BID BOOKLET
FOR HIGHWAY CONSTRUCTION

LINN COUNTY ROAD DEPARTMENT
ALBANY, OREGON

BRIDGE, ROADWAY AND UTILITY

COX CREEK: GOLDFISH FARM ROAD BRIDGE REPLACEMENT

GOLDFISH FARM ROAD

LINN COUNTY

FEBRUARY 18, 2025

CLASS OF PROJECT COUNTY

CLASS OF WORK A) BRIDGES AND STRUCTURES, OR
B) COMBINATION OF 1) EARTHWORK AND DRAINAGE AND 2) MISCELLEOUS HIGHWAY APPURTENANCES

BID OF _____

Cox Creek: Goldfish Farm Road Bridge Replacement
Bridge, Roadway and Utility

TABLE OF CONTENTS FOR BID BOOKLET

Cox Creek: Goldfish Farm Road Bridge Replacement
Bridge, Roadway and Utility

DESCRIPTION OF WORK

Bridge, Roadway and Utility
Cox Creek: Goldfish Farm Road Bridge Replacement
Goldfish Farm Road
Linn County

TIMES AND PLACES OF RECEIVING BIDS (BID CLOSING)

Bid Closing for the work described above will be 9:15:00 a.m. on the 18th day of February, 2025.

Before 9:15:00 a.m. on the day of Bid Closing, Bids shall be submitted to:

Darrin Lane, County Administrative Officer, Linn County Courthouse, 300 Fourth Avenue S.W., Room 201, Albany, Oregon 97321

Bids, Bid modifications, and Bid withdrawals will not be accepted on or after 9:15:00 a.m. on the day of Bid Closing.

PLACE, TIME, AND DATE OF READING BIDS (BID OPENING)

Bid Opening for the work described above will be opened and read at the Linn County Courthouse, Board of Commissioners, 300 Fourth Avenue S.W., Room 201, Albany, Oregon, beginning at approximately 9:35 a.m. on the day of Bid Closing.

COMPLETION TIME LIMIT

See Special Provisions Subsection 00180.50(h).

CLASS OF PROJECT

This is a County Project.

CLASS OF WORK

The Class of Work for this Project is either: A) Bridges and Structures, or B) the combination of 1) Earthwork and Drainage & 2) Miscellaneous Highway Appurtenances.

APPLICABLE SPECIAL PROVISIONS

The Special Provisions booklet applicable to the above-described work, for which Bids will be opened at the place, time, and date stated above, is that which contains the exact information as shown above.

Bidders are cautioned against basing their Bids on a booklet bearing any different description, date(s), class of project, or class of work.

BID SECTION

The Bid Section can be found as Appendix A.

Cox Creek: Goldfish Farm Road Bridge Replacement
Bridge, Roadway and Utility

BIDDERS CHECKLIST

Before sealing this Bid, have you:

- ☐ Completed the Bid Schedule according to 00120.40(c)?
- ☐ Read and understood the Bid Proposal Certifications (Appendix A)?
- ☐ Filled in the required information on pages 6 and 7 of the Bid Proposal (Appendix A)?
- ☐ Filled in and had the Surety sign the Bid Bond in Appendix A, or included an irrevocable letter of credit issued by an insured institution as defined in ORS 706.008, a cashier's check, or a certified check according to 00120.40(e)?
- ☐ Completed a limiting statement on page 7 of the Bid Proposal, when appropriate, according to 00120.50?
- ☐ Filled in the required information on pages 6 and 7 or pages 6, 9, 10, and 11 of the Bid Proposal; affixed proper signatures on page 8 or pages 9, 10, and 11 of the Bid Proposal according to subsection 00120.40(d), and had the signatures notarized?
- ☐ Documented your DBE commitment using the form "DBE Commitment Certification and Utilization Form"?
- ☐ Used DBE firms certified by the Certification Office of Business Inclusion and Diversity (COBID) to meet your DBE Commitment? (See DBE Information)
- ☐ Prequalified through ODOT according to 00120.00?
- ☐ Prequalified through the Linn County Road Department according to 00120.00?
- ☐ Identified as a Plan Holder on the Plan Holder's List through the Linn County Road Department "Plan Holder Registration" according to 00120.05?

Failure to complete and/or affix signatures as noted above will be cause for rejection of this Bid.

Cox Creek: Goldfish Farm Road Bridge Replacement
Bridge, Roadway and Utility

INSTRUCTIONS FOR MODIFYING BID

General - Bid modifications must be received in writing by hand delivery, mail, parcel delivery service, email, or by electronic facsimile (FAX) transmission prior to the time designated for Bid Closing. Bid modifications received after Bid Closing will not be considered. **Incomplete or late transmittals will not be accepted, regardless of reason.**

Bids will be modified at the Bid Opening according to the information received.

Instructions and Format - Make modifications to Bids according to the "Letter Format for Modifying Bid" document located in this Bid Booklet and the following:

- Prepare the modifications on the Bidder's letterhead stationery.
- Include the Project title and the Bidder's company name.
- Make changes (increase/decrease statement) for each affected Bid Item. (*Lumping the changes into one Bid Item may result in the Bid Item being unbalanced, causing the Bid to be considered irregular and constituting grounds for Bid rejection.*)
- List all decreased-in-Bid items in numerical order first, then list all increased-in-Bid items.
- Show the total difference in the Bid last. (*Do not refer to your original Bid total. Do not show a new Bid total. Do not include a new Bid Schedule.*)
- Print name and sign the letter by an individual authorized to execute Bids.

Hand Delivery, Mail, or Parcel Delivery Service - If delivering by hand, mail, or parcel delivery service deliver to:

Darrin Lane, County Administrative Officer, Linn County Courthouse, 300 Fourth Avenue S.W., Room 201, Albany, Oregon 97321

FAX Transmittals - If using FAX as transmission, send them according to the following:

- Send the FAX to the FAX telephone number 541-926-8228. FAX transmittals will be accepted only at this number. (*Contractors will be responsible for the payment for the transmission of Bid modifications*.)
- The time of receipt of FAX transmittals by the County will be determined by the time which is electronically imprinted upon the Bid change by the County facsimile machine.
- The Agency is not responsible for any failed or partial FAX transmissions of Bid changes, caused by whatever reason, mechanical failure or otherwise.
- **Complete Bids will not be accepted by FAX**.

Email - If using email as transmission, send them according to the following:

- Send scanned document to the email address: roads.bidding@co.linn.or.us. Emails will be accepted only at this email address.
- In the subject line of the email, include the words "Modification to Bids for (Project Title)"
- The time of receipt of email by the County will be determined by the time which is electronically imprinted upon the email receipt of Bid changes received at the County email address.
- The Agency is not responsible for any failed or partial email transmissions of Bid changes, caused by whatever reason, mechanical failure or otherwise.
- **Complete Bids will not be accepted by email**.

Cox Creek: Goldfish Farm Road Bridge Replacement
Bridge, Roadway and Utility

LETTER FORMAT FOR MODIFYING BID

(*NOTE: Text shown as "italic-underline" are instructions for preparing the letter for modifying Bids.*)

(Prepare on Bidders Letterhead Stationery)

(*Bid Opening Date*)

Attn: Darrin Lane, County Administrative Officer

Hand Delivery, Mail, or Parcel Delivery Service Address:

Linn County Courthouse
300 Fourth Avenue S.W., Room 201
Albany, Oregon 97321

SUBJECT: Modifications to Bid
(*Project Title*)
(*Bidders Company Name*)

(***For a decrease in a Bid amount:*** *Copy and paste the following line for each Bid Item reduction.*)

Reduce Bid Item No. _____ by $_____ per _____ (*Indicate unit of measurement, e.g., ton, cu. yd., sq. ft., etc.*)

(***For an increase in a Bid amount:*** *Copy and paste the following line for each Bid Item increase.*)

Increase Bid Item No. _____ by $_____ per _____ (*Indicate unit of measurement, e.g., ton, cu. yd., sq. ft., etc.*)

This will (increase/decrease) our total Bid by $_____. (*Only show the total increase or decrease of your Bid. Do not show a new Bid total.*)

_____
(*Printed name of individual signing below.)*

_____
(*Signed by an individual authorized to sign Bids and execute documents.*)

Cox Creek: Goldfish Farm Road Bridge Replacement
Bridge, Roadway and Utility

FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM INSTRUCTIONS

Instructions for Submitting Form

At time of Bid closing:

Submit the First-Tier Subcontractor Disclosure form at the time designated for receipt of Bids either with the Bid by hand-delivery, mail or parcel delivery service to the following address: Linn County Courthouse, 300 Fourth Avenue S.W., Room 201, Albany, OR 97321

After the time of Bid closing for either paper Bids or electronic Bids:

Submit the First-Tier Subcontractor Disclosure form not later than two working hours after the time set for Bid Closing (For example, before 11:00 a.m. after a 9:00 a.m. Bid Closing.) by any of the following methods:

- Print the Subcontractor Disclosure Form from the Bid Booklet on OregonBuys website or print the Subcontractor Disclosure Form from the County's website at:
  https://www.linncountyor.gov/roads/page/construction-bidding-documents
- Hand delivering it to: Linn County Courthouse, 300 Fourth Avenue S.W., Room 201, Albany, OR 97321;
- FAX it to 541-924-0202; or
- Email to: roads.bidding@co.linn.or.us.

The Department is not responsible for partial, failed, illegible, or partially legible email or FAX transmissions.

Instructions for First-Tier Subcontractor Disclosure

Without regard to the amount of a Bidder's Bid, if the Agency's cost range for a public improvement Project in the "Notice to Contractors", or in other advertisement or solicitation documents is greater than $100,000 Bidders are required to disclose information about first-tier Subcontractors that will furnish labor or labor and materials (See ORS 279C.370). Specifically, when the contract amount of a first-tier Subcontractor is greater than or equal to: (1) 5% of the total project Bid, but at least $15,000, or (2) $350,000 regardless of the percentage of the total project Bid, you must disclose the following information about that Subcontractor not later than two working hours after the time set for opening Bids:

- The name of the Subcontractor
- The category of work that the Subcontractor will be performing
- The dollar amount of the subcontract

Total all work for each Subcontractor in making this determination.

If the Agency's cost range is greater than $100,000 and you will not be using any first-tier Subcontractors, you are still required to submit the form, with the appropriate box checked or enter "NONE" on the first line.

If the Agency's cost range is greater than $100,000 and you are not subject to the above disclosure requirements, you are still required to submit the form, with the appropriate box checked or enter "NONE" on the first line.

THE AGENCY MUST REJECT BIDS if the Bidder fails to submit the disclosure form with this information by the stated deadline.

DBE INFORMATION

GENERAL INFORMATION

It is the policy of the Linn County Road Department that Disadvantaged Business Enterprises (DBE) shall have the opportunity to participate in the performance of contracts under this agreement.

Firms certified by the State of Oregon Certification Office of Business Inclusion and Diversity (COBID) as DBE in the state of Oregon shall be used to meet the assigned DBE contract goals for DBE participation.

Responsiveness is based on the DBE firm's certification status at time of Bid Opening. Contractors should not rely upon past experiences and verbal assurances of firms listed or non-listed.

Services and Commodity Codes reflect information provided by the certified DBE Firms and is not used as a pre-qualification factor by ODOT or the Linn County Road Department.

WEBSITES

DBE Directory - A Certification Directory of DBEs is available from COBID at:

https://oregon4biz.diversitysoftware.com/FrontEnd/SearchCertifiedDirectory.asp?XID=2315&TN=oregon4biz

EXAMPLE OF BID SUBMISSION ENVELOPE

Submit Bids in Bidder provided envelopes according to 00120.45 of the Specifications. Include the information shown below on Bidder provided envelopes:

TO BE OPENED ONLY BY AUTHORIZED PERSONNEL

BID FOR

PROJECT NAME
(Use the same information that is on the bid booklet cover)

(Date and Time Bids to be received)

Day _____

Date _____

Time _____ a.m. PDT

Bidder Name _____

Bidder Address _____

(Mail, Parcel Delivery Service, or hand delivery Address)

Darrin Lane, County Administrative Officer
Linn County Courthouse
300 Fourth Avenue SW, Room 201
Albany, OR 97321

If submitted by mail or parcel delivery service, the Bidder shall place the sealed envelope containing the paper Bid inside a separate sealed envelope or package. Paper Bids may be submitted by mail, parcel delivery service, or hand delivery to the offices and addresses, and at the time and places designated for receipt of Bids.

SPECIAL PROVISIONS
FOR HIGHWAY CONSTRUCTION

LINN COUNTY ROAD DEPARTMENT
ALBANY, OREGON

BRIDGE, ROADWAY AND UTILITY

COX CREEK: GOLDFISH FARM ROAD BRIDGE REPLACEMENT

GOLDFISH FARM ROAD

LINN COUNTY

FEBRUARY 18, 2025

Cox Creek: Goldfish Farm Road Bridge Replacement
Bridge, Roadway and Utility

DESCRIPTION OF WORK

Bridge, Roadway and Utility
Cox Creek: Goldfish Farm Road Bridge Replacement
Goldfish Farm Road
Linn County

TIMES AND PLACES OF RECEIVING BIDS (BID CLOSING)

Bid Closing for the work described above will be 9:15:00 a.m. on the 18th day of February, 2025.

Before 9:15:00 a.m. on the day of Bid Closing, Bids shall be submitted to:

Darrin Lane, County Administrative Officer, Linn County Courthouse, 300 Fourth Avenue S.W., Room 201, Albany, Oregon 97321

Bids, Bid modifications, and Bid withdrawals will not be accepted on or after 9:15:00 a.m. on the day of Bid Closing.

PLACE, TIME, AND DATE OF READING BIDS (BID OPENING)

Bid Opening for the work described above will be opened and read at the Linn County Courthouse, Board of Commissioners, 300 Fourth Avenue S.W., Room 201, Albany, Oregon, beginning at approximately 9:35 a.m. on the day of Bid Closing.

START DATE

No work included in this contract shall begin prior to the Preconstruction Meeting. Other Job Site Restrictions may apply as shown in 00130.80 and 00180.40(b) of the Specifications.

COMPLETION TIME LIMIT

See Subsection 00180.50(h).

CLASS OF PROJECT

This is a County Project.

CLASS OF WORK

The Class of Work for this Project is either: A) Bridges and Structures, or B) the combination of 1) Earthwork and Drainage & 2) Miscellaneous Highway Appurtenances.

PROJECT INFORMATION

Information pertaining to this Project may be obtained from the following:

Cox Creek: Goldfish Farm Road Bridge Replacement
Bridge, Roadway and Utility

Daineal Malone, P.E., County Engineer, Linn County Road Department,
3010 Ferry St, S.W., Albany, Oregon 97322; Phone 541-967-3919, Fax 541-924-0202.
Email: daineal.malone@co.linn.or.us

Kevin Groom, P.E., Project Engineer, Linn County Road Department,
3010 Ferry St, S.W., Albany, Oregon 97322; Phone 541-967-3919, Fax 541-924-0202.
Email: kgroom@co.linn.or.us

Cox Creek: Goldfish Farm Road Bridge Replacement
Bridge, Roadway and Utility

TABLE OF CONTENTS FOR SPECIAL PROVISIONS

ASSIGNED DBE CONTRACT GOAL

The minimum Assigned **DBE** Contract Goal for this Project is **0%**.

A Certification Directory of DBEs is available from the Certification Office of Business Inclusion and Diversity (COBID) website at:

https://oregon4biz.diversitysoftware.com/FrontEnd/VendorSearchPublic.asp

or by telephone at 503-986-0075.

PROJECT WAGE RATES

Minimum Wage Requirements - This Project is subject to State prevailing wage rate requirements. Not less than the higher of the applicable State prevailing wage rates shall be paid to workers according to 00170.65(b) and 00170.65(e).

Applicable Wages - Prevailing wage rates published in the wage determinations and any applicable modifications or amendments apply to this Project and are incorporated by reference:

Oregon Bureau of Labor and Industries (BOLI), "Prevailing Wage Rates for Public Works Contracts in Oregon".

The applicable State prevailing wage rates last published prior to the time of Bid Opening, which is stated on the Description of Work page, apply to this Project.

Wage Rates are Internet-Accessible - The applicable BOLI wage rates can be found at their website (see 00110.05(e)).

Wage Rates are Subject to Change - Modifications or amendments to the BOLI wage rates applicable to this Project may occur at any time before Bid Opening. Bidders are responsible to monitor the respective websites for modifications and amendments up until Bid Opening.

LINN COUNTY ROAD DEPARTMENT

SPECIAL PROVISIONS

FOR

Bridge and Roadway
Cox Creek: Goldfish Farm Road Bridge Replacement
Goldfish Farm Road
Linn County

PROFESSIONAL OF RECORD CERTIFICATION(s):

Seal w/signature  Digitally signed by Daineal Malone Date: 2025.01.17 15:59:04-08'00' Expires: 12/31/2026	I certify the Special Provision Section(s) listed below are applicable to the design for the subject project for General Conditions. Modified Special Provisions were prepared by me or under my supervision. Section 00100, 00120, 00130, 00140, 00150, 00160, 00165, 00170, 00180, 00190, 00195, 00196, 00197, 00210, 00220, 00221, 00222, 00245, 00280, 00290, 00305, 00310, 00320, 00330, 00340, 00350, 00390, 00405, 00415, 00430, 00445, 00470, 00490,00641, 00730, 00744, 00749, 00759, 00850, 00855, 00865, 00867, 00905, 00920, 00930, 00940, 01012, 01030, 01040, 01070, 01140, 01150, 01170, 02001, 02050, 02320, 02415, 02910
Date Signed: January 17, 2025	

LINN COUNTY ROAD DEPARTMENT

SPECIAL PROVISIONS

FOR

Bridge and Roadway
Cox Creek: Goldfish Farm Road Bridge Replacement
Goldfish Farm Road
Linn County

PROFESSIONAL OF RECORD CERTIFICATION(s):

Seal w/signature  Expires: 6/30/2025	I certify the Special Provision Section(s) listed below are applicable to the design for the subject project Bridges. Modified Special Provisions were prepared by me or under my supervision. Section 00501, 00510, 00520, 00530, 00540, 00545, 00550, 00582, 00585, 00587, 00592, 02510, 02560, 02690
Date Signed: _____	

Cox Creek: Goldfish Farm Road Bridge Replacement
Bridge, Roadway and Utility

SPECIAL PROVISIONS

WORK TO BE DONE

The Work to be done under this Contract consists of the following:

1. Furnish, install, maintain, and remove traffic control and erosion control devices
2. Construct roadway rebuild
3. Perform grading, excavation/embankment, and riprap placement
4. Construct concrete curb, gutter, and sidewalks
5. Construct ADA compliant curb ramps
6. Install storm sewer system
7. Install sanitary sewer system
8. Install waterline adjustments
9. Asphalt pavement saw cutting
10. Remove existing structure
11. Install piling, cap beams and wingwalls
12. Construct new bridge structure
13. Cold plane pavement removal
14. Install asphalt concrete pavement
15. Install pavement markings
16. Install signage
17. Install mailboxes
18. Install fences
19. Install driveways
20. Install planters
21. Perform additional and incidental Work as called for by the Specifications and Plans

APPLICABLE SPECIFICATIONS

The Specifications that are applicable to the Work on this Project are the 2024 edition of the "General Conditions for Construction for the Linn County Road Department" published on December 1, 2023 and the 2024 edition of the "Oregon Standard Specifications for Construction", as modified by these Special Provisions. All Sections in Part 00100 apply, whether or not modified or referenced in the Special Provisions.

All number references in these Special Provisions shall be understood to refer to the Sections and subsections of the Standard Specifications bearing like numbers and to Sections and subsections contained in these Special Provisions in their entirety.

CLASS OF PROJECT

This is a County Project.

SECTION 00100 - GENERAL CONDITIONS

Comply with Section 00100 of the General Conditions for Construction for the Linn County Road Department modified as follows:

00110.05(e) Reference to Websites: - Add the following bullet list to the end of this subsection:

Cox Creek: Goldfish Farm Road Bridge Replacement
Bridge, Roadway and Utility

- American Traffic Safety Services Association (ATSSA)
  www.atssa.com
- EquipmentWatch
  www.equipmentwatch.com
- Linn County Road Department Bidding documents
  https://www.linncountyor.gov/roads/page/construction-bidding-documents
- Linn County Road Department Plan Holders' Registration
  https://www.linncountyor.gov/roads/webform/plan-holder-registration
- ODOT Office of Equity and Civil Rights
  www.oregon.gov/ODOT/Business/OCR/Pages/Forms.aspx
- ODOT Construction Section
  www.oregon.gov/odot/construction/pages/index.aspx
- ODOT Construction Section - Qualified Products List (QPL)
  www.oregon.gov/ODOT/Construction/Pages/Qualified-Products.aspx
- ODOT Construction Surveying Manual for Contractors
  www.oregon.gov/ODOT/ETA/Documents_Geometronics/Construction-Survey-Manual-Contractors.pdf
- ODOT Estimating
  www.oregon.gov/ODOT/Business/Pages/Steel.aspx
- ODOT Oregon Trucking Online - "Highway Restriction Notice - Size and/or Weight" (Form No. 734-2357)
  www.oregontruckingonline.com/cf/MCAD/pubMetaEntry/restriction/
- ODOT Procurement Office - Conflict of Interest Guidelines and Disclosure Forms
  www.oregon.gov/ODOT/Business/Procurement/Pages/PSK.aspx
- ODOT Procurement Office - Construction Contracts Unit prequalification forms
  www.oregon.gov/odot/business/procurement/pages/bid_award.aspx
- ODOT Traffic Control Plans Unit
  www.oregon.gov/ODOT/Engineering/Pages/Work-Zone.aspx
- ODOT Traffic Standards
  www.oregon.gov/ODOT/Engineering/Pages/Signals.aspx
- Oregon Bureau of Labor and Industries (BOLI)
  www.oregon.gov/boli/WHD/PWR/Pages/index.aspx
- OregonBuys - Oregon eProcurement System
  https://oregonbuys.gov/bso/view/login/login.xhtml
- Oregon Legislative Counsel
  www.oregonlegislature.gov/lc
- Oregon Secretary of State: State Archives
  sos.oregon.gov/archives/Pages/default.aspx
- US Department of Labor
  https://sam.gov/content/wage-determinations

SECTION 00120 - BIDDING

Comply with Section 00120 of the Standard Specifications.

