



DAN JOHNSON
DIRECTOR

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
DEVELOPMENT SERVICES BUILDING
150 BEAVERCREEK ROAD OREGON CITY, OR 97045

August 15, 2024

BCC Agenda Date/Item: _____

Board of County Commissioners
Clackamas County

Approval of an Agreement with the Johnson Creek Watershed Council on the Rugg Road/Badger Creek Culvert and Fish Passage Project. Total agreement value is \$496,312. Funding is through a National Oceanic and Atmospheric Administration grant and County Road Funds. No County General Funds are involved.

Previous Board Action/Review	08/13/24: Request for consent		
Performance Clackamas	The project will build a strong infrastructure		
Counsel Review	05/08/24: Hong Huynh	Procurement Review	N/A
Contact Person	Devin Patterson	Contact Phone	503-742-4666

EXECUTIVE SUMMARY Department of Transportation and Development (DTD) staff requests Board approval of an Agreement between Clackamas County and the Johnson Creek Watershed Council (JCWC) for the construction of the Badger Creek at Rugg Road Culvert Replacement Project. The existing culverts that carry Badger Creek under Rugg Road in the Boring area are in poor condition, at risk of failure, and act as a partial barrier to passage for aquatic organisms of all species and life stages. DTD and JCWC propose to replace the existing culvert with a single, 10-foot diameter culvert that is 1.5 times the active channel width, resulting in a resilient transportation structure that would meet federal and state fish-passage criteria.

The engineer’s estimate for the construction cost is estimated at \$451,193 and the agreement includes a County cash contribution of up to \$129,713. However, if bids exceed this estimate by up to 10 percent, the County cash contribution would extend up to \$174,832. Additionally, the County provided funding for the design and other in-kind services including utility coordination, right-of-way acquisition, and inspection of project construction. The remainder of project construction costs of \$321,480.00 will be funded by JCWC-acquired grant funding.

For Filing Use Only

RECOMMENDATION: Staff respectfully recommend that the Board of County Commissioners sign the attached agreement with the Johnson Creek Watershed Council for the Rugg Road/Badger Creek Culvert and Fish Passage Project.

Respectfully submitted,

Dan Johnson

Dan Johnson
Director of Transportation & Development

**AGREEMENT ON
RUGG ROAD/BADGER CREEK
CULVERT AND FISH PASSAGE PROJECT**

THIS AGREEMENT is entered into by and between CLACKAMAS COUNTY, hereinafter referred to as "COUNTY," and JOHNSON CREEK WATERSHED COUNCIL, hereinafter referred to as "JCWC," each herein referred to individually as a "Party" and collectively as the "Parties."

RECITALS

A. Rugg Road, no. 13004, is a COUNTY-maintained urban local road that serves many residents in the area and that crosses Badger Creek over two culverts in Damascus, Oregon;

B. Badger Creek is a cold-water tributary of Johnson Creek and has been found to have native fish, steelhead/rainbow trout, coho salmon, and Pacific lamprey, including in the area over which Rugg Road crosses;

C. In 2019, the COUNTY identified the need to replace the two existing culverts at Badger Creek to ensure continuity of road services, reduce the risk of flooding and washouts during significant rainfall events, and remove any fish barrier that may be caused by the degraded conditions of the culverts;

D. JCWC is a non-profit organization that promotes restoration and stewardship of the Johnson Creek Watershed, including restoring native fish, such as species listed under the federal Endangered Species Act, and in 2022, as part of its Clackamas Partnership Native Fish Population Habitat Resilience project, applied for grant funding available through the Infrastructure Investment and Jobs Act to restore fish passage at the crossing of Badger Creek and Rugg Road;

E. The Parties recognize the mutual benefits of collaborating and contributing to a proposed project that would improve road conditions and fish passage at the crossing of Rugg Road and Badger Creek, by removing the two existing culverts and replacing them with a new single larger culvert while restoring the area with native vegetation at an estimated cost of \$451,193;

F. JCWC wishes to have primary responsibility for delivering the proposed project, including grant administration, procurement, construction, project management and monitoring, while the COUNTY wishes to contribute some funding, design management, and certain in-kind staff services;

G. The Parties desire to define their respective obligations with regards to the proposed project.

TERMS OF AGREEMENT

NOW THEREFORE, it is agreed by the parties as follows:

1. **TERM.** This Agreement becomes effective as of the last date of signature by a Party indicated below. Unless terminated earlier pursuant to Section 5 of this Agreement, this Agreement will expire upon the completion and acceptance of any grant-required post-construction monitoring and reporting, or by December 31, 2027, whichever is sooner.

2. **PROJECT DESCRIPTION.** As used in this Agreement, the term “Project” means all work or tasks, including administration, planning, designing, constructing, mitigating, implementing, and monitoring that are essential to removing of the two existing 36-inch in diameter culverts at the crossing of Rugg Road and Badger Creek at mile point 1.38 in Damascus, Oregon, A; to installing a new single 10-foot in diameter culvert in a configuration that enhances fish passage; to restoring the native vegetation of the Project area; to monitoring the Project area following construction; all of which are more fully described in relevant parts in Exhibit A, Exhibit B, and Exhibit C attached hereto.

3. **JCWC AGREEMENTS AND OBLIGATIONS.**
 - 3.1. JCWC agrees to deliver the Project scope of work, as more particularly described in the Section 2, Exhibit A, Exhibit B, and Exhibit C of this Agreement;
 - 3.2. JCWC must contract for the Project scope of work as set out in the Section 2, Exhibit A, Exhibit B, and Exhibit C of this Agreement, except for those tasks described in Section 4.2 of this Agreement. JCWC agrees to manage the Project, and timely administer any associated engineering, design and construction work.
 - 3.3. Subject to the COUNTY’S coverage of Project construction costs as described in Section 4 of this Agreement, JCWC is exclusively responsible for all costs and expenses related to its performance of work and tasks in delivering the Project. JCWC agrees to allow the County the opportunity to approve or deny contract change orders throughout construction of the Project.
 - 3.4. JCWC must comply with the terms and conditions contained in any grant agreement associated with the Project, and be solely responsible for ensuring receipt of all grant funds, from any source whatsoever, that will be associated with the Project.

4. **THE COUNTY AGREEMENTS AND OBLIGATIONS.**
 - 4.1. The COUNTY agrees to scope of work, as more particularly described in the Section 2, Exhibit B, and Exhibit C of this Agreement;

4.2. At its sole cost, the COUNTY agrees to manage and deliver the following work and tasks associated with the Project:

- 4.2.1. Coordinate meetings and communications
- 4.2.2. Conduct preconstruction survey work;
- 4.2.3. Review and approve plans and specifications;
- 4.2.4. Acquire right-of-way;
- 4.2.5. Acquire all required Federal, State and local permits;
- 4.2.6. Review construction submittals;
- 4.2.7. Inspect project construction.
- 4.2.8. Conduct landowner outreach;
- 4.2.9. Conduct utility coordination
- 4.2.10. Manage and fund project design

4.3. In addition to the in-kind contribution described above in Sections 4 of this Agreement, and provided that the actual cost of the Project is shown not to exceed the estimated Project construction cost of \$451,193, the COUNTY agrees to fund the remainder of the Project construction cost.

4.3.1. If bids for Project work exceed the engineer's estimate of \$451,193, as shown in Exhibit A, by 10%, the COUNTY shall have no obligation to contribute under this Section 4 unless the COUNTY agrees in writing to proceed.

4.3.2. Any requirement of the COUNTY to provide cash contribution to the Project construction costs under this Section 4.3 of the Agreement is contingent on the COUNTY's receipt and review of documentation of costs incurred and expenditures in excess of the grant funding for construction amount of \$321,480, and approval of said documentation.

5. Upon substantial completion of the Project, the COUNTY and JCWC will collaborate in working with the primary contractor to address punch list items, and both Parties will be given the opportunity to provide final acceptance of the Project on behalf of their respective agency.

6. TERMINATION

6.1. The COUNTY and JCWC, by mutual written agreement, may terminate this Agreement at any time.

6.2. JCWC may terminate this Agreement effective upon delivery of written notice to the COUNTY, or at such later date as may be established by JCWC, if the COUNTY fails to perform any of its obligations under this agreement, or so fails

to pursue its obligations as to endanger performance of this Agreement in accordance with its terms, and after receipt of written notice from JCWC fails to correct such failures within ten (10) days or such longer period as is reasonably necessary to cure such default.

6.3. The COUNTY may terminate this Agreement effective upon delivery of written notice to JCWC, or at such later date as may be established by COUNTY, if JCWC fails to perform any of its obligations under this Agreement, or so fails to pursue its obligations as to endanger performance of this Agreement in accordance with its terms, and after receipt of written notice from COUNTY fails to correct such failures within ten (10) days or such longer period as is reasonably necessary to cure such default.

6.4. Nothing herein shall prevent the Parties from meeting to mutually discuss the Project or any of the obligations contained in this Agreement. Each Party will use best efforts to coordinate with the other to minimize conflicts.

6.5. Any termination of this Agreement will not prejudice any rights or obligations accrued to the Parties prior to termination.

7. INDEMNIFICATION

7.1. Subject to the limits of the Oregon Constitution and the Oregon Tort Claims Act or successor statute, the COUNTY agrees to indemnify, save harmless and defend JCWC, its officers, elected officials, agents and employees from and against all costs, losses, damages, claims or actions and all expenses incidental to the investigation and defense thereof (including legal and other professional fees) arising out of or based upon damages or injuries to persons or property caused by the negligent or willful acts of the COUNTY or its officers, elected officials, owners, employees, agents, or its subcontractors or anyone over which the COUNTY has a right to control.

7.2. JCWC agrees to indemnify, save harmless and defend the COUNTY, its officers, elected officials, agents and employees from and against all costs, losses, damages, claims or actions and all expenses incidental to the investigation and defense thereof (including legal and other professional fees) arising out of or based upon damages or injuries to persons or property caused by the negligent or willful acts of JCWC or its officers, elected officials, owners, employees, agents, or its subcontractors or anyone over which JCWC has a right to control.

8. GENERAL PROVISIONS

8.1. **Oregon Law and Forum.** This Agreement will be construed according to the laws of the State of Oregon, without giving effect to the conflict of law provisions thereof.

8.2. **Applicable Law.** The Parties hereto agree to comply in all ways with applicable local, state and federal ordinances, statutes, laws and regulations.

