



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: 05-09-2023

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 DEP2300000022 1	Procurement Folder:	1047655
Document Name:	EOI - 2022 AML Contract 6 Projects - North	Reason for Modification:	
Document Description:	EOI - 2022 AML Contract 6 Projects - North		
Procurement Type:	Central Purchase Order		
Buyer Name:	Joseph E Hager III		
Telephone:	(304) 558-2306		
Email:	joseph.e.hageriii@wv.gov		
Shipping Method:	Best Way	Effective Start Date:	
Free on Board:	FOB Dest, Freight Prepaid	Effective End Date:	

VENDOR	DEPARTMENT CONTACT																				
Vendor Customer Code: 000000209609 CIVIL TECH ENGINEERING INC 300A PRESTIGE DR HURRICANE WV 25526 US Vendor Contact Phone: 999-999-9999 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: Jessica S Chambers Requestor Phone: 304-926-0499 Requestor Email: jessica.s.chambers@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

Purchasing Division's File Copy

Total Order Amount: \$4,392,245.00

ENTERED

PURCHASING DIVISION AUTHORIZATION DATE: <i>5/11/2023</i> ELECTRONIC SIGNATURE ON FILE	ATTORNEY GENERAL APPROVAL AS TO FORM DATE: <i>5/11/2023</i> ELECTRONIC SIGNATURE ON FILE	ENCUMBRANCE CERTIFICATION DATE: <i>5-19-2023</i> ELECTRONIC SIGNATURE ON FILE
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Extended Description:

The vendor, Civil Tech Engineering, agrees to enter into this contract with the agency, The West Virginia Environmental Protection agency, for engineering and construction management services per the specifications, terms and conditions, Addendum #1 issued 6/22/2022, and the vendor's negotiated scope of work dated 4/25/2023 all incorporated herein by reference and made apart hereof.

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
1	81100000	0.00000		0.000000	1122410.00
Service From	Service To	Manufacturer		Model No	

Commodity Line Description: Professional Svcs - Clarksburg (Post) Landslide

Extended Description:

Professional Svcs - Clarksburg (Post) Landslide

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
2	81100000	0.00000		0.000000	979505.00
Service From	Service To	Manufacturer		Model No	

Commodity Line Description: Professional Svcs - Fairmont Gateway Connector Portals

Extended Description:

Professional Svcs - Fairmont Gateway Connector Portals

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
3	81100000	0.00000		0.000000	1119525.00
Service From	Service To	Manufacturer		Model No	

Commodity Line Description: Professional Svcs - Horners Run Portals

Extended Description:

Professional Svcs - Horners Run Portals

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
4	81100000	0.00000		0.000000	1170805.00
Service From	Service To	Manufacturer		Model No	

Commodity Line Description: Professional Svcs - Lick Run 5

Extended Description:

Professional Svcs - Lick Run 5

EXPRESSION OF INTEREST

2022 AML Contract 6 Projects – North

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 (as may be applicable for each of the Projects as listed in Section One):

- Access or accesses as required.
- Geotechnical investigation and analyses.
- Landslide Stabilization(s).
- Hydrologic and hydraulic analyses.
- 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 90 days from the issuance of the Purchase Order, unless specified otherwise during the Pre-Design Meeting.

Locations: Projects are in Marion, Harrison, and Preston Counties.

Project 1: Clarksburg (Post) Landslide is located south of the City of Clarksburg, in Harrison County, WV, off CR 98. The project is for the stabilization of two dangerous landslides, repair and/or replacement of existing drainage systems, realign and reconstruct paved roads/driveways, installation of additional drainage control and AMD drainage systems, and some highwall reclamation.

Project 2: Fairmont Gateway Connector Portals is located off Interstate 79 (I-79) northbound exit ramp and the county route intersection in the City of Fairmont, in Marion County, WV. The project is for the mitigation of open and collapsed portals near and around dangerous sections of highwall.

Project 3: Horners Run Portals is located north of the City of Bridgeport, in Harrison County, WV, and paralleling along the western side of I-79 and over the ridge. The site is accessed off Saltwell and Horners Run Roads. The project is for the stabilization of a

EXPRESSION OF INTEREST

2022 AML Contract 6 Projects – North

dangerous landslide, reclamation of collapsed and draining portals, installation of additional drainage controls and systems, and highwall reclamation.

Project 4: Lick Run 5 is located southwest of the City of Kingwood, in Preston County, WV, between Howesville and Borgman off CR26. The project is for reclamation of a dangerous highwall, reclamation of a refuse pile, installation of drainage controls and systems.

The Sites are around multiple residences; potential vendors are not to show up on occupied residences. A site visit will be performed with the Highest Scoring Vendor during the Negotiation Phase of this solicitation.

2. **Projects and Goals:** The project goals and objectives include but are not limited to that as listed below. Vendors should discuss any anticipated concepts and proposed methods of approach for achieving each of the listed goals and objectives:

- 2.1. NEPA tasks and IJIA compliance.
- 2.2. Determine legal ownership of properties and provide legal documentation to substantiate legal ownership findings (if required).
- 2.3. Develop construction plans and technical specifications for all aspects to reclaim mine portals, drainage controls and systems, slope stabilization, coal refuse reclamation, stream restoration, highwall reclamation, limits of disturbance, storm water and erosion and sediment control, regrade and revegetation, and all other conditions encountered on the project sites.
- 2.4. Obtain/maintain/release all required permits.
- 2.5. Provide resident project representative, QA/QC certification, and prepare daily field activity logs summarizing construction activities.

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.

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: The Initial Contract Term will be for a period of _____. The Initial Contract Term becomes effective on the effective start date listed on the first page of this Contract and the Initial Contract Term ends on the effective end date also shown on the first page of this Contract.

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:

☐ the contract will continue for _____ years;

☐ the 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).

☐ **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:** Contract Term specified in _____

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 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 in this section must be provided to the Purchasing Division by the Vendor as specified:

☐ **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.

Revised 04/01/2022

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.

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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. NO DEBT CERTIFICATION: 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. By submitting a bid, or entering into a contract with the State, Vendor is affirming that (1) for construction contracts, the Vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, neither the Vendor nor any related party owe a debt as defined above, and neither the Vendor nor any related party are in employer default as defined in the statute cited above unless the debt or employer default is permitted under the statute.

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 disclosure of interested parties prior to beginning work under this Contract. Additionally, the Vendor must submit a supplemental disclosure of interested parties reflecting any new or differing interested parties to the contract, which were not included in the original pre-work 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.

46. ISRAEL BOYCOTT: Bidder understands and agrees that, pursuant to W. Va. Code § 5A-3-63, it is prohibited from engaging in a boycott of Israel during the term of this contract.

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.

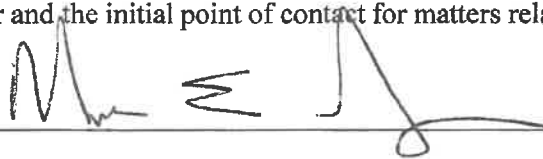
3. PRE-BID MEETING RESPONSIBILITIES: The Architect/Engineer shall be available to attend any pre-bid meeting for the construction or other work resulting from the plans, drawings, or specifications prepared by the Architect/Engineer.

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.

(Name, Title)



(Printed Name and Title) Mark E Pennington, PE, President

(Address) 300A Prestige Drive, Hurricane, WV 25526

(Phone Number) / (Fax Number) 304-757-8094/304-757-8095

(email address) civiltech1@frontier.com

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation/Contract 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/Contract 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; and that pursuant to W. Va. Code 5A-3-63, the entity entering into this contract is prohibited from engaging in a boycott against Israel.

Civil Tech Engineering, Inc.
(Company)

(Authorized Signature) (Representative Name, Title)

Mark E Pennington, PE, President June 22, 2022

(Printed Name and Title of Authorized Representative) (Date)

304-757-8094/304-757-8095

(Phone Number) (Fax Number)

civiltech1@frontier.com

(Email Address)

ADDENDUM ACKNOWLEDGEMENT FORM

SOLICITATION NO.: CEOI 0313 DEP22*15

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:

(Check the box next to each addendum received)

☒ Addendum No. 1

☐ Addendum No. 6

☐ Addendum No. 2

☐ Addendum No. 7

☐ Addendum No. 3

☐ Addendum No. 8

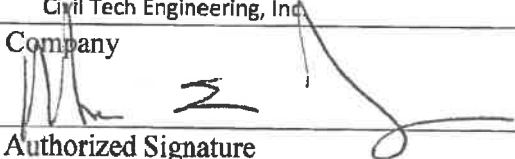
☐ Addendum No. 4

☐ Addendum No. 9

☐ Addendum No. 5

☐ Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Civil Tech Engineering, Inc.
Company

Authorized Signature

June 22, 2022
Date

NOTE: This addendum acknowledgment should be submitted with the bid to expedite document processing.

CIVIL TECH ENGINEERING, INC.
300A Prestige Drive
Hurricane, West Virginia 25526
Phone: 304-757-8094 Fax: 304-757-8095
civiltech1@frontier.com

April 25, 2023

Mr. Troy H. Schell, PE
WVDEP-AML
101 Cambridge Place
Bridgeport, West Virginia 26330

Subject: **Scope of Services and Cost Proposal**
2022 AML Contract 6 Projects – North
Clarksburg (Post) Landslide, Fairmont Gateway Connector
Portals, Horners Run Portals, and Lick Run 5
Civil Tech Project No. 22140

Dear Mr. Schell:

CIVIL TECH ENGINEERING, INC. is pleased to present a proposal for engineering services associated with the above referenced project. This proposal includes; a description of the 2022 AML Contract 6 Projects - North, preliminary site observations, design considerations, scope of services, budget, and schedule. This proposal is based on the following:

1. Work directive from Troy Schell to the writer dated September 22, 2022.
2. Topographic mapping developed by Mead & Hunt under the WVDEP State Contract.
3. The initial site visit for the Clarksburg (Post) Landslide and the Fairmont Gateway Connector portals was performed on October 26, 2022. The initial site visit for Lick Run 5 and Horners Run Portals was performed on November 3, 2022. All meetings were conducted with WVDEP-AML personnel, the writer, and our designer.

As requested, separate costs and a grand total for all projects have been included on the enclosed Application for Payment Template provided by the WVDEP. A summary sheet has been provided as Page 1 of 22 showing costs for all projects. Separate costs are included for the following projects:

Project 1: Clarksburg (Post) Landslide

Project 2: Fairmont Gateway Connector Portals

Project 3: Horners Run Portals

Project 4: Lick Run 5

Drilling services are proposed herein for each project, except Fairmont Gateway Connector Portals, as discussed in the field during our initial site visit. Drilling services are needed to evaluate subsurface conditions in the slide areas, estimate the depth of refuse, locate borrow material for

CIVIL TECH ENGINEERING, INC.
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Hurricane, West Virginia 25526
Phone: 304-757-8094 Fax: 304-757-8095
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use as soil cover, and to investigate the mine floor, mine voids, and dangerous impoundments created by collapsed portals. The reader is referred to the OSM51 report for a complete description and history of the four sites included in this contract. A brief site description along with observations and a discussion of design constraints is provided herein for each site.

Civil Tech Engineering Inc. shall be responsible for uploading all project documents into AMLNET as may be required by AML for every stage and task of the contract (including videos).

The project team is described below:

PROJECT TEAM

PROJECT MANAGER: Mark Pennington will be responsible for project quality, schedule, and budget.

PROJECT ENGINEERS: Mark Pennington and Jennifer Pennington with Civil Tech and Aaron Randolph with Randolph Engineering will be responsible for planning, direction, and performance of all work.

SURVEYING: Don Hayes, PS and Charles Arthur Jr. will serve as party chiefs. Survey helpers will be announced.

DESIGNER: Charles Arthur Jr. and Neal Craig with Civil Tech and Larry Stricker with Randolph Engineering will serve as designers and CAD draftsmen.

REALTY: Don Hayes with Randolph Engineering will provide necessary realty agent services.

ENVIRONMENTAL: Linda Raines with Decota Consulting will provide environmental services.

CONSTRUCTION INSPECTORS: Construction inspectors will work under the direction of the Project Manager. Technicians will be obtained from staff and will be announced when construction is slated to begin based on the needs of the project.

The construction inspection shall also provide administrative support to oversee compliance with all applicable laws such as; certified payroll and verifying contractor's compliance with the Davis-Bacon Act, and Infrastructure Investment and Jobs Act (IIJA) with regards to employing current and former employees of the coal industry. To determine IIJA compliance, Civil Tech Engineering will follow the guidance on the Bipartisan Infrastructure Law (BIL), and AML Grant Implementation provided by OSMRE. All Contractor Certified Payrolls shall be uploaded into AMLNET by Civil Tech.

Engineering, permitting, and construction contract administration services will comply with all local, state, and federal laws. Personnel time and expenses included herein are our best estimate of time required to complete the projects. The actual time may vary up or down from this estimate. However, we will not bill for hours not worked, and we will not exceed the contract time without justification and an approved change order.

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Hurricane, West Virginia 25526
Phone: 304-757-8094 Fax: 304-757-8095
civiltech1@frontier.com

We trust this proposal is complete and acceptable. However, should you have questions or need additional information, please feel free to call.

Very Truly yours,

CIVIL TECH ENGINEERING INC.

A handwritten signature in dark ink, appearing to read 'Mark E. Pennington', with a stylized, sweeping flourish at the end.

Mark E. Pennington, MS, PE
Principal Engineer

CIVIL TECH ENGINEERING, INC.
300A Prestige Drive
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PROJECT DESCRIPTION & SITE VISIT OBSERVATIONS

CLARKSBURG (POST) LANDSLIDE (CPL)

According to the OSM51 report, the Pittsburgh Coal was surface mined at this site. The mining operations have left a wide strip bench that has been developed as residential property. Spoil created by the mining has been cast onto the slope between the homes and Taftarosa Drive. The spoil has become unstable and is currently threatening two homes, driveways, and Taftarosa Drive. The approximate limits of the two landslide areas are shown on Figure 1. Home owners' names have been added to Figure 1 for clarity.

Slide No. 1: The home owned by John Post is located near the top of the out-slope of the mine bench and the mine spoil slopes down from the out-slope to the southeast where it meets Taftarosa Drive. The Post home is threatened by continued slide movement. We understand unstable soils are routinely removed from the highway ditch by the WVDOH to maintain the road and drainage, and this work was last performed in the spring of 2022. The old mine bench slopes down toward the landslide along with roof and surface drainage from the residential development. The drainage from the surface, and subsurface drainage from the mine bench and slide area, is captured by a road ditch and a 15-inch diameter HDPE pipe that carries water under the County Road near the western limits of the active landslide described herein. Material observed in the slide area consists of clayey soils that were relatively dry at the time of the site visit described herein. As shown on Figure 1, the slope adjacent to the roadway beyond the limits of, and north of, the active slide shows evidence of past instability. The stability of the entire slope will be addressed as part of this project.

Slide No. 2: This large slide has been active in the past and threatens the McColeman Home and driveway, along with Taftarosa Drive and Cedar Heights Road, which provide access to property owned by Charles McClung. This slide occurs in mine spoil and its' features are subtle and difficult to discern in the field except for an old scarp and movement/hummocky features in the McColeman Driveway. See Figure 1.

Remedial Measures: The project will require measures to stabilize the landslides. Measures to be considered will be dependent on subsurface conditions determined based on the results of the subsurface investigation proposed herein. However, based on experience, typical measures may include; retaining walls and, grade and drain techniques. We have also considered a deep underdrain will be provided along the base of the highwall to capture/drain subsurface drainage from the mine and bench to improve the stability of the spoil. These measures will be designed to minimize the risk of additional damage to the residential property and roadways. Design constraints identified during our site visit are summarized below:

Scope of Services and Cost Proposal
2022 AML Contract 6 Projects – North
Clarksburg (Post) Landslide, Fairmont Gateway Connector
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Civil Tech Project No. 22140

Design Constraints

1. Soil, bedrock, and groundwater conditions in the slide areas.
2. The alignment and grade of roadways.
3. Existing drainage features including private drains from the residential development and the roadway ditch and cross piping.
4. Access to the slide area.
5. Maintaining access to the homes when work is performed.
6. Potential damage to residential property during construction.
7. Waste and borrow areas, and staging for the project.

Typical photographs of the Landslides follow:



Photo No. 1: Post home. The active slide is on the left in the photo.

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Photo No. 2: Landslide scarp and Post home.



Photo No. 3: Improperly supported deck posts and hot tub. The posts are supported on masonry blocks laid on the ground surface without a foundation.

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Photo No. 4: Landslide toe below Post home.



Photo No. 5: Slide facing uphill toward the Post Home.

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Photo No. 6: Taftarosa Drive facing north.



Photo No. 7: Yard and slope between the Post Home and Taftarosa Drive.



Photo No. 8: Slide 2 facing west toward the McColeman Home and Driveway.



Photo No. 9: McColeman Home and Driveway. Note slide features in the road.

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Photo No. 10: Slide scarp and repair with new drain pipe.



Photo No. 11: Mine bench and highwall facing south from the McColeman Home.



Photo No. 12: Mine bench and highwall facing north toward the McColeman Home.



Photo No. 13: Slide 2. The scarp is believed to be the steep slope on the left side of the photo.