SECTION 00130 - AWARD AND EXECUTION OF CONTRACT

00130.40(c) Workers' Compensation – Replace this subsection, except for the subsection number and title, with the following:

To certify compliance with the workers' compensation insurance coverage required by 00170.61(a) and 00170.70(e), the successful Bidder shall complete and sign the "Certification of Workers' Compensation Coverage" form bound in the Contract booklet.

SECTION 00140 - SCOPE OF WORK

Comply with Section 00140 of the Standard Specifications.

SECTION 00150 - CONTROL OF WORK

Comply with Section 00150 of the Standard Specifications modified as follows:

00150.50(c) Contractor's Responsibilities – Replace the bullet that begins "In addition to the notification required…" with the following bullet:

- In addition to the notification required in OAR 952-001-0090(7), notify the Engineer and the Utility as soon as the Contractor discovers any previously unknown Utility conflicts or issues. Contrary to the OAR, stop excavating until directed by the Engineer and allow the Utility a minimum of two weeks to relocate or resolve the previously unknown Utility issues; and

Add the following subsection:

00150.50(f) Utility Information (No Anticipated Relocations) - Within the Project limits, there are no anticipated relocations with the Utilities listed in Table 00150-1. The Contractor shall contact those Utilities having buried facilities and request that they locate and mark them for their protection prior to construction.

Table 00150-1

Utility	Contact Person's Name, Email, and Phone Number
NW Natural	Darrell Hammond, Darrell.Hammond@nwnatural.com, 541-981-0164
City of Albany (Water and Sewer)	Carl Berg, carl.berg@albanyoregon.gov, 541-917-7633

The Contractor shall notify, in writing, the Utilities listed above, with a copy to the Engineer, at least 14 Calendar Days before beginning Work on the Project. Utilities may require an on-site observer, at no cost to the Contractor.

(NW Natural) - Gas Utilities - In the event of an emergency, and in addition to the calls required by the Utilities notification system, the Contractor shall call:

- Northwest Natural Gas 1-800-882-3377

Add the following subsection:

00150.50(g) Utility Information (Anticipated Relocations) - The organizations list in Table 00150-2 may be adjusting Utilities within the limits of the Project during the period of the Contract with relocation Work estimated to be completed by the following dates and times:

Table 00150-2

Subsection	Utility	Contact Person's Name, Email, and Phone Number
00150.50(g)(1)	PacifiCorp	Jared Albers, jarad.albers@pacificorp.com, 541-967-6179
00150.50(g)(2)	CenturyLink (Lumen)	Gordon Bates, gbates@terratechllc.net, 541-410-4936
00150.50(g)(3)	Comcast	Michael Allen, Michael_allen@cable.comcast.com, 541-230-0219

The Contractor shall contact the Engineer to view the approved utility relocation Plans.

The Contractor shall notify, in writing, the Utilities listed above, with a copy to the Engineer, at least 14 Calendar Days before beginning Work on the Project. Utilities may require an on-site observer, at no cost to the Contractor.

(1) (Pacific Power) - "Power Supplier": The Contractor shall notify the Power Supplier(s) in writing, with a copy to the Engineer, at least 14 Calendar Days before beginning Work within 10 feet of the power line(s).

The Contractor shall notify the Power Supplier in writing, with a copy to the Engineer, 30 Calendar Days before the Contractor is scheduled to begin performing Pile Driving. After the Power Supplier receives the notification, the Contractor shall then allow the Power Supplier 15 Calendar Days to schedule and complete the relocation and adjustment work before the Contractor begins performing Pile Driving.

The Contractor shall notify the Power Supplier in writing, with a copy to the Engineer, 14 Calendar Days before the Contractor's estimated completion of Pile Driving. After the Contractor has completed this Work or 14 Calendar Days after the Power Supplier receives the notification, whichever occurs later, the Contractor shall then allow the Power Supplier 14 Calendar Days to schedule and complete the relocation and adjustment work.

Energized power lines overhang portions of the Work with a minimum vertical clearance of 18 feet. The Contractor shall maintain at least 10 feet of safety clearance. Exceptions require written approval from the Power Supplier(s) and may require an on-site safety watcher, at no cost to the Contractor. The Contractor shall provide the Engineer a copy of the written approval of exception before beginning work.

(2) (CenturyLink (Lumen)) - "Telecommunication Utility": The Contractor shall notify the Telecommunication Utility in writing, with a copy to the Engineer, at least 14 Calendar Days before beginning Work within 10 feet of the Telecommunication Utility facilities.

The Contractor shall notify the Telecommunication Utility in writing, with a copy to the Engineer, 30 Calendar Days before the Contractor is scheduled to begin performing bridge removal or excavation. After the Telecommunication Utility receives the notification, the Contractor shall then allow the Telecommunication Utility 14 Calendar Days to schedule and complete the relocation and adjustment work before the Contractor begins performing bridge removal or excavation.

The Contractor shall obtain written approval from the Telecommunication Utility for excavating within 10 feet of a buried fiber optic communications cable. The Telecommunication Utility may require an

on-site safety representative at no cost to the Contractor for monitoring purposes. The Contractor shall provide the Engineer a copy of the written approval before beginning work.

(3) (Comcast) - "Telecommunication Utility": The Contractor shall notify the Telecommunication Utility in writing, with a copy to the Engineer, at least 14 Calendar Days before beginning Work within 10 feet of the Telecommunication Utility facilities.

The Contractor shall notify the Telecommunication Utility in writing, with a copy to the Engineer, 30 Calendar Days before the Contractor is scheduled to begin performing bridge removal or excavation. After the Telecommunication Utility receives the notification, the Contractor shall then allow the Telecommunication Utility 14 Calendar Days to schedule and complete the relocation and adjustment work before the Contractor begins performing bridge removal or excavation.

The Contractor shall obtain written approval from the Telecommunication Utility for excavating within 10 feet of a buried fiber optic communications cable. The Telecommunication Utility may require an on-site safety representative at no cost to the Contractor for monitoring purposes. The Contractor shall provide the Engineer a copy of the written approval before beginning work.

00150.60(a) Load and Speed Restrictions for Construction Vehicles and Equipment - Add the following bullet to the end of the bullet list:

- The Contractor shall restrict the combined weights of construction vehicles, Equipment, and Materials on Bridges according to 00220.45.

SECTION 00160 - SOURCE OF MATERIALS

Comply with Section 00160 of the Standard Specifications.

SECTION 00165 - QUALITY OF MATERIALS

Comply with Section 00165 of the Standard Specifications.

SECTION 00170 - LEGAL RELATIONS AND RESPONSIBILITIES

Comply with Section 00170 of the Standard Specifications modified as follows:

00170.61(a) Workers' Compensation - Replace this subsection, except for the subsection number and title, with the following:

The Contractor shall provide workers' compensation coverage for on-the-job injuries as required by 00170.70(e).

00170.65(b)(1) Minimum Wage Rates – Replace the paragraph that begins "The Bureau of Labor and Industries (BOLI) …" with the following paragraph:

The Bureau of Labor and Industries (BOLI) determines and publishes the existing State prevailing wage rates in the publication *Prevailing Wage Rates for Public Works Contracts*. The Contractor shall pay workers not less than the specified minimum hourly wage rate according to ORS 279C.838 and ORS 279C.840, and shall include this requirement in all subcontracts.

00170.70(a) Insurance Coverages - Add the following to the end of this subsection:

The following insurance coverages and dollar amounts are required pursuant to this subsection:

Insurance Coverages	Combined Single Limit per Occurrence	Annual Aggregate Limit
Commercial General Liability	$2,000,000	$4,000,000
Commercial Automobile Liability	$2,000,000	(aggregate limit not required)

00170.70(d) Additional Insured - Replace the paragraph that begins "The liability insurance coverages of 00170.70(a)…" with the following paragraph:

The liability insurance coverages of 00170.70(a) shall include an Additional Insured Endorsement endorsing the “State of Oregon, the Oregon Transportation Commission and the Oregon Department of Transportation, and their respective officers, members, agents, and employees” as Additional Insureds, but only with respect to the Contractor's activities to be performed under the Contract. Coverage shall be primary and non-contributory with any other insurance and self-insurance. The liability coverages of 00170.70(a) that are permitted by the Agency to be obtained by an appropriate Subcontractor shall include all of the foregoing as Additional Insureds and shall also include the Contractor and its officers and employees as Additional Insureds.

00170.70(g) Certificate(s) of Insurance - Replace the bullet that begins "List Linn County and its officers…" with the following bullet:

- List Linn County and its officers, agents, employees, and the Linn County Board of Commissioners and its members, officers, agents, and employees and list the “State of Oregon, the Oregon Transportation Commission and the Oregon Department of Transportation, and their respective officers, members, agents and employees” as a Certificate holder and endorse as Additional Insureds;

00170.72 Indemnity/Hold Harmless - Add the following paragraph and bullet to the end of this subsection:

Extend indemnity, defense and hold harmless to the Agency and the following:

- The State of Oregon, Oregon Transportation Commission and its members, Oregon Department of Transportation and its officers, employees and agents.

SECTION 00180 - PROSECUTION AND PROGRESS

Comply with Section 00180 of the Standard Specifications modified as follows:

00180.21(a) General – Replace the bullet that begins " If the Subcontractor is providing any…" with the following bullet:

- If the Subcontractor is providing any of the insurance coverages as permitted under 00170.70(a), the Agency will respond within 35 Calendar Days after the Engineer's receipt of the request. (28 Calendar Days for the Agency to review and approve the Certificates of Insurance required by 00170.70(g) plus 7 Calendar Days to review and approve the subcontract request.)

Add the following subsection:

00180.40(c) Specific Limitations - Limitations of operations specified in these Special Provisions include, but are not limited to, the following:

Limitations	Subsection
Cooperation with Utilities	00150.50
Contract Time	00180.50(h)
Closed Lanes	00220.40(e)(1)
Regulated Work Areas	00290.34(a)
Noise Control	00290.32
Opening Sections to Traffic	00744.51

The Contractor shall be aware of and subject to schedule limitations in the Standard Specifications that are not listed in this subsection.

Add the following subsection:

00180.50(h) Contract Time - There is one Contract Time on this Project as follows:

The Contractor shall complete all Work to be done under the Contract, except for seeding establishment and planting establishment, before the elapse of 180 Calendar Days, or not later than September 30, 2025, whichever occurs first.

00180.85(b) Liquidated Damages - Add the following to the end of this subsection:

The liquidated damages for failure to complete the Work on time required by 00180.50(h) will be $ 983.00 per Calendar Day *.

* Calendar Day amounts are applicable when the Contract time is expressed on the Calendar Day or fixed date basis.

SECTION 00190 - MEASUREMENT OF PAY QUANTITIES

Comply with Section 00190 of the Standard Specifications modified as follows:

00190.20(f)(2) Scale Without Automatic Printer - Replace the paragraph that begins "The Contractor shall inform…" with the following paragraph:

If the scales require manual entry of gross weight information, the Agency may periodically have a representative weigh witness at the scales to observe the weighing procedures. The Contractor shall inform the Engineer of their intent to use a scale without an automatic printer at least 3 working days before weighing begins or before the Contractor changes to a scale that does not have an automatic printer. The Contractor shall pay costs for the weigh witness. The hourly cost of the weigh witness will be as stated in the Special Provisions. In addition, the Engineer may periodically check the weight for a load of Materials by directing the haul vehicle to reweigh on a different scale that has been inspected and certified according to 00190.20(b) and 00190.20(d).

Add the following paragraph after the paragraph that begins " If the scales require manual entry…":

Pay costs for the weigh witness at $35.00 per hour.

00190.20(g) Agency-Provided Weigh Technician - Add the following paragraph to the end of this subsection:

Pay costs for the weigh technician at $35.00 per hour.

SECTION 00195 - PAYMENT

Comply with Section 00195 of the Standard Specifications modified as follows:

00195.12(d) Steel Materials Pay Item Selection - Add the following paragraph to the end of this subsection:

No Pay Items under this Contract qualify for the steel escalation/de-escalation program for this Project.

00195.50(c)(1) Cash, Alternate A – Replace this subsection, except for the subsection number and title, with the following:

Retainage will be deducted from progress payments and held by the Agency until final payment is made according to 00195.90, unless otherwise specified in the Contract.

Except as otherwise provided, the Agency will deposit the cash retainage withheld in an interest bearing account, established through the State Treasurer for the benefit of the Agency, as required by ORS 279C.560(5). Interest earned on the account shall accrue to the Contractor. Amounts retained and interest earned will be included in the final payment made according to 00195.90, unless otherwise specified in the Contract.

Any retainage withheld on Work performed by a Subcontractor will be released to the Contractor according to 00195.50(d).

00195.50(c)(2) Cash, Alternate B (Retainage Surety Bond) - Replace this subsection, except for the subsection number and title, with the following:

The Contractor may submit a Surety bond in lieu of all or a portion of the retainage required under the Contract. The Agency will accept this Surety bond unless the Agency first finds in writing good cause for rejection based on unique project circumstances in accordance with ORS 279C.560(1)(c).

The Surety bond must be in substantially the form specified in ORS 701.435 (4) (Oregon House Bill 4006, 2024), and executed by a Surety bonding company that is authorized to transact Surety business in the State of Oregon and may not be a Surety obligation of an individual. The Surety bond and any proceeds of the Surety bond must be made subject to all claims and liens and in the same manner and priority specified for retainage under ORS 279C.550 to 279C.570 and ORS 279C.600 to 279C.625. Agency will reduce the cash retainage held by an amount equal to the value of the Surety bond and pay the amount of the reduction to Contractor according to ORS 279C.570. Any retainage withheld on Work performed by a Subcontractor will be released to the Contractor according to 00195.50(d).

When the Agency accepts a Surety bond in lieu of retainage from the Contractor, the Contractor shall accept Surety bonds from Subcontractors or Suppliers from which the Contractor has withheld retainage. At any time before final payment a Subcontractor may submit a Surety bond to the Contractor and request that the Contractor submit a Surety bond as described above for the portion of the Contractor's retainage that pertains to the Subcontractor. The Surety bond the Subcontractor provides to the Contractor must meet the Agency requirements specified in the paragraph above. When a Contractor at a Subcontractor's request obtains and submits a Surety bond under this subsection, the Contractor may withhold from payments to the Subcontractor an amount equivalent to the portion of the Contractor's Surety bond premium for which the Subcontractor is responsible in accordance with ORS 279C.560 (Oregon House Bill 4006, 2024).

Within 30 Days after a Subcontractor's request the Contractor shall provide a Surety bond as described above, and the Agency will accept the Surety bond unless:

- the Agency finds in writing good cause for rejection based on unique project circumstances in accordance with ORS 279C.560;
- a Surety bond is not commercially available;
- the Subcontractor refuses to pay to the Contractor the Subcontractor's portion of the Surety bond premium; or
- the Subcontractor refuses to provide the Contractor with a Surety bond that meets the requirements of ORS 279C.560(1)(b).

Notwithstanding 00195.50(d), within 30 Days of receiving a Surety bond from Contractor at a Subcontractor's or Supplier's request, Agency will release to the Contractor the amount held as retainage that is equivalent to the amount the Contractor submitted as a Surety bond. Contractor shall, within 30 Days after receiving a Surety bond from a Subcontractor or Supplier, release to the Subcontractor or Supplier the amount the Contractor holds as retainage that is equivalent to the amount of the Surety bond submitted, in accordance with ORS 279C.560(8).

00195.50(c)(3) Bonds, Securities, and Other Instruments - Replace this subsection, except for the subsection number and title, with the following:

Contractor may deposit bonds, securities or other instruments with the Agency or in a bank or other financial institution, to be held by Agency instead of cash retainage for the benefit of the Agency, which the Agency will accept unless the Agency first finds in writing good cause for rejection based on unique project circumstances, in accordance with ORS 279C.560(1)(c).

If the Contractor deposits bonds, securities or other instruments, and Agency does not reject the bonds, securities or other instruments as permitted by ORS 279C.560(1)(c), the Agency will reduce the cash retainage by an amount equal to the value of the bonds, securities and other instruments. Interest or earnings on the bonds, securities and other instruments accrue to the Contractor.

Bonds, securities and other instruments deposited instead of cash retainage shall be of a character approved by the Director of the Oregon Department of Administrative Services, including, but not limited to:

- Bills, certificates, notes or bonds of the United States;
- Other obligations of the United States or agencies of the United States;
- Obligations of a corporation wholly owned by the federal government;
- Indebtedness of the Federal National Mortgage Association;
- General obligation bonds of the State of Oregon or a political subdivision of the State of Oregon;
- Irrevocable letters of credit issued by an insured institution, as defined in ORS 706.008.

00195.50(f) Prompt Payment Policy - Replace this subsection, except for the subsection number and title, with the following:

Payments shall be made promptly according to ORS 279C.560, ORS 279C.570, ORS 279C.580 and other applicable legal requirements.

SECTION 00196 - PAYMENT FOR EXTRA WORK

Comply with Section 00196 of the Standard Specifications.

SECTION 00197 - PAYMENT FOR FORCE ACCOUNT WORK

Comply with Section 00197 of the Standard Specifications.

SECTION 00199 - DISAGREEMENTS, PROTESTS, AND CLAIMS

Comply with Section 00199 of the Standard Specifications.

SECTION 00210 - MOBILIZATION

Comply with Section 00210 of the Standard Specifications.

SECTION 00220 - ACCOMMODATIONS FOR PUBLIC TRAFFIC

Comply with Section 00220 of the Standard Specifications modified as follows:

Add the following subsection:

00220.42 Bridge Site Road Closure - Close the road to traffic at the Bridge site during reconstruction of the Bridge. Do not close the road until all Materials and Equipment are on hand or guaranteed to be delivered so that the Work can be done in an efficient manner with a minimum period of road closure.

The road closure will not be allowed until the area and the detour route are signed according to the TCP and the requirements of Section 00221 and Section 00222.

Add the following subsection:

00220.45 Load Restrictions on Bridges - For Structure No.0328-0036, limit the combined weight of construction vehicles, Equipment, and daily Material usage to 11,750 pounds for every 1,000 square feet of surface area plus the weight of long term storage of Materials to 1,100 pounds for every 100 square feet of surface area of the Bridge or a total of 20,000 pounds for each span of the Bridge, whichever is less.

The Contractor may request alternate loadings by submitting, 30 Calendar Days before proposed loadings, stamped loading calculations and data according to 00150.35.

SECTION 00221 - COMMON PROVISIONS FOR WORK ZONE TRAFFIC CONTROL

Comply with Section 00221 of the Standard Specifications modified as follows:

00221.06 Traffic Control Plan - Replace this subsection with the following subsection:

00221.06 Traffic Control Plan and Tourist-Oriented Directional and Business Logo Signs –

(a) Traffic Control Plan - Submit one of the following, 5 Calendar Days before the preconstruction conference:

(1) Agency Traffic Control Plan - If the Contractor intends to use the Agency TCP without modification, a written notification indicating that the Agency TCP will be used without modification.

(2) Contractor-Modified Traffic Control Plan - The Contractor may request to use a Contractor-modified Agency TCP, or a TCP developed by the Contractor. Do not use a modified TCP, or a TCP developed by the Contractor, unless approved by the Engineer. Use the Agency TCP unless a modified TCP, or a TCP developed by the Contractor is accepted.

The Engineer is not obligated to consider any modified Agency TCP or a TCP developed by the Contractor. The Agency will not be liable to the Contractor for failure to accept or act upon any request for a modified Agency TCP or a TCP developed by the Contractor.

To conserve time and funds, the Contractor may first submit a written request for a preliminary review by the Engineer. The request should contain a description of the proposal together with a rough estimate of anticipated dollar and time impacts. The Engineer will, within a reasonable time, respond to the Contractor in writing whether or not the request would be considered by the Agency.

If requesting a Contractor-modified Agency TCP, or a TCP developed by the Contractor, at a minimum the request shall meet all requirements of the Contract documents and comply with the Project transportation management plan (TMP). Provide the following information:

- Stamped Working Drawings according to 00150.35 that include the proposed TCP showing all TCM and quantities of TCD.
- A TPAR plan that includes:
  - Details and features used to provide pedestrian accessibility.
  - Pedestrian staging Plans at a scale no smaller than 1 inch = 50 feet.
  - Temporary alternate facilities or detour routes for pedestrian traffic.
- Staging sequences and details for Work affecting vehicular, pedestrian, and bicycle traffic.
- Proposed order and duration of the TCM.
- A detailed temporary striping plan.

