Civil & Environmental Consultants, Inc.

Expression of Interest

Grafton #4 Refuse & HW

Purchase Order No. DEP16073 | Taylor County, West Virginia



Before Construction

HOWESVILLE SITES



After Construction

Submitted To:

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF ABANDONED MINE LANDS
601 57th Street, SE – Box 20
Charleston, West Virginia 25304-2345

January 29, 2013
Convenience Copy

01/24/13 09:44:29 AM
West Virginia Purchasing Division

1

Section 1:
EOI Cover Letter

2

Section 2:
Request for Quotation

3

Section 3:
EOI Signatory Pages

4

Section 4:
AML Consultant Confidential Qualification Questionnaire

5

Section 5:
AML Related Project Experience Matrix

AVERY READY INDEX 600083

January 29, 2013

Mr. Nick Estes, Design Administrator
West Virginia Department of Environmental Protection
Office of Abandoned Mine Lands
601 57th Street, SE – Box 20
Charleston, West Virginia 25304-2345

Dear Mr. Estes:

Subject: Grafton #4 Refuse & HW, P.O. Number DEP16073

Please find enclosed an Expression of Interest (EOI) for Civil & Environmental Consultants, Inc. (CEC) to perform engineering services for Grafton #4 Refuse & HW, P.O. Number DEP 16073, West Virginia Department of Environmental Protection, Office of Abandoned Mine Lands (WVAML) reclamation project. CEC is a 557 member engineering company with offices in Bridgeport, West Virginia and Pittsburgh, Pennsylvania. Please review the enclosed completed "AML Consultant Confidential Qualification Questionnaire", "AML and Related Project Experience Matrix", Purchasing Affidavit, and other signatory pages for CEC to perform engineering services for the Grafton #4 Refuse & HW Design Services project.

CEC personnel has successfully completed the Brownton School Refuse project within 3.5 miles of the project area. Therefore, CEC personnel are very familiar with the project area mining, geology and hydrology. CEC personnel have project specific experience successfully completing projects for the WVAML Program; for the West Virginia Department of Environmental Protection, Office of Special Reclamation; for the Ohio Department of Natural Resources (ODNR) AML Program; and for the West Virginia Conservation Agency. In addition, our AML employee project experience includes: design meetings, monthly progress reports, invoicing, and other necessary AML paperwork; surveying and mapping; subsurface investigations; existing slope and design slope stability analyses; groundwater and surface water testing, analyses, and reporting; refuse and overburden neutralization calculations and design; off-site borrow area investigation and design; wet mine seals and modified wet mine seals with bat gates designs; mass balanced earthwork quantities; structure demolition and removal plans; site drainage design including hydrologic and hydraulic studies for bridges, natural stream designs, channels, ditches, pipes and box culverts; civil site design; sediment and erosion control meeting NPDES permit requirements; revegetation plans; and construction plans and specifications. Our employees have successfully completed projects involving passive acid mine drainage treatment designs ranging from simple limestone beds to complex interactive systems that boost AMD pH to precipitate metals, settle and filter dissolved metals, and polish effluent water with alkalinity prior to release of near neutral waters from project areas. Grafton #4 Refuse & HW EOI-Specific AML reclamation and related experience includes:

1. WVDEP: Norton Highwall #1:

$2,200,000 Eng. Estimate	170,000 C.Y. Earthwork 10,600 L.F. "V" Ditches 45 L.F. Flat Bottom Ditches 1,410 L.F. Subs. Drain 15 Mine Seals	Refuse Regrading Mine Drainage Treatment Plan Structure and Debris Removal Sediment Control Plan Revegetation 53 Acres Access Road Improvement and Construction	Construction Plans and Specifications, Geotechnical Subsurface Investigation, Cost Estimates, Project Mapping, Hydrologic Investigation, Revegetation Plan, Project Reporting and Invoicing

2. WVDEP: Tub Run Highwall and Refuse Phase II:

$2,800,000 Eng. Estimate	307,000 C.Y. Earthwork 9,400 L.F. "V" Ditches 1,900 L.F. Flat Bottom Ditches 2,500 L.F. Subs. Drain 4 Mine Seals	Refuse Regrading Mine Drainage Treatment Plan Structure and Debris Removal Sediment Control Plan Revegetation 114.0 Acres Access Road Improvement and Construction	Construction Plans and Specifications, Geotechnical Subsurface Investigation, Cost Estimates, Project Mapping, Hydrologic Investigation, Revegetation Plan, Project Reporting and Invoicing

3. WVDEP: Tub Run Highwall and Refuse Phase I:

$2,300,000 Eng. Estimate	265,000 C.Y. Earthwork 9,900 L.F. "V" Ditches 244 L.F. Culvert 8 Ft. by 8 Ft. Box Culvert 1,000 L.F. Subs. Drain	Refuse Regrading Mine Drainage Treatment Plan Structure and Debris Removal Sediment Control Plan Revegetation 74.0 Acres Access Road Improvement and Construction	Construction Plans and Specifications, Geotechnical Subsurface Investigation, Cost Estimates, Project Mapping, Hydrologic Investigation, Revegetation Plan, Project Reporting and Invoicing

4. WVDEP: Birds Creek #4:

$1,000,000 Eng. Estimate	35,000 C.Y. Earthwork 4,750 L.F. "V" Ditches 469 L.F. Flat Btm. Ditches 170 L.F. Culvert 750 L.F. Subs. Drain 1 Manhole 9 Mine Seals	Refuse Regrading Mine Drainage Treatment Plan Structure and Debris Removal Sediment Control Plan Revegetation 28.0 Acres Access Road Improvement and Construction	Construction Plans and Specifications, Geotechnical Subsurface Investigation, Cost Estimates, Project Mapping, Hydrologic Investigation, Revegetation Plan, Project Reporting and Invoicing

5. WVDEP: Howesville Sites:

$1,580,000 Eng. Estimate	63,000 C.Y. Earthwork 3,750 L.F. "V" Ditches 1,050 Flat Btm. Ditches 90 L.F. Culverts 11 Mine Seals 4 Bat Gate Seals 1,500 L.F. Subsurface Drain	Refuse Regrading Mine Drainage Treatment Plan Structure and Debris Removal Sediment Control Plan Revegetation 35.0 Acres Access Road Improvement and Construction	Construction Plans and Specifications, Geotechnical Subsurface Investigation, Cost Estimates, Project Mapping, Hydrologic Investigation, Revegetation Plan, Project Reporting and Invoicing

6. WVDEP: Church Creek/Manown Highwall:

$2,600,000 Eng. Estimate	196,000 C.Y. Earthwork 9,853 L.F. "V" Ditches 891 Flat Btm. Ditches 30 L.F. Culverts 1 Manhole 27 Mine Seals 3,000 L.F. Subsurface Drain	Refuse Regrading Mine Drainage Treatment Plan Structure and Debris Removal Sediment Control Plan Revegetation 63.0 Acres Re-Forestation 8.0 Acres Access Road Improvement and Construction	Construction Plans and Specifications, Geotechnical Subsurface Investigation, Cost Estimates, Project Mapping, Hydrologic Investigation, Revegetation Plan, Project Reporting and Invoicing

Some Grafton #4 Refuse & HW EOI-specific experience completed for the West Virginia Conservation Agency includes:

1. Laurel Lake Sediment Removal Project:

$800,000 Bid Estimate	77,000 C.Y. Earthwork 90 L.F. Flat Bottom Ditches Off-Site Disposal Area Traffic Control Plan Utility and DOH Coordination	Debris Removal Refuse Removal Plan De-watering Plan Access Road Improvement and Construction	Construction Plans and Specifications, Geotechnical Subsurface Investigation, Cost Estimates, Project Mapping, Hydrologic Investigation, Revegetation Plan, Project Reporting and Invoicing

2. North Fork Hughes River Stream Bank Stabilization Project:

$15,000 Bid Estimate	Mid-Channel Bar Removal Structure Stabilization 350 L.F. by 9 Ft. high Riprap Revetment Stream Bank Protection	Construction Plans and Specifications, Geotechnical Subsurface Investigation, Cost Estimates, Project Mapping, Hydrologic Investigation, Revegetation Plan, Project Reporting and Invoicing

3. Parchment Valley Stream Bank Protection Project:

$25,000 Bid Estimate	3,100 C.Yds. Excavation 600 L.F. by 15 Ft. high Riprap Revetment Stream Bank Protection	Construction Plans and Specifications, Geotechnical Subsurface Investigation, Cost Estimates, Project Mapping, Hydrologic Investigation, Revegetation Plan, Project Reporting and Invoicing

At the request of WVDEP, CEC can provide Quality Control/Quality Assurance and Construction Observation for the Grafton #4 Refuse & HW Design Services project. CEC routinely provides QA/QC services to governmental agencies, public and private companies, and individuals. Some Project-Specific design and associated QA/QC experience includes:

QC Services	Building Foundation	Kelly Chevrolet	252 Pittsburgh Road, Butler, PA
QA Services	Fertilizer Tank Farm	Forsythe & Long Eng.	100 Pattons Road, Martins Ferry, OH
QA/QC Services	Eden Hall Foundation	Chatham University	Woodland Road, Pittsburgh, PA
QC Services	Foundation Construction	Mascaro Construction Co.	Pittsburgh, PA
QA Services	Site Improvements	Lowes	Steubenville, OH

270 other QA/QC projects completed in the last five (5) years; additional projects available upon request.

The above projects demonstrate some of our project-specific and project-related experience that details a "one-stop shopping" solution for the Grafton #4 Refuse & HW, P.O. Number DEP 16073, reclamation project. Projects outlined in our attached AMLCCQQ provide more details on the above projects as well as others completed by CEC and our employees for the West Virginia Department of Environmental Protection AML and Special Reclamation Programs; the Ohio Department of Natural Resources AML Program; the West Virginia Conservation Agency; and others. CEC also has employee experience with numerous Small Operators Assistance Program Applications for surface and deep mine applications in West Virginia and Maryland, as well as over 438 hydrologic investigations for Special Reclamation on bond forfeited sites, all involving hydrologic and geologic investigations and Probable Consequences of Mining in different geologic and hydrologic settings across the State.

CEC can allot one (1) design team to this project. The Design Team leader will be Gregory Linder, P.E., supplemented by necessary support personnel including CADD Operators, Staff Engineers, Survey Crews, and other support personnel to ensure the project is completed within WVDEP timeframes. In addition, Randy Calkins will serve as AML Manager.

We are very excited about the opportunity to continue our working relationship with the West Virginia Department of Environmental Protection and look forward to providing engineering services on this most important project. We believe no other company can meet our quality of work, which, when coupled with our experience, allows us to be more efficient and therefore very cost competitive. Our Bridgeport office is located within 12 miles of the project site; has successfully and economically completed similar projects; and will respond quickly, effectively, and in the most economical way. If chosen, our primary objective will be to address WVAML needs complimented by other professionals in varying fields of

expertise available on an "as needed" basis from our pool of over 550 professionals in Surveying and Mapping, Civil and Site Engineering, Geotechnical Engineering, and Construction.

Should any questions arise, or if we can supply additional information or be of further service to you, the Purchasing Division, or the West Virginia Department of Environmental Protection please contact me anytime at 304-933-3119.

Respectfully submitted,

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.

Gregory Linder, P.E., Project Manager
Tel: (304) 933-3119
Fax: (304) 933-3327
glinder@cecinc.com

Dennis E. Miller, Principal
Tel: (304) 933-3119
Fax: (304) 933-3327
dmiller@cecinc.com

Attachment: CEC EOI for Grafton #4 Refuse & HW

130-112-L-EOI-DEP16073-1-29-13/P

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

Solicitation

NUMBER	PAGE
DEP16073	1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
FRANK WHITTAKER
304-558-2316

VENDOR
RFQ COPY
TYPE NAME/ADDRESS HERE

SHIP TO
ENVIRONMENTAL PROTECTION
DEPARTMENT OF
OFFICE OF AML&R
601 57TH STREET SE
CHARLESTON, WV
25304 304-926-0499

DATE PRINTED
12/20/2012

BID OPENING DATE: 01/29/2013 BID OPENING TIME 1:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	JB		906-29		

GRAFTON #4 REFUSE & HW DESIGN

EXPRESSION OF INTEREST

THE WEST VIRGINIA PURCHASING DIVISION, FOR THE AGENCY, THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, IS SOLICITING EXPRESSIONS OF INTEREST FOR PROFESSIONAL ENGINEERING DESIGN SERVICES AND CONSTRUCTION MONITORING SERVICES AT THE GRAFTON #4 REFUSE & HW PROJECT IN TAYLOR COUNTY, WEST VIRGINIA PER THE FOLLOWING BID REQUIREMENTS AND ATTACHED SPECIFICATIONS.

****** THIS IS THE END OF RFQ DEP16073 ****** TOTAL:

SIGNATURE	TELEPHONE	DATE
TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO SOLICITATION, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

EXPRESSION OF INTEREST
GRAFTON #4 REFUSE & HIGHWALL
DEP16073

TABLE OF CONTENTS:

1. **Table of Contents**
2. **Section One: General Information**
3. **Section Two: Instructions to Vendors Submitting Bids**
4. **Section Three: Project Specifications**
5. **Section Four: Vendor Proposal, Evaluation, and Award**
6. **Section Five: Terms and Conditions**
7. **Certification and Signature Page**

SECTION ONE: GENERAL INFORMATION

1. **PURPOSE:** The Acquisition and Contract Administration Section of the Office of West Virginia State Purchasing Division (Purchasing Division) is soliciting Expression(s) of Interest (EOI) for the West Virginia Department of Environmental Protection, Office of Abandoned Mine Lands and Reclamation (WVDEP/AML), from qualified firms (Vendors) to provide architectural/engineering services as defined herein.

2. **PROJECT:** The mission or purpose of the project for which bids are being solicited is to provide design services for the following:

   GRAFTON #4 REFUSE & HIGHWALL:

   Design of drainage conveyances.
   Installation of mine seals.
   Subsidence area reclamation.
   Highwall reclamation.
   Refuse reclamation.
   Re-vegetation of disturbed areas.

EXPRESSION OF INTEREST
GRAFTON #4 REFUSE & HIGHWALL
DEP16073

3. SCHEDULE OF EVENTS:

Release of the EOI..... .....12/28/2012
Addendum Issued .....TBD
Expressions of Interest Opening Date..... 01/29/2013
Estimated Date for Interviews .....TBD

SECTION TWO: INSTRUCTIONS TO VENDORS SUBMITTING BIDS

Instructions begin on the next page.

INSTRUCTIONS TO VENDORS SUBMITTING BIDS

1. **REVIEW DOCUMENTS THOROUGHLY:** The attached documents contain a solicitation for bids. Please read these instructions and all documents attached in their entirety. These instructions provide critical information about requirements that if overlooked could lead to disqualification of a Vendor's bid. All bids must be submitted in accordance with the provisions contained in these instructions and the Solicitation. Failure to do so may result in disqualification of Vendor's bid.

2. **MANDATORY TERMS:** The Solicitation may contain mandatory provisions identified by the use of the words "must," "will," and "shall." Failure to comply with a mandatory term in the Solicitation will result in bid disqualification.

3. **PREBID MEETING:** The item identified below shall apply to this Solicitation.

   [✓] A pre-bid meeting will not be held prior to bid opening.

   [ ] A **NON-MANDATORY PRE-BID** meeting will be held at the following place and time:

   [ ] A **MANDATORY PRE-BID** meeting will be held at the following place and time:

   All Vendors submitting a bid must attend the mandatory pre-bid meeting. Failure to attend the mandatory pre-bid meeting shall result in disqualification of the Vendor's bid. No one person attending the pre-bid meeting may represent more than one Vendor.

   An attendance sheet provided at the pre-bid meeting shall serve as the official document verifying attendance. The State will not accept any other form of proof or documentation to verify attendance. Any person attending the pre-bid meeting on behalf of a Vendor must list on the attendance sheet his or her name and the name of the Vendor he or she is representing. Additionally, the person attending the pre-bid meeting should include the Vendor's E-Mail address, phone number, and Fax number on the attendance sheet. It is the Vendor's responsibility to locate the attendance sheet and provide the required

information. Failure to complete the attendance sheet as required may result in disqualification of Vendor's bid.

All Vendors should arrive prior to the starting time for the pre-bid. Vendors who arrive after the starting time but prior to the end of the pre-bid will be permitted to sign in, but are charged with knowing all matters discussed at the pre-bid.

Questions submitted at least five business days prior to a scheduled pre-bid will be discussed at the pre-bid meeting if possible. Any discussions or answers to questions at the pre-bid meeting are preliminary in nature and are non-binding. Official and binding answers to questions will be published in a written addendum to the Solicitation prior to bid opening.

4. **VENDOR QUESTION DEADLINE:** Vendors may submit questions relating to this Solicitation to the Purchasing Division. Questions must be submitted in writing. All questions must be submitted on or before the date listed below and to the address listed below in order to be considered. A written response will be published in a Solicitation addendum if a response is possible and appropriate. Non-written discussions, conversations, or questions and answers regarding this Solicitation are preliminary in nature and are non-binding.

Question Submission Deadline:

Submit Questions to:

Frank Whhittaker
2019 Washington Street, East
P.O. Box 50130
Charleston, WV 25305
Fax: 304-558-4115
Email: frank.m.whittaker@wv.gov

5. **VERBAL COMMUNICATION:** Any verbal communication between the Vendor and any State personnel is not binding, including that made at the mandatory pre-bid conference. Only information issued in writing and added to the Solicitation by an official written addendum by the Purchasing Division is binding.

6. **BID SUBMISSION:** All bids must be signed and delivered by the Vendor to the Purchasing Division at the address listed below on or before the date and time of the bid opening. Any bid received by the Purchasing Division staff is considered to be in the possession of the Purchasing Division and will not be returned for any reason. The bid delivery address is:

Department of Administration, Purchasing Division
2019 Washington Street East
P.O. Box 50130,
Charleston, WV 25305-0130

The bid should contain the information listed below on the face of the envelope or the bid may not be considered:

SEALED BID
BUYER: _____
SOLICITATION NO.: _____
BID OPENING DATE: _____
BID OPENING TIME: _____
FAX NUMBER: _____

In the event that Vendor is responding to a request for proposal, the Vendor shall submit one original technical and one original cost proposal plus [ ] convenience copies of each to the Purchasing Division at the address shown above. Additionally, the Vendor should identify the bid type as either a technical or cost proposal on the face of each bid envelope submitted in response to a request for proposal as follows:

BID TYPE: [ ] Technical
[ ] Cost

7. **BID OPENING:** Bids submitted in response to this Solicitation will be opened at the location identified below on the date and time listed below. Delivery of a bid after the bid opening date and time will result in bid disqualification. For purposes of this Solicitation, a bid is considered delivered when time stamped by the official Purchasing Division time clock.

Bid Opening Date and Time:	01/29/2013 at 1:30 PM
Bid Opening Location:	Department of Administration, Purchasing Division 2019 Washington Street East P.O. Box 50130, Charleston, WV 25305-0130

8. **ADDENDUM ACKNOWLEDGEMENT:** Changes or revisions to this Solicitation will be made by an official written addendum issued by the Purchasing Division. Vendor should acknowledge receipt of all addenda issued with this Solicitation by completing an Addendum Acknowledgment Form, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

9. **BID FORMATTING:** Vendor should type or electronically enter the information onto its bid to prevent errors in the evaluation. Failure to type or electronically enter the information may result in bid disqualification.

EXPRESSION OF INTEREST
GRAFTON #4 REFUSE & HIGHWALL
DEP16073

SECTION THREE: PROJECT SPECIFICATIONS

1. **Location:** Agency is located at 209 South Main Street, Philippi, WV 26416 and the Project is located in Taylor County, WV.

   Directions to Site: From Philippi, take US 119 north towards Webster in Taylor County. Turn left (east) on Simpson Rd. (CR 13) for 3.6 miles. Turn left on Bosley/Gabe Fork Road, CR 13 / 5, for 0.85 miles to red metal barn and farm road, on right. Follow farm road (to the north of Robert Spencer's residence) northwest through field to bench for about 0.3 miles. Collapsed and draining portals begin here.

2. **Background:** Firms are to be licensed Architectural/Engineering Firms (A/E) and should be familiar with, and have a successful track record of design of similar projects. The anticipated contract will be for "full-service" A/E design. Aspects of the design are to include, but not be limited to, Civil, Structural, Geological and Hydrological.

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

   Design of drainage conveyances.
   Installation of mine seals.
   Subsidence area reclamation.
   Highwall reclamation.
   Refuse reclamation.
   Re-vegetation of disturbed areas.

   Preliminary design documents will be due 75 days from the issuance of the Purchase Order.

3. **Qualifications and Experience:** Vendors will provide information regarding its employees, such as staff qualifications and experience in completing similar projects; references; copies of any staff certifications or degrees applicable to this project; proposed staffing plan; descriptions of past projects completed entailing the location of the project, project manager name and contact information, type of project, and what the project goals and objectives where and how they were met.

EXPRESSION OF INTEREST
GRAFTON #4 REFUSE & HIGHWALL
DEP16073

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

AML Consultant Qualification Questionnaire (CQQ) must be completed to be eligible (See Attachment "B").

AML and Related Project Experience Matrix (RPEM) must also be completed to be eligible (See Attachment "C").

Electronic copies of the above referenced documents Attachment "B" and Attachment "C" are available online for registered vendors at: http://www.state.wv.us/admin/purchase/newbul.htm.

4. **Project and Goals:** The project goals and objectives are:

   Develop drawings and specifications to remediate an abandoned mine land problem area.

5. **Oral Presentations (Agency Option):** The Agency has the option of requiring oral presentations of all Vendors participating in the EOI process. If this option is exercised, it would be listed in the Schedule of Events (Section 1.3) of this EOI. During oral presentations, Vendors may not alter or add to their submitted proposal, but only clarify information. A description of the materials and information to be presented is provided below:

   5.1. Materials and Information Required at Oral Presentation:

   "Evaluation and Award Process" will be conducted with the three firms selected as the most qualified by the WVDEP Selection Committee. The Committee will schedule the interviews.

EXPRESSION OF INTEREST
GRAFTON #4 REFUSE & HIGHWALL
DEP16073

The format for the interviews will be a 15-30 minute PowerPoint presentation consisting, at a minimum, of the following:

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

SECTION FOUR: VENDOR PROPOSAL, EVALUATION, & AWARD

1. **Economy of Preparation:** EOI's should be prepared simply and economically, providing a straightforward, concise description of firm's abilities to satisfy the requirements and goals and objectives of the EOI. Emphasis should be placed on completeness and clarity of content. The response sections should be labeled for ease of evaluation.

   All responses should be submitted in a loose-leaf, three ring binder. Submit one original, one convenience copy and one copy on CD.

2. **BIDS MUST NOT CONTAIN PRICE QUOTATIONS:** The State shall select the best value solution according to §5G-1-3 of the West Virginia State Code. In accordance with the Code requirements, no "price" or "fee" information is requested or permitted in the bid response.

3. **Evaluation and Award Process:** Expressions of Interest for projects estimated to cost $250,000 or more will be evaluated and awarded in accordance with West Virginia Code §5G-1-3. That Code section requires the following:

   3.1. **Required Elements of EOI Response**: The director of purchasing shall encourage such firms engaged in the lawful practice of the profession to submit an expression of

EXPRESSION OF INTEREST
GRAFTON #4 REFUSE & HIGHWALL
DEP16073

interest, which shall include a statement of qualifications, and performance data and may include anticipated concepts and proposed methods of approach to the project.

3.2. **Public Advertisement:** All EOI requests shall be announced by public notice published as a Class II legal advertisement in compliance with the provisions of West Virginia Code §59-3-1 et seq.

3.3. **Selection Committee Evaluation & Negotiation:** A committee comprised of three to five representatives of the agency initiating the request shall:

3.3.1. Evaluate the statements of qualifications and performance data and other material submitted by the interested firms and select three firms which in their opinion are the best qualified to perform the desired service.

3.3.2. Conduct interviews with each firm selected and the conduct discussions regarding anticipated concepts and the proposed methods of approach to the assignment.

3.3.3. Rank in order of preference no less than three professional firms deemed to be the most highly qualified to provide the services required, and shall commence scope of service and price negotiations with the highest qualified professional firm.

3.3.4. Should the agency be unable to negotiate a satisfactory contract with the professional firm considered to be the most qualified, at a fee determined to be fair and reasonable, price negotiations with the firm of second choice shall commence. Failing accord with the second most qualified professional firm, the committee shall undertake price negotiations with the third most qualified professional firm.

3.3.5. Should the agency be unable to negotiate a satisfactory contract with any of the selected professional firms, it shall select additional professional firms in order of their competence and qualifications and it shall continue negotiations in accordance with this section until an agreement is reached.

EXPRESSION OF INTEREST
GRAFTON #4 REFUSE & HIGHWALL
DEP16073

3.4. **Vendor Ranking:** All evaluation criteria is defined in the Procurement Specifications section and based on a 100 point total score.

