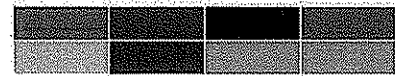


**WilburSmith**  
ASSOCIATES



*Expression of Interest*

**Hazy Creek (Sprouse) Portal Design**

**RFQ #DEP14947**

**March 16, 2010**

**West Virginia Department of Environmental Protection  
Office of Abandoned Mine Lands and Reclamation  
Charleston, WV**

RECEIVED

2010 MAR 15 PM 1:01

WV PURCHASING  
DIVISION



March 16, 2010

West Virginia Environmental Protection Department  
Office of Abandoned Mine Lands and Reclamation  
601 57th Street SE  
Charleston, WV 25304

Re: Hazy Creek (Sprouse) Portal Design, RFQ #14947

Dear Evaluation Committee:

The attached *AML Consultant Confidential Qualification Questionnaire* and the *AML and Related Project Experience Matrix* are submitted in response to the above-referenced Expression of Interest for professional engineering design services and construction monitoring services at the **Hazy Creek (Sprouse) Portal Design** project in Raleigh County. We understand that the types of professional engineering services required by this contract will include civil, environmental, geotechnical, and hydrological services and have developed a team to cover all aspects of the project.

Founded in 1952, WSA is a prominent national consulting firm specializing in civil/transportation design, infrastructure improvements, and context-sensitive solutions in both urban and rural environments. The firm is routinely ranked among the top engineering firms in the nation by *Engineering News Record* and has cultivated an outstanding track record for delivering high-quality projects through skilled engineering and proficient project management. Our Charleston, WV office is led by professionals who have successfully completed numerous engineering projects throughout West Virginia. We have received frequent recognition for our outstanding work on these projects. The staff in the Charleston, WV office is also acutely aware of the need to provide economical engineering services while considering the impacts on communities and the environment.

We have chosen to collaborate on this project with **Triad Engineering, Inc.** This firm is a local West Virginia firm that holds the same standard of excellence as WSA. Triad will supply the geotechnical and surveying services for this project. This team can provide all the design services necessary to complete a project such as this in a timely and economical manner. Together, the specialized skills of WSA and its subconsultant partner will provide an exceptional combination of relevant experience and technical resources to successfully meet the DEP's needs.

If you have any questions regarding our submittal, contact me at 304-345-2339.

Respectfully submitted,

**WILBUR SMITH ASSOCIATES**

Wesley O. Stafford, PE, AICP  
West Virginia Division Manager



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

# Request for Quotation

RFQ NUMBER  
 DEP14947

PAGE  
 1

ADDRESS CORRESPONDENCE TO ATTENTION OF  
 CHUCK BOWMAN  
 304-558-2157

RFQ COPY

TYPE NAME/ADDRESS HERE

Wilbur Smith Associates  
 Geary Plaza, Suite 210  
 700 Washington Street East  
 Charleston, WV 25301

SHIP TO

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

| DATE PRINTED | TERMS OF SALE | SHIP VIA | FOB | FREIGHT TERMS |
|--------------|---------------|----------|-----|---------------|
| 02/10/2010   |               |          |     |               |

BID OPENING DATE: 03/16/2010 BID OPENING TIME 01:30PM

| LINE  | QUANTITY | UOP | CAT NO | ITEM NUMBER | UNIT PRICE | AMOUNT |
|---|----------|-----|--------|-------------|------------|--------|
| 0001  | 1        | JB  |        | 906-29      |            |        |
| HAZY CREEK (SPOUSE) PORTAL DESIGN   |          |     |        |             |            |        |
| EXPRESSION OF INTEREST  |          |     |        |             |            |        |
| <p>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 HAZY CREEK (SPOUSE) PORTAL PROJECT IN RALEIGH COUNTY, WV, PER THE FOLLOWING BID REQUIREMENTS AND ATTACHED SPECIFICATIONS.</p> <p>BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THE STATE MAY DEEM THE CONTRACT NULL AND VOID, AND TERMINATE SUCH CONTRACT WITHOUT FURTHER ORDER.</p> |          |     |        |             |            |        |
| ***** THIS IS THE END OF RFQ DEP14947 ***** TOTAL:  |          |     |        |             |            |        |

|   |              |                                   |  |
|---|--------------|-----------------------------------|--|
| SEE REVERSE SIDE FOR TERMS AND CONDITIONS |              |                                   |  |
| SIGNATURE                                 | TELEPHONE    | DATE                              |  |
|   | 304.345.2339 | 03/16/2010                        |  |
| TITLE                                     | FBN          | ADDRESS CHANGES TO BE NOTED ABOVE |  |
| Associate-In-Charge                       | 57-0405950   |                                   |  |

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

**GENERAL TERMS & CONDITIONS**  
**REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)**

1. Awards will be made in the best interest of the State of West Virginia.
2. The State may accept or reject in part, or in whole, any bid.
3. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division and have paid the required \$125 fee.
4. All services performed or goods delivered under State Purchase Order/Contracts are to be continued for the term of the Purchase Order/Contracts, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods this Purchase Order/Contract becomes void and of no effect after June 30.
5. Payment may only be made after the delivery and acceptance of goods or services.
6. Interest may be paid for late payment in accordance with the *West Virginia Code*.
7. Vendor preference will be granted upon written request in accordance with the *West Virginia Code*.
8. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
9. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller.
10. The laws of the State of West Virginia and the *Legislative Rules* of the Purchasing Division shall govern the purchasing process.
11. Any reference to automatic renewal is hereby deleted. The Contract may be renewed only upon mutual written agreement of the parties.
12. **BANKRUPTCY:** In the event the vendor/contractor files for bankruptcy protection, the State may deem this contract null and void, and terminate such contract without further order.
13. **HIPAA BUSINESS ASSOCIATE ADDENDUM:** The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, is available online at [www.state.wv.us/admin/purchase/vrc/hipaa.htm](http://www.state.wv.us/admin/purchase/vrc/hipaa.htm) and is hereby made part of the agreement. Provided that the Agency meets the definition of a Cover Entity (45 CFR §160.103) and will be disclosing Protected Health Information (45 CFR §160.103) to the vendor.
14. **CONFIDENTIALITY:** The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in <http://www.state.wv.us/admin/purchase/privacy/noticeConfidentiality.pdf>.
15. **LICENSING:** Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, and the West Virginia Insurance Commission. The vendor must provide all necessary releases to obtain information to enable the director or spending unit to verify that the vendor is licensed and in good standing with the above entities.
16. **ANTITRUST:** In submitting a bid to any agency for the State of West Virginia, the bidder offers and agrees that if the bid is accepted the bidder will convey, sell, assign or transfer to the State of West Virginia all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to the bidder.

I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, or person or entity submitting a bid for the same material, supplies, equipment or services and is in all respects fair and without collusion or fraud. I further certify that I am authorized to sign the certification on behalf of the bidder or this bid.

**INSTRUCTIONS TO BIDDERS**

1. Use the quotation forms provided by the Purchasing Division. Complete all sections of the quotation form.
2. Items offered must be in compliance with the specifications. Any deviation from the specifications must be clearly indicated by the bidder. Alternates offered by the bidder as **EQUAL** to the specifications must be clearly defined. A bidder offering an alternate should attach complete specifications and literature to the bid. The Purchasing Division may waive minor deviations to specifications.
3. Unit prices shall prevail in case of discrepancy. All quotations are considered F.O.B. destination unless alternate shipping terms are clearly identified in the quotation.
4. All quotations must be delivered by the bidder to the office listed below prior to the date and time of the bid opening. Failure of the bidder to deliver the quotations on time will result in bid disqualifications: Department of Administration, Purchasing Division, 2019 Washington Street East, P.O. Box 50130, Charleston, WV 25305-0130
5. Communication during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited (W.Va. C.S.R. §148-1-6.6).



**1.4 Inquiries:**

Additional information inquiries regarding this EOI must be submitted in writing to the State Buyer with the exception of questions regarding proposal submission, which may be oral. The deadline for written inquiries is identified in the Schedule of Events, Section 1.16. All inquiries of specification clarification must be addressed to:

Chuck Bowman, Buyer Supervisor  
Purchasing Division  
P.O. Box 50130  
Charleston, WV 25305-0130  
Fax: (304) 558-4115  
Email: charles.a.bowmanjr@wv.gov

**The firm, or anyone on the firm's behalf, is not permitted to make any contact whatsoever with any member of the evaluation committee.** Violation may result in rejection of the EOI. The State Buyer named above is the sole contact for any and all inquiries after this EOI has been released.