8.3. **Non-Exclusive Rights and Remedies.** Except as otherwise expressly provided herein, the rights and remedies expressly afforded under the provisions of this Agreement is not exclusive, and is in addition to and cumulative with any and all rights and remedies otherwise available at law or in equity. The exercise by either Party of any one or more of such remedies shall not preclude the exercise by it, at the same or different times, of any other remedies for the same default or breach, or for any other default or breach, by the other Party.

8.4. **Access to Records.** The Parties acknowledge and agree that each Party, the federal government, and their duly authorized representatives have access to each Party's books, documents, papers, and records which are directly pertinent to this Agreement for the purpose of making audit, examination, excerpts, and transcripts for a period of three years after final payment. Copies of applicable records shall be made available upon request. The cost of such inspection is borne by the inspecting Party.

8.5. **Debt Limitation.** This Agreement is expressly subject to the debt limitation of Oregon counties set forth in Article XI, Section 10, of the Oregon Constitution, and is contingent upon funds being appropriated therefore. Any provisions herein which would conflict with law are deemed inoperative to that extent.

8.6. **Severability.** If any provision of this Agreement is found to be unconstitutional, illegal or unenforceable, this Agreement nevertheless will remain in full force and effect and the offending provision shall be stricken. The Court or other authorized body finding such provision unconstitutional, illegal or unenforceable shall construe this Agreement without such provision to give effect to the maximum extent possible the intentions of the Parties.

8.7. **Integration, Amendment and Waiver.** Except as otherwise set forth herein, this Agreement constitutes the entire agreement between the Parties on the matter of the Project. There are no understandings, agreements, or representations, oral or written, not specified herein regarding this Agreement. No waiver, consent, modification or change of terms of this Agreement shall bind either Party unless in writing and signed by both Parties and all necessary approvals have been obtained. Such waiver, consent, modification or change, if made, shall be effective only in the specific instance and for the specific purpose given. The failure of either Party to enforce any provision of this Agreement shall not constitute a waiver by such Party of that or any other provision.

8.8. **Interpretation.** The titles of the sections of this Agreement are inserted for convenience of reference only and are to be disregarded in construing or interpreting any of its provisions.

- 8.9. **Independent Contractor.** Each of the Parties hereto shall be deemed an independent contractor for purposes of this Agreement. No representative, agent, employee or contractor of one Party shall be deemed to be a representative, agent, employee or contractor of the other Party for any purpose, except to the extent specifically provided herein. Nothing herein is intended, nor shall it be construed, to create between the Parties any relationship of principal and agent, partnership, joint venture or any similar relationship, and each Party hereby specifically disclaims any such relationship.
- 8.10. **No Third-Party Beneficiary.** Neither Party intends that this Agreement benefit, or create any right or cause of action in, or on behalf of, any person or entity other than the COUNTY or JCWC.
- 8.11. **No Assignment.** No Party shall have the right to assign its interest in this Agreement (or any portion thereof) without the prior written consent of the other Party, which consent may be withheld for any reason. The benefits conferred by this Agreement, and the obligations assumed hereunder, shall inure to the benefit of and bind the successors of the Parties.
- 8.12. **Counterparts.** This Agreement may be executed in any number of counterparts (electronic, facsimile or otherwise) all of which when taken together shall constitute one agreement binding on all Parties, notwithstanding that all Parties are not signatories to the same counterpart. Each copy of this Agreement so executed shall constitute an original.
- 8.13. **Authority.** Each Party represents that it has the authority to enter into this Agreement on its behalf and the individual signatory for a Party represents that it has been authorized by that Party to execute and deliver this Agreement.
- 8.14. **Necessary Acts.** Each Party shall execute and deliver to the others all such further instruments and documents as may be reasonably necessary to carry out this Agreement.
- 8.15. **Attorney Fees.** The Parties shall bear their own costs and attorney fees in the event an action is brought to enforce, modify or interpret the provisions of this Agreement.

THE PARTIES, by execution of this Agreement, hereby acknowledge that their signing representatives have read this Agreement, understand it, and agree to be bound by its terms and conditions.

**JOHNSON CREEK WATERSHED
COUNCIL**

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ac95-0d55649054ba

Digitally signed by
95b06649-1f83-4120-
ac95-0d55649054ba
Date: 2024.07.17 16:34:01 -07'00'

Daniel Newberry

Executive Director
Title

July 17, 2024

Date

**BOARD OF COMMISSIONERS
CLACKAMAS COUNTY**

Chair

Recording Secretary

Date

AGR NO. _____

Exhibit A – Project Plans and Cost Estimate

ODOT Std	Bid Item	Unit	Unit Price	Quantity	Subtotal
00180	Workplace Harassment Prevention Plan	LS	\$500	1	\$500
00196	Extra Work As Authorized	LS	\$20,000	1	\$20,000
00210	Mobilization	LS	\$45,000	1	\$45,000
00221	Temporary Work Zone Traffic Control, Complete	LS	\$30,000	1	\$30,000
00245	Temporary Water Management Facility at STA 0+95	LS	\$35,000	1	\$35,000
00280	Erosion Control	LS	\$5,000	1	\$5,000
00280	Check Dam, Type 2	LF	\$10	650	\$6,500
00280	Sediment Fence	LF	\$6	1,350	\$8,100
00290	Pollution Control Plan	LS	\$10,000	1	\$10,000
00290	Turbidity Monitoring	LS	\$5,000	1	\$5,000
00305	Construction Survey Work	LS	\$5,000	1	\$5,000
00310	Asphalt Pavement Saw Cut	LF	\$25	43	\$1,075
00310	Removal of Structures and Obstructions	LS	\$10,000	1	\$10,000
00320	Cleaning and Grubbing	LS	\$5,000	1	\$5,000
00330	Selected Granular Backfill Material	CY	\$150	20	\$3,000
00350	Subgrade Geotextile	SQYD	\$10	90	\$900
00390	Loose Riprap, Class 100	CUYD	\$150	45	\$6,750
00405	Rock Excavation	CY	\$400	10	\$4,000
00445	120 Inch Corrugated Metal Pipe	LF	\$350	60	\$21,000
00510	Structure Excavation	LS	\$66,100	1	\$66,100
00510	Granular Structure Backfill	LS	\$70,500	1	\$70,500
00620	Cold Plane Pavement Removal, 2 Inch Depth	SY	\$20	85	\$1,700
00640	Aggregate subbase, base, and shoulders	TON	\$125	30	\$3,750
00730	Emulsified Asphalt Tack Coat	TON	\$1,000	0.5	\$500
00744	Level 2, 1/2 Inch ACP Mixture	TON	\$300	28	\$8,400
01030	Native Plant Seeding	AC	\$15,000	0.10	\$1,500
01030	Mulching	AC	\$15,000	0.10	\$1,500
01091	Streambed Enhancement, Special Provisions	LS	\$10,000	1	\$10,000
01091	Fish Cobble, Special Provisions	TON	\$150	90	\$13,500
01091	Fish Rocks, Type 1, Special Provisions	EA	\$400	6	\$2,400
05002	Boulder Ballast	EA	\$500	6	\$3,000
05003	Imported Large Wood Placement, Special Provision	EA	\$4,000	1	\$4,000
05004	Salvaged Large Wood Placement, Special Provision	EA	\$2,000	1	\$2,000

Description

Rugg Rd.
 Dewatering and Diversion (pumps and pipes), fish screens, cofferdams
 Includes diversion dike at diversion outlet
 Straw Wattles
 Silt Fence

removing the 2 existing 42-inch culverts
 includes removing red cedar tree
 possibility of needing 1 1/2" - 0" from street and storm drainage note #5

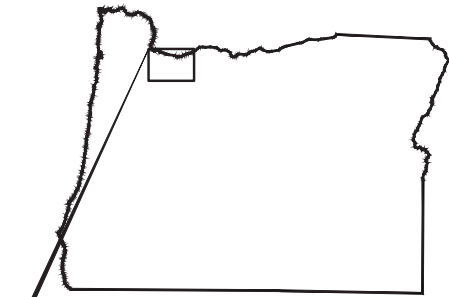
in case
 10ft diamter, 12ga, circular, aluminized steel, 75yr service life
 (600CY + 10%) * \$100/CY
 (427CY + 10%) * \$150/CY

~1542ft³ = 90tons of streambed material (165lb/ft³)

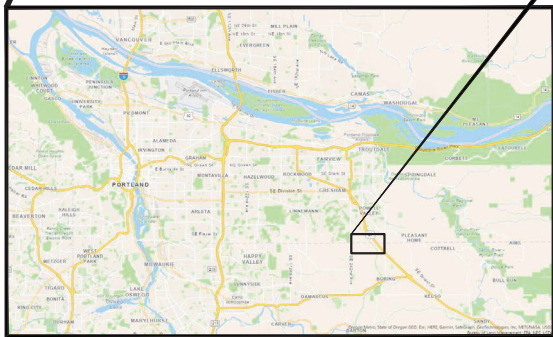
Construction Subtotal	\$410,175
10% Contingency	\$41,018
Project Total	\$451,193

Badger Creek - Rugg Road Culvert Replacement

90% PRELIMINARY DESIGN
CLACKAMAS COUNTY, OREGON
SEPTEMBER 2023



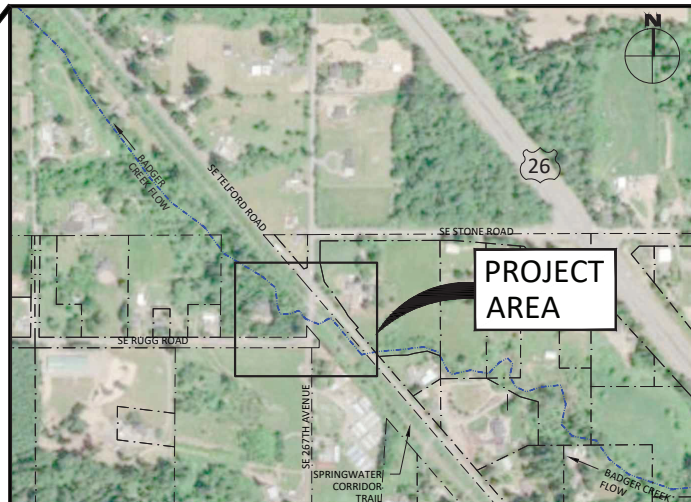
STATE OF OREGON



VICINITY MAP
NOT TO SCALE

SHEET INDEX

- 1 - COVER SHEET, LOCATION MAP, AND SHEET INDEX
- 2 - GENERAL NOTES
- 3 - SITE MAP - EXISTING CONDITIONS AND ACCESS
- 4 - SITE MAP - EXISTING CONDITIONS AND DEWATERING
- 5 - PLAN VIEW - EROSION CONTROL, STAGING, AND DIVERSION
- 6 - PLAN VIEW - PROPOSED CONDITIONS
- 7 - PLAN AND PROFILE VIEW - PROPOSED CONDITIONS
- 8 - GRADING CROSS SECTION VIEW AND TYPICAL DETAILS
- 9 - TYPICAL DETAILS
- 10 - TYPICAL DETAILS
- 11 - PLAN VIEW - REVEGETATION PLAN



