City of West Linn	**INVITATION FOR BID** CONSTRUCTION PROJECT	**Public Works Department** 22500 Salamo Road West Linn, Oregon 97068 Telephone: (503) 722-5500 Fax: (503) 656-4106

City of West Linn

Plans and Bid Documents

Project Number: **PW-13-09**

Project Description: **Mapleton Water Main Relocation**

Prospective Bidders' Conference: November 20, 2013 2:00 p.m., local time

Due Date: December 4, 2013 2:00 p.m., local time

Plans and Specifications may be reviewed or picked-up at:

Public Works Department
Engineering Division
22500 Salamo Road
West Linn, Oregon 97068

There is a **$25.00 *non-refundable*** charge for each set of Plans and Specifications.

Plans and Specifications are also available for download at no charge from the City's website at http://westlinnoregon.gov/rfps

PROSPECTIVE BIDDERS' CONFERENCE ATTENDANCE IS REQUIRED

It is highly encouraged that Contractors and Subcontractors visit the site.

EXPIRES: 12/31/2013

City of West Linn, Oregon

Notice of Invitation for Bid

Project Number:	**PW-13-09**	Bid Due Date:	**December 4, 2013**
Project Name:	**Mapleton Water Main Relocation**	Bid Due Time:	2:00 p.m.
		Contact:	Erich Lais, P.E.
Bid Opening Location:	City of West Linn – City Hall Council Chambers	Title:	Asst. City Engineer
Address:	22500 Salamo Road, West Linn, OR 97068	Phone:	(503) 722-5514
Project Description:	Project includes the abandonment and replacement of approximately 4,000 linear feet of existing 6-inch AC pipe with 8-inch DI pipe. Includes the installation of new valves, water services, and hydrants; Jack and Bore 40 linear feet of 16-inch steel casing.		

Sealed bids for the project identified and described above will be received by the City of West Linn at the specified location above until the date and time cited above. Bids received by the correct date and time shall be publicly opened and the bid price read. Bids shall be in the actual possession of the identified bidding department on or prior to the exact date and time indicated above. Late bids will not be considered, except as provided in the City of West Linn Procurement Policy. ***Bids shall be submitted in a sealed envelope with the Invitation for Bid Project Number, Project Description, and the bidder's name and address clearly indicated on the front of the envelope***. All bids shall be completed in ink or typewritten. This Bid is for a public works project subject to ORS 279C.800 to 279C.870. Bidders are strongly encouraged to carefully read the ***entire*** Invitation for Bid Package.

BIDDER

To the City of West Linn:

The undersigned hereby Bids and agrees to furnish materials and/or services in compliance with all terms, conditions, specifications and addenda in the Notice of Invitation for Bid except for any written exceptions in the Bid. The signature below also certifies his or her understanding and compliance with The City of West Linn Standard Terms and Conditions.

Is the Bidder a "Resident" Bidder per ORS 279A.120? _____ Yes/No
Construction Contractors Board
Registration Number: _____

Federal Employer
Identification Number: _____

For clarification of this Bid contact:

Name: _____

Telephone: _____

_____
Company Name

_____
Address

_____
City State Zip Code

_____
Authorized Signature for Bidder

_____
Printed Name

_____
Title

ACCEPTANCE OF BID AND CONTRACT AWARD (For City of West Linn Use Only)

Your bid is hereby accepted. The Contractor is now bound to sell the materials and/or services listed by the attached award notice based upon the solicitation, including all terms, conditions, specifications, plans, addendum, amendments, etc., and the Contractor's Bid as accepted by the City.

Approved as to form:

_____
Megan Thornton
Assistant City Attorney

City of West Linn, Oregon.

Awarded on _____, _____.

_____
Chris Jordan, City Manager

City of West Linn, Oregon

Notice of Invitation for Bid

1. **PREPARATION OF BID:**

   a. All bids shall be submitted on the forms provided in this *Invitation to Bid* package. It is permissible to copy these forms if required. Telegraphic (facsimile), electronic or mailgram bids will not be considered.

   b. The Bid and Contract Award document shall be submitted with an original ink signature by a person authorized to sign the Bid.

   c. Erasures, interlineations, or other modifications in the bid shall be initialed in original ink by the authorized person signing the Bid.

   d. If price is a consideration and in case of error in the extension of prices in the bid, the unit price shall govern. No bid shall be altered, amended, or withdrawn after the specified bid due date and time.

   e. Periods of time, stated as a number of days, shall be calendar days.

   f. Bid due date and time is stated as local Oregon time.

   g. The following items must be completed as part of the Bid submittal; Notice of Invitation for Bid (indicating Oregon Construction Contractors Board License Number), Bid Form, Bid Guaranty (Bond), Non-Collusion Affidavit, and Addenda. Within two (2) hours of the Bid submittal, or with the Bid submittal, the First Tier Subcontractor Disclosure Form must be submitted if the bid is greater than $100,000.

   h. It is the responsibility of all Bidders to examine the entire *Invitation For Bid* package and seek clarification of any item or requirement that may not be clear and to check all responses for accuracy before submitting a bid. Negligence in preparing a Bid confers no right of withdrawal after bid due date and time.

2. **INQUIRIES:** Any question related to the *Invitation For Bid* (*IFB*) shall be directed to the Buyer whose name appears as the Contact on the *IFB*. The Bidder shall not contact or ask questions of the department for which the requirement is being procured. Questions should be submitted in writing when time permits. The Buyer may require any and all questions be submitted in writing at the Buyer's sole discretion. Any correspondence related to an *Invitation For Bid* should refer to the appropriate *IFB* number, page, and paragraph number. All requests for additional information or interpretation of the *IFB* shall be submitted to the Buyer no later than five (5) calendar days before the deadline for submission of bids. If, in the opinion of the City, additional information or clarification is required, an addendum will be issued to all plan holders on record. Any addenda issued by the City seventy-two (72) hours or more before the scheduled closing time for filing bids shall be binding upon the Bidder. Addenda may be downloaded from the City's website. Bidders shall frequently check the City's website until closing including at least daily the week of the closing. Failure of the Bidder to receive or obtain such addenda shall not excuse them from compliance therewith if they are awarded the contract. Oral instructions or information given by City Officers, employees or agents to Bidders concerning this *IFB* or the work in general shall not bind the City.

3. **PROSPECTIVE BIDDERS CONFERENCE:** A prospective Bidders conference may be held. If scheduled, the date and time of this conference will be indicated on the cover page of this document. The purpose of this conference will be to clarify the contents of this *Invitation For Bid* in order to prevent any misunderstanding of the City's position. Any doubt as to the requirements of this *Invitation For Bid* or any apparent omission or discrepancy should be presented to the City at this conference. The City will then determine if any action is necessary and may issue a written addendum to the *IFB*.

4. **LATE BIDS:** Late Bids received after the scheduled bid due date and time will be returned to the Bidder unopened.

5. **WITHDRAWAL OF BID:** At any time prior to the specified bid due date and time, a Bidder (or designated representative) may withdraw the bid.

6. **ADDENDUM OF BID:** Receipt of Addendum shall be acknowledged by signing and returning the document with the Bid at the specified bid due date and time.

7. **CONSTRUCTION CONTRACTORS REGISTRATION:** A person shall not submit a bid or proposal to work as a construction contractor unless that person is first registered with the Construction Contractors Board as required by ORS 701.021 or licensed by the State Landscape Contractor's Board as required by ORS 671.530. Bids from persons who fail to comply with this requirement shall be deemed non-responsive and be rejected.

8. **AWARD OF CONTRACT:**

   a. Notwithstanding any other provision of this *Invitation For Bid*, The City expressly reserves the right to: waive any immaterial defect or informality, reject any bids that do not comply with the prescribed public contracting procedures (including the requirement to demonstrate the bidder's responsibility under ORS 279C.375 (3)(b)), reject all bids for good cause if in the public interest, or reissue an *Invitation For Bid*.

   b. A response to an *Invitation For Bid* is a Bid to contract with the City based upon the terms, conditions and specifications contained in the City's *Invitation For Bid* and the written addenda thereto, if any. Bids do not become contracts unless and until they are accepted and executed by the **City Local Contract Review Board, City Manager or Department Director** in accordance with the City of West Linn Procurement Policy. A contract is formed when written notice of award(s) is provided to the successful Bidder(s). The contract has its inception in the award document, eliminating a formal signing of a separate contract. For that reason, all of the terms and conditions of the procurement contract are contained in the *Invitation For Bid*; unless modified by an Addendum.

Public Works Department
22500 Salamo Road
West Linn, Oregon 97068
Telephone: (503) 722-5500
Fax: (503) 656-4106

THE FOLLOWING TERMS AND CONDITIONS ARE AN EXPLICIT PART OF THE SOLICITATION AND ANY RESULTANT CONTRACT.

1. **APPLICABLE LAW:** In the performance of this agreement, contractors shall abide by and conform to any and all laws of the United States, State of Oregon and City of West Linn including but not limited to federal and state executive orders providing for equal employment and procurement opportunities, the Federal Occupational Safety and Health Act and any other federal or state laws applicable to this agreement.

   Attention is called to the requirements of Oregon Revised Statutes (O.R.S.) Chapter 279A, 279B, and 279C. This contract shall be governed by the laws of the State of Oregon. Any action or suits pertaining to this contract may be brought only in courts in the Circuit Court of Clackamas County or the U.S. District Court in Portland. Each and every provision of law and any clause required by law to be in the contract will be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party, the contract will forthwith be physically amended to make such insertion or correction.

   The City may cancel this contract without penalty or further obligations by the City or any of its departments or agencies if any person significantly involved in initiating, negotiating, securing, drafting or creating the contract on behalf of the City or any of its departments or agencies, is at any time while the contract or any extension of the contract is in effect, an employee of any other party to the contract in any capacity or a consultant to any other party of the contract with respect to the subject matter of the contract.

2. **AMERICANS WITH DISABILITIES ACT, DISCRIMINATION & AFFIRMATIVE ACTION:** Bidders agree that if awarded a contract, the successful Bidder will comply with all applicable provisions of the Americans with Disabilities Act of 1990, 42 UFC Section 12101 et seq. If any Bidder requires special assistance or auxiliary aids during the bidding process, please notify the City of West Linn, 503-657-0331 or TDD 503-657-7845 at least two (2) business days prior to the required assistance. To the extent applicable, the Contractor represents that it will comply with Executive Order 11246 as amended, Executive Order 11141, Section 503 of the Vocational Rehabilitation Act of 1973 as amended and the Age Discrimination Act of 1975, and all rules and regulations issued pursuant to the Acts. It is the policy of the City of West Linn that suppliers of goods or services to the City adhere to a policy of equal employment opportunity and demonstrate an affirmative effort to recruit, hire, and promote regardless of race, color, religion, gender, national origin, age or disability. By submitting the first tier subcontractor disclosure form, Bidder certifies that it has complied with ORS 279A.110(1), which states that a bidder may not discriminate against a subcontractor in awarding a subcontract because the subcontractor is a minority, women or emerging business enterprise certified under ORS 200.055 or a business enterprise that is owned or controlled by, or that employs a disabled veteran.

3. **BUSINESS LICENSE:** A current business license is required before doing business with the City. Information related to complying with the business license requirements is available by contacting the City Finance Department at 503-657-0331 or online at https://westlinnoregon.gov/finance/online-business-license-registration.

4. **CONSTRUCTION AND LANDSCAPE CONTRACTORS BOARDS:** Construction contractors must be licensed with the State of Oregon Construction Contractors Board in accordance with O.R.S. 701.005 and any other specialty licensing as required in the bid specification prior to submitting a bid to the City. For information contact:

   CONSTRUCTION CONTRACTORS BOARD
   700 Summer St. NE, Suite #300, Salem, OR 97310
   (503) 378-4621 (website) http://www.ccb.state.or.us

   A Landscape Contractors Board license is required in accordance with O.R.S. 671.510 if the bid specification includes landscape work as defined by O.R.S. 671.510. For information contact:

   LANDSCAPE CONTRACTORS BOARD
   2111 Front St. NE, Suite #2-101, Salem, OR 97310
   (503) 378-5909 (website) http://www.oregon.gov/LCB/

Public Works Department
22500 Salamo Road
West Linn, Oregon 97068
Telephone: (503) 722-5500
Fax: (503) 656-4106

5. **LEGAL REMEDIES:** All claims and controversies shall be subject to resolution according to the terms of the City of West Linn Procurement Policy.

6. **BID GUARANTY:** All construction contracts shall be accompanied by a bid guaranty. No bid for construction will be considered unless accompanied by a certified check, cashier's check, or a bid bond for an amount not less than ten percent (10%) of the aggregate amount of the bid by a surety company authorized to issue such bonds in the State of Oregon. It shall be payable to the City of West Linn as a guaranty that the bid shall be irrevocable for a period of sixty (60) calendar days, unless otherwise specified, after the bid opening date and time and as liquidated damages should the Bidder fail or neglect to furnish the required performance bond and insurance and execute a contract within ten (10) calendar days after receiving said contract from the City for execution. The City will hold all bid security during the evaluation process. As soon as is practical after the completion of the evaluation, the City will issue a contract award notice for those Bids accepted by the City and return all checks to those who have not been issued a contract award notice.

   All bid security from contractors who have been issued an award notice shall be held until the successful execution of all required contractual documents and bonds (performance bond, insurance, etc.). If the contractor fails to execute the required contractual documents and bonds within the time specified, or ten (10) days after notice of award if no period is specified, the contractor may be found to be in default and the contract terminated by the City. In case of default, the City reserves all rights inclusive of, but not limited to, the right to purchase material and/or to complete the required work in accordance with the City of West Linn Procurement Policy and to recover any actual excess costs from the contractor. Collection against the bid security shall be one of the measures available toward the recovery of any excess costs.

7. **CONFLICT OF INTEREST:** A Bidder submitting a bid hereby certifies that no officer, agent or employee of the City who has a pecuniary interest in this bid has participated in the contract negotiations on the part of the City, that the bid is made in good faith without fraud, collusion, or connection of any kind with any other Bidder of the same Invitation for Bids, and that the Bidder is competing solely in its own behalf without connection with, or obligation to, any undisclosed person or firm. No bid will be considered unless accompanied by the notarized Non-Collusion Affidavit form included in the Invitation for Bid.

8. **PRE-BID REQUIREMENTS:** Before submitting a bid, each Bidder shall carefully examine the Drawings, read the Specifications and all Addenda and visit the work site, if applicable. Each Bidder shall fully inform themselves prior to submitting a bid as to all existing conditions and limitations under which the Work is to be performed, and shall include in the bid a sum to cover all costs of all items necessary to perform the Work as set forth in the Bid Documents. No allowance will be made to any Bidder because of lack of such examination or knowledge. Submission of a bid will be construed as conclusive evidence that the Bidder has made such examination.

9. **LOCAL BUSINESS PREFERENCE:** ORS 279A.120 requires that, in all public contracts, the public contracting agency shall prefer good or services that have been manufactured or produced in this State if price, fitness, availability and quality are otherwise equal. As such the City desires to employ local businesses in the purchase, lease, or sale of any personal property, public improvements or services that have been manufactured or produced by a local business if price, fitness, availability and quality are otherwise equal. When a public contract is awarded to a nonresident bidder and the contract price exceeds $10,000, the bidder shall promptly report to the Department of Revenue on forms provided by the department all information as required by ORS 279A.120(3).

10. **COST OF BID/PROPOSAL PREPARATION:** The City shall not reimburse the cost of developing, presenting, or providing any response to this solicitation. Bids submitted for consideration should be prepared simply and economically, providing adequate information in a straightforward and concise manner. The Invitation For Bid does not commit the City to pay any costs incurred by a Bidder in the submission of their bid, or in making any necessary studies or designs for the preparation thereof.

11. **CONTRACT:** The contract between the City and the Contractor shall consist of (1) the Invitation for Bid, including instructions, all terms and conditions, specifications, scopes of work, attachments, price sheet(s) and any amendments

Public Works Department
22500 Salamo Road
West Linn, Oregon 97068
Telephone: (503) 722-5500
Fax: (503) 656-4106

thereto, and (2) the Bid submitted by the Contractor in response to the Invitation for Bid (IFB). In the event of a conflict in language between the IFB and the Bid, the provisions and requirements in the IFB shall govern. However, the City reserves the right to clarify, in writing, any contractual terms with the concurrence of the Contractor, and such written contract shall govern in case of conflict with the applicable requirements stated in the IFB or the Vendor's Bid. The IFB shall govern in all other matters not affected by the written contract. The contract, if awarded, will be made to the lowest, responsive and responsible Bidder offering the lowest unit price base bid. Determination of the lowest responsive, responsible bid is subject to review by the City. Adversely affected or aggrieved bidders shall have seven calendar days after notice of award to submit to the City a written protest of the notice of award. Any written protest must be submitted in accordance with the adopted City Local Contract Review Board Rules.

12. **CONTRACT AMENDMENTS:** This contract may be modified only by a written Contract Amendment signed by persons duly authorized to enter into contracts on behalf of the City and the Contractor.

13. **CONTRACT APPLICABILITY:** The Bidder shall substantially conform to the terms, conditions, specifications and other requirements found within the text of this IFB. All previous agreements, contracts, or other documents, which have been executed between the Bidder and the City are not applicable to this IFB or any resultant contract.

14. **DRUG TESTING PROGRAM:** Pursuant to O.R.S. 279.505 (2) (1), the Contractor awarded the contract shall demonstrate that an employee drug-testing program is in place. The Contractor demonstrates that a drug-testing program is in place by signing of the contact. The drug testing program will apply to all employees and will be maintained for the duration of the Contract awarded. Failure to maintain a program shall constitute a material breach of contract.

15. **RELATIONSHIP TO PARTIES:** It is clearly understood that each party will act in its individual capacity and not as an agent, employee, partner, joint venturer, or associate of the other. An employee or agent of one party shall not be deemed or construed to be the employee or agent of the other for any purpose whatsoever. The Contractor is advised that taxes or Social Security payments will not be withheld from any City payments issued hereunder and that the Contractor should make arrangements to directly pay such expenses, if any.

16. **INTERPRETATION-PAROL EVIDENCE:** This contract represents the entire agreement of the Parties with respect to its subject matter, and all previous agreements, whether oral or written, entered into prior to this contract are hereby revoked and superseded by this contract. No representations, warranties, inducements or oral agreements have been made by any of the Parties except as expressly set forth herein, or in any other contemporaneous written agreement executed for the purposes of carrying out the provisions of this contact. This contract may not be changed, modified or rescinded except as provided for herein, absent a written agreement signed by both Parties. Any attempt at oral modification of this contract shall be void and of no effect.

17. **SUBCONTRACTS – ASSIGNMENT & DELEGATION:** Contractor shall submit a list of Subcontractors for approval by the City, and Contractor shall be fully responsible for the acts or omissions of any Subcontractors and of all persons employed by them, and neither the approval by City of any Subcontractor nor anything contained herein shall be deemed to create any contractual relation between the Subcontractor and City.

    This agreement, and all of the covenants and conditions hereof, shall inure to the benefit of and be binding upon the City and the Contractor respectively and their legal representatives. Contractor shall not assign any rights nor delegate any duties incurred by this contract, or any part hereof without the written consent of City, and any assignment or delegation in violation hereof shall be void.

18. **APPROVAL OF SUBSTITIONS:** The materials, products, and equipment described in the Documents and Addenda establish a standard or required function, dimension, appearance, and quality to be met by any proposed substitution. No substitute will be considered unless written request for approval has been received by the City or its representative at least five (5) days prior to the scheduled closing time for receipt of bids. Each such request shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitute including any drawings,

Public Works Department
22500 Salamo Road
West Linn, Oregon 97068
Telephone: (503) 722-5500
Fax: (503) 656-4106

cuts, performance, and test data and any other information necessary for evaluation of the substitute. If a substitute is approved, the approval shall be acknowledged in writing. Bidder shall not consider approvals made in any other manner.

19. **RIGHTS AND REMEDIES:** No provision in this document or in the vendor's Bid shall be construed, expressly or by implication, as waiver by the City of any existing or future right and/or remedy available by law in the event of any claim of default or breach of contract. The failure of the City to insist upon the strict performance of any term or condition of the contract or to exercise or delay the exercise of any right or remedy provided in the contract, or by law, or the City's acceptance of and payment for materials or services, shall not release the Contractor from any responsibilities or obligations imposed by this contract or by law, and shall not be deemed a waiver of any right of the City to insist upon the strict performance of the Contract.

20. **INDEMNIFICATION:** Contractor warrants that all its work will be performed in accordance with generally accepted professional practices and standards as well as the requirements of applicable federal, state and local laws, it being understood that acceptance of a contractor's work by City shall not operate as a waiver or release.

    Contractor agrees to indemnify and defend the City, its officers, agents and employees and hold them harmless from any and all liability, causes of action, claims, losses, damages, judgments or other costs or expenses including attorney's fees and witness costs and (at both trial and appeal level, whether or not a trial or appeal ever takes place) that may be asserted by any person or entity which in any way arise from, during or in connection with the performance of the work described in this contract, except liability arising out of the sole negligence of the City and its employees. If any aspect of this indemnity shall be found to be illegal or invalid for any reason whatsoever, such illegality or invalidity shall not affect the validity of the remainder of this indemnification. The amount and type of insurance coverage requirements set forth herein will in no way be construed as limiting the scope of the indemnity in this paragraph.

21. **EARLY TERMINATION:** This agreement may be terminated without cause prior to the expiration of the agreed upon term by mutual written consent of the parties and for the following reasons:

    a. If work under the Contract is suspended by an order of a public agency for any reason considered to be in the public interest other than by a labor dispute or by reason of any third party judicial proceeding relating to the work other than a suit or action filed in regard to a labor dispute; or

    b. If the circumstances or conditions are such that it is impracticable within a reasonable time to proceed with a substantial portion of the Contract.

    Payment of Contractor shall be as provided by ORS 279C.660 and shall be prorated to and include the day of termination and shall be in full satisfaction of all claims by Contractor against City under this Contract. Termination under any provision of this paragraph shall not affect any right, obligation, or liability of Contractor or City which accrued prior to such termination.

22. **CANCELLATION WITH CAUSE:** City may terminate this Contract effective upon delivery of written notice to Contractor, or at such later date as may be established by City, under any of the following conditions:

    a. If City funding from federal, state, local, or other sources is not obtained and continued at levels sufficient to allow for the purchase of the indicated quantity of services. This Contract may be modified to accommodate a reduction in funds,

    b. If Federal or State regulations or guidelines are modified, changed, or interpreted in such a way that the services are no longer allowable or appropriate for purchase under this Contract,

    c. If any license or certificate required by law or regulation to be held by Contractor, its subcontractors, agents, and employees to provide the services required by this Contract is for any reason denied, revoked, or not renewed,

Public Works Department
22500 Salamo Road
West Linn, Oregon 97068
Telephone: (503) 722-5500
Fax: (503) 656-4106

d. If Contractor becomes insolvent, if voluntary or involuntary petition in bankruptcy is filed by or against Contractor, if a receiver or trustee is appointed for Contractor, or if there is an assignment for the benefit of creditors of Contractor, or

e. If Contractor fails to maintain reasonable relations with the public. Verbal abuse, threats, or other inappropriate behavior towards members of the public constitutes grounds for termination.

Any such termination of this agreement under this section shall be without prejudice to any obligations or liabilities of either party already accrued prior to such termination.

City, by written notice of default (including breach of contract) to Contractor, may terminate the whole or any part of this Contract:

f. If Contractor fails to provide services called for by this Contract within the time specified herein or any extension thereof, or

g. If Contractor fails to perform any of the other provisions of this Contract, or so fails to pursue the work as to endanger performance of this Contract in accordance with its terms, and after receipt of written notice from City, fails to correct such failures within ten (10) days or such other period as City may authorize.

