

#### Expression of Interest

## West Virginia Department of Environmental Protection Division of Abandoned Mine Lands

# DEP Request for Quotainon: Thomps Refuse File Design #DEP15212

Preparental

State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Charleston, WV 25305



#### SUMMIT ENGINEERING, INC.

Serving West Virginia with offices in Chapmanville, Charleston and Bridgeport.

#### West Virginia Department for Environmental Protection Division of Abandoned Mine Lands **DEP 15212 – Thorpe Refuse Pile Design**

#### Table of Contents

REQUEST FOR QUOTATION PURCHASING AFFIDAVIT

SECTION I

**Executive Summary** 

General Statement of Qualifications Additional Company Information:

- Qualifications of Personnel
- Management & Work Plan
- Experience with AML Projects
- Office Locations
- Project Team Chart

SECTION II

**Project Discussion** 

SECTION III

Attachments

- Consultant Confidential Qualification Questionnaire
- Related Project Experience Matrix (Attachment "C")



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

#### Request for Quotation

DEP15212

PACE 1

\*\*ADDRESS CONHESPONDENCE TO ATTENTION CF

CHUCK BOWMAN 304-558-2157

RFQ COPY
YPE NAME/ADDRESS HERE
Summit Engineering, Inc.
400 Allen Drive, Suite 100
Charleston, WV 25302

ENVIRONMENTAL PROTECTION
ADEPARTMENT OF
OFFICE OF AML&R
TOOL 57TH STREET SE
OCHARLESTON, WV
25304 304-926-0499

DATE F	PRINTED	TERMS OF	SALE	SHIP VIA	F.O.B	FREIGHTTERMS
11/03	/2010					
BID OPENING D	ATE:	1/30/2010		BID O	PENING TIME 01	:30PM
LINE	QUA	OU YTITM	P CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
001		JB	9	<b>06-29</b>		
	THORPE I	REFUSE	LE DESI	SN —		•
		EXPF	RESSION	OF INTEREST		
Çeriye	THE WEST	r VIRGINIA	A PURCHA	SING DIVISION, MENT OF ENVIRON	FOR THE AGENCY,	
	PROTECTI	CON, I\$ SC	L‡CITII	IMENT OF ENVIRONS IG EXPRESSIONS OF DESIGN SERVICE	INTEREST FOR	
	CONSTRUC	CTION MONI DJECT IN	TORING	SERVICES AT THE L COUNTY, WEST	THORPE REFUSE	
•	PER THE SPECIFIC		BID RE	QUIREMENTS AND	ATTACHED	
	BANKRIIDI	יכי או יו	אים לים אינוי	T THE VENDOR/CO	TTPACTOR ETLEC	
	FOR BANK CONTRACT	RUPTCY PR NULL AND	OTECTION	ON, THE STATE MAY AND TERMINATE SO	DEEM THIS	
	WITHOUT	FURTHER C	RDER.			
,						
			·			
÷						
					·	
SIGNATURE		//-Z	SEE REV	ERSE SIDE FOR TERMS AND CON		
	ines.	leens.	my		04-342-1342 DATE	11/16/10
A T C ECA	Presiden	. L-	61/ø991	104	ADDRESS CHANGE	S TO BE NOTED ABOVE

RFQ No.	#DEP15212
תדע וווט.	#11111111111

#### STATE OF WEST VIRGINIA Purchasing Division

#### **PURCHASING AFFIDAVIT**

West Virginia Code §5A-3-10a states: 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 the debt owed is an amount greater than one thousand dollars in the aggregate.

#### **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.

"Debtor" means any individual, corporation, partnership, association, limited liability company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "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.

**EXCEPTION:** The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this 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.

Under penalty of law for false swearing (**West Virginia Code** §61-5-3), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

#### WITNESS THE FOLLOWING SIGNATURE

Vendor's Name: Summit Engineering, Inc	2.
Authorized Signature: June of Muleulum	<u>Date: 1//16//0</u>
State of West Virginia	
County of Kanawha , to-wit:	
Taken, subscribed, and sworn to before me this <u>//</u> day of	November 20/6
My Commission expires February 27	, 20 <u>1<b>9</b></u> .
AFFIX SEAL HERE NO	OTARY PUBLIC JUM A COBSTA

#### Executive Summary

Summit Engineering, Inc. proposes to provide design and specification services, surveying and mapping, and any required laboratory or subsurface investigation, in support of the Department of Environmental Protection's (DEP) effort to reclaim lands and water affected by coal mining which occurred prior to the promulgation of the Surface Mining Control and Reclamation Act of 1977. We also propose to offer the service of construction contract document preparation and contract administration to these projects.

Summit Engineering, Inc. is a large, diverse mining and civil engineering firm with seven regional offices strategically located in the Appalachian Coalfields and in close proximity to the anticipated projects requested by the Department for the required scope of work. Our three West Virginia offices are located in Charleston, Chapmanville and Bridgeport, West Virginia. We have combined our individual talents and expertise to benefit many post mining projects in the region. Being a mining and civil engineering firm, we have many corporate attributes that uniquely qualify our firm to provide services for abandoned mine lands reclamation projects in the state of West Virginia.

#### These attributes include:

- Strategically located offices in West Virginia coalfields (Charleston, Chapmanville and Bridgeport)
- Successful working relationship with West Virginia DEP
- Award-winning post mining land use projects
- Extensive background in coal mine design
- Experienced and available professional staff
- Vast amount of existing data in areas of potential projects

Summit has taken the opportunity to conduct field investigations of this project and has an understanding of the project scope.





#### SUMMIT ENGINEERING, INC.

400 Allen Drive, Ste 100 Charleston, WV 25302 (304) 342-1342

Principal Contact: Jim Canterbury, PE jcanterbury@summit-engr.com

#### Firm Highlights

- Founded in 1977
- Over 30 years experience in engineering and architectural services
- Combined experience of more than 110 highly trained employees

Professionals registered in multiple states:

Kentucky Virginia West Virginia Indiana Tennessee Ohio Pennsylvania Arkansas

#### Firm History

Summit Engineering, Inc. is a Pikeville, Kentucky based firm. Established in 1977, we have rapidly expanded to meet the growing civil, architectural and mining engineering needs of Kentucky, western Virginia and West Virginia. Summit opened its second office in 1980 which is now located in Big Rock, VA. In 1981, Summit's Civil Engineering Design Headquarters opened in Lexington, KY. A fourth branch opened in 1985 in Chapmanville, West Virginia. Summit Architectural Services was created in April 1995 and operates out of the Pikeville office. Our second West Virginia office was opened in Charleston in 1996. Summit's sixth office opened in Hazard, Kentucky in 1998. In February 2008, Summit opened its third West Virginia office in Bridgeport, West Virginia.

Summit's experience and expertise offers a wide range of civil & mining engineering, surveying, architecture and environmental assessment consultation and design services.



Charleston, West Virginia Office

#### Mining Engineering Services

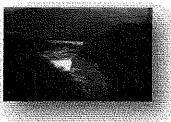
Our firm has decades of combined experience in the mining and reclamation projects. Summit is proud to have accumulated an enormous amount of experience, which ensures our clients of high quality services at very competitive fees. Projects include:

- Plan Design
- Surveying and Mapping
- → Hydrologic Investigation
- Geologic Investigation
- Permitting
- Environmental Monitoring and Testing
- → Technical Report Preparation

Summit's most valuable asset is the experience of our staff. Our staff has over of 100 years of cumulative experience in the mining industry. The experience, knowledge, and skills of our staff enable us to assist with the planning and permitting needs of the coal industry in order to overcome the obstacles faced in today's market. Summit has also been instrumental in the development of unique post mining land uses. We have been involved in developing golf courses, residential subdivisions, commercial developments and recreational facilities on previously mined sites, thus illustrating our capacity to combine different disciplines of engineering for the benefit of industry, community, and the environment.







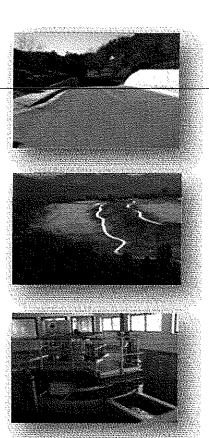
#### Civil Engineering Services

For over 30 years, Summit's staff of experienced civil engineers has provided civil engineering services for several municipalities as well as water and sewer districts. It is Summit's mission to provide cost-effective solutions to meeting the needs of our clients. Summit's services range from project design and management to bidding and construction administration. As municipal engineers for various communities and projects, Summit has worked extensively with local, state and federal regulations that may be encountered during project development.

Services provided by our Civil Engineering division include:

- Roadways and Bridges
- Urban planning
- → Water supply systems
- Sanitary and storm sewer systems
- Utilities/Infrastructure Needs Studies
- **→** Regional Facilities Planning
- Industrial & Commercial site development
- → Sanitary landfills
- Residential communities

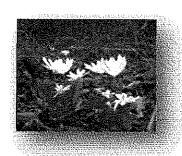
It is our goal to be a full-service provider for your project. Summit also provides additional services to our civil engineering clients, including project administration, construction inspection and funding assistance.



#### **Environmental Services**

Summit has developed an in-depth understanding of environmental situations, investigations, and mitigation plans. Our staff of highly trained and experienced personnel enables Summit to provide quality, efficient results on projects ranging in size and sensitivity. Project owners have utilized Summit's services for both mining and civil engineering projects requiring:

- **→** Environmental site assessments
- → Reclamation liability studies
- → Aquatic biologic surveys
- Stream and wetland mitigation
- → Wetland delineation
- **→** Corps of Engineers permits
- → Toxic release inventory reporting
- → Water quality studies
- Land reclamation cost analysis
- Stream benthic surveys
- KPDES permit applications
- Air quality permits and reporting
- Spill prevention control and countermeasures plans
- **♦** EPA underground injection permits







#### Surveying

Summit Engineering's field staff offers more than 100 years of combined experience in both conventional and global positioning (GPS) survey methods. Our survey staff is comprised of six qualified field personnel who have accumulated an impressive depth of experience on jobs, both large and small, the majority of which are in challenging terrain.

