiling Installer	See Appendix	See Appendix
Drywall Taper (See Painter & Drywall Taper)	See Appendix	See Appendix
Electrician	See Appendix	See Appendix
Elevator Constructor, Installer and Mechanic	See Appendix	See Appendix
Fence Constructor (Non-metal)	\$23.44	\$9.10
Fence Erector (Metal)	\$20.22	\$4.30
Flagger	\$21.03	\$10.45
Glazier	See Appendix	See Appendix
Hazardous Materials Handler/Mechanic	\$17.49	\$3.87
Highway and Parking Striper	See Appendix	See Appendix
Ironworker	See Appendix	See Appendix
Laborer Group 1	\$24.25	\$10.01
Laborer Group 2	\$25.29	\$9.52
Laborer Group 3	\$22.35	\$11.30
Landscape Laborer/Technician	\$16.94	\$4.00
Limited Energy Electrician	\$26.51	\$8.63
Line Constructor	See Appendix	See Appendix
Marble Setter	See Appendix	See Appendix
Millwright Group 1 & 2 (See Carpenter Group 3 & 4)	See Appendix	See Appendix
Painter	\$21.86	\$6.72
Piledriver (See Carpenter Group 6)	See Appendix	See Appendix
Plasterer and Stucco Mason	\$25.27	\$13.61
Plumber/Pipefitter/Steamfitter	See Appendix	See Appendix
Power Equipment Operator Group 1	See Appendix	See Appendix
Power Equipment Operator Group 1A	See Appendix	See Appendix
Power Equipment Operator Group 1B	See Appendix	See Appendix
Power Equipment Operator Group 2	See Appendix	See Appendix
Power Equipment Operator Group 3	See Appendix	See Appendix
Power Equipment Operator Group 4	See Appendix	See Appendix
Power Equipment Operator Group 5	See Appendix	See Appendix
Power Equipment Operator Group 6	See Appendix	See Appendix

REGION # 1
Clatsop, Columbia and Tillamook Counties

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Roofer	See Appendix	See Appendix
Sheet Metal Worker	\$30.45	\$12.87
Soft Floor Layer	\$24.43	\$9.40
Sprinkler Fitter	See Appendix	See Appendix
Tender to Mason Trades (Brick and Stonemason, Mortar Mixer, Hod Carrier)	See Appendix	See Appendix
Tender to Plasterer and Stucco Mason	\$17.35	\$12.74
Testing, Adjusting, and Balancing (TAB) Technician	\$27.53	\$8.18
Tile Setter/Terrazzo Worker: Hard Tile Setter	\$26.38	\$10.55
Tile, Terrazzo, and Marble Finisher	See Appendix	See Appendix
Truck Driver	\$19.80	\$6.11

REGION #2
Clackamas, Multnomah and Washington Counties

Using the booklet, [Definitions of Covered Occupations](#), find the definition that most closely matches the actual work being performed by the worker.

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Asbestos Worker/Insulator	See Appendix	See Appendix
Boilermaker	\$30.97	\$16.16
Bricklayer/Stonemason	See Appendix	See Appendix
Bridge & Highway Carpenter (See Carpenter Group 5)	See Appendix	See Appendix
Carpenter Group 1 & 2	See Appendix	See Appendix
Cement Mason	See Appendix	See Appendix
Diver	See Appendix	See Appendix
Divers' Tender	See Appendix	See Appendix
Dredger	\$34.21	\$9.69
Drywall, Lather, Acoustical Carpenter & Ceiling Installer	See Appendix	See Appendix
Drywall Taper (See Painter & Drywall Taper)	See Appendix	See Appendix
Electrician	See Appendix	See Appendix
Elevator Constructor, Installer and Mechanic	See Appendix	See Appendix
Fence Constructor (Non-metal)	\$23.44	\$9.10
Fence Erector (Metal)	\$20.22	\$4.30
Flagger (See Laborer Group 3)	See Appendix	See Appendix
Glazier	See Appendix	See Appendix
Hazardous Materials Handler/Mechanic	\$17.49	\$3.87
Highway and Parking Striper	\$26.11	\$8.20
Ironworker	See Appendix	See Appendix
Laborer Group 1	See Appendix	See Appendix
Laborer Group 2	See Appendix	See Appendix
Laborer Group 3	See Appendix	See Appendix
Landscape Laborer/Technician	\$16.94	\$4.00
Limited Energy Electrician	See Appendix	See Appendix
Line Constructor	See Appendix	See Appendix
Marble Setter	See Appendix	See Appendix
Millwright Group 1 & 2	\$29.32	\$10.68
Painter	See Appendix	See Appendix
Piledriver (See Carpenter Group 6)	See Appendix	See Appendix
Plasterer and Stucco Mason	\$25.27	\$13.61
Plumber/Pipefitter/Steamfitter	See Appendix	See Appendix
Power Equipment Operator Group 1	See Appendix	See Appendix
Power Equipment Operator Group 1A	See Appendix	See Appendix
Power Equipment Operator Group 1B	See Appendix	See Appendix
Power Equipment Operator Group 2	See Appendix	See Appendix
Power Equipment Operator Group 3	See Appendix	See Appendix
Power Equipment Operator Group 4	See Appendix	See Appendix
Power Equipment Operator Group 5	See Appendix	See Appendix
Power Equipment Operator Group 6	See Appendix	See Appendix

REGION #2
Clackamas, Multnomah, and Washington Counties

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Roofer	\$22.87	\$7.42
Sheet Metal Worker	See Appendix	See Appendix
Soft Floor Layer	See Appendix	See Appendix
Sprinkler Fitter	See Appendix	See Appendix
Tenders to Mason Trades (Brick and Stonemason, Mortar Mixer, Hod Carrier)	See Appendix	See Appendix
Tender to Plasterer and Stucco Mason	\$17.35	\$12.74
Testing, Adjusting, and Balancing (TAB) Technician	\$27.53	\$8.18
Tile Setter/Terrazzo Worker: Hard Tile Setter	See Appendix	See Appendix
Tile, Terrazzo, and Marble Finisher	See Appendix	See Appendix
Truck Driver	\$19.80	\$6.11

REGION #3
Marion, Polk and Yamhill Counties

Using the booklet, [Definitions of Covered Occupations](#), find the definition that most closely matches the actual work being performed by the worker.

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Asbestos Worker/Insulator	See Appendix	See Appendix
Boilermaker	\$30.97	\$16.16
Bricklayer/Stonemason	See Appendix	See Appendix
Bridge and Highway Carpenter (See Carpenter Group 5)	See Appendix	See Appendix
Carpenter Group 1 & 2	See Appendix	See Appendix
Cement Mason	\$25.37	\$13.11
Diver	See Appendix	See Appendix
Divers' Tender	See Appendix	See Appendix
Dredger	See Appendix	See Appendix
Drywall, Lather, Acoustical Carpenter & Ceiling Installer	See Appendix	See Appendix
Drywall Taper (See Painter & Drywall Taper)	See Appendix	See Appendix
Electrician	See Appendix	See Appendix
Elevator Constructor, Installer and Mechanic	See Appendix	See Appendix
Fence Constructor (Non-metal)	\$23.44	\$9.10
Fence Erector (Metal)	\$20.22	\$4.30
Flagger (See Laborer Group 3 in Appendix)	See Appendix	See Appendix
Glazier	See Appendix	See Appendix
Hazardous Materials Handler/Mechanic	\$17.49	\$3.87
Highway and Parking Striper	\$26.11	\$8.20
Ironworker	See Appendix	See Appendix
Laborer Group 1	\$24.25	\$10.01
Laborer Group 2	\$25.29	\$9.52
Laborer Group 3	\$22.35	\$11.30
Landscape Laborer/Technician	\$16.94	\$4.00
Limited Energy Electrician	See Appendix	See Appendix
Line Constructor	See Appendix	See Appendix
Marble Setter	\$28.26	\$6.64
Millwright Group 1 & 2	\$29.32	\$10.68
Painter	See Appendix	See Appendix
Piledriver (See Carpenter Group 6)	See Appendix	See Appendix
Plasterer and Stucco Mason	See Appendix	See Appendix
Plumber/Pipefitter/Steamfitter	See Appendix	See Appendix
Power Equipment Operator Group 1	See Appendix	See Appendix
Power Equipment Operator Group 1A	See Appendix	See Appendix
Power Equipment Operator Group 1B	See Appendix	See Appendix
Power Equipment Operator Group 2	See Appendix	See Appendix
Power Equipment Operator Group 3	See Appendix	See Appendix
Power Equipment Operator Group 4	See Appendix	See Appendix
Power Equipment Operator Group 5	See Appendix	See Appendix
Power Equipment Operator Group 6	See Appendix	See Appendix

REGION #3
Marion, Polk and Yamhill Counties

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Roofer	See Appendix	See Appendix
Sheet Metal Worker	\$30.45	\$12.87
Soft Floor Layer	See Appendix	See Appendix
Sprinkler Fitter	See Appendix	See Appendix
Tender to Mason Trades (Brick and Stonemason, Mortar Mixer, Hod Carrier)	See Appendix	See Appendix
Tender to Plasterer and Stucco Mason	\$17.35	\$12.74
Testing, Adjusting, and Balancing (TAB) Technician	\$27.53	\$8.18
Tile Setter/Terrazzo Worker: Hard Tile Setter	\$26.38	\$10.55
Tile, Terrazzo, and Marble Finisher	See Appendix	See Appendix
Truck Driver	\$19.80	\$6.11

REGION #4
Benton, Lincoln and Linn Counties

Using the booklet, [Definitions of Covered Occupations](#), find the definition that most closely matches the actual work being performed by the worker.

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Asbestos Worker/Insulator	See Appendix	See Appendix
Boilermaker	See Appendix	See Appendix
Bricklayer/Stonemason	See Appendix	See Appendix
Bridge and Highway Carpenter	\$31.93	\$13.36
Carpenter Group 1 & 2	See Appendix	See Appendix
Cement Mason	See Appendix	See Appendix
Diver	See Appendix	See Appendix
Divers' Tender	See Appendix	See Appendix
Dredger	\$34.21	\$9.69
Drywall, Lather, Acoustical Carpenter & Ceiling Installer	See Appendix	See Appendix
Drywall Taper (See Painter & Drywall Taper)	See Appendix	See Appendix
Electrician	See Appendix	See Appendix
Elevator Constructor, Installer and Mechanic	See Appendix	See Appendix
Fence Constructor (Non-metal)	\$23.44	\$9.10
Fence Erector (Metal)	\$20.22	\$4.30
Flagger	\$21.03	\$10.45
Glazier	See Appendix	See Appendix
Hazardous Materials Handler/Mechanic	\$17.49	\$3.87
Highway and Parking Striper	\$26.11	\$8.20
Ironworker	See Appendix	See Appendix
Laborer Group 1	\$24.25	\$10.01
Laborer Group 2	\$25.29	\$9.52
Laborer Group 3	\$22.35	\$11.30
Landscape Laborer/Technician	\$16.94	\$4.00
Limited Energy Electrician	\$26.51	\$8.63
Line Constructor	See Appendix	See Appendix
Marble Setter	See Appendix	See Appendix
Millwright Group 1 & 2 (See Carpenter Group 3 & 4)	See Appendix	See Appendix
Painter	\$21.86	\$6.72
Piledriver (See Carpenter Group 6)	See Appendix	See Appendix
Plasterer and Stucco Mason	See Appendix	See Appendix
Plumber/Pipefitter/Steamfitter	See Appendix	See Appendix
Power Equipment Operator Group 1	See Appendix	See Appendix
Power Equipment Operator Group 1A	See Appendix	See Appendix
Power Equipment Operator Group 1B	See Appendix	See Appendix
Power Equipment Operator Group 2	See Appendix	See Appendix
Power Equipment Operator Group 3	See Appendix	See Appendix
Power Equipment Operator Group 4	See Appendix	See Appendix
Power Equipment Operator Group 5	See Appendix	See Appendix
Power Equipment Operator Group 6	See Appendix	See Appendix

REGION #4
Benton, Lincoln and Linn Counties

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Roofer	See Appendix	See Appendix
Sheet Metal Worker	See Appendix	See Appendix
Soft Floor Layer	See Appendix	See Appendix
Sprinkler Fitter	\$29.78	\$12.38
Tenders to Mason Trades (Brick and Stonemason, Mortar Mixer, Hod Carrier)	See Appendix	See Appendix
Tender to Plasterer and Stucco Mason	\$17.35	\$12.74
Testing, Adjusting, and Balancing (TAB) Technician	\$27.53	\$8.18
Tile Setter/Terrazzo Worker: Hard Tile Setter	\$26.38	\$10.55
Tile, Terrazzo, and Marble Finisher	See Appendix	See Appendix
Truck Driver	\$19.80	\$6.11

Using the booklet, [Definitions of Covered Occupations](#), find the definition that most closely matches the actual work being performed by the worker.

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Asbestos Worker/Insulator	See Appendix	See Appendix
Boilermaker	See Appendix	See Appendix
Bricklayer/Stonemason	See Appendix	See Appendix
Bridge and Highway Carpenter	\$31.93	\$13.36
Carpenter Group 1 & 2	See Appendix	See Appendix
Cement Mason	See Appendix	See Appendix
Diver	See Appendix	See Appendix
Divers' Tender	See Appendix	See Appendix
Dredger	See Appendix	See Appendix
Drywall, Lather, Acoustical Carpenter & Ceiling Installer	See Appendix	See Appendix
Drywall Taper (See Painter & Drywall Taper)	See Appendix	See Appendix
Electrician	See Appendix	See Appendix
Elevator Constructor, Installer and Mechanic	See Appendix	See Appendix
Fence Constructor (Non-metal)	\$23.44	\$9.10
Fence Erector (Metal)	\$20.22	\$4.30
Flagger (See Laborer Group 3)	See Appendix	See Appendix
Glazier	See Appendix	See Appendix
Hazardous Materials Handler/Mechanic	\$17.49	\$3.87
Highway and Parking Striper	\$26.11	\$8.20
Ironworker	See Appendix	See Appendix
Laborer Group 1	See Appendix	See Appendix
Laborer Group 2	See Appendix	See Appendix
Laborer Group 3	See Appendix	See Appendix
Landscape Laborer/Technician	\$16.94	\$4.00
Limited Energy Electrician	\$26.51	\$8.63
Line Constructor	See Appendix	See Appendix
Marble Setter	See Appendix	See Appendix
Millwright Group 1 & 2	\$29.32	\$10.68
Painter	\$21.86	\$6.72
Piledriver	\$33.46	\$13.91
Plasterer and Stucco Mason	\$25.27	\$13.61
Plumber/Pipefitter/Steamfitter	See Appendix	See Appendix
Power Equipment Operator Group 1	See Appendix	See Appendix
Power Equipment Operator Group 1A	See Appendix	See Appendix
Power Equipment Operator Group 1B	See Appendix	See Appendix
Power Equipment Operator Group 2	See Appendix	See Appendix
Power Equipment Operator Group 3	See Appendix	See Appendix
Power Equipment Operator Group 4	See Appendix	See Appendix
Power Equipment Operator Group 5	See Appendix	See Appendix
Power Equipment Operator Group 6	See Appendix	See Appendix

REGION #5
Lane County

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Roofer	\$22.87	\$7.42
Sheet Metal Worker	\$30.45	\$12.87
Soft Floor Layer	\$24.43	\$9.40
Sprinkler Fitter	\$29.78	\$12.38
Tender to Mason Trades (Brick and Stonemason, Mortar Mixer, Hod Carrier)	See Appendix	See Appendix
Tender to Plasterer and Stucco Mason	\$17.35	\$12.74
Testing, Adjusting, and Balancing (TAB) Technician	\$27.53	\$8.18
Tile Setter/Terrazzo Worker: Hard Tile Setter	\$26.38	\$10.55
Tile, Terrazzo, and Marble Finisher	See Appendix	See Appendix
Truck Driver	\$19.80	\$6.11

Using the booklet, [Definitions of Covered Occupations](#), find the definition that most closely matches the actual work being performed by the worker.

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Asbestos Worker/Insulator	See Appendix	See Appendix
Boilermaker	See Appendix	See Appendix
Bricklayer/Stonemason	See Appendix	See Appendix
Bridge and Highway Carpenter	\$31.93	\$13.36
Carpenter Group 1 & 2	\$28.45	\$10.48
Cement Mason	\$25.37	\$13.11
Diver	See Appendix	See Appendix
Divers' Tender	See Appendix	See Appendix
Dredger	See Appendix	See Appendix
Drywall, Lather, Acoustical Carpenter & Ceiling Installer	See Appendix	See Appendix
Drywall Taper (See Painter & Drywall Taper)	See Appendix	See Appendix
Electrician	\$34.81	\$13.51
Elevator Constructor, Installer and Mechanic	See Appendix	See Appendix
Fence Constructor (Non-metal)	\$23.44	\$9.10
Fence Erector (Metal)	\$20.22	\$4.30
Flagger (See Laborer Group 3)	See Appendix	See Appendix
Glazier	\$28.75	\$12.35
Hazardous Material Handler/Mechanic	\$17.49	\$3.87
Highway and Parking Striper	See Appendix	See Appendix
Ironworker	See Appendix	See Appendix
Laborer Group 1	See Appendix	See Appendix
Laborer Group 2	See Appendix	See Appendix
Laborer Group 3	See Appendix	See Appendix
Landscape Laborer/Technician	\$16.94	\$4.00
Limited Energy Electrician	\$26.51	\$8.63
Line Constructor	See Appendix	See Appendix
Marble Setter	See Appendix	See Appendix
Millwright Group 1 & 2	\$29.32	\$10.68
Painter	See Appendix	See Appendix
Piledriver (See Carpenter Group 6)	See Appendix	See Appendix
Plasterer and Stucco Mason	See Appendix	See Appendix
Plumber/Pipefitter/Steamfitter	\$36.36	\$16.47
Power Equipment Operator Group 1	See Appendix	See Appendix
Power Equipment Operator Group 1A	See Appendix	See Appendix
Power Equipment Operator Group 1B	See Appendix	See Appendix
Power Equipment Operator Group 2	See Appendix	See Appendix
Power Equipment Operator Group 3	See Appendix	See Appendix
Power Equipment Operator Group 4	See Appendix	See Appendix
Power Equipment Operator Group 5	See Appendix	See Appendix
Power Equipment Operator Group 6	See Appendix	See Appendix

REGION #6
Douglas County

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Roofer	See Appendix	See Appendix
Sheet Metal Worker	See Appendix	See Appendix
Soft Floor Layer	\$24.43	\$9.40
Sprinkler Fitter	See Appendix	See Appendix
Tender to Mason Trades (Brick and Stonemason, Mortar Mixer, Hod Carrier)	\$25.45	\$11.39
Tender to Plasterer and Stucco Mason	See Appendix	See Appendix
Testing, Adjusting, and Balancing (TAB) Technician (See Sheet Metal Worker or Plumber/Pipefitter/Steamfitter)	See Appendix	See Appendix
Tile Setter/Terrazzo Worker: Hard Tile Setter	\$26.38	\$10.55
Tile, Terrazzo, and Marble Finisher	See Appendix	See Appendix
Truck Driver	\$19.80	\$6.11

REGION #7
Coos and Curry Counties

Using the booklet, [Definitions of Covered Occupations](#), find the definition that most closely matches the actual work being performed by the worker.