The rights and remedies of City provided in the above clause related to defaults (including breach of contract) by Contractor shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract.

If City terminates this Contract per clause f or g above, Contractor shall be entitled to receive as full payment for all services satisfactorily rendered and expenses incurred, an amount which bears the same ratio to the total fees specified in this Contract as the services satisfactorily rendered by Contractor bear to the total services otherwise required to be performed for such total fee; provided, that there shall be deducted from such amount the amount of damages, if any, sustained by City due to breach of contract by Contractor. Damages for breach of contract shall be those allowed by Oregon law, reasonable and necessary attorney fees, and other costs of litigation at trial and upon appeal.

23. **SEVERABILITY:** In the event any provision or portion of this Contract is held to be unenforceable or invalid by any court of competent jurisdiction, the remainder of this Contract shall remain in full force and effect and shall in no way be affected or invalidated thereby.

24. **FORCE MAJEURE:** Neither City nor Contractor shall be considered in default because of any delays in completion of responsibilities hereunder due to causes beyond the control and without fault or negligence on the part of the party so disenabled, including, but not restricted to, an act of God or of a public enemy, volcano, earthquake, fire, flood, epidemic, quarantine, restriction, area-wide strike, freight embargo, unusually severe weather or delay of Subcontractor or suppliers due to such cause; provided that the party so disenabled shall within ten (10) days from the beginning of such delay, notify the other party in writing of the causes of delay and its probable extent. Such notification shall not be the basis for a claim for additional compensation. Each party shall, however, make all reasonable efforts to remove or eliminate such a cause of delay or default and shall, upon cessation of the cause, diligently pursue performance of its obligation under Contract.

25. **RIGHT TO ASSURANCE:** Whenever one party to this contract in good faith has reason to question the other party's intent to perform he may demand that the other party give a written assurance of this intent to perform. In the event that a demand is made and no written assurance is given within five (5) days, the demanding party may treat this failure as an anticipatory repudiation of the Contract.

26. **RIGHT TO ACCESS RECORDS:** City shall have access to such books, documents, papers and records of Contractor and Subcontractors as are directly pertinent to this Contract for the purpose of making audit, examination, excerpts, and transcripts.

Public Works Department
22500 Salamo Road
West Linn, Oregon 97068
Telephone: (503) 722-5500
Fax: (503) 656-4106

27. **WARRANTIES:** All work shall be guaranteed by the Contractor for a period of 18 months after the date of final acceptance of the work by the Owner. Contractor warrants that all practices and procedures, workmanship, and materials shall be the best available unless otherwise specified in the profession. Neither acceptance of the work nor payment therefore shall relieve Contractor from liability under warranties contained in or implied by this contract. Additional warranty requirements may be set forth in the solicitation.

28. **TITLE AND RISK OF LOSS:** The title and risk of loss of material and/or service shall not pass to the City until the City actually receives the material or service at the point of delivery, unless otherwise provided within this Contract.

29. **CONFLICT BETWEEN TERMS:** It is expressly agreed by and between the parties hereto that should there be any conflict between the terms of this instrument and the bid of the Contractor, this instrument shall control and nothing herein shall be considered as an acceptance of the said terms of said bid conflicting herewith.

30. **NONWAIVER:** The failure of the City to insist upon or enforce strict performance by Contractor of any of the terms of this contract or to exercise any rights hereunder shall not be construed as a waiver or relinquishment to any extent of its right to assert or rely upon such terms or rights on any future occasion.

31. **LIENS:** All materials, service or construction shall be free of all liens, and if the City requests, a formal release of all liens shall be delivered to the City.

32. **LICENSES:** Contractor shall have at the time of bid submittal, and shall maintain in current status, all Federal, State and Local licenses and permits required for the operation of the business conducted by the Contractor as applicable to this Contract. The conclusion of the issuing authority in each case is to be deemed conclusive for the purposes of complying with this provision. By submitting a bid for this public contract, you agree that, with respect to the contract, substantial compliance does not meet the minimum requirements of this or any provision hereof, or of any applicable law or other authority, and that strict compliance alone is adequate to meet those requirements, unless the City consents to such substantial compliance in writing at the time of bid submittal. The determination shall be made by the City.

33. **ATTORNEY'S FEES:** In case suit or action is instituted to enforce the provisions of this contract, the parties agree that the losing party shall pay such sum as the Court may adjudge reasonable attorney's fees and court costs including attorney's fees and court costs on appeal.

34. **PUBLIC RECORD:** All Bids submitted in response to this solicitation shall become the property of the City and shall become a matter of public record available for review, subsequent to the award notification, in accordance with the City's Procurement Policy.

35. **WORK IS PROPERTY OF THE CITY:** All work performed by Contractor under this Contract shall be the property of the City.

36. **ADVERTISING:** Contractor shall not advertise or publish information concerning this Contract, without prior written consent of the City.

Public Works Department
22500 Salamo Road
West Linn, Oregon 97068
Telephone: (503) 722-5500
Fax: (503) 656-4106

1. **DEFINITIONS**: The terms, as used in or pertaining to the contract, are defined as follows:

   CITY: The word *"City"* shall refer to the City of West Linn, Oregon.

   CONTRACTOR: The word *"Contractor"* is defined as the person, firm or corporation with whom the contract is made by the City.

   CONTRACT: The word *"Contract"* will include; the Invitation to Bid Notice, Instructions to Bidders, Bid Form, Bid Guaranty, Performance Bond, Payment Bond, Notice of Award, Notice to Proceed, Change Order, Certificate of Insurance, Certificate of Completion, Contractor's Affidavit Regarding Settlement of Claims, Contractor's Affidavit Certifying Non-Collusion in Bidding, Standard Terms & Conditions, General Terms & Conditions, Special Terms & Conditions, Technical Provisions, Plans and Addenda thereto.

   ENGINEER: The word *"Engineer"* is defined as the person, firm or corporation duly authorized by the City to act as agent in providing professional services including studies, planning, engineering design and construction administration services, inspecting materials and construction, and interpreting plans and specifications.

   MATERIALS: The word *"Materials"* will include, in addition to materials incorporated in the project, equipment and other material used and/or consumed in the performance of the work.

   SUBCONTRACTOR: The word *"Subcontractor"* is defined as those persons or groups of persons having a direct contract with the contractor and those who furnish material worked to a special design according to the plans and/or specifications for this work, and includes those who merely furnish materials not so worked.

   WORK: The word *"Work"* shall include all labor necessary to accomplish the construction required by the Contract and all materials and equipment incorporated or to be incorporated in said construction.

2. **REFERENCE STANDARDS**:

   a. The "2008 Oregon Standard Specifications for Construction" and the latest edition of the "Oregon Standard Drawings and Standard Details" which are sponsored and distributed by the Oregon Department of Transportation (ODOT), and which are hereinafter referred to as the *"ODOT Specifications,"* are hereby adopted as part of these contract documents.

   b. If any contradiction exists between "ODOT Specifications" and this solicitation document, the solicitation language shall prevail.

3. **LAWS AND REGULATIONS**: The Contractor shall keep himself fully informed of all existing and future City and County ordinances and regulations and state and federal laws and Occupational Safety and Health Standards (OSHA) in any manner affecting the work herein specified. He shall at all times observe and protect and indemnify the City of West Linn, Oregon, and its officers and agents against any claim or liability arising from or based on the violation of any such ordinances, regulations or laws. It is the responsibility of the Contractor to obtain any and all information regarding the laws and regulations which may be referenced in the Specifications.

4. **RIGHTS OF WAY:** The City will provide Rights-of-Way and easements for all work specified in this contract, and the Contractor shall not enter or occupy with men, tools, equipment or materials any private ground outside the property of the City of West Linn, without the consent of the owner.

   The Contractor, at his own expense, is responsible for the acquisition of any additional easements or rights-of-way that he may desire to complete the work of this contract.

Public Works Department
22500 Salamo Road
West Linn, Oregon 97068
Telephone: (503) 722-5500
Fax: (503) 656-4106

5. **PROPOSAL QUANTITIES**: It is expressly understood and agreed by the parties hereto that the quantities of the various classes of work to be done and the material to be furnished under this Contract, which have been estimated as stated in the Bids, are only approximate and are to be used solely for the purpose of comparing, on a consistent basis, the bids for the work under this Contract. The Contractor further agrees that the City of West Linn will not be held responsible if any of the quantities shall be found incorrect; and the Contractor will not make any claim for damages or for loss of profits because of a difference between the quantities of the various classes of work as estimated and the work actually done. If any error, omission, or misstatement is found to occur in the estimated quantities, the same shall not invalidate this Contract or the whole or any part of the work in accordance with the Specifications and Plans herein mentioned, and for the prices herein agreed upon and fixed therefore, or excuse him from any of the obligations or liabilities hereunder, or entitle him to any damage or compensation except as may be provided in this contract.

6. **PREVAILING WAGE RATE DETERMINATION**: The Contractor shall pay the applicable prevailing wage rates that are in effect at the time the Contract is bid. If the contract price exceeds $50,000 and is not otherwise exempt, workers shall be paid not less than the specified minimum hourly rate of wage in accordance with ORS 279C.838 and ORS 279C.840. Hard copies of the prevailing wage rates publication may be obtained by contacting the Oregon Bureau of Labor and Industries via telephone at: (971) 673-0839. The applicable prevailing wage rates may be accessed via the internet at: http://www.oregon.gov/BOLI/WHD/PWR/pwr_book.shtml. If the Project is subject to the Davis-Bacon Act and the state prevailing rate of wage is higher than the federal prevailing rate of wage, the contractor and every subcontractor on the Project shall pay at least the state prevailing rate of wage as determined under ORS 279C.815.

   The Contractor and all subcontractors must have a public works bond filed with the Oregon Construction Contractors Board before starting work on the Project, unless exempt under ORS 279C.836(4), (7), (8) or (9). If the contractor fails to pay for labor or services, the City can pay and withhold these amounts from payments due the contractor in accordance with ORS 279C.515. Daily, weekly, weekend, and holiday overtime will be paid as required in ORS 279C.540. The Contractor shall provide workers with a written schedule showing the number of hours per day and days per week the employee may be required to work in accordance with ORS 279C.520. Contractor must promptly pay for any medical services they have agreed to pay per ORS 279C.530.

   The City will not receive or consider a bid unless the bid contains a statement by the bidder that the bidder will comply with ORS 279C.838, ORS 279C.840, or 40 U.S.C. 3141. By signing and submitting the Bid, the Contractor agrees to comply with ORS 279C.838 or 279C.840 and/or 40 U.S.C. 3141 et seq. for a public works project subject to the state prevailing wage rates under ORS 279C.800 to 279C.870, the federal prevailing wage rates under the Davis-Bacon Act (40 U.S.C. 3141 et seq.) or both.

   For contracts $50,000 or greater, the City shall pay a fee to the Bureau of Labor and Industries and shall be mailed or otherwise delivered to the Bureau in accordance with Form WH-81 & WH-39.

7. **PAYMENTS TO CONTRACTOR**: City agrees to pay Contractor for performance of those services provided hereunder, which payment shall be based upon the following applicable terms:

   a. Payment: Payment shall be based upon the unit prices bid by the Contractor, as listed in attached bid. Contractor shall prepare and submit each month to the Buyer identified in the Invitation for Bid at the address listed, a statement of services rendered, (indicating the description of each service used in the bid and the dollar amount of each service completed through the stated date), together with a request for payment duly verified by the Contractor's Representative.

      Payment by the City shall release the City from any further obligation for payment to Contractor for services performed or expenses incurred as of the date of the statement of services. Payment of installments shall not be considered acceptance or approval of any work or waiver of any defects therein. City certifies that sufficient funds are available and authorized for expenditure to finance costs of this contract. Contractor shall include proof of payment to any and all

Public Works Department
22500 Salamo Road
West Linn, Oregon 97068
Telephone: (503) 722-5500
Fax: (503) 656-4106

subcontractors and suppliers with each statement submitted to the City. The City shall retain the right to withhold payments if required proof of payment to subcontractor and suppliers is not included with a statement.

b. Timing of Payments: Progress payments, less a five percent retainage as authorized by ORS 279C.555, shall be made to the Contractor within twenty (20) days of the City's receipt of the statement of services.

c. Final Payment: The Contractor shall notify the City in writing when the Contractor considers the project complete, and the City shall, within 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 accepted by the City, the remaining balance due to the Contractor, including the retained percentage, shall be paid to the Contractor by the City within 30 days after the date of said acceptance.

The City shall pay to the Contractor interest at the rate of one and one-half percent per month on the final payment due the Contractor, to commence 30 days after the work under the Contract has been completed and accepted and to run until the date when final payment is tendered to the Contractor. If the City does not, within 15 days after receiving written notice of completion, notify the Contractor of work yet to be performed to fulfill contractual obligations, the interest provided by this subsection shall commence to run 30 days after the end of the 15-day period.

As a further condition of final acceptance, the City may require the Contractor to submit evidence, satisfactory to the City's Representative, that all payrolls, material bills, and other indebtedness connected with the project have been paid. If any indebtedness or liens are in dispute, the Contractor may submit a surety bond satisfactory to the City guaranteeing payment of all such disputed amounts if such payment has not already been guaranteed by surety bond.

All notices, bills and payments shall be made in writing and may be given by personal delivery or by mail. Notices, bills and payments sent by mail should be addressed to the attention of the Buyer and/or Authorized Bidder at the addresses identified in the Invitation for Bid and shall be deemed given upon deposit in the United States mail, postage paid. In all other instances, notices, bills and payments shall be deemed given at the time of actual delivery. Changes may be made in the names and addresses of the person to whom notices, bills, and payments are to be given by giving written notice pursuant to this paragraph.

8. **LIQUIDATED DAMAGES:** The Contractor agrees that the "Time of Completion" is defined in the Bid and agrees to complete the work by said date. The Contractor and City agree that the City will suffer damages each day the work remains uncompleted after the Time of Completion and that the amounts of those damages are difficult to calculate. Contractor and City agree that a reasonable amount of damages for late completion is **$500 per calendar day** and Contractor agrees to pay such amounts as liquidated damages if the work is not completed by the Time of Completion. Contractor agrees that the liquidated damages specified herein are a fair way of ascertaining damages to the City and are not a penalty for late completion.

9. **STATUS OF CONTRACTOR AS INDEPENDENT CONTRACTOR:** Contractor certifies that:

a. Contractor acknowledges that for all purposes related to this Agreement, Contractor is and shall be deemed to be an Independent Contractor as defined by ORS 670.600 and not an employee of City, shall not be entitled to benefits of any kind to which an employee of City is entitled and shall be solely responsible for all payments and taxes required by law. Furthermore, in the event that Contractor is found by a court of law or any administrative agency to be an employee of City for any purpose, City shall be entitled to offset compensation due, or to demand repayment of any amounts paid to Contractor under the terms of this Agreement, to the full extent of any benefits or other remuneration Contractor receives (from City or third party) as a result of said finding and to the full extent of any payments that City is required to make (to Contractor or to a third party) as a result of said finding.

Public Works Department
22500 Salamo Road
West Linn, Oregon 97068
Telephone: (503) 722-5500
Fax: (503) 656-4106

b. The Contractor hereby represents that no employee of the City, or any partnership or corporation in which a City employee has an interest, has or will receive any remuneration of any description from Contractor, either directly or indirectly, in connection with the letting or performance of this Agreement, except as specifically declared in writing.

c. If payment is to be charged against Federal funds, Contractor certifies that he or she is not currently employed by the Federal Government and the amount charged does not exceed his or her normal charge for the type of service provided.

d. Contractor and its employees, if any, are not active members of the Oregon Public Employees Retirement System and are not employed for a total of 600 hours or more in the calendar year by any public employer participating in the Retirement System.

e. Contractor certifies that it currently has a City business license or will obtain one prior to delivering services under this Agreement.

f. Contractor is not an officer, employee, or agent of the City as those terms are used in ORS 30.265.

10. **CERTIFIED PAYROLL:** The Contractor shall make payment promptly, as due, to all persons supplying to such Contractor labor or material for the performance of the work provided for in this contract. The Contractor will pay all contributions or amounts due the Industrial Accident Fund under the Worker's Compensation Law from such Contractor or Subcontractor incurred in the performance of this contract. The Contractor will pay to the Department of Revenue all sums withheld from employees pursuant to ORS 316.167. The Contractor shall not permit any lien or claim to be filed or prosecuted against the City of West Linn on account of any labor or material furnished.

The Contractor or the Contractor's Surety and every Subcontractor or the Subcontractor's Surety shall file certified statements with the City in writing on a form prescribed by the Commissioner of the Bureau of Labor and Industries, certifying the hourly rate of wage paid each worker which the Contractor or the Subcontractor has employed upon such public work, and further certifying that no worker employed upon such public work has been paid less than the prevailing rate of wage or less that the minimum hourly rate of wage specified in the contract, which certificate and statement shall be verified by the oath of the Contractor or the Contractor's Surety or Subcontractor or the Subcontractor's Surety that the Contractor or Subcontractor has read such statement and certificate and knows the contents thereof and that the same is true to the Contractor's or Subcontractor's knowledge.

a. The certified statements shall set out accurately and completely the payroll records, including the name and address of each worker, the worker's correct classification, rate of pay, daily and weekly number of hours worked, and the gross wages the worker earned during each week identified in the certified statement.

b. Each certified statement required herein shall be delivered or mailed by the Contractor or Subcontractor to the City. A true copy of the certified statements shall also be filed at the same time with the Commissioner of the Bureau of Labor and Industries. Certified statements shall be submitted as set forth in ORS 279C.845.

c. The City shall retain 25 percent of any amount earned by Contractor until the certified statements as required by this section have been filed. City shall pay Contractor the amount retained under this subsection within 14 days after Contractor files the certified statements as required by this section, regardless of whether a subcontractor has failed to file certified statements as required by this section. City is not required to verify the truth of the contents of certified statements filed by Contractor.

The Contractor agrees that if the Contractor fails, neglects or refuses to make prompt payment of any claim for labor or services furnished to the Contractor or a Subcontractor by any person in connection with this contract as such claim becomes due, the proper office of the City of West Linn 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 to the Contractor by reason of such contract. Payment of a

Public Works Department
22500 Salamo Road
West Linn, Oregon 97068
Telephone: (503) 722-5500
Fax: (503) 656-4106

claim in this manner shall not relieve the Contractor or the Contractor's Surety from obligation with respect to any unpaid claims.

Contractor agrees that no person shall be employed for more than ten (10) hours in any one day, or forty (40) hours in any one week, except in cases of necessity, emergency or when public policy absolutely requires it, and in such cases the laborer shall be paid at least time and a half pay for all overtime in excess of eight (8) hours in any one day or forty (40) hours in any one week when the workweek is five consecutive days, Monday through Friday, or ten (10) hours in any one day and or forty (40) hours in any one week when the workweek is four consecutive days, Monday through Friday and for all work performed on Saturday and on any legal holiday as specified in ORS 279C.540.

Contractor agrees to pay promptly as due, to any person, co partnership, association or corporation furnishing medical, surgical, and hospital care or other needed care and attention incident to sickness or injury to the Contractor's employees, of all sums which the Contractor agreed to pay for such services and all money and sums which the Contractor collected or deducted from employee wages pursuant to any law, contract or agreement for the purpose of providing or paying for such service.

11. **PRE-CONSTRUCTION CONFERENCE:** Within 30 days of the issuance of the Notice of Award, the Contractor is required to attend a Pre-construction Conference. The City will contact the Contractor to schedule a specific date, time and location for the Pre-construction conference. The purpose of the meeting is to outline specific construction items and procedures and to address items which require special attention on the part of the Contractor. The Contractor may also present proposed variations in procedures which the Contractor believes may improve constructability of the project, reduce cost, or will reduce inconvenience to the public. Any necessary coordination and procedures for Construction inspection and staking will be addressed during the Pre-construction Conference. The Contractor will be required to provide the following information at the Pre-construction Conference:

    a. Names and emergency telephone numbers of key personnel involved in the project.

    b. Names and telephone numbers of all subcontractors proposed for use on the project.

    c. A construction progress schedule showing the estimated time for start and completion of the major items of work.

    d. A written proposal outlining the intended plans for maintaining continuous access to residences and businesses along the construction site, and traffic control.

    e. An itemized list of all required shop drawings, material and equipment submittals and a schedule indicating the dates each of these items will be transmitted to the City for review.

    Each of the above items is subject to the review and approval by the City.

12. **INSURANCE REQUIREMENTS:** The Contractor, at Contractor's own expense, shall purchase and maintain the herein stipulated minimum insurance with companies licensed to do business in the State of Oregon with policies and forms satisfactory to the City. The City reserves the right to reject all or any insurance carrier(s) with an unacceptable financial rating. All insurance required herein shall be maintained in full force and effect until all work required to be performed under the terms of the Contract is satisfactorily completed and formally accepted; failure to do so may, at the sole direction of the City, constitute a material breach of this Contract. The Contractor's insurance shall be primary insurance, and any insurance or self insurance maintained by the City shall not contribute to it.

    Any failure to comply with the claim reporting provisions of the policies or any breach of an insurance policy warranty shall not affect coverage afforded under the policy to protect the City. The insurance policies shall contain a waiver of transfer

Public Works Department
22500 Salamo Road
West Linn, Oregon 97068
Telephone: (503) 722-5500
Fax: (503) 656-4106

rights of recovery (subrogation) against the City, its agents, representatives, directors, officers, and employees for any claims arising out of the Contractor's work or service.

The City reserves the right to request and to receive, within 10 working days, certified copies of any or all of the herein required insurance policies and/or endorsements. The City shall not be obligated, however, to review same or to advise Contractor of any deficiencies in such policies and endorsements, and such receipt shall not relieve Contractor from, or be deemed a waiver of the City's right to insist on, strict fulfillment of Contractor's obligations under this Contract.

The insurance policies required by this Contract shall name the City, its agents, representatives, officers, directors, officials and employees as Additional Insured with respect to this contract. All Liability Insurance policies will be endorsed to show this additional coverage. A cross-liability clause or separation of insured clause will be included in general liability policy.

The policy or policies of insurance maintained by the Contractor and its subcontractors shall provide at least the following limits and coverage:

a. Commercial General Liability Insurance: Includes all liability including all major divisions of coverage, but not limited to, Premises/Operations, Completed Operations, Independent Contractors' Protective, Products-Completed Operations, Contractual Liability (including coverage for the Contractor's indemnity obligations and other contractual indemnity obligations assumed by the Contractor), Personal Injury, and Broad Form Property Damage (including coverage for Explosion, Collapse, and Underground Hazards). The following insurance will be carried:

   Employer's Liability Insurance
   $ 2,000,000.00 Each Occurrence
   $ 2,000,000.00 Disease Each Employee
   $ 2,000,000.00 Disease – Policy

   Commercial General Liability insurance
   $ 2,000,000.00 Each Occurrence Limit
   $ 3,000,000.00 General Aggregate
   $ 3,000,000.00 Products/Completed Operations Aggregate
   $ 3,000,000.00 Personal and Advertising Injury
   $ 2,000,000.00 Limited Job Site Pollution Occurrence Sub-Limit

   Comprehensive Automobile Liability Insurance including coverage for all owned, hired and non-owned vehicles
   $ 2,000,000.00 Each Occurrence Combined Single Limit
   $ 3,000,000.00 Aggregate Bodily Injury & Property Damage
   or
   $ 2,000,000.00 Each Person Bodily Injury
   $ 2,000,000.00 Each Occurrence Bodily Injury
   $ 2,000,000.00 Each Occurrence Property Damage
   $ 2,000,000.00 Each Occurrence Pollution Occurrence Sub-Limit

b. "All risk" Builder's Risk Insurance (including earthquake and flood) covering the real and personal property of others in the care, custody, and control of the contractor, if applicable. Coverage shall include theft and damage to building interiors, exterior, in transit and offsite storage. The minimum amount of coverage to be carried shall be equal to the full amount of the contract.

