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: 12-02-2024

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 0313 DEP2500000012 1	**Procurement Folder:**	1257503
Document Name:	EOI - 2023 AML Contract N1	**Reason for Modification:**	
Document Description:	EOI - 2023 AML Contract N1		
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:**	2024-11-20
Free on Board:	FOB Dest, Freight Prepaid	**Effective End Date:**	

VENDOR

Vendor Customer Code: VS0000028116
KLEINFELDER INC
180 White Oaks Blvd

Bridgeport WV 26330
US
Vendor Contact Phone: 3042888978 **Extension:**

Discount Details:

	Discount Allowed	Discount Percentage	Discount Days
#1	No	0.0000	0
#2	Not Entered		
#3	Not Entered		
#4	Not Entered		

DEPARTMENT CONTACT

Requestor Name: Jessica S Chambers
Requestor Phone: (304) 414-1140
Requestor Email: jessica.s.chambers@wv.gov

2025
FILE LOCATION _____

INVOICE TO

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

SHIP TO

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

CR 12-3-24

Total Order Amount:	$3,409,570.00

Purchasing Division's File Copy

JM 12.2.24

PURCHASING DIVISION AUTHORIZATION	ATTORNEY GENERAL APPROVAL AS TO FORM	ENCUMBRANCE CERTIFICATION
DATE: 12/3/24	DATE: John S. Grau	DATE: 12-4-24
ELECTRONIC SIGNATURE ON FILE	ELECTRONIC SIGNATURE ON FILE	ELECTRONIC SIGNATURE ON FILE

12/4/2024

Extended Description:

The vendor, Kleinfelder Inc., agrees to enter into this contract with the agency, The West Virginia Department of Environmental Protection, for the design and engineering services for the 2023 AML Contract 3 Projects - North per the specifications, terms and conditions, Addendum #1 issued 8/9/2024, and the vendors submitted cost proposal date 10/9/2024, all incorporated herein by referenece and made a part hereof.

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
1	81100000	0.00000		0.000000	493660.00
Service From	**Service To**	**Manufacturer**		**Model No**	

Commodity Line Description: Enterprise Portal

Extended Description:
Enterprise Portal

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
2	81100000	0.00000		0.000000	14680.00
Service From	**Service To**	**Manufacturer**		**Model No**	

Commodity Line Description: Glosser/Williams Property Phase II

Extended Description:
Glosser/Williams Property

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
3	81100000	0.00000		0.000000	751140.00
Service From	**Service To**	**Manufacturer**		**Model No**	

Commodity Line Description: Miller Mine Drainage Phase II

Extended Description:
Miller Mine Drainage

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
4	81100000	0.00000		0.000000	540245.00
Service From	**Service To**	**Manufacturer**		**Model No**	

Commodity Line Description: Shinnston (Sheppard) Mine Drainage

Extended Description:
Shinnston (Sheppard) Mine Drainage

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
5	81100000	0.00000		0.000000	831115.00
Service From	**Service To**	**Manufacturer**		**Model No**	

Commodity Line Description: Simpson Creek Highwall, Tipple & Portals, Phase II

Extended Description:
Simpson Creek Highwall, Tipple & Portals, Phase II

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
6	81100000	0.00000		0.000000	19880.00
Service From	**Service To**	**Manufacturer**		**Model No**	

Commodity Line Description: Weaver Portals and Drainage Phase III

Extended Description:
Weaver Portals and Drainage Phase III

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
7	81100000	0.00000		0.000000	758850.00
Service From	**Service To**	**Manufacturer**		**Model No**	

Commodity Line Description: West Fork #9

Extended Description:
West Fork #9

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 within _____days.

☐ **Fixed Period Contract with Renewals:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and part of the Contract more fully described in the attached specifications must be completed within _____ days. Upon completion of the work covered by the preceding sentence, the vendor agrees that:

☐ the contract will continue for _____ years;

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

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

☑ **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.

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

8. INSURANCE: The apparent successful Vendor shall furnish proof of the insurance identified by a checkmark below 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.

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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 Agency's right to pursue any other available remedy. Vendor shall pay liquidated damages in the amount specified below or as described in the specifications:

☐ _____ for _____.

☐ Liquidated Damages Contained in the Specifications.

☐ Liquidated Damages Are Not Included in this Contract.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

34. VENDOR 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.

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) Samantha J. Pretzel, Senior Program Manager

(Address) 180 White Oaks Blvd, Suite 110, Bridgeport, WV 26330

(Phone Number) / (Fax Number) 304-288-8978

(Email address) spretzel@kleinfelder.com

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through *wv*OASIS, 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.

Kleinfelder, Inc.

(Company)

(Signature of Authorized Representative)

Troy M. Holloway, VP and Area Manager 9/17/2024

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

717-216-5644

(Phone Number) (Fax Number)

tholloway@kleinfelder.com

(Email Address)

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.:

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

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

Addendum Numbers Received:
(Check the box next to each addendum received)

[X] Addendum No. 1	[ ] Addendum No. 6
[ ] Addendum No. 2	[ ] Addendum No. 7
[ ] Addendum No. 3	[ ] Addendum No. 8
[ ] Addendum No. 4	[ ] Addendum No. 9
[ ] Addendum No. 5	[ ] Addendum No. 10

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

Kleinfelder, Inc.

Company

John Holloway

Authorized Signature

9/17/2024

Date

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

West Virginia Department of Environmental Protection

Office of Abandoned Mine Lands and Reclamation

2023 AML Contract N1

October 9, 2024

KLEINFELDER
Bright People. Right Solutions.

180 White Oaks Blvd, Suite 110
Bridgeport, WV 26330
Phone: 302-734-9188 | www.kleinfelder.com

October 9, 2024

KLEINFELDER
Bright People. Right Solutions.

Mr. Troy H. Schell, PE
West Virginia Department of Environmental Protection
Office of Abandoned Mine Lands and Reclamation
1000 Technology Drive, Suite 3220
Fairmont, WV 26554

SUBJECT: 2023 AML Contract N1
Proposal and Scope Documents

Dear Mr. Schell:

Kleinfelder (KLF) appreciates the opportunity to support the West Virginia (WV) Department of Environmental Protection (DEP) Office of Abandoned Mine Lands and Reclamation (AMLR) and its efforts to remediate abandoned mine lands (AML) and acid mine drainage (AMD). We understand AMLR is seeking contracts with consulting firms like KLF due to the influx of Infrastructure Investment and Jobs Act (IIJA) funding entering the state for AML reclamation and AMD treatment. Below, please find our scope of work (SOW) and cost proposal for the 2023 AML Contract based upon the discussions with the AMLR team as well as the site visit conducted prior to this submission.

As per the original EOI request, the following sites have been included in the attached scope description and documentation as per the 2023 AML Contract N1. KLF has evaluated each site based on initial information provided, field visit documentation and continued discussions for the individual sites. Please refer to the table of contents for the scope descriptions related to each Site.

Site Name:	Function/OASIS Number:
Enterprise Portal	EPAM 23095
Glosser Williams Property Phase II	EPAM 24029
Miller Mine Drainage Phase II	EPAM 24025
Shinnston (Sheppard) Mine Drainage	EPAM 23102
Simpson Creek Highwall, Tipple & Portal Phase II	EPAM 23078
Weaver Portals and Drainage Phase III	EPAM 24030
West Fork #9	EPAM 23103

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ENTERPRISE PORTAL (EPAM 23095)

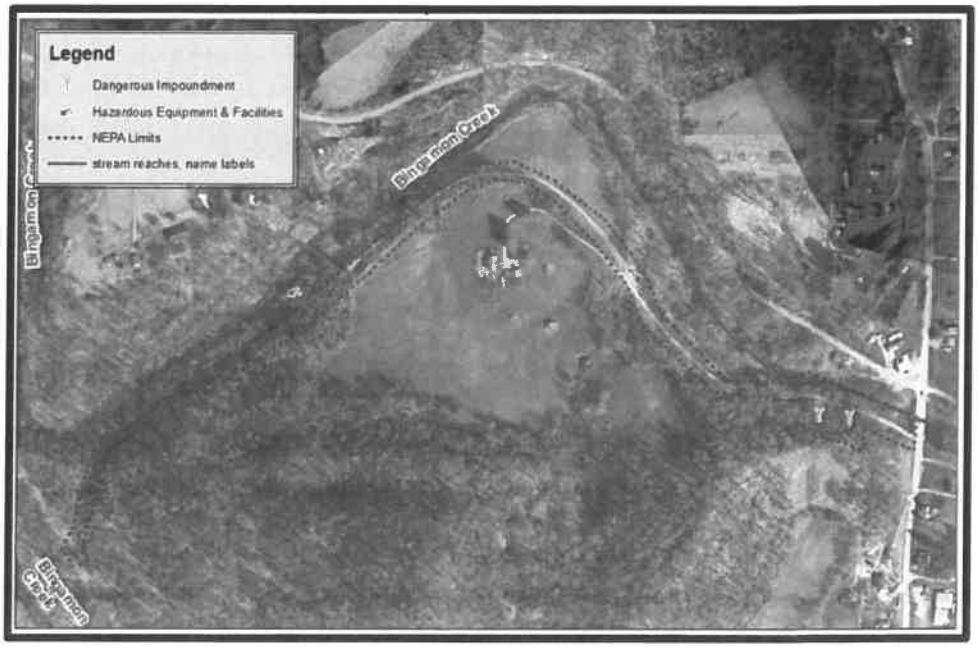


Figure 1 *- Site Location and AML feature polygons and points.*

INTRODUCTION AND UNDERSTANDING

Site / Problem Area Description:

The site was last mined by the Acme Coal Company through their Acme Mine on the Pittsburgh seam from 1948-1957. AML features include:

1. Priority 1 (PI) Dangerous Impoundments (DI) – two collapsed deep mine portals / openings have created two sources of AMD that flow along the south side of roadway paralleling Bingamon Creek. This has created soft saturated conditions that could be easily driven into by a vehicle. AMD is characterized by a flow of around 100-gallons per minute (GPM) with a circumneutral pH and iron (Fe) concentrations around 10-milligrams per liter (mg/L).
2. PI Hazardous Equipment and Facility (HEF) – This is a concrete structure between the roadway and Bingamon Creek that is 12-feet (ft) by 12-ft and approximately 8-ft in height. This structure, which could be a secondary mine access or airway, has rotting I-beams on top covered with moss and leaves. This poses a dangerous hazard in the event someone steps onto the rotting I-beams. If the structure extends to the coal limits, then it could be as much as 50-ft deep.

AMLR lists the project size as 1-acre (ac). AMLR also lists the **Anticipated Environmental Improvements** as reclamation of the site will remove the chance of a potential blowout, which would severely hinder the environmental conditions of the stream. Reclaiming the fan house entry will remove the chance of wildlife falling inside and drowning, as there is no good way to get out once something has fallen inside.

The **Tentative Reclamation Plan** for the Enterprise Portals project will be to first prepare the site by clearing and grubbing the areas around the DIs or open portals discharging AMD and

upgrading access where necessary. Erosion and sediment (E&S) controls will be installed throughout the site and maintained until the site has established a minimum of 70-percent vegetative cover. Modified wet seals with grouted riprap channels will be installed at each DI located on the project area. The grouted channels, along with new culverts will convey water to Bingamon Creek. The HEF, believed to be a fan house entry, will be demolished and reclaimed. Lastly, the site will be regraded and revegetated.

Problem:

Two collapsed portals, both draining AMD, can be seen to the south of the private access roadway. The combined drainage coalesces into a very saturated area just off the roadway, then drains into a culvert and into Bingamon Creek. The mine maps indicate there could be as many as five (5) portals in this area, however, two (2) are very apparent and flowing. A blowout could cause loss of road and access to the landowner's property as well as causing significant water quality issues to Bingamon Creek and the West Fork River.

The second site includes a concrete structure that possibly served as a secondary mine access or airway. The structure has a volume of around 43-cubic yards (CY). If a person or animal were to fall through the rotting surface grate, it would be difficult to escape not knowing the true depth of the water inside.

Reclamation of the site will include constructing and installing wet seals and open limestone ditches (OLD) at both portal entries. This reclamation will eliminate the chance of a potential blowout, which could cause roadway damage, limiting landowner access, and detrimental water quality impacts to the receiving streams. Reclaiming the HEF will eliminate the threat of people or wildlife from falling into the concrete structure with an unknown depth of water inside.

The area of the project is around 1.0-ac in size.

SCOPE OF WORK

The Enterprise Portals Project shall adhere to all inclusions, assumptions, and deliverables outlined in the Detailed Description of Services Required and Cost Proposal Requirement documents (**Attachment A and B**). The Planning, Reality, Design, and Construction Task Deliverable descriptions follow.

1. Planning

Environmental Consultations and Delineations

The objective for the environmental delineations and consultations will be to identify constraints on site related to potentially jurisdictional and state-regulated streams and wetlands, cultural resources, and listed threatened and endangered (T&E) species. All planning work shall adhere to Tasks 1.1 through 1.12 as outlined in the Detailed Description of Services Required and Cost Proposal Requirement documents (**Attachment A and B**).

Desktop Review

Prior to initiating field activities, KLF will conduct a desktop review of the site to assess known locations of wetlands, streams, cultural resources, and T&E species habitat. The results of the initial desktop review will guide the initial development of permitting scope and documents, as well as provide baseline information for additional consultation submittals to involved agencies. KLF planning staff will conduct the review utilizing available online resources, to include:

- Harrison County Floodplain Coordinator
- Natural Resources Conservation Service (NRCS) soil survey maps to evaluate the potential for hydric soils.
- U.S. Geological Survey (USGS) 7.5-minute topographic maps and aerial photographs to evaluate the potential for waters of the U.S. (WOTUS)
- U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) mapped wetlands.
- West Virginia Division of Natural Resources (WVDNR) List of Known Mussel Streams.
- Federal Emergency Management Act (FEMA) Flood Insurance Maps
- National Hydrography Dataset (NHD) Maps
- WV DEP online database resources.
- WV State Historic Preservation Office (WV SHPO) Online Viewer,
- USFWS Information for Planning and Consultation (IPaC).

Stream and Wetland Delineation

KLF biologists will perform field delineations to identify potentially jurisdictional waters, including watercourses, wetlands, and potentially jurisdictional ditches, within the project area. The extent of potentially jurisdictional wetlands and watercourses on-site will be evaluated per the U.S. Army Corps of Engineers (USACE) 1987 Corps of Engineers Wetland Delineation Manual and the 2012 Eastern Mountains and Piedmont Regional Supplement (Version 2.0). Methods include the following:

- On-site collection of soil profile data
- Cataloguing of plant species and vegetative communities
- Hydrology observations
- Photo documentation in support of wetland and waters delineations
- USACE Wetland determination data forms
- The use of sub-meter accurate Global Positioning System (GPS) to map the limits of observed wetlands and waters limits.

The USACE maintains jurisdiction over WOTUS under Section 404b of the Clean Water Act (CWA). Jurisdictional waters are defined to include the territorial seas and traditional navigable waters (TNW), perennial and intermittent tributaries to TNW, and adjacent wetlands, ponds, and lakes that have "regular surface water communication" with TNW. KLF will complete an analysis to determine the potentiality for on-site wetlands and / or waters to be considered jurisdictional by the USACE, or as isolated waters of the State of WV, by investigating surface water connectivity to TNW during the wetland and waters delineation field work.

KLF will prepare a Wetland Delineation and Stream Identification Report that details the results of our field delineation. The report will include location mapping, potentially jurisdictional aquatic feature mapping, desktop review generated site background information, and observed vegetative communities, soils, and hydrology. Maps, figures, photographs, and USACE wetland determination data forms will be provided as appendices. A delineation results figure will be provided depicting potentially jurisdictional wetlands and/or waters delineated on-site with an aerial background.

Threatened and Endangered Species Consultation

Initially, the project limits will be uploaded into the USFWS Information for Planning and Consultation (IPaC) System (https://ipac.ecosphere.fws.gov) including the initial / planned National Environmental Policy Act (NEPA) boundary from the OSM-51. The IPaC will generate an official "species list" from the NEPA boundary. Once the project LOD and proposed impacts (i.e.- tree clearing, work within streams or wetlands) have been determined, KLF will complete the applicable Determination Keys (D-Keys) within IPaC, most likely to include the Northeast Endangered Species and Northern Long-eared Bat *(Myotis septentrionalis)* D-Keys. KLF will complete the necessary bat conservation studies due to any clearing activities associated with the project.

If a "No Effect" or "May Affect, Not Likely to Adversely Affect" result is generated, KLF will continue with the NEPA review and Environmental Assessment / Finding of No Significant Impact (EA/FONSI) package preparation.

If a "May Affect" finding is generated by the completed D-Keys, KLF will submit consultation to the USFWS to confirm any required conservation measures to be implemented during construction, such as seasonal tree clearing, and assess the need for species specific surveys (if required). KLF will upload any surveys/investigations deemed necessary by the USFWS into AMLNET (or equivalent). All further consultation, surveys, or investigations will be included in the EA/FONSI package.

Additionally, KLF will submit a consultation letter to the WV DNR with a request for T&E species records within the project area.

EA/FONSI

In addition to the above consultations and reports, KLF will complete consultation with the WV SHPO and the WV Regional Planning and Development Council (Region 6) to identify any proposed project planning and design constraints. All documentation will be uploaded into AMLNET (or equivalent), with all final consultations, surveys, reports, delineations, and documentation included in a draft EA/FONSI package (per the example provided to KLF by AMLR) which KLF will submit to the AMLR planning group for review.

Ladd Williams will serve as KLF's Planning POC for the scope listed above and will be coordinating with the overall project team.

2. Realty

Realty investigations and communications will be completed by KLF's ROW team (**Table 1**). This includes:

- Research on historical project information, existing agreements, landowner contact information, Ownership Questionnaire completion, Master Realty Landowner Contact Info Sheet template completion, lien determination, and written rights to perform design and repairs.
- Onsite scoping meeting coordination with AMLR with impacted landowners invited.
- Determination of legal ownership of properties impacted prior to acquiring access permissions.
- Compilation of names and contact info for all individuals owning a legal interest, including date of determination log.

- Utility coordination.
- Coordination between AMLR and impacted landowners for first contact meeting. Acquiring verbal or written approval for access to investigate. Document and log date of contact and permission granted to enter. Firm acts as the project liaison between AMLR and impacted landowners.
- Determinations of Rights-Of-Entry (ROE) are needed for fill borrow / waste locations.
- Confirmation of legal ownership through courthouse research prior to ROE being requested and reviewed up until initiation of construction. All documentation uploaded to AMLNET, or an approved equivalent process as directed by the WV AML, including date of confirmation.
- Determination if owner participated in the mining, accepted royalties, or leased the land / resources for the mining, or received any benefit, if information is available.
- Determination if any boundary disputes exist. Attempt will first be made to sign-up both sides to avoid survey. Necessity for a boundary survey to be discussed with AMLR.
- Obtain useful project information from landowners including, but not limited to, underground utilities, septic, leach fields, ROWs, property boundaries / monuments, safety concerns, etc. Uploaded to AMLNET (or equivalent) with lien determination form if needed.
- Provide all status updates of landowner negotiations, questions, agreements, on a regular basis to AMLR Realty weekly. Completion of Master Realty Landowner Contact Info Sheet as well.
- Determining if landowner is interested in being added as additionally insured prior to entering any agreements.
- Serve as a primary contact source in educating landowners on the AMLR program, what it has to offer said landowner, and acquiring all necessary Exploratory ROE and Ingress / Egress (I/E) agreements. Agreement will allow AMLR, the Office of Surface Mining Reclamation and Enforcement (OSMRE), KLF, and KLF's subcontractors / agents to access for investigation. Approval necessary prior to any commitments and signed document must be notarized at expense to firm.
- Acquire additional agreements if property changes ownership during project.
- Production and storage of daily logs with notes detailing landowner conversations, who conversation was between, summary of those conversations, when and where those conversations took place. Logs need to be sufficient quality to be used as evidence in court.
- Upload each ROE to AMLNET (or equivalent) within five (5) business-days. This includes land use agreement(s), legal documents, pre-construction photos, ownership questionnaires with sketches, landowner correspondence. Documents to be kept on file for three (3) years by KLF.
- Collection of existing condition photos, documenting evidence of visible property boundaries / monuments, and most feasible access route(s) for exploration / construction.
- KLF will also acquire any additional ROE during design phase if needed.
- KLF Realty will be responsible for reviewing the plans and specifications in advance of each design review stage to establish understanding of reclamation plan, supplying comments or revisions if needed.
- KLF Realty will attend all design review meetings.

- Upon design review approval, the KLF Realty will schedule a meeting with each impacted property owner to obtain approval and written construction ROE, I/E, and / or any needed borrow / waste agreements.
- Construction ROE shall grant permission for AMLR, OSMRE, KLF, all KLF subcontractors / agents, and construction contractor(s) to access for construction. Any signed documents must be notarized at the firm's expense and uploaded to AMLNET (or equivalent).
- Upload to AMLNET (or equivalent) the construction ROE packet, land-use agreements, legal documents, pre-construction photos, and landowner(s) correspondence with five (5) working days.
- Attend design, pre-bid, and pre-construction conferences, keeping daily logs, and being available for questions or status updates as needed by AMLR. Additionally, KLF Realty will be available during construction should the need arise.

Table 1. *Initial Enterprise Portals Project Property owner. All owners contacted on August 22, 2023.*

Owner	Acres	Address
Paul and Rhonda Deavers	22.74	3461 Hood Avenue, Worthington, WV
Bell Shareholders	5.54	2862 War Hill Park Rd., Dawsonville, GA 30534

Realty tasks and deliverables will be completed primarily by KLF's ROW Office out of Pittsburgh, Pennsylvania (PA) and supervised by Ken Hawker, Senior Program Manager with 25-years of experience in project ROW coordination. Ken is a Senior Member of the International ROW Association since 2005. His experience extends into all phases of the ROW / acquisition process. Ken leads KLF's group of ROW professionals and provides assurance that all public projects requiring the acquisition of private property rights and / or relocations are completed in accord with the rules and regulations established within each state. All Realty work shall adhere to the tasks as outlined in the Detailed Description of Services Required and Cost Proposal Requirement documents (**Attachment A and B**).

Ken Hawker will serve as KLF's Realty Point of Contact (POC) for coordination related to the project.

3. Design

It is assumed that KLF will provide design deliverables in the standard AMLR format utilizing examples and CAD standards supplied. As mentioned previously, KLF shall adhere to all inclusions, assumptions, and deliverables outlined in the Design section of the Detailed Description of Services Required and Cost Proposal Requirement documents (**Attachment A and B**).

Once a reclamation design plan is formalized prior to moving into conceptual, KLF's design SOW will be reviewed by AMLR for comment / recommendations prior to proceeding further.

All design meetings will be transcribed with notes offered and uploaded adhering to the time constraints references in **Attachment B**. KLF will also generate, maintain, and distribute action item and project contact lists for all personnel involved with the project.

Data collected during the Realty and Planning tasks of this project will guide the design decisions needed for successful reclamation construction and the reclamation of AML features and points listed in the OSM-51.

All E&S Control Designs and Details shall conform to WV's National Pollution Discharge Elimination System (NPDES) and Construction Stormwater General Permit (GP), as referenced in the 2016 revised manual.

KLF has assumed that design plans for the Enterprise Portals Project will be developed in the following order of completion.

Survey / Base Mapping - Base mapping will include aerial, topo, and tax map data and will map in detail the project site topography (1-ac according to the OSM-51 document), details including AML features and extents, watercourses, boring locations, access roads, a georeferenced underground mine map and property lines (2 tracts listed under Realty are assumed at this time).

All referenced collected data will then be compiled into finalized base mapping that will be used within all remaining project tasks including stake-out for the eventual construction contractor.

All Surveying deliverables must be signed, sealed, and dated by an active WV Registered Professional Surveyor (PS). Base mapping will be completed utilizing WV NAD 83 and WV North Zone 17 datum as per the standardization requirements by WV State and Local government agencies.

Geotechnical Investigation – The objective of the Geotechnical Investigation will be to determine the engineering characteristics and stratification of subsurface materials across the project site. The proposed SOW will include the review of published geologic data, completion of a subsurface field exploration, laboratory testing program, a preliminary geotechnical engineering analysis, and the preparation of a Preliminary Geotechnical Summary Report.

Our scope is focused on the **Tentative Reclamation Plan** listed above but keeps the other possible layouts in mind.

It is proposed that test borings will be completed within the proposed limits of disturbance, extending to depths totaling up to 250-LF. Should soft or otherwise unstable soil conditions, or fill, be encountered at the scheduled termination depth of the test boring, the test boring will be extended until suitable soils are identified.

The test borings will be completed with a track- or ATV-mounted drill rig equipped with casing, hollow-stem augers, and split-spoon samplers. Samples of the soils encountered will be recovered at suitable intervals and the Standard Penetration Test (SPT) values will be recorded. All sampling procedures will be performed in accordance with the applicable American Society for Testing and Materials (ASTM) standards.

One piezometer will also be installed to measure the mine pool elevation to determine if that elevation is increasing due to the plugged / semi-plugged nature of the drainage pipes.

Should refusal on bedrock, or buried obstructions, be encountered prior to reaching a depth that will interfere with construction of the proposed structure, bedrock coring will be completed at representative locations. Rock coring will be conducted with NX-size coring equipment, in accordance with all applicable ASTM guidelines. Information regarding percent recovery, RQD, drilling rates, any loss of drill fluids, and the presence of any voids or soil seams will be carefully measured and recorded. For the purpose of this proposal 250-LF of rock coring has been assumed based on past project site experience.

For purposes of this proposal, three (3) days of test boring and auger probe drilling have been budgeted.

Laboratory Testing Program - To define the physical characteristics of the soils encountered, it is proposed that laboratory analysis of soils consisting of USCS classifications be conducted, in accordance with ASTM D2487 standards and specifications. This testing will include: Atterberg limits determination, gradation analysis, and natural moisture content testing. It is proposed that four (4) standard classification tests and a moisture-density (proctor) be completed in accordance with ASTM D698 be performed on representative soil samples obtained from the project site.

Additionally, representative samples of the bedrock cores recovered from the test borings will be subjected to unconfined compressive strength testing (ASTM D7012) to aid in understanding the level of difficulty associated with excavation. Two (2) tests have been budgeted for this proposal.

Geotechnical Engineering Report - A geotechnical engineering analysis and report presenting our results and recommendations, based on the SOW outlined above, will be prepared. This will include the following:

- Geologic Site Evaluation (including terrain description, brief geological history, and surface drainage conditions)
- Description of Subsurface Conditions (including description of exploration and sampling methods, soil identification and classification)
- Results of Preliminary Geotechnical Analysis
- Test Boring Logs
- Test Boring Profiles
- Exploration Plan
- Results of All Laboratory Testing
- Preliminary Conclusions and Recommendations concerning:
    - Anticipated Ground Improvement Options
    - Soil Strength Conditions
    - General Earthwork Criteria
    - Suitability of On-Site Soils for Use as Structural Fill
    - Site Excavation Characteristics
    - Construction Dewatering

A digital (pdf) copy of the final report will be submitted to the client within ten (10) working days upon completion of the laboratory testing. The report will be signed by a professional engineer (PE), licensed in the state of WV, and qualified in geotechnical engineering. This schedule may be impacted by weather, site / subsurface conditions beyond our control and / or the subcontractor's availability.

It is assumed that all services not specifically outlined above are excluded from this proposal. KLF has assumed that AMLR will require two (2) weeks for review of deliverables at each milestone listed below.

Conceptual Design (12-weeks) – Complete an initial 811 inquiry. Includes 30-percent conceptual site plan and a brief narrative to convey general understanding and assumptions made during this phase of design. Submitted electronically in PDF format to AMLR for review. One round of review and revision has been included for the conceptual design package. An in-person or virtual

meetings with AMLR will be held to review the document submission, which will include KLF's Project Team (Principal, Project Manager and Environmental / Civil Lead) for the project.

Preliminary Design (10-weeks) - Includes 60-percent preliminary site plan and a brief narrative to convey general understanding and assumptions made during this phase of design. Submitted electronically in PDF format to AMLR for review. One round of review and revision has been included for the preliminary design package which will include calculations, PDR, draft specifications, preliminary cost estimates and draft EA. An in-person or virtual meetings with AMLR will be held to review the document submission, which will include KLF's Project Team (Principal, Project Manager, Construction Manager and Environmental / Civil Lead) for the project. All landowner consents will be obtained prior to finalization of the prelamination design.

Pre-Final Design (8-weeks) – Includes 90-percent pre-final design. Pre-final documents will include drawings, technical specifications, and an engineer's cost estimate. Documents to be submitted electronically in DWG, Microsoft Word, and Excel formats, respectively. One round of review and revision has been included for the pre-final design package. An in-person or virtual meetings with AMLR will be held to review the document submission, which will include KLF's Project Team (Principal, Project Manager, Construction Manager and Environmental / Civil Lead).

Final Design (4-weeks) – Includes 100-Percent final design documents which have been signed, sealed, and dated by a licensed WV PE. PDF and CAD files (in AutoCAD 2020 format or AMLR accepted later addition) of the plans must be included as part of the electronic portion of the final deliverable package. Both electronic and physical copies will be transmitted to AMLR as part of the Final Design and documents deliverables. All deliverables will also be uploaded into AMLNET (or equivalent).

Permitting - KLF will prepare permitting document submittals from examples provided by AMLR. This will include necessary submittals to the USACE, USFWS, WV DNR, WV SHPO, the Harrison County Floodplain Coordinator, WV Division of Highways (WVDOH) and the Region 6 Development Council. Permitting documents will be given to the AMLR for review before submittal.

KLF will prepare a permitting matrix for the proposed project based upon our understanding of the site conditions, wetland delineations, and permitting requirements for AMLR projects. Upon completion of the permitting matrix, a schedule for anticipated permitting activities to facilitate construction will be provided to AMLR, to include Jurisdictional Determinations and USCAE Coordination.

It is assumed that all impacts to Waters of the United States (WOTUS) will fall within the threshold for GP coverage. KLF is assuming permit coordination and reviews will meet the estimated schedule. If delays in permitting occur outside of KLF's control, any additional effort will be evaluated and discussed with AMLR. The proposed timeline for approval of permits assumes any proposed aquatic impacts will qualify for coverage under WV GPs per all applicable conditions. This task also assumes that zoning changes or any other land development permits required for the proposed SOW will not exceed more than two (2) months.

Sami Pretzel, PE will serve as KLF's Design POC for the scope listed above and will be coordinating with the overall project team.

4. Construction

KLF will support construction management of the project per the guidelines provided by AMLR found in **Attachment A.** The assumed construction schedule will commence seven (7) days a week from 7:00 am to 7:00 pm, permission from AMLR and landowners will need to be granted for work taking place on the weekends and holidays. The project will adhere to the requirements of the Build America, Buy America (BABA) and the Davis-Bacon Acts. **The anticipated timeframe to complete the project's construction phase is about eight (8) weeks from Notice to Proceed to completion of earthwork activities.** We have considered and assumed the following for the pricing of this task.

At least one month prior, KLF will provide resumes and reference lists of inspector(s). The Construction Inspector(s) (CI) will act as the onsite point of contact with the Contractor and will relay coordination efforts from the Engineer of Record (EoR) and Construction Manager (CM) throughout construction. The CI will have the authority to process and document redline changes communicated from the EoR. Approval is needed from AMLR prior to any inspector mobilization. KLF will coordinate construction meetings for the Project and provide notification to stakeholders.

KLF will provide construction management services throughout the duration of the project. Following permitting approval, KLF will advertise a bid date on behalf of AMLR. A KLF administrator along with the CM will prepare the bid documents and any necessary coordination with proposed contractors, including the delivery of bid documents to the prospective Contractor(s). The CM and CI will attend a pre-bid meeting with the Department to review the documentation advertised in the bid and to discuss the facilitation of the bidding process. The CM and CI will attend the official bid meeting to receive the proposals from the Contractors and announce the lowest bid for each contract. This pre-construction conference will be videotaped and transcribed for minutes. Following an acceptable bid approval by AMLR, KLF will schedule a Pre-Construction Conference and Project Meeting with the awarded Contractor(s).

In the initial meeting the EOR, CM, and CI will attend to become acquainted with the Contractor(s). During this meeting, a schedule will be defined, contact information will be distributed, Contractor(s) working hours set, inspection expectations defined, discussions on possible hazards and construction concerns, equipment procurement, subcontractor lists, shareholder concerns, overall site safety, public safety, and environmental best practices shall all take place. Following this meeting, an Issued for Construction set of plans and specifications will be produced and a system of document control will be established with the Contractor(s) to maintain version control throughout the life of the project. Additionally, a date will be set for a Pre-Construction Inspection of the site where the CM, and CI will walk the Project Site with the Contractor and review the construction sequencing process. The Contractor will provide a survey crew to delineate the LOD and environmental resources prior to the start of construction.

Weekly progress meetings between the Inspector and CM will occur throughout the duration of the project to track progress and maintain schedules; meetings can occur virtually to accommodate scheduling. The CM will coordinate communications with AMLR, handle billing and change orders, organize the construction schedule, and provide utility coordination.

As construction progresses, the CI will be on site daily documenting with pictures, the Contractor's progress and verify the Project sequencing is being followed per the plans and specifications. The CI will record the location, date, and the specifications of the installation of the E&S and stormwater control devices and document daily quantity reports of installed materials. The inspection team will consist of one (1) Construction Inspector per construction crew provided by the Contractor.

Environmental Inspections, including the Stormwater Pollution Prevention Plan (SWPPP), are the contractor's responsibility. This also may include wood or impacted soil that should be disposed of in accordance with the WV DEP's Solid Waste Management Regulations.

Following construction activities, the Contractor will provide a survey crew to document As-Built conditions. Following the field survey, a WV PLS sealed As-Built plan will be provided by the Contractor to KLF for review, and ultimately AMLR. The KLF Review Team will consist of the CM, & CI for QA / QC. A certification that the project was installed in accordance with the plans and specs will be supplied to AMLR signed, sealed, and dated by a licensed WV PE.

All daily logs, pictures, video, documentation, design / permitting changes, etc. will be uploaded to AMLR's AMLNET (or equivalent) online database as per the timing requirements set forth in **Attachment A**.

KLF understands that the warranty period inspections are the responsibility of the firm and that DWWM and Environmental Enforcement will need to be notified that the Notice-of-Termination (NOT) is being requested once project is set to be released from NPDES. One (1) inspection of the Site will occur per month following the submitted As-Built until the Project NOT has been issued with the PM and CM reviewing the inspection reports of post construction conditions.

- Project Management, Administration and Construction Management support at 12 hours per week for the duration of the project for request for information (RFI) support, invoicing, scheduling, QA/QC, utility management, and meetings.
- Construction Inspection support at 12 Hour Days, 7 days per week per construction crew for the project's duration to document construction installations, provide Contractor communications, and representation to landowners.
- Meeting Attendance as described above for identified staff are assumed to be 8 hours for onsite meetings, 2 hours for virtual meetings.

Nicholas Flanders will serve as KLF's Construction POC for the scope listed above and will be coordinating with the overall project team.

PROPOSED COST

KLF is proposing the **Not-to-Exceed (NTE)** cost as noted in the **AML Contract N1_COST SHEET PDF COMBINED**, attached to this document as **Attachment C**, and to be billed on a monthly basis. Hours not worked and costs not incurred will not be billed. Rates are locked in for the duration of the contract and are flat rates, no overtime rates will be billed per the contract terms. Please refer to **Attachment C** for designated hours and rates for the enclosed scope.

PROPOSED SCHEDULE

Please refer to the table below for estimated completion schedule for the scope of work described above. Should delays be encountered that are beyond KLF's control, WV AML will be notified and coordination with the Project Manager, Mr. Jamie Shaffer, will be conducted in accordance with the contract documents. Should additional scope be necessary, an estimate to complete and schedule impacts will be provided once identified by the Project Team.

Milestone Description:	Estimated Schedule (Weeks)
Conceptual Design (30%)	12
Preliminary Design (60%)	10
Pre-Final Design (90%)	8
Final Design (100%)	4
Anticipated DEP Review Time	*2 per Milestone*
Total Anticipated Project Schedule	**44**

Schedule is assumed to begin upon receipt of NTP, KLF will coordinate and submit a final project schedule prior to the initial contract kick-off meeting.

GLOSSER WILLIAMS PROPERTY PHASE II

(EPAM 24029)

INTRODUCTION AND UNDERSTANDING

Glosser Williams Project Site / Problem Area Description:

The site was deep mined for Pittsburgh Seam coal in the early 1940s by Getty Coal Company (Eagle Mine) and the Katherine Coal Mining Company (Katherine Mine). AML features include:

1. Priority 2 (PII) Dangerous Impoundment (DI) – DI caused by a potentially increasing mine pool behind two homes causing AMD to occur on their properties. Lat: 39.3514 Long: -80.3345

KLF understands that due to site conditions, adverse stakeholders, and additional AML features at this time WV DEP will be postponing the development of the Glosser Williams Project. The following scope of work was developed to memorialize the findings of the site visits conducted and general recommendations and / or assumptions that developed for both of the projects.

SCOPE OF WORK

The following two tasks will be completed as requested by WV DEP.

1. Glosser Williams Feasibility Report

KLF will develop a memorandum report to document the general understanding of the original scope of work proposed in the Glosser Williams AML OSM-51 documents, activities completed on Site, documentation of current site conditions (photo log) and / or exhibit map, as well as a summary of general findings, design constraints, and recommendations for future development of the Site.