**1.5 Vendor Registration:**

Firms participating in this process should complete and file a **Vendor Registration and Disclosure Statement** (Form WV-1) and remit the registration fee. Firm is not required to be a registered vendor in order to submit an EOI, but the **successful firm must register and pay the fee prior to the issuance of an actual contract.**

**1.6 Oral Statements and Commitments:**

Firm must clearly understand that any verbal representations made or assumed to be made during any oral discussions held between firm's representatives and any State personnel are **not** binding. Only the information issued in writing and added to the Expression of Interest specifications file by an official written addendum is binding.

**1.7 Economy of Preparation:**

EOI's should be prepared simply and economically, providing a straightforward, concise description of firm's abilities to satisfy the requirements of the EOI. Emphasis should be placed on completeness and clarity of content. Example projects referred to in a firm's EOI's submittal should address projects that are similar in scope to that of the EOI. **Firms must complete the CQQ and RPEM as included in Section 4.2 of this EOI. (Proposals must be no more than 100 pages).**

**1.8 Labeling of the Sections:** The response sections should be labeled for ease of evaluation.

**1.9 Submission:**

1.9.1 State law requires that the original expression shall be submitted to the Purchasing Division. All copies to the Purchasing Division must be submitted **prior** to the date and time stipulated as the opening date. All expressions will be date and time stamped on the Purchasing Division official time clock to verify time and date of receipt.

1.9.2 Firms mailing expressions should allow sufficient time for mail delivery to ensure timely arrival. The Purchasing Division **CANNOT** waive or excuse late receipt of an expression which is delayed and late for any reason according West Virginia State Code §5A-3-11. Any EOI received after the bid opening time and date will be immediately disqualified in accordance with State law and the Legislative Rule 148-CSR-1.

**Submit:**

One original plus one convenience copy and one copy on CD to:

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

The outside of the envelope or package(s) should be clearly marked:

Buyer: CB-23  
Req #: DEP14947  
Opening Date: 03/16/2010  
Opening Time: 1:30 pm

**1.10 Rejection of Expressions:**

The State shall select the best value solution according to §5G-1-3 of the West Virginia State Code. However, the State reserves the right to accept or reject any or all expressions and to reserve the right to withdraw this Expression of Interest at any time and for any reason. Submission of, or receipt by the State of Expressions confers no rights upon the firm nor obligates the State in any manner.

**1.11 Incurring Costs:**

The State and any of its employees or officers shall not be held liable for any expenses incurred by any firm responding to this EOI for expenses to prepare, deliver, or to attend the short-list interviews.

**1.12 Addenda:**

If it becomes necessary to revise any part of this EOI, an official written



addendum will be issued by the State to all potential firms of record.

**1.13 Independent Price Determination:**

A contract will not be considered for award if the negotiated price was not arrived at independently without collusion, consultation, communication, or agreement as to any matter relating to prices with any competitor.

**1.14 Price Quotations:** No "price" or "fee" quotation is requested or permitted in the response.

**1.15 Public Record:**

*1.15.1 Submissions are Public Record.*

All documents submitted to the State Purchasing Division related to purchase orders/contracts are considered public records. All EOI's submitted by firms shall become public information and are available for inspection during normal official business hours in the Purchasing Division Records and Distribution center after the expressions have been opened.

*1.15.2 Written Release of Information.*

All public information may be released with or without a Freedom of Information request, however, only a written request will be acted upon with duplication fees paid in advance. Duplication fees shall apply to all requests for copies of any document. Currently the fees are \$0.50/page, or a minimum of \$10.00 per request, whichever is greater.

*1.15.3 Risk of Disclosure.*

The only exemptions to disclosure of information are listed in West Virginia Code §29B-1-4. Primarily, only trade secrets as submitted by a firm are the only exemption to public disclosure. The submission of any information to the State by a firm puts the risk of disclosure on the firm. The submission of any information to the State by a vendor puts the risk of disclosure on the vendor. The State does not guarantee non-disclosure of any information to the public.

**1.16 Schedule of Events:**

|                       |            |
|-----------------------|------------|
| Release of EOI.....   | 02/11/2010 |
| EOI Opening Date..... | 03/16/2010 |

**1.17 Mandatory Pre-bid Conference:** N/A

**1.18 Bond Requirements:** N/A

**1.19 Purchasing Affidavit:**

West Virginia State Code §5A-3-10a (3) (d) requires that all firms submit an

Affidavit regarding any debt owed to the State and licensing and confidentiality certifications. The Affidavit **must** be signed and submitted prior to award. It is preferred that the Affidavit be submitted with the EOI.

## PART 2

### OPERATING ENVIRONMENT

#### 2.1 Location:

##### Directions to Hazy Creek (Sprouse) Portal:

From Beckley, travel West on Route 3 to Glen Daniel. In Glen Daniel, continue to travel West on Route 3 towards Whitesville. Travel to Edwight, then cross Marsh Fork on the left and travel up Hazy creek approximately 1.5 miles. The exposed refuse is toeing into the creek on the left side of the creek and road. The road that leads to the refuse pile and the open portal is located to the left of the refuse pile. Travel up this road approximately ¼ mile to the first large bench on the right. Take this bench for approximately ¼ mile; the portal is located on the left side of this bench.

#### 2.2 Background:

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

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

The site consists of an open, non-draining portal, exposed refuse, and structural remains.

Preliminary design documents will be due 60 days from the issuance of the Purchase Order.

## PART 3

### PROCUREMENT SPECIFICATIONS

#### 3.1 General Requirements:

Firm must submit a completed CQQ (Attachment "B") and RPEM (Attachment "C") as per Section 4.2

### 3.2 Project Description:

#### **Scope of Work - Hazy Creek (Sprouse) Portal:**

Create diversion channels, ditches and/or under drains to transport drainage.  
 Install wet seals and/or bat gates.  
 Demolish/dispose of structure.  
 Provide for stream bank protection.  
 Re-grade refuse areas.  
 Reclaim and re-vegetate all areas disturbed during construction.

### 3.3 Special Terms and Conditions:

#### 3.3.1 *Bid and Performance Bonds:*

3.3.2 *Insurance Requirements:* \$1,000,000 General Liability per Occurrence  
 \$2,000,000 Aggregate  
 \$1,000,000 Automobile Liability  
 \$1,000,000 Professional Liability  
 Workers Compensation Certificate Upon Award  
 West Virginia Statutory requirements including  
 West Virginia Code §23-4-2 (Mandolidis)  
 DEP14947 must be listed on Insurance Cert.

### 3.4 General Terms and Conditions:

By signing and submitting the EOI, the successful firm agrees to be bound by all the terms contained in Section Three (3) of this EOI.

#### 3.4.1 *Conflict of Interest:*

Firm affirms that it, its officers or members or employees presently have no interest and shall not acquire any interest, direct or indirect which would conflict or compromise in any manner or degree with the performance or its services hereunder. The firm further covenants that in the performance of the contract, the firm shall periodically inquire of its officers, members and employees concerning such interests. Any such interests discovered shall be promptly presented in detail to the Agency.

#### 3.4.2 *Prohibition Against Gratuities:*

Firm warrants that it has not employed any company or person other than a bona fide employee working solely for the firm or a company regularly employed as its marketing agent to solicit or secure the contract and that it has not paid or agreed to pay any company or person any fee, commission, percentage, brokerage fee, gifts or any other consideration contingent upon

or resulting from the award of the contract. For breach or violation of this warranty, the State shall have the right to annul this contract without liability at its discretion, and/or to pursue any other remedies available under this contract or by law.

#### 3.4.3 *Certifications Related to Lobbying:*

Firm certifies that no federal appropriated funds have been paid or will be paid, by or on behalf of the company or an employee thereof, to any person for purposes of influencing or attempting to influence an officer or employee of any Federal entity, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement.

If any funds other than federally appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee or any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the firm shall complete and submit a disclosure form to report the lobbying.

Firm agrees that this language of certification shall be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub recipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this contract was made and entered into.

#### 3.4.4 *Vendor Relationship:*

The relationship of the firm to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by the parties to this contract. The firm as an independent contractor is solely liable for the acts and omissions of its employees and agents.

Firm shall be responsible for selecting, supervising and compensating all individuals employed pursuant to the terms of this EOI and resulting contract. Neither the firm nor any employees or contractors of the firm shall be deemed to be employees of the State for any purposes whatsoever.

The Firm shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties,

fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension or other deferred compensation plans, including but not limited to Workers' Compensation and Social Security obligations, and licensing fees, etc. and the filing of all necessary documents, forms and returns pertinent to all of the foregoing.

