



INVITATION TO BID #2017-17
Carli Creek Enhancement and Water Quality Project
ADDENDUM NUMBER 3
June 7, 2017

On May 11, 2017, Clackamas County ("County") on behalf of Clackamas Service District No. 1 ("CCSD#1") published Invitation to Bid #2017-17 ("BID") and on May 15, 2017 published Addendum #1, and on June 01, 2017 published Addendum #2. The County has found that it is in its interest to amend the BID through the issuance of this Addendum #3. Except as expressly amended below, all other terms and conditions of the original BID and subsequent Addenda shall remain unchanged.

1. Add to Special Provisions Section 00235.02:

- a. Clean fill deposited on the Agency provided site may not include concrete, asphalt and brick. ODOT 2015 Standard Sections 330.12 and 330.13 define borrow material and selected general backfill material which describe what is acceptable to deposit on the site.
- b. See ODOT 2015 Standard sections 330.42 and 330.43 for placement requirements associated with this location.
- c. A grading plan and grading permit will be needed for the placement of the 20,000 cubic yards of fill on the Capps compost site per County Excavation and Grading Ordinance Section 9.03 (<http://www.clackamas.us/code/>).

2. Add the following to Section 00330.17 Quality Control (from ODOT 2015 Standard Secitons 00165.35 which is not part of our standard specifications):

Nonfield-Tested Materials – The Contractor shall furnish Materials meeting Specifications, along with all Materials Conformance and Quality Compliance Documents.

(a) Test Results Certificate - The Certificate shall:

- Be from the manufacturer verifying that the Material furnished has been sampled and tested and the test results meet the Specifications.
- Include, or be accompanied by, a copy of the specified test results (ODOT, AASHTO, ASTM, UL or other).
- Identify the testing agency and the representative responsible for the test results.
- Permit positive determination that Material delivered to the Project is the same Material covered by the test results.
- Be delivered to the Engineer with the shipment of the material.

(b) Quality Compliance Certificate - The Certificate from the manufacturer shall:

- Verify that the Material meets the Specifications, and identify by number the specified test methods used, (ODOT, AASHTO, ASTM, UL, or other)
- Permit positive determination that Material delivered to the Project is the same Material covered by the certificate,
- Be delivered to the Engineer with the shipment of the Material, or be an identification plate or mark, decal, sticker, label, or tag attached to the container or Material,

(c) **Equipment List and Drawings** - These consist of lists of proposed Equipment and Materials, such as:

- Shop drawings
- Material lists
- Equipment lists
- Catalog description sheets
- Manufacturer's brochures

Submit these lists to the Engineer for review of conformance with the Specifications.

3. Submittal List has been added – Please see attached *Carli Creek Enhancement and Water Quality Design Project- Submittal List* dated June 1, 2017.

4. Piezometer readings from geotechnical engineer have been updated (See Attachment 1, dated June 6, 2017, attached and hereby included by reference).

5. Delete Special Provision Section 00202.04 “Milestones” and Special Provision Section 00202.03 “Completion Times”. Please note Key Dates listed in the Public Improvement Contract.

6. Remove and replace the Bid Tab with the attached Bid Tab titled *Addendum #3 Bid/Fee Sheet*. (Note the following updated quantities):

- a. Item No. 11 Removal of Curbs: 810 L.F
- b. Item No. 13 Asphalt Pavement Sawcutting: 1,018 L.F.
- c. Item No. 38 Trench Resurfacing: 1,200 S.Y.
- d. Item No. 40 Concrete Curb, Standard Vertical Curb: 810 L.F.
- e. Item No. 51 – Soil Testing: Removed from Bid

7. Add the following to the Supplemental General Conditions:

The following sections are added to Section D.2- Delays:

D.2.4 DAMAGES FOR DELAY – LIQUIDATED DAMAGES

(a) It is imperative that the Work in this Contract reach Substantial Completion by June 30, 2019, and as further required in the Plans and Specifications and Section 5 of the Contract to ensure Clackamas Service District No. 1 and Clackamas County Development Agency can meet the mitigation wetland permit requirements. The Contractor represents and agrees that the Substantial Completion date is reasonable, that it can meet the Substantial Completion date, and it has taken into account in its Offer the requirements of the Contract Documents, the location, the time allowed for the Work, local conditions, weather, availability of materials, equipment, and labor, and any other factor which may affect performance of the Work.

(b) If the Contractor fails to achieve Substantial Completion as specified above, then the Contractor and Owner agree that it would be extremely difficult to ascertain the

damages incurred by Owner for the Contractor's failure. Therefore, Owner and the Contractor agree that in lieu of actual damages for delay, the Contractor shall reimburse Owner a stipulated sum of nine hundred dollars (\$900.00) per day for each and every calendar day of delay until Substantial Completion. The Contractor further agrees the stipulated sum is not a penalty.

Likewise, if the Work does not reach Final Completion by July 30, 2019, as identified in Section 4 of the Contract, then the Contractor shall owe to the Owner, not as a penalty but as liquidated damages, the sum of one thousand two hundred and fifty dollars (\$1,250.00) per day for each and every calendar day of delay until Final Completion