If the Contractor's request to use a Contractor-modified Agency TCP, or a TCP developed by the Contractor is approved in whole or in part, acceptance will be made by a Change Order.

The Engineer will establish prices that represent a fair measure of the value of Work to be added, changed, or deleted as a result of any accepted modifications to the Agency TCP or an accepted TCP developed by the Contractor.

Once a TCP has been accepted by the Engineer, any additional modifications must be submitted by the Contractor for Agency review following the procedure described above. The Engineer is not obligated to consider additional modifications to a previously approved TCP.

(b) Tourist-Oriented Directional and Business Logo Signs - Submit one of the following for approval, at least 5 Calendar Days before the preconstruction conference:

(1) No Signs - If there are no tourist-oriented directional (TOD) or business logo signs on the Project, a written notification that no TOD or business logo signs exist within the Project limits or

(2) Signs - Submit one copy of a sketch map of the Project showing all existing TOD and business logo signs and a written narrative describing how these signs will be kept in service and protected throughout all the construction stages. If modifications are necessary, submit updated information to the Engineer for approval at least 21 Calendar Days before the change is needed.

SECTION 00222 - TEMPORARY TRAFFIC CONTROL SIGNS

Comply with Section 00222 of the Standard Specifications modified as follows:

00222.40(e) Temporary Sign Placement - Add the following to the end of the bullet list:

- Install two sign flag boards, as shown on the Standard Drawings, above the following detour and road closed advance warning signs, where applicable:
  - "DETOUR AHEAD", "DETOUR XXXX FT", "DETOUR X/X MILE" (W20-2) signs.
  - "ROAD CLOSED AHEAD", "ROAD CLOSED XXXX FT", "ROAD CLOSED X/X MILE" (W20-3) signs.

00222.45(b) Portable Changeable Message Signs - Add the following bullet to the end of this subsection:

- At least seven Calendar Days before the road closure, place one or more PCMS displaying the following message as shown, or as directed:

Panel 1	Panel 2
GOLDFISH FARM RD	CLOSURE
BRIDGE	(Time Frame)
CLOSURE	(Time Frame)

SECTION 00245 - TEMPORARY WATER MANAGEMENT

Section 00245, which is not a Standard Specification, is included in this Project by Special Provision.

Description

00245.00 Scope - This Work consists of furnishing, installing, operating, maintaining, and removing temporary water management facilities in regulated Work areas.

00245.01 Abbreviations:

TWM - Temporary Water Management
TWMF - Temporary Water Management Facility
TWMP - Temporary Water Management Plan

00245.02 Definitions:

Temporary Water Management Facility - A TWMF that conveys water around or through Work areas, removes water from Work areas, and treats and discharges water at locations outside Work areas.

00245.03 Temporary Water Management Plan - The Agency TWMP is a concept plan. 28 Calendar Days before beginning Work in regulated Work areas, submit stamped Working Drawings of a Contractor-developed TWMP, according to 00150.35, based on either the Agency's concept plan or an independent plan that meets water quality and environmental guideline requirements and does not negatively affect neighboring properties or water rights.

Include the following minimum information in the TWMP:

- The sequence and schedule for dewatering and re-watering. This sequence and schedule must include when to contact the Engineer prior to dewatering and re-watering.

- How the Work area is isolated from the active stream flow upstream, through, and downstream.
- How the stream flow is routed and conveyed around or through the isolated Work area.
- How fish passage is provided around the Work area, if required.
- How the isolated Work area is de-watered.
- How the pumped water is treated, if necessary, before it is discharged downstream.
- Description of all construction stages, including appropriate contact points for each stage.
- A list of on-site backup Materials and Equipment.
- Provide the name of the TWM Subcontractor (if applicable) and Contractor's superintendent, and their 24-hour contact phone number 10 Days before the pre-Work meeting. If changes in the appointment of the TWM Subcontractor or Contractor's superintendent occur during the term of the Contract, provide written notice to the Engineer within 5 Calendar Days of the change.
- Calculations of water withdraw pump's capacity.
- Details of the proposed water intake screen used to isolate in-water Work area and how it meets the requirements of 00290.34(c)(3).

Any change to the TWMP during construction requires approval prior to implementation.

Obtain the Engineer's written approval before beginning Work in in-water Work areas.

00245.04 Pre-Work Meeting - Before beginning any TWM Work, attend a pre-work meeting at the Project Site with the Engineer no more than 8 Calendar Days prior to implementation of TWM. Required meeting attendees include:

- Engineer
- Contractor
- TWM Subcontractor (if applicable)
- Agency Environmental Coordinator or their appointed representative

The pre-Work meeting agenda typically includes the method of TWM, the TWMP, fish salvage plan and strategy, describe environmental risks, turbidity monitoring, energy dissipation, dewatering and re-watering plan and strategy, site clean-up expectations, and the circumstances under which contacting the Engineer is required.

Materials

00245.10 Materials - Furnish Materials meeting the following requirements:

Plastic Sheeting ..... 00280.14(a)
Sandbags ..... 00280.15(a)
Water Intake Screening ..... 00290.34(c)

Furnish pumps that are:

- Self-priming.
- Equipped with a variable speed governor.
- Equipped with a power source.
- Able to pump water that contains soft and hard solid.

Construction

00245.40 Fish Removal - Qualified Agency, ODFW, or ODOT consultant biologists will remove fish and other aquatic organisms from the isolation Work areas. Coordinate fish removal with the Engineer at least 28 Calendar Days before beginning Work in regulated Work areas. Allow access into the isolation Work areas before, during and after installation of the TWMF to perform the specified tasks as follows:

- **Before Installation of TWMF** - Before any in-water Work, including installing TWMF, qualified personnel will remove fish and other native aquatic organisms from within the proposed isolated Work area.

- **After Installation of TWMF** - After installing TWMF and the reduction of the water level through the isolated Work area has begun, qualified personnel will remove all fish and aquatic organisms as the water level is reduced. Do not completely de-water the isolation area until all fish and aquatic organisms have been removed.

00245.41 Installation - During installation of the temporary water management facility, maintain a downstream water flow rate of at least 50 percent of the upstream water flow rate.

00245.42 Operation - Operate temporary water management as follows:

- Protect fish and fish habitat according to 00290.34.
- Maintain and control water flow downstream of the isolated Work area for the duration of the diversion to prevent downstream de-watering.
- Clean, maintain and repair water intake screening to ensure adequate flows and protection of aquatic organisms.
- In the event of containment failure immediately notify the Engineer so arrangements can be made to remove fish and aquatic organisms from the isolation Work areas prior to the continuation of Work within the ordinary high water limits.

Maintenance

00245.60 Maintenance - Monitor water turbidity according to 00290.30(a)(8).

Finishing and Cleaning Up

00245.70 Removal - Prior to removal of the TWMF, obtain approval from the Engineer after completion of all Work within ordinary high water limits. Remove the TWMF and re-water and restore the stream flow. Maintain downstream water flow during removal of the facility. Staged or metered re-watering may be required and will be determined by the Engineer.

Measurement

00245.80 Measurement - No measurement of quantities will be made for temporary water management facilities.

The estimated quantities of Materials required for the temporary water management facility are:

Plastic Sheeting.....56 Square Yard
Sandbags ..... 360 Each
or
Floating Silt Curtain ..... 120 Feet

Turbidity monitoring will be measured according to 00290.80.

Payment

00245.90 Payment - The accepted quantities of temporary water management facilities will be paid for at the Contract lump sum amount for the item "Temporary Water Management".

The location of the facility will be inserted in the blank.

Payment will be payment in full for furnishing and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

Turbidity monitoring will be paid for according to 00290.90.

No separate or additional payment will be made for TWMP, maintaining, operating, monitoring, moving, or removing the facility.

SECTION 00280 - EROSION AND SEDIMENT CONTROL

Comply with Section 00280 of the Standard Specifications modified as follows:

00280.00 Scope - Replace the paragraph that begins "This Work also consists of providing temporary …" with the following paragraph:

This Work also consists of providing temporary erosion and sediment control (ESC) measures and furnishing, installing, moving, operating, maintaining, inspecting, and removing ESC throughout the Project area according to the Standard Drawings, the erosion and sediment control plan (ESCP), the Specifications, or as directed, until the site is permanently stabilized. Included also is the monitoring of weather, of stormwater and receiving waters, the reporting of monitoring observations, the reporting of corrective actions (when necessary) and the updates and revisions of the ESCP, including ESCP cover sheet, necessary to keep it representative of current site conditions and compliant with the 1200-CA permit if applicable.

Delete the paragraph that begins “When contaminants, pollutants or hazardous materials…”.

Add the following paragraph to the end of this subsection:

The Agency’s NPDES 1200-CA permit is not applicable to this Project. Comply with all applicable conditions of this Section.

00280.04 Erosion and Sediment Control Plan on Agency Controlled Lands - Replace the bullet that begins “Information required under 1200-CA…” with the following bullet:

- Information required under 1200-CA permit, if applicable.

00280.41(f) Hauling Material – Replace this subsection, except for the subsection number and title, with the following:

Cover loads carrying soil or sediment which may generate dust. Haul saturated loads in water tight beds or drain saturated loads prior to leaving the Project Site.

00280.41(g) Underground Injection Controls (UIC) – Replace this subsection, except for the subsection number and title, with the following:

Do not allow storm water from work area to enter Underground Injection Control (UIC) inlets, UIC catch basins or UIC wells.

00280.62 Inspecting and Monitoring – Delete the paragraph that begins “Inspect the Project Site…”.

00280.62(a) Inspection - Replace the paragraph that begins "Perform site inspection, complete…" with the following paragraph:

Inspect the Project Site and all ESC devices for Effective Function and potential erosion or sediment movement and complete all applicable parts of the ODOT Erosion Control Monitoring Form, and submit the form to the Agency as follows:

00280.62(b) Rainfall – Add the following to the end of this subsection:

The closest on-line rain gauge is located at:
forecast.weather.gov/MapClick.php?lat= 44.6309&lon=-123.0482&unit=0&lg=english&FcstType=graphical

00280.64(a) Corrective Action Timelines – Delete the bullet that begins “If completion of corrective action is not feasible…”

Delete the bullet that begins “Provide a schedule for clean-up and corrective actions…”

Delete the bullet that begins “Provide all corrective action documentation and photographs…”

SECTION 00290 - ENVIRONMENTAL PROTECTION

Comply with Section 00290 of the Standard Specifications modified as follows:

Add the following subsection:

00290.30(a)(7) Water Quality:

- Do not discharge water contaminated by pollutants including sediment, drilling fluids and waste, concrete, grout, or water contained within a work area isolation, into any waters of the State or U.S. or conveyances draining thereto until it has been treated using Materials such as those listed in 00280.15 or 00280.16 or by pumping to a vegetated upland location. Do not allow Project discharges to increase the concentration of any pollutant in the receiving water to a level that exceeds the limits prescribed by OAR 340-041.
- Do not use permanent stormwater quality treatment facilities to treat construction runoff unless prescribed by an ESCP approved under Section 00280.
- If construction discharge water is released using an outfall or diffuser port, do not exceed velocities more than 4 feet per second, and do not exceed an aperture size of 1 inch.
- Implement containment measures adequate to prevent pollutants from entering waters of the State or U.S. Such pollutants include but are not limited to construction and demolition materials, waste spoils, fuel or petroleum products, detergents, silt, welding slag and grindings, concrete sawcutting by-products and sandblasting abrasives.
- Do not allow curing concrete or grout to be submerged within waters of the State or U.S. less than 24 hours after placement, except within work area isolation. Do not end-dump riprap into the waters of the State or U.S. Place riprap from above the ordinary high water line.

- Monitor weather and streamflow forecasts and conditions to anticipate high flows that may unintentionally inundate any portion of the Project Site.
- If high flow conditions occur or are anticipated to occur that may unintentionally inundate any portion of the Project Site, remove all potentially affected Equipment, Materials, and debris from the potential inundation area. Cease Work in the area until water recedes and the risk of further high water events passes. The Engineer retains the authority to temporarily halt or modify the Work in case of excessive turbidity or damage to natural resources.
- If Work in or around waters of the State or U.S. violate permit conditions or any requirement of this subsection, stop such Work and notify the Engineer.

Add the following subsection:

00290.30(a)(8) Turbidity Monitoring - In addition to the requirements of 00280.62(c) to monitor the receiving stream to identify water quality issues, during Work in waters of the State or U.S., implement best management practices (BMPs) to minimize turbidity and monitor turbidity according to the following:

- Every four hours, make observations at an upcurrent location outside the influence of the Project, and at a downcurrent location representative of turbidity caused by the Project.
- Document all turbidity monitoring observations including date, time, and location on form 734-2755, “Turbidity Monitoring Report” or another form approved by the Engineer. Submit reports to the Engineer weekly while working in waters of the State or U.S. and keep copies of the reports at the Project Site.
- A visible downcurrent turbidity plume emanating from the work area requires a presumption that project-caused turbidity is more than 10% above the upcurrent background level and is therefore in violation of DEQ’s turbidity water quality standard (OAR 340-041-0036), unless turbidity meter analyses of samples taken from an upcurrent location and from a location within the visible plume show that the actual turbidity increase is no more than 10% above the upcurrent background level.
- If observations indicate that the Project has increased turbidity to more than 10% above the upcurrent background level, modify work procedures and repair or upgrade BMPs. If turbidity is still more than 10% above the upcurrent background level at the next four-hour observation, stop turbidity-causing Work and repair or upgrade BMPs. Resume such Work when downcurrent turbidity returns to no more than 10% above the upcurrent background level.

00290.32 Noise Control - Replace the first bullet with the following:

- Do not perform construction operations, including staging, within 1000 feet of any occupied dwelling unit on Sundays, legal holidays and between the hours of 8:00 p.m. and 7:00 a.m. on weekdays and between the hours of 8:00 p.m. and 8:00 a.m. on Saturdays, unless otherwise approved by the Engineer.

00290.34(a) Regulated Work Areas - Add the following to the end of this subsection:

The regulated work area is the area at or below the ordinary high water (OHW) elevation shown on the plans.

Perform work within the regulated work area only during the in-water work period. The in-water work period is from July 1 to August 31.

The total volume of material filled or discharged into waters of the State and waters of the U.S. shall not exceed 0 cubic yards.

The total volume of material excavated from the waters of the State and waters of the U.S. shall not exceed 50 cubic yards.

Submit a schedule to complete all work within the regulated work area within the in-water work period at least 10 Days prior to the preconstruction conference.

Add the following subsection:

00290.34(c) Aquatic Species Protection Measures Required by Environmental Permits:

(1) General Requirements:

- Do not install fish ladders (for example: pool and weirs, vertical slots, fishways) or fish trapping systems.
- Do not apply surface fertilizer within 50 feet of any stream channel.

Use heavy equipment as follows:

- Choice of equipment must have the least adverse effects on the environment (for example: minimally sized, low ground pressure).
- Secure absorbent material around all stationary power equipment (for example: generators, cranes, drilling equipment) operated within 150 feet of wetlands, waters of the State, waters of the U. S., drainage ditches, or water quality facilities to prevent leaks, unless suitable containment is provided to prevent spills from entering waters of the State or waters of the U.S.
- Do not cross directly through a stream for construction access, unless shown or approved. If shown or approved, cross perpendicular to the stream and do not block stream flow. When a crossing is no longer needed, completely remove the crossing and restore the soils and vegetation to the original condition.
- Store fuel and maintain all equipment in staging areas that are at least 150 feet away from any waters of the State, waters of the U.S., or storm inlet or on an impervious surface that is isolated from any waters of the State, waters of the U.S., or storm inlet.
- If temporary access roads are needed within 150 feet of any body of water, use existing routes unless new routes are shown or approved.
- Before beginning work on temporary access routes that are not shown, submit a proposal to the Engineer for approval.

(2) Work Area Isolation - Provide work isolation according to Section 00245. Provide safe passage around or through the isolated work area for adult and juvenile migratory fish unless passage did not previously exist.

(3) Water Intake Screening - Install, operate, and maintain fish screens on each water intake used for project construction, including pumps used to isolate an in-water work area. When drawing or pumping water from any stream, protect fish by equipping intakes with screens having a minimum 27 percent open area and meeting the following requirements:

- Perforated plate openings shall be 3/32 inch or smaller.
- Mesh or woven wire screen openings shall be 3/32 inch or smaller in the narrowest direction.
- Profile bar screen or wedge wire openings shall be 1/16 inch or smaller in the narrow direction.

Choose size and position of screens to meet the following criteria in Table 00290-1:

Table 00290-1

Type	Approach Velocity [1] (Ft./Sec.)	Sweeping Velocity [2] (Ft./Sec.)	Wetted Area of Screen (Sq. Ft.)	Comments
Ditch Screen	≤ 0.4	Shall exceed approach velocity	Divide max. water flow rate (cfs) by 0.4 fps	If screen is longer than 4 feet, angle 45° or less to stream flow
Screen with proven self-cleaning system	≤ 0.4	–	Divide max. water flow rate (cfs) by 0.4 fps	–
Screen with no cleaning system other than manual	≤ 0.2	–	Divide max. water flow rate (cfs) by 0.2 fps	Pump rate 1 cfs or less
[1] Velocity perpendicular to screen face at a distance of approximately 3 inches [2] Velocity parallel to screen				

Provide ditch screens with a bypass system to transport fish safely and rapidly back to the stream.

(4) Site Restoration - Restore damaged streambanks to a natural slope, pattern, and profile suitable for establishment of permanent woody vegetation unless precluded by pre-project conditions (for example: natural rock substrate):

- Replant all damaged streambanks before the first April 15 following construction.
- If use of large wood, native topsoil, or native channel material is required for the site restoration according to the roadside development plans, stockpile all large wood, native vegetation, weed-free topsoil, and native channel material displaced by construction. Cut trees or large wood and trees into pieces of no less than 20 feet in length, or as shown on the roadside development plans or as directed. Stockpiled native wood and vegetation remain the property of the Agency.
- Stabilize all disturbed soils, including obliteration of temporary access roads, following any break in work unless construction will resume in 4 Calendar Days.

(5) Surface Water Diversions - Surface water may be diverted to meet construction needs other than work area isolation, consistent with Oregon law, only if water from sources that are already developed, such as municipal supplies, small ponds, reservoirs, or tank trucks, is unavailable or inadequate, and meeting the following conditions:

- When alternative surface sources are available, divert from the stream with the greatest flow.
- Install, operate, and maintain a temporary fish screen.
- Do not exceed a pumping rate and volume of 10 percent of the available flow. For streams with less than 5 cubic feet per second, do not exceed drafting of 18,000 gallons per Day. Do not use more than one pump for each site.

(6) Hydro-Acoustic - Unless otherwise shown or approved, piling below the ordinary high water shall be removed as follows:

- Whenever feasible, use vibratory hammer for piling installation. Otherwise, use the smallest drop or impact hammer necessary to complete the job, and set the drop height to the minimum necessary to drive the piling. use one of the following sound attenuation devices to effectively dampen sound:
    - When using an impact or vibratory hammer to remove steel piling within a body of water, or as directed, If water velocity is 1.6 feet per second or less, surround the pile being driven with a bubble curtain that distributes small air bubbles around 100 percent of the piling perimeter for the full depth of the water column and is in accordance to the guidance in the Appendix

of The ODOT-FHWA Federal Aid Highway Program Programmatic User's Guide titled *NMFS and USFWS Impact Pile Driving Sound Attenuation Specifications*. The FAHP User's Guide is available on the Agency's website at:
https://www.oregon.gov/ODOT/GeoEnvironmental/Pages/Manuals.aspx

- If water velocity is greater than 1.6 feet per second, surround the piling being removed by a confined bubble curtain (for example: a bubble ring surrounded by a fabric or metal sleeve) that will distribute air bubbles around 100 percent of the piling perimeter for the full depth of the water column and is in accordance to the guidance in the Appendix of The ODOT-FHWA FAHP User's Guide titled *NMFS and USFWS Impact Pile Driving Sound Attenuation Specifications*.

(7) Drilling, Boring, or Jacking - If drilling, boring, or jacking is used, the following conditions apply:

- Design, build, and maintain facilities to collect and treat all construction and drilling discharge water using the best available technology applicable to site conditions. Provide treatment to remove debris, nutrients, sediment, petroleum hydrocarbons, metals, and other pollutants likely to be present. An alternate to treatment is collection and proper disposal offsite.
- Isolate drilling operations from wetted stream to prevent drilling fluids from contacting waters of the State or waters of the U.S.
- Use casing to prevent loss of drilling fluid to the subsurface formation. Do not drill without a containment method to keep drilling fluids and slurry isolated.
- If it is necessary to drill through an over-water bridge deck, use containment measures to prevent drilling debris from entering the stream channel.
- If drilling fluid or waste is released to surface water, wetland or other sensitive environment, cease all drilling pending written approval from appropriate regulatory agencies through the Engineer to resume drilling.
- Recover all waste and spoils if precipitation is falling or imminent. Recover, recycle, or dispose of all drilling fluids and waste to prevent entry into flowing water.

    - Recycle drilling fluids using a tank instead of drill recovery/recycling pits, whenever feasible.
    - When drilling is completed, make attempts to remove the remaining drilling fluid from the sleeve (for example: by pumping) to reduce turbidity when the sleeve is removed.