The Firm shall hold harmless the State, and shall provide the State and Agency with a defense against all claims including but not limited to the foregoing payments, withholdings, contributions, taxes, social security taxes and employer income tax returns.

The firm shall not assign, convey, transfer or delegate any of its responsibilities and obligations under this contract to any person, corporation, partnership, association or entity without expressed written consent of the Agency.

**3.4.5 Indemnification:**

The firm agrees to indemnify, defend and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered by any subcontractor, person or firm performing or supplying services, materials or supplies in connection with the performance of the contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the firm, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use or disposition of any data used under the contract in a manner not authorized by the contract, or by Federal or State statutes or regulations; (3) Any failure of the firm, its officers, employees or subcontractors to observe State and Federal laws, including but not limited to labor and wage laws.

**3.4.6 Contract Provisions:**

After the most qualified firm is identified, and fee negotiations are concluded, a formal contract document will be executed between the State and the firm. The order of precedence is the contract, the EOI and the firm's response to the EOI.

**3.4.7 Governing Law:**

This contract shall be governed by the laws of the State of West Virginia. The firm further agrees to comply with the Civil Rights Act of 1964 and all other applicable laws (Federal, State or Local Government) regulations.

**3.4.8 Compliance with Laws and Regulations:**

The firm shall procure all necessary permits and licenses to comply with all applicable laws, Federal, State or municipal, along with all regulations, and ordinances of any regulating body.

The firm shall pay any applicable sales, use, or personal property taxes arising out of this contract and the transactions contemplated thereby. Any other taxes levied upon this contract, the transaction, or the equipment, or services delivered pursuant here to shall be borne by the contractor. It is clearly understood that the State of West Virginia is exempt from any taxes regarding performance of the scope of work of this contract.

**3.4.9 Subcontracts/Joint Ventures:**

The State will consider the firm to be the sole point of contact with regard to all contractual matters. The firm may, with the prior written consent of the State, enter into written subcontracts for performance of work under this contract; however, the firm is totally responsible for payment of all subcontractors.

**3.4.10 Term of Contract:**

This contract will be effective (date set upon award) and shall extend until the scope of work is complete or for one (1) consecutive twelve (12) month period. The contract may be renewed upon mutual consent for two (2) consecutive years one (1) year periods or until such reasonable time as may be necessary to obtain a new contract or to complete work.

**3.4.11 Non-Appropriation of Funds:**

If the Agency is not allotted funds in any succeeding fiscal year for the continued use of the service covered by this contract by the West Virginia Legislature, the Agency may terminate the contract at the end of the affected current fiscal period without further charge or penalty. The Agency shall give the firm written notice of such non-allocation of funds as soon as possible after the Agency receives notice. No penalty shall accrue to the Agency in the event this provision is exercised.

**3.4.12 Contract Termination:**

The State may terminate any contract resulting from this EOI immediately at any time the firm fails to carry out its responsibilities or to make substantial progress under the terms of this EOI and resulting contract. The State shall provide the firm with advance notice of performance conditions, which are endangering the contract's continuation. If after such notice the firm fails to remedy the conditions contained in the notice, within the time contained in the notice, the State shall issue the firm an order to cease and desist all work immediately.

The State shall be obligated only for services rendered and accepted prior to the date of the notice of termination. The contract may also be terminated upon mutual agreement of the parties with thirty (30) days prior notice.

**3.4.13 Changes:**

If changes to the original contract become necessary, a formal contract change

order will be required. Prior to any work being performed, the change must be negotiated and approved by the State, the Agency and the firm. An approved contract change order is defined as one approved by the Purchasing Division and approved as to form by the West Virginia Attorney General's Office prior to the effective date of such amendment. **NO CHANGE SHALL BE IMPLEMENTED BY THE FIRM UNTIL THE FIRM RECEIVES AN APPROVED WRITTEN CHANGE ORDER.**

*3.4.14 Invoices, Progress Payments, & Retainage:*

The Firm shall submit invoices, in arrears, to the Agency at the address on the face of the purchase order labeled "Invoice To" pursuant to the terms of the contract. Progress payments may be made at the option of the Agency based on percentage of work completed if so defined in the final contract. Any provision for progress payments must also include language for a minimum 10% retainage until the final deliverable is accepted.

If progress payments are permitted, firm is required to identify points in the work plan at which compensation would be appropriate. Progress reports must be submitted to Agency with the invoice detailing progress completed or any deliverables identified. Payment will be made only upon approval of acceptable progress or deliverables as documented in the firm's report. Invoices may not be submitted more than once monthly and State law forbids payment of invoices prior to receipt of services.

*The firm will invoice for completed work on an approved WVDEP form.*

*3.4.15 Liquidated Damages:*

According to West Virginia State Code §5A-3-4(8), firm agrees that liquidated damages shall be imposed at the rate of N/A per workday, for failure to provide deliverables at the agreed upon date identified in the final contract. This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue to any other additional remedy to which the State or Agency may have legal cause for action including further damages against the firm.

*3.4.16 Record Retention (Access & Confidentiality):*

Firm shall comply with all applicable Federal and State of West Virginia rules and regulations, and requirements governing the maintenance of documentation to verify any cost of services or commodities rendered under this contract by the firm. The firm shall maintain such records a minimum of five (5) years and make available all records to Agency personnel at firm's location during normal business hours upon written request by Agency within 10 days after receipt of the request.

Firm shall have access to private and confidential data maintained by Agency to

the extent required for firm to carry out the duties and responsibilities defined in this contract. Firm agrees to maintain confidentiality and security of the data made available and shall indemnify and hold harmless the State and Agency against any and all claims brought by any party attributed to actions of breach of confidentiality by the firm, subcontractors, or individuals permitted access by the firm.

## **PART 4 EVALUATION & AWARD**

### **4.1 Evaluation and Award Process:**

- a) Expressions of Interest will be evaluated and awarded in accordance with **§5G-1-3 "Contracts for architectural and engineering services; selection process where total project costs are estimated to cost two hundred fifty thousand dollars or more."**

"In the procurement of architectural and engineering services for projects estimated to cost two hundred and fifty thousand dollars or more the director of purchasing shall encourage such firms engaged in the lawful practice of the profession to submit an expression of interest, which shall include a statement of qualifications, and performance data and may include anticipated concepts and proposed methods of approach to the project. All such jobs shall be announced by public notice published as a Class II legal advertisement in compliance with the provisions of article three [§59-3-1et seq.] A committee comprised of three to five representatives of the agency initiating the request shall evaluate the statements of qualifications and performance data and other material submitted by the interested firms and select three firms which in their opinion are the best qualified to perform the desired service. Interviews with each firm selected shall be conducted and the committee shall conduct discussions regarding anticipated concepts and the proposed methods of approach to the assignment. The committee shall then rank in order of preference no less than three professional firms deemed to be the most highly qualified to provide the services required, and shall commence scope of service and price negotiations with the highest qualified professional firm for architectural or engineering services or both. Should the agency be unable to negotiate a satisfactory contract with the professional firm considered to be the most qualified, at a fee determined to be fair and reasonable, price negotiations with the firm of second choice shall commence. Failing accord with the second most qualified professional firm, the committee shall undertake price negotiations with the third most qualified professional firm. Should the agency be unable to negotiate a satisfactory contract with any of the selected professional



firms, it

shall select additional professional firms in order of their competence and qualifications and it shall continue negotiations in accordance with this section until an agreement is reached.”