End of Addendum #3

Carli Creek Enhancement and Water Quality Design Project - Submittal List

Herrera Project Number 14-05930-000















June 1, 2017

| Section | ODOT 2015/Special Provisions | Submittal | Requirements | Schedule |
|----------|--|--|--|--|
| 00202.01 | Special Provisions | Schedule of Working Hours | Mobilization, timing of work, weather-dependent work, contingency days, milestones, substantial completion, punch list | Must be approved prior to mobilization. |
| 00225.05 | Special Provisions | Traffic Control Plan | Include specific Traffic Control Measures (TCMs) per Section 00225.01 and quantities and duration of all TCMs. Describe any temporary lane closures or access disruptions. | 5 calendar days before pre-construction conference |
| 00245.00 | Special provisions 00245.03 | Temporary Water Management Plan | Contractor's TWMP shall include at least the following information: <ul style="list-style-type: none"> • The sequence and schedule for dewatering and re-watering. • How the work area will be isolated from the active stream flow including upstream flow and downstream backwater. • How the stream flow will be routed and conveyed around the isolated work area. • How high storm flows will be conveyed through the site, should they occur. • How the isolated work area will be de-watered. • How any pumped water will be treated before it is discharged downstream. • How energy dissipation will be provided at all bypass flow outlet locations. • Discuss water management for all construction stages. • A list of on-site backup materials and equipment. • Calculations of water withdrawal pump capacity (if part of the plan). • Calculations of gravity bypass pipe capacity (if part of the plan). • Description of proposed means to anchor bypass pipe in place (if part of the plan). | 10 Calendar Days before beginning work in regulated work areas, submit stamped working drawings of a Contractor developed TWMP |
| 00280.04 | Special Provisions 00280.04 | Erosion and Sediment Control Plan | Contractor shall develop an Erosion and Sediment Control Plan (ESCP) and submit to Agency as required for the NPDES 1200-CA permit. Update Erosion and Sediment Control Plans and Details included in the Drawings based on Contractor's proposed construction sequence and means and methods of construction. Submit the following: <ul style="list-style-type: none"> • Proposed ESCP showing all ESC work and quantities of all work. • Implementation schedules for the ESCP based on each phase of the Contractor's work. | 10 calendar days before pre-construction conference |
| 00280.06 | ODOT 00280.06 | Qualifications of Erosion and Sediment Control Manager (may be included in ESCP) | Conform to specs | 10 calendar days before pre-construction conference |
| 00280.16 | ODOT 00280.16 | Sediment Fence | "Level B" documentation per 02320.10(c) for geotextile | |
| 00280.16 | ODOT 00280.16(d) | Inlet Protection, Type 3 | Provide documentation that inlet protection device is on ODOT's QPL | |
| 00280.16 | ODOT 00280.16(a) | Aggregate for Construction Entrance | Clean, durable, open graded angular aggregate sized between 4 inches and 1 inch with less than 5 percent by weight passing the No. 4 sieve. | |
| 00280.16 | ODOT 00280.16(a) | Geotextile for Construction entrance | "Level B" documentation per 2320.10(c) | |
| 00280.16 | ODOT 00280.16(j) | Floating turbidity barrier | Product information/shop drawings for: Turbidity curtain, bulk bags, pit run (to fill bulk bags), handles | |
| 00280.30 | Special Provisions 00280.30 | Erosion and Sediment Control Manager | Provide qualifications for Certified Erosion and Sediment Control Lead (CESCL). | 10 calendar days before pre-construction conference |
| 00280.41 | ODOT 00280.41 | High Vis. Fence | Product information for high vis. Fence | |
| 00280.41 | ODOT 00280.41 (c) | Stockpile Cover | Product information for stockpile cover materials/methods | |
| 00290.30 | Special provisions 00290.30(a)(8). | Turbidity Monitoring Daily log | Daily log form | Submit daily log form to Engineer for approval |
| 00290.30 | Special provisions 00290.30(a)(8). | Turbidity Monitoring Daily log | Document all turbidity monitoring results including date, time, and location on a daily log form approved by the Agency. | Maintain daily logs; submit to Engineer weekly when working in regulated work areas |
| 00298.03 | Special Provisions 00298.03 | Well Preservation and Abandonment | Provide the Engineer with all Permit applications, permit fees, start cards, well reports, bonds, and letters of credit required by the Oregon Water Resources Department. | Within 48 hours of completing the work |
| 00305.00 | Special Provisions 00305.00 | Construction Survey Work | Provide survey drawing files and the Civil 3D surface to the Engineer. Notification, control, survey crew qualifications, and preservation of markers and monuments shall conform with the current edition on the date of Advertisement, of the ODOT "Construction Surveying Manual for Contractors". This manual is available on the web at: http://www.oregon.gov/ODOT/HWY/GEOMETRONICS/Pages/documents.aspx | |
| 00330.06 | Special provisions 00330.06 | Soil Management Plan | The Soils Management Plan shall include the following: <ul style="list-style-type: none"> • A map verifying locations, types, depths, and estimated quantities of soils for salvage • A map indicating locations for proposed stockpiling, methods and locations for characterization per Section 00330.05 • Schedule with proposed sequence of construction • Qualifications of Quality Control Personnel who will be performing soil density testing and fines testing • Contingency measures for rain days • Description of handling activities that will ensure salvaged soils maintain accordance with the properties in the respective sections of these Special Provisions: | 20 days prior to start of excavation |
| 00330.18 | Special Provisions 00330.18(a) | Segregation and Placement of Salvage Low Permeability Soil Lining Materials | Submit test results for fines content testing (ASTM D1440) to the Engineer and obtain written approval. | Prior to placement of fill |
| 00405.00 | ODOT 00405.40 and Special Provisions 00405.41(f) | Trench Excavation, Bedding and Backfill | 1. 00405.40 Qualifications for Quality Control Personnel | |
| 00405.00 | ODOT 00405.40 and Special Provisions 00405.41(f) | Trench Excavation, Bedding and Backfill | 00405.41(f) Trench protection plan. Submit within 30 days of the effective notice to proceed. a. Design documents, including detailed written description of excavation support system to be used, including materials, required equipment, work sequence, and work schedule. d. Design drawings and calculations prepared, stamped, dated and signed by a licensed professional engineer. Calculations shall demonstrate the integrity of the proposed support system to withstand ground, groundwater, and construction loads. Drawings shall include dimensions, minimum section properties, locations of existing structures, utilities, right-of-way easements. i. Methods and procedures for installing and removing trench protection system j. Shop drawings and manufacturer literature for major equipment and installation systems l. Confirmation of trench protection with dewatering plan. | |
| 00405.00 | Special Provisions 00405.43(c) | Dewatering Plan | 1. 00405.43 Dewatering Plan. Contractor shall prepare a dewatering plan that is stamped and signed by a licensed professional engineer. Submit within 30 calendar days of the effective notice to proceed. Include: a. Qualifications of well driller and dewatering system designer b. Drawings and design calculations for dewatering system c. Coordination with trench protection designer d. Evaluation of need for settlement monitoring and settlement monitoring design, if appropriate e. Number, location, size, and depth of all dewatering wells and other dewatering system components f. Capacities of pumps and standby equipment g. Detailed description of the dewatering schedule, sequence, operation, maintenance, and abandonment procedures h. Estimated dewatering system discharge flow rates i. Proposed method of dewatering water treatment and disposal. If storage and disposal at the Site are proposed, provide design for all conveyance, energy dissipation, sediment control, and other measures to ensure that dewatering treatment and disposal will be consistent with the environmental protection requirements of Section 00290. | |
| 00405.00 | ODOT 00405.00 | Trench and Backfill Materials | 1. Source and product information for trench foundation, bedding, pipe zone material, and trench backfill. Include technical data, gradation data, and mix designs if applicable. a. Aggregates b. Crushed gravels c. Granular backfills d. Controlled density fill including mix designs e. Other applicable materials 1. Testing information materials including: a. Granular backfill b. Controlled density fill c. Other applicable materials | |

