

CONTRACT PROVISIONS and SPECIFICATIONS

**2025 Waste Storage Facility Construction
Project #WA1206-140-6**

**SMALL PUBLIC WORKS PROJECT
SKAGIT COUNTY PUBLIC WORKS**

Must be an approved contractor on the Municipal Research and Services Center (MRSC) Roster in order to Bid this project:
<http://www.mrscrosters.org>



2025 Waste Storage Facility Construction Project #1206-140-6

This Contract is for the construction of a livestock waste storage facility for one landowner in Skagit County.

Schedule: TBD from Notice to Proceed.

Measurement & Payment: Each item will be per the bid proposal.



Image: Fitzgerald site of previous manure pile and location for construction.

WASHINGTON STATE DEPARTMENT OF HEALTH
CLEAN WATER PROGRAM
SPECIFICATIONS INSERT

This project has been funded wholly or in part by the United States Environmental Protection Agency under assistance agreement PC-01J89801 to the Washington State Department of Health. The contents of this document do not necessarily reflect the views and policies of the Environmental Protection Agency, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.

GENERAL INFORMATION AND CONTRACT PROVISIONS

These general provisions are hereby a part of the conditions agreed to by the Contractor upon Bid. Skagit County Public Works is guided by Title 39 RCW, and utilizes the *2025 Standard Specifications for Road, Bridge, and Municipal Construction*, where applicable.

GENERAL INFORMATION

PROJECT TITLE: 2025 Waste Storage Facility Construction

DESCRIPTION OF WORK: Skagit County is interested in obtaining the services of a contractor to construct livestock waste storage facility on one (1) property in Skagit County. The waste storage facility will include two (2) bays that will be covered by a roof and include roof runoff structures designed to NRCS standards. The designed structure is two hundred (200) square feet with a concrete curtain extending out from the front of the structure. A Land Disturbance Activity permit will have to be submitted for the concrete curtain, with a SWPP submitted by the Contractor.

Work shall take place at the following property:

Brian Fitzgerald, Owner
19954 Double Creek Lane
Sedro-Woolley, WA 98284

BID DUE DATE AND TIME: Wednesday, May 28, 2025, at 4:00 p.m., or soon thereafter

ENGINEER'S ESTIMATE: \$28,000 - \$33,000

NOTICE TO PROCEED: Contractor shall not commence work until notice to proceed has been given by Skagit County; this occurs after the Contract has been executed by Skagit County Board of Commissioners.

QUESTIONS AND ANSWERS: All technical questions and requests for interpretation shall be in writing and submitted by email with the subject line reading, "Waste Storage Facility," no later than **4:00 p.m. on Friday, May 9, 2025**, to Leanne Ingman, Natural Resources Technician, leannei@co.skagit.wa.us. Questions will not be accepted after Friday, May 9, 2025.

ADDENDA: If Skagit County issues addenda to this project, bidders must acknowledge receipt of all addenda on the revised bid proposal. It is the Bidder's responsibility to ensure that the bidder has received all addenda, although Skagit County will make reasonable effort to provide addenda to all plan holders. Addenda will be forwarded to Contractors on the Plan Holder list via email, and will be posted online at www.skagitcounty.net/rfp. Failure to sign the acknowledgement of addenda on the revised proposal packet may result in rejection of the bid.

All addenda, if needed, will be posted online for this work **by 4:00 p.m. on Friday, May 16, 2025**. All addenda shall become part of the bid package. If further addenda are required to be issued, after Friday, May 16, 2025, the bid opening may be postponed. Contractors on the plan holder list will be notified of postponement via phone and email. A postponement notice will also be posted online at www.skagitcounty.net/rfp.

MANDATORY BIDDER RESPONSIBILITY CRITERIA: Before award, the bidder must meet the following bidder responsibility criteria to be considered a responsible bidder. The bidder may be required by Skagit County to submit documentation demonstrating compliance with the criteria.

The bidder must:

1. Have a current certificate of registration as a contractor in compliance with Title 18.27 RCW, which must have been in effect at the time of bid submittal;
2. Have a current Washington Unified Business Identifier (UBI) number;
3. Have Industrial Insurance (workers' compensation) coverage for the bidder's employees working in Washington, as required in Title 51 RCW;
4. Have a Washington Employment Security Department number (ESD), as required in Title 50 RCW, **(and, if lowest responsive and responsible bidder, provide documentation in the form of a letter or statement from ESD within 24 hours of submitting bid);**
5. Have a Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW;
6. Not be disqualified from bidding on any public works contract under Title 39.06.010 RCW or Title 39.12.065(3) RCW and;
7. Not be excluded or suspended from bidding on any public works contract under federal laws.

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

For questions regarding Skagit County's Title VI Program, you may contact the Public Works Department's Title VI Coordinator, Michael See, at (360) 416-1400.

EXAMINATION OF BID AND CONTRACT DOCUMENTS, SITE, AND SITE CONDITIONS:
The Bidder shall carefully examine the Bid Documents as defined in Section 1-01.3 of the *2025 Standard Specifications for Road, Bridge, and Municipal Construction*.

Submittal of a Bid shall be conclusive evidence that the Bidder has made these examinations and understands all requirements for the performance of the completed Work. The Bidder further warrants, agrees, and acknowledges by submitting a Bid that it:

1. Has taken steps reasonably necessary to ascertain the nature and location of the Work;
2. Has investigated and satisfied itself as to the general and local conditions, which can affect the Work or its cost, including but not limited to:
 - a. Conditions bearing upon acquisition, transportation, disposal, handling, and storage of materials;

- b. The availability of labor, materials, water, electric power, and roads;
 - c. Uncertainties of weather, river stages, tides, or similar physical conditions at the site;
 - d. The conformation and condition of the ground;
 - e. The character of equipment and facilities needed preliminary to and during Work performance; and
 - f. The site biological hazards and associated physical hazards.
3. Has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the Work site (including material sites) as well as from the Bid Documents and other information made a part of this Contract; and
4. Has satisfied itself as to the adequacy of time allowed for the completion of the physical Work on the Contract.

Any failure of the Bidder to take the actions described and acknowledged in this clause shall not relieve the Bidder from responsibility for estimating properly the difficulty and cost of successfully performing the Work, or from proceeding to successfully perform the Work without additional expense to the Contracting Agency.

The Bidder agrees that the Contracting Agency shall not be liable to it on any claim for additional payment or additional time or any claim whatsoever if the claim directly or indirectly results from the Bidder's failure to investigate and familiarize itself sufficiently with the conditions under which the Contract is to be performed.

The Bidder shall be familiar and comply with all Federal, State, tribal, and local laws, ordinances, and regulations which might affect those engaged in the Work. The Contracting Agency will not consider any plea of misunderstanding or ignorance of such requirements.

BID PRICE: Bid prices shall reflect what the Bidder anticipates the cost of completing the Work to be, including methods, materials, labor, and equipment. Except as the Contract may provide, the Bidder shall receive no payment for any costs that exceed those in the Bid prices.

The Contractor shall bear all cost for such insurance as provided in Section 1-07.10. No Claim shall be allowed because of any ambiguity in the Contract if:

1. The Bidder discovers an ambiguity but fails to notify the Contracting Agency, or
2. The Bidder failed to discover a patent ambiguity that would be discovered by a reasonably prudent contractor in preparing its Bid.

Any prospective Bidder desiring an explanation or interpretation of the Bid Documents, shall request the explanation or interpretation in writing by close of business on the Thursday preceding the bid opening to allow a written reply to reach all prospective Bidders before the submission of their Bids. Oral explanations, interpretations, or instructions given by anyone before the Award of a Contract will not be binding on the Contracting Agency.

Any information given a prospective Bidder concerning any of the Bid Documents will be furnished to all prospective Bidders as an Addendum if that information is deemed by the Contracting Agency to be necessary in submitting Bids or if the Contracting Agency concludes that the lack of the information would be prejudicial to other prospective Bidders.

BID PROCEDURES AND CONDITIONS

PROPOSAL FORMS: At the request of a bidder, the Contracting Agency will provide a proposal form for any project on which the bidder is eligible to bid.

The proposal form will identify the project, list estimated quantities, units of measurement, the items of work, and the materials to be furnished at the unit bid prices. The bidder shall complete spaces on the proposal form that call for information such as: unit prices; extensions; total bid amount; signatures; date; retail sales taxes; the bidder's name, address, telephone number, and signature.

PREPARATION OF PROPOSAL: The Contracting Agency will accept only those Proposals properly executed on forms it provides.

All prices shall be in legible figures (not words) written in ink or typed. The Proposal shall include:

1. A unit price for each item (omitting digits more than four (4) places to the right of the decimal point)
2. An extension for each unit price (omitting digits more than two (2) places to the right of the decimal point)
3. The total Contract price (the sum of all extensions)

BID PRICE: The bidder shall submit the completed Bid Proposal as part of the bid. The bid shall include everything necessary for the prosecution and completion of the Contract including, but not limited to, furnishing all material, labor, equipment, and Subcontractors, and other facilities and all management, superintendent's labor and service as outlined in the Provisions, except as may be provided otherwise in the Contract documents. In the event of a discrepancy between the unit price and the total price, the unit price will govern and Skagit County will correct total price accordingly.

SIGNATURES: Bids shall be signed by one of the legally authorized officers of said corporation. If awarded the contract, the Contract shall also be so executed. If a Bid Proposal or Contract is signed by an agent, the agent shall provide satisfactory evidence of authority to sign as legal representative of Bidder, upon request of Skagit County. An authorized partner of a co-partnership may sign the contract, subject to the approval of the attorney, who may at his discretion, require each and every member of the co-partnership to sign the contract.

DELIVERY OF PROPOSAL: Sealed bids will be received by the Board of Skagit County Commissioners. Bids must be received no later than **4:00 p.m. on Wednesday, May 28, 2025** according to the SKAGIT COUNTY COMMISSIONERS' Reception Desk clock. All bid envelopes must be plainly marked on the outside, "Sealed Bid: Waste Storage Facility," and delivered to the address below.

Hand-deliver or Mail Proposal to:
Skagit County Commissioners
1800 Continental Place, Suite 100
Mount Vernon, WA 98273

It is the Contractor's responsibility to allow enough time for delivery to occur before the designated time. Quotations delivered to locations other than as indicated above or received after the designated time will not be accepted. Incomplete proposals cannot be considered. Oral, telephonic, telegraphic, electronic, or faxed proposals will not be accepted.

Skagit County reserves the right to reject any or all bids, waive informalities, and make the award in the best interest of Skagit County. Quotation results and questions pertaining to this project can be obtained by calling Leanne Ingman, Natural Resources Technician at (360) 416-1450.

Bids remain confidential and no information about bids is released until the public information of the bids is otherwise available.

The Contracting Agency will not open or consider any Proposal when the Proposal or Bid deposit is received after the time specified for receipt of Proposals or received in a location other than that specified for receipt of Proposals unless an emergency or unanticipated event interrupts normal work processes of the Contracting Agency so that Proposals cannot be received.

If an emergency or unanticipated event interrupts normal work processes of the Contracting Agency so that Proposals cannot be received at the office designated for receipt of bids as specified above the time specified for receipt of the Proposal will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which the normal work processes of the Contracting Agency resume.

BID BOND DEPOSIT/GUARANTY: Pursuant to Title 36.32.250 RCW, no bid will be considered unless accompanied by a surety company bid bond, Cashier's or certified check payable to the order of Skagit County for a sum not less than five percent (5%) of the estimated bid amount. Should the successful bidder fail to enter into such contract, the bid bond will be forfeited to Skagit County.

Any proposal bond shall be on a form acceptable to the Contracting Agency and shall be signed by the Bidder and the Surety. A proposal bond shall not be conditioned in any way to modify the minimum five percent (5%) required. The Surety shall: (1) be registered with the Washington State Insurance Commissioner, and (2) appear on the current Authorized Insurance List in the State of Washington published by the Office of the Insurance Commissioner.

The failure to furnish a Bid deposit of a minimum of five percent (5%) with the Bid or as a physical supplement to the electronic Proposal Form shall make the Bid nonresponsive and shall cause the Bid to be rejected by the Contracting Agency.

NON-COLLUSION: Submittal and signature of the non-collusion certificate confirms the bid is genuine and not a sham or collusive, and not made in the interest of any person not named, and that the Contractor has not induced or solicited others to submit a sham offer, or to refrain from proposing.

CONSIDERATION OF BIDS: After opening and reading proposals, the Contracting Agency will check them for correctness of extensions of the prices per unit and the total price. If a discrepancy exists between the price per unit and the extended amount of any bid item, the price per unit will control. The total of extensions, corrected where necessary, will be used by the Contracting Agency for Award purposes and to fix the amount of the Contract Bond.

The right is reserved by the Contracting Agency to waive informalities in the bidding, accept a Proposal of the lowest responsible Bidder, reject any or all Bids, republish the call for Bids, revise or cancel the Work, or require the Work to be done in another way, if the best interest of the Contracting Agency is served.

A Bidder who wishes to claim error after the Bids have been opened and read as required by Title 47.28.090 RCW shall promptly notify the Contracting Agency that an error occurred. The Bidder shall submit a notarized affidavit or declaration under penalty of perjury signed by the Bidder and accompanied by the work sheets used in the preparation of the Bid, requesting relief from the responsibilities of Award. The affidavit or declaration shall describe the specific error(s) and certify that the work sheets are the ones used in preparing the Bid.

The affidavit or declaration shall be submitted no later than 4:30 p.m. on the first business day after Bid opening or the claim will not be considered. The Contracting Agency will review the affidavit or declaration and the certified work sheets to determine the validity of the claimed error and if the error is of the kind for which the law allows relief from forfeiture of the Bid deposit. If the Contracting Agency concurs in the claim of error and determines that the error is of the kind which allows relief from forfeiture, the Bidder will be relieved of responsibility and the Bid deposit of the Bidder will be returned. If the Contracting Agency does not concur in the error or determines that the error is not the kind for which the law allows relief, the Contracting Agency may Award the Contract and if the Bidder refuses to execute the Contract, the Bidder's Bid deposit shall be forfeited as required by Title 47.28.100 RCW. Title 39.04.107 RCW applies, thereafter.

NON-RESPONSIVE BIDS: Any bid that does not comply with these instructions, is not signed, supplements or deviates from the specifications herein, or is incomplete, may be declared non-responsive by Skagit County and not further considered.

PROTESTS: Protests will be in accordance with all RCWs, as applicable.

AWARD OF CONTRACT

CONDITION OF AWARD: It is the intent of Skagit County to award a contract to the lowest responsive and responsible bidder. The Board of Skagit County Commissioners reserves the right to reject any or all bids for cause, and to waive minor irregularities in the bidding.

AWARD OF CONTRACT: Normally, Contract Award or Bid rejection will occur within forty-five (45) calendar days after Bid opening. If the lowest responsible Bidder and the Contracting Agency agree, this deadline may be extended. If they cannot agree on an extension by the 45-calendar day deadline, the Contracting Agency reserves the right to Award the Contract to the next lowest responsible Bidder or reject all Bids. The Contracting Agency will notify the successful Bidder of the Contract Award in writing.

ACCEPTANCE OF AWARD: If awarded, the Contractor is deemed to have agreed to all Addenda, Bid Instruction to bidders, General and Contract Provisions, Scope of Work, Specifications, Contract, and all other related documents.

COORDINATION OF DOCUMENTS: Any inconsistency in the parts of the Contract shall be resolved by following this order of precedence (e.g., 1 presiding over 2, 3, 4, 5, 6, and 7; 2 presiding over 3, 4, 5, 6, and 7; and so forth):

1. Addenda,
2. Proposal Form,
3. Special Provisions,
4. Contract Plans,
5. Amendments to the Standard Specifications,
6. Standard Specifications, and
7. Standard Plans.

On the Contract Plans, Working Drawings, and Standard Plans, figured dimensions shall take precedence over scaled dimensions.

This order of precedence shall not apply when Work is required by one part of the Contract but omitted from another part or parts of the Contract. The Work required in one part must be furnished even if not mentioned in other parts of the Contract.

Whenever reference is made in these Specifications or the Special Provisions to codes, rules, specifications, and standards, the reference shall be construed to mean the code, rule, specification, or standard that is in effect on the Bid advertisement date, unless otherwise stated or as required by law.

If any part of the Contract requires Work that does not include a description for how the Work is to be performed, the Work shall be performed in accordance with standard trade practice(s). For purposes of the Contract, a standard trade practice is one having such regularity of observance in the trade as to justify an expectation that it will be observed by the Contractor in doing the Work.

In case of any ambiguity or dispute over interpreting the Contract, the Engineer's decision will be final as provided in *2025 WSDOT Standard Specifications for Road, Bridge, and Municipal Construction* Section 1-05.1.

CONTRACT

EXECUTION OF CONTRACT: Successful bidder is allowed a maximum of **ten (10) calendar days** after the award date to return the signed contract, contract bond, all required insurance certifications, and any other required documentation as specified in this document.

Until the Contracting Agency executes a Contract, no Proposal shall bind the Contracting Agency nor shall any Work begin within the project limits or within Contracting Agency-furnished sites. The Contractor shall bear all risks for any Work begun outside such areas and for any materials ordered before the Contract is executed by the Contracting Agency.

If the Bidder experiences circumstances beyond their control that prevents return of the Contract documents within ten (10) calendar days after the Award date, the Contracting Agency may grant up to a maximum of ten (10) additional calendar days for return of the documents, provided the Contracting Agency deems the circumstances warrant it.

CONTRACT DOCUMENTS: The Addenda, Bid Proposal, General and Contract Provisions and Specifications, and Contract, shall be a part of and constitute the Contract entered into by Skagit County and successful Bidder. In the event there is discrepancy between any of the

foregoing contract documents, the above order of documents governs so that the former prevails over the latter.

CONTRACT BOND: Pursuant to Title 39.08 RCW, the successful Bidder shall provide an executed contract bond for the full contract amount. This contract bond shall:

1. Be on a Contracting Agency-furnished form;
2. Be signed by an approved Surety (or Sureties) that:
 - a. Is registered with the Washington State Insurance Commissioner, and
 - b. Appears on the current Authorized Insurance List in the State of Washington published by the Office of the Insurance Commissioner,
3. Be conditioned upon the faithful performance of the contract by the Contractor within the prescribed time;
4. Guarantee that the Surety shall indemnify, defend, and protect the Contracting Agency against any claim of direct or indirect loss resulting from the failure:
 - a. Of the Contractor (or any of the employees, subcontractors, or lower tier subcontractors of the Contractor) to faithfully perform the contract, or
 - b. Of the Contractor (or the subcontractors or lower tier subcontractors of the Contractor) to pay all laborers, mechanics, subcontractors, lower tier subcontractors, material or any other person who provides supplies or provisions for carrying out the work;

The Contracting Agency may require Sureties or Surety companies on the Contract Bond to appear and qualify themselves. Whenever the Contracting Agency deems the Surety or Sureties to be inadequate, it may, upon written demand, require the Contractor to furnish additional Surety to cover any remaining work. Until the added Surety is furnished, payments on the Contract will stop.

RETAINAGE: Pursuant to Title 60.28 RCW, a sum of five percent (5%) of the monies earned by the Contractor will be retained from progress estimates. Such retainage shall be used as a trust fund for the protection and payment (1) to the State with respect to taxes imposed pursuant to Title 82 RCW, and (2) the claims of any person arising under the Contract.

Monies retained under the provisions of Title 60.28 RCW shall, at the option of the Contractor, be:

1. Retained in a fund by the Contracting Agency; or
2. Deposited by the Contracting Agency in an escrow (interest-bearing) account in a bank, mutual saving bank, or savings and loan association (interest on monies so retained shall be paid to the Contractor). Deposits are to be in the name of the Contracting Agency and are not to be allowed to be withdrawn without the Contracting Agency's written authorization. The Contracting Agency will issue a check representing the sum of the monies reserved, payable to the bank or trust company. Such check shall be converted into bonds and securities chosen by the Contractor as the interest accrues.

At the time the Contract is executed the Contractor shall designate the option desired. The Contractor in choosing option (2) agrees to assume full responsibility to pay all costs that may accrue from escrow services, brokerage charges or both, and further agrees to assume all risks in connection with the investment of the retained percentages in securities. The Contracting Agency may also, at its option, accept a bond in lieu of retainage.

Release of the retainage will be made sixty (60) days following the Completion Date (pursuant to Title 39.12 RCW, and Title 60.28 RCW) provided the following conditions are met:

1. On Contracts totaling more than \$35,000, a release has been obtained from the Washington State Department of Revenue.
2. Affidavits of Wages Paid for the Contractor and all Subcontractors are on file with the Contracting Agency (Title 39.12.040 RCW).
3. A certificate of Payment of Contributions Penalties and Interest on Public Works Contract is received from the Washington State Employment Security Department.
4. Washington State Department of Labor and Industries (in accordance with Section 1-07.10) shows the Contractor is current with payments of industrial insurance and medical aid premiums.
5. All claims, as provided by law, filed against the retainage have been resolved. In the event claims are filed and provided the conditions of 1, 2, 3, and 4 are met, the Contractor will be paid such retained percentage less an amount sufficient to pay any such claims together with a sum determined by the Contracting Agency sufficient to pay the cost of foreclosing on claims and to cover attorney's fees.

INSURANCE: Contractor shall comply with the following conditions and procure and keep in force during the term of this Agreement, at Contractor's own cost and expense, the following policies of insurance with companies authorized to do business in the State of Washington, which are rated at least "A" or better and with a numerical rating of no less than seven (7), by A.M. Best Company and which are acceptable to the County.

1. Commercial General Liability Insurance on an occurrence basis in an amount not less than \$1,000,000 per occurrence and at least \$1,000,000 in the annual aggregate, including but not limited to: premises/operations (including off-site operations), blanket contractual liability and broad form property damage.
2. Business Automobile Liability Insurance in an amount not less than \$1,000,000 per occurrence, extending to any automobile.
3. Workers' Compensation Insurance as required by Washington law and Employer's Liability Insurance (Stop Gap) with limits not less than \$1,000,000 per occurrence. If the County authorizes sublet work, the Contractor shall require each Subcontractor to provide Workers' Compensation Insurance for its employees, unless the Contractor covers such employees.

The above liability policies shall contain a provision that the policy shall not be canceled or materially changed without thirty (30) days prior written notice to the County. No cancellation provision in any insurance policy shall be construed in derogation of the continuous duty of the Contractor to furnish the required insurance during the term of this Agreement.

Upon written request by the County, the insurer or his/her agent will furnish, prior to or during any Work being performed, a copy of any policy cited above, certified to be a true and complete copy of the original.

ADDITIONAL INSURED: Prior to the Contractor performing any Work, Contractor shall provide the County with a Certificate of Insurance acceptable to the County Attorney evidencing the above-required insurance and naming Skagit County, its officers, employees and agents as Additional Insureds on the Commercial General Liability Insurance policy and the Business Automobile Liability Insurance policy with respect to the operations performed and services provided under this Agreement and that such insurance shall apply as primary insurance on

behalf of such Additional Insureds. Skagit County shall be named as an Additional Insured by endorsement using ISO Form CG 2010 or equivalent. Receipt by the County of any certificate showing less coverage than required is not a waiver of the Contractor's obligations to fulfill the requirement.

The Certificate must name the County as additional insured, and state: Skagit County, its elected officials, officers and employees are named as additional insured.

The insurance policies required in this Contract are to contain and be endorsed to contain the following provisions:

With respect to all Liability Policies:

Skagit County its officers, officials, employees, and agents and volunteers are named as additional insured's as respects liability arising out of activities performed by or on behalf of the Contractor in connection with this Contract.

The Contractor's insurance coverage shall be primary insurance as respects Skagit County, its officers, officials, employees, agents, volunteers and consultants. Any insurance and/or self-insurance maintained by Skagit County, its officers, officials, employees, agents and consultants shall not contribute with the Contractor's insurance or benefit the Contractor in any way.

An additional insureds endorsement template can be provided by Skagit County, upon request.

PUBLIC WORKS PROJECT – PREVAILING WAGE: Pursuant to Title 39.12 RCW, if awarded the project, the Contractor and each Subcontractor shall complete or have on file with the County a current "Statement of Intent to Pay Prevailing Wages" before payment will be made for work performed. An "Affidavit of Wages Paid" shall be required at the end of the project, before final payment is authorized. These forms are available from Washington State Department of Labor & Industries and can be filed electronically at <http://www.lni.wa.gov/TradesLicensing/PrevWage>.

The State of Washington prevailing wage rates applicable for this public works project, which is located in Skagit County, may be found at the following website address of the Department of Labor and Industries: <https://fortress.wa.gov/lni/wagelookup/prvWagelookup.aspx>.

Any materials purchased will be used in public work type projects as defined in RCW 39.12, and therefore, subject to state prevailing wage rates as set forth by the Washington Department of Labor and Industries. Bidders are advised to consider this charge when computing bids.

LICENSES AND PERMITS: Contractor shall procure all licenses, pay all charges, fees and taxes, and give all notices necessary and incidental to the due and lawful prosecution of the work. Contractors awarded a County Contract are responsible for compliance with Washington State Business License regulations.

A Land Disturbance Activity permit will have to be submitted for the concrete curtain, with a SWPP submitted by the Contractor.

CHANGES/AMENDMENTS: Skagit County reserves the right to add or delete work, items, agencies, or locations from this contract, subject to appropriate adjustments to the Contract

price. Added items, agencies, or locations will be related to those on contract, and additions or deletions will be by mutual agreement, with prices consistent with the original bid price margins, and evidenced by an amendment to the Contract. The execution of an amendment shall constitute a waiver of Claims by the Contractor arising out of the Work to be performed or deleted pursuant to the amendment, except as specifically described in the amendment. General reservations of rights will be deemed waived and void.

FAILURE TO EXECUTE CONTRACT: Upon failure to return the performance and payment bonds, insurance certifications, and any other required documentation as specified in this document with the signed contract, as required, Skagit County may then award the contract to the second lowest responsive and responsible Bidder, or reject all remaining bids.

RETURN OF BID BOND/GUARANTY: Proposal bonds and deposits will be held until the Contract has been properly executed pursuant to Title 36.32.250 RCW. When the Contract has been properly executed, all remaining bonds or deposits, except those subject to forfeiture, will be returned.

LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC

COMPLIANCE WITH LAWS: Contractor shall comply with all applicable federal, state, tribal and local laws, rules, and regulations affecting its performance and hold Skagit County harmless against any claims arising from the violation thereof. No extension of time or additional payment will be made for loss of time or disruption of work caused by any actions against the Contractor for any of the above reasons.

APPLICATION OF SALES TAX: The work on this contract is to be performed upon lands whose ownership obligates the Contractor to pay State sales tax. Department of Revenue Rule 171 applies to this project. This work is not exempt from Sales Tax. The contractor shall include appropriate sales tax as shown on the Bid Proposal. The Contracting Agency will not adjust its payment if the Contractor bases a bid on a misunderstood tax liability.

DEFENSE & INDEMNITY AGREEMENT: The Contractor agrees to defend, indemnify and save harmless the County, its appointed and elective officers and employees, from and against all loss or expense, including but not limited to judgments, settlements, attorney's fees and costs by reason of any and all claims and demands upon the County, its elected or appointed officials or employees for damages because of personal or bodily injury, including death at any time resulting therefrom, sustained by any person or persons and on account of damage to property including loss of use thereof, whether such injury to persons or damage to property is due to the negligence of the Contractor, its subcontractors, its elected officers, employees or their agents, except only such injury or damage as shall have been occasioned by the sole negligence of the County, its appointed or elected officials or employees. It is further provided that no liability shall attach to the County by reason of entering into this contract, except as expressly provided herein.

HOLD HARMLESS: The Contractor shall hold Skagit County and its officers, agents and employees harmless from all costs, claims or liabilities of any nature including attorneys; fees, costs and expenses for or on account of injuries or damages sustained by any persons or property resulting from the negligent activities or omissions of the Contractor, its agents or employees pursuant to the Contract, or on account of any unpaid wages or other remuneration for services; and if a suit as described above be filed, the Contractor shall appear and defend

the same at its own cost and expense, and if judgment be rendered or settlement made requiring payment by Skagit County, the Contractor shall pay the same.

TERMINATION FOR PUBLIC CONVENIENCE: The County may terminate the contract in whole or in part whenever the County determines, in its sole discretion that such termination is in the best interests of the County. Whenever the contract is terminated in accordance with this paragraph, the Contractor shall be entitled to payment for actual work performed at unit contract prices for completed items of work. An equitable adjustment in the contract price for partially completed items of work will be made, but such adjustment shall not include provision for loss of anticipated profit on deleted or uncompleted work. Termination of this contract by the County at any time during the term, whether for default or convenience, shall not constitute a breach of contract by the County. If sufficient funds are not appropriated or allocated for payment under this contract for any future fiscal period, the County will not be obligated to make payments for services or amounts incurred after the end of the current fiscal period. No penalty or expense shall accrue to the County in the event this provision applies.

PAYMENT

INVOICES: The Contractor shall be paid, upon submission of a proper invoice for payment request, the prices stipulated in the Contract for services performed (less deductions, if any), in accordance with all payment and retainage instructions herein. All accounts are paid according to Title 39.76 RCW. Submitted Payment Requests must contain the following minimum information:

- Contract number;
- Item number, quantity, and description as appropriate;
- Unit and extended prices.
- Approved Intent of Wages Paid with WA Department of Labor and Industries

Payments are to be submitted no more than monthly, but not less than quarterly.

Mail Payment Requests to:

Skagit County Public Works
ATTN: Leanne Ingman, Natural Resources Technician
1800 Continental Place
Mount Vernon, WA 98273-5625

Payment will be made to the Contractor upon completion of all work and after final inspection and acceptance of the work by the Owner's Representative.

APPENDIX A

WA State Prevailing Wages

State of Washington
 Department of Labor & Industries
 Prevailing Wage Section - Telephone 360-902-5335
 PO Box 44540, Olympia, WA 98504-4540

Washington State Prevailing Wage

The PREVAILING WAGES listed here include both the hourly wage rate and the hourly rate of fringe benefits. On public works projects, worker's wage and benefit rates must add to not less than this total. A brief description of overtime calculation requirements are provided on the Benefit Code Key.

