	(		OM COUNTY ORMATION SHE	ET		Wh		ounty Contract Numbe 02211003 – 1	r:
Originating Department:			85 Health and Community Services						
Division/Program: (i.e. Dept. Division and Program)			8540 Environmental Health / 854080 Solid Waste						
Contract or Grant Admin	istrator:		Jennifer Hayd	en					
Contractor's / Agency Na	ame:		Bennett Engin	eering, LL0	2				
Is this a New Contract?	If not, is this an Amen	dment or Renew	al to an Existing	Contract?			١	∕es ⊠ No □	
Yes □ No ⊠	If Amendment or Re				ontract #:			202211003	
Does contract require (	Council Approval? Yes	s ⊠ No □	If No, include	WCC:					
Already approved? Co	ouncil Approved Date:	-27	(Exclusions see: Whatcom County Codes 3.06.010, 3.08.090 and 3.08.100)						
Is this a grant agreeme Yes □ No ☑	nt? If yes, grantor aç	jency contract nu	ımber(s):			CFDA#:			
Is this contract grant full Yes □ No ⊠		County grant co	ntract number(s):						
	Ilt of a RFP or Bid process?				Contract	Cost			
Yes ⊠ No □	If yes, RFP and Bid num	ber(s): 22-	-31		Center:		14020	01	
Is this agreement exclu	ided from E-Verify?	lo □ Yes ▷							
If YES, indicate exclusion									
	ces agreement for certified/l	icensed profess						emergency.	_
☐ Contract work is for less than \$100,000.			☐ Contract fo					OTS).	_
Contract work is for less than 120 days.			☐ Work relate					-1 -1 11 11 11 11	_
☐ Interlocal Agreement (between Governments). ☐ Public Works - Local Agency/Federally Funded FHWA.						$\underline{}$			
Contract Amount: (sum of original contract amount and any prior amendments):  Council approval required for; all property leases, contracts or bid awards <b>exceeding \$40,000</b> , and professional service contract amendments that have an increase greater than \$10,000 or									
any prior amendments):			act amount, whiche				rease gi	reater than \$10,000	OI
\$ 36,486			ng an option conta				roved b	y the council.	
2. Contract is for design, construction, r-o-w acquisition, prof. services, or other ca				s, or other capital co	sts				
Total Amended Amount:			ed by council in a ca		t appropriat	ion ordina	ance.		
\$ 83,296			ward is for supplies ent is included in E		the Rudget	t Ordinan	CA		
ψ   00,200								ntenance of electror	nic
		systems	s and/or technical s	upport and	software ma	aintenand			
			ary software currer						
	s amendment extends the cor Ifill monitoring services at clos				oudget to r	eflect 20	24 pric	ing. This contract	
Term of Contract:	1 Year	ong ting ting to the terror and the ting to the ting t	Expiration Date		12/3	1/2024			
	Prepared by:	JT			1	Date	e:	09/07/2023	
Contract Routing:	2. Health Budget Approval	KR/JS				Date	e:	09/27/2023	
	Attorney signoff:	RB				Date	э:	09/28/2023	
	4. AS Finance reviewed:	A Martin				Date	e:	11/2/2023	
	5. IT reviewed (if IT related):					Date	e:		
	6. Contractor signed:	DS				Date	e:		
	7. Executive Contract Review:	BSR				Date	Э:	11/27/2023	
	8. Council approved (if necess	ary): AB202	23-737			Date	e:	11/21/2023	
	Executive signed:					Date	e:	11/27/2023	
	10. Original to Council:					Date	э:		

# WHATCOM COUNTY Health and Community Services



Erika Lautenbach, MPH, Director Amy Harley, MD, MPH, Co-Health Officer Greg Thompson, MD, MPH, Co-Health Officer

# **Memorandum**

TO: Satpal Sidhu, County Executive

FROM: Erika Lautenbach, Director

**RE:** Bennett Engineering, LLC – Closed Cedarville & Y-Road Landfill Monitoring

Contract Amendment #1

DATE: NOVEMBER 27, 2023

Attached is a contract amendment between Whatcom County and Bennett Engineering, LLC for your review and signature. This amendment extends the contract for an additional year, adds a task to prepare a PFAS Characterization Plan and updates the budget to reflect pricing for the extended contract period.

# Background and Purpose

This contract provides funding for monitoring of ground and surface water as well as gas emissions at the closed Cedarville and Y-Road landfills. Monitoring ensures that each site is compliant with Federal, State and Local laws and regulations in accordance with approved landfill post-closure plans and National Pollutant Discharge Elimination System and Industrial Stormwater General Permit conditions.

#### Funding Amount and Source

Funding for this contract period (01/01/2024 – 12/31/2024) is not to exceed \$46,810 and is provided by the Solid Waste Fund. These funds will be included in the 2024 budget. Council authorization is required as cumulative funding for the entire contract period (01/01/2023 – 12/31/2024) exceeds \$40,000.

#### Differences from Previous Contracts

Section	Differences	
General Terms – Section 10.2 Extension	Extends contract for an additional year, through 12/31/2024	
	Adds preparation of a PFAS Characterization Plan for the	
Exhibit A – Scope of Work	Cedarville Landfill as required by the County's NPDES	
	Permit.	
Exhibit P. Componentian	Updates budget to reflect 2024 pricing and increase the	
Exhibit B - Compensation	amount of sample analyses for new sample points	

Please contact Jennifer Hayden, Environmental Health Supervisor at 360-778-6036 (<a href="mailto:JHayden@co.whatcom.wa.us">JHayden@co.whatcom.wa.us</a>) or Kathleen Roy, Financial & Administrative Manager at 360-778-6007 (<a href="mailto:KRoy@co.whatcom.wa.us">KRoy@co.whatcom.wa.us</a>), if you have any questions.



