

The following documentation is an electronicallysubmitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at *wvOASIS.gov*. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at *WVPurchasing.gov* with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

| WOASIS | Jump to: PRCUID 🚖 Go 🔊 Home 🔑 Personalize 🚳 Accessibility 🛜 App Help 🌾 About 🔯 |
|---|--|
| Welcome, Lu Anne Cottrill Procurement | Budgeting Accounts Receivable Accounts Payable |
| Solicitation Response(SR) Dept: 0313 ID: ESR1005150000001447 Ver.: 1 Function: New Phase: Final | Modified by batch , 11/03/2015 |
| Header | |
| | Eist View |
| General Information Contact Default Values Discount Document Information | |
| Procurement Folder: 114103 | SO Doc Code: CEOI |
| Procurement Type: Central Contract - Fixed Amt | SO Dept: 0313 |
| Vendor ID: 00000209609 | SO Doc ID: DEP1600000002 |
| Legal Name: CIVIL TECH ENGINEERING INC | Published Date: 10/20/15 |
| Alias/DBA: | Close Date: 11/3/15 |
| Total Bid: \$0.00 | Close Time: 13:30 |
| Response Date: 10/05/2015 | Status: Closed |
| Response Time: 7:38 | Solicitation Description: Addendum 03 EOI Bickmore Refuse #2 |
| | Total of Header Attachments: 0 |
| | Total of All Attachments: 0 |



Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

State of West Virginia Solicitation Response

| | Proc Folder : 114103 Solicitation Description : Addendum 03 EOI Bickmore Refuse #2 Proc Type : Central Contract - Fixed Amt | | | | |
|-------------|---|----|--------------------------|---------|--|
| Date issued | | | | Version | |
| | 2015-11-03 13:30:00 | SR | 0313 ESR1005150000001447 | 1 | |

VENDOR

00000209609

CIVIL TECH ENGINEERING INC

FOR INFORMATION CONTACT THE BUYER Beth Collins

(304) 558-2157 beth.a.collins@wv.gov

Signature X

FEIN #

DATE

| Line | Comm Ln Desc | Qty | Unit Issue | Unit Price | Ln Total Or Contract Amount |
|--------------|--|-------------------|--------------|------------|-----------------------------|
| 1 | EOI Engineering Design Services | | | | \$0.00 |
| Comm Code | Manufacturer | Specification | | Model # | |
| 81100000 | | | | | |
| Extended Des | scription : *Dates of service are esti | mated for bidding | purpsoses or | ıly. | |
| | | | | | |

DEP16396 EXPRESSION OF INTEREST TO PROVIDE PROFESSIONAL ENGINEERING SERVICES FOR BICKMORE REFUSE #2

> SUBMITTED TO: WVDEP – OFFICE OF AML & R

SUBMITTED BY: CIVIL TECH ENGINEERING INC. 300A PRESTIGE DRIVE HURRICANE, WV 25526 Phone: 304-757-8094 Fax: 304-757-8095 civiltech1@frontier.com

DATE SUBMITTED: OCTOBER 8, 2015

PHOTO: SUNRISE SANITATION MINE DRAIN

CIVIL TECH ENGINEERING, INC.

300A Prestige Drive Hurricane, West Virginia 25526 Phone: 304-757-8094 Fax: 304-757-8095 civiltech1@frontier.com

October 8, 2015

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

Subject: Expression of Interest for DEP16396 Bickmore Refuse #2, Clay County, WV

To Whom it May Concern:

CIVIL TECH ENGINEERING INC. is pleased to present this EOI for the subject Project. This EOI has been prepared to illustrate our recent and pertinent experience with AML and civil design projects. Important and pertinent AML experience is summarized below:

- □ 50 years of combined experience with AML projects.
- □ 21 AML projects completed by Civil Tech since 2008.
- □ 137 AML projects completed by our principals prior to 1996.
- □ All projects completed on time and within budget.

We believe our past and recent experience makes our company uniquely qualified for <u>AML design projects.</u> We look forward to meeting with the selection committee to discuss the project and our qualifications.

Very truly yours,

CIVIL TECH ENGINEERING INC.

5

Mark E. Pennington MS, PE Principal Engineer

CIVIL TECH ENGINEERING, INC. 300A Prestige Drive Hurricane, West Virginia 25526 Phone: 304-757-8094 Fax: 304-757-8095 civiltech1@frontier.com

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Purchasing Divison 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

State of West Virginia Centralized Expression of Interest 02 — Architect/Engr

| Pro | oc Folder: 114103 | | | | | |
|-------------|--|------------------------|---------|--|--|--|
| Do | Doc Description: EOI Bickmore Refuse #2 DEP16396 | | | | | |
| Pro | oc Type: Central Contra | act - Fixed Amt | | | | |
| Date Issued | Solicitation Closes | Solicitation No | Version | | | |
| 2015-08-11 | 2015-09-23 13:30:00 | CEOI 0313 DEP160000002 | 1 | | | |

| BID CLERK | | |
|------------------------------|----|-------|
| DEPARTMENT OF ADMINISTRATION | | |
| PURCHASING DIVISION | | |
| 2019 WASHINGTON ST E | | |
| CHARLESTON | WV | 25305 |
| US | | |

| VENDOR |
|---|
| Vendor Name, Address and Telephone Number: Civil Tech Engineering Inc. |
| 300A Prestige Drive |
| Hurricane, West Virginia 25526 |
| 304-757-8094 |

| FOR INFORMATION CONTACT THE BUYER | | |
|---|------------|----------------------|
| Beth Collins | | |
| (304) 558-2157 | | |
| beth.a.collins@wv.gov | | |
| | | |
| Signature X FEIN # | 55-0757403 | date October 8, 2015 |
| All offers subject to all terms and conditions contained in this solicitation | I | |

| INVOICE TO | | SHIP TO | |
|-----------------------------------|---------|-----------------------------------|----------|
| ENVIRONMENTAL PROTECTION | | ENVIRONMENTAL PROTECTION | |
| OFFICE OF AML&R 601 57TH ST SE | | OFFICE OF AML&R 601 57TH ST SE | |
| CHARLESTON | WV25304 | CHARLESTON | WV 25304 |
| US | | US | |

| Line | Comm Ln Desc | Qty | Unit Issue | |
|------|---------------------------------|-----|------------|--|
| 1 | EOI Engineering Design Services | | | |
| | | | | |

| Comm Code | Manufacturer | Specification | Model # | |
|-----------|--------------|---------------|---------|--|
| 81100000 | | | | |
| | | | | |

Extended Description :

*Dates of service are estimated for bidding purpsoses only.

| | Document Phase | Document Description | Page 3 | |
|--------------|----------------|----------------------------------|--------|---|
| DEP160000002 | Final | EOI Bickmore Refuse #2 DEP1 6396 | of 3 | ĺ |

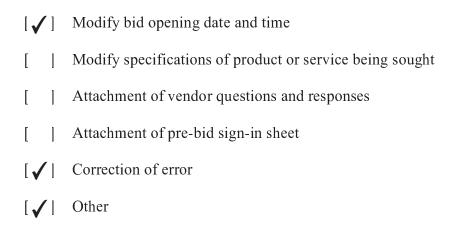
ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

SOLICITATION NUMBER: CEOI DEP160000002 Addendum Number: 01

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

Applicable Addendum Category:



Description of Modification to Solicitation:

This addendum is issued to modify the solicitation per the attached documentation and the following:

- 1. To correct a legal advertisement error.
- 2. To change the question submittal deadline to September 25, 2015 at 5:00 PM, EST
- 3. To modify the bid opening date to October 8, 2015 at 1:30 PM, EST

No other changes.

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

Terms and Conditions:

- 1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.
- 2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.:

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

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

Addendum Numbers Received:

(Check the box next to each addendum received)

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

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

| Civil Tech Engineering Inc. | | | | | |
|-----------------------------|--|--|--|--|--|
| Company | | | | | |
| Authorized Signature | | | | | |
| October 8, 2015 | | | | | |
| Date | | | | | |

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing. Revised 6/8/2012

State of West Virginia

VENDOR PREFERENCE CERTIFICATE

Certification and application* is hereby made for Preference in accordance with *West Virginia Code*, §5A-3-37. (Does not apply to construction contracts). *West Virginia Code*, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the *West Virginia Code*. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Vendor Preference, if applicable.

1. Application is made for 2.5% vendor preference for the reason checked:

- Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; **or**,
- Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or 80% of the ownership interest of Bidder is held by another individual, partnership, association or corporation resident vendor who has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years continuously in West Virginia for four (4) years immediately preceding the date of this certification; or 80% of the preceding the date of this certification; or 80% of the ownership interest of Bidder is held by another individual, partnership, association or corporation resident vendor who has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or,
- Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; **or**,

2. Application is made for 2.5% vendor preference for the reason checked:

Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; **or**,

3. Application is made for 2.5% vendor preference for the reason checked:

Bidder is a nonresident vendor employing a minimum of one hundred state residents or is a nonresident vendor with an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia employing a minimum of one hundred state residents who certifies that, during the life of the contract, on average at least 75% of the employees or Bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; **or**,

4. Application is made for 5% vendor preference for the reason checked:

Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; or,

5. Application is made for 3.5% vendor preference who is a veteran for the reason checked:

Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; **or**,

6. Application is made for 3.5% vendor preference who is a veteran for the reason checked:

- Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.
- 7. Application is made for preference as a non-resident small, women- and minority-owned business, in accordance with *West Virginia Code* §5A-3-59 and *West Virginia Code of State Rules.*
- Bidder has been or expects to be approved prior to contract award by the Purchasing Division as a certified small, womenand minority-owned business.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.

Under penalty of law for false swearing (West Virginia Code, §61-5-3), Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.

| Bidder: | Signed: |
|---------|---------|
| Date: | Title: |

RFQ No.

STATE OF WEST VIRGINIA Purchasing Division PURCHASING AFFIDAVIT

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

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

DEFINITIONS:

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

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

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

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

| WITNESS THE FOLLOWING SIGNATURE: | N |
|--|---|
| Vendor's Name: CINH ECH ENGINE | ARING INC. |
| Authorized Signature: | Date: 9/11/15 |
| State of West Virginia | 8 |
| County of to-wit: | |
| Taken, subscribed, and sworn to before me this to d | ay of September 2015 |
| My Commission expires 3/28/23 | 20013 |
| AFFIX SEAL HERE | NOTARY PUBLIC Masteri Agur |
| OFFICIAL SEAL Notary Public, State of West Virginia DUSTIN C MILLER City National Bank 100 Poplar Fork Road Scatt Depol, WV 25560 My commission expires March 28, 2023 | Purchasing Affidavit (Revised 07/01/2012) |

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- 3. Section Two: Instructions to Vendors Submitting Bids
- 4. Section Three: Project Specifications
- 5. Section Four: Vendor Proposal, Evaluation, and Award
- 6. Section Five: Terms and Conditions
- 7. Certification and Signature Page

SECTION ONE: GENERAL INFORMATION

- 1. PURPOSE: The Acquisition and Contract Administration Section of the Office of West Virginia State Purchasing Division (Purchasing Division) is soliciting Expression(s) of Interest (EOI) for the West Virginia Department of Environmental Protection, Office of Abandoned Mine Lands and Reclamation (WVDEP/AML), from qualified firms (Vendors) to provide architectural/engineering services as defined herein.
- 2. **PROJECT:** The mission or purpose of the project for which bids are being solicited is to provide design services for the following:

BICKMORE REFUSE # 2:

Design of drainage conveyances. Installation of mine seals. Reclamation of refuse. Installation of streambank protection. Re-vegetation of disturbed areas.

3. SCHEDULE OF EVENTS:

,

| Release of the EOI | 08/11/2015 | |
|--------------------------------------|------------|---|
| Addendum Issued | | |
| Expressions of Interest Opening Date | | 1 |
| Estimated Date for Interviews | | |

SECTION TWO: INSTRUCTIONS TO VENDORS SUBMITTING BIDS

Instructions begin on the next page.

INSTRUCTIONS TO VENDORS SUBMITTING BIDS

- 1. REVIEW DOCUMENTS THOROUGHLY: The attached documents contain a solicitation for bids. Please read these instructions and all documents attached in their entirety. These instructions provide critical information about requirements that if overlooked could lead to disqualification of a Vendor's bid. All bids must be submitted in accordance with the provisions contained in these instructions and the Solicitation. Failure to do so may result in disqualification of Vendor's bid.
- 2. MANDATORY TERMS: The Solicitation may contain mandatory provisions identified by the use of the words "must," "will," and "shall." Failure to comply with a mandatory term in the Solicitation will result in bid disqualification.
- 3. PREBID MEETING: The item identified below shall apply to this Solicitation.

 \checkmark A pre-bid meeting will not be held prior to bid opening.