Our projects are held to the highest standards of accuracy by utilizing state of the art equipment, software and support vehicles. Summit's experience has been gained on a wide array of survey projects including:

- Planimetric
- → Reconnaissance
- Terrain
- → Boundary
- Property and subdivision
- Roadway surveys
- Cross-sections
- Construction staking

- → Control surveys for aerial photography
- → Mine Surveys
- → Underground
- Quarries
- → Stockpiles
- → GPS Capability
- ALTA Plat Standards



Summit's organization combines fieldwork experience with superior project management.



#### Experience & Capabilities

#### CORPORATE EXPERIENCE WITH ABANDONED MINE LAND PROJECTS

Summit Engineering has been involved in AML reclamation projects since 1983. We have provided services to the West Virginia Department of Environmental Protection – Division of Abandoned Mine Lands, the Virginia Division of Mined Land Reclamation, the Kentucky Division of Abandoned Mine Lands and directly to the Office of Surface Mining. Projects in all three states have included some or all of the following: study, planning, permitting, design and construction oversight on varied types of projects including landslide and other soil and rock stability problems, mine and refuse fire abatement, sealing of hazardous shafts and other portals, mine subsidence problems, channel restoration, acid mine drainage mitigation and facility demolition, water studies and infrastructure projects. Our projects completed for West Virginia's Division of Abandoned Mine Lands include the Godby Branch Project and the Twin Branch Portal Closings Project.

The following exhibit of Abandoned Mine Lands and Reclamation Experience, which briefly describes prior and ongoing AML&R projects by Summit, is a quick reference guide to our experience and expertise with AML projects. You will note that most of these projects have been successfully built and have dealt with a variety of issues that might be encountered when dealing with a reclamation project.

Our most recent experience has been obtained in the area of ground water contamination studies. Consequently, many of our studies have resulted in the funding of multiple water supply projects. As an illustration of this success, Summit is proud to have several water supply projects in the region fully funded and in various stages of final design and construction

Summit maintains the experienced staff and other in-house and/or sub-contracted capabilities for all phases of Abandoned Mine Land projects which require services in surveying and mapping, geotechnical investigation, design engineering, contract drawings and specifications, contract document preparation and administration. Thus we are expertly qualified to provide these services for the abatement of problems resulting from abandoned mine lands.



#### **QUALIFICATIONS OF PERSONNEL**

Today, Summit Engineering employs approximately 125 highly-trained staff members representing a diverse range of professional backgrounds and technical expertise. Our employees include engineers, geologists, environmental scientists, hydrologists, surveyors and resident inspectors who are complemented by a dedicated support staff.

These individuals have worked on many projects that have addressed both mining and civil engineering concerns. Many of those projects have dealt with post-mining land use or abandoned mine lands. Several of these projects have uniquely integrated all of our engineering disciplines. One similar project is the Stone Crest Golf Course, where previously mined lands were developed into and 18-hole championship golf course in Prestonsburg, Kentucky. Another of these projects is the Grant's Branch Park, where a community facility along with a fishing lake was developed on post-mining lands.

#### PROJECT TEAM ORGANIZATION

Summit Engineering utilizes an interdisciplinary team approach to develop realistic, cost-effective solutions to the environmental issues associated with abandoned mine lands. This approach allows for the collective input of ideas and expertise and gives the client and the project the "best of both worlds" utilizing our mining and civil engineering departments.

The Principal-in-Charge will ultimately be responsible for the entire scope of the project. **Jim Canterbury**, **PE**, who will serve as the Principal-in-Charge and is a legally authorized official of our firm, is authorized to sign all contractual documents related to AML work. Mr. Canterbury serves as the Office Manager of our Charleston office where he will have direct, hands-on control of any awarded project. Mr. Canterbury has worked for years as an advocate of the coal mining industry and continues to serve on many panels and in industry organizations.

The Project Manager will be responsible for the overall management of each project assigned. **Donald Bailey, PE** will serve as project manager on all WV DEP AML projects. Mr. Bailey is a professional engineer with an intimate familiarity with the DEP on many levels. A portion of his responsibilities as project manager will be as the official project liaison with the DEP. Mr. Bailey and/or key members of his staff will review the work directive, visit the site(s) and develop and execute a work plan.

Additional project engineers may be assigned by the project manager. The majority of the Project Manager's work will involve the technical aspects of the project (i.e., design of engineering plans, detailed review of calculations and



drawings, preparation of technical reports and construction documents), however he will also assume some managerial duties. Particularly, he will coordinate the technical efforts and field work of the team members and will be responsible for any subcontractors regarding their specific assignments as well as regular monitoring of the design process.

Summit Engineering's survey team is led by **Steve Haywood, LS (WV)**. Topographic and control surveying are integral parts of the services we provide. Our survey staff offers specialized expertise in various types of field surveys including boundary surveys, topographic surveys, control surveys for aerial mapping, construction surveys and spad setting in underground mine works. We have performed surveying and mapping on projects ranging from mine reclamation projects to water and wastewater lines and from underground mine layouts to construction layout for major projects including roadways, golf courses and industrial sites. Our survey staff is equipped with the latest technology including the use of GPS Systems and other precision instruments for making extremely accurate measurements in the rugged terrain of the Appalachian coalfields.

CAD Technicians dedicated to this project include staff from the Charleston office as well as the Bridgeport and Chapmanville offices, based on the office most readily available to the project site and DEP personnel. Utilizing state of the art equipment and software, we are able to offer a spectacular product of mapping, exhibits and illustrations in a clear and concise format.

#### PROJECT MANAGEMENT PLAN

Project management is focused on the commitment of resources — physical, fiscal, and personnel — to ensure completion of assigned projects within the specified time and budgetary constraints. The management function encompasses the basic tasks of organizing, staffing, deciding, directing, monitoring, controlling and evaluating all aspects of project formulation and implementation. Summit's West Virginia offices have both the technical capabilities and qualified staff, to efficiently and effectively implement a work plan that has been proven successful on previous AML projects in West Virginia, Kentucky and Virginia.

The team assigned to your projects has worked together on previous occasions, many of which are similar in scope to the upcoming DEP projects. Summit is committed to the allocation of additional personnel and any other required resources that may be necessary to successfully complete your projects in an efficient, timely, professional and cost effective manner.



Project Name	Location	Owner
Twin Branch Portal Abandoned deep mine reclamation, portal/shaft closure, hydrologic/hydraulic design/evaluation, mine/refuse fire abatement, project specifications, stream restoration	Mingo County, WV	WV DEP 601 57th Street, S.E. Charleston, WV 25304
Jim Cantebury, PE Project Manager  Godby Branch Portal AML Project Drainage Phase II Abandoned deep mine reclamation, portal/shaft closure, hydrologic/hydraulic design/evaluation, project specifications, stream restoration.  Jim Cantebury, PE Project Manager	Logan, WV	WV DEP 601 57th Street, S.E. Charleston, WV 25304
Dent's Run Bridge Hydrologic/hydraulic design/evaluation, equipment/structure removal. Jim Cantebury, PE Principle in Charge Mike Hill, PE, Project Manager	Monongalia County, WV	William Henrich, ROW Division WV Dept. of Transportation, Bldg. 5 Charleston, WV 25305
Vanita Stanley Group AML Project  Design of Remediation Project  Kevin Howard, PE, Project Manager	Pike County, KY	KY Division of Abandoned Mine Lands 2521 Lawrenceburg Road Frankfort, KY 40601 (502) 564-2141
Fedscreek-Mouthcard AML Water Supply Project Phase I & II contracts: Design, bid documents and construction admin for AML water supply project. Funding supplemented with RD,DWSRF & Coal severance funds. 48 miles of 4,6,8,10 & 12" line, 2. MGD plant, 1.0mg tank, 300,000 gal. tank 2 skid tanks over 20,000 gal, 3 booster pump stations and telemetry. Kevin Howard, PE, Project Manager	Pike County, KY	Mountain Water District P.O. Box 3157 Pikeville, KY 41501 (606) 631-9162
Ferrell's Creek AML Groundwater Contamination Study Ground water study of multiple watersheds in Pike Co., KY. Organized as 4 MOAs covering Woodman, PawPaw, Shelby Valley, Straight Hollow and Ferrells Creek. Included 294 AML eligible households. Kevin Howard, PE, Project Manager	Pike County, KY	Mountain Water District P.O. Box 3157 Pikeville, KY 41501 (606) 631-9162
Lula Neece Survey for volume calculations. Steve Haywood, LS, Project Manager	Perry County, KY	KY Division of Abandoned Mine Lands 2521 Lawrenceburg Road Frankfort, KY 40601 502) 564-2141
Garrett Refuse Survey for volume calculations Steve Haywood, LS, Project Manager	Floyd County, KY	KY Division of Abandoned Mine Lands 2521 Lawrenceburg Road Frankfort, KY 40601 (502) 564-2141
Redwine Inspection of remediation project. Includes 64,500 CY earthwork on 22 acre site, 1,100 tons of soil additive, 3,200 CY of gabion and 3,215 tons of rip rap.  Mike Hill, PE, Project Manager	Morgan County, KY	KY Division of Abandoned Mine Lands 2521 Lawrenceburg Road Frankfort, KY 40601 (502) 564-2141
Carter Slide  Design of remediation project. 100 LF of pile and lagging wall to protect Frank Carter residence from landslide.  Mike Hill, PE, Project Manager	Pike County, KY	KY Division of Abandoned Mine Lands 2521 Lawrenceburg Road Frankfort, KY 40601 (502) 564-2141