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Asbestos Worker/Insulator	See Appendix	See Appendix
Boilermaker	See Appendix	See Appendix
Bricklayer/Stonemason	See Appendix	See Appendix
Bridge and Highway Carpenter	\$31.93	\$13.36
Carpenter Group 1 & 2	See Appendix	See Appendix
Cement Mason	\$25.37	\$13.11
Diver	See Appendix	See Appendix
Divers' Tender	See Appendix	See Appendix
Dredger	See Appendix	See Appendix
Drywall, Lather, Acoustical Carpenter & Ceiling Installer	See Appendix	See Appendix
Drywall Taper (See Painter & Drywall Taper)	See Appendix	See Appendix
Electrician	See Appendix	See Appendix
Elevator Constructor, Installer and Mechanic	See Appendix	See Appendix
Fence Constructor (Non-metal)	\$23.44	\$9.10
Fence Erector (Metal)	\$20.22	\$4.30
Flagger (See Laborer Group 3)	See Appendix	See Appendix
Glazier	See Appendix	See Appendix
Hazardous Materials Handler/Mechanic	\$17.49	\$3.87
Highway and Parking Striper	See Appendix	See Appendix
Ironworker	See Appendix	See Appendix
Laborer Group 1	See Appendix	See Appendix
Laborer Group 2	See Appendix	See Appendix
Laborer Group 3	See Appendix	See Appendix
Landscape Laborer/Technician	\$16.94	\$4.00
Limited Energy Electrician	\$26.51	\$8.63
Line Constructor	See Appendix	See Appendix
Marble Setter	See Appendix	See Appendix
Millwright Group 1 & 2	\$29.32	\$10.68
Painter	\$21.86	\$6.72
Piledriver (See Carpenter Group 6)	See Appendix	See Appendix
Plasterer and Stucco Mason	See Appendix	See Appendix
Plumber/Pipefitter/Steamfitter	See Appendix	See Appendix
Power Equipment Operator Group 1	See Appendix	See Appendix
Power Equipment Operator Group 1A	See Appendix	See Appendix
Power Equipment Operator Group 1B	See Appendix	See Appendix
Power Equipment Operator Group 2	See Appendix	See Appendix
Power Equipment Operator Group 3	See Appendix	See Appendix
Power Equipment Operator Group 4	See Appendix	See Appendix
Power Equipment Operator Group 5	See Appendix	See Appendix
Power Equipment Operator Group 6	See Appendix	See Appendix

REGION #7
Coos and Curry Counties

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Roofer	\$22.87	\$7.42
Sheet Metal Worker	See Appendix	See Appendix
Soft Floor Layer	See Appendix	See Appendix
Sprinkler Fitter	\$29.78	\$12.38
Tender to Mason Trades (Brick and Stonemason, Mortar Mixer, Hod Carrier)	\$25.45	\$11.39
Tender to Plasterer and Stucco Mason	See Appendix	See Appendix
Testing, Adjusting, and Balancing (TAB) Technician	\$27.53	\$8.18
Tile Setter/Terrazzo Worker: Hard Tile Setter	\$26.38	\$10.55
Tile, Terrazzo, and Marble Finisher	See Appendix	See Appendix
Truck Driver	\$19.80	\$6.11

REGION #8
Jackson and Josephine Counties

Using the booklet, [Definitions of Covered Occupations](#), find the definition that most closely matches the actual work being performed by the worker.

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Asbestos Worker/Insulator	See Appendix	See Appendix
Boilermaker	See Appendix	See Appendix
Bricklayer/Stonemason	\$32.33	\$14.78
Bridge and Highway Carpenter	\$31.93	\$13.36
Carpenter Group 1 & 2	\$28.45	\$10.48
Cement Mason	\$25.37	\$13.11
Diver	See Appendix	See Appendix
Divers' Tender	See Appendix	See Appendix
Dredger	See Appendix	See Appendix
Drywall, Lather, Acoustical Carpenter & Ceiling Installer	\$30.03	\$14.62
Drywall Taper	\$28.67	\$13.41
Electrician	See Appendix	See Appendix
Elevator Constructor, Installer and Mechanic	See Appendix	See Appendix
Fence Constructor (Non-metal)	\$23.44	\$9.10
Fence Erector (Metal)	\$20.22	\$4.30
Flagger	\$21.03	\$10.45
Glazier	\$28.75	\$12.35
Hazardous Materials Handler/Mechanic	\$17.49	\$3.87
Highway and Parking Striper	\$26.11	\$8.20
Ironworker	See Appendix	See Appendix
Laborer Group 1	\$24.25	\$10.01
Laborer Group 2	\$25.29	\$9.52
Laborer Group 3	\$22.35	\$11.30
Landscape Laborer/Technician	\$16.94	\$4.00
Limited Energy Electrician	\$26.51	\$8.63
Line Constructor	See Appendix	See Appendix
Marble Setter	See Appendix	See Appendix
Millwright Group 1 & 2	\$29.32	\$10.68
Painter	\$21.86	\$6.72
Piledriver (See Carpenter Group 6)	See Appendix	See Appendix
Plasterer and Stucco Mason	\$25.27	\$13.61
Plumber/Pipefitter/Steamfitter	See Appendix	See Appendix
Power Equipment Operator Group 1	See Appendix	See Appendix
Power Equipment Operator Group 1A	See Appendix	See Appendix
Power Equipment Operator Group 1B	See Appendix	See Appendix
Power Equipment Operator Group 2	See Appendix	See Appendix
Power Equipment Operator Group 3	See Appendix	See Appendix
Power Equipment Operator Group 4	See Appendix	See Appendix
Power Equipment Operator Group 5	See Appendix	See Appendix
Power Equipment Operator Group 6	See Appendix	See Appendix

REGION #8
Jackson and Josephine Counties

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Roofer	\$22.87	\$7.42
Sheet Metal Worker	\$30.45	\$12.87
Soft Floor Layer	\$24.43	\$9.40
Sprinkler Fitter	\$29.78	\$12.38
Tender to Mason Trades (Brick and Stonemason, Mortar Mixer, Hod Carrier)	\$25.45	\$11.39
Tender to Plasterer and Stucco Mason	\$17.35	\$12.74
Testing, Adjusting, and Balancing (TAB) Technician (See Sheet Metal Worker or Plumber/Pipefitter/Steamfitter)	See Appendix	See Appendix
Tile Setter/Terrazzo Worker: Hard Tile Setter	\$26.38	\$10.55
Tile, Terrazzo, and Marble Finisher	See Appendix	See Appendix
Truck Driver	\$19.80	\$6.11

Using the booklet, [Definitions of Covered Occupations](#), find the definition that most closely matches the actual work being performed by the worker.

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Asbestos Worker/Insulator	See Appendix	See Appendix
Boilermaker	See Appendix	See Appendix
Bricklayer/Stonemason	See Appendix	See Appendix
Bridge and Highway Carpenter (See Carpenter Group 5)	See Appendix	See Appendix
Carpenter Group 1 & 2	\$28.45	\$10.48
Cement Mason	\$25.37	\$13.11
Diver	See Appendix	See Appendix
Divers' Tender	See Appendix	See Appendix
Dredger	See Appendix	See Appendix
Drywall, Lather, Acoustical Carpenter & Ceiling Installer	\$30.03	\$14.62
Drywall Taper	\$28.67	\$13.41
Electrician	See Appendix	See Appendix
Elevator Constructor, Installer and Mechanic	See Appendix	See Appendix
Fence Constructor (Non-metal)	\$23.44	\$9.10
Fence Erector (Metal)	\$20.22	\$4.30
Flagger (See Laborer Group 3)	See Appendix	See Appendix
Glazier	\$28.75	\$12.35
Hazardous Materials Handler/Mechanic	\$17.49	\$3.87
Highway and Parking Striper	\$26.11	\$8.20
Ironworker	See Appendix	See Appendix
Laborer Group 1	See Appendix	See Appendix
Laborer Group 2	See Appendix	See Appendix
Laborer Group 3	See Appendix	See Appendix
Landscape Laborer/Technician	\$16.94	\$4.00
Limited Energy Electrician	See Appendix	See Appendix
Line Constructor	See Appendix	See Appendix
Marble Setter	See Appendix	See Appendix
Millwright Group 1 & 2 (See Carpenter Group 3 & 4)	See Appendix	See Appendix
Painter	\$21.86	\$6.72
Piledriver	\$33.46	\$13.91
Plasterer and Stucco Mason	See Appendix	See Appendix
Plumber/Pipefitter/Steamfitter	See Appendix	See Appendix
Power Equipment Operator Group 1	See Appendix	See Appendix
Power Equipment Operator Group 1A	See Appendix	See Appendix
Power Equipment Operator Group 1B	See Appendix	See Appendix
Power Equipment Operator Group 2	See Appendix	See Appendix
Power Equipment Operator Group 3	See Appendix	See Appendix
Power Equipment Operator Group 4	See Appendix	See Appendix
Power Equipment Operator Group 5	See Appendix	See Appendix
Power Equipment Operator Group 6	See Appendix	See Appendix

REGION #9
Hood River, Sherman and Wasco Counties

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Roofer	\$22.87	\$7.42
Sheet Metal Worker	\$30.45	\$12.87
Soft Floor Layer	\$24.43	\$9.40
Sprinkler Fitter	See Appendix	See Appendix
Tender to Mason Trades (Brick and Stonemason, Mortar Mixer, Hod Carrier)	\$25.45	\$11.39
Tender to Plasterer and Stucco Mason	\$17.35	\$12.74
Testing, Adjusting, and Balancing (TAB) Technician (See Sheet Metal Worker or Plumber/Pipefitter/Steamfitter)	See Appendix	See Appendix
Tile Setter/Terrazzo Worker: Hard Tile Setter	See Appendix	See Appendix
Tile, Terrazzo, and Marble Finisher	See Appendix	See Appendix
Truck Driver	\$19.80	\$6.11

REGION #10
Crook, Deschutes and Jefferson Counties

Using the booklet, [Definitions of Covered Occupations](#), find the definition that most closely matches the actual work being performed by the worker.

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Asbestos Worker/Insulator	See Appendix	See Appendix
Boilermaker	See Appendix	See Appendix
Bricklayer/Stonemason	See Appendix	See Appendix
Bridge and Highway Carpenter (See Carpenter Group 5)	See Appendix	See Appendix
Carpenter Group 1 & 2	\$28.45	\$10.48
Cement Mason	\$25.37	\$13.11
Diver	See Appendix	See Appendix
Divers' Tender	See Appendix	See Appendix
Dredger	See Appendix	See Appendix
Drywall, Lather, Acoustical Carpenter & Ceiling Installer	See Appendix	See Appendix
Drywall Taper	\$28.67	\$13.41
Electrician	See Appendix	See Appendix
Elevator Constructor, Installer and Mechanic	See Appendix	See Appendix
Fence Constructor (Non-metal)	\$23.44	\$9.10
Fence Erector (Metal)	\$20.22	\$4.30
Flagger	\$21.03	\$10.45
Glazier	\$28.75	\$12.35
Hazardous Materials Handler/Mechanic	\$17.49	\$3.87
Highway and Parking Striper	\$26.11	\$8.20
Ironworker	See Appendix	See Appendix
Laborer Group 1	\$24.25	\$10.01
Laborer Group 2	\$25.29	\$9.52
Laborer Group 3	\$22.35	\$11.30
Landscape Laborer/Technician	\$16.94	\$4.00
Limited Energy Electrician	\$26.51	\$8.63
Line Constructor	See Appendix	See Appendix
Marble Setter	\$28.26	\$6.64
Millwright Group 1 & 2 (See Carpenter Group 3 & 4)	See Appendix	See Appendix
Painter	\$21.86	\$6.72
Piledriver	\$33.46	\$13.91
Plasterer and Stucco Mason	\$25.27	\$13.61
Plumber/Pipefitter/Steamfitter	See Appendix	See Appendix
Power Equipment Operator Group 1	See Appendix	See Appendix
Power Equipment Operator Group 1A	See Appendix	See Appendix
Power Equipment Operator Group 1B	See Appendix	See Appendix
Power Equipment Operator Group 2	See Appendix	See Appendix
Power Equipment Operator Group 3	See Appendix	See Appendix
Power Equipment Operator Group 4	See Appendix	See Appendix
Power Equipment Operator Group 5	See Appendix	See Appendix
Power Equipment Operator Group 6	See Appendix	See Appendix

REGION #10
Crook, Deschutes and Jefferson Counties

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Roofer	\$22.87	\$7.42
Sheet Metal Worker	\$30.45	\$12.87
Soft Floor Layer	See Appendix	See Appendix
Sprinkler Fitter	\$29.78	\$12.38
Tender to Mason Trades (Brick and Stonemason, Mortar Mixer, Hod Carrier)	See Appendix	See Appendix
Tender to Plasterer and Stucco Mason	\$17.35	\$12.74
Testing, Adjusting, and Balancing (TAB) Technician (See Sheet Metal Worker or Plumber/Pipefitter/Steamfitter)	See Appendix	See Appendix
Tile Setter/Terrazzo Worker: Hard Tile Setter	\$26.38	\$10.55
Tile, Terrazzo, and Marble Finisher	See Appendix	See Appendix
Truck Driver	\$19.80	\$6.11

REGION #11
Klamath and Lake Counties

Using the booklet, [Definitions of Covered Occupations](#), find the definition that most closely matches the actual work being performed by the worker.

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Asbestos Worker/Insulator	See Appendix	See Appendix
Boilermaker	See Appendix	See Appendix
Bricklayer/Stonemason	See Appendix	See Appendix
Bridge and Highway Carpenter	\$31.93	\$13.36
Carpenter Group 1 & 2	\$28.45	\$10.48
Cement Mason	\$25.37	\$13.11
Diver	See Appendix	See Appendix
Divers' Tender	See Appendix	See Appendix
Dredger	See Appendix	See Appendix
Drywall, Lather, Acoustical Carpenter & Ceiling Installer	See Appendix	See Appendix
Drywall Taper	\$28.67	\$13.41
Electrician	See Appendix	See Appendix
Elevator Constructor, Installer and Mechanic	See Appendix	See Appendix
Fence Constructors (Non-metal)	\$23.44	\$9.10
Fence Erector (Metal)	\$20.22	\$4.30
Flagger (See Laborer Group 3)	See Appendix	See Appendix
Glazier	\$28.75	\$12.35
Hazardous Materials Handler/Mechanic	\$17.49	\$3.87
Highway and Parking Striper	See Appendix	See Appendix
Ironworker	See Appendix	See Appendix
Laborer Group 1	See Appendix	See Appendix
Laborer Group 2	See Appendix	See Appendix
Laborer Group 3	See Appendix	See Appendix
Landscape Laborer/Technician	\$16.94	\$4.00
Limited Energy Electrician	See Appendix	See Appendix
Line Constructor	See Appendix	See Appendix
Marble Setter	See Appendix	See Appendix
Millwright Group 1 & 2 (See Carpenter Group 3 & 4)	See Appendix	See Appendix
Painter	\$21.86	\$6.72
Piledriver	\$33.46	\$13.91
Plasterer and Stucco Mason	\$25.27	\$13.61
Plumber/Pipefitter/Steamfitter	\$36.36	\$16.47
Power Equipment Operator Group 1	See Appendix	See Appendix
Power Equipment Operator Group 1A	See Appendix	See Appendix
Power Equipment Operator Group 1B	See Appendix	See Appendix
Power Equipment Operator Group 2	See Appendix	See Appendix
Power Equipment Operator Group 3	See Appendix	See Appendix
Power Equipment Operator Group 4	See Appendix	See Appendix
Power Equipment Operator Group 5	See Appendix	See Appendix
Power Equipment Operator Group 6	See Appendix	See Appendix

REGION #11
Klamath and Lake Counties

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Roofer	\$22.87	\$7.42
Sheet Metal Worker	\$30.45	\$12.87
Soft Floor Layer	\$24.43	\$9.40
Sprinkler Fitter	\$29.78	\$12.38
Tender to Mason Trades (Brick and Stonemason, Mortar Mixer, Hod Carrier)	See Appendix	See Appendix
Tender to Plasterer and Stucco Mason	\$17.35	\$12.74
Testing, Adjusting, and Balancing (TAB) Technician	\$27.53	\$8.18
Tile Setter/Terrazzo Worker: Hard Tile Setter	\$26.38	\$10.55
Tile, Terrazzo, and Marble Finisher	See Appendix	See Appendix
Truck Driver	\$19.80	\$6.11

REGION #12

Gilliam, Grant, Morrow, Umatilla and Wheeler Counties

Using the booklet, [Definitions of Covered Occupations](#), find the definition that most closely matches the actual work being performed by the worker.

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Asbestos Worker/Insulator	See Appendix	See Appendix
Boilermaker	See Appendix	See Appendix
Bricklayer/Stonemason	See Appendix	See Appendix
Bridge and Highway Carpenter (See Carpenter Group 5)	See Appendix	See Appendix
Carpenter Group 1 & 2	See Appendix	See Appendix
Cement Mason	\$25.37	\$13.11
Diver	See Appendix	See Appendix
Divers' Tender	See Appendix	See Appendix
Dredger	See Appendix	See Appendix
Drywall, Lather, Acoustical Carpenter & Ceiling Installer	See Appendix	See Appendix
Drywall Taper (See Painter & Drywall Taper)	See Appendix	See Appendix
Electrician	See Appendix	See Appendix
Elevator Constructor, Installer and Mechanic	See Appendix	See Appendix
Fence Constructor (Non-metal)	\$23.44	\$9.10
Fence Erector (Metal)	\$20.22	\$4.30
Flagger (See Laborer Group 3)	See Appendix	See Appendix
Glazier	See Appendix	See Appendix
Hazardous Materials Handler/Mechanic	\$17.49	\$3.87
Highway and Parking Striper	See Appendix	See Appendix
Ironworker	See Appendix	See Appendix
Laborer Group 1	See Appendix	See Appendix
Laborer Group 2	See Appendix	See Appendix
Laborer Group 3	See Appendix	See Appendix
Landscape Laborer/Technician	\$16.94	\$4.00
Limited Energy Electrician	\$26.51	\$8.63
Line Constructor	See Appendix	See Appendix
Marble Setter	See Appendix	See Appendix
Millwright Group 1 & 2 (See Carpenter Group 3 & 4)	See Appendix	See Appendix
Painter	See Appendix	See Appendix
Piledriver (See Carpenter Group 6)	See Appendix	See Appendix
Plasterer and Stucco Mason	\$25.27	\$13.61
Plumber/Pipefitter/Steamfitter	See Appendix	See Appendix
Power Equipment Operator Group 1	See Appendix	See Appendix
Power Equipment Operator Group 1A	See Appendix	See Appendix
Power Equipment Operator Group 1B	See Appendix	See Appendix
Power Equipment Operator Group 2	See Appendix	See Appendix
Power Equipment Operator Group 3	See Appendix	See Appendix
Power Equipment Operator Group 4	See Appendix	See Appendix
Power Equipment Operator Group 5	See Appendix	See Appendix
Power Equipment Operator Group 6	See Appendix	See Appendix

REGION #12
 Gilliam, Grant, Morrow, Umatilla and Wheeler Counties

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Roofer	\$22.87	\$7.42
Sheet Metal Worker	See Appendix	See Appendix
Soft Floor Layer	\$24.43	\$9.40
Sprinkler Fitter	\$29.78	\$12.38
Tenders to Mason Trades (Brick and Stonemason, Mortar Mixer, Hod Carrier)	\$25.45	\$11.39
Tender to Plasterer and Stucco Mason	\$17.35	\$12.74
Testing, Adjusting, and Balancing (TAB) Technician (See Sheet Metal Worker or Plumber/Pipefitter/Steamfitter)	See Appendix	See Appendix
Tile Setter/Terrazzo Worker: Hard Tile Setter	\$26.38	\$10.55
Tile, Terrazzo, and Marble Finisher	See Appendix	See Appendix
Truck Driver	\$19.80	\$6.11

REGION #13
Baker, Union and Wallowa Counties

Using the booklet, [Definitions of Covered Occupations](#), find the definition that most closely matches the actual work being performed by the worker.