CLARKSBURG (POST) LANDSLIDE (CPL) - SCOPE OF ENGINEERING SERVICES

TASKS I AND II - NEPA, ESA, AND REALTY (CPL)

1. Environmental:

- A. Preliminary Information Review: We will review any existing supporting documentation for use in the drafting of the EA. We will also develop schedules to complete the proposed work in a timely manner.
 - B. Environmental Assessment:
We will prepare a draft EA report in compliance with the National Environmental Policy Act (NEPA) of 1969 and in accordance with the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA, 40 Code of Federal Regulations (CFR), Part 1500-1508, and with the Corps' NEPA implementing regulations, Engineer Regular (ER) 200-2-2 (33 CFR 230). The draft EA will be generated and reviewed internally for correctness and consistency prior to submission. Once the report is determined to be sufficient, we will electronically-transmit the draft EA for comments and/or edits. Once comments/edits are addressed and incorporated into the report, the draft EA will be completed, and one electronic copy will be submitted for distribution as needed. We will also address any comments/edits received by the WVDEP or affiliated regulatory agencies, and will subsequently generate the Final EA. If required, a draft Finding of No Significant Impact (FONSI) document will be prepared and submitted to the WVDEP and the affiliated regulatory agencies for comment. A final FONSI document will be prepared and included in the Project's final NEPA document.
 - C. Environmental Consultation: As part of the EA Task, we will initiate consultations with the following regulatory agencies: United States Fish and Wildlife Service (USFWS) (via the online IPaC determination tool), West Virginia Division of Natural Resources (WVDNR), the West Virginia State Historic Preservation Office (WVSHPO), Regional Development Council, and City/County Governments as needed.
 - D. Additional Services: Costs outlined for Environmental Assessment do not include time for additional agency consultations, field investigations, or biological surveys. Should it be determined that more detailed information or additional studies are required, additional costs may incur. Additional services if required will be supervised and/or performed by a certified bat biologist as required by the agency.
2. Determine legal ownership of properties: This work has been partially completed by AML personnel. However, discrepancies in the tax records and ownership of property have been pointed out by DEP personnel involved with this project. Since there are apparent discrepancies concerning ownership of some of the tracts affected by the project, we will have our surveyor review information and examine deeds, plats, and tax records in the

courthouse to determine legal ownership. We will also examine deeds for all landowners affected and request any additional rights of entry when needed. We will record the date of our courthouse visits and note the same on the tax map sheet included with the drawing package.

3. Obtain exploratory rights of entry: Exploratory rights of entry (EROE) have been obtained for all known affected property owners by AML personnel. However, as discussed, the DEP has indicated there may be property issues that must be resolved before additional exploratory work, including drilling, can be performed onsite. Once this is resolved, we will attempt to obtain any other EROE as needed if affected landowners have not been signed.
4. Meetings: Site meetings will be conducted with the WVDOH, AML, USFWS, and any affected utilities when the project is 30%, 60%, and 90% complete to go over the plans and verify all stakeholders agree with the scope of the project before obtaining CROE and OSM project authorization. We will prepare and submit an MM109 permit to the WVDOH in order to obtain approval for the project.
5. Obtain construction rights of entry: CROE will be obtained from affected landowners once we have plans that are 90% complete. Once plans reach 100% and all final documents are ready, we will prepare the necessary documents and submit the project to AML for submission to OSM for authorization and notice to proceed.

TASK III – DESIGN (CPL)

Planning & Field Work (CPL)

1. Initial Site Visit: Our engineer and engineering technician met with you and other DEP personnel on October 26, 2022 in order to develop a scope of services for the project. During our site visit, we walked and visually examined the mine bench, landslide areas, and roadways.
2. Information Review: Information provided including aerial photographs will be reviewed to become familiar with the history of the site in order to identify or confirm important design constraints that must be considered.
3. Site Reconnaissance: We will perform a detailed examination of the site looking for pertinent features which may affect the construction including; seepage areas, property corners, utilities, pipes, drainage systems, old structures, etc. Important site features will be located and mapped by our crew for future reference and consideration.

4. Surveying: Topographic mapping (2 ft. contour interval) has been developed by the WVDEP under separate contract and therefore, surveying to develop topographic mapping has not been included in this scope of work. However, we have included surveying to develop typical confirmation cross sections to verify the mapping is correct relative to the control set by the mapping contractor. If there are discrepancies with the mapping, we will correct the same as needed. We will obtain any additional mapping needed to fill in gaps or adjacent areas not included in the mapping provided. We will also perform any needed surveying to locate pertinent site features and borings with our in-house crew, as required. Surveying services, if needed, will be performed in relation to onsite vertical and horizontal control set by the mapping contractor.

Geotechnical Investigation (CPL)

1. Engineering: Drilling and sampling will be subcontracted to Triad Engineering Inc. Drilling activity will be directed and observed by our representative full time. Triad may also furnish a geologist to log the borings and direct daily drilling activity in the field if required by our project manager.
2. Drilling and Sampling General Scope of Work: Drilling and sampling will be needed to investigate the subsurface conditions in the slide areas and mine bench including soil, groundwater, and bedrock. Refer to Figure 1 for a site plan and limits of the project area considered in this proposal.

For purposes of this estimate, we have included fifteen (15) test borings and have considered an average depth to bedrock of 20 ft. per boring. All borings will be advanced to split spoon refusal on bedrock and rock coring will be performed in five of the fifteen borings to obtain bedrock information in the event a retaining wall(s) are necessary. We will also install a piezometer in 5 borings. This drilling estimate results in a total soil drilling footage of 300 LF, 100 LF of rock core, and 100 LF of piezometer installation

Standard penetration testing and sampling will be performed at regular intervals throughout the borings extending from the surface to refusal on bedrock. Soil samples obtained in conjunction with the standard penetration testing will be stored in air tight glass jars and delivered to our office for visual classification. Rock core will be placed in partitioned boxes and marked for depth, length of core run, and recovery. The driller will also note fracturing, drill chatter, depth to voids, cave-in etc., and RQD on the boring logs. We will perform natural moisture content, Atterberg limits, and particle size analysis on representative soil samples obtained from the borings. The results of this lab testing in conjunction with “N” values obtained from the standard penetration test results and the geometry of the landslide will be used to estimate the engineering properties of the soils for use in the stability analysis.

Design Engineering & Contract Documents (CPL)

1. Conceptual Engineering (30% plans complete): A conceptual plan will be prepared and submitted to the WVDEP for review and approval prior to proceeding with preliminary design. The topographic mapping developed and furnished to us by the WVDEP will be used for design. We will meet with WVDEP representatives in the Bridgeport Office to discuss the conceptual design and obtain direction prior to proceeding with the Preliminary Engineering.
2. Preliminary Engineering (60% plans complete): Preliminary Engineering will be performed and will include:
 - a. Planning, layout and design of access, drainage channels, and remediation of the active slides to reduce the risk of future movement and damage to the onsite homes and roads. This work will include;
 - improving access and provisions for a staging area if practical,
 - grading to re-establish drainage,
 - surface and subsurface drainage as needed,
 - evaluation of remedial measures including; a retaining wall(s) or grade and drain, techniques. Grade and drain may include one or all of the following; excavation of unstable soils, installation of subsurface drainage, and possible construction of a rock buttress at the toe. We point out that some of this work may be risky considering the location of the homes and roadways in relation to the landslide limits.
 - Re-vegetation at completion.
 - b. Construction Specifications.
 - c. Preliminary Design Drawings.
 - d. Preparation of a brief design report including all calculations and the results of stability analysis. Drainage channels will be sized using the 24-hour 10-year storm event with a check for storms up to the 100-year event.
3. Submit preliminary design documents (60%) to AML for review, and meet with WVDEP representatives in Bridgeport, WV to discuss the preliminary design and revisions needed. Correct preliminary plans (90%) and submit the same to AML for follow up review before preparing final design documents. At this time, we will meet with AML, WVDOH, USFWS, and any affected utilities to begin permitting and the approval process. We will also begin consultation with the affected landowners at this time to obtain CROE.
4. Final Design Drawings: A complete set of design drawings suitable for construction will be prepared using AutoCad Civil3D or Carlson Civil 2023 compatible with AutoCad format. Once plans progress to 100% complete this will trigger AML submittal to OSM for project authorization. Once plans are complete, a copy of the final design documents will be

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uploaded to AMLNET in both pdf and CAD formats. The plans will be stamped by our professional engineer registered in West Virginia. The design drawings will include:

- a. Cover sheet.
- b. Existing Site Conditions.
- c. Geometric Layout.
- d. Site Plan(s).
- e. Site Plan with Tax Map Overlay.
- f. Roadway and Driveway Reconstruction, Plans, Alignment, Profiles, Cross Sections, etc.
- g. Construction staging including maintenance of traffic plans and/or continuous access control throughout construction.
- h. AMD, Utility Poles, etc., Management/Relocation etc.
- i. Landslide Correction Sections and Profiles.
- j. Drainage Structure Profiles.
- k. Miscellaneous Details including Channel Sections, piping, underdrain, etc.
- l. Temporary Erosion and Sediment Control Measures.
- m. Erosion and Sediment Control Details

5. Specifications: A complete set of specifications with bid form suitable for construction and bidding will be prepared using WVDEP AML format. Specifications will include the following as appropriate:

- a. Special Provisions
- b. Mobilization/Demobilization
- c. Construction Layout
- d. Quality Control
- e. Site Preparation
- f. Unclassified Excavation
- g. Drainage
- h. Retaining Structures
- i. Sediment Control Structures
- j. Re-vegetation
- k. Utilities
- l. Administration
- m. Traffic Control
- n. Asphalt Paving and Miscellaneous Road Repair
- o. Subsurface Investigation

6. Engineering Cost Estimate and Construction Schedule: An estimated construction cost and construction schedule will be prepared and included in the design documents. The construction cost estimate will be based on typical unit rates for construction and quantities estimated from the design drawings.
7. Permits: We will submit and obtain a construction storm water permit from the WVDEP and a MM-109 from the WVDOH. At this time, it is not anticipated that a permit from the USACE will be needed. No permit fees are included. The WVDEP AML will be responsible for payment of any fee or bonding required for the DOH MM-109. If a bond, permit, or inspection fee is required for the MM-109 Permit, this fee(s) will be paid by the WVDEP and the WVDEP representative will sign the MM-109 application.
8. Prebid Meeting: A pre-bid meeting will be conducted at the site by our Project Manager (Professional Engineer in charge of the project). A representative of realty will attend the meeting. The meeting will be videoed by one of our construction inspectors and we will prepare an addendum responding to questions or comments.
9. Pre-Construction Meeting: A pre-construction meeting will be attended at the site by our Project Manager (Professional Engineer in charge of the project). A representative of realty will attend the meeting. The meeting will be videoed by one of our construction inspectors and we will prepare notes to document the meeting. All contractor submittals will be reviewed and approved by Civil Tech.

TASKS IV AND V – Construction Phase Services (CPL)

1. Construction Phase Services including quality assurance and quality control (QA/QC):
 - a. Civil Tech Engineering Inc. will provide construction management services during the project acting as an agent for the WVDEP/DLR/AML&R in accordance with the Agency Terms and Conditions for Construction and Reclamation Contracts.
 - b. We will provide a full-time inspector throughout construction. We have considered a construction duration of 6 months plus one extra month (7 months total or 28 weeks) for contingency in the event the project would not be completed in the 6-month duration considered.
 - c. Our inspector will prepare daily construction activity logs that will, at a minimum, include all data required by the WVDEP, and will summarize construction activities to the satisfaction of the WVDEP. The inspector will have "job stop" authority when work performed by the contractor does not comply with the approved plans or specifications. Activity logs and photographs taken by our inspector using an iPad, cell phone, hand held digital camera, etc. will be uploaded to the AMLNET website within 48 hours along with photographs obtained

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from the stationary time lapse camera. Photographs shall be sufficient to show the work performed and to assure quality control of any items or features not visible on the surface once construction is complete. We have considered two, time lapse photo cameras will be set on site as approved by the WVDEP.

- d. Our project engineer will make routine visits to the site to address problems encountered and to verify conformance with the approved plans and specifications. A report will be prepared and uploaded to the AMLNET website within 48 hours.
 - e. The project manager will administer the construction contract and will provide engineering support and services throughout construction including review and approval of invoices, change orders, field change directives, supplemental agreements, etc. These documents will be uploaded to AMLNET for WVDEP review and approval.
 - f. At completion of the project, we will review and approve as-built plans provided by the Contractor and will include the same with an engineer's certification report. Deviations from the approved plans will be noted in the certification report.
2. Post Construction Services: Our inspector will inspect the project monthly for a duration of one year and upload a report with recommendations for maintenance and warranty work to the AMLNET website within 48 hours after the inspection. Should a problem develop which requires engineering assessment and evaluation, our project engineer will visit the site and make recommendations for repair or warranty work. The engineers report will also be uploaded to the AMLNET website within 48 hours after the site visit.

The costs provided herein for construction phase services are based on the following.

1. Unit costs provided herein for engineering are based on a 5-year contract duration and can be used throughout the duration of the contract.
2. A construction duration of 180 days or 6 months has generally been considered. However, we have added 1 month as a contingency to arrive at a total duration of 7 months or 210 days (28 weeks) in the event construction is not completed on-time.
3. As directed, we have considered 7 days per week at 12 hours per day for our inspector(s) (12 hrs/day x 210 days = 2,520 hours).
4. Routine trips to the site by our project engineer to provide consultation, address construction issues, and verify conformance with the approved plans and specifications. We have considered a weekly visit to the site will be necessary throughout construction (12 hrs/wk x 28 wks = 336 hours).
5. Eight hours per week for 28 weeks (8 hrs x 28 wks = 224 hrs.) for our project engineer to provide construction contract administration including review and approval of submittals and applications for payment, review and approval of change orders, and enforcement of the plans and specifications, etc.

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6. Per diem for our inspector for over-night stay is estimated as $6 \text{ days/wk} \times 28 \text{ weeks} = 168$ days.
7. Vehicle expense estimated as $600 \text{ miles/wk} \times 28 \text{ weeks} = 16,800$ miles.
8. We have considered 16 hours per month for 12 months for our inspector to visit the site post construction and prepare a report ($12 \text{ months} \times 16 \text{ hrs/month} = 192 \text{ hrs}$). We have also considered four trips to the site for our project engineer as $4 \text{ trips} \times 12 \text{ hrs/trip} = 48 \text{ hrs}$.

Based on the scope of services to be provided, we will provide full time inspection and contract administration for an estimated cost of \$ 554,960. This cost corresponds to an estimated weekly rate for Phase IV (without post construction monitoring) of approximately \$ 19,820. This weekly rate can be used to adjust the contract if the duration of the construction should exceed 28 weeks.

CLARKSBURG (POST) LANDSLIDE ENGINEERING BUDGET (CPL)

An estimated cost for engineering services based on the scope of services described herein and a detailed breakdown with man-hours and unit costs for each activity is provided on the Application and Certificate for Payment (Proposed Budget) which is attached to this proposal. A total cost for this project of \$ 1,122,410.00 is proposed. Refer to Page 6 of 22.

PROJECT DESCRIPTION & SITE VISIT OBSERVATIONS

FAIRMONT GATEWAY CONNECTOR PORTALS (FGCP)

According to the OSM51 report, the Pittsburgh Coal was deep mined by Consolidation Coal Company at this site in the 1920's. During construction of the Fairmont Gateway Connector, (I79 Exit 136) mine workings were exposed that are visible from the new highway. Sidewalks and heavily travelled roads are within 50 ft. of the openings to the workings. Debris and trash present are an indication the public is visiting the mine openings. These openings are referred to as portals in the OSM51 report and in this proposal. Originally, there were twenty-two (22) portals included in the project. However, seven portals (7) were reported to have been closed and removed from the project. Some of these closed portals may have reopened due to roof rock collapse and burrowing animals using the old mines as dens. However, as described in the OSM 51 report, of the original 22, the remaining fifteen (15) portals are open and unstable due to collapsing roof rock around the openings. None of the portals are producing mine drainage. Although mine drainage flows into the road ditch around the intersection and AMD buildup has clogged the ditch and drain pipe inlets. Remedial measures to correct drainage issues was beyond the scope of this project. Borings have already been drilled at the site by the WVDEP-AML. We understand piezometers were installed in the borings. Boring logs were not available at the time this proposal was prepared. However, it appears the grade of the connector highway has been constructed below the old mine workings. Portals are shown on Figure 2 and can be observed just above the base of the rock cuts on both sides of the highway. The portal status is summarized below:

<u>Portal No.s</u>	<u>Status</u>
1, 2, 15 – 18, 21	Removed from Project and Closed (7 total) – Some may have reopened.
3 – 14, 19, 20, and 22	Open and Unstable (15 total) – Bats found in P7 & P22

We understand bats were found in Portals 7 and 22. DEP is waiting on a decision from USFWS to determine if we can proceed with work on these portals and other adjacent portals where we understand bats were not found but may be interconnected through the mine workings. No bats were found on the north side of the highway and these portals have been closed with soil fill. Two open portals remain (P19 and P20). Also, some of the soil fill placed over the closed portals has settled and the roof rock has collapsed at some locations opening some of the closed portals back up. These portals will be addressed as part of this project. Based on information provided and observations made during our site visits, we have identified the following constraints.

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Design Constraints:

1. Access to the site.
2. Highway traffic.
3. Unstable rock above the portals.
4. Insufficient soil volume for use as portal backfill material.
5. Space limitations for closure of the portals.
6. Bats.

Project approval will be needed from the USFWS once their review of the bat study is complete. It is unknown when the USFWS will issue an approval for the project or if the project will be allowed to go forward. Due to the small size of any disturbance which is likely, we do not anticipate a construction stormwater permit will be needed. Also, a permit from the USACE will not likely be required. A WVDOH encroachment permit and traffic control plan will be needed for the project. Depending on the final decision by the USFWS, design work may include one or combination of; construction of barriers to restrict access, dry seals, and bat gates. Photographs and portal opening dimensions were provided in the OSM51 report. We will inspect the portals periodically to verify there have been no changes to the condition of the features prior to finalizing design work as discussed herein.

FAIRMONT GATEWAY CONNECTOR PORTALS - SCOPE OF ENGINEERING SERVICES

TASKS I and II – NEPA, ESA, AND REALTY (FGCP)

1. **Environmental:**

A. **Preliminary Information Review:** We will review any existing supporting documentation for use in the drafting of the EA and will formally conduct United States Fish and Wildlife Service (USFWS) consultation. We will also develop schedules to complete the proposed work in a timely manner.