A <u>NON-MANDATORY PRE-BID</u> meeting will be held at the following place and time:

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

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

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

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

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

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

Question Submission Deadline: August 31, 2015 at 5:00 PM, EST

Submit Questions to: Beth A. Collins, Senior Buyer 2019 Washington Street, East Charleston, WV 25305 Fax: (304) 558-4115 (Vendors should not use this fax number for bid submission) Email: beth.a.collins@wv.gov

- 5. VERBAL COMMUNICATION: Any verbal communication between the Vendor and any State personnel is not binding, including verbal communication at the mandatory pre-bid conference. Only information issued in writing and added to the Solicitation by an official written addendum by the Purchasing Division is binding.
- 6. BID SUBMISSION: All bids must be submitted electronically through wvOASIS or signed and delivered by the Vendor to the Purchasing Division at the address listed below on or before the date and time of the bid opening. Any bid received by the Purchasing Division staff is considered to be in the possession of the Purchasing Division and will not be returned for any reason. The Purchasing Division will not accept bids, modification of bids, or addendum acknowledgment forms via e-mail. Acceptable delivery methods include electronic submission via wvOASIS, hand delivery, delivery by courier, or facsimile. The bid delivery address is:

Department of Administration, Purchasing Division 2019 Washington Street East Charleston, WV 25305-0130 A bid that is not submitted electronically through wvOASIS should contain the information listed below on the face of the envelope or the bid may be rejected by the Purchasing Division.:

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

In the event that Vendor is responding to a request for proposal, and choses to respond in a manner other than by electronic submission through wvOASIS, the Vendor shall submit one original technical and one original cost proposal plus convenience copies of each to the Purchasing Division at the address shown above. Additionally, if Vendor does not submit its bid through wvOASIS, the Vendor should identify the bid type as either a technical or cost proposal on the face of each bid envelope submitted in response to a request for proposal as follows:

BID TYPE: (This only applies to CRFP)

Technical

Cost

7. BID OPENING: Bids submitted in response to this Solicitation will be opened at the location identified below on the date and time listed below. Delivery of a bid after the bid opening date and time will result in bid disqualification. For purposes of this Solicitation, a bid is considered delivered when confirmation of delivery is provided by wvOASIS (in the case of electronic submission) or when the bid is time stamped by the official Purchasing Division time clock (in the case of hand delivery).

Bid Opening Date and Time: September 23, 2015 at 1:30 PM, EST Bid Opening Location: Department of Administration, Purchasing Division 2019 Washington Street East Charleston, WV 25305-0130

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

- 9. BID FORMATTING: Vendor should type or electronically enter the information onto its bid to prevent errors in the evaluation. Failure to type or electronically enter the information may result in bid disqualification.
- 10. ALTERNATES: Any model, brand, or specification listed in this Solicitation establishes the acceptable level of quality only and is not intended to reflect a preference for, or in any way favor, a particular brand or vendor. Vendors may bid alternates to a listed model or brand provided that the alternate is at least equal to the model or brand and complies with the required specifications. The equality of any alternate being bid shall be determined by the State at its sole discretion. Any Vendor bidding an alternate model or brand should clearly identify the alternate items in its bid and should include manufacturer's specifications, industry literature, and/or any other relevant documentation demonstrating the equality of the alternate items. Failure to provide information for alternate items may be grounds for rejection of a Vendor's bid.
- 11. EXCEPTIONS AND CLARIFICATIONS: The Solicitation contains the specifications that shall form the basis of a contractual agreement. Vendor shall clearly mark any exceptions, clarifications, or other proposed modifications in its bid. Exceptions to, clarifications of, or modifications of a requirement or term and condition of the Solicitation may result in bid disqualification.
- 12. COMMUNICATION LIMITATIONS: In accordance with West Virginia Code of State Rules §148-1-6.6, communication with the State of West Virginia or any of its employees regarding this Solicitation during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited without prior Purchasing Division approval. Purchasing Division approval for such communication is implied for all agency delegated and exempt purchases.
- **13. REGISTRATION:** Prior to Contract award, the apparent successful Vendor must be properly registered with the West Virginia Purchasing Division and must have paid the \$125 fee, if applicable.
- 14. UNIT PRICE: Unit prices shall prevail in cases of a discrepancy in the Vendor's bid.
- **15. PREFERENCE:** Vendor Preference may only be granted upon written request and only in accordance with the West Virginia Code § 5A-3-37 and the West Virginia Code of State Rules. A Vendor Preference Certificate form has been attached hereto to allow Vendor to apply for the preference. Vendor's failure to submit the Vendor Preference Certificate form with its bid will result in denial of Vendor Preference. Vendor Preference does not apply to construction projects.
- 16. SMALL, WOMEN-OWNED, OR MINORITY-OWNED BUSINESSES: For any solicitations publicly advertised for bid, in accordance with West Virginia Code §5A-3-37(a)(7) and W. Va. CSR § 148-22-9, any non-resident vendor certified as a small, women-owned, or minority-owned business under W. Va. CSR § 148-22-9 shall be provided the

same preference made available to any resident vendor. Any non-resident small, womenowned, or minority-owned business must identify itself as such in writing, must submit that writing to the Purchasing Division with its bid, and must be properly certified under W. Va. CSR § 148-22-9 prior to contract award to receive the preferences made available to resident vendors. Preference for a non-resident small, women-owned, or minority owned business shall be applied in accordance with W. Va. CSR § 148-22-9.

- 17. WAIVER OF MINOR IRREGULARITIES: The Director reserves the right to waive minor irregularities in bids or specifications in accordance with West Virginia Code of State Rules § 148-1-4.6.
- 18. ELECTRONIC FILE ACCESS RESTRICTIONS: Vendor must ensure that its submission in wvOASIS can be accessed by the Purchasing Division staff immediately upon bid opening. The Purchasing Division will consider any file that cannot be immediately opened and/or viewed at the time of the bid opening (such as, encrypted files, password protected files, or incompatible files) to be blank or incomplete as context requires, and are therefore unacceptable. A vendor will not be permitted to unencrypt files, remove password protections, or resubmit documents after bid opening if those documents are required with the bid.

SECTION THREE: PROJECT SPECIFICATIONS

1. Location: Agency is located at 601 57th Street, SE, Charleston, WV 25304 and the Project is located in Clay County, WV.

Directions to Site 2: From Charleston, Take I-79N to Walback/Clay Exit (#34); Turn Right onto Rt. 36S and drive 7.2 miles; Veer Left onto Rt. 4N and drive 2.4 miles; Turn Right onto Rt. 16S (Main St.) and drive 5.5 miles; Turn Left, cross bridge and continue on Rt. 16 another 2.7 miles; Turn Right onto Carver Fork. Portals are located on Left, ~60' above road. Approximate coordinates of coal refuse: N38-23-51, W81-06-59.

Directions to Site 1: From Site 2, Turn Right onto Rt. 16S and drive 1.3 miles; Turn Left onto Fola Road and drive 0.4 miles; Turn Left @ old mechanic shop. Approximate coordinates of coal refuse: N38-55-15.6, W80-47-38.09.

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

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

Design of drainage conveyances. Installation of mine seals. Reclamation of refuse. Installation of streambank protection. Re-vegetation of disturbed areas.

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

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

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

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

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

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

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

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

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

5.1. Materials and Information Required at Oral Presentation:

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

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

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

SECTION FOUR: VENDOR PROPOSAL, EVALUATION, & AWARD

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

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

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

- 3. Evaluation and Award Process: Expressions of Interest for projects estimated to cost \$250,000 or more will be evaluated and awarded in accordance with West Virginia Code \$5G-1-3. That Code section requires the following:
 - 3.1. Required Elements of EOI Response: The director of purchasing shall encourage such firms engaged in the lawful practice of the profession to submit an expression of interest, which shall include a statement of qualifications, and performance data and may include anticipated concepts and proposed methods of approach to the project.
 - 3.2. **Public Advertisement:** All EOI requests shall be announced by public notice published as a Class II legal advertisement in compliance with the provisions of West Virginia Code §59-3-1 et seq.
 - 3.3. Selection Committee Evaluation & Negotiation: A committee comprised of three to five representatives of the agency initiating the request shall:
 - 3.3.1. Evaluate the statements of qualifications and performance data and other material submitted by the interested firms and select three firms which in their opinion are the best qualified to perform the desired service.
 - 3.3.2. Conduct interviews with each firm selected and the conduct discussions regarding anticipated concepts and the proposed methods of approach to the assignment.
 - 3.3.3. Rank in order of preference no less than three professional firms deemed to be the most highly qualified to provide the services required, and shall commence scope of service and price negotiations with the highest qualified professional firm.

- 3.3.4. Should the agency be unable to negotiate a satisfactory contract with the professional firm considered to be the most qualified, at a fee determined to be fair and reasonable, price negotiations with the firm of second choice shall commence. Failing accord with the second most qualified professional firm, the committee shall undertake price negotiations with the third most qualified professional firm.
- 3.3.5. Should the agency be unable to negotiate a satisfactory contract with any of the selected professional firms, it shall select additional professional firms in order of their competence and qualifications and it shall continue negotiations in accordance with this section until an agreement is reached.
- 3.4. Vendor Ranking: All evaluation criteria is defined in the Procurement Specifications section and based on a 100 point total score.

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

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

SECTION FIVE: TERMS AND CONDITIONS

Terms and conditions begin on the next page.

GENERAL TERMS AND CONDITIONS:

- 1. CONTRACTUAL AGREEMENT: Issuance of a Award Document signed by the Purchasing Division Director, or his designee, and approved as to form by the Attorney General's office constitutes acceptance of this Contract made by and between the State of West Virginia and the Vendor. Vendor's signature on its bid signifies Vendor's agreement to be bound by and accept the terms and conditions contained in this Contract.
- 2. **DEFINITIONS:** As used in this Solicitation/Contract, the following terms shall have the meanings attributed to them below. Additional definitions may be found in the specifications included with this Solicitation/Contract.
 - 2.1. "Agency" or "Agencies" means the agency, board, commission, or other entity of the State of West Virginia that is identified on the first page of the Solicitation or any other public entity seeking to procure goods or services under this Contract.
 - **2.2.** "Contract" means the binding agreement that is entered into between the State and the Vendor to provide the goods or services requested in the Solicitation.
 - **2.3.** "Director" means the Director of the West Virginia Department of Administration, Purchasing Division.
 - 2.4. "Purchasing Division" means the West Virginia Department of Administration, Purchasing Division.
 - 2.5. "Award Document" means the document signed by the Agency and the Purchasing Division, and approved as to form by the Attorney General, that identifies the Vendor as the contract holder.
 - **2.6.** "Solicitation" means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.
 - 2.7. "State" means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.
 - **2.8.** "Vendor" or "Vendors" means any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract as context requires.

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

Term Contract

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

Renewal Term: This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal should be submitted to the Purchasing Division thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Renewal of this Contract is limited to ________ successive one (1) year periods or multiple renewal periods of less than one year, provided that the multiple renewal periods do not exceed _______ months in total. Automatic renewal of this Contract is prohibited. Notwithstanding the foregoing, Purchasing Division approval is not required on agency delegated or exempt purchases. Attorney General approval may be required for vendor terms and conditions.

Delivery Order Limitations: In the event that this contract permits delivery orders, a delivery order may only be issued during the time this Contract is in effect. Any delivery order issued within one year of the expiration of this Contract shall be effective for one year from the date the delivery order is issued. No delivery order may be extended beyond one year after this Contract has expired.

Fixed Period Contract: This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed within 1,095 days.

Fixed Period Contract with Renewals: This Contract becomes effective upon Vendor's receipt of the notice to proceed and part of the Contract more fully described in the attached specifications must be completed within ______ days. Upon completion, the vendor agrees that maintenance, monitoring, or warranty services will be provided for one year thereafter with an additional ______ successive one year renewal periods or multiple renewal periods of less than one year provided that the multiple renewal periods do not exceed ______ months in total. Automatic renewal of this Contract is prohibited.

] One Time Purchase: The term of this Contract shall run from the issuance of the Award Document until all of the goods contracted for have been delivered, but in no event will this Contract extend for more than one fiscal year.

Other: See attached.

- 4. NOTICE TO PROCEED: Vendor shall begin performance of this Contract immediately upon receiving notice to proceed unless otherwise instructed by the Agency. Unless otherwise specified, the fully executed Award Document will be considered notice to proceed.
- 5. QUANTITIES: The quantities required under this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below,
 - Open End Contract: Quantities listed in this Solicitation are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.
 - Service: The scope of the service to be provided will be more clearly defined in the specifications included herewith.
 - Combined Service and Goods: The scope of the service and deliverable goods to be provided will be more clearly defined in the specifications included herewith.
 - One Time Purchase: This Contract is for the purchase of a set quantity of goods that are identified in the specifications included herewith. Once those items have been delivered, no additional goods may be procured under this Contract without an appropriate change order approved by the Vendor, Agency, Purchasing Division, and Attorney General's office.
- 6. **PRICING:** The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the State. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the State in the Solicitation to do so, may result in bid disqualification.
- 7. EMERGENCY PURCHASES: The Purchasing Division Director may authorize the Agency to purchase goods or services in the open market that Vendor would otherwise provide under this Contract if those goods or services are for immediate or expedited delivery in an emergency. Emergencies shall include, but are not limited to, delays in transportation or an unanticipated increase in the volume of work. An emergency purchase in the open market, approved by the Purchasing Division Director, shall not constitute of breach of this Contract and shall not entitle the Vendor to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One Time Purchase contract.
- 8. **REQUIRED DOCUMENTS:** All of the items checked below must be provided to the Purchasing Division by the Vendor as specified below.

- **BID BOND:** All Vendors shall furnish a bid bond in the amount of five percent (5%) of the total amount of the bid protecting the State of West Virginia. The bid bond must be submitted with the bid.
- PERFORMANCE BOND: The apparent successful Vendor shall provide a performance bond in the amount of ______. The performance bond must be received by the Purchasing Division prior to Contract award. On construction contracts, the performance bond must be 100% of the Contract value.
- **LABOR/MATERIAL PAYMENT BOND:** The apparent successful Vendor shall provide a labor/material payment bond in the amount of 100% of the Contract value. The labor/material payment bond must be delivered to the Purchasing Division prior to Contract award.

