

#4

Not Entered

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: 03-31-2025

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 DEP2500000017 1 **Change Order No: Procurement Folder:** 1257313 **Document Name:** EOI - 2023 AML Contract S2 Reason for Modification: **Document Description:** EOI - 2023 AML Contract S2 **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:** 2025-04-01 Free on Board: FOB Dest, Freight Prepaid **Effective End Date:**

	VENDOR				DEPARTMENT CONTACT		
POT	lor Customer Code: ESTA & ASSOCIATES MACCORKLE AVE SI		13		Requestor Name: Requestor Phone: Requestor Email:	Jessica S Chambers (304) 414-1140 jessica.s.chambers@wv.gov	
US	RLESTON	000 000 0000	WV	25304		2025	
	or Contact Phone: ount Details:	999-999-9999	Extensi	on:	F	ILE LOCATION_	
	Discount Allowed	Discount Perc	entage	Discount Days	-		
#1	No	0.0000		0	-		
#2	Not Entered				-		
#3	Not Entered						

	INVOICE TO		SHIP TO		
ENVIRONMENTAL PROTECTION	N	ENVIRONMENTAL PROTECTION	DN .		
601 57TH ST SE		601 57TH ST SE			
CHARLESTON	WV 25304	CHARLESTON	WV 25304		
US		us			

CR 4-4-25

Total Order Amount: \$4,347,049.83

Purchasing Division's File Copy

PURCHASING DIVISION AUTHORIZATION

ELECTRONIC SIGNATURE ON FILE

ATTOR ROVA AS TO FORM

ELECTRON IC SIGNATURE ON FILE

DATE: COLLEGE OF THE 4-14-25

Date Printed: Mar 31, 2025

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Page: 1

FORM ID: WV-PRC-CPO-002 2020/05

Extended Description:

The vendor, Potesta & Associtates Inc., agrees to enter into this contract with the agency, The West Virginia Department of Environmental Protection, for the "full service" A/E design, planning, realty, and construction services per the specifications, terms and conditions, and the vendors submitted cost proposal and negotiated scope of work dated

12/23/2024, all incoporated herein by reference and made a part hereof.

Commodity Code	Quantity Unit		Unit Price	Total Price	
81100000	0.00000		0.000000	331964.85	
Service To	Manufacturer		Model No		
		81100000 0.00000	81100000 0.00000	81100000 0.00000 0.000000 0.000000	

Commodity Line Description:

Professional Svcs - Drawdy Creek

Extended Description:

Professional Svcs - Drawdy Creek

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
2	81100000	0.00000		0.000000	283697.45
Service From	Service To	Manufacturer		Model No	

Commodity Line Description:

Professional Svcs - Peytona (Bowles) Portals & Drainage

Extended Description:

Professional Svcs - Peytona (Bowles) Portals & Drainage

Line	Commodity Code	Quantity	Quantity Unit		Total Price
3	81100000	0.00000		0.000000	325347.95
Service From	Service To	Manufacturer		Model No	

Commodity Line Description:

Professional Svcs - Toney Fork Portals

Extended Description:

Professional Svcs - Toney Fork Portals

Line	Commodity Code	Quantity Unit		Unit Price	Total Price
4	81100000	0.00000		0.000000	282491.70
Service From	Service To	Manufacturer		Model No	

Commodity Line Description:

Professional Svcs - Mitchell Cemetery Complex

Extended Description:

Professional Svcs - Mitchell Cemetery Complex

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
5	81100000	0.00000		0.000000	385955.14
Service From Service To Manufacturer		Manufacturer		Model No	

Commodity Line Description:

Professional Svcs - New Butler Drainage

Extended Description:

Date Printed: Mar 31, 2025

Professional Svcs - New Butler Drainage

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Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
6	81100000	0.00000		0.000000	313445.14
Service From	Service To	Manufacturer		Model No	

Commodity Line Description:

Professional Svcs - Lens Creek Refuse Pile

Extended Description:

Professional Svcs - Lens Creek Refuse Pile

Service From	Service To	Manufacturer		Model No	
7	81100000	0.00000		0.000000	303855.90
Line	Commodity Code	Quantity	Unit	Unit Price	Total Price

Commodity Line Description:

Professional Svcs - Lens Creek Left Fork Portals

Extended Description:

Professional Svcs - Lens Creek Left Fork Portals

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
8	81100000	0.00000		0.000000	426549.04
Service From	Service To	Manufacturer		Model No	

Commodity Line Description:

Professional Svcs - Poe Hollow Portals and Drainage

Extended Description:

Professional Svcs - Poe Hollow Portals and Drainage

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
9	81100000	0.00000		0.000000	262633.40
Service From	Service To	Manufacturer		Model No	

Commodity Line Description:

Professional Svcs - Route 60 Drainage Phase II

Extended Description:

Professional Svcs - Route 60 Drainage Phase II

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
10	81100000	0.00000		0.000000	302816.50
Service From	Service To	Manufacturer		Model No	

Commodity Line Description:

Professional Svcs - Cannelton (Miller) Drainage

Extended Description:

Professional Svcs - Cannelton (Miller) Drainage

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
11	81100000	0.00000		0.000000	241409.60
Service From	Service To	Manufacturer		Model No	

Commodity Line Description:

Professional Svcs - Cabot Portals

Extended Description:

Professional Svcs - Cabot Portals

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Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
12	81100000	0.00000		0.000000	292900.80
Service From	Service To	Manufacturer		Model No	

Commodity Line Description:

Professional Svcs - Big Ugly (O'Neal) Drainage

Extended Description:

Professional Svcs - Big Ugly (O'Neal) Drainage

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
13	81100000	0.00000		0.000000	593982.36
Service From	Service To	Manufacturer		Model No	

Commodity Line Description:

Professional Svcs - Prenter UMF

Extended Description: Professional Svcs - Prenter UMF

Order Number: CPO 0313 9171 DEP2500000017 1 FORM ID: WV-PRC-CPO-002 2020/05 Date Printed: Mar 31, 2025 Page: 4

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, identified as the State of West Virginia contract cover page containing the signatures of the Purchasing Division, Attorney General, and Encumbrance clerk (or another page identified as), 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 withindays.

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.
Construction/Project Oversight: This Contract becomes effective on the effective start date listed on the first page of this Contract, identified as the State of West Virginia contract cover page containing the signatures of the Purchasing Division, Attorney General, and Encumbrance clerk (or another page identified as), and continues until the project for which the vendor is providing oversight is complete.
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.
Construction: This Contract is for construction activity more fully defined in the specifications.
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 of 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:
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.
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

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listed above.

8. INSURANCE: The apparent successful Vendor shall furnish proof of the insurance identified by a checkmark below 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: \$1,000,0000.00 per occurrence.
Automobile Liability Insurance in at least an amount of: \$1,000,0000.00 per occurrence.
Professional/Malpractice/Errors and Omission Insurance in at least an amount of: \$1,000,0000.00 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.

- **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. VENUE: All legal actions for damages brought by Vendor against the State shall be brought in the West Virginia Claims Commission. Other causes of action must be brought in the West Virginia court authorized by statute to exercise jurisdiction over it.

11. LIQUIDATED DAMAGES: This clause shall in no way be considered exclusive and shall

not limit the State or A liquidated damages in	Agency's right to pursue any other available reached the amount specified below or as described in	medy. Vendor shall pay the specifications:
	for	
Liquidated I	Damages Contained in the Specifications.	
☐ Liquidated I	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 NON-CONFLICT:** Neither Vendor nor its representatives are permitted to have any interest, nor shall they 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.

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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 heath, 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 July1, 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.

(Printed Name and Title) D. Mark Kiser, Project Manager
(Address) 7012 MacCorkle Avenue, SE, Charleston, WV 25304
(Phone Number) / (Fax Number) (304) 342-1400 / (304) 343-9031
(Email address) dmkiser@potesta.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 this bid or offer was made without prior understanding, agreement, or connection with any entity submitting a bid or offer for the same material, supplies, equipment or services; that this bid or offer is in all respects fair and without collusion or fraud; 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; 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.

Potesta & Associates, Inc.	
(Company) P Bus on A	
Inna L'Durno	
(Signature of Authorized Representative)	
Dana L. Burns, PE, Vice President	
(Printed Name and Title of Authorized Representative) (Date)	
(304) 342-1400 (304) 343-9031	
(Phone Number) (Fax Number)	
dlburns@potesta.com	
(Email Address)	



125 Lakeview Drive, Morgantown, WV 26508 • (304) 225-2245 • www.potesta.com

VIA EMAIL ONLY

December 23, 2024

Mr. Jonathan Holbert, P.E. Southern Design Administrator West Virginia Department of Environmental Protection Office of Abandoned Mine Lands 601 57th Street SE Charleston, West Virginia 25304

RE: Proposal for Engineering Services 2023 AML Contract S2 CEOI 0313 DEP2400000001 POTESTA Project No. 0101-23-0258

Dear Mr. Holbert:

Potesta & Associates, Inc. (POTESTA) is pleased to provide this proposal to the West Virginia Department of Environmental Protection (WVDEP), Office of Abandoned Mine Lands (AML) for engineering and design services for the 2023 AML Contract S2 project. Our proposal is based on information provided by WVDEP, AML during a kickoff meeting, subsequent emails, and observations made and discussions during site visits on the following dates:

- 1. November 28, 2023 kickoff meeting between WVDEP, AML representatives and POTESTA representatives held at WVDEP's Fayetteville office.
- 2. Email dated November 17, 2023 from Jonathan Holbert of WVDEP, AML to POTESTA including a link to a Google share file containing information on the Contract S2 projects, WVDEP guidelines and standards, and other information. The Google share file was subsequently updated with additional information.
- Site visits conducted including WVDEP, AML representatives and POTESTA 3. representatives to review the project sites as follows:

Route 60 Drainage - Phase II and Cannelton (Miller) December 13, 2023 Drainage

January 18, 2024 Lens Creek Refuse Pile, New Butler Drainage, Lens Creek Left Fork Portals, and Mitchell Cemetery Complex



January 23, 2024	Peytona (Bowles) Portals and Drainage, Drawdy Creek, and Toney Fork Portals
January 24, 2024	Cabot Portals and Prenter Underground Mine Fire
January 30, 2024	Big Ugly (O'Neal) Drainage
February 29, 2024	Return Visit to Cannelton (Miller) Drainage to Observe Drainage Following Resident Complaint

4. Subsequent email communications and meetings.

INTRODUCTION

The 2023 AML Contract S2 Project includes 13 separate AML projects. For accounting purposes, each project is referred to as a commodity with separate costs identified per project or commodity. POTESTA will track and invoice project costs by commodity so that each project's true cost can be accounted for.

The 13 projects or commodities included in this contract are:

Commodity Line 1 – Drawdy Creek Commodity Line 2 – Peytona (Bowle

Commodity Line 2 – Peytona (Bowles) Portals and Drainage

Commodity Line 3 – Toney Fork Portals

 $Commodity\ Line\ 4-Mitchell\ Cemetery\ Complex$

Commodity Line 5 – New Butler Drainage

Commodity Line 6 – Lens Creek Refuse Pile

Commodity Line 7 – Lens Creek Left Fork Portals

Commodity Line 8 – Poe Hollow Portals and Drainage

Commodity Line 9 – Route 60 Drainage-Phase II

Commodity Line 10 – Cannelton (Miller) Drainage

Commodity Line 11 – Cabot Portals

Commodity Line 12 - Big Ugly (O'Neal) Drainage

Commodity Line 13 – Prenter UMF

Brief project descriptions for each project follow.

WVDEP-AML will be represented by Craig Dunlap serving as project manager for POTESTA's contract. WVDEP will have four representatives on this contract assigned to the functions of planning, realty, design, and construction oversight. Craig Dunlap will serve as the design representative as well as the WVDEP project manager, Chris Waldeck will serve as the planning



representative, Maranda Williams will serve as the realty representative, and Jimmy Suttle will serve as the construction representative. WVDEP envisions that the four representatives will work with POTESTA to develop and complete the different services required.

Project/Commodity Line 1: Drawdy Creek is located along Three Mile Branch Road near the community of Andrew in Boone County, West Virginia. The project includes 10 collapsed draining portals and one open portal along both sides of a narrow hollow. Several homes are located below and in close proximity to the portals. A landslide was observed below a bench and portals on the west side of the hollow.

Project/Commodity Line 2: Peytona (Bowles) Portals and Drainage is located along Route 3 near the community of Andrew in Boone County, West Virginia. The project includes two sites. Site 1 is located on a hillside above and north of a house and barn. Site 1 includes five collapsed and draining portals. Site 2 is southwest of Site 1 on the hillside above Atha Chapel. Site 2 includes an open portal with a broken block seal visible from outside the portal.

Project/Commodity Line 3: Toney Fork Portals is located along Route 3 and Toney Fork near the community of Andrew in Boone County, West Virginia. The project includes four sites. Site 1 is located along Stringer Branch Road and the Left Hand Fork of Stringer Branch Road and includes two totally collapsed and draining portals, two open portals, and an unknown number (at present) of collapsed or partially collapsed portals along Stringer Branch Road. Site 2 includes four portals at the end of Dry Stone Lane. Three portals are behind the landowner's home and he does not want reclamation due to the close proximity to his house and backyard area which he has improved with a small pond. The one remaining portal is partially open and will be sealed. Site 3 is reported to have two open portals and one collapsed and draining portal. Site 4 has one open portal and one totally collapsed portal. WVDEP, AML received another complaint during our site visit about mine drainage below Site 3. This may be added to the project.

Project/Commodity Line 4: Mitchell Cemetery Complex is located south of Marmet and Hernshaw in Kanawha County, West Virginia. The project includes 21 identified portals in different conditions along both sides of Left Fork Road and associated with different coal seams. Portals include open and draining, collapsed and draining, open and dry, and partially collapsed and draining.

Project/Commodity Line 5: New Butler Drainage is located off of Route 94, south of Lens Creek, approximately ¾ mile south of Hernshaw, Kanawha County, West Virginia. The project includes two refuse piles and a number of draining portals and collapsed portals. One refuse pile is well vegetated and appears stable and may not require reclamation. Drainage from the mine portals and coal seam is visibly orange and impacting Lens Creek. Water sampling revealed low pH and elevated iron levels. Most portals are collapsed and significant discharge has been reported/observed at many of these portals.



Project/Commodity Line 6: Lens Creek Refuse Pile is located off of Route 94, south of Lens Creek, approximately 1 mile south of Hernshaw in Kanawha County, West Virginia. The project includes a refuse pile along the edge of Lens Creek which has experienced erosion with coal refuse deposited in Lens Creek. The refuse pile continues to erode due to flows in the stream and lack of vegetation on the eroded slopes. Three collapsed and draining portals are located on the hillside above the refuse pile.

Project/Commodity Line 7: Lens Creek Left Fork Portals is located south of Marmet and Hernshaw in Kanawha County, West Virginia. The project includes several (currently nine documented) portals in various conditions; collapsed and draining, open and draining, open and dry, partially collapsed, and open and venting. Some portals are located on the steep hillside above homes. Abandoned mining equipment is scattered throughout the project area.

Project/Commodity Line 8: Poe Hollow Portals and Drainage is located south of Marmet and Hernshaw in Kanawha County, West Virginia. The project includes several portals and a section of clogged stream located along Poe Hollow off of Left Fork Road. Portals exist as open and draining, collapsed and draining, open and venting, and open and dry.

Project/Commodity Line 9: Route 60 Drainage-Phase II is located on a steep hillside overlooking the town of Smithers, West Virginia in Fayette County. The project is located within an area where WVDEP, AML constructed wet mine seals and drainage ditches in 2014. The town of Smithers contacted WVDEP, AML on several occasions beginning in 2015 to report that uncontrolled drainage was again impacting several businesses below the project area. During WVDEP, AML maintenance work on the project, problems with the drainage ditches as well as possible areas of uncontrolled drainage were discovered. These problems were significant enough that the decision was made to handle the project as a grant project rather than as maintenance work. This project will include measures to control mine drainage.

Project/Commodity Line 10: Cannelton (Miller) Drainage is located along Cannelton Hollow Road approximately 2.2 miles from its intersection with US Route 60 in Smithers, Fayette County, West Virginia. The project includes one possible collapsed and draining portal on a steep hillside above closely spaced homes. The portal location was not found during the site visit.

Project/Commodity Line 11: Cabot Portals is located along Prenter Road near the community of Milltown in Boone County, West Virginia. The project includes several portals in various conditions including totally collapsed and draining, open, and partially collapsed. Building remnants exist at some locations. Portals are along an abandoned railroad grade and along Lavinia Fork which is a tributary of Hopkins Fork. An area of clogged stream exists. WVDEP, AML has partially completed reclamation plans for this project. POTESTA will complete this project by continuing where WVDEP, AML in-house design stopped.



Project/Commodity Line 12: Big Ugly (O'Neal) Drainage is located on Big Ugly Creek Road near Estep, Boone County, West Virginia. The project includes four mine portals on a steep hillside overlooking homes along Big Ugly Creek Road. One portal is collapsed and draining. Two portals have small openings. Additionally, a wet area exists on and below a steep slope near the driveway and carport of a residence. This area yields significant seepage with low pH and high sulfur. The hillside above this wet area is steep and soft. Access is a concern.

Project/Commodity Line 13: Prenter Underground Mine Fire (UMF) is located west of the community of Prenter in Boone County, West Virginia. The project includes approximately 57 acres along the top of a mountain overlooking a previous coal mining complex, Big Mountain No. 16 operated by Pine Ridge Coal Company. This site potentially includes three burning coal seams. Numerous subsidence cracks and crevices are present on the ground surface. Some of these cracks and crevices are venting smoke and combustion gases.

REQUIRED SCOPE OF WORK

The proposed scope of work for each project will include project development, design, documentation, oversight and engineering services necessary for each project, including planning, realty, design, and construction related professional services. WVDEP, AML provided a spreadsheet template to be used for the cost proposal. The spreadsheet template is organized as a series of tasks and subtasks as follows:

Task I — Planning

Task II — Realty

Task III — Design

Task IV — Construction Oversight

Task V — Post-Construction Oversight

Various subtasks are included under each task listed above.

SCOPE OF SERVICES

POTESTA's proposed scope of services for each project follows. Proposed costs for each project follow the scope of services narrative. Finally, a figure is included for each project showing aerial photography, tax map information, and proposed test borings.

Project/Commodity Line 1: Drawdy Creek

This project includes 10 collapsed and draining portals and one open portal situated in Three Mile Branch hollow. The ground slopes of the hollow are steep. The mine portals are situated on the



steep hillsides along benches. Drainage from most of the collapsed portals accumulates on the benches leading to saturated and soft soil conditions. Homes, the stream, and the public road are below the mine portals. A landslide was observed below a group of two portals on the western slope of the hollow. Access to the portals is difficult due to the steep topography, locations of homes, and possibly property ownership issues.

The envisioned reclamation will include access road construction, wet mine seals, a bat gate with wet seal, splash pads, and possible drainage conveyances. A temporary stream crossing or crossings will be required to access the portals on the east side of the hollow. Disturbed areas will be reclaimed and revegetated.

Due to the collapsed, draining portals and significant seepage on and around these portals, geotechnical exploration including setting piezometers at some of the portals is being proposed.

Planning, realty, design, and construction oversight scope of services follows:

Task I – National Environmental Policy Act (NEPA) and Environmental Assessment (EA)

This task includes agency coordination and development of an Environmental Assessment (EA) to obtain a finding of no significant impact (FONSI).

POTESTA will review project information available from WVDEP, AML including OSM-51 documents and consultation letters that may have been prepared/sent for the project. The OSM-51 form will be reviewed for accuracy with the known project information. The OSM-51 will be sent with a cover letter to West Virginia Division of Natural Resources (WVDNR), State Historic Preservation Office (SHPO), and the regional planning council requesting comments on the project. The United States Fish and Wildlife Service (USFWS) IPaC system will be accessed to determine potential impacts to threatened and endangered species. A Phase I bat assessment will be completed by WVDEP, AML to determine if the portals are considered to be suitable bat habitat. POTESTA will update the IPaC information and submit the IPaC forms and a consultation request to the USFWS, if needed. This proposal does not include mist netting bat surveys. Projects on national forest land will require the OSM-51 and letter be sent to the Forest Service (FS). Letters to and from the agencies will be uploaded to AMLNET.

As development and engineering design/preparation of the plans and specifications proceeds, the OSM-51 will be reviewed along with the plans and specifications to provide consistency.

Based on discussions with WVDEP, AML, the AML projects will require preparation of an EA and submission of the EA to the Office of Surface Mining for review and approval. We have assumed that an EA level NEPA review will be required for this project. A preliminary EA will be prepared using the EA template provided and will be submitted to the WVDEP, AML for initial review.



Upon completion of the initial review, POTESTA will finalize the EA document and submit to the necessary agencies.

A preliminary table of contents for the EA is included below.

Table of Contents

Chapter 1: Purpose and Need

- A. Purpose of the Proposed Action
- B. Need for the Proposed Action
- C. Scoping
- D. List of Related Laws and Executive Orders
- Chapter 2: Proposed Action and Appropriate Alternatives and Mitigation Measures
 - A. Alternatives Considered
 - B. Alternatives Considered but Eliminated from Detailed Analysis
- Chapter 3: Affected Environment and Environmental Impacts
 - A. Environmental Consequences of the Proposed Actions and Mitigation Measures
 - B. Affected Resources Including Special Areas of Consideration
 - C. Summary

Chapter 4: Consultations and Coordination

- A. Persons and Agencies Contacted to Assist in the Preparation of the Environmental Assessment
- B. List of Potential Permits and Responsible Parties
- C. Public Involvement
- D. Preparer
- E. Signatures

Chapter 5: References and Appendices

- A. References
- B. Appendices

Following WVDEP, AML approval, final environmental documents will be uploaded to AMLNET.



Per WVDEP, AML, public involvement process activities including the public meetings will be conducted by the WVDEP, AML Planning Group. POTESTA's cost for this task does not include public involvement hours or costs.

Task II - Realty

Realty services for the project will include obtaining exploratory rights of entry (EROE), construction rights of entry (CROE), maintenance rights of entry (MROE) and attendance of the pre-bid conference and pre-construction conference meetings.

Prior to field work (surveying, drilling, field reconnaissance, etc.), POTESTA will visit the courthouse to perform research to determine landowners that could be impacted by the project including access to the work area. POTESTA will obtain copies of tax maps, deeds for current landowners, ownership documentation, and landowner contact information for parcels likely to be impacted.

POTESTA will then make contact with landowners to obtain EROE. This may require more than one visit with each landowner. Attempts at landowner contact will be documented. Landowner concerns will be noted. After discussion with the WVDEP, AML realty representative, POTESTA will attempt to finalize negotiations with the landowners and obtain signed EROEs for each impacted parcel. EROEs including legal ownership information/documentation and project photographs will be provided to WVDEP, AML's realty representative for review and subsequent uploading to AMLNET. This will include pertinent property information, landowner information, and legal ownership documentation.

WVDEP, AML indicated that some landowners may request to be an additional insured for the CROE. It is important to note that if this happens, the landowner making the request should be added as an "additional insured," not an "additional named insured."

Review of tax maps for the project area indicates the mine portals are located on five different parcels. Access to the mine portals for exploratory work (surveying and drilling) may involve four or five additional parcels for a total of ten.

Once plans and specifications have been developed for each project, POTESTA will again visit the courthouse to verify that property owner and property ownership information is still valid, or obtain current information and documentation if this has changed. POTESTA will subsequently make contact with each affected landowner. Attempts at landowner contact will be documented. Proposed construction/reclamation activities will be reviewed with each landowner. Landowner demands will be noted and shared/discussed with our WVDEP, AML realty contact. If appropriate, landowner demands will be incorporated into the plans and specifications. POTESTA will then meet with each landowner and present them with a CROE. The CROE typically includes a clause



granting WVDEP, AML right of entry for maintenance activities. Upon execution of the CROE form, the CROE including legal ownership information/documentation and project photographs will be provided to WVDEP, AML's realty representative for review and subsequent uploading to AMLNET.

POTESTA's realty agent will keep a journal/log while working on this task. The journal/log will include duration of time spent working on realty activities, mileage, and a record of landowners or others that POTESTA's realty agent has interactions with pertaining to Task II activities.

POTESTA's realty agent will attend the pre-bid and pre-construction conference and be able to respond to questions about property ownership, potential landowner issues, and CROE information.

Prior to construction, POTESTA's agent and/or construction monitor will visit each impacted parcel of land to obtain photographic documentation of such items as general site conditions, property monuments, fences, trees in close proximity of planned ground disturbance, existing driveways and roads, etc. Photographs will be uploaded to AMLNET for documentation of pre-reclamation conditions.

Task III – Design

Subtask IIIA - Site Reconnaissance and Exploration

This subtask includes site reconnaissance for project planning to establish the extent and locations of problem areas, obtain photographic documentation of the site, develop preliminary notes and sketches, review possible access routes to be used during construction, etc. This subtask also includes planning for execution of the engineering/design scope of services. Since this project includes draining mine portals, POTESTA has included three grab samples of mine drainage and analysis of pH, iron, aluminum, and manganese.

Subtask IIIB - Surveying and Mapping

We are proposing to develop aerial topographic mapping for this project due to the size of the area over which the mine portals are located.

Aerial mapping coverage is proposed to include approximately 35 acres.

POTESTA will survey to establish ground control for development of aerial topographic mapping. Project baselines will be established along Three Mile Branch Road. Topographic mapping will be prepared at an appropriate scale and with a contour interval of 2 feet.



A minimum of three survey control points will be established and shown on the mapping. Found corner/property monumentation on impacted parcels will be located during field surveying. Existing structures including pipes and culverts will be located. Pipe sizes and type will be noted on the survey. POTESTA will survey locations of existing visible utilities, as well as utility locations marked following a locate request by POTESTA to WV 811.

Borings drilled for setting piezometers under the geotechnical exploration will be surveyed for horizontal and vertical location.

Subtask IIIC - Geotechnical Exploration

This subtask includes drilling test borings to determine the elevation of coal seam/mine workings and depth of impounded water. Four borings equipped with casing to serve as piezometers are planned to be installed. Reclamation and revegetation of drill roads will be performed. Borings are estimated to be 50 feet deep, and drilled at the approximate locations shown on Figure 1.

Borings will include hollow stem augering, split spoon sampling and standard penetration testing, and rock coring. One and one-half inch diameter PVC pipe (piezometers) will be set in borings encountering voids drilled above the suspected deep mine entries to be used to monitor water levels during mine dewatering and mine seal construction. PVC casing will be backfilled with auger cuttings at the ground surface. No sand pack is proposed. PVC casing will be installed above the ground surface with a lockable protective covering. One and one-half inch diameter PVC casing is proposed since it can be installed through the drill stems in the event gob or broken rock is encountered in the mine void. Borings not developed as piezometers will be backfilled with auger cuttings. POTESTA will monitor the soil/rock borings and produce boring logs documenting encountered conditions.

In the event that borings encounter solid coal, we will make up to two additional attempts by moving and drilling a new boring. The drilling footage in our cost estimate reflects three attempts. Second and third attempt borings will be drilled only if needed.

Disturbed areas resulting from drilling will be seeded and mulched. Access and drill pads will be regraded to as close to original contours as practical.

Subtask IIID - Analysis and Design

This subtask includes developing a conceptual reclamation plan for the site. POTESTA will prepare a 20 to 30 percent conceptual plan showing the proposed reclamation for the site. This will include the type, location, and size of the proposed mine seals (drainage channels and/or control structures below mine seals will also be shown), access to the work area, etc. The conceptual plan will include proposed construction limits to allow for adequate access to the work areas. Property line



information will be developed using tax maps. POTESTA will meet with the WVDEP, AML on site to discuss our conceptual plan and will incorporate comments from the WVDEP, AML into our design documents.

Subtask IIIE - Preparation of Plans, Specifications and Engineer's Cost Estimate

This subtask involves the design and preparation of construction drawings, technical specifications, engineer's construction cost estimate, and contractor's bid form after receiving WVDEP's concurrence with the 20 to 30 percent conceptual plan from Subtask IIID. POTESTA will prepare and make the following submissions to WVDEP, AML, including the previously referenced items:

- 1. 60 percent complete submission;
- 2. 90 percent complete submission;
- 3. Final documents issued for bidding and construction.

A review meeting will be conducted with WVDEP, AML following the 60 percent and 90 percent complete submissions to review WVDEP, AML comments and the responses required to address the comments. Following these meetings, we will revise the preliminary design documents based on WVDEP, AML review comments and prepare the next submission of the bidding/construction documents. We have included minimal time to make revisions to the bidding documents following WVDEP, AML review. Extensive review comments/revisions requested by WVDEP, AML will necessitate a request for change order by POTESTA.

Subtask IIIF - Permitting

This subtask includes preparation and submission of the appropriate application forms and supporting documents for the following permits/approvals:

- 1. West Virginia Division of Highways (WVDOH) MM-109 encroachment permit.
- 2. WVDEP National Pollutant Discharge Elimination System (NPDES) General Construction Stormwater Permit.

POTESTA will prepare the application for the MM-109 permit for signature by the WVDEP, AML and submit the permit application to the appropriate office.

WVDEP, AML has requested that POTESTA prepare the application for the NPDES General Construction Stormwater Permit, and once a construction contract has been awarded, that POTESTA process a permit modification to add the construction contractor as a co-applicant.



POTESTA will prepare and submit the NPDES application, provide written response on behalf of WVDEP, AML to WVDEP Environmental Enforcement notices, submit renewal/reissuance requests for the permit, and apply for the Notice of Termination.

WVDEP, AML will be listed as the original applicant, and once a construction contractor has been selected, the NPDES permit will be transferred to the contractor or the contractor will be added as a co-applicant.

The contractor will be responsible for permit modifications if required by Division of Water and Waste.

Subtask IIIG - Pre-Bid Conference

POTESTA will provide a senior level engineer or the project manager who was involved in the overall project design to conduct the on-site pre-bid conference. The planned construction monitor who will provide construction oversight will also attend the pre-bid meeting. POTESTA's realty agent will also attend the pre-bid conference (hours are included under the realty section). POTESTA will conduct the pre-bid meeting including bidder information, providing an overview of the project requirements, video-recording of the meeting, documenting bidder questions and responses to the questions in a pre-bid meeting memorandum, keeping the pre-bid meeting sign-in sheet, and preparation of addenda which may be required. Pre-bid conference documents and video will be uploaded to AMLNET by POTESTA.

Subtask IIIH - Pre-Construction Conference

POTESTA will provide a senior level engineer or the project manager who was involved in the overall project design to conduct the on-site pre-construction conference. The planned construction monitor who will provide construction oversight will also attend the pre-construction conference. POTESTA's realty agent will also attend the pre-construction conference (hours are included under the realty section of our cost proposal). POTESTA will video record the pre-construction conference. Project submittals from the construction contractor will be reviewed and approved by POTESTA. The video recording and submittals will be uploaded to AMLNET by POTESTA.

Design files (plans, specifications, engineer's construction cost estimate, permit applications, permits, geotechnical exploration information, etc.) shall be uploaded to AMLNET by POTESTA. These same files will also be submitted to WVDEP, AML's project manager.

Task IV - Construction Oversight

This task includes continuous project construction oversight, observation/monitoring, documentation, engineering, and related office services. No testing such as aggregate gradation,



soundness, durability, soil moisture/density relationship testing, field density tests, concrete or grout testing, soil analysis, etc. is included. POTESTA will review results of required quality assurance/control tests provided by the construction contractor. POTESTA will provide an assigned (and WVDEP, AML-approved) construction monitor qualified to perform such services.

Construction oversight services will include a pre-construction review, landowner contact, pre-construction photographs, identification of potential hazards, review of plans to identify conditions on-site which may contradict plans, etc.

POTESTA will provide construction management services during the project acting as an agent for WVDEP, Division of Land Restoration, Abandoned Mine Lands and Reclamation. Note that POTESTA cannot issue a stop work notice (suspension of work) to the construction contractor. If POTESTA would issue a stop work notice, this could void our professional liability insurance coverage. POTESTA's construction monitor will call to the attention of the contractor failure of the work or materials to conform to the specifications and suggest that the contractor correct the noncompliance work. If this communication is not effective, POTESTA will contact WVDEP, AML's construction representative and explain the situation so WVDEP, AML can suspend the contractor's work if necessary. POTESTA will document instances where the contractor's work is not in compliance including date, time, contractor representative who was informed of non-compliant work, summary of non-compliant activity, verbal notice that payment will not be approved for non-compliant work, and verbal notice that non-compliant work will require removal.

During construction, POTESTA's monitor will be present on-site when the contractor is performing construction. POTESTA's monitor will document construction activities, take photographs to document stages of the work, keep track of pay items and quantities incorporated in the construction, prepare daily logs and photographs with captions to be uploaded to AMLNET within 48 hours of the activity, track materials and quantities on a daily basis, and prepare weekly and monthly summaries of construction and quantities.

We have assumed a duration of construction of 120 calendar days for this project. Construction monitor time has been proposed at up to 10 hours per day, 7 AM to 5 PM, 5 days per week including on-site activities and time to prepare daily documentation and uploading to AMLNET.

POTESTA will receive, review, and process construction contractor pay applications, review and approve as-built drawings prepared by the construction contractor, prepare a professional engineer's project certification, prepare and issue a substantial completion notice, conduct the final inspection, and prepare and issue the final release. These documents will be uploaded to AMLNET by POTESTA.

This task also includes administrative support to oversee compliance with applicable laws, such as certified payroll and for verifying the contractor's compliance with the Davis-Bacon Act and



Infrastructure Investment and Jobs Act (IIJA) with regard to employing current and former employees of the coal industry.

The effort required for this task depends on the contractor's construction schedule, rate of construction, weather and time for completion. We have made our best guess as to the time required for construction monitoring services as stated above.

Task V - Post-Construction Oversight

This task includes site visits upon the completion of reclamation construction to document the performance of reclamation measures and site conditions. Site visits are required until the Notice of Termination for the construction stormwater permit has been submitted to WVDEP permitting. Each visit will be documented in a daily report style log with photographs attached. Post-construction oversight reports will be uploaded to AMLNET. We have included three visits during the warranty period and final release inspection.



6

CADD

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION **COST PROPOSAL** Purchase Order No.: CEOI DEP240000001 Contract Name: 2023 AML Contract S2 Commodity Line: Project Name: Drawdy Creek SCHEDULE PER CONTRACT CONTRACT UNIT TOTAL TASK UNIT DESCRIPTION **OUANTITY** PRICE PRICE TASK I: NEPA & EA AGENCY COORDINATIONS (including Office Work, AMLNET, etc.) 1 HR 295.00 295.00 2 Chief Engineer HR 2 255.00 510.00 \$ \$ 3 Project Manager / Senior Engineer / Senior Scientist HR 20 \$ 175.00 \$ 3,500.00 4 Staff Engineer / Staff Scientist \$ 1,560.00 HR 12 130.00 5 Engineer / Scientist HR 110.00 \$ 6 CADD HR 5 \$ 135.00 675.00 7 Clerical \$ 95.00 570.00 HR 6 8 Mileage Mile 100 0.67 67.00 7,177.00 Subtotal Task I.A: В PUBLIC INVOLVEMENT (including Legal Ads, Public Hearings, Documents, Presentations, WVDEP's Website, etc.) 1 Principal 295.00 2 Chief Engineer HR 255.00 3 Project Manager / Senior Engineer / Senior Scientist \$ HR 175.00 4 Staff Engineer / Staff Scientist HR 130.00 \$ 5 Engineer / Scientist HR 110.00 CADD 6 135.00 HR 7 Clerical HR 95.00 8 Mile 0.67 Subtotal Task I.R. STUDIES, SURVEYS & MITIGATION PLANS (as applicable) 1 Principal HR 2 295.00 590.00 2 510.00 Chief Engineer 255.00 HR 3 Project Manager / Senior Engineer / Senior Scientist HR 14 175.00 2,450.00 \$ \$ 4 Staff Engineer / Staff Scientist HR 12 130.00 1,560.00 5 Engineer / Scientist HR \$ 110.00 6 CADD HR \$ 135.00 \$ 7 Clerical 95.00 HR \$ 8 Mileage 0.67 200 134.00 Mile Subtotal I.C: 5,244.00 CATEX / EA / FONSI / EIS D 1 Principal HR 295.00 295.00 2 Chief Engineer HR 2 \$ 255.00 510.00 3 Project Manager / Senior Engineer / Senior Scientist HR 24 175.00 4,200.00 \$ 4 1,300.00 Staff Engineer / Staff Scientist HR. 10 \$ 130.00 \$ 5 Engineer / Scientist HR 110.00

HR

5

\$

135.00 \$



675.00

TASK	SK DESCRIPTION		CONTRACT QUANTITY]	UNIT PRICE	TOTAL PRICE	
7	Clerical	HR	4	\$	95.00	\$	380.0
8	Mileage	Mile		\$	0.67	\$	0.51
	Subtotal I.D:					8	7,360.0
8	TOTAL TASK I:					8	19,781.0
ASK II:	REALTY						
A	EXPLORATORY RIGHTS OF ENTRY (EROE)						
1	Principal :	HR	1	\$	295.00	\$	295.0
2	Chief Engineer	HR	2	\$	255.00	\$	510.0
3	Project Manager / Senior Engineer / Senior Scientist	HR	6	\$	175.00	\$	1,050.0
4	Realty Agent	HR	40	\$	115.00	\$	4,600.0
5	Engineer / Scientist	HR		\$	110.00	\$	-
6	CADD	HR		\$	135.00	\$	-
7	Clerical	HR	2	\$	95.00	\$	190.0
8	Mileage	Mile	250	\$	0.67	\$	167.50
	Subtotal II.A:			34		\$	6,812.50
В	CONSTRUCTION RIGHTS OF ENTRY (CROE)						
1	Principal	HR	1	\$	295.00	\$	295.00
2	Chief Engineer	HR	2	\$	255.00	\$	510.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	10	\$	175.00	\$	1,750.00
4	Realty Agent	HR	40	\$	115.00	\$	4,600.00
5	Engineer / Scientist	HR		\$	110.00	\$	-
6	CADD	HR		\$	135.00	\$	-
7	Clerical	HR	2	\$	95.00	\$	190.00
8	Mileage	Mile	250	\$	0.67	\$	167.50
	Subtotal II.B:					\$	7,512.50
	PRE-BID CONFERENCE						
1	Principal	HR		\$	295.00	\$	-
2	Chief Engineer	HR		\$	255.00	\$	-
3	Project Manager / Senior Engineer / Senior Scientist	HR		\$	175.00	\$	
4	Realty Agent	HR	5	\$	115.00	\$	575.00
5	Engineer / Scientist	HR		\$	110.00	\$	
6	CADD	HR		\$	135.00	\$	-
7	Clerical	HR.	1	\$	95.00	\$	95.00
8	Mileage	Mile	50	\$	0.67	\$	33.50
	Subtotal II.C:				A card	\$	703.50
	PRE-CONSTRUCTION CONFERENCE						
1	Principal Principal	HR		\$	295.00	\$	-
2	Chief Engineer	HR		\$	255.00	\$	-
3	Project Manager / Senior Engineer / Senior Scientist	HR		\$	175.00	\$	_
4	Realty Agent	HR	5	\$	115.00	\$	575.00
5	Engineer / Scientist	HR		\$	110.00	\$	-
6	CADD	HR		\$	135.00	\$	-
7	Clerical	HR	1	\$	95.00	\$	95.00
8	Mileage	Mile	50	\$	0.67	\$	33.50
	Subtotal II.D:					\$	703.50
	TOTAL TASK II:					\$	15,732.00



TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE		TOTAL PRICE	
ASK III: DESIGN							
A T	SITE RECONNAISSANCE AND EXPLORATION						
1	Principal	HR	1	\$	295.00	\$	295.00
2	Chief Engineer	HR	14	\$	255.00	\$	3,570.0
3	Project Manager / Senior Engineer / Senior Scientist	HR	24	\$	175.00	\$	4,200.0
4	Staff Engineer / Staff Scientist	HR	14	\$	130.00	\$	1,820.0
5	Engineer / Scientist	HR		\$	110,00	\$	-
6	Clerical	HR	4	\$	95.00	\$	380.0
7	Water Sample Analysis (pH, iron, aluminum, manganese)	EA	3	\$	90.00	\$	270.0
8	Mileage	Mile	100	\$	0.67	\$	67.0
	Subtotal III.A:					\$	10,602.0
В	SURVEYING & MAPPING						
1	Principal	HR	1	\$	295.00	\$	295.0
2	Chief Engineer	HR	3	\$	255.00	\$	765.0
3	Project Manager / Senior Engineer / Senior Scientist	HR	4	\$	175.00	\$	700.0
4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	-
5	Engineer / Scientist	HR		\$	110.00	\$	-
6	CADD	HR	12	\$	135.00	\$	1,620.0
7	Clerical	HR		\$	95.00	\$	2
8	Professional Surveyor / Chief Surveyor	HR	20	\$	160.00	\$	3,200.0
9	2-Man Survey Crew	HR	35	\$	150.00	\$	5,250.0
10	Topographic Mapping Development	AC	35	\$	38.00	\$	1,330.0
11	Mileage	Mile	300	\$	0.67	\$	201.0
	Subtotal III.B:					\$	13,361.0
С	GEOTECHNICAL EXPLORATION						
1	Principal	HR	-1	\$	295.00	\$	295.0
2	Chief Engineer	HR	3	\$	255.00	\$	765.0
3	Project Manager / Senior Engineer / Senior Scientist	HR	12	\$	175.00	\$	2,100.0
4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	-
5	Engineer / Scientist	HR	84	\$	110.00	\$	9,240.0
6	CADD	HR		\$	135.00	\$	3
7	Clerical	HR	2	\$	95.00	\$	190.0
8	Mobilization	LS	1	\$	5,600.00	\$	5,600.0
9	Soil Augering	LF	180	\$	44.80	\$	8,064.0
10	Rock Coring	LF	420	\$	44.80	\$	18,816.0
11	Piezometer Installation	LF	200	\$	28.00	\$	5,600.0
12	Heavy Equipment for Access	DAY	7	\$	952.00	\$	6,664.0
13	Reclamation	LS	1	\$	3,360.00	\$	3,360.0
14	Stream Crossing	LS	1	\$	5,600.00	-	5,600.0
15	Water Set-up	EA	12	\$	1,680.00	\$	20,160.0
16	Lockable Cover for Piezometers	EA	4	\$	560.00	\$	2,240.0
17	Mileage	Mile	720	\$	0.67	\$	482.4
	Subtotal III.C:			1.		S	89,176,4



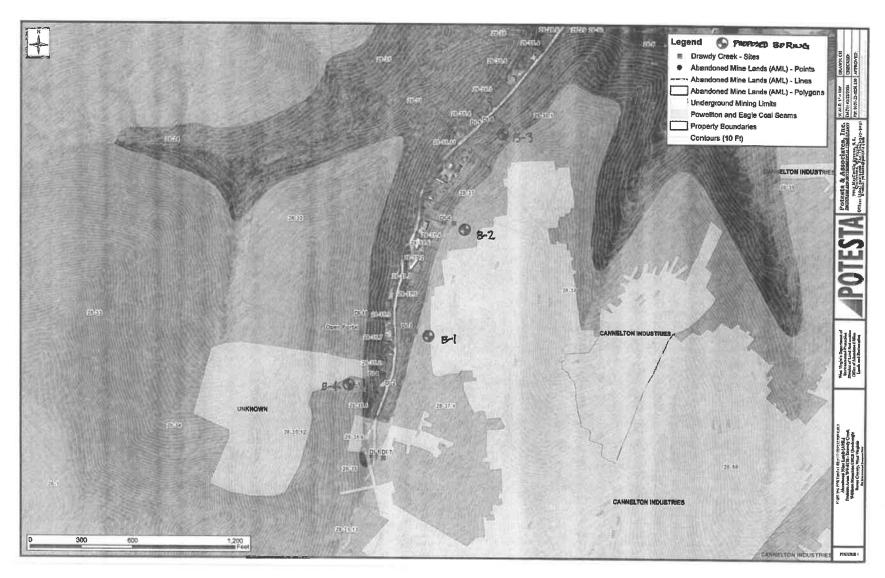
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE	TOTAL PRICE
D	ANALYSIS AND DESIGN				
1	Principal	HR	2	\$ 295.00	\$ 590.0
2	Chief Engineer	HR	10	\$ 255.00	\$ 2,550.0
3	Project Manager / Senior Engineer / Senior Scientist	HR	20	\$ 175.00	\$ 3,500.0
4	Staff Engineer / Staff Scientist	HR	10	\$ 130.00	\$ 1,300.0
5	Engineer / Scientist	HR		\$ 110.00	\$ -
6	CADD	HR	26	\$ 135.00	\$ 3,510.0
7	Clerical	HR	4	\$ 95.00	\$ 380.0
8	Mîleage ,	Mile	100	\$ 0.67	\$ 67.0
	Subtotal III.D:	, ner			\$ 11,897.00
Е	PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEER'S ESTIMATE				
1	Principal	HR	1	\$ 295.00	\$ 295.0
2	Chief Engineer	HR	12	\$ 255.00	\$ 3,060.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	12	\$ 175.00	\$ 2,100.00
4	Staff Engineer / Staff Scientist	HR	4	\$ 130.00	\$ 520.00
5	Engineer / Scientist	HR	12	\$ 110.00	\$ 1,320.00
6	CADD	HR	70	\$ 135.00	\$ 9,450.00
7	Clerical	HR	6	\$ 95.00	\$ 570.00
8	Mileage	Mile	100	\$ 0.67	\$ 67.00
	Subtotal III.E:				\$ 17,382.00
9	PERMITTING				
1	Principal	HR	1	\$ 295.00	\$ 295.00
2	Chief Engineer	HR	2	\$ 255.00	\$ 510.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	12	\$ 175.00	\$ 2,100.00
4	Staff Engineer / Staff Scientist	HR	58	\$ 130.00	\$ 7,540.00
5	Engineer / Scientist	HR		\$ 110.00	\$ -
6	CADD	HR	6	\$ 135.00	\$ 810.00
7	Clerical	HR	12	\$ 95.00	\$ 1,140.00
8	Mileage	Mile		\$ 0.67	\$ -
	Subtotal III.F:	R			\$ 12,395.00
3	PRE-BID CONFERENCE				+,-,-
1	Principal	HR		\$ 295.00	\$ -
2	Chief Engineer	HR		\$ 255.00	\$ -
3	Project Manager / Senior Engineer / Senior Scientist	HR	12	\$ 175.00	\$ 2,100.00
4	Staff Engineer / Staff Scientist	HR		\$ 130.00	
5	Engineer / Scientist	HR			\$ -
6	CADD !	HR		\$ 135.00	\$ -
7	Clerical	HR	4	\$ 95.00	\$ 380.00
8	Construction Monitor	HR	8	\$ 95.00	\$ 760.00
9	Mileage .	Mile	50	\$ 0.67	\$ 33.50
	Subtotal III.G:	IVIIIL	JU	ψ 0.07	\$ 3,273.50
	PRE-CONSTRUCTION CONFERENCE		THE WILLIAM		ψ 5917515U
1	Principal	HR		\$ 295.00	\$ -
2	Chief Engineer	HR			\$ -
3	Project Manager / Senior Engineer / Senior Scientist	HR	8		\$ 1,400.00



TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY		UNIT PRICE		TOTAL PRICE
4 5	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	_
5 I	Engineer / Scientist	HR		\$	110.00	\$	-
	CADD	HR		\$	135.00	\$	_
7 (Clerical	HR	2	\$	95.00	\$	190.00
8 (Construction Monitor	HR	8	\$	95.00	\$	760.00
9 1	Mileage	Mile	50	\$	0.67	\$	33.50
	Subtotal III.H:				8 1401	\$	2,383.50
	TOTAL TASK III:					\$	160,470.40
ASK IV:	CONSTRUCTION OVERSIGHT			di.			
A C	CONSTRUCTION INSPECTION						
1 1	Principal	HR	14	\$	295.00	\$	4,130.00
2 0	Chief Engineer	HR	20	\$	255.00	\$	5,100.00
3 1	Project Manager / Senior Engineer / Senior Scientist	HR	171	\$	175.00	\$	29,925.00
4 5	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	-
5 1	Engineer / Scientist	HR		\$	110.00	\$	-
6 0	CADD	HR		\$	135.00	\$	¥
7 (Clerical	HR	80	\$	95.00	\$	7,600.00
8 (Construction Monitor	HR	857	\$	95.00	\$	81,415.00
9 1	Mileage	Mile	4285	\$	0.67	\$	2,870.95
	Subtotal IV.A:					\$.	131,040.95
	TOTAL TASK IV:					\$.	131,040.95
TASK V: P	POST-CONSTRUCTION OVERSIGHT						
A I	FIELD VISITS / INSPECTIONS						
1 3	Principal	HR		\$	295.00	\$	-
2 0	Chief Engineer	HR	2	\$	255,00	\$	510.00
3]	Project Manager / Senior Engineer / Senior Scientist	HR	9	\$	175.00	\$	1,575.0
4 5	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	-
5 1	Engineer / Scientist	HR		\$	110.00	\$	-
6 (CADD	HR		\$	135.00	\$	-
7 (Clerical	HR	3	\$	95.00	\$	285.00
8 (Construction Monitor	HR	26	\$	95.00	\$	2,470.0
9 1	Mileage	Mile	150	\$	0.67	\$	100.5
	Subtotal V.A:					\$	4,940.5
	TOTAL TASK V:				_	\$	4,940.50
	TOTAL TASKS I THROUGH V:					\$.	331,964.85



Mr. Jonathan Holbert, P.E. December 23, 2024 Page 20





Project/Commodity Line 2: Peytona (Bowles) Portals and Drainage

This project includes four collapsed and draining portals along a hillside above a home and barn as documented on the OSM-51. During our initial site visit, the landowner showed us two additional suspected portals which were collapsed and draining. The landowner is agreeable to allowing access from Route 3 along his southwestern property boundary through a field to reach the two new portals, then continuing along an old timber road to the next four portals. The envisioned reclamation will include access road construction, access road upgrade, wet mine seals with splash pads, and possible drainage conveyances to the receiving stream.

This project also includes an open portal located approximately 3000 feet west of the other portals on a hillside overlooking homes along Route 3. This portal will be sealed with an appropriate mine seal. Access is across the driveway and parking area of a church, then proceeding up the hill along an old road. The envisioned reclamation will include access road construction, access road upgrade, appropriate mine seal, and possibly drainage conveyances below portals with significant drainage.

Due to the collapsed and draining portals and the potential for damage in the event of an uncontrolled release of the mine pool, geotechnical exploration including setting piezometers at some of the portals will be included.

Planning, realty, design, and construction oversight scope of services follows:

Task I – National Environmental Policy Act (NEPA) and Environmental Assessment (EA)

This task includes agency coordination and development of an Environmental Assessment (EA) to obtain a finding of no significant impact (FONSI).

POTESTA will review project information available from WVDEP, AML including OSM-51 documents and consultation letters that may have been prepared/sent for the project. The OSM-51 form will be reviewed for accuracy with the known project information. The OSM-51 will be sent with a cover letter to West Virginia Division of Natural Resources (WVDNR), State Historic Preservation Office (SHPO), and the regional planning council requesting comments on the project. The United States Fish and Wildlife Service (USFWS) IPaC system will be accessed to determine potential impacts to threatened and endangered species. A Phase I bat assessment will be completed by WVDEP, AML to determine if the portals are considered to be suitable bat habitat. POTESTA will update the IPaC information and submit the IPaC forms and a consultation request to the USFWS, if needed. This proposal does not include mist netting bat surveys. Projects on national forest land will require the OSM-51 and letter be sent to the Forest Service (FS). Letters to and from the agencies will be uploaded to AMLNET.



As development and engineering design/preparation of the plans and specifications proceeds, the OSM-51 will be reviewed along with the plans and specifications to provide consistency.

Based on discussions with WVDEP, AML, the AML projects will require preparation of an EA and submission of the EA to the Office of Surface Mining for review and approval. We have assumed that an EA level NEPA review will be required for this project. A preliminary EA will be prepared using the EA template provided and will be submitted to the WVDEP, AML for initial review. Upon completion of the initial review, POTESTA will finalize the EA document and submit to the necessary agencies.

A preliminary table of contents for the EA is included below.

Table of Contents

Chapter 1: Purpose and Need

- A. Purpose of the Proposed Action
- B. Need for the Proposed Action
- C. Scoping
- D. List of Related Laws and Executive Orders

Chapter 2: Proposed Action and Appropriate Alternatives and Mitigation Measures

- A. Alternatives Considered
- B. Alternatives Considered but Eliminated from Detailed Analysis

Chapter 3: Affected Environment and Environmental Impacts

- A. Environmental Consequences of the Proposed Actions and Mitigation Measures
- B. Affected Resources Including Special Areas of Consideration
- C. Summary

Chapter 4: Consultations and Coordination

- A. Persons and Agencies Contacted to Assist in the Preparation of the Environmental Assessment
- B. List of Potential Permits and Responsible Parties
- C. Public Involvement
- D. Preparer
- E. Signatures



Chapter 5: References and Appendices

- A. References
- B. Appendices

Following WVDEP, AML approval, final environmental documents will be uploaded to AMLNET.