Chloe Group	Pike County, KY	KY Division of Abandoned Mine Lands
Design of remediation project. Includes reclamation of		2521 Lawrenceburg Road
10 acres of distrubance at 7 sites. Work inclues		Frankfort, KY 40601
36,000CY earthwork, 125 LF pile and lagging wall, 17		(502) 564-2141
portal closures, 1,320 CY gabion ditch, and 130 CY		
gabion wall.		
Kevin Howard, PE, Project Manager		
Fouch Drainage	Pike County, KY	KY Division of Abandoned Mine Lands
Design of remediation project. Two acre slide behind	r ine County, it i	2521 Lawrenceburg Road
Fouch and Tiller residences. Includes 1,100 CY		
		Frankfort, KY 40601
earthwork, 500 CY gabion retaing wall, and 300 LF		(502) 564-2141
storm drain system.		İ
Kevin Howard, PE, Project Manager		
Stanley Slide	Pike County, KY	KY Division of Abandoned Mine Lands
Design and inspection of remediation project. Project		2521 Lawrenceburg Road
involved 400 CY of gabion retaining wall and 2,000 CY	•	Frankfort, KY 40601
earthwork behind Stanley home.		(502) 564-2141
Kevin Howard, PE, Project Manager		
Davella Slide II	Martin County, KY	KY Division of Abandoned Mine Lands
Design of remediation project. Project consisted of		2521 Lawrenceburg Road
stabilizing a half-acre landslide threatening a grave by		Frankfort, KY 40601
material removal.		(502) 564-2141
Kevin Howard, PE, Project Manager		( )
Job Project	Martin County, KY	KY Division of Abandoned Mine Lands
Design of remediation project. Project included three	moran ooding, iti	2521 Lawrenceburg Road
sites. The project involved silt pond elimination, slide		Frankfort, KY 40601
stabilization by restraint and slide stabilization by		(502) 564-2141
removal.		(002) 304-2141
1		
Kevin Howard, PE, Project Manager  Manton II	Florid County I/V	I/V Division of Abandanad Miss Lands
	Floyd County, KY	KY Division of Abandoned Mine Lands
Design of remediation project. Project consisted of		2521 Lawrenceburg Road
stabilizing and re-vegetating three abandoned coal		Frankfort, KY 40601
refuse piles. The project involved approximately 10		(502) 564-2141
acres of disturbance.		
Kevin Howard, PE, Project Manager	5000000	
Little Fork Project-Phase I	Pike County, KY	KY Division of Abandoned Mine Lands
Design of remediation project that included a two-acre	·	2521 Lawrenceburg Road
landslide behind Turner Robinson home to be stripped		Frankfort, KY 40601
to rock. Work includes 33, 677 CY earthwork, 250 LF		(502) 564-2141
pipe, 1,000 CY gabion ditch, and seven (7) mine portal		' '
closures.		
Kevin Howard, PE, Project Manager		
Ashcamp Project	Pike County, KY	KY Division of Abandoned Mine Lands
Design and resident inspection of remediation project.	· mo odding, ici	2521 Lawrenceburg Road
Includes 200 LF of 6" RCP, 500 LF lined ditch, and silt		Frankfort, KY 40601
pond removal.		(502) 564-2141
Jack Sykes, PE, CEO, Project Manager		(302) 307-2171
Jack Sykes, FL, OLO, Flojett Mallayer		
Winns Branch Project	Pike County, KY	KY Division of Abandoned Mine Lands
Design and resident inspection of remediation project.	FIRE County, AT	2521 Lawrenceburg Road
Project stabilization of 0.5 acre slide adjacent to a		
home.		Frankfort, KY 40601
i i		(502) 564-2141
Kevin Howard, PE, Project Manager		



Johns Creek Silt Pond Design for correcting a 10 acre slide, removal of a silt pond and associated diversion channels.  Mike Hill, PE, Project Manager	Morgan County, KY	KY Division of Abandoned Mine Lands 2521 Lawrenceburg Road Frankfort, KY 40601 (502) 564-2141
Ferguson Slide Project	Pike County, KY	KY Division of Abandoned Mine Lands
Design of remediation project. Includes 1 acre of general reclamation and a gabion retaining wall.  Jack Sykes, PE, CEO, Project Manager		2521 Lawrenceburg Road Frankfort, KY 40601 (502) 564-2141
Pike / Floyd Project  Design of remediation project.  Jack Sykes, PE, CEO, Project Manager	Pike County, KY	KY Division of Abandoned Mine Lands 2521 Lawrenceburg Road Frankfort, KY 40601 (502) 564-2141
McDowell Slides Project  Design of remediation project. Three slides corrected by combination of re-grading and material removal.  Mike Hill, PE, Project Manager	Floyd County, KY	KY Division of Abandoned Mine Lands 2521 Lawrenceburg Road Frankfort, KY 40601 (502) 564-2141
Lane Branch Slide Project  Design of remediation project. Thirteen-acre slide was stabilized by material removal.  Mike Hill, PE, Project Manager	Floyd County, KY	KY Division of Abandoned Mine Lands 2521 Lawrenceburg Road Frankfort, KY 40601 (502) 564-2141
Hellier Refuse Phase III  Design and resident inspection of remediation project involving twenty acres of coal refuse reclaims. Twelve portals were also closed.  Mark Sanders, PE, Project Manager	Pike County, KY	KY Division of Abandoned Mine Lands 2521 Lawrenceburg Road Frankfort, KY 40601 (502) 564-2141
B J & C  Design and resident inspection of remediation project.  Ten -acre slide was stabilized by re-grading.  Kevin Howard, PE, Project Manager	Pike County, KY	KY Division of Abandoned Mine Lands 2521 Lawrenceburg Road Frankfort, KY 40601 (502) 564-2141
460 Portals Project included closing of six (6) abandoned mine openings. Jack Sykes, PE, CEO, Project Manager	Buchanan County, VA	Virginia Div. Of Mined Land Reclamation
Lee Mining Design and resident inspection for abandoned contour mine site with steep and eroding outslopes.  Kevin Howard, PE, Project Manager	Martin County, KY	KY Division of Abandoned Mine Lands 2521 Lawrenceburg Road Frankfort, KY 40601 (502) 564-2141
Ashland M & D  Design and resident inspection for three (3) abandoned mountaintop removal sites totaling approximately 112 acres. Includes 10 separate slides totaling 33 acres  Jack Sykes, PE, CEO, Project Manager	Martin County, KY	KY Division of Abandoned Mine Lands 2521 Lawrenceburg Road Frankfort, KY 40601 (502) 564-2141
Fletcher Ridge Subsidence Project Evaluation and determination of the extent of potential subsidence on a residence. Initiation of plans and specifications to correct and stabilize problem.  Jack Sykes, PE, CEO, Project Manager	Russell County, VA	Virginia Division of Mined Land Reclamation



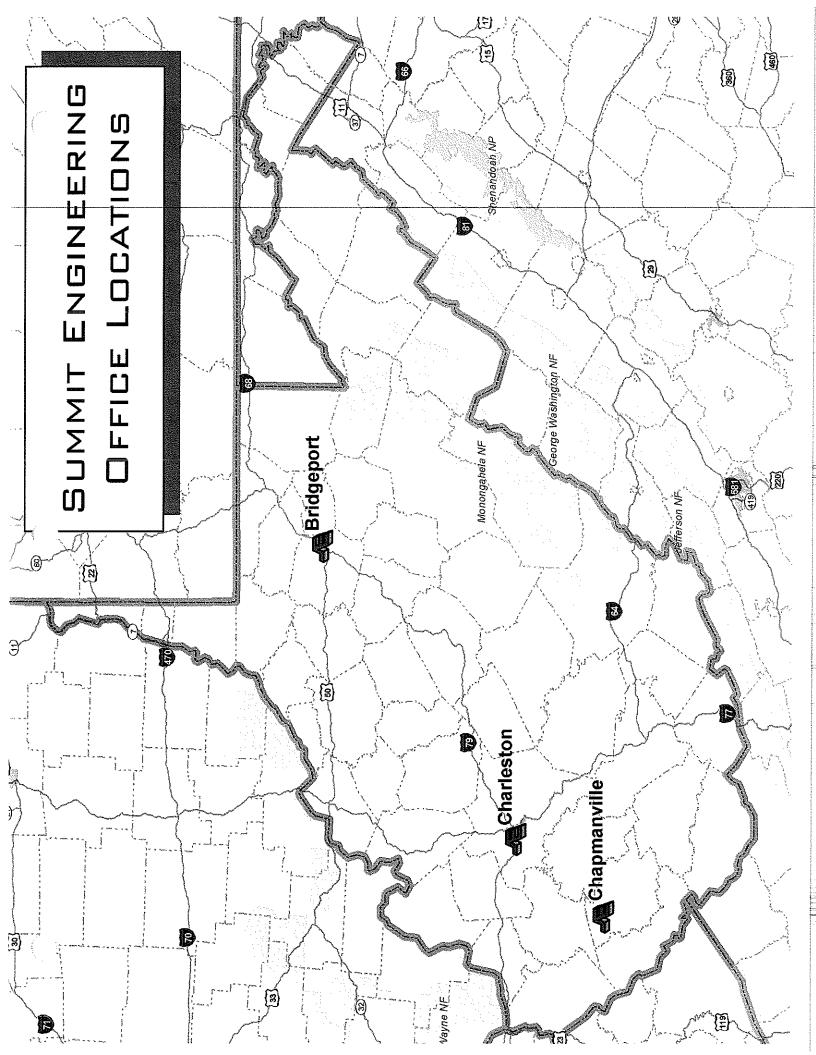
Sizemore Landslide Project Initiation of preparation of plans & specifications to correct 2 landslides covering approximately 4 acres Jack Sykes, PE, CEO, Project Manager	Russell County, VA	Virginia Division of Mined Land Reclamation
Hellier Refuse	Pike County, KY	KY Division of Abandoned Mine Lands
Developed plans & specifications for restoring approximately 2900 feet of Marrowbone Creek, & correct AMD from refuse area.  Kevin Howard, PE, Project Manager		2521 Lawrenceburg Road Frankfort, KY 40601 (502) 564-2141
Roadrunner Mine Developed plans for restoration of approximately 600 feet of Fords Branch. Kevin Howard, PE, Project Manager	Pike County, KY	KY Division of Abandoned Mine Lands 2521 Lawrenceburg Road Frankfort, KY 40601 (502) 564-2141
Virginia Dept. of Mines, Minerals & Energy Work involved analysis of surface & groundwater samples collected by Dept. to document water quality Jack Sykes, PE, CEO, Project Manager	Big Stone Gap, VA	Virginia Dept. of Mines, Minerals & Energy P.O. Drawer 900 Big Stone Gap, VA 24219
Dry Hollow Sedimentation Project Restored 1930 feet of Conaway Creek near Conaway, VA. Jack Sykes, PE, CEO, Project Manager	Buchanan County, VA	Virginia Division of Mined Land Reclamation
Hellier Refuse Project included demolition of abandoned tipple & removal of abandoned equipment. Mike Hill, PE, Project Manager	Pike County, KY	KY Division of Abandoned Mine Lands 2521 Lawrenceburg Road Frankfort, KY 40601 (502) 564-2141