Journey Level Prevailing Wage Rates for the Effective Date: 5/28/2025

Skagit County

Trade^	Job Classification	Wage	Holiday	Overtime	Note	Risk Class
Asbestos Abatement Workers	Journey Level	\$63.87	5D	1H		View
Boilermakers	Journey Level	\$80.89	5N	1C		View
Brick Mason	Journey Level	\$71.82	7E	1N		View
Brick Mason	Pointer-Caulker-Cleaner	\$71.82	7E	1N		View

Building Service Employees	Janitor	\$16.66		1		View
Building Service Employees	Shampooer	\$16.66		1		View
Building Service Employees	Waxer	\$16.66		1		View
Building Service Employees	Window Cleaner	\$16.66		1		View
Cabinet Makers (In Shop)	Journey Level	\$18.85		1		View
Carpenters	Acoustical Worker	\$78.96	15J	11U		View
Carpenters	Bridge Dock and Wharf Carpenter	\$80.50	15J	11U	9L	View
Carpenters	Floor Layer & Floor Finisher	\$78.96	15J	11U		View
Carpenters	General Carpenter	\$78.96	15J	11U		View
Carpenters	Scaffold Erector	\$78.96	15J	11U		View
Cement Masons	Application of all Composition Mastic	\$77.30	15J	4U		View
Cement Masons	Application of all Epoxy Material	\$76.78	15J	4U		View
Cement Masons	Application of all Plastic Material	\$77.30	15J	4U		View

<u>Cement Masons</u>	Application of Sealing Compound	\$76.78	15J	4U	View
<u>Cement Masons</u>	Application of Underlayment	\$77.30	15J	4U	View
<u>Cement Masons</u>	Building General	\$76.78	15J	4U	View
<u>Cement Masons</u>	Composition or Kalman Floors	\$77.30	15J	4U	View
<u>Cement Masons</u>	Concrete Paving	\$76.78	15J	4U	View
<u>Cement Masons</u>	Curb & Gutter Machine	\$77.30	15J	4U	View
<u>Cement Masons</u>	Curb & Gutter, Sidewalks	\$76.78	15J	4U	View
<u>Cement Masons</u>	Curing Concrete	\$76.78	15J	4U	View
<u>Cement Masons</u>	Finish Colored Concrete	\$77.30	15J	4U	View
<u>Cement Masons</u>	Floor Grinding	\$77.30	15J	4U	View
<u>Cement Masons</u>	Floor Grinding/Polisher	\$76.78	15J	4U	View
<u>Cement Masons</u>	Green Concrete Saw, self-powered	\$77.30	15J	4U	View
<u>Cement Masons</u>	Grouting of all Plates	\$76.78	15J	4U	View

<u>Cement Masons</u>	Grouting of all Tilt-up Panels	\$76.78	15J	4U	View
<u>Cement Masons</u>	Guniting Nozzleman	\$77.30	15J	4U	View
<u>Cement Masons</u>	Hand Powered Grinder	\$77.30	15J	4U	View
<u>Cement Masons</u>	Journey Level	\$76.78	15J	4U	View
<u>Cement Masons</u>	Patching Concrete	\$76.78	15J	4U	View
<u>Cement Masons</u>	Pneumatic Power Tools	\$77.30	15J	4U	View
<u>Cement Masons</u>	Power Chipping & Brushing	\$77.30	15J	4U	View
<u>Cement Masons</u>	Sand Blasting Architectural Finish	\$77.30	15J	4U	View
<u>Cement Masons</u>	Screed & Rodding Machine	\$77.30	15J	4U	View
<u>Cement Masons</u>	Spackling or Skim Coat Concrete	\$76.78	15J	4U	View
<u>Cement Masons</u>	Troweling Machine Operator	\$77.30	15J	4U	View
<u>Cement Masons</u>	Troweling Machine Operator on Colored Slabs	\$77.30	15J	4U	View

<u>Cement Masons</u>	Tunnel Workers	\$77.30	15J	4U		View
<u>Divers & Tenders</u>	Bell/Vehicle/Submersible Operator (not under pressure)	\$156.25	15J	11T	9I	View
<u>Divers & Tenders</u>	Dive Supervisor	\$157.75	15J	11T	9I	View
<u>Divers & Tenders</u>	Diver	\$156.25	15J	11T	9I	View
<u>Divers & Tenders</u>	Diver Tender	\$86.86	15J	11T	9I	View
<u>Divers & Tenders</u>	Hyperbaric Worker - Compressed Air Worker 0-30.00 PSI	\$109.76	15J	11U		View
<u>Divers & Tenders</u>	Hyperbaric Worker - Compressed Air Worker 31.01-44.00 PSI	\$118.99	15J	11U		View
<u>Divers & Tenders</u>	Hyperbaric Worker - Compressed Air Worker 44.01 - 54.00 PSI	\$128.22	15J	11U		View
<u>Divers & Tenders</u>	Hyperbaric Worker - Compressed Air Worker 54.01 - 60.00 PSI	\$137.45	15J	11U		View
<u>Divers & Tenders</u>	Hyperbaric Worker - Compressed Air Worker 60.01 - 64.00 PSI	\$146.67	15J	11U		View

Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 64.01 - 68.00 PSI	\$155.90	15J	11U		View
Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 68.01 - 70.00 PSI	\$165.13	15J	11U		View
Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 70.01 - 72.00 PSI	\$174.36	15J	11U		View
Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 72.01 - 74.00 PSI	\$183.59	15J	11U		View
Divers & Tenders	Lead Diver (Dive Master)	\$101.32	15J	11T	9I	View
Divers & Tenders	Manifold Operator (Life Support Technician)	\$86.86	15J	11T	9I	View
Divers & Tenders	Remote Operated Vehicle Operator/Technician	\$86.86	15J	11T	9I	View
Divers & Tenders	Remote Operated Vehicle Operator/Technician	\$86.86	15J	11T	9I	View
Divers & Tenders	Remote Operated Vehicle Tender	\$80.55	15J	11T	9I	View
Divers & Tenders	Stand-by Diver	\$96.32	15J	11T	9I	View

Dredge Workers	Assistant Engineer	\$85.37	5D	3F	View
Dredge Workers	Assistant Mate (Deckhand)	\$84.71	5D	3F	View
Dredge Workers	Boatmen	\$85.37	5D	3F	View
Dredge Workers	Engineer Welder	\$87.02	5D	3F	View
Dredge Workers	Leverman, Hydraulic	\$88.77	5D	3F	View
Dredge Workers	Mates	\$85.37	5D	3F	View
Dredge Workers	Oiler	\$84.71	5D	3F	View
<u>Drywall Applicator</u>	Journey Level	\$78.76	150	11S	View
<u>Drywall Tapers</u>	Journey Level	\$78.76	150	11S	View
<u>Electrical Fixture Maintenance Workers</u>	Journey Level	\$21.48		1	View
<u>Electricians - Inside</u>	Cable Splicer	\$95.85	7H	1E	View
<u>Electricians - Inside</u>	Construction Stock Person	\$46.03	7H	1D	View

Electricians - Inside	Journey Level	\$89.75	7H	1E		View
Electricians - Motor Shop	Craftsman	\$16.66		1		View
Electricians - Motor Shop	Journey Level	\$16.66		1		View
Electricians - Powerline Construction	Cable Splicer	\$102.42	5A	4D		View
Electricians - Powerline Construction	Certified Line Welder	\$93.99	5A	4D		View
Electricians - Powerline Construction	Groundperson	\$59.30	5A	4D		View
Electricians - Powerline Construction	Heavy Line Equipment Operator	\$93.99	5A	4D		View
Electricians - Powerline Construction	Journey Level Lineperson	\$93.99	5A	4D		View
Electricians - Powerline Construction	Line Equipment Operator	\$80.96	5A	4D		View
Electricians - Powerline Construction	Meter Installer	\$59.30	5A	4D	8W	View
Electricians - Powerline Construction	Pole Sprayer	\$93.99	5A	4D		View
Electricians - Powerline Construction	Powderperson	\$69.84	5A	4D		View
Electronic Technicians	Electronic Technicians Journey Level	\$58.51	5B	1B		View

Elevator Constructors	Mechanic	\$115.14	7D	4A		View
Elevator Constructors	Mechanic In Charge	\$124.53	7D	4A		View
Fabricated Precast Concrete Products	Journey Level	\$16.66		1		View
Fabricated Precast Concrete Products	Journey Level - In-Factory Work Only	\$16.66		1		View
Fence Erectors	Fence Erector	\$54.65	15J	11P	8Y	View
Fence Erectors	Fence Laborer	\$54.65	15J	11P	8Y	View
Flaggers	Journey Level	\$54.65	15J	11P	8Y	View
Glaziers	Journey Level	\$82.16	7L	1Y		View
Heat & Frost Insulators And Asbestos Workers	Journey Level	\$91.81	15H	11C		View
Heating Equipment Mechanics	Mechanic	\$99.46	7F	1E		View
Hod Carriers & Mason Tenders	Journey Level	\$67.38	15J	11P	8Y	View
Industrial Power Vacuum Cleaner	Journey Level	\$16.66		1		View

Inland Boatmen	Boat Operator	\$71.28	5B	1K	View
Inland Boatmen	Cook	\$69.70	5B	1K	View
Inland Boatmen	Deckhand	\$70.00	5B	1K	View
Inland Boatmen	Deckhand Engineer	\$69.55	5B	1K	View
Inland Boatmen	Launch Operator	\$71.23	5B	1K	View
Inland Boatmen	Mate	\$89.12	5B	1K	View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Cleaner Operator	\$51.27	15M	110	View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Foamer Operator	\$51.27	15M	110	View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Grout Truck Operator	\$51.27	15M	110	View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote	Head Operator	\$49.20	15M	110	View

ControlInspection/Cleaning/Sealing OfSewer & Water Systems By RemoteControl

Technician

\$42.99

15M**110****View**Inspection/Cleaning/Sealing OfSewer & Water Systems By RemoteControl

TV Truck Operator

\$46.10

15M**110****View**Insulation Applicators

Journey Level

\$78.96

15J**11U****View**Ironworkers

Journeyman

\$90.82

15K**11N****View**Laborers

Air, Gas Or Electric Vibrating Screed

\$63.87

15J**11P****8Y****View**Laborers

Airtrac Drill Operator

\$65.75

15J**11P****8Y****View**Laborers

Ballast Regular Machine

\$63.87

15J**11P****8Y****View**Laborers

Batch Weighman

\$54.65

15J**11P****8Y****View**Laborers

Brick Pavers

\$63.87

15J**11P****8Y****View**Laborers

Brush Cutter

\$63.87

15J**11P****8Y****View**

Laborers	Brush Hog Feeder	\$63.87	15J	11P	8Y	View
Laborers	Burner	\$63.87	15J	11P	8Y	View
Laborers	Caisson Worker	\$65.75	15J	11P	8Y	View
Laborers	Carpenter Tender	\$63.87	15J	11P	8Y	View
Laborers	Cement Dumper-paving	\$64.98	15J	11P	8Y	View
Laborers	Cement Finisher Tender	\$63.87	15J	11P	8Y	View
Laborers	Change House Or Dry Shack	\$63.87	15J	11P	8Y	View
Laborers	Chipping Gun (30 Lbs. And Over)	\$64.98	15J	11P	8Y	View
Laborers	Chipping Gun (Under 30 Lbs.)	\$63.87	15J	11P	8Y	View
Laborers	Choker Setter	\$63.87	15J	11P	8Y	View
Laborers	Chuck Tender	\$63.87	15J	11P	8Y	View
Laborers	Clary Power Spreader	\$64.98	15J	11P	8Y	View
Laborers	Clean-up Laborer	\$63.87	15J	11P	8Y	View

<u>Laborers</u>	Concrete Dumper/Chute Operator	\$64.98	15J	11P	8Y	View
<u>Laborers</u>	Concrete Form Stripper	\$63.87	15J	11P	8Y	View
<u>Laborers</u>	Concrete Placement Crew	\$64.98	15J	11P	8Y	View
<u>Laborers</u>	Concrete Saw Operator/Core Driller	\$64.98	15J	11P	8Y	View
<u>Laborers</u>	Crusher Feeder	\$54.65	15J	11P	8Y	View
<u>Laborers</u>	Curing Laborer	\$63.87	15J	11P	8Y	View
<u>Laborers</u>	Demolition: Wrecking & Moving (Incl. Charred Material)	\$63.87	15J	11P	8Y	View
<u>Laborers</u>	Ditch Digger	\$63.87	15J	11P	8Y	View
<u>Laborers</u>	Diver	\$65.75	15J	11P	8Y	View
<u>Laborers</u>	Drill Operator (Hydraulic, Diamond)	\$64.98	15J	11P	8Y	View
<u>Laborers</u>	Dry Stack Walls	\$63.87	15J	11P	8Y	View
<u>Laborers</u>	Dump Person	\$63.87	15J	11P	8Y	View

Laborers	Epoxy Technician	\$63.87	15J	11P	8Y	View
Laborers	Erosion Control Worker	\$63.87	15J	11P	8Y	View
Laborers	Faller & Bucker Chain Saw	\$64.98	15J	11P	8Y	View
Laborers	Fine Graders	\$63.87	15J	11P	8Y	View
Laborers	Firewatch	\$54.65	15J	11P	8Y	View
Laborers	Form Setter	\$64.98	15J	11P	8Y	View
Laborers	Gabian Basket Builders	\$63.87	15J	11P	8Y	View
Laborers	General Laborer	\$63.87	15J	11P	8Y	View
Laborers	Grade Checker & Transit Person	\$67.38	15J	11P	8Y	View
Laborers	Grinders	\$63.87	15J	11P	8Y	View
Laborers	Grout Machine Tender	\$63.87	15J	11P	8Y	View
Laborers	Groutmen (Pressure) Including Post Tension Beams	\$64.98	15J	11P	8Y	View

Laborers	Guardrail Erector	\$63.87	15J	11P	8Y	View
Laborers	Hazardous Waste Worker (Level A)	\$65.75	15J	11P	8Y	View
Laborers	Hazardous Waste Worker (Level B)	\$64.98	15J	11P	8Y	View
Laborers	Hazardous Waste Worker (Level C)	\$63.87	15J	11P	8Y	View
Laborers	High Scaler	\$65.75	15J	11P	8Y	View
Laborers	Jackhammer	\$64.98	15J	11P	8Y	View
Laborers	Laserbeam Operator	\$64.98	15J	11P	8Y	View
Laborers	Maintenance Person	\$63.87	15J	11P	8Y	View
Laborers	Manhole Builder-Mudman	\$64.98	15J	11P	8Y	View
Laborers	Material Yard Person	\$63.87	15J	11P	8Y	View
Laborers	Mold Abatement Worker	\$63.87	15J	11P	8Y	View
Laborers	Motorman-Dinky Locomotive	\$67.48	15J	11P	8Y	View
Laborers	nozzleman (concrete pump, green cutter when using combination of	\$67.38	15J	11P	8Y	View

high pressure air & water on
concrete & rock, sandblast, gunite,
shotcrete, water blaster, vacuum
blaster)

Laborers	Pavement Breaker	\$64.98	15J	11P	8Y	View
Laborers	Pilot Car	\$54.65	15J	11P	8Y	View
Laborers	Pipe Layer (Lead)	\$67.38	15J	11P	8Y	View
Laborers	Pipe Layer/Tailor	\$64.98	15J	11P	8Y	View
Laborers	Pipe Pot Tender	\$64.98	15J	11P	8Y	View
Laborers	Pipe Reliner	\$64.98	15J	11P	8Y	View
Laborers	Pipe Wrapper	\$64.98	15J	11P	8Y	View
Laborers	Pot Tender	\$63.87	15J	11P	8Y	View
Laborers	Powderman	\$65.75	15J	11P	8Y	View
Laborers	Powderman's Helper	\$63.87	15J	11P	8Y	View

Laborers	Power Jacks	\$64.98	15J	11P	8Y	View
Laborers	Power Washer	\$63.87	15J	11P	8Y	View
Laborers	Railroad Spike Puller - Power	\$64.98	15J	11P	8Y	View
Laborers	Raker - Asphalt	\$67.38	15J	11P	8Y	View
Laborers	Re-timberman	\$65.75	15J	11P	8Y	View
Laborers	Remote Equipment Operator	\$64.98	15J	11P	8Y	View
Laborers	Rigger/Signal Person	\$64.98	15J	11P	8Y	View
Laborers	Rip Rap Person	\$63.87	15J	11P	8Y	View
Laborers	Rivet Buster	\$64.98	15J	11P	8Y	View
Laborers	Rodder	\$64.98	15J	11P	8Y	View
Laborers	Scaffold Erector	\$63.87	15J	11P	8Y	View
Laborers	Scale Person	\$63.87	15J	11P	8Y	View
Laborers	Sloper (Over 20")	\$64.98	15J	11P	8Y	View

Laborers	Sloper Sprayer	\$63.87	15J	11P	8Y	View
Laborers	Spreader (Concrete)	\$64.98	15J	11P	8Y	View
Laborers	Stake Hopper	\$63.87	15J	11P	8Y	View
Laborers	Stock Piler	\$63.87	15J	11P	8Y	View
Laborers	Swinging Stage/Boatswain Chair	\$54.65	15J	11P	8Y	View
Laborers	Tamper & Similar Electric, Air & Gas Operated Tools	\$64.98	15J	11P	8Y	View
Laborers	Tamper (Multiple & Self-propelled)	\$64.98	15J	11P	8Y	View
Laborers	Timber Person - Sewer (Lagger, Shorer & Cribber)	\$64.98	15J	11P	8Y	View
Laborers	Toolroom Person (at Jobsite)	\$63.87	15J	11P	8Y	View
Laborers	Topper	\$63.87	15J	11P	8Y	View
Laborers	Track Laborer	\$63.87	15J	11P	8Y	View
Laborers	Track Liner (Power)	\$64.98	15J	11P	8Y	View

Laborers	Traffic Control Laborer	\$58.20	15J	11P	9C	View
Laborers	Traffic Control Supervisor	\$61.47	15J	11P	9C	View
Laborers	Truck Spotter	\$63.87	15J	11P	8Y	View
Laborers	Tugger Operator	\$64.98	15J	11P	8Y	View
Laborers	Tunnel Work-Compressed Air Worker 0-30 psi	\$200.40	15J	11P	9B	View
Laborers	Tunnel Work-Compressed Air Worker 30.01-44.00 psi	\$205.43	15J	11P	9B	View
Laborers	Tunnel Work-Compressed Air Worker 44.01-54.00 psi	\$209.11	15J	11P	9B	View
Laborers	Tunnel Work-Compressed Air Worker 54.01-60.00 psi	\$214.81	15J	11P	9B	View
Laborers	Tunnel Work-Compressed Air Worker 60.01-64.00 psi	\$216.93	15J	11P	9B	View
Laborers	Tunnel Work-Compressed Air Worker 64.01-68.00 psi	\$222.03	15J	11P	9B	View

<u>Laborers</u>	Tunnel Work-Compressed Air Worker 68.01-70.00 psi	\$223.93	15J	11P	9B	View
<u>Laborers</u>	Tunnel Work-Compressed Air Worker 70.01-72.00 psi	\$225.93	15J	11P	9B	View
<u>Laborers</u>	Tunnel Work-Compressed Air Worker 72.01-74.00 psi	\$227.93	15J	11P	9B	View
<u>Laborers</u>	Tunnel Work-Guage and Lock Tender	\$67.48	15J	11P	8Y	View
<u>Laborers</u>	Tunnel Work-Miner	\$67.48	15J	11P	8Y	View
<u>Laborers</u>	Vibrator	\$64.98	15J	11P	8Y	View
<u>Laborers</u>	Vinyl Seamer	\$63.87	15J	11P	8Y	View
<u>Laborers</u>	Watchman	\$49.97	15J	11P	8Y	View
<u>Laborers</u>	Welder	\$64.98	15J	11P	8Y	View
<u>Laborers</u>	Well Point Laborer	\$64.98	15J	11P	8Y	View
<u>Laborers</u>	Window Washer/Cleaner	\$49.97	15J	11P	8Y	View

<u>Laborers - Underground Sewer & Water</u>	General Laborer & Topman	\$63.87	15J	11P	8Y	View
<u>Laborers - Underground Sewer & Water</u>	Pipe Layer	\$64.98	15J	11P	8Y	View
<u>Landscape Construction</u>	Landscape Construction/Landscaping Or Planting Laborers	\$49.97	15J	11P	8Y	View
<u>Landscape Construction</u>	Landscape Operator	\$85.27	15J	11G	8X	View
<u>Landscape Maintenance</u>	Groundskeeper	\$16.66		1		View
<u>Lathers</u>	Journey Level	\$78.76	150	11S		View
<u>Marble Setters</u>	Journey Level	\$71.82	7E	1N		View
<u>Metal Fabrication (In Shop)</u>	Fitter	\$16.66		1		View
<u>Metal Fabrication (In Shop)</u>	Laborer	\$16.66		1		View
<u>Metal Fabrication (In Shop)</u>	Machine Operator	\$16.66		1		View
<u>Metal Fabrication (In Shop)</u>	Painter	\$16.66		1		View

Metal Fabrication (In Shop)	Welder	\$16.66		1		View
Millwright	Journey Level	\$80.28	15J	4C		View
Modular Buildings	Journey Level	\$16.66		1		View
Painters	Journey Level	\$54.71	6Z	11J		View
Pile Driver	Crew Tender	\$86.81	15J	11U	9L	View
Pile Driver	Journey Level	\$80.50	15J	11U	9L	View
Plasterers	Journey Level	\$73.54	7Q	1R		View
Plasterers	Nozzleman	\$77.54	7Q	1R		View
Playground & Park Equipment Installers	Journey Level	\$16.66		1		View
Plumbers & Pipefitters	Journey Level	\$90.87	5A	1G		View
Power Equipment Operators	Asphalt Plant Operators	\$86.69	15J	11G	8X	View
Power Equipment Operators	Assistant Engineer	\$81.51	15J	11G	8X	View

Power Equipment Operators	Barrier Machine (zipper)	\$85.93	15J	11G	8X	View
Power Equipment Operators	Batch Plant Operator: concrete	\$85.93	15J	11G	8X	View
Power Equipment Operators	Boat Operator	\$87.82	7A	11H	8X	View
Power Equipment Operators	Bobcat	\$81.51	15J	11G	8X	View
Power Equipment Operators	Brokk - Remote Demolition Equipment	\$81.51	15J	11G	8X	View
Power Equipment Operators	Brooms	\$81.51	15J	11G	8X	View
Power Equipment Operators	Bump Cutter	\$85.93	15J	11G	8X	View
Power Equipment Operators	Cableways	\$86.69	15J	11G	8X	View
Power Equipment Operators	Chipper	\$85.93	15J	11G	8X	View
Power Equipment Operators	Compressor	\$81.51	15J	11G	8X	View
Power Equipment Operators	Concrete Finish Machine - Laser Screed	\$81.51	15J	11G	8X	View
Power Equipment Operators	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump	\$85.27	15J	11G	8X	View

High Pressure

Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Over 42 M	\$86.69	15J	11G	8X	View
Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	\$85.93	15J	11G	8X	View
Power Equipment Operators	Conveyors	\$85.27	15J	11G	8X	View
Power Equipment Operators	Cranes Friction: 200 tons and over	\$90.46	7A	11H	8X	View
Power Equipment Operators	Cranes, A-frame: 10 tons and under	\$82.59	7A	11H	8X	View
Power Equipment Operators	Cranes: 100 tons through 199 tons, or 150' of boom (including jib with attachments)	\$88.67	7A	11H	8X	View
Power Equipment Operators	Cranes: 20 tons through 44 tons with attachments	\$87.03	7A	11H	8X	View
Power Equipment Operators	Cranes: 200 tons- 299 tons, or 250' of boom including jib with attachments	\$89.60	7A	11H	8X	View
Power Equipment Operators	Cranes: 300 tons and over or 300' of boom including jib with attachments	\$90.46	7A	11H	8X	View

Power Equipment Operators	Cranes: 45 tons through 99 tons, under 150' of boom(including jib with attachments)	\$87.82	7A	11H	8X	View
Power Equipment Operators	Cranes: Friction cranes through 199 tons	\$89.60	7A	11H	8X	View
Power Equipment Operators	Cranes: through 19 tons with attachments, a-frame over 10 tons	\$86.36	7A	11H	8X	View
Power Equipment Operators	Crusher	\$85.93	15J	11G	8X	View
Power Equipment Operators	Deck Engineer/Deck Winches (power)	\$85.93	15J	11G	8X	View
Power Equipment Operators	Derricks, On Building Work	\$87.82	7A	11H	8X	View
Power Equipment Operators	Dozers D-9 & Under	\$85.27	15J	11G	8X	View
Power Equipment Operators	Drill Oilers: Auger Type, Truck Or Crane Mount	\$85.27	15J	11G	8X	View
Power Equipment Operators	Drilling Machine	\$87.59	15J	11G	8X	View
Power Equipment Operators	Elevator and man-lift: permanent and shaft type	\$81.51	15J	11G	8X	View

Power Equipment Operators	Finishing Machine, Bidwell And Gamaco & Similar Equipment	\$85.93	15J	11G	8X	View
Power Equipment Operators	Forklift: 3000 lbs and over with attachments	\$85.27	15J	11G	8X	View
Power Equipment Operators	Forklifts: under 3000 lbs. with attachments	\$81.51	15J	11G	8X	View
Power Equipment Operators	Grade Engineer: Using Blue Prints, Cut Sheets, Etc	\$85.93	15J	11G	8X	View
Power Equipment Operators	Gradechecker/Stakeman	\$81.51	15J	11G	8X	View
Power Equipment Operators	Guardrail Punch	\$85.93	15J	11G	8X	View
Power Equipment Operators	Hard Tail End Dump Articulating Off-Road Equipment 45 Yards. & Over	\$86.69	15J	11G	8X	View
Power Equipment Operators	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	\$85.93	15J	11G	8X	View
Power Equipment Operators	Horizontal/Directional Drill Locator	\$85.27	15J	11G	8X	View
Power Equipment Operators	Horizontal/Directional Drill Operator	\$85.93	15J	11G	8X	View
Power Equipment Operators	Hydralifts/Boom Trucks Over 10 Tons	\$86.36	7A	11H	8X	View

Power Equipment Operators	Hydralifts/boom trucks: 10 tons and under	\$82.59	7A	11H	8X	View
Power Equipment Operators	Leverman	\$88.47	15J	11G	8X	View
Power Equipment Operators	Loader, Overhead, 6 Yards. But Not Including 8 Yards	\$86.69	15J	11G	8X	View
Power Equipment Operators	Loaders, Overhead Under 6 Yards	\$85.93	15J	11G	8X	View
Power Equipment Operators	Loaders, Plant Feed	\$85.93	15J	11G	8X	View
Power Equipment Operators	Loaders: Elevating Type Belt	\$85.27	15J	11G	8X	View
Power Equipment Operators	Locomotives, All	\$85.93	15J	11G	8X	View
Power Equipment Operators	Material Transfer Device	\$85.93	15J	11G	8X	View
Power Equipment Operators	Mechanics: All (Leadmen - \$0.50 per hour over mechanic)	\$87.59	15J	11G	8X	View
Power Equipment Operators	Motor Patrol Graders	\$86.69	15J	11G	8X	View
Power Equipment Operators	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	\$86.69	15J	11G	8X	View

Power Equipment Operators	Oil Distributors, Blower Distribution & Mulch Seeding Operator	\$81.51	15J	11G	8X	View
Power Equipment Operators	Outside Hoists (Elevators and Manlifts), Air Tuggers, Strato	\$85.27	15J	11G	8X	View
Power Equipment Operators	Overhead, bridge type Crane: 20 tons through 44 tons	\$87.03	7A	11H	8X	View
Power Equipment Operators	Overhead, bridge type: 100 tons and over	\$88.67	7A	11H	8X	View
Power Equipment Operators	Overhead, bridge type: 45 tons through 99 tons	\$87.82	7A	11H	8X	View
Power Equipment Operators	Pavement Breaker	\$81.51	15J	11G	8X	View
Power Equipment Operators	Pile Driver (other Than Crane Mount)	\$85.93	15J	11G	8X	View
Power Equipment Operators	Plant Oiler - Asphalt, Crusher	\$85.27	15J	11G	8X	View
Power Equipment Operators	Posthole Digger, Mechanical	\$81.51	15J	11G	8X	View
Power Equipment Operators	Power Plant	\$81.51	15J	11G	8X	View
Power Equipment Operators	Pumps - Water	\$81.51	15J	11G	8X	View

Power Equipment Operators	Quad 9, Hd 41, D10 And Over	\$86.69	15J	11G	8X	View
Power Equipment Operators	Quick Tower: no cab, under 100 feet in height base to boom	\$85.93	15J	11G	8X	View
Power Equipment Operators	Remote Control Operator On Rubber Tired Earth Moving Equipment	\$86.69	15J	11G	8X	View
Power Equipment Operators	Rigger and Bellman	\$82.59	7A	11H	8X	View
Power Equipment Operators	Rigger/Signal Person, Bellman(Certified)	\$86.36	7A	11H	8X	View
Power Equipment Operators	Rollagon	\$86.69	15J	11G	8X	View
Power Equipment Operators	Roller, Other Than Plant Mix	\$81.51	15J	11G	8X	View
Power Equipment Operators	Roller, Plant Mix Or Multi-lift Materials	\$85.27	15J	11G	8X	View
Power Equipment Operators	Roto-mill, Roto-grinder	\$85.93	15J	11G	8X	View
Power Equipment Operators	Saws - Concrete	\$85.27	15J	11G	8X	View
Power Equipment Operators	Scraper, Self Propelled Under 45 Yards	\$85.93	15J	11G	8X	View

Power Equipment Operators	Scrapers - Concrete & Carry All	\$85.27	15J	11G	8X	View
Power Equipment Operators	Scrapers, Self-propelled: 45 Yards And Over	\$86.69	15J	11G	8X	View
Power Equipment Operators	Service Engineers: Equipment	\$85.27	15J	11G	8X	View
Power Equipment Operators	Shotcrete/Gunite Equipment	\$81.51	15J	11G	8X	View
Power Equipment Operators	Shovel, Excavator, Backhoe, Tractors Under 15 Metric Tons	\$85.27	15J	11G	8X	View
Power Equipment Operators	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	\$86.69	15J	11G	8X	View
Power Equipment Operators	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	\$85.93	15J	11G	8X	View
Power Equipment Operators	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	\$87.59	15J	11G	8X	View
Power Equipment Operators	Shovel, Excavator, Backhoes: Over 90 Metric Tons	\$88.47	15J	11G	8X	View
Power Equipment Operators	Slipform Pavers	\$86.69	15J	11G	8X	View
Power Equipment Operators	Spreader, Topsider & Screedman	\$86.69	15J	11G	8X	View

Power Equipment Operators	Subgrader Trimmer	\$85.93	15J	11G	8X	View
Power Equipment Operators	Tower Bucket Elevators	\$85.27	15J	11G	8X	View
Power Equipment Operators	Tower Crane: over 175' through 250' in height, base to boom	\$89.60	7A	11H	8X	View
Power Equipment Operators	Tower crane: up to 175' in height base to boom	\$88.67	7A	11H	8X	View
Power Equipment Operators	Tower Cranes: over 250' in height from base to boom	\$90.46	7A	11H	8X	View
Power Equipment Operators	Transporters, All Track Or Truck Type	\$86.69	15J	11G	8X	View
Power Equipment Operators	Trenching Machines	\$85.27	15J	11G	8X	View
Power Equipment Operators	Truck Crane Oiler/Driver: 100 tons and over	\$87.03	7A	11H	8X	View
Power Equipment Operators	Truck crane oiler/driver: under 100 tons	\$86.36	7A	11H	8X	View
Power Equipment Operators	Truck Mount Portable Conveyor	\$85.93	15J	11G	8X	View
Power Equipment Operators	Vac Truck (Vactor Guzzler, Hydro Excavator)	\$85.93	15J	11G	8X	View

Power Equipment Operators	Welder	\$86.69	15J	11G	8X	View
Power Equipment Operators	Wheel Tractors, Farmall Type	\$81.51	15J	11G	8X	View
Power Equipment Operators	Yo Yo Pay Dozer	\$85.93	15J	11G	8X	View
Power Equipment Operators- Underground Sewer & Water	Asphalt Plant Operators	\$86.69	15J	11G	8X	View
Power Equipment Operators- Underground Sewer & Water	Assistant Engineer	\$81.51	15J	11G	8X	View
Power Equipment Operators- Underground Sewer & Water	Barrier Machine (zipper)	\$85.93	15J	11G	8X	View
Power Equipment Operators- Underground Sewer & Water	Batch Plant Operator, Concrete	\$85.93	15J	11G	8X	View
Power Equipment Operators- Underground Sewer & Water	Boat Operator	\$87.82	7A	11H	8X	View
Power Equipment Operators- Underground Sewer & Water	Bobcat	\$81.51	15J	11G	8X	View
Power Equipment Operators- Underground Sewer & Water	Brokk - Remote Demolition Equipment	\$81.51	15J	11G	8X	View

<u>Power Equipment Operators- Underground Sewer & Water</u>	Brooms	\$81.51	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Bump Cutter	\$85.93	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Cableways	\$86.69	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Chipper	\$85.93	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Compressor	\$81.51	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Concrete Finish Machine - Laser Screed	\$81.51	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure	\$85.27	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Concrete Pump: Truck Mount With Boom Attachment Over 42 M	\$86.69	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	\$85.93	15J	11G	8X	View

<u>Power Equipment Operators- Underground Sewer & Water</u>	Conveyors	\$85.27	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Cranes Friction: 200 tons and over	\$90.46	7A	11H	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Cranes, A-frame: 10 tons and under	\$82.59	7A	11H	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Cranes: 100 tons through 199 tons, or 150' of boom (including jib with attachments)	\$88.67	7A	11H	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Cranes: 20 tons through 44 tons with attachments	\$87.03	7A	11H	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Cranes: 200 tons- 299 tons, or 250' of boom including jib with attachments	\$89.60	7A	11H	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Cranes: 300 tons and over or 300' of boom including jib with attachments	\$90.46	7A	11H	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Cranes: 45 tons through 99 tons, under 150' of boom(including jib with attachments)	\$87.82	7A	11H	8X	View

<u>Power Equipment Operators- Underground Sewer & Water</u>	Cranes: Friction cranes through 199 tons	\$89.60	7A	11H	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Cranes: through 19 tons with attachments, a-frame over 10 tons	\$86.36	7A	11H	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Crusher	\$85.93	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Deck Engineer/Deck Winches (power)	\$85.93	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Derricks, On Building Work	\$87.82	7A	11H	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Dozers D-9 & Under	\$85.27	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Drill Oilers: Auger Type, Truck Or Crane Mount	\$85.27	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Drilling Machine	\$87.59	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Elevator and man-lift: permanent and shaft type	\$81.51	15J	11G	8X	View

<u>Power Equipment Operators- Underground Sewer & Water</u>	Finishing Machine, Bidwell And Gamaco & Similar Equipment	\$85.93	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Forklift: 3000 lbs and over with attachments	\$85.27	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Forklifts: under 3000 lbs. with attachments	\$81.51	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Grade Engineer: Using Blue Prints, Cut Sheets, Etc	\$85.93	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Gradechecker/Stakeman	\$81.51	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Guardrail Punch	\$85.93	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	\$86.69	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Hard Tail End Dump Articulating Off- road Equipment Under 45 Yards	\$85.93	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Horizontal/Directional Drill Locator	\$85.27	15J	11G	8X	View

<u>Power Equipment Operators- Underground Sewer & Water</u>	Horizontal/Directional Drill Operator	\$85.93	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Hydralifts/boom trucks: 10 tons and under	\$82.59	7A	11H	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Hydralifts/boom trucks: over 10 tons	\$86.36	7A	11H	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Leverman	\$88.47	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Loader, Overhead, 6 Yards. But Not Including 8 Yards	\$86.69	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Loaders, Overhead Under 6 Yards	\$85.93	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Loaders, Plant Feed	\$85.93	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Loaders: Elevating Type Belt	\$85.27	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Locomotives, All	\$85.93	15J	11G	8X	View

<u>Power Equipment Operators- Underground Sewer & Water</u>	Material Transfer Device	\$85.93	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Mechanics: All (Leadmen - \$0.50 per hour over mechanic)	\$87.59	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Motor Patrol Graders	\$86.69	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	\$86.69	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Oil Distributors, Blower Distribution & Mulch Seeding Operator	\$81.51	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Outside Hoists (Elevators and Manlifts), Air Tuggers, Strato	\$85.27	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Overhead, bridge type Crane: 20 tons through 44 tons	\$87.03	7A	11H	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Overhead, bridge type: 100 tons and over	\$88.67	7A	11H	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Overhead, bridge type: 45 tons through 99 tons	\$87.82	7A	11H	8X	View

<u>Power Equipment Operators- Underground Sewer & Water</u>	Pavement Breaker	\$81.51	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Pile Driver (other Than Crane Mount)	\$85.93	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Plant Oiler - Asphalt, Crusher	\$85.27	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Posthole Digger, Mechanical	\$81.51	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Power Plant	\$81.51	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Pumps - Water	\$81.51	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Quad 9, Hd 41, D10 And Over	\$86.69	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Quick Tower: no cab, under 100 feet in height base to boom	\$85.93	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Remote Control Operator On Rubber Tired Earth Moving Equipment	\$86.69	15J	11G	8X	View

<u>Power Equipment Operators- Underground Sewer & Water</u>	Rigger and Bellman	\$82.59	7A	11H	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Rigger/Signal Person, Bellman(Certified)	\$86.36	7A	11H	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Rollagon	\$86.69	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Roller, Other Than Plant Mix	\$81.51	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Roller, Plant Mix Or Multi-lift Materials	\$85.27	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Roto-mill, Roto-grinder	\$85.93	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Saws - Concrete	\$85.27	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Scraper, Self Propelled Under 45 Yards	\$85.93	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Scrapers - Concrete & Carry All	\$85.27	15J	11G	8X	View

<u>Power Equipment Operators- Underground Sewer & Water</u>	Scrapers, Self-propelled: 45 Yards And Over	\$86.69	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Shotcrete/Gunite Equipment	\$81.51	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Shovel, Excavator, Backhoe, Tractors Under 15 Metric Tons	\$85.27	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	\$86.69	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	\$85.93	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	\$87.59	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Shovel, Excavator, Backhoes: Over 90 Metric Tons	\$88.47	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Slipform Pavers	\$86.69	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Spreader, Topsider & Screedman	\$86.69	15J	11G	8X	View

<u>Power Equipment Operators- Underground Sewer & Water</u>	Subgrader Trimmer	\$85.93	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Tower Bucket Elevators	\$85.27	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Tower Crane: over 175' through 250' in height, base to boom	\$89.60	7A	11H	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Tower crane: up to 175' in height base to boom	\$88.67	7A	11H	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Tower Cranes: over 250' in height from base to boom	\$90.46	7A	11H	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Transporters, All Track Or Truck Type	\$86.69	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Trenching Machines	\$85.27	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Truck Crane Oiler/Driver: 100 tons and over	\$87.03	7A	11H	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Truck crane oiler/driver: under 100 tons	\$86.36	7A	11H	8X	View

