WHATCOM COUNTY CONTRACT INFORMATION SHEET

Whatcom County Contract No.

Originating Department:	Public Works
Division/Program: (i.e. Dept. Division and Program)	Stormwater-907620
Contract or Grant Administrator:	Cathy Craver
Contractor's / Agency Name:	Herrera Environmental Consultants
	WCC 3.08.100 (a)) Original Contract #: 201905009
Does contract require Council Approval? Yes O No O Already approved? Council Approved Date:	If No, include WCC: (Exclusions see: Whatcom County Codes 3.06.010, 3.08.090 and 3.08.100)
Is this a grant agreement? Yes O No O If yes, grantor agency contrac	t number(s): CFDA#:
Is this contract grant funded? Yes O No O If yes, Whatcom County gran	t contract number(s):
Is this contract the result of a RFP or Bid process? Yes No No If yes, RFP and Bid number(s): RFC	Contract 18-01 Cost Center: 10860.544410
Is this agreement excluded from E-Verify? No O Yes (If no, include Attachment D Contractor Declaration form.
amount and any prior amendments): \$40,000, and than \$10,000 1. Exercisi 2. Contract capital of capital of a Equipment Amount: 5 65,135.00 3. Bid or a 4. Equipment Amount: 5 164,956.00 5. Contract capital of a Equipment Amount:	Contract for Commercial off the shelf items (COTS). Work related subcontract less than \$25,000. Public Works - Local Agency/Federally Funded FHWA. Oval required for; all property leases, contracts or bid awards exceeding professional service contract amendments that have an increase greater or 10% of contract amount, whichever is greater, except when: ng an option contained in a contract previously approved by the council. It is for design, construction, r-o-w acquisition, prof. services, or other costs approved by council in a capital budget appropriation ordinance. Ward is for supplies. ent is included in Exhibit "B" of the Budget Ordinance. The is for manufacturer's technical support and hardware maintenance of contract systems and/or technical support and software maintenance from the
Contract amendment to expand scope of existing c Bioinfiltration Swale Evaluation of the Geneva Retro	
Term of Contract:	Expiration Date: 12/31/2020
Contract Routing: 1. Prepared by: Cathy Craver	Date: 10/15/19
2. Attorney signoff: Christopher Quinn	Date: 10/16/2019
3. AS Finance reviewed: Brad Bennett	Date: 10/18/19
4. IT reviewed (if IT related):	Date:
5. Contractor signed:6. Submitted to Exec.:	Date:
7. Council approved (if necessary):	Date: Date:
8. Executive signed:	Date:
9. Original to Council:	Date:

Whatcom County Contract No.

Amendment No.___1__ Whatcom County Contract No. _201905009 CONTRACT BETWEEN WHATCOM COUNTY AND Herrera Environmental Consultants

THIS AMENDMENT is to the Contract between Whatcom County and Herrera Environmental Consultants,
dated May 22, 2019 and designated "Whatcom County Contract No. 201905009 ". In
consideration of the mutual benefits to be derived, the parties agree to the following:
This Amendment extends the term of this Agreement through December 31, 2020, and increases
the maximum consideration by \$ <u>65,135</u> to a total consideration of \$ <u>164,956</u> .
This Amendment also adds the following to the Scope of Work, Exhibit A:
Unless specifically amended by this agreement, all other terms and conditions of the original contract shall remain in full force and effect.
This Amendment takes effect: November 6, 2019 , regardless of the date of signature.
IN WITNESS WHEREOF, Whatcom County andHerrera Environmental Consultantshave executed this Amendment on the date and year below written.
DATED this 22 day of October, 2019.
CONTRACTOR:
Herrera Environmental Consultants Christopher Webb, PE, Principal
STATE OF WASHINGTON)
OUNTY OF WHATCOM) ss.
On this 22 day of october, 2019, before me personally appeared Christopher webb to me known to be the principal of the Herrera and who executed the above instrument and who
acknowledged to me the act of signing and sealing thereof.
Diane de Ford
NOTARY PUBLIC in and for the State of Washington,
Diane M. Ford printed name,
printed fidule,
residing at Bellingham. My commission expires 3-6-21.
My commission expires 3-6-21.
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WHATCOM COUNTY: Recommended for Aproval:	
By:	10/24/19 Date
Approved as to form:	
Senior Deputy Prosecuting Attorney-Civil Division	10/24/19 n Date
Approved:	
Accepted for Whatcom County:	
By: Jack Louws, Whatcom County Executive	
STATE OF WASHINGTON)) ss COUNTY OF WHATCOM)	
On this day of, 20, before me pers County, who executed the above instrument and who ackn	sonally appeared Jack Louws, to me known to be the Executive of Whatcom lowledged to me the act of signing and sealing thereof.
	NOTARY PUBLIC in and for the State of Washington, residing at My commission expires