Per WVDEP, AML, public involvement process activities including the public meetings will be conducted by the WVDEP, AML Planning Group. POTESTA's cost for this task does not include public involvement hours or costs.

Task II - Realty

Realty services for the project will include obtaining exploratory rights of entry (EROE), construction rights of entry (CROE), maintenance rights of entry (MROE) and attendance of the pre-bid conference and pre-construction conference meetings.

Prior to field work (surveying, drilling, field reconnaissance, etc.), POTESTA will visit the courthouse to perform research to determine landowners that could be impacted by the project including access to the work area. POTESTA will obtain copies of tax maps, deeds for current landowners, ownership documentation, and landowner contact information.

POTESTA will then make contact with landowners to obtain EROE. This may require more than one visit with each landowner. Attempts at landowner contact will be documented. Landowner concerns will be noted. After discussion with the WVDEP, AML realty representative, POTESTA will attempt to finalize negotiations with the landowners and obtain signed EROEs for each impacted parcel. EROEs including legal ownership information/documentation and project photographs will be provided to WVDEP, AML's realty representative for review and subsequent uploading to AMLNET. This will include pertinent property information, landowner information, and legal ownership documentation for parcels likely to be impacted.

WVDEP, AML indicated that some landowners may request to be an additional insured for the CROE. It is important to note that if this happens, the landowner making the request should be added as an "additional insured," not an "additional named insured."

Review of tax maps for the project area indicates the mine portals are located on two different parcels. Access to the mine portals for exploratory work (surveying and drilling) and construction may involve two additional parcels for a total of four.

Once plans and specifications have been developed for each project, POTESTA will again visit the courthouse to verify that property owner and property ownership information is still valid, or obtain



current information and documentation if this has changed. POTESTA will subsequently make contact with each affected landowner. Attempts at landowner contact will be documented. Proposed construction/reclamation activities will be reviewed with each landowner. Landowner demands will be noted and shared/discussed with our WVDEP, AML realty contact. If appropriate, landowner demands will be incorporated into the plans and specifications. POTESTA will then meet with each landowner and present them with a CROE. The CROE typically includes a clause granting WVDEP, AML right of entry for maintenance activities. Upon execution of the CROE form, the CROE including legal ownership information/documentation and project photographs will be provided to WVDEP, AML's realty representative for review and subsequent uploading to AMLNET.

POTESTA's realty agent will keep a journal/log while working on this task. The journal/log will include duration of time spent working on realty activities, mileage, and a record of landowners or others that POTESTA's realty agent has interactions with pertaining to Task II activities.

POTESTA's realty agent will attend the pre-bid and pre-construction conference and be able to respond to questions about property ownership, potential landowner issues, and CROE information.

Prior to construction, POTESTA's realty agent and/or construction monitor will visit each impacted parcel of land to obtain photographic documentation of such items as general site conditions, property monuments, fences, trees in close proximity of planned ground disturbance, existing driveways and roads, etc. Photographs will be uploaded to AMLNET for documentation of pre-reclamation conditions.

Task III - Design

Subtask IIIA - Site Reconnaissance and Exploration

This subtask includes site reconnaissance for project planning to establish the extent and locations of problem areas, obtain photographic documentation of the site, develop preliminary notes and sketches, review possible access routes to be used during construction, etc. This subtask also includes planning for execution of the engineering/design scope of services. Since this project includes draining mine portals, POTESTA has included two grab samples of mine drainage and analysis of pH, iron, aluminum, and manganese.

Subtask IIIB - Surveying and Mapping

We are proposing to develop aerial topographic mapping for this project due to the size of the area over which the mine portals are located.

Aerial mapping coverage is proposed to include approximately 25 acres.



POTESTA will survey to establish ground control for development of aerial topographic mapping. Project baselines will be established along Route 3. Topographic mapping will be prepared at an appropriate scale and with a contour interval of 2 feet.

A minimum of four survey control points will be established and shown on the mapping. Found corner/property monumentation for impacted parcels will be located during field surveying. Existing structures including pipes and culverts will be located. Pipe sizes and type will be noted on the survey. POTESTA will survey locations of existing visible utilities, as well as utility locations marked following a locate request by POTESTA to WV 811.

Borings drilled for setting piezometers under the geotechnical exploration will be surveyed for horizontal and vertical location.

Subtask IIIC - Geotechnical Exploration

This subtask includes drilling test borings to determine the elevation of coal seam/mine workings and depth of impounded water. Two borings equipped with casing to serve as piezometers are planned to be installed. Reclamation and revegetation of drill roads will be performed. Borings are estimated to be 50 feet deep, and drilled at the approximate locations shown on Figure 2.

Borings will include hollow stem augering, split spoon sampling and standard penetration testing, and rock coring. One and one-half inch diameter PVC pipe (piezometers) will be set in borings encountering voids drilled above the suspected deep mine entries to be used to monitor water levels during mine dewatering and mine seal construction. PVC casing will be backfilled with auger cuttings at the ground surface. No sand pack is proposed. PVC casing will be installed above the ground surface with a lockable protective covering. One and one-half inch diameter casing is proposed since it can be installed through the drill stems in the event gob or broken rock is encountered in the mine void. Borings not developed as piezometers will be backfilled with auger cuttings. POTESTA will monitor the soil/rock borings and produce boring logs documenting encountered conditions.

In the event that borings encounter solid coal, we will make up to two additional attempts by moving and drilling a new boring. The drilling footage in our cost estimate reflects three attempts. Second and third attempt borings will be drilled only if needed.

Disturbed areas resulting from drilling will be seeded and mulched. Access roads and drill pads will be regraded to as close to original contours as practical.



Subtask IIID - Analysis and Design

This subtask includes developing a conceptual reclamation plan for the site. POTESTA will prepare a 20 to 30 percent conceptual plan showing the proposed reclamation for the site. This will include the type, location, and size of the proposed mine seals (drainage channels and/or control structures below mine seals will also be shown), access to the work area, etc. The conceptual plan will include proposed construction limits to allow for adequate access to the work areas. Property line information will be developed using tax maps. POTESTA will meet with the WVDEP, AML on site to discuss our conceptual plan and will incorporate comments from the WVDEP, AML into our design documents.

Subtask IIIE - Preparation of Plans, Specifications and Engineer's Cost Estimate

This subtask involves the design and preparation of construction drawings, technical specifications, engineer's construction cost estimate, and contractor's bid form after receiving WVDEP, AML's concurrence with the 20 to 30 percent conceptual plan from Subtask IIID. POTESTA will prepare and make the following submissions to WVDEP, AML including the previously referenced items:

- 1. 60 percent complete submission;
- 2. 90 percent complete submission;
- 3. Final documents issued for bidding and construction.

A review meeting will be conducted with WVDEP, AML following the 60 percent and 90 percent complete submissions to review WVDEP, AML comments and the responses required to address the comments. Following these meetings, we will revise the preliminary design documents based on WVDEP review comments and prepare the next submission of the bidding/construction documents. We have included minimal time to make revisions to the bidding documents following WVDEP, AML review. Extensive review comments/revisions requested by WVDEP, AML will necessitate a request for change order by POTESTA.

Subtask IIIF - Permitting

This subtask includes preparation and submission of the appropriate application forms and supporting documents for the following permits/approvals:

- 1. West Virginia Division of Highways (WVDOH) MM-109 encroachment permit.
- 2. WVDEP National Pollutant Discharge Elimination System (NPDES) General Construction Stormwater Permit.

POTESTA will prepare the application for the MM-109 permit for signature by the WVDEP, AML and submit the permit application to the appropriate office.



WVDEP, AML has requested that POTESTA prepare the application for the NPDES General Construction Stormwater Permit, and once a construction contract has been awarded, that POTESTA process a permit modification to add the construction contractor as a co-applicant.

POTESTA will prepare and submit the NPDES application, provide written response on behalf of WVDEP, AML to WVDEP Environmental Enforcement notices, submit renewal/reissuance requests for the permit, and apply for the Notice of Termination.

WVDEP, AML will be listed as the original applicant, and once a construction contractor has been selected, the NPDES permit will be transferred to the contractor or the contractor will be added as a co-applicant.

The contractor will be responsible for permit modifications if required by Division of Water and Waste.

Subtask IIIG - Pre-Bid Conference

POTESTA will provide a senior level engineer or the project manager who was involved in the overall project design to conduct the on-site pre-bid conference. The planned construction monitor who will provide construction oversight will also attend the pre-bid meeting. POTESTA's realty agent will also attend the pre-bid conference (hours are included under the realty section). POTESTA will conduct the pre-bid meeting including bidder information, providing an overview of the project requirements, video-recording of the meeting, documenting bidder questions and responses to the questions in a pre-bid meeting memorandum, keeping the pre-bid meeting sign-in sheet, and preparation of addenda which may be required. Pre-bid conference documents and video will be uploaded to AMLNET by POTESTA.

Subtask IIIH - Pre-Construction Conference

POTESTA will provide a senior level engineer or the project manager who was involved in the overall project design to conduct the on-site pre-construction conference. The planned construction monitor who will provide construction oversight will also attend the pre-construction conference. POTESTA's realty agent will also attend the pre-construction conference (hours are included under the realty section of our cost proposal). POTESTA will video record the pre-construction conference. Project submittals from the construction contractor will be reviewed and approved by POTESTA. The video recording and submittals will be uploaded to AMLNET by POTESTA.

Design files (plans, specifications, engineer's construction cost estimate, permit applications, permits, geotechnical exploration information, etc.) shall be uploaded to AMLNET by POTESTA. These same files will also be submitted to WVDEP, AML's project manager.



Task IV - Construction Oversight

This task includes continuous project construction oversight, observation/monitoring, documentation, engineering, and related office services. No testing such as aggregate gradation, soundness, durability, soil moisture/density relationship testing, field density tests, concrete or grout testing, soil analysis, etc. is included. POTESTA will review results of required quality assurance/control tests provided by the construction contractor. POTESTA will provide an assigned (and WVDEP, AML-approved) construction monitor qualified to perform such services.

Construction oversight services will include a pre-construction review, landowner contact, pre-construction photographs, identification of potential hazards, review of plans to identify conditions on-site which may contradict plans, etc.

POTESTA will provide construction management services during the project acting as an agent for WVDEP, Division of Land Restoration, Abandoned Mine Lands and Reclamation. Note that POTESTA cannot issue a stop work notice (suspension of work) to the construction contractor. If POTESTA would issue a stop work notice, this could void our professional liability insurance coverage. POTESTA's construction monitor will call to the attention of the contractor failure of the work or materials to conform to the specifications and suggest that the contractor correct the noncompliance work. If this communication is not effective, POTESTA will contact WVDEP, AML's construction representative and explain the situation so WVDEP, AML can suspend the contractor's work if necessary. POTESTA will document instances where the contractor's work is not in compliance including date, time, contractor representative who was informed of non-compliant work, summary of non-compliant activity, verbal notice that payment will not be approved for non-compliant work, and verbal notice that non-compliant work will require removal.

During construction, POTESTA's monitor will be present on-site when the contractor is performing construction. POTESTA's monitor will document construction activities, take photographs to document stages of the work, keep track of pay items and quantities incorporated in the construction, prepare daily logs and photographs with captions to be uploaded to AMLNET within 48 hours of the activity, track materials and quantities on a daily basis, and prepare weekly and monthly summaries of construction and quantities.

We have assumed a duration of construction of 120 calendar days for this project. Construction monitor time has been proposed at up to 10 hours per day, 7 AM to 5 PM, 5 days per week including on-site activities and time to prepare daily documentation and uploading to AMLNET.

POTESTA will receive, review, and process construction contractor pay applications, review and approve as-built drawings prepared by the construction contractor, prepare a professional engineer's project certification, prepare and issue a substantial completion notice, conduct the final inspection,



and prepare and issue the final release. These documents will be uploaded to AMLNET by POTESTA.

This task also includes administrative support to oversee compliance with applicable laws, such as certified payroll and for verifying the contractor's compliance with the Davis-Bacon Act and Infrastructure Investment and Jobs Act (IIJA) with regard to employing current and former employees of the coal industry.

The effort required for this task depends on the contractor's construction schedule, rate of construction, weather and time for completion. We have made our best guess as to the time required for construction monitoring services as stated above.

Task V – Post-Construction Oversight

This task includes site visits upon the completion of reclamation construction to document the performance of reclamation measures and site conditions. Site visits are required until the Notice of Termination for the construction stormwater permit has been submitted to WVDEP permitting. Each visit will be documented in a daily report style log with photographs attached. Post-construction oversight reports will be uploaded to AMLNET. We have included three visits during the warranty period and final release inspection.



		OFFICE OF ABANDONED MINE LANDS & F	RECLAM	ATION								
		COST PROPOSAL										
_		e Order No.: CEOI DEP2400000001										
_		tt Name: 2023 AML Contract S2 dity Line: 2										
_		Name: Peytona (Bowles) Portals and Drainage			_							
	oject											
		SCHEDULE PER CONTRACT	_	1	_		,					
7	FASK	DESCRIPTION	UNIT	CONTRACT QUANTITY]	UNIT PRICE				UNIT PRICE		TOTAL PRICE
ΓΑ	SK I	: NEPA & EA										
A	Ш	AGENCY COORDINATIONS (including Office Work, AMLNET, etc.)										
	1	Principal	HR	1	\$	295.00	\$	295.00				
	2	Chief Engineer	HR	2	\$	255.00	\$	510.00				
	3	Project Manager / Senior Engineer / Senior Scientist	HR	18	\$	175.00	\$	3,150.00				
	4	Staff Engineer / Staff Scientist	HR	16	\$	130.00	\$	2,080.00				
	5	Engineer / Scientist	HR		\$	110.00	\$					
	6	CADD	HR	5	\$	135.00	\$	675.00				
	7	Clerical	HR	5	\$	95.00	\$	475.00				
	8	Mileage	Mile	100	\$	0.67	\$	67.00				
		Subtotal Task I.A:					\$	7,252.00				
В		PUBLIC INVOLVEMENT (including Legal Ads, Public Hearings, Documents, Present	tations, W	VDEP's Website,	etc.)							
	1	Principal	HR		\$	295.00	\$	-				
	2	Chief Engineer	HR		\$	255.00	\$	-				
	3	Project Manager / Senior Engineer / Senior Scientist	HR		\$	175.00	\$	-				
	4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	-				
	5	Engineer / Scientist	HR		\$	110.00	\$	-				
	6	CADD	HR		\$	135.00	\$	-				
	7	Clerical	HR		\$	95.00	\$	-				
	8	Mileage	Mile		\$	0.67	\$	-				
		Subtotal Task I.B:					8	-				
С		STUDIES, SURVEYS & MITIGATION PLANS (as applicable)										
	1	Principal :	HR	2	\$	295.00	\$	590.00				
	2	Chief Engineer	HR	2	\$	255.00	\$	510.00				
	3	Project Manager / Senior Engineer / Senior Scientist	HR	14	\$	175.00	\$	2,450.00				
	4	Staff Engineer / Staff Scientist	HR	14	\$	130.00	\$	1,820.00				
	5	Engineer / Scientist	HR		\$	110.00	\$	-				
	6	CADD	HR		\$	135.00	\$	-				
1	7	Clerical	HR		\$	95.00	\$	-				
1	8	Mileage	Mile	200	\$	0.67	\$	134.00				
	13	Subtotal I.C:			Ŋ.		\$	5,504.00				
)		CATEX / EA / FONSI / EIS										
1	1	Principal	HR	1	\$	295.00	\$	295.00				
1	2	Chief Engineer	HR	2	\$	255.00	\$	510.00				
1	3	Project Manager / Senior Engineer / Senior Scientist	HR	24	\$	175.00	\$	4,200.00				
7	4	Staff Engineer / Staff Scientist	HR	10	\$		\$	1,300.00				
1	5	Engineer / Scientist	HR		\$	110.00	\$	-				
7	6	CADD	HR	5	\$		\$	675.00				

Т	ASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	100	UNIT RICE		TOTAL PRICE
	7	Clerical	HR	4	\$	95.00	\$	380.0
1	8	Mileage	Mile		\$	0.67	\$	
		Subtotal I.D:					\$	7,360.00
		TOTAL TASK I:					8	20,116.00
À	SK II:	REALTY						
A		EXPLORATORY RIGHTS OF ENTRY (EROE)						
	1	Principal Principal	HR	1	\$	295.00	\$	295.0
	2	Chief Engineer	HR	2	\$	255.00	\$	510.0
	3	Project Manager / Senior Engineer / Senior Scientist	HR	6	\$	175.00	\$	1,050.0
	4	Realty Agent	HR	30	\$	115.00	\$	3,450.0
	5	Engineer / Scientist	HR		\$	110.00	\$	-
	6	CADD	HR		\$	135.00	\$	
	7	Clerical	HR	2	\$	95.00	\$	190.0
	8	Mileage	Mile	250	\$	0.67	\$	167.50
		Subtotal II.A:				- Test	8	5,662.5
В		CONSTRUCTION RIGHTS OF ENTRY (CROE)						
	1	Principal	HR	1	\$	295.00	\$	295.0
	2	Chief Engineer	HR	2	\$	255.00	\$	510.0
	3	Project Manager / Senior Engineer / Senior Scientist	HR	10	\$	175.00	\$	1,750.0
	4	Realty Agent	HR	32	\$	115.00	\$	3,680.0
	5	Engineer / Scientist	HR		\$	110.00	\$	-
	6	CADD	HR		\$	135.00	\$	-
	7	Clerical	HR	2	\$	95.00	\$	190.0
	8	Mileage	Mile	250	\$	0.67	\$	167.5
		Subtotal II.B:					\$	6,592.5
С		PRE-BID CONFERENCE						
	1	Principal	HR		\$	295.00	\$	-
	2	Chief Engineer	HR		\$	255.00	\$	-
	3	Project Manager / Senior Engineer / Senior Scientist	HR		\$	175.00	\$	
	4	Realty Agent	HR	5	\$	115.00	\$	575.0
	5	Engineer / Scientist	HR		\$	110.00	\$	-
	6	CADD	HR		\$	135.00	\$	-
	7	Clerical	HR	1	\$	95.00	\$	95.0
	8	Mileage	Mile	50	\$	0.67	\$	33.5
		Subtotal II.C:					8	703.5
D		PRE-CONSTRUCTION CONFERENCE						
	1	Principal	HR		\$	295.00	\$	-
	2	Chief Engineer	HR		\$	255.00	\$	-
	3	Project Manager / Senior Engineer / Senior Scientist	HR		\$	175.00	\$	_
	4	Realty Agent	HR	5	\$	115.00	\$	575.0
	5	Engineer / Scientist	HR		\$	110.00	\$	-
Г	6	CADD	HR		\$	135.00	\$	-
	7	Clerical	HR	1	\$	95.00	\$	95.0
П	8	Mileage	Mile	50	\$	0.67	\$	33.5
		Subtotal II.D:					\$	703.5
П		TOTAL TASK II:					\$	13,662.0



TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE	TOTAL PRICE
rask III	: DESIGN		i e		
A	SITE RECONNAISSANCE AND EXPLORATION				
1	Principal '	HR	1	\$ 295.00	\$ 295.0
2	Chief Engineer	HR	14	\$ 255.00	\$ 3,570.0
3	Project Manager / Senior Engineer / Senior Scientist	HR	24	\$ 175.00	\$ 4,200.0
4	Staff Engineer / Staff Scientist	HR	14	\$ 130.00	\$ 1,820.0
5	Engineer / Scientist	HR		\$ 110.00	\$ -
6	Clerical	HR	4	\$ 95.00	\$ 380.0
7	Water Sample (pH, iron, aluminum, manganese)	EA	2	\$ 90.00	\$ 180.0
8	Mileage	Mile	100	\$ 0.67	\$ 67.0
	Subtotal III,A;			Fizedi	\$ 10,512.0
В	SURVEYING & MAPPING				
1	Principal	HR	1	\$ 295.00	\$ 295.0
2	Chief Engineer	HR	3	\$ 255.00	\$ 765.0
3	Project Manager / Senior Engineer / Senior Scientist	HR	4	\$ 175,00	\$ 700.0
4	Staff Engineer / Staff Scientist	HR		\$ 130.00	\$ -
5	Engineer / Scientist	HR		\$ 110.00	\$ -
6	CADD	HR	12	\$ 135.00	\$ 1,620.0
7	Clerical	HR		\$ 95.00	\$ -
8	Professional Surveyor / Chief Surveyor	HR	18	\$ 160.00	\$ 2,880.0
9	2-Man Survey Crew	HR	34	\$ 150.00	\$ 5,100.0
10	Topographic Mapping Development	AC	25	\$ 38.00	\$ 950.0
11	Mileage	Mile	300	\$ 0.67	\$ 201.0
	Subtotal III.B:				\$ 12,511.00
	GEOTECHNICAL EXPLORATION				
1	Principal	HR	1	\$ 295.00	\$ 295.0
2	Chief Engineer	HR	2	\$ 255.00	\$ 510.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	8	\$ 175.00	\$ 1,400.00
4	Staff Engineer / Staff Scientist	HR		\$ 130.00	\$ -
5	Engineer / Scientist	HR	48	\$ 110.00	\$ 5,280.00
6	CADD	HR		\$ 135.00	\$ -
7	Clerical !	HR	2	\$.95.00	\$ 190.00
8	Mobilization	LS	1	\$ 3,360.00	\$ 3,360.00
9	Soil Augering	LF	90	\$ 44.80	\$ 4,032.00
10	Rock Coring	LF	210	\$ 44.80	\$ 9,408.00
11	Piezometer Installation	LF	100	\$ 28.00	\$ 2,800.00
12	Heavy Equipment for Access	DAY	6	\$ 952.00	\$ 5,712.00
13	Reclamation	LS	1	\$ 2,800.00	\$ 2,800.00
14	Water Set-up	EA	6	\$ 1,120.00	\$ 6,720.0
15	Lockable Cover for Piezometers	EA	2	\$ 560.00	\$ 1,120.00
16	Mileage	Mile	600	\$ 0.67	\$ 402.00
	Subtotal III. C:	1 1		255	\$ 44,029.00



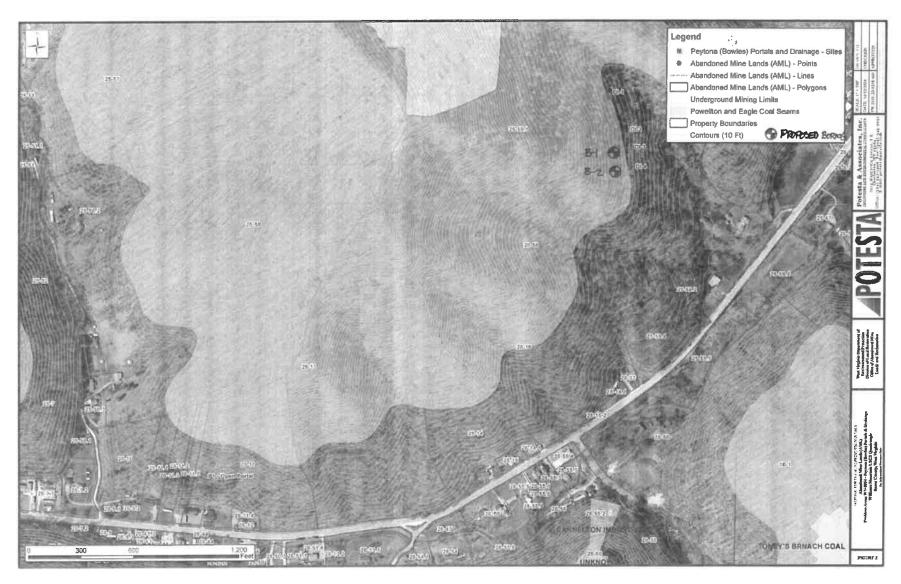
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	I .	NIT ICE		TOTAL PRICE
	ANALYSIS AND DESIGN						
1	Principal	HR	2	\$	295.00	\$	590.00
2	Chief Engineer	HR	10	\$	255.00	\$	2,550.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	18	\$	175.00	\$	3,150.00
4	Staff Engineer / Staff Scientist	HR	10	\$	130.00	\$	1,300.00
5	Engineer / Scientist	HR		\$	110.00	\$	-
6	CADD	HR	24	\$	135.00	\$	3,240.00
7	Clerical	HR	4	\$	95.00	\$	380.00
8	Mileage	Mile	100	\$	0.67	\$	67.00
	Subtotal III.D:				10	\$	11,277.00
Е	PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEER'S ESTIMATE						
1	Principal	HR	1	\$	295.00	\$	295.00
2	Chief Engineer	HR.	12	\$	255.00	\$	3,060.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	12	\$	175.00	\$	2,100.00
4	Staff Engineer / Staff Scientist	HR	4	\$	130.00	\$	520.00
5	Engineer / Scientist	HR	12	\$	110.00	\$	1,320.00
6	CADD	HR	70	\$	135.00	\$	9,450.00
7	Clerical	HR	6	\$	95.00	\$	570.00
8	Mileage	Mile	100	\$	0.67	\$	67.00
	Subtotal III.E:					\$	17,382.00
F	PERMITTING						
1	Principal Principal	HR	1	\$	295.00	\$	295.00
2	Chief Engineer	HR	2	\$	255.00	\$	510.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	12	\$	175.00	\$	2,100.00
4	Staff Engineer / Staff Scientist	HR	58	\$	130.00	\$	7,540.00
5	Engineer / Scientist	HR		\$	110.00	\$	
6	CADD	HR	6	\$	135.00	\$	810.00
7	Clerical	HR	12	\$	95.00	\$	1,140.00
8	Mileage	Mile		\$	0.67	\$	-
	Subtotal III.F:					\$	12,395.00
G	PRE-BID CONFERENCE						
1	Principal	HR		\$	295.00	\$	-
2	Chief Engineer	HR		\$	255.00	\$	
3	Project Manager / Senior Engineer / Senior Scientist	HR	12	\$	175.00	\$	2,100.00
4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	-
5	Engineer / Scientist	HR		\$	110.00	\$	+
6	CADD	HR		\$	135.00	\$	-
7	Clerical	HR	4	\$	95.00	\$	380.00
8	Construction Monitor	HR	8	\$	95.00	\$	760.0
9	Mileage	Mile	50	\$	0.67	\$	33.5
	Subtotal III.G:					8	3,273.50
н	PRE-CONSTRUCTION CONFERENCE						
1	Principal	HR		\$	295.00	\$	
2	Chief Engineer	HR		\$	255.00	\$	74
3	Project Manager / Senior Engineer / Senior Scientist	HR	8	\$	175.00	\$	1,400.00



TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY		UNIT PRICE		TOTAL PRICE
4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	-
5	Engineer / Scientist	HR		\$	110.00	\$	-
-	CADD	. HR		\$	135.00	\$	-
7	Clerical	HR	2	\$	95.00	\$	190.0
8	Construction Monitor	HR	8	\$	95.00	\$	760.00
9	Mileage ,	Mile	50	\$	0.67	\$	33.50
	Subtotal III.H:				17.12	\$	2,383.50
	TOTAL TASK III:					\$.	113,763.00
ASK IV:	CONSTRUCTION OVERSIGHT	V					
4	CONSTRUCTION INSPECTION						
1	Principal [HR	14	\$	295.00	\$	4,130.00
2	Chief Engineer	HR	20	\$	255.00	\$	5,100.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	172	\$	175.00	\$	30,100.00
4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	-
5	Engineer / Scientist	HR		\$	110.00	\$	30
6	CADD	HR		\$	135.00	\$	-
7	Clerical	HR	80	\$	95.00	\$	7,600.00
8	Construction Monitor	HR	857	\$	95.00	\$	81,415.00
9	Mileage	Mile	4285	\$	0.67	\$	2,870.95
	Subtotal IV.A:			- 3		\$	131,215.95
	TOTAL TASK IV:					\$	131,215.95
ASK V: F	POST-CONSTRUCTION OVERSIGHT						
A 1	FIELD VISITS / INSPECTIONS						
1 1	Principal	HR		\$	295.00	\$	-
2 (Chief Engineer	HR	2	\$	255.00	\$	510.00
3 1	Project Manager / Senior Engineer / Senior Scientist	HR	9	\$	175.00	\$	1,575.00
4 5	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	-
5 1	Engineer / Scientist	HR		\$	110.00	\$	-
6 (CADD	HR		\$	135.00	\$	-
7 (Clerical	HR	3	\$	95.00	\$	285.00
8 (Construction Monitor	HR	26	\$	95.00	\$	2,470.00
9 1	Mileage	Mile	150	\$	0.67	\$	100.50
	Subtotal V.A:					\$	4,940.50
	TOTAL TASK V:					\$	4,940.50
	TOTAL TASKS I THROUGH V:	A 14	d Fu Par Europe			\$ 2	83,697.45



Mr. Jonathan Holbert, P.E. December 23, 2024 Page 35





Project/Commodity Line 3: Toney Fork Portals

This project includes portals grouped at four sites. Site 1 is along Stringer Branch Road and the Left Hand Fork of Stringer Branch Road. The revised OSM-51 shows three (previously seven) portals exist along a steep bluff just off the west edge of Stringer Branch Road approximately 0.2 mile from its intersection with Route 3. Moving north along Stringer Branch Road and around the hillside above the Left Fork are two collapsed and draining portals. These portals are on the hillside above residences. The collapsed portals and wet conditions on the bench in front of the portals indicate that a geotechnical exploration at this location is prudent.

Site 2 is near the end of Drystone Lane. The original OSM-51 showed five mine portals. The four portals in the rear of the landowner's house will not be reclaimed after WVDEP discussions with the landowner. The landowner indicated he does not want the area behind his house disturbed by reclamation as he has done a lot of work including routing drainage from these portals to a small pond he constructed. The revised OSM-51 removed the portals behind the residence. One portal, partially open, was observed along the north edge of his filled front yard area, on the edge of a small drain. This is the only portal on Site 2 to be reclaimed.

Site 3 includes two portals located on the hillside north of Route 3. One portal is collapsed and draining and one has an opening of 1 foot by 1 foot. These portals are located along a bench above a driveway leading to a residence.

Site 4 includes one open and one collapsed portal on the hillside south of Route 3 and the stream. Access is best gained from a culverted residential driveway stream crossing.

The envisioned reclamation plan includes access road construction, wet mine seals with splash pads and drainage conveyances where portals have significant water discharge, and bat gates as appropriate for open portals indicated by the Phase I bat assessment. Disturbed areas will be reclaimed and revegetated.

The portals on the bench above the homes at Sites 1 and 3 will include geotechnical exploration due to the collapsed nature, significant ponded water on the bench in front of the portals, and the proximity to the nearby homes.

Planning, realty, design, and construction oversight scope of services follows.

Task I – National Environmental Policy Act (NEPA) and Environmental Assessment (EA)

This task includes agency coordination and development of an Environmental Assessment (EA) to obtain a finding of no significant impact (FONSI).



POTESTA will review project information available from WVDEP, AML including OSM-51 documents and consultation letters that may have been prepared/sent for the project. The OSM-51 form will be reviewed for accuracy with the known project information. The OSM-51 will be sent with a cover letter to West Virginia Division of Natural Resources (WVDNR), State Historic Preservation Office (SHPO), and the regional planning council requesting comments on the project. The United States Fish and Wildlife Service (USFWS) IPaC system will be accessed to determine potential impacts to threatened and endangered species. A Phase I bat assessment will be completed by WVDEP, AML to determine if the portals are considered to be suitable habitat. POTESTA will update the IPaC information and submit the IPaC forms and a consultation request to the USFWS, if needed. This proposal does not include mist netting bat surveys. Projects on national forest land will require the OSM-51 and letter be sent to the Forest Service (FS). Letters to and from the agencies will be uploaded to AMLNET.

As development and engineering design/preparation of the plans and specifications proceeds, the OSM-51 will be reviewed along with the plans and specifications to provide consistency.

Based on discussions with WVDEP, AML, the AML projects will require preparation of an EA and submission of the EA to the Office of Surface Mining for review and approval. We have assumed that an EA level NEPA review will be required for this project. A preliminary EA will be prepared using the EA template provided and will be submitted to the WVDEP, AML for initial review. Upon completion of the initial review, POTESTA will finalize the EA document and submit to the necessary agencies.

A preliminary table of contents for the EA is included below.

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- A. Purpose of the Proposed Action
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Chapter 4: Consultations and Coordination

- A. Persons and Agencies Contacted to Assist in the Preparation of the Environmental Assessment
- B. List of Potential Permits and Responsible Parties
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- A. References
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Following WVDEP, AML approval, final environmental documents will be uploaded to AMLNET.

Per WVDEP, AML, public involvement process activities including the public meetings will be conducted by the WVDEP, AML Planning Group. POTESTA's cost for this task does not include public involvement hours or costs.

Task II - Realty

Realty services for the project will include obtaining exploratory rights of entry (EROE), construction rights of entry (CROE), maintenance rights of entry (MROE) and attendance of the pre-bid conference and pre-construction conference meetings.

Prior to field work (surveying, drilling, field reconnaissance, etc.), POTESTA will visit the courthouse to perform research to determine landowners that could be impacted by the project including access to the work area. POTESTA will obtain copies of tax maps, deeds for current landowners, ownership documentation, and landowner contact information.

POTESTA will then make contact with landowners to obtain EROE. This may require more than one visit with each landowner. Attempts at landowner contact will be documented. Landowner concerns will be noted. After discussion with the WVDEP, AML realty representative, POTESTA will attempt to finalize negotiations with the landowners and obtain signed EROEs for each impacted parcel. EROEs including legal ownership information/documentation and project photographs will be provided to WVDEP, AML's realty representative for review and subsequent



uploading to AMLNET. This will include pertinent property information, landowner information, and legal ownership documentation.

WVDEP, AML indicated that some landowners may request to be an additional insured for the CROE. It is important to note that if this happens, the landowner making the request should be added as an "additional insured," not an "additional named insured."

Review of tax maps for the project area indicates the mine portals are located on seven different parcels. Access to the mine portals for exploratory work (surveying and drilling) may involve two additional parcels for a total of nine.

Once plans and specifications have been developed for each project, POTESTA will again visit the courthouse to verify that property owner and property ownership information is still valid, or obtain current information and documentation if this has changed. POTESTA will subsequently make contact with each affected landowner. Attempts at landowner contact will be documented. Proposed construction/reclamation activities will be reviewed with each landowner. Landowner demands will be noted and shared/discussed with our WVDEP, AML realty contact. If appropriate, landowner demands will be incorporated into the plans and specifications. POTESTA will then meet with each landowner and present them with a CROE. The CROE typically includes a clause granting WVDEP, AML right of entry for maintenance activities. Upon execution of the CROE form, the CROE including legal ownership information/documentation and project photographs will be provided to WVDEP, AML's realty representative for review and subsequent uploading to AMLNET.

POTESTA's realty agent will keep a journal/log while working on this task. The journal/log will include duration of time spent working on realty activities, mileage, and a record of landowners or others that POTESTA's realty agent has interactions with pertaining to Task II activities.

POTESTA's realty agent will attend the pre-bid and pre-construction conference and be able to respond to questions about property ownership, potential landowner issues, and CROE information.

Prior to construction, POTESTA will visit each impacted parcel of land to obtain photographic documentation of such items as general site conditions, property monuments, fences, trees in close proximity of planned ground disturbance, existing driveways and roads, etc. Photographs will be uploaded to AMLNET for documentation of pre-reclamation conditions.



Task III - Design

Subtask IIIA - Site Reconnaissance and Exploration

This subtask includes site reconnaissance for project planning to establish the extent and locations of problem areas, obtain photographic documentation of the site, develop preliminary notes and sketches, review possible access routes to be used during construction, etc. This subtask also includes planning for execution of the engineering/design scope of services. Since this project includes draining mine portals, POTESTA has included three grab samples of mine drainage and analysis of pH, iron, aluminum, and manganese.

Subtask IIIB - Surveying and Mapping

We are proposing to develop aerial topographic mapping for this project due to the size of the area over which the mine portals are located.

Aerial mapping coverage is proposed to include approximately 50 acres.

POTESTA will survey to establish ground control for development of aerial topographic mapping. Project baselines will be established at each site. Topographic mapping will be prepared at an appropriate scale and with a contour interval of 2 feet.

A minimum of three survey control points will be established and shown on the mapping. Found corner/property monumentation will be located during field surveying. Existing structures including pipes and culverts will be located. Pipe sizes and type will be noted on the survey. POTESTA will survey locations of existing visible utilities, as well as utility locations marked following a locate request by POTESTA to WV 811.

Borings drilled for setting piezometers under the geotechnical exploration will be surveyed for horizontal and vertical location.

Subtask IIIC – Geotechnical Exploration

This subtask includes drilling test borings to determine the elevation of coal seam/mine workings and depth of impounded water. Three borings equipped with casing to serve as piezometers are planned to be installed. Reclamation and revegetation of drill roads will be performed. Borings are estimated to be 50 feet deep, and drilled at the approximate locations shown on Figure 3.

Borings will include hollow stem augering, split spoon sampling and standard penetration testing, and rock coring. One and one-half inch diameter PVC pipe (piezometers) will be set in borings encountering voids drilled above the suspected deep mine entries to be used to monitor water levels



during mine dewatering and mine seal construction. PVC casing will be backfilled with auger cuttings at the ground surface. No sand pack is proposed. PVC casing will be installed above the ground surface with a lockable protective covering. One and one-half inch diameter casing is proposed since it can be installed through the drill stems in the event gob or broken rock is encountered in the mine void. Borings not developed as piezometers will be backfilled with auger cuttings. POTESTA will monitor the soil/rock borings and produce boring logs documenting encountered conditions.

In the event that borings encounter solid coal, we will make up to two additional attempts by moving and drilling a new boring. The drilling footage in our cost estimate reflects three attempts. Second and third attempt borings will be drilled only if needed.

Disturbed areas resulting from drilling will be seeded and mulched. Access roads and drill pads will be regraded to as close to original contours as practical.

Subtask IIID - Analysis and Design

This subtask includes developing a conceptual reclamation plan for the site. POTESTA will prepare a 20 to 30 percent conceptual plan showing the proposed reclamation for the site. This will include the type, location, and size of the proposed mine seals (drainage channels and/or control structures below mine seals will also be shown), access to the work area, etc. The conceptual plan will include proposed construction limits to allow for adequate access to the work areas. Property line information will be developed using tax maps. POTESTA will meet with the WVDEP, AML on site to discuss our conceptual plan and will incorporate comments from the WVDEP, AML into our design packages.

Subtask IIIE - Preparation of Plans, Specifications and Engineer's Cost Estimate

This subtask involves the design and preparation of construction drawings, technical specifications, engineer's construction cost estimate, and contractor's bid form after receiving WVDEP, AML's concurrence with the 20 to 30 percent conceptual plan from Subtask IIID. POTESTA will prepare and make the following submissions to WVDEP, AML including the previously referenced items:

- 1. 60 percent complete submission;
- 2. 90 percent complete submission;
- 3. Final documents issued for bidding and construction.

A review meeting will be conducted with WVDEP, AML following the 60 percent and 90 percent complete submissions to review WVDEP, AML comments and the responses required to address the comments. Following these meetings, we will revise the preliminary design documents based on WVDEP, AML review comments and prepare the next submission of the bidding/construction



documents. We have included minimal time to make revisions to the bidding documents following WVDEP, AML review. Extensive review comments/revisions requested by WVDEP, AML will necessitate a request for change order by POTESTA.

Subtask IIIF - Permitting

This subtask includes preparation and submission of the appropriate application forms and supporting documents for the following permits/approvals:

- 1. West Virginia Division of Highways (WVDOH) MM-109 encroachment permit.
- 2. WVDEP National Pollutant Discharge Elimination System (NPDES) General Construction Stormwater Permit.

POTESTA will prepare the application for the MM-109 permit for signature by the WVDEP, AML, and submit the permit application to the appropriate office.

WVDEP has requested that POTESTA prepare the application for the NPDES General Construction Stormwater Permit, and once a construction contract has been awarded, that POTESTA process a permit modification to add the construction contractor as a co-applicant.

POTESTA will prepare and submit the NPDES application, provide written response on behalf of WVDEP, AML to WVDEP Environmental Enforcement notices, submit renewal/reissuance requests for the permit, and apply for the Notice of Termination.

WVDEP, AML will be listed as the original applicant, and once a construction contractor has been selected, the NPDES permit will be transferred to the contractor or the contractor will be added as a co-applicant.

The contractor will be responsible for permit modifications if required by Division of Water and Waste.

Subtask IIIG - Pre-Bid Conference

POTESTA will provide a senior level engineer or the project manager who was involved in the overall project design to conduct the on-site pre-bid conference. The planned construction monitor who will provide construction oversight will also attend the pre-bid meeting. POTESTA's realty agent will also attend the pre-bid conference (hours are included under the realty section). POTESTA will conduct the pre-bid meeting including bidder information, providing an overview of the project requirements, video-recording of the meeting, documenting bidder questions and responses to the questions in a pre-bid meeting memorandum, keeping the pre-bid meeting sign-in



sheet, and preparation of addenda which may be required. Pre-bid conference documents and video will be uploaded to AMLNET by POTESTA.

Subtask IIIH - Pre-Construction Conference

POTESTA will provide a senior level engineer or the project manager who was involved in the overall project design to conduct the on-site pre-construction conference. The planned construction monitor who will provide construction oversight will also attend the pre-construction conference. POTESTA's realty agent will also attend the pre-construction conference (hours are included under the realty section of our cost proposal). POTESTA will video record the pre-construction conference. Project submittals from the construction contractor will be reviewed and approved by POTESTA. The video recording and submittals will be uploaded to AMLNET by POTESTA.

Design files (plans, specifications, engineer's construction cost estimate, permit applications, permits, geotechnical exploration information, etc.) shall be uploaded to AMLNET by POTESTA. These same files will also be submitted to WVDEP, AML's project manager.

Task IV - Construction Oversight

This task includes continuous project construction oversight, observation/monitoring, documentation, engineering, and related office services. No testing such as aggregate gradation, soundness, durability, soil moisture/density relationship testing, field density tests, concrete or grout testing, soil analysis, etc. is included. POTESTA will review results of required quality assurance/control tests provided by the construction contractor. POTESTA will provide an assigned (and WVDEP, AML-approved) construction monitor qualified to perform such services.

Construction oversight services will include a pre-construction review, landowner contact, pre-construction photographs, identification of potential hazards, review of plans to identify conditions on-site which may contradict plans, etc.

POTESTA will provide construction management services during the project acting as an agent for WVDEP, Division of Land Restoration, Abandoned Mine Lands and Reclamation. Note that POTESTA cannot issue a stop work notice (suspension of work) to the construction contractor. If POTESTA would issue a stop work notice, this could void our professional liability insurance coverage. POTESTA's construction monitor will call to the attention of the contractor failure of the work or materials to conform to the specifications and suggest that the contractor correct the noncompliance work. If this communication is not effective, POTESTA will contact WVDEP, AML's construction representative and explain the situation so WVDEP, AML can suspend the contractor's work if necessary. POTESTA will document instances where the contractor's work is not in compliance including date, time, contractor representative who was informed of



non-compliant work, summary of non-compliant activity, verbal notice that payment will not be approved for non-compliant work, and verbal notice that non-compliant work will require removal.

During construction, POTESTA's monitor will be present on-site when the contractor is performing construction. POTESTA's monitor will document construction activities, take photographs to document stages of the work, keep track of pay items and quantities incorporated in the construction, prepare daily logs and photographs with captions to be uploaded to AMLNET within 48 hours of the activity, track materials and quantities on a daily basis, and prepare weekly and monthly summaries of construction and quantities.

We have assumed a duration of construction of 120 calendar days for this project. Construction monitor time has been proposed at up to 10 hours per day, 7 AM to 5 PM, 5 days per week including on-site activities and time to prepare daily documentation and uploading to AMLNET.

POTESTA will receive, review, and process construction contractor pay applications, review and approve as-built drawings prepared by the construction contractor, prepare a professional engineer's project certification, prepare and issue a substantial completion notice, conduct the final inspection, and prepare and issue the final release. These documents will be uploaded to AMLNET by POTESTA.

This task also includes administrative support to oversee compliance with applicable laws, such as certified payroll and for verifying the contractor's compliance with the Davis-Bacon Act and Infrastructure Investment and Jobs Act (IIJA) with regard to employing current and former employees of the coal industry.

The effort required for this task depends on the contractor's construction schedule, rate of construction, weather and time for completion. We have made our best guess as to the time required for construction monitoring services as stated above.

Task V - Post-Construction Oversight

This task includes site visits upon the completion of reclamation construction to document the performance of reclamation measures and site conditions. Site visits are required until the Notice of Termination for the construction stormwater permit has been submitted to WVDEP permitting. Each visit will be documented in a daily report style log with photographs attached. Post-construction oversight reports will be uploaded to AMLNET. We have included three visits during the warranty period and final release inspection.