| Section | ODOT 2015/Special Provisions | Submittal | Requirements | Schedule |
|----------|---|--|--|---|
| 00445.11 | Special provisions 00445.11 | Pipe layout drawings for diversion storm line | | |
| 00445.11 | Special provisions 00445.11 | Product data sheets for selected diversion storm line pipe and fitting material. | Polyvinyl Chloride Pipe – AWWA C905, minimum DR 41, in conformance with Section 02415.50 Reinforced Concrete Pipe - In conformance with Section 02410.10 Polypropylene Pipe - ASTM F2736 in conformance with Section 02415.40 Corrugated Polyethylene AASHTO M294, Type S, in conformance with Section 02415.40 | |
| 00445.11 | Special provisions 00445.11 | Tracer wire | Product information for tracer wire | |
| 00470 | ODOT 00470.40(b) | Pipe Connections | Product information for flexible pipe connections | |
| 00470 | ODOT and Special Provisions 00470 | Manholes | Shop drawings: a. Indicate manhole locations and elevations and sizes and elevations of penetrations. b. Indicate manhole lid orientation. | |
| 00470 | ODOT and Special Provisions 00470 | Catch Basins | Shop drawings and product information for precast catch basin | |
| 00470.11 | ODOT 00470.11 | Precast Manhole Base | 1. Shop Drawings and Product Data: a. Precast base b. Crushed rock c. Reinforcing bars, including placement | |
| 00470.30 | Special Provisions 00470.30 | Diversion Manhole- Weirwalls | 1. Product information for weirwalls 2. Shop drawings for weirwalls including elevations | |
| 00480 | ODOT 00480 | Vertical Curb- Type 'C' | Product information | |
| 00744 | ODOT 00744 | Hot Mix Asphalt Concrete | Test results and product information for Level 3 ACP for trench resurfacing | |
| 00744 | ODOT 00744.10 | Aggregates | Test results and product information for dense graded aggregate for trench resurfacing | |
| 00745 | ODOT 00730 | Emulsified Asphalt Tack Coat | Product information | |
| 01010 | Special Provisions 01010.03 | Water Quality Structure- Inline CDS unit | Provide SD CDS-D5 96" Submit the following according to the General Conditions: Unstamped working drawings that include the following information: • All design and construction details. • Structure plan view with dimensions. • Typical section with dimensions. • All appurtenances labeled. • Installation and pipe connection details. • Peak flow bypass details. Manufacturer prepared product brochures. Design calculations showing the water quality design flow rate and online peak flow rate requirements for water quality structures | |
| 01030.10 | Special Provisions 01030.10 | Seeding | Provide material submittals and obtain approval for the following: • Fertilizer • Seed • Tackifier • Mulch • Pesticides | 30 days prior to use |
| 01030.13 | ODOT 01030.13(g) and Special Provisions 01030.13(f) | Seeding | Submit Seed List, Source, PLS data | 30 days prior to seeding |
| 01030.14 | ODOT and Special Provisions 01030.14 | Fertilizer | Fertilizer and soil amendment plan: 1. Submit a minimum of 30 days prior to commencing soil preparation. 2. Schedule for fertilizing and soil amendment. 3. Equipment. 4. Fertilizing and soil amendment techniques. 5. Letters of certification from manufacturers for materials including fertilizer and soil amendments. 6. Name and address of suppliers of fertilizer and soil amendments. 7. Material Safety Data Sheets. | 30 days prior to seeding |
| 01030.15 | Special Provisions 01030.15(a) | Mulch for hydroseeding | Submit product information indicating that water holding capacity, functional longevity, biodegradability, and other requirements conform to specifications. | 30 days prior to seeding |
| 01030.16 | Special Provisions 01030.16 | Tackifier | Furnish a commercial quality tackifier containing no agent toxic to plant life. Furnish a dry powder tackifier meeting the requirements in 01030.16(b). | 30 days prior to seeding |
| 01030.17 | Special Provisions 01030.17 | Pesticide | Submit any proposed pesticides or product substitutions and receive approval before using. Submit a copy of the manufacturer's federal registered label and, if requested, a Material Safety Data Sheet. | 10 days before preconstruction conference |
| 01030.42 | Special Provisions 01030.42(a) | Weed Control Work Plan | Submit a WCWP that addresses the following general construction measures from SLOPES V Restoration: • Clearly flag all buffer areas and no application zones prior to application. • What measures will be used to limit vegetation removal and soil disturbance within the riparian zone during non-herbicide methods • Describe herbicide applicator qualifications, training and procedures that will be used to ensure that herbicide applicators will comply with all label instructions; methods to specifically target particular plant species; and strategies to avoid site impacts. • Include herbicide transportation and safety plan to reduce the likelihood of spills or misapplication, to take remedial actions in the event of spills, and to fully report the event. • The only herbicides acceptable for use on this project are included on the Drawings. In addition, submit the following information within the WCWP: • Name and contact information for the approved weed control coordinator. • Botanical and common name of each species of weed to be removed. • Additional methods, not identified within the Drawings, for continuing control of each weed species listed • Schedule of weed control measures. • Request to use wheeled or tracked construction equipment in sensitive areas. If changes of the WCWP are necessary, resubmit a revised WCWP for approval before proceeding. | 10 days before preconstruction conference |
| 01040.03 | ODOT 01040.03 | Pesticide Applicators License and Chemical Registration | Furnish evidence that each applicator is licensed for the specific class of chemical being applied. Also, furnish evidence that any chemical is registered for the proposed use by the Oregon Department of Agriculture according to ORS Chapters 452, 561, 570, and 634. | |
| 01040.04 | Special Provisions and ODOT 01040.04 | Planting- General | Provide material submittals and obtain approval prior to use for the following: • Pesticides • Fertilizer • Amendments • Wood chip mulch • Plant materials | |
| 01040.16 | ODOT 01040.16 | Soil Amendments | Product information. Furnish manufacturer or supplier quality compliance certification according to 00165.35. | 30 days prior to planting |
| 01040.19 | 1040.19(g) | Contract Grown Plant Materials | Include a contract growing agreement between the Contractor and a nursery supplier in order to ensure plant availability or suitability. Submit a Contract Growing Plan that describes plant material species, stock type, size at delivery, growth environment, name and location of nursery, and the source for each plant (native seed, indigenous cuttings, or commercially grown). Submit this information as part of the PWP. | 30 days prior to planting (This will not be enough time to get correct plants if submittal shows incorrect stock types) |
| 01040.19 | ODOT 01040.19(e) | Plants- Availability | Furnish a list of nursery sources for all specified plants. Verify, by this list, that all specified plant material has been located and will be available for use on the Project. If applicable, see 01040.19(g) for alternate requirements. | within 90 calendar days after execution of the Contract |
| 01040.20 | ODOT and Special Provisions 01040.20 | Plants- Mulch | Product information including testing results. | 30 days prior to planting |