Whatcom County Contract Number:

202211003 - 1

#### WHATCOM COUNTY CONTRACT AMENDMENT

**PARTIES:** 

Whatcom County Whatcom County Health and Community Services 509 Girard Street Bellingham, WA 98225 AND CONTRACTOR: Bennett Engineering, LLC 2324 James Street Bellingham, WA 98225

**CONTRACT PERIODS:** 

Original: 01/01/2023 – 12/31/2023 Amendment #1: 01/01/2024 – 12/31/2024

THE CONTRACT IDENTIFIED HEREIN, INCLUDING ANY PREVIOUS AMENDMENTS THERETO, IS HEREBY AMENDED AS SET FORTH IN THE DESCRIPTION OF THE AMENDMENT BELOW BY MUTUAL CONSENT OF ALL PARTIES HERETO

#### **DESCRIPTION OF AMENDMENT:**

- 1. Extend the duration and other terms and conditions of this contract for one year, as per the original contract "General Terms, Section 10.2 Extension".
- 2. Amend Exhibit A Scope of Work, to include Task 3.E, preparation of a PFAS Characterization Plan for the Cedarville Landfill, as required by the NPDES Permit.
- 3. Amend Exhibit B Compensation, to reflect pricing for the extended contract period and increases the amount of sample analyses for new sample points.
- 4. Funding for this contract period (01/01/2024 12/31/2024) is not to exceed \$46,810.
- 5. Funding for the total contract period (01/01/2023 12/31/2024) is not to exceed \$83,296.
- 6. All other terms and conditions remain unchanged.
- 7. The effective start date of the amendment is 01/01/2024.

ALL OTHER TERMS AND CONDITIONS OF THE ORIGINAL CONTRACT AND ANY PREVIOUS AMENDMENTS THERETO REMAIN IN FULL FORCE AND EFFECT. ALL PARTIES IDENTIFIED AS AFFECTED BY THIS AMENDMENT HEREBY ACKNOWLEDGE AND ACCEPT THE TERMS AND CONDITIONS OF THIS AMENDMENT. Each signatory below to this Contract warrants that he/she is the authorized agent of the respective party; and that he/she has the authority to enter into the contract and bind the party thereto.

DocuSigned	i by:	
APPROVAL AS TO PROGRAM: Sw Sw Sw O51358A396		11/27/2023
	Environmental Health Manager	Date
	Lautenbach	11/27/2023
The state of the s	tenbach, Health and Community Services Director	Date
APPROVAL AS TO FORM: Koyu Buckiv	igliam	11/27/2023
Royce Buckingha	m, Senior Civil Deputy Prosecutor	Date
FOR THE CONTRACTOR:  DocuSigned by:		
thomas E. Bennett, P.E.	Thomas E. Bennett, P.E. – Managing Member	11/27/2023
Contractor Signature	Printed Name and Title	Date

## FOR WHATCOM COUNTY:

DocuSigned by:

Carol Fragey

8C1B2C72D4554A4...

11/27/2023

Carol Frazey, Executive Pro Tem

Date

#### **CONTRACTOR INFORMATION:**

Bennett Engineering, LLC 2324 James Street Bellingham, WA 98225 tomb@bennettengr.com

# EXHIBIT "A" – Amendment #1 (SCOPE OF WORK)

# I. Background

#### **Cedarville Landfill**

Cedarville has been a closed landfill since February 1990. Final closure improvements were completed in October 1993. A leachate management system was constructed in 2012, consisting of a retention pond, aeration and settling vaults, and bio-swale filtration.

All surface water and leachate sampling at the Cedarville landfill shall be in compliance with the Sampling and Analysis Plan (Cedarville SAP) dated January 2013. Included, are sampling parameters and procedures and reporting requirements. Quarterly surface water monitoring must be conducted at the Downstream Ditch sampling location in accordance with the Cedarville SAP, the current Industrial Stormwater General Permit (ISGP #WAR001280), and the National Pollutant Discharge Elimination System (NPDES – WA0501490) for the landfill. Discharge monitoring reports and visual inspection are to be prepared for each quarterly event.

#### Y-Road Landfills

The Y-Road landfills are comprised of two former landfill areas located on the west side (Y-Road I Landfill) and on the east side (Y-Road II Landfill) of Y-Road in Whatcom County. All monitoring must comply with the Revised Sampling and Analysis Plan (Y-Road SAP), dated October 2003 and revised in 2013. There are a total of four groundwater wells to be sampled, one surface water sampling location, and seven gas probes installed at the two sites.

The work of this contract is divided into four tasks, as follows:

#### Task 1: Project Management and Annual Compliance Report – Cedarville Landfill

#### Task 1.A Project Management

Project management includes project scoping and setup, invoice review, meetings, and correspondence with Whatcom County staff and outside vendors.

#### Task 1.B 2023 Annual Compliance Report

The 2013 SAP for the Cedarville landfill does not include semi-annual groundwater or landfill monitoring in 2023. As such, the Contractor will prepare the 2023 Annual Compliance Report, which will include a description of the activities performed at the Site during the year, summary tables for the data obtained under the ISGP and NPDES Permits and a discussion regarding compliance with permit limits and recommended maintenance items, as necessary. The 2023 Annual Compliance Report will be submitted to Whatcom County in PDF format via email prior to December 31, 2023.

#### Task 2: Surface Water Monitoring – Cedarville Landfill

#### Task 2.A Quarterly Sampling and Site Inspection

Stormwater monitoring and site inspection will be conducted in accordance with the ISGP, which calls for quarterly observations for oil sheen and surface water sampling at the Downstream Ditch (D.D.) and Upstream locations, and analysis of the following parameters: pH (field), turbidity, and total copper and

zinc. Visual inspections are performed during the quarterly events and include observations of uncontrolled discharges to the ground, floating materials, visible sheens, discoloration, turbidity, and odor.

## Task 2.B Laboratory Testing

The Contractor will deliver water samples under proper chain of custody to Edge Analytical Laboratory immediately following the sampling events.

#### Task 2.C Quarterly Discharge Monitoring Reports and Visual Inspection Reports

The Contractor will enter quarterly Discharge Monitoring Reports (DMR) into Ecology's WebDMR system prior to the 15<sup>th</sup> day of the month, following the respective quarter. The DMRs are reviewed and validated by Whatcom County Health Department (WCHD) staff to complete the submittal process. Quarterly Visual Inspection Reports will be submitted to WCHD in PDF format on the day of the inspections, which will summarize site observations and provide a list of recommended actions, if necessary.