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Asbestos Worker/Insulator	See Appendix	See Appendix
Boilermaker	See Appendix	See Appendix
Bricklayer/Stonemason	See Appendix	See Appendix
Bridge and Highway Carpenter	\$31.93	\$13.36
Carpenter Group 1 & 2	\$28.45	\$10.48
Cement Mason	\$25.37	\$13.11
Diver	See Appendix	See Appendix
Divers' Tender	See Appendix	See Appendix
Dredger	See Appendix	See Appendix
Drywall, Lather, Acoustical Carpenter & Ceiling Installer	See Appendix	See Appendix
Drywall Taper	\$28.67	\$13.41
Electrician	\$34.81	\$13.51
Elevator Constructor, Installer and Mechanic	See Appendix	See Appendix
Fence Constructor (Non-metal)	\$23.44	\$9.10
Fence Erector (Metal)	\$20.22	\$4.30
Flagger	\$21.03	\$10.45
Glazier	See Appendix	See Appendix
Hazardous Materials Handler/Mechanic	\$17.49	\$3.87
Highway and Parking Striper	\$26.11	\$8.20
Ironworker	See Appendix	See Appendix
Laborer Group 1	\$24.25	\$10.01
Laborer Group 2	\$25.29	\$9.52
Laborer Group 3	\$22.35	\$11.30
Landscape Laborer/Technician	\$16.94	\$4.00
Limited Energy Electrician	\$26.51	\$8.63
Line Constructor	\$26.36	\$4.89
Marble Setter	See Appendix	See Appendix
Millwright Group 1 & 2	\$29.32	\$10.68
Painter	\$21.86	\$6.72
Piledriver	\$33.46	\$13.91
Plasterer and Stucco Mason	\$25.27	\$13.61
Plumber/Pipefitter/Steamfitter	\$36.36	\$16.47
Power Equipment Operator Group 1	See Appendix	See Appendix
Power Equipment Operator Group 1A	See Appendix	See Appendix
Power Equipment Operator Group 1B	See Appendix	See Appendix
Power Equipment Operator Group 2	See Appendix	See Appendix
Power Equipment Operator Group 3	See Appendix	See Appendix
Power Equipment Operator Group 4	See Appendix	See Appendix
Power Equipment Operator Group 5	See Appendix	See Appendix
Power Equipment Operator Group 6	See Appendix	See Appendix

REGION #13
 Baker, Union and Wallowa Counties

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Roofer	\$22.87	\$7.42
Sheet Metal Worker	\$30.45	\$12.87
Soft Floor Layer	See Appendix	See Appendix
Sprinkler Fitter	\$29.78	\$12.38
Tenders to Mason Trades (Brick and Stonemason, Mortar Mixer, Hod Carrier)	\$25.45	\$11.39
Tender to Plasterer and Stucco Mason	\$17.35	\$12.74
Testing, Adjusting, and Balancing (TAB) Technician	\$27.53	\$8.18
Tile Setter/Terrazzo Worker: Hard Tile Setter	\$26.38	\$10.55
Tile, Terrazzo, and Marble Finisher	See Appendix	See Appendix
Truck Driver	\$19.80	\$6.11

REGION #14
Harney and Malheur Counties

Using the booklet, [Definitions of Covered Occupations](#), find the definition that most closely matches the actual work being performed by the worker.

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Asbestos Worker/Insulator	See Appendix	See Appendix
Boilermaker	See Appendix	See Appendix
Bricklayer/Stonemason	See Appendix	See Appendix
Bridge and Highway Carpenter (See Carpenter Group 5)	See Appendix	See Appendix
Carpenter Group 1 & 2	\$28.45	\$10.48
Cement Mason	\$25.37	\$13.11
Diver	See Appendix	See Appendix
Divers' Tender	See Appendix	See Appendix
Dredger	See Appendix	See Appendix
Drywall, Lather, Acoustical Carpenter & Ceiling Installer	\$30.03	\$14.62
Drywall Taper	\$28.67	\$13.41
Electrician	\$34.81	\$13.51
Elevator Constructor, Installer and Mechanic	See Appendix	See Appendix
Fence Constructor (Non-metal)	\$23.44	\$9.10
Fence Erector (Metal)	\$20.22	\$4.30
Flagger	\$21.03	\$10.45
Glazier	\$28.75	\$12.35
Hazardous Materials Handler/Mechanic	\$17.49	\$3.87
Highway and Parking Striper	\$26.11	\$8.20
Ironworker	\$30.70	\$15.56
Laborer Group 1	\$24.25	\$10.01
Laborer Group 2	\$25.29	\$9.52
Laborer Group 3	\$22.35	\$11.30
Landscape Laborer/Technician	\$16.94	\$4.00
Limited Energy Electrician	See Appendix	See Appendix
Line Constructor	\$26.36	\$4.89
Marble Setter	See Appendix	See Appendix
Millwright Group 1 & 2	\$29.32	\$10.68
Painter	\$21.86	\$6.72
Piledriver	\$33.46	\$13.91
Plasterer and Stucco Mason	\$25.27	\$13.61
Plumber/Pipefitter/Steamfitter	\$36.36	\$16.47
Power Equipment Operator Group 1	\$33.56	\$10.10
Power Equipment Operator Group 1A	\$37.31	\$11.60
Power Equipment Operator Group 1B	\$34.65	\$17.50
Power Equipment Operator Group 2	\$31.67	\$10.06
Power Equipment Operator Group 3	\$30.87	\$9.64
Power Equipment Operator Group 4	\$30.02	\$8.79
Power Equipment Operator Group 5	\$27.67	\$8.62
Power Equipment Operator Group 6	\$26.30	\$8.93

REGION #14
Harney and Malheur Counties

OCCUPATION	BASIC HOURLY RATE	FRINGE RATE
Roofer	\$22.87	\$7.42
Sheet Metal Worker	\$30.45	\$12.87
Soft Floor Layer	\$24.43	\$9.40
Sprinkler Fitter	See Appendix	See Appendix
Tenders to Mason Trades (Brick and Stonemason, Mortar Mixer, Hod Carrier)	\$25.45	\$11.39
Tender to Plasterer and Stucco Mason	\$17.35	\$12.74
Testing, Adjusting, and Balancing (TAB) Technician	\$27.53	\$8.18
Tile Setter/Terrazzo Worker: Hard Tile Setter	\$26.38	\$10.55
Tile, Terrazzo, and Marble Finisher	See Appendix	See Appendix
Truck Driver	\$19.80	\$6.11

APPENDIX

JANUARY 1, 2013

Collectively Bargained Rates

(To be used only when referred to in the Regions pages 6-33)

JANUARY 1, 2013 APPENDIX

The Appendix rates are Collectively Bargained Rates to be used ONLY for Regions/Trades specified in pages 6 through 33. Refer to pages 6 through 33 BEFORE using rates in this section. Using the booklet, [Definitions of Covered Occupations](#), find the definition that most closely matches the actual work being performed by the worker.

Asbestos Worker/Insulator	38
Boilermaker	38
Bricklayer/Stonemason.....	38
Bridge and Highway Carpenter (See Carpenter Group 5)	38-39
Carpenter.....	38-39
Cement Mason	39
Diver	39-40
Divers' Tender.....	39-40
Dredger.....	40
Drywall, Lather, Acoustical Carpenter & Ceiling Installer	40-41
Drywall Taper (See Painter)	44
Electrician.....	41-42
Elevator Constructor, Installer and Mechanic	42
Glazier.....	42
Hazardous Materials Handler	42
Highway/Parking Striper	42
Ironworker	42
Laborer	42-43
Limited Energy Electrician	43
Line Constructor.....	44
Marble Setter	44
Millwright Group 1 & 2 (See Carpenter Group 3 & 4)	38-39
Painter and Drywall Taper	44
Piledriver (See Carpenter Group 6).....	38-39
Plasterer and Stucco Mason	44
Plumber/Pipefitter/Steamfitter	44
Power Equipment Operator	45
Roofer	45-46
Sheet Metal Worker	46-47
Soft Floor Layer	47
Sprinkler Fitter	47
Tender to Mason Trades (Brick and Stonemason, Mortar Mixer, Hod Carrier).....	47
Tender to Plasterer and Stucco Mason	47
Testing and Balancing (TAB) Technician.....	47
Tile Setter/Terrazzo Worker: Hard Tile Setter	47
Tile, Terrazzo, and Marble Finisher.....	47
Truck Driver.....	47-48
 MAP: Power Equipment Operator, Zone 1	 49

OREGON DETERMINATION 2013-01					
TRADE	BASIC HOURLY RATE	FRINGE	TRADE	BASIC HOURLY RATE	FRINGE

CARPENTER (continued)

<u>Group 1</u> (Carpenter Group-I)	<u>Group 2</u> (Carpenter Group-II)

Group 3
(Millwright Group-I)

Group 4
(Millwright Group-II)

<u>Group 5</u>	<u>Group 6</u>
(Bridge & Highway Carpenter)	(Piledriver)

Zone Differential for Carpenters
(Add to Zone 1 Base Rate)

Zone 2	.85
Zone 3	1.25
Zone 4	1.70
Zone 5	2.00
Zone 6	3.00
Zone 7	5.00

Zone 2	.85
Zone 3	1.25
Zone 4	1.70
Zone 5	2.00
Zone 6	3.00
Zone 7	5.00

Zone 1: Projects located within 30 miles of the respective city hall of the cities listed below.
Zone 2: More than 30 miles but less than 40 miles.
Zone 3: More than 40 miles but less than 50 miles.
Zone 4: More than 50 miles but less than 60 miles.
Zone 5: More than 60 miles but less than 70 miles.
Zone 6: More than 70 miles but less than 100 miles.
Zone 7: More than 100 miles.

Zone 1: Projects located within 30 miles of the respective city hall of the cities listed below.

Zone 2: More than 30 miles but less than 40 miles.

Zone 3: More than 40 miles but less than 50 miles.

Zone 4: More than 50 miles but less than 60 miles.

Zone 5: More than 60 miles but less than 70 miles.

Zone 6: More than 70 miles but less than 100 miles.

Zone 7: More than 100 miles.

Zone 1: Projects located within 30 miles of the respective city hall of the cities listed below.
Zone 2: More than 30 miles but less than 40 miles.
Zone 3: More than 40 miles but less than 50 miles.
Zone 4: More than 50 miles but less than 60 miles.
Zone 5: More than 60 miles but less than 70 miles.
Zone 6: More than 70 miles but less than 100 miles.
Zone 7: More than 100 miles.

Zone 1: Projects located within 30 miles of the respective city hall of the cities listed below.
Zone 2: More than 30 miles but less than 40 miles.
Zone 3: More than 40 miles but less than 50 miles.
Zone 4: More than 50 miles but less than 60 miles.
Zone 5: More than 60 miles but less than 70 miles.
Zone 6: More than 70 miles but less than 100 miles.
Zone 7: More than 100 miles.

Reference Cities for Group 1 and 2 Carpenters

Albany	Goldendale	Madras	Roseburg
Astoria	Grants Pass	Medford	Salem
Baker City	Hermiston	Newport	The Dalles
Bend	Hood River	Ontario	Tillamook
Brookings	Klamath Falls	Pendleton	Vancouver
Burns	La Grande	Portland	
Coos Bay	Lakeview	Port Orford	
Eugene	Longview	Reedsport	

Albany	Goldendale	Madras	Roseburg
Astoria	Grants Pass	Medford	Salem
Baker City	Hermiston	Newport	The Dalles
Bend	Hood River	Ontario	Tillamook
Brookings	Klamath Falls	Pendleton	Vancouver
Burns	La Grande	Portland	
Coos Bay	Lakeview	Port Orford	
Eugene	Longview	Reedsport	

Zones for Groups 3 and 4 Carpenter are determined by the distance between the project site and **either**

Zones for Groups 3 and 4 Carpenter are determined by the distance between the project site and **either**

- 1) The worker's residence; **or**
- 2) City Hall of a reference city listed for the appropriate group shown, whichever is closer

Reference Cities for Group 3 and 4 Carpenters

Eugene	Medford	Portland	Vancouver
Longview	North Bend	The Dalles	

Zones for Groups 5 and 6 Carpenter are determined by the distance between the project site and **either**

TRADE

**BASIC
HOURLY FRINGE
RATE**

TRADE

**BASIC
HOURLY FRINGE
RATE**

CARPENTER (continued)

- 1) The worker's residence; **or**
- 2) City Hall of a reference city listed for the appropriate group shown, whichever is closer

Reference Cities for Group 5 and 6 Carpenters

Bend	Longview	North Bend
Eugene	Medford	Portland

Note: All job or project locations shall be computed (determined) on the basis of road miles and in the following manner. A mileage measurement will start at the entrance to the respective city hall, facing the project (if possible), and shall proceed by the normal route (shortest time-best road) to the geographical center on the highway, railroad, and street construction projects (end of measurement). On all project contracts, the geographical center where the major portion of the construction is located, shall be considered the center of the project (end measurement).

Welders receive \$.75/hour above their group's rate.

When working with creosote and other toxic, treated wood and steel material, workers shall receive \$.25/hour premium pay for minimum of eight (8) hours.

When working in sheet pile coffer dams or cells up to the external water level, Group 6 workers shall receive \$.15/hour premium pay for minimum of eight (8) hours.

CEMENT MASON

(This trade is tended by "Concrete Laborer")

Zone 1 (Base Rate)

Group 1	29.98	17.76
Group 2	30.58	17.76
Group 3	30.58	17.76
Group 4	31.18	17.76

Zone Differential for Cement Mason
(Add to Zone 1 Base Rate)

Zone 2	.65
Zone 3	1.15
Zone 4	1.70
Zone 5	3.00

Zone 1: Projects located within 30 miles of the respective city hall of the reference cities listed.

Zone 2: More than 30 miles, but less than 40 miles.
Zone 3: More than 40 miles, but less than 50 miles.
Zone 4: More than 50 miles, but less than 80 miles.
Zone 5: More than 80 miles.

CEMENT MASON (continued)

Reference Cities

Bend	Eugene	Portland	The Dalles
Corvallis	Medford	Salem	Vancouver

Note: All job or project locations shall be computed (determined) on the basis of road miles and in the following manner. A mileage measurement will start at the entrance to the respective city hall, facing the project (if possible), and shall proceed by the normal route (shortest time-best road) to the geographical center on the highway, railroad, and street construction projects (end of measurement). On all other project contracts, the geographical center where the major portion of the construction is located, shall be considered the center of the project (end measurement).

DIVER & DIVERS' TENDER

Zone 1 (Base Rate)

DIVER	78.38	14.44
DIVER'S TENDER	36.97	14.44

- 1) For those workers who reside within a reference city below, their zone pay shall be computed from the city hall of the city wherein they reside.
- 2) For those workers who reside nearer to a project than is the city hall of any reference city below, the mileage from their residence may be used in computing their zone pay differential.
- 3) The zone pay for all other projects shall be computed from the city hall of Portland.

Zone Differential for Diver/Divers' Tender
(Add to Zone 1 Base Rate)

Zone 2	.85
Zone 3	1.25
Zone 4	1.70
Zone 5	2.00
Zone 6	3.00
Zone 7	5.00

Zone 1: Projects located within 30 miles of city hall of the reference cities listed.

Zone 2: More than 30 miles, but less than 40 miles.
Zone 3: More than 40 miles, but less than 50 miles.
Zone 4: More than 50 miles, but less than 60 miles.
Zone 5: More than 60 miles, but less than 70 miles.
Zone 6: More than 70 miles, but less than 100 miles.

Zone 7: More than 100 miles from the city hall of employee's home local.

TRADE

**BASIC
HOURLY FRINGE
RATE**

TRADE

**BASIC
HOURLY FRINGE
RATE**

DIVER & DIVERS' TENDER (continued)

Reference Cities for Diver/Divers' Tender

Astoria	Klamath Falls	Newport	Roseburg
Bend	Longview	North Bend	Salem
Eugene	Medford	Portland	The Dalles

Note: All job or project locations shall be computed (determined) on the basis of road miles and in the following manner. A mileage measurement will start at the entrance to the respective city hall, facing the project (if possible), and shall proceed by the normal route (shortest time-best road) to the geographical center on the highway, railroad, and street construction projects (end of measurement). On all project contracts, the geographical center where the major portion of the construction is located, shall be considered the center of the project (end measurement).

Depth Pay and Enclosure Pay are added to the Divers' Basic Hourly Rate to obtain the Total Hourly Rate for the Diver.

Basic Hourly Rate	+	Hourly Depth Pay	+	Hourly Enclosure Pay	=	Divers' Total Hourly Pay Rate

Divers' Depth Pay:

<u>Depth of Dive</u>	<u>Hourly Depth Pay</u>
50-100 ft.	\$1.00 per foot over 50 feet
101-150 ft.	\$1.50 per foot over 100 feet
151-200 ft.	\$2.00 per foot over 150 feet

Depth shall be figured from the surface to the actual depth where the diving work is being performed.

Divers' Enclosure Pay (working without vertical escape):

Distance Traveled

In the Enclosure Hourly Enclosure Pay

5-50ft.	\$1.50/hr. up to \$4.00 maximum per day
50-100ft.	\$1.13/hr. up to \$9.00 maximum per day
100-150ft.	\$2.13/hr. up to \$17.00 maximum per day
150-200ft.	\$4.63/hr. up to \$37.00 maximum per day
200-300ft.	\$4.63/hr. up to \$37.00 maximum per day, plus \$.40 per foot traveled in enclosure.
300-450ft.	\$4.63/hr. up to \$37.00 maximum per day, plus \$.80 per foot traveled in enclosure.
450-600ft.	\$4.63/hr. up to \$37.00 maximum per day, plus \$1.60 per foot traveled in enclosure.

DREDGER

Zone A (Base Rate)

Leverman (Hydraulic & Clamshell)	43.93	13.70
Assistant Engineer (Watch Engineer, Mechanic Machinist)	41.06	13.70
Tenderman (Boatman Attending Dredge Plant) Fireman	39.73	13.70
Fill Equipment Operator	38.66	13.70
Assistant Mate	36.18	13.70

Zone Differential for Dredgers
(Add to Zone A Base Rate)

Zone B	3.00
Zone C	6.00

Zone mileage based on road miles:

- Zone A: Center of jobsite to no more than 30 miles from the city hall of Portland.
- Zone B: More than 30 miles but not more than 60 miles.
- Zone C: Over 60 miles.

DRYWALL, LATHER, ACOUSTICAL CARPENTER & CEILING INSTALLER

Zone 1 (Base Rate)

1. DRYWALL INSTALLER	32.90	14.15
2. LATHER, ACOUSTICAL CARPENTER & CEILING INSTALLER	31.02	16.03

Zone Differential for Drywall, Lather, Acoustical
Carpenter & Ceiling Installer
(Add to Zone 1 Base Rate)

Zone mileage based on road miles:

Zone 2	31-40 miles	.85
Zone 3	41-50 miles	1.25
Zone 4	51-60 miles	1.70
Zone 5	61-70 miles	2.00
Zone 6	71-100 miles	3.00
Zone 7	101 or more	5.00

TRADE

**BASIC
HOURLY FRINGE
RATE**

TRADE

**BASIC
HOURLY FRINGE
RATE**

**DRYWALL, LATHER, ACOUSTICAL CARPENTER
& CEILING INSTALLER (continued)**

The correct transportation allowance shall be based on road mileage from the City Hall of the local union having jurisdiction of the job or other transportation reference cities herein listed.