PROPOSED COST

KLF is proposing the **Not-to-Exceed (NTE)** cost as noted in the **AML Contract N1_COST SHEET PDF COMBINED**, attached to this document as **Attachment C**, and to be billed on a monthly basis. Hours not worked and costs not incurred will not be billed. Rates are locked in for the duration of the contract and are flat rates, no overtime rates will be billed per the contract terms. Please refer to **Attachment C** for designated hours and rates for the enclosed scope.

PROPOSED SCHEDULE

Please refer to the table below for estimated completion schedule for the scope of work described above. Should delays be encountered that are beyond KLF's control, WV AML will be notified and coordination with the Project Manager, Mr. Jamie Shaffer, will be conducted in accordance with the contract documents. Should additional scope be necessary, an estimate to complete and schedule impacts will be provided once identified by the Project Team.

Milestone Description:	Estimated Schedule (Weeks)
Feasibility Report	6
Anticipated DEP Review Time	*2*
Final Documents	1
Total Anticipated Project Schedule	**9**

Schedule is assumed to begin upon receipt of NTP, KLF will coordinate and submit a final project schedule prior to the initial contract kick-off meeting.

MILLER MINE DRAINAGE PHASE II (EPAM 24025)

INTRODUCTION AND UNDERSTANDING

The Miller Drainage Phase II Project (WV-4983) scope is based upon the discussions with the AMLR team as well as the site visit conducted prior to this submission at the location shown in **Figure 1** below.

Figure 2 *- Site Location adjacent to Summit Park.*

Site / Problem Area Description:

The site was surface mined in the early 1970s by LaRosa Fuel Company. Immediately following the mining activities, construction began on the Summit Park playground and ballfield. There is also underground mining (ref. 1926 mapping, unknown company) associated with the site and AMD discharging from the Pittsburgh Coal Seam outcrop or from the collapsed deep mines along the coal outcrop. AML features include:

1. Priority 1 (PI) Dangerous Slide (DS) – Associated with collapsed portal.
2. Priority 2 (PII) Dangerous Impoundment (DI) – Water from a suspected collapsed portal.
3. PII DI – Pond located near the scarp area of the DS.
4. Priority 3 (PIII) Highwall (HW) – 500-Linear Feet (LF) on eastern side of Problem Area (PA).

AMLR lists the project size as 4-acres (ac). AMLR also lists the **Anticipated Environmental Improvements** as elimination of the slide that could block culvert under Summit Park that could cause flooding in the upstream area and potential "washouts" of downstream stream channels, homes, and infrastructure if released.

The **Tentative Reclamation Plan** for the site will include the following procedures. Upgrades to the access road such as refreshment of gravel and potential grading to safely allow ingress and egress of machinery. Erosion and sediment (E&S) controls will be installed throughout the site and maintained until the site has established a minimum of 70% vegetative cover. During

construction clearing and grubbing of the site will commence to install the designed controls, features, seals, and underdrains. Following construction, grade will be returned to approximate original contours and disturbed areas will be seeded to re-establish vegetative cover.

Problem:

The primary concern with this project is the DS. Backfilling of the HW will only be completed if the volume of materials from the slide area needs to be removed and placed in a stable location. Spoil from the pre-law mining was placed on the slope below the upper coal seam. Currently, there is an active slide area with a series of small scarp lines near the top of the spoil pile and the toe of the slide near the base of the valley near the stream.

There are two areas within the slide area where materials have subsided, creating a sinkhole formation. The larger of the two contains a pool of water approximately 10-LF in diameter and 4-LF deep. The freeboard of the sinkhole extends steeply nearly 3-LF above the beachline.

The DS is composed of past mining spoil placed on the slope above the stream. The spoil is tied to the previously deposited spoil that most likely came from the HW or another nearby surface mine. The DS material is adjacent to the stream and continues to move into the floodplain. Water percolating through the spoil has created areas near the toe of the DS of soil liquefaction.

Located east of the DS and level with the scarps is a DI of approximately 4,000-square feet. DS movement is more than likely to be aided by this ponded water. Additional DS movement could cause a loss of stabilization of the pond embankment. This potential movement could block the stream culvert under Summit Park. This would then cause flooding of residences upslope of the culvert and cause washouts downstream impacting channels, homes, and infrastructure.

Located at the eastern end of the HW and the DI is what appears to be a portion of a historical belt line. Steel I-Beams are also protruding from the ground surface up to 2-LF. Historical steel structures, including rollers, are found here, as well as metal piping from the spoil near the base of the highwall. A steady stream of water often exits this piping.

SCOPE OF WORK

The Miller Mine Drainage Phase II SOW shall adhere to all inclusions, assumptions, and deliverables outlined in the Detailed Description of Services Required and Cost Proposal Requirement documents (**Attachment A and B**). The Planning, Realty, Design, and Construction Task Deliverable descriptions follow.

1. Planning

Environmental Consultations and Delineations

The objective for the environmental delineations and consultations will be to identify constraints on site related to potentially jurisdictional and state-regulated streams and wetlands, cultural resources, and listed threatened and endangered (T&E) species. All Planning work shall adhere to tasks as outlined in the Detailed Description of Services Required and Cost Proposal Requirement documents (**Attachment A and B**).

Desktop Review

Prior to initiating field activities, KLF will conduct a desktop review of the site to assess known locations of wetlands, streams, cultural resources, and T&E species habitat. The results of the initial desktop review will guide the initial development of permitting scope and documents, as well as provide baseline information for additional consultation submittals to involved agencies. KLF planning staff will conduct the review utilizing available online resources, to include:

- Harrison County Floodplain Coordinator
- Natural Resources Conservation Service (NRCS) soil survey maps to evaluate the potential for hydric soils.
- U.S. Geological Survey (USGS) 7.5-minute topographic maps and aerial photographs to evaluate the potential for waters of the U.S. (WOTUS)
- U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) mapped wetlands.
- WV Division of Natural Resources (DNR) List of Known Mussel Streams.
- Federal Emergency Management Act (FEMA) Flood Insurance Maps
- National Hydrography Dataset (NHD) Maps
- WV DEP online database resources.
- WV State Historic Preservation Office (SHPO) Online Viewer,
- USFWS Information for Planning and Consultation (IPaC).

Stream and Wetland Delineation

Due to the movement of DS material into the floodplain / stream and clearing activities needed to facilitate reclamation of the DS and DIs onsite, it is critical to complete the necessary field investigations to confirm any potential risks to the project. Upon completion of the base mapping, SOW for the environmental delineations will be confirmed. The assumptions and costs in this Task are based upon the information provided to KLF and the site visit completed in December 2023.

KLF biologists will perform field delineations to identify potentially jurisdictional waters, including watercourses, wetlands, and potentially jurisdictional ditches, within the project area. The extent of potentially jurisdictional wetlands and watercourses on-site will be evaluated per the U.S. Army Corps of Engineers (USACE) 1987 Corps of Engineers Wetland Delineation Manual and the 2012 Eastern Mountains and Piedmont Regional Supplement (Version 2.0). Methods include the following:

- On-site collection of soil profile data
- Cataloguing of plant species and vegetative communities
- Hydrology observations
- Photo documentation in support of wetland and waters delineations
- USACE Wetland determination data forms
- The use of sub-meter accurate Global Positioning System (GPS) to map the limits of observed wetlands and waters limits.

The USACE maintains jurisdiction over WOTUS under Section 404b of the Clean Water Act (CWA). Jurisdictional waters are defined to include the territorial seas and traditional navigable waters (TNW), perennial and intermittent tributaries to TNW, and adjacent wetlands, ponds, and lakes that have "regular surface water communication" with TNW. KLF will complete an analysis to determine the potentiality for on-site wetlands and / or waters to be considered jurisdictional by

the USACE, or as isolated waters of the State of WV, by investigating surface water connectivity to TNW during the wetland and waters delineation field work.

KLF will prepare a Wetland Delineation and Stream Identification Report that details the results of our field delineation. The report will include location mapping, potentially jurisdictional aquatic feature mapping, desktop review generated site background information, and observed vegetative communities, soils, and hydrology. Maps, figures, photographs, and USACE wetland determination data forms will be provided as appendices. A delineation results figure will be provided depicting potentially jurisdictional wetlands and/or waters delineated on-site with an aerial background.

Threatened and Endangered Species Consultation

Initially, the project limits will be uploaded into the USFWS IPaC System (https://ipac.ecosphere.fws.gov) including the initial / planned NEPA boundary from the OSM-51. The IPaC will generate an official "species list" from the NEPA boundary. Once the project LOD and proposed impacts (i.e.- tree clearing, work within streams or wetlands) have been determined, KLF will complete the applicable Determination Keys (D-Keys) within IPaC, most likely to include the Northeast Endangered Species and Northern Long-eared Bat *(Myotis septentrionalis)* D-Keys. KLF will complete the necessary bat conservation studies due to any clearing activities associated with the project.

If a "No Effect" or "May Affect, Not Likely to Adversely Affect" result is generated, KLF will continue with the NEPA review and Environmental Assessment / Finding of No Significant Impact (EA/FONSI) package preparation.

If a "May Affect" finding is generated by the completed D-Keys, KLF will submit consultation to the USFWS to confirm any required conservation measures to be implemented during construction, such as seasonal tree clearing, and assess the need for species specific surveys (if required). KLF will upload any surveys / investigations deemed necessary by the USFWS into AMLNET (or equivalent). All further consultation, surveys, or investigations will be included in the EA/FONSI package.

Additionally, KLF will submit a consultation letter to the WV DNR with a request for T&E species records within the project area.

EA/FONSI

In addition to the above consultations and reports, KLF will complete consultation with the WV SHPO and the WV Regional Planning and Development Council (Region 6) to identify any proposed project planning and design constraints. All documentation will be uploaded into AMLNET (or equivalent), with all final consultations, surveys, reports, delineations, and documentation included in a draft EA/FONSI package (per the example provided to KLF by AMLR) which KLF will submit to the AMLR planning group for review.

Ladd Williams will serve as KLF's Planning POC for the scope listed above and will be coordinating with the overall project team.

2. Realty

Due the possibility of at least three (3) impacted landowners, the need for additional project approvals (Harrison County Commission), and the Mon Power electrical line right-of-way (ROW) traversing the site, significant Realty investigations and communications will be completed by KLF's ROW team (**Table 1**). All Realty work shall adhere to tasks as outlined in the Detailed Description of Services Required and Cost Proposal Requirement documents (**Attachment A and B**). This includes:

- Research on historical project information, existing agreements, landowner contact information, Ownership Questionnaire completion, Master Realty Landowner Contact Info Sheet template completion, lien determination, and written rights to perform design and repairs.
- Onsite scoping meeting coordination with AMLR with impacted landowners invited.
- Determination of legal ownership of properties impacted prior to acquiring access permissions.
- Compilation of names and contact info for all individuals owning a legal interest, including date of determination log.
- Mon Power and other utility coordination.
- Coordination between AMLR and impacted landowners for first contact meeting. Acquiring verbal or written approval for access to investigate. Document and log date of contact and permission granted to enter. Firm acts as the project liaison between AMLR and impacted landowners.
- Determinations of Rights-Of-Entry (ROE) are needed for fill borrow / waste locations.
- Confirmation of legal ownership through courthouse research prior to ROE being requested and reviewed up until initiation of construction. All documentation uploaded to AMLNET, or an approved equivalent process as directed by the WV AML, including date of confirmation.
- Determination if owner participated in the mining, accepted royalties, or leased the land / resources for the mining, or received any benefit, if information is available.
- Determination if any boundary disputes exist. Attempt will first be made to sign-up both sides to avoid survey. Necessity for a boundary survey to be discussed with AMLR.
- Obtain useful project information from landowners including, but not limited to, underground utilities, septic, leach fields, ROWs, property boundaries / monuments, safety concerns, etc. Uploaded to AMLNET (or equivalent) with lien determination form if needed.
- Provide all status updates of landowner negotiations, questions, agreements, on a regular basis to AMLR Realty weekly. Completion of Master Realty Landowner Contact Info Sheet as well.
- Determining if landowner is interested in being added as additionally insured prior to entering any agreements.
- Serve as a primary contact source in educating landowners on the AMLR program, what it has to offer said landowner, and acquiring all necessary Exploratory ROE and Ingress / Egress (I/E) agreements. Agreement will allow AMLR, the Office of Surface Mining Regulatory Enforcement (OSMRE), KLF, and KLF's subcontractors / agents to access for investigation. Approval necessary prior to any commitments and signed document must be notarized at expense to firm.
- Acquire additional agreements if property changes ownership during project.

- Production and storage of daily logs with notes detailing landowner conversations, who conversation was between, summary of those conversations, when and where those conversations took place. Logs need to be sufficient quality to be used as evidence in court.
- Upload each ROE to AMLNET (or equivalent) within five (5) business-days. This includes land use agreement(s), legal documents, pre-construction photos, ownership questionnaires with sketches, landowner correspondence. Documents to be kept on file for three (3) years by KLF.
- Collection of existing condition photos, documenting evidence of visible property boundaries / monuments, and most feasible access route(s) for exploration / construction.
- KLF will also acquire any additional ROE during design phase if needed.
- KLF Realty will be responsible for reviewing the plans and specifications in advance of each design review stage to establish understanding of reclamation plan, suppling comments or revisions if needed.
- KLF Realty will attend all design review meetings.
- Upon design review approval, the KLF Realty will schedule a meeting with each impacted property owner to obtain approval and written construction ROE, I/E, and/or any needed borrow / waste agreements.
- Construction ROE shall grant permission for AMLR, OSMRE, KLF, all KLF subcontractors / agents, and construction contractor(s) to access for construction. Any signed documents must be notarized at the firm's expense and uploaded to AMLNET (or equivalent).
- Upload to AMLNET (or equivalent) the construction ROE packet, land-use agreements, legal documents, pre-construction photos, and landowner(s) correspondence with five (5) working days.
- Attend design, pre-bid, and pre-construction conferences, keeping daily logs, and being available for questions or status updates as needed by AMLR. Additionally, KLF Realty will be available during construction should the need arise.

Table 1. *Initial Miller Mine Drainage Phase II property owners. All owners contacted on August 22, 2023.*

Owner	Phone	Address	Approval
Sherry Washington	304.669.6042	1720 N 18th St Clarksburg 26301	Verbal
Tim N. Fitzwater		651 Murphys Run RD Clarksburg 26301	Verbal
Harrison Co. Commission			
***Mon Valley Power also has an electrical service ROW through the property.**			

Realty tasks and deliverables will be completed primarily by KLF's ROW Office out of Pittsburgh, Pennsylvania (PA) and supervised by Ken Hawker, Senior Program Manager with 25-years of experience in project ROW coordination. Ken is a Senior Member of the International ROW Association since 2005. His experience extends into all phases of the ROW / acquisition process. Ken leads KLF's group of ROW professionals and provides assurance that all public projects requiring the acquisition of private property rights and / or relocations are completed in accord with the rules and regulations established within each state.

Ken Hawker will serve as KLF's Realty Point of Contact (POC) for coordination related to the project.

3. Design

It is assumed that KLF will provide design deliverables in the standard AMLR format utilizing the examples and CAD standards supplied. As mentioned previously, KLF shall adhere to all inclusions, assumptions, and deliverables outlined in the Design section of the Detailed Description of Services Required and Cost Proposal Requirement documents (**Attachment A and B**).

Once a reclamation design plan is formalized prior to moving into conceptual, KLF's design SOW will be reviewed by AMLR for comment / recommendations prior to proceeding further.

All design meetings will be transcribed with notes offered and uploaded adhering to the time constraints references in **Attachment B**. KLF will also generate, maintain, and distribute action item and project contact lists for all personnel involved with the project.

Data collected during the Realty and Planning tasks of this project will guide the design decisions needed for successful reclamation construction and the reclamation of AML features and points listed in the OSM-51.

All E&S Control Designs and Details shall conform to WV's National Pollution Discharge Elimination System (NPDES) and Construction Stormwater General Permit (GP), as referenced in the 2016 revised manual.

KLF has assumed that design plans for the Miller Mine Drainage Phase II will be developed in the following order of completion.

Survey / Base Mapping - Base mapping will include aerial, topo, and tax map data and will map in detail the project site topography (4-ac according to the OSM-51 document), details including AML features and extents, watercourses, boring locations, access roads, and property lines (Three (3) tracts listed under Realty are assumed at this time).

Due to a possible increasing mine pool being the cause of the DS and DIs, a desktop mine map review and georeferencing of that pool for Geotechnical Investigations will also be completed.

All referenced collected data will then be compiled into finalized base mapping that will be used within all remaining projects tasks including stake-out for the eventual construction contractor.

All Surveying deliverables must be signed, sealed, and dated by an active WV Registered Professional Surveyor (PS). Base mapping will be completed utilizing WV NAD 83 and WV North Zone 17 datum as per the standardization requirements by WV State and Local government agencies.

Geotechnical Investigation - The objective of the Geotechnical Investigation will be to determine the engineering characteristics and stratification of subsurface materials across the project site. The proposed SOW will include the review of published geologic data, completion of a subsurface field exploration, laboratory testing program, a preliminary geotechnical engineering analysis and the preparation of a Preliminary Geotechnical Summary Report.

Our scope is focused on the **Tentative Reclamation Plan** listed above but keeps the other possible layouts in mind.

It is proposed that test borings will be completed within the proposed limits of disturbance, extending to depths totaling up to 400-LF. Should soft or otherwise unstable soil conditions, or

fill, be encountered at the scheduled termination depth of the test boring, the test boring will be extended until suitable soils are identified.

The test borings will be completed with a track- or ATV-mounted drill rig equipped with casing, hollow-stem augers, and split-spoon samplers. Samples of the soils encountered will be recovered at suitable intervals and the Standard Penetration Test (SPT) values will be recorded. All sampling procedures will be performed in accordance with the applicable American Society for Testing and Materials (ASTM) standards.

One piezometer will also be installed to measure the mine pool elevation to determine if that elevation is increasing due to the plugged / semi-plugged nature of the drainage pipes.

Should refusal on bedrock, or buried obstructions, be encountered prior to reaching a depth that will interfere with construction of the proposed structure, bedrock coring will be completed at representative locations. Rock coring will be conducted with NX-size coring equipment, in accordance with all applicable ASTM guidelines. Information regarding percent recovery, RQD, drilling rates, any loss of drill fluids, and the presence of any voids or soil seams will be carefully measured and recorded. For the purposes of this proposal 400-LF of rock coring has been assumed based on past project site experience.

For purposes of this proposal, five (5) days of test boring and auger probe drilling have been budgeted.

Laboratory Testing Program - To define the physical characteristics of the soils encountered, it is proposed that laboratory analysis of soils consisting of USCS classifications be conducted, in accordance with ASTM D2487 standards and specifications. This testing will include: Atterberg limits determination, gradation analysis, and natural moisture content testing. It is proposed that four (4) standard classification tests and a moisture-density (proctor) be completed in accordance with ASTM D698 be performed on representative soil samples obtained from the project site.

Additionally, representative samples of the bedrock cores recovered from the test borings will be subjected to unconfined compressive strength testing (ASTM D7012) to aid in understanding the level of difficulty associated with excavation. Two (2) tests have been budgeted for this proposal.

Geotechnical Engineering Report - A preliminary geotechnical engineering analysis and report presenting our results and recommendations, based on the SOW outlined above, will be prepared. This will include the following:

- Geologic Site Evaluation (including terrain description, brief geological history, and surface drainage conditions)
- Description of Subsurface Conditions (including description of exploration and sampling methods, soil identification and classification)
- Results of Preliminary Geotechnical Analysis
- Test Boring Logs
- Test Boring Profiles
- Exploration Plan
- Results of All Laboratory Testing
- Preliminary Conclusions and Recommendations concerning:
    - Anticipated Ground Improvement Options
    - Soil Strength Conditions
    - General Earthwork Criteria

- Suitability of On-Site Soils for Use as Structural Fill
- Site Excavation Characteristics
- Construction Dewatering

A digital (pdf) copy of the final report will be submitted to the client within ten (10) working days upon completion of the laboratory testing. The report will be signed by a professional engineer (PE), licensed in the state of WV, and qualified in geotechnical engineering. This schedule may be impacted by weather, site / subsurface conditions beyond our control and / or the subcontractor's availability.

It is assumed that all services not specifically outlined above are excluded from this proposal. KLF has assumed that AMLR will require two (2) weeks for review of deliverables at each milestone listed below.

Conceptual Design (18-weeks) – Complete and initial 811 inquiry. Includes 30-percent conceptual site plan and a brief narrative to convey general understanding and assumptions made during this phase of design. Submitted electronically in PDF format to AMLR for review. One round of review and revision has been included for the conceptual design package. An in-person or virtual meetings with AMLR will be held to review the document submission, which will include KLF's Project Team (Principal, Project Manager and Environmental / Civil Lead) for the project. Additionally, it is assumed that access to the site will be proposed via Summit Park.

Preliminary Design (14-weeks) - Includes 60-percent preliminary site plan and a brief narrative to convey general understanding and assumptions made during this phase of design. Submitted electronically in PDF format to AMLR for review. One round of review and revision has been included for the preliminary design package which will include calculations, PDR, draft of specifications, preliminary cost estimates and draft EA. An in-person or virtual meetings with AMLR will be held to review the document submission, which will include KLF's Project Team (Principal, Project Manager, Construction Manager and Environmental / Civil Lead) for the project. All landowner consents will be obtained by the finalization of the preliminary design.

Pre-Final Design (10-weeks) – Includes 90-percent pre-final design. Pre-Final documents will include drawings, technical specifications, and an engineer's cost estimate. Documents to be submitted electronically in DWG, Microsoft Word, and Excel formats, respectively. One round of review and revision has been included for the pre-final design package. An in-person or virtual meetings with AMLR will be held to review the document submission, which will include KLF's Project Team (Principal, Project Manager, Construction Manager and Environmental / Civil Lead).

Final Design (2-weeks) – Includes 100-percent final design documents which have been signed, sealed, and dated by a licensed WV PE. PDF and CAD files (in AutoCAD 2020 format or AMLR accepted later addition) of the plans must be included as part of the electronic portion of the final deliverable package. Both electronic and physical copies will be transmitted to AMLR as part of the Final Design and documents deliverables. All deliverables will also be uploaded into AMLNET (or equivalent), the AMLR online record-keeping database.

Permitting - KLF will prepare permitting document submittals from examples provided by AMLR. This will include necessary submittals to the USACE, USFWS, WV DNR, WV SHPO, Harrison County Floodplain Coordinator, WV Division of Highways (WVDOH) and the Region 6

Development Council. Permitting documents will be given to the AMLR for review before submittal.

KLF will prepare a permitting matrix for the proposed project based upon our understanding of the site conditions, wetland delineations, and permitting requirements for AMLR projects. Upon completion of the permitting matrix, a schedule for anticipated permitting activities to facilitate construction will be provided to AMLR, to include Jurisdictional Determinations and USCAE Coordination.

It is assumed that all impacts to WOTUS will fall within the threshold for GP coverage. KLF is assuming permit coordination and reviews will meet the estimated schedule. If delays in permitting occur outside of KLF's control, any additional effort will be evaluated and discussed with AMLR. Price includes Jurisdictional and USACOE coordination. The proposed timeline for approval of permits assumes any proposed aquatic impacts will qualify for coverage under WV GPs per all applicable conditions. This task also assumes that zoning changes or any other land development permits required for the proposed SOW will not exceed more than two months.

Sami Pretzel, PE will serve as KLF's Design POC for the scope listed above and will be coordinating with the overall project team.

4. Construction

KLF will support construction management of the project per the guidelines provided by AMLR found in **Attachment A.** The assumed construction schedule will commence seven (7) days a week from 7:00 am to 7:00 pm, permission from AMLR and landowners will need to be granted for work taking place on the weekends and holidays. The project will adhere to the requirements of the Build America, Buy America (BABA) and the Davis-Bacon Acts. **The anticipated timeframe to complete the project's construction phase is about twenty (20) weeks from Notice to Proceed to completion of earthwork activities.** We have considered and assumed the following for the pricing of this task.

At least one month prior, KLF will provide resumes and reference lists of inspector(s). The Construction Inspector(s) (CI) will act as the onsite point of contact with the Contractor and will relay coordination efforts from the Engineer of Record (EoR) and Construction Manager (CM) throughout construction. The CI will have the authority to process and document redline changes communicated from the EoR. Approval is needed from AMLR prior to any inspector mobilization. KLF will coordinate construction meetings for the Project and provide notification to stakeholders.

KLF will provide construction management services throughout the duration of the project. Following permitting approval, KLF will advertise a bid date on behalf of AMLR. A KLF administrator along with the CM will prepare the bid documents and any necessary coordination with proposed contractors, including the delivery of bid documents to the prospective Contractor(s). The CM and CI will attend a pre-bid meeting with the Department to review the documentation advertised in the bid and to discuss the facilitation of the bidding process. The CM and CI will attend the official bid meeting to receive the proposals from the Contractors and announce the lowest bid for each contract. This pre-construction conference will be videotaped and transcribed for minutes. Following an acceptable bid approval by AMLR, KLF will schedule a Pre-Construction Conference and Project Meeting with the awarded Contractor(s).

In the initial meeting the EOR, CM, and CI will attend to become acquainted with the Contractor(s). During this meeting, a schedule will be defined, contact information will be distributed,

Contractor(s) working hours set, inspection expectations defined, discussions on possible hazards and construction concerns, equipment procurement, subcontractor lists, shareholder concerns, overall site safety, public safety, and environmental best practices shall all take place. Following this meeting, an Issued for Construction set of plans and specifications will be produced and a system of document control will be established with the Contractor(s) to maintain version control throughout the life of the project. Additionally, a date will be set for a Pre-Construction Inspection of the site where the CM, and CI will walk the Project Site with the Contractor and review the construction sequencing process. The Contractor will provide a survey crew to delineate the LOD and environmental resources prior to the start of construction.

Weekly progress meetings between the Inspector and CM will occur throughout the duration of the project to track progress and maintain schedules; meetings can occur virtually to accommodate scheduling. The CM will coordinate communications with AMLR, handle billing and change orders, organize the construction schedule, and provide utility coordination.

As construction progresses, the CI will be on site daily documenting with pictures, the Contractor's progress and verify the Project sequencing is being followed per the plans and specifications. The CI will record the location, date, and the specifications of the installation of the E&S and stormwater control devices and document daily quantity reports of installed materials. The inspection team will consist of one (1) Construction Inspector per construction crew provided by the Contractor.

Environmental Inspections, including the Stormwater Pollution Prevention Plan (SWPPP), are the contractor's responsibility. This also may include wood or impacted soil that should be disposed of in accordance with the WV DEP's Solid Waste Management Regulations.

Following construction activities, the Contractor will provide a survey crew to document As-Built conditions. Following the field survey, a WV PLS sealed As-Built plan will be provided by the contractor to KLF for review, and ultimately AMLR. The KLF Review Team will consist of the CM, CI, for QA / QC. A certification that the project was installed in accordance with the plans and specs will be supplied to AMLR signed, sealed, and dated by a WV PE.

All daily logs, pictures, video, documentation, design / permitting changes, etc. will be uploaded to AMLR's AMLNET online database (or equivalent) as per the timing requirements set forth in **Attachment A**.

KLF understands that the warranty period inspections are the responsibility of the firm and that DWWM and Environmental Enforcement will need to be notified that the Notice-of-Termination (NOT) is being requested once project is set to be released from NPDES. One (1) inspection of the Site will occur per month following the submitted As-Built until the Project NOT has been issued with the PM and CM reviewing the inspection reports of post construction conditions.

The following assumptions have been made for the weekly hour estimation in this document:

- Project Management, Administration and Construction Management support at 18 hours per week (2 Hours – Administrator, 4 Hours – PM,10 Hours – CM) for the duration of the project for request for information (RFI) support, invoicing, scheduling, QA/QC, utility management, RFI, and meetings.
- Construction Inspection support at 12 Hour Days, 7 days per week per construction crew for the project's duration to document construction installations, provide Contractor communications, and representation to landowners.

- Meeting Attendance as described above for identified staff are assumed to be 8 hours for onsite meetings, 2 hours for virtual meetings.

Nicholas Flanders will serve as KLF's Construction POC for the scope listed above and will be coordinating with the overall project team.

PROPOSED COST

KLF is proposing the **Not-to-Exceed (NTE)** cost as noted in the **AML Contract N1_COST SHEET PDF COMBINED**, attached to this document as **Attachment C**, and to be billed on a monthly basis. Hours not worked and costs not incurred will not be billed. Rates are locked in for the duration of the contract and are flat rates, no overtime rates will be billed per the contract terms. Please refer to **Attachment C** for designated hours and rates for the enclosed scope.

PROPOSED SCHEDULE

Please refer to the table below for estimated completion schedule for the scope of work described above. Should delays be encountered that are beyond KLF's control, WV AML will be notified and coordination with the Project Manager, Mr. Jamie Shaffer, will be conducted in accordance with the contract documents. Should additional scope be necessary, an estimate to complete and schedule impacts will be provided once identified by the Project Team.

Milestone Description:	Estimated Schedule (Weeks)
Conceptual Design (30%)	18
Preliminary Design (60%)	14
Pre-Final Design (90%)	10
Final Design (100%)	2
Anticipated DEP Review Time	*2 per Milestone*
Total Anticipated Project Schedule	**53**

Schedule is assumed to begin upon receipt of NTP, KLF will coordinate and submit a final project schedule prior to the initial contract kick-off meeting.

SHINNSTON (SHEPPARD) MINE DRAINAGE

(EPAM 23102)

INTRODUCTION AND UNDERSTANDING

The Shinnston (Sheppard) Mine Drainage Project (WV-7038) scope is based upon the discussions with the AMLR team as well as the site visit conducted prior to this submission at the location shown in **Figure 1** below.

Figure 3 *- Site Location with feature polygon and points noted.*

Site / Problem Area Description:

The site was last mined in the late 1920s by Consolidated Coal Company within their No. 77 Mine (unknown dates), No. 21 Mine (1910-1928), No. 91 Mine (1917-1923) and No. 78 Mine (unknown dates). AML features include:

1. Dangerous Impoundment (DI) – Two (2) 36-inch (in) prelaw mine drainage pipes that are mostly clogged, particularly the northern most. Lat: 39.3862 Long: -80.3125
2. Dangerous Slide (DS) – 0.1-acre (ac) DS that may be associated with an increasing mine pool caused by the clogged DI pipes. Lat: 39.3877 Long: -80.3120
3. Water Problem (WA) – 200-300 gallon per minute (GPM) Pittsburgh Seam AMD discharge that is net alkaline and circumneutral with over 10-milligram per liter (mg/L) of iron (Fe). Lat: 39.3876 Long: -80.3119

AMLR lists the project size as 2.25-acres (ac). AMLR also lists the **Anticipated Environmental Improvements** as reclamation of the site will remove the chance of potential mine blowout. Since the site is directly adjacent to the West Fork River, a blowout would significantly affect the water quality of the river. This project will also reduce the threat of landslides into the river, by mitigating the blow-out potential, reducing erosion and sedimentation.

The **Tentative Reclamation Plan** for the Shinnston (Sheppard) Mine Drainage project will be to first prepare the site by clearing, grubbing and installing an access road utilizing an existing rail grade. Erosion and sediment (E&S) controls will be installed throughout the site and maintained until the site has established a minimum of 70-percent vegetative cover. Reclamation will include horizontally boring into the existing mine workings, the possibility of installing wet seals if the site allows and installing a grouted channel to the West Fork River. After the major reclamation components are complete, the slide will be regraded, underdrains will be installed, and the water will be conveyed to West Fork River. Lastly, all areas disturbed by construction will be revegetated.

Problem:

There are two (2) 36-in diameter mine pool drainage pipes from a prelaw Pittsburgh seam deep mine that are clogged. The more northern pipe is completely clogged, and the more southern pipe is about 25-percent open from past conditions according to the landowner. Seep / wet areas have emerged elsewhere on the landowner's property possibly due to the clogged nature of these drainage pipes. This has caused a DS of around 10-feet (ft) wide and 1.5-ft in depth near the bank of the West Fork River.

These clogged pipes drain the underground Pittsburgh coal seam mine workings from Consolidated Coal Company mines No. 77, 29, 91, and 78, but it is difficult to determine which of those mines the drainage pipes are installed within for drainage. There is a concern that the clogged nature of the pipes is causing a mine pool to increase in size and is causing the seep / wet area and DS to emerge. The mine pool has been estimated to be around 1,100-ac in size but could be larger based upon adjacent Pittsburgh seem mining. Due to this, there are concerns for a potential blowout or increased saturation zones leading to additional DSs as the pipes continue to clog causing an increase in the mine pool area.

Water quality exiting the DI has a circumneutral pH and is highly alkaline but does have an Fe concentration greater than 10-mg/L according to AMLR. The flow has been estimated to be between 200-300 GPM. While a passive treatment system to precipitate that Fe loading would be of interest, spacing constraints between the pipes and the West Fork River as well as needing landowner permission could make that goal difficult to achieve.

Access to the site from State Route (SR) 19 could be difficult and should be considered during the design process. There could be an alternative route through an unknown business property with landowner information provided by AMLR. In addition, there are two (2) gas lines directly adjacent to the DI that should be considered during design.

Reclamation of the site will eliminate the chance for a potential mine pool blow-out. Since the site is directly adjacent to the West Fork River, a blowout would significantly impact water quality. The reclamation would also remove the potential for blowouts that is causing the DS, reducing sedimentation.

According to AMLR, the area of the project is 2.25-ac.

SCOPE OF WORK

The Shinnston (Sheppard) Mine Drainage SOW shall adhere to all inclusions, assumptions, and deliverables outlined in the Detailed Description of Services Required and Cost Proposal

Requirement documents (**Attachment A and B**). The Planning, Realty, Design, and Construction Task Deliverable descriptions follow.

1. Planning

Environmental Consultations and Delineations

The objective for the environmental delineations and consultations will be to identify constraints on site related to potentially jurisdictional and state-regulated streams and wetlands, cultural resources, and listed threatened and endangered (T&E) species. All Planning work shall adhere to tasks as outlined in the Detailed Description of Services Required and Cost Proposal Requirement documents (**Attachment A and B**).

Desktop Review

Prior to initiating field activities, KLF will conduct a desktop review of the site to assess known locations of wetlands, streams, cultural resources, and T&E species habitat. The results of the initial desktop review will guide the initial development of permitting scope and documents, as well as provide baseline information for additional consultation submittals to involved agencies. KLF planning staff will conduct the review utilizing available online resources, to include:

- Harrison County Floodplain Coordinator
- Natural Resources Conservation Service (NRCS) soil survey maps to evaluate the potential for hydric soils.
- U.S. Geological Survey (USGS) 7.5-minute topographic maps and aerial photographs to evaluate the potential for waters of the U.S. (WOTUS)
- U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) mapped wetlands.
- WV Division of Natural Resources (DNR) List of Known Mussel Streams.
- Federal Emergency Management Act (FEMA) Flood Insurance Maps
- National Hydrography Dataset (NHD) Maps
- WV DEP online database resources.
- WV State Historic Preservation Office (SHPO) Online Viewer,
- USFWS Information for Planning and Consultation (IPaC).

Stream and Wetland Delineation

Due to the movement of DS material into the floodplain / stream and clearing activities needed to facilitate reclamation of the DS and DIs onsite, it is critical to complete the necessary field investigations to confirm any potential risks to the project. Upon completion of the base mapping, SOW for the environmental delineations will be confirmed. The assumptions and costs in this Task are based upon the information provided to KLF and the site visit completed in December 2023.

KLF biologists will perform field delineations to identify potentially jurisdictional waters, including watercourses, wetlands, and potentially jurisdictional ditches, within the project area. The extent of potentially jurisdictional wetlands and watercourses on-site will be evaluated per the U.S. Army Corps of Engineers (USACE) 1987 Corps of Engineers Wetland Delineation Manual and the 2012 Eastern Mountains and Piedmont Regional Supplement (Version 2.0). Methods include the following:

- On-site collection of soil profile data

- Cataloguing of plant species and vegetative communities
- Hydrology observations
- Photo documentation in support of wetland and waters delineations
- USACE Wetland determination data forms
- The use of sub-meter accurate Global Positioning System (GPS) to map the limits of observed wetlands and waters limits.

The USACE maintains jurisdiction over WOTUS under Section 404b of the Clean Water Act (CWA). Jurisdictional waters are defined to include the territorial seas and traditional navigable waters (TNW), perennial and intermittent tributaries to TNW, and adjacent wetlands, ponds, and lakes that have "regular surface water communication" with TNW. KLF will complete an analysis to determine the potentiality for on-site wetlands and/or waters to be considered jurisdictional by the USACE, or as isolated waters of the State of WV, by investigating surface water connectivity to TNW during the wetland and waters delineation field work.

KLF will prepare a Wetland Delineation and Stream Identification Report that details the results of our field delineation. The report will include location mapping, potentially jurisdictional aquatic feature mapping, desktop review generated site background information, and observed vegetative communities, soils, and hydrology. Maps, figures, photographs, and USACE wetland determination data forms will be provided as appendices. A delineation results figure will be provided depicting potentially jurisdictional wetlands and/or waters delineated on-site with an aerial background.

Threatened and Endangered Species Consultation

Initially, the project limits will be uploaded into the United States Fish and Wildlife Service (USFWS) IPaC System (https://ipac.ecosphere.fws.gov) including the initial / planned National Environmental Policy Act (NEPA) boundary from the OSM-51. The IPaC will generate an official "species list" from the NEPA boundary. Once the project limits-of-disturbance (LOD) and proposed impacts (i.e. tree clearing, work within streams or wetlands) have been determined, KLF will complete the necessary bat conservation studies due to any clearing activities associated with the project. In addition, KLF will complete the applicable Determination Keys (D-Keys) within IPaC, most likely to include the Northeast Endangered Species and Northern Long-eared Bat *(Myotis septentrionalis)* D-Keys.