B. **Environmental Assessment:**

We will prepare a draft EA report in compliance with the National Environmental Policy Act (NEPA) of 1969 and in accordance with the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA, 40 Code of Federal Regulations (CFR), Part 1500-1508, and with the Corps' NEPA implementing regulations, Engineer Regular (ER) 200-2-2 (33 CFR 230). The draft EA will be generated and reviewed internally for correctness and consistency prior to submission. Once the report is determined to be sufficient, we will electronically-transmit the draft EA for comments and/or edits. Once comments/edits are addressed and incorporated into the report, the draft EA will be completed, and one electronic copy will be submitted for distribution as

needed. We will also address any comments/edits received by the WVDEP or affiliated regulatory agencies, and will subsequently generate the Final EA. If required, a draft Finding of No Significant Impact (FONSI) document will be prepared and submitted to the WVDEP and the affiliated regulatory agencies for comment. If applicable, a final FONSI document will be prepared and included in the Project's final NEPA document.

- C. Environmental Consultation: As part of the EA Task, we will initiate consultations with the following regulatory agencies: United States Fish and Wildlife Service (USFWS) (via the online IPaC determination tool), West Virginia Division of Natural Resources (WVDNR), the West Virginia State Historic Preservation Office (WVSHPO), Regional Development Council, and City/County Governments as needed.
 - D. Additional Services: Costs outlined for Environmental Assessment do not include time for additional agency consultations, field investigations, or biological surveys. Should it be determined that more detailed information or additional studies are required, additional costs may incur. Additional services if required will be supervised and/or performed by a certified bat biologist as required by the agency.
-
- 2. Determine legal ownership of properties: This work has been partially completed by AML personnel and the only landowner affected at this time is the WVDOT Division of Highways (DOH). However, if needed we will obtain rights of entry from adjacent landowners. We will visit the courthouse to examine deeds, plats, and tax records to determine and verify legal ownership. We will also examine deeds for all landowners affected and request any additional rights of entry when needed. We will record the date of our courthouse visits and note the same on the tax map sheet included with the drawing package.
 - 3. Obtain exploratory rights of entry: Exploratory rights of entry (EROE) have been obtained for all affected property owners by AML personnel. However, we will attempt to obtain any other EROE as needed if affected landowners have not been signed. This work will be documented by a courthouse visit.
 - 4. Meetings: Site meetings will be conducted with the WVDOH, AML, USFWS, and any affected utilities when the project is 30%, 60%, and 90% complete to go over the plans and verify all stakeholders agree with the scope of the project before obtaining CROE and OSM project authorization. We will prepare and submit an MM109 permit to the WVDOH in order to obtain approval for the project.
 - 5. Obtain construction rights of entry: CROE will be obtained from affected landowners once we have plans that are 90% complete. Once plans and permits reach 100% and all final documents are ready, we will prepare the necessary documents and submit the project to AML for submission to OSM for authorization and notice to proceed.

TASK III – DESIGN (FGCP)

Planning & Field Work (FGCP)

1. Initial Site Visit: Our engineer and engineering technician met with you and other DEP personnel on October 26, 2022 in order to develop a scope of services for the project. During our site visit, we walked and visually examined the highway connector and mine-openings.
2. Information Review: Information provided including aerial photographs will be reviewed to become familiar with the history of the site in order to identify or confirm important design constraints that must be considered.
3. Site Reconnaissance: We will perform a detailed examination of the site looking for pertinent features which may affect the construction including; mine drainage, ROW markers, utilities, pipes, drainage systems, etc.
4. Surveying: Topographic mapping (2 ft. contour interval) has been developed by the WVDEP in-house and therefore, surveying to develop topographic mapping has not been included in this scope of work. However, we have included surveying to develop typical confirmation cross sections to verify the mapping is correct relative to the control set by the mapping contractor. If there are discrepancies with the mapping, we will correct the same as needed. We will obtain any additional mapping needed to fill in gaps or adjacent areas not included in the mapping provided. We will also perform any needed surveying to locate pertinent site features and borings with our in-house crew, as required. Surveying services, if needed, will be performed in relation to onsite vertical and horizontal control set by the WVDEP. If needed we will reset the control using GPS surveying techniques.

Geotechnical Investigation (FGCP) – Drilling is not proposed for this project. However, we will use available borings from the WVDEP-AML (if available) to determine the coal floor and piezometric level in the mine workings for purposes of closing the mine openings or designing bat gates or barriers to restrict access to the open portals.

Design Engineering & Contract Documents (FGCP)

1. Conceptual Engineering (30% Complete): A conceptual plan will be prepared and submitted to the WVDEP for review and approval prior to proceeding with preliminary design. The topographic mapping developed and furnished to us by the WVDEP will be used for design. We will meet with WVDEP representatives in the Bridgeport Office to discuss the conceptual design and obtain direction prior to proceeding with the Preliminary Engineering. We will also meet with USFWS as needed for concurrence before moving forward with Preliminary Engineering.

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2. Preliminary Engineering (60% Complete): Preliminary Engineering will be performed and will include:
 - a. Planning, layout, and design of access restrictions, mine portal closures, and bat gates. This work will include design of;
 - barriers to restrict access,
 - mine opening closures,
 - pipe type bat gates,
 - bar type bat gates with a concrete face around the mine opening,
 - Re-vegetation at completion.
 - b. Construction Specifications.
 - c. Preliminary Design Drawings.
 - d. Preparation of a brief design report including all calculations.
3. Meetings: Site meetings will be conducted with the WVDOH, AML, USFWS, and any affected utilities when the project is 30%, 60%, and 90% complete to go over the plans and verify all stakeholders agree with the scope of the project before obtaining CROE and OSM project authorization. We will prepare and submit an MM109 permit to the WVDOH in order to obtain approval for the project.
4. Obtain construction rights of entry: CROE will be obtained from affected landowners once we have plans that are 90% complete. Once plans reach 100% and all final documents are ready, we will submit the project to AML for submission to OSM for authorization and notice to proceed.
5. Final Design Drawings: A complete set of design drawings suitable for construction will be prepared using AutoCad Civil3D or Carlson Civil 2023 compatible with AutoCad format. Once plans progress to 100% complete this will trigger AML submittal to OSM for project authorization. Once plans are complete, a copy of the final design documents will be uploaded to AMLNET in both pdf and CAD formats. The plans will be stamped by our professional engineer registered in West Virginia. The design drawings will include:
 - a. Cover sheet.
 - b. Existing Site Conditions.
 - c. Geometric Layout.
 - d. Site Plan(s).
 - e. Site Plan with Tax Map Overlay.

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- f. Roadway and Driveway Reconstruction, Plans, Alignment, Profiles, Cross Sections, etc.
 - g. Construction staging including maintenance of traffic plans and/or continuous access control throughout construction.
 - h. AMD, Utility Poles, etc., Management/Relocation etc.
 - i. Landslide Correction Sections and Profiles.
 - j. Drainage Structure Profiles.
 - k. Miscellaneous Details including Channel Sections, piping, underdrain, etc.
 - l. Temporary Erosion and Sediment Control Measures.
 - m. Erosion and Sediment Control Details
- 6. Specifications: A complete set of specifications with bid form suitable for construction and bidding will be prepared using WVDEP AML format. Specifications will include the following as appropriate:
 - a. Special Provisions
 - b. Mobilization/Demobilization
 - c. Construction Layout
 - d. Quality Control
 - e. Site Preparation (includes abandoning piezometers)
 - f. Unclassified Excavation
 - g. Drainage
 - h. Retaining Structures
 - i. Mine Seals
 - j. Sediment Control Structures
 - k. Re-vegetation
 - l. Utilities
 - m. Administration
 - n. Traffic Control
 - o. Asphalt Paving and Miscellaneous Road Repair
 - p. Subsurface Investigation
- 7. Engineering Cost Estimate and Construction Schedule: An estimated construction cost and construction schedule will be prepared and included in the design documents. The construction cost estimate will be based on typical unit rates for construction and quantities estimated from the design drawings.
- 8. Permits: We will submit and obtain a construction storm water permit from the WVDEP, if needed, and a MM-109 from the WVDOH. At this time, it is not anticipated that a permit from the USACE will be needed. No permit fees are included. If a bond, permit, or

inspection fee is required for the MM-109 Permit, this fee(s) will be paid by the WVDEP and the WVDEP representative will sign the MM-109 application.

9. Prebid Meeting: A pre-bid meeting will be conducted at the site by our Project Manager (Professional Engineer in charge of the project). A representative of realty will attend the meeting. The meeting will be videoed by one of our construction inspectors and we will prepare an addendum responding to questions or comments.
10. Pre-Construction Meeting: A pre-construction meeting will be attended at the site by our Project Manager (Professional Engineer in charge of the project). A representative of realty will attend the meeting. The meeting will be videoed by one of our construction inspectors and we will prepare notes to document the meeting. All contractor submittals will be reviewed and approved by Civil Tech.

TASKS IV AND V – Construction Phase Services (FGCP)

1. Construction Phase Services including quality assurance and quality control (QA/QC):
 - a. Civil Tech Engineering Inc. will provide construction management services during the project acting as an agent for the WVDEP/DLR/AML&R in accordance with the Agency Terms and Conditions for Construction and Reclamation Contracts.
 - b. We will provide a full-time inspector throughout construction. We have considered a construction duration of 6 months plus one extra month (7 months total or 28 weeks) for contingency in the event the project would not be completed in the 6-month duration considered.
 - c. Our inspector will prepare daily construction activity logs that will, at a minimum, include all data required by the WVDEP, and will summarize construction activities to the satisfaction of the WVDEP. The inspector will have “job stop” authority when work performed by the contractor does not comply with the approved plans or specifications. Activity logs and photographs taken by our inspector using an iPad, cell phone, hand held digital camera, etc. will be uploaded to the AMLNET website within 48 hours along with photographs obtained from the stationary time lapse camera. Photographs shall be sufficient to show the work performed and to assure quality control of any items or features not visible on the surface once construction is complete. We have considered two, time lapse photo cameras will be set on site as approved by the WVDEP.
 - d. Our project engineer will make routine visits to the site to address problems encountered and to verify conformance with the approved plans and specifications. A report will be prepared and uploaded to the AMLNET website within 48 hours.
 - e. The project manager will administer the construction contract and will provide engineering support and services throughout construction including review and approval of invoices,

change orders, field change directives, supplemental agreements, etc. These documents will be uploaded to AMLNET for WVDEP review and approval.

- f. At completion of the project, we will review and approve as-built plans provided by the Contractor and will include the same with an engineer's certification report. Deviations from the approved plans will be noted in the certification report.
2. Post Construction Services: Our inspector will inspect the project monthly for a duration of one year and upload a report with recommendations for maintenance and warranty work to the AMLNET website within 48 hours after the inspection. Should a problem develop which requires engineering assessment and evaluation, our project engineer will visit the site and make recommendations for repair or warranty work. The engineers report will also be uploaded to the AMLNET website within 48 hours after the site visit.

The costs provided herein for construction phase services are based on the following.

1. Unit costs provided herein for engineering are based on a 5-year contract duration and can be used throughout the duration of the contract.
2. A construction duration of 180 days or 6 months has generally been considered. However, we have added 1 month as a contingency to arrive at a total duration of 7 months or 210 days (28 weeks) in the event construction is not completed on-time.
3. As directed, we have considered 7 days per week at 12 hours per day for our inspector(s) (12 hrs/day x 210 days = 2,520 hours).
4. Routine trips to the site by our project engineer to provide consultation, address construction issues, and verify conformance with the approved plans and specifications. We have considered a weekly visit to the site will be necessary throughout construction (12 hrs/wk x 28 wks = 336 hours).
5. Eight hours per week for 28 weeks (8 hrs x 28 wks = 224 hrs.) for our project engineer to provide construction contract administration including review and approval of submittals and applications for payment, review and approval of change orders, and enforcement of the plans and specifications, etc.
6. Per diem for our inspector for over-night stay is estimated as 6 days/wk x 28 weeks = 168 days.
7. Vehicle expense estimated as 600 miles/wk x 28 weeks = 16,800 miles.
8. We have considered 16 hours per month for 12 months for our inspector to visit the site post construction and prepare a report (12 months x 16 hrs/month = 192 hrs). We have also considered four trips to the site for our project engineer as 4 trips x 12 hrs/trip = 48 hrs.

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Based on the scope of services to be provided, we will provide full time inspection and contract administration for an estimated cost of \$ 554,960. This cost corresponds to an estimated weekly rate for Phase IV (without post construction monitoring) of approximately \$ 19,820. This weekly rate can be used to adjust the contract if the duration of the construction should exceed 28 weeks.

FAIRMONT GATEWAY CONNECTOR PORTALS ENGINEERING BUDGET (FGCP)

An estimated cost for engineering services based on the scope of services described herein and a detailed breakdown with man-hours and unit costs for each activity is provided on the Application and Certificate for Payment (Proposed Budget) which is attached to this proposal. A total cost for this project of \$ 979,505.00 is proposed. Refer to Pages 1 and 11 of 22.

PROJECT DESCRIPTION & SITE VISIT OBSERVATIONS

HORNERS RUN PORTALS (HRP)

A landslide has developed uphill of a home owned by Steve Garner at 1334 Horners Run Road, near Shinnston, West Virginia. The slide also reportedly extends onto Mr. Garner's neighbor's property. Mr. Garner reported he purchased the property in 2018 and constructed a home at the base of the hillside. Following construction of the home, a landslide developed in the hillside to the rear of the structure. In an attempt to stabilize the slide, Mr. Garner installed a diversion channel and regraded part of the hillside in the slide area. However, based on information provided, the landslide has continued to worsen. This information will need to be confirmed as part of the scope of our work on this project. Refer to Figure 3.

According to the OSM51 report, the Pittsburgh Coal Seam was deep mined by Mountaineer Coal Company at this site in the 1960's as Mine 32. The coal seam has also been strip mined around the contour of the mountain to the north, west, and south sides of the slide area. There are two collapsed and draining portals onsite above the slide area (P1 and P2) that are saturating the slope and contributing to the landslide. Information provided suggests these portals are situated down dip of the mine workings and old strip mine. Accordingly, these old mine portals would be expected to produce AMD. AMD observed flowing from the collapsed portals is reported as moderate and exhibits low pH consistent with that produced by the Pittsburgh Seam. Due to the down dip of the coal toward the portals and slide area, there is concern that poor drainage along the strip mine bench and highwall may be allowing surface water from the surface mine bench to enter the mine workings and drain toward the portals. Improper drainage on the mine bench could be a large source of AMD contributing to the portal discharge. A possible portal designated as P3 has been identified at the base of the highwall to the north and west of the slide area. Flow into this portal from the strip mine bench may also be a source of AMD discharge in Portals P1 and P2.

Due to dry seasonal conditions, AMD observed at the portals was low at the time of our site visit. A high-tension power line passes across the slope above Portals P1 and P2. First Energy has recently replaced the towers above the slide area. We understand the new towers are supported on caissons constructed to bear below the old mine workings and subsidence damage to the power line should no longer be a concern.

The project will require wet mine seals to permanently dewater the mine pool and measures to improve the stability of the slope to the rear of the homes. Measures to be considered will be dependent on subsurface conditions determined based on borings and the results of drainage/stability analysis. Also, work completed by the home owner will be considered when designing remedial measures. However, typical measures include; installation of surface and subsurface drainage features, retaining walls and, grade and drain techniques. It may also be possible to reduce the risk of future sliding with the installation of wet mine seals and construction

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of proper drainage structures needed to convey mine drainage offsite and away from the unstable slope and homes below. We understand the property owner may not want to reclaim the mine bench and highwall associated with the old strip mine. Therefore, drainage measures proposed will be limited to that required to seal the up-dip mine workings and drain water away from the base of the highwall. If allowed by the landowner, AMD will be reduced by constructing a drainage channel with cross drains along the base of the highwall. These channels will be designed to cause minimal disturbance of the highwall and bench by following existing drainage and lay of land to the extent possible. The channels will be lined with a Geosynthetic Clay Liner (GCL) to reduce surface water intrusion from the mine bench to the mine workings. These measures will be designed to reduce AMD flowing from Portals P1 and P2, and minimize the risk of additional damage to the residential property and power line. Design constraints identified during our site visit are summarized below:

Design Constraints

1. Soil, bedrock, and groundwater conditions in the slide area.
2. Existing drainage features including private drains from the residential development.
3. Access to the slide area.
4. Potential damage to residential property during construction.
5. Waste and borrow areas, and staging for the project.

Typical photographs of the AMD and Landslide follow:



Photo No.1: Garner home as seen from the slide area.

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Photo No.2: Slide area above home.



Photo No.3: Portal P1 was dry on this date.

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Photo No.4: Portal P2 was producing minor AMD discharge on this date.



Photo No.5: AMD discharge from P2.

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Photo No.6: Standing water on the strip mine bench to the west of the slide.



Photo No.7: Mine bench and highwall is wooded.

HORNERS RUN PORTALS (HRP) – SCOPE OF ENGINEERING SERVICES

TASKS I AND II - NEPA, ESA, AND REALTY (HRP)

1. Environmental:

- A. Preliminary Information Review: We will review any existing supporting documentation for use in the drafting of the EA and will formally conduct United States Fish and Wildlife Service (USFWS) consultation. We will also develop schedules to complete the proposed work in a timely manner.
 - B. Environmental Assessment:
We will prepare a draft EA report in compliance with the National Environmental Policy Act (NEPA) of 1969 and in accordance with the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA, 40 Code of Federal Regulations (CFR), Part 1500-1508, and with the Corps' NEPA implementing regulations, Engineer Regular (ER) 200-2-2 (33 CFR 230). The draft EA will be generated and reviewed internally for correctness and consistency prior to submission. Once the report is determined to be sufficient, we will electronically-transmit the draft EA for comments and/or edits. Once comments/edits are addressed and incorporated into the report, the draft EA will be completed, and one electronic copy will be submitted for distribution as needed. We will also address any comments/edits received by the WVDEP or affiliated regulatory agencies, and will subsequently generate the Final EA. If required, a draft Finding of No Significant Impact (FONSI) document will be prepared and submitted to the WVDEP and the affiliated regulatory agencies for comment. If applicable, a final FONSI document will be prepared and included in the Project's final NEPA document.
 - C. Environmental Consultation: As part of the EA Task, we will initiate consultations with the following regulatory agencies: United States Fish and Wildlife Service (USFWS) (via the online IPaC determination tool), West Virginia Division of Natural Resources (WVDNR), the West Virginia State Historic Preservation Office (WVSHPO), Regional Development Council, and City/County Governments as needed.
 - D. Additional Services: Costs outlined for Environmental Assessment do not include time for additional agency consultations, field investigations, or biological surveys. Should it be determined that more detailed information or additional studies are required, additional costs may incur. Additional services, if required, will be supervised and/or performed by a certified bat biologist as required by the agency.
2. Determine legal ownership of properties: This work has been partially completed by AML personnel. However, we believe there are landowners joining the site which may be needed for EROE and CROE. We will also examine deeds for all landowners affected and tax records to verify legal ownership of landowners affected by this project. We will

record the date of our courthouse visits and note the same on the tax map sheet included with the drawing package

3. Meetings: Site meetings will be conducted with the WVDOH, AML, USFWS, and any affected utilities when the project is 30%, 60%, and 90% complete to go over the plans and verify all stakeholders agree with the scope of the project before obtaining CROE and OSM project authorization. We will prepare and submit a MM109 permit to the WVDOH in order to obtain approval for the project.
4. Obtain construction rights of entry: CROE will be obtained from affected landowners once we have plans that are 90% complete. Once plans reach 100% and all final documents are ready, we will prepare the necessary documents and submit the project to AML for submission to OSM for authorization and notice to proceed.