Reference Cities

Albany	Coquille	Medford	Roseburg
Astoria	Eugene	Newport	Salem
Baker	Grants Pass	North Bend	Seaside
Bandon	Hermiston	Pendleton	The Dalles
Bend	Klamath Falls	Portland	Tillamook
Brookings	Kelso-Longview	Reedsport	Vancouver

ELECTRICIAN

Area 1

Electrician	27.70	12.14
Cable Splicer	30.47	12.28

Reference Counties Area 1

Malheur

Area 2

Electrician	36.55	16.28
Cable Splicer	38.38	16.33

Reference Counties Area 2

Baker	Grant	Umatilla	Wallowa
Gilliam	Morrow	Union	Wheeler

Area 3

Electrician	32.65	14.33

Reference Counties Area 3

Coos	Douglas (a)	Lincoln
Curry	Lane (a)	

(a) Those portions of Lane and Douglas lying **west** of a line running North and South from the NE corner of Coos County to the SE corner of Lincoln County.

ELECTRICIAN (continued)

Area 4

Electrician	36.46	16.27
Cable Splicer	40.11	16.38
Lighting Maintenance/ Material Handlers	17.64	8.03

Reference Counties Area 4

Benton	Jefferson	Marion
Crook	Lane (b)	Polk
Deschutes	Linn	Yamhill (c)

(b) That portion of Lane County lying **east** of a line running North and South from the NE corner of Coos County to the SE corner of Lincoln County.

(c) South half

Area 5

Electrician	37.05	18.41
Material Handler/ Lighting Maintenance	21.12	11.57
Electrical Welder	40.76	18.52

Reference Counties Area 5

Clackamas	Hood River	Tillamook	Yamhill (d)
Clatsop	Multnomah	Wasco	
Columbia	Sherman	Washington	

(d) North Half

**Zone Pay for Area 5 Electrician and
Electrical Welder**

(Add to Basic Hourly Rate)

Zone mileage based on air miles:

Zone 1	31-50 miles	1.50
Zone 2	51-70 miles	3.50
Zone 3	71-90 miles	5.50
Zone 4	91 or more	9.00

There shall be a 30-mile free zone from downtown Portland City Hall and a similar 15-mile free zone around the following cities:

Astoria	Seaside	Tillamook
Hood River	The Dalles	

Further, the free zone at the Oregon coast shall extend along Hwy 101 west to the ocean Hwy 101 east 10 miles if not already covered by the above 15-mile free zone.

TRADE

**BASIC
HOURLY FRINGE
RATE**

TRADE

**BASIC
HOURLY FRINGE
RATE**

ELECTRICIAN (continued)

Area 6

Electrician	30.02	14.80
Cable Splicer	30.02	14.80
Lighting Maintenance and Material Handlers	16.22	7.99

Reference Counties Area 6

Douglas (e) Harney	Jackson Josephine	Klamath Lake

(e) That portion of Douglas County lying east of a line running North and South from the NE corner of Coos County to the SE corner of Lincoln County.

Zone Pay for Area 6

Lighting Maintenance and Material Handlers
(Add to Basic Hourly Rate)

Zone mileage based on road miles:

Zone 1	0-20 miles	0.00
Zone 2	21-30 miles	1.00
Zone 3	31-40 miles	2.80
Zone 4	41-50 miles	4.50
Zone 5	51-60 miles	6.30
Zone 6	60 or more	9.00

There shall be a 20-mile free zone from the downtown Post Office in Grants Pass, Klamath Falls, Medford, and Roseburg.

ELEVATOR CONSTRUCTOR, INSTALLER AND MECHANIC

Area 1

Mechanic	46.54	23.54

Reference Counties Area 1

Baker	Umatilla	Union	Wallowa

Area 2

Mechanic	47.19	30.75

Reference Counties Area 2

All remaining Counties

GLAZIER

32.71 16.08

Add \$1.00 to base rate if safety belt is required by State safety regulations.

Add \$4.00 to base rate for work done from a non-motorized single-man bosun chair.

HAZARDOUS MATERIALS HANDLER

21.50 10.06

HIGHWAY/PARKING STRIPER

33.41 9.59

IRONWORKER

Zone 1 (Base Rate): **34.12 20.60**

Zone Differential for Ironworker
(Add to Basic Hourly Rate)

Zone 2	3.75 hr. or \$30.00 maximum per day
Zone 3	6.88 hr. or \$55.00 maximum per day
Zone 4	9.38 hr. or \$75.00 maximum per day

Zone 1: Projects located within 45 miles of city hall in the reference cities listed below.

Zone 2: More than 45 miles, but less than 60 miles.

Zone 3: More than 60 miles, but less than 100 miles.

Zone 4: More than 100 miles.

Note: Zone pay for Ironworkers shall be determined using AAA road mileage computed from the city hall of the reference cities listed below or the residence of the employee, whichever is nearer to the project.

Reference Cities

Medford	Portland

LABORER

Zone 1 (Base Rate):

Group 1	25.27	12.85
Group 2	26.27	12.85
Group 3	21.75	12.85

Note: A Hazardous Waste Removal Differential must be added to the base rate if work is performed inside the boundary of a Federally Designated Hazardous Waste Site. A Group 1 base rate is used for General Laborer on such a site. For further information on this, call the Prevailing Wage Rate Coordinator at (971) 673-0839.

TRADE

**BASIC
HOURLY FRINGE
RATE**

TRADE

**BASIC
HOURLY FRINGE
RATE**

LABORER (continued)

Zone Differential for Laborers
(Add to Zone 1 Base Rate)

Zone 2	.65
Zone 3	1.15
Zone 4	1.70
Zone 5	2.75

Zone 1: Projects located within 30 miles of city hall in the reference cities listed below.

Zone 2: More than 30 miles but less than 40 miles.

Zone 3: More than 40 miles but less than 50 miles.

Zone 4: More than 50 miles but less than 80 miles.

Zone 5: More than 80 miles.

Reference Cities

Albany	Burns	Hermiston	Roseburg
Astoria	Coos Bay	Klamath Falls	Salem
Baker City	Eugene	Medford	The Dalles
Bend	Grants Pass	Portland	

Note: All job or project locations shall be computed (determined) on the basis of road miles and in the following manner. A mileage measurement will start at the entrance to the respective city hall, facing the project (if possible), and shall proceed by the normal route (shortest time-best road) to the geographical center on the highway, railroad, and street construction projects (end of measurement). On all other project contracts, the geographical center where the major portion of the construction is located, shall be considered the center of the project (end measurement).

LIMITED ENERGY ELECTRICIAN

Area 1 **18.90 7.45**

Reference Counties Area 1

Malheur

Area 2 **26.95 13.66**

Reference Counties Area 2

Baker	Grant	Umatilla	Wallowa
Gilliam	Morrow	Union	Wheeler

LIMITED ENERGY ELECTRICIAN (continued)

Area 3 **24.90 12.60**

Reference Counties Area 3

Coos	Douglas (a)	Lincoln
Curry	Lane (a)	

(a) Those portions of Lane and Douglas lying **west** of a line running North and South from the NE corner of Coos County to the SE corner of Lincoln County.

Area 4 **27.04 12.31**

Reference Counties Area 4

Benton	Jefferson	Marion
Crook	Lane (b)	Polk
Deschutes	Linn	Yamhill (c)

(b) That portion of Lane County lying **east** of a line running North and South from the NE corner of Coos County to the SE corner of Lincoln County.

(c) South half

Area 5 **27.75 14.83**

Reference Counties Area 5

Clackamas	Hood River	Tillamook	Yamhill (d)
Clatsop	Multnomah	Wasco	
Columbia	Sherman	Washington	

(d) North Half

Area 6 **24.90 11.25**

Reference Counties Area 6

Douglas (e)	Jackson	Klamath
Harney	Josephine	Lake

(e) That portion of Douglas County lying **east** of a line running North and South from the NE corner of Coos County to the SE corner of Lincoln County.

TRADE

**BASIC
HOURLY FRINGE
RATE**

TRADE

**BASIC
HOURLY FRINGE
RATE**

LINE CONSTRUCTOR

Area 1

Group 1	50.10	14.85
Group 2	44.73	14.64
Group 3	31.44	10.85
Group 4	38.47	11.48
Group 5	33.55	11.03
Group 6	31.31	10.95
Group 7	16.69	9.57

Area 1

All counties except Malheur County

Group 1

Cable Splicer
Leadman Pole Sprayer

Group 2

Heavy Line Equipment Man
Journeyman Lineman Welder
Journeyman Lineman
Pole Sprayer

Group 3

Tree Trimmer

Group 4

Line Equipment man

Group 5

Head Groundman
Jackhammer Man
Powderman

Group 6

Groundman

Group 7

Tree Trimmer Groundman

Area 2

Cable Splicer	41.42	12.37
Journeyman Lineman	35.74	11.59
Line Equip. Operator	31.23	11.39
Groundman	22.24	9.35

Area 2

Malheur County

MARBLE SETTER

33.75 15.56

(This trade is tended by "Tile, Terrazzo, & Marble Finishers")

PAINTER & DRYWALL TAPER

COMMERCIAL PAINTING	19.71	8.50
INDUSTRIAL PAINTING	20.61	8.50
BRIDGE PAINTING	24.06	8.50

PAINTER & DRYWALL TAPER (continued)

Add \$0.75 to base rate for work over 60 ft. high on swing stage, mechanical climber, spider or bucket truck for both commercial and industrial painting.

DRYWALL TAPER **32.22 12.40**

PLASTERER AND STUCCO MASON

(This trade is tended by "Tenders to Plasterers")

Nozzleman	30.86	12.81
Swinging Scaffold	29.86	12.81
All Other Work	28.86	12.81

PLUMBER/PIPEFITTER/STEAMFITTER

Area 1 **24.93 13.57**

Reference Counties Area 1

Baker Harney (a) Malheur

(a) Except that portion which lies North and West of a North-South line drawn from the town of John Day to a point five miles east of the town of Burns and three miles South of Burns thence on an airline through the town of Wagonire West to the county line.

Area 2 **46.85 24.89**

Reference Counties Area 2

Grant (b) Umatilla Wallowa
Morrow Union

(b) Except Southwest Portion

Area 3 **38.20 21.63**

Reference Counties Area 3

All Remaining Counties

TRADE

**BASIC
HOURLY FRINGE
RATE**

TRADE

**BASIC
HOURLY FRINGE
RATE**

POWER EQUIPMENT OPERATOR

Zone 1 (Base Rate)

Group 1	37.63	13.55
Group 1A	39.51	13.55
Group 1B	41.39	13.55
Group 2	35.97	13.55
Group 3	34.96	13.55
Group 4	34.00	13.55
Group 5	32.88	13.55
Group 6	29.84	13.55

Note: A Hazardous Waste Removal Differential must be added to the base rate if work is performed inside the boundary of a Federally Designated Waste Site. For information on this differential, call the Prevailing Wage Rate Coordinator at (971) 673-0839.

Zone Pay Differential
(Add to Zone 1 Base Rate)

Zone 2	3.00
Zone 3	6.00

For projects in the following metropolitan counties:

Clackamas	Marion	Washington
Columbia	Multnomah	Yamhill

See map on page 49 for Zone 1 of this classification

- (A) All jobs or projects located in Multnomah, Clackamas and Marion counties, West of the western boundary of Mt. Hood National Forest and west of Mile Post 30 on Interstate 84 and West of Mile Post 30 on State Hwy 26 and West of Mile Post 30 on Hwy 22 and all jobs located in Yamhill County, Washington County and Columbia County shall receive Zone 1 pay for all classifications.
- (B) All jobs or projects located in the area outside the *identified boundary* above, but less than 50 miles from the Portland City Hall shall receive Zone 2 pay for all classifications.
- (C) All jobs or projects located more than 50 miles from the Portland City Hall, but outside the identified border above, shall receive Zone 3 pay for all classifications.

POWER EQUIPMENT OPERATOR (continued)

Reference cities for projects in all remaining counties:

Albany	Coos Bay	Grants Pass	Medford
Bend	Eugene	Klamath Falls	Roseburg

- (A) All jobs or projects located within 30 miles of the respective city hall of the above mentioned cities shall receive Zone 1 pay for all classifications.
- (B) All jobs or projects located more than 30 miles and less than 50 miles from the respective city hall of the above mentioned cities shall receive Zone 2 for all classifications.
- (C) All jobs or projects located more than 50 miles from the respective city hall of the above mentioned cities shall receive Zone 3 pay for all classifications.

Note: All job or project locations shall be computed (determined) on the basis of road miles and in the following manner. A mileage measurement will start at the entrance to the respective city hall, facing the project (if possible), and shall proceed by the normal route (shortest time-best road) to the geographical center on the highway, railroad, and street construction projects (end of measurement). On all other project contracts, the geographical center where the major portion of the construction is located, shall be considered the center of the project (end measurement).

ROOFER

Area 1*

Roofer	28.03	9.65
Handling coal tar pitch	30.83	9.65
Remove fiberglass insulation	30.83	9.65

Reference Counties Area 1

Baker	Gilliam	Multnomah	Washington
Clackamas	Grant	Sherman	Wheeler
Clatsop	Hood River	Tillamook	
Columbia	Jefferson	Wasco	

*On all jobs on which coal tar pitch is the basic roofing material or where the old roof being removed is composed of coal tar based material, a rate of pay ten percent (10%) greater than the basic rate of pay shall be paid for all work performed.

TRADE

**BASIC
HOURLY FRINGE
RATE**

TRADE

**BASIC
HOURLY FRINGE
RATE**

ROOFER (continued)

*All employees engaged in removing fiberglass insulation shall receive a rate of pay ten percent (10%) greater than the employee's basic rate of pay.

Area 2**

Roofer **23.37 10.87**

Reference Counties Area 2

Benton	Douglas	Lake	Marion
Coos	Harney	Lane	Polk
Crook	Jackson	Lincoln	Yamhill
Curry	Josephine	Linn	
Deschutes	Klamath	Malheur	

** Add \$2.00 to basic hourly rate for application, spudding and cutting or removal of coal tar products.

** Add \$0.50 per hour to base hourly rate for application, spudding and cutting or removal of fiberglass insulation.

Area 4***

Roofers **24.10 10.22**

Reference Counties Area 4

Umatilla Union Wallowa

*** Add \$2.00 to basic hourly rate for employees working with irritable bituminous materials.

*** Add \$2.00 to basic hourly rate for employees removing fiberglass insulation.

Area 5****

Roofers **24.14 10.27**

Reference County for Area 5

Morrow

**** Add \$3.00 to basic hourly rate for employees working with irritable bituminous materials

SHEET METAL WORKER

Area 1 **36.23 17.64**

Reference Counties Area 1

Benton	Gilliam	Linn	Wasco
Clackamas	Grant	Marion	Washington
Clatsop	Harney	Multnomah	Wheeler
Columbia	Hood River	Polk	Yamhill
Crook	Jefferson	Sherman	
Deschutes	Lincoln	Tillamook	

Add \$1.00 to base rate for work performed on any swinging platform, swinging chair or swinging ladder.

Add \$1.00 to base rate for work where a worker is exposed to resins, chemicals or acid.

Area 2 **23.00 15.60**

Reference Counties Area 2

Baker Malheur

Area 3 **32.16 18.42**

Reference Counties Area 3

Morrow Umatilla Union Wallowa

Add \$1.00 per hour to base rate for work where it is necessary to wear a chemically activated type face mask.

Area 4 **31.52 15.79**

Reference Counties Area 4

Douglas Lake Lane

Add \$1.00 to base rate for work performed on any swinging platform, swinging chair or swinging ladder.

Add \$1.00 to base rate for work where a worker is exposed to resins, chemicals or acid.

TRADE

**BASIC
HOURLY FRINGE
RATE**

TRADE

**BASIC
HOURLY FRINGE
RATE**

SHEET METAL WORKER (continued)

Area 5 **30.25 16.86**

Reference Counties Area 5

Coos Curry

Add \$1.00 to base rate for work performed on any swinging platform, swinging chair or swinging ladder.

Add \$1.00 to base rate for work where a worker is exposed to resins, chemicals or acid.

Area 6 **26.91 14.99**

Reference Counties Area 6

Jackson Josephine Klamath

Add \$1.00 to base rate for work performed on any swinging platform, swinging chair or swinging ladder.

Add \$1.00 to base rate for work where a worker is exposed to resins, chemicals or acid.

SOFT FLOOR LAYER **27.28 11.92**

SPRINKLER FITTER **32.43 19.70**

TENDERS TO MASON TRADES (Brick and Stonemason, Mortar Mixer, Hod Carrier)

27.05 12.85

Add \$0.50 to base rate for refractory work.

Add to base rate an amount equal to that received for safety belt requirements or other unusual job conditions by the mechanic this worker is tending.

TENDER TO PLASTERER AND STUCCO MASON

27.21 13.25

TESTING AND BALANCING (TAB) TECHNICIAN

Air-Handling Equipment, Ductwork

See **SHEET METAL WORKER**

Water Distribution Systems

See **PLUMBER/PIPEFITTER/STEAMFITTER**

TILE SETTER/TERRAZZO WORKER: Hard Tile Setter

28.94 14.01

(This trade is tended by "Tile, Terrazzo, & Marble Finisher")

TILE, TERRAZZO, AND MARBLE FINISHER

1. TILE, TERRAZZO FINISHER

21.84 10.40

Add \$1.00 to base rate if safety belt required by State safety regulations.

Add \$1.00 to base rate if work involves epoxy, furnane, alkyl acetylene black grouting or waterproof membrane.

2. BRICK AND MARBLE FINISHER

21.84 10.50

TRUCK DRIVER

Zone A (Base Rate):

Group 1	26.90	13.25
Group 2	27.02	13.25
Group 3	27.15	13.25
Group 4	27.41	13.25
Group 5	27.63	13.25
Group 6	27.79	13.25
Group 7	27.99	13.25

(continued)

TRADE

BASIC
HOURLY FRINGE
RATE

TRADE

BASIC
HOURLY FRINGE
RATE

TRUCK DRIVER (continued)

For the Following Cities:

Albany	Grants Pass	Ontario
Astoria	Hermiston	Oregon City
Baker	Hood River	Pendleton
Bend	Klamath Falls	Portland
Bingen	LaGrande	Port Orford
Brookings	Lakeview	Reedsport
Burns	Longview	Roseburg
Coos Bay	Madras	Salem
Corvallis	Medford	The Dalles
Eugene	McMinnville	Tillamook
Goldendale	Newport	Vancouver

Zone differential for Truck Drivers
(Add to Zone A Base Rate)

Zone B	.65
Zone C	1.15
Zone D	1.70
Zone E	2.75

Zone A: Projects within 30 miles of the cities listed above

Zone B: More than 30 miles but less than 40 miles.

Zone C: More than 40 miles but less than 50 miles.

