**JANUARY 31, 2013** 

Statement of Qualifications

ORIGINAL

# BROAD RUN PORTALS DESIGN DEP16078

KANAWHA COUNTY, WEST VIRGINIA



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

01/29/13 04:17:09 PM West Virginia Purchasing Division



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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

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ADDRESS CORRESPONDENCE TO ATTENTION OF:

GUY NISBET

304-558-8802

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

DATE PRINTED ... 12/21/ BID OPENING DATE: 01/31/2013 BID OPENING TIME 1:30PM LINE QUANTITY UOP ITEM NUMBER UNIT PRICE AMOUNT 0001 JВ 906-29 BROAD RUN PORTALS DESIGN EXPRESSION OF INTEREST THE WEST VIRGINIA PURCHASING DIVISION, FOR THE AGENCY, THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, IS SOLICITING EXPRESSIONS OF INTEREST FOR PROFESSIONAL ENGINEERING DESIGN SERVICES AND CONSTRUCTION MONITORING SERVICES AT THE BROAD RUN PORTALS PROJECT IN KANAWHA COUNTY, WEST VIRGINIA, PER THE FOLLOWING BID REQUIREMENTS AND ATTACHED SPECIFICATIONS. THIS IS THE END OF REQ DEP16078 \*\*\*\*\* TOTAL: SIGNATURE TELEPHONE DATE

FEIN

550594633

304-776-7473

1-18-13

ADDRESS CHANGES TO BE NOTED ABOVE.





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: Broad Run Portals

DEP16078

**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 Broad Run Portals design project located in Kanawha 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.

By:

Richard W. Watts, P.G.

Rihmy W. Matt

Project Manager



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| Abandoned Mine Lands Reclamation Experience |
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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 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.

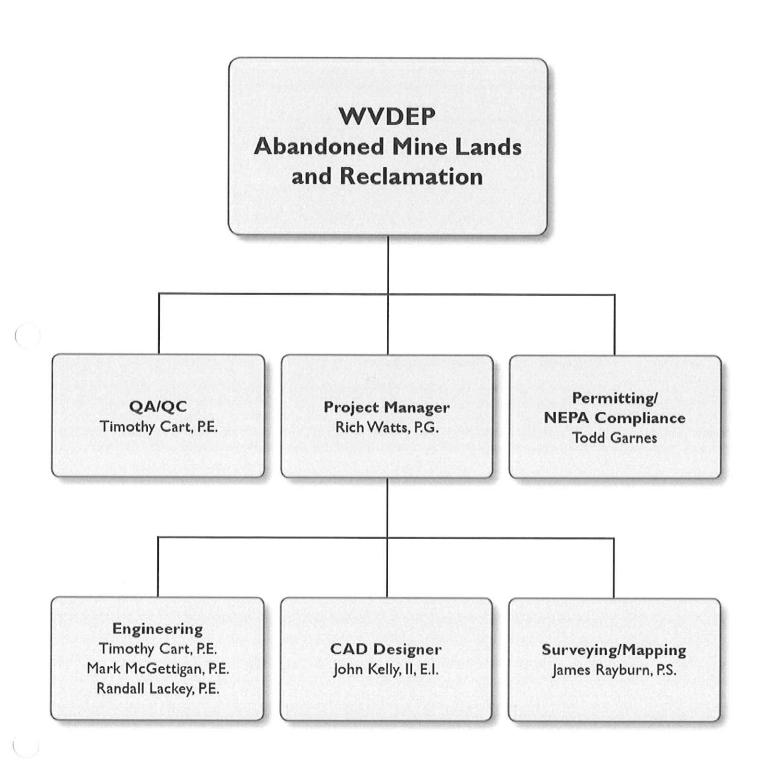
Our staff is well-qualified and experienced in related reclamation projects. They have the knowledge and capabilities to perform all of the tasks required for your project. In addition to your primary project team, other members of our organization may be called upon from time to time to provide their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





#### 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



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|---|-----------------------------|---|---|-----------------------------|---|
|   | IL CONSUI                   |   | TIA QUALIFICATION Q   | UESTIONN                    | AIRE Attach at "B'  |
| PROJECT NAME<br>Broad Run Portals<br>DEP16078   | Run Portals January 10, 201 |   |   | FEIN<br>55-059463           | 3   |
| 1. FIRM NAME<br>E.L. Robinson Engineering Co.   |                             | 2. HOME OFFICE BUSINESS ADDRESS<br>5088 Washington Street, West<br>Charleston, WV 25313 |   | 3. FORMER                   | FIRM NAME   |
| 4. HOME OFFICE TELEPHONE 304-776-7473   | 5. ESTABL<br>1978           | ISHED (YEAR)  | 6. TYPE OWNERSHIP Individual x Corpor Partnership Joint-V   |                             | 6a. WV REGISTERED DBE (Disadvantaged Business Enterprise) YES x NO                              |
| 7. PRIMARY AML DESIGN OFFICE: 5088 Washington Street, West Charleston, WV 25313   |                             |   | .E./56 Staff in Charlest  | on Area                     |   |
| 8. NAMES OF PRINCIPAL OFFICER: Ed Robinson, P.E. 304 776-747.   |                             | RS OF FIRM  | 8a. NAME, TITLE, & TELE   | PHONE NUMB                  | ER - OTHER PRINCIPALS   |
| ARCHITECTS BIOLOGIST 7 CADD OPERATORS — CHEMICAL ENGINEERS 10 CIVIL ENGINEERS 15 CONSTRUCTION INSPECTORS — DESIGNERS DRAFTSMEN  TOTAL NUMBER OF WV REGI | STERED PRO                  | ISTS ICAL ENGINEERS NMENTALISTS TORS ISTS IANS OGISTS FESSIONAL ENGINE                  | 2 LANDSCAPE ARCHITE  — MECHANICAL ENGIN MINING ENGINEERS  — PHOTOGRAMMETRIST PLANNERS: URBAN/ — SANITARY ENGINEE 1 SOILS ENGINEERS — SPECIFICATION WRITERS  ERS IN PRIMARY OFFICE: pporting documentation t | EERS<br>S<br>REGIONAL<br>RS | 6 STRUCTURAL ENGINEERS 7 SURVEYORS — TRAFFIC ENGINEERS — OTHER  56 TOTAL PERSONNEL  ies them to |
|   |                             |   |   |                             |   |
|   |                             |   |   |                             |   |
|   |                             |   |   |                             |   |
| 10. HAS THIS JOINT-VENTURE WO   | SKED TOGET                  | HER REFORE?   | ☐ YES NO X This   | is not app                  | licable   |

| 11. OUT DE KEY CONSULTANTS/SUB-CONSULTANTS/SUB | ANTS ANTICIPATED TO 3 USED. Attach "AML not on file with AM | Consultant Confidential Qual cation |
|--|---|-------------------------------------|
| NAME AND ADDRESS:  | SPECIALTY:  | WORKED WITH BEFORE                  |
|  | Drilling  |                                     |
| Novel Geo – Environmental (NGE)  |   | <u>X</u> YES                        |
| 806 B Street, St. Albans, WV   |   | No                                  |
| NAME AND ADDRESS:  | SPECIALTY:  | NO WORKED WITH BEFORE               |
| NAME AND ADDRESS.  | SPECIALI I.   | WORKED WITH BEFORE                  |
|  |   | YES                                 |
|  |   |                                     |
|  |   | NO                                  |
| NAME AND ADDRESS:  | SPECIALTY:  | WORKED WITH BEFORE                  |
|  |   | VES                                 |
|  |   | YES                                 |
|  |   | NO                                  |
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|  |   | YES                                 |
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|  |   |                                     |
|  |   | NO                                  |
| NAME AND ADDRESS:  | SPECIALTY:  | WORKED WITH BEFORE                  |
|  |   | XTC .                               |
|  |   | YES                                 |
|  |   | NO                                  |
| NAME AND ADDRESS:  | SPECIALTY:  | WORKED WITH BEFORE                  |
|  |   |                                     |
|  |   | YES                                 |
|  |   | NO                                  |
| NAME AND ADDRESS:  | SPECIALTY:  | NO WORKED WITH BEFORE               |
| NAME AND ADDRESS.  | SPECIALI I.   | WORKED WITH BEFORE                  |
|  |   | YES                                 |
| *  |   |                                     |
|  |   | NO                                  |

| 12. | A             | Ts v  | our firm experienced in Abandoned Mine Lan Remediation/Mine Reclamation Engineering?   |
|-----|---------------|-------|--|
|     | **            | 12 A  | car film experienced in Abandoned mine bank kemediation/Mine Reclamation Engineering?  |
|     | X             | YES   | Description and Number of Projects: Eighty-nine (89) Projects - See Attached Sheet   |
|     | _             | NO    |  |
|     | В.            | Is y  | our firm experienced in Soil Analysis?   |
|     | X             | YES   | Description and Number of Projects: Eighteen (18) Projects Listed - See attached Sheet   |
|     | -             | NO    |  |
|     | C.            | Is y  | our 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?  |
|     | <u>X</u>      | 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 yo | our firm experienced in domestic waterline design? (Include any experience your firm has in uation 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 yo | our firm experienced in Acid Mine Drainage<br>Lation and Abatement Design?   |
|     | X             | YES   | Description and Number of Projects: Seven (7) Projects   |
|     | <del></del> : | NO    |  |

|  | , i  |   |   |  |  |
|--|--|---|---|--|--|
| 13. PERSONAL HISTORY STATEMENT   | OF PRINCIPALS AND ASSOCIATES   | RESPONSIBLE FOR AML PROJECT D   | ESIGN (Furnish complete                           |  |  |
| data but keep to essentials  | 5)   |   |   |  |  |
| JAME & TITLE (Last, First, Middle int.)  | YEARS OF EXPERIENCE  |   | YEARS OF EXPERIENCE                               |  |  |
| Edward L. Robinson, President  | YEARS OF AML DESIGN EXPERIENCE:  | YEARS OF AML RELATED DESIGN EXPERIENCE:   | YEARS OF DOMESTIC WATERLINE<br>DESIGN EXPERIENCE: |  |  |
| 11 1102212011, 1100240110  | 12   | 26  | 34  |  |  |
| Brief Explanation of Responsibi  | lities   |   | 1   |  |  |
| Mr. Robinson worked in the Righ<br>major utility plans. He has ex<br>land acquisition. He has provi<br>Provide and coordinate Quality  | tensive experience in propert<br>ded quality control on all pr                               | y surveys, property title sea<br>ojects designed by this firm                         | rches, aerial mapping and                         |  |  |
| EDUCATION (Degree, Year, Specia  | lization)  |   | 8   |  |  |
| Bachelor of Science 1969 Civil<br>Master of Science 1981 Civil   | Engineering<br>Engineering   |   |   |  |  |
| MEMBERSHIP IN PROFESSIONAL ORGA  | NIZATIONS  | REGISTRATION (Type, Year, St.   | ate)  |  |  |
| American Society of Civil Engin<br>American Council of Engineering<br>National Society of Professiona  | Companies  | 1975 Civil Engineering<br>Registered in West Virginia<br>Professional Licensed Survey | and Kentucky<br>or No. 1150                       |  |  |
| 3. PERSONAL HISTORY STATEMENT  | OF DRINCIPALS AND ASSOCIATES   |   |   |  |  |
| out keep to essentials)  | OF FRINCIPALS AND ASSOCIATES   | RESPONSIBLE FOR AFIL PROJECT D.   | ESIGN (Furnish complete data                      |  |  |
| MAME & TITLE (Last, First, Middle nt.)   |  | YEARS OF EXPERIENCE   |   |  |  |
|  | YEARS OF AML DESIGN EXPERIENCE:  | YEARS OF AML RELATED DESIGN   | YEARS OF DOMESTIC WATERLINE                       |  |  |
| Richard W. Watts, P.G.   | 29   | EXPERIENCE: 34  | DESIGN EXPERIENCE:                                |  |  |
| Brief Explanation of Responsibi  | lities   |   |   |  |  |
| Mr. Watts has served as project include project management, fie analysis, specification writing Projects included surface and d  | geologist on more than ninet<br>ld reconnaissance, drilling c<br>quantity determinations, co | oordination, laboratory testi: st estimates, pre-bid and pre-                         | ng and analysis, stability                        |  |  |
| EDUCATION (Degree, Year, Specia<br>B.S./1977/Geology<br>M.S./1994/Geography  | lization)  |   |   |  |  |
| MEMBERSHIP IN PROFESSIONAL ORGA  | NIZATIONS  | REGISTRATION (Type, Year, Sta   | ate)  |  |  |
| eological Society of America essociation of Engineering Geologists  REGISTRATION (Type, Year, State) Professional Geologist/1992/Virginia Professional Geologist/1993/Kentucky |  |   | Virginia  |  |  |
|  |  |   |   |  |  |