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

Purchase Order No.: CEOI DEP2400000001 Contract Name: 2023 AML Contract S2

Commodity Line:

Project Name: Toney Fork Portals

SCHEDULE PER CONTRACT

TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	1	UNIT PRICE	TOTAL PRICE
TASK I	NEPA & EA					
A	AGENCY COORDINATIONS (including Office Work, AMLNET, etc.)					
1	Principal	HR	1	\$	295.00	\$ 295.00
2	Chief Engineer	HR	2	\$	255.00	\$ 510.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	18	\$	175.00	\$ 3,150.00
4	Staff Engineer / Staff Scientist	HR	14	\$	130.00	\$ 1,820.00
5	Engineer / Scientist	HR		\$	110.00	\$
6	CADD	HR	5	\$	135.00	\$ 675.00
7	Clerical	HR	6	\$	95.00	\$ 570.00
8	Mileage	Mile	100	\$	0.67	\$ 67.00
	Subtotal Task I.A:					\$ 7,087.00
В	PUBLIC INVOLVEMENT (including Legal Ads, Public Hearings, Documents, Presen	tations, W	VDEP's Website,	etc.)		
1	Principal	HR		\$	295.00	\$
2	Chief Engineer	HR		\$	255.00	\$ -
3	Project Manager / Senior Engineer / Senior Scientist	HR		\$	175.00	\$ - 4
4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$ -
5	Engineer / Scientist	HR		\$	110.00	\$ -
6	CADD	HR		\$	135.00	\$ _
7	Clerica1	HR		\$	95.00	\$ -
8	Mileage	Mile		\$	0.67	\$ -
	Subtotal Task I.B:				IV III	\$ 1 1 5
С	STUDIES, SURVEYS & MITIGATION PLANS (as applicable)					
1	Principal Principal	HR	2	\$	295.00	\$ 590.00
2	Chief Engineer	HR	2	\$	255.00	\$ 510.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	16	\$	175.00	\$ 2,800.00
4	Staff Engineer / Staff Scientist	HR	14	\$	130.00	\$ 1,820.00
5	Engineer / Scientist	HR		\$	110.00	\$ _
6	CADD	HR		\$	135.00	\$ -
7	Clerical	HR		\$	95.00	\$ -
8	Mileage	Mile	400	\$	0.67	\$ 268.00
	Subtotal I.C:					\$ 5,988.00
D	CATEX / EA / FONSI / EIS					
1	Principal	HR	1	\$	295.00	\$ 295.00
2	Chief Engineer	HR	2	\$	255.00	\$ 510.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	24	\$	175.00	\$ 4,200.00
4	Staff Engineer / Staff Scientist	HR	10	\$	130.00	\$ 1,300.00
5	Engineer / Scientist	HR		\$	110.00	\$
6	CADD	HR	5	\$	135.00	\$ 675.00



TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE		TOTAL PRICE
7	Clerical	HR	4	\$ 95.00	\$	380.0
8	Mileage	Mile		\$ 0.67	\$	
	Subtotal I.D:				8	7,360.0
	TOTAL TASK I:				\$	20,435.0
ASK II	REALTY					
A	EXPLORATORY RIGHTS OF ENTRY (EROE)					
1	Principal	HR	1	\$ 295.00	\$	295.0
2	Chief Engineer	HR	2	\$ 255.00	\$	510.0
3	Project Manager / Senior Engineer / Senior Scientist	HR	6	\$ 175.00	\$	1,050.0
4	Realty Agent	HR	40	\$ 115.00	\$	4,600.0
5	Engineer / Scientist	HR		\$ 110.00	\$	
6	CADD	HR		\$ 135.00	\$	-
7	Clerical	HR	2	\$ 95.00	\$	190.0
8	Mileage	Mile	250	\$ 0.67	\$	167.50
	Subtotal II.A:				s	6,812.5
В	CONSTRUCTION RIGHTS OF ENTRY (CROE)					
1	Principal	HR	1	\$ 295.00	\$	295.00
2	Chief Engineer	HR	2	\$ 255.00	\$	510.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	10	\$ 175.00	\$	1,750.00
4	Realty Agent	HR	40	\$ 115.00	\$	4,600.00
5	Engineer / Scientist	HR		\$ 110.00	\$	-
6	CADD	HR		\$ 135.00	\$	_
7	Clerical	HR	2	\$ 95.00	\$	190.00
8	Mileage	Mile	250	\$ 0.67	\$	167.50
	Subtotal II.B:		15. TO 1		\$	7,512.50
	PRE-BID CONFERENCE					
1	Principal	HR		\$ 295.00	\$	-
2	Chief Engineer	HR		\$ 255.00	\$	-
3	Project Manager / Senior Engineer / Senior Scientist	HR		\$ 175.00	\$	
4	Realty Agent	HR	5	\$ 115.00	\$	575.00
5	Engineer / Scientist	HR		\$ 110.00	\$	-
6	CADD	HR		\$ 135.00	\$	_
7	Clerical	HR	1	\$ 95.00	\$	95.00
8	Mileage	Mile	50	\$ 0.67	\$	33.50
	Subtotal II.C:				5	703.50
	PRE-CONSTRUCTION CONFERENCE					
1	Principal *	HR		\$ 295.00	\$	-
2	Chief Engineer	HR		\$ 255.00	\$	-
3	Project Manager / Senior Engineer / Senior Scientist	HR		\$ 175.00	\$	_
4	Realty Agent	HR	5	\$ 115.00	\$	575.00
5	Engineer / Scientist	HR		\$ 110.00	\$	
6	CADD	HR		\$ 135.00	\$	-
7	Clerical	HR	1	\$ 95.00	\$	95.00
8	Mileage	Mile	50	\$ 0.67	\$	33.50
	Subtotal II.D:				\$	703.50
	TOTAL TASK II:					15,732.00



TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY		INIT RICE		TOTAL PRICE
TASK III	: DESIGN						
A	SITE RECONNAISSANCE AND EXPLORATION						
1	Principal	HR	1	\$	295.00	\$	295.00
2	Chief Engineer	HR	18	\$	255,00	\$	4,590.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	26	\$	175.00	\$	4,550.0
4	Staff Engineer / Staff Scientist	HR	14	\$	130.00	\$	1,820.0
5	Engineer / Scientist	HR		\$	110.00	\$	
6	Clerical	HR	4	\$	95.00	\$	380.0
7	Water Sample (pH, iron, aluminum, manganese)	EA	3	\$	90.00	\$	270.0
8	Mileage	Mile	100	\$	0.67	\$	67.0
	Subtotal III.A:					8	11,972.00
В	SURVEYING & MAPPING						
1	Principal	HR	1	\$	295.00	\$	295.00
2	Chief Engineer	HR	3	\$	255,00	\$	765,00
3	Project Manager / Senior Engineer / Senior Scientist	HR	4	\$	175.00	\$	700,00
4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	
5	Engineer / Scientist	HR		\$	110,00	\$	
6	CADD	HR	12	\$	135.00	\$	1,620.00
7	Clerical	HR		\$	95.00	\$	-
8	Professional Surveyor / Chief Surveyor	HR	14	\$	160.00	\$	2,240.00
9	2-Man Survey Crew	HR	56	\$	150.00	\$	8,400.00
10	Topographic Mapping Development	AC	50	\$	38.00	\$	1,900.00
11	Mileage	Mile	500	\$	0.67	\$	335.00
	Subtotal III.B:					S	16,255.00
c	GEOTECHNICAL EXPLORATION						
1	Principal	HR	1	\$	295.00	\$	295.0
2	Chief Engineer	HR	2	\$	255.00	\$	510.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	8	\$	175.00	\$	1,400.00
4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	_
5	Engineer / Scientist	HR	70	\$	110.00	\$	7,700.00
6	CADD	HR		\$	135.00	\$	
7	Clerical	HR	2	\$	95.00	\$	190.00
8	Mobilization	LS	1	\$	4,480.00	\$	4,480.00
9	Soil Augering	LF	135	\$	44.80	\$	6,048.00
10	Rock Coring	LF	315	\$	44.80	\$	14,112.00
11	Piezometer Installation	LF	150	\$	28.00	\$	4,200.0
12	Heavy Equipment for Access	DAY	7	\$	952.00	\$	6,664.00
13	Reclamation	LS	1	_	3,360.00	\$	3,360.00
14	Water Set'up	ĒΑ	9	-	1,120.00	\$	10,080.00
15	Lockable Cover for Piezometers	EA	3	\$	560.00	\$	1,680.0
16	Drill Crew Per Diem	Day				\$	92
17	Mileage	Mile	750	\$	0.67	\$	502.50
	Subtotal III.C:					\$	61,221.50

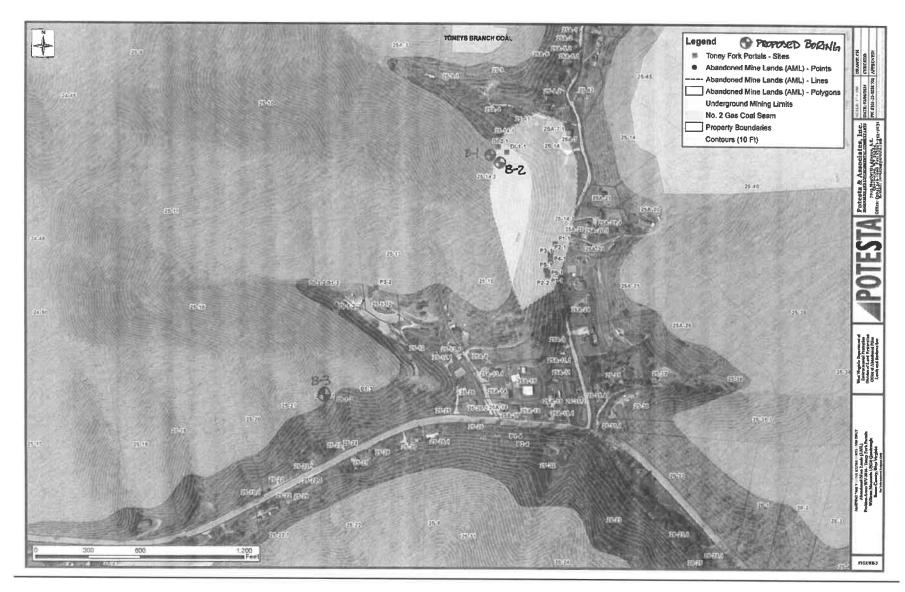


TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY		UNIT PRICE		TOTAL PRICE
D	ANALYSIS AND DESIGN		ĺ				
1	Principal i	HR	2	\$	295.00	\$	590.0
2	Chief Engineer	HR	10	\$	255.00	\$	2,550.0
3	Project Manager / Senior Engineer / Senior Scientist	HR	22	\$	175.00	\$	3,850.0
4	Staff Engineer / Staff Scientist	HR	12	\$	130.00	\$	1,560.0
5	Engineer / Scientist	HR		\$	110.00	\$	_
6	CADD	HR	32	\$	135.00	\$	4,320.0
7	Clerical	HR	4	\$	95.00	\$	380.0
8	Mileage	Mile	100	\$	0.67	\$	67.0
	Subtotal III.D:			120		\$	13,317.0
Е	PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEER'S ESTIMATE						
1	Principal	HR	1	\$	295.00	\$	295.0
2	Chief Engineer	HR	12	\$	255.00	\$	3,060.0
3	Project Manager / Senior Engineer / Senior Scientist	HR	12	\$	175.00	\$	2,100.0
4	Staff Engineer / Staff Scientist	HR	4	\$	130.00	\$	520.00
5	Engineer / Scientist	HR	16	\$	110.00	\$	1,760.00
6	CADD	HR	164	\$	135.00	\$	22,140.00
7	Clerical	HR	6	\$	95.00	\$	570.00
8	Mileage	Mile	100	\$	0.67	\$	67.00
	Subtotal III.E:					\$	30,512.00
F	PERMITTING						
1	Principal	HR	1	\$	295.00	\$	295.00
2	Chief Engineer	HR	2	\$	255.00	\$	510.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	16	\$	175.00	\$	2,800.00
4	Staff Engineer / Staff Scientist	HR	64	\$	130.00	\$	8,320.00
5	Engineer / Scientist	HR		\$	110.00	\$	
6	CADD	HR	5	\$	135.00	\$	675.00
7	Clerical	HR	12	\$	95.00	\$	1,140.00
8	Mileage	Mile		\$	0.67	\$	_
	Subtotal III.F:		11111391		1000	_	13,740.00
G	PRE-BID CONFERENCE						
1	Principal	HR		\$	295.00	\$	
2	Chief Engineer	HR		\$	255.00	\$	
3	Project Manager / Senior Engineer / Senior Scientist	HR	14	\$	175.00	\$	2,450.00
4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	-
5	Engineer / Scientist	HR		\$	110.00	\$	-
6	CADD	HR		\$	135.00	\$	
7	Clerical	HR	4	\$	95.00	\$	380.00
8	Construction Monitor	HR	8	\$	95.00	\$	760.00
9	Mileage .	Mile	50	\$	0.67	\$	33.50
	Subtotal III.G:		1 -4 16 19	ij.	1 7 7	\$	3,623.50
H I	PRE-CONSTRUCTION CONFERENCE					*	2,020130
1	Principal Principal	HR		\$	295.00	\$	
2	Chief Engineer	HR		\$	255.00	\$	
3	Project Manager / Senior Engineer / Senior Scientist	HR	8	\$		\$	1,400.00



TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE		TOTAL PRICE
4	Staff Engineer / Staff Scientist	HR		\$ 130.00	\$	-
5	Engineer / Scientist	HR		\$ 110.00	\$	-
6	CADD	HR		\$ 135.00	\$	-
7	Clerical	HR	2	\$ 95.00	\$	1.90.0
8	Construction Monitor	HR	8	\$ 95.00	\$	760.0
9	Mileage	Mile	50	\$ 0.67	\$	33.5
MILLO	Subtotal III.H:				\$	2,383.5
	TOTAL TASK III:				\$	153,024.5
ASK IV:	CONSTRUCTION OVERSIGHT					
A	CONSTRUCTION INSPECTION					
1	Principal	HR	14	\$ 295.00	\$	4,130.0
2	Chief Engineer	HR	20	\$ 255.00	\$	5,100.0
3	Project Manager / Senior Engineer / Senior Scientist	HR	172	\$ 175.00	\$	30,100.0
4	Staff Engineer / Staff Scientist	HR		\$ 130.00	\$	-
5	Engineer / Scientist	HR		\$ 110.00	\$	35
6	CADD	HR		\$ 135.00	\$	-
7	Clerical	HR	80	\$ 95.00	\$	7,600.0
8	Construction Monitor	HR	857	\$ 95.00	\$	81,415.0
9	Mileage	Mile	4285	\$ 0.67	\$	2,870.9
	Subtotal IV.A:				S	131,215.9.
	TOTAL TASK IV:				\$.	131,215.9.
ASK V:	POST-CONSTRUCTION OVERSIGHT					
A	FIELD VISITS / INSPECTIONS					
1	Principal	HR		\$ 295.00	\$	-
2	Chief Engineer	HR	2	\$ 255,00	\$	510.0
3	Project Manager / Senior Engineer / Senior Scientist	HR	9	\$ 175.00	\$	1,575.0
4	Staff Engineer / Staff Scientist	HR		\$ 130.00	\$	-
5	Engineer / Scientist	HR		\$ 110.00	\$	-
6	CADD	HR		\$ 135.00	\$	-
7	Clerical	HR	3	\$ 95.00	\$	285.0
8	Construction Monitor	HR	26	\$ 95.00	\$	2,470.0
9	Mileage	Mile	150	\$ 0.67	\$	100.5
	Subtotal V.A:				8	4,940.5
	TOTAL TASK V:				\$	4,940.5
	TOTAL TASKS I THROUGH V:		HIV MEDICATION		\$.	325,347.9





Project/Commodity Line 4: Mitchell Cemetery Complex

This project includes 21 portals and an area of seepage located along Left Fork of Lens Creek. The portals are located behind a locked gate. The OSM-51 describes open and draining portals, collapsed and draining portals, open and dry portals (not venting), and open venting and draining portals. Most of the portals identified are located on the eastern hillside, across the stream from the existing access road. Five portals are located on the western hillside.

The portals included on this project are remote and not near houses, roads used by the public, etc. As a result, we are not proposing geotechnical exploration.

The envisioned reclamation will include access road construction, wet mine seals, dry mine seals, bat gate mine seals where indicated by the Phase I bat assessment, splash pads, and drainage conveyances below wet mine seals with significant discharges. Temporary stream crossings will be required. Disturbed areas will be reclaimed and revegetated.

Planning, realty, design, and construction oversight scope of services follows.

Task I – National Environmental Policy Act (NEPA) and Environmental Assessment (EA)

This task includes agency coordination and development of an Environmental Assessment (EA) to obtain a finding of no significant impact (FONSI).

POTESTA will review project information available from WVDEP, AML including OSM-51 documents and consultation letters that may have been prepared/sent for the project. The OSM-51 form will be reviewed for accuracy with the known project information. The OSM-51 will be sent with a cover letter to West Virginia Division of Natural Resources (WVDNR), State Historic Preservation Office (SHPO), and the regional planning council requesting comments on the project. The United States Fish and Wildlife Service (USFWS) IPaC system will be accessed to determine potential impacts to threatened and endangered species. An initial portal assessment will be completed by WVDEP, AML to determine if the portals are considered to be suitable bat habitat. POTESTA will update the IPaC information and submit the IPaC forms and a consultation request to the USFWS, if needed. This proposal does not include mist netting bat surveys. Projects on national forest land will require the OSM-51 and letter be sent to the Forest Service (FS). Letters to and from the agencies will be uploaded to AMLNET.

As development and engineering design/preparation of the plans and specifications proceeds, the OSM-51 will be reviewed along with the plans and specifications to provide consistency.

Based on discussions with WVDEP, AML, the AML projects will require preparation of an EA and submission of the EA to the Office of Surface Mining for review and approval. We have assumed



that an EA level NEPA review will be required for this project. A preliminary EA will be prepared using the EA template provided and will be submitted to the WVDEP, AML for initial review. Upon completion of the initial review, POTESTA will finalize the EA document and submit to the necessary agencies.

A preliminary table of contents for the EA is included below.

Table of Contents

Chapter 1: Purpose and Need

- A. Purpose of the Proposed Action
- B. Need for the Proposed Action
- C. Scoping
- D. List of Related Laws and Executive Orders

Chapter 2: Proposed Action and Appropriate Alternatives and Mitigation Measures

- A. Alternatives Considered
- B. Alternatives Considered but Eliminated from Detailed Analysis

Chapter 3: Affected Environment and Environmental Impacts

- A. Environmental Consequences of the Proposed Actions and Mitigation Measures
- B. Affected Resources Including Special Areas of Consideration
- C. Summary

Chapter 4: Consultations and Coordination

- A. Persons and Agencies Contacted to Assist in the Preparation of the Environmental Assessment
- B. List of Potential Permits and Responsible Parties
- C. Public Involvement
- D. Preparer
- E. Signatures

Chapter 5: References and Appendices

- A. References
- B. Appendices

Following WVDEP, AML approval, final environmental documents will be uploaded to AMLNET.



Per WVDEP, AML, public involvement process activities including the public meetings will be conducted by the WVDEP, AML Planning Group. POTESTA's cost for this task does not include public involvement hours or costs.

Task II – Realty

Realty services for the project will include obtaining exploratory rights of entry (EROE), construction rights of entry (CROE), maintenance rights of entry (MROE) and attendance of the pre-bid conference and pre-construction conference meetings.

Prior to field work (surveying, drilling, field reconnaissance, etc.), POTESTA will visit the courthouse to perform research to determine landowners that could be impacted by the project including access to the work area. POTESTA will obtain copies of tax maps, deeds for current landowners, ownership documentation, and landowner contact information.

POTESTA will then make contact with landowners to obtain EROE. This may require more than one visit with each landowner. Attempts at landowner contact will be documented. Landowner concerns will be noted. After discussion with the WVDEP, AML realty representative, POTESTA will attempt to finalize negotiations with the landowners and obtain signed EROEs for each impacted parcel. EROEs including legal ownership information/documentation and project photographs will be provided to WVDEP, AML's realty representative for review and subsequent uploading to AMLNET. This will include pertinent property information, landowner information, and legal ownership documentation.

WVDEP, AML indicated that some landowners may request to be an additional insured for the CROE. It is important to note that if this happens, the landowner making the request should be added as an "additional insured," not an "additional named insured."

Review of tax maps for the project area indicates the mine portals are located on two different parcels.

Once plans and specifications have been developed for each project, POTESTA will again visit the courthouse to verify that property owner and property ownership information is still valid, or obtain current information and documentation if this has changed. POTESTA will subsequently make contact with each affected landowner. Attempts at landowner contact will be documented. Proposed construction/reclamation activities will be reviewed with each landowner. Landowner demands will be noted and shared/discussed with our WVDEP, AML realty contact. If appropriate, landowner demands will be incorporated into the plans and specifications. POTESTA will then meet with each landowner and present them with a CROE. The CROE typically includes a clause granting WVDEP, AML right of entry for maintenance activities. Upon execution of the CROE



form, the CROE including legal ownership information/documentation and project photographs will be provided to WVDEP, AML's realty representative for review and subsequent uploading to AMLNET.

POTESTA's realty agent will keep a journal/log while working on this task. The journal/log will include duration of time spent working on realty activities, mileage, and a record of landowners or others that POTESTA's realty agent has interactions with pertaining to Task II activities.

POTESTA's realty agent will attend the pre-bid and pre-construction conference and be able to respond to questions about property ownership, potential landowner issues, and CROE information.

Prior to construction, POTESTA will visit each impacted parcel of land to obtain photographic documentation of such items as general site conditions, property monuments, fences, trees in close proximity of planned ground disturbance, existing driveways and roads, etc. Photographs will be uploaded to AMLNET for documentation of pre-reclamation conditions.

Task III - Design

Subtask IIIA - Site Reconnaissance and Exploration

This subtask includes site reconnaissance for project planning to establish the extent and locations of problem areas, obtain photographic documentation of the site, develop preliminary notes and sketches, review possible access routes to be used during construction, etc. This subtask also includes planning for execution of the engineering/design scope of services. Since this project includes draining mine portals, POTESTA has included three grab samples of mine drainage and analysis of pH, iron, aluminum, and manganese.

Subtask IIIB - Surveying and Mapping

We are proposing to develop aerial topographic mapping for this project due to the size of the area over which the mine portals are located.

Aerial mapping coverage is proposed to include approximately 85 acres.

POTESTA will survey to establish ground control for development of aerial topographic mapping. Project baselines will be established along Left Fork Road. Topographic mapping will be prepared at an appropriate scale and with a contour interval of 2 feet.

A minimum of three survey control points will be established and shown on the mapping. Found corner/property monumentation will be located during field surveying. Existing structures including pipes and culverts will be located. Pipe sizes and type will be noted on the survey. POTESTA will



survey locations of existing visible utilities, as well as utility locations marked following a locate request by POTESTA to WV 811.

Subtask IIIC – Geotechnical Exploration

No geotechnical exploration is proposed for this site.

Subtask IIID - Analysis and Design

This subtask includes developing a conceptual reclamation plan for the site. POTESTA will prepare a 20 to 30 percent conceptual plan showing the proposed reclamation for the site. This will include the type, location, and size of the proposed mine seals (drainage channels and/or control structures below mine seals will also be shown), access to the work area, etc. The conceptual plan will include proposed construction limits to allow for adequate access to the work areas. Property line information will be developed using tax maps. POTESTA will meet with the WVDEP, AML on site to discuss our conceptual plan and will incorporate comments from the WVDEP, AML into our design packages.

Subtask IIIE - Preparation of Plans, Specifications and Engineer's Cost Estimate

This subtask involves the design and preparation of construction drawings, technical specifications, engineer's construction cost estimate, and contractor's bid form after receiving WVDEP, AML's concurrence with the 20 to 30 percent conceptual plan from Subtask IIID. POTESTA will prepare and make the following submissions to WVDEP, AML including the previously referenced items:

- 1. 60 percent complete submission;
- 2. 90 percent complete submission;
- 3. Final documents issued for bidding and construction.

A review meeting will be conducted with WVDEP, AML following the 60 percent and 90 percent complete submissions to review WVDEP, AML comments and the responses required to address the comments. Following these meetings, we will revise the preliminary design documents based on WVDEP, AML review comments and prepare the next submission of the bidding/construction documents. We have included minimal time to make revisions to the bidding documents following WVDEP, AML review. Extensive review comments/revisions requested by WVDEP, AML will necessitate a request for change order by POTESTA.

Subtask IIIF - Permitting

This subtask includes preparation and submission of the appropriate application forms and supporting documents for the following permits/approvals:



- 1. West Virginia Division of Highways (WVDOH) MM-109 encroachment permit.
- 2. WVDEP National Pollutant Discharge Elimination System (NPDES) General Construction Stormwater Permit.

POTESTA will prepare the application for the MM-109 permit for signature by the WVDEP, AML, and submit the permit application to the appropriate office.

WVDEP, AML has requested that POTESTA prepare the application for the NPDES General Construction Stormwater Permit, and once a construction contract has been awarded, that POTESTA process a permit modification to add the construction contractor as a co-applicant.

POTESTA will prepare and submit the NPDES application, provide written response on behalf of WVDEP, AML to WVDEP Environmental Enforcement notices, submit renewal/reissuance requests for the permit, and apply for the Notice of Termination.

WVDEP, AML will be listed as the original applicant, and once a construction contractor has been selected, the NPDES permit will be transferred to the contractor or the contractor will be added as a co-applicant.

The contractor will be responsible for permit modifications if required by Division of Water and Waste.

Subtask IIIG - Pre-Bid Conference

POTESTA will provide a senior level engineer or the project manager who was involved in the overall project design to conduct the on-site pre-bid conference. The planned construction monitor who will provide construction oversight will also attend the pre-bid meeting. POTESTA's realty agent will also attend the pre-bid conference (hours are included under the realty section). POTESTA will conduct the pre-bid meeting including bidder information, providing an overview of the project requirements, video-recording of the meeting, documenting bidder questions and responses to the questions in a pre-bid meeting memorandum, keeping the pre-bid meeting sign-in sheet, and preparation of addenda which may be required. Pre-bid conference documents and video will be uploaded to AMLNET by POTESTA.

Subtask IIIH - Pre-Construction Conference

POTESTA will provide a senior level engineer or the project manager who was involved in the overall project design to conduct the on-site pre-construction conference. The planned construction monitor who will provide construction oversight will also attend the pre-construction conference. POTESTA's realty agent will also attend the pre-construction conference (hours are included under



the realty section of our cost proposal). POTESTA will video record the pre-construction conference. Project submittals from the construction contractor will be reviewed and approved by POTESTA. The video recording and submittals will be uploaded to AMLNET by POTESTA.

Design files (plans, specifications, engineer's construction cost estimate, permit applications, permits, geotechnical exploration information, etc.) shall be uploaded to AMLNET by POTESTA. These same files will also be submitted to WVDEP, AML's project manager.

Task IV – Construction Oversight

This task includes continuous project construction oversight, observation/monitoring, documentation, engineering, and related office services. No testing such as aggregate gradation, soundness, durability, soil moisture/density relationship testing, field density tests, concrete or grout testing, soil analysis, etc. is included. POTESTA will review results of required quality assurance/control tests provided by the construction contractor. POTESTA will provide an assigned (and WVDEP, AML-approved) construction monitor qualified to perform such services.

Construction oversight services will include a pre-construction review, landowner contact, pre-construction photographs, identification of potential hazards, review of plans to identify conditions on-site which may contradict plans, etc.

POTESTA will provide construction management services during the project acting as an agent for WVDEP, Division of Land Restoration, Abandoned Mine Lands and Reclamation. Note that POTESTA cannot issue a stop work notice (suspension of work) to the construction contractor. If POTESTA would issue a stop work notice, this could void our professional liability insurance coverage. POTESTA's construction monitor will call to the attention of the contractor failure of the work or materials to conform to the specifications and suggest that the contractor correct the noncompliance work. If this communication is not effective, POTESTA will contact WVDEP, AML's construction representative and explain the situation so WVDEP, AML can suspend the contractor's work if necessary. POTESTA will document instances where the contractor's work is not in compliance including date, time, contractor representative who was informed of non-compliant work, summary of non-compliant activity, verbal notice that payment will not be approved for non-compliant work, and verbal notice that non-compliant work will require removal.

During construction, POTESTA's monitor will be present on-site when the contractor is performing construction. POTESTA's monitor will document construction activities, take photographs to document stages of the work, keep track of pay items and quantities incorporated in the construction, prepare daily logs and photographs with captions to be uploaded to AMLNET within 48 hours of the activity, track materials and quantities on a daily basis, and prepare weekly and monthly summaries of construction and quantities.



We have assumed a duration of construction of 120 calendar days for this project. Construction monitor time has been proposed at up to 10 hours per day, 7 AM to 5 PM, 5 days per week including on-site activities and time to prepare daily documentation and uploading to AMLNET.

POTESTA will receive, review, and process construction contractor pay applications, review and approve as-built drawings prepared by the construction contractor, prepare a professional engineer's project certification, prepare and issue a substantial completion notice, conduct the final inspection, and prepare and issue the final release. These documents will be uploaded to AMLNET by POTESTA.

This task also includes administrative support to oversee compliance with applicable laws, such as certified payroll and for verifying the contractor's compliance with the Davis-Bacon Act and Infrastructure Investment and Jobs Act (IIJA) with regard to employing current and former employees of the coal industry.

The effort required for this task depends on the contractor's construction schedule, rate of construction, weather and time for completion. We have made our best guess as to the time required . for construction monitoring services as stated above.

Task V – Post-Construction Oversight

This task includes site visits upon the completion of reclamation construction to document the performance of reclamation measures and site conditions. Site visits are required until the Notice of Termination for the construction stormwater permit has been submitted to WVDEP permitting. Each visit will be documented in a daily report style log with photographs attached. Post-construction oversight reports will be uploaded to AMLNET. We have included three visits during the warranty period and final release inspection.



6

CADD

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION COST PROPOSAL Purchase Order No.: CEOI DEP240000001 Contract Name: 2023 AML Contract S2 Commodity Line: Project Name: Mitchell Cemetery Complex SCHEDULE PER CONTRACT CONTRACT UNIT **TOTAL** TASK DESCRIPTION UNIT QUANTITY PRICE PRICE TASK I: NEPA & EA AGENCY COORDINATIONS (including Office Work, AMLNET, etc.) HR 295.00 295.00 2 HR 2 255.00 510.00 Chief Engineer \$ \$ 3 Project Manager / Senior Engineer / Senior Scientist HR 20 \$ 175.00 \$ 3,500.00 4 Staff Engineer / Staff Scientist HR 18 130.00 2,340.00 5 Engineer / Scientist HR 110.00 \$ 6 CADD 135.00 \$ 1,080.00 HR 8 \$ Clerical HR 6 \$ 95.00 570.00 Mile 40 0.67 26.80 Mileage \$ 8,321.80 Subtotal Task I.A: PUBLIC INVOLVEMENT (including Legal Ads, Public Hearings, Documents, Presentations, WVDEP's Website, etc.) 295.00 HR Principal 2 HR 255.00 \$ Chief Engineer 3 Project Manager / Senior Engineer / Senior Scientist HR \$ 175.00 \$ Staff Engineer / Staff Scientist HR \$ 130.00 \$ 5 Engineer / Scientist HR 110.00 \$ 135.00 CADD 6 HR Clerical HR \$ 95.00 S 8 Mile 0.67 -Subtotal Task I.B: С STUDIES, SURVEYS & MITIGATION PLANS (as applicable) Principal HR 2 295.00 590.00 255.00 765.00 2 Chief Engineer \$ HR 3 18 175.00 3,150.00 Project Manager / Senior Engineer / Senior Scientist HR \$ \$ 4 Staff Engineer / Staff Scientist HR 18 130.00 2,340.00 5 Engineer / Scientist \$ 110.00 HR CADD 135.00 6 HR \$ \$ 95.00 7 Clerical HR \$ 8 Mileage 0.67 80,40 Mile 120 \$ 6,925.40 Subtotal I.C: D CATEX / EA / FONSI / EIS Principal HR \$ 295.00 295.00 Chief Engineer HR 2 \$ 255.00 510.00 Project Manager / Senior Engineer / Senior Scientist 4,200.00 \$ 175.00 3 HR 24 1,300.00 4 Staff Engineer / Staff Scientist 10 \$ 130.00 \$ HR Engineer / Scientist HR \$ 110.00

HR

5

\$

135.00



675.00

TA	SK	DESCRIPTION	UNIT	CONTRACT QUANTITY		UNIT PRICE		TOTAL PRICE
	7	Clerical	HR	4	\$	95.00	\$	380.0
	8	Mileage	Mile		\$	0.67	\$	2
B		Subtotal I.D:					8	7,360.00
		TOTAL TASK I:					\$	22,607.20
ΓAS	K II:	REALTY						
A		EXPLORATORY RIGHTS OF ENTRY (EROE)						
T	1	Principal	HR	1	\$	295.00	\$	295.00
	2	Chief Engineer	HR	2	\$	255.00	\$	510.00
	3	Project Manager / Senior Engineer / Senior Scientist	HR	6	\$	175.00	\$	1,050.00
1	4	Realty Agent	HR	32	\$	115.00	\$	3,680.00
	5	Engineer / Scientist	HR		\$	110.00	\$	-
1	5	CADD	HR		\$	135.00	\$	-
1	7	Clerical	HR	2	\$	95.00	\$	190.00
1	3	Mileage	Mile	40	\$	0.67	\$	26.80
		Subtotal II.A:					\$	5,751.80
В		CONSTRUCTION RIGHTS OF ENTRY (CROE)						
	1	Principal	HR	1	\$	295.00	\$	295.00
-	2	Chief Engineer	HR	2	\$	255.00	\$	510.00
1	_	Project Manager / Senior Engineer / Senior Scientist	HR	12	\$	175.00	\$	2,100.00
-	1	Realty Agent	HR	32	\$	115.00	\$	3,680.00
-	5	Engineer / Scientist	HR		\$	110.00	\$	-
-	5	CADD	HR		\$	135.00	\$	-
1	_	Clerical	HR	2	\$	95.00	\$	190.00
- 1	_	Mileage	Mile	60	\$	0.67	\$	40.20
		Subtotal II.B:					s	6,815.20
С	+	PRE-BID CONFERENCE						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
1		Principal	HR		\$	295.00	\$	
1 2	-	Chief Engineer	HR		\$	255.00	\$	
3	-	Project Manager / Senior Engineer / Senior Scientist	HR		\$	175.00	\$	
4	-	Realty Agent	HR	5	\$	115.00	\$	575.00
5	-	Engineer / Scientist	HR		\$	110.00	\$	-
6	-	CADD	HR		\$	135.00	\$	
7	+	Clerical	HR	1	\$	95.00	\$	95.00
8	-	Mileage	Mile	20	\$	0.67	\$	13,40
		Subtotal II.C:	1,220		Ť	0.07	5	683.40
-	+	PRE-CONSTRUCTION CONFERENCE					100	000170
1	+	Principal Principal	HR		\$	295.00	\$	_
2	-	Chief Engineer	HR		\$		\$	_
3	-	Project Manager / Senior Engineer / Senior Scientist	HR		\$	175.00	\$	
4	_	Realty Agent	HR	5	\$	115.00	\$	575.00
5	-	Engineer / Scientist	HR		\$	110.00	\$	-
6	-	CADD CADD	HR		\$		\$	
7	_	Clerical	HR	1	\$		\$	95.00
-	+	Mileage	Mile	20	\$	0.67	\$	13.40
- 9	1 1	IMIDGE	TATHE	20	Ψ	0.07	4	10.40
8		Subtotal II.D:					\$	683.40



TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE	TOTAL PRICE
ASK III	: DESIGN				
A	SITE RECONNAISSANCE AND EXPLORATION				
1	Principal	HR	1	\$ 295.00	\$ 295.0
2	Chief Engineer	HR	15	\$ 255.00	\$ 3,825.0
3	Project Manager / Senior Engineer / Senior Scientist	HR	26	\$ 175.00	\$ 4,550.0
4	Staff Engineer / Staff Scientist	HR	14	\$ 130.00	\$ 1,820.0
5	Engineer / Scientist	HR		\$ 110.00	\$ -
6	Clerical	HR	4	\$ 95.00	\$ 380.0
7	Water Samples (pH, iron, aluminum, manganese)	EA	3	\$ 90.00	\$ 270.0
8	Mileage	Mile	80	\$ 0.67	\$ 53.6
	Subtotal III.A:				\$ 11,193.6
В	SURVEYING & MAPPING				
1	Principal	HR	1	\$ 295.00	\$ 295.0
2	Chief Engineer	HR	4	\$ 255.00	\$ 1,020.0
3	Project Manager / Senior Engineer / Senior Scientist	HR	4	\$ 175.00	\$ 700.0
4	Staff Engineer / Staff Scientist	HR		\$ 130.00	\$ -
5	Engineer / Scientist	HR	6	\$ 110.00	\$ 660.0
6	CADD	HR	14	\$ 135.00	\$ 1,890.0
7	Clerical	HR		\$ 95.00	\$ -
8	Professional Surveyor / Chief Surveyor	HR	66	\$ 160.00	\$ 10,560.0
9	2-Man Survey Crew	HR	116	\$ 150.00	\$ 17,400.0
10	Topographic Mapping Development	AC	85	\$ 38.00	\$ 3,230.0
11	Mileage	Mile	360	\$ 0.67	\$ 241.2
	Subtotal III.B:				\$ 35,996.2
С	GEOTECHNICAL EXPLORATION				
1	Principal	HR		\$ 295.00	\$ -
2	Chief Engineer	HR		\$ 255.00	\$ -
3	Project Manager / Senior Engineer / Senior Scientist	HR		\$ 175.00	\$ -
4	Staff Engineer / Staff Scientist	HR		\$ 130.00	\$ -
5	Engineer / Scientist	HR		\$ 110.00	\$ -
6	CADD	HR		\$ 135.00	\$ -
7	Clerical	HR		\$ 95.00	\$ -
8	Mobilization	LS			\$ -
9	Soil Augering	LF			\$
10	Rock Coring	LF			\$ -
11	Piezometer Installation	LF			\$ -
12	Heavy Equipment	HR			\$ -
13	Reclamation	LS			\$ -
14	Laboratory Analysis	LS			\$ -
15	Drill Crew Per Diem	Day			\$ -
16	Mileage	Mile		\$ 0.67	\$ -
	Subtotal III.C:	- 11		0.01	s -

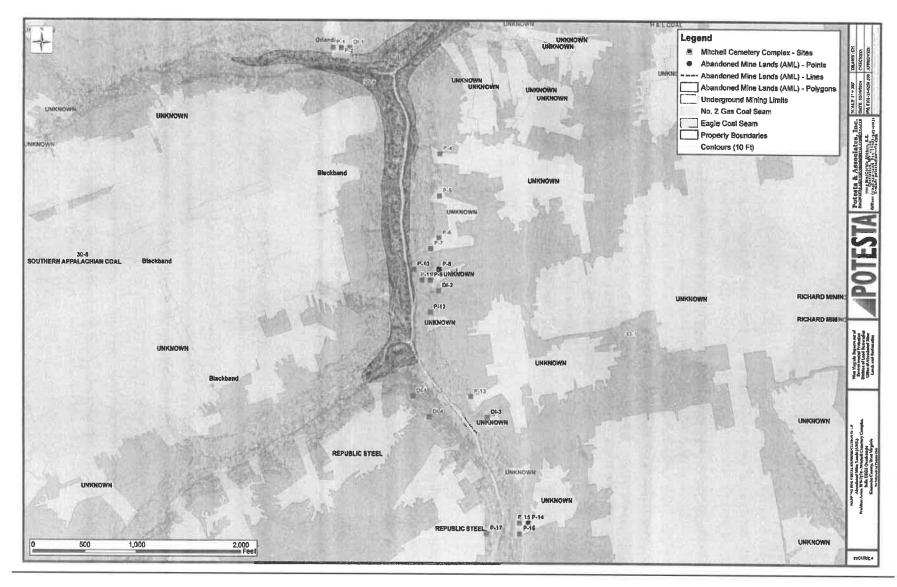


TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE	TOTAL PRICE
D	ANALYSIS AND DESIGN				
1	Principal	HR	2	\$ 295.00	\$ 590.0
2	Chief Engineer	HR	12	\$ 255.00	\$ 3,060.0
3	Project Manager / Senior Engineer / Senior Scientist	HR	24	\$ 175.00	\$ 4,200.0
4	Staff Engineer / Staff Scientist	HR	14	\$ 130.00	\$ 1,820.0
5	Engineer / Scientist	HR		\$ 110.00	\$ -
6	CADD	HR	30	\$ 135.00	\$ 4,050.0
7	Clerical	HR	4	\$ 95.00	\$ 380.0
8	Mileage	Mile	60	\$ 0.67	\$ 40.2
	Subtotal III.D:				\$ 14,140.20
В	PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEER'S ESTIMATE				
1	Principal	HR	1	\$ 295.00	\$ 295.0
2	Chief Engineer	HR	14	\$ 255.00	\$ 3,570.0
3	Project Manager / Senior Engineer / Senior Scientist	HR	12	\$ 175.00	\$ 2,100.0
4	Staff Engineer / Staff Scientist	HR	4	\$ 130.00	\$ 520.0
5	Engineer / Scientist	HR	20	\$ 110.00	\$ 2,200.0
6	CADD	HR	160	\$ 135.00	\$ 21,600.0
7	Clerical	HR	6	\$ 95.00	\$ 570.0
8	Mileage	Mile	60	\$ 0.67	\$ 40.2
	Subtotal III.E:	11 515	1 = 1 1 3		\$ 30,895.20
F	PERMITTING				
1	Principal	HR	1	\$ 295.00	\$ 295.00
2	Chief Engineer	HR	2	\$ 255.00	\$ 510.0
3	Project Manager / Senior Engineer / Senior Scientist	HR	12	\$ 175.00	\$ 2,100.00
4	Staff Engineer / Staff Scientist	HR	64	\$ 130.00	\$ 8,320.00
5	Engineer / Scientist	HR		\$ 110.00	\$ =
6	CADD	HR	6	\$ 135.00	\$ 810.00
7	Clerical	HR	12	\$ 95.00	\$ 1,140.00
8	Mileage	Mile		\$ 0.67	\$ -
	Subtotal III.F:			11.	\$ 13,175.00
3	PRE-BID CONFERENCE				
1	Principal	HR		\$ 295.00	\$ -
2	Chief Engineer	HR		\$ 255.00	\$ -
3	Project Manager / Senior Engineer / Senior Scientist	HR	12	\$ 175.00	\$ 2,100.00
4	Staff Engineer / Staff Scientist	HR		\$ 130.00	\$ -
5	Engineer / Scientist	HR		\$ 110.00	\$ -
6	CADD	HR		\$ 135.00	\$ -
7	Clerical ,	HR	4	\$ 95.00	\$ 380.00
8	Construction Monitor	HR	8	\$ 95.00	\$ 760.00
9	Mileage	Mile	20	\$ 0.67	\$ 13.40
	Subtotal III.G:	4 - 4			\$ 3,253.40
1	PRE-CONSTRUCTION CONFERENCE				
1	Principal Principal	HR		\$ 295.00	\$ -
2	Chief Engineer	HR		\$ 255.00	\$ -
	Project Manager / Senior Engineer / Senior Scientist	HR	8	\$ 175.00	\$ 1,400.00



TASK DESCRIPTION		UNIT	CONTRACT QUANTITY	UNIT PRICE		TOTAL PRICE
4 Staff Engineer / Staff Scientist		HR		\$ 130.00	\$	-
5 Engineer / Scientist		HR		\$ 110.00	\$	_
6 CADD		HR		\$ 135.00	\$	_
7 Clerical		HR	2	\$ 95.00	\$	1.90.0
8 Construction Monitor		HR	8	\$ 95.00	\$	760.0
9 Mileage		Mile	20	\$ 0.67	\$	13.40
	Subtotal III.H:				\$	2,363.4
	TOTAL TASK III:				\$.	111,017.0
ASK IV: CONSTRUCTION OVERSIGHT						
CONSTRUCTION INSPECTION						
1 Principal		HR	14	\$ 295.00	\$	4,130.00
2 Chief Engineer		HR	20	\$ 255.00	\$	5,100.00
3 Project Manager / Senior Engineer / Senior Scientist		HR	172	\$ 175.00	\$	30,100.00
4 Staff Engineer / Staff Scientist		HR		\$ 130.00	\$	140
5 Engineer / Scientist		HR		\$ 110,00	\$	
6 CADD		HR		\$ 135.00	\$	-
7 Clerical		HR	80	\$ 95.00	\$	7,600.00
8 Construction Monitor		HR	857	\$ 95.00	\$	81,415.00
9 Mileage		Mile	2550	\$ 0.67	\$	1,708.50
	Subtotal IV.A:				\$	130,053.50
	TOTAL TASK IV:				\$ 1	30,053.50
ASK V: POST-CONSTRUCTION OVERSIGHT						
FIELD VISITS / INSPECTIONS						
1 Principal		HR		\$ 295.00	\$	-
2 Chief Engineer	1	HR	2	\$ 255,00	\$	510.00
3 Project Manager / Senior Engineer / Senior Scientist		HR	9	\$ 175.00	\$	1,575.00
4 Staff Engineer / Staff Scientist		HR		\$ 130.00	\$	-
5 Engineer / Scientist		HR		\$ 110.00	\$	-
6 CADD		HR		\$ 135.00	\$	-
7 Clerical		HR	3	\$ 95.00	\$	285.00
8 Construction Monitor		HR	26	\$ 95.00	\$	2,470.00
9 Mileage		Mile	60	\$ 0.67	\$	40.2
	Subtotal V.A:				\$	4,880.20
	TOTAL TASK V:				\$	4,880.20
Te	OTAL TASKS I THROUGH V:				\$.	282,491.70







Project/Commodity Line 5: New Butler Drainage

This project includes two refuse piles, nine collapsed and draining portals, one open portal, and an area of seepage. There is significant seepage exiting the ground below and in front of some of the collapsed portals. Drainage has the orange (high iron) characteristic of mine drainage. Portals are located on a steep hillside at different elevations suggesting more than one coal seam. Gas lines cross through the area where the portals are located.

The northernmost refuse pile is well vegetated and appears stable. This refuse pile may be removed from the reclamation project. The second refuse pile toes out on the edge of Lens Creek. This refuse pile may be regraded to a 2:1 slope, soil covered, and revegetated.

Mine portals will be sealed using the appropriate seal. The envisioned reclamation will include access road construction, temporary stream crossings, wet seals, bat gate mine seal if appropriate, refuse regrading and soil cover, drainage conveyance construction, and revegetation of disturbed areas.

Due to the significant drainage and apparent high iron content from the collapsed portals and location of a nearby home, geotechnical exploration including setting piezometers at some of the collapsed portals is proposed.

Planning, realty, design, and construction oversight scope of services follows.

Task I – National Environmental Policy Act (NEPA) and Environmental Assessment (EA)

This task includes agency coordination and development of an Environmental Assessment (EA) to obtain a finding of no significant impact (FONSI).

POTESTA will review project information available from WVDEP, AML including OSM-51 documents and consultation letters that may have been prepared/sent for the project. The OSM-51 form will be reviewed for accuracy with the known project information. The OSM-51 will be sent with a cover letter to West Virginia Division of Natural Resources (WVDNR), State Historic Preservation Office (SHPO), and the regional planning council requesting comments on the project. The United States Fish and Wildlife Service (USFWS) IPaC system will be accessed to determine potential impacts to threatened and endangered species. A Phase I bat assessment will be completed by WVDEP, AML to determine if the portals are considered to be suitable bat habitat. POTESTA will update the IPaC information and submit the IPaC forms and a consultation request to the USFWS, if needed. This proposal does not include mist netting bat surveys. Projects on national forest land will require the OSM-51 and letter be sent to the Forest Service (FS). Letters to and from the agencies will be uploaded to AMLNET.



As development and engineering design/preparation of the plans and specifications proceeds, the OSM-51 will be reviewed along with the plans and specifications to provide consistency.

Based on discussions with WVDEP, AML, the AML projects will require preparation of an EA and submission of the EA to the Office of Surface Mining for review and approval. We have assumed that an EA level NEPA review will be required for this project. A preliminary EA will be prepared using the EA template provided and will be submitted to the WVDEP, AML for initial review. Upon completion of the initial review, POTESTA will finalize the EA document and submit to the necessary agencies.

A preliminary table of contents for the EA is included below.

Table of Contents

Chapter 1: Purpose and Need

- A. Purpose of the Proposed Action
- B. Need for the Proposed Action
- C. Scoping
- D. List of Related Laws and Executive Orders

Chapter 2: Proposed Action and Appropriate Alternatives and Mitigation Measures

- A. Alternatives Considered
- B. Alternatives Considered but Eliminated from Detailed Analysis

Chapter 3: Affected Environment and Environmental Impacts

- A. Environmental Consequences of the Proposed Actions and Mitigation Measures
- B. Affected Resources Including Special Areas of Consideration
- C. Summary

Chapter 4: Consultations and Coordination

- A. Persons and Agencies Contacted to Assist in the Preparation of the Environmental Assessment
- B. List of Potential Permits and Responsible Parties
- C. Public Involvement
- D. Preparer
- E. Signatures



Chapter 5: References and Appendices

- A. References
- B. Appendices

Following WVDEP, AML approval, final environmental documents will be uploaded to AMLNET.

Per WVDEP, AML, public involvement process activities including the public meetings will be conducted by the WVDEP, AML Planning Group. POTESTA's cost for this task does not include public involvement hours or costs.

Task II - Realty

Realty services for the project will include obtaining exploratory rights of entry (EROE), construction rights of entry (CROE), maintenance rights of entry (MROE) and attendance of the pre-bid conference and pre-construction conference meetings.

Prior to field work (surveying, drilling, field reconnaissance, etc.), POTESTA will visit the courthouse to perform research to determine landowners that could be impacted by the project including access to the work area. POTESTA will obtain copies of tax maps, deeds for current landowners, ownership documentation, and landowner contact information.

POTESTA will then make contact with landowners to obtain EROE. This may require more than one visit with each landowner. Attempts at landowner contact will be documented. Landowner concerns will be noted. After discussion with the WVDEP, AML realty representative, POTESTA will attempt to finalize negotiations with the landowners and obtain signed EROEs for each impacted parcel. EROEs including legal ownership information/documentation and project photographs will be provided to WVDEP, AML's realty representative for review and subsequent uploading to AMLNET. This will include pertinent property information, landowner information, and legal ownership documentation.

WVDEP, AML indicated that some landowners may request to be an additional insured for the CROE. It is important to note that if this happens, the landowner making the request should be added as an "additional insured," not an "additional named insured."

Review of tax maps for the project area indicates the refuse piles and mine portals are located on two different parcels. Access to the mine portals for exploratory work (surveying and drilling) and construction may involve additional parcels.

Once plans and specifications have been developed for each project, POTESTA will again visit the courthouse to verify that property owner and property ownership information is still valid, or obtain



current information and documentation if this has changed. POTESTA will subsequently make contact with each affected landowner. Attempts at landowner contact will be documented. Proposed construction/reclamation activities will be reviewed with each landowner. Landowner demands will be noted and shared/discussed with our WVDEP, AML realty contact. If appropriate, landowner demands will be incorporated into the plans and specifications. POTESTA will then meet with each landowner and present them with a CROE. The CROE typically includes a clause granting WVDEP, AML right of entry for maintenance activities. Upon execution of the CROE form, the CROE including legal ownership information/documentation and project photographs will be provided to WVDEP, AML's realty representative for review and subsequent uploading to AMLNET.

POTESTA's realty agent will keep a journal/log while working on this task. The journal/log will include duration of time spent working on realty activities, mileage, and a record of landowners or others that POTESTA's realty agent has interactions with pertaining to Task II activities.

POTESTA's realty agent will attend the pre-bid and pre-construction conference and be able to respond to questions about property ownership, potential landowner issues, and CROE information.

Prior to construction, POTESTA will visit each impacted parcel of land to obtain photographic documentation of such items as general site conditions, property monuments, fences, trees in close proximity of planned ground disturbance, existing driveways and roads, etc. Photographs will be uploaded to AMLNET for documentation of pre-reclamation conditions.

Task III - Design

Subtask IIIA - Site Reconnaissance and Exploration

This subtask includes site reconnaissance for project planning to establish the extent and locations of problem areas, obtain photographic documentation of the site, develop preliminary notes and sketches, review possible access routes to be used during construction, etc. This subtask also includes planning for execution of the engineering/design scope of services. Since this project includes draining mine portals, POTESTA has included three grab samples of mine drainage and analysis of pH, iron, aluminum, and manganese.

Subtask IIIB – Surveying and Mapping

We are proposing to develop aerial topographic mapping for this project due to the size of the area over which the mine portals are located.

Aerial mapping coverage is proposed to include approximately 55 acres.



POTESTA will survey to establish ground control for development of aerial topographic mapping. Project baselines will be established in the project area. Topographic mapping will be prepared at an appropriate scale and with a contour interval of 2 feet.

A minimum of three survey control points will be established and shown on the mapping. Found corner/property monumentation will be located during field surveying. Existing structures including pipes and culverts will be located. Pipe sizes and type will be noted on the survey. POTESTA will survey locations of existing visible utilities, as well as utility locations marked following a locate request by POTESTA to WV 811.

Borings drilled for setting piezometers under the geotechnical exploration will be surveyed for horizontal and vertical location.

Subtask IIIC – Geotechnical Exploration

This subtask includes drilling test borings to determine the elevation of coal seam/mine workings and depth of impounded water. Six borings equipped with casing to serve as piezometers are planned to be installed. Reclamation and revegetation of drill roads will be performed. Borings are estimated to be 50 feet deep, and drilled at the approximate locations shown on Figure 5.

Borings will include hollow stem augering, split spoon sampling and standard penetration testing, and rock coring. One and one-half inch diameter PVC pipe (piezometers) will be set in borings encountering voids drilled above the suspected deep mine entries to be used to monitor water levels during mine dewatering and mine seal construction. PVC casing will be backfilled with auger cuttings at the ground surface. No sand pack is proposed. PVC casing will be installed above the ground surface with a lockable protective covering. One and one-half inch diameter casing is proposed since it can be installed through the drill stems in the event gob or broken rock is encountered in the mine void. Borings not developed as piezometers will be backfilled with auger cuttings. POTESTA will monitor the soil/rock borings and produce boring logs documenting encountered conditions.

In the event that borings encounter solid coal, we will make up to two additional attempts by moving and drilling a new boring. The drilling footage in our cost estimate reflects three attempts. Second and third attempt borings will be drilled only if needed.

Disturbed areas resulting from drilling will be seeded and mulched. Access roads and drill pads will be regraded to as close to original contours as practical.



Subtask IIID - Analysis and Design

This subtask includes developing a conceptual reclamation plan for the site. POTESTA will prepare a 20 to 30 percent conceptual plan showing the proposed reclamation for the site. This will include the type, location, and size of the proposed mine seals (drainage channels and/or control structures below mine seals will also be shown), access to the work area, etc. The conceptual plan will include proposed construction limits to allow for adequate access to the work areas. Property line information will be developed using tax maps. POTESTA will meet with the WVDEP, AML on-site to discuss our conceptual plan and will incorporate comments from the WVDEP, AML into our design packages.

Subtask IIIE - Preparation of Plans, Specifications and Engineer's Cost Estimate

This subtask involves the design and preparation of construction drawings, technical specifications, engineer's construction cost estimate, and contractor's bid form after receiving WVDEP, AML's concurrence with the 20 to 30 percent conceptual plan from Subtask IIID. POTESTA will prepare and make the following submissions to WVDEP, AML including the previously referenced items:

- 1. 60 percent complete submission;
- 2. 90 percent complete submission;
- 3. Final documents issued for bidding and construction.

A review meeting will be conducted with WVDEP, AML following the 60 percent and 90 percent complete submissions to review WVDEP, AML comments and the responses required to address the comments. Following these meetings, we will revise the preliminary design documents based on WVDEP, AML review comments and prepare the next submission of the bidding/construction documents. We have included minimal time to make revisions to the bidding documents following WVDEP, AML review. Extensive review comments/revisions requested by WVDEP, AML will necessitate a request for change order by POTESTA.

Subtask IIIF - Permitting

This subtask includes preparation and submission of the appropriate application forms and supporting documents for the following permits/approvals:

- 1. West Virginia Division of Highways (WVDOH) MM-109 encroachment permit.
- 2. WVDEP National Pollutant Discharge Elimination System (NPDES) General Construction Stormwater Permit.
- 3. United States Army Corps of Engineers permit for work in Lens Creek.



POTESTA will prepare the application for the MM-109 permit for signature by the WVDEP, AML, and submit the permit application to the appropriate office.

WVDEP, AML has requested that POTESTA prepare the application for the NPDES General Construction Stormwater Permit, and once a construction contract has been awarded, that POTESTA process a permit modification to add the construction contractor as a co-applicant.

POTESTA will prepare and submit the NPDES application, provide written response on behalf of WVDEP, AML to WVDEP Environmental Enforcement notices, submit renewal/reissuance requests for the permit, and apply for the Notice of Termination.

WVDEP, AML will be listed as the original applicant, and once a construction contractor has been selected, the NPDES permit will be transferred to the contractor or the contractor will be added as a co-applicant.

The contractor will be responsible for permit modifications if required by Division of Water and Waste.

Subtask IIIG - Pre-Bid Conference

POTESTA will provide a senior level engineer or the project manager who was involved in the overall project design to conduct the on-site pre-bid conference. The planned construction monitor who will provide construction oversight will also attend the pre-bid meeting. POTESTA's realty agent will also attend the pre-bid conference (hours are included under the realty section). POTESTA will conduct the pre-bid meeting including bidder information, providing an overview of the project requirements, video-recording of the meeting, documenting bidder questions and responses to the questions in a pre-bid meeting memorandum, keeping the pre-bid meeting sign-in sheet, and preparation of addenda which may be required. Pre-bid conference documents and video will be uploaded to AMLNET by POTESTA.

Subtask IIIH - Pre-Construction Conference

POTESTA will provide a senior level engineer or the project manager who was involved in the overall project design to conduct the on-site pre-construction conference. The planned construction monitor who will provide construction oversight will also attend the pre-construction conference. POTESTA's realty agent will also attend the pre-construction conference (hours are included under the realty section of our cost proposal). POTESTA will video record the pre-construction conference. Project submittals from the construction contractor will be reviewed and approved by POTESTA. The video recording and submittals will be uploaded to AMLNET by POTESTA.



Design files (plans, specifications, engineer's construction cost estimate, permit applications, permits, geotechnical exploration information, etc.) shall be uploaded to AMLNET by POTESTA. These same files will also be submitted to WVDEP, AML's project manager.

Task IV - Construction Oversight

This task includes continuous project construction oversight, observation/monitoring, documentation, engineering, and related office services. No testing such as aggregate gradation, soundness, durability, soil moisture/density relationship testing, field density tests, concrete or grout testing, soil analysis, etc. is included. POTESTA will review results of required quality assurance/control tests provided by the construction contractor. POTESTA will provide an assigned (and WVDEP, AML-approved) construction monitor qualified to perform such services.

Construction oversight services will include a pre-construction review, landowner contact, pre-construction photographs, identification of potential hazards, review of plans to identify conditions on-site which may contradict plans, etc.

POTESTA will provide construction management services during the project acting as an agent for WVDEP, Division of Land Restoration, Abandoned Mine Lands and Reclamation. Note that POTESTA cannot issue a stop work notice (suspension of work) to the construction contractor. If POTESTA would issue a stop work notice, this could void our professional liability insurance coverage. POTESTA's construction monitor will call to the attention of the contractor failure of the work or materials to conform to the specifications and suggest that the contractor correct the noncompliance work. If this communication is not effective, POTESTA will contact WVDEP, AML's construction representative and explain the situation so WVDEP, AML can suspend the contractor's work if necessary. POTESTA will document instances where the contractor's work is not in compliance including date, time, contractor representative who was informed of non-compliant work, summary of non-compliant activity, verbal notice that payment will not be approved for non-compliant work, and verbal notice that non-compliant work will require removal.

During construction, POTESTA's monitor will be present on-site when the contractor is performing construction. POTESTA's monitor will document construction activities, take photographs to document stages of the work, keep track of pay items and quantities incorporated in the construction, prepare daily logs and photographs with captions to be uploaded to AMLNET within 48 hours of the activity, track materials and quantities on a daily basis, and prepare weekly and monthly summaries of construction and quantities.