If a "No Effect" or "May Affect, Not Likely to Adversely Affect" result is generated, KLF will continue with the NEPA review and Environmental Assessment / Finding of No Significant Impact (EA / FONSI) package preparation.

If a "May Affect" finding is generated by the completed D-Keys, KLF will submit consultation to the USFWS to confirm any required conservation measures to be implemented during construction, such as seasonal tree clearing, and assess the need for species specific surveys (if required). KLF will upload any surveys / investigations deemed necessary by the USFWS into AMLNET. All further consultation, surveys, or investigations will be included in the EA/FONSI package.

Additionally, KLF will submit a consultation letter to the WV DNR with a request for T&E species records within the project area.

EA / FONSI

In addition to the above consultations and reports, KLF will complete consultation with the WV SHPO and the WV Regional Planning and Development Council (RPDC) (Region 6) to identify any proposed project planning and design constraints. All documentation will be uploaded into AMLNET (or equivalency), with all final consultations, surveys, reports, delineations, and documentation included in a draft EA / FONSI package (per the example provided to KLF by the WV DEP) which KLF will submit to the AMLR planning group for review.

Ladd Williams will serve as KLF's Planning POC for the scope listed above and will be coordinating with the overall project team.

2. Realty

Realty investigations and communications will be completed by KLF's Right-of-Way (ROW) team (**Table 1**). All Realty work shall adhere to tasks as outlined in the Detailed Description of Services Required and Cost Proposal Requirement documents (**Attachment A and B**). This includes:

- Research on historical project information, existing agreements, landowner contact information, Ownership Questionnaire completion, Master Realty Landowner Contact Info Sheet template completion, lien determination, and written rights to perform design and repairs.
- Onsite scoping meeting coordination with AMLR with impacted landowners invited.
- Determination of legal ownership of properties impacted prior to acquiring access permissions.
- Compilation of names and contact info for all individuals owning a legal interest, including date of determination log.
- Utility coordination.
- Coordination between AMLR and impacted landowners for first contact meeting. Acquiring verbal or written approval for access to investigate. Document and log date of contact and permission granted to enter. Firm acts as the project liaison between AMLR and impacted landowners.
- Determinations of Rights-Of-Entry (ROE) are needed for fill borrow / waste locations.
- Confirmation of legal ownership through courthouse research prior to ROE being requested and reviewed up until initiation of construction. All documentation uploaded to AMLNET, or an approved equivalent process as directed by the WV AML, including date of confirmation.
- Determination if owner participated in the mining, accepted royalties, or leased the land / resources for the mining, or received any benefit, if information is available.
- Determination if any boundary disputes exist. Attempt will first be made to sign-up both sides to avoid survey. Necessity for a boundary survey to be discussed with AMLR.
- Obtain useful project information from landowners including, but not limited to, underground utilities, septic, leach fields, ROWs, property boundaries / monuments, safety concerns, etc. Uploaded to AMLNET (or equivalency) with lien determination form if needed.
- Provide all status updates of landowner negotiations, questions, agreements, on a regular basis to AMLR Realty weekly. Completion of Master Realty Landowner Contact Info Sheet as well.
- Determining if landowner is interested in being added as additionally insured prior to entering any agreements.

- Serve as a primary contact source in educating landowners on the AMLR program, what it has to offer said landowner, and acquiring all necessary Exploratory ROE and Ingress / Egress (I/E) agreements. Agreement will allow AMLR, the Office of Surface Mining Reclamation and Enforcement (OSMRE), KLF, and KLF's subcontractors / agents to access for investigation. Approval necessary prior to any commitments and signed document must be notarized at expense to firm.
- Acquire additional agreements if property changes ownership during project.
- Production and storage of daily logs with notes detailing landowner conversations, who conversation was between, summary of those conversations, when and where those conversations took place. Logs need to be sufficient quality to be used as evidence in court.
- Upload each ROE to AMLNET (or equivalency) within five (5) business-days. This includes land use agreement(s), legal documents, pre-construction photos, ownership questionnaires with sketches, landowner correspondence. Documents to be kept on file for three (3) years by KLF.
- Collection of existing condition photos, documenting evidence of visible property boundaries / monuments, and most feasible access route(s) for exploration / construction.
- KLF will also acquire any additional ROE during design phase if needed.
- KLF Realty will be responsible for reviewing the plans and specifications in advance of each design review stage to establish understanding of reclamation plan, suppling comments or revisions if needed.
- KLF Realty will attend all design review meetings.
- Upon design review approval, the KLF Realty will schedule a meeting with each impacted property owner to obtain approval and written construction ROE, I/E, and / or any needed borrow / waste agreements.
- Construction ROE shall grant permission for AMLR, OSMRE, KLF, all KLF subcontractors / agents, and construction contractor(s) to access for construction. Any signed documents must be notarized at the firm's expense and uploaded to AMLNET (or equivalency).
- Upload to AMLNET (or equivalency) the construction ROE packet, land-use agreements, legal documents, pre-construction photos, and landowner(s) correspondence with five (5) working days.
- Attend design, pre-bid, and pre-construction conferences, keeping daily logs, and being available for questions or status updates as needed by AMLR. Additionally, KLF Realty will be available during construction should the need arise.

Realty tasks and deliverables will be completed primarily by KLF's ROW Office out of Pittsburgh, Pennsylvania (PA) and supervised by Ken Hawker, Senior Program Manager with 25-years of experience in project ROW coordination. Ken is a Senior Member of the International ROW Association since 2005. His experience extends into all phases of the ROW / acquisition process. Ken leads KLF's group of ROW professionals and provides assurance that all public projects requiring the acquisition of private property rights and / or relocations are completed in accord with the rules and regulations established within each state.

Table 1. *Initial Shinnston (Sheppard) Mine Drainage possibly impacted property owners.*

Owner	Acres	Address
Stephen W Moore	NA	102 Factory St Shinnston, WV 26431
Joseph Sheppard	4.39	PO Box 374 Shinnston, WV 26431
Ruby Mae Miller	2.14	615 Highland Ave Shinnston, WV 26431
Mon Power	8.01	800 Cabin Hill Dr Greensburg, PA 15601
Sandra Lee Davis	0.89	203 Maryland Ave Nutter Fort, WV 26301
Gerald Basford	0.42	900 Factory St Shinnston, WV 26431

3. Design

It is assumed that KLF will provide design deliverables in the standard AMLR format utilizing the examples and CAD standards supplied. As mentioned previously, KLF shall adhere to all inclusions, assumptions, and deliverables outlined in the Design section of the Detailed Description of Services Required and Cost Proposal Requirement documents (**Attachment A and B**).

Once a reclamation design plan is formalized prior to moving into conceptual, KLF's design SOW will be reviewed by AMLR for comment / recommendations prior to proceeding further.

All design meetings will be transcribed with notes offered and uploaded adhering to the time constraints references in **Attachment A and B**. KLF will also generate, maintain, and distribute action items and project contact lists for all personnel involved with the project.

Data collected during the Realty and Planning tasks of this project will guide the design decisions needed for successful reclamation construction and the reclamation of AML features and points listed in the OSM-51.

All E&S Control Designs and Details shall conform to WV's National Pollution Discharge Elimination System (NPDES) and Construction Stormwater General Permit (GP), as referenced in the 2016 revised manual.

KLF has assumed that design plans for the Shinnston (Sheppard) Mine Drainage will be developed in the following order of completion.

Survey / Base Mapping - Base mapping will include aerial, topo, and tax map data and will map in detail the project site topography (2.5-ac according to the OSM-51 document), details including AML features and extents, watercourses, boring locations, access roads, structures, mine drainage, creeks, utilities, and property lines (six (6) possible tracts listed under Realty are assumed at this time).

Due to a possible increasing mine pool being the cause of the DS and DIs, a desktop mine map review and georeferencing of that pool for Geotechnical Investigations will also be completed.

All referenced collected data will then be compiled into finalized base mapping that will be used within all remaining projects tasks including stake-out for the eventual construction contractor.

All Surveying deliverables must be signed, sealed, and dated by an active WV Registered Professional Surveyor (PS). Base mapping will be completed utilizing WV NAD 83 and WV North

Zone 17 datum as per the standardization requirements by WV State and Local government agencies.

Geotechnical Investigation - The objective of the Geotechnical Investigation will be to determine the engineering characteristics and stratification of subsurface materials across the project site. The proposed SOW will include the review of published geologic data, completion of a subsurface field exploration, laboratory testing program, a preliminary geotechnical engineering analysis and the preparation of a Preliminary Geotechnical Summary Report.

Our SOW is focused on the **Tentative Reclamation Plan** listed above but keeps the other possible layouts in mind.

It is proposed that five (5) test borings will be completed within the proposed limits of disturbance, extending to depths totaling up to 250-linear feet. Should soft or otherwise unstable soil conditions, or fill, be encountered at the scheduled termination depth of the test boring, the test boring will be extended until suitable soils are identified.

The test borings will be completed with a track- or ATV-mounted drill rig equipped with casing, hollow-stem augers, and split-spoon samplers. Samples of the soils encountered will be recovered at suitable intervals and the Standard Penetration Test (SPT) values will be recorded. All sampling procedures will be performed in accordance with the applicable American Society for Testing and Materials (ASTM) standards.

One piezometer will also be installed to measure the mine pool elevation to determine if that elevation is increasing due to the plugged / semi-plugged nature of the drainage pipes.

Should refusal on bedrock, or buried obstructions, be encountered prior to reaching a depth that will interfere with construction of the proposed structure, bedrock coring will be completed at representative locations. Rock coring will be conducted with NX-size coring equipment, in accordance with all applicable ASTM guidelines. Information regarding percent recovery, RQD, drilling rates, any loss of drill fluids, and the presence of any voids or soil seams will be carefully measured and recorded. For the purposes of this proposal 250-linear feet of rock coring has been assumed based on past project site experience.

For purposes of this proposal, three (3) days of test boring and auger probe drilling have been budgeted.

Laboratory Testing Program - To define the physical characteristics of the soils encountered, it is proposed that laboratory analysis of soils consisting of USCS classifications be conducted, in accordance with ASTM D2487 standards and specifications. This testing will include: Atterberg limits determination, gradation analysis, and natural moisture content testing. It is proposed that three (3) standard classification tests and a moisture-density (proctor) be completed in accordance with ASTM D698 be performed on representative soil samples obtained from the project site.

Additionally, representative samples of the bedrock cores recovered from the test borings will be subjected to unconfined compressive strength testing (ASTM D7012) to aid in understanding the level of difficulty associated with excavation. One (1) test has been budgeted for this proposal.

It is assumed that since the site is not conducive for passive treatment, and the fact that the West Fork River is of size to attenuate adequately the Fe loading, no water quality lab testing will be completed.

Geotechnical Engineering Report - A preliminary geotechnical engineering analysis and report presenting our results and recommendations, based on the SOW outlined above, will be prepared. This will include the following:

- Geologic Site Evaluation (including terrain description, brief geological history, and surface drainage conditions)
- Description of Subsurface Conditions (including description of exploration and sampling methods, soil identification and classification)
- Results of Preliminary Geotechnical Analysis
- Test Boring Logs
- Test Boring Profiles
- Exploration Plan
- Results of All Laboratory Testing
- Preliminary Conclusions and Recommendations concerning:
    - Anticipated Ground Improvement Options
    - Soil Strength Conditions
    - General Earthwork Criteria
    - Suitability of On-Site Soils for Use as Structural Fill
    - Site Excavation Characteristics
    - Construction Dewatering

A digital (pdf) copy of the final report will be submitted to the client within ten (10) working days upon completion of the laboratory testing. The report will be signed by a professional engineer (PE), licensed in the state of WV, and qualified in geotechnical engineering. This schedule may be impacted by weather, site / subsurface conditions beyond our control and / or the subcontractor's availability.

It is assumed that all services not specifically outlined above are excluded from this proposal. KLF has assumed that AMLR will require two (2) weeks for review of deliverables at each milestone listed below.

Conceptual Design (16-weeks) – Complete an initial 811 inquiry. Includes 30-percent conceptual site plan and a brief narrative to convey general understanding and assumptions made during this phase of design. Submitted electronically in PDF format to AMLR for review. One round of review and revision has been included for the conceptual design package. An in-person or virtual meetings with AMLR will be held to review the document submission, which will include KLF's Project Team (Principal, Project Manager and Environmental / Civil Lead) for the project.

Preliminary Design (14-weeks) - Includes 60-percent preliminary site plan and a brief narrative to convey general understanding and assumptions made during this phase of design. Submitted electronically in PDF format to AMLR for review. One round of review and revision has been included for the preliminary design package which will include calculations, PDR, draft specifications, preliminary cost estimates and draft EA. An in-person or virtual meetings with AMLR will be held to review the document submission, which will include KLF's Project Team (Principal, Project Manager, Construction Manager and Environmental / Civil Lead) for the project. All landowner consents will be collected by the completion of the Preliminary Design.

Pre-Final Design (8-weeks) – Includes 90-percent pre-final design. Pre-Final documents will include drawings, technical specifications, and an engineer's cost estimate. Documents to be submitted electronically in DWG, Microsoft Word, and Excel formats, respectively. One round of review and revision has been included for the pre-final design package. An in-person or virtual meetings with AMLR will be held to review the document submission, which will include KLF's Project Team (Principal, Project Manager, Construction Manager and Environmental / Civil Lead).

Final Design (3-weeks) – Includes 100-Percent final design documents which have been signed, sealed, and dated by a licensed WV PE. PDF and CAD files (in AutoCAD 2020 format or AMLR accepted later addition) of the plans must be included as part of the electronic portion of the final deliverable package. Both electronic and physical copies will be transmitted to AMLR as part of the Final Design and documents deliverables. All deliverables will also be uploaded into AMLNET (or equivalency).

Permitting - KLF will prepare permitting document submittals from examples provided by the WV DEP. This will include necessary submittals to the USACE, USFWS, WVDNR, WVSHPO, Harrison County Floodplain Coordinator, WV Division of Highways (WVDOH) and the Region 6 RPDC. Permitting documents will be given to the AMLR for review before submittal.

KLF will prepare a permitting matrix for the proposed project based upon our understanding of the site conditions, wetland delineations, and permitting requirements for AMLR projects. Upon completion of the permitting matrix, a schedule for anticipated permitting activities to facilitate construction will be provided to AMLR, to include Jurisdictional Determinations and USCAE Coordination.

It is assumed that all impacts to WOTUS will fall within the threshold for GP coverage. KLF is assuming permit coordination and reviews will meet the estimated schedule. If delays in permitting occur outside of KLF's control, any additional effort will be evaluated and discussed with AMLR. Pricing included Jurisdictional Determination and USACE coordination. The proposed timeline for approval of permits assumes any proposed aquatic impacts will qualify for coverage under WV GPs per all applicable conditions. This task also assumes that zoning changes or any other land development permits required for the proposed SOW will not exceed more than two (2) months.

Sami Pretzel, PE will serve as KLF's Design POC for the scope listed above and will be coordinating with the overall project team.

4. Construction

KLF will support construction management of the project per the guidelines provided by AMLR found in **Attachment A**. The assumed construction schedule will commence seven (7) days a week from 7:00 am to 7:00 pm, permission from AMLR and landowners will need to be granted for work taking place on the weekends and holidays. The project will adhere to the requirements of the Build America, Buy America (BABA) and the Davis-Bacon Acts. **The anticipated timeframe to complete the project's construction phase is about nine (9) weeks from Notice to Proceed to completion of earthwork activities.** We have considered and assumed the following for the pricing of this task.

At least one month prior, KLF will provide resumes and reference lists of inspectors(s). The Construction Inspector(s) (CI) will act as the onsite point of contact with the Contractor and will relay coordination efforts from the Engineer of Record (EoR) and Construction Manager (CM) throughout construction. The CI will have the authority to process and document redline changes

communicated from the EoR. Approval is needed from AMLR prior to any inspector mobilization. KLF will coordinate construction meetings for the Project and provide notification to stakeholders.

KLF will provide construction management services throughout the duration of the project. Following permitting approval, KLF will advertise a bid date on behalf of AMLR. A KLF administrator along with the CM will prepare the bid documents and any necessary coordination with proposed contractors, including the delivery of bid documents to the prospective Contractor(s). The CM and CI will attend a pre-bid meeting with the Department to review the documentation advertised in the bid and to discuss the facilitation of the bidding process. The CM and CI will attend the official bid meeting to receive the proposals from the Contractors and announce the lowest bid for each contract. This pre-construction conference will be videotaped and transcribed for minutes. Following an acceptable bid approval by AMLR, KLF will schedule a Pre-Construction Conference and Project Meeting with the awarded Contractor(s).

In the initial meeting the EOR, CM, and CI will attend to become acquainted with the Contractor(s). During this meeting, a schedule will be defined, contact information will be distributed, Contractor(s) working hours set, inspection expectations defined, discussions on possible hazards and construction concerns, equipment procurement, subcontractor lists, shareholder concerns, overall site safety, public safety, and environmental best practices shall all take place. Following this meeting, an Issued for Construction set of plans and specifications will be produced and a system of document control will be established with the Contractor(s) to maintain version control throughout the life of the project. Additionally, a date will be set for a Pre-Construction Inspection of the site where the CM, and CI will walk the Project Site with the Contractor and review the construction sequencing process. The Contractor will provide a survey crew to delineate the LOD and environmental resources.

Weekly progress meetings between the Inspector and CM will occur throughout the duration of the project to track progress and maintain schedules, meetings can occur virtually to accommodate scheduling. The CM will coordinate communications with the AMLR, handle billing and change orders, organize the construction schedule, and provide utility coordination.

As construction progresses, the CI will be on site daily documenting with pictures, the Contractor's progress and verify the Project sequencing is being followed per the plans and specifications. The CI will record the location, date, and the specifications of the installation of the E&S and stormwater control devices and document daily quantity reports of installed materials. The inspection team will consist of one (1) CI per construction crew provided by the Contractor.

Environmental Inspections, including the Stormwater Pollution Prevention Plan (SWPPP), are the contractor's responsibility. This also may include wood or impacted soil that should be disposed of in accordance with the WV DEP's Solid Waste Management Regulations.

Following construction activities, the Contractor will provide a survey crew to document As-Built conditions. Following the field survey, a WV PLS sealed As-Built plan will be provided by the contractor to KLF for review, and ultimately AMLR. The KLF Review Team will consist of the CM, CI for QA / QC. A certification that the project was installed in accordance with the plans and specs will be supplied to AMLR signed, sealed, and dated by a WV PE.

All daily logs, pictures, video, documentation, design / permitting changes, etc. will be uploaded to AMLR's AMLNET online database (or equivalency) as per the timing requirements set forth in **Attachment A.**

KLF understands that the warranty period inspections are the responsibility of the firm and that DWWM and Environmental Enforcement will need to be notified that the Notice-of-Termination (NOT) is being requested once project is set to be released from NPDES. One (1) inspection of

the Site will occur per month following the submitted As-Built until the Project NOT has been issued with the PM and CM reviewing the inspection reports of post construction conditions.

- Project Management, Administration and Construction Management support at 12 hours per week for the duration of the project for request for information (RFI) support, invoicing, scheduling, QA / QC, utility management, and meetings.
- Construction Inspection support at 12 Hour Days, 7 days per week per construction crew for the project's duration to document construction installations, provide Contractor communications, and representation to landowners.
- Meeting Attendance as described above for identified staff are assumed to be 8 hours for onsite meetings, 2 hours for virtual meetings.

Nicholas Flanders will serve as KLF's Construction POC for the scope listed above and will be coordinating with the overall project team.

PROPOSED COST

KLF is proposing the **Not-to-Exceed (NTE)** cost as noted in the **AML Contract N1_COST SHEET PDF COMBINED**, attached to this document as **Attachment C**, and to be billed on a monthly basis. Hours not worked and costs not incurred will not be billed. Rates are locked in for the duration of the contract and are flat rates, no overtime rates will be billed per the contract terms. Please refer to **Attachment C** for designated hours and rates for the enclosed scope.

PROPOSED SCHEDULE

Please refer to the table below for estimated completion schedule for the scope of work described above. Should delays be encountered that are beyond KLF's control, WV AML will be notified and coordination with the Project Manager, Mr. Jamie Shaffer, will be conducted in accordance with the contract documents. Should additional scope be necessary, an estimate to complete and schedule impacts will be provided once identified by the Project Team.

Milestone Description:	Estimated Schedule (Weeks)
Conceptual Design (30%)	16
Preliminary Design (60%)	14
Pre-Final Design (90%)	8
Final Design (100%)	3
Anticipated DEP Review Time	*2 per Milestone*
Total Anticipated Project Schedule	**50**

Schedule is assumed to begin upon receipt of NTP, KLF will coordinate and submit a final project schedule prior to the initial contract kick-off meeting.

SIMPSON CREEK HIGHWALL, TIPPLE & PORTAL PHASE II

(EPAM 23078)

INTRODUCTION AND UNDERSTANDING

The Simpson Creek Highwall, Tipple, and Portals Phase II Project (WV-1972) scope is based upon the discussions with the WV AMLR team as well as the site visit conducted prior to this submission at the location shown in **Figure 1** below.

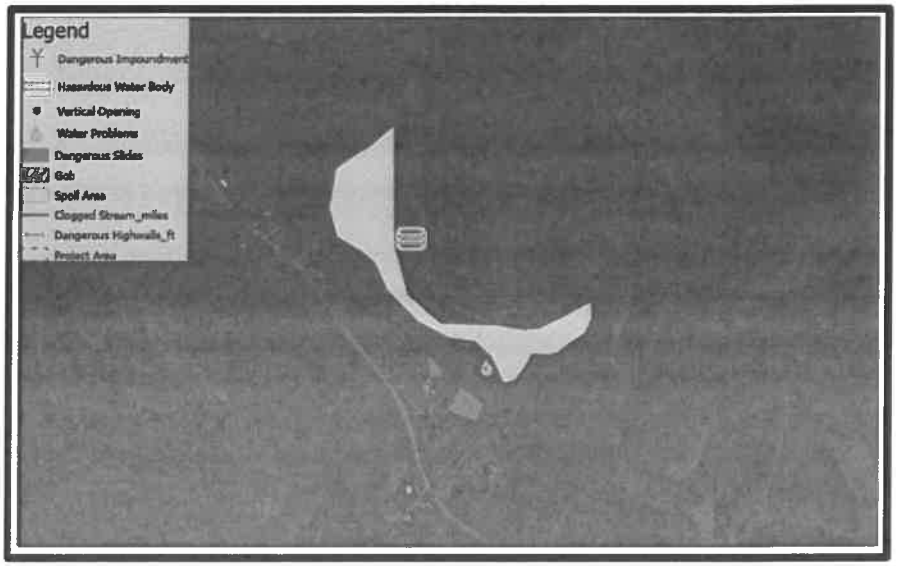


***Figure 4** - Site Location of the Simpson Highwall AML features and points.*

Site / Problem Area Description:

The Pittsburgh seam was mined by Simpson Creek Collieries Company via their Galloway No. 2 Mine which operated from 1920 to 1923 and from 1926 to 1948. Arch Coal has an active mine nearby within the Middle Kittanning seams. AML features include:

1. Vertical Opening (VO) – vertical opening possibly associated with the nearby Galloway No. 2 Mine. An unnamed tributary (UNT) flows into this VO resulting in full stream capture. Upon investigation, the flow was approximately 50-100 gallons per minutes (GPM) and more than likely is the primary cause of the AMD Water Issues (WA) and Dangerous Impoundment (DI) features within this Problem Area (PA). Lat: 39.2278 Long: -80.1086
2. Dangerous Highwall (DH) – averages 30-feet (ft) in height and 1,264-ft in length. There is a gravel access road at the base of the DH which leads to an active gas well managed by Summit Appalachia Company, LLC (Lake S. #3 147.900606). Lat: 39.2244 Long: -80.1987 to Lat: 39.2233 Long: -80.1058.
3. Dangerous Slide (DS) – heavily saturated 0.75-acre (ac) on McNamara property. Water flows through lawn and under and across the driveway to a clogged stream, which is a tributary of Simpson Creek. Lat: 39.2210 Long: -80.1080

4. DS #2 – heavily saturated 0.5-ac on Barkley property. Potential for DS throughout the area from AMD along hillside spoil. Landowner has constructed a temporary channel and French drain to manage flow. Lat: 39.2221 Long: -80.1085
5. Clogged Stream (CS) – clogged UNT to Simpson Creek that flows around the edge of the McNamara property. Water from the other AML features likely are drained by this stream as well as from the spoil and wet seals from the Phase I project. A ceramic culvert drains the flow through a driveway and has been occasionally clogged with debris. Lat: 39.2199 Long: -80.1082
6. Dangerous Impoundment (DI) – iron (Fe) laden AMD flowing downhill and into flat area. Steepness of hill could pose a hazard. Lat: 39.2269 Long: -80.1096
7. DI #2 – another source of Fe laden AMD that joins #6. Flow is between 30-40 GPM combined. Lat: 39.2266 Long: -80.1093
8. DI #3 – another source of Fe laden water, not joining the previous two sources. Flow of around 20-GPM of circumneutral pH with Fe around 7.5-mg/l. Lat: 39.2264 Long: -80.1091
9. Hazardous Water Body (HWB) – ponded area fed by AMD and surface water. Fe hydroxide a foot deep covering a 525-square foot (sq ft) area that could be a hazard. Water quality is circumneutral with 2-mg/l of Fe with a flow of 15-20 GPM. Could be contributing to downstream flooding issues. Lat: 39.2245 Long: -80.1090.
10. Spoil Area (SA) – around 8.7-ac situated uphill from nearby residences. Large blocks of slate and coal present. AMD from the Galloway No.3 or the VO mentioned above flowing through into yards and the CS. Lat: 39.2219 Long: -80.1071.
11. Water Issues (WA) – stream flowing through SA. Water is circumneutral with 2-mg/l of Fe that has eroded the hillside and SA. Eventually settles into a small pond and likely into the CS increasing flooding potential. Lat: 39.2219 Long: -80.1071

AMLR lists the project size as 10-ac. AMLR also lists the **Anticipated Environmental Improvements** as completion of this project, drainage may be directed away from impacted springs and streams. The CS may be cleared of debris, allowing for a more natural flow of water. HWBs will be drained, allowing the surface water to flow more freely downhill via channels as well.

AMLRs' listed **Tentative Reclamation Plan** includes the reclamation of the site will include the following procedures. Upgrades to the access road such as refreshment of gravel and potential grading will occur to safely allow ingress and egress of machinery. Erosion and sediment (E&S) controls will be installed throughout the site and maintained until the site has established a minimum of 70% vegetative cover. During construction clearing and grubbing of the site will commence to install the designed controls, features, seals, channels, culverts, and underdrains. The tributary re-routing and channelization will be completed first as it has the potential of positively impacting other AML features. Surface water will be redirected from the vertical opening to allow the flow to continue flowing over the surface in reconstructed stream channels and through a culvert. This will be completed first to gauge positive impacts to other features. Underdrains at Barkley and McNamara properties will be constructed in a manner to not create a safety hazard for the property owners. Any trash found on site will be properly disposed of off-site. Following construction, grade will be tracked to help control erosion and disturbed areas will be seeded to re-establish vegetative cover.

Problem:

Property owner has specified that they would like to see the area reclaimed to eliminate the hazards, especially dealing with the AMD impacting property and causing the CS. Neighboring property owner has constructed ditching to route AMD away from his residence.

High potential of a DS in the two landowner's yards due to AMD flowing through SA upslope of each home. The water quality is not impaired greatly with circumneutral pH and Fe only around 2-mg/L. Property owner has stated that the natural spring in the backyard was once of good quality, but now impaired.

The AMD needs eliminated as much as possible and diverted away from springs and streams where it is causing current issues. HWB are to be drained allowing for more natural flow from upslope areas. DH and SA will be reclaimed as well as the gas line infrastructure constraints allow.

SCOPE OF WORK

The Simpson Creek Highwall, Tipple and Portals Phase II SOW shall adhere to all inclusions, assumptions, and deliverables outlined in the Detailed Description of Services Required and Cost Proposal Requirement documents (**Attachment A and B**). The Planning, Realty Design, and Construction Task Deliverable descriptions follow.

1. Planning

Environmental Consultations and Delineations

The objective for the environmental delineations and consultations will be to identify constraints on site related to potentially jurisdictional and state-regulated streams and wetlands, cultural resources, and listed threatened and endangered (T&E) species. All Planning work shall adhere to tasks as outlined in the Detailed Description of Services Required and Cost Proposal Requirement documents (**Attachment A and B**).

Desktop Review

Prior to initiating field activities, KLF will conduct a desktop review of the site to assess known locations of wetlands, streams, cultural resources, and T&E species habitat. The results of the initial desktop review will guide the initial development of permitting scope and documents, as well as provide baseline information for additional consultation submittals to involved agencies. KLF planning staff will conduct the review utilizing available online resources, to include:

- Barbour County Floodplain Coordinator
- Natural Resources Conservation Service (NRCS) soil survey maps to evaluate the potential for hydric soils.
- U.S. Geological Survey (USGS) 7.5-minute topographic maps and aerial photographs to evaluate the potential for waters of the U.S. (WOTUS)
- U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) mapped wetlands.
- WV Division of Natural Resources (DNR) List of Known Mussel Streams.
- Federal Emergency Management Act (FEMA) Flood Insurance Maps
- National Hydrography Dataset (NHD) Maps
- WV DEP online database resources.
- WV State Historic Preservation Office (SHPO) Online Viewer,

- USFWS Information for Planning and Consultation (IPaC).

Stream and Wetland Delineation

The assumptions and costs in this task are based upon the information provided to KLF and the site visit completed in February 2024.

KLF biologists will perform field delineations to identify potentially jurisdictional waters, including watercourses, wetlands, and potentially jurisdictional ditches, within the project area. The extent of potentially jurisdictional wetlands and watercourses on-site will be evaluated per the U.S. Army Corps of Engineers (USACE) 1987 Corps of Engineers Wetland Delineation Manual and the 2012 Eastern Mountains and Piedmont Regional Supplement (Version 2.0). Methods include the following:

- On-site collection of soil profile data
- Cataloguing of plant species and vegetative communities
- Hydrology observations
- Photo documentation in support of wetland and waters delineations
- USACE Wetland determination data forms
- The use of sub-meter accurate Global Positioning System (GPS) to map the limits of observed wetlands and waters limits.

The USACE maintains jurisdiction over WOTUS under Section 404b of the Clean Water Act (CWA). Jurisdictional waters are defined to include the territorial seas and traditional navigable waters (TNW), perennial and intermittent tributaries to TNW, and adjacent wetlands, ponds, and lakes that have "regular surface water communication" with TNW. KLF will complete an analysis to determine the potentiality for on-site wetlands and / or waters to be considered jurisdictional by the USACE, or as isolated waters of the State of WV, by investigating surface water connectivity to TNW during the wetland and waters delineation field work.

KLF will prepare a Wetland Delineation and Stream Identification Report that details the results of our field delineation. The report will include location mapping, potentially jurisdictional aquatic feature mapping, desktop review generated site background information, and observed vegetative communities, soils, and hydrology. Maps, figures, photographs, and USACE wetland determination data forms will be provided as appendices. A delineation results figure will be provided depicting potentially jurisdictional wetlands and / or waters delineated on-site with an aerial background.

Threatened and Endangered Species Consultation

Initially, the project limits will be uploaded into the USFWS IPaC System (https://ipac.ecosphere.fws.gov) including the initial / planned NEPA boundary from the OSM-51. The IPaC will generate an official "species list" from the NEPA boundary. Once the project limit-of-disturbance and proposed impacts (i.e. tree clearing, work within streams or wetlands) have been determined, KLF will complete the applicable Determination Keys (D-Keys) within IPaC, most likely to include the Northeast Endangered Species and Northern Long-eared Bat *(Myotis septentrionalis)* D-Keys. KLF will complete the necessary bat conservation studies due to any clearing activities associated with the project.

If a "No Effect" or "May Affect, Not Likely to Adversely Affect" result is generated, KLF will continue with the NEPA review and Environmental Assessment / Finding of No Significant Impact (EA / FONSI) package preparation.

If a "May Affect" finding is generated by the completed D-Keys, KLF will submit consultation to the USFWS to confirm any required conservation measures to be implemented during construction, such as seasonal tree clearing, and assess the need for species specific surveys (if required). KLF will upload any surveys / investigations deemed necessary by the USFWS into AMLNET (or equivalent). All further consultation, surveys, or investigations will be included in the EA/FONSI package.

Additionally, KLF will submit a consultation letter to the WV DNR with a request for T&E species records within the project area.

EA / FONSI

In addition to the above consultations and reports, KLF will complete consultation with the WV SHPO and the WV Regional Planning and Development Council (RPDC) (Region 6) to identify any proposed project planning and design constraints. All documentation will be uploaded into AMLNET (or equivalent), with all final consultations, surveys, reports, delineations, and documentation included in a draft EA / FONSI package (per the example provided to KLF by AMLR) which KLF will submit to the AMLR planning group for review.

Ladd Williams will serve as KLF's Planning POC for the scope listed above and will be coordinating with the overall project team.

2. Realty

Realty investigations and communications will be completed by KLF's Right-of-Way (ROW) team (**Table 1**). All Realty work shall adhere to tasks as outlined in the Detailed Description of Services Required and Cost Proposal Requirement documents (**Attachment A and B**). This includes:

- Research on historical project information, existing agreements, landowner contact information, Ownership Questionnaire completion, Master Realty Landowner Contact Info Sheet template completion, lien determination, and written rights to perform design and repairs.
- Onsite scoping meeting coordination with AMLR with impacted landowners invited.
- Determination of legal ownership of properties impacted prior to acquiring access permissions.
- Compilation of names and contact info for all individuals owning a legal interest, including date of determination log.
- Utilities coordination
- Coordination between AMLR and impacted landowners for first contact meeting. Acquiring verbal or written approval for access to investigate. Document and log date of contact and permission granted to enter. Firm acts as the project liaison between AMLR and impacted landowners.
- Determinations of Rights-Of-Entry (ROE) are needed for fill borrow / waste locations.
- Confirmation of legal ownership through courthouse research prior to ROE being requested and reviewed up until initiation of construction. All documentation uploaded to

AMLNET, or an approved equivalent process as directed by the WV AML, including date of confirmation.

- Determination if owner participated in the mining, accepted royalties, or leased the land / resources for the mining, or received any benefit, if information is available.
- Determination if any boundary disputes exist. Attempt will first be made to sign-up both sides to avoid survey. Necessity for a boundary survey to be discussed with AMLR.
- Obtain useful project information from landowners including, but not limited to, underground utilities, septic, leach fields, ROWs, property boundaries / monuments, safety concerns, etc. Uploaded to AMLNET (or equivalent) with lien determination form if needed.
- Provide all status updates of landowner negotiations, questions, agreements, on a regular basis to AMLR Realty weekly. Completion of Master Realty Landowner Contact Info Sheet as well.
- Determining if landowner is interested in being added as additionally insured prior to entering any agreements.
- Serve as a primary contact source in educating landowners on the AMLR program, what it has to offer said landowner, and acquiring all necessary Exploratory ROE and Ingress / Egress (I/E) agreements. Agreement will allow AMLR, the Office of Surface Mining Regulatory Enforcement (OSMRE), KLF, and KLF's subcontractors / agents to access for investigation. Approval necessary prior to any commitments and signed document must be notarized at expense to firm.
- Acquire additional agreements if property changes ownership during project.
- Production and storage of daily logs with notes detailing landowner conversations, who conversation was between, summary of those conversations, when and where those conversations took place. Logs need to be sufficient quality to be used as evidence in court.
- Upload each ROE to AMLNET (or equivalent) within five (5) business-days. This includes land use agreement(s), legal documents, pre-construction photos, ownership questionnaires with sketches, landowner correspondence. Documents to be kept on file for three (3) years by KLF.
- Collection of existing condition photos, documenting evidence of visible property boundaries / monuments, and most feasible access route(s) for exploration / construction.
- KLF will also acquire any additional ROE during design phase if needed.
- KLF Realty will be responsible for reviewing the plans and specifications in advance of each design review stage to establish understanding of reclamation plan, supplying comments or revisions if needed.
- KLF Realty will attend all design review meetings.
- Upon design review approval, the KLF Realty will schedule a meeting with each impacted property owner to obtain approval and written construction ROE, I/E, and / or any needed borrow / waste agreements.
- Construction ROE shall grant permission for AMLR, OSMRE, KLF, all KLF subcontractors / agents, and construction contractor(s) to access for construction. Any signed documents must be notarized at the firm's expense and uploaded to AMLNET (or equivalent).
- Upload to AMLNET (or equivalent) the construction ROE packet, land-use agreements, legal documents, pre-construction photos, and landowner(s) correspondence within five (5) working days.

Attend design, pre-bid, and pre-construction conferences, keeping daily logs, and being available for questions or status updates as needed by AMLR. Additionally, KLF Realty will be available during construction should the need arise.

Realty tasks and deliverables will be completed primarily by KLF's ROW Office out of Pittsburgh, Pennsylvania (PA) and supervised by Ken Hawker, Senior Program Manager with 25-years of experience in project ROW coordination. Ken is a Senior Member of the International ROW Association since 2005. His experience extends into all phases of the ROW / acquisition process. Ken leads KLF's group of ROW professionals and provides assurance that all public projects requiring the acquisition of private property rights and / or relocations are completed in accord with the rules and regulations established within each state.