LOCATION

CLACKAMAS COUNTY, OREGON
LAT: 45°27'36.50"N
LONG: 122°23'16.93"W
SECTION: Section 25, T1S R3E

GEODETIC DATUM - NORTH AMERICAN DATUM OF 1983 (2011) EPOCH 2010
VERTICAL DATUM - NORTH AMERICAN VERTICAL DATUM OF 1988
COORDINATE SYSTEM - OCRS (PORTLAND ZONE)
PROJECTION - LAMBERT CONFORMAL CONIC

SITE MAP

NOT TO SCALE

SITE INFORMATION

AFFECTED TAXLOTS:
PARCEL 13E25B01501
PARCEL 13E25B01100

SOIL TYPE (NRCS):
CORNELIUS SILT LOAM (40.4%)
WAPATO SILTY CLAY LOAM (40.3%)
AND POWELL SILT LOAM (19.4)

PRELIMINARY
NOT FOR
CONSTRUCTION

3			
2			
1			
REV.	DESCRIPTION:	BY:	DATE:
STATUS: 90% PRELIMINARY DESIGN			

PARR
excellence
302 W. Steuben St. #6
Bingen, WA 98505
www.parr-usa.com

CLIENT: Clackamas County
150 Beaver Creek Road
Oregon City, OR 97045

SITE: Badger Creek - Rugg Road
Culvert Replacement

TITLE: COVER SHEET, LOCATION
MAP, AND SHEET INDEX

SCALE:	DATE:	DRAWN:	CHECKED:
	9/29/23	RP & PW	BN
TRD. NO:	DRAWING NO:	TOTAL SHEETS:	
-	1	12	

GENERAL NOTES

- ALL WORK AND MATERIALS SHALL CONFORM TO THESE PLANS AND THE APPLICABLE PROVISIONS.
- THE LOCATION OF EXISTING UTILITIES SHOWN ON THE PLANS IS APPROXIMATE AND SHOWN FOR INFORMATION PURPOSES ONLY.
- TOPOGRAPHIC SURVEY BY: CLACKAMAS COUNTY DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT, BRIAN W. PAULL, PLS 89074
- VEGETATION AND TOPSOIL ARE TO BE STRIPPED TO MINERAL EARTH AND APPROVED BY THE PRIMARY INSPECTOR PRIOR TO PLACEMENT OF FILL OR BASE MATERIALS.
- ALL GAS OR DIESEL POWERED PUMPS MUST BE INSIDE OF CONTAINMENT POOLS.
- SUBSEQUENT SETTLEMENT OR CRACKING OF FINISHED SURFACE WITHIN THE WARRANTY PERIOD SHALL BE CONSIDERED TO BE A FAILURE OF THE SUBGRADE AND REPAIRED AT NO COST TO THE COUNTY AND IN A MANNER ACCEPTABLE TO THE COUNTY.
- THE CONTRACTOR SHALL CONTROL TRAFFIC THROUGH THE PROJECT SITE IN CONFORMANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, AND OREGON SUPPLEMENTS. THE CONTRACTOR SHALL, AT ALL TIMES, MAINTAIN LOCAL ACCESS FOR EMERGENCY VEHICLES, BUSINESSES, BUSES, AND HOMEOWNERS ALONG THE PROJECT SITE.
- WHEN TRAFFIC DELAYS ARE TO BE EXPECTED, THE CONTRACTOR SHALL NOTIFY THE APPLICABLE AGENCIES, INCLUDING TRIMET, SCHOOL DISTRICT, EMERGENCY SERVICES, AND LOCAL BUSINESSES.
- CONTRACTOR SHALL COORDINATE AND SCHEDULE ALL EARTHWORK, TRENCH BACKFILL AND ROAD CONSTRUCTION COMPACTION TESTS, AND GEOTECHNICAL REVIEWS WITH THE SOILS TESTING LAB AS REQUIRED FOR ACCEPTANCE OF PROJECT WORK BY CLACKAMAS COUNTY. COUNTY SHALL BE PROVIDED WITH ALL TEST RESULTS.
- CONTRACTOR SHALL CAREFULLY MAINTAIN BENCHMARKS, PROPERTY CORNERS, MONUMENTS, AND OTHER REFERENCE POINTS PURSUANT TO ORS 209.140 AND ORS 209.150. IF SUCH POINTS ARE DISTURBED OR DESTROYED BY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND PAY FOR THEIR REPLACEMENT BY EMPLOYING A PROFESSIONAL LAND SURVEYOR TO RESET PROPERTY CORNERS & OTHER SUCH MONUMENTS.
- FINAL CLEANUP - PRIOR TO FINAL ACCEPTANCE, THE CONTRACTOR SHALL CLEAN THE WORK SITE AND ADJACENT AREAS OF ANY DEBRIS, DISCARDED ACP, CONCRETE OR OTHER ITEMS DEPOSITED BY THE CONTRACTOR'S PERSONNEL DURING THE PERFORMANCE OF THIS CONTRACT.
- THE SPRINGWATER CORRIDOR TRAIL MUST REMAIN OPEN AT ALL TIMES.
- PRIVATE DRIVEWAYS ARE TO REMAIN OPEN AT ALL TIMES.

GRADING NOTES

- ALL FILLS ON PRIVATE PROPERTY MUST BE PLACED CONSISTENT WITH COUNTY CODE TITLE 9.03, EXCAVATION AND GRADING. SITE PREPARATION MUST INCLUDE THE REMOVAL OF VEGETATION, NON-COMPLYING FILL, TOPSOIL, OR OTHER UNSUITABLE MATERIAL PRIOR TO PLACEMENT OF THE FILL. FILL SLOPES SHALL NOT EXCEED A GRADE OF TWO HORIZONTAL TO ONE VERTICAL.
- ALL CUTS ON PRIVATE PROPERTY SHALL BE MADE CONSISTENT

WITH TITLE 9.03, EXCAVATION AND GRADING ORDINANCE. NO CUT SHALL EXCEED A GRADE OF TWO HORIZONTAL TO ONE VERTICAL UNLESS APPROVED BEFOREHAND BY CLACKAMAS COUNTY.

- APPROPRIATE BENCHING OF FILLS IS REQUIRED FOR FILLS OVER FIVE FEET IN HEIGHT ON SLOPES IN EXCESS OF FIVE HORIZONTAL TO ONE VERTICAL. BENCHING MUST BE DONE IN ACCORDANCE WITH THE APPROVED PLANS. CLACKAMAS COUNTY SHALL INSPECT BENCHES PRIOR TO FILL PLACEMENT.
- CUT AND FILL SLOPES AND ALL EXPOSED SOILS SHALL BE PROTECTED FROM EROSION AND BE IN COMPLIANCE WITH THE LOCAL SURFACE WATER AUTHORITY RULES, REGULATIONS, AND STANDARDS. SUCH CONTROL SHALL CONSIST OF TEMPORARY MEASURES DURING CONSTRUCTION AND PERMANENT MEASURES AT THE COMPLETION OF CONSTRUCTION ACTIVITIES, INCLUDING APPROPRIATE REVEGETATION OR OTHER ACCEPTABLE MEANS AND METHODS. TEMPORARY EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO EARTHWORK OR SITE STRIPPING.
- THE CONTRACTOR SHALL NOTIFY THE PRIMARY INSPECTOR, COUNTY INSPECTOR, AND ENGINEER 48 HOURS PRIOR, FOR ALL REQUIRED EROSION CONTROL AND STRUCTURAL FILL INSPECTIONS AT THE FOLLOWING STAGES OF CONSTRUCTION:
 - EROSION CONTROL INSPECTION PRIOR TO INITIATING CONSTRUCTION ACTIVITIES;
 - PROOF ROLL ON SUBGRADE AND
 - AT EVERY ONE FOOT OF STRUCTURAL FILL OR 300 CUBIC YARDS AND AT EVERY ONE FOOT OF STRUCTURAL FILL OR 300 CUBIC YARDS AND
 - AT COMPLETION OF STRUCTURAL FILL BEFORE GEOTEXTILE FABRIC AND BASE AGGREGATE IS PLACED AND
 - AT COMPLETION OF BASE AGGREGATE COURSE FOLLOWED BY DENSITY TESTING ON THE FINAL BASE COURSE PRIOR TO PAVING.

STREET & STORM DRAINAGE NOTES

- STREET AND STORM DRAIN IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CLACKAMAS COUNTY ROADWAY STANDARDS AND THE APPROPRIATE SURFACE WATER DISTRICT. ALL STORM SEWER PIPES SHALL HAVE RUBBER GASKETS, WHICH SHALL PROVIDE A WATER TIGHT CONNECTION.
- MATERIAL IN SOFT SPOTS WITHIN THE ROADWAY SHALL BE REMOVED TO THE DEPTH REQUIRED TO PROVIDE A FIRM FOUNDATION AND SHALL BE REPLACED WITH 1 1/2"-0" CRUSHED ROCK. THE ENTIRE SUBGRADE SHALL BE THOROUGHLY COMPACTED TO 95% AASHTO T-99
- CONTRACTOR SHALL NOTIFY THE PROJECT MANAGER WHEN SUBGRADE IS COMPLETE AND 24 HOURS PRIOR TO PLACEMENT OF BASE ROCK MATERIAL. CONTRACTOR SHALL ALSO NOTIFY THE ENGINEER 24 HOURS PRIOR TO FINAL PAVING FOR AN INSPECTION OF THE WORK. CLACKAMAS COUNTY REQUIRES A PROOF ROLL WITH A FULLY LOADED 10-YARD DUMP TRUCK TO CHECK SUBGRADE COMPACTION PRIOR TO PLACEMENT OF ROCK. SUBBASE AND AGAIN AT THE COMPLETION OF THE PLACEMENT OF THE BASE ROCK PRIOR TO PAVING THE FIRST LIFT OF ASPHALTIC CONCRETE.