#### Task 2.D 2022 ISGP Annual Report

The draft 2022 ISGP Annual Report will be prepared using the Ecology template and submitted to WCHD for review and comment before April 15, 2023. The final report will be entered into Ecology's WebDMR system prior to the May 15, 2023 deadline.

# Task 3: NPDES Permit Sampling - Cedarville Landfill Leachate Management System

#### Task 3.A NPDES Permit Sampling

Treated effluent will be sampled at Outfall #001 during the months of January through April, November and December 2023 (6 events total). Surface water samples will also be obtained in the drainage ditch to determine the turbidity at locations upgradient and downgradient of Outfall #001. The Contractor will measure field parameters (pH, conductivity and temperature) during each sampling event. The Contractor will deliver effluent samples under proper chain of custody to Edge Analytical Laboratory immediately following the sampling event.

## Task 3.B Discharge Monitoring Reports

DMRs will be entered into Ecology's WebDMR system every month (12 total), regardless of the status of system discharge. County staff will review and validate the DMRs prior to the 28<sup>th</sup> day of the month following the sampling event.

#### Task 3.C Coordination of Annual O&M Work Items

The Contractor will develop a list of maintenance work items for the Leachate Management System (LMS), in accordance with the Operation & Maintenance Manual dated February 2013 and site observations made during the year. The Contractor will coordinate subcontractor services, as necessary, provide field support and observation during the maintenance work and submit associated field reports and photo documentation to Whatcom County following completion of the work.

#### Task 3.D Laboratory Testing

The Contractor will deliver effluent samples under proper chain of custody to Edge Analytical Laboratory immediately following the sampling events.

#### Task 3.E PFAS Characterization Plan for the Cedarville Landfill

The contractor will prepare a Polyflouroalkyl Substances (PFAS) Characterization Plan (Plan) to address the requirements of the NPDES Permit and will be prepared in accordance with the Department of Ecology's *Guidelines for Preparing Quality Assurance Project Plans (QAPP) for Environmental Studies* 

(Ecology, 2004) and the QAPP developed by Ecology (2020), for the PFAS sampling conducted at several landfills in Washington State in 2020.

The Plan will include two years of quarterly PFAS sampling during Years 2 (2025) and 3 (2026) of the permit, with the first quarterly PFAS sampling event occurring during the period of January through March, 2025.

The Contractor will prepare a draft Plan and submit it to WCHCS and Ecology for review and comment by June 1, 2024.

The Contractor will complete a final Plan within two weeks of receipt of agency review comments and distribute it for final approval.

#### Task 4: Groundwater, Surface Water and Landfill Gas Monitoring – Y-Road Landfills

Landfill monitoring will be performed at the Y-Road landfills in accordance with the current SAP (revised 2013). Semi-annual monitoring events are scheduled for January and July 2023. Specifically, this task will include the work items listed below.

# Task 4.A Semi-Annual Sampling and Inspection

Groundwater sampling will be conducted using low-flow methods, as described below.

- 1. The depth to water and depth to bottom will be measured to the nearest 0.01 foot in Monitoring Well (MW)-1, 3, 4, 5, 6, 7, 8, and 9 using an electric water level indicator and recorded in the field data sheets. The bottom elevations will be compared to previous readings to determine the depth of sediment accumulation and evaluate the need for well re-development.
- 2. MW 1, 3, 4, and 9 will be purged with a peristaltic pump at approximately 0.5 liter per minute. Purge water will be disposed on the ground. The water level probe will be used to monitor changes in water level during purging. The purge rate will be adjusted to minimize groundwater drawdown. Field parameters will be measured with field meters during purging. Sampling will begin when these parameters have stabilized. Groundwater samples will be collected directly from the discharge stream of the pump in appropriate sample containers provided by Edge Analytical Laboratory.
- 3. Field parameter readings, date, time, weather conditions, and any special field observations will be recorded on field data sheets for each monitoring well.
- 4. Sample bottles will be labeled with the date, sample location, sample depth, and sampler's name and placed into a cooler with ice or ice substitute.
- Field sampling equipment will be decontaminated between each well.

Surface water sampling will be performed in Carpenter Creek using a polyethylene sample bottle immersed in water upstream of sampling personnel to avoid possible inclusion of suspended sediment, and then transferred to appropriate sample bottles supplied by Edge. Field parameter readings, date, time, weather conditions, and special field observations will be recorded on the field data sheet.

A visual inspection will also be performed during the semi-annual monitoring events and will include observations of the following items (at a minimum):

- 1. Landfill cover regarding vegetation and indications of erosion, seepage or subsidence:
- 2. Stormwater facilities regarding ponding, obstructions and indications of erosion;
- 3. Groundwater and gas monitoring wells with respect to physical condition; and
- 4. Flow in Carpenter Creek.

#### Task 4.B Laboratory Testing

The Contractor will deliver water samples to proper chain of custody to Edge Analytical Laboratory on the day of the semi-annual monitoring events. Dissolved metal samples will be filtered at the lab.

#### Task 4.C Semi-Annual Gas Probe Monitoring

Methane gas concentrations will be measured at the seven gas monitoring wells at the Y-Road II landfill using an RKI Eagle 2 combustible gas meter. The gas meter will be calibrated by the vendor using a 25% LEL methane standard and ambient oxygen conditions. Gas pressures will be measured at each well to the nearest 0.01 inches of water column using a digital manometer. The barometric pressure during the semi-annual monitoring events will be obtained from data recorded by the National Weather Service at the Bellingham International Airport.

#### Task 4.D Semi-Annual Report

The Semi-Annual Report will include a discussion of site conditions observed during the January 2023 event, analytical results, groundwater flow direction and velocity, and summary tables for groundwater, surface water and gas monitoring results. Groundwater contour maps, field data sheets and laboratory results will be attached to the report along with chain of custody documentation. The Semi-Annual Report will be submitted to WCHD in electronic PDF within 30 days of receipt of the analytical data.

#### Task 4.E 2023 Annual Report

The 2023 Annual Report for the Y-Road Landfills will be prepared following the July 2023 event and will include time-series plots for conductivity, chloride, and total barium, iron and manganese, qualitative analysis of water quality trends, summary tables of historic analytical data, and other data as previously described under Task 4.D for the Semi-Annual Report. The 2023 Annual Report will be submitted to WCHD in electronic PDF prior to September 30, 2023.