TASK III DESIGN (HRP)

Planning & Field Work (HRP)

1. Initial Site Visit: Our engineer and engineering technician met with you and other DEP personnel on November 3, 2022 in order to develop a scope of services for the project. During our site visit, we walked and visually examined the mine bench, landslide, power line, and access, and private property below.
2. Information Review: Information provided as well as mine maps and aerial photographs will be reviewed to become familiar with the history of the site in order to identify or confirm important design constraints that must be considered.
3. Site Reconnaissance: We will perform a detailed examination of the site looking for pertinent features that may affect the construction including; AMD seepage areas, property corners, utilities, pipes, drainage systems, old structures, access, etc.
4. Surveying: Topographic mapping (2 ft. contour interval) has been developed by the WVDEP under separate contract and therefore, surveying to develop topographic mapping has not been included in this scope of work. However, we have included surveying to develop typical confirmation cross sections to verify the mapping is correct relative to the control set by the mapping contractor. If there are discrepancies with the mapping, we will correct the same as needed. We will obtain any additional mapping needed to fill in gaps or adjacent areas not included in the mapping provided. We will also perform any needed surveying to locate pertinent site features and borings with our in-house crew, as required. Surveying services, if needed, will be performed in relation to onsite vertical and horizontal control set by the mapping contractor. Should control need to be replaced, we will use GPS

surveying techniques to reset these points. Our crew will also obtain spot elevations along the base of the highwall to provide detailed information for design of drainage features if needed.

Geotechnical Investigation (HRP)

1. Engineering: Drilling and sampling will be subcontracted to Triad Engineering Inc. Drilling activity will be directed and observed by our representative. Our representative will be onsite full time when drilling is being conducted. Triad will provide a geologist to log the borings and direct daily drilling activity in the field, if directed by our project manager.
2. Drilling and Sampling General Scope of Work: Drilling and sampling will be needed to investigate the subsurface conditions in the slide area including soil, groundwater, and bedrock. Borings will also be needed to determine the coal floor elevation and the piezometric level in the old mine workings.

Twenty (20) standard test borings are proposed and will be drilled within the approximate limits of the project as shown on Figure 3. All borings will be advanced to split spoon refusal on bedrock and rock coring will be performed in selected borings to obtain bedrock information in the event a retaining wall is necessary to stabilize the landslide and to obtain coal floor elevation in the old mine workings. We will also install piezometers in half of the borings. For purposes of estimating the drilling footage, we have considered an average soil drilling depth of 15 ft., 20 ft. of rock coring in 5 of the borings, and piezometer installation in half of the borings. This corresponds to a total of 300 ft. of standard soil test borings, 100 ft. of rock core, and 100 ft. of piezometers.

Standard penetration testing and sampling will be performed at regular intervals throughout the borings. Soil samples obtained in conjunction with the standard Penetration testing will be stored in air tight glass jars and delivered to our office for visual classification. Rock core will be placed in partitioned boxes and marked for depth, length of core run, and recovery. The driller will also note fracturing, drill chatter, RQD, and loss of drilling fluid on the boring logs. We will perform natural moisture content, Atterberg limits, and particle size analysis on representative soil samples obtained from the borings. The results of this lab testing in conjunction with N values obtained from the standard penetration test results will be used to estimate the engineering properties of the soils for use in the stability analysis. Piezometers installed in the borings drilled on the power line bench will be used to estimate the volume of the mine reservoir for dewatering and pH treatment purposes.

Design Engineering & Contract Documents (HRP)

1. Conceptual Engineering (30% Complete): A conceptual plan will be prepared and submitted to the WVDEP for review and approval prior to proceeding with preliminary design. The topographic mapping developed and furnished to us by the WVDEP will be used for design. We will meet with WVDEP representatives in the Bridgeport Office to discuss the conceptual design and obtain direction prior to proceeding with the Preliminary Engineering if required.
2. Preliminary Engineering (60% Complete): Preliminary Engineering will be performed and will include:
 - a. Planning, layout and design of access, drainage channels, mine dewatering and treatment, wet mine seals, and remediation of the active slide to reduce the risk of future movement and damage to the home. This work will include;
 - improving access and provisions for a staging area if practical,
 - grading to re-establish proper drainage,
 - subsurface and surface drainage as needed,
 - mine dewatering and construction of wet seals to reduce AMD and improve the stability of the slope below.
 - evaluation of remedial measures to correct the landslide including; a retaining wall or a grade and drain technique. Grade and drain may include excavation of unstable soils, installation of subsurface drainage, and possible construction of a rock buttress at the toe. We point out that this procedure may be risky considering the location of the Garner home in relation to the landslide toe.
 - Re-vegetation at completion.
 - b. Construction Specifications.
 - c. Preliminary Design Drawings.
 - d. Preparation of a brief design report including all calculations and results of stability analysis. Drainage channels will be sized using the 24-hour 10-year storm event with a check for storms up to the 100-year event.
3. Submit preliminary design documents (60%) to AML for review, and meet with WVDEP representatives in Bridgeport, WV to discuss the preliminary design and revisions needed. Correct preliminary plans (90%) and submit the same to AML for follow up review before preparing final design documents. At this time, we will meet with AML, WVDOH, USFWS, and any affected utilities to begin permitting and the approval process. We will also begin consultation with the affected landowners at this time to obtain CROE.

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4. **Final Design Drawings:** A complete set of design drawings suitable for construction will be prepared using AutoCad Civil3D or Carlson Civil 2023 compatible with AutoCad format. Once plans progress to 100% complete this will trigger submission to AML for submission to OSM for project authorization and to obtain CROE from affected landowners. Once plans are complete a copy of the final design documents will be uploaded to AMLNET in both pdf and CAD formats. The plans will be stamped by our professional engineer registered in West Virginia. The design drawings will include:
 - a. Cover sheet.
 - b. Existing Site Conditions
 - c. Geometric Layout
 - d. Site Plan (s).
 - e. Site Plan with Tax Map Overlay.
 - f. Landslide Correction Sections and Profiles.
 - g. Wet Mine Seals.
 - h. Drainage Structure Profiles.
 - i. Miscellaneous Details including channel sections, piping, retaining walls, wet mine seals, underdrain, etc.
 - j. Temporary Erosion and Sediment Control Measures.
 - k. Erosion and Sediment Control Details
5. **Specifications:** A complete set of specifications with bid form suitable for construction and bidding will be prepared using WVDEP AML format. Specifications will include the following as appropriate:
 - a. Special Provisions
 - b. Mobilization/Demobilization
 - c. Construction Layout
 - d. Quality Control
 - e. Site Preparation
 - f. Unclassified Excavation
 - g. Drainage
 - h. Retaining Structures
 - i. Mine Seals
 - j. Sediment Control Structures
 - k. Re-vegetation
 - l. Utilities
 - m. Administration
 - n. Traffic Control
 - o. Asphalt Paving and Miscellaneous Road Repair

p. Subsurface Investigation

6. Engineering Cost Estimate and Construction Schedule: An estimated construction cost and construction schedule will be prepared and included in the design documents. The construction cost estimate will be based on typical unit rates for construction and quantities estimated from the design drawings.
7. Permits: We will submit and obtain a construction storm water permit from the WVDEP and a MM-109 from the WVDOH. At this time, it is not anticipated that a permit from the USACE will be needed. No permit fees are included. If a bond, permit, or inspection fee is required for the MM-109 Permit, this fee(s) will be paid by the WVDEP and the WVDEP representative will sign the MM-109 application.
8. Prebid Meeting: A pre-bid meeting will be conducted at the site by our Project Manager (Professional Engineer in charge of the project). A representative of realty will attend the meeting. The meeting will be videoed by one of our construction inspectors and we will prepare an addendum responding to questions or comments.
9. Pre-Construction Meeting: A pre-construction meeting will be attended at the site by our Project Manager (Professional Engineer in charge of the project). A representative of realty will attend the meeting. The meeting will be videoed by one of our construction inspectors and we will prepare notes to document the meeting. All contractor submittals will be reviewed and approved by Civil Tech.

TASKS IV AND V - Construction Phase Services (HRP)

1. Construction Phase Services including quality assurance and quality control (QA/QC):
 - a. Civil Tech Engineering Inc. will provide construction management services during the project acting as an agent for the WVDEP/DLR/AML&R in accordance with the Agency Terms and Conditions for Construction and Reclamation Contracts
 - b. We will provide a full-time inspector throughout construction. We have considered a construction duration of 6 months plus one extra month (7 months total or 28 weeks) for contingency in the event the project would not be completed in the 6-month duration considered.
 - c. Our inspector will prepare daily construction activity logs that will, at a minimum, include all data required by the WVDEP, and will summarize construction activities to the satisfaction of the WVDEP. The inspector will have "job stop" authority when work performed by the contractor does not comply with the approved plans or specifications. Activity logs and photographs taken by our inspector using an iPad, cell phone, hand held digital camera, etc. will be uploaded to the AMLNET website within 48 hours along with photographs obtained

from the stationary time lapse camera. Photographs shall be sufficient to show the work performed and to assure quality control of any items or features not visible on the surface once construction is complete. We have considered two, time lapse photo cameras will be set on site as approved by the WVDEP.

- d. Our project engineer will make routine visits to the site to address problems encountered and to verify conformance with the approved plans and specifications. A report will be prepared and uploaded to the AMLNET website within 48 hours.
 - e. The project manager will administer the construction contract and will provide engineering support and services throughout construction including review and approval of invoices, change orders, field change directives, supplemental agreements, etc. These documents will be uploaded to AMLNET for WVDEP review and approval.
 - f. At completion of the project, we will review and approve as-built plans provided by the Contractor and will include the same with an engineer's certification report. Deviations from the approved plans will be noted in the certification report.
2. Post Construction Services: Our inspector will inspect the project monthly for a duration of one year and upload a report with recommendations for maintenance and warranty work to the AMLNET website within 48 hours after the inspection. Should a problem develop which requires engineering assessment and evaluation, our project engineer will visit the site and make recommendations for repair or warranty work. The engineers report will also be uploaded to the AMLNET website within 48 hours after the site visit.

The costs provided herein for construction phase services are based on the following.

1. Unit costs provided herein for engineering are based on a 5-year contract duration and can be used throughout the duration of the contract.
2. A construction duration of 180 days or 6 months has generally been considered. However, we have added 1 month as a contingency to arrive at a total duration of 7 months or 210 days (28 weeks) in the event construction is not completed on-time.
3. As directed, we have considered 7 days per week at 12 hours per day for our inspector(s) (12 hrs/day x 210 days = 2,520 hours).
4. Routine trips to the site by our project engineer to provide consultation, address construction issues, and verify conformance with the approved plans and specifications. We have considered a weekly visit to the site will be necessary throughout construction (12 hrs/wk x 28 wks = 336 hours).
5. Eight hours per week for 28 weeks (8 hrs x 28 wks = 224 hrs.) for our project engineer to provide construction contract administration including review and approval of submittals and applications for payment, review and approval of change orders, and enforcement of the plans and specifications, etc.

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6. Per diem for our inspector for over-night stay is estimated as $6 \text{ days/wk} \times 28 \text{ weeks} = 168$ days.
7. Vehicle expense estimated as $600 \text{ miles/wk} \times 28 \text{ weeks} = 16,800$ miles.
8. We have considered 16 hours per month for 12 months for our inspector to visit the site post construction and prepare a report ($12 \text{ months} \times 16 \text{ hrs/month} = 192 \text{ hrs}$). We have also considered four trips to the site for our project engineer as $4 \text{ trips} \times 12 \text{ hrs/trip} = 48 \text{ hrs}$.

Based on the scope of services to be provided, we will provide full time inspection and contract administration for an estimated cost of \$ 554,960. This cost corresponds to an estimated weekly rate for Phase IV (without post construction monitoring) of approximately \$ 19,820. This weekly rate can be used to adjust the contract if the duration of the construction should exceed 28 weeks.

HORNER RUN PORTALS ENGINEERING BUDGET (HRP)

An estimated cost for engineering services based on the scope of services described herein and a detailed breakdown with man-hours and unit costs for each activity is provided on the Application and Certificate for Payment (Proposed Budget) which is attached to this proposal. A total cost of \$ 1,119,525.00 is proposed for this project. Refer to page 16 of 22.

PROJECT DESCRIPTION & SITE VISIT OBSERVATIONS

LICK RUN 5 (LR5)

Based on the OSM51 report, the project includes four portals, a 300 ft. long x 30 ft. tall highwall, and a large coal refuse pile. An initial site visit was conducted with the WVDEP on November 3, 2022. A portal survey performed by AML suggested the portals were not suitable for bat habitat, bat gates would not be needed, and only a bat roost study would be needed. However, we understand the AML portal survey is no longer considered valid because it was not performed by a certified bat biologist. A new portal survey by a certified bat biologist will be required to determine if bat gates are needed for these portals. The portals are partially collapsed and are producing low to moderate AMD. The coal seam mined was not known at the time this proposal was prepared. However, the AMD exhibits a low pH and iron. No obvious source of soil suitable for use as soil cover was observed onsite. We understand the DEP has a permitted site located near the project that may be a source of borrow for use as soil cover that may need to be investigated as part of this project. The NRCS web soil survey suggests there may be a band of clayey soil located downslope of the refuse and Portals P1 – P3 that may provide a source of soil cover. However, development of this area as a borrow site would require additional disturbance and clearing.

The property is owned by Kingdom Ministries International – Shepard's Tent and is currently used as a youth camp. The previous owner, Ron Thorn, donated the property to the church. Mr. Thorn is concerned about the safety of the church members since the highwall is located within 50 ft. of cabins and a rock-climbing wall. Also, one of the portals is somewhat open at the face and is a safety concern due to collapsing roof rock. He would like to see the mine hazards eliminated.

As mentioned, the results of the AML portal survey suggested the portals were not suitable for bat habitat. However, as mentioned, the portal survey will be redone by a certified bat biologist and the need for bat gates and/or additional studies will be assessed at that time. Regardless of the results of the portal survey the site is located within a bat buffer zone, and bat roost study will be required to identify any roosting locations within the LOD since clearing will be needed for the project. If roosting bats are discovered, a habitat enhancement and conservation plan will be required and development of this plan has been included herein. The project will require four (4) wet mine seals and/or bat gates to permanently dewater the mine pool, and drainage channels to convey AMD downslope to natural drainage. We understand, it was originally planned to back stack the highwall with coal refuse, cover with soil, and revegetate the reclamation area. Due to clearing concerns and difficult access between the highwall and refuse pile, it may be necessary to reclaim the highwall with mine spoil and grade the refuse in-place. Design constraints identified during our site visit are summarized below:

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Design Constraints

1. Access to the site.
2. Bat habitat impact.
3. Soil cover availability.

Typical photographs of the site follow:



Photo No.1: Highwall and bench.

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Photo No.2: Mine spoil slope.



Photo No.3: Highwall and bench.



Photo No.4: Collapsed Portal P4.



Photo No.5: Minor AMD discharge from P4.



Photo No.6: Exposed coal refuse near P1 – P3.



Photo No.7: Portal P3.

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Photo No.8: Portal P2.



Photo No.9: Portal P1.



Photo No.10: Natural drainage feature.

LICK RUN 5 (LR5) – SCOPE OF ENGINEERING SERVICES

TASKS I AND II - NEPA, ESA, AND REALTY (LR5)

1. Environmental:

- A. Preliminary Information Review: We will review any existing supporting documentation for use in the drafting of the EA and will formally conduct United States Fish and Wildlife Service (USFWS) consultation. We will also develop schedules to complete the proposed work in a timely manner.
- B. Environmental Assessment:
We will prepare a draft EA report in compliance with the National Environmental Policy Act (NEPA) of 1969 and in accordance with the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA, 40 Code of Federal Regulations (CFR), Part 1500-1508, and with the Corps' NEPA implementing regulations, Engineer Regular (ER) 200-2-2 (33 CFR 230). The draft EA will be generated and reviewed internally for correctness and consistency prior to submission. Once the report is determined to be sufficient, we will electronically-transmit the draft EA for comments and/or edits. Once comments/edits are addressed and incorporated into the report, the draft EA will be completed, and one electronic copy will be submitted for distribution as needed. We will also address any comments/edits received by the WVDEP or affiliated regulatory agencies, and will subsequently generate the Final EA. If required, a draft

Finding of No Significant Impact (FONSI) document will be prepared and submitted to the WVDEP and the affiliated regulatory agencies for comment. If applicable, a final FONSI document will be prepared and included in the Project's final NEPA document.