Table 1. *Initial Simpson Creek Highwalls, Tipples and Portals Phase II property owners.*

Owner	Acres	Address
Beckwith Lumber Co. Inc.	356.11	PO Box 39 Galloway Rd. Slaty Fork, WV 26291
Devon McNamara	18.30	27 Polk Dr. Philippi, WV 26416
Edward L Barkley Sr	5.33	4636 Galloway Rd. Flemington, WV 26347
* Michael Hickman	24.06	132 Pold Dr. Philippi, WV 26416
*Samual Mayle	11.50	4290 Galloway Rd Flemington, WV 26347
*Possible project impact.		

3. Design

It is assumed that KLF will provide design deliverables in the standard AMLR format utilizing the examples and CAD standards supplied. As mentioned previously, KLF shall adhere to all inclusions, assumptions, and deliverables outlined in the Design section of the Detailed Description of Services Required and Cost Proposal Requirement documents (**Attachment A and B**).

Once a reclamation design plan is formalized prior to moving into conceptual, KLF's design SOW will be reviewed by AMLR for comment / recommendations prior to proceeding further.

All design meetings will be transcribed with notes offered and uploaded adhering to the time constraint references in **Attachment A and B**. KLF will also generate, maintain, and distribute action item and project contact lists for all personnel involved with the project.

Data collected during the Realty and Planning phases of this project will guide the design decisions needed for successful reclamation construction and the reclamation of AML features and points listed in the OSM-51.

All E&S Control Designs and Details shall conform to WV's National Pollution Discharge Elimination System (NPDES) and Construction Stormwater General Permit (GP), as referenced in the 2016 revised manual.

KLF has assumed that design plans for the Simpson Creek Highwalls, Tipples and Portals Phase II will be developed in the following order of completion.

Survey / Base Mapping - Base mapping will include aerial, topo, and tax map data and will map in detail the project site topography (10-ac according to the OSM-51 document), details including

AML features and extents, watercourses, boring locations, access roads, structures, utilities, AMD, and property lines (five (5) possible tracts listed under Realty are assumed at this time).

Due to a possible increasing mine pool being the cause of the DS and DIs, a desktop mine map review and georeferencing of that pool for Geotechnical Investigations will also be completed.

All referenced collected data will then be compiled into finalized base mapping that will be used within all remaining projects tasks including stake-out for the eventual construction contractor.

All Surveying deliverables must be signed, sealed, and dated by an active WV Registered Professional Surveyor (PS). Base mapping will be completed utilizing WV NAD 83 and WV North Zone 17 datum as per the standardization requirements by WV State and Local government agencies.

Geotechnical Investigation - The objective of geotechnical investigation will be to determine the engineering characteristics and stratification of subsurface materials across the project site. The proposed SOW will include the review of published geologic data, completion of a subsurface field exploration, laboratory testing program, a preliminary geotechnical engineering analysis and the preparation of a Preliminary Geotechnical Summary Report.

KLF's SOW is focused on the Tentative Reclamation Plan listed in the Introduction / Understanding section of this proposal but keeps other possible layouts in mind.

It is proposed that test borings will be completed within the proposed limits of disturbance, extending to depths totaling up to 400-linear feet (LF). Should soft or otherwise unstable soil conditions, or fill, be encountered at the scheduled termination depth of the test boring, the test boring will be extended until suitable soils are identified.

The test borings will be completed with a track- or ATV-mounted drill rig equipped with casing, hollow-stem augers, and split-spoon samplers. Samples of the soils encountered will be recovered at suitable intervals and the Standard Penetration Test (SPT) values will be recorded. All sampling procedures will be performed in accordance with the applicable American Society for Testing and Materials (ASTM) standards.

Should refusal on bedrock, or buried obstructions, be encountered prior to reaching a depth that will interfere with construction of the proposed structure, bedrock coring will be completed at representative locations. Rock coring will be conducted with NX-size coring equipment, in accordance with all applicable ASTM guidelines. Information regarding percent recovery, RQD, drilling rates, any loss of drill fluids, and the presence of any voids or soil seams will be carefully measured and recorded. For the purpose of this proposal approximately 400-LF of rock coring has been assumed based on past project site experience.

For purposes of this proposal, five (5) days of test boring and auger probe drilling have been budgeted. In addition, a piezometer will be installed into the mine pool for continued monitoring.

Laboratory Testing Program - To define the physical characteristics of the soils encountered, it is proposed that laboratory analysis of soils consisting of USCS classifications be conducted, in accordance with ASTM D2487 standards and specifications. This testing will include: Atterberg limits determination, gradation analysis, and natural moisture content testing. It is proposed that four (4) standard classification tests and a moisture-density (proctor) be completed in accordance with ASTM D698 be performed on representative soil samples obtained from the project site.

Additionally, representative samples of the bedrock cores recovered from the test borings will be subjected to unconfined compressive strength testing (ASTM D7012) to aid in understanding the level of difficulty associated with excavation. Two (2) tests have been budgeted for this proposal.

Geotechnical Engineering Report - A preliminary geotechnical engineering analysis and report presenting our results and recommendations, based on the SOW outlined above, will be prepared. This will include the following:

- Geologic Site Evaluation (including terrain description, brief geological history, and surface drainage conditions)
- Description of Subsurface Conditions (including description of exploration and sampling methods, soil identification and classification)
- Results of Preliminary Geotechnical Analysis
- Test Boring Logs
- Test Boring Profiles
- Exploration Plan
- Results of All Laboratory Testing
- Preliminary Conclusions and Recommendations concerning:
    - Anticipated Ground Improvement Options
    - Soil Strength Conditions
    - General Earthwork Criteria
    - Suitability of On-Site Soils for Use as Structural Fill
    - Site Excavation Characteristics
    - Construction Dewatering

A digital (pdf) copy of the final report will be submitted to the client within ten (10) working days upon completion of the laboratory testing. The report will be signed by a professional engineer (PE), licensed in the state of WV, and qualified in geotechnical engineering. This schedule may be impacted by weather, site / subsurface conditions beyond our control and / or the subcontractor's availability.

It is assumed that all services not specifically outlined above are excluded from this proposal. KLF has assumed that AMLR will require two (2) weeks for review of deliverables at each milestone listed below.

Conceptual Design (20-weeks) – Complete an initial 811 inquiry. Includes 30-percent conceptual site plan and a brief narrative to convey general understanding and assumptions made during this phase of design. Submitted electronically in PDF format to AMLR for review. One round of review and revision has been included for the conceptual design package. An in-person or virtual meetings with AMLR will be held to review the document submission, which will include KLF's Project Team (Principal, Project Manager and Environmental / Civil Lead) for the project.

Preliminary Design (18-weeks) - Includes 60-percent preliminary site plan and a brief narrative to convey general understanding and assumptions made during this phase of design. Submitted electronically in PDF format to AMLR for review. One round of review and revision has been included for the preliminary design package which will include calculations, PDR, draft specifications. Preliminary cost estimates and draft EA. An in-person or virtual meetings with AMLR will be held to review the document submission, which will include KLF's Project Team (Principal, Project Manager, Construction Manager and Environmental / Civil Lead) for the project. All landowner consents will be obtained prior to finalization of preliminary design.

Pre-Final Design (16-weeks) – Includes 90-percent pre-final design. Pre-final documents will include drawings, technical specifications, and an engineer's cost estimate. Documents to be submitted electronically in DWG, Microsoft Word, and Excel formats, respectively. One round of review and revision has been included for the pre-final design package. An in-person or virtual meetings with AMLR will be held to review the document submission, which will include KLF's Project Team (Principal, Project Manager, Construction Manager and Environmental / Civil Lead).

Final Design (5-weeks) – Includes 100-percent final design documents which have been signed, sealed, and dated by a licensed WV PE. PDF and CAD files (in AutoCAD 2020 format or AMLR accepted later addition) of the plans must be included as part of the electronic portion of the final deliverable package. Both electronic and physical copies will be transmitted to AMLR as part of the Final Design and documents deliverables. All deliverables will also be uploaded into AMLNET (or equivalent).

Permitting - KLF will prepare permitting document submittals from examples provided by the WV DEP. This will include necessary submittals to the USACE, USFWS, WV DNR, and WV SHPO, Barbour County Floodplain Coordinator, WV Division of Highways (WVDOH) and the Region 6 RPDC. Permitting documents will be given to AMLR for review before submittal.

KLF will prepare a permitting matrix for the proposed project based upon our understanding of the site conditions, wetland delineations, and permitting requirements for AMLR projects. Upon completion of the permitting matrix, a schedule for anticipated permitting activities to facilitate construction will be provided to AMLR, to include Jurisdictional Determinations and USCAE Coordination.

It is assumed that all impacts to WOTUS will fall within the threshold for GP coverage. KLF is assuming permit coordination and reviews will meet the estimated schedule. If delays in permitting occur outside of KLF's control, any additional effort will be evaluated and discussed with AMLR. The proposed timeline for approval of permits assumes any proposed aquatic impacts will qualify for coverage under WV GPs per all applicable conditions. This task also assumes that zoning changes or any other land development permits required for the proposed SOW will not exceed more than two months.

Sami Pretzel, PE will serve as KLF's Design POC for the SOW listed above and will be coordinating with the overall project team.

4. Construction

KLF will support construction management of the project per the guidelines provided by AMLR found in **Attachment A**. The assumed construction schedule will commence seven (7) days a week from 7:00 am to 7:00 pm, permission from AMLR and landowners will need to be granted for work taking place on the weekends and holidays. The project will adhere to the requirements of the Build America, Buy America (BABA) and the Davis-Bacon Acts. **The anticipated timeframe to complete the project's construction phase is about twenty (20) weeks from Notice to Proceed to completion of earthwork activities.** We have considered and assumed the following for the pricing of this task.

At least one month prior, KLF will provide resumes and reference lists of inspector(s). The Construction Inspector(s) (CI) will act as the onsite point of contact with the Contractor and will relay coordination efforts from the Engineer of Record (EoR) and Construction Manager (CM) throughout construction. The CI will have the authority to process and document redline changes

communicated from the EoR. Approval is needed from AMLR prior to any inspector mobilization. KLF will coordinate construction meetings for the Project and provide notification to stakeholders.

KLF will provide construction management services throughout the duration of the project. Following permitting approval, KLF will advertise a bid date on behalf of AMLR. A KLF administrator along with the CM will prepare the bid documents and any necessary coordination with proposed contractors, including the delivery of bid documents to the prospective Contractor(s). The CM and CI will attend a pre-bid meeting with AMLR to review the documentation advertised in the bid and to discuss the facilitation of the bidding process. The CM and CI will attend the official bid meeting to receive the proposals from the Contractors and announce the lowest bid for each contract. This pre-construction conference will be videotaped and transcribed for minutes. Following an acceptable bid approval by AMLR, KLF will schedule a Pre-Construction Conference and Project Meeting with the awarded Contractor(s).

In the initial meeting the EOR, CM, and CI will attend to become acquainted with the Contractor(s). During this meeting, a schedule will be defined, contact information will be distributed, Contractor(s) working hours set, inspection expectations defined, discussions on possible hazards and construction concerns, equipment procurement, subcontractor lists, shareholder concerns, overall site safety, public safety, and environmental best practices shall all take place. Following this meeting, an Issued for Construction set of plans and specifications will be produced and a system of document control will be established with the Contractor(s) to maintain version control throughout the life of the project. Additionally, a date will be set for a Pre-Construction Inspection of the site where the CM, and CI will walk the Project Site with the Contractor and review the construction sequencing process. The Contractor will provide a survey crew to delineate the LOD and environmental resources prior to the start of construction.

Weekly progress meetings between the Inspector and CM will occur throughout the duration of the project to track progress and maintain schedules; meetings can occur virtually to accommodate scheduling. The CM will coordinate communications with AMLR, handle billing and change orders, organize the construction schedule, and provide utility coordination.

As construction progresses, the CI will be on site daily documenting with pictures, the Contractor's progress and verify the Project sequencing is being followed per the plans and specifications. The CI will record the location, date, and the specifications of the installation of the E&S and stormwater control devices and document daily quantity reports of installed materials. The inspection team will consist of one (1) Construction Inspector per construction crew provided by the Contractor.

Environmental Inspections, including the Stormwater Pollution Prevention Plan (SWPPP), are the contractor's responsibility. This also may include wood or impacted soil that should be disposed of in accordance with the WV DEP's Solid Waste Management Regulations.

Following construction activities, the contractor will provide a survey crew to document As-Built conditions. Following the field survey, a WV PLS sealed As-Built plan will be created by the Contractor and provided to KLF for review, and ultimately AMLR. The KLF Review Team will consist of the CM, CI for QA / QC. A certification that the project was installed in accordance with the plans and specs will be supplied to AMLR signed, sealed, and dated by a WV PE.

All daily logs, pictures, video, documentation, design / permitting changes, etc. will be uploaded to AMLR's AMLNET online database as per the timing requirements set forth in **Attachment A**.

KLF understands that the warranty period inspections are the responsibility of the firm and that DWWM and Environmental Enforcement will need to be notified that the Notice-of-Termination

(NOT) is being requested once project is set to be released from NPDES. One (1) inspection of the Site will occur per month following the submitted As-Built until the Project NOT has been issued with the PM and CM reviewing the inspection reports of post construction conditions.

- Project Management, Administration and Construction Management support at 12 hours per week for the duration of the project for request for information (RFI) support, invoicing, scheduling, QA/QC, utility management, RFI, and meetings.
- Construction Inspection support at 12 Hour Days, 7 days per week per construction crew for the project's duration to document construction installations, provide Contractor communications, and representation to landowners.
- Meeting Attendance as described above for identified staff are assumed to be 8 hours for onsite meetings, 2 hours for virtual meetings.

Nicholas Flanders will serve as KLF's Construction POC for the scope listed above and will be coordinating with the overall project team.

PROPOSED COST

KLF is proposing the **Not-to-Exceed (NTE)** cost as noted in the **AML Contract N1_COST SHEET PDF COMBINED**, attached to this document as **Attachment C**, and to be billed on a monthly basis. Hours not worked and costs not incurred will not be billed. Rates are locked in for the duration of the contract and are flat rates, no overtime rates will be billed per the contract terms. Please refer to **Attachment C** for designated hours and rates for the enclosed scope.

PROPOSED SCHEDULE

Please refer to the table below for estimated completion schedule for the scope of work described above. Should delays be encountered that are beyond KLF's control, WV AML will be notified and coordination with the Project Manager, Mr. Jamie Shaffer, will be conducted in accordance with the contract documents. Should additional scope be necessary, an estimate to complete and schedule impacts will be provided once identified by the Project Team.

Milestone Description:	Estimated Schedule (Weeks)
Conceptual Design (30%)	20
Preliminary Design (60%)	18
Pre-Final Design (90%)	16
Final Design (100%)	5
Anticipated DEP Review Time	*2 per Milestone*
Total Anticipated Project Schedule	**68**

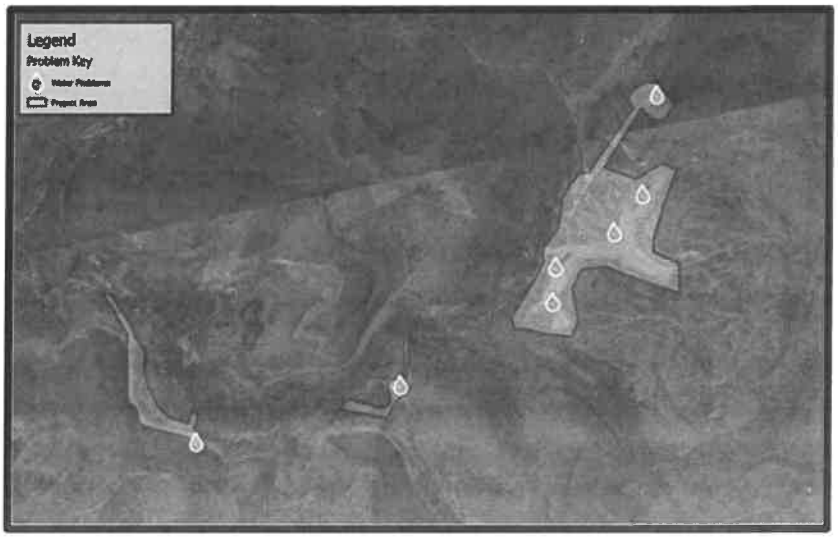
Schedule is assumed to begin upon receipt of NTP, KLF will coordinate and submit a final project schedule prior to the initial contract kick-off meeting.

WEAVER PORTALS AND DRAINAGE PHASE III

(EPAM 24030)

INTRODUCTION AND UNDERSTANDING

Weaver Portals and Drainage Project Site / Problem Area Description:



Two separate underground mining operations occurred at the site. The majority of the site was mined by Davis Coal and Coke from 1906 to 1927 from their Weaver No. 2 Mine, also referred to as Davis No. 2 Mine. Another area was mined by the Maryland Smokeless Coal Company from 1903 to 1905 and continued under Davis Coal and Coke from 1906 to 1914. The Kittanning No. 8 and WV Coal and Coke No. 3 were also located adjacent to the primary problem area.

The Weaver Portal Passive Systems were constructed by the WV DEP in the early-mid 2000's to treat AMD emanating from the Weaver Portals. Unfortunately, these systems are no longer effectively treating AMD from the site and bypassing untreated flows. Two other previously reclaimed areas with untreated AMD are also included in this project from the Weaver Highwall and Portals site and an untreated discharge within the Beaver Creek Highwall Project site.

AMD from these mines is characterized as being highly acidic, with pH less than 4.0 containing elevated concentrations of both iron (Fe) and aluminum (Al).

KLF understands that due to site conditions, adverse stakeholders, and additional AML features at this time WV DEP will be postponing the development of both the Weaver Portals Project. The following scope of work was developed to memorialize the findings of the site visits conducted and general recommendations and / or assumptions that developed for both of the projects.

SCOPE OF WORK

The following two tasks will be completed as requested by WV DEP.

1. Weaver Feasibility Report

KLF will develop a memorandum report to document the general understanding of the original scope of work proposed in the Weaver Portal AML OSM-51 documents, activities completed on Site (Figure 1), documentation of current site conditions (photo log) and / or exhibit map, as well as a summary of general findings, design constraints, and recommendations for future development of the Site.

PROPOSED COST

KLF is proposing the **Not-to-Exceed (NTE)** cost as noted in the **AML Contract N1_COST SHEET PDF COMBINED**, attached to this document as **Attachment C**, and to be billed on a monthly basis. Hours not worked and costs not incurred will not be billed. Rates are locked in for the duration of the contract and are flat rates, no overtime rates will be billed per the contract terms. Please refer to **Attachment C** for designated hours and rates for the enclosed scope.

PROPOSED SCHEDULE

Please refer to the table below for estimated completion schedule for the scope of work described above. Should delays be encountered that are beyond KLF's control, WV AML will be notified and coordination with the Project Manager, Mr. Jamie Shaffer, will be conducted in accordance with the contract documents. Should additional scope be necessary, an estimate to complete and schedule impacts will be provided once identified by the Project Team.

Milestone Description:	Estimated Schedule (Weeks)
Feasibility Report	6
Anticipated DEP Review Time	*2*
Final Documents	1
Total Anticipated Project Schedule	**9**

Schedule is assumed to begin upon receipt of NTP, KLF will coordinate and submit a final project schedule prior to the initial contract kick-off meeting.

WEST FORK #9 (EPAM 23103)

INTRODUCTION AND UNDERSTANDING

The West Fork #9 Project (WV-1274) scope is based upon the discussions with the AMLR team as well as the site visit conducted prior to this submission at the location shown in **Figure 1** below.

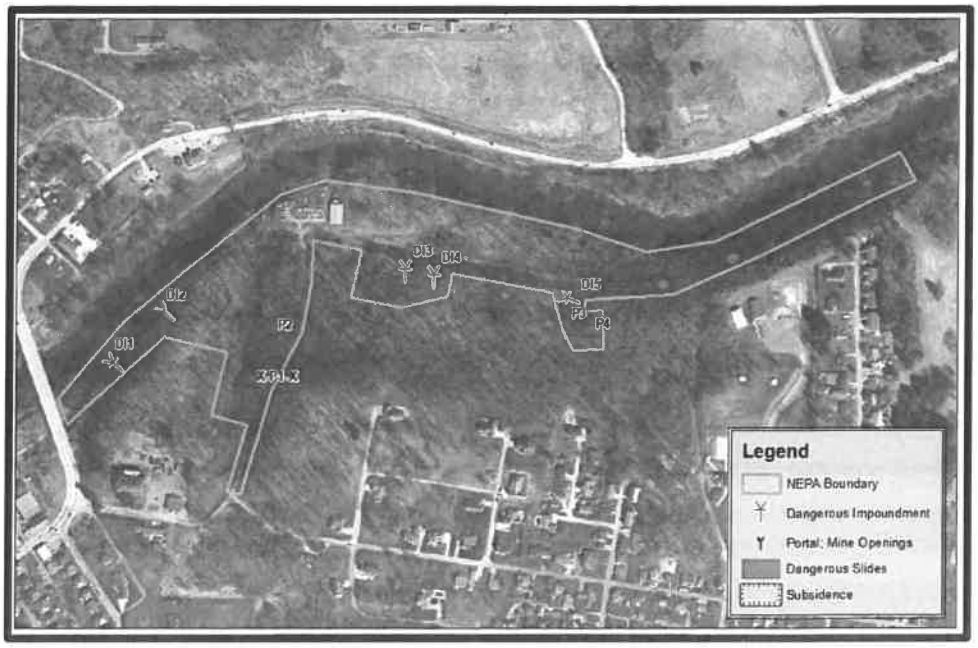


Figure 1. *Site Location with AML features and points located.*

Site / Problem Area Description:

This site was last mined by Alsted Coal in 1946 removing Pittsburgh seam coal from their Alsted Mine. Prior, Consolidated Coal Company removed the same from the No. 66 Mine around the middle 1920s. AML features include:

1. Priority 2 (PII) Dangerous Impoundments (DI) – five collapsed portals all seeping low-flow AMD water adjacent to a heavily used rail-trail. The first two DIs are characterized as having circumneutral pH with elevated, but relatively low concentrations of iron (Fe). The other three are similarly low-flow AMD discharges, but are more adverse in water quality, having pH below 4.0 and more than likely containing elevated concentrations of aluminum (Al).
    a. DI #1 – lowest in elevation with 5-10 gallons per minute ()GPM) of AMD that is of relatively good quality. Lat: 39.3994 Long: -80.2963
    b. DI #2 – collapsed portal seeping AMD of relatively good quality creating saturation. Lat: 39.4000 Long: -80.2955
    c. DI #3 – 10-20 GPM of acidic water with pH below 4.0. Lat: 39.4003 Long: -80.2917
    d. DI #4 – adjacent and similar to DI #3, Lat: 39.4004 Long: -80.2920
    e. DI #5 – AMD seeping from two collapsed entries. Similar quality to DI #3. Lat: 39.4000 Long: -80.2895
2. PII Portals (P) – three total with two being collapsed portals and the other of unknown mining relation with brick façade removed, but pipe visible.

a. P #2 – portal with brick removed but pipe visible. Lat: 39.3995 Long: -80.2944
b. P #3 – collapsed portal. Lat: 39.3998 Long: -80.2894
c. P #4 – collapsed portal. Lat: 39.3997 Long: -80.2893

3. PII Subsidence (S) – two (s) totaling about 0.8-acres (ac).
   a. S #1 – Lat: 39.4001 Long: -80.2835
   b. S #2 – Lat: 39.4003 Long: -80.2924
4. Priority 1 (PI) Dangerous Slides – both around 0.1-ac in size, but on very steep slopes and quite dangerous that could lead to material sliding onto rail-trail.
   a. DS #1 – water draining through that is around 4.0 pH Lat: 39.4003 Long: -80.2882
   b. DS #2 – Lat: 39.4006 Long: -80.2872

Problem:

There are at least five (5) potential DIs found along the rail trail parallel to the West Fork River. DIs appear to simply seep out from the coal seam, others appear to be collapsed portals. Prior to a December 2023 investigation, four (4) DIs were inventoried parallel to the rail trail, heading east from the current location of DI #5, roughly halfway up the hillside. After the field investigation, finding AMD at the location of DI #5, and reviewing the mine map overlay with coal seam contours, it is believed that a horizontal bore at the location of DI #5 could alleviate the AMD seeping out of the previously inventoried locations where the other DIs were inventoried.

Along the hillside where DIs were initially inventoried, there are at least two (2) DSs. Water collected in a channel below the slides has a pH of about 4.1. It is believed that AMD is seeping out of the coal seam at these locations, fueling the slides. Mine mapping at these two (2) locations shows entrances very close. If the horizontal bore does not dewater the mine completely, wet seals may be needed at these locations too.

There are two previously inventoried PII Ps (P #3 and P #4). From investigating, there does not appear to be evidence of visitation anymore like described previously. P #3 and P #4 are adjacent to DI #5. They appear to be collapsed portals, but no AMD is visible even though they are down-dip in the coal seam. It is believed that the mine drainage is coming out at DI #5.

P #2 is an unknown pipe that appears to be clogged and draining. Prior to investigation in December 2023, there was a stone façade built around it. This has since collapsed, exposing the pipe.

There are multiple S areas adjacent to the rail trail. The largest subsidence area is about 20-feet (ft) by 20-ft. The rest of the subsidence areas are at least 10-ft by 10-ft. The depth of these areas ranges from 6 to 8-ft. There appears to be about eight (8) features in the western portion and three (3) in the eastern. There does not appear to be any opening into the mine, but all are covered with a large amount of leaf litter. These S zones pose a serious safety concern, should someone fall into the mine as it is not confirmed whether all are completely closed. These areas may also be contributing to the mine pool, acting as collection basins for rainfall and flowing surface water.

AMLR lists the project size as 25-ac. AMLR also lists the **Anticipated Environmental Improvements** as reclaiming the Dangerous Impoundments that are seeping AMD. This will dry up the ground and allow for better vegetation growth. Also, reclaiming the subsidence areas will stabilize the ground and allow for vegetation growth.

The **Tentative Reclamation Plan** for the West Fork #9 Portals project will be to first prepare the site by clearing and grubbing the areas around the DIs or open portals and upgrading access where necessary. Erosion and sediment (E&S) controls will be installed throughout the site and maintained until the site has established a minimum of 70-percent vegetative cover. Streambank protection will be installed along the West Fork River. The subsidence areas adjacent to the rail trail will be plugged and reclaimed. The dangerous impoundments / portals will either be reclaimed with modified wet seals or dry seals. Grouted channels, along with new culverts will convey water to the West Fork River. Lastly, the site will be regraded and revegetated.

SCOPE OF WORK

The West Fork #9 Project shall adhere to all inclusions, assumptions, and deliverables outlined in the Detailed Description of Services Required and Cost Proposal Requirement documents (**Attachment A and B**). The Planning, Realty, Design, and Construction Task Deliverable descriptions follow.

1. Planning

Environmental Consultations and Delineations

The objective for the environmental delineations and consultations will be to identify constraints on site related to potentially jurisdictional and state-regulated streams and wetlands, cultural resources, and listed threatened and endangered (T&E) species. All Planning work shall adhere to tasks as outlined in the Detailed Description of Services Required and Cost Proposal Requirement documents (**Attachment A and B**).

Desktop Review

Prior to initiating field activities, KLF will conduct a desktop review of the site to assess known locations of wetlands, streams, cultural resources, and T&E species habitat. The results of the initial desktop review will guide the initial development of permitting scope and documents, as well as provide baseline information for additional consultation submittals to involved agencies. KLF planning staff will conduct the review utilizing available online resources, to include:

- Harrison County Floodplain Coordinator
- Natural Resources Conservation Service (NRCS) soil survey maps to evaluate the potential for hydric soils.
- U.S. Geological Survey (USGS) 7.5-minute topographic maps and aerial photographs to evaluate the potential for waters of the U.S. (WOTUS)
- U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) mapped wetlands.
- West Virginia Division of Natural Resources (WV DNR) List of Known Mussel Streams.
- Federal Emergency Management Act (FEMA) Flood Insurance Maps
- National Hydrography Dataset (NHD) Maps
- WV DEP online database resources.
- WV State Historic Preservation Office (WV SHPO) Online Viewer,
- USFWS Information for Planning and Consultation (IPaC).

Stream and Wetland Delineation

Upon completion of the base mapping, SOW for the environmental delineations will be confirmed. The assumptions and costs in this task are based upon the information provided to KLF and the site visit completed in December 2023.

KLF biologists will perform field delineations to identify potentially jurisdictional waters, including watercourses, wetlands, and potentially jurisdictional ditches, within the project area. The extent of potentially jurisdictional wetlands and watercourses on-site will be evaluated per the U.S. Army Corps of Engineers (USACE) 1987 Corps of Engineers Wetland Delineation Manual and the 2012 Eastern Mountains and Piedmont Regional Supplement (Version 2.0). Methods include the following:

- On-site collection of soil profile data
- Cataloguing of plant species and vegetative communities
- Hydrology observations
- Photo documentation in support of wetland and waters delineations
- USACE Wetland determination data forms
- The use of sub-meter accurate Global Positioning System (GPS) to map the limits of observed wetlands and waters limits.

The USACE maintains jurisdiction over WOTUS under Section 404b of the Clean Water Act (CWA). Jurisdictional waters are defined to include the territorial seas and traditional navigable waters (TNW), perennial and intermittent tributaries to TNW, and adjacent wetlands, ponds, and lakes that have "regular surface water communication" with TNW. KLF will complete an analysis to determine the potentiality for on-site wetlands and / or waters to be considered jurisdictional by the USACE, or as isolated waters of the State of WV, by investigating surface water connectivity to TNW during the wetland and waters delineation field work.

KLF will prepare a Wetland Delineation and Stream Identification Report that details the results of our field delineation. The report will include location mapping, potentially jurisdictional aquatic feature mapping, desktop review generated site background information, and observed vegetative communities, soils, and hydrology. Maps, figures, photographs, and USACE wetland determination data forms will be provided as appendices. A delineation results figure will be provided depicting potentially jurisdictional wetlands and / or waters delineated on-site with an aerial background.

Threatened and Endangered Species Consultation

Initially, the project limits will be uploaded into the USFWS IPaC System (https://ipac.ecosphere.fws.gov) including the initial / planned National Environmental Policy Act (NEPA) boundary from the OSM-51. The IPaC will generate an official "species list" from the NEPA boundary. Once the project LOD and proposed impacts (i.e. tree clearing, work within streams or wetlands) have been determined, KLF will complete the applicable Determination Keys (D-Keys) within IPaC, most likely to include the Northeast Endangered Species and Northern Long-eared Bat *(Myotis septentrionalis)* D-Keys. KLF will complete the necessary bat conservation studies due to any clearing activities associated with the project.

If a "No Effect" or "May Affect, Not Likely to Adversely Affect" result is generated, KLF will continue with the NEPA review and Environmental Assessment / Finding of No Significant Impact (EA / FONSI) package preparation.

If a "May Affect" finding is generated by the completed D-Keys, KLF will submit consultation to the USFWS to confirm any required conservation measures to be implemented during construction, such as seasonal tree clearing, and assess the need for species specific surveys (if required). KLF will upload any surveys / investigations deemed necessary by the USFWS into AMLNET. All further consultation, surveys, or investigations will be included in the EA / FONSI package.

Additionally, KLF will submit a consultation letter to the WV DNR with a request for T&E species records within the project area.

EA / FONSI

In addition to the above consultations and reports, KLF will complete consultation with the WV SHPO and the WV Regional Planning and Development Council (RPDC) Region 6 to identify any proposed project planning and design constraints. All documentation will be uploaded into AMLNET (or equivalent), with all final consultations, surveys, reports, delineations, and documentation included in a draft EA / FONSI package (per the example provided to KLF by AMLR) which KLF will submit to the AMLR planning group for review.

Ladd Williams will serve as KLF's Planning POC for the scope listed above and will be coordinating with the overall project team.

2. Realty

Realty investigations and communications will be completed by KLF's ROW team (**Table 1**). All Realty work shall adhere to tasks as outlined in the Detailed Description of Services Required and Cost Proposal Requirement documents (**Attachment A and B**). This includes:

- Research on historical project information, existing agreements, landowner contact information, Ownership Questionnaire completion, Master Realty Landowner Contact Info Sheet template completion, lien determination, and written rights to perform design and repairs.
- Onsite scoping meeting coordination with AMLR with impacted landowners invited.
- Determination of legal ownership of properties impacted prior to acquiring access permissions.
- Compilation of names and contact info for all individuals owning a legal interest, including date of determination log.
- Utility coordination.
- Coordination between AMLR and impacted landowners for first contact meeting. Acquiring verbal or written approval for access to investigate. Document and log date of contact and permission granted to enter. Firm acts as the project liaison between AMLR and impacted landowners.
- Determinations of Rights-Of-Entry (ROE) are needed for fill borrow / waste locations.
- Confirmation of legal ownership through courthouse research prior to ROE being requested and reviewed up until initiation of construction. All documentation uploaded to AMLNET, or an approved equivalent process as directed by the WV AML, including date of confirmation.
- Determination if owner participated in the mining, accepted royalties, or leased the land / resources for the mining, or received any benefit, if information is available.

- Determination if any boundary disputes exist. Attempt will first be made to sign-up both sides to avoid survey. Necessity for a boundary survey to be discussed with AMLR.
- Obtain useful project information from landowners including, but not limited to, underground utilities, septic, leach fields, Right-Of-Ways (ROWs), property boundaries / monuments, safety concerns, etc. Uploaded to AMLNET (or equivalent) with lien determination form if needed.
- Provide all status updates of landowner negotiations, questions, agreements, on a regular basis to AMLR Realty weekly. Completion of Master Realty Landowner Contact Info Sheet as well.
- Determining if landowner is interested in being added as additionally insured prior to entering any agreements.
- Serve as a primary contact source in educating landowners on the AMLR program, what it has to offer said landowner, and acquiring all necessary Exploratory ROE and Ingress / Egress (I/E) agreements. Agreement will allow AMLR, the Office of Surface Mining Reclamation and Enforcement (OSMRE), KLF, and KLF's subcontractors / agents to access for investigation. Approval necessary prior to any commitments and signed document must be notarized at expense to firm.
- Acquire additional agreements if property changes ownership during project.
- Production and storage of daily logs with notes detailing landowner conversations, who conversation was between, summary of those conversations, when and where those conversations took place. Logs need to be sufficient quality to be used as evidence in court.
- Upload each ROE to AMLNET (or equivalent) within five (5) business-days. This includes land use agreement(s), legal documents, pre-construction photos, ownership questionnaires with sketches, landowner correspondence. Documents to be kept on file for three (3) years by KLF.
- Collection of existing condition photos, documenting evidence of visible property boundaries / monuments, and most feasible access route(s) for exploration / construction.
- KLF will also acquire any additional ROE during design phase if needed.
- KLF Realty will be responsible for reviewing the plans and specifications in advance of each design review stage to establish understanding of reclamation plan, suppling comments or revisions if needed.
- KLF Realty will attend all design review meetings.
- Upon design review approval, the KLF Realty will schedule a meeting with each impacted property owner to obtain approval and written construction ROE, I/E, and / or any needed borrow / waste agreements.
- Construction ROE shall grant permission for AMLR, OSMRE, KLF, all KLF subcontractors / agents, and construction contractor(s) to access for construction. Any signed documents must be notarized at the firm's expense and uploaded to AMLNET (or equivalent).
- Upload to AMLNET (or equivalent) the construction ROE packet, land-use agreements, legal documents, pre-construction photos, and landowner(s) correspondence with five (5) working days.
- Attend design, pre-bid, and pre-construction conferences, keeping daily logs, and being available for questions or status updates as needed by AMLR. Additionally, KLF Realty will be available during construction should the need arise.

Table 1. *Initial West Fork #9 potential property owners.*

Owner	Acres	Address
Riverdale Estates	19.50	PO Box 373 Shinnston, WV 26431
Riverdale Estates	21.20	PO Box 373 Shinnston, WV 26431
Jack Anderson	0.48	76 Walnut St Shinnston, WV, 26431
Glenn Rife	0.80	50 Roosevelt St. Shinnston, WV 26431
Riverside Rentals	2.84	11 Morgans Way Shinnston, WV 26341
City of Shinnston	1.32	PO Box 1865 Shinnston, WV 26431
City of Shinnston	1.86	PO Box 1865 Shinnston, WV 26431
City of Shinnston	16.52	PO Box 1865 Shinnston, WV 26431
Adam Maley	1.22	1291 Landing Way Shinnston, WV 26431
Florentino Felosa	6.86	55 Simon Dr. Shinnston, WV 26431
WVA RR Maintenance Authority	7.14	PO Box 470 Moorefield, WV 26386

Realty tasks and deliverables will be completed primarily by KLF's ROW Office out of Pittsburgh, Pennsylvania (PA) and supervised by Ken Hawker, Senior Program Manager with 25-years of experience in project ROW coordination. Ken is a Senior Member of the International ROW Association since 2005. His experience extends into all phases of the ROW / acquisition process. Ken leads KLF's group of ROW professionals and provides assurance that all public projects requiring the acquisition of private property rights and / or relocations are completed in accord with the rules and regulations established within each state.

3. Design

It is assumed that KLF will provide design deliverables in the standard AMLR format utilizing the examples and CAD standards supplied. As mentioned previously, KLF shall adhere to all inclusions, assumptions, and deliverables outlined in the Design section of the Detailed Description of Services Required and Cost Proposal Requirement documents (**Attachment A and B**).

Once a reclamation design plan is formalized prior to moving into conceptual, KLF's design SOW will be reviewed by AMLR for comment / recommendations prior to proceeding further.

All design meetings will be transcribed with notes offered and uploaded adhering to the time constraints references in **Attachment B**. KLF will also generate, maintain, and distribute action item and project contact lists for all personnel involved with the project.

Data collected during the Realty and Planning tasks of this project will guide the design decisions needed for successful reclamation construction and the reclamation of AML features and points listed in the OSM-51.