We have assumed a duration of construction of 120 calendar days for this project. Construction monitor time has been proposed at up to 10 hours per day, 7 AM to 5 PM, 5 days per week including on-site activities and time to prepare daily documentation and uploading to AMLNET.



POTESTA will receive, review, and process construction contractor pay applications, review and approve as-built drawings prepared by the construction contractor, prepare a professional engineer's project certification, prepare and issue a substantial completion notice, conduct the final inspection, and prepare and issue the final release. These documents will be uploaded to AMLNET by POTESTA.

This task also includes administrative support to oversee compliance with applicable laws, such as certified payroll and for verifying the contractor's compliance with the Davis-Bacon Act and Infrastructure Investment and Jobs Act (IIJA) with regard to employing current and former employees of the coal industry.

The effort required for this task depends on the contractor's construction schedule, rate of construction, weather and time for completion. We have made our best guess as to the time required for construction monitoring services as stated above.

Task V – Post-Construction Oversight

This task includes site visits upon the completion of reclamation construction to document the performance of reclamation measures and site conditions. Site visits are required until the Notice of Termination for the construction stormwater permit has been submitted to WVDEP permitting. Each visit will be documented in a daily report style log with photographs attached. Post-construction oversight reports will be uploaded to AMLNET. We have included three visits during the warranty period and final release inspection.



6

CADD

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION **COST PROPOSAL** Purchase Order No.: CEOI DEP2400000001 Contract Name: 2023 AML Contract S2 Commodity Line: 5 Project Name: New Butler Drainage SCHEDULE PER CONTRACT CONTRACT UNIT TOTAL TASK DESCRIPTION UNIT QUANTITY PRICE PRICE TASK I: NEPA & EA AGENCY COORDINATIONS (including Office Work, AMLNET, etc.) Principal 295.00 \$ 295.00 1 HR 510.00 2 Chief Engineer HR 2 \$ 255.00 3,500.00 3 Project Manager / Senior Engineer / Senior Scientist HR 20 175.00 2,340.00 4 Staff Engineer / Staff Scientist HR 18 130.00 \$ 5 Engineer / Scientist HR \$ 110.00 \$ 135.00 6 CADD HR 5 675.00 570.00 7 Clerical 95.00 HR 6 \$ \$ 8 Mileage Mile 0.67 26.80 7,916.80 Subtotal Task I.A: PUBLIC INVOLVEMENT (including Legal Ads, Public Hearings, Documents, Presentations, WVDEP's Website, etc.) В 295.00 \$ 2 Chief Engineer HR \$ 255.00 3 Project Manager / Senior Engineer / Senior Scientist HR \$ 175.00 \$ Staff Engineer / Staff Scientist \$ 130.00 \$ 5 \$ 110.00 \$ Engineer / Scientist HR 6 CADD HR \$ 135.00 7 Clerical HR \$ 95.00 \$ -8 0.67 Mileage Mile Subtotal Task I.B: STUDIES, SURVEYS & MITIGATION PLANS (as applicable) 2 295.00 \$ 590.00 1 Principal HR. 2 255.00 765.00 Chief Engineer HR 3 \$ Project Manager / Senior Engineer / Senior Scientist HR 20 175.00 \$ 3,500.00 4 Staff Engineer / Staff Scientist HR 20 \$ 130.00 \$ 2,600.00 5 Engineer / Scientist \$ 110.00 \$ HR 6 CADD HR \$ 135.00 \$ 7 Clerical HR \$ 95.00 \$ Mileage 100 \$ 0.67 67.00 7,522.00 Subtotal I.C: CATEX / EA / FONSI / EIS Principal HR \$ 295.00 \$ 295.00 2 \$ 255.00 \$ 510.00 Chief Engineer HR 2 3 24 \$ 175.00 \$ 4,200.00 Project Manager / Senior Engineer / Senior Scientist HR \$ 1,300.00 4 Staff Engineer / Staff Scientist HR 10 130.00 \$ 5 Engineer / Scientist HR \$ 110.00



675.00

5

\$

135.00 \$

TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE			TOTAL PRICE
7 0	Clerical	HR	4	\$	95.00	\$	380.00
8 2	Mileage	Mile		\$	0.67	\$	
	Subtotal I.D:			IE		8	7,360.00
	TOTAL TASK I:					8	22,798.80
TASK II: F	REALTY						
A I	EXPLORATORY RIGHTS OF ENTRY (EROE)						
1 1	Principal Principal	HR	1	\$	295.00	\$	295.00
2 (Chief Engineer	HR	2	\$	255.00	\$	510.00
3 1	Project Manager / Senior Engineer / Senior Scientist	HR	6	\$	175.00	\$	1,050.00
4 1	Realty Agent	HR	36	\$	115.00	\$	4,140.00
5 1	Engineer / Scientist	HR		\$	110.00	\$	-
6 0	CADD	HR		\$	135.00	\$	-
7 (Clerical	HR	2	\$	95.00	\$	190.00
8 1	Mileage	Mile	100	\$	0.67	\$	67.00
	Subtotal II.A:					\$	6,252.00
В	CONSTRUCTION RIGHTS OF ENTRY (CROE)						
1 1	Principal	HR	1	\$	295.00	\$	295.00
2 0	Chief Engineer	HR	2	\$	255.00	\$	510.00
3 1	Project Manager / Senior Engineer / Senior Scientist	HR	12	\$	175.00	\$	2,100.00
4 1	Realty Agent	HR	36	\$	115.00	\$	4,140.00
5 1	Engineer / Scientist	HR		\$	110.00	\$	-
6 (CADD	HR		\$	135.00	\$	-
7 (Clerical	HR	2	\$	95.00	\$	190.00
8 1	Mileage	Mile	100	\$	0.67	\$	67.00
	Subtotal II.B:					\$	7,302.00
C I	PRE-BID CONFERENCE						
1 1	Principal Principal	HR		\$	295.00	\$	-
2	Chief Engineer	HR		\$	255.00	\$	-
3 1	Project Manager / Senior Engineer / Senior Scientist	HR		\$	175.00	\$	-
4]	Realty Agent	HR	5	\$	115.00	\$	575.00
5	Engineer / Scientist	HR		\$	110.00	\$	-
6	CADD	HR		\$	135.00	\$	-
7	Clerical	HR	1	\$	95.00	\$	95.00
8	Mileage	Mile	20	\$	0.67	\$	13.40
	Subtotal II.C:					\$	683.40
D	PRE-CONSTRUCTION CONFERENCE						
1	Principal	HR		\$	295.00	\$	-
2	Chief Engineer	HR		\$	255.00	\$	-
3	Project Manager / Senior Engineer / Senior Scientist	HR		\$	175.00	\$	-
4	Realty Agent	HR	5	\$	115.00	\$	575.00
5	Engineer / Scientist	HR		\$	110.00	\$	_
6	CADD	HR		\$	135.00	\$	-
7	Clerical	HR	1	\$	95.00	\$	95.00
8	Mileage	Mile	20	\$	0.67	\$	13.40
	Subtotal II.D:			-		\$	683.40
	TOTAL TASK II:					\$	14,920.80



TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY		UNIT PRICE		TOTAL PRICE
ASK III	: DESIGN			Ī		T	
A	SITE RECONNAISSANCE AND EXPLORATION			Ī			
1	Principal :	HR	1	\$	295.00	\$	295.0
2	Chief Engineer	HR	18	\$	255.00	\$	4,590.0
3	Project Manager / Senior Engineer / Senior Scientist	HR	26	\$	175.00	\$	4,550.0
4	Staff Engineer / Staff Scientist	HR	16	\$	130.00	\$	2,080.0
5	Engineer / Scientist	HR		\$	110.00	\$	-
6	Clerical	HR	4	\$	95.00	\$	380.0
7	Water Samples (pH, iron, aluminum, manganese)	EA	3	\$	90.00	\$	270.0
8	Mileage	Mile	40	\$	0.67	\$	26.8
	Subtotal III.A:				البيات	\$	12,191.8
3	SURVEYING & MAPPING						
1	Principal	HR	1	\$	295.00	\$	295.0
2	Chief Engineer	HR	3	\$	255.00	\$	765.0
3	Project Manager / Senior Engineer / Senior Scientist	HR	4	\$	175.00	\$	700.0
4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	-
5	Engineer / Scientist	HR		\$	110.00	\$	-
6	CADD	HR	12	\$	135.00	\$	1,620.0
7	Clerical	HR		\$	95.00	\$	-
8	Professional Surveyor / Chief Surveyor	HR	32	\$	160.00	\$	5,120.0
9	2-Man Survey Crew	HR	56	\$	150.00	\$	8,400.0
10	Topographic Mapping Development	AC	55	\$	38.00	\$	2,090.0
11	Mileage	Mile	200	\$	0.67	\$	134.0
	Subtotal III.B:					\$	19,124.0
	GEOTECHNICAL EXPLORATION						
1	Principal	HR	1	\$	295.00	\$	295.0
2	Chief Engineer	HR	4	\$	255.00	\$	1,020.0
3	Project Manager / Senior Engineer / Senior Scientist	HR	16	\$	175.00	\$	2,800.0
4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	12
5	Engineer / Scientist	HR	135	\$	110.00	\$	14,850.0
6	CADD	HR		\$	135.00	\$	
7	Clerical .	HR	3	\$	95.00	\$	285.0
8	Mobilization	LS	1	\$	4,480.00	\$	4,480.0
9	Soil Augering	LF	270	\$	44.80	\$	12,096.0
10	Rock Coring	LF	630	\$	44.80	\$	28,224.0
11	Piezometer Installation	LF	300	\$	28.00	\$	8,400.0
12	Heavy Equipment for Access	DAY	7	\$	952.00	\$	6,664.0
13	Reclamation	LS	1	\$	4,480.00	\$	4,480.0
14	Water Set-up	EA	18	\$	1,120.00	\$	20,160.0
15	Stream Crossing	EA	2	\$	2,240.00	\$	4,480.0
16	Lockable Cover for Piezometers	EA	6	\$	560.00	\$	3,360.0
17	Drill Crew Per Diem	Day				\$	-
18	Mileage	Mile	360	\$	0.67	\$	241.20
	Subtotal III.C:					8 1	11,8

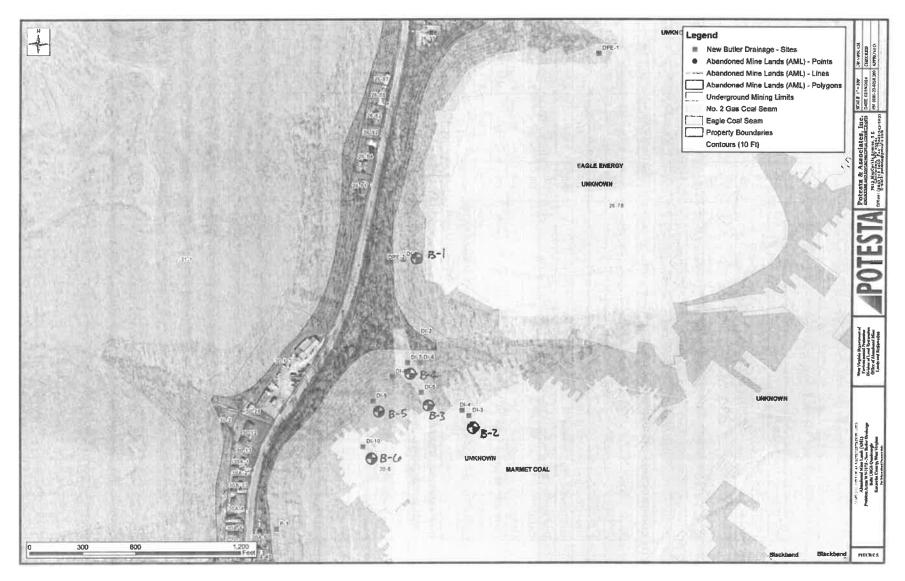


TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE	TOTAL PRICE
	ANALYSIS AND DESIGN				
1	Principal	HR	2	\$ 295.00	\$ 590.00
2	Chief Engineer	HR	13	\$ 255.00	\$ 3,315.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	27	\$ 175.00	\$ 4,725.00
4	Staff Engineer / Staff Scientist	HR	14	\$ 130.00	\$ 1,820.0
5	Engineer / Scientist	HR		\$ 110.00	\$ =
6	CADD	HR	32	\$ 135.00	\$ 4,320.0
7	Clerical	HR	4	\$ 95.00	\$ 380.0
8	Mileage	Mile	40	\$ 0.67	\$ 26.8
	Subtotal III.D:				\$ 15,176.80
Е	PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEER'S ESTIMATE				
1	Principal	HR	1	\$ 295.00	\$ 295.0
2	Chief Engineer	HR	14	\$ 255.00	\$ 3,570.0
3	Project Manager / Senior Engineer / Senior Scientist	HR	12	\$ 175.00	\$ 2,100.00
4	Staff Engineer / Staff Scientist	HR	4	\$ 130.00	\$ 520.00
5	Engineer / Scientist	HR	18	\$ 110.00	\$ 1,980.00
6	CADD	HR	150	\$ 135.00	\$ 20,250.00
7	Clerical	HR	6	\$ 95.00	\$ 570.00
8	Mileage	Mile	40	\$ 0.67	\$ 26.8
	Subtotal III.E:				\$ 29,311.8
F	PERMITTING				
1	Principal	HR	1	\$ 295.00	\$ 295.0
2	Chief Engineer	HR	2	\$ 255.00	\$ 510.0
3	Project Manager / Senior Engineer / Senior Scientist	HR	20	\$ 175.00	\$ 3,500.0
4	Staff Engineer / Staff Scientist	HR	86	\$ 130.00	\$ 11,180.0
5	Engineer / Scientist	HR	18	\$ 110.00	\$ 1,980.0
6	CADD	HR.	10	\$ 135.00	\$ 1,350.0
7	Clerical	HR	12	\$ 95.00	\$ 1,140.0
8	Mileage	Mile		\$ 0.67	\$ -
	Subtotal III.F:			\$ 0.07	\$ 19,955.00
G	PRE-BID CONFERENCE				,,
1	Principal	HR		\$ 295.00	\$:=
2	Chief Engineer	HR		\$ 255.00	\$ -
3	Project Manager / Senior Engineer / Senior Scientist	HR	14	\$ 175.00	\$ 2,450.0
4	Staff Engineer / Staff Scientist	HR		\$ 130.00	
5	Engineer / Scientist	HR		\$ 110.00	\$ -
6	CADD	HR	-	\$ 135.00	\$ -
7	Clerical	HR	4	\$ 95.00	\$ 380.0
8	Construction Monitor	HR	8	\$ 95.00	\$ 760.0
9	Mileage	Mile	20	\$ 0.67	\$ 13.4
1	Subtotal III.G:	Wille	20	0.07	\$ 3,603.4
н	PRE-CONSTRUCTION CONFERENCE				w 3,003.4
1	Principal	HR		\$ 295.00	\$ -
2	Chief Engineer	HR		\$ 255.00	
3	Project Manager / Senior Engineer / Senior Scientist	HR	8	\$ 255.00	



TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY		UNIT PRICE		TOTAL PRICE
4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	-
5	Engineer / Scientist	HR		\$	110.00	\$	-
6	CADD	HR		\$	135.00	\$	-
7	Clerical	HR	2	\$	95.00	\$	190.0
8	Construction Monitor	HR	8	\$	95.00	\$	760.0
9	Mileage	Mîle	20	\$	0.67	\$	13.4
	Subtotal III.H:					\$	2,363.4
	TOTAL TASK III:					\$.	213,561.4
ASK IV	: CONSTRUCTION OVERSIGHT						
4	CONSTRUCTION INSPECTION						
1	Principal	HR	14	\$	295.00	\$	4,130.0
2	Chief Engineer	HR	20	\$	255.00	\$	5,100.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	172	\$	175.00	\$	30,100.00
4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	-
5	Engineer / Scientist	HR		\$	110.00	\$	-
6	CADD	HR		\$	135.00	\$	
7	Clerical	HR	80	\$	95.00	\$	7,600.00
8	Construction Monitor	HR	857	\$	95.00	\$	81,415.00
9	Mileage	Mile	1782	\$	0.67	\$	1,193.94
	Subtotal IV.A:					\$.	129,538.94
	TOTAL TASK IV:					\$.	129,538.94
ASK V:	POST-CONSTRUCTION OVERSIGHT						
	FIELD VISITS / INSPECTIONS						
1	Principal	HR		\$	295,00	\$	-
2	Chief Engineer	HR	3	\$	255.00	\$	765.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	9	\$	175.00	\$	1,575.00
4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	-
5	Engineer / Scientist	HR.		\$	110.00	\$	-
6	CADD	HR		\$	135.00	\$	-
7	Clerical	HR	3	\$	95.00	\$	285.00
8	Construction Monitor	HR	26	\$	95,00	\$	2,470.00
9	Mileage	Mile	60	\$	0.67	\$	40.20
	Subtotal V.A:			18		\$	5,135.20
	TOTAL TASK V:				TILS !!	\$	5,135.20
	TOTAL TASKS I THROUGH V:					\$ 3	85,955.14







Project/Commodity Line 6: Lens Creek Refuse Pile

This project includes three collapsed and draining portals along a bench over an eroding coal refuse pile. The refuse pile toes out in Lens Creek. The steep slope is bare and continues to erode depositing coal refuse in Lens Creek.

The envisioned reclamation plan will include access road upgrade, access road construction, wet mine seals, regrading of the refuse pile, soil cover of the refuse pile, streambank protection, and drainage conveyances.

Due to the collapsed and draining portals, coal refuse pile, and proximity of the portals to nearby homes, a geotechnical exploration is being proposed.

Planning, realty, design, and construction oversight scope of services follows.

Task I – National Environmental Policy Act (NEPA) and Environmental Assessment (EA)

This task includes agency coordination and development of an Environmental Assessment (EA) to obtain a finding of no significant impact (FONSI).

POTESTA will review project information available from WVDEP, AML including OSM-51 documents and consultation letters that may have been prepared/sent for the project. The OSM-51 form will be reviewed for accuracy with the known project information. The OSM-51 will be sent with a cover letter to West Virginia Division of Natural Resources (WVDNR), State Historic Preservation Office (SHPO), and the regional planning council requesting comments on the project. The United States Fish and Wildlife Service (USFWS) IPaC system will be accessed to determine potential impacts to threatened and endangered species. A Phase I bat assessment will be completed by WVDEP, AML to determine if the portals are considered to be suitable bat habitat. POTESTA will update the IPaC information and submit the IPaC forms and a consultation request to the USFWS, if needed. This proposal does not include mist netting bat surveys. Projects on national forest land will require the OSM-51 and letter be sent to the Forest Service (FS). Letters to and from the agencies will be uploaded to AMLNET.

As development and engineering design/preparation of the plans and specifications proceeds, the OSM-51 will be reviewed along with the plans and specifications to provide consistency.

Based on discussions with WVDEP, AML, the AML projects will require preparation of an EA and submission of the EA to the Office of Surface Mining for review and approval. We have assumed that an EA level NEPA review will be required for this project. A preliminary EA will be prepared using the EA template provided and will be submitted to the WVDEP, AML for initial review.



Upon completion of the initial review, POTESTA will finalize the EA document and submit to the necessary agencies.

A preliminary table of contents for the EA is included below.

Table of Contents

Chapter 1: Purpose and Need

- A. Purpose of the Proposed Action
- B. Need for the Proposed Action
- C. Scoping
- D. List of Related Laws and Executive Orders

Chapter 2: Proposed Action and Appropriate Alternatives and Mitigation Measures

- A. Alternatives Considered
- B. Alternatives Considered but Eliminated from Detailed Analysis

Chapter 3: Affected Environment and Environmental Impacts

- A. Environmental Consequences of the Proposed Actions and Mitigation Measures
- B. Affected Resources Including Special Areas of Consideration
- C. Summary

Chapter 4: Consultations and Coordination

- A. Persons and Agencies Contacted to Assist in the Preparation of the Environmental Assessment
- B. List of Potential Permits and Responsible Parties
- C. Public Involvement
- D. Preparer
- E. Signatures

Chapter 5: References and Appendices

- A. References
- B. Appendices

Following WVDEP, AML approval, final environmental documents will be uploaded to AMLNET.



Per WVDEP, AML, public involvement process activities including the public meetings will be conducted by the WVDEP, AML Planning Group. POTESTA's cost for this task does not include public involvement hours or costs.

Task II - Realty

Realty services for the project will include obtaining exploratory rights of entry (EROE), construction rights of entry (CROE), maintenance rights of entry (MROE) and attendance of the pre-bid conference and pre-construction conference meetings.

Prior to field work (surveying, drilling, field reconnaissance, etc.), POTESTA will visit the courthouse to perform research to determine landowners that could be impacted by the project including access to the work area. POTESTA will obtain copies of tax maps, deeds for current landowners, ownership documentation, and landowner contact information.

POTESTA will then make contact with landowners to obtain EROE. This may require more than one visit with each landowner. Attempts at landowner contact will be documented. Landowner concerns will be noted. After discussion with the WVDEP, AML realty representative, POTESTA will attempt to finalize negotiations with the landowners and obtain signed EROEs for each impacted parcel. EROEs including legal ownership information/documentation and project photographs will be provided to WVDEP, AML's realty representative for review and subsequent uploading to AMLNET. This will include pertinent property information, landowner information, and legal ownership documentation.

WVDEP, AML indicated that some landowners may request to be an additional insured for the CROE. It is important to note that if this happens, the landowner making the request should be added as an "additional insured," not an "additional named insured."

Review of tax maps for the project area indicates the refuse pile and mine portals are located on a single parcel. Access to the mine portals for exploratory work (surveying and drilling) may involve one additional parcel for a total of two. This project may also involve lessees on the property.

Once plans and specifications have been developed for each project, POTESTA will again visit the courthouse to verify that property owner and property ownership information is still valid, or obtain current information and documentation if this has changed. POTESTA will subsequently make contact with each affected landowner. Attempts at landowner contact will be documented. Proposed construction/reclamation activities will be reviewed with each landowner. Landowner demands will be noted and shared/discussed with our WVDEP, AML realty contact. If appropriate, landowner demands will be incorporated into the plans and specifications. POTESTA will then meet with each landowner and present them with a CROE. The CROE typically includes a clause granting WVDEP, AML right of entry for maintenance activities. Upon execution of the CROE



form, the CROE including legal ownership information/documentation and project photographs will be provided to WVDEP, AML's realty representative for review and subsequent uploading to AMLNET.

POTESTA's realty agent will keep a journal/log while working on this task. The journal/log will include duration of time spent working on realty activities, mileage, and a record of landowners or others that POTESTA's realty agent has interactions with pertaining to Task II activities.

POTESTA's realty agent will attend the pre-bid and pre-construction conference and be able to respond to questions about property ownership, potential landowner issues, and CROE information.

Prior to construction, POTESTA will visit each impacted parcel of land to obtain photographic documentation of such items as general site conditions, property monuments, fences, trees in close proximity of planned ground disturbance, existing driveways and roads, etc. Photographs will be uploaded to AMLNET for documentation of pre-reclamation conditions.

Task III - Design

Subtask IIIA - Site Reconnaissance and Exploration

This subtask includes site reconnaissance for project planning to establish the extent and locations of problem areas, obtain photographic documentation of the site, develop preliminary notes and sketches, review possible access routes to be used during construction, etc. This subtask also includes planning for execution of the engineering/design scope of services. Since this project includes draining mine portals, POTESTA has included three grab samples of mine drainage and analysis of pH, iron, aluminum, and manganese.

Subtask IIIB - Surveying and Mapping

We are proposing to develop aerial topographic mapping for this project due to the size of the area over which the mine portals are located.

Aerial mapping coverage is proposed to include approximately 20 acres.

POTESTA will survey to establish ground control for development of aerial topographic mapping. Project baselines will be established in or near the project area. Topographic mapping will be prepared at an appropriate scale and with a contour interval of 2 feet.

A minimum of three survey control points will be established and shown on the mapping. Found corner/property monumentation will be located during field surveying. Existing structures including pipes and culverts will be located. Pipe sizes and type will be noted on the survey. POTESTA will



survey locations of existing visible utilities, as well as utility locations marked following a locate request by POTESTA to WV 811.

Borings drilled for setting piezometers under the geotechnical exploration will be surveyed for horizontal and vertical location.

Subtask IIIC - Geotechnical Exploration

This subtask includes drilling test borings to determine the elevation of coal seam/mine workings and depth of impounded water. Two borings equipped with casing to serve as piezometers are planned to be installed. Reclamation and revegetation of drill roads will be performed. Borings are estimated to be 50 feet deep, and drilled at the approximate locations shown on Figure 6.

Borings will include hollow stem augering, split spoon sampling and standard penetration testing, and rock coring. One and one-half inch diameter PVC pipe (piezometers) will be set in borings encountering voids drilled above the suspected deep mine entries to be used to monitor water levels during mine dewatering and mine seal construction. PVC casing will be backfilled with auger cuttings at the ground surface. No sand pack is proposed. PVC casing will be installed above the ground surface with a lockable protective covering. One and one-half inch diameter casing is proposed since it can be installed through the drill stems in the event gob or broken rock is encountered in the mine void. Borings not developed as piezometers will be backfilled with auger cuttings. POTESTA will monitor the soil/rock borings and produce boring logs documenting encountered conditions.

In the event that borings encounter solid coal, we will make up to two additional attempts by moving and drilling a new boring. The drilling footage in our cost estimate reflects three attempts. Second and third attempt borings will be drilled only if needed.

Disturbed areas resulting from drilling will be seeded and mulched. Access roads and drill pads will be regraded to as close to original contours as practical.

Subtask IIID - Analysis and Design

This subtask includes developing a conceptual reclamation plan for the site. POTESTA will prepare a 20 to 30 percent conceptual plan showing the proposed reclamation for the site. This will include the type, location, and size of the proposed mine seals (drainage channels and/or control structures below mine seals will also be shown), access to the work area, etc. The conceptual plan will include proposed construction limits to allow for adequate access to the work areas. Property line information will be developed using tax maps. POTESTA will meet with the WVDEP, AML on site to discuss our conceptual plan and will incorporate comments from the WVDEP, AML into our design packages.



Subtask IIIE - Preparation of Plans, Specifications and Engineer's Cost Estimate

This subtask involves the design and preparation of construction drawings, technical specifications, engineer's construction cost estimate, and contractor's bid form after receiving WVDEP, AML's concurrence with the 20 to 30 percent conceptual plan from Subtask IIID. POTESTA will prepare and make the following submissions to WVDEP, AML including the previously referenced items:

- 1. 60 percent complete submission;
- 2. 90 percent complete submission;
- 3. Final documents issued for bidding and construction.

A review meeting will be conducted with WVDEP, AML following the 60 percent and 90 percent complete submissions to review WVDEP, AML comments and the responses required to address the comments. Following these meetings, we will revise the preliminary design documents based on WVDEP, AML review comments and prepare the next submission of the bidding/construction documents. We have included minimal time to make revisions to the bidding documents following WVDEP, AML review. Extensive review comments/revisions requested by WVDEP, AML will necessitate a request for change order by POTESTA.

Subtask IIIF - Permitting

This subtask includes preparation and submission of the appropriate application forms and supporting documents for the following permits/approvals:

- 1. West Virginia Division of Highways (WVDOH) MM-109 encroachment permit.
- 2. WVDEP National Pollutant Discharge Elimination System (NPDES) General Construction Stormwater Permit.
- 3. US Army Corps of Engineers permit for streambank protection.

POTESTA will prepare the applications for the MM-109 permit and the US Army Corps of Engineers permit for streambank protection for signature by the WVDEP, and submit the permit applications to the appropriate offices.

WVDEP, AML has requested that POTESTA prepare the application for the NPDES General Construction Stormwater Permit, and once a construction contract has been awarded, that POTESTA process a permit modification to add the construction contractor as a co-applicant.

POTESTA will prepare and submit the NPDES application, provide written response on behalf of WVDEP, AML to WVDEP Environmental Enforcement notices, submit renewal/reissuance requests for the permit, and apply for the Notice of Termination.



WVDEP, AML will be listed as the original applicant, and once a construction contractor has been selected, the NPDES permit will be transferred to the contractor or the contractor will be added as a co-applicant.

The contractor will be responsible for permit modifications if required by Division of Water and Waste.

Subtask IIIG - Pre-Bid Conference

POTESTA will provide a senior level engineer or the project manager who was involved in the overall project design to conduct the on-site pre-bid conference. The planned construction monitor who will provide construction oversight will also attend the pre-bid meeting. POTESTA's realty agent will also attend the pre-bid conference (hours are included under the realty section). POTESTA will conduct the pre-bid meeting including bidder information, providing an overview of the project requirements, video-recording of the meeting, documenting bidder questions and responses to the questions in a pre-bid meeting memorandum, keeping the pre-bid meeting sign-in sheet, and preparation of addenda which may be required. Pre-bid conference documents and video will be uploaded to AMLNET by POTESTA.

Subtask IIIH - Pre-Construction Conference

POTESTA will provide a senior level engineer or the project manager who was involved in the overall project design to conduct the on-site pre-construction conference. The planned construction monitor who will provide construction oversight will also attend the pre-construction conference. POTESTA's realty agent will also attend the pre-construction conference (hours are included under the realty section of our cost proposal). POTESTA will video record the pre-construction conference. Project submittals from the construction contractor will be reviewed and approved by POTESTA. The video recording and submittals will be uploaded to AMLNET by POTESTA.

Design files (plans, specifications, engineer's construction cost estimate, permit applications, permits, geotechnical exploration information, etc.) shall be uploaded to AMLNET by POTESTA. These same files will also be submitted to WVDEP, AML's project manager.

Task IV - Construction Oversight

This task includes continuous project construction oversight, observation/monitoring, documentation, engineering, and related office services. No testing such as aggregate gradation, soundness, durability, soil moisture/density relationship testing, field density tests, concrete or grout testing, soil analysis, etc. is included. POTESTA will review results of required quality



assurance/control tests provided by the construction contractor. POTESTA will provide an assigned (and WVDEP, AML-approved) construction monitor qualified to perform such services.

Construction oversight services will include a pre-construction review, landowner contact, pre-construction photographs, identification of potential hazards, review of plans to identify conditions on-site which may contradict plans, etc.

POTESTA will provide construction management services during the project acting as an agent for WVDEP, Division of Land Restoration, Abandoned Mine Lands and Reclamation. Note that POTESTA cannot issue a stop work notice (suspension of work) to the construction contractor. If POTESTA would issue a stop work notice, this could void our professional liability insurance coverage. POTESTA's construction monitor will call to the attention of the contractor failure of the work or materials to conform to the specifications and suggest that the contractor correct the noncompliance work. If this communication is not effective, POTESTA will contact WVDEP, AML's construction representative and explain the situation so WVDEP, AML can suspend the contractor's work if necessary. POTESTA will document instances where the contractor's work is not in compliance including date, time, contractor representative who was informed of non-compliant work, summary of non-compliant activity, verbal notice that payment will not be approved for non-compliant work, and verbal notice that non-compliant work will require removal.

During construction, POTESTA's monitor will be present on-site when the contractor is performing construction. POTESTA's monitor will document construction activities, take photographs to document stages of the work, keep track of pay items and quantities incorporated in the construction, prepare daily logs and photographs with captions to be uploaded to AMLNET within 48 hours of the activity, track materials and quantities on a daily basis, and prepare weekly and monthly summaries of construction and quantities.

We have assumed a duration of construction of 120 calendar days for this project. Construction monitor time has been proposed at up to 10 hours per day, 7 AM to 5 PM, 5 days per week including on-site activities and time to prepare daily documentation and uploading to AMLNET.

POTESTA will receive, review, and process construction contractor pay applications, review and approve as-built drawings prepared by the construction contractor, prepare a professional engineer's project certification, prepare and issue a substantial completion notice, conduct the final inspection, and prepare and issue the final release. These documents will be uploaded to AMLNET by POTESTA.

This task also includes administrative support to oversee compliance with applicable laws, such as certified payroll and for verifying the contractor's compliance with the Davis-Bacon Act and Infrastructure Investment and Jobs Act (IIJA) with regard to employing current and former employees of the coal industry.



The effort required for this task depends on the contractor's construction schedule, rate of construction, weather and time for completion. We have made our best guess as to the time required for construction monitoring services as stated above.

Task V - Post-Construction Oversight

This task includes site visits upon the completion of reclamation construction to document the performance of reclamation measures and site conditions. Site visits are required until the Notice of Termination for the construction stormwater permit has been submitted to WVDEP permitting. Each visit will be documented in a daily report style log with photographs attached. Post-construction oversight reports will be uploaded to AMLNET. We have included three visits during the warranty period and final release inspection.



6

CADD

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION **COST PROPOSAL** Purchase Order No.: CEOI DEP2400000001 Contract Name: 2023 AML Contract S2 Commodity Line: Project Name: Lens Creek Refuse Pile SCHEDULE PER CONTRACT CONTRACT UNIT TOTAL TASK UNIT DESCRIPTION **OUANTITY** PRICE PRICE TASK I: NEPA & EA AGENCY COORDINATIONS (including Office Work, AMLNET, etc.) HR 295.00 \$ 295.00 2 Chief Engineer HR 255.00 510.00 2 \$ 3 Project Manager / Senior Engineer / Senior Scientist HR 20 \$ 175.00 3,500.00 4 Staff Engineer / Staff Scientist 20 \$ 2,600.00 HR 130.00 5 Engineer / Scientist HR 110.00 \$ 6 CADD HR 5 \$ 135.00 675.00 7 Clerical HR \$ 95.00 570.00 6 8 Mileage Mile 60 \$ 0.67 40.20 8,190.20 Subtotal Task I.A: В PUBLIC INVOLVEMENT (including Legal Ads, Public Hearings, Documents, Presentations, WVDEP's Website, etc.) 1 Principal Principal 295.00 2 Chief Engineer HR 255.00 3 Project Manager / Senior Engineer / Senior Scientist HR \$ 175.00 4 Staff Engineer / Staff Scientist HR \$ 130.00 \$ 5 Engineer / Scientist HR \$ 110.00 \$ CADD 135.00 6 HR 7 Clerical HR 95.00 8 Mile 0.67 -Subtotal Task I.B: \$ STUDIES, SURVEYS & MITIGATION PLANS (as applicable) C 1 Principal HR 2 295.00 \$ 590.00 2 510.00 Chief Engineer HR 2 255.00 3 Project Manager / Senior Engineer / Senior Scientist HR 14 \$ 175.00 2,450.00 4 Staff Engineer / Staff Scientist HR 14 130.00 \$ 1,820.00 5 Engineer / Scientist HR \$ 110.00 \$ 6 CADD \$ 135.00 HR 7 Clerical 95.00 \$ HR Mileage 8 60 0.67 40.20 Mile 5,410.20 D CATEX / EA / FONSI / EIS 1 Principal HR \$ 295.00 295.00 2 Chief Engineer HR 2 \$ 255.00 510.00 3 Project Manager / Senior Engineer / Senior Scientist HR 175.00 4,200.00 24 4 Staff Engineer / Staff Scientist HR 10 \$ 130.00 \$ 1,300.00 5 Engineer / Scientist HR 110.00

HR

\$

5

135.00 \$



675.00

TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY		UNIT PRICE		TOTAL PRICE
7	Clerical	HR	4	\$	95.00	s	380.0
8	Mileage	Mile		\$	0.67	\$	-
	Subtotal J.D;	TIE BY		88	- 10 II (4 E	\$	7,360.00
	TOTAL TASK I:					\$	20,960.40
ASK II	: REALTY						
4	EXPLORATORY RIGHTS OF ENTRY (EROE)						
1	Principal 1	HR	1	\$	295.00	\$	295.0
2	Chief Engineer	HR	2	\$	255.00	\$	510.0
3	Project Manager / Senior Engineer / Senior Scientist	HR	6	\$	175.00	\$	1,050.0
4	Realty Agent	HR	33	\$	115.00	\$	3,795.0
5	Engineer / Scientist	HR		\$	110.00	\$	-
6	CADD	HR		\$	135.00	\$	-
7	Clerical	HR	2	\$	95.00	\$	190.00
8	Mileage :	Mile	60	\$	0.67	\$	40.20
10,1	Subtotal II.A:					\$	5,880.20
3	CONSTRUCTION RIGHTS OF ENTRY (CROE)						
1	Principal	HR	1	\$	295.00	\$	295.00
2	Chief Engineer	HR	2	\$	255.00	\$	510.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	10	\$	175.00	\$	1,750.00
4	Realty Agent	HR	32	\$	115.00	\$	3,680.00
5	Engineer / Scientist	HR		\$	110.00	\$	
6	CADD	HR		\$	135.00	\$	_
7	Clerical	HR	2	\$	95.00	\$	190.00
8	Mileage	Mile	60	\$	0.67	\$	40.20
	Subtotal II.B:					\$	6,465.20
	PRE-BID CONFERENCE						
1	Principal	HR		\$	295.00	\$	-
2	Chief Engineer	HR		\$	255.00	\$	_
3	Project Manager / Senior Engineer / Senior Scientist	HR		\$	175.00	\$	_
4	Realty Agent	HR	5	\$	115.00	\$	575.00
5	Engineer / Scientist	HR		\$	110.00	\$	-
6	CADD	HR		\$	135.00	\$	-
7	Clerical	HR	1	\$	95.00	\$	95.00
8	Mileage	Mile	20	\$	0.67	\$	13.40
	Subtotal II.C:			K I		\$	683.40
,	PRE-CONSTRUCTION CONFERENCE						
1	Principal !	HR		\$	295.00	\$	-
2	Chief Engineer	HR		\$	255.00	\$	_
3	Project Manager / Senior Engineer / Senior Scientist	HR		\$	175.00	\$	-
4	Realty Agent	HR	5	\$	115.00	\$	575.00
5	Engineer / Scientist	HR		\$	110.00	\$	-
6	CADD	HR		\$		\$	-
7	Clerical	HR	1	\$		\$	95.00
8	Mileage	Mile	20	\$		\$	13.40
	Subtotal II.D:		all profits			\$	683.40
1	TOTAL TASK II:					5	13,712.20



TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY]	UNIT PRICE		TOTAL PRICE
ASK III	: DESIGN						
A	SITE RECONNAISSANCE AND EXPLORATION						
1	Principal	HR	1	\$	295.00	\$	295.0
2	Chief Engineer	HR	17	\$	255.00	\$	4,335.0
3	Project Manager / Senior Engineer / Senior Scientist	HR	26	\$	175.00	\$	4,550.0
4	Staff Engineer / Staff Scientist	HR	14	\$	130.00	\$	1,820.0
5	Engineer / Scientist	HR		\$	110.00	\$	_
6	Clerical	HR	4	\$	95.00	\$	380.0
7	Water Samples (pH, iron, aluminum, manganese)	EA	3	\$	90.00	\$	270.0
8	Mileage	Mile	60	\$	0.67	\$	40.2
	Subtotal III,A;					_	11,690.2
В	SURVEYING & MAPPING						
1	Principal Principal	HR	1	\$	295.00	\$	295.0
2	Chief Engineer	HR	3	\$	255.00	\$	765,0
3	Project Manager / Senior Engineer / Senior Scientist	HR	4	\$	175.00	\$	700.0
4	Staff Engineer / Staff Scientist	HR		\$	130,00	\$	
5	Engineer / Scientist	HR		\$	110,00	\$	
6	CADD	HR	12	\$	135.00	\$	1,620.0
7	Clerical	HR		\$	95.00	\$	
8	Professional Surveyor / Chief Surveyor	HR	22	\$	160.00	\$	3,520.0
9	2-Man Survey Crew	HR	35	\$	150.00	\$	5,250.0
10	Topographic Mapping Development	AC	20	\$	38.00	\$	760.0
11	Mileage	Mile	120	\$	0.67	\$	80.4
	Subtotal III.B:			-		S	12,990.4
c	GEOTECHNICAL EXPLORATION					-	12,770.7
1	Principal	HR	1	\$	295.00	\$	295.0
2	Chief Engineer	HR	2	\$	255.00	\$	510.0
3	Project Manager / Senior Engineer / Senior Scientist	HR	8	\$	175.00	\$	1,400.0
4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	1,100.0
5	Engineer / Scientist	HR	50	\$	110.00	\$	5,500.0
6	CADD	HR		\$	135.00	\$	2,500.5
7	Clerical	HR	2	\$	95.00	\$	190.0
8	Mobilization	LS	1	\$	3,360.00	\$	3,360.0
9	Soil Augering	LF	90	\$	44.80	\$	4,032.0
10	Rock Coring	LF	210	\$	44.80	\$	9,408.0
11	Piezometer Installation	LF	100	\$	28.00	\$	2,800.0
12	Heavy Equipment for Access	DAY	6	\$	952.00	\$	5,712.0
13	Reclamation	LS	1	\$	2,240.00	\$	2,240.0
14	Water Set-up	EA	6	\$	1,680.00	\$	10,080.0
15	Lockable Cover for Piezometers	EA	2	\$	560.00	\$	1,120.0
16	Drill Crew Per Diem	Day	Δ	9	500,00	\$	1,120.0
17	Mileage	Mile	160	\$	0.67	\$	107.2
17	Subtotal III.C:	IVIIIC	100	Φ	0.07	\$	46,754.2

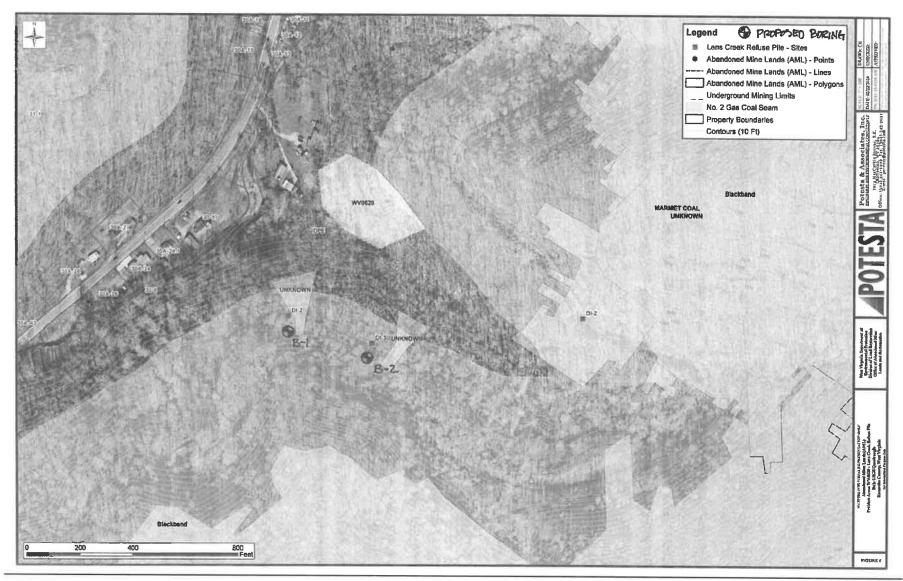


TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY]	UNIT PRICE	TOTAL PRICE
D	ANALYSIS AND DESIGN					
1	Principal	HR	2	\$	295.00	\$ 590.00
2	Chief Engineer	HR	10	\$	255.00	\$ 2,550.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	20	\$	175.00	\$ 3,500.00
4	Staff Engineer / Staff Scientist	HR	14	\$	130.00	\$ 1,820.00
5	Engineer / Scientist	HR		\$	110.00	\$ 8
6	CADD	HR	26	\$	135.00	\$ 3,510.00
7	Clerical	HR	4	\$	95.00	\$ 380.00
8	Mileage	Mile	40	\$	0.67	\$ 26.80
	Subtotal III.D:					\$ 12,376.80
E	PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEER'S ESTIMATE					
1	Principal	HR	1	\$	295.00	\$ 295.00
2	Chief Engineer	HR	14	\$	255.00	\$ 3,570.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	12	\$	175.00	\$ 2,100.00
4	Staff Engineer / Staff Scientist	HR	4	\$	130.00	\$ 520.00
5	Engineer / Scientist	HR	16	\$	110.00	\$ 1,760.00
6	CADD	HR	164	\$	135.00	\$ 22,140.00
7	Clerical	HR	6	\$	95.00	\$ 570.00
8	Mileage	Mile	40	\$	0.67	\$ 26.80
	Subtotal III.E:					\$ 30,981.80
F	PERMITTING					
1	Principal	HR	1	\$	295.00	\$ 295.00
2	Chief Engineer	HR	2	\$	255.00	\$ 510.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	20	\$	175.00	\$ 3,500.00
4	Staff Engineer / Staff Scientist	HR	80	\$	130.00	\$ 10,400.00
5	Engineer / Scientist	HR	20	\$	110.00	\$ 2,200.00
6	CADD	HR	10	\$	135.00	\$ 1,350.00
7	Clerical	HR	12	\$	95.00	\$ 1,140.00
8	Mileage	Mile		\$	0.67	\$ -
	Subtotal III.F:		ALCO SEE			\$ 19,395.00
3	PRE-BID CONFERENCE					
1	Principal	HR		\$	295.00	\$ -
2	Chief Engineer	HR		\$	255.00	\$ -
3	Project Manager / Senior Engineer / Senior Scientist	HR	12	\$	175.00	\$ 2,100.00
4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$ _
5	Engineer / Scientist	HR		\$	110.00	\$ _
6	CADD	HR		\$	135.00	\$ -
7	Clerical	HR	4	\$	95.00	\$ 380.00
8	Construction Monitor	HR	8	\$	95.00	\$ 760.00
9	Mileage	Mile	20	\$	0.67	\$ 13.40
	Subtotal III. G:				1 = 1 = 1	\$ 3,253.40
I	PRE-CONSTRUCTION CONFERENCE					
1	Principal	HR		\$	295.00	\$ -
2	Chief Engineer	HR		\$	255.00	\$
3	Project Manager / Senior Engineer / Senior Scientist	HR	8	\$	175.00	\$ 1,400.00



TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	1	UNIT PRICE	1	TOTAL PRICE
4	Staff Engineer / Staff Scientist	HR		\$	130,00	\$	-
5	Engineer / Scientist	HR		\$	110.00	\$	-
6	CADD	HR		\$	135.00	\$	-
7	Clerical	HR	2	\$	95.00	\$	190.00
8	Construction Monitor	HR	8	\$	95.00	\$	760.00
9	Mileage	Mile	20	\$	0.67	\$	13.40
	Subtotal III.H:				1	S	2,363.40
	TOTAL TASK III:					\$	139,805.20
TASK IV:	: CONSTRUCTION OVERSIGHT		A.,	Α			
A	CONSTRUCTION INSPECTION						
1	Principal	HR	20	\$	295.00	\$	5,900.00
2	Chief Engineer	HR	30	\$	255.00	\$	7,650.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	172	\$	175.00	\$	30,100.00
4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	-
5	Engineer / Scientist	HR		\$	110.00	\$	- 4
6	CADD	HR		\$	135.00	\$	6
7	Clerical	HR	80	\$	95.00	\$	7,600.00
8	Construction Monitor	HR	857	\$	95.00	\$	81,415.00
9	Mileage	Mile	1742	\$	0.67	\$	1,167.14
	Subtotal IV.A:					\$	133,832.14
	TOTAL TASK IV:					\$	133,832.14
TASK V:	POST-CONSTRUCTION OVERSIGHT						
A	FIELD VISITS / INSPECTIONS						
1	Principal	HR		\$	295.00	\$	-
2	Chief Engineer	HR	3	\$	255.00	\$	765.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	9	\$	175.00	\$	1,575.00
4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	-
5	Engineer / Scientist	HR		\$	110.00	\$	-
6	CADD	HR		\$	135.00	\$	-
7	Clerical	HR	3	\$	95.00	\$	285.00
8	Construction Monitor	HR	26	\$	95.00	\$	2,470.00
9	Mileage	Mile	60	\$	0.67	\$	40.20
	Subtotal V.A:					\$	5,135.20
	TOTAL TASK V:					5	5,135.20
	TOTAL TASKS I THROUGH V:		The contra			\$.	313,445.14







Project/Commodity Line 7: Lens Creek Left Fork Portals

This project includes nine portals in various conditions including open and draining, open and dry, collapsed and draining, partially collapsed, and open and venting. Mine equipment is scattered around the portals on the eastern hillside of the project.

The envisioned reclamation will include access road upgrade, access road construction, temporary steam crossing, dry seals, wet mine seals, and bat gate mine seals. Drainage conveyances will be included where appropriate. Disturbed areas will be reclaimed and revegetated. Mine equipment will be removed and disposed off-site.

Planning, realty, design, and construction oversight scope of services follows.

Task I – National Environmental Policy Act (NEPA) and Environmental Assessment (EA)

This task includes agency coordination and development of an Environmental Assessment (EA) to obtain a finding of no significant impact (FONSI).

POTESTA will review project information available from WVDEP, AML including OSM-51 documents and consultation letters that may have been prepared/sent for the project. The OSM-51 form will be reviewed for accuracy with the known project information. The OSM-51 will be sent with a cover letter to West Virginia Division of Natural Resources (WVDNR), State Historic Preservation Office (SHPO), and the regional planning council requesting comments on the project. The United States Fish and Wildlife Service (USFWS) IPaC system will be accessed to determine potential impacts to threatened and endangered species. A Phase I bat assessment will be completed by WVDEP, AML to determine if the portals are considered to be suitable bat habitat. POTESTA will update the IPaC information and submit the IPaC forms and a consultation request to the USFWS, if needed. This proposal does not include mist netting bat surveys. Projects on national forest land will require the OSM-51 and letter be sent to the Forest Service (FS). Letters to and from the agencies will be uploaded to AMLNET.

As development and engineering design/preparation of the plans and specifications proceeds, the OSM-51 will be reviewed along with the plans and specifications to provide consistency.

Based on discussions with WVDEP, AML, the AML projects will require preparation of an EA and submission of the EA to the Office of Surface Mining for review and approval. We have assumed that an EA level NEPA review will be required for this project. A preliminary EA will be prepared using the EA template provided and will be submitted to the WVDEP, AML for initial review. Upon completion of the initial review, POTESTA will finalize the EA document and submit to the necessary agencies.



A preliminary table of contents for the EA is included below.

Table of Contents

Chapter 1: Purpose and Need

- A. Purpose of the Proposed Action
- B. Need for the Proposed Action
- C. Scoping
- D. List of Related Laws and Executive Orders

Chapter 2: Proposed Action and Appropriate Alternatives and Mitigation Measures

- A. Alternatives Considered
- B. Alternatives Considered but Eliminated from Detailed Analysis

Chapter 3: Affected Environment and Environmental Impacts

- A. Environmental Consequences of the Proposed Actions and Mitigation Measures
- B. Affected Resources Including Special Areas of Consideration
- C. Summary

Chapter 4: Consultations and Coordination

- A. Persons and Agencies Contacted to Assist in the Preparation of the Environmental Assessment
- B. List of Potential Permits and Responsible Parties
- C. Public Involvement
- D. Preparer
- E. Signatures

Chapter 5: References and Appendices

- A. References
- B. Appendices

Following WVDEP, AML approval, final environmental documents will be uploaded to AMLNET.

Per WVDEP, AML, public involvement process activities including the public meetings will be conducted by the WVDEP, AML Planning Group. POTESTA's cost for this task does not include public involvement hours or costs.



Task II - Realty

Realty services for the project will include obtaining exploratory rights of entry (EROE), construction rights of entry (CROE), maintenance rights of entry (MROE) and attendance of the pre-bid conference and pre-construction conference meetings.

Prior to field work (surveying, drilling, field reconnaissance, etc.), POTESTA will visit the courthouse to perform research to determine landowners that could be impacted by the project including access to the work area. POTESTA will obtain copies of tax maps, deeds for current landowners, ownership documentation, and landowner contact information.

POTESTA will then make contact with landowners to obtain EROE. This may require more than one visit with each landowner. Attempts at landowner contact will be documented. Landowner concerns will be noted. After discussion with the WVDEP, AML realty representative, POTESTA will attempt to finalize negotiations with the landowners and obtain signed EROEs for each impacted parcel. EROEs including legal ownership information/documentation and project photographs will be provided to WVDEP, AML's realty representative for review and subsequent uploading to AMLNET. This will include pertinent property information, landowner information, and legal ownership documentation.

WVDEP, AML indicated that some landowners may request to be an additional insured for the CROE. It is important to note that if this happens, the landowner making the request should be added as an "additional insured," not an "additional named insured."

Review of tax maps for the project area indicates the mine portals and AML problems are located on four different parcels. Access to the mine portals for exploratory work (surveying and drilling) and reclamation may involve two additional parcels for a total of six.

Once plans and specifications have been developed for each project, POTESTA will again visit the courthouse to verify that property owner and property ownership information is still valid, or obtain current information and documentation if this has changed. POTESTA will subsequently make contact with each affected landowner. Attempts at landowner contact will be documented. Proposed construction/reclamation activities will be reviewed with each landowner. Landowner demands will be noted and shared/discussed with our WVDEP, AML realty contact. If appropriate, landowner demands will be incorporated into the plans and specifications. POTESTA will then meet with each landowner and present them with a CROE. The CROE typically includes a clause granting WVDEP, AML right of entry for maintenance activities. Upon execution of the CROE form, the CROE including legal ownership information/documentation and project photographs will be provided to WVDEP, AML's realty representative for review and subsequent uploading to AMLNET.