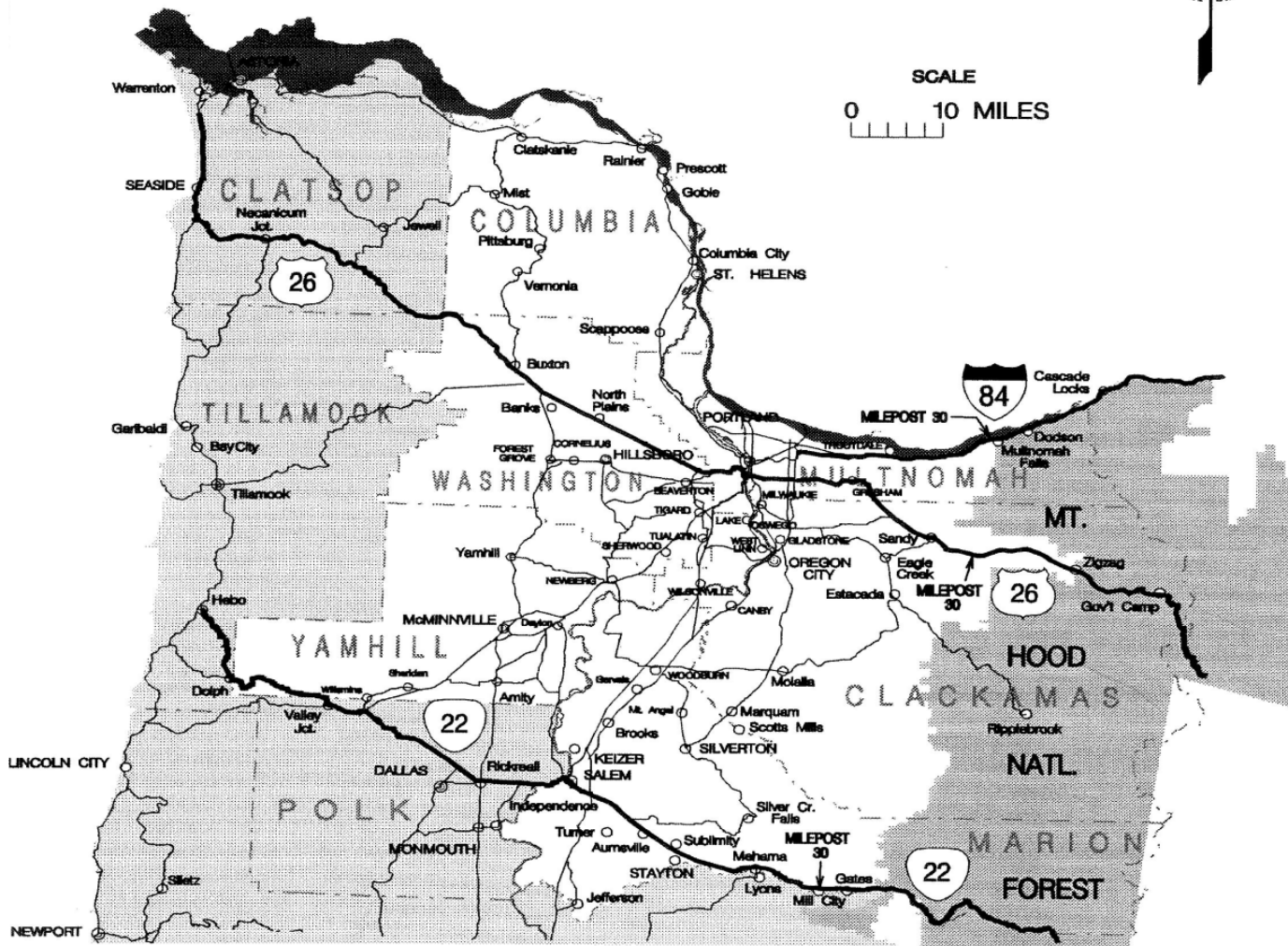
Zone D: More than 50 miles but less than 80 miles.

Zone E: More than 80 miles.

Note: All job or project locations shall be computed (determined) on the basis of road miles and in the following manner. A mileage measurement will start at the entrance to the respective city hall, facing the project (if possible), and shall proceed by the normal route (shortest time-best road) to the geographical center on the highway, railroad, and street construction projects (end of measurement). On all other project contracts, the geographical center where the major portion of the construction is located, shall be considered the center of the project (end measurement).

Power Equipment Operators

Zone 1



**LIST OF CONTRACTORS INELIGIBLE
TO RECEIVE PUBLIC WORKS CONTRACTS
PUBLICATION DATE: JANUARY 1, 2013**

To: All Oregon Contracting Agencies

Pursuant to ORS 279C.860, contractors on this list are ineligible to receive public works contracts subject to the Prevailing Wage Rate Law. These contractors and subcontractors, as well as any firm, corporation, partnership or association in which the contractor or subcontractor has a financial interest are ineligible to receive public works contracts until removed from this list.

If you have questions regarding the list or for the most current information regarding persons ineligible to receive prevailing wage contracts, please contact the Prevailing Wage Rate Coordinator in Portland at (971) 673-0839.

	<u>CONTRACTOR NAME</u>	<u>DATE PLACED</u>	<u>REMOVAL DATE</u>
1.	Affordable Safe and Professional Flagging, LLC 305 NE 6 th Street Grants Pass, OR 97526	September 17, 2012	September 16, 2017
2.	All Concrete Specialties, Inc. 9415 NE 62 nd Avenue Vancouver, WA 98665	March 29, 2012	March 28, 2015
3.	American Eagle Electric, LLC 3894 Roosevelt Boulevard Eugene, OR 97402	November 1, 2011	October 31, 2014
4.	Ameritech Machine Mfg., Inc. PO Box 1455, Redmond, OR 97756-0402 350 SW Industrial Way, Bend, OR 97702-1073 2328 NW Stonehill Drive, Bend, OR 97701-6806 2660 NE Highway 20, Suite 610 Bend, OR 97701-6403	June 17, 2011	June 16, 2014
5.	Anbasa Transport, LLC PO Box 1003 Boring, OR 97009-1003	May 15, 2012	May 14, 2014
6.	Anderson Builders, Inc. PO Box 601 Chiloquin, OR 97624-0601	June 17, 2011	June 16, 2014
7.	Travis B. Anderson 2790 NE Broken Bow Drive Bend, OR 97701-5804	September 14, 2011	September 13, 2014
8.	ASAP Flagging & Traffic Control, Inc. 11681 Sumner Street, Suite A Portland, OR 97220	September 17, 2012	September 16, 2017
9.	B & C Northwest Electric, Inc. dba Horizon Electric 1818 16 th Street West Linn, OR 97068	November 1, 2011	October 31, 2014
10.	BPM Plaster, Inc. PO Box 17915 Salem, OR 97305	January 15, 2011	January 14, 2014
11.	Beaver Flagging 2239 Dakota Street Eugene, OR 97404	November 25, 2009	November 24, 2019
12.	Christy C. Beaver 2570 River Road Eugene, OR 97404	November 25, 2009	November 24, 2019

**LIST OF CONTRACTORS INELIGIBLE
TO RECEIVE PUBLIC WORKS CONTRACTS
PUBLICATION DATE: JANUARY 1, 2013**

	<u>CONTRACTOR NAME</u>	<u>DATE PLACED</u>	<u>REMOVAL DATE</u>
13.	Bennett Commercial Floors, Inc. 416 Leandra Lane PO Box 1020 Eagle Point, OR 97524	January 1, 2012	December 31, 2014
14.	Richard D. Bennett, Jr. 416 Leandra Lane PO Box 1020 Eagle Point, OR 97524	January 1, 2012	December 31, 2014
15.	Cameron Creations Steven Cameron Nancy Cameron PO Box 2 Lowell, OR 97452	May 25, 2000	Not to be Removed
16.	James Cauthorn 4790 NW Walnut Blvd. Corvallis, OR 97330	September 25, 2012	September 24, 2015
17.	Century Atlantic Construction, LLC fdba First Choice Gutters 10725 NE Tillamook Portland, OR 97220	June 3, 2011	June 2, 2014
18.	Ronald Cook PO Box 1455, Redmond, OR 97756-0402 350 SW Industrial Way, Bend, OR 97702-1073 2328 NW Stonehill Drive, Bend, OR 97701-6806 2660 NE Highway 20, Suite 610 Bend, OR 97701-6403	June 17, 2011	June 16, 2014
19.	Timothy Covington 1000 NE 122 nd Street, Suite B-13 Portland, OR 97230	September 17, 2012	September 16, 2017
20.	Dark Horse Construction, LLC 15824 S Pope Lane Oregon City, OR 97045	November 1, 2011	October 31, 2014
21.	E.H. Glaab, General Contractor, Inc. 16762 Sandy Court La Pine, OR 97739-1027	September 14, 2011	September 13, 2014
22.	Edward H. Glaab 16762 Sandy Court La Pine, OR 97739-1027	September 14, 2011	September 13, 2014
23.	Eugene B. Graeme 169 SE Cody Lane Madras, OR 97741	May 3, 2012	May 2, 2015
24.	James Hays 8011 25 th Street White City, OR 97503-1547	September 14, 2011	September 13, 2014

**LIST OF CONTRACTORS INELIGIBLE
TO RECEIVE PUBLIC WORKS CONTRACTS
PUBLICATION DATE: JANUARY 1, 2013**

	<u>CONTRACTOR NAME</u>	<u>DATE PLACED</u>	<u>REMOVAL DATE</u>
25.	Hays Drywall, Inc. PO Box 1398 Medford, OR 97501-0104, Medford, OR 97501-0104 8011 25 th Street White City, OR 97503-1547	September 14, 2011	September 13, 2014
26.	Holm II, Inc. Dennis A. Holm Linda A. Holm 618 N 2 nd Avenue Stayton, OR 97383	January 1, 2011	December 31, 2013
27.	John Benjamin Kamph 1113 SW Courtney Laine Drive McMinnville, OR 97128-1017	January 5, 2012	January 4, 2015
28.	Kamph Construction Company, Inc. 1113 SW Courtney Laine Drive McMinnville, OR 97128-1017	January 5, 2012	January 4, 2015
29.	Kelaye Concrete, LLC 21822 SE Bohna Park Road Damascus, OR 97089	May 15, 2012	May 14, 2014
30.	Ken-Dee Construction, Ltd. PO Box 822093 Vancouver, WA 98682	February 8, 2012	February 7, 2015
31.	Lance Lupton PO Box 7529 Bend, OR 97708	May 24, 2010	May 23, 2013
32.	Lela Mae Lupton PO Box 7529 Bend, OR 97708	May 24, 2010	May 23, 2013
33.	Servando Garcia Maldonado PO Box 17915 Salem, OR 97305	January 15, 2011	January 14, 2014
34.	Michael S. Varner Construction, Inc. PO Box 9416 Bend, OR 97708-9416	February 22, 2012	February 21, 2015
35.	Michelle Delrae Mullins aka Michelle Sutherland aka Michelle Shearer dba Oregon Traffic Solutions 2522 Fort Worth Ave, Apt 113 Dallas, TX 75211-1716 125 SW Kathleen Street Waldport, OR 97394	January 5, 2012	January 4, 2015

**LIST OF CONTRACTORS INELIGIBLE
TO RECEIVE PUBLIC WORKS CONTRACTS
PUBLICATION DATE: JANUARY 1, 2013**

	<u>CONTRACTOR NAME</u>	<u>DATE PLACED</u>	<u>REMOVAL DATE</u>
36.	Northwest Road Builders, Inc. 57280 Timber Road Vernonia, OR 97064-9645	June 3, 2011	June 2, 2014
37.	Alex J. Olsen dba BSD Enterprises PO Box 493 11600 ½ Highway 101 S. Tillamook, OR 97141	April 25, 2012	April 24, 2015
38.	Oregon Traffic Solutions 125 SW Kathleen Street Waldport, OR 97394	January 5, 2012	January 4, 2015
39.	Pacwest Contracting, LLC 23388 Butterfield Trail Bend, OR 97702	May 24, 2010	May 23, 2013
40.	Pok Wan Contracting, Inc. 4790 NW Walnut Blvd. Corvallis, OR 97330	September 25, 2012	September 24, 2015
41.	Portland Tile Contractors, LLC 8781 SE 55 th Avenue Portland, OR 97206 16434 S Harding Road Oregon City, OR 97045	May 31, 2012	May 30, 2015
42.	William J. Postles 1818 16 th Street West Linn, OR 97068	November 1, 2011	October 31, 2014
43.	Aaron Powless PO Box 5143 Klamath Falls, OR 97229	October 8, 2012	October 7, 2015
44.	Powless Roofing, Inc. PO Box 5143 Klamath Falls, OR 97229	October 8, 2012	October 7, 2015
45.	Quality Building Services, Inc. PO Box 249 Wilsonville, OR 97070 2245 Crestview Drive West Linn, OR 97068	August 27, 2012	August 26, 2015
46.	RC Landworks, Inc. PO Box 232 Boring, OR 97009 21822 SE Bohna Park Road Damascus, OR 97089	May 15, 2012	May 14, 2015
47.	RMH Group, Inc. dba H & M Concrete Company 830 NE Hidden Valley Bend, OR 97702	September 14, 2011	September 13, 2014

**LIST OF CONTRACTORS INELIGIBLE
TO RECEIVE PUBLIC WORKS CONTRACTS
PUBLICATION DATE: JANUARY 1, 2013**

	<u>CONTRACTOR NAME</u>	<u>DATE PLACED</u>	<u>REMOVAL DATE</u>
48.	Right Choice Underground, LLC 14630 NE Springbrook Road Newberg, OR 97132	November 26, 2012	November 25, 2015
49.	Edward S. Rodgers PO Box 601 Chiloquin, OR 97624-0601	June 17, 2011	June 16, 2014
50.	Christopher Rogers 1355 Piedmont Springfield, OR 97477	June 3, 2011	June 2, 2014
51.	Rogers Consulting and Construction, Inc. 496 S 69 th Place Springfield, OR 97478	June 3, 2011	June 2, 2014
52.	Terry Rand Ross 18598 SW Mount Adams Loop Powell Butte, OR 97753-1652	March 29, 2012	March 28, 2015
53.	Frances L Sallah and Edrissa Sallah 4800 SW Maple Avenue Beaverton, OR 97005	May 1, 2011	April 30, 2014
54.	Terrence Samuel PO Box 249 Wilsonville, OR 97070 2245 Crestview Drive West Linn, OR 97068	August 27, 2012	August 26, 2015
55.	Michelle Shearer aka Michelle Sutherland aka Michelle Delrae Mullins dba Oregon Traffic Solutions 2522 Fort Worth Ave, Apt 113 Dallas, TX 75211-1716 125 SW Kathleen Street Waldport, OR 97394	January 5, 2012	January 4, 2015
56.	Silvercreek Woodworks, Inc. 20551 Builders Court La Pine, OR 97701-8507	September 14, 2011	September 13, 2014
57.	Sunikerr, LLC 4800 SW Maple Avenue Beaverton, OR 97005	May 1, 2011	April 30, 2014
58.	Michelle Sutherland aka Michelle Delrae Mullins aka Michelle Shearer dba Oregon Traffic Solutions 2522 Fort Worth Ave, Apt 113 Dallas, TX 75211-1716 125 SW Kathleen Street Waldport, OR 97394	January 5, 2012	January 4, 2015

**LIST OF CONTRACTORS INELIGIBLE
TO RECEIVE PUBLIC WORKS CONTRACTS
PUBLICATION DATE: JANUARY 1, 2013**

	<u>CONTRACTOR NAME</u>	<u>DATE PLACED</u>	<u>REMOVAL DATE</u>
59.	Tile Masters, LLC 4676 Commercial Street SE Salem, OR 97302-1902 5015 Micah Court SE Salem, OR 97306-2855	June 17, 2011	June 16, 2014
60.	Richard W. Titus 57280 Timber Road Vernonia, OR 97064-9645	June 3, 2011	June 2, 2014
61.	Michael S. Varner PO Box 9416 Bend, OR 97708-9416	February 22, 2012	February 21, 2015
62.	Venetian Terrazzo Co., LLC 845 NW Dunbar Ave. Suite #114 Troutdale, OR 97060 29776 Crown Z Road Scappoose, OR 97056	August 21, 2012	August 20, 2015
63.	WCI Construction, LLC 169 SE Cody Lane Madras, OR 97741	May 3, 2012	May 2, 2015
64.	Rebekah Williams PO Box 1003 Boring, OR 97009-1003 21822 SE Bohna Park Road Damascus, OR 97089	May 15, 2012	May 14, 2014
65.	Russell T. Williams PO Box 232 Boring, OR 97009 21822 SE Bohna Park Road Damascus, OR 97089	May 15, 2012	May 14, 2015
66.	Wrangler Construction, Inc. 169 SE Cody Lane Madras, OR 97741	May 3, 2012	May 2, 2015

**BRAD AVAKIAN, COMMISSIONER
OREGON BUREAU OF LABOR AND INDUSTRIES**

PREVAILING WAGE RATE FORMS

WH-38	Certified Payroll Form
WH-39	Public Work Contract Fee Information Form
WH-40	Public Work Contract Fee Adjustment Form
WH-81	Notice of Award of Public Works Contract
WH-118	Planned Public Improvement Summary
WH-119	Capital Improvement Cost Comparison Estimate



BUREAU OF LABOR AND INDUSTRIES, PREVAILING WAGE RATE UNIT

**INSTRUCTIONS FOR COMPLETING THE PREVAILING WAGE RATE
PAYROLL/CERTIFIED STATEMENT FORM (WH-38)**

The Payroll/Certified Statement form (WH-38) may be used by contractors for reporting their payroll as required by ORS 279C.845 on public works projects subject to the Prevailing Wage Rate (PWR) Law. Although this form has not been officially approved by the U.S. Department of Labor (US DOL), it is designed to meet the requirements of the federal Davis-Bacon Act. For projects associated with the U.S. Department of Housing and Urban Development (HUD), contact the public agency (owner) associated with the project for assistance with payroll reporting.

Contractors are not required to use the WH-38 form in reporting their payroll; however, the contractor must provide all of the information contained in the form, including the certified statement on page two. The certified statement must be signed by the contractor, certifying the accuracy of the information reported on the payroll, including representations pertaining to the provision of fringe benefits to employees by third parties, and must be submitted with each weekly payroll report. Detailed instructions concerning the preparation of the form follow:

Complete the top third of the form. Be sure to enter the date the contract was first advertised for bid. If you are not sure of this date, contact the public agency (owner) associated with the project. The "Payroll No." is a US DOL requirement and represents the week number for the reporting period.

Column 1 – NAME AND ADDRESS: The employee's full name must be shown on each payroll submitted. The employee's address must also be shown on the first payroll submitted. The address need not be shown on subsequent payrolls submitted unless the address changes. The US DOL requires an employee identification number for each individual employee, on each payroll submitted. This number may be, but does not have to be, the last four digits of the employee's social security number.

Column 2 – CLASSIFICATION: For assistance in determining the correct classification, use the Bureau of Labor and Industries' publication "Definitions of Covered Occupations for Public Works Contracts in Oregon." On the WH-38, list the classification that is most descriptive of the work actually performed by the employee. Give the group number for those classifications that include such information. Indicate which workers are apprentices, if any, and give their current percentage, classification, and group number when applicable. If an employee works in more than one classification, use the highest rate for all hours worked, or use separate line entries to show hours worked and hourly rates for each classification.

Column 3 – DAY AND DATE: Enter the day of the week (M, T, W, Th, F, S, and Sn) in the top row of boxes, and the corresponding date below.

HOURS WORKED EACH DAY: Enter the total number of straight time hours worked in the row marked "ST." Generally, hours worked over 8 in a day or work performed on Saturdays, Sundays, and legal holidays should be entered as overtime ("OT") hours worked. Contractors who have adopted and followed a written work schedule of four consecutive ten-hour days (Monday through Thursday or Tuesday through Friday) may enter hours worked over 10 in a day as overtime hours. For more information on overtime requirements, see the Contractor Responsibilities section of the Bureau of Labor and Industries' publication "Prevailing Wage Rate Laws" handbook.

Column 4 – TOTAL HOURS: Enter separately the total number of straight time and overtime hours worked by the employee (in each classification, if applicable) on the PWR project during the week. The total number of straight time hours worked should be entered in the lower box ("ST"); the total number of overtime hours worked should be entered in the top box ("OT").