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

- MAINTENANCE BOND: The apparent successful Vendor shall provide a two (2) year maintenance bond covering the roofing system. The maintenance bond must be issued and delivered to the Purchasing Division prior to Contract award.
- **INSURANCE:** The apparent successful Vendor shall furnish proof of the following insurance prior to Contract award and shall list the state as a certificate holder:

 - **Builders Risk Insurance:** In an amount equal to 100% of the amount of the Contract.
 - ✓ \$1,000,000.00 Professional Liability
 - ✓ \$1,000,000.00 Auto Liability
 - 2,000,000.00 Aggregate

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

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

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

- 9. WORKERS' COMPENSATION INSURANCE: The apparent successful Vendor shall comply with laws relating to workers compensation, shall maintain workers' compensation insurance when required, and shall furnish proof of workers' compensation insurance upon request.
- 10. LITIGATION BOND: The Director reserves the right to require any Vendor that files a protest of an award to submit a litigation bond in the amount equal to one percent of the lowest bid submitted or \$5,000, whichever is greater. The entire amount of the bond shall be forfeited if the hearing officer determines that the protest was filed for frivolous or improper purpose, including but not limited to, the purpose of harassing, causing unnecessary delay, or needless expense for the Agency. All litigation bonds shall be made payable to the Purchasing Division. In lieu of a bond, the protester may submit a cashier's check or certified check payable to the Purchasing Division. Cashier's or certified checks will be deposited with and held by the State Treasurer's office. If it is determined that the protest has not been filed for frivolous or improper purpose, the bond or deposit shall be returned in its entirety.
- 11. LIQUIDATED DAMAGES: Vendor shall pay liquidated damages in the amount of

for

This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue any other available remedy.

- 12. ACCEPTANCE/REJECTION: The State may accept or reject any bid in whole, or in part. Vendor's signature on its bid signifies acceptance of the terms and conditions contained in the Solicitation and Vendor agrees to be bound by the terms of the Contract, as reflected in the Award Document, upon receipt.
- 13. FUNDING: This Contract shall continue for the term stated herein, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise made available, this Contract becomes void and of no effect beginning on July 1 of the fiscal year for which funding has not been appropriated or otherwise made available.
- 14. PAYMENT: Payment in advance is prohibited under this Contract. Payment may only be made after the delivery and acceptance of goods or services. The Vendor shall submit invoices, in arrears.
- **15. TAXES:** The Vendor shall pay any applicable sales, use, personal property or any other taxes arising out of this Contract and the transactions contemplated thereby. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
- 16. CANCELLATION: The Purchasing Division Director reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Purchasing Division Director may also cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-7.16.2.
- **17. TIME:** Time is of the essence with regard to all matters of time and performance in this Contract.
- 18. APPLICABLE LAW: This Contract is governed by and interpreted under West Virginia law without giving effect to its choice of law principles. Any information provided in specification manuals, or any other source, verbal or written, which contradicts or violates the West Virginia Constitution, West Virginia Code or West Virginia Code of State Rules is void and of no effect.
- **19. COMPLIANCE:** Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendor acknowledges that it has reviewed, understands, and will comply with all applicable law.
- **20. PREVAILING WAGE:** Vendor shall be responsible for ensuring compliance with prevailing wage requirements and determining when prevailing wage requirements are applicable.

- 21. ARBITRATION: Any references made to arbitration contained in this Contract, Vendor's bid, or in any American Institute of Architects documents pertaining to this Contract are hereby deleted, void, and of no effect.
- 22. MODIFICATIONS: This writing is the parties' final expression of intent. Notwithstanding anything contained in this Contract to the contrary, no modification of this Contract shall be binding without mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). No Change shall be implemented by the Vendor until such time as the Vendor receives an approved written change order from the Purchasing Division.
- 23. WAIVER: The failure of either party to insist upon a strict performance of any of the terms or provision of this Contract, or to exercise any option, right, or remedy herein contained, shall not be construed as a waiver or a relinquishment for the future of such term, provision, option, right, or remedy, but the same shall continue in full force and effect. Any waiver must be expressly stated in writing and signed by the waiving party.
- 24. SUBSEQUENT FORMS: The terms and conditions contained in this Contract shall supersede any and all subsequent terms and conditions which may appear on any form documents submitted by Vendor to the Agency or Purchasing Division such as price lists, order forms, invoices, sales agreements, or maintenance agreements, and includes internet websites or other electronic documents. Acceptance or use of Vendor's forms does not constitute acceptance of the terms and conditions contained thereon.
- 25. ASSIGNMENT: Neither this Contract nor any monies due, or to become due hereunder, may be assigned by the Vendor without the express written consent of the Agency, the Purchasing Division, the Attorney General's office (as to form only), and any other government agency or office that may be required to approve such assignments. Notwithstanding the foregoing, Purchasing Division approval may or may not be required on certain agency delegated or exempt purchases.
- 26. WARRANTY: The Vendor expressly warrants that the goods and/or services covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency; (b) be merchantable and fit for the purpose intended; and (c) be free from defect in material and workmanship.
- 27. STATE EMPLOYEES: State employees are not permitted to utilize this Contract for personal use and the Vendor is prohibited from permitting or facilitating the same.
- **28. BANKRUPTCY:** In the event the Vendor files for bankruptcy protection, the State of West Virginia may deem this Contract null and void, and terminate this Contract without notice.
- 29. CONFIDENTIALITY: The Vendor agrees that it will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents

to the disclosure in writing or the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in http://www.state.wv.us/admin/purchase/privacy/default.html.

30. DISCLOSURE: Vendor's response to the Solicitation and the resulting Contract are considered public documents and will be disclosed to the public in accordance with the laws, rules, and policies governing the West Virginia Purchasing Division. Those laws include, but are not limited to, the Freedom of Information Act found in West Virginia Code §§ 29B-1-1 et seq. and the competitive bidding laws found West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq.

If a Vendor considers any part of its bid to be exempt from public disclosure, Vendor must so indicate by specifically identifying the exempt information, identifying the exemption that applies, providing a detailed justification for the exemption, segregating the exempt information from the general bid information, and submitting the exempt information as part of its bid but in a segregated and clearly identifiable format. Failure to comply with the foregoing requirements will result in public disclosure of the Vendor's bid without further notice. A Vendor's act of marking all or nearly all of its bid as exempt is not sufficient to avoid disclosure and WILL NOT BE HONORED. Vendor's act of marking a bid or any part thereof as "confidential" or "proprietary" is not sufficient to avoid disclosure and WILL NOT BE HONORED. A legend or other statement indicating that all or substantially all of the bid is exempt from disclosure is not sufficient to avoid disclosure and WILL NOT BE HONORED. Additionally, pricing or cost information will not be considered exempt from disclosure and requests to withhold publication of pricing or cost information WILL NOT BE HONORED.

Vendor will be required to defend any claimed exemption for nondisclosure in the event of an administrative or judicial challenge to the State's nondisclosure. Vendor must indemnify the State for any costs incurred related to any exemptions claimed by Vendor. Any questions regarding the applicability of the various public records laws should be addressed to your own legal counsel prior to bid submission.

- **31. LICENSING:** In accordance with West Virginia Code of State Rules §148-1-6.1.7, Vendor must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agency or political subdivision. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Purchasing Division Director or the Agency to verify that the Vendor is licensed and in good standing with the above entities.
- **32. ANTITRUST:** In submitting a bid to, signing a contract with, or accepting a Award Document from any agency of the State of West Virginia, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States

and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to Vendor.

- 33. VENDOR CERTIFICATIONS: By signing its bid or entering into this Contract, Vendor certifies (1) that its bid or offer was made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, person or entity submitting a bid or offer for the same material, supplies, equipment or services; (2) that its bid or offer is in all respects fair and without collusion or fraud; (3) that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; and (4) that it has reviewed this Solicitation in its entirety; understands the requirements, terms and conditions, and other information contained herein. Vendor's signature on its bid or offer also affirms that neither it nor its representatives have any interest, nor shall acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency. The individual signing this bid or offer on behalf of Vendor certifies that he or she is authorized by the Vendor to execute this bid or offer or any documents related thereto on Vendor's behalf; that he or she is authorized to bind the Vendor in a contractual relationship; and that, to the best of his or her knowledge, the Vendor has properly registered with any State agency that may require registration.
- 34. PURCHASING CARD ACCEPTANCE: The State of West Virginia currently utilizes a Purchasing Card program, administered under contract by a banking institution, to process payment for goods and services. The Vendor must accept the State of West Virginia's Purchasing Card for payment of all orders under this Contract unless the box below is checked.

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

35. VENDOR RELATIONSHIP: The relationship of the Vendor to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by this Contract. The Vendor as an independent contractor is solely liable for the acts and omissions of its employees and agents. Vendor shall be responsible for selecting, supervising, and compensating any and all individuals employed pursuant to the terms of this Solicitation and resulting contract. Neither the Vendor, nor any employees or subcontractors of the Vendor, shall be deemed to be employees of the State for any purpose whatsoever. Vendor shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension, or other deferred compensation plans, including but not limited to, Workers' Compensation and Social Security obligations, licensing fees, etc. and the filing of all necessary documents, forms, and returns pertinent to all of the foregoing. Vendor shall hold harmless the State, and shall provide the State and Agency with a defense

against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns.

- 36. INDEMNIFICATION: The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered by any subcontractor, person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws.
- **37. PURCHASING AFFIDAVIT:** In accordance with West Virginia Code § 5A-3-10a, all Vendors are required to sign, notarize, and submit the Purchasing Affidavit stating that neither the Vendor nor a related party owe a debt to the State in excess of \$1,000. The affidavit must be submitted prior to award, but should be submitted with the Vendor's bid. A copy of the Purchasing Affidavit is included herewith.
- **38. ADDITIONAL AGENCY AND LOCAL GOVERNMENT USE:** This Contract may be utilized by and extends to other agencies, spending units, and political subdivisions of the State of West Virginia; county, municipal, and other local government bodies; and school districts ("Other Government Entities"). This Contract shall be extended to the aforementioned Other Government Entities on the same prices, terms, and conditions as those offered and agreed to in this Contract. If the Vendor does not wish to extend the prices, terms, and conditions of its bid and subsequent contract to the Other Government Entities, the Vendor must clearly indicate such refusal in its bid. A refusal to extend this Contract to the Other Government Entities shall not impact or influence the award of this Contract in any manner.
- **39. CONFLICT OF INTEREST:** Vendor, its officers or members or employees, shall not presently have or acquire an interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency.
- **40. REPORTS:** Vendor shall provide the Agency and/or the Purchasing Division with the following reports identified by a checked box below:
 - Such reports as the Agency and/or the Purchasing Division may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract, total contract expenditures by agency, etc.

- Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing of purchases by agency. Quarterly reports should be delivered to the Purchasing Division via email at <u>purchasing.requisitions@wv.gov</u>.
- **41. BACKGROUND CHECK:** In accordance with W. Va. Code § 15-2D-3, the Director of the Division of Protective Services shall require any service provider whose employees are regularly employed on the grounds or in the buildings of the Capitol complex or who have access to sensitive or critical information to submit to a fingerprint-based state and federal background inquiry through the state repository. The service provider is responsible for any costs associated with the fingerprint-based state and federal background inquiry.

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

The State reserves the right to prohibit a service provider's employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check.

Service providers should contact the West Virginia Division of Protective Services by phone at (304) 558-9911 for more information.

- **42. PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS:** Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code § 5A-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code § 5A-3-56. As used in this section:
 - a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.
 - b. "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more or such operations, from steel made by the open heath, basic oxygen, electric furnace, Bessemer or other steel making process. The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:
 - c. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total contract cost or two thousand five hundred dollars (\$2,500.00), whichever is greater.

For the purposes of this section, the cost is the value of the steel product as delivered to the project; or

- d. The Director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.
- **43. PREFERENCE FOR USE OF DOMESTIC ALUMINUM, GLASS, AND STEEL:** In Accordance with W. Va. Code § 5-19-1 et seq., and W. Va. CSR § 148-10-1 et seq., for every contract or subcontract, subject to the limitations contained herein, for the construction, reconstruction, alteration, repair, improvement or maintenance of public works or for the purchase of any item of machinery or equipment to be used at sites of public works, only domestic aluminum, glass or steel products shall be supplied unless the spending officer determines, in writing, after the receipt of offers or bids, (1) that the cost of domestic aluminum, glass or steel products is unreasonable or inconsistent with the public interest of the State of West Virginia, (2) that domestic aluminum, glass or steel products are not produced in sufficient quantities to meet the contract requirements, or (3) the available domestic aluminum, glass, or steel do not meet the contract specifications. This provision only applies to public works contracts that require more than ten thousand pounds of steel products.

The cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than twenty percent (20%) of the bid or offered price for foreign made aluminum, glass, or steel products. If the domestic aluminum, glass or steel products to be supplied or produced in a "substantial labor surplus area", as defined by the United States Department of Labor, the cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than thirty percent (30%) of the bid or offered price for foreign made aluminum, glass, or steel products.

This preference shall be applied to an item of machinery or equipment, as indicated above, when the item is a single unit of equipment or machinery manufactured primarily of aluminum, glass or steel, is part of a public works contract and has the sole purpose or of being a permanent part of a single public works project. This provision does not apply to equipment or machinery purchased by a spending unit for use by that spending unit and not as part of a single public works project.

All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for foreign aluminum, glass or steel products plus the applicable preference. If the reduced bid or offer prices are made in writing and supersede the prior bid or offer prices, all bids or offers, including the reduced bid or offer prices, will be reevaluated in accordance with this rule.