- C. Environmental Consultation: As part of the EA Task, we will initiate consultations with the following regulatory agencies: United States Fish and Wildlife Service (USFWS) (via the online IPaC determination tool), West Virginia Division of Natural Resources (WVDNR), the West Virginia State Historic Preservation Office (WVSHPO), Regional Development Council, and City/County Governments as needed.
 - D. PRT Survey and Myotis Bat Conservation Plan: Prior to construction, we will conduct a Portal Survey (PS) and a Potential Roost Tree (PRT) survey within the area of interest. Results will be compiled into a report and submitted to USFWS for concurrence prior to construction. Following the PS and PRT surveys and prior to construction, we will draft and submit a Myotis Bat Conservation Plan (MBCP) in accordance with Section 7 of the ESA. The MBCP will detail measures for implementation during construction to minimize impacts on listed bat species identified within the project area. The MBCP will be submitted to USFWS for approval prior to construction. This work will be performed under the supervision of, or by a certified bat biologist.
 - E. Additional Services: Costs outlined for Environmental Assessment do not include time for additional agency consultations, field investigations, or biological surveys. We anticipate this work will be performed with the aid of a certified Bat Biologist. Should it be determined that more detailed information or additional studies are required, additional costs may incur. Additional services if required will be supervised and/or performed by a certified bat biologist as required by the agency.
2. Determine legal ownership of properties: This work has been partially completed by AML personnel. However, we believe there are landowners joining the site which may be needed for EROE and CROE. We will also examine deeds for all landowners affected and tax records to verify legal ownership of landowners affected by this project. We will record the date of our courthouse visits and note the same on the tax map sheet included with the drawing package.
3. Meetings: Site meetings will be conducted with the WVDOH, AML, USFWS, and any affected utilities when the project is 30%, 60%, and 90% complete to go over the plans and verify all stakeholders agree with the scope of the project before obtaining CROE and OSM project authorization. We will prepare and submit an MM109 permit to the WVDOH in order to obtain approval for the project.

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4. Obtain construction rights of entry: CROE will be obtained from affected landowners once we have plans that are 90% complete. Once plans reach 100% and all final documents are ready, we will prepare the necessary documents and submit the project to AML for submission to OSM for authorization and notice to proceed.

TASK III – DESIGN (LR5)

Planning & Field Work (LR5)

1. Initial Site Visit: Our engineer and engineering technician met with you and other DEP personnel on November 3, 2022 in order to develop a scope of services for the project. During our site visit, we walked and visually examined the mine bench, refuse pile, and the portals.
2. Information Review: Information provided as well as mine maps and aerial photographs will be reviewed to become familiar with the history of the site in order to identify or confirm important design constraints that must be considered.
3. Site Reconnaissance: We will perform a detailed examination of the site looking for pertinent features which may affect the construction including; AMD discharge and seepage areas, property corners, utilities, pipes, drainage systems, old structures, access, etc.
4. Surveying: Topographic mapping (2 ft. contour interval) has been developed by the WVDEP under separate contract and therefore, surveying to develop topographic mapping has not been included in this scope of work. However, we have included surveying to develop typical confirmation cross sections to verify the mapping is correct relative to the control set by the mapping contractor. If there are discrepancies with the mapping, we will correct the same as needed. We will obtain any additional mapping needed to fill in gaps or adjacent areas not included in the mapping provided. We will also perform any needed surveying to locate pertinent site features and borings with our in-house crew, as required. Surveying services if needed will be performed in relation to onsite vertical and horizontal control set by the mapping contractor. If control must be reset, we will re-establish the points using GPS Surveying techniques.

Geotechnical Investigation (LR5)

1. Engineering: Drilling and sampling will be subcontracted to Triad Engineering Inc. Drilling activity will be directed and observed by our representative. Our representative will be onsite full time when drilling is being conducted. Triad will provide a geologist to log the borings and direct daily drilling activity in the field if directed by our project manager

2. Drilling and Sampling General Scope of Work: Because the mines portals are open, drilling and sampling has not been included to investigate and determine the coal floor elevation and the piezometric level in the old mine workings. Therefore, borings will not be required for the mine portals. However, borings will be needed to locate potential soil borrow onsite or offsite nearby the AML location. We have considered two mobilizations for the drilling equipment in the event it is necessary to drill two sites to investigate for soil borrow. Six (6) standard test borings have been considered for each site with a corresponding total of twelve. We will advance the borings to bedrock or a maximum depth of 20 ft., if the depth to rock exceeds 20 ft. below the ground surface. No rock coring or piezometers are proposed. For cost estimate purposes, this corresponds to a total estimated drilling footage of 240 ft.

Standard penetration testing and sampling will be performed at regular intervals throughout the borings. Soil samples obtained in conjunction with the standard Penetration testing will be stored in air tight glass jars and delivered to our office for visual classification. No laboratory testing is proposed or included in this proposal.

Design Engineering & Contract Documents (LR5)

1. Conceptual Engineering (30% Complete): A conceptual plan will be prepared and submitted to the WVDEP for review and approval prior to proceeding with preliminary design. The topographic mapping developed and furnished to us by the WVDEP will be used for design. We will meet with WVDEP representatives in the Bridgeport Office to discuss the conceptual design and obtain direction prior to proceeding with the Preliminary Engineering if required.
2. Preliminary Engineering (60% Complete): Preliminary Engineering will be performed and will include:
 - a. Planning, layout and design of access, drainage channels, mine dewatering and treatment, wet mine seals, grading and soil cover of refuse/mine spoil remediation. This work will include;
 - improving access and provisions for a staging area if practical,
 - grading to re-establish drainage,
 - subsurface drainage as needed,
 - evaluation of remedial measures including; wet mine seals, drainage channels, highwall back-stack, refuse grading, and borrow for use as soil cover availability,
 - Re-vegetation at completion.
 - b. Construction Specifications.
 - c. Preliminary Design Drawings.

Scope of Services and Cost Proposal
2022 AML Contract 6 Projects – North
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Civil Tech Project No. 22140

- d. Preparation of a brief design report including all calculations and results of stability analysis. Drainage channels will be sized using the 24-hour 10-year storm event with a check for storms up to the 100-year event.
3. Submit preliminary design documents (60%) to AML for review, and meet with WVDEP representatives in Bridgeport, WV to discuss the preliminary design and revisions needed. Correct preliminary plans (90%) and submit the same to AML for follow up review before preparing final design documents. At this time we will meet with AML, WVDOH, USFWS, and any affected utilities to begin permitting and the approval process. We will also begin consultation with the affected landowners at this time to obtain CROE.
4. **Final Design Drawings:** A complete set of design drawings suitable for construction will be prepared using AutoCad Civil3D or Carlson Civil 2023 compatible with AutoCad format. Once plans progress to 100% complete this will trigger AML submittal to OSM for project authorization. Once plans are complete, a copy of the final design documents will be uploaded to AMLNET in both pdf and CAD formats. The plans will be stamped by our professional engineer registered in West Virginia. The design drawings will include:
 - a. Cover sheet.
 - b. Existing Site Conditions
 - c. Existing Site Conditions with Geometric Layout
 - d. Site Plan (s).
 - e. Site Plan with Tax Map Overlay.
 - f. Wet Mine Seals or Bat Gates as needed
 - g. Drainage Structure Profiles.
 - h. Highwall Back-stack Sections.
 - i. Refuse grading and cover.
 - j. Grading Cross Sections.
 - k. Miscellaneous Details including Channel Sections, wet mine seals, piping, underdrain, etc.
 - l. Temporary Erosion and Sediment Control Measures.
 - m. Erosion and Sediment Control Details
5. **Specifications:** A complete set of specifications with bid form suitable for construction and bidding will be prepared using WVDEP AML format. Specifications will include the following as appropriate:
 - a. Special Provisions
 - b. Mobilization/Demobilization
 - c. Construction Layout

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- d. Quality Control
 - e. Site Preparation
 - f. Unclassified Excavation
 - g. Drainage
 - h. Retaining Structures
 - i. Mine Seals or Bat Gates as needed
 - j. Sediment Control Structures
 - k. Re-vegetation
 - l. Utilities
 - m. Administration
 - n. Traffic Control
 - o. Asphalt Paving and Miscellaneous Road Repair
 - p. Subsurface Investigation
6. Engineering Cost Estimate and Construction Schedule: An estimated construction cost and construction schedule will be prepared and included in the design documents. The construction cost estimate will be based on typical unit rates for construction and quantities estimated from the design drawings.
7. Permits: We will submit and obtain a construction storm water permit from the WVDEP and a MM-109 from the WVDOH, if needed. At this time, it is not anticipated that a permit from the USACE will be needed. No permit fees are included. If a bond, permit fee, or inspection fee is required for the MM-109 Permit, this fee(s) will be paid by the WVDEP and the WVDEP representative will sign the MM-109 application.
8. Prebid Meeting: A pre-bid meeting will be conducted at the site by our Project Manager (Professional Engineer in charge of the project). A representative of realty will attend the meeting. The meeting will be videoed by one of our construction inspectors and we will prepare an addendum responding to questions or comments.
9. Pre-Construction Meeting: A pre-construction meeting will be attended at the site by our Project Manager (Professional Engineer in charge of the project). A representative of realty will attend the meeting. The meeting will be videoed by one of our construction inspectors and we will prepare notes to document the meeting. All contractor submittals will be reviewed and approved by Civil Tech.

TASKS IV AND V - Construction Phase Services (LR5)

1. Construction Phase Services including quality assurance and quality control (QA/QC):

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2022 AML Contract 6 Projects – North
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- a. Civil Tech Engineering Inc. will provide construction management services during the project acting as an agent for the WVDEP/DLR/AML&R in accordance with the Agency Terms and Conditions for Construction and Reclamation Contract.
 - b. We will provide a full-time inspector throughout construction. We have considered a construction duration of 6 months plus one extra month (7 months total or 28 weeks) for contingency in the event the project would not be completed in the 6-month duration considered.
 - c. Our inspector will prepare daily construction activity logs that will, at a minimum, include all data required by the WVDEP, and will summarize construction activities to the satisfaction of the WVDEP. The inspector will have “job stop” authority when work performed by the contractor does not comply with the approved plans or specifications. Activity logs and photographs taken by our inspector using an iPad, cell phone, hand held digital camera, etc. will be uploaded to the AMLNET website within 48 hours along with photographs obtained from the stationary time lapse camera. Photographs shall be sufficient to show the work performed and to assure quality control of any items or features not visible on the surface once construction is complete. We have considered two, time lapse photo cameras will be set on site as approved by the WVDEP.
 - d. Our project engineer will make routine visits to the site to address problems encountered and to verify conformance with the approved plans and specifications. A report will be prepared and uploaded to the AMLNET website within 48 hours.
 - e. The project manager will administer the construction contract and will provide engineering support and services throughout construction including review and approval of invoices, change orders, field change directives, supplemental agreements, etc. These documents will be uploaded to AMLNET for WVDEP review and approval.
 - f. At completion of the project, we will review and approve as-built plans provided by the Contractor and will include the same with an engineer’s certification report. Deviations from the approved plans will be noted in the certification report.
2. Post Construction Services: Our inspector will inspect the project monthly for a duration of one year and upload a report with recommendations for maintenance and warranty work to the AMLNET website within 48 hours after the inspection. Should a problem develop which requires engineering assessment and evaluation, our project engineer will visit the site and make recommendations for repair or warranty work. The engineers report will also be uploaded to the AMLNET website within 48 hours after the site visit.

The costs provided herein for construction phase services are based on the following.

1. Unit costs provided herein for engineering are based on a 5-year contract duration and can be used throughout the duration of the contract.

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2. A construction duration of 180 days or 6 months has generally been considered. However, we have added 1 month as a contingency to arrive at a total duration of 7 months or 210 days (28 weeks) in the event construction is not completed on-time.
3. As directed, we have considered 7 days per week at 12 hours per day for our inspector(s) (12 hrs/day x 210 days = 2,520 hours).
4. Routine trips to the site by our project engineer to provide consultation, address construction issues, and verify conformance with the approved plans and specifications. We have considered a weekly visit to the site will be necessary throughout construction (12 hrs/wk x 28 wks = 336 hours).
5. Eight hours per week for 28 weeks (8 hrs x 28 wks = 224 hrs.) for our project engineer to provide construction contract administration including review and approval of submittals and applications for payment, review and approval of change orders, and enforcement of the plans and specifications, etc.
6. Per diem for our inspector for over-night stay is estimated as 6 days/wk x 28 weeks = 168 days.
7. Vehicle expense estimated as 600 miles/wk x 28 weeks = 16,800 miles.
8. We have considered 16 hours per month for 12 months for our inspector to visit the site post construction and prepare a report (12 months x 16 hrs/month = 192 hrs). We have also considered four trips to the site for our project engineer as 4 trips x 12 hrs/trip = 48 hrs.

Based on the scope of services to be provided, we will provide full time inspection and contract administration for an estimated cost of \$ 554,960. This cost corresponds to an estimated weekly rate for Phase IV (without post construction monitoring) of approximately \$ 19,820. This weekly rate can be used to adjust the contract if the duration of the construction should exceed 28 weeks.

LICK RUN 5 ENGINEERING BUDGET (LR5)

An estimated cost for engineering services based on the scope of services described herein and a detailed breakdown with man-hours and unit costs for each activity is provided on the Application and Certificate for Payment (Proposed Budget) which is attached to this proposal. The total proposed cost for Lick Run is \$ 1,170,805.00. See page 21 of 22.

2022 CONTRACT 6 PROJECTS – NORTH COST SUMMARY AND SCHEDULE

The current project status will impact the start and completion dates for the projects. Based on the current schedule and if allowed to go forward by the regulatory agency, all projects should be complete within the 5-year contract period. However, the new requirement for USFWS consultation on every project and the need to use certified bat biologists for the work may cause delay. The schedule reflects this delay. However, where allowed by the agency and AML, we will work concurrently on other tasks including; mapping, EROE, subsurface investigation, and

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preliminary design to advance the schedule where possible. Potential delays are summarized below:

- Clarksburg (Post) Landslide will be delayed by a property issue and EROE. The schedule considers potential delay to resolve the property issue. We have not considered delay for any environmental issue other than the USFWS consultation.
- Fairmont Gateway Connector Portals will be delayed by the presence of endangered bats in the portals. We understand USFWS did not provide a definitive ruling for this project. The schedule considers a delay for this project to resolve issues with the bats and design. We will also obtain EROE and CROE for any joining landowner affected by the project.
- Horners Run Portals needs additional EROE. Although EROE may impact the scope of the project, we do not anticipate the EROE will delay the project. However, the schedule considers some delay for USFWS consultation.
- Lick Run 5 may be delayed by the need to redo the portal study, perform a bat roost study, and develop and implement a conservation plan. The schedule considers delay for these activities.

Once we receive NTP, we will begin working on NEPA and Realty activities required for the projects. We will immediately begin working on Task II at Horners Run Portals with USFWS concurrence and this is reflected in the schedule. Other projects will follow as problems with NEPA and Realty are resolved. However, in general, we would anticipate completing Tasks I thru III within 9 to 12 months after NEPA problems are resolved and work has begun. Season permitting, construction should begin within 12 to 18 months after start-up of engineering, and construction should be complete prior to 2 ½ years after startup. An engineering schedule is attached. Based on the scope of work to be performed, we estimate the total cost of the design project will be \$4,392,245.00 for all four sites. Refer to the Cost Summary for a breakdown of costs for each project presented on the APPLICATION AND CERTIFICATE FOR PAYMENT (PROPOSED BUDGET) attached to this proposal as a budget estimate. The summary for all projects and tasks is presented on Page 1 of 22.

Additional Services and Exclusions

1. Other services not included in the scope of this project can be provided as directed by WVDEP in accordance with the unit rates provided on the attached Application and Certificate for Payment (Proposed Budget).
2. Other Permits: We will prepare and submit any other permit applications not included herein for review and approval as additional services if required by the WVDEP or the respective agency. The cost of these permitting services other than those described herein has **not** been included in the scope of this proposal.

Scope of Services and Cost Proposal
2022 AML Contract 6 Projects – North
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Portals, Horners Run Portals, and Lick Run 5
Civil Tech Project No. 22140

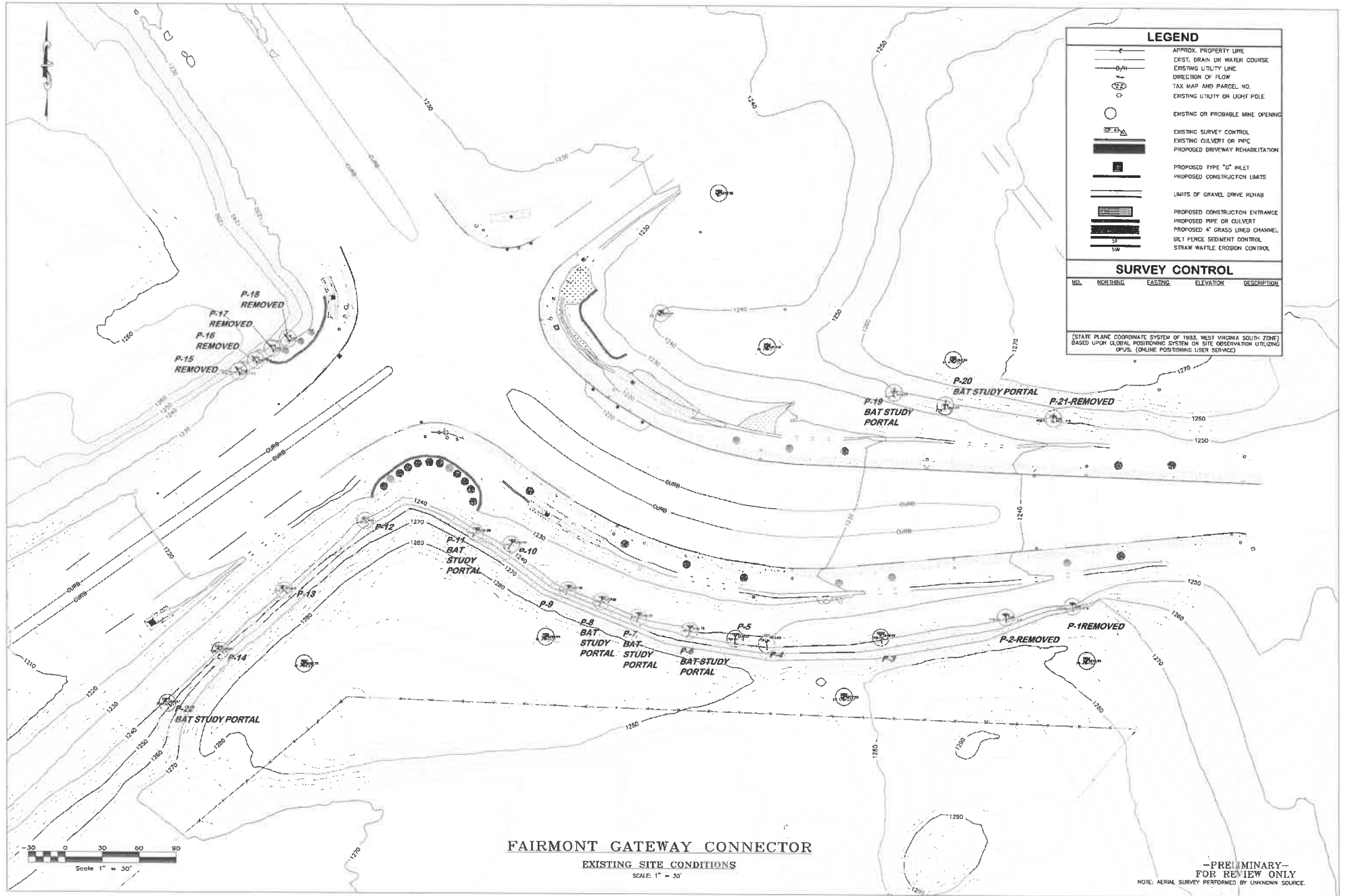
3. Environmental testing, assessment, wetland delineation, and natural stream design services; public hearings etc., are not included in the work scope unless listed in this proposal.
4. All permit fees are excluded as discussed herein.