Points shall be assigned based upon the Vendor's response to the evaluation criteria as follows:

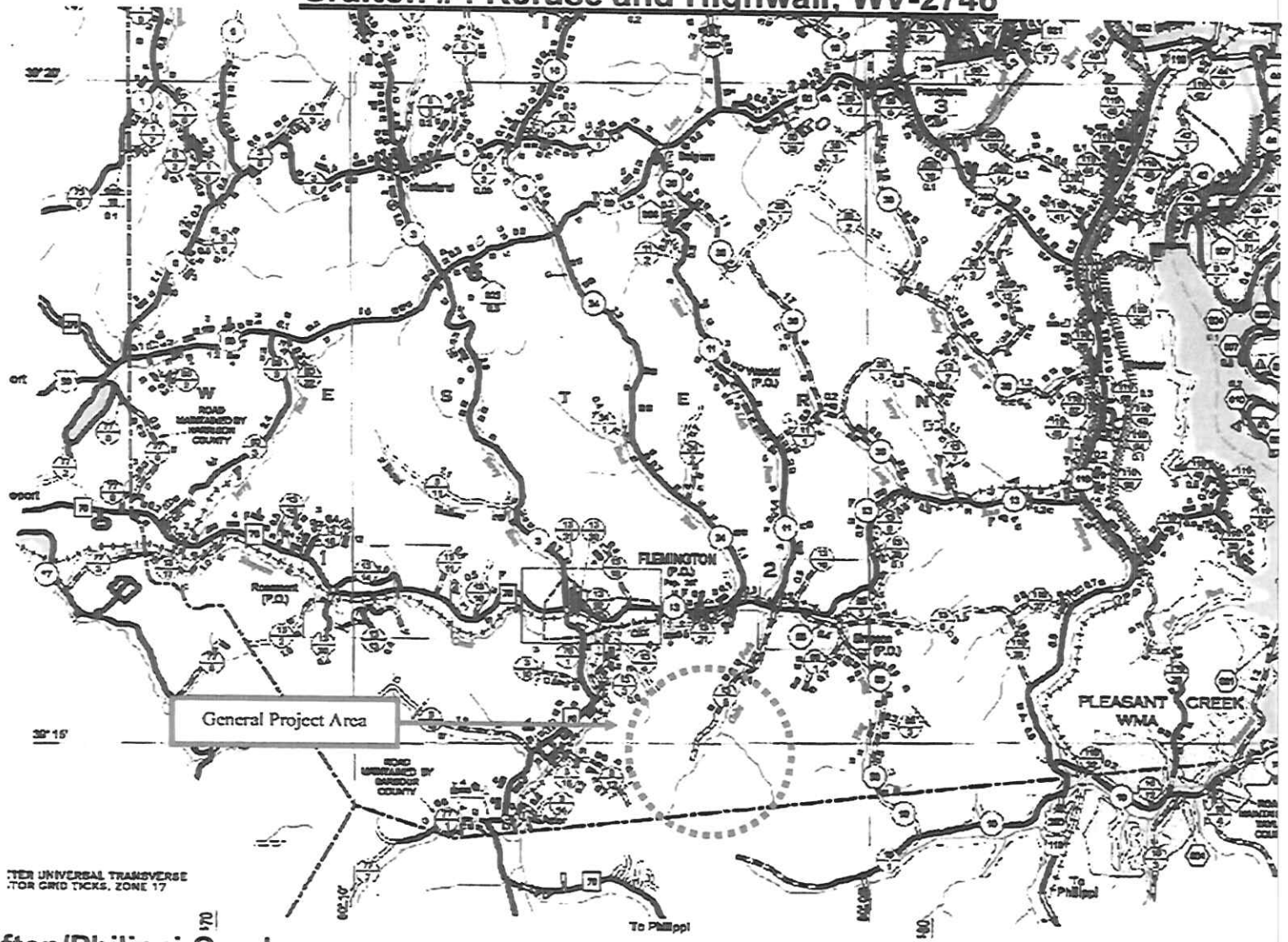
A. WV Registered Professional Engineers (Civil or Mining) In the Primary Office:	20 points
B. Reclamation Engineering design experience of the Primary Office's WVRPE as it relates to the specific project problem Areas:	25 points
C. Available WV-AML Design Teams within the Primary office (A Design team should consist of one Project Engineer (Civil or Mining), one CAD person and availability of other support personnel a required by the particular project):	20 points
D. The Oral Interview (See Section 5.1 under Section 3 of this EOI):	35 points

EXPRESSION OF INTEREST
GRAFTON #4 REFUSE & HIGHWALL
DEP16073

SECTION FIVE: TERMS AND CONDITIONS

Terms and conditions begin on the next page.

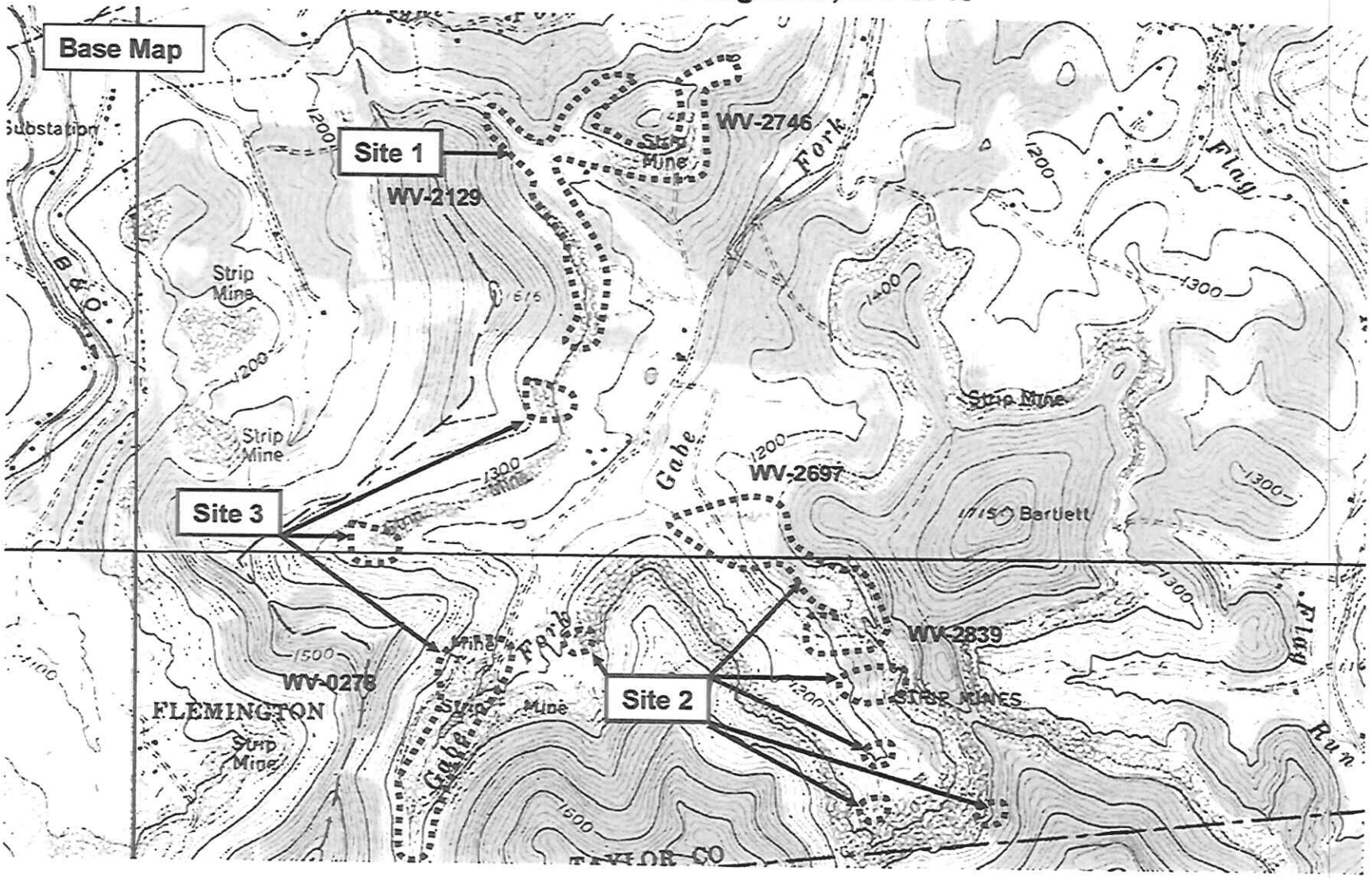
Highway Map
Grafton #4 Refuse and Highwall; WV-2746



Grafton/Philippi Quads
Latitude: 39° 15' 23"

Taylor County
Longitude: 80° 06' 25"

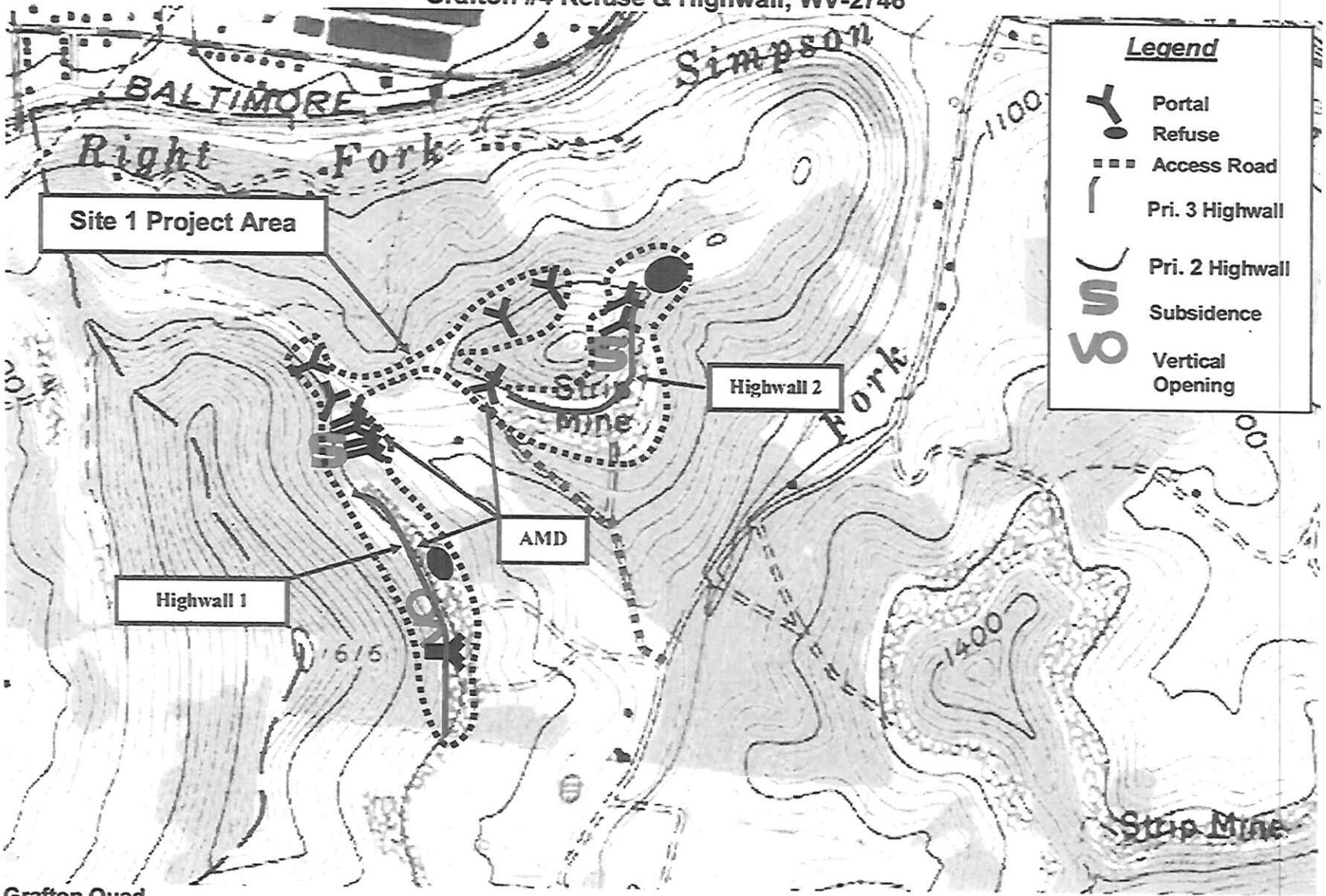
Project Location - Topographic Map
Grafton #4 Refuse & Highwall; WV-2746



Grafton/Philippi Quads
Latitude: 39° 15' 23"

Taylor County
Longitude: 80° 06' 25"

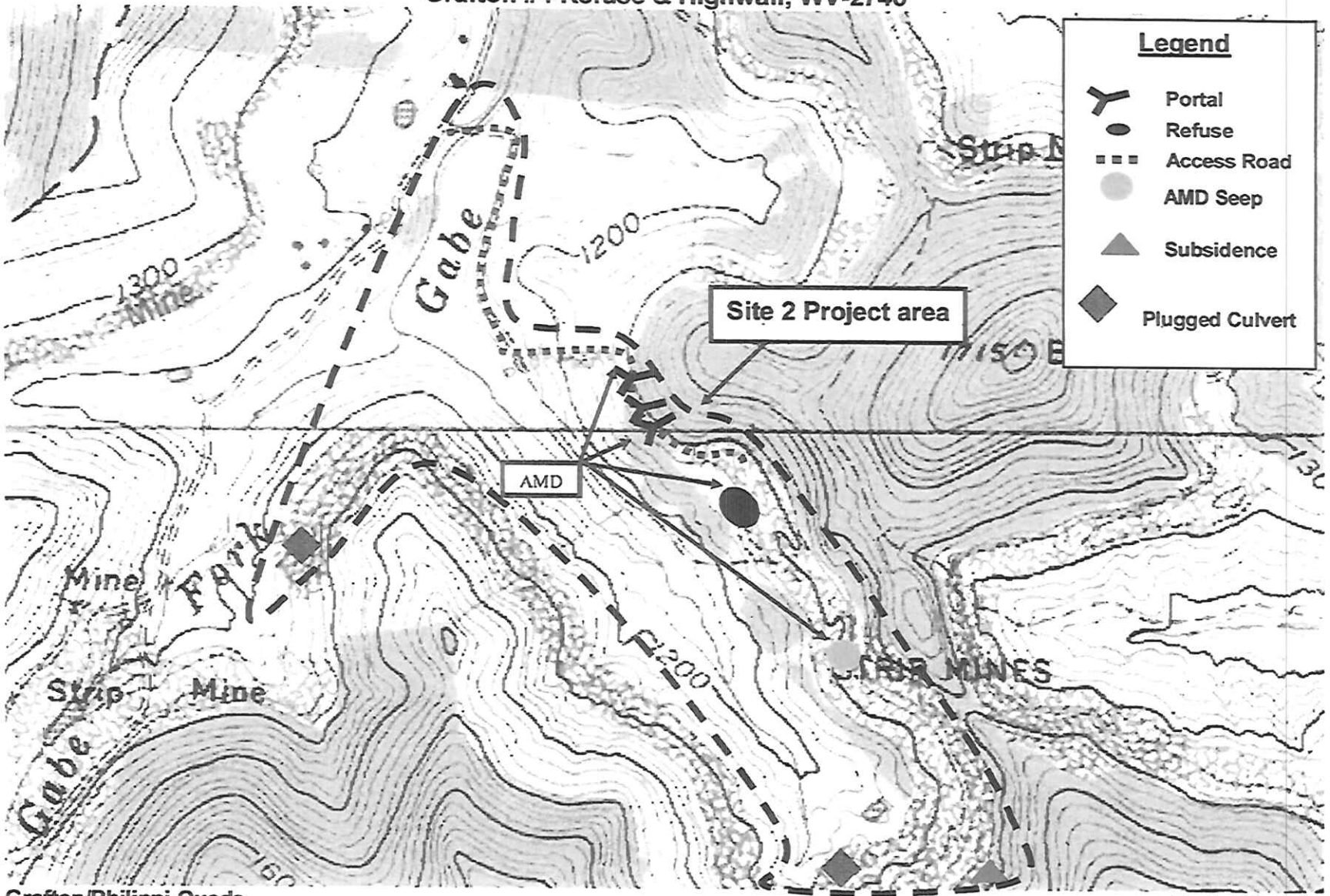
Project Location - Topographic Map
Grafton #4 Refuse & Highwall; WV-2746



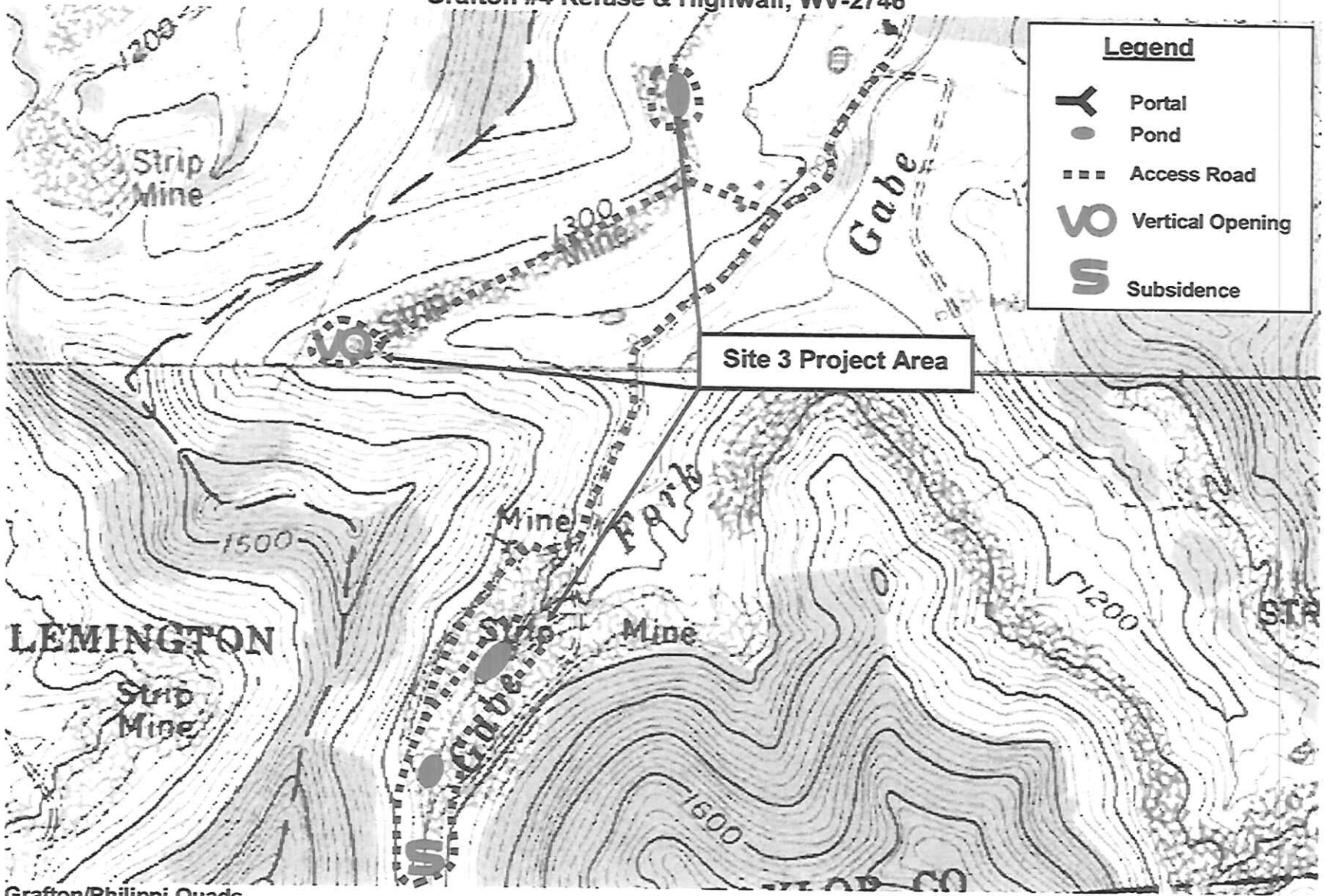
Grafton Quad
Latitude: 39° 15' 23"

Taylor County
Longitude: 80° 06' 25"

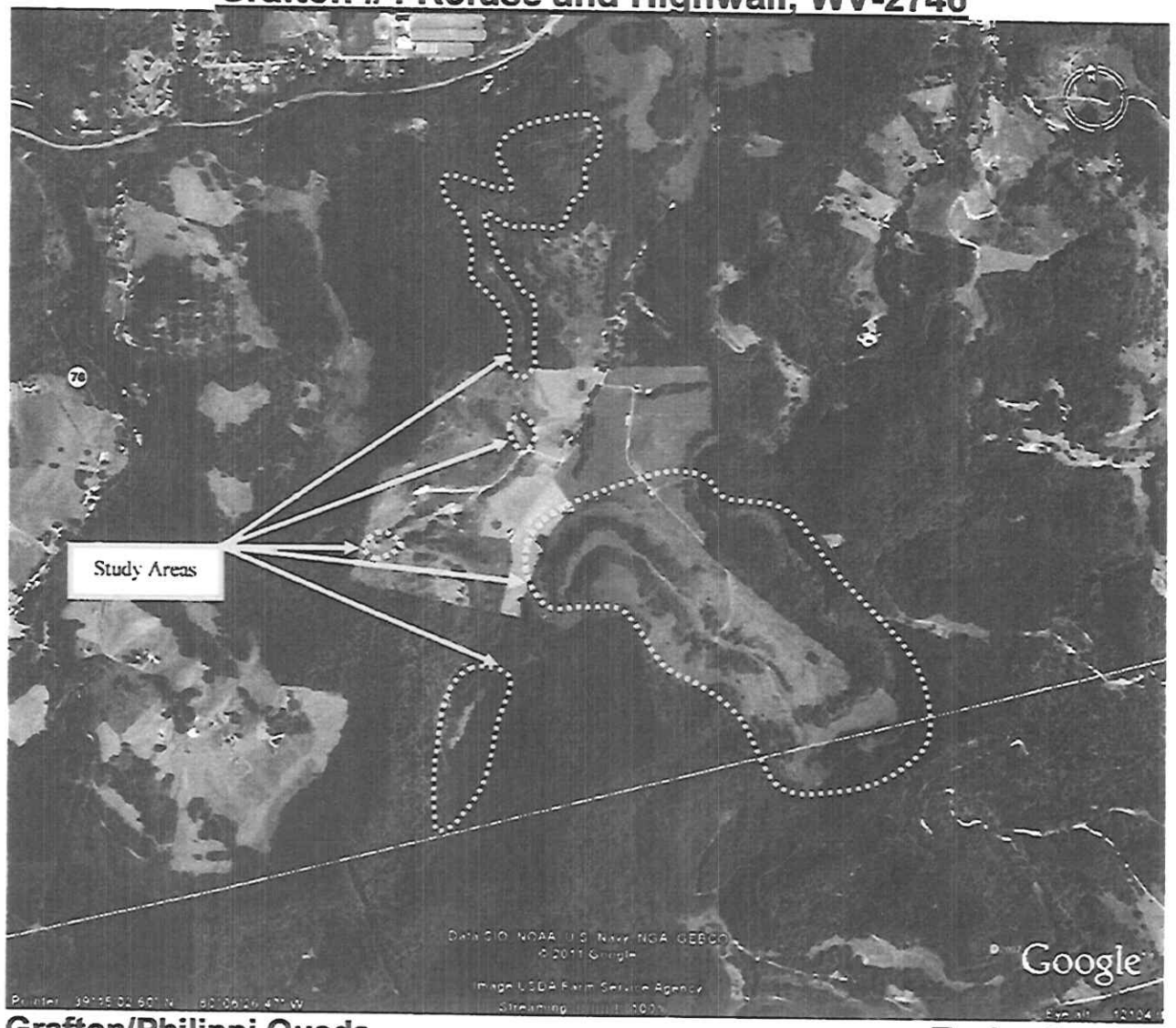
Project Location - Topographic Map
Grafton #4 Refuse & Highwall; WV-2746



Project Location - Topographic Map
Grafton #4 Refuse & Highwall; WV-2746



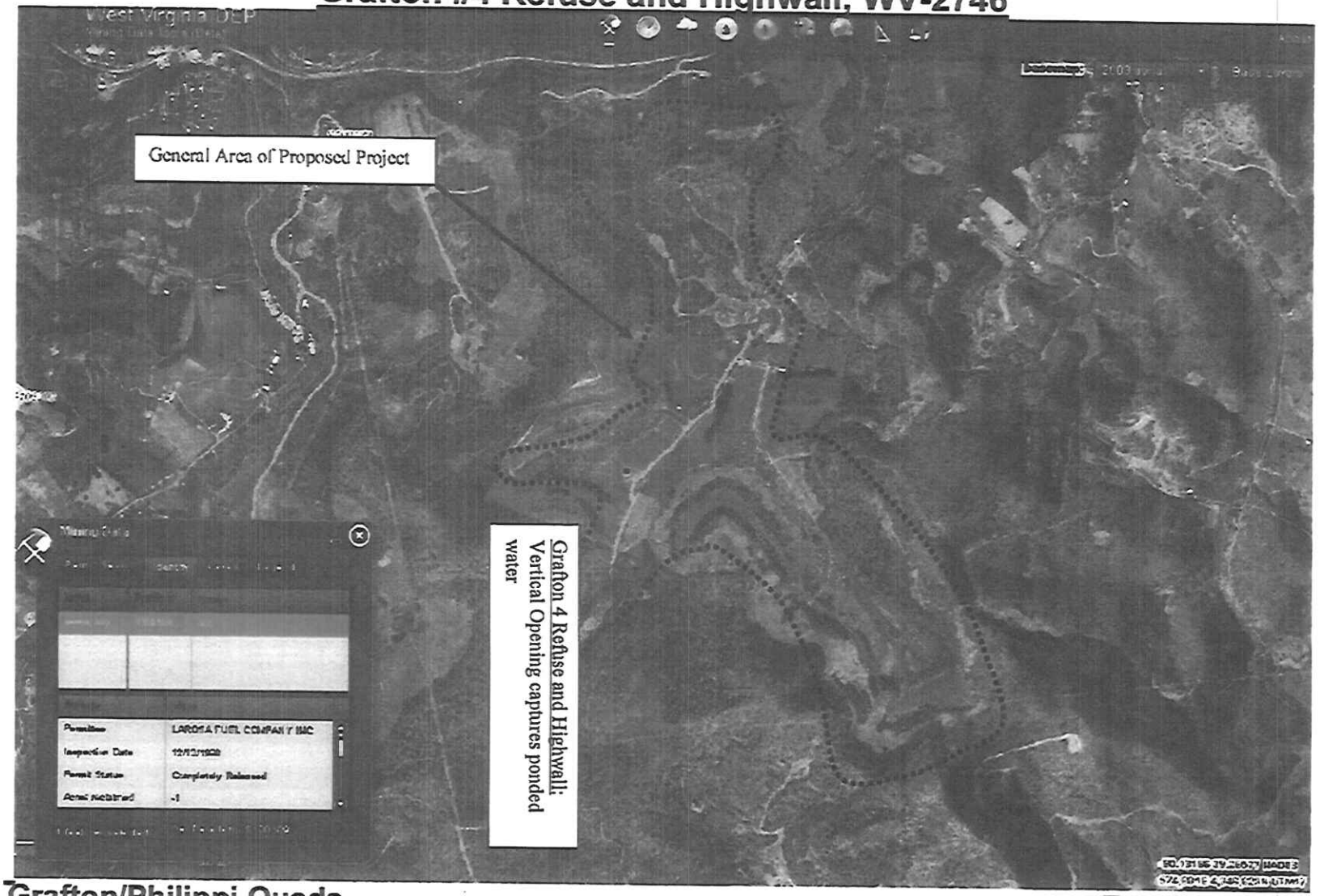
Project Aerial Location Map
Grafton #4 Refuse and Highwall; WV-2746



