**JANUARY 31, 2013** 

Statement of Qualifications

ORIGINAL

# HOPEWELL CHURCH REFUSE & AMD DESIGN DEP16074

PRESTON COUNTY, WEST VIRGINIA



01/29/13 04:17:14 PM West Virginia Purchasing Division

E.L. Robinson Engineering Co. 5088 Washington Street West Charleston, West Virginia 25313 Phone: (304) 776-7473 www.elrobinsonengineering.com



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TYPE NAME/ADDRESS HERE

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

#### Solicitation

NUMBER	
DEP16	074

PAGE	4
1	

ADDRESS CORRESPONDENCE TO ATTENTION OF

FRANK WHITTAKER

304-558-2316

ENVIRONMENTAL PROTECTION DEPARTMENT OF OFFICE OF AML&R 601 57TH STREET SE CHARLESTON, WV

25304 304-926-0499

DATE PRINTED 12/21/201 BID OPENING DATE: 01/31/2013 OPENING TIME 1:30PMCAT NO. QUANTITY UOP ITEM NUMBER UNIT PRICE AMOUNT LINE 906-29 0001 JΒ 1 HOPEWELL CHURCH REFUSE & AMD DESIGN EXPRESSION OF INTEREST THE WEST VIRGINIA PURCHASING DIVISION, FOR THE AGENCY, THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL IS SOLICITING EXPRESSIONS OF INTEREST FOR PROTECTION, PROFESSIONAL ENGINEERING DESIGN SERVICES AND CONSTRUCTION MONIFORING SERVICES AT THE HOPEWELL CHURCH REFUSE & AMD PROJECT IN PRESTON COUNTY, WEST VIRGINIA, PER THE FOLLOWING BID REQUIREMENTS AND ATTACHED SPECIFICATIONS. DEP16074 \*\*\*\*\* TOTAL: IS THE END OF REQ \*\*\*\*\* THIS DATE

SIGNATURE TITLE FEIN TELEPHONE

304-776-7473

1-18-13

550594633

ADDRESS CHANGES TO BE NOTED ABOVE



T: 304.776.7473 F: 304.776.6426

5088 Washington St. West Charleston, WV 25313

January 29, 2013

elrobinsonengineering.com

West Virginia Department of Environmental Protection Office of AML & R 601 57<sup>th</sup> Street Charleston, WV 25304

Attn: Eric J. Coberly, P.E., Chief

Re: Hopewell Church Refuse & AMD Design

DEP16074

**Expression of Interest** 

Dear Mr. Coberly:

E. L. Robinson Engineering Co. (ELR) is pleased to submit this proposal in response to your request to perform professional engineering design services, and construction monitoring services associated with the design of the Hopewell Church Refuse & AMD design project located in Preston County.

We have completed plans and specifications for numerous reclamation and waterline projects for WVDEP/AML over thirteen years. In addition, we have completed numerous projects with ODNR. We have descriptions of these projects in the attached proposal. Please note that the majority of staff that worked on these projects are still with ELR.

The ELR staff has combined experience in the design of more than 181 AML projects.

We are able to assemble multiple design teams with our current staff. The Charleston office has:

- A. Thirteen (13) registered professional engineers (civil or mining), two (2) geologists, two (2) Landscape architects, four (4) engineers in training as well as several CADD technicians that may be used on these teams.
- B. ELR Corporate experience in designing nearly sixty-eight (68) abandoned mine land remediation projects. Personal experience on approximately one hundred eighty-one (181) AML projects. This number does not include surveying/mapping/drilling projects.
- E. L. Robinson Engineering Co. has grown from 13 employees in 1996 to over 110 employees today. Throughout this growth period we have continued to meet project deadlines while providing a high quality engineering product.

In 2012, ELR was named to the Engineering News Record (ENR) 500 at number 485. This prestigious honor is reserved for the top performing civil engineering companies throughout the country. ELR is one of the few West Virginia based firms ever to be included on this list.

We have also recently opened offices in Clarksburg, WV and Cleveland, OH.

Our office location in Charleston is centrally and conveniently located in respect to the WVDEP offices and the referenced project.

We at E.L. Robinson Engineering Co. look forward to serving your agency under this contract. If you have any questions or need clarification, please feel free to contact me at (304) 776-7473.

Sincerely,

E. L. Robinson Engineering Co.

Richard W. Wats

By:

Richard W. Watts, P.G.

Project Manager



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## Executive Summary

For more than 14 years, E.L. Robinson Engineering Company has been a prime and preferred engineering and surveying consultant to the WV Division of Environmental Protection, Office of Abandoned Mine Lands and Reclamation (WVDEP/AML) program. We have provided this Executive Summary to directly respond to the Expression of Interest and provide ease for the evaluators to score this proposal.

#### **Understanding of Project Requirements**

E.L. Robinson Engineering Co. fully understands the requirements for this project and is committed to giving the WVDEP/Office of Abandoned Mine Lands and Reclamation the time and attention that is necessary for the reclamation project. Professional services may include: civil; structural; geological; surveying and mapping; preparation of all necessary permit applications; construction monitoring and other services that may be required.

#### Firm's Capacity

E.L. Robinson Engineering Co. approaches all engineering projects with the same attention to detail and fiscal responsibility to ensure the client receives the most cost effective plan, design and operationally functional project possible. Our approach truly makes the WVDEP/AML engineering staff an integral part in the design of the project. We want to make sure that the review staff is comfortable with the design concept before the project is submitted for review. During this process, we evaluate all technical alternatives to determine the most cost effective plan and technically acceptable project for the WVDEP/AML staff.

E.L. Robinson Engineering Co. has more than 50 professionals on staff and individuals experienced in mine reclamation. This capacity allows for the development of innovative and alternative methods to address complex issues involved in reclamation projects of this nature. Our QA/QC process also allows for a different perspective to be brought to the project before submission to the client and for review. E.L. Robinson Engineering Co. has the capacity to take this project from conception to completion with a wide variety of experienced professionals with in-house staff for planning, design, permitting, bidding and construction monitoring.

E.L. Robinson Engineering Co. will work diligently to deliver the highest quality, cost effective solution that the WVDEP/AML deserves. We have extensive knowledge in mine reclamation and are currently working with WVDEP/AML on similar projects. We have an excellent understanding of the requirements for this type of project and a good working relationship with NEPA, permitting and regulatory issues.



#### Project Approach

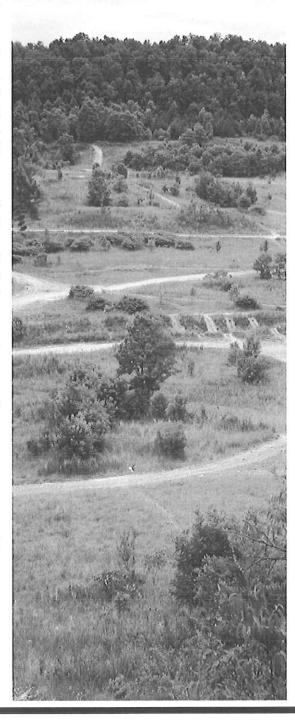
E.L. Robinson is familiar with the project area and the type of project for which you are seeking engineering services. We believe that we have a thorough understanding of the work to be provided to the WVDEP/AML for the subject reclamation project.

We are anxious to become an extension of your staff by providing prompt planning, design and construction monitoring services as needed. We interact with the various review and permitting agencies. As you will see from our resumes, we are uniquely diversified to provide quality engineering services to your agency.

E.L. Robinson will work closely with the WVDEP/AML and all regulatory and permitting agencies to complete this project. We feel that our extensive knowledge and experience in the planning and design of similar projects are significant assets in developing a cost-effective solution to your reclamation project.

The scope of services will include but are not limited to:

- Conceptual engineering and identification of permitting requirements
- Surveying and contour mapping
- Geotechnical services
- Design
- Preparation of plans and specifications
- Participation in the pre-bid meeting
- Participation in the pre-construction meeting
- Preparation of all necessary permit applications
- Construction monitoring
- Other services that may be required by the WVDEP/AML





## Our Project Team

Our firm has put together a project team that is experienced in the design and construction of mine reclamation projects and has the capacity to perform the project's scope in a timely and efficient manner.

Mr. Rich Watts, P.G. will be assigned as the Project Manager.

Mr. John Kelly, II, E.I. will be assigned the CADD designer and principal production person for the project. He has performed this role for numerous mine reclamation projects.

Mr. Timothy Cart, P.E., Mr. Randall Lackey, P.E. and Mr. Mark McGettigan, P.E. will be assigned as the Project Engineers.

Mr. James Rayburn, P.S. will be assigned to oversee all surveying and mapping activities.

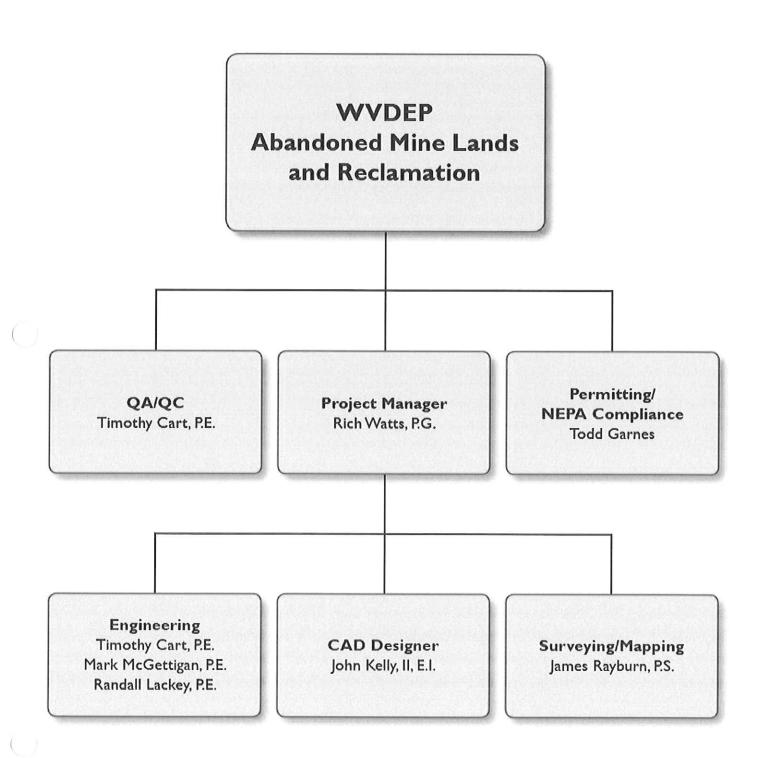
Our staff is well-qualified and experienced in related reclamation projects. They have the knowledge and capabilities to perform all of the tasks required for your project. In addition to your primary project team, other members of our organization may be called upon from time to time to provide their expertise and assistance to ensure this important project is completed on time and on budget.

Our team of construction inspectors, led by Ronnie Williams, offers years of experience with construction monitoring.

Also, our team of surveyors, managed by James Rayburn, P.S., provides the WVDEP/AML with the latest in technology and experience in surveying and mapping. By using GIS-based mapping and high-tech instrumentation, E.L. Robinson's survey team can evaluate any type of surface. Other services pertaining to surveying that our company specializes in are aerial photogrammetric consulting, hydrographic surveying, land surveying and GPS surveying.



#### Our Prolect Team





## Our Capabilities

Over the past 30 years, E.L. Robinson Engineering Co. has focused its efforts on delivering quality projects to our clients and building strong relationships based on trust and partnership. We believe building lasting relationships with our clients is key to delivering exceptional service for many years to come.

E.L. Robinson provides WVDEP/AML with the capabilities, expertise and resources of one of the top-notched civil engineering firms in the region. Our offices are staffed with professionals experienced in AML reclamation mapping, permitting, design and construction monitoring projects with more than 50 employees, including 13 registered professional engineers, degreed design engineers, construction inspectors and a support team of administrative and technical personnel to assist the WVDEP/AML.

We are very familiar with the requirements of the permitting and regulatory agencies. This experience expedites the completion of projects.

As part of our commitment to quality, E.L. Robinson realizes that every project, client and location is very different. As a result, we look at each project independently to determine the most cost-effective solution. Specifically, we look at ways we can maximize the project benefit and minimize the construction cost while at the same time completing projects on time and within budget.





#### Previous Experience

E.L. Robinson is well-qualified and experienced in mine reclamation projects. We are very familiar with the requirements of the project. We have demonstrated abilities in developing practical and cost-effective reclamation and improvement projects and are dedicated to meeting project schedules and budgets.