We trust this scope of work and cost estimate is satisfactory. An insurance certificate showing general liability, professional liability, and workers compensation coverage will be provided under separate cover along with a purchasing affidavit as requested.

ILLUSTRATIONS

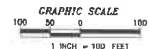
Figures 1 thru 4

Engineering and Construction Schedule





LEGEND	
	PROPERTY LINE
	TRACT LINE
	RIGHT OF WAY
	STREAM/DRIFT
	EXISTING FENCE LINE
	EXISTING SANITARY SEWER
	EXISTING STORM SEWER
	EXISTING WATER LINE
	EXISTING GAS LINE
	OVERHEAD ELECTRIC
	OVERHEAD TELEPHONE
	OVERHEAD CABLE
	OVERHEAD ELECTRIC/CABLE
	OVERHEAD ELECTRIC/CABLE/TELEPHONE
	OVERHEAD CABLE/TELEPHONE
	UNDERGROUND FIBER
	UNDERGROUND ELECTRIC
	UNDERGROUND TELEPHONE
	UNDERGROUND CABLE
	UNDERGROUND ELECTRIC/TELEPHONE
	BENCH MARK
	EXISTING FIRE HYDRANT
	EXISTING WATER OR GAS METER
	EXISTING WATER OR GAS VALVES
	TELEPHONE OR ELECTRIC RISER
	UTILITY POLE
	MINE PORTAL
	BORING
	MANHOLE




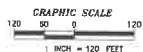
				SURVEYED CMN 04/29		 OFFICE OF ABANDONED MINE LANDS & RECLAMATION	 400 TRACY WAY, SUITE 200 CHARLESTON, WV 25311 (304) 345-6712 PHONE (304) 345-6714 FAX	PROJECT NAME: HORNERS RUN		OVERALL MAP	DATE: 05/09/2022	
				DRAWN CRH 05/09				COUNTY: HARRISON			SHEET: 2 OF 5	
				CHECKED TRL 05/09				PROJECT NO.: DEP210000002				
NO.	REVISION	DATE	BY	REVIEWED	CMN	05/09						

FIGURE 3 HORNERS RUN PORTALS

UNLESS OTHERWISE NOTED, ALL
PALLADIUM ENGINEERING, INC.
DRAWINGS ARE TO BE USED FOR
NO OTHER PROJECTS



LEGEND	
	PROPERTY LINE
	TRACT LINE
	RIGHT OF WAY
	STREAM/GROTCH
	EXISTING FENCE LINE
	EXISTING SANITARY SEWER
	EXISTING STORM SEWER
	EXISTING WATER LINE
	EXISTING GAS LINE
	OVERHEAD ELECTRIC
	OVERHEAD TELEPHONE
	OVERHEAD CABLE
	OVERHEAD ELECTRIC/CABLE
	OVERHEAD ELECTRIC/CABLE/TELEPHONE
	OVERHEAD ELECTRIC/TELEPHONE
	OVERHEAD CABLE/TELEPHONE
	UNDERGROUND FIBER
	UNDERGROUND ELECTRIC
	UNDERGROUND TELEPHONE
	UNDERGROUND CABLE
	UNDERGROUND ELECTRIC/TELEPHONE
	BENCH MARK
	EXISTING FIRE HYDRANT
	EXISTING WATER OR GAS METER
	EXISTING WATER OR GAS VALVES
	TELEPHONE OR ELECTRIC RISER
	UTILITY POLE
	MINE PORTAL
	BORING
	MANHOLE



			SURVEYED		CMN	04/05	 OFFICE OF ABANDONED MINE LANDS & RECLAMATION	 400 TRACY WAY, SUITE 200 CHARLESTON, WV 25311 (304) 345-6712 PHONE (304) 345-6714 FAX	PROJECT NAME:		OVERALL MAP	DATE:	
			DRAWN		CRH	05/11			LICK RUN			05/11/2022	
			CHECKED		TRL	05/11			PROJECT NO.:			SHEET:	
NO.	REVISION	DATE	BY	REVIEWED	CMN	05/11	DEP2100000002	COUNTY: PRESTON	2 OF 4				

FIGURE 4 - LICK RUN 5

[illegible]

NOTES: FLOAT PROVIDES ADDITIONAL TIME FOR PROJECT DELAY DUE TO UNFORSEEN CIRCUMSTANCES INCLUDING; PERMITTING, ENVIRONMENTAL ISSUES, PUBLIC INPUT, BIDDING, WEATHER, ETC. USFWS APPROVAL WILL BE OBTAINED AT 90% PLAN COMPLETION IF REQUIRED BY THE AGENCY FOR ALL OF THE PROJECTS.

ATTACHMENT
APPLICATION AND CERTIFICATE FOR PAYMENT
(PROPOSED BUDGET)

2022 AML CONTRACT 6 PROJECTS NORTH - COST SUMMARY

Civil Tech Engineering Inc.

4.25.23

PROJECT	TASK					EST. COST
	I	II	III	IV	V	
CLARKSBURG (POST) LANDSLIDE	\$ 78,520.00	\$ 70,560.00	\$ 372,210.00	\$ 554,960.00	\$ 46,160.00	\$ 1,122,410.00
FAIRMONT GATEWAY CONNECTOR PORTALS	\$ 87,560.00	\$ 70,560.00	\$ 220,265.00	\$ 554,960.00	\$ 46,160.00	\$ 979,505.00
HORNERS RUN PORTALS	\$ 80,880.00	\$ 70,560.00	\$ 366,965.00	\$ 554,960.00	\$ 46,160.00	\$ 1,119,525.00
LICK RUN 5	\$ 120,275.00	\$ 73,640.00	\$ 375,770.00	\$ 554,960.00	\$ 46,160.00	\$ 1,170,805.00

CONTRACT ESTIMATED TOTAL COST**\$ 4,392,245.00**

See pages 2 - 22 for breakdown of costs

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Page 2 of 22 Pages

Project Name:	Clarksburg (Post) Landslide
----------------------	------------------------------------

SCHEDULE PER CONTRACT

ILLED TO DATE

COST

\$0.00

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Page 3 of 22 Pages

Page 3 of 22 Pages

Page 3 of 22 Pages

Page 3 of 22 Pages

WORK COMPLETED

SCHEDULE PER CONTRACT					TOTAL	PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE		
TASK		DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK II: REALTY												
A		Exploratory Rights of Entry (EROE)										
	1	Project Manager / Senior Engineer	HR	8.00	\$265.00	\$2,120.00		\$0.00	0.00	\$0.00	0.00	\$0.00
	2	Realty Agent							0.00			
	a	Courthouse Work	HR	24.00	\$175.00	\$4,200.00		\$0.00	0.00	\$0.00	0.00	\$0.00
	b	Field Reconnaissance / Landowner Correspondence	HR	40.00	\$175.00	\$7,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
	c	Office Work / AMLNET	HR	40.00	\$175.00	\$7,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
	3	Mileage	Mile	1200.00	\$1.00	\$1,200.00		\$0.00	0.00	\$0.00	0.00	\$0.00
	4	Per Diem	Day	0.00	\$265.00	\$0.00		\$0.00	0.00	\$0.00	0.00	\$0.00
									0.00		0.00	
B		Construction Rights of Entry (CROE)										
	1	Project Manager / Senior Engineer	HR	16.00	\$265.00	\$4,240.00		\$0.00	0.00	\$0.00	0.00	\$0.00
	2	Realty Agent										
	a	Courthouse Work	HR	60.00	\$175.00	\$10,500.00		\$0.00	0.00	\$0.00	0.00	\$0.00
	b	Field Reconnaissance / Landowner Correspondence	HR	80.00	\$175.00	\$14,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
	c	Office Work / AMLNET	HR	60.00	\$175.00	\$10,500.00		\$0.00	0.00	\$0.00	0.00	\$0.00
	3	Mileage	Mile	3000.00	\$1.00	\$3,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
	4	Per Diem	Day	0.00	\$265.00	\$0.00		\$0.00	0.00	\$0.00	0.00	\$0.00
C		Pre-Bid Conference										
	1	Realty Agent	HR	16.00	\$175.00	\$2,800.00		\$0.00	0.00	\$0.00	0.00	\$0.00
	2	Mileage	Mile	600.00	\$1.00	\$600.00		\$0.00	0.00	\$0.00	0.00	\$0.00
D		Prc-Construction Conference						\$0.00		\$0.00	0.00	\$0.00
	1	Realty Agent	HR	16.00	\$175.00	\$2,800.00		\$0.00	0.00	\$0.00	0.00	\$0.00
	2	Mileage	Mile	600.00	\$1.00	\$600.00		\$0.00	0.00	\$0.00	0.00	\$0.00
					SUBTOTAL PAGE 3 CONTRACT	\$70,560.00	SUBTOTAL PAGE 3 PREVIOUS	\$0.00	SUBTOTAL PAGE 3 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 3 TO DATE	\$0.00
AML-7A (Revised 11/17/2022)												

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION											
CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT											
Purchase Order No.: CEOI DEP22*15						Application No.: NA			Page 4 of 22 Pages		
Contract Name: 2022 AML Contract 6 Projects - North											
Commodity Line: 1											
Project Name: Clarksburg (Post) Landslide						WORK COMPLETED					
SCHEDULE PER CONTRACT					TOTAL	PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK III: DESIGN											
A	SITE RECONNAISSANCE, INVESTIGATIONS AND PROPOSAL PREPARATION										
1	Project Manager / Senior Engineer	HR	60.00	\$265.00	\$15,900.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Staff Engineer	HR	80.00	\$175.00	\$14,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Mileage	Mile	1200.00	\$1.00	\$1,200.00		\$0.00	0.00	\$0.00	0.00	\$0.00
4	Per Diem	Day	0.00	\$265.00	\$0.00		\$0.00	0.00	\$0.00	0.00	\$0.00
B	SURVEYING & MAPPING										
1	Project Manager / Senior Engineer	HR	4.00	\$265.00	\$1,060.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Staff Engineer	HR	10.00	\$175.00	\$1,750.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Professional Surveyor / Chief Surveyor	HR	20.00	\$200.00	\$4,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
4	Survey Crew	HR	40.00	\$265.00	\$10,600.00		\$0.00	0.00	\$0.00	0.00	\$0.00
5	Senior Technician	HR	60.00	\$125.00	\$7,500.00		\$0.00	0.00	\$0.00	0.00	\$0.00
6	Topographic, Planimetric and Check Surveying	Acre	16.00	\$265.00	\$4,240.00		\$0.00	0.00	\$0.00	0.00	\$0.00
7	Mileage	Mile	2400.00	\$1.00	\$2,400.00		\$0.00	0.00	\$0.00	0.00	\$0.00
8	Per Diem	Day	4.00	\$265.00	\$1,060.00		\$0.00	0.00	\$0.00	0.00	\$0.00
C	GEOTECHNICAL INVESTIGATION						\$0.00		\$0.00	0.00	\$0.00
1	Project Manager / Senior Engineer	HR	24.00	\$265.00	\$6,360.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Geotechnical Engineer/Geologist	HR	80.00	\$175.00	\$14,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Mobilization / Demobilization	LS	1.00	\$4,000.00	\$4,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
4	Soil Augering	LF	300.00	\$36.50	\$10,950.00		\$0.00	0.00	\$0.00	0.00	\$0.00
5	Rock Coring	LF	100.00	\$55.65	\$5,565.00		\$0.00	0.00	\$0.00	0.00	\$0.00
6	Heavy Equipment	HR	16.00	\$240.00	\$3,840.00		\$0.00	0.00	\$0.00	0.00	\$0.00
7	Piezometer Installation	LF	100.00	\$40.00	\$4,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
8	Drill Crew Per Diem	Day	8.00	\$480.00	\$3,840.00		\$0.00	0.00	\$0.00	0.00	\$0.00
9	Reclamation	LS	1.00	\$2,385.00	\$2,385.00		\$0.00	0.00	\$0.00	0.00	\$0.00
10	Geotechnical Investigation Report	LS	1.00	\$3,315.00	\$3,315.00		\$0.00	0.00	\$0.00	0.00	\$0.00
11	Mileage	Mile	3000.00	\$1.00	\$3,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
12	Per Diem for Boring Inspector and Supervisor	Day	8.00	\$265.00	\$2,120.00		\$0.00	0.00	\$0.00	0.00	\$0.00
SUBTOTAL PAGE 4 CONTRACT					\$127,085.00	SUBTOTAL PAGE 4 PREVIOUS		\$0.00	SUBTOTAL PAGE 4 THIS APPLICATION		\$0.00
									SUBTOTAL PAGE 4 TO DATE		\$0.00

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CEOI DEP22*15					Application No.: NA					Page 5 of 22 Pages	
Contract Name: 2022 AML Contract 6 Projects - North											
Commodity Line: 1											
Project Name: Clarksburg (Post) Landslide					WORK COMPLETED						
SCHEDULE PER CONTRACT					TOTAL	PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK	DESCRIPTION			UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST
TASK III: DESIGN (CONTINUED)											
D		ANALYSIS AND DESIGN									
1		Project Manager / Senior Engineer			HR	12.00	\$265.00	\$3,180.00			
2		Geotechnical Engineer			HR	60.00	\$175.00	\$10,500.00			
3		Enviornmental Specialist			HR	40.00	\$175.00	\$7,000.00			
4		Staff Engineer			HR	120.00	\$175.00	\$21,000.00			
5		CADD Technician			HR	180.00	\$125.00	\$22,500.00			
E		PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEERS ESTIMATE									
1		Project Manager / Senior Engineer			HR	40.00	\$265.00	\$10,600.00			
2		Geotechnical Engineer			HR	80.00	\$175.00	\$14,000.00			
3		Enviornmental Specialist			HR	100.00	\$175.00	\$17,500.00			
4		Staff Engineer			HR	120.00	\$175.00	\$21,000.00			
5		CADD Technician			HR	200.00	\$125.00	\$25,000.00			
F		PERMITTING AND MEETINGS (30%, 60%, 90%, 100%)									
1		Project Manager / Senior Engineer			HR	120.00	\$265.00	\$31,800.00			
2		Engineer / Environmental Scientist			HR	180.00	\$175.00	\$31,500.00			
3		NPDES Construction Stormwater Permit Fee			EA	0.00	\$0.00	\$0.00			
3		Mileage			Mile	3400.00	\$1.00	\$3,400.00			
4		Per Diem			Day	0.00	\$0.00	\$0.00			
G		PRE-BID CONFERENCE									
1		Project Manager / Senior Engineer			HR	40.00	\$265.00	\$10,600.00			
2		Mileage			Mile	600.00	\$1.00	\$600.00			
3		Per Diem			Day	1.00	\$265.00	\$265.00			
H		PRE-CONSTRUCTION CONFERENCE									
1		Project Manager / Senior Engineer			HR	40.00	\$265.00	\$10,600.00			
2		Construction Inspector			HR	24.00	\$145.00	\$3,480.00			
3		Mileage			Mile	600.00	\$1.00	\$600.00			
SUBTOTAL PAGE 5 CONTRACT						\$245,125.00	SUBTOTAL PAGE 5 PREVIOUS	\$0.00	SUBTOTAL PAGE 5 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 5 TO DATE \$0.00
AML-7A (Revised 11/17/2022)											

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION												
CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT												
Purchase Order No.: CEOI DEP22*15					Application No.: NA			Page 6 of 22 Pages				
Contract Name: 2022 AML Contract 6 Projects - North												
Commodity Line: 1												
Project Name: Clarksburg (Post) Landslide												
SCHEDULE PER CONTRACT					TOTAL	PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE		
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST	
TASK IV: CONSTRUCTION OVERSITE												
A	Construction Inspection											
1	Project Manager / Senior Engineer	HR	336.00	\$265.00	\$89,040.00		\$0.00	0.00	\$0.00	0.00	\$0.00	
2	Construction Inspector											
a	Construction Inspection	HR	2520.00	\$145.00	\$365,400.00		\$0.00	0.00	\$0.00	0.00	\$0.00	
b	Office Work / AMLNET	HR	224.00	\$175.00	\$39,200.00		\$0.00	0.00	\$0.00	0.00	\$0.00	
c	Mileage	HR	16800.00	\$1.00	\$16,800.00		\$0.00	0.00	\$0.00	0.00	\$0.00	
d	Per Diem	Day	168.00	\$265.00	\$44,520.00		\$0.00	0.00	\$0.00	0.00	\$0.00	
TASK V: POST-CONSTRUCTION OVERSITE												
A	FIELD VISITS / INSPECTIONS											
1	Project Manager / Senior Engineer	HR	48.00	\$265.00	\$12,720.00		\$0.00	0.00	\$0.00	0.00	\$0.00	
2	Construction Inspector	HR	192.00	\$145.00	\$27,840.00		\$0.00	0.00	\$0.00	0.00	\$0.00	
3	Mileage	Mile	5600.00	\$1.00	\$5,600.00		\$0.00	0.00	\$0.00	0.00	\$0.00	
SUBTOTAL PAGE 6 CONTRACT					\$601,120.00	SUBTOTAL PAGE 6 PREVIOUS	\$0.00	SUBTOTAL PAGE 6 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 6 TO DATE	\$0.00	
Clarksburg (Post) Landslide					\$1,122,410.0	PROJECT TOTAL PREVIOUS	\$0.00	PROJECT TOTAL THIS APPLICATION	\$0.00	PROJECT TOTAL TO DATE	\$0.00	