Grafton/Philippi Quads
Latitude: 39° 15' 23"

Taylor County
Longitude: 80° 06' 25"

Permit Map
Grafton #4 Refuse and Highwall; WV-2746



Grafton/Philippi Quads
Latitude: 39° 15' 23"

Taylor County
Longitude: 80° 06' 25"

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
AML CONSULTANT QUALIFICATION QUESTIONNAIRE

Attachment "B"

PROJECT NAME	DATE (DAY, MONTH, YEAR)	FEIN
1. FIRM NAME	2. HOME OFFICE BUSINESS ADDRESS	3. FORMER FIRM NAME

4. HOME OFFICE TELEPHONE	5. ESTABLISHED (YEAR)	6. TYPE OWNERSHIP Individual Corporation Partnership Joint-Venture	6a. WV REGISTERED DBE (Disadvantaged Business Enterprise) YES NO

7. PRIMARY AML DESIGN OFFICE: ADDRESS/ TELEPHONE/ PERSON IN CHARGE/ NO. AML DESIGN PERSONNEL EACH OFFICE

8. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM	8a. NAME, TITLE, & TELEPHONE NUMBER – OTHER PRINCIPALS

9. PERSONNEL BY DISCIPLINE

— ADMINISTRATIVE
— ARCHITECTS
— **BIOLOGIST**
— **CADD OPERATORS**
— CHEMICAL ENGINEERS
— **CIVIL ENGINEERS**
— CONSTRUCTION INSPECTORS
— DESIGNERS
— DRAFTSMEN
— ECOLOGISTS
— ECONOMISTS
— ELECTRICAL ENGINEERS
— ENVIRONMENTALISTS
— ESTIMATORS
— **GEOLOGISTS**
— HISTORIANS
— HYDROLOGISTS
— LANDSCAPE ARCHITECTS
— MECHANICAL ENGINEERS
— **MINING ENGINEERS**
— PHOTOGRAMMETRISTS
— PLANNERS: URBAN/REGIONAL
— SANITARY ENGINEERS
— SOILS ENGINEERS
— SPECIFICATION WRITERS
— STRUCTURAL ENGINEERS
— **SURVEYORS**
— TRAFFIC ENGINEERS
— OTHER

— TOTAL PERSONNELL

TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE: _____
***RPEs other than Civil and Mining must provide supporting documentation that qualifies them to supervise and perform this type of work.**

10. HAS THIS JOINT-VENTURE WORKED TOGETHER BEFORE? ☐ YES ☐ NO

11. OUTSIDE KEY CONSULTANTS/SUB-CONSULTANTS ANTICIPATED TO BE USED. Attach "AML Consultant Qualification Questionnaire".		
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No

12. A. Is your firm's personnel experienced in Abandoned Mine Lands Remediation/Mine Reclamation Engineering?

YES Description and Number of Projects: _____

NO

B. Is your firm experienced in Soil Analysis?

YES Description and Number of Projects: _____

NO

C. Is your firm experienced in hydrology and hydraulics?

YES Description and Number of Projects: _____

NO

D. Does your firm produce its own Aerial Photography and Develop Contour Mapping?

YES Description and Number of Projects: _____

NO

E. Is your firm experienced in domestic waterline design? (Include any experience your firm has in evaluation of aquifer degradation as a result of mining.)

YES Description and Number of Projects: _____

NO

F. Is your firm experienced in Acid Mine Drainage Evaluation and Abatement Design?

YES Description and Number of Projects: _____

NO

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES **RESPONSIBLE FOR AML PROJECT DESIGN** (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:

Brief Explanation of Responsibilities

EDUCATION (Degree, Year, Specialization)

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES **RESPONSIBLE FOR AML PROJECT DESIGN** (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:

Brief Explanation of Responsibilities

EDUCATION (Degree, Year, Specialization)

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES **RESPONSIBLE FOR AML PROJECT DESIGN** (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:

Brief Explanation of Responsibilities

EDUCATION (Degree, Year, Specialization)

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES **RESPONSIBLE FOR AML PROJECT DESIGN** (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:

Brief Explanation of Responsibilities

EDUCATION (Degree, Year, Specialization)

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)

14. PROVIDE A LIST OF SOFTWARE AND EQUIPMENT AVAILABLE IN THE PRIMARY OFFICE WHICH WILL BE USED TO COMPLETE AML DESIGN SERVICES

15. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATED ENGINEER OF RECORD

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE

TOTAL NUMBER OF PROJECTS:

TOTAL ESTIMATED CONSTRUCTION COSTS: $

16. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A SUB-CONSULTANT TO OTHERS

PROJECT NAME, TYPE AND LOCATION	NATURE OF FIRMS RESPONSIBILITY	NAME AND ADDRESS OF OWNER	ESTIMATED COMPLETION DATE	ESTIMATED CONSTRUCTION COST	
				ENTIRE PROJECT	YOUR FIRMS RESPONSIBILITY

17. C[illegible]LETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)

18. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM HAS BEEN A SUB-CONSULTANT TO OTHER FIRMS (INDICATE PHASE OF WORK FOR WHICH YOUR FIRM WAS RESPONSIBLE)

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH

19. Use this space to provide any additional information or description of resources supporting your firm's qualifications to perform work for the West Virginia Abandoned Mine Lands Program.

20. The foregoing is a statement of facts.

Signature:_____ Title:_____ Date:_____

Printed Name:_____

AML and RELATED PROJECT EXPERIENCE MATRIX

PROJECT	Exp. Basis C=Corp. P=Personal *	Additional Info Provided in Section (s) **	PROJECT EXPERIENCE REQUIREMENTS															PRIMARY STAFF PARTICIPATION/CAPACITY *** M=Management P=Professional					
			Abandoned Surface Mine Reclamation	Abandoned Deep Mine Reclamation	Portal/Shaft Closure	Hydrologic/Hydraulic Design/Eval.	Remining Evaluation	Mine/Refuse Fire Abatement	Subsidence Investigation Mitigation	Hazardous Waste Disposal	Project Specifications	Water Quality Evaluation/Mitigation/ Replacement	Construction Inspection/Management	Water Treatment	Equipment/Structure Removal	Stream Restoration	Geotechnical/Stability						

* List whether project experience is corporate or personnel based or both.
** Use this area to provide specific sections or pages if needed for reference.
*** List Primary Design personnel and their functional capacity for the projects listed.

Attachment "C"

GENERAL TERMS AND CONDITIONS:

1. **CONTRACTUAL AGREEMENT:** Issuance of a Purchase Order signed by the Purchasing Division Director, or his designee, and approved as to form by the Attorney General's office constitutes acceptance of this Contract made by and between the State of West Virginia and the Vendor. Vendor's signature on its bid 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 "Contract" means the binding agreement that is entered into between the State and the Vendor to provide the goods and services requested in the Solicitation.

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

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

   2.5 "Purchase Order" 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 successful bidder and Contract holder.

   2.6 "Solicitation" means the official solicitation published by the Purchasing Division and identified by number on the first page thereof.

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

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

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

| | **Term Contract**

Initial Contract Term: This Contract becomes effective on [ ] and extends for a period of [ ] year(s).

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 must be submitted to the Purchasing Division Director 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. Renewal of this Contract is limited to [ ] successive one (1) year periods. Automatic renewal of this Contract is prohibited. Notwithstanding the foregoing, Purchasing Division approval is not required on agency delegated or exempt purchases. Attorney General approval may be required for vendor terms and conditions.

Reasonable Time Extension: At the sole discretion of the Purchasing Division Director, and with approval from the Attorney General's office (Attorney General approval is as to form only), this Contract may be extended for a reasonable time after the initial Contract term or after any renewal term as may be necessary to obtain a new contract or renew this Contract. Any reasonable time extension shall not exceed twelve (12) months. Vendor may avoid a reasonable time extension by providing the Purchasing Division Director with written notice of Vendor's desire to terminate this Contract 30 days prior to the expiration of the then current term. During any reasonable time extension period, the Vendor may terminate this Contract for any reason upon giving the Purchasing Division Director 30 days written notice. Automatic extension of this Contract is prohibited. Notwithstanding the foregoing, Purchasing Division approval is not required on agency delegated or exempt purchases, but Attorney General approval may be required.

| | **Fixed Period Contract:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed within [ ] days.

|✓| **One Time Purchase:** The term of this Contract shall run for one year from the date the Purchase Order is issued or from the date the Purchase Order is issued until all of the goods contracted for have been delivered, whichever is shorter.

| | **Other:** See attached.

4. **NOTICE TO PROCEED:** Vendor shall begin performance of this Contract immediately upon receiving notice to proceed unless otherwise instructed by the Agency. Unless otherwise specified, the fully executed Purchase Order will be considered notice to proceed

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 are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.

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

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

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

6. **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.

7. **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.

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

   [ ] **BID BOND:** All Vendors shall furnish a bid bond in the amount of five percent (5%) of the total amount of the bid protecting the State of West Virginia. The bid bond must be submitted with the bid.

| | **PERFORMANCE BOND:** The apparent successful Vendor shall provide a performance bond in the amount of [ ]. The performance bond must be issued and received by the Purchasing Division prior to Contract award. On construction contracts, the performance bond must be 100% of the Contract value.

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

In lieu of the Bid Bond, Performance Bond, and Labor/Material Payment Bond, the Vendor may provide certified checks, cashier's checks, or irrevocable letters of credit. Any certified check, cashier's check, or irrevocable letter of credit provided in lieu of a bond must be of the same amount and delivered on the same schedule as the bond it replaces. A letter of credit submitted in lieu of a performance and labor/material payment bond will only be allowed for projects under $100,000. Personal or business checks are not acceptable.

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

| | **WORKERS' COMPENSATION INSURANCE:** The apparent successful Vendor shall have appropriate workers' compensation insurance and shall provide proof thereof upon request.

|✓| **INSURANCE:** The apparent successful Vendor shall furnish proof of the following insurance prior to Contract award:

|✓| **Commercial General Liability Insurance:** $1,000,000.00 or more.

[ ] **Builders Risk Insurance:** builders risk – all risk insurance in an amount equal to 100% of the amount of the Contract.

[✓]	$2,000,000.00 Aggregate
[✓]	$1,000,000.00Automobile Liability
[✓]	$1,000,000.00 Professional Liability
[ ]	
[ ]	

The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether or not that insurance requirement is listed above.

[ ] **LICENSE(S) / CERTIFICATIONS / PERMITS:** In addition to anything required under the Section entitled Licensing, of the General Terms and Conditions, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits prior to Contract award, in a form acceptable to the Purchasing Division.

[ ]	
[ ]	
[ ]	
[ ]	

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

9. **LITIGATION BOND:** The Director reserves the right to require any Vendor that files a protest of an award to submit a litigation bond in the amount equal to one percent of the lowest bid submitted or $5,000, whichever is greater. The entire amount of the bond shall be forfeited if the hearing officer determines that the protest was filed for frivolous or improper purpose, including but not limited to, the purpose of harassing, causing unnecessary delay, or needless expense for the Agency. All litigation bonds shall be made payable to the Purchasing Division. In lieu of a bond, the protester may submit a cashier's check or certified check payable to the Purchasing Division. Cashier's or certified checks will be deposited with and held by the State Treasurer's office. If it is determined that the protest has not been filed for frivolous or improper purpose, the bond or deposit shall be returned in its entirety.

10. **ALTERNATES:** Any model, brand, or specification listed herein establishes the acceptable level of quality only and is not intended to reflect a preference for, or in any way favor, a particular brand or vendor. Vendors may bid alternates to a listed model or brand provided that the alternate is at least equal to the model or brand and complies with the required specifications. The equality of any alternate being bid shall be determined by the State at its sole discretion. Any Vendor bidding an alternate model or brand should clearly identify the alternate items in its bid and should include manufacturer's specifications, industry literature, and/or any other relevant documentation demonstrating the equality of the alternate items. Failure to provide information for alternate items may be grounds for rejection of a Vendor's bid.

11. **EXCEPTIONS AND CLARIFICATIONS:** The Solicitation contains the specifications that shall form the basis of a contractual agreement. Vendor shall clearly mark any exceptions, clarifications, or

other proposed modifications in its bid. Exceptions to, clarifications of, or modifications of a requirement or term and condition of the Solicitation may result in bid disqualification.

12. **LIQUIDATED DAMAGES:** Vendor shall pay liquidated damages in the amount _____ for _____ _____. 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.

13. **ACCEPTANCE/REJECTION:** The State may accept or reject any bid in whole, or in part. Vendor's signature on its bid signifies acceptance of the terms and conditions contained in the Solicitation and Vendor agrees to be bound by the terms of the Contract, as reflected in the Purchase Order, upon receipt.

14. **REGISTRATION:** Prior to Contract award, the apparent successful Vendor must be properly registered with the West Virginia Purchasing Division and must have paid the $125 fee if applicable.

15. **COMMUNICATION LIMITATIONS:** In accordance with West Virginia Code of State Rules §148-1-6.6, communication with the State of West Virginia or any of its employees regarding this Solicitation during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited without prior Purchasing Division approval. Purchasing Division approval for such communication is implied for all agency delegated and exempt purchases.

16. **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.

17. **PAYMENT:** Payment in advance is prohibited under this Contract. Payment may only be made after the delivery and acceptance of goods or services. The Vendor shall submit invoices, in arrears, to the Agency at the address on the face of the purchase order labeled "Invoice To."

18. **UNIT PRICE:** Unit prices shall prevail in cases of a discrepancy in the Vendor's bid.

19. **DELIVERY:** All quotations are considered freight on board destination ("F.O.B. destination") unless alternate shipping terms are clearly identified in the bid. Vendor's listing of shipping terms that contradict the shipping terms expressly required by this Solicitation may result in bid disqualification.

20. **INTEREST:** Interest attributable to late payment will only be permitted if authorized by the West Virginia Code. Presently, there is no provision in the law for interest on late payments.

21. **PREFERENCE:** Vendor Preference may only be granted upon written request and only in accordance with the West Virginia Code § 5A-3-37 and the West Virginia Code of State Rules. A Resident Vendor Certification form has been attached hereto to allow Vendor to apply for the preference. Vendor's

failure to submit the Resident Vendor Certification form with its bid will result in denial of Vendor Preference. Vendor Preference does not apply to construction projects.

22. **SMALL, WOMEN-OWNED, OR MINORITY-OWNED BUSINESSES:** For any solicitations publicly advertised for bid on or after July 1, 2012, in accordance with West Virginia Code §5A-3-37(a)(7) and W. Va. CSR § 148-22-9, any non-resident vendor certified as a small, women-owned, or minority-owned business under W. Va. CSR § 148-22-9 shall be provided the same preference made available to any resident vendor. Any non-resident small, women-owned, or minority-owned business must identify itself as such in writing, must submit that writing to the Purchasing Division with its bid, and must be properly certified under W. Va. CSR § 148-22-9 prior to submission of its bid to receive the preferences made available to resident vendors. Preference for a non-resident small, women-owned, or minority owned business shall be applied in accordance with W. Va. CSR § 148-22-9.

23. **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.

24. **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 cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-7.16.2.

25. **WAIVER OF MINOR IRREGULARITIES:** The Director reserves the right to waive minor irregularities in bids or specifications in accordance with West Virginia Code of State Rules § 148-1-4.6.

26. **TIME:** Time is of the essence with regard to all matters of time and performance in this Contract.

27. **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.

28. **COMPLIANCE:** Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendors acknowledge that they have reviewed, understand, and will comply with all applicable law.

29. **PREVAILING WAGE:** On any contract for the construction of a public improvement, Vendor and any subcontractors utilized by Vendor shall pay a rate or rates of wages which shall not be less than the fair minimum rate or rates of wages (prevailing wage), as established by the West Virginia Division of Labor under West Virginia Code §§ 21-5A-1 et seq. and available at http://www.sos.wv.gov/administrative-law/wagerates/Pages/default.aspx. Vendor shall be responsible for ensuring compliance with prevailing wage requirements and determining when prevailing wage

requirements are applicable. The required contract provisions contained in West Virginia Code of State Rules § 42-7-3 are specifically incorporated herein by reference.

30. **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.

31. **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). **No Change shall be implemented by the Vendor until such time as the Vendor receives an approved written change order from the Purchasing Division.**

32. **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.

33. **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.

34. **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. Notwithstanding the foregoing, Purchasing Division approval may or may not be required on certain agency delegated or exempt purchases.

35. **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.

36. **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.

37. **BANKRUPTCY**: In the event the Vendor files for bankruptcy protection, the State of West Virginia may deem this Contract null and void, and terminate this Contract without notice.

38. **HIPAA BUSINESS ASSOCIATE ADDENDUM**: The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, is available online at **http://www.state.wv.us/admin/purchase/vrc/hipaa.html** and is hereby made part of the agreement provided that the Agency meets the definition of a Covered entity (45 CFR §160.103) and will be disclosing Protected Health Information (45 CFR §160.103) to the Vendor.

39. **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.

40. **DISCLOSURE:** Vendor's response to the Solicitation and the resulting Contract are considered public documents and will be disclosed to the public in accordance with the laws, rules, and policies governing the West Virginia Purchasing Division. Those laws include, but are not limited to, the Freedom of Information Act found in West Virginia Code § 29B-1-1 et seq.

    If a Vendor considers any part of its bid to be exempt from public disclosure, Vendor must so indicate by specifically identifying the exempt information, identifying the exemption that applies, providing a detailed justification for the exemption, segregating the exempt information from the general bid information, and submitting the exempt information as part of its bid but in a segregated and clearly identifiable format. Failure to comply with the foregoing requirements will result in public disclosure of the Vendor's bid without further notice. A Vendor's act of marking all or nearly all of its bid as exempt is not sufficient to avoid disclosure and WILL NOT BE HONORED. Vendor's act of marking a bid or any part thereof as "confidential" or "proprietary" is not sufficient to avoid disclosure and WILL NOT BE HONORED. In addition, a legend or other statement indicating that all or substantially all of the bid is exempt from disclosure is not sufficient to avoid disclosure and WILL NOT BE HONORED. Vendor will be required to defend any claimed exemption for nondisclosure in the event of an administrative or judicial challenge to the State's nondisclosure. Vendor must indemnify the State for any costs incurred related to any exemptions claimed by Vendor. Any questions regarding the applicability of the various public records laws should be addressed to your own legal counsel prior to bid submission.

41. **LICENSING:** In accordance with West Virginia Code of State Rules §148-1-6.1.7, 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. 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.

42. **ANTITRUST:** In submitting a bid to, signing a contract with, or accepting a Purchase Order 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.

43. **VENDOR CERTIFICATIONS:** By signing its bid or entering into this Contract, Vendor certifies (1) that its bid was made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, person or entity submitting a bid for the same material, supplies, equipment or services; (2) that its bid is in all respects fair and without collusion or fraud; (3) that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; and (4) that it has reviewed this RFQ in its entirety; understands the requirements, terms and conditions, and other information contained herein. Vendor's signature on its bid also affirms that neither it nor its representatives have any interest, nor shall acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency.

    The individual signing this bid on behalf of Vendor certifies that he or she is authorized by the Vendor to execute this bid or any documents related thereto on Vendor's behalf; that he or she is authorized to bind the Vendor in a contractual relationship; and that, to the best of his or her knowledge, the Vendor has properly registered with any State agency that may require registration.

44. **PURCHASING CARD ACCEPTANCE:** The State of West Virginia currently utilizes a Purchasing Card program, administered under contract by a banking institution, to process payment for goods and services. The Vendor must accept the State of West Virginia's Purchasing Card for payment of all orders under this Contract unless the box below is checked.

    | ✓ | Vendor is not required to accept the State of West Virginia's Purchasing Card as payment for all goods and services.

45. **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.

46. **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.

47. **PURCHASING AFFIDAVIT:** In accordance with West Virginia Code § 5A-3-10a, all Vendors are required to sign, notarize, and submit the Purchasing Affidavit stating that neither the Vendor nor a related party owe a debt to the State in excess of $1,000. The affidavit must be submitted prior to award, but should be submitted with the Vendor's bid. A copy of the Purchasing Affidavit is included herewith.

48. **ADDITIONAL AGENCY AND LOCAL GOVERNMENT USE:** This Contract may be utilized by and extends to other agencies, spending units, and political subdivisions of the State of West Virginia; county, municipal, and other local government bodies; and school districts ("Other Government Entities"). This Contract shall be extended to the aforementioned Other Government Entities on the same prices, terms, and conditions as those offered and agreed to in this Contract. If the Vendor does not wish to extend the prices, terms, and conditions of its bid and subsequent contract to the Other Government Entities, the Vendor must clearly indicate such refusal in its bid. A refusal to extend this Contract to the Other Government Entities shall not impact or influence the award of this Contract in any manner.

49. **CONFLICT OF INTEREST:** Vendor, its officers or members or employees, shall not presently have or acquire any 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.

50. **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.requisitions@wv.gov.

51. **BACKGROUND CHECK:** In accordance with W. Va. Code § 15-2D-3, the Director of the Division of Protective Services shall require any service provider whose employees are regularly employed on the grounds or in the buildings of the Capitol complex or who have access to sensitive or critical information to submit to a fingerprint-based state and federal background inquiry through the state repository. The service provider is responsible for any costs associated with the fingerprint-based state and federal background inquiry.

After the contract for such services has been approved, but before any such employees are permitted to be on the grounds or in the buildings of the Capitol complex or have access to sensitive or critical information, the service provider shall submit a list of all persons who will be physically present and working at the Capitol complex to the Director of the Division of Protective Services for purposes of verifying compliance with this provision.

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.

52. **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.

The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:

a. 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

b. 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.

53. **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.

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:

    a. 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:** Contracts for architectural and engineering services will be governed by the AIA document B101-2007, as amended by the Supplementary Conditions for the State of West Virginia, in addition to the terms and conditions contained herein when procured under Chapter 5G of the West Virginia Code.

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

RFQ No. _____

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

MANDATE: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (*W. Va. Code* §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: _____

Authorized Signature: _____ Date: _____

State of _____

County of _____, to-wit:

Taken, subscribed, and sworn to before me this ___ day of _____, 20___.

My Commission expires _____, 20___.

AFFIX SEAL HERE **NOTARY PUBLIC** _____

CERTIFICATION AND SIGNATURE PAGE

By signing below, I certify that I have reviewed this Solicitation in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this bid or proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

_____
(Company)

_____
(Authorized Signature)

_____
(Representative Name, Title)

_____
(Phone Number) (Fax Number)

_____
(Date)

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: DEP16073

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

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

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

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

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

_____
Company

_____
Authorized Signature

_____
Date

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

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

Solicitation

NUMBER	PAGE
DEP16073	1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
FRANK WHITTAKER
304-558-2316

VENDOR
RFQ COPY
TYPE NAME/ADDRESS HERE
Civil & Environmental Consultants, Inc.
106 Cambridge Place, Suite B
Bridgeport, WV 26330

SHIP TO
ENVIRONMENTAL PROTECTION
DEPARTMENT OF
OFFICE OF AML&R
601 57TH STREET SE
CHARLESTON, WV
25304 304-926-0499

DATE PRINTED
12/20/2012

BID OPENING DATE: 01/29/2013 BID OPENING TIME 1:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	JB		906-29		

GRAFTON #4 REFUSE & HW DESIGN

EXPRESSION OF INTEREST

THE WEST VIRGINIA PURCHASING DIVISION, FOR THE AGENCY, THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, IS SOLICITING EXPRESSIONS OF INTEREST FOR PROFESSIONAL ENGINEERING DESIGN SERVICES AND CONSTRUCTION MONITORING SERVICES AT THE GRAFTON #4 REFUSE & HW PROJECT IN TAYLOR COUNTY, WEST VIRGINIA PER THE FOLLOWING BID REQUIREMENTS AND ATTACHED SPECIFICATIONS.

****** THIS IS THE END OF RFQ DEP16073 ****** TOTAL:

Dennis E. Miller

SIGNATURE	TELEPHONE	DATE
	304-933-3119	January 29, 2013

TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE
Vice President	25-1599565	

WHEN RESPONDING TO SOLICITATION, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

RFQ No. DEP 16073

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

MANDATE: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (*W. Va. Code* §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: Civil & Environmental Consultants, Inc.

Authorized Signature: _____ Date: 1-23-2013

Dennis E. Miller, Vice President

State of West Virginia

County of Harrison, to-wit:

Taken, subscribed, and sworn to before me this 23rd day of January, 2013.

My Commission expires May 10, 2017.