<u>Power Equipment Operators- Underground Sewer & Water</u>	Truck Mount Portable Conveyor	\$85.93	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Vac Truck (Vactor Guzzler, Hydro Excavator)	\$85.93	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Welder	\$86.69	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Wheel Tractors, Farmall Type	\$81.51	15J	11G	8X	View
<u>Power Equipment Operators- Underground Sewer & Water</u>	Yo Yo Pay Dozer	\$85.93	15J	11G	8X	View
<u>Power Line Clearance Tree Trimmers</u>	Journey Level In Charge	\$64.20	5A	4A		View
<u>Power Line Clearance Tree Trimmers</u>	Spray Person	\$60.74	5A	4A		View
<u>Power Line Clearance Tree Trimmers</u>	Tree Equipment Operator	\$64.20	5A	4A		View
<u>Power Line Clearance Tree Trimmers</u>	Tree Trimmer	\$57.29	5A	4A		View
<u>Power Line Clearance Tree Trimmers</u>	Tree Trimmer Groundperson	\$43.05	5A	4A		View
<u>Refrigeration & Air Conditioning Mechanics</u>	Journey Level	\$95.46	5A	1G		View

Residential Brick Mason	Journey Level	\$32.30		1	View
Residential Carpenters	Journey Level	\$32.48		1	View
Residential Cement Masons	Journey Level	\$20.67		1	View
Residential Drywall Applicators	Journey Level	\$51.52	15J	4C	View
Residential Drywall Tapers	Journey Level	\$34.10		1	View
Residential Electricians	Journey Level	\$47.21	7F	1D	View
Residential Glaziers	Journey Level	\$56.50	7L	1H	View
Residential Insulation Applicators	Journey Level	\$23.91		1	View
Residential Laborers	Journey Level	\$23.64		1	View
Residential Marble Setters	Journey Level	\$32.30		1	View
Residential Painters	Journey Level	\$24.50		1	View
Residential Plumbers & Pipefitters	Journey Level	\$57.55	5A	1G	View

Residential Refrigeration & Air Conditioning Mechanics	Journey Level	\$102.92	7F	1E	View
Residential Sheet Metal Workers	Journey Level	\$24.60		1	View
Residential Soft Floor Layers	Journey Level	\$30.31		1	View
Residential Sprinkler Fitters (Fire Protection)	Journey Level	\$37.16		1	View
Residential Stone Masons	Journey Level	\$32.30		1	View
Residential Terrazzo Workers	Journey Level	\$32.30		1	View
Residential Terrazzo/Tile Finishers	Journey Level	\$35.85		1	View
Residential Tile Setters	Journey Level	\$32.30		1	View
<u>Roofers</u>	Journey Level	\$67.45	5A	3H	View
<u>Roofers</u>	Using Irritable Bituminous Materials	\$70.45	5A	3H	View
<u>Sheet Metal Workers</u>	Journey Level (Field or Shop)	\$99.46	7F	1E	View
Shipbuilding & Ship Repair	New Construction Boilermaker	\$58.93	7X	4J	View

Shipbuilding & Ship Repair	New Construction Carpenter	\$51.85	7X	4J	View
Shipbuilding & Ship Repair	New Construction Crane Operator	\$43.00	7V	1	View
Shipbuilding & Ship Repair	New Construction Electrician	\$58.98	7X	4J	View
Shipbuilding & Ship Repair	New Construction Heat & Frost Insulator	\$91.81	15H	11C	View
Shipbuilding & Ship Repair	New Construction Laborer	\$58.60	7X	4J	View
Shipbuilding & Ship Repair	New Construction Machinist	\$58.79	7X	4J	View
Shipbuilding & Ship Repair	New Construction Operating Engineer	\$43.00	7V	1	View
Shipbuilding & Ship Repair	New Construction Painter	\$58.72	7X	4J	View
Shipbuilding & Ship Repair	New Construction Pipefitter	\$59.07	7X	4J	View
Shipbuilding & Ship Repair	New Construction Rigger	\$58.93	7X	4J	View
Shipbuilding & Ship Repair	New Construction Sheet Metal	\$58.68	7X	4J	View
Shipbuilding & Ship Repair	New Construction Shipwright	\$51.85	7X	4J	View

Shipbuilding & Ship Repair	New Construction Warehouse/Teamster	\$43.00	7V	1	View
Shipbuilding & Ship Repair	New Construction Welder / Burner	\$58.93	7X	4J	View
Shipbuilding & Ship Repair	Ship Repair Boilermaker	\$58.93	7X	4J	View
Shipbuilding & Ship Repair	Ship Repair Carpenter	\$51.85	7X	4J	View
Shipbuilding & Ship Repair	Ship Repair Crane Operator	\$45.06	7Y	4K	View
Shipbuilding & Ship Repair	Ship Repair Electrician	\$58.98	7X	4J	View
Shipbuilding & Ship Repair	Ship Repair Heat & Frost Insulator	\$91.81	15H	11C	View
Shipbuilding & Ship Repair	Ship Repair Laborer	\$58.60	7X	4J	View
Shipbuilding & Ship Repair	Ship Repair Machinist	\$58.79	7X	4J	View
Shipbuilding & Ship Repair	Ship Repair Operating Engineer	\$45.06	7Y	4K	View
Shipbuilding & Ship Repair	Ship Repair Painter	\$58.72	7X	4J	View
Shipbuilding & Ship Repair	Ship Repair Pipefitter	\$59.07	7X	4J	View

Shipbuilding & Ship Repair	Ship Repair Rigger	\$58.93	7X	4J	View
Shipbuilding & Ship Repair	Ship Repair Sheet Metal	\$58.68	7X	4J	View
Shipbuilding & Ship Repair	Ship Repair Shipwright	\$51.85	7X	4J	View
Shipbuilding & Ship Repair	Ship Repair Warehouse / Teamster	\$45.06	7Y	4K	View
<u>Sign Makers & Installers (Electrical)</u>	Journey Level	\$16.66		1	View
<u>Sign Makers & Installers (Non-Electrical)</u>	Journey Level	\$16.66		1	View
<u>Soft Floor Layers</u>	Journey Level	\$63.29	15J	4C	View
<u>Solar Controls For Windows</u>	Journey Level	\$16.66		1	View
<u>Sprinkler Fitters (Fire Protection)</u>	Journey Level	\$98.99	5C	1X	View
<u>Stage Rigging Mechanics (Non Structural)</u>	Journey Level	\$16.66		1	View
<u>Stone Masons</u>	Journey Level	\$71.82	7E	1N	View
<u>Street And Parking Lot Sweeper Workers</u>	Journey Level	\$16.66		1	View

Surveyors	Assistant Construction Site Surveyor	\$86.36	7A	11H	8X	View
Surveyors	Chainman	\$82.59	7A	11H	8X	View
Surveyors	Construction Site Surveyor	\$87.82	7A	11H	8X	View
Surveyors	Drone Operator (when used in conjunction with survey work only)	\$82.59	7A	11H	8X	View
Surveyors	Ground Penetrating Radar Operator	\$82.59	7A	11H	8X	View
Telecommunication Technicians	Telecom Technician Journey Level	\$58.51	5B	1B		View
Telephone Line Construction - Outside	Cable Splicer	\$41.35	5A	2B		View
Telephone Line Construction - Outside	Hole Digger/Ground Person	\$27.31	5A	2B		View
Telephone Line Construction - Outside	Telephone Equipment Operator (Light)	\$34.53	5A	2B		View
Telephone Line Construction - Outside	Telephone Lineperson	\$39.07	5A	2B		View
Terrazzo Workers	Journey Level	\$67.51	7E	1N		View

<u>Tile Setters</u>	Journey Level	\$65.51	7E	1N	View
<u>Tile, Marble & Terrazzo Finishers</u>	Finisher	\$56.34	7E	1N	View
<u>Traffic Control Stripers</u>	All cleanup required in connection with traffic control stripers work (Group 1)	\$92.44	15L	1K	View
<u>Traffic Control Stripers</u>	Handling, painting and installing of all car stops, stop signs and any other type sign (Group 2)	\$62.69	15L	1K	View
<u>Traffic Control Stripers</u>	Installation of guard rail and posts and similar protective devices (Group 2)	\$62.69	15L	1K	View
<u>Traffic Control Stripers</u>	Installation of parking gates, ticket spitters and other mechanical and automatic control devices (Group 2)	\$62.69	15L	1K	View
<u>Traffic Control Stripers</u>	Installation of plastic metal or composition button, or lines used instead of paint (Group 1)	\$92.44	15L	1K	View

Traffic Control Stripers	Line removal; chemical sand and hydro-blast, paint and button (Group 1)	\$92.44	15L	1K		View
Traffic Control Stripers	Manufacturing and installation of all car stops and control devices and similar traffic regulators (Group 2)	\$62.69	15L	1K		View
Traffic Control Stripers	Manufacturing, painting, stenciling, servicing, repairing, placing and removal of traffic safety and control devices/barricades (Group 2)	\$62.69	15L	1K		View
Traffic Control Stripers	Painting and installing lines, arrows, bumpers, curbs, etc., on parking lots, air fields, highways, game courts (Group 1)	\$92.44	15L	1K		View
Traffic Control Stripers	Preparation and maintenance of all surfaces (Group 1)	\$92.44	15L	1K		View
Traffic Control Stripers	Seal coating, slurry coating and other surface protection (Group 2)	\$62.69	15L	1K		View
Truck Drivers	Asphalt Mix Over 16 Yards	\$78.65	15J	11M	8L	View

<u>Truck Drivers</u>	Asphalt Mix To 16 Yards	\$77.81	15J	11M	8L	View
<u>Truck Drivers</u>	Dump Truck	\$77.81	15J	11M	8L	View
<u>Truck Drivers</u>	Dump Truck & Trailer	\$78.65	15J	11M	8L	View
<u>Truck Drivers</u>	Other Trucks	\$78.65	15J	11M	8L	View
<u>Truck Drivers - Ready Mix</u>	Transit Mix	\$78.65	15J	11M	8L	View
<u>Well Drillers & Irrigation Pump Installers</u>	Irrigation Pump Installer	\$16.66		1		View
<u>Well Drillers & Irrigation Pump Installers</u>	Oiler	\$16.66		1		View
<u>Well Drillers & Irrigation Pump Installers</u>	Well Driller	\$16.66		1		View

Overtime Codes

Overtime calculations are based on the hourly rate actually paid to the worker. On public works projects, the hourly rate must be not less than the prevailing rate of wage minus the hourly rate of the cost of fringe benefits actually provided for the worker.

1. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.
 - B. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
 - C. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
 - D. The first two (2) hours before or after a five-eight (8) hour workweek day or a four-ten (10) hour workweek day and the first eight (8) hours worked the next day after either workweek shall be paid at one and one-half times the hourly rate of wage. All additional hours worked and all worked on Sundays and holidays shall be paid at double the hourly rate of wage.
 - E. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
 - F. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours worked, except Labor Day, shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.
 - G. The first ten (10) hours worked on Saturdays and the first ten (10) hours worked on a fifth calendar weekday in a four-ten hour schedule, shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day Monday through Saturday and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
 - H. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions or equipment breakdown) shall be paid at one and one-half times the hourly rate of wage. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
 - I. All hours worked on Sundays and holidays shall also be paid at double the hourly rate of wage.
 - J. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked over ten (10) hours Monday through Saturday, Sundays and holidays shall be paid at double the hourly rate of wage.
 - K. All hours worked on Saturdays and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.
 - M. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

Overtime Codes Continued

1. N. All hours worked on Saturdays (except makeup days) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
- O. The first ten (10) hours worked on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays, holidays and after twelve (12) hours, Monday through Friday and after ten (10) hours on Saturday shall be paid at double the hourly rate of wage.
- P. All hours worked on Saturdays (except makeup days if circumstances warrant) and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.
- Q. The first two (2) hours after eight (8) regular hours Monday through Friday and up to ten (10) hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day Monday through Saturday and all hours worked on Sundays and holidays (except Christmas day) shall be paid at double the hourly rate of wage. All hours worked on Christmas day shall be paid at two and one-half times the hourly rate of wage.
- R. All hours worked on Sundays and holidays shall be paid at two times the hourly rate of wage.
- U. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays (except Labor Day) shall be paid at two times the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.
- V. All hours worked on Sundays and holidays (except Thanksgiving Day and Christmas day) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Thanksgiving Day and Christmas day shall be paid at double the hourly rate of wage.
- W. All hours worked on Saturdays and Sundays (except make-up days due to conditions beyond the control of the employer)) shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.
- X. The first four (4) hours after eight (8) regular hours Monday through Friday and the first twelve (12) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked over twelve (12) hours Monday through Saturday, Sundays and holidays shall be paid at double the hourly rate of wage. When holiday falls on Saturday or Sunday, the day before Saturday, Friday, and the day after Sunday, Monday, shall be considered the holiday and all work performed shall be paid at double the hourly rate of wage.
- Y. All hours worked outside the hours of 5:00 am and 5:00 pm (or such other hours as may be agreed upon by any employer and the employee) and all hours worked in excess of eight (8) hours per day (10 hours per day for a 4 x 10 workweek) and on Saturdays and holidays (except labor day) shall be paid at one and one-half times the hourly rate of wage. (except for employees who are absent from work without prior approval on a scheduled workday during the workweek shall be paid at the straight-time rate until they have worked 8 hours in a day (10 in a 4 x 10 workweek) or 40 hours during that workweek.) All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and Labor Day shall be paid at double the hourly rate of wage.
- Z. All hours worked on Saturdays and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid the straight time rate of pay in addition to holiday pay.

Overtime Codes Continued

2. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.
- B. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage.
- F. The first eight (8) hours worked on holidays shall be paid at the straight hourly rate of wage in addition to the holiday pay. All hours worked in excess of eight (8) hours on holidays shall be paid at double the hourly rate of wage.
- M. This code appears to be missing. All hours worked on Saturdays, Sundays and holidays shall be paid at double the hourly rate of wage.
- R. All hours worked on Sundays and holidays and all hours worked over sixty (60) in one week shall be paid at double the hourly rate of wage.
- U. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked over 12 hours in a day or on Sundays and holidays shall be paid at double the hourly rate of wage.
3. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.
- F. All hours worked on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sunday shall be paid at two times the hourly rate of wage. All hours worked on paid holidays shall be paid at two and one-half times the hourly rate of wage including holiday pay.
- H. All work performed on Sundays between March 16th and October 14th and all Holidays shall be compensated for at two (2) times the regular rate of pay. Work performed on Sundays between October 15th and March 15th shall be compensated at one and one half (1-1/2) times the regular rate of pay.
- J. All hours worked between the hours of 10:00 pm and 5:00 am, Monday through Friday, and all hours worked on Saturdays shall be paid at a one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
- K. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal 5 am to 6pm shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage. All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays, and all hours worked in excess of twelve (12) hours in a single shift shall be paid at double the hourly rate of wage.

After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more. When an employee returns to work without at least eight (8) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the eight (8) hours rest period.

Overtime Codes Continued

4. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

- A. All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at double the hourly rate of wage. All hours worked on Saturdays, Sundays and holidays shall be paid at double the hourly rate of wage
- C. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay. On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay, except that if the job is down on Monday through Friday due to weather conditions or other conditions outside the control of the employer, the first ten (10) hours on Saturday may be worked at the straight time rate of pay. All hours worked over twelve (12) hours in a day and all hours worked on Sunday and Holidays shall be paid at two (2) times the straight time rate of pay.
- D. All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at double the hourly rate of wage. All hours worked on Saturday, Sundays and holidays shall be paid at double the hourly rate of pay. Rates include all members of the assigned crew.

EXCEPTION:

On all multipole structures and steel transmission lines, switching stations, regulating, capacitor stations, generating plants, industrial plants, associated installations and substations, except those substations whose primary function is to feed a distribution system, will be paid overtime under the following rates:

The first two (2) hours after eight (8) regular hours Monday through Friday of overtime on a regular workday, shall be paid at one and one-half times the hourly rate of wage. All hours in excess of ten (10) hours will be at two (2) times the hourly rate of wage. The first eight (8) hours worked on Saturday will be paid at one and one-half (1-1/2) times the hourly rate of wage. All hours worked in excess of eight (8) hours on Saturday, and all hours worked on Sundays and holidays will be at the double the hourly rate of wage.

All overtime eligible hours performed on the above described work that is energized, shall be paid at the double the hourly rate of wage.

- E. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

On a four-day, ten-hour weekly schedule, either Monday thru Thursday or Tuesday thru Friday schedule, all hours worked after ten shall be paid at double the hourly rate of wage. The Monday or Friday not utilized in the normal four-day, ten hour work week, and Saturday shall be paid at one and one half (1½) times the regular shift rate for the first eight (8) hours. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
- G. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
- I. The First eight (8) hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of eight (8) per day on Saturdays shall be paid at double the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

Overtime Codes Continued

4. J. The first eight (8) hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of eight (8) hours on a Saturday shall be paid at double the hourly rate of wage. All hours worked over twelve (12) in a day, and all hours worked on Sundays and Holidays shall be paid at double the hourly rate of wage.
- K. All hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage, so long as Saturday is the sixth consecutive day worked. All hours worked over twelve (12) in a day Monday through Saturday, and all hours worked on Sundays and Holidays shall be paid at double the hourly rate of wage.
- L. The first twelve (12) hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on a Saturday in excess of twelve (12) hours shall be paid at double the hourly rate of pay. All hours worked over twelve (12) in a day Monday through Friday, and all hours worked on Sundays shall be paid at double the hourly rate of wage. All hours worked on a holiday shall be paid at one and one-half times the hourly rate of wage, except that all hours worked on Labor Day shall be paid at double the hourly rate of pay.
- S. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, work performed in excess of (10) hours shall be paid at one and one half (1-1/2) times the hourly rate of pay. On Monday through Friday, work performed outside the normal work hours of 6:00 a.m. and 6:00 p.m. shall be paid at one and one-half (1-1/2) times the straight time rate, (except for special shifts or multiple shift operations).
- All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All work performed on Sundays and holidays shall be paid at double the hourly rate of wage. When an employee returns to work without at least eight (8) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.
- Multiple Shift Operations: When the first shift of a multiple shift (a two or three shift) operation is started at the basic straight time rate or at a specific overtime rate, all shifts of that day's operation shall be completed at that rate. Special Shifts: The Special Shift Premium is the basic hourly rate of pay plus \$2.00 an hour. When due to conditions beyond the control of the employer or when an owner (not acting as the contractor), a government agency or the contract specifications require more than four (4) hours of a special shift can only be performed outside the normal 6am to 6pm shift then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they shall be paid the special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday).
- U. The first four (4) hours after eight (8) regular hours Monday through Friday and the first twelve (12) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. (Except on makeup days if work is lost due to inclement weather, then the first eight (8) hours on Saturday may be paid the regular rate.) All hours worked over twelve (12) hours Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

Overtime Codes Continued

4. X. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage. Work performed outside the normal shift of 6 am to 6pm shall be paid at one and one-half the straight time rate, (except for special shifts or three shift operations). All work performed on Sundays and holidays shall be paid at double the hourly rate of wage. Shifts may be established when considered necessary by the Employer.

The Employer may establish shifts consisting of eight (8) or ten (10) hours of work (subject to WAC 296-127-022), that shall constitute a normal forty (40) hour work week. The Employer can change from a 5-eight to a 4-ten hour schedule or back to the other. All hours of work on these shifts shall be paid for at the straight time hourly rate. Work performed in excess of eight hours (or ten hours per day (subject to WAC 296-127-022) shall be paid at one and one-half the straight time rate.

When due to conditions beyond the control of the Employer, or when contract specifications require that work can only be performed outside the regular day shift, then by mutual agreement a special shift may be worked at the straight time rate, eight (8) hours work for eight (8) hours pay. The starting time shall be arranged to fit such conditions of work.

When an employee returns to work without at a break of eight (8) hours since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

Overtime Codes Continued

11. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

B After an employee has worked eight (8) hours, all additional hours worked shall be paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

C The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours worked, except Labor Day, and all hours on Sunday shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage. All non-overtime and non-holiday hours worked between 4:00 pm and 5:00 am, Monday through Friday, shall be paid at a premium rate of 15% over the hourly rate of wage.

D. All hours worked on Saturdays and holidays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays shall be paid at double the hourly rate of wage.

After an employee has worked eight (8) hours, all additional hours worked shall be paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

E. The first two (2) hours after eight (8) regular hours Monday through Friday, the first ten (10) hours on Saturday, and the first ten (10) hours worked on Holidays shall be paid at one and one-half times the hourly rate of wage. All hours worked over ten (10) hours Monday through Saturday, and Sundays shall be paid at double the hourly rate of wage.

After an employee has worked eight (8) hours, all additional hours worked shall be paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

Overtime Codes Continued

11. F. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
- On a four-day, ten-hour weekly schedule, either Monday thru Thursday or Tuesday thru Friday schedule, all hours worked after ten shall be paid at double the hourly rate of wage. The Monday or Friday not utilized in the normal four-day, ten hour work week, and Saturday shall be paid at one-half times the hourly rate of wage for the first eight (8) hours. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
- G. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal 5 am to 6pm shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage.
- All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays, and all hours worked in excess of twelve (12) hours in a single shift shall be paid at double the hourly rate of wage.
- After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of nine (9) hours or more. When an employee returns to work without at least nine (9) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the nine (9) hours rest period.
- H. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal 5 am to 6pm shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage.
- All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays, and all hours worked in excess of twelve (12) hours in a single shift shall be paid at double the hourly rate of wage.
- After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of ten (10) hours or more. When an employee returns to work without at least ten (10) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the ten (10) hours rest period.
- J. All hours worked on holidays shall be paid at double the hourly rate of wage.
- K. On Monday through Friday hours worked outside 4:00 am and 5:00 pm, and the first two (2) hours after eight (8) hours worked shall be paid at one and one-half times the hourly rate. All hours worked over 10 hours per day Monday through Friday, and all hours worked on Saturdays, Sundays, and Holidays worked shall be paid at double the hourly rate of wage.
- L. An employee working outside 5:00 am and 5:00 pm shall receive an additional two dollar (\$2.00) per hour for all hours worked that shift. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage.

Overtime Codes Continued

11. M. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay.
- Work performed outside the normal work hours of 5:00 a.m. and 6:00 p.m. shall be paid at one and one-half (1-1/2) times the straight time rate, (except for special shifts or multiple shift operations). When the first shift of a multiple shift (a two or three shift) operation is started at the basic straight time rate or at a specific overtime rate, all shifts of that day's operation shall be completed at that rate. When due to conditions beyond the control of the Employer or when contract specifications require that work can only be performed outside the regular day shift of 5:00 am to 6:00 pm, then a special shift may be worked at the straight time rate, plus the shift pay premium when applicable. The starting time of work will be arranged to fit such conditions of work. Such shift shall consist of eight (8) hours work for eight (8) hours pay or ten (10) hours work for ten (10) hours pay for four ten shifts.
- On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay. All work performed after 6:00 pm Saturday to 5:00 am Monday, all work performed over twelve (12) hours, and all work performed on holidays shall be paid at double the straight time rate of pay.
- Shift Pay Premium: In an addition to any overtime already required, all hours worked between the hours of 6:00 pm and 5:00 am shall receive an additional two dollars (\$2.00) per hour.
- N. All work performed over twelve hours in a shift and all work performed on Sundays and Holidays shall be paid at double the straight time rate.
- Any time worked over eight (8) hours on Saturday shall be paid double the straight time rate, except employees assigned to work six 10-hour shifts per week shall be paid double the straight time rate for any time worked on Saturday over 10 hours.
- O. All work performed on Saturdays, Sundays, and Holidays shall be paid at one and one half (1-1/2) times the straight time rate of pay.

Overtime Codes Continued

11. P. Work performed in excess of ten (10) hours of straight time per day when four ten (10) hour shifts are established and all work on Saturdays, except for make-up days shall be paid at time and one-half (1 ½) the straight time rate.
- Work performed outside the normal work hours of 5:00 a.m. and 6:00 p.m. shall be paid at one and one-half (1-1/2) times the straight time rate, (except for special shifts or multiple shift operations). When the first shift of multiple shift (a two or three shift) operation is started at the basic straight time rate or at a specific overtime rate, all shifts of that day's operation shall be completed at that rate. When due to conditions beyond the control of the Employer or when contract specifications require that work can only be performed outside the regular day shift of 5:00 a.m. to 6:00 p.m., then a special shift may be worked at the straight time rate, plus the shift pay premium when applicable. The starting time of work will be arranged to fit such conditions of work. Such shifts shall consist of eight (8) hours work for eight (8) hours pay or ten (10) hours work for ten (10) hours pay for four ten-hour shifts.
- In the event the job is down due to weather conditions, then Saturday may, be worked as a voluntary make-up day at the straight time rate. However, Saturday shall not be utilized as a make-up day when a holiday falls on Friday. All work performed on Sundays and holidays and work in excess of twelve (12) hours per day shall be paid at double (2x) the straight time rate of pay.
- After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.
- When an employee returns to work without a break of eight (8) hours since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.
- Q. All hours worked between the hours of 6:00 pm and 6:00 am, Monday through Saturday, shall be paid at a premium rate of 35% over the hourly rate of wage. Work performed on Sundays shall be paid at double time. All hours worked on holidays shall be paid at double the hourly rate of wage.
- R. On Monday through Saturday hours worked outside 6:00 am and 7:00 pm, and all hours after eight (8) hours worked shall be paid at one and one-half times the hourly rate. All hours worked on Sundays and Holidays shall be paid at double the hourly rate of wage.
- When a holiday falls on a Saturday, the Friday before shall be the observed holiday. When a holiday falls on a Sunday, the following Monday shall be the observed holiday.
- S. The first ten (10) hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. In the event the job is down due to weather conditions, or other conditions beyond the control of the Employer, then Saturday may be worked at the straight time rate, for the first eight (8) hours, or the first ten (10) hours when a four day ten hour workweek has been established.
- All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
- When an employee returns to work without a break of eight (8) hours since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

Benefit Code Key – Effective 3/5/2025 thru 8/30/2025

11. T. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay.
- On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay, except that if the job is down on Monday through Friday due to weather conditions or other conditions outside the control of the employer, the first ten (10) hours on Saturday may be worked at the straight time rate of pay.
- All hours worked over twelve (12) hours in a day and all hours worked on Sunday and Holidays shall be paid at two (2) times the straight time rate of pay.
- U. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay.
- On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay, except that if the job is down on Monday through Friday due to weather conditions or other conditions outside the control of the employer, the first ten (10) hours on Saturday may be worked at the straight time rate of pay.
- All hours worked over twelve (12) hours in a day and all hours worked on Sunday and Holidays shall be paid at two (2) times the straight time rate of pay.
- If, due to conditions beyond the control of the Employer or when contract specifications require that work can only be performed outside the regular day shift, then a Special Shift may be worked, Monday through Friday, at the straight-time rate. The starting time of work for the Special Shift will be arranged to fit such conditions of work. Such Special Shift shall consist of eight (8) hours of work for eight (8) hours of pay or ten (10) hours of work for ten(10) hours of pay on a four-ten workday schedule.

Holiday Codes

5. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, and Christmas Day (7).
- B. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, the day before Christmas, and Christmas Day (8).
- C. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).
- D. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8).
- H. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Day after Thanksgiving Day, And Christmas (6).

Holiday Codes Continued

5. I. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).
- K. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, The Day Before Christmas, And Christmas Day (9).
- L. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (8).
- N. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, The Friday After Thanksgiving Day, And Christmas Day (9).
- P. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday And Saturday After Thanksgiving Day, The Day Before Christmas, And Christmas Day (9). If A Holiday Falls On Sunday, The Following Monday Shall Be Considered As A Holiday.
- Q. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).
- R. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Day After Thanksgiving Day, One-Half Day Before Christmas Day, And Christmas Day. (7 1/2).
- S. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, And Christmas Day (7).
- Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).

Holiday Codes Continued

6. G. Paid Holidays: New Year's Day, Martin Luther King Jr. Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and Christmas Eve Day (11).
- H. Paid Holidays: New Year's Day, New Year's Eve Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, Christmas Day, The Day After Christmas, And A Floating Holiday (10).
- T. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Last Working Day Before Christmas Day, And Christmas Day (9).
- Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (7). If a holiday falls on Saturday, the preceding Friday shall be considered as the holiday. If a holiday falls on Sunday, the following Monday shall be considered as the holiday.

Holiday Codes Continued

7. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any Holiday Which Falls On A Sunday Shall Be Observed As A Holiday On The Following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.
- B. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- C. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- D. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8). Unpaid Holidays: President's Day. Any paid holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any paid holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- E. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- F. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the last working day before Christmas day and Christmas day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

Holiday Codes Continued

7. G. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.
- H. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- I. Holidays: New Year's Day, President's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Day Before Christmas Day And Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- J. Holidays: New Year's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

Holiday Codes Continued

7. K. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- L. Holidays: New Year's Day, Memorial Day, Labor Day, Independence Day, Thanksgiving Day, the Last Work Day before Christmas Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- N. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. When Christmas falls on a Saturday, the preceding Friday shall be observed as a holiday.
- P. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.
- Q. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.
- S. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Day, the Day after Christmas, and A Floating Holiday (9). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.
- V. Holidays: New Year's Day, President's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, the day before or after Christmas, and the day before or after New Year's Day. If any of the above listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.
- W. Holidays: New Year's Day, Day After New Year's, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Eve Day, Christmas Day, the day after Christmas, the day before New Year's Day, and a Floating Holiday.
- X. Holidays: New Year's Day, Day before or after New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and the day before or after Christmas day. If a holiday falls on a Saturday or on a Friday that is the normal day off, then the holiday will be taken on the last normal workday. If the holiday falls on a Monday that is the normal day off or on a Sunday, then the holiday will be taken on the next normal workday.
- Y. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day. (8) If the holiday falls on a Sunday, then the day observed by the federal government shall be considered a holiday and compensated accordingly.
- Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, Christmas Eve, and Christmas Day (9). Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday. Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

Holiday Codes Continued

15. G. New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, the last scheduled workday before Christmas, and Christmas Day (9). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.
- H. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- I. Holidays: New Year's Day, President's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Day Before Christmas Day And Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- J. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.
- K. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- L. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.
- M. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Eve Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.
- N. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.
- O. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, the day before Christmas day, and Christmas Day (10). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

Note Codes

8. D. Workers working with supplied air on hazmat projects receive an additional \$1.00 per hour.
- L. Workers on hazmat projects receive additional hourly premiums as follows -Level A: \$0.75, Level B: \$0.50, And Level C: \$0.25.
- M. Workers on hazmat projects receive additional hourly premiums as follows: Levels A & B: \$1.00, Levels C & D: \$0.50.
- N. Workers on hazmat projects receive additional hourly premiums as follows -Level A: \$1.00, Level B: \$0.75, Level C: \$0.50, And Level D: \$0.25.
- S. Effective August 31, 2012 – A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. This classification is only effective on or after August 31, 2012.
- T. Effective August 31, 2012 – A Traffic Control Laborer performs the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. This classification is only effective on or after August 31, 2012.
- U. Workers on hazmat projects receive additional hourly premiums as follows – Class A Suit: \$2.00, Class B Suit: \$1.50, And Class C Suit: \$1.00. Workers performing underground work receive an additional \$0.40 per hour for any and all work performed underground, including operating, servicing and repairing of equipment. The premium for underground work shall be paid for the entire shift worked. Workers who work suspended by a rope or cable receive an additional \$0.50 per hour. The premium for work suspended shall be paid for the entire shift worked. Workers who do “pioneer” work (break open a cut, build road, etc.) more than one hundred fifty (150) feet above grade elevation receive an additional \$0.50 per hour.
8. V. In addition to the hourly wage and fringe benefits, the following depth and enclosure premiums shall be paid. The premiums are to be calculated for the maximum depth and distance into an enclosure that a diver reaches in a day. The premiums are to be paid one time for the day and are not used in calculating overtime pay.
- Depth premiums apply to depths of fifty feet or more. Over 50' to 100' - \$2.00 per foot for each foot over 50 feet. Over 101' to 150' - \$3.00 per foot for each foot over 101 feet. Over 151' to 220' - \$4.00 per foot for each foot over 220 feet. Over 221' - \$5.00 per foot for each foot over 221 feet.
- Enclosure premiums apply when divers enter enclosures (such as pipes or tunnels) where there is no vertical ascent and is measured by the distance travelled from the entrance. 25' to 300' - \$1.00 per foot from entrance. 300' to 600' - \$1.50 per foot beginning at 300'. Over 600' - \$2.00 per foot beginning at 600'.
- W. Meter Installers work on single phase 120/240V self-contained residential meters. The Lineman/Groundmen rates would apply to meters not fitting this description.

Note Codes Continued

- X. Workers on hazmat projects receive additional hourly premiums as follows - Class A Suit: \$2.00, Class B Suit: \$1.50, Class C Suit: \$1.00, and Class D Suit: \$0.50. Special Shift Premium: Basic hourly rate plus \$2.00 per hour.

When due to conditions beyond the control of the Employer or when an owner (not acting as the contractor), a government agency or the contract specifications requires that work can only be performed outside the normal 5 am to 6pm shift, then the special shift premium will be applied to the basic hourly rate. When an employee works on a special shift, they shall be paid a special shift premium for each hour worked unless they are in OT or Double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

- Y. Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay.

Swinging Stage/Boatswains Chair: Employees working on a swinging state or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents (\$0.75) per hour above the classification rate.

- Z. Workers working with supplied air on hazmat projects receive an additional \$1.00 per hour.

Special Shift Premium: Basic hourly rate plus \$2.00 per hour. When due to conditions beyond the control of the Employer or when an owner (not acting as a contractor), a government agency or the contract specifications require that more than (4) hours of a special shift can only be performed outside the normal 6 am to 6pm shift, then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they will be paid a special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

Note Codes Continued

9. A. Workers working with supplied air on hazmat projects receive an additional \$1.00 per hour.

Special Shift Premium: Basic hourly rate plus \$2.00 per hour. When due to conditions beyond the control of the Employer or when an owner (not acting as the contractor), a government agency or the contract specifications require that more than four (4) hours of a special shift can only be performed outside the normal 6 am to 6pm shift, then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they shall be paid a special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

Certified Crane Operator Premium: Crane operators requiring certifications shall be paid \$0.50 per hour above their classification rate.

Boom Pay Premium: All cranes including tower shall be paid as follows based on boom length:

(A) – 130' to 199' – \$0.50 per hour over their classification rate.

(B) – 200' to 299' – \$0.80 per hour over their classification rate.

(C) – 300' and over – \$1.00 per hour over their classification rate.

Note Codes Continued

9. B. The highest pressure registered on the gauge for an accumulated time of more than fifteen (15) minutes during the shift shall be used in determining the scale paid.

Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay. Swinging Stage/Boatswains Chair: Employees working on a swinging stage or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents (\$0.75) per hour above the classification rate.

- C. Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay. Swinging Stage/Boatswains Chair: Employees working on a swinging stage or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents (\$0.75) per hour above the classification rate.

Effective August 31, 2012 – A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. A Traffic Control Laborer performs the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. These classifications are only effective on or after August 31, 2012.