POTESTA's realty agent will keep a journal/log while working on this task. The journal/log will include duration of time spent working on realty activities, mileage, and a record of landowners or others that POTESTA's realty agent has interactions with pertaining to Task II activities.

POTESTA's realty agent will attend the pre-bid and pre-construction conference and be able to respond to questions about property ownership, potential landowner issues, and CROE information.

Prior to construction, POTESTA will visit each impacted parcel of land to obtain photographic documentation of such items as general site conditions, property monuments, fences, trees in close proximity of planned ground disturbance, existing driveways and roads, etc. Photographs will be uploaded to AMLNET for documentation of pre-reclamation conditions.

Task III - Design

Subtask IIIA - Site Reconnaissance and Exploration

This subtask includes site reconnaissance for project planning to establish the extent and locations of problem areas, obtain photographic documentation of the site, develop preliminary notes and sketches, review possible access routes to be used during construction, etc. This subtask also includes planning for execution of the engineering/design scope of services. Since this project includes draining mine portals, POTESTA has included three grab samples of mine drainage and analysis of pH, iron, aluminum, and manganese.

Subtask IIIB - Surveying and Mapping

We are proposing to develop aerial topographic mapping for this project due to the size of the area over which the mine portals are located.

Aerial mapping coverage is proposed to include approximately 46 acres.

POTESTA will survey to establish ground control for development of aerial topographic mapping. Project baselines will be established along Left Fork. Topographic mapping will be prepared at an appropriate scale and with a contour interval of 2 feet.

A minimum of three survey control points will be established and shown on the mapping. Found corner/property monumentation will be located during field surveying. Existing structures including pipes and culverts will be located. Pipe sizes and type will be noted on the survey. POTESTA will survey locations of existing visible utilities, as well as utility locations marked following a locate request by POTESTA to WV 811.



Borings drilled for setting piezometers under the geotechnical exploration will be surveyed for horizontal and vertical location.

Subtask IIIC - Geotechnical Exploration

This subtask includes drilling test borings to determine the elevation of coal seam/mine workings and depth of impounded water. One boring equipped with casing to serve as a piezometer is planned to be installed at the collapsed and draining portal. Reclamation and revegetation of drill roads will be performed. The boring is estimated to be 50 feet deep, and drilled at the approximate location shown on Figure 7.

The boring will include hollow stem augering, split spoon sampling and standard penetration testing, and rock coring. One and one-half inch diameter PVC pipe (piezometer) will be set in the boring encountering voids drilled above the suspected deep mine entry to be used to monitor water levels during mine dewatering and mine seal construction. PVC casing will be backfilled with auger cuttings at the ground surface. No sand pack is proposed. PVC casing will be installed above the ground surface with a lockable protective covering. One and one-half inch diameter casing is proposed since it can be installed through the drill stems in the event gob or broken rock is encountered in the mine void. Borings not developed as piezometers will be backfilled with auger cuttings. POTESTA will monitor the soil/rock borings and produce boring logs documenting encountered conditions.

In the event that borings encounter solid coal, we will make up to two additional attempts by moving and drilling a new boring. The drilling footage in our cost estimate reflects three attempts. Second and third attempt borings will be drilled only if needed.

Disturbed areas resulting from drilling will be seeded and mulched. Access roads and drill pads will be regraded to as close to original contours as practical.

Subtask IIID – Analysis and Design

This subtask includes developing a conceptual reclamation plan for the site. POTESTA will prepare a 20 to 30 percent conceptual plan showing the proposed reclamation for the site. This will include the type, location, and size of the proposed mine seals (drainage channels and/or control structures below mine seals will also be shown), access to the work area, etc. The conceptual plan will include proposed construction limits to allow for adequate access to the work areas. Property line information will be developed using tax maps. POTESTA will meet with the WVDEP, AML on-site to discuss our conceptual plan and will incorporate comments from the WVDEP, AML into our design packages.



Subtask IIIE - Preparation of Plans, Specifications and Engineer's Cost Estimate

This subtask involves the design and preparation of construction drawings, technical specifications, engineer's construction cost estimate, and contractor's bid form after receiving WVDEP, AML's concurrence with the 20 to 30 percent conceptual plan from Subtask IIID. POTESTA will prepare and make the following submissions to WVDEP, AML including the previously referenced items:

- 1. 60 percent complete submission;
- 2. 90 percent complete submission;
- 3. Final documents issued for bidding and construction.

A review meeting will be conducted with WVDEP, AML following the 60 percent and 90 percent complete submissions to review WVDEP, AML comments and the responses required to address the comments. Following these meetings, we will revise the preliminary design documents based on WVDEP, AML review comments and prepare the next submission of the bidding/construction documents. We have included minimal time to make revisions to the bidding documents following WVDEP, AML review. Extensive review comments/revisions requested by WVDEP, AML will necessitate a request for change order by POTESTA.

Subtask IIIF - Permitting

This subtask includes preparation and submission of the appropriate application forms and supporting documents for the following permits/approvals:

- 1. West Virginia Division of Highways (WVDOH) MM-109 encroachment permit.
- 2. WVDEP National Pollutant Discharge Elimination System (NPDES) General Construction Stormwater Permit.

POTESTA will prepare the application for the MM-109 permit for signature by the WVDEP, AML, and submit the permit application to the appropriate office.

WVDEP, AML has requested that POTESTA prepare the application for the NPDES General Construction Stormwater Permit, and once a construction contract has been awarded, that POTESTA process a permit modification to add the construction contractor as a co-applicant.

POTESTA will prepare and submit the NPDES application, provide written response on behalf of WVDEP, AML to WVDEP Environmental Enforcement notices, submit renewal/reissuance requests for the permit, and apply for the Notice of Termination.



WVDEP, AML will be listed as the original applicant, and once a construction contractor has been selected, the NPDES permit will be transferred to the contractor or the contractor will be added as a co-applicant.

The contractor will be responsible for permit modifications if required by Division of Water and Waste.

Subtask IIIG - Pre-Bid Conference

POTESTA will provide a senior level engineer or the project manager who was involved in the overall project design to conduct the on-site pre-bid conference. The planned construction monitor who will provide construction oversight will also attend the pre-bid meeting. POTESTA's realty agent will also attend the pre-bid conference (hours are included under the realty section). POTESTA will conduct the pre-bid meeting including bidder information, providing an overview of the project requirements, video-recording of the meeting, documenting bidder questions and responses to the questions in a pre-bid meeting memorandum, keeping the pre-bid meeting sign-in sheet, and preparation of addenda which may be required. Pre-bid conference documents and video will be uploaded to AMLNET by POTESTA.

Subtask IIIH - Pre-Construction Conference

POTESTA will provide a senior level engineer or the project manager who was involved in the overall project design to conduct the on-site pre-construction conference. The planned construction monitor who will provide construction oversight will also attend the pre-construction conference. POTESTA's realty agent will also attend the pre-construction conference (hours are included under the realty section of our cost proposal). POTESTA will video record the pre-construction conference. Project submittals from the construction contractor will be reviewed and approved by POTESTA. The video recording and submittals will be uploaded to AMLNET by POTESTA.

Design files (plans, specifications, engineer's construction cost estimate, permit applications, permits, geotechnical exploration information, etc.) shall be uploaded to AMLNET by POTESTA. These same files will also be submitted to WVDEP, AML's project manager.

Task IV - Construction Oversight

This task includes continuous project construction oversight, observation/monitoring, documentation, engineering, and related office services. No testing such as aggregate gradation, soundness, durability, soil moisture/density relationship testing, field density tests, concrete or grout testing, soil analysis, etc. is included. POTESTA will review results of required quality assurance/control tests provided by the construction contractor. POTESTA will provide an assigned (and WVDEP, AML-approved) construction monitor qualified to perform such services.



Construction oversight services will include a pre-construction review, landowner contact, pre-construction photographs, identification of potential hazards, review of plans to identify conditions on-site which may contradict plans, etc.

POTESTA will provide construction management services during the project acting as an agent for WVDEP, Division of Land Restoration, Abandoned Mine Lands and Reclamation. Note that POTESTA cannot issue a stop work notice (suspension of work) to the construction contractor. If POTESTA would issue a stop work notice, this could void our professional liability insurance coverage. POTESTA's construction monitor will call to the attention of the contractor failure of the work or materials to conform to the specifications and suggest that the contractor correct the noncompliance work. If this communication is not effective, POTESTA will contact WVDEP, AML's construction representative and explain the situation so WVDEP, AML can suspend the contractor's work if necessary. POTESTA will document instances where the contractor's work is not in compliance including date, time, contractor representative who was informed of non-compliant work, summary of non-compliant activity, verbal notice that payment will not be approved for non-compliant work, and verbal notice that non-compliant work will require removal.

During construction, POTESTA's monitor will be present on-site when the contractor is performing construction. POTESTA's monitor will document construction activities, take photographs to document stages of the work, keep track of pay items and quantities incorporated in the construction, prepare daily logs and photographs with captions to be uploaded to AMLNET within 48 hours of the activity, track materials and quantities on a daily basis, and prepare weekly and monthly summaries of construction and quantities.

We have assumed a duration of construction of 120 calendar days for this project. Construction monitor time has been proposed at up to 10 hours per day, 7 AM to 5 PM, 5 days per week including on-site activities and time to prepare daily documentation and uploading to AMLNET.

POTESTA will receive, review, and process construction contractor pay applications, review and approve as-built drawings prepared by the construction contractor, prepare a professional engineer's project certification, prepare and issue a substantial completion notice, conduct the final inspection, and prepare and issue the final release. These documents will be uploaded to AMLNET by POTESTA.

This task also includes administrative support to oversee compliance with applicable laws, such as certified payroll and for verifying the contractor's compliance with the Davis-Bacon Act and Infrastructure Investment and Jobs Act (IIJA) with regard to employing current and former employees of the coal industry.



The effort required for this task depends on the contractor's construction schedule, rate of construction, weather and time for completion. We have made our best guess as to the time required for construction monitoring services as stated above.

Task V – Post-Construction Oversight

This task includes site visits upon the completion of reclamation construction to document the performance of reclamation measures and site conditions. Site visits are required until the Notice of Termination for the construction stormwater permit has been submitted to WVDEP permitting. Each visit will be documented in a daily report style log with photographs attached. Post-construction oversight reports will be uploaded to AMLNET. We have included three visits during the warranty period and final release inspection.



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CADD

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION COST PROPOSAL Purchase Order No.: CEOI DEP2400000001 Contract Name: 2023 AML Contract S2 Commodity Line: Lens Creek Left Fork Portals Project Name: SCHEDULE PER CONTRACT CONTRACT UNIT TOTAL TASK DESCRIPTION UNIT PRICE QUANTITY PRICE TASK I: NEPA & EA AGENCY COORDINATIONS (including Office Work, AMLNET, etc.) 295.00 HR 295.00 Principal 1 2 HR 2 295.00 \$ 590.00 Chief Engineer 175.00 | \$ 3,500.00 \$ Project Manager / Senior Engineer / Senior Scientist HR 20 3 130.00 2,600.00 4 Staff Engineer / Staff Scientist HR 20 \$ \$ 5 Engineer / Scientist HR \$ 110.00 HR 5 \$ 135.00 \$ 675.00 6 CADD 95.00 570.00 HR 6 \$ 7 Clerical \$ 0.67 \$ 26.80 Mileage Mile Subtotal Task I.A: 8,256.80 PUBLIC INVOLVEMENT (including Legal Ads, Public Hearings, Documents, Presentations, WVDEP's Website, etc.) В 295.00 \$ HR \$ 255.00 \$ 2 Chief Engineer HR 3 Project Manager / Senior Engineer / Senior Scientist HR \$ 175.00 \$ \$ 130.00 \$ HR 4 Staff Engineer / Staff Scientist 110.00 \$ HR \$ 5 Engineer / Scientist 135.00 \$ 6 CADD HR \$ HR \$ 95.00 \$ 7 Clerical 0.67 \$ 8 Mile \$ -Mileage Subtotal Task I.B: \$ STUDIES, SURVEYS & MITIGATION PLANS (as applicable) 2 \$ 295.00 \$ 590.00 Principal HR 1 765.00 2 Chief Engineer HR 3 \$ 255.00 \$ HR 18 \$ 175.00 \$ 3,150.00 3 Project Manager / Senior Engineer / Senior Scientist 4 Staff Engineer / Staff Scientist \$ 130.00 \$ 2,080.00 \$ 110.00 \$ 5 Engineer / Scientist HR \$ HR 135.00 \$ 6 CADD 7 \$ 95.00 \$ Clerical 8 120 \$ 0.67 \$ 80.40 Mileage Mile 6,665.40 Subtotal I.C: CATEX / EA / FONSI / EIS 295.00 \$ 295.00 1 Principal HR 2 Chief Engineer HR 2 \$ 255.00 510.00 \$ 4,200.00 3 Project Manager / Senior Engineer / Senior Scientist HR 24 175.00 | \$ \$ 130.00 \$ 1,560.00 4 Staff Engineer / Staff Scientist 12 HR 5 Engineer / Scientist HR \$ 110.00

HR

\$

5

135.00 \$



675.00

TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY		UNIT PRICE		TOTAL PRICE
7 (Clerical	HR	4	\$	95.00	\$	380.0
8 N	Mileage	Mile		\$	0.67	\$	
	Subtotal I.D:					8	7,620.0
	TOTAL TASK I:					\$	22,542.2
ASK II: R	REALTY						
A E	EXPLORATORY RIGHTS OF ENTRY (EROE)						
1 P	Principal	HR	1	\$	295.00	\$	295.0
2 0	Chief Engineer	HR	2	\$	255.00	\$	510.0
3 P	Project Manager / Senior Engineer / Senior Scientist	HR	6	\$	175.00	\$	1,050.0
4 F	Realty Agent	HR	40	\$	115.00	\$	4,600.0
5 E	Engineer / Scientist	HR		\$	110.00	\$	-
6 0	CADD	HR		\$	135.00	\$	-
7 0	Clerical	HR	2	\$	95.00	\$	190.0
8 N	Mileage	Mile	200	\$	0.67	\$	134.0
	Subtotal II.A;					8	6,779.0
в	CONSTRUCTION RIGHTS OF ENTRY (CROE)						
1 P	Principal	HR	1	\$	295.00	\$	295.0
\rightarrow	Chief Engineer	HR	2	\$	255.00	\$	510.0
3 F	Project Manager / Senior Engineer / Senior Scientist	HR	10	\$	175.00	\$	1,750.0
-	Realty Agent	HR	40	\$	115.00	\$	4,600.0
-	Engineer / Scientist	HR		\$	110.00	\$	-
-	CADD	HR		\$	135.00	\$	
\rightarrow	Clerical	HR	2	\$	95.00	\$	190.0
8 N	Mileage	Mile	250	\$	0.67	\$	167.5
	Subtotal II.B:					S	7,512.5
C F	PRE-BID CONFERENCE						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
+++	Principal	HR		\$	295.00	\$	
\rightarrow	Chief Engineer	HR		\$	255.00	\$	
\rightarrow	Project Manager / Senior Engineer / Senior Scientist	HR		\$	175.00	\$	
- - - - - - - - - - 	Realty Agent	HR	5	\$	115.00	\$	575.0
-	Engineer / Scientist	HR	-	\$	110.00	\$	
\rightarrow	CADD	HR		\$	135.00	\$	-
	Clerical	HR	1	\$	95.00	\$	95.0
	Mileage	Mile	20	\$	0.67	\$	13.4
	Subtotal II.C:			Ť		S	683.4
D F	PRE-CONSTRUCTION CONFERENCE						
\rightarrow	Principal	HR		\$	295.00	\$	
-	Chief Engineer	HR		\$	255.00	\$	_
	Project Manager / Senior Engineer / Senior Scientist	HR		\$	175.00	\$	
-	Realty Agent	HR	5	\$	115.00	\$	575.0
	Engineer / Scientist	HR	-	\$	110.00	\$	-
	CADD	HR		\$	135.00	\$	
	Clerical	HR	1	\$	95.00	\$	95.0
-	Mileage	Mile	20	\$	0.67	\$	13.4
	Subtotal H.D;	273300		+	5.07	\$	683.4
+++	TOTAL TASK II:			-		_	15,658.3



TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE	TOTAL PRICE
TASK III	DESIGN				
A	SITE RECONNAISSANCE AND EXPLORATION				
1	Principal	HR	1	\$ 295.00	\$ 295.00
2	Chief Engineer	HR	16	\$ 255.00	\$ 4,080.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	26	\$ 175.00	\$ 4,550.00
4	Staff Engineer / Staff Scientist	HR	14	\$ 130.00	\$ 1,820.00
5	Engineer / Scientist	HR		\$ 110.00	\$ -
6	Clerical	HR	4	\$ 95.00	\$ 380.00
7	Water Samples (pH, iron, aluminum, manganese)	EA	3	\$ 90.00	\$ 270.00
8	Mileage	Mile	80	\$ 0.67	\$ 53.60
	Subtotal III.A:				\$ 11,448.60
В	SURVEYING & MAPPING				
1	Principal	HR	1	\$ 295.00	\$ 295.00
2	Chief Engineer	HR	4	\$ 255.00	\$ 1,020.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	4	\$ 175.00	\$ 700.00
4	Staff Engineer / Staff Scientist	HR		\$ 130.00	\$ -
5	Engineer / Scientist	HR		\$ 110.00	\$ -
6	CADD	HR	12	\$ 135.00	\$ 1,620.00
7	Clerical	HR		\$ 95.00	\$ -
8	Professional Surveyor / Chief Surveyor	HR	50	\$ 160.00	\$ 8,000.00
9	2-Man Survey Crew	HR	84	\$ 150.00	\$ 12,600.00
10	Topographic Mapping Development	AC	46	\$ 38.00	\$ 1,748.00
11	Mileage	Mile	260	\$ 0.67	\$ 174.20
	Subtotal III.B:			100	\$ 26,157.20
c	GEOTECHNICAL EXPLORATION				
1	Principal	HR	_ 1	\$ 295.00	\$ 295.00
2	Chief Engineer	HR	2	\$ 255.00	\$ 510.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	8	\$ 175.00	\$ 1,400.00
4	Staff Engineer / Staff Scientist	HR		\$ 130.00	\$ -
5	Engineer / Scientist	HR	33	\$ 110.00	\$ 3,630.00
6	CADD	HR		\$ 135.00	\$ -
7	Clerical	HR	2	\$ 95.00	\$ 190.00
8	Mobilization	LS	1	\$ 3,360.00	\$ 3,360.00
9	Soil Augering	LF	45	\$ 44.80	\$ 2,016.00
10	Rock Coring	LF	105	\$ 44.80	\$ 4,704.00
11	Piezometer Installation	LF	50	\$ 28.00	\$ 1,400.00
12	Heavy Equipment for Acess	DAY	3	\$ 952.00	\$ 2,856.00
13	Reclamation	LS	11	\$ 2,240.00	\$ 2,240.00
14	Water Set-up	EA	3	\$ 1,120.00	\$ 3,360.00
15	Stream Crossing	EA	1	\$ 1,120.00	\$ 1,120.00
16	Lockable Cover for Piezometers	EA	1	\$ 560.00	\$ 560.00
17	Drill Crew Per Diem	Day			\$ -
18	Mileage	Mile	120	\$ 0.67	\$ 80.40
	Subtotal III.C:				\$ 27,721.40

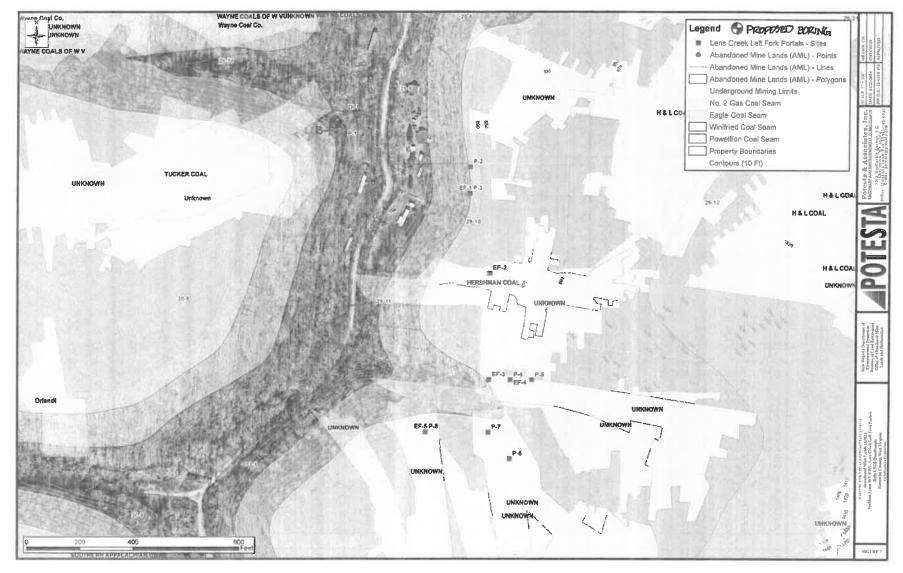


TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE		TOTAL PRICE
D	ANALYSIS AND DESIGN				Т	
1	Principal	HR	2	\$ 295.00	\$	590.00
2	Chief Engineer	HR	12	\$ 255.00	\$	3,060.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	24	\$ 175.00	\$	4,200.00
4	Staff Engineer / Staff Scientist	HR	14	\$ 130.00	\$	1,820.00
5	Engineer / Scientist	HR		\$ 110.00	\$	3
6	CADD	HR	34	\$ 135.00	\$	4,590.00
7	Clerical	HR	4	\$ 95.00	\$	380.00
8	Mileage	Mile	80	\$ 0.67	\$	53.60
	Subtotal III.D:				8	14,693.60
Е	PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEER'S ESTIMATE					
1	Principal	HR	1	\$ 295.00	\$	295.00
2	Chief Engineer	HR	14	\$ 255.00	\$	3,570.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	12	\$ 175.00	\$	2,100.00
4	Staff Engineer / Staff Scientist	HR	8	\$ 130.00	\$	1,040.00
5	Engineer / Scientist	HR	14	\$ 110.00	\$	1,540.00
6	CADD	HR	162	\$ 135.00	\$	21,870.00
7	Clerical	HR	6	\$ 95.00	\$	570.00
8	Mileage	Mile	60	\$ 0.67	\$	40.20
	Subtotal III.E:				\$	31,025.20
F	PERMITTING					
1	Principal	HR	1	\$ 295.00	\$	295.00
2	Chief Engineer	HR	2	\$ 255.00	\$	510.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	14	\$ 175.00	\$	2,450.00
4	Staff Engineer / Staff Scientist	HR	67	\$ 130.00	\$	8,710.00
5	Engineer / Scientist	HR		\$ 110.00	\$	-
6	CADD	HR.	6	\$ 135.00	\$	810.00
7	Clerical	HR	12	\$ 95.00	\$	1,140.00
8	Mileage	Mile		\$ 0.67	\$	
	Subtotal III.F:				\$	13,915.00
G	PRE-BID CONFERENCE					
1	Principal	HR		\$ 295.00	\$	9.
2	Chief Engineer	HR		\$ 255.00	\$	[7]
3	Project Manager / Senior Engineer / Senior Scientist	HR	16	\$ 175.00	\$	2,800.00
4	Staff Engineer / Staff Scientist	HR		\$ 130.00	\$	
5	Engineer / Scientist	HR		\$ 110.00	\$	-
6	CADD	HR		\$ 135.00	\$	-
7	Clerical	HR	4	\$ 95.00	\$	380.0
8	Construction Monitor	HR	8	\$ 95.00	\$	760.0
9	Mileage	Mile	20	\$ 0.67	\$	13.4
	Subtotal III.G:				\$	3,953.40
Н	PRE-CONSTRUCTION CONFERENCE					
1	Principal	HR		\$ 295.00	\$	-
2	Chief Engineer	HR		\$ 255.00	\$	-
3	Project Manager / Senior Engineer / Senior Scientist	HR	8	\$ 175.00	\$	1,400.00



TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY		UNIT PRICE		TOTAL PRICE
4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	-
5	Engineer / Scientist	HR		\$	110,00	\$	-
6	CADD	HR		\$	135.00	\$	
7	Clerical	HR	2	\$	95.00	\$	190.0
8	Construction Monitor	HR	8	\$	95.00	s	760.0
9	Mileage	Mile	20	\$	0.67	\$	13.4
	Subtotal III.H:			8		\$	2,363.40
	TOTAL TASK III:					\$ 1	131,277.80
ASK IV:	CONSTRUCTION OVERSIGHT						
A	CONSTRUCTION INSPECTION						
1	Principal !	HR	14	\$	295,00	\$	4,130.00
2	Chief Engineer	HR	20	\$	255.00	\$	5,100.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	172	\$	175.00	\$	30,100.00
4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	-
5	Engineer / Scientist	HR		\$	110.00	\$	-
6	CADD	HR		\$	135.00	\$	-
7	Clerical	HR	80	\$	95.00	\$	7,600.00
8	Construction Monitor	HR	857	\$	95.00	\$	81,415.00
9	Mileage	Mile	1720	\$	0.67	\$	1,152.40
	Subtotal IV.A:					\$ 1	129,497.40
	TOTAL TASK IV:					\$ 1	129,497.40
ASK V: I	POST-CONSTRUCTION OVERSIGHT						
	FIELD VISITS / INSPECTIONS						
1	Principal	HR		\$	295.00	\$	-
2	Chief Engineer	HR	2	\$	255.00	\$	510.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	9	\$	175.00	\$	1,575.00
4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	-
5	Engineer / Scientist	HR		\$	110.00	\$	-
6	CADD	HR		\$	135.00	\$	-
7	Clerical	HR	3	\$	95.00	\$	285.00
8	Construction Monitor	HR	26	\$	95.00	\$	2,470.00
9	Mileage	Mile	60	\$	0.67	\$	40.20
	Subtotal V.A:		يا الدسيس			\$	4,880.20
	TOTAL TASK V:			7		\$	4,880.20
	TOTAL TASKS I THROUGH V:	EE O	MALE LEVEL		4000	\$ 3	03,855.90







Project/Commodity Line 8: Poe Hollow Portals and Drainage

This project includes several mine portals including six which are open and dry, six which are open and draining or wet, and five which are collapsed and draining. One of these portals is currently equipped with piping to deliver water to a home below. A second portal may also be used for watering animals. A section of clogged stream exists. Some of these portals are in close proximity to houses.

The envisioned reclamation will include access road upgrade and access road construction, temporary steam crossings, dry seals, wet seals, bat gate mine seals, stream restoration, and drainage conveyances below the wet mine seals to the receiving stream.

Due to the collapsed, draining nature of some of the portals and their proximity to existing houses, and the fact that two residents may have piping in the mine pool and are using this as a water source, a geotechnical exploration including setting piezometers is proposed.

Planning, realty, design, and construction oversight scope of services follows.

Task I – National Environmental Policy Act (NEPA) and Environmental Assessment (EA)

This task includes agency coordination and development of an Environmental Assessment (EA) to obtain a finding of no significant impact (FONSI).

POTESTA will review project information available from WVDEP, AML including OSM-51 documents and consultation letters that may have been prepared/sent for the project. The OSM-51 form will be reviewed for accuracy with the known project information. The OSM-51 will be sent with a cover letter to West Virginia Division of Natural Resources (WVDNR), State Historic Preservation Office (SHPO), and the regional planning council requesting comments on the project. The United States Fish and Wildlife Service (USFWS) IPaC system will be accessed to determine potential impacts to threatened and endangered species. A Phase I bat assessment will be completed by WVDEP, AML to determine if the portals are considered to be suitable bat habitat. POTESTA will update the IPaC information and submit the IPaC forms and a consultation request to the USFWS, if needed. This proposal does not include mist netting bat surveys. Projects on national forest land will require the OSM-51 and letter be sent to the Forest Service (FS). Letters to and from the agencies will be uploaded to AMLNET.

As development and engineering design/preparation of the plans and specifications proceeds, the OSM-51 will be reviewed along with the plans and specifications to provide consistency.

Based on discussions with WVDEP, AML, the AML projects will require preparation of an EA and submission of the EA to the Office of Surface Mining for review and approval. We have assumed



that an EA level NEPA review will be required for this project. A preliminary EA will be prepared using the EA template provided and will be submitted to the WVDEP, AML for initial review. Upon completion of the initial review, POTESTA will finalize the EA document and submit to the necessary agencies.

A preliminary table of contents for the EA is included below.

Table of Contents

Chapter 1: Purpose and Need

- A. Purpose of the Proposed Action
- B. Need for the Proposed Action
- C. Scoping
- D. List of Related Laws and Executive Orders
- Chapter 2: Proposed Action and Appropriate Alternatives and Mitigation Measures
 - A. Alternatives Considered
 - B. Alternatives Considered but Eliminated from Detailed Analysis
- Chapter 3: Affected Environment and Environmental Impacts
 - A. Environmental Consequences of the Proposed Actions and Mitigation Measures
 - B. Affected Resources Including Special Areas of Consideration
 - C. Summary
- Chapter 4: Consultations and Coordination
 - A. Persons and Agencies Contacted to Assist in the Preparation of the Environmental Assessment
 - B. List of Potential Permits and Responsible Parties
 - C. Public Involvement
 - D. Preparer
 - E. Signatures
- Chapter 5: References and Appendices
 - A. References
 - B. Appendices

Following WVDEP, AML approval, final environmental documents will be uploaded to AMLNET.



Per WVDEP, AML, public involvement process activities including the public meetings will be conducted by the WVDEP, AML Planning Group. POTESTA's cost for this task does not include public involvement hours or costs.

Task II - Realty

Realty services for the project will include obtaining exploratory rights of entry (EROE), construction rights of entry (CROE), maintenance rights of entry (MROE) and attendance of the pre-bid conference and pre-construction conference meetings.

Prior to field work (surveying, drilling, field reconnaissance, etc.), POTESTA will visit the courthouse to perform research to determine landowners that could be impacted by the project including access to the work area. POTESTA will obtain copies of tax maps, deeds for current landowners, ownership documentation, and landowner contact information.

POTESTA will then make contact with landowners to obtain EROE. This may require more than one visit with each landowner. Attempts at landowner contact will be documented. Landowner concerns will be noted. After discussion with the WVDEP, AML realty representative, POTESTA will attempt to finalize negotiations with the landowners and obtain signed EROEs for each impacted parcel. EROEs including legal ownership information/documentation and project photographs will be provided to WVDEP, AML's realty representative for review and subsequent uploading to AMLNET. This will include pertinent property information, landowner information, and legal ownership documentation.

WVDEP, AML indicated that some landowners may request to be an additional insured for the CROE. It is important to note that if this happens, the landowner making the request should be added as an "additional insured," not an "additional named insured."

Review of tax maps for the project area indicates the mine portals are located on five different parcels. Access to the mine portals for exploratory work (surveying and drilling) may involve two or three additional parcels for a total of seven or eight.

Once plans and specifications have been developed for each project, POTESTA will again visit the courthouse to verify that property owner and property ownership information is still valid, or obtain current information and documentation if this has changed. POTESTA will subsequently make contact with each affected landowner. Attempts at landowner contact will be documented. Proposed construction/reclamation activities will be reviewed with each landowner. Landowner demands will be noted and shared/discussed with our WVDEP, AML realty contact. If appropriate, landowner demands will be incorporated into the plans and specifications. POTESTA will then meet with each landowner and present them with a CROE. The CROE typically includes a clause



granting WVDEP, AML right of entry for maintenance activities. Upon execution of the CROE form, the CROE including legal ownership information/documentation and project photographs will be provided to WVDEP, AML's realty representative for review and subsequent uploading to AMLNET.

POTESTA's realty agent will keep a journal/log while working on this task. The journal/log will include duration of time spent working on realty activities, mileage, and a record of landowners or others that POTESTA's realty agent has interactions with pertaining to Task II activities.

POTESTA's realty agent will attend the pre-bid and pre-construction conference and be able to respond to questions about property ownership, potential landowner issues, and CROE information.

Prior to construction, POTESTA will visit each impacted parcel of land to obtain photographic documentation of such items as general site conditions, property monuments, fences, trees in close proximity of planned ground disturbance, existing driveways and roads, etc. Photographs will be uploaded to AMLNET for documentation of pre-reclamation conditions.

Task III - Design

Subtask IIIA – Site Reconnaissance and Exploration

This subtask includes site reconnaissance for project planning to establish the extent and locations of problem areas, obtain photographic documentation of the site, develop preliminary notes and sketches, review possible access routes to be used during construction, etc. This subtask also includes planning for execution of the engineering/design scope of services. Since this project includes draining mine portals, POTESTA has included five grab samples of mine drainage and analysis of pH, iron, aluminum, and manganese.

Subtask IIIB – Surveying and Mapping

We are proposing to develop aerial topographic mapping for this project due to the size of the area over which the mine portals are located.

Aerial mapping coverage is proposed to include approximately 108 acres.

POTESTA will survey to establish ground control for development of aerial topographic mapping. Project baselines will be established along Poe Hollow. Topographic mapping will be prepared at an appropriate scale and with a contour interval of 2 feet.

A minimum of three survey control points will be established and shown on the mapping. Found corner/property monumentation will be located during field surveying. Existing structures including



pipes and culverts will be located. Pipe sizes and type will be noted on the survey. POTESTA will survey locations of existing visible utilities, as well as utility locations marked following a locate request by POTESTA to WV 811.

Borings drilled for setting piezometers under the geotechnical exploration will be surveyed for horizontal and vertical location.

Subtask IIIC - Geotechnical Exploration

This subtask includes drilling test borings to determine the elevation of coal seam/mine workings and depth of impounded water. Seven borings equipped with casing to serve as piezometers are planned to be installed. Reclamation and revegetation of drill roads will be performed. Borings are estimated to be 50 feet deep, and drilled at the locations shown on Figure 8.

Borings will include hollow stem augering, split spoon sampling and standard penetration testing, and rock coring. One and one-half inch diameter PVC pipe (piezometers) will be set in borings encountering voids drilled above the suspected deep mine entries to be used to monitor water levels during mine dewatering and mine seal construction. PVC casing will be backfilled with auger cuttings at the ground surface. No sand pack is proposed. PVC casing will be installed above the ground surface with a lockable protective covering. One and one-half inch diameter casing is proposed since it can be installed through the drill stems in the event gob or broken rock is encountered in the mine void. Borings not developed as piezometers will be backfilled with auger cuttings. POTESTA will monitor the soil/rock borings and produce boring logs documenting encountered conditions.

In the event that borings encounter solid coal, we will make up to two additional attempts by moving and drilling a new boring. The drilling footage in our cost estimate reflects three attempts. Second and third attempt borings will be drilled only if needed.

Disturbed areas resulting from drilling will be seeded and mulched. Access roads and drill pads will be regarded to as close to original contours as practical.

Subtask IIID - Analysis and Design

This subtask includes developing a conceptual reclamation plan for the site. POTESTA will prepare a 20 to 30 percent conceptual plan showing the proposed reclamation for the site. This will include the type, location, and size of the proposed mine seals (drainage channels and/or control structures below mine seals will also be shown), access to the work area, etc. The conceptual plan will include proposed construction limits to allow for adequate access to the work areas. Property line information will be developed using tax maps. POTESTA will meet with the WVDEP, AML on site



to discuss our conceptual plan and will incorporate comments from the WVDEP, AML into our design packages.

Subtask IIIE - Preparation of Plans, Specifications and Engineer's Cost Estimate

This subtask involves the design and preparation of construction drawings, technical specifications, engineer's construction cost estimate, and contractor's bid form after receiving WVDEP, AML's concurrence with the 20 to 30 percent conceptual plan from Subtask IIID. POTESTA will prepare and make the following submissions to WVDEP, AML including the previously referenced items:

- 1. 60 percent complete submission;
- 2. 90 percent complete submission;
- 3. Final documents issued for bidding and construction.

A review meeting will be conducted with WVDEP, AML following the 60 percent and 90 percent complete submissions to review WVDEP, AML comments and the responses required to address the comments. Following these meetings, we will revise the preliminary design documents based on WVDEP, AML review comments and prepare the next submission of the bidding/construction documents. We have included minimal time to make revisions to the bidding documents following WVDEP, AML review. Extensive review comments/revisions requested by WVDEP, AML will necessitate a request for change order by POTESTA.

Subtask IIIF - Permitting

This subtask includes preparation and submission of the appropriate application forms and supporting documents for the following permits/approvals:

- 1. West Virginia Division of Highways (WVDOH) MM-109 encroachment permit.
- 2. WVDEP National Pollutant Discharge Elimination System (NPDES) General Construction Stormwater Permit.
- 3. United States Army Corps of Engineers permit for clogged steam.

POTESTA will prepare the application for the MM-109 permit for signature by the WVDEP, and submit the permit application to the appropriate office.

WVDEP, AML has requested that POTESTA prepare the application for the NPDES General Construction Stormwater Permit, and once a construction contract has been awarded, that POTESTA process a permit modification to add the construction contractor as a co-applicant.



POTESTA will prepare and submit the NPDES application, provide written response on behalf of WVDEP, AML to WVDEP Environmental Enforcement notices, submit renewal/reissuance requests for the permit, and apply for the Notice of Termination.

WVDEP, AML will be listed as the original applicant, and once a construction contractor has been selected, the NPDES permit will be transferred to the contractor or the contractor will be added as a co-applicant.

The contractor will be responsible for permit modifications if required by Division of Water and Waste.

Subtask IIIG - Pre-Bid Conference

POTESTA will provide a senior level engineer or the project manager who was involved in the overall project design to conduct the on-site pre-bid conference. The planned construction monitor who will provide construction oversight will also attend the pre-bid meeting. POTESTA's realty agent will also attend the pre-bid conference (hours are included under the realty section). POTESTA will conduct the pre-bid meeting including bidder information, providing an overview of the project requirements, video-recording of the meeting, documenting bidder questions and responses to the questions in a pre-bid meeting memorandum, keeping the pre-bid meeting sign-in sheet, and preparation of addenda which may be required. Pre-bid conference documents and video will be uploaded to AMLNET by POTESTA.

Subtask IIIH - Pre-Construction Conference

POTESTA will provide a senior level engineer or the project manager who was involved in the overall project design to conduct the on-site pre-construction conference. The planned construction monitor who will provide construction oversight will also attend the pre-construction conference. POTESTA's realty agent will also attend the pre-construction conference (hours are included under the realty section of our cost proposal). POTESTA will video record the pre-construction conference. Project submittals from the construction contractor will be reviewed and approved by POTESTA. The video recording and submittals will be uploaded to AMLNET by POTESTA.

Design files (plans, specifications, engineer's construction cost estimate, permit applications, permits, geotechnical exploration information, etc.) shall be uploaded to AMLNET by POTESTA. These same files will also be submitted to WVDEP, AML's project manager.

Task IV - Construction Oversight

This task includes continuous project construction oversight, observation/monitoring, documentation, engineering, and related office services. No testing such as aggregate gradation,



soundness, durability, soil moisture/density relationship testing, field density tests, concrete or grout testing, soil analysis, etc. is included. POTESTA will review results of required quality assurance/control tests provided by the construction contractor. POTESTA will provide an assigned (and WVDEP, AML-approved) construction monitor qualified to perform such services.

Construction oversight services will include a pre-construction review, landowner contact, pre-construction photographs, identification of potential hazards, review of plans to identify conditions on-site which may contradict plans, etc.

POTESTA will provide construction management services during the project acting as an agent for WVDEP, Division of Land Restoration, Abandoned Mine Lands and Reclamation. Note that POTESTA cannot issue a stop work notice (suspension of work) to the construction contractor. If POTESTA would issue a stop work notice, this could void our professional liability insurance coverage. POTESTA's construction monitor will call to the attention of the contractor failure of the work or materials to conform to the specifications and suggest that the contractor correct the noncompliance work. If this communication is not effective, POTESTA will contact WVDEP, AML's construction representative and explain the situation so WVDEP, AML can suspend the contractor's work if necessary. POTESTA will document instances where the contractor's work is not in compliance including date, time, contractor representative who was informed of non-compliant work, summary of non-compliant activity, verbal notice that payment will not be approved for non-compliant work, and verbal notice that non-compliant work will require removal.

During construction, POTESTA's monitor will be present on-site when the contractor is performing construction. POTESTA's monitor will document construction activities, take photographs to document stages of the work, keep track of pay items and quantities incorporated in the construction, prepare daily logs and photographs with captions to be uploaded to AMLNET within 48 hours of the activity, track materials and quantities on a daily basis, and prepare weekly and monthly summaries of construction and quantities.

We have assumed a duration of construction of 120 calendar days for this project. Construction monitor time has been proposed at up to 10 hours per day, 7 AM to 5 PM, 5 days per week including on-site activities and time to prepare daily documentation and uploading to AMLNET.

POTESTA will receive, review, and process construction contractor pay applications, review and approve as-built drawings prepared by the construction contractor, prepare a professional engineer's project certification, prepare and issue a substantial completion notice, conduct the final inspection, and prepare and issue the final release. These documents will be uploaded to AMLNET by POTESTA.

This task also includes administrative support to oversee compliance with applicable laws, such as certified payroll and for verifying the contractor's compliance with the Davis-Bacon Act and



Infrastructure Investment and Jobs Act (IIJA) with regard to employing current and former employees of the coal industry.

The effort required for this task depends on the contractor's construction schedule, rate of construction, weather and time for completion. We have made our best guess as to the time required for construction monitoring services as stated above.

Task V – Post-Construction Oversight

This task includes site visits upon the completion of reclamation construction to document the performance of reclamation measures and site conditions. Site visits are required until the Notice of Termination for the construction stormwater permit has been submitted to WVDEP permitting. Each visit will be documented in a daily report style log with photographs attached. Post-construction oversight reports will be uploaded to AMLNET. We have included three visits during the warranty period and final release inspection.



CADD

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WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION COST PROPOSAL Purchase Order No.: CEOI DEP2400000001 Contract Name: 2023 AML Contract S2 Commodity Line: Project Name: Poe Hollow Portals and Drainage SCHEDULE PER CONTRACT CONTRACT UNIT TOTAL. TASK DESCRIPTION UNIT **QUANTITY** PRICE PRICE TASK I: NEPA & EA AGENCY COORDINATIONS (including Office Work, AMLNET, etc.) HR 295.00 295.00 2 Chief Engineer HR 2 S 255.00 510.00 3 Project Manager / Senior Engineer / Senior Scientist HR 20 175.00 3,500.00 2,340.00 Staff Engineer / Staff Scientist HR 18 \$ 130.00 4 5 Engineer / Scientist HR 110.00 \$ 6 CADD HR 5 135.00 675.00 7 Clerical HR \$ 95.00 570.00 6 Mileage 0.67 40.20 8 Mile \$ Subtotal Task I.A: 7,930.20 PUBLIC INVOLVEMENT (including Legal Ads, Public Hearings, Documents, Presentations, WVDEP's Website, etc.) 295.00 Principal 2 Chief Engineer HR 255.00 3 Project Manager / Senior Engineer / Senior Scientist HR \$ 175.00 \$ Staff Engineer / Staff Scientist HR 130.00 \$ 5 Engineer / Scientist HR \$ 110.00 \$ CADD 135.00 HR HR 95.00 Clerical 0.67 8 Mile \$ \$ -Subtotal Task I.B: STUDIES, SURVEYS & MITIGATION PLANS (as applicable) Principal HR 2 \$ 295.00 590.00 HR \$ 255.00 765.00 Chief Engineer 3 Project Manager / Senior Engineer / Senior Scientist HR 175.00 4,200.00 130.00 2,860.00 HR 22 4 Staff Engineer / Staff Scientist 5 Engineer / Scientist HR \$ 110.00 6 CADD HR \$ 135.00 7 Clerical HR S 95.00 0.67 8 Mileage Mile 100 \$ 67.00 Subtotal I.C: 8,482.00 CATEX / EA / FONSI / EIS D 295.00 295.00 Principal HR 1 \$ 2 Chief Engineer HR 2 \$ 255.00 510.00 Project Manager / Senior Engineer / Senior Scientist HR 25 \$ 175.00 4,375.00 3 Staff Engineer / Staff Scientist HR 130.00 1,560.00 5 110.00 Engineer / Scientist HR

HR

\$

135.00



675.00

TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE		TOTAL PRICE
7	Clerical	HR	4	\$ 95.00	\$	380.0
8	Mileage	Mile		\$ 0.67	\$	2
	Subtotal I.D:				\$	7,795.00
	TOTAL TASK I:				\$	24,207.20
TASK IJ	: REALTY					
A	EXPLORATORY RIGHTS OF ENTRY (EROE)					
1	Principal (HR	1	\$ 295.00	\$	295.00
2	Chief Engineer	HR	2	\$ 255.00	\$	510.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	6	\$ 175.00	\$	1,050.00
4	Realty Agent	HR	38	\$ 115.00	\$	4,370.00
5	Engineer / Scientist	HR		\$ 110.00	\$	
6	CADD	HR		\$ 135.00	\$	-
7	Clerical	HR	2	\$ 95.00	\$	190.00
8	Mileage	Mile	100	\$ 0.67	\$	67.00
	Subtotal II.A:				\$	6,482.00
В	CONSTRUCTION RIGHTS OF ENTRY (CROE)					
1	Principal	HR	1	\$ 295.00	\$	295.00
2	Chief Engineer	HR	2	\$ 255.00	\$	510.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	12	\$ 175.00	\$	2,100.00
4	Realty Agent	HR	38	\$ 115.00	\$	4,370.00
5	Engineer / Scientist	HR		\$ 110.00	\$	
6	CADD	HR		\$ 135.00	\$	-
7	Clerical	HR	2	\$ 95.00	\$	190.00
8	Mileage	Mile	100	\$ 0.67	\$	67.00
	Subtotal II.B:				\$	7,532.00
	PRE-BID CONFERENCE					
1	Principal .	HR.		\$ 295.00	\$	-
2	Chief Engineer	HR		\$ 255.00	\$	-
3	Project Manager / Senior Engineer / Senior Scientist	HR		\$ 175.00	\$	-
4	Realty Agent	HR	5	\$ 115.00	\$	575.00
5	Engineer / Scientist	HR		\$ 110.00	\$	
6	CADD	HR		\$ 135.00	\$	-
7	Clerical	HR	1	\$ 95.00	\$	95.00
8	Mileage	Mile	20	\$ 0.67	\$	13.40
	Subtotal II.C:				S	683.40
,	PRE-CONSTRUCTION CONFERENCE					
1	Principal	HR		\$ 295.00	\$	-
2	Chief Engineer	HR		\$ 	\$	
3	Project Manager / Senior Engineer / Senior Scientist	HR		\$ 	\$	_
4	Realty Agent	HR	5	\$ 115.00	\$	575.00
5	Engineer / Scientist	HR		\$ 110.00	\$	-
6	CADD	HR		\$ 135.00	\$	-
7	Clerical	HR	1	\$ 95.00	\$	95.00
8	Mileage	Mile	20	\$ 0.67	\$	13.40
	Subtotal II.D:			INF	\$	683.40
	TOTAL TASK II:				\$	15,380.80



TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY]	UNIT PRICE		TOTAL PRICE
ASK III	: DESIGN						
A.	SITE RECONNAISSANCE AND EXPLORATION						
1	Principal	HR	1	\$	295.00	\$	295.00
2	Chief Engineer	HR	16	\$	255.00	\$	4,080.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	28	\$	175.00	\$	4,900.00
4	Staff Engineer / Staff Scientist	HR	18	\$	130.00	\$	2,340.00
5	Engineer / Scientist	HR		\$	110.00	\$	-
6	Clerical	HR	4	\$	95.00	\$	380.00
7	Water Sample (pH, iron, aluminum, manganese)	EA	5	\$	90.00	\$	450.00
8	Mileage	Mile	60	\$	0.67	\$	40.20
	Subtotal III.A:					\$	12,485.20
В	SURVEYING & MAPPING						
1	Principal	HR	1	\$	295.00	\$	295.00
2	Chief Engineer	HR	3	\$	255.00	\$	765.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	4	\$	175.00	\$	700.00
4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	-
5	Engineer / Scientist	HR		\$	110.00	\$	-
6	CADD	HR	12	\$	135.00	\$	1,620.00
7	Clerical	HR		\$	95.00	\$	-
8	Professional Surveyor / Chief Surveyor	HR	50	\$	160.00	\$	8,000.00
9	2-Man Survey Crew	HR	92	\$	150.00	\$	13,800.00
10	Topographic Mapping Development	AC	108	\$	38.00	\$	4,104.00
11	Mileage	Mile	280	\$	0.67	\$	187.60
	Subtotal III.B;					8	29,471.60
c	GEOTECHNICAL EXPLORATION						
1	Principal	HR	1	\$	295.00	\$	295.00
2	Chief Engineer	HR	4	\$	255.00	\$	1,020.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	16	\$	175.00	\$	2,800.00
4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	-
5	Engineer / Scientist	HR	164	\$	110.00	\$	18,040.00
6	CADD	HR		\$	135.00	\$	-
7	Clerical	HR	4	\$	95.00	\$	380.00
8	Mobilization	LS	1	\$	3,360.00	\$	3,360.00
9	Soil Augering	LF	315	\$	44.80	\$	14,112.00
10	Rock Coring	LF	735	\$	44.80	\$	32,928.00
11	Piezometer Installation	LF	350	\$	28.00	\$	9,800.00
12	Heavy Equipment for Access	DAY	15	\$	952.00	\$	14,280.00
13	Reclamation	LS	1	\$	4,480.00	\$	4,480.00
14	Water Set-up	EA	21	\$	1,120.00	\$	23,520.00
15	Stream Crossing	EA	4	\$	2,240.00	\$	8,960.00
16	Lockable Cover for Piezometers	EA	7	\$	560.00	\$	3,920.00
17	Drill Crew Per Diem	Day		1		\$	-
18	Mileage	Mile	450	\$	0.67	\$	301.50
	Subtotal III.C:		1	1	0.07	-	138,196.50

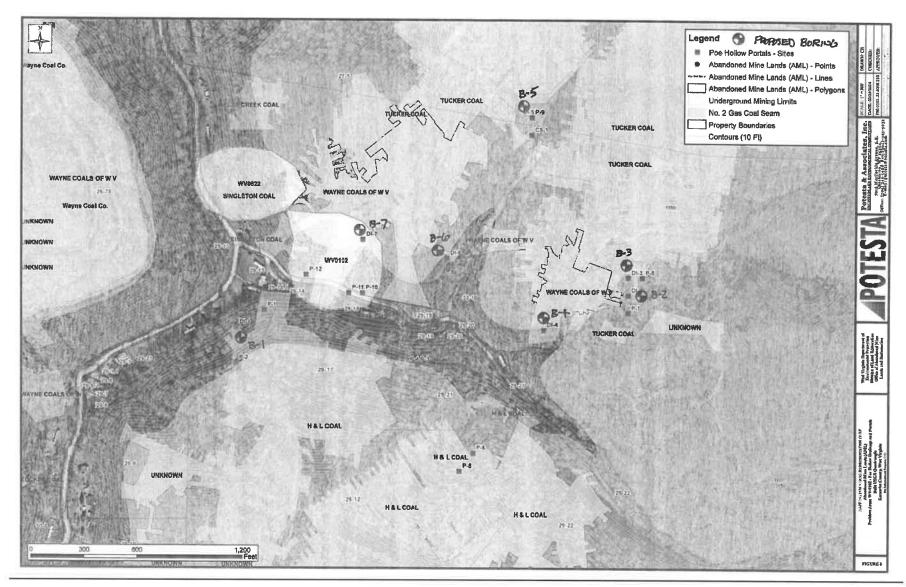


TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE	TOTAL PRICE
D	ANALYSIS AND DESIGN				
1	Principal	HR	2	\$ 295.00	\$ 590.00
2	Chief Engineer	HR	20	\$ 255.00	\$ 5,100.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	27	\$ 175.00	\$ 4,725.0
4	Staff Engineer / Staff Scientist	HR	14	\$ 130.00	\$ 1,820.0
5	Engineer / Scientist	HR		\$ 110.00	s -
6	CADD	HR	32	\$ -135.00	\$ 4,320.0
7	Clerical	HR	4	\$ 95.00	\$ 380.0
8	Mileage	Mile	40	\$ 0.67	\$ 26.8
	Subtotal III.D:	Ribu i			\$ 16,961.86
Е	PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEER'S ESTIMATE				
1	Principal	HR	1	\$ 295.00	\$ 295.00
2	Chief Engineer	HR	14	\$ 255.00	\$ 3,570.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	12	\$ 175.00	\$ 2,100.00
4	Staff Engineer / Staff Scientist	HR	4	\$ 130.00	\$ 520.00
5	Engineer / Scientist	HR	16	\$ 110.00	\$ 1,760.00
6	CADD	HR	158	\$ 135.00	\$ 21,330.00
7	Clerical	HR	6	\$ 95.00	\$ 570.00
8	Mileage	Mile	40	\$ 0.67	\$ 26.80
+	Subtotal III.E;				\$ 30,171.80
F	PERMITTING				
1	Principal	HR	1	\$ 295.00	\$ 295.00
2	Chief Engineer	HR	2	\$ 255.00	\$ 510.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	16	\$ 175.00	\$ 2,800.00
4	Staff Engineer / Staff Scientist	HR	80	\$ 130.00	\$ 10,400.00
5	Engineer / Scientist	HR	20	\$ 110.00	\$ 2,200.00
6	CADD CADD	HR	12	\$ 135.00	\$ 1,620.00
7	Clerical	HR	12	\$ 95.00	\$ 1,140.00
8	Mileage	Mile	12	\$ 0.67	\$ -
0	Subtotal III.F:	IVIIIC		\$ 0.07	\$ 18,965.00
G	PRE-BID CONFERENCE				\$ 10,705.00
1	Principal	HR		\$ 295.00	\$ -
2	Chief Engineer	HR		\$ 255.00	\$ -
3	Project Manager / Senior Engineer / Senior Scientist	HR	16	\$ 235.00 \$ 175.00	\$ 2,800.00
4		HR	10	\$ 130.00	
-	Staff Engineer / Staff Scientist	HR		\$ 110.00	
5	Engineer / Scientist			\$ 135.00	
6	CADD	HR	4	\$ 95.00	\$ 380.00
7	Clerical Construction Manifest	HR	8		\$ 760.00
8	Construction Monitor	HR			
9	Mileage	Mile	20	\$ 0.67	
	Subtotal III.G:				\$ 3,953.40
I .	PRE-CONSTRUCTION CONFERENCE	1770		A 20102	Ф
1	Principal ·	HR		\$ 295.00	\$ -
2	Chief Engineer	HR		\$ 255.00	\$ -
3	Project Manager / Senior Engineer / Senior Scientist	HR	8	\$ 175.00	\$ 1,400.00



TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE		TOTAL PRICE
4 Sta	aff Engineer / Staff Scientist	HR		\$ 130,00	\$	-
5 En	ngineer / Scientist	HR		\$ 110.00	\$	-
6 C/	ADD	HR		\$ 135.00	\$	-
7 CI	erical	HR	2	\$ 95,00	\$	190,00
8 Cc	onstruction Monitor	HR	8	\$ 95.00	\$	760.00
9 M	ileage	Mile	20	\$ 0.67	\$	13.40
	Subtotal III.H:				\$	2,363.40
	TOTAL TASK III:				\$	252,568.70
TASK IV: C	ONSTRUCTION OVERSIGHT		711			
A CO	ONSTRUCTION INSPECTION					
1 Pr	incipal	HR	14	\$ 295.00	\$	4,130.00
2 Cl	hief Engineer	HR	20	\$ 255.00	\$	5,100.00
3 Pr	roject Manager / Senior Engineer / Senior Scientist	HR	172	\$ 175.00	\$	30,100.00
4 Sta	aff Engineer / Staff Scientist	HR		\$ 130.00	\$	-
5 En	ngineer / Scientist	HR		\$ 110.00	\$;=
6 C/	ADD	HR		\$ 135.00	\$	
7 Cl	erical	HR	80	\$ 95.00	\$	7,600.00
8 Co	onstruction Monitor	HR	857	\$ 95.00	\$	81,415.00
9 M	ileage	Mile	1742	\$ 0.67	\$	1,167.14
	Subtotal IV.A:				\$	129,512.14
	TOTAL TASK IV:				\$	129,512.14
TASK V: PO	OST-CONSTRUCTION OVERSIGHT		***			
A FI	ELD VISITS / INSPECTIONS					
1 Pr	rincipal	HR		\$ 295.00	\$	-
2 Cl	hief Engineer	HR	2	\$ 255.00	\$	510.00
3 Pr	roject Manager / Senior Engineer / Senior Scientist	HR	9	\$ 175.00	\$	1,575.00
4 St	aff Engineer / Staff Scientist	HR		\$ 130.00	\$	-
5 Er	ngineer / Scientist	HR		\$ 110.00	\$	-
6 C	ADD	HR		\$ 135.00	\$	-
7 C1	lerical	HR	3	\$ 95.00	\$	285.00
8 Co	onstruction Monitor	HR	26	\$ 95.00	\$	2,470.00
9 M	fileage	Mile	60	\$ 0.67	\$	40.20
	Subtotal V.A:				8	4,880.20
	TOTAL TASK V:				8	4,880.20
	TOTAL TASKS I THROUGH V:		- 1-1-1-1	-11	\$	426,549.04







Project/Commodity Line 9: Route 60 Drainage Phase II

This project is in the same area covered under two previous WVDEP, AML projects. The first AML project was completed around 2014 and included several wet mine seals and grouted riprap channels to convey mine drainage from the mine seals (and surface runoff) to a culvert crossing under US Route 60. Subsequently, WVDEP, AML returned to perform maintenance on the drainage system and constructed a soldier beam and concrete lagging retaining wall to stabilize an area of hillside above a grouted riprap channel. WVDEP was contacted by Smithers about uncontrolled drainage impacting businesses below the former AML projects.