| 13. PER AL HISTORY STATEMENT   | OF PRINCIPALS AND ASSOCIATE  | ESPONSIBLE FOR AML PROJECT DESIGN (Furnish compl   |   |  |  |
|--|--|--|---|--|--|
| data but keep to essentials  |  |  |   |  |  |
| NAME & TITLE (Last, First, Middle Int.)  |  | YEARS OF EXPERIENCE  |   |  |  |
| John Kelly II, E.I.  | YEARS OF AML DESIGN EXPERIENCE:  | YEARS OF AML RELATED DESIGN<br>EXPERIENCE:<br>14   | YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:  |  |  |
| Brief Explanation of Responsibilities Mr. Kelly has worked on many AML projects since joining ELR. His responsibilities have included drilling inspection, sampling of coal refuse materials, hydrology, hydraulics design of drainage structures, and development of regrading plans. Estimation of quantities developed estimated cost. Mr. Kelly is proficient with Auto Cadd. Mr. Kelly has performed layout and inspection of core drilling operations for bridge and roadway projects. In addition, he has designed cut slopes for large-scale roadway projects such as the US Route 52 Kermit Bypass in Mingo County, WV and Meadowbrook Road in Harrison County, WV. |  |  |   |  |  |
| 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 OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)  |  |  |   |  |  |
|  | YEARS OF EXPERIENCE  |  |   |  |  |
| NAME & TITLE (Last, First, Middle Int.)  |  | YEARS OF EXPERIENCE  |   |  |  |
| NAME & TITLE (Last, First, Middle  | YEARS OF AML DESIGN EXPERIENCE: 29   |  | YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 22   |  |  |
| NAME & TITLE (Last, First, Middle Int.)  | lities mine reclamation projects unvegetation cover, disposal of and disposal of old mining solutions to determine if grounded in the design and constructions ojects in Mingo; Kanawha; Puts                      | YEARS OF AML RELATED DESIGN EXPERIENCE:  29  der the AML program, including acid producing materials, and tructures. Designed passive advater had been affected by pation management of waterline and cabell counties. | DESIGN EXPERIENCE: 22  g regrading of coal refuse d developing methods for AMD treatment systems. re-law mining. extension projects. Mr. Cart |  |  |
| NAME & TITLE (Last, First, Middle Int.)  Timothy B. Cart, P.E.  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 experien has recently completed water promr. Cart has performed geotechn  | lities mine reclamation projects unvegetation cover, disposal of and disposal of old mining solutions to determine if grounce in the design and constructions in Mingo; Kanawha; Putrical engineering calculations | YEARS OF AML RELATED DESIGN EXPERIENCE:  29  der the AML program, including acid producing materials, and tructures. Designed passive advater had been affected by pation management of waterline and cabell counties. | DESIGN EXPERIENCE: 22  g regrading of coal refuse d developing methods for AMD treatment systems. re-law mining. extension projects. Mr. Cart |  |  |
| NAME & TITLE (Last, First, Middle Int.)  Timothy B. Cart, P.E.  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 experien has recently completed water pr Mr. Cart has performed geotechn embankments.   | lities mine reclamation projects unvegetation cover, disposal of and disposal of old mining solutions to determine if grounce in the design and constructions in Mingo; Kanawha; Putrical engineering calculations | YEARS OF AML RELATED DESIGN EXPERIENCE:  29  der the AML program, including acid producing materials, and tructures. Designed passive advater had been affected by pation management of waterline and cabell counties. | DESIGN EXPERIENCE: 22  g regrading of coal refuse d developing methods for AMD treatment systems. re-law mining. extension projects. Mr. Cart |  |  |

| OF PRINCIPALS AND ASSOCIATE   | ESPONSIBLE FOR AML PROJECT DI  | ESIGN (Furnish compl  |  |  |  |  |
|---|--|---|--|--|--|--|
|   | YEARS OF EXPERIENCE  |   |  |  |  |  |
| YEARS OF AML DESIGN EXPERIENCE: 7   | YEARS OF AML RELATED DESIGN EXPERIENCE:  | YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:  |  |  |  |  |
| Brief Explanation of Responsibilities   |  |   |  |  |  |  |
| Mr. McGettigan has worked on several AML projects since joining our firm. He has developed grading plans, cross sections, estimated and checked quantity calculations. He has also served as a field inspector for several waterline Projects designed by E. L. Robinson Engineering Co. He has been the lead designer on waterlines over the past five years.  Mr. McGettigan also has experience with surveying and equipment including; theodolites, levels, and total stations. He has also performed various concrete and soil tests and is certified on Troxler nuclear density gage. |  |   |  |  |  |  |
| lization)   |  |   |  |  |  |  |
| an/Fairmont State/1999  |  |   |  |  |  |  |
| NIZATIONS   | REGISTRATION (Type, Year, Sta  | ate)  |  |  |  |  |
|   | Professional Engineer WV   |   |  |  |  |  |
| OF PRINCIPALS AND ASSOCIATES :  | RESPONSIBLE FOR AML PROJECT D  | ESIGN (Furnish complete data  |  |  |  |  |
|   | YEARS OF EXPERIENCE  |   |  |  |  |  |
| YEARS OF AML DESIGN EXPERIENCE:   | YEARS OF AML RELATED DESIGN EXPERIENCE: 8  | YEARS OF DOMESTIC WATERLINE<br>DESIGN EXPERIENCE:<br>1  |  |  |  |  |
| Brief Explanation of Responsibilities Mr. Lackey has performed hydraulics and scour for Ripley Town Bridge; Tallman Bridge; Meadowbrook Road Bridge; Simpson Creek Bridge; Kermit Bypass Bridge; Left Hand Fork Bridge; and Blennerhassett Bridge.  |  |   |  |  |  |  |
| Mr. Lackey has also 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 our Division of Highways projects.  |  |   |  |  |  |  |
| EDUCATION (Degree, Year, Specialization)  |  |   |  |  |  |  |
| lization)   |  |   |  |  |  |  |
| lization)   |  |   |  |  |  |  |
| NIZATIONS   | REGISTRATION (Type, Year, Sta  | ate)  |  |  |  |  |
|   | YEARS OF AML DESIGN EXPERIENCE:  7 lities  veral AML projects since join quantity calculations. He has not engineering Co. He has not engineering Co. He has not entity surveying and equipmented and soil tests and is lization)  an/Fairmont State/1999  NIZATIONS  OF PRINCIPALS AND ASSOCIATES:  1 lities lics and scour for Ripley Tow dge; Left Hand Fork Bridge; a alculations for deck drainage reports; type, size and loca | YEARS OF EXPERIENCE  YEARS OF AML DESIGN EXPERIENCE: YEARS OF AML RELATED DESIGN EXPERIENCE:  7  1ities  Veral AML projects since joining our firm. He has develope quantity calculations. He has also served as a field insenson Engineering Co. He has been the lead designer on watence with surveying and equipment including; theodolites, lead oncrete and soil tests and is certified on Troxler nuclear lization)  an/Fairmont State/1999  NIZATIONS  REGISTRATION (Type, Year, Statement of the project of the professional Engineer WV  OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN EXPERIENCE:  YEARS OF AML DESIGN EXPERIENCE: YEARS OF AML RELATED DESIGN EXPERIENCE:  1  1  1  1  1  1  1  1  1  1  1  1  1 |  |  |  |  |

| 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                     |   |  |  |  |  |
| J. Todd Garnes  | YEARS OF AML DESIGN EXPERIENCE: 5  | YEARS OF AML RELATED DESIGN EXPERIENCE: | YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:    |  |  |  |  |
| Brief Explanation of Responsibi   | Brief Explanation of Responsibilities  |   |   |  |  |  |  |
| Mr. Garnes experience surveying extrusions. He has provided co Mr. Garnes has performed numero mapping, mine research, and dev  | enstruction inspection services<br>ous water feasibility studies,<br>relopment of final reports.   | s for landsides and subsidence          | e projects in Ohio.                               |  |  |  |  |
| EDUCATION (Degree, Year, Specia<br>A.S. Architectural Design/ 1999<br>A.S. Computer Aided Drafting an   | d Design/ 1999   |   |   |  |  |  |  |
| MEMBERSHIP IN PROFESSIONAL ORGA   | REGISTRATION (Type, Year, State)   |   |   |  |  |  |  |
| 13. PERSONAL HISTORY STATEMENT but keep to essentials)  | OF PRINCIPALS AND ASSOCIATES 1   | RESPONSIBLE FOR AML PROJECT DE          | 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<br>DESIGN EXPERIENCE: |  |  |  |  |
|   |  | 31                                      |   |  |  |  |  |
| Brief Explanation of Responsibilities Mr. Rayburn has experience in mine mapping and surveying, formulated short term and long range mining plans for all types of coal mining, designed mine drainage and water supply systems for underground and surface mines, designed mine ventilation plans and systems which include precision pressure quality surveys and computer simulation of ventilation systems.  He has performed slope stability analysis and hydrology calculations, provides computer analysis for mining applications, work with leases and land management as well as reclamation and environmental permits.  By utilizing "state of the art" electronic total stations and/or GPS (Satellite) equipment, he performs control surveys for aerial mapping and collects data and develops GIS for utility mapping.  Mr. Rayburn has also performed surveying and mapping for large scale highway projects. |  |   |   |  |  |  |  |
| EDUCATION (Degree, Year, Specialization)  |  |   |   |  |  |  |  |
| A.S. Mechanical Engineering, WV   | and the control of th |   |   |  |  |  |  |
| MEMBERSHIP IN PROFESSIONAL ORGA   | NIZATIONS  | REGISTRATION (Type, Year, Sta           | ate)  |  |  |  |  |
|   |  | Professional Surveyor WV                |   |  |  |  |  |