# EXHIBIT "B" - Amendment #1

(COMPENSATION)

I. <u>Budget and Source of Funding</u>: The source of funding for this contract period (01/01/2024 – 12/31/2024), in an amount not to exceed \$46,810, is the Whatcom County Solid Waste Fund. The budget for this contract is indicated in the six pages to follow.

# II. Invoicing

- 1. The Contractor shall submit invoices to (include contract/PO #) HL-BusinessOffice@whatcomcounty.us.
- 2. The Contractor shall submit itemized invoices on a monthly basis in a format approved by the County. Monthly invoices must be submitted by the 15<sup>th</sup> of the month following the month of service. Invoices submitted for payment must include the items identified in the table above.
- 3. Payment by the County will be considered timely if it is made within 30 days of the receipt and acceptance of billing information from Contractor. The County may withhold payment of an invoice if the Contractor submits it more than 30 days after the expiration of this contract.
- 4. Invoices must include the following statement, with an authorized signature and date:
  - I certify that the materials have been furnished, the services rendered, or the labor performed as described on this invoice.
- 5. <u>Duplication of Billed Costs or Payments for Service:</u> The Contractor shall not bill the County for services performed or provided under this contract, and the County shall not pay the Contractor, if the Contractor has been or will be paid by any other source, including grants, for those costs used to perform or provide the services in this contract. The Contractor is responsible for any audit exceptions or disallowed amounts paid as a result of this contract.