Such demonstrations can be seen in our recent and past work on reclamation projects, including:

- Thorpe Refuse Pile -2011
- Abney Refuse Piles 2011
- Shinnston-Lumberport Subsidence 2011
- Keaton Branch Complex- 2010
- Gordon "C" Refuse 2010
- Newtown-Kinder Portals 2010
- Island Creek #18 Mine Complex -2010
- Keystone (Avery) Landslide and Portal –2010
- Jacob's Fork Complex –2008
- Rhodell Refuse and Portals –October 2008
- Gilmer B Sites 3-8 –2008
- Ohio DNR Emergency Reclamation 19 sites completed
- Toney Fork Landslide Emergency –2006



			NT ENVIRONMENTAL			"P"
	IL CONSUL		TIA QUALIFICATION Q		ALKE ALLACIA IL	D
PROJECT NAME Hopewell Church Refuse & AMD DEP16074	Design	DATE (DAY, MONTE January 10, 2013		FEIN 55-059463	3	
1. FIRM NAME E.L. Robinson Engineering Co.		2. HOME OFFICE I 5088 Washington Charleston, WV 2		3. FORMER	FIRM NAME	
4. HOME OFFICE TELEPHONE 304-776-7473	1978	ISHED (YEAR)	6. TYPE OWNERSHIP Individual x Corpor Partnership Joint-V	'enture	6a. WV REGISTERED DBE (Disadvantaged Business Enterprise) YES x NO	
7. PRIMARY AML DESIGN OFFICE: 5088 Washington Street, West Charleston, WV 25313	ADDRESS/ 304-776-	TELEPHONE/ PERSOI 7473/Tim Cart, P	.E./56 Staff in Charlest	on Area		
8. NAMES OF PRINCIPAL OFFICER Ed Robinson, P.E. 304 776-747	S OR MEMBE 3 Ext 211	RS OF FIRM	8a. NAME, TITLE, & TELE	PHONE NUME	ER - OTHER PRINCIPALS	
9. PERSONNEL BY DISCIPLINE						
6 ADMINISTRATIVE ARCHITECTS BIOLOGIST 7 CADD OPERATORS — CHEMICAL ENGINEERS 10 CIVIL ENGINEERS 15 CONSTRUCTION INSPECTORS — DESIGNERS DRAFTSMEN	<pre>— ESTIMA 2 GEOLOG</pre>	ISTS ICAL ENGINEERS IMMENTALISTS ITORS ISTS IANS	2 LANDSCAPE ARCHITE  — MECHANICAL ENGIN MINING ENGINEERS  — PHOTOGRAMMETRIST PLANNERS: URBAN/ — SANITARY ENGINEE 1 SOILS ENGINEERS — SPECIFICATION WRITERS	EERS S REGIONAL	6 STRUCTURAL ENGINEERS 7 SURVEYORS — TRAFFIC ENGINEERS — OTHER  56 TOTAL PERSONNEL	
TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE:13 *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 WO	RKED TOGET	THER BEFORE?	☐ YES NO X This	is not app	licable	

11. OUT DE KEY CONSULTANTS/SUB-CONSULT Que lonnaire" for each if copy is	ANTS ANTICIPATED TO TUSED. Attach "AML not on file with AM	Consultant Confidential Qual cation
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
Novel Geo – Environmental (NGE) 806 B Street, St. Albans, WV	Drilling	<u>X</u> YES
800 B Street, St. Albans, W V		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
		_
NAME AND ADDRESS:	SPECIALTY:	NO WORKED WITH BEFORE
NAME AND ADDRESS:	SPECIALIT.	WORKED WITH BELOKE
		YES
l		NO

12.	A		Is your firm experienced in Abandoned Mine Lan Remediation/Mine Reclamation Engineering?
		X	YES Description and Number of Projects: Eighty-nine (89) Projects - See Attached Sheet
			NO
	B.		Is your firm experienced in Soil Analysis?
		X	YES Description and Number of Projects: Eighteen (18) Projects Listed - See attached Sheet
		( <del></del> -	NO
	C.		Is your firm experienced in hydrology and hydraulics?
		X	YES Description and Number of Projects: Ten (10) Projects Listed - See attached sheet
		-	NO
	D.		Does your firm produce its own Aerial Photography and Develop Contour Mapping?
		$\underline{X}$	YES Description and Number of Projects: > 200 - in Firm History - 65 Recent Projects Listed
-			All ELR WV & OH AML Projects since 2003 have been surveyed with ELR Surveying Staff
		_	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.)
		X	YES Description and Number of Projects: Sixty-eight (68) Total Eleven (11) Domestic Waterline Experience (AML Related) Thirty-two (32) Evaluation of Aquifer Degradation
		-	NO Twenty Five (25) Non-AML Domestic Water Lines
	F.		Is your firm experienced in Acid Mine Drainage Evaluation and Abatement Design?
		X	YES Description and Number of Projects: Seven (7) Projects
		-	NO

13. PERSONAL HISTORY STATEMENT	OF PRINCIPALS AND ASSOCIATES	RESPONSIBLE FOR AML PROJECT D	ESIGN (Furnish complete
data but keep to essentials			THE RESIDENCE OF THE PROPERTY
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
Edward L. Robinson, President	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE: 26	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 34
Brief Explanation of Responsibi	lities		
Mr. Robinson worked in the Righ major utility plans. He has ex land acquisition. He has provi Provide and coordinate Quality	tensive experience in property ded quality control on all pro	y surveys, property title sea: ojects designed by this firm	rches, aerial mapping and
EDUCATION (Degree, Year, Specia	lization)		
Bachelor of Science 1969 Civil Master of Science 1981 Civil			
MEMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION (Type, Year, St.	ate)
American Society of Civil Engin American Council of Engineering National Society of Professiona	Companies	1975 Civil Engineering Registered in West Virginia a Professional Licensed Survey	
3. PERSONAL HISTORY STATEMENT but keep to essentials)	OF PRINCIPALS AND ASSOCIATES	RESPONSIBLE FOR AML PROJECT D	<b>ESIGN</b> (Furnish complete data
JAME & TITLE (Last, First, Middle int.)		YEARS OF EXPERIENCE	
Richard W. Watts, P.G.	YEARS OF AML DESIGN EXPERIENCE: 29	YEARS OF AML RELATED DESIGN EXPERIENCE: 34	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Brief Explanation of Responsibi Mr. Watts has served as project include project management, fie analysis, specification writing Projects included surface and d	geologist on more than ninetald reconnaissance, drilling of quantity determinations, con	oordination, laboratory testi- st estimates, pre-bid and pre	ng and analysis, stability -construction meetings.
EDUCATION (Degree, Year, Specia B.S./1977/Geology M.S./1994/Geography	lization)		
MEMBERSHIP IN PROFESSIONAL ORGA Geological Society of America Association of Engineering Geol		REGISTRATION (Type, Year, St. Professional Geologist/1992/Professional Geologist/1993/	Virginia

13. PER AL HISTORY STATEMENT data out keep to essentials	OF PRINCIPALS AND ASSOCIATE	ESPONSIBLE FOR AML PROJECT D	ESIGN (Furnish compl
NAME & TITLE (Last, First, Middle Int.)	,	YEARS OF EXPERIENCE	
John Kelly II, E.I.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE: 14	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Brief Explanation of Responsibi Mr. Kelly has worked on many AM sampling of coal refuse materia plans. Estimation of quantitie Mr. Kelly has performed layout addition, he has designed cut s County, WV and Meadowbrook Road	L projects since joining ELR. ls, hydrology, hydraulics des s developed estimated cost. and inspection of core drilli lopes for large-scale roadway	ign of drainage structures, as Mr. Kelly is proficient with a no operations for bridge and	nd development of regrading Auto Cadd. roadway projects In
EDUCATION (Degree, Year, Specia	lization)		
B.S. Civil Engineering/1998/WVU			
MEMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION (Type, Year, Sta	ate)
		Engineer Intern, WV	
13. PERSONAL HISTORY STATEMENT but keep to essentials)	OF PRINCIPALS AND ASSOCIATES	RESPONSIBLE FOR AML PROJECT D	ESIGN (Furnish complete data
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
Timothy B. Cart, P.E.	YEARS OF AML DESIGN EXPERIENCE: 29	YEARS OF AML RELATED DESIGN EXPERIENCE: 29	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 22
Brief Explanation of Responsibi Mr. Cart has completed numerous materials, re-establishment of extinguishing burning materials Conducted Phase I and Phase II Mr. Cart has extensive experient has recently completed water promain. Cart has performed geotechnic embankments.	mine reclamation projects un vegetation cover, disposal of and disposal of old mining s Studies to determine if groun ce in the design and construc ojects in Mingo; Kanawha; Put	acid producing materials, and tructures. Designed passive a dwater had been affected by pa tion management of waterline of nam; and Cabell counties.	d developing methods for AMD treatment systems. re-law mining. extension projects. Mr. Cart
EDUCATION (Degree, Year, Special	lization)		
Bachelor of Science 1981 Civil	Engineering		
MEMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION (Type, Year, Sta Professional Engineer WV OH	ate)

12 DED 31 HEADON CONTROL		Validities and the second seco	
data but keep to essentials	OF PRINCIPALS AND ASSOCIATE	ESPONSIBLE FOR AML PROJECT D	ESIGN (Furnish compl
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
Mark McGettigan, P.E.	YEARS OF AML DESIGN EXPERIENCE: 7	YEARS OF AML RELATED DESIGN EXPERIENCE: 7	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Brief Explanation of Responsibi	lities		
Mr. McGettigan has worked on se sections, estimated and checked Projects designed by E. L. Robi years. Mr. McGettigan also has experie He has also performed various c	quantity calculations. He h nson Engineering Co. He has a nce with surveying and equipm oncrete and soil tests and is	as also served as a field insponded the lead designer on water the including the dolling the lead of the services. It	pector for several waterline erlines over the past five
EDUCATION (Degree, Year, Specia	lization)		
B.S. Civil Engineering Technici			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS REGISTRATION (Type, Year, State)			
		Professional Engineer WV	
13. PERSONAL HISTORY STATEMENT but keep to essentials)	OF PRINCIPALS AND ASSOCIATES :	RESPONSIBLE FOR AML PROJECT DI	ESIGN (Furnish complete data
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
Randall L. Lackey, P.E.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE: 8	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 1
Brief Explanation of Responsibi Mr. Lackey has performed hydrau Creek Bridge; Kermit Bypass Bri	lics and scour for Ripley Town	n Bridge; Tallman Bridge; Mead nd Blennerhassett Bridge.	dowbrook Road Bridge; Simpson
Mr. Lackey has also performed canalysis; prepared design study Highways projects.	reports; type, size and loca	; performed girder design and tion reports and final plans (	analysis; pier design and on many of our Division of
EDUCATION (Degree, Year, Specia	lization)		
B.S. Civil Engineering/1999			
MEMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION (Type, Year, Sta	ate)
		Professional Engineer WV	

13. PERSONAL HISTORY STATEMENT data but keep to essentials	OF PRINCIPALS AND ASSOCIATES	RESPONSIBLE FOR AML PROJECT I	DESIGN (Furnish complete
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
J. Todd Garnes	YEARS OF AML DESIGN EXPERIENCE: 5	YEARS OF AML RELATED DESIGN EXPERIENCE: 5	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:  6
Brief Explanation of Responsibi	lities		
Mr. Garnes experience surveying extrusions. He has provided co Mr. Garnes has performed numero mapping, mine research, and dev EDUCATION (Degree, Year, Specia	enstruction inspection service ous water feasibility studies, relopment of final reports.	es for landsides and subsidence	e projects in Ohio
A.S. Architectural Design/ 1999 A.S. Computer Aided Drafting an	d Design/ 1999		
MEMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION (Type, Year, St	ate)
13. PERSONAL HISTORY STATEMENT but keep to essentials)	OF PRINCIPALS AND ASSOCIATES		ESIGN (Furnish complete data
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
Thomas Rayburn, P.S.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
		31	
Brief Explanation of Responsibi Mr. Rayburn has experience in m types of coal mining, designed ventilation plans and systems wisystems.  He has performed slope stability applications, work with leases	ine mapping and surveying, fo mine drainage and water suppl hich include precision pressury analysis and hydrology calc and land management as well a	y systems for underground and re quality surveys and comput ulations, provides computer a reclamation and environment	surface mines, designed mine er simulation of ventilation nalysis for mining
By utilizing "state of the art" surveys for aerial mapping and Mr. Rayburn has also performed	electronic total stations an collects data and develops GI	d/or GPS (Satellite) equipmen S for utility mapping	t, he performs control
EDUCATION (Degree, Year, Specia	lization)		
A.S. Mechanical Engineering, WV	IT/1970		
MEMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION (Type, Year, St	ate)
		Professional Surveyor WV	

13. PERSONAL HISTORY STATEMENT data but keep to essentials	OF PRINCIPALS AND ASSOCIATES	RESPONSIBLE FOR AML PROJECT D	ESIGN (Furnish complete
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
Scott LeRose, P.E.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Brief Explanation of Responsibi Mr. LeRose is experienced in de Drilling Operations; Groundwate Specific major highway design a of new four lane highway; US 52 interchanges; design of 2 mile Corridor H from Grant/Hardy Cou While working on these projects relocation, MOT, signing and paseeding, pollution control quan development of ROW plans, inclu-	eveloping major highway and rier Sampling/Monitoring; UST Reand right of way plan developm (I-73), a 3.5 mile design and section of Appalachian Corridanty line to Moorefield.  The has gained experience in evement stripping. He has per atities, and other items associating deed plots and legal design.	emoval/Replacement and Mine Penent projects include: Meadow Row plans for a new four landor H from Davis to Bismark; de major drainage design, site of formed quantity calculations that with roadway plans. He	ermitting/Reclamation.  brook Road, a 2 mile design e highway with two major esign of 5.2 mile section of  grading design, utility for payement drainage
EDUCATION (Degree, Year, Specia	lization)		
B.S. Civil Engineering/1997			
MEMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION (Type, Year, Sta	ate)
		Professional Engineer WV	
13. PERSONAL HISTORY STATEMENT but keep to essentials)	OF PRINCIPALS AND ASSOCIATES :	RESPONSIBLE FOR AML PROJECT D	ESIGN (Furnish complete data
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
22.21	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN	Typing on house
Ray Tilley, P.E.		EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Ray Tilley, P.E.			[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]
Ray Tilley, P.E.  Brief Explanation of Responsibing Mr. Tilley has over 30 years explanation of Responsibing Mr. Tilley is a certified Water projects over his career. His EDUCATION (Degree, Year, Special B.S. Civil Engineering/WV Tech	perience in water and wastewar Plant Operator. Mr. Tilley I current duties include managin lization)	EXPERIENCE:  5  ter design as a Project Manage has successfully completed nuring both water and wastewater of	DESIGN EXPERIENCE:  31 er/Engineer. In addition,
Brief Explanation of Responsibile Mr. Tilley has over 30 years exp Mr. Tilley is a certified Water projects over his career. His EDUCATION (Degree, Year, Special	perience in water and wastewar Plant Operator. Mr. Tilley I current duties include managin lization) 1975; M.S. Sanitary Engineerin	EXPERIENCE:  5  ter design as a Project Manage has successfully completed nuring both water and wastewater of	DESIGN EXPERIENCE:  31  er/Engineer. In addition, merous waterline design design projects for ELR.