CONTRACTOR INFORMATION:

Herrera Environmental Consultants John Lenth, Water Practice Director

114 W. Magnolia St., Suite 504 Bellingham, WA 98225

Contact Name: Chris Webb Contact Phone: (360) 398-5075 Contact FAX: (206) 441-9108

Contact Email: cwebb@herrerainc.com

EXHIBIT A

COMPREHENSIVE BIOINFILTRATION SWALE EVALUATION –

Scope of Work Amendment #1

Whatcom County requested expanding the services to be provided under the original contract #201905009 to include the following additional tasks under a contract amendment:

- Task 5.0Analysis of Coronado-Freemont Swale
- Task 6.0Analysis of Geneva Area Filter Vaults

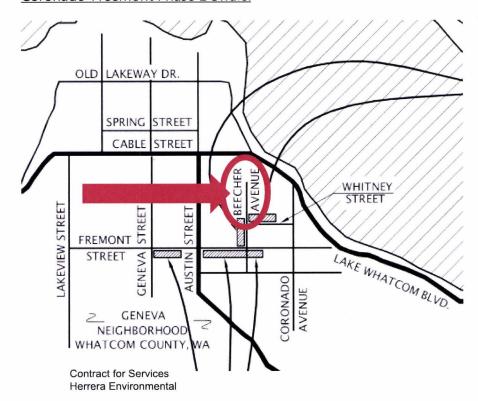
Project Assumptions

- Outreach and communication with adjacent land owners and other stakeholders will be led by the County with support from Herrera as requested.
- The hours per person in the attached budget template are intended to describe the anticipated level of effort, but it is understood that the hours and costs shown in this task may be reallocated to perform the tasks requested by the County.

Task 5.0 - Analysis of Coronado-Freemont Swale

The following map shows the project location, as indicated by the ellipse. The multi-cell "swale" being evaluated under this task are all water quality treatment cells within the Beecher Avenue Right of Way between Freemont and Whitney Streets. Herrera will evaluate the existing as-built conditions of this swale, assess its performance and present this to the County to support its effectiveness evaluation requirements under their NPDES permit.

Coronado-Freemont Phase 1 Swale:



Task 5.1 - Facility Design Review, Basin Delineation & Modeling

Herrera will perform a site visit, review the design documents for the subject facilities, and then delineate the tributary areas in GIS using LiDAR contours and County-provided GIS stormwater conveyance network data. Herrera will then ground truth and finalize the tributary basin delineations and produce tributary basin maps and tables of land cover for each facility. Herrera will then perform hydrologic modeling for the subject facilities based on the basin delineations prepared to determine the expected flow regime for each facility. Herrera will review the media specification, observe the media in the field, and assess its similarity to the technical guidance manuals published at the time of the projects' design and the media observed in the Geneva swales being evaluated under Task 2.