(8) Treated Wood - Treated wood includes any wood treated with any pesticide or wood preservatives. Do not use lumber, pilings, or other wood products that are treated or preserved with pesticidal compounds below the ordinary high water (OHW) or as part of an in-water or over-water structure, except as described below:

- Store treated wood shipped to the Project out of contact with standing water and wet soil, and protected from precipitation.
- Visually inspect each load and piece of treated wood. Reject for use in or above aquatic environments if visible residues, bleeding of preservative, preservative-saturated sawdust, contaminated soil, or other matter is present.
- Use pre-fabrication to the extent feasible. When field fabrication is necessary, all cutting and drilling of treated wood, and field preservative treatment of wood exposed by cutting and drilling, shall occur above the OHW. Use tarps, plastic tubs, or similar devices to contain the bulk of any fabrication debris, and wipe off any excess field preservative.
- All treated wood structures, including pilings, shall have design features to avoid or minimize impacts and abrasion by livestock, pedestrians, vehicles, vessels, and floats.
- Treated wood may be used to construct a bridge, over-water structure or an in-water structure, with the exception of the work containment system, provided that all surfaces exposed to

leaching by precipitation, overtopping waves, or submersion are coated with a water-proof seal or barrier are maintained. Apply and contain coatings and paint-on field treatment to prevent contamination. Surfaces that are not exposed to precipitation or wave attack, such as parts of a timber bridge completely covered by the bridge deck, are exempt from this requirement.

- During demolition of treated wood, ensure that no treated wood debris falls into the water. If treated wood debris does fall into the water, remove it immediately.
- Store removed treated wood debris in appropriate dry storage areas, at least 150 feet away from the regulated work area.

(9) Piling Removal - Remove temporary or permanent piling according to the following:

- Install a floating surface boom to capture floating surface debris.
- Keep all equipment out of the water, grip piles above the waterline, and complete all work during low water and low current conditions.
- Dislodge the piling with a vibratory hammer, whenever feasible. Do not intentionally break a pile by twisting or bending.
- Slowly lift the pile from the sediment and through the water column.
- Do not excavate to remove piling.
- Dispose of all removed piles, floating surface debris, contaminated supplies, and sediment spilled on work surfaces at a permitted upland disposal site.
- For all pile removed, maintain a pile removal log and submit the log when the related work is completed. Include types, sizes, locations, removal methods, and dates in the log.

a. Non-Treated Piling - Use the following methods to remove non-treated piling:

- Fill holes left by each pile with clean, native sediments whenever feasible.

b. Treated Piling - To minimize toxic release, sediment disturbance, and total suspended solids, use the following methods to remove treated piling:

- Place the pile in a containment basin on a barge deck, pier, or shoreline without attempting to clean or remove any adhering sediment.
- Fill the hole left by each removed or partially removed pile with clean, native sediments and cap with clean, native substrates that match surrounding streambed materials immediately after removal.

(10) Broken or Intractable Pile - If a pile breaks above the surface of uncontaminated sediment, or less than 2 feet below the surface, make every attempt short of excavation to remove it entirely. If the pile cannot be removed without excavation, drive the pile deeper if possible.

- If a pile in contaminated sediment is intractable or breaks above the surface, cut the pile or stump off at the sediment line.
- If a pile breaks within contaminated sediment, make no further effort to remove it and cover the hole with a cap of clean substrate appropriate for the site.

(11) Disposal of Treated Timbers - Dispose of temporary or permanent treated timber piling at a DEQ approved landfill. Payment for disposal of treated timbers is incidental to section 00501.

(12) Injured Fish Notification - If a dead or injured fish is found in the project area, immediately notify the Agency. If the injured fish is in a location where further injury or stress may take place, attempt to move the fish to a safer location, if one is available, near the capture site while keeping the fish in the water and reducing its stress as much as possible. Do not disturb the fish after it has been

moved. If the fish is dead or dies while being captured or moved, save the fish and any tags. The Agency will notify appropriate regulatory agencies about the injured or dead fish and provide additional direction to the Contractor.

00290.36(a) Migratory Birds - Add the following to the end of this subsection:

(1) Bird Management - Bird management activities to comply with the Migratory Bird Treaty Act (16 U.S.C. 703 712) will be performed by the Agency. Ensure that the Agency and its permitted agents have access to the project area, as needed to prevent migratory bird nesting. Nesting prevention may include daily bird harassment and the installation and maintenance of devices that exclude birds.

Do not disturb migratory bird nesting habitats (shrubs, trees, and structures), or clear vegetation from March 1 to September 1 of each calendar year without prior written approval from the Engineer. Notify the Engineer, in writing, a minimum of 10 Calendar Days prior to starting activities that could harm nesting birds.

Add the following subsection:

00290.42 Work Containment Plan - A Work Containment Plan (WCP) is required on this Project for bridge removal and bridge installation activities.

Develop and submit a WCP for approval at least 28 Calendar Days prior to mobilization for bridge work activities. Maintain a copy of the WCP on the Project Site at all times during construction, readily available to employees and inspectors. Ensure that all employees comply with the provisions of the WCP. Design the WCP to avoid or minimize disturbance to protected features (sensitive cultural or natural resources, regulated work areas, aquatic life or habitat in regulated work areas) related to Contractor operations.

Before developing the WCP, meet with Agency to review the Contractor’s activities that require the WCP to ensure that all parties understand the locations of protected features to be avoided and the measures needed to avoid and protect them.

Notify the Engineer at least 10 Calendar Days before beginning work access or containment construction activities.

The Agency reserves the right to stop Work and require the Contractor to change the WCP methods and Equipment before any additional Contract Work, at no additional cost to the Agency, if and when, in the opinion of the Agency, such methods jeopardize sensitive cultural or natural resources, regulated work areas, or aquatic life or habitat in regulated work areas.

The WCP shall identify how the Contractor's construction operations will protect regulated features during mobilization, construction, maintenance, and demolition. Include a narrative describing compliance with Section 00290 as related to construction, operation, and demolition activities specified in Section 00253.

Design, construct, maintain, and remove temporary work access and containment systems according to Section 00253.

Add the following subsection:

00290.42(b) Work Containment System (WCS) - Add the following paragraph:
The WCS must be approved by the Project Manager prior to implementation and any over-water concrete pumping. The WCS shall include all load assumptions and calculations used in the design, and a written plan for the Emergency Shut-Off Procedure.

00290.90 Payment - Add the following paragraph(s) to the end of this subsection:

The work containment plan and the work containment system will be paid for at the Contract lump sum amount for the item "Work Containment Plan and System".

Partial Payments will be made as follows:

- When the initial WCP and WCS is approved.....20%
- When WCS has been installed……....40%
- When WCS has been removed and all equipment and materials have been removed from the site..…….....40%

Payment will be payment in full for furnishing all Materials, Equipment, labor, and Incidentals necessary to complete the Work as specified. Payment includes providing and updating the Work Containment Plan and for designing, constructing, maintaining, and removing the containment system.

No separate or additional payment will be made for Work Zone Fencing.

No separate or additional payment will be made for Turbidity Monitoring.

SECTION 00305 - CONSTRUCTION SURVEY WORK

Section 00305, which is not a Standard Specification, is included for this Project by Special Provision.

Description

00305.00 Scope - This work consists of all surveying activities necessary to control the many phases of work required to construct the Project to the lines and grades as shown, specified, or established.

Make all supporting computations and field notes required for control of the work and as necessary to establish the exact position, orientation, and elevation of the work from control stations, including furnishing and setting construction stakes and marks, reference marks, and additional control stations.

Plans, specifications and other data necessary to lay out the work will be available for inspection at the Project Manager’s office. The Contractor will be furnished a copy of these documents.

00305.01 Definitions:

Confidence Points - Random points measured in the field within the boundary of a digital terrain model (DTM), the purposes of which are to verify the accuracy of the DTM and to provide evidence just prior to construction that the DTM is a reasonable representation of the original ground for computation of volumes and pay quantities. Similarly, confidence points are used to verify that a constructed grade has been built according to the design DTM. Additional information is available from the Engineer.

Confidence point locations follow these guidelines:

- Randomly selected without regard for the location of DTM points or triangles
- Evenly distributed over the entire DTM area to be validated
- Proportionately distributed between confidence point classifications as applicable

- At a density sufficient to validate the surface, generally ten per instrument location as used in collecting DTM data or if not applicable, as in data collected photogrammetrically, 2% of DTM points

Control Network - An array of control stations either established by the Contractor or provided by the Agency.

Control Station - Any item identified in the Project records as having a position and/or elevation on the Project datum and intended to be used to control the many phases of the construction work.

Digital Terrain Model (DTM) - An electronic computer model of the shape of the ground.

Reference Stakes - Stakes set away from but with information relating back to the intended location and/or grade.

Slope Catch - The location where a design slope intersects the existing ground and where excavation or embankment work should begin to provide the intended earthwork.

Slope Staking - The process of using measurements and calculations in the field to determine the slope catch. Slope staking shall normally include setting stakes to mark the slope catch and setting a reference stake for every catch stake.

Stakes - Stakes, nails, marks, string lines, or other devices or mechanisms set or established for the purpose of indicating or controlling the location, orientation, or grade of any feature intended for construction, or for the purpose of limiting or influencing the construction work.

Staking - The act of placing stakes.

Subgrade Area – The area of Subgrade from Subgrade shoulder to Subgrade shoulder.

Survey Marker - Any survey monument, control station, or stake.

Survey Monument - Any natural or man-made item specified or identified in a property deed, boundary survey, government document, or other instrument of public record, when the purpose of said item is to mark or reference a property boundary, geographical location, elevation, or other position.

Surveyor - The individual designated by the Contractor and licensed in the state of Oregon as a Professional Land Surveyor and placed in "responsible charge" of the survey work as defined in ORS 672.002(6)(b).

Temporary Bench Mark (TBM) - A control station established for the purpose of providing vertical control for the Project. A TBM may or may not have an established horizontal position.

00305.02 Pre-Survey Conference -The prime Contractor, subcontractors, surveyor, survey crew leader, and all surveying personnel who are to be involved in the survey work shall be present at the preconstruction meeting or shall schedule to meet with the Project Manager two weeks prior to beginning survey work. The purpose of this meeting will be to discuss methods and practices of accomplishing required survey work.

00305.03 Review by the Engineer -The Engineer may periodically review the notes, calculations and layout work, including field locations, for compliance with these specifications. Survey work that does not meet the tolerances in 00305.40 may be rejected, and the work redone at the Contractors expense to meet the tolerances.

Review by the Engineer does not constitute approval or acceptance of the work, nor does it relieve the Contractor of responsibility for performing work in conformance with the plans and specifications.

00305.04 Agency Responsibilities - The Agency Shall perform or provide the following items of work:

- Perform and provide a Pre-Construction Survey.
- Provide copies of plans and specifications.
- Establish initial horizontal and vertical control stations in the proximity of the Project.
- Provide horizontal and vertical alignment data.
- Provide cross section grade elevations to establish lines, grades, slopes, cross sections, and curve superelevation for each phase of roadwork.
- Evaluate grade for acceptance at each course of material.
- Perform measurements and calculations for pay quantities.
- Review Contractor's work and records periodically.

00305.05 Contractor Responsibilities - The Contactor shall perform or provide the following items of work:

- Make calculations, field notes and survey drawings for the layout and control of the work as are necessary to construct the Project as specified
- Provide original or copies of notes, calculations and drawings as requested.
- Preserve survey monuments and control stations according to 00305.71 and as governed by applicable law.
- Give the Engineer such facilities and assistance in establishing lines, grades and points as the Engineer may require.
- In the case of alterations, which involve any changes in stakes, the Contractor shall cooperate with the Engineer and facilitate the prompt re-establishment of field control for the altered or adjusted work.
- Replace and augment control stations as necessary to control the Project.
- Establish additional control stations as necessary to control the Project.
- Perform slope staking necessary for construction of earthwork including intersections and matchlines.
- Set stakes defining limits for clearing. Set stakes defining approximate right-of-way and easements.
- Set stakes to define construction centerline, centerline offsets, detour lines, or other lines necessary for control of the Project work.
- Set stakes to define the work, that may include but is not limited to the following:
    - Roadway location and grade. Set stakes and/or hubs at 50-foot intervals on tangents and 25-foot intervals on curves
    - Controls for sanitary and domestic water systems
    - Fences and gates.
    - Guardrail, barrier, barricades, and associated features.
    - Traffic delineators, reflectors, and guide devices.
    - Temporary and permanent signing *
    - Temporary and permanent pavement striping and pavement marking devices.

- Poles and footings, cabinets, junction boxes, sensors, and other features associated with illumination and signal facilities *
- Curbs, walks, ADA ramps, stairs, walls, mailboxes, and other miscellaneous structures.*
- Pipes, manholes, inlets, weirs, settlement basins and other storm water, drainage and water quality structures and facilities *

  *This includes field verification of fit and functionality or as instructed by the Engineer.
- Landscaping items.
- Earthwork features including guardrail flares and mounds, berms, and mounds
- Buildings and other structures and facilities.
- Environmental impact mitigation features.
- Other incidental survey Work common to this type of construction project.

- Remove and dispose of all flagging, lath, stakes and other temporary staking material after the Project is completed.
- Perform final "as constructed" measurements.
- Complete a Post-Construction survey of monuments and control stations and submit as-built documentation to Linn County Surveyor's Office.
- For bridge work, supply survey drawings depicting the location and elevations of the elements of substructure and superstructure and place stakes for features including, but not limited, to the following:

  Substructure:

  - Piling
  - Footings
  - Columns, walls, and abutments
  - Pile caps and cross beams
  - Bearing pads or devices

  Superstructure:

  - Horizontal alignment and deck edges
  - Soffit grades
  - Seismic restraints
  - Wing walls and retaining walls
  - Bridge end panels
  - Deck elevations
  - Railings
  - Deck drains and other bridge drainage facilities

- Set reference stakes and elevations in the vicinity of the structure work, as are necessary for the Engineer to check the layout. This may include establishment of a control network.

00305.06 Survey Methods - Survey procedures shall be appropriate for the equipment being used and be according to current Agency practices.
New survey procedures that are not according to current Agency practices shall be submitted to the Engineer for review 21 days prior to conducting the work. The surveyor may be required to demonstrate the capabilities, accuracy, and reliability of the intended procedure. The Engineer will evaluate the procedure and intended application and provide approval or rejection within 21 days. Work may proceed immediately upon approval of procedures by the Engineer.

Survey equipment must be properly calibrated and kept in good repair.

00305.07 Survey Work Records - Contractor's survey personnel shall maintain a Project daily record of work performed by the survey crew. The daily record shall contain the date, crew names, type and location of work, and work accomplished. Upon request, furnish a copy of diary entries to the Engineer. Furnish a final copy of the diary when the Project is complete.

Contractor's survey personnel shall make all field notes and calculations in a manner consistent with current Agency practices and on forms provided or approved by the Engineer. Computations, survey notes and other records necessary to accomplish the work shall be neat, legible and complete. Furnish copies of computations, notes and other records when requested by the Engineer.

When a Project affects any permanent change to vertical clearances within the traveled way, complete and submit a Standard Vertical Clearance form (Form 734-2614) within 30 days of the change to the vertical clearance.

When a Project temporarily restricts any vertical clearances submit a Standard Vertical Clearance form (Form 734-2614) 28 days before the restriction takes effect.

For bridges, furnish all computations, layout notes, and drawings of the structure to the Engineer for review 7 Calendar Days before beginning construction.
Upon completion of construction staking and prior to final acceptance of the Contract, furnish to the Engineer, computations, survey notes, Project records and other data used to accomplish the work. Include an itemized list of the data.

All data and original documentation associated with the Project will become the property of the Agency.

00305.08 Communication with the Surveyor - The Engineer has the right to communicate directly with the surveyor.

00305.09 Electronic Data - The Engineer will not be responsible for any data translations. Compressed data provided by the Engineer or the Contractor will be in a "self-expanding executable" format. The method of exchange of electronic data will be mutually agreed upon at the pre-survey conference.

00305.10 File Formats for Digital Data Exchange - Below are the preferred formats for data exchanged between the Agency and the Contractor. Other formats may be used, but must be pre-approved by the Engineer.

- **CAD (graphics) Files** - AutoCAD Civil 3D 2012 (.DWG) format.
- **Alignments (Horizontal and Vertical)** - AutoCAD Civil 3D 2012 (.DWG) format.
- **Elevations** - ASCII Elevation File format.
- **DTM Data** - AutoCAD Civil 3D DTM or AutoCAD Civil 3D (.DWG) format.
- **Coordinates of Miscellaneous Survey Points Set** - ASCII Coordinate File format.

00305.12 Other Documents - Adobe Acrobat Portable Document Format (pdf) is the preferred format for exchanging documents such as reports, drawings and maps.

Materials

00305.20 Materials - Furnish all materials including supplies, clothing, and incidentals required to accomplish the work. Use materials of good quality and suitable for the purpose intended. Stakes, hubs, and guinnies are to be of sufficient length to provide a solid set in the ground. Mark the stakes in such a

way as to remain legible for the intended duration. Provide and use safety equipment required by State and federal regulations.

Equipment

00305.30 Survey Equipment - Furnish survey equipment required to accomplish the work that meets the following requirements:

- Components designed to work together.
- Suitable for the purpose intended.
- Capable of achieving specified tolerances.
- In good operating condition.
- Maintained to meet manufacturers specifications.
- Kept in proper adjustment throughout the duration of the Project.

Submit documentation on survey equipment that is new to the industry, to the Engineer for review 21 days prior to its use. The Engineer will evaluate the equipment and intended application and provide approval or rejection within 21 days. Equipment may be used immediately upon approval by the Engineer.

Labor

00305.40 Personnel - Provide technically qualified personnel capable of performing required tasks in a timely and accurate manner. Perform work under the direction and review of the Surveyor.

The Surveyor is responsible for:

- Maintaining registration as a Professional Land Surveyor in the State of Oregon.
- Performing or validating requirements for procedures and testing of equipment.
- Maintaining familiarity with the site conditions and progress of the Project.
- Becoming familiar with the plans and specifications.
- Determining notes and documentation required for types of survey work.
- Determining the accuracy required for each survey stake.
- Using appropriate equipment and methods.
- Keeping close communication with the Project inspector(s), Project Manager, and Agency survey crews working on the Project.
- Being familiar with the varying construction survey requirements of each aspect of the Project, including the various bridge construction techniques when applicable.
- Notifying the Project inspector of conflicts and changes necessary due to utilities, match point variations, design revisions, or other variables.

The survey crew leader is responsible for:

- Becoming familiar with the plans and specifications.
- Keeping close communication with the Project inspector(s), Project Manager working on the Project.
- Notifying the Project inspector of conflicts and changes necessary due to utilities, match point variations, design revisions, or other variables.

Construction

00305.50 Construction Staking Tolerances - Set stakes or other devices at an adequate frequency and within the following tolerances:

Item	Horizontal	Vertical
Box Culverts	± 0.10 ft	± 0.05 ft
Bridge Substructures	± 0.03 ft	± 0.03 ft
Bridge Superstructures	± 0.02 ft	± 0.02 ft
Clearing and Grubbing Stakes	± 1.00 ft	n/a
Construction Centerline Control Points	± 0.05 ft	n/a
Construction Centerline Station Points	± 0.10 ft	n/a
Curbs, Walks, and Bikepaths	± 0.03 ft	± 0.02 ft
Grade Stakes - Roadway Subgrade	± 0.20 ft	± 0.05 ft
Grade Stakes - Top of Rock	± 0.20 ft	± 0.03 ft
Grade Stakes - Roadway Finish	± 0.10 ft	± 0.02 ft
Manholes, Inlets, and Culverts	± 0.10 ft	± 0.03 ft
PCC Pavement	± 0.10 ft	± 0.02 ft
Slope Stakes and References	± 0.30 ft	± 0.10 ft
Traffic Markings	± 0.20 ft	n/a
Walls - Retaining, MSE, Sound, etc.	± 0.10 ft	± 0.05 ft
Wetland Mitigation Control Stakes	± 0.20 ft	± 0.20 ft
Luminaire and Signal Poles (incl. footings)	± 0.20 ft	± 0.03 ft

Stakes for miscellaneous items not listed above will have a horizontal and vertical tolerance of 0.20 foot, unless otherwise directed. Features that are to be constructed flush to another surface should take on the same tolerance as that surface.

Staking tolerances for special circumstances will be discussed at the pre-construction meeting.
These staking tolerances are not cumulative to the construction tolerances identified for the appropriate items in which construction tolerances are required.

In constructing the work, the contractor shall meet the appropriate construction tolerances for the material as specified in the special provisions or standard specifications, regardless of the construction staking tolerances, specific to the work item.

00305.51 Slope Stakes and References - Set slope stakes and references at even design stationing on both sides of centerline at 50-foot stations on tangents, at 25-foot stations on curves, and at terrain breaks and changes in the typical section. Establish slope stakes in the field as the actual point of intersection of the design roadway slope with the existing ground line. Direct staking of the theoretical (computer generated) slope stake catch point requires prior approval of the Engineer.

Set slope stake references farther out from centerline than the actual catch point. Include all reference point and slope stake information on the reference stakes.

