



Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia Purchase Order

Order Date: 07-08-2022

CORRECT ORDER NUMBER MUST APPEAR
ON ALL PACKAGES, INVOICES, AND
SHIPPING PAPERS. QUESTIONS
CONCERNING THIS ORDER SHOULD BE
DIRECTED TO THE DEPARTMENT
CONTACT.

Order Number:	CPO 0313 9171 DEP2300000001 1	Procurement Folder:	970677
Document Name:	EOI - Francis Drainage Maintenance	Reason for Modification:	
Document Description:	EOI - Francis Drainage Maintenance		
Procurement Type:	Central Purchase Order		
Buyer Name:	Joseph E Hager III		
Telephone:	(304) 558-2306		
Email:	joseph.e.hageriii@wv.gov		
Shipping Method:		Effective Start Date:	
Free on Board:		Effective End Date:	

VENDOR	DEPARTMENT CONTACT																				
Vendor Customer Code: 000000160928 CIVIL & ENVIRONMENTAL CONSULTANTS INC 700 CHERRINGTON PKWY MOON TOWNSHIP PA 15108 US Vendor Contact Phone: 304-933-3119 Extension: Discount Details: <table><thead><tr><th></th><th>Discount Allowed</th><th>Discount Percentage</th><th>Discount Days</th></tr></thead><tbody><tr><td>#1</td><td>No</td><td>0.0000</td><td>0</td></tr><tr><td>#2</td><td>Not Entered</td><td></td><td></td></tr><tr><td>#3</td><td>Not Entered</td><td></td><td></td></tr><tr><td>#4</td><td>Not Entered</td><td></td><td></td></tr></tbody></table>		Discount Allowed	Discount Percentage	Discount Days	#1	No	0.0000	0	#2	Not Entered			#3	Not Entered			#4	Not Entered			Requestor Name: Katrina J Dufourmy Requestor Phone: (304) 926-0499 Requestor Email: katrina.j.dufourmy@wv.gov 23 FILE LOCATION _____
	Discount Allowed	Discount Percentage	Discount Days																		
#1	No	0.0000	0																		
#2	Not Entered																				
#3	Not Entered																				
#4	Not Entered																				

INVOICE TO	SHIP TO
ENVIRONMENTAL PROTECTION OFFICE OF AML&R 601 57TH ST SE CHARLESTON WV 25304 US	ENVIRONMENTAL PROTECTION OFFICE OF AML&R 601 57TH ST SE CHARLESTON WV 25304 US

Total Order Amount: \$126,820.49

Purchasing Division's File Copy

ENTERED

PURCHASING DIVISION AUTHORIZATION DATE: 7/11/2022 ELECTRONIC SIGNATURE ON FILE	ATTORNEY GENERAL APPROVAL AS TO FORM DATE: 7/19/2022 ELECTRONIC SIGNATURE ON FILE	ENCUMBRANCE CERTIFICATION DATE: 7/20/2022 ELECTRONIC SIGNATURE ON FILE
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Extended Description:

The vendor, Civil & Environmental Consultants, Inc., agrees to enter into this contract with the agency, The West Virginia Department of Environmental Protection, for Design Engineering Services for the Francis Drainage Maintenance project located in Harrison County per the specifications, terms and conditions, the vendors negotiated scope of work dated 6/1/2022, all incorporated herein by reference and made apart hereof.

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
1	81100000	0.00000		0.000000	1601.21
Service From	Service To	Manufacturer		Model No	

Commodity Line Description: Task 1

Extended Description:

Site Reconnaissance and Preparation of Cost Proposal

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
2	81100000	0.00000		0.000000	11641.63
Service From	Service To	Manufacturer		Model No	

Commodity Line Description: Task 2

Extended Description:

Field Surveying and Aerial Mapping

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
3	81100000	0.00000		0.000000	51606.60
Service From	Service To	Manufacturer		Model No	

Commodity Line Description: Task 3

Extended Description:

Field and Subsurface Investigation and Preliminary Design

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
4	81100000	0.00000		0.000000	31100.00
Service From	Service To	Manufacturer		Model No	

Commodity Line Description: Task 4

Extended Description:

Development of Bid Ready Plans

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
5	81100000	0.00000		0.000000	20348.21
Service From	Service To	Manufacturer		Model No	

Commodity Line Description: Task 5

Extended Description:

Project Permitting

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
6	81100000	0.00000		0.000000	6482.00
Service From	Service To	Manufacturer		Model No	

Commodity Line Description: Task 6

Extended Description:
Development of Construction Specifications

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
7	81100000	0.00000		0.000000	1004.00
Service From	Service To	Manufacturer		Model No	

Commodity Line Description: Task 7

Extended Description:
Construction Cost Estimate

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
8	81100000	0.00000		0.000000	2209.63
Service From	Service To	Manufacturer		Model No	

Commodity Line Description: Task 8

Extended Description:
Construction Time Estimate

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
9	81100000	0.00000		0.000000	827.21
Service From	Service To	Manufacturer		Model No	

Commodity Line Description: Task 9

Extended Description:
Pre-Bid Conference

GENERAL TERMS AND CONDITIONS:

1. CONTRACTUAL AGREEMENT: Issuance of an Award Document signed by the Purchasing Division Director, or his designee, and approved as to form by the Attorney General's office constitutes acceptance by the State of this Contract made by and between the State of West Virginia and the Vendor. Vendor's signature on its bid, or on the Contract if the Contract is not the result of a bid solicitation, signifies Vendor's agreement to be bound by and accept the terms and conditions contained in this Contract.

2. DEFINITIONS: As used in this Solicitation/Contract, the following terms shall have the meanings attributed to them below. Additional definitions may be found in the specifications included with this Solicitation/Contract.

2.1. "Agency" or "Agencies" means the agency, board, commission, or other entity of the State of West Virginia that is identified on the first page of the Solicitation or any other public entity seeking to procure goods or services under this Contract.

2.2. "Bid" or "Proposal" means the vendors submitted response to this solicitation.

2.3. "Contract" means the binding agreement that is entered into between the State and the Vendor to provide the goods or services requested in the Solicitation.

2.4. "Director" means the Director of the West Virginia Department of Administration, Purchasing Division.

2.5. "Purchasing Division" means the West Virginia Department of Administration, Purchasing Division.

2.6. "Award Document" means the document signed by the Agency and the Purchasing Division, and approved as to form by the Attorney General, that identifies the Vendor as the contract holder.

2.7. "Solicitation" means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.

2.8. "State" means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.

2.9. "Vendor" or "Vendors" means any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract as context requires.

3. CONTRACT TERM; RENEWAL; EXTENSION: The term of this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below:

☐ **Term Contract**

Initial Contract Term: This Contract becomes effective on _____ and the initial contract term extends until _____.

Renewal Term: This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal should be delivered to the Agency and then submitted to the Purchasing Division thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Unless otherwise specified below, renewal of this Contract is limited to _____ successive one (1) year periods or multiple renewal periods of less than one year, provided that the multiple renewal periods do not exceed the total number of months available in all renewal years combined. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

☐ **Alternate Renewal Term** – This contract may be renewed for _____ successive _____ year periods or shorter periods provided that they do not exceed the total number of months contained in all available renewals. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

Delivery Order Limitations: In the event that this contract permits delivery orders, a delivery order may only be issued during the time this Contract is in effect. Any delivery order issued within one year of the expiration of this Contract shall be effective for one year from the date the delivery order is issued. No delivery order may be extended beyond one year after this Contract has expired.

☒ **Fixed Period Contract:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed within One thousand ninety-five (1,095) days.

☐ **Fixed Period Contract with Renewals:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and part of the Contract more fully described in the attached specifications must be completed within _____ days. Upon completion of the work covered by the preceding sentence, the vendor agrees that maintenance, monitoring, or warranty services will be provided for _____ year(s) thereafter.

☐ **One Time Purchase:** The term of this Contract shall run from the issuance of the Award Document until all of the goods contracted for have been delivered, but in no event will this Contract extend for more than one fiscal year.

☐ **Other:** See attached _____
Revised 07/01/2021

4. AUTHORITY TO PROCEED: Vendor is authorized to begin performance of this contract on the date of encumbrance listed on the front page of the Award Document unless either the box for "Fixed Period Contract" or "Fixed Period Contract with Renewals" has been checked in Section 3 above. If either "Fixed Period Contract" or "Fixed Period Contract with Renewals" has been checked, Vendor must not begin work until it receives a separate notice to proceed from the State. The notice to proceed will then be incorporated into the Contract via change order to memorialize the official date that work commenced.

5. QUANTITIES: The quantities required under this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below.

☐ **Open End Contract:** Quantities listed in this Solicitation/Award Document are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.

☐ **Service:** The scope of the service to be provided will be more clearly defined in the specifications included herewith.

☐ **Combined Service and Goods:** The scope of the service and deliverable goods to be provided will be more clearly defined in the specifications included herewith.

☐ **One Time Purchase:** This Contract is for the purchase of a set quantity of goods that are identified in the specifications included herewith. Once those items have been delivered, no additional goods may be procured under this Contract without an appropriate change order approved by the Vendor, Agency, Purchasing Division, and Attorney General's office.

6. EMERGENCY PURCHASES: The Purchasing Division Director may authorize the Agency to purchase goods or services in the open market that Vendor would otherwise provide under this Contract if those goods or services are for immediate or expedited delivery in an emergency. Emergencies shall include, but are not limited to, delays in transportation or an unanticipated increase in the volume of work. An emergency purchase in the open market, approved by the Purchasing Division Director, shall not constitute a breach of this Contract and shall not entitle the Vendor to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One Time Purchase contract.

7. REQUIRED DOCUMENTS: All of the items checked below must be provided to the Purchasing Division by the Vendor as specified below.

☐ **BID BOND (Construction Only):** Pursuant to the requirements contained in W. Va. Code § 5-22-1(c), All Vendors submitting a bid on a construction project shall furnish a valid bid bond in the amount of five percent (5%) of the total amount of the bid protecting the State of West Virginia. The bid bond must be submitted with the bid.

☐ **PERFORMANCE BOND:** The apparent successful Vendor shall provide a performance bond in the amount of 100% of the contract. The performance bond must be received by the Purchasing Division prior to Contract award.

☐ **LABOR/MATERIAL PAYMENT BOND:** The apparent successful Vendor shall provide a labor/material payment bond in the amount of 100% of the Contract value. The labor/material payment bond must be delivered to the Purchasing Division prior to Contract award.

In lieu of the Bid Bond, Performance Bond, and Labor/Material Payment Bond, the Vendor may provide certified checks, cashier's checks, or irrevocable letters of credit. Any certified check, cashier's check, or irrevocable letter of credit provided in lieu of a bond must be of the same amount and delivered on the same schedule as the bond it replaces. A letter of credit submitted in lieu of a performance and labor/material payment bond will only be allowed for projects under \$100,000. Personal or business checks are not acceptable. Notwithstanding the foregoing, West Virginia Code § 5-22-1 (d) mandates that a vendor provide a performance and labor/material payment bond for construction projects. Accordingly, substitutions for the performance and labor/material payment bonds for construction projects is not permitted.

☐ **MAINTENANCE BOND:** The apparent successful Vendor shall provide a two (2) year maintenance bond covering the roofing system. The maintenance bond must be issued and delivered to the Purchasing Division prior to Contract award.

☐ **LICENSE(S) / CERTIFICATIONS / PERMITS:** In addition to anything required under the Section of the General Terms and Conditions entitled Licensing, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits upon request and in a form acceptable to the State. The request may be prior to or after contract award at the State's sole discretion.