#### RECOMMENDED BUDGET

# 2024 LANDFILL MONITORING AND MAINTENANCE SERVICES

REVISED 10-12-2023		CEDARV	ILLE AND Y-R	OAD LANDF
TASK 1 - PROJECT MANAGEMENT & ANNUAL COMPLIANCE REPORT				
CEDARVILLE LANDFILL		REC	COMMENDED	BUDGET
Task 1.A - Project Management		Time	Rate	Total
Project Scoping and Setup		2	\$140.00	\$280.00
nvoice Review		12	\$140.00	\$1,680.00
Correspondence With County, Ecology, and Outside Vendors		16	\$140.00	\$2,240.00
Task 1.A Total				\$4,200.00
Task 1.B - Annual Compliance Report		Time	Rate	Total
2024 Annual Compliance Report (Due Dec. 2024)		12	\$140.00	\$1,680.00
Task 1.B Total				\$1,680.00
		TA	SK 1 TOTAL:	\$5,880.00
TASK 2 - SURFACE WATER MONITORING				
CEDARVILLE LANDFILL		REC	COMMENDED E	BUDGET
Task 2.A - Quarterly Sampling and Site Inspection	Events	Time	Rate	Total
Quarterly Sampling Events	4	4	\$130.00	\$2,080.00
Field Monitoring Equipment	4	1	\$25.00	\$100.00
Quarterly Visual Inspection Report	4	1	\$140.00	\$560.00
Task 2.A Total				\$2,740.00
Task 2.B - Laboratory Testing (Edge Analytical)		Quantity	Rate	Total
Turbidity		12	\$19.00	\$228.00
Total Metals (Cu and Zn)		12	\$50.00	\$600.00
Task 2.2 Subtotal			400.00	\$828.00
Markup (7.5%)				\$62.00
Task 2.B Total				\$890.00
Task 2.C - Quarterly Discharge Monitoring Reports/Visual Insp. Reports	Events	Time	Rate	Total
Quarterly Discharge Monitoring Reports	4	1	\$140.00	\$560.00
Quarterly Visual Inspection Report	4	1	\$140.00	\$560.00
Task 2.C Total				\$1,120.00
Task 2.D - 2022 ISGP Annual Report		Time	Rate	Total
2023 ISGP Annual Report to Ecology - Due May 15, 2024	1	5	\$140.00	\$700.00
		TA	SK 2 TOTAL:	\$5,450.00
TASK 3 - NPDES PERMIT SAMPLING				*-*
CEDARVILLE LANDFILL		REG	COMMENDED E	BUDGET
Task 3.A - Monthly Effluent Sampling	Events	Time	Rate	Total
Field Sampling Events (Jan-April and Nov-Dec 2024)	6	4	\$130.00	\$3,120.00
Field Monitoring Equipment	6	1	\$25.00	\$150.00
Peristaltic Pump	6	1	\$75.00	\$450.00
Task 3.A Total				
	Firente	Time		\$3,720.00
Task 3.B - Monthly Discharge Monitoring Reports	Events	Time	Rate	\$3,720.00 Total
Task 3.B - Monthly Discharge Monitoring Reports Discharge Monitoring Reports	Events 12	Time 2		\$3,720.00
Task 3.B - Monthly Discharge Monitoring Reports Discharge Monitoring Reports			Rate	\$3,720.00 Total
Task 3.B - Monthly Discharge Monitoring Reports Discharge Monitoring Reports  Task 3.C - Coordination of Annual O&M Work Items  Work Item Punchlist/Field Observation/Reporting		2	Rate \$140.00	\$3,720.00 Total \$3,360.00 Total \$1,120.00
Task 3.B - Monthly Discharge Monitoring Reports Discharge Monitoring Reports Task 3.C - Coordination of Annual O&M Work Items		2 Time	Rate \$140.00 Rate	\$3,720.00 Total \$3,360.00 Total
Task 3.B - Monthly Discharge Monitoring Reports Discharge Monitoring Reports  Task 3.C - Coordination of Annual O&M Work Items  Work Item Punchlist/Field Observation/Reporting  Task 3.C Total		2 Time 8	Rate \$140.00 Rate \$140.00	\$3,720.00 Total \$3,360.00 Total \$1,120.00 \$1,120.00
Task 3.B - Monthly Discharge Monitoring Reports Discharge Monitoring Reports  Task 3.C - Coordination of Annual O&M Work Items  Work Item Punchlist/Field Observation/Reporting  Task 3.C Total  Task 3.D - Laboratory Testing (Edge Analytical)		2 Time	Rate \$140.00 Rate	\$3,720.00 Total \$3,360.00 Total \$1,120.00
Task 3.B - Monthly Discharge Monitoring Reports Discharge Monitoring Reports  Task 3.C - Coordination of Annual O&M Work Items Work Item Punchlist/Field Observation/Reporting  Task 3.C Total  Task 3.D - Laboratory Testing (Edge Analytical)  Biological Oxygen Demand		2 Time 8 Quantity	Rate \$140.00 Rate \$140.00	\$3,720.00  Total \$3,360.00  Total \$1,120.00 \$1,120.00  Total
Task 3.B - Monthly Discharge Monitoring Reports Discharge Monitoring Reports  Task 3.C - Coordination of Annual O&M Work Items  Work Item Punchlist/Field Observation/Reporting  Task 3.C Total  Task 3.D - Laboratory Testing (Edge Analytical) Biological Oxygen Demand  Total Suspended Solids		2 Time 8 Quantity 6	Rate \$140.00 Rate \$140.00 Rate \$61.00	\$3,720.00  Total \$3,360.00  Total \$1,120.00 \$1,120.00  Total \$366.00
Task 3.B - Monthly Discharge Monitoring Reports  Discharge Monitoring Reports  Task 3.C - Coordination of Annual O&M Work Items  Work Item Punchlist/Field Observation/Reporting  Task 3.C Total  Task 3.D - Laboratory Testing (Edge Analytical)  Biological Oxygen Demand  Total Suspended Solids  Turbidity		Time 8 Quantity 6 6	Rate \$140.00 Rate \$140.00 Rate \$61.00 \$24.00	\$3,720.00 Total \$3,360.00 Total \$1,120.00 \$1,120.00 Total \$366.00 \$144.00
Task 3.B - Monthly Discharge Monitoring Reports Discharge Monitoring Reports  Task 3.C - Coordination of Annual O&M Work Items  Work Item Punchlist/Field Observation/Reporting  Task 3.C Total  Task 3.D - Laboratory Testing (Edge Analytical)  Biological Oxygen Demand  Total Suspended Solids  Turbidity Chloride		2 Time 8 Quantity 6 6 18	Rate \$140.00 Rate \$140.00 Rate \$61.00 \$24.00 \$19.00	\$3,720.00  Total \$3,360.00  Total \$1,120.00 \$1,120.00  Total \$366.00 \$144.00 \$342.00
Task 3.B - Monthly Discharge Monitoring Reports Discharge Monitoring Reports  Task 3.C - Coordination of Annual O&M Work Items Work Item Punchlist/Field Observation/Reporting  Task 3.C Total  Task 3.D - Laboratory Testing (Edge Analytical)  Biological Oxygen Demand Total Suspended Solids Turbidity Chloride Total Metals (As, Ba, Cu, Fe, Mn, Ni, and Zn)		2 Time 8 8 Quantity 6 6 6 18 6	Rate \$140.00 Rate \$140.00 Rate \$61.00 \$24.00 \$19.00 \$25.00 \$175.00	\$3,720.00  Total \$3,360.00  Total \$1,120.00  \$1,120.00  \$1,120.00  \$366.00 \$144.00 \$342.00 \$150.00 \$175.00
Task 3.B - Monthly Discharge Monitoring Reports Discharge Monitoring Reports  Task 3.C - Coordination of Annual O&M Work Items  Work Item Punchlist/Field Observation/Reporting  Task 3.C Total  Task 3.D - Laboratory Testing (Edge Analytical) Biological Oxygen Demand  Total Suspended Solids  Turbidity  Chloride  Total Metals (As, Ba, Cu, Fe, Mn, Ni, and Zn)  Ammonia		2 Time 8	Rate \$140.00 Rate \$140.00 Rate \$61.00 \$24.00 \$19.00 \$25.00	\$3,720.00 Total \$3,360.00 Total \$1,120.00 \$1,120.00 Total \$366.00 \$144.00 \$342.00
Task 3.B - Monthly Discharge Monitoring Reports Discharge Monitoring Reports  Task 3.C - Coordination of Annual O&M Work Items  Work Item Punchlist/Field Observation/Reporting  Task 3.C Total  Task 3.D - Laboratory Testing (Edge Analytical) Biological Oxygen Demand  Total Suspended Solids  Turbidity Chloride Total Metals (As, Ba, Cu, Fe, Mn, Ni, and Zn)  Ammonia  Alpha Terpineol/Benzoic Acid/p-Cresol/Phenol		2 Time 8 Quantity 6 6 18 6 1	Rate \$140.00 Rate \$140.00 Rate \$61.00 \$24.00 \$19.00 \$25.00 \$175.00 \$25.00	\$3,720.00  Total \$3,360.00  Total \$1,120.00 \$1,120.00  Total \$366.00 \$144.00 \$342.00 \$175.00 \$175.00 \$255.00 \$262.00
Task 3.B - Monthly Discharge Monitoring Reports  Discharge Monitoring Reports  Task 3.C - Coordination of Annual O&M Work Items  Work Item Punchlist/Field Observation/Reporting  Task 3.C Total  Task 3.D - Laboratory Testing (Edge Analytical)  Biological Oxygen Demand  Total Suspended Solids  Turbidity  Chloride  Total Metals (As, Ba, Cu, Fe, Mn, Ni, and Zn)  Ammonia  Alpha Terpineol/Benzoic Acid/p-Cresol/Phenol  Sulfate		2 Time 8 Quantity 6 6 6 18 6 1 1	Rate \$140.00 Rate \$140.00 Rate \$61.00 \$24.00 \$19.00 \$25.00 \$175.00 \$25.00 \$262.00 \$25.00	\$3,720.00  Total \$3,360.00  Total \$1,120.00  \$1,120.00  Total \$366.00 \$144.00 \$342.00 \$150.00 \$175.00 \$252.00 \$252.00