The soil along the downhill side of the grouted riprap channel has settled or moved due to soil creep on the steep hillside. Vegetation/organic material is in portions of the channel restricting its capacity. Corrugated plastic pipes have been added to the sections of channel. Wet mine seals appear to be functioning. A wet area was observed along a power line right of way.

The approach will be to evaluate, repair, and/or replace sections of the grouted riprap channel not performing. Existing access roads will be upgraded. The area of seepage will be collected with an underdrain. Disturbed areas will be revegetated.

Planning, realty, design, and construction oversight scope of services follows.

Task I – National Environmental Policy Act (NEPA) and Environmental Assessment (EA)

This task includes agency coordination and development of an Environmental Assessment (EA) to obtain a finding of no significant impact (FONSI).

POTESTA will review project information available from WVDEP, AML including OSM-51 documents and consultation letters that may have been prepared/sent for the project. The OSM-51 form will be reviewed for accuracy with the known project information. The OSM-51 will be sent with a cover letter to West Virginia Division of Natural Resources (WVDNR), State Historic Preservation Office (SHPO), and the regional planning council requesting comments on the project. The United States Fish and Wildlife Service (USFWS) IPaC system will be accessed to determine potential impacts to threatened and endangered species. Projects on national forest land will require the OSM-51 and letter be sent to the Forest Service (FS). Letters to and from the agencies will be uploaded to AMLNET.

As development and engineering design/preparation of the plans and specifications proceeds, the OSM-51 will be reviewed along with the plans and specifications to provide consistency.

Based on discussions with WVDEP, AML, the AML projects will require preparation of an EA and submission of the EA to the Office of Surface Mining for review and approval. We have assumed



that an EA level NEPA review will be required for this project. A preliminary EA will be prepared using the EA template provided and will be submitted to the WVDEP, AML for initial review. Upon completion of the initial review, POTESTA will finalize the EA document and submit to the necessary agencies.

A preliminary table of contents for the EA is included below.

Table of Contents

Chapter 1: Purpose and Need

- A. Purpose of the Proposed Action
- B. Need for the Proposed Action
- C. Scoping
- D. List of Related Laws and Executive Orders

Chapter 2: Proposed Action and Appropriate Alternatives and Mitigation Measures

- A. Alternatives Considered
- B. Alternatives Considered but Eliminated from Detailed Analysis

Chapter 3: Affected Environment and Environmental Impacts

- A. Environmental Consequences of the Proposed Actions and Mitigation Measures
- B. Affected Resources Including Special Areas of Consideration
- C. Summary

Chapter 4: Consultations and Coordination

- A. Persons and Agencies Contacted to Assist in the Preparation of the Environmental Assessment
- B. List of Potential Permits and Responsible Parties
- C. Public Involvement
- D. Preparer
- E. Signatures

Chapter 5: References and Appendices

- A. References
- B. Appendices

Following WVDEP, AML approval, final environmental documents will be uploaded to AMLNET.



Per WVDEP, AML, public involvement process activities including the public meetings will be conducted by the WVDEP, AML Planning Group. POTESTA's cost for this task does not include public involvement hours or costs.

Task II - Realty

Realty services for the project will include obtaining exploratory rights of entry (EROE), construction rights of entry (CROE), maintenance rights of entry (MROE) and attendance of the pre-bid conference and pre-construction conference meetings.

Prior to field work (surveying, field reconnaissance, etc.), POTESTA will visit the courthouse to perform research to determine landowners that could be impacted by the project including access to the work area. POTESTA will obtain copies of tax maps, deeds for current landowners, ownership documentation, and landowner contact information.

POTESTA will then make contact with landowners to obtain EROE. This may require more than one visit with each landowner. Attempts at landowner contact will be documented. Landowner concerns will be noted. After discussion with the WVDEP, AML realty representative, POTESTA will attempt to finalize negotiations with the landowners and obtain signed EROEs for each impacted parcel. EROEs including legal ownership information/documentation and project photographs will be provided to WVDEP, AML's realty representative for review and subsequent uploading to AMLNET. This will include pertinent property information, landowner information, and legal ownership documentation.

WVDEP, AML indicated that some landowners may request to be an additional insured for the CROE. It is important to note that if this happens, the landowner making the request should be added as an "additional insured," not an "additional named insured."

Review of tax maps for the project area indicates the problem areas are located on two different parcels. Access to the mine portals for exploratory work (surveying and drilling) may involve one or two additional parcels for a total of three or four.

Once plans and specifications have been developed for each project, POTESTA will again visit the courthouse to verify that property owner and property ownership information is still valid, or obtain current information and documentation if this has changed. POTESTA will subsequently make contact with each affected landowner. Attempts at landowner contact will be documented. Proposed construction/reclamation activities will be reviewed with each landowner. Landowner demands will be noted and shared/discussed with our WVDEP, AML realty contact. If appropriate, landowner demands will be incorporated into the plans and specifications. POTESTA will then meet with each landowner and present them with a CROE. The CROE typically includes a clause



granting WVDEP, AML right of entry for maintenance activities. Upon execution of the CROE form, the CROE including legal ownership information/documentation and project photographs will be provided to WVDEP, AML's realty representative for review and subsequent uploading to AMLNET.

POTESTA's realty agent will keep a journal/log while working on this task. The journal/log will include duration of time spent working on realty activities, mileage, and a record of landowners or others that POTESTA's realty agent has interactions with pertaining to Task II activities.

POTESTA's realty agent will attend the pre-bid and pre-construction conference and be able to respond to questions about property ownership, potential landowner issues, and CROE information.

Prior to construction, POTESTA will visit each impacted parcel of land to obtain photographic documentation of such items as general site conditions, property monuments, fences, trees in close proximity of planned ground disturbance, existing driveways and roads, etc. Photographs will be uploaded to AMLNET for documentation of pre-reclamation conditions.

Task III - Design

Subtask IIIA - Site Reconnaissance and Exploration

This subtask includes site reconnaissance for project planning to establish the extent and locations of problem areas, obtain photographic documentation of the site, develop preliminary notes and sketches, review possible access routes to be used during construction, etc. This subtask also includes planning for execution of the engineering/design scope of services.

Subtask IIIB – Surveying and Mapping

We are proposing to develop aerial topographic mapping for this project due to the size of the area over which the mine portals and drainage problems are located.

Aerial mapping coverage is proposed to include approximately 15 acres.

POTESTA will survey to establish ground control for development of aerial topographic mapping. Project baselines will be established along the power line right of way crossing the project area. Topographic mapping will be prepared at an appropriate scale and with a contour interval of 2 feet.

A minimum of three survey control points will be established and shown on the mapping. Found corner/property monumentation will be located during field surveying. Existing structures including pipes and culverts will be located. Pipe sizes and type will be noted on the survey. POTESTA will



survey locations of existing visible utilities, as well as utility locations marked following a locate request by POTESTA to WV 811.

Subtask IIIC – Geotechnical Exploration

No geotechnical exploration is proposed for this site.

Subtask IIID - Analysis and Design

This subtask includes developing a conceptual reclamation plan for the site. POTESTA will prepare a 20 to 30 percent conceptual plan showing the proposed reclamation for the site. This will include the type, location, and size of the proposed mine seals (drainage channels and/or control structures below mine seals will also be shown), access to the work area, etc. The conceptual plan will include proposed construction limits to allow for adequate access to the work areas. Property line information will be developed using tax maps. POTESTA will meet with the WVDEP, AML on site to discuss our conceptual plan and will incorporate comments from the WVDEP, AML into our design packages.

Subtask IIIE - Preparation of Plans, Specifications and Engineer's Cost Estimate

This subtask involves the design and preparation of construction drawings, technical specifications, engineer's construction cost estimate, and contractor's bid form after receiving WVDEP, AML's concurrence with the 20 to 30 percent conceptual plan from Subtask IIID. POTESTA will prepare and make the following submissions to WVDEP, AML including the previously referenced items:

- 1. 60 percent complete submission;
- 2. 90 percent complete submission;
- 3. Final documents issued for bidding and construction.

A review meeting will be conducted with WVDEP, AML following the 60 percent and 90 percent complete submissions to review WVDEP, AML comments and the responses required to address the comments. Following these meetings, we will revise the preliminary design documents based on WVDEP, AML review comments and prepare the next submission of the bidding/construction documents. We have included minimal time to make revisions to the bidding documents following WVDEP, AML review. Extensive review comments/revisions requested by WVDEP, AML will necessitate a request for change order by POTESTA.

Subtask IIIF - Permitting

This subtask includes preparation and submission of the appropriate application forms and supporting documents for the following permits/approvals:



- 1. West Virginia Division of Highways (WVDOH) MM-109 encroachment permit.
- 2. WVDEP National Pollutant Discharge Elimination System (NPDES) General Construction Stormwater Permit.

POTESTA will prepare the application for the MM-109 permit for signature by the WVDEP, AML, and submit the permit application to the appropriate office.

WVDEP, AML has requested that POTESTA prepare the application for the NPDES General Construction Stormwater Permit, and once a construction contract has been awarded, that POTESTA process a permit modification to add the construction contractor as a co-applicant.

POTESTA will prepare and submit the NPDES application, provide written response on behalf of WVDEP, AML to WVDEP Environmental Enforcement notices, submit renewal/reissuance requests for the permit, and apply for the Notice of Termination.

WVDEP, AML will be listed as the original applicant, and once a construction contractor has been selected, the NPDES permit will be transferred to the contractor or the contractor will be added as a co-applicant.

The contractor will be responsible for permit modifications if required by Division of Water and Waste.

Subtask IIIG - Pre-Bid Conference

POTESTA will provide a senior level engineer or the project manager who was involved in the overall project design to conduct the on-site pre-bid conference. The planned construction monitor who will provide construction oversight will also attend the pre-bid meeting. POTESTA's realty agent will also attend the pre-bid conference (hours are included under the realty section). POTESTA will conduct the pre-bid meeting including bidder information, providing an overview of the project requirements, video-recording of the meeting, documenting bidder questions and responses to the questions in a pre-bid meeting memorandum, keeping the pre-bid meeting sign-in sheet, and preparation of addenda which may be required. Pre-bid conference documents and video will be uploaded to AMLNET by POTESTA.

Subtask IIIH – Pre-Construction Conference

POTESTA will provide a senior level engineer or the project manager who was involved in the overall project design to conduct the on-site pre-construction conference. The planned construction monitor who will provide construction oversight will also attend the pre-construction conference. POTESTA's realty agent will also attend the pre-construction conference (hours are included under



the realty section of our cost proposal). POTESTA will video record the pre-construction conference. Project submittals from the construction contractor will be reviewed and approved by POTESTA. The video recording and submittals will be uploaded to AMLNET by POTESTA.

Design files (plans, specifications, engineer's construction cost estimate, permit applications, permits, geotechnical exploration information, etc.) shall be uploaded to AMLNET by POTESTA. These same files will also be submitted to WVDEP, AML's project manager.

Task IV - Construction Oversight

This task includes continuous project construction oversight, observation/monitoring, documentation, engineering, and related office services. No testing such as aggregate gradation, soundness, durability, soil moisture/density relationship testing, field density tests, concrete or grout testing, soil analysis, etc. is included. POTESTA will review results of required quality assurance/control tests provided by the construction contractor. POTESTA will provide an assigned (and WVDEP, AML-approved) construction monitor qualified to perform such services.

Construction oversight services will include a pre-construction review, landowner contact, pre-construction photographs, identification of potential hazards, review of plans to identify conditions on-site which may contradict plans, etc.

POTESTA will provide construction management services during the project acting as an agent for WVDEP, Division of Land Restoration, Abandoned Mine Lands and Reclamation. Note that POTESTA cannot issue a stop work notice (suspension of work) to the construction contractor. If POTESTA would issue a stop work notice, this could void our professional liability insurance coverage. POTESTA's construction monitor will call to the attention of the contractor failure of the work or materials to conform to the specifications and suggest that the contractor correct the noncompliance work. If this communication is not effective, POTESTA will contact WVDEP, AML's construction representative and explain the situation so WVDEP, AML can suspend the contractor's work if necessary. POTESTA will document instances where the contractor's work is not in compliance including date, time, contractor representative who was informed of non-compliant work, summary of non-compliant activity, verbal notice that payment will not be approved for non-compliant work, and verbal notice that non-compliant work will require removal.

During construction, POTESTA's monitor will be present on-site when the contractor is performing construction. POTESTA's monitor will document construction activities, take photographs to document stages of the work, keep track of pay items and quantities incorporated in the construction, prepare daily logs and photographs with captions to be uploaded to AMLNET within 48 hours of the activity, track materials and quantities on a daily basis, and prepare weekly and monthly summaries of construction and quantities.



We have assumed a duration of construction of 120 calendar days for this project. Construction monitor time has been proposed at up to 10 hours per day, 7 AM to 5 PM, 5 days per week including on-site activities and time to prepare daily documentation and uploading to AMLNET.

POTESTA will receive, review, and process construction contractor pay applications, review and approve as-built drawings prepared by the construction contractor, prepare a professional engineer's project certification, prepare and issue a substantial completion notice, conduct the final inspection, and prepare and issue the final release. These documents will be uploaded to AMLNET by POTESTA.

This task also includes administrative support to oversee compliance with applicable laws, such as certified payroll and for verifying the contractor's compliance with the Davis-Bacon Act and Infrastructure Investment and Jobs Act (IIJA) with regard to employing current and former employees of the coal industry.

The effort required for this task depends on the contractor's construction schedule, rate of construction, weather and time for completion. We have made our best guess as to the time required for construction monitoring services as stated above.

Task V – Post-Construction Oversight

This task includes site visits upon the completion of reclamation construction to document the performance of reclamation measures and site conditions. Site visits are required until the Notice of Termination for the construction stormwater permit has been submitted to WVDEP permitting. Each visit will be documented in a daily report style log with photographs attached. Post-construction oversight reports will be uploaded to AMLNET. We have included three visits during the warranty period and final release inspection.



		OFFICE OF ABANDONED MINE LANDS & RE	CLAIVL	AHON				
_		COST PROPOSAL						
_		Order No.: CEOI DEP2400000001						
_		Name: 2023 AML Contract S2						
_	ject N						_	
	jeeri	miner Your of Training Linear XX						
		SCHEDULE PER CONTRACT						
Т	ASK	DESCRIPTION	UNIT	CONTRACT		UNIT PRICE		TOTAL PRICE
ТА	SK I:	NEPA & EA						
A		AGENCY COORDINATIONS (including Office Work, AMLNET, etc.)						
	1	Principal	HR	1	\$	295.00	\$	295.00
	2	Chief Engineer	HR	2	\$	255.00	\$	510.00
	3	Project Manager / Senior Engineer / Senior Scientist	HR	22	\$	175.00	\$	3,850.00
	4	Staff Engineer / Staff Scientist	HR	16	\$	130.00	\$	2,080.0
	5	Engineer / Scientist	HR	10	\$	110.00	\$	_,,,,,,,,
	6	CADD	HR	5	\$	135.00	\$	675.0
	7	Clerical	HR	6	\$	95.00	\$	570.00
	8	Mileage	Mile	120	\$	0.67	\$	80.4
	+	Subtotal Task I.A;					S	8,060.40
В	\vdash	PUBLIC INVOLVEMENT (including Legal Ads, Public Hearings, Documents, Present	tations, W	/VDEP's Website.	etc.)			
	1	Principal	HR		\$	295.00	\$	
	2	Chief Engineer	HR	1	\$	255.00	\$	
	3	Project Manager / Senior Engineer / Senior Scientist	HR		\$	175.00	\$	
	4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	
	5	Engineer / Scientist	HR		\$	110.00	\$	
	6	CADD	HR		\$	135.00	\$	_
	7	Clerical	HR		\$	95.00	\$	
	8	Mileage	Mile		\$	0.67	\$	
		Subtotal Task I.B:					S	-
С		STUDIES, SURVEYS & MITIGATION PLANS (as applicable)						
	1	Principal	HR	2	\$	295.00	\$	590.0
	2	Chief Engineer	HR	2	\$	255.00		510.0
	3	Project Manager / Senior Engineer / Senior Scientist	HR	14	\$	175.00	-	2,450.0
	4	Staff Engineer / Staff Scientist	HR	4	\$	130.00	_	520.0
	5	Engineer / Scientist	HR		\$	110.00	-	-
	6	CADD	HR		\$	135.00	-	
	7	Clerical	HR		\$	95.00		_
	8	Mileage	Mile	120	\$	0.67	1	80.4
		Subtotal I.C:					8	4,150.4
D	1	CATEX / EA / FONSI / EIS						
_	1	Principal	HR	1	\$	295.00	\$	295.0
	2	Chief Engineer	HR	2	\$	255.00	+	510.0
-	3	Project Manager / Senior Engineer / Senior Scientist	HR	24	\$	175.00	+	4,200.0
	4	Staff Engineer / Staff Scientist	HR	10	\$	130.00	-	1,300.0
	5	Engineer / Scientist	HR		\$	110.00	-	
	6	CADD	HR	5	\$	135.00	+	675.0



TA	SK	DESCRIPTION	UNIT	CONTRACT QUANTITY		UNIT PRICE		TOTAL PRICE
7	7	Clerical	HR	4	\$	95.00	\$	380.0
8	3	Mileage	Mile		\$	0.67	\$	¥
		Subtotal I.D:					\$	7,360.00
		TOTAL TASK I:					\$	19,570.80
TASK	CII:	REALTY						
A		EXPLORATORY RIGHTS OF ENTRY (EROE)						
1	T	Principal :	HR	1	\$	295.00	\$	295.00
2		Chief Engineer	HR	2	\$	255.00	\$	510.0
3		Project Manager / Senior Engineer / Senior Scientist	HR	6	\$	175.00	\$	1,050.00
4		Realty Agent	HR	36	\$	115.00	\$	4,140.00
5		Engineer / Scientist	HR		\$	110.00	\$	-
6		CADD	HR		\$	135.00	\$	-
7		Clerical	HR	2	\$	95.00	\$	190.00
8	1	Mileage	Mile	240	\$	0.67	\$	160.80
		Subtotal II.A:	E 2 1		E		\$	6,345.80
В		CONSTRUCTION RIGHTS OF ENTRY (CROE)						
1	T	Principal	HR	1	\$	295.00	\$	295.00
2		Chief Engineer	HR	2	\$	255.00	\$	510.00
3		Project Manager / Senior Engineer / Senior Scientist	HR	14	\$	175.00	\$	2,450.00
4		Realty Agent	HR	36	\$	115.00	\$	4,140.00
5	1	Engineer / Scientist	HR		\$	110.00	\$	
6		CADD	HR		\$	135.00	\$	-
7	+-	Clerical	HR	2	\$	95.00	\$	190.00
8	+	Mileage	Mile	240	\$	0.67	\$	160.80
		Subtotal II.B:					\$	7,745.80
		PRE-BID CONFERENCE						
1		Principal	HR		\$	295.00	\$	_
2		Chief Engineer	HR		\$	255.00	\$	-
3	t	Project Manager / Senior Engineer / Senior Scientist	HR		\$	175.00	\$	-
4	t	Realty Agent	HR	5	\$	115.00	\$	575.00
5		Engineer / Scientist	HR		\$	110.00	\$	-
6	T	CADD	HR		\$	135.00	\$	_
7	t	Clerical	HR	1	\$		\$	95.00
8	T	Mileage	Mile	60	\$	0.67	\$	40.20
		Subtotal II.C:					\$	710.20
,	т	PRE-CONSTRUCTION CONFERENCE						
1		Principal	HR		\$	295.00	\$	
2	-	Chief Engineer	HR		\$		\$	
3	-	Project Manager / Senior Engineer / Senior Scientist	HR	-	\$		\$	-
4	-	Realty Agent	HR	5	\$		\$	575.00
5	-	Engineer / Scientist	HR		\$		\$	-
6	-	CADD	HR		\$		\$	_
7	-	Clerical	HR	1	\$		\$	95.00
8	1	Mileage	Mile	60	\$		\$	40.20
		Subtotal II.D:					\$	710.20
	\Box	TOTAL TASK II:					_	15,512.00



TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE	TOTAL PRICE
'ASK III	: DESIGN				
A	SITE RECONNAISSANCE AND EXPLORATION				
1	Principal	HR	1	\$ 295.00	\$ 295.0
2	Chief Engineer	HR	16	\$ 255.00	\$ 4,080.0
3	Project Manager / Senior Engineer / Senior Scientist	HR	28	\$ 175,00	\$ 4,900.0
4	Staff Engineer / Staff Scientist	HR	14	\$ 130.00	\$ 1,820.0
5	Engineer / Scientist	HR		\$ 110.00	\$ -
6	CADD	HR		\$ 135.00	\$ -
7	Clerical	HR	4	\$ 95.00	\$ 380.0
8	Mileage	Mile	120	\$ 0.67	\$ 80.4
	Subtotal III.A:				\$ 11,555.4
3	SURVEYING & MAPPING				
1	Principal Principal	HR	1	\$ 295.00	\$ 295.0
2	Chief Engineer	HR	2	\$ 255.00	\$ 510.0
3	Project Manager / Senior Engineer / Senior Scientist	HR	4	\$ 175.00	\$ 700.0
4	Staff Engineer / Staff Scientist	HR		\$ 130.00	\$ -
5	Engineer / Scientist	HR		\$ 110.00	\$ -
6	CADD	HR	12	\$ 135.00	\$ 1,620.0
7	Clerical	HR		\$ 95.00	\$ -
8	Professional Surveyor / Chief Surveyor	HR	18	\$ 160.00	\$ 2,880.0
9	2-Man Survey Crew	HR	40	\$ 150.00	\$ 6,000.0
10	Topographic Mapping Development	AC	15	\$ 38.00	\$ 570.0
11	Mileage	Mile	360	\$ 0.67	\$ 241.2
	Subtotal III.B:				\$ 12,816.2
c	GEOTECHNICAL EXPLORATION				
1	Principal	HR		\$ 295.00	\$ -
2	Chief Engineer	HR		\$ 255.00	\$ -
3	Project Manager / Senior Engineer / Senior Scientist	HR		\$ 175.00	\$ -
4	Staff Engineer / Staff Scientist	HR		\$ 130.00	\$ -
5	Engineer / Scientist	HR		\$ 110.00	\$ -
6	CADD	HR		\$ 135.00	\$ -
7	Clerical	HR		\$ 95.00	\$ -
8	Mobilization	LS			\$ -
9	Soil Augering	LF			\$ -
10	Rock Coring	LF			\$ -
11	Piezometer Installation	LF			\$ -
12	Heavy Equipment	HR			\$ -
13	Reclamation	LS			\$ -
14	Laboratory Analysis	LS			\$ -
15	Drill Crew Per Diem	Day			\$ -
16	Mileage	Mile		\$ 0.67	\$ -
	Subtotal III.C:				s -

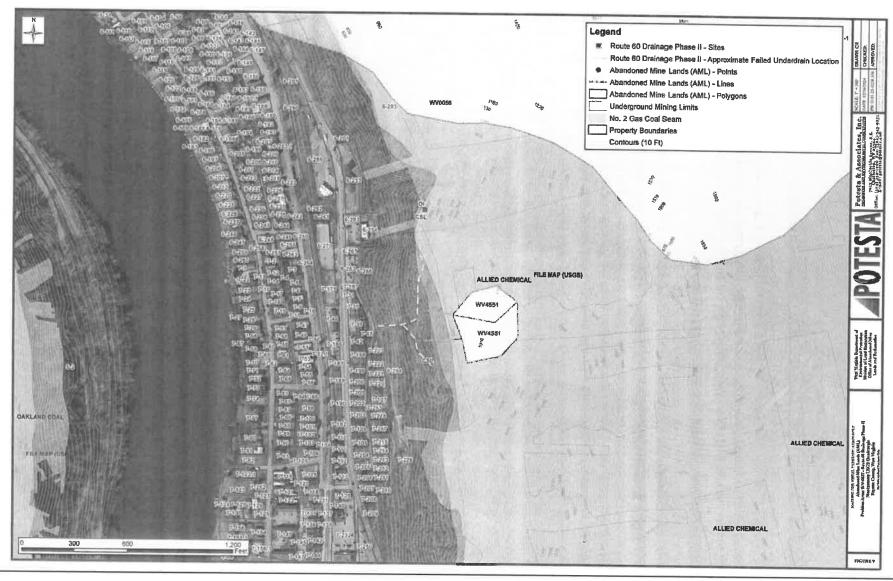


Т	ASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	1	UNIT RICE		TOTAL PRICE
D		ANALYSIS AND DESIGN					T	
	1	Principal	HR	2	\$	295.00	\$	590.00
	2	Chief Engineer	HR	12	\$	255.00	\$	3,060.00
	3	Project Manager / Senior Engineer / Senior Scientist	HR	20	\$	175.00	\$	3,500.00
	4	Staff Engineer / Staff Scientist	HR	10	\$	130.00	\$	1,300.00
	5	Engineer / Scientist	HR		\$	110.00	\$	_
	6	CADD	HR	26	\$	135.00	\$	3,510.00
	7	Clerical	HR	4	\$	95.00	\$	380.00
	8	Mileage	Mile	120	\$	0.67	\$	80.40
		Subtotal III.D:					8	12,420.40
Е		PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEER'S ESTIMATE						
	1	Principal	HR	1	\$	295.00	\$	295.00
	2	Chief Engineer	HR	12	\$	255.00	\$	3,060.00
T	3	Project Manager / Senior Engineer / Senior Scientist	HR	12	\$	175.00	\$	2,100.00
	4	Staff Engineer / Staff Scientist	HR	4	\$	130.00	\$	520.00
	5	Engineer / Scientist	HR	16	\$	110.00	\$	1,760.00
T	6	CADD	HR	135	\$	135.00	\$	18,225.00
	7	Clerical	HR	6	\$	95.00	\$	570.00
	8	Mileage	Mile	120	\$	0.67	\$	80.40
		Subtotal III.E:					\$	26,610.40
F		PERMITTING						
	1	Principal	HR	1	\$	295.00	\$	295.00
T	2	Chief Engineer	HR	2	\$	255.00	\$	510.00
	3	Project Manager / Senior Engineer / Senior Scientist	HR	12	\$	175.00	\$	2,100.00
T	4	Staff Engineer / Staff Scientist	HR	60	\$	130.00	\$	7,800.00
	5	Engineer / Scientist	HR		\$	110.00	\$	
1	6	CADD	HR	6	\$	135.00	\$	810.00
T	7	Clerical	HR	12	\$	95.00	\$	1,140.00
1	8	Mileage	Mile		\$	0.67	\$	-,
		Subtotal III.F:	21111					12,655.00
G		PRE-BID CONFERENCE						
T	1	Principal	HR		\$	295.00	\$	
1	2	Chief Engineer	HR		\$	255.00	\$	
	3	Project Manager / Senior Engineer / Senior Scientist	HR	14	\$	175.00	\$	2,450.00
1	4	Staff Engineer / Staff Scientist	HR		\$	-	\$	-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
1	5	Engineer / Scientist	HR		\$		\$	
-	5	CADD	HR		\$		\$	-
1	7	Clerical	HR		\$		\$	380.00
-	3	Construction Monitor	HR		\$		\$ \$	760.00
9	_	Mileage	Mile		\$	_	\$	40.20
+		Subtotal III. G:	1.110		Ÿ	_	s	3,630.20
1		PRE-CONSTRUCTION CONFERENCE					-	-,020020
		Principal	HR		\$	295.00	\$	
2	_	Chief Engineer	HR		\$		\$ \$	
-	_	Project Manager / Senior Engineer / Senior Scientist	HR		\$ \$		\$ \$	1,400.00



TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE		TOTAL PRICE	
4 Staf	ff Engineer / Staff Scientist	HR		\$	130.00	\$	-
	gineer / Scientist	HR		\$	110.00	\$	_
6 CA	DD	HR		\$	135.00	\$	-
7 Clei	rical	HR	2	\$	95.00	\$	190.00
8 Con	nstruction Monitor	HR	8	\$	95.00	\$	760.00
9 Mile	eage	Mile	60	\$	0.67	\$	40.20
	Subtotal III.H:					\$	2,390.20
	TOTAL TASK III:					\$	82,077.80
ASK IV: CO	DISTRUCTION OVERSIGHT	•	31				
A CO	NSTRUCTION INSPECTION						
1 Prin	ncipal	HR	22	\$	295.00	\$	6,490.00
2 Chi	ief Engineer	HR	30	\$	255.00	\$	7,650.00
3 Pro	oject Manager / Senior Engineer / Senior Scientist	HR	172	\$	175.00	\$	30,100.00
4 Stat	ff Engineer / Staff Scientist	HR		\$	130.00	\$	_
5 Eng	gineer / Scientist	HR		\$	110.00	\$	-
6 CA	DD	HR		\$	135.00	\$	-
7 Cle	rical	HR	120	\$	95.00	\$	11,400.00
8 Cor	nstruction Monitor	HR	857	\$	95.00	\$	81,415.00
9 Mil	eage	Mile	5160	\$	0.67	\$	3,457.2
	Subtotal IV.A:					\$.	140,512.2
	TOTAL TASK IV:					\$.	140,512.20
TASK V: POS	ST-CONSTRUCTION OVERSIGHT	121	-91-				
A FIE	ELD VISITS / INSPECTIONS						
1 Pri	ncipal	HR		\$	295.00	\$	-
2 Chi	ief Engineer	HR	2	\$	255.00	\$	510.0
3 Pro	oject Manager / Senior Engineer / Senior Scientist	HR	9	\$	175.00	\$	1,575.0
4 Sta	off Engineer / Staff Scientist	HR		\$	130.00	\$	-
5 Eng	gineer / Scientist	HR		\$	110.00	\$	-
6 CA	ADD	HR		\$	135.00	\$	
7 Cle	erical	HR	3	\$	95.00	\$	285.0
8 Co	enstruction Monitor	HR	26	\$	95.00	\$	2,470.0
9 Mil	leage	Mile	180	\$	0.67	\$	120.6
	Subtotal V.A:					\$	4,960.6
	TOTAL TASK V:					\$	4,960.6
	TOTAL TASKS I THROUGH V:					\$	262,633.4





Project/Commodity Line 10: Cannelton (Miller) Drainage

This project includes a suspected mine portal on a steep hillside above closely spaced houses along the south side of Cannelton Hollow Road. The landowner complained about water flowing out of the hillside, entering his yard and causing problems. During the initial site visit, we did not find the source of drainage or a mine portal.

During a follow-up site visit made on February 29, 2023 at the request of WVDEP, AML following a precipitation event and call to WVDEP, AML by a resident complaining of water/drainage problems, POTESTA observed drainage exiting the hillside in two separate locations. Water/drainage flows were in the range of 40 to 50 gallons per minute from both locations. These water discharges may be due to water pooled in mine workings and seeping through barrier coal in place along the outcrop.

The envisioned reclamation will include access road construction, wet mine seal (or other appropriate drain), and drainage conveyance to the receiving stream. Areas disturbed during reclamation construction will be revegetated.

Due to the source of water not being evident, we are proposing to drill two borings to locate the coal seam and possible mine workings.

Planning, realty, design, and construction oversight scope of services follows.

Task I – National Environmental Policy Act (NEPA) and Environmental Assessment (EA)

This task includes agency coordination and development of an Environmental Assessment (EA) to obtain a finding of no significant impact (FONSI).

POTESTA will review project information available from WVDEP, AML including OSM-51 documents and consultation letters that may have been prepared/sent for the project. The OSM-51 form will be reviewed for accuracy with the known project information. The OSM-51 will be sent with a cover letter to West Virginia Division of Natural Resources (WVDNR), State Historic Preservation Office (SHPO), and the regional planning council requesting comments on the project. The United States Fish and Wildlife Service (USFWS) IPaC system will be accessed to determine potential impacts to threatened and endangered species. A Phase I bat assessment will be completed by WVDEP, AML if mine portals are located to determine if the portals are considered to be suitable bat habitat. POTESTA will update the IPaC information and submit the IPaC forms and a consultation request to the USFWS, if needed. This proposal does not include mist netting bat surveys. Projects on national forest land will require the OSM-51 and letter be sent to the Forest Service (FS). Letters to and from the agencies will be uploaded to AMLNET.



As development and engineering design/preparation of the plans and specifications proceeds, the OSM-51 will be reviewed along with the plans and specifications to provide consistency.

Based on discussions with WVDEP, AML, the AML projects will require preparation of an EA and submission of the EA to the Office of Surface Mining for review and approval. We have assumed that an EA level NEPA review will be required for this project. A preliminary EA will be prepared using the EA template provided and will be submitted to the WVDEP, AML for initial review. Upon the initial review, POTESTA will finalize the EA document and submit to the necessary agencies.

A preliminary table of contents for the EA is included below.

Table of Contents

Chapter 1: Purpose and Need

- A. Purpose of the Proposed Action
- B. Need for the Proposed Action
- C. Scoping
- D. List of Related Laws and Executive Orders

Chapter 2: Proposed Action and Appropriate Alternatives and Mitigation Measures

- A. Alternatives Considered
- B. Alternatives Considered but Eliminated from Detailed Analysis

Chapter 3: Affected Environment and Environmental Impacts

- A. Environmental Consequences of the Proposed Actions and Mitigation Measures
- B. Affected Resources Including Special Areas of Consideration
- C. Summary

Chapter 4: Consultations and Coordination

- A. Persons and Agencies Contacted to Assist in the Preparation of the Environmental Assessment
- B. List of Potential Permits and Responsible Parties
- C. Public Involvement
- D. Preparer
- E. Signatures



Chapter 5: References and Appendices

- A. References
- B. Appendices

Following WVDEP, AML approval, final environmental documents will be uploaded to AMLNET.

Per WVDEP, AML, public involvement process activities including the public meetings will be conducted by the WVDEP, AML Planning Group. POTESTA's cost for this task does not include public involvement hours or costs.

Task II - Realty

Realty services for the project will include obtaining exploratory rights of entry (EROE), construction rights of entry (CROE), maintenance rights of entry (MROE) and attendance of the pre-bid conference and pre-construction conference meetings.

Prior to field work (surveying, drilling, field reconnaissance, etc.), POTESTA will visit the courthouse to perform research to determine landowners that could be impacted by the project including access to the work area. POTESTA will obtain copies of tax maps, deeds for current landowners, ownership documentation, and landowner contact information.

POTESTA will then make contact with landowners to obtain EROE. This may require more than one visit with each landowner. Attempts at landowner contact will be documented. Landowner concerns will be noted. After discussion with the WVDEP, AML realty representative, POTESTA will attempt to finalize negotiations with the landowners and obtain signed EROEs for each impacted parcel. EROEs including legal ownership information/documentation and project photographs will be provided to WVDEP, AML's realty representative for review and subsequent uploading to AMLNET. This will include pertinent property information, landowner information, and legal ownership documentation.

WVDEP, AML indicated that some landowners may request to be an additional insured for the CROE. It is important to note that if this happens, the landowner making the request should be added as an "additional insured," not an "additional named insured."

Review of tax maps for the project area indicates the mine portals/drainage locations are located on one parcel. The drainage conveyance may cross three additional parcels for a total of four.

Once plans and specifications have been developed for each project, POTESTA will again visit the courthouse to verify that property owner and property ownership information is still valid, or obtain current information and documentation if this has changed. POTESTA will subsequently make



contact with each affected landowner. Attempts at landowner contact will be documented. Proposed construction/reclamation activities will be reviewed with each landowner. Landowner demands will be noted and shared/discussed with our WVDEP, AML realty contact. If appropriate, landowner demands will be incorporated into the plans and specifications. POTESTA will then meet with each landowner and present them with a CROE. The CROE typically includes a clause granting WVDEP, AML right of entry for maintenance activities. Upon execution of the CROE form, the CROE including legal ownership information/documentation and project photographs will be provided to WVDEP, AML's realty representative for review and subsequent uploading to AMLNET.

POTESTA's realty agent will keep a journal/log while working on this task. The journal/log will include duration of time spent working on realty activities, mileage, and a record of landowners or others that POTESTA's realty agent has interactions with pertaining to Task II activities.

POTESTA's realty agent will attend the pre-bid and pre-construction conference and be able to respond to questions about property ownership, potential landowner issues, and CROE information.

Prior to construction, POTESTA will visit each impacted parcel of land to obtain photographic documentation of such items as general site conditions, property monuments, fences, trees in close proximity of planned ground disturbance, existing driveways and roads, etc. Photographs will be uploaded to AMLNET for documentation of pre-reclamation conditions.

Task III – Design

Subtask IIIA - Site Reconnaissance and Exploration

This subtask includes site reconnaissance for project planning to establish the extent and locations of problem areas, obtain photographic documentation of the site, develop preliminary notes and sketches, review possible access routes to be used during construction, etc. This subtask also includes planning for execution of the engineering/design scope of services. Since this project includes draining mine portals, POTESTA has included three grab samples of mine drainage and analysis of pH, iron, aluminum, and manganese.

Subtask IIIB - Surveying and Mapping

We are proposing to develop aerial topographic mapping for this project.

Aerial mapping coverage is proposed to include approximately 15 acres.



POTESTA will survey to establish ground control for development of aerial topographic mapping. Project baselines will be established along Cannelton Hollow Road. Topographic mapping will be prepared at an appropriate scale and with a contour interval of 2 feet.

A minimum of three survey control points will be established and shown on the mapping. Found corner/property monumentation will be located during field surveying. Existing structures including pipes and culverts will be located. Pipe sizes and type will be noted on the survey. POTESTA will survey locations of existing visible utilities, as well as utility locations marked following a locate request by POTESTA to WV 811.

Borings drilled for setting piezometers under the geotechnical exploration will be surveyed for horizontal and vertical location.

Subtask IIIC – Geotechnical Exploration

This subtask includes drilling test borings to determine the elevation of coal seam/mine workings and depth of impounded water. Two borings equipped with casing to serve as piezometers are planned to be installed. Reclamation and revegetation of drill roads will be performed. Borings are estimated to be 50 feet deep, and drilled at the approximate locations shown on Figure 10.

Borings will include hollow stem augering, split spoon sampling and standard penetration testing, and rock coring. One and one-half inch diameter PVC pipe (piezometers) will be set in borings encountering voids drilled above the suspected deep mine entries (or mine drainage discharges) to be used to monitor water levels during mine dewatering and mine seal construction. PVC casing will be backfilled with auger cuttings at the ground surface. No sand pack is proposed. PVC casing will be installed above the ground surface with a lockable protective covering. One and one-half inch diameter casing is proposed since it can be installed through the drill stems in the event gob or broken rock is encountered in the mine void. Borings not developed as piezometers will be backfilled with auger cuttings. POTESTA will monitor the soil/rock borings and produce boring logs documenting encountered conditions.

In the event that borings encounter solid coal, we will make up to two additional attempts by moving and drilling a new boring. The drilling footage in our cost estimate reflects three attempts. Second and third attempt borings will be drilled only if needed.

Disturbed areas resulting from drilling will be seeded and mulched. Access roads and drill pads will be regraded to as close to original contours as practical.



Subtask IIID - Analysis and Design

This subtask includes developing a conceptual reclamation plan for the site. POTESTA will prepare a 20 to 30 percent conceptual plan showing the proposed reclamation for the site. This will include the type, location, and size of the proposed mine seals (drainage channels and/or control structures below mine seals will also be shown), access to the work area, etc. The conceptual plan will include proposed construction limits to allow for adequate access to the work areas. Property line information will be developed using tax maps. POTESTA will meet with the WVDEP, AML on site to discuss our conceptual plan and will incorporate comments from the WVDEP, AML into our design packages.

Subtask IIIE - Preparation of Plans, Specifications and Engineer's Cost Estimate

This subtask involves the design and preparation of construction drawings, technical specifications, engineer's construction cost estimate, and contractor's bid form after receiving WVDEP, AML's concurrence with the 20 to 30 percent conceptual plan from Subtask IIID. POTESTA will prepare and make the following submissions to WVDEP, AML including the previously referenced items:

- 1. 60 percent complete submission;
- 2. 90 percent complete submission;
- 3. Final documents issued for bidding and construction.

A review meeting will be conducted with WVDEP, AML following the 60 percent and 90 percent complete submissions to review WVDEP, AML comments and the responses required to address the comments. Following these meetings, we will revise the preliminary design documents based on WVDEP, AML review comments and prepare the next submission of the bidding/construction documents. We have included minimal time to make revisions to the bidding documents following WVDEP, AML review. Extensive review comments/revisions requested by WVDEP, AML will necessitate a request for change order by POTESTA.

Subtask IIIF - Permitting

This subtask includes preparation and submission of the appropriate application forms and supporting documents for the following permits/approvals:

- 1. West Virginia Division of Highways (WVDOH) MM-109 encroachment permit.
- 2. WVDEP National Pollutant Discharge Elimination System (NPDES) General Construction Stormwater Permit.

POTESTA will prepare the application for the MM-109 permit for signature by the WVDEP, AML, and submit the permit application to the appropriate offices.



WVDEP, AML has requested that POTESTA prepare the application for the NPDES General Construction Stormwater Permit, and once a construction contract has been awarded, that POTESTA process a permit modification to add the construction contractor as a co-applicant.

POTESTA will prepare and submit the NPDES application, provide written response on behalf of WVDEP, AML to WVDEP Environmental Enforcement notices, submit renewal/reissuance requests for the permit, and apply for the Notice of Termination.

WVDEP, AML will be listed as the original applicant, and once a construction contractor has been selected, the NPDES permit will be transferred to the contractor or the contractor will be added as a co-applicant.

The contractor will be responsible for permit modifications if required by Division of Water and Waste.

Subtask IIIG - Pre-Bid Conference

POTESTA will provide a senior level engineer or the project manager who was involved in the overall project design to conduct the on-site pre-bid conference. The planned construction monitor who will provide construction oversight will also attend the pre-bid meeting. POTESTA's realty agent will also attend the pre-bid conference (hours are included under the realty section). POTESTA will conduct the pre-bid meeting including bidder information, providing an overview of the project requirements, video-recording of the meeting, documenting bidder questions and responses to the questions in a pre-bid meeting memorandum, keeping the pre-bid meeting sign-in sheet, and preparation of addenda which may be required. Pre-bid conference documents and video will be uploaded to AMLNET by POTESTA.

Subtask IIIH - Pre-Construction Conference

POTESTA will provide a senior level engineer or the project manager who was involved in the overall project design to conduct the on-site pre-construction conference. The planned construction monitor who will provide construction oversight will also attend the pre-construction conference. POTESTA's realty agent will also attend the pre-construction conference (hours are included under the realty section of our cost proposal). POTESTA will video record the pre-construction conference. Project submittals from the construction contractor will be reviewed and approved by POTESTA. The video recording and submittals will be uploaded to AMLNET by POTESTA.

Design files (plans, specifications, engineer's construction cost estimate, permit applications, permits, geotechnical exploration information, etc.) shall be uploaded to AMLNET by POTESTA. These same files will also be submitted to WVDEP, AML's project manager.



Task IV - Construction Oversight

This task includes continuous project construction oversight, observation/monitoring, documentation, engineering, and related office services. No testing such as aggregate gradation, soundness, durability, soil moisture/density relationship testing, field density tests, concrete or grout testing, soil analysis, etc. is included. POTESTA will review results of required quality assurance/control tests provided by the construction contractor. POTESTA will provide an assigned (and WVDEP-approved) construction monitor qualified to perform such services.

Construction oversight services will include a pre-construction review, landowner contact, pre-construction photographs, identification of potential hazards, review of plans to identify conditions on-site which may contradict plans, etc.

POTESTA will provide construction management services during the project acting as an agent for WVDEP, Division of Land Restoration, Abandoned Mine Lands and Reclamation. Note that POTESTA cannot issue a stop work notice (suspension of work) to the construction contractor. If POTESTA would issue a stop work notice, this could void our professional liability insurance coverage. POTESTA's construction monitor will call to the attention of the contractor failure of the work or materials to conform to the specifications and suggest that the contractor correct the noncompliance work. If this communication is not effective, POTESTA will contact WVDEP, AML's construction representative and explain the situation so WVDEP, AML can suspend the contractor's work if necessary. POTESTA will document instances where the contractor's work is not in compliance including date, time, contractor representative who was informed of non-compliant work, summary of non-compliant activity, verbal notice that payment will not be approved for non-compliant work, and verbal notice that non-compliant work will require removal.

During construction, POTESTA's monitor will be present on-site when the contractor is performing construction. POTESTA's monitor will document construction activities, take photographs to document stages of the work, keep track of pay items and quantities incorporated in the construction, prepare daily logs and photographs with captions to be uploaded to AMLNET within 48 hours of the activity, track materials and quantities on a daily basis, and prepare weekly and monthly summaries of construction and quantities.

We have assumed a duration of construction of 120 calendar days for this project. Construction monitor time has been proposed at up to 10 hours per day, 7 AM to 5 PM, 5 days per week including on-site activities and time to prepare daily documentation and uploading to AMLNET.

POTESTA will receive, review, and process construction contractor pay applications, review and approve as-built drawings prepared by the construction contractor, prepare a professional engineer's project certification, prepare and issue a substantial completion notice, conduct the final inspection,



and prepare and issue the final release. These documents will be uploaded to AMLNET by POTESTA.

This task also includes administrative support to oversee compliance with applicable laws, such as certified payroll and for verifying the contractor's compliance with the Davis-Bacon Act and Infrastructure Investment and Jobs Act (IIJA) with regard to employing current and former employees of the coal industry.

The effort required for this task depends on the contractor's construction schedule, rate of construction, weather and time for completion. We have made our best guess as to the time required for construction monitoring services as stated above.

Task V – Post-Construction Oversight

This task includes site visits upon the completion of reclamation construction to document the performance of reclamation measures and site conditions. Site visits are required until the Notice of Termination for the construction stormwater permit has been submitted to WVDEP permitting. Each visit will be documented in a daily report style log with photographs attached. Post-construction oversight reports will be uploaded to AMLNET. We have included three visits during the warranty period and final release inspection.