Column 5 – HOURLY BASE RATE: Enter the hourly base rate (plus zone pay, if any) and the hourly overtime rate (plus zone pay, if any) paid to the employee in the appropriate straight time and overtime boxes. (Payment of not less than one and one half times the base rate of pay, including zone pay but not

including fringe benefits, is required to be paid for overtime hours pursuant to ORS 279C.540). Generally, use the appropriate prevailing wage rates in effect at the time the contract was first advertised for bid by the public agency. If this date is not known, or if the project was not advertised for bid, contact the public agency (owner) associated with the project for assistance with applicable rates.

Column 6 – HOURLY FRINGE BENEFIT AMOUNT PAID AS WAGES TO THE EMPLOYEE: Enter hourly fringe benefit amounts paid directly to the employee as wages. (For overtime hours worked, it is not necessary to pay time and one half for the fringe benefit portion of the prevailing wage rate.)

Column 7 – GROSS AMOUNT EARNED: Enter the gross amount earned for work on the PWR project during the week. If part of the employee's wages for the pay period were earned on projects other than the project described on the WH-38, or if the employee is paid less often than on a weekly basis, enter in column 7 first the gross amount earned on the PWR project for the week, then the total gross amount earned for the pay period. For example: \$567.84 / \$1,267.27.

Column 8 – ITEMIZED DEDUCTIONS, FICA, FED, STATE, ETC.: Enter deductions withheld from wages for the pay period. All deductions must be in accordance with the provisions of ORS 652.610 (and as defined in Regulations, Part 3 (29 CFR Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. Stat. 967, 76 Stat. 357; 40 U.S.C 276c) on projects subject to Davis-Bacon Act). For projects subject to the Davis-Bacon Act, itemize the deductions.

Column 9 – NET WAGES PAID: Enter the total amount of net wages actually paid to the employee for the pay period. This figure can be calculated by subtracting the total deductions reported in Column 8 from the gross amount of wages for the pay period reported in the bottom portion of Column 7.

Column 10 – HOURLY FRINGE BENEFITS PAID TO BENEFITS PARTY, PLAN, FUND OR PROGRAM: Enter the hourly amount of fringe benefits paid to each individually approved party, plan, fund, or program, for each employee. List these amounts separately on the lines provided. Any contractor who is making payments to approved parties, plans, funds or programs in amounts less than the required hourly fringe benefit is obligated to pay the difference directly to the employee as wages in lieu of fringe benefits, and to show that amount in Column 6 of this form. For information on how to calculate hourly fringe benefit credits, see Appendix A in the Bureau of Labor and Industries' publication "Prevailing Wage Rate Laws" handbook.

Column 11 – NAME OF BENEFIT PARTY, PLAN, FUND OR PROGRAM: Enter the name of the party, plan, fund, or program that corresponds to the amount paid as an hourly fringe benefit in Column 10.

CALCULATION CHECK

In order to determine whether the wages and fringe benefits paid are sufficient to meet prevailing wage rate requirements, the following check may be performed:

1. For each classification listed in column 2, compute the sum of:
 - a) the hourly base rate of pay shown in Column 5,
 - b) the hourly fringe benefit amount paid as wages to employee shown in Column 6, and
 - c) the hourly fringe benefits paid to benefit party, plan, fund or program shown in Column 10.
2. This sum must equal or exceed the total of the hourly base rate (including zone pay) and the hourly fringe benefit rate for that classification as listed in the appropriate issue of the Bureau of Labor and Industries publications Prevailing Wage Rates for Public Works Contracts in Oregon.

IF YOU HAVE QUESTIONS REGARDING COMPLETION OF THIS FORM, CONTACT THE PREVAILING WAGE RATE UNIT OF THE BUREAU OF LABOR AND INDUSTRIES AT (971) 673-0838.

NOTE: PAYROLL/CERTIFIED STATEMENTS ARE ONLY REQUIRED TO BE SUBMITTED TO THE PUBLIC AGENCY ASSOCIATED WITH THE PROJECT.

**CERTIFIED PAYROLL AND OTHER FORMS ARE AVAILABLE ON OUR WEBSITE:
WWW.OREGON.GOV/BOLI**

**PAYROLL/CERTIFIED STATEMENT FORM WH-388
FOR USE IN COMPLYING WITH ORS 279C.845***

[illegible]

Page 65

CERTIFIED STATEMENT

Date: _____

I, _____, _____ (NAME OF SIGNATORY PARTY) _____ (TITLE)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by:

_____ (CONTRACTOR, SUBCONTRACTOR OR SURETY)
on the _____ (BUILDING OR WORK) _____; that during the payroll period
commencing on the _____ day of _____ (MONTH) _____ (YEAR), and ending the _____ day
of _____ (MONTH) _____ (YEAR), all persons employed on said project have been paid the
full weekly wages earned, that no rebates have been or will be made either directly or
indirectly to or on behalf of said _____

_____ (CONTRACTOR, SUBCONTRACTOR OR SURETY)
from the full weekly wages earned by any person, and that no deductions have been
made either directly or indirectly from the full wages earned by any person, other than
permissible deductions as specified in ORS 652.610, and as defined in Regulations, Part
3 (29 CFR Subtitle A), issued by the Secretary of Labor under the Copeland Act, as
amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. 276c), and
described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above
period are correct and complete; that the wage rates for workers contained therein are
not less than the applicable wage rates contained in any wage determination
incorporated into the contract; that the classifications set forth therein for each worker
conform with work performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide
apprenticeship program registered with a state apprenticeship agency recognized by the
Bureau of Apprenticeship and Training, United States Department of Labor, or if no such
recognized agency exists in a state, are registered with the Bureau of Apprenticeship
and Training, United States Department of Labor.

I HAVE READ THIS CERTIFIED STATEMENT, KNOW THE CONTENTS THEREOF
AND IT IS TRUE TO MY KNOWLEDGE:

(NAME AND TITLE)

(SIGNATURE AND DATE)

In addition to completing sections (1) - (3), if your project is subject to the federal
Davis-Bacon Act requirements, complete the following section as well:

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS OR
PROGRAMS

☐ - In addition to the basic hourly wage rates paid to each laborer or mechanic
listed in the above referenced payroll, payments of fringe benefits as listed in
the contract have been or will be made to appropriate programs for the benefit
of such employees, except as noted in Section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☐ - Each laborer or mechanic listed in the above referenced payroll has been paid,
as indicated on the payroll, an amount not less than the sum of the applicable
basic hourly wage rate plus the amount of the required fringe benefits as listed
in the contract, except as noted in Section 4(c) below.

(c) EXCEPTIONS:

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY
SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL
PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31
OF THE UNITED STATES CODE.

FILE THIS FORM WITH THE PUBLIC AGENCY ASSOCIATED WITH THE PROJECT
NOTE TO CONTRACTORS: YOU MUST ATTACH COPIES OF THIS FORM TO EACH OF YOUR PAYROLL SUBMISSIONS ON THIS PROJECT.
INSTRUCTIONS AND ADDITIONAL FORMS ARE AVAILABLE ON OUR WEBSITE: WWW.OREGON.GOV/BOLI.



CONTRACT FEE SECTION
PREVAILING WAGE RATE UNIT
BUREAU OF LABOR AND INDUSTRIES
800 N.E. OREGON ST., #1045
PORTLAND, OR 97232-2180
PHONE: (971) 673-0852
FAX: (971) 673-0769

For Office Use Only:

Project DB #: _____

PUBLIC WORKS FEE INFORMATION FORM

For use by public agencies that have contracted with a contractor on a public works project regulated by ORS 279C.800 to 279C.870, in compliance with ORS 279C.825. Also for use by public agencies that are a party to a public works project pursuant to ORS 279C.800(6)(a)(B) or (C).

PUBLIC AGENCIES: Please complete and mail this form to BOLI at the above address, along with the public works fee of one-tenth of one percent of the contract price (contract amount x .001), payable to BOLI. **The minimum fee is \$250.00; the maximum fee is \$7,500.00.** Without the following completed information, the bureau may be unable to properly credit you for payment received.

PUBLIC AGENCY: _____ **AGENCY #:** _____

AGENCY MAILING ADDRESS: _____

CITY, STATE, ZIP _____

AGENCY CONTACT PERSON: _____ **PHONE:** () _____

PROJECT MANAGER NAME: _____ **PHONE:** () _____

PROJECT NAME: _____

CONTRACT NAME (if part of larger project): _____

PROJECT LOCATION: _____

PROJECT NO: _____ **DATE CONTRACT FIRST ADVERTISED:** _____

DATE CONTRACT AWARDED: _____ **CONTRACTOR CCB#:** _____

CONTRACTOR BUSINESS NAME (DBA): _____

CONTRACTOR ADDRESS: _____

CITY, STATE ZIP _____

CONTRACT AMOUNT: \$ _____ **FEE AMOUNT DUE/PAID: \$** _____

If less than \$50K is it part of a larger project? ☐ yes ☐ no

Contract amount x .001 = fee due

(Please duplicate this form for future use.)



CONTRACT FEE SECTION
PREVAILING WAGE RATE UNIT
BUREAU OF LABOR AND INDUSTRIES
800 N.E. OREGON ST., #1045
PORTLAND, OR 97232-2180
PHONE: (971) 673-0852
FAX: (971) 673-0769

For Office Use Only:

Project DB #: _____

PUBLIC WORKS FEE ADJUSTMENT FORM

THIS FORM TO BE USED FOR RECONCILIATION OF FEES UPON COMPLETION OF PUBLIC WORKS PROJECTS

(As required by ORS 279C.825 and OAR 839-025-0210)

PUBLIC AGENCIES: Complete and mail this form to BOLI at the above address after completion of the public work project and not less than 30 days after the final progress payment is made to the contractor. Public agencies are required to determine the final contract price, including all change orders or other adjustments to the original contract price, and to calculate the adjusted prevailing wage rate fee based on the revised contract price. Documentation must be included to support the final contract price. Documentation of the final contract price may consist of change orders or other contract documents substantiating the amount of the contract. The prevailing wage rate fee of one-tenth of one percent (.001) shall be applied to the final contract price, with credit taken for fees already submitted. The public agency must submit any additional fee payable to BOLI, or submit any request for refund, with this adjustment form. **NO ADDITIONAL FEE IS REQUIRED TO BE PAID, AND REFUNDS WILL NOT BE MADE, FOR RECONCILED AMOUNTS OF LESS THAN \$100.00.**

PUBLIC AGENCY: _____ **AGENCY #:** _____

AGENCY CONTACT PERSON: _____ **PHONE : ()** _____

MAILING ADDRESS: _____

PROJECT NAME: _____

CONTRACT NAME (if part of larger project): _____

PROJECT NUMBER: _____ **PROJECT LOCATION:** _____

CONTRACTOR/BUSINESS NAME (DBA): _____

CONTRACTOR CCB#: _____ **DATE AWARDED:** _____

FINAL CONTRACT/PROJECT AMOUNT: _____ **FINAL FEE DUE:** _____

(Include all change orders and adjustments to the contract price)

(Final Contract amount X .001)

ORIGINAL CONTRACT AMOUNT: _____ **INITIAL FEE PAID:** _____

(Original Contract amount X .001)

TOTAL ADJUSTMENT: _____ **BALANCE DUE*:** _____

or

REFUND DUE*: _____

*Final contract fee less initial fee paid

Sample Calculation:			
Final Contract Amount:	\$ 400,000.00	Final Fee Due:	\$ 400.00
Original Contract Amount:	- 300,000.00	Initial Fee Paid:	- 300.00
Total Adjustment:	\$ 100,000.00	Additional Amount Due:	\$ 100.00

(Please duplicate this form for future use)



BUREAU OF LABOR AND INDUSTRIES
NOTICE OF PUBLIC WORKS
(For use by public agencies in complying with ORS 279C.835
for public works awarded after January 1, 2008)

NOTE: ORS 279C.835 requires that public contracting agencies include with this form a copy of the disclosure of first-tier subcontractors submitted pursuant to ORS 279C.370.

PUBLIC AGENCY INFORMATION

Agency Name: _____ Agency Number (if known): _____
Address: _____ Agency Division: _____
City, State, Zip: _____
Agency Representative: _____ Phone: _____

SECTION A: To be completed when a public agency awards a contract to a contractor for a public works project, including CM/GC projects. (See reverse for public works projects in which no public agency awards a contract to a contractor.)

CONTRACT INFORMATION:

Project Name: _____ Project Number: _____
Contract Name (if part of larger project): _____ Contract Number: _____
Project Manager Name: _____ Phone #: _____ Fax #: _____
Project Location (Street(s), City): _____ Project County: _____
Contract Amount: \$ _____ If under \$50,000, is this contract part of a larger project? YES _____ NO _____
If yes, total project amount: \$ _____
Will project use federal funds that require compliance with the Davis-Bacon Act? YES _____ NO _____
Date Contract Specifications First Advertised for Bid (if not advertised, date of RFP or first contact with contractor): _____
If CM/GC Contract, Date Contract Became a Public Works Contract (see OAR 839-025-0020(6)): _____
Date Contract Awarded: _____ Date Work Expected to Begin: _____
Date Work Expected to be Complete: _____

PRIME CONTRACTOR INFORMATION:

Name: _____
Address: _____
City, State Zip: _____ Phone: _____
Construction Contractors Board Registration Number: _____
Name of Bonding Company: _____
Address: _____
Agent Name and Phone Number: _____
Bond Number: _____

☐ Copy of first-tier subcontractors attached (see NOTE above).

THIS FORM WILL BE RETURNED TO THE PUBLIC AGENCY FOR CORRECTION AND RESUBMITTAL IF INCOMPLETE.

SECTION B: To be completed when a project is a public works pursuant to ORS 279C.800(6)(a)(B) (a project for the construction, reconstruction, major renovation or painting of a privately owned road, highway, building, structure or improvement of any type that uses funds of a private entity and \$750,000 or more of funds of a public agency) and no public agency awards a contract to a contractor.

CONTRACT INFORMATION:

Name of Project Owner: _____ Phone #: _____ Fax #: _____
Project Name: _____ Project Number: _____
Project Location (Street(s), City): _____ Project County: _____
Total Project Amount: \$ _____ Amount of Public Funds Provided for the project: \$ _____
Name(s) of Public Agency (ies) Providing Public Funds: _____
Date the public agency or agencies commit to the provision of funds for the project: _____
Will project use federal funds that require compliance with the Davis-Bacon Act? YES ____ NO ____
Date Work Expected to Begin: _____
Date Work Expected to be Complete: _____

SECTION C: To be completed when a project is a public works pursuant to ORS 279C.800(6)(a)(C) (a project for the construction of a privately owned road, highway, building, structure or improvement of any type that uses funds of a private entity and in which 25 percent or more of the square footage of the completed project will be occupied or used by a public agency) and no public agency awards a contract to a contractor.

CONTRACT INFORMATION:

Name of Project Owner: _____ Phone #: _____ Fax #: _____
Project Name: _____ Project Number: _____
Project Location (Street(s), City): _____ Project County: _____
Total Project Amount: \$ _____ Amount of Public Funds Provided for the project: \$ _____
Name(s) of Public Agency(ies) Providing Public Funds: _____
Total square footage of privately owned road, highway, building, structure or improvement: _____
Percent of total square footage of the completed project that will be occupied or used by a public agency: _____
Date the public agency or agencies entered into an agreement to occupy or use the completed project: _____
Will project use federal funds that require compliance with the Davis-Bacon Act? YES ____ NO ____
Date Work Expected to Begin: _____
Date Work Expected to be Complete: _____

THIS FORM WILL BE RETURNED TO THE PUBLIC AGENCY FOR CORRECTION AND RESUBMITTAL IF INCOMPLETE.

Signature of agency representative completing form: _____

Printed Name: _____ Phone #: _____ Date: _____

RETURN THIS COMPLETED FORM TO:
Prevailing Wage Rate Unit • Bureau of Labor and Industries • 800 NE Oregon Street, #1045 • Portland, OR 97232-2180
Telephone (971) 673-0852 • FAX (971) 673-0769



PLANNED PUBLIC IMPROVEMENT SUMMARY

FISCAL YEAR: _____

(Name of State or Local Government Agency) _____

PAGE ____ OF ____

Project Number	Project Name	Project Type	Project Location	Estimated Project Cost	Agency or Contract Work

ORS 279C.305 requires that not less than 30 days prior to adoption of its budget for the subsequent budget period, each public agency shall prepare and file with the Commissioner of the Bureau of Labor and Industries a list of every public improvement known to the agency that the agency plans to fund in the budget period, identifying each improvement by name and estimating the total on-site construction costs. The list shall also contain a statement as to whether the agency intends to perform the construction by a private contractor. If the agency intends to perform construction work using the agency's own equipment and personnel on a project estimated to cost more than \$125,000, the agency must also show that its decision conforms to the state's policy that public agencies make every effort to construct public improvements at the least cost to the public agency. Public agencies are required to keep and preserve a full, true and accurate account of the costs of performing the work, including all engineering and administrative expenses, and the cost, including investment costs, of any equipment used.

This form (WH-118) may be used to list planned public improvements. Form WH-119 (Capital Improvement Project Cost Comparison Estimate) may be used to report the agency's least cost analysis.

Completed forms should be mailed to:

Prevailing Wage Rate Unit
Wage and Hour Division, #1045
Bureau of Labor and Industries
800 N.E. Oregon St.
Portland, OR 97232-2180



DEPARTMENT: _____

PROPOSED YEAR: _____

PROJECT DESCRIPTION: _____

PROJECT NAME: _____

FUND: _____

PROJECT NUMBER: _____

Rough Quantity Estimates	Units	Work Class Description	Agency Force Estimate		Agency Contract Estimate	
			Agency Force Estimate		Agency Contract Estimate	
			Unit Cost	Total Cost	Unit Cost	Total Cost
						\$

ESTIMATED CONSTRUCTION PERIOD: _____

The above-named agency has determined that this project can be performed at the least cost by: ☐ the Agency ☐ Contractor (check one)

(Signature of Agency Official)

ORS 279C.305 requires that not less than 30 days prior to adoption of its budget for the subsequent budget period, each public agency shall prepare and file with the Commissioner of the Bureau of Labor and Industries a list of every public improvement known to the agency that the agency plans to fund in the budget period, identifying each improvement by name and estimating the total on-site construction costs. The list shall also contain a statement as to whether the agency intends to perform the construction by a private contractor. If the agency intends to perform construction work using the agency's own equipment and personnel on a project estimated to cost more than \$125,000, the agency must also show that its decision conforms to the state's policy that public agencies make every effort to construct public improvements at the least cost to the public agency. Public agencies are required to keep and preserve a full, true and accurate account of the costs of performing the work, including all engineering and administrative expenses, and the cost, including investment costs, of any equipment used.

Form WH-118 (Planned Public Improvement Summary) may be used to list planned public improvements. This form (WH-119) may be used to report the agency's least cost analysis.

Completed forms should be mailed to:

Prevailing Wage Rate Unit
Wage and Hour Division, #1045
Bureau of Labor and Industries
800 N.E. Oregon St.
Portland, OR 97232-2180

The 2012 edition of the Prevailing Wage Rate Laws handbook is available. One complimentary hard copy of each Prevailing Wage Rate (PWR) publication is available upon request by emailing BOLI at pwremail@boli.state.or.us or calling (971) 673-0838. Additional copies are available at cost, plus postage.

In addition to providing this and other PWR publications, the Bureau of Labor and Industries' PWR Unit regularly offers free, informational seminars for both public agencies and contractors.

Prior to responding below, please consider that all PWR-related information is available online at <http://www.oregon.gov/BOLI/WHD/PWR/Pages/index.aspx>. If you are interested in receiving the handbook and/or being included on our mailing lists for future seminar notifications, please complete the form below and return it to the bureau's PWR Unit. You may mail this form to the address on the opposite side of the form, or fax it to (971) 673-2372.