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The apparent successful Vendor shall also furnish proof of any additional licenses or certifications contained in the specifications regardless of whether or not that requirement is listed above.

8. INSURANCE: The apparent successful Vendor shall furnish proof of the insurance identified by a checkmark below and must include the State as an additional insured on each policy prior to Contract award. The insurance coverages identified below must be maintained throughout the life of this contract. Thirty (30) days prior to the expiration of the insurance policies, Vendor shall provide the Agency with proof that the insurance mandated herein has been continued. Vendor must also provide Agency with immediate notice of any changes in its insurance policies, including but not limited to, policy cancelation, policy reduction, or change in insurers. The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether that insurance requirement is listed in this section.

Vendor must maintain:

☒ **Commercial General Liability Insurance** in at least an amount of: \$1,000,000.00 per occurrence.

☒ **Automobile Liability Insurance** in at least an amount of: \$1,000,000.00 per occurrence.

☒ **Professional/Malpractice/Errors and Omission Insurance** in at least an amount of: \$1,000,000.00 per occurrence. Notwithstanding the forgoing, Vendor's are not required to list the State as an additional insured for this type of policy.

☐ **Commercial Crime and Third Party Fidelity Insurance** in an amount of: _____ per occurrence.

☐ **Cyber Liability Insurance** in an amount of: _____ per occurrence.

☐ **Builders Risk Insurance** in an amount equal to 100% of the amount of the Contract.

☐ **Pollution Insurance** in an amount of: _____ per occurrence.

☐ **Aircraft Liability** in an amount of: _____ per occurrence.

☐☐☐☐

Notwithstanding anything contained in this section to the contrary, the Director of the Purchasing Division reserves the right to waive the requirement that the State be named as an additional insured on one or more of the Vendor's insurance policies if the Director finds that doing so is in the State's best interest.

9. WORKERS' COMPENSATION INSURANCE: Vendor shall comply with laws relating to workers compensation, shall maintain workers' compensation insurance when required, and shall furnish proof of workers' compensation insurance upon request.

10. [Reserved]

11. LIQUIDATED DAMAGES: This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue any other available remedy. Vendor shall pay liquidated damages in the amount specified below or as described in the specifications:

☐ _____ for _____.

☐ Liquidated Damages Contained in the Specifications.

☐ Liquidated Damages Are Not Included in this Contract.

12. ACCEPTANCE: Vendor's signature on its bid, or on the certification and signature page, constitutes an offer to the State that cannot be unilaterally withdrawn, signifies that the product or service proposed by vendor meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise indicated, and signifies acceptance of the terms and conditions contained in the Solicitation unless otherwise indicated.

13. PRICING: The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the State. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the State in the Solicitation to do so, may result in bid disqualification. Notwithstanding the foregoing, Vendor must extend any publicly advertised sale price to the State and invoice at the lower of the contract price or the publicly advertised sale price.

14. PAYMENT IN ARREARS: Payments for goods/services will be made in arrears only upon receipt of a proper invoice, detailing the goods/services provided or receipt of the goods/services, whichever is later. Notwithstanding the foregoing, payments for software maintenance, licenses, or subscriptions may be paid annually in advance.

15. PAYMENT METHODS: Vendor must accept payment by electronic funds transfer and P-Card. (The State of West Virginia's Purchasing Card program, administered under contract by a banking institution, processes payment for goods and services through state designated credit cards.)

16. TAXES: The Vendor shall pay any applicable sales, use, personal property or any other taxes arising out of this Contract and the transactions contemplated thereby. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.

17. ADDITIONAL FEES: Vendor is not permitted to charge additional fees or assess additional charges that were not either expressly provided for in the solicitation published by the State of West Virginia, included in the Contract, or included in the unit price or lump sum bid amount that Vendor is required by the solicitation to provide. Including such fees or charges as notes to the solicitation may result in rejection of vendor's bid. Requesting such fees or charges be paid after the contract has been awarded may result in cancellation of the contract.

18. FUNDING: This Contract shall continue for the term stated herein, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise made available, this Contract becomes void and of no effect beginning on July 1 of the fiscal year for which funding has not been appropriated or otherwise made available. If that occurs, the State may notify the Vendor that an alternative source of funding has been obtained and thereby avoid the automatic termination. Non-appropriation or non-funding shall not be considered an event of default.

19. CANCELLATION: The Purchasing Division Director reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Purchasing Division Director may also cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-5.2.b.

20. TIME: Time is of the essence regarding all matters of time and performance in this Contract.

21. APPLICABLE LAW: This Contract is governed by and interpreted under West Virginia law without giving effect to its choice of law principles. Any information provided in specification manuals, or any other source, verbal or written, which contradicts or violates the West Virginia Constitution, West Virginia Code, or West Virginia Code of State Rules is void and of no effect.

22. COMPLIANCE WITH LAWS: Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendor acknowledges that it has reviewed, understands, and will comply with all applicable laws, regulations, and ordinances.

SUBCONTRACTOR COMPLIANCE: Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to comply with all applicable laws, regulations, and ordinances. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor.

23. ARBITRATION: Any references made to arbitration contained in this Contract, Vendor's bid, or in any American Institute of Architects documents pertaining to this Contract are hereby deleted, void, and of no effect.

24. MODIFICATIONS: This writing is the parties' final expression of intent. Notwithstanding anything contained in this Contract to the contrary no modification of this Contract shall be binding without mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any change to existing contracts that adds work or changes contract cost, and were not included in the original contract, must be approved by the Purchasing Division and the Attorney General's Office (as to form) prior to the implementation of the change or commencement of work affected by the change.

25. WAIVER: The failure of either party to insist upon a strict performance of any of the terms or provision of this Contract, or to exercise any option, right, or remedy herein contained, shall not be construed as a waiver or a relinquishment for the future of such term, provision, option, right, or remedy, but the same shall continue in full force and effect. Any waiver must be expressly stated in writing and signed by the waiving party.

26. SUBSEQUENT FORMS: The terms and conditions contained in this Contract shall supersede any and all subsequent terms and conditions which may appear on any form documents submitted by Vendor to the Agency or Purchasing Division such as price lists, order forms, invoices, sales agreements, or maintenance agreements, and includes internet websites or other electronic documents. Acceptance or use of Vendor's forms does not constitute acceptance of the terms and conditions contained thereon.

27. ASSIGNMENT: Neither this Contract nor any monies due, or to become due hereunder, may be assigned by the Vendor without the express written consent of the Agency, the Purchasing Division, the Attorney General's office (as to form only), and any other government agency or office that may be required to approve such assignments.

28. WARRANTY: The Vendor expressly warrants that the goods and/or services covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency; (b) be merchantable and fit for the purpose intended; and (c) be free from defect in material and workmanship.

29. STATE EMPLOYEES: State employees are not permitted to utilize this Contract for personal use and the Vendor is prohibited from permitting or facilitating the same.

30. PRIVACY, SECURITY, AND CONFIDENTIALITY: The Vendor agrees that it will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in <http://www.state.wv.us/admin/purchase/privacy/default.html>.

31. YOUR SUBMISSION IS A PUBLIC DOCUMENT: Vendor's entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq. and the Freedom of Information Act West Virginia Code §§ 29B-1-1 et seq.

DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.

Submission of any bid, proposal, or other document to the Purchasing Division constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. The Purchasing Division will disclose any document labeled "confidential," "proprietary," "trade secret," "private," or labeled with any other claim against public disclosure of the documents, to include any "trade secrets" as defined by West Virginia Code § 47-22-1 et seq. All submissions are subject to public disclosure without notice.

32. LICENSING: In accordance with West Virginia Code of State Rules § 148-1-6.1.e, Vendor must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agency or political subdivision. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Purchasing Division Director or the Agency to verify that the Vendor is licensed and in good standing with the above entities.

SUBCONTRACTOR COMPLIANCE: Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to be licensed, in good standing, and up-to-date on all state and local obligations as described in this section. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor.

33. ANTITRUST: In submitting a bid to, signing a contract with, or accepting a Award Document from any agency of the State of West Virginia, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to Vendor.

34. VENDOR CERTIFICATIONS: By signing its bid or entering into this Contract, Vendor certifies (1) that its bid or offer was made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, person or entity submitting a bid or offer for the same material, supplies, equipment or services; (2) that its bid or offer is in all respects fair and without collusion or fraud; (3) that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; and (4) that it has reviewed this Solicitation in its entirety; understands the requirements, terms and conditions, and other information contained herein.

Vendor's signature on its bid or offer also affirms that neither it nor its representatives have any interest, nor shall acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency. The individual signing this bid or offer on behalf of Vendor certifies that he or she is authorized by the Vendor to execute this bid or offer or any documents related thereto on Vendor's behalf; that he or she is authorized to bind the Vendor in a contractual relationship; and that, to the best of his or her knowledge, the Vendor has properly registered with any State agency that may require registration.

35. VENDOR RELATIONSHIP: The relationship of the Vendor to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by this Contract. The Vendor as an independent contractor is solely liable for the acts and omissions of its employees and agents. Vendor shall be responsible for selecting, supervising, and compensating any and all individuals employed pursuant to the terms of this Solicitation and resulting contract. Neither the Vendor, nor any employees or subcontractors of the Vendor, shall be deemed to be employees of the State for any purpose whatsoever. Vendor shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension, or other deferred compensation plans, including but not limited to, Workers' Compensation and Social Security obligations, licensing fees, etc. and the filing of all necessary documents, forms, and returns pertinent to all of the foregoing.

Vendor shall hold harmless the State, and shall provide the State and Agency with a defense against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns.

36. INDEMNIFICATION: The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered by any subcontractor, person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws.

37. PURCHASING AFFIDAVIT: In accordance with West Virginia Code §§ 5A-3-10a and 5-22-1(i), the State is prohibited from awarding a contract to any bidder that owes a debt to the State or a political subdivision of the State, Vendors are required to sign, notarize, and submit the Purchasing Affidavit to the Purchasing Division affirming under oath that it is not in default on any monetary obligation owed to the state or a political subdivision of the state.

38. CONFLICT OF INTEREST: Vendor, its officers or members or employees, shall not presently have or acquire an interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency.

39. REPORTS: Vendor shall provide the Agency and/or the Purchasing Division with the following reports identified by a checked box below:

☐ Such reports as the Agency and/or the Purchasing Division may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract, total contract expenditures by agency, etc.

☐ Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing of purchases by agency. Quarterly reports should be delivered to the Purchasing Division via email at purchasing.division@wv.gov.

40. BACKGROUND CHECK: In accordance with W. Va. Code § 15-2D-3, the State reserves the right to prohibit a service provider's employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check. Service providers should contact the West Virginia Division of Protective Services by phone at (304) 558-9911 for more information.

41. PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS: Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code § 5A-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code § 5A-3-56. As used in this section:

- a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.
- b. "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more or such operations, from steel made by the open hearth, basic oxygen, electric furnace, Bessemer or other steel making process.
- c. The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:

1. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total contract cost or two thousand five hundred dollars (\$2,500.00), whichever is greater. For the purposes of this section, the cost is the value of the steel product as delivered to the project; or
2. The Director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.