AFFIX SEAL HERE

NOTARY PUBLIC Sherry B Flesher

OFFICIAL SEAL
NOTARY PUBLIC
State of West Virginia
SHERRY B. FLESHER
Genesis Partners
P. O. Box 1000
Bridgeport, WV 26330
My Commission Expires May 10, 2017

CERTIFICATION AND SIGNATURE PAGE

By signing below, I certify that I have reviewed this Solicitation in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this bid or proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

Civil & Environmental Consultants, Inc.
(Company)

(Authorized Signature)

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

304-933-3119 304-933-3327
(Phone Number) (Fax Number)

January 29, 2013
(Date)

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: DEP16073

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

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

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

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

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

Civil & Environmental Consultants, Inc.
Company

Authorized Signature

January 29,2013
Date

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

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
AML CONSULTANT CONFIDENTIAL QUALIFICATION QUESTIONNAIRE

Attachment "B"

PROJECT NAME: **DEP 16073** **Grafton #4 Refuse & HW Design Services**	DATE (DAY, MONTH, YEAR) 29 January 2013	FEIN 25-1599565
1. FIRM NAME: Civil & Environmental Consultants, Inc.	2. HOME OFFICE BUSINESS ADDRESS: 333 Baldwin Road, Pittsburgh, PA 15205-4751	3. FORMER FIRM NAME

4. REGIONAL OFFICE TELEPHONE	5. ESTABLISHED (YEAR)	6. TYPE OWNERSHIP	6a. WV REGISTERED DBE
304-933-3119 855-488-9539	1989	_ Individual X Corporation _ Partnership _ Joint-Venture	_ YES X NO

7. PRESENT OFFICES: ADDRESS/ TELEPHONE/ PERSON IN CHARGE/ NO. PERSONNEL EACH OFFICE

7a. Total Personnel 557 as of 01/01/2013:

Austin, TX	206 Basin Road – Wild Basin A, Suite 240 Austin, TX 78746	(512)329-0006	Ray Shull	8
Boston, MA	31 Bellows Road, Raynham, MA 02767	(774)501-2176	Barry VanLaarhoven	15
Bridgeport, WV	**106 Cambridge Place, Suite B, Bridgeport, WV 26330**	**(304)933-3119**	**Dennis Miller**	**15**
Charlotte, NC	2030 S. Tryon Street, Suite 3E, Charlotte, NC 28203	(980)224-8104	Scott Brown	13
Chicago, IL	555 Butterfield Road, Suite 300, Lombard, IL 60148	(630)963-6026	John Hock	23
Cincinnati, OH	4274 Glendale Milford Road, Cincinnati, OH 45242	(513)985-0226	John Imbus	27
Cleveland, OH	5910 Harper Road Suite 106, Solon, OH 44139	(440)287-0157	Steve Putrich	10
Columbus, OH	8740 Orion Place Suite 100, Columbus, OH 43240	(614)540-6633	John DiNunzio	37
Detroit, MI	28373 Beck Road Suite H-10, Wixom, MI 48393	(248)374-8600	Ryan Dunning	6
Export, PA	4000 Triangle Lane Suite 200, Export, PA 15632	(724)327-5200	Dave Olson	30
Indianapolis, IN	530 E. Ohio Street Suite G, Indianapolis, IN 46204	(317)655-7777	Aaron Hurt	15
Nashville, TN	405 Duke Drive Suite 270, Franklin, TN 37067	(615)333-7797	Greg Kugler	15
North Central, PA	703 S. Elmer Avenue Suite 125, Sayre, PA 18840	(570)886-2007	Chip Amer	35
Phoenix, AZ	11811 North Tatum Boulevard Suite 3057, Phoenix, AZ	(602)760-2324	Randy Bodnar	10
Pittsburgh, PA	**333 Baldwin Road, Pittsburgh, PA 15205**	**(412)429-2324**	**Angelo Masullo**	**265**
St. Louis, MO	4848 Park 370 Boulevard Suite F, Hazelwood, MO 63042	(314)656-4566	Kevin Brown	29
Toledo, OH	3232 Executive Parkway Suite 105, Toledo, OH 43606	(419)724-5281	Tom Covrett	4
			CEC TOTAL:	**557**

8. NAMES OF PRINCIPAL OFFICIALS OR MEMBERS OF FIRM

Ken Miller – President & CEO
Dan Szwed – COO
Henry Soose – CFO
Jim Nairn – Senior Vice President
David Olsen – Vice President
Greg Kugler – Vice President
Angelo Masullo – Vice President
Joe Kolmer – Vice President
Dennis E. Miller – Vice President

8a. NAME, TITLE & TELEPHONE NUMBER - OTHER PRINCIPALS

Greg Quatchak – Board Secretary – (412) 429-2324
Jim Roberts – Board Director – (412) 429-2324
Gerry Solanti – Board Director – (412) 429-2324

9. **Personnel by Discipline:** (List each person only once, by primary function.) **Bold Lettering Indicates Design Team Members**

57	Administrative	56	Ecologist	0	Hydraulic Engineer	0	Project Manager
4	Archeologist	0	Economist	0	Hydrologist	41	Sanitary Engineer
1	Architect	0	Electrical Engineer	0	Interior Designer	0	Structural Engineer
22	**Biologist**	18	Environmental Engineer	7	Landscape Architect	28	**Surveyor**
35	**CADD Technician**	44	Environmental Scientist	0	Mechanical Engineer	4	Technician / Analyst
1	Chemical Engineer	See below	Foundation/Geotechnical Engineer	0	Mining Engineer	0	Toxicologist
75	**Civil Engineer**	9	Geographic Info. System Specialist	0	Planner: Urban / Regional	0	Transportation Engineer
25	Construction Inspector	37	**Geologist**	0	Process Engineer / Designer	15	Water Resources Engineer
1	Construction Manager	21	**Geotechnical Engineer**	10	Professional Land Surveyor	46	Other
						557	*TOTAL PERSONNEL*

Civil & Environmental Consultants, Inc. (CEC) has one (1) Bridgeport, WV Office AML Design Team and four (4) Pittsburg, PA office Design Teams that can be assigned to this project. Each AML Design Team will be comprised of: CADD operators and other necessary support personnel to ensure project goals are achieved and the project is completed within WVDEP established timeframes. The Bridgeport, WV Office Design Team leader is Greg Linder, P.E. Mr. Randy Calkins will serve as the AML Manager for this project.

10 HAS THIS JOINT-VENTURE WORKED TOGETHER BEFORE? ☐ YES ☐ NO

11.	OUTSIDE KEY CONSULTANTS / SUB-CONSULTANTS ANTICIPATED TO BE USED. Attach "AML Consultant Confidential Qualification Questionnaire".	
NAME AND ADDRESS: Novel Geo-Environmental, PLLC 806 B Street St. Albans, West Virginia 25177	**SPECIALTY:** Subsurface drilling investigation-geotechnical engineering – soil, rock, coal physical property testing	**WORKED WITH BEFORE:** [X] YES [ ] NO
NAME AND ADDRESS: Sturm Environmental Services P.O. Box 650 Bridgeport, WV 26330	**SPECIALTY:** Chemical analysis of soil, rock, and coal	**WORKED WITH BEFORE:** [X] YES [ ] NO
NAME AND ADDRESS: Keddal Aerial Mapping 1121 Boyce Road - Suite 3100 Pittsburgh, PA 15241	**SPECIALTY:** Aerial Photography Developing mapping from aerial photography	**WORKED WITH BEFORE:** [X] YES [ ] NO
NAME AND ADDRESS:	**SPECIALTY:**	**WORKED WITH BEFORE:** [ ] YES [ ] NO
NAME AND ADDRESS:	**SPECIALTY:**	**WORKED WITH BEFORE:** [ ] YES [ ] NO
NAME AND ADDRESS:	**SPECIALTY:**	**WORKED WITH BEFORE:** [ ] YES [ ] NO
NAME AND ADDRESS:	**SPECIALTY:**	**WORKED WITH BEFORE:** [ ] YES [ ] NO

12. **Is your firm experienced in Abandoned Mine Lands Remed[illegible]n / Mine Reclamation Engineering?**

[X] Yes
[ ] No

Description and Number of Projects: **Corporate and Employee Experience: Forty (48) Projects**

Civil & Environmental Consultants, Inc. (CEC) personnel have successfully completed forty eight (48) AML Reclamation projects. See Sheets 5 through 11 for a detailed listing of the projects, including the tasks involved with each project.

B. **Is your firm experienced in Soil Analysis?**

[X] Yes
[ ] No

Description and Number of Projects: **Corporate and Employee Experience: Numerous Projects including Forty Six (46) AML and Thirty Two (32) AML Related Projects**

CEC personnel have successfully completed numerous soil analysis projects, ranging in size and complexity. In addition, CEC personnel have completed forty six (46) AML and thirty two (32) AML related Soil Analysis projects. See Sheet 13 for a detailed listing of the AML and related projects, including the tasks involved with each project.

C. **Is your firm experienced in Hydrology and Hydraulics?**

[X] Yes
[ ] No

Description and Number of Projects: **Corporate and Employee Experience: Numerous Projects including Sixty (60) AML and Twenty Four (24) AML Related Projects**

CEC personnel have successfully completed numerous hydrology and hydraulics projects, including studies associated with bridges, box culverts, pipes, ditches, and sediment and other ponds. In addition, CEC personnel have completed sixty (60) AML and twenty four (24) AML related Hydrology and Hydraulics projects. See Sheets 5 through 11 and Sheet 14 for a detailed listing of the projects, including the tasks involved with each of the AML and AML related projects.

D. **Does your firm produce its own Aerial Photography and Develop Contour Mapping?**

[X] Yes
[X] No

Description and Number of Projects: **Corporate and Experience: Numerous Projects including over 260 AML and AML Related Projects**

CEC subcontracts development of aerial photography to Keddal Aerial Mapping and has successfully set aerial photographic control points on numerous engineering projects by GPS and Conventional Surveying techniques. CEC has also developed topographic and planimetric maps from GPS and Conventional Surveying techniques and supplemented topographic and planimetric features on mapping developed by aerial mapping firms. In addition, CEC personnel have completed over 260 AML and AML related mapping projects. CEC personnel have supplied Aerial Mapping for the North and South AML Mapping Contracts from 2008 to 2011; and the South Mapping Contract from 2011 to 2012. See Sheets 5 through 11 and Sheet 15 for a detailed listing of the AML and AML related projects, including the tasks involved with each project.

E. **Is your firm experienced in Domestic Waterline Design? (Include any experience your firm has in evaluation of aquifer degradation as a result of mining.)**

[X] Yes
[ ] No

Description and Number of Projects: **Corporate Experience: Numerous Projects including Eleven (11) AML Mining Related Aquifer Investigations.**

CEC personnel have successfully completed numerous waterline projects, including eleven (11) AML Mining Related Aquifer Investigations. See Sheets 5 through 11 and Sheet 16 for a detailed listing of the projects, including the tasks involved with each project.

12. Is your firm experienced in Acid Mine Drainage Evaluation and Abatement Design?

X	**Yes**
	No

Description and Number of Projects: **Corporate and Employee Experience: Twenty (20) Projects**

CEC personnel have successfully completed Twenty (20) Acid Mine Drainage Evaluation and Abatement Design projects. See Sheets 17 and 18 for a detailed listing of the projects, including the tasks involved with each project.

12. A.	Is your firm experienced in Abandoned Mine Lands Remediation / Mine Reclamation Engineering?
[X] Yes [ ] No	Description and Number of Projects: **Corporate Experien Forty Eight (48) Projects**

CORPORATE AND EMPLOYEE EXPERIENCE:	
1. CADD Services Contract	Open-end contract to provide computer aided drafting services for the in-house design teams. The first project assigned was Stollings (White) Portals. That project included six (6) drafted sheets and involved three (3) Bat Gate Mine Seals; initial on-site meeting; professional opinion on mitigating the abandoned mine lands problems; developing and submitting an Engineering Cost Proposal and Scope of Work; Final Design Package submittal; Monthly Report Updates and Invoicing.
2. Norton Highwall #1	Reclamation design with 170,00 Cubic Yards of Excavation, Fifteen (15) Wet Mine Seals; Access Road; 34,000 l. ft. Sediment Control; 10,650 l.ft. of Ditches; 940 l.ft. of pipes; 1,410 l.ft. of Subsurface Drains; two (2) Type "A" Manholes; and 53 acres of Revegetation; Topographic Surveying; Generation of Construction Mapping; Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Dewatering and AMD Treatment Plan; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
3. Tub Run Highwall and Refuse Phase II:	Reclamation design with 307,000 Cubic Yards of Excavation, Four (4) Wet Mine Seals; 9,500 l.ft. Access Road; 65,000 l. ft. Sediment Control; 11,400 l.ft. of Ditches; and 114 acres of Revegetation; Topographic Surveying; Generation of Construction Mapping; Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Dewatering and AMD Treatment Plan; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
4. Tub Run Highwall and Refuse Phase I:	Reclamation design with 265,000 Cubic Yards of Excavation, 8,500 l.ft. Access Road; 46,000 l. ft. Sediment Control; 9,900 l.ft. of Ditches; 4 Pipes; 8 ft. by 8 ft. Box Culvert; and 74 acres of Revegetation; Topographic Surveying; Generation of Construction Mapping; Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Dewatering and AMD Treatment Plan; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
5. Town of Newburg Waterline Extension Feasibility Study, I.D. No. 392:	8.0 Mile Waterline Extension Feasibility Study – I.D. No. 392, involving 96 Residents. Surface and Ground Water Testing and Reporting; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Water Analyses Interpretation and Evaluation; and Initial On-Site Meeting. Engineering cost proposal approved and awaiting a purchase order and "Notice to Proceed".
6. Webster County Point Mountain Waterline Extension Feasibility Study:	15.0 Mile Waterline Extension Feasibility Study – I.D. No. 384, involving 103 Residents. Surface and Ground Water Testing and Reporting; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Water Analyses Interpretation and Evaluation; and Initial On-Site Meeting, Preliminary Report, Monthly Reports, and Invoicing.
7. Greenbrier Hollow Refuse:	Reclamation design of coal refuse pile with 51,000 Cubic Yards of Excavation, two (2) wet mine seals; 4,300 l.ft. Sediment Control; 1,015 l.ft. of Ditches; 5 Pipes; and 8 acres of revegetation; Topographic Surveying; Generation of Construction Mapping; Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
8. Sauls Run (Carpenter) Landslide:	Mitigation of a landslide behind the Carpenter House with 40,000 Cubic Yards of Excavation, 2,500 l.ft. Sediment Control; 610 l.ft. of Ditches; 3 Pipes; 1 Manhole; Subsurface Drain; and 7 acres of revegetation; Topographic Surveying; Generation of Construction Mapping; Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.

12. A.	Is your firm experienced in Abandoned Mine Lands Remediation / Mine Reclamation Engineering?
[X] Yes [ ] No	Description and Number of Projects: **Corporate Experien Forty Eight (48) Projects**

CORPORATE AND EMPLOYEE EXPERIENCE:	
9. Pageton (Lambert) Portals:	Reclamation design of coal refuse pile with 51,000 Cubic Yards of Excavation, twenty four (24) wet mine seals; 13,700 l.ft. Sediment Control; 1,600 l.ft. of Ditches; 1 Pipe; Streambank Protection; and 24 acres of revegetation; Topographic Surveying; Generation of Construction Mapping; Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
10. WVDEP Mapping Contract – South Region (2011-2012):	Seventeen (17) sites mapped totaling 1,800 acres. Set horizontal and vertical control for and developed aerial mapping for the sites. Set baselines for Engineering Design and Construction on all sites and provided topographic and planimetric survey for features not shown by aerial photography. Visited all sites with DEP, attended project meetings, provided weekly/monthly updates, and invoicing
11. Birds Creek Number Four:	Reclamation design with 35,000 Cubic Yards of Excavation, eight (8) wet mine seals including five (5) bat gate designs; and 18 acres of revegetation; Topographic Surveying; Generation of Construction Mapping; Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
12. Bergoo Waterline Extension Feasibility Study, I.D. No. 351:	12.0 Mile Waterline Extension Feasibility Study – I.D. No. 351, involving 350 to 400 Residents. Surface and Ground Water Testing and Reporting; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Water Analyses Interpretation and Evaluation; Ground Water Contamination Mitigation Alternatives with Estimated Construction Costs; and Initial On-Site Meeting, Preliminary Report, Final Report, Monthly Reports, and Invoicing.
13. Lewis County EDA Waterline Extension Feasibility Study, I.D. No. 374:	15.2 Mile Waterline Extension Feasibility Study – I.D. No. 374, involving 110 Residents. Surface and Ground Water Testing and Reporting; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Water Analyses Interpretation and Evaluation; and Initial On-Site Meeting, Preliminary Report, Monthly Reports, and Invoicing.
14. Scott Road and Findley Road Waterline Extension Feasibility Study, I.D. No. 356:	1.5 Mile Waterline Extension Feasibility Study – I.D. No. 356, involving 7 Residents. Surface and Ground Water Testing and Reporting; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Water Analyses Interpretation and Evaluation; Ground Water Contamination Mitigation Alternatives with Estimated Construction Costs; and Initial On-Site Meeting, Preliminary Report, Final Report, Monthly Reports, and Invoicing.
15. WVDEP Mapping Contract – South Region (2008-2011):	Fifty One (51) sites mapped totaling 4,100 acres. Set horizontal and vertical control for and developed aerial mapping for the sites. Set baselines for Engineering Design and Construction on all sites and provided topographic and planimetric survey for features not shown by aerial photography. Visited all sites with DEP, attended project meetings, provided weekly/monthly updates, and invoicing.
16. WVDEP Mapping Contract – North Region (2008-2011):	Thirty four (34) sites mapped totaling 4,800 acres. Set horizontal and vertical control for and developed aerial mapping for the sites. Set baselines for Engineering Design and Construction on all sites and provided topographic and planimetric survey for features not shown by aerial photography. Visited all sites with DEP, attended project meetings, provided weekly/monthly updates, and invoicing.
17. Church Creek/Manown Highwall:	Reclamation design of four (4) sites with 11,800 linear feet of highwall with 220,000 Cubic Yards of Excavation, twenty three (23) wet mine seals including two (2) bat gate designs; and 85 acres of revegetation; Topographic Surveying; Subsurface and Geological Investigation (nine (9) piezometers installed); Generation of Construction Mapping; Water and Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.

12. A.	Is your firm experienced in Abandoned Mine Lands Remediation / Mine Reclamation Engineering?
[X] Yes [ ] No	Description and Number of Projects: **Corporate Experien Forty Eight (48) Projects**

CORPORATE EXPERIENCE:	
18. Racine (Bradshaw) Portals:	Reclamation design of six (6) sites with 2,500 Cubic Yards of Excavation, sixteen (16) wet mine seals including eight (8) bat gate designs; and 5 acres of revegetation; Topographic Surveying; Generation of Construction Mapping; Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
19. Hampton Number Four Maintenance:	Reclamation design of a failed refuse fill approximately 600 feet high (in elevation). The site consists of one (1) slip area and an erosion channel up to 40-feet deep in some areas that traverses the centermost portion of the fill area. Acid mine drainage seeps (field pH = 2.5 S.U.) impacts Spruce Laurel Fork, a high quality trout stream. The 16 acre site required 25,000 cubic yards of earthwork, 2,700 linear foot of ditches, a bridge upgrade to handle construction loads, and upgrading existing access roads. Topographic Surveying; Subsurface Geological Investigation; Surface and Groundwater Testing and Reporting; Generation of Construction Mapping; Hydrologic and Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
20. Howesville Sites:	Reclamation design of two (2) sites with 4,000 linear feet of highwall with 63,000 Cubic Yards of Excavation, fifteen (15) wet mine seals including four (4) bat gate designs; and 52 acres of revegetation; Topographic Surveying of 67 acres; Subsurface and Geological Investigation (five (5) piezometers installed); Generation of Construction Mapping; Water and Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
21. Sandy Run Highwall and Portals:	Reclamation design of 1,850 linear feet of highwall with 47,200 Cubic yards of Excavation, five (5) wet mine seals; and 15 acres of revegetation. Topographic Surveying of 22 acres; Subsurface and Geological Investigation (three (3) piezometers installed); Generation of Construction Mapping; Water and Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
22. Wilsie-Rosedale, Sugar Creek PSD Waterline Feasibility Study I.D. No. 324:	17.0 Mile Waterline Extension Feasibility Study – I.D. No. 324, involving 175 Residents. Surface and Ground Water Testing and Reporting; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Water Analyses Interpretation and Evaluation; Ground Water Contamination Mitigation Alternatives with Estimated Construction Costs; and Initial On-Site Meeting, Preliminary Report, Final Report, Monthly Reports, and Invoicing.
23. Laurel Valley (Daniels) Landslide Emergency AML Project:	Reclamation design of a 4.0 acre landslide from an abandoned surface mine resting against the Daniels house; 13,000 yards of earthwork; Geotechnical Subsurface Investigation; Existing and Proposed Slope Stability Analysis; Hydrologic and Hydraulic Studies for ditches and culverts; Sediment Control; Revegetation Design. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
24. Price Hill Airshaft/Buildings (Price Hill Complex):	Reclamation design of a 1.5 acre abandoned deep mine shaft site; 1,300 yards of earthwork; suspected vertical mine shaft investigation and sealing (if present); capping another vertical mine shaft with ability to discharge up to 12 cfs of mine water; demolishing several concrete and cut stone ruins; garbage removal, stockpiling and burying on-site refuse. Subsurface Investigation for seating of caps; mine water testing; Hydrologic and Hydraulic Studies for ditches and existing culverts; Sediment Control; Revegetation Design. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
25. Old Bridgeport Hill Mine Drainage, Phase II:	Reclamation design including four (4) Wet Mine Seals and Drainage Facilities to capture and convey mine drainage around businesses and residents along a half-mile stretch of Old Bridgeport Hill Road. Topographic Surveying; Subsurface Geological Investigation (Piezometer Installation); Surface and Ground Water Testing and Reporting; Generation of Mapping; Reclamation Design with earthwork quantities; Design and Hydrologic and Hydraulic Studies for nine (9) Ditches, eight (8) Pipes, one (1) Subsurface Drain, and four (4) Inlets; Sediment Control Design; Revegetation Plan. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.

12.	Is your firm experienced in Abandoned Mine Lands Rem tion / Mine Reclamation Engineering?
[X] Yes [ ] No	Description and Number of Projects: **Corporate Experience: Forty Eight (48) Projects**

CORPORATE EXPERIENCE:

26. Nixon Run AMD:	The site consists of one (1) open portal into the abandoned Consol 32 Mine that is discharging acid mine drainage (AMD). Preliminary average estimates of AMD flow from the open portal is 235 gallons per minute exhibiting a pH of 3.2 with acidity concentrations around 150 mg/l, iron concentrations around 11 mg/l, aluminum concentrations around 8 mg/l, and manganese concentrations less than 2 mg/l. Topographic Surveying; Subsurface Geological Investigation (Piezometer Installation); Surface and Ground Water Testing and Reporting; Generation of Mapping; Reclamation Design with earthwork quantities; Design and Hydrologic and Hydraulic Studies for nine 905 L.Ft. Ditches, four (4) Pipes, one (1) Subsurface Drain, Sediment Control Design; and Revegetation Plan. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
27. Arlington (Cox) Drainage:	Reclamation design to alleviate ground water impacts to the Cox Residence involving Two (2) Wet Mine Seals; Hydrologic and Hydraulic Studies and design for 198 feet of Subsurface Drains, two (2) Ditches, and one (1) Pipe; Mine Dewatering and AMD Treatment Plan; Sediment Control Plan; and Revegetation Plan. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
28. James and Amanda Taylor Waterline Feasibility Study I.D. No. 309:	1.0 Mile Waterline Extension Feasibility Study – I.D. No. 309, involving ten (10) Residents. Surface and Ground Water Testing and Reporting; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Water Analyses Interpretation and Evaluation; Ground Water Contamination Mitigation Alternatives with Estimated Construction Costs; and Initial On-Site Meeting, Preliminary Report, Final Report, Monthly Reports, and Invoicing.
29. Glady Fork Mining, Inc. (Permit D-35-82) Bond Forfeiture:	Active AMD Treatment Facility – Involved the design of a $3,000,000.00 AMD plant design that incorporated a single treatment train capable of handling 1,000 gallons per minute of alkaline mine drainage with 15 ppm of total iron and included necessary piping and seating for a second treatment train if future needs arise. The project also involved relining existing boreholes to eliminate mine discharge interruptions, design and construction of 2,500 linear feet of gravity fed plant intake line from the boreholes to the plant site, and an active chemical treatment plant. The treatment plant included an aeration basin (concrete), flocculator (concrete), chemical feed building, settling basin (concrete), sludge thickener (concrete), and geo-tube sludge disposal system with overflow catchment and re-treatment capabilities.
30. Poplar Ridge / Morrison Ridge Waterline Feasibility Study – I.D. No. 298:	Waterline Extension Feasibility Study – I.D. No. 298, involving 21 Residences. Surface and Ground Water Testing and Reporting; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Water; On-Site Meeting and interviews, Monthly Reports, and Invoicing.



NIXON RUN AMD:
Wet Mine Seal outlet pipes and receiving ditch.



PRICE HILL AIRSHAFT AND BUILDINGS:
Vertical mine shaft sealing in progress.