- D. Industrial Painter wages are required for painting within industrial facilities such as treatment plants, pipelines, towers, dams, bridges, power generation facilities and manufacturing facilities such as chemical plants, etc., or anywhere abrasive blasting is necessary to prepare surfaces, or hazardous materials encapsulation is required.
- E. Heavy Construction includes construction, repair, alteration or additions to the production, fabrication or manufacturing portions of industrial or manufacturing plants, hydroelectric or nuclear power plants and atomic reactor construction. Workers on hazmat projects receive additional hourly premiums as follows -Level A: \$1.00, Level B: \$0.75, Level C: \$0.50, And Level D: \$0.25.
- F. Industrial Painter wages are required for painting within industrial facilities such as treatment plants, pipelines, towers, dams, power generation facilities and manufacturing facilities such as chemical plants, etc., or anywhere abrasive blasting is necessary to prepare surfaces, or hazardous materials encapsulation is required.
- H. One (1) person crew shall consist of a Party Chief. (Total Station or similar one (1) person survey system). Two (2) person survey party shall consist of a least a Party Chief and a Chain Person. Three (3) person survey party shall consist of at least a Party Chief, an Instrument Person, and a Chain Person.

Benefit Code Key – Effective 3/5/2025 thru 8/30/2025

9. I. In addition to the hourly wage and fringe benefits, the following depth and enclosure premiums shall be paid. The premiums are to be calculated for the maximum depth and distance into an enclosure that a diver reaches in a day. The premiums are to be paid one time for the day and are not used in calculating overtime pay.
- Depth premiums apply to depths of fifty feet or more. Over 50' to 100' - \$2.00 per foot for each foot over 50 feet. Over 101' to 150' - \$3.00 per foot for each foot over 101 feet. Over 151' to 220' - \$4.00 per foot for each foot over 220 feet. Over 221' - \$5.00 per foot for each foot over 221 feet.
- Enclosure premiums apply when divers enter enclosures (such as pipes or tunnels) where there is no vertical ascent and is measured by the distance travelled from the entrance. 25' to 300' - \$1.00 per foot from entrance. 300' to 600' - \$1.50 per foot beginning at 300'. Over 600' - \$2.00 per foot beginning at 600'.
- Employees may be required to perform any combination of work within the Diving team/crew, (with the exception of dive Supervisor) provided they are paid at the highest rate at which he/she has worked for the shift.
- L. Workers on hazmat projects receive additional hourly premiums as follows -Level A: \$0.75, Level B: \$0.50, And Level C: \$0.25.
- Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay.
- Swinging Stage/Boatswains Chair: Employees working on a swinging stage or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents (\$0.75) per hour above the classification rate.

APPENDIX B

**Contract, Contract Bond, and
Supporting Documents**

CONSTRUCTION CONTRACT AGREEMENT

THIS AGREEMENT, effective upon the date of mutual execution, is made and entered into between Skagit County, Washington, and _____, hereinafter called the Contractor.

WITNESSETH:

That in consideration of the terms and conditions contained herein and attached and made a part of this agreement, the parties hereto covenant and agree as follows:

- I. The Contractor shall do all work and furnish all tools, materials, equipment, and transportation required for the construction of _____ in accordance with and as described in the attached plans and specifications and the Washington State Department of Transportation *Standard Specifications for Road, Bridge, and Municipal Construction M 41-10 2025 edition*, which are by this reference incorporated herein and made a part hereof, and shall perform any changes to the work in accord with the Contract Documents.
- II. The Contractor shall provide and bear the expense of all equipment, work, and labor of any sort whatsoever that may be required for the transfer of materials and for constructing and completing the work provided for in this contract and every part thereof and shall guarantee said materials and work for a period of one year after substantial completion of this contract, except as may be modified by the plans, specifications and/or contract documents.
- III. Skagit County, Washington, hereby promises and agrees with the Contractor to retain and does retain the Contractor to provide the materials and to do and cause to be done the above-described work and to complete and finish the same according to the attached plans and specifications and the terms and conditions herein contained, and hereby contracts to pay for the same according to the attached specifications and the schedule of prices bid and hereto attached, at the time and in the manner and upon the conditions provided for in this contract.
- IV. The Contractor for himself/herself, and for his/her heirs, executors, administrators, successors, and assigns, does hereby agree to full performance of all covenants required of the Contractor in the contract.
- V. It is further provided that no liability shall attach to Skagit County by reason of entering into this contract, except as provided herein.

IN WITNESS WHEREOF the Contractor has executed this instrument on the day and year first below written, and the Authorized Official has caused this instrument to be executed by and in the name of Skagit County the day and year first above written.

CONTRACTOR

Signature _____

Mailing Address:

Printed _____

Title _____

Date _____

Telephone No. (____) ____-____

DATED this _____ day of _____, 2025.

**BOARD OF COUNTY COMMISSIONERS
SKAGIT COUNTY, WASHINGTON**

Lisa Janicki, Chair

Ron Wesen, Commissioner

Attest:

Peter Browning, Commissioner

Clerk of the Board

For contracts under \$5,000:
Authorization per Resolution R20030146

Recommended:

County Administrator

Department Head

Approved as to form:

Civil Deputy Prosecuting Attorney

Approved as to indemnification:

Risk Manager

Approved as to budget:

Budget & Finance Director

CONTRACT BOND

KNOW ALL MEN BY THESE PRESENTS, that Skagit County, a Municipal Corporation of Washington, has awarded

_____ of _____, as Principal, and _____ as Surety, are jointly and severally held and bound unto the County of Skagit in the penal sum of _____ (\$ _____), dollars, for the payment of which we jointly and severally bind ourselves, our heirs, executors, administrators, and assigns, and successors and assigns, firmly by these presents.

THE CONDITION of this bond is such that whereas, on the _____ day of _____ A.D., 2025, the said Principal, herein, executed a certain contract with the County of Skagit by the items, conditions and provisions of which contract the said _____, Principal, herein agree to furnish all material and do certain work, to wit: That _____ will undertake and complete the

2025 Waste Storage Facility Construction

according to the maps, plans and specifications made a part of said contract, which contract as so executed, is hereunto attached, is now referred to and by reference is incorporated herein and made a part hereof as fully for all purposes as if here set forth at length. The bond shall cover all approved change orders as if they were in the original contract.

NOW, THEREFORE, if the Principal herein shall faithfully and truly observe and comply with the terms, conditions and provisions of said contract in all respects and shall well and truly and fully do and perform all matters and things by _____ (principal) undertaken to be performed under said contract, upon the terms proposed therein, and within the time prescribed therein, and until the same is accepted, and shall pay all laborers, mechanics, subcontractors and material men, and all persons who shall supply such contractor or subcontractor with provisions and supplies for the carrying on of such work, and shall in all respects faithfully perform said contract according to law, then this obligation to be void, otherwise to remain in full force and effect.

WITNESS our hands this _____ day of _____, 2025.

(Principal)

Attorney-in-Fact, Surety

Name and Address
Local Office of Agent

APPROVED AS TO FORM
RICH WEYRICH
Skagit County Prosecuting Attorney

APPROVED AS TO FORM
BONNIE BEDDALL
Skagit County Risk Manager

BY: _____
Approving Authority

DATE: _____, 2025

SURETY BOND NUMBER

CONTRACT NUMBER



SKAGIT COUNTY PUBLIC WORKS DEPARTMENT

1800 Continental Place, Mount Vernon, WA 98273-5625
(360) 416-1400 FAX (360) 416-1405

DECLARATION OF OPTION FOR MANAGEMENT OF STATUTORY RETAINED PERCENTAGE

Note: This form must be submitted at the time the Contractor executes the contract. Contractor shall designate the option desired by checking the appropriate space.

Monies reserved under provisions of **Chapter 60.28 RCW**, at the option of the Contractor, shall be:

- ☐ 1. I hereby elect to have the retained percentage of this contract held in a fund by Skagit County in a non-interest bearing account.
- ☐ 2. I hereby elect to have Skagit County deposit the retained percentage of this contract in an interest bearing account, not subject to withdrawal until after final acceptance of the work.

I hereby further agree to open the interest-bearing account in a qualified financial institution. I further agree to provide instructions to the bank to provide Skagit County Public Works with a monthly account statement to the attention of the Project Manager. Prior to Skagit County depositing any funds into the account, the CONTRACTOR shall obtain a letter from the financial institution on their letterhead stating the account number and bank address and confirming they will not release any funds until authorized in writing by Skagit County.

- ☐ 3. I hereby elect to have Skagit County invest the retained percentage of this contract from time to time as such retained percentage accrues.

I hereby designate _____ as the repository for the escrow of said funds.

I hereby further agree to be fully responsible for payment of all costs or fees incurred as a result of placing said retained percentage in escrow and investing it as authorized by statute.

Skagit County shall not be liable in any way for any costs or fees in connection therewith. Prior to Skagit County investing any funds in an escrow account, the CONTRACTOR shall obtain an escrow agreement from the repository stating their acceptance of the account, the account number and a statement that they will not release any funds until authorized in writing by Skagit County. Additionally, Skagit County Public Works will require a monthly statement from the bank for the escrow account.

- ☐ 4. I hereby elect to obtain a Retainage Bond acceptable to Skagit County, and agree to provide the original bond to the County. I acknowledge that no retainage will be held by Skagit County from the CONTRACTOR when Skagit County has received an acceptable bond.

The Contractor in choosing option (2) or (3) agrees to assume full responsibility to pay all costs which may accrue from escrow services, brokerage charges or both, and further agrees to assume all risks in connection with the investment of the retained percentages in securities.

Company Name

Date

Authorized Signature

Title

Print Name

Phone Number

APPENDIX C

Proposal Forms

Proposal For Bidding Purposes

2025 Waste Storage Facility Construction Project #WA1206-140-6

SKAGIT COUNTY PUBLIC WORKS

Must be an approved contractor on the Municipal Research and Services Center (MRSC) Roster in order to Bid this project:

<http://www.mrscrosters.org>



**SKAGIT COUNTY
Public Works Department
1800 Continental Place
Mount Vernon, WA 98273**

BID PROPOSAL

2025 Waste Storage Facility Construction

Skagit County, Washington

2025

**** ENTIRE PROPOSAL TO BE RETURNED AS YOUR BID PACKAGE ****

MUST BE AN APPROVED CONTRACTOR ON THE MUNICIPAL RESEARCH AND SERVICES CENTER (MRSC) ROSTER IN ORDER TO BID THIS PROJECT:

<http://www.mrscrosters.org>

All bid envelopes must be plainly marked on the outside, "**Sealed Bid: Waste Storage Facility.**"

BID DUE DATE AND TIME: Wednesday, May 28, 2025 at 4:00 p.m.

Late and/or incomplete bids will not be considered. Oral, telephonic, telegraphic, electronic, or faxed proposals will not be accepted.

Sealed Bids will be accepted at the following location by one of the following delivery methods:

Bids May be Hand-Delivered or Mailed to:

Skagit County Commissioners Office
Attn: Reception Desk
1800 Continental Place
Mount Vernon, WA 98273

**FAILURE TO SIGN OR COMPLETE ALL INFORMATION ON THE FORMS PROVIDED CAN RESULT IN
REJECTION OF THE PROPOSAL AS NON-RESPONSIVE**

CONDITION OF AWARD:

It is the intent of Skagit County to award a contract to the low responsive and responsible bidder. All terms and conditions listed in the Contract Provisions and Specifications apply to this condition.

MANDATORY BIDDER CRITERIA:

Before award, the bidder must meet the following bidder responsibility criteria to be considered a responsible bidder. The bidder may be required by Skagit County to submit documentation demonstrating compliance with the criteria. The bidder must:

1. Have a current certificate of registration as a contractor in compliance with chapter 18.27 RCW, which must have been in effect at the time of bid submittal.
2. Have a current Washington Unified Business Identifier (UBI) number.
3. Have Industrial Insurance (workers' compensation) coverage for the bidder's employees working in Washington, as required in Title 51 RCW. Not applicable to sole proprietors if the owner performs work himself/herself.
4. Have a Washington Employment Security Department number (ESD), as required in Title 50 RCW **(and, if the lowest responsive and responsible bidder, provide documentation from ESD in the form of a letter or statement within 24 hours of submitting bid);**
5. Have a Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW;
6. Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065(3) and;
7. Not be excluded or suspended from bidding on any public works contract under federal laws.

SCHEDULE:

Contractor shall not commence work until notice to proceed has been given by Skagit County; this occurs after the Contract has been executed by Skagit County Board of County Commissioners.

PAYMENT:

Invoices can be submitted after work is performed. Payment is made when the Contractor has filed his/her "Intent to Pay Prevailing Wages" with the Washington State Department of Labor and Industries. Final payment is made when the Contractor has filed his/her "Affidavit of Paying Prevailing Wages".

FAILURE TO SIGN OR COMPLETE ALL INFORMATION ON THE FORMS PROVIDED CAN RESULT IN REJECTION OF THE PROPOSAL AS NON-RESPONSIVE

This certifies that the undersigned has examined the entire bid proposal and contract provisions and specifications for the:

2025 Waste Storage Facility Construction

and the contract governing the work embraced in this project, and the method by which payment will be made for said work, is understood. The undersigned hereby proposes to undertake and complete the work, or as much thereof as can be completed with the money available in accordance with the said description of work and contract, and the following schedule of rates and prices. Bidder acknowledges all requirements and signed all certificates contained herein. Bidder agrees to pay labor not less than the prevailing rates of wages in accordance with the requirements of the special provisions for this project.

2025 Waste Storage Facility Construction					
Item	Description	Qty.	Unit	Unit Price	Total Cost
1	Mobilization	1	Per Site	\$	\$
2	Site Preparation (grading, staging, fill, etc.)	1	LS	\$	\$
3	Fitzgerald Waste Storage Facility (labor, equipment, materials)	1	LS	\$	\$
Subtotal:					\$
Sales Tax (8.6%):					\$
Total:					\$

Please use ink, print legibly, and initial and date any changes, erasures, or cross-outs. All unit prices, when relevant, are mandatory and shall control.

FAILURE TO SIGN OR COMPLETE ALL INFORMATION ON THE FORMS PROVIDED CAN RESULT IN REJECTION OF THE PROPOSAL AS NON-RESPONSIVE
PROPOSAL – Signature Page

The bidder is hereby advised that by signature of this proposal he/she is deemed to have acknowledged all requirements and signed all certificates contained herein.

The undersigned hereby agrees to pay labor not less than the prevailing rates of wages in accordance with the requirements of the special provisions for this project.

A proposal guaranty in an amount, which is equal to five percent (5%) of the estimated bid amount, based upon the approximate estimate of above prices and in the form as indicated below is attached hereto:

- ☐ CASHIER'S CHECK In the amount of \$ _____ Dollars
- ☐ CERTIFIED CHECK In the amount of \$ _____ Dollars
(Payable to Skagit County)
- ☐ PROPOSAL BOND In the amount of five percent (5%) of the total estimated contract
amount.

If addendums have been issued:

Receipt is hereby acknowledged of Addendum(s) No.(s) _____

**S
I
G
N**

Signature of Authorized Official(s):

Firm Name: _____

Address: _____

Phone No. _____

State of Washington Contractor's License No. _____

UBI No. _____ Employment Security Department No. _____

Note:

- (1) This proposal form is not transferable and any alteration of the firm's name entered hereon without prior permission from the Skagit County will be cause for considering the proposal irregular and subsequent rejection of the bid.
- (2) Please refer to Section 1-02.6 of the Standard Specifications, "Preparation of Proposal", or "Article 4" of the Instruction to Bidders for building construction jobs.

**FAILURE TO SIGN OR COMPLETE ALL INFORMATION ON THE FORMS PROVIDED CAN RESULT IN
REJECTION OF THE PROPOSAL AS NON-RESPONSIVE**

NON-COLLUSION DECLARATION

I, by signing the proposal on page 5, hereby declare, under penalty of perjury under the laws of the United States that the following statements are true and correct:

1. That the undersigned person(s), firm, association or corporation has (have) not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the project for which this proposal is submitted.
2. That by signing the signature page of this proposal, I am deemed to have signed and have agreed to the provisions of this declaration.

NOTICE TO ALL BIDDERS

To report bid rigging activities call:

1-800-424-9071

The U.S. Department of Transportation (USDOT) operates the above toll free 'hotline' Monday through Friday, 8:00 a.m. to 5:00 p.m., Eastern Standard Time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the 'hotline' to report such activities.

The 'hotline' is part of USDOT's continuing effort to identify and investigate highway construction fraud and abuse and is operated under the direction of the USDOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

MUST ACCOMPANY EACH BID

FAILURE TO SIGN OR COMPLETE ALL INFORMATION ON THE FORMS PROVIDED CAN RESULT IN REJECTION OF THE PROPOSAL AS NON-RESPONSIVE

NON-DISBARMENT CERTIFICATION

Are you on Comptroller General's list of Ineligible Contractors or list of parties excluded from Federal procurement or non-procurement programs? ☐ NO ☐ YES

Company Name: _____

Type of Business ☐ Corporation ☐ Partnership (general) ☐ Partnership (limited)
☐ Sole Proprietorship ☐ Limited Liability Company

FID #: _____

Company Address: _____

The County/State/Zip: _____

Phone: _____ Fax: _____

E-Mail: _____

Print Name of Signatory: _____

Print Title of Signatory: _____

MUST ACCOMPANY EACH BID

**FAILURE TO SIGN OR COMPLETE ALL INFORMATION ON THE FORMS PROVIDED CAN RESULT IN
REJECTION OF THE PROPOSAL AS NON-RESPONSIVE**

**IN LIEU OF A CASHIER'S OR
CERTIFIED CHECK, YOU MAY
SUBMIT THE
ENCLOSED PROPOSAL
BOND FORM WITH
YOUR PROPOSAL**

**USE OF OTHER FORMS
MAY SUBJECT YOUR
BID TO REJECTION**

INFORMATION ONLY

PROPOSAL BOND

KNOW ALL MEN BY THESE PRESENTS, That we, _____

_____ of

_____ as principal, and the

_____ a corporation duly

organized under the laws of the State of _____,
and authorized to do business in the State of Washington, as surety, are held and firmly bound unto
Skagit County in the full and penal sum of five (5) percent of the total amount of the bid proposal of said
principal for the work hereinafter described for the payment of which, well and truly to be made, we bind
our heirs, executors, administrators and assigns, and successors and assigns, firmly by these presents.

The condition of this bond is such, that whereas the principal herein is herewith submitting his or
its sealed proposal for the following construction, to wit:

2025 Waste Storage Facility Construction

said bid and proposal, by reference thereto, being made a part hereof.

NOW THEREFORE, If the said proposal bid by said principal be accepted, and the contract be
awarded to said principal, and if said principal shall duly make and enter into and execute said contract
and shall furnish bond as required by Skagit County within a period of ten (10) days from and after said
award, exclusive of the day of such award, then this obligation shall be null and void, otherwise it shall
remain and be in full force and effect.

IN TESTIMONY WHEREOF, The principal and surety have caused these presents to be
signed and sealed this _____ day of _____, 2025.

(Principal)

(Surety)

(Attorney-in-fact)



Certification of Compliance with Wage Payment Statutes

The bidder hereby certifies that, within the three-year period immediately preceding the bid solicitation date on Friday, April 25, 2025, the bidder is not a “willful” violator, as defined in RCW 49.48.082, of any provision of chapters 49.46, 49.48, or 49.52 RCW, as determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction.

I certify under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct.

Bidder’s Business Name

Signature of Authorized Official*

Printed Name

Title

Date

City

State

Check One:

Sole Proprietorship ☐ Partnership ☐ Joint Venture ☐ Corporation ☐

State of Incorporation, or if not a corporation, State where business entity was formed:

If a co-partnership, give firm name under which business is transacted:

** If a corporation, proposal must be executed in the corporate name by the president or vice-president (or any other corporate officer accompanied by evidence of authority to sign). If a co-partnership, proposal must be executed by a partner.*

APPENDIX D

**Agricultural Best Management Practice
Guidelines for WA State**

PUGET SOUND
National Estuary Program



Washington State Department of Health
National Estuary Program Shellfish Strategic Initiative

Agricultural Best Management Practice Guidelines



DOH 334-492 March 2023

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Publication Information

This document provides agricultural best management practices (ag BMPs) eligibility and implementation guidance to Washington State Department of Health (DOH) National Estuary Program (NEP) Shellfish Strategic Initiative (SSI) grant subrecipients. It updates the Agricultural Best Management Practice Guidelines we published in November 2018, and strategically borrows from and aligns with the state Department of Ecology's funding guidelines for ag BMPs. We will update it as needed.

Technical Contact Information

Lea Shields
National Estuary Program Environmental Planner
Office of Environmental Health and Safety
Washington State Department of Health
Lea.shields@doh.wa.gov
360-819-2908

Administrative Contact Information

Megan Schell
National Estuary Program Contract Manager
Office of Environmental Health and Safety
Washington State Department of Health
megan.schell@doh.wa.gov
360-236-3307

Laura Heinse
National Estuary Program Contract Manager
Office of Environmental Health and Safety
Washington State Department of Health
laura.heinse@doh.wa.gov
360-236-3301

Jill Stewart
National Estuary Program Contract Manager
Office of Environmental Health and Safety
Washington State Department of Health
jill.stewart@doh.wa.gov
360-236-3337

Background

When not managed properly, animal manure and chemical fertilizer from agricultural land uses can allow fecal bacteria and nutrient water pollution to enter ditches, streams, rivers, lakes, and marine waters. Fecal bacteria from animal manure can contain pathogens. Too much fecal bacteria measured in surface waters and marine waters can lead to limits and advisories on human contact, recreational activities, and shellfish harvesting.

Agricultural best management practices (ag BMPs) are tools farmers can use to reduce soil and nutrient runoff, protect riparian areas, and manage animals and animal waste in ways that minimize or prevent water pollution.

Overview

Throughout this document, “we” and “us” refer to Department of Health National Estuary Program (DOH NEP) and “you” refers to the subrecipient unless otherwise stated.

Purpose

We will contract with subrecipients to use our DOH NEP Shellfish Strategic Initiative (SSI) ag BMP funds (DOH ag BMP funds) in approved project areas. Projects will promote, plan, and install eligible ag BMPs that help control fecal bacteria and nutrient pollution sources and improve and protect the filtering and habitat functions of riparian areas. Ag BMPs installed and maintained in eligible project areas may significantly reduce the potential for livestock and manure to negatively affect water quality flowing to Puget Sound shellfish growing areas.

Subrecipients will encourage landowners to access our ag BMP funds to help implement eligible practices to correct identified fecal bacteria pollution sources. You will provide technical assistance to help landowners locate, design, construct, and install eligible ag BMPs according to applicable U.S. Environmental Protection Agency (EPA) grant terms and conditions, DOH guidelines and requirements, and U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) specifications.

When using our ag BMP funds, you will inform participants of eligibility requirements and perform administrative tasks necessary for landowner cost-share reimbursement, administrative cost reimbursement, and grant reporting. Administrative tasks include working with us to complete project pre-approval and federal Section 106 cultural resource review requirements before any ground-disturbing work takes place related to BMP implementation.

Subrecipients may combine ag BMP funds with other grant funds to implement multiple BMPs on the same property. Examples of other funding sources may include Washington State Conservation Commission, Department of Ecology (Ecology), and NRCS. You should work with us to clarify when using multiple grant funding sources for BMPs on the same property.

You may contract with or use other organizations to complete ag BMP implementation tasks. However, you remain responsible for project oversight and for ensuring that required tasks are completed. We will reimburse you directly for eligible and approved ag BMP installation costs and eligible administrative costs. You are responsible for reimbursing landowners, contractors, or sub-subrecipients (subawardees of DOH subrecipients) for eligible ag BMP project and administrative costs before requesting reimbursement from DOH.

Need assistance? Contact the National Estuary Program (page 3) for contract requirements, best management practice eligibility, technical questions, and payment requests for pre-approved BMP projects. We will review and authorize payment requests and distribute reimbursements.

For contracts with subawardees, communications with us should follow the appropriate privity of contract relationships.

General funding eligibility, approval, and implementation requirements

To be eligible for DOH ag BMP fund cost reimbursement, ag BMPs must:

- Be based primarily on water quality improvement purposes and not on agricultural production needs. Ag BMPs should provide a public benefit by correcting riparian area damage; conditions where livestock and manure contribute to fecal bacteria, sediment, and nutrient pollution to surface water flowing to commercial shellfish growing areas; or both.
- Comply with the requirements in this document and the [NRCS Field Office Technical Guide \(FOTG\) for Washington State](#) construction specifications or equivalent construction standards. If NRCS specifications aren't available, a licensed engineer must design the structural design of the proposed BMP. To avoid implementing ineligible projects or practices, you should follow the steps in this document's "Project Implementation Steps" section.
- Receive documented project pre-approval from us.
- Comply with all applicable local codes and requirements: State Environmental Policy Act (SEPA), permits, Critical Areas Ordinances, and any others as needed. You are responsible for ensuring any local requirements are fulfilled.

To be eligible for DOH ag BMP fund cost reimbursement, properties must:

- Be in a project area included in the subrecipient contract Statement of Work. You should be able to clearly demonstrate—using a combination of topographic maps, aerial imagery, flow lines, or seasonal or preferential pathways—that runoff from the property affects shellfish growing areas downstream.
- Be implemented on a property where the owner or operator has a manure management plan in place or be part of the development of a manure management plan.
- Have a signed landowner agreement in place before BMP implementation.
- See "Project implementation steps" section for more details.

General DOH ag BMP fund reimbursement rates:

- For all eligible practices described in these guidelines, we will reimburse up to 100% of installation costs (within associated cost caps). We may grant exceptions for project estimates that exceed cost caps on a case-by-case basis. Subrecipient must provide adequate justification for the increased cost of the project. Plan to allow additional time for review and pre-approval if the project budget exceeds stated cost caps.
- Practices not described in these guidelines may also be eligible for reimbursement up to 100%. You must provide adequate justification for benefit to water quality and shellfish growing areas downstream during the pre-approval process. Requesting pre-approval for BMPs not listed in this document may add additional time for approval.
- Proposals that include appropriate riparian buffers or address multiple pollution sources on water courses on the properties in the project area in support water quality and salmon recovery will be prioritized for funding.

Project implementation steps

Planning and pre-approval

In approved project areas, subrecipients will:

1. Promote use of DOH ag BMP funds to help implement eligible ag BMPs to address identified sources of fecal bacteria and nutrient pollution to surface water.
2. Meet with landowners to assess project sites and evaluate the need for ag BMPs.
3. Identify potential qualifying ag BMP projects in project areas and work with landowners to develop site-specific plans locating and designing eligible BMPs to NRCS specifications.
4. Work with us to complete the DOH pre-approval process. To request project pre-approval:
 - a. Submit a completed “Project Pre-approval Form” with requested attachments. The Project Pre-approval Form will include a recommended suite of BMPs, estimated project costs, and a description of existing site conditions or expected water quality benefit to shellfish growing areas. See Appendix I for Pre-approval Process detail.
 - b. We will review the submitted materials and provide written notice to the subrecipient about project funding eligibility and pre-approval status.

Cultural Resources Review

When you receive project pre-approval from us, you will:

5. Work with us to complete the required Section 106 Cultural Resource Review process. See Appendix II for Section 106 Cultural Resource Review process detail.
6. Receive our confirmation that Cultural Resources Review is complete before any ground disturbance activity takes place related to ag BMP project implementation. **Note that Cultural Resources Review must be completed through DOH and not prior to pre-approval or independent from our process. Costs incurred before Cultural Resources Review is complete are not eligible for reimbursement.**

Landowner agreement

Before installing eligible BMPs, you will:

7. Secure a signed landowner agreement between the property owner and the subrecipient.
 - a. The agreement must allow you to inspect the BMP(s) and may provide for you and the landowner to arrange public and educational tours. The landowner will agree to maintain the installed BMPs for at least 10 years or the lifespan of the practice (defined by NRCS), whichever is longer.

Technical assistance to implement approved BMPs

After securing a signed landowner agreement, you will:

8. Provide technical assistance to landowners to construct and install pre-approved ag BMP projects according to NRCS specifications.
 - a. As necessary, coordinate with other technical service providers to obtain engineering design or construction plans to properly locate, design, construct, and install eligible and DOH pre-approved ag BMP projects. Pre-project installation work should include taking “before” pictures to capture site conditions prior to project installation.

- i. Take before and after pictures from the same location to show context and site condition before and after ag BMP installation. When submitted to us as part of cost share reimbursement request, you should label pictures to clearly identify cost-shared work.
- b. Conduct site visits during the BMP construction and installation period to ensure BMP implementation meets NRCS standards.
- c. Before submitting a cost share reimbursement request to us, conduct a final site visit to ensure BMPs were implemented properly. Your post-installation site visit should include taking pictures of completely installed and functional BMPs.
- d. Conduct follow up site visits to ensure proper operation and maintenance of NEP SSI supported ag BMPs. As needed or requested, you will report to us findings of follow-up visits you did to assess operation and maintenance status of BMPs.

Administrative tasks for grant reporting and cost share reimbursement request

Throughout project planning, pre-approval, implementation, and follow up you will:

9. Collect BMP project information and maintain project records to support timely and accurate grant reporting and cost share reimbursement requests.
 - a. Gather and maintain project information (including photos) necessary to document and track BMP project pre-approval, implementation, costs, follow up, and reimbursement requests.
10. Provide administrative assistance to participants to meet recordkeeping and reporting requirements for cost share reimbursement.
11. Ensure accuracy of data and records submitted for grant reporting and payment requests.
12. When ag BMP installation is complete, submit required forms to the contract manager and ag BMP technical lead to approve deliverable of ag BMP, including ag BMP project management checklist, post-installation form (documenting certification of implementation, “after” photos,” and actual installation costs).
13. Within 90 days of confirming that the approved ag BMP was installed to NRCS specifications and is operational, submit to us a request for BMP cost share reimbursement using the process in *SSI Subrecipient Grant Funding Guidance*. Submit an invoice package as a stand-alone payment request (not to be combined with other contract work) for review and approval.

Eligible Best Management Practices

This section describes eligibility requirements and specific practices that qualify to be considered for DOH ag BMP fund cost share reimbursement. You may work with participants to install a combination of eligible BMPs on a single property.

Riparian Buffers and associated practices

DOH ag BMP funds can be used to implement riparian buffer projects that help protect water quality and improve riparian area productivity and functions. Eligible riparian buffer project work can include riparian planting, livestock exclusion fencing, and off stream watering (may include well construction and livestock stream crossing) practices.

See Appendix III for detail supporting EPA’s Riparian Buffer Programmatic Condition and tools to help determine stream class, appropriate buffer width, and process for submitting a deviation request.

Figure 1: EPA Riparian Buffer Programmatic Condition

Riparian buffer restoration projects in agricultural areas shall be consistent with the interim riparian buffer recommendations provided to EPA and the Natural Resource Conservation Service by National Marine Fisheries Service letters of January 30, 2013, (stamp received date - February 4, 2013) and April 9, 2013 (stamp received date - April 16, 2013), or the October 28, 2013, guidance. Grantees shall confirm in writing projects' consistency with the recommendations referenced above.

When developing project proposals, grantees also should consider the extent to which proposals include appropriate riparian buffers or otherwise address pollution sources on other water courses on the properties in the project area to support water quality and salmon recovery.

Deviations can only be obtained through an exception approved by EPA. In order for EPA to evaluate a request for an exception, the grantee must submit the scientific rationale demonstrating adequacy of buffers for supporting water quality and salmon recovery. The request must summarize tribal input on the scientific rationale or other relevant issues.

The scientific rationale could be developed from sources such as site-specific assessment data, salmon recovery plans, Total Maximum Daily Loads (TMDLs) and the state nonpoint plan. EPA will confer with the National Oceanic and Atmospheric Administration (NOAA) and the Washington Department of Ecology and provide the opportunity for affected tribes to consult with EPA before making a final decision on a deviation request.”¹

Additional eligibility requirements:

- Riparian buffer widths must be measured starting from the ordinary high-water mark.
- When establishing riparian buffer projects in forested areas, the buffer width must be consistent with the EPA Riparian Buffer Programmatic Condition (Figure 1) and Washington State Forest Practices Rules.
- Subrecipient must obtain any necessary permits and will verify compliance with all applicable codes and regulations, including county Critical Area Ordinances, county Shoreline Rules, and other state and local regulations.
- To be eligible for funding, the minimum riparian buffer width on each side of surface water must be consistent with the EPA Riparian Buffer Programmatic Condition.
 - If a project's site conditions, such as existing infrastructure, make it difficult to adhere to the EPA Riparian Buffer Condition, you can request a deviation from minimum NMFS buffer-width requirements. EPA must approve the deviation request.
 - You must work with us to pursue EPA review of a riparian buffer deviation request. A buffer deviation request must provide adequate justification as to why the minimum buffer requirement cannot be met. Deviations have been granted for existing structures within the minimum buffer width requirements. Please reach

out to your contract manager or ag BMP technical lead for more information on the deviation request process.

Riparian Planting

Riparian buffer projects eligible for cost share reimbursement may be planted only with native trees and shrubs. Grass filter strips by themselves are not sufficient to satisfy this requirement.

- Prior to implementation, the subrecipient must develop site-specific plans for riparian buffer projects. Your plan must include plant locations and species; and you must base it on an assessment of native plant associations and community types.

Livestock Exclusion Fencing

DOH ag BMP funds may be used to install qualifying and pre-approved fencing to permanently exclude livestock from a waterway and riparian planting. To qualify for cost reimbursement, fencing must be part of a riparian buffer planting project, provide a minimum setback from the ordinary high-water mark consistent with the EPA Riparian Buffer Condition, and be built according to NRCS specifications.

- Cross fencing is not eligible for ag BMP cost-share funding.

Off stream watering

When included in an eligible riparian buffer project that installs qualifying livestock exclusion fencing, off-stream water facilities (including well construction) are conditionally eligible for DOH ag BMP fund financial assistance.

Financial assistance limits (cost caps) for watering facilities are based on the continuous linear distance of riparian exclusion per landowner. See Table 1 below for limits.

Table 1. Financial assistance limits for off-stream watering projects

Miles of Livestock Riparian Exclusion	Financial Assistance Limit for water facility (per project)
< ½ mile	100% of total eligible cost or \$8,000 (whichever is less)
> ½ mile and < 1 mile	100% of total eligible cost or \$12,000 (whichever is less)
> 1 mile and < 1.5 miles	100% of total eligible cost or \$16,000 (whichever is less)
> 1.5 miles and < 2 miles	100% of total eligible cost or \$24,000 (whichever is less)
> 2 miles and < 2.5 miles	100% of total eligible cost or \$32,000 (whichever is less)
> 2.5 miles	100% of total eligible cost or \$40,000 (whichever is less)

Other requirements for off-stream watering project funding:

- The riparian buffer project must include permanent and continuous fencing compliant with NRCS specifications that displaces an established watering area in the riparian area.