42. PREFERENCE FOR USE OF DOMESTIC ALUMINUM, GLASS, AND STEEL: In Accordance with W. Va. Code § 5-19-1 et seq., and W. Va. CSR § 148-10-1 et seq., for every contract or subcontract, subject to the limitations contained herein, for the construction, reconstruction, alteration, repair, improvement or maintenance of public works or for the purchase of any item of machinery or equipment to be used at sites of public works, only domestic aluminum, glass or steel products shall be supplied unless the spending officer determines, in writing, after the receipt of offers or bids, (1) that the cost of domestic aluminum, glass or steel products is unreasonable or inconsistent with the public interest of the State of West Virginia, (2) that domestic aluminum, glass or steel products are not produced in sufficient quantities to meet the contract requirements, or (3) the available domestic aluminum, glass, or steel do not meet the contract specifications. This provision only applies to public works contracts awarded in an amount more than fifty thousand dollars (\$50,000) or public works contracts that require more than ten thousand pounds of steel products.

The cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than twenty percent (20%) of the bid or offered price for foreign made aluminum, glass, or steel products. If the domestic aluminum, glass or steel products to be supplied or produced in a "substantial labor surplus area", as defined by the United States Department of Labor, the cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than thirty percent (30%) of the bid or offered price for foreign made aluminum, glass, or steel products. This preference shall be applied to an item of machinery or equipment, as indicated above, when the item is a single unit of equipment or machinery manufactured primarily of aluminum, glass or steel, is part of a public works contract and has the sole purpose or of being a permanent part of a single public works project. This provision does not apply to equipment or machinery purchased by a spending unit for use by that spending unit and not as part of a single public works project.

All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for foreign aluminum, glass or steel products plus the applicable preference. If the reduced bid or offer prices are made in writing and supersede the prior bid or offer prices, all bids or offers, including the reduced bid or offer prices, will be reevaluated in accordance with this rule.

43. INTERESTED PARTY SUPPLEMENTAL DISCLOSURE: W. Va. Code § 6D-1-2 requires that for contracts with an actual or estimated value of at least \$1 million, the vendor must submit to the Agency a supplemental disclosure of interested parties reflecting any new or differing interested parties to the contract, which were not included in the original pre-award interested party disclosure, within 30 days following the completion or termination of the contract. A copy of that form is included with this solicitation or can be obtained from the WV Ethics Commission. This requirement does not apply to publicly traded companies listed on a national or international stock exchange. A more detailed definition of interested parties can be obtained from the form referenced above.

44. PROHIBITION AGAINST USED OR REFURBISHED: Unless expressly permitted in the solicitation published by the State, Vendor must provide new, unused commodities, and is prohibited from supplying used or refurbished commodities, in fulfilling its responsibilities under this Contract.

45. VOID CONTRACT CLAUSES – This Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law.

ADDITIONAL TERMS AND CONDITIONS
(Architectural and Engineering Contracts Only)

1. PLAN AND DRAWING DISTRIBUTION: All plans and drawings must be completed and available for distribution at least five business days prior to a scheduled pre-bid meeting for the construction or other work related to the plans and drawings.

2. PROJECT ADDENDA REQUIREMENTS: The Architect/Engineer and/or Agency shall be required to abide by the following schedule in issuing construction project addenda. The Architect/Engineer shall prepare any addendum materials for which it is responsible, and a list of all vendors that have obtained drawings and specifications for the project. The Architect/Engineer shall then send a copy of the addendum materials and the list of vendors to the State Agency for which the contract is issued to allow the Agency to make any necessary modifications. The addendum and list shall then be forwarded to the Purchasing Division buyer by the Agency. The Purchasing Division buyer shall send the addendum to all interested vendors and, if necessary, extend the bid opening date. Any addendum should be received by the Purchasing Division at least fourteen (14) days prior to the bid opening date.

3. PRE-BID MEETING RESPONSIBILITIES: The Architect/Engineer shall be available to attend any pre-bid meeting for the construction or other work resulting from the plans, drawings, or specifications prepared by the Architect/Engineer.

4. AIA DOCUMENTS: All construction contracts that will be completed in conjunction with architectural services procured under Chapter 5G of the West Virginia Code will be governed by the attached AIA documents, as amended by the Supplementary Conditions for the State of West Virginia, in addition to the terms and conditions contained herein. The terms and conditions of this document shall prevail over anything contained in the AIA Documents or the Supplementary Conditions.

5. GREEN BUILDINGS MINIMUM ENERGY STANDARDS: In accordance with West Virginia Code § 22-29-4, all new building construction projects of public agencies that have not entered the schematic design phase prior to July 1, 2012, or any building construction project receiving state grant funds and appropriations, including public schools, that have not entered the schematic design phase prior to July 1, 2012, shall be designed and constructed complying with the ICC International Energy Conservation Code, adopted by the State Fire Commission, and the ANSI/ASHRAE/IESNA Standard 90.1-2007: Provided, That if any construction project has a commitment of federal funds to pay for a portion of such project, this provision shall only apply to the extent such standards are consistent with the federal standards.

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.


Daniel Martinez, PE - Project Manager
(Name, Title)
Daniel Martinez, PE - Project Manager
(Printed Name and Title)
120 Genesis Boulevard, Bridgeport, WV 26330
(Address)
304-203-8855
(Phone Number) / (Fax Number)
dmartinez@cecinc.com
(email address)

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law.

Civil & Environmental Consultants, Inc.

(Company)

 Dennis E. Miller Vice President
(Authorized Signature) (Representative Name, Title)

Dennis Miller, PS - Vice President

(Printed Name and Title of Authorized Representative)

January 11, 2022

(Date)

304-933-3119 / 304-933-3327

(Phone Number) (Fax Number)

EXPRESSION OF INTEREST

Francis Drainage Maintenance CRQS: DEP22*25

SECTION THREE: PROJECT SPECIFICATIONS

1. **Background:** Firms are to be licensed Architectural/Engineering Firms (A/E) in the State of West Virginia and should be familiar with and have successful track record of design of similar projects. The anticipated contract will be for “full service” A/E design. Aspects of the design are to include, but not be limited to; Civil, Geological and Hydrological.

The successful A/E Firm will be responsible for Design of the following:

- Access or accesses as required.
- Geotechnical analysis.
- Hydrologic and hydraulic analyses.
- AMD passive treatment system.
- Oxidation bed design.
- Clear and grub affected areas.
- Regrade as necessary.
- Install drainage channels, underdrains, and/or other controls to safely convey water off-site.
- Condition and revegetate all disturbed areas.
- Obtain required permits as determined at the Pre-Design meeting.

Preliminary design documents will be due 60 days from the issuance of the Purchase Order.

Location: The Project location is near Francis in Harrison County close to Harrison / Marion County line.

The project site is on private property behind a locked farm gate. A site visit will be performed with the Highest Scoring Vendor during the Negotiation Phase of this solicitation.

2. **Project and Goals:** The project goals and objectives are listed below. Vendors should discuss any anticipated concepts and proposed methods of approach for achieving each of the listed goals and objectives:
 - 2.1. Develop construction plans and technical specifications to rehabilitate and retrofit the passive treatment facility at the abandoned mine lands project area known as Francis Drainage Maintenance.

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Francis Drainage Maintenance CRQS: DEP22*25

- 2.2. Design plans and develop specifications to control any associated water with the site, including but not limited to oxidation bed design to replace current treatment facilities.
 - 2.3. Design plans and develop specifications for limits of disturbance, storm water control and erosion and sediment prevention. All disturbed areas are to be regraded and revegetated.
 - 2.4. Design plans and develop specifications for all conditions encountered on the project sites.
3. **Qualifications, Experience, and Past Performance:** Vendors should provide information regarding its employees, such as staff qualifications and experience in completing similar projects; references; copies of any staff certifications or degrees applicable to this project; proposed staffing plan; descriptions of past projects completed entailing the location of the project, project manager name and contact information, type of project, and the project goals and objectives and how they were met.

The response should be presented in concise format which defines the corporation history and the experience, qualifications, and performance data of the firm's staff as requested by the AML Consultant Qualification Questionnaire (CQQ), Attachment "A" and the AML and Related Project Experience Matrix (RPEM), Attachment "B".

AML Consultant Qualification Questionnaire (CQQ) should be completed and submitted with Vendor's submitted response to be eligible (**See Attachment "A"**).

AML and Related Project Experience Matrix (RPEM) should also be completed and submitted with Vendor's submitted response to be eligible (**See Attachment "B"**).

4. **Oral Presentations/Interviews:** The Agency will conduct individual interviews with the three vendors that are determined to be the most qualified to provide the required service. During oral presentations/interviews, vendors may not alter or add to their submitted proposal, but only clarify information already submitted. A description of the materials and information to be presented is provided below:

4.1. Materials and Information Required at Oral Presentation/Interviews:

An Oral Presentation will be conducted with the three firms selected as the most qualified by the WVDEP Selection Committee. The Committee will schedule the interviews. The format for the interviews will be a 15–30-minute PowerPoint presentation consisting, at a minimum, of the following:

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- Corporate/personnel experience as it relates to the project or projects
- Proposed project management plan
- Key personnel available for the proposed work
- Proposed subcontractors (mapping, geotechnical, etc.)
- Product quality control
- Project cost control
- Project Schedule

SECTION FOUR: VENDOR PROPOSAL, EVALUATION, & AWARD

1. **Economy of Preparation:** EOIs should be prepared simply and economically, providing a straight-forward, concise description of the firm's abilities to satisfy the requirements and goals and objectives of the EOI. Emphasis should be placed on completeness and clarity of content. The response sections should be labeled for ease of evaluation.
2. **BIDS MUST NOT CONTAIN PRICE INFORMATION:** The State shall select the best value solution according to W. Va. Code §5G-1-3. In accordance with Code requirements, no "price" or "fee" information is permitted in the Vendor's EOI response.
3. **Evaluation and Award Process:** Expressions of Interest for projects estimated to cost \$250,000 or more will be evaluated and awarded in accordance with W.Va. Code §5G-1-3. That Code section requires the following related to evaluation and award:
 - 3.1. **Selection Committee Evaluation and Negotiation:** A committee comprised of three to five representatives of the agency initiating the request shall:
 - 3.1.1. Evaluate the statements of qualifications and performance data and other material submitted by the interested firms and select three firms which in their opinion are the best qualified to perform the desired service.
 - 3.1.2. Conduct interviews with each of the three firms selected.
 - 3.1.3. Rank the three selected firms in order of preference
 - 3.1.4. And commence scope of service and price negotiations with the highest

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qualified professional firm.

If negotiations are successful, the contract documents will be forwarded to the WV Purchasing Division for review and approval, and then to the WV Attorney General's office for review and approval as to form. Once approved, a formal contract will be issued to the Vendor.

Should the agency be unable to negotiate a satisfactory contract with the professional firm considered to be the most qualified at a fee determined to be fair and reasonable, the agency will then commence negotiations with the second most qualified firm, and so on, until an agreement is reached, or the solicitation is cancelled.

- 3.2. Three Firm Evaluation Rankings:** The Agency will evaluate the three firms that have been determined most qualified to perform the desired service. The evaluation criteria are defined in the Procurement Specifications section and based on a 100-point total score. Points shall be assigned based upon the Vendor's response to the evaluation criteria as follows:

• Qualifications, Experience, and Past Performance	(35) Points Possible
• Goals and Objectives: – Anticipated Concepts and Methods of Approach	(30) Points Possible
• <u>Oral Interview</u>	<u>(35) Points Possible</u>
Total	100

- 3.3 Contractor Information Form (AVS):** Vendor must complete an AVS (Applicant Violator System) form to request an eligibility evaluation from the Office of Surface Mining Reclamation and Enforcement. This requirement applies to contractors and their sub-contractors and is found under OSMRE's regulations at 30 CFR 874.16. Vendor must sign and date it. Form must be completed within 30 days of award to be considered for award. The completion of the form will be requested by the Agency after evaluation and prior to award of the purchase order.