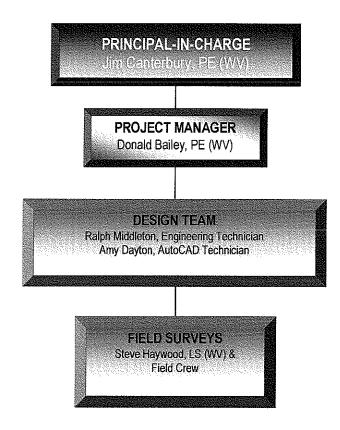
#### OFFICE LOCATIONS & RESOURCES

Summit's Charleston office will be the primary provider of services required for this project. Our Chapmanville and Bridgeport offices will also be utilized for field reconnaissance and other services when one of those offices is within closer proximity to the project. Additionally, Summit's multiple office locations will make it possible to add additional team members as the project necessitates. The work will be performed as a tightly coordinated effort between Summit and sub-consultants. As a result, DEP will not only receive quality service but will be utilizing the highest level of expertise within the individual disciplines within our firm.

You will note that our three West Virginia offices are located in manageable proximity to the project locations, affording us quick response time to project location. Our Charleston office particularly will allow our staff direct and immediate service to the Department of Environmental Protection.



#### Project Team Chart





#### **Project Discussion**

The Thorpe Refuse Pile project is located near Thorpe in McDowell County. The project is approximately 125 miles from Summit's Charleston Office. The project site is located near several coal mining operations in southern West Virginia for which Summit provides engineering services

Mr. Jim Canterbury from our Charleston office has visited the project site to become familiar with the site and the design and construction problems associated with this project. Access to the site will have to be constructed across Harmon Branch. With work to be complete along a stream bank the US Army Corps of Engineers may need to be dealt with. Exact limits of the refuse areas will need to be defined. There looks to be sufficient amount of "topsoil" material available in the project area to cover the refuse area. There is an existing WV Special Reclamation project (Gary Coal Sales U-58-84) and an existing surface mine (Mid-Vol Coal Sales, Inc. S-4007-00) above the refuse site. From Mr. Canterbury's site visit and after reviewing the After reviewing the "Expression of Interest" package Summit understands the major components of engineering this project is to: 1.) to provide design plans and specifications for the project area, 2.) to design for the regarding and stability of the refuse area, 3.) to design drainage channels and/or underdrains to transport surface water safely off site; 4.) to provide design for soil cover over the regarded refuse area; 5.) to design for stream bank protection where needed; 6.) to provide for the removal and/or demolition of abandoned structures; 7.) reclaim the coke oven areas; 8.) provide revegetation standards for all disturbed areas, 9.) to provide estimated quantities, 10.) to prepare a cost estimate and 11.) to have the preliminary design documents ready within 60 days from issuance of a Purchase Order.

This project would be completed at Summit's Charleston office. The Charleston office has successfully completed two (2) WVAML projects, but at the present time does not have a WVAML project they are designing. The Twin Branch Portals project that Summit's Charleston office designed is very similar in scope as this project. Summit currently has three (3) WV Registered Professional Engineers at the Charleston Office with over thirty five (35) years of coal mining reclamation engineering experience. Mr. Canterbury has personally been involved in the design, bidding and/or construction of over one hundred WV Abandon Mine Lands Projects. This project would be an excellent size project for Summit to complete and show the WV Abandon Mine Lands Section Summit's capabilities.

If awarded this project Mr. Jim Canterbury (PE) will oversee the project with Mr. Don Bailey (PE) being the Project Engineer and Mr. Ralph Middleton (Engineering Technician) and Ms. Amy Dayton (Auto Cad Technician) providing support. Any surveying required will be completed by Summit Engineering. Therefore, Summit will be able to commit qualified resources to completing this project within the required time frame.

If an US Army Corps of Engineers permit is required to complete this project, Summit has the experience to complete an Army Corps of Engineers permit application and has worked with the Huntington Corps on several mining permit applications.













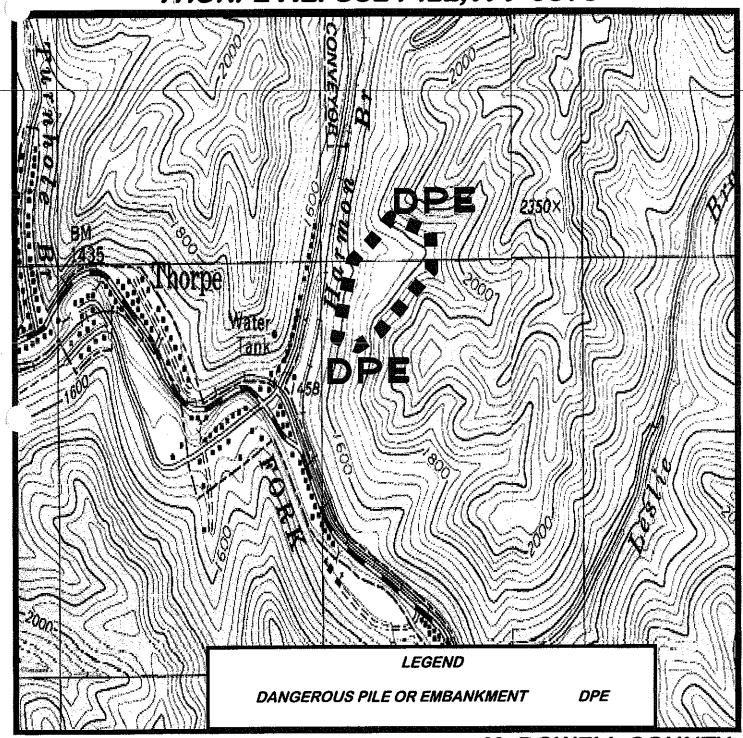








### PROJECT LOCATION MAP THORPE REFUSE PILE, WV-0575



*GARY QUAD. LATITUDE:37°21'58"*  McDOWELL COUNTY LONGITUDE:81°31'31"