		All the state of t	
13. PERSONAL HISTORY STATEMENT data but keep to essentials	OF PRINCIPALS AND ASSOCIATES )	RESPONSIBLE FOR AML PROJECT D	ESIGN (Furnish complete
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
James Eric Gwinn, E.I.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE: 10	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 11
Brief Explanation of Responsibi	lities		
Mr. Gwinn has experience in con requirements. He has worked on Plateau Regional Water Project. Mr. Gwinn has designed approach	the Cabell County Water Proj He has performed calculatio slabs, decks and extensive d	ect and the raw water intake : ns on various AML project	structure for the Fayette
EDUCATION (Degree, Year, Specia	195		
B.S. Civil Engineering/1998/ We	st Virginia Institute of Tech	nology	
MEMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION (Type, Year, Sta	ate)
13. PERSONAL HISTORY STATEMENT but keep to essentials)	OF PRINCIPALS AND ASSOCIATES	RESPONSIBLE FOR AML PROJECT DI	ESIGN (Furnish complete data
NAME & TITLE (Last, First, Middle		117777 07 711777	to the description of the second of the seco
Int.)		YEARS OF EXPERIENCE	
	YEARS OF AML DESIGN EXPERIENCE:		YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 12
Int.)	2	YEARS OF AML RELATED DESIGN EXPERIENCE:	DESIGN EXPERIENCE:
Int.) Brian D. Morton, P.E.	2 lities ine extension projects in Put:	YEARS OF AML RELATED DESIGN EXPERIENCE: 2 nam and Kanawha County. He a	DESIGN EXPERIENCE: 12
Brian D. Morton, P.E.  Brief Explanation of Responsibi  Mr. Morton has worked on waterl waterline relocation projects in  Mr. Morton has prepared signing culverts and other drainage str specifications, bid documents,	lities  ine extension projects in Put: nvolving the West Virginia Di- and pavement marking plans as uctures and highway construct and has performed construction	YEARS OF AML RELATED DESIGN EXPERIENCE:  2  nam and Kanawha County. He all vision of Highways.  nd performed hydrologic and hy	DESIGN EXPERIENCE: 12  lso has completed numerous  ydraulic calculations for
Int.) Brian D. Morton, P.E.  Brief Explanation of Responsibi Mr. Morton has worked on waterl waterline relocation projects in Mr. Morton has prepared signing culverts and other drainage str	lities  ine extension projects in Put: nvolving the West Virginia Di- and pavement marking plans as uctures and highway construct and has performed construction	YEARS OF AML RELATED DESIGN EXPERIENCE:  2  nam and Kanawha County. He all vision of Highways.  nd performed hydrologic and hy	DESIGN EXPERIENCE: 12  lso has completed numerous  ydraulic calculations for
Brian D. Morton, P.E.  Brief Explanation of Responsibi Mr. Morton has worked on waterl waterline relocation projects in Mr. Morton has prepared signing culverts and other drainage str specifications, bid documents, EDUCATION (Degree, Year, Special B.S. Civil Engineering/1998	lities ine extension projects in Put: nvolving the West Virginia Di- and pavement marking plans a: uctures and highway construct and has performed construction	YEARS OF AML RELATED DESIGN EXPERIENCE:  2  nam and Kanawha County. He all vision of Highways.  nd performed hydrologic and hy	DESIGN EXPERIENCE: 12  lso has completed numerous  ydraulic calculations for
Int.) Brian D. Morton, P.E.  Brief Explanation of Responsibi Mr. Morton has worked on waterl waterline relocation projects in Mr. Morton has prepared signing culverts and other drainage str specifications, bid documents,  EDUCATION (Degree, Year, Special	lities ine extension projects in Put: nvolving the West Virginia Di- and pavement marking plans a: uctures and highway construct and has performed construction	YEARS OF AML RELATED DESIGN EXPERIENCE:  2  nam and Kanawha County. He all vision of Highways.  nd performed hydrologic and hy	DESIGN EXPERIENCE: 12  lso has completed numerous  ydraulic calculations for lopment plans, ojects.

<ol> <li>PER: AL HISTORY STATEMENT data but keep to essentials</li> </ol>	OF PRINCIPALS AND ASSOCIATE:	ESPONSIBLE FOR AML PR	ROJECT DESIGN (Furnish comple		
		ALMER AND			
NAME & TITLE (Last, First, Middle (nt.)	YEARS OF EXPERIENCE				
Carney, Joseph T. P.E.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DE EXPERIENCE:	SIGN YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 36		
rief Explanation of Responsibi	lities				
and contract administration. H	e has worked on a variety of roadway, bridge design, hydro	Civil Engineering pro-	documents, construction inspection ects including grading, earthwork, s, sanitary sewer and water systems		
EMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION (Type, Y	ear, State)		
		Professional Engineer	, 1976, WV		
3. PERSONAL HISTORY STATEMENT ut keep to essentials)	OF PRINCIPALS AND ASSOCIATES:	RESPONSIBLE FOR AML PR	OJECT DESIGN (Furnish complete data		
AME & TITLE (Last, First, Middle nt.)	YEARS OF EXPERIENCE				
Workman, Gary A., CADD Senior Technician	YEARS OF AML DESIGN EXPERIENCE: 23	YEARS OF AML RELATED EXPERIENCE: 23	DESIGN YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:		
rief Explanation of Responsibi r. Workman is responsible for VDEP/AML projects while employ	CADD design on AMT, projects	as well as geotechnica ed on 18 AML projects	l soil analysis. He Worked on 44 while at E. L. Robinson.		
DUCATION (Degree, Year, Special echnical School/1987/CADD	lization)				

13. PER: AL HISTORY STATEMENT data but keep to essentials	OF PRINCIPALS AND ASSOCIATE:	ESPONSIBLE FOR AML PROJECT DI	ESIGN (Furnish comple				
NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE						
Mayes, Jason M.	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 2				
Brief Explanation of Responsibilities							
Provides CADD Design for site d Nearly ten years experience in	WV DOT design with a prior fi	er extensions, and layout on $\mathcal U$	AML Projects. Mr. Mayes has				
EDUCATION (Degree, Year, Specia	lization)						
B.S. Industrial Technology 1997 A.S. Drafting and Design 1996 W							
MEMBERSHIP IN PROFESSIONAL ORGA	NIZATIONS	REGISTRATION (Type, Year, State)					
13. PERSONAL HISTORY STATEMENT but keep to essentials)	OF PRINCIPALS AND ASSOCIATES	RESPONSIBLE FOR AML PROJECT DI	ESIGN (Furnish complete data				
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE					
Scott A. Pratt	YEARS OF AML DESIGN	YEARS OF AML RELATED DESIGN	YEARS OF DOMESTIC WATERLINE				
The supplied of the supplied o	EXPERIENCE:	EXPERIENCE:	DESIGN EXPERIENCE:				
	13	EXPERIENCE:	DESIGN EXPERIENCE:				
Brief Explanation of Responsibi	13		DESIGN EXPERIENCE:				
Brief Explanation of Responsibi Mr. Pratt has extensive experie samples, and obtaining water le experienced in mine map researce	13 lities nce as a Field Geologist, per vels. He has also performed m	13 forming test boring over-sight any geotechnical soil tests in	t, logging soil and core n the laboratory. He is also				
Mr. Pratt has extensive experie samples, and obtaining water le	13 lities nce as a Field Geologist, per vels. He has also performed m h, specification writing, and	13 forming test boring over-sight any geotechnical soil tests in	t, logging soil and core n the laboratory. He is also				
Mr. Pratt has extensive experie samples, and obtaining water le experienced in mine map researc	lities  nce as a Field Geologist, per vels. He has also performed m h, specification writing, and lization)	13 forming test boring over-sight any geotechnical soil tests in	t, logging soil and core n the laboratory. He is also				
Mr. Pratt has extensive experie samples, and obtaining water le experienced in mine map researc EDUCATION (Degree, Year, Specia	lities  nce as a Field Geologist, per vels. He has also performed m h, specification writing, and lization)  iversity	13 forming test boring over-sight any geotechnical soil tests in	t, logging soil and core n the laboratory. He is also ns for AML projects.				

14. PROWNE A LIST OF SOFTWARE AND EQUIPMENT AVAILABLE IN PRIMARY OFFICE WHICH WILL BE USED TO COMPLETE AND DES . SERVICES
Various computer hardware and software including: Microstation, InRoads, AutoCAD, ELRSoil, Microsoft Office applications, Haested, Water CADD, Culvert Master, Flow Master
Various surveying equipment:
Instruments - Topcon Total Station (6), Trimble Robotic DR200+ (2)
GPS Equipment - Trimble 5700 Receiver (6), Trimble TSCe Controller/Handheld (5)
*all equipment lists have various misc. survey equipment to go along (poles, tape measures, data collectors, etc.)
Riegl LMS - 360 3D Laser Scanner - surface imaging system based upon accurate distance measurement by means of electro-optical range measurement and a two axis scanning mechanism.

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
Abney Refuse Piles Raleigh County	WVDEP/AML&R	Surveying, Mapping and Design	\$885,575	98
Milam Ridge Refuse Wyoming County	WVDEP/AML&R	Surveying, Mapping and Design	\$595,000	90
Vest Columbia B Mason County	WVDEP/AML&R	Surveying, Mapping and Design	\$1,365,9950	90
Cartright Branch Logan County	WVDEP/AML&R	Surveying, Mapping and Design	\$242,550	100
Marsh Fork Water Extension	Logan County PSD 41 Armory Rd. Logan, WV 25601	Design and Construction Management	\$2.9 M	10
Big Ugly Creek Waterline Extension	Logan County PSD 41 Armory Rd. Logan, WV 25601	Design and Construction Management	\$11 M	20
Phase III-A Sanitary Sewer Extension	Logan County PSD 41 Armory Rd. Logan, WV 25601	Design and Construction Management	\$ 9 M	10

15. CUR /T ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATE INGINEER OF RECORD					
PROJECT NAME, TYPE AND LOCATION	OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE	
Danese Waterline Extension	Danese Public Service District	Design and Construction Management	\$6.0 M	85	
Lower Mud River Waterline Extension	Lincoln County PSD 240 Lower Coal River Rd. Alum Creek, WV 25003	Design and Construction Management	\$ 7.9 M	65	
McDowell PSD Jolo Phase II Water McDowell County	McDowell Public Service District	Design and Construction Management	\$4.0 M	85	
Dille/Widen Water Extension Clay County	Birch River PSD	Design and Construction Management	\$4.0 M	85	
Dutch Ridge/Sanderson Water Extension, Kanawha County	Kanawha County RDA	Design and Construction Management	\$2.5 M	85	
Lavalette PSD Nestlowe Water Phase 2	Lavalette PSD 5308 Route 152 Lavalette, WV 25535	Design and Construction Management	\$4.7 M	98%	
Iaeger Regional Sewer Project	McDowell County PSD HC 31 Box 436J Welch, WV	Design and Construction Management	\$5 M	40	
TOTAL NUMBER OF PROJECT	S:14	TOTAL ESTIM	TATED CONSTRUCTION COSTS:	\$ 60 Million	

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 COS		
				ENTIRE PROJECT	YOUR FIRMS RESPONSIBILITY	
2						
		9				

17. C LETED WORK WITHIN L	AST 5 YEARS ON WHICH YOUR FIR.	AS THE DESIGNATED ENGINEER OF RECOR	D	
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
Thorpe Refuse Pile McDowell County	WVDEP-AML Oak Hill, WV Mark Proctor	\$744,240	2011	Yes
Shinnston-Lumberport Subsidence Harrison County, WV	WVDEP-AML Philippi, WV Timothy LeMasters	\$442,000	2011	Yes
Corridor H Davis-Bismark X347-H-64.85 00 Tucker County	WV Dept. of Transportation Engineering Division Charleston, WV 25301 Attn: Gregory Bailey	\$9.0 M	2008	No
WVDEP-Emergency East Bank (Willis) Mine Blowout	WVDEP-AML 601 57 <sup>th</sup> Street Charleston, WV 25304	\$0.8 M	2009	Yes
Newtown (Kinder) Portals Mingo County	WVDEP-AML 601 57 <sup>th</sup> Street Charleston, WV 25304 Roger Earle	\$490,410	2010	Yes
Keaton Branch Complex Raleigh County	WVDEP-AML Oak Hill, WV Mark Proctor	\$527,250	2010	Yes
Gilmer B Sites 3-8 Gilmer County	WVDEP-AML&R 601 57 <sup>th</sup> Street Charleston, WV 25304	\$675,000	2009	Yes
Upshur County Industrial Park Upshur County	Upshur County EDA	\$4.0 M	2009	Yes