		WEST VIRGINIA DEPARTMENT OF ENVIRONMEN OFFICE OF ABANDONED MINE LANDS & R						
_		COST PROPOSAL	ECLAIVI	AHON				
Pu	rchas	e Order No.: CEOI DEP240000001						_
Co	ntrac	t Name: 2023 AML Contract S2						
Co	mmo	dity Line: 10						
Pre	oject]	Name: Cannelton (Miller) Drainage						
		SCHEDULE PER CONTRACT						
7	ΓASK	DESCRIPTION	UNIT	CONTRACT QUANTITY		UNIT PRICE		TOTAL PRICE
TA	SK I:	NEPA & EA						
A		AGENCY COORDINATIONS (including Office Work, AMLNET, etc.)						
	1	Principal ,	HR	1	\$	295.00	\$	295.00
	2	Chief Engineer	HR	2	\$	255.00	\$	510.00
	3	Project Manager / Senior Engineer / Senior Scientist	HR	20	\$	175.00	\$	3,500.00
	4	Staff Engineer / Staff Scientist	HR	20	\$	130.00	\$	2,600.00
	5	Engineer / Scientist	HR		\$	110.00	\$	-
	6	CADD	HR	8	\$	135.00	\$	1,080.00
	7	Clerical	HR	6	\$	95.00	\$	570.00
	8	Mileage	Mile	120	\$	0.67	\$	80.40
		Subtotal Task I.A:					\$	8,635.40
В		PUBLIC INVOLVEMENT (including Legal Ads, Public Hearings, Documents, Presen	tations, W	VDEP's Website,	etc.)			
	1	Principal	HR		\$	295.00	\$	
	2	Chief Engineer	HR		\$	255.00	\$	-
	3	Project Manager / Senior Engineer / Senior Scientist	HR		\$	175.00	\$	-
	4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	-
	5	Engineer / Scientist	HR		\$	110.00	\$	-
	6	CADD	HR		\$	135.00	\$	_
	7	Clerical	HR		\$	95.00	\$	-
	8	Mileage	Mile		\$	0.67	\$	-
	H)	Subtotal Task I.B:	TELLE		W.		S	
С		STUDIES, SURVEYS & MITIGATION PLANS (as applicable)						
	1	Principal	HR.	2	\$	295.00	\$	590.00
	2	Chief Engineer	HR	2	\$	255.00	\$	510.00
	3	Project Manager / Senior Engineer / Senior Scientist	HR	16	\$	175.00	\$	2,800.00
1	4	Staff Engineer / Staff Scientist	HR	12	\$	130.00	\$	1,560.00
	5	Engineer / Scientist	HR		\$	110.00	\$	-
1	6	CADD	HR		\$	135.00	\$	-
1	7	Clerical	HR		\$	95.00	\$	_
7	8	Mileage	Mile	120	\$	0.67	\$	80.40
		Subtotal J.C:				3.07	\$	5,540.40
5	1	CATEX / EA / FONSI / EIS					-	-,- ,0,,0
1	1	Principal	HR	1	\$	295.00	\$	295.00
-	2	Chief Engineer	HR	2	\$	255.00	\$	510.00
1	3	Project Manager / Senior Engineer / Senior Scientist	HR	26	\$	175.00	\$	4,550.00
+	4	Staff Engineer / Staff Scientist	HR	10	\$	130.00	\$	1,300.00
7	5	Engineer / Scientist	HR		\$	110.00	\$	-
-	6	CADD	HR	5	\$	135.00	\$	675.00

TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY		UNIT PRICE		TOTAL PRICE
7	Clerical	HR	4	\$	95.00	\$	380.0
8	Mileage	Mile		\$	0.67	\$	-
	Subtotal I.D:		Contract of the	-,15		\$	7,710.00
	TOTAL TASK I:					\$	21,885.80
TASK II:	REALTY						
A	EXPLORATORY RIGHTS OF ENTRY (EROE)						
1	Principa1	HR	1	\$	295.00	\$	295.00
2	Chief Engineer	HR	2	\$	255.00	\$	510.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	6	\$	175.00	\$	1,050.00
4	Realty Agent	HR	38	\$	115.00	\$	4,370.00
5	Engineer / Scientist	HR		\$	110.00	\$	-
6	CADD	HR		\$	135.00	\$	-
7	Clerical	HR	2	\$	95.00	\$	190.00
8	Mileage	Mile	240	\$	0.67	\$	160.80
	Subtotal II.A:					\$	6,575.86
В	CONSTRUCTION RIGHTS OF ENTRY (CROE)						
1	Principal	HR	1	\$	295.00	\$	295.00
2	Chief Engineer	HR	2	\$	255.00	\$	510.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	10	\$	175.00	\$	1,750.0
4	Realty Agent	HR	40	\$	115.00	\$	4,600.0
5	Engineer / Scientist	HR		\$	110.00	\$	-
6	CADD	HR		\$	135.00	\$	-
7	Clerical	HR	2	\$	95.00	\$	190.00
8	Mileage	Mile	240	\$	0.67	\$	160.80
	Subtotal II.B:	-				S	7,505.80
С	PRE-BID CONFERENCE						
1	Principal	HR		\$	295.00	\$	-
2	Chief Engineer	HR		\$	255.00	\$	-
3	Project Manager / Senior Engineer / Senior Scientist	HR		\$	175.00	\$	
4	Realty Agent	HR	5	\$	115.00	\$	575.0
5	Engineer / Scientist	HR		\$	110.00	\$	
6	CADD	HR		\$	135.00	\$	
7	Clerical	HR	1	\$	95.00	\$	95.0
8	Mileage	Mile	60	\$	0.67	\$	40.2
	Subtotal II.C:					\$	710.2
D	PRE-CONSTRUCTION CONFERENCE						
1	Principal	HR		\$	295.00	\$	-
2	Chief Engineer	HR		\$	255.00	\$	-
3	Project Manager / Senior Engineer / Senior Scientist	HR		\$	175.00	\$	-
4	Realty Agent	HR	5	\$	115.00	\$	575.0
5	Engineer / Scientist	HR		\$	110.00	\$	-
6	CADD	HR		\$	135.00	\$	-
7	Clerical	HR	1	\$	95.00	\$	95.0
8	Mileage	Mile	60	\$	0.67	\$	40.2
	Subtotal II.D:					\$	710.2
	TOTAL TASK II:					8	15,502.00



TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE	TOTAL PRICE
CASK III	: DESIGN				
A	SITE RECONNAISSANCE AND EXPLORATION				
1	Principal '	HR	1	\$ 295.00	\$ 295.00
2	Chief Engineer	HR	16	\$ 255.00	\$ 4,080.00
3	Project Manager / Senior Engineer / Senior Scientist	. HR	24	\$ 175.00	\$ 4,200.00
4	Staff Engineer / Staff Scientist	HR	14	\$ 130.00	\$ 1,820.00
5	Engineer / Scientist	HR		\$ 110.00	s -
6	Clerical	HR	4	\$ 95,00	\$ 380.00
7	Water Sample (pH, iron, aluminum, manganese)	EA	3	\$ 90.00	\$ 270.00
8	Mileage	Mile	120	\$ 0.67	\$ 80.40
	Subtotal III.A:				\$ 11,125.40
В	SURVEYING & MAPPING				
1	Principal	HR	1	\$ 295.00	\$ 295.00
2	Chief Engineer	HR	3	\$ 255.00	\$ 765.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	4	\$ 175,00	\$ 700,00
4	Staff Engineer / Staff Scientist	HR		\$ 130.00	\$ -
5	Engineer / Scientist	HR		\$ 110.00	\$ -
6	CADD	HR	12	\$ 135.00	\$ 1,620.00
7	Clerical	HR		\$ 95.00	\$ -
8	Professional Surveyor / Chief Surveyor	HR	18	\$ 160.00	\$ 2,880.00
9	2-Man Survey Crew	HR	28	\$ 150.00	\$ 4,200.00
10	Topographic Mapping Development	AC	15	\$ 38.00	\$ 570.00
11	Mileage	Mile	300	\$ 0.67	\$ 201.00
	Subtotal III.B:				\$ 11,231.00
	GEOTECHNICAL EXPLORATION				
1	Principal Principal	HR	1	\$ 295.00	\$ 295,00
2	Chief Engineer	HR	2	\$ 255.00	\$ 510.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	8	\$ 175.00	\$ 1,400.00
4	Staff Engineer / Staff Scientist	HR		\$ 130.00	\$ -
5	Engineer / Scientist	HR	48	\$ 110.00	\$ 5,280.00
6	CADD	HR		\$ 135.00	\$ -
7	Clerical	HR	2	\$ 95.00	\$ 190,00
8	Mobilization	LS	1	\$ 3,360.00	\$ 3,360.00
9	Soil Augering	LF	90	\$ 44.80	\$ 4,032.00
10	Rock Coring	LF	210	\$ 44.80	\$ 9,408.00
11	Piezometer Installation	LF	100	\$ 38,00	\$ 3,800,00
12	Heavy Equipment for Access	DAY	6	\$ 952.00	\$ 5,712.00
13	Reclamation	LS	1	\$ 2,800.00	\$ 2,800.00
14	Water Set-up	EA	6	\$ 1,680.00	\$ 10,080.00
15	Lockable Cover for Piezometers	EA	2	\$ 560.00	\$ 1,120.00
16	Drill Crew Per Diem	Day			\$ -
17	Mileage	Mile	450	\$ 0.67	\$ 301.50
	Subtotal III.C:				\$ 48,288.50

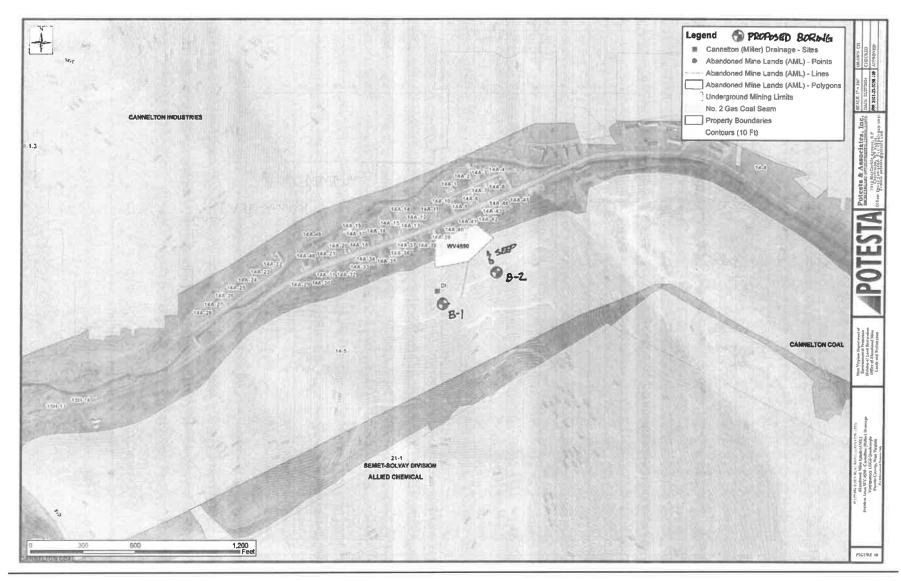


TAS	SK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE			TOTAL PRICE
D	T	ANALYSIS AND DESIGN						
1		Principal	HR	2	\$	295.00	\$	590.00
2	2	Chief Engineer	HR	10	\$	255.00	\$	2,550.00
3	3	Project Manager / Senior Engineer / Senior Scientist	HR	20	\$	175.00	\$	3,500.00
4	1	Staff Engineer / Staff Scientist	HR	10	\$	130.00	\$	1,300.0
5	5	Engineer / Scientist	HR		\$	110.00	\$	-
6	5	CADD	HR	28	\$	135.00	\$	3,780.00
7	7	Clerical	HR	4	\$	95.00	\$	380.00
8	3	Mileage	Mile	120	\$	0.67	\$	80.4
		Subtotal III.D:					\$	12,180.40
E	1	PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEER'S ESTIMATE						
1		Principal	HR	1	\$	295.00	\$	295.00
2	2	Chief Engineer	HR	12	\$	255.00	\$	3,060.00
3	3	Project Manager / Senior Engineer / Senior Scientist	HR	12	\$	175.00	\$	2,100.00
4	1	Staff Engineer / Staff Scientist	HR	4	\$	130.00	\$	520.00
5	5	Engineer / Scientist	HR	16	\$	110.00	\$	1,760.00
6	5	CADD	HR	140	\$	135.00	\$	18,900.00
7	7	Clerical	HR	6	\$	95.00	\$	570.0
8	3	Mileage	Mile	120	\$	0.67	\$	80.4
		Subtotal III.E:					\$	27,285.40
F	1	PERMITTING						
1		Principal	HR	1	\$	295.00	\$	295.00
2	2	Chief Engineer	HR	2	\$	255.00	\$	510.00
3	3	Project Manager / Senior Engineer / Senior Scientist	HR	10	\$	175.00	\$	1,750.0
1	1	Staff Engineer / Staff Scientist	HR	65	\$	130.00	\$	8,450.0
5	5	Engineer / Scientist	HR		\$	110.00	\$	
1	_	CADD	HR	6	\$	135.00	\$	810.0
7	7	Clerical	HR	8	\$	95.00	\$	760.00
18	_	Mileage	Mile		\$	0.67	\$	_
		Subtotal III.F:					8	12,575.00
G	+	PRE-BID CONFERENCE						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	\top	Principal	HR		\$	295.00	\$	
2	-	Chief Engineer	HR		\$	255.00	\$:=
3	_	Project Manager / Senior Engineer / Senior Scientist	HR	14	\$	175.00	\$	2,450.0
-	$\overline{}$	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	-,
1	+	Engineer / Scientist	HR		\$	110.00	\$	-
1	_	CADD	HR		\$	135.00	\$	_
	-	Clerical	HR	4	\$	95.00	\$	380.0
- 8	-	Construction Monitor	HR	8	\$	95.00	\$	760.0
,	_	Mileage	Mile	60	\$	0.67	\$	40.2
1		Subtotal III.G:	1,1110	30	Ψ.	0.07	S	3,630.2
H	-	PRE-CONSTRUCTION CONFERENCE					φ	2,030.2
11	+	Principal	ĤR		\$	295.00	\$	_
-	2	Chief Engineer	HR		\$	255.00	\$	
		(Cities automobile	1117	1	ΙΨ	400.00	Ψ	



TASK DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE		TOTAL PRICE
4 Staff Engineer / Staff Scientist	HR		\$ 130.00	\$	-
5 Engineer / Scientist	HR		\$ 110.00	\$	-
6 CADD	HR		\$ 135.00	\$	-
7 Clerical	HR	2	\$ 95.00	\$	190.0
8 Construction Monitor	HR	8	\$ 95.00	\$	760.0
9 Mileage	Mile	60	\$ 0.67	\$	40.2
Subtotal III.H:			1.1	\$	2,390.2
TOTAL TASK III:				\$.	128,706.1
ASK IV: CONSTRUCTION OVERSIGHT		***************************************			
A CONSTRUCTION INSPECTION					
1 Principal	HR	14	\$ 295.00	\$	4,130.0
2 Chief Engineer	HR	20	\$ 255.00	\$	5,100.0
3 Project Manager / Senior Engineer / Senior Scientist	HR	172	\$ 175.00	\$	30,100.0
4 Staff Engineer / Staff Scientist	HR		\$ 130.00	\$	-
5 Engineer / Scientist	HR		\$ 110.00	\$	-
6 CADD	HR		\$ 135.00	\$	-
7 Clerical	HR	80	\$ 95,00	\$	7,600.0
8 Construction Monitor	HR	857	\$ 95.00	\$	81,415.0
9 Mileage	Mile	5100	\$ 0.67	\$	3,417.0
Subtotal IV.A:				\$ 1	131,762.0
TOTAL TASK IV:				\$ 1	31,762.00
ASK V: POST-CONSTRUCTION OVERSIGHT					
FIELD VISITS / INSPECTIONS					
1 Principal	HR		\$ 295.00	\$	-
2 Chief Engineer	HR	2	\$ 255.00	\$	510.0
3 Project Manager / Senior Engineer / Senior Scientist	HR	9	\$ 175.00	\$	1,575.00
4 Staff Engineer / Staff Scientist	HR		\$ 130.00	\$	-
5 Engineer / Scientist	HR		\$ 110,00	\$	-
6 CADD	HR		\$ 135.00	\$	-
7 Clerical	HR	3	\$ 95.00	\$	285.00
8 Construction Monitor	HR	26	\$ 95.00	\$	2,470.00
9 Mileage	Mile	180	\$ 0.67	\$	120.6
Subtotal V.A:				\$	4,960.60
TOTAL TASK V:				\$	4,960.60
TOTAL TASKS I THROUGH V:				\$ 3	02,816.50







Project/Commodity Line 11: Cabot Portals

This project began as an in-house design for WVDEP, AML. WVDEP, AML was in the process of plan development and decided to include the project completion as part of Contract S2. The project includes two sites. Site 1 includes four mine portals to be sealed. Three proposed mine seal are shown on the existing plan. One additional portal was discovered during the site visit. Concrete building foundations exist and will be removed and buried on-site. Site 2 includes nine portals with proposed seals as shown on the existing plans. During the site visit, we discovered three additional mine entries that may be added to the proposed reclamation plan. Site 2 also includes concrete structures to be removed and buried.

POTESTA will take the existing plans and perform additional design work to develop the final reclamation plan and bid documents.

Planning, realty, design, and construction oversight scope of services follows.

Task I – National Environmental Policy Act (NEPA) and Environmental Assessment (EA)

This task includes agency coordination and development of an Environmental Assessment (EA) to obtain a finding of no significant impact (FONSI).

POTESTA will review project information available from WVDEP, AML including OSM-51 documents and consultation letters that may have been prepared/sent for the project. The OSM-51 form will be reviewed for accuracy with the known project information. The OSM-51 will be sent with a cover letter to West Virginia Division of Natural Resources (WVDNR), State Historic Preservation Office (SHPO), and the regional planning council requesting comments on the project. The United States Fish and Wildlife Service (USFWS) IPaC system will be accessed to determine potential impacts to threatened and endangered species. A Phase I bat assessment will be completed by WVDEP, AML to determine if the portals are considered to be suitable bat habitat. POTESTA will update the IPaC information and submit the IPaC forms and a consultation request to the USFWS, if needed. This proposal does not include mist netting bat surveys. Projects on national forest land will require the OSM-51 and letter be sent to the Forest Service (FS). Letters to and from the agencies will be uploaded to AMLNET.

As development and engineering design/preparation of the plans and specifications proceeds, the OSM-51 will be reviewed along with the plans and specifications to provide consistency.

Based on discussions with WVDEP, AML, the AML projects will require preparation of an EA and submission of the EA to the Office of Surface Mining for review and approval. We have assumed that an EA level NEPA review will be required for this project. A preliminary EA will be prepared using the EA template provided and will be submitted to the WVDEP, AML for initial review.



Upon completion of the initial review, POTESTA will finalize the EA document and submit to the necessary agencies.

A preliminary table of contents for the EA is included below.

Table of Contents

Chapter 1: Purpose and Need

- A. Purpose of the Proposed Action
- B. Need for the Proposed Action
- C. Scoping
- D. List of Related Laws and Executive Orders
- Chapter 2: Proposed Action and Appropriate Alternatives and Mitigation Measures
 - A. Alternatives Considered
 - B. Alternatives Considered but Eliminated from Detailed Analysis
- Chapter 3: Affected Environment and Environmental Impacts
 - A. Environmental Consequences of the Proposed Actions and Mitigation Measures
 - B. Affected Resources Including Special Areas of Consideration
 - C. Summary

Chapter 4: Consultations and Coordination

- A. Persons and Agencies Contacted to Assist in the Preparation of the Environmental Assessment
- B. List of Potential Permits and Responsible Parties
- C. Public Involvement
- D. Preparer
- E. Signatures

Chapter 5: References and Appendices

- A. References
- B. Appendices

Following WVDEP, AML approval, final environmental documents will be uploaded to AMLNET.



Per WVDEP, AML, public involvement process activities including the public meetings will be conducted by the WVDEP, AML Planning Group. POTESTA's cost for this task does not include public involvement hours or costs.

Task II - Realty

Realty services for the project will include obtaining exploratory rights of entry (EROE), construction rights of entry (CROE), maintenance rights of entry (MROE) and attendance of the pre-bid conference and pre-construction conference meetings.

Prior to field work (surveying, drilling, field reconnaissance, etc.), POTESTA will visit the courthouse to perform research to determine landowners that could be impacted by the project including access to the work area. POTESTA will obtain copies of tax maps, deeds for current landowners, ownership documentation, and landowner contact information.

POTESTA will then make contact with landowners to obtain EROE. This may require more than one visit with each landowner. Attempts at landowner contact will be documented. Landowner concerns will be noted. After discussion with the WVDEP, AML realty representative, POTESTA will attempt to finalize negotiations with the landowners and obtain signed EROEs for each impacted parcel. EROEs including legal ownership information/documentation and project photographs will be provided to WVDEP, AML's realty representative for review and subsequent uploading to AMLNET. This will include pertinent property information, landowner information, and legal ownership documentation.

WVDEP, AML indicated that some landowners may request to be an additional insured for the CROE. It is important to note that if this happens, the landowner making the request should be added as an "additional insured," not an "additional named insured."

Review of tax maps for the project area indicates the mine portals are located on a single parcel.

Once plans and specifications have been developed for each project, POTESTA will again visit the courthouse to verify that property owner and property ownership information is still valid, or obtain current information and documentation if this has changed. POTESTA will subsequently make contact with each affected landowner. Attempts at landowner contact will be documented. Proposed construction/reclamation activities will be reviewed with each landowner. Landowner demands will be noted and shared/discussed with our WVDEP, AML realty contact. If appropriate, landowner demands will be incorporated into the plans and specifications. POTESTA will then meet with each landowner and present them with a CROE. The CROE typically includes a clause granting WVDEP, AML right of entry for maintenance activities. Upon execution of the CROE form, the CROE including legal ownership information/documentation and project photographs will



be provided to WVDEP, AML's realty representative for review and subsequent uploading to AMLNET.

POTESTA's realty agent will keep a journal/log while working on this task. The journal/log will include duration of time spent working on realty activities, mileage, and a record of landowners or others that POTESTA's realty agent has interactions with pertaining to Task II activities.

POTESTA's realty agent will attend the pre-bid and pre-construction conference and be able to respond to questions about property ownership, potential landowner issues, and CROE information.

Prior to construction, POTESTA will visit each impacted parcel of land to obtain photographic documentation of such items as general site conditions, property monuments, fences, trees in close proximity of planned ground disturbance, existing driveways and roads, etc. Photographs will be uploaded to AMLNET for documentation of pre-reclamation conditions.

Task III - Design

Subtask IIIA - Site Reconnaissance and Exploration

This subtask includes site reconnaissance for project planning to establish the extent and locations of problem areas, obtain photographic documentation of the site, develop preliminary notes and sketches, review possible access routes to be used during construction, etc. This subtask also includes planning for execution of the engineering/design scope of services. Since this project includes draining mine portals, POTESTA has included three grab samples of mine drainage and analysis of pH, iron, aluminum, and manganese.

Subtask IIIB - Surveying and Mapping

Aerial topographic mapping was developed by WVDEP, AML for this project. POTESTA will utilize the existing mapping and CADD files developed by WVDEP, AML.

POTESTA has included survey time to locate necessary features or additions to the project.

Subtask IIIC – Geotechnical Exploration

No geotechnical exploration is proposed for this project.

Subtask IIID - Analysis and Design

No analysis and design is proposed for this project as WVDEP, AML has a reclamation plan including CADD drawings underway.



Subtask IIIE - Preparation of Plans, Specifications and Engineer's Cost Estimate

This subtask involves the design and preparation of construction drawings, technical specifications, engineer's construction cost estimate, and contractor's bid form. POTESTA will prepare and make the following submissions to WVDEP, AML including the previously referenced items:

- 1. 60 percent complete submission;
- 2. 90 percent complete submission;
- 3. Final documents issued for bidding and construction.

A review meeting will be conducted with WVDEP, AML following the 60 percent and 90 percent complete submissions to review WVDEP, AML comments and the responses required to address the comments. Following these meetings, we will revise the preliminary design documents based on WVDEP, AML review comments and prepare the next submission of the bidding/construction documents. We have included minimal time to make revisions to the bidding documents following WVDEP, AML review. Extensive review comments/revisions requested by WVDEP, AML will necessitate a request for change order by POTESTA.

Subtask IIIF - Permitting

This subtask includes preparation and submission of the appropriate application forms and supporting documents for the following permits/approvals:

- 1. West Virginia Division of Highways (WVDOH) MM-109 encroachment permit.
- 2. WVDEP National Pollutant Discharge Elimination System (NPDES) General Construction Stormwater Permit.

POTESTA will prepare the application for the MM-109 permit for signature by the WVDEP, AML, and submit the permit application to the appropriate office.

WVDEP, AML has requested that POTESTA prepare the application for the NPDES General Construction Stormwater Permit, and once a construction contract has been awarded, that POTESTA process a permit modification to add the construction contractor as a co-applicant.

POTESTA will prepare and submit the NPDES application, provide written response on behalf of WVDEP, AML to WVDEP Environmental Enforcement notices, submit renewal/reissuance requests for the permit, and apply for the Notice of Termination.



WVDEP, AML will be listed as the original applicant, and once a construction contractor has been selected, the NPDES permit will be transferred to the contractor or the contractor will be added as a co-applicant.

The contractor will be responsible for permit modifications if required by Division of Water and Waste.

Subtask IIIG - Pre-Bid Conference

POTESTA will provide a senior level engineer or the project manager who was involved in the overall project design to conduct the on-site pre-bid conference. The planned construction monitor who will provide construction oversight will also attend the pre-bid meeting. POTESTA's realty agent will also attend the pre-bid conference (hours are included under the realty section). POTESTA will conduct the pre-bid meeting including bidder information, providing an overview of the project requirements, video-recording of the meeting, documenting bidder questions and responses to the questions in a pre-bid meeting memorandum, keeping the pre-bid meeting sign-in sheet, and preparation of addenda which may be required. Pre-bid conference documents and video will be uploaded to AMLNET by POTESTA.

Subtask IIIH - Pre-Construction Conference

POTESTA will provide a senior level engineer or the project manager who was involved in the overall project design to conduct the on-site pre-construction conference. The planned construction monitor who will provide construction oversight will also attend the pre-construction conference. POTESTA's realty agent will also attend the pre-construction conference (hours are included under the realty section of our cost proposal). POTESTA will video record the pre-construction conference. Project submittals from the construction contractor will be reviewed and approved by POTESTA. The video recording and submittals will be uploaded to AMLNET by POTESTA.

Design files (plans, specifications, engineer's construction cost estimate, permit applications, permits, geotechnical exploration information, etc.) shall be uploaded to AMLNET by POTESTA. These same files will also be submitted to WVDEP, AML's project manager.

Task IV - Construction Oversight

This task includes continuous project construction oversight, observation/monitoring, documentation, engineering, and related office services. No testing such as aggregate gradation, soundness, durability, soil moisture/density relationship testing, field density tests, concrete or grout testing, soil analysis, etc. is included. POTESTA will review results of required quality assurance/control tests provided by the construction contractor. POTESTA will provide an assigned (and WVDEP, AML-approved) construction monitor qualified to perform such services.



Construction oversight services will include a pre-construction review, landowner contact, pre-construction photographs, identification of potential hazards, review of plans to identify conditions on-site which may contradict plans, etc.

POTESTA will provide construction management services during the project acting as an agent for WVDEP, Division of Land Restoration, Abandoned Mine Lands and Reclamation. Note that POTESTA cannot issue a stop work notice (suspension of work) to the construction contractor. If POTESTA would issue a stop work notice, this could void our professional liability insurance coverage. POTESTA's construction monitor will call to the attention of the contractor failure of the work or materials to conform to the specifications and suggest that the contractor correct the noncompliance work. If this communication is not effective, POTESTA will contact WVDEP, AML's construction representative and explain the situation so WVDEP, AML can suspend the contractor's work if necessary. POTESTA will document instances where the contractor's work is not in compliance including date, time, contractor representative who was informed of non-compliant work, summary of non-compliant activity, verbal notice that payment will not be approved for non-compliant work, and verbal notice that non-compliant work will require removal.

During construction, POTESTA's monitor will be present on-site when the contractor is performing construction. POTESTA's monitor will document construction activities, take photographs to document stages of the work, keep track of pay items and quantities incorporated in the construction, prepare daily logs and photographs with captions to be uploaded to AMLNET within 48 hours of the activity, track materials and quantities on a daily basis, and prepare weekly and monthly summaries of construction and quantities.

We have assumed a duration of construction of 120 calendar days for this project. Construction monitor time has been proposed at up to 10 hours per day, 7 AM to 5 PM, 5 days per week including on-site activities and time to prepare daily documentation and uploading to AMLNET.

POTESTA will receive, review, and process construction contractor pay applications, review and approve as-built drawings prepared by the construction contractor, prepare a professional engineer's project certification, prepare and issue a substantial completion notice, conduct the final inspection, and prepare and issue the final release. These documents will be uploaded to AMLNET by POTESTA.

This task also includes administrative support to oversee compliance with applicable laws, such as certified payroll and for verifying the contractor's compliance with the Davis-Bacon Act and Infrastructure Investment and Jobs Act (IIJA) with regard to employing current and former employees of the coal industry.



The effort required for this task depends on the contractor's construction schedule, rate of construction, weather and time for completion. We have made our best guess as to the time required for construction monitoring services as stated above.

Task V – Post-Construction Oversight

This task includes site visits upon the completion of reclamation construction to document the performance of reclamation measures and site conditions. Site visits are required until the Notice of Termination for the construction stormwater permit has been submitted to WVDEP permitting. Each visit will be documented in a daily report style log with photographs attached. Post-construction oversight reports will be uploaded to AMLNET. We have included three visits during the warranty period and final release inspection.



_		OFFICE OF ABANDONED MINE LANDS & R						
D	robos	COST PROPOSAL e Order No.: CEOI DEP2400000001			_		_	
_		t Name: 2023 AML Contract S2						
_	_	dity Line: 11						
_		Name: Cabot Portals						
		SCHEDULE PER CONTRACT						
7	ГАSК	DESCRIPTION	UNIT	CONTRACT QUANTITY	1	UNIT PRICE		TOTAL PRICE
ГΑ	SK I	: NEPA & EA			_			
A	Ш	AGENCY COORDINATIONS (including Office Work, AMLNET, etc.)						
	1	Principal	HR	1	\$	295.00	\$	295.00
	2	Chief Engineer	HR	2	\$	255.00	\$	510.00
	3	Project Manager / Senior Engineer / Senior Scientist	HR	20	\$	175.00	\$	3,500.00
	4	Staff Engineer / Staff Scientist	HR	20	\$	130.00	\$	2,600.00
	5	Engineer / Scientist	HR		\$	110.00	\$	-
	6	CADD	HR	5	\$	135.00	\$	675.00
	7	Clerical	HR	6	\$	95.00	\$	570.00
	8	Mileage	Mile	240	\$	0.67	\$	160.80
d		Subtotal Task I.A:					\$	8,310.80
В		PUBLIC INVOLVEMENT (including Legal Ads, Public Hearings, Documents, Presen	tations, W	VDEP's Website,	etc.)			
	1	Principal	HR		\$	295.00	\$	
	2	Chief Engineer	HR		\$	255.00	\$	-
	3	Project Manager / Senior Engineer / Senior Scientist	HR		\$	175.00	\$	-
	4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	-
	5	Engineer / Scientist	HR		\$	110.00	\$	-
	6	CADD	HR		\$	135.00	\$	_
	7	Clerical	HR		\$	95.00	\$	-
	8	Mileage	Mile		\$	0.67	\$	-
Ĭ.		Subtotal Task I.B:					s	
С		STUDIES, SURVEYS & MITIGATION PLANS (as applicable)						
	1	Principal	HR	2	\$	295.00	\$	590.00
	2	Chief Engineer	HR	2	\$	255.00	\$	510.00
	3	Project Manager / Senior Engineer / Senior Scientist	HR	20	\$	175.00	\$	3,500.00
T	4	Staff Engineer / Staff Scientist	HR	20	\$	130.00	\$	2,600.00
	5	Engineer / Scientist	HR		\$	110.00	\$	-
	6	CADD	HR		\$	135.00	\$	-
٦	7	Clerical	HR		\$	95.00	\$	-
	8	Mileage	Mile	240	\$	0.67	\$	160.80
		Subtotal I.C:					\$	7,360.80
D		CATEX / EA / FONSI / EIS						
	1	Principal ,	HR	1	\$	295.00	\$	295.00
	2	Chief Engineer	HR	1	\$	255.00	\$	255.00
	3	Project Manager / Senior Engineer / Senior Scientist	HR	22	\$	175.00	\$	3,850.00
	4	Staff Engineer / Staff Scientist	HR	10	\$	130.00	\$	1,300.00
	5	Engineer / Scientist	HR		\$	110.00	\$	-
1	6	CADD	HR	5	\$	135.00	\$	675.00



TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE		TOTAL PRICE
7	Clerical	HR	4	\$ 95.00	\$	380.0
8	Mileage	Mile		\$ 0.67	\$	*
150	Subtotal 1.D:				\$	6,755.00
	TOTAL TASK I:				\$	22,426.60
TASK II:	REALTY					
A	EXPLORATORY RIGHTS OF ENTRY (EROE)					
1	Principal	HR	1	\$ 295.00	\$	295.00
2	Chief Engineer	HR	2	\$ 255.00	\$	510.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	6	\$ 175.00	\$	1,050.00
4	Realty Agent	HR	28	\$ 115.00	\$	3,220.00
5	Engineer / Scientist	HR		\$ 110.00	\$	-
6	CADD	HR		\$ 135.00	\$	-
7	Clerical	HR	2	\$ 95.00	\$	190.00
8	Mileage	Mile	240	\$ 0.67	\$	160.80
	Subtotal II.A:				\$	5,425.80
В	CONSTRUCTION RIGHTS OF ENTRY (CROE)					
1	Principal	HR	1	\$ 295.00	\$	295.00
2	Chief Engineer	HR	2	\$ 255.00	\$	510.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	10	\$ 175.00	\$	1,750.00
4	Realty Agent	HR	28	\$ 115.00	\$	3,220.00
5	Engineer / Scientist	HR		\$ 110.00	\$	-
6	CADD	HR		\$ 135.00	\$	-
7	Clerical	HR	2	\$ 95.00	\$	190.00
8	Mileage	Mile	240	\$ 0.67	\$	160.80
	Subtotal II.B:				\$	6,125.8
С	PRE-BID CONFERENCE					
1	Principal	HR		\$ 295.00	\$	-
2	Chief Engineer	HR		\$ 255.00	\$	_
3	Project Manager / Senior Engineer / Senior Scientist	HR		\$ 175.00	\$	-
4	Realty Agent	HR	5	\$ 115.00	\$	575.0
5	Engineer / Scientist	HR		\$ 110.00	\$	-
6	CADD	HR		\$ 135.00	\$	-
7	Clerical	HR	1	\$ 95.00	\$	95.0
8	Mileage	Mile	60	\$ 0.67	\$	40.2
	Subtotal II.C:				8	710.20
D	PRE-CONSTRUCTION CONFERENCE					
1	Principal	HR		\$ 295.00	\$	-
2	Chief Engineer	HR		\$ 255.00	\$	-
3	Project Manager / Senior Engineer / Senior Scientist	HR		\$ 175.00	\$	_
4	Realty Agent	HR	5	\$ 115.00	\$	575.0
5	Engineer / Scientist	HR		\$ 110.00	\$	-
6	CADD	HR		\$ 135.00	\$	_
7	Clerical	HR	1	\$ 95.00	\$	95.0
8	Mileage	Mile	60	\$ 0.67	\$	40.2
	Subtotal II.D:				\$	710.2
	TOTAL TASK II:				\$	12,972.00



TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE		TOTAL PRICE
ASK III	: DESIGN				Ť	
A	SITE RECONNAISSANCE AND EXPLORATION					
1	Principal	HR	1	\$ 295.00	\$	295.0
2	Chief Engineer	HR	14	\$ 255.00	\$	3,570.0
3	Project Manager / Senior Engineer / Senior Scientist	HR	20	\$ 175.00	\$	3,500.0
4	Staff Engineer / Staff Scientist	HR	14	\$ 130.00	\$	1,820.0
5	Engineer / Scientist	HR		\$ 110.00	\$	-
6	Water Sample (pH, iron, aluminum, manganese)	EA	3	\$ 90.00	\$	270.0
7	Clerical !	HR	4	\$ 95.00	\$	380.0
8	Mileage ,	Mile	60	\$ 0.67	\$	40.2
	Subtotal III.A:				\$	9,875.2
3	SURVEYING & MAPPING					
1	Principal	HR	1	\$ 295.00	\$	295,0
2	Chief Engineer	HR	2	\$ 255.00	\$	510,0
3	Project Manager / Senior Engineer / Senior Scientist	HR	4	\$ 175.00	\$	700.0
4	Staff Engineer / Staff Scientist	HR		\$ 130.00	\$	-
5	Engineer / Scientist	HR		\$ 110.00	\$	-
6	CADD	HR	4	\$ 135.00	\$	540.0
7	Clerical	HR		\$ 95.00	\$	-
8	Professional Surveyor / Chief Surveyor	HR	4	\$ 160,00	\$	640.00
9	2-Man Survey Crew	HR	10	\$ 150.00	\$	1,500.00
10	Topographic Mapping Development	AC			\$	-
11	Mileage	Mile	120	\$ 0.67	\$	80.40
	Subtotal III.B:				\$	4,265.40
	GEOTECHNICAL EXPLORATION					
1	Principal :	HR		\$ 295.00	\$	
2	Chief Engineer	HR		\$ 255.00	\$	-
3	Project Manager / Senior Engineer / Senior Scientist	HR		\$ 175.00	\$	-
4	Staff Engineer / Staff Scientist	HR		\$ 130.00	\$	-
5	Engineer / Scientist	HR		\$ 110.00	\$	-
6	CADD	HR		\$ 135.00	\$	<u>-</u>
7	Clerical	HR		\$ 95.00	\$	-
8	Mobilization	LS			\$	-
9	Soil Augering	LF			\$	
10	Rock Coring	LF			\$	
11	Piezometer Installation	LF			\$	-
12	Heavy Equipment	HR			\$	-
13	Reclamation	LS			\$	-
14	Laboratory Analysis	LS			\$	-
15	Drill Crew Per Diem	Day			\$	-
16	Mileage	Mile		\$ 0.67	\$	-

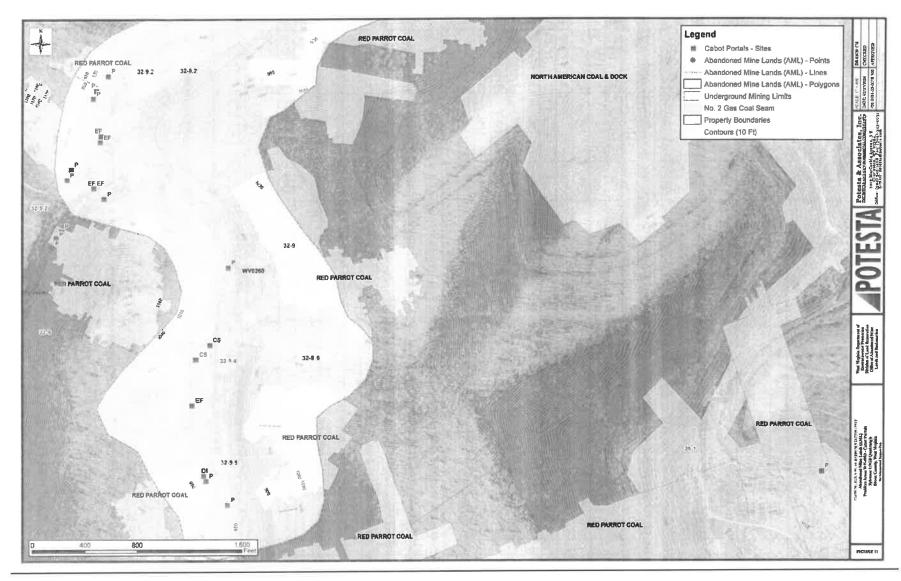


TA	SK	DESCRIPTION	UNIT	CONTRACT QUANTITY		UNIT PRICE		TOTAL PRICE
D	T	ANALYSIS AND DESIGN						
	1	Principal Principal	HR	2	\$	295.00	\$	590.00
1	2	Chief Engineer	HR	2	\$	255.00	\$	510.00
1	3	Project Manager / Senior Engineer / Senior Scientist	HR	16	\$	175.00	\$	2,800.00
1	4	Staff Engineer / Staff Scientist	HR	12	\$	130.00	\$	1,560.00
	5	Engineer / Scientist	HR		\$	110.00	\$	-
1	6	CADD	HR	26	\$	135.00	\$	3,510.00
T	7	Clerical	HR	4	\$	95.00	\$	380.00
7	8	Mileage	Mile	60	\$	0.67	\$	40.20
1		Subtotal III.D:					8	9,390.20
Е		PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEER'S ESTIMATE						
\top	1	Principal	HR	1	\$	295.00	\$	295.00
+	2	Chief Engineer	HR	12	\$	255.00	\$	3,060.00
\top	3	Project Manager / Senior Engineer / Senior Scientist	HR	12	\$	175.00	\$	2,100.00
-	4	Staff Engineer / Staff Scientist	HR	4	\$	130.00	\$	520.00
+	5	Engineer / Scientist	HR	16	\$	110.00	\$	1,760.00
-	6	CADD	HR	108	\$	135.00	\$	14,580.00
+	7	Clerical	HR	6	\$	95.00	\$	570.00
-	8	Mileage	Mile	60	\$	0.67	\$	40.20
+		Subtotal III.E:					8	22,925.20
F		PERMITTING						
-	1	Principal	HR	1	\$	295.00	\$	295.00
\rightarrow	2	Chief Engineer	HR	2	\$	255.00	\$	510.00
-	3	Project Manager / Senior Engineer / Senior Scientist	HR	10	\$	175.00	\$	1,750.00
-	4	Staff Engineer / Staff Scientist	HR	54	\$	130.00	\$	7,020.00
\rightarrow	5	Engineer / Scientist	HR		\$	110.00	\$.,
-	6	CADD	HR	6	\$	135.00	\$	810.00
\rightarrow	7	Clerical	HR	10	\$	95.00	\$	950.00
-	8	Mileage	Mile		\$	0.67	\$	
+		Subtotal III.F:	113110		Ť	0.07	S	11,335.00
G	+	PRE-BID CONFERENCE					, T	22,000
-	1	Principal	HR		\$	295.00	\$	
-	2	Chief Engineer	HR		\$	255.00	\$	_
-	3	Project Manager / Senior Engineer / Senior Scientist	HR	14	\$	175.00		2,450.00
-	4	Staff Engineer / Staff Scientist	HR	1	\$	130.00	\$	-,150.0
-	5	Engineer / Scientist Engineer / Scientist	HR		\$	110.00	\$	
-	6	CADD	HR		\$	135.00	\$	
-	7	Clerical	HR	4	\$	95.00	\$	380.00
-	8	Construction Monitor	HR	8	\$	95.00	\$	760.00
-	9		Mile	60	\$	0.67	\$	40.20
+	7	Mileage Subtotal III.G:	IVIIIC	00	φ.	0.07	5	3,630.20
H	-				-		φ.	2,030.2
	4	PRE-CONSTRUCTION CONFERENCE	HR		\$	295.00	\$	
-	1 1						D	_
-	2	Principal Chief Engineer	HR		\$	255.00	\$	



TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE		TOTAL PRICE
4 S	Staff Engineer / Staff Scientist	HR		\$ 130.00	\$	-
5 E	Engineer / Scientist	HR		\$ 110.00	\$	-
6 0	CADD	HR		\$ 135.00	\$	-
7 0	Clerical	HR	2	\$ 95.00	\$	190.0
8 0	Construction Monitor	HR	8	\$ 95.00	\$	760,0
9 N	Aîleage	Mile	60	\$ 0.67	\$	40.2
	Subtotal III.H:			5100	\$	2,390.2
	TOTAL TASK III:				\$	63,811.4
TASK IV: (CONSTRUCTION OVERSIGHT					
A C	ONSTRUCTION INSPECTION					
1 P	rincipal I	HR	16	\$ 295.00	\$	4,720.0
2 C	Chief Engineer	HR	24	\$ 255,00	\$	6,120.0
3 P	roject Manager / Senior Engineer / Senior Scientist	HR	172	\$ 175.00	\$	30,100.0
4 S1	taff Engineer / Staff Scientist	HR		\$ 130.00	\$	-
5 E	ngineer / Scientist	HR		\$ 110.00	\$	-
6 C	ADD	HR		\$ 135.00	\$	-
7 C	lerical	HR	120	\$ 95.00	\$	11,400.00
8 C	onstruction Monitor	HR	857	\$ 95,00	\$	81,415.00
9 M	fileage	Mile	5200	\$ 0.67	\$	3,484.00
	Subtotal IV.A:	FILE			\$	137,239.00
	TOTAL TASK IV:				\$	137,239.00
ASK V: PC	OST-CONSTRUCTION OVERSIGHT					
A FI	ELD VISITS / INSPECTIONS					
1 Pr	rincipal	HR		\$ 295.00	\$	_
2 C1	hief Engineer	HR	2	\$ 255.00	\$	510.00
3 Pr	roject Manager / Senior Engineer / Senior Scientist	HR	9	\$ 175.00	\$	1,575.00
4 St	aff Engineer / Staff Scientist	HR		\$ 130.00	\$	-
5 Er	ngineer / Scientist	HR		\$ 110.00	\$	_
6 CA	ADD	HR		\$ 135.00	\$	-
7 CI	erical	HR	3	\$ 95.00	\$	285.00
8 Co	onstruction Monitor	HR	26	\$ 95.00	\$	2,470.00
9 M	ileage	Mile	180	\$ 0.67	\$	120.60
	Subtotal V.A:	1 15 30	(para p = 1	0_1E YE	\$	4,960.60
	TOTAL TASK V:				\$	4,960.60
	TOTAL TASKS I THROUGH V:			100	\$ 2	41,409.60







Project/Commodity Line 12: Big Ugly (O'Neal) Drainage

This project includes four mine portals and an area of seepage adjacent to a parking area and driveway of a residence. Mine portals are located on a steep hillside overlooking homes along Big Ugly Creek Road. Access to the portals is complicated by steep slopes, seepage from the hillside, and soft soil conditions adjacent to and extending up the hillside from the resident's driveway and concrete parking area. Attempting access from the existing driveway to reach the mine portals is not advisable due to the potential for slope failure leading to additional problems.

Mine portals are located on two different levels on a steep hillside south of the residence. One portal is collapsed with heavy seepage onto the associated bench. The other portal on this level has a small opening and water is seeping from the collapsed material onto the bench.

Two other portals are located on a bench above the first two mine portals.

The envisioned reclamation includes wet mine seals, but gate seals where appropriate, and drainage conveyances to the stream. An underdrain may be appropriate to control seepage from the hillside above the driveway. Access will be difficult to reach the mine portals.

Due to a collapsed, draining portal and proximity to the homes below, geotechnical exploration including setting piezometers at one of the portals is being proposed.

Planning, realty, design, and construction oversight scope of services follows.

Task I – National Environmental Policy Act (NEPA) and Environmental Assessment (EA)

This task includes agency coordination and development of an Environmental Assessment (EA) to obtain a finding of no significant impact (FONSI).

POTESTA will review project information available from WVDEP, AML including OSM-51 documents and consultation letters that may have been prepared/sent for the project. The OSM-51 form will be reviewed for accuracy with the known project information. The OSM-51 will be sent with a cover letter to West Virginia Division of Natural Resources (WVDNR), State Historic Preservation Office (SHPO), and the regional planning council requesting comments on the project. The United States Fish and Wildlife Service (USFWS) IPaC system will be accessed to determine potential impacts to threatened and endangered species. A Phase I bat assessment will be completed by WVDEP, AML to determine if the portals are considered to be suitable habitat. POTESTA will update the IPaC information and submit the IPaC forms and a consultation request to the USFWS, if needed. This proposal does not include mist netting bat surveys. Projects on national forest land will require the OSM-51 and letter be sent to the Forest Service (FS). Letters to and from the agencies will be uploaded to AMLNET.



As development and engineering design/preparation of the plans and specifications proceeds, the OSM-51 will be reviewed along with the plans and specifications to provide consistency.

Based on discussions with WVDEP, AML, the AML projects will require preparation of an EA and submission of the EA to the Office of Surface Mining for review and approval. We have assumed that an EA level NEPA review will be required for this project. A preliminary EA will be prepared using the EA template provided and will be submitted to the WVDEP, AML for initial review. Upon the initial review, POTESTA will finalize the EA document and submit to the necessary agencies.

A preliminary table of contents for the EA is included below.

Table of Contents

Chapter 1: Purpose and Need

- A. Purpose of the Proposed Action
- B. Need for the Proposed Action
- C. Scoping
- D. List of Related Laws and Executive Orders
- Chapter 2: Proposed Action and Appropriate Alternatives and Mitigation Measures
 - A. Alternatives Considered
 - B. Alternatives Considered but Eliminated from Detailed Analysis
- Chapter 3: Affected Environment and Environmental Impacts
 - A. Environmental Consequences of the Proposed Actions and Mitigation Measures
 - B. Affected Resources Including Special Areas of Consideration
 - C. Summary
- Chapter 4: Consultations and Coordination
 - A. Persons and Agencies Contacted to Assist in the Preparation of the Environmental Assessment
 - B. List of Potential Permits and Responsible Parties
 - C. Public Involvement
 - D. Preparer
 - E. Signatures



Chapter 5: References and Appendices

A. References

B. Appendices

Following WVDEP, AML approval, final environmental documents will be uploaded to AMLNET.

Per WVDEP, AML, public involvement process activities including the public meetings will be conducted by the WVDEP, AML Planning Group. POTESTA's cost for this task does not include public involvement hours or costs.

Task II – Realty

Realty services for the project will include obtaining exploratory rights of entry (EROE), construction rights of entry (CROE), maintenance rights of entry (MROE) and attendance of the pre-bid conference and pre-construction conference meetings.

Prior to field work (surveying, drilling, field reconnaissance, etc.), POTESTA will visit the courthouse to perform research to determine landowners that could be impacted by the project including access to the work area. POTESTA will obtain copies of tax maps, deeds for current landowners, ownership documentation, and landowner contact information.

POTESTA will then make contact with landowners to obtain EROE. This may require more than one visit with each landowner. Attempts at landowner contact will be documented. Landowner concerns will be noted. After discussion with the WVDEP, AML realty representative, POTESTA will attempt to finalize negotiations with the landowners and obtain signed EROEs for each impacted parcel. EROEs including legal ownership information/documentation and project photographs will be provided to WVDEP, AML's realty representative for review and subsequent uploading to AMLNET. This will include pertinent property information, landowner information, and legal ownership documentation.

WVDEP, AML indicated that some landowners may request to be an additional insured for the CROE. It is important to note that if this happens, the landowner making the request should be added as an "additional insured," not an "additional named insured."

Review of tax maps for the project area indicates the mine portals are located on a single parcel. Access to the mine portals for exploratory work (surveying and drilling) and reclamation may involve several additional parcels.

Once plans and specifications have been developed for each project, POTESTA will again visit the courthouse to verify that property owner and property ownership information is still valid, or obtain



current information and documentation if this has changed. POTESTA will subsequently make contact with each affected landowner. Attempts at landowner contact will be documented. Proposed construction/reclamation activities will be reviewed with each landowner. Landowner demands will be noted and shared/discussed with our WVDEP, AML realty contact. If appropriate, landowner demands will be incorporated into the plans and specifications. POTESTA will then meet with each landowner and present them with a CROE. The CROE typically includes a clause granting WVDEP, AML right of entry for maintenance activities. Upon execution of the CROE form, the CROE including legal ownership information/documentation and project photographs will be provided to WVDEP, AML's realty representative for review and subsequent uploading to AMLNET.

POTESTA's realty agent will keep a journal/log while working on this task. The journal/log will include duration of time spent working on realty activities, mileage, and a record of landowners or others that POTESTA's realty agent has interactions with pertaining to Task II activities.

POTESTA's realty agent will attend the pre-bid and pre-construction conference and be able to respond to questions about property ownership, potential landowner issues, and CROE information.

Prior to construction, POTESTA will visit each impacted parcel of land to obtain photographic documentation of such items as general site conditions, property monuments, fences, trees in close proximity of planned ground disturbance, existing driveways and roads, etc. Photographs will be uploaded to AMLNET for documentation of pre-reclamation conditions.

Task III - Design

Subtask IIIA – Site Reconnaissance and Exploration

This subtask includes site reconnaissance for project planning to establish the extent and locations of problem areas, obtain photographic documentation of the site, develop preliminary notes and sketches, review possible access routes to be used during construction, etc. This subtask also includes planning for execution of the engineering/design scope of services. Since this project includes draining mine portals, POTESTA has included two grab samples of mine drainage and analysis of pH, iron, aluminum, and manganese.

Subtask IIIB – Surveying and Mapping

We are proposing to develop aerial topographic mapping for this project.

Aerial mapping coverage is proposed to include approximately 20 acres.



POTESTA will survey to establish ground control for development of aerial topographic mapping. Project baselines will be established along Big Ugly Creek Road. Topographic mapping will be prepared at an appropriate scale and with a contour interval of 2 feet.

A minimum of three survey control points will be established and shown on the mapping. Found corner/property monumentation will be located during field surveying. Existing structures including pipes and culverts will be located. Pipe sizes and type will be noted on the survey. POTESTA will survey locations of existing visible utilities, as well as utility locations marked following a locate request by POTESTA to WV 811.

Borings drilled for setting piezometers under the geotechnical exploration will be surveyed for horizontal and vertical location.

Subtask IIIC - Geotechnical Exploration

This subtask includes drilling a test boring to determine the elevation of coal seam/mine workings and depth of impounded water. One boring equipped with casing to serve as a piezometer is planned to be installed. Reclamation and revegetation of drill roads will be performed. The boring is estimated to be 50 feet deep, and drilled at the approximate location shown on Figure 12.

The boring will include hollow stem augering, split spoon sampling and standard penetration testing, and rock coring. One and one-half inch diameter PVC pipe (piezometer) will be set in the boring encountering voids drilled above the suspected deep mine entry to be used to monitor water levels during mine dewatering and mine seal construction. PVC casing will be backfilled with auger cuttings at the ground surface. No sand pack is proposed. PVC casing will be installed above the ground surface with a lockable protective covering. One and one-half inch diameter casing is proposed since it can be installed through the drill stems in the event gob or broken rock is encountered in the mine void. Borings not developed as piezometers will be backfilled with auger cuttings. POTESTA will monitor the soil/rock borings and produce boring logs documenting encountered conditions.