PROJECT NAME DEP15212 Thorpe Refuse Pile Design 1. FIRM NAME Summit Engineering, Inc. 4. HOME OFFICE TELEPHONE (304) 342-1342	MEST VIRGINIA DEPA MIL CONSULTANT CON DATE (DAY November 3  2. HO 400 All 5. ESTABLISHED(YEAR)	TA DEPARTMENT OF EANT CONFIDENTIAL OF DATE (DAY, MONTH, YEAR) November 30, 2010  2. HOME OFFICE BUSIN 400 Allen Drive, Suite 100 (HED(YEAR) 6. TYPE Individ Partner	WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION  AMIL CONSULTANT CONFIDENTIAL OUALIFICATION QUESTIONNAIRE  DATE (DAY, MONTH, YEAR)  November 30, 2010  2. HOME OFFICE BUSINESS ADDRESS 400 Allen Drive, Suite 100 Charleston, WV 25302  S. ESTABLISHED(YEAR)  6. TYPE OWNERSHIP  Individual X Corporation  Partnership Joint-Venture  YES	PROTECTION SESTIONNAJIRE FEIN 61-0991104 3. FORMER FIRM NAME N/A 6a. WV REGISTERED DBE (Disadvantaged Business Ent YES X NO	MAIRE  RMER FIRM NAME  6a. WV REGISTERED DBE (Disadvantaged Business Enterprise)  YES X NO
7. PRIMARY AML DESIGN OFFICE: ADDRESS/ TELEPHONE/ PERSON IN CHARGE/ NO. AML DESIGN PERSONNEL EACH OFFICE 400 Allen Drive, Suite 100, Charleston, WV 25302/(304) 342-1342/ James Canterbury, PE/10 Personnel 8. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM Jack C. Sykes, P.E., L.S.  Revin M. Howard, P.E., L.S. Mike Hill, P.E., L.S. Tracy Goff, P.E. James S. Canterbury, PE  Byrd Copley, Office Manager (276) 530-7220  PERSONNET BY DISCIPLINE	E: ADDRESS/ TELEPHONE n, WV 25302/(304) 342-134 RS OR MEMBERS OF FIRM Phillip Lucas, P.E., L.S. Kevin M. Howard, P.E., L.S. Mike Hill, P.E., L.S.I.T. Tracy Goff, P.E.	PHONE/ PERSON IN 342-1342/ James Cante F FIRM S. E., L.S. T.	CHARGE/ NO. AML DESIGN PERSONNEL EACH OFFICE erbury, PE/10 Personnel  8a. NAME, TITLE, & TELEPHONE NUMBER - OTHER PRINCIPALS J.D. Elkins, Office Manager (304) 855-5691  Byrd Copley, Office Manager (276) 530-7220	SONNEL EACH OFFICE WE NUMBER - OTHER PRII 855-5691 ) 530-7220	NCIPALS
ADMINISTRATIVE ARCHITECTS BIOLOGIST CADD OPERATORS CHEMICAL ENGINEERS CONSTRUCTION INSPECTORS DESIGNERS DRAFTSMEN	ECOLOGISTS ECONOMISTS ELECTRICAL ENG ENTRONMENTAL ESTIMATORS 4 GEOLOGISTS HISTORIANS HISTORIANS HISTORIANS HISTORIANS	ECOLOGISTS ECONOMISTS ELECTRICAL ENGINEERS ENVIRONMENTALISTS ESTIMATORS GEOLOGISTS HISTORIANS HYDROLOGISTS	LANDSCAPE ARCHITECTS  MECHANICAL ENGINEERS  20 MINING ENGINEERS PHOTOGRAMMETRISTS PHOTOGRAMMETRISTS PLANNERS: URBAN/REGIONAL SANITARY ENGINEERS SOILS ENGINEERS SPECIFICATION WRITERS	134 41 134 134 134 134 134 134 134 134 1	STRUCTURAL ENGINEERS SURVEYORS TRAFFIC ENGINEERS OTHER TOTAL PERSONNEL
TOTAL NUMBER OF WV REGISTERED PROFESSIONAL *RPEs other than Civil and Mining must provide supporting ( supervise and perform this type of work.	ERED PROFES	SSIONAL ENGINEE porting documentati	L ENGINEERS IN PRIMARY OFFICE: 3 documentation that qualifies them to Not Applicable		
10. HAS THIS JOINT-VENTURE WORKED TOGETHER BEFORE? TYES X NO	DTOGETHER	BEFORE? CYES	NO X		

	100	
Į		
ı		
ı		
	ш	
	-	
	Œ	* *
	-	111-5
	Œ	
	-	
	)	
	7	
	Ξ.	2
	÷	3.3
	82	
	Ø	
		*
	=	
	34	
	-50	
	7	- E
	50	
	9	
	ď	
	)	
	2	
	4	
		8.2
	ч	
	9	
	*	
	₹	
	SED.	
	77	
	<b>45</b>	
	W	
	٥	
	-	
	0	¥.
	<u> </u>	
	٧	= -
	<u>a</u>	
	Ī	
	Л	
	Ш	
	4	
	У	
	Øn.	
	Ш	70.4
	Z	
	Ø.	
	$\mathbf{H}$	
	7	
		-8.4
	<b>V</b> 2	
	Q.	
	$\odot$	
	20	
	5	
	75	
	~	
	7	
	3	
	<u> </u>	
	on.	· # -
	$\mathbf{Z}$	
	0	
	O	*
	ر ر	*
	Т	3
	H	4
		8
	7	8
	4	
	5	8
	5	
		100

NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		Yes
The state of the s	THE CONTRACT OF THE CONTRACT O	No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		Yes
THE THE PROPERTY OF THE PROPER		No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		Yes
The state of the s		No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		Yes
THE THE PROPERTY OF THE PROPER		No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		Yes
THE PROPERTY OF THE PROPERTY O	THE PROPERTY OF THE PROPERTY O	No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		Yes
The second secon		No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		Yes
The state of the s		No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
		Yes
		No

	The state of the s	(
2		
<b>√</b> i	Is your firm experienced in Abandoned Mine Lands Remediation/Mine Reclamation Engineering?  YES Description and Number of Projects:	
	Our services include mining permits, reclamation projects and AML water line projects through our civil, mining, surveying and environmental divisions. The number of projects is well over 100 due to our 29 years of service to the various industries, public and private clients we serve.	
B,	Is your firm experienced in Soil Analysis?  YES Description and Number of Projects:	
	We perform routine services such as slope stability analyses and small retaining wall design. We utilize subconsultants for exploration and detailed analysis such as consolidation, liquefaction, etc. Number of Projects is well over 100 as we do soil analysis for many of our mining clients as well as for stream bank stabilization and environmental projects.	
J	Is your firm experienced in hydrology and hydraulics?  YES Description and Number of Projects:	· TOTAL TOTA
	Summit designs have primarily addressed the control, treatment, and diversion of surface and ground water.  Summit has designed well over 100 projects involving hydrology and hydraulics.	
Ď.	Does your firm produce its own Aerial Photography and Develop Contour Mapping?  YES Description and Number of Projects:	
	We develop contour maps by field survey for sites up to 50 acres. We utilize sub-consultants for mapping by aerial photogrammetry for sites larger than 50 acres. Number of projects is well over 100 as we do mapping for all mining and civil engineering and surveying clients.	
ш	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:	
	Summit's civil engineering division has over 30 years of experience with domestic waterline design.  NO	
Į <sub>į,</sub>	Is your firm experienced in Acid Mine Drainage Evaluation and Abatement Design?	
	YES Description and Number of Projects:  Summit Engineering has been doing mining permits for 30 years and has addressed acid mine drainage in each of those. As a firm we have only completed one project that directly mitigated acid mine drainage.	
	ON	

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES REPONSI data but keep to essentials)	ASSOCIATES Read-PONSIBLE FOR AML PROJECT DESIGN (Furnish complete	
NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE	
James S. Canterbury, Partner/Office Manager 22	YEARS OF AML RELATED DESIGN YEARS OF DOMESTIC EXPERIENCE: 22 EXPERIENCE: 0	OMESTIC DESIGN :: 0
Brief Explanation of Responsibilities Partner, Branch Office Manager Mr. Canterbury's responsibilities include managing day-to-day activities of the office and staff. Responsibilities also include obtaining and assisting in the preparation of coalmining permits, invoicing, performing accounts receivable, assisting clients, and working with regulatory agencies.	Responsibilities also include obtaining and assisting in the pregulatory agencies.	preparation of coal-
EDUCATION (Degree, Year, Specialization) B.S. – (1975) Civil Engineering – West Virginia Institute of Technology M.S. – (1979) Business Administration – Marshall University		
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State) P.E.: WV (1977), KY (1979), PA (1998)	
MENT OF PRINCIPALS AND	ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete	
NAME & TITLE (Last, First, Middle Int.)  YEARS OF AML DESIGN EXPERIENCE:	YEARS OF EXPERIENCE  VEARS OF AMI RELATED DESIGN  VEARS OF AMI RELATED DESIGN	MESTIC
Phillip Lucas, Vice President		DESIGN
Brief Explanation of Responsibilities  Mr. Lucas Joined Summit Engineering in 1992 and presently serves as Vice-President and Partner in the firm. Mr. Lucas has oversight responsibility in the Pikeville, KY, Hazard, KY, and Charleston, WV Offices. He is presently responsible for design and design supervision of deep mines, surface mines, refuse impoundments, and construction related projects.	and presently serves as Vice-President and Partner in the firm. Mr. Lucas has oversight responsibility in the Pikeville, KY, He is presently responsible for design and design supervision of deep mines, surface mines, refuse impoundments, and	in the Pikeville, KY, impoundments, and
EDUCATION (Degree, Year, Specialization) B.S. – (1976)- Civil Engineering, Mining Option - University of Kentucky M.S. – (1997) - Mining Engineering - University of Kentucky		
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS Kentucky Society of Professional Engineers National Society of Professional Engineers American Institute of Mining Engineers	REGISTRATION (Type, Year, State) P.E. (1991) KY, (1991) VA, (1991) WV L.S. (1993) KY, (1996) VA, (1996) WV	

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES Recolded to but keep to essentials)	ASSOCIATES Read-PONSIBLE FOR AML PROJECT DESIGN (Furnish complete
NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE
J.D. Elkins, Partner/Office Manager  4	CE: YEARS OF AML RELATED DESIGN YEAR\$ OF DOMESTIC EXPERIENCE: 4 EXPERIENCE: 2
Brief Explanation of Responsibilities  Mr. Elkins has over twelve years experience in the layout, design, and implementation of surface and underground mining and reclamation projects. Experience includes mine planning; reserve/depletion studies; design of dams, roadways, and fill areas; reclamation plans; re-vegetation/reforestation schedules; feasibility/forecast studies; construction and reclamation supervision; and property management. Mr. Elkins' duties include supervision of a complete office staff of project engineers, technicians, draftsmen, and clerical personnel.	nd implementation of surface and underground mining and reclamation projects. Experience includes mine fill areas; reclamation plans; re-vegetation/reforestation schedules; feasibility/forecast studies; construction ins' duties include supervision of a complete office staff of project engineers, technicians, draftsmen, and
EDUCATION (Degree, Year, Specialization)	
B.S. – (1990) - Industrial Engineering Technology – West Virginia State University Undergraduate Courses (198601987) Mining Engineering	
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)
13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESI data but keep to essentials)	ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete
NAME & TITLE (Last, First, Middle Int.)  YEARS OF AML DESIGN EXPERIENCE:  David F. Rasnick, Vice President/Partner	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE:
22	22 EXPERIENCE: 0
Brief Explanation of Responsibilities  Mr. Rasnick joined Summit Engineering after graduation from the University of Kentuc Virginia, Kentucky and Virginia. He has been responsible for the design of surface mirrailroad design and layout, refuse fill design, property surveys, the layout of water Geotechnical exploration projects.	University of Kentucky in 1978. He is currently Vice-President of the firm and oversees projects in West design of surface mine operations, deep mine layouts, mineral reserve studies, mine reclamation projects, the layout of water monitoring programs, topographic mapping projects, construction supervision and
EDUCATION (Degree, Year, Specialization)	
B.S (1977)- Civil Engineering - University of Kentucky	
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS National Society of Professional Engineers American Institute of Mining Engineers Kentucky Society of Professional Engineers	REGISTRATION (Type, Year, State) P.E.: (1981) KY, (1982) VA, (1985) WV, (1986) OH, (1985) IN L.S. (1983) KY, (1995) WV