The policy shall be endorsed to have the General Aggregate apply to this Project Only.

The insurance policies may provide coverage which contains deductibles or self-insured retentions. Such deductible and/or self insured retentions shall not be applicable with respect to the coverage provided to the City under such policies. The

Public Works Department
22500 Salamo Road
West Linn, Oregon 97068
Telephone: (503) 722-5500
Fax: (503) 656-4106

Contractor shall be solely responsible for deductible and/or self insured retention and the City, at its option, may require the Contractor to secure the payment of such deductible or self-insured retentions by a surety bond or an irrevocable and unconditional letter of credit.

Certificates of Insurance: Prior to commencing Services under this Contract, Contractor shall furnish the City with Certificates of Insurance, or formal endorsements as required by the Contract, issued by Contractor's insurer(s), as evidence that policies providing the required coverage, conditions and limits required by this Contract are in full force and effect. Certificates of Insurance should read "Insurance certificate pertaining to (this contract). The City of West Linn, its officers, directors and employees shall be added as additional insured with respects to this contract. Insured coverage is primary" in the description portion of the certificate.

If a policy does expire during the life of the contract, a renewal certificate must be sent to the City ten (10) days prior to the expiration date. Insurance required herein shall not expire, be canceled, or materially changed without thirty (30) days prior written notice to the City. The procuring of such required insurance shall not be construed to limit contractor's liability hereunder. Notwithstanding said insurance, Contractor shall be obligated for the total amount of any damage, injury, or loss caused by negligence or neglect connected with this Contract.

13. **PERFORMANCE BOND:** The contractor shall be required to furnish non-revocable security binding the contractor to provide faithful performance of the contract in the amount of 100% of the total contract price payable to the City of West Linn.

    Performance security shall be in the form of a performance bond, certified check or cashier's check. This security must be in the possession of the City within the time specified or ten (10) days after notice of award if no period is specified. If the contractor fails to execute the security document as required, the contractor may be found in default and the contract terminated by the City. In case of default the City reserves all rights.

    All performance bonds shall be executed on the Performance Bond form included in the Bid Document, duly executed by the Bidder as Principal and having as Surety thereon a Surety company approved by the owner and holding a Certificate of Authority to transact surety business in the State of Oregon, by the Oregon Department of Insurance. Individual sureties are unacceptable. All Insurers and Sureties shall have at the time of submission of the proposal an A.M. Best's Key Rating Guide of "A-" or better as currently listed in the most recent Best Key Guide, published by the A.M. Best Company, payable without condition to the Owner.

14. **PAYMENT BOND:** The contractor shall be required to furnish non-revocable security for the protection of all persons supplying labor and material to the contractor or any subcontractor for the performance of any work related to the contract. Payment security shall be in the amount of 100% of the total contract price and be payable to the City of West Linn. Payment security shall be in the form of a payment bond, certified check or cashier's check.

    All payment bonds shall be executed on the Payment Bond form included in the Bid Document, duly executed by the Bidder as Principal and having as Surety thereon a Surety company approved by the owner and holding a Certificate of Authority to transact surety business in the State of Oregon, by the Oregon Department of Insurance. Individual sureties are unacceptable. All Insurers and Sureties shall have at the time of submission of the proposal and A.M. Best's Key Rating Guide of "A-" or better as currently listed in the most recent Best Key Guide, published by the A.M. Best Company, payable without condition to the Owner.

15. **NOTICE TO PROCEED**: Within 45 days of the issuance of the Notice of Award the City may issue a written Notice to Proceed. The Notice to Proceed shall stipulate the actual contract start date, the contract duration and the contract completion date. The time required for the Contractor to obtain permits, licenses and easements shall be included in the contract duration and shall not be justification for a delay claim by the Contractor. The time required for the Contractor to

Public Works Department
22500 Salamo Road
West Linn, Oregon 97068
Telephone: (503) 722-5500
Fax: (503) 656-4106

prepare, transmit and obtain approval of applicable submittals shall be included in the contract duration and shall not be justification for a delay claim by the Contractor.

No work shall be started until after all required permits, licenses, and easements have been obtained.

No work shall be started until all applicable submittals have been submitted and returned approved by the City's Representative.

16. **PROTECTION OF FINISHED OR PARTIALLY FINISHED WORK**: The Contractor shall properly guard and protect all finished or partially finished work, and shall be responsible for the same until the entire contract is completed and accepted by the City Engineer. The Contractor shall turn over the entire work in full accordance with these Specifications before final settlement shall be made.

17. **CHANGE ORDERS**: The City may at any time, and without notice, issue a written Change Order requiring additional work within the general scope of this Contract, or any amendment thereto, or directing the omission of or variation in work. If such Change Order results in a material change in the amount or character of the work, an equitable adjustment in the Contract price and other provisions of this Contract as may be affected may be made. Any claim by Contractor for an adjustment under this section shall be asserted in writing within thirty (30) days from the date of receipt by Contractor of the notification of change or the claim will not be allowed. Whether made pursuant to this section or by mutual agreement, no change shall be binding upon City until a Change Order is executed by the Authorized Representative of City, which expressly states that it constitutes a Change Order to this Contract. The issuance of information, advice, approvals, or instructions by City's Representative or other City personnel shall not constitute an authorized change pursuant to this section. Nothing contained in this section shall excuse the Contractor from proceeding with the prosecution of the work in accordance with the Contract, as changed.

18. **STOCKPILE OF MATERIALS**: The Contractor may, if approved by the City Engineer, place or stockpile materials in the public right-of-way provided they **do not** prevent access to adjacent properties or prevent compliance with traffic regulations. Traffic shall not be required to travel over stockpiled materials, and proper dust control shall be maintained.

19. **EXCESS MATERIALS**: When excavations are made, resultant loose earth shall be utilized for filling by compacting in place or disposed of off the site. Excess or unsuitable material, broken asphaltic concrete and broken portland cement concrete excavated from the right-of-way shall be removed from the project and disposed of by the Contractor.

    Waste material shall not be placed on private property without express permission of the property owner.

    The Contractor shall at all times keep the premises free from accumulation of waste materials or rubbish caused by his operations. At the completion of the work, he shall remove all equipment, tools and surplus materials, and shall completely clean the premises, removing and disposing of all debris and rubbish, and cleaning all stains, spots, marks, dirt, smears, etc. When work premises are turned over to the City, they shall be thoroughly clean and ready for immediate use.

    Clean-up shall include removal of all excess pointing mortar materials within pipes and removal of oversized rocks and boulders left after finish grading. The Contractor shall provide for the legal disposal of all waste products debris, etc., and shall make necessary arrangements for such disposal.

20. **ENVIRONMENTAL POLLUTION**: As provided by ORS 279C.525, all applicable provisions of federal, state or local statutes, ordinances and regulations dealing with the prevention of environmental pollution and the preservation of natural resources that affect the work under this contract are by reference incorporated herein to the same force and affect as if set forth herein in full. If the Contractor must undertake additional work due to the enactment of new or the amendment of existing statutes, ordinances or regulations occurring after the submission of the successful bid, the City shall issue a Change Order setting forth the additional work that must be undertaken. The Change Order shall not invalidate the Contract and

Public Works Department
22500 Salamo Road
West Linn, Oregon 97068
Telephone: (503) 722-5500
Fax: (503) 656-4106

there shall be, in addition to a reasonable extension, if necessary, of the contract time, a reasonable adjustment in the contract price, if necessary, to compensate the Contractor for all costs and expenses incurred, including overhead and profits, as a result of the delay or additional work.

21. **SALVAGE, COMPOSTING OR MULCHING**: If this is a contract for demolition work, the Contractor shall salvage or recycle construction and demolition debris, if feasible and cost-effective. If this is a contract for lawn and landscape maintenance, Contractor shall compost or mulch yard waste material at an approved site, if feasible and cost-effective.

22. **LOSSES AND DAMAGES**: All loss or damage arising out of the nature of the work to be done or from the action of the elements or from any unforeseen circumstances in the prosecution of the same, or from any unusual obstructions or difficulties which may be encountered in and/or during the prosecution of the work, or from any casualty whatsoever of every description, shall be sustained and borne by the Contractor at his own cost and expense.

23. **CHARACTER AND STATUS OF WORKMEN**: Only skilled foremen and workmen shall be employed on work requiring special qualifications. When required by the City, the Contractor shall discharge any person who is, in the opinion of the City Engineer, disorderly, dangerous, insubordinate, incompetent, or otherwise objectionable. The Contractor shall keep the City harmless from damages or claims for compensation that may occur in the enforcement of this section.

24. **WORK METHODS:** The methods, equipment and appliances used on the work shall be such as will produce a satisfactory quality of work, and shall be adequate to complete the contract within the time limit specified.

    Except as is otherwise specified, the Contractor's procedure and methods of construction may, in general, be of his own choosing, provided they follow best general practice and are calculated to secure results which will satisfy the requirements of the specifications and the supervision of the work.

    The work covered by this Contract shall be carefully laid out in advance and performed in a manner to minimize interference with normal operation and utilization of the roads. The Contractor shall exercise caution during the course of this construction work to avoid damage to all known existing or possible unknown existing underground utilities. He shall conduct his construction operations in such a manner as to avoid injury to his personnel and to avoid damage to all utilities. Any damage done will be repaired without delay and at the expense of the Contractor.

25. **INSPECTION:** All material and/or services are subject to inspection and acceptance by the City. Materials and/or services failing to conform to the specifications of this Contract will be held at Contractor's risk and may be returned to the Contractor. If so returned, all costs are the responsibility of the Contractor. The City may elect to do any or all of the following per written determination:

    a. Waive the non-conformance.

    b. Stop the work immediately.

    c. Bring material into compliance.

26. **TRAFFIC REGULATIONS**: All traffic affected by this construction shall be regulated in accordance with the *Oregon Temporary Traffic Control Handbook,* latest edition, as prepared by the Oregon Department of Transportation and any questions shall be referred to the City of West Linn City Engineer for interpretation.

    At the time of the pre-construction conference, the Contractor shall designate an employee who is well qualified and experienced in construction traffic control and safety to be responsible for implementing, monitoring and altering traffic control measure, as necessary. At the same time the City will designate a representative who will be responsible to see that

Public Works Department
22500 Salamo Road
West Linn, Oregon 97068
Telephone: (503) 722-5500
Fax: (503) 656-4106

all traffic control and any alterations are implemented and monitored to the extent that traffic is carried through the work area in an effective manner and that motorists, pedestrians, bicyclists and workers are protected from hazard and accidents.

a. All traffic control devices required for this project shall be the responsibility of the Contractor. The Contractor shall place advance warnings signs in accordance with the Traffic Control Handbook.

b. The Contractor shall provide, erect and maintain all necessary flashing arrow boards, barricades, suitable and sufficient warning lights, signals and signs, and shall take all necessary precautions for the protection of the work and safety of the public. The Contractor shall provide, erect and maintain acceptable and adequate detour signs at all closures and along detour routes.

c. All barricades and obstructions shall be illuminated at night, and all safety lights shall be kept burning from sunset until sunrise. All barricades and signs used by the Contractor shall conform to the standard design, generally accepted for such purposes, and payment for all such services and materials shall be considered as included in the other pay items of the Contract unless specifically listed and identified.

d. The Contractor shall insure that all existing traffic signs are erect, clean and in full view of the intended traffic at all times. Street name signs at major street intersections shall be maintained erect at all times. If these signs should interfere with construction, the Contractor shall notify the Inspector at least forty eight (48) hours in advance for City personnel to temporarily relocate said signs. The City will re-set all traffic and street name signs to permanent locations when notified by the Contractor that construction is complete unless otherwise stated in the specifications.

e. When construction activities or traffic hazards at the construction site require the use of flagmen, it shall be the Contractor's responsibility to provide adequate personnel including flagmen to direct traffic safely.

f. Equipment used and/or directed by the Contractor shall travel with traffic at all times. Supply trucks shall travel with traffic except when being spotted. Provide a flagman to assist with this operation.

g. During construction, it may be necessary to alter traffic control. Alterations shall be in accordance with the Traffic Control Handbook.

h. **NO STREET WITHIN THIS PROJECT MAY BE CLOSED TO THROUGH TRAFFIC OR TO LOCAL EMERGENCY TRAFFIC WITHOUT THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER PER DIRECTION OF THE CITY MANAGER OF THE CITY OF WEST LINN.** Written approval may be given if sufficient time exists to allow for notification of the public at least two (2) days in advance of such closing. Partial closure of streets within the project shall be done in strict conformity with written directions to be obtained from the City Engineer.

i. The Contractor shall address how local access to adjacent properties will be handled in accordance with the specification herein.

j. Where crossings of existing pavements occur, no open trenches shall be permitted overnight, but plating may be permitted if conditions allow as determined by the City Engineer or his authorized representative. If plates cannot be used, crossings shall be appropriately back-filled to provide a safe smooth travelling surface.

27. **OUTDOOR CONSTRUCTION RESTRICTIONS:** Outdoor construction is restricted to the times listed below in the following table:

	Weekdays (Mon.-Fri.)	Weekends (Sat.-Sun.), Holidays
All Outdoor Construction Work	7:00 a.m. to 5:00 p.m.	9:00 a.m. to 5:00 p.m.

Public Works Department
22500 Salamo Road
West Linn, Oregon 97068
Telephone: (503) 722-5500
Fax: (503) 656-4106

Holidays include: New Year's Day, Martin Luther King Jr. Birthday, Washington's Birthday/President's Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day, and Christmas Day.

28. **FIRST TIER SUBCONTRACTOR DISCLOSURE:** If a Bid for the Project is greater than $100,000, within two working hours of the date and time the Bids are due, the Bidder must submit a written disclosure for all First Tier Subcontractors furnishing labor or labor and materials whose subcontracts are equal to or greater in value than 5% of the total Project Bid or $15,000, whichever is greater, or $350,000 regardless of the percentage of the total project bid in accordance with ORS 279C.370. The Bidder must disclose the following information about their first-tier subcontracts either in its Bid submission or within two (2) working hours after the date and time of the deadline when bids are due:

    a. The subcontractor's name, address, Construction Contractor's Board Number (as applicable), and

    b. The dollar value of the subcontract, and

    c. The category of work that the subcontractor will be performing.

    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 accompanying form. Failure to submit this form by the disclosure deadline will result in a non-responsive bid. A non-responsive bid will not be considered for award. It is the Bidder's responsibility to determine all the documents are must be submitted to the City.

29. **USE OF EQUALS:** When the specifications for materials, articles, products, and equipment state "or equal", Contractor may bid upon, and use materials, articles, products, and equipment which will perform equally the duties imposed by the general design. The Engineer will have the final approval of all materials, articles, products, and equipment proposed to be used as an "equal." It shall not be purchased or installed without prior written approval from the City or its representative.

30. **HAZARDOUS MATERIALS**: The Contractor shall supply the City with a list of any and all hazardous substances used in performance of this Contract. That list shall identify the location of storage and use of all such hazardous substances and identify the amounts stored and used at each location. Contractor shall provide City with material safety data sheets for all hazardous substances brought onto City property, created on City property or delivered to City pursuant to this Contract. For the purpose of this section, "hazardous substance" means hazardous substance as defined by ORS 453.307(5). Contractor shall complete the State Fire Marshall's hazardous substance survey as required by ORS 453.317 and shall assist City to complete any such survey that it may be required to complete because of substances used in the performance of this Contract.

31. **HAZARDOUS WASTE**: If, as a result of performance of this Contract, Contractor generates any hazardous wastes, Contractor shall be responsible for disposal of any such hazardous wastes in compliance with all applicable federal and state requirements. Contractors shall provide City with documentation, including all required manifests, demonstrating proper transportation and disposal of any such hazardous wastes. Contractor shall defend, indemnify, and hold harmless City for any disposal or storage of hazardous wastes generated pursuant to this Contract and any releases or discharges of hazardous materials.

32. **TEMPORARY SANITARY FACILITIES**: The Contractor shall provide facilities for the use of workmen employed on the work site in accordance with the requirements of ORS 654.150, (Sanitary facilities at construction projects; standards, exemptions) and the rules adopted pursuant thereto. Whether or not ORS 654.150 is applicable to the project is the sole responsibility of the Contractor. Contractor shall be responsible for all costs that may be incurred in complying with or in securing exemption or partial exemption from the requirements as incidental to this contract.

33. **ELECTRIC POWER, WATER AND TELEPHONE**: Unless otherwise specified, the Contractor shall make his own arrangements for electric power, water and telephone. Subject to the convenience of the utility, he may be permitted to

Public Works Department
22500 Salamo Road
West Linn, Oregon 97068
Telephone: (503) 722-5500
Fax: (503) 656-4106

connect to existing facilities where available, but he shall meter and bear the cost of such power or water, and installation and disconnect of such power, water and telephone services.

34. **UTILITIES AND ELECTRICAL POWER LINES**: The electric utility company may maintain energized aerial electrical power lines in the immediate vicinity of this project. Do not consider these lines to be insulated. Construction personnel working in proximity to these lines are exposed to an extreme hazard from electrical shock. Contractors, their employees and all other construction personnel working on this project must be warned of the danger and instructed to take adequate protective measure, including maintaining a minimum ten (10) feet clearance between the lines and all construction equipment and personnel. (see: OSHA Std. 1926.550 (a) 15).

    Electrical utility companies may maintain energized underground electrical power lines in the immediate vicinity of this project. These power lines represent an extreme hazard of electrical shock to any construction personnel or equipment coming in contact with them. Contractors, their employees, and all other personnel working near any underground power lines must be warned to take adequate protective measure. (see: OSHA Std. 1926-651 (A)).

    Oregon law requires all parties planning excavations in public rights-of-way to contact utilities for locations of their underground facilities in accordance with the 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.

35. **COOPERATIVE PURCHASING**: Any publicly funded city, county, district, agency or similar entity shall have the authority to purchase specified goods/services directly from the contractor under the terms and conditions of this contract as indicated below:

    a. The bidder agrees to extend identical pricing to local public agencies for the same terms. Quantities listed in this document reflect the City of West Linn's estimated usage only.

    b. Each contracting agency will execute a separate contract with the successful bidder for its requirements.

    c. Any bidder, by written notification at the time of the bid due date and time, may decline to extend the prices and terms of this bid to any, and/or all other public agencies.

    d. Additional costs may be incurred by the successful bidder in contracting with another public agency. All demonstrable costs (shipping, etc.) may be passed on to that public agency.

    Contractor shall provide information regarding total usage of contract upon request of the City of West Linn.

Public Works Department
22500 Salamo Road
West Linn, Oregon 97068
Telephone: (503) 722-5500
Fax: (503) 656-4106

Purpose: The City of West Linn intends to establish a contract for the **Mapleton Water Main Relocation**. For the technical provisions see Appendix B.

1. **Prospective Bidders Conference:** Prospective bidders are required to attend a conference to be held at the City of West Linn City Hall:

   ADDRESS: 22500 Salamo Road
   West Linn, Oregon 97068
   Bolton Conference Room

   DATE/TIME: AS INDICATED ON INVITATION FOR BID

   The purpose of this conference will be to clarify the contents of this Invitation For Bid in order to prevent any misunderstanding of the City's position. Any doubt as to the requirements of this Invitation For Bid or any apparent omission or discrepancy should be presented to the City at this conference. The City will then determine the appropriate action necessary, if any, and issue a written addendum to the Invitation For Bid. Oral statements or instructions shall not constitute an amendment to the Invitation For Bid.

2. **Bid Acceptance Period:** In order to allow for an adequate evaluation, the City requires a Bid in response to this Solicitation to be valid and irrevocable for sixty (60) days after the opening time and date.

3. **Time of Completion:** The Contractor shall commence work for this project on or before the fifth (5) day following the project start date indicated on the "Notice to Proceed" issued by the City of West Linn and shall fully complete all work under the project within 75 **calendar days**. The Contractor shall, at all times, during the continuance of the Contract, prosecute the work with such force and equipment as is sufficient to complete all work within the time specified.

4. **Plans and Specifications to Successful Bidder:** The successful Bidder may obtain five (5) sets of Plans and Specifications for this project from the City at no cost.

5. **City of West Linn Permit:** As a City project, the Contractor is not required to obtain a City Public Works Construction, Improvement, Blasting, or Erosion Control permit. The Contractor will be responsible for any other required agency permits.

6. **Key Personnel:** It is essential that the Contractor provide adequate experienced personnel, capable of and devoted to the successful accomplishment of work to be performed under this contract. The Contractor must agree to assign specific individuals to the key positions.

   a. The Contractor agrees that, once assigned to work under this contract, key personnel shall not be removed or replaced without written notice to the City.

   b. If key personnel are not available for work under this contract for a continuous period exceeding 30 calendar days, or are expected to devote substantially less effort to the work than initially anticipated, the Contractor shall immediately notify the City, and shall, subject to the concurrence of the City, replace such personnel with personnel of substantially equal ability and qualifications.

BID FORM

Solicitation Number: PW-13-09

Public Works Department
22500 Salamo Road
West Linn, Oregon 97068
Telephone: (503) 722-5500
Fax: (503) 656-4106

Item	ODOT Spec	Description of material and/or services	Quantity	Unit	Unit Price	Total Amount
1		MOBILIZATION/DEMOBILIZATION	1	LS		
2		TRAFFIC CONTROL	1	LS		
3		HYDRANT REMOVAL	5	EA		
4	01140.00	4 INCH DIP W/ POLY BAG, FITTINGS & COUPLINGS, W/ CLASS B BACKFILL	130	LF		
5	01140.00	4 INCH DIP W/ POLY BAG, FITTINGS & COUPLINGS, W/ RESTRAINED JOINTS AND CLASS B BACKFILL	160	LF		
6	01140.00	6 INCH DIP W/ POLY BAG, FITTINGS & COUPLINGS, W/ CLASS B BACKFILL	100	LF		
7	01140.00	8 INCH DIP W/ POLY BAG, FITTINGS & COUPLINGS, W/ CLASS B BACKFILL	915	LF		
8	01140.00	8 INCH DIP W/ POLY BAG, FITTINGS & COUPLINGS, W/ RESTRAINED JOINTS AND CLASS B BACKFILL	2730	LF		
9	01140.00	12 INCH DIP W/ POLY BAG, FITTINGS & COUPLINGS, W/ RESTRAINED JOINTS AND CLASS B BACKFILL	85	LF		
10	01170.00	1 INCH WATER SERVICE CONNECTIONS W/ PVC SLEEVE AND CLASS B BACKFILL	74	EA		
11	01150.00	4 INCH GATE VALVE	1	EA		
12	01150.00	6 INCH GATE VALVE	1	EA		
13	01150.00	8 INCH GATE VALVE	12	EA		
14	01150.00	12 INCH BUTTERFLY VALVE	2	EA		
15	01140.00	BLOWOFF ASSEMBLY, 2 INCH	1	EA		
16	01140.00	BLOWOFF ASSEMBLY, 4 INCH	1	EA		
17	01160.00	HYDRANT ASSEMBLY	8	EA		
18	00406.00	TUNNELING, BORING AND JACKING OF 16" CASING W/ CLASS E BACKFILL IN BORING SHAFTS	1	LS		
19	00495.00	TRENCH RESURFACING, 6 INCH CLASS E BACKFILL	1350	SQ-YD		
		Total Bid:				$_____

City of West Linn	**BID BOND** Solicitation Number: PW-13-09	**Public Works Department** 22500 Salamo Road West Linn, Oregon 97068 Telephone: (503) 722-5500 Fax: (503) 656-4106

KNOW ALL PERSONS BY THESE PRESENTS:

That we, _____, as "Principal,"
(Name of Principal)

and _____, an _____ Corporation,
(Name of Surety)
authorized to transact Surety business in Oregon, as "Surety," hereby jointly and severally bind ourselves, our respective heirs, executors, administrators, successors and assigns to pay unto the City of West Linn ("Obligee") the sum of ($_____) _____ dollars.