USACE IN-WATER WORK PERIODS

ALL WORK BELOW ORDINARY HIGH WATER SHALL BE CONDUCTED BETWEEN JULY 15 - SEPTEMBER 30.

CONSTRUCTION ACCESS/TRAFFIC CONTROL

THE CONTRACTOR SHALL KEEP THE WORK AREAS IN A CLEAN AND NEAT CONDITION FREE OF DEBRIS AND LITTER FOR THE DURATION OF THE PROJECT.

ALL AFFECTED AREAS INCLUDING ROADS AND ACCESS ROUTES

SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER.

ALL DISTURBED AREAS OUTSIDE THE LIMITS OF DISTURBANCE SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER AT NO COST TO THE OWNER.

PUBLIC RIGHTS-OF-WAY SHALL BE KEPT IN A CLEAN AND SERVICEABLE CONDITION AT ALL TIMES. IN THE EVENT MATERIALS ARE INADVERTENTLY DEPOSITED ON ROADWAYS THE MATERIAL SHALL BE PROMPTLY REMOVED. MATERIALS ARE TO BE SWEEPED AND REMOVED PRIOR TO ANY STREET FLUSHING.

QUANTITIES

LISTED IN SPECIAL PROVISIONS AND BID SCHEDULE.

ALL EARTHWORK QUANTITIES PROVIDED ARE IN-PLACE QUANTITIES. NO TRUCK MEASURE.

CONSTRUCTION MATERIALS

ANY EXCESS MATERIALS SHALL BE STOCKPILED NEATLY IN AN APPROVED LOCATION OF THE STOCKPILE AND STAGING AREAS. THE MATERIAL SHALL BE REMOVED FROM THE SITE PRIOR TO THE COMPLETION OF WORK.

CONTROL DEWATERING

MEET TURBIDITY STANDARDS REFERENCED IN SPECIAL PROVISIONS 00290.

TURBID OR CONTAMINATED DEWATERING WATER FROM CONSTRUCTION EQUIPMENT OPERATION SHALL BE PREVENTED FROM DELIVERING SEDIMENT TO THE STREAM. DISPOSAL OPTIONS FOR DEWATERING DISCHARGE INCLUDE:

- SEDIMENT-LADEN WATER MAY BE PUMPED TO AN UPLAND AREA AND ALLOWED TO SHEET FLOW OVER UNDISTURBED GROUND THROUGH EXISTING VEGETATION TO INFILTRATE INTO THE GROUND.
- USE OF AN APPROPRIATELY SIZED AND MAINTAINED SEDIMENTATION BAG (DIRTBAG) OR OTHER SEDIMENTATION FACILITY WITH OUTFALL TO A DITCH OR SWALE FOR SMALL VOLUMES OF LOCALIZED DEWATERING.

VEHICLE OPERATIONS AND STAGING

BEFORE OPERATIONS BEGIN AND AS OFTEN AS NECESSARY DURING OPERATION, PRESSURE WASH ALL EQUIPMENT THAT WILL BE USED BELOW BANKFULL ELEVATION UNTIL ALL VISIBLE EXTERNAL OIL, GREASE, MUD, AND OTHER VISIBLE CONTAMINANTS ARE REMOVED.

CONTRACTOR SHALL PROVIDE BIODEGRADABLE LUBRICANTS AND FLUIDS USED ON EQUIPMENT OPERATING NEAR THE STREAM CHANNEL AND LIVE WATER.

FISH SALVAGE

FISH SALVAGE TO BE PERFORMED BY XXX. CONTRACTOR TO PROVIDE 14 DAYS WRITTEN NOTICE TO XXX TO PERFORM FISH SALVAGE.

ABBREVIATIONS

ACP	ASPHALT CONCRETE PAVEMENT
APPROX	APPROXIMATE
BMP	BEST MANAGEMENT PRACTICES
CY	CUBIC YARDS
DIA	DIAMETER
DBH	DIAMETER BREST HEIGHT
EA	EACH
ELEV	ELEVATION
FT	FEET
HORIZ	HORIZONTAL
IN	INCHES
INV	INVERT
LWM	LARGE WOODY MATERIAL
MAX	MAXIMUM
MIN	MINIMUM
OHW	ORDINARY HIGH WATER
STA	STATION
TESC	TEMPORARY EROSION AND SEDIMENT CONTROL
TYP	TYPICAL
VERT	VERTICAL
WSE	WATER SURFACE ELEVATION
YR	YEAR

PRELIMINARY
NOT FOR
CONSTRUCTION

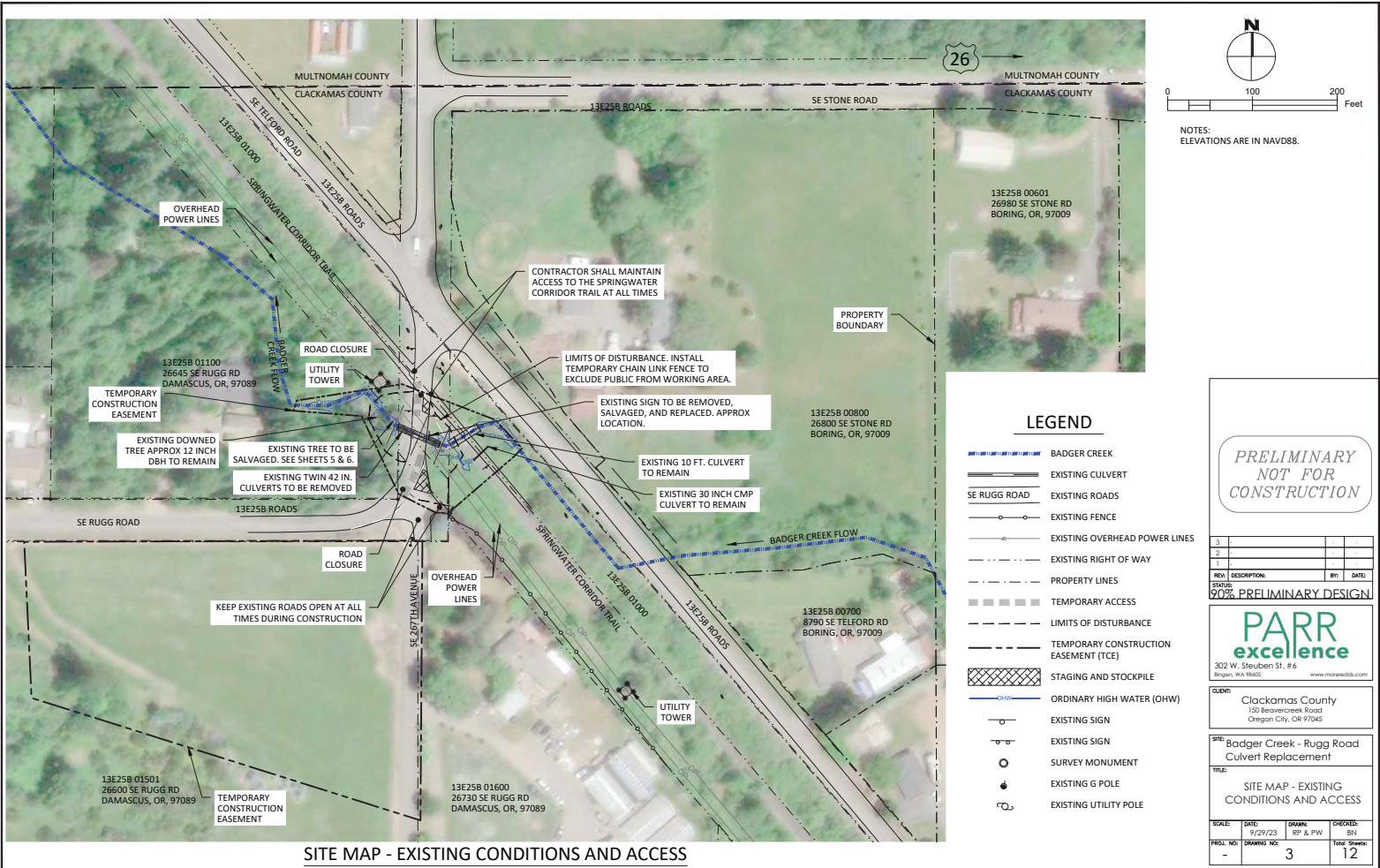
3			
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REV	DESCRIPTION	BY	DATE
STATUS: 90% PRELIMINARY DESIGN			

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302 W. Steuben St. #6
Eugene, OR 97405
www.parrsds.com