| 13. PERSONAL HISTORY STATEMENT data but keep to essentials   |                                 | RESPONSIBLE FOR AML PROJECT DI          | ESIGN (Furnish complete                           |  |  |
|--|---------------------------------|---|---|--|--|
| NAME & TITLE (Last, First, Middle  |                                 | YEARS OF EXPERIENCE                     |   |  |  |
| Int.) Scott LeRose, P.E.   | YEARS OF AML DESIGN EXPERIENCE: | YEARS OF AML RELATED DESIGN EXPERIENCE: | YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:    |  |  |
| Brief Explanation of Responsibilities Mr. LeRose is experienced in developing major highway and right of way plans; Bridge Construction Inspections; Core Drilling Operations; Groundwater Sampling/Monitoring; UST Removal/Replacement and Mine Permitting/Reclamation. Specific major highway design and right of way plan development projects include: Meadowbrook Road, a 2 mile design of new four lane highway; US 52(I-73), a 3.5 mile design and ROW plans for a new four lane highway with two major interchanges; design of 2 mile section of Appalachian Corridor H from Davis to Bismark; design of 5.2 mile section of Corridor H from Grant/Hardy County line to Moorefield.  While working on these projects, he has gained experience in major drainage design, site grading design, utility relocation, MOT, signing and pavement stripping. He has performed quantity calculations for pavement, drainage, seeding, pollution control quantities, and other items associated with roadway plans. He is also experienced in the development of ROW plans, including deed plots and legal descriptions. |                                 |   |   |  |  |
| 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 DI          | ESIGN (Furnish complete data                      |  |  |
| NAME & TITLE (Last, First, Middle Int.)  |                                 | YEARS OF EXPERIENCE                     |   |  |  |
| Ray Tilley, P.E.   | YEARS OF AML DESIGN EXPERIENCE: | YEARS OF AML RELATED DESIGN EXPERIENCE: | YEARS OF DOMESTIC WATERLINE<br>DESIGN EXPERIENCE: |  |  |
|  |                                 | 5                                       | 31  |  |  |
| Brief Explanation of Responsibilities Mr. Tilley has over 30 years experience in water and wastewater design as a Project Manager/Engineer. In addition, Mr. Tilley is a certified Water Plant Operator. Mr. Tilley has successfully completed numerous waterline design projects over his career. His current duties include managing both water and wastewater design projects for ELR.  |                                 |   |   |  |  |
| EDUCATION (Degree, Year, Specialization)  B.S. Civil Engineering/WV Tech 1975; M.S. Sanitary Engineering Virginia Tech, 1976   |                                 |   |   |  |  |
| MEMBERSHIP IN PROFESSIONAL ORGA  | NIZATIONS                       | REGISTRATION (Type, Year, Sta           | ate)  |  |  |
| THE THE THE THE THE THE  | 11 2 2 1 1 VIVO                 | Professional Engineer WV                | 200)  |  |  |

| 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:             | YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:          |  |  |
| Brief Explanation of Responsibi  | lities   |   |   |  |  |
| Mr. Gwinn has experience in construction layout for waterline projects. He performs calculation and permit requirements. He has worked on the Cabell County Water Project and the raw water intake structure for the Fayette Plateau Regional Water Project. He has performed calculations on various AML project.  Mr. Gwinn has designed approach slabs, decks and extensive detailing on several bridge projects.  EDUCATION (Degree, Year, Specialization)  B.S. Civil Engineering/1998/ West Virginia Institute of Technology |  |   |   |  |  |
| MEMBERSHIP IN PROFESSIONAL ORGA  | NIZATIONS  | REGISTRATION (Type, Year, St.                       | ate)  |  |  |
| 13. PERSONAL HISTORY STATEMENT   | OF DDINCIDALS AND ASSOCIATES                                   | DECDONGTED E FOR AMI, DROTTEGE D                    | ESTSN /Flynnigh gomplete date                           |  |  |
| but keep to essentials)  | OI FRINCIPALS AND ASSOCIATES                                   | RESPONSIBLE FOR AND PROCECT D                       | ESIGN (Fullish complete data                            |  |  |
| NAME & TITLE (Last, First, Middle Int.)  |  | YEARS OF EXPERIENCE                                 |   |  |  |
| Brian D. Morton, P.E.  | YEARS OF AML DESIGN EXPERIENCE:                                | YEARS OF AML RELATED DESIGN<br>EXPERIENCE:<br>2     | YEARS OF DOMESTIC WATERLINE<br>DESIGN EXPERIENCE:<br>12 |  |  |
| Brief Explanation of Responsibi  | l<br>lities  |   |   |  |  |
| Mr. Morton has worked on waterl waterline relocation projects i  | ine extension projects in Put<br>nvolving the West Virginia Di | nam and Kanawha County. He a<br>vision of Highways. | lso has completed numerous                              |  |  |
| Mr. Morton has prepared signing culverts and other drainage str specifications, bid documents,   | uctures and highway construct                                  | ion. Also prepared site deve                        | lopment plans,  |  |  |
| EDUCATION (Degree, Year, Specia  | lization)  |   |   |  |  |
| B.S. Civil Engineering/1998  |  |   |   |  |  |
| MEMBERSHIP IN PROFESSIONAL ORGA  | NIZATIONS  | REGISTRATION (Type, Year, St.                       | ate)  |  |  |
|  |  | Professional Engineer WV                            |   |  |  |

| data out keep to essentials<br>NAME & TITLE (Last, First, Middle                                    |   |   |   |  |  |  |
|---|---|---|---|--|--|--|
| arney, Joseph T. P.E.   | YEARS OF AML DESIGN EXPERIENCE:                             |   | YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 36   |  |  |  |
| rief Explanation of Responsibi  | lities  | L   |   |  |  |  |
| and contract administration. H  | He has worked on a variety of roadway, bridge design, hydro | Civil Engineering projects                                | uments, construction inspection<br>including grading, earthwork,<br>anitary sewer and water systems |  |  |  |
| EMBERSHIP IN PROFESSIONAL ORGA  | NIZATIONS   | REGISTRATION (Type, Year,                                 | State)  |  |  |  |
|   |   | Professional Engineer, 19                                 | 76, WV  |  |  |  |
| 3. PERSONAL HISTORY STATEMENT ut keep to essentials)  | OF PRINCIPALS AND ASSOCIATES                                | RESPONSIBLE FOR AML PROJECT                               | T DESIGN (Furnish complete data   |  |  |  |
| AME & TITLE (Last, First, Middle nt.)   |   | YEARS OF EXPERIENCE                                       |   |  |  |  |
| Workman, Gary A., CADD<br>Senior Technician   | YEARS OF AML DESIGN EXPERIENCE:                             | YEARS OF AML RELATED DESIGNATE PROPERTIENCE: 23           | GN YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:   |  |  |  |
| rief Explanation of Responsibi<br>Mr. Workman is responsible for<br>VVDEP/AML projects while employ | CADD design on AML projects,                                | as well as geotechnical so<br>ed on 18 AML projects while | il analysis. He Worked on 44<br>e at E. L. Robinson.  |  |  |  |
| DUCATION (Degree, Year, Specia<br>echnical School/1987/CADD   | lization)   |   |   |  |  |  |
|   |   |   |   |  |  |  |

| 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  |   |   |  |  |
| Mayes, Jason M.   | YEARS OF AML DESIGN EXPERIENCE:  | YEARS OF AML RELATED DESIGN EXPERIENCE:  2  YEARS OF DOMESTIC WATERLING DESIGN EXPERIENCE: 2                                    |   |  |  |
| Brief Explanation of Responsibi   | lities   |   |   |  |  |
| Provides CADD Design for site d<br>Nearly ten years experience in   | WV DOT design with a prior fi  | er extensions, and layout on A  | AML Projects. Mr. Mayes has   |  |  |
| B.S. Industrial Technology 1997<br>A.S. Drafting and Design 1996 W  | WVU Tech<br>VU Tech  |   |   |  |  |
| MEMBERSHIP IN PROFESSIONAL ORGA   |  | REGISTRATION (Type, Year, Sta   | ate)  |  |  |
|   |  |   |   |  |  |
| 13. PERSONAL HISTORY STATEMENT but keep to essentials)  | OF PRINCIPALS AND ASSOCIATES 1   | RESPONSIBLE FOR AML PROJECT DE  | ESIGN (Furnish complete data  |  |  |
| 13. PERSONAL HISTORY STATEMENT but keep to essentials)  NAME & TITLE (Last, First, Middle Int.)   |  | YEARS OF EXPERIENCE   | ESIGN (Furnish complete data  |  |  |
| but keep to essentials) NAME & TITLE (Last, First, Middle   | OF PRINCIPALS AND ASSOCIATES I YEARS OF AML DESIGN EXPERIENCE:   |   | YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:  |  |  |
| but keep to essentials)  NAME & TITLE (Last, First, Middle Int.)  | YEARS OF AML DESIGN  | YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN   | YEARS OF DOMESTIC WATERLINE   |  |  |
| but keep to essentials)  NAME & TITLE (Last, First, Middle Int.)  | YEARS OF AML DESIGN<br>EXPERIENCE:   | YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE:   | YEARS OF DOMESTIC WATERLINE   |  |  |
| but keep to essentials)  NAME & TITLE (Last, First, Middle Int.)  Scott A. Pratt  Brief Explanation of Responsibi  Mr. Pratt has extensive experie samples, and obtaining water le experienced in mine map researce | YEARS OF AML DESIGN EXPERIENCE:  13  lities  nce as a Field Geologist, per: vels. He has also performed many that is a performed many that is a period of the control of th | YEARS OF EXPERIENCE  YEARS OF AML RELATED DESIGN EXPERIENCE:  13  forming test boring over-sight any geotechnical soil tests in | YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:  t, logging soil and core the laboratory. He is also |  |  |
| but keep to essentials)  NAME & TITLE (Last, First, Middle Int.)  Scott A. Pratt  Brief Explanation of Responsibi  Mr. Pratt has extensive experie samples, and obtaining water le                                  | YEARS OF AML DESIGN EXPERIENCE:  13  lities  nce as a Field Geologist, per: vels. He has also performed ma h, specification writing, and lization)  iversity   | YEARS OF EXPERIENCE  YEARS OF AML RELATED DESIGN EXPERIENCE:  13  forming test boring over-sight any geotechnical soil tests in | YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:  t, logging soil and core the laboratory. He is also |  |  |

| 14. PROVEDE A LIST OF SOFTWARE AND EQUIPMENT AVAILABLE IN THE 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. |
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| PROJECT NAME, TYPE AND LOCATION         | NAME AND ADDRESS OF<br>OWNER                         | NATURE OF YOUR FIRM'S RESPONSIBILITY     | ESTIMATED CONSTRUCTION COST | PERCENT COMPLETE |  |
|---|--|--|-----------------------------|------------------|--|
| Abney Refuse Piles<br>Raleigh County    | WVDEP/AML&R  | Surveying, Mapping and<br>Design         | \$885,575                   | 98               |  |
| Milam Ridge Refuse<br>Wyoming County    | WVDEP/AML&R  | Surveying, Mapping and Design            | \$595,000                   | 90               |  |
| Vest Columbia B<br>Mason County         | WVDEP/AML&R  | Surveying, Mapping and Design            | \$1,365,9950                | 90               |  |
| Cartright Branch<br>Logan County        | WVDEP/AML&R  | Surveying, Mapping and Design            | \$242,550                   | 100              |  |
| Marsh Fork Water<br>Extension           | Logan County PSD<br>41 Armory Rd.<br>Logan, WV 25601 | Design and<br>Construction<br>Management | \$2.9 M                     | 10               |  |
| Big Ugly Creek<br>Waterline Extension   | Logan County PSD<br>41 Armory Rd.<br>Logan, WV 25601 | Design and<br>Construction<br>Management | \$11 M                      | 20               |  |
| Phase III-A Sanitary<br>Sewer Extension | Logan County PSD<br>41 Armory Rd.<br>Logan, WV 25601 | Design and<br>Construction<br>Management | \$ 9 M                      | 10               |  |