| Section | ODOT 2015/Special Provisions | Submittal | Requirements | Schedule |
|-------------|---|---|---|---|
| 01091.03 | Special Provisions 01091.03 | Stream Construction Plan | Submit stamped working drawings of a Contractor-developed Stream Construction Plan (SCP). The Plan shall meet environmental protection and permit requirements described in Section 00290. Include at least the following information: <ul style="list-style-type: none"> • Proposed access to all Engineered Log Structure locations • Proposed sequence of construction activities • The sequence and schedule for work area isolation and fish release areas in accordance with Section 00245. The work isolation areas shown on the Drawings are to be updated as necessary by the Contractor based on proposed means and methods of instream construction activities. • A list of on-site backup materials and equipment • Intermediate temporary erosion and sediment control measures that will be implemented to protect the stream channel, banks, and benches within the channel. The plan shall also detail how the temporary access routes will be stabilized and restored following construction. | 10 days before preconstruction conference |
| 01120.10 | Special Provisions 01120.10 | Irrigation Systems- Water Management Plan | Provide a Water Management Plan (WMP) with the irrigation system plans that describes a plan to maintain vegetation in a healthy and thriving growing condition throughout the Warranty Period. Water according to Section 01040.78. | |
| 01999 | Special Provisions 01999 | Aggregate Base for access road | Product information including gradation | |
| 01999.03 | Special Provisions 01999.03 | Step Pool Channel | Product submittals shall include the following. If products are included as submittal under other work, flag submittal to indicate product or items which will also apply to Step Pool Channel work. <ul style="list-style-type: none"> • Mechanical Earth Anchors • Logs • Streambed Material • Lag bolts • Woven Coir Blanket • Geotextile • General Topsoil | |
| 02080 | ODOT 02080 | Grout | 1. Manufacturer's data for grout 2. Certified Test Reports: Before delivery of materials or grout, submit certified reports of the tests specified herein. Accompany the certified reports on previously tested materials with the manufacturer's certified statement that the previously tested material is of the same type, quality, manufacture, and make as that proposed for use in this Contract. Certified test reports are required for the following: a. All cement grout constituents, including cement and aggregates. | |
| 02095 | Special Provisions 02095 | Sodium Bentonite | Product information including testing results. | |
| 02320.10 | ODOT 02320.10(c) ; Special Provisions 02320 | Geosynthetics | Furnish a Level A or Level B certification. Include minimum properties. | |
| 002440 | ODOT 02440.50 | Joint Materials | Product information and testing results for joint materials for concrete precast manhole section joints | |
| 002440 | ODOT 02440.60 | Joint Materials | Product information and testing results for plastic compound for precast manhole section joints | |
| 002440 | ODOT 02440.70 | Joint Materials | Product information and testing results for water stop for concrete precast manholes | |
| 02450.10 | ODOT 02450.10 | Precast Concrete Manhole Sections | Product information, including dimensions, for manhole top, riser, cones, and cover slabs. | |
| 02450.30 | ODOT 02450.30 | Metal Frames, Covers, Grates, and Ladders | Product information, including dimensions, for metal frames, covers, grates, and ladders | |
| 02620 | Special Provisions 02620 | Streambed Aggregates | Product information including gradation | |
| 03020.10 | Special Provisions 03020.10 | Compost | Submit the following: a. Documentation for the two analyses described in section 01040.14(d)(2) of this specification (particle gradation and pH) shall be performed by an accredited laboratory with current certification. The date of the analyses shall be no more than 90 calendar days prior to the date of the submittal. Include the following information in the report: <ul style="list-style-type: none"> • Name and address of the laboratory. • Phone contact and e-mail address for the laboratory. • Test data, including the date and name of the test procedure. b. Compost technical data sheet: For the compost component of the blended soil, provide a compost technical data sheet from the vendor. The analysis and report must conform to the sampling and reporting requirements of the US Composting Council Seal of Testing Assurance (STA) program. The analysis shall be performed and reported by an approved independent STA program laboratory and be no more than 90 calendar days prior to the date of the submittal. c. Up to two 5-gallon buckets of the blended material, as requested. | At least 14 work days in advance of installation |
| 00290.30(b) | ODOT 00290.30(b) | Pollution Control Plan (PCP) | Include the following information in the PCP: <ul style="list-style-type: none"> • Identify a professional on-call spill response team. • Identify all contractor activities, hazardous substances used and wastes generated. • Describe how hazardous substances and wastes will be stored, used, contained, monitored, disposed of and documented. Include pollution prevention, spill response, waste reduction, dust prevention, off site tracking prevention, washout facility design, vehicle and equipment fueling and maintenance procedures, employee training and emergency contact information. • Include the waste determination results from 00290.20(c-1). Provide reuse, recycle, and disposal options, the reason for selecting that alternative, and estimated quantities for each reuse, recycle, and disposal option. • Include or refer to the SPCC plan and the hazardous waste contingency plan, if required. • Include scaled site plans showing locations for hazardous substance storage, spill response equipment, communications equipment and fire suppression equipment. A "Pollution Control Plan Contractor Packet" is available from the Agency. | 10 days before preconstruction conference |
| 00290.34(a) | Special provisions 00290.34(a) | Protection of Fish and Fish Habitat- Regulated Work Areas | Submit a schedule to complete all work within the regulated work area within the in-water work period Include or describe the proposed methods for the following: <ul style="list-style-type: none"> • Work progress schedule according to 00180.41 • Material submittals according to 01040.10 • Contract Growing Plan according to 01040.19(g) • Topsoil and/or Wetland Topsoil approvals according to 01040.14 • Plant installation and establishment • Weed Control Work Plan (WCWP) according to 01030.42(a) • Emergency contact person, including the Name, telephone and pager numbers, and voice mail and/or email address information. • Contract Growing Plan according to 01040.19(g). The following are included as part of the PWP, but are required only before the related planting work begins: <ul style="list-style-type: none"> • Soil Fertility Test and Soil Amendment Report according to 01040.13. • Soil Testing and Soil Bio-amendment Report according to 01040.13. | At least 10 days prior to the preconstruction conference. |
| 01040.04(a) | Special Provisions and ODOT 01040.04(a) | Planting Work Plan (PWP) | | Within 90 days of award of Contract |