Task 3.B - Monthly Discharge Monitoring Reports Discharge Monitoring Reports  Task 3.C - Coordination of Annual O&M Work Items Work Item Punchlist/Field Observation/Reporting  Task 3.C Total  Task 3.D - Laboratory Testing (Edge Analytical)  Biological Oxygen Demand  Total Suspended Solids  Turbidity Chloride  Total Metals (As, Ba, Cu, Fe, Mn, Ni, and Zn)  Ammonia  Alpha Terpineol/Benzoic Acid/p-Cresol/Phenol  Sulfate  Vitrate + Nitrite		2 Time 8 Quantity 6 6 18 6 1 1 1 1	Rate \$140.00 Rate \$140.00 Rate \$61.00 \$24.00 \$19.00 \$25.00 \$175.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00	\$3,720.00  Total \$3,360.00  Total \$1,120.00 \$1,120.00  \$1,120.00 \$366.00 \$144.00 \$350.00 \$175.00 \$25.00 \$25.00 \$25.00 \$25.00
Task 3.B - Monthly Discharge Monitoring Reports Discharge Monitoring Reports  Task 3.C - Coordination of Annual O&M Work Items  Work Item Punchlist/Field Observation/Reporting  Task 3.C Total  Task 3.D - Laboratory Testing (Edge Analytical)  Biological Oxygen Demand  Total Suspended Solids  Turbidity  Chloride  Total Metals (As, Ba, Cu, Fe, Mn, Ni, and Zn)  Ammonia  Alpha Terpineol/Benzoic Acid/p-Cresol/Phenol  Sulfate  Nitrate + Nitrite  Soluble Reactive Phosphorus		2 Time 8  Quantity 6 6 18 1 1 1 1 1 1	Rate \$140.00 Rate \$140.00 Rate \$61.00 \$24.00 \$19.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00	\$3,720.00  Total \$3,360.00  Total \$1,120.00 \$1,120.00  \$144.00 \$366.00 \$144.00 \$342.00 \$175.00 \$25.00 \$25.00 \$262.00 \$25.00 \$28.00
Task 3.B - Monthly Discharge Monitoring Reports  Discharge Monitoring Reports  Task 3.C - Coordination of Annual O&M Work Items  Work Item Punchlist/Field Observation/Reporting  Task 3.C Total  Task 3.D - Laboratory Testing (Edge Analytical)  Biological Oxygen Demand  Total Suspended Solids  Turbidity  Chloride  Total Metals (As, Ba, Cu, Fe, Mn, Ni, and Zn)  Ammonia  Alpha Terpineol/Benzoic Acid/p-Cresol/Phenol  Sulfate  Nitrate + Nitrite  Soluble Reactive Phosphorus  Total Organic Carbon		2 Time 8 Quantity 6 6 18 6 1 1 1 1	Rate \$140.00 Rate \$140.00 Rate \$61.00 \$24.00 \$19.00 \$25.00 \$175.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00	\$3,720.00  Total \$3,360.00  Total \$1,120.00 \$1,120.00  Total \$366.00 \$144.00 \$175.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00
Task 3.B - Monthly Discharge Monitoring Reports Discharge Monitoring Reports  Task 3.C - Coordination of Annual O&M Work Items Work Item Punchlist/Field Observation/Reporting  Task 3.C Total  Task 3.D - Laboratory Testing (Edge Analytical)  Biological Oxygen Demand Total Suspended Solids Turbidity Chloride Total Metals (As, Ba, Cu, Fe, Mn, Ni, and Zn) Ammonia Alpha Terpineol/Benzoic Acid/p-Cresol/Phenol  Sulfate Nitrate + Nitrite Soluble Reactive Phosphorus Total Organic Carbon  Task 3.4 Subtotal		2 Time 8  Quantity 6 6 18 1 1 1 1 1 1	Rate \$140.00 Rate \$140.00 Rate \$61.00 \$24.00 \$19.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00	\$3,720.00  Total \$3,360.00  Total \$1,120.00  \$1,120.00  \$1,120.00  \$144.00 \$342.00 \$150.00 \$175.00 \$250.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$34.00 \$34.00 \$34.00
Task 3.B - Monthly Discharge Monitoring Reports Discharge Monitoring Reports  Task 3.C - Coordination of Annual O&M Work Items Work Item Punchlist/Field Observation/Reporting  Task 3.C Total  Task 3.D - Laboratory Testing (Edge Analytical)  Biological Oxygen Demand Total Suspended Solids Turbidity Chloride Total Metals (As, Ba, Cu, Fe, Mn, Ni, and Zn) Ammonia Alpha Terpineol/Benzoic Acid/p-Cresol/Phenol Sulfate Vitrate + Nitrite Soluble Reactive Phosphorus Total Organic Carbon  Task 3.4 Subtotal Markup (7.5%)		2 Time 8  Quantity 6 6 18 6 11 1 1 1 1	Rate \$140.00 Rate \$140.00 Rate \$61.00 \$24.00 \$19.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00	\$3,720.00  Total \$3,360.00  Total \$1,120.00  \$1,120.00  \$1,140.00  \$144.00 \$150.00 \$175.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00
Task 3.B - Monthly Discharge Monitoring Reports Discharge Monitoring Reports  Task 3.C - Coordination of Annual O&M Work Items  Work Item Punchlist/Field Observation/Reporting  Task 3.C Total  Task 3.D - Laboratory Testing (Edge Analytical) Biological Oxygen Demand  Total Suspended Solids  Turbidity Chloride Total Metals (As, Ba, Cu, Fe, Mn, Ni, and Zn)  Ammonia Alpha Terpineol/Benzoic Acid/p-Cresol/Phenol Sulfate Nitrate + Nitrite Soluble Reactive Phosphorus Total Organic Carbon  Task 3.4 Subtotal  Markup (7.5%) Task 3.D Total		2 Time 8  Quantity 6 6 18 6 1 1 1 1 1 1 1	Rate \$140.00 Rate \$140.00 Rate \$61.00 \$24.00 \$19.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00	\$3,720.00  Total \$3,360.00  Total \$1,120.00 \$1,120.00 \$1,120.00 \$366.00 \$144.00 \$366.00 \$150.00 \$150.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$28.00 \$31.00 \$1,593.00 \$1,20.00 \$1,713.00
Task 3.B - Monthly Discharge Monitoring Reports Discharge Monitoring Reports  Task 3.C - Coordination of Annual O&M Work Items  Work Item Punchlist/Field Observation/Reporting  Task 3.C Total  Task 3.D - Laboratory Testing (Edge Analytical) Biological Oxygen Demand  Total Suspended Solids  Turbidity Chloride Total Metals (As, Ba, Cu, Fe, Mn, Ni, and Zn)  Ammonia Alpha Terpineol/Benzoic Acid/p-Cresol/Phenol Sulfate Nitrate + Nitrite Soluble Reactive Phosphorus Total Organic Carbon  Task 3.4 Subtotal  Markup (7.5%) Task 3.D Total  Task 3.E - PFAS Characterization Plan		2 Time 8  Quantity 6 6 18 6 11 1 1 1 1 1 Time	Rate \$140.00 Rate \$140.00 Rate \$61.00 \$24.00 \$19.00 \$25.00 \$25.00 \$262.00 \$262.00 \$25.00 \$25.00 \$25.00 \$25.00	\$3,720.00  Total \$3,360.00  Total \$1,120.00  \$1,120.00  Total \$366.00 \$144.00 \$150.00 \$175.00 \$262.00 \$25.00 \$25.00 \$25.00 \$25.00 \$27.00 \$1,73.00 \$1,73.00 \$1,73.00 \$1,73.00 \$1,73.00 \$1,73.00 \$1,73.00 Total
Task 3.B - Monthly Discharge Monitoring Reports Discharge Monitoring Reports  Task 3.C - Coordination of Annual O&M Work Items Work Item Punchlist/Field Observation/Reporting  Task 3.C Total  Task 3.D - Laboratory Testing (Edge Analytical)  Biological Oxygen Demand Total Suspended Solids Turbidity Chloride Total Metals (As, Ba, Cu, Fe, Mn, Ni, and Zn) Ammonia Alpha Terpineol/Benzoic Acid/p-Cresol/Phenol  Sulfate Nitrate + Nitrite Soluble Reactive Phosphorus Total Organic Carbon  Task 3.4 Subtotal Markup (7.5%) Task 3.D Total  Task 3.E - PFAS Characterization Plan Draft Plan Preparation - Submit to WCHD/Ecology for Review Comments		2 Time 8  Quantity 6 6 18 6 1 1 1 1 1 1 Time 32	Rate \$140.00 Rate \$140.00 Rate \$61.00 \$24.00 \$19.00 \$25.00 \$175.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00 \$25.00	\$3,720.00  Total \$3,360.00  Total \$1,120.00  \$1,120.00  \$1,120.00  \$144.00 \$150.00 \$175.00 \$262.00 \$25.00
Task 3.B - Monthly Discharge Monitoring Reports Discharge Monitoring Reports  Task 3.C - Coordination of Annual O&M Work Items  Work Item Punchlist/Field Observation/Reporting  Task 3.C Total  Task 3.D - Laboratory Testing (Edge Analytical) Biological Oxygen Demand  Total Suspended Solids  Turbidity Chloride Total Metals (As, Ba, Cu, Fe, Mn, Ni, and Zn)  Ammonia Alpha Terpineol/Benzoic Acid/p-Cresol/Phenol Sulfate Nitrate + Nitrite Soluble Reactive Phosphorus Total Organic Carbon  Task 3.4 Subtotal  Markup (7.5%) Task 3.D Total  Task 3.E - PFAS Characterization Plan		2 Time 8  Quantity 6 6 18 6 11 1 1 1 1 1 Time	Rate \$140.00 Rate \$140.00 Rate \$61.00 \$24.00 \$19.00 \$25.00 \$25.00 \$262.00 \$262.00 \$25.00 \$25.00 \$25.00 \$25.00	\$3,720.00  Total \$3,360.00  Total \$1,120.00  \$1,120.00  Total \$366.00 \$144.00 \$150.00 \$175.00 \$262.00 \$25.00 \$25.00 \$25.00 \$25.00 \$27.00 \$1,73.00 \$1,73.00 \$1,73.00 \$1,73.00 \$1,73.00 \$1,73.00 \$1,73.00 Total