WHEREAS, the condition of the obligation of this bond is that Principal has submitted its proposal or bid to an agency of the Obligee in response to Obligee's procurement document for the project identified in the Solicitation Number indicated above which proposal or bid is made a part of this bond by reference, and Principal is required to furnish bid security in an amount equal to ten (10%) percent of the total amount of the bid pursuant to the procurement document and ORS 279C.365(4) for competitive bidding or 279C.400(5) for competitive proposals.

NOW, THEREFORE, if the proposal or bid submitted by Principal is accepted, and if a contract pursuant to the proposal or bid is awarded to Principal, and if Principal enters into and executes such contract within the time specified in the procurement document and executes and delivers to Obligee its good and sufficient performance and payment bonds required by Obligee, as well as any required proof of insurance, within the time fixed by Obligee, then this obligation shall be void; otherwise, it shall remain in full force and effect.

IN WITNESS WHEREOF, we have caused this instrument to be executed and sealed by our duly authorized legal representatives this _____day of _____, 20__.

PRINCIPAL: _____

By_____
Signature

_____
Official Capacity

Attest: _____
Corporation Secretary

SURETY: _____

BY ATTORNEY-IN-FACT:

_____
Name

_____
Signature

_____
Address

_____
City State Zip

_____ _____
Phone Fax

City of West Linn	**PERFORMANCE BOND** Solicitation Number: PW-13-09	**Public Works Department** 22500 Salamo Road West Linn, Oregon 97068 Telephone: (503) 722-5500 Fax: (503) 656-4106

KNOW ALL MEN BY THESE PRESENTS, that we, _____
(Official Name & Form of Organization)

Whose address is: _____
(Street Address) *(City)* *(State)* *(Zip)*

as Principal, and, _____
(Name of Surety) *(Print - Agent / Contact Name)* *(Phone Number)*

_____
(Street Address of Surety) *(City)* *(State)* *(Zip)*

a corporation duly authorized to conduct a general surety business in the State of Oregon, as Surety, are jointly and severally held and bound unto the City of West Linn, Oregon, a municipality of the State of Oregon, hereinafter called Obligee, in the sum of _____ and ____/100 DOLLARS ($_____),*(The Contract Price, Both in Words & Figures)* lawful money of the United State of America, for the payment of which we, as Principal, and as Surety, jointly and severally bind ourselves, our successors and assigns firmly by these presents,

TERMS AND CONDITIONS

On the _____ *(Day)* of _____*(Month)*, _____*(Year)*, _____
(Name of Contractor)

Principal, entered into a contract with the City of West Linn, Oregon, Obligee, to construct certain public improvements and to provide material, labor and equipment for the construction of those improvements. The public improvements and work to be performed by Principal are more fully described in the contract documents between Principal and Obligee. Those contract documents are incorporated herein by reference.

In the event that Principal fails to complete the work as required under the contract, Surety shall either complete the work or pay Obligee the costs of completion of the work. Work is only complete when it meets the standards required by the Contract and applicable City standards. Surety's obligation shall remain in effect until the work is accepted by Obligee, but shall terminate on acceptance by Obligee. The total amount of the Surety's liability to Obligee under this bond shall in no event exceed the amount stated above.

Surety agrees that no change, extension of time, alternation, or addition to the terms of the contract, or to the work to be performed thereunder or the specifications accompanying the same shall in anywise 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 the specifications.

IN WITNESS WHEREOF, the parties hereto have caused this Bond to be executed in _____, Oregon, this ____ *(Day)* of _____*(Month)*, _____*(Year)*.

_____
Contractor

_____
Principal Signature

Witnesses:

_____
Principal Printed Name

_____
Surety

(A true copy of the Power of Attorney must be attached to the original of this bond)

Countersigned:

_____
Surety Attorney of Fact

_____
Resident Agent

PAYMENT BOND

Solicitation Number: PW-13-09

Public Works Department
22500 Salamo Road
West Linn, Oregon 97068
Telephone: (503) 722-5500
Fax: (503) 656-4106

KNOW ALL MEN BY THESE PRESENTS, that we, _____
(Official Name & Form of Organization)

Whose address is: _____
(Street Address) *(City)* *(State)* *(Zip)*

as Principal, and, _____
(Name of Surety) *(Print - Agent / Contact Name)* *(Phone Number)*

_____
(Street Address of Surety) *(City)* *(State)* *(Zip)*

a corporation duly authorized to conduct a general surety business in the State of Oregon, as Surety, are jointly and severally held and bound unto the City of West Linn, Oregon, a municipality of the State of Oregon, hereinafter called Obligee, in the sum of _____ and _____/100 DOLLARS ($_____),*(The Contract Price, Both in Words & Figures)* lawful money of the United State of America, for the payment of which we, as Principal, and as Surety, jointly and severally bind ourselves, our successors and assigns firmly by these presents,

TERMS AND CONDITIONS

On the _____ *(Day)* of _____*(Month)*, _____*(Year)*, _____
(Name of Contractor)

Principal, entered into a contract with the City of West Linn, Oregon, Obligee, for the construction of certain public improvements. As part of the contract, Principal is required to furnish materials, labor, and equipment to construct the improvements. The contract documents between Principal and Obligee are incorporated herein by this reference.

In the event that Principal fails to make payments when due to suppliers of labor, equipment or materials, Surety shall pay the suppliers the amounts they are due. In the event that Obligee pays any amounts to suppliers that Principal was required to pay, Surety shall reimburse Obligee for those payments. In the event that Principal permits any lien or claim to be filed or prosecution against the City on account of any labor or material furnished, Surety shall take such steps as are necessary to clear the lien, claim or prosecution. In the event that Principal fails to (1) promptly pay all contributions or amounts due the State Unemployment Compensation Trust Fund incurred to the performance of the contract, (2) promptly, as due, make payments to the person, co-partnership, association, or corporation entitled thereto of the money and sums mentioned in Section 279C.600 of the Oregon Revised Statutes, or (3) promptly pay to the Oregon State Tax Commission all sums required to be deducted and retained from wages of employees of the Principal and his sub-Contractors, pursuant to the Section 316.711, Oregon Revised Statues. Surety shall make the required payments. Surety's obligations under this bond shall terminate when all payments required of Principal described in this paragraph are made in full.

The total amount of the Surety's liability under this bond both to the Obligee and to the persons furnishing labor or materials, provisions and goods to any person or persons, shall in no event exceed the amount stated above.

Surety agrees that no change, extension of time, alternation, or addition to the terms of the contract, or to the work to be performed there under or the specifications accompanying the same shall in anywise 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 the specifications.

IN WITNESS WHEREOF, the parties hereto have caused this Bond to be executed in _____, Oregon, this ____ *(Day)* of _____*(Month)*, _____*(Year)*.

_____
Contractor

_____
Principal Signature

Witnesses:

_____ _____
Principal Printed Name

_____ _____
Surety

(A true copy of the Power of Attorney must be attached to the original of this bond)

Countersigned:

_____
Surety Attorney of Fact

_____
Resident Agent

Public Works Department
22500 Salamo Road
West Linn, Oregon 97068
Telephone: (503) 722-5500
Fax: (503) 656-4106

NONCOLLUSION AFFIDAVIT

STATE OF _____)
)§
COUNTY OF _____)

I, (Type/Print Name)_____, state that I am **(Position Title)** _____of **(Name of Firm)**_____ and that I am authorized to make this affidavit on behalf of my firm, and its owners, directors, and, officers. I am the person responsible in my firm for the price(s) and the amount of this bid.

I state that:

1. The price(s) and the amount of this bid have been arrived at independently and without consultation, communication or agreement with any other contractor, bidder or potential bidder.

2. Neither the price(s) nor the amount of this bid, and neither the approximate price(s) nor approximate amount of this bid, have been disclosed to any other firm or person who is a bidder or potential bidder, and they will not be disclosed before bid opening.

3. No attempt has been made or will be made to induce any firm or person to refrain from bidding on this contract, or to submit a bid higher than this bid, or to submit any intentionally high or noncompetitive bid or other form of complementary bid.

4. The bid of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive bid.

5. **(Name of Firm)**_____, its affiliates, subsidiaries, officers, directors, and employees are not currently under investigation by any governmental agency and have not in the last four (4) years been convicted or found liable for any act prohibited by state or federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding on any public contract, except as follows:

I state that **(Name of Firm)**_____ understands and acknowledges that the above representations are material and important, and will be relied on by **THE CITY OF WEST LINN, OREGON** in awarding the contract(s) for which this bid is submitted. I understand and my firm understands that any misstatement in this affidavit is and shall be treated as fraudulent concealment from **THE CITY OF WEST LINN, OREGON** of the true facts relating to the submission of bids for this contract.

_____
(Signature) (Signatory's Name)

_____
(Signatory's Title)

SWORN TO AND SUBSCRIBED BEFORE ME THIS _____DAY OF _____, **20**____

_____
Notary Public

My Commission Expires_____

Public Works Department
22500 Salamo Road
West Linn, Oregon 97068
Telephone: (503) 722-5500
Fax: (503) 656-4106

CONTRACTOR'S AFFIDAVIT
SETTLEMENT OF CLAIMS

DATE:_____

PROJECT: Mapleton Water Main Relocation

TO: City of West Linn

Gentlemen:

This is to certify that all lawful claims for materials, rental of equipment, and labor used in connection with the construction of the above, whether by subcontractor or claimant in person, have been duly discharged.

The undersigned, for the consideration of $_____, as set forth in the final pay estimate, as full and complete payment under the terms of the contract, hereby waives and relinquishes any and all further claims or right of lien under, in connection with, or as a result of this project. The undersigned further agrees to indemnify and hold harmless _____against any and all liens, claims of liens, suits, actions, damages, charges and expenses whatsoever, which _____ may suffer arising out of the failure of the undersigned to pay for all labor performance and materials furnished for the performance of said project.

Signed at _____, this _____ day of _____, 20_____

_____
(CONTRACTOR)

BY:_____

STATE OF _____)
)§
COUNTY OF _____)

The foregoing instrument was subscribed and sworn to before me this _____ day of _____, 20___

_____
Notary Pubic

My Commission Expires:_____

Public Works Department
22500 Salamo Road
West Linn, Oregon 97068
Telephone: (503) 722-5500
Fax: (503) 656-4106

THREE YEAR EXPERIENCE RECORD

Recent projects first

#1 (Project Name, Location, Contract Cost)

_____

Project description: _____

_____

_____

Project completion date: (contract) _____ (actual) _____

Contact name: _____

Telephone: _____

#2 (Project Name, Location, Contract Cost)

_____

Project description: _____

_____

_____

Project completion date: (contract) _____ (actual) _____

Contact name: _____

Telephone: _____

#3 (Project Name, Location, Contract Cost)

_____

Project description: _____

_____

Public Works Department
22500 Salamo Road
West Linn, Oregon 97068
Telephone: (503) 722-5500
Fax: (503) 656-4106

Project completion date: (contract) _____ (actual) _____

Contact name: _____

Telephone: _____

#4 (Project Name, Location, Contract Cost)

_____

Project description: _____

_____

_____

Project completion date: (contract) _____ (actual) _____

Contact name: _____

Telephone: _____

#5 (Project Name, Location, Contract Cost)

_____

Project description: _____

_____

_____

Project completion date: (contract) _____ (actual) _____

Contact name: _____

Telephone: _____

Attach additional sheets if needed.

Public Works Department
22500 Salamo Road
West Linn, Oregon 97068
Telephone: (503) 722-5500
Fax: (503) 656-4106

ADDITIONAL PROJECT FORMS ATTACHED INCLUDE:

APPENDIX A

1) FIRST-TIER SUBCONTRACTOR DISCLOSURE (WH-179)

2) PUBLIC WORKS FEE INFORMATION FORM (WH-39)
   - To be completed and paid by City upon award.

3) NOTICE OF PUBLIC WORKS (WH-81)
   - To be completed by City upon award.

4) PAYROLL INSTRUCTIONS (WH-38A)

5) PAYROLL/CERTIFIED STATEMENT FORM (WH-38)

6) PUBLIC WORKS FEE ADJUSTMENT FORM (WH-40)
   - To be completed by City after final completion of project.

7) CURRENT PREVAILING WAGE RATE COVER AND AMENDMENTS
   - The complete prevailing wage rate documents can be downloaded from the Oregon Bureau of Labor and Industries website at http://www.oregon.gov/boli/WHD/PWR/pages/pwr_state.aspx

APPENDIX B – TECHNICAL PROVISIONS

1) ASBESTOS CEMENT PIPE
2) JACK AND BORING

APPENDIX C – PROJECT PLANS

Public Works Department
22500 Salamo Road
West Linn, Oregon 97068
Telephone: (503) 722-5500
Fax: (503) 656-4106

Appendix A

FIRST-TIER SUBCONTRACTOR DISCLOSURE

PROJECT NAME: _____

BID #: _____

BID CLOSING: Date: _____Time:_____

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

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) _____	$ _____	_____
(5) _____	$ _____	_____
(6) _____	$ _____	_____
(7) _____	$ _____	_____
(8) _____	$ _____	_____
(9) _____	$ _____	_____

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

Form submitted by (bidder name):_____

Contact name: _____ Phone no.: ( ) _____

ORS 279C.370 First-tier subcontractor disclosure. (1)(a) Within two working hours after the date and time of the deadline when bids are due to a contracting agency for a public improvement contract, a bidder shall submit to the contracting agency a disclosure of the first-tier subcontractors that:

(A) Will be furnishing labor or will be furnishing labor and materials in connection with the public improvement contract; and

(B) Will have a contract value that is equal to or greater than five percent of the total project bid or $15,000, whichever is greater, or $350,000 regardless of the percentage of the total project bid.

(b) For each contract to which this subsection applies, the contracting agency shall designate a deadline for submission of bids that has a date on a Tuesday, Wednesday or Thursday and a time between 2 p.m. and 5 p.m., except that this paragraph does not apply to public contracts for maintenance or construction of highways, bridges or other transportation facilities.

(c) This subsection applies only to public improvement contracts **("projects")** with a value, estimated by the contracting agency, of more than **$100,000**.

(d) This subsection does not apply to public improvement contracts that have been exempted from competitive bidding requirements under ORS 279C.335 (2).

(2) The disclosure of first-tier subcontractors under subsection (1) of this section must include the name of each subcontractor, the category of work that each subcontractor will perform and the dollar value of each subcontract. The information shall be disclosed in substantially the following [above] form:

(3) A contracting agency shall accept the subcontractor disclosure. The contracting agency shall consider the bid of any contractor that does not submit a subcontractor disclosure to the contracting agency to be a non-responsive bid and may not award the contract to the contractor. A contracting agency is not required to determine the accuracy or the completeness of the subcontractor disclosure.

(4) After the bids are opened, the subcontractor disclosures must be made available for public inspection.

(5) A contractor may substitute a first-tier subcontractor under the provisions of ORS 279C.585.

(6) A subcontractor may file a complaint under ORS 279C.590 based on the disclosure requirements of subsection (1) of this section.

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.)

BUREAU OF LABOR AND INDUSTRIES
NOTICE OF PUBLIC WORKS

(For use by public agencies in complying with ORS 279C.835)

For Office Use Only:
Project DB #:

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: _____

Payment 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 • pwremail@boli.state.or.us

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

BUREAU OF LABOR AND INDUSTRIES
WAGE AND HOUR DIVISION

PAYROLL/CERTIFIED STATEMENT FORM WH-38
FOR USE IN COMPLYING WITH ORS 279C.845*

PRIME CONTRACTOR ☐ SUBCONTRACTOR ☐ PAYROLL NO.

Business Name (DBA): Phone: ( ) CCB Registration Number:

Project Name: Project Number: Type of Work:

Street Address: Project Location:

Mailing Address: Project County:

Date Pay Period Began: Date Pay Period Ended:

THIS SECTION FOR PRIME CONTRACTORS ONLY

Public Contracting Agency Name:
Phone: ( )
Date Contract Specifications First Advertised for Bid:
Contract Amount:

THIS SECTION FOR SUBCONTRACTORS ONLY

Subcontract Amount:
Prime Contractor Business Name (DBA):
Prime Contractor Phone: ( )
Prime Contractor's CCB Registration Number:
Date You Began Work on the Project:

(1)	(2)		(3) DAY AND DATE	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
NAME , ADDRESS AND EMPLOYEE'S IDENTIFICATION NUMBER	CLASSIFICATION (INCLUDE GROUP # AND APPRENTICESHIP STEP IF APPLICABLE)		HOURS WORKED EACH DAY	TOTAL HOURS	HOURLY BASE RATE	HOURLY FRINGE BENEFIT AMOUNTS PAID AS WAGES TO EMPLOYEE	GROSS AMOUNT EARNED (see directions)	ITEMIZED DEDUCTIONS FICA, FED, STATE, ETC.	NET WAGES PAID	HOURLY FRINGE BENEFITS PAID TO BENEFIT PARTY, PLAN, FUND, OR PROGRAM	NAME OF BENEFIT PARTY, PLAN, FUND, OR PROGRAM
		OT									
		ST									
		OT									
		ST									
		OT									
		ST									
		OT									
		ST									
		OT									
		ST									

*Although this form has not been officially approved by the U.S. Department of Labor, it is designed to meet the requirements of both the state PWR law and the federal Davis-Bacon Act.

THIS FORM CONTINUED ON REVERSE

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 _____; that during the payroll period
(BUILDING OR WORK)
commencing on the _____ day of _____, _____, and ending the _____ day
(MONTH) (YEAR)
of _____, _____, all persons employed on said project have been paid the
(MONTH) (YEAR)
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 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. **THE MINIMUM FEE IS $250.00; THE MAXIMUM FEE IS $7,500.00. NO ADDITIONAL FEE IS REQUIRED TO BE PAID, AND REFUNDS WILL NOT BE MADE, IF THE BALANCE DUE OR THE REFUND DUE IS 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)

PREVAILING WAGE RATES

for

Public Works Contracts in Oregon

OREGON BUREAU OF LABOR AND INDUSTRIES

Brad Avakian
Commissioner
Bureau of Labor and Industries

Effective: July 1, 2013

APPENDIX

JULY 1, 2013

Collectively Bargained Rates

(To be used only when referred to in the Regions pages 6-33)

JULY 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
Diver 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 42-43
Laborer 43
Limited Energy Electrician 43-44
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 44-45
Power Equipment Operator 45-46
Roofer 46
Sheet Metal Worker 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 48
Tile Setter/Terrazzo Worker: Hard Tile Setter 48
Tile, Terrazzo, and Marble Finisher 48
Truck Driver 48

MAP: Power Equipment Operator, Zone 1 49

TRADE	BASIC HOURLY RATE	FRINGE RATE
ASBESTOS WORKER/INSULATOR		
	41.27	**19.02**
FIRESTOP/CONTAINMENT WORKERS		
	27.73	**12.29**
BOILERMAKER	**34.40**	**27.94**

BRICKLAYER/STONEMASON
(This trade is tended by "Tenders to Mason Trades")

Area 1	**32.75**	**16.65**

Reference Counties Area 1

Baker	Grant	Marion	Umatilla
Benton (a)	Harney	Morrow	Union
Clackamas	Hood River	Multnomah	Wallowa
Clatsop	Lincoln (a)	Polk	Wasco (a)
Columbia	Linn (a)	Sherman	Washington
Gilliam	Malheur	Tillamook	Yamhill

(a) North Half

(Add $1.00 per hour to Fringe for Refractory repair work.)

Area 2	**31.53**	**16.30**

Reference Counties Area 2

Benton (b)	Deschutes	Jefferson	Lincoln (b)
Coos	Douglas	Klamath	Linn (b)
Crook	Jackson	Lake	Wasco (b)
Curry	Jefferson	Lane	Wheeler

(b) South Half

(Add $1.00 per hour to Fringe for Refractory repair work.)

CARPENTER

Zone 1 (Base Rate)

Group 1	**33.58**	**14.47**
Group 2	**33.73**	**14.47**
Group 3	**34.08**	**14.47**
Group 4	**34.23**	**14.47**
Group 5	**34.08**	**14.47**
Group 6	**34.58**	**14.47**

CARPENTER (continued)

Group 1 (Carpenter Group-I)
Group 2 (Carpenter Group-II)
Group 3 (Millwright Group-I)
Group 4 (Millwright Group-II)
Group 5 (Bridge & Highway Carpenter)
Group 6 (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 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	

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 RATE	FRINGE	TRADE	BASIC HOURLY RATE	FRINGE

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**

CEMENT MASON (continued)

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.

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 & DIVER TENDER

Zone 1 (Base Rate)

DIVER	**80.70**	**14.47**
DIVER TENDER	**38.04**	**14.47**

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/Diver 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**

TRADE	BASIC HOURLY RATE	FRINGE	TRADE	BASIC HOURLY RATE	FRINGE

DIVER & DIVER TENDER (continued)

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.

Reference Cities for Diver/Diver 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 Diver Basic Hourly Rate to obtain the Total Hourly Rate for the Diver.

Basic Hourly Rate Pay	+	Hourly Depth Pay	+	Hourly Enclosure Pay	=	Diver Total Hourly Rate

Diver Depth Pay:

Depth of Dive	Hourly Depth Pay
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.

Diver Enclosure Pay (working without vertical escape):

Distance Traveled In the Enclosure	Hourly Enclosure Pay
5-50ft.	$.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**

TRADE	BASIC HOURLY RATE	FRINGE	TRADE	BASIC HOURLY RATE	FRINGE

DRYWALL, LATHER, ACOUSTICAL CARPENTER & CEILING INSTALLER (continued)

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**

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	**37.05**	**17.29**
Cable Splicer	**38.90**	**17.35**

Reference Counties Area 2

Baker	Grant	Umatilla	Wallowa
Gilliam	Morrow	Union	Wheeler

ELECTRICIAN (continued)

Area 3

Electrician	**34.00**	**14.52**

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

Electrician	**37.16**	**16.44**
Cable Splicer	**40.88**	**16.56**
Lighting Maintenance/ Material Handlers	**17.64**	**8.18**

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	**38.05**	**19.54**
Electrical Welder	**41.85**	**19.66**
Material Handler/ Lighting Maintenance	**21.69**	**12.59**

Reference Counties Area 5

Clackamas	Hood River	Tillamook	Yamhill (d)
Clatsop	Multnomah	Wasco	
Columbia	Sherman	Washington	

(d) North Half

TRADE	BASIC HOURLY RATE	FRINGE RATE

ELECTRICIAN (continued)

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.

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)	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.

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.

TRADE	BASIC HOURLY RATE	FRINGE RATE

ELEVATOR CONSTRUCTOR, INSTALLER AND MECHANIC

Area 1

Mechanic	**47.00**	**25.19**

Reference Counties Area 1

Baker	Umatilla	Union	Wallowa

Area 2

Mechanic	**47.19**	**30.75**

Reference Counties Area 2

All remaining Counties

GLAZIER	**33.27**	**16.42**

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**	**21.35**

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.

TRADE	BASIC HOURLY RATE	FRINGE	TRADE	BASIC HOURLY RATE	FRINGE

IRONWORKER (continued)

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	**26.09**	**12.85**
Group 2	**27.09**	**12.85**
Group 3	**22.57**	**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.

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	

LABORER (continued)

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 **28.75** **14.96**

Reference Counties Area 2

Baker	Grant	Umatilla	Wallowa
Gilliam	Morrow	Union	Wheeler

Area 3 **25.95** **12.78**

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

TRADE	BASIC HOURLY RATE	FRINGE

LIMITED ENERGY ELECTRICIAN (continued)

Area 5	**28.75**	**15.11**

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.