| | | | | | | | |
|---|--|--|--|--|--|------------------------------|--|
| DRILLING COMPANY: Hard Core Drilling | | | | | | SURFACE ELEVATION: 98.5 Feet | |
| DRILLING METHOD: Mud Rotary, 5" tricone bit | | | | | | DATE STARTED: 2/2/15 | |
| DRILLING EQUIPMENT: CME 75 | | | | | | DATE COMPLETED: 2/2/15 | |
| BORING LOCATION: See Figure 2 | | | | | | LOGGED BY: ADM | |

| SAMPLE ID | SAMPLE TYPE | SAMPLE | MOISTURE CONTENT (%) | BLOWS / 6" | DEPTH (FT) | GRAPHIC SYMBOL | MATERIAL DESCRIPTION | OTHER TESTS & NOTES |
|-----------|-------------|---|----------------------|------------|------------|---|--|---|
| S-1 | SPT |  | 20.0 | 5-8-14 | |  | 5.5 inches asphalt over 8 inches gravel base rock. Brown Clayey GRAVEL with Sand (GC), moist, medium dense. (FILL) | GSD, %F = 9.5 Very hard, slow drilling below 9.5 feet. |
| S-2 | C-MOD |  | 14.2 | 14-22-17 | 5 |  | Brown mottled dark gray, Poorly Graded GRAVEL with Clay and Sand (GP-GC), very moist, medium dense. (ALLUVIUM) | |
| S-3 | SPT |  | 16.9 | 11-10-13 | |  | | |
| S-4 | C-MOD |  | 11.1 | 50/5.5" | 10 |  | Brown mottled dark gray, Poorly Graded GRAVEL with Sand (GP), very moist, very dense. | |
| S-5 | SPT |  | 18.7 | 50/2" | 15 |  | | |
| S-6 | SPT |  | 19.9 | 50/3.5" | 20 |  | Gray Poorly Graded GRAVEL with Clay and Sand (GP-GC), very moist, very dense. | |
| S-7 | SPT |  | 36.5 | 11-11-16 | 25 |  | Light brownish gray Silty SAND (SM), wet, medium dense. | |
| NOTES: | | | | | | | Total Depth = 27.0'. Vibrating Wire Piezometer installed at 26.30'. Groundwater Depth and (Elev.): 02/03/15: 10.91' (87.59) 02/07/15: 9.88' (88.62) 06/05/15: 13.34' (85.16') 02/05/16: 8.53' (89.97') | |