BENNETT ENGINEERING, LLC

PROJECT: 24003

#### RECOMMENDED BUDGET REVISED 10-12-2023

# 2024 LANDFILL MONITORING AND MAINTENANCE SERVICES CEDARVILLE AND Y-ROAD LANDFILLS

TASK 4 - GROUND WATER, SURFACE WATER, AND LANDFILL  GAS MONITORING - Y-ROAD LANDFILL		RE	COMMENDED E	BUDGET
Task 4.A - Semi-Annual Ground/Surface Water Sampling	Events	Time	Rate	Total
Sampling Events and Inspection	2	12	\$130.00	\$3,120.00
Field Sampling Equipment/Supplies (w/ 7.5% Markup)	2		\$400.00	\$800.00
Task 4.A Total				\$3,920.00
Task 4.B - Laboratory Testing (Edge Analytical)				
4 Monitoring Wells/Surface Water		Quantity	Rate	Total
Total Suspended Solids		10	\$24.00	\$240.00
Total Dissolved Solids		10	\$24.00	\$240.00
Turbidity		10	\$19.00	\$190.00
Chloride		10	\$25.00	\$250.00
Nitrate		10	\$25.00	\$250.00
Nitrite		10	\$25.00	\$250.00
Ammonia		10	\$25.00	\$250.00
Total Organic Carbon		10	\$51.00	\$510.00
Hardness		2	\$29.00	\$58.00
Sulfate		10	\$25.00	\$250.00
Chemical Oxygen Demand		10	\$44.00	\$440.00
Biochemical Oxygen Demand		2	\$61.00	\$122.00
Total Metals (As, Ba, Fe, Mn, Hg, Pb, Zn)		10	\$146.00	\$1,460.00
Dissolved Zn + Lab Filtration (Surface Water Sample)		2	\$25.00	\$50.00
Task 4.2 Subtotal				\$4,560.00
Markup (7.5%)				\$342.00
Task 4.B Total				\$4,902.00
Task 4.C - Semi-Annual Gas Probe Monitoring	Events	Time	Rate	Total
Gas Monitoring Events	2	2	\$130.00	\$520.00
Task 4.D - Semi-Annual Report		Time	Rate	Total
Report Preparation		8	\$140.00	\$1,120.00
Data Validation/Database Maintenance		2	\$140.00	\$280.00
Drafting - Ground Water Contour Maps		2	\$80.00	\$160.00
Task 4.D Total				\$1,560.00
Task 4.E - Annual Report		Time	Rate	Total
Report Preparation		12	\$140.00	\$1,680.00
Data Validation/Database Maintenance		2	\$140.00	\$280.00
Time Series Plots		6	\$140.00	\$840.00
Drafting - Ground Water Contour Maps		2	\$80.00	\$160.00
Task 4.E Total		-	400.00	\$2,960.00
Tuore the Total		ТΔ	SK 4 TOTAL:	\$13,862.00
		1.00	SUBTOTAL:	\$40,705.00
		* CONTING	ENCY (15%):	\$6,105.00