13. PERE JNAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES R. data but keep to essentials)	ASSOCIATES R. PONSIBLE FOR AME PROJECT DESIGN (Furnish complete	imish complete
NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE	
YEARS OF AML DESIGN EXPERIENCE: Michael I Akers Ir PF	YE	YEARS OF DOMESTIC
4	4	EXPERIENCE:
Brief Explanation of Responsibilities  Mr. Akers' responsibilities include interacting with mining clients, the WVDEP and Summit staff to prepare and obtain approval of all types of Article 3 and NPDES permits.	ummit staff to prepare and obtain approval of all typ	es of Article 3 and NPDES permits.
EDUCATION (Degree, Year, Specialization) B.S. Mathematics, West Virginia Institute of Technology (1975) M.S. Petroleum Engineering, West Virginia University (1978) M.B.A., West Virginia College of Graduate Studies (1980)		
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS Society of Petroleum Engineers Virginia Oil and Gas Association	REGISTRATION (Type, Year, State) P.E.: KY (1982), WV (1982)	
Kentucky Oil and Gas Association		
MENT OF PRINCIPALS AND	ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Fumish complete	ımish complete
NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE	
YEARS OF AML DESIGN EXPERIENCE:  Donald Bailey, P.E.	JENCE: YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN
	1	EXPERIENCE: 0
Brief Explanation of Responsibilities		
Mr. Bailey's responsibilities include interacting with mining clients, the WVDEP and	the WVDEP and Summit staff to prepare and obtain approval of all types of Article 3 and NPDES permits	pes of Article 3 and NPDES permits
EDUCATION (Degree, Year, Specialization)		
B.S.: Civil Engineering, West Virginia University Institute of Technology (2003)		
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)	
	P.E: WV (2009)	

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND AS data but keep to essentials)	SSOCIATES RESPONSIB	ASSOCIATES RESPONSIBLE FOR AME PROJECT DESIGN (Furnish complete	ırrıish complete
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
Kevin M. Howard, Vice President/Partner	YEARS OF AML DESIGN EXPERIENCE: 12	YEARS OF AML RELATED DESIGN EXPERIENCE: 12	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 25
Brief Explanation of Responsibilities  Mr. Howard's projects have included roadways, shopping centers, hydrologic impact statements, sanitary and storm sewers, lift stations, municipal water system and channel change designs.	lated design projects. Mr. Howard's system and channel change designs.	oward's projects have included roadways, lesigns.	shopping centers, hydrologic impact
EDUCATION (Degree, Year, Specialization)			
B.S. – (1979)- Civil Engineering - University of Kentucky M.S. – (1982)- Civil Engineering - University of Kentucky			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		REGISTRATION (Type, Year, State)	
National Society of Professional Engineers American Society of Professional Engineers Kentucky Society of Professional Engineers		P.E. (1992) WV, (1983) KY L.S. (1985) KY	
MENT OF PRINCIPALS AND	SSOCIATES RESPONSIB	ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete	ırnıstı complete
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
Jack C. Sykes, P.E., L.S.	YEARS OF AML DESIGN EXPERIENCE: 14	YEARS OF AML RELATED DESIGN EXPERIENCE: 14	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 30
Brief Explanation of Responsibilities  Mr. Sykes has been a principal and President of Summit Engineering, Inc. since its establishment in October 1977. He has performed technical review and been in the position of responsible person in charge for many projects handled by the firm. Some of the projects Mr. Sykes has been associated with have included forecasts and feasibility studies, residential and commercial development, construction supervision, roadway design, design of water and wastewater handling and treatment facilities, control surveying and mapping, earth fill designs, mineral reserve evaluation, preparation of mine plans, design of coal handling facilities, mine permitting, mine land reclamation, land surveying, and golf course design.  EDUCATION (Degree, Year, Specialization)  B.S. (1973) Civil Engineering, University of Kentucky  M.S. (1975) Civil Engineering, University of Kentucky	Inc. since its establishment the firm. Some of the proje sion, roadway design, desig preparation of mine plans,	in October 1977. He has performed tech ects Mr. Sykes has been associated with high of water and wastewater handling and design of coal handling facilities, mine p	nical review and been in the ve included forecasts and feasibility reatment facilities, control armitting, mine land reclamation,
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		REGISTRATION (Time Year State)	
Kentucky Society of Professional Engineers National Society Professional Engineers Institute of Transportation Engineers		P.E.: WV (1978), KY (1977), VA (1977), TN(1979), IN (1985), OH (1986)	), TN(1979),
Coal Operators and Associates		L.S.: WV (1995), KY (1980)	

-

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

# Computers/Servers

Dell Optiplex 320 with Dell 22" FP Dell Precision T5500 workstation with Dell 22" FP Dell Precision T3400 workstation with 2- Dell 22" FP Dell Precision T5400 workstation with 2- Dell 22" FP Dell Precision M4400 Laptop with 2- Dell 22" FP Dell Precision T3400 workstation with 2- Dell 22" FP Dell Precision T5400 workstation with 2- Dell 22" FP Dell Precision T3500 workstation with 2- Dell 22" FP Dell Optiplex GX620 workstation with Dell 20" FP Dell Optiplex GX620 workstation with Dell 20" FP Dell Precision T5400 workstation with 2- Dell 22" FP Dell Precision T5400 workstation with 2- Dell 22" FP

# Printers / Peripherals

HP DesignJet 1050C Network Plotter Xerox Phaser 6180 Color Network Printer Ricoh Super G3 Network Copier/Scanner/Fax WorkCenter HP OfficeJet 8500 Pro Network Printer

HP Laserjet P2035N Network Printer

## Engineering Software: Reame 2008

Sedcad

Autodesk Map 3D 2009 Autodesk AutoCad 2009 Carlson Civil and Mining Suite 2009

igneric di	PROJECTS)	PERCENT COMPLETE	75%	85%	30%	%06	%59%	. %08	%08	%56%	THE PARTY OF THE P	
	ESIGNATED ENGINEER OF RECORD (BE SURE TO LIST ALL WYDEP PROJECTS)	ESTIMATED CONSTRUCTION COST	Design and Permitting Only	Design and Permitting Only	Design and Permitting Only 3	Design and Permitting Only	Design and Permitting Only 6	Design and Permitting Only 3	Design and Permitting Only	Design and Permitting Only 9	UCTION COSTS:	N/A
(***)	TED ENGINEER OF RECORD (	NATURE OF YOUR FIRM'S RESPONSIBILITY	Design, submit, make corrections to and obtain approval of all the permit applications.	Dynamic Energy Corporation P.O. Box 1085 Beckley, WV 25801	Dynamic Energy Corporation P.O. Box 1085 Beckley, WV 25801	Design, submit, make corrections to and obtain approval of all the permit applications.	Design, submit, make corrections to and obtain approval of all the permit applications.	Design, submit, make corrections to and obtain approval of all the permit applications.	Design, submit, make corrections to and obtain approval of all the permit applications.	Design, submit, make corrections to and obtain approval of all the permit applications.	TOTAL ESTIMATED CONSTRUCTION COSTS:	
		NAME AND ADDRESS OF OWNER	Brooks Run Mining Company, LLC 25 Little Birch Road Sutton, WV 26601	Dynamic Energy Corporation P.O. Box 1085 Beckley, WV 25801	Dynamic Energy Corporation P.O. Box 1085 Beckley, WV 25801	Terry Eagle Coal Company P. O. Box 180 Bickmore, WV 25019	Kentucky Fuel Corporation P. O. Box 2178 Beaver, WV 25813	Kentucky Fuel Corporation P. O. Box 2178 Beaver, WV 25813	Atlantic Leaseco, LLC 702 Professional Park Drive, Suite D Summersville, WV 26651	Brooks Run Mining Company, LLC 25 Little Birch Road Sutton, WV 26601	TO THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OW	page)
	15. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS THE D	PROJECT NAME, TYPE AND LOCATION	Antietam Mine Article 3, 401 & NPDES Permits Webster County, WV	Coal Mountain No. 1 Surface Mine Amendment No.1 Article 3 & NPDES Permits Wyoming county, WV	Coal Mountain No. 1 Surface Mine Amendment No.2 Article 3 & NPDES Permits Wyoming county, WV	Ramp Run Haul Road Article 3 & NPDES Permits Nicholas County, WV	Beartown Surface Mine Article 3, 401 & NPDES Permits Wyoming County, WV	Barkers Ridge Surface Mine Article 3, 401 & NPDES Permits Wyoming County, WV	Clear Fork No. 1 Surface Mine Article 3 & NPDES Permits Nicholas County, WV	Sumter Deep Mine Article 3, 401 & NPDES Permits Braxton, County, WV	TOTAL NUMBER OF PROJECTS:	8 (this page)