Page 1

GEOTECHNICS LLC

BORING B-3
 Carli Creek Stormwater
 Clackamas, Oregon

Addendum #3

Bid/Fee Sheet



Project Name: Carli Creek Enhancement and Water Quality Project
2017-17

Project Number: Clackamas County Service District No. 1

| Item No. | Spec Section | Item Description | Qty | Unit | Unit Cost | Total Cost |
|----------|--------------|---|--------|------|-----------|------------|
| | 200 | TEMPORARY FEATURES AND APPURTENANCES | | | | |
| 1 | 00210.90 | Mobilization | 1 | L.S. | \$ | \$ |
| 2 | 00225.90 | Temporary Work Zone Traffic Control, Complete | 1 | L.S. | \$ | \$ |
| 3 | 00245.90 | Temporary Water Management | 1 | L.S. | \$ | \$ |
| 4 | 00280.90 | Erosion Control | 1 | L.S. | \$ | \$ |
| 5 | 00280.90 | Construction Entrance | 1 | Each | \$ | \$ |
| 6 | 00280.90 | Sediment Fence | 5,000 | L.F. | \$ | \$ |
| 7 | 00280.90 | High-Vis Fencing | 2,000 | L.F. | \$ | \$ |
| 8 | 00280.90 | Inlet Protection, Type 3 | 16 | Each | \$ | \$ |
| 9 | 00290.90 | Pollution Control Plan | 1 | L.S. | \$ | \$ |
| | 300 | ROADWORK | | | | |
| 10 | 00305.00 | Construction Survey Work | 1 | L.S. | \$ | \$ |
| 11 | 00310.90 | Removal of Curbs | 810 | L.F. | \$ | \$ |
| 12 | 00310.90 | Removal of Surfacing | 2,713 | S.Y. | \$ | \$ |
| 13 | 00310.90 | Asphalt Pavement Sawcutting | 1,018 | L.F. | \$ | \$ |
| 14 | 00320.90 | Clearing and grubbing | 9.40 | Acre | \$ | \$ |
| 15 | 00330.06 | Soil Management Plan | 1 | L.S. | \$ | \$ |
| 16 | 00330.07 | Topsoil Salvage and Placement | 5,000 | C.Y. | \$ | \$ |
| 17 | 00330.07 | Segregation and Placement of Excess Salvaged Topsoil | 690 | C.Y. | \$ | \$ |
| 18 | 00330.18(a) | Segregation and Placement of Low Permeability Soil Lining Materials | 6,300 | C.Y. | \$ | \$ |
| 19 | 00330.18(b) | Segregation and Placement of Bentonite-amended Lining Material | 1,200 | C.Y. | \$ | \$ |
| 20 | 00330.19(a) | Segregation and Placement of Structural Fill | 3,300 | C.Y. | \$ | \$ |
| 21 | 00330.19(b) | General Fill | 9,200 | C.Y. | \$ | \$ |
| 22 | 00330.22(a) | Spoils Haul and Disposal - Clean and Organic Free Materials | 6,600 | C.Y. | \$ | \$ |
| 23 | 00330.22(b) | Spoils Haul and Disposal - Municipal Solid Waste | 5 | Ton | \$ | \$ |
| 24 | 00330.22(c) | Spoils Haul and Disposal - Organic Materials | 4,600 | C.Y. | \$ | \$ |
| 25 | 00330.41(b) | General Excavation | 37,400 | C.Y. | \$ | \$ |
| 26 | 00330.41(c) | Unsuitable Material Overexcavation | 1,900 | C.Y. | \$ | \$ |
| 27 | 00350.90 | Geotextile Separator | 3,700 | S.Y. | \$ | \$ |
| | 400 | DRAINAGE AND SEWERS | | | | |
| 28 | 00445.90 | 18-inch storm pipe, 5 foot depth | 42 | L.F. | \$ | \$ |
| 29 | 00445.90 | 18-inch storm pipe, 10 foot depth | 605 | L.F. | \$ | \$ |
| 30 | 00445.90 | 18-inch storm pipe, 20 foot depth | 286 | L.F. | \$ | \$ |
| 31 | 00445.90 | 24-inch storm pipe, 10 foot depth | 52 | L.F. | \$ | \$ |
| 32 | 00445.90 | 24-inch storm pipe, 20 foot depth | 811 | L.F. | \$ | \$ |
| 33 | 00470.90 | Concrete manhole, 48 inch, 8 to 10 feet deep | 2 | Each | \$ | \$ |
| 34 | 00470.90 | Concrete manhole, 48 inch, 11 to 17 feet deep | 6 | Each | \$ | \$ |
| 35 | 00470.90 | Concrete manhole, 48" Shallow | 2 | Each | \$ | \$ |
| 36 | 00470.90 | Connections to Existing Structures | 6 | Each | \$ | \$ |
| 37 | 00470.90 | Catch Basin - Ditch Inlet | 1 | Each | \$ | \$ |
| 38 | 00495.90 | Trench Resurfacing | 1,200 | S.Y. | \$ | \$ |
| | 600 | BASES | | | | |
| 39 | 00641.90 | Aggregate bases | 21 | Ton | \$ | \$ |
| | 700 | WEARING SURFACES | | | | |
| 40 | 00759.90 | Concrete Curb, Standard Vertical Curb | 810 | L.F. | \$ | \$ |
| | 900 | PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS | | | | |
| 41 | 00905.90 | Remove and Reinstall Existing Signs | 1 | L.S. | \$ | \$ |
| | 1000 | RIGHT OF WAY DEVELOPMENT AND CONTROL | | | | |
| 42 | 01010.90 | Water Quality Structure, SD CDS-D4 | 1 | Each | \$ | \$ |
| 43 | 01030.14 | Fertilizer | 7.4 | Acre | \$ | \$ |
| 44 | 01030.42 | Weed control | 9.4 | Acre | \$ | \$ |
| 45 | 01030.43 | Temporary Seed Mix | 6.0 | Acre | \$ | \$ |
| 46 | 01030.90 | Wetland seeding, Hand Broadcast | 1.0 | Acre | \$ | \$ |
| 47 | 01030.90 | Oak Prairie Seeding, Hydroseeding | 1.9 | Acre | \$ | \$ |
| 48 | 01030.90 | Riparian seeding, Hydroseeding | 2.3 | Acre | \$ | \$ |
| 49 | 01030.90 | Mulching - planting | 1.0 | Acre | \$ | \$ |
| 50 | 01030.90 | Mulching - access paths | 120 | C.Y. | \$ | \$ |
| 51 | 01040.90 | Soil testing | 50 | Each | \$ n/a | \$ n/a |