June 1, 2022

West Virginia Department of Environmental Protection
Division of Land Restoration
Office of Abandoned Mine Lands
101 Cambridge Place
Bridgeport, WV 26330

Attn: Sheldon Holbert, P.E. & Jamie Shafer, ERS3

Dear Mr. Holbert,

Subject: Francis Drainage Maintenance – CEOI 0313 DEP2200000006
CEC Project 320-020
Revised Proposal Depicting Updated Fees

Civil & Environmental Consultants, Inc. (CEC) is pleased to submit this Scope of Work Letter and associated Engineering Cost proposal to provide engineering services for the Francis Drainage Maintenance replacement and reclamation project. This project is located west of Whitehall, WV and east of Enterprise, WV outside of the City of Fairmont's MS4 boundary. The project area can be found at the end of Harrison County Route 12/12 (Trainer Road) approximately 600 feet from the intersection of Harrison County Route 12/12 (Trainer Road) and Harrison County Route 12 (Francis Mine Road). The project area drains to Coons Run of the West Fork River of the Monongahela River Basin. The basis for this proposal is as follows:

- A. An Expression of Interest (EOI) dated December 10, 2021, advertised in accordance with West Virginia §5G-1-3 by the West Virginia Department of Environmental Protection (WVDEP), Office of Abandoned Mine Lands and Reclamation (WVAML);
- B. A letter dated January 21, 2022 shortlisting CEC as one (1) of three (3) firms to provide engineering services to the WVDEP for the Francis Drainage Maintenance abandoned mine lands reclamation project;
- C. A virtual interview conducted on February 3, 2022. The interview process involved three (3) potential firms selected to provide engineering related services for the Francis Drainage Maintenance Project for WVAML based upon EOI submittals. The EOI submittal included past experience and capability to perform required engineering tasks;
- D. A letter dated March 08, 2022 from the WVAML Bridgeport Office selecting CEC to perform engineering services for Francis Drainage Maintenance Project;
- E. A meeting held on March 18, 2022 with Mr. Jamie Shafer and Mr. Lee Yost of the WVAML and Mr. Timothy Denicola and Mr. Daniel Martinez of CEC to review the historic sampling data available for the existing project treatment systems; and
- F. An on-site pre-bid meeting was held on April 05, 2022 with Mr. Eric Simpson, Mr. Sheldon Holbert, Mr. Jamie Shafer, Mr. Lee Yost, and several others from the WVAML as well as Mr. and Mrs. Holcomb being the landowners. Representing CEC was Mr. Timothy Denicola and Mr. Daniel Martinez.

- G. A virtual meeting conducted on April 22, 2022 to review the initial proposal and receive comments from the DEP.
- H. A meeting between Jamie Shafer and Daniel Martinez on May 05, 2022 to discuss the WVAML's presentation of the conceptual design to the landowner and discuss project scope and approach.

1.0 BACKGROUND AND PURPOSE

The original footprint of this project was surface mined with deep mine development prior to the Surface Mining Control and Reclamation Act (SMCRA) of 1977 leaving unstable coal refuse, erodible soils with poor vegetation, and problematic mine drainage from acid-producing materials. The land stability and water quality issues were addressed by the State of West Virginia under its Abandoned Mine Lands Program as the program pioneered the development of passive treatment systems. In 1996, Sturm and Associates was afforded the opportunity to work with AML to design remedial efforts to stabilize the site and mitigate the Abandoned Mine Drainage (AMD) using the most proven principles at the time. In the present day, the acid mine water mitigation measures previously designed are at the end of their lifespan and warrant replacement.

The present day project entails the reclamation and replacement of the existing treatment facilities with a treatment system that is effective in treating the mine discharge while reducing the overall treatment system footprint. From the April 05, 2022 on-site pre-bid meeting, it was expressed by the landowner that regenerative cattle farming operations will be taking place on the site of the existing treatment facility. Their primary desire entailed reclaiming the existing treatment facility and re-sloping the land to regain as much farmable landscape as possible while still leaving behind an effective treatment system. Of particular importance to the landowner is the restoration of the land to grades that are conducive to mowing and farm tractor access.

2.0 PROPOSED MITIGATION ALTERNATIVE

CEC's objective is to redesign the treatment facilitate to provide effective passive mine water drainage treatment while reducing the treatment system size from what is currently present. Based on discussions with the WVAML and the landowner as well as evaluation of historic sampling data, CEC proposed the following abatement procedures:

- A. Design and develop a Clearing and Grubbing plan to remove all woody vegetation, accumulated trash, and other debris from the project area;
- B. Identify onsite borrow and disposal areas to facility the removal and backfilling of the existing treatment systems. Suitable borrow locations and material if encountered onsite will be identified using the results of the subsurface drilling and investigation;
- C. Design cut/fill operations to provide positive drainage throughout the project area. Suitable excavation materials will be utilized to backfill the existing treatment cells and regrade the landscape to a topography mostly conducive to farming and access;
- D. Design open flow limestone ditches to capture surface runoff and ground water expressions to direct flow around or through the project site. All designed ditches will have engineered linings to provide stability and retard erosive forces. Limestone will be specified for all riprap lined ditches to add

alkalinity to captured waters;

- E. Decommission the existing defunct treatment facilities and design an AMD passive treatment system that will treat the mine water to a pH 6.0 or greater prior to release into project area streams. Water samples taken during the subsurface investigation as well as historic sampling data provided by the WVAML will form the basis for this plan;
- F. Evaluate the existing downstream drainage channel known as Unnamed Tributary to Coons Run and determine if maintenance or improvements are needed to convey the design 25-yr storm event;
- G. Design road improvements to provide all-weather construction access to the project area;
- H. Design a sediment control plan to be implemented during all phases of construction activities. CEC will submit an NPDES Application and a Regional General Permit for Abandoned Mine Lands (if required) for the project. CEC assumes in our cost estimate that both permits will be required for this project; and
- I. Revegetate disturbed areas in accordance with WVAML standard revegetation specifications. Repair driveways, access roads, and county roads, as well as other landowner constructed appurtenances affected by construction activities.

3.0 SCOPE OF WORK

CEC proposes the following scope of services based upon our understanding of the problem, WVAML's explanation of the problem, and the on-site kick-off meeting, subsequent cursory field investigation and follow-up meeting with the WVAML to adjust the scope of services.

3.1 Task 1 – Site Reconnaissance and Preparation of Cost Proposal and Budget Estimate

CEC met with WVAML personnel on April 05, 2022. At that time, the WVAML explained site problems, delineated Project boundaries, and indicated reclamation alternatives. The landowners also provided information as to the sites history and expressed their desires and objectives for the reclamation project. CEC has prepared this scope of work and cost estimate budget proposal based upon our understanding of the condition of the existing passive treatment facility and the likely scope of construction activities required to adjust and replace the systems and topography associated with the Francis Drainage Maintenance project.

Task 1 subtotal..... \$1,601.21

3.2 Task 2 - Field Surveying and Aerial Mapping

The purpose of this task is to capture the constructed conditions from the 1996 Francis Mine reclamation project since no as-built mapping exists. This will be done through the use of aerial mapping utilizing LiDAR and photogrammetry supplemented by conventional field surveying techniques.

3.2.1 *Field Surveying*

CEC survey crews will locate manmade and natural features not shown on the aerial mapping to be obtained under this task. These features include the pipe inverts of the AMD discharge points and ditch elevations below the water surface. Surveyed boreholes will aid in proper design of embankments and

backfill, soil cover, mine seal installations, and horizontal boring targets.

Field survey operations will establish project baselines and cross sections at project site to control construction activities, Contractor quantity estimates, and define project boundaries. Field crews will locate and note all visible overhead and marked underground utilities and constructions and contact Miss Utility of West Virginia for a complete listing of affected utilities within the project area. Results of field surveys will be placed on the mapping for the project.

CEC understands the project has several property lines that bisect the project area. The WVAML has requested that CEC remove the partial boundary survey effort that was originally proposed to establish the parcel lines. CEC assumes that the WVAML will be able to obtain approval from all landowners involved in the project area and that no boundary survey will be necessary by CEC. If boundary survey does need to be performed, CEC may perform these services for an additional fee.

This proposal does not include surveys for proposed easements, land transfers, or other associated items that may be needed for development purposes (such as zoning, annexations, lot splits, subdivision plats).

3.2.2 Aerial Mapping

CEC survey crews will establish horizontal and vertical control on the project site utilizing GPS observations and OPUS post processing. A minimum of three (3) horizontal and vertical control points will be established around the project site. The horizontal datum will be based upon the State Plane Coordinate System (NAD83 – NSRS2011), and the vertical datum will be based upon the North American Vertical Datum of 1988 (NAVD88; Geoid 18). These points will serve as the basis for the LiDAR and deliverables to be produced. Control Points will be established by using rebar with caps stamped “CEC CONTROL” driven flush to the ground or a “mag nail” driven flush to the pavement surface.

Aerial control points (ACPs) will be placed around the site to ensure accurate correlation of photographic data collected. ACPs may consist of a combination of fabric and spray paint.

CEC will use a small Unmanned Aerial System (sUAS) coupled with the appropriate sensor(s) (LiDAR, high resolution camera, etc.) to collect the raw data required to produce the requested deliverables. The sUAS will be operated in accordance with CEC’s Unmanned Aerial System’s Standard Operating Procedures and the applicable equipment operating manuals by a team of trained technicians who hold FAA Part 107 certificates. All data used for deliverables will be checked for adherence to the US National Map Accuracy Standard.

Due to the current nature of technology and Federal Aviation Administration regulations, weather can be a factor in CEC’s ability to operate the sUAS. The data collection will occur provided the following conditions are not present at the time of collection:

- Prevailing winds in excess of 18 miles per hour;
- Precipitation greater than a light mist;
- Thunderstorms within 10 nautical miles;
- Less than 3 miles visibility from the pilot in command’s (PIC) point of view; and
- Publication of a Temporary Flight Restriction.

Should any of the factors listed above occur during the scheduled data collection times, CEC reserves the right to reschedule or modify this proposal. CEC will notify the client immediately and work with the client to reschedule when conditions are more conducive to operations.

Collected data will be processed by trained technicians for final deliverable production using specialized software for each set of data.

Upon completion of data collection CEC will provide the following deliverables:

- Topographic map
 - 1' Contours
 - Low Resolution Planimetrics (roads, buildings, outlines of vegetated areas)
- Georectified Orthomosaic Image GeoJPG Format

CEC assumes that this project will only include the scope of services listed above and the estimated costs contained herein do not encompass repeat quarterly or annual reporting requirements.

CEC assumes that site access will be granted by the client on the scheduled day(s) of services, and that all coordinating information will be provided to CEC prior to arrival on site. Typical restrictions that impede operations include closed gates, landowner notification and approval, and blocked roads.

The surveying services outlined above presume that no equipment or material stockpiles will be present in the area that may inhibit the collection of the survey environment. Additionally, periods of ice and snow accumulation may impact the sensor's ability to collect reliable data.

In the event CEC technicians are confronted with extenuating circumstances that may inhibit the collection of data, CEC will notify the client immediately and a decision will be made to continue to survey work or delay the field work until the adverse conditions are remedied.