All E&S Control Designs and Details shall conform to WV's National Pollution Discharge Elimination System (NPDES) and Construction Stormwater General Permit (GP), as referenced in the 2016 revised manual.

KLF has assumed that design plans for the West Fork #9 will be developed in the following order of completion.

Survey / Base Mapping - Base mapping will include aerial, topo, and tax map data and will map in detail the project site topography (4-ac according to the OSM-51 document), details including

AML features and extents, watercourses, boring locations, access roads, structures, utilities, AMD and property lines (11-tracts listed in **Table 1** are assumed at this time).

Due to a possible increasing mine pool(s) being the cause of some of the AMLs, a desktop mine map review and georeferencing of that pool(s) for Geotechnical Investigations will also be completed.

All referenced collected data will then be compiled into finalized base mapping that will be used within all remaining project tasks including stake-out for the eventual construction contractor.

All Surveying deliverables must be signed, sealed, and dated by an active WV Registered Professional Surveyor (PS). Base mapping will be completed utilizing WV NAD 83 and WV North Zone 17 datum as per the standardization requirements by WV State and Local government agencies.

Geotechnical Investigation - The objective of the geotechnical investigations will be to determine the engineering characteristics and stratification of subsurface materials across the project site. The proposed SOW will include the review of published geologic data, completion of a subsurface field exploration, laboratory testing program, a preliminary geotechnical engineering analysis and the preparation of a Preliminary Geotechnical Summary Report.

Our scope is focused on the tentative reclamation plan listed but keeps other possible layouts in mind.

It is proposed that test borings will be completed within the proposed limits of disturbance, extending to depths totaling up to 400-linear feet (LF). Should soft or otherwise unstable soil conditions, or fill, be encountered at the scheduled termination depth of the test boring, the test boring will be extended until suitable soils are identified.

The test borings will be completed with a track- or ATV-mounted drill rig equipped with casing, hollow-stem augers, and split-spoon samplers. Samples of the soils encountered will be recovered at suitable intervals and the Standard Penetration Test (SPT) values will be recorded. All sampling procedures will be performed in accordance with the applicable American Society for Testing and Materials (ASTM) standards.

Should refusal on bedrock, or buried obstructions, be encountered prior to reaching a depth that will interfere with construction of the proposed structure, bedrock coring will be completed at representative locations. Rock coring will be conducted with NX-size coring equipment, in accordance with all applicable ASTM guidelines. Information regarding percent recovery, RQD, drilling rates, any loss of drill fluids, and the presence of any voids or soil seams will be carefully measured and recorded. For the purposes of this proposal 400-linear feet of rock coring has been assumed based on past project site experience.

For purposes of this proposal, five (5) days of test boring and auger probe drilling have been budgeted. In addition, up to two (2) piezometers will be installed into the mine pool(s) for continued monitoring.

Laboratory Testing Program - To define the physical characteristics of the soils encountered, it is proposed that laboratory analysis of soils consisting of USCS classifications be conducted, in accordance with ASTM D2487 standards and specifications. This testing will include: Atterberg limits determination, gradation analysis, and natural moisture content testing. It is proposed that

four (4) standard classification tests and a moisture-density (proctor) be completed in accordance with ASTM D698 be performed on representative soil samples obtained from the project site.

Additionally, representative samples of the bedrock cores recovered from the test borings will be subjected to unconfined compressive strength testing (ASTM D7012) to aid in understanding the level of difficulty associated with excavation. Two (2) tests have been budgeted for this proposal.

It is assumed that since the site is not conducive for passive treatment, and the fact that the West Fork River is of size to attenuate adequately the AMD loading, no water quality lab testing will be completed.

Geotechnical Engineering Report - A preliminary geotechnical engineering analysis and report presenting our results and recommendations, based on the SOW outlined above, will be prepared. This will include the following:

- Geologic Site Evaluation (including terrain description, brief geological history, and surface drainage conditions)
- Description of Subsurface Conditions (including description of exploration and sampling methods, soil identification and classification)
- Results of Preliminary Geotechnical Analysis
- Test Boring Logs
- Test Boring Profiles
- Exploration Plan
- Results of All Laboratory Testing
- Preliminary Conclusions and Recommendations concerning:
    - Anticipated Ground Improvement Options
    - Soil Strength Conditions
    - General Earthwork Criteria
    - Suitability of On-Site Soils for Use as Structural Fill
    - Site Excavation Characteristics
    - Construction Dewatering

A digital (pdf) copy of the final report will be submitted to the client within ten (10) working days upon completion of the laboratory testing. The report will be signed by a professional engineer (PE), licensed in the state of WV, and qualified in geotechnical engineering. This schedule may be impacted by weather, site / subsurface conditions beyond our control and / or the subcontractor's availability.

It is assumed that all services not specifically outlined above are excluded from this proposal. KLF has assumed that AMLR will require two (2) weeks for review of deliverables at each milestone listed below.

Conceptual Design (18-weeks) – Complete an initial 811 inquiry. Includes 30-percent conceptual site plan and a brief narrative to convey general understanding and assumptions made during this phase of design. Submitted electronically in PDF format to AMLR for review. One round of review and revision has been included for the conceptual design package. An in-person or virtual meetings with AMLR will be held to review the document submission, which will include KLF's Project Team (Principal, Project Manager and Environmental / Civil Lead) for the project.

Preliminary Design (16-weeks) - Includes 60-percent preliminary site plan and a brief narrative to convey general understanding and assumptions made during this phase of design. Submitted

electronically in PDF format to AMLR for review. One round of review and revision has been included for the preliminary design package which will include calculations, PDR, draft specifications, preliminary cost estimates and draft EA. An in-person or virtual meetings with AMLR will be held to review the document submission, which will include KLF's Project Team (Principal, Project Manager, Construction Manager and Environmental / Civil Lead) for the project. All landowner consents will be collected prior the finalizing the preliminary design.

Pre-Final Design (10-weeks) – Includes 90-percent pre-final design. Pre-final documents will include drawings, technical specifications, and an engineer's cost estimate. Documents to be submitted electronically in DWG, Microsoft Word, and Excel formats, respectively. One round of review and revision has been included for the pre-final design package. An in-person or virtual meetings with AMLR will be held to review the document submission, which will include KLF's Project Team (Principal, Project Manager, Construction Manager and Environmental / Civil Lead).

Final Design (3-weeks) – Includes 100-percent final design documents which have been signed, sealed, and dated by a licensed WV PE. PDF and CAD files (in AutoCAD 2020 format or AMLR accepted later addition) of the plans must be included as part of the electronic portion of the final deliverable package. Both electronic and physical copies will be transmitted to AMLR as part of the Final Design and documents deliverables. All deliverables will also be uploaded into AMLNET.

Permitting - KLF will prepare permitting document submittals from templates provided by the WV DEP. This will include necessary submittals to the USACE, USFWS, WV DNR, WV SHPO, Harrison County Floodplain Coordinator, WV Division of Highways (WVDOH) and the Region 6 RPDC. Permitting documents will be given to AMLR for review before submittal.

KLF will prepare a permitting matrix for the proposed project based upon our understanding of the site conditions, wetland delineations, and permitting requirements for AMLR projects. Upon completion of the permitting matrix, a schedule for anticipated permitting activities to facilitate construction will be provided to AMLR, to include Jurisdictional Determinations and USCAE Coordination.

It is assumed that all impacts to WOTUS will fall within the threshold for GP coverage. KLF is assuming permit coordination and reviews will meet the estimated schedule. If delays in permitting occur outside of KLF's control, any additional effort will be evaluated and discussed with AMLR. Pricing for Jurisdiction Determination and USACE coordination is included. The proposed timeline for approval of permits assumes any proposed aquatic impacts will qualify for coverage under WV GPs per all applicable conditions. This task also assumes that zoning changes or any other land development permits required for the proposed SOW will not exceed more than two months.

Sami Pretzel, PE will serve as KLF's Design POC for the scope listed above and will be coordinating with the overall project team.

4. Construction

KLF will support construction management of the project per the guidelines provided by AMLR found in Attachment A. The assumed construction schedule will commence seven (7) days a week from 7:00 am to 7:00 pm, permission from AMLR and landowners will need to be granted for work taking place on the weekends and holidays. The project will adhere to the requirements of the Build America, Buy America (BABA) and the Davis-Bacon Acts. **The anticipated timeframe to complete the project's construction phase is about twelve (12) weeks from**

Notice to Proceed to completion of earthwork activities. We have considered and assumed the following for the pricing of this task.

At least one month prior, KLF will provide resumes and reference lists of inspector(s). The Construction Inspector(s) (CI) will act as the onsite point of contact with the Contractor and will relay coordination efforts from the Engineer of Record (EoR) and Construction Manager (CM) throughout construction. The CI will have the authority to process and document redline changes communicated from the EoR. Approval is needed from AMLR prior to any inspector mobilization. KLF will coordinate construction meetings for the Project and provide notification to stakeholders.

KLF will provide construction management services throughout the duration of the project. Following permitting approval, KLF will advertise a bid date on behalf of AMLR. A KLF administrator along with the CM will prepare the bid documents and any necessary coordination with proposed contractors, including the delivery of bid documents to the prospective Contractor(s). The CM and CI will attend a pre-bid meeting with AMLR to review the documentation advertised in the bid and to discuss the facilitation of the bidding process. The CM and CI will attend the official bid meeting to receive the proposals from the Contractors and announce the lowest bid for each contract. This pre-construction conference will be videotaped and transcribed for minutes. Following an acceptable bid approval by AMLR, KLF will schedule a Pre-Construction Conference and Project Meeting with the awarded Contractor(s).

In the initial meeting the EOR, CM, and CI will attend to become acquainted with the Contractor(s). During this meeting, a schedule will be defined, contact information will be distributed, Contractor(s) working hours set, inspection expectations defined, discussions on possible hazards and construction concerns, equipment procurement, subcontractor lists, shareholder concerns, overall site safety, public safety, and environmental best practices shall all take place. Following this meeting, an Issued for Construction set of plans and specifications will be produced and a system of document control will be established with the Contractor(s) to maintain version control throughout the life of the project. Additionally, a date will be set for a Pre-Construction Inspection of the site where the CM, and CI will walk the Project Site with the Contractor and review the construction sequencing process. The Contractor will provide a survey crew to delineate the LOD and environmental resources prior to the start of construction.

Weekly progress meetings between the Inspector and CM will occur throughout the duration of the project to track progress and maintain schedules; meetings can occur virtually to accommodate scheduling. Additionally, the CM will hold weekly internal progress meetings with the Project Manager (PM) and CI to discuss the progress, quality of construction, and Project oversite. The CM will coordinate communications with AMLR, handle billing and change orders, organize the construction schedule, and provide utility coordination.

As construction progresses, the CI will be on site daily documenting with pictures, the Contractor's progress and verify the Project sequencing is being followed per the plans and specifications. The CI will record the location, date, and the specifications of the installation of the E&S and stormwater control devices and document daily quantity reports of installed materials. The inspection team will consist of one (1) Construction Inspector per construction crew provided by the Contractor. For the purpose of this proposal, one construction crew is assumed in the pricing, if additional crews are utilized by the Contractor, KLF will coordinate with AMLR if any changes to overall cost are necessary.

Environmental Inspections, including the Stormwater Pollution Prevention Plan (SWPPP), are the contractor's responsibility. This also may include wood or impacted soil that should be disposed of in accordance with the WVDEP's Solid Waste Management Regulations.

Following construction activities, the Contractor will provide a survey crew to document As-Built conditions. Following the field survey, a WV PLS sealed As-Built plan will be provided by the contractor to KLF for review, and ultimately AMLR. The KLF Review Team will consist of the PM, CM, CI for QA/QC. A certification that the project was installed in accordance with the plans and specs will be supplied to AMLR signed, sealed, and dated by a WV PE.

All daily logs, pictures, video, documentation, design / permitting changes, etc. will be uploaded to AMLR's AMLNET online database (or equivalent) as per the timing requirements set forth in Attachment A.

KLF understands that the warranty period inspections are the responsibility of the firm and that DWWM and Environmental Enforcement will need to be notified that the Notice-of-Termination (NOT) is being requested once project is set to be released from NPDES. One (1) inspection of the Site will occur per month following the submitted As-Built until the Project NOT has been issued with the PM and CM reviewing the inspection reports of post construction conditions.

- Project Management, Administration and Construction Management support at 12 hours per week for the duration of the project for request for information (RFI) support, invoicing, scheduling, QA/QC, utility management, RFI, and meetings.
- Construction Inspection support at 12 Hour Days, 7 days per week per construction crew for the project's duration to document construction installations, provide Contractor communications, and representation to landowners.
- Meeting Attendance as described above for identified staff are assumed to be 8 hours for onsite meetings, 2 hours for virtual meetings.

Nicholas Flanders will serve as KLF's Construction POC for the scope listed above and will be coordinating with the overall project team.

PROPOSED COST

KLF is proposing the **Not-to-Exceed (NTE)** cost as noted in the **AML Contract N1_COST SHEET PDF COMBINED**, attached to this document as **Attachment C**, and to be billed on a monthly basis. Hours not worked and costs not incurred will not be billed. Rates are locked in for the duration of the contract and are flat rates, no overtime rates will be billed per the contract terms. Please refer to **Attachment C** for designated hours and rates for the enclosed scope.

PROPOSED SCHEDULE

Please refer to the table below for estimated completion schedule for the scope of work described above. Should delays be encountered that are beyond KLF's control, WV AML will be notified and coordination with the Project Manager, Mr. Jamie Shaffer, will be conducted in accordance with the contract documents. Should additional scope be necessary, an estimate to complete and schedule impacts will be provided once identified by the Project Team.

Milestone Description:	Estimated Schedule (Weeks)
Conceptual Design (30%)	18
Preliminary Design (60%)	16
Pre-Final Design (90%)	10
Final Design (100%)	3
Anticipated DEP Review Time	*2 per Milestone*
Total Anticipated Project Schedule	**56**

Schedule is assumed to begin upon receipt of NTP, KLF will coordinate and submit a final project schedule prior to the initial contract kick-off meeting.

Based on the information listed in the project descriptions above the following sections apply to the overall 2023 AML Contract N1.

SCHEDULE

Individual project schedules have been included above in their respective sections of this documents. KLF can begin work upon receipt of a signed Task Order and a notice-to-proceed (NTP). A proposed schedule will then be provided and agreed upon by KLF and AMLR accordingly. The N1 Contract is expected to commence within two weeks of NTP. If during the project schedule we anticipate a delay, KLF will discuss the anticipated delay (i.e. third-party issues, weather, unforeseen circumstances) with AMLR to still meet project scope of work and goals.

LIMITATIONS

Our work will be performed in a manner consistent with that level of care and skill ordinarily exercised by other members of KLF's profession practicing in the same locality, under similar conditions, and at the date the services are provided. Our conclusions, opinions, and recommendations will be based on a limited number of observations and data. It is possible that conditions could vary between or beyond the data evaluated.

Regulations and professional standards applicable to KLF's engineering services are continually evolving. Techniques are, by necessity, often new and untried. Different professionals may adopt different approaches to similar problems. As such, our services are intended to provide AMLR with a source of professional advice, opinions, and recommendations based on our limited number of field observations and tests collected and performed in accordance with the generally accepted engineering practice that exists at the time our services are rendered and may depend on, and be qualified by, information gathered previously by others and provided to KLF by AMLR.

AUTHORIZATION

Services will be completed under contract between AMLR and KLF. The fees, schedule, and assumptions provided here assume there will be no contracting delays. All terms and conditions indicated in this proposal will be considered by both parties to be in effect from the effective date of the executed purchase order and formal notice to proceed through project completion.

This proposal is a statement of our understanding of the project and an incorporation of an approach to best meet your objectives. If a portion of this proposal does not meet your needs, or if those needs have changed, KLF is prepared to consider appropriate modifications. Changes in scope, methodology, scheduling, and contract terms and conditions may result in changes to the risks assumed by AMLR, coordination with the assigned Project Manager will be conducted in accordance with the executed purchase order and associated contract documents.

AMLR owns the intellectual property rights for any deliverable created or modified by Work paid for by the State, unless protected by patent and otherwise accepted or permitted by the State.

AMLR has the right to remove any employee or subcontractor of the successful consulting firm from any project-related site, at AMLR's sole discretion for any reason, and request that an equivalent or better replacement be provided at any time, at no additional cost to WV. Violence, harassment, theft, illegal drug use, on-site intoxication, or other unprofessional behavior will not be tolerated.

AMLR reserves the right to withhold payment for deliverables of unacceptable quality – as determined by the State – until the quality issue is remedied to the satisfaction of the State.

CLOSING

We appreciate the opportunity to present this proposal and look forward to working with you on these projects. If you have any questions, or require additional information, please contact Sami Pretzel at 304-288-8978.

Sincerely,

KLEINFELDER, INC.

Samantha Pretzel, PE
Senior Program Manager

Thomas Clark
Project Development Manager

ATTACHMENT A

DETAILED DESCRIPTION OF SERVICES REQUIRED

The successful A/E firm will be responsible for Planning Work of the following (note that the below includes any modifications during design development, construction, or notices of termination at the end of the work):

1.1. Compliance with all applicable laws, such as collecting and filing certified payroll and for verifying compliance with the Davis-Bacon Act, Infrastructure Investment and Jobs Act (IIJA) (including surveys of employment for current and former employees of the coal industry and any required Environmental Justice reporting), BABA compliance with purchased materials, prevailing wage rates, etc., where applicable.

1.2. Requesting whatever consultation letters have been sent, work that has been done, example of West Virginia Division of Natural Resources (WVDNR) submission, example of West Virginia Historic Preservation Office (SHPO) submission, example of WV Regional Planning and Development Council submission, example for an Environmental Assessment (EA), existing water quality data that may exist, agency contact information, any other existing information pertaining to the project, and any other information the successful A/E firm believes to be useful that WVDEP-DLR-AML may be able to provide.

1.3. West Virginia Division of Natural Resources (WVDNR) agency consultation, including whatever consultations, surveys, documentation, and generation of reports may be required. Upload documentation into AMLNET (WVDEP-DLR-AML document storage database). Any timing restrictions to any activity must be clearly shown in the project schedule. Examples of timing restrictions that must be shown on the project schedule may include but not be limited to bat studies, portal closures, bat gate installations, in-stream work, tree clearing, etc.

1.4. West Virginia Historic Preservation Office (SHPO) agency inquiry / consultation and follow-up for approval, including whatever consultations, surveys, documentation, and generation of reports may be required. Upload documentation into AMLNET.

1.5. West Virginia Regional Planning and Development Council inquiry / consultation and follow-up for approval, including whatever consultations, surveys, documentation, and generation of reports may be required. If no response is received within thirty (30) days, an original signed request letter must be provided to WVDEP-DLR-AML, and the project may move forward. Upload documentation into AMLNET.

1.6. US Forest Service (only if on National Forest land) inquiry / consultation and follow-up for approval, including whatever consultations, surveys, documentation, and generation of reports may be required. Upload documentation into AMLNET.

1.7. Upload project into the USFWS (US Fish and Wildlife Service) Information for Planning and Consultation (IPaC) System including the initial / planned NEPA boundary from the OSM-51, and add the WVDEP-DLR-AML's team planner to the project in IPaC. Obtain the species list for the initial design. Upload the LOD map once the limits are clearly defined. Complete the determination keys (D-KEYs). If a "May Affect" is received, consult with USFWS. If "No Effect" or "May Affect, Not

Likely To Adversely Affect", continue with environmental assessment (EA) package. Upload documentation into AMLNET. Any timing restrictions to any activity must be clearly shown in the project schedule. Examples of timing restrictions that must be shown on the project schedule may include but not be limited to bat studies, portal closures, bat gate installations, in-stream work, tree clearing, etc.

1.8. NEPA (National Environmental Policy Act), surveys, documentation, and generation of the related reports for submission, if applicable. Upload documentation into AMLNET.

1.9. Threatened and Endangered Species investigation that is deemed necessary via consultations with USFWS, including bat surveys (portal surveys, roost tree surveys, etc.), habitat surveys, and water quality analysis (at a West Virginia State-certified lab), as needed. Upload documentation into AMLNET.

1.10. Perform all required consultations, surveys, documentation, and generation of reports to generate the draft EA package. Submit the draft EA package to the WVDEP-DLR-AML Planning group for comment / revision. Implement revisions and submit the finalized EA package once the Plans and Specifications are finalized (100% Issued for Bid – see Section 3 below) to WVDEP-DLR-AML Planning. WVDEP-DLR-AML will submit the ATP (Authorization to Proceed) request package to OSMRE (Office of Surface Mining Reclamation & Enforcement) to receive an ATP and Finding of No Significant Impacts (FONSI). Upload documentation into AMLNET.

1.11. Attend design meetings, pre-bid conferences, and pre-construction conferences, as required.

1.12. Engage in any permit or consultation termination activities required at the end of the work for the above, as applicable.

Note that the successful A/E firm, their subcontractors, and their agents will not be permitted onto private property without prior landowner permission, which must be acquired by the successful A/E firm.

The successful A/E firm will be responsible for Realty Work of the following:

2.1. Compliance with all applicable laws, such as collecting and filing certified payroll and for verifying compliance with the Davis-Bacon Act, Infrastructure Investment and Jobs Act (IIJA) (including surveys of employment for current and former employees of the coal industry and any required Environmental Justice reporting), BABA compliance with purchased materials, prevailing wage rates, etc., where applicable.

2.2. Requesting whatever work that has been done, existing agreements that may be in place, available landowner contact information, WVDEP-DLR-AML Ownership Questionnaire template, Master Realty Landowner Contact Information Sheet template, Lien Determination Memorandum, any past history, any other existing information pertaining to the project, and any other information the successful A/E firm believes to be useful that WVDEP-DLR-AML may be able to provide.

2.3. Coordinate with WVDEP-DLR-AML for an on-site scoping meeting.

2.4. Determine legal ownership of the properties to be affected by the project, using desktop

/ online research, prior to acquiring initial (verbal) permissions from affected landowners. This involves defining all parcels of land within the project limits (including access to the project) and then ascertaining the names and contact information for all individuals owning a legal interest in the defined properties. The date of the determination for each property must be documented.

2.5. ***WVDEP-DLR-AML to accompany successful A/E firm on landowner first contact, unless otherwise indicated by the WVDEP-DLR-AML*** Acquiring landowner permission (can be verbal or written) for the WVDEP-DLR-AML, OSMRE, the successful A/E firm, the successful A/E firm's subcontractors, and any other agents of the successful A/E firm to access the landowner's property for whatever investigative activities the successful A/E firm requires to submit a cost proposal to the WVDEP-DLR-AML. Verbal permission from the landowner shall be documented as to the date of contact and the permission granted to enter their property, with this being included in the status updates transmitted to the WVDEP-DLR-AML Realty (see below). **Note that no other on-site activity on private property, by the A/E firm, their subcontractors, or any other A/E firm agents, will be permitted until this has been completed. This restriction applies to each parcel individually (so if the successful A/E firm only has permission from the sole landowner of parcel A, the A/E firm would only be permitted to be on landowner A's property until further permissions were acquired by the A/E firm).** Throughout the course of the project, the successful A/E firm shall act as a liaison between the WVDEP-DLR-AML and the landowner(s) to relay relevant realty information in efforts to develop a comprehensive reclamation plan. Also note that rights of entry are required, not just for the property where work is taking place, but also from borrow / waste locations where excess or needed soil would be deposited or removed from.

2.6. Confirm legal ownership of properties for each landowner with research physically at the courthouse, prior to formal Rights of Entry being requested or signed (see below). Accurate and legal documentation substantiating ownership findings to be uploaded into AMLNET. The date of the confirmation at the courthouse for each property must be documented and shall be included in the status updates required (see below). Any miscellaneous expenses – including expenses for copies – are at the successful A/E firm's expense, if not explicitly included in the proposal.

2.7. In addition to determining legal ownership, it is important to research if the legal owner participated in the mining, if they accepted royalty payments or lease the land / resources for the mining, received some benefit from said mining (monetary or otherwise), did the party or entity in question that benefited from the mining obtain a legal interest in or accrue a benefit from present property owner (including being the parent corporation of a subsidiary to the present property owner, etc.). If the answer to all of the above questions is yes, then ownership is subject to the lien provision within the West Virginia State Code, Chapter 22, Article 2, and the EROE-Lien/CROE-Lien Forms shall be utilized.

2.8. Should there be any dispute or question as to boundary lines, an attempt shall be made to sign up both sides/owners in efforts to avoid a boundary survey. The necessity for boundary surveys by a licensed WV Land Surveyor or certified title opinions in efforts to resolve boundary disputes and ownership shall be discussed with the WVDEP-DLR-

AML staff and the successful A/E firm before taking any action.

2.9. Acquire and document useful project-related information from landowners, including but not limited to: underground utility locations, septic systems, leach fields, right of ways, property boundaries and monuments, cemetery boundaries, safety-related concerns, and any other information that may be useful for construction or access through the property. This project-related information, along with the corresponding WVDEP-DLR-AML Ownership Questionnaire (template available from WVDEP-DLR-AML upon request) to be completed, signed, and uploaded into AMLNET. This further includes inputting the information for the Lien Determination Form into AMLNET.

2.10. Provide status updates of landowner negotiations, landowner questions, and landowner agreements on a regular basis to WVDEP-DLR-AML Realty (assume weekly reporting) – this shall occur from project start to the completion of the Realty work. This will include, at a minimum, an updated Master Realty Landowner Contact Information Sheet completed with all information known at that date and updated monthly.

2.11. Should a landowner request to be listed as an additional insured prior to entering into any agreement, the successful A/E firm shall satisfy the landowner's request prior to accessing their property.

2.12. Perform as frontline contact source in educating the property owner on the WVDEP-DLR-AML program and what it has to offer and conduct negotiation to acquire all necessary Exploratory Rights of Entry (EROE) agreements and Ingress/Egress agreements. These signed agreements shall grant permission for the WVDEP-DLR-AML, OSMRE, the successful A/E firm, and all subcontractors / agents of the successful A/E firm to access the property for investigative purposes in connection with the project. Note that approval must be received from WVDEP-DLR-AML Realty in advance for any commitment made to a landowner (whether verbal or written). Note that any signed document with a landowner must be notarized at the successful A/E firm's expense.

2.13. Consideration shall be given that ownership can change at any point from EROE through CROE and may require the successful A/E firm to acquire new agreements. All ownership of property shall be updated utilizing courthouse records prior to the pre-construction conference in efforts to assure that title has not transferred to a new owner at which time a new CROE would be necessary.

2.14. Throughout the EROE and CROE (below) process, the successful A/E firm will be required to produce and keep daily logs with thorough notes detailing each landowner conversation: who was included in the conversation, a summary of the conversation itself, when the conversation occurred (date and time), and where each conversation has occurred. These logs shall be accurate, detailed, and professional to the point of being sufficient for evidence in court, if required. Legal support will not be required from the successful A/E firm. If, after due diligence by the successful A/E firm, a landowner continues to refuse to agree to Rights of Entry, the entire documented matter shall be turned over to the WVDEP-DLR-AML Realty contact for next steps by the State. Any logs can also be requested at any time by the WVDEP-DLR-AML Realty.

2.15. Upload each EROE packet to AMLNET within five (5) working days of completing; each shall include but not be limited to all land use agreement(s), legal documents, pre-construction photos, ownership questionnaires (with sketches, as required), and landowner correspondences. Original documents to be retained by the successful A/E firm and be available to be supplied to the WVDEP-DLR-AML on an as-needed basis until three (3) years after the project completion.

2.16. Upon receiving EROE, the successful A/E firm representative(s) shall conduct their own reconnaissance of project sites to confirm the information provided in the project narrative (OSM-51) is accurate and to inform the WVDEP-DLR-AML of any newly discovered or undocumented AML features not identified.

2.17. Take photos of existing conditions, document evidence of visible boundaries, and / or potential corner monuments within the project limits and assess or evaluate the most feasible access route for exploratory and construction activities.

2.18. Successful A/E firm will acquire any additional EROE that is deemed necessary by the WVDEP-DLR-AML during the design phase and in accordance with the above stated criteria.

2.19. The Realty section of the successful A/E firm will be responsible for reviewing the plans and specifications in advance of each design review stage to establish a comprehensive understanding of the proposed reclamation plan and provide (internal to the successful A/E firm) comments within a reasonable amount of time should revisions become necessary or if any additional realty related issues require consideration. The Realty section of the successful A/E firm will also be responsible for attending all design review meetings.

2.20. Upon the plans being regarded as acceptable to the WVDEP-DLR-AML, the Realty representative of the successful A/E firm will, in a timely and professional manner, schedule a meeting with each property owner involved. This effort being to review the proposed reclamation plan and to ensure landowner(s) agree with the plan, and ultimately to secure a written Construction Right of Entry (CROE) agreement, Ingress/Egress agreement, and/or a Borrow or Waste agreement consenting to the commencement of construction activities. CROE shall grant permission for the WVDEP-DLR-AML, OSMRE, the successful A/E firm, all subcontractors / agents of the successful A/E firm, the future construction contractor, and all subcontractors / agents of the future construction contractor to access the property for the purposes of constructing the project. Note that any signed document with a landowner must be notarized at the successful A/E firm's expense.

2.21. Uploading the CROE packet within five (5) working days of completing each task in addition to all land use agreements, legal documents, pre-construction photos, and landowner correspondence.

2.22. Engage in other support functions, such as design, pre-bid, and pre-construction conferences attendance, keeping daily logs with thorough notes to document realty-related conversations, and being available for questions or status updates, as needed.

The successful A/E firm will be responsible for Design Work of the following (note

that the below includes any modifications during construction or notices of termination at the end of the work):

3.1 Compliance with all applicable laws, such as collecting and filing certified payroll and for verifying compliance with the Davis-Bacon Act, Infrastructure Investment and Jobs Act (IIJA) (including surveys of employment for current and former employees of the coal industry and any required Environmental Justice reporting), BABA compliance with specified or purchased material(s), prevailing wage rates, etc., where applicable.

3.2 After review of the OSM-51 document(s) and requesting any additional project or site information available, engage in whatever site reconnaissance and investigations the successful A/E firm deems necessary to successfully scope the project. It is strongly recommended that this scope be reviewed by the WVDEP-DLR-AML for comment to generate any additional requirements or items to consider before the successful A/E firm proceeds further.

3.3 The successful A/E firm shall request all existing information pertaining to the project, including but not limited to: prior project as-builts (if applicable), example plans / typical details, example specification(s), disclaimer language to be inserted into the specifications for boring, Pay Application Template, Pre-Bid Conference (PBC) addendum template, Construction Notice to Proceed (NTP) Letter template, Construction Date Certification Form template, Certification of Construction form template, status report template (or the successful A/E firm can propose their own for approval), current State of West Virginia's approved (and current) National Pollutant Discharge Elimination System (NPDES) Construction Stormwater (CSW) General Permit (WV0115924), US Army Corps of Engineers (USACE) Regional General Permit (RGP) for WVDEP-DLR-AML Revised 11/28/2023 (expires 11/28/2028; permit# LRH-2022-932), and any other information the successful A/E firm believes to be useful that WVDEP-DLR-AML may be able to provide.

3.4 Once a more granular scope is agreed upon – which shall include at minimum the problems to be solved and the proposed pathways to the corresponding solutions – the successful A/E firm will generate and embed said written scope into their cost proposal to perform the work that will design solutions to the problems identified.

3.5 Adding detail to and refining the preliminary project schedules included in the accepted cost proposal to generate more detailed schedules showing start dates, end dates, and durations for all tasks associated with each project – these schedules will need to be updated and transmitted monthly to the WVDEP-DLR-AML throughout the life of each project. Generate a status report table (Excel format preferred) showing what deliverables are required for each project and inputting the completion date when completed for each item – this shall be kept up to date throughout the life of each project and transmitted monthly. The expectation is that both the more detailed schedule and status report table above would be reviewed during the kickoff meeting below.

3.6 Once an approved Purchase Order (PO) is received and signed by the successful A/E firm, the WVDEP-DLR-AML will issue the successful A/E firm a Notice to Proceed (NTP) to authorize the earliest date which work can begin. After the NTP date, the successful A/E firm must hold a kick-off meeting with the WVDEP-DLR-AML stakeholders to bring up any needs it has and the overall plan to move forward in detail

(who specifically is working on what, when it is expected to be completed, and any items of note). The successful A/E firm shall take notes in the meeting and email them to the WVDEP-DLR-AML after the meeting is concluded (no later than three (3) business days after, but one (1) business day is preferred – note this requirement is present for any meeting / conference conducted by the successful A/E firm going forward) for review and comment. The successful A/E firm shall also generate, maintain, distribute, and follow up on any action items lists. The successful A/E firm shall generate, maintain, and distribute a project contact list providing the name, area of responsibility, company / agency, phone, and email information for all project stakeholders acting as agents for the WVDEP-DLR-AML on the project, including within WVDEP-DLR-AML itself and also the successful A/E firm.

3.7 Perform any initial site investigations and surveys that may be required. In particular, water, electric, sewage, septic tanks, communications, and any other above or below-ground utilities need to be identified and the corresponding 811 requests made as part of that identification process.

3.8 Overlay all available mine maps on the project site, verify and / or identify all AML features for each project, verify geological information, and attempt to determine the location of underground mine pools and potential portal locations that may have been missed based on available data. Relevant features shall be shown on the Plans. The successful A/E firm shall use all available information, investigations, and other resources to determine the best design to properly mitigate and reclaim the sites.

3.9 Utilities pathways found by Realty in the process of requesting information from landowners to fill out the Ownership Questionnaire need relayed to design.

3.10 The successful A/E firm is responsible to perform (or have performed by their agents) the 811 calls prior to drilling / excavating and to keep a record of when this was done, who was talked to, and any written confirmation, if available. Where there is the possibility of fire, such as a refuse pile or coal seam being excavated or drilled into (that could either start a fire or expose an existing smothered fire within the pile to air to take off), the successful A/E firm shall review the plan with the WVDEP-DLR-AML for approval prior to proceeding with the drilling or excavation.

3.11 Perform any geotechnical investigations, materials testing, and analysis that may be necessary to properly define and complete the design of each project.

3.12 Provide current mapping of project sites to achieve the design scope for each project. Perform topographic survey and other related services. This includes overlaying the site on a USGS quad map, county highway map, an 811 ticket request for marking utilities within project area, surveying original ground features to create an existing conditions basemap with two (2) foot contour intervals and ten (10) foot index contour intervals. Topographic mapping shall meet the National Standard for Spatial Data Accuracy (NSSDA) for Horizontal and Vertical accuracy if derived from aerial photography, satellite imagery, UAS photography or 3D LIDAR. Topographic mapping developed from conventional terrestrial survey or GPS survey methods shall meet NSPS MODEL STANDARDS FOR TOPOGRAPHIC SURVEYS Approved 3/12/02. Mapping shall include but is not limited to planimetrics such as location, size, type, and depth of all marked and observable utilities (private or public) / structures /

fence / posts / portals / property corners / bodies of water or vegetation / tree lines / garbage / coal refuse piles / ditches / culverts / traveled ways / pavements or roads (public or private) / and any specified objects, etc. Mapping will also include spot elevations in areas where contours do not accurately depict the topography. Digital copies of the mapping will be developed and be compatible with AutoCAD 2020 format or WVDEP-DLR-AML accepted later edition. Survey collected point data will be provided in P, N, E, Z and D in .csv or compatible format. All survey data will be provided in the horizontal NAD83 (2011) WV State Plane, North or South Zone, US Survey Foot and vertical NAVD 88 (GEOID18) datum coordinate systems. A minimum of three (3) survey control monuments (rebar or monument with description and references noted) shall be set at each project site. All surveying deliverables must be signed, sealed, and dated by an active West Virginia Registered Professional Surveyor.

3.13 All erosion and sediment control designs and details for all projects shall conform with the State of West Virginia's approved (and current) National Pollutant Discharge Elimination System (NPDES) Construction Stormwater (CSW) General Permit (WV0115924) as obtained by the WVDEP Division of Water and Waste Management (DWWM), and in as such referenced therein the WVDEP Erosion and Sediment Control (ESC) Best Management Practices (BMP) Manual, dated 2006 and revised August 29, 2016 (or current if different). It is preferred that projects be designed such that they can satisfy the requirements of the General Permit and receive a project CSW general permit registration. BMP practices and permit requirements shall be taken into consideration during all stages of the project development and design.

3.14 Generate a conceptual (30%) design for review by the WVDEP-DLR-AML, which shall include conceptual plans. Conceptual plans shall include all information required for the existing site conditions, including a dedicated sheet depicting existing conditions which shall include existing contours, existing utilities, etc. All existing required information must be included in the conceptual design. Conceptual plans shall include another dedicated sheet showing the tax map overlay for the property. Mine mapping overlays, EROE list table, planned or actual boring locations, etc. shall all be clearly defined and provided. This design shall identify conceptual engineered solutions to the problems posed in the OSM-51s / subsequent scope in the proposal and show them on the plans. Any danger to the public or property (such as highwalls, landslides, open portals, underground mine fires, etc.) as well as any impacts to landowners need to be shown and subsequently addressed with an engineered solution in the design at this stage. The site shall have been evaluated at this stage to determine how above-ground and/or subsurface water has contributed to the problems in this area and the correct means to fix this issue without harm to surrounding roads, structures, or the public, if applicable (boring, channels, mine seals, etc.). Conceptual plans shall have the LOD clearly shown with consideration given to access and potential for soil tracking off-site during construction. Consideration shall be given for accessibility during construction and future maintenance. For any construction near a residence, business, or government facility, consideration shall also be given for how the layout / LOD can be tailored to minimize disruption to local landowners, including during construction when both landowners and the construction contractor would need proper access. Consideration shall be given for how the LOD can be tailored to minimize

permitting requirements and schedule impacts. Conceptual engineered solutions need to be practical, feasible, long-term, constructible, legal, technically sound, and be safe for both workers and the public – both in the long-term result and also during the construction process. All details do not need to be present, but what is shown needs to make sense (i.e. not having any fundamental flaws that could carry forward in a complete re-design later). The Plans must be signed, sealed, and dated by an active West Virginia Registered Professional Engineer and clearly stamped "Preliminary – Not for Construction" or equivalent. Upload the conceptual design into AMLNET.