18. C LETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIR AS BEEN A SUB-CONSULTANT TO OTHER FIRMS (INDICAT HASE 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	
Appalachian Corridor D Blennerhassett Island Bridge X354-D-0.00	Sub to Michael Baker, Jr., Inc. Post Design Services	\$7,500,000	2008	Yes	Michael Baker, Jr., Inc.	
Appalachian Corridor H Section 6 X316-H-100.40	Sub to Michael Baker Jr., Inc. Surveying, ROW questionnaires, Hydraulic Studies	\$950,000	2008	Yes	Michael Baker, Jr., Inc.	
Appalachian Corridor H Section 3 Davis to Bismark	Sub to Modjeski & Masters Survey, Geotech & ROW Plans	\$9,000,000	2008	No	Modjeski & Masters	
Robinson Creek Bridge S303-85-27.81 Boone County	Sub to EDG Roadway, Surveying, Structures, Hydraulic Studies, ROW Plans	\$1,000,000	2008	Yes	EDG	
Holley Grove Bridge Kanawha County	Sub to Triton Construction Plans for Bridge, Hydraulics, Post Design	\$500,000	2010	Yes	Triton Construction	
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.  E. L. Robinson Engineering Co. is committed to the WVDEP/AML program to provide professional design, surveying and mapping and construction monitoring services in a timely and cost-efficient manner. Our business plan relies heavily on the work offered by the WVDEP/AML program.						
20. The foregoing is Signature: Running Printed Name: Richard	a statement of facts.  Matte	Title: PROJECT MANA	GER	Date: January 10, 20	13	



Project: Glen Rogers Emergency

Wyoming County, WV

Year: 2012

Client: WVDEP-AML

Charleston, WV

**Description:** Performed survey, drilling, and design for shaft seals.

Project: Abney Refuse Pile

Raleigh County, WV

Year: 2011-2013 Client: WVDEP-AML

Oak Hill, WV

**Description:** Field surveying and mapping, subsurface investigation, design

work for refuse regarding, mine seals, and drainage.

Project: Cartright Branch Refuse Pile

Logan County, WV

Year: 2011-2013 Client: WVDEP-AML

Charleston, WV

**Description:** Performed survey, drilling, design for refuse regrading and mine

drainage control.

Project: Thorpe Refuse Pile

McDowell County, WV

Year: 2011-2012
Client: WVDEP-AML

Oak Hill, WV

**Description:** Performed survey, drilling, design for refuse and spoil regrading

and mine drainage control.

Project: Shinnston-Lumberport Subsidence

Harrison County, WV

Year: 2010-2012 Client: WVDEP-AML Philippi, WV

**Description:** Performed site survey, drilling and prepared subsidence

abatement design.



Project: Newtown (Kinder) Portals Design

Mingo County, WV

Year: 2010-2012 Client: WVDEP-AML

Charleston, WV

**Description:** Performed site survey, and prepared design for portals

reclamation and drainage abatement design.

Project: Gordon "C" Refuse Pile

Boone County, WV

Year: 2010-2012 Client: WVDEP-AML

Oak Hill, WV

**Description:** Field surveying and mapping, subsurface investigation, design

work for mine seals, drainage, and refuse reclamation.

Project: Keaton Branch Complex

Raleigh County, WV

Year: 2010-2011 Client: WVDEP-AML

Oak Hill, WV

**Description:** Performed survey, drilling, design for refuse regrading and mine

drainage control.

Project: Dunloup Creek Complex

Raleigh County, WV

Year: 2009-2011 Client: WVDEP-AML Oak Hill, WV

**Description:** Performed survey, drilling, design for refuse and spoil regrading

and mine drainage control.

Project: Brownton (McCord) Landslide

Barbour County, WV

Year: 2009-2011 Client: WVDEP-AML

Philippi, WV

**Description:** Performed site survey, drilling and prepared landslide abatement

design.



Project: Keystone (Avery) Landslide and Portal

McDowell County, WV

Year: 2009-2011 Client: WVDEP-AML

Charleston, WV

**Description:** Performed site survey and prepared landslide abatement design,

portals reclamation, and drainage control.

Project: Dan's Branch (Pennington) Landslide Emergency

Mingo County, WV

Year: 2011

Client: WVDEP-AML

Charleston, WV

**Description:** Field surveying and mapping, subsurface investigation, design

work for landslide reclamation.

Project: East Bank (Willis) Mine Blowout

Kanawha County, WV

Year: 2009

Client: WVDEP-AML

Charleston, WV

**Description:** Field surveying and mapping, design work for mine seal and

drainage control.

Project: Island Creek #18 Mine Complex

Logan County, WV

Year: 2009-2011 Client: WVDEP-AML

Oak Hill, WV

**Description:** Field surveying and mapping, subsurface investigation, design

work for mine seals, drainage, and refuse reclamation.

Project: Jacob's Fork Complex

Boone County, WV

Year: 2008-2009 Client: WVDEP-AML

Charleston, WV

**Description:** Field surveying and mapping, subsurface investigation, design

work for mine seals, drainage, and reclamation.



Project: Rhodell Refuse & Portals

Wyoming County, WV

Year: 2008

Client: WVDEP-AML

Charleston, WV

**Description:** Performed survey, drilling, design for refuse and spoil regarding

and mine drainage control.

Project: Gilmer B Site 3.8

Gilmer County, WV

Year: 2008

Client: WVDEP-AML

Charleston, WV

**Description:** Performed survey, drilling, design for refuse and spoil regarding

and mine drainage control.

Project: Gouge Landslide Emergency

Scott Town, OH

Year: September 2007

Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed site survey, drilling and prepared landslide abatement

design.

Project: Brown Landslide Emergency

Rayland, OH

Year: August 2007 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed site survey and prepared landslide abatement design.

Project: Rodgers Subsidence Emergency

Wellston, OH

Year: January 2007 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed site survey and prepared subsidence abatement

design.



Project: McAdams Subsidence Emergency

Stark County, OH

Year: April 2006 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed investigation and prepared report of findings.

Project: Athens Rt. 13 Refuse Fire Emergency

Athens County, OH

Year: March 2006 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed site survey, prepared abatement design and monitored

on site construction for fire extinguishment.

Project: Toney Fork Landslide Emergency

Boone County, WV

Year: February 2006
Client: WVDEP-AML

Charleston, WV

**Description:** Performed site survey, drilling and prepared plans and

specifications to stabilize an emergency landslide area.

Project: Cox Refuse Fire Emergency

Gallia County, OH

Year: December 2005 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed abatement design for fire extinguishment.

Project: Lavender Refuse Fire Emergency

Meigs County, OH

Year: November 2005 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed abatement plan and monitored construction.



Project: Goetz Subsidence Emergency

Columbiana County, OH

Year: November 2005 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed investigation and prepared report of findings.

Project: Adkins Landslide Emergency

Gallia County, OH

Year: December 2005
Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed surveying, drilling, landslide abatement and

construction monitoring.

Project: North Matewan (Sipple Drainage)

Mingo County, WV

Year: February 2005 Client: WVDEP-AML

**Description:** Performed surveying, drilling and design for drainage project

abatement.

Project: Phalen Landslide Emergency

Martins Ferry, OH

Year: January 2005 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed site surveying and landslide abatement design.

Project: Baisden Subsidence Emergency

Jackson, OH

Year: January 2005 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed drilling to develop subsidence abatement solutions.



Project: Parsons Landslide Emergency

New Philadelphia, OH

Year: December 2004
Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed site review and report concerning landslides relation

to mining and potential solutions.

Project: Treadway Landslide Emergency

Rayland, OH

Year: October 2004
Client: ODNR-AML

1855 Fountain Square Columbus, OH

**Description:** Performed site surveying, drilling and landslide abatement

design.

Project: Big Creek "C" Refuse

Logan County, WV

Year: July 2004
Client: WVDEP-AML

**Description:** Performed surveying and drilling for design.

Project: Imboden Landslide Emergency

Rutland, OH

Year: June 2004 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed drilling and surveying to develop landslide abatement

solutions and cost estimates.

Project: Titus Road Landslide Emergency

Rutland, OH

Year: June 2004 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed surveying, drilling and prepared plans and

specifications to stabilize and emergency landslide area.



Project: Jefferson County Road 26 Landslide Emergency

Winterville, OH

Year: May 2004 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed surveying, drilling and prepared plans and

specifications to stabilize and emergency landslide area.

Project: Charleston Romeo Landslide

Kanawha County, WV

Year: May 2004 Client: WVDEP-AML

**Description:** Performed surveying, drilling and design of landslide abatement.

Project: Roush Landslide Emergency

Pomeroy, OH

Year: March 2004 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Prepared plans and specifications to stabilize an emergency

landslide area.

Project: Lewis Landslide Emergency

Pomeroy, OH

Year: March 2004 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Performed surveying, drilling, prepared plans and specifications

to stabilize an emergency landslide area, and provided

construction monitoring.

Project: Moran Subsidence

Clinton, OH

Year: January 2004 Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Prepared plans and specifications to stabilize an emergency

subsidence area.



Year:

# Abandoned Mine Land Reclamation Experience

Project: Ron Bobar Subsidence

Flushing, OH Year: January 2004

Client: ODNR-AML

1855 Fountain Square

Columbus, OH

**Description:** Investigation and report of an emergency subsidence area.

Project: Gooney Otter Refuse

Wyoming County, WV

Year: January 2004 Client: WVDEP-AML

**Description:** Performed surveying, drilling and site design for refuse

regarding project.

Project: Chapmanville (Gorby) Mine Blowout

Logan County, WV December 2003

Client: WVDEP-AML

**Description:** Performed surveying, drilling and design of landslide regrading

and retaining wall design.

Project: Tuppers Creek (Layne) Landslide

Kanawha County, WV

Year: July 2003 Client: WVDEP-AML

**Description:** Performed surveying, drilling and design of landslide abatement.

Project: Maidsville (Tennant) Landslide

Monongalia County, WV

Year: February 2003 Client: WVDEP-AML

**Description:** Performed surveying, drilling and design of landslide abatement.



# Abandoned Mine Land Reclamation Experience

Project: Whittington Hill (Walker Landslide)

Kanawha County, WV

Year: June 2002 Client: WVDEP-AML

**Description:** Performed surveying, drilling and design for an emergency

landslide.

Project: Minden Refuse Pile Reclamation Project

Fayette County, WV

Year: September 2001 Client: WVDEP-AML

**Description:** Performed surveying and design for emergency project to

upgrade drainage control.

Project: Jeffrey Mine Complex Reclamation Project

Boone County, WV

Year: July 2001 Client: WVDEP-AML

**Description:** Performed surveying and design regrading refuse.

Project: Hot Coal Reclamation Project

Raleign County, WV

Year: October 2000 Client: WVDEP-AML

Charleston, WV

**Description:** Performed surveying and design for regrading refuse.

Project: Bull Run #27

Preston County, WV

Year: October 2000 Client: WVDEP-AML

**Description:** Performed surveying and design for regrading refuse.

Project: Rich Fork (Thaxton) Landslide

Kanawha County, WV

Year: July 2003 Client: WVDEP-AML

**Description:** Performed surveying, drilling and design of landslide abatement.



# Abandoned Mine Land Reclamation Experience

Project: Maidsville (Tennant) Landslide

Monongalia County, WV

Year: February 2003 Client: WVDEP-AML

**Description:** Performed surveying, drilling and design of landslide abatement.

Project: Whittington Hill (Walker Landslide)

Kanawha County, WV

Year: June 2002 Client: WVDEP-AML

**Description:** Performed surveying, drilling and design for an emergency

landslide.

Project: Minden Refuse Pile Reclamation Project

Fayette County, WV

Year: September 2001 Client: WVDEP-AML

**Description:** Performed surveying and design for emergency project to

upgrade drainage control.

Project: Jeffrey Mine Complex Reclamation Project

Boone County, WV

Year: July 2001 Client: WVDEP-AML

**Description:** Performed surveying and design regrading refuse.

Project: Hot Coal Reclamation Project

Raleign County, WV

Year: October 2000 Client: WVDEP-AML

Charleston, WV

**Description:** Performed surveying and design for regrading refuse.

Project: Bull Run #27

Preston County, WV

Year: October 2000 Client: WVDEP-AML

**Description:** Performed surveying and design for regrading refuse.



# Abandoned Mine Land Reclamation Experience

Project:

Riffe Branch Impoundment

Fayette County, WV

Year:

June 2000

Client:

WVDEP-AML

Description:

Performed surveying and design for regrading refuse and

drainage control.

Project:

Ven's Run Landslide

Year:

Harrison County, WV September 1999

Client:

WVDEP-AML

Description:

Performed surveying and design for regraded landslide area.

Project:

Fickey Run

Preston County, WV

Year: Client: September 1999 WVDEP-AML

Description:

Performed surveying and design for refuse and spoil regrading

and drainage control.

Project:

Bull Run #35

Year:

July 1999

Client:

WVDEP-AML

Description:

Performed surveying and design for refuse and spoil regrading.

Project:

Securro Mine Drainage Site 1 & 2

Fairmont, WV

Year:

July 1998

Client:

WVDEP-AML

Description:

Performed surveying and design for mine drainage system.