LINE CONSTRUCTOR

Area 1

Group 1	**51.10**	**15.34**
Group 2	**45.62**	**15.15**
Group 3	**26.10**	**10.23**
Group 4	**39.23**	**11.82**
Group 5	**34.22**	**11.17**
Group 6	**31.31**	**11.15**
Group 7	**15.60**	**8.51**

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

LINE CONSTRUCTOR (continued)

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**	**16.65**

(This trade is tended by "Tile, Terrazzo, & Marble Finishers")

PAINTER & DRYWALL TAPER

COMMERCIAL PAINTING	**19.81**	**8.93**
INDUSTRIAL PAINTING	**21.01**	**8.93**
BRIDGE PAINTING	**24.81**	**8.93**

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 Wagontire West to the county line.

TRADE	BASIC HOURLY RATE	FRINGE	TRADE	BASIC HOURLY RATE	FRINGE

PLUMBER/PIPEFITTER/STEAMFITTER (continued)

Add $2.21 per hour to basic hourly rate if it is possible for worker to fall 30 ft. or more, or if required to wear a fresh-air mask or similar equipment for 2 hours or more.

Zone Differential for Area 1
Plumbers/Pipefitters/Steamfitters
(Add to Base Rate)

Zone 1	**2.50** per hour
Zone 2	**3.50** per hour
Zone 3	**5.00** per hour

Zone mileage based on road miles:

Zone 1: Forty (40) to fifty five (55) miles from City Hall in the reference cities listed below.
Zone 2: Fifty five (55) to one hundred (100) miles.
Zone 3: Over one hundred (100) miles.
There shall be a maximum of ten (10) hours of zone pay per workday.

Reference Cities
Boise, Idaho Twin Falls, Idaho

Area 2	**48.10**	**25.89**

Reference Counties Area 2
Plumbers/Pipefitters/Steamfitters

Grant	Umatilla	Wallowa
Morrow	Union	

Zone Differential for Area 2
(Add to Base Rate)

Zone 2 **10.62** hr. not to exceed $80.00 day.

Zone mileage based on road miles:

Zone 2: Eighty (80) miles or more from City Hall in Pasco, Washington.

Area 3	**39.71**	**22.37**

Reference Counties Area 3

All Remaining Counties

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**	**11.06**
Handling coal tar pitch	**30.83**	**11.06**
Remove fiberglass insulation	**30.83**	**11.06**

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.

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	**23.87**	**11.58**

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

TRADE	BASIC HOURLY RATE	FRINGE

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 RATE	FRINGE

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 **25.74** **14.01**

SPRINKLER FITTER **32.43** **19.85**

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**

TRADE	BASIC HOURLY RATE	FRINGE	TRADE	BASIC HOURLY RATE	FRINGE

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

29.19 15.09

(This trade is tended by "Tile, Terrazzo, & Marble Finisher")

TILE, TERRAZZO, AND MARBLE FINISHER

1. TILE, TERRAZZO FINISHER
21.82 11.36

2. BRICK AND MARBLE FINISHER
21.82 11.46

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, alkor acetylene black grouting or waterproof membrane.

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**

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

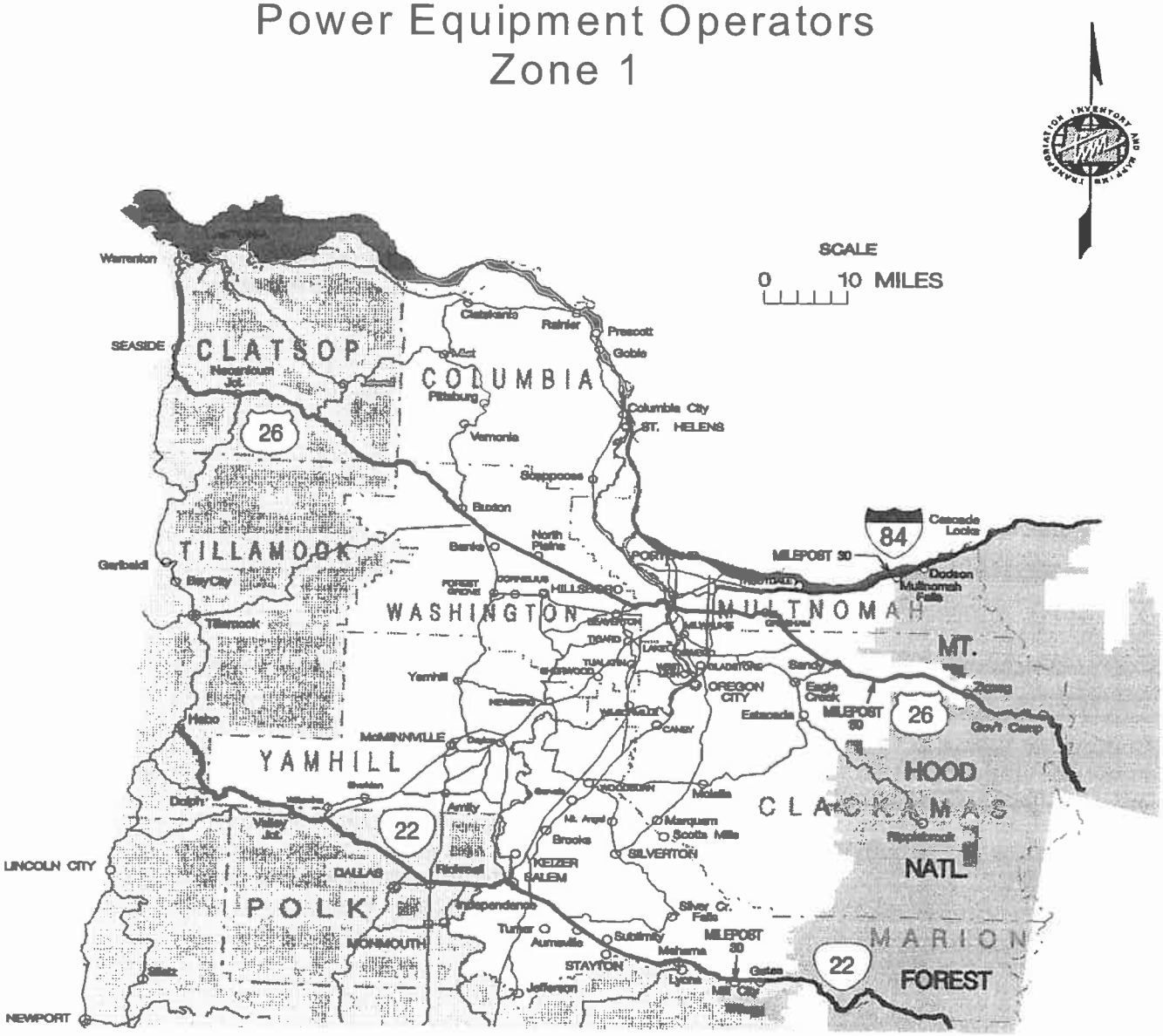
Zone differential for Truck Drivers
(Add to Zone A Base Rate)

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



Public Works Department
22500 Salamo Road
West Linn, Oregon 97068
Telephone: (503) 722-5500
Fax: (503) 656-4106

Appendix B

§1926.1101 ASBESTOS.

(a) Scope and application. This section regulates asbestos exposure in all work as defined in 29 CFR 1910.12(b), including but not limited to the following:

(1) Demolition or salvage of structures where asbestos is present;

(2) Removal or encapsulation of materials containing asbestos;

(3) Construction, alteration, repair, maintenance, or renovation of structures, substrates, or portions thereof, that contain asbestos;

(4) Installation of products containing asbestos;

(5) Asbestos spill/emergency cleanup; and

(6) Transportation, disposal, storage, or containment of and housekeeping activities involving asbestos or products containing asbestos, on the site or location at which construction activities are performed.

(7) Coverage under this standard shall be based on the nature of the work operation involving asbestos exposure.

(8) This section does not apply to asbestos-containing asphalt roof coatings, cements and mastics.

(b) Definitions.

"Aggressive method" means removal or disturbance of building material by sanding, abrading, grinding or other method that breaks, crumbles, or disintegrates intact ACM.

"Amended water" means water to which surfactant (wetting agent) has been added to increase the ability of the liquid to penetrate ACM.

"Asbestos" includes chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos, and any of these minerals that has been chemically treated and/or altered. For purposes of this standard, "asbestos" includes PACM, as defined below.

"Asbestos-containing material (ACM)" means any material containing more than one percent asbestos.

"Assistant Secretary" means the Assistant Secretary of Labor for Occupational Safety and Health, U.S. Department of Labor, or designee.

"Authorized person" means any person authorized by the employer and required by work duties to be present in regulated areas.

"Building/facility owner" is the legal entity, including a lessee, which exercises control over management and record keeping functions relating to a building and/or facility in which activities covered by this standard take place.

"Certified Industrial Hygienist (CIH)" means one certified in the practice of industrial hygiene by the American Board of Industrial Hygiene.

"Class I asbestos work" means activities involving the removal of TSI and surfacing ACM and PACM.

"Class II asbestos work" means activities involving the removal of ACM which is not thermal system insulation or surfacing material. This includes, but is not limited to, the removal of asbestos-containing wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastics.

"Class III asbestos work" means repair and maintenance operations, where "ACM", including TSI and surfacing ACM and PACM, is likely to be disturbed.

"Class IV asbestos work" means maintenance and custodial activities during which employees contact but do not disturb ACM or PACM and activities to clean up dust, waste and debris resulting from Class I, II, and III activities.

"Clean room" means an uncontaminated room having facilities for the storage of employees' street clothing and uncontaminated materials and equipment.

"Closely resemble" means that the major workplace conditions which have contributed to the levels of historic asbestos exposure, are no more protective than conditions of the current workplace.

"Competent person" means, in addition to the definition in 29 CFR 1926.32(f), one who is capable of identifying existing asbestos hazards in the workplace and selecting the appropriate control strategy for asbestos exposure, who has the authority to take prompt corrective measures to eliminate them, as specified in 29 CFR 1926.32(f): in addition, for Class I and Class II work who is specially trained in a training course which meets the criteria of EPA's Model Accreditation Plan (40 CFR Part 763) for supervisor, or its equivalent and, for Class III and Class IV work, who is trained in a manner consistent with EPA requirements for training of local education agency maintenance and custodial staff as set forth at 40 CFR 763.92(a)(2).

"Critical barrier" means one or more layers of plastic sealed over all openings into a work area or any other similarly placed physical barrier sufficient to prevent airborne asbestos in a work area from migrating to an adjacent area.

"Decontamination area" means an enclosed area adjacent and connected to the regulated area and consisting of an equipment room, shower area, and clean room, which is used for the decontamination of workers, materials, and equipment contaminated with asbestos.

"Demolition" means the wrecking or taking out of any load-supporting structural member and any related razing, removing, or stripping of asbestos products.

"Director" means the Director, National Institute for Occupational Safety and Health, U.S. Department of Health and Human Services, or designee.

"Disturbance" means activities that disrupt the matrix of ACM or PACM, crumble or pulverize ACM or PACM, or generate visible debris from ACM or PACM. Disturbance includes cutting away small amounts of ACM and PACM, no greater than the amount which can be contained in one standard sized glove bag or waste bag in order to access a building component. In no event shall the amount of ACM or PACM so disturbed exceed that which can be contained in one glove bag or waste bag which shall not exceed 60 inches in length and width.

"Employee exposure" means that exposure to airborne asbestos that would occur if the employee were not using respiratory protective equipment.

"Equipment room (change room)" means a contaminated room located within the decontamination area that is supplied with impermeable bags or containers for the disposal of contaminated protective clothing and equipment.

"Fiber" means a particulate form of asbestos, 5 micrometers or longer, with a length-to-diameter ratio of at least 3 to 1.

"Glove bag" means not more than a 60 by 60-inch impervious plastic bag-like enclosure affixed around an asbestos-containing material, with glove-like appendages through which material and tools may be handled.

"High-efficiency particulate air (HEPA) filter" means a filter capable of trapping and retaining at least 99.97 percent of all mono-dispersed particles of 0.3 micrometers in diameter.

"Homogeneous area" means an area of surfacing material or thermal system insulation that is uniform in color and texture.

"Industrial hygienist" means a professional qualified by education, training, and experience to anticipate, recognize, evaluate and develop controls for occupational health hazards.

"Intact" means that the ACM has not crumbled, been pulverized, or otherwise deteriorated so that the asbestos is no longer likely to be bound with its matrix.

"Modification for purposes of paragraph (g)(6)(ii)" means a changed or altered procedure, material or component of a control system, which replaces a procedure, material or component of a required system. Omitting a procedure or component, or reducing or diminishing the stringency or strength of a material or component of the control system is not a "modification" for purposes of paragraph (g)(6) of this section.

"Negative Initial Exposure Assessment" means a demonstration by the employer, which complies with the criteria in paragraph (f)(2)(iii) of this section, that employee exposure during an operation is expected to be consistently below the PELs.

"PACM" means "presumed asbestos containing material".

"Presumed Asbestos Containing Material" means thermal system insulation and surfacing material found in buildings constructed no later than 1980. The designation of a material as "PACM" may be rebutted pursuant to paragraph (k)(5) of this section.

"Project Designer" means a person who has successfully completed the training requirements for an abatement project designer established by 40 U.S.C. §763.90(g).

"Regulated area" means an area established by the employer to demarcate areas where Class I, II, and III asbestos work is conducted, and any adjoining area where debris and waste from such asbestos work accumulate; and a work area within which airborne concentrations of asbestos exceed or there is a reasonable possibility they may exceed the permissible exposure limit. Requirements for regulated areas are set out in paragraph (e) of this section.

"Removal" means all operations where ACM and/or PACM is taken out or stripping from structures or substrates, and includes demolition operations.

"Renovation" means the modifying of any existing structure, or portion thereof.

"Repair" means overhauling, rebuilding, reconstructing, or reconditioning of structures or substrates, including encapsulations or other repair of ACM or PACM attached to structures or substrates.

"Surfacing material" means material that is sprayed, troweled-on or otherwise applied to surfaces (such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, and other purposes).

"Surfacing ACM" means surfacing material which contains more than 1% asbestos.

"Thermal system insulation (TSI)" means ACM applied to pipes, fittings, boilers, breeching, tanks, ducts or other structural components to prevent heat loss or gain.

"Thermal system insulation ACM" is thermal system insulation which contains more than 1% asbestos.

(c) Permissible exposure limits (PELS).

(1) Time-weighted average limit (TWA). The employer shall ensure that no employee is exposed to an airborne concentration of asbestos in excess of 0.1 fiber per cubic centimeter of air as an eight (8)-hour time-weighted average (TWA), as determined by the method prescribed in Appendix A to this section, or by an equivalent method.

(2) Excursion limit. The employer shall ensure that no employee is exposed to an airborne concentration of asbestos in excess of 1.0 fiber per cubic centimeter of air (1 f/cc) as averaged over a sampling period of thirty (30) minutes, as determined by the method prescribed in Appendix A to this section, or by an equivalent method.

(d) Multi-employer worksites.

(1) On multi-employer worksites, an employer performing work requiring the establishment of a regulated area shall inform other employers on the site of the nature of the employer's work with asbestos and/or PACM, of the existence of and requirements pertaining to regulated areas, and the measures taken to ensure that employees of such other employers are not exposed to asbestos.

(2) Asbestos hazards at a multi-employer work site shall be abated by the contractor who created or controls the source of asbestos contamination. For example, if there is a significant breach of an enclosure containing Class I work, the employer responsible for erecting the enclosure shall repair the breach immediately.

(3) In addition, all employers of employees exposed to asbestos hazards shall comply with applicable protective provisions to protect their employees. For example, if employees working immediately adjacent to a Class I asbestos job are exposed to asbestos due to the inadequate containment of such job, their employer shall either remove the employees from the area until the enclosure breach is repaired; or perform an initial exposure assessment pursuant to (f) of this section.

(4) All employers of employees working adjacent to regulated areas established by another employer on a multi-employer work-site, shall take steps on a daily basis to ascertain the integrity of the enclosure and/or the effectiveness of the control method relied on by the primary asbestos contractor to assure that asbestos fibers do not migrate to such adjacent areas.

(5) All general contractors on a construction project which includes work covered by this standard shall be deemed to exercise general supervisory authority over the work covered by this standard, even though the general contractor is not qualified to serve as the asbestos "competent person" as defined by paragraph (b) of this section. As supervisor of the entire project, the general contractor shall ascertain whether the asbestos contractor is in compliance with this standard, and shall require such contractor to come into compliance with this standard when necessary.

(e) Regulated areas.

(1) All Class I, II and III asbestos work shall be conducted within regulated areas. All other operations covered by this standard shall be conducted within a regulated area where airborne concentrations of asbestos exceed, or there is a reasonable possibility they may exceed a PEL. Regulated areas shall comply with the requirements of paragraphs (2), (3), (4) and (5) of this section.

(2) Demarcation. The regulated area shall be demarcated in any manner that minimizes the number of persons within the area and protects persons outside the area from exposure to airborne asbestos. Where critical barriers or negative pressure enclosures are used, they may demarcate the regulated area. Signs shall be provided and displayed pursuant to the requirements of paragraph (k)(7) of this section.

(3) Access. Access to regulated areas shall be limited to authorized persons and to persons authorized by the Act or regulations issued pursuant thereto.

(4) Respirators. All persons entering a regulated area where employees are required pursuant to paragraph (h)(1) of this section to wear respirators shall be supplied with a respirator selected in accordance with paragraph (h)(2) of this section.

(5) Prohibited activities. The employer shall ensure that employees do not eat, drink, smoke, chew tobacco or gum, or apply cosmetics in the regulated area.

(6) Competent Persons. The employer shall ensure that all asbestos work performed within regulated areas is supervised by a competent person, as defined in paragraph (b) of this section. The duties of the competent person are set out in paragraph (o) of this section.

(f) Exposure assessments and monitoring.

(1) General monitoring criteria.

(i) Each employer who has a workplace or work operation where exposure monitoring is required under this section shall perform monitoring to determine accurately the airborne concentrations of asbestos to which employees may be exposed.

(ii) Determinations of employee exposure shall be made from breathing zone air samples that are representative of the 8-hour TWA and 30-minute short-term exposures of each employee.

(iii) Representative 8-hour TWA employee exposure shall be determined on the basis of one or more samples representing full-shift exposure for employees in each work area. Representative 30-minute short-term employee exposures shall be determined on the basis of one or more samples representing 30-minute exposures associated with operations that are most likely to produce exposures above the excursion limit for employees in each work area.

(2) Initial Exposure Assessment.

(i) Each employer who has a workplace or work operation covered by this standard shall ensure that a "competent person" conducts an exposure assessment immediately before or at the initiation of the operation to ascertain expected exposures during that operation or workplace. The assessment must be completed in time to comply with requirements which are triggered by exposure data or the lack of a "negative exposure assessment," and to provide information necessary to assure that all control systems planned are appropriate for that operation and will work properly.

(ii) Basis of Initial Exposure Assessment: Unless a negative exposure assessment has been made pursuant to paragraph (f)(2)(iii) of this section, the initial exposure assessment shall, if feasible, be based on monitoring conducted pursuant to paragraph (f)(1)(iii) of this section. The assessment shall take into consideration both the monitoring results and all observations, information or calculations which indicate employee exposure to asbestos, including any previous monitoring conducted in the workplace, or of the operations of the employer which indicate the levels of airborne asbestos likely to be encountered on the job. For Class I asbestos work, until the employer conducts exposure monitoring and documents that employees on that job will not be exposed in excess of the PELs, or otherwise makes a negative exposure assessment pursuant to paragraph (f)(2)(iii) of this section, the employer shall presume that employees are exposed in excess of the TWA and excursion limit.

(iii) Negative Exposure Assessment: For any one specific asbestos job which will be performed by employees who have been trained in compliance with the standard, the employer may demonstrate that employee exposures will be below the PELs by data which conform to the following criteria;

(A) Objective data demonstrating that the product or material containing asbestos minerals or the activity involving such product or material cannot release airborne fibers in concentrations exceeding the TWA and excursion limit under those work conditions having the greatest potential for releasing asbestos; or

(B) Where the employer has monitored prior asbestos jobs for the PEL and the excursion limit within 12 months of the current or projected job, the monitoring and analysis were performed in compliance with the asbestos standard in effect; and the data were obtained during work operations conducted under workplace conditions "closely resembling" the processes, type of material, control methods, work practices, and environmental conditions used and prevailing in the employer's current operations, the operations were conducted by employees whose training and experience are no more extensive than that of employees performing the current job, and these data show that under the conditions prevailing and which will prevail in the current workplace there is a high degree of certainty that employee exposures will not exceed the TWA and excursion limit; or

(C) The results of initial exposure monitoring of the current job made from breathing zone air samples that are representative of the 8-hour TWA and 30-minute short-term exposures of each employee covering operations which are most likely during the performance of the entire asbestos job to result in exposures over the PELs.

(3) Periodic monitoring.

(i) Class I and II operations. The employer shall conduct daily monitoring that is representative of the exposure of each employee who is assigned to work within a regulated area who is performing Class I or II work, unless the employer pursuant to (f)(2)(iii) of this section, has made a negative exposure assessment for the entire operation.

(ii) All operations under the standard other than Class I and II operations. The employer shall conduct periodic monitoring of all work where exposures are expected to exceed a PEL, at intervals sufficient to document the validity of the exposure prediction.

(iii) Exception: When all employees required to be monitored daily are equipped with supplied-air respirators operated in the pressure demand mode, or other positive pressure mode respirator, the employer may dispense with the daily monitoring required by this paragraph. However, employees performing Class I work using a control method which is not listed in paragraph (g)(4)(i), (ii), or (iii) of this section or using a modification of a listed control method, shall continue to be monitored daily even if they are equipped with supplied-air respirators.

(4) Termination of monitoring.

(i) If the periodic monitoring required by paragraph (f)(3) of this section reveals that employee exposures, as indicated by statistically reliable measurements, are below the permissible exposure limit and excursion limit the employer may discontinue monitoring for those employees whose exposures are represented by such monitoring.

(ii) Additional monitoring. Notwithstanding the provisions of paragraph (f)(2) and (3), and (f)(4) of this section, the employer shall institute the exposure monitoring required under paragraph (f)(3) of this section whenever there has been a change in process, control equipment, personnel or work practices that may result in new or additional exposures above the permissible exposure level and/or excursion limit or when the employer has any reason to suspect that a change may result in new or additional exposures above the permissible exposure level and/or excursion limit. Such additional monitoring is required regardless of whether a "negative exposure assessment" was previously produced for a specific job.

(5) Employee notification of monitoring results.

(i) The employer shall notify affected employees of the monitoring results that represent that employee's exposure as soon as possible following receipt of monitoring results.

(ii) The employer shall notify affected employees of the results of monitoring representing the employee's exposure in writing either individually or by posting at a centrally located place that is accessible to affected employees.

(6) Observation of monitoring.

(i) The employer shall provide affected employees and their designated representatives an opportunity to observe any monitoring of employee exposure to asbestos conducted in accordance with this section.

(ii) When observation of the monitoring of employee exposure to asbestos requires entry into an area where the use of protective clothing or equipment is required, the observer shall be provided with and be required to use such clothing and equipment and shall comply with all other applicable safety and health procedures.

(g) Methods of compliance.

(1) Engineering controls and work practices for all operations covered by this section. The employer shall use the following engineering controls and work practices in all operations covered by this section, regardless of the levels of exposure:

(i) Vacuum cleaners equipped with HEPA filters to collect all debris and dust containing ACM or PACM, except as provided in paragraph (g)(8)(ii) of this section in the case of roofing material.