Task 2 subtotal..... \$11,641.63

3.3 Task 3 – Field and Subsurface Investigation and Preliminary Design

3.3.1 *Summary of Work*

CEC will conduct a thorough field reconnaissance to perform a complete visual examination of the Project work areas. Tasks to be completed during the field reconnaissance include, but are not limited to:

- A. Perform a desktop reconnaissance of the existing treatment facility utilizing sources for available mapping of the abandoned deep mine complexes prior to performing field operations and to inform the design. These sources may include private entities and public organizations such as the West Virginia Geological and Economic Survey and West Virginia Geographic Information Systems Technical Center;
- B. Delineate existing and proposed drainage patterns, conveyances, and facilities, and locate areas where upgradient drainage disconnected by the current AMD treatment facility can be reconnected to the Unnamed Tributary to Coon's Run;

- C. Delineate and investigate garbage and debris dumps located within the Project area. Investigate the dump areas to evaluate if hazardous materials are present that may require special disposal operations;
- D. Evaluate and define site access for proposed drill hole locations associated with subsurface investigations for the Project and construction equipment for reclamation activities.
- E. CEC will utilize the existing design plans, field sampling data, and boring logs to implement a subsurface investigation plan to confirm the findings from both the initial investigation from 1996 as well as the continued investigation performed by the WVAML from 1998 to 2021. CEC will place proposed borings in locations suitable to identifying usable borrow locations as well as confirm the subsurface geology and chemistry is as anticipated from the previously collected data. Please refer to the attached map entitled Francis Drainage Maintenance Project Engineering Cost Estimate Map for locations of the proposed subsurface investigation boring holes;
- F. CEC will collect water quality samples at the existing AMD sources to quantify contaminant loads intended for treatment. Field parameters may include temperature, pH, specific conductivity, dissolved oxygen, and oxidation-reduction potential. Laboratory parameters may include acidity, alkalinity, sulfate total iron, aluminum, manganese, calcium, and magnesium, and dissolved iron, aluminum, and manganese. Discharge measurements will be collected within and in proximity to the project location with the bucket and stopwatch method at pipe outlets. Drainage conveyances to be installed or repaired in the mitigation of chronic AMD discharges in particular may reference the results of the water chemistry testing to facilitate a suitable selection of channel protection or lining material.
- G. CEC will obtain 14 soil samples to be laboratory analyzed for acid-base accounting, sulfur forms, and plant nutrients to identify acid-generating potential and to design lime and fertilizer application rates and an effective revegetation plan; and
- H. CEC will develop a source for required construction material, particularly calcium carbonate rich riprap, to be used in the open limestone ditches.

3.3.2 Subsurface Investigation

CEC will subcontract Novel-Geo Environmental (NGE) to coordinate and perform the geotechnical engineering and subsurface investigation for this project. CEC will provide surveyors for locating the proposed test borings in the field and determine their existing ground surface elevations. CEC will coordinate placing the West Virginia 811 utility location request at least two (2) business days prior to mobilizing to the site for drilling. CEC notes however that the 811 utility location service may not locate all utilities on private property. CEC and its subcontractors are not responsible for damage to unmarked or improperly marked utility lines.

Eleven (11) test borings are proposed to perform the subsurface investigation at the Francis Drainage Maintenance site. The layout of the test borings can be found in the attached map entitled Francis Drainage Maintenance Project Engineering Cost Estimate Map. The depths of the borings are proposed to extend an average of 20 ft below the existing ground surface unless bedrock is encountered based on a review of the fill depths from the original 1996 Francis Mine reclamation project. These borings are necessary to characterize the soil in potential borrow locations and identify the depths and quantities of relic mine spoil as opposed to suitable material. The borings have been proposed in anticipated sources of

borrow material.

NGE will perform the laboratory testing on selected samples obtained during the test drilling. Laboratory testing will likely include Atterberg Limits (plasticity), grain size analysis, moisture content, and standard Proctor density, and direct shear on soil samples.

NGE will prepare a geotechnical report summarizing the data obtained that presents conclusions and recommendations in accordance with the purpose of the project. The report will include a boring location plan, the field representative's logs, slope stability analysis results, and laboratory test results. CEC will provide the WVAML with one (1) pdf copy of the report. The drilling logs will additionally be included in the construction specifications developed under a later task.

CEC will additionally subcontract Sturm Environmental Services to perform water and soil chemistry evaluation and reporting associated with the field sample acquisition.

3.3.3 Preliminary Design

Based upon field survey and mapping, review of available information, subsurface investigation, and laboratory results of water and soil tests, CEC will complete a preliminary design for the Francis Drainage Maintenance Project. Engineering analysis will include hydraulic/hydrologic calculations, preliminary quantity estimates, and area computations. We will work closely with WVAML during this phase to develop a mediation plan that is practical, economical, and consistent with the goals of the Abandoned Mine Lands Program. Field meetings conducted on April 05, 2022 established the importance of abating the AMD while reducing the footprint of the existing treatment facility. CEC's objective is to develop a design that satisfies the concerns of the Project stakeholders.

This phase will include preparation of preliminary drawings to define work in general, and at a minimum, will include sufficient detail to visually convey our proposed reclamation alternative. The preliminary design phase is necessary to identify possible treatment alternatives. CEC includes for consideration with this cost estimate the development and presentation of one (1) passive AMD treatment approach. Although analyses completed for the preliminary designs are not generally performed in sufficient detail to fulfill final design requirements, the analyses are useful in identifying remedial measures and problems requiring further attention. The preliminary design will form the basis of the final design for the Project. Preliminary design will include:

- A. Conceptual design of proposed regraded areas for review by WVAML;
- B. Tributary to Coons Run analysis to determine if maintenance or improvements are needed to convey the design 25-yr storm event as determined by Table 4-2 of the West Virginia Division of Highways Drainage Manual. If improvements to the ditch beyond routine maintenance are recommended, CEC will share their findings with the WVAML and determine how to proceed. Grading improvements performed in the Federal Emergency Management Agency (FEMA) established 100-yr designated floodplain in Coons Run will require additional hydraulic analysis, reporting, and permitting. If these services are required, the WVAML may request CEC perform these additional tasks for an additional fee;
- C. Methods and constructions used to divert or convey surface run-off, ground water, and mine drainage through or around the project areas keeping in mind landowner access. Open limestone ditches will

be utilized to the extent possible and practicable for landowner access. Proposed ditches will have engineered linings to provide stability and retard erosive forces. Where required, proposed ditches will have impervious, flexible linings to reconnect streams lost to mine subsidence. Conceptual design of subsurface drains to correct drainage problems associated with the abandoned deep mine operations. Installation and construction of pipes in ditches will be limited to replacing or constructing new crossings beneath existing access roads or required for construction access; and

- D. One (1) conceptual design conveying the passive treatment designs of AMD treatment beds and channels, sources of borrow or disposal areas, open limestone channels and surface stormwater drainage conveyances will be presented to the WVAML in PDF format for review.

After completion of the surveying and mapping, field and water quality data investigations, laboratory analysis, and development of preliminary design alternatives, CEC will meet WVAML personnel to review and discuss the preliminary design for the maintenance or replacement of the existing Francis Drainage AMD treatment project. Preliminary drawings developed to visually convey preferred reclamation alternatives would be submitted prior to the meeting. The preliminary design will be modified based upon WVAML's comments and resubmitted for approval prior to preparation of the final construction plans and specifications.

Task 3 subtotal..... \$51,606.60

3.4 Task 4 – Development of Bid Ready Plans

Based upon the results of Tasks 1, 2, and 3, the final engineering design will be completed, and construction drawings prepared for the alternative selected and approved by WVAML.

The preliminary design performed during Task 3 for the selected alternative will be further evaluated and analyzed. Preparation of final drawings will include engineering analyses necessary to design regraded contours to balance cut and fill quantities, reclamation or replacement of existing treatment facilities, site surface and subsurface drainage conveyances, methods to treat AMD, replacement of existing access roads and establishment of new drainage crossings to facilitate landowner agricultural access, site restoration including private road and/or driveway repairs, landscape vegetation replacement (if necessary); erosion and sediment control plan; and revegetation plan.

A complete set of construction drawings will be prepared for the Francis Drainage Maintenance project. These drawings will present details of proposed reclamation or replacement measures and will typically include the following sheets:

Francis Drainage Maintenance Construction Plans		
Anticipated Sheet List	Scale	Number of Sheets
Title Sheet	Varies	1
Composite Drawing	1" = 100'	1
Existing Conditions with Tax Map Overlays	1" = 40'	2
Erosion & Sediment Control Plan	1" = 40'	2
Overall Site Plan	1" = 100'	1
Final Site Plan & Profiles	1" = 40'	4

Francis Drainage Maintenance Construction Plans		
Anticipated Sheet List	Scale	Number of Sheets
Baseline Cross Sections	1" = 20'	5
Ditch Profiles	1" = 20'	5
Ditch Maintenance Plan and Profile	1" = 20'	2
Typical Details	Varies	4
Erosion & Sediment Control Details	Varies	2
Total Estimated Number of Sheets		29

Task 4 subtotal \$31,100.00

3.5 Task 5 – Project Permitting

3.5.1 *NPDES Permitting*

CEC anticipates incorporating the erosion and sedimentation control plans into an application for a National Pollutant Discharge Elimination System (NPDES) general permit coverage for the proposed site construction activities, in accordance with the requirements and regulations of the WVDEP. The development of the overall project is anticipated to disturb more than 3 acres of land. Therefore, the project will require a "Major Construction Project Application" for discharges of stormwater from a construction activity will be required for the site work activities. The following services are anticipated as a part of the NPDES permitting:

- A. CEC will perform the design work required to develop the proposed E&S program, including the E&S Plan, construction details, narrative, construction sequence, application, and supporting documentation, and submit the information to WVDEP via e-permitting for review and approval.
- B. Coordinate with the local regulatory agencies during their review of the plans and permits, and respond to comments to facilitate plan and/or permit approval. CEC will respond to one (1) round of review comments from the WVDEP as part of this scope.
- C. CEC will prepare an NPDES application and prepare a Notice of Termination (NOT) form at the end of the project.
- D. Permit fees associated with the NPDES permit are excluded from this scope of work and will need to be paid by the owner at the time of submission.

If requested by the WVAML, CEC can remove the NPDES permitting from this scope of work proposal to have the selected construction contractor complete this task under their contract.

3.5.2 *Wetland and Stream Delineation Report*

Based on information obtained during an on-site field reconnaissance, it appears the site likely contains waters of the United States. The purpose of this task is to mobilize ecologists to georeference the location and extent of onsite water. The information obtained in this task will be utilized in the preparation of permit applications to maintain compliance with federal and state regulations.

CEC will conduct an on-site field delineation within an approximate 31-acre area to identify streams and delineate wetland boundaries. CEC's wetland delineation services will be performed in accordance with the 1987 *U.S. Army Corps of Engineers (USACE) Manual*, supplemented by the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region Version 2.0*, the *National Wetland Plant List* (Lichvar, 2016), and the U.S. Department of Agriculture's *Hydric Soils of the United States*. CEC will identify wetlands using the three (3) criteria described in the Corps Manual: Hydrophytic Vegetation, Hydric Soils, and Hydrology.

Prior to conducting the on-site field delineation, CEC will review aerial and topographic mapping to identify potential streams and wetlands. During the on-site field delineation, CEC will collect test site data at the identified wetlands and representative upland locations. Wetland data forms will be completed for the test site locations. If a wetland is present, CEC will define the wetland/non-wetland boundaries in the field by placing consecutively numbered surveyor's ribbon along the wetland boundary. CEC will geo reference the flagged wetland boundary points and test site locations using a hand-held Trimble Geo-XH global positioning system (GPS) unit.