-
- ☐ Please send me the 2012 edition of the Prevailing Wage Rate Laws handbook.
- ☐ Please add me to the mailing list to receive information about BOLI PWR seminars.
- ☐ Please add me to the e-mailing list to receive information about BOLI PWR seminars.

AGENCY OR CONTRACTOR BUSINESS NAME and PHONE NUMBER (Required)

AGENCY OR CONTRACTOR BUSINESS E-MAIL ADDRESS (Please print clearly)

MAILING ADDRESS

CITY, STATE, ZIP

NAME OF REPRESENTATIVE and PHONE NUMBER if different from above.

place
stamp
here

BOLI - PREVAILING WAGE RATE UNIT
800 NE OREGON #1045
PORTLAND, OR 97232

BUREAU OF LABOR AND INDUSTRIES
WAGE AND HOUR DIVISION – PWR UNIT
800 NE OREGON STREET # 1045
PORTLAND, OR 97232

PRSRT STD
US POSTAGE
PAID
PORTLAND, OR
PERMIT No. 5

FEDERAL DAVIS BACON WAGE RATES

General Decision Number: OR130024 02/08/2013 OR24

Superseded General Decision Number: OR20120024

State: Oregon

Construction Type: Building

County: Columbia County in Oregon.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Modification Number Publication Date

0	01/04/2013
1	01/11/2013
2	01/18/2013
3	01/25/2013
4	02/08/2013

BROR0001-014 06/01/2012

	Rates	Fringes
BRICK FINISHER.....	\$ 21.86	10.84
BRICKLAYER.....	\$ 32.75	15.80
TILE FINISHER.....	\$ 21.86	10.19
TILE SETTER.....	\$ 29.19	13.27

CARP0001-025 06/01/2012

	Rates	Fringes
Carpenters:		
Hardwood floors and batt insulation.....	\$ 32.76	14.44
Including metal stud installation, from work and scaffold building.....	\$ 32.61	14.44

CARP9001-003 06/01/2012

	Rates	Fringes
Acoustical Ceiling Installer & Drywall Hanger.....	\$ 32.90	14.15
LATHER.....	\$ 31.02	16.03

ELEC0048-018 01/01/2013

	Rates	Fringes
ELECTRICIAN.....	\$ 38.05	18.44

ELEC0048-019 01/01/2013

	Rates	Fringes
ELECTRICIAN Computer Installation, telephone installation, HVAC temperature control installation, Electrical low voltage wiring installer and sound technician only.....	\$ 22.50	13.83
Electrical installer alarms and Low voltage wiring for alarms only.....	\$ 28.75	14.96

ENGI0701-022 01/01/2013

	Rates	Fringes
Power equipment operators:		
GROUP 1.....	\$ 37.63	13.55
GROUP 1A.....	\$ 39.51	13.55
GROUP 1B.....	\$ 41.39	13.55
GROUP 2.....	\$ 35.97	13.55
GROUP 3.....	\$ 34.96	13.55
GROUP 4.....	\$ 34.00	13.55
GROUP 5.....	\$ 32.88	13.55
GROUP 6.....	\$ 29.84	13.55

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: CRANE: Helicopter Operator, when used in erecting

work; Whirley Operator, 90 ton and over; LATTICE BOOM CRANE: Operator 200 tons through 299 tons, and/or over 200 feet boom; HYDRAULIC CRANE: Hydraulic Crane Operator 90 tons through 199 tons with luffing or tower attachments

GROUP 1A: HYDRAULIC CRANE: Hydraulic Operator, 200 tons and over (with luffing or tower attachment); LATTICE BOOM CRANE: Operator, 200 tons through 299 tons, with over 200 feet boom;

GROUP 1B: LATTICE BOOM CRANE: Operator, 300 tons through 399 tons with over 200 feet boom; Operator 400 tons and over

GROUP 2: CRANE: Cableway Operator, 25 tons and over; HYDRAULIC CRANE: Hydraulic crane operator 90 tons through 199 tons (without luffing or tower attachment); TOWER/WHIRLEY OPERATOR: Tower Crane Operator; Whirley Operator, under 90 tons; LATTICE BOOM CRANE: 90 through 199 tons and/or 150 to 200 feet boom; HYDRAULIC CRANE: Hydraulic crane operator, 50 tons through 89 tons (with luffing or tower attachment); Rubber tired scraper with tandem scrapers, multi-engine Trenching Machine-Wheel Operator; Excavator over 130,000 lbs; Loader 120,000 lbs and above; BLADE: Auto Grader; Blade Operator-Robotic

GROUP 3: HYDRAULIC CRANE: Hydraulic crane operator, 50 tons through 89 tons (without luffing or tower attachment); LATTICE BOOM CRANES: Lattice Boom Crane-50 through 89 tons (and less than 150 feet boom); Rubber Tired Scraper: with tandem scrapers; self loading, paddle wheel, auger type, finish and/or 2 or more units; Excavator over 80,000 lbs through 130,000; Loader 60,000 lbs and less than 120,000 lbs.

GROUP 4: CRANE: Hydraulic Crane Operator, under 50 tons; LATTICE BOOM CRANE OPERATOR: Lattice Boom Crane Operator, under 50 tons; TRACKHOE/EXCAVATOR-ROBOTIC: up to and including 20,000 lbs. with any or all attachments; Excavator Operator over 20,000 lbs through 80,000 lbs.; BLADE: Blade Operator; Tractor operator with boom attachment; DRILLING: Churn Drill and Earth Boring Machine Operator; Directional Drill Operator over 20,000 lbs pullback; CRANE: Chicago boom and similar types; Boom type lifting device, 5 ton capacity or less; HYDRAULIC HOES: Robotic Hydraulic backhoe operator, track and wheel type up

to and including 20,000 lbs. with any or all attachments;
 Asphalt Paver; Screed Operator; Rubber-Tired Scraper,
 single engine, single scraper; Compactor-Self Propelled;
 Trenching Machine, digging capacity over 3 ft Depth;
 Excavator over 20,000 lbs through 80,000 lbs; Loaders
 25,000 lbs and less than 60,000 lbs

GROUP 5: TRACKHOE/EXCAVATOR-HYDRAULIC: up to and including
 20,000 lbs.; Boom truck operator; DRILLING: Churm Drill and
 Earth Boring Machine Operator; Directional Drill Operator
 less than 20,000 lbs pullback; HYDRAULIC HOES: Hydraulic
 Backhoe Operator, wheel type (Ford, John Deere, Case type);
 Hydraulic Backhoe Operator track type up to and including
 20,000 lbs.; Concrete Pumper; Concrete Paver: Compactor;
 Loaders, rubber tired type , less than 25,00 lbs; Forklift
 over 5 ton, Man Lift/Outside Elevator

GROUP 6: LOADERS: (less than 1 cu yd.); Roller
 (Non-Asphalt); Oiler; Bobcat/Skid Loader; Grade Checker;
 Crane oiler; Drill Assistant; Forklift

IRON0029-011 01/01/2012

	Rates	Fringes
IRONWORKER (Ornamental, Reinforcing, and Structural).....	\$ 33.87	20.12

LABO0001-030 06/01/2008

	Rates	Fringes
Laborers: (Mason Tender-Cement/Concrete).....	\$ 25.75	11.25

LABO0001-031 06/01/2008

	Rates	Fringes
Laborers: (Mason Tender-Brick)...	\$ 25.75	11.25

LABO0001-032 06/01/2008

	Rates	Fringes

Laborers: (Mason Tender-Stone)...\$ 25.75 11.25

LABO0003-010 06/29/2012

Rates Fringes

Laborers:

GROUP 1.....\$ 25.27 12.85
GROUP 2.....\$ 26.27 12.85

LABORER CLASSIFICATIONS

GROUP 1: Form-Stripping; Demolition, General Laborer

GROUP 2: Power Tool Operator, Vibrating Plate, Grade
Checker, Pipelayer, Asphalt Raker

PAIN0055-025 07/01/2009

Rates Fringes

PAINTER

BRUSH, ROLLER AND SPRAY.....\$ 19.59 7.24

PAIN0055-026 08/13/2012

Rates Fringes

DRYWALL FINISHER/TAPER.....\$ 32.22 12.40

PAIN0740-002 01/01/2013

Rates Fringes

GLAZIER.....\$ 35.80 13.89

PAIN1236-007 01/01/2013

Rates Fringes

FLOOR LAYER: Vinyl Flooring.....\$ 27.28 11.62

PLAS0082-004 06/01/2011

Rates Fringes

PLASTERER

Including Stucco.....\$ 25.08 11.32

PLAS0555-006 06/01/2012

Rates Fringes

CEMENT MASON/CONCRETE FINISHER...\$ 29.98 17.76

PLUM0290-009 04/01/2011

Rates Fringes

PIPEFITTER

Including HVAC Pipe
Installation.....\$ 36.69 20.09

PLUM0290-010 04/01/2011

Rates Fringes

PLUMBER.....\$ 36.69 20.09

ROOF0049-004 07/01/2012

Rates Fringes

ROOFER

Excluding Metal Roof.....\$ 28.03 9.55

* SFOR0669-002 01/01/2013

Rates Fringes

SPRINKLER FITTER

Fire Sprinklers.....\$ 32.43 19.75

SHEE0016-015 07/01/2011

Rates Fringes

Sheet Metal Worker

Including HVAC Duct
Installation.....\$ 35.32 16.10

	Rates	Fringes
LABORER: Landscape.....	\$ 12.38	0.00
MILLWRIGHT.....	\$ 17.62	3.19
TRUCK DRIVER: Dump Truck.....	\$ 20.42	7.21
TRUCK DRIVER: Water Truck.....	\$ 18.11	5.05

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

=====

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is union or non-union.

Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters , PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union number or district council number where applicable , i.e.,

Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rates.

0000/9999: weighted union wage rates will be published annually each January.

Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union majority rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====

END OF GENERAL DECISION

ATTACHMENT "C"
SAMPLE CONTRACT

COLUMBIA COUNTY EMERGENCY MANAGEMENT FACILITY

CONSTRUCTION CONTRACT

BY AND BETWEEN

COLUMBIA COUNTY AND

XXXXXXXXXXXXXXXXXXXXXXX, INC.

This Agreement is made and entered into by and between Columbia County, a political subdivision of the State of Oregon, hereinafter referred to as "Owner" or "County", and XXXXXXXXXXXXXXXXXXXXX, Inc., hereinafter referred to as "Contractor".

WITNESSETH:

IT IS HEREBY AGREED by and between the parties above-mentioned for and in consideration of the mutual promises hereinafter stated as follows:

1. Effective Date/Completion Date. This Agreement will be effective when it has been executed by both Owner and Contractor. However, Contractor shall not commence work on the project until Contractor has received a notice to proceed from the County's Representative. The Project shall be completed according to the schedule for completion set forth in the Contract Documents. The deadline for substantial completion shall be August 30, 2013. The deadline for final completion shall be September 20, 2013. All time limits stated in the contract documents are of the essence of this Agreement. Notwithstanding the provisions for contract time extensions in the General Conditions the Contractor and County agree that timely completion of the work is essential to the success of the Project and approval for time extensions shall be only a last resort. Both parties agree to make every effort to recover "lost time". The completion date may be amended only by written agreement of the parties.
2. Project Funding. Work under this contract will be funded in part with federal grant funds from the Department of Homeland Security, FEMA, administered by the Oregon State Department of Emergency Management EOC Grant #10-076 and Columbia County. Contractor shall comply with Grant Requirements set forth in Exhibit H, which is attached hereto and is incorporated herein by this reference. Contractor shall include the Grant Requirements in all sucontracts.
3. Exhibits. The following exhibits are attached hereto and are incorporated herein by this reference:

- Exhibit A- Invitation to Bid
- Exhibit B- Contractor's Bid
- Exhibit C- Contract Specifications and Plans
- Exhibit D- General Conditions
- Exhibit E- Special Provisions
- Exhibit F- State Prevailing Wage Rates
- Exhibit G- Davis-Bacon Prevailing Wage Determination
- Exhibit H- Grant Requirements

Together with this construction contract, the foregoing documents constitute the Contract Documents.

4. Contractor's Services.

- A. Contractor agrees to provide the services described in the Invitation to Bid which is attached hereto as Exhibit "A", and is incorporated herein by this reference.
- B. Contractor agrees to provide the service as proposed in Contractor's Bid which is attached hereto as Exhibit "B", and is incorporated herein by this reference.
- C. Contractor agrees to provide the services as set forth in the Contract Specifications and Plans which are included in the which is attached hereto as Exhibit "C" and titled "Emergency Operations Center Contract Specifications" and is incorporated herein by this reference.
- D. Contractor's services shall include/exclude the alternative sprinkler system.
- E. Contractor shall provide said services in the manner provided for in the General Conditions for Public Improvement Projects, which are attached hereto as Exhibit "D", and are incorporated herein by this reference.
- F. Contractor shall provide said services in the manner provided for in the Special Provisions, which are attached hereto as Exhibit "E" and are incorporated herein by this reference.
- G. Contractor shall comply with the higher of the **DAVIS-BACON** prevailing wage rates or Oregon prevailing wage rates, as shown in Exhibits F and G and standards as provided herein.

5. Controlling Documents. In the case where there may be a conflict between or among the terms of this Agreement and/or its exhibits, the conflict shall be resolved in the following manner:

- A. The applicable provisions of the U.S. Constitution, U.S. Code, Code of Federal Regulations, Oregon Constitution, Oregon Revised Statutes and

Oregon Administrative Rules (from highest priority to lowest) supersede any conflicting provision or provisions of this Agreement and its Exhibits and attachments.

- B. If this Agreement and/or any of its Exhibits conflict with the applicable provisions of the of DOEM Agreement Grant # EOC 10-076, as amended, and/or with the applicable provisions of any other grant agreement, the conflict shall be resolved by full compliance with the grant agreements as amended. In such case, Owner and Contractor shall negotiate for an amendment to the provision or provisions which conflict(s) with the agreements as amended, such amendment to be in writing and signed by Owner and Contractor.
- D. If there is a conflict between or among this Agreement and/or the Invitation to Bid (Exhibit "A") and/or Contractor's Proposal (Exhibit "B"), this Agreement shall control, followed by the Invitation to Bid, Exhibit "A".
- E. If there is a conflict between or among this Agreement and/or the General Conditions (Exhibit "D") and/or the Special Provisions (Exhibit "E") this Agreement shall control, followed by the General Conditions, Exhibit "D".
6. Consideration. Owner shall pay Contractor a fee for service in the amount of \$XXXXXX.00, said amount to be the complete compensation to Contractor for the services performed under this Agreement. This fee shall include all expenses. Payment shall be made in the manner prescribed in the General Conditions. This Agreement is subject to the appropriation of funds by Owner, and/or the receipt of funds from state and federal sources. In the event sufficient funds shall not be appropriated, and/or received, by Owner for the payment of consideration required to be paid under this Agreement, Owner may terminate this Agreement without penalty in accordance with Section 26 of this Agreement.
7. Contract Representatives. Contract representatives for this Agreement shall be:

For the Owner:

Bill Potter, Facilities Manager
230 Strand
St. Helens, Oregon 97051
503-397-7213

For the Contractor:

XXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXX

All correspondence shall be sent to the above addressees when written notification is necessary. The Contractor understands and agrees that only the Owner's Contract Representative is authorized to give Contractor work authorizations, issue written approvals and notices to proceed. If any work is done by Contractor without prior written authorization by the Owner's Contract Representative, the Owner will not be obligated to pay for such work. Contract representatives can be changed by providing written notice to the other party at the address listed.

8. Permits; Licenses; Bonds; Qualifications. Unless otherwise specified, Contractor shall procure all permits, licenses and bonds, pay all charges and fees and give all notices necessary for performance of this Agreement prior to commencement of work. Contractor, by entering into this Agreement represents, that all personnel assigned to the work required under this Agreement are fully qualified to perform the work to which they will be assigned in a skilled and workmanlike manner and, if required to be registered, licensed or bonded by the state of Oregon, are so registered, licensed or bonded.
9. Compliance with Codes and Standards. Contractor shall at all times observe and comply with all federal and state laws, administrative rules and regulations issued thereunder, and with all applicable ordinances, and building, health and sanitation laws and codes. Contractor shall engage in no activity which creates an actual conflict of interest or violates the Code of Ethics as provided by ORS Chapter 244.
10. Reports. Contractor shall provide Owner's Contract Representative with periodic reports about the progress of the project as requested by Owner.
11. Ownership of Documents. Owner will own the documents and data prepared and/or compiled by Contractor pursuant to this agreement, including working papers, drawings, and other material necessary for complete understanding of the plans. Contractor hereby conveys, transfers, and grants to Owner all copyrights and rights of reproduction to all such documents. Owner agrees not to assign or transfer the drawings which would duplicate the work product represented in the drawings at another location without the written consent of the Contractor. Contractor shall retain the right to reproduce the documents for purposes related to this project, for Contractor's archival records, and for marketing purposes.
12. Guarantee. Contractor guarantees all work under this Agreement against all defects in materials and workmanship. This guarantee shall extend from the date of completion by the Owner for the period of a minimum of one year, or longer, if so specified in the Contract Documents. Contractor shall promptly make all necessary repairs or replacements to correct any defects in workmanship or materials for which notice in writing has been sent to the Contractor from the Owner's Contract Representative within the guarantee period. In the event Contractor fails to take any action to correct conditions covered by this guarantee promptly after notice of such condition, Owner may do so, and Contractor and its surety shall be liable for the cost thereof. Normal wear and tear and the results of accidents not chargeable to Contractor or its agents are excepted from the above requirements.
13. Qualified Work. By signing this Agreement, Contractor represents that all personnel assigned to the work required under this Agreement are fully qualified to perform the work to which they will be assigned in a skilled and workmanlike manner and, if required to be registered, licensed or bonded by the State of Oregon, are so registered, licensed or bonded.
14. Independent Contractor. Contractor is engaged hereby as an independent

contractor and shall not be considered an employee, agent, partner, joint venturer or representative of Owner for any purpose whatsoever. Owner does not have the right of direction or control over the manner in which Contractor delivers services under this Agreement and does not exercise any control over the activities of the Contractor, except the services must be performed in a manner that is consistent with the terms of this Agreement. Owner shall have no obligation with respect to Contractor's debts or any other liabilities of Contractor. Contractor shall be responsible for furnishing all equipment necessary for the performance of the services required herein. In addition:

- A. Contractor will be solely responsible for payment of any Federal or State taxes required as a result of this Agreement.
 - B. This Agreement is not intended to entitle Contractor to any benefits generally granted to Owner's employees. Without limitation, but by way of illustration, the benefits which are not intended to be extended by this Agreement to the Contractor are vacation, holiday and sick leave, other leaves with pay, tenure, medical and dental coverage, life and disability insurance, overtime, social security, workers' compensation, unemployment compensation, or retirement benefits (except insofar as benefits are otherwise required by law if the Contractor is presently a member of the Public Employees Retirement System).
 - C. The Contractor is an independent contractor for purposes of the Oregon workers' compensation law (ORS Chapter 656) and is solely liable for any workers' compensation coverage under this Agreement. If the Contractor has the assistance of other persons in the performance of the Agreement, the Contractor shall qualify and remain qualified for the term of this Agreement as a carrier-insured or self-insured employer under ORS 656.407. If the Contractor performs this Agreement without the assistance of any other person, unless otherwise agreed to by the parties, Contractor shall apply for and obtain workers' compensation insurance for itself as a sole proprietor under ORS 656.128.
15. Statutory Provisions. Pursuant to the requirements of ORS 279C.500 through 279C.530 and Article XI, Section 10 of the Oregon Constitution, the following terms and conditions are made a part of this Agreement:
- A. Contractor shall:
 - (1) Make payment promptly, as due, to all persons supplying to Contractor labor or material for the prosecution of the work provided for in this Agreement.
 - (2) Pay all contributions or amounts due the Industrial Accident Fund from the Contractor or any subcontractor incurred in the performance of this Agreement.