(ii) Wet methods, or wetting agents, to control employee exposures during asbestos handling, mixing, removal, cutting, application, and cleanup, except where employers demonstrate that the use of wet methods is infeasible due to for example, the creation of electrical hazards, equipment malfunction, and, in roofing, except as provided in paragraph (g)(8)(ii) of this section; and

(iii) Prompt clean-up and disposal of wastes and debris contaminated with asbestos in leak-tight containers, except in roofing operations, where the procedures specified in paragraph (g)(8)(ii) of this section apply.

(2) In addition to the requirements of paragraph (g)(1) of this section, the employer shall use the following control methods to achieve compliance with the TWA permissible exposure limit and excursion limit prescribed by paragraph (c) of this section;

(i) Local exhaust ventilation equipped with HEPA filter dust collection systems;

(ii) Enclosure or isolation of processes producing asbestos dust;

(iii) Ventilation of the regulated area to move contaminated air away from the breathing zone of employees and toward a filtration or collection device equipped with a HEPA filter;

(iv) Use of other work practices and engineering controls that the Assistant Secretary can show to be feasible.

(v) Wherever the feasible engineering and work practice controls described above are not sufficient to reduce employee exposure to or below the permissible exposure and/or excursion limit prescribed in paragraph (c), of this section, the employer shall use them to reduce employee exposure to the lowest levels attainable by these controls and shall supplement them by the use of respiratory protection that complies with the requirements of paragraph (h) of this section.

(3) Prohibitions. The following work practices and engineering controls shall not be used for work related to asbestos or for work which disturbs ACM or PACM, regardless of measured levels of asbestos exposure or the results of initial exposure assessments:

(i) High-speed abrasive disc saws that are not equipped with point of cut ventilator or enclosures with HEPA filtered exhaust air.

(ii) Compressed air used to remove asbestos, or materials containing asbestos, unless the compressed air is used in conjunction with an enclosed ventilation system designed to capture the dust cloud created by the compressed air.

(iii) Dry sweeping, shoveling or other dry clean-up of dust and debris containing ACM and PACM.

(iv) Employee rotation as a means of reducing employee exposure to asbestos.

(4) Class I Requirements. In addition to the provisions of paragraphs (g)(1) and (2) of this section, the following engineering controls and work practices and procedures shall be used.

(i) All Class I work, including the installation and operation of the control system shall be supervised by a competent person as defined in paragraph (b) of this section;

(ii) For all Class I jobs involving the removal of more than 25 linear or 10 square feet of thermal system insulation or surfacing material; for all other Class I jobs, where the employer cannot produce a negative exposure assessment pursuant to paragraph (f)(2)(iii) of this section, or where employees are working in areas adjacent to the regulated area, while the Class I work is being performed, the employer shall use one of the following methods to ensure that airborne asbestos does not migrate from the regulated area:

(A) Critical barriers shall be placed over all the openings to the regulated area, except where activities are performed outdoors; or

(B) The employer shall use another barrier or isolation method which prevents the migration of airborne asbestos from the regulated area, as verified by perimeter area surveillance during each work shift at each boundary of the regulated area, showing no visible asbestos dust; and perimeter area monitoring showing that clearance levels contained in 40 CFR Part 763, Subpart E, of the EPA Asbestos in Schools Rule are met, or that perimeter area levels, measured by Phase Contrast Microscopy (PCM) are no more than background levels representing the same area before the asbestos work began. The results of such

monitoring shall be made known to the employer no later than 24 hours from the end of the work shift represented by such monitoring. **Exception:** For work completed outdoors where employees are not working in areas adjacent to the regulated areas, this paragraph (g)(4)(ii) is satisfied when the specific control methods in paragraph (g)(5) of this section are used.

(iii) For all Class I jobs, HVAC systems shall be isolated in the regulated area by sealing with a double layer of 6 mil plastic or the equivalent;

(iv) For all Class I jobs, impermeable drop cloths shall be placed on surfaces beneath all removal activity;

(v) For all Class I jobs, all objects within the regulated area shall be covered with impermeable drop cloths or plastic sheeting which is secured by duct tape or an equivalent.

(vi) For all Class I jobs where the employer cannot produce a negative exposure assessment, or where exposure monitoring shows that a PEL is exceeded, the employer shall ventilate the regulated area to move contaminated air away from the breathing zone of employees toward a HEPA filtration or collection device.

(5) Specific control methods for Class I work. In addition, Class I asbestos work shall be performed using one or more of the following control methods pursuant to the limitations stated below:

(i) Negative Pressure Enclosure (NPE) systems: NPE systems may be used where the configuration of the work area does not make the erection of the enclosure infeasible, with the following specifications and work practices.

(A) Specifications:

(1) The negative pressure enclosure (NPE) may be of any configuration,

(2) At least 4 air changes per hour shall be maintained in the NPE,

(3) A minimum of -0.02 column inches of water pressure differential, relative to outside pressure, shall be maintained within the NPE as evidenced by manometric measurements,

(4) The NPE shall be kept under negative pressure throughout the period of its use, and

(5) Air movement shall be directed away from employees performing asbestos work within the enclosure, and toward a HEPA filtration or a collection device.

(B) Work Practices:

(1) Before beginning work within the enclosure and at the beginning of each shift, the NPE shall be inspected for breaches and smoke-tested for leaks, and any leaks sealed.

(2) Electrical circuits in the enclosure shall be deactivated, unless equipped with ground-fault circuit interrupters.

(ii) Glove bag systems may be used to remove PACM and/or ACM from straight runs of piping and elbows and other connections with the following specifications and work practices:

(A) Specifications:

(1) Glove bags shall be made of 6 mil thick plastic and shall be seamless at the bottom.

(2) Glove bags used on elbows and other connections must be designed for that purpose and used without modifications.

(B) Work Practices:

(1) Each glove bag shall be installed so that it completely covers the circumference of pipe or other structure where the work is to be done.

(2) Glove bags shall be smoke-tested for leaks and any leaks sealed prior to use.

(3) Glove bags may be used only once and may not be moved.

(4) Glove bags shall not be used on surfaces whose temperature exceeds 150° F.

(5) Prior to disposal, glove bags shall be collapsed by removing air within them using a HEPA vacuum.

(6) Before beginning the operation, loose and friable material adjacent to the glove bag/box operation shall be wrapped and sealed in two layers of 6 mil plastic or otherwise rendered intact,

(7) Where system uses attached waste bag, such bag shall be connected to collection bag using hose or other material which shall withstand pressure of ACM waste and water without losing its integrity:

(8) Sliding valve or other device shall separate waste bag from hose to ensure no exposure when waste bag is disconnected:

(9) At least two persons shall perform Class I glove bag removal operations.

(iii) Negative Pressure Glove Bag Systems. Negative pressure glove bag systems may be used to remove ACM or PACM from piping.

(A) Specifications: In addition to specifications for glove bag systems above, negative pressure glove bag systems shall attach HEPA vacuum systems or other devices to bag to prevent collapse during removal.

(B) Work Practices:

(1) The employer shall comply with the work practices for glove bag systems in paragraph (g)(5)(ii)(B)*(4)* of this section.

(2) The HEPA vacuum cleaner or other device used to prevent collapse of bag during removal shall run continually during the operation until it is completed, at which time the bag shall be collapsed prior to removal of the bag from the pipe.

(3) Where a separate waste bag is used along with a collection bag and discarded after one use, the collection bag may be reused if rinsed clean with amended water before reuse.

(iv) Negative Pressure Glove Box Systems: Negative pressure glove boxes may be used to remove ACM or PACM from pipe runs with the following specifications and work practices.

(A) Specifications:

(1) Glove boxes shall be constructed with rigid sides and made from metal or other material which can withstand the weight of the ACM and PACM and water used during removal:

(2) A negative pressure generator shall be used to create negative pressure in the system:

(3) An air filtration unit shall be attached to the box:

(4) The box shall be fitted with gloved apertures:

(5) An aperture at the base of the box shall serve as a bagging outlet for waste ACM and water:

(6) A back-up generator shall be present on site:

(7) Waste bags shall consist of 6 mil thick plastic double-bagged before they are filled or plastic thicker than 6 mil.

(B) Work practices:

(1) At least two persons shall perform the removal:

(2) The box shall be smoke-tested for leaks and any leaks sealed prior to each use.

(3) Loose or damaged ACM adjacent to the box shall be wrapped and sealed in two layers of 6 mil plastic prior to the job, or otherwise made intact prior to the job.

(4) A HEPA filtration system shall be used to maintain pressure barrier in box.

(v) Water Spray Process System. A water spray process system may be used for removal of ACM and PACM from cold line piping if, employees carrying out such process have completed a 40-hour separate training course in its use, in addition to training required for employees performing Class I work. The system shall meet the following specifications and shall be performed by employees using the following work practices.

(A) Specifications:

(1) Piping shall be surrounded on 3 sides by rigid framing.

(2) A 360 degree water spray, delivered through nozzles supplied by a high pressure separate water line, shall be formed around the piping.

(3) The spray shall collide to form a fine aerosol which provides a liquid barrier between workers and the ACM and PACM.

(B) Work Practices:

(1) The system shall be run for at least 10 minutes before removal begins.

(2) All removal shall take place within the water barrier.

(3) The system shall be operated by at least three persons, one of whom shall not perform removal, but shall check equipment, and ensure proper operation of the system.

(4) After removal, the ACM and PACM shall be bagged while still inside the water barrier.

(vi) A small walk-in enclosure which accommodates no more than two persons (mini-enclosure) may be used if the disturbance or removal can be completely contained by the enclosure with the following specifications and work practices.

(A) Specifications:

(1) The fabricated or job-made enclosure shall be constructed of 6 mil plastic or equivalent:

(2) The enclosure shall be placed under negative pressure by means of a HEPA filtered vacuum or similar ventilation unit:

(B) Work practices:

(1) Before use, the mini-enclosure shall be inspected for leaks and smoke-tested to detect breaches, and any breaches sealed.

(2) Before reuse, the interior shall be completely washed with amended water and HEPA-vacuumed.

(3) During use, air movement shall be directed away from the employee's breathing zone within the mini-enclosure.

(6) Alternative control methods for Class I work. Class I work may be performed using a control method which is not referenced in paragraph (g)(5) of this section, or which modifies a control method referenced in paragraph (g)(5) of this section, if the following provisions are complied with:

(i) The control method shall enclose, contain or isolate the processes or source of airborne asbestos dust, or otherwise capture or redirect such dust before it enters the breathing zone of employees.

(ii) A certified industrial hygienist or licensed professional engineer who is also qualified as a project designer as defined in paragraph (b) of this section, shall evaluate the work area, the projected work practices and the engineering controls and shall certify in writing that the planned control method is adequate to reduce direct and indirect employee exposure to below the PELs under worst-case conditions of use, and that the planned control method will prevent asbestos contamination outside the regulated area, as measured by clearance sampling which meets the requirements of EPA's Asbestos in Schools rule issued under AHERA, or perimeter monitoring which meets the criteria in paragraph (g)(4)(ii)(B) of this section.

(A) Where the TSI or surfacing material to be removed is 25 linear or 10 square feet or less, the evaluation required in paragraph (g)(6) of this section may be performed by a "competent person", and may omit consideration of perimeter or clearance monitoring otherwise required.

(B) The evaluation of employee exposure required in paragraph (g)(6) of this section, shall include and be based on sampling and analytical data representing employee exposure during the use of such method under worst-case conditions and by employees whose training and experience are equivalent to employees who are to perform the current job.

(iii) Before work which involves the removal of more than 25 linear or 10 square feet of thermal system insulation or surfacing material is begun using an alternative method which has been the subject of a paragraph (g)(6) of this section required evaluation and certification, the employer shall send a copy of such evaluation and certification to the national office of OSHA, Office of Technical Support, Room N3653, 200 Constitution Avenue, NW, Washington, DC 20210. The submission shall not constitute approval by OSHA.

(7) Work Practices and Engineering Controls for Class II work.

(i) All Class II work shall be supervised by a competent person as defined in paragraph (b) of this section.

(ii) For all indoor Class II jobs, where the employer has not produced a negative exposure assessment pursuant to paragraph (f)(2)(iii) of this section, or where during the job, changed conditions indicate there may be exposure above the PEL or where the employer does not remove the ACM in a substantially intact state, the employer shall use one of the following methods to ensure that airborne asbestos does not migrate from the regulated area;

(A) Critical barriers shall be placed over all openings to the regulated area; or,

(B) The employer shall use another barrier or isolation method which prevents the migration of airborne asbestos from the regulated area, as verified by perimeter area monitoring or clearance monitoring which meets the criteria set out in paragraph (g)(4)(ii)(B) of this section.

(C) Impermeable drop cloths shall be placed on surfaces beneath all removal activity;

(iii) Reserved

(iv) All Class II asbestos work shall be performed using the work practices and requirements set out above in paragraph (g)(1)(i) through (g)(1)(iii) of this section.

(8) Additional Controls for Class II work. Class II asbestos work shall also be performed by complying with the work practices and controls designated for each type of asbestos work to be performed, set out in this paragraph. Where more than one control method may be used for a type of asbestos work, the employer may choose one or a combination of designated control methods. Class II work also may be performed using a method allowed for Class I work, except that glove bags and glove boxes are allowed if they fully enclose the Class II material to be removed.

(i) For removing vinyl and asphalt flooring materials which contain ACM or for which in buildings constructed no later than 1980, the employer has not verified the absence of ACM pursuant to paragraph (g)(8)(i)(I) of this section. The employer shall ensure that employees comply with the following work practices and that employees are trained in these practices pursuant to paragraph (k)(9):

(A) Flooring or its backing shall not be sanded.

(B) Vacuums equipped with HEPA filter, disposable dust bag, and metal floor tool (no brush) shall be used to clean floors.

(C) Resilient sheeting shall be removed by cutting with wetting of the snip point and wetting during delamination. Rip-up of resilient sheet floor material is prohibited.

(D) All scraping of residual adhesive and/or backing shall be performed using wet methods.

(E) Dry sweeping is prohibited.

(F) Mechanical chipping is prohibited unless performed in a negative pressure enclosure which meets the requirements of paragraph (g)(5)(i) of this section.

(G) Tiles shall be removed intact, unless the employer demonstrates that intact removal is not possible.

(H) When tiles are heated and can be removed intact, wetting may be omitted.

(I) Resilient flooring material including associated mastic and backing shall be assumed to be asbestos-containing unless an industrial hygienist determines that it is asbestos-free using recognized analytical techniques.

(ii) For removing roofing material which contains ACM the employer shall ensure that the following work practices are followed:

(A) Roofing material shall be removed in an intact state to the extent feasible.

(B) Wet methods shall be used to remove roofing materials that are not intact, or that will be rendered not intact during removal, unless such wet methods are not feasible or will create safety hazards.

(C) Cutting machines shall be continuously misted during use, unless a competent person determines that misting substantially decreases worker safety.

(D) When removing built-up roofs with asbestos-containing roofing felts and an aggregate surface using a power roof cutter, all dust resulting from the cutting operation shall be collected by a HEPA dust collector, or shall be HEPA vacuumed by vacuuming along the cut line. When removing built-up roofs with asbestos-containing roofing felts and a smooth surface using a power roof cutter, the dust resulting from the cutting operation shall be collected either by a HEPA dust collector or HEPA vacuuming along the cut line, or by gently sweeping and then carefully and completely wiping up the still-wet dust and debris left along the cut line.

The dust and debris shall be immediately bagged or placed in covered containers.

(E) Asbestos-containing material that has been removed from a roof shall not be dropped or thrown to the ground. Unless the material is carried or passed to the ground by hand, it shall be lowered to the ground via covered, dust-tight chute, crane or hoist:

(1) Any ACM that is not intact shall be lowered to the ground as soon as is practicable, but in any event no later than the end of the work shift. While the material remains on the roof it shall either be kept wet, placed in an impermeable waste bag, or wrapped in plastic sheeting.

(2) Intact ACM shall be lowered to the ground as soon as is practicable, but in any event no later than the end of the work shift.

(F) Upon being lowered, unwrapped material shall be transferred to a closed receptacle in such manner so as to preclude the dispersion of dust.

(G) Roof level heating and ventilation air intake sources shall be isolated or the ventilation system shall be shut down.

(H) Notwithstanding any other provision of this section, removal or repair of sections of intact roofing less than 25 square feet in area does not require use of wet methods or HEPA vacuuming as long as manual methods which do not render the material non-intact are used to remove the material and no visible dust is created by the removal method used. In determining whether a job involves less than 25 square feet, the employer shall include all removal and repair work performed on the same roof on the same day.

(iii) When removing cementitious asbestos-containing siding and shingles or transite panels containing ACM on building exteriors (other than roofs, where paragraph (g)(8)(ii) of this section applies), the employer shall ensure that the following work practices are followed:

(A) Cutting, abrading or breaking siding, shingles, or transite panels, shall be prohibited unless the employer can demonstrate that methods less likely to result in asbestos fiber release cannot be used.

(B) Each panel or shingle shall be sprayed with amended water prior to removal.

(C) Unwrapped or unbagged panels or shingles shall be immediately lowered to the ground via covered dust-tight chute, crane or hoist, or placed in an impervious waste bag or wrapped in plastic sheeting and lowered to the ground no later than the end of the work shift.

(D) Nails shall be cut with flat, sharp instruments.

(iv) When removing gaskets containing ACM, the employer shall ensure that the following work practices are followed:

(A) If a gasket is visibly deteriorated and unlikely to be removed intact, removal shall be undertaken within a glove bag as described in paragraph (g)(5)(ii) of this section.

(B) Reserved

(C) The gasket shall be placed in a disposal container.

(D) Any scraping to remove residue must be performed wet.

(v) When performing any other Class II removal of asbestos containing material for which specific controls have not been listed in paragraph (g)(8)(iv)(A) through (D) of this section, the employer shall ensure that the following work practices are complied with.

(A) The material shall be thoroughly wetted with amended water prior to and during its removal.

(B) The material shall be removed in an intact state unless the employer demonstrates that intact removal is not possible.

(C) Cutting, abrading or breaking the material shall be prohibited unless the employer can demonstrate that methods less likely to result in asbestos fiber release are not feasible.

(D) Asbestos-containing material removed, shall be immediately bagged or wrapped, or kept wetted until transferred to a closed receptacle, no later than the end of the work shift.

(vi) Alternative Work Practices and Controls. Instead of the work practices and controls listed in paragraph (g)(8)(i) through (v) of this section, the employer may use different or modified engineering and work practice controls if the following provisions are complied with.

(A) The employer shall demonstrate by data representing employee exposure during the use of such method under conditions which closely resemble the conditions under which the method is to be used, that employee exposure will not exceed the PELs under any anticipated circumstances.

(B) A competent person shall evaluate the work area, the projected work practices and the engineering controls, and shall certify in writing, that the different or modified controls are adequate to reduce direct and indirect employee exposure to below the PELs under all expected conditions of use and that the method meets the requirements of this standard. The evaluation shall include and be based on data representing employee exposure during the use of such method under conditions which closely resemble the conditions under which the method is to be used for the current job, and by employees whose training and experience are equivalent to employees who are to perform the current job.

(9) Work Practices and Engineering Controls for Class III asbestos work. Class III asbestos work shall be conducted using engineering and work practice controls which minimize the exposure to employees performing the asbestos work and to bystander employees.

(i) The work shall be performed using wet methods.

(ii) To the extent feasible, the work shall be performed using local exhaust ventilation.

(iii) Where the disturbance involves drilling, cutting, abrading, sanding, chipping, breaking, or sawing of thermal system insulation or surfacing material, the employer shall use impermeable drop cloths, and shall isolate the operation using mini-enclosures or glove bag systems pursuant to paragraph (g)(5) of this section or another isolation method.

(iv) Where the employer does not produce a "negative exposure assessment" for a job, or where monitoring results show the PEL has been exceeded, the employer shall contain the area using impermeable drop cloths and plastic barriers or their equivalent, or shall isolate the operation using a control system listed in and in compliance with paragraph (g)(5) of this section.

(v) Employees performing Class III jobs, which involve the disturbance of thermal system insulation or surfacing material, or where the employer does not produce a "negative exposure assessment" or where monitoring results show a PEL has been exceeded, shall wear respirators which are selected, used and fitted pursuant to provisions of paragraph (h) of this section.

(10) Class IV asbestos work. Class IV asbestos jobs shall be conducted by employees trained pursuant to the asbestos awareness training program set out in paragraph (k)(9) of this section. In addition, all Class IV jobs shall be conducted in conformity with the requirements set out in paragraph (g)(1) of this section, mandating wet methods, HEPA vacuums, and prompt clean up of debris containing ACM or PACM.

(i) Employees cleaning up debris and waste in a regulated area where respirators are required shall wear respirators which are selected, used and fitted pursuant to provisions of paragraph (h) of this section.

(ii) Employers of employees who clean up waste and debris in, and employers in control of, areas where friable thermal system insulation or surfacing material is accessible, shall assume that such waste and debris contain asbestos.

(11) Alternative methods of compliance for installation, removal, repair, and maintenance of certain roofing and pipeline coating materials. Notwithstanding any other provision of this section, an employer who complies with all provisions of this paragraph (g)(11) when installing, removing, repairing, or maintaining intact pipeline asphaltic wrap, or roof flashings which contain asbestos fibers encapsulated or coated by bituminous or resinous compounds shall be deemed to be in compliance with this section. If an employer does not comply with all provisions of this paragraph

(g)(11), or if during the course of the job the material does not remain intact, the provisions of paragraph (g)(8) of this section apply instead of this paragraph (g)(11).

(i) Before work begins and as needed during the job, a competent person who is capable of identifying asbestos hazards in the workplace and selecting the appropriate control strategy for asbestos exposure, and who has the authority to take prompt corrective measures to eliminate such hazards, shall conduct an inspection of the worksite and determine that the roofing material is intact and will likely remain intact.

(ii) All employees performing work covered by paragraph (g)(11) shall be trained in a training program that meets the requirements of paragraph (k)(9)(viii) of this section.

(iii) The material shall not be sanded, abraded, or ground. Manual methods which do not render the material non-intact shall be used.

(iv) Material that has been removed from a roof shall not be dropped or thrown to the ground. Unless the material is carried or passed to the ground by hand, it shall be lowered to the ground via covered, dust-tight chute, crane or hoist. All such material shall be removed from the roof as soon as practicable, but in any event no later than the end of the work shift.

(v) Where roofing products which have been labeled as containing asbestos pursuant to paragraph (k)(8) of this section are installed on non-residential roofs during operations covered by this paragraph (g)(11), the employer shall notify the building owner of the presence and location of such materials no later than the end of the job.

(vi) All removal or disturbance of pipeline asphaltic wrap shall be performed using wet methods.

(h) Respiratory protection.

(1) General. For employees who use respirators required by this section, the employer must provide each employee an appropriate respirator that complies with the requirements of this paragraph. Respirators must be used during:

(i) Class I asbestos work.

(ii) Class II asbestos work when ACM is not removed in a substantially intact state.

(iii) Class II and III asbestos work that is not performed using wet methods, except for removal of ACM from sloped roofs when a negative-exposure assessment has been conducted and ACM is removed in an intact state.

(iv) Class II and III asbestos work for which a negative-exposure assessment has not been conducted.

(v) Class III asbestos work when TSI or surfacing ACM or PACM is being disturbed.

(vi) Class IV asbestos work performed within regulated areas where employees who are performing other work are required to use respirators.

(vii) Work operations covered by this section for which employees are exposed above the TWA or excursion limit.

(viii) Emergencies.

(2) Respirator program.

(i) The employer must implement a respiratory protection program in accordance with 29 CFR 1910.134(b) through (d) (except (d)(1)(iii)), and (f) through (m), which covers each employee required by this section to use a respirator.