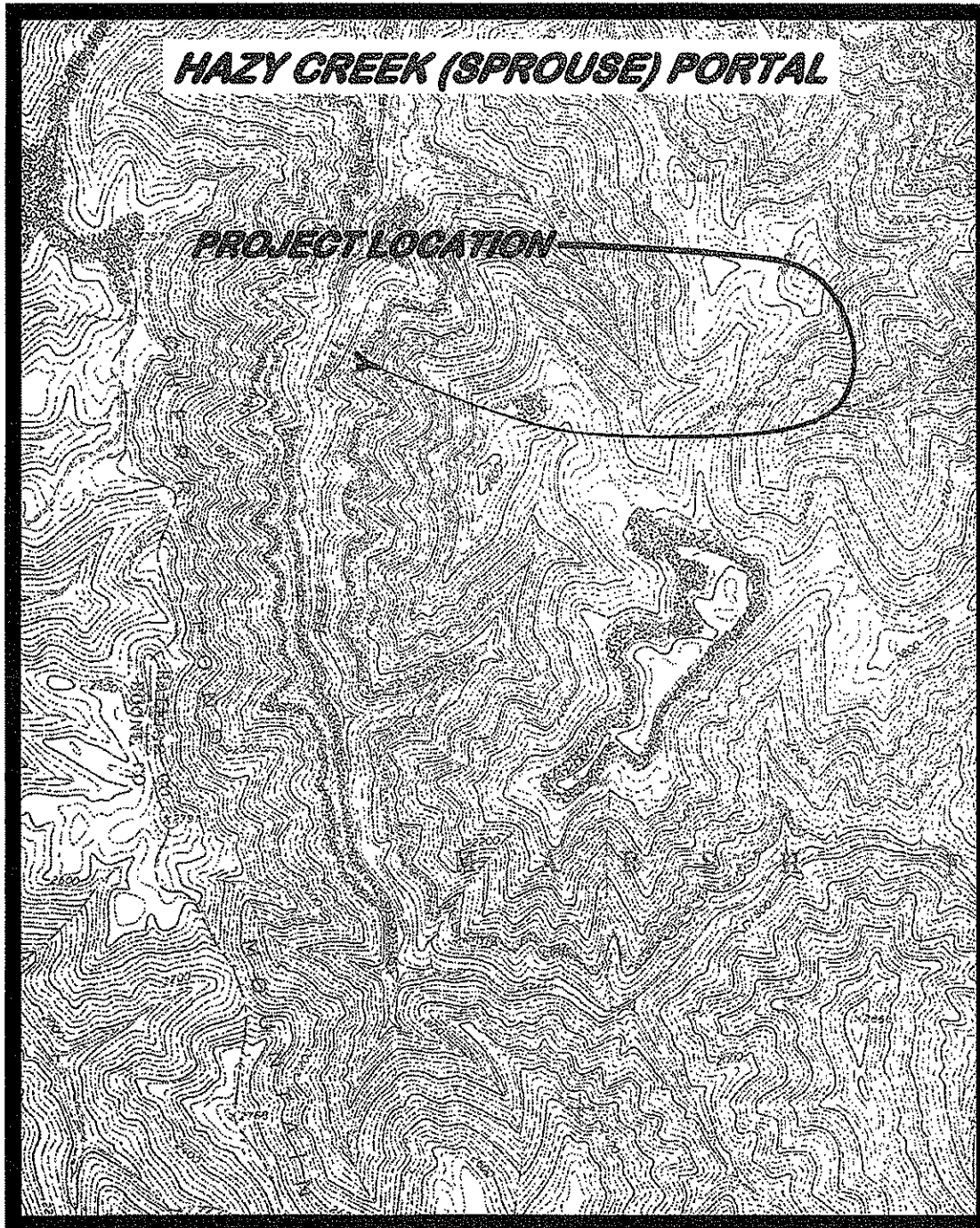
b) The evaluation criteria and assigned point values are as follows:

- |   |           |
|---|-----------|
| A. WV Registered Professional Engineers (Civil or Mining)<br>In the Primary Office:   | 20 points |
| B. Reclamation Engineering design experience of the Primary<br>Office's WVRPE as it relates to the specific project problem<br>Areas:   | 25 points |
| C. Available WV-AML Design Teams within the Primary office<br>(A Design team should consist of one Project Engineer (Civil<br>or Mining), one CAD person and availability of other support<br>personnel as required by the particular project): | 20 points |
| D. The Oral Interview (See Section 4.3 of this EOI):  | 35 points |
- 4.2 (a) AML Consultant Qualification Questionnaire (CQQ) must be completed to be eligible (See Attachment "B").
- (b) AML and Related Project Experience Matrix (RPEM) must also be completed to be eligible (See Attachment "C").
- 4.3 Interviews as stated in 4.1 "Evaluation and Award Process" will be conducted with the three firms selected as the most qualified by the WVDEP Selection Committee. The Committee will schedule the interviews.

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

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

# PROJECT LOCATION MAP



**SCALE: 1"=2000'**  
**PILOT KNOB QUAD.**

**RALEIGH COUNTY**

**LATITUDE 37° 51' 40"**  
**LONGITUDE 81° 33' 07"**

**DASHED LINE IS POTENTIAL PROJECT  
 LIMITS FOR OFF SITE BORROW AND  
 DISPOSAL AREAS.**



**WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
AML CONSULTANT QUALIFICATION QUESTIONNAIRE Attachment "B"**

PROJECT NAME \_\_\_\_\_ DATE (DAY, MONTH, YEAR) \_\_\_\_\_ FEIN \_\_\_\_\_

1. FIRM NAME \_\_\_\_\_ 2. HOME OFFICE BUSINESS ADDRESS \_\_\_\_\_ 3. FORMER FIRM NAME \_\_\_\_\_

4. HOME OFFICE TELEPHONE \_\_\_\_\_ 5. ESTABLISHED (YEAR) \_\_\_\_\_ 6. TYPE OWNERSHIP \_\_\_\_\_ 6a. WV REGISTERED DBE (Disadvantaged Business Enterprise) YES NO

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

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

9. PERSONNEL BY DISCIPLINE

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

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

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

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

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

YES Description and Number of Projects: \_\_\_\_\_

NO

B. Is your firm experienced in Soil Analysis?

YES Description and Number of Projects: \_\_\_\_\_

NO

C. Is your firm experienced in hydrology and hydraulics?

YES Description and Number of Projects: \_\_\_\_\_

NO

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

YES Description and Number of Projects: \_\_\_\_\_

NO

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

YES Description and Number of Projects: \_\_\_\_\_

NO

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

YES Description and Number of Projects: \_\_\_\_\_

NO

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

|  |   |  |
|--|---|--|
| NAME & TITLE (Last, First, Middle Int.)  | YEARS OF EXPERIENCE                     |  |
| YEARS OF AML DESIGN EXPERIENCE:          | YEARS OF AML RELATED DESIGN EXPERIENCE: | YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: |
| Brief Explanation of Responsibilities    |   |  |
| EDUCATION (Degree, Year, Specialization) |   |  |
| MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS |   |  |
| REGISTRATION (Type, Year, State)         |   |  |

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

|  |   |  |
|--|---|--|
| NAME & TITLE (Last, First, Middle Int.)  | YEARS OF EXPERIENCE                     |  |
| YEARS OF AML DESIGN EXPERIENCE:          | YEARS OF AML RELATED DESIGN EXPERIENCE: | YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: |
| Brief Explanation of Responsibilities    |   |  |
| EDUCATION (Degree, Year, Specialization) |   |  |
| MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS |   |  |
| REGISTRATION (Type, Year, State)         |   |  |

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

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

Brief Explanation of Responsibilities

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

EDUCATION (Degree, Year, Specialization)

\_\_\_\_\_

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

REGISTRATION (Type, Year, State)

\_\_\_\_\_

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

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

Brief Explanation of Responsibilities

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

EDUCATION (Degree, Year, Specialization)

\_\_\_\_\_

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

REGISTRATION (Type, Year, State)

\_\_\_\_\_





| 15. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATED ENGINEER OF RECORD |                           |                                      |  |                  |
|--|---------------------------|--------------------------------------|--|------------------|
| PROJECT NAME, TYPE AND LOCATION  | NAME AND ADDRESS OF OWNER | NATURE OF YOUR FIRM'S RESPONSIBILITY | ESTIMATED CONSTRUCTION COST            | PERCENT COMPLETE |
|  |                           |                                      |  |                  |
|  |                           |                                      |  |                  |
|  |                           |                                      |  |                  |
|  |                           |                                      |  |                  |
|  |                           |                                      |  |                  |
|  |                           |                                      |  |                  |
|  |                           |                                      |  |                  |
|  |                           |                                      |  |                  |
| TOTAL NUMBER OF PROJECTS:  |                           |                                      | TOTAL ESTIMATED CONSTRUCTION COSTS: \$ |                  |









14947

RFQ No. \_\_\_\_\_

STATE OF WEST VIRGINIA  
Purchasing Division

**PURCHASING AFFIDAVIT**

**West Virginia Code §5A-3-10a states:** No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate.

**DEFINITIONS:**

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

"Debtor" means any individual, corporation, partnership, association, limited liability company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

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

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

**WITNESS THE FOLLOWING SIGNATURE**

Vendor's Name: Wilbur Smith Associates

Authorized Signature: *Mary E. Hill* Date: 3/15/10

State of West Virginia

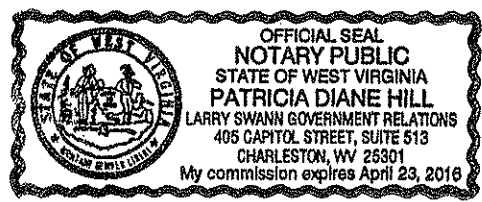
County of Kanawha, to-wit:

Taken, subscribed, and sworn to before me this 15 day of March, 2010.