Assumptions

- County will provide the design documents for the subject facilities and GIS data for the project areas.
- Modelling will be performed in either WWHM or MGSFlood

Task 5.2 - Existing Conditions Technical Memo

Herrera will analyze these swales to the same level of detail and in the same manner as the Geneva swales identified in the original contract. Herrera will detail any differences between observations, simulation results, and previous assumptions obtained from existing design and construction documents. All review and analysis data will be added to the technical memorandum already being developed under Task 2.

Assumptions

 This work will be presented in the Existing Conditions Technical Memo (Task 2) for the whole project.

Deliverable

• All data collected, analysis performed, and recommendations developed as part of this task will be added to the technical memoranda created for Tasks 2 through 4 from the original contract.

Task 5.3 - Media Testing and Swale Monitoring

Herrera will evaluate the existing media in this multi-cell swale for water quality performance. If the cells are not meeting target infiltration rates and appear to be sized properly, then either the media was not specified or placed properly, or the infiltration rate has been degraded by sedimentation or over compaction. To assess the infiltration performance, in-situ infiltration testing will be conducted with single ring infiltration tests at a representative set of locations in the swale.

Water quality treatment performance will also be evaluated. Initially, grab samples to determine influent and effluent chemistry will be collected on 4 occasions and analyzed for total suspended solids, particle size distribution, total and dissolved copper and zinc, total phosphorus, and orthophosphate. Herrera will also collect a maximum of four representative columns of media to perform water quality performance testing in the lab. Herrera may also collect 3 samples of the media (from 6- and 12-inch

depths) from locations in the upper and lower swale sections and analyze them for OM content and grain size.

Assumptions

- Herrera will have access to the swales and structures for testing and inspection.
- Whatcom County will keep Herrera informed of any maintenance or other activities that may influence swale performance evaluations.
- Herrera will perform 6-12 infiltration tests in the cells
- There will be no deliverables under this task, all collected data will be synthesized and reported under task 6.3.

Task 5.4 -Reporting

Herrera will produce a technical memorandum that summarizes the work performed and data collected and provides recommendations to the County for any design or O&M changes. The memorandum will be targeted to meet the NPDES permit requirements for performance assessment.

Deliverable

 Technical Memorandum transmitting all data collected, analysis performed, and recommendations developed as part of this task.

Task 6.0 - Analysis of Geneva Area Filter Vaults

Herrera will begin this task with a kick-off meeting with County staff. Herrera will then evaluate the insitu performance of a representative number of stormwater filtration vaults for the removal of target pollutants including phosphorus. Herrera will review Whatcom County's filter vault asset list and select 3 vaults for detailed assessment. These facilities will be selected to best represent the County's total filter vault asset class in the watershed.

Assumptions

 Some early action items for this task were performed under the original contract in advance of the execution of the amendment covering this task, and will be used in the vault analysis report.

Task 6.1 -Kick-off, Facility Design Review, Basin Delineation & Modelling

Herrera will perform a site visit, review the design documents for the selected vaults and then delineate the tributary areas in GIS using LiDAR contours and County-provided GIS stormwater conveyance network data. Then Herrera will ground truth and finalize the tributary basin delineations and produce tributary basin maps and tables of land cover for each facility. Herrera will then perform hydrologic modeling for the subject facilities based on the basin delineations prepared to determine the expected flow regime for each facility.

Assumptions

- The County will provide the design documents for the subject facilities and GIS data for the tributary basins.
- Modelling will be performed in either WWHM or MGSFlood

Deliverables

- Kick-off meeting & site visit
- Basin Maps
- Modeling results

Task 6.2 -Records Review and In-Situ Testing

Herrera will review any maintenance records provided by the County and interview County maintenance staff to gain qualitative insight into the performance of the filter vaults.

Herrera will visit each of the 3 filter vaults quarterly to assess hydraulic performance over one year (one maintenance cycle). At each quarterly assessment, Herrera will perform the following testing:

- 1. Visual inspection including measurement of accumulated sediment depth in the vault.
- 2. Hydraulic flow test with a contracted water truck. This test will entail discharging variable metered flows into the facility until the water level stabilizes at the bypass elevation. The associated flow rate will be compared with the design flow rate to assess system hydraulic performance.