If an automated slope staking routine is intended to be used, the system shall be able to perform the proper superelevation, lane transitions, and benching, as well as duplicate other details in the design surface. The system shall record field modifications made to the final catch slopes. Any modifications shall be recorded and provided to the Engineer.

Record the actual as staked (three dimensional) position of the slope and reference stakes. Prepare field notes showing slope stake and reference information, and provide to the Engineer.

00305.52 Clearing Limits - Set clearing limit stakes according to Section 00320. Space clearing limit stakes at intervals not greater than 50 feet on tangents and not greater than 25 feet on curves, or as directed.

00305.53 Grade Stakes - Set grade stakes or other control for grade elevation and horizontal alignment. Set grade stakes at each grade break line. Set additional points at intervals, as necessary, not to exceed the width of the grading equipment, or as approved by the Engineer. Set these rows at 50-foot stations on tangents and at 25-foot stations on curves, or as required in special situations, as in road connections and other areas where conditions require tighter spacing of grade stakes to assure grade and alignment.

Stakes and hubs shall be checked by the inspector as a representative of the Engineer. Do not begin placement of the next material course until the Engineer has accepted the grade and approval is given to proceed.

00305.54 Walls - Set stakes or other devices to control the location and elevation of walls, including retaining walls, geotextile walls, wing walls, sound walls and other walls as specified. Provide horizontal and vertical control for elements of wall(s) including but not limited to footings, leveling pads, batter slope and direction, and top elevation. Stake drainage facilities, electrical conduits water pipes and other items shown or identified that are to be integrated into the construction of the wall(s).

00305.55 Pipes and Culverts - Stake pipes and culverts to fit field conditions. Their location may be different from the plans. Perform the following:

- Determine the roadbed slope catch points at the inlet and outlet of pipes and culverts.
- Set reference point offsets to pipes and culverts. Record information necessary to determine structure length and end treatments.
- Stake ditches or grade to make pipes and culverts functional.
- Complete and submit a Culvert Data Sheet (Form 734-3247)
- Submit a copy of the field notes to the Engineer by the next working day following completion of the staking work.

00305.56 Manholes and Inlets - Determine the location of manholes, inlets, siphon boxes, slope protectors, and other similar structures. This may require an approved field adjustment to the planned location in order to avoid obstacles or assure placement at the low point. Determine the elevation of the center of the grate.

Set a stake referencing the center of the structure. Set a guard stake with the following information written on it:

- Type of structure
- Centerline station
- Centerline offset
- Reference distance
- Cut or fill to top of structure
- Center of structure elevation

Establish a reference line to control the alignment of the structure. Record data on the Culvert Data Sheet (Form 734-3247) containing staking information for the outlet pipe from the specific drainage structure.

00305.57 Box Culverts - Set stakes or other devices to control the location and elevation of box culverts as specified. Provide horizontal and vertical control for elements of the box culvert(s) including but not limited to footing, side walls, wing walls, weirs, fish ladders, apron and top elevation. Stake other drainage

facilities, electrical conduits, water pipes, and other items shown or identified that are to be integrated into the construction of the box culvert(s). Stake ditches to make the box culverts(s) functional.

00305.60 Horizontal Control - Establish horizontal control stations using Theodolite/EDM network or static GPS techniques. Least squares adjustments shall be applied to either method. The use of traverses will be permitted only if approved by the Engineer.

Preserve all Agency provided and Contractor established horizontal control stations for the life of the Project. If the horizontal control network cannot be preserved in its original position during construction or if the Agency provided control stations are not of adequate quantity or location, establish a secondary horizontal control network using the original control as a basis. This secondary control network may then be used by the Contractor to layout all construction items and may be used by the Agency for right-of-way monumentation and for other purposes.

(a) General Specifications - Horizontal control networks shall conform to these general requirements in addition to Theodolite/EDM or GPS specifications to follow.

(1) Equipment:

- Use tripods for all occupations with theodolite, target, or GPS antenna.
- Test all components and adjust according to manufacturer specifications.

(2) Procedures:

- Include in field notes a detailed point description and vicinity sketch for each control station and survey monument established or used.
- Perform a minimally and fully constrained Least Squares adjustment.
- Prior to using 2 points for the basis of bearing, perform an analysis to verify that the points are actually those indicated in the record.
- Control station monuments shall conform to the requirements of the Agency "Right-of-Way Monumentation Policy" available from the Engineer.
- If available, include at least three existing control stations in establishing any control network.
- Establish a point identifier for each control point within the range of 1 - 399. Alphanumeric point identifiers up to eight characters may be used. Inscribe the point identifier on the monument.

(3) Acceptance Standards - At least squares adjustment shall be accepted based on the following criteria for all specified tolerances.

- Two-thirds of all values shall be within the total tolerance.
- 100% of all values shall be within 3 times the total tolerance.
- Tolerance for confidence regions at the 95% level is 0.05 feet + 50 ppm based on the shortest distance to the nearest unadjusted control station.

(4) Data Requirements:

- Field notes containing a detailed point description and vicinity sketch for each control station and survey monument established or used.

(b) Terrestrial Networks:

(1) Equipment:

- Use Theodolites with a maximum angular standard of error no greater than ± 6 seconds.
- Use EDMs with a maximum distance standard error no greater than ± 0.02 feet ± 5 ppm.
- All components shall be of compatible accuracy and designed to be used together.

(2) Field Procedures:

- Include distance measurements with all observations unless impractical.
- Have at least one redundant observation for every point in the network.
- Triangulation, trilateration, and resection methods are acceptable.

(3) Acceptance Tolerances:

- Tolerance for angle residuals is ± 3 seconds.
- Tolerance for distance residuals is ± 0.02 feet ± 2 ppm.

(4) Data Requirements - Provide the following to the Engineer for each network or circuit established:

- **Raw Data Files** - These are electronic data files containing original measurements produced by the Theodolite (total station). The file shall contain:
  - Observation data for each measurement, including:
    - point identifier
    - direction, plate reading, or horizontal angle
    - vertical or zenith angle
    - slope distance
  - Supplemental measurement data, including:
    - distance units recorded
    - angular units recorded
    - curvature and refraction correction applied
    - atmospheric correction applied
    - prism correction applied
  - Codes or instructions to the processing software on how to process the data.
  - Atmospheric conditions at the time of the survey.
  - Angular and distance units recorded, and whether the distance has been corrected for curvature and refraction and/or atmospheric conditions.
- **Set Reduction Report** - This report summarizes the reduction of the angle sets and mean distances.
- **Least Squares Adjustment Report** – These reports contain details of the least squares adjustment, including a list of all angular and distance residuals, confidence region values at a 95% confidence level, and final adjusted coordinates.

(c) GNSS Networks:

(1) Equipment:

- GNSS receivers shall be dual frequency geodetic receivers with a manufacturer-specified accuracy of ± 0.02 feet ± 1 ppm or better.
- All components shall be of compatible accuracy and designed to be used together.

(2) Field Procedures:

- Ensure that satellite geometry during the field observation phase is sufficient to produce accurate results. The geometric dilution of precision (GDOP) shall not be greater than 8.
- The number of healthy satellites being observed at any time shall be four or more.
- The elevation mask shall be not less than 15 degrees.
- Horizontal survey measurements, once completed, shall form a closed figure, and shall be connected to at least two existing horizontal control stations.
- Network shall be comprised entirely of independent baselines.
- Adjacent stations shall have direct connections.
- Every station shall be connected to two or more stations.
- Receiver documentation shall be followed for observation times and epoch intervals.
- Each control station shall be occupied no less than twice, of which two occupations shall be separated from each other by time. Separation shall be measured start-time to start-time. Separation shall be 90 minutes or more from initial occupation and 90 minutes or more from any 12-hour multiple thereafter for 30 days. Additional occupations beyond two are not subject to time restrictions.
- Back-to-back occupations of 90 minutes or more shall be separated by off leveling and re-setting the tripod and rotation of the tribrach or leveling equipment by 120 degrees or more.
- Stations closer together than 1,500 feet shall be connected with terrestrial observations.
- Inter-visible stations closer together than 3,000 feet shall be connected with terrestrial observations.

(3) Acceptance Tolerances:

- Tolerance for linear residuals in latitude, longitude, and elevation is ± 0.05 feet.

(4) Data Requirements - Provide the following to the Engineer for each network established:

- **Receiver Independent Exchange (RINEX) Data Files** - These are industry-standard non-proprietary electronic data files containing original data collected by the receiver. The provided files shall contain all data supported by both the RINEX file format and the equipment and software employed in the survey. Files provided shall include as a minimum:
  - GNSS observation data file
  - GNSS navigation message file
- **Observation Log Sheet** - This log includes, for each observation, start and stop times, and antenna height including measurement procedure.
- **Least Squares Adjustment Report** – These reports contain details of the least squares adjustment, including a list of all angular and distance residuals, confidence region values at a 95% confidence level, and final adjusted coordinates.

(d) Traverses:

(1) Equipment:

- Identical to requirements for Theodolite/EDM networks.

(2) Field Procedures:

- Include distance measurements with all observations unless impractical.
- Close both traverse for angle and distance.

(3) Acceptance Standards - Closure shall be a minimum of 1:20,000 after angular adjustment and prior to coordinate adjustment.

(4) Data Requirements - Provide the following to the Engineer for each traverse established:

- **Adjustment Report** - This report contains details of the traverse adjustment, including adjusted coordinates.
- **Other Reports** - All data required for Theodolite/EDM networks except least squares adjustment report.

00305.61 Vertical Control - Establish vertical control stations using differential leveling and third order or better equipment and techniques. The development of vertical control by techniques other than differential leveling must be approved by the Engineer. A least squares adjustment shall be applied to each network of acceptable level circuits.

The Agency provided and Contractor established vertical control stations shall be preserved for the life of the Project. If the vertical control network cannot be preserved in its original position during construction or if the Agency provided control stations are not of adequate quantity or location, establish a secondary vertical control network using the original control as a basis. This secondary control network would then be used to layout all construction items and may be used by the Agency for other purposes.

(a) Field Procedures:

- Use a compensated (or "automatic") optical level or compensated digital level.
- Use precise non-adjustable rod(s) unless otherwise directed. Do not use "Lenker" or self-computing rods.
- Use a rod level with each rod.
- Include a minimum of two published bench marks in each circuit unless otherwise directed.
- If the circuit between benches does not close within the tolerance stated below, close circuit back to the starting point.
- If the use of one benchmark is approved, close circuit back to the starting point.
- Select turning points that are firm, solid objects with a defined high point. Set a nail, spike, or stake if no existing items are acceptable. Turning plates with a weight of not less than 4.5 pounds may be used.
- Balance backsight and foresight distances to within 30 feet on each setup and to within 30 feet on the entire circuit.
- Make a record of the rod reading(s) and the observation distance on each sighting
- Set TBMs near significant construction items (bridges, intersections, and other locations where elevations will be needed) and not more than 1,000 feet apart throughout the Project.

- Select TBM monuments that are firm, solid objects with a defined high point, not likely to be moved by human or natural influences, readily identifiable, and out of the path of construction. Do not use fire hydrants, guardrails, highway signs, or nails or spikes in utility poles or fence posts.
- Include detailed point descriptions and vicinity sketch in field notes.
- Take field notes when recording measurements electronically. Include data and information not electronically measured and recorded.
- Apply a vertical least squares adjustment to allowable errors. The use of proportional distribution of error may be used if approved by the Engineer.

(b) Acceptance Standards - Each leveling circuit shall be accepted based on the "point-to point" or "closed-loop" limits described below. A single least squares adjustment shall be applied to the observation in the leveling circuits meeting the acceptance standards.

- Accept point to point circuit based on the following. Error of closure shall be no greater than:

  $$\text{Allowable Error} = 0.05 \text{ ft.} \sqrt{D}$$

  D = Shortest level line distance in miles

- If a closed loop, the error of closure shall be no greater than:

  $$\text{Allowable Error} = 0.035 \text{ ft.} \sqrt{E}$$

  E = Perimeter of level loop in miles

(c) Data Requirements - Provide the following to the Engineer for each network or circuit established:

- **Raw Data** - These are hand written field notes or hand-written field notes accompanied by electronic data files containing original measurements produced by the level. The file shall contain:
  - Data for each measurement, including a:
    - point identifier (within a range of 400 - 499 and also inscribed on the monument)
    - rod reading
    - observation distance.
  - Supplemental measurement data, including:
    - distance units recorded
    - curvature and refraction correction applied
- **ASCII Point Elevation Data File**

00305.62 Bridges - Set stakes, nails, or other devices to control the location and elevation of the various parts of bridges and progressive phases of construction. Provide horizontal and vertical control for all elements of bridge construction. Stake drainage facilities, electrical conduits, water and sewer pipes, pedestrian and bicycle facilities, traffic signal and sign supports, illumination devices, and other items shown or identified that are to be integrated into the construction of the bridge.

Identify marks or provide field notes or reports to the Engineer. Such provision of information shall be adequate for the Engineer to review the location and elevation of the mark for the intended purpose prior to incorporating material that is based on the mark.

(a) Bridge Survey Control Stations - Use the smallest number of original Project control station s as is practical for establishing positions and reference points for bridge construction on one bridge. Use of multiple control station will increase the probability of incorporating error into the construction. Use control stations that are as closely related mathematically as practical. The Contractor may establish additional control stations as necessary to complete the survey work. Additional control stations shall be established in such a manner as to provide the accuracy needed to meet the tolerances in Section 00305.

Original Project stations shall be used only after the following evaluation is completed for each bridge:

- Supply a list of original Project horizontal and vertical control stations intended by the Contractor to be used in establishing positions on a given bridge.
- Measure relative positions of original Project horizontal control stations intended to be used.
- Measure elevation differences between original Project vertical control stations intended to be used.
- Supply horizontal and vertical measurement data to the Engine
- Compare measured values with those computed from original horizontal network coordinates and vertical network elevations.
- Any discrepancy of concern to either the Contractor or the Engineer will be resolved before that combination of control stations is used.

(b) Layout Marks and Reference Points:

(1) Substructure - Stake, reference, or otherwise identify locations, orientations, and elevations necessary for placement of substructure components, including but not limited to cofferdams, piling (including batter), drilled shafts, footings, columns, abutments, caps, cross beams, bearing devices, temporary supports or falsework, and excavations and embankments associated with any of the above.

Verify and document the locations, elevations and spatial relationships with adjacent substructure components. On bridges where prefabricated beams will be used, measure and document span lengths between bearing devices at each beam location as soon as practical. Supply a copy of such documentation to the Engineer for review before the next stage of construction.

Compute the final elevations after studying the plans, specifications, and shop drawings. Adjust the grades as needed to compensate for camber or prefabricated beams, chording of beams across the low side of superelevations, width of flat beams on superelevated surfaces, and any other factor resulting from design or construction methods.

(2) Superstructure - Stake, reference, or otherwise identify locations, orientations, and elevations necessary for placement of superstructure components, including but not limited to beams, girders, diaphragms, earthquake restraints, deck, rails, structure mounted traffic control and illumination devices, and concrete forms, temporary supports or falsework, and excavations and embankments associated with any of the above.

Stake alignment of structure as needed at each stage of construction. Stake alignment of poured-in-place items at 10-foot stations or as established by the Engineer. Stake alignment for the following items as needed to maintain the horizontal tolerance defined in section 00305.50:

- Outside edge of girder(s)
- Face(s) or centerline(s) of internal girders or stem walls

- Edge of deck
- Alignment of grade breaks
- Pedestrian and bicycle facilities
- Rails and railings

Stake grades at each stage of construction. Stake grade of poured-in-place items 10-foot stations, or as established by the Engineer. Apply corrections to design grades based on the dynamics of the evolving structure. Corrections that may be required depend upon the design of the bridge and the constriction methods employed. Provide correction values to the Engineer at least 15 working days prior to incorporating into the structure. The following list is examples of possible corrections:

- Design camber (upward adjustment to compensate for anticipated deflection)
- Structural deflection (deflection of the bridge under its own increasing weight)
- Structural shifting (dynamics of the bridge under eccentric loading)
- Falsework deflection (deflection of falsework beams under increasing weight)
- Falsework crush (compression of falsework supports under increasing weight)
- Form crush (compression of forms under increasing weight)
- Equipment deflection (deflection of deck finishing machine or deck rails)
- Other adjustments to staked value to achieve the design grade.

(c) Bridge Deck Grades - Set stakes or other devices to control the deck grade elevations. The exact process will depend upon the type of deck and the equipment being used.

(1) Portland Cement Concrete Deck - The surveyor and survey crew leader shall attend the first of the two deck pre-placement conferences, described in the Oregon Standard Specifications for Construction, subsection 00540.02(a), required for each deck placement.

Control of a PCC deck may involve significant work with the deck placement crew to establish control for a deck finishing machine. Rails for supporting the deck finishing machine are generally set up on either side of the deck. Each rail is held up by adjustable supports every 5 feet. Adjust the rail at each support to the desired grade while the rail is supporting the weight of the finishing machine. Corrections may need to be applied as listed in subsection 00305.52(c-2)

(2) Asphalt Concrete Deck - Control of an AC deck will not generally involve as many variables as PCC. An AC deck serves as a wearing surface, but not a structural component. Asphaltic concrete will frequently be used as filler to create the desired superelevations when flat beams form the superstructure. Stake control of the finish grade like any asphalt finish grade. Under some circumstances, design camber and structural deflection may need to be considered.

00305.63 Pavements - Set stakes or other control devices to control the location and elevation of asphalt and PCC pavement as shown. Provide surveying or survey-related activity necessary to control grade, thickness, and smoothness as required.

00305.64 Signs, Signals, Illumination and Fabricated Items - Determine the exact location and their relative location to roadway and bridge features as appropriate such as edge of pavement, curbs, islands, sidewalks, sidewalk ramps, lane lines, bridge columns, bridge decks, and other existing features for the following items:

- Posts and poles including foundations
- Cabinets

- Junction boxes
- Detectors
- Other similar sign, signal, and illumination appurtenances
- New fabricated items

Provide the following documentation to the Engineer before submitting working drawings:

- Field verified length of poles, posts, mast arms, and tenon locations
- Field verified orientation of triangular bases for poles
- Field verified measurements of all existing features including orientation and relationship to all other new appurtenances and new fabricated items.
- Plan, elevation, and side views
- Identification of all obstacles

Field adjustment to the planned location may be required in order to avoid obstacle and to ensure its placement in a functional location. Do not submit working drawings until the Engineer returns the field verified documents. The Engineer will return field verified documents within 21 Calendar Days after receipt of the documents.

Set a stake referencing the center of the item. Set a guard stake with the following information written on it:

- Description of item (by plan number if applicable)
- Centerline station
- Centerline offset
- Cut or fill from reference point (and what point the cut or fill is to)
- Intended elevation

If the orientation of the item is significant and is not clear, establish a reference line for the skew of the item.

Have bridge layout and roadway layout features staked, including referencing, no more than seven calendar days before submitting field verification documents.

00305.70 Temporary Protection and Direction of Traffic - Provide work zone signing conforming to "Oregon Temporary Traffic Control Handbook for Operations of 3 Days or Less."

Provide temporary roll-up signs and sign supports meeting the requirements of the Oregon Standard Specifications for Construction, subsection 00225.11. Provide flaggers and flagger equipment meeting the requirements of the Oregon Standard Specifications for Construction, Section 00225.

00305.71 Preservation of Survey Markers:

(a) Project Control Points Established by the Engineer - Maintain, relocate or replace existing survey monuments, control points, and stakes, as determined by the Engineer. Perform the work to produce the same level of accuracy as the original monument(s) in a timely manner, and at no additional cost to the Agency.

(b) Monuments of Record - Preserve survey monuments according to subsection 00170.82(c), ORS 209.140 and ORS 209.150. If such monuments are to be disturbed or destroyed, comply with requirements of these ORS at no additional cost to the Agency.

(c) Post Construction Survey - At the completion of the project, file a post construction survey with the Linn County Surveyor's Office. Provide the Engineer with a copy of the approved survey. If no monuments were disturbed or destroyed during construction activities submit stamped, written verification to the Engineer.

00305.72 Project Monumentation - The Contractor will not be responsible for performing right-of-way monumentation.

00305.73 Pre-Construction Survey - The Contractor will not be responsible for performing a pre-construction Survey.

Measurement

00305.80 Measurement - No measurement of quantities will be made for work performed under this section.

Payment

00305.90 Payment - The accepted quantities of construction survey work will be paid for at the Contract lump sum amount for the item "Construction Survey Work".

Payment will be payment in full for furnishing all material, equipment, labor, and incidentals necessary to complete the work as specified.

No separate or additional payment will be made for temporary protection and direction of traffic measures including flaggers and signing necessary for the performance of the construction survey work.

No separate or additional payment will be made for preparing surveying documents including but not limited to office time, preparing and checking survey notes, and all other related preparation work.

The amount to be allowed for "Construction Survey Work" in the progress payments will not be in excess of the reasonable value of the surveying work performed under this specification as said reasonable value is estimated by the Engineer.

Costs incurred as a result of survey errors will be borne by the Contractor. Such costs include price adjustments for failure to meet requirements of the construction specifications, repair or removal and replacement of deficient product, and over-run of material.

In cases where changes, not due to the Contractor's operations, necessitate redesign of the work, increased Contractor survey costs due to these changes will be paid for as Extra Work.

SECTION 00310 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS

Comply with Section 00310 of the Standard Specifications.