ADDITIONAL TERMS AND CONDITIONS (Architectural and Engineering Contracts Only)

- 1. PLAN AND DRAWING DISTRIBUTION: All plans and drawings must be completed and available for distribution at least five business days prior to a scheduled pre-bid meeting for the construction or other work related to the plans and drawings.
- 2. PROJECT ADDENDA REQUIREMENTS: The Architect/Engineer and/or Agency shall be required to abide by the following schedule in issuing construction project addenda. The Architect/Engineer shall prepare any addendum materials for which it is responsible, and a list of all vendors that have obtained drawings and specifications for the project. The Architect/Engineer shall then send a copy of the addendum materials and the list of vendors to the State Agency for which the contract is issued to allow the Agency to make any necessary modifications. The addendum and list shall then be forwarded to the Purchasing Division buyer by the Agency. The Purchasing Division buyer shall send the addendum to all interested vendors and, if necessary, extend the bid opening date. Any addendum should be received by the Purchasing Division at least fourteen (14) days prior to the bid opening date.
- **3. PRE-BID MEETING RESPONSIBILITIES:** The Architect/Engineer shall be available to attend any pre-bid meeting for the construction or other work resulting from the plans, drawings, or specifications prepared by the Architect/Engineer.
- 4. AIA DOCUMENTS: Contracts for architectural and engineering services will be governed by the AIA document B101-2007, as amended by the Supplementary Conditions for the State of West Virginia, in addition to the terms and conditions contained herein when procured under Chapter 5G of the West Virginia Code.
- 5. GREEN BUILDINGS MINIMUM ENERGY STANDARDS: In accordance with West Virginia Code § 22-29-4, all new building construction projects of public agencies that have not entered the schematic design phase prior to July 1, 2012, or any building construction project receiving state grant funds and appropriations, including public schools, that have not entered the schematic design phase prior to July1, 2012, shall be designed and constructed complying with the ICC International Energy Conservation Code, adopted by the State Fire Commission, and the ANSI/ASHRAE/IESNA Standard 90.1-2007: Provided, That if any construction project has a commitment of federal funds to pay for a portion of such project, this provision shall only apply to the extent such standards are consistent with the federal standards.

CERTIFICATIONAND SIGNATURE PAGE

By signing below, or submitting documentation through wvOASIS, 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, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

Civil Tech Engineering Inc.

(Company)

Mark E. Pennington, President

(Authorized Signature) (Representative Name, Title)

<u>(304-757-8094)(304-757-8095)(October 8, 2015)</u> (Phone Number) (Fax Number) (Date)

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.:

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

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

Addendum Numbers Received:

(Check the box next to each addendum received)

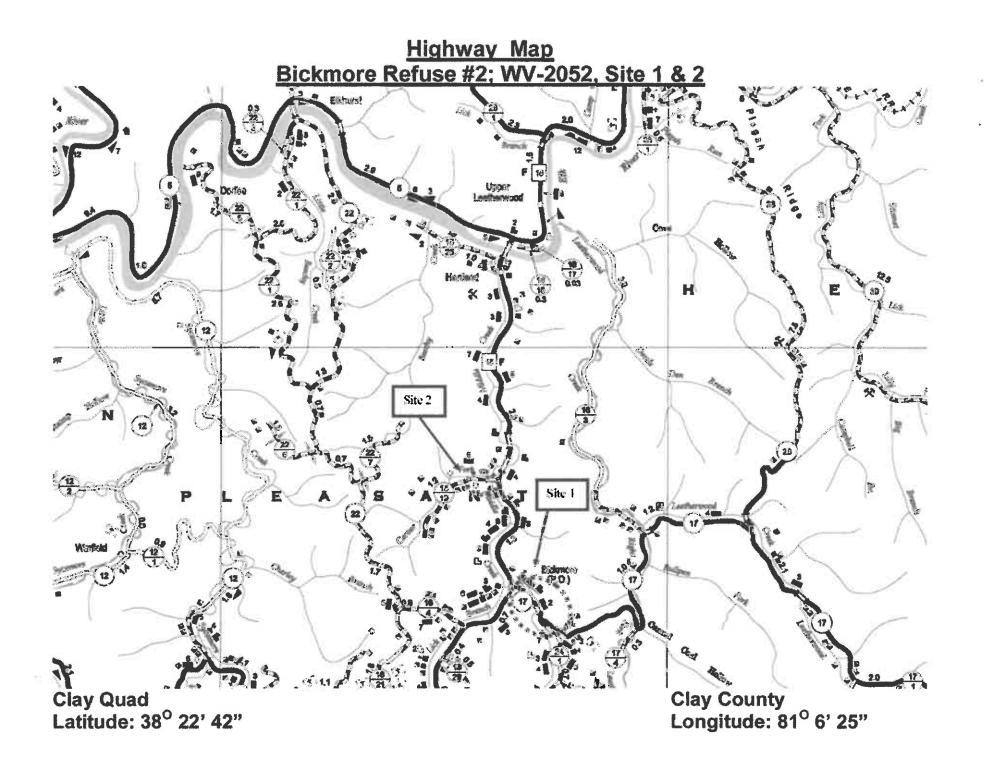
| X | Addendum No. 1 | Addendum No. 6 |
|---|----------------|-----------------|
| | Addendum No. 2 | Addendum No. 7 |
| | Addendum No, 3 | Addendum No. 8 |
| | Addendum No. 4 | Addendum No. 9 |
| | Addendum No. 5 | Addendum No. 10 |

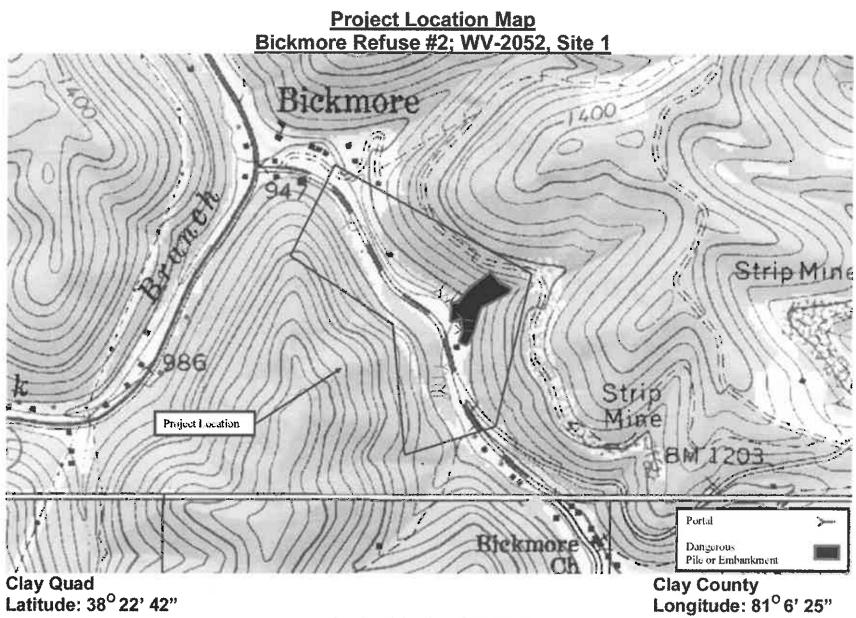
I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information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

| Civil Tech Engineering | Inc. |
|------------------------|------|
| Company Z | |
| Authorized Signature | |
| October 8, 2015 | |

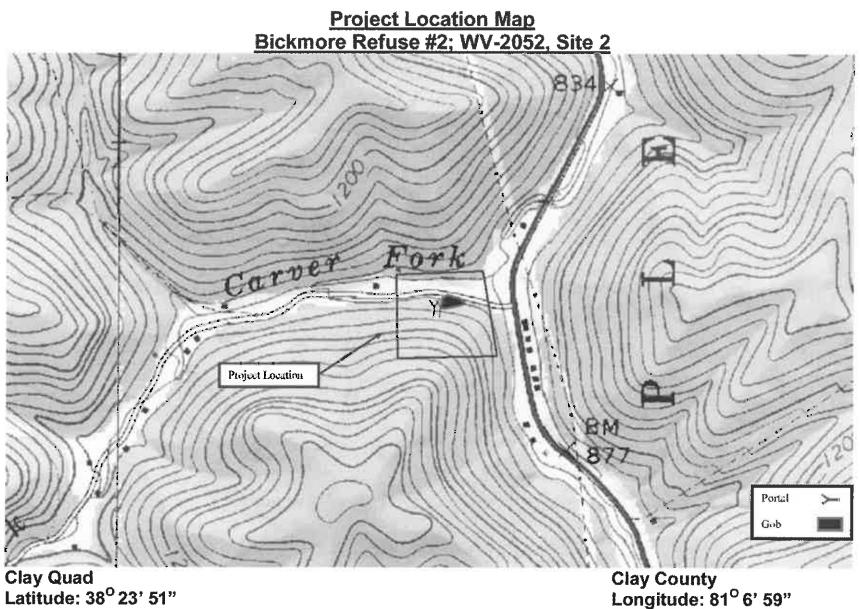
Date

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

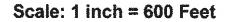








Clay County Longitude: 81⁰ 6' 59"



| | DEPARTMENT OF ENVIRONMENT IT CONFIDENTIAL QUALIFICA: | |
|--|---|--|
| Bickmore Refuse #2(DEP16396)October1. FIRM NAME2. HOMECIVIL TECH ENGINEERING INC.300A Pre | AY, MONTH, YEAR) 8, 2015 OFFICE BUSINESS ADDRESS estige Drive ne, West Virginia 25526 | FEIN 55-0757403 3. FORMER FIRM NAME NA |
| 4. HOME OFFICE TELEPHONE5. ESTABLISHED (YR 1996304-757-80941996 | Individual <u>Corpo</u> Partnership Joint | oration6a. WV REGISTERED DBE (Disadvantaged Business Enterprise) YESVentureEnterprise) YES |
| PRIMARY AML DESIGN OFFICE: ADDRESS/ TELEPHONE 300A Prestige Drive, Hurricane, WV 25526/Man NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIE Mark E. Pennington MS, PE Jennifer E. Pennington PE | rk E. Pennington PE/Twelve | DESIGN PERSONNEL EACH OFFICE ELEPHONE NUMBER - OTHER PRINCIPALS |
| 9. PERSONNEL BY DISCIPLINE — ADMINISTRATIVE — ECOLOGISTS — ARCHITECTS — ECONOMISTS — BIOLOGIST — ELECTRICAL ENGI 2 CADD OPERATORS 1 ENVIRONMENTALIS — CHEMICAL ENGINEERS — ESTIMATORS 3 CIVIL ENGINEERS 1 GEOLOGISTS 4 CONSTRUCTION INSPECTORS — HISTORIANS — DESIGNERS — HISTORIANS — DRAFTSMEN — DRAFTSMEN | — LANDSCAPE ARCH — MECHANICAL ENG INEERS — MINING ENGINE | GINEERS1SURVEYORSEERS—TRAFFIC ENGINEERSISTSOTHER (Technicians)AN/REGIONAL12 TOTAL PERSONNEL |
| TOTAL NUMBER OF WV REGISTERED PROFESSIONAL *RPEs other than Civil and Mining must pro supervise and perform this type of work. | ovide supporting documentation | |
| HAS THIS JOINT-VENTURE WORKED TOGETHER BEFORE 11. OUTSIDE KEY CONSULTANTS/SUB-CONSULTANTS ANT Ouestionnaire". | | |

| NAME AND ADDRESS: Novel Geo-Environmental PLLC 806 B Street St. Albans, WV 25177 | SPECIALTY: Drilling and Laboratory Soils Testing | WORKED WITH BEFOREXYes | | | |
|---|--|--|--|--|--|
| NAME AND ADDRESS: Triad Engineering Inc. 219 Hartman Run Road Morgantown, WV 26505 | SPECIALTY: Drilling and Laboratory Soils Testing | No WORKED WITH BEFORE XYes No | | | |
| NAME AND ADDRESS: Stantec 1 Moore Avenue Buckhannon, WV 26201 | SPECIALTY: Mapping | WORKED WITH BEFOREYesNo | | | |
| | andoned Mine Lands Remediation/Mine Reclamation Engineering? E Projects: See Section A 158 AML Projects - Personnel & Corporate Experience 50+ Subsidence Claims - Corporate Experience | | | | |
| NO B. Is your firm experienced in | Soil Analysis? | | | | |
| YES Description and Number | of Projects: See Sections B.2, B.3, and 1500+ Projects - Corporate | | | | |
| NO | | | | | |
| C. Is your firm experienced in | hydrology and hydraulics? | | | | |
| YES Description and Number | of Projects: See Sections B.2, B.3, and 50+ Projects involving stor design. | B.4 m water controls and dam spillway | | | |
| NO | | | | | |

| D. | Does your firm produce its own Aerial Photography and Develop Contour Mapping? | | | | | | |
|---------------------------|--|--|--|--|--|--|--|
| | YES | | | | | | |
| | NO XX | | | | | | |
| Ε. | evaluation of aquifer de | in domestic waterline design gradation as a result of minin mber of Projects:Douglas W | ng.) | | | | |
| | NO | | | | | | |
| F. | Is your firm experienced Evaluation and Abatement | - | | | | | |
| | YES Description and Nu | mber of Projects:_ Design of 1 | Liming station and dams for Cr | canberry River | | | |
| | NO | | | | | | |
| | L HISTORY STATEMENT OF PR t keep to essentials) | INCIPALS AND ASSOCIATES RESPO | NSIBLE FOR AML PROJECT DESIGN | (Furnish complete | | | |
| | E (Last, First, Middle Int.) | | YEARS OF EXPERIENCE | | | | |
| Pennington President · | , Mark E. - Principal Engineer | YEARS OF AML DESIGN EXPERIENCE: 19 | YEARS OF AML RELATED DESIGN EXPERIENCE: 38 | YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 4 | | | |

| PROJECT RESPONSIBILITIES | COMPANY RESPONSIBILTIES | RECENT AND ONGOING PROJECTS |
|---|--|--|
| ENVIRONMENTAL PERMITTING TOPOGRAPHIC MAPPING HYDROLOGY AND HYDRAULICS FLOOD ASSESSMENT EROSION CONTROL STORM WATER CONTROLS SANITARY SEWER DESIGN GEOTECHNICAL ANALYSIS SUBSIDENCE ABATEMENT LANDSLIDE ANALYSIS AND DESIGN | COMPANY MANAGEMENT BUSINESS DEVELOPMENT PROJECT PLANNING AND SUPERVISION | THOMAS SUNRISE SANITATION - AML PROSPECT VALLEY HIGHWALL #4 – AML WINIFREDE (MCFANN) PORTALS - AML DOUGLAS WL DESIGN – AML CAMBRIA PORTALS & DESIGN - AML ZEBB'S CREEK HW #2 - AML HAWKINBERRY HOLLOW PORTALS - AML WITCHER CREEK PORTALS – AML STOWE REFUSE PILES – AML RIDENOUR COMPLEX – AML |
| RETAINING WALL DESIGN DAM MODIFICATIONS ANNUAL DAM INSPECTIONS COMMERCIAL CIVIL SITE DEVELOPMENT CONSTRUCTION CONTRACT ADMINISTRATION | | BRAEHOLM PORTALS – AML MONTECARLO COMPLEX - AML GRAFTON #4 REFUSE AND HW - AML LITTLE DAYCAMP BRANCH – AML OLDHOUSE BRANCH REFUSE – AML BOOTHS CREEK MINES – AML RT. 49 GOOLSBY LANDSLIDE - AML |