12.	Is your firm experienced in Abandoned Mine Lands Ren tion / Mine Reclamation Engineering?
X Yes No	Description and Number of Projects: **Corporate Experience: Forty Eight (48) Projects**

CORPORATE EXPERIENCE:	
31. Murray City AMD and Art Project:	Reclamation design for abandoned portals discharging Acid Mine Drainage. Topographical Surveying; Mapping; Subsurface Investigation (Piezometer Installation and Soils Testing); Passive Acid Mine Drainage Treatment System including two (2) SAPS, two (2) Precipitate Ponds, One (1) Flush Pond, Mine Pool Stabilization Pond and Overflow Treatment Pond; Design and Hydrologic and Hydraulic Studies for Construction in Floodway (Local Flood Plain Coordination and Permit), thirteen (13) Ditches and six (6) Spillways; Design of a Wet Mine Seal; Incorporation of Art Component to Satisfy Funding; Interim Grading Plan to allow relocation of a high pressure gas line; Sediment Control Plan; Revegetation Design; Environmental Permits; Construction Plans and Specifications; Calculation Brief with Quantity Calculations; Engineers Cost Estimate; Initial On-Site, 50%, 90%, Check Set, and Final Design Meetings; Monthly Reports and Invoicing.
32. Summit Park PSD Waterline Feasibility Study – I.D. No. 288:	2.75 Mile Waterline Extension Feasibility Study – I.D. No. 288, involving 167 Residences and Businesses. Surface and Ground Water Testing and Reporting; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Water Analyses Interpretation and Evaluation; Ground Water Contamination Mitigation; Soil Sampling; Project Mapping; Alternatives with Estimated Construction Costs; and Initial On-Site Meeting, Preliminary Report, Final Report, Executive Summary, Monthly Reports, and Invoicing.
33. Nutters Tipple D-716:	Reclamation design of a 7.2 Acre Bond Forfeiture Coal Tipple Site; Surveying; Geotechnical (Slope Stability) Investigation; Coal Analysis; HazMat Materials (2 UST'S, 8 AST's, R-R Ties, 55–Gallon Drums, Refrigerators, Stained Soil); Debris Removal Plan; Design and Hydrologic and Hydraulic Studies for Subsurface Drain; two (2) Ditches, and a Channel Design; Sediment Control Plan; Revegetation Plan; Calculation Brief with Quantity Computations; Engineers Cost Estimate; Construction Plans and Specifications; Initial, 50%, 90%, Final Design Meetings; Monthly Reports and Invoicing.
34. Hodgesville PSD Waterline Feasibility Study – I.D. No. 275:	1.2 Mile Waterline Extension Feasibility Study – I.D. No. 275, involving Seventeen (17) Residents. Surface and Ground Water Testing and Reporting; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Water Analyses Interpretation and Evaluation; Ground Water Contamination Mitigation Alternatives with Estimated Construction Costs; and Initial On-Site Meeting, Preliminary Report, Final Report, Monthly Reports, and Invoicing.
35. McElwain Waterline Feasibility Study – I.D. No. 271:	0.64 Mile Waterline Extension Feasibility Study – I.D. No. 271, involving One (1) Resident. Surface and Ground Water Testing and Reporting; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Water Analyses Interpretation and Evaluation; Ground Water Contamination Mitigation Alternatives with Estimated Construction Costs; and Initial On-Site Meeting, Preliminary Report, Final Report, Monthly Reports, and Invoicing.



TUNNELTON (DILLSWORTH) LANDSLIDE
Gabion Basket Wall Installation behind Dillsworth Residence



SAULS RUN STRIP AND LANDSLIDE
AML related slip threatening residences along Sauls Run

12. A. (Cont.) Is your firm experienced in Abandoned Mine Lands Remediation / Mine Reclamation Engineering?					
[X] Yes [ ] No	Description and Number of Projects: **Corporate Experience: Forty Eight (48) Projects**				
36. Fairmont (Hendrickson) Subsidence:	Subsidence investigation of Hendrickson Residence involving Geologic Subsurface Investigation; review and compilation of three previous reports; Field Surveying; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Structure and Support Area Mitigation Alternatives; and Initial On-Site Meeting, Preliminary Report, Final Report, Monthly Reports, and Invoicing.				
37. Flint Run East Acid Mine Drainage Reclamation:	Phase I Reclamation design of a 171-Acre Coal Refuse Area, design reclamation of spoil piles, treatment and discharge plan for ponds and lakes filled with AMD, passive AMD treatment design, including a SAPS, Wetland, Limestone Bed, Steel Slag Leach Beds, and Open Limestone Channels. GPS, Topographic Surveying; supplement of available aerial mapping; Design and Hydrologic and Hydraulic Studies for four (4) Channels, three (3) Ditches, and seven (7) Spillways, Design of eight (8) Impoundments (Three Flush Ponds, Sediment Pond, SAPS Pond, Fresh Water Pond, and Steel Slag Pond); Sediment Control Design; Revegetation Design; Environmental Permits; Construction Plans and Specifications, Calculation Brief with Quantity Calculations; Engineers Cost Estimate; Initial On-Site, 50%, 90%, Check Set, and Final Design Meetings; Monthly Reports and Invoicing.				
38. Danehart Acid Mine Drainage Reclamation:	Reclamation design on a 2.0 Acre Slope Failure Five (5) Feet from a Residence; Surveying (Property and Topographic); Geotechnical (Slope Failure) Investigation; Surface and Ground Water Testing; Mapping; Reclamation Design with Pier and Lag Retaining Wall Design; Design and Hydrologic and Hydraulic Studies for a Ditch, a Subsurface Drain, Culvert Design; Sediment Control Plan; Revegetation Plan; Calculation Brief with Quantity Computations; Engineers Cost Estimate; Construction Plans and Specifications; Initial, 50%, 90%, Check Set, and Final Design Meetings; Monthly Reports and Invoicing.				
39. Midvale Coal Number 7:	35 Acre Coal Tipple and Coal Refuse Disposal Fill Area; GPS and Topographic Surveying; Subsurface Investigation; Coal Analysis; Soil Borrow Analysis; HazMat Investigation (PCB's, Drums, Pails, Stained Soils); Mapping; Calculation Brief with Quantity Computations; Initial On-Site, 50%, 90%, Final Design Meetings; Monthly Reports and Invoicing.				
40. Tunnelton (Dillsworth) Landslide:	Reclamation of a landslide behind Dillsworth Residence by design of an 84 foot long by 18 foot high Gabion Basket Retaining Wall; Hydrologic and Hydraulic Studies and design for 214 feet of Subsurface Drains, two (2) Pipes, Manhole, and Drop Inlet; Traffic Control and Pavement Repair Plan; Sediment Control Design; and Revegetation Plan Topographic Surveying and Generation of Mapping; Subsurface Geological Investigation (two (2) piezometers installed); Surface and Groundwater Testing and Reporting; Reclamation Design with Earthwork Quantities; Sediment Control Design; and Revegetation Plan. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.				
41. Sauls Run Strip and Landslide:	Reclamation design of AML related slip behind the Love, Lee, Rohrbaugh, and Gregory Residences with 59,350 Yards of Earthwork; Hydrologic and Hydraulic Studies and design for 2,764 feet of Ditches, 500 feet of Subsurface Drains, five (5) Pipes, and two (2) Headwalls; Traffic Control and Pavement Repair Plan; Sediment Control; and 6.7 acres of Revegetation. Topographic Surveying and supplementation and generation of Mapping; Subsurface Geological Investigation (ten (10) piezometers installed); Surface and Groundwater Testing and Reporting; Sediment Control Design; and Revegetation Plan. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.				
42. Linden Acid Mine Drainage Bioremediation:	*43. Glen Castle Reclamation:*	*44. Misco Burning Gob:*	*45. Ferris Forfeiture:*	*46. Brown Subsidence:*	GPS and Topographic Surveying; Aerial Photography (Control and Mapping); Mapping.
47. Flint Run Acid Mine Drainage Reclamation:	Provided options with cost/benefit analysis to mitigate "worst" acid mine drainage in the State of Ohio. Project included two (2) month hydrologic investigation; impounded water and sediment investigation; chemical treatment option (AquaFix or hydrated lime) for AMD discharges; passive treatment options for AMD discharges included: eliminating AMD discharge sites through backfilling operations; reducing AMD flows by diverting up-gradient ground waters; cover high infiltration areas; alkaline amendment for coal refuse cover and to support vegetation; open limestone channels; steel slag leach beds; aerobic wetlands; limestone filter beds; limestone polishing leach bed; open limestone drainage ditches and channels; and vegetation plan.				

12. A. (Cont.)	Is your firm experienced in Abandoned Mine Lands Remediation / Mine Reclamation Engineering?
[X] Yes [ ] No	Description and Number of Projects: **Corporate Experience: Forty Eight (48) Projects**
48. Lake Milton Investigation:	220 Acre-foot Impoundment Investigation; GPS, Hydrographic and Topographic Surveying; Geotechnical (Pending Embankment Failure) Investigation; Surface and Ground Water Testing; Impounded Water and Sediment Investigation; Mapping; Aerial Photography (Control and Mapping); Reclamation Design Alternatives Report; Hydrologic and Hydraulic Studies for Ditch, Channel, Spillway Design; Sediment Control Design; Revegetation Plan; Calculation Brief with Quantity Computations; Engineers Cost Estimate; Initial On-Site, 50%, 90%, Final Design Meetings; Monthly Reports; Invoicing.



Lake Milton Embankment Piping Leak
LAKE MILTON - near Jackson, Jackson County, OH



Lake Milton Geotechnical Investigation
LAKE MILTON - near Jackson, Jackson County, OH

Related Abandoned Mine Lands Remediation / Mine Reclamation Engineering

West Virginia Conservation Agency:	Fisher-Mill Creek Bank Stabilization, Laurel Lake Sediment Removal, Krout Creek H&H Investigation, Harmons Creek Bank Stabilization, Parchment Creek Bank Stabilization, North Fork Hughes River Bank Stabilization, Spencer Flood Plain Improvement Study, Logan County Flood Plain Improvement Project, Coalwood Floodplain Improvement Project, Rachel Floodplain Improvement Project, Barkers Creek Stream Bank Protection Project, Reedsville Equipment Storage Building, Jackon's Mill Livestock Arena, Edgewood Stream Bank Stabilization Project, Pringle Road Landslide Remediation, Back Creek Natural Stream Restoration Project, Bunnell Run Stream Bank Stabilization Project, Deckers Creek Stream Bank Stabilization Project.

12. A. (Cont.) **Is your firm experienced in Abandoned Mine Lands Remediation / Mine Reclamation Engineering?**

[X] Description and Number of Projects: **Employee Experience: Additional (12) [illegible] Projects and Various Other Mine Reclamation Projects**

[ ] **No**

AML, MINE RECLAMATION ENGINEERING CORPORATE AND EMPLOYEE EXPERIENCE:

Randy Calkins, Project Manager, WVAML Design – Eighty One (81) Completed Projects – Three (3) Preliminary Design Projects; Seventy Eight (78) Mine Reclamation Engineering Projects.

WVAML – *Completed Designs* – 1. CADD Services Open-End Contract; 2. Norton Highwall #1; 3. Tub Run Highwall and Refuse Phase II; 4. Tub Run Highwall and Refuse Phase I; 5. Town of Newburg Waterline Feasibility Study, I.D. 392; 6. Webster Point Mountain Waterline Feasibility, I.D. 384; 7. Green brier Hollow Refuse; 8. Sauls Run (Carpenter) Landslide; 9. Pageton (Lambert) Portals; 10. WVDEP Mapping Contract – South Region: 11. Birds Creek Number 4; 12. Bergoo Waterline Feasibility Study, I.D. 351; 13. Lewis County EDA Waterline Feasibility Study, I.D. 374; 14. Scott Road and Findley Road Waterline Feasibility Study, I.D. 356; 15. WVDEP Mapping North; 16. WVDEP Mapping South; 17. Church Creek/ Manown Highwall; 18. Racine (Bradshaw) Portals; 19. Hampton Number Four Maintenance; 20. Howesville Sites; 21. Sandy Run Highwall and Portals; 22. Wilsie Rosedale Waterline Feasibility Study, I.D. 324; 23. Laurel Valley (Daniels) Landslide; 24. Price Hill Airshaft/Buildings; 25. Weaver Portals and Highwall Phase I; 26. Weaver Portals and Highwall Phase II; 27. Nixon Run AMD; 28. Fairmont (Hendrickson) Subsidence; 29. Tunnelton (Dillsworth) Landslide; 30. Arlington (Cox) Drainage; 31. Sauls Run Strip and Landslide; 32. Taylor Waterline Extension Feasibility Study-I.D. No. 309; 33. Poplar Ridge Waterline Feasibility Study-I.D. No. 298; 34. Summit Park Waterline Feasibility Study-I.D. No. 288; 35. Hodgesville PSD Waterline Extension-I.D. No. 275; 36. McElwain Waterline Feasibility Study-I.D. No. 271; 37. Old Bridgeport Hill Mine Drainage, Phase II; 38. Adaland Tipple and Refuse; 39. Bismark Strip Drainage and Refuse; 40. Brownton School Refuse; 41. Burdock Highwall; 42. Clarksburg (Ryder Avenue) Drainage; 43. Conners Highwall; 44. Francis Drainage and Refuse; 45. Muddy Creek Tipple Complex; 46. Pringle Drainage; 47. Superior Hydraulics; 48. Thomas (Euclid Avenue) Subsidence; 49. Zebs Creek Highwall. – *Preliminary Designs*: 1. Amigo Smokeless Refuse; 2. Austin Highwall; 3. Slab Fork Mine Dump. **Special Reclamation** – Glady Fork Mining, Inc., D-35-82 Bond Forfeiture. **Mine Reclamation Engineering** – Surface Mine Applications (WV – S.O.A.P. Applications) – S.O.A.P. Numbers 201, 205, 206, 208, 209, 210, 211, 212, 213, 214, 216, 217, 221, 230, 233, 236, 238, 247, 249, 250, 251, 260, 267, 268, and 273. Deep Mine Applications (WV – S.O.A.P. Applications) S.O.A.P. Numbers 202, 207, 239, 241, 257, and 271.

Ohio AML – *Completed Designs* - 1. Flint Run East; 2. Murray City AMD and Art, 3. Flint Run Acid Mine Drainage, 4. Danehart Acid Mine Drainage, 5. Nutters Tipple D-716, 6. Lake Milton Investigation, 7. Midvale Coal Number 7, 8. Linden Acid Mine Drainage Bioremediation, 9. Glen Castle Reclamation, 10. Misco Burning Gob, 11. Ferris Forfeiture, 12. Brown Subsidence

Dennis Miller, Survey Manager, Thirty One (32) Projects:

1. WVDEP Mapping South; 2. WVDEP Mapping North; 3. WVDEP Mapping South; 4. Church Creek/ Manown Highwall; 5. Racine (Bradshaw) Portals; 6. Hampton Number Four Maintenance; 7. Howesville Sites; 8. Sandy Run Highwall and Portals; 9. Laurel Valley (Daniels) Landslide; 10. Price Hill Complex; 11. Adaland Tipple and Refuse; 12. Barkers Ridge Highwall; 13. Bismark Strip Drainage and Refuse; 14. Bridge Run; 15. Brownton School Refuse; 16. Camp Run; 17. Conners Highwall; 18. Dawmont AML; 19. Francis Drainage and Refuse; 20. Muddy Creek Tipple Complex; 21. Pine Bluff Tipple Site; 22. Philip Thorn Highwall; 23. Rainelle AML; 24. SCS Reclamation; 25. Shegon Refuse Pile; 26. Shoemaker Landslide; 27. Superior Hydraulics; 28. Taylor Creek Impoundment; 29. Taylor Creek Tipple Complex; 30. Tibbs Run Portal; 31. Masontown No. 4 AML; 32. Rosemont Highwall and Portals



Reclaimed Highwall
ZEBS CREEK HIGHWALL - near Elkins, Randolph County, WV



Stabilized Refuse Pile
MUDDY CREEK TIPPLE COMPLEX - near Mt. Storm, Grant County, WV

12. Is your firm experienced in Soil Analysis?

[X] Yes [ ] No

Description and Number of Projects: **Numerous Projects Involving Physical Properties of Soil Including Soil Stability Investigations, Design of Soil Fill Slopes, as well as Chemical Properties of Soils including Revegetation Plans.**

CORPORATE AND EMPLOYEE EXPERIENCE:

Slope Stability and Design of Fill Slopes	**AML** – Sauls Run (Carpenter) Landslide; Laurel Valley (Daniels) Landslide; Price Hill Airshaft/Buildings; Fairmont (Hendrickson) Subsidence; Tunnelton (Dillsworth) Landslide; Sauls Run Strip and Landslide; Nutters Tipple D-716; Danehart Acid Mine Drainage; Lake Milton Investigation. **Landslides** – Carload Express Landslide; Landslide Insurance B&R Recycling; Mitchell Power Station Ash Fill Slide Repair; State Farm Jeff Banner Landslide; PAWC Munhall Landslide; Ft. Beeler Landslide Repair; Tomko Landslide; Allegheny Woodlands Landslide Review; Embassy Park Building Landslide; Robinson Towne Center Landslide; Community College of Allegheny County Parking Lot Slide Repair; AGX Intermodal Landslide; Mountain State Carbon Landslide; South Fayette Landslide E&S Plan Modification; Rotella Landslide Remediation Review; Impala Drive Landslide Remediation; Emerson Commons Landslide; Pleasant Valley Road Landslide; South Fayette School District Landslide Repair and QA/QC; Impala Drive Landslide Remediation; Shinnston, WV Landslide; RIDEC Surface Mine Landslide; Bascom Avenue Landslide; Hukill Landslide Investigation; Oliver Construction Landslide; **WVCA** – Fisher-Mill Creek Bank Stabilization; Harmons Creek Bank Stabilization; Parchment Valley Bank Stabilization; North Fork Hughes River Bank Stabilization. **Road Design** – U.S. Route 35 Couch to Coast Guard Station; Lawrence County Route 7; Corridor H, Section 6 Davis to Bismark. **Quality Control / Quality Assurance Projects** – Glady Fork Permit D-35-82 Bond Forfeiture; Fisher Mill Creek Bank Stabilization; Hazelton Federal Prison; Clifford Hollow Bridge; Corridor H Job 123; Corridor H Job 125; Corridor H at Baker; Mon-Fayette Bridge; Glenville Federal Prison. Evaluation of of Poor Soil Drainage; Soil Study-Fellows Riverside Gardens.
Revegetation Plans	**AML** – Norton Highwall #1; Tub Run Highwall and Refuse Phase I and II; Greenbrier Hollow Refuse; Pageton (Lambert) Portals; Birds Creek Number 4; Church Creek/Manown Highwall; Racine (Bradshaw) Portals; Howesville Sites, Sandy Run Portals; Laurel Valley (Daniels) Landslide; Price Hill Airshaft/Buildings; Glady Fork Mining, Inc. D-35-82 Bond Forfeiture; Weaver Portals and Highwall Phase I and II; Nixon Run AMD; Tunnelton (Dillsworth) Landslide; Arlington (Cox) Drainage; Sauls Run Strip and Landslide; Old Bridgeport Hill Mine Drainage, Phase II; Flint Run East Acid Mine Drainage Reclamation; Murray City AMD and Art Project; Flint Run Acid Mine Drainage Reclamation; Danehart Acid Mine Drainage; Midvale Coal Number 7; Nutters Tipple D-716; Lake Milton Investigation.

AML, MINE RECLAMATION ENGINEERING EMPLOYEE EXPERIENCE:

Revegetation Plans	*Randy Calkins, Project Manager, WVAML Design - Thirty Four (34) Completed Projects; Numerous Mine Reclamation Engineering Projects:* **WVAML** – *Completed Designs* – 1. Norton Highwall #1; 2. & 3. Tub Run Highwall and Refuse Phase I and II; 4. Greenbrier Hollow Refuse; 5. Pageton (Lambert) Portals; 6. Sauls Run (Carpenter) Landslide; 7. Birds Creek Number 4; 8. Church Creek/ Manown Highwall; 9. Racine (Bradshaw) Portals; 10. Hampton Number Four Maintenance; 11. Howesville Sites; 12. Sandy Run Highwall and Portals; 13. Laurel Valley (Daniels) Landslide; 14. Price Hill Airshaft/Buildings; 15. & 16. Weaver Portals and Highwall Phase I and II; 17. Nixon Run AMD; 18. Fairmont (Hendrickson) Subsidence; 19. Tunnelton (Dillsworth) Landslide; 20. Arlington (Cox) Drainage; 21. Sauls Run Strip and Landslide; 22. Old Bridgeport Hill Mine Drainage, Phase II; 23. Adaland Tipple and Refuse; 24. Bismark Strip Drainage and Refuse; 25. Brownton School Refuse; 26. Burdock Highwall; 27. Clarksburg (Ryder Avenue) Drainage; 28. Conners Highwall; 29. Francis Drainage and Refuse; 30. Muddy Creek Tipple Complex; 31. Pringle Drainage; 32. Superior Hydraulics; 33. Thomas (Euclid Avenue) Subsidence; 34. Zebs Creek Highwall.



Installation of retaining wall designed to provide slope stability.

DANEHART ACID MINE DRAINAGE RECLAMATION PROJECT

Near York, Belmont County, OH

12. C.	Is your firm experienced in hydrology and hydraulics?
[X] Yes [ ] No	Description and Number of Projects: **Numerous Projects Involving H & H Studies for Flood Plain Improvements, Impoundments, and Bridges, Pipes, Culverts, Box Culverts, Ditches, Channels, and Channel Relocations and Restoration using Natural Stream Design Techniques.**

CORPORATE AND EMPLOYEE EXPERIENCE:

H & H Studies for Flood Plain Improvements and Impoundments	**AML** – Weaver Portals and Highwall Phase I & II; Flint Run East Acid Mine Drainage Reclamation; Murray City AMD and Art Project; Flint Run Acid Mine Drainage Reclamation; Lake Milton Investigation. **SPEC REC** – Glady Fork Mining, Permit D-35-82, **NPDES and Waste Permits (Sediment Control Structures)** – C.J. Martin Enterprises; A.F. Wendling Inc.; Pope Properties; Deer Park Development; Fairfax Trucking (Corridor H); Mountaineer Grading (Upper Tract to Petersburg Road); Allwood Construction (Philippi Bypass); Odom Construction Job 123 (4 Waste Permits); Odom Construction Job 125 (1 Waste Permit); C.J. Martin Enterprises Waste Permit; Mountaineer Grading (Moorefield Junction Road). **WVCA** – Fisher-Mill Creek Bank Stabilization, Laurel Lake Sediment Removal, Kraut Creek H&H Investigation, Harmons Creek Bank Stabilization, Parchment Valley Bank Stabilization, North Fork Hughes River Bank Stabilization, Spencer Flood Plain Improvement Study, Logan County Flood Plain Improvement Project.
H & H Studies for Bridges	**SPEC REC** – Glady Fork Mining, Permit D-35-82, **Others** - Route 35 (Mason County); Mile Branch Bridge; Upper Tract bridge; Buffalo Creek Bridge; SR18 Browns Bridge Temp. Wall; SR2037 Temporary Slope and Wall Design; SR21 Section A10 Temporary Wall; SR6 Sect 105 Reinforced Wall and Slope; Lowries Run Bridge Replacement; Footbridge and Switchback Design; Mon/Fayette Expressway Bridge; Brown's Island Roadway Design; Allegheny Ludlum Bridge Geotech.
H & H Studies for Pipes, Inlets, Culverts, Box Culverts	**AML** – Norton highwall #1; Tub Run Highwall and Refuse Phase I and II; Greenbrier Hollow Refuse; Pageton (Lambert) Portals; Birds Creek Number 4; Church Creek/Manown Highwall; Racine (Bradshaw) Portals; Howesville Sites, Sandy Run Portals; Laurel Valley (Daniels) Landslide; Price Hill Airshaft/Buildings; Weaver Portals and Highwall Phase I & II; Nixon Run AMD; Tunnleton (Dillsworth) Landslide; Arlington (Cox) Drainage; Sauls Run Strip and Landslide; Old Bridgeport Hill Mine Drainage, Phase II; Flint Run East Acid Mine Drainage Reclamation; Murray City AMD and Art; Flint Run Acid Mine Drainage Reclamation; Danehart Acid Mine Drainage; Nutters Tipple D-716; Lake Milton Investigation. **SPEC REC** – Glady Fork Mining, Permit D-35-82. **Road Design** – U.S. Route 35; Corridor H, Section 6 Davis to Bismark. ACF Environmental Trash Guard Hydrology.
Stream Assessments and Restoration	Racine (Bradshaw) Portals; Tub Run Highwall and Refuse Phase I; Greenbrier Hollow Refuse; Pageton (Lambert) Portals; Weaver Portals and Highwall; U.S. Rte. 35 600 linear feet Natural Stream Design, Little Coal River Natural Stream Design. Amfire Stream Assessment, Hare Creek Biomonitoring, Consol Crafts Creek Panel E20, Consol Bailey Mine Panel 151 – 161, Consol Bailey 141 Panel, Consol Bailey 131 Panel, Templeton Fork Monitoring, PBS Coal Bassett Section 404 Permit, Consol Rocky Run E-9 Restoration, Consol Crabapple Restoration, Consol Templeton Fork Water Monitoring, Consol Poly Hollow Investigation, Consol Bailey Mine Panel 16C Dunkard Fork Restoration, Consol Bailey Mine 101 & 111 Stream Restoration. **WVCA** – Fisher-Mill Creek Bank Stabilization, Laurel Lake Sediment Removal; Kraut Creek H&H Investigation, Harmons Creek Bank Stabilization, Parchment Valley Bank Stabilization, North Fork Hughes River Bank Stabilization, Spencer Flood Plain Improvement Study, Logan County Flood Plain Improvement Project.

AML, MINE RECLAMATION ENGINEERING EMPLOYEE EXPERIENCE:

H & H Studies for Pipes, Culverts, Box Culverts	*Randy Calkins, Project Manager, WVAML Design - Eighty One (81) Completed Projects – Three (3) Preliminary Design Projects; Seventy Eight (78) Mine Reclamation Engineering Projects (see page 12).* **WVAML** – *Completed Designs* - 1. Adaland Tipple and Refuse; 2. Bismark Strip Drainage and Refuse; 3. Brownton School Refuse; 4. Burdock Highwall; 5. Clarksburg (Ryder Avenue) Drainage; 6. Conners Highwall; 7. Francis Drainage and Refuse; 8. Muddy Creek Tipple Complex; 9. Pringle Drainage; 10. Superior Hydraulics; 11. Thomas (Euclid Avenue) Subsidence; 12. Zebs Creek Highwall. **Mine Reclamation Engineering** – Surface Mine Applications (WV – S.O.A.P. Applications) – S.O.A.P. Numbers 201, 205, 206, 208, 209, 210, 211, 212, 213, 214, 216, 217, 221, 230, 233, 236, 238, 247, 249, 250, 251, 260, 267, 268, and 273. Deep Mine Applications (WV – S.O.A.P. Applications) S.O.A.P. Numbers 202, 207, 239, 241, 257, and 271



Fabri-form Ditch.

BURDOCK HIGHWALL
Near Elk Garden,
Grant County, WV



Rock riprap channel.