| PROJECT NAME, TYPE AND LOCATION   | OWNER   | NATURE OF YOUR FIRM'S RESPONSIBILITY     | ESTIMATED CONSTRUCTION COST | PERCENT COMPLETE |
|---|---|--|-----------------------------|------------------|
| nese Waterline Danese Public Service Design and Construction Management |   | \$6.0 M                                  | 85                          |                  |
| Lower Mud River<br>Waterline Extension                                  | Lincoln County PSD<br>240 Lower Coal River<br>Rd.<br>Alum Creek, WV 25003 | Design and<br>Construction<br>Management | \$ 7.9 M                    | 65               |
| McDowell PSD Jolo<br>Phase II Water<br>McDowell County                  | McDowell Public<br>Service District                                       | Design and<br>Construction<br>Management | \$4.0 M                     | 85               |
| Dille/Widen Water<br>Extension<br>Clay County                           | Birch River PSD   | Design and<br>Construction<br>Management | \$4.0 M                     | 85               |
| Outch Ridge/Sanderson<br>Water Extension,<br>Kanawha County             | Kanawha County RDA  | Design and<br>Construction<br>Management | \$2.5 M                     | 85               |
| Lavalette PSD Nestlowe<br>Water Phase 2                                 | Lavalette PSD<br>5308 Route 152<br>Lavalette, WV 25535                    | Design and<br>Construction<br>Management | \$4.7 M                     | 98%              |
| Iaeger Regional Sewer<br>Project  | McDowell County PSD<br>HC 31 Box 436J<br>Welch, WV                        | Design and<br>Construction<br>Management | \$5 M                       | 40               |

| 16. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A SUB-CONSULTANT TO OTHERS |                                   |                              |                           |                             |                              |  |
|--|-----------------------------------|------------------------------|---------------------------|-----------------------------|------------------------------|--|
| PROJECT NAME, TYPE<br>AND LOCATION   | NATURE OF FIRMS<br>RESPONSIBILITY | NAME AND ADDRESS<br>OF OWNER | ESTIMATED COMPLETION DATE | ESTIMATED CONSTRUCTION COST |                              |  |
|  |                                   |                              |                           | ENTIRE PROJECT              | YOUR FIRMS<br>RESPONSIBILITY |  |
|  |                                   |                              |                           |                             |                              |  |
|  |                                   |                              |                           |                             |                              |  |
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|  |                                   |                              |                           |                             |                              |  |
|  |                                   |                              |                           |                             |                              |  |

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

| 18. ( LETED WORK WOF WORK FOR WHI   | VITHIN LAST 5 YEARS ON WHI<br>CCH YOUR FIRM WAS RESPONSI                        | ICH YOUR FIF (AS BEEN A SUB-CONIBLE)                  | NSULTANT | TO OTHER FIRMS             | (INDICA) HASE               |  |
|---|---|---|----------|----------------------------|-----------------------------|--|
| PROJECT NAME, TYPE AND LOCATION   | NAME AND ADDRESS<br>OF OWNER  | ESTIMATED CONSTRUCTION COST<br>OF YOUR FIRM'S PORTION | YEAR     | CONSTRUCTED<br>(YES OR NO) | FIRM ASSOCIATED WITH        |  |
| Appalachian Corridor<br>D Blennerhassett<br>Island Bridge<br>X354-D-0.00  | Sub to Michael Baker,<br>Jr., Inc.<br>Post Design Services                      | \$7,500,000   | 2008     | Yes                        | Michael Baker, Jr.,<br>Inc. |  |
| Appalachian Corridor H<br>Section 6<br>X316-H-100.40  | Sub to Michael Baker Jr., Inc. Surveying, ROW questionnaires, Hydraulic Studies | \$950,000   | 2008     | Yes                        | Michael Baker, Jr.,<br>Inc. |  |
| Appalachian Corridor H<br>Section 3<br>Davis to Bismark   | Sub to Modjeski & Masters<br>Survey, Geotech & ROW<br>Plans                     | \$9,000,000   | 2008     | No                         | Modjeski & Masters          |  |
| Robinson Creek<br>Bridge<br>S303-85-27.81<br>Boone County   | Sub to EDG Roadway, Surveying, Structures, Hydraulic Studies, ROW Plans         | \$1,000,000   | 2008     | Yes                        | EDG                         |  |
| Holley Grove Bridge<br>Kanawha County   | Sub to Triton Construction Plans for Bridge, Hydraulics, Post Design            | \$500,000   | 2010     | Yes                        | Triton<br>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 <u>committed</u> 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: Reference Printed Name: Richard   | of W. Walls   | Title: PROJECT MANAG                                  |          | Date:<br>January 10, 20    | 13                          |  |



Project: Glen Rogers Emergency

Wyoming County, WV 2012

Year:

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

Hent: 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 December 2005

Year: December 200 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.



Project:

Ron Bobar Subsidence

Year:

Flushing, OH 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 WVDEP-AML

Client: **Description:** 

Performed surveying, drilling and site design for refuse

regarding project.

Project:

Chapmanville (Gorby) Mine Blowout

Logan County, WV

Year:

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 September 2001

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 September 2001

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

Harrison County, WV

Year: September 1999
Client: WVDEP-AML

**Description:** Performed surveying and design for regraded landslide area.

Project: Fickey Run

Preston County, WV
Year: September 1999
Client: 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 Geolechnical 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 Geolechnical 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 Geotechnical 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

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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. Computer modeling was prepared using the USACE 1-D HEC-2

program and the FHWA WSPRO program.



# Aerial Photography and ontour 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 ontour 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' x 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





## 13 = KEYPERSONNEL

## 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,





## KEYMPERSONNE!

## 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 Scanning, Photogrammetric 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.





## KEYABERSONNEL

#### **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.





## 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 the 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                               | XIX                                   |                                 |                      |                                     |                     |  |                                     | Attach                   | ment "                 | C"  |                                   |                 | -32-1-11                    |                    |                        |                   | 37             |                        |                       | 0100             |                           |                       |
|--|--|---|---------------------------------------|---------------------------------|----------------------|-------------------------------------|---------------------|--|-------------------------------------|--------------------------|------------------------|---|-----------------------------------|-----------------|-----------------------------|--------------------|------------------------|-------------------|----------------|------------------------|-----------------------|------------------|---------------------------|-----------------------|
|  |  |   |                                       |                                 |                      |                                     |                     |  |                                     |                          |                        |   |                                   | 11/2            |                             |                    |                        |                   | Prima          | - 2                    | iff Par               | 2000             | tion                      |                       |
|  |  |   |                                       |                                 |                      |                                     | PROJE               | CTEX   | PERIEN                              | ICE                      |                        |   | =                                 |                 |                             |                    |                        |                   |                | 1                      | A-Mngm                | t                | 100                       |                       |
| PROJECT  | Experience<br>Basis<br>Corporate-C<br>Personal-P | Additional<br>Information<br>in Section | Abandoned Surface Mine<br>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/Managemen | 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<br>Rhodell Refuse & Portals                 | C  | YES<br>YES                              |                                       | X                               | X                    | X                                   | _                   |  |                                     |                          | X                      | -   |                                   |                 |                             | X                  | X                      | M                 | P              |                        | P                     | P                | -                         | -                     |
| Gilmer B Sites 3-8   | Č  | YES                                     | _                                     | x                               | x                    | x                                   | _                   | _  | -                                   |                          | X                      |   |                                   |                 |                             | x                  | x                      | M                 | P              | -                      | P                     | P                |                           | $\overline{}$         |
| Creek Waterline Feasibility                                      | c  | YES                                     |                                       |                                 |                      |                                     |                     |  |                                     |                          |                        | ×   |                                   |                 |                             |                    |                        | м                 | Р              |                        | Р                     | Р                |                           | ヿ                     |
| Camp Creek Waterline<br>Feasibility Study                        | С  | YES                                     |                                       |                                 |                      |                                     |                     |  |                                     |                          |                        | x   |                                   |                 |                             |                    |                        | м                 | Р              |                        | Р                     | Р                |                           | $\neg$                |
| Lick Creek Waterline<br>Feasibility Study                        | С  | YES                                     |                                       |                                 |                      |                                     |                     |  |                                     |                          |                        | ×   |                                   |                 |                             |                    |                        | М                 | Р              |                        | Р                     | Р                |                           |                       |
| Ragland Waterline Feasibility<br>Study                           | С  | YES                                     |                                       |                                 |                      |                                     |                     |  |                                     |                          |                        | х   |                                   |                 |                             |                    |                        | м                 | Р              |                        | Р                     | Р                |                           | $\neg$                |
| Beech Creek and Ben II<br>Waterline Feasibility Study            | С  | YES                                     |                                       |                                 |                      |                                     |                     |  |                                     |                          |                        | х   |                                   |                 |                             |                    |                        | М                 | Р              |                        | Р                     | Р                |                           | $\Box$                |
| Dingess Waterline Feasibility<br>Study                           | С  | YES                                     |                                       |                                 |                      |                                     |                     |  |                                     |                          |                        | х   |                                   |                 |                             |                    |                        | М                 | Р              |                        | Р                     | Р                |                           |                       |
| Sharon Heights Waterline<br>Feasibility Study                    | С  | YES                                     |                                       |                                 |                      |                                     |                     |  |                                     |                          |                        | ×   |                                   |                 |                             |                    |                        | М                 | Р              |                        | Р                     |                  |                           | $\Box$                |
| Amhestdale Water Feasibility                                     | С  | YES                                     |                                       |                                 |                      |                                     |                     |  |                                     |                          |                        | Х   |                                   |                 |                             |                    |                        | М                 | Р              |                        | Р                     | Р                |                           |                       |
| Mercer County Commission   | С  | YES                                     |                                       |                                 |                      |                                     |                     |  |                                     |                          |                        | X   |                                   |                 |                             |                    |                        | М                 | Р              |                        | Р                     | Р                |                           |                       |
| Danese PSD Waterline   | С  | YES                                     |                                       |                                 |                      |                                     |                     |  |                                     |                          |                        | X   |                                   |                 |                             |                    |                        | М                 | Р              |                        | Р                     | Р                |                           | _                     |
| New Haven Waterline  | С  | YES                                     |                                       |                                 |                      |                                     |                     |  |                                     |                          |                        | X   |                                   |                 |                             |                    |                        | М                 | Р              |                        | Р                     | Р                |                           | _                     |
| Nubbin Ridge/Camp Creek<br>Waterline Feasibility Study           | С  | YES                                     |                                       |                                 |                      |                                     |                     |  |                                     |                          |                        | ×   |                                   |                 |                             |                    |                        | М                 | Р              |                        | Р                     |                  |                           |                       |
| Bramwell Hill Waterline<br>Feasibility Study                     | С  | YES                                     |                                       |                                 |                      |                                     |                     |  |                                     |                          |                        | X   |                                   |                 |                             |                    |                        | М                 | Р              |                        | Р                     | Р                |                           | $\Box$                |
| Coaldale and Coaldale<br>Mountain Waterline Feasibility<br>Study | С  | YES                                     |                                       |                                 |                      |                                     |                     |  |                                     |                          |                        | х   |                                   |                 |                             |                    |                        | М                 | Р              |                        | Р                     | Р                |                           |                       |
| Jennie Creek Waterline<br>Feasibility Study                      | С  | YES                                     |                                       |                                 |                      |                                     |                     |  |                                     |                          |                        | ×   |                                   |                 |                             |                    |                        | М                 | Р              |                        | Р                     |                  |                           |                       |
| Beech Creek and Ben Areas<br>Waterline Feasibility Study         | С  | YES                                     |                                       |                                 |                      |                                     |                     |  |                                     |                          |                        | х   |                                   |                 |                             |                    |                        | М                 | Р              |                        | Р                     | Р                |                           |                       |
| Blair/Sharples Area Waterline<br>Feasibility Study               | L .  | YES                                     |                                       |                                 |                      |                                     |                     |  |                                     |                          |                        | ×   |                                   |                 |                             |                    |                        | М                 | Р              |                        | Р                     | Р                |                           |                       |
| Brown's Creek #10  | С  | YES                                     | X                                     | X                               | X                    | X                                   | X                   |  |                                     |                          | X                      |   |                                   | -               | X                           | X                  | X                      | M                 | Р              |                        |                       |                  | -                         | -                     |
| Bull Run #35   | С  | YES                                     | Х                                     | X                               | X                    | X                                   | X                   | -  |                                     |                          | X                      | X   |                                   | X               | Х                           | X                  | X                      | M                 | P              |                        |                       | P                | -                         | -                     |
| Seccuro Mine Drainage  | C  | YES<br>YES                              | - v                                   | X                               | X                    | X                                   | - V                 | -  | -                                   |                          | X                      | - V   |                                   | - V             | _                           | - V                |                        | M                 | P              | <b>-</b>               | -                     | P                | $\rightarrow$             | $\dashv$              |
| Fickey Run<br>Ven's Run  | C  | YES                                     | X                                     | X                               | ×                    | X                                   | ×                   |  |                                     | -                        | X                      | X   |                                   | ×               | -                           | X                  | X                      | M                 | P              |                        |                       | P                | $\rightarrow$             | $\dashv$              |
| Bull Run #27   | C  | YES                                     | X                                     | ×                               | X                    | X                                   | ×                   |  |                                     |                          | X                      | ×   |                                   | ×               |                             | X                  | ×                      | M                 | P              |                        | Р                     | P                |                           | -                     |
| Riffe Branch   | c  | YES                                     | x                                     | ×                               | X                    | X                                   | ×                   | <del>                                     </del> |                                     |                          | X                      | <u> </u>  |                                   | _^              |                             | x                  | x                      | M                 | P              |                        | - F                   | P                | -                         |                       |
| Hot Coal   | Č  | YES                                     | _^                                    | x                               | x                    | x                                   | x                   |  |                                     |                          | x                      |   |                                   |                 | 5                           | x                  | x                      | M                 | P              |                        | Р                     | Р                |                           | $\neg$                |
| Minden Refuse Pile   | č  | YES                                     |                                       | x                               |                      | x                                   | _^                  |  |                                     | 7                        | x                      |   |                                   |                 |                             | x                  |                        | M                 | P              |                        | P                     | P                | -                         | -                     |
| Jeffrey Mine Complex   | Č  | YES                                     |                                       | X                               | X                    | X                                   | X                   |  |                                     |                          | X                      |   |                                   |                 |                             |                    | X                      | M                 | Р              |                        | Р                     | Р                |                           | -                     |
| Pigeon Creek Waterline   | C  | YES                                     |                                       |                                 |                      | X                                   |                     |  |                                     |                          | X                      | X   | X                                 |                 |                             |                    |                        | М                 | Р              |                        |                       | Р                |                           |                       |
| Red Jacket, Matewan,<br>Newtown Waterline                        | С  | YES                                     |                                       |                                 |                      | ×                                   |                     |  |                                     |                          | ×                      | ×   |                                   |                 |                             |                    |                        | М                 | Р              |                        | Р                     | Р                |                           |                       |
| Marrowbone Waterline   | С  | YES                                     |                                       |                                 |                      | X                                   |                     |  |                                     |                          | X                      | X   | X                                 |                 |                             |                    |                        | М                 | P              |                        | Р                     | Р                |                           |                       |
| Mount Zion Waterline   | С  | YES                                     |                                       |                                 |                      | X                                   |                     |  |                                     |                          | X                      | X   |                                   |                 |                             |                    |                        | М                 | P              |                        | Р                     | Р                |                           |                       |