- (3) Not permit any lien or claim to be filed or prosecuted against County on account of any labor or material furnished.
 - (4) Pay to the Department of Revenue all sums withheld from employees under ORS 316.167.
 - (5) Demonstrate that an employee drug testing program is in place.
- B. If Contractor fails, neglects or refuses to make prompt payment of any claim for labor or services furnished to Contractor or a subcontractor by any person in connection with this Agreement as the claim becomes due, the proper officer or officers representing County may pay such claim to the person furnishing the labor or services and charge the amount of the payment against funds due or to become due Contractor by reason of this Agreement. The County reserves the right to make payments directly or by multiple-payee check payments. Upon County's request, Contractor shall furnish to County the information required to facilitate such payments with each application for payment, including (1) names, addresses, and telephone numbers of persons making any such claim for labor, equipment, services or material, and (2) a complete listing of outstanding amounts owed to all such persons.
- C. If the Contractor or a first-tier subcontractor fails, neglects or refuses to make payment to a person furnishing labor or materials in connection with this contract within 30 days after receipt of payment from the Owner, the Contractor or first-tier subcontractor shall owe the person the amount due plus interest charges commencing at the end of the 10-day period that payment is due under ORS 279C.580(4) and ending upon final payment, unless payment is subject to a good faith dispute as defined in ORS 279C.580. The rate of interest charged to the Contractor or first-tier subcontractor on the amount due shall equal three times the discount rate on 90-day commercial paper in effect at the Federal Reserve Bank in the Federal Reserve district that includes Oregon on the date that is 30 days after the date when payment was received from the Owner or from Contractor, but the rate of interest may not exceed 30 percent. The amount of interest may not be waived.
- D. If the Contractor or a subcontractor fails, neglects or refuses to make payment to a person furnishing labor or materials in connection with this Agreement, the person may file a complaint with the Construction Contractors Board, unless payment is subject to a good faith dispute as defined in ORS 279C.580.
- E. Payment by the County of a claim in the manner authorized in this paragraph shall not relieve the Contractor or the Contractor's surety from obligation with respect to unpaid claims.

- F. No person may be employed for more than 10 hours in any one day, or 40 hours in any one week, except in cases of necessity, emergency, or where the public policy absolutely requires it, and in such cases, except in cases of contracts for personal services as defined in ORS 279C.100, the employee shall be paid at least time and a half pay:
- (1) For all overtime in excess of eight hours in any one day or 40 hours in any one week when the work week is five consecutive days, Monday through Friday; or
 - (2) For all overtime in excess of 10 hours in any one day or 40 hours in any one week when the work week is four consecutive days, Monday through Friday; and
 - (3) For all work performed on Saturday and on any legal holiday specified in ORS 279C.540.

Contractor and any employer under this Agreement must give notice in writing to employees who work under this Agreement, either at the time of hire or before commencement of work on the contract, or by posting a notice in a location frequented by employees, of the number of hours per day and days per week, that the employees may be required to work, along with the prevailing wage rate information and any fringe benefit information. If Contractor fails to give written notice of the workers' schedule, the work schedule will be presumed to be a five-day schedule. The schedule may only be changed if the change is intended to be permanent and is not designed to evade the Prevailing Wage Rate overtime requirement.

- G. When Contractor or subcontractor provides for or contributes to a health and welfare plan or a pension plan, or both, for contractor or subcontractor's employees who are working under this Contract, the details of all fringe benefit plans or programs must be posted on the work site. The posting must include a description of the plan or plans, information about how and where claims can be made and where to obtain more information. The notice must be posted in a conspicuous place at the work site in the same location as the prevailing wage rates.
- H. Contractor shall promptly, as due, make payment to any person, co-partnership, association or corporation, furnishing medical, surgical and hospital care services or other needed care and attention, incident to sickness and injury, to the employees of Contractor, of all sums that Contractor agrees to pay for the services and all moneys and sums that Contractor collects or deducts from the wages of employees under any law, contract or agreement for the purpose of providing or paying for such services.
- I. All subject employers working under this Agreement, including Contractor,

shall comply with ORS 656.017 and provide the required Workers' Compensation coverage, unless such employers that are exempt under ORS 656.126. Contractor shall ensure that each of its subcontractors complies with these requirements.

- J. Any worker employed by Contractor shall be foreclosed from the right to collect for any overtime provided in ORS 279C.540 unless a claim for payment is filed with the Contractor within 90 days from the completion of the contract, providing the Contractor has:
 - (1) Caused a circular clearly printed in boldfaced 12-point type and containing a copy of this section to be posted in a prominent place alongside the door of the timekeeper's office or in a similar place that is readily available and freely visible to workers employed on the work.
 - (2) Maintained the circular continuously posted from the inception to the completion of the contract on which workers are or have been employed.
- K. Contractor shall include in each subcontract for property or services entered into by the Contractor and a first-tier subcontractor, including a material supplier, for the purpose of performing a construction contract:
 - (1) A payment clause that obligates the Contractor to pay the first-tier subcontractor for satisfactory performance under its subcontract within 10 days out of such amounts as are paid to the Contractor by Owner under this Agreement; and
 - (2) An interest penalty clause that obligates the Contractor, if payment is not made within 30 days after receipt of payment from Owner, to pay to the first-tier subcontractor an interest penalty on amounts due in the case of each payment not made in accordance with the payment clause included in the subcontract under paragraph (1) of this subsection. Contractor or any first-tier subcontractor may not be obligated to pay an interest penalty if the only reason that Contractor or the first-tier subcontractor did not make payment when payment was due is that Contractor or first-tier subcontractor did not receive payment from Owner or Contractor when payment was due. The interest penalty shall be:
 - (a) For the period beginning on the day after the required payment date and ending on the date on which payment of the amount due is made; and
 - (b) Computed at the rate specified in ORS 279C.515(2).
- L. Contractor shall include in each of Contractor's subcontracts, for the purpose

of performance of such contract condition, a provision requiring the first-tier subcontractor to include a payment clause and an interest penalty clause conforming to the standards of subsection K of this section in each of the first-tier subcontractor's subcontracts and to require each of the first-tier subcontractor's subcontractors to include such clauses in their subcontracts with each lower-tier subcontractor or supplier.

- M. The provisions of this Section are not intended to impair the right of Contractor or a subcontractor at any tier to negotiate, and to include in the subcontract, provisions as allowed by ORS 279C.580(5). Such clauses and provisions are subject to the provisions of ORS 279C.580(6) through (10).
- N. Persons claiming to have supplied labor or materials for the performance of the work provided for in this Agreement, including any person having a direct contractual relationship with Contractor or direct contractual relationship with any subcontractor, or an assignee of such person, or a person claiming moneys due the State Accident Insurance Fund Corporation, the Unemployment Compensation Trust Fund or the Department of Revenue in connection with the performance of this Agreement, has a right of action on Contractor's payment bond as provided for in ORS 279C.380 and 279C.400 only if:
 - (1) The person or the assignee of the person has not been paid in full; and
 - (2) The person gives written notice of claim, as prescribed in ORS 279C.605, to the Contractor and Owner.
- O. Prevailing Wage Requirements. Exhibits "F" and "G" to this Agreement include the existing state prevailing rate of wage and the federal prevailing rate of wage required under the Davis-Bacon Act (40 U.S.C 3141 et seq) that must be paid to workers in each trade or occupation required for the Project employed in the performance of this Agreement either by the Contractor or any subcontractor or other person doing or contracting to do the whole or any part of the work contemplated by this Agreement. All workers shall be paid not less than the specified minimum hourly rate of wage in accordance with ORS 279C.838 and 279C.840. The Contractor and every subcontractor on the Project shall pay the state or federal prevailing rate of wage for workers in each trade or occupation in the locality of the Project, whichever is higher, as determined by the Commissioner or the Bureau of Labor and Industries under ORS 279C.815(2)(c). State prevailing wages are set forth in Exhibit "F", which is attached hereto and is incorporated herein by this reference. The Davis-Bacon wage determination is set forth in Exhibit "G", which is attached hereto and is incorporated herein by this reference.
- P. Pursuant to ORS 279C.830(2) Contractor shall obtain and file with the CCB, a Public Works Bond with a corporate surety authorized to do business in

Oregon in the amount of \$30,000 unless exempt. Contractor shall require in every subcontract and verify that subcontractors have filed a Public Works Bond before permitting a subcontractor to start work on the Project, unless exempt.

- Q. This Agreement is expressly subject to the debt limitation of Oregon counties set forth in Article XI, Section 10 of the Oregon Constitution, and is contingent upon funds being appropriated therefor. Any provisions herein which would conflict with law are deemed inoperative to that extent.

16. Construction Contractor's Board/Public Works Bond. Contractor and all subcontractors must be registered with the Oregon Construction Contractor's Board (CCB). Contractor shall provide Owner with evidence that all persons on the job as subcontractors are in fact independent contractors registered with the Construction Contractor's Board. Contractor and subcontractors shall remain eligible to receive public works contracts under 279C.860 at all times during the term of this Contract.

17. Subcontracts and other Agreements.

- A. Subcontractor List. Before commencing work, Contractor shall provide to Owner a list of all subcontractors and suppliers to be involved on the Project. The receipt of such list shall not require the Owner to investigate the qualifications of proposed subcontractors and suppliers, nor shall it waive the right of the Owner to later object to or reject any proposed subcontractor or supplier. It shall be the responsibility of the Contractor to assure that all subcontractors are duly registered with the Oregon State Construction Contractors Board and have not been declared ineligible to work on a public contract.
- B. Removal and Substitution. Owner shall have the ability to require removal and substitution of any subcontractor or supplier prior to commencement of the Work. Owner further reserves the right during the Project to reasonably require removal from the Project of any of Contractor's employees, agents, subcontractors or suppliers for good cause, and to require a substitution that meets Owner's approval, which approval shall not be unreasonably withheld.
- C. Responsibility; Assignment. The Contractor shall be responsible for all the acts and omissions of subcontractors and suppliers and their employees and agents. Contractor's subcontracts and supply contracts shall require the subcontractor and/or supplier, to the extent of the Work to be performed by the subcontractor or supplier, to be bound to Contractor by the terms of the Contract Documents and to assume toward Contractor all of the obligations which Contractor, by the Contract Documents, assumes toward Owner. Contractor's subcontracts and supply contracts shall include a provision whereby the subcontractor and/or supplier consents to the assignment of the subcontract/supply contract to Owner contingent upon Contractor's default of Agreement.

D. Contractor's Obligations under Subcontracts.

1. No use of a subcontractor shall relieve the Contractor of any of its obligations or liabilities under the Agreement. The Contractor shall be fully responsible and liable for the acts or omissions of all subcontractors and suppliers including persons directly or indirectly employed by them. The Contractor shall have sole responsibility for managing and coordinating the operations of its subcontractors and suppliers, including the settlement of disputes with or between the Contractor and any such subcontractor.
2. The Contractor shall include in each subcontract and require each subcontractor to include in any lower tier subcontract, any provisions necessary to make all of the provisions of the this Agreement fully effective as applied to subcontractors. The Contractor shall provide all necessary Plans, Specifications, and instructions to its suppliers and subcontractors to enable them to properly perform their work.

18. Accounting/Records/Audit.

- A. The Contractor shall keep full and detailed accounts and exercise such controls as may be necessary for proper financial management under this Agreement; the accounting and control systems shall be satisfactory to the Owner. The Owner and the Owner's Representatives, shall be afforded reasonable and regular access to the Contractor's records, books, correspondence, instructions, drawings, receipts, subcontracts, purchase orders, vouchers, memoranda, and other data relating to this Agreement, and the Contractor shall preserve these for a period of six years after final payment, or for such longer period as may be required by law.
- B. The Owner may, at its discretion, perform periodic audits of the Cost of the Work and any other reimbursable costs associated with the Project. The Owner intends to conduct a final audit of reimbursable costs prior to the Agreement closeout. The Contractor shall cooperate fully with the Owner in the performance of such audits.

19. Laws, Regulations, and Orders. Contractor shall, at all times during performance of this Agreement, observe and comply with all applicable federal, state, and local laws, statutes, codes, regulations, rules, ordinances, orders and rulings as well as all applicable construction industry standards, including without limitation those governing labor, materials, equipment, construction procedures, safety, health, sanitation and the environment. Contractor agrees to indemnify, hold harmless, reimburse, and defend Owner from and against any penalties or liabilities arising out of violations of such obligations by Contractor or its subcontractors or suppliers at any tier. Contractor must also comply with all Oregon tax laws and shall submit a certification of such compliance in accordance with ORS 305.385(6). Contractor shall not engage in activity which creates an actual conflict of interest or violates

Government Standards and Practices as provided in ORS Chapter 244.

20. Permits and Licenses. Unless otherwise specifically stated herein, Contractor shall procure all permits and licenses, pay all charges and fees and give all notices necessary for performance of this Agreement prior to the commencement of work hereunder.
21. Non-Discrimination. Contractor agrees that no person shall, on the grounds of race, color, creed, national origin, sex, marital status, handicap or age, suffer discrimination in the performance of this Agreement when employed by Contractor. Contractor certifies that it has not discriminated and will not discriminate, in violation of ORS 279A.110, against any minority, women or emerging small business enterprise or against a business enterprise that is owned or controlled by or that employs a disabled veteran in obtaining any required subcontract.
22. Assignment; Subcontracts. Contractor shall not assign, subcontract or delegate the responsibility for providing services hereunder to any other person, firm or corporation without the express written permission of the Owner. Any attempted assignment or subcontract by Contractor without the written consent of Owner shall be void. Contractor shall be fully responsible for the acts or omissions of any assigns or subcontractors and of all persons employed by them, and the approval by Owner of any assignment or subcontract shall not create any contractual relation between the assignee or subcontractor and Owner.
23. Nonwaiver. The failure of the Owner to enforce any provision of this Agreement shall not constitute a waiver by the Owner of that or any other provision of the Agreement.
24. Indemnity. Contractor shall indemnify, defend, save, and hold harmless the Owner, its officers, agents and employees, the State of Oregon, the Oregon Department of Emergency Management and their officers, employees, agents and members from any and all claims, suits, actions, losses, damages, liabilities, costs and expenses of any nature, resulting from, arising out of, or relating to the activities of the Contractor or Contractor's officers, employees, subcontractors, or agents under this Agreement. Contractor shall, by contract, cause all subcontractors to indemnify, defend, save, and hold harmless the Owner, its officers, agents and employees, the State of Oregon, and the Oregon Department of Emergency Management and their officers, employees, agents and members from any and all claims, suits, actions, losses, damages, liabilities, costs and expenses of any nature, resulting from, arising out of, relating to the activities of the subcontractor or subcontractor's officers, employees, subcontractors, or agents for the work described herein.
25. Insurance. Insurance Requirements are set forth in Section 7 of the Special Provisions, attached hereto, and Section G.2 of the General Conditions.

///
///
///

26. Termination.
- A. Mutual Consent. This Agreement may be terminated at any time in whole or in part by mutual consent of both parties.
 - B. The County may terminate this Agreement for convenience as provided in Subsection J.5 of the General Conditions.
 - C. The County may terminate this Agreement for cause as provided in Subsection J.4 of the General Conditions.
27. Mediation. In the event of a dispute between the parties arising out of or relating to this Agreement, the parties agree to submit such dispute to a mediator agreed upon by both parties as soon as practicable after the dispute arises, and preferably before commencement of litigation or any permitted arbitration. The parties agree to exercise their best efforts in good faith to resolve all disputes in mediation.
28. Time of the Essence. The parties agree that time is of the essence in performance of this Agreement. Contractor shall commence work under this Agreement upon receipt of a Notice to Proceed from the Owner's Contract Representative and shall prosecute the work diligently, so as to proceed with and complete the work in this Project in a timely manner. Any failure of Contractor to perform work on time is a material breach of this Agreement. Failure to meet the deadline for final completion will result in liquidated damages in the amount of one thousand dollars (\$1000.00) per day as set forth in Section 24 of the Special Provisions, Exhibit "F" to this Agreement.
29. Choice of Law. This Agreement shall be governed by the laws of the State of Oregon.
30. Venue. Venue relating to this Agreement shall be in the Circuit Court of the State of Oregon for Columbia County, located in St. Helens, Oregon.
31. Attorneys Fees. In the event an action, suit or proceeding, including appeal therefrom, is brought for failure to observe any of the terms of this Agreement, each party shall be responsible for its own attorneys fees, expenses, costs and disbursements for said action, suit, proceeding or appeal.
32. Severability. Should any provision or portion thereof of this Agreement at any time be in conflict with any law, ruling or regulation, or be unenforceable for any reason, then such provision shall continue in effect only to the extent that it remains valid. In the event any provision of this Agreement becomes less than fully operative or is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision and the remaining portion of that provision and all other provisions of this Agreement shall, nevertheless, remain in full force and effect.

33. ENTIRE AGREEMENT. THIS AGREEMENT (INCLUDING EXHIBITS) CONSTITUTES THE ENTIRE AGREEMENT BETWEEN THE PARTIES. NO WAIVER, CONSENT, MODIFICATION OR CHANGE OF TERMS OF THIS AGREEMENT SHALL BIND EITHER PARTY UNLESS IN WRITING AND SIGNED BY BOTH PARTIES. SUCH WAIVER, CONSENT, MODIFICATION OR CHANGE, IF MADE, SHALL BE EFFECTIVE ONLY IN THE SPECIFIC INSTANCE AND FOR THE SPECIFIC PURPOSE GIVEN. THERE ARE NO UNDERSTANDINGS, AGREEMENTS, OR REPRESENTATIONS, ORAL OR WRITTEN, NOT SPECIFIED HEREIN REGARDING THIS AGREEMENT. CONTRACTOR, BY THE SIGNATURE OF ITS AUTHORIZED REPRESENTATIVE(S) BELOW, HEREBY ACKNOWLEDGES THAT IT HAS READ THIS AGREEMENT, UNDERSTANDS IT AND AGREES TO BE BOUND BY ITS TERMS AND CONDITIONS.

IN WITNESS WHEREOF, the parties hereto have executed, or have caused to be executed by their duly authorized officials, this Agreement between Owner and Contractor in duplicate on the respective dates indicated below.

CONTRACTOR:

OWNER:

BOARD OF COUNTY COMMISSIONERS FOR
COLUMBIA COUNTY, OREGON

By:

By: _____
Henry Heimuller, Chair

Title: _____

By: _____
Anthony Hyde, Commissioner

Date: _____

By: _____
Earl Fisher, Commissioner

Date: _____

Approved as to form by

By: _____
Office of County Counsel

(For purposes of the Sample Contract, Exhibits are not attached).

EXHIBIT "A"

INVITATION TO BID
(To be attached to final contract)

EXHIBIT "B"

CONTRACTOR'S BID

(The successful bidder's bid to be attached to final contract)

EXHIBIT "C"

CONTRACT SPECIFICATIONS AND PLANS

(Attachment B to ITB and any addenda thereto to be attached to final contract)

EXHIBIT "D"

GENERAL CONDITIONS

(General Provisions, Section 9 to ITB, to be attached to final contract)

EXHIBIT "E"

SPECIAL PROVISIONS

(Special Provisions, Section 10 to ITB, to be attached to final contract)

EXHIBIT "F"

STATE PREVAILING WAGE RATES

(PWR at Lock In Date to be attached to final contract)

EXHIBIT "G"

DAVIS-BACON PREVAILING WAGE DETERMINATION

(DB rates at lock-in date to be attached to final contract)