SECTION 00320 - CLEARING AND GRUBBING

Comply with Section 00320 of the Standard Specifications modified as follows:

00320.01 Areas of Work - Replace this subsection, except for the subsection number and title, with the following:

Clearing and grubbing will be required to the extents needed to complete the work unless otherwise shown on the plans or directed by the Engineer.

00320.40(c) Tree and Vegetation Trimming - Replace the bullet that begins "Trim branches obstructing sight…" with the following bullet:

- Trim and remove branches, vegetation, or other materials obstructing sight distance at intersections or impairing visibility of signs, signals, illumination, and other TCD.

SECTION 00330 - EARTHWORK

Comply with Section 00330 of the Standard Specifications modified as follows:

00330.03 Basis of Performance - Add the following paragraph to the end of this subsection:

Perform all earthwork under this Section on the excavation basis.

00330.41(a)(4) Excess Materials - Replace this subsection, except for the subsection number and title, with the following:

If the quantities of excavated materials are greater than required to construct embankments and to do all filling and backfilling, the Contractor may use the remaining materials to uniformly widen embankments or to flatten slopes in a manner satisfactory to the Engineer.

00330.41(a)(5) Waste Materials - Replace this subsection, except for the subsection number and title, with the following:

Unless otherwise specifically allowed and subject to the requirements of Section 00280, dispose of materials, classed as waste materials in 00330.41(a)(3), outside and beyond the limits of the Project and Agency controlled property according to 00290.20. Do not dispose of materials on Wetlands, either public or private, or within 300 feet of rivers or streams.

00330.43(d) Small, Irregular Fill Areas – Replace the paragraph that begins "The density requirements of 00330.43 do not apply…" with the following paragraph:

The density requirements of 00330.43 do not apply to irregular fill areas outside of the travel lanes that have a total volume of no more than 150 cubic yards at each location. Construct these areas according to the following:

00330.92 Kinds of Incidental Earthwork - Add the following bullet to the end of the bullet list:

- Earthwork required for driveways and road approaches. Earthwork for driveways and road approaches will be that which is outside the Neat Line limits shown on the typical sections.

SECTION 00340 - WATERING

Comply with Section 00340 of the Standard Specifications.

SECTION 00350 - GEOSYNTHETIC INSTALLATION

Comply with Section 00350 of the Standard Specifications.

SECTION 00390 - RIPRAP PROTECTION

Comply with Section 00390 of the Standard Specifications.

SECTION 00405 - TRENCH EXCAVATION, BEDDING, AND BACKFILL

Comply with Section 00405 of the Standard Specifications modified as follows:

00405.45 Bedding – Add the following sentence:

All pipe shall be placed on a bedding of a minimum of 4 inches of compacted aggregate base material conforming to 00405.12.

00405.14(b) Class B Backfill - Replace the words "Section 00641" with the words "Section 00640".

SECTION 00415 - VIDEO PIPE INSPECTION

Comply with Section 00415 of the Standard Specifications modified as follows:

Add the following subsection:

00415.02 Definitions:

Flexible Pipe - Pipes constructed of corrugated metal are considered Flexible Pipes.

Rigid Pipe - Pipes constructed of concrete and ductile iron are considered Rigid Pipes.

Thermoplastic Pipe - Pipes constructed of polyvinyl chloride, polyethylene, and polypropylene are considered Thermoplastic Pipe.

00415.20(b) Transporter - Replace the paragraph that begins “Use an all-wheel…” with the following paragraph:
Use an all-wheel drive or track mounted transporter capable of inspecting pipes ranging in size from 12 to 60 inches in diameter. Provide a transporter with an adjustable operating speed while recording not to exceed 30 feet per minute.

00415.41 Pre-Installation Video Inspection - Replace the paragraph that begins “Perform a pre-installation video inspection…” with the following paragraph:

Perform a pre-installation video inspection at least 5 Calendar Days before beginning Work. Begin Inspection at one end of the pipe and proceed through the entire pipe length at a speed not greater than 30 feet per minute. Move the camera through the pipe, along the approximate center of the pipe, and provide a continuous 360 degree pan of each pipe joint. Stop and record all cracks, deformities, and defects to document the pipe condition, including the location of all lateral connections to the mainline.

00415.42 Post Installation Video Inspection - Replace the paragraph that begins “Perform post construction video inspection…” with the following paragraph:

Perform post construction video inspection according to 00415.40 and 00415.41. Video inspect the pipe interior no sooner than 30 Days after the trench backfill and compaction have been completed, and before any paving is performed. If the Contract duration does not permit a 30-Day waiting period, the Engineer may allow the inspection when the compacted backfill reaches a minimum of 2 feet above the pipe crown.

00415.42(a) Deflection Testing for Flexible Pipe - Replace this subsection with the following subsection:

00415.42(a) Post Installation Deflection Testing - Perform post construction deflection testing for all Flexible Pipe and Thermoplastic Pipe as described.

- Flexible Pipe for new pipe installations and extensions greater than 15 feet in length.
- Thermoplastic Pipe for new pipe installations and extensions greater than 10 feet in length.

If any portion of the new pipe interior is not accessible for a visual inspection, then perform deflection testing for the entire installation of new pipe or extension regardless of pipe length.

Use one of the approved following methods:

00415.42(a)(1) Remote Video Inspection with Laser Profiler – Replace the paragraph that begins "Calibrate and perform…" with the following paragraph:

For pipe 48 inches or less in diameter, calibrate, and perform deflection inspection according to ASTM F3080. Use video inspection equipment meeting the requirements of 00415.22.

00415.42(a)(2) Manual Deflection Test - Replace the paragraph that begins "Use equipment meeting…" with the following paragraph:

For pipes larger than 48 inches and when the entire length of the pipe is accessible, use equipment meeting the requirements of 00415.23.

00415.71 Corrections to Deficiencies in Work - Replace the paragraph that begins "Where the pipe deflection…" with the following paragraph:

Where the pipe deflection is greater than 5 percent and less than 7.5 percent of the nominal diameter, submit a remediation plan to the Engineer. The remediation plan must be a stamped Working Drawing according to 00150.35. Replace pipe where the deflection exceeds 7.5 percent of the nominal diameter at no additional cost to Agency.

SECTION 00430 - SUBSURFACE DRAINS

Comply with Section 00430 of the Standard Specifications.

SECTION 00440 - COMMERCIAL GRADE CONCRETE

Comply with Section 00440 of the Standard Specifications modified as follows:

00440.12 Properties of CGC - Replace the bullet that begins "Compressive Strength" with the following bullet:

- **Compressive Strength -** Minimum 3,300 psi at 28 days

SECTION 00445 - SANITARY, STORM, CULVERT, SIPHON, AND IRRIGATION PIPE

Comply with Section 00445 of the Standard Specifications modified as follows:

00445.11(h) Fittings for Polyvinyl Chloride Pipe – Furnish mechanical coupler with No. 305 stainless steel bands by the following manufacturers, or approved equal:

- Calder
- Fernco, Inc.

00445.43(c) Polyvinyl Chloride Pipe – Install flexible, mechanical couplers for connecting plain ends of non-compatible types or sizes of pipe according to 00445.11(h). For PVC pipe six inches in diameter and smaller, where a plain end of PVC pipe is to be connected to the plain end of another type of plastic pipe, a solid sleeve, gasketed coupler shall be used.

Add the following subsection:

00445.40(h) Damages to Pipe - Any repairs to pipe that is damaged or dislocated by subsequent work in the vicinity of the pipe will be the responsibility of the Contractor at no additional cost to the Agency.

00445.91 Payment – Add the following pay item to the pay item list:

(n) 30 Inch Flared End Concrete Outfall…….Each

SECTION 00470 - MANHOLES, CATCH BASINS, AND INLETS

Comply with Section 00470 of the Standard Specifications.

SECTION 00490 - WORK ON EXISTING SEWERS AND STRUCTURES

Comply with Section 00490 of the Standard Specifications modified as follows:

00490.90 Payment - Add the following pay item and paragraph:

(j) Flexible Mechanical Coupling, 12” x 15”…….Each

Item (j) includes all costs associated with furnishing and installing coupling to joining pipe to existing storm sewer pipe.

SECTION 00501 - BRIDGE REMOVAL

Comply with Section 00501 of the Standard Specifications modified as follows:

00501.00 Scope - Add the following paragraph(s) to the end of this subsection:

Remove the existing bridge over Cox Creek on Goldfish Farm Road.

Add the following subsection:

00501.03 Submittals - Submit unstamped bridge removal plans according to 00150.35 21 Calendar Days before beginning removal work.

Include the following information in the submittal:

- Removal sequence, including contractor staging and traffic staging.
- Detailed schedule of bridge removal work.

- Type of equipment that will be used, including size and capacity.
- Equipment location during removal operations.

Do not begin bridge removal work until the bridge removal plans have been approved.

Add the following subsection:

00501.45 Salvage - Salvage the following items and notify the engineer when the items are stockpiled on site and ready to be picked up by the Linn County Road Department:

- Structural steel elements of the substructure.

SECTION 00510 - STRUCTURE EXCAVATION AND BACKFILL

Comply with Section 00510 of the Standard Specifications modified as follows:

00510.80(b)(1) Lump Sum - Add the following to the end of this subsection:

The estimated quantity of Structure excavation is:

Location	Structure Excavation (Cubic Yard)
Bridge No. 0328-0036	220.0

00510.80(d)(1) Lump Sum - Add the following to the end of this subsection:

The estimated quantity of granular structure backfill is:

Location	Granular Structure Backfill (Cubic Yard)
Bridge No. 0328-0036	40.0

SECTION 00520 - DRIVEN PILES

Comply with Section 00520 of the Standard Specifications modified as follows:

00520.11 Engineer's Estimated Length List - Add the following to the end of this subsection:

The Engineer's estimated lengths of steel piling are:

Location	Number	Length (feet)	Type and Size
Bent 1	11	26	PP 12.75 x 0.375
Bent 2	11	26	PP 12.75 x 0.375

00520.43(d) Reinforced Pile Tips - Add the following sentence to the end of this subsection:

For steel pipe piling, provide inside fit, open end cutting shoes meeting the requirements of 02520.10(e).

SECTION 00530 - STEEL REINFORCEMENT FOR CONCRETE

Comply with Section 00530 of the Standard Specifications modified as follows:

00530.10 Materials - Replace this subsection, except for the subsection number and title, with the following:

Concrete Inserts.....02513.35
Deformed Bar Reinforcement 02510.10
Deformed Bar Reinforcement (Stainless Steel) 02513.10
Dowels 02510.50
Dowels (Stainless Steel) 02513.50
Epoxy Coated Reinforcement.....02510.11
Galvanized Coating.....02510.30
Headed Bar Reinforcement.....02510.25
Mechanical Splices 02510.20
Mechanical Splices (Stainless Steel).....02513.20
Ties and Supports 02510.60
Ties and Supports (Stainless Steel) 02513.60
Welded Wire Reinforcement.....02510.40

00530.41(a) Fabric - Replace this subsection with the following subsection:

00530.41(a) Welded Wire Reinforcement - If welded wire reinforcement is shipped in rolls, straighten it into flat sheets before placing.

00530.41(b) Ties and Supports – Replace the bullet that begins “When stainless steel rebar is specified…” with the following bullet:

- When stainless steel reinforcing is specified, use stainless steel ties and supports meeting the requirements of 02513.60.

Delete the bullet that begins “Tie stainless steel reinforcement …”.

Delete the bullet that begins “Support stainless steel reinforcement…”.

Replace the bullet that begins "Do not allow direct contact between stainless …" with the following bullet:

- Do not allow stainless steel reinforcement to directly contact ASTM A1035 CS reinforcement. Do not allow stainless steel reinforcement or ASTM A1035 CS reinforcement in direct contact with other reinforcement with a different type of metal. When stainless steel or ASTM A1035 CS reinforcing or dowels are located near other reinforcing with a different type of metal, use nylon or polyethylene spacers to maintain a minimum 1 inch clearance between the two metals and bind them with nylon cable ties. Where insufficient space exists to maintain this minimum, either bar may be sleeved with a continuous polyethylene or nylon tube extending at least 1 inch in each direction past the point of closest contact between the two dissimilar bars.

Add the following bullets to the end of the bullet list:

- When ASTM A1035 CS reinforcing is specified, use epoxy coated ties and supports meeting the requirements of 02510.60(a).

00530.43 Splicing Welded Wire Fabric – Replace this subsection with the following subsection:

00530.43 Splicing Welded Wire Reinforcement - Overlap sheets of welded wire reinforcement as shown or provide edge and end laps not less than one mesh in width. Securely fasten sheets at the ends and edges according to 00530.41.

00530.80(a) Lump Sum - Add the following to the end of this subsection:

The estimated quantity of reinforcement is:

Structure Number	Uncoated Reinforcement Quantity (Pound)				
	Grade 60	Grade 80	Grade 100 ASTM A615	Grade 100 ASTM A706	Grade 100 ASTM A1035 (____)
0328-0036	16,630	0	0	0	0

00530.90 Payment - Replace this subsection, except for the subsection number and title, with the following:

The accepted quantities of reinforcement will be paid for at the Contract unit price, per unit of measurement, for the following items:

Pay Item **Unit of Measurement**

(a) Reinforcement, Grade _____ ..... Lump Sum or Pound

In items (a) the grade of reinforcement will be inserted in the blank.

Item (a) includes fabricating and placing uncoated reinforcement as specified.

Payment for reinforcement will be made when the reinforcement is incorporated into the concrete.

Payment will be payment in full for furnishing and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

No separate or additional payment will be made for clips, wire, separators, wire chairs, or other Material used in fastening the reinforcement in place.

SECTION 00540 - STRUCTURAL CONCRETE

Comply with Section 00540 of the Standard Specifications modified as follows:
Add the following subsection:

00540.10(a) Pigmented Sealer - Furnish a semi-opaque, or opaque, 100% acrylic or acrylic co-polymer resin concrete sealer meeting the following requirements:

Property	**Test Method**	**Requirement**
UV Resistance	ASTM D5894	5000 hour exposure
Wind Driven Rain Resistance	ASTM D6904 reference FED TT-P-555B	No visible leaks
Permeance	ASTM E96/E96M or ASTM D1653	Minimum 10 perms
Fungal Growth	FED STD 141	No fungal growth after 21 Days

Provide colors and color samples as shown or directed. Furnish a sealer designated for vertical application when applied to walls. When applied to structures with soffits or overhangs, furnish a sealer that is designated for vertical and overhead application.

Furnish pigmented sealer color that conforms to the following colors:

Light Gray, conforming to SAE AMS-STD-595C color #36375.
Dark Gray, conforming to SAE AMS-STD-595C color #36176.

00540.53(d) Concrete Coating – Replace the paragraph that begins "Apply either a concrete paint…" with the following paragraph:

Apply either a concrete paint or a pigmented sealer as shown or specified. Where a Class 1 or Class 2 surface finish is shown, apply a concrete paint unless specified or shown otherwise.

00540.53(d)(2) Penetrating Concrete Stain or Sealer - Replace this subsection with the following subsection:

00540.53(d)(2) Pigmented Sealer - Prepare concrete surfaces and apply 2 coats of the pigmented sealer according to the manufacturer's recommendations. Follow all recommended curing schedules for newly placed concrete prior to application and for recoat or repair. Monitor and follow all environmental limitations as published by the manufacturer during application, and curing.

00540.80(a)(1) Lump Sum - Add the following to the end of this subsection:

The estimated quantity of concrete for Bridge No. 0328-0036 is:

Type and Class	Quantity (Cu. Yd.)
General Structural Concrete, Class 3300	137.0

SECTION 00545 - REINFORCED CONCRETE BRIDGE APPROACH SLABS

Comply with Section 00545 of the Standard Specifications.

SECTION 00550 - PRECAST PRESTRESSED CONCRETE MEMBERS

Comply with Section 00550 of the Standard Specifications.

SECTION 00582 - BRIDGE BEARINGS

Comply with Section 00582 of the Standard Specifications.

SECTION 00585 - EXPANSION JOINTS

Comply with Section 00585 of the Standard Specifications modified as follows:

00585.80 Measurement - Add the following to the end of the subsection:

The estimated quantities of joints are:

Structure	Joint Type	Quantity (Foot)
Bridge No. 0328-0036	Poured Joint Seal	238.0

SECTION 00587 - BRIDGE RAILS

Comply with Section 00587 of the Standard Specifications modified as follows:

00587.80 Measurement - Add the following to the end of this subsection:

The estimated quantity of bridge rail is:

Structure	Rail Type	Quantity (Foot)
Bridge No. 0328-0036	Flush Mounted Combination Bridge Rail	223.3

SECTION 00592 - ROLLED WATERPROOFING MEMBRANE

Comply with Section 00592 of the Standard Specifications.

SECTION 00641 - AGGREGATE SUBBASE, BASE, AND SHOULDERS

Comply with Section 00641 of the Standard Specifications modified as follows:

00641.10(a) Base and Shoulder Aggregate - In the paragraph that begins "Aggregate for bases…", add the following sentence after the first sentence:

Base Aggregate shall be either 1″-0 or 3/4"-0 (as the Contractor elects) size crushed quarry rock only.
Add the following subsection:

00641.46 Small, Irregular Areas – Haul, place, shape and compact small irregular areas according to 00640.41 through 00640.43. A small or irregular area is outside of the Traveled Way and requires no more than 5 Tons of Aggregate Base or as otherwise approved by the Engineer.

In areas not accessible to the Equipment specified in 00641.24, use a weighted roller, vibratory plate compactor, tamping rammer compactor, or other approved Equipment suitable for the area as approved by the Engineer.

SECTION 00730 - EMULSIFIED ASPHALT TACK COAT

Comply with Section 00730 of the Standard Specifications modified as follows:

00730.11 Emulsified Asphalt – Replace the sentence that begins “Furnish CSS-1, CSS-1h…” with the following sentence:

Furnish CSS-1, CSS-1h, CMS-2, CMS-2S, CMS-2h, CRS-1, CRS-2, HFRS-2, HFMS-2 or HPTC as selected by the Contractor.

SECTION 00744 - ASPHALT CONCRETE PAVEMENT

Comply with Section 00744 of the Standard Specifications modified as follows:

00744.11(a) Asphalt Cement - Add the following to the end of this subsection:

Provide 64-22 grade asphalt cement for this Project.

00744.43(c) Placing - Add the following:

Any asphalt concrete left on the shoulder of the road that is 3-inches or larger shall be removed prior to shoulder rock being placed.

00744.45(a)(3) Excess Asphalt Concrete Pavement- Delete the sentence that begins “Payment will be made….” and replace with the following:

After completing end panels as specified, dispose of unused, remaining ACP outside and beyond the limits of the Project and Agency controlled property according to 00290.20. Do not dispose of materials on wetlands, either public or private, or within 300 feet of rivers or streams.

Add the following subsection:

00744.51 Opening Sections to Traffic - Schedule work so that, during the same shift, the surfaces being paved are paved full width and length through the wearing Course before opening to traffic.

00744.90 Payment - In the paragraph that begins "No separate or additional payment…" add the following bullets:

- Asphalt tack coat
- Unused, remaining, or excess ACP
- Reflective tape or temporary flexible pavement markings

Add the following to the end of this subsection:

Payment will be made for the actual material placed. A weigh ticket shall be provided for any material not used on the project. If a weigh ticket is not provided, the Engineer will make an appropriate determination on the amount of Asphalt that was not used.

SECTION 00749 - MISCELLANEOUS ASPHALT CONCRETE STRUCTURES

Comply with Section 00749 of the Standard Specifications.

SECTION 00759 - MISCELLANEOUS PORTLAND CEMENT CONCRETE STRUCTURES

Comply with Section 00759 of the Standard Specifications modified as follows:

00759.11 Aggregate Base - Replace this subsection, except for the subsection number and title, with the following:

Furnish Aggregate Base Materials for Base, foundation courses, Leveling courses, or bedding meeting the requirements of 00640.10 and included in the Special Provisions.

00759.22(a) Qualified Smart Levels – Replace this subsection, except for the subsection number and title, with the following:

Slopes will be measured with the use of a 24 inch SmartTool level model 92379 or model 92500, and a 6 inch SmartTool level model 92346 or 92510.

00759.42 Foundations - Replace this subsection with the following subsection:

00759.42 Aggregate Base - Before placing concrete, prepare underlying Aggregate Base surfaces according to Section 00640.

00759.51 Curing - Add the following paragraph to the end of this subsection:

Concrete Structures may be opened to Public Traffic before 7 Calendar Days if the concrete has reached a minimum compressive strength of 2,000 psi as verified by the rebound number determined according to ASTM C805. Test at locations as directed.

00759.90 Payment – Add the following pay item to the pay item list:

Item	Unit of Measurement
(o) Concrete Valley Gutter	Cubic Yard

SECTION 00850 - COMMON PROVISIONS FOR PAVEMENT MARKINGS

Comply with Section 00850 of the Standard Specifications modified as follows:

00850.30 Manufacturer's Representative - Replace this subsection, except for the subsection number and title, with the following:

For Sections referencing 00850.30, the services of a manufacturer's representative are not required. Place Pavement markings only when the Pavement is ready for the Pavement marking material according to the manufacturer's installation instructions.

SECTION 00855 - PAVEMENT MARKERS

Comply with Section 00855 of the Standard Specifications.