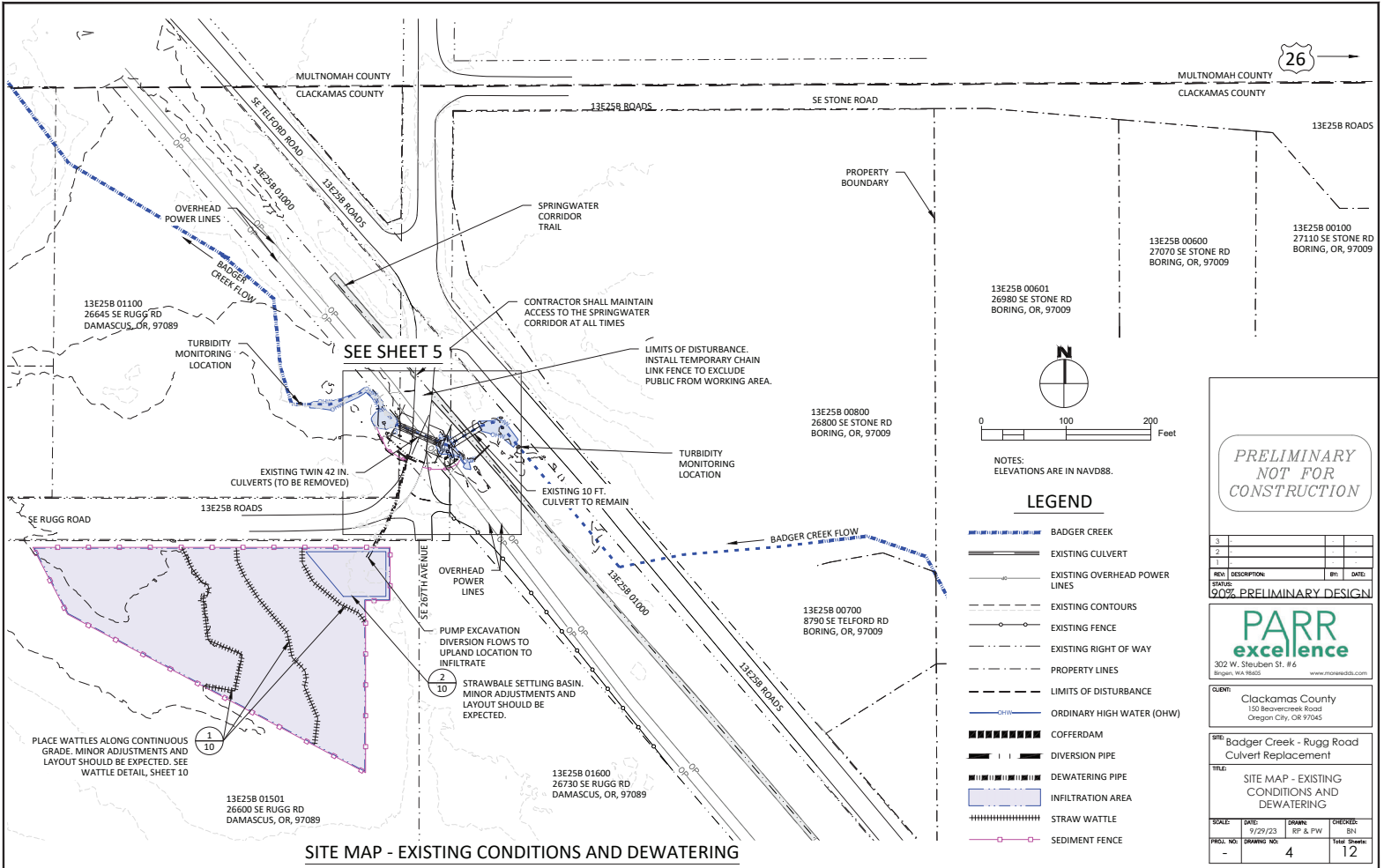
CLIENT: Clackamas County
150 Beaver Creek Road
Oregon City, OR 97045

SITE: Badger Creek - Rugg Road
Culvert Replacement

GENERAL NOTES			
SCALE:	DATE:	DRAWN:	CHECKED:
	9/29/23	RP & PW	BN
PROJ. NO:	DRAWING NO:	TOTAL SHEETS:	
-	2	12	



SITE MAP - EXISTING CONDITIONS AND ACCESS



SITE MAP - EXISTING CONDITIONS AND DEWATERING



0 100 200 Feet

NOTES:
ELEVATIONS ARE IN NAVD88.

LEGEND

- BADGER CREEK
- EXISTING CULVERT
- EXISTING OVERHEAD POWER LINES
- EXISTING CONTOURS
- EXISTING FENCE
- EXISTING RIGHT OF WAY
- PROPERTY LINES
- LIMITS OF DISTURBANCE
- ORDINARY HIGH WATER (OHW)
- COFFERDAM
- DIVERSION PIPE
- DEWATERING PIPE
- INFILTRATION AREA
- STRAW WATTLE
- SEDIMENT FENCE

*PRELIMINARY
NOT FOR
CONSTRUCTION*

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REV.	DESCRIPTION:	BY:	DATE:
STATUS: 90% PRELIMINARY DESIGN			

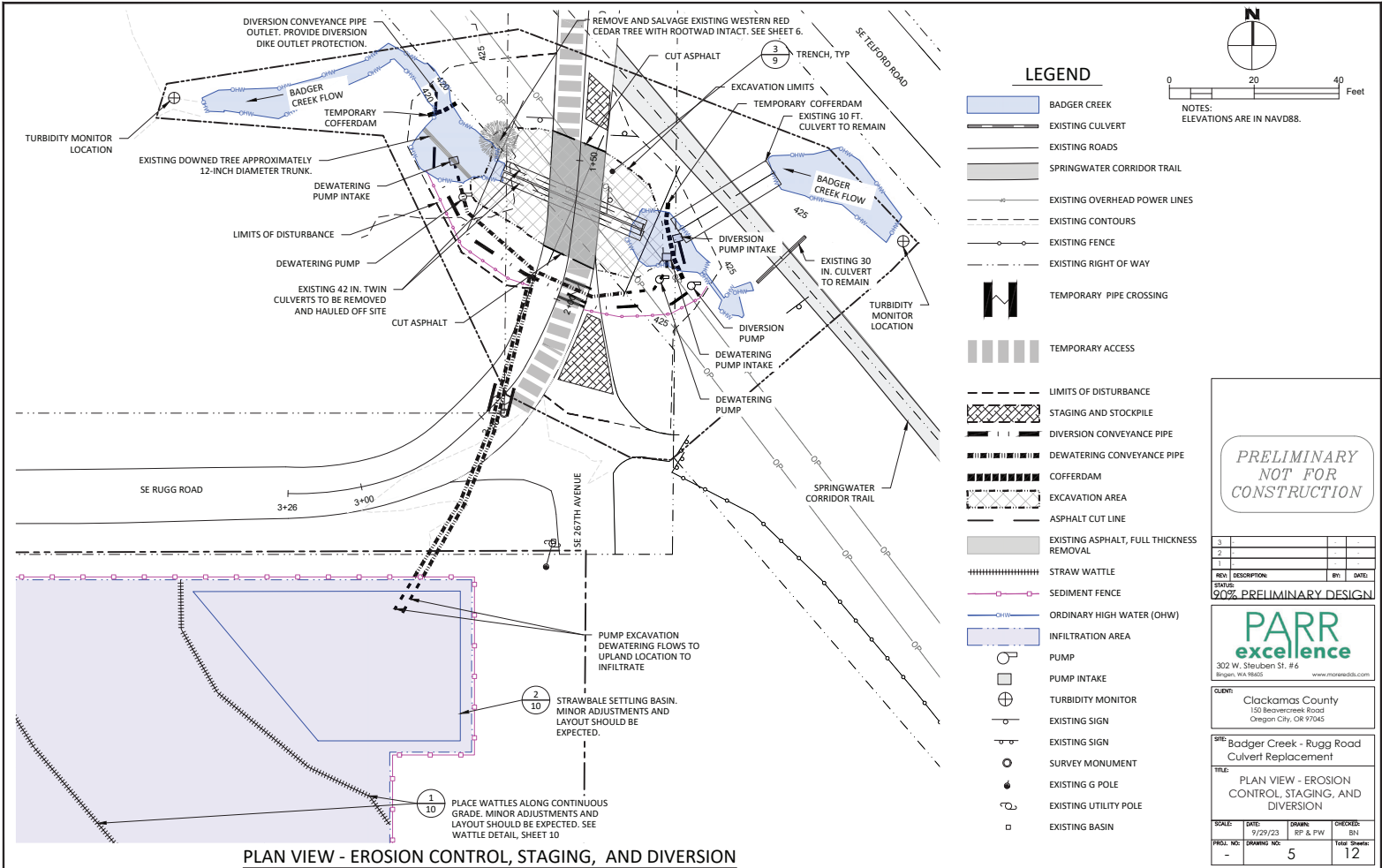
PARR
excellence
302 W. Steuben St. #6
Boring, WA 97143
www.parrusdb.com

CLIENT: Clackamas County
150 Beaver Creek Road
Oregon City, OR 97045

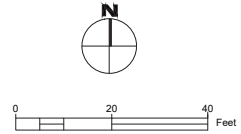
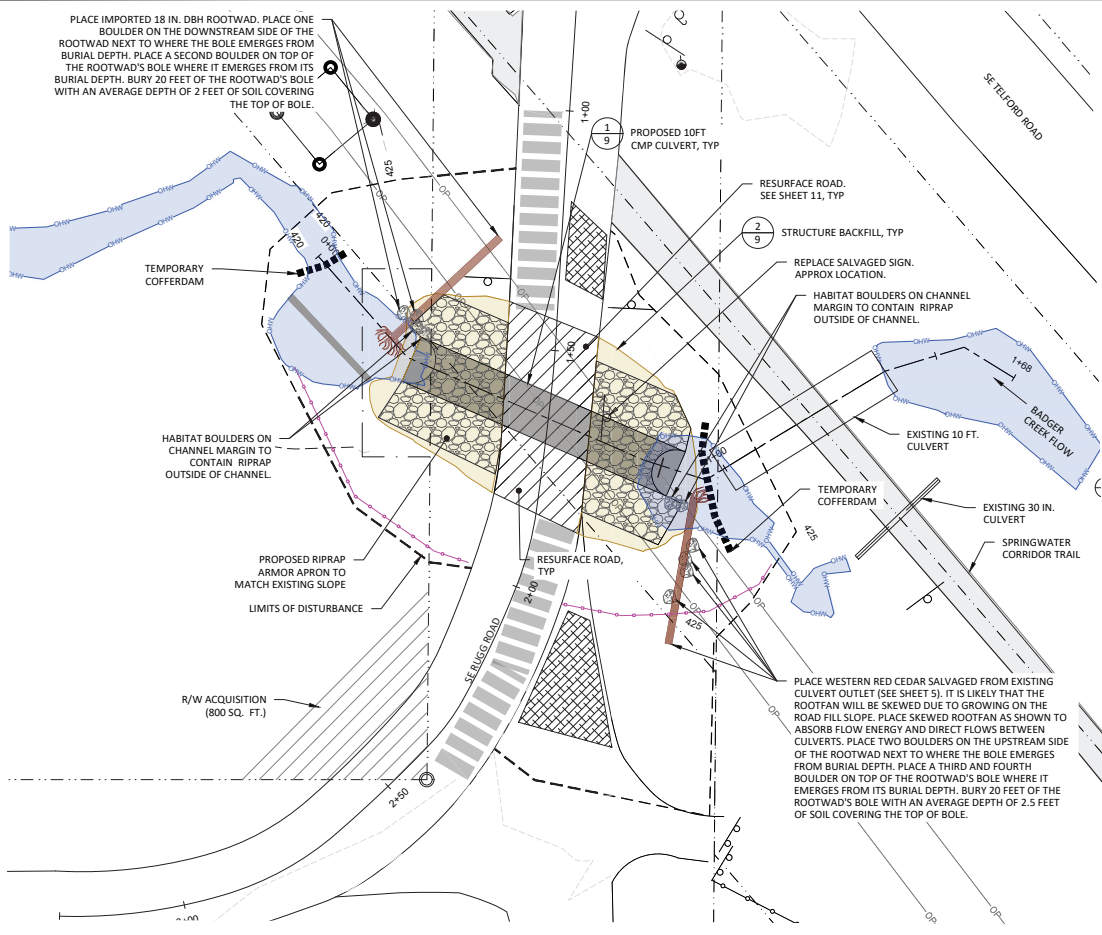
SITE: Badger Creek - Rugg Road
Culvert Replacement