| AML and RELATED PRO                               | JECT EXPERI                                      | ENCE MATE                               | XIX                                   |                                 | 10.11                |                                     | -                   |                            |                                     | Attach                   | ment "                 | C"  | 12/1/2                             |                 | e , , , , , ,                                    | -                  |                        |                   | - 10.00        |                        | PEV                   |                  | -                         |                       |
|---|--|---|---------------------------------------|---------------------------------|----------------------|-------------------------------------|---------------------|----------------------------|-------------------------------------|--------------------------|------------------------|---|------------------------------------|-----------------|--|--------------------|------------------------|-------------------|----------------|------------------------|-----------------------|------------------|---------------------------|-----------------------|
|   |  |   | HIR                                   |                                 |                      |                                     | 222                 | -07.54                     |                                     |                          |                        |   |                                    |                 |  | Too Is             |                        |                   | Prim           | -                      | aff Par               | 11000            | tion                      |                       |
| 10 4 2 2 2 1                                      |  |   |                                       | -                               |                      |                                     | PROJ                | CTEX                       | PERIEN                              | NCE                      |                        |   | -                                  |                 |  |                    |                        |                   |                |                        | M-Mngn                | nt I             |                           |                       |
| PROJECT   | Experience<br>Basis<br>Corporate-C<br>Personal-P | Additional<br>Information<br>in Section | Abandoned Surface Mine<br>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 |
| Coopers Rock, Pisgah, and<br>Laurel Run Waterline | С  | YES                                     |                                       |                                 |                      | ×                                   |                     |                            |                                     |                          | ×                      | ×   |                                    |                 |  |                    |                        | М                 | Р              |                        | Р                     | Р                |                           |                       |
| Davis Water Tank                                  | С  | YES                                     |                                       |                                 |                      | X                                   |                     |                            |                                     |                          | X                      | Х   |                                    |                 |  |                    |                        | М                 | P              |                        | Р                     | Р                |                           |                       |
| Whittington Hill (Walker)Slide                    | С  | YES                                     |                                       | ×                               | X                    | ×                                   |                     |                            |                                     |                          | ×                      |   |                                    |                 |  |                    | ×                      | М                 | Р              |                        |                       |                  |                           |                       |
| Maidsville Landslide                              | С  | YES                                     | Х                                     |                                 |                      |                                     |                     |                            |                                     |                          | ×                      |   |                                    |                 |  |                    | ×                      | М                 | Р              |                        | Р                     | Р                |                           |                       |
| Rich Fork Landslide                               | С  | YES                                     | X                                     | X                               |                      |                                     |                     |                            |                                     |                          | X                      |   |                                    |                 |  |                    | Х                      | M                 | Р              |                        | Р                     | Р                |                           |                       |
| Tupppers Creek Landslide                          | С  | YES                                     | Х                                     | X                               |                      |                                     |                     |                            |                                     |                          | X                      |   |                                    |                 |  |                    | X                      | M                 | Р              |                        | Р                     | Р                |                           |                       |
| Glen Rogers Waterline<br>Gooney Otter Refuse      | C  | YES<br>YES                              | Х                                     | ×                               | X                    | X                                   | X                   |                            |                                     |                          | X                      | X   |                                    |                 |  |                    |                        | M                 | P              |                        | Р                     | P                | _                         | -                     |
| Chapmanville Mine Blowout                         | Č  | YES                                     | _^                                    | ^                               | ^                    | _^                                  | _ ^                 |                            |                                     |                          | _ ^                    |   |                                    |                 | -  |                    | X                      | M                 | P              |                        | α α                   | P                |                           | -                     |
| Charleston Romeo Landslide                        | č  | YES                                     |                                       | X                               | Х                    | X                                   |                     |                            |                                     | _                        | X                      | _   |                                    |                 |  |                    | ×                      | M                 | P              |                        | P                     | P                |                           | -                     |
| Big Creek C Refuse                                | С  | YES                                     |                                       | X                               |                      |                                     |                     |                            |                                     |                          |                        |   |                                    |                 |  |                    | X                      | M                 | P              |                        | P                     | P                |                           | $\neg$                |
| North Matewan Sipple                              | С  | YES                                     |                                       | X                               | X                    | X                                   |                     |                            |                                     |                          | X                      |   |                                    |                 |  |                    | X                      | М                 | Р              |                        | Р                     | Р                |                           |                       |
| Moran Subsidence                                  | С  | YES                                     |                                       | X                               |                      |                                     |                     |                            | X                                   |                          | X                      |   |                                    |                 |  |                    |                        | М                 | Р              |                        | Р                     | Р                |                           |                       |
| Lewis Landslide                                   | С  | YES                                     |                                       | X                               |                      | X                                   |                     |                            |                                     |                          | X                      |   | X                                  |                 |  |                    | X                      | M                 | Р              |                        | Р                     | Р                |                           |                       |
| Roush Landslide                                   | С  | YES                                     |                                       | X                               |                      | X                                   |                     |                            |                                     |                          | X                      | _   | X                                  |                 |  |                    | X                      | M                 | Р              |                        | Р                     | Р                |                           |                       |
| Jefferson 26 Landslide<br>Titus Road Landslide    | C  | YES<br>YES                              | X                                     | X                               |                      | X                                   |                     |                            | -                                   |                          | X                      | -   |                                    |                 | _  |                    | X                      | M                 | P              |                        | Р                     | Р                | _                         | -                     |
| Imboden Landslide                                 | C  | YES                                     | X                                     | X                               |                      | _^_                                 |                     |                            | -                                   |                          | _ X                    |   |                                    |                 |  |                    | X                      | M                 | P              |                        | Ω Ω                   | P                | _                         | -                     |
| Baisden Subsidence                                | č  | YES                                     | ^                                     | X                               |                      |                                     |                     |                            | ×                                   |                          |                        | -   |                                    |                 |  |                    | _^                     | M                 | P              |                        | P                     | P                |                           | $\overline{}$         |
| Parsons Landslide                                 | C  | YES                                     |                                       | X                               |                      |                                     |                     |                            |                                     |                          |                        |   |                                    |                 |  |                    | X                      | M                 | P              |                        | P                     | P                | _                         | $\neg$                |
| Treadway Landslide                                | С  | YES                                     | Х                                     | Х                               |                      | Х                                   |                     |                            |                                     |                          | Х                      |   |                                    |                 |  |                    | X                      | М                 | P              |                        | P                     | Р                |                           |                       |
| Phalen Landslide                                  | С  | YES                                     |                                       | X                               |                      | X                                   |                     |                            |                                     |                          | X                      |   |                                    |                 |  |                    | X                      | М                 | P              |                        | Р                     | Р                |                           |                       |
| Adkins Landslide                                  | С  | YES                                     | X                                     | X                               |                      | X                                   |                     |                            |                                     |                          | X                      |   |                                    |                 |  |                    | X                      | M                 | P              | 1                      | Р                     | Р                |                           |                       |
| Goetz Subsidence                                  | С  | YES                                     |                                       | X                               |                      |                                     |                     |                            | X                                   |                          |                        |   |                                    |                 |  |                    |                        | M                 |                |                        |                       | Р                |                           |                       |
| Lavender Refuse Fire                              | C  | YES                                     |                                       | X                               |                      |                                     |                     | X                          |                                     |                          | X                      |   | X                                  |                 |  |                    |                        | M                 |                |                        |                       | Р                |                           | -                     |
| Cox Refus Fire Toney Fork Landslide               | C  | YES<br>YES                              |                                       | X                               |                      | X                                   |                     | ×                          |                                     |                          | X                      |   | X                                  |                 | -  | _                  | -                      | M                 | Р              |                        |                       | Р                |                           |                       |
| Athens Rt. 13 Refuse Fire                         | C  | YES                                     |                                       | X                               |                      | _ ^                                 |                     | X                          |                                     |                          | X                      |   | X                                  | -               |  |                    | _                      | M                 | P              |                        | Р                     | P                | _                         |                       |
| McAdams Subsidenc Ermer                           | č  | YES                                     |                                       | x                               |                      |                                     |                     | ^                          | X                                   |                          | x                      |   | ^                                  |                 |  |                    |                        | M                 |                |                        |                       | P                |                           | $\vdash$              |
| Rodgers Subsidence                                | Č  | YES                                     |                                       | X                               |                      |                                     |                     |                            | ×                                   |                          | ×                      |   | ×                                  |                 | _  |                    | _                      | M                 | $\vdash$       |                        |                       | P                |                           | $\vdash$              |
| Brown Landslide                                   | С  | YES                                     |                                       | X                               |                      | X                                   |                     |                            |                                     |                          | X                      |   |                                    |                 |  |                    |                        | M                 | Р              |                        | Р                     | P                |                           |                       |
| Town Run  | Р  | NO                                      |                                       |                                 |                      |                                     |                     |                            |                                     |                          |                        | X   |                                    |                 |  |                    |                        |                   |                |                        |                       |                  |                           |                       |
| Witcher Creek                                     | Р  | NO                                      |                                       |                                 |                      |                                     |                     |                            |                                     |                          |                        | X   | ·                                  |                 |  |                    |                        |                   |                |                        |                       |                  |                           |                       |
| Pond Gap, Hitop & Spangler                        | Р  | NO                                      |                                       |                                 |                      |                                     |                     |                            |                                     |                          |                        | X   |                                    |                 |  |                    |                        |                   |                |                        |                       |                  |                           |                       |
| Elk City  | Р  | NO                                      |                                       |                                 |                      | 227                                 |                     |                            | -                                   |                          |                        | X   |                                    |                 | -  | 20                 |                        | _                 | 200            |                        |                       | $\vdash$         |                           | -                     |
| Little Fork Refuse Pile                           | Р  |   |                                       | X                               |                      | ×                                   | ×                   | ×                          |                                     |                          |                        |   |                                    |                 |  | X                  | X                      |                   | Р              |                        |                       |                  |                           |                       |
| OSM-Tackett Fork                                  | Р  |   | X                                     | X                               | X                    | X                                   |                     |                            |                                     |                          |                        |   |                                    |                 |  |                    | X                      |                   | E              | Р                      |                       |                  |                           |                       |
| OSM-Ironton                                       | P  |   |                                       | X                               |                      | X                                   |                     |                            |                                     |                          |                        |   |                                    |                 |  |                    | X                      |                   | P              | _                      |                       | $\Box$           |                           | $\square$             |
| OSM-Williamson LS<br>OSM-Ray Landslide            | P  | -                                       |                                       | X                               |                      | X                                   |                     |                            |                                     |                          |                        | -   | X                                  |                 |  | _                  | X                      | _                 | P              | 2                      |                       | $\vdash$         |                           |                       |
| OSM-Spence Landslide                              | P  |   |                                       | X                               |                      | ×                                   |                     |                            | _                                   |                          | -                      |   |                                    | _               | 1  |                    | X                      | -                 | P              | D                      |                       |                  | 17.00                     |                       |
| OSM-Ratliff Landslide                             | P  |   | _                                     | x                               |                      | ×                                   |                     | -                          | -                                   |                          |                        | -   |                                    | _               | <del>                                     </del> |                    | X                      | _                 | P              | P                      |                       | $\vdash$         | _                         | $\rightarrow$         |
| OSM-Pigeon Roost LS                               | P  |   |                                       | X                               |                      | x                                   |                     |                            |                                     |                          |                        |   |                                    |                 |  |                    | x                      |                   | P              | P                      |                       | $\vdash$         |                           | -                     |
| OSM-Oak Hill Subsidence                           | Р  |   |                                       | X                               | X                    | X                                   |                     |                            | X                                   |                          | X                      |   |                                    |                 |  |                    | X                      |                   |                | P                      |                       | $\vdash$         |                           | $\neg$                |
| OSM-Little Prater Creek                           | Р  |   |                                       | X                               |                      | X                                   |                     |                            |                                     |                          |                        |   |                                    |                 |  |                    |                        |                   |                | P                      |                       |                  |                           |                       |
| OSM-Hamilton II Landslide                         | Р  |   |                                       | X                               |                      | X                                   |                     |                            |                                     |                          |                        |   |                                    |                 |  |                    | X                      |                   |                | Р                      |                       |                  |                           |                       |
| Tuppers Creek B                                   | Р  |   | X                                     | X                               | X                    | X                                   |                     |                            |                                     |                          |                        |   |                                    |                 |  |                    | X                      |                   | Р              | Р                      |                       |                  |                           |                       |