My Commission expires April 23, 2010.

**AFFIX SEAL HERE**

**NOTARY PUBLIC** *Patricia Diane Hill*







11. OUTSIDE KEY CONSULTANTS/SUB-CONSULTANTS ANTICIPATED TO BE USED. Attach "AML Consultant Qualification Questionnaire".

|  |  |   |
|--|--|---|
| <p>NAME AND ADDRESS:<br/> <b>Triad Engineering, Inc.</b><br/>         4980 Teays Valley Road<br/>         Scott Depot, WV 25560<br/> <i>Triad's forms are on file with WVDEP</i></p> | <p>SPECIALTY:<br/>         Geotechnical engineering and survey</p> | <p>WORKED WITH BEFORE<br/> <input checked="" type="checkbox"/> Yes<br/> <input type="checkbox"/> No</p> |
| <p>NAME AND ADDRESS:</p>   | <p>SPECIALTY:</p>  | <p>WORKED WITH BEFORE<br/> <input type="checkbox"/> Yes<br/> <input type="checkbox"/> No</p>            |
| <p>NAME AND ADDRESS:</p>   | <p>SPECIALTY:</p>  | <p>WORKED WITH BEFORE<br/> <input type="checkbox"/> Yes<br/> <input type="checkbox"/> No</p>            |
| <p>NAME AND ADDRESS:</p>   | <p>SPECIALTY:</p>  | <p>WORKED WITH BEFORE<br/> <input type="checkbox"/> Yes<br/> <input type="checkbox"/> No</p>            |
| <p>NAME AND ADDRESS:</p>   | <p>SPECIALTY:</p>  | <p>WORKED WITH BEFORE<br/> <input type="checkbox"/> Yes<br/> <input type="checkbox"/> No</p>            |
| <p>NAME AND ADDRESS:</p>   | <p>SPECIALTY:</p>  | <p>WORKED WITH BEFORE<br/> <input type="checkbox"/> Yes<br/> <input type="checkbox"/> No</p>            |
| <p>NAME AND ADDRESS:</p>   | <p>SPECIALTY:</p>  | <p>WORKED WITH BEFORE<br/> <input type="checkbox"/> Yes<br/> <input type="checkbox"/> No</p>            |
| <p>NAME AND ADDRESS:</p>   | <p>SPECIALTY:</p>  | <p>WORKED WITH BEFORE<br/> <input type="checkbox"/> Yes<br/> <input type="checkbox"/> No</p>            |
| <p>NAME AND ADDRESS:</p>   | <p>SPECIALTY:</p>  | <p>WORKED WITH BEFORE<br/> <input type="checkbox"/> Yes<br/> <input type="checkbox"/> No</p>            |

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

**YES** Description and Number of Projects: **Members of our project team have worked on numerous WDEP AMP Projects while working for other firms.**

NO

B. Are your firm's personnel experienced in Soil Analysis?

**YES** Description and Number of Projects: **Hundreds of projects firmwide; We use data obtained from soils laboratories in preparing studies and designs. WSA has geotechnical engineers as part of staffing component. We will be using subconsultant for geotechnical services on small projects only.**

NO

C. Are your firm's personnel experienced in hydrology and hydraulics?

**YES** Description and Number of Projects: **Hundreds of projects firmwide; Our personnel have experience addressing drainage issues on our nation's roadways and on urban and rural development projects, as well as site development projects and other infrastructure and municipal services.**

NO

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

**YES** Description and Number of Projects: \_\_\_\_\_

NO

E. Are your firm's personnel experienced in domestic waterline design? (Include any experience in evaluation of aquifer degradation as a result of mining.)

**YES** Description and Number of Projects: **Hundreds of projects firmwide; WSA's water resources consults on all aspects of water, wastewater, and sewer engineering. Over the past 25 years, WSA has provided comprehensive water, wastewater, stormwater, and utility design and planning on projects which have entailed working closely with municipalities, water and sewer districts, and other public entities in evaluating existing systems and developing sound recommendations and engineering designs.**

NO

F. Are your firm's personnel experienced in Acid Mine Drainage Evaluation and Abatement Design?

**YES** Description and Number of Projects: \_\_\_\_\_

NO

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

|   |  |  |   |
|---|--|--|---|
| <p><b>NAME &amp; TITLE (Last, First, Middle Int.)</b><br/> <b>Morrison, Donald, E.</b><br/> <b>CET, Project Manager</b></p> | <p><b>YEARS OF AML DESIGN EXPERIENCE:</b><br/>                 0-1</p> | <p><b>YEARS OF AML RELATED DESIGN EXPERIENCE:</b><br/>                 0-1</p> | <p><b>YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:</b> 34</p> |
|---|--|--|---|

Brief Explanation of Responsibilities  
**Mr. Morrison will assist in water supply, collection, and transport designs. His experience includes design and construction management of water and wastewater systems, sewer rehabilitation, storm drain systems, and street and roadway projects. Mr. Morrison has additional experience preparing water and wastewater studies including user charge recommendations, system evaluations, contract administration, and construction inspection.**

**EDUCATION (Degree, Year, Specialization)**  
**Engineering Technician, Institute for the Certification of Engineering Technicians, 1974, Civil Engineering Design**

**MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS**  
**American Water Works Association, National Society of Professional Engineers, America Society of Highway Engineers, Columbus Engineers Club, Ohio Environmental Council, Ohio Alliance for the Environment**

**REGISTRATION (Type, Year, State)**  
**Certified Engineering Technician**

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

|  |  |  |   |
|--|--|--|---|
| <p><b>NAME &amp; TITLE (Last, First, Middle Int.)</b><br/> <b>Stewart, David W.</b><br/> <b>Senior Project Manager</b></p> | <p><b>YEARS OF AML DESIGN EXPERIENCE:</b><br/>                 0-1</p> | <p><b>YEARS OF AML RELATED DESIGN EXPERIENCE:</b><br/>                 0-1</p> | <p><b>YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:</b> 33</p> |
|--|--|--|---|

Brief Explanation of Responsibilities  
**Mr. Stewart is an expert in water and wastewater treatment systems including chemical, biological, and physical processes. Mr. Stewart will provide hydraulic and treatment design for any AMD active or passive treatment systems.**

**EDUCATION (Degree, Year, Specialization)**  
**BS, 1976, Civil Engineering and Environmental Engineering**

**MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS**  
**American Water Works Association, Water Environment Federation, Ohio Water Environment Association**

**REGISTRATION (Type, Year, State)**  
**Professional Engineer: 1982 MD and VA; 1994 OH**  
**Class III Wastewater Treatment Operator 2006**

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

|  |  |   |   |  |
|--|--|---|---|--|
| NAME & TITLE (Last, First, Middle Int.)<br><b>Williams, Ron<br/>PE, PS, SR/WA<br/>Senior Right-of-Way and Utility Engineer</b>   |  | YEARS OF AML DESIGN EXPERIENCE:<br><b>3</b> | YEARS OF AML RELATED DESIGN EXPERIENCE:<br><b>3</b> | YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:<br><b>6</b> |
| Brief Explanation of Responsibilities<br><b>Mr. Williams will be responsible for complete operation and management of an engineering office. He has more than 50 years of right-of-way, engineering, and surveying experience. His work has included design of water treatment distribution lines, wastewater collection and treatment, reclamation of abandoned mine lands for the WVDEP, and highway design for WVDOH.</b> |  |   |   |  |
| EDUCATION (Degree, Year, Specialization)<br><b>MS, 1977, Civil Engineering<br/>BS, 1959, Civil Engineering</b>   |  |   |   |  |
| MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS<br><b>Senior Member, International Right of Way Association; Fellow, American Society of Engineers; Member, National Society of Civil Engineers; Member, National Society of Professional Surveyors; Member, West Virginia Association of Land Surveyors; Past Chairman, Transportation Research Board, National Academy of Science</b>   |  |   |   |  |
| REGISTRATION (Type, Year, State)<br><b>Professional Engineer: 1963 WV; 1993 VA; 1959 PA<br/>Professional Land Surveyor: 1963 WV; 1961 PA</b>   |  |   |   |  |