| | | | | | | |
|-----|----------|---|-------|------|----|----|
| 52 | 01040.90 | Compost Mulch | 4,100 | C.Y. | \$ | \$ |
| 53 | 01040.90 | Acer circinatum, Vine maple, Seedling tree 36"+ stem | 31 | Each | \$ | \$ |
| 54 | 01040.90 | Acer macrophyllum, Bigleaf maple, Seedling tree 18"-36" stem | 18 | Each | \$ | \$ |
| 55 | 01040.90 | Alnus rubra, Red alder, Seedling tree 36"+ stem | 28 | Each | \$ | \$ |
| 56 | 01040.90 | Amelanchier alnifolia, Western serviceberry, Transplant 18"+ | 31 | Each | \$ | \$ |
| 57 | 01040.90 | Cornus sericea var. stolonifera, Red-osier dogwood, 6' Plant cutting | 1,815 | Each | \$ | \$ |
| 58 | 01040.90 | Crataegus douglassii, Douglas hawthorn, Seedling tree 36"+ stem | 3 | Each | \$ | \$ |
| 59 | 01040.90 | Frangula (Rhamnus) purshiana, Cascara, Seedling tree 6"-12" stem | 88 | Each | \$ | \$ |
| 60 | 01040.90 | Fraxinus latifolia, Oregon ash, Seedling tree 36"+ stem | 30 | Each | \$ | \$ |
| 61 | 01040.90 | Gaultheria shallon, Salal, 1 Gallon container | 713 | Each | \$ | \$ |
| 62 | 01040.90 | Holodiscus discolor, Oceanspray, Seedling tree 36"+ stem | 238 | Each | \$ | \$ |
| 63 | 01040.90 | Lonicera involucrata, Twinberry, Seedling tree 18"-36" stem | 356 | Each | \$ | \$ |
| 64 | 01040.90 | Berberis aquifolium, Tall Oregon grape, Seedling tree 18"-36" stem | 271 | Each | \$ | \$ |
| 65 | 01040.90 | Malus fusca, Western crabapple, Seedling tree 18"-36" stem | 8 | Each | \$ | \$ |
| 66 | 01040.90 | Oemleria cerasiformis, Indian plum, Seedling shrub 18"-36" stem | 198 | Each | \$ | \$ |
| 67 | 01040.90 | Philadelphus lewisii, Mock orange, Seedling shrub 18"-36" stem | 198 | Each | \$ | \$ |
| 68 | 01040.90 | Physocarpus capitatus, Pacific ninebark, Seedling tree 36"+ stem | 609 | Each | \$ | \$ |
| 69 | 01040.90 | Populus balsamifera var. trichocarpa, Black cottonwood, Seedling tree 36"+ stem | 23 | Each | \$ | \$ |
| 70 | 01040.90 | Prunus emarginata, Bitter cherry, Seedling tree 18"-36" stem | 4 | Each | \$ | \$ |
| 71 | 01040.90 | Pseudotsuga menziesii, Douglas fir, Deep rooted seedling tree | 5 | Each | \$ | \$ |
| 72 | 01040.90 | Quercus garryana, Oregon white oak, 2016 acorns | 10 | Each | \$ | \$ |
| 73 | 01040.90 | Ribes sanguineum, Red flowering currant, Seedling shrub 12"-18" stem | 198 | Each | \$ | \$ |
| 74 | 01040.90 | Rosa gymnocarpa, Baldhip rose, 14" Deep container | 50 | Each | \$ | \$ |
| 75 | 01040.90 | Rosa gymnocarpa, Baldhip rose, Seedling shrub 36"+ stem | 535 | Each | \$ | \$ |
| 76 | 01040.90 | Rosa nutkana var. nutkana, Nootka rose, 14" Deep container | 50 | Each | \$ | \$ |
| 77 | 01040.90 | Rosa nutkana var. nutkana, Nootka rose, Seedling shrub 36"+ stem | 1,289 | Each | \$ | \$ |
| 78 | 01040.90 | Rosa pisocarpa, Swamp rose, Seedling shrub 36"+ stem | 1,289 | Each | \$ | \$ |
| 79 | 01040.90 | Rubus spectabilis, Salmonberry, Seedling shrub 18"-36" stem | 446 | Each | \$ | \$ |
| 80 | 01040.90 | Salix hookeriana, Piper's willow, 6' Plant cutting | 1,010 | Each | \$ | \$ |
| 81 | 01040.90 | Salix lucida ssp. lasiandra, Pacific willow, 6' Plant cutting | 18 | Each | \$ | \$ |
| 82 | 01040.90 | Salix scouleriana, Scouler willow, 6' Plant cutting | 875 | Each | \$ | \$ |
| 83 | 01040.90 | Salix sitchensis, Sitka willow, 6' Plant cutting | 1,010 | Each | \$ | \$ |
| 84 | 01040.90 | Sambucus cerulea, Blue elderberry, Seedling shrub 18"-36" stem | 19 | Each | \$ | \$ |
| 85 | 01040.90 | Sambucus racemosa, Red elderberry, Seedling shrub 18"-36" stem | 25 | Each | \$ | \$ |
| 86 | 01040.90 | Spiraea douglasii, Douglas' spiraea, Seedling shrub 18"-36" stem | 766 | Each | \$ | \$ |
| 87 | 01040.90 | Symphoricarpus albus, Snowberry, 14" Deep container | 50 | Each | \$ | \$ |
| 88 | 01040.90 | Symphoricarpus albus, Snowberry, Seedling shrub 12"-18" stem | 535 | Each | \$ | \$ |
| 89 | 01040.90 | Thuja plicata, Western red cedar, Deep rooted seedling tree | 17 | Each | \$ | \$ |