| AML and RELATED PRO                  | JECT EXPERI                                      | ENCE MATE                               | RIX                                   | 554                             | History.             |                                     |                     | 4175                       |                                     | Attach                   | ment "                 | C"  |                                      | 7 3 7           |                             |                    |                        |                   |                |                        |                       | TI'V             |                           |                       |
|--------------------------------------|--|---|---------------------------------------|---------------------------------|----------------------|-------------------------------------|---------------------|----------------------------|-------------------------------------|--------------------------|------------------------|---|--------------------------------------|-----------------|-----------------------------|--------------------|------------------------|-------------------|----------------|------------------------|-----------------------|------------------|---------------------------|-----------------------|
|                                      |  |   | PROJECT EXPERIENCE                    |                                 |                      |                                     |                     |                            |                                     |                          |                        |   | Primary Staff Participation  M-Mngmt |                 |                             |                    |                        |                   |                |                        |                       |                  |                           |                       |
| PROJECT                              | Experience<br>Basis<br>Corporate-C<br>Personal-P | Additional<br>Information<br>in Section | Abandoned Surface Mine<br>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<br>Leslie (Nelson)  | P  | 2002                                    | Х                                     | X                               | X                    | X                                   | X                   |                            |                                     |                          | -                      | -   | V                                    |                 |                             |                    | Х                      |                   | Р              | P                      |                       |                  | D                         |                       |
| Swiss Drennan                        | P  | 2002                                    | Α                                     | _ X                             | X                    | _ X                                 | X                   |                            |                                     | -                        | X                      | X   | Х                                    | _               | -                           |                    |                        |                   | -              | P                      |                       | -                | P                         | P                     |
| Minden C                             | P  | 2002                                    | X                                     | ×                               | ×                    | ×                                   | ×                   |                            |                                     | ×                        | ×                      | _^  |                                      |                 | Х                           |                    |                        |                   |                | P                      |                       |                  | P                         | P                     |
| Weston                               | Р  | 2002                                    |                                       |                                 |                      |                                     |                     |                            |                                     |                          |                        | Х   |                                      |                 |                             |                    |                        |                   |                | Р                      |                       | -                | P                         | P                     |
| Parkette                             | Р  | 2002                                    |                                       |                                 |                      |                                     |                     |                            | X                                   |                          |                        | Х   |                                      |                 |                             |                    | Х                      |                   |                | Р                      |                       |                  | Р                         | Р                     |
| East Dupont Avenue Landslide         | P  | 2003<br>2003                            |                                       | X                               | X                    | X                                   |                     |                            |                                     |                          | X                      |   |                                      |                 |                             |                    | X                      |                   |                | Р                      |                       |                  |                           | Р                     |
| Skin Creek Phase II<br>Witcher Creek | P  | 2003                                    | X                                     | X                               | X                    | X                                   |                     |                            | -                                   | _                        | X                      |   | X                                    |                 | Х                           | X                  | X                      | -                 |                | P                      |                       |                  | <u>α</u> α                | P                     |
| Crane Creek                          | P  | 2004                                    | X                                     | _^_                             | ×                    | - x                                 | ×                   |                            | -                                   |                          | ×                      | ×   | X                                    | _               |                             | ×                  | X                      |                   |                | P                      |                       |                  | #100 P                    | P                     |
| Yoursco                              | Р  | 2004                                    | X                                     | X                               | X                    | _ ^                                 | _ ^                 |                            |                                     |                          | _^                     | Ŷ   |                                      |                 | -                           | _^                 | _^                     |                   | -              | P                      |                       |                  |                           | P                     |
| Carswell                             | Р  | 2004                                    | X                                     |                                 |                      | X                                   | X                   |                            |                                     |                          | X                      |   | X                                    |                 | Х                           | X                  | ×                      |                   |                | P                      |                       |                  | P                         | P                     |
| Craigmoor                            | Р  | 2004                                    |                                       |                                 |                      | X                                   |                     |                            |                                     |                          | X                      |   | X                                    |                 |                             |                    | X                      |                   |                | P                      |                       |                  | Р                         | Р                     |
| Downey Pierpont                      | Р  | 2006                                    |                                       |                                 |                      |                                     |                     |                            | X                                   |                          |                        |   |                                      |                 |                             |                    | X                      |                   |                | P                      |                       |                  | Р                         | Р                     |
| Ames (Clare) Landslide               | P  | 2007<br>1995                            | X                                     | X                               |                      |                                     |                     |                            |                                     |                          | X                      |   |                                      |                 |                             |                    | X                      |                   |                | Р                      |                       |                  | Р                         | Р                     |
| Lorado<br>Madeline Refuse            | P  | 1995                                    | X                                     | X                               | X                    | X                                   | X                   |                            |                                     | X                        | X                      | Х   |                                      |                 | X                           |                    | X                      | -                 |                | P                      |                       | $\vdash$         |                           | P                     |
| Rocklick                             | P  | 1995                                    | x                                     | x                               | x                    | x                                   | _^                  |                            |                                     | ^                        | x                      |   |                                      |                 | ^                           | Х                  | ×                      | -                 | _              | P                      | -                     | $\vdash$         |                           | P                     |
| Wahoo                                | P  | 1996                                    | X                                     |                                 |                      | X                                   | ×                   | ×                          |                                     |                          | x                      |   |                                      |                 | Х                           |                    | x                      | _                 | _              | P                      |                       |                  |                           | P                     |
| Meadowbrook                          | Р  | 1996                                    | X                                     | Х                               | X                    | X                                   | X                   |                            |                                     |                          | X                      | X   |                                      |                 | X                           |                    | X                      |                   |                | P                      |                       |                  |                           | P                     |
| Jumping Branch                       | Р  | 1996                                    |                                       |                                 |                      |                                     |                     |                            |                                     |                          |                        | X   |                                      |                 |                             |                    |                        |                   |                | P                      |                       |                  |                           | Р                     |
| Beard's Fork                         | Р  | 1997                                    | X                                     | X                               | X                    | X                                   | X                   | Х                          |                                     | Х                        | X                      |   |                                      |                 | Х                           |                    |                        |                   |                | Р                      |                       |                  |                           | Р                     |
| Turkey Wallow                        | Р  | 1997                                    | X                                     | X                               | X                    | X                                   | X                   | X                          |                                     |                          | X                      |   |                                      |                 |                             |                    | X                      |                   |                | Р                      | 4                     |                  |                           | Р                     |
| Otsego<br>Miller                     | P  | 1997<br>1997                            | X                                     | X                               | X                    | X                                   | X                   |                            | _                                   |                          | X                      | - V   |                                      |                 | X                           |                    | X                      |                   |                | P                      |                       |                  |                           | Р                     |
| Whithy                               | P  | 1998                                    | X                                     | â                               | ×                    | X                                   |                     |                            | _                                   | -                        | X                      | X   |                                      | ×               | ×                           | X                  | X                      | -                 |                | P                      |                       | -                |                           | 9                     |
| Barker                               | P  | 1999                                    | X                                     | X                               | X                    | X                                   |                     |                            |                                     |                          | x                      | x   |                                      | <u> </u>        | _^                          | _^_                | _^                     | -                 | _              | P                      |                       |                  | P                         | P                     |
| Gauley River Road                    | Р  | 1999                                    |                                       |                                 |                      |                                     |                     |                            | -                                   |                          | -                      | X   |                                      |                 |                             |                    |                        |                   |                | P                      |                       |                  | P                         | P                     |
| Skin Creek                           | Р  | 2000                                    | X                                     | X                               | X                    | X                                   | X                   |                            |                                     |                          | X                      | X   |                                      |                 | X                           | Х                  | ×                      |                   |                | P                      |                       |                  | P                         | P                     |
| Jolo                                 | Р  | 2001                                    |                                       |                                 |                      |                                     |                     |                            |                                     |                          |                        | Х   |                                      |                 |                             |                    |                        |                   |                | Р                      |                       |                  | Р                         | Р                     |
| Tioga                                | Р  | 2001                                    |                                       |                                 |                      |                                     |                     |                            |                                     |                          |                        | X   |                                      |                 |                             |                    |                        | _                 |                | Р                      |                       |                  | P                         | Р                     |
| Turkey Gap<br>Big Sandy              | P  | 2001<br>1987                            | X                                     | X                               | X                    | X                                   |                     | - V                        |                                     | _                        | X                      | -   |                                      |                 | X                           | X                  |                        |                   |                | P                      |                       |                  | Р                         | Р                     |
| Marfrance                            | P  | 1988                                    | x                                     | Х                               | х                    | X                                   |                     | X                          |                                     |                          | X                      | ×   |                                      |                 | X                           |                    |                        | -                 | Р              | P                      | -                     |                  | _                         | $\vdash$              |
| New Hill Ballpark                    | P  | 1988                                    | X                                     | X                               | X                    | X                                   | ×                   |                            |                                     |                          | X                      | x   |                                      |                 | _                           |                    |                        |                   | P              | P                      | ,                     | $\vdash$         | _                         | $\vdash$              |
| Jones Run                            | Р  | 1988                                    | Х                                     | X                               | Х                    | X                                   |                     |                            | X                                   |                          | X                      | X   |                                      |                 | ×                           |                    | X                      |                   | P              | P                      |                       | $\vdash$         |                           |                       |
| Chapmanville Landslide               | Р  | 1989                                    |                                       | X                               | X                    | X                                   |                     |                            |                                     |                          | X                      |   |                                      |                 |                             |                    | X                      |                   |                | Ρ                      |                       |                  |                           | Р                     |
| Wharncliff Landslide                 | Р  | 1989                                    |                                       | Х                               | X                    | X                                   |                     |                            |                                     |                          | X                      |   |                                      |                 |                             |                    | X                      |                   |                | Р                      |                       |                  |                           | Р                     |
| Joyce Sturm                          | P  | 1990                                    | L.,                                   | Х                               | X                    | X                                   |                     |                            |                                     |                          | X                      | X   |                                      | X               |                             |                    |                        | _                 |                | Р                      |                       |                  |                           | Р                     |
| Marianna Refuse<br>Cedar Grove       | P  | 1991<br>1991                            | X                                     | X                               | ×                    | X                                   | X                   |                            |                                     |                          | X                      | X   |                                      | Х               |                             |                    | X                      | -                 |                | P                      |                       |                  |                           | P                     |
| Eskdale                              | P  | 1991                                    |                                       | x                               | x                    | x                                   |                     |                            |                                     |                          | ×                      | _^  |                                      | X               | ×                           |                    | _^                     |                   |                | p                      |                       |                  |                           | P                     |
| Hodgesville                          | P  | 1991                                    | X                                     | X                               | X                    | ×                                   |                     |                            |                                     |                          | x                      | X   |                                      | x               | _^_                         |                    | ×                      |                   |                | P                      |                       |                  |                           | P                     |
| Newsome Branch                       | Р  | 1992                                    | Х                                     | X                               | X                    | X                                   | X                   |                            |                                     |                          | X                      |   |                                      |                 | X                           |                    | X                      |                   |                | P                      |                       |                  |                           | P                     |
| Morrison                             | P  | 1992                                    |                                       | Х                               | Х                    | Х                                   |                     |                            |                                     |                          | X                      | Х   |                                      |                 |                             |                    | Х                      |                   |                | P                      |                       |                  |                           | Р                     |
| Snake Island                         | Р  | 1993                                    | X                                     |                                 |                      | X                                   | Х                   | X                          |                                     |                          | X                      |   |                                      |                 | X                           | X                  |                        |                   |                |                        |                       |                  |                           |                       |
| Orchard Branch                       | Р  | 1994                                    | X                                     | X                               | X                    | X                                   | X                   |                            |                                     |                          | X                      | X   |                                      | X               |                             |                    | X                      |                   |                | Р                      |                       |                  |                           | P                     |
| Beckley Layne                        | P  | 1994                                    |                                       | X                               | X                    | X                                   |                     |                            |                                     |                          | X                      | X   |                                      |                 |                             |                    | X                      |                   |                | P                      |                       |                  |                           | Р                     |
| Quinwood Booth<br>Little Fork        | P  | 1994<br>1983                            | Х                                     | X                               | X                    | X                                   | - V                 | X                          | X                                   |                          | X                      | X   |                                      | _               |                             | -                  | -                      |                   |                | Δ Δ                    |                       | $\vdash$         |                           | Р                     |
| Little FOIX                          |  | 1983                                    | ۸.                                    | _ ^                             | Α                    | _ X                                 | X                   | Α                          |                                     |                          | X                      | L   |                                      |                 | L                           | Х                  | X                      |                   |                | <u> </u>               |                       | $\perp$          |                           |                       |