- Livestock fencing excludes livestock from waters of the state according to EPA's Riparian Buffer Programmatic Condition.
- The project will address an existing surface water quality problem(s) and establish an improved watering area at a location far enough from waterways to prevent a pollution risk to surface water.
 - Ag BMP funds may not be used to rebuild watering facilities where the primary purpose is to repair existing infrastructure.
- For off-stream watering BMP projects using surface water as a source, the participant must own a legal right to surface water withdrawal for the purpose of livestock watering.
- Subrecipient will ensure that water supplied is for livestock use only.
- If land use is changed from livestock management to residential, commercial, or industrial development during the landowner/subrecipient agreement period, the grant recipient must repay DOH immediately for all financial assistance we issued for the off-stream watering facility project.
 - Facilities must serve no greater number of livestock than historically range that parcel of property. The amount of water that livestock consume due to the funded off-stream watering facility should not exceed the amount consumed if they drink directly from the stream.
 - Pumps, pipes, and water troughs, as needed, are eligible.
 - All components of solar powered pumps are project eligible.
 - Electrical or mechanical power provisions are eligible only if existing infrastructure is available and can be used at a minimal cost.
- Off-stream water facilities for fewer than 20 Animal Units (see [WAC 173-224-030](#) for definition of animal unit) may be eligible for ag BMP cost share reimbursement. However, related well construction is not eligible for cost share reimbursement when the project serves fewer than 20 animal units.
- Heavy-use area protection at watering facilities is eligible as part of the watering facility if necessary and approved. The cost of heavy-use area protection related to a watering facility is part of the cost of the off-stream watering facility BMP and is included in the funding limitations listed in Table 1.

Well construction

For wells to be eligible for ag BMP funding as part of an off-stream watering facility, the participant property must have at least 20 animal units. The funding caps related to off-stream watering facilities (Table 1) include the cost for well drilling. A cost analysis for wells must be completed according to the following criteria:

- The participant must consider gravity feeding or pumping from existing surface water (if participant owns a legal right to surface water withdrawal for the purpose of livestock watering) and groundwater sources and water hauling as first choices. If these alternatives are not feasible, the participant may consider newly dug or drilled wells.
- DOH ag BMP funds will not reimburse recipients for costs related to unsuccessful well drilling.
- Wells eligible for DOH ag BMP funds must be either less costly or demonstrably more cost-effective (based on analysis of hydraulic flow, sediment clogging, freezing).
- The selected practice must follow a site-specific farm plan (or more focused plan involving livestock exclusion and off-stream water provisions).

Livestock Crossing

- Structures built to provide livestock access across a stream are conditionally eligible for DOH ag BMP fund cost reimbursement. To be eligible, the stream crossing must be part of a riparian buffer project with livestock excluded from stream access and buffer widths that meet EPA's Riparian Buffer Programmatic Condition.
- A stream crossing bridge eligible for cost reimbursement must be used only by livestock and be no more than 6 feet wide. If a landowner wants to construct a crossing wider than 6 feet, we may consider prorating the cost-share eligibility based on the 6-foot width. For example, the total cost of a 10-foot-wide bridge would be 60% eligible for cost reimbursement. Subrecipients must get preapproval from us to cost share bridges more than 6 feet wide.

Waste management

Select waste management BMPs are eligible for DOH ag BMP funds. They include waste storage or composting facilities designed and constructed to NRCS or equivalent engineering standards, to address sources of livestock- and manure-related nonpoint surface water pollution. A participant may install a combination of waste management BMPs when appropriate and necessary to address the threat to water quality.

Eligible waste management (storage or composting) BMPs must be engineered to NRCS or equivalent engineering standards and include a permanent roof, a concrete floor, and gutters or other appropriate structures to manage roof runoff.

DOH ag BMP funds for waste management practices apply only to projects that will correct an identified fecal bacteria-related water quality problem. They may not be used where the primary purpose is to repair existing structures.

BMPs for waste management are eligible for reimbursement with the combined total package of waste management BMPs eligible for up to a maximum reimbursement (cost cap) of \$32,000 per landowner. The "total package of waste management BMPs" is defined to include:

- A waste storage or a composting structure with impervious concrete floor.
- A permanent roof.
- Gutters.
- Other roof runoff structure such as downspouts and underground outlets.

Funding eligibility conditions for waste management BMPs include:

- A professional engineer must design and stamp waste storage and composting facilities.
- The recipient must obtain any required building permits.
- The owner or operator must have a manure management plan in place to protect water quality.
- Eligible waste management BMPs must be designed, built, and located so that the management area does not present a risk of polluting surface water.

Waste storage facility or Composting facility

- Waste storage or composting facilities, roofs and covers, and roof runoff structures must be designed and constructed according to NRCS standards, located in compliance with all local codes, compliant with NMFS buffers, and sited to optimize water quality protection.

Roof runoff structure

- As a stand-alone BMP, roof runoff structures for existing buildings are eligible on a case-by-case basis. To be eligible, roof runoff structures on existing buildings must demonstrate a water quality benefit.

Heavy Use Area Protection

Heavy-use area protection must prevent manure contaminated mud and polluted runoff at feeding, watering, and waste management facilities. The design and construction must meet NRCS standards.

- Heavy use area protection is eligible for cost reimbursement up to a maximum of \$10,700 per landowner.
- Concrete and other cement-based materials, rock aggregate, and other appropriate materials may be eligible for funding when included in an eligible heavy use area protection BMP designed and constructed to NRCS standards.
- A participant must use a waste management facility and protect adjacent waterways with appropriate riparian buffers to be eligible for cost share to implement heavy use area protection (see Waste storage facility or Composting facility above).
 - Building permanent feed lots where livestock will be confined continuously throughout the year is not eligible for heavy use area protection funding.
- Heavy use area protection is eligible only to protect critical areas directly surrounding feeding, watering, and manure storage locations.

Fencing that creates temporary animal confinement to support relocation of livestock feeding areas that threaten water quality or to prevent the use of pasture/rangeland in winter months is eligible. Fencing to create permanent confinement areas is not eligible. Fencing must be limited to areas directly surrounding feeding stations and may include a connected pasture area. This type of fencing is eligible up to a maximum of \$10,700 per landowner, in addition to the heavy use protection area.

Reimbursement requests

Ag BMP Installation Cost Reimbursement

For a project to be eligible for reimbursement, we require the subrecipient to receive DOH pre-approval for each proposed ag BMP project and meet all other eligibility requirements outlined in this guidance document. Ag BMP installations that do not adhere to these funding guidelines or are not installed as pre-approved may not be eligible for reimbursement. Once pre-approved, we will keep on file:

- Pre-approval form and email documenting DOH pre-approval and geographic eligibility.
- Pre-installation photos.
- EZ-1 form and final determination letter documenting completion of Section 106 requirements.

The subrecipient should ensure that thorough and accurate records of materials, labor, and other expenses are kept during the installation process. Expenses lacking proper documentation may not be eligible for reimbursement.

Ag BMPs should be implemented and fully operational before a subrecipient submits a reimbursement request to us. After successful implementation of BMP(s), subrecipients will submit to their contract manager and ag BMP technical lead all documentation required to approve the deliverable. This includes:

- Ag BMP project management checklist.
- Post-installation reporting form (including post-installation photos, certification of implementation, and actual costs).
- Signed landowner agreement (CD form).

If the landowner chooses not to complete the full project according to guidelines, the subrecipient will seek to recoup any funds previously reimbursed. For projects with multiple ag BMPs that must be implemented in stages, we may allow cost reimbursement for individual BMPs completed in an early stage as part of a larger, multi-stage project. To consider reimbursement for partially completed projects, we require a written agreement. We will consider reimbursement for partially completed projects on a case-by-case basis.

In-kind contributions are eligible as match (if needed). In-kind contributions include interlocal costs, donated or loaned real or personal property, volunteer services, and employee services donated by a third party.

Interlocal costs are in-kind contributions made to the project by a governmental entity other than the recipient according to a valid written agreement, which details the work to be accomplished, the goods to be provided, and the value thereof. If deemed necessary, in-kind match documentation must be submitted with the reimbursement requests.

Payment Request Package

You must submit all the pre-approval and post-installation documentation described above before we will process reimbursement requests. Refer to the SSI Subrecipient Grant Funding Guidance for the reimbursement request process.

Appendix I

Project Pre-Approval Process

DOH technical staff must review and pre-approve ag BMP projects proposed for DOH ag BMP funding to ensure eligibility for cost reimbursement. To request pre-approval, subrecipient must

provide DOH with enough information for technical staff to assess the project scope and confirm eligibility for DOH ag BMP funds.

Subrecipients will submit a completed Project Pre-approval Form to DOH describing:

- Existing site features and conditions.
- Project site location in relation to affected and eligible shellfish growing area clearly showing how runoff from the property impacts growing area(s) downstream.
- Existing water quality problem to be corrected and how the proposed BMP(s) will help address the problem.
- Ag BMP(s) proposed for addressing water quality problem.
- Estimated costs of proposed BMPs.
- Any other information to support project eligibility (e.g. applicable NRCS practice name and number, status of a manure management plan, presence of existing livestock exclusion fencing, etc.).
- Map or maps sufficient to allow reviewers to understand project area property location relative to affected shellfish growing area. Map(s) should include:
 - aerial photo(s) with labeled project site details such as topography lines, surface water flow, existing site features (i.e. waterways, buildings, fencing), and ag BMPs proposed for funding through DOH NEP. Include other site photos or explanation as necessary.

Depending on what BMPs are proposed, DOH can most efficiently complete project review if supplied with complete information supporting eligibility. For example:

- A project proposes a composting facility (waste management BMP in guidelines) with gutters and an associated improved heavy use area to address an identified water quality problem.
 - Funding guidelines note that a manure management plan is required for a waste management and a heavy use area protection BMP to be eligible for funding.
- The project proposal description should include a statement confirming the proposed BMP(s) is/are part of a manure management plan.
- Also helpful is for the project form to acknowledge the BMP(s) will be constructed to NRCS standards and to note the NRCS practice name(s) and practice number(s). By proactively stating in the pre-approval request that eligibility components are in place, it saves some back and forth with DOH asking subrecipient to confirm. The application should clearly explain the water quality problem in need of correction for a reviewer who has not visited the site. Additional maps or photos with hand-drawn lines showing flow pathways by which contaminated runoff enters surface waters and downstream shellfish growing areas are especially helpful for project areas without obvious watercourses on site.

Appendix II

Section 106 Cultural Resources Review Requirements and Process

These requirements are outlined in Section 106 of the National Historic Preservation Act. The process requires agencies to consider effects of their actions on historic properties and ensure preservation values are factored into planning and decisions. Section 106 requires consultation about projects with the State Historic Preservation Officer, Indian Tribes, and other interested

parties. See more information about the Section 106 Cultural Resources review process at the Washington State Department of Archaeology and Historic Preservation (DAHP) [website](https://dahp.wa.gov/project-review/section-106) (<https://dahp.wa.gov/project-review/section-106>).

DOH staff work with subrecipients to conduct required cultural resources review. The cultural resources review process follows steps with DAHP and tribes to determine if a project site has the potential of disturbing or significantly impacting cultural or historic resources. Activities associated with cultural and historic resources site assessments for proposed projects are eligible for DOH ag BMP fund cost reimbursement.

After receiving project pre-approval from DOH, a subrecipient will submit a completed EZ-1 form to DOH to begin the Section 106 Cultural Resource review process. DOH NEP subrecipients **must** go through DOH to complete this process.

- Subrecipients are responsible for submitting an accurate and complete [EZ-1 form](#) to DOH and for complying with project specific requirements for cultural resource protection as directed by DOH Cultural and Environmental Program Specialist.
 - Subrecipient will email a completed EZ-1 form to Scott Kugel at scott.kugel@doh.wa.gov for DOH review and processing. Please cc: your DOH NEP contract manager and the technical staff for ag BMP projects.
 - Subrecipients should include a copy of the Project Pre-approval Form in the email.

Throughout the cultural resources review process, a DOH Cultural and Environmental Program Specialist will communicate with subrecipients and DOH NEP staff to facilitate completion of cultural resources review requirements. General steps in the cultural resources review process include:

- Preliminary Determination.
- Request for Concurrence with Preliminary Determination.
 - Letters to DAHP and to consulting tribes.
 - Includes a 30-day consultation period.
- Archaeological survey (in cases of adverse effect, or potential adverse effect).
- Final Determination.

A subrecipient should not pursue any ground disturbing activity related to a DOH ag BMP funded project until subrecipient receives a Final Determination letter from DOH.

- Ground-disturbing activities that occur prior to a cultural resources review *are not eligible expenses*.
- An Inadvertent Discovery Plan (IDP) is required at the project site at all times.

Appendix III

List of Subrecipient Forms

Please refer to the ag BMP page in the [NEP subrecipient resources SharePoint](#) for current versions of these forms and templates:

- Flowchart for ag BMP installations cultural review
- Ag BMP pre-approval form
- Ag BMP post-installation reporting form
- Ag BMP project management checklist (including list of supporting documentation and required forms)
- SSI Subrecipient Grant Funding Guidance (Policies and Processes page)

Appendix IV

Riparian Buffer Guidance

DOH ag BMP funds can be used to implement riparian buffer projects that meet EPA's Riparian Buffer Programmatic Condition (included verbatim in the text box below). The EPA condition requires that riparian buffer projects in agricultural areas be consistent with interim riparian buffer recommendations provided by National Marine Fisheries Service (NMFS) letters of January 30, 2013, and April 9, 2013, or October 28, 2013, guidance. These buffer width recommendations are referred to as "NMFS buffers."

Appendix III provides:

- EPA Riparian Buffer Programmatic Condition and copies of the NMFS letters and guidance referred to in the condition:
 - January 30, 2013, letter;
 - April 9, 2013, letter; and,
 - October 28, 2013, guidance
- Additional sources to help subrecipients determine minimum buffer width appropriate to for the water body to be protected.
- Information about requesting a deviation from NMFS buffers.

EPA Riparian Buffer Programmatic Condition

Riparian buffer restoration projects in agricultural areas shall be consistent with the interim riparian buffer recommendations provided to EPA and the Natural Resource Conservation Service by National Marine Fisheries Service letters of January 30, 2013 (stamp received date - February 4, 2013) and April 9, 2013 (stamp received date – April 16, 2013), or the October 28, 2013, guidance. Grantees shall confirm in writing projects' consistency with the recommendations referenced above.

When developing project proposals, grantees also should consider the extent to which proposals include appropriate riparian buffers or otherwise address pollution sources on other water courses on the properties in the project area to support water quality and salmon recovery.

Deviations can only be obtained through an exception approved by EPA. In order for EPA to evaluate a request for an exception, the grantee must submit the scientific rationale demonstrating adequacy of buffers for supporting water quality and salmon recovery. The request must summarize tribal input on the scientific rationale or other relevant issues.

The scientific rationale could be developed from sources such as site-specific assessment data, salmon recovery plans, Total Maximum Daily Loads (TMDLs) and the state nonpoint plan. EPA will confer with the National Oceanic and Atmospheric Administration (NOAA) and the Washington Department of Ecology and provide the opportunity for affected tribes to consult with EPA before making a final decision on a deviation request.”¹

¹ Always refer to your contract for most current Terms and Conditions



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northwest Region
7600 Sand Point Way N.E., Bldg. 1
Seattle, WA 98115

January 30, 2013

RECEIVED

FEB 04 2013

Office Of The Executive

Ms. Roylene Rides-at-the Door
USDA Natural Resources Conservation Service
316 W. Boone Avenue, Suite 450
Spokane, Washington 99201-2348

Mr. Dennis McLerran, Regional Administrator
EPA - Region 10
1200 6th Ave., Suite 900
Seattle, Washington 98101

Dear Ms. Rides-at-the-Door and Mr. McLerran:

Our three agencies have been in very active discussions on opportunities to restore the health of our streams and nearshore areas as part and parcel of our collective effort to address the Treaty rights issues associated with the continuing loss of habitat productivity of importance to salmon and steelhead populations and other fishery resources in the Pacific Northwest. In particular, we have been examining the adequacy of our current approaches to describing those riparian buffers in lower elevation landscapes that may be necessary to protect and restore important aquatic functions.

NOAA Fisheries has recently reviewed the current scientific information associated with this topic in order to assist us in identifying approaches that might help protect aquatic functions important to fishery resources. In this context, I am writing to recommend that you use on an interim basis the enclosed matrix of riparian buffers in programs EPA or the NRCS support or fund. I would also couple this with our request to join with us and others to refine the matrix based on best available science over the coming months. For your information, I have enclosed a brief synopsis of existing scientific information about the relationship between riparian buffers and aquatic stream functions important to Pacific salmonids in the low elevation agricultural landscapes of western Washington which I believe will help provide some meaningful background for our recommendation.

Several factors provide context for our recommendation. Numerous populations of salmon and steelhead in the Pacific Northwest are at risk of extinction and as a consequence, federally-reserved treaty rights to harvest these fish are also at risk. Degradation and loss of freshwater and estuary habitat are significant factors in the decline of these populations. Salmon habitat ranges from the forested areas of the upper elevations to the lower-elevation floodplains to the estuarine and near-shore habitats of Puget Sound. All of these areas provide vital functions in



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the system as whole, particularly the lower-elevation and estuarine areas that are the focus of my recommendation. There are many ongoing efforts to rebuild Puget Sound salmon, including those of numerous state and federal agencies, tribal and local governments and the private sector. I am providing the enclosed matrix as NOAA Fisheries' recommendation for minimum riparian buffers in lower-elevation agricultural landscapes. Our technical guidance is intended to help shape recovery and rebuilding efforts effectively and to offer our technical advice on what aquatic functions fish need.

In some cases, our recommendations are framed in terms of ranges of buffer widths rather than point estimates, and expressed as probabilities of achieving desired outcomes. Local conditions and local circumstances matter, and may affect the choice of the riparian buffer most effective at achieving salmon recovery. Nevertheless, the scientific information does support conclusions about the probability of differing buffer ranges to provide a range of aquatic functions that are essential for water quality and salmon needs, as depicted in the enclosures. We are ready to work with project proponents, landowners, agencies, departments and tribes to provide technical advice and find solutions that will support salmon recovery.

The enclosed matrix has its origins in the Washington Agriculture, Fish and Water process (AFW), which occurred from 1999 to 2003 and included participation by state and federal agencies, tribal governments and diverse agricultural interests. One of the efforts undertaken in the AFW process was to identify riparian buffers for agricultural landscapes that provide adequate salmon habitat and are implementable. Several options were developed by the AFW caucuses. For the sake of clarity, the enclosed matrix displays the proposal developed by the federal caucus at the request of the AFW Executive Committee, Option 3. It was presented to the Executive Committee by NOAA Fisheries, along with several caveats which still hold true today: 1) there is a technical basis for the buffer table, supported by the refereed literature and other references; 2) it represents a coarse-scale classification; and 3) the goal of the matrix is to meet state and federal water quality standards and improve salmon habitat. NOAA Fisheries explained the numbers are within an advisable range, and stated there is flexibility to implement more complex approaches when looking at specific sites, so long as water quality protection and salmon habitat function are equivalent or better than that provided by our recommendations.

This history is relevant today as our view of the buffer table is unchanged. We supported its use in 2002, and we still support its use in 2012 as a guide for establishing interim minimum buffers for programs to promote good water quality and aquatic conditions important to salmon and other aquatic life. While the table identifies buffers as narrow as 35 feet for limited situations, in most settings buffers will need to be significantly wider than this to meet salmon habitat needs. We recommend protecting wider buffers where they exist and creating wider buffers where it is practicable and where local watershed conditions warrant. Further, we are convinced that any strategy to meaningfully increase the agricultural landscape's contribution to salmon recovery, as well as any strategy to sufficiently protect water quality, should contain a robust riparian restoration program.

3

If you have any further questions about this letter, please feel free to call me directly or Mr. Steve Landino, the director of our Washington State Habitat Office.

Sincerely,

A handwritten signature in blue ink, reading "William W. Stelle, Jr." in a cursive style.

William W. Stelle, Jr.
Regional Administrator

Enclosures

cc: Puget Sound Federal Caucus Agencies
Northwest Indian Fisheries Commission
Washington State Dept. of Ecology
Washington State Department of Fish and Wildlife
Washington State Department of Natural Resources
Washington State Department of Agriculture
Washington State Department of Health
Washington State Conservation Commission
Washington Recreation and Conservation Office
Puget Sound Partnership

**Interim Riparian Buffer Recommendations for Streams in Puget Sound Agricultural Landscapes
November 2012**

**(Originally proposed as federal Option 3 for the
Agriculture Fish and Water (AFW) Process, March 2002)**

Channel Type	Habitat Functions	Composition	Buffer Width	Comments
Class I Constructed ditches; small non-fish bearing streams	Water quality protection; shade; sediment filtration	Grasses, trees or shrubs; may only need woody vegetation on one side of channel	As wide as necessary to meet water quality standards; can be determined by NRCS Field Office Technical Guide (FOTG)	Channels constructed for purpose of draining farmland. If dredged, dredging should occur when fish are absent or at lowest densities
Class II Fish bearing streams; natural and modified natural watercourses that are incised and cannot move	Water quality; LWD for cover, complexity; litter fall; shade	Site potential vegetation; trees where they will grow	2/3 Site potential tree height; 50 ft. minimum to 180 ft. maximum	Portions of natural watercourses that can no longer migrate laterally
Class III Fish bearing; natural unconfined channels	Same as above, but structural LWD essential	Same as above	3/4 Site potential tree height	Highly desirable to buffer entire channel migration zone (CMZ)
Class IV fish bearing streams confined by dikes or other hardened man- made feature	Water quality; complex cover; litter fall; shade	Trees and shrubs	Face of levee, from top of dike to Ordinary High Water (OHW) mark	
Class V Fish bearing intertidal and estuarine streams and channels	Water quality; food inputs; habitat complexity	Site potential vegetation (salt- tolerant sedges, shrubs, trees)	35-75 ft.; varies according to adjacent land use	



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northwest Region
7600 Sand Point Way N.E., Bldg. 1
Seattle, WA 98115

April 9, 2013

RECEIVED

APR 10 2013

**OFFICE OF ECOSYSTEMS
TRIBAL & PUBLIC AFFAIRS**

Ms. Roylene Rides-at-the-Door
Washington State Conservationist
USDA - Natural Resources Conservation Service
316 W. Boone Avenue, Suite 450
Spokane, Washington 99201-2348

Mr. Dennis McLerran, Regional Administrator
U.S. Environmental Protection Agency - Region 10
1200 Sixth Avenue, Suite 900
Seattle, Washington 98101

Dear Ms. Rides-at-the-Door and Mr. McLerran:

I am writing to convey my support for slight modifications to the riparian matrix that I distributed on January 30 of this year. As Natural Resources Conservation Service (NRCS) staff developed guidance for implementing riparian restoration actions consistent with the matrix, they discovered that internal agency issues prevented the use of a 100-year soil site index upon which the matrix is predicated. It is my understanding that the NRCS is required to use soils data that are available on line, and that only 50-year soil site index data are so available. Fortunately, NRCS and NMFS staff crafted a workaround that requires only minor modifications to the matrix while enabling the use of 50-year soil site index data.

Buffers for two of the channel types on the matrix were to be set at minimums equal to either two-thirds or three-fourths of a 100-year-old site potential tree. Using the same fractions of a 50-year site index potential tree height, at least where site potential trees are conifers, would result in much narrower buffers. However, a review of conifer growth rates across a range of western Washington soil types suggests that modifying the matrix to set minimums at three-fourths and 100 percent of a 50-year old site potential tree height, respectively, would yield nearly identical minimum buffer widths as those in the original matrix. I support this modification as a practical accommodation to on-the-ground implementation.

In addition, I understand there are concerns that the matrix is too vague regarding type 1 channels. The intent is that type 1 channels not contribute to water quality problems downstream. Reference to the Field Office Technical Guide is intended to convey that the necessary width and composition of buffers on type 1 channels will vary depending on the adjacent land use and geomorphic setting.



To implement the recommendations in the matrix, when surface waters are present, water quality must be identified as a resource concern and appropriate combinations of best management practices (BMPs)¹ must be applied to ensure the associated farm operation will comply with water quality standards. For example, where pathogens are of concern, there is no support in the literature for buffers narrower than 35 feet. Therefore, we expect that type 1 channels on lands occupied by livestock or where manure is being applied will be treated with a combination of BMPs that will result in a buffer width of 35 feet or greater, e.g., a 15-foot wide hedgerow and a 20-foot or wider filter strip.

Lastly, I agree that channel type 4, leveed channels, should be removed from the list, as these features are managed according to Corps of Engineers' requirements.

I look forward to working with each of you in applying our shared authorities and responsibilities to dramatically improve habitat and water quality in the Puget Sound basin. If you have any further questions about this letter, please feel free either to call me directly or to contact Mr. Steve Landino, the director of our Washington State Habitat Office.

Sincerely,



William W. Stelle, Jr.
Regional Administrator

cc: Washington State Dept. of Ecology
Washington State Conservation Commission
Mike Grayum, Northwest Indian Fisheries Commission
Thomas Eaton, Environmental Protection Agency
Linda Anderson Carnahan, Environmental Protection Agency
Sherre Copeland, Natural Resources Conservation Service

¹ BMPs may include conservation practices found in the Field Office Technical Guide applied in manner that results in compliance with water quality standards.

October 28, 2013, guidance

Interim Riparian Buffer Recommendations for Streams in Puget Sound Agricultural Landscapes (Originally proposed as federal Option 3 for the Agriculture Fish and Water (AFW) Process, March 2002)

Guidance

October 28, 2013 Final

NMFS Channel Type ⁱ	Channel Types	Habitat Functions/Composition	Buffer – Minimum Default Width ⁱⁱ
Class I Constructed ditches; fishless streams.	1. Constructed Ditches, Intermittent Streams and Ephemeral Streams that are not identified as being accessed and were historically not accessed by anadromous or ESA listed fish species 2. Perennial waters that are not identified as being accessed and were historically not accessed by anadromous or ESA listed fish species	Water quality protection; shade; sediment filtration	1. 35' 2. 50'
Class II Fish bearing, modified natural channel, entrenched or spring fed watercourses that do not move	Modified or highly entrenched perennial, intermittent and ephemeral waters that are identified as being accessed or were historically accessed by anadromous or ESA listed fish species	Water quality, large wood debris (LWD) for cover, complexity and shade	100' supporting site assessment recommended to increase buffer width
Class III Fish bearing	Unconfined perennial, intermittent and ephemeral waters that are identified as being accessed or were historically accessed by anadromous or ESA listed fish species	Water quality, large wood debris (LWD) for cover, complexity and shade	100' supporting site assessment recommended to increase buffer width
Class IV. Diked, permanently fixed ⁱⁱⁱ	N/A	N/A	N/A
Class V^{iv} Fish bearing, intertidal/estuary	Perennial, intermittent and ephemeral waters that are identified as being accessed or were historically accessed by anadromous or ESA listed fish species in intertidal and estuarine streams and channels	Site potential vegetation (salt water) sedges, shrubs, etc.	35' – 75' Supporting site assessment of adjacent land use recommended to increase buffer protections needed to meet all applicable water quality standards.

ⁱ Fish presence based on Washington's Integrated Fish Distribution database. Fish presence includes all classes of presence of anadromous or ESA listed fish. Where no fish distribution data is available, fish presence must be determined by contacting local WDFW or Tribal biologist.

ⁱⁱ Buffer widths are required minimums, however, if a landowner believes that the buffers called for by the table significantly interfere with his/her ability to reasonably use their property, there is a process to identify alternative buffers that are smaller. Please see FAQs for more information.

ⁱⁱⁱ Generally, buffer vegetation is required between the watercourse and dike, based upon the criteria of the corresponding channel type. However, levee vegetation requirements are subject to U.S. Army Corps of Engineers (Corps) guidance which can be found in Engineering Technical Letter No. 1110-2-571, "Engineering and Design: Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams, and Appurtenant Structures", as well as in the USACE Levee Owner's Manual for Non-Federal Flood Control Works.

^{iv} Estuarine channels are defined as stream channels having direct, daily tidal influence such that the vegetation is adapted to saltwater or intertidal conditions.

Resources to help determine and document stream class and associated NMFS buffer minimum:

- Fish distribution
 - For fish distribution (presence) information, consult [Statewide Washington Integrated Fish Distribution | Statewide Washington Integrated Fish Distribution | Washington State Geospatial Open Data Portal](#)
- Riparian Buffer Width Map - Washington State Department of Ecology
 - ArcGIS - [WAECY - Riparian Buffer Width Map](#)
 - Website notes the buffer width information is based on the 2013 Distribution of Anadromous and ESA listed fish species, and the most recent published flowlines from the National Hydrography Dataset (NHD). Anadromous and ESA listed fish distribution data was compiled by the Northwest Indian Fish Commission (NWIFC) and the Washington Department of Fish and Wildlife (WDFW).
- Water quality and flow information - Washington State Department of Ecology Water Quality Atlas
 - [Water Quality Atlas - Map](#)
 - The Water Quality Atlas is a web-based map application developed to search for and access Washington State water quality information. Data includes water quality standards, assessment categories, TMDL information, reach codes, and flow information.

When proposing a riparian buffer project for DOH ag BMP funding, subrecipients must demonstrate to DOH how the project meets the EPA riparian buffer condition. Submitted materials should include:

- Site map(s)
 - Map(s) should include aerial photo(s) that label existing conditions and proposed buffer (width, length, composition).
- Project background
 - Identify the project's channel type and associated NMFS buffer minimum
 - Describe land use and site conditions
 - Identify habitat and water quality functions improved by proposed buffer

If a project proposes to establish riparian buffers narrower than NMFS recommendations, the subrecipient must prepare a scientific exemption request and seek EPA approval through DOH. The request to deviate from NMFS buffer minimums must include a scientific rationale demonstrating that proposed buffers adequately support water quality and salmon recovery.

If requesting a deviation from NMFS buffer minimum widths, scientific rationale supporting a deviation should include site map and project background information described above, as well as:

- How the proposed buffer is adequate to support water quality and salmon recovery.
- Salmonid presence or use, water quality conditions, and the applicable habitat functions of the project's channel type
- Summarize tribal input on the scientific rationale or other relevant issues

The scientific rationale may include information from the Integrated Fish Distribution portal, Riparian Buffer Width Map, or Water Quality Atlas sources listed as "Resources to help determine and document stream class and associated NMFS buffer minimum" in this Appendix. Other sources could be site-specific assessment data, salmon recovery plans, Total Maximum Daily Loads (TMDLs) and Washington's Water Quality Management Plan to Control Nonpoint Sources of Pollution.

If physical infrastructure on a property interferes with a riparian buffer project's ability to meet the relevant NMFS minimum buffer width, the subrecipient may seek to implement a buffer that is narrower at the

location of the interfering infrastructure but that otherwise meets NMFS buffer requirements. Subrecipients seeking a deviation due to property infrastructure constraints should submit site map, project background, and scientific rationale information described in this Appendix to DOH to be considered on a case-by-case basis. EPA must approve a deviation request before the project can be considered for DOH ag BMP funding.

APPENDIX E

NRCS Guidelines

Conservation Practice Overview

September 2020

Composting Facility (Code 317)

A structure or device to contain and facilitate an aerobic microbial ecosystem for the decomposition of manure, other organic material, or both, into a final product sufficiently stable for storage, onfarm use, and application to land as a soil amendment.

Practice Information

A composting facility is designed to produce an amendment that adds organic matter and beneficial organisms to the soil, provides slow-release plant-available nutrients, and improves soil health. This amendment can be applied to the land or marketed to the public.



Organic solid wastes to be composted derive primarily from agricultural production or processing. The compost can be reused in the operation, utilized for crop production, improve soil health, or marketed to the public.

Composting is accomplished by mixing a carbon material with a nitrogen-rich material in a manner that encourages the growth of aerobic bacteria. Bins, windrows, or in-vessel structures, such as a rotary drum, can be used.

Design information for this practice includes site location, design sizing, storage period, and safety/biosecurity features. It may also include fabricated structure criteria.

This practice has a minimum expected life of 15 years. Operation requirements for the facility depend on the type of facility chosen by the producer. For every system, the temperature and moisture content of the compost will be monitored frequently. Bin or windrow compost must be turned at least once during the composting process. The operation and maintenance plan includes provisions for proper utilization of residual material. Routine maintenance is needed to ensure the facility operates as designed.

Common Associated Practices

NRCS Conservation Practice Standard (CPS) Composting Facility (Code 317) is commonly applied with NRCS CPSs Roofs and Covers (Code 367), Roof Runoff Structure (Code 558), Heavy Use Area Protection (Code 561), Waste Storage Facility (Code 313), and Waste Transfer (Code 634). Utilization of composted material will be handled in accordance with NRCS CPS Nutrient Management (Code 590). If animal mortality is to be composted, use NRCS CPS Animal Mortality Facility (Code 316). If animal manure solids are just being stored without managing for composting, use NRCS CPS Waste Storage Facility (Code 313).

For further information, contact your local NRCS field office.

Natural Resources Conservation Service

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Natural Resources Conservation Service

CONSERVATION PRACTICE STANDARD

ROOFS AND COVERS

CODE 367

(no)

DEFINITION

A rigid, semirigid, or flexible manufactured membrane, composite material, or roof structure placed over a waste management facility, agrichemical handling facility, or an on-farm secondary containment facility.

PURPOSE

Use this practice to accomplish one or more of the following purposes—

- Protect clean water by excluding precipitation from potential contaminants.
- Improve waste management and utilization to protect nearby surface water quality.
- Reduce emissions of ammonia, odorous sulfur compounds, greenhouse gases, volatile organic compounds, and particulate matter to improve air quality.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies where—

- Precipitation should be excluded from the following areas: animal feeding and management areas, on-farm secondary containment facilities, facilities for waste storage, animal mortality, composting, waste transfer or waste treatment, and agrichemical handling.
- Biotreatment of emissions using a porous cover on a wastewater storage facility is needed to improve air quality, limit odors, and moderate the net effect of greenhouse gas emissions.
- A cover is needed to exclude precipitation from a waste management facility. Auxiliary elements of the cover will also capture and manage biogas emissions, improve air quality, limit odors, and reduce the net effect of greenhouse gas emissions.
- Biogas capture for energy production is a component of an existing or planned waste management system. Biogas capture and utilization will also improve air quality, limit odors, and reduce the net effect of greenhouse gas emissions.

This practice does not apply to NRCS Conservation Practice Standard (CPS) High Tunnel System (Code 325).

CRITERIA

General Criteria Applicable to All Purposes

Laws and Regulations

Plan, design, and construct the roof and covers to meet all Federal, State, Tribal, and local laws and regulations.