SECTION 00865 - LONGITUDINAL PAVEMENT MARKINGS - DURABLE

Comply with Section 00865 of the Standard Specifications modified as follows:

00865.90 Payment – Add the following pay item to the pay item list:

Item	Unit of Measurement
Method AB (Profiled Extruded or Sprayed)	
(k) Thermoplastic, Extruded or Sprayed, Surface, Profiled	Foot

SECTION 00867 - TRANSVERSE PAVEMENT MARKINGS - LEGENDS AND BARS

Comply with Section 00867 of the Standard Specifications.

SECTION 00905 - REMOVAL AND REINSTALLATION OF EXISTING SIGNS

Comply with Section 00905 of the Standard Specifications.

SECTION 00920 - SIGN SUPPORT FOOTINGS

Comply with Section 00920 of the Standard Specifications.

SECTION 00930 - METAL SIGN SUPPORTS

Comply with Section 00930 of the Standard Specifications modified as follows:

00930.80 Measurement - Add the following to the end of this subsection:

The estimated quantities of structural steel are as follows:

Minor Sign Supports

Item	Estimated Quantity (Pound)
Pipe Sign Supports	167.0
Perforated Steel Square Tube Slip Base Sign Supports	58.1

SECTION 00940 - SIGNS

Comply with Section 00940 of the Standard Specifications modified as follows:

SECTION 01012 - STORMWATER CONTROL, WATER QUALITY BIOFILTRATION SWALE

Section 01012, which is not a Standard Specification, is included for this Project by Special Provision.

Description

01012.00 Scope - This Work consists of furnishing and installing a water quality biofiltration swale as shown.

Materials

01012.10 Materials - Furnish Material meeting the following requirements:

Concrete 00440
Polyvinyl Chloride Pipe ..... 02415.50(a)
Perforated Polyvinyl Chloride Pipe ..... 02415.50(a)
Gravel Lens ..... 00710.10(c)

01012.11 Drain Rock - Furnish drain rock Material of 1-1/2" – 3/4" uncrushed, washed, open graded rock meeting the following gradation requirements:

Sieve Size	Percent Passing (by Weight)
1-3/4"	100
1-1/2"	90-100
1"	30 - 50
3/4"	15 - 35
1/2"	0 – 20
3/8"	0 – 10
No. 4	0 - 10
No. 8	0 - 5
No. 200	0 - 1

01012.12 Water Quality Mixture - Furnish medium compost meeting the requirements of Section 03020. Furnish soil meeting the following gradation requirements:

Sieve Size	Percent Passing (by Weight)
1"	100
No. 4	75-100
No 10	40 - 100
No. 40	15 - 50
No. 100	7 - 25
No. 200	7 - 15

Sample soil according to AASHTO R 90. Determine sieve analysis according to AASHTO T 27 and AASHTO T 11.

The growing medium blend shall have a Coefficient of Uniformity (D60/D10) equal to or greater than 6 to ensure that it is well graded (has a broad range of particle sizes). The coefficient is the ratio of two particle diameters on a grain-size distribution curve; it is the particle diameter at 60 percent passing divided by the particle diameter at 10 percent passing.

Blend the medium compost and soil so that the mixture:

- Is composed of between 20 percent and 25 percent medium compost material and between 75 percent and 80 percent soil material.
- Has a pH between 6 and 8.0.
- Does not have clumps greater than 3 inches in any direction.

01012.13 Check Dams - Furnish check dams meeting the following requirements:

(a) Wood – Furnish wood boards that are constructed from wood naturally resistant to decay, such as cedar, redwood, or approved equal. Wood shall be free of splits, holes, and/or other damage.

(b) Backing Plate – Furnish perforated steel square tube sign supports meeting the requirements of 00930.10.

(c) Ballast Rock – Furnish an unweathered, hard, durable, free-draining Materials, visibly open-graded ballast aggregate in size between 4 inches and 2 inches.

01012.14 Curb Notch Splash Pad – Furnish concrete splash pad paver stones by Willamette Graystone, 24" x24" Citystone XL, or approved equal.

01012.15 Standard Cleanout Frame and Cover – Standard frame and cover assemblies shall be cast iron. "STORM" shall be cast into the cover for storm drain service cleanouts. Adjustable valve boxes shall be supplied without bottom flanges. Acceptable valve box assemblies:

Olympic Foundry, Inc.	Part No. VB 910
Kiswok Industries Pvt. Ltd.	Part No. 910
East Jordan Iron Works	Part No. 00363912

01012.16 Overflow Assemblies – Furnish 6" atrium inlet grates from the following manufacturer, or approved equal:

NDS	Part No. 80
Dura Plastic Products, Inc.	Part No. 040-A

Construction

01012.40 General - Construct water quality biofiltration swale facility as shown. Perform excavation, fine grading, and placement work only when the facility area is dry and only from the top of the swale area. Do not stockpile excavated material in the facility area. Perform work in sequence as follows:

(a) Scarify - After excavation scarify the subsoil area a minimum 6 inches deep.

(b) Laying Pipe - Lay the pipe according to Section 00445. Place pipe with perforations down, 2-1/2" above existing subgrade.

(c) Joining Pipe - Fasten pipes together with coupling fittings or bands as specified for the type of pipe used. Cap the upstream end of the pipe.

(d) Inspection and Repair - Place the water quality mix only after all the pipe is laid, joined, and inspected. Remove and reinstall or replace all pipe that is out of alignment, has settled, or is damaged at no additional cost to the Agency.

(e) Check Dams – Two, 2" x 12" boards shall be installed, fastened with a backing plate, and 6" of ballast rock shall be placed on the downstream side.

(f) Drain Rock – Drain rock shall be placed on scarified bare ground below the gravel lens.

(g) Gravel Lens - Gravel lens shall be placed to separate the growing medium from the drain rock. The gravel lens shall be placed to prevent growing medium from infiltrating and loading the void spaces in the drain rock.

(h) Placement of Water Quality Mixture - Place the water quality mixture in maximum 8 inch Lifts. Compact each Lift with a water filled landscape roller or approved equal.

(i) Curb Notch Splash Pad - Splash pads shall measure 12 inches wider than the inlet opening, centered. Splash pads shall be no less than 18 inches long as measured along the flow path into the structure. Embed splash pad 2-3" into gravel lens.

(j) Plantings – Install plantings according to Section 01040.

Maintenance

01012.70 Cleaning - If a stormwater control facility is used for erosion and sediment control, remove all accumulated sediment and debris before completing the facility.

01012.71 Removal - Remove temporary erosion and sediment control features according to 00280.70 only after water quality vegetation has met the establishment requirements of 01030.60.

Measurement

01012.80 Measurement - No measurement of quantities will be made for Work performed under this Section. The estimated quantities of Materials are:

Water Quality Swale Sta: 15+75 Left:

Item	Quantity
Gravel Lens	2.75 Cu. Yd.
Granular Drain Backfill	8.25 Cu. Yd.
4” PVC Pipe	14.0 Foot
4” Perforated PVC Pipe	36.0 Foot
6” PVC Pipe	3.25 Foot
PVC Pipe Elbow, 4” x 4”	2 Each
PVC Pipe Tee, 6” x 6” x 6”	1 Each
PVC Pipe Couple, 4”	3 Each
PVC Pipe Reducer, 6” x 4”	2 Each
4” PVC Pipe Cleanout and Cover	2 Each
6” PVC Pipe Overflow and Grate	1 Each
Concrete Curb Notch	4 Each
Concrete Splash Pad	4 Each
Check Dam	1 Each
Water Quality Mixture	16.3 Cu. Yd.

Water Quality Swale Sta: 15+75 Right:

Item	Quantity
Gravel Lens	2.75 Cu. Yd.
Granular Drain Backfill	8.25 Cu. Yd.
4” PVC Pipe	14.0 Foot
4” Perforated PVC Pipe	36.0 Foot
6” PVC Pipe	3.25 Foot
PVC Pipe Elbow, 4” x 4”	2 Each
PVC Pipe Tee, 6” x 6” x 6”	1 Each
PVC Pipe Couple, 4”	3 Each
PVC Pipe Reducer, 6” x 4”	2 Each
4” PVC Pipe Cleanout and Cover	2 Each
6” PVC Pipe Overflow and Grate	1 Each
Concrete Curb Notch	4 Each
Concrete Splash Pad	4 Each
Check Dam	1 Each
Water Quality Mixture	16.3 Cu. Yd.

Water Quality Swale Sta: 20+00 Left:

Item	Quantity
Gravel Lens	4.5 Cu. Yd.
Granular Drain Backfill	13.6 Cu. Yd.
4” PVC Pipe	48.5 Foot
4” Perforated PVC Pipe	55.7 Foot
6” PVC Pipe	3.25 Foot
PVC Pipe Elbow, 4” x 4”	1 Each
PVC Pipe Elbow, 6” x 6”	1 Each
PVC Pipe Tee, 4” x 4” x 4”	1 Each
PVC Pipe Couple, 4”	7 Each
PVC Pipe Reducer, 6” x 4”	1 Each
4” PVC Pipe Cleanout and Cover	2 Each
6” PVC Pipe Overflow and Grate	1 Each
Concrete Curb Notch	6 Each
Concrete Splash Pad	6 Each
Check Dam	3 Each
Water Quality Mixture	22.6 Cu. Yd.

Water Quality Swale Sta: 20+08 Right:

Item	Quantity
Gravel Lens	4.4 Cu. Yd.
Granular Drain Backfill	13.1 Cu. Yd.
4” PVC Pipe	26.0 Foot
4” Perforated PVC Pipe	56.0 Foot
6” PVC Pipe	3.25 Foot
PVC Pipe Elbow, 4” x 4”	1 Each
PVC Pipe Elbow, 6” x 6”	1 Each
PVC Pipe Tee, 4” x 4” x 4”	1 Each
PVC Pipe Couple, 4”	5 Each
PVC Pipe Reducer, 6” x 4”	1 Each
4” PVC Pipe Cleanout and Cover	2 Each
6” PVC Pipe Overflow and Grate	1 Each
Concrete Curb Notch	5 Each
Concrete Splash Pad	5 Each
Check Dam	3 Each
Water Quality Mixture	26.0 Cu. Yd.

Excavation will be measured according to 00330.80.

Plantings will be measured according to 01040.80.

Payment

01012.90 Payment - The accepted quantities of Work performed under this Section will be paid for at the Contract lump sum amount for the item "Roadside Shallow Swale".

Excavation will be paid according to 00330.90.

Plantings will be paid according to 01040.90.

Payment will be payment in full for furnishing and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

SECTION 01030 - SEEDING

Comply with Section 01030 of the Standard Specifications modified as follows:

01030.13(f) Types of Seed Mixes - Add the following to the end of this subsection:

Provide the following Permanent Seed mix formulas:

Botanical Name (Common Name)	PLS Specified Rate (lb/acre)
Bromus Vulgaris (California brome)	12
Deschampsia caespitosa (tufted hairgrass)	1
Festuca californica (California fescue)	10
Hordeum brachyantherum (meadow barley)	7

SECTION 01040 - PLANTING

Comply with Section 01040 of the Standard Specifications modified as follows:

01040.04(a) Planting Work Plan – Replace the bullet that begins "Plant installation and…" with the following bullet:

- Plant installation

Add the following bullet to the end of the bullet list:

- Plant establishment plan according to 01040.70

Add the following subsection:

01040.05 Submittals – Submit the following for review and approval:

- Contract Growing Plan according to 01040.19(g).
- Planting work plan according 01040.04(a).
- Plant establishment plan according to 01040.70.
- Weed Control Work Plan according to 01030.42(a).
- Photo log 10 Days after each plant establishment visit and periodic inspection. Date stamped photographs in photo log of each plant establishment site visit with photos of multiple individual plants, seeded areas, and weed control areas, sufficiently close as to display plant condition and that are representative of the health, vigor and growth of the site plantings.

01040.53(b)(3) Compost Blanket - Replace this subsection with the following subsection:

01040.53(b)(3) - Compost Mulch - Spread compost on top of the Soil to a nominal depth of 3 inches. Where a compost erosion blanket is in place according to 00280.44(f) apply and spread additional compost to achieve a depth of 3 inches.

01040.70 Plant Establishment – Add the following paragraph and bullets after the paragraph that begins "The Contractor is responsible…"

At a minimum of 15 Days prior to landscape Work, submit the plant establishment plan as part of the planting work plan according to 01040.04(a). Should the plan become unworkable at any time during Plant Establishment Period, submit a revised plan prior to proceeding with further Work. Include the following in the plant establishment plan:

- Activity descriptions necessary to ensure continued health and vigor of planted and seeded areas according to 01030.60 and 01040.71.
- Proposed scheduling of joint inspection meetings, weeding, and watering/irrigation schedule.
- Materials including herbicides and fertilizers, and Equipment to be utilized for the plant establishment.
- Proposed adaptive management activities for successful establishment of seeded, sodded, and planted areas, during changing environmental conditions or unanticipated weather.

01040.71 Plant Care and Success Criteria - Add the following to the end of this subsection:

The following watering frequencies are required:

- Deciduous trees that are 1-1/2 inch and larger, water at a frequency of 15 gallons once per week.
- All shrubs, water at a frequency of 1" once every two weeks.

01040.80(g) Miscellaneous - Add the following bullets to the bulleted list:

- 3" Perforated PVC Pipe – No measurement of quantities will be made for perforated drain pipe.

  The estimated quantity of 3" Perforated PVC pipe is 50.0 feet.

- Hardwood Stakes – No measurement of quantities will be made for hardwood stakes.

  The estimated quantity of hardwood stakes is 40 each.

01040.90 Payment – In the sentence that begins "No Separate or additional payment…", add the following bullets to the bulleted list:

- 3" Perforated PVC Pipe
- Hardwood Stakes

SECTION 01070 - MAILBOX SUPPORTS

Comply with Section 01070 of the Standard Specifications.

SECTION 01140 - POTABLE WATER PIPE AND FITTINGS

Comply with Section 01140 of the Standard Specifications.

SECTION 01150 - POTABLE WATER VALVES

Comply with Section 01150 of the Standard Specifications.

SECTION 01170 - POTABLE WATER SERVICE CONNECTIONS, 2 INCH AND SMALLER

Comply with Section 01170 of the Standard Specifications.

SECTION 02001 - CONCRETE

Comply with Section 02001 of the Standard Specifications.

SECTION 02050 - CURING MATERIALS

Comply with Section 02050 of the Standard Specifications modified as follows:

02050.10 Liquid Compounds – Replace the paragraph that begins "Furnish liquid membrane-forming curing …" with the following:

Furnish liquid membrane-forming curing compounds from the QPL and meeting the requirements of ASTM C309. Before use, submit two, one quart samples from each lot for testing. Samples will be tested according to ODOT TM 721. Samples are not required for curing compounds used on Commercial Grade Concrete.

SECTION 02320 - GEOSYNTHETICS

Comply with Section 02320 of the Standard Specifications.

SECTION 02415 - PLASTIC PIPE

Comply with Section 02415 of the Standard Specifications modified as follows:

02415.50 Polyvinyl Chloride Pipe – Replace this subsection, except for the subsection number and title, with the following:

Furnish polyvinyl chloride (PVC) pipe and fittings as follows:

(a) Non-Pressure Storm Sewers outside Road Prism - Furnish PVC pipe and fittings for non-pressure storm sewers and culverts from the QPL and meeting the following requirements:

Pipe and fitting sizes 4" through 15"	ASTM D 3034 SDR 35
Pipe and fitting sizes 18" through 27"	ASTM F 679 SDR 35
Pipe Joint Connections	Push-on-Type
Pipe Rubber Gaskets	ASTM F 477
Pipe and Connection sizes smaller than 6"	Gasketed Coupler
Drain Pipe and fittings	ASTM D 1784
Perforated Pipe	ASTM F 782

Perforations in drain pipe shall be circular, on 3-1/4" centers. Hole size shall be a minimum of 3/16" and a maximum of 3/8" arranged in four rows along the full length of pipe below the spring line (midpoint height) of the pipe

(a) Non-Pressure Storm Sewers Within Road Prism - Furnish PVC pipe and fittings for non-pressure storm sewers and culverts from the QPL and meeting the following requirements:

Pipe and fittings .....AWWA C900
Pipe Joint Connections ..... Push-on-Type
Pipe Rubber Gaskets .....ASTM F 477

(c) Non-Pressure Sanitary Sewers - Furnish polypropylene pipe and fittings for non-pressure sanitary sewers from the QPL and meeting the following requirements:

Pipe sizes and fitting 4" through 15" .....ASTM D 3034 SDR 35
Pipe sizes and fitting 18" through 27" .....ASTM F 679 SDR 35
Pipe Joint Connections .....Push-on-Type
Pipe Rubber Gaskets ..... ASTM F 477
Pipe and Connection sizes smaller than 6" .....Gasketed Coupler

SECTION 02510 - REINFORCEMENT

Comply with Section 02510 of the Standard Specifications modified as follows:

02510.11(c) Coated Reinforcement Ties and Supports - Delete this subsection.

02510.11(d) Epoxy Coating Repair - Delete this subsection.

02510.30(d) Ties and Support - Delete this subsection.

02510.60 Wire Reinforcement - Replace this subsection with the following subsection:

02510.60 Ties and Supports - Provide tie wire and supports according to *CRSI Manual of Standard Practice*.

(a) Coated Reinforcement Ties and Supports – Provide nonmetallic coated ties and supports for coated reinforcement, including ties for coated-to-uncoated reinforcement connections.

(b) Uncoated Reinforcement Ties and Supports - Tie all mats of galvanized steel bars with galvanized ties. Provide precast concrete blocks with galvanized ties that support galvanized reinforcement.

SECTION 02560 - FASTENERS

Comply with Section 02560 of the Standard Specifications modified as follows:

02560.60(a)(1) Method 1 – Replace the paragraph that begins "Continue to tighten the nut until…" with the following:

Continue to tighten the nut until the nut has turned twice the rotation shown in Table 00560-3 of Section 00560 from its snug-tight position mark for bolt lengths up to 8D (for greater than 8D up to 12D bolt lengths tighten to 1 1/6 turn from snug-tight).

SECTION 02690 - PCC AGGREGATES

Comply with Section 02690 of the Standard Specifications.

SECTION 02910 - SIGN MATERIALS

Comply with Section 02910 of the Standard Specifications.

INTENTIONALLY LEFT BLANK

ATTACHMENT A - PROJECT PLANS

Under Separate Cover

The Plans, which are applicable to the Work to be performed under this Contract, bear title and date as follows:

Bridge, Roadway and Utility
Cox Creek: Goldfish Farm Road Bridge Replacement
Goldfish Farm RoadLinn County
February 2025

APPENDIX A - BID SECTION

ATTENTION:

DO NOT INCLUDE THE PLANS AND SPECIFICATIONS WHEN SUBMITTING YOUR BID PROPOSAL. SUBMIT ONLY THE ITEMS INCLUDED IN THE BID SECTION AND ANY ADDENDUM THAT MAY HAVE BEEN ISSUED FOR THIS PROJECT.