| AML and RELATED PRO                           | JECT EXPERI                                      | ENCE MATR                               | RIX                                   |                                 |                      |                                     | TE E                |                            | 100                                 | Attach                   | ment "                 | C"  |                                    |                             |                             |                    |                        |                   |                |                        |                       |                  |                           |                       |
|---|--|---|---------------------------------------|---------------------------------|----------------------|-------------------------------------|---------------------|----------------------------|-------------------------------------|--------------------------|------------------------|---|------------------------------------|-----------------------------|-----------------------------|--------------------|------------------------|-------------------|----------------|------------------------|-----------------------|------------------|---------------------------|-----------------------|
|   |  |   |                                       | PROJECT EXPERIENCE              |                      |                                     |                     |                            |                                     |                          |                        |   |                                    | Primary Staff Participation |                             |                    |                        |                   |                |                        |                       |                  |                           |                       |
|   |  |   |                                       |                                 |                      |                                     | PROJE               | CT EX                      | PERIEN                              | ICE                      |                        |   | -                                  |                             |                             |                    |                        |                   |                |                        | VI-Mngn               | nt               |                           |                       |
| PROJECT                                       | Experience<br>Basis<br>Corporate-C<br>Personal-P | Additional<br>Information<br>in Section | Abandoned Surface Mine<br>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 |
| Elkridge Refuse<br>Lando Mines                | P  | 1984<br>1984                            |                                       | X                               | X                    | X                                   | Х                   | X                          |                                     |                          | X                      |   |                                    |                             | Х                           |                    | X                      | $\vdash$          |                | P<br>P                 |                       | -                |                           | _                     |
| West Varney                                   | P  | 1984                                    |                                       | X                               | X                    | X                                   |                     |                            |                                     |                          | X                      | 1   | -                                  |                             |                             |                    | X                      | $\vdash$          | <u> </u>       | P                      |                       | -                |                           | $\vdash$              |
| Bethel Portals                                | P  | 1985                                    |                                       | X                               | ×                    | ×                                   |                     |                            |                                     |                          | ×                      | ×   |                                    |                             |                             |                    | X                      | +                 |                | P                      |                       |                  |                           |                       |
| Mammoth Landslide                             | P  | 1985                                    |                                       |                                 |                      | x                                   |                     |                            |                                     |                          | x                      | ^   |                                    | X                           | X                           |                    | x                      | $\vdash$          |                | P                      |                       | $\vdash$         |                           |                       |
| Cheyenne                                      | Р  | 1985                                    | X                                     |                                 |                      | X                                   |                     |                            |                                     |                          | X                      | X   |                                    | X                           | X                           |                    | X                      |                   | P              | P                      |                       |                  |                           |                       |
| Mudlick A Landslide                           | Р  | 1985                                    | X                                     |                                 | X                    | X                                   |                     |                            |                                     |                          | X                      | X   |                                    |                             | -                           | X                  | X                      |                   | Р              | Р                      |                       |                  |                           |                       |
| Nelson Landslide                              | Р  | 1985                                    | Х                                     | Х                               |                      |                                     |                     |                            |                                     |                          | X                      |   |                                    |                             |                             |                    | ×                      |                   |                | Р                      |                       |                  |                           |                       |
| Mudlick B Refuse                              | Р  | 1985                                    | X                                     | X                               | X                    | X                                   | Х                   |                            |                                     |                          | X                      |   |                                    |                             | X                           | X                  | X                      |                   | P              | Ρ                      |                       |                  |                           |                       |
| Bluff Mountain                                | Р  | 1985                                    | X                                     | X                               | X                    | X                                   | X                   |                            |                                     |                          | X                      | X   |                                    |                             | X                           | X                  | X                      |                   | P              | Р                      |                       |                  |                           |                       |
| Montgomery Drainage                           | Р  | 1986                                    |                                       | X                               | X                    | X                                   |                     |                            |                                     |                          | X                      |   |                                    | X                           |                             |                    | X                      | _                 | Р              | Р                      |                       |                  |                           |                       |
| Mayoros Drainage                              | Р  | 1986                                    |                                       | X                               | X                    | X                                   |                     |                            |                                     |                          | X                      | X   |                                    | X                           |                             |                    |                        | -                 | Р              | Р                      |                       | _                |                           |                       |
| Ridgeview A & B                               | P  | 1987                                    |                                       | X                               | X                    | X                                   | X                   | X                          |                                     |                          | X                      | X   |                                    | X                           | X                           |                    | X                      | ₩                 | Р              | P                      |                       | _                |                           |                       |
| Tupper Valley                                 | P  | 1987<br>1987                            | X                                     | X                               | X                    | X                                   |                     |                            |                                     |                          | X                      | X   |                                    | X                           |                             | _                  | ×                      | $\vdash$          | P              | P                      |                       | -                |                           |                       |
| Airport Bottom<br>Manilla Creek               | P  | 1987                                    | ×                                     | X                               | X                    | X                                   | ×                   | _                          |                                     | _                        | X                      | X   | _                                  | ×                           | X                           | _                  | X                      | $\vdash$          |                | P                      |                       | -                |                           | -                     |
| McAlpin McAlpin                               | P  | 2009                                    | ^                                     | _^                              | ^                    | _^_                                 | _^_                 | _                          |                                     |                          | x                      | _^  |                                    | _^                          | _^                          | _                  | x                      | -                 | -              | P                      |                       | P                | Р                         | P                     |
| Robey   | P  | 2009                                    | X                                     | ×                               | ×                    | X                                   |                     |                            | _                                   |                          | - x                    | _   |                                    |                             |                             |                    | x                      | -                 |                | P                      | _                     | 11               |                           | P                     |
| Katy Lick                                     | P  | 2009                                    | x                                     | _^                              | _^                   | x                                   |                     |                            |                                     |                          | x                      | _   |                                    |                             |                             |                    | x                      | _                 |                | P                      | -                     |                  | P                         | P                     |
| Clear Fork                                    | C  | 2009                                    | - ~                                   |                                 |                      |                                     |                     |                            |                                     |                          | - / /                  | Х   |                                    |                             |                             |                    | - ~                    | м                 |                | Р                      |                       |                  | P                         | P                     |
| Coal Mountain                                 | C  | 2009                                    |                                       |                                 |                      |                                     |                     |                            |                                     |                          |                        | X   |                                    |                             |                             |                    |                        | М                 | Р              | Р                      |                       |                  |                           | Р                     |
| Naugatuck/East Kermit                         | С  | 2009                                    |                                       |                                 |                      |                                     |                     |                            |                                     |                          |                        | X   |                                    |                             |                             |                    |                        | М                 | Р              | Р                      |                       | Р                | Р                         | Р                     |
| Prenter                                       | Р  | 2008                                    |                                       |                                 |                      |                                     |                     |                            |                                     |                          |                        | Х   |                                    |                             |                             |                    |                        |                   |                | Р                      |                       |                  | Р                         | Р                     |
| Hanover                                       | P  | 2009                                    |                                       |                                 |                      |                                     |                     |                            |                                     |                          |                        | Х   | THOO CHOOL                         |                             |                             |                    |                        |                   | 11             | Р                      |                       |                  | Р                         | Р                     |
| Lower Dempsey                                 | Р  | 2009                                    |                                       | X                               | X                    | X                                   |                     |                            |                                     |                          | X                      |   |                                    |                             |                             |                    | X                      | $\vdash$          | Р              | Р                      |                       |                  | 50                        | Р                     |
| Island Creek #18                              | С  | 2009                                    |                                       | X                               | X                    | X                                   |                     |                            |                                     |                          | X                      | X   |                                    |                             | X                           |                    | X                      | _                 | Р              | Р                      |                       | 250              | A11                       | Р                     |
| Brownton Landslide                            | С  | 2009                                    |                                       | X                               | X                    | X                                   |                     |                            |                                     |                          | X                      | X   |                                    |                             |                             |                    | X                      | -                 | P              | P                      |                       | 11               | Р                         | Р                     |
| East Bank Emergency                           | C  | 2009                                    | - V                                   |                                 | -                    | -                                   |                     | -                          | -                                   |                          |                        | -   | _                                  | _                           | - 0                         | -                  | -                      | -                 | P              | 2                      |                       |                  | P                         | P<br>P                |
| Dunloup Creek                                 | C  | 2010                                    | X                                     | ×                               | X                    | X                                   | _                   |                            |                                     |                          | X                      | X   |                                    |                             | X                           | X                  | X                      | -                 | -              | P                      |                       | _                | P<br>P                    | P                     |
| Otsego/Pierpoint/Maben<br>Barkers Ridge/Basin | C  | 2010                                    | _                                     |                                 |                      |                                     |                     | _                          |                                     | -                        | -                      | X   |                                    |                             |                             | _                  |                        | $\vdash$          |                | P                      |                       | _                | P                         | P                     |
| Herndon/Covel/Garwood                         | C  | 2010                                    |                                       |                                 |                      |                                     |                     |                            |                                     |                          |                        | x   |                                    |                             |                             |                    |                        |                   | -              | P                      |                       | _                | P                         | P                     |
| Bud/Alpoca/Mill Branch                        | č  | 2010                                    |                                       |                                 | 1                    |                                     |                     |                            |                                     |                          |                        | Ŷ   |                                    |                             | _                           |                    |                        |                   | P              | P                      | -                     | _                | P                         | P                     |
| Keystone (Avery)                              | Č  | 2010                                    |                                       |                                 |                      |                                     |                     |                            |                                     |                          |                        | 1   |                                    |                             |                             |                    |                        | $\vdash$          | 1.0            | P                      |                       |                  |                           | Р                     |
| Keystone (Emergency)                          | С  | 2010                                    |                                       |                                 |                      |                                     |                     |                            | 1.77                                |                          |                        |   |                                    |                             |                             |                    |                        |                   | P              | Р                      |                       |                  |                           | Р                     |
| Cane Branch                                   | C  | 2010                                    |                                       |                                 |                      |                                     |                     |                            |                                     |                          |                        | X   |                                    |                             |                             |                    |                        |                   | Р              | Р                      |                       |                  |                           |                       |
| Spy Rock/Edmond/ Flanagan<br>Mountain         | С  | 2010                                    |                                       |                                 |                      |                                     |                     |                            |                                     |                          |                        | ×   |                                    |                             |                             |                    |                        |                   | Р              | Р                      |                       |                  | Р                         |                       |
| Wilderness PSD                                | С  | 2010                                    |                                       |                                 |                      |                                     |                     |                            |                                     |                          |                        | X   |                                    |                             |                             |                    |                        |                   | P              | Р                      |                       |                  | Р                         |                       |
| Gordon C                                      | C  | 2010                                    |                                       | X                               | X                    | Х                                   |                     |                            |                                     |                          | X                      |   |                                    |                             |                             |                    | X                      |                   | 45.55          | Р                      |                       |                  | Ρ                         |                       |
| Keaton Branch<br>Verner Grimmett Burning      | С  | 2010                                    |                                       | X                               | Х                    | X                                   |                     |                            |                                     |                          | X                      |   |                                    |                             |                             |                    | X                      | $\vdash$          | Р              | Р                      |                       | P                | Р                         |                       |
| Refuse  | С  | 2010                                    |                                       |                                 |                      |                                     |                     | ×                          |                                     |                          | X                      |   |                                    |                             |                             |                    | ,                      |                   | Р              |                        |                       | Р                |                           |                       |
| Shinnston-Lumberport                          | С  | 2011                                    |                                       |                                 |                      |                                     |                     |                            | X                                   |                          | Х                      |   |                                    |                             |                             |                    |                        |                   | Р              | Р                      |                       |                  | Р                         |                       |
| Newtown-Kinder                                | С  | 2011                                    |                                       | X                               | X                    | Х                                   |                     |                            |                                     |                          | X                      |   |                                    |                             |                             |                    | X                      |                   | Р              | Р                      |                       | Р                | Р                         |                       |
| Dan's Branch Emergency                        | С  | 2011                                    |                                       | X                               | X                    | X                                   |                     |                            |                                     |                          | X                      |   |                                    |                             |                             |                    | X                      |                   | Р              |                        |                       | Р                |                           |                       |
| Cartright Branch                              | C  | 2011                                    |                                       | X                               | X                    | X                                   |                     |                            |                                     |                          | X                      |   |                                    |                             |                             |                    | X                      | _                 | Р              | Р                      |                       |                  | Р                         |                       |
| Thorpe Refuse Pile                            | С  | 2011                                    |                                       | X                               | X                    | Х                                   |                     |                            |                                     |                          | X                      |   |                                    |                             |                             |                    | X                      | -                 | -              | Р                      | -                     |                  | Р                         |                       |
| Glen Rogers Emergency                         | C  | 2012                                    |                                       | X                               | X                    | -                                   | -                   |                            |                                     | -                        | X                      |   |                                    | -                           | -                           | -                  | -                      | -                 | P              | -                      | _                     | P                | P                         | $\vdash$              |
| Abney Refuse Piles                            | C  | 2012                                    | 1                                     | ×                               | ×                    | X                                   | 1                   | 1                          | I                                   | ls s                     | ×                      | 1   | 1                                  | 1                           | 1                           | I                  | ×                      | 1                 | 15             | P                      | l .                   | 1                | 1                         |                       |