	TOTAL ESTIMATED CONSTRUCTION COSTS:	TOTAL ESTIMAT	8 (this page)	TOTAL NUMBER OF PROJECTS:
%08		Design, submit, make corrections to and obtain approval of USACE 404 IP Permit and Stream Mitigation Plan	Kentucky Fuel Corporation P. O. Box 2178 Beaver, WV 25813	Barkers Ridge Surface Mine US Army Corps of Engineers 404 Individual Permit Wyoming County, WV
20%	Design and Permitting Only 5	Design, submit, make corrections to and obtain approval of USACE 404 IP Permit and Stream Mitigation Plan	Brooks Run Mining Company, LLC 25 Little Birch Road Sutton, WV 26601	Sumter Deep Mine US Army Corps of Engineers 404 Individual Permit Braxton, County, WV
50%	Design and Permitting Only 5	Design, submit, make corrections to and obtain approval of USACE 404 IP Permit and Stream Mitigation Plan	Brooks Run Mining Company, LLC 25 Little Birch Road Sutton, WV 26601	Antietam Mine US Army Corps of Engineers 404 Individual Permit Webster County, WV
%0\$	Design and Permitting Only 5	Design, submit, make corrections to and obtain approval of all the permit applications.	Justice Highwall Mining, Inc. PO BOX 1085 Beckley, WV 25801	McDonald Fork Surface Mine Article 3 & NPDES Permits Wyoming Co., WV
25%	Design and Permitting Only	Design, submit, make corrections to and obtain approval of all the permit applications.	Brooks Run Mining Company, LLC 25 Little Birch Road Sutton, WV 26601	Jackson Bridge No.2 Deep Mine Article 3 & NPDES Permits Webster County, WV
90%	Design and Permitting Only	Design, submit, make corrections to and obtain approval of all the permit applications.	Terry Eagle Coal Company P. O. Box 180 Bickmore, WV 25019	Ramp Run No. 2 Amendment Article 3 & NPDES Permits Nicholas County, WV
\$5%	Design and Permitting Only	Design, submit, make corrections to and obtain approval of all the permit applications.	Dynamic Energy Corporation P.O. Box 1085 Beckley, WV 25801	McDonald Fork Surface Mine Article 3 & NPDES Permits Wyoming County, WV
35%	Design and Permitting Only 3	Design, submit, make corrections to and obtain approval of all the permit applications.	ICG Eastern, LLC P.O. Box 1019 Cowen, WV 26206	Birch River Operation Facilities Article 3 & NPDES Permits Webster County, WV
PROJECTS) PERCENT COMPLETE	E SURE TO LIST ALL WYDEP ESTIMATED CONSTRUCTION COST	IED ENGINEER OF RECORD (B) NATURE OF YOUR FIRM'S RESPONSIBILITY	PROJECT NAME, TYPE AND NAME AND ADDRESS OF NATURE OF YOUR FIRM'S CONSTRUCTION COST  RESPONSIBILITY CONSTRUCTION COST  RESPONSIBILITY  CONSTRUCTION COST	15 CURRENT ACHIVITHES ON W PROJECT NAME, TYPE AND LOCATION
		THE COLUMN TWO COLUMNS CO. C. L. C.		1.5 Cimples of Acoustages (2001)

· · · · · · · · · · · · · · · · · · ·		PERCENT COMPLETE	\$0%	75%			
		ESTIMATED CONSTRUCTION COST	Design and Permitting Only	Design and Permitting Only			TOTAL ESTIMATED CONSTRUCTION COSTS: \$ N/A
( ,	ESIGNATED ENGINEER OF RECORD	NATURE OF YOUR FIRM'S RESPONSIBILITY	Design, submit, make corrections to and obtain approval of USACE 404 IP Permit and Stream Mitigation Plan	Design stormwater runoff and obtain permit for school bus parking area			TOTAL ESTIMATE
	TICH YOUR FIRM IS THE DESIGNATION	NAME AND ADDRESS OF OWNER	Kentucky Fuel Corporation P. O. Box 2178 Beaver, WV 25813	Boone County Schools 69 Avenue B Madison, WV 25130			JECTS: 2 (this page)/18 Total Projects
	1S, CURRENT ACHVITIES ON WHICH YOUR FIRM IS THE D	PROJECT NAME, TYPE AND LOCATION	Beartown Surface Mine US Army Corps of Engineers 404 Individual Permit Wyoming County, WV	Boone County Schools Stormwater Permit Boone, County, WV			TOTAL NUMBER OF PROJECTS: 2 (this p

garan. H		TRUCTION COST	YOUR FIRMS RESPONSIBILITY				
	NONE	ESTIMATED CONSTRUCTION COST	ENTIRE PROJECT				
· · · · · · · · · · · · · · · · · · ·	NG AS A SUB-CONSULTANT TO OTHERS	ESTIMATED COMPLETION DATE					
· respective in the second sec	S SERVING AS A SUB-CON	NAME AND ADDRESS OF OWNER					
	16. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS SERVI	NATURE OF FIRMS RESPONSIBILITY					
	16. CURRENT ACTIVITIES	PROJECT NAME, TYPE AND LOCATION		N/A			

17. COMPLETED WORK WITHIN LAS	T S YEARS ON WHICH YOUR FIRM WAS	17. COMPLETED 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)
Twin Branch Portal – AML Project Mingo County, WV	WV DEP 601 57th Street, S.E. Charleston, WV 25304	\$512,000	2005	Yes
Godby Branch Portal AML Project Drainage Phase II Logan, WV	WV DEP 601 57 <sup>th</sup> Street, S.E. Charleston, WV 25304	\$75,000	2005	Yes
Georges Creeks Surface Mine US Army Corps of Engineers 404 Individual Permit Logan County, WV	Highland Mining Company P. O. Box 1097 Holden, WV 25625	Design and Permitting Only	2005	Yes
Camp Branch Surface Mine US Army Corps of Engineers 404 Individual Permit Logan County, WV	Aracoma Coal Company P. O. Box 1120 Holden, WV 25625	Design and Permitting Only	2005	Yes
O'Brien No. 2 Surface Mine Article 3 and NPDES Permits Webster County, WV	ICG Eastern, LLC P. O. Box 1019, Rt. 82 West Cowen, WV 26206	Design and Permitting Only	2005	Yes
Brandy Station Mine Article 3 and NPDES Permits USACOE 404 IP Webster County, WV	Brooks Run Mining Company, LLC 25 Little Birch Road Sutton, WV 26601	Design and Permitting Only	2005	No
Cove Mountain Deep Mine Article 3 and NPDES Permits USACOE 404 IP Webster County, WV	Brooks Run Mining Company, LLC 25 Little Birch Road Sutton, WV 26601	Design and Permitting Only	2005	No
Big Creek No. 2 Amendment Article 3 and NPDES Permits Fayette County, WV	Appalachian Fuels, LLC 1500 N. Big Run Rd. Ashland, KY 41102	Design and Permitting Only	2005	Yes
Berkeley County Industrial Park Access Road Road Design Berkeley County, WV	WV Dept. of Transportation Bldg. 5, Room 603 1900 Kanawha Blvd., E Charleston, WV 25305-0430	Design Only	2005	Yes

17. COMPLETED WORK WITHIN LAS	T S YEARS ON WHICH YOUR FIRM WAS	17. COMPLETED 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)
Horsepen Alma "C" Deep Mine Article 3 and NPDES Permits Logan County, WV	Mingo Logan Coal Company P. O. Box 40 L Wharncliffe, WV 25651	Design and Permitting Only	2005	Yes
Guyandotte Slope Mine Article 3 and NPDES Permits Wyoming County, WV	Road Fork Development Company, Inc. P. O. Box 565 Matewan, WV 25678	Design and Permitting Only	2005	Yes
Casey Creek No. 1 Surface Mine Article 3 and NPDES Permits USACOE 404 IP Boone County, WV	Hillside Mining Company P. O. Box 1189 Charleston, WV 25324	Design and Permitting Only	2006	No
Saylors A & B Deep Mines Article 3 and NPDES Permits Webster County, WV	Brooks Run Mining Company, LLC 25 Little Birch Road Sutton, WV 26601	Design and Permitting Only	2006	Yes
Boone North No. 3 Surface Mine Article 3 and NPDES Permits Boone County, WV	Raven Crest Contracting, LLC P. O. Box 1200 Robinson Creek, KY 41560	Design and Permitting Only	2006	Yes
Mountain Laurel Complex US Army Corps of Engineers 404 Individual Permit Logan County, WV	Mingo Logan Coal Company 1000 Mingo Logan Avenue Wharncliffe, WV 25657	Design and Permitting Only	2006	Yes
Guyandotte Slope Mine - SCP Article 3 and NPDES Permits Wyoming County, WV	Road Fork Development Company, Inc. P. O. Box 565 Matewan, WV 25678	Design and Permitting Only	2006	Yes
Mountain Laurel Upper Coalburg Deep Mine Article 3 and NPDES Permits Boone & Logan Counties, WV	Mingo Logan Coal Company P. O. Box E Sharples, WV 25651	Design and Permitting Only	2006	Yes
Highland Middle Coalburg Deep Mine Article 3 and NPDES Permits Logan County, WV	Highland Mining Company P. O. Box 1097 Holden, WV 25625	Design and Permitting Only	2006	Yes