(ii) No employee shall be assigned to asbestos work that requires respirator use if, based on their most recent medical examination, the examining physician determines that the employee will be unable to function normally while using a respirator, or that the safety or health of the employee or other employees will be impaired by the employee's respirator use. Such employees must be assigned to another job or given the opportunity to transfer to a different position that they can perform. If such a transfer position is available, it must be with the same employer, in the same geographical area, and with the same seniority, status, rate of pay, and other job benefits the employee had just prior to such transfer.

(3) Respirator selection.

(i) Employers must:

(A) Select, and provide to employees, the appropriate respirators specified in paragraph (d)(3)(i)(A) of 29 CFR 1910.134; however, employers must not select or use filtering facepiece respirators for use against asbestos fibers.

(B) Provide HEPA filters for powered and non-powered air-purifying respirators.

(ii) Employers must provide an employee with tight-fitting, powered air-purifying respirator (PAPR) instead of a negative pressure respirator selected according to paragraph (h)(3)(i)(A) of this standard when the employee chooses to use a PAPR and it provides adequate protection to the employee.

(iii) Employers must provide employees with an air-purifying half mask respirator, other than a filtering facepiece respirator, whenever the employees perform:

(A) Class II or Class III asbestos work for which no negative exposure assessment is available.

(B) Class III asbestos work involving disturbance of TSI or surfacing ACM or PACM.

(iv) Employers must provide employees with:

(A) A tight-fitting powered air-purifying respirator or a full facepiece, supplied-air respirator operated in the pressure-demand mode and equipped with either HEPA egress cartridges or an auxiliary positive-pressure, self-contained breathing apparatus (SCBA) whenever the employees are in a regulated area performing Class I asbestos work for which a negative exposure assessment is not available and the exposure assessment indicates that the exposure level will be at or below 1 f/cc as an 8-hour time-weighted average (TWA).

(B) A full facepiece supplied-air respirator operated in the pressure-demand mode and equipped with an auxiliary positive-pressure SCBA whenever the employees are in a regulated area performing Class I asbestos work for which a negative exposure assessment is not available and the exposure assessment indicates that the exposure level will be above 1 f/cc as an 8-hour TWA.

(i) Protective clothing.

(1) General. The employer shall provide and require the use of protective clothing, such as coveralls or similar whole body clothing, head coverings, gloves, and foot coverings for any employee exposed to airborne concentrations of asbestos that exceed the TWA and/or excursion limit prescribed in paragraph (c) of this section, or for which a required negative exposure assessment is not produced, or for any employee performing Class I operations which involve the removal of over 25 linear or 10 square feet of TSI or surfacing ACM and PACM.

(2) Laundering.

(i) The employer shall ensure that laundering of contaminated clothing is done as to prevent the release of airborne asbestos in excess of the TWA and/or excursion limit prescribed in paragraph (c) of this section.

(ii) Any employer who gives contaminated clothing to another person for laundering shall inform such person of the requirement in paragraph (i)(2)(i) of this section to effectively prevent the release of airborne asbestos in excess of the TWA and excursion limit prescribed in paragraph (c) of this section.

(3) Contaminated clothing. Contaminated clothing shall be transported in sealed impermeable bags, or other closed, impermeable containers, and be labeled in accordance with paragraph (k) of this section.

(4) Inspection of protective clothing.

(i) The competent person shall examine work suits worn by employees at least once per work shift for rips or tears that may occur during performance of work.

(ii) When rips or tears are detected while an employee is working, rips and tears shall be immediately mended, or the work suit shall be immediately replaced.

(j) Hygiene facilities and practices for employees.

(1) Requirements for employees performing Class I asbestos jobs involving over 25 linear or 10 square feet of TSI or surfacing ACM and PACM.

(i) Decontamination areas: the employer shall establish a decontamination area that is adjacent and connected to the regulated area for the decontamination of such employees. The decontamination area shall consist of an equipment room, shower area, and clean room in series. The employer shall ensure that employees enter and exit the regulated area through the decontamination area.

(A) Equipment room. The equipment room shall be supplied with impermeable, labeled bags and containers for the containment and disposal of contaminated protective equipment.

(B) Shower area. Shower facilities shall be provided which comply with 29 CFR 1910.141(d)(3), unless the employer can demonstrate that they are not feasible. The showers shall be adjacent both to the equipment room and the clean room, unless the employer can demonstrate that this location is not feasible. Where the employer can demonstrate that it is not feasible to locate the shower between the equipment room and the clean room, or where the work is performed outdoors, the employers shall ensure that employees:

(1) Remove asbestos contamination from their work suits in the equipment room using a HEPA vacuum before proceeding to a shower that is not adjacent to the work area; or

(2) Remove their contaminated work suits in the equipment room, then don clean work suits, and proceed to a shower that is not adjacent to the work area.

(C) Clean change room. The clean room shall be equipped with a locker or appropriate storage container for each employee's use. When the employer can demonstrate that it is not feasible to provide a clean change area adjacent to the work area or where the work is performed outdoors, the employer may permit employees engaged in Class I asbestos jobs to clean their protective clothing with a portable HEPA-equipped vacuum before such employees leave the regulated area. Following showering, such employees however must then change into street clothing in clean change areas provided by the employer which otherwise meet the requirements of this section.

(ii) Decontamination area entry procedures. The employer shall ensure that employees:

(A) Enter the decontamination area through the clean room;

(B) Remove and deposit street clothing within a locker provided for their use; and

(C) Put on protective clothing and respiratory protection before leaving the clean room.

(D) Before entering the regulated area, the employer shall ensure that employees pass through the equipment room.

(iii) Decontamination area exit procedures. The employer shall ensure that:

(A) Before leaving the regulated area, employees shall remove all gross contamination and debris from their protective clothing.

(B) Employees shall remove their protective clothing in the equipment room and deposit the clothing in labeled impermeable bags or containers.

(C) Employees shall not remove their respirators in the equipment room.

(D) Employees shall shower prior to entering the clean room.

(E) After showering, employees shall enter the clean room before changing into street clothes.

(iv) Lunch Areas. Whenever food or beverages are consumed at the worksite where employees are performing Class I asbestos work, the employer shall provide lunch areas in which the airborne concentrations of asbestos are below the permissible exposure limit and/or excursion limit.

(2) Requirements for Class I work involving less than 25 linear or 10 square feet of TSI or surfacing ACM and PACM, and for Class II and Class III asbestos work operations where exposures exceed a PEL or where there is no negative exposure assessment produced before the operation.

(i) The employer shall establish an equipment room or area that is adjacent to the regulated area for the decontamination of employees and their equipment which is contaminated with asbestos which shall consist of an area covered by a impermeable drop cloth on the floor or horizontal working surface.

(ii) The area must be of sufficient size as to accommodate cleaning of equipment and removing personal protective equipment without spreading contamination beyond the area (as determined by visible accumulations).

(iii) Work clothing must be cleaned with a HEPA vacuum before it is removed.

(iv) All equipment and surfaces of containers filled with ACM must be cleaned prior to removing them from the equipment room or area.

(v) The employer shall ensure that employees enter and exit the regulated area through the equipment room or area.

(3) Requirements for Class IV work. Employers shall ensure that employees performing Class IV work within a regulated area comply with the hygiene practice required of employees performing work which has a higher classification within that regulated area. Otherwise employers of employees cleaning up debris and material which is TSI or surfacing ACM or identified as PACM shall provide decontamination facilities for such employees which are required by paragraph (j)(2) of this section.

(4) Smoking in work areas. The employer shall ensure that employees do not smoke in work areas where they are occupationally exposed to asbestos because of activities in that work area.

(k) Communication of hazards.

(1) This section applies to the communication of information concerning asbestos hazards in construction activities to facilitate compliance with this standard. Most asbestos-related construction activities involve previously installed building materials. Building owners often are the only and/or best sources of information concerning them. Therefore, they, along with employers of potentially exposed employees, are assigned specific information conveying and retention duties under this section. Installed Asbestos Containing Building Material. Employers and building owners shall identify TSI and sprayed or troweled on surfacing materials in buildings as asbestos-containing, unless they determine in compliance with paragraph (k)(5) of this section that the material is not asbestos-containing. Asphalt and vinyl flooring material installed no later than 1980 must also be considered as asbestos containing unless the employer, pursuant to paragraph (g)(8)(i)(I) of this section determines that it is not asbestos-containing. If the employer/building owner has actual knowledge, or should have known through the exercise of due diligence, that other materials are asbestos-containing, they too must be treated as such. When communicating information to employees pursuant to this standard, owners and employers shall identify "PACM" as ACM. Additional requirements relating to communication of asbestos work on multi-employer worksites are set out in paragraph (d) of this section.

(2) Duties of building and facility owners.

(i) Before work subject to this standard is begun, building and facility owners shall determine the presence, location, and quantity of ACM and/or PACM at the work site pursuant to paragraph (k)(1) of this section.

(ii) Building and/or facility owners shall notify the following persons of the presence, location and quantity of ACM or PACM, at the work sites in their buildings and facilities. Notification either shall be in writing, or shall consist of a personal communication between the owner and the person to whom notification must be given or their authorized representatives:

(A) Prospective employers applying or bidding for work whose employees reasonably can be expected to work in or adjacent to areas containing such material;

(B) Employees of the owner who will work in or adjacent to areas containing such material:

(C) On multi-employer worksites, all employers of employees who will be performing work within or adjacent to areas containing such materials;

(D) Tenants who will occupy areas containing such material.

(3) Duties of employers whose employees perform work subject to this standard in or adjacent to areas containing ACM and PACM. Building/facility owners whose employees perform such work shall comply with these provisions to the extent applicable.

(i) Before work in areas containing ACM and PACM is begun; employers shall identify the presence, location, and quantity of ACM, and/or PACM therein pursuant to paragraph (k)(1) of this section.

(ii) Before work under this standard is performed employers of employees who will perform such work shall inform the following persons of the location and quantity of ACM and/or PACM present in the area and the precautions to be taken to insure that airborne asbestos is confined to the area.

(A) Owners of the building/facility;

(B) Employees who will perform such work and employers of employees who work and/or will be working in adjacent areas.

(iii) Within 10 days of the completion of such work, the employer whose employees have performed work subject to this standard, shall inform the building/facility owner and employers of employees who will be working in the area of the current location and quantity of PACM and/or ACM remaining in the area and final monitoring results, if any.

(4) In addition to the above requirements, all employers who discover ACM and/or PACM on a worksite shall convey information concerning the presence, location and quantity of such newly discovered ACM and/or PACM to the owner and to other employers of employees working at the work site, within 24 hours of the discovery.

(5) Criteria to rebut the designation of installed material as PACM.

(i) At any time, an employer and/or building owner may demonstrate, for purposes of this standard, that PACM does not contain asbestos. Building owners and/or employers are not required to communicate information about the presence of building material for which such a demonstration pursuant to the requirements of paragraph (k)(5)(ii) of this section has been made. However, in all such cases, the information, data and analysis supporting the determination that PACM does not contain asbestos, shall be retained pursuant to paragraph (n) of this section.

(ii) An employer or owner may demonstrate that PACM does not contain more than 1% asbestos by the following:

(A) Having a completed inspection conducted pursuant to the requirements of AHERA (40 CFR Part 763, Subpart E) which demonstrates that the material is not ACM; or

(B) Performing tests of the material containing PACM which demonstrate that no ACM is present in the material. Such tests shall include analysis of bulk samples collected in the manner described in 40 CFR 763.86. The tests, evaluation and sample collection shall be conducted by an accredited inspector or by a CIH. Analysis of samples shall be performed by persons or laboratories with proficiency demonstrated by current successful participation in a nationally recognized testing program such as the National Voluntary Laboratory Accreditation Program (NVLAP) or the National Institute for Standards and Technology (NIST) or the Round Robin for bulk samples administered by the American Industrial Hygiene Association (AIHA) or an equivalent nationally-recognized round robin testing program.

(iii) The employer and/or building owner may demonstrate that flooring material including associated mastic and backing does not contain asbestos, by a determination of an industrial hygienist based upon recognized analytical techniques showing that the material is not ACM.

(6) At the entrance to mechanical rooms/areas in which employees reasonably can be expected to enter and which contain ACM and/or PACM, the building owner shall post signs which identify the material which is present, its location, and appropriate work practices which, if followed, will ensure that ACM and/or PACM will not be disturbed. The employer shall ensure, to the extent feasible, that employees who come in contact with these signs can comprehend them. Means to ensure employee comprehension may include the use of foreign languages, pictographs, graphics, and awareness training.

(7) Signs.

(i) Warning signs that demarcate the regulated area shall be provided and displayed at each location where a regulated area is required to be established by paragraph (e) of this section. Signs shall be posted at such a distance from such a location that an employee may read the signs and take necessary protective steps before entering the area marked by the signs.

(ii)

(A) The warning signs required by paragraph (k)(7) of this section shall bear the following information:

DANGER
ASBESTOS
CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY

(B) In addition, where the use of respirators and protective clothing is required in the regulated area under this section, the warning signs shall include the following:

RESPIRATORS AND PROTECTIVE
CLOTHING ARE REQUIRED
IN THIS AREA

(iii) The employer shall ensure that employees working in and contiguous to regulated areas comprehend the warning signs required to be posted by paragraph (k)(7)(i) of this section. Means to ensure employee comprehension may include the use of foreign languages, pictographs and graphics.

(8) Labels.

(i) Labels shall be affixed to all products containing asbestos and to all containers containing such products, including waste containers. Where feasible, installed asbestos products shall contain a visible label.

(ii) Labels shall be printed in large, bold letters on a contrasting background.

(iii) Labels shall be used in accordance with the requirements of 29 CFR 1910.1200(f) of OSHA's Hazard Communication standard, and shall contain the following information:

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

(iv) Reserved

(v) Labels shall contain a warning statement against breathing airborne asbestos fibers.

(vi) The provisions for labels required by paragraphs (k)(8)(i) through (k)(8)(iii) do not apply where:

(A) Asbestos fibers have been modified by a bonding agent, coating, binder, or other material, provided that the manufacturer can demonstrate that, during any reasonably foreseeable use, handling, storage, disposal, processing, or transportation, no airborne concentrations of asbestos fibers in excess of the permissible exposure limit and/or excursion limit will be released, or

(B) Asbestos is present in a product in concentrations less than 1.0 percent.

(vii) When a building owner or employer identifies previously installed PACM and/or ACM, labels or signs shall be affixed or posted so that employees will be notified of what materials contain PACM and/or ACM. The employer shall attach such labels in areas where they will clearly be noticed by employees who are likely to be exposed, such as at the entrance to mechanical room/areas. Signs required by paragraph (k)(6) of this section may be posted in lieu of labels so long as they contain information required for labelling. The employer shall ensure, to the extent feasible, that employees who come in contact with these signs or labels can comprehend them. Means to ensure employee comprehension may include the use of foreign languages, pictographs, graphics, and awareness training.

(9) Employee Information and Training.

(i) The employer shall train each employee who is likely to be exposed in excess of a PEL, and each employee who performs Class I through IV asbestos operations, in accordance with the requirements of this section. Such training shall be conducted at no cost to the employee. The employer shall institute a training program and ensure employee participation in the program.

(ii) Training shall be provided prior to or at the time of initial assignment and at least annually thereafter.

(iii) Training for Class I operations and for Class II operations that require the use of critical barriers (or equivalent isolation methods) and/or negative pressure enclosures under this section shall be the equivalent in curriculum, training method and length to the EPA Model Accreditation Plan (MAP) asbestos abatement workers training (40 CFR Part 763, Subpart E, Appendix C).

(iv) Training for Class II work.

(A) For work with asbestos containing roofing materials, flooring materials, siding materials, ceiling tiles, or transite panels, training shall include at a minimum all the elements included in paragraph (k)(9)(viii) of this section and in addition, the specific work practices and engineering controls set forth in paragraph (g) of this section which specifically relate to that category. Such course shall include "hands-on" training and shall take at least 8 hours.

(B) An employee who works with more than one of the categories of material specified in paragraph (k)(9)(iv)(A) of this section shall receive training in the work practices applicable to each category of material that the employee removes and each removal method that the employee uses.

(C) For Class II operations not involving the categories of material specified in paragraph (k)(9)(iv)(A) of this section, training shall be provided which shall include at a minimum all the elements included in paragraph (k)(9)(viii) of this section and in addition, the specific work practices and engineering controls set forth in paragraph (g) of this section which specifically relate to the category of material being removed, and shall include "hands-on" training in the work practices applicable to each category of material that the employee removes and each removal method that the employee uses.

(v) Training for Class III employees shall be consistent with EPA requirements for training of local education agency maintenance and custodial staff as set forth at 40 CFR 763.92(a)(2). Such a course shall also include "hands-on" training and shall take at least 16 hours. **Exception:** For Class III operations for which the competent person determines that the EPA curriculum does not adequately cover the training needed to perform that activity, training shall include as a minimum all the elements included in paragraph (k)(9)(viii) of this section and in addition, the specific work practices and engineering controls set forth in paragraph (g) of this section which specifically relate to that activity, and shall include "hands-on" training in the work practices applicable to each category of material that the employee disturbs.

(vi) Training for employees performing Class IV operations shall be consistent with EPA requirements for training of local education agency maintenance and custodial staff as set forth at 40 CFR 763.92(a)(1). Such a course shall include available information concerning the locations of thermal system insulation and surfacing ACM/PACM, and asbestos-containing flooring material, or flooring material where the absence of asbestos has not yet been certified; and instruction in recognition of damage, deterioration, and delamination of asbestos containing building materials. Such course shall take at least 2 hours.

(vii) Training for employees who are likely to be exposed in excess of the PEL and who are not otherwise required to be trained under paragraph (k)(9)(iii) through (vi) of this section, shall meet the requirements of paragraph (k)(9)(viii) of this section.

(viii) The training program shall be conducted in a manner that the employee is able to understand. In addition to the content required by provisions in paragraph (k)(9)(iii) through (vi) of this section, the employer shall ensure that each such employee is informed of the following:

(A) Methods of recognizing asbestos, including the requirement in paragraph (k)(1) of this section to presume that certain building materials contain asbestos;

(B) The health effects associated with asbestos exposure;

(C) The relationship between smoking and asbestos in producing lung cancer;

(D) The nature of operations that could result in exposure to asbestos, the importance of necessary protective controls to minimize exposure including, as applicable, engineering controls, work practices, respirators, housekeeping procedures, hygiene facilities, protective clothing, decontamination procedures, emergency procedures, and waste disposal procedures, and any necessary instruction in the use of these controls and procedures; where Class III and IV work will be or is performed, the contents of EPA 20T-2003, "Managing Asbestos In-Place" July 1990 or its equivalent in content;

(E) The purpose, proper use, fitting instructions, and limitations of respirators as required by 29 CFR 1910.134;

(F) The appropriate work practices for performing the asbestos job;

(G) Medical surveillance program requirements;

(H) The content of this standard including appendices;

(I) The names, addresses and phone numbers of public health organizations which provide information, materials and/or conduct programs concerning smoking cessation. The employer may distribute the list of such organizations contained in Appendix J to this section, to comply with this requirement; and

(J) The requirements for posting signs and affixing labels and the meaning of the required legends for such signs and labels.

(10) Access to training materials.

(i) The employer shall make readily available to affected employees without cost, written materials relating to the employee training program, including a copy of this regulation.

(ii) The employer shall provide to the Assistant Secretary and the Director, upon request, all information and training materials relating to the employee information and training program.

(iii) The employer shall inform all employees concerning the availability of self-help smoking cessation program material. Upon employee request, the employer shall distribute such material, consisting of NIH Publication No. 89-1647, or equivalent self-help material, which is approved or published by a public health organization listed in Appendix J to this section.

(l) Housekeeping.

(1) Vacuuming. Where vacuuming methods are selected, HEPA filtered vacuuming equipment must be used. The equipment shall be used and emptied in a manner that minimizes the reentry of asbestos into the workplace.

(2) Waste disposal. Asbestos waste, scrap, debris, bags, containers, equipment, and contaminated clothing consigned for disposal shall be collected and disposed of in sealed, labeled, impermeable bags or other closed, labeled, impermeable containers except in roofing operations, where the procedures specified in paragraph (g)(8)(ii) of this section apply.

(3) Care of asbestos-containing flooring material.

(i) All vinyl and asphalt flooring material shall be maintained in accordance with this paragraph unless the building/facility owner demonstrates, pursuant to paragraph (g)(8)(i)(I) of this section that the flooring does not contain asbestos.

(ii) Sanding of flooring material is prohibited.

(iii) Stripping of finishes shall be conducted using low abrasion pads at speeds lower than 300 rpm and wet methods.

(iv) Burnishing or dry buffing may be performed only on flooring which has sufficient finish so that the pad cannot contact the flooring material.

(4) Waste and debris and accompanying dust in an area containing accessible thermal system insulation or surfacing ACM/PACM or visibly deteriorated ACM:

(i) Shall not be dusted or swept dry, or vacuumed without using a HEPA filter;

(ii) Shall be promptly cleaned up and disposed of in leak tight containers.

(m) Medical surveillance.

(1) General.

(i) Employees covered.

(A) The employer shall institute a medical surveillance program for all employees who for a combined total of 30 or more days per year are engaged in Class I, II and III work or are exposed at or above a permissible exposure limit. For purposes of this paragraph, any day in which a worker engages in Class II or Class III operations or a combination thereof on intact material for one hour or less (taking into account the entire time spent on the removal operation, including cleanup) and, while doing so, adheres fully to the work practices specified in this standard, shall not be counted.

(B) For employees otherwise required by this standard to wear a negative pressure respirator, employers shall ensure employees are physically able to perform the work and use the equipment. This determination shall be made under the supervision of a physician.

(ii) Examination.

(A) The employer shall ensure that all medical examinations and procedures are performed by or under the supervision of a licensed physician, and are provided at no cost to the employee and at a reasonable time and place.

(B) Persons other than such licensed physicians who administer the pulmonary function testing required by this section shall complete a training course in spirometry sponsored by an appropriate academic or professional institution.

(2) Medical examinations and consultations.

(i) Frequency. The employer shall make available medical examinations and consultations to each employee covered under paragraph (m)(1)(i) of this section on the following schedules:

(A) Prior to assignment of the employee to an area where negative-pressure respirators are worn;

(B) When the employee is assigned to an area where exposure to asbestos may be at or above the permissible exposure limit for 30 or more days per year, or engage in Class I, II, or III work for a combined total of 30 or more days per year, a medical examination must be given within 10 working days following the thirtieth day of exposure;

(C) And at least annually thereafter.

(D) If the examining physician determines that any of the examinations should be provided more frequently than specified, the employer shall provide such examinations to affected employees at the frequencies specified by the physician.

(E) Exception: No medical examination is required of any employee if adequate records show that the employee has been examined in accordance with this paragraph within the past 1-year period.

(ii) Content. Medical examinations made available pursuant to paragraphs (m)(2)(i)(A) through (m)(2)(i)(C) of this section shall include:

(A) A medical and work history with special emphasis directed to the pulmonary, cardiovascular, and gastro-intestinal systems.

(B) On initial examination, the standardized questionnaire contained in Part 1 of Appendix D to this section, and, on annual examination, the abbreviated standardized questionnaire contained in Part 2 of Appendix D to this section.

(C) A physical examination directed to the pulmonary and gastrointestinal systems, including a chest roentgenogram to be administered at the discretion of the physician, and pulmonary function tests of forced vital capacity (FVC) and forced expiratory volume at one second (FEV_1). Interpretation and classification of chest roentgenograms shall be conducted in accordance with Appendix E to this section.

(D) Any other examinations or tests deemed necessary by the examining physician.