3.15 Schedule and lead a conceptual (30%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the conceptual design plans to the WVDEP-DLR-AML for review. Note any comments or action items that occur before or during the review meeting and email the meeting minutes and action items to the WVDEP-DLR-AML within no later than three (3) business days (one (1) preferred) after the meeting for review and comment. Proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing action items. Upload the conceptual design review comments into AMLNET.

3.16 Throughout the work, effective and timely communication needs to take place within the successful A/E firm itself, between the successful A/E firm and the WVDEP-DLR-AML, and between the successful A/E firm and any external stakeholders who could delay, stop, or hinder the project (such as regulatory agencies or landowners, when appropriate).

3.17 Any tree felling timing restrictions need to be communicated to the designers for them to incorporate into the design package (including the construction specifications) and also the project schedule.

3.18 Any permitting restrictions on timing of any construction activity (such as installation of bat gates, mine seals, or portal closures) need to be incorporated into the design package (including the construction specifications) and also the project schedule.

3.19 Landowner requests need to be considered in the design and incorporated, if approved. This includes asking the landowner(s) for their preference for felled tree disposal (windrowing vs. hauling them off) and incorporating into the design package (including the construction specifications), as needed.

3.20 Generate a preliminary (60%) design submission for review by the WVDEP-DLR-AML. The 60% preliminary design submission (Preliminary PS&E) should include but not be limited to: preliminary plans, preliminary specifications (WVDEP-DLR-AML has examples available upon request), an Engineer's Estimate for estimated construction costs, preliminary Erosion and Sedimentation Control Plan (E&S plans shall be located within the plans), any required cut / fill calculations, any required geotechnical investigation reports (including boring logs, reports, analysis, etc.), and any required hydraulic / hydrologic analysis, or other preliminary information, as needed. This design shall build on the accepted conceptual design, incorporate all comments from the conceptual design phase, and not have any major missing components. Temporary and permanent accesses (for maintenance) shall be clearly shown, as well as any pre-existing ROWs (info from the successful A/E firm's Realty side). Design details need to be present in the plans. This shall show any above-ground

or below-ground utilities, septic tanks, or obstacles that could have an impact on the design or construction. Consideration needs to be given to the location of underground utilities and timber mats properly shown if underground utilities would be crushed by heavy equipment. Consideration shall also be given for any low-hanging above-ground utility lines and the pathway that construction equipment may take, based on the LOD presented. For situations that could involve road obstructions during construction, traffic control needs to be present in the specifications. For a design involving drilling during construction, both plan and profile views of the drilling must be included. When unclassified excavation is paid for by volume quantity, cut / fill calculations must be presented backing up estimated quantities with the shrink / swell factor(s) explicitly stated. Cross-sections for excavations shall be provided, where appropriate. The design needs to be practical, feasible, long-term, constructible, legal, technically sound, and be safe for both workers and the public – both in the long-term result and also during the construction process. At this stage, there shall be consideration given to how the design will be maintained after construction, location and function of E&S Controls, whether a phased E&S control approach is required, any preliminary landowner comments or concerns, and any other granular details. This design shall be accurate, complete, and professional enough to show to landowners for comment in advance of acquiring the CROEs. Both the specifications and plans must be signed, sealed, and dated by an active West Virginia Registered Professional Engineer and clearly stamped "Preliminary – Not for Construction" or equivalent. Upload the preliminary design (60%) PS&E to AMLNET.

3.21 Schedule and lead a preliminary (60%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the preliminary design PS&E package for review. Note any comments or action items that occur before or during the review meeting and subsequently email the meeting minutes and action items to the WVDEP-DLR-AML within three (3) business days (one (1) day preferred) for review and comment. Proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing the action items. Upload the preliminary design (60%) PS&E review comments into AMLNET.

3.22 WVDEP DWWM NPDES CSW General Permit Registration via the ESS. Prepare all required documentation to obtain the permit. Any project that requires an NPDES CSW permit shall be put out for public notice through the permit process. WVDEP-DLR-AML stormwater consultations surveys, documentation, and generation of the related reports for submission, if applicable. Upload documentation into AMLNET.

3.23 USACE (US Army Corps of Engineers) consultations and preparation of 401/404 stream and wetland permits, water quality sampling (at a West Virginia State-certified lab), etc. as applicable. This also includes checking the National Wetland Mapper to identify any possible wetlands that may exist within the areas of disturbance. Upload documentation into AMLNET.

3.24 WV Division of Natural Resources (WVDNR) Office of Land and Streams consultation(s) and preparation of Stream Activity permit(s), as applicable. Upload documentation into AMLNET.

3.25 Any timing restrictions to any activity must be clearly shown in the project schedule.

Examples of timing restrictions that must be shown on the project schedule may include but not be limited to bat studies, portal closures, bat gate installations, in-stream work, tree clearing, etc.

3.26 WVDOH consultations and preparation of Right-of-Way Encroachment Permit Application(s), Form MM-109, and obtain permit(s). Upload documentation into AMLNET.

3.27 County / City consultations and permit preparation for county or city-specific permits, such as floodplain permits, as needed. Upload documentation into AMLNET.

3.28 WV Bureau of Health consultation and permit preparation (if needed, should water lines extensions or septic line reroutes be required). Upload documentation into AMLNET.

3.29 Perform whatever final surveys of the site are needed. All surveying deliverables must be signed, sealed, and dated by an active West Virginia Registered Professional Surveyor and the final survey uploaded into AMLNET.

3.30 For liability reasons, videotape (with audio narrative) and take pictures with date / coordinates / time stamp to document existing conditions prior to any impacting site investigation work (such as drilling, etc., if applicable) and also prior to construction. Particular attention shall be given to any structures present in the LOD (such as cracks in the foundations of houses) and the condition of roads leading to the job-site. This shall also include an overhead drone video of the site before, during, and after construction (drone pilot to be federally licensed) as well as videotape of the roads before and after construction. Note that the specifications will also need to include requirements that the construction contractor perform similar pre-construction surveys as a part of the construction contract. Upload the pictures and video into AMLNET.

3.31 Generate a (90%) design package (PS&E) for review by the WVDEP-DLR-AML, which shall include all design deliverables, with nothing missing. Both the specifications and plans must be signed, sealed, and dated by an active West Virginia Registered Professional Engineer and clearly stamped "Preliminary – Not for Construction" or equivalent. Upload the 90% design package to AMLNET.

3.32 Schedule and lead a (90%) design review meeting with the WVDEP-DLR-AML stakeholders at least one (1) week after transmitting the 90% design documents package for review. Note any comments or action items that occur before or during the review meeting and subsequently email the meeting minutes and action items to the WVDEP-DLR-AML within three (3) business days (one (1) day preferred) for review and comment. Proceed with updating the design in accordance with WVDEP-DLR-AML comments and processing any action items. Upload the 90% design package review comments into AMLNET.

3.33 Generate the (100%) Issued for Bid documents, transmit to WVDEP-DLR-AML, and ask for confirmation that all comments have been incorporated. Upon confirmation, transmit the electronic files to the WVDEP-DLR-AML and also upload the Issued for Bid design package into AMLNET – this includes both pdf and CAD (AutoCAD 2020 format) files of the plans, the specifications, the Engineer's Estimate, geotechnical investigation report, calculations brief, permits and / or project book, and any other

final documentation for the project. Physical copies of the Issued for Bid design package to be mailed or hand-delivered to the WVDEP-DLR-AML – a minimum of three (3) ANSI D-Size (22"x34") sets of the plans are required. The successful A/E firm will also be required to bring one (1) physical copy of Issued for Bid design package to the on-site pre-bid conference (PBC). All documents prepared by a Professional Engineer of the successful A/E firm, including but not limited to Plans, Specifications, Stormwater Pollution Prevention Plan (SWPPP), Calculations Briefs, Geotechnical Investigation Reports, etc. must be signed, sealed, and dated by an active West Virginia Registered Professional Engineer.

3.34 Once WVDEP-DLR-AML has submitted the (100%) Issued for Bid documents to WVDEP Purchasing, WVDEP Purchasing will review the documents and subsequently put the project out to bid once any required changes have been made to their satisfaction. The successful A/E firm will be responsible to implement any required updates that WVDEP Purchasing requests, restamp, and resubmit accordingly in a timely manner to ensure a quick turnaround to pre-bid.

3.35 WVDEP-DLR-AML will schedule and the successful A/E firm will lead the on-site pre-bid conference (PBC) for the potential construction contractors and all other stakeholders. This includes videotaping the PBC conference, documenting any questions / answers / comments discussed during the conference, and providing both the video and conference notes to the WVDEP-DLR-AML within three (3) business days (one (1) day preferred). Staking the site for notable portions of the design immediately before the pre-bid and removing the stakes when the pre-bid is concluded is required, as directed by the WVDEP-DLR-AML (this helps bidders to visualize what is where). Producing an addendum document (WVDEP-DLR-AML has a template available) within three (3) business days (one (1) day preferred) based on the in-person questions with answers, electronic questions submitted in Oasis with answers, and conference notes (also created by the successful A/E firm) for WVDEP-DLR-AML to then process.

3.36 Conduct the on-site pre-construction conference (including all others internal to the successful A/E firm leading the conference). Producing an addendum document (WVDEP-DLR-AML has a template available) within three (3) business days (one (1) day preferred) based on any State-approved changes for WVDEP-DLR-AML to then process, if applicable. Additional detail provided in Section 4 below.

3.37 Complete the Construction Notice to Proceed letter and submit to WVDEP-DLR-AML for signature and processing.

3.38 Engage in any permit or consultation termination activities required at the end of the work for the above, as applicable.

The successful A/E firm will be responsible for Construction Oversight of the following:

4.1. Compliance with all applicable laws, such as collecting and filing certified payroll and for verifying compliance with the Davis-Bacon Act, Infrastructure Investment and Jobs Act (IIJA) (including surveys of employment for current and former employees of the

coal industry and any required Environmental Justice reporting), BABA compliance with purchased materials, prevailing wage rates, etc., where applicable.

4.2. At least one (1) month in advance of construction, provide resumes and reference lists of inspectors planned to be used for the work for approval by the WVDEP-DLR-AML. Approval by the WVDEP-DLR-AML must occur before an inspector can be mobilized to the site. WVDEP-DLR-AML has the right to remove any employee or subcontractor of the successful A/E firm from any project-related site, at the WVDEP-DLR-AML's sole discretion for any reason, and request that an equivalent or better replacement be provided at any time, at no additional cost to the State. Violence, harassment, theft, illegal drug use, on-site intoxication, or other unprofessional behavior will not be tolerated.

4.3. Inspectors to become familiar with the projects, the specifications, the plans, any permit requirements, any landowner obligations, and any other pertinent information to the projects. Ideally, the other members of the successful A/E firm's team will engage in an on-boarding meeting with the new inspectors to bring them up to speed in advance of being mobilized to the site.

4.4. Schedule and lead the on-site pre-construction conference (PCC) with the construction contractor and all other stakeholders. This includes videotaping the conference, documenting any questions / answers / comments discussed during the conference, and providing both the video and conference notes to the WVDEP-DLR-AML for review and comment. Upload video and conference notes into AMLNET upon approval. Producing an addendum document (WVDEP-DLR-AML has a template available) within three (3) business days (one (1) day preferred) based on any State-approved changes for WVDEP-DLR-AML to then process, if applicable.

4.5. Successful A/E firm's Construction Engineer (must be an active West Virginia Registered Professional Engineer) shall be responsible for collecting all required construction contractor submission documents for review and approval. Upload documents into AMLNET, once approved.

4.6. Successful A/E firm Construction Engineer to complete the Construction Date Certification Form, update the relevant information in the WVDEP ESS system / NPDES, and upload the completed form to AMLNET for record.

4.7. During construction, the successful A/E firm's Construction Engineer will be responsible for answering any technical questions that either the Construction Contractor staff or the successful A/E firm's inspectors have concerning the work.

4.8. Construction inspector is to engage in construction oversight while any construction is taking place. The expectation is that – whenever the construction contractor is doing work – the construction inspector is present and watching the work take place. The construction inspector must be actively monitoring the job-site at all times that construction is occurring, ensuring that the correct structures are being installed in the locations shown on the plans, proper soil compaction is being implemented, proper concrete / grout testing is occurring, proper materials are being utilized, ensuring that proper revegetation practices are being followed, ensuring safe work practices, and all other requirements that are being implemented as outlined in the approved purchase

order (APO) contract, which includes the plans, specifications, all other design package deliverables, and any other related documentation to the APO.

4.9. The inspector does not direct means and methods of the work taking place, but the inspector is there to ensure the construction is occurring in accordance with the requirements set forth in the Plans, Specifications, Permits, Purchase Order, etc. If construction is not occurring according to the requirements set forth, the inspector is to immediately inform the construction contractor of the issue. In the event that the issue is not immediately corrected, the inspector is to issue a cease-and-desist order and notify the successful A/E firm's project management. The inspector will need to document the issue via photos with a date, location / coordinates, and time stamp and assemble all the information into a supporting email providing a summary of the issue to the WVDEP-DLR-AML contact for the project within one (1) business day. It is important that the issue be clearly documented by the inspector and that the inspector always remains professional in his / her dealings with the construction contractor – even and especially when the construction contractor is not professional.

4.10. Successful A/E firm will be responsible for reviewing and approving (if justified) all construction contractor invoices. The inspector will need to provide all invoice-related material ticketing, certifications, subsequent photos, etc. to show payment is justified. These documents are required for the successful A/E firm Construction Engineer to approve the invoice. This will allow the invoice to be subsequently approved by the WVDEP-DLR-AML for payment. Successful A/E firm Construction Engineer does have the authority to reject invoices which are not justified. Invoices are to be accepted or rejected within three (3) business days.

4.11. The successful A/E firm or WVDEP-DLR-AML may, at its discretion, choose to reject any invoice(s) for work not completed in accordance with the contract Plans and Specifications. The inspector will need to document the issue via photos with a date, location / coordinates, and time stamp and assemble all the information into a supporting email providing a summary of the issue to the WVDEP-DLR-AML contact for the project. It is important that the issue be clearly documented by the inspector and that the inspector always remains professional in his / her dealings with the construction contractor – even and especially when the construction contractor is not professional.

4.12. If the inspector sees a safety issue, which is an immediate risk to life or property, the inspector is to immediately stop the job, provide the contractor an opportunity to correct the issue, and then, if the contractor has not taken corrective actions that remove the immediate risk to life or property, issue a cease-and-desist order. The inspector is to then immediately call the WVDEP-DLR-AML contact(s), including the Project Engineer, for the project. The inspector shall thoroughly document the issue via photos with a date, location / coordinates, and time stamp. The inspector shall assemble all supporting information into an email providing a summary of the issue to the WVDEP-DLR-AML contact(s), including the Project Engineer, for the project. The construction contractor will be required to cease work for a period of time specified in the cease-and-desist order, engage in a safety standdown, and correct the safety issue in order to resume work.

4.13. The construction inspector is to keep a daily log for each day that construction occurs that contains photos with a date, location / coordinates, and time stamp detailing what has occurred for that day. If concrete or grout testing and pouring have occurred, that will need to be included. The daily log is to be uploaded into AMLNET daily but in no case later than forty-eight (48) hours after the date of the inspection. Any problems or concerns must be detailed in the daily log and shall be brought to the successful A/E firm's Project Engineer and the WVDEP-DLR-AML's attention at least before the end of the day (but preferably when known).

4.14. Each day that an environmental inspector performs an inspection, the inspector is to fill out an inspection form that details, at a minimum: date, location, weather, rainfall amount, what was inspected, the results of the inspection, and any other items of note. Inspection form to be uploaded into AMLNET on a same-day basis but in no case later than 48 hours after the date of the inspection. The same holds true for personnel training records, maintenance reports, and corrective action reports (see Stormwater Permit for details). Any problems or concerns detailed in the inspection forms shall be brought to the successful A/E firm's Project Engineer and the WVDEP-DLR-AML's attention at least before the end of the day (but preferably when known).

4.15. Any update to the Erosion and Sediment Control plans must be approved by the Engineer who stamped the plans and / or the successful A/E firm Engineer that prepared the NPDES application and was responsible for obtaining the stormwater permit. Once approved, the redline showing this update must be marked on the on-site copy of the E&S plans by the environmental inspector. This must be done before the update is physically implemented. The on-site redline copy of the E&S plans must be kept on-site at all times in the event of an audit. This can often come up with silt fence needing moved because the location shown on the plans would be ineffective or additional E&S controls being required. A photo of the updated redline copy of the E&S plans is to be uploaded into AMLNET by the inspector.

4.16. Should a permit modification be needed per DWWM and NPDES requirements, the successful A/E firm shall be required to prepare and submit all needed modification documentation to get the modification approved.

4.17. Any update to the plans themselves must be approved by the Engineer who stamped the plans. Once approved, the redline showing this update must be marked on the redlines for the construction (which is the issued for bid drawings with the redline marks written on it). This must be done before the update is physically implemented. A photo of the updated redlines for the construction is to be uploaded into AMLNET by the inspector. At the end of the job, these redlines must be assembled into one (1) package by the Construction Contractor, reviewed by the inspector, and uploaded in one (1) package to AMLNET by the inspector.

4.18. At the conclusion of the construction, the successful A/E firm will issue the WVDEP-DLR-AML a certification that the project was installed in accordance with the plans and specifications. This certification must be signed, sealed, and dated by an active West Virginia Registered Professional Engineer acting as an official representative of the successful A/E firm. The successful A/E firm will also upload the drone videos, pictures, and road videos before, during, and after construction to AMLNET.

4.19. Successful A/E firm will be responsible for inspections during the construction contractor warranty period.

4.20. DWWM / Environmental Enforcement will need to be notified that a Notice of Termination (NOT) is being requested once the project is ready to be released from the NPDES permit. This needs to be completed at least sixty (60) days prior to the warranty release meeting. If the project is not released from the NPDES permit, the project is not eligible for the warranty release.

4.21. At the conclusion of the one (1) year warranty period or when the warranty is released, whichever is later – and neither of which can occur before all project-related permits are released – the successful A/E firm will be responsible to attend the warranty release meeting with the construction contractor, affirm that all warranty obligations have been satisfied (if they have or reject if not), and sign off on the release of warranty at the end of the Work.

4.22. Complete the Bond Release document and submit to WVDEP-DLR-AML for signature and processing.

ATTACHMENT B

COST PROPOSAL REQUIREMENTS

WVDEP-DLR-AML has provided an Application and Certificate for Payment template spreadsheet file, which will mirror future pay applications / invoices, for the successful A/E firm to develop their Task / Cost Breakdown portion of their proposal for each project that is part of the contract. Please note this Application and Certificate for Payment template will clarify much of what is stated below regarding the Cost Proposal.

Cost Proposal should be electronically returned to WVDEP-DLR-AML representative within 14 calendar days after the conclusion of all meetings with the WVDEP-DLR-AML regarding the proposal. If this is unachievable, the successful A/E firm should contact the WVDEP-DLR-AML representative to establish a mutually agreeable deadline.

Cost proposal from the successful A/E firm will have a "Task / Cost Breakdown Schedule" section detailing Contract Quantities ("not-to-exceed") and the associated Unit Bid Prices for each task and compensable subtask. Cost Proposal is to include rates locked in for the entire duration of the contract (any escalation / inflation – and any overtime needed to meet the schedule – need incorporated into the unit bid prices provided).

The expectation is that the proposal should encompass reasonably foreseeable contingencies such that change orders will be kept to a minimum or eliminated entirely. In the event of unknowns that cannot be defined at this stage, assumptions should be stated to adequately limit the liability within the proposal. The successful A/E firm could state in their proposal that they are assuming their borings (soil augering and rock coring) required will be beyond the amount that would require a change order. The successful A/E firm would only bill for the boring lengths performed.

Proposal **must** encompass the below:

a. Proposal must explicitly state, "Hours not worked and costs not incurred will not be billed."
b. Proposal must **not** describe itself as time and material with no cost or hours limit.
c. Proposal must explicitly state that rates are locked in for the duration of the contract.
d. Proposal must explicitly state that rates are flat rates with the State not being billed a higher rate for overtime.
e. Proposal must explicitly state that all documents prepared by a Professional Engineer of the successful A/E firm, including but not limited to Plans, Specifications, Stormwater Pollution Prevention Plan (SWPPP), Calculations Briefs, Geotechnical Investigation Reports, etc. must be signed, sealed, and dated by an active West Virginia Registered Professional Engineer.
f. Proposal must explicitly state that all surveying deliverables must be signed, sealed, and dated by an active West Virginia Registered Professional Surveyor.
g. Proposal must explicitly state that both PDFs and CAD files (in AutoCAD 2020 format or WVDEP-DLR-AML accepted later edition) of the plans must be included as part of the electronic portion of the final design deliverables to the WVDEP-DLR-AML. Please reference the "Detailed Description of Services Required" document for what encompasses final design deliverables.

h. Proposal should explicitly state that both electronic (USB / CD and email / Google Drive) and physical copies will be transmitted to the WVDEP-DLR-AML as a part of the final design and documents deliverables. Number of physical copies to be determined on a project-by-project basis. All deliverables to be uploaded into AMLNET (WVDEP-DLR-AML online record-keeping database).

i. Proposal must explicitly indicate that the WVDEP-DLR-AML has the right to remove any employee or subcontractor of the successful A/E firm from any project-related site, at the WVDEP-DLR-AML's sole discretion for any reason, and request that an equivalent or better replacement be provided at any time, at no additional cost to the State. Violence, harassment, theft, illegal drug use, on-site intoxication, or other unprofessional behavior will not be tolerated.

j. Proposal must explicitly indicate that, at the end of the project, the successful A/E firm will provide a final certification of the project to the WVDEP-DLR-AML.

k. Proposal should be developed assuming that all information provided upon request from the WVDEP-DLR-AML up to the date of the proposal is the only information available from the WVDEP-DLR-AML. Whatever additional investigation quantities may be required to take this information to completion should be included in the proposal by the successful A/E firm. The successful A/E firm should also build quantities into their proposal to confirm all information received.

l. Proposal should assume that WVDEP-DLR-AML will serve in only a support capacity (answering questions or making Management decisions), with the successful A/E firm providing a complete solution to the project: planning (including but not limited to all aspects of necessary permitting and consultations), realty, design, and construction oversight.

m. Proposal should assume that the successful A/E firm will prepare and submit the NPDES Construction Stormwater Permit Registration Application.

n. Proposal should assume that NEPA consultations will lead to an Environmental Assessment **not** an Environmental Impact Statement (unless specifically required or requested during the proposal development).

o. If applicable, proposal should assume both Phase I and Phase II bat assessments will be required and have each broken out separately.

p. Proposal should assume all realty documents requiring signature must be notarized at the successful A/E firm's expense.

q. Proposal should assume boundary surveys are not included within the scope (however the successful A/E firm needs to have the capability of performing them, should they become necessary).

r. Proposal should assume quantities for sampling and testing of water for any project requiring such information. All water sampling analysis will occur at a WV-certified lab. Successful A/E firm to coordinate with WVDEP-DLR-AML for specific sampling requirements.

s. Proposal should assume that any properties operating under a current lease agreement (such as a replacement project) will need to have the current lease agreement boundaries identified / verified and a plat developed, as applicable. Plat must be signed, sealed, and dated by an active West Virginia Registered Professional Surveyor.

t. For any permanent facility with electricity going to it containing a Motor Control Center bucket (MCC), the proposal should assume that an arc flash study will be

required, as applicable.

u. Proposal should assume compliance with OSHA in both design and construction, and the manhours for the checks to make that happen. For example, any permanent facility with a ladder extending more than 24 feet, the design must include cages around ladders, offset landings, kick plates, mid rail, top rail, self-closing safety gate at the top, and a personal fall arrest system incorporated into the design (see https://www.ecfr.gov/current/title-29/subtitle-B/chapter-XVII/part-1910/subpart-D for details), as applicable.

v. Proposal should include sufficient quantities to manage the project – this includes tracking all action items due by any party (including the WVDEP-DLR-AML) and regularly following up on each action item until resolved. This also includes taking notes and emailing a summary of all meetings with the WVDEP-DLR-AML, preferably by the next business day but in no case later than 3 business days after the meeting. This further includes providing a more detailed project schedule of the successful A/E firm's scope than what is included in the proposal, regularly updating that schedule, and distributing a copy of the schedule to the WVDEP-DLR-AML at regular intervals (for the purposes of the proposal, assume the schedule will be updated and distributed on a monthly basis).

w. Proposal should include sufficient quantities (at least 40hrs) for the successful A/E firm's representative(s) of each discipline to engage in training with the WVDEP-DLR-AML, as well as to provide other support functions, such as presentations, as needed.

x. Proposal should include sufficient quantities for all relevant documentation to be uploaded into AMLNET (WVDEP-DLR-AML document storage database).

y. Proposal should explicitly state the number of hours per day and days per week that the successful A/E firm has estimated for the construction inspector and the number of weeks of inspection estimated per project.

z. Proposal narrative should describe the experience, qualifications, and responsibility-level of construction inspectors, with a different description for each pay scale (tell us the difference between a mid-level construction inspector and a senior construction inspector and what will be expected of each).

aa. Proposal should include a manager that all inspectors on all projects within this contract report to (for a small number of projects this could just be a project manager, but if a large number of construction projects are occurring concurrently, this will need its own position).

bb. Proposal should include allowing sufficient quantities to produce construction specifications and plans such that all permit requirements are included into the construction contractor's scope of work. This includes making sure the requirement for the construction contractor to provide environmental inspector(s) is included (with AMLNET uploads of inspection reports) as well as ensuring that it is explicitly written that all fines are to be paid by the construction contractor.

cc. Proposal should include additional administrative support quantities to oversee and ensure compliance with all applicable laws, such as collecting and filing certified payroll and for verifying compliance with the Davis-Bacon Act, Infrastructure Investment and Jobs Act (IIJA) (including surveys of employment for current and former employees of the coal industry), BABA compliance with purchased materials, prevailing wage rates, etc., where applicable.

dd. Proposal should include videotaping the job site (usually with time-lapsed drone videos) and photos (such as close-in photos of building foundations) before, during, and after construction and uploading the video and photos into AMLNET. This usually also includes videotaping the roads to be used by construction before and after construction activities, which also need to be uploaded into AMLNET.

ee. Proposal should include quantities to attend, schedule, and lead the pre-bid and pre-construction conferences with the construction contractor(s) for each project. This includes videotaping the conferences, documenting any questions / answers / comments discussed during the meeting, and providing both the video and meeting notes to the WVDEP-DLR-AML, preferably by the next business day but in no case later than 3 business days after the conference. Proposal should also include generating an addendum or addenda document(s) (WVDEP-DLR-AML has a template available) based on the in-person questions with answers, electronic questions submitted in Oasis with answers, and meeting notes for WVDEP-DLR-AML to then process.

ff. Proposal must **not** have legal clauses that remove all responsibility from the successful A/E firm. The successful A/E firm is not responsible for factors beyond its reasonable control, but it is responsible for working in good faith to produce the deliverables it is being paid to provide at a professional level of quality.

gg. Proposal must **not** use the word "estimated" in front of hours or costs.

hh. Proposal must structure payment terms to mirror quantities and costs incurred being billed (**not** lump sum based on % complete). Individual line item descriptions (tasks or job classification) within the Task / Cost Breakdown may still be lump sum (such as mobilization for a drilling crew) but not the project in whole.

ii. Proposal must be consistent with itself. For example, the narrative of the proposal should be subdivided into sections to mirror and match the Task / Cost Breakdown portion of the proposal.

jj. Within the Task / Cost Breakdown portion of the proposal, if there is a unit rate associated with a given description (like "Engineer II") that same rate needs applied for all tasks with that description. Subcontractors with a different rate need to have a different task (like "Sub-Engineer II").

kk. Task / Cost Breakdown may only pick one of "Vehicle" or "Mileage" for each given task. Both cannot be present for a given task.

ll. Task / Cost Breakdown must be completely filled out without any blanks present. Zeros should be used as a quantity if a given description is not needed for a given task or project. All units must be identified and associated unit bid prices provided.

Cost proposal is to include a preliminary schedule showing beginning dates, ending dates, and durations for all major tasks – this schedule will need to be consistent with the other parts of the cost proposal (like in the narrative of the proposal where the number of weeks of inspection per project is given and the total quantities for the inspectors being consistent with what is shown in the Task / Cost Breakdown). The schedule also needs to make sense; for instance, showing construction – that isn't tree clearing – in the middle of winter should be avoided. Likewise, tree clearing windows and when bat studies are permitted to occur need factored into the schedule provided with the proposal. Schedule is to be in the form of a Gantt chart or other WVDEP-DLR-AML acceptable format.

The proposal shall not be considered as open-ended time and material – the successful A/E firm's proposal is binding once a Purchase Order is given, and any quantities beyond the Contract Quantity ("not to exceed") are at the successful A/E firm's risk. Because of this, it is in the successful A/E firm's interests to include prudent quantities within the Task / Cost Breakdown likely to cover or exceed what might be encountered for each project. Notwithstanding, if any quantities do not appear to be reasonable, the WVDEP-DLR-AML will bring this to the successful A/E firm's attention for reconsideration and / or correction. If the matter cannot be expediently resolved (as determined by the WVDEP-DLR-AML), the WVDEP-DLR-AML reserves the right to proceed with the 2nd highest ranked bidder.

WVDEP-DLR-AML **is not** willing to proceed with a professional services contract where the invoices are based on a lump-sum / percent complete basis. WVDEP-DLR-AML **is** willing to proceed with a professional services contract where the invoices are based on actual quantities worked and costs incurred up to the limits set in the Task / Cost Breakdown. Once the Purchase Order has been issued by the WVDEP-DLR-AML to the successful A/E firm to properly complete the work, any tasks requiring additional quantities must be evaluated and adjustment made through the change order process. The successful A/E firm may only invoice for task contract quantities incurred and shall not be permitted to exceed in total the contract quantity, as reflected in the Task / Cost Breakdown included in the approved Purchase Order or approved Change Order for a given task. The successful A/E firm should plan to bill monthly until the work is completed.

ATTACHMENT C

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 1
Project Name: Enterprise Portal

Application No.: CONTRACT NEGOTIATION | **PAGE 1 of 6 Pages**

SCHEDULE PER CONTRACT							WORK COMPLETED					
							PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK			DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK I: PLANNING													
A			AGENCY COORDINATION (INCLUDING OFFICE WORK, AMLNET, ETC.)										
	1		Principal	HR	8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	2		Project Manager / Senior Engineer	HR	16	$195.00	$3,120		$0.00		$0.00	0.0	$0.00
	3		Engineer / Technical Scientist	HR	16	$150.00	$2,400		$0.00		$0.00	0.0	$0.00
	4		Planning / Technical Specialist	HR	24	$110.00	$2,640		$0.00		$0.00	0.0	$0.00
B			PUBLIC INVOLVEMENT (INCLUDING LEGAL ADS, PUBLIC HEARINGS, DOCUMENTS, PRESENTATIONS, WVDEP'S WEBSITE, ETC.)										
	1		Principal	HR	1	$235.00	$235		$0.00		$0.00	0.0	$0.00
	2		Project Manager / Senior Engineer	HR	1	$195.00	$195		$0.00		$0.00	0.0	$0.00
	3		Engineer / Technical Scientist	HR	1	$150.00	$150		$0.00		$0.00	0.0	$0.00
	4		Planning / Technical Specialist	HR	1	$110.00	$110		$0.00		$0.00	0.0	$0.00
C			STUDIES, SURVEYS & MITIGATION PLANS (AS APPLICABLE)										
	1		Principal		8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	2		Project Manager / Senior Engineer	HR	16	$195.00	$3,120		$0.00		$0.00	0.0	$0.00
	3		Engineer / Technical Scientist	HR	20	$150.00	$3,000		$0.00		$0.00	0.0	$0.00
	4		Planning / Technical Specialist	HR	24	$110.00	$2,640		$0.00		$0.00	0.0	$0.00
D			CATEX / EA / FONSI / EIS										
	1		Pricipal	HR	4	$235.00	$940		$0.00		$0.00	0.0	$0.00
	2		Project Manager / Senior Engineer	HR	8	$195.00	$1,560		$0.00		$0.00	0.0	$0.00
	3		Engineer / Technical Scientist	HR	16	$150.00	$2,400		$0.00		$0.00	0.0	$0.00
	4		Planning / Technical Specialist	HR	24	$110.00	$2,640		$0.00		$0.00	0.0	$0.00
						SUBTOTAL PAGE 1 COST	$28,910	SUBTOTAL PAGE 1 PREVIOUS	$0.00	SUBTOTAL PAGE 1 THIS APPLICATION	$0.00	SUBTOTAL PAGE 1 TO DATE	$0.00

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 1
Project Name: Enterprise Portal

Application No.: CONTRACT NEGOTIATION | **PAGE 2 of 6 Pages**

SCHEDULE PER CONTRACT								WORK COMPLETED					
								PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK			DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK II: REALTY													
A			EXPLORATORY RIGHTS OF ENTRY (EROE)										
	1		Principal	HR	8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	2		Project Manager / Senior Engineer	HR	16	$195.00	$3,120		$0.00		$0.00	0.0	$0.00
	3		ROW Manager	HR	64	$150.00	$9,600		$0.00		$0.00		$0.00
	4		Realty Agent										
		a	Courthouse Work	HR	40	$120.00	$4,800		$0.00		$0.00	0.0	$0.00
		b	Field Reconnaisance / Landowner Correspondence	HR	40	$120.00	$4,800		$0.00		$0.00	0.0	$0.00
		c	Office Work / AMLNET	HR	24	$120.00	$2,880		$0.00		$0.00	0.0	$0.00
B			CONSTRUCTION RIGHTS OF ENTRY (CROE)										
	1		Project Manager / Senior Engineer	HR	8	$195.00	$1,560		$0.00		$0.00	0.0	$0.00
	2		ROW Manager	HR	24	$150.00	$3,600		$0.00		$0.00	0.0	$0.00
	3		Realty Agent										
		a	Courthouse Work	HR	24	$120.00	$2,880		$0.00		$0.00	0.0	$0.00
		b	Field Reconnaisance / Landowner Correspondence	HR	12	$120.00	$1,440		$0.00		$0.00	0.0	$0.00
		c	Office Work / AMLNET	HR	8	$120.00	$960		$0.00		$0.00	0.0	$0.00
C			PRE-BID CONFERENCE										
	1		ROW Manager	HR	12	$150.00	$1,800		$0.00		$0.00	0.0	$0.00
	2		Realty Agent	HR	4	$120.00	$480		$0.00		$0.00	0.0	$0.00
D			PRE-CONSTRUCTION CONFERENCE										
	1		ROW Manager	HR	12	$150.00	$1,800		$0.00		$0.00	0.0	$0.00
	2		Realty Agent	HR	4	$120.00	$480		$0.00		$0.00	0.0	$0.00
						SUBTOTAL PAGE 2 COST	$42,080	SUBTOTAL PAGE 2 PREVIOUS	$0.00	SUBTOTAL PAGE 2 THIS APPLICATION	$0.00	SUBTOTAL PAGE 2 TO DATE	$0.00

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 1
Project Name: Enterprise Portal

Application No.: CONTRACT NEGOTIATION | **PAGE 3 of 6 Pages**

SCHEDULE PER CONTRACT							WORK COMPLETED					
							PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK			DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	UNIT BID PRICE	UNITS	COST	UNITS	COST	UNITS	COST
TASK III: DESIGN													
A			SITE RECONNAISSANCE AND INVESTIGATIONS										
	1		Principal	HR	8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	2		Project Manager / Senior Engineer	HR	16	$195.00	$3,120		$0.00		$0.00	0.0	$0.00
	3		Technical Scientist / Environmental Specialist	HR	16	$150.00	$2,400		$0.00		$0.00	0.0	$0.00
	4		Staff Engineer	HR	24	$110.00	$2,640		$0.00		$0.00	0.0	$0.00
B			SURVEYING & MAPPING										
	1		Principal	HR	8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	2		Project Manager / Senior Engineer	HR	16	$195.00	$3,120		$0.00		$0.00	0.0	$0.00
	3		Staff Engineer	HR	40	$110.00	$4,400		$0.00		$0.00	0.0	$0.00
	4		Professional Surveyor / Chief Surveyor	HR	20	$165.00	$3,300		$0.00		$0.00	0.0	$0.00
	5		Survey Crew	HR	20	$170.00	$3,400		$0.00		$0.00	0.0	$0.00
	6		Senior Technician	HR	24	$95.00	$2,280		$0.00		$0.00	0.0	$0.00
	7		Topographic, Planimetric and Check Surveying	LS	1	$10,000.00	$10,000		$0.00		$0.00	0.0	$0.00
C			GEOTECHNICAL INVESTIGATION										
	1		Principal	HR	8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	2		Project Manager / Senior Engineer	HR	12	$195.00	$2,340		$0.00		$0.00	0.0	$0.00
	3		Geotechnical Engineer/Geologist	HR	24	$150.00	$3,600		$0.00		$0.00	0.0	$0.00
	4		Staff Geologist/Engineer	HR	50	$110.00	$5,500		$0.00		$0.00	0.0	$0.00
	5		Admin Support	HR	12	$85.00	$1,020		$0.00		$0.00	0.0	$0.00
	6		Mobilization / Demobilization	LS	1	$3,500.00	$3,500		$0.00		$0.00	0.0	$0.00
	7		Soil Augering	LF	250	$40.00	$10,000		$0.00		$0.00	0.0	$0.00
	8		Rock Coring	LF	250	$40.00	$10,000		$0.00		$0.00	0.0	$0.00
	9		Heavy Equipment	Day	1	$1,500.00	$1,500		$0.00		$0.00	0.0	$0.00
	10		Piezometer Installation	LS	1	$6,500.00	$6,500		$0.00		$0.00	0.0	$0.00
	11		Piezometer Removal	LS	1	$2,500.00	$2,500		$0.00		$0.00	0.0	$0.00
	12		Drill Crew Per Diem	Day	7	$450.00	$3,150		$0.00		$0.00	0.0	$0.00
	13		Lab Testing	LS	1	$2,000.00	$2,000		$0.00		$0.00		
	14		Reclamation	LS	1	$2,500.00	$2,500		$0.00		$0.00	0.0	$0.00
	15		Geotechnical Investigation Report	LS	1	$7,000.00	$7,000		$0.00		$0.00	0.0	$0.00
						SUBTOTAL PAGE 3 COST	$101,410	SUBTOTAL PAGE 3 PREVIOUS	$0.00	SUBTOTAL PAGE 3 THIS APPLICATION	$0.00	SUBTOTAL PAGE 3 TO DATE	$0.00