All necessary local, state, and federal permits shall be obtained by the producer or their designee. Construction specifications and/or drawings will specify that NRCS be provided copies of all required permits prior to construction. A Concentrated Animal Feeding Operations Permit may be required for the facility from the North Dakota Department of Environmental Quality (ND DEQ). Excavation or embankment work within or near streams and wetlands may require a permit from the U.S. Army Corps of Engineers in accordance with Section 404 of the Clean Water Act (Bismarck Regulatory Office). Projects that disturb more than 1 acre are required to develop a Stormwater Pollution Prevention Plan and submit it along with a Notice of Intent to the ND Department of Environmental Quality. Projects within the ordinary high-water mark of navigable lakes and streams require a Sovereign Lands Permit from the ND Department of Water Resources. Ensure that proposed embankments and/or overall site gradings involving fill do not increase the Base Flood (100-year recurrence interval) Elevation within Special Flood Hazard Areas (SFHA) by more than the allowable as defined by the local County Floodplain Administrator. Obtain a floodplain development permit through the local County Floodplain Administrator and the ND Department of Water Resources Floodplain Management Regulatory Program as necessary.

In addressing the National Environmental Policy Act (NEPA) for conservation practices within or near wetlands, sequencing must be conducted as per Executive Order 11990 included in Section G. Wetlands of the NRCS-CPA-052. Sequencing must include avoiding impacts if feasible. If avoidance is not feasible, a determination will be made using the North Dakota Minimal Effect Evaluation Worksheet. If the effects are determined to be minimal, the determination will be included in the NRCS-CPA-052. If the determination is not minimal, either wetland mitigation credits must be purchased from an approved mitigation bank or completed on site, on the basis of an HGM evaluation of lost wetland function. Implementation of the conservation practice(s) impacting the wetland(s) may begin upon obtaining either the letter of approved sale from the mitigation bank or all signatures on the wetland mitigation plan and agreement.

In cases where a 367 Roof Structure is being used for relocation or expansion if there is a significant increase animal numbers or a change in livestock type, consult the State Resource Conservationist to determine if a NRCS-CPA-052 will be adequate for addressing NEPA.

Materials

Select the type, thickness and material properties of the roof or cover and any supporting members after accounting for all loads and stresses due to operational, environmental, and climatic conditions.

Design

Design roofs and covers to withstand all anticipated loads in accordance with the requirements in Title 210, National Engineering Manual, Part 536, "Structural Design" (210-NEM-536) including all anticipated loads in the structural design for facility components that serve as part of the foundation or support for a roof or cover. See the sections below, on Additional Criteria for Rigid and Semi-rigid Roofs and Covers, and Additional Criteria for Flexible Covers.

Refer to NRCS CPS Waste Storage Facility (Code 313) or NRCS CPS Agrichemical Handling Facility (Code 309) for structural design criteria of the foundations associated with these respective practices. Account for all items that will influence the performance of the roof or cover, including strength, durability, serviceability, material properties and construction quality in the current editions of the following material references, as well as other references as appropriate as noted in Title 210, National Engineering Manual, Part 536, "Structural Design" (210-NEM-536):

- Steel. Manual of Steel Construction, AISC, American Institute of Steel Construction.
- Timber. National Design Specifications for Wood Construction, American Wood Council.
- Concrete Appropriate ACI Standard (see 210-NEM-536), American Concrete Institute.

- HDPE/LLDPE Geomembrane. HDPE and LLDPE Geomembrane Installation Specification, International Association of Geosynthetic Installers.

Access

Provide suitable access for normal operation and maintenance of a facility which is enclosed as the result of a roof or cover.

Venting

For an enclosed roof structure located over animals, manure storage, or petroleum product storage, provide ridge or end vent openings of at least 2 inches per 10-foot-width of building. This prevents buildup of moisture and gases in the attic area.

For enclosed buildings, provide mechanical (exhaust fans) or natural (adequate openings) ventilation in order to maintain a safe working environment when human entry is intended. Refer to American Society of Agricultural and Biological Engineers' (ASABE's) document, *ASABE S607, Ventilating Manure Storages to Reduce Entry Risk* for design standards.

Safety

Provide safety features, including fences and warning signs, as appropriate, to prevent undue hazards from biogases and drowning. Refer to ASABE's document, *ASAE EP470.1, Manure Storage Safety* for guidance.

Design covers and grating over openings such that livestock and humans cannot accidentally displace them and fall into the facility.

Include provisions in the design to prevent the unintentional conveyance of biogas to any facilities connected to the installed roof or cover.

Confined spaces where human entry may occur shall be designed and operated in compliance with the provisions contained in ASABE EP470, Manure Storage Safety.

Additional Criteria for Rigid and Semirigid Roofs and Covers - Confinement Barns

These facilities are defined as roof structures that are used to feed livestock in a confined building where they do not have access to open lots November through July. Confinement barns in the Upper Midwest are typically termed "Bedded Pack Barns", where a minimum manure pack depth of 24 inches. "Compost Barns", when the manure pack will be regularly tilled for aeration to optimize composting on the floor, and "Slatted Floor Barns" has a concrete deep pit below the concrete slatted pen surface.

Confinement Barns are considered to be a Conservation Practice when one of the following conditions apply:

1. To replace and/or expand feedlots located above shallow glacial drift aquifers that have been rated by the ND Department of Environmental Quality as highly or moderately vulnerable to surface contaminants. Aquifer extents and up to date vulnerability ratings are available at <https://gishubdata-ndgov.hub.arcgis.com/datasets/ndgishub-drastic/explore>. All outdoor lots will be abandoned except for sick pens and working facilities.
2. To replace all, or portions of, outdoor feedlots when an economic analysis supports a confinement barn as being the most cost-effective long-term alternative to bring the current or future expanded operation into compliance with water quality standards. The planning engineer will work with the producer to document their rationale and decisions utilizing the ND Economic Analysis Tool Open Lot vs Confinement Barn, available at: [Engineering Planning Guides - North Dakota | Natural Resources Conservation Service \(usda.gov\)](#) If outdoor lots are to be utilized in conjunction with a confinement barn then the runoff from the lots

will need to be addressed with a 313 Waste Storage Facility or 635 Vegetated Treatment Area.

The extent of the confinement barn for the purpose of this standard includes the roof and all of the structural components that support the roof. These components may include piers, columns, footings, pilings, walls, beams, connections, and other items.

- 1. Floors of confinement barns located over highly or moderately vulnerable shallow glacial drift aquifers the finished subgrade elevation, must be constructed entirely of concrete or a hardened soil- cement surface. Soil cement floor shall be constructed with one of the following secondary containment structures: A clay liner designed in accordance with Appendix 10D of the Agricultural Waste Management Field Handbook (AWMFH). The liner shall also meet any additional requirements defined in CPS Pond Sealing or Lining – Compacted Soil (520).**
- 2. A synthetic liner designed in accordance with CPS Pond Sealing or Lining – Geomembrane or Geosynthetic Clay Liner (521).**

Design of floors, interior waste stacking walls, and other related facilities will be through the Waste Storage Facility Practice Standard (313).

A minimum of 270 days storage will be provided for bedding material and the solid portion of manure, within the roofed structure and/or other storage facilities designed under the Waste Storage Facility Practice Standard (313). The methodology presented in SD NRCS Tech Note SD2011-1, “Beef and Dairy Bedded Pack Barn Planning and Design” will be utilized for computing storage requirements.

Design rigid and semirigid roofs and covers to withstand all anticipated loads including, but not limited to, internal and external loads, uplift pressure, concentrated surface and impact loads and load combinations in compliance with this standard. Design roofs, covers and associated support systems to resist all applicable loads including wind, snow, and seismic loads as specified in the current version of American Society of Civil Engineers (ASCE), Standard ASCE 7, *Minimum Design Loads for Buildings and Other Structures*. In lieu of compliance with ASCE 7, use the applicable provisions of the current International Building Code (IBC) to develop design loads and load combinations.

Design covers intended for vehicle, equipment and/or livestock traffic to withstand anticipated dead and live loads. The minimum live load design values for covers are contained in ASABE ASAE EP378.4, *Floor and Suspended Loads on Agricultural Structures Due to Use*, and ASAE EP393.3, *Manure Storages*. For tank wagons having more than a 2,000-gallon capacity, use the actual axle load for design.

Follow criteria outlined in NRCS CPS Roof Runoff Structure (Code 558) for structural practices to collect, control and convey roof runoff away from the contaminated area. Divert any outside surface water from entering the roofed area.

Treated Wood

Use preservative-treated wood when wood members are exposed to animal waste or elements that deteriorate wood. Preservative-treated wood must meet the applicable American Wood Protection Association (AWPA) Standards or have an evaluation service report (ESR) prepared by an organization recognized by the International Code Council (ICC). Treated wood in contact with animal wastes or as critical components that are difficult to replace, should meet AWPA UC4B or equivalent for heavy-duty ground contact.

Aluminum fasteners, connectors, or cladding must not be used in direct contact with treated wood unless specifically allowed by the preservative manufacturer. Use hot-dipped galvanized or stainless steel bolts, washers, nuts, nails, and other hardware which meet American Society for Testing and Materials (ASTM) specifications A153 for fasteners and ASTM A653 coating designation G185 for sheet metal connectors, or ASTM A240 for Type 304 or 316 stainless steel, except as noted below. Fasteners and connectors of

other materials may be used if specifically allowed by the preservative manufacturer. All fasteners, connectors, and any other metal in contact with Alkaline Copper Quaternary (ACQ), micronized copper quaternary (MCQ), Copper Azole (CA), Micronized Copper Azole (MCA), or Dispersed Copper Azole (μ CA-C) treated wood shall be stainless steel if the conditions for AWPA Use Category UC4B apply, if in direct contact with manure, or if constant, repetitive, or where long periods of wet conditions may occur. All fasteners, connectors, and any other metal in contact with wood treated with Ammoniacal Copper Zinc Arsenate (ACZA) or any other preservative containing ammonia must be stainless steel.

Repair

Allow use of sectional replacement repair for rigid or semirigid roof and cover material.

Additional Criteria for Flexible Covers -

For fabrication of flexible membrane inflated and floating covers, use only membrane materials which have been certified by the manufacturer as suitable for the intended application.

Design flexible membrane cover systems to resist snow, wind, and wind uplift loads as appropriate. **A wind speed of 90 mph (3-second gust) shall be used for uplift analysis unless weather data indicates otherwise for a 50-year recurrence interval.**

Design floating covers to fluctuate with rising and falling liquid levels to properly manage the waste storage facility.

Include floatation materials on floating membrane covers as necessary for proper cover performance, and operation and maintenance tasks.

Design impermeable floating covers with a biogas collection, transfer, and control system to provide protection for the cover and convey biogas to a flare, release, or control point.

Design biogas handling systems with the capacity to handle the large range in gas production that can occur as a result of changing ambient temperatures and substrate conditions.

Design inflated(**supported by forced air from mechanical means**) covers to be—

- Equipped with a warning system to notify operator of blower failure for mechanically forced air systems.
- Provided with a support system to limit cover collapse.

Use table 1 to select the minimum thickness for flexible geomembrane cover materials.

Table 1. Flexible geomembrane cover materials.

Type for	Minimum Thickness Criteria	
Purpose	Contain Biogas	Divert Clean Water
HDPE	40 mil	30 mil
LLDPE	40 mil	30 mil
LLDPE-R	36 mil	24 mil
PVC	40 mil	30 mil
EPDM	45 mil	45 mil
FPP	40 mil	30 mil
FPP-R	36 mil	23 mil
PE-R	NR	23 mil

1 mil = 1/1000 of an inch

HDPE – High Density Polyethylene Geomembrane

LLDPE – Linear Low Density Polyethylene Geomembrane

LLDPE-R – Reinforced Linear Low Density Polyethylene Geomembrane,

PVC – Polyvinyl Chloride Geomembrane

EPDM – Ethylene Propylene Diene Terpolymer Geomembrane

FPP – Flexible Polypropylene Geomembrane

FPP-R – Reinforced Flexible Polypropylene Geomembrane PE-R – Reinforced, Slit –Film, Woven Polyethylene Geomembrane

NR – Not Recommended

Repair.

Use only flexible cover material which is readily repairable. Repair may be made by solvent, adhesive, thermoplastic welding, or other methods according to manufacturer's recommendation.

Additional Criteria for Biogas Control/Utilization-

Biogas Emissions

The cover system will provide for bio-reduction and treated release of gaseous emissions, contain and manage release of gaseous emissions, or capture and control or utilization of biogas, as appropriate.

- Permeable Cover for Bio-reduction and Treated Release. Select a cover fabricated of a permeable composite membrane designed to promote biological treatment of gaseous emissions which pass through the membrane for treated release to the atmosphere.
- Impermeable Cover for Precipitation Exclusion and Biogas Capture. Design the impermeable cover system on the stored manure and organic wastes with auxiliary elements to manage any biogas produced by capturing biogas emissions and transferring biogas to the point of discharge without mixing with air. For storage cover systems which collect biogas, provide for the safe handling, transfer, and flaring or utilization of the biogas.

Equipment and material exposed to biogas must be resistant to corrosion and suitable for use within a potentially explosive environment. Materials, controls, motors and their installation must conform to the National Electrical Code (NEC). Motors must be rated explosion proof and properly sealed.

Design aboveground pipe for biogas transfer with fittings for expansion and contraction effects.

Use steel or plastic materials for aboveground biogas transfer pipe intended for pressurized biogas systems. Steel pipe must meet the requirements of American Water Works Association (AWWA) Specification C-200, or ASTM A53; or AWWA C-220 or ASTM A312 for stainless steel. Plastic pipe must be HDPE meeting AWWA Specification C-906 or ASTM D-3350. PVC is only acceptable for aboveground biogas transfer when pipe meets ASTM D2241 or D1785, is ultraviolet light inhibited and pipe material is modified for high impact strength.

Perforated pipe and other components under the facility cover shall be designed to exclude floating debris and waste residue and shall have a service life consistent with the expected cover life, but not less than 10 years.

Anchorage. Design the cover anchorage system to withstand internal gas pressures, corrosive environment, wind loads, air tightness (as necessary), and other forces as appropriate to the cover system.

Pressure. For covers associated with biogas production, include provisions for fail safe pressure relief when interior pressures exceed design operating pressures. Do not exceed manufacturer's recommended maximum pressure.

Precipitation. Design features to direct precipitation on impermeable covers to collection points for removal by pumping or by controlled release to suitable grassed or otherwise stabilized areas for discharge or infiltration.

Biogas Capture

Design the cover materials and all appurtenances such as weights and floats, to capture and convey biogas to the gas collection system. Provide for the following:

1. Air Exclusion - Design the cover system and appurtenances, including perimeter soil slopes above the water line, for in-ground liquid waste storage, to exclude the entrance of air under all operating conditions.
2. Gas Collection, Control, and Utilization - The collection, control, and utilization of biogas must meet appropriate criteria in NRCS CPS Anaerobic Digester (Code 366). **Specifically:**
 - **Appropriate fire protection equipment and biogas leak detection sensors and/or ventilation shall be provided where biogas leakage would enter confined areas intended for human entry.**
 - **Open flares shall be located a minimum distance of 95 feet from the biogas source. Flares shall have a minimum height of 10 feet and shall be grounded or otherwise protected to minimize the chance of lightning strike damage.**
 - **A flame trap assembly (flame arrester and thermal valve) device shall be installed in the biogas line between the cover/structure and sources of ignition or as recommended by the flame arrester manufacturer.**
 - **The location of underground gas lines shall be marked with signs to prevent accidental disturbance or rupture. Mark exposed pipe to indicate whether gas line or other.**

Biogas Safety

As a minimum for all roofs and covers that contain or control biogas, post the following warning signs:

- “Warning Flammable Gas.”
- “No Smoking.”
- And when human entry is possible: “Do Not Enter – Hazardous Gases.”

Where biogas is captured, design the gas collection, transfer and control/utilization system in accordance with standard engineering practice for safely handling a flammable gas including safety criteria noted in NRCS CPS Anaerobic Digester (Code 366).

CONSIDERATIONS

Consider an increased level of designed treatment for sites with high priority areas for source water protection or that are upstream of community drinking water withdrawal sites. Also consider increased levels of treatment in watersheds where water quality impairments for nutrients or pathogens have been shown to have impacted the designated use of downstream waterbodies.

To further improve water quality, consider eliminating or reducing feedlot areas when placing livestock under roof.

Screening with vegetative plantings, landforms, or other measures may be implemented for aesthetic purposes.

Maintain storage capacity and functionality of covered liquid waste storage by minimizing solids accumulation. Consider the use of manure management practices such as solid/liquid separation, NRCS CPS Waste Separation (Code 632).

On USDA certified organic and transitioning-organic operations, all wood treatments should comply with the National Organic Program (NOP) regulations.

For organic applications, consider using special construction material such as qualifying lumber as documented by an evaluation service recognized by the International Code Council (ICC). Other application considerations may also need to be made to address organic issues.

For areas where energy production is an option, consider adding energy recovery or production to the gas handling system. Energy recovery or production can offset air emissions from fossil fuel combustion.

Consider storage of biogas when installing flexible covers over waste storage facilities or waste treatment lagoons to attenuate gas supply for end use or treated release.

Waste facility covers which capture biogas may change nutrient volatilization of the stored manure. Consider the effect this may have on the nutrient management plan.

Waste facility covers which capture biogas may increase the odor nuisance during agitation, pump out, and land application. Consider the effect these activities may have on the surrounding areas and waste management options.

PLANS AND SPECIFICATIONS

Prepare plans and specifications that describe the requirements for applying this practice to meet its intended purpose.

As a minimum, the plans and specifications will provide the following:

- Include information about the location and sequence of the phases of construction.
- Specify layout and location of agricultural waste storage and handling facility, or agrichemical handling facility.
- Include roof or cover footprint, any waste collection points and all planned access features.
- Grading plan showing excavation and fill. Include appropriate drainage features and revegetation plan as needed.
- Materials and structural details of the roof or cover including all necessary appurtenances as appropriate for the complete system.
- For flexible geomembrane cover systems with biogas utilization, include a listing of associated biogas collection and transfer equipment, and necessary appurtenances.
- Specify that the manufacturer or installer of the geomembrane cover system must certify the installation of the cover. Require the same manufacturer or installer to provide the project owner with maintenance instructions for the cover material.
- Biosecurity measures during installation.
- Warning and safety signage placement.

OPERATION AND MAINTENANCE

Prepare an operation and maintenance (O&M) plan and review the plan with the landowner or operator responsible for the application of this practice. Provide specific instructions for proper operation and maintenance of each component of this practice and detail the level of inspection and repairs needed to maintain the effectiveness and useful life of the practice.

- For covers fabricated of a permeable composite membrane designed to promote biological treatment of gaseous emissions, maintain the cover media for the life of the practice to ensure proper biofilter operation.
- Address biosecurity concerns in all aspects of operation and maintenance.
- For enclosed waste facilities, exercise caution and care during cover removal or access. If opening of the cover is required for facility management, include provisions to prevent exposure of workers to hazardous gases.

- If personnel are or may be required to enter an enclosed waste facility, include safety provisions recommended by the National Institute for Occupational Safety and Health (NIOSH) for working in confined spaces including, but not limited to, using a positive-pressure self-contained breathing apparatus, safety line, and standby personnel.
- Develop an emergency action plan for covered systems associated with biogas production. Include instructions as to limits of cover performance and emergency procedures if control equipment fails. Provide contact(s) and phone numbers of person(s) to contact for the event of an emergency.

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Natural Resources Conservation Service
CONSERVATION PRACTICE STANDARD
ROOF RUNOFF STRUCTURE

CODE 558

(no)

DEFINITION

A structure or system of structures to collect, control, and convey precipitation runoff from a roof.

PURPOSE

This practice may be applied to achieve one or more of the following purposes:

- Protect surface water quality by excluding roof runoff from contaminated areas
- Prevent erosion from roof runoff
- Increase infiltration of roof runoff
- Capture roof runoff for onfarm use

CONDITIONS WHERE PRACTICE APPLIES

Where roof runoff from precipitation needs to be—

- Diverted away from a contaminated area.
- Collected and conveyed to a stable outlet or infiltration area.
- Collected and captured for other uses such as evaporative cooling systems, livestock water, or irrigation.

CRITERIA

General Criteria Applicable to All Purposes

Plan, design, and construct the roof runoff structure to comply with all Federal, State, and local laws and regulations. Notify landowner and/or contractor of their responsibility to locate all buried utilities in the project area, including drainage tile and other structural measures. The landowner is also required to obtain all necessary permits for project installation prior to construction.

Evaluate the condition of the existing roof structure prior to installation of a gutter. Install new fascia boards as needed to support gutters and downspouts for the practice life span. Mount gutters on plumb fascia boards. If the building does not have a fascia board, mount to the rafter ends, adding any necessary appurtenances to ensure the gutters are securely attached and positioned to collect runoff from the roof.

Ensure that the gutter support system will withstand the anticipated loading from precipitation including loads from snow and ice, where applicable. Where snow and ice are expected, install roof gutters below the projection of the roof line. If this is not possible with the existing roof, install rigid supports or wraparound straps. If structural supports are missing or insufficient, design the required supports for the gutter.

Protect the downspouts, laterals, and cross-pipe pipelines from damage by livestock or equipment with heavy-walled pipe, fencing, or other protective measures to exclude livestock and equipment.

Gutter design capacity

To exclude roof runoff from manure contamination, design roof runoff structures to convey the peak flow from a 25-year, 5-minute rainfall event. (Refer to NRCS National Engineering Handbook (Title 210), Part 651, Agricultural Waste Management Field Handbook, Chapter 10, Appendix 10B.)

For other applications, design roof runoff structures to convey the peak flow from a 10-year, 5-minute rainfall event.

Downspout

Design downspouts, collector pipes, lateral downspouts, or cross-pipes with a capacity that equals or exceeds the designed roof gutter flow rate. If downspouts drain directly onto the ground, use an elbow and energy dissipation device at the outlet to provide erosion protection and direct water away from the foundation of the structure by ensuring that ground slopes away from the building.

Ground gutter

If roof gutters are not feasible, ground gutters may be used in some instances. Ground gutters may not be practical for livestock housing where the purpose is to exclude roof runoff from contaminated areas.

Use ground gutters only on buildings with eaves that extend 12 inches or more horizontally from the building. Where runoff from the roof eave drops onto the ground surface, provide a gutter with the same capacity as required for roof gutters. Ground gutters must convey runoff away from the building to a stable outlet without erosion.

Ground gutters can be rock-lined channels, rock-filled trenches with subsurface drains, or concrete channels.

Outlet

Roof runoff can empty into a subsurface drain, underground outlet, a storage tank, a dry well, or onto an energy dissipation device as described above in section "Downspout."

Size outlets to handle the design flow from the gutter system. Provide accessible cleanouts for subsurface drains, underground outlets, and storage tanks that are used as outlets.

Use NRCS Conservation Practice Standard (CPS) Subsurface Drain (Code 606) to design subsurface drains if necessary to dewater ground gutters or infiltration ditches.

Use NRCS CPS Underground Outlet (Code 620) to design underground outlets to convey roof runoff to a stable outlet. In cold climates, ensure underground outlets are deep enough to avoid freezing or include a method to bypass the outlet without damage to the downspout.

Materials

Roof gutters and downspouts may be made of aluminum, galvanized steel, plastic, or wood. Aluminum gutters must have a minimum nominal thickness of 0.027 inches. Aluminum downspouts of 3 inches by 4 inches must have a minimum nominal thickness of 0.019 inches. Aluminum downspouts larger than 3 inches by 4 inches must have a minimum nominal thickness of 0.024 inches. Galvanized steel gutters and downspouts must be a minimum of 28 gauge. Plastics must contain ultraviolet stabilizers. Wood gutters must be made of rot-resistant wood free of knots.

To prevent corrosion, avoid contact between components of dissimilar metals.

To improve infiltration for rock-filled trenches and dry wells, use poorly graded gravel.

Where traffic, climatic, or other conditions necessitate the use of reinforced concrete for channels, pads, and slabs, refer to NRCS National Engineering Manual (NEM) (Title 210), Part 536, Section 536.20, "Design Criteria for Reinforced Concrete," for design and installation of reinforced concrete.

Where nonreinforced concrete is acceptable, refer to NRCS 210-NEM-536, Section 536.22, "Design Criteria for Concrete Slabs-on-Ground," for design and installation of nonreinforced concrete.

Additional Criteria to Increase Infiltration

Increase runoff infiltration by directing flow to existing vegetation or infiltration features (e.g., lawns, mass planting areas, existing natural areas, infiltration trenches, dry wells, rain gardens, or natural areas). Ensure these areas have the capacity to infiltrate the runoff without flowing directly to surface or ground water, causing excessive erosion, or adversely affecting the desired plant species.

Additional Criteria to Capture Water for Other Uses

Roof runoff can be contaminated with environmental pollutants that have settled on the roof between runoff events. This may make the captured runoff unsuitable for uses such as drinking water for livestock without treatment. The operator is responsible for ensuring that the quality of the runoff is suitable for the intended purpose.

If runoff water is to be stored, determine the tank size based on the planned use of the captured water. Select tank materials that have adequate strength and durability to hold water for the intended purpose and length of time required. Use materials that will not degrade the quality of the stored water for its intended use. Include a drain to allow maintenance of the tank and to protect from damage from freezing.

Install the storage tank on a firm, level foundation that will not settle differentially. Examples of suitable foundation materials are bedrock, concrete, compacted gravel, and stable well-compacted soils. Where necessary, prepare the foundation by removal and disposal of materials that are not adequate to support the design loads. Anchor or brace aboveground tanks as needed to prevent overturning or sliding by wind and animals.

Use NRCS design procedures or manufacturer's guidelines to ensure that buried tanks will withstand all earth and vehicle loads anticipated for the site.

Include provisions for access to the tank for maintenance and repairs. However, ensure that access points will limit unintended or unauthorized access.

Design tanks connected directly to gutters and downspouts to bypass runoff events that exceed the design capacity of the tank. Include provisions to convey overflows to a stable outlet without excessive erosion.

CONSIDERATIONS

Gutter size can be decreased by increasing the number of downspouts. When designing a gutter and downspout system consider the balance between gutter size and the spacing and sizing of downspouts to optimize the design.

If roof runoff will be used for livestock drinking water, the runoff should be treated before being consumed by livestock. This might include bypassing the first flush of runoff which often contains the majority of pollutants. Depending on the use of the runoff, additional actions may be necessary, such as settling and filtration to remove suspended particles and treatment of pathogens with ultraviolet light or chlorination. See International Code Council, CSA/ICC 805-2018, "Rainwater Harvesting Systems," for information on water quality treatment options for different end uses of the collected water.

Discharging roof runoff outlets near wells and sinkholes or directly into drainage ditches, streams, or ponds can be a point source of pollution. Consider the use of vegetative filter areas, such as raingardens, at outlets to minimize the pollution potential from roof runoff.

Consider the use of wraparound straps in lieu of rigid supports on steep roofs where the outer edge of the gutter cannot be placed below the projected roof line.

On roofs subject to snow and ice slides, consider additional supports even if the gutter is installed below the projected roof line.

PLANS AND SPECIFICATIONS

Provide plans and specifications that describe the requirements for applying this practice to achieve its intended purpose. As a minimum, include—

- A plan view showing the layout of gutters, downspouts, and outlets.
- Details of gutter installation, including necessary cross sections and slope of gutters.
- Details on the protection of downspouts from damage.
- Details on outlets, storage tanks, or infiltration areas as appropriate.
- Any other site-specific detail drawings necessary for the installation of the practice.
- Requirements for stabilization of any areas disturbed by the installation of the practice.
- Construction specifications describing the installation of the practice, materials, and quantities.

OPERATION AND MAINTENANCE

Prepare an operation and maintenance plan and review it with the operator. Describe the actions that must be taken to ensure that the facility functions properly for its design life. As a minimum, include—

- A schedule for regularly checking the gutters and downspouts for removal of any accumulated debris, damage from weather events, livestock, and equipment. Additional checks should be made after significant weather events (rain, snow, ice, extended cold periods, or high winds).
- Ensuring that the outlets are freely operating and not causing erosion.
- Ensuring roof runoff structures are clean, operating properly, and overflows are not causing erosion.
- Promptly repairing or replacing any damaged components.

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Natural Resources Conservation Service

CONSERVATION PRACTICE STANDARD

SUBSURFACE DRAIN

CODE 606

(ft)

DEFINITION

A conduit, or system of conduits, installed beneath the ground surface to manage soil water conditions.

PURPOSE

Use this practice to accomplish one or more of the following purposes:

- Remove or distribute soil water
- Remove salts and other contaminants from the soil profile
- Mitigate degraded plant health and vigor and undesirable plant productivity due to saturated soil, ponding, and flooding
- Mitigate degraded animal health productivity due to saturated soil, ponding, and flooding

CONDITIONS WHERE PRACTICE APPLIES

This practice applies to all land uses where a shallow water table exists or where a subsurface drainage system can mitigate one or more of the following adverse conditions caused by excessive soil moisture:

- Poor health, vigor, and productivity of plants
- Poor field trafficability
- Accumulation of salts in the root zone
- Health risk and livestock stress due to pests
- Adverse soil conditions around farmsteads, structures, and roadways

This practice also applies to water distribution through subsurface drain pipe for utilization or treatment.

CRITERIA

General Criteria Applicable to All Purposes

Plan, design, and construct this practice to comply with all applicable Federal, State, Tribal, and local laws and regulations. The landowner must obtain all necessary permissions from regulatory agencies or document that no permits are required. The landowner or contractor is responsible for locating all buried utilities in the project area, including drainage tile and other structural measures.

If wetlands are present, complete an appropriate wetland determination per established procedures. Avoid adverse effects of the drainage system on the ecology and hydrology of the site and on adjacent lands, especially potential or delineated wetlands, existing easements, and wildlife habitat.

Capacity

Base design capacity on the following, as applicable:

NRCS reviews and periodically updates conservation practice standards. To obtain the current version of this standard, contact your Natural Resources Conservation Service State office or visit the Field Office Technical Guide online by going to the NRCS website at <https://www.nrcs.usda.gov/> and type FOTG in the search field.

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- Recommendations from the State drainage guide
- Application of a locally proven drainage coefficient for the acreage drained
- The yield of ground water based on the expected deep percolation of irrigation water from the overlying fields, including leaching requirement
- Comparison of the site to other similar sites with known subsurface drain yields
- Measurement of the rate of subsurface flow at the site during a period of adverse weather and ground water conditions
- Application of Darcy's law to lateral or artesian subsurface flow
- Contributions from surface inlets based on hydrologic analysis or flow measurements
- Drain inlet opening size versus drain intake rate

Size

Compute the drain size by applying Manning's formula, using roughness coefficients recommended by the manufacturer of the conduit or coefficients adopted by the regulating authority. Base the size on the maximum design flow rate and compute using one of the following:

- The hydraulic grade line parallel to the bottom grade of the subsurface drain with the conduit flowing full at design flow (normal condition, no internal pressure)
- Conduit flowing partly full where a steep grade or other conditions require excess capacity
- Conduit flowing under internal pressure with hydraulic grade line set by site conditions, which differs from the bottom grade of the subsurface drain

All subsurface drains must have a nominal diameter that equals or exceeds 3 inches.

Internal hydraulic pressure

Drains are normally designed to flow with no internal pressure, and the flow is normally classified as open channel. Maintain the design internal pressure of drains at or below the limits recommended by the manufacturer of the conduit.

Horizontal alignment

Accomplish a change in horizontal direction of the subsurface drain by one of the following methods:

- The use of manufactured fittings
- The use of junction boxes or manholes
- A gradual curve of the drain trench on a radius in accordance with the limitations of the installation equipment and the recommendations of the pipe manufacturer while maintaining grade

Location, depth, and spacing

Base the location, depth, and spacing of the subsurface drain on site conditions including soils, plants, topography, ground water conditions, crops, land use, outlets, saline or sodic conditions, and proximity to wetlands.

The minimum depth of cover over subsurface drains may exclude sections of conduit near the outlet or through minor depressions, providing these sections of conduit are not subject to damage by frost action or equipment travel.

In mineral soils, provide a minimum depth of cover over subsurface drains of 2 feet.

In organic soils, provide a minimum depth of cover after initial subsidence of 3 feet. If water control structures are installed and managed to limit oxidation and subsidence of the soil, the minimum depth of cover may be reduced to 2.5 feet.

For flexible conduits, base maximum burial depth on the manufacturer's recommendations for the site conditions or on a site-specific engineering design consistent with methods in NRCS National Engineering Handbook (NEH) (Title 210), Part 636, Chapter 52, "Structural Design of Flexible Conduits."

For computation of maximum allowable loads on subsurface drains of all materials, use the trench and bedding conditions specified and the compressive strength of the conduit. Base the design load on the conduit from a combination of embedment, backfill, and live loads.

Base live loads on the maximum equipment or vehicle wheel loads. Equipment loads on the conduit may be neglected when the depth of cover exceeds 6 feet.

Minimum velocity and grade

In areas where sedimentation of fine sands and silts is not a hazard, design the minimum grade based on site conditions and velocity of not less than 0.5 feet per second. If a sedimentation potential exists, use a velocity of not less than 1.4 feet per second to establish the minimum grade. Otherwise, include provisions for preventing sedimentation by use of filters or by collecting and periodically removing sediment from installed traps, or by periodically cleaning the lines with high-pressure jetting systems or cleaning solutions. Prior to using high-pressure jetting systems, verify that the jetting system will not damage the pipe or the pipe embedment.

Maximum velocity

Limit the maximum velocity in a perforated corrugated plastic drainage pipe under open channel flow to 12 feet per second unless further restricted by the manufacturer's recommendation.

Limit the maximum design velocities in open-joint pipe (clay or concrete) to those given in table 1 if protective measures are not installed. Refer to NRCS 210-NEH, Section 16, Chapter 4, "Subsurface Drainage."

Table 1. Maximum Flow Velocities by Soil Texture

Soil Texture	Velocity (ft/s)
Sand and sandy loam	3.5
Silt and silt loam	5.0
Silty clay loam	6.0
Clay and clay loam	7.0
Coarse sand or gravel	9.0

Protective measures for high velocities in open-joint pipe may include the following, as appropriate:

- Bed the conduit in a sand and gravel envelope that is filter-compatible with the joint openings and surrounding soil
- Wrap the joints with nonwoven geotextile

Releases from water control structures must not cause flow velocities in perforated or open-joint drains to exceed allowable velocities in table 1, unless protective measures are installed.

Thrust control

Follow pipe manufacturer's recommendations for thrust control or anchoring where the following conditions exist:

- Axial forces that tend to move the pipe down steep slopes
- Thrust forces from abrupt changes in pipeline grade or horizontal alignment that exceed soil-bearing strength
- Reductions in pipe size

In the absence of manufacturer's data, design thrust blocks in accordance with NRCS 210-NEH-636-52.

Outlets

Provide drainage outlets adequate for the quantity and quality of water to be discharged.

Avoid submerged outlets unless intermittent submerged outlets are designed for protection from root clogging. For discharge to streams or channels, locate the outlet invert above the elevation of normal flow and at least 1 foot above the channel bottom.

For outlets into sumps, locate the discharge elevation above the elevation at which pumping is initiated.

Protect outlets against erosion and undermining of the conduit, entry of tree roots, damaging periods of submergence, and entry of rodents or other animals into the subsurface drain.