NUTTERS TIPPLE, D-716
Near New Straitesville,
Perry County, OH

12. D. **Does your firm produce its own Aerial Photography and Develop Contour Mapping?**

[X] Yes
[ ] No

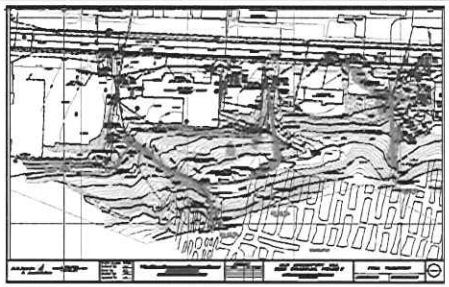
Description and Number of Projects: **Numerous Projects Dev ng Contour Mapping from Conventional and GPS Surveying. Aeri otography and Associated Mapping ubcontracted to Keddal Aerial Mapping.**

CORPORATE AND EMPLOYEE EXPERIENCE:

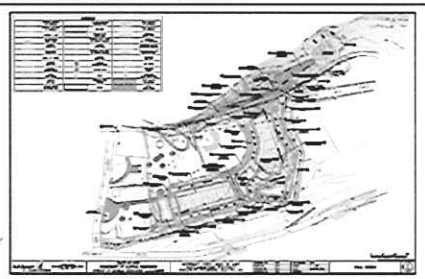
Contour Mapping from Aerial Photography	**AML** – WVDEP South Mapping Contract (2011-2012), 17 Sites Totaling 1,800 Acres; WVDEP North Mapping Contract (2008-2011), 34 Sites Totaling 4,800 Acres, WVDEP South Mapping Contract (2008-2011), 51 Sites Totaling 4,100 Acres.
Contour Mapping from GPS and Conventional Surveying Techniques	**AML** – Norton Highwall #1; Tub Run Highwall and Refuse Phase I and II; Greenbrier Hollow Refuse; Pageton (Lambert) Portals; Birds Creek Number Four; Church Creek/Manown Highwall; Racine (Bradshaw) Portals; Howesville Sites, Sandy Run Portals; Hampton Number Four Maintenance; Howesville Sites; Sandy Run Highwall and Portals; Laurel Valley (Daniels) Landslide; Price Hill Airshaft/Buildings; Weaver Portals and Highwall, Phase I & II; Nixon Run AMD; Tunnleton (Dillsworth) Landslide; Arlington (Cox) Drainage; Sauls Run Strip and Landslide; Fairmont (Hendrickson) Subsidence; Old Bridgeport Hill Mine Drainage, Phase II; Flint Run East Acid Mine Drainage Reclamation; Murray City AMD and Art Project; Flint Run Acid Mine Drainage Reclamation; Danehart Acid Mine Drainage; Nutters Tipple D-716; Lake Milton Investigation; Midvale Coal Number 7; Linden Acid Mine Drainage Bioremediation; Glen Castle Reclamation; Misco Burning Gob; Ferris Forfeiture; Brown Subsidence. **SPEC REC** – Glady Fork Mining, Permit D-35-82. **WVCA** – Fisher-Mill Creek Bank Stabilization, Laurel Lake Sediment Removal, Kraut Creek H&H Investigation, Harmons Creek Bank Stabilization, Parchment Valley Bank Stabilization, North Fork Hughes River Bank Stabilization, Spencer Flood Plain Improvement Study, Logan County Flood Plain Improvement Project. **NPDES and Waste Permits** - Odom Construction Job 123 (4 Waste Permits); Odom Construction Job 125 (1 Waste Permit); C.J. Martin Enterprises Waste Permit; Mountaineer Grading (Moorefield Junction Road). **Others** – Glenville Federal Prison Pistol Range; BBL Carlton State Office Consolidation Complex Site; West Virginia Wesleyan College Site; Unlimited Futures Site; Dollar Tree Site; Jim Waggle Site; John Jenkins Site.

AML, MINE RECLAMATION ENGINEERING EMPLOYEE EXPERIENCE:

Contour Mapping from GPS and Conventional Surveying Techniques	*Randy Calkins, Project Manager, WVAML Design – Eighty One (81) Completed Projects – Three (3) Preliminary Design Projects; Seventy Eight (78) Mine Reclamation Engineering Projects (see page 12).* **WVAML** – *Completed Designs - 1.* Adaland Tipple and Refuse; 2. Bismark Strip Drainage and Refuse; 3. Brownton School Refuse; 4. Burdock Highwall; 5. Clarksburg (Ryder Avenue) Drainage; 6. Conners Highwall; 7. Francis Drainage and Refuse; 8. Muddy Creek Tipple Complex; 9. Pringle Drainage; 10. Superior Hydraulics; 11. Thomas (Euclid Avenue) Subsidence; 12. Zebs Creek Highwall. *Preliminary Designs*: 1. Amigo Smokeless Refuse; 2. Austin Highwall; 3. Slab Fork Mine Dump. **Mine Reclamation Engineering** – Surface Mine Applications (WV – S.O.A.P. Applications) – S.O.A.P. Numbers 201, 205, 206, 208, 209, 210, 211, 212, 213, 214, 216, 217, 221, 230, 233, 236, 238, 247, 249, 250, 251, 260, 267, 268, and 273. Deep Mine Applications (WV – S.O.A.P. Applications) S.O.A.P. Numbers 202, 207, 239, 241, 257, and 271.
	Dennis Miller, Survey Manager, Fifty Three (53) Projects: **WVAML** - 1. Adaland Tipple and Refuse; 2. Barkers Ridge Highwall; 3. Bismark Strip Drainage and Refuse; 4. Bridge Run; 5. Brownton School Refuse; 6. Camp Run; 7. Conners Highwall; 8. Dawmont AML; 9. Francis Drainage and Refuse; 10. Muddy Creek Tipple Complex; 11. Pine Bluff Tipple Site; 12. Philip Thorn Highwall; 13. Rainelle AML; 14. SCS Reclamation; 15. Shegon Refuse Pile; 16. Shoemaker Landslide; 17. Superior Hydraulics; 18. Taylor Creek Impoundment; 19. Taylor Creek Tipple Complex; 20. Tibbs Run Portal; 21. Masontown No. 4 AML



Mapping generated from conventional surveying. OLD BRIDGEPORT HILL MINE DRAINAGE



Mapping generated from conventional and GPS survey techniques. MURRAY CITY AMD AND ART PROJECT

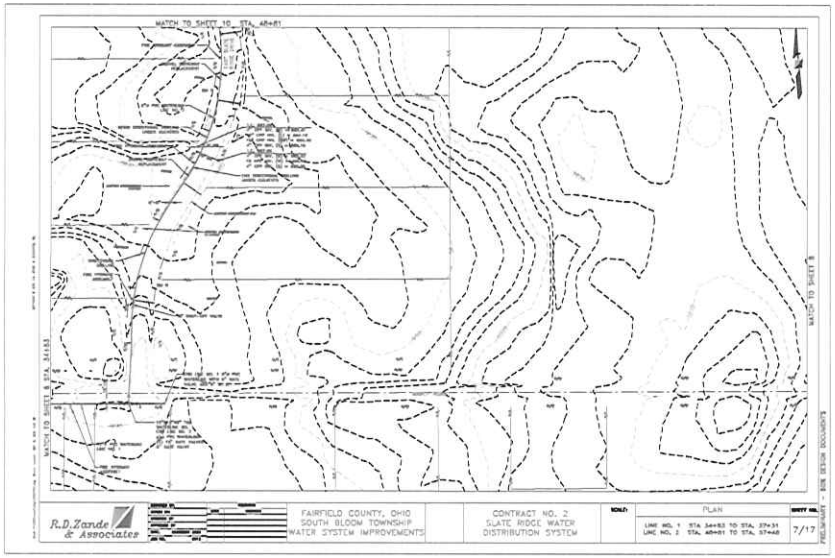
12. E. Is your firm experienced in domestic waterline experience? (Include experience your firm has in evaluation of aquifer degradation as a result of mining.)

[X] Yes
[ ] No

Description and Number of Projects:

CORPORATE AND EMPLOYEE EXPERIENCE:

Waterline Extension Feasibility Studies	**AML** – 1. Town of Newburg Waterline Feasibility Study - I.D. No. 392; 2. Webster Point Mountain Waterline Feasibility Study - I.D. No. 384; 3. Bergoo Waterline Extension Feasibility Study - I.D. No. 351; 4. Lewis County EDA Waterline Extension Feasibility Study - I.D. No. 374; 5. Scott Road and Findley Road Waterline Extension Feasibility Study - I.D. No. 356; 6. Wilsie-Rosedale Waterline Extension Feasibility Study – I.D. No. 324; 7. James and Amanda Taylor Waterline Extension Feasibility Study – I.D. No. 309; 8. Poplar Ridge/Morrison Ridge Waterline Feasibility Study – I.D. No. 298; 9. Summit Park PSD Waterline Extension Feasibility Study – I.D. No. 288; 10. Hodgesville PSD Waterline Extension Feasibility Study – I.D. No.275; 11. Charles L. and Donice J. McElwain Waterline Feasibility Study – I.D. No. 271. **SPEC REC** – Glady Fork Mining, Permit D-35-82.
Aquifer Degradation Investigation	**AML (Mining Related)** – Weaver Portals and Highwall; Flint Run Acid Mine Drainage Reclamation; Lake Milton Investigation; Danehart Acid Mine Drainage; **Other** – Newville Chemical Company Act 2 Support; CDR Pigments and Dispersions Act 2 Support; Antero Resources Jones Pad Borehole Collapse; Pine Crest Manor Groundwater Assessment; SRBC Groundwater Withdrawal Application; Osborne Landfill Superfund Site; First Energy Little Blue Run Impoundment Investigation; Quantum Management Group Groundwater Remediation.
Domestic Waterline Experience	**Private** - Pope Properties Cross Lanes; Odom Construction Corridor H Job 123. **Public** – U.S. Route 35 Waterline Relocation.



Waterline distribution system design.

SOUTH BLOOM TOWNSHIP WATERLINE EXTENSION

Near South Bloom, Fairfield County, OH

12. F.	Is your firm experienced in Acid Mine Drainage Evaluation and Abatement Design?
[X] Yes [ ] No	Description and Number of Projects: **Corporate and Employe perience – Nine (9) WVDEP AML Projects, Six (6) Ohio AML Proj One (1) Ohio Watershed Organization – Employee Experience – Four (4) W √AML Projects – Thirteen (13) Bond Forfeiture Projects.**

CORPORATE AND EMPLOYEE EXPERIENCE:

1. Glady Fork Mining, Inc. (Permit D-35-82) Bond Forfeiture	Active AMD Treatment Facility – Involved the design of a $3,000,000.00 AMD plant design that incorporated a single treatment train capable of handling 1,000 gallons per minute of alkaline mine drainage with 15 ppm of total iron and included necessary piping and seating for a second treatment train if future needs arise. The project also involved relining existing boreholes to eliminate mine discharge interruptions, design and construction of 2,500 linear feet of gravity fed plant intake line from the boreholes to the plant site, and an active chemical treatment plant. The treatment plant included an aeration basin (concrete), flocculator (concrete), chemical feed building, settling basin (concrete), sludge thickener (concrete), and geo-tube sludge disposal system with overflow catchment and re-treatment capabilities. Treated water limits are 0.50 ppm iron average, 0.75 ppm iron maximum.
2,3. Weaver Portals and Highwall, Phase I & II:	**WVDEP AML** – Twenty (20) collapsed portals contribute approximately 95 gpm of pH 3.2, 200 mg/l acidity, 10 mg/l iron, 20 mg/l aluminum, and 2 mg/l manganese to Beaver Creek. Designed passive acid mine drainage treatment systems consisting of Open Limestone Channels and six (6) Limestone Beds with engineered "Aluminator" piping systems. The project also included 97,000 Yards Earthwork, 20 Wet Mine Seals, 25 Ditches, 10 Pipes, Sediment Control Plan, and 35 acre Revegetation Plan. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
4. Tub Run Highwall and Refuse Phase I and II; Greenbrier Hollow Refuse; Pageton (Lambert) Portals; Birds Creek Number Four, Church Creek / Manown Highwall, Racine, Howesville Sites, Sandy Run Highwall and Portals, Price Hill Airshaft / Buildings (Price Hill Complex), Nixon Run AMD, Old Bridgeport Hill, and Arlington (Cox) Drainage	**WVDEP AML** – Designed Mine Dewatering and AMD Discharge Treatment Plans.
5. Flint Run East Acid Mine Drainage Reclamation:	**Ohio AML – Phase I** – Designed passive acid mine drainage treatment system for "worst" acid mine drainage in the State of Ohio. Water Quality was pH 3.0, acidity from 1,600 to 6,000 mg/l, iron from 200 to 600 mg/l, aluminum from 30 to 250 mg/l, and manganese from 5 to 55 mg/l. Designs include Open Limestone Channels; Sediment Pond, SAPS Pond, Wetland, Horizontal Limestone Bed, Fresh Water Pond, Steel Slag Leach Bed, and three (3) Flush Ponds; up-gradient diversion of ground water around refuse fills; cover high infiltration areas, alkaline amendment for coal refuse cover and vegetation; sediment control design; vegetation design; environmental permits; Construction Plans and Specifications; Calculation Brief with Quantity Calculations; Engineers Cost Estimate; Initial On-Site, 50%, 90%, Check Set, and Final Design Meetings; monthly reports and invoicing.
6. Flint Run Acid Mine Drainage Reclamation:	**Ohio AML** – Report and Investigation with cost/benefit analysis to mitigate "worst" acid mine drainage in Ohio. Project included two (2) month hydrologic investigation; impounded water and sediment investigation; chemical treatment (AquaFix or hydrated lime) for AMD discharges; passive treatment options for AMD discharges: eliminating AMD discharge sites by backfilling operations; reducing AMD flows by diverting up-gradient ground waters; cover high infiltration areas; alkaline amendment for coal refuse cover and to support vegetation; open limestone channels; steel slag leach beds; aerobic wetlands; limestone filter beds; limestone polishing leach bed; open limestone drainage ditches and channels; and vegetation plan.
7. Danehart Acid Mine Drainage Reclamation:	**Ohio AML** – Acid mine drainage caused a failed slope in close proximity to Danehart residence. Design included earthwork mass balance, 75 foot long by 10 foot high pier and lag retaining wall design; subsurface drain to treat AMD; ditch and channel design; and vegetation plan.

12. F. (Cont.)	Is your firm experienced in Acid Mine Drainage Evaluation and Abatement Design?
X Yes No	Description and Number of Projects: **Corporate and Empl Experience –Nine (9) WVDEP AML Projects, Six (6) Ohio AML P cts; One (1) Ohio Watershed Organization – Employee Experience – Four (4) WVAML Projects – Thirteen (13) Bond Forfeiture Projects.**

8. Lake Milton Investigation:	**Ohio AML** – 220 Ac.Ft. Impoundment Investigation to mitigate embankment "piping" leak. Impounded water is lightly buffered AMD that required design of SAPS to mitigate impounded and discharged waters. Design included "pump and treat" and "gravity discharge and treat" options while repairing embankment and constructing SAPS. After repair, discharged waters were used to drive steel slag leach bed for additional alkaline addition to the watershed.
9. Nutters Tipple D-716:	**Ohio AML** – Alkaline amendment for coal refuse cover and vegetation; encapsulation of coal refuse by subsurface drains and surface diversions to reduce water contact and reaction with coal refuse and eliminate generation of AMD.
10. Linden AMD Bioremedaition:	**Ohio AML** – Developed mapping for design of AMD treatment systems.
11. Murray City AMD and Art Project:	**Monday Creek Restoration Watershed Group** – Geologic and hydrologic and hydraulic investigation to seat AMD passive treatment systems within and next to a floodplain. Water Quality was pH 2.8, acidity 608 mg/l, iron 106 mg/l, aluminum 47 mg/l, manganese 7 mg/l, and flow of 163 gpm. Design, construction plans, specifications, operating manuals for the Murray City AMD and Art Project including Wet Mine Seals, a Mine Pool Stabilization Pond, Overflow Treatment Pond, two stage SAPS Pond or Vertical Flow Wetland, two Precipitate Ponds, and a Flush Pond to passively treat AMD from two nearby deep mine portals, site drainage ditches and channels, cut/fill grading design, vegetation plan, environmental permits; Construction Plans and Specifications; Calculation Brief with Quantity Calculations; Engineers Cost Estimate; On-Site, 50%, 90%, Check Set, and Final Design Meetings; monthly reports and invoicing.

EMPLOYEE EXPERIENCE:

Randy Calkins, Project Manager, WVAML Design – Eighty One (81) Completed Projects – Three (3) Preliminary Design Projects; Seventy Eight (78) Mine Reclamation Engineering Projects (see page 12).

WVAML – *Completed Designs* – 1. Bismark Strip Drainage and Refuse; 2. Francis Drainage and Refuse; 3. Muddy Creek Tipple Complex; 4. Zebs Creek Highwall; **SPEC REC** - 438 Bond Forfeiture Sites;
Aerobic Wetland Design: S. Kelly Industries, Allison Engineering, Phase I, Z & F Development Company, Peter Rosati complaint, Kodiak Land Company, Greendale Coal Company, Claytex Coal Company, Kittle Flats, and Pierce Coal and Construction.
Anaerobic Wetland Design: Pierce Coal and Construction, Z & F Development Company, Keister Coal Company, and Lobo Capitol, Inc.
Anoxic Limestone Drain: Z & F Development Company, Lobo Capitol, Inc., Kittle Flats, Pierce Coal and Construction, and Greendale Coal Company



Bismark Strip and Drainage: Located near Mt. Storm Passive Acid Mine Drainage Treatment system shortly after construction.



SPEC REC: Glady Fork Mining, Permit D-35-82 Bond Forfeiture alkaline mine drainage active chemical treatment facility. Along Stonecoal Creek near Buckhannon West Virginia.

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML DESIGN (Furnish complete data but keep essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Linder, Gregory, S., P.E. **Bridgeport, WV Office**	6	11	0

Brief Explanation of Responsibilities: TEAM LEADER - Project Engineer and Signatory - expression of interest response, Project scope of work document and associated engineering cost estimate, invoicing, and monthly progress reports. Designer – MicroStation, AutoCAD, SurvCAD, Hec-Ras, and Haestads Operator. Specification Writer, Calculation Brief, Bid Estimate, Microsoft Word and Excel Operator.

WVAML Experience: Birds creek No. 4, Bergoo Waterline Extension Feasibility Study, I.D. No. 351; Lewis County EDA Waterline Extension Feasibility Study, I.D. No. 374; Scott Road and Findley Road Waterline Extension Feasibility Study, I.D. No. 356; Howesville Sites; Sandy Run Highwall and Portals; Laurel Valley (Daniels) Landslide; Price Hill Airshaft/Buildings; Weaver Portals and Highwall, Phase I and II; Nixon Run AMD; Tunnelton (Dillsworth) Landslide; Sauls Run Strip and Landslide; **SPEC REC:** Glady Fork Mining, Permit D-35-82; **WVCA:** Fisher-Mill Creek Bank Stabilization, Laurel Lake Sediment Removal, Kraut Creek H&H Investigation, Harmons Creek Bank Stabilization, Parchment Valley Bank Stabilization, North Fork Hughes River Bank Stabilization, Spencer Flood Plain Improvement Study, Logan County Flood Plain Improvement Project.

EOI Experience: Mr. Linder has been involved with engineering design involving channel restoration, geotechnical analysis, site reclamation, and utility relocation of over 24 bridges, including highway, railway, and pedestrian bridges. Mr. Linder is also experienced with environmental studies including endangered bat studies, watershed management plans, and environmental assessments. Mr. Linder's projects include: U.S. Route 35 Couch to Coast Guard Station; Corridor H, Section 6 Davis to Bismark; North Shore Connector, Allegheny County, PA; Headsville Bridge Replacement, Mineral Co., WV; NJ Route 18 Extension; S.R. 836 Extension, Miami-Dade County, FL; Bridge Design Group B, Allegheny Co., PA; Sharon Heights Connector, Mingo Co., WV; PA Rout 28 Galleria Mall Interchange; Bridge Design Group H, Allegheny Co., PA; Star City Bridge, Monongalia Co., WV; S.R. 0022 over Stoney Run, Westmoreland Co., PA; S.R. 0309 over Church Road, Montgomery Co., PA; S.R. 0056 over Stony Creek, Cambria Co., PA; Rail Rehabilitation Akron and Canton, OH; Cranberry Interchange, Butler Co., PA; Mon/Fayette Expressway, Washington Co., PA; U.S. Route 33, Hocking and Athens Co., OH.

Related EOI Experience: Environmental projects include: Enterprise/Interstate 79 Connector Environmental Assessment, including Indiana Bat survey and assessment; Southern Beltway, Allegheny and Washington Co., PA. Short-eared Owl observation; Meldahis Undercut, Wood Co., WV. Soil contamination survey; C&O Flats, Staunton, VA. Propane tank and railroad tie removal; Nelsonville Bat Survey, Nelsonville, OH; North Fork Watershed Management Plan, Pendleton and Grant Cos., WV. Water resources, forest management, wetland documentation, sedimentation and flood prevention; Deegan Lake Dam and Hinkle Lake Dam, Harrison Co., WV. Environmental permit work for dam rehabilitation.

Education (Degree, Year, Specialization):
Fairmont State College, B.S. Biology
West Virginia University, B.S. Civil Engineering
Level One Natural Stream Design, August 2002
Level Two Natural Stream Design, May 2003
Level Three Natural Stream Design, June 2003
Level Four Natural Stream Design, July 2003

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:
American Society of Highway Engineers, Vice-President, North Central WV Chapter

Registration (Type, Year, State):
Registered Professional Engineer, 2003, West Virginia
Registered Professional Engineer, 2006, Pennsylvania
Registered Professional Engineer, 2006, Kentucky

13. **PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML DESIGN** (Furnish complete data but keep essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	**YEARS OF AML RELATED DESIGN EXPERIENCE:**	**YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:**
Calkins, Randolph, M., P.S. **Bridgeport, WV Office**	15	32	0

Brief Explanation of Responsibilities: AML MANAGER - Project Manager and Principal Designer – **ALL FIELD AND OFFICE RELATED WORK,** including expression of interest response, Project scope of work document and associated engineering cost estimate, invoicing, and monthly progress reports. Designer - AutoCAD, SurvCAD, and Haestads Operator. Specification Writer, Calculation Brief, Bid Estimate, Microsoft Word and Excel Operator.

WVAML experience: *PROJECTS COMPLETED* – Cadd Services Open-End Contract; Norton Highwall #1; Tub Run Highwall and Refuse Phase I and II; Greenbrier Hollow Refuse; Pageton (Lambert) Portals; Birds Creek Number 4; Church Creek/Manown Highwall; Racine (Bradshaw) Portals; Hampton Number Four Maintenance; Howesville Sites, Sandy Run Highwall and Portals; Wilsie-Rosedale Waterline Extension Feasibility Study – I.D. No. 324; Laurel Valley (Daniels) Landslide; Price Hill Airshaft/Buildings; Weaver Portals and Highwall, Phase I and II; Old Bridgeport Hill Mine Drainage, Phase II; Nixon Run AMD; Arlington (Cox) Drainage; Fairmont (Hendrickson) Subsidence; Tunnelton (Dillsworth) Landslide; Sauls Run Strip and Landslide; Taylor Waterline Extension Feasibility Study-I.D. No. 309; Poplar Ridge Waterline Extension Feasibility Study-I.D. No. 298; Summit Park Waterline Extension Feasibility Study-I.D. No. 288: Hodgesville PSD Waterline Extension Feasibility Study-I.D. No. 275; McElwain Waterline Feasibility Study-I.D. No. 271; Adaland Tipple and Refuse; Bismark Strip Drainage and Refuse; Brownton School Refuse; Burdock Highwall; Clarksburg (Ryder) Avenue Drainage; Conners Highwall; Francis Drainage and Refuse; Muddy Creek Tipple Complex; Pringle Drainage; Superior Hydraulics; Thomas (Euclid Avenue) Subsidence; Zebs Creek Highwall; *PRELIMINARY DESIGN WORK* – Amigo Smokeless Refuse; Austin Highwall; Slab Fork Mine Dump.

Ohio AML Experience: Flint Run East Acid Mine Drainage Reclamation Project; Murray City AMD and Art Project; Danehart Acid Mine Drainage Reclamation; Ferris Forfeiture; Flint Run Acid Mine Drainage Reclamation; Glen Castle Reclamation; Lake Milton Investigation; Linden Acid Mine Drainage Bioremediation; Midvale Coal Number 7; Misco Burning Gob; Nutters Tipple D-716.

Related AML Design: SPEC REC: Glady Fork Mining Permit D-35-82; **WVCA:** Fisher-Mill Creek Bank Stabilization, Laurel Lake Sediment Removal, Harmons Creek Bank Stabilization, Parchment Valley Bank Stabilization, North Fork Hughes River Bank Stabilization; **WV Small Operators Assistance Program** (25 applications), **Maryland Small Operators Assistance Program** (1 application), **WV Bond Forfeiture Program** (438 sites), various waste permits for Corridor H (15 permits), Grafton Coal Company (12 years of experience with surface and deep mines)

Education (Degree, Year, Specialization):
A.S. Surveying Technology, 1970, Surveying
Level One Natural Stream Design, September 2002
Level Two Natural Stream Design, May 2003
401 / 404 Permit Training, WVDOH, January 2003

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:	**Registration (Type, Year, State):** Registered Professional Surveyor, 1979, West Virginia



1998 Associated Builders and Contractors Award of Excellence for Zebs Creek Highwall AML Design.

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML DESIGN (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Masullo Jr., Angelo, L. ,P.E. **Pittsburgh, PA Office**	6	30	0

Brief Explanation of Responsibilities: Vice President.

AML Experience: Office of Surface Mining – Geotechnical Services for Emergency Projects. Supervised several mine subsidence projects including subsurface investigations, developing grouting programs, plans, construction specifications, design drawings, and final reports. Designed cutoff walls for mine gas control including clay cutoffs and cement-bentonite slurry walls.