INCLUDED IN THIS SECTION:

- BID SCHEDULE
- BID PROPOSAL
- BID PROPOSAL BOND
- FIRST TIER SUBCONTRACTOR DISCLOSURE FORM

BID SCHEDULE

Cox Creek: Goldfish Farm Road Bridge Replacement
Bridge, Roadway and Utility

Bid Opening: February 18, 2025 **at** 9:35 **a.m., P.D.T.**

SPEC	ITEM	UNIT	QUANT.	UNIT PRICE	TOTAL
00210	1. Mobilization	LS	All	$	$
00221	2. Temporary Protection & Direction of Traffic	LS	All	$	$
00222	3. Temporary Signs	SQFT	260	$	$
00222	4. Portable Changeable Message Signs	EACH	2	$	$
00224	5. Temporary Barricade, Type III	EACH	2	$	$
00245	6. Temporary Water Management	LS	All	$	$
00280	7. Erosion Control	LS	All	$	$
00280	8. Inlet Protection, Type 3	EACH	1	$	$
00280	9. Inlet Protection, Type 7	EACH	4	$	$
00280	10. Inlet Protection, Type 11	EACH	19	$	$
00280	11. Sediment Barrier, Type 3	FOOT	1,035	$	$
00290	12. Pollution Control Plan	LS	All	$	$
00290	13. Work Containment Plan and System	LS	All	$	$
00305	14. Construction Survey Work	LS	All	$	$
00310	15. Asphalt Pavement Saw Cutting	FOOT	227	$	$
00310	16. Removal of Structures and Obstructions	LS	All	$	$
00320	17. Clearing and Grubbing	LS	All	$	$
00330	18. General Excavation	CUYD	2,993	$	$
00350	19. Rip Rap Geotextile, Type 1	SQYD	149	$	$
00350	20. Subgrade Geotextile	SQYD	2,410	$	$
00390	21. Loose Rip Rap, Class 50	CUYD	10	$	$
00390	22. Loose Rip Rap, Class 100	CUYD	124	$	$
00445	23. Mainline Video Inspection	FOOT	60	$	$
00445	24. 8 Inch PVC Sewer Pipe, 5 Ft Depth	FOOT	60	$	$
00445	25. 12 Inch PVC C900 Storm Pipe, 5 Ft Depth	FOOT	174	$	$
00445	26. 30 Inch PVC C900 Storm Pipe, 5 Ft Depth	FOOT	261	$	$
00445	27. 30 Inch Concrete Storm Pipe, 5 Ft Depth	FOOT	8	$	$
00445	28. 30 Inch Flared End Concrete Outfall	EACH	1	$	$
00470	29. Concrete Sanitary Sewer Manhole, Shallow	EACH	1	$	$

Cox Creek: Goldfish Farm Road Bridge Replacement
Bridge, Roadway and Utility

SPEC	ITEM	UNIT	QUANT.	UNIT PRICE	TOTAL
00470	30. Concrete Storm Sewer Manhole	EACH	2	$	$
00470	31. Concrete Storm Sewer Manhole, Shallow	EACH	3	$	$
00470	32. Concrete Inlet, Type G-2	EACH	4	$	$
00470	33. Concrete Inlet, Field Inlet	EACH	1	$	$
00470	34. Flexible Mechanical Coupling, 12” x 15”	EACH	1	$	$
00501	35. Bridge Removal Work	LS	All	$	$
00510	36. Structure Excavation	LS	All	$	$
00510	37. Granular Structure Backfill	CUYD	40	$	$
00520	38. Furnish Pile Driving Equipment	LS	All	$	$
00520	39. Furnish PP12x0.375 Steel Piles	FOOT	572	$	$
00520	40. Drive PP12x0.375 Steel Piles	EACH	22	$	$
00520	41. Reinforced Pile Tips	EACH	22	$	$
00520	42. PP12x0.375 Steel Pile Splices	EACH	11	$	$
00530	43. Reinforcement, Grade 60	LS	16,630	$	$
00540	44. General Structural Concrete, Class 3300	LS	All	$	$
00545	45. Reinforced Concrete Bridge Approach Slabs	SQYD	256	$	$
00550	46. 33” Precast Prestresssed Box Beam	FOOT	994	$	$
00585	47. Poured Joint Seal	LS	All	$	$
00587	48. Combination Bridge Rail	FOOT	223	$	$
00592	49. Rolled Waterproofing Membrane	SQFT	3,066	$	$
00641	50. Aggregate Base	TON	3,783	$	$
00744	51. Level 3, 1/2” ACP Mixture	TON	1,153	$	$
00759	52. Concrete Curbs, Curb and Gutter	FOOT	924	$	$
00759	53. Concrete Curbs, Standard Curb	FOOT	78	$	$
00759	54. Concrete Driveways, Residential	SQFT	502	$	$
00759	55. Concrete Driveways, Commercial	SQFT	536	$	$
00759	56. Concrete Valley Gutter	SQFT	199	$	$
00759	57. Concrete Walks	SQFT	4,621	$	$
00759	58. Extra for Curb Ramps	EACH	7	$	$
00759	59. Truncated Domes on New Surfaces	EACH	48	$	$
00865	60. Thermoplastic, Extruded or Sprayed Surface, Non-Profiled	FOOT	2,190	$	$
00865	61. Thermoplastic, Extruded or Sprayed, Surface, Profiled	FOOT	2,109	$	$

Cox Creek: Goldfish Farm Road Bridge Replacement
Bridge, Roadway and Utility

SPEC	ITEM	UNIT	QUANT.	UNIT PRICE	TOTAL
00867	62. Pavement Legend, Type B: Arrows	EACH	2	$	$
00867	63. Pavement Legend, Type B-HS: Bicycle Lane Stencil	EACH	3	$	$
00867	64. Pavement Bar, Type B	SQFT	13	$	$
00867	65. Pavement Bar, Type B-HS	SQFT	90	$	$
00905	66. Remove and Protect Existing Signs and Supports	EACH	5	$	$
00905	67. Reinstall Existing Signs	EACH	2	$	$
00930	68. Pipe Sign Supports	LS	All	$	$
00930	69. Perforated Steel Square Tube Support	LS	All	$	$
00940	70. Signs, Standard Sheeting, Sheet Aluminum	SQFT	50	$	$
01012	71. Roadside Shallow Swales	LS	All	$	$
01030	72. Permanent Seeding	ACRE	0.17	$	$
01040	73. Topsoil	CUYD	78	$	$
01040	74. Deciduous Trees, 2-1/2 Inch Caliper	EACH	20	$	$
01040	75. Shrubs, #1 Container	EACH	2,091	$	$
01040	75. Shrubs, #3 Container	EACH	92	$	$
01040	76. Groundcovers, #1 Container	EACH	616	$	$
01040	78. Wood Chip Mulch	CUYD	26	$	$
01050	79. Removing and Rebuilding Fence	FOOT	28	$	$
01070	80. Single Mailbox Support	EACH	4	$	$
01150	81. 2 Inch Combination Air Release / Air Vacuum Valve Assembly	EACH	1	$	$
01150	82. 2 Inch Water Service Line	FOOT	21	$	$
01150	83. 2 Inch Water Meter Assembly	EACH	1	$	$
				PROJECT TOTAL	$

Company Name

Address

City State Zip Code

Cox Creek: Goldfish Farm Road Bridge Replacement
Bridge, Roadway and Utility

BID PROPOSAL

TO: COUNTY BOARD OF COMMISSIONERS, LINN COUNTY, OREGON

The undersigned, as Bidder, declares that:

This Bid is for the work described on the "Description of Work" sheet bound in this Bid.

This Bid has been prepared from documents obtained from Linn County Road Department website at: https://www.linncountyor.gov/roads/page/construction-bidding-documents - Project Title.

The only persons or parties interested in this Bid as principals are those named in this Bid.

The Bidder submits this Bid in accordance with and subject to the terms and conditions stated in Sections 00120 and 00130 of the specifications.

Bidder shall check one box: Bidder ☐ is ☐ is not a resident Bidder as defined in ORS 279A.120.

The Bidder has obtained and become acquainted with the applicable standard specifications, special provisions, plans, and other required provisions applicable to the particular work for which the Bid is submitted.

The Bidder has reviewed the requirements of the Agency's Conflict of Interest Guidelines and all required Conflict of Interest disclosures have been made.

The Bidder has personally inspected the location and the site of the work and has become acquainted with all conditions, local and otherwise, affecting it.

The Bidder has obtained and become acquainted with the forms of contract and bond which are to be signed by the successful Bidder.

The Bidder is satisfied as to the quantities and conditions and understands that in signing this Bid the Bidder waives all right to claim any misunderstanding regarding these quantities and conditions.

The Bidder is licensed by the Construction Contractors Board or the State Landscape Contractors Board for the Agency to consider a Bid for the public improvement contract. (This does not apply to Federally Funded Projects, the Contractor need not be licensed to submit a Bid, but shall have a current active CCB license prior to execution of the Contract.)

The bid guaranty submitted with this Bid, if a Bid Bond, is by this reference made a part of this Bid.

The Bidder also proposes and agrees that:

If this Bid is accepted, the Bidder will execute the Contract form furnished by the Agency, will provide all necessary machinery, equipment, tools, apparatus, labor and other means of construction, and will do all work and furnish all the materials specified in or called for by the Contract in the manner and time prescribed in the Contract and according to the requirements of the Engineer as given in the Contract.

The Bidder will accept, as full payment for the work performed and the materials, labor, equipment, machinery, tools, apparatus and other means of construction furnished, the amount earned under the Contract as computed in the manner described in the specifications from the quantities of the various

classes of work performed and the respective unit prices Bid as these prices are given in the "Bid Schedule" bound in this Bid.

Any contract awarded to the Bidder shall include the provisions required by ORS 279C.830 or 40 U.S.C. 276a.

The Bidder also certifies to the following:

A. Noncollusion:

The price(s) and amount of this Bid have been arrived at independently and without consultation, communication, or agreement with any other Contractor, Bidder, or potential Bidder except as disclosed on a separately attached statement.

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

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

This Bid is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive Bid.

The Bidder, its affiliates, subsidiaries, officers, directors, and employees are not currently under investigation by any governmental agency and have not in the last four years been convicted of or found liable for any act, prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding on any public contract except as described on a separately attached statement.

The Bidder understands and acknowledges that the above representations are material and important and will be relied on by the Linn County's Board of Commissioners, in awarding the Contract(s) for which this Bid is submitted. The Bidder understands that any misstatement in this certification is and shall be treated as fraudulent concealment from the Linn County's Board of Commissioners, of the true facts relating to the submission of Bids for this Contract.

B. Noninvolvement in Any Debarment and Suspension:

The Bidder, its owners, directors, principals, and officers:

- Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

- Have not within a three-year period preceding this Bid been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

- Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in the preceding paragraph of this certification; and

- Have not within a three-year period preceding this Bid had one or more public transactions (Federal, State, or local) terminated for cause or default.

Where the prospective primary participant is unable to certify to any of the statements in this certification, the prospective primary participant shall attach an explanation to this Bid.

List exceptions. (For each exception noted, indicate to whom the exception applies, initiating agency, and dates of action. If additional space is required, attach another page with the following heading: Certification Exceptions continued, Bid Insert.)

Exceptions will not necessarily result in denial of award, but will be considered in determining Bidder responsibility. Providing false information may result in criminal prosecution or administrative sanctions.

C. Lobbying Activities:

To the best of my knowledge and belief, that:

- No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

- If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer of employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying" to the Linn County Road Department.

- This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

- The prospective participant also agrees by submitting their Bid that they shall require that the language of this certification be inserted in all lower tier subcontracts, which exceed $100,000 and that all such subrecipients shall certify and disclose accordingly.

D. Compliance With Oregon Tax Laws:

By signature on this Bid, the undersigned hereby certifies under penalty of perjury that the undersigned is authorized to act on behalf of Bidder, that the undersigned has authority and knowledge regarding Bidder's payment of taxes, and that Bidder is, to the best of the undersigned's knowledge, not in violation of any Oregon Tax Laws. For purposes of this certification, "Oregon Tax Laws" means a state tax imposed by ORS 320.005 to 320.150 (Amusement Device Taxes), ORS 403.200 to 403.250 (Tax For Emergency Communications), and ORS Chapters 118 (Inheritance Tax), 314 (Income Tax), 316 (Personal Income Tax), 317 (Corporation Excise Tax), 318 (Corporation Income Tax), 321 (Timber And Forestland Tax), and 323 (Cigarettes And Tobacco Products Tax), and any local taxes administered by the Department of Revenue under ORS 305.620.

E. Employee Drug Testing Program:

Pursuant to ORS 279C.505(2), that the Bidder has an employee drug testing program in place, and will maintain such program for the entire period of this Contract. Failure to maintain such program shall constitute a material breach of contract.

F. Nondiscrimination:

Pursuant to ORS 279A.110, that the Bidder has not discriminated and will not discriminate against a disadvantaged business enterprise, a minority-owned business, a woman-owned business, a business that a service-disabled veteran owns, or an emerging small business in obtaining any required subcontracts. The Bidder understands that it may be disqualified from bidding on this public improvement project if the Agency finds that the Bidder has violated subsection (1) of ORS 279A.110.

The Bidder certifies that it has a written policy and practice that meets the requirements described in ORS 279A.112 (House Bill 3060, 2017) of preventing sexual harassment, sexual assault and discrimination against employees who are members of a protected class.

G. Use of Registered Subcontractors:

That all subcontractors performing work on this public improvement contract will be registered with the Construction Contractors Board or licensed by the State Landscape Contractors Board in accordance with ORS Chapter 701 before the subcontractors commence work under this Contract.

H. Incorporation of All Addenda:

The Bidder has incorporated into this Bid all Addenda issued for this Project.

The Bidder understands and acknowledges that the Agency will provide all Addenda only by publishing them on the Linn County Road Department's website. Addenda may be downloaded from the Linn County Road Department's website.

The Bidder shall be responsible for diligently checking the Linn County Road Department's website for Addenda. Bidders should check the website at least weekly until the week of Bid Closing and daily during the week of Bid Closing.

By submitting this Bid, the Bidder assumes all risks associated with its failure to access all Addenda and waives all claims, suits, and actions against the Linn County Board of Commissioners and their members, officers, agents, and employees that may arise out of the Bidder's failure to access all

Addenda, in spite of any contingencies such as website failure, down-time, service interruptions, and corrupted, inaccurate, or incomplete Addenda or information.

I. Pay Equity Certificate:

If the Bidder employs 50 or more full-time employees and the estimated amount of the Contract exceeds $500,000, the Bidder certifies that the Bidder possesses an unexpired certificate issued by the Oregon Department of Administrative Services (under ORS 279A.167), issued upon completion of the curriculum and assessment that the Bidder understands the prohibitions set forth in ORS 652.220 and the other laws and rules that prohibit discrimination in compensation or wage payment.

INTENTIONALLY LEFT BLANK

Cox Creek: Goldfish Farm Road Bridge Replacement
Bridge, Roadway and Utility

The party by whom this proposal is submitted, and by whom the Contract will be entered into in case the award is made to Bidder is:

_____
[Enter "an individual," "a partnership," "a corporation," or "an association"]

doing business under the name of _____

at

_____
[Street] [City] [State] [Zip Code]

which address is the address to which all communications concerning this Bid and the Contract should be sent.

The telephone number to which communications may be directed is (____) _____
[Telephone No.]

The email address to which communications may be directed is

_____
[Email Address]

The name of the surety by which the Performance Bond and Payment Bond covering the Contract, if awarded, will be furnished and the name and address of the surety's local agent are as follows:

Name of Surety _____

Name of Agent _____Tel. No. _____

Address _____
[Street] [City] [State] [Zip Code]

Accompanying this Bid as bid guaranty is a _____
["Bid Proposal Bond," "cashier's check," "certified check", or "irrevocable letter of credit"]

in the amount of (10) percent of the total amount of the Bid.

The Bidder further proposes to accept as full payment for the work proposed herein the amount computed under the provision of the Contract documents and based on the unit price amounts, under Bid Schedule bound herein, it being expressly understood that the unit prices are independent of the exact quantities involved. The Bidder agrees that the unit prices represent a true measure of the labor and materials required to perform the work, including all allowances for overhead and profit for each type and unit of work called for in these Contract documents.

If this Bid Proposal shall be accepted and the undersigned shall fail or neglect to contract as aforesaid, and to give bonds in the amount specified, with surety satisfactory to the Linn County Board of Commissioners, within ten (10) days [not including Sunday] from the date of receiving from the Board of Commissioners the Contract and prepared and ready for execution, the Board of Commissioners may,

at its option, determine that the Bidder has abandoned the Contract, and thereupon forfeiture of the guaranty accompanying the Bid shall operate and the same shall be the property of the Linn County Board of Commissioners.

_____ Dated _____, 20___
Bidder

By: _____ By:_____

If you desire to limit the number of contracts to be awarded to your firm at this opening of bids as permitted by 00120.50 of the Specifications, please complete one of the following limiting statements:

LIMITING STATEMENTS:

- No. 1. This Bid is conditioned upon my (our) not being awarded more than _____ of the contracts on which I (we) have bid at this opening of bids.

- No. 2. This Bid is conditioned upon my (our) not being awarded contracts at this opening of bids for an aggregate total amount in excess of $_____.____.

INTENTIONALLY LEFT BLANK

SIGNATURE SECTION

THE BIDDER HEREBY ACKNOWLEDGES THAT ALL REQUIREMENTS AND CONDITIONS INCLUDED OR IDENTIFIED IN THE SOLICITATION DOCUMENTS, INCLUDING THE BID BOOKLET, ADDENDA, PLANS, STANDARD SPECIFICATIONS, AND SPECIAL PROVISIONS, ARE PART OF THIS BID AND CONTRACT. THE BIDDER IS ADVISED THAT BY SIGNING THIS BID THE BIDDER IS DEEMED TO HAVE SIGNED AND READ, UNDERSTOOD, ACCEPTED, AGREED TO, AND ACKNOWLEDGED ALL OF THE ABOVE STATEMENTS AND ALL OF THE STATEMENTS INCLUDED IN THE PROVISIONS OF ALL THE DOCUMENTS, CERTIFICATIONS, AND STATEMENTS CONTAINED IN THIS BID.

FAILURE TO HAVE ALL REQUIRED SIGNATURES IN THIS SIGNATURE SECTION NOTARIZED WILL BE CAUSE TO REJECT THIS BID.

PART A	**IF YOU ARE NOT A JOINT VENTURE OR PARTNERSHIP, COMPLETE THIS PART A.** **IF YOU ARE A JOINT VENTURE OR PARTNERSHIP, COMPLETE PART B.**

_____
(Bidder's Name)

_____ _____
(Oregon Construction Contractors Board Registration Number) (Expiration Date)

By _____ SIGN HERE
(Signature of Bidder's Authorized Representative)

_____ Dated _____, 20___
(Typed or Printed Name and Title of Signer)

State of _____

County of _____ NOTARY SEAL HERE

Signed and sworn to (or affirmed) before me on this

____*day of* _____*, 20*____

_____ NOTARY SIGN HERE
(Notary Public's Signature)

My commission expires _____

PART B	**IF YOU ARE A JOINT VENTURE OR PARTNERSHIP AN AUTHORIZED SIGNATORY MUST SIGN ON BEHALF OF THE JOINT VENTURE OR PARTNERSHIP, AND EACH MEMBER OF THE JOINT VENTURE OR PARTNERSHIP MUST SIGN INDIVIDUALLY. THE CONTRACTOR AND EACH MEMBER OF THE JOINT VENTURE OR PARTNERSHIP SHALL BE JOINTLY AND SEVERALLY LIABLE UNDER THE CONTRACT.**

_____
(Bidder's Joint Venture or Partnership Name)

AUTHORIZED SIGNATORY FOR JOINT VENTURE OR PARTNERSHIP

_____ _____
(Oregon Construction Contractors Board Registration Number) (Expiration Date)

SIGN HERE

By _____
(Signature of Joint Venture's or Partner's Authorized Representative)

_____ Dated _____, 20___
(Typed or Printed Name and Title of Signer)

State of _____

NOTARY SEAL HERE

County of _____

Signed and sworn to (or affirmed) before me on this

____*day of* _____*, 20*____

NOTARY SIGN HERE

_____
(Notary Public's Signature)

My commission expires _____

Continue Joint Venture or Partnership signatures on next page.

CONTINUED JOINT VENTURE OR PARTNERSHIP SIGNATURE PAGE

JOINT VENTURE/PARTNER

_____ _____
(Oregon Construction Contractors Board Registration Number) (Expiration Date)

By _____ SIGN HERE
(Signature of Joint Venture's or Partner's Authorized Representative)

_____ Dated _____, 20___
(Typed or Printed Name and Title of Signer)

State of _____

County of _____ NOTARY SEAL HERE

Signed and sworn to (or affirmed) before me on this

____ *day of* _____, *20*_____

_____ NOTARY SIGN HERE
(Notary Public's Signature)

My commission expires _____

JOINT VENTURE/PARTNER

_____ _____
(Oregon Construction Contractors Board Registration Number) (Expiration Date)

By _____ SIGN HERE
(Signature of Joint Venture's or Partner's Authorized Representative)

_____ Dated _____, 20___
(Typed or Printed Name and Title of Signer)

State of _____

County of _____ NOTARY SEAL HERE

Signed and sworn to (or affirmed) before me on this

____ *day of* _____, *20*_____

_____ NOTARY SIGN HERE
(Notary Public's Signature)

My commission expires _____

Cox Creek: Goldfish Farm Road Bridge Replacement
Bridge, Roadway and Utility

BID PROPOSAL BOND

KNOW ALL MEN BY THESE PRESENTS, that _____,

a surety company duly organized under the laws of the State of _____,

having its principal place of business at _____,

in the State of _____, and authorized to do business in the State of Oregon, as surety, are held and firmly bound unto the Linn County Board of Commissioners as an obligee, in the full and penal sum of ten percent (10%) 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 ourselves, our heirs, executors, administrators, and assigns, and successors and assigns, firmly by these presents.

The condition of this bond is such that, whereas _____
[Bidder]

Is herewith submitting its Bid for the following work, to wit:

_____

_____

_____

said Bid Proposal, by this reference being made a part hereof;

NOW, THEREFORE, if the said proposal submitted by the said principal be accepted, and the Contract for said work be awarded to said Bidder, and if the said Bidder shall enter into and execute the said Contract and shall furnish bond as required by the Linn County Board of Commissioners within the time fixed by said Board, then this obligation shall be void; otherwise to remain in full force and effect.

Signed and sealed this _____, day of _____, 20____

_____
[Bidder Signature]

_____
[Company]

Countersigned at _____, this_____, day of _____, 20____

_____
[Surety Company]

_____
[Signature]

_____
[Agent Phone]

FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM

Project Name _____

Highway _____

County _____

Bid Opening Date _____

Name of Bidding Contractor _____

Email Address _____

☐ *CHECK THIS BOX IF YOU WILL NOT BE USING ANY FIRST-TIER SUBCONTRACTORS OR IF YOU ARE NOT SUBJECT TO THE DISCLOSURE REQUIREMENTS (SEE INSTRUCTIONS).*

FIRST-TIER SUBCONTRACTORS

Firm Name	Dollar Amount
Category of Work	

Firm Name	Dollar Amount
Category of Work	

Firm Name	Dollar Amount
Category of Work	

Firm Name	Dollar Amount
Category of Work	

Firm Name	Dollar Amount
Category of Work	

Firm Name	Dollar Amount
Category of Work	

Firm Name	Dollar Amount
Category of Work	

(Attach additional sheets as necessary)