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

|  |  |   |  |  |
|--|--|---|--|--|
| NAME & TITLE (Last, First, Middle Int.)<br><b>Clegg, Larry, P.<br/>PE, Senior Project Manager</b>  |  | YEARS OF AML DESIGN EXPERIENCE:<br><b>0</b> | YEARS OF AML RELATED DESIGN EXPERIENCE:<br><b>22</b> | YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:<br><b>2</b> |
| Brief Explanation of Responsibilities<br><b>Mr. Clegg, as senior project manager, is responsible for the execution of the project. These responsibilities include managing the budget, project schedule, and design staff, as well as overseeing the design. Mr. Clegg's experience includes working on many types of civil engineering projects such as grading, water, wastewater, roadway, drainage, hydraulics, and stormwater management.</b> |  |   |  |  |
| EDUCATION (Degree, Year, Specialization)<br><b>BSEM, 1981, Mining Engineering<br/>BSCE, 1987, Civil Engineering</b>  |  |   |  |  |
| MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS<br><b>Professional Engineer, 1999 WV; 1991 FL; 2003 AR; 2009 VA</b>   |  |   |  |  |

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

|  |   |  |  |
|--|---|--|--|
| <b>NAME &amp; TITLE (Last, First, Middle Int.)</b><br><b>Simpson, Wesley, D.</b><br><b>PE, Project Manager</b> | <b>YEARS OF AML DESIGN EXPERIENCE:</b><br>0 | <b>YEARS OF AML RELATED DESIGN EXPERIENCE:</b><br>15 | <b>YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:</b><br>0 |
|--|---|--|--|

**Brief Explanation of Responsibilities**  
**Mr. Simpson, as project manager, is responsible for the execution of the project. These responsibilities include managing the budget, project schedule, and design staff as well as overseeing the design. Mr. Simpson's experience includes working on many types of civil engineering projects such as bridges, retaining walls, roadway, drainage, and hydraulics.**

**EDUCATION (Degree, Year, Specialization)**  
**BSCe, 1993, Civil Engineering**

**MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS**  
**REGISTRATION (Type, Year, State)**  
**Professional Engineer: 1998 WV and DE**

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

|   |   |  |  |
|---|---|--|--|
| <b>NAME &amp; TITLE (Last, First, Middle Int.)</b><br><b>Shamblin, Cynthia, L.</b><br><b>PE, Senior Project Manager</b> | <b>YEARS OF AML DESIGN EXPERIENCE:</b><br>0 | <b>YEARS OF AML RELATED DESIGN EXPERIENCE:</b><br>25 | <b>YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:</b><br>0 |
|---|---|--|--|

**Brief Explanation of Responsibilities**  
**Mrs. Shamblin, as senior project manager, is responsible for the execution of the project. These responsibilities include managing the budget, project schedule, and design staff, as well as overseeing the design. Mrs. Shamblin's experience includes working on many types of civil engineering projects such as bridges, retaining walls, culverts, and hydraulics.**

**EDUCATION (Degree, Year, Specialization)**  
**MSCE, 1989, Civil Engineering**  
**BSCe, 1984, Civil Engineering**

**MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS**  
**National Council of Examiners for Engineering and Surveying**  
**National Society of Professional Engineers**  
**REGISTRATION (Type, Year, State)**  
**Professional Engineer: 1991 WV and NC; 2007 VA; 2009 DC**

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

|  |  |  |  |   |
|--|--|--|--|---|
| NAME & TITLE (Last, First, Middle Int.)<br><b>Martin, Reason, W.<br/>CADD Technician III</b> |  | YEARS OF AML DESIGN EXPERIENCE:<br>0-1 | YEARS OF AML RELATED DESIGN EXPERIENCE:<br>0-1 | YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:<br>2 |
|--|--|--|--|---|

Brief Explanation of Responsibilities  
**Mr. Martin will participate in various stages of waterline design and relocation done for various projects. He has nine years of experience in surveying, design, drafting, and construction inspection in West Virginia and Virginia.**

EDUCATION (Degree, Year, Specialization)  
**BS, Engineering Technology/Civil Emphasis, 1998  
AS, Civil Engineering Technology, 1997**

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

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

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

Brief Explanation of Responsibilities

EDUCATION (Degree, Year, Specialization)

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

14. PRIMARY OFFICE WHICH WILL BE USED TO COMPLETE AML  
 DESIGN SERVICES

| <u>Field of Engineering</u> | <u>Software Used by WSA</u>  | <u>Field of Engineering</u> | <u>Software Used by WSA</u>   |
|-----------------------------|--|-----------------------------|---|
| Roadway and Other           | <ul style="list-style-type: none"> <li>• AutoCad</li> <li>• AutoTurn</li> <li>• Eagle Point</li> </ul>                 | Hydrology and Hydraulics    | <ul style="list-style-type: none"> <li>• FlowMaster</li> <li>• PondPack</li> <li>• Ensoft Hydro</li> <li>• XP-SWMM</li> <li>• HY-8</li> <li>• TR-20 and TR-55</li> <li>• HEC-1 and HEC-2</li> </ul>   |
| Structures                  | <ul style="list-style-type: none"> <li>• STRAAD III</li> <li>• RC Pier</li> <li>• STRUDL</li> <li>• CONSPAN</li> </ul> | Traffic                     | <ul style="list-style-type: none"> <li>• MicroStation</li> <li>• GEOPAK</li> <li>• Microsoft Projects and SureTRAK</li> <li>• Merlin Dash</li> <li>• Synchro 5 and 6</li> <li>• Passer II-94, Transyt 7F</li> <li>• Signal 94, TSIS (CORSIM)</li> </ul>                     |
|                             |  |                             | <ul style="list-style-type: none"> <li>• HEC-6,</li> <li>• HEC-22</li> <li>• HEC-RAS and HEC GeoRAS</li> <li>• HEC-12</li> <li>• HEC-HMS</li> <li>• Culvert Master</li> <li>• SIDRA, VISSIM</li> <li>• Highway Capacity Software (HCS)</li> <li>• NETSIM, MinUTP</li> </ul> |

15. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATED ENGINEER OF RECORD (Partial Listing of Projects)

| PROJECT NAME, TYPE AND LOCATION                               | NAME AND ADDRESS OF OWNER                                     | NATURE OF YOUR FIRM'S RESPONSIBILITY | ESTIMATED CONSTRUCTION COST  | PERCENT COMPLETE  |
|---|---|--------------------------------------|--|---|
| King Coal Highway Highway and Bridge Design Mercer County, WV | WVDOT<br>1900 Kanawha Blvd. East<br>Charleston, WV 25305-0430 | \$ 98,000,000                        | 99%  | King Coal Highway Highway and Bridge Design Mercer County, WV |
| Charles Town By-Pass Sign Renovation Plans Jefferson County   | WVDOT<br>1900 Kanawha Blvd. East<br>Charleston, WV 25305-0430 | \$500,000                            | 45%  | Charles Town By-Pass Sign Renovation Plans Jefferson County   |
| I-70 Sign Renovation, Ohio County                             | WVDOT<br>1900 Kanawha Blvd. East<br>Charleston, WV 25305-0430 | \$2,000,000                          | 75%  | I-70 Sign Renovation, Ohio County                             |
| District 2 Design/Build                                       | WVDOT<br>1900 Kanawha Blvd. East<br>Charleston, WV 25305-0430 | \$5,700,000                          | 80%  | District 2 Design/Build                                       |
| Beckley Z-Way Raleigh County                                  | WVDOT<br>1900 Kanawha Blvd. East<br>Charleston, WV 25305-0430 | \$45,000,000                         | 30%  | Beckley Z-Way Raleigh County                                  |
| Pennsylvania Avenue Signals Kanawha County                    | WVDOT<br>1900 Kanawha Blvd. East<br>Charleston, WV 25305-0430 | \$500,000                            | 75%  | Pennsylvania Avenue Signals Kanawha County                    |
| Statewide Transportation Plan Various Counties                | WVDOT<br>1900 Kanawha Blvd. East<br>Charleston, WV 25305-0430 | N/A                                  | 30%  | Statewide Transportation Plan Various Counties                |
| TOTAL NUMBER OF PROJECTS: 7                                   |   |                                      | TOTAL ESTIMATED CONSTRUCTION COSTS: \$ 151,700,000 (Construction Cost) |   |



16. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A SUBCONSULTANT TO OTHERS (Partial Listing of Projects)

| PROJECT NAME, TYPE AND LOCATION | NATURE OF FIRMS RESPONSIBILITY                         | NAME AND ADDRESS OF OWNER   | ESTIMATED COMPLETION DATE | ESTIMATED CONSTRUCTION COST |                           |
|---------------------------------|--|---|---------------------------|-----------------------------|---------------------------|
|                                 |  |   |                           | ENTIRE PROJECT              | YOUR FIRMS RESPONSIBILITY |
|                                 | Freeway Corridor Studies                               | Sub to: HNTB<br>For: Texas DOT<br>125 E. 11 <sup>th</sup> Street<br>Austin, TX 78701      | 2014                      | N/A                         | \$595,395 (Fee)           |
| I-4 CEI Services Florida        | Construction Engineering and Inspection for Expressway | Sub to: Parson Brinkerhoff<br>For: Florida DOT<br>605 Suwanee St<br>Tallahassee, FL 32399 | 2008                      | N/A                         | \$492,314 (Fee)           |
|                                 |  |   |                           |                             |                           |
|                                 |  |   |                           |                             |                           |
|                                 |  |   |                           |                             |                           |
|                                 |  |   |                           |                             |                           |
|                                 |  |   |                           |                             |                           |

| 17. CC | PROJECT NAME, TYPE AND LOCATION  |  | NAME AND ADDRESS OF OWNER                                     |  | IS THE DESIGNATED ENGINEER OF RECORD (Partial Listing) |      | CONSTRUCTED (YES OR NO) |
|--------|--|--|---|--|--|------|-------------------------|
|        |  |  |   |  | YEAR   |      |                         |
|        | West Virginia Route 9 Environmental Impact Statement Berkeley County, WV |  | WVDOT<br>1900 Kanawha Blvd. East<br>Charleston, WV 25305-0430 |  | \$162,000,000  | 2000 | Yes                     |
|        | US 522 Highway & Bridge Design Morgan County, WV                         |  | WVDOT<br>1900 Kanawha Blvd. East<br>Charleston, WV 25305-0430 |  | \$50,000,000   | 2006 | No                      |
|        | US 470 Sign Renovation Contract Plans Ohio County, WV                    |  | WVDOT<br>1900 Kanawha Blvd. East<br>Charleston, WV 25305-0430 |  | \$750,000  | 2007 | Yes                     |
|        | Greenbrier St. Sign Renovation Contract Plans Kanawha County, WV         |  | WVDOT<br>1900 Kanawha Blvd. East<br>Charleston, WV 25305-0430 |  | \$500,000  | 2005 | Yes                     |
|        | WV 2 Highway Design Wetzel/Marshall County, WV                           |  | WVDOT<br>1900 Kanawha Blvd. East<br>Charleston, WV 25305-0430 |  | \$22,000,000   | 2007 | No                      |
|        | WV 10 CEI, Logan County, WV  |  | WVDOT<br>1900 Kanawha Blvd. East<br>Charleston, WV 25305-0430 |  | \$10,000,000   | 2002 | Yes                     |
|        | WV 2 CEI, Brooke County, WV  |  | WVDOT<br>1900 Kanawha Blvd. East<br>Charleston, WV 25305-0430 |  | \$21,000,000   | 2002 | Yes                     |
|        | WV 14 CEI, Wood County, WV   |  | WVDOT<br>1900 Kanawha Blvd. East<br>Charleston, WV 25305-0430 |  | \$10,000,000   | 2004 | Yes                     |
|        | I-81 Sign Renovation Berkeley County, WV                                 |  | WVDOT<br>1900 Kanawha Blvd. East<br>Charleston, WV 25305-0430 |  | \$1,500,000  | 2005 | Yes                     |

|  |  |  |      |     |
|--|--|--|------|-----|
| Sign Fabrication Manual<br>Revisi/ & Updates, Charleston WV                                | WV DOT<br>1900 Kanawha Blvd. East<br>Charleston, WV 25305-0430         | N/A  | 2005 | N/A |
| Gilliam Arch Bridge Replacement<br>Highway and Bridge Design<br>Mercer County, WV          | WV DOT<br>1900 Kanawha Blvd. East<br>Charleston, WV 25305-0430         | \$1,300,000                                  | 2005 | Yes |
| Reedy Creek Hydraulic Study<br>Roane County, WV  | WV DOT<br>1900 Kanawha Blvd. East<br>Charleston, WV 25305-0430         | \$ 19.3<br>(WSA Fee)                         | 1999 | No  |
| West Virginia Turnpike<br>Toll Revenue & Rate Reclassification                             | WV PED<br>1900 Kanawha Blvd. East<br>Charleston, WV 25305-0430         | \$41,700<br>(WSA Fee)                        | 1999 | N/A |
| US 119 Rock Creek Intersection<br>Traffic Safety and Improvement Study<br>Boone County, WV | WV DOT<br>1900 Kanawha Blvd. East<br>Charleston, WV 25305-0430         | \$69,000<br>(WSA Fee)                        | 2001 | N/A |
| US 522 EIS<br>Morgan County, WV  | WV DOT<br>1900 Kanawha Blvd. East<br>Charleston, WV 25305-0430         | \$351,000<br>(WSA Fee)                       | 2002 | N/A |
| East Beckley Bypass EA<br>Raleigh County, WV   | WV DOT<br>1900 Kanawha Blvd. East<br>Charleston, WV 25305-0430         | \$464,000<br>(WSA Fee)                       | 2002 | N/A |
| US 50 Traffic Operations and Safety<br>Study<br>Mineral/ Hampshire Counties, WV            | WV DOT<br>1900 Kanawha Blvd. East<br>Charleston, WV 25305-0430         | \$185,000                                    | 2003 | N/A |
| WV 9 EIS<br>Morgan/Berkeley/Jefferson Counties,<br>WV                                      | WV DOT<br>1900 Kanawha Blvd. East<br>Charleston, WV 25305-0430         | \$509,000<br>Stop Work Order at 50% Complete | 2002 | N/A |
| Ohio SR 7 Traffic Operations & Safety<br>Study<br>Washington County, DOH                   | ODOT<br>WV DOT<br>1900 Kanawha Blvd. East<br>Charleston, WV 25305-0430 | \$250,000<br>(WSA FEE)                       | 2000 | N/A |

|   |   |                        |      |     |
|---|---|------------------------|------|-----|
| Parkersburg-Marietta MPO<br>Long Range Multimodal<br>Transportation Plan, Wood County,<br>WV & Washington County OH | WWW Interstate Planning Commisr<br>531 Market St<br>Parkersburg, WV 26101                               | \$267,000              | 2004 | N/A |
| US 220 Relocation<br>Hampshire County, WV   | WVDOT<br>1900 Kanawha Blvd. East<br>Charleston, WV 25305-0430   | \$668,000<br>(WSA Fee) | 2004 | No  |
| I-81 Sign Renovation<br>Berkeley Co. WV   | WVDOT<br>1900 Kanawha Blvd. East<br>Charleston, WV 25305-0430   | \$195,000<br>(WSA Fee) | 2003 | No  |
| I-15 Managed Lanes Value Pricing<br>Demonstration<br>San Diego, CA  | San Diego Association of Governments<br>401 B Street, Suite 800<br>San Diego, CA 92101                  | \$777,571              | 2002 | Yes |
| Grissom Parkway<br>Myrtle Beach, SC   | City of Myrtle Beach<br>PO Box 2468<br>Myrtle Beach, SC 29578   | \$678,976              | 2002 | Yes |
| James White Parkway Design<br>Knoxville KY  | Tennessee Dept of Transportation<br>505 Deadrick Street<br>Nashville, TN 37243                          | N/A                    | 2000 | Yes |
| I-95 Atlee-Elmont Interchange<br>Hanover County, VA   | Commonwealth of Virginia<br>Structure and Bridge Division<br>1401 E. Broad Street<br>Richmond, VA 23219 | \$2,735,809            | 2001 | Yes |

18. CC LETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM S BEEN A SUB-CONSULTANT TO OTHER FIRMS (INDICATE F SE

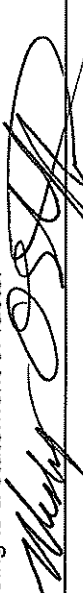
OF WORK FOR WHICH YOUR FIRM WAS RESPONSIBLE) (Partial Listing of Projects)

| PROJECT NAME, TYPE AND LOCATION   | NAME AND ADDRESS OF OWNER | ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION | YEAR | CONSTRUCTED (YES OR NO) | FIRM ASSOCIATED WITH |
|---|---------------------------|--|------|-------------------------|----------------------|
| Data is not currently available. WSA has served as a subconsultant to numerous firms on large and small projects worldwide. |                           |  |      |                         |                      |
|   |                           |  |      |                         |                      |
|   |                           |  |      |                         |                      |
|   |                           |  |      |                         |                      |
|   |                           |  |      |                         |                      |
|   |                           |  |      |                         |                      |

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.