In addition to wetlands, streams and other open waters within the delineation area will be identified. Stream data forms will be completed at the stream crossing locations, and photographs will be collected to support CEC's findings. Streams will be classified as perennial, intermittent, or ephemeral.

CEC's proposal assumes that the delineations can be completed in one (1) mobilization, utilizing a two (2) person field crew.

Following the onsite delineations, CEC will prepare a report to include a discussion of general site conditions and vegetation; climate conditions leading up to and during the field survey; hydrology and soils; descriptions and limits of wetlands and streams; and pertinent mapping depicting the boundaries of these resources. CEC will use available aerial mapping to show wetland boundaries, wetland type and acreage, and stream location and type. The figures will include a Site Location Map, Soils Map, NWI Map, and Wetland Delineation Map.

3.5.3 Agency Consultation

In order for the USACE to issue authorization under Section 404 of the Federal Clean Water Act, this project must also comply with the Endangered Species Act (ESA) and the National Historic Preservation Act (NHPA). The purpose of this task is to prepare the anticipated deliverables to comply with the ESA and NHPA.

CEC will prepare and submit technical assistance letters to the USFWS and West Virginia Division of Natural Resources (WVDNR) for a threatened and endangered species review and to the State Historic Preservation Office (SHPO) for a cultural resources review. These packages will generally include the following:

- Letter describing the proposed project and general site conditions;
- Site location map;
- Photographs keyed to a photo location map; and
- Desktop review information.

This task does not include species specific surveys or cultural resource surveys. If these items become necessary, CEC will submit an amended scope of work and fee.

3.5.4 Regional General Permit for AML

As previously mentioned, waters of the United States are likely present onsite and design activities may result in impacts to these waters. The purpose of this task is to prepare the federal permit application for compliance with Section 404/401 of the Federal Clean Water Act.

CEC will prepare a Pre-construction Notification (PCN) to the USACE, Pittsburgh District. The package will include the following components:

- Letter describing the project purpose and need;
- Description of the proposed work;
- Impact Mapping;
- Engineering Plans;
- Delineation Report; and
- Agency Correspondences.

The PCN application and supporting documentation will be submitted to the WVDEP-AML for review prior to submittal to the USACE. Our scope of services includes one (1) round of responses to the USACE to address administrative and minor technical comments. If substantial technical comments or additional responses from the USACE are received, these services will be addressed as a separate scope of service and fee.

3.5.5 Stream Activity Application

The purpose of this task is to prepare a Stream Activity Application for anticipated stream crossings and impacts associated with the project.

Scope of Service: CEC will prepare and submit a Stream Activity Application to the WVDNR's Office of Land and Streams for the required License and Right of Entry for stream impacts associated with the project. The application package will include the documents listed below:

- Stream Activity Application Form;
- Site Vicinity Map; and
- Stream Impact Summary Table.

This task does not include payment for the License and Right-of-Entry; this will be the responsibility of the WVAML.

Task 5 subtotal..... \$20,348.21

3.6 Task 6 – Development of Construction Specifications

Based on the final construction drawings, a set of technical contract specifications will be prepared. The specifications prepared will be based on WVAML's standard specifications as much as practical. These specifications typically will include the following:

Francis Drainage Maintenance Anticipated Project Specifications	
Anticipated Specification List	Specification #
Definitions	-
WVAML provided Contracting Documents	-
Table of Contents	-
Project Narrative	-
Special Provisions	-
Mobilization / Demobilization	1
Construction Layout	2
Quality Control	3
Site Preparation	4
Sediment and Erosion Control	5
Revegetation	6
Drainage Structures	7
Unclassified Excavation	8
Utilities	9
Asphalt Pavement Wearing Course	10
Subsurface Drains	11
Test Boring Logs	12
Traffic Control	13

Task 6 subtotal..... \$6,482.00

3.7 Task 7 – Construction Cost Estimate

Based on final construction drawings and specifications, quantity estimates will be completed to perform the work as described. In conjunction with WVAML, CEC will prepare an itemized opinion of probable cost for the selected alternative. Construction costs will be based upon purchase price for goods and materials used in the design accompanied by estimated equipment, labor, and profit costs associated with their installation and/or construction.

Task 7 subtotal..... \$1,004.00

3.8 Task 8 – Construction Time Estimate

CEC has included sufficient time and mileage for CEC's Project Manager or AMD treatment specialist to visit the Francis Drainage Maintenance project three (3) separate times remaining onsite for four (4) hours each visit during the construction phase. The site visits will be as scheduled and requested by the WVAML and will be used to clarify Contractor questions concerning the Plans and the Specifications. With the aid of the WVAML on-site representative, the CEC Observer can review the construction progress and techniques on particular components of the proposed treatment system and reclamation plan as warranted by the WVAML during these site visits. If requested by the WVAML, CEC can provide a surveyor to confirm or check baselines and grades at critical locations at the time of these site visits for an additional fee. Following each site visit, CEC will prepare and submit a

construction field report describing the findings from the site visit within three (3) business days of performing the site visit unless critical findings have been discovered. In the event that unsafe or other detrimental situations are encountered, CEC will immediately notify the WVAML once safe to do so to determine how to proceed.

Task 8 subtotal \$2,209.63

3.9 Task 9 – Pre-bid Conference

CEC will provide a professional staff member who was involved in and is familiar with the construction plans and specifications for the Francis Drainage Maintenance project, at the Pre-Bid Conference. The professional member will facilitate the pre-bid meeting by showing and explaining the primary aspects of the plans and specifications to potential Contractors. Questions asked by prospective bidders which are not able to be answered at the pre-bid will be recorded and answered via follow-up email to all bidders.

CEC has removed the attendance of a professional staff member at the pre-construction conference from this scope of service as requested by the WVAML.

CEC understands that the WVAML will arrange and schedule the meeting at the conclusion of all design work for the Project.

Task 9 subtotal \$827.21

3.10 Task 10 – Construction Monitoring

CEC has removed construction monitoring from its scope of services as requested by the WVAML.

4.0 ESTIMATED ENGINEERING COSTS

The project costs are summarized below. These costs are based on our current understanding of the anticipated work effort and the assumptions described within this section. A breakdown of the engineering costs for each task of the work herein described is presented as an attachment entitled "Summary of Costs and Man-Hours".

Francis Drainage Maintenance Estimated Engineering Cost Summary	
Task Number and Description	Task Fee
Task 1 - Site Reconnaissance and Preparation of Cost Proposal	\$1,601.21
Task 2 - Field Surveying and Aerial Mapping	\$11,641.63
Task 3 – Field and Subsurface Investigation and Preliminary Design	\$51,606.60
Task 4 – Development of Bid Ready Plans	\$31,100.00
Task 5 – Project Permitting	\$20,348.21
Task 6 – Development of Construction Specifications	\$6,482.00
Task 7 – Construction Cost Estimate	\$1,004.00
Task 8 – Construction Time Estimate*	\$2,209.63
Task 9 – Pre-bid Conference	\$827.21
Total Estimated Fee:	\$126,820.49

*As requested by the WVAML, see attached summary of costs

The estimated costs presented above do not include the following services, which may be required as the project progresses. At your request, we can provide separate proposals which include these additional services as their scope is defined.

- A. State and Local Regulatory Fees;
- B. FEMA related permitting and hydraulic evaluation;
- C. Construction Stakeout Survey Services;
- D. Construction Administration; and
- E. Environmental Assessments

CEC proposes to perform all of the work described above for the estimated fee indicated above in accordance with the attached Summary of Costs and Man-hours as approved by the West Virginia Department of Environmental Protection, Office of Abandoned Mine Lands.

5.0 PROJECT SCHEDULE

CEC is available to initiate work on the Francis Drainage Maintenance project within three (3) days of receiving notice to proceed. We understand the compressed nature of this work and will strive to deliver preliminary construction documents within approximately 60 days of receiving a purchase order.

A general summary of the proposed work schedule is as follows:

- Site Reconnaissance and Record Search..... Week 1
- Field Surveying and Aerial Mapping..... Weeks 2 to 3
- Subsurface Investigation..... Weeks 2 to 3
- Preliminary Construction Drawings and Design Weeks 3 to 8
- Construction Specifications Week 10 to 12
- Construction Cost Estimate..... Week 13 to 14
- Final Design and Submittals Week 14 to 16
- Pre-Bid Conference..... As scheduled by WVAML
- Construction Site Visits As scheduled by WVAML

CEC will utilize the necessary staff and resources to complete the above-described work in an efficient, timely, and professional manner. The field crews and in-house design team will operate under the direct supervision of Mr. Daniel Martinez, P.E. Project Manager and Project Engineer, who will closely monitor and coordinate the project schedule, budget, and deliverables. Mr. Martinez will also be the WVAML's point of contact for project communication and any concerns the WVAML may have. He can be reached at (304) 933-3119 or by e-mail to dmartinez@cecinc.com. Mr. Timothy Denicola, P.G. will serve as the technical expert for matters regarding passive AMD treatment systems and chemical analysis for this project.

Mr. Sheldon Holbert, P.E.
CEC Project 320-020
Page 15
June 1, 2022

6.0 CLOSING REMARKS

CEC sincerely appreciates the opportunity to be of service to the WVAML for this project. We look forward to working with you on the successful completion of this project. We are confident our diverse site development design capabilities will be an asset to your team.

Sincerely,

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.