<sup>\*</sup>The Contractor will not expend any contingency funds without prior written authorization of the County.

PROJECT: 24003



#### Analytical Services Quotation

Client: Bennett Engineering Start date: 1-1-24
Client ID: BEN03 Good through: 12-31-23

Prepared for: Tom Bennett

Estimated 10 to 12 BD TAT for inorganics and 20 to 25 BD for organics

#### Services and materials included in pricing:

- Results online, PDF or Hard Copy
- · Bottles and coolers for transport

#### Hilltop Landfill

HIIIOP Landiii	
Test Parameter	Price Per Test
BOD5	\$60.80
TSS	\$23.20
Ammonia-N	\$24.80
NWTPH DX	\$102.40
Turbidity	\$18.40
Chloride	\$24.80
Zinc, Total	\$24.80
Benzoic Acid, Alpha Terpineol, p-Cresol & Phenol (8270)	\$261.60
Sulfate	\$24.80
Nitrate-N	\$24.80
Hardness	\$28.80
Dissolved Oxygen	\$24.80
тос	\$50.40
Soluble Reactive Phosphate (SRP or o-PO4)	\$27.20
Arsenic, Total	\$24.80
Iron, Total	\$24.80
Iron, Dissolved	\$24.80
Manganese, Total	\$24.80
Manganese, Dissolved	\$24.80

#### Airport Landfill

Test Parameter	Price Per Test
BOD5	\$60.80
TSS	\$23.20
Total Ammonia	\$24.80
Nitrate plus Nitrite N	\$24.80
Chloride	\$24.80
Oil and Grease	\$76.00
Phosphorus (Total)	\$28.00
Soluble Reactive Phosphorus (as P)	\$27.20
Benzoic Acid, Alpha Terpineol, p-Cresol & Phenol (8270)	\$261.60
Zinc (Total)	\$24.80

# Cedarville Landfill

Test Parameter	Price Per Test
BOD5	\$60.80
TSS	\$23.20
Turbidity	\$18.40
Chloride	\$24.80
Benzoic Acid, Alpha Terpineol, p-Cresol & Phenol (8270)	\$261.60
Total Ammonia	\$24.80
Sulfate	\$24.80
Nitrate plus Nitrite N	\$24.80
TOC	\$50.40
Soluble Reactive P	\$27.20
Copper (as total metal)	\$24.80
Manganese	\$24.80
Zinc (as total metal)	\$24.80
Arsenic (as total metal)	\$24.80
Barium (as total metal)	\$24.80
Iron (as total metal)	\$24.80
Nickel (as total metal)	\$24.80

#### Y-Road Landfill

Test Parameter	Price Per Test
Chloride	\$24.80
Sulfate	\$24.80
Nitrate-N	\$24.80
Nitrite-N	\$24.80
Ammonia-N	\$24.80
COD	\$43.20
BOD5	\$60.80
TOC	\$50.40
TSS	\$23.20
TDS	\$24.00
Turbidity	\$18.40
Hardness	\$28.80
Total Metals (As, Ba, Fe, Hg, Mn, Pb, ZN) 7 metals	\$145.60
Dissolved Zinc	\$24.80

#### Orcas Island Landfill

Test Parameter	Price Per Test
Ammonia	\$24.80
Total Metals (Ca, Fe, Mn, K, Na, Zn) 6 metals	\$129.60
Arsenic, Total	\$24.80
Arsenic, Dissolved	\$24.80
Chloride	\$24.80
Nitrite	\$24.80
Nitrate	\$24.80
Sulfate	\$24.80
Total Alkalinity	\$31.20
Total Dissolved Solids	\$24.00
Total Organic Carbon	\$50.40
Total Suspended Solids	\$23.20
Volatile Organic Compounds	\$270.40
Volatile Organic Compounds, SIM	\$100.00

#### Whatcom County Shops

Test Parameter	Price Per Test		
NWTPH-G/BTEX.W	\$126.40		
NWTPH-DX	\$102.40		
Total Cu	\$24.80		
Total Zn	\$24.80		
Turbidity	\$18.40		

Please note credit cards will be charged a 3% surcharge pay by debit, checks and ACH to avoid 3% surcharge.

Thank you for your review.

Sandy Skrabut 360-757-1400 ext. 102



#### 2024 SCHEDULE OF FEES - BENNETT ENGINEERING, LLC

Charges for services provided by Bennett Engineering, LLC will be invoiced on the basis of the following schedule of fees. Billing rates for 2024 are as follows:

PERSONNEL:	TASK CODE	RATE
STAFF ENGINEER	300	\$ 80.00
SENIOR ENGINEER I	500	\$120.00
SENIOR ENGINEER II	510	\$130.00
PROJECT MANAGER	520	\$140.00
HEARING/EXPERT TESTIMONY	700	\$160.00
EXPENSES:		
Subconsultant Services		Cost + 7.5%
Direct Project Expenses		Cost + 7.5%

Field equipment will be charged in accordance with the following schedule:

#### **EQUIPMENT:**

Disposable Bailers, each	\$10.00
Peristaltic Pump, per day	
Soil Sampling Equipment, per day	
Field Monitoring Equipment, per day	
Field Manometer, per day	
Field Filter Pump and Assembly, per day	
Generator	

BENNETT ENGINEERING, LLC

2024 SCHEDULE OF FEES