Use a continuous section of rigid pipe, without open joints or perforations and with stiffness necessary to withstand expected loads at the outlet end of the drain line. Table 2 shows minimum lengths for the outlet section of the conduit. Unsupported single-wall corrugated plastic pipe is not suitable for the section that outlets into a ditch or channel.

Table 2. Minimum Length of Outlet Pipe Sections

Pipe Diameter (in)	Minimum Section Length (ft)
8 and smaller	10
10 to 12	12
15 to 18	16
Larger than 18	20

The use and installation of outlet pipe must conform to the following requirements:

- If burning vegetation on the outlet ditch bank is likely to create a fire hazard, select fireproof material for the pipe
- Bury at least two-thirds of the rigid outlet pipe section in the ditch bank and project the cantilever section past the toe of the ditch side slope; or protect the side slope from erosion below the outlet pipe
- If ice or floating debris may damage the outlet pipe, protect the pipe by recessing the cantilevered part of the pipe to protect it from the current of flow in the ditch or channel
- Headwalls used for subsurface drain outlets must be adequate in strength and design to avoid washouts and other failures

For outlets into sumps, locate the discharge elevation above the elevation at which pumping is initiated.

Protection from biological and mineral clogging

Drains in certain soils are subject to clogging of perforations by bacterial action in association with ferrous iron, manganese, or sulfides. Iron ochre can clog drain openings and seal manufactured (fabric) filters. Manganese deposits and sulfides can clog drain openings.

Where bacterial activity is expected to lead to clogging of drains, provide access points for cleaning the drain lines.

Where possible, outlet individual drains to an open ditch to isolate localized areas of contamination and to limit the translocation of contamination throughout the system.

Protection from root clogging

Problems may occur where drains are near perennial vegetation. Drain clogging may result from root penetration by water-loving trees, such as willow, cottonwood, elm, and soft maple, and some shrubs, grasses, and deep-rooted perennial crops growing near subsurface drains. Refer to the USDA PLANTS Database website as a preliminary planning tool for obtaining vegetation properties and qualities information.

Use one or more of the following steps to reduce the incidence of root intrusion:

- Install a continuous section of nonperforated pipe or tubing with sealed joints through the root zone
- Remove water-loving trees for a distance of at least 100 feet on each side of the drain and locate drains a distance of 50 feet or more from noncrop tree species
- Provide for intermittent submergence of the drain to limit rooting depth by installing a structure for water control that allows for raising the elevation of the drain outlet (e.g., an inline weir with adjustable crest)

Utilize the intermittent submergence option only when the raised elevation of the drain outlet will not adversely impact the performance of the land use supported by the subsurface drain, and where the raised elevation will not adversely impact flooding on neighboring properties.

Water quality

Do not connect septic systems to the subsurface drainage system, nor allow animal waste to be directly introduced into the subsurface drainage system.

Materials

Subsurface drains include flexible conduits of plastic, bituminized fiber, or metal; rigid conduits of vitrified clay or concrete; or other materials of acceptable quality.

The conduit must meet strength and durability requirements for the site. All conduits must meet or exceed the minimum requirements of the appropriate and current specifications published by the American Society for Testing and Materials (ASTM), American Association of State Highway Transportation Officials (AASHTO), or the American Water Works Association (AWWA).

Conduit foundation

If soft or yielding foundation conditions are encountered, stabilize the conduit foundation and protect the area from settlement. The following methods are acceptable foundation treatments:

- Remove the unstable material and provide stable bedding of granular envelope or filter material.
- Provide continuous cradle support for the conduit through the unstable section.
- Bridge unstable areas using long sections of a conduit having adequate strength and stiffness to ensure satisfactory subsurface drain performance.
- Place conduit on a flat, treated plank. This method must not be used for flexible conduits (e.g., plastic pipe) without proper bedding between the plank and conduit.
- Use bedding to avoid laying the pipe on rock, rocky soil, or extremely hard soil.

Conduit Placement and bedding

Placement and bedding requirements apply to both trenching and plow-type installations.

Place the conduit on a firm foundation to ensure proper alignment.

The conduits must not be placed on exposed rock, stones greater than 1.5 inches for conduits 6 inches or larger in diameter, or stones greater than three-fourths of an inch for conduits less than 6 inches in diameter. Where site conditions do not meet this requirement, the trench must be over-excavated a minimum of 6 inches and refilled to grade with suitable bedding material. For trench installations where a sand-gravel envelope or compacted bedding is not specified, the conduit embedment must be suitable backfill. Soil excavated from the trench may be used for backfill as long as it contains no hard objects larger than the specified stone sizes above. Place initial backfill to a minimum of 3 inches above the conduit. Compact backfill to a density similar to the surrounding soil material. Mound the backfill over the trench to provide material for settling.

If installation will be below a water table or where unstable soils are present, special equipment, installation procedures, or bedding materials may be needed. These special requirements may also be

necessary to prevent soil movement into the drain or plugging of the envelope if installation will be made in materials such as soil slurries.

For the installation of corrugated plastic pipe with diameter of 8 inches or less, specify one of the following bedding methods:

- Provide a shaped groove with an angle of support of 90 degrees or greater in the bottom of the trench for tubing support and alignment
- Provide a sand-gravel envelope, at least 3 inches thick, for support
- Provide compacted embedment material beside and to 3 inches above the conduit

For the installation of corrugated plastic pipe with diameter larger than 8 inches, the same bedding requirements apply except that a semicircular or trapezoidal groove shaped to fit the conduit with a support angle of 120 degrees will be used rather than a V-shaped groove.

For rigid conduits installed in a trench, the same requirements apply except that a groove or notch is not required.

Filter envelopes and materials

Design filters around conduits, as needed, to enhance water entry and stabilize the structure of the surrounding soil material. Determine the need for a filter by the characteristics of the surrounding soil material, site conditions, and the velocity of flow in the conduit. Use a suitable filter if any of the following conditions exist:

- Local experience with soil site conditions indicates a need
- Soil materials surrounding the conduit are dispersed clays, silts with a plasticity index less than 7, or fine sands with a plasticity index less than 7
- The soil is subject to cracking by desiccation
- The method of installation may result in inadequate consolidation between the conduit and backfill material

Design the sand or sand-gravel filter gradation in accordance with NRCS 210-NEH, Part 633, Chapter 26, "Gradation Design of Sand and Gravel Filters."

Specified filter material must completely encase the conduit such that all openings are covered with at least 3 inches of filter material, except where the top of the conduit and side filter material will be covered by a sheet of plastic or similar impervious material to reduce the quantity of filter material required. In all cases, the resulting flow path through the filter material must be a minimum of 3 inches in length.

Use geotextile filter materials with the effective opening size, strength, durability, and permeability to prevent soil movement into the drain throughout the expected life of the system. Where the silt content in the soil exceeds 40 percent, ensure the geotextile filter material will not clog during its design life.

Hydraulic envelopes and materials

Use an envelope around subsurface drains, as needed, to improve flow conditions in the area immediately adjacent to the drain.

Materials used for envelopes must not contain materials that will cause an accumulation of sediment in the conduit or render the envelope unsuitable for bedding of the conduit.

Envelope materials must consist of sand-gravel, organic, or similar material. Use an envelope gradation such that 100 percent of sand-gravel passes a 1.5-inch sieve, not more than 30 percent passes a number 60 sieve, and not more than 5 percent passes a number 200 sieve.

Organic or other compressible envelope materials must not be used below the centerline of flexible conduits. If organic or other compressible materials are used they must be of a type that will not readily decompose within the expected lifespan of the practice.

Refer to NRCS 210-NEH, Part 650, Chapter 14, "Water Management (Drainage)," for more complete definitions of envelopes (e.g., hydraulic envelope, filter envelope, and bedding).

Auxiliary structures and protection

The capacity of any structure installed in the drain line must be no less than that of the line or lines feeding into or through the structure.

Structures for water table management, with provisions to elevate the outlet and allow submergence of the upstream drain, must meet applicable design criteria in NRCS Conservation Practice Standard (CPS) Structure for Water Control (Code 587). Mark buried boxes with surface evidence or referenced to fixed aboveground markings or structures.

Underground outlets connected to the subsurface drainage system must meet the applicable provision of NRCS CPS Underground Outlet (Code 620). Design the capacity of the surface water inlet to be no greater than the maximum design flow in the downstream drain line or lines. Install sediment traps if sediment might pose a problem.

Specify pressure relief wells as needed to allow excess flow to escape the conduit and flow over the ground surface. Use pressure relief wells where there is a stable outlet for the flow from the relief well. Cover the relief well with a grate or other appropriate means to prevent accidental entry of machines, animals, humans, and debris. Design the subsurface drain system to have a positive hydraulic grade to the relief well flow line. Base the relief well system capacity on the flow from the drainage system and other site conditions. Capacity must be adequate to lower the water head to the desired level. Relief wells must not be less than 4 inches in diameter.

Junction boxes, manholes, catch basins, and sediment traps must be accessible for maintenance. Provide a clear opening of not less than 2 feet in diameter or 2 feet by 2 feet square.

Protect the drain system against turbulence created near outlets, surface inlets, or similar structures. Use continuous nonperforated or closed-joint pipe in drain lines adjoining the structure where excessive velocities will occur.

As an alternative to manufactured fittings, install a junction box where three or more lines join or if two lines join at different elevations. Use a solid cover if the junction box is buried. The junction box should have a minimum of 1.5 feet of soil cover. Protect buried boxes from traffic.

If not connected to a structure, close the upper end of each subsurface drain line with a tight-fitting cap or plug of the same material as the conduit, or other durable materials.

Use watertight conduits designed to withstand the expected loads where subsurface drains cross under irrigation canals, ditches, or other structures.

CONSIDERATIONS

When planning, designing, and installing this practice, consider—

- Protection of shallow drains, auxiliary structures, and outlets from damage due to freezing and thawing
- Proper surface drainage to reduce the required capacity of the subsurface drainage system
- Designs that can incorporate drainage water management practices (or facilitate future incorporation of drainage water management) to reduce nutrient loading of receiving waters, including downstream drinking water sources.

- Drainage laterals oriented along elevation contours to improve the effectiveness of drainage water management structures
- The effects of drainage systems on runoff volume, seepage, and the availability of soil water needed for plant growth
- Confirmation of soil survey information with site investigation, including augering and shallow excavations to identify soil profile hydraulic characteristics, soil texture layering, water table depth, etc
- Maximizing wetland functions and values to the extent practicable
- Subsoiling or ripping of soils with contrasting texture layers to improve internal drainage. Where this treatment is needed use NRCS CPS Deep Tillage (Code 324)
- Installations in a dry soil profile to minimize problems of trench stability, conduit alignment, and soil movement into the drain
- The effects to surface water quality
- Using measures to reduce the risk of drain water contamination from surface applications of manure (e.g., temporary flow-blocking devices)
- Using NRCS CPSs Drainage Water Management (Code 554), Constructed Wetland (Code 656), Saturated Buffer (Code 604), or Denitrifying Bioreactor (Code 605) in conjunction with this standard where removal of nitrate nitrogen in subsurface drainage is needed
- Including a tailwater reuse system that conforms to NRCS CPS Irrigation and Drainage Tailwater Recovery (Code 447) in conjunction with this standard where excess soil water will be reused for irrigation
- The potential existence of a hazardous atmosphere in junction boxes or manholes

PLANS AND SPECIFICATIONS

Prepare plans and specifications for installing subsurface drains according to the applicable criteria that describe the requirements for implementing the practice to achieve its intended purpose.

At a minimum, plans and specifications must include, as applicable—

- Location and plan view of the drainage system
- Conduit lengths, grades, spacing, sizes, and type of materials
- Requirements and typical cross sections or details for the subsurface drain, filter, envelope, and bedding
- Structure locations, dimensions, and elevations
- Outlet locations, elevations, and protection required
- Location of utilities and notification requirements
- Construction specifications describing site-specific installation requirements of the subsurface drain

OPERATION AND MAINTENANCE

Provide an operation and maintenance (O&M) plan with specific instructions for operating and maintaining the system to ensure proper function as designed. At a minimum, the O&M plan must address—

- Necessary periodic inspection and prompt repair of system components (e.g., structures for water control, underground outlets, vents, drain outlets, trash, and rodent guards)
- Winterization protection from freezing conditions (if applicable) for drainage systems in cold climates
- Protection requirements during manure applications (if applicable)

REFERENCES

USDA NRCS. 2008. National Engineering Handbook (Title 210), Section 16, Chapter 4, Subsurface Drainage. Washington, D.C. <https://directives.sc.egov.usda.gov/>

USDA NRCS. 2017. National Engineering Handbook (Title 210), Part 633, Chapter 26, Gradation Design of Sand and Gravel Filters. Washington, D.C. <https://directives.sc.egov.usda.gov/>

USDA NRCS. 2005. National Engineering Handbook (Title 210), Part 636, Chapter 52, Structural Design of Flexible Conduits. Washington, D.C. <https://directives.sc.egov.usda.gov/>

USDA NRCS. 2021. National Engineering Handbook (Title 210), Part 650, Chapter 14, Water Management (Drainage). Washington, D.C. <https://directives.sc.egov.usda.gov/>

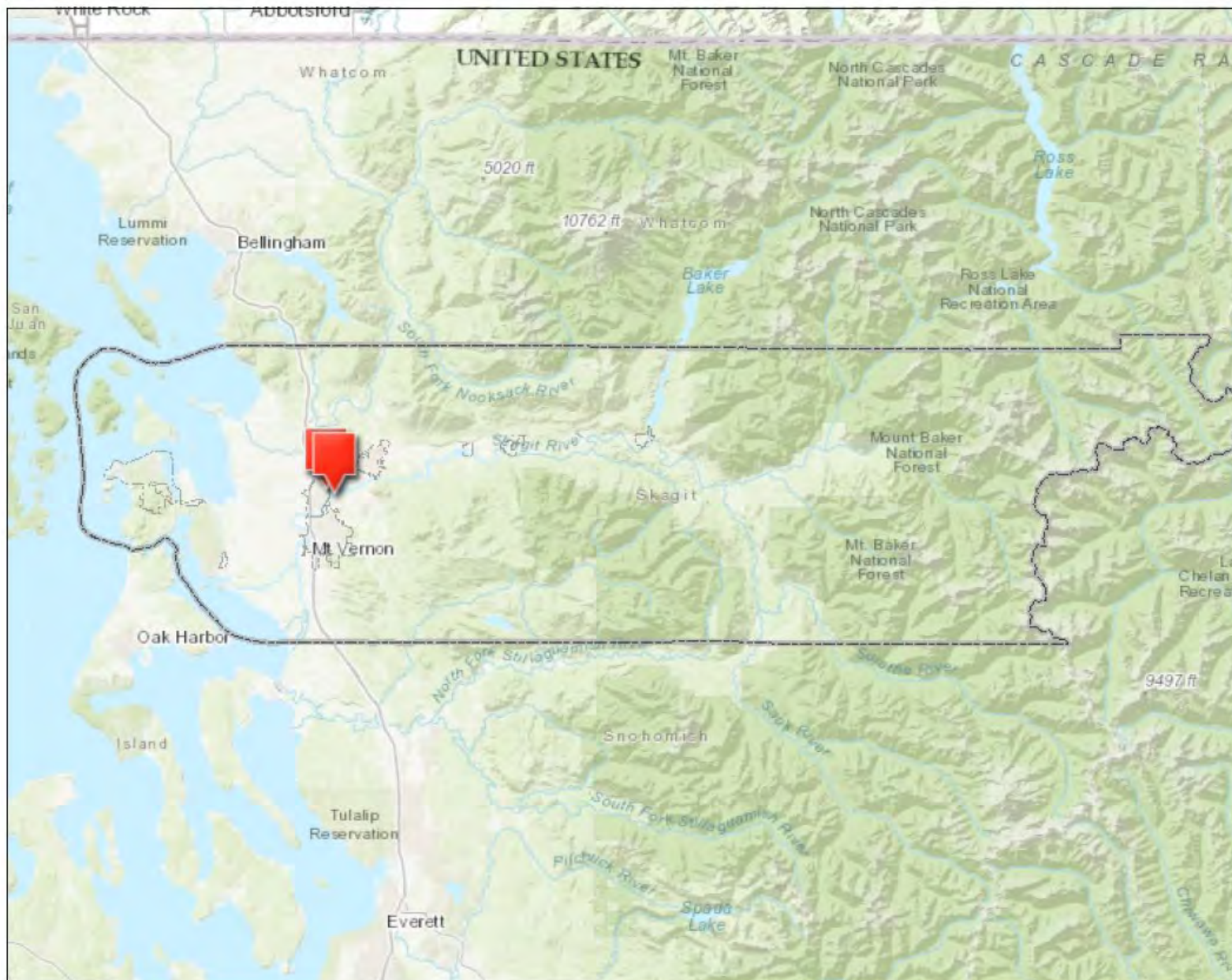
USDA NRCS. "PLANTS Database." Accessed February 17, 2021. <https://plants.sc.egov.usda.gov/>

APPENDIX F

Vicinity Map and Plans



2025 Waste Storage Facility Locations



Legend

- City Limit Lines
- County Boundary

Notes

24.18 0 12.09 24.18 Miles

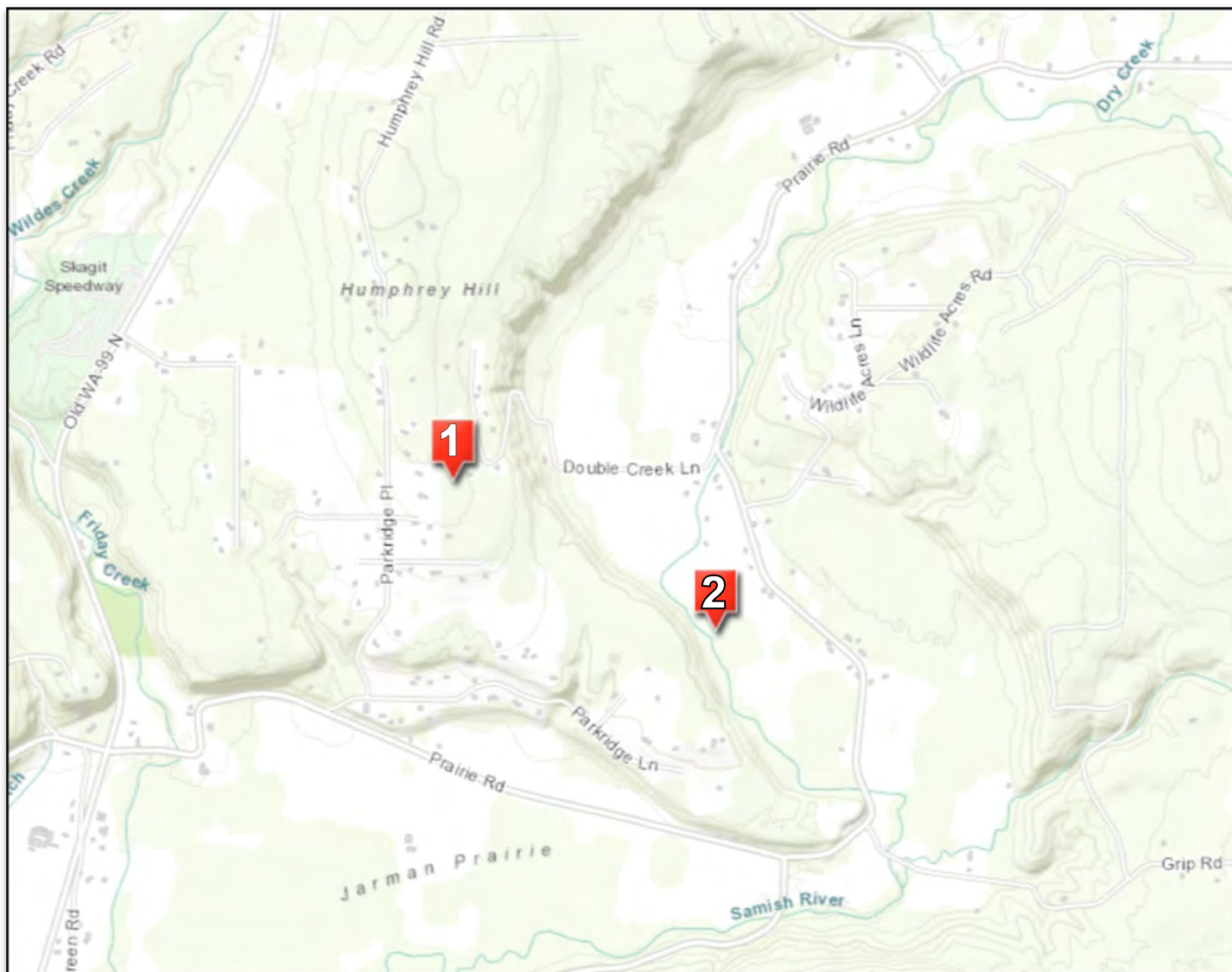
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© Skagit County



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3/7/2025



Legend		
Site 1	Fitzgerald	19954 Double Creek Ln, Sedro Woolley, WA 98284
Site 2	Groesbeck	20601 Prairie Road, Sedro Woolley, WA 98284



Site 1, Fitzgerald, 19954 Double Creek Ln, Sedro Woolley, WA 98284



Site 1 Fitzgerald, Yellow rectangle marks construction location



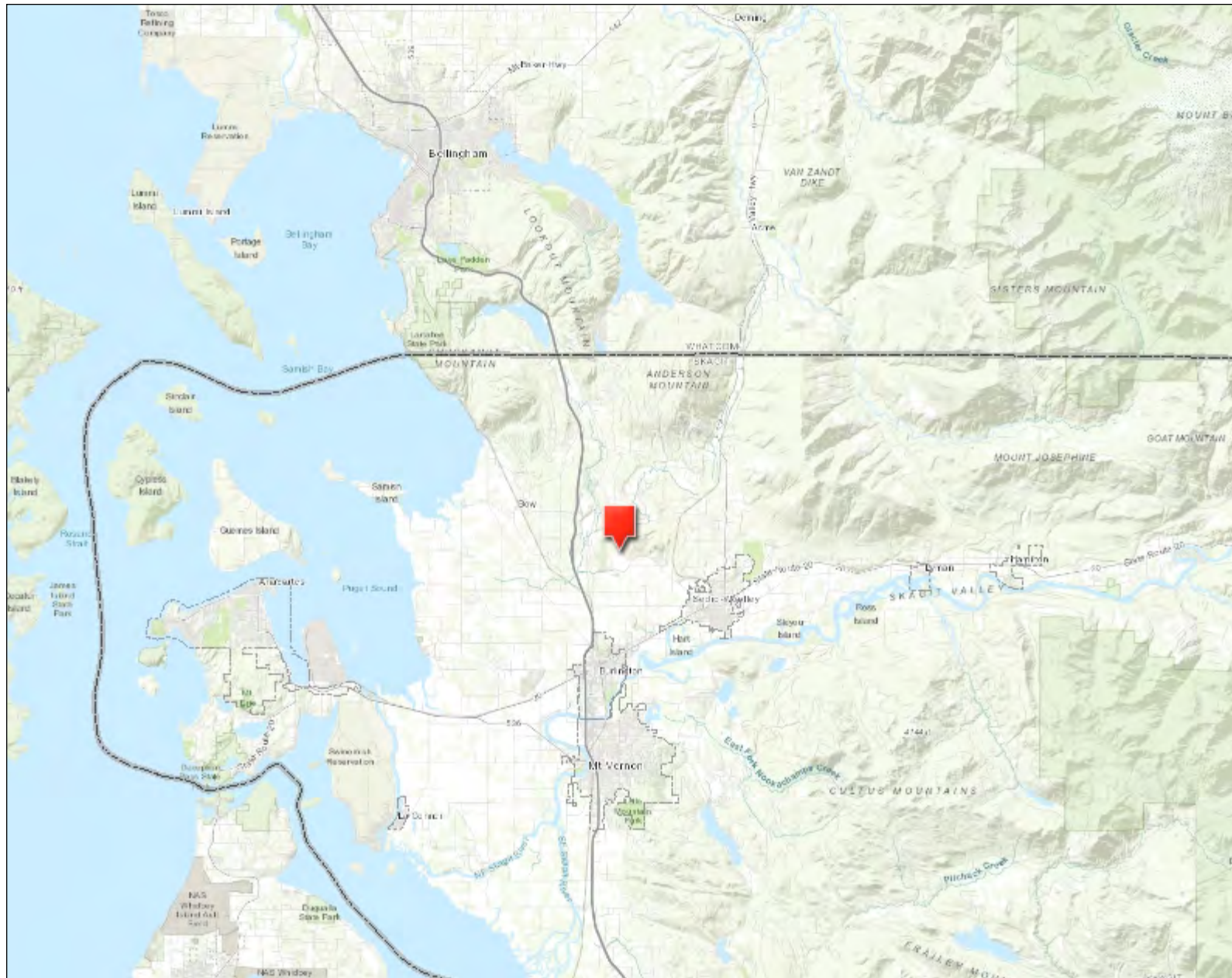
Site 2, Groesbeck, 20601 Prairie Road, Sedro Woolley, WA 98284



Site 2 Groesbeck, Yellow rectangle marks construction location.



Waste Storage Facility Location



Legend

- City Limit Lines
- County Boundary

Notes

11.33 0 5.66 11.33 Miles

Scale 1: 358,833

© Skagit County

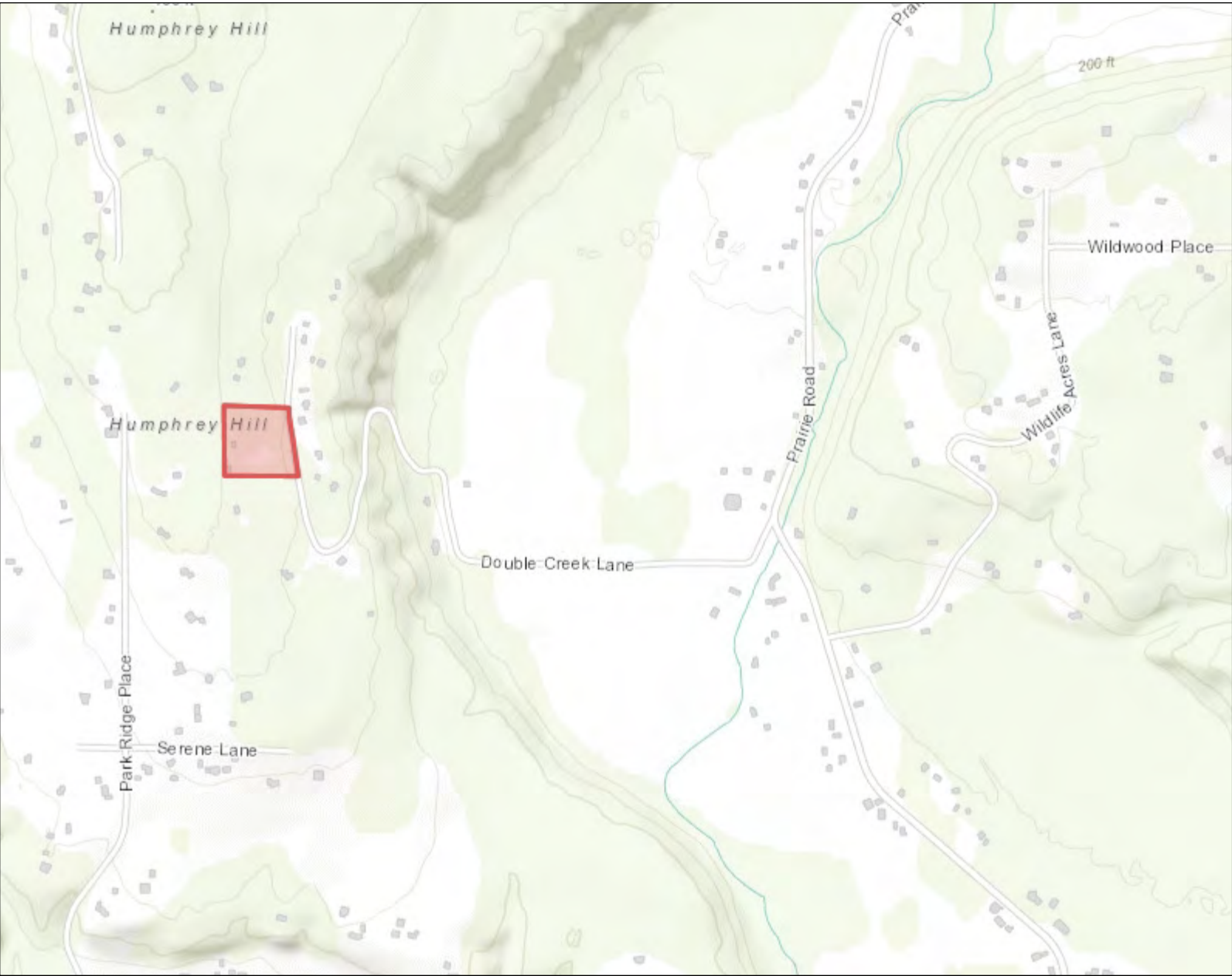


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4/25/2025



Waste Storage Facility Location



- Legend
- City Limit Lines
 - County Boundary

Notes
Fitzgerald



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4/25/2025



2025 Waste Storage Facility Locations- Fitzgerald



Legend

- Tax Parcels
- City Limit Lines
- County Boundary



0.05 0 0.02 0.05 Miles

Scale 1: 1,496

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3/7/2025

Notes

FITZGERALD WSF ROOF DRAINAGE AND CONCRETE APRON



SKAGIT COUNTY OFFICIALS

BOARD OF COMMISSIONERS
•LISA JANICKI, CHAIR
•RON WESEN, COMMISSIONER
•PETER BROWNING, COMISSIONER

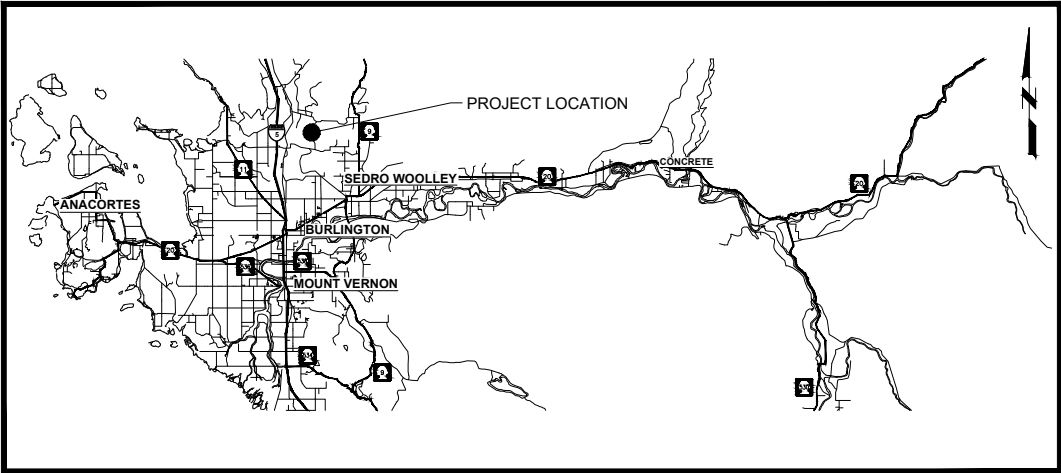
APPROVED FOR CONSTRUCTION

[Signature]

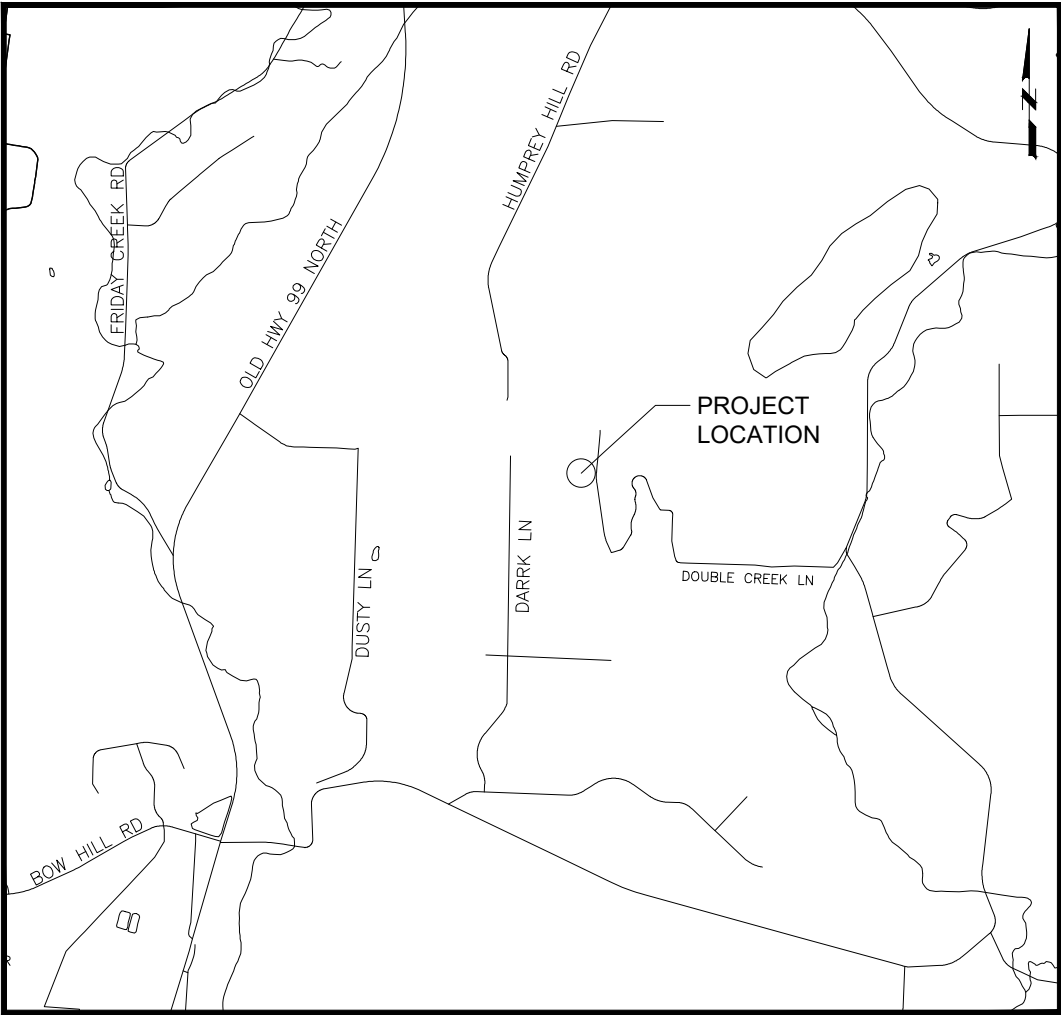
THOMAS M. WELLER, P.E. ACTING COUNTY ENGINEER

04/25/2025

DATE



VICINITY MAP NTS



SITE MAP NTS

ABBREVIATIONS:

APPROX	APPROXIMATE	MAX	MAXIMUM
ASPH	ASPHALT	MIN	MINIMUM
AVE	AVENUE	MIC	MONUMENT IN CASE
BLDG	BUILDING	MON	MONUMENT
BLVD	BOULEVARD	MP	MILE POST
CAT	CATEGORY	MUTCD	MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES
CB	CATCH BASIN	N	NORTH/NORTHING
CIP	CAST IRON PIPE	NRCS	NATURAL RESOURCES CONSERVATION SERVICE
CFS	CUBIC FEET PER SECOND	NTS	NOT TO SCALE
CL & t	CENTERLINE	PCMS	PORTABLE CHANGEABLE MESSAGE SIGN
CP	CONTROL POINT	PERF	PERFORATED PIPE
CMP	CORRUGATED METAL PIPE	PI	POINT OF INTERSECTION
CPP	CORRUGATED PLASTIC PIPE	R	RADIUS
CPCP	CORRUGATED POLYETHYLENE CULVERT PIPE	RD	ROAD
CPSSP	CORRUGATED POLYETHYLENE STORM SEWER PIPE	R/W & ROW	RIGHT OF WAY
CSBC	CRUSHED SURFACING BASE COURSE	RT	RIGHT
CSP	CORRUGATED STEEL PIPE	S	SOUTH
CULV	CULVERT	SEC	SECTION
CY	CUBIC YARD	SF	SQUARE FOOT
DEG	DEGREE	SHLD	SHOULDER
DIA	DIAMETER	SPEC	SPECIFICATIONS
DWG	DRAWING	ST	STREET
E	EAST/EASTING	STA	STATION
EL & ELEV	ELEVATION	TYP	TYPICAL
EST	ESTIMATED	UG	UNDERGROUND
EVC	END VERTICAL CURVE	USDA	UNITED STATES DEPARTMENT OF AGRICULTURE
FGR	FACE OF GUARDRAIL	W	WEST
FT & '	FEET	WSDOT	WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
GALV	GALVANIZED	W.M.	WILLAMETTE MERIDIAN
GND	GROUND	WSF	WASTE STORAGE FACILITY
HUA	HEAVY USE AREA		
IN & "	INCHES		
INV	INVERT		
LF	LINEAR FEET		
LT	LEFT		

SHEETLIST TABLE	
SHEET NUMBER	SHEET TITLE
1	COVER SHEET
2	SITE PLAN
3	ROOF DRAINAGE PLAN
4	CONCRETE APRON PLAN

LEGEND	
	CORRUGATED STEEL PIPE (CSP)
	DESIGN BY OTHERS
	DESIGN LINES - ROOF DRAINAGE & CONCRETE APRON
	FINISHED GRADE
	CRUSHED SURFACING BASE COURSE
	NATIVE MATERIAL
	ROOF DRAINAGE ASSEMBLY

SURVEY NOTES:
HORIZONTAL DATUM: NAD83 WASHINGTON STATE PLANE NORTH ZONE
VERTICAL DATUM: NAVD88



Know what's **below**
Call before you dig.
Determina lo que está **bajo tierra**
Llama antes de excavar.