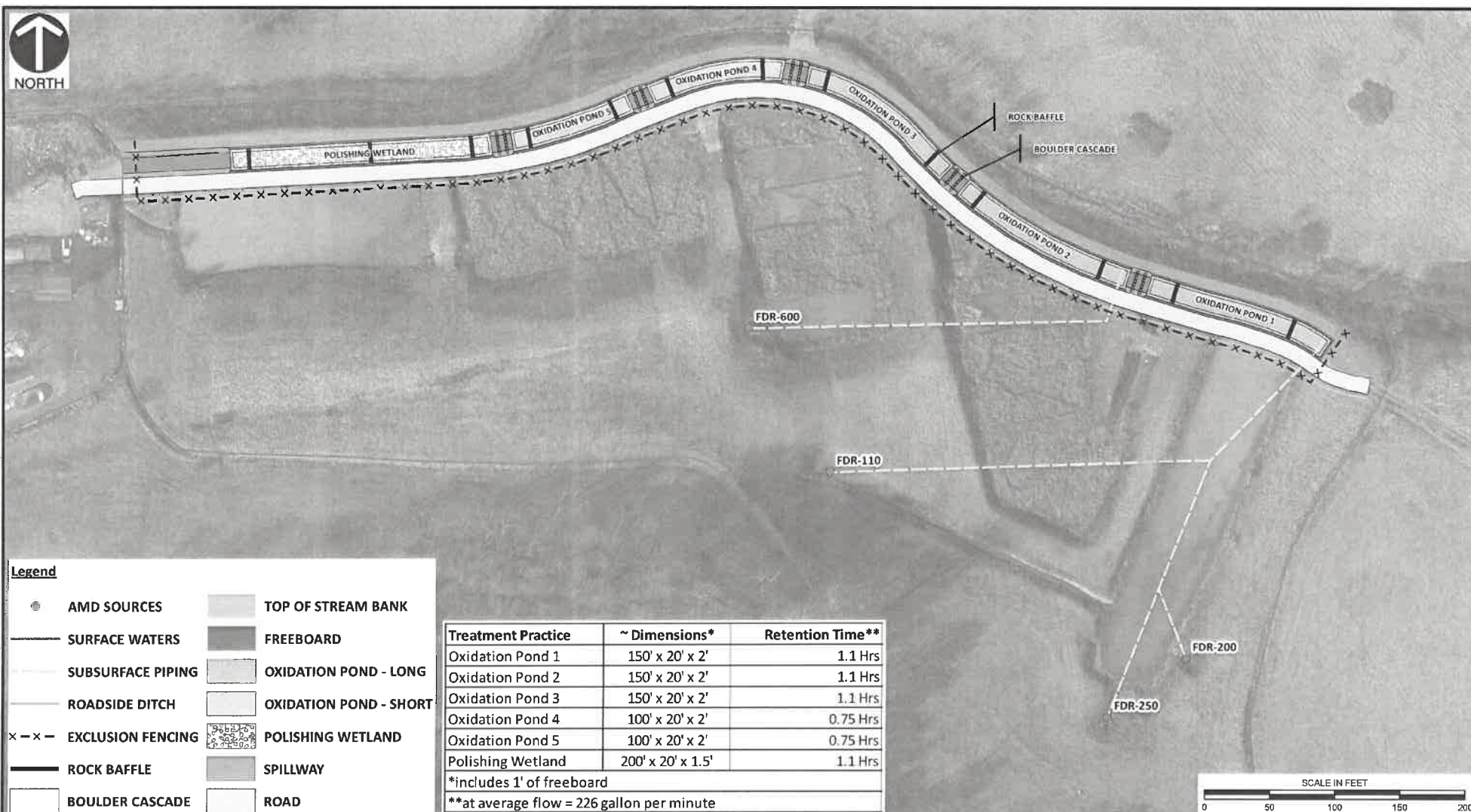


Daniel A. Martinez, P.E.
Project Manager



Dennis E. Miller, P.S.
Vice President

Enclosures: Francis Drainage Maintenance Cost Proposal
Francis Drainage Maintenance Project Engineering Cost Estimate Map



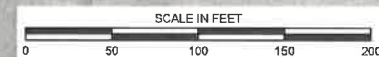
Legend

	AMD SOURCES		TOP OF STREAM BANK
	SURFACE WATERS		FREEBOARD
	SUBSURFACE PIPING		OXIDATION POND - LONG
	ROADSIDE DITCH		OXIDATION POND - SHORT
	EXCLUSION FENCING		POLISHING WETLAND
	ROCK BAFFLE		SPILLWAY
	BOULDER CASCADE		ROAD

Treatment Practice	~ Dimensions*	Retention Time**
Oxidation Pond 1	150' x 20' x 2'	1.1 Hrs
Oxidation Pond 2	150' x 20' x 2'	1.1 Hrs
Oxidation Pond 3	150' x 20' x 2'	1.1 Hrs
Oxidation Pond 4	100' x 20' x 2'	0.75 Hrs
Oxidation Pond 5	100' x 20' x 2'	0.75 Hrs
Polishing Wetland	200' x 20' x 1.5'	1.1 Hrs

*includes 1' of freeboard

**at average flow = 226 gallon per minute



Reference

1. AERIAL IMAGERY WVGIS/C LEAF-OFF IMAGERY OBTAINED FROM WV GIS TECH CENTER.
2. LIDAR TOPOGRAPHY OBTAINED FROM "http://data.wvrgis.wvu.edu/elevation"
3. SURFACE WATERS ARE APPROXIMATE AND DIGITIZED FROM PUBLICLY AVAILABLE LIDAR.

CONCEPTUAL DESIGN



Civil & Environmental Consultants, Inc.

120 Genesis Blvd - Bridgeport, WV 26330-9121

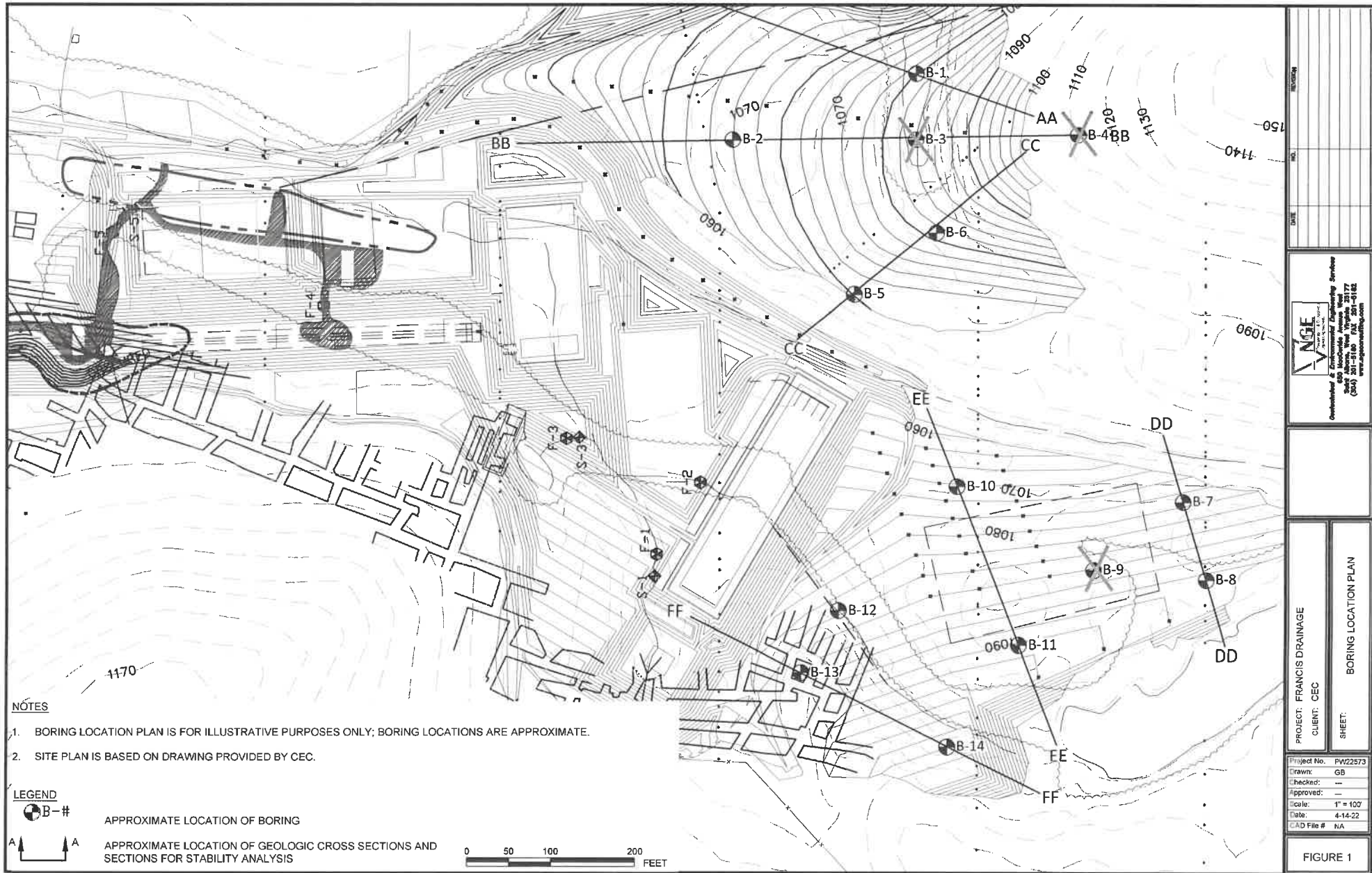
Ph: 304-933-3119 · Toll: 855-488-9539 · Fax: 304-933-3327

www.cecinc.com

WV DEPT. OF ENVIRONMENTAL PROTECTION
ABANDONED MINE LANDS AND RECLAMATION
FRANCIS AMD REMEDIATION
HARRISON COUNTY, WEST VIRGINIA

CONCEPTUAL AMD TREATMENT

DRAWN BY:	TAD	CHECKED BY:	MKD	APPROVED BY:	JDK	FIGURE NO:	
DATE:	4/27/2022	SCALE:	1" = 70'	PROJECT NO:	320-020.PROP		



DEPARTMENT OF ENVIRONMENTAL PROTECTION
Office of Abandoned Mine Lands & Reclamation



ENGINEERING COST PROPOSAL - REVISION 4

Page 1 of 6 pages

Project Name: Francis Drainage Maintenance

DATE. 6/1/2022

ITEM # A	DESCRIPTION B	CONTRACT UNITS C	UNIT BID PRICE D	UNITS THIS APPLICATION E	COST THIS APPLICATION F	UNITS COMPLETED TO DATE G	PROPOSED PROJECT COST H=(DXF)
TASK I: Site Reconnaissance and Preperation of Cost Proposal							
A. Professional Services:							
I. Professional Staff:							
101	Principal	1 Hrs.	\$ 230.00	0 Hrs.	\$ -	0 Hrs.	\$ 230.00
103	Project Geologist	5 Hrs.	\$ 136.00	0 Hrs.	\$ -	0 Hrs.	\$ 680.00
104	Project Engineer/Manager	5 Hrs.	\$ 136.00	0 Hrs.	\$ -	0 Hrs.	\$ 680.00
B. Expenses							
I. General Expenses							
201	Automobile Expense	19 Miles	\$ 0.59	0 Miles	\$ -	0 Miles	\$ 11.21
TASK I: Site Reconnaissance and Preperation of Cost Proposal							\$ 1,601.21



ENGINEERING COST PROPOSAL - REVISION 4

Page 2 of 6 pages

Project Name: Francis Drainage Maintenance

DATE: 6/1/2022

ITEM # A	DESCRIPTION B	CONTRACT UNITS C	UNIT BID PRICE D	UNITS THIS APPLICATION E	COST THIS APPLICATION F	UNITS COMPLETED TO DATE G	PROPOSED PROJECT COST H=(DXF)
TASK II: Field Surveying and Aerial Mapping							
A. Professional Services - Aerial Mapping:							
I. Professional Staff:							
101	Principal	1	Hrs. \$ 230.00	0	Hrs. \$ -	0	Hrs. \$ 230.00
103	Project Manager	5	Hrs. \$ 136.00	0	Hrs. \$ -	0	Hrs. \$ 680.00
105	Assistant Project Manager (Data Processing)	14	Hrs. \$ 115.00	0	Hrs. \$ -	0	Hrs. \$ 1,610.00
106	Project Consultant	4	Hrs. \$ 100.00	0	Hrs. \$ -	0	Hrs. \$ 400.00
109	2 Person Drone Crew	10	Hrs. \$ 165.00	0	Hrs. \$ -	0	Hrs. \$ 1,650.00
B. Professional Services - Field Survey:							
I. Professional Staff:							
101	Principal	4	Hrs. \$ 230.00	0	Hrs. \$ -	0	Hrs. \$ 920.00
103	Project Manager	0	Hrs. \$ 136.00	0	Hrs. \$ -	0	Hrs. \$ -
105	Assistant Project Manager	8	Hrs. \$ 115.00	0	Hrs. \$ -	0	Hrs. \$ 920.00
108	Senior CADD Technician	8	Hrs. \$ 91.00	0	Hrs. \$ -	0	Hrs. \$ 728.00
110	2 Person Survey Crew	16	Hrs. \$ 165.00	0	Hrs. \$ -	0	Hrs. \$ 2,640.00
C. Expenses:							
I. General Expenses							
201	Automobile Expense	57	Miles \$ 0.59	0	Miles \$ -	0	Miles \$ 33.63
202	CADD/GIS Usage (Processing)	22	Hr. \$ 15.00	0	Hr. \$ -	0	Hr. \$ 330.00
203	LiDAR Usage	1	Ea. \$ 1,000.00	0	Ea. \$ -	0	Ea. \$ 1,000.00
204	eBee/NOA UAS	1	Ea. \$ 500.00	0	Ea. \$ -	0	Ea. \$ 500.00
TASK II: Field Surveying and Mapping Subtotal							\$ 11,641.63