Herrera will also target 3 storm events over the water year to collect water quality grab samples at the inlet and outlet of the 3 selected vaults. Only events where bypass is not occurring will be targeted as bypass flows may mix with treated flows and bias results. The samples will be analyzed for: total suspended solids, total and dissolved copper and zinc, total phosphorus, and orthophosphate.

Assumptions

- Herrera will have access to the vaults for testing and inspection.
- There will be no deliverables under this task, all collected data will be synthesized and reported under task 6.3

Task 6.3 - Analysis and Reporting

Herrera will produce a technical memorandum that summarizes the work performed and data collected and provides recommendations to the County for any design or O&M changes. The memorandum will be targeted to meet the NPDES permit requirements for performance assessment.

Deliverable

 Technical Memorandum transmitting all data collected, analysis performed, and recommendations developed as part of this task.

EXHIBIT B

HERRERA ENVIRONMENTAL CONSULTANTS

Cost Estimate for Comprehensive Bioswale, Evaluation Project Amendment #1

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BUDGET NARRATIVE:

Contract amounts shall not exceed the total budget referenced above. As consideration for services provided in Exhibit A. Scope of Work, the Country agrees to compensate the contractor according to the actual billing rates of personnel Contract amounts shall not exceed the total budget referenced above. As consideration for services provided in the course of performing the duties herein shall be reimbursed, including mileage at the current IRS rate. Lodging and working on the project, within the ranges provided in the Billing Rates in Exhibit B-1. Other reasonable expenses incurred in the course of performing the duties herein shall not exceed the GSA rate for the location where services are provided. Other expenditures such as printing, postage, and telephone charges shall be reimbursed at actual cost plus 10%. Expense reimbursement requests must be per diem shall not exceed the GSA rate for the location where services are provided. Other expenditures such as printing, postage, and telephone charges shall be reimbursed at actual cost plus 10%. Expense reimbursement requests must be per diem shall not exceed the GSA rate for the location where services are provided. Other expenditures such as printing, postage, and telephone charges shall be reimbursed at actual cost plus 10%. Expense reimbursement requests must be per diem shall not exceed the contractor of the contractor o

EXHIBIT B-1

Herrera Environmental Consultants, Inc.

Comprehensive Bioswale Evaluation Project Amendment #1

160.30	50.89	0/A1/A2/A3/A, IT Technician I, II, III, IV	0/A1/A2/A3/A,
214.37	122.30	Marketing Specialist V, VI	A5/A6
96.18	89.10	Administrative Coordinator III, IV/ HR Generalist IV	A2/A3
156.13	74 80	t1/F2/F3/F4/F1 Accounting Administrator I, II, III, IV, V	1/F2/F3/F4/F
74.80	50.89	Intern	PO
94.40	76.30	Engineer 1/ Scientist 1/ Planner 1/ Analyst 1	P1
112.21	82.68	Engineer II / Scientist II / Planner II / Landscape Architect II / Analyst II	P2
155.91	108.39	Engineer III/ Scientist III/ Planner III/ Landscape Architect III/ CAD Technician III/ Analyst III	P3
184.16	130.48	Engineer IV/ Scientist IV/ Planner IV/ Landscape Architect IV/ Analyst IV	P4
218.00	136.89	Engineer V / Scientist V / Planner V / Analyst V	P C
216.33	205.92	Engineer VI, Scientist VI, Planner VI	0
262.03	214.78	President, Executive Vice President. Vice President	P7
Maximum	Minimum	Labor Category	
Inclusive Billing Rate	Inclusive Hourly Billing Rate		
		2019 Herrera Labor Rate Schedule	

Herrera adjusts salaries annually in January. Maximum DL rate includes a 5% escalation.