| 90 | 01040.90 | Camassia quamash, Camas, Bulb | 1,131 | Each | \$ | \$ |
| 91 | 01040.90 | Carex amplifolia, Big-leaf sedge, 10" cu. In. Tubeling | 2,672 | Each | \$ | \$ |
| 92 | 01040.90 | Carex densa, Dense sedge, 10" cu. In. Tubeling | 2,137 | Each | \$ | \$ |
| 93 | 01040.90 | Carex dewyana ssp. Leptopoda, Dewey's sedge, 10" cu. In. Tubeling | 2,137 | Each | \$ | \$ |
| 94 | 01040.90 | Carex obnupta, Slough sedge, 10" cu. In. Tubeling | 3241 | Each | \$ | \$ |
| 95 | 01040.90 | Carex unilateralis, One-side sedge, 10" cu. In. Tubeling | 2,672 | Each | \$ | \$ |
| 96 | 01040.90 | Dicentra formosa, Pacific bleedingheart, 1 Gallon container | 322 | Each | \$ | \$ |
| 97 | 01040.90 | Eleocharis obtusa var. obtusa, Ovate spikerush, 10" cu. In. Tubeling | 3,812 | Each | \$ | \$ |
| 98 | 01040.90 | Juncus acuminatus, Tapertip rush, 10" cu. In. Tubeling | 8,504 | Each | \$ | \$ |
| 99 | 01040.90 | Juncus ensifolius, Dagger-leaf rush, 10" cu. In. Tubeling | 8,504 | Each | \$ | \$ |
| 100 | 01040.90 | Juncus patens, Spreading rush, 10" cu. In. Tubeling | 8,504 | Each | \$ | \$ |
| 101 | 01040.90 | Juncus tenuis, Slender rush, 10" cu. In. Tubeling | 8,504 | Each | \$ | \$ |
| 102 | 01040.90 | Mimulus guttatus, Seep monkeyflower, Bareroot seedling | 200 | Each | \$ | \$ |
| 103 | 01040.90 | Polystichum munitum, Western swordfern, 1 Gallon container | 805 | Each | \$ | \$ |
| 104 | 01040.90 | Schoenoplectus acutus, Hard-stemmed bulrush, 10" cu. In. Tubeling | 958 | Each | \$ | \$ |
| 105 | 01040.90 | Scirpus microcarpus, Small-fruited bulrush, 10" cu. In. Tubeling | 3,312 | Each | \$ | \$ |
| 106 | 01040.90 | Veronica americana, American speedwell, Bareroot seedling | 100 | Each | \$ | \$ |
| | | | | | | |
| | | | | | | |
| | | SPECIAL PROVISIONS | | | | |
| 107 | 01091.90 | Type 1 Key Log - 14-18" x 20' w/ rootwad | 64 | Each | \$ | \$ |
| 108 | 01091.90 | Type 2 Key Log -14-18" x 20' w/o rootwad | 54 | Each | \$ | \$ |
| 109 | 01091.90 | Type 3 Key Log -14-18" x 30' w/ rootwad | 43 | Each | \$ | \$ |
| 110 | 01091.90 | Type 4 Key Log -18" x 30' w/o rootwad | 12 | Each | \$ | \$ |
| 111 | 01091.90 | Type 5 Key Log -14-18" x 10' w/ rootwad | 0 | Each | \$ | \$ |
| 112 | 01091.90 | Type 6 Pile Log -10-12" x 15'-20' w/ rootwad | 37 | Each | \$ | \$ |
| 113 | 01091.90 | Type 7 Pile Log -10-12" x 15'-20' w/o rootwad | 100 | Each | \$ | \$ |
| 114 | 01091.90 | Floodplain Habitat Structure 1 | 1 | Each | \$ | \$ |
| 115 | 01091.90 | Floodplain Habitat Structure 2 | 6 | Each | \$ | \$ |
| 116 | 01091.90 | Floodplain Habitat Structure 3 | 8 | Each | \$ | \$ |
| 117 | 01091.90 | Grade Control Structure | 6 | Each | \$ | \$ |
| 118 | 01091.90 | Stream Habitat Structure | 11 | Each | \$ | \$ |
| 119 | 01091.90 | Fallen Tree Structure | 21 | Each | \$ | \$ |
| 120 | 01091.90 | Bank Habitat Structure 1 | 5 | Each | \$ | \$ |
| 121 | 01091.90 | Bank Habitat Structure 2 | 2 | Each | \$ | \$ |
| 122 | 01091.90 | Snag Structure | 15 | Each | \$ | \$ |
| 123 | 01091.90 | Beaver Dam Analog Structure | 8 | Each | \$ | \$ |
| 124 | 01091.90 | Channel Realignment | 1 | L.S. | \$ | \$ |
| 125 | 01120.90 | Irrigation System | 7.4 | Acre | \$ | \$ |
| 126 | 01999.01 | Haul Roads | 4,000 | L.F. | \$ | \$ |
| 127 | 01999.01 | Access Paths | 1,112 | L.F. | \$ | \$ |
| 128 | 01999.02 | Weir Structure A | 1 | L.S. | \$ | \$ |

| | | | | | | |
|-----|----------|------------------------------|---|------|----|-----------|
| 129 | 01999.02 | Weir Structure B | 1 | L.S. | \$ | \$ |
| 130 | 01999.02 | Weir Structure C | 1 | L.S. | \$ | \$ |
| 131 | 01999.02 | Detention Cell Spillway | 1 | L.S. | \$ | \$ |
| 132 | 01999.02 | Detention Outfall Dissipator | 1 | L.S. | \$ | \$ |
| 133 | 01999.03 | Step Pools | 1 | L.S. | \$ | \$ |
| | | | | | | |
| | | Construction Subtotal | | | | \$ |
| | | | | | | |
| | | | | | | \$ |
| | | | | | | \$ |
| | | | | | | \$ |
| | | Total | | | | \$ |