DATE. 6/1/2022

ITEM # A	DESCRIPTION B	CONTRACT UNITS C		UNIT BID PRICE D	UNITS THIS APPLICATION E		COST THIS APPLICATION F		UNITS COMPLETED TO DATE G		PROPOSED PROJECT COST H=(Cx D)
TASK III: Field and Subsurface Investigation and Preliminary Design											
A. Professional Services - Field Investigation:											
I. Professional Staff:											
102	Senior Consultant	8	Hrs.	\$ 230.00	0	Hrs.	\$ -	0	Hrs.	\$ 1,840.00	
103	Project Geologist	16	Hrs.	\$ 136.00	0	Hrs.	\$ -	0	Hrs.	\$ 2,176.00	
104	Project Engineer/Manager	8	Hrs.	\$ 136.00	0	Hrs.	\$ -	0	Hrs.	\$ 1,088.00	
B. Professional Services - Subsurface Investigation and Geotechnical Engineering:											
I. Professional Staff:											
116	Senior Engineer - Geotechnical	16	Hrs.	\$196.00	0	Hrs.	\$ -	0	Hrs.	\$ 3,136.00	
117	Project Geologist - Geotechnical	12	Hrs.	\$173.60	0	Hrs.	\$ -	0	Hrs.	\$ 2,083.20	
118	Project Engineer - Geotechnical	8	Hrs.	\$162.40	0	Hrs.	\$ -	0	Hrs.	\$ 1,299.20	
119	Draftsperson - Geotechnical	4	Hrs.	\$117.60	0	Hrs.	\$ -	0	Hrs.	\$ 470.40	
C. Professional Services - Preliminary Design:											
I. Professional Staff:											
101	Principal	4	Hrs.	\$ 230.00	0	Hrs.	\$ -	0	Hrs.	\$ 920.00	
102	Senior Consultant	2	Hrs.	\$ 230.00	0	Hrs.	\$ -	0	Hrs.	\$ 460.00	
103	Project Geologist	12	Hrs.	\$ 135.00	0	Hrs.	\$ -	0	Hrs.	\$ 1,620.00	
104	Project Engineer/Manager	70	Hrs.	\$ 135.00	0	Hrs.	\$ -	0	Hrs.	\$ 9,450.00	
106	Project Consultant	16	Hrs.	\$ 100.00	0	Hrs.	\$ -	0	Hrs.	\$ 1,600.00	
107	Staff Consultant	52	Hrs.	\$ 96.00	0	Hrs.	\$ -	0	Hrs.	\$ 4,992.00	
115	Clerical	2	Hrs.	\$ 61.00	0	Hrs.	\$ -	0	Hrs.	\$ 122.00	
D. Expenses:											
I. General Expenses											
201	Automobile Transportation	476	Miles	\$ 0.59	0	Miles	\$ -	0	Miles	\$ 280.84	
202	CADD/GIS Usage	40	Hrs.	\$ 15.00	0	Hrs.	\$ -	0	Hrs.	\$ 600.00	
E. Field Services:											
I. General Drilling/Subsurface Exploration Services											
301	Mobilization and Demobilization	1	L.S.	\$ 2,800.00	0	L.S.	\$ -	0	L.S.	\$ 2,800.00	
302	Soil Auguring	226	Ft.	\$ 31.36	0	Ft.	\$ -	0	Ft.	\$ 7,087.36	
304	Bag Samples	6	Ea.	\$ 100.80	0	Ea.	\$ -	0	Ea.	\$ 604.80	
307	Drill Crew Per Diem	4	Days	\$ 392.00	0	Days	\$ -	0	Days	\$ 1,568.00	
308	Engineering Supervision	12	Hrs.	\$ 145.60	0	L.S.	\$ -	0	Hrs.	\$ 1,747.20	
F. Laboratory Services											
401	Moisture Content	50	Ea.	\$ 11.76	0	Ea.	\$ -	0	Ea.	\$ 588.00	
402	Atterberg Limits	6	Ea.	\$ 106.40	0	Ea.	\$ -	0	Ea.	\$ 638.40	
403	Sieve Analysis with #200 wash	6	Ea.	\$ 140.00	0	Ea.	\$ -	0	Ea.	\$ 840.00	
404	Standard Proctor	2	Ea.	\$ 224.00	0	Ea.	\$ -	0	Ea.	\$ 448.00	
406	Direct Shear	2	Ea.	\$ 1,120.00	0	Ea.	\$ -	0	Ea.	\$ 2,240.00	
407	Water Samples	6	Ea.	\$ 151.20	0	Ea.	\$ -	0	Ea.	\$ 907.20	
TASK III: Field and Subsurface Investigation and Preliminary Design Subtotal										\$ 51,606.60	



ENGINEERING COST PROPOSAL - REVISION 4

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Project Name: Francis Drainage Maintenance

DATE: 6/1/2022

ITEM #	DESCRIPTION	CONTRACT UNITS		UNIT BID PRICE		UNITS THIS APPLICATION		COST THIS APPLICATION		UNITS COMPLETED TO DATE		PROPOSED PROJECT COST
A	B	C		D		E		F		G		H=(Cx D)
TASK IV: Development of Bid Ready Plans												
A. Professional Services:												
I. Professional Staff:												
101	Principal	8	Hrs.	\$	230.00	0	Hrs.	\$	-	0	Hrs.	\$ 1,840.00
103	Project Geologist	16	Hrs.	\$	136.00	0	Hrs.	\$	-	0	Hrs.	\$ 2,176.00
104	Professional Engineer/Manager	80	Hrs.	\$	136.00	0	Hrs.	\$	-	0	Hrs.	\$ 10,880.00
105	Assistant Project Manager	60	Hrs.	\$	115.00	0	Hrs.	\$	-	0	Hrs.	\$ 6,900.00
107	Staff Consultant	100	Hrs.	\$	90.00	0	Hrs.	\$	-	0	Hrs.	\$ 9,000.00
115	Clerical	4	Hrs.	\$	61.00	0	Hrs.	\$	-	0	Hrs.	\$ 244.00
B. Expenses:												
I. General Expenses												
208	Large Format Zerox	60	Page	\$	1.00	0	Page	\$	-	0	Page	\$ 60.00
TASK IV: Development of Bid Ready Subtotal												\$ 31,100.00
TASK V: Project Permitting												
A. Professional Services:												
I. Professional Staff:												
101	Principal	14	Hrs.	\$	230.00	0	Hrs.	\$	-	0	Hrs.	\$ 3,220.00
104	Professional Engineer/Manager	12	Hrs.	\$	136.00	0	Hrs.	\$	-	0	Hrs.	\$ 1,632.00
105	Assistant Project Manager	40	Hrs.	\$	115.00	0	Hrs.	\$	-	0	Hrs.	\$ 4,600.00
111	Ecological Assistant Project Manager	69	Hrs.	\$	95.00	0	Hrs.	\$	-	0	Hrs.	\$ 6,555.00
112	Project Scientist	10	Hrs.	\$	87.00	0	Hrs.	\$	-	0	Hrs.	\$ 870.00
113	GIS/CADD Technician	30	Hrs.	\$	95.00	0	Hrs.	\$	-	0	Hrs.	\$ 2,850.00
B. Expenses:												
I. General Expenses												
201	Automobile Expense	19	Miles	\$	0.59	0	Miles	\$	-	0	Miles	\$ 11.21
202	CADD/GIS Usage	30	Hrs.	\$	15.00	0	Hrs.	\$	-	0	Hrs.	\$ 450.00
206	Handheld GPS	1	Ea.	\$	85.00	0	Ea.	\$	-	0	Ea.	\$ 85.00
207	Application Fee	1	Ea.	\$	75.00	0	Ea.	\$	-	0	Ea.	\$ 75.00
TASK V: Project Permitting Subtotal												\$ 20,348.21



ENGINEERING COST PROPOSAL - REVISION 4

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Project Name: Francis Drainage Maintenance

DATE: 6/1/2022

ITEM # A	DESCRIPTION B	CONTRACT UNITS C		UNIT BID PRICE D		UNITS THIS APPLICATION E		COST THIS APPLICATION F		UNITS COMPLETED TO DATE G		PROPOSED PROJECT COST H=(Cx D)
TASK VI: Development of Construction Specifications												
A. Professional Services:												
I. Professional Staff												
102	Senior Consultant	4	Hrs.	\$	230.00	0	Hrs.	\$	-	0	Hrs.	\$ 920.00
103	Project Geologist	10	Hrs.	\$	136.00	0	Hrs.	\$	-	0	Hrs.	\$ 1,360.00
104	Project Engineer/Manager	30	Hrs.	\$	136.00	0	Hrs.	\$	-	0	Hrs.	\$ 4,080.00
115	Clerical	2	Hrs.	\$	61.00	0	Hrs.	\$	-	0	Hrs.	\$ 122.00
TASK VI: Development of Specifications and Reviews Subtotal												\$ 6,482.00
TASK VII: Construction Cost Estimate												
A. Professional Services:												
I. Professional Staff:												
101	Principal	2	Hrs.	\$	230.00	0	Hrs.	\$	-	0	Hrs.	\$ 460.00
103	Project Geologist	2	Hrs.	\$	136.00	0	Hrs.	\$	-	0	Hrs.	\$ 272.00
104	Project Engineer/Manager	2	Hrs.	\$	136.00	0	Hrs.	\$	-	0	Hrs.	\$ 272.00
TASK VII:Cost Estimate Subtotal												\$ 1,004.00
TASK VIII: Construction Time Estimate												
A. Professional Services:												
I. Professional Staff												
103	Project Geologist	16	Hrs.	\$	136.00	0	Hrs.	\$	-	0	Hrs.	\$ 2,176.00
104	Project Engineer/Manager	0	Hrs.	\$	136.00	0	Hrs.	\$	-	0	Hrs.	\$ -
B. Expenses:												
I. General Expenses												
201	Automobile Expense	57	Miles	\$	0.59	0	EA	\$	-	0	EA	\$ 33.63
TASK VIII: Construction Time Estimate Subtotal												\$2,209.63



ENGINEERING COST PROPOSAL - REVISION 4

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Project Name: Francis Drainage Maintenance

DATE: 6/1/2022

ITEM # A	DESCRIPTION B	CONTRACT UNITS C	UNIT BID PRICE D	UNITS THIS APPLICATION E	COST THIS APPLICATION F	UNITS COMPLETED TO DATE G	PROPOSED PROJECT COST H=(CxD)
TASK IX: Pre-bid Conference							
A. Professional Services:							
I. Professional Staff							
104	Project Engineer/Manager	6	Hrs. \$ 136.00	0	Hrs. \$ -	0	Hrs. \$ 816.00
B. Expenses:							
I. General Expenses							
201	Automobile Expense	19	Miles \$ 0.59	0	Miles \$ -	0	Miles \$ 11.21
TASK IX: Pre-bid & Pre-Construction Conferences Subtotal							\$827.21
FRANCIS DRAINAGE MAINTENANCE PROJECT TOTAL							\$126,820.49