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH PROJECT NAME, TYPE NAME AND	S YEARS ON WHICH YOUR FIRM WAS NAME AND ADDRESS	ADDRESS ESTIMATED CONSTRUCTION COST	VFAR	CONSTRUCTED
Calvin Branch Surface Mine Article 3 and NPDES Permits Logan County, WV	Apogee Coal Company, LLC HC61 Box 156 Yolyn, WV 25654	Design and Permitting Only	2006	(YES OR NO) Yes
Moccasin Hollow Deep Mine Article 3 and NPDES Permits Boone County, WV	Catenary Coal Company, LLC 5914 Cabin Creek Rd Eskdale, WV 25075	Design and Permitting Only	2007	No
Tenmile Fork Deep Mine Article 3 and NPDES Permits Kanawha County, WV	Catenary Coal Company, LLC 5914 Cabin Creek Rd Eskdale, WV 25075	Design and Permitting Only	2007	No
Bridge Fork West Amendment Article 3 and NPDES Permits Fayette County, WV	Powellton Coal Company P. O. Box 158 Bickmore, WV 25019	Design and Permitting Only	2007	No
Falling Rock Deep Mine Article 3 & NPDES Permits Boone County, WV	Raven Crest Contracting, LLC P.O. Box 1200 Robinson Creek, KY 41560	Design and Permitting Only	2007	No
Mountaineer II Deep Mine SCP Article 3 and NPDES Permits Logan County, WV	Mingo Logan Coal Company P. O. Box E Sharples, WV 25651	Design and Permitting Only	2007	Yes
Rich Fork Surface Mine Article 3 & NPDES Permits Boone County, WV	Raven Crest Contracting, LLC P.O. Box 1200 Robinson Creek, KY 41560	Design and Permitting Only	2007	No
Seven Pines Amendment Article 3 & NPDES Permit Webster County, WV	Brooks Run Mining Company, LLC 25 Little Birch Road Sutton, WV 26601	Design and Permitting Only	2007	No
Rich Fork Surface Mine US Army Corps of Engineers 404 Individual Permit Boone County, WV	Raven Crest Contracting, LLC P.O. Box 1200 Robinson Creek, KY 41560	Design and Permitting Only	2008	No

17. COMPLETED WORK WITHIN LAST	I S YEARS ON WHICH YOUR FIRM WAS	17. COMPLETED 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)
Boone North No. 5 Surface Mine Article 3 & NPDES Permits Boone County, WV	Raven Crest Contracting, LLC P.O. Box 1200 Robinson Creek, KY 41560	Design and Permitting Only	2009	No
Jackson Bridge Deep Mine Article 3 & NPDES Permits Webster County, WV	Brooks Run Mining Company, LLC 25 Little Birch Road Sutton, WV 26601	Design, submit, make corrections to and obtain approval of all the permit applications.	2009	NO
Martinsburg Baptist Church Site Layouts and Permits Martinsburg, WV	Martinsburg Baptist Church 315 W. King Street Martinsburg, WV 25401	\$250,000.00	2009	Yes

ATHER FIRMS (INTER DEASE	CONSTRUCTED FIRM ASSOCIATED WITH			perform work for the West Virginia Abandoned	Date: ////6//0
YOUR FIRM HAS BEEN A SUB-CONSULTANT TO OTHER FIRMS (NUMER PEASE	ESTIMATED CONSTRUCTION COST YEAR OF YOUR FIRM'S PORTION			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.	resident
COMPLETED WORK WITHIN FAST 5 YEARS ON WHICH	OF WORK FOR WHICH YOUR FIRM WAS RESPONSIBLE NAME, TYPE NAME AND ADDRESS AND LOCATION OF OWNER			any additional information or descript	Lint of facts.  Lint Many, PE
18 COMPLETED WORK WI		N/A		19. Use this space to provide a Mine Lands Program.	20. The foregoing is a statement of facts.  Signature:

	PRIMARY STAFF PARTICIPATION/CAPACITY ***   I=Management   P=Professional		Holel	Bailey Midd Mins Ray	lqleA				a	, a	ř <u>r</u>	<u> </u>	a	Q.
	PRIMARY STAFFI *** I/⊞Managi			oinrioe Sentenc Sensity	Georg		8. X	a any	######################################	E W	a	a W	A A W	a d
	UREMENTS	uagse	tue tu tu sõni v	ecement mager earTre	Evaluation Value		X		×			×	×	
	PROJECT EXPERIENCE REQUIREMENTS		gdiM no edzskW dssilioe	inames onabis onabis onabis laso	edA evol exeH exeH gasiQ proje		×	×	×	×	×	×	×	×
RIX	PRO	njic e.r. Vjine t	Deep no no Negosi no Closi	sloom s enchn enchnal	Mine Rec Port Hyd		×	×	×	×	×	×	×	× ×
AML and RELATED PROJECT EXPERIENCE MATRIX		Additional SiS info	Perform Pravided for the Carlon (s) Carlon (	<b>euo</b> pu	BdA	Current Projects	S. Both	Both	Both	Boxp	Both	Soth	Boyn	Boun
AML and RELATED PRO			PROJECT			Page 1	Antieram Mine Article 3 & NPDES	Ramp Run Haul Road	Beartown Surface Mine	Clear Fork No. 1 Surface Mina.	Ramp Run No. 2 Amendment	McDonald Fort. Surface Mine	Barkers Ridge Sufface Mine	Sumter Deep Mine

\*\* 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"

ON CAPACITY (685 Rey 1) I D EIKINS	ł														
Mike Ray  Jim Canterbury  Annike Akers  Jim Canterbury  Annike Ray  Jim Canterbury  Annike Ray  Jim Canterbury							į.				· BE	e.	61. 01.	6.	EL EL
PRIMARY  WAR AKER  WING AKER  WIN	1	14 P	47	17 P	d   d   f)	自由所	M.P	M.F	d Pf	M.B.	i i i	E 42	10 2	0 2	W.B. B.
Sheam Restoration Geotechnical/Stability		×	×	×	×	×	×	×	×	×	×	×	×	×	×
Equipment/Structure Remark		×	×				×	×	×				×	×	×
Construction Assertication Management  Water Treatment		×	×												
Project Specifications  Water Quality Evaluation  Mitigation/Replacement															
in a noting thin		×	×	×	×	×	×	×	×	×	×	×	×	×	×
Mine/Returner Disposition  Mittigation/Repisers Disposition  Mater Quality Evaluations  Mittigation/Repisers Disposition  Mater Quality Evaluations  Mittigation/Repisers Disposition  Mittigation/Repisers Disposition  Mater Quality Evaluations  Mittigation/Repisers Disposition				×	×				×		×				
Hydrologic/Hydraulic Design/Evaluation Remining Evaluation		×													
Portsil/Shaft Closure		×	×	×	×	×	×	×	×	×	×	×	×	×	×
A A Mine A Substitute Mine A M		×	×												
RIENCE M Additional Info Provided in Sextion (s)															
CT EXPE	ojecis		Both	Beth		Page 1	the diameter	Bah	30.00	Bath	Both	Both	Both	201	
D PROJE	Previous 5 Years Projects					Aine				ment					
AML and RELATED PROJECT EXPERIENCE MATRIX   Exp. Basis Jute  0=5cm: PROJECT  Petersonal Section is perferance and perferance a		h Portal	nch Portal	Moccasin Hollow Deep Mine	Feamile Fork Deep Mina	O'Brien No. 2 Surface Mine	Casey Craek No. 1 Surface Mine	tion Mine	Deep Mine	Big Creek No. 2 Amendment	Saylors A & B Deep Wine	Jackson Bridge Deep Wine	Rich Fork Surface Mina	Falling Rock Deep Mine	Seven Pines Amendment
AML an	Page 1 of 2	Twin Branch Porta	Godby Branch Portal	Moccasin	Tenmile Fo	O'Brien No	Casey Cree	Brandy Station Mine	Cove Min Deep Mine	Big Creek	Saylors A. &	Jackson Br	Rich Fork	Falling Roc	Seven Pine

\* List whether project experience is corporate or personnel based or both.

<sup>\*\*</sup> Use this area to provide specific sections or pages if needed for reference.

<sup>\*\*\*</sup> List Primary Design personnel and their functional capacity for the projects listed.

	SAPACITY storial				ке Вау	W				ф	á.	ē.	e.		
	PRIMARY STAFF PARTICIPATION/CAPAC			notalt	3 Elkius aby Midd	4				M. P	4 10	# X	6/10		
	tY STAFF PAI M≐Manageme				ne Aker (elisă no	4		al la	di						
	PRIMAR		Ann		indoetoe	4		F/ (B.	MP						
			J.	oderole	eX mean	9		×	×	×	×	×	×		
	S	ĮE	vomaR an		ian1 nate namqiu;p	$\dashv$									
	UREMENT		osidaA\no snsM\nodo	iteglii <i>M</i> /		3		×			×				
	NCE REQ		lseogalG and		azsidous g& lasion	-						×	×		
	PROJECT EXPERIENCE REQUIREMENTS		tnemetsd/			-		×	×		×	×	×		
	PROJEC		ИO	Keulava	Бијиња	ä									
		EG.	ei Liic Design		ark/kho	-		×	×	×	×	×	×		
MATRIX			eFi eniM e: sbeFi eniM			+			×						
ERIENCE		Additional	Frovided in Section (s)				Projects								
JECT EXP			Exp. Basis C=Com P=Personal				Previous 5 Years Projects	Beth	Вол	5000	Both	Bath	Both		O.
ATED PRO							FILE	Surface Mine	Amendment	ace Mine	ampiex	Deep Mine	ine		provide specif
AML and RELATED PROJECT EXPERIENCE MATRIX			PROJECT				Page 2 of 2	Boone North No. 3 Surface Wine	Bridge Fork West Amendment	Camp Branch Surface Mine	Mountain Laurel Complex	Horseben Alma "C" Deep Mine	Gyandotte Slope Mina		"Use this area to provide specific
AM							HBG	Boon	Bridg	Cam	Mour	HOR	Gyan		÷.

\* List whether project experience is corporate or personnel based or both.

Vttachment "C

<sup>\*\*</sup> Use this area to provide specific sections or pages if needed for reference.

<sup>\*\*\*</sup> List Primary Design personnel and their functional capacity for the projects listed.