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Application No.: NA

Page 7 of 22 Pages

Commodity Line: 2

Project Name:	Fairmont Gateway Connector Portals
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WORK COMPLETED:AML-7A (Revised 11/17/2022)

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CEOIDEP22*15

Application No.: NA

Page 8 of 22 Pages

Contract Name: 2022 AML Contract 6 Projects - North

Commodity Line: 2

Project Name: Fairmont Gateway Connector Portals

SCHEDULE PER CONTRACT					TOTAL	PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK II: REALTY											
A	Exploratory Rights of Entry (EROE)										
1	Project Manager / Senior Engineer	HR	8.00	\$265.00	\$2,120.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Realty Agent										
a	Courthouse Work	HR	24.00	\$175.00	\$4,200.00		\$0.00	0.00	\$0.00	0.00	\$0.00
b	Field Reconnaissance / Landowner Correspondence	HR	40.00	\$175.00	\$7,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
c	Office Work / AMLNET	HR	40.00	\$175.00	\$7,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Mileage	Mile	1200.00	\$1.00	\$1,200.00		\$0.00	0.00	\$0.00	0.00	\$0.00
4	Per Diem	Day	0.00	\$265.00	\$0.00		\$0.00	0.00	\$0.00	0.00	\$0.00
B	Construction Rights of Entry (CROE)										
1	Project Manager / Senior Engineer	HR	16.00	\$265.00	\$4,240.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Realty Agent										
a	Courthouse Work	HR	60.00	\$175.00	\$10,500.00		\$0.00	0.00	\$0.00	0.00	\$0.00
b	Field Reconnaissance / Landowner Correspondence	HR	80.00	\$175.00	\$14,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
c	Office Work / AMLNET	HR	60.00	\$175.00	\$10,500.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Mileage	Mile	3000.00	\$1.00	\$3,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
4	Per Diem	Day	0.00	\$265.00	\$0.00		\$0.00	0.00	\$0.00	0.00	\$0.00
C	Pre-Bid Conference										
1	Realty Agent	HR	16.00	\$175.00	\$2,800.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Mileage	Mile	600.00	\$1.00	\$600.00		\$0.00	0.00	\$0.00	0.00	\$0.00
D	Pre-Construction Conference						\$0.00		\$0.00	0.00	\$0.00
1	Realty Agent	HR	16.00	\$175.00	\$2,800.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Mileage	Mile	600.00	\$1.00	\$600.00		\$0.00	0.00	\$0.00	0.00	\$0.00
SUBTOTAL PAGE 3 CONTRACT					\$70,560.00	SUBTOTAL PAGE 3 PREVIOUS	\$0.00	SUBTOTAL PAGE 3 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 3 TO DATE	\$0.00

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CEOI DEP22*15

Contract Name: 2022 AML Contract 6 Projects - North

Application No.: NA

Page 9 of 22 Pages

Commodity Line: 2

Project Name: Fairmont Gateway Connector Portals

SCHEDULE PER CONTRACT					TOTAL	PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK III: DESIGN											
A	SITE RECONNAISSANCE, INVESTIGATIONS AND PROPOSAL PREPARATION										
1	Project Manager / Senior Engineer	HR	40.00	\$265.00	\$10,600.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Staff Engineer	HR	80.00	\$175.00	\$14,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Mileage	Mile	1200.00	\$1.00	\$1,200.00		\$0.00	0.00	\$0.00	0.00	\$0.00
4	Per Diem	Day	0.00	\$265.00	\$0.00		\$0.00	0.00	\$0.00	0.00	\$0.00
B	SURVEYING & MAPPING										
1	Project Manager / Senior Engineer	HR	4.00	\$265.00	\$1,060.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Staff Engineer	HR	8.00	\$175.00	\$1,400.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Professional Surveyor / Chief Surveyor	HR	16.00	\$200.00	\$3,200.00		\$0.00	0.00	\$0.00	0.00	\$0.00
4	Survey Crew	HR	40.00	\$265.00	\$10,600.00		\$0.00	0.00	\$0.00	0.00	\$0.00
5	Senior Technician	HR	80.00	\$125.00	\$10,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
6	Topographic, Planimetric and Check Surveying	Acre	16.00	\$265.00	\$4,240.00		\$0.00	0.00	\$0.00	0.00	\$0.00
7	Mileage	Mile	2400.00	\$1.00	\$2,400.00		\$0.00	0.00	\$0.00	0.00	\$0.00
8	Per Diem	Day	2.00	\$265.00	\$530.00		\$0.00	0.00	\$0.00	0.00	\$0.00
C	GEOTECHNICAL INVESTIGATION										
1	Project Manager / Senior Engineer	HR	16.00	\$265.00	\$4,240.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Geotechnical Engineer/Geologist	HR	32.00	\$175.00	\$5,600.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Mobilization / Demobilization	LS	0.00	\$4,000.00	\$0.00		\$0.00		\$0.00	0.00	\$0.00
4	Soil Augering	LF	0.00	\$36.50	\$0.00		\$0.00		\$0.00	0.00	\$0.00
5	Rock Coring	LF	0.00	\$55.65	\$0.00		\$0.00		\$0.00	0.00	\$0.00
6	Heavy Equipment	HR	0.00	\$240.00	\$0.00		\$0.00		\$0.00	0.00	\$0.00
7	Piezometer Installation	LF	0.00	\$40.00	\$0.00		\$0.00		\$0.00	0.00	\$0.00
8	Drill Crew Per Diem	Day	0.00	\$480.00	\$0.00		\$0.00		\$0.00	0.00	\$0.00
9	Reclamation	LS	0.00	\$2,385.00	\$0.00		\$0.00		\$0.00	0.00	\$0.00
10	Geotechnical Investigation Report	LS	1.00	\$3,315.00	\$3,315.00		\$0.00	0.00	\$0.00	0.00	\$0.00
11	Mileage	Mile	600.00	\$1.00	\$600.00		\$0.00	0.00	\$0.00	0.00	\$0.00
12	Per Diem for Boring Inspector and Supervisor	Day	0.00	\$265.00	\$0.00		\$0.00	0.00	\$0.00	0.00	\$0.00
SUBTOTAL PAGE 4 CONTRACT					\$72,985.00	SUBTOTAL PAGE 4 PREVIOUS	\$0.00	SUBTOTAL PAGE 4 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 4 TO DATE	\$0.00

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CEOI DEP22*15

Application No.: NA

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Contract Name: 2022 AML Contract 6 Projects - North

Commodity Line: 2

Project Name: Fairmont Gateway Connector Portals

SCHEDULE PER CONTRACT					TOTAL	PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK III: DESIGN (CONTINUED)											
D	ANALYSIS AND DESIGN										
1	Project Manager / Senior Engineer	HR	10.00	\$265.00	\$2,650.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Geotechnical Engineer	HR	20.00	\$175.00	\$3,500.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Environmental Specialist	HR	40.00	\$175.00	\$7,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
4	Staff Engineer	HR	60.00	\$175.00	\$10,500.00		\$0.00	0.00	\$0.00	0.00	\$0.00
5	CADD Technician	HR	80.00	\$125.00	\$10,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
E	PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEERS ESTIMATE										
1	Project Manager / Senior Engineer	HR	10.00	\$265.00	\$2,650.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Geotechnical Engineer	HR	30.00	\$175.00	\$5,250.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Environmental Specialist	HR	30.00	\$175.00	\$5,250.00		\$0.00	0.00	\$0.00	0.00	\$0.00
4	Staff Engineer	HR	60.00	\$175.00	\$10,500.00		\$0.00	0.00	\$0.00	0.00	\$0.00
5	CADD Technician	HR	120.00	\$125.00	\$15,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
F	PERMITTING AND MEETINGS (30%, 60%, 90%, 100%)										
1	Project Manager / Senior Engineer	HR	80.00	\$265.00	\$21,200.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Engineer / Environmental Scientist	HR	140.00	\$175.00	\$24,500.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	NPDES Construction Stormwater Permit Fee	EA	0.00	\$0.00	\$0.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Mileage	Mile	3400.00	\$1.00	\$3,400.00		\$0.00	0.00	\$0.00	0.00	\$0.00
4	Per Diem	Day	0.00	\$265.00	\$0.00		\$0.00	0.00	\$0.00	0.00	\$0.00
G	PRE-BID CONFERENCE										
1	Project Manager / Senior Engineer	HR	40.00	\$265.00	\$10,600.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Mileage	Mile	600.00	\$1.00	\$600.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Per Diem	Day	0.00	\$265.00	\$0.00		\$0.00	0.00	\$0.00	0.00	\$0.00
H	PRE-CONSTRUCTION CONFERENCE										
1	Project Manager / Senior Engineer	HR	40.00	\$265.00	\$10,600.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Construction Inspector	HR	24.00	\$145.00	\$3,480.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Mileage	Mile	600.00	\$1.00	\$600.00		\$0.00	0.00	\$0.00	0.00	\$0.00
SUBTOTAL PAGE 5 CONTRACT					\$147,280.00	SUBTOTAL PAGE 5 PREVIOUS	\$0.00	SUBTOTAL PAGE 5 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 5 TO DATE	\$0.00

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION												
CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT												
Purchase Order No.: CEOI DEP22*15					Application No.: NA				Page 11 of 22 Pages			
Contract Name: 2022 AML Contract 6 Projects - North												
Commodity Line: 2												
Project Name: Fairmont Gateway Connector Portals					WORK COMPLETED							
SCHEDULE PER CONTRACT					TOTAL	PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE		
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST	
TASK IV: CONSTRUCTION OVERSITE												
A	Construction Inspection											
1	Project Manager / Senior Engineer	HR	336.00	\$265.00	\$89,040.00		\$0.00	0.00	\$0.00	0.00	\$0.00	
2	Construction Inspector											
a	Construction Inspection	HR	2520.00	\$145.00	\$365,400.00		\$0.00	0.00	\$0.00	0.00	\$0.00	
b	Office Work / AMLNET	HR	224.00	\$175.00	\$39,200.00		\$0.00	0.00	\$0.00	0.00	\$0.00	
c	Mileage	HR	16800.00	\$1.00	\$16,800.00		\$0.00	0.00	\$0.00	0.00	\$0.00	
d	Per Diem	Day	168.00	\$265.00	\$44,520.00		\$0.00	0.00	\$0.00	0.00	\$0.00	
TASK V: POST-CONSTRUCTION OVERSITE												
A	FIELD VISITS / INSPECTIONS											
1	Project Manager / Senior Engineer	HR	48.00	\$265.00	\$12,720.00		\$0.00	0.00	\$0.00	0.00	\$0.00	
2	Construction Inspector	HR	192.00	\$145.00	\$27,840.00		\$0.00	0.00	\$0.00	0.00	\$0.00	
3	Mileage	Mile	5600.00	\$1.00	\$5,600.00		\$0.00	0.00	\$0.00	0.00	\$0.00	
					SUBTOTAL PAGE 6 CONTRACT	\$601,120.00		SUBTOTAL PAGE 6 PREVIOUS	\$0.00		SUBTOTAL PAGE 6 THIS APPLICATION	
									\$0.00		SUBTOTAL PAGE 6 TO DATE	
											\$0.00	
Fairmont Gateway Connector Portals					\$979,505.00	PROJECT TOTAL PREVIOUS	\$0.00	PROJECT TOTAL THIS APPLICATION	\$0.00	PROJECT TOTAL TO DATE	\$0.00	

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Page 13 of 22 Pages

Project Name:	Horners Run Portals
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AML-7A (Revised 11/17/2022)

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CEOI DEP22*15					Application No.: NA					Page 14 of 22 Pages	
Contract Name: 2022 AML Contract 6 Projects - North											
Commodity Line: 3											
Project Name: Horners Run Portals					WORK COMPLETED						
SCHEDULE PER CONTRACT					TOTAL	PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK III: DESIGN											
A	SITE RECONNAISSANCE, INVESTIGATIONS AND PROPOSAL PREPARATION										
1	Project Manager / Senior Engineer	HR	40.00	\$265.00	\$10,600.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Staff Engineer	HR	80.00	\$175.00	\$14,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Mileage	Mile	1200.00	\$1.00	\$1,200.00		\$0.00	0.00	\$0.00	0.00	\$0.00
4	Per Diem	Day	0.00	\$265.00	\$0.00		\$0.00	0.00	\$0.00	0.00	\$0.00
B	SURVEYING & MAPPING										
1	Project Manager / Senior Engineer	HR	4.00	\$265.00	\$1,060.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Staff Engineer	HR	8.00	\$175.00	\$1,400.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Professional Surveyor / Chief Surveyor	HR	16.00	\$200.00	\$3,200.00		\$0.00	0.00	\$0.00	0.00	\$0.00
4	Survey Crew	HR	40.00	\$265.00	\$10,600.00		\$0.00	0.00	\$0.00	0.00	\$0.00
5	Senior Technician	HR	80.00	\$125.00	\$10,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
6	Topographic, Planimetric and Check Surveying	Acre	16.00	\$265.00	\$4,240.00		\$0.00	0.00	\$0.00	0.00	\$0.00
7	Mileage	Mile	2400.00	\$1.00	\$2,400.00		\$0.00	0.00	\$0.00	0.00	\$0.00
8	Per Diem	Day	8.00	\$265.00	\$2,120.00		\$0.00	0.00	\$0.00	0.00	\$0.00
C	GEOTECHNICAL INVESTIGATION						\$0.00		\$0.00	0.00	\$0.00
1	Project Manager / Senior Engineer	HR	24.00	\$265.00	\$6,360.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Geotechnical Engineer/Geologist	HR	120.00	\$175.00	\$21,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Mobilization / Demobilization	LS	1.00	\$4,000.00	\$4,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
4	Soil Augering	LF	300.00	\$36.50	\$10,950.00		\$0.00	0.00	\$0.00	0.00	\$0.00
5	Rock Coring	LF	100.00	\$55.65	\$5,565.00		\$0.00	0.00	\$0.00	0.00	\$0.00
6	Heavy Equipment	HR	16.00	\$240.00	\$3,840.00		\$0.00	0.00	\$0.00	0.00	\$0.00
7	Piezometer Installation	LF	100.00	\$40.00	\$4,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
8	Drill Crew Per Diem	Day	8.00	\$480.00	\$3,840.00		\$0.00	0.00	\$0.00	0.00	\$0.00
9	Reclamation	LS	1.00	\$2,385.00	\$2,385.00		\$0.00	0.00	\$0.00	0.00	\$0.00
10	Geotechnical Investigation Report	LS	1.00	\$3,315.00	\$3,315.00		\$0.00	0.00	\$0.00	0.00	\$0.00
11	Mileage	Mile	3000.00	\$1.00	\$3,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
12	Per Diem for Boring Inspector and Supervisor	Day	8.00	\$265.00	\$2,120.00		\$0.00	0.00	\$0.00	0.00	\$0.00
SUBTOTAL PAGE 4 CONTRACT					\$131,195.00	SUBTOTAL PAGE 4 PREVIOUS	\$0.00	SUBTOTAL PAGE 4 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 4 TO DATE	\$0.00

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CEOI DEP22*15					Application No.: NA					Page 15 of 22 Pages	
Contract Name: 2022 AML Contract 6 Projects - North											
Commodity Line: 3											
Project Name: Horners Run Portals					WORK COMPLETED						
SCHEDULE PER CONTRACT					TOTAL	PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK	DESCRIPTION			UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST
TASK III: DESIGN (CONTINUED)											
D		ANALYSIS AND DESIGN									
	1	Project Manager / Senior Engineer			HR	24.00	\$265.00	\$6,360.00			
	2	Geotechnical Engineer			HR	60.00	\$175.00	\$10,500.00			
	3	Enviornmental Specialist			HR	60.00	\$175.00	\$10,500.00			
	4	Staff Engineer			HR	100.00	\$175.00	\$17,500.00			
	5	CADD Technician			HR	120.00	\$125.00	\$15,000.00			
E		PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEERS ESTIMATE									
	1	Project Manager / Senior Engineer			HR	40.00	\$265.00	\$10,600.00			
	2	Geotechnical Engineer			HR	80.00	\$175.00	\$14,000.00			
	3	Enviornmental Specialist			HR	100.00	\$175.00	\$17,500.00			
	4	Staff Engineer			HR	120.00	\$175.00	\$21,000.00			
	5	CADD Technician			HR	200.00	\$125.00	\$25,000.00			
F		PERMITTING AND MEETINGS (30%, 60%, 90%, 100%)									
	1	Project Manager / Senior Engineer			HR	100.00	\$265.00	\$26,500.00			
	2	Engineer / Environmental Scientist			HR	180.00	\$175.00	\$31,500.00			
	3	NPDES Construction Stormwater Permit Fee			EA	0.00	\$0.00	\$0.00			
	3	Mileage			Mile	3400.00	\$1.00	\$3,400.00			
	4	Per Diem			Day	0.00	\$265.00	\$0.00			
G		PRE-BID CONFERENCE									
	1	Project Manager / Senior Engineer			HR	40.00	\$265.00	\$10,600.00			
	2	Mileage			Mile	600.00	\$1.00	\$600.00			
	3	Per Diem			Day	2.00	\$265.00	\$530.00			
H		PRE-CONSTRUCTION CONFERENCE									
	1	Project Manager / Senior Engineer			HR	40.00	\$265.00	\$10,600.00			
	2	Construction Inspector			HR	24.00	\$145.00	\$3,480.00			
	3	Mileage			Mile	600.00	\$1.00	\$600.00			
					SUBTOTAL PAGE 5 CONTRACT	\$235,770.00	SUBTOTAL PAGE 5 PREVIOUS	\$0.00	SUBTOTAL PAGE 5 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 5 TO DATE \$0.00