AML Projects in Pennsylvania and West Virginia – numerous AML reclamation projects including site grading, earthwork quantities, hydrologic and hydraulic analyses, and stability analyses. Developed construction drawings, technical specifications, construction cost estimates, and bid documents. Conducted numerous geotechnical investigations to determine slope stability and landslide mitigation.

Education (Degree, Year, Specialization): B.S., Civil Engineering, University of Pittsburgh

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:	Registration (Type, Year, State):
American Society of Civil Engineers	P.E., 1984, West Virginia, 10844 P.E., 1984, Pennsylvania, 033364-E P.E., Ohio, E-53740 P.E., Virginia, 020488 P.E., Maryland, 17582 P.E., New Jersey, GE34650 P.E., Louisiana, 23447-E P.E., Colorado, 27833 P.E., Texas, 83004 P.E., Kansas, 19149 P.E., Michigan, 56224 P.E., Arkansas, 14140

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML DESIGN (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Tomiczek III, Paul, W., P.E. **Pittsburgh, PA Office**	5	25	0

Brief Explanation of Responsibilities: Vice President.

AML experience: Office of Surface Mining – Geotechnical Services for over 20 mine subsidence projects. Evaluated subsurface data to determine the cause of the surface deformation, identified methods to stabilize the subsidence, and developed construction plans and specifications. Assisted in the design of the Little Short creek AML project for the Ohio Department of Natural Resources, including hydrologic and hydraulic studies and slope stability analyses.

Related AML Experience: Tyson's Dump and Cleve Reber Remedial designs; Norristown, PA and Ascension LA. USACE Project Engineer developed sediment control structures, waste volume calc's, designed sheet pile retaining walls, addressed permit requirements, pond dewatering, designed multi-layer caps, developed construction plans, cost estimates, and final closure documents. Project Manager for permitting of Babcock & Wilcox nuclear fuels decommissioning project. Environmental compliance audits for: ArcelorMittal Steel, Georgetown Steel Corporation, Bayou Steel Company, Copperweld, North Star Steel Company, IPSCO Steel, Oregon Steel Mills, LTV Copperweld Facilities, Nucor Steel, and Robertson Ceco Corporation. Completed and had approved numerous NPDES permit applications. Project manager for numerous site investigations and remediation plans, including several superfund sites, that required geologic knowledge of the area to install monitoring wells, soil and water sampling, closing of the facility.

Education (Degree, Year, Specialization): B.S., Civil Engineering, Cornell University, M.S. Civil Engineering Carnegie Mellon University

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:	Registration (Type, Year, State):
American Chemical Society – Energy Technology Group American Society of Civil Engineers	P.E., 2008, West Virginia, 17603 P.E., 1996, Pennsylvania, 047451E P.E., 1998, Ohio, 63195 P.E., South Carolina, 29419 P.E. Georgia, PE037442 P.E. Kentucky, 28995 Registered Environmental Manager – NREP 7878

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML DESIGN (Furnish complete data but keep essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Cummings, Biff, D., P.E. **Pittsburgh, PA Office**	20	35	0

Brief Explanation of Responsibilities: Principal.

Mr. Cummings has over 30 years of diverse professional experience in civil, geotechnical, and geo-environmental engineering which includes design, consulting, construction and project management. He has particular expertise with remedial design and remedial actions that include closure plans, synthetic and clay caps, leachate collection, slurry and sheet pile walls, groundwater collection systems, waste removal, and in-situ stabilization. Mr. Cummings experience also includes waste disposal areas such as lagoons, landfills and coal tailings dams. Additionally, he is experienced in geotechnical engineering and investigations to include building foundations, waste and soil consolidation, slope stability, mine subsidence, and fill placement. His experience also includes the full range of civil site design (land development) and abandoned mine land reclamation (mine drainage and seals, regarding and vegetation of spoil piles, landside investigation and abatement, subsidence abatement, mine and spoil fires, and stream channel restoration).

Related AML Experience: Senior Project Manager Hobet Mining Company, Senior Project Manager Barton Mine Fire Abatement in Maryland, Engineer Barnabus Refuse Piles Reclamation Project WV, Engineer Bradshaw Coal Refuse Pile Reclamation Project WV, Project Geotechnical Engineer Union Pacific Railroad, Senior Geotechnical Engineer West Summit Compressor Pad PA, Senior Geotechnical Engineer Bird Mine Bridge Replacement Foundation Investigation, Senior Project Manager Stickle Well Pad and Freshwater Impoundment PA, Senior Project Manager Coastal Freshwater Impoundment Design and Permitting PA, Senior Project Manager Miller to Headlee Pipeline Permitting PA, Senior Project Manager Shoaf Pipeline and Interconnect Permitting PA, Senior Geotechnical Engineer Welling Compressor Pad Foundation Investigation. Remedial Design/ Remedial Actions: Project Manager/Engineer high pH and arsenic impacted groundwater from glass making operation, Bayer Landfill WV, high pH leachate collection drain AR, outfall reconstruction IO, Port Authority site assessments and remedial action PA, USACE chemical warfare and decontaminating chemicals landfill MD, Monsanto Corporation Geotechnical Engineer soil cap and subsurface slurry wall.

Education (Degree, Year, Specialization): B.S., Civil Engineering, Pennsylvania State University

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:	**Registration (Type, Year, State):**
	P.E., 2004, West Virginia, 015871 P.E., 1984, Pennsylvania, PE033238E P.E., 1994, Ohio, 57675 P.E., Illinois, 062.059306 P.E., Alabama, 27197

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML DESIGN (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Maher Jr., Thomas, L., P.G. **Pittsburgh, PA Office**	6	28	0

Brief Explanation of Responsibilities: Principal.

Mr. Maher is a Principal with over 20 years of experience performing and managing diverse environmental and geotechnical projects. Mr. Maher's diverse environmental experience includes state and federally lead Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) projects; state and federally lead Resource Conservation and Recovery Act (RCRA) projects; assessment, investigation, and remediation of electric utility properties including coal-fired power plants, ash disposal facilities, electric substations, transmission facilities, and office/storage facilities; assessment, investigation, and remediation of natural gas utility properties including transmission pipelines, compressor stations, mercury metering stations, office/storage facilities; landfill gas and leachate extraction and beneficial use projects; underground storage tank assessments, remediations and closures; Phase I and Phase II environmental assessments for various commercial and industrial properties to be sold and/or redeveloped; groundwater remediation and monitoring projects for residual, municipal, and hazardous waste landfills; assessment of the impact of previous deep and surface mining including handling and treatment of acid mine drainage; and permitting of processed waste materials for beneficial co-product use. Mr. Maher's geotechnical experience includes design and monitoring subsurface investigations for residential, commercial, and industrial developments; geotechnical report preparation including conclusions and recommendations for shallow and deep foundations, earthwork, floor slabs, pavement, retaining walls, mine subsidence risk reduction, groundwater and surface water control, cut and fill slopes, infiltration basins, sedimentation basins, cement-bentonite slurry, and other barrier walls.

Related AML Experience: Analyses of potential mine subsidence on ash disposal fill synthetic liner, Recmix of PA lead for re-use/recycling of waste slag for alternate uses including AMD treatment Project Manager Duquesne Light flyash disposal post closure monitoring of groundwater, surface water, and NPDES outfalls; Project Manager Design/Build Team for Alternate Energies involving landfill gas and leachate systems; power Strategies Project Manager for development of Vertical Vaporator™ technology; Project Manager analyses of potential mine subsidence effects on a synthetic liner for Allegheny Power ash disposal site; supervised the the subsurface investigation to estimate the aquifer characteristics at a Super Fund Site in Bally PA; managed numerous projects to estimate the risk of structural damage from mine subsidence; assisted in grouting to recover lost streams above an active longwall mine; project Manager for Excell Minerals for waste audit, minimization, and re-use/recycling products including Excellorator fertilizer and Excell cement; Project Manager for Heckett MultiServ waste evaluation, minimization, and re-use/recycling products with potential uses for AMD treatment and engineered structural fills.

Education (Degree, Year, Specialization): B.S., Geology, University of Pittsburgh

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:	**Registration (Type, Year, State):** P.G., Pennsylvania, 1277 P.G., Virginia, 2801 P.G., Arkansas, 1920

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML DESIGN (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Walsh Jr., H. Thomas, P.G. **Pittsburgh, PA Office**	3	22	0

Brief Explanation of Responsibilities: Principal.

Mr. Walsh, a Senior Project Manager at Civil & Environmental Consultants, Inc., has 18 years of experience in conducting and managing large-scale environmental assessment and monitoring projects, site investigations, remedial designs, and large-scale hydrogeologic assessments, including computer analysis of aquifer test data and digital computer modeling. He is also experienced in the design and installation of monitoring well networks and various types of remediation systems. He has experience conducting and managing environmental assessments at industrial facilities where organic solvents, coatings, resins, electroplating wastes, primary metals manufacturing wastes, PCBs, asbestos, coal tar and wood treating chemicals were manufactured or disposed. He also has extensive experience in Phase I and Phase II environmental site assessments, as well as underground storage tank investigations, removal and remediation.

Related AML Experience: Project Manager for a watershed-wide hyrogeologic and hydraulic study of AMD in western Virginia; completed a digital computer groundwater model for a chemical plant along the Ohio River; completed portions of coal to liquid fuel permit applications; digital computer model of groundwater for a concrete plant along the Ohio River; support services for decommissioning of a nuclear reactor for NASA; hydrologic investigations for two coal ash disposal sites in WV; investigations of two ash, furnace dust, and metal finishing waste disposal areas in PA; managed the surveying, investigative and geotechnical services associated with a multi-phase project to remove coal tar impacted sediments from the Ohio River; performed aerial photographic interpretation to identify the orientation and magnitude of bedrock fracturing at a coal ash sludge impoundment in PA and WV; conducted numerous Phase I and Phase II Environmental Assessments including monitoring well installation and soil and waste material sampling.

Education (Degree, Year, Specialization): B.S., Geology, Clemson University; M.S., Geology, University of Toledo

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:	Registration (Type, Year, State):
	P.G., Pennsylvania, PG003251

13. **PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML DESIGN** (Furnish complete data but keep essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Clark, Douglas, M., P.E. **Pittsburgh, PA Office**	20	20	0

Brief Explanation of Responsibilities: Principal responsible for technical and administrative oversight of geological, geotechnical, and civil design.

AML experience: Emergency evaluation of private residence in Allegheny County, PA., Emergency investigation mine subsidence beneath Interstate 70 near Cambridge, OH., Abandoned Mine Subsidence Borrow of Munhall, PA., Landslide affecting six residences in Glassport Borough, Allegheny County, PA., Collection, treatment, and sludge disposal for 20 individual seeps near Hollywood, PA., designed directional boreholes to drain the mine pool to a treatment plant, 20 wet mine seals, 15,000 l.ft. gravity sewer, 3 pump stations, sludge disposal system in adjacent deep mine through 5,000 l.ft. pipeline, 2 injection holes, plugging 3 mine drainage boreholes, designed treatment plant and 3 acre polishing pond. AMDAT Plan for Huff Run in northeast OH., QA/QC services on Hickory Run AMD passive treatment system, AMD watershed planning study in Cheat and Tygart Basins, WV for the USACE.

Related AML Design: Phase II ESA abandoned coal prep plant and surface mine in WV; groundwater tracer study for landfill next to an abandoned deep mine; design and construction of stabilization programs for deep mine works beneath three solid waste landfills in western PA; stability analysis of rock cut slope above an abandoned deep mine; MSHA engineering design study expand coal refuse slurry in Monongalia County; geotechnical investigation and closure plan for a fine coal refuse slurry impoundment near Morgantown, WV; design and construction inspection services of a mine stabilization program for a single-span bridge for a coal shipment facility in Greene County, PA; emergency evaluation of subsidence event affecting private residences over Upper Freeport deep mine in Allegheny County, PA; evaluation of mine pool conditions in Pittsburg and Sewickley coal seams near Gray's Landing Lock and Dam; bedrock hydraulic characteristics beneath proposed coal refuse impoundment in Braxton County, WV; design calculations and construction drawings for 400 feet of reinforced soil slope (RSS); slope stability analyses, design calculations, and construction drawings for 10,000 feet of temporary RSS for reconstruction of State Route 22 near Lewistown, PA; geotechnical investigation and foundation recommendations for Lifestyle Center, Bethlehem, PA; Seneca Valley School District, Jackson Township, PA; Economy Elementary School, Highland Road Elementary School, and Ambridge Area High School in Beaver County, PA.; Donaldson Elementary School, North Fayette County, PA.; Temple Emanuel, Allegheny County, PA; Costco Warehouse, Allegheny County, PA; Community College of Allegheny County, PA.; Carnegie Melon University, Pittsburgh, PA.

Education (Degree, Year, Specialization): B.S., Civil Engineering, West Virginia University, B.S. Geology, University of West Virginia

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:	**Registration (Type, Year, State):** P.E., 2001, West Virginia, 013253 P.E., 2001, Pennsylvania, 049186E

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML DESIGN (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Fink., Edward, J., CPESC, P.E. **Pittsburgh, PA Office**	2	10	0

Brief Explanation of Responsibilities: Principal responsible for technical and administrative oversight of geological, geotechnical, and civil design.

Mr. Fink has experience including various site feasibility studies, permitting, site layout designs, volumetric analyses, storm water management designs, sanitary sewer designs, water distribution system designs, erosion and sedimentation control plans, retaining wall designs, roadway designs, wetland delineations, foundation designs, and drilling inspections.

Related AML Design: Patriot Coal Company flood plain analyses WV; Consol erosion and sediment control inspections PA; erosion and sediment control plan for Consol slurry impoundment PA; Project Manager MarkWest Sherwood Gas Processing Plant surveying, ecological work, site layout, grading, utilities, storm water and erosion and sediment control; PennDOT District 12-0 geotechnical engineer in charge of investigations, slope stability analyses, and design of landslide repairs; storm water analysis for Walmart Distribution Center #6027 PA; USPS canopy expansion including site layout, grading, utility and storm water and erosion and sediment control.

Education (Degree, Year, Specialization): B.S., Civil Engineering, West Virginia University

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:	**Registration (Type, Year, State):** P.E., 2001, West Virginia, 18669 Certified Professional in Erosion and Sediment Control – CPESC 4854 Certified Professional in Storm Water Quality – CPESC 0664

13. **PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML DESIGN** (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	**YEARS OF EXPERIENCE**		
	YEARS OF AML DESIGN EXPERIENCE:	**YEARS OF AML RELATED DESIGN EXPERIENCE:**	**YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:**
Miller, Dennis, E., P.S. **Bridgeport, WV Office**	11	25	0

Brief Explanation of Responsibilities: Survey Manager – **ALL FIELD RELATED WORK,** including field survey of topographic and planimetric project information. Generate or supplement mapping for the Project area. Designer - AutoCAD, SurvCAD, and Haestads Operator. Specification Writer, Calculation Brief, Bid Estimate, Microsoft Word and Excel Operator.

WVAML Experience: Norton Highwall #1; Tub Run Highwall and Refuse Phase I and II; Greenbrier Hollow Refuse; Pageton (Lambert) Portals; Birds Creek Number 4; Bergoo Waterline Extension Feasibility Study, I.D. No. 351; Lewis County EDA Waterline Extension Feasibility Study, I. D. No. 374; Scott Road and Findley Road Waterline Extension Feasibility Study, I.D. No. 356; WVDEP North Mapping Contract; WVDEP South Mapping Contract; Church Creek/Manown Highwall; Racine (Bradshaw) Portals; Hampton Number Four Maintenance; Howesville Sites, Sandy Run Highwall and Portals; Laurel Valley (Daniels) Landslide; Price Hill Airshaft/buildings; Weaver Portals and Highwall, Phase I and II; Old Bridgeport Hill Mine Drainage, Phase II; Nixon Run AMD; Arlington (Cox) Drainage; Fairmont (Hendrickson) Subsidence; Tunnelton (Dillsworth) Landslide; Sauls Run Strip and Landslide; Adaland Tipple and Refuse; Bismark Strip Drainage and Refuse; Brownton School Refuse; Burdock Highwall; Clarksburg (Ryder) Avenue Drainage; Conners Highwall; Francis Drainage and Refuse; Muddy Creek Tipple Complex; Pringle Drainage; Superior Hydraulics; Thomas (Euclid Avenue) Subsidence; Zebs Creek Highwall; Bridge Run, Camp Run, Philip Thorn Highwall, Rainelle AML, SCS Reclamation, Shegon Refuse Pile, Taylor Creek Tipple Complex, Tibbs Run Portal, Masontown.

Ohio AML Experience: Flint Run East Acid Mine Drainage Reclamation Project; Murray City AMD and Art Project; Danehart Acid Mine Drainage Reclamation; Ferris Forfeiture; Flint Run Acid Mine Drainage Reclamation; Glen Castle Reclamation; Lake Milton Investigation; Linden Acid Mine Drainage Bioremediation; Midvale Coal Number 7; Misco Burning Gob; Nutters Tipple D-716.

Related AML Design: SPEC REC: Glady Fork Mining Permit D-35-82; **WVCA:** Fisher-Mill Creek Bank Stabilization, Laurel Lake Sediment Removal, Kraut Creek H&H Investigation, Harmons Creek Bank Stabilization, Parchment Valley Bank Stabilization, North Fork Hughes River Bank Stabilization, Spencer Flood Plain Improvement Study, Logan County Flood Plain Improvement Project. **WV Bond Forfeiture Program** (438 sites), various waste permits for Corridor H (15 permits), Clarksburg U.S. Postal Facility, Grant Town Power Plant, U.S. Route 19 Bridge Layout, Salem Bridge Layout, Webster Bridge Layout, Corridor H (4 Sections), Project Impact Bench Marks, numerous property and topographic mapping projects.

Education (Degree, Year, Specialization): A.S., 1989, Surveying

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:	**Registration (Type, Year, State):**
West Virginia Contractor's Association West Virginia Association of Land Surveyors West Virginia Associated Builders Upshur County Chamber of Commerce	Registered Professional Surveyor, 1994, West Virginia

13. **PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML DESIGN** (Furnish complete data but keep essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Littler, Jason, D., P.S. **Bridgeport, WV Office**	11	20	0

Brief Explanation of Responsibilities: Survey Manager – **ALL FIELD RELATED WORK,** including field survey of topographic and planimetric project information. Generate or supplement mapping for the Project area. Designer - AutoCAD, SurvCAD, and Haestads Operator. Specification Writer, Calculation Brief, Bid Estimate, Microsoft Word and Excel Operator.

WVAML Experience: Norton Highwall #1; Tub Run Highwall and Refuse Phase I and II; Greenbrier Hollow Refuse; Pageton (Lambert) Portals; Birds Creek Number 4; Bergoo Waterline Extension Feasibility Study, I.D. No. 351; Lewis County EDA Waterline Extension Feasibility Study, I. D. No. 374; Scott Road and Findley Road Waterline Extension Feasibility Study, I.D. No. 356; WVDEP North Mapping Contract; WVDEP South Mapping Contract; Church Creek/Manown Highwall; Racine (Bradshaw) Portals; Hampton Number Four Maintenance; Howesville Sites, Sandy Run Highwall and Portals; Laurel Valley (Daniels) Landslide; Price Hill Airshaft/buildings; Weaver Portals and Highwall, Phase I and II; Old Bridgeport Hill Mine Drainage, Phase II; Nixon Run AMD; Arlington (Cox) Drainage; Fairmont (Hendrickson) Subsidence; Tunnelton (Dillsworth) Landslide; Sauls Run Strip and Landslide; Adaland Tipple and Refuse; Bismark Strip Drainage and Refuse; Brownton School Refuse; Burdock Highwall; Clarksburg (Ryder) Avenue Drainage; Conners Highwall; Francis Drainage and Refuse; Muddy Creek Tipple Complex; Pringle Drainage; Superior Hydraulics; Thomas (Euclid Avenue) Subsidence; Zebs Creek Highwall; Bridge Run, Camp Run, Philip Thorn Highwall, Rainelle AML, SCS Reclamation, Shegon Refuse Pile, Taylor Creek Tipple Complex, Tibbs Run Portal, Masontown.

Ohio AML Experience: Flint Run East Acid Mine Drainage Reclamation Project; Murray City AMD and Art Project; Danehart Acid Mine Drainage Reclamation; Ferris Forfeiture; Flint Run Acid Mine Drainage Reclamation; Glen Castle Reclamation; Lake Milton Investigation; Linden Acid Mine Drainage Bioremediation; Midvale Coal Number 7; Misco Burning Gob; Nutters Tipple D-716.

Related AML Design: SPEC REC: Glady Fork Mining Permit D-35-82; **WVCA:** Fisher-Mill Creek Bank Stabilization, Laurel Lake Sediment Removal, Kraut Creek H&H Investigation, Harmons Creek Bank Stabilization, Parchment Valley Bank Stabilization, North Fork Hughes River Bank Stabilization, Spencer Flood Plain Improvement Study, Logan County Flood Plain Improvement Project, various waste permits for Corridor H (15 permits), Clarksburg U.S. Postal Facility, Grant Town Power Plant, U.S. Route 19 Bridge Layout, Salem Bridge Layout, Webster Bridge Layout, Corridor H (4 Sections), Project Impact Bench Marks, numerous property and topographic mapping projects.

Education (Degree, Year, Specialization): B.S., 1996, Engineering Technology/Surveying

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:	**Registration (Type, Year, State):** Registered Professional Surveyor, 2006, West Virginia

13. **PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML DESIGN** (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	**YEARS OF AML RELATED DESIGN EXPERIENCE:**	**YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:**
5 CADD Operators	8	Varies	Varies

Brief Explanation of Responsibilities: CADD Draftsperson including generation of topographic mapping or supplementation of existing mapping, cross sections, detail sheets, tax map overlays, Project Manager or Staff Engineer design compilation. AutoCAD, SurvCAD, and Haestads Operator. Calculation Brief Details and Drawings, Microsoft Word and Excel Operator.

WVAML experience: CADD Services Contract, Norton Highwall #1; Tub Run Highwall and Refuse Phase I and II, Town of Newburg Waterline Extension Feasibility Study, I.D. No. 392; Webster County Point Mountain Waterline feasibility Study, I.D. No. 384; Greenbrier Hollow Refuse; Sauls Run (Carpenter) Landslide; Pageton (Lambert) Portals; WVDEP Mapping Contract - South Region (2001-2012); Birds Creek #4; Bergoo Waterline Extension Feasibility Study, I.D. No. 351; Lewis County EDA Waterline Extension Feasibility Study, I.D. No. 374; Scott Road and Findley Road Waterline Extension Feasibility Study, I.D. No. 356; Birds Creek Number 4; WVDEP Mapping Contract – South Region (2008-2011); WVDEP Mapping Contract – North Region (2008-2011); Church Creek/Manown Highwall; Racine (Bradshaw) Portals; Hampton Number Four Maintenance; Howesville Sites, Sandy Run Highwall and Portals; Wilsie-Rosedale Waterline Extesion Feasibility Study – I.D. No. 324; Laurel Valley (Daniels) Landslide; Price Hill Airshaft/Buildings; Weaver Portals and Highwall, Phase I and II; Old Bridgeport Hill Mine Drainage, Phase II; Nixon Run AMD; Arlington (Cox) Drainage; Fairmont (Hendrickson) Subsidence; Tunnelton (Dillsworth) Landslide; Sauls Run Strip and Landslide; Taylor Waterline Extension Feasibility Study-I.D. No. 309; Poplar Ridge Waterline Extension Feasibility Study-I.D. No. 298; Summit Park Waterline Extension Feasibility Study-I.D. No. 288: Hodgesville PSD Waterline Extension Feasibility Study-I.D. No. 275; McElwain Waterline Feasibility Study-I.D. No. 271; Bridge Run; Camp Run; Philip Thorn Highwall; Rainelle AML; SCS Reclamation; Shegon Refuse Pile; Taylor Creek Tipple Complex; Tibbs Run Portal; Masontown AML.

Ohio AML Experience: Flint Run East Acid Mine Drainage Reclamation Project; Murray City AMD and Art Project; Danehart Acid Mine Drainage Reclamation; Ferris Forfeiture; Flint Run Acid Mine Drainage Reclamation; Glen Castle Reclamation; Lake Milton Investigation; Linden Acid Mine Drainage Bioremediation; Midvale Coal Number 7; Misco Burning Gob; Nutters Tipple D-716.

Related AML Design: SPEC REC: Glady Fork Mining Permit D-35-82; **WVCA:** Fisher-Mill Creek Bank Stabilization, Laurel Lake Sediment Removal, Kraut Creek H&H Investigation, Harmons Creek Bank Stabilization, Parchment Valley Bank Stabilization, North Fork Hughes River Bank Stabilization, Spencer Flood Plain Improvement Study, Logan County Flood Plain Improvement Project. Various waste permits for Corridor H (15 permits), numerous topographic and property surveys, Pope Properties Waterline and Wastewater Extension, Nitro, WV

Education (Degree, Year, Specialization): CADD Operators – varies

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:	**Registration (Type, Year, State):** N/A

13. **PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML DESIGN** (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	**YEARS OF AML RELATED DESIGN EXPERIENCE:**	**YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:**
2 Survey Crews (6 Survey Crews Pittsburgh)	8	30+	30+

Brief Explanation of Responsibilities: Two (2) fully equipped survey crews can obtain field data to develop topographic mapping or to supplement available aerial mapping. These crews can also use GPS survey techniques to bring horizontal and vertical control to the Project site or control for aerial photography operations. All filed data is electronically gathered, to eliminate errors and blunders, and can be directly downloaded into our computer workstations. Field to finish modules of our SurvCADD software recognize field entered codes that control line work ensuring proper points are connected, proper break lines area established prior to contour generation, and greatly reduces CADD time.