| AML and RELATED PR | ROJECT EXPER                                     | IENCE MATE                              | RIX                                   |                                 | WE ST                |                                     |                     |                            |                                     | Attach                   | ment "                 | C"  |                                    | Care Day        |                             |                    |                        |                   |                |                        | -                     | - 12             | -JE                       |                       |
|--------------------|--|---|---------------------------------------|---------------------------------|----------------------|-------------------------------------|---------------------|----------------------------|-------------------------------------|--------------------------|------------------------|---|------------------------------------|-----------------|-----------------------------|--------------------|------------------------|-------------------|----------------|------------------------|-----------------------|------------------|---------------------------|-----------------------|
| E REGULA           |  |   |                                       |                                 | PROJECT EXPERIENCE   |                                     |                     |                            |                                     |                          |                        |   |                                    |                 |                             | ation              |                        |                   |                |                        |                       |                  |                           |                       |
| PROJECT            | Experience<br>Basis<br>Corporate-C<br>Personal-P | Additional<br>Information<br>in Section | Abandoned Surface Mine<br>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 |
| Milam Ridge Refuse | С  | 2012                                    |                                       | Х                               | X                    | X                                   |                     |                            |                                     |                          | Х                      |   |                                    |                 |                             |                    | X                      |                   | P              | P                      |                       | P                | P                         | -                     |
| West Columbia "B"  | C  | 2012                                    |                                       | X                               | X                    | X                                   |                     |                            |                                     |                          | X                      |   |                                    | _               |                             |                    | X                      | -                 | D              | D                      |                       | 10               | 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 E                           | ngineering co.       |
|---|----------------------|
| (Company)                                 | 0                    |
| Richard W.                                | With                 |
| (Authorized Signature)                    |                      |
| Rizhard W. Wa<br>(Representative Name, Ti | tto, Project Manager |
| 364-776-7473                              | 304-776-6426         |
| (Phone Number)                            | (Fax Number)         |
| 1-29-13                                   |                      |
| (Date)                                    |                      |

RFQ No. DEP 16078

#### 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: Ruby W. Walls Date: 1-22-13   |
| State of West Virginia   |
| Taken, subscribed, and sworn to before me this 22 day of   |
| My Commission expires October 5 , 2016.  |
| APPIX SPACHERE OFFICIAL SEAL NOTARY PUBLIC NOTARY PUBLIC Purchasing Affidavit (Revised 07/01/2012) |

STATE OF WEST VIRGINIA Brian D. Morton E.L. Robinson 5088 Washington Street, West Charleston, WY 25313 My Commission Expires Ool, 5, 2016