In the event that borings encounter solid coal, we will make up to two additional attempts by moving and drilling a new boring. The drilling footage in our cost estimate reflects three attempts. Second and third attempt borings will be drilled only if needed.

Disturbed areas resulting from drilling will be seeded and mulched. Access roads and drill pads will be regraded to as close to original contours as practical.



Subtask IIID – Analysis and Design

This subtask includes developing a conceptual reclamation plan for the site. POTESTA will prepare a 20 to 30 percent conceptual plan showing the proposed reclamation for the site. This will include the type, location, and size of the proposed mine seals (drainage channels and/or control structures below mine seals will also be shown), access to the work area, etc. The conceptual plan will include proposed construction limits to allow for adequate access to the work areas. Property line information will be developed using tax maps. POTESTA will meet with the WVDEP, AML on site to discuss our conceptual plan and will incorporate comments from the WVDEP, AML into our design packages.

Subtask IIIE - Preparation of Plans, Specifications and Engineer's Cost Estimate

This subtask involves the design and preparation of construction drawings, technical specifications, engineer's construction cost estimate, and contractor's bid form after receiving WVDEP, AML's concurrence with the 20 to 30 percent conceptual plan from Subtask IIID. POTESTA will prepare and make the following submissions to WVDEP, AML including the previously referenced items:

- 1. 60 percent complete submission;
- 2. 90 percent complete submission;
- 3. Final documents issued for bidding and construction.

A review meeting will be conducted with WVDEP, AML following the 60 percent and 90 percent complete submissions to review WVDEP, AML comments and the responses required to address the comments. Following these meetings, we will revise the preliminary design documents based on WVDEP, AML review comments and prepare the next submission of the bidding/construction documents. We have included minimal time to make revisions to the bidding documents following WVDEP, AML review. Extensive review comments/revisions requested by WVDEP, AML will necessitate a request for change order by POTESTA.

Subtask IIIF - Permitting

This subtask includes preparation and submission of the appropriate application forms and supporting documents for the following permits/approvals:

- 1. West Virginia Division of Highways (WVDOH) MM-109 encroachment permit.
- 2. WVDEP National Pollutant Discharge Elimination System (NPDES) General Construction Stormwater Permit.

POTESTA will prepare the application for the MM-109 permit for signature by the WVDEP, AML, and submit the permit application to the appropriate office.



WVDEP has requested that POTESTA prepare the application for the NPDES General Construction Stormwater Permit, and once a construction contract has been awarded, that POTESTA process a permit modification to add the construction contractor as a co-applicant.

POTESTA will prepare and submit the NPDES application, provide written response on behalf of WVDEP, AML to WVDEP Environmental Enforcement notices, submit renewal/reissuance requests for the permit, and apply for the Notice of Termination.

WVDEP, AML will be listed as the original applicant, and once a construction contractor has been selected, the NPDES permit will be transferred to the contractor or the contractor will be added as a co-applicant.

The contractor will be responsible for permit modifications if required by Division of Water and Waste.

Subtask IIIG - Pre-Bid Conference

POTESTA will provide a senior level engineer or the project manager who was involved in the overall project design to conduct the on-site pre-bid conference. The planned construction monitor who will provide construction oversight will also attend the pre-bid meeting. POTESTA's realty agent will also attend the pre-bid conference (hours are included under the realty section). POTESTA will conduct the pre-bid meeting including bidder information, providing an overview of the project requirements, video-recording of the meeting, documenting bidder questions and responses to the questions in a pre-bid meeting memorandum, keeping the pre-bid meeting sign-in sheet, and preparation of addenda which may be required. Pre-bid conference documents and video will be uploaded to AMLNET by POTESTA.

Subtask IIIH - Pre-Construction Conference

POTESTA will provide a senior level engineer or the project manager who was involved in the overall project design to conduct the on-site pre-construction conference. The planned construction monitor who will provide construction oversight will also attend the pre-construction conference. POTESTA's realty agent will also attend the pre-construction conference (hours are included under the realty section of our cost proposal). POTESTA will video record the pre-construction conference. Project submittals from the construction contractor will be reviewed and approved by POTESTA. The video recording and submittals will be uploaded to AMLNET by POTESTA.

Design files (plans, specifications, engineer's construction cost estimate, permit applications, permits, geotechnical exploration information, etc.) shall be uploaded to AMLNET by POTESTA. These same files will also be submitted to WVDEP, AML's project manager.



Task IV - Construction Oversight

This task includes continuous project construction oversight, observation/monitoring, documentation, engineering, and related office services. No testing such as aggregate gradation, soundness, durability, soil moisture/density relationship testing, field density tests, concrete or grout testing, soil analysis, etc. is included. POTESTA will review results of required quality assurance/control tests provided by the construction contractor. POTESTA will provide an assigned (and WVDEP, AML-approved) construction monitor qualified to perform such services.

Construction oversight services will include a pre-construction review, landowner contact, pre-construction photographs, identification of potential hazards, review of plans to identify conditions on-site which may contradict plans, etc.

POTESTA will provide construction management services during the project acting as an agent for WVDEP, Division of Land Restoration, Abandoned Mine Lands and Reclamation. Note that POTESTA cannot issue a stop work notice (suspension of work) to the construction contractor. If POTESTA would issue a stop work notice, this could void our professional liability insurance coverage. POTESTA's construction monitor will call to the attention of the contractor failure of the work or materials to conform to the specifications and suggest that the contractor correct the noncompliance work. If this communication is not effective, POTESTA will contact WVDEP, AML's construction representative and explain the situation so WVDEP, AML can suspend the contractor's work if necessary. POTESTA will document instances where the contractor's work is not in compliance including date, time, contractor representative who was informed of non-compliant work, summary of non-compliant activity, verbal notice that payment will not be approved for non-compliant work, and verbal notice that non-compliant work will require removal.

During construction, POTESTA's monitor will be present on-site when the contractor is performing construction. POTESTA's monitor will document construction activities, take photographs to document stages of the work, keep track of pay items and quantities incorporated in the construction, prepare daily logs and photographs with captions to be uploaded to AMLNET within 48 hours of the activity, track materials and quantities on a daily basis, and prepare weekly and monthly summaries of construction and quantities.

We have assumed a duration of construction of 120 calendar days for this project. Construction monitor time has been proposed at up to 10 hours per day, 7 AM to 5 PM, 5 days per week including on-site activities and time to prepare daily documentation and uploading to AMLNET.

POTESTA will receive, review, and process construction contractor pay applications, review and approve as-built drawings prepared by the construction contractor, prepare a professional engineer's project certification, prepare and issue a substantial completion notice, conduct the final inspection,



and prepare and issue the final release. These documents will be uploaded to AMLNET by POTESTA.

This task also includes administrative support to oversee compliance with applicable laws, such as certified payroll and for verifying the contractor's compliance with the Davis-Bacon Act and Infrastructure Investment and Jobs Act (IIJA) with regard to employing current and former employees of the coal industry.

The effort required for this task depends on the contractor's construction schedule, rate of construction, weather and time for completion. We have made our best guess as to the time required for construction monitoring services as stated above.

Task V – Post-Construction Oversight

This task includes site visits upon the completion of reclamation construction to document the performance of reclamation measures and site conditions. Site visits are required until the Notice of Termination for the construction stormwater permit has been submitted to WVDEP permitting. Each visit will be documented in a daily report style log with photographs attached. Post-construction oversight reports will be uploaded to AMLNET. We have included three visits during the warranty period and final release inspection.



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

COST PROPOSAL

Purchase Order No.: CEOI DEP2400000001
Contract Name: 2023 AML Contract S2

Commodity Line: 12

Project Name: Big Ugly (O'Neal) Drainage

SCHEDULE PER CONTRACT

Т	ASK	DESCRIPTION	UNIT	CONTRACT QUANTITY		UNIT PRICE		TOTAL PRICE
TA	SK I:	NEPA & EA						
Α		AGENCY COORDINATIONS (including Office Work, AMLNET, etc.)						
	1	Principal	HR	1	\$	295.00	\$	295.00
	2	Chief Engineer	HR	2	\$	255.00	\$	510.00
	3	Project Manager / Senior Engineer / Senior Scientist	HR.	20	\$	175.00	\$	3,500.00
	4	Staff Engineer / Staff Scientist	HR	16	\$	130.00	\$	2,080.00
	5	Engineer / Scientist	HR		\$	110.00	\$	-
	6	CADD	HR	8	\$	135.00	\$	1,080.00
	7	Clerical	HR	6	\$	95.00	\$	570.00
	8	Mileage	Mile	190	\$	0.67	\$	127.30
		Subtotal Task I.A:					\$	8,162.30
В		PUBLIC INVOLVEMENT (including Legal Ads, Public Hearings, Documents, Presen	tations, W	VDEP's Website,	etc.)			
	1	Principal	HR		\$	295.00	\$	-
	2	Chief Engineer	HR		\$	255.00	\$	-
	3	Project Manager / Senior Engineer / Senior Scientist	HR		\$	175.00	\$	-
	4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	-
	5	Engineer / Scientist	HR		\$	110.00	\$	_
	6	CADD	HR		\$	135.00	\$	-
	7	Clerical	HR		\$	95.00	\$	_
	8	Mileage	Mile		\$	0.67	\$	-
		Subtotal Task I.B:					\$	_
С		STUDIES, SURVEYS & MITIGATION PLANS (as applicable)						
	1	Principal	HR	2	\$	295.00	\$	590.00
	2	Chief Engineer	HR	2	\$	255.00	\$	510.00
	3	Project Manager / Senior Engineer / Senior Scientist	HR	16	\$	175.00	\$	2,800.00
	4	Staff Engineer / Staff Scientist	HR	14	\$	130.00	\$	1,820.00
	5	Engineer / Scientist	HR		\$	110.00	\$	_
	6	CADD	HR		\$	135.00	\$	_
	7	Clerical	HR		\$	95.00	\$	
	8	Mileage	Mile	285	\$	0.67	\$	190.95
		Subtotal I.C:					S	5,910.95
D		CATEX / EA / FONSI / EIS						
	1	Principal	HR	1	\$	295.00	\$	295.00
	2	Chief Engineer	HR	1	\$	255.00	\$	255.00
	3	Project Manager / Senior Engineer / Senior Scientist	HR	26	\$	175.00	\$	4,550.00
	4	Staff Engineer / Staff Scientist	HR	10	\$	130.00	\$	1,300.00
	5	Engineer / Scientist	HR		\$	110.00	\$	-
	6	CADD	HR	5	\$	135.00	\$	675.00



TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY]	UNIT PRICE		TOTAL PRICE
7	Clerical	HR	4	\$	95.00	\$	380.0
8	Mileage	Mile		\$	0.67	\$	15
	Subtotal I.D:	-13			1500	\$	7,455.0
\Box	TOTAL TASK I:					8	21,528.2
ASK I	I: REALTY						
A	EXPLORATORY RIGHTS OF ENTRY (EROE)						
1	Principal	HR	1	\$	295.00	\$	295.0
2	Chief Engineer	HR	2	\$	255.00	\$	510.0
3	Project Manager / Senior Engineer / Senior Scientist	HR	8	\$	175.00	\$	1,400.0
4	Realty Agent	HR	40	\$	115.00	\$	4,600.0
5	Engineer / Scientist	HR		\$	110.00	\$	-
6	CADD	HR		\$	135.00	\$	-
7	Clerical	HR	2	\$	95.00	\$	190.00
8	Mileage	Mile	285	\$	0.67	\$	190.9
	Subtotal II.A:					\$	7,185.93
3	CONSTRUCTION RIGHTS OF ENTRY (CROE)						
1	Principal	HR	1	\$	295.00	\$	295.00
2	Chief Engineer	HR	2	\$	255.00	\$	510.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	10	\$	175.00	\$	1,750.00
4	Realty Agent	HR	40	\$	115.00	\$	4,600.00
5	Engineer / Scientist	HR		\$	110.00	\$	-
6	CADD	HR		\$	135.00	\$	_
7	Clerical	HR	2	\$	95.00	\$	190.00
8	Mileage	Mile	285	\$	0.67	\$	190.95
	Subtotal II.B:			14,0		S	7,535.95
	PRE-BID CONFERENCE						
1	Principal	HR		\$	295.00	\$	-
2	Chief Engineer	HR		\$	255.00	\$	-
3	Project Manager / Senior Engineer / Senior Scientist	HR		\$	175.00	\$	-
4	Realty Agent	HR	5	\$	115.00	\$	575.00
5	Engineer / Scientist	HR		\$	110.00	\$	-
6	CADD	HR		\$	135.00	\$	-
7	Clerical	HR	1	\$	95.00	\$	95.00
8	Mileage	Mile	95	\$	0.67	\$	63.65
	Subtotal II.C:			1.5	3554	5	733.65
	PRE-CONSTRUCTION CONFERENCE						
1	Principal '	HR		\$	295.00	\$	-
2	Chief Engineer	HR		\$	255.00	\$	-
3	Project Manager / Senior Engineer / Senior Scientist	HR		\$	175.00	\$	-
4	Realty Agent	HR	5	\$	115.00	\$	575.00
5	Engineer / Scientist	HR		\$		\$	-
6	CADD	HR		\$	135.00	\$	-
7	Clerical	HR	1	\$		\$	95.00
8	Mileage	Mile	95	\$	0.67	\$	63.65
	Subtotal II.D:	17.17		-18		\$	733.65
	TOTAL TASK II:					S	16,189.20



TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY		UNIT PRICE		TOTAL PRICE
rask II	I: DESIGN						
A	SITE RECONNAISSANCE AND EXPLORATION						
1	Principal	HR	1	\$	295.00	\$	295,00
2	Chief Engineer	HR	16	\$	255.00	\$	4,080.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	26	\$	175,00	\$	4,550.00
4	Staff Engineer / Staff Scientist	HR	12	\$	130.00	\$	1,560.00
5	Engineer / Scientist	HR		\$	110.00	\$	
6	Clerical	HR	4	\$	95.00	\$	380.00
7	Water Samples (pH, iron, aluminum, manganese)	EA	2	\$	90.00	\$	180.00
8	Mileage	Mile	80	S	0.67	\$	53.60
++	Subtotal III.A:					_	11,098.60
В	SURVEYING & MAPPING					-	-2,
1	Principal Principal	HR	1	\$	295.00	\$	295.00
2	Chief Engineer	HR	3	S	255.00	\$	765,00
3	Project Manager / Senior Engineer / Senior Scientist	HR	4	\$	175.00	\$	700.00
4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	-
5	Engineer / Scientist	HR		\$	110.00	\$	
6	CADD	HR	12	\$	135.00	\$	1,620.00
7	Clerical	HR	12	\$	95.00	\$	1,020.00
8	Professional Surveyor / Chief Surveyor	HR	18	\$	160.00	\$	2,880.00
-	·		36	\$	150.00	\$	5,400.00
9	2-Man Survey Crew	HR				\$	760.0
10	Topographic Mapping Development	AC	20	\$	38.00	-	
11	Mileage	Mile	500	\$	0.67	\$	335.0
	Subtotal III.B:			-		\$	12,755.00
C	GEOTECHNICAL EXPLORATION				207.00		207.0
1	Principal	HR	1	\$	295.00	\$	295.0
2	Chief Engineer	HR	2	\$	255.00	\$	510.00
3	Project Manager / Senior Engineer / Senior Scientist	HR	8	\$	175.00	\$	1,400.0
4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	- 040.0
5	Engineer / Scientist	HR	26	\$	110.00	\$	2,860.0
6	CADD	HR		\$	135.00	\$	<u> </u>
7	Clerical	HR	2	\$	95.00	\$	190.0
8	Mobilization	LS	1	\$	3,360.00	\$	3,360.0
9	Soil Augering	LF	45	\$	44.80		2,016.0
10	Rock Coring	LF	105	\$	44.80	-	4,704.0
11	Piezometer Installation	LF	50	\$	28.00	-	1,400.0
12	Heavy Equipment for Access	DAY	6	\$	952.00	+-	5,712.0
13	Reclamation	LS	1	\$	4,480.00	+-	4,480.0
14	Water Set-up	EA	3	\$	1,680.00	\$	5,040.0
15	Lockable Cover for Piezometers	EA	1	\$	560.00	\$	560.0
16	Drill Crew Per Diem	Day				\$	-
17	Mileage	Mile	380	\$	0.67	\$	254.6
	Subtotal III, C:					5	32,781.6



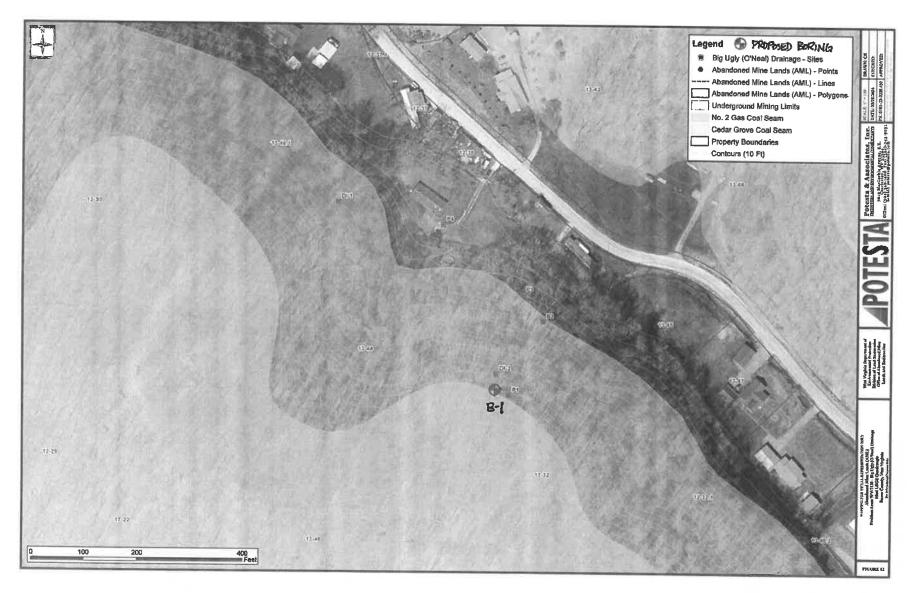
	TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY		UNIT PRICE		TOTAL PRICE
D		ANALYSIS AND DESIGN			П		Ī	
	1	Principal	HR	2	\$	295.00	\$	590.00
	2	Chief Engineer	HR	10	\$	255.00	\$	2,550.00
	3	Project Manager / Senior Engineer / Senior Scientist	HR	20	\$	175.00	\$	3,500.00
	4	Staff Engineer / Staff Scientist	HR	10	\$	130.00	\$	1,300.00
	5	Engineer / Scientist	HR		\$	110.00	\$	
	6	CADD	HR	32	\$	135.00	\$	4,320.00
	7	Clerical	HR	4	\$	95.00	\$	380.00
	8	Mileage	Mile	190	\$	0.67	\$	127.30
		Subtotal III.D:					8	12,767.30
E		PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEER'S ESTIMATE						
	1	Principal	HR	1	\$	295.00	\$	295.00
	2	Chief Engineer	HR	16	\$	255.00	\$	4,080.00
	3	Project Manager / Senior Engineer / Senior Scientist	HR	12	\$	175.00	\$	2,100.00
	4	Staff Engineer / Staff Scientist	HR	4	\$	130.00	\$	520.00
	5	Engineer / Scientist	HR	12	\$	110.00	\$	1,320.00
	6	CADD	HR	140	\$	135.00	\$	18,900.00
	7	Clerical	HR	6	\$	95.00	\$	570.00
	8	Mileage	Mile	80	\$	0.67	\$	53.60
Ī		Subtotal III.E:					\$	27,838.60
F		PERMITTING						
П	1	Principal	HR	1	\$	295.00	\$	295.00
Ī	2	Chief Engineer	HR	2	\$	255.00	\$	510.00
	3	Project Manager / Senior Engineer / Senior Scientist	HR	12	\$	175.00	\$	2,100.00
	4	Staff Engineer / Staff Scientist	HR	60	\$	130.00	\$	7,800.00
	5	Engineer / Scientist	HR		\$	110.00	\$	-
Ŧ	6	CADD	HR	6	\$	135.00	\$	810.00
Ť	7	Clerical	HR	12	\$	95.00	\$	1,140.00
	8	Mileage	Mile		\$	0.67	\$	
		Subtotal III.F:					\$	12,655.00
G		PRE-BID CONFERENCE						
ī	1	Principal	HR		\$	295.00	\$	-
11	2	Chief Engineer	HR		\$	255.00	\$	
	3	Project Manager / Senior Engineer / Senior Scientist	HR	16	\$	175.00	\$	2,800.00
	4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	-
	5	Engineer / Scientist	HR		\$	110.00	\$	
7	6	CADD	HR		\$	135.00	\$	-
	7	Clerical	HR	4	\$	95.00	\$	380.00
Ĭ	8	Construction Monitor	HR	8	\$	95.00	\$	760.00
	9	Mileage	Mile	95	\$	0.67	\$	63.65
		Subtotal III. G:	- F-1			u gui	8	4,003.65
I		PRE-CONSTRUCTION CONFERENCE						
	1	Principal ·	HR		\$	295.00	\$	-
	2	Chief Engineer	HR		\$	255.00	\$	-
	3	Project Manager / Senior Engineer / Senior Scientist	HR	8	\$	175.00	\$	1,400.00
_1	-				100			-,



TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE	TOTAL PRICE
4 S	taff Engineer / Staff Scientist	HR		\$ 130.00	\$ -
5 E	ingineer / Scientist	HR		\$ 110.00	\$ -
6 C	CADD	HR		\$ 135.00	\$ -
7 C	lerical	HR	2	\$ 95,00	\$ 190,00
8 C	Construction Monitor	HR	8	\$ 95.00	\$ 760.00
9 N	1ileage	Mile	95	\$ 0.67	\$ 63.65
14 34	Subtotal III.H:			1 -5	\$ 2,413.65
	TOTAL TASK III:				\$ 116,313.40
TASK IV: (CONSTRUCTION OVERSIGHT				
A C	CONSTRUCTION INSPECTION				
1 P	rincipal	HR	14	\$ 295.00	\$ 4,130.00
2 C	hief Engineer	HR	20	\$ 255.00	\$ 5,100.00
3 P	roject Manager / Senior Engineer / Senior Scientist	HR	172	\$ 175.00	\$ 30,100.00
4 S	taff Engineer / Staff Scientist	HR		\$ 130.00	\$ -
5 E	ingineer / Scientist	HR		\$ 110.00	\$
6 C	ADD	HR		\$ 135.00	\$ -
7 0	Clerical	HR	80	\$ 95.00	\$ 7,600.00
8 0	Construction Monitor	HR	857	\$ 95.00	\$ 81,415.00
9 N	Aileage	Mile	8200	\$ 0.67	\$ 5,494.00
	Subtotal IV.A:				\$ 133,839.00
	TOTAL TASK IV:				\$ 133,839.00
TASK V: P	OST-CONSTRUCTION OVERSIGHT				
A F	IELD VISITS / INSPECTIONS				
1 P	rincipal	HR		\$ 295.00	\$ - 2
2 0	Chief Engineer	HR	2	\$ 255.00	\$ 510.00
3 P	roject Manager / Senior Engineer / Senior Scientist	HR	9	\$ 175.00	\$ 1,575.00
4 S	taff Engineer / Staff Scientist	HR		\$ 130,00	\$ -
5 E	Engineer / Scientist	HR		\$ 110,00	\$ _
	CADD	HR		\$ 135.00	\$ -
7 0	Clerical	HR	3	\$ 95.00	\$ 285,0
8 0	Construction Monitor	HR	26	\$ 95.00	\$ 2,470.00
9 N	Лileage	Mile	285	\$ 0.67	\$ 190.9
	Subtotal V.A:				\$ 5,030.93
	TOTAL TASK V:				\$ 5,030.95
	TOTAL TASKS I THROUGH V:				\$ 292,900.80



Mr. Jonathan Holbert, P.E. December 23, 2024 Page 182





Project/Commodity Line 13: Prenter UMF

This project is an underground mine fire. The extent of the mine fire is not known. Three different coal seams could be impacted by the underground mine fire: Five Block, Upper Five Block, and Six Block. WVDEP does not want a reclamation plan prepared at this time or construction oversight services included at this time.

POTESTA will conduct an investigation of coal seam historical mining and coal seam characteristics within the 57-acre problem area. Geotechnical exploration will be completed to help determine the extent of the underground mine fire.

Realty and engineering analysis scope of services follows.

Task I – National Environmental Policy Act (NEPA) and Environmental Assessment (EA)

At this time, no reclamation plan bid documents will be prepared. As a result, the normal planning and environmental services are not proposed for this project.

Task II – Realty

Realty services for the project will include obtaining exploratory rights of entry (EROE).

Prior to completion of field work (surveying, drilling, field reconnaissance, etc.), POTESTA will visit the courthouse to perform research to determine landowners that could be impacted by the project including access to the work area. POTESTA will obtain copies of tax maps, deeds for current landowners, ownership documentation, and landowner contact information.

POTESTA will then make contact with landowners to obtain EROE. This may require more than one visit with each landowner. Attempts at landowner contact will be documented. Landowner concerns will be noted. After discussion with the WVDEP, AML realty representative, POTESTA will attempt to finalize negotiations with the landowners and obtain signed EROEs for each impacted parcel. EROEs including legal ownership information/documentation and project photographs will be provided to WVDEP, AML's realty representative for review and subsequent uploading to AMLNET. This will include pertinent property information, landowner information, and legal ownership documentation.

Review of tax maps for the project area indicates the mine fire is located on a single parcel. Access to the mine fire area for exploratory work (surveying and drilling) may involve crossing an additional parcel.



POTESTA's realty agent will keep a journal/log while working on this task. The journal/log will include duration of time spent working on realty activities, mileage, and a record of landowners or others that POTESTA's realty agent has interactions with pertaining to Task II activities.

Task III – Engineering Analysis

Subtask IIIA - Site Reconnaissance and Exploration

This subtask includes site reconnaissance for project planning to establish the extent and locations of problem areas, obtain photographic documentation of the site, develop preliminary notes and sketches.

Subtask IIIB – Surveying and Mapping

We are proposing to develop aerial topographic mapping for this project due to the size of the area over which the mine fire is located.

Aerial mapping coverage is proposed to include approximately 75 acres.

POTESTA will survey to establish ground control for development of aerial topographic mapping. Topographic mapping will be prepared at an appropriate scale and with a contour interval of 2 feet.

A minimum of three survey control points will be established and shown on the mapping. Found corner/property monumentation will be located during field surveying. POTESTA will survey locations of existing visible utilities, as well as utility locations marked following a locate request by POTESTA to WV 811.

Borings drilled for the geotechnical exploration will be surveyed for horizontal and vertical location.

Subtask IIIC – Geotechnical Exploration

This subtask includes drilling test borings to determine the elevation of coal seams/mine workings and temperatures encountered. Twenty-three borings are proposed. Reclamation and revegetation of drill roads will be performed.

POTESTA will monitor the soil/rock borings and produce boring logs documenting encountered conditions.

Our geotechnical exploration program includes drilling air rotary borings to access the No. 5 Block, Upper No. 5 Block, and No. 6 Block coal seams to assist in determining which coal seams may be on fire. Our plan includes drilling 7 air rotary borings from the bench near the outcrop of the Upper



No. 5 Block coal seam to penetrate the No. 5 Block coal seam. Temperature readings will be taken in these seven borings to provide an indication on whether the No. 5 Block seam is on fire and the locations that may be on fire. Depths of these seven borings are estimated to be between 25 and 49 feet.

Likewise, we are proposing to evaluate conditions in the Upper No. 5 Block coal seam by drilling seven air rotary borings from the bench near the No. 6 Block coal seam outcrop. Temperature readings will be taken in these seven borings to provide an indication of whether the Upper No. 5 Block coal seam in on fire and the locations that may be on fire. Depths of these seven borings are estimated to be between 32 and 68 feet.

Our geotechnical exploration includes five air rotary borings drilled from above the outcrop of the No. 6 Block coal seam. Depths of these borings range between 49 and 63 feet. Temperature readings will be taken in these borings to provide an indication of whether the No. 6 Block coal seam is on fire and the locations that may be on fire.

The previously described borings are located near the outcrops of the three coal seams to avoid potential problems with drilling through a coal seam to get to a lower coal seam. Problems could include loss of return air and binding of the drill tools in the boring due to accumulation of cuttings. Another concern includes introducing a possible conduit that could allow a fire in a lower seam from impacting the higher coal seam via migration up the bore hole.

POTESTA's geotechnical exploration program includes four borings in the interior portion of the site to provide additional coverage over the project area for the three coal seams. These borings will penetrate all three coal seams and as a result, could have the problems previously described. As a result, these bore holes will be cased using steel casing to overcome problems with loss of return air and migration of fire from a lower to an upper coal seam. As a result, these four borings are deeper and will be fitted with steel casing. Boring diameter and casing diameter will be reduced first at the No. 6 Block coal seam and against the upper No. 5 Block seam. Boring depths range from 247 to 294 feet.

Upon completion of drilling and temperature monitoring, each boring will have a 1-inch diameter sacrificial pipe set with grout basket and be grouted to the surface.

The boring plan and a summary of anticipated drilling footage by coal seam and boring are attached as Figure 13 and Summary of Proposed Temperature Monitoring Borings.

Subtask HID - Analysis and Design

Based on the drilling results, POTESTA will evaluate the data and prepare a report presenting the topographic mapping developed, boring locations, findings from the geotechnical exploration,



temperature monitoring results, and a discussion on possible burning coal in the three coal seams evaluated.

Subtask IIIE - Preparation of Plans, Specifications and Engineer's Cost Estimate

No plans, specifications, or other bid documents are proposed.

Subtask IIIF - Permitting

No permitting is proposed.

Subtask IIIG - Pre-Bid Conference

No bidding phase services are proposed.

Subtask IIIH - Pre-Construction Conference

No construction phase services are proposed.

Task IV – Construction Oversight

No construction phase services are proposed.

Task V – Post-Construction Oversight

No post-construction services are proposed.



		OFFICE OF ABANDONED MINE LANDS & R	RECLAN	IATION			
		COST PROPOSAL					
_		Order No.: CEOI DEP2400000001					
_		Name: 2023 AML Contract S2					
	mmoa ject N	lity Line: 13 Name: Prenter UMF					
	jeerr						
		SCHEDULE PER CONTRACT					
Т	ASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE		TOTAL PRICE
ГА	SK I:	NEPA & EA					
Α		AGENCY COORDINATIONS (including Office Work, AMLNET, etc.)					
	1	Principal	HR		\$ 295.00	\$	-
	2	Chief Engineer	HR		\$ 255.00	\$	_
	3	Project Manager / Senior Engineer / Senior Scientist	HR		\$ 175.00	\$	
	4	Staff Engineer / Staff Scientist	HR		\$ 130.00	\$	-
	5	Engineer / Scientist	HR		\$ 110.00	\$	-
	6	CADD	HR		\$ 135.00	\$	-
	7	Clerical	HR		\$ 95.00	\$	
	8	Mileage	Mile		\$ 0.67	\$	-
		Subtotal Task I.A:				\$	-
В		PUBLIC INVOLVEMENT (including Legal Ads, Public Hearings, Documents, Present	tations, W	VDEP's Website,	etc.)		
	1	Principal Principal	HR		\$ 295.00	\$	
	2	Chief Engineer	HR		\$ 255.00	\$	-
	3	Project Manager / Senior Engineer / Senior Scientist	HR		\$ 175.00	\$	-
	4	Staff Engineer / Staff Scientist	HR		\$ 130.00	\$	-
	5	Engineer / Scientist	HR		\$ 110.00	\$	-
	6	CADD	HR		\$ 135.00	\$	-
	7	Clerical	HR		\$ 95.00	\$	
	8	Mileage	Mile		\$ 0.67	\$	-
		Subtotal Task I.B:				\$	
С		STUDIES, SURVEYS & MITIGATION PLANS (as applicable)					
	1	Principal Principal	HR		\$ 295.00	\$	-
	2	Chief Engineer	HR		\$ 255.00	\$	-
	3	Project Manager / Senior Engineer / Senior Scientist	HR		\$ 175.00	\$	-
	4	Staff Engineer / Staff Scientist	HR		\$ 130.00	-	-
	5	Engineer / Scientist	HR		\$ 110.00	-	-
	6	CADD	HR		\$ 135.00	-	-
	7	Clerical	HR		\$ 95.00	_	-
	8	Mileage	Mile		\$ 0.67	_	-
D		Subtotal J. C: CATEX / EA / FONSI / EIS				\$	-
ט	1		HR		\$ 295.00	\$	
-	2	Principal Chief Engineer			\$ 295.00	-	-
_	3		HR			_	
=	-	Project Manager / Senior Engineer / Senior Scientist	HR		\$ 175.00	-	
_	5	Staff Engineer / Staff Scientist	HR		\$ 130.00	-	-
_	6	Engineer / Scientist CADD	HR	-	\$ 110.00 \$ 135.00	_	-



T	ASK	DESCRIPTION	UNIT	CONTRACT QUANTITY		UNIT PRICE		TOTAL PRICE
Т	7	Clerical	HR		\$	95.00	\$	
7	8	Mileage	Mile		\$	0.67	\$	-
		Subtotal I.D:					\$	
		TOTAL TASK I:				195	\$	HI E
AS	КП	: REALTY						
A	\neg	EXPLORATORY RIGHTS OF ENTRY (EROE)						
T	1	Principal !	HR	2	\$	295.00	\$	590.0
	2	Chief Engineer	HR	4	\$	255.00	\$	1,020.0
T	3	Project Manager / Senior Engineer / Senior Scientist	HR	8	\$	175.00	\$	1,400.0
7	4	Realty Agent	HR	36	\$	115.00	\$	4,140.0
\exists	5	Engineer / Scientist	HR		\$	110.00	\$	-
7	6	CADD	HR		\$	135.00	\$	-
	7	Clerical	HR	2	\$	95.00	\$	190.0
	8	Mileage	Mile	240	\$	0.67	\$	160.8
		Subtotal II.A:	W.Y.				S	7,500.8
В		CONSTRUCTION RIGHTS OF ENTRY (CROE)						
T	1	Principal Principal	HR		\$	295.00	\$	-
T	2	Chief Engineer	HR		\$	255.00	\$	-
1	3	Project Manager / Senior Engineer / Senior Scientist	HR		\$	175.00	\$	_
T	4	Realty Agent	HR		\$	115.00	\$	-
1	5	Engineer / Scientist	HR		\$	110.00	\$	-
1	6	CADD	HR		\$	135.00	\$	-
\dagger	7	Clerical	HR		\$	95.00	\$	-
Ť	8	Mileage	Mile		\$	0.67	\$	
		Subtotal II.B:			1		S	
	T	PRE-BID CONFERENCE						
T	1	Principal	HR		\$	295.00	\$	
T	2	Chief Engineer	HR		\$	255.00	\$	-
1	3	Project Manager / Senior Engineer / Senior Scientist	HR.		\$	175.00	\$	-
+	4	Realty Agent	HR		\$	115.00	\$	-
1	5	Engineer / Scientist	HR		\$	110.00	\$	-
1	6	CADD	HR		\$	135.00	\$	-
1	7	Clerical	HR		\$	95.00	\$	-
1	8	Mileage	Mile		\$	0.67	\$	-
T		Subtotal II.C:					S	
5		PRE-CONSTRUCTION CONFERENCE						
1	1	Principal	HR		\$	295.00	\$	
-	2	Chief Engineer	HR		\$	255.00	\$	-
1	3	Project Manager / Senior Engineer / Senior Scientist	HR		\$	175.00	\$	-
1	4	Realty Agent	HR		\$	115.00	\$	
1	5	Engineer / Scientist	HR		\$	110.00	\$	
1	6	CADD	HR		\$	135.00	\$	
-	7	Clerical	HR		\$	95.00	\$	
-	8	Mileage	Mile		\$	0.67	\$	
1		Subtotal II.D:					S	
T		TOTAL TASK II:					5	7,500.8



TA	\sk	DESCRIPTION	UNIT	CONTRACT QUANTITY		UNIT PRICE		TOTAL PRICE
ΓAS	K III:	DESIGN		200				
A		SITE RECONNAISSANCE AND EXPLORATION						
	1	Principal	HR	4	\$	295.00	\$	1,180.00
	2	Chief Engineer	HR	24	\$	255.00	\$	6,120.00
	3	Project Manager / Senior Engineer / Senior Scientist	HR	40	\$	175.00	\$	7,000.00
	4	Staff Engineer / Staff Scientist	HR	16	\$	130.00	\$	2,080.00
T	5	Engineer / Scientist	HR		\$	110.00	\$	_
	6	CADD	HR		\$	135.00	\$	
\top	7	Clerical	HR	4	\$	95.00	\$	380.00
T	8	Mileage	Mile	240	\$	0.67	\$	160.80
		Subtotal III.A:					S	16,920.80
В		SURVEYING & MAPPING						
\top	1	Principal	HR	2	\$	295.00	\$	590.00
1	2	Chief Engineer	HR	6	\$	255.00	\$	1,530.00
-	3	Project Manager / Senior Engineer / Senior Scientist	HR	6	\$	175.00	\$	1,050,00
	4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	1,020,00
	5	Engineer / Scientist	HR		\$	110.00	\$	
-	6	CADD	HR	16	\$	135.00	\$	2,160.00
-	7	Clerical	HR	10	\$	95.00	\$	2,100.00
-	8	Professional Surveyor / Chief Surveyor	HR	18	\$	160.00	\$	2,880.00
-	9	2-Man Survey Crew	HR	42	\$	150.00	\$	6,300.00
-	10	Topographic Mapping Development	AC	75	\$	38.00	\$	2,850.00
-	11	Mileage	Mile	480	\$	0.67	\$	321.60
+		Subtotal III.B:	IVIIIC	400	Φ	0.07	\$	17,681.60
c		GEOTECHNICAL EXPLORATION			_		φ	1/,001.00
-	1	Principal	HR	8	\$	295.00	\$	2 260 00
-	2	Chief Engineer	HR	40	\$		\$	2,360.00
-	3	Project Manager / Senior Engineer / Senior Scientist	HR	100	\$	255.00	\$	
-	4	Staff Engineer / Staff Scientist	HR	100	\$	175.00	_	17,500.00
-	5	Engineer / Scientist	HR	440	\$	130.00	\$	49 400 00
-	6	CADD	HR	440	\$	110.00	\$	48,400.00
-	7	Clerical	HR	8	\$	135.00 95.00	\$	760.00
-	8	Mobilization (Drill and 2-Man Crew)	LS	1	\$		\$	
-	9	Mobilization (Dozer and Operator)	LS	1	\$	22,960.00	\$	22,960.00
-	10	Air Rotary Drilling			-	4,480.00	_	4,480.00
-	11	Air Compressor Mobilization	LS	2194	\$	4,060.00	_	134,536.08
-	12	Air Compressor Rental/Operation		1 0	\$		\$	4,060.00
-	13	Dozer Operations	WK	8	\$	5,460.00	\$	43,680.00
-	14	-	Day	12	\$	2,240.00	\$	26,880.00
-	15	Dozer Rental Temperature Monitor Rental	WK	7	\$	2,800.00	\$	19,600.00
-	-		WK	4	\$	250.00	\$	1,000.00
-		2-Man Drill Crew Per Diem	Day	33	\$	392.00	\$	12,936.00
-	_	Per Diem, Dozer Operator	Day	12	\$	224.00	\$	2,688.00
-	_	PW Casing Installed	LF	660	\$	61.60	\$	40,656.00
-	_	NW Casing Installed	LF	1012	\$	39.20	\$	39,670.40
-	20	Final Grout Completion with 1" Sacrificial Pipe	LF	2194	\$	22.12	_	48,531.28
	21	Four Gas Monitors for Workers	WK	6	\$	790.00	\$	4,740.00



	TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY		UNIT PRICE		TOTAL PRICE
_	22	Reclamation	LS	1	\$	27,000.00	\$	27,000.0
	+-+-	UTV	wĸ	8	\$	375.00	\$	3,000.00
	-	Mileage	Mile	3300	s	0.67	\$	2,211.0
		Subtotal III.C:		W = 1 5			s	517,848.70
D		ANALYSIS AND DESIGN						
_	-	Principal	HR	8	\$	295.00	\$	2,360.0
-	-	Chief Engineer	HR	30	\$	255.00	\$	7,650.0
_	-	Project Manager / Senior Engineer / Senior Scientist	HR	60	\$	175.00	\$	10,500.0
_	+	Staff Engineer / Staff Scientist	HR	24	\$	130.00	\$	3,120.0
_	-	Engineer / Scientist	HR	28	\$	110.00	\$	3,080.0
_	-	CADD	HR	48	\$	135.00	\$	6,480.0
	+		HR	8	\$	95.00	\$	760.0
_	-	Clerical			-	0.67	\$	80.4
	8	Mileage	Mile	120	\$	0.67	-	
		Subtotal III.D:					\$	34,030.4
E	+ -	PREPARATION OF PLANS, SPECIFICATIONS AND ENGINEER'S ESTIMATE			_	445.00		
	-	Principal	HR		\$	315.00	\$	
	2	Chief Engineer	HR		\$	275.00	\$	
	3	Project Manager / Senior Engineer / Senior Scientist	HR		\$	175.00	\$	
	4	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	
	5	Engineer / Scientist	HR		\$	110.00	\$	
	6	CADD	HR		\$	135.00	\$	-
	7	Clerical	HR		\$	95.00	\$	
	8	Mileage	Mile		\$	0.67	\$	74
		Subtotal III.E:					\$	
F		PERMITTING						
	1	Principal	HR		\$	315.00	\$	
	2	Chief Engineer	HR		\$	275.00	\$	
	3	Project Manager / Senior Engineer / Senior Scientist	HR		\$	175.00	\$	
	1 2 3 4 5 6 7 8 8 9 1 1 2 3 3 4 4 5 6 6 7 7 8 8 9 1 1 2 3 3 4 4 5 6 6 7 7 8 8 9 1 1 2 1 3 1 4 5 6 6 7 7 8 8 9 1 1 1 2 1 3 1 4 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Staff Engineer / Staff Scientist	HR		\$	130.00	\$	
	5	Engineer / Scientist	HR		\$	110.00	\$	
	6	CADD	HR		\$	135.00	\$	-
	-	Clerical	HR		\$	95.00	\$	-
_	-	Mileage	Mile		\$	0.67	\$	
Ť	-	Unit Permitting Fees	Unit		\$	1.00	\$	-
i		Subtotal III.F:		LTI/S X			S	111
G	H	PRE-BID CONFERENCE						
9		Principal Principal	HR		\$	315.00	\$	_
+			HR		S	275.00	\$	
	-	Chief Engineer Project Manager / Sonior Engineer / Sonior Scientist	HR		\$	175.00	\$	_
-	-	Project Manager / Senior Engineer / Senior Scientist	HR		\$	130.00	\$	
1	-	Staff Engineer / Staff Scientist			\$	110.00	\$	
	V -	Engineer / Scientist	HR		_			
	V	CADD	HR		\$	135.00	\$	
	-	Clerical	HR		\$	95.00	\$	-
	-	Construction Monitor	HR		\$	95.00	\$	
	9	Mileage	Mile		\$	0.67	\$	
		Subtotal III.G:				ROLL TO A	\$	



TASI	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE	TOTAI PRICE	
-I	PRE-CONSTRUCTION CONFERENCE					
1	Principal	HR		\$ 315.00	\$	-
2	Chief Engineer	HR		\$ 275.00	\$	_
3	Project Manager / Senior Engineer / Senior Scientist	HR		\$ 175.00	\$	_
4	Staff Engineer / Staff Scientist	HR		\$ 130,00	\$	-
5	Engineer / Scientist	HR		\$ 110.00	\$	-
6	CADD	HR		\$ 135.00	\$	-
7	Clerical	HR		\$ 95.00	\$	_
8	Construction Monitor	HR		\$ 95.00	\$	-
9	Mileage	Mile		\$ 0.67	\$	_
	Subtotal III.H:				S	_
П	TOTAL TASK III:				\$ 586,48	7.5
ASK	V: CONSTRUCTION OVERSIGHT		,			
1	CONSTRUCTION INSPECTION					
1	Principal	HR		\$ 315.00	\$	_
2	Chief Engineer	HR		\$ 275.00	\$	_
3	Project Manager / Senior Engineer / Senior Scientist	HR		\$ 175.00	\$	-
4	Staff Engineer / Staff Scientist	HR		\$ 130,00	\$	-
5	Engineer / Scientist	HR		\$ 110.00	\$	-
6	CADD	HR		\$ 135.00	\$	-
7	Clerical	HR		\$ 95.00	\$	-
8	Construction Monitor	HR		\$ 95.00	\$	_
9	Mileage	Mile		\$ 0.67	\$	_
	Subtotal IV.A:				S	-
	TOTAL TASK IV:				\$	-
ASK '	/: POST-CONSTRUCTION OVERSIGHT					
	FIELD VISITS / INSPECTIONS					
1	Principal	HR		\$ 315.00	\$	-
2	Chief Engineer	HR		\$ 275.00	\$	-
3	Project Manager / Senior Engineer / Senior Scientist	HR		\$ 175.00	\$	-
4	Staff Engineer / Staff Scientist	HR		\$ 130.00	\$	-
5	Engineer / Scientist	HR		\$ 110.00	\$	-
6	CADD	HR		\$ 135,00	\$	-
7	Clerical	HR		\$ 95.00	\$	-
8	Construction Monitor	HR		\$ 95.00	\$	-
9	Mileage	Mile		\$ 0.67	\$	-
	Subtotal V.A:				\$	_
	TOTAL TASK V:				\$	_



SUMMARY OF PROPOSED TEMPERATURE MONITORING BORINGS

Prenter Underground Mine Fire (WV-6933)
Prenter, West Virginia
Potesta Project No. 0101-21-0258

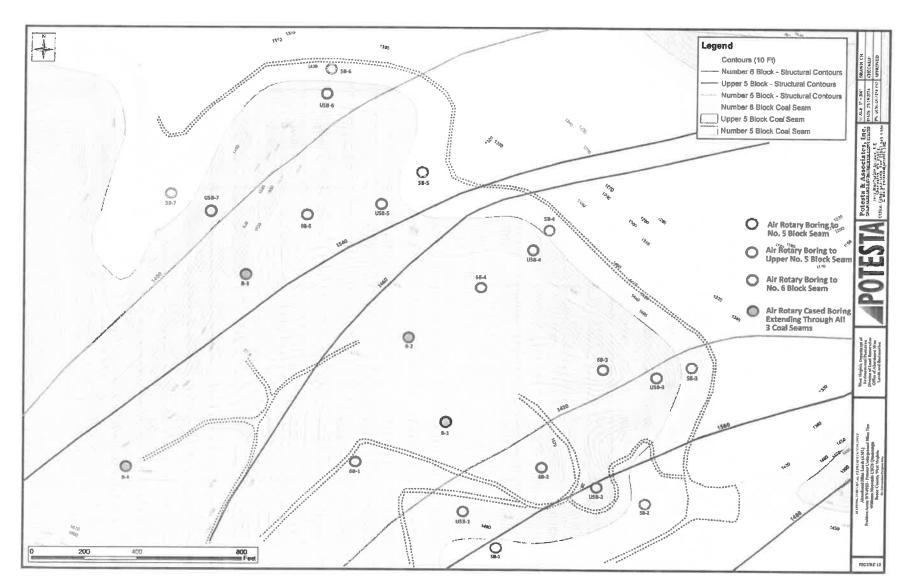
3 1 1 1 1 1 1 1 1	SURFACE												
BORING NO.	ELEVATION	No. 5 Block	U. No. 5 Block	No. 6 Block	TOTAL DEPTH								
5B-1	1460	1425			35								
5B-2	1470	1426			44								
5B-3	1470	1421			49								
5B-4	1450	1412			38								
5B-5	1430	1405			25								
5B-6	1430	1397			33								
5B-7	1430	1397			33								
U5B-1	1520		1468		52								
U5B-2	1540		1472		68								
U5B-3	1540		1472		68								
U5B-4	1495		1463		32								
U5B-5	1495		1457		38								
U5B-6	1505		1454		51								
U5B-7	1510		1454		56								
6B-1	1600			1551	49								
6B-2	1620			1557	63								
6B-3	1615			1555	60								
6B-4	1605			1546	59								
6B-5	1595			1537	58								
B-1	1680	1417 263	1468 212	1553 127	263								
B-2	1690	1411 279	1462 228	1547 <i>143</i>	279								
B-3	1650	1403 247	1455 <i>195</i>	1538 112	247								
B-4	1700	1406 294	1455 245	1543 <i>157</i>	294								

PROPOSED DRILLING FOOTAGE 1,994

ADDITIONAL 10% CONTENGENCY FOOTAGE 200

TOTAL 2,194







COST ESTIMATE AND SCHEDULE

Our detailed manhour and cost estimate for this project is shown on the tables included under each project scope of services description. POTESTA's estimated cost for the project is \$4,347,049.83 as summarized below.

Commodity Line 1	Drawdy Creek	\$ 331,964.85
Commodity Line 2	Peytona (Bowles) Portals and Drainage	\$ 283,697.45
Commodity Line 3	Toney Fork Portals	\$ 325,347.95
Commodity Line 4	Mitchell Cemetery Complex	\$ 282,491.70
Commodity Line 5	New Butler Drainage	\$ 385,955.14
Commodity Line 6	Lens Creek Refuse Pile	\$ 313,445.14
Commodity Line 7	Lens Creek Left Fork Portals	\$ 303,855.90
Commodity Line 8	Poe Hollow Portals and Drainage	\$ 426,549.04
Commodity Line 9	Route 60 Drainage-Phase II	\$ 262,633.40
Commodity Line 10	Cannelton (Miller) Drainage	\$ 302,816.50
Commodity Line 11	Cabot Portals	\$ 241,409.60
Commodity Line 12	Big Ugly (O'Neal) Drainage	\$ 292,900.80
Commodity Line 13	Prenter UMF	\$ 593,982.36
Outrained in the second	Total Project Cost:	\$ 4,347,049.83

To determine IIJA compliance, POTESTA will follow the Guidance on the Bipartisan Infrastructure Law (BIL) (Pub. L. 117-58), Abandoned Mine Land Grant Implementation provided by the Office of Surface Mining and Enforcement (OSMRE).

POTESTA will bill WVDEP only for actual manhours and expenses expended in performing this project.

POTESTA proposes to complete preparation of the preliminary construction documents (60 percent complete submission) in accordance with the following schedule. We have also provided a schedule for submission of final construction documents assuming WVDEP provides review comments for the preliminary submission within two weeks. A graphical schedule follows as Figure 1.

PROJECT SCHEDULE

Commodity Line	Weeks from Notice to Proceed (NTP) to 60 Percent Submission	Weeks from NTP to Final Submission		
1 – Drawdy Creek	13	18		
2 – Peytonna (Bowles) Portals and Drainage	11	16		
3 – Toney Fork Portals	15	20		



Commodity Line	mmodity Line Weeks from Notice to Proceed (NTP) to 60 Percent Submission						
4 – Mitchell Cemetery Complex	17	22					
5 – New Butler Drainage	19	24					
6 – Lens Creek Refuse Pile	20	25					
7 – Lens Creek Left Fork Portals	22	27					
8 – Poe Hollow Portals and Drainage	24	30					
9 – Route 60 Drainage-Phase II	26	31					
10 – Cannelton (Miller) Drainage	8	13					
11 – Cabot Portals	7	12					
12 - Big Ugly (O'Neal) Drainage	24	29					
13 – Prenter UMF	24	29					

CLOSING

We trust this information meets your requirements and needs and look forward to serving you on this project. If you have questions or need additional information, please do not hesitate to contact us.

Sincerely,

POTESTA & ASSOCIATES, INC.

Machiner

D. Mark Kiser Chief Engineer

DMK/cla

Enclosure



Project No. 0101-23-0258

FIGURE 1 - SCHEDULE

Protect		Weeks															0														
Project	1	2	3	4	5	6	7	N	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25:	26	27	28	29	30	31
Drawdy Creek						-							\rightarrow					>													
Pcytona (Bowles) Portals and Drainage			- 15								-														19						
Foney Fork Portals										- 10 H					→					>											
Mitchell Cemetery Complex						-														••••		****									
New Butler Drainage																			\rightarrow					>							
Lons Creek Refuse Pile		1						_												-											
Lens Creek Left Fork Portals																						-					· · · · >				
Poe Hollow Portals and Drainage								E													-				->		•••	****	*****		
Route 60 Drainage-Phase II																		_													
Cannelton (Miller) Dramage																				l la											
Cabot Portals			-	ļ			->			···:																					
Big Ugly (O'Neal) Dramage												:-	-											-							
Prenter UMF			-	-					-			\vdash					-			-				-	-						

Realty

NEPA

Geotechical/Surveying

Engineering (To 60% Plans Submission)

Engineering (To Final Plans)

WVDEP Review