(3) Information provided to the physician. The employer shall provide the following information to the examining physician:

(i) A copy of this standard and Appendices D, E, and I to this section;

(ii) A description of the affected employee's duties as they relate to the employee's exposure;

(iii) The employee's representative exposure level or anticipated exposure level;

(iv) A description of any personal protective and respiratory equipment used or to be used; and

(v) Information from previous medical examinations of the affected employee that is not otherwise available to the examining physician.

(4) Physician's written opinion.

(i) The employer shall obtain a written opinion from the examining physician. This written opinion shall contain the results of the medical examination and shall include:

(A) The physician's opinion as to whether the employee has any detected medical conditions that would place the employee at an increased risk of material health impairment from exposure to asbestos;

(B) Any recommended limitations on the employee or on the use of personal protective equipment such as respirators; and

(C) A statement that the employee has been informed by the physician of the results of the medical examination and of any medical conditions that may result from asbestos exposure.

(D) A statement that the employee has been informed by the physician of the increased risk of lung cancer attributable to the combined effect of smoking and asbestos exposure.

(ii) The employer shall instruct the physician not to reveal in the written opinion given to the employer specific findings or diagnoses unrelated to occupational exposure to asbestos.

(iii) The employer shall provide a copy of the physician's written opinion to the affected employee within 30 days from its receipt.

(n) Recordkeeping.

(1) Objective data relied on pursuant to paragraph (f) of this section.

(i) Where the employer has relied on objective data that demonstrates that products made from or containing asbestos or the activity involving such products or material are not capable of releasing fibers or asbestos in concentrations at or above the permissible exposure limit and/or excursion limit under the expected conditions of processing, use, or handling to satisfy the requirements of paragraph (f), the employer shall establish and maintain an accurate record of objective data reasonably relied upon in support of the exemption.

(ii) The record shall include at least the following information:

(A) The product qualifying for exemption;

(B) The source of the objective data;

(C) The testing protocol, results of testing, and/or analysis of the material for the release of asbestos;

(D) A description of the operation exempted and how the data support the exemption; and

(E) Other data relevant to the operations, materials, processing, or employee exposures covered by the exemption.

(iii) The employer shall maintain this record for the duration of the employer's reliance upon such objective data.

(2) Exposure measurements.

(i) The employer shall keep an accurate record of all measurements taken to monitor employee exposure to asbestos as prescribed in paragraph (f) of this section.

Note: The employer may utilize the services of competent organizations such as industry trade associations and employee associations to maintain the records required by this section.

(ii) This record shall include at least the following information:

(A) The date of measurement;

(B) The operation involving exposure to asbestos that is being monitored;

(C) Sampling and analytical methods used and evidence of their accuracy;

(D) Number, duration, and results of samples taken;

(E) Type of protective devices worn, if any; and

(F) Name, social security number, and exposure of the employees whose exposures are represented.

(iii) The employer shall maintain this record for at least thirty (30) years, in accordance with 29 CFR 1910.1020.

(3) Medical surveillance.

(i) The employer shall establish and maintain an accurate record for each employee subject to medical surveillance by paragraph (m) of this section, in accordance with 29 CFR 1910.1020.

(ii) The record shall include at least the following information:

(A) The name and social security number of the employee;

(B) A copy of the employee's medical examination results, including the medical history, questionnaire responses, results of any tests, and physician's recommenddations.

(C) Physician's written opinions;

(D) Any employee medical complaints related to exposure to asbestos; and

(E) A copy of the information provided to the physician as required by paragraph (m) of this section.

(iii) The employer shall ensure that this record is maintained for the duration of employment plus thirty (30) years, in accordance with 29 CFR 1910.1020.

(4) Training records. The employer shall maintain all employee training records for one (1) year beyond the last date of employment by that employer.

(5) Data to Rebut PACM. Where the building owner and employer have relied on data to demonstrate that PACM is not asbestos-containing, such data shall be maintained for as long as they are relied upon to rebut the presumption.

(6) Records of Required Notifications. Where the building owner has communicated and received information concerning the identification, location and quantity of ACM and PACM, written records of such notifications and their content shall be maintained by the building owner for the duration of ownership and shall be transferred to successive owners of such buildings/facilities.

(7) Availability.

(i) The employer, upon written request, shall make all records required to be maintained by this section available to the Assistant Secretary and the Director for examination and copying.

(ii) The employer, upon request, shall make any exposure records required by paragraphs (f) and (n) of this section available for examination and copying to affected employees, former employees, designated representatives, and the Assistant Secretary, in accordance with 29 CFR 1910.1020(a) through (e) and (g) through (i).

(iii) The employer, upon request, shall make employee medical records required by paragraphs (m) and (n) of this section available for examination and copying to the subject employee, anyone having the specific written consent of the subject employee, and the Assistant Secretary, in accordance with 29 CFR 1910.1020.

(8) Transfer of records.

(i) The employer shall comply with the requirements concerning transfer of records set forth in 29 CFR 1910.1020(h).

(ii) Whenever the employer ceases to do business and there is no successor employer to receive and retain the records for the prescribed period, the employer shall notify the Director at least 90 days prior to disposal and, upon request, transmit them to the Director.

(o) Competent person.

(1) General. On all construction worksites covered by this standard, the employer shall designate a competent person, having the qualifications and authorities for ensuring worker safety and health required by Subpart C, General Safety and Health Provisions for Construction (29 CFR 1926.1020 through 1926.32).

(2) Required Inspections by the Competent Person. Section 1926.1020(b)(2) which requires health and safety prevention programs to provide for frequent and regular inspections of the job sites, materials, and equipment to be made by competent persons, is incorporated.

(3) Additional Inspections. In addition, the competent person shall make frequent and regular inspections of the job sites, in order to perform the duties set out below in paragraph (o)(3)(i) of this section. For Class I jobs, on-site inspections shall be made at least once during each work shift, and at any time at employee request. For Class II, III and IV jobs, on-site inspections shall be made at intervals sufficient to assess whether conditions have changed, and at any reasonable time at employee request.

(i) On all worksites where employees are engaged in Class I or II asbestos work, the competent person designated in accordance with paragraph (e)(6) of this section shall perform or supervise the following duties, as applicable:

(A) Set up the regulated area, enclosure, or other containment;

(B) Ensure (by on-site inspection) the integrity of the enclosure or containment;

(C) Set up procedures to control entry to and exit from the enclosure and/or area;

(D) Supervise all employee exposure monitoring required by this section and ensure that it is conducted as required by paragraph (f) of this section;

(E) Ensure that employees working within the enclosure and/or using glove-bags wear respirators and protective clothing as required by paragraphs (h) and (i) of this section;

(F) Ensure through on-site supervision, that employees set up, use, and remove engineering controls, use work practices and personal protective equipment in compliance with all requirements;

(G) Ensure that employees use the hygiene facilities and observe the decontamination procedures specified in paragraph (j) of this section;

(H) Ensure that through on-site inspection, engineering controls are functioning properly and employees are using proper work practices; and,

(I) Ensure that notification requirement in paragraph (k) of this section are met.

(ii) Reserved

(4) Training for the competent person.

(i) For Class I and II asbestos work the competent person shall be trained in all aspects of asbestos removal and handling, including: abatement, installation, removal and handling; the contents of this standard; the identification of asbestos; removal procedures, where appropriate; and other practices for reducing the hazard. Such training shall be obtained in a comprehensive course for supervisors that meets the criteria of EPA's Model Accreditation Plan (40 CFR Part 763, Subpart E, Appendix C), such as a course conducted by an EPA-approved or state-approved training provider, certified by EPA or a state, or a course equivalent in stringency, content and length.

(ii) For Class III and IV asbestos work, the competent person shall be trained in aspects of asbestos handling appropriate for the nature of the work, to include procedures for setting up glove bags and mini-enclosures, practices for reducing asbestos exposures, use of wet methods, the contents of this standard, and the identification of asbestos. Such training shall include successful completion of a course that is consistent with EPA requirements for training of local education agency maintenance and custodial staff as set forth at 40 CFR 763.92(a)(2), or its equivalent in stringency, content, and length. Competent persons for Class III and IV work, may also be trained pursuant to the requirements of paragraph (o)(4)(i) of this section.

(p) Appendices.

(1) Appendices A, C, D, and E to this section are incorporated as part of this section and the contents of these appendices are **mandatory**.

(2) Appendices B, F, H, I, J, and K to this section are **informational** and are not intended to create any additional obligations not otherwise imposed or to detract from any existing obligations.

(Approved by the Office of Management and Budget under control number 1218-0133)

Stat. Auth.: ORS 654.025(2) and 656.726(4).
Stats. Implemented: ORS 654.001 through 654.295.
Hist: APD Admin. Order 8-1989, f. 7/7/89, ef. 7/7/89.
OR-OSHA Admin. Order 3-1990, f. 1/19/90, ef. 1/19/90 (temp).
OR-OSHA Admin. Order 7-1990, f. 3/2/90, ef. 3/2/90 (perm).
OR-OSHA Admin. Order 13-1990, f. 6/28/90, ef. 8/1/90 (temp).
OR-OSHA Admin. Order 19-1990, f. 8/31/90, ef. 8/31/90 (perm).
OR-OSHA Admin. Order 11-1992, f. 10/9/92, ef. 10/9/92.
OR-OSHA Admin. Order 4-1995, f. 3/29/95, ef. 3/29/95.
OR-OSHA Admin. Order 8-1995, f. 8/25/95, ef. 8/25/95.
OR-OSHA Admin. Order 5-1996, f. 11/29/96, ef. 11/29/96.
OR-OSHA Admin. Order 6-1996, f. 11/29/96, ef. 11/29/96.
OR-OSHA Admin. Order 3-1998, f. 7/7/98, ef. 7/7/98.
OR-OSHA Admin. Order 7-1998, f. 12/28/98, ef. 12/12/98.
OR-OSHA Admin. Order 4-2006, f. 7/24/06, ef. 7/24/06.
OR-OSHA Admin. Order 10-2006, f. 11/30/06, ef. 11/30/06.
OR-OSHA Admin. Order 5-2009, f. 5/29/09, ef. 5/29/09.

Asbestos Program

How to Remove Nonfriable Asbestos Cement Water Pipe

A Guide for Meeting DEQ Rules

State of Oregon
Department of
Environmental
Quality

Air Quality
Asbestos
2020 SW 4th Ave., Suite 400
Portland, OR 97201
Phone: 503-229-5982
800-452-4011
Fax: 503-229-6945
Contact: Susan Patterson
www.oregon.gov/DEQ

DEQ is a leader in restoring, maintaining and enhancing the quality of Oregon's air, land and water.

Purpose

The Department of Environmental Quality (DEQ) regulates the removal, handling and disposal of asbestos-containing materials during construction, remodeling, and demolition. This document provides guidance for removing nonfriable asbestos cement (AC) water pipe.

Before you start

Contact one of the DEQ regional offices (see contact information below) for information on complying with Oregon's asbestos program regulations.

Oregon Occupational Safety and Health Administration (OR-OSHA) also has rules for working with asbestos-containing materials. Contact OR-OSHA at 503-378-3272 for current rule and policy information.

How to determine if a material contains asbestos

The only way to determine if a material contains asbestos is to take a sample and have it analyzed by an accredited laboratory.

What is asbestos cement pipe?

Asbestos cement (AC) pipe was used widely in the mid-1900's in potable water distribution systems. Since the lifetime of this product is approximately 70 years, many projects to update this infrastructure involve removal of this product. The cement acts as a binder that holds the asbestos fibers within a solid matrix. This will prevent asbestos fibers from being released easily, unless mishandled, damaged, or in badly weathered condition. In most cases, AC pipe is considered nonfriable.

Removing nonfriable AC pipe

The removal of nonfriable asbestos-containing materials in good condition is exempt from some DEQ rules. You **do not** need to be a DEQ licensed asbestos contractor or a DEQ certified asbestos worker to do nonfriable asbestos removal. If you remove AC pipe following this guide, they should remain in a nonfriable condition.

Notification

File a DEQ notification form ASN-6 for removal of nonfriable asbestos materials and pay the applicable fee. The notification must be received by the DEQ Business Office at least 5 days prior to starting the removal project.

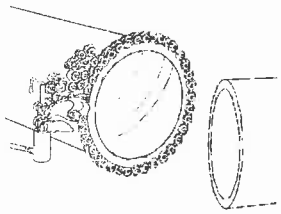
Options for removing nonfriable AC water pipe

AC water pipe must be removed, handled and disposed of in a manner that keeps the material in predominantly whole pieces to be considered nonfriable. Sanding, sawing, grinding, chipping, or the use of power tools is not allowed. The tiles must be kept wet during removal. Wetting minimizes asbestos fibers from being released.

12-AQ-007
Last updated: 7/10/12
By: Nancy Stellmach

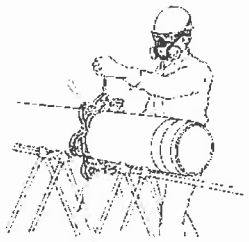
DEQ recommends that you use the following methods to remove AC pipe.

1. Snap cutters



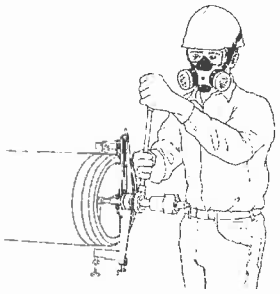
Snap cutters ("squeeze-and-pop" equipment) operate by means of cutting wheels mounted in a chain wrapper around the pipe barrel. Hydraulic pressure, applied by means of a remote, pneumatically, or manually operated pump, squeezes the cutting wheels into the pipe wall until the cut is made.

2. Carbide-tipped blade cutters



Blade cutters are frame adjustable to the circumference of the pipe and have a number of self-tracking rollers that align one or more carbide-tipped cutting blades. Because of the relatively low mechanical input and clean cutting action, hand operated blade cutters do not produce significant amounts of airborne asbestos dust.

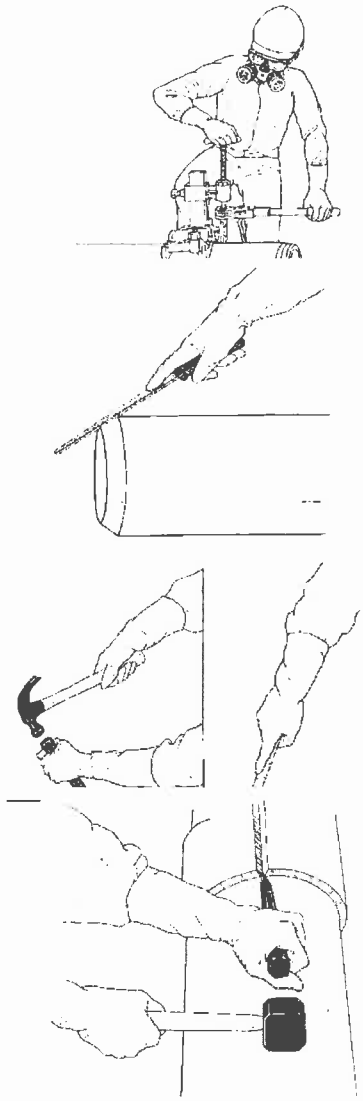
3. Manual field lathes



Manual field lathes are designed to end-trim and re-machine rough pipe barrels to factory-machined end profiles. The lathe consists of an adjustable, self-aligning arbor inserted into the pipe bore (which acts as a mandrel upon which the turning handle operates), a screw-fed turning frame, carbide machining blades, and manual (hand or ratchet) turning handles.

4. Wet tapping AC pressure pipe

Pressure or "wet" tapping for service connections is performed in the trench while the pipe is under pressure. The equipment (manual driven) is affixed to the pipe by means of a chain yoke. A combination boring-and-inserting bar drills and taps the pipe wall and inserts a corporation stop or pipe plug. The pressure chamber, which protects against water leakage, also catches the asbestos-cement chips, so this is essentially a dust-free operation.



5. Dry tapping ACD pressure pipe

Non-pressure or "dry" tapping for service connections may be performed in or out of the trench. The equipment is affixed to the pipe by means of a chain yoke. Separate drills and taps or a combination tool is used to drill and tap the pipe wall. Corporation stops or other connections may then be affixed to the pipe.

6. **Manual rasp**

Short lengths of AC pipe, machined-end exclusively (MEE) and machined overall (MOA), can be cut to make closures and repairs and to locate fittings exactly. Field-cut ends may be re-beveled with a coarse wood rasp to form a taper approximating the profile of the factory-beveled end.

7. Chisel and rasp

Holes may be cut into AC pipe with a hammer and chisel. The edge of a plumber's wood chisel is used to cut completely around the hole outline, about ¼ in. (7 mm) from the prescribed line. The operation is repeated and the cut deepened until through. The edges of the hole are then dressed with a coarse wood rasp.

8. Hammer and chisel

Replacement of damaged pipe may necessitate excavation, exposure and removal. AC coupling removal may be accomplished by gradually splitting the coupling lengthwise using a chisel and hammer. After the top of the coupling has been split, a crowbar or similar tool is used as a lever to split the bottom of the coupling.

Waste Disposal

Place the AC pipe in a leak-tight container and mark it with the warning statement "DANGER ASBESTOS-CONTAINING MATERIAL". Locate a landfill that is authorized to accept asbestos waste and be sure to inquire about hours of operation and any special packaging requirements they might have. Fill out a DEQ waste shipment report ASN-4 and give it to the landfill upon arrival.

If the material becomes friable

If the AC pipe becomes shattered, damaged, or is badly weathered, it is considered friable and may release asbestos fibers. If the tiles become friable, stop work immediately and promptly contact a DEQ licensed asbestos abatement contractor. Friable asbestos materials must be removed by a ***DEQ licensed asbestos contractor using DEQ certified workers.***

All asbestos abatement rules under OAR 340-248-0005 through -0280 must be followed. A DEQ notification form ASN-1 for the removal of friable asbestos and the applicable fee must be filed. The notification must be received by the DEQ Business Office at least 10 days prior to starting the

removal project. For emergency situations a waiver of the 10-day period may be granted by the DEQ. For more information contact DEQ.

For more information

Please contact the office nearest to where the project is occurring:

Clackamas, Clatsop, Columbia, Multnomah, Tillamook and Washington Counties:
Contact Susan Patterson, Portland office at 503-229-5982.

Benton, Lincoln, Linn, Marion, Polk and Yamhill Counties:
Contact Dottie Boyd, Salem office at 503-378-5086 or 800-349-7677.

Lane County:
Contact Tom Freeman, Lane Regional Air Protection Agency at 541-736-1056 x 222.

Jackson, Josephine and Eastern Douglas Counties:
Contact Steve Croucher, Medford office at 541-776-6107 or 877-823-3216.

Coos, Curry and Western Douglas Counties:
Contact Martin Abts, Coos Bay office at 541-269-2721, extension 222.

Crook, Deschutes, Harney, Hood River, Jefferson, Klamath, Lake, Sherman, and Wasco Counties:
Contact Frank Messina, Bend office at 541-633-2019.

Baker, Gilliam, Grant, Malheur, Morrow, Umatilla, Union, Wallowa, and Wheeler Counties:
Contact Tom Hack, Pendleton office at 541-278-4626 or 800-304-3513.

Accessibility information

DEQ is committed to accommodating people with disabilities. Please notify DEQ of any special physical or language accommodations or if you need information in large print, Braille or another format.

To make these arrangements, contact DEQ Communications and Outreach in Portland at 503-229-5696 or call toll-free in Oregon at 800-452-4011; fax 503-229-6762; email: deqinfo@deq.state.or.us.

People with hearing impairments may call 711.

JACK AND BORE

Scope of Work: The work specified in this Technical Provision are the approved construction methods, procedures and materials for Jack and Bore (J&B), also known as auger boring, that is not included in the Oregon Standard Specifications for Construction, Section 00406.

Materials: The material standards accepted for the (J&B) installation shall meet AWWA C150, C151, C200. Unless otherwise tested and approved by the City of West Linn (City), only use encasement pipe or uncased carrier pipe material that is new and has smooth interior and exterior walls.

Steel Pipe Casing and Welds: In addition to meeting or exceeding the above standards, the following must be met:

(a) The size of the steel casing must be at least 6 inches larger than the largest outside diameter of the carrier.

(b) The casing pipe must be straight seam pipe or seamless pipe.

(c) All steel pipe may be bare inside and out, with the manufacturer's recommended minimum nominal wall thicknesses to meet the greater of either installation, loading or carrier requirements.

(d) All steel casing pipe must be square cut and have dead-even lengths which are compatible with the J&B equipment.

Ensure that steel pipe casing of insufficient length achieves the required length through fully welded joints. Ensure that joints are air-tight and continuous over the entire circumference of the pipe with a bead equal to or exceeding the minimum of either that are required to meet the thickness criteria of the pipe wall for jacking and loading or service life. A certified welder must perform all welding.

Site Conditions: Within 48 hours of completing installation of the boring product, ensure that the work site is cleaned of all excess auger fluids or spoils. Removal and final disposition of excess fluids or spoils is the responsibility of the boring Contractor and ensure that the work site is restored to pre-construction conditions or as identified on the plans.

Ground Water Control: Investigate all sites for possibility of having to manage groundwater problems that may occur due to seasonal changes or natural conditions. When ground water level must be controlled, use a system and equipment that is compatible with the properties, characteristics, and behavior of the soils as indicated by the soil investigation report.

Damage Restoration: Take responsibility for restoring any damage caused by heaving, settlement, separation of pavement, escaping boring fluid (fracout) of the J&B operation at no cost to the City.

Remediation Plans: When required by the Engineer, provide detailed plans which show how damage to any roadway facility will be remedied. These details will become part of the As-Built Plans Package. Remediation Plans must follow the same guidelines for development and presentation of the As-Built Plans. When remediation plans are required, they must be approved by the City Engineer before any work proceeds.

Quality Control: Take control of the operation at all times. Have a representative who is thoroughly knowledgeable of the equipment, boring, and Department procedures present at the job site during the entire installation and available to address immediate concerns and emergency operations. Notify the City Engineer 48 hours in advance of starting work. Do not begin the installation until the Engineer is present at the job site and agrees that proper preparations have been made.

Testing: When there is any indication that the installed product has sustained damage and may leak, stop the work, notify the City Engineer and investigate damage. The City Engineer may require a pressure test and reserves the right to be present during the test. Perform pressure test within 24 hours unless otherwise approved by the Engineer. Furnish a copy of the test results to the City Engineer for review and approval. The Engineer shall be allowed up to 72 hours to approve or determine if the product installation is not in compliance with specifications. The City Engineer may require non-compliant installations to be filled with excavatable flowable fill.

Failed Bore Path: If conditions warrant removal of any materials installed in a failed bore path, as determined by the City Engineer, it will be at no cost to the City. Promptly fill all voids by injecting all taken out of service products that have any annular space with Class E backfill.

If an obstruction is encountered which prevents completion of the installation in accordance with the design location and specifications; the pipe may be taken out of service and left in place at the discretion of the City Engineer. Immediately fill the product left in place with Class E backfill. Submit a new installation procedure and revised plans to the Engineer for approval before resuming work at another location. If damage is observed to any property, cease all work until a plan of action to minimize further damage and restore damaged property is submitted and approved by the City Engineer.

As-Built Plans: Provide the City Engineer with a complete set of As-Built-Plans showing all bores (successful and failed) within 30 calendar days of completion of the work. Plans must be dimensionally correct copies of the Contract plans. Include notes on the plans stating the final bore path diameter, facility diameter, drilling fluid composition, composition of any other materials used to fill the annular void between the bore path and the facility or facility placed out of service. If the facility is a casing, note this, as well as the size and type of carrier pipes to be placed within the casing as part of the Contract work.

Public Works Department
22500 Salamo Road
West Linn, Oregon 97068
Telephone: (503) 722-5500
Fax: (503) 656-4106

Appendix C