TITLE: SITE MAP - EXISTING
CONDITIONS AND
DEWATERING

SCALE:	DATE:	DRAWN:	CHECKED:
	9/29/23	RP & PW	BN
PROJ. NO:	DRAWING NO:	TOTAL SHEETS:	
-	4	12	



PLACE IMPORTED 18 IN. DBH ROOTWAD. PLACE ONE BOULDER ON THE DOWNSTREAM SIDE OF THE ROOTWAD NEXT TO WHERE THE BOLE EMERGES FROM BURIAL DEPTH. PLACE A SECOND BOULDER ON TOP OF THE ROOTWAD'S BOLE WHERE IT EMERGES FROM ITS BURIAL DEPTH. BURY 20 FEET OF THE ROOTWAD'S BOLE WITH AN AVERAGE DEPTH OF 2 FEET OF SOIL COVERING THE TOP OF BOLE.



NOTES:
ELEVATIONS ARE IN NAVD88.

LEGEND

- BADGER CREEK
- EXISTING CULVERT
- EXISTING ROADS
- SPRINGWATER CORRIDOR TRAIL
- EXISTING OVERHEAD POWER LINES
- EXISTING CONTOURS
- EXISTING FENCE
- EXISTING RIGHT OF WAY
- PERMANENT EASEMENT
- PROPOSED CULVERT
- TEMPORARY ACCESS
- LIMITS OF DISTURBANCE
- STAGING AND STOCKPILE
- COFFERDAM
- ROAD RESURFACING
- PLACED SALVAGED MATERIAL
- RIPRAP ARMOR APRON
- SEDIMENT FENCE
- ORDINARY HIGH WATER (OHW)
- EXISTING SIGN
- EXISTING SIGN
- SURVEY MONUMENT
- EXISTING G POLE

*PRELIMINARY
NOT FOR
CONSTRUCTION*

3			
2			
1			

REV. DESCRIPTION: BY: DATE:
STATUS: 90% PRELIMINARY DESIGN

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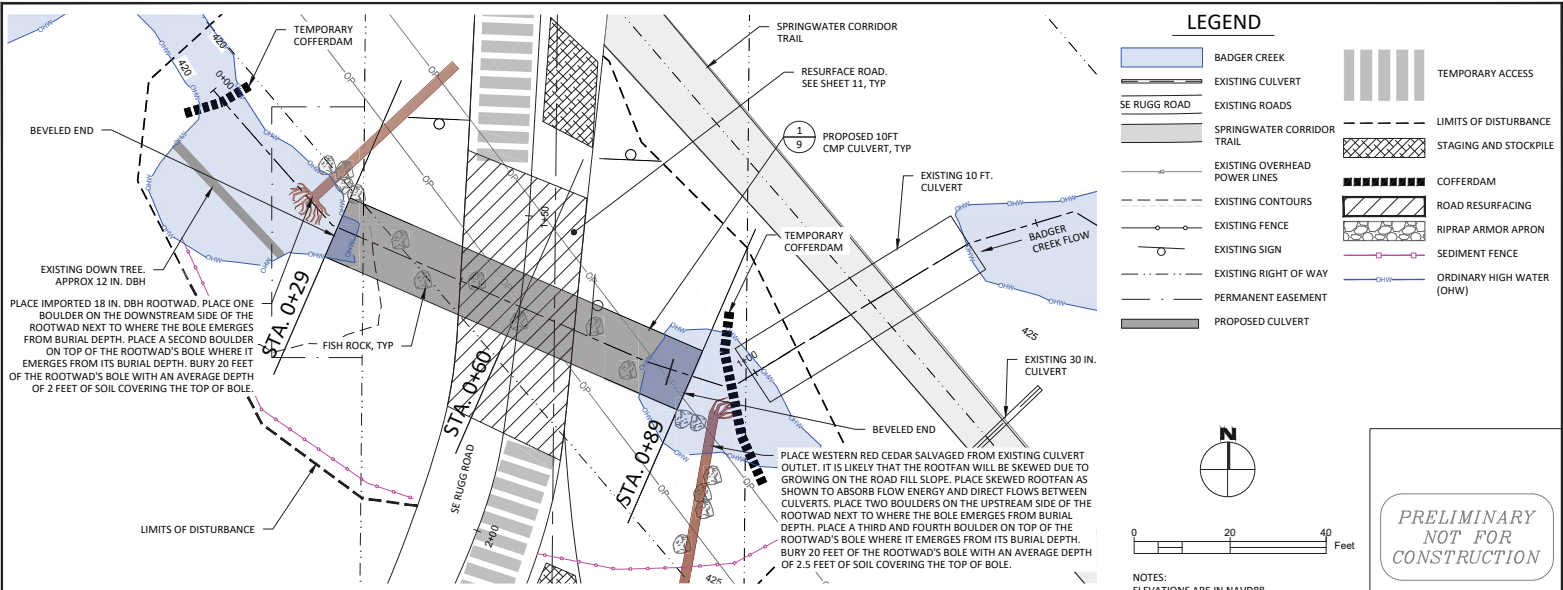
CLIENT: Clackamas County
150 Beaver Creek Road
Oregon City, OR 97045

SITE: Badger Creek - Rugg Road
Culvert Replacement

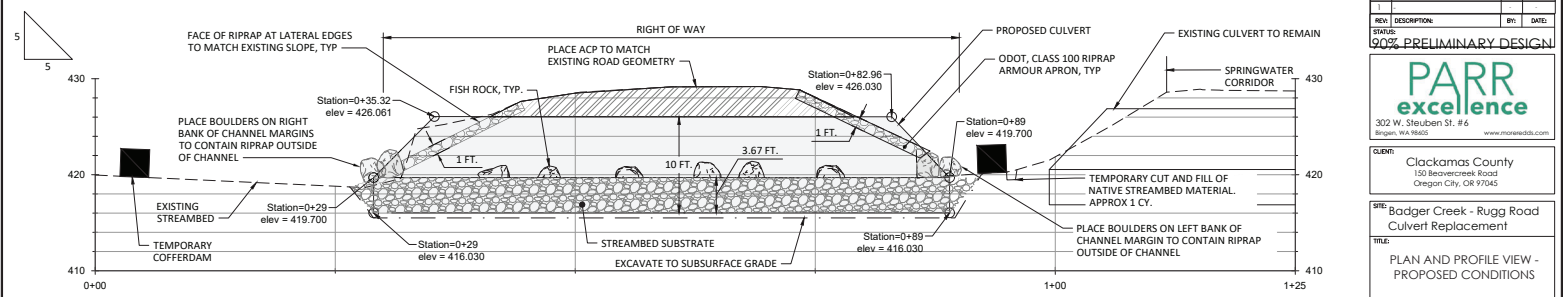
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CONDITIONS

SCALE:	DATE: 9/29/23	DRAWN: RP & PW	CHECKED: BN
PROJ. NO:	DRAWING NO: 6	TOTAL SHEETS: 12	

PLAN VIEW - PROPOSED CONDITIONS



PLAN VIEW - PROPOSED CONDITIONS



PROFILE VIEW - PROPOSED CONDITIONS

**PRELIMINARY
NOT FOR
CONSTRUCTION**

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REV. DESCRIPTION: BY: DATE:

STATUS: **90% PRELIMINARY DESIGN**

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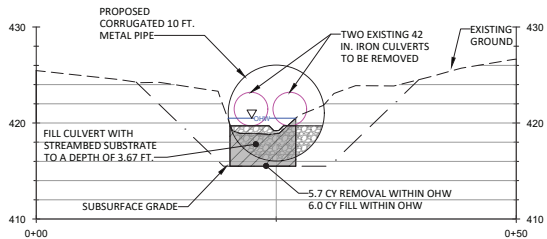
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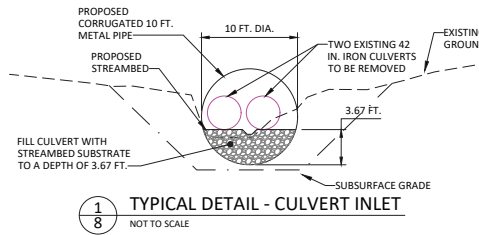
SITE: Badger Creek - Rugg Road
Culvert Replacement

TITLE: PLAN AND PROFILE VIEW -
PROPOSED CONDITIONS

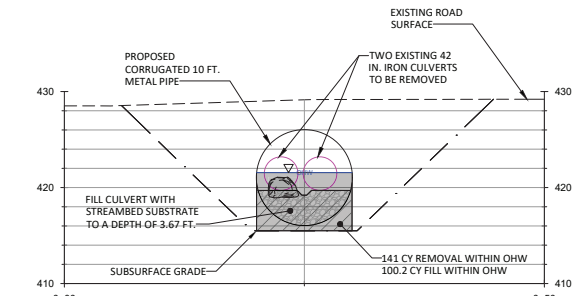
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	9/29/23	RP & PW	BN
PROJ. NO:	DRAWING NO:	TOTAL SHEETS:	
-	7	12	