As the former manager of the St. Albans Office of Triad Engineering and a founder of Civil Tech, Mr. Pennington has gained a broad knowledge of most civil engineering disciplines involving abandoned mine lands, storm water and erosion controls, dams, as well as private, industrial, and municipal projects involving topographic mapping, geotechnical analysis, and civil site development. <u>He has been responsible for 158 AML projects, 48 dam modification projects, and many large commercial, private, and industrial projects. Mr. Pennington has a working knowledge of AML projects including; subsidence, landslides, mine drainage/portals, erosion, shafts, burning refuse, and surface/subsurface drainage. He has served as project manager on 21 AML projects since 2008. These projects have included; the Thomas Surrise Sanitation Mine Drainage Project, Prospect Valley HW #4, Cambria Portals, Winifrede Portals, Douglas WL, and Witcher Creek Portals. Most of these project are complete and all have been successfully completed on time. Mr. Pennington has substantial construction experience gained while administering the construction contract on over 100 projects and while serving as the Assistant Project Manager on the USACOE Moorefield Flood Levee Project as an employee of Heeter Construction of Spencer, West Virginia. EDUCATION (Degree, Year, Specialization)</u>

BSCE/1977/Civil Engineering Undergraduate Degree - WVU MSCE/1985/Soils and Foundations/WVCOG

| MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS | REGISTRATION (Type, Year, State) |
|--|--|
| | CE/1981/WV CE/1995/NC CE/1988/KY CE/1988/OH CE/2013/VA PS/1995/WV |

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 | | | | | |
|--|---|--|---|--|--|--|
| Pennington, Jennifer E. | YEARS OF AM | ML DESIGN EXPERIENCE: | | YEARS OF DOMESTIC | | |
| Vice President - Principal | | 19 | EXPERIENCE: 27 | WATERLINE DESIGN EXPERIENCE: 0 | | |
| Engineer | | - | | | | |
| Brief Explanation of Responsibilitie | ,S | | | | | |
| COMPANY RESPONSIBILTIES | | | PROJECT RESPONSIBILITIES | | | |
| COMPANY MANAGEMENT PROJECT PLANNING AND DIRECTION | | HYDROLOGY AND HYDRAULICS FLOOD ASSESSMENT EROSION CONTROL STORM WATER CONTROLS GEOTECHNICAL ANALYSIS LANDSLIDE ANALYSIS AND DESIGN RETAINING WALL DESIGN DAM MODIFICATIONS ANNUAL DAM INSPECTIONS COMMERCIAL CIVIL SITE DEVELOPMENT | | | | |
| Ms. Pennington is a multi-discipline geotechnical engineering projects in design/rehabilitation, civil site de Engineering. While with Triad, she for the analysis of the Rock Branch design engineering associated with r Zebb's Creek, Birds Creek, Oldhouse responsibilities at Civil Tech inclu | volving sub evelopment, performed g Landslide P cecent AML p Branch, Lit | bsurface investigation storm water control geotechnical analys Project in Kanawha (projects including f ttle Daycamp, Montec | ion, geotechnical analysis, ls, etc. She is a former sen is for many AML projects and County. Ms. Pennington has Thomas Sunrise Sanitation, P carlo, and Booths Creek. Ms. | dam dior engineer with Triad was directly responsible also been responsible for Prospect Valley, Cambria, Pennington's duties and | | |

design, dam modification design, and hydrologic/hydraulic analysis. She has expertise in the use of HEC1, HEC2, Dams2, Flowmaster, Hydrocad, SPW911, PCstable 5 and 6,Autocad, and Eagle Point modeling software.

EDUCATION (Degree, Year, Specialization)

BSCE/1988/Civil Engineering Undergraduate Degree - University of Kentucky

| MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS | REGISTRATION (Type, Year, State) |
|---|----------------------------------|
| American Society of Civil Engineers (ASCE) | CE/1992/WV |
| Association of State Dam Safety Officials (ASDSO) | PS/1995/WV |

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 | | | | | | |
|---|---------------------------------|--|--|--|--|--|--|
| Kessler, Robert R Geologist | YEARS OF AML DESIGN EXPERIENCE: | YEARS OF AML RELATED DESIGN EXPERIENCE: 15 | YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: | | | | |
| | | | 0 | | | | |

Brief Explanation of Responsibilities: Mr. Kessler is responsible for all geologic studies/investigations required to support engineering services for Civil Tech. Projects include mining subsidence investigations, blasting studies, and geologic studies for more than 48 dam modifications throughout West Virginia. EDUCATION (Degree, Year, Specialization) B.S. - Geology - 1965 - Ohio University Post Graduate Work - 1965 to 1966 - Geology - Ohio University B.S. - Mathematics - 1980 - University of Charleston 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 YEARS OF DOMESTIC EXPERIENCE: WATERLINE DESIGN Arthur, Charles D. - CADD Designer 7 15 EXPERIENCE: & Survey Crew Party Chief 2 Brief Explanation of Responsibilities Senior designer responsible for direction of other draftsmen and preparation of design drawings using Autocad and Eagle Point modeling software, survey party chief, and evaluation of mine maps and subsidence. Mr. Arthur has served as a senior designer for the following recent projects. □ Thomas Mine Drainage and Blowout AML Projects, Thomas, WV □ Prospect Valley Highwall No. 4, Shinnston, WV □ Winifred McFann Portals, Winifrede, Kanawha County, WV □ Nellis (Smith) Drainage, Nellis, WV □ Zebb's Creek HW#2, Barbour County, WV □ Cambria Portals, Harrison County, WV □ Hawkinberry Hollow Portals, Marion County, WV □ Thomas Sewer-Stormwater Segregation Project, Thomas, WV □ Thomas Stormwater Improvements, Thomas, WV □ Nearly 40 dam modification projects throughout WV □ Holiday Inn Express, Mineral Wells, WV □ Fairfield Inn & Suites, Weirton, WV □ Birds Creek Portals, Preston County, WV □ Witcher Creek Portals, Kanawha County, WV □ Montecarlo Complex, Wyoming County, WV □ Grafton#4 Refuse and Highwall, Taylor County, WV □ Little Daycamp Branch, McDowell County, WV □ Oldhouse Branch Refuse - Wyoming County, WV □ Booths Creek Browning Farm Mines, Marion County, WV Rt. 49 Goolsby Landslide, Mingo County, WV

Mr. Arthur also performs field surveying necessary to support engineering services and develop topographic mapping

required for all civil project performed by our company.

EDUCATION (Degree, Year, Specialization) Pre-blast Surveyor Training - May 2003 - WVDEP Computer-aided Drafting/1080 hours - June 2000 - Ben Franklin Career and Tech. Ed. Ctr., Dunbar, WV Welding/1,320 hours - June 1997 - Ben Franklin Career and Tech. Ed. Ctr., Dunbar, WV Welding/72 hours - Dec 1993 - Richmond Technical Center, Richmond, VA

| 14. | PROVIDE | А | LIST | OF | SOFTWARE | AND | EQUIPMENT | AVAILABLE | IN | THE | PRIMARY | OFFICE | WHICH | WILL | ΒE | USED | ТО | COMPLETE | AML |
|-----|---------|-----|--------|----|----------|-----|-----------|-----------|----|-----|---------|--------|-------|------|----|------|----|----------|-----|
| | DESIGN | SEF | RVICES | S | | | | | | | | | | | | | | | |

Software:

| DOLCW | WUI C . | | | | |
|-------|---|------------|--------------------------|------------------------|------------------|
| | Autocad Civil3D | | | | |
| | Microstation | | | | |
| | Eaglepoint 2009 | | | | |
| | HEC-1 | | | | |
| | HEC-2 | | | | |
| | HECRAS | | | | |
| | HEC-HMS | | | | |
| | Dams2 | | | | |
| | Hydrocad version 9 | | | | |
| | Flowmaster | | | | |
| | Sewercad | | | | |
| | nacci caa | | | | |
| | PCstable | | | | |
| | SPW911 - Pile Buck Sheet Pile Wa | - | - | | |
| | Word Perfect, Excel, and other o | office sup | port programs. | | |
| | pment: | | | | |
| | 2 4WD Pickup | | | | |
| | 1 Jeep Grand Cherokee | | | | |
| | 4 Desktop Computers | | | | |
| | 5 Laptop Computers | | | | |
| | | | | | |
| | 1 HP Designjet 1050C Plotter 4 HP Deskjet Printers | | | | |
| | 1 Color Laser Printer | | | | |
| | 1 Topcon Total Station & Carlson | Controll | or | | |
| | | | <u>CT</u> | | |
| _ | Rods, prisms, tripods, targets, | and gurve | v support equipment | | |
| | | | | | |
| 15. C | CURRENT ACTIVITIES ON WHICH YOUR F | TRM IS TH | E DESIGNAIED ENGINEER OF | | |
| PROJE | ECT NAME, TYPE AND NAME AND ADD | | NATURE OF YOUR FIRM'S | ESTIMATED CONSTRUCTION | PERCENT COMPLETE |
| | LOCATION OWNER | Ĺ | RESPONSIBILITY | COST | |

| Cacapon State Park Dam Modifications | Brad Leslie WVDNR Parks & Recreation Section Capitol Complex, Building 3, Room 723 Charleston, WV 25305 | Topographic M Design Permitting Bidding Construction Contract Admi | Monitoring | \$ 1,500,000 | Mapping 100% Design 100% Permitting 100% Bidding 0% Const. Monitoring 0% Contract Admin 0% Construction expected 2016 |
|---|--|---|-------------|--------------------|---|
| Grafton #4 Refuse and HW Taylor County, WV | Gregg Smith WVDEP-AML Bridgeport, WV | Subsurface Ir Design Permitting Bidding Construction | - | \$ 750,000 | Design 100% (scope revised awaiting Change Order Permitting 100% Bidding 100% Const. Monitoring 0% Construction expected 2016. |
| Oldhouse Branch Refuse, Wyoming County, WV | Mark Proctor WVDEP-AML Oak Hill, WV | Design Permitting Bidding Construction | Monitoring | \$ 970,000 | Design 90% Permitting 0% Bidding 0% Const. Monitoring 0% Project on hold - funding. |
| Booths Creek Browning Farm Mines, Marion County, WV | Sheldon Holbert WVDEP-AML Bridgeport, WV | Design Permitting Bidding Construction | Monitoring | \$ 700,000 | Design 90% Permitting 0% Bidding 0% Const. Monitoring 0% Construction expected 2016 |
| Rt. 49 Goolsby Landslide Mingo County, WV | Jason Foster WVDEP-AML Emergency Program Charleston, WV | Design Permitting Bidding Construction | Monitoring | \$ 650,000 | Design 100% Permitting 100% Bidding 100% Const. Monitoring 100% Under Construction 2015 |
| Culloden PSD Dam Declassification, Culloden, WV | Brett Morgan WV American Water Company Charleston, WV | Topographic M Design Permitting Bidding Construction Contract Admi | Monitoring | \$ 500,000 | Mapping 100% Design 100% Permitting 90% Bidding 0% Const. Monitoring 0% Contract Admin 0% Construction expected 2016 |
| TOTAL NUMBER OF PROJECT | S: Seven | I | TOTAL ESTIM | LATED CONSTRUCTION | * |

| 16. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A SUB-CONSULTANT TO OTHERS None | | | | | | | | |
|---|-----------------------------------|------------------------------|------------------------------|----------------|------------------------------|--|--|--|
| PROJECT NAME, TYPE AND LOCATION | NATURE OF FIRMS RESPONSIBILITY | NAME AND ADDRESS OF OWNER | ESTIMATED COMPLETION DATE | ESTIMATED CO | ESTIMATED CONSTRUCTION COST | | | |
| | | | | ENTIRE PROJECT | YOUR FIRMS RESPONSIBILITY | | | |