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 1
Project Name: Enterprise Portal

Application No.: CONTRACT NEGOTIATION | **Page 4 of 6 Pages**

SCHEDULE PER CONTRACT							WORK COMPLETED					
							PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK			DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK III: DESIGN (CONTINUED)													
D			CONCEPTUAL DESIGN (30%)										
	1		Project Manager / Senior Engineer	HR	48	$195.00	$9,360		$0.00		$0.00	0.0	$0.00
	2		Engineer / Environmental Scientist	HR	60	$150.00	$9,000		$0.00		$0.00	0.0	$0.00
	3		Principal Engineer / Scientist	HR	16	$235.00	$3,760		$0.00		$0.00	0.0	$0.00
	4		Environmental Specialist / Staff Engineer	HR	120	$110.00	$13,200		$0.00		$0.00	0.0	$0.00
	5		CADD Technician	HR	60	$95.00	$5,700		$0.00		$0.00	0.0	$0.00
	6		Adminstration	HR	4	$85.00	$340		$0.00		$0.00	0.0	$0.00
E			PRELIMINARY DESIGN (60%)										
	1		Project Manager / Senior Engineer	HR	48	$195.00	$9,360		$0.00		$0.00	0.0	$0.00
	2		Engineer / Environmental Scientist	HR	60	$150.00	$9,000		$0.00		$0.00	0.0	$0.00
	3		Principal Engineer / Scientist	HR	16	$235.00	$3,760		$0.00		$0.00	0.0	$0.00
	4		Environmental Specialist / Staff Engineer / Geologist	HR	120	$110.00	$13,200		$0.00		$0.00	0.0	$0.00
	5		CADD Technician	HR	60	$95.00	$5,700		$0.00		$0.00	0.0	$0.00
	6		Adminstration	HR	4	$85.00	$340		$0.00		$0.00	0.0	$0.00
F			PRE-FINAL DESIGN (90%)										
	1		Project Manager / Senior Engineer	HR	48	$195.00	$9,360		$0.00		$0.00	0.0	$0.00
	2		Engineer / Environmental Scientist	HR	60	$150.00	$9,000		$0.00		$0.00	0.0	$0.00
	3		Principal Engineer / Scientist	HR	16	$235.00	$3,760		$0.00		$0.00	0.0	$0.00
	4		Environmental Specialist / Staff Engineer / Geologist	HR	120	$110.00	$13,200		$0.00		$0.00	0.0	$0.00
	5		CADD Technician	HR	60	$95.00	$5,700		$0.00		$0.00	0.0	$0.00
	6		Adminstration	HR	4	$85.00	$340		$0.00		$0.00	0.0	$0.00
G			FINAL DESIGN (100%)										
	1		Project Manager / Senior Engineer	HR	8	$195.00	$1,560		$0.00		$0.00	0.0	$0.00
	2		Engineer / Environmental Scientist	HR	12	$150.00	$1,800		$0.00		$0.00	0.0	$0.00
	3		Principal Engineer / Scientist	HR	4	$235.00	$940		$0.00		$0.00	0.0	$0.00
	4		Environmental Specialist / Staff Engineer / Geologist	HR	24	$110.00	$2,640		$0.00		$0.00	0.0	$0.00
	5		CADD Technician	HR	24	$95.00	$2,280		$0.00		$0.00	0.0	$0.00
	6		Adminstration	HR	4	$85.00	$340		$0.00		$0.00	0.0	$0.00
						SUBTOTAL PAGE 4 COST	$133,640	SUBTOTAL PAGE 4 PREVIOUS	$0.00	SUBTOTAL PAGE 4 THIS APPLICATION	$0.00	SUBTOTAL PAGE 4 TO DATE	$0.00

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 1
Project Name: Enterprise Portal

Application No.: CONTRACT NEGOTIATION | **Page 5 of 6 Pages**

SCHEDULE PER CONTRACT							WORK COMPLETED					
							PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK			DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK III: DESIGN (CONTINUED)													
F			PERMITTING (Matrix, USACE, USFWS, WVDNR, WVSHPO, FLOOD, WVDOH)										
	1		Project Manager / Senior Engineer	HR	40	$195.00	$7,800		$0.00		$0.00	0.0	$0.00
	2		Principal Engineer / Scientist	HR	16	$235.00	$3,760		$0.00		$0.00	0.0	$0.00
	3		Engineer / Environmental Scientist	HR	48	$150.00	$7,200		$0.00		$0.00	0.0	$0.00
	4		Planning Specialist	HR	60	$110.00	$6,600		$0.00		$0.00	0.0	$0.00
G			PRE-BID CONFERENCE										
	1		Project Manager / Senior Engineer	HR	12	$195.00	$2,340		$0.00		$0.00	0.0	$0.00
	2		Construction Inspector	HR	12	$145.00	$1,740		$0.00		$0.00	0.0	$0.00
H			PRE-CONSTRUCTION CONFERENCE										
	1		Project Manager / Senior Engineer	HR	12	$195.00	$2,340		$0.00		$0.00	0.0	$0.00
	2		Construction Inspector	HR	12	$145.00	$1,740		$0.00		$0.00	0.0	$0.00
						SUBTOTAL PAGE 5 COST	$33,520	SUBTOTAL PAGE 5 PREVIOUS	$0.00	SUBTOTAL PAGE 5 THIS APPLICATION	$0.00	SUBTOTAL PAGE 5 TO DATE	$0.00

B

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 1
Project Name: Enterprise Portal

Application No.: CONTRACT NEGOTIATION |

SCHEDULE PER CONTRACT							WORK COMPLETED					
							PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK			DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK IV: CONSTRUCTION OVERSIGHT													
A			CONSTRUCTION INSPECTION										
	1		Project Manager / Senior Engineer	HR	108	$195.00	$21,060		$0.00		$0.00	0.0	$0.00
	2		Construction Inspector										
		a	Construction Inspection	HR	672	$145.00	$97,440		$0.00		$0.00	0.0	$0.00
		b	Office Work / AMLNET	HR	40	$145.00	$5,800		$0.00		$0.00	0.0	$0.00
	3		Administrative Staff	HR	16	$85.00	$1,360		$0.00		$0.00		
TASK V: POST-CONSTRUCTION OVERSIGHT													
A			FIELD VISITS / INSPECTIONS										
	1		Project Manager / Senior Engineer	HR	12	$195.00	$2,340		$0.00		$0.00	0.0	$0.00
	2		Construction Inspector	HR	180	$145.00	$26,100		$0.00		$0.00	0.0	$0.00

	SUBTOTAL PAGE 6 AMOUNT	$154,100	SUBTOTAL PAGE 6 PREVIOUS	$0	SUBTOTAL PAGE 6 THIS APPLICATION	$0	SUBTOTAL PAGE 6 TO DATE	$0
TOTAL TASK I - V COST	TOTAL CONTRACT AMOUNT	$493,660	TOTAL PREVIOUS BILLED	$0	TOTAL BILLED THIS APPLICATION	$0	TOTAL BILLED TO DATE TASK I - V	$0
2023 AML Contract N1	TOTAL CONTRACT AMOUNT	$3,409,570	TOTAL PREVIOUS CONTRACT BILLED	$0	TOTAL CONTRACT BILLED THIS APPLICATION	$0	TOTAL BILLED CONTRACT TO DATE	$0

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 2
Project Name: Glosser Williams Property Phase II

Application No.: CONTRACT NEGOTIATION | **PAGE 1 of 1 Pages**

SCHEDULE PER CONTRACT							WORK COMPLETED					
							PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK		DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK I: FEASIBILITY STUDY												
A		GLOSSER WILLIAMS										
	1	Principal	HR	16	$235.00	$3,760		$0.00		$0.00	0.0	$0.00
	2	Project Manager / Senior Engineer	HR	40	$195.00	$7,800		$0.00		$0.00	0.0	$0.00
	3	Engineer / Technical Scientist	HR	12	$150.00	$1,800		$0.00		$0.00	0.0	$0.00
	4	Planning / Technical Specialist	HR	12	$110.00	$1,320		$0.00		$0.00	0.0	$0.00

	SUBTOTAL PAGE 1 COST	$14,680	SUBTOTAL PAGE 1 PREVIOUS	$0	SUBTOTAL PAGE 1 THIS APPLICATION	$0	SUBTOTAL PAGE 1 TO DATE	$0
TOTAL COMMODITY	TOTAL CONTRACT AMOUNT	$14,680	TOTAL PREVIOUS BILLED	$0	TOTAL BILLED THIS APPLICATION	$0	TOTAL BILLED TO DATE TASK I - V	$0
2023 AML Contract N1	TOTAL CONTRACT AMOUNT	$3,409,570	TOTAL PREVIOUS CONTRACT BILLED	$0	TOTAL CONTRACT BILLED THIS APPLICATION	$0	TOTAL BILLED CONTRACT TO DATE	$0

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 3
Project Name: Miller Mine Drainage Phase II

Application No.: CONTRACT NEGOTIATION | **PAGE 1 of 6 Pages**

SCHEDULE PER CONTRACT							WORK COMPLETED					
							PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK			DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK I: PLANNING													
A			AGENCY COORDINATION (INCLUDING OFFICE WORK, AMLNET, ETC.)										
	1		Principal	HR	8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	2		Project Manager / Senior Engineer	HR	12	$195.00	$2,340		$0.00		$0.00	0.0	$0.00
	3		Engineer / Technical Scientist	HR	8	$150.00	$1,200		$0.00		$0.00	0.0	$0.00
	4		Planning / Technical Specialist	HR	32	$110.00	$3,520		$0.00		$0.00	0.0	$0.00
B			PUBLIC INVOLVEMENT (INCLUDING LEGAL ADS, PUBLIC HEARINGS, DOCUMENTS, PRESENTATIONS, WVDEP'S WEBSITE, ETC.)										
	1		Principal	HR	1	$235.00	$235		$0.00		$0.00	0.0	$0.00
	2		Project Manager / Senior Engineer	HR	1	$195.00	$195		$0.00		$0.00	0.0	$0.00
	3		Engineer / Technical Scientist	HR	1	$150.00	$150		$0.00		$0.00	0.0	$0.00
	4		Planning / Technical Specialist	HR	1	$110.00	$110		$0.00		$0.00	0.0	$0.00
C			STUDIES, SURVEYS & MITIGATION PLANS (AS APPLICABLE)										
	1		Principal	HR	8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	2		Project Manager / Senior Engineer	HR	16	$195.00	$3,120		$0.00		$0.00	0.0	$0.00
	3		Engineer / Technical Scientist	HR	24	$150.00	$3,600		$0.00		$0.00	0.0	$0.00
	4		Planning / Technical Specialist	HR	40	$110.00	$4,400		$0.00		$0.00	0.0	$0.00
D			CATEX / EA / FONSI / EIS										
	1		Pricipal	HR	4	$235.00	$940		$0.00		$0.00	0.0	$0.00
	2		Project Manager / Senior Engineer	HR	8	$195.00	$1,560		$0.00		$0.00	0.0	$0.00
	3		Engineer / Technical Scientist	HR	16	$150.00	$2,400		$0.00		$0.00	0.0	$0.00
	4		Planning / Technical Specialist	HR	16	$110.00	$1,760		$0.00		$0.00	0.0	$0.00
						SUBTOTAL PAGE 1 COST	$29,290	SUBTOTAL PAGE 1 PREVIOUS	$0.00	SUBTOTAL PAGE 1 THIS APPLICATION	$0.00	SUBTOTAL PAGE 1 TO DATE	$0.00

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 3
Project Name: Miller Mine Drainage Phase II

Application No.: CONTRACT NEGOTIATION

SCHEDULE PER CONTRACT								WORK COMPLETED					
								PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK			DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK II: REALTY													
A			EXPLORATORY RIGHTS OF ENTRY (EROE)										
	1		Principal	HR	8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	2		Project Manager / Senior Engineer	HR	16	$195.00	$3,120		$0.00		$0.00	0.0	$0.00
	3		ROW Manager	HR	90	$150.00	$13,500		$0.00		$0.00		$0.00
	4		Realty Agent										
		a	Courthouse Work	HR	60	$120.00	$7,200		$0.00		$0.00	0.0	$0.00
		b	Field Reconnaisance / Landowner Correspondence	HR	64	$120.00	$7,680		$0.00		$0.00	0.0	$0.00
		c	Office Work / AMLNET	HR	32	$120.00	$3,840		$0.00		$0.00	0.0	$0.00
B			CONSTRUCTION RIGHTS OF ENTRY (CROE)										
	1		Project Manager / Senior Engineer	HR	8	$195.00	$1,560		$0.00		$0.00	0.0	$0.00
	2		ROW Manager	HR	48	$150.00	$7,200		$0.00		$0.00	0.0	$0.00
	3		Realty Agent										
		a	Courthouse Work	HR	40	$120.00	$4,800		$0.00		$0.00	0.0	$0.00
		b	Field Reconnaisance / Landowner Correspondence	HR	32	$120.00	$3,840		$0.00		$0.00	0.0	$0.00
		c	Office Work / AMLNET	HR	8	$120.00	$960		$0.00		$0.00	0.0	$0.00
C			PRE-BID CONFERENCE										
	1		ROW Manager	HR	12	$150.00	$1,800		$0.00		$0.00	0.0	$0.00
	2		Realty Agent	HR	4	$120.00	$480		$0.00		$0.00	0.0	$0.00
D			PRE-CONSTRUCTION CONFERENCE										
	1		ROW Manager	HR	12	$150.00	$1,800		$0.00		$0.00	0.0	$0.00
	2		Realty Agent	HR	4	$120.00	$480		$0.00		$0.00	0.0	$0.00
						SUBTOTAL PAGE 2 COST	$60,140	SUBTOTAL PAGE 2 PREVIOUS	$0.00	SUBTOTAL PAGE 2 THIS APPLICATION	$0.00	SUBTOTAL PAGE 2 TO DATE	$0.00

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 3
Project Name: Miller Mine Drainage Phase II

Application No.: CONTRACT NEGOTIATION | **PAGE 3 of 6 Pages**

SCHEDULE PER CONTRACT							WORK COMPLETED					
							PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK			DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	UNIT BID PRICE	UNITS	COST	UNITS	COST	UNITS	COST
TASK III: DESIGN													
A			SITE RECONNAISSANCE AND INVESTIGATIONS										
	1		Principal	HR	8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	2		Project Manager / Senior Engineer	HR	60	$195.00	$11,700		$0.00		$0.00	0.0	$0.00
	3		Technical Scientist / Environmental Specialist	HR	16	$150.00	$2,400		$0.00		$0.00	0.0	$0.00
	4		Staff Engineer	HR	32	$110.00	$3,520		$0.00		$0.00	0.0	$0.00
B			SURVEYING & MAPPING										
	1		Principal	HR	4	$235.00	$940		$0.00		$0.00	0.0	$0.00
	2		Project Manager / Senior Engineer	HR	8	$195.00	$1,560		$0.00		$0.00	0.0	$0.00
	3		Staff Engineer	HR	24	$110.00	$2,640		$0.00		$0.00	0.0	$0.00
	4		Professional Surveyor / Chief Surveyor	HR	20	$165.00	$3,300		$0.00		$0.00	0.0	$0.00
	5		Survey Crew	HR	30	$170.00	$5,100		$0.00		$0.00	0.0	$0.00
	6		Senior Technician	HR	24	$95.00	$2,280		$0.00		$0.00	0.0	$0.00
	7		Topographic, Planimetric and Check Surveying	LS	1	$7,500.00	$7,500		$0.00		$0.00	0.0	$0.00
C			GEOTECHNICAL INVESTIGATION										
	1		Principal	HR	8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	2		Project Manager / Senior Engineer	HR	12	$195.00	$2,340		$0.00		$0.00	0.0	$0.00
	3		Geotechnical Engineer/Geologist	HR	24	$150.00	$3,600		$0.00		$0.00	0.0	$0.00
	4		Staff Geologist/Engineer	HR	50	$110.00	$5,500		$0.00		$0.00	0.0	$0.00
	5		Admin Support	HR	12	$85.00	$1,020		$0.00		$0.00	0.0	$0.00
	6		Mobilization / Demobilization	LS	1	$3,500.00	$3,500		$0.00		$0.00	0.0	$0.00
	7		Soil Augering	LF	400	$40.00	$16,000		$0.00		$0.00	0.0	$0.00
	8		Rock Coring	LF	400	$40.00	$16,000		$0.00		$0.00	0.0	$0.00
	9		Heavy Equipment	Day	1	$1,500.00	$1,500		$0.00		$0.00	0.0	$0.00
	10		Piezometer Installation	LS	1	$6,500.00	$6,500		$0.00		$0.00	0.0	$0.00
	11		Piezometer Removal	LS	1	$2,500.00	$2,500		$0.00		$0.00	0.0	$0.00
	12		Drill Crew Per Diem	Day	7	$450.00	$3,150		$0.00		$0.00	0.0	$0.00
	13		Lab Testing	LS	1	$3,500.00	$3,500		$0.00		$0.00		
	14		Reclamation	LS	1	$2,500.00	$2,500		$0.00		$0.00	0.0	$0.00
	15		Geotechnical Investigation Report	LS	1	$7,000.00	$7,000		$0.00		$0.00	0.0	$0.00
						SUBTOTAL PAGE 3 COST	$119,310	SUBTOTAL PAGE 3 PREVIOUS	$0.00	SUBTOTAL PAGE 3 THIS APPLICATION	$0.00	SUBTOTAL PAGE 3 TO DATE	$0.00

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 3
Project Name: Miller Mine Drainage Phase II

Application No.: CONTRACT NEGOTIATION |

SCHEDULE PER CONTRACT							WORK COMPLETED					
							PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK			DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK III: DESIGN (CONTINUED)													
D			CONCEPTUAL DESIGN (30%)										
	1		Project Manager / Senior Engineer	HR	60	$195.00	$11,700		$0.00		$0.00	0.0	$0.00
	2		Engineer / Environmental Scientist	HR	60	$150.00	$9,000		$0.00		$0.00	0.0	$0.00
	3		Principal Engineer / Scientist	HR	8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	4		Environmental Specialist / Staff Engineer	HR	160	$110.00	$17,600		$0.00		$0.00	0.0	$0.00
	5		CADD Technician	HR	80	$95.00	$7,600		$0.00		$0.00	0.0	$0.00
	6		Adminstration	HR	8	$85.00	$680		$0.00		$0.00	0.0	$0.00
E			PRELIMINARY DESIGN (60%)										
	1		Project Manager / Senior Engineer	HR	60	$195.00	$11,700		$0.00		$0.00	0.0	$0.00
	2		Engineer / Environmental Scientist	HR	90	$150.00	$13,500		$0.00		$0.00	0.0	$0.00
	3		Principal Engineer / Scientist	HR	16	$235.00	$3,760		$0.00		$0.00	0.0	$0.00
	4		Environmental Specialist / Staff Engineer / Geologist	HR	160	$110.00	$17,600		$0.00		$0.00	0.0	$0.00
	5		CADD Technician	HR	80	$95.00	$7,600		$0.00		$0.00	0.0	$0.00
	6		Adminstration	HR	8	$85.00	$680		$0.00		$0.00	0.0	$0.00
F			PRE-FINAL DESIGN (90%)										
	1		Project Manager / Senior Engineer	HR	60	$195.00	$11,700		$0.00		$0.00	0.0	$0.00
	2		Engineer / Environmental Scientist	HR	90	$150.00	$13,500		$0.00		$0.00	0.0	$0.00
	3		Principal Engineer / Scientist	HR	16	$235.00	$3,760		$0.00		$0.00	0.0	$0.00
	4		Environmental Specialist / Staff Engineer / Geologist	HR	160	$110.00	$17,600		$0.00		$0.00	0.0	$0.00
	5		CADD Technician	HR	80	$95.00	$7,600		$0.00		$0.00	0.0	$0.00
	6		Adminstration	HR	8	$85.00	$680		$0.00		$0.00	0.0	$0.00
G			FINAL DESIGN (100%)										
	1		Project Manager / Senior Engineer	HR	16	$195.00	$3,120		$0.00		$0.00	0.0	$0.00
	2		Engineer / Environmental Scientist	HR	16	$150.00	$2,400		$0.00		$0.00	0.0	$0.00
	3		Principal Engineer / Scientist	HR	8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	4		Environmental Specialist / Staff Engineer / Geologist	HR	40	$110.00	$4,400		$0.00		$0.00	0.0	$0.00
	5		CADD Technician	HR	40	$95.00	$3,800		$0.00		$0.00	0.0	$0.00
	6		Adminstration	HR	4	$85.00	$340		$0.00		$0.00	0.0	$0.00
						SUBTOTAL PAGE 4 COST	$174,080	SUBTOTAL PAGE 4 PREVIOUS	$0.00	SUBTOTAL PAGE 4 THIS APPLICATION	$0.00	SUBTOTAL PAGE 4 TO DATE	$0.00

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 3
Project Name: Miller Mine Drainage Phase II

Application No.: CONTRACT NEGOTIATION | **Page 5 of 6 Pages**

SCHEDULE PER CONTRACT							WORK COMPLETED					
							PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK			DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK III:			DESIGN (CONTINUED)										
F			PERMITTING (Matrix, USACE, USFWS, WVDNR, WVSHPO, FLOOD, WVDOH)										
	1		Project Manager / Senior Engineer	HR	40	$195.00	$7,800		$0.00		$0.00	0.0	$0.00
	2		Principal Engineer / Scientist	HR	8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	3		Engineer / Environmental Scientist	HR	40	$150.00	$6,000		$0.00		$0.00	0.0	$0.00
	4		Planning Specialist	HR	60	$110.00	$6,600		$0.00		$0.00	0.0	$0.00
G			PRE-BID CONFERENCE										
	1		Project Manager / Senior Engineer	HR	12	$195.00	$2,340		$0.00		$0.00	0.0	$0.00
	2		Construction Inspector	HR	12	$145.00	$1,740		$0.00		$0.00	0.0	$0.00
H			PRE-CONSTRUCTION CONFERENCE										
	1		Project Manager / Senior Engineer	HR	12	$195.00	$2,340		$0.00		$0.00	0.0	$0.00
	2		Construction Inspector	HR	12	$145.00	$1,740		$0.00		$0.00	0.0	$0.00
						SUBTOTAL PAGE 5 COST	$30,440	SUBTOTAL PAGE 5 PREVIOUS	$0.00	SUBTOTAL PAGE 5 THIS APPLICATION	$0.00	SUBTOTAL PAGE 5 TO DATE	$0.00

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 3
Project Name: Miller Mine Drainage Phase II

Application No.: CONTRACT NEGOTIATION | **Page 6 of 6 Pages**

SCHEDULE PER CONTRACT							WORK COMPLETED					
							PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK			DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK IV: CONSTRUCTION OVERSIGHT													
A			CONSTRUCTION INSPECTION										
	1		Project Manager / Senior Engineer	HR	252	$195.00	$49,140		$0.00		$0.00	0.0	$0.00
	2		Construction Inspector										
		a	Construction Inspection	HR	1680	$145.00	$243,600		$0.00		$0.00	0.0	$0.00
		b	Office Work / AMLNET	HR	80	$145.00	$11,600		$0.00		$0.00	0.0	$0.00
	3		Administrative Staff	HR	60	$85.00	$5,100		$0.00		$0.00		
TASK V: POST-CONSTRUCTION OVERSIGHT													
A			FIELD VISITS / INSPECTIONS										
	1		Project Manager / Senior Engineer	HR	12	$195.00	$2,340		$0.00		$0.00	0.0	$0.00
	2		Construction Inspector	HR	180	$145.00	$26,100		$0.00		$0.00	0.0	$0.00

	SUBTOTAL PAGE 6 COST	$337,880	SUBTOTAL PAGE 6 PREVIOUS	$0	SUBTOTAL PAGE 6 THIS APPLICATION	$0	SUBTOTAL PAGE 6 TO DATE	$0
TOTAL TASK I - V COST	TOTAL CONTRACT AMOUNT	$751,140	TOTAL PREVIOUS BILLED	$0	TOTAL BILLED THIS APPLICATION	$0	TOTAL BILLED TO DATE TASK I - V	$0
2023 AML Contract N1	TOTAL CONTRACT AMOUNT	$3,409,570	TOTAL PREVIOUS CONTRACT BILLED	$0	TOTAL CONTRACT BILLED THIS APPLICATION	$0	TOTAL BILLED CONTRACT TO DATE	$0

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 4
Project Name: Shinnston (Sheppard) Mine Drainage

Application No.: CONTRACT NEGOTIATION | **PAGE 1 of 6 Pages**

SCHEDULE PER CONTRACT						WORK COMPLETED					
						PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK I: PLANNING											
A	**AGENCY COORDINATION (INCLUDING OFFICE WORK, AMLNET, ETC.)**										
1	Principal	HR	4	$235.00	$940		$0.00		$0.00	0.0	$0.00
2	Project Manager / Senior Engineer	HR	16	$195.00	$3,120		$0.00		$0.00	0.0	$0.00
3	Engineer / Technical Scientist	HR	8	$150.00	$1,200		$0.00		$0.00	0.0	$0.00
4	Planning / Technical Specialist	HR	32	$110.00	$3,520		$0.00		$0.00	0.0	$0.00
B	**PUBLIC INVOLVEMENT (INCLUDING LEGAL ADS, PUBLIC HEARINGS, DOCUMENTS, PRESENTATIONS, WVDEP'S WEBSITE, ETC.)**										
1	Principal	HR	1	$235.00	$235		$0.00		$0.00	0.0	$0.00
2	Project Manager / Senior Engineer	HR	1	$195.00	$195		$0.00		$0.00	0.0	$0.00
3	Engineer / Technical Scientist	HR	1	$150.00	$150		$0.00		$0.00	0.0	$0.00
4	Planning / Technical Specialist	HR	1	$110.00	$110		$0.00		$0.00	0.0	$0.00
C	**STUDIES, SURVEYS & MITIGATION PLANS (AS APPLICABLE)**										
1	Principal	HR	4	$235.00	$940		$0.00		$0.00	0.0	$0.00
2	Project Manager / Senior Engineer	HR	16	$195.00	$3,120		$0.00		$0.00	0.0	$0.00
3	Engineer / Technical Scientist	HR	16	$150.00	$2,400		$0.00		$0.00	0.0	$0.00
4	Planning / Technical Specialist	HR	30	$110.00	$3,300		$0.00		$0.00	0.0	$0.00
D	**CATEX / EA / FONSI / EIS**										
1	Pricipal	HR	2	$235.00	$470		$0.00		$0.00	0.0	$0.00
2	Project Manager / Senior Engineer	HR	10	$195.00	$1,950		$0.00		$0.00	0.0	$0.00
3	Engineer / Technical Scientist	HR	10	$150.00	$1,500		$0.00		$0.00	0.0	$0.00
4	Planning / Technical Specialist	HR	24	$110.00	$2,640		$0.00		$0.00	0.0	$0.00
				SUBTOTAL PAGE 1 COST	**$25,790**	**SUBTOTAL PAGE 1 PREVIOUS**	**$0.00**	**SUBTOTAL PAGE 1 THIS APPLICATION**	**$0.00**	**SUBTOTAL PAGE 1 TO DATE**	**$0.00**

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 4
Project Name: Shinnston (Sheppard) Mine Drainage

Application No.: CONTRACT NEGOTIATION | **PAGE 2 of 6 Pages**

SCHEDULE PER CONTRACT							WORK COMPLETED					
							PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK			DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK II: REALTY													
A			EXPLORATORY RIGHTS OF ENTRY (EROE)										
	1		Principal	HR	8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	2		Project Manager / Senior Engineer	HR	16	$195.00	$3,120		$0.00		$0.00	0.0	$0.00
	3		ROW Manager	HR	72	$150.00	$10,800		$0.00		$0.00		$0.00
	4		Realty Agent										
		a	Courthouse Work	HR	48	$120.00	$5,760		$0.00		$0.00	0.0	$0.00
		b	Field Reconnaisance / Landowner Correspondence	HR	48	$120.00	$5,760		$0.00		$0.00	0.0	$0.00
		c	Office Work / AMLNET	HR	24	$120.00	$2,880		$0.00		$0.00	0.0	$0.00
B			CONSTRUCTION RIGHTS OF ENTRY (CROE)										
	1		Project Manager / Senior Engineer	HR	8	$195.00	$1,560		$0.00		$0.00	0.0	$0.00
	2		ROW Manager	HR	32	$150.00	$4,800		$0.00		$0.00	0.0	$0.00
	3		Realty Agent										
		a	Courthouse Work	HR	32	$120.00	$3,840		$0.00		$0.00	0.0	$0.00
		b	Field Reconnaisance / Landowner Correspondence	HR	24	$120.00	$2,880		$0.00		$0.00	0.0	$0.00
		c	Office Work / AMLNET	HR	8	$120.00	$960		$0.00		$0.00	0.0	$0.00
C			PRE-BID CONFERENCE										
	1		ROW Manager	HR	12	$150.00	$1,800		$0.00		$0.00	0.0	$0.00
	2		Realty Agent	HR	4	$120.00	$480		$0.00		$0.00	0.0	$0.00
D			PRE-CONSTRUCTION CONFERENCE										
	1		ROW Manager	HR	12	$150.00	$1,800		$0.00		$0.00	0.0	$0.00
	2		Realty Agent	HR	4	$120.00	$480		$0.00		$0.00	0.0	$0.00
						SUBTOTAL PAGE 2 COST	$48,800	SUBTOTAL PAGE 2 PREVIOUS	$0.00	SUBTOTAL PAGE 2 THIS APPLICATION	$0.00	SUBTOTAL PAGE 2 TO DATE	$0.00

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 4
Project Name: Shinnston (Sheppard) Mine Drainage

Application No.: CONTRACT NEGOTIATION | **PAGE 3 of 6 Pages**

SCHEDULE PER CONTRACT							WORK COMPLETED					
							PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	UNIT BID PRICE		UNITS	COST	UNITS	COST	UNITS	COST
TASK III: DESIGN												
A	SITE RECONNAISSANCE AND INVESTIGATIONS											
1	Principal	HR	12	$235.00	$2,820			$0.00		$0.00	0.0	$0.00
2	Project Manager / Senior Engineer	HR	60	$195.00	$11,700			$0.00		$0.00	0.0	$0.00
3	Technical Scientist / Environmental Specialist	HR	16	$150.00	$2,400			$0.00		$0.00	0.0	$0.00
4	Staff Engineer	HR	32	$110.00	$3,520			$0.00		$0.00	0.0	$0.00
B	SURVEYING & MAPPING											
1	Principal	HR	2	$235.00	$470			$0.00		$0.00	0.0	$0.00
2	Project Manager / Senior Engineer	HR	8	$195.00	$1,560			$0.00		$0.00	0.0	$0.00
3	Staff Engineer	HR	20	$110.00	$2,200			$0.00		$0.00	0.0	$0.00
4	Professional Surveyor / Chief Surveyor	HR	20	$165.00	$3,300			$0.00		$0.00	0.0	$0.00
5	Survey Crew	HR	30	$170.00	$5,100			$0.00		$0.00	0.0	$0.00
6	Senior Technician	HR	24	$95.00	$2,280			$0.00		$0.00	0.0	$0.00
7	Topographic, Planimetric and Check Surveying	LS	1	$5,000.00	$5,000			$0.00		$0.00	0.0	$0.00
C	GEOTECHNICAL INVESTIGATION											
1	Principal	HR	8	$235.00	$1,880			$0.00		$0.00	0.0	$0.00
2	Project Manager / Senior Engineer	HR	12	$195.00	$2,340			$0.00		$0.00	0.0	$0.00
3	Geotechnical Engineer/Geologist	HR	24	$150.00	$3,600			$0.00		$0.00	0.0	$0.00
4	Staff Geologist/Engineer	HR	50	$110.00	$5,500			$0.00		$0.00	0.0	$0.00
5	Admin Support	HR	12	$85.00	$1,020			$0.00		$0.00	0.0	$0.00
6	Mobilization / Demobilization	LS	1	$3,500.00	$3,500			$0.00		$0.00	0.0	$0.00
7	Soil Augering	LF	250	$40.00	$10,000			$0.00		$0.00	0.0	$0.00
8	Rock Coring	LF	250	$40.00	$10,000			$0.00		$0.00	0.0	$0.00
9	Heavy Equipment	Day	1	$1,500.00	$1,500			$0.00		$0.00	0.0	$0.00
10	Piezometer Installation	LS	1	$6,500.00	$6,500			$0.00		$0.00	0.0	$0.00
11	Piezometer Removal	LS	1	$2,500.00	$2,500			$0.00		$0.00	0.0	$0.00
12	Drill Crew Per Diem	Day	7	$450.00	$3,150			$0.00		$0.00	0.0	$0.00
13	Lab Testing	LS	1	$2,000.00	$2,000			$0.00		$0.00		
14	Reclamation	LS	1	$2,500.00	$2,500			$0.00		$0.00	0.0	$0.00
15	Geotechnical Investigation Report	LS	1	$7,000.00	$7,000			$0.00		$0.00	0.0	$0.00
				SUBTOTAL PAGE 3 COST	$103,340		SUBTOTAL PAGE 3 PREVIOUS	$0.00	SUBTOTAL PAGE 3 THIS APPLICATION	$0.00	SUBTOTAL PAGE 3 TO DATE	$0.00

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 4
Project Name: Shinnston (Sheppard) Mine Drainage

Application No.: CONTRACT NEGOTIATION |

SCHEDULE PER CONTRACT							WORK COMPLETED					
TASK			DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	PREVIOUS UNITS	PREVIOUS BILLED COST	THIS APPLICATION UNITS	AMOUNT DUE THIS APPLICATION COST	TOTAL BILLED TO DATE UNITS	TOTAL BILLED TO DATE COST
TASK III: DESIGN (CONTINUED)													
D			CONCEPTUAL DESIGN (30%)										
	1		Project Manager / Senior Engineer	HR	60	$195.00	$11,700		$0.00		$0.00	0.0	$0.00
	2		Engineer / Environmental Scientist	HR	80	$150.00	$12,000		$0.00		$0.00	0.0	$0.00
	3		Principal Engineer / Scientist	HR	24	$235.00	$5,640		$0.00		$0.00	0.0	$0.00
	4		Environmental Specialist / Staff Engineer	HR	90	$110.00	$9,900		$0.00		$0.00	0.0	$0.00
	5		CADD Technician	HR	40	$95.00	$3,800		$0.00		$0.00	0.0	$0.00
	6		Adminstration	HR	4	$85.00	$340		$0.00		$0.00	0.0	$0.00
E			PRELIMINARY DESIGN (60%)										
	1		Project Manager / Senior Engineer	HR	80	$195.00	$15,600		$0.00		$0.00	0.0	$0.00
	2		Engineer / Environmental Scientist	HR	80	$150.00	$12,000		$0.00		$0.00	0.0	$0.00
	3		Principal Engineer / Scientist	HR	24	$235.00	$5,640		$0.00		$0.00	0.0	$0.00
	4		Environmental Specialist / Staff Engineer / Geologist	HR	140	$110.00	$15,400		$0.00		$0.00	0.0	$0.00
	5		CADD Technician	HR	90	$95.00	$8,550		$0.00		$0.00	0.0	$0.00
	6		Adminstration	HR	4	$85.00	$340		$0.00		$0.00	0.0	$0.00
F			PRE-FINAL DESIGN (90%)										
	1		Project Manager / Senior Engineer	HR	60	$195.00	$11,700		$0.00		$0.00	0.0	$0.00
	2		Engineer / Environmental Scientist	HR	60	$150.00	$9,000		$0.00		$0.00	0.0	$0.00
	3		Principal Engineer / Scientist	HR	24	$235.00	$5,640		$0.00		$0.00	0.0	$0.00
	4		Environmental Specialist / Staff Engineer / Geologist	HR	120	$110.00	$13,200		$0.00		$0.00	0.0	$0.00
	5		CADD Technician	HR	60	$95.00	$5,700		$0.00		$0.00	0.0	$0.00
	6		Adminstration	HR	4	$85.00	$340		$0.00		$0.00	0.0	$0.00
G			FINAL DESIGN (100%)										
	1		Project Manager / Senior Engineer	HR	12	$195.00	$2,340		$0.00		$0.00	0.0	$0.00
	2		Engineer / Environmental Scientist	HR	12	$150.00	$1,800		$0.00		$0.00	0.0	$0.00
	3		Principal Engineer / Scientist	HR	8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	4		Environmental Specialist / Staff Engineer / Geologist	HR	30	$110.00	$3,300		$0.00		$0.00	0.0	$0.00
	5		CADD Technician	HR	20	$95.00	$1,900		$0.00		$0.00	0.0	$0.00
	6		Adminstration	HR	4	$85.00	$340		$0.00		$0.00	0.0	$0.00
						SUBTOTAL PAGE 4 COST	$158,050	SUBTOTAL PAGE 4 PREVIOUS	$0.00	SUBTOTAL PAGE 4 THIS APPLICATION	$0.00	SUBTOTAL PAGE 4 TO DATE	$0.00