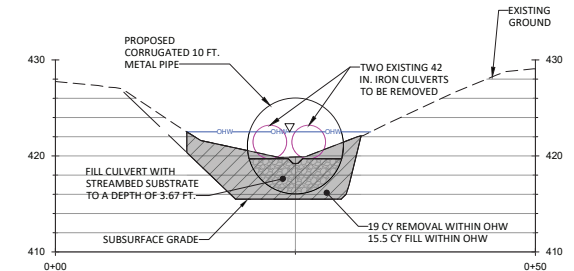
CROSS-SECTION STA. 0+29



1/8 TYPICAL DETAIL - CULVERT INLET
NOT TO SCALE



CROSS-SECTION STA. 0+60



CROSS-SECTION STA. 0+89

LEGEND

- CUT WITHIN ORDINARY HIGH WATER
- FILL WITHIN ORDINARY HIGH WATER

CUT VOLUME BELOW ORDINARY HIGH WATER				
START STA	END STA	LENGTH (FT)	AREA (SF)	VOL (CY)
0+24	0+29	5	25	5
0+31	0+89	60	65.5	134.5
0+89	0+94	5	78.5	14.5
			TOTAL	154

FILL VOLUME BELOW ORDINARY HIGH WATER							
START STA	END STA	LENGTH (FT)	AREA (SF)	VOLUME (CY)			TOTAL
				SOIL	STREAMBED	FISH ROCK	
0+24	0+29	5	28.5	0.5	5.0	0.0	5.5
0+29	0+89	60	41.5	35.1	56.5	0.7	92.3
0+89	0+94	5	72.5	8.7	5.0	0.0	13.7
			TOTAL	44.3	66.5	0.7	111.5

PRELIMINARY
NOT FOR
CONSTRUCTION

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1			
REV.	DESCRIPTION:	BY:	DATE:
STATUS: 90% PRELIMINARY DESIGN			

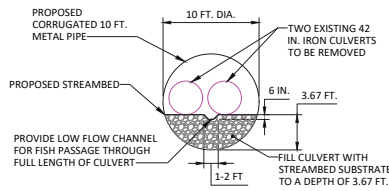
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302 W. Steubens St. #6
Eugene, OR 97405
www.parr-sdi.com

CLIENT: Clackamas County
150 Beaver Creek Road
Oregon City, OR 97045

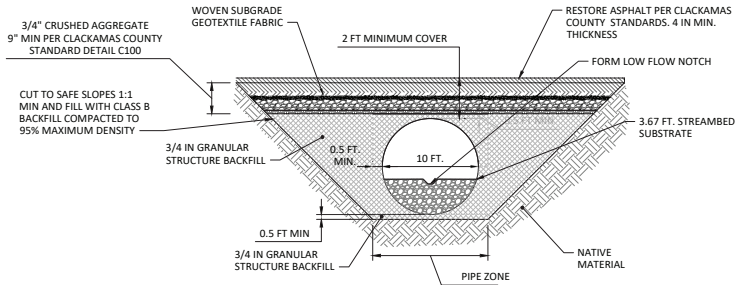
SITE: Badger Creek - Rugg Road
Culvert Replacement

TITLE: GRADING CROSS SECTION
VIEW AND TYPICAL DETAILS

SCALE:	DATE:	DRAWN:	CHECKED:
	9/29/23	RP & PW	BN
PROJ. NO:	DRAWING NO:	TOTAL SHEETS:	
-	8	12	



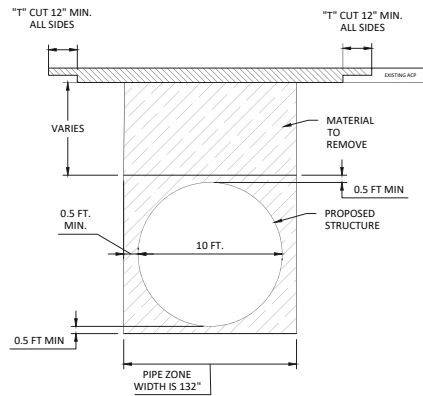
1
9 TYPICAL DETAIL - CULVERT INLET
NOT TO SCALE



NOTES:

1. BACKFILL IN PIPE ZONE SHALL BE PLACED IN MAXIMUM 6" LIFTS AND COMPACTED.
2. TRENCH BACKFILL SHALL BE PLACED IN MAXIMUM 12" LIFTS TO 95% DENSITY.
3. RESTORE ACP SECTION WITH 4" OF HMA/C LEVEL 2, PG 64-22, 1/2" DENSE GRADED AGGREGATE OR AN EQUAL THICKNESS OF THAT REMOVED WHICHEVER IS GREATER. ASPHALT CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF OREGON STANDARD SPECIFICATIONS SEC. 00744.40. ACP TO BE PLACED IN LIFTS BETWEEN 2" AND 3" IN THICKNESS.
4. ACP JOINTS/SEAMS SHALL BE SEALED WITH HOT LIQUID ASPHALT, OR APPROVED EQUAL, AND SANDED.
5. SEE SHEET 10 FOR STRUCTURE TRENCH DETAIL.

2
9 TYPICAL DETAIL - STRUCTURE EXCAVATION, BEDDING, AND BACKFILL
NOT TO SCALE



NOTES:

1. THE EXISTING ACP SHALL BE SAWCUT THROUGH ENTIRE ACP SECTION PRIOR TO EXCAVATION.
2. SAWCUT EDGES TO BE TACKED WITH HOT LIQUID ASPHALT.
3. WORK RESULTING IN IRREGULAR TRENCH WIDTHS OR INCIDENTAL DAMAGE TO THE ROADWAY SURFACE WILL REQUIRE ANOTHER SAWCUT AND SUBSEQUENT REMOVAL OF ACP. THE SAWCUT LINE SHALL BE APPROVED BY CLACKAMAS COUNTY PRIOR TO THE PERMANENT ACP REPAIR.
4. CLACKAMAS COUNTY SHALL BE NOTIFIED FOR INSPECTION.
5. SEE SHEET 9 FOR STRUCTURE EXCAVATION, BEDDING, AND BACKFILL.

3
9 TYPICAL DETAIL - STRUCTURE TRENCH
NOT TO SCALE

PRELIMINARY
NOT FOR
CONSTRUCTION

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REV.	DESCRIPTION:	BY:	DATE:

STATUS:
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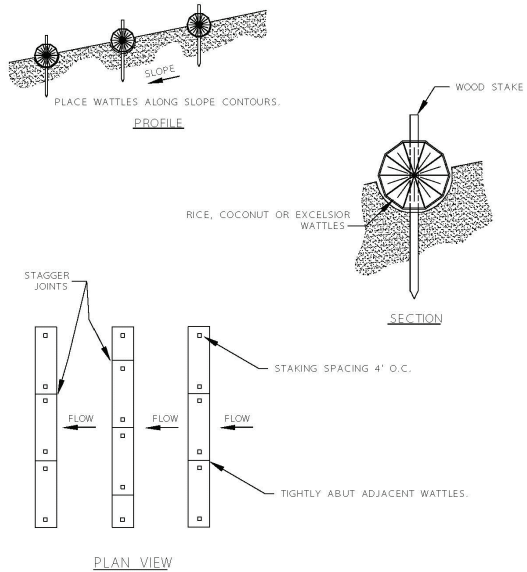
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CLIENT:
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150 Beaver Creek Road
Oregon City, OR 97045

SITE:
Badger Creek - Rugg Road
Culvert Replacement

TITLE:
TYPICAL DETAILS

SCALE:	DATE:	DRAWN:	CHECKED:
-	9/29/23	RP & PW	BN
PROJ. NO:	DRAWING NO:	TOTAL SHEETS:	
-	9	12	



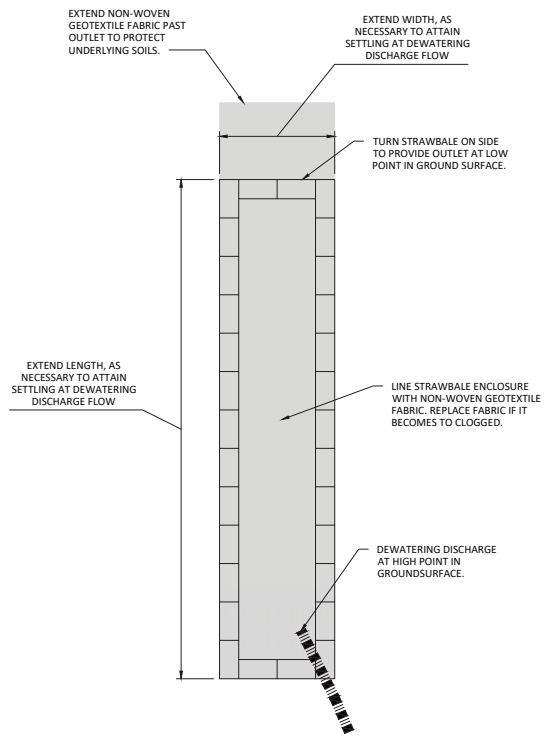
- NOTES:
- STAKING SPECIFICATIONS:
 - 1"x2" WOODEN STAKES
 - ADDITIONAL STAKES MAY BE INSTALLED ON DOWNHILL SIDE OF WATTLES, ON STEEP SLOPE OR HIGHLY EROSION SOILS.
 - SPACING IN ACCORDANCE WITH DETAIL 940.