Project:

Brown's Creek #10 Reclamation Project

Year:

1997

Client:

WVDEP-AML

**Description:** 

Performed surveying and design for refuse regrading and

mine seal installation.



# Soil Analysis Sectechnical Experience

#### **US-52 Kermit By-Pass**

Solicited Bids from core boring contractors and performed core borings for highway and bridges for a planned four-lane highway in Mingo County West Virginia.

Designed cuts performed slope stability analysis and settlement analysis for several major fill areas, designed foundations for a total of six bridges.

#### Meadowbrook Road

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a planned four-lane highway in Harrison County West Virginia.

Designed cuts performed slope stability analysis and settlement analysis for several major fill areas, designed foundations for a bridge spanning the West Fork River.

#### US 60 Coal River Bridge

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a replacement for a bridge, which spans the Coal River in Kanawha County West Virginia. Prepared geotechnical report with recommended foundations and performed slope stability analysis of the existing fill slopes.

#### US 60 CSX-Overpass Bridge

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a replacement for a bridge that spans mainline tracks of the CSX Railroad in Kanawha County West Virginia. Prepared geotechnical report with recommended foundations and performed slope stability analysis of the existing fill slopes.

#### Indian Creek Bridge Boone County West Virginia

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a replacement for a bridge that spans the Coal River in Boone County West Virginia. Prepared geotechnical report with recommended foundations and performed slope stability analysis of the proposed fill slopes.

#### Camp Creek Bridge - Lavalette

Layout and directed core boring operations using WVDOH forces for a replacement bridge on US 152 in Wayne County West Virginia. Prepared Geotechnical report with recommended foundation alternatives.



# Soil Analysis Seotechnical Experience

#### **Jackson Bridge**

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a replacement for a bridge that spans Middle Island Creek in Tyler County West Virginia. Prepared geotechnical report with recommended foundations and performed slope stability analysis of the proposed fill slopes.

#### Tallman Bridge

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a replacement for a bridge that spans Middle Island Creek in Tyler County West Virginia. Prepared geotechnical report with recommended foundations and performed slope stability analysis of the proposed fill slopes.

#### Corridor H-Section 7 (Foreman to Moorefield)

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a planned four-lane highway in Hardy County West Virginia.

Designed cuts performed slope stability analysis and settlement analysis for several major fill areas, designed foundations for a bridge spanning the South Branch of Potomac River.

#### Corridor H-Section 12 Section 01(Davis to Bismarck)

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a planned four-lane highway in Tucker/Grant Counties West Virginia.

#### Corridor H-Section 12 Section 03 (Davis to Bismarck)

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a planned four-lane highway in Tucker/Grant County West Virginia.

Designed cuts performed slope stability analysis and settlement analysis for several major fill areas, designed foundations for a bridge spanning the West Fork River.

#### I-79 Lodgeville Bridge

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a replacement for a bridge and road-widening project. Prepared geotechnical report with recommended foundations and performed slope stability analysis of the proposed fill slopes.



# Soil Analysis Seotechnical Experience

#### I-79 Simpson Creek Bridge

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a replacement for a bridge and road-widening project. Prepared geotechnical report with recommended foundations and performed slope stability analysis of the proposed fill.

#### I-79 Meadowbrook Road Over Pass

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a replacement for a bridge and road-widening project. Prepared geotechnical report with recommended foundations and performed slope stability analysis of the proposed fill.

#### **Ripley Town Bridge**

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a replacement for a bridge that spans Mill Creek in Jackson County West Virginia. Prepared geotechnical report with recommended foundations and performed slope stability analysis of the proposed fill slopes.

#### Ripley Route 21 Road Widening

Performed slope stability analysis of a landslide area and designed a method to stabilize the area so the existing roadway could be widened. Developed Plans and specifications, which were included in the bid, package for the road-widening project.

#### I-64 Cross Roads Overpass Bridge

Solicited Bids from core boring contractors and performed core borings for highway and bridge for a replacement for a bridge and road-widening project. Prepared geotechnical report with recommended foundations and performed slope stability analysis of the proposed fill.

#### I-79 Left Hand Fork Bridge

Reviewed existing core boring data, and performed slope stability analysis on the existing bridge abutment that had moved. Reviewed data from slope inclinometers and design pile lagging and rock buttress to stabilize the embankment.



Project:

Blennerhassett Island Bridge Over Ohio River

Year:

1999-2003

Client:

Michael Baker Jr., Inc.

5088 Washington Street, West

Charleston, WV 25313

Contact:

Pi Amin, P.E.

Vice President Michael Baker Jr, Inc. (Southwest Region)

304-769-0821

**Description:** 

Prepared an analysis of the hydraulic impact of the proposed bridge on the Ohio River flow, and prepared an appropriate hydraulic report. The analysis utilized HEC-RAS and as a part of the hydraulic report, a scour analysis was performed. E. L. Robinson Engineering Co. developed a computer model of the Ohio River using hydrographic survey mapping provided by our survey group.

Two – Dimensional Hydraulic was also developed to model complex flows for various bridge configurations and to provide more accurate predictions of hydraulic behavior anticipated in the area. The 2-D and 3-D models allow derivation of design details and design analyses and provide more accurate simulations of scour hole geometry.

Project:

**US 52 Mainline Bridge** 

KY 40 Bridge/Kermit Bypass over Marrowbone Creek

Year:

2000

Client:

West Virginia Department of Transportation

Division of Highways

Building 5

1900 Kanawha Blvd. East Charleston, WV 25305

Contact:

James Sothen, P.E., Director, Engineering Division

304-558-0501

**Description:** 

Prepared an analysis of the hydraulic impact of the Kermit Bypass Project over Marrowbone Creek and a partial relocation of the creek and prepared the appropriate hydraulics and scour reports. E. L. Robinson Engineering's survey unit developed the cross sections and mapping that were utilized in the analysis process. Computer modeling was prepared using the USACE 1-D HEC-RAS program.



Project: Bridge No. 2922.1 NB & SB

I-79 Over Left Hand Creek & US 119

Year: 2000

Client: West Virginia Department of Transportation

Division of Highways

**Building 5** 

1900 Kanawha Blvd. East Charleston, WV 25305

Contact: James Sothen, P.E., Director, Engineering Division

304-558-0501

Description: Prepared an analysis of the hydraulic impact of the placement of a

retaining wall for slope protection of the Left Hand Fork Bridge over Left Hand Creek and prepared the appropriate hydraulics and scour reports. E. L. Robinson Engineering's survey unit developed the cross sections and mapping that were utilized in the analysis process. Computer modeling was prepared using the USACE 1-D HEC-RAS

program.

ELR also prepared Section 404 permitting documents outlining the effects a temporary cofferdam, which would be used during the construction phase, would have on the outlying areas upstream of the

projects.

Project: Bridge No. 2448.1 – Simpson Creek Bridge

I-79 Over Simpson Creek

Year: 2000

Client: West Virginia Department of Transportation

Division of Highways

Building 5

1900 Kanawha Blvd. East Charleston, WV 25305

Contact: James Sothen, P.E., Director, Engineering Division

304-558-0501

**Description:** Prepared an analysis of the hydraulic impact of the widening of the

Simpson Creek Bridge over Simpson Creek and prepared the appropriate hydraulics and scour reports. E. L. Robinson Engineering's survey unit developed the cross sections and mapping that were utilized in the analysis process. Computer modeling was prepared using the USACE 1-

D HEC-RAS program.

ELR also prepared Section 404 permitting documents outlining the effects temporary cofferdams, which would be used during the construction phase, would have on the outlying areas upstream of

the projects.



Project: Bridge No. 10059 – Ripley Town Bridge

US 33 Over Mill Creek

Year: 1999

Client: West Virginia Department of Transportation

Division of Highways

Building 5

1900 Kanawha Blvd. East Charleston, WV 25305

Contact: James Sothen, P.E., Director, Engineering Division

304-558-0501

Description: Prepared an analysis of the hydraulic impact of the replacement Ripley

Town Bridge over Mill Creek and prepared the appropriate hydraulics and scour reports. E. L. Robinson Engineering's survey unit developed the cross sections and mapping that were utilized in the analysis process. Computer modeling was prepared using the USACE 1-D HEC-RAS program. ELR also prepared Section 404 permitting documents outlining the effects temporary causeways, which would be used during the construction phase, would have on the outlying areas upstream of the

projects.

Project: Bridge No. 4732 – Jackson Bridge

WV 18 Over Point Pleasant Creek

Year: 1999

Client: West Virginia Department of Transportation

Division of Highways

Office of the District Engineer, District 6

903 3rd Street

Moundsville, WV 26041

Contact: Daniel W. Sikora, P.E., District Engineer

304-843-4008

**Description**: Prepared an analysis of the hydraulic impact of the replacement Jackson

Bridge over Point Pleasant Creek and prepared the appropriate hydraulics and scour reports. E. L. Robinson Engineering's survey unit developed the cross sections and mapping that were utilized in the analysis process. Computer modeling was prepared using the USACE 1-

D HEC-RAS program.



Project: Bridge No. 4636 – Indian Creek Bridge

CR 3/25 Over Big Coal River

**Year:** 1999

Client: West Virginia Department of Transportation

Division of Highways

Office of the District Engineer, District 1

1334 Smith Street Charleston, WV 25301

Contact: John W. Dawson, P.E., District Engineer

304-558-3001

Description: Prepared an analysis of the hydraulic impact of the Indian Creek

Replacement Bridge over the Big Coal River and prepared the appropriate hydraulic and scour reports. E. L. Robinson Engineering's survey unit developed the cross sections and mapping that were utilized in the analysis process. Computer modeling was prepared using the

USACE 1-D HEC-2 program and the FHWA WSPRO program.

Project: Bridge No. 4769 – Tallman Bridge

CR 24 Over Middle Island Creek

Year: 1999

Client: West Virginia Department of Transportation

Division of Highways

Office of the District Engineer, District 6

904 3rd Street

Moundsville, WV 26041

Client: Daniel W. Sikora, P.E., District Engineer

304-843-4008

**Description:** Prepared an analysis of the hydraulic impact of the replacement Tallman

Bridge over Middle Island Creek and prepared the appropriate hydraulics and scour reports. E. L. Robinson Engineering's survey unit developed the cross sections and mapping that were utilized in the analysis process. Computer modeling was prepared using the USACE 1-D HEC-RAS

program.



Project:

Bridge No. 10058 - Meadowbrook Road Bridge

CR 24 Over West Fork River

Year:

1999

Client:

West Virginia Department of Transportation

Division of Highways

**Building 5** 

1900 Kanawha Blvd. East Charleston, WV 25305

Contact:

James Sothen, P.E., Director, Engineering Division

304-558-0501

Description:

Prepared an analysis of the hydraulic impact of the new Meadowbrook Road Bridge over the West Fork River and prepared the appropriate hydraulics and scour reports. E. L. Robinson Engineering's survey unit developed the cross sections and mapping that were utilized in the analysis process and the Harrison County Flood Insurance Study model of the West Fork River was also used. Computer modeling was prepared

using the USACE 1-D HEC-RAS program.

Prepared Section 404 permitting documents outlining the effects temporary sheet piling, which would be used during the construction phase, would have on the outlying areas upstream of the projects.

Project:

Bridge No. 4426 - Lower Gassaway Bridge

WV 4 Over Elk River

Year:

1999

Client:

West Virginia Department of Transportation

Division of Highways

Building 5

1900 Kanawha Blvd. East Charleston, WV 25305

Contact:

James Sothen, P.E., Director, Engineering Division

304-558-0501

Description:

Prepared an analysis of the hydraulic impact of the Lower Gassaway Replacement Bridge over the Elk River and prepared the appropriate hydraulic and scour reports. E. L. Robinson Engineering's survey unit developed the cross sections and mapping that were utilized in the analysis process. Computer modeling was prepared using the USACE 1-

D HEC-2 program and the FHWA WSPRO program.



Project:

Bridge No. 4574 - Camp Creek Bridge

WV 52 Over Camp Creek

Year:

1998

Client:

West Virginia Department of Transportation

Division of Highways

Office of the District Engineer, District 2

P.O. Box 880

Huntington, WV 25712

Contact:

J. Wilson Braley, P.E., District Engineer

304-528-5625

Description:

Prepared analyses of the hydraulic impact of the Camp Creek Bridge over Camp Creek and prepared the appropriate hydraulic and scour reports. E. L. Robinson Engineering's survey unit developed the cross sections and mapping that were utilized in the analysis process.

sections and mapping that were utilized in the analysis process. Computer modeling was prepared using the USACE 1-D HEC-2

program and the FHWA WSPRO program.