| 17. COMPLETED WORK WITHIN LAST 5 Y | | | - | |
|---|--|-----------------------------|------|-------------|
| PROJECT NAME, TYPE | NAME AND ADDRESS | ESTIMATED CONSTRUCTION COST | YEAR | CONSTRUCTED |
| AND LOCATION | OF OWNER | A RED 000 | 0010 | (YES OR NO) |
| Stowe Refuse Piles Logan County, WV | Roger Earle WVDEP - AML | \$ 750,000 | 2013 | YES |
| logan councy, w | Charleston, WV | | | |
| | | | | |
| Ridenour Complex | Gregg Smith | \$ 250,000 | 2013 | YES |
| Monongalia County, WV | WVDEP-AML | | | |
| | Bridgeport, WV | | | |
| Braeholm (Evans) Portals and Drainage | Roger Earle | \$ 250,000 | 2013 | YES |
| Logan County, WV | WVDEP - AML | | | |
| | Charleston, WV | | | |
| | | | | |
| Douglas Waterline Extension | Jonathan Holbert | \$ 250,000 | 2013 | YES |
| Tucker County, WV | WVDEP-AML Charleston, WV | | | |
| | Charleston, WV | | | |
| Hawkinberry Hollow Portals and | Tim Lemasters | \$ 500,000 | 2012 | YES |
| Drainage | WVDEP-AML | | | |
| Marion County, WV | Bridgeport, WV | | | |
| Birds Creek Portals | Gregg Smith | \$ 750,000 | 2012 | YES |
| Preston County, WV | WVDEP-AML | ÷ ,50,000 | 2012 | 185 |
| | Bridgeport, WV | | | |
| | | t | 0010 | |
| Longbranch Dam Dam Modification | Mr. Brad Leslie | \$ 200,000 | 2012 | YES |
| Dam Modification Pipestem State Park | Parks and Recreation Section | | | |
| | 324 4 th Avenue South Charleston, WV | | | |
| Berwind Dam | Mr. Brad Leslie | \$ 1,000,000 | 2012 | YES |
| Dam Modification | WVDNR | | | |
| Berwind WMA | Parks and Recreation Section | | | |
| | 324 4 th Avenue South Charleston, WV | | | |
| | South that rescon, WV | | 1 | 1 |

| Prospect Valley Highwall #4 | Tim Lemasters | \$ 1,000,000 | 2011 | YES |
|---|--|--------------|------|-----|
| Shinnston, Harrison County, WV | WVDEP-AML 105 South Railroad Street Philippi, WV 26416 | | | |
| Winifred (McFann) Portals Winifrede, Kanawha County, WV | Dean Stiltner WVDEP-AML 116 Industrial Drive Oak Hill, WV 25901 | \$ 250,000 | 2011 | YES |
| Zebb's Creek Highwall #2 Junior WV, Barbour County, WV | Gregg Smith WVDEP-AML 209 South Main Street Philippi, WV 26416 | \$ 200,000 | 2011 | YES |
| Cambria Portals & Drainage Design Cambria, Harrison County, WV | Tim Lemasters WVDEP-AML 209 South Main Street Philippi, WV 26416 | UNKNOWN | 2011 | YES |
| Mt. Storm Gate Modification Mt. Storm Power Station | Mr. Patrick Flaugher Dominion Generation Mt. Storm Power Station Dominion Energy Inc. HC 76 Box 430 Mt. Storm, WV 26739 | UNKNOWN | 2011 | YES |
| Drain Pipe and Gate Repair Jimmy Lewis Dam Pinnacle Rock SP Mercer Co., WV | Brad Leslie WVDNR Parks and Recreation Section 324 4 th Avenue South Charleston, WV | \$ 280,000 | 2011 | YES |
| Thomas Sunrise Sanitation Mine Drainage Thomas, Tucker County, WV | Gregg Smith WVDEP-AML 209 South Main Street Philippi, WV 26416 | \$ 250,000 | 2009 | YES |
| Thomas Sunrise Sanitation Mine Blowout Thomas, Tucker County, WV | Gregg Smith WVDEP-AML 209 South Main Street Philippi, WV 26416 | \$ 250,000 | 2009 | YES |
| Stony River Dam Breach Dam to Remove from WVDEP Jurisdiction Grant County, WV | Sterlin Rebuck NewPage Corporation 300 Pratt Street Luke, MD 21540 | \$ 250,000 | 2009 | YES |
| Units 1 -3 Ash Handling Area Pavement Replacement Design Mt. Storm Power Station Mt. Storm, WV | Patrick W. Flaugher Dominion Energy Inc. HC 76 Box 430 Mt. Storm, WV 26739 | \$ 2,000,000 | 2014 | YES |

| Flow & Temperature Monitoring Stony River Mt. Storm Power Station Mt. Storm, WV | Weir | Patrick W. Flaugh Dominion Energy : HC 76 Box 430 Mt. Storm, WV 26 | Inc. | \$ 250,000 | | 2009 | YES | |
|---|--|---|---|--|--|---|---|--|
| Fairfield Inn & Suites Weirton, WV | | Michael Holtz MPH Hotels 490 East Route 22 North Barrington | | \$ 2,500,000 (Esti | mated) | 2009 | YES | |
| Deegan & Hinkle Dams Dam Modifications Bridgeport, WV | | Tom Brown - Cit City of Bridgep 515 West Main S Bridgeport, WV | oort Street | \$ 1,500,000 | | 2008 | YES | |
| Flip Bucket Stabilization Mt. Storm Lake Dam Mt. Storm Power Station Mt. Storm, WV | | Patrick W. Flaugh Dominion Energy : HC 76 Box 430 Mt. Storm, WV 20 | Inc. | \$ 750,000 | | | 2008 | YES |
| 18. COMPLETED WORK WITHIN | | | OUR FIRM HAS BE None | EN A SUB-CONSULTA | ΑΝΤ ΤΟ ΟΙ | HER FIRMS | (INDICATI | E PHASE |
| PROJECT NAME, TYPE AND LOCATION | COJECT NAME, TYPE NAME AND ADDRESS E | | | ESTIMATED CONSTRUCTION COST YEAR CONSTRUCT OF YOUR FIRM'S PORTION (YES OR | | | | IRM ASSOCIATED WITH |
| | | | | | | | | |
| 19. Use this space to prov to perform work for th range of clients inclus of Bridgeport, NewPage Power, Huntersville, N Water, and other priva Portals, Subsidence Ab civil site design, infi knowledge makes our fit | e West Vi ding, the Corporat C, WVDNR te concer atement, rastructu | rginia Abandoned Bridgeport, Cha ion, Mt. Top PSI Parks and Wildl: ms and contracto and a waterline ure, & site grad: | d Mine Lands Pr arleston, and C D, Dominion Gen ife Sections, A ors. Current an extension. Ou ing combined wi | ogram. Civil Teo ak Hill Offices of eration - Mt. Sto merican Electric d recent AML prog r experience with th our AML experi | ch provid of the WV orm & Nor Power - jects inc n impound | es engineer DEP-AML, th th Branch H John Amos H lude AMD, H ments, dam | ring serv ne City o Power Sta Plant, W Highwall breach/1 | vices to wide of Thomas, City ations, Duke V American Reclamation, reclamation, |

| 20. The foregoing is a statement of facts. | | |
|--|------------------|-----------------------|
| Mh = | | Date: October 8, 2015 |
| Signature: | Title: President | |
| Printed Name: Mark E. Pennington | | |

| AML and RELATED PR | OJECT E | XPERIENC | CE MAT | RIX | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------------|--|---------------------------------------|------------------------------------|----------------------|--------------------------------------|---------------------|-------------------------------|---|-----------------------------|------------------------|--|---|-----------------|---------------------------------|--------------------|------------------------|---|---------------------|----------------|--------------------|-----------------|----------|
| | | | | | | | PF | ROJECT | EXPER | RIENCE | REQUI | REMEN | ITS | | | | | PRIMARY STAFF PARTICIPATION/CAPACITY *** M=Management P=Professional | | | | | |
| PROJECT | Exp. Basis C=Corp. P=Personal | Additional Info Provided in Section (s) ** | Abandoned Surface Mine Reclamation | Abandoned Deep Mine Reclamation | Portal/Shaft Closure | Hydrologic/Hydraulic Design/Eval. | Remining Evaluation | Mine/Refuse Fire Abatement | Subsidence Investigation Mitigation | Hazardous Waste Disposal | Project Specifications | Water Quality Evaluation/Nitigation/ Replacement | Construction Inspection/Manageme nt | Water Treatment | Eq;uipment/Structure Removal | Stream Restoration | Geotechnical/Stability | Mark Pennington | Jennifer Pennington | Robert Kessler | Charles Arthur Jr. | H. Thomas Brown | |
| Thomas Sunrise Sanitation Mine Drain | С | А | | x | | x | | | | | x | | x | | | | | M/P | Р | | Р | | |
| Thomas Sunrise Sanitation Mine Blowout | С | А | | x | x | x | | | | | × | | x | | | | x | M/P | Р | | Р | Р | |
| Prospect Valley Highwall #4 | С | А | х | x | x | × | | | | | х | | × | | | | x | M/P | Р | Р | Р | Р | |
| Winifred (McFann) Portals | С | А | | x | x | x | | | | | х | | x | | | | | M/P | Р | Р | Р | Р | |
| Douglas WL Extension | с | А | | | | | | | | | х | x | x | | | | | M/P | Р | Р | Ρ | Р | |
| Pines CC Subsidence | с | A | | | | x | | | x | | х | x | x | | | | x | M/P | Р | Р | Р | Р | |
| Cambria Portals & Drainage | С | А | | x | x | x | | | | | х | x | x | | | | x | M/P | Р | Р | Р | Р | |
| Zebbs Creek HW#2 | С | А | х | | | x | | | | | х | | x | | | | x | M/P | Р | Р | Р | Р | |
| Nellis (Smith) Drainage | С | А | | | | x | | | | | х | | x | | | | | M/P | Р | Р | Ρ | Р | |
| Hawkinberry Hollow | с | Α | х | x | x | x | | | x | | х | x | x | | | | | M/P | Р | Р | Ρ | Р | |
| Birds Creek Portals | С | А | х | x | x | x | | | | | х | x | x | | | | x | M/P | Р | Р | Ρ | Р | |
| Stowe Refuse Piles | С | А | х | x | | x | | | | | х | | x | | | | x | M/P | Р | Р | Ρ | Р | |
| Ridenour Complex | С | А | х | × | x | x | | | × | | х | | x | | | | x | M/P | Р | Р | Ρ | Р | |
| Breaholm (Evans) Portals | с | A | х | x | x | x | | | | | х | | x | | | | x | M/P | Р | Р | Р | Р | |
| Witcher Creek Portals | С | А | х | x | x | x | | | | | х | X | x | | x | x | x | M/P | Р | Р | Ρ | Р | |
| Turner Slide | Р | Α | х | x | | x | | | | | x | | | | | | x | M/P | Р | | | | |
| Montecarlo Complex | С | А | х | x | x | x | | | x | | х | | x | | | | x | M/P | Р | Р | Р | Р | |
| Grafton #4 Refuse and HW | С | А | х | x | x | x | | | x | | х | | x | | | | x | M/P | Р | Р | Р | Р | |
| Little Daycamp Branch | С | Α | х | x | x | x | | | | | х | | x | | | | х | M/P | Р | Р | Ρ | Р | |
| Oldhouse Branch | С | А | х | x | x | x | | | | | х | | | | x | | x | M/P | Р | Р | Р | | |
| Booths Creek Mines | С | А | | x | x | x | | | x | | х | | | | x | | x | M/P | Р | Р | Р | | |
| Rt. 49 Goolsby Landslide | С | А | х | x | x | x | | | x | | х | | x | | | | x | M/P | Р | Р | Р | | |

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

** Use this area to provide specific sections or pages if needed for reference. *** List Primary Design personnel and their functional capacity for the projects listed.

SECTION A - ABANDONED MINE LANDS EXPERIENCE

- 1. **More than 50 years combined experience with AML Projects:** The principals of Civil Tech Engineering, Inc. have gained AML experience providing professional services to the OSM, WVDEP, and BRIM on abandoned mine lands projects including: Subsidence, Landslides, Mine Drainage, Mine and Refuse Fires, Mine Shafts, Water Impoundments, and Pollution of Ground and Surface Water. **Recent AML Projects performed for the WVDEP AML&R Offices located in Bridgeport, Oak Hill, and Charleston, WV include:**
 - **Thomas (Sunrise Sanitation) Mine Drainage Project (DEP14171). Complete June, 2010.**
 - **Thomas Sunrise Sanitation Mine Blowout (Emergency Project). Complete Spring, 2009.**
 - Prospect Valley Highwall #4 (DEP 14433). Complete 2011.
 - U Winifrede (McFann) Portals (DEP 14479). Complete 2011.
 - Pines County Club (Ponds) Subsidence (DEP14633). Preliminary Design Project Cancelled.
 - **Douglas Water Line Extension (DEP14951).** Construction Complete 2013.
 - **Cambria Portals & Drainage Design (DEP 14845).** Construction Complete 2012.
 - **Birds Creek Portals (DEP 15065).** Construction complete 2012.
 - □ Nellis (Smith) Drainage (DEP15002). Construction complete 2012
 - **Zebb's Creek Highwall #2 (DEP14991).** Construction complete 2011.
 - □ Hawkinberry Hollow Portals and Drainage (DEP 15220). Construction complete 2012.
 - **Stowe Refuse Piles (DEP15586).** Construction Complete 2014.
 - □ Witcher Creek Portals and Refuse (DEP15601). Construction Complete 2014.
 - **Ridenour Complex (DEP15598).** Construction complete 2013.
 - **D** Braeholm (Evans) Portals & Drainage (DEP15634). Construction complete 2013.
 - □ Montecarlo Complex (DEP16032). Complete through bidding 2014 Cancelled after bidding.
 - Grafton #4 Refuse & Highwall (DEP16073) Design Complete.
 - Little Daycamp Project (DEP16033) Construction Complete 2015
 - □ Oldhouse Branch Refuse (DEP16395) Preliminary Design Complete Project on hold funding.
 - **D** Booths Creek Browning Farm Mines (DEP16430) Preliminary Design Complete Permitting underway.
 - □ Rt. 49 (Goolsby) Landslide (Emergency Project) Under Construction
- 2. Principals of Civil Tech were responsible for planning, performing, and managing past AML work performed by Triad prior to February of 1996: Prior to forming Civil Tech, Mark Pennington managed the branch office of Triad Engineering in St. Albans, West Virginia. Jennifer Pennington was a senior engineer in that office. While employed by Triad, our principals were responsible for the performance and/or management of virtually all AML projects performed until February of 1996 when we resigned from Triad. A total of approximately 137 AML projects were completed during the period of 1990 to early 1996.
- 3. **Civil Tech Mine Subsidence Determinations:** Our corporate AML experience is detailed on the enclosed CCQQ forms. Our recent corporate experience includes examination of structures to determine cause of damage and mining relatedness. We have performed these mine subsidence determinations using information on file with the WVGS, and with the assistance of AML personnel and records. Services have been provided for insurance companies and BRIM.
- 4. **Civil Tech has demonstrated experience and professional capability in all aspects of engineering and support services required to successfully complete AML Projects.** Since forming Civil Tech, our staff has successfully completed nearly 2000 projects. Services provided have included: surveying and mapping, subsurface investigations, laboratory analysis, geotechnical engineering, structural design and assessment, environmental engineering, sewer & stormwater projects, land use/planning, reclamation, hydraulic/hydrologic studies, flood routing, dam break analysis and risk assessment, design engineering, plans, specifications, bidding, contract administration, and construction

monitoring. See enclosed CCQQ forms for Civil Tech Engineering, Inc. and Sections B.1 thru B.4.