WATTLES

DETAIL DRAWING 4-27

REVISED 01-09

1 TYPICAL DETAIL - STRAW WATTLES
NOT TO SCALE



2 TYPICAL DETAIL - STRAWBALE SETTLING BASIN
NOT TO SCALE

PRELIMINARY
NOT FOR
CONSTRUCTION

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REV.	DESCRIPTION:	BY:	DATE:

STATUS: 90% PRELIMINARY DESIGN

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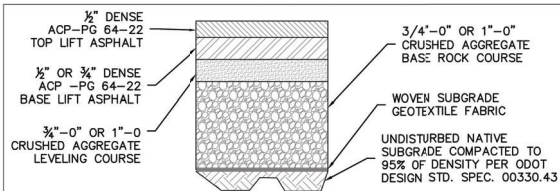
302 W. Steubens St. #6
Eugene, OR 97405
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CLIENT: Clackamas County
150 Beaver Creek Road
Oregon City, OR 97045

SITE: Badger Creek - Rugg Road
Culvert Replacement

TITLE: TYPICAL DETAILS

SCALE:	DATE:	DRAWN:	CHECKED:
	9/29/23	RP & PW	BN
PROJ. NO:	DRAWING NO:	TOTAL SHEETS:	
-	10	12	



ASPHALTIC CONCRETE STANDARD STRUCTURAL SECTION

FUNCTIONAL CLASSIFICATION	LEVEL ACP	ACP DEPTH (IN.)	AGGREGATE LEVELING COURSE DEPTH (IN.)	AGGREGATE BASE COURSE DEPTH (IN.)
LOCAL	2	4	3	6
CONNECTOR	2	4	3	6
COLLECTOR	3	6	4	10
LOCAL CONNECTOR, OR COLLECTOR SERVING COMMERCIAL	3	7-1/2	4	10
MINOR/MAJOR ARTERIALS	3	7-1/2	4	10

NOTES

- THE STREET SECTIONS ARE A MINIMUM. IF THE EXISTING STREET SECTION IS GREATER THAN THE MINIMUM REQUIRED, THE PROPOSED STREET SECTION SHALL BE CONSTRUCTED IN KIND. THE ENGINEER OF RECORD IS RESPONSIBLE FOR AN ADEQUATE STRUCTURAL SECTION.
- FOR IMPROVEMENTS TO EXISTING STREETS, SAW CUT LINE SHALL BE APPROVED BY COUNTY ENGINEERING STAFF PRIOR TO COMMENCEMENT OF WORK, AND MAY BE REQUIRED TO EXCEED CENTERLINE. THE SAWCUT LOCATION SHALL NOT BE LOCATED IN A WHEEL TRACK.
- ASPHALTIC CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF OREGON STANDARD SPECIFICATIONS SEC. 00744.40. ACP TO BE PLACED IN LIFTS BETWEEN 2 INCHES AND 3 INCHES IN THICKNESS.
- WITHIN A DEVELOPMENT, THE FINAL LIFT OF ASPHALTIC CONCRETE SHALL NOT BE PLACED ON LOCAL STREETS UNTIL ALL UTILITIES WITHIN THE ROADWAY HAVE BEEN ACCEPTED AND ALL CURB REPAIRS COMPLETED.
- MATERIAL AND INSTALLATION SHALL CONFORM TO CURRENT OREGON STANDARD SPECIFICATIONS AND MANUFACTURER'S RECOMMENDATIONS.
- THE WIDTH AND EXTENT OF THE IMPROVEMENT SHALL BE DETERMINED BY ENGINEERING ACCORDING TO STREET CLASSIFICATION.
- CRUSHED AGGREGATE USED FOR BASE ROCK AND LEVELING COURSE SHALL CONFORM TO THE REQUIREMENTS OF OREGON STANDARD SPECIFICATIONS SEC. 02630.

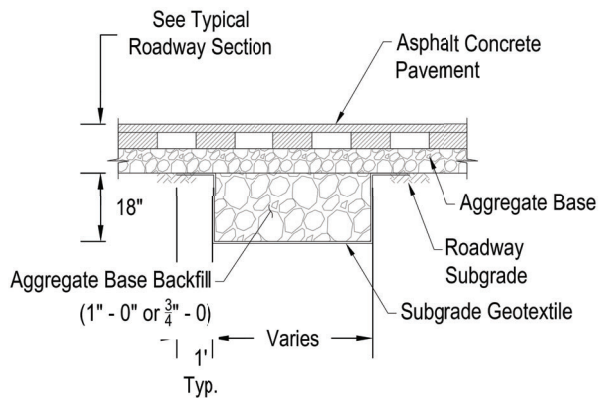
REVISION	DATE	BY	DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT	APPROVAL DATE: 6/1/2020	SCALE: N.T.S.	STANDARD DRAWING
REVISED	11/19/18	SP				
REVISED	12/19/18	SP				
REVISED	3/20/19	SP				



150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

STREET STRUCTURAL SECTION C100

- NOTE:
- Locate As Directed By The Engineer.



18 INCH SUBGRADE STABILIZATION
Not to Scale

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CONSTRUCTION

3			
2			
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Oregon City, OR 97045

SITE: Badger Creek - Rugg Road
Culvert Replacement

TITLE: TYPICAL DETAILS

SCALE:	DATE:	DRAWN:	CHECKED:
-	9/29/23	RP & PW	BN
FIG. NO:	DRAWING NO.:	TOTAL SHEETS:	
-	11	12	

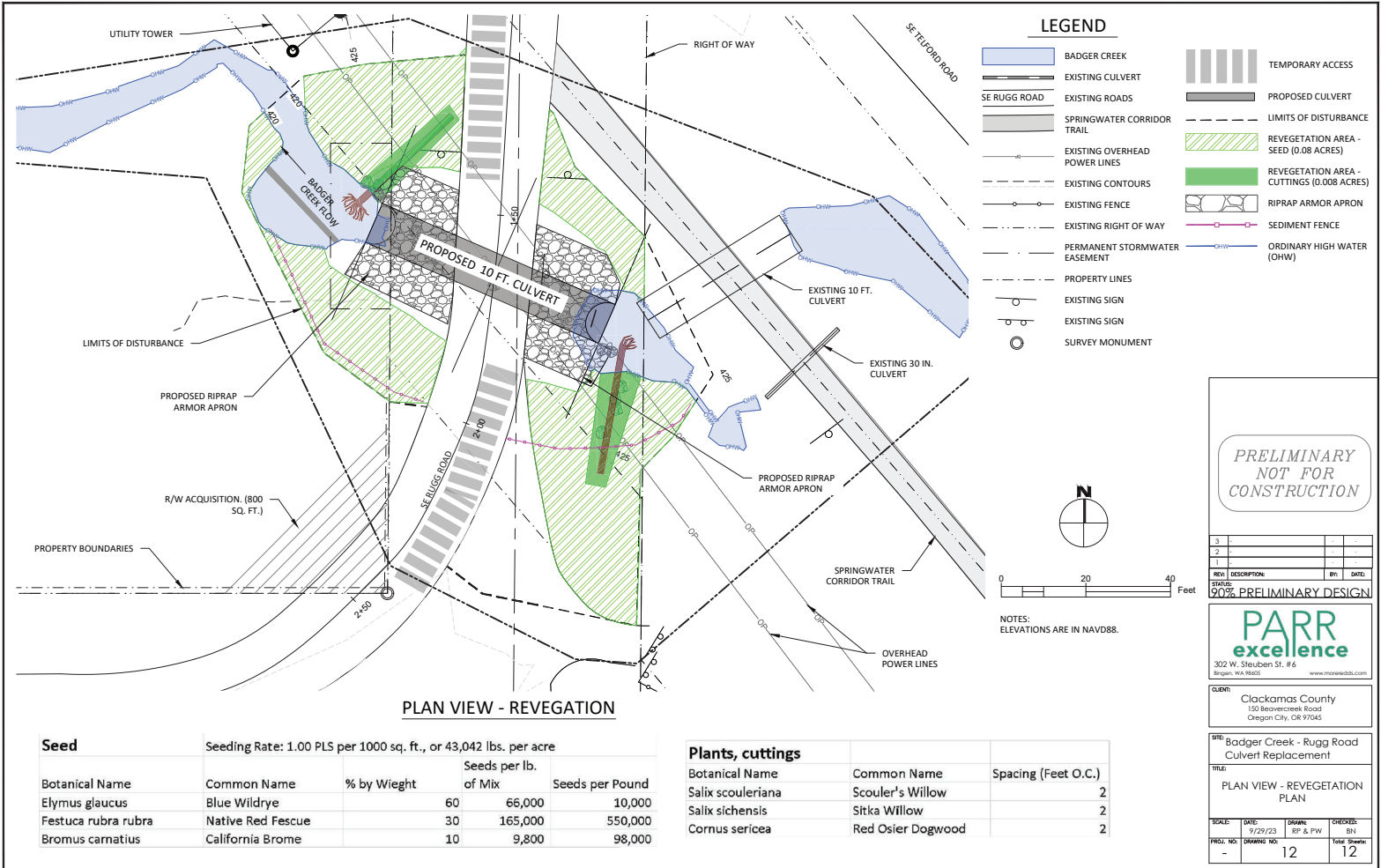


Exhibit B

Clackamas Partnership Native Fish Population Habitat Resilience: Narrative (Update: 03/27/2023)

Project #10: Badger Creek/Rugg Road Fish Passage

Location: Lat 45.4601, Long -122.3882 at the crossing of Badger Creek and Rugg Rd in Boring, OR.

Impact Area: 0.7 stream miles fully opened to fish passage

Project Cost: NOAA request: \$375,818

Project Description: Badger Creek is a cold water tributary of Johnson Creek in Boring, Oregon. Cold water tributaries are significantly important to salmon, especially with climate change impacts continuing to increase. Since 2016, the Council has conducted eDNA testing in Badger Creek at this location and found the presence of steelhead/rainbow trout, coho salmon, and Pacific lamprey. The two culverts crossing Rugg Rd are a partial fish passage barrier and are in very poor condition. Resolving this fish passage barrier will fully open 0.7 stream miles up to another culvert that Johnson Creek Watershed Council is resolving by fall of 2022, which will open an additional 0.7 miles of stream. In addition to fish passage concerns, Rugg Rd is an arterial road to many residents in this area and these culverts are so degraded they are at risk of failing. If this road was to collapse due to culvert failure, access would be limited to many residential homes. We would like to replace these degraded culverts with a large culvert to fully open salmonid spawning habitat and avoid an access-limiting road failure to many residents.

Timeline and Key Milestones: This project is currently in the conceptual design stage. The following milestones will include:

- 30% designs completed by Jan 2023
- Permit-ready designs completed by Apr, 2024
- Permits obtained by Oct 2024
- Final designs completed by Jan 2025
- Construction during the in-water-work-window of July 15 - August 31, 2025
- Invasive plant treatments and native plantings will occur the fall and spring after construction. Additional treatments and plantings will occur in the spring prior to construction as needed.

Exhibit C

Clackamas Partnership Native Fish Population Habitat Resilience: Budget Narrative (Update: July 7, 2023)

#10 Badger Creek / Rugg Road Fish Passage (Johnson Creek Watershed Council project)

There is only one contract for this project: the construction contract. This will include mobilization, excavation of culvert removal, new larger culvert, environmental controls, stream isolation, revegetation. \$321,480. This project will be implemented in 2025, so this entire amount will be incurred between 6/1/25 and 5/31/26.

	Grant Year 1	Grant Year 2	Grant Year 3
Engineering			
Construction			\$321,480

Total contracts for project #10: \$321,480