# Aerial Photography and Contour Mapping Experience

E.L. Robinson Engineering Co. has worked with various clients to develop contour mapping of sites and areas that otherwise could not be determined. With the use of aerial photography and state of the art technology, E.L. Robinson Engineering Co. has developed maps from photographs for numerous projects including but not limited to:

- City of Beckley
- City of Charleston
- Corridor D
- Corridor H
- Cross Lanes Connector
- Eldora
- Frazier's Bottom
- Glenwood
- Hatfield Cemetery
- I-70 Washington Avenue (Wheeling, WV)
- I-64 Glade Creek
- Jackson Mill
- King Coal
- KY 40 Connector
- Logan Run
- New River Parkway
- Ohio River Crossing
- Pinegrove
- Parkersburg
- Powell Creek
- Prince
- PSI-Baker/Ft. Henry Bridges
- Racetrack
- White Sulphur Springs
- Veterans Park



# Aerial Photography and Contour Mapping Experience

E.L. Robinson Engineering Co. has completed the preliminary mapping, within the past five years, for West Virginia Department of Environmental Protection for the projects listed below:

#### 2003-Present

All ELR AML Projects WV and OH

#### 2002

Community of Preston Rhodell Refuse Portals Vivian Refuse Maintenance Glen Rogers Waterline Sundial (Hatfield) Refuse Pile Jacob Fork Complex Thomas (NE) Subsidence

#### 2001

Bartley Mine Dump
Beckley Soccer Complex
Holden Portals/Structures
Jeffrey Complex
Minden Refuse Drainage
Roach Branch Refuse
Sauls Run Strip
Stonecoal Creek Complex
Waterline Photography
Weaver Portals/Mine Drain

#### 2000

Micajah Refuse Pile
McAlphin Eroding Dump
Flemington Portals/Drainage
Minden "C" Refuse Pile
National Mine Complex
Linger Clogged Stream
Hotcoal Mine Dump
Layton Mine Drainage
Quintain Development

#### 1999

Bull Run #27
8th Street-Warwood Avenue
Mabie Highwall
Coal Branch
Matoaka Subsidence
Elkins Coal
Springton Refuse
Veins Run

#### 1998

Bull Run #35 Fickey Run

#### 1997

Browns Creek Marrowbone Matewan Pigeon Creek



## Edward L. Robinson, P.E., P.S. President

#### Education

M.S. Civil Engineering
University of West Virginia, (COGS),
1981

B.S. Civil Engineering
West Virginia Institute of
Technology, 1969

#### Registrations

Registered Professional Engineer in West Virginia, Kentucky, Ohio, Pennsylvania, North Carolina, South Carolina, Virginia, Georgia, Maryland and Colorado.

Registered Professional Surveyor in West Virginia.

#### **Professional Memberships**

- American Society of Civil Engineers
- National Society of Professional Engineers

#### **Professional Experience**

Mr. Robinson founded E. L. Robinson Engineering Co. in 1978 with four employees. Initially the firm provided land surveying and land development services.

Under his leadership, E. L. Robinson has entered the new millennium as a multidisciplined professional services firm that



utilizes the latest technology in the design of highways, bridges, structures, environmental, civil, and geotechnical projects as well as global position satellite surveying, right-ofway, construction inspection and architectural services.

The firm now employs more than 90 engineers, architects, surveyors and support personnel and has been converted to an employee owned company through an Employee Stock Ownership Plan (ESOP).

#### Representative Projects

Engineering Review of the following projects:

- US Route 52 Kermit Bypass: This project consisted of 2.5 miles of four-lane divided highway, 3,000 LF of four-lane access road design, two 4-ramp intersections, one set of twin structures, one single bridge, and 2,900 LF of stream relocation, all of which resulted in 10 million cubic yards of excavation and an estimated total construction cost of \$88 million.
- Corridor H Davis to Bismark: This project consisted of 1.75 miles of four-lane divided highway, one bridge, two at-





grade intersections, and a  $6' \times 6'$  concrete box culvert. This project has an estimated total construction cost of \$9 million.

- Corridor H Foreman to Moorefield:
   This project consisted of 5 miles of four-lane divided highway, almost 3 miles of access road design, a truck escape ramp, one set of twin structures, one single bridge, a box culvert, and naturalized stream design. This project resulted in 10 million cubic yards of excavation and an estimated construction cost of \$75 million.
- CAMC 33<sup>rd</sup> Street Relocation: Engineering design and construction management for the relocation of 33<sup>rd</sup> street and site development for a five story clinical teaching facility in Charleston, WV.

#### Offices Held

- Current Member of West Virginia University Board of Governors
- Current Chairman of WVUIT Advisory Board
- President of West Virginia Council of Engineering Companies
- Chairman Transportation Committee
   WV Association of Consulting Engineers
- State Director of West Virginia Society of Professional Engineers
- President of West Virginia Society of Professional Engineers

- Assistant Treasurer of the American Society of Civil Engineers
- National Director of the ASCE representing WV, NC, SC and VA
- President of West Virginia Section of ASCE

#### Honors Awarded

- Honorary PhD, Doctor of Science West Virginia Institute of Technology 2002
- Engineering Entrepreneur of the Year Ernst & Young, 2001
- National Entrepreneur of the Year Finalist - Ernst & Young, 2001
- Engineer of the Year American Society of Civil Engineers, 1998
- Engineer of the Year West Virginia Society of Professional Engineers, 1997
- Alumnus of the Year West Virginia University Institute of Technology, 1992





#### Richard W. Watts

Project Manager/Geologist

#### Education

B.S.in Geology, Marshall University, 1977M.S.in Geography, Marshall University, 1994

#### **Professional Registrations**

Registered Professional Geologist, Kentucky, 1993, No.159Certified Professional Geologist, Virginia, 1992, No.856

#### Professional Memberships

Geological Society of America Association of Engineering Geologists

#### Teaching Experience

Instructor, 1998 - Marshall University Engineering Geology Program - Soil and Rock Mechanics

#### Professional Experience

Mr. Watts has more than 31 years of experience in providing consulting services as a senior geologist. He has also served as project manager on numerous projects.

Mr. Watts is primarily an engineering geologist whose range of project experience has encompassed numerous projects concerning geologic investigation, rock and soils engineering, landslides, land reclamation, forensic damage investigations, hydrogeology and the coal industry.



He has performed hundreds of slope stability analyses for landslides and other projects involving the design of stable slopes. In addition, he has performed several studies involving landslide prediction to aid clients in land use and safety planning. Projects involving rock slope stability have included the analysis of the stability of high rock cuts for surface mining operations and highways.

Geotechnical experience has included numerous projects involving soils, foundations, landfills and damage studies. These projects have encompassed such areas as pile driving, caisson installation, earth fill placement, subsurface exploration, site reconnaissance, grout and concrete placement and quality control.

#### AML and Coal Industry Projects:

Work on more than 100 Abandoned Mine Land Reclamation projects, including:

- Mine subsidence, refuse piles and draining mine portals.
- Coal seam mineability studies.
- Coal refuse embankment and slurry pond design.
- Coal permitting, exploration and drill log correlations.
- Roof and floor studies and pillar strength evaluations.





Timothy B. Cart, P.E., P.S. Project Engineer

#### **Education**

B.S. Civil Engineering West Virginia University, 1981

#### Registrations

Registered Professional Engineer in West Virginia and Ohio

Registered Professional Surveyor in West Virginia

#### **Professional Memberships**

· American Society of Civil Engineers

#### Professional Experience

Mr. Cart has over 25 years of experience in providing consulting engineering services. Clients served have included Industrial, Public and Private Institutions and State and Federal Agencies.

Mr. Cart has served as Project Engineer on numerous geotechnical investigations over the years. These projects have included highways, bridges, industrial sites and private development.

He has designed numerous waterline extensions and sewer collection systems. These extensions have included providing service to many residential as well as industrial customers. The sewer collection systems have included design of systems to collect sewage from residential and industrial sites. Mr. Cart served as a project



engineer on several major waste water treatment plant upgrades for industrial clients in the Kanawha Valley. He has designed several plants to serve industrial as well.

Mr. Cart has performed over 100 Abandoned Mine Land Reclamations projects throughout Appalachia. These projects have been mainly in Ohio, West Virginia and Eastern Kentucky. These projects have involved draining flooded mine workings, support of ground experiencing or subject to Mine subsidence and the stabilization of landslides.

Mr. Cart has designed numerous retention and retaining ponds for sites. These designs have involved the determination of storm runoff and design of structures to safely retain and pass the required storm peak flows.

His experience includes permitting activities for projects which have included:

- · Railroad Occupancy Permits for Utilities
- NPDES Permits for Industrial and Public Wastewater Facilities
- Highway Permits for Utility Occupancy and Access Road Tie Ins
- Health Department Permits for Water and Sewer Projects





- US Corps of Engineers Permits -Nationwide and Individual
- West Virginia Public Lands Permits

Mr. Cart has recently been involved in the design of a 100 acre Industrial Site and 8 acre Industrial/Commercial Site in Mingo County. These projects are currently under construction and are located near Appalachian US 119 Corridor G.





## John R. Kelly, III Engineer Intern

#### **Education**

B.S. Civil Engineering West Virginia University, 1998

#### Computer Skills

AutoCAD, Microstation, COM624-P, Inroads, Hec-Ras, and ELRSoil

#### **Professional Memberships**

· American Society of Civil Engineers

#### Professional Experience

Mr. Kelly has performed layout and inspection of core drilling operations for bridges and roadway projects. He has also designed numerous mine reclamation projects as well as assisted in completion of water feasibility studies.

Mr. Kelly has performed construction inspections of waste water treatment facilities and has experience with roadway design, design of foundations, and retaining walls.



#### Representative Projects

Mr. Kelly has designed cut slopes for large scale roadway projects such as:

- · Kermit Bypass, Mingo County, WV
- Meadowbrook Road, Harrison County, WV
- US-35, Mason County, WV
- Corridor H, Section 7, Hardy County, WV





## James T. Rayburn, P.S. Chief Surveyor

#### **Education**

A.S. Mechanical Engineering, West Virginia Institute of Technology, 1970

#### Registrations

Registered Professional Surveyor in West Virginia

#### **Professional Memberships**

American Congress on Surveying and Mapping

The American Association for Geodetic Surveying (AAGS)

Member Organization of ACSM.

Cartography and Geographic Information Society (CaGIS)

Geographic and Land Information Society (GLIS)

National Society of Professional Surveyors (NSPS)

West Virginia Association of Land Surveyors, Inc.



#### **Professional Experience**

Mr. Rayburn currently serves as Manager of Surveying for E.L. Robinson Engineering (ELR) and has more than 30 years of Design Surveying and Construction Surveying experience. The responsibilities include management of surveying and control for various design projects, including highways, buildings, and bridges. In addition, Mr. Rayburn manages and performs work consisting of courthouse research for property ownership resolution for the above mentioned project types. This includes preparation of property resolution maps, deed descriptions for property acquisitions required for project plan preparation. Mr. Rayburn has experience in Geodetic Control Surveys, 3D Laser Photogrammetric Scanning, Control, Topographic Surveys, Cemetery Surveys, Boundary Surveys, Construction Stakeout, Subdivision Surveys, along with Hydrographic surveys of river and lake bottoms. A few of the more notable surveying projects performed by ELR under the supervision of Mr. Rayburn, has been the Blennerhassett Bridge Project, 11 continuous miles of Corridor H design surveys, GPS Control for the West Virginia Statewide Mapping and Addressing Board Project, 3D Laser Scan and mapping of the





CAMC Parking Garage partial collapse, and 3D Laser Scanning of I64/I77 Retaining Wall for Monitoring.

#### Representative Projects

#### **Design Surveys**

- Corridor H (WVDOT) Hardy County, WV: Lead Surveyor for Design Surveys, Right of Way Staking, etc. for approximately 11 miles of Corridor H in Hardy County, WV. This was for Sections 6 & 7 of Corridor H, both Sections of which are now under construction. Estimated construction cost of \$150 million dollars.
- WV Route 10 (WVDOT) Logan to Man WV, Logan County, WV: Lead Surveyor for Design Surveys for a section approximately five miles in length from Man, WV, to Rita, WV, including the Man Bridge. Also provided control surveying for the entire project length of approximately 12 miles. The approximate five miles section of roadway is now under construction at an estimated cost of \$51 million dollars.
- Blennerhassett Bridge, Corridor D (WVDOT), Wood County, WV: Lead Surveyor for Design Surveys for this landmark Bridge Project which is now under construction at an estimated cost of \$120 million dollars.
- James Ramsey Bridge (WVDOT) Potomac River, Shepardstown, WV: Lead Surveyor for Design Surveys for this Bridge Project which is now completed at an estimated cost \$15.5 million dollars. This project involved working in an environmentally historic area, which adjoined a National Park.
- US Route 35 (WVDOT) Mason County, WV: Lead Surveyor for Design Surveys for two Design Sections each approximately 2.5

miles in length from Lower Five Mile Road to Upper Nine Mile Road. Also provided control surveying for the entire US 35 design project length of approximately 22 miles.

- 164/US 35 (WVDOT) 164 to US 34 Crooked Creek, Putnam County, WV: Lead Surveyor for Design Surveys, Right of Way Staking, etc. for approximately four miles of US 35 including Interstate 64 Ramps and Flyovers in Putnam County, WV. This included the 164 Bridges and Flyovers, which is now under construction.
- ATB-Parrish Road (ODOT) Ashtabula County,
   Ohio: Project Design Surveyor for rail grade separation project. Project involved roadway realignment, 900' new bridge, new waterline, storm and sanitary sewers. Project is currently under construction. Estimated construction cost: \$8.6 million.
- PIC-23-3.21 and Various (ODOT) Pickaway County, Ohio: Project Design Surveyor for ODOT Project PIC-23-3.21 and Various. Project involves deck replacements along 11 miles of US 23 in Pickaway County. Project includes large diameter culvert liner, interchange upgrade that includes mainline profile correction, ramp reconstruction, and addition of barrier wall and storm drainage. Project is currently under design (90%). Project scheduled for construction in 2007. Estimated construction cost: \$12 million.
- ATB-90-22.06 (ODOT) Ashtabula County, Ohio:
  Project Design Surveyor for Interstate
  Reconstruction Project. Project includes total
  pavement replacement, bridge widening, and contra

   crossover maintenance of traffic, culvert
  replacements and storm sewer rehabilitation and
  sign replacements. Project is currently under design
  (50%) and scheduled for construction in 2011.
  Estimated construction cost: \$36 million.