5. <u>As highlighted in this submittal, our experience with the design of civil</u> <u>infrastructure and dam design combined with our AML experience makes our</u> <u>company uniquely qualified for AML Design Projects.</u>

A partial listing of AML experience gained while employed by Triad during 1990 to 1996 is presented in this submittal along with other related projects which include photographs to showcase our capability to provide services for AML projects.

AML Projects Performed in 1990

- Approximately 20 projects were completed.
- These projects included: mine drainage, subsidence, and landslides.
- Typical Projects included:

Carbondale Portals, Smithers, WV

- < AML Representative: Neil Robinson
- < Services Provided: Drilling, Sampling, Engineering

Tuppers Creek (Burford) Landslide, Kanawha Co., WV

- < AML Representative: Michael Richardson
- Services Provided: Surveying, Mapping, Drilling, Stability Analysis, Mine Drainage Control, Mine Seals, Plans, Specifications, Bidding Assistance.

AML Projects Performed in 1991

- □ Approximately 20 projects were completed.
- These projects included: landslides, mine shafts, subsidence, mine and refuse fires, and mine drainage.
- □ Typical Projects included:

Pine Creek Mine Shaft, Logan Co., WV

- < Work Performed for AML
- Services Provided: Surveying, Mapping, Drilling, Plans, Specifications, Bidding Assistance.

Monaville School Subsidence Determination, Logan Co., WV

- < Work Performed for AML
- < Services Provided: Drilling and Engineering

AML Projects Performed in 1992

- □ Approximately 25 projects were completed.
- These projects included: landslides, subsidence, mine shafts, refuse fires, and mine drainage.
- □ Typical Projects included:

McMillian Drainage, Davis Creek, Kanawha Co., WV

- < Work Performed for AML
- < Services Provided: Surveying, Mapping, Drilling, Lab, Engineering.

Millburn Burning Refuse, Kanawha Co., WV

- < Work Performed for AML
- < Services Provided: Surveying, Mapping, Drilling, Lab, and Engineering

AML Projects Performed in 1993

- Approximately 26 projects were completed.
- These projects included: aerial surveying and mapping, landslides, subsidence, and mine drainage.
- Typical Projects included:

Eckman Refuse Pile, McDowell Co., WV

- < Work Performed for AML
- < Services Provided: Ground Control, Aerial Photography, Aerial Mapping.

Oxley Subsidence and Slide, Davis Creek, Kanawha Co., WV

- < AML Representative: Michael Richardson
- < Services Provided: Surveying, Drilling, Engineering

AML Projects Performed in 1994

- Approximately 27 projects were completed.
- These projects included: aerial surveying and mapping, landslides, subsidence, and mine drainage.
- Typical Projects included:

Turner Landslide, Belle, WV

- < Work Performed for AML
- < Services Provided: Surveying, Mapping, Drilling, Sampling, Plans, Specifications, Bidding Assistance

Sammons Drainage, Chauncey, WV

- < Work Performed for AML
- < Services Provided: Drilling and Engineering

AML Projects Performed in 1995

- □ Approximately 19 projects were completed.
- These projects included: aerial surveying and mapping, landslides, subsidence, burning refuse, and mine drainage.
- □ Typical Projects included:

Mullins Subsidence, Crab Orchard, WV

- < AML Representative: Michael Richardson
- < Services Provided: Drilling, Sampling and Engineering

Big Cub Creek Refuse Pile

- < AML Representative: Dean Stiltner
- < Services Provided: Aerial Photography, Ground Control, Aerial Mapping

Sample design drawings and photographs from our recent AML Projects follow this page.



Thomas Sunrise Sanitation – DEP14171



Thomas Sunrise Sanitation – DEP14171



Prospect Valley Highwall #4 – DEP14433



Prospect Valley Highwall #4 – DEP14433



Prospect Valley Highwall #4 – DEP14433



Prospect Valley Highwall #4 – DEP14433

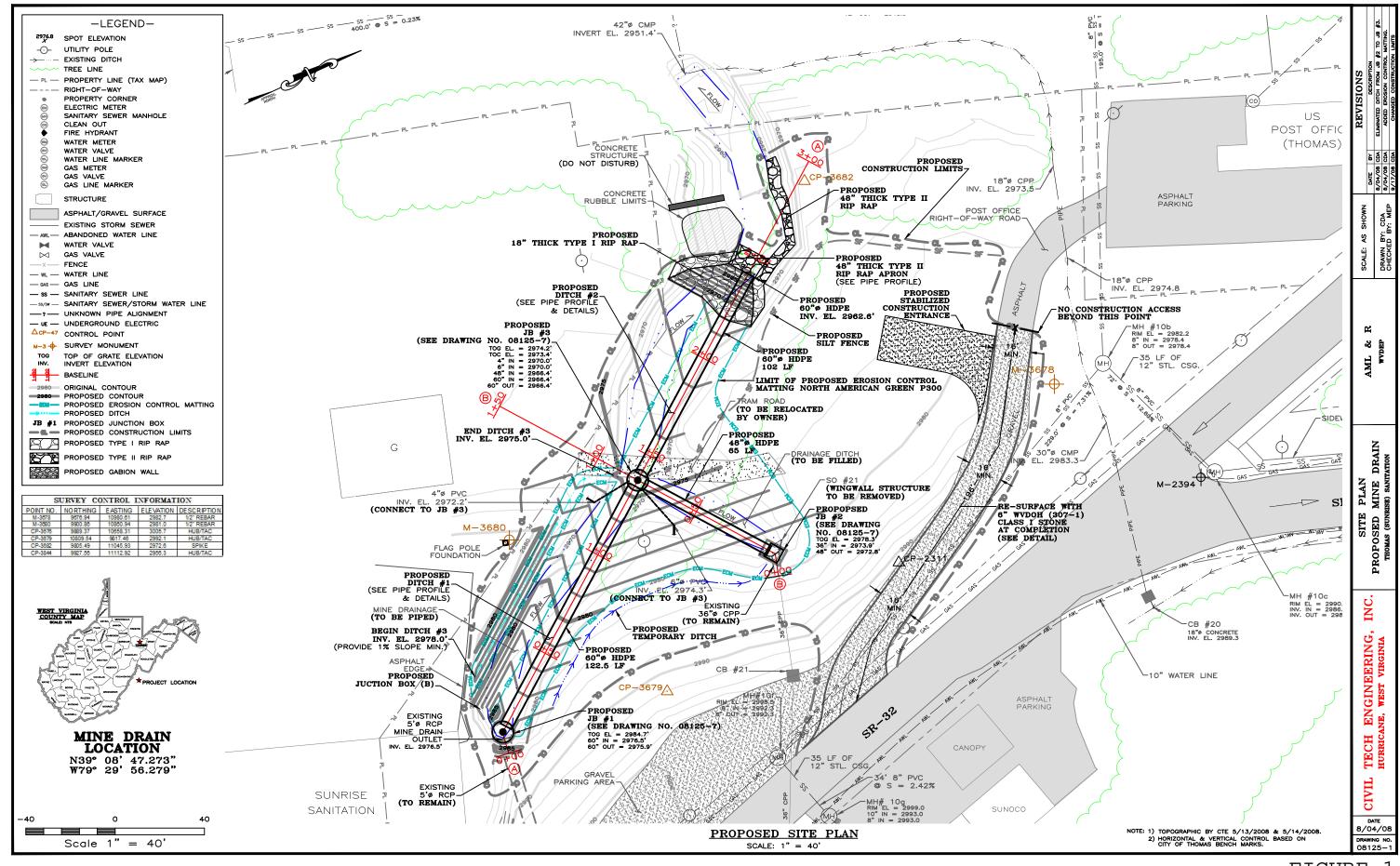
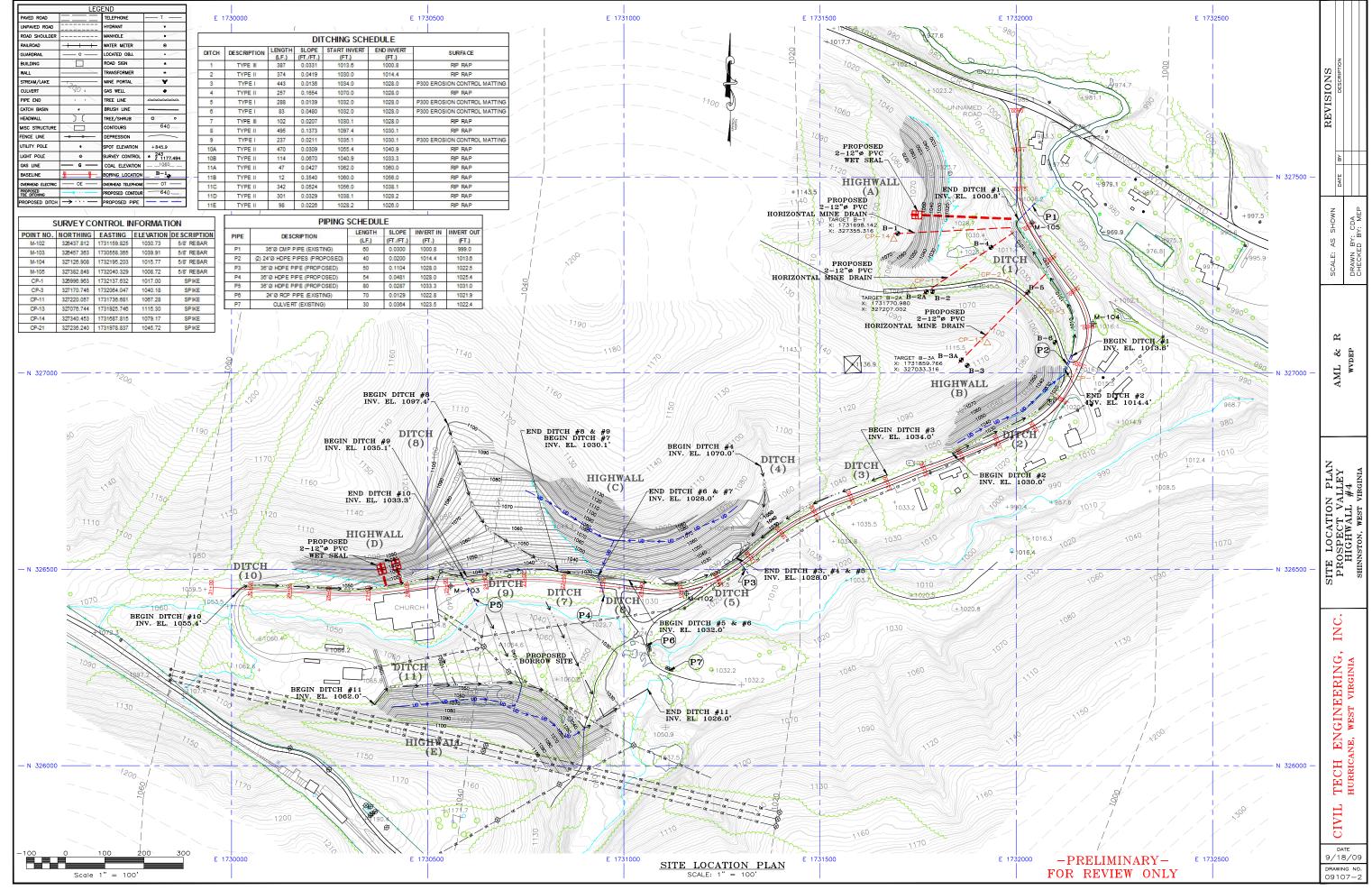


FIGURE 1



SECTION B.1 - HISTORY OF FIRM

- Services: Civil Tech Engineering, Inc. has provided in-house professional engineering services since 1996 in the following areas of expertise.
 - □ AML Design Services
 - Civil Design/Consulting
 - □ Wastewater Treatment and Collection
 - Dam Safety, Design, and Rehabilitation
 - □ Geotechnical Engineering
 - □ Surveying & Mapping
 - Construction Contract Administration/Construction Monitoring
- Background: Civil Tech Engineering Inc. was formed in 1996 by our principals, Mark and Jennifer Pennington. Prior to forming Civil Tech, Mark Pennington managed the branch office of Triad Engineering in St. Albans, West Virginia. Jennifer Pennington was a senior engineer at Triad. <u>Our principals have a combined experience of 65 years in</u> <u>civil and geotechnical engineering.</u>
- Typical Projects and Capability: Since forming Civil Tech, our staff has provided professional engineering services for a variety of clients and projects involving:
 - □ 48 Dam rehabilitation and design projects
 - Annual inspection of more than 65 dams throughout West Virginia
 - □ Topographic mapping to support our engineering projects
 - □ AML Design Services
 - □ Site planning, development, and permitting
 - □ Sanitary sewer/storm water segregation
 - □ Storm water evaluation and design
 - □ Foundation investigation and design for buildings, power plant structures, water tanks, etc.
 - □ Landslide investigation and design
 - Construction storm water pollution prevention plans and permitting
 - □ Permitting
 - Construction monitoring and testing for our design projects
 - Construction contract administration for our design projects
 - Cause of damage assessment of residential and commercial structures for insurance companies
 - □ Subsidence Claims for BRIM
- □ <u>Submittal:</u> We have prepared this submittal to illustrate our complete capabilities in civil engineering. The reader will find information on a variety of projects intended to illustrate the quality of our work, complete capability, and qualifications to provide the engineering services for most civil engineering projects.