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 4
Project Name: Shinnston (Sheppard) Mine Drainage

Application No.: CONTRACT NEGOTIATION | **Page 5 of 6 Pages**

SCHEDULE PER CONTRACT							WORK COMPLETED					
							PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK			DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK III: DESIGN (CONTINUED)													
F			PERMITTING (Matrix, USACE, USFWS, WVDNR, WVSHPO, FLOOD, WVDOH)										
	1		Project Manager / Senior Engineer	HR	40	$195.00	$7,800		$0.00		$0.00	0.0	$0.00
	2		Principal Engineer / Scientist	HR	8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	3		Engineer / Environmental Scientist	HR	30	$150.00	$4,500		$0.00		$0.00	0.0	$0.00
	4		Planning Specialist	HR	48	$110.00	$5,280		$0.00		$0.00	0.0	$0.00
G			PRE-BID CONFERENCE										
	1		Project Manager / Senior Engineer	HR	12	$195.00	$2,340		$0.00		$0.00	0.0	$0.00
	2		Construction Inspector	HR	12	$145.00	$1,740		$0.00		$0.00	0.0	$0.00
H			PRE-CONSTRUCTION CONFERENCE										
	1		Project Manager / Senior Engineer	HR	12	$195.00	$2,340		$0.00		$0.00	0.0	$0.00
	2		Construction Inspector	HR	12	$145.00	$1,740		$0.00		$0.00	0.0	$0.00
						SUBTOTAL PAGE 5 COST	$27,620	SUBTOTAL PAGE 5 PREVIOUS	$0.00	SUBTOTAL PAGE 5 THIS APPLICATION	$0.00	SUBTOTAL PAGE 5 TO DATE	$0.00

B

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 4
Project Name: Shinnston (Sheppard) Mine Drainage

Application No.: CONTRACT NEGOTIATION |

SCHEDULE PER CONTRACT								WORK COMPLETED					
								PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK			DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK IV: CONSTRUCTION OVERSIGHT													
A			CONSTRUCTION INSPECTION										
	1		Project Manager / Senior Engineer	HR	120	$195.00	$23,400		$0.00		$0.00	0.0	$0.00
	2		Construction Inspector										
		a	Construction Inspection	HR	756	$145.00	$109,620		$0.00		$0.00	0.0	$0.00
		b	Office Work / AMLNET	HR	95	$145.00	$13,775		$0.00		$0.00	0.0	$0.00
	3		Administrative Staff	HR	18	$85.00	$1,530		$0.00		$0.00		
TASK V: POST-CONSTRUCTION OVERSIGHT													
A			FIELD VISITS / INSPECTIONS										
	1		Project Manager / Senior Engineer	HR	12	$185.00	$2,220		$0.00		$0.00	0.0	$0.00
	2		Construction Inspector	HR	180	$145.00	$26,100		$0.00		$0.00	0.0	$0.00

	SUBTOTAL PAGE 6 COST	$176,645	SUBTOTAL PAGE 6 PREVIOUS	$0	SUBTOTAL PAGE 6 THIS APPLICATION	$0	SUBTOTAL PAGE 6 TO DATE	$0
TOTAL TASK I - V COST	TOTAL CONTRACT AMOUNT	$540,245	TOTAL PREVIOUS BILLED	$0	TOTAL BILLED THIS APPLICATION	$0	TOTAL BILLED TO DATE TASK I - V	$0
2023 AML Contract N1	TOTAL CONTRACT AMOUNT	$3,409,570	TOTAL PREVIOUS CONTRACT BILLED	$0	TOTAL CONTRACT BILLED THIS APPLICATION	$0	TOTAL BILLED CONTRACT TO DATE	$0

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 5
Project Name: Simpson Creek Highwall, Tipple & Portal Phase II

Application No.: CONTRACT NEGOTIATION | **PAGE 1 of 6 Pages**

SCHEDULE PER CONTRACT							WORK COMPLETED					
							PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK		DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK I: PLANNING												
A		AGENCY COORDINATION (INCLUDING OFFICE WORK, AMLNET, ETC.)										
	1	Principal	HR	8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	2	Project Manager / Senior Engineer	HR	16	$195.00	$3,120		$0.00		$0.00	0.0	$0.00
	3	Engineer / Technical Scientist	HR	40	$150.00	$6,000		$0.00		$0.00	0.0	$0.00
	4	Planning / Technical Specialist	HR	40	$110.00	$4,400		$0.00		$0.00	0.0	$0.00
B		PUBLIC INVOLVEMENT (INCLUDING LEGAL ADS, PUBLIC HEARINGS, DOCUMENTS, PRESENTATIONS, WVDEP'S WEBSITE, ETC.)										
	1	Principal	HR	1	$235.00	$235		$0.00		$0.00	0.0	$0.00
	2	Project Manager / Senior Engineer	HR	1	$195.00	$195		$0.00		$0.00	0.0	$0.00
	3	Engineer / Technical Scientist	HR	1	$150.00	$150		$0.00		$0.00	0.0	$0.00
	4	Planning / Technical Specialist	HR	1	$110.00	$110		$0.00		$0.00	0.0	$0.00
C		STUDIES, SURVEYS & MITIGATION PLANS (AS APPLICABLE)										
	1	Principal	HR	8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	2	Project Manager / Senior Engineer	HR	8	$195.00	$1,560		$0.00		$0.00	0.0	$0.00
	3	Engineer / Technical Scientist	HR	40	$150.00	$6,000		$0.00		$0.00	0.0	$0.00
	4	Planning / Technical Specialist	HR	40	$110.00	$4,400		$0.00		$0.00	0.0	$0.00
D		CATEX / EA / FONSI / EIS										
	1	Pricipal	HR	4	$235.00	$940		$0.00		$0.00	0.0	$0.00
	2	Project Manager / Senior Engineer	HR	8	$195.00	$1,560		$0.00		$0.00	0.0	$0.00
	3	Engineer / Technical Scientist	HR	24	$150.00	$3,600		$0.00		$0.00	0.0	$0.00
	4	Planning / Technical Specialist	HR	24	$110.00	$2,640		$0.00		$0.00	0.0	$0.00
					SUBTOTAL PAGE 1 COST	$38,670	SUBTOTAL PAGE 1 PREVIOUS	$0.00	SUBTOTAL PAGE 1 THIS APPLICATION	$0.00	SUBTOTAL PAGE 1 TO DATE	$0.00

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 5
Project Name: Simpson Creek Highwall, Tipple & Portal Phase II

Application No.: CONTRACT NEGOTIATION | **PAGE 2 of 6 Pages**

SCHEDULE PER CONTRACT							WORK COMPLETED					
							PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK			DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK II: REALTY													
A			EXPLORATORY RIGHTS OF ENTRY (EROE)										
	1		Principal	HR	8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	2		Project Manager / Senior Engineer	HR	16	$195.00	$3,120		$0.00		$0.00	0.0	$0.00
	3		ROW Manager	HR	96	$150.00	$14,400		$0.00		$0.00		$0.00
	4		Realty Agent										
		a	Courthouse Work	HR	48	$120.00	$5,760		$0.00		$0.00	0.0	$0.00
		b	Field Reconnaisance / Landowner Correspondence	HR	80	$120.00	$9,600		$0.00		$0.00	0.0	$0.00
		c	Office Work / AMLNET	HR	40	$120.00	$4,800		$0.00		$0.00	0.0	$0.00
B			CONSTRUCTION RIGHTS OF ENTRY (CROE)										
	1		Project Manager / Senior Engineer	HR	9	$195.00	$1,755		$0.00		$0.00	0.0	$0.00
	2		ROW Manager	HR	56	$150.00	$8,400		$0.00		$0.00	0.0	$0.00
	3		Realty Agent										
		a	Courthouse Work	HR	32	$120.00	$3,840		$0.00		$0.00	0.0	$0.00
		b	Field Reconnaisance / Landowner Correspondence	HR	40	$120.00	$4,800		$0.00		$0.00	0.0	$0.00
		c	Office Work / AMLNET	HR	12	$120.00	$1,440		$0.00		$0.00	0.0	$0.00
C			PRE-BID CONFERENCE										
	1		ROW Manager	HR	12	$150.00	$1,800		$0.00		$0.00	0.0	$0.00
	2		Realty Agent	HR	4	$120.00	$480		$0.00		$0.00	0.0	$0.00
D			PRE-CONSTRUCTION CONFERENCE										
	1		ROW Manager	HR	12	$150.00	$1,800		$0.00		$0.00	0.0	$0.00
	2		Realty Agent	HR	4	$120.00	$480		$0.00		$0.00	0.0	$0.00
						SUBTOTAL PAGE 2 COST	$64,355	SUBTOTAL PAGE 2 PREVIOUS	$0.00	SUBTOTAL PAGE 2 THIS APPLICATION	$0.00	SUBTOTAL PAGE 2 TO DATE	$0.00

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 5
Project Name: Simpson Creek Highwall, Tipple & Portal Phase II

Application No.: CONTRACT NEGOTIATION | **PAGE 3 of 6 Pages**

SCHEDULE PER CONTRACT							WORK COMPLETED					
							PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK			DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	UNIT BID PRICE	UNITS	COST	UNITS	COST	UNITS	COST
TASK III: DESIGN													
A			SITE RECONNAISSANCE AND INVESTIGATIONS										
	1		Principal	HR	8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	2		Project Manager / Senior Engineer	HR	60	$195.00	$11,700		$0.00		$0.00	0.0	$0.00
	3		Technical Scientist / Environmental Specialist	HR	24	$150.00	$3,600		$0.00		$0.00	0.0	$0.00
	4		Staff Engineer	HR	32	$110.00	$3,520		$0.00		$0.00	0.0	$0.00
B			SURVEYING & MAPPING										
	1		Principal	HR	8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	2		Project Manager / Senior Engineer	HR	16	$195.00	$3,120		$0.00		$0.00	0.0	$0.00
	3		Staff Engineer	HR	40	$110.00	$4,400		$0.00		$0.00	0.0	$0.00
	4		Professional Surveyor / Chief Surveyor	HR	24	$165.00	$3,960		$0.00		$0.00	0.0	$0.00
	5		Survey Crew	HR	40	$170.00	$6,800		$0.00		$0.00	0.0	$0.00
	6		Senior Technician	HR	40	$95.00	$3,800		$0.00		$0.00	0.0	$0.00
	7		Topographic, Planimetric and Check Surveying	LS	1	$16,000.00	$16,000		$0.00		$0.00	0.0	$0.00
C			GEOTECHNICAL INVESTIGATION										
	1		Principal	HR	8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	2		Project Manager / Senior Engineer	HR	12	$195.00	$2,340		$0.00		$0.00	0.0	$0.00
	3		Geotechnical Engineer/Geologist	HR	32	$150.00	$4,800		$0.00		$0.00	0.0	$0.00
	4		Staff Geologist/Engineer	HR	70	$110.00	$7,700		$0.00		$0.00	0.0	$0.00
	5		Admin Support	HR	16	$85.00	$1,360		$0.00		$0.00	0.0	$0.00
	6		Mobilization / Demobilization	LS	1	$3,500.00	$3,500		$0.00		$0.00	0.0	$0.00
	7		Soil Augering	LF	400	$40.00	$16,000		$0.00		$0.00	0.0	$0.00
	8		Rock Coring	LF	400	$40.00	$16,000		$0.00		$0.00	0.0	$0.00
	9		Heavy Equipment	Day	3	$1,500.00	$4,500		$0.00		$0.00	0.0	$0.00
	10		Piezometer Installation	LS	2	$6,500.00	$13,000		$0.00		$0.00	0.0	$0.00
	11		Piezometer Removal	LS	2	$2,500.00	$5,000		$0.00		$0.00	0.0	$0.00
	12		Drill Crew Per Diem	Day	7	$450.00	$3,150		$0.00		$0.00	0.0	$0.00
	13		Lab Testing	LS	1	$3,500.00	$3,500		$0.00		$0.00		
	14		Reclamation	LS	1	$2,500.00	$2,500		$0.00		$0.00	0.0	$0.00
	15		Geotechnical Investigation Report	LS	1	$7,000.00	$7,000		$0.00		$0.00	0.0	$0.00
						SUBTOTAL PAGE 3 COST	$152,890	SUBTOTAL PAGE 3 PREVIOUS	$0.00	SUBTOTAL PAGE 3 THIS APPLICATION	$0.00	SUBTOTAL PAGE 3 TO DATE	$0.00

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 5
Project Name: Simpson Creek Highwall, Tipple & Portal Phase II

Application No.: CONTRACT NEGOTIATION | **Page 4 of 6 Pages**

SCHEDULE PER CONTRACT						WORK COMPLETED					
						PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK III:	DESIGN (CONTINUED)										
D	CONCEPTUAL DESIGN (30%)										
1	Project Manager / Senior Engineer	HR	90	$195.00	$17,550		$0.00		$0.00	0.0	$0.00
2	Engineer / Environmental Scientist	HR	90	$150.00	$13,500		$0.00		$0.00	0.0	$0.00
3	Principal Engineer / Scientist	HR	16	$235.00	$3,760		$0.00		$0.00	0.0	$0.00
4	Environmental Specialist / Staff Engineer	HR	180	$110.00	$19,800		$0.00		$0.00	0.0	$0.00
5	CADD Technician	HR	90	$95.00	$8,550		$0.00		$0.00	0.0	$0.00
6	Adminstration	HR	8	$85.00	$680		$0.00		$0.00	0.0	$0.00
E	PRELIMINARY DESIGN (60%)										
1	Project Manager / Senior Engineer	HR	90	$195.00	$17,550		$0.00		$0.00	0.0	$0.00
2	Engineer / Environmental Scientist	HR	90	$150.00	$13,500		$0.00		$0.00	0.0	$0.00
3	Principal Engineer / Scientist	HR	16	$235.00	$3,760		$0.00		$0.00	0.0	$0.00
4	Environmental Specialist / Staff Engineer / Geologist	HR	180	$110.00	$19,800		$0.00		$0.00	0.0	$0.00
5	CADD Technician	HR	90	$95.00	$8,550		$0.00		$0.00	0.0	$0.00
6	Adminstration	HR	8	$85.00	$680		$0.00		$0.00	0.0	$0.00
F	PRE-FINAL DESIGN (90%)										
1	Project Manager / Senior Engineer	HR	90	$185.00	$16,650		$0.00		$0.00	0.0	$0.00
2	Engineer / Environmental Scientist	HR	90	$135.00	$12,150		$0.00		$0.00	0.0	$0.00
3	Principal Engineer / Scientist	HR	16	$225.00	$3,600		$0.00		$0.00	0.0	$0.00
4	Environmental Specialist / Staff Engineer / Geologist	HR	180	$95.00	$17,100		$0.00		$0.00	0.0	$0.00
5	CADD Technician	HR	90	$85.00	$7,650		$0.00		$0.00	0.0	$0.00
6	Adminstration	HR	8	$85.00	$680		$0.00		$0.00	0.0	$0.00
G	FINAL DESIGN (100%)										
1	Project Manager / Senior Engineer	HR	16	$185.00	$2,960		$0.00		$0.00	0.0	$0.00
2	Engineer / Environmental Scientist	HR	16	$135.00	$2,160		$0.00		$0.00	0.0	$0.00
3	Principal Engineer / Scientist	HR	8	$225.00	$1,800		$0.00		$0.00	0.0	$0.00
4	Environmental Specialist / Staff Engineer / Geologist	HR	40	$95.00	$3,800		$0.00		$0.00	0.0	$0.00
5	CADD Technician	HR	40	$85.00	$3,400		$0.00		$0.00	0.0	$0.00
6	Adminstration	HR	2	$85.00	$170		$0.00		$0.00	0.0	$0.00
				SUBTOTAL PAGE 4 COST	$199,800	SUBTOTAL PAGE 4 PREVIOUS	$0.00	SUBTOTAL PAGE 4 THIS APPLICATION	$0.00	SUBTOTAL PAGE 4 TO DATE	$0.00

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 5
Project Name: Simpson Creek Highwall, Tipple & Portal Phase II

Application No.: CONTRACT NEGOTIATION | **Page 5 of 6 Pages**

SCHEDULE PER CONTRACT							WORK COMPLETED					
							PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK			DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK III:			DESIGN (CONTINUED)										
F			PERMITTING (Matrix, USACE, USFWS, WVDNR, WVSHPO, FLOOD, WVDOH)										
	1		Project Manager / Senior Engineer	HR	40	$195.00	$7,800		$0.00		$0.00	0.0	$0.00
	2		Principal Engineer / Scientist	HR	16	$235.00	$3,760		$0.00		$0.00	0.0	$0.00
	3		Engineer / Environmental Scientist	HR	60	$150.00	$9,000		$0.00		$0.00	0.0	$0.00
	4		Planning Specialist	HR	80	$110.00	$8,800		$0.00		$0.00	0.0	$0.00
G			PRE-BID CONFERENCE										
	1		Project Manager / Senior Engineer	HR	12	$195.00	$2,340		$0.00		$0.00	0.0	$0.00
	2		Construction Inspector	HR	12	$145.00	$1,740		$0.00		$0.00	0.0	$0.00
H			PRE-CONSTRUCTION CONFERENCE										
	1		Project Manager / Senior Engineer	HR	12	$195.00	$2,340		$0.00		$0.00	0.0	$0.00
	2		Construction Inspector	HR	12	$145.00	$1,740		$0.00		$0.00	0.0	$0.00
						SUBTOTAL PAGE 5 COST	$37,520	SUBTOTAL PAGE 5 PREVIOUS	$0.00	SUBTOTAL PAGE 5 THIS APPLICATION	$0.00	SUBTOTAL PAGE 5 TO DATE	$0.00

B

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 5
Project Name: Simpson Creek Highwall, Tipple & Portal Phase II

Application No.: CONTRACT NEGOTIATION | **Page 6 of 6 Pages**

SCHEDULE PER CONTRACT								WORK COMPLETED					
								PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK			DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK IV: CONSTRUCTION OVERSIGHT													
A			CONSTRUCTION INSPECTION										
	1		Project Manager / Senior Engineer	HR	252	$195.00	$49,140		$0.00		$0.00	0.0	$0.00
	2		Construction Inspector										
		a	Construction Inspection	HR	1680	$145.00	$243,600		$0.00		$0.00	0.0	$0.00
		b	Office Work / AMLNET	HR	80	$145.00	$11,600		$0.00		$0.00	0.0	$0.00
	3		Administrative Staff	HR	60	$85.00	$5,100		$0.00		$0.00		
TASK V: POST-CONSTRUCTION OVERSIGHT													
A			FIELD VISITS / INSPECTIONS										
	1		Project Manager / Senior Engineer	HR	12	$195.00	$2,340		$0.00		$0.00	0.0	$0.00
	2		Construction Inspector	HR	180	$145.00	$26,100		$0.00		$0.00	0.0	$0.00

	SUBTOTAL PAGE 6 COST	$337,880	SUBTOTAL PAGE 6 PREVIOUS	$0	SUBTOTAL PAGE 6 THIS APPLICATION	$0	SUBTOTAL PAGE 6 TO DATE	$0
TOTAL TASK I - V COST	TOTAL CONTRACT AMOUNT	$831,115	TOTAL PREVIOUS BILLED	$0	TOTAL BILLED THIS APPLICATION	$0	TOTAL BILLED TO DATE TASK I - V	$0
2023 AML Contract N1	TOTAL CONTRACT AMOUNT	$3,409,570	TOTAL PREVIOUS CONTRACT BILLED	$0	TOTAL CONTRACT BILLED THIS APPLICATION	$0	TOTAL BILLED CONTRACT TO DATE	$0

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 6
Project Name: Weaver Portals and Drainage Phase III

Application No.: CONTRACT NEGOTIATION | **PAGE 1 of 1 Pages**

SCHEDULE PER CONTRACT						WORK COMPLETED					
						PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK I: FEASIBILITY STUDY											
A	WEAVER PORTALS										
1	Principal	HR	16	$235.00	$3,760		$0.00		$0.00	0.0	$0.00
2	Project Manager / Senior Engineer	HR	40	$195.00	$7,800		$0.00		$0.00	0.0	$0.00
3	Engineer / Technical Scientist	HR	32	$150.00	$4,800		$0.00		$0.00	0.0	$0.00
4	Planning / Technical Specialist	HR	32	$110.00	$3,520		$0.00		$0.00	0.0	$0.00

AML-7A (Revised 12/6/2023)	SUBTOTAL PAGE 1 COST	$19,880	SUBTOTAL PAGE 1 PREVIOUS	$0	SUBTOTAL PAGE 1 THIS APPLICATION	$0	SUBTOTAL PAGE 1 TO DATE	$0
TOTAL COMMODITY	TOTAL CONTRACT AMOUNT	$19,880	TOTAL PREVIOUS BILLED	$0	TOTAL BILLED THIS APPLICATION	$0	TOTAL BILLED TO DATE TASK I - V	$0
2023 AML Contract N1	TOTAL CONTRACT AMOUNT	$3,409,570	TOTAL PREVIOUS CONTRACT BILLED	$0	TOTAL CONTRACT BILLED THIS APPLICATION	$0	TOTAL BILLED CONTRACT TO DATE	$0

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 7
Project Name: West Fork #9

Application No.: CONTRACT NEGOTIATION |

SCHEDULE PER CONTRACT							WORK COMPLETED					
							PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK			DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK I: PLANNING													
A			AGENCY COORDINATION (INCLUDING OFFICE WORK, AMLNET, ETC.)										
	1		Principal	HR	8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	2		Project Manager / Senior Engineer	HR	24	$195.00	$4,680		$0.00		$0.00	0.0	$0.00
	3		Engineer / Technical Scientist	HR	24	$150.00	$3,600		$0.00		$0.00	0.0	$0.00
	4		Planning / Technical Specialist	HR	40	$110.00	$4,400		$0.00		$0.00	0.0	$0.00
B			PUBLIC INVOLVEMENT (INCLUDING LEGAL ADS, PUBLIC HEARINGS, DOCUMENTS, PRESENTATIONS, WVDEP'S WEBSITE, ETC.)										
	1		Principal	HR	1	$235.00	$235		$0.00		$0.00	0.0	$0.00
	2		Project Manager / Senior Engineer	HR	1	$195.00	$195		$0.00		$0.00	0.0	$0.00
	3		Engineer / Technical Scientist	HR	1	$150.00	$150		$0.00		$0.00	0.0	$0.00
	4		Planning / Technical Specialist	HR	1	$110.00	$110		$0.00		$0.00	0.0	$0.00
C			STUDIES, SURVEYS & MITIGATION PLANS (AS APPLICABLE)										
	1		Principal	HR	8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	2		Project Manager / Senior Engineer	HR	20	$195.00	$3,900		$0.00		$0.00	0.0	$0.00
	3		Engineer / Technical Scientist	HR	32	$150.00	$4,800		$0.00		$0.00	0.0	$0.00
	4		Planning / Technical Specialist	HR	48	$110.00	$5,280		$0.00		$0.00	0.0	$0.00
D			CATEX / EA / FONSI / EIS										
	1		Pricipal	HR	8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	2		Project Manager / Senior Engineer	HR	16	$195.00	$3,120		$0.00		$0.00	0.0	$0.00
	3		Engineer / Technical Scientist	HR	16	$150.00	$2,400		$0.00		$0.00	0.0	$0.00
	4		Planning / Technical Specialist	HR	24	$110.00	$2,640		$0.00		$0.00	0.0	$0.00
						SUBTOTAL PAGE 1 COST	$41,150	SUBTOTAL PAGE 1 PREVIOUS	$0.00	SUBTOTAL PAGE 1 THIS APPLICATION	$0.00	SUBTOTAL PAGE 1 TO DATE	$0.00

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 7
Project Name: West Fork #9

Application No.: CONTRACT NEGOTIATION | **PAGE 2 of 6 Pages**

SCHEDULE PER CONTRACT								WORK COMPLETED					
							PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK			DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK II: REALTY													
A			EXPLORATORY RIGHTS OF ENTRY (EROE)										
	1		Principal	HR	8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	2		Project Manager / Senior Engineer	HR	16	$195.00	$3,120		$0.00		$0.00	0.0	$0.00
	3		ROW Manager	HR	104	$150.00	$15,600		$0.00		$0.00		$0.00
	4		Realty Agent										
		a	Courthouse Work	HR	56	$120.00	$6,720		$0.00		$0.00	0.0	$0.00
		b	Field Reconnaisance / Landowner Correspondence	HR	80	$120.00	$9,600		$0.00		$0.00	0.0	$0.00
		c	Office Work / AMLNET	HR	40	$120.00	$4,800		$0.00		$0.00	0.0	$0.00
B			CONSTRUCTION RIGHTS OF ENTRY (CROE)										
	1		Project Manager / Senior Engineer	HR	16	$195.00	$3,120		$0.00		$0.00	0.0	$0.00
	2		ROW Manager	HR	64	$150.00	$9,600		$0.00		$0.00	0.0	$0.00
	3		Realty Agent										
		a	Courthouse Work	HR	40	$120.00	$4,800		$0.00		$0.00	0.0	$0.00
		b	Field Reconnaisance / Landowner Correspondence	HR	48	$120.00	$5,760		$0.00		$0.00	0.0	$0.00
		c	Office Work / AMLNET	HR	16	$120.00	$1,920		$0.00		$0.00	0.0	$0.00
C			PRE-BID CONFERENCE										
	1		ROW Manager	HR	12	$150.00	$1,800		$0.00		$0.00	0.0	$0.00
	2		Realty Agent	HR	4	$120.00	$480		$0.00		$0.00	0.0	$0.00
D			PRE-CONSTRUCTION CONFERENCE										
	1		ROW Manager	HR	12	$150.00	$1,800		$0.00		$0.00	0.0	$0.00
	2		Realty Agent	HR	4	$120.00	$480		$0.00		$0.00	0.0	$0.00
						SUBTOTAL PAGE 2 COST	$71,480	SUBTOTAL PAGE 2 PREVIOUS	$0.00	SUBTOTAL PAGE 2 THIS APPLICATION	$0.00	SUBTOTAL PAGE 2 TO DATE	$0.00

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 7
Project Name: West Fork #9

Application No.: CONTRACT NEGOTIATION | **PAGE 3 of 6 Pages**

SCHEDULE PER CONTRACT							WORK COMPLETED					
							PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK			DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	UNIT BID PRICE	UNITS	COST	UNITS	COST	UNITS	COST
TASK III: DESIGN													
A			SITE RECONNAISSANCE AND INVESTIGATIONS										
	1		Principal	HR	8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	2		Project Manager / Senior Engineer	HR	64	$195.00	$12,480		$0.00		$0.00	0.0	$0.00
	3		Technical Scientist / Environmental Specialist	HR	24	$150.00	$3,600		$0.00		$0.00	0.0	$0.00
	4		Staff Engineer	HR	60	$110.00	$6,600		$0.00		$0.00	0.0	$0.00
B			SURVEYING & MAPPING										
	1		Principal	HR	4	$235.00	$940		$0.00		$0.00	0.0	$0.00
	2		Project Manager / Senior Engineer	HR	16	$195.00	$3,120		$0.00		$0.00	0.0	$0.00
	3		Staff Engineer	HR	40	$110.00	$4,400		$0.00		$0.00	0.0	$0.00
	4		Professional Surveyor / Chief Surveyor	HR	24	$165.00	$3,960		$0.00		$0.00	0.0	$0.00
	5		Survey Crew	HR	50	$170.00	$8,500		$0.00		$0.00	0.0	$0.00
	6		Senior Technician	HR	24	$95.00	$2,280		$0.00		$0.00	0.0	$0.00
	7		Topographic, Planimetric and Check Surveying	LS	1	$17,500.00	$17,500		$0.00		$0.00	0.0	$0.00
C			GEOTECHNICAL INVESTIGATION										
	1		Principal	HR	8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	2		Project Manager / Senior Engineer	HR	12	$195.00	$2,340		$0.00		$0.00	0.0	$0.00
	3		Geotechnical Engineer/Geologist	HR	32	$150.00	$4,800		$0.00		$0.00	0.0	$0.00
	4		Staff Geologist/Engineer	HR	70	$110.00	$7,700		$0.00		$0.00	0.0	$0.00
	5		Admin Support	HR	16	$85.00	$1,360		$0.00		$0.00	0.0	$0.00
	6		Mobilization / Demobilization	LS	1	$3,500.00	$3,500		$0.00		$0.00	0.0	$0.00
	7		Soil Augering	LF	400	$40.00	$16,000		$0.00		$0.00	0.0	$0.00
	8		Rock Coring	LF	400	$40.00	$16,000		$0.00		$0.00	0.0	$0.00
	9		Heavy Equipment	Day	3	$1,500.00	$4,500		$0.00		$0.00	0.0	$0.00
	10		Piezometer Installation	LS	2	$6,500.00	$13,000		$0.00		$0.00	0.0	$0.00
	11		Piezometer Removal	LS	2	$2,500.00	$5,000		$0.00		$0.00	0.0	$0.00
	12		Drill Crew Per Diem	Day	7	$450.00	$3,150		$0.00		$0.00	0.0	$0.00
	13		Lab Testing	LS	1	$3,500.00	$3,500		$0.00		$0.00		
	14		Reclamation	LS	1	$2,500.00	$2,500		$0.00		$0.00	0.0	$0.00
	15		Geotechnical Investigation Report	LS	1	$7,000.00	$7,000		$0.00		$0.00	0.0	$0.00
						SUBTOTAL PAGE 3 COST	$157,490	SUBTOTAL PAGE 3 PREVIOUS	$0.00	SUBTOTAL PAGE 3 THIS APPLICATION	$0.00	SUBTOTAL PAGE 3 TO DATE	$0.00

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 7
Project Name: West Fork #9

Application No.: CONTRACT NEGOTIATION

SCHEDULE PER CONTRACT							WORK COMPLETED					
							PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK			DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK III: DESIGN (CONTINUED)													
D			CONCEPTUAL DESIGN (30%)										
	1		Project Manager / Senior Engineer	HR	90	$195.00	$17,550		$0.00		$0.00	0.0	$0.00
	2		Engineer / Environmental Scientist	HR	120	$150.00	$18,000		$0.00		$0.00	0.0	$0.00
	3		Principal Engineer / Scientist	HR	24	$235.00	$5,640		$0.00		$0.00	0.0	$0.00
	4		Environmental Specialist / Staff Engineer	HR	180	$110.00	$19,800		$0.00		$0.00	0.0	$0.00
	5		CADD Technician	HR	120	$95.00	$11,400		$0.00		$0.00	0.0	$0.00
	6		Adminstration	HR	8	$85.00	$680		$0.00		$0.00	0.0	$0.00
E			PRELIMINARY DESIGN (60%)										
	1		Project Manager / Senior Engineer	HR	90	$195.00	$17,550		$0.00		$0.00	0.0	$0.00
	2		Engineer / Environmental Scientist	HR	120	$150.00	$18,000		$0.00		$0.00	0.0	$0.00
	3		Principal Engineer / Scientist	HR	24	$235.00	$5,640		$0.00		$0.00	0.0	$0.00
	4		Environmental Specialist / Staff Engineer / Geologist	HR	180	$110.00	$19,800		$0.00		$0.00	0.0	$0.00
	5		CADD Technician	HR	120	$95.00	$11,400		$0.00		$0.00	0.0	$0.00
	6		Adminstration	HR	8	$85.00	$680		$0.00		$0.00	0.0	$0.00
F			PRE-FINAL DESIGN (90%)										
	1		Project Manager / Senior Engineer	HR	90	$195.00	$17,550		$0.00		$0.00	0.0	$0.00
	2		Engineer / Environmental Scientist	HR	120	$150.00	$18,000		$0.00		$0.00	0.0	$0.00
	3		Principal Engineer / Scientist	HR	24	$235.00	$5,640		$0.00		$0.00	0.0	$0.00
	4		Environmental Specialist / Staff Engineer / Geologist	HR	180	$110.00	$19,800		$0.00		$0.00	0.0	$0.00
	5		CADD Technician	HR	120	$95.00	$11,400		$0.00		$0.00	0.0	$0.00
	6		Adminstration	HR	8	$85.00	$680		$0.00		$0.00	0.0	$0.00
G			FINAL DESIGN (100%)										
	1		Project Manager / Senior Engineer	HR	16	$195.00	$3,120		$0.00		$0.00	0.0	$0.00
	2		Engineer / Environmental Scientist	HR	16	$150.00	$2,400		$0.00		$0.00	0.0	$0.00
	3		Principal Engineer / Scientist	HR	8	$235.00	$1,880		$0.00		$0.00	0.0	$0.00
	4		Environmental Specialist / Staff Engineer / Geologist	HR	40	$110.00	$4,400		$0.00		$0.00	0.0	$0.00
	5		CADD Technician	HR	40	$95.00	$3,800		$0.00		$0.00	0.0	$0.00
	6		Adminstration	HR	4	$85.00	$340		$0.00		$0.00	0.0	$0.00
						SUBTOTAL PAGE 4 COST	$235,150	SUBTOTAL PAGE 4 PREVIOUS	$0.00	SUBTOTAL PAGE 4 THIS APPLICATION	$0.00	SUBTOTAL PAGE 4 TO DATE	$0.00

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 7
Project Name: West Fork #9

Application No.: CONTRACT NEGOTIATION | **Page 5 of 6 Pages**

SCHEDULE PER CONTRACT							WORK COMPLETED					
							PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK			DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK III: DESIGN (CONTINUED)													
F			PERMITTING (Matrix, USACE, USFWS, WVDNR, WVSHPO, FLOOD, WVDOH)										
	1		Project Manager / Senior Engineer	HR	40	$195.00	$7,800		$0.00		$0.00	0.0	$0.00
	2		Principal Engineer / Scientist	HR	16	$235.00	$3,760		$0.00		$0.00	0.0	$0.00
	3		Engineer / Environmental Scientist	HR	80	$150.00	$12,000		$0.00		$0.00	0.0	$0.00
	4		Planning Specialist	HR	80	$110.00	$8,800		$0.00		$0.00	0.0	$0.00
G			PRE-BID CONFERENCE										
	1		Project Manager / Senior Engineer	HR	12	$195.00	$2,340		$0.00		$0.00	0.0	$0.00
	2		Construction Inspector	HR	12	$145.00	$1,740		$0.00		$0.00	0.0	$0.00
H			PRE-CONSTRUCTION CONFERENCE										
	1		Project Manager / Senior Engineer	HR	12	$195.00	$2,340		$0.00		$0.00	0.0	$0.00
	2		Construction Inspector	HR	12	$145.00	$1,740		$0.00		$0.00	0.0	$0.00
						SUBTOTAL PAGE 5 COST	$40,520	SUBTOTAL PAGE 5 PREVIOUS	$0.00	SUBTOTAL PAGE 5 THIS APPLICATION	$0.00	SUBTOTAL PAGE 5 TO DATE	$0.00

B

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

CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT

Purchase Order No.: CPO DEPxx*xx
Contract Name: 2023 AML Contract N1
Commodity Line: 7
Project Name: West Fork #9

Application No.: CONTRACT NEGOTIATION |

SCHEDULE PER CONTRACT								WORK COMPLETED					
								PREVIOUS	PREVIOUS BILLED	THIS APPLICATION	AMOUNT DUE THIS APPLICATION	TOTAL BILLED TO DATE	
TASK			DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT BID PRICE	COST	UNITS	COST	UNITS	COST	UNITS	COST
TASK IV: CONSTRUCTION OVERSIGHT													
A			CONSTRUCTION INSPECTION										
	1		Project Manager / Senior Engineer	HR	160	$195.00	$31,200		$0.00		$0.00	0.0	$0.00
	2		Construction Inspector										
		a	Construction Inspection	HR	1008	$145.00	$146,160		$0.00		$0.00	0.0	$0.00
		b	Office Work / AMLNET	HR	36	$145.00	$5,220		$0.00		$0.00	0.0	$0.00
	3		Administrative Staff	HR	24	$85.00	$2,040		$0.00		$0.00		
TASK V: POST-CONSTRUCTION OVERSIGHT													
A			FIELD VISITS / INSPECTIONS										
	1		Project Manager / Senior Engineer	HR	12	$195.00	$2,340		$0.00		$0.00	0.0	$0.00
	2		Construction Inspector	HR	180	$145.00	$26,100		$0.00		$0.00	0.0	$0.00

	SUBTOTAL PAGE 6 COST	$213,060	SUBTOTAL PAGE 6 PREVIOUS	$0	SUBTOTAL PAGE 6 THIS APPLICATION	$0	SUBTOTAL PAGE 6 TO DATE	$0
TOTAL TASK I - V COST	TOTAL CONTRACT AMOUNT	$758,850	TOTAL PREVIOUS BILLED	$0	TOTAL BILLED THIS APPLICATION	$0	TOTAL BILLED TO DATE TASK I - V	$0
2023 AML Contract N1	TOTAL CONTRACT AMOUNT	$3,409,570	TOTAL PREVIOUS CONTRACT BILLED	$0	TOTAL CONTRACT BILLED THIS APPLICATION	$0	TOTAL BILLED CONTRACT TO DATE	$0