#### Construction Surveys

- Corridor D (WVDOT) Wood County, WV: Lead Surveyor for Highway/Bridge Construction Monitoring surveys for the following segments of Corridor D and related relocation projects:
  - Godbey Athletic Field Relocation Construction
  - Godbey Colt Field and Soccer Field Construction
  - West WV 47-East WV 47 Highway/Bridge Construction
  - East Buckeye-West Little Kanawha River Highway/Bridge Construction
- Interstate I-79 Widening and Median Barrier (WVDOT) Harrison County, WV: Lead Surveyor for construction layout surveys for the widening of I-79 from the Meadowbrook Exit, north to the Jerry Dove Exit approximately three miles in length, as a subcontractor to the prime contractor.
- CAMC 33<sup>rd</sup> Street Relocation and Building Expansion, Charleston, WV: Lead Surveyor for construction layout surveys for 33<sup>rd</sup> Street relocation along with ancillary items including sidewalks, drainage and utilities. Also layout surveys for building expansion project.
- Saturn Dealership, Hurricane, WV: Lead Surveyor for Saturn Dealership site development and access roads at Hurricane Interchange of Interstate 64.
- Arch Coal WV Mining Operations: Lead Surveyor as a subcontractor to Arch Coal operations for Valley Fill Construction (Up to 27 million cubic yard fills), mine haul road layout, drill line staking, and dragline pit layout.





### Mayadarsonna:

# Randall L. Lackey, P.E. Project Engineer

#### Education

B.S. Civil Engineering West Virginia University Institute of Technology, 1999

#### Registrations

Registered Professional Engineer in West Virginia, Ohio and Kentucky

#### **Professional Memberships**

- · American Society of Civil Engineers
- · Society of American Military Engineers

#### Computer Skills

C++, AutoCAD, MathCAD, Microstation, MS Excel, MS Word, MS Project, MSPowerPoint, Windows, MDX, MERLIN, BRASS Systems, SIMON, HEC-RAS, RC Pier, and HY8

#### Professional Experience

Prior to joining E.L. Robinson Engineering Co., Mr. Lackey worked with the WV Division of Highways as an Engineering Co-op Technician. As part of his co-op experiences, he performed calculations for steel, flowrate and roadway. He performed roadway and guardrail design and construction inspection for bridge and roadway projects.



#### Representative Projects

Mr. Lackey has been intricately involved in the hydraulic design process of the Blennerhassett Island Bridge Project, which will connect West Virginia to Ohio as well as span the Ohio River and Blennerhassett Island. Included in this project are the following: Preparation of flood plain analysis for existing, temporary, and various post construction conditions, scour analysis using FHWA approved publications, analyzing the affects that debris flow will have on the bridge as well as Blennerhassett Island, and studying the potential for lateral channel migration and understanding the affects the migration would have on the design on the bridge substructure.

Mr. Lackey has also been involved with the hydraulic design process of the Corridor H South Branch of the Potomac River Bridge. Included in this project are the following: Preparation of flood plain analysis for existing, temporary, and various post construction conditions, scour analysis using FHWA approved publications, analyzing the affects that debris flow will have on the bridge, studying the affects the proposed conditions





will have on the Town of Moorefield, WV flood level, and studying the potential for lateral channel migration and understanding the affects the migration would have on the design on the bridge substructure.

Mr. Lackey has also performed hydraulics and scour computations for Ripley Town Bridge, Jackson Bridge, Beaver Creek Bridge, Walnut Bottom Bridge, Tallman Bridge, Meadowbrook Road Bridge, Simpson Creek Bridge, Kermit Bypass Bridges and culverts, Left Hand Fork Bridge, and Corridor H Bridges over Walnut Bottom Run and an unnamed tributary.

Mr. Lackey has prepared Section 404 permitting analysis and paperwork for Ripley Town Bridge, Simpson Creek Bridge, Meadowbrook Road Bridge, and the Left Hand Fork Bridge. Along with this work, Mr. Lackey has prepared CLOMR analysis and documentation for Horseshoe Village Subdivision and for The Ohio State University Medical Center's two proposed bridges that connect the University with OH SR 314 over the Olentangy River.

Mr. Lackey has performed calculations for deck drainage, performed girder design and analysis, pier design and analysis, prepared design study reports, type, size and location reports and final plans on many of E.L. Robinson's Division of Highways projects.





# Mark Allen McGettigan, PE, Project Manager

## Education

M.S.E. Engineering Management/Environmental Engineering,

Marshall University December 2007

B.S. Civil Engineering Technology, Fairmont State College, 1999

#### Registrations

Registered Professional Engineer in West Virginia

#### **Professional Memberships**

· American Society of Civil Engineers

#### Professional Experience

Successfully worked on and managed numerous Phase I and II ground water quality investigations and feasibility studies for the West Virginia Department of Environmental Protection.

Mr. McGettigan has taken several large water and wastewater projects from the initial development phase through the construction phase. This includes writing preliminary engineering report, developing funding scenarios, designing the system, developing the plans and specifications, developing the bid documents/overseeing the bid process and managing the construction inspection.



Developed specifications and managed construction inspection for land development and utility construction projects.

#### Representative Projects

Mr. McGettigan has been the design engineer on the following projects:

- Lavalette Public Service District's U.S. Route 52 Waterline Extension Project.
- Lavalette Public Service District's Crockett and Millers Fork Waterline Extension Project.
- Lavalette Public Service District's State Route 37 Waterline Extension Project.
- Crum Public Service District's Mill Creek Waterline Extension Project.



AML and RELATED PRO	JECT EXPERI	ENCE MATR	IX				814			Attachi	ment "C	)"		7.3										
			10111			773	PROJE	CT EXI	PERIEN	CE			1413		11.01				Prima	ary Sta	off Pari		tion	
PROJECT	Experience Basis Corporate-C Personal-P	Additional Information in Section	Abandoned Surface Mine Reclamation	Abandoned Deep Mine Reclamation	Portal/Shaft Closure	Hydrological/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	Ed Robinson, P.E.	Tim Cart, P.E.	Richard W. Watts, P.G.	Mark McGettigan, P.E.	John Kelly. E.I.	Scott A. Pratt, Geologist	Gary A. Workman, CADD
Jacob's Fork Complex	С	YES		X	X	X					X					X	X	М	Р		Р	Р		_
Rhodell Refuse & Portals	С	YES		X	X	X					X					X	X	M	P		P	P		
Gilmer B Sites 3-8 Morrisvale/Cameo/Big Horse	С	YES		Х	Х	Х					X				-	Х							$\overline{}$	$\dashv$
Creek Waterline Feasibility	С	YES										X						М	Р		Р	Р		
Camp Creek Waterline Feasibility Study	С	YES										Х						М	Р		Р	Р		
Lick Creek Waterline Feasibility Study	С	YES										х						М	Р		Р	Р		
Ragland Waterline Feasibility Study	С	YES										Х						М	Р		Р	Р		$\square$
Beech Creek and Ben II Waterline Feasibility Study	С	YES										X						М	Р		Р	Р		Ш
Dingess Waterline Feasibility Study	С	YES										X						М	Р		Р	Р		Ш
Sharon Heights Waterline Feasibility Study	С	YES										х						М	Р		Р			$\square$
Amhestdale Water Feasibility	С	YES										X						M	P		P	P	-	-
Mercer County Commission	С	YES	-				_					X				-	_	M	P	_	P	P	-	-
Danese PSD Waterline New Haven Waterline	C	YES YES					-	_				x		_				M	P		P	P	-	$\neg$
Nubbin Ridge/Camp Creek																		м	Р		Р			$\neg$
Waterline Feasibility Study Bramwell Hill Waterline	С	YES					-					X	-					1 800	P		P	P	_	Н
Feasibility Study Coaldale and Coaldale	С	YES										X					-	М	P		P .	P		$\vdash$
Mountain Waterline Feasibility Study	С	YES										×						М	Р		Р	Р		
Jennie Creek Waterline Feasibility Study	С	YES										×						М	Р		Р			
Beech Creek and Ben Areas Waterline Feasibility Study	С	YES										х						М	Р	V.	Р	Р		
Blair/Sharples Area Waterline Feasibility Study	C	YES										х						М	Р		Р	Р		Ш
Brown's Creek #10	С	YES	Х	X	X	X	X				X	L			X	X	X	M	P			P		$\vdash$
Bull Run #35	С	YES	X	X	X	X	X				X	X		X	X	X	X	M	P		-	P		-
Seccuro Mine Drainage	C	YES YES	×	X	X	X	X	-			X	×		X	_	×	-	M	P		-	P		$\vdash$
Fickey Run Ven's Run	C	YES	<del>X</del>	^	_^	x	_^				×					- "	X	M	P			P		
Bull Run #27	č	YES	X	Х	X	×	X				X	X		X		X	X	М	Р		Р	Р		
Riffe Branch	С	YES	Х	X	X	X	X				X					X	X	M	P		_	Р	-	$\vdash$
Hot Coal	С	YES		X	×	X	X	_			X	-			-	X	X	M	P		P	P		$\vdash$
Minden Refuse Pile Jeffrey Mine Complex	C	YES YES		X	X	X	X				X				_	_^	X	M	P		P	P		$\vdash$
Pigeon Creek Waterline	C	YES		_^	1	×	1 ^				x	X	×				<u> </u>	М	P			Р		
Red Jacket, Matewan, Newtown Waterline	С	YES				×					×	x						М	Р		Р	Р		
Marrowbone Waterline	С	YES				×					X	Х	Х					М	Р		Р	Р		$\Box$
Mount Zion Waterline	С	YES				X					X	X					1	M	Р		Р	Р		$\Box$

AML and RELATED PRO	JECT EXPERI	ENCE MATR	XIX		200					Attach	ment "(	C"		Trans.								1731		
		DDO IS	CTEV	PERIEN	ICE		100							Prim	ary Sta	aff Par M-Mngn	-	tion						
	E. 11. 15.11						PROJE	CIEX	PERIEN	ICE.		_	=							1	Vi=iviingri	T		
PROJECT	Experience Basis Corporate-C Personal-P	Additional Information in Section	Abandoned Surface Mine Reclamation	Abandoned Deep Mine Reclamation	Portal/Shaft Closure	Hydrological/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	Equipmen/Structure Removal	Stream Restoration	Geotechnical/Stability	Ed Robinson, P.E.	Tim Cart, P.E.	Richard W. Watts, P.G.	Mark McGettigan, P.E.	John Kelly. E.I.	Scott A. Pratt, Geologist	Gary A. Workman, CADD
Coopers Rock, Pisgah, and Laurel Run Waterline	С	YES				×					×	×						М	Р		P	Р		
Davis Water Tank	С	YES				X					X	X						М	Р		Р	Р		
Whittington Hill (Walker)Slide	С	YES		х	×	×					х						×	М	Р					
Maidsville Landslide	С	YES	X	_						_	×	1					X	М	Р		P	Р		
Rich Fork Landslide	Č	YES	X	X							X						X	М	Р		Р	Р		
Tupppers Creek Landslide	C	YES	×	X							X						X	M	Р		P	P		
Glen Rogers Waterline	С	YES				X					X	X						M	Р		P	Р		
Gooney Otter Refuse	С	YES	X	X	X	X	X				X						X	M	P		Р	Р		
Chapmanville Mine Blowout	С	YES																М	P		Р	P		
Charleston Romeo Landslide	С	YES		X	X	X		_		_	X	_	_	-	-	-	X	M	P	-	P	P	-	_
Big Creek C Refuse	С	YES	-	X	Х	X		-		-	X	-		-	-		×	M	P		P	P		_
North Matewan Sipple	C	YES	-	X	_ <u> </u>			-	X	-	X			<del>                                     </del>	_		_^	M	P	+	P	P	-	_
Moran Subsidence Lewis Landslide	C	YES		×		×		-	^	<del>                                     </del>	x		X				X	M	P		P	P		
Roush Landslide	C	YES	_	x		x		_			X	1	X		_		X	M	P	1	P	P		
Jefferson 26 Landslide	Č	YES		X		X					X						X	М	Р		P	Р		
Titus Road Landslide	С	YES	X	X		X					X						X	M	Р		P	Р		
Imboden Landslide	С	YES	X	X			7										X	М	Р		Р	Р	-	_
Baisden Subsidence	С	YES		X					X						-			M	P	-	P	P	_	-
Parsons Landslide	С	YES		X						_					-		X	M	P	-	P	P		-
Treadway Landslide	С	YES	X	X		X			-	-	X	-			-	_	X	M	P	-	P	P	-	_
Phalen Landslide	C	YES YES	X	X		X		-	-	-	X	-	-		_		1 x	M	P		P	P		-
Adkins Landslide Goetz Subsidence	c	YES	<del>  ^</del>	x		_^	_		X	+	_^	+	_	-	+	_		M	100		30.00	P		_
Lavender Refuse Fire	Č	YES	$\vdash$	X				X	- "		×		×					M				P		
Cox Refus Fire	C	YES	-	X				X			×		X					M				Р		
Toney Fork Landslide	С	YES		Х		×					X							M	Р		P	Р		
Athens Rt. 13 Refuse Fire	С	YES		X				X			X		X					M				Р		-
McAdams Subsidenc Ermer	С	YES	_	X					X	_	X	-		-	-		-	M	-	-	-	P		-
Rodgers Subsidence	С	YES	-	X		~		_	X	-	X	-	X	-	+	<del> </del>	-	M	P		P	P		-
Brown Landslide	C	YES	_	X		X				-		X	+		+	<del>                                     </del>	-	IVI	+ -		-	-		+
Town Run Witcher Creek	P	NO NO	-					-		1	-	1 x				1		$\vdash$						
Pond Gap, Hitop & Spangler	P	NO	<del></del>						1	1		x		1			1	1						
Elk City	P	NO										X												
Little Fork Refuse Pile	Р	2017		X		Х	х	×								Х	X		Р					
OSM-Tackett Fork	Р		Х	Х	X	X										100	X		P	Р				
OSM-Ironton	P			X		×											X		Р					
OSM-Williamson LS	P			X		X						_	X		_		X	-	Р	P		1		₩
OSM-Ray Landslide	P			X		-		-		-		-	-	-	-		X	+-	P		-	-	-	-
OSM-Spence Landslide	P			X	-	X		-	-	-		-	-	_	+	-	X	+	P	1	+	+-	_	+
OSM-Ratliff Landslide	P		-	X	-	X	-	-	1	+		+	+	+	†	+	X	+	P		+	+		$\overline{}$
OSM-Pigeon Roost LS OSM-Oak Hill Subsidence	P		1	×	×	X			×	_	×	_	-		1		x		P	P				1
OSM-Uak Hill Subsidence OSM-Little Prater Creek	P		1	x	_^	x				1						1	-	1	P	P				
OSM-Hamilton II Landslide	P	-		x		X									1	1	X	$\top$	P	P				
Tuppers Creek B	P		X	X	X	X											X		P	Р				