AML-7A (Revised 11/17/2022)

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION											
CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT											
Purchase Order No.: CEOI DEP22*15					Application No.: NA			Page 16 of 22 Pages			
Contract Name: 2022 AML Contract 6 Projects - North											
Commodity Line: 3											
Project Name: Horners Run Portals											
SCHEDULE PER CONTRACT					TOTAL	PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK IV: CONSTRUCTION OVERSITE											
A	Construction Inspection										
1	Project Manager / Senior Engineer	HR	336.00	\$265.00	\$89,040.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Construction Inspector										
a	Construction Inspection	HR	2520.00	\$145.00	\$365,400.00	0.00	\$0.00	0.00	\$0.00	0.00	\$0.00
b	Office Work / AMLNET	HR	224.00	\$175.00	\$39,200.00		\$0.00	0.00	\$0.00	0.00	\$0.00
c	Mileage	HR	16800.00	\$1.00	\$16,800.00		\$0.00	0.00	\$0.00	0.00	\$0.00
d	Per Diem	Day	168.00	\$265.00	\$44,520.00		\$0.00	0.00	\$0.00	0.00	\$0.00
TASK V: POST-CONSTRUCTION OVERSITE											
A	FIELD VISITS / INSPECTIONS								\$0.00	0.00	\$0.00
1	Project Manager / Senior Engineer	HR	48.00	\$265.00	\$12,720.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Construction Inspector	HR	192.00	\$145.00	\$27,840.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Mileage	Mile	5600.00	\$1.00	\$5,600.00		\$0.00	0.00	\$0.00	0.00	\$0.00
SUBTOTAL PAGE 6 CONTRACT					\$601,120.00	SUBTOTAL PAGE 6 PREVIOUS	\$0.00	SUBTOTAL PAGE 6 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 6 TO DATE	\$0.00
Horners Run Portals					\$1,119,525	PROJECT TOTAL PREVIOUS	\$0.00	PROJECT TOTAL THIS APPLICATION	\$0.00	PROJECT TOTAL TO DATE	\$0.00

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CEOI DEP22*15					Application No.: NA			Page 17 of 22 Pages			
Contract Name: 2022 AML Contract 6 Projects - North											
Commodity Line: 4											
Project Name: Lick Run 5											
SCHEDULE PER CONTRACT					TOTAL	PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK I: NEPA & ESA											
A	Agency Coordinations (including Office Work, AMLNET, etc.)										
1	Project Manager / Senior Engineer	HR	16.00	\$265.00	\$4,240.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Engineer / Technical Scientist	HR	60.00	\$175.00	\$10,500.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Planning / Technical Specialist	HR	80.00	\$135.00	\$10,800.00		\$0.00	0.00	\$0.00	0.00	\$0.00
4	Mileage	Mile	1200.00	\$1.00	\$1,200.00		\$0.00	0.00	\$0.00	0.00	\$0.00
5	Per Diem	Day	2.00	\$265.00	\$530.00		\$0.00	0.00	\$0.00	0.00	\$0.00
B	Public Involvement (including Legal Ads, Public Hearings, Documents, Presentations, WVDEP's Website, etc.)										
1	Project Manager / Senior Engineer	HR	0.00	\$265.00	\$0.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Engineer / Technical Scientist	HR	0.00	\$175.00	\$0.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Planning / Technical Specialist	HR	0.00	\$135.00	\$0.00		\$0.00	0.00	\$0.00	0.00	\$0.00
4	Mileage	Mile	0.00	\$1.00	\$0.00		\$0.00	0.00	\$0.00	0.00	\$0.00
5	Per Diem	Day	0.00	\$265.00	\$0.00		\$0.00	0.00	\$0.00	0.00	\$0.00
C	Studies, Surveys & Mitigation Plans (as applicable) and Meetings with Agencies										
1	Project Manager / Senior Engineer	HR	76.00	\$265.00	\$20,140.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Engineer / Technical Scientist	HR	120.00	\$175.00	\$21,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Planning / Technical Specialist	HR	80.00	\$135.00	\$10,800.00		\$0.00	0.00	\$0.00	0.00	\$0.00
4	Mileage	Mile	2200.00	\$1.00	\$2,200.00		\$0.00	0.00	\$0.00	0.00	\$0.00
5	Per Diem	Day	5.00	\$265.00	\$1,325.00		\$0.00	0.00	\$0.00	0.00	\$0.00
D	CATEX / EA / FONSI / EIS										
1	Project Manager / Senior Engineer	HR	16.00	\$265.00	\$4,240.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Engineer / Technical Scientist	HR	60.00	\$175.00	\$10,500.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Planning / Technical Specialist	HR	160.00	\$135.00	\$21,600.00		\$0.00	0.00	\$0.00	0.00	\$0.00
4	Mileage	Mile	1200.00	\$1.00	\$1,200.00		\$0.00	0.00	\$0.00	0.00	\$0.00
5	Per Diem	Day		\$265.00	\$0.00		\$0.00		\$0.00	0.00	\$0.00
SUBTOTAL PAGE 2 CONTRACT					\$120,275.00	SUBTOTAL PAGE 2 : PREVIOUS		\$0.00	SUBTOTAL PAGE 2 THIS APPLICATION		\$0.00
SUBTOTAL PAGE 2 TO DATE						SUBTOTAL PAGE 2 TO DATE			SUBTOTAL PAGE 2 TO DATE		\$0.00

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CEOI DEP22*15

Application No.: NA

Page 18 of 22 Pages

Contract Name: 2022 AML Contract 6 Projects - North

Commodity Line: 4

Project Name: Lick Run 5

SCHEDULE PER CONTRACT					TOTAL	WORK COMPLETED					
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	PREVIOUS UNITS	PREVIOUS BILLED COST	THIS APPLICATION UNITS	AMOUNT DUE THIS APPLICATION COST	TOTAL BILLED TO DATE UNITS	TOTAL BILLED TO DATE COST
TASK II: REALTY											
A	Exploratory Rights of Entry (EROE)										
1	Project Manager / Senior Engineer	HR	16.00	\$265.00	\$4,240.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Realty Agent										
a	Courthouse Work	HR	30.00	\$175.00	\$5,250.00		\$0.00	0.00	\$0.00	0.00	\$0.00
b	Field Reconnaissance / Landowner Correspondence	HR	60.00	\$175.00	\$10,500.00		\$0.00	0.00	\$0.00	0.00	\$0.00
c	Office Work / AMLNET	HR	60.00	\$175.00	\$10,500.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Mileage	Mile	2400.00	\$1.00	\$2,400.00		\$0.00	0.00	\$0.00	0.00	\$0.00
4	Per Diem	Day	2.00	\$265.00	\$530.00		\$0.00	0.00	\$0.00	0.00	\$0.00
B	Construction Rights of Entry (CROE)										
1	Project Manager / Senior Engineer	HR	16.00	\$265.00	\$4,240.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Realty Agent										
a	Courthouse Work	HR	30.00	\$175.00	\$5,250.00		\$0.00	0.00	\$0.00	0.00	\$0.00
b	Field Reconnaissance / Landowner Correspondence	HR	60.00	\$175.00	\$10,500.00		\$0.00	0.00	\$0.00	0.00	\$0.00
c	Office Work / AMLNET	HR	60.00	\$175.00	\$10,500.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Mileage	Mile	2400.00	\$1.00	\$2,400.00		\$0.00	0.00	\$0.00	0.00	\$0.00
4	Per Diem	Day	2.00	\$265.00	\$530.00		\$0.00	0.00	\$0.00	0.00	\$0.00
C	Pre-Bid Conference										
1	Realty Agent	HR	16.00	\$175.00	\$2,800.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Mileage	Mile	600.00	\$1.00	\$600.00		\$0.00	0.00	\$0.00	0.00	\$0.00
D	Pre-Construction Conference						\$0.00		\$0.00	0.00	\$0.00
1	Realty Agent	HR	16.00	\$175.00	\$2,800.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Mileage	Mile	600.00	\$1.00	\$600.00		\$0.00	0.00	\$0.00	0.00	\$0.00
SUBTOTAL PAGE 3 CONTRACT					\$73,640.00	SUBTOTAL PAGE 3 PREVIOUS	\$0.00	SUBTOTAL PAGE 3 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 3 TO DATE	\$0.00

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CEOI DEP22*15

Application No.: NA

Page 19 of 22 Pages

Contract Name: 2022 AML Contract 6 Projects - North

Commodity Line: 4

Project Name: Lick Run 5

SCHEDULE PER CONTRACT					TOTAL	PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK III: DESIGN											
A	SITE RECONNAISSANCE, INVESTIGATIONS AND PROPOSAL PREPARATION										
1	Project Manager / Senior Engineer	HR	40.00	\$265.00	\$10,600.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Staff Engineer	HR	80.00	\$175.00	\$14,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Mileage	Mile	1200.00	\$1.00	\$1,200.00		\$0.00	0.00	\$0.00	0.00	\$0.00
4	Per Diem	Day	2.00	\$265.00	\$530.00		\$0.00	0.00	\$0.00	0.00	\$0.00
B	SURVEYING & MAPPING										
1	Project Manager / Senior Engineer	HR	16.00	\$265.00	\$4,240.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Staff Engineer	HR	20.00	\$175.00	\$3,500.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Professional Surveyor / Chief Surveyor	HR	30.00	\$200.00	\$6,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
4	Survey Crew	HR	40.00	\$265.00	\$10,600.00		\$0.00	0.00	\$0.00	0.00	\$0.00
5	Senior Technician	HR	80.00	\$125.00	\$10,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
6	Topographic, Planimetric and Check Surveying	Acre	16.00	\$265.00	\$4,240.00		\$0.00	0.00	\$0.00	0.00	\$0.00
7	Mileage	Mile	2400.00	\$1.00	\$2,400.00		\$0.00	0.00	\$0.00	0.00	\$0.00
8	Per Diem	Day	4.00	\$265.00	\$1,060.00		\$0.00	0.00	\$0.00	0.00	\$0.00
C	GEOTECHNICAL INVESTIGATION						\$0.00		\$0.00	0.00	\$0.00
1	Project Manager / Senior Engineer	HR	24.00	\$265.00	\$6,360.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Geotechnical Engineer/Geologist	HR	120.00	\$175.00	\$21,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Mobilization / Demobilization	LS	2.00	\$4,000.00	\$8,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
4	Soil Augering	LF	240.00	\$36.50	\$8,760.00		\$0.00	0.00	\$0.00	0.00	\$0.00
5	Rock Coring	LF	0.00	\$55.65	\$0.00		\$0.00	0.00	\$0.00	0.00	\$0.00
6	Heavy Equipment	HR	16.00	\$240.00	\$3,840.00		\$0.00	0.00	\$0.00	0.00	\$0.00
7	Piezometer Installation	LF	0.00	\$40.00	\$0.00		\$0.00	0.00	\$0.00	0.00	\$0.00
8	Drill Crew Per Diem	Day	4.00	\$480.00	\$1,920.00		\$0.00	0.00	\$0.00	0.00	\$0.00
9	Reclamation	LS	2.00	\$2,385.00	\$4,770.00		\$0.00	0.00	\$0.00	0.00	\$0.00
10	Geotechnical Investigation Report	LS	1.00	\$3,315.00	\$3,315.00		\$0.00	0.00	\$0.00	0.00	\$0.00
11	Mileage	Mile	2400.00	\$1.00	\$2,400.00		\$0.00	0.00	\$0.00	0.00	\$0.00
12	Per Diem for Boring Inspector and Supervisor	Day	8.00	\$265.00	\$2,120.00		\$0.00	0.00	\$0.00	0.00	\$0.00
SUBTOTAL PAGE 4 CONTRACT					\$130,855.00	SUBTOTAL PAGE 4 PREVIOUS	\$0.00	SUBTOTAL PAGE 4 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 4 TO DATE	\$0.00

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CEOI DEP22*15

Contract Name: 2022 AML Contract 6 Projects - North

Commodity Line: 4

Project Name: Lick Run 5

Application No.: NA

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SCHEDULE PER CONTRACT					TOTAL	PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK III: DESIGN (CONTINUED)											
D	ANALYSIS AND DESIGN										
1	Project Manager / Senior Engineer	HR	16.00	\$265.00	\$4,240.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Geotechnical Engineer	HR	60.00	\$175.00	\$10,500.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Enviornmental Specialist	HR	60.00	\$175.00	\$10,500.00		\$0.00	0.00	\$0.00	0.00	\$0.00
4	Staff Engineer	HR	120.00	\$175.00	\$21,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
5	CADD Technician	HR	180.00	\$125.00	\$22,500.00		\$0.00	0.00	\$0.00	0.00	\$0.00
E	PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEERS ESTIMATE										
1	Project Manager / Senior Engineer	HR	40.00	\$265.00	\$10,600.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Geotechnical Engineer	HR	80.00	\$175.00	\$14,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Enviornmental Specialist	HR	100.00	\$175.00	\$17,500.00		\$0.00	0.00	\$0.00	0.00	\$0.00
4	Staff Engineer	HR	120.00	\$175.00	\$21,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
5	CADD Technician	HR	200.00	\$125.00	\$25,000.00		\$0.00	0.00	\$0.00	0.00	\$0.00
F	PERMITTING AND MEETINGS (30%, 60%, 90%, 100%)										
1	Project Manager / Senior Engineer	HR	100.00	\$265.00	\$26,500.00		\$0.00	0.00	\$0.00	0.00	\$0.00
2	Engineer / Environmental Scientist	HR	180.00	\$175.00	\$31,500.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	NPDES Construction Stormwater Permit Fee	EA	0.00	\$0.00	\$0.00		\$0.00	0.00	\$0.00	0.00	\$0.00
4	Mileage	Mile	3400.00	\$1.00	\$3,400.00		\$0.00	0.00	\$0.00	0.00	\$0.00
5	Per Diem	Day	2.00	\$265.00	\$530.00		\$0.00	0.00	\$0.00	0.00	\$0.00
G	PRE-BID CONFERENCE										
1	Project Manager / Senior Engineer	HR	40.00	\$265.00	\$10,600.00	0.00	\$0.00	0.00	\$0.00	0.00	\$0.00
2	Mileage	Mile	600.00	\$1.00	\$600.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Per Diem	Day	1.00	\$265.00	\$265.00		\$0.00	0.00	\$0.00	0.00	\$0.00
H	PRE-CONSTRUCTION CONFERENCE										
1	Project Manager / Senior Engineer	HR	40.00	\$265.00	\$10,600.00	0.00	\$0.00	0.00	\$0.00	0.00	\$0.00
2	Construction Inspector	HR	24.00	\$145.00	\$3,480.00		\$0.00	0.00	\$0.00	0.00	\$0.00
3	Mileage	Mile	600.00	\$1.00	\$600.00		\$0.00	0.00	\$0.00	0.00	\$0.00
SUBTOTAL PAGE 5 CONTRACT					\$244,915.00	SUBTOTAL PAGE 5 PREVIOUS	\$0.00	SUBTOTAL PAGE 5 THIS APPLICATION	\$0.00	SUBTOTAL PAGE 5 TO DATE	\$0.00

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION											
CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT											
Purchase Order No.: CEOI DEP22*15					Application No.: NA			Page 21 of 22 Pages			
Contract Name: 2022 AML Contract 6 Projects - North											
Commodity Line: 4											
Project Name: Lick Run 5					WORK COMPLETED						
SCHEDULE PER CONTRACT					TOTAL	PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK	DESCRIPTION			UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST
TASK IV: CONSTRUCTION OVERSITE											
A		Construction Inspection									
	1	Project Manager / Senior Engineer			HR	336.00	\$265.00	\$89,040.00	\$0.00	0.00	\$0.00
	2	Construction Inspector									\$0.00
	a	Construction Inspection			HR	2520.00	\$145.00	\$365,400.00	\$0.00	0.00	\$0.00
	b	Office Work / AMLNET			HR	224.00	\$175.00	\$39,200.00	\$0.00	0.00	\$0.00
	c	Mileage			HR	16800.00	\$1.00	\$16,800.00	\$0.00	0.00	\$0.00
	d	Per Diem			Day	168.00	\$265.00	\$44,520.00	\$0.00	0.00	\$0.00
TASK V: POST-CONSTRUCTION OVERSITE											
A		FIELD VISITS / INSPECTIONS							\$0.00	0.00	\$0.00
	1	Project Manager / Senior Engineer			HR	48.00	\$265.00	\$12,720.00	\$0.00	0.00	\$0.00
	2	Construction Inspector			HR	192.00	\$145.00	\$27,840.00	\$0.00	0.00	\$0.00
	3	Mileage			Mile	5600.00	\$1.00	\$5,600.00	\$0.00	0.00	\$0.00

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION													
CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT													
Purchase Order No.: CEOLDEP22*15						Application No.: NA				Page 22 of 22 Pages			
Contract Name: 2022 AML Contract 6 Projects - North						THE GRAND TOTALS HERE COULD BE MADE A SEPARATE 'SHEET' SO TO SUM ALL PROJECT TOTALS EACH PROJECT COULD/SHOULD BE ON A SEPARATE 'SHEET', AND PAGE NUMBERS CORRECTED AS NEEDED							
Commodity Line: N/A													
Project Name: N/A													
SCHEDULE PER CONTRACT					TOTAL	PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE			
TASK	DESCRIPTION				UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	

2022 AML Contract 6 Projects - North						\$4,392,245	GRAND TOTAL PREVIOUS	\$0.00	GRAND TOTAL THIS APPLICATION	\$0.00	GRAND TOTAL TO DATE	\$0.00
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