Please see the narrative provided at the end of the submittal

20. The foregoing is a statement of facts.

Signature: 

Printed Name: Wesley O. Stafford, PE, AIGP

Title: Associate-in-Charge

Date: March 16, 2010



## PROFESSIONAL QUALIFICATIONS

WSA is an international consulting firm providing services in the fields of engineering, architecture, planning, and economics. The firm is multidisciplinary and has a diversified practice with its major concentration of services in the analysis and planning of transportation systems, the design of transportation facilities, and planning and design of community and industrial infrastructure systems and facilities. Established in 1952, the firm has completed more than 30,000 projects including work in 50 states as well as projects in more than 117 countries throughout the world. WSA has provided comprehensive engineering and inspection services for a broad range of transportation facilities, including highways, bridges and other structures, parking, and interchanges in the United States and around the world. *For additional general information about Wilbur Smith Associates, please refer to our web site at [www.WilburSmith.com](http://www.WilburSmith.com).*

### WSA's professional services include:

#### Water Resources

WSA's water resources division originated as a supplement to highway design, addressing drainage issues on our nation's roadways. Later, these methods were applied to urban and rural development projects. As the company expanded its capabilities, new opportunities surfaced. Since then, the water resources group has evolved into a full service division, supporting not only highway design, but urban and rural planning, site development and other infrastructure and municipal services. Water resources services include:

- hydrology and hydraulics
- hydrodynamic modeling
- drainage and waterline design
- detention ponds/lakes
- stormwater master plans
- stormwater utility development
- FEMA flood studies
- flood control strategies
- watershed modeling
- bridge scour studies
- river mechanics and modeling
- stream restoration
- pump stations

#### Geotechnical Investigation and Reports

WSA has integrated geotechnical engineering, pavement design, and foundation/site-related construction services into the design of our highway and bridge structures, commercial buildings, power plants, dams, ports, airports, and industrial facilities. Our geotechnical engineering services include:

- subsurface investigations
- shallow and deep foundation design
- slope stability analyses
- earth retaining structures and reinforced slopes
- rock slope engineering
- seismic hazard analysis
- ground improvement
- earth dam engineering
- seepage and dewatering analysis
- pavement design and management systems

**WSA will be teaming with a subconsultant, Triad Engineering, to fully provide these services to DEP.** Triad has provided project inspection, survey, material testing, laboratory testing, drilling, and sampling, as well as full geotechnical design for projects for more than 25 years. The firm's clients have included WVDEP, WVDOT, highway/bridge design firms, contractors, and every county in West Virginia. In addition to WVDEP projects, Triad has performed numerous large-scale surveys for other state agencies and private entities. Triad's staff of more than 250 includes individuals with degrees in the scientific and technical areas of civil, geotechnical, environmental, mining engineering, and geology and hydrogeology.

#### Environmental Engineering

WSA has provided our clients and the community with environmental planning and National Environmental Policy Act services for over 30 years. This includes over 250 completed projects in more than 36 states. Our environmental capabilities address all transportation modes including, aviation, rail, transit, roadways, bridges,

and ports, in addition to site development projects. Our firm is unique because we have in-house technical staff to address the full range of NEPA technical disciplines. This multi-discipline approach provides a culture that encourages creativity and non-traditional methods, thus bringing new ideas and streamlining processes to our clients. In addition to NEPA documentation and a variety of wetland, endangered species, and other natural resource assessments, our experience includes:

- noise and air quality modeling
- hazardous materials surveys
- community impact assessments
- environmental justice analysis
- public and stakeholder involvement
- agency coordination letters
- geographic information services

### Engineering (Highway Design)

Since WSA's first roadway design project in the late 1950s, we have continued to grow our roadway and highway design division to offer a full-spectrum of services to our clients. With over 21 design offices in the United States, some of our related services include:

- design of rural and urban streets, arterials, expressways, intersections, and interchanges
- HOV and HOT lanes
- parkways and landscaping
- roadway widening, surfacing, and rehabilitation
- grade separation structures, roadway, and railroad
- roadway hydrology and hydraulics
- route surveying

WSA has successfully completed numerous roadway design projects that have included road section and turn lane widening, curb and sidewalk repairs, intersection improvements, new sidewalk and trail design, bus shelters and other pedestrian access features. These services have also been provided on a larger scale to include planning and final construction design of a major corridor. For these projects, WSA has generated base plans from surveys, feasibility studies, utility coordination and relocation designs, environmental studies and permitting, right of way plans, traffic data collection, analysis, and projections, and concept, preliminary and final construction plans, among other tasks.

### Engineering (Bridge Design)

WSA continues to be a leader in contemporary bridge technology. Our work falls into nearly every category of bridge configuration and contemporary structural materials, and every type of highway structure including overhead signs, mast lights, tension poles, pedestrian bridges, and pedestrian and traffic tunnels and culverts. From feasibility studies, inspections and investigations to new and rehabilitative design and contract documents, WSA is a leader in bridge technology.

- pioneered the design of embedded "integral" post-tensioned caps in structural steel bridges — a first in the U.S.
- employed state-of-the-practice non-linear, structural seismic analysis techniques — a forerunner to industry standards
- developed the FHWA inspection manual for fracture-critical bridge members — providing instruction for more than 10 years
- 35 years of bridge research for FHWA and the National Academy of Sciences — used in technology transfer worldwide
- extensive experience in bridge hydraulics
- experience ranging from the simplest, single-span bridge to analysis and design of complex structures

### Cultural Resources

WSA offers a full scope of archaeological services from Phase I survey to Phase III mitigation and cultural historic surveys and National Register evaluations including resource management. We have a staff of professional archaeologists, architectural historians as well as access to surveyors, computer mapping specialists with expertise in CAD and GIS software and techniques, and graphic artists. WSA has provided cultural resources services on numerous department of transportation projects in Kentucky, Michigan, Tennessee, South Carolina, and West Virginia. Previously, WSA has held the Statewide Cultural Resources contract with WVDOH and has been able to supply archaeological and cultural historic services on a couple of projects.



Throughout its history, WSA has performed a significant number of archaeological and cultural historic projects. Our experience conducting archaeological investigations varies from small scale prehistoric sites to large scale historic farmsteads and industrial complexes. Cultural historic studies performed by WSA include the Statewide Historic Bridge Survey, in which over 300 structures were identified and evaluated. Other recent transportation cultural historic survey projects include the proposed I-66 corridor, in which over 400 structures were surveyed, and KY 52, which contained over 350 evaluated structures.

#### Natural Resources

As a part of our environmental engineering and planning services, WSA provides services related to natural resource assessment, including wetland/ stream mitigation, pre-construction notification, threatened and endangered species surveys, neotropical and migratory bird habitat and stream buffer variance applications. Additionally, our personnel have experience in the preparation of natural resource reports in support of Categorical Exclusions, Environmental Assessments, and Environmental Impact Statements for transportation projects.

#### Right-of-Way Services

WSA's right-of-way practice serves as an integral part to the success of our projects. Our professionals are equipped to support public and private sector clients nationwide in planning, negotiations, and relocations. We offer extensive knowledge in permitting and real estate law and possess above-average communication and people skills in order to minimize condemnation rates. Our creative solutions are a precursor to your success and guaranteed to help you achieve your goals. WSA's Charleston office has provided the following right-of-way services to WVDOT under past statewide agreements for right-of-way functions:

- review of right-of-way invoices (procurement by the Department by option, deed, or an agreement)
- review of condemnation packages for invoicing
- property management
- preparation of property descriptions
- plan review
- project oversight
- right-of-way stakeouts

#### Construction Inspection

WSA provides top-notch construction engineering and inspection services to assist project owners in executing construction projects in an efficient and cost effective manner. Construction quality is assured through WSA's well-managed program in inspection, materials sampling, and testing is evidenced through the following available CEI client services:

- pre-bid conferences
- bid openings
- contractor evaluations
- bid tabulations
- contract/award recommendations
- DBE compliance
- preconstruction conferences
- overall contract administration
- detailed resident inspection
- QA testing
- contractor pay requests
- claim assessment and change orders
- contractor labor compliance
- quality calculations and measurements
- schedule and budget coordination
- construction site safety
- work zone traffic control
- pre- and final inspection
- project closeout

WSA engages the most project-specific, appropriately skilled and capable personnel by staffing its initiatives with well-qualified, experienced professionals familiar with the client's vision, intent, and established methods and procedures. This working principle, accompanied by a demanding quality assurance focus, ensures WSA's responsiveness to a quality design project.