AML and RELATED PRO	JECT EXPERI	ENCE MATR	RIX							Attach	ment "	C"					F 17 (2)			777	12-1			
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PROJECT	Experience Basis Corporate-C Personal-P	Additional Information in Section	Abandoned Surface Mine Reclamation	Abandoned Deep Mine Reclamation	Portal/Shaft Closure	Hydrological/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	Ed Robinson, P.E.	Tim Cart, P.E.	Richard W. Watts, P.G.	Mark McGettigan, P.E.	John Kelly. E.I.	Scott A. Pratt, Geologist	Gary A. Workman, CADD
Big Sandy Refuse	Р	2000		X		X											X		Р	Р			_	
Leslie (Nelson) Swiss Drennan	P	2002 2002	Х	X	X	X	X	-	-		X	X	X					-		P		$\vdash$	P	P P
Swiss Drennan Minden C	P	2002	X	X	×	×	X	<del>                                     </del>	<b>—</b>	×	Х	X			X				_	P			P	F
Weston	P	2002	, A		^	^				~		X			_^					P			P	P
Parkette	P	2002							X			X					X	$\overline{}$		P			P	P
East Dupont Avenue Landslide		2003		Х	Х	X					X						X			Р			P	Ρ
Skin Creek Phase II	Р	2003	X			Х					Х				Х	X	X			Р			Р	Р
Witcher Creek	Р	2001		X	X	X					X		X				X			Р			Р	Р
Crane Creek	Р	2004			X	X	X				X	X				X	X			Р			Р	Р
Yoursco	Р	2004	Х	X	X							Х								Р		_	Р	Р
Carswell	Р	2004	X			X	X				X		X		X	X	X			Р		$\overline{}$	Р	Р
Craigmoor	Р	2004				X					X		Х				X	₩	_	Р			Р	P
Downey Pierpont Ames (Clare) Landslide	P P	2006	-	X			_		X	_		-					X	-	-	P		-	P	P
Lorado	P	1995	×	X	×	×	_	_	_		X	×		_	×		X	-	_	P		$\vdash$	Ρ	-
Madeline Refuse	P	1995	×	x	x	x	×	_	-	×	x	<u> </u>			x	X	x	-		P	_			P
Rocklick	P	1995	X	X	X	X					X				_^_	^	X	-		P				P
Wahoo	Р	1996	X			X	X	×			X				X		X	-		P				P
Meadowbrook	Р	1996	X	X	X	X	X				X	X			X		X	-		Р				Р
Jumping Branch	Р	1996										X								P				P
Beard's Fork	Р	1997	X	X	X	X	X	X		X	X				X					Р				Р
Turkey Wallow	Р	1997	X	X	X	X	X	X			X						X	_		Р				Р
Otsego	Р	1997	X	X	X	X	X				X				X		X			Р				Р
Miller	Р	1997		X	X	X					X	X						-		P				Р
Whitby	Р	1998	X	X	X	X					X	X		X	X	X	X	-		P			_	Р
Barker Coulou Divos Bood	P	1999 1999	X	X	X	X		-	-	_	X	X					_	$\vdash$	-	P			P	2
Gauley River Road Skin Creek	P	2000	×	X	×	×	X	+	<del>                                     </del>		X	X		<b>—</b>	×	×	X	-	_	P	_		P	
Jolo	P	2000	1	_^	_^	^	_^				^	x				^	_^	-		P			P	P
Tioga	P	2001										X	50 5					-		P		_	P	Р
Turkey Gap	Р	2001	X	X	X	X					X				X	X				P			P	Ρ
Big Sandy	Р	1987	X			Х		X			Х				X					Р				
Marfrance	Р	1988	X	Х	X	X					Х	X							Р	Р				
New Hill Ballpark	P	1988		X	X	X	X				X	X						_	P	Р				$\square$
Jones Run	P	1988		X	X	X			X		X	X			X		X	-	Ρ	P		$\vdash$		P
Chapmanville Landslide	P	1989 1989		X	X	X		-	-		X	-					X	-		P		$\vdash$		P
Wharncliff Landslide Joyce Sturm	P	1989		X	×	X			-		X	×		X				<del>                                     </del>	-	P	-	$\vdash$		P
Marianna Refuse	P	1991	×	_^	^	×	×	-	-		×	-		^		-	×	$\vdash$	-	P	_	$\vdash$		P
Cedar Grove	Р	1991		X	X	X					×	×		X			x	-		P				P
Eskdale	Р	1991		X	×	X					X			X	X					P		$\vdash$		P
Hodgesville	Р	1991	X	X	X	X					X	X		X			Х	1		P				Р
Newsome Branch	Р	1992		X	×	×	X				X				Х		Х			Р				Р
Morrison	Р	1992		X	Х	X					X	X					Х			Р				Р
Snake Island	Р	1993	X			X	X	Х			X				X	X	1							
Orchard Branch	Р	1994		X	X	X	X				X	X		X			X			Р				Р
Beckley Layne	Р	1994		X	Х	X					X	X					X			Р				Р
Quinwood Booth	P P	1994		X	X	X	-		X		X	X		_				-		Р		$\vdash$		Р
Little Fork		1983	X	X	X	X	X	X			X					X	X			Р				-

AML and RELATED PRO	JECT EXPERI	ENCE MATR	:IX						-114	Attach	ment "	C"				-						AT I		
				PROJECT EXPERIENCE										Primary Staff Participation  M-Mngmt										
			91	Reclamation		n/Eval.	PROJE					ement	gement		oval							II.	st	Q
PROJECT	Experience Basis Corporate-C Personal-P	Additional Information in Section	Abandoned Surface Mine Reclamation	Abandoned Deep Mine Recla	Portal/Shaft Closure	Hydrological/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	Ed Robinson, P.E.	Tim Cart, P.E.	Richard W. Watts, P.G.	Mark McGettigan, P.E.	John Kelly. E.I.	Scott A. Pratt, Geologist	Gary A. Workman, CADD
Elkridge Refuse	Р	1984	Х	Х	Х	Х	Х	Х			Х				×		Х			Р				
Lando Mines	Р	1984	X	X	X	X					X						Х		_	Р				
West Varney	P	1984		X	X	X					X						X		7.5	P				
Bethel Portals	P P	1985	_	X	X	X			-		X	X				_	X	-		P				
Mammoth Landslide Chevenne	P	1985 1985	×			X			_	-	X	×		X	X		X	-	P	P				
Mudlick A Landslide	P	1985	x		×	x					x	Ŷ		_^	_^	X	x x	+	1	P			-	-
Nelson Landslide	Р	1985	X	X							X	_ ^					X	_		P				
Mudlick B Refuse	Р	1985	Х	X	X	X	X				X				X	X	X		P	Р				
Bluff Mountain	Р	1985	X	X	X	X	X				X	X			X	X	X		Р	Р				
Montgomery Drainage	Р	1986		X	X	X					X			X			X			P				
Mayoros Drainage	P	1986	L	X	X	X					X	Х		X				_		Р				
Ridgeview A & B	P	1987	X	X	X	X	X	X			X	X		X	X		X	-		P				
Tupper Valley Airport Bottom	P	1987 1987	Х	X	X	X			-		X	X		X			X	-	D	Р				-
Manilla Creek	P	1987	Х	x	x	x	X		-		x	1 x		X	×		X	-	P	P		-		
McAlpin	P	2009	<u> </u>	_^	_^	_^	_^		_		X	<del>  ^</del> -		_^	_^		X	-	P	P		Р	P	P
Robey	Р	2009	X	X	X	X					×						X	-	P	P		P	P	P
Katy Lick	Р	2009	Х			X					X						X	1	Р	Р		Р	Р	Р
Clear Fork	С	2009										Х								Р				Р
Coal Mountain	С	2009										X								Р		1.05		Р
Naugatuck/East Kermit	С	2009										X						М	1.0	Р				Р
Prenter	P	2008		_		_			-			X						-		P				Р
Hanover Lower Dempsey	P	2009 2009	_	×	X	X				-	X	X					X	+		P				P
Island Creek #18	c	2009	_	x	x	x	-		-		x	X			X		x	-		P				0
Brownton Landslide	Č	2009		X	X	X					X	X					x		P	P			_	P
East Bank Emergency	C	2009															<u> </u>		P	P		P	P	P
Dunloup Creek	С	2010	X	X	X	Х					X	X			X	Х	X		P	Р		P	P	Р
Otsego/Pierpoint/Maben	C	2010										X							Ρ	Р				Р
Barkers Ridge/Basin	С	2010							-			X						-	1	Р				Р
Herndon/Covel/Garwood Bud/Alpoca/Mill Branch	C	2010 2010	<b>—</b>									X					_	-		P				P
Keystone (Avery)	c	2010		-					_						-			+		P				P
Keystone (Emergency)	C	2010							t									1	-	P				P
Cane Branch	Č	2010										X						†	_	P				
Spy Rock/Edmond/ Flanagan	С	2000 400							2			X												
Mountain	1981	2010										997,6							Р	Р			Р	
Wilderness PSD	С	2010										X							I.F.	Р			Р	
Gordon C	С	2010	_	X	X	X			_		X						X	1		Р			Р	
Keaton Branch	С	2010		X	X	X					X						X	-	Р	Ρ		Р	Р	
Verner Grimmett Burning Refuse	С	2010						×			×							1	ь			, I		i J
Shinnston-Lumberport	C	2010	-			_		^	×		X	-	_	_		-	-	+	P	P		P	P	
Newtown-Kinder	C	2011		X	X	Х			1 ^		x	-					X	_	P	P			P	
Dan's Branch Emergency	Č	2011		X	X	X					x						x		P			Р		
Cartright Branch	C	2011		X	X	X			1		X						X	1		P			P	
Thorpe Refuse Pile	C	2011		X	X	X					X						X	1	P	P			P	
Glen Rogers Emergency	С	2012		Х	Х						X								Р			Р		
Abney Refuse Piles	С	2012		X	X	X		1	Į.	]	X		1	l	1		×	1	Ρ	P		P	P	

AML and RELATED F	PROJECT EXPER	IENCE MATE	XIX					BON I		Attach	ment "	C"				A B						-	130	
							PROJE	ECT EX	PERIEN	ICE								Primary Staff Participation  M-Mngmt						
PROJECT	Experience Basis Corporate-C Personal-P		Abandoned Recla	Abandoned Deep Mine Reclamation	Portal/Shaft Closure	Hydrological/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	Ed Robinson, P.E.	Tim Cart, P.E.	Richard W. Watts, P.G.	Mark McGettigan, P.E.	John Kelly. E.I.	Scott A. Pratt, Geologist	Gary A. Workman, CADD
Milam Ridge Refuse	C	2012		X	X	X					Х						X	-	P	Р		P	P	_
West Columbia "B"	C	2012		X	X	X					X						X	1	D	D		D	D	+-

#### **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.

E.L. Robinson	Engineering Co.
(Company)	
(Authorized Signature)	Walts
Richard W. Watts (Representative Name, Titl	Project Manager
364-776-7473	304-776-6426
(Phone Number)	(Fax Number)
1-29-13	the state of the s
(Date)	

RFQ No. DEP 16074

#### 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: E. L. Robinson Engineering Co,  Authorized Signature: Reibant W: Walls Date: 1-22-13
State of West Virginia
County of Kanasha , to-wit:  Taken, subscribed, and sworn to before me this 22 day of January , 20 18.
My Commission expires October 5 , 2016.
APTIX SPACHERE OFFICIAL SEAL NOTARY PUBLIC BADMING Purchasing Affidavit (Revised 07/01/201)

STATE OF WEST VIRGINIA

Brian D. Morton

E.L. Robinson

5088 Washington Street, West

Charleston, WV 25313

My Commission Expires Oct. 5, 2016