Statement of Qualifications Civil Tech Engineering, Inc. Last Revised August 2015

SECTION B.1 - OFFICE, STAFF, & EQUIPMENT

Office: All work is performed from our office located in Hurricane, West Virginia. The physical address, telephone number, email address and staff information is provided below:

> **CIVIL TECH ENGINEERING, INC.** 300A Prestige Drive Hurricane, West Virginia 25526

Phone 304-757-8094 Fax 304-757-8095 email <u>civiltech1@frontier.com</u>

- <u>Principals</u>: Mark E. Pennington MS, PE, PLS Jennifer E. Pennington PE, PLS
- <u>Staff</u>: H Tom Brown PE – Senior Engineer Robert Kessler - Senior Geologist Charles Arthur Jr. - CADD H Neal Craig - CADD
- **Resumes:** Resumes for key personnel and staff follow this section.
- □ Equipment: Civil Tech Engineering, Inc. maintains complete in-house computer equipment and software to support our engineering services. This equipment is complimented by our electronic survey instruments, Carlson software, and external data collector.





RESUME OF MARK E. PENNINGTON PRESIDENT – CIVIL TECH ENGINEERING INC. 05 - 27 - 15

EDUCATION:

B.S.C.E. - Civil Engineering - 1977 - West Virginia University M.S.C.E. - Civil Engineering - 1985 - West Virginia College of Graduate Studies

PROFESSIONAL REGISTRATION:

Registered Professional Engineer - West Virginia, Ohio, and North Carolina Professional Land Surveyor - West Virginia

EMPLOYMENT HISTORY:

| Principal Engineer President | -CIVIL TECH ENGINEERING, INC. February 1996 to Present |
|---------------------------------|--|
| Chief Engineer | -Heeter Construction, Inc., Spencer, WV |
| Vice President | February 1996 to April 1997 |
| Principal Engineer | -Triad Engineering, Inc., St. Albans, WV |
| Vice President | September 1980 to February 1996 |
| Staff Engineer | -American Electric Power Service Corporation |
| | Civil Engineering Laboratory - May 1977 thru July 1978 Ash Utilization & Research - August 1978 to Sept. 1980 |

PERTINENT EXPERIENCE:

<u>General</u>: Mr. Pennington is one of the founders and president of Civil Tech Engineering Inc. In this capacity, he is responsible for overall management of the company, business development, proposal preparation, and the direction/technical review of all engineering work produced by the company.

After graduation from college, Mr. Pennington worked as a staff engineer for American Electric Power. He initially performed various engineering tasks for the Civil Engineering Lab in New Haven, West Virginia. He later joined the ash utilization and research section where was involved with landfill design and testing. Mr. Pennington authored the "Fly Ash Structural Fill Inspection and Training Manual" dated February 15, 1979 which is still in use today in the AEP system. Recently, Mr. Pennington managed compaction testing at the John Amos Plant Quarrier Landfill under contract with AEP.

Prior to establishing Civil Tech Engineering, Mr. Pennington served as Branch Manager of the St. Albans Office of Triad Engineering, Inc. In this capacity, he supervised and coordinated all projects performed by the St. Albans Office and managed over 60 employees including;

engineers, geologists, technicians, designers, draftsmen, environmental technicians, surveyors, drillers, marketing, and clerical personnel. Mr. Pennington's areas of expertise include: general civil design, dam design/rehabilitation/safety, abandoned mine lands reclamation, geotechnical engineering, hazardous and municipal waste design/permitting, hydraulics, hydrology, groundwater studies, laboratory testing, surveying and mapping, drilling, construction inspection/testing, and construction project/contract administration. Mr. Pennington also reviewed and approved mine permits for the Logan Office of Triad Engineering.

RESUME OF MARK E. PENNINGTON CONTINUED

Mr. Pennington has provided and directed engineering services on over 1600 projects since forming Civil Tech Engineering, Inc. These projects have been performed for clients including: WVDEP-AML, BRIM, Steel of West Virginia, FMC, WVDNR, WVDEP, Dominion Generation, Duke Energy, Huntington Area Development Authority, City of Belington, Culloden PSD, City of South Charleston, City of Thomas, City of Pennsboro, Cedar Lakes Conference Center, Middleport Terminals, Contractors, Architects, Private Home Owners, and insurance companies. Mr. Pennington has been responsible for a wide range of engineering projects and services including:

- Dam Inspection, Design, and Rehabilitation
- Surveying and Mapping
- Abandoned Mine Land Projects
- Foundation Investigations for Industrial, Commercial, and Residential Structures
- Civil Design for Residential/Commercial Projects.
- Damage Investigation/Evaluation of Commercial/Residential Structures.
- Mine Subsidence Claims
- Municipal Landfill Design/Permitting
- Municipal Sewage Design and Permitting
- Water Line Extension
- Hazardous Waste Landfill Design/Permitting
- Groundwater Contamination Studies
- Stormwater Design and Control
- Erosion and Sediment Control Design and Permitting
- Construction Quality Control
- Construction Contract Administration

<u>**Civil Design, Municipal Sewage and Water Service</u></u>: Mr. Pennington was the design engineer for a \$ 3,000,000 sanitary sewer/storm water segregation project for the City of Thomas, West Virginia. He routinely assists the City of Thomas with the evaluation of storm water problems and has been responsible for the design and construction of a \$ 750,000 storm water improvement project which was completed in 2006**. Past experience with general civil engineering including utility and roadway infrastructure, site grading, storm water, and permitting has included large commercial and private projects such as Southridge Centre (100 acres), First Church of God (10 acres), Ridgeline Developments (100 acres), Dudley Farms (50 acres), and recent 2 acre developments for hotel sites in Mineral Wells, and Weirton, West Virginia. He was recently responsible for the design of a 1 ½ mile water service extension for the town of Douglas, West Virginia.</u>

Dam Safety: Mr. Pennington is qualified in the field of dam safety, rehabilitation, and design. He is responsible for performing over 65 annual safety inspections for various dams and clients throughout West Virginia and surrounding states. Mr. Pennington has been responsible for the design of over 48 dam design and rehabilitation projects. His areas of expertise include the use of Roller Compacted Concrete (RCC) in the rehabilitation of dams. Mr. Pennington made a presentation at the ASCE fall technical conference in 1994 discussing the use of Roller Compacted Concrete as overtopping protection at the Anawalt Lake Dam. A partial list of typical dam design and rehabilitation projects for which Mr. Pennington has been responsible include:

- No. 2 Impoundment Dam Modification Union Carbide, Sistersville, WV
- Anawalt Lake Dam (new construction) WVDNR McDowell Co, WV
- Warden Lake Dam Modification WVDNR Hardy Co., WV
- Seneca Lake Dam Modification WVDNR Pocahontas Co., WV

RESUME OF MARK E. PENNINGTON CONTINUED

- Teter Creek Lake Dam Modifications WVDNR Barbour Co., WV
- Belington Water Supply Dam Modifications City of Belington Barbour Co., WV
- FMC Tailings Pond Dam Modifications FMC Corp.- Bessemer City, NC
- Water Supply Dam Modifications Culloden PSD Culloden, WV
- Joyce Lake Dam Modifications Joyce Properties Clarksburg, WV
- Handley Dam WVDNR Pocahontas Co., WV
- Thomas Dam Rehabilitation City of Thomas, WV
- Old Pond 11 McClintic Wildlife Management Area
- Wells Lock and Dam Emergency Repairs, Elizabeth, WV
- Rollins Dam Emergency Repairs, Ripley, WV
- Handley Dam Modifications, Pocahontas County, WV
- Winterplace Dam, Raleigh County, WV
- Anawalt Flood Damage Repairs, McDowell County, WV
- Bailey and Lemley Dams, Monongalia County, WV
- Wilson Big Hollow Dam, Hampshire County, WV
- Burches Run Dam Height Reduction, Marshall County, WV
- Mt. Storm Power Station Dam, Grant County, WV
- Deegan and Hinkle Dam Modifications, Bridgeport, WV
- Mill Run Water Supply Dam, Mt. Top PSD, Mt. Storm, WV
- Canaan Valley Resort Water Supply Reservoir, Davis, WV

Construction: Mr. Pennington provided engineering and construction management services to Heeter Construction of Spencer, West Virginia in 1996 and 1997. He assisted Heeter with bidding, project management, and any technical problems requiring engineering expertise. During 1996 and early 1997 while with Heeter Construction, he served as the assistant project manager for the construction of a 10 million dollar flood control levee designed by the US Army Corps of Engineers for the City of Moorefield, West Virginia. Mr. Pennington continues to provide bidding and construction consultation as well as value engineering proposals, waste site design, and other engineering services for Heeter Construction.

<u>US Army Corps of Engineers:</u> While with Triad Engineering, Mr. Pennington managed the Huntington District Corps of Engineers indefinite delivery geotechnical contract for a period of 3 years. During this time, he was responsible for the design of Charleston Haddad Riverfront Park, certification of Pond 16 (a small dam designed by the COE at McClintic WMA), landslide investigations, seepage/stability analysis for flood levees, and numerous re-analysis investigations for dams including Dillon and Beech City Dams in the State of Ohio.

<u>Mine Permitting/Surveying</u>: While employed by Triad Engineering, Mr. Pennington was responsible for review and approval of mine permitting and surveying operations conducted in the Logan, West Virginia Office of Triad.

WVDEP-AML Experience: Mr. Pennington has been responsible for the completion of 21 AML projects for the WVDEP since 2008. These projects have ranged in size from under \$ 250,000 to over \$ 1,000,000. He was also responsible for all AML work produced by the St. Albans office of Triad Engineering prior to resigning from the company in early 1996. His work included proposal preparation, planning, direction, management, and performance of all engineering activity associated with Triad's AML contract. Mr. Pennington was responsible for the successful completion of approximately 137 projects during the period from 1990 to 1996. His expertise includes the abatement of mine related problems associated with subsidence, blasting, landslides, mine drainage, refuse fires, mine fires, mine shafts, drainage, impoundments, and groundwater/surface water pollution. Since leaving Triad and forming Civil Tech, he

RESUME OF MARK E. PENNINGTON CONTINUED

has also been responsible for the investigation of mine subsidence claims throughout West Virginia for the State Board of Risk and Insurance Management (BRIM) and various insurance companies including State Farm and Nationwide. Prior to working with the WVDEP - AML, he worked with the Office of Surface Mining on similar projects.

Insurance and BRIM Investigation: During Mr. Pennington's career, he has provided professional engineering services to insurance companies including State Farm, Nationwide, St. Paul, Westfield, Travelers, Allstate, Prudential, Hartford, and others. From 2002 to 2005, Mr. Pennington also investigated numerous mine subsidence claims for BRIM. Services provided to insurance companies have included examination/evaluation of damage to various structures including:

- Light Commercial Buildings
- Residential Houses
- Manufactured Houses
- Small Bridges
- Retaining/Basement Walls
- Pavements/parking lot surfaces
- Chimneys/fireplaces
- Municipal Concerns

Mr. Pennington is experienced in the assessment of damage caused by wind, flood, snow, erosion, fire, leaking utility lines, earth movement (problem clay soils, settlement, landslides, etc.), vehicle impact, structural defects/failure, and manufacturing defects (related to housing), blasting and subsidence related to mining.

RESUME OF JENNIFER E. PENNINGTON PRINCIPAL ENGINEER

05-27-15

EDUCATION

BSCE - Civil Engineering - 1988 - University of Kentucky

CERTIFICATION/REGISTRATION

Registered Professional Engineer - West Virginia Licensed Land Surveyor - West Virginia

EMPLOYMENT HISTORY

| Principal Engineer | Civil Tech Engineering, Inc., St. Albans, WV |
|--------------------|---|
| | March 1996 to Present |
| Senior Engineer | Triad Engineering, Inc., St. Albans, WV, 1988 to 1996 |

PERTINENT EXPERIENCE

Ms. Pennington has served as a team member and project manager on AML, civil design, and geotechnical projects involving abandoned mine land reclamation, subsurface investigation, geotechnical analysis, and dam design. She has been responsible for technical analysis and review of all AML projects completed by Civil Tech since 2008. She was responsible for all dam design and rehabilitation projects, and projects performed for the Huntington District