SKAGIT COUNTY
PUBLIC WORKS
1800 CONTINENTAL PLACE
MOUNT VERNON, WA 98273-5625
(360) 416-1400

NO.	REVISIONS	DATE



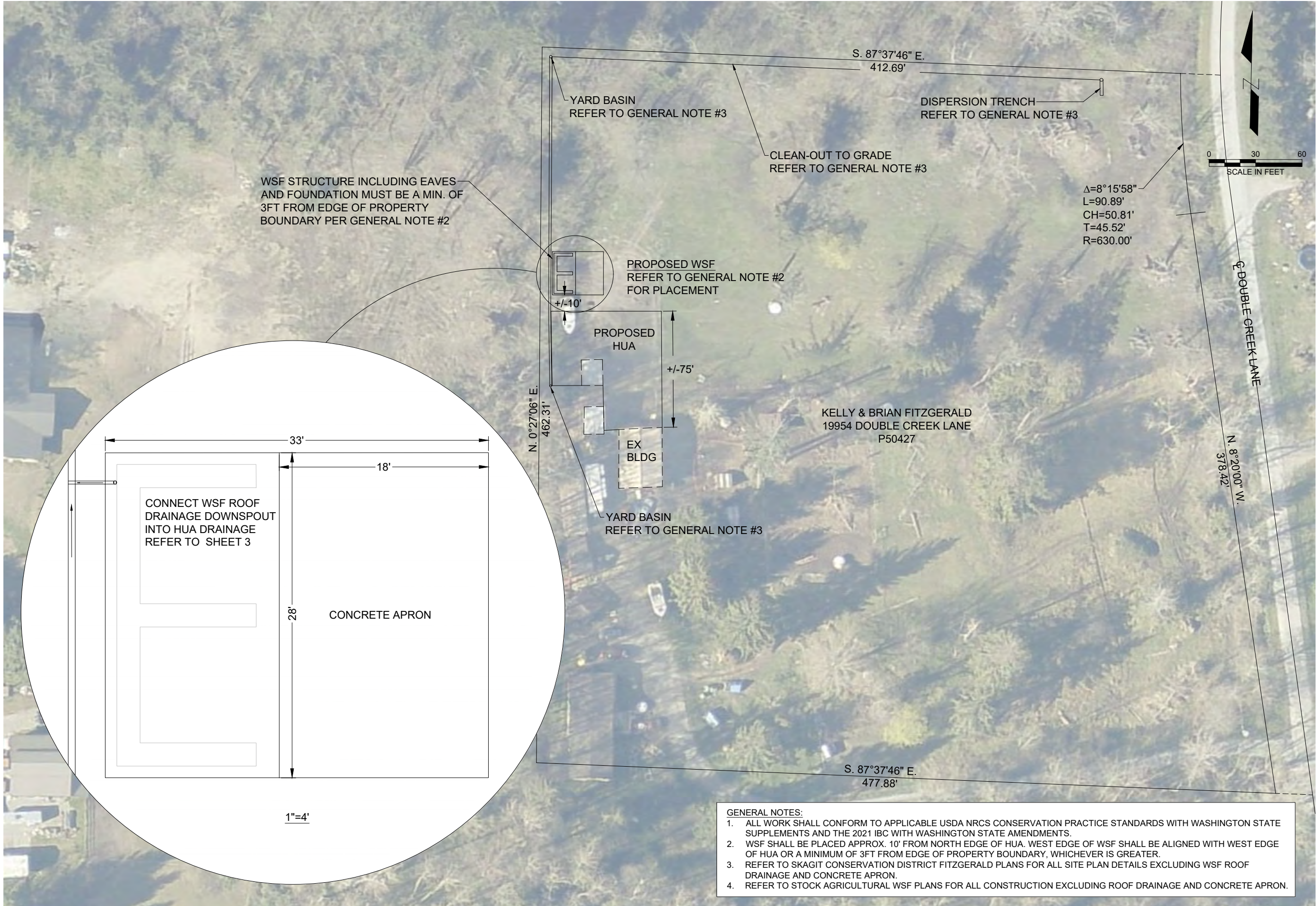
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PROJECT LOCATED NEAR: SEDRO WOOLLEY, WA 98284 SEC 32, T38N, R4E					

FITZGERALD WSF
ROOF DRAINAGE AND
CONCRETE APRON

COVER SHEET

1 INCH SCALE BAR
ADJUST SCALE ACCORDINGLY

SHEET
1 OF 4



- GENERAL NOTES:**
1. ALL WORK SHALL CONFORM TO APPLICABLE USDA NRCS CONSERVATION PRACTICE STANDARDS WITH WASHINGTON STATE SUPPLEMENTS AND THE 2021 IBC WITH WASHINGTON STATE AMENDMENTS.
 2. WSF SHALL BE PLACED APPROX. 10' FROM NORTH EDGE OF HUA. WEST EDGE OF WSF SHALL BE ALIGNED WITH WEST EDGE OF HUA OR A MINIMUM OF 3FT FROM EDGE OF PROPERTY BOUNDARY, WHICHEVER IS GREATER.
 3. REFER TO SKAGIT CONSERVATION DISTRICT FITZGERALD PLANS FOR ALL SITE PLAN DETAILS EXCLUDING WSF ROOF DRAINAGE AND CONCRETE APRON.
 4. REFER TO STOCK AGRICULTURAL WSF PLANS FOR ALL CONSTRUCTION EXCLUDING ROOF DRAINAGE AND CONCRETE APRON.

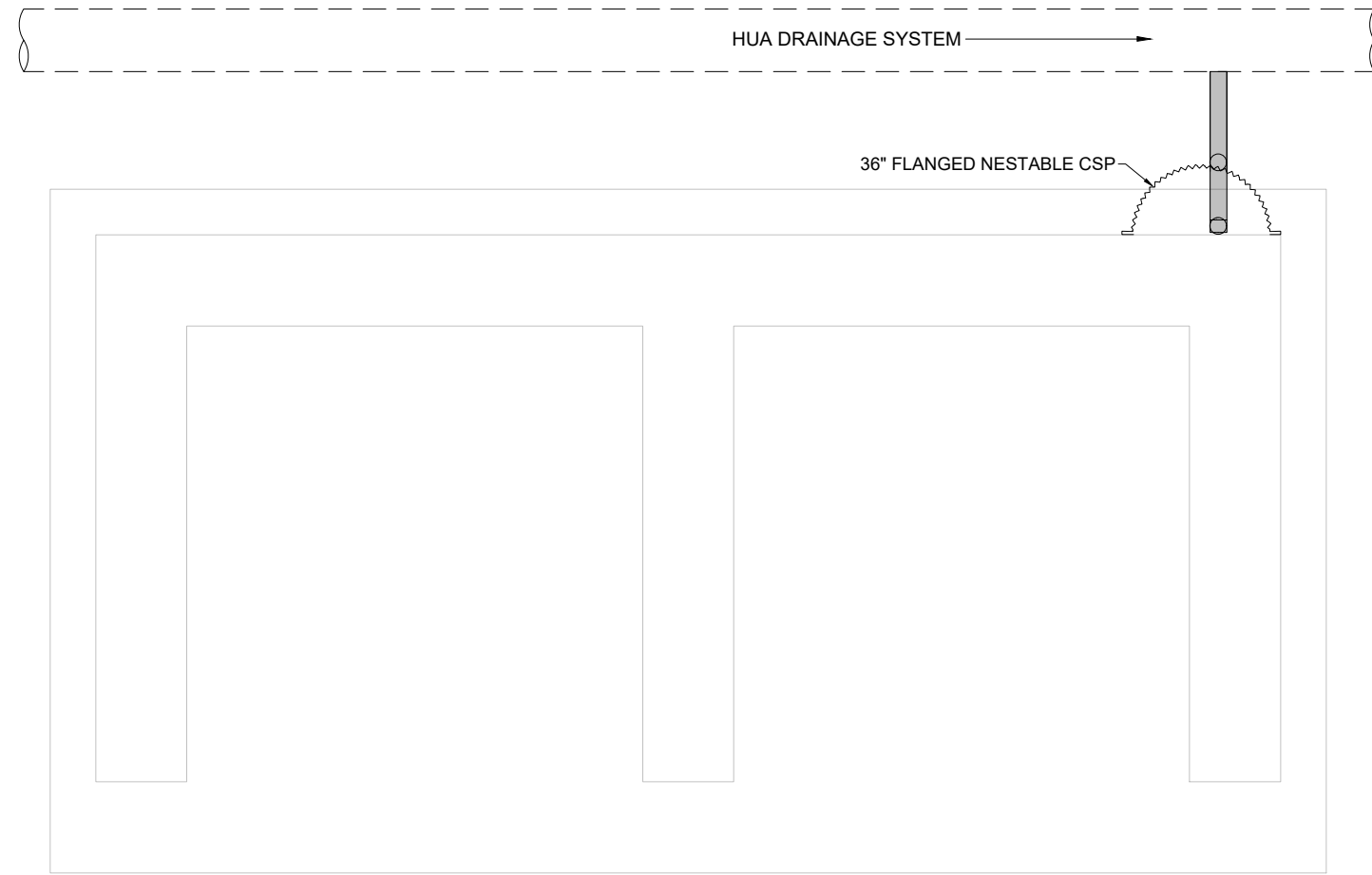
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(360) 416-1400

NO.	REVISIONS	DATE

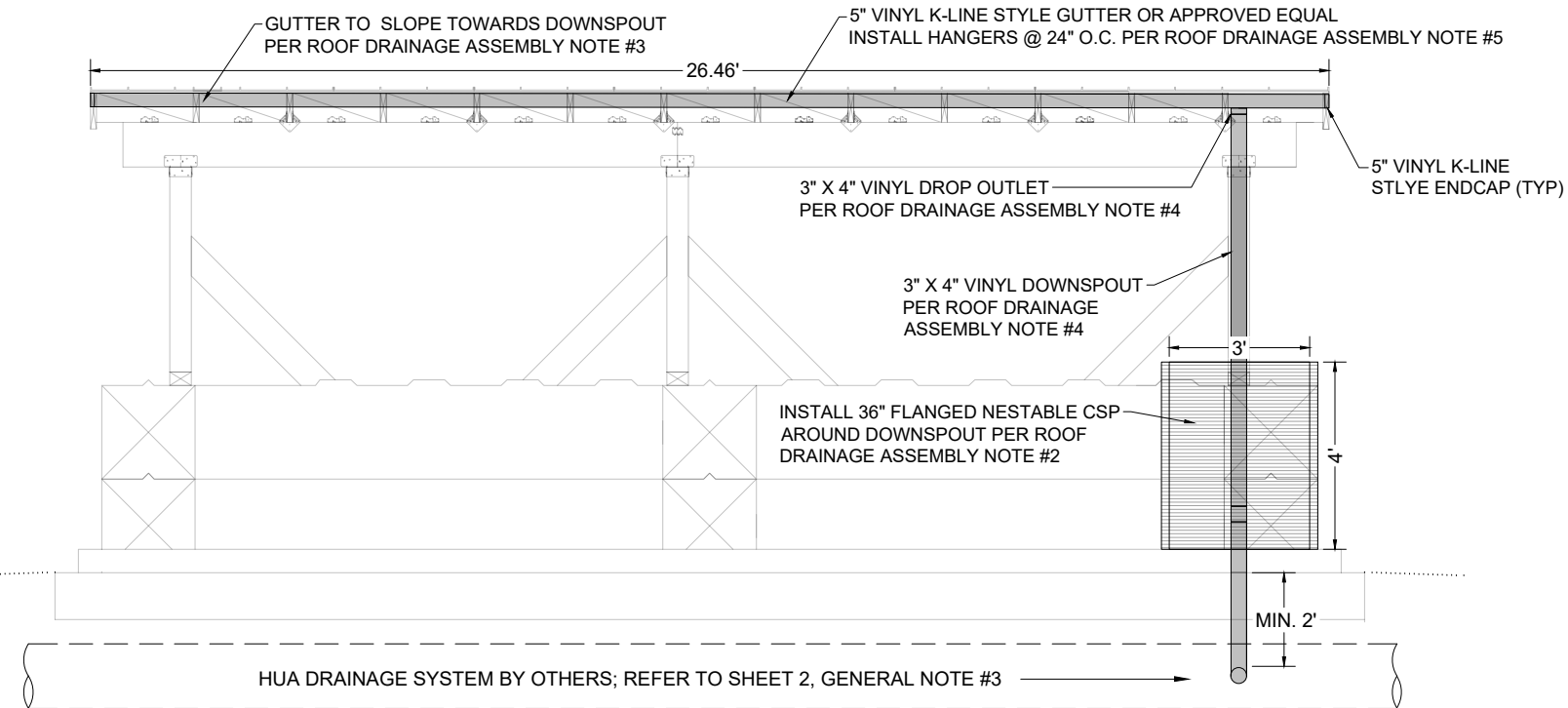


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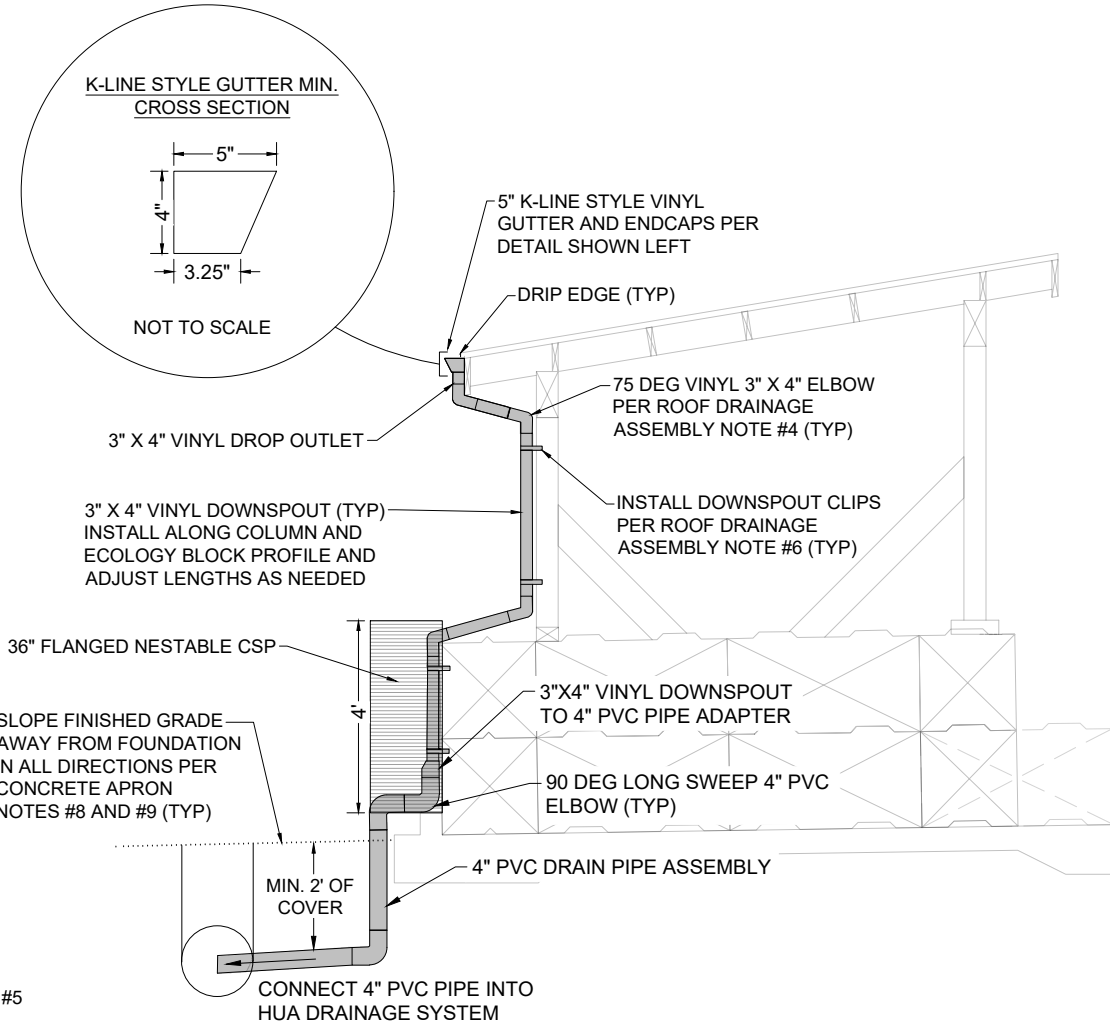
FITZGERALD WSF ROOF DRAINAGE AND CONCRETE APRON	SITE PLAN
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PLAN VIEW
1" = 2'



WEST ELEVATION
1" = 2'



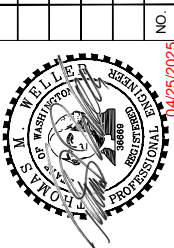
SECTION VIEW
1" = 2'

ROOF DRAINAGE ASSEMBLY NOTES:

1. ROOF DRAINS AND HARDWARE SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
2. 36" DIAMETER BY 4' LONG HALF ROUND FLANGE TYPE GALVANIZED NESTABLE CSP (OR APPROVED EQUAL) TO BE INSTALLED AROUND LOWEST 4FT-SECTION OF DOWNSPOUT. BOTTOM EDGE OF CSP TO REST ON TOP OF CURB. ATTACH CSP TO ECOLOGY BLOCKS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
3. GUTTER MUST HAVE A MINIMUM $\frac{1}{4}$ " PER 10' OF SLOPE TOWARDS DOWNSPOUT.
4. DROP OUTLET, ELBOWS AND DOWNSPOUTS MUST BE 3" X 4" VINYL OR APPROVED EQUAL.
5. GUTTER HANGERS SHALL BE SPACED AT MAXIMUM 24" O.C.
6. DOWNSPOUT SUPPORT CLIPS MUST HAVE MAXIMUM SPACING OF 60" O.C. AND MAXIMUM SPACING OF 6" BETWEEN ANGLE JOINTS AND BRACKETS.

**SKAGIT COUNTY
PUBLIC WORKS**
1800 CONTINENTAL PLACE
MOUNT VERNON, WA 98273-5625
(360) 416-1400

NO.	REVISIONS	DATE

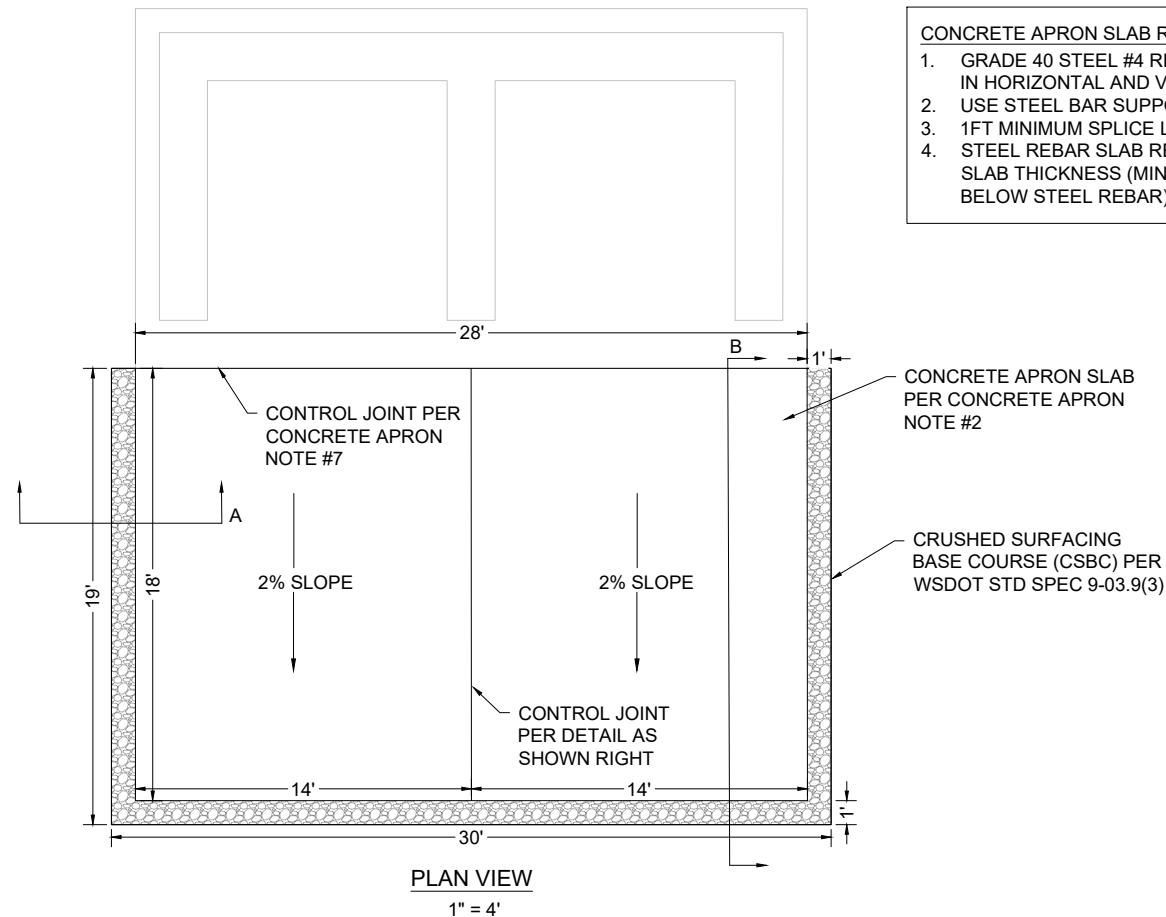


ENGINEER OF RECORD
M. J. RIDDLE
STATE OF WASHINGTON
LICENSE NO. 36868
04/25/2025

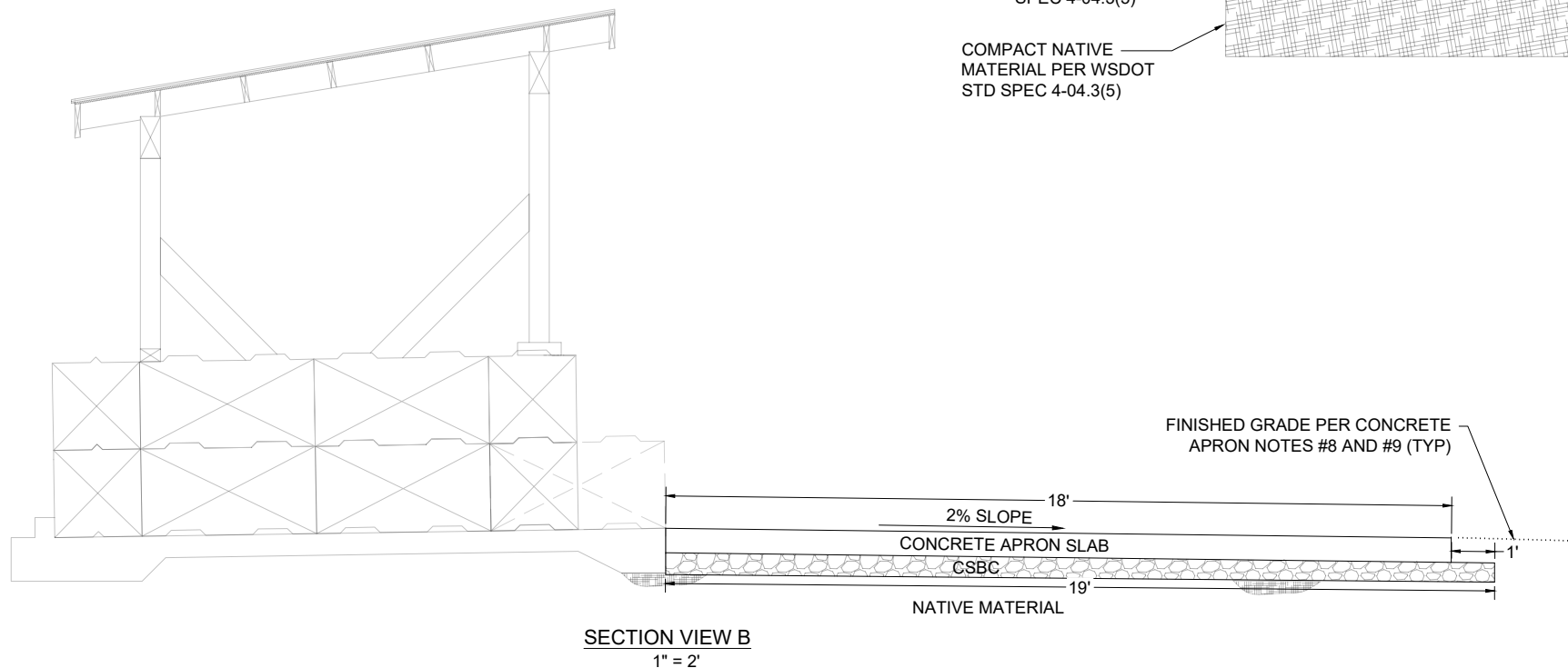
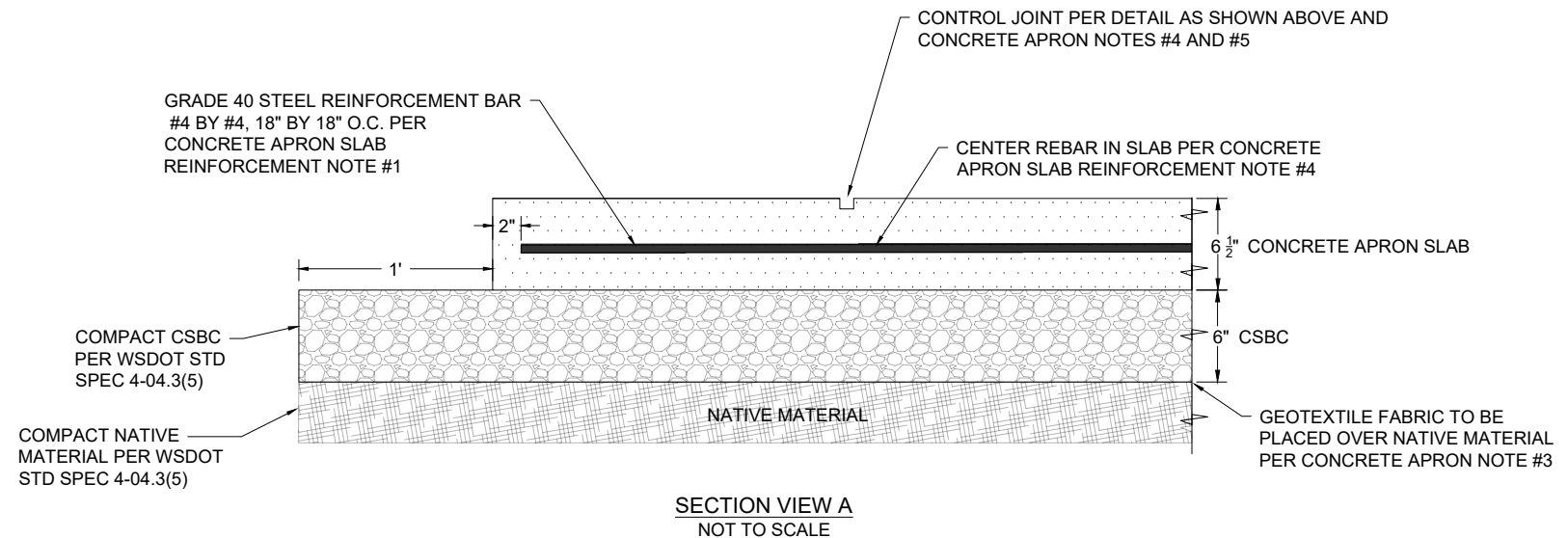
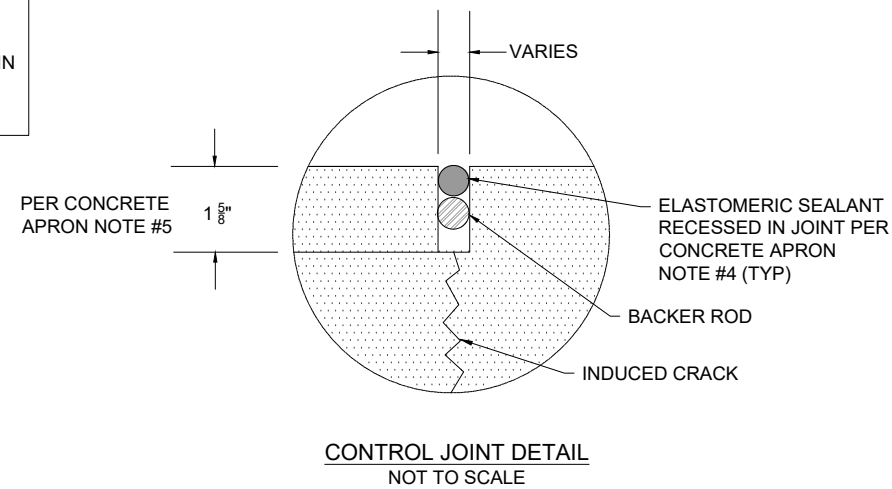
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PROJECT LOCATED NEAR: SEDRO WOOLLEY, WA 98284				SEC 32, T36N, R4E

FITZGERALD WSF ROOF DRAINAGE AND CONCRETE APRON	ROOF DRAINAGE PLAN
--	--------------------

1 INCH SCALE BAR
ADJUST SCALE ACCORDINGLY
SHEET
3 OF 4



- CONCRETE APRON SLAB REINFORCEMENT NOTES:**
1. GRADE 40 STEEL #4 REBAR ($\frac{1}{2}$ " DIA.) PLACED AT 18" O.C. IN HORIZONTAL AND VERTICAL DIRECTIONS.
 2. USE STEEL BAR SUPPORTS AS NEEDED (TYP).
 3. 1FT MINIMUM SPLICE LAP LENGTH.
 4. STEEL REBAR SLAB REINFORCING TO BE CENTERED IN SLAB THICKNESS (MIN 3" OF CONCRETE ABOVE AND BELOW STEEL REBAR).



- CONCRETE APRON NOTES:**
1. ALL EXCAVATIONS SHALL BE PROPERLY BACKFILLED.
 2. CONCRETE APRON SLAB SHALL BE COMPOSED OF A 6-SACK 4000 PSI CONCRETE MIX.
 3. GEOTEXTILE FABRIC SHALL BE MIRAFI 180N OR APPROVED EQUAL.
 4. ELASTOMERIC SEALANT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
 5. CONTROL JOINT TO BE MADE TO ONE-FOURTH THE DEPTH OF THE SLAB PER ACI 327R-14.
 6. SOIL CHARACTERISTICS HAVE BEEN ASSUMED IN ACCORDANCE WITH THE 2021 IBC SECTION 1806.2 BASED ON SPECIFIED LOAD-BEARING VALUES OF SOILS CONSISTENT WITH CLAY, SANDY CLAY, SILTY CLAY, CLAYEY SILT AND SANDY SILT (CL, ML, MH AND CH). CONTRACTOR TO CONFIRM SOIL TYPES PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY CONDITIONS THAT DO NOT CONFORM BEFORE CONTINUING WORK.
 7. CONCRETE PAD AND CONCRETE APRON TO BE POURED AS SEPARATE SLABS OR TOGETHER AND SEPARATED BY ADDITIONAL CONTROL JOINT.
 8. SLOPE FINISHED GRADE AWAY FROM SLAB IN ALL DIRECTIONS (TYP).
 9. HYDROSEED EXPOSED SOILS UPON COMPLETION (TYP).
 10. REFER TO STOCK AGRICULTURAL WSF PLANS FOR ALL OTHER CONSTRUCTION DETAILS.

NO.	REVISIONS	DATE



PROJECT NO.: WA1206-140-6	FED. AID NO.: N/A
DESIGNED BY: RMM	DRAWN BY: RMM
CHECKED BY: TMW	APPROVED BY: TMW
PROJECT LOCATED NEAR: SEDRO WOOLLEY, WA 98284	SEC 32, T36N, R4E

FITZGERALD WSF ROOF DRAINAGE AND CONCRETE APRON	CONCRETE APRON PLAN
--	---------------------