WVAML experience: CADD Services Contract, Norton Highwall #1; Tub Run Highwall and Refuse Phase I and II, Town of Newburg Waterline Extension Feasibility Study, I.D. No. 392; Webster County Point Mountain Waterline feasibility Study, I.D. No. 384; Greenbrier Hollow Refuse; Sauls Run (Carpenter) Landslide; Pageton (Lambert) Portals; WVDEP Mapping Contract - South Region (2001-2012); Birds Creek Number 4; WVDEP North Mapping Contract; WVDEP South Mapping Contract; Church Creek/Manown Highwall; Racine (Bradshaw) Portals; Hampton Number Four Maintenance; Howesville Sites, Sandy Run Highwall and Portals; Laurel Valley (Daniels) Landslide; Price Hill Airshaft/Buildings; Weaver Portals and Highwall, Phase I and II; Old Bridgeport Hill Mine Drainage, Phase II; Nixon Run AMD; Arlington (Cox) Drainage; Fairmont (Hendrickson) Subsidence; Tunnelton (Dillsworth) Landslide; Sauls Run Strip and Landslide; Taylor Waterline Extension Feasibility Study-I.D. No. 309; Poplar Ridge Waterline Extension Feasibility Study-I.D. No. 298; Summit Park Waterline Extension Feasibility Study-I.D. No. 288: Hodgesville PSD Waterline Extension Feasibility Study-I.D. No. 275; McElwain Waterline Feasibility Study-I.D. No. 271; Bridge Run; Camp Run; Philip Thorn Highwall; Rainelle AML; SCS Reclamation; Shegon Refuse Pile; Superior Hydraulics; Taylor Creek Tipple Complex; Tibbs Run Portal; Masontown.

Ohio AML Experience: Flint Run East Acid Mine Drainage Reclamation Project; Murray City AMD and Art Project; Danehart Acid Mine Drainage Reclamation; Ferris Forfeiture; Flint Run Acid Mine Drainage Reclamation; Glen Castle Reclamation; Lake Milton Investigation; Linden Acid Mine Drainage Bioremediation; Midvale Coal Number 7; Misco Burning Gob; Nutters Tipple D-716.

Related AML Design: SPEC REC: Glady Fork Mining Permit D-35-82; **WVCA:** Fisher-Mill Creek Bank Stabilization, Laurel Lake Sediment Removal, Kraut Creek H&H Investigation, Harmons Creek Bank Stabilization, Parchment Valley Bank Stabilization, North Fork Hughes River Bank Stabilization, Spencer Flood Plain Improvement Study, Logan County Flood Plain Improvement Project; various waste permits for Corridor H (15 permits), numerous topographic and property surveys, Pope Properties Waterline and Wastewater Extension, Nitro, WV

Education (Degree, Year, Specialization): 2 Party Chiefs – Associate Degrees Civil Engineering or Surveying Technology.

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:	**Registration (Type, Year, State):** Three (3) RPS – West Virginia

14.	PROVIDE A LIST OF SOFTWARE AND EQUIPMENT AVAILABLE IN THE PRIMARY OFFICE WHICH WILL BE USED TO COMPLETE AML DESIGN SERVICES.
10 Computer Workstations (250 Computer Workstations Pittsburgh)	
3 Robotic Total Stations and 12 Surveying Electronic Total Stations	
18 Field Survey Data Collectors	
6 Survey Grade GPS Survey Instruments (complete with base and 2 rovers each)	
AutoCAD Versions2008, 2006, 2002, 2000I, Map 4.0, Map 5.0, version 14.0	
SurvCADD versions 2008, 2006, XML2, CES, 98	
AutoCAD Land Development	
Bentley MicroStation with InRoads	
ESRI ArcView GIS (Version 3.2) and Mapping Software (Version 8.3)	
KY Pipe Water and Sewer Line Software	
Haestads Water CAD Water and Sewer Line Software	
Haestads Culvert Master, Flow Master, Storm CAD	
Terrain Navigator with seamless WV 7.5' USGS Quads and Sure Maps by Titan Systems	
North American Green Erosion Control Blanket Software	
Microsoft Office, including Word and Excel	
Microsoft Project Scheduling Software	
Corel 98 Suite	
Numerous HP, Canon, and Toshiba Ink Plotters and Printers	
XSTABL version 5.2 Slope Stability Software	

15. CURRENT ACTIVITIES ON WHICH YOUR FIRM OR EMPLOYEES ARE THE DESIGNATED ENGINEER OF RECORD.				
PROJE NAME , TYPE, AND LOCATION	**NAME AND ADDRESS OF OWNER**	**NATU OF YOUR FIRM'S RESPONSIBILITY**	**ESTIMATED CONSTRUCTION COST**	**PERCENT COMPLETE**
Special Reclamation – Multiple Projects, Barbour County, Upshur County, Harrison County, and Grant County	Mr. David McCoy, P.E., Project Manager West Virginia Department of Environmental Protection 105 South Railroad Street Philippi, WV 26416	Reclamation design of five (5) bond forfeited sites throughout northern WV. Tasks include subsurface investigation; aerial and topographic mapping; earthwork design to balance cuts and fills; design site drainage conveyances; rebuild permitted erosion and sediment control structures; design additional site E&S controls as needed; install wet mine seals; design soil or alternate cover to seal exposed coal refuse; refuse neutralization; clearing and grubbing; and revegetation. Preliminary and Final Design; Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.	Unk.	0%
CADD Services –Open End Contract, Statewide	Mr. Mark Proctor, P.E., Project Manager West Virginia Department of Environmental Protection 116 Industrial Drive Oak Hill, WV 25901	Develop construction plans as directed by in-house WVDEP design personnel. First job assigned was Stollings (White) Portals. Tasks included drafting of five (5) construction plans sheet that involved three (3) bat gate mine seals and details; E&S controls including silt fence and construction entrance and associated details.	Unk.	100%
Norton Highwall #1 – Randolph County	Mr. Tim Lemasters, P.E. West Virginia Department of Environmental Protection 209 South Main Street Philippi, WV 26416	Reclamation design with 170,000 Cubic Yards of Excavation, 10,600 L.Ft. Ditches; 940 L.Ft. of pipe; 15 Wet Mine Seals; 1,410 L.Ft. of Subsurface Drain; and 53 acres of Revegetation; Topographic Surveying; Generation of Construction Mapping; Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.	$2,202,000	Design 95% Constr. 0%
Pageton (Lambert) Portals, McDowell County, WV	Mr. Mark Proctor, P.E., Project Manager West Virginia Department of Environmental Protection 116 Industrial Drive Oak Hill, WV 25901	Reclamation design of coal refuse pile with 51,000 Cubic Yards of Excavation, twenty four (24) wet mine seals; and 24 acres of revegetation; Topographic Surveying; Generation of Construction Mapping; Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.	$ 1,100,000	Design 85% Complete (awaiting utility coordination)

15. CURRENT ACTIVITIES ON WHICH YOUR FIRM OR EMPLOYEES ARE THE DESIGNATED ENGINEER OF RECORD.				
PROJECT NAME , TYPE, AND LOCATION	**NAME AND ADDRESS OF OWNER**	**NATURE OF YOUR FIRM'S RESPONSIBILITY**	**ESTIMATED CONSTRUCTION COST**	**PERCENT COMPLETE**
Greenbrier Hollow Refuse, McDowell County, WV	Mr. Mark Proctor, P.E., project Manager West Virginia Department of Environmental Protection 116 Industrial Drive Oak Hill, WV 25901	Reclamation design of coal refuse pile with 51,000 Cubic Yards of Excavation, two (2) wet mine seals; and 8 acres of revegetation; Topographic Surveying; Generation of Construction Mapping; Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.	$ 712,000	Design 100% Complete
Tub Run Highwall and Refuse Phase II, Tucker County, WV	Mr. Ronald Lane, P.E. West Virginia Department of Environmental Protection 209 South Main Street Philippi, WV 26416	Reclamation design with 307,000 Cubic Yards of Excavation; 9,500 L.Ft. Access Road; 11,400 L.Ft. Ditches; 4 Wet Mine Seals; and 114 acres of revegetation; Topographic Surveying; Generation of Construction Mapping; Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.	$ 2,800,000	Design 100%, Constr. 0%
Tub Run Highwall and Refuse Phase I, Tucker County, WV	Mr. Gregg Smith, P.E. West Virginia Department of Environmental Protection 209 South Main Street Philippi, WV 26416	Reclamation design with 265,000 Cubic Yards of Excavation, eight 8,500 L.Ft. Access Road; 9,900 L.Ft. Ditches; 4 Pipes and a Box culvert; and 74 acres of revegetation; Topographic Surveying; Generation of Construction Mapping; Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.	$ 2,300,000	Design 100%, Constr. 100%
Town of Newburg Waterline Extension Feasibility Study, I.D. No. 392, Preston County, WV	Mr. Jonathon Holbert West Virginia Department of Environmental Protection Office of Abandoned Mine Lands 601 57th Street, SE – Box 20 Charleston, West Virginia 25304	8.0 Mile Waterline Extension Feasibility Study – I.D. No. 351, involving 96 Residents. Surface and Ground Water Testing and Reporting; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Water Analyses Interpretation and Evaluation; Ground Water Contamination Mitigation Alternatives with Estimated Construction Costs; and Initial On-Site Meeting, Preliminary Report, Final Report, Monthly Reports, and Invoicing.and Initial On-Site Meeting, Preliminary Report, Final Report, Monthly Reports, and Invoicing.	N/A	Design 100%

16. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A SUB-CONSULTANT TO OTHERS.					
PROJECT NAME , TYPE, AND LOCATION	**NATURE OF YOUR FIRM'S RESPONSIBILITY**	**NAME AND ADDRESS OF OWNER**	**ESTIMATED COMPLETION DATE**	**ESTIMATED CONSTRUCTION COST**	
				ENTIRE PROJECT	**YOUR FIRM'S RESPONSIBILITY**
Howard Concrete Pumping, Franklin Street Mine Grouting, Pittsburgh, PA	Geotechnical investigation to determine extent of deep mining; Grouting QA/QC	TKA Architects 4951 Centre Avenue Pittsburgh, PA	On-Going	N/A	$20,000
Slippery Rock University, PA; Student Union Building Construction	Geotechnical investigation for foundation design.	DRS Architects, Inc One Gateway Center Pittsburgh, PA	On-Going	Unk.	$26,000

17. C PLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR F OR EMPLOYEES WERE DESIGNATED THE ENGINEER OF F ORD.					
PROJECT NAME & TYPE	**LOCATION**	**NAME & ADDRESS OF OWNER**	**ESTIMATED CONSTRUCTION COST**	**YEAR**	**CONSTRUCTED (YES OR NO)**
Weaver Highwall and Mine Drainage, Phase I	Weaver, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$1,200,000	2008	Yes
Weaver Highwall and Mine Drainage, Phase II	Weaver, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$1,300,000	2008	Yes
Laurel Valley (Daniels) Landslide	Lost Creek, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$230,000	2008	Yes
Price Hill Airshaft and Buildings	Price Hill, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$575,000	2009	Yes
Sandy Run Highwall and Portals	Kingwood, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$493,000	2009	Yes
Howesville Sites	Howesville, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$575,000	2009	Yes
Hampton Number Four Maintenance	Clothier, Boone County, WV	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$ 850,000	2010	Yes
Racine (Bradshaw) Portals	Racine, Boone County, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$ 410,000	2010	Yes

17. C PLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FI OR EMPLOYEES WERE DESIGNATED THE ENGINEER OF P ORD.					
PROJECT NAME & TYPE	**LOCATION**	**NAME & ADDRESS OF OWNER**	**ESTIMATED CONSTRUCTION COST**	**YEAR**	**CONSTRUCTED (YES OR NO)**
Church Creek/Manown Highwall	Kingwood, Preston County, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$ 2,500,000	2011	Yes
WVDEP Mapping Contract –North Region (2008-2011)	Northern Coal Producing Counties	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	N/A	2011	Yes
WVDEP Mapping Contract –South Region (2008-2011)	Southern Coal Producing Counties	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	N/A	2011	Yes
Scott Road and Findley Road Waterline Extension Feasibility Study, I.D. No. 356	Norton, Randolph County, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$259,600	2011	Awaiting Funding
Lewis County EDA Waterline Extension Feasibility Study, I.D. No. 374	Pricetown, Lewis County, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$2,276,000	2011	No (Didn't Qualify for Funding)
Bergoo Waterline Extension Feasibility Study, I.D. No. 351	Bergoo, Webster County, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$1,788,000	2011	No (Didn't Qualify for Funding)
Birds Creek Number Four	Kingwood, Preston County, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$ 999,000	2011	Yes
Sauls Run (Carpenter) Landslide	Weston, Lewis County, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$ 450,000	2011	Yes
Webster County Point Mountain Waterline Extension Feasibility Study, I.D. No. 384	Webster Springs, Webster County, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	N/A	2011	No (Didn't Qualify for Funding)

17. C PLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR F OR EMPLOYEES WERE DESIGNATED THE ENGINEER OF RD.					
PROJECT NAME & TYPE	**LOCATION**	**NAME & ADDRESS OF OWNER**	**ESTIMATED CONSTRUCTION COST**	**YEAR**	**CONSTRUCTED (YES OR NO)**
Town of Newburg Waterline Extension Feasibility Study, I.D. No. 392	Newburg, Preston County, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	N/A	2012	Awaiting Funding
Tub Run Highwall and Refuse Phase I	Thomas, Tucker County, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$ 2,300,000	2012	Yes
WVDEP Mapping Contract –South Region (2011-2012)	Southern Coal Producing Counties	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	N/A	2012	Yes
Greenbrier Hollow Refuse	McDowell, McDowell County, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$ 712,000	2012	In Process
Pageton (Lambert) Portals	Pageton, McDowell County, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$ 1,100,000	2012	No
Tub Run Highwall and Refuse Phase II	Thomas, Tucker County, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$ 2,800,000	2012	In Process
Four PA Longwall Mines. Hydrological and Biological Stream Monitoring	Southwest PA	CNX Center 1000 CONSOL Energy drive Canonsburg. PA 15317	$9,200,000	2005 – Present	On-Going
Pristine Mine Permitting. Mine Permit Transfers	PA (Statewide)	Pristine Resources 4020 Kinros Lakes Parkway Richfield, OH	$313,000	2005 - Present	On-Going
Bailey East Mine Long Wall Expansion. Ecological Monitoring and Permitting	Washington, PA	CNX Center 1000 CONSOL Energy drive Canonsburg. PA 15317	$424,000	2006 – Present	On-Going
Batavia Mines. NPDES Permit	Batavia, OH	Arch Minerals, LLC P.O. Box 851 Owensville, OH	$14,500	2008 - Present	On-Going

17. C PLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR F M OR EMPLOYEES WERE DESIGNATED THE ENGINEER OF R ORD.					
PROJECT NAME & TYPE	**LOCATION**	**NAME & ADDRESS OF OWNER**	**ESTIMATED CONSTRUCTION COST**	**YEAR**	**CONSTRUCTED (YES OR NO)**
Wooster Aggregates. Wetland Evaluation, Design, and Construction	Wooster, Oh	The Olen Corporation 4755 South High Street Columbus, OH	$218,000	2009 – Present	In Process
CRDA Templeton Fork Restoration. Construction Management 40,000 L.Ft. Stream Restoration and 6.75 Acres of Wetland Mitigation	East Findley, PA	CNX Center 1000 CONSOL Energy drive Canonsburg. PA 15317	$40,000	2010 – Present	On-Going
Northern WV. Water Treatment Presentation	Marion County, WV	CNX Center 1000 CONSOL Energy drive Canonsburg. PA 15317	$6,400	2010 – Present	In Process
Crabapple Mitigation Project. QA/QC on 4,000 L.Ft. Stream Mitigation and 1.25 Acres of Wetland Mitigation	Wind Ridge, PA	CNX Center 1000 CONSOL Energy drive Canonsburg. PA 15317	$33,000	2010 – Present	On-Going
Federal No. 2 Water Quality. Current and Future Water Discharge Evaluation	Fairview, WV	Patriot Coal Corporation 750 Levels Road Fairmont, WV	$58,000	2101 – Present	On-Going
Cunningham Hollow Mine Expansion. USACOE 404 Permit and Benthic Survey	Benwood, WV	CNX Center 1000 CONSOL Energy drive Canonsburg. PA 15317	$50,000	2010 – Present	On-Going
Wayneburg Central Parts. Site Development	Waynesburg, PA	CNX Center 1000 CONSOL Energy drive Canonsburg. PA 15317	$2,700	2011 – Present	In Process
Bassett Surface Mine. USACOE Section 404 Permitting	Friedens, PA	PBS Coal Inc. 1576 Stoystown, PA 15541	$21,000	2011 – Present	On-Going
Baily Mine Coal Refuse Dispoasl Areas 7 & 8. Environmental Permitting	Time, PA	CNX Center 1000 CONSOL Energy drive Canonsburg. PA 15317	$325,000	2011 - Present	In Process
Rocky Run Restoration/Permitting. Stream Restoration Design and Permitting	Washington, PA	CNX Center 1000 CONSOL Energy drive Canonsburg. PA 15317	$26,000	2011 - Present	On-Going
Washington Dam No. 4. Structural Design and Permitting	Washington, PA	CNX Center 1000 CONSOL Energy drive Canonsburg. PA 15317	$96,000	2012 - Present	In Process
Shoemaker Mine 8 Shaft Site. USACOE 404 Permitting	Calisa, WV	CNX Center 1000 CONSOL Energy drive Canonsburg. PA 15317	$1,600	2012 – Present	In Process

18. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOU IRM HAS BEEN A SUB-CONTRACTOR TO OTHER FIRMS (IN CATE PHASE OF WORK FOR WHICH YOUR FIRM WAS RESPONSIBLE).

PROJECT NAME , TYPE, AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH
Group Nine Intersection Improvements Traffic Design	City of Columbus 109 N. Front Street Columbus, Ohio 43015	$45	1997	Yes	Dynotec Engineering
Morse Bethel Road Connector Right-of-Way Studies	City of Columbus 109 N. Front Street Columbus, Ohio 43015	N/A	1998	N/A	Burgess & Niple
NETL Technologies Support Facility Morgantown, West Virginia	Department of Energy	$13	2008	Yes	Loftus Engineers
NETL Technologies Day Care Building Morgantown, West Virginia	Department of Energy	$16	2010	Yes	Loftus Engineers

19. *Use this space to provide any additional information or description of resources supporting your firm's qualifications to perform work for the West Virginia Abandoned Mine Lands Program.*

Civil & Environmental Consultants, Inc. (CEC) can provide one-stop shopping for the West Virginia Abandoned Mine Lands Program. Work, including surveying, development of mapping from field surveys, site design, CADD operations, water testing, hazmat testing, calculations, plans, and specifications associated with this task order contract completed in-house. CEC carefully selected sub-contractors, successfully used in the past, to perform drilling and chemical testing of soils, rock, and coal that have experience and are extremely familiar with WVAML Projects. CEC has EOI-specific corporate and employee experience with highwall reclamation engineering, mine seals, drainage control structures and facilities, passive treatment of AMD, debris and waste handling and disposal plan, and revegetation of drastically disturbed mined lands. CEC also has EOI-experience in surveying and mapping, subsurface investigations, H & H studies, construction plans and specifications, calculations, conducting associated bid meetings, and necessary reports and invoicing procedures. CEC has corporate and employee experience on over seventy (70) WVAML projects and twelve (12) ODNR AML projects. In addition, CEC employees have completed eight (8) AML Related projects for the West Virginia Conservation Agency. CEC personnel stay abreast of current developments and technological advances in Abandoned Mine Lands reclamation and acid mine drainage by attending seminars and symposiums on the subjects. In the past, CEC personnel have attended the WV Surface Mining Task Force Symposium in Morgantown, WV; the National Association of Abandoned Mine Lands Symposium in Athens, OH; West Virginia University Natural Stream Restoration Program in Morgantown, WV; 404/401 Permit Training in Charleston, WV; and State and Local Mitigation Planning in Buckhannon, sponsored by FEMA and WVOES.

20. The foregoing is a statement of facts.

The foregoing is a statement of facts.

Signature: _____ **TITLE: Vice President** **DATE:** January 29, 2013

Printed Name: Dennis E. Miller, Vice President

ATTACHMENT "C" - GRAFTON #4 REFUSE & HW DESIGN SERVICES P.[illegible] DEP16073 - AML AND RELATED PROJECT EXPERIENCE MATRIX

PROJECTS	EXP. BASIS C=Corporation P=Personal	Additional Info Provided in Section(s)	PROJECT EXPERIE[illegible] REQUIREMENTS															PRIMARY STAFF PARTICIPATION/CAPACITY					
			Abandoned Surface Mine Reclamation	Abandoned Deep Mine Reclamation	Portal/ Shaft Closure	Hydrologic/Hydraulic Design/Evaluation	Remining Evaluation	Mine/Refuse Fire Abatement	Subsidence Investigation Mitigation	Hazardous Waste Disposal	Project Specifications	Water Quality Evaluation/Mitigation/ Replacement	Construction Inspection / Management	Water Treatment	Equipment / Structure Removal	Stream Restoration	Geotechnical/Stability	Greg Linder, P.E. Project Manager	Randy Calkins, P.S. Designer	Dennis Miller, P.S. Designer	Jason Littler, P.S. Staff Engineer	2 Survey Crews	5 CADD Operators
Tub Run Highwall and Refuse Phase II	C	Pg. 4	X	X	X	X				X	X			X	X				P			P	P
Tub Run Highwall and Refuse Phase I	C	Pg. 4	X			X					X				X				P			P	P
Newburg Waterline Feasibility Study	C	Pg. 4				X						X		X				M	P				P
Point Mtn. Waterline Feasibility Study	C	Pg. 4				X						X		X				M	P				P
Greenbrier Hollow Refuse	C	Pg. 4	X	X	X	X					X			X	X				P			P	P
Sauls Run (Carpenter) Landslide	C	Pg. 4	X	X	X	X					X			X	X		X		P	M	P	P	P
Pageton (Lambert) Portals	C	Pg. 4	X	X	X	X					X			X	X				P			P	P
Birds Creek #4	C	Pg. 5	X	X	X	X					X			X	X				P			P	P
Church Creek/Manown Highwall	C	Pg. 5	X		X	X					X				X	X			P			P	P
Racine (Bradshaw) Portals*	C	Pg. 5		X	X	X					X				X	X			P			P	P
Hampton #4 Maintenance*	C	Pg. 5	X			X					X	X				X	X		P	M	P	P	P
Howesville Sites*	C	Pg. 6	X	X	X	X				X	X	X			X	X	X	M	P			P	P
Sandy Run Highwall and Portals*	C	Pg. 6	X	X	X	X				X	X	X			X	X	X	M	P			P	P
Wilsie-Rosedale Waterline Feasibility I.D. # 324*	C	Pg. 6				X						X		X			X		P				P
Laurel Valley (Daniels) Landslide*	C	Pg. 6	X			X					X						X	M	P	M	P	P	P
Price Hill Airshaft/Buildings*	C	Pg. 6		X	X	X					X	X		X	X		X		P	M	P	P	P
Glady Fork AMD Trmt. Plant.****	C	Pg. 7		X		X					X	X	X	X			X	M	P	M	P	P	P
Weaver Portals, Ph. I & II*	C	Pg. 6	X	X	X	X			X		X	X	X	X	X	X	X	M	P	M	P	P	P
Nixon Run AMD*	C	Pg. 7	X	X	X	X					X	X		X	X	X	X		P	M	P	P	P
Taylor Waterline Feasibility, I.D. # 309*	C	Pg. 7				X						X		X					P				P
Poplar Ridge Waterline Feasibility, I.D. # 298*	C	Pg. 7				X						X		X					P				P
Summit Park Waterline Feasibility I.D. # 288*	C	Pg. 8				X						X		X					P				P
Fairmont (Hendrickson) Subsidence*	C	Pg. 9		X		X			X		X	X					X		P	M	P	P	P
Tunnelton (Dillsworth) Landslide*	C	Pg. 9		X		X			X	X	X				X		X	P	M	M	P	P	P
Arlington (Cox) Drainage*	C	Pg. 7		X	X	X			X		X		X				X		M	M	P	P	P
Sauls Run Strip and Landslide*	C	Pg. 9	X			X					X		X			X	X	P	M	M	P	P	P
Hodgesville Waterline Feasibility I.D. # 275*	C	Pg. 8				X						X		X					M				P
McElwain Waterline Feasibility I.D. # 271*	C	Pg. 8				X						X		X									P
Old Bridgeport Hill Mine Drainage, Ph II*	C	Pg. 6	X	X	X	X			X		X	X		X	X	X	X		M	M	P	P	P
Flint Run East Acid Mine Drainage**	C	Pg. 9	X			X				X	X	X		X	X	X	X		M			P	P
Murray City AMD and Art Project***	C	Pg. 8		X	X	X					X	X		X					M			P	P
Danehart Acid Mine Drainage**	C	Pg. 9	X			X			X		X	X		X			X		M	M		P	P
Nutters Tipple Bond Forfeiture**	C	Pg. 8	X			X				X	X				X	X	X		M	M		P	P
Lake Milton Acid Mine Drainage*	C	Pg. 10	X			X					X	X		X	X	X	X		M			P	P
Midvale Coal AML**	C	Pg. 9	X							X	X								M	M	P	P	P
Fisher-Mill Creek Bank Stabilization*****	C	Pg. 40				X	X			X	X		X			X	X	M	P	P	P	P	P
Bismark Strip Drainage*	P	Pg. 11	X	X	X	X					X	X		X	X	X	X		M	P			
Conners Highwall*	P	Pg. 11	X			X				X	X	X			X	X	X		M				
Francis Drainage & Refuse*	P	Pg. 11	X	X	X	X	X			X	X	X		X	X	X	X		M				
Muddy Creek Tipple*	P	Pg. 11	X	X	X	X	X				X	X		X	X	X	X		M	P			
Zebs Creek Highwall*	P	Pg. 11	X			X					X	X		X		X	X		M				

* West Virginia AML Project ** Ohio AML Project *** Ohio Watershed Group Project ****West Virginia Spec Rec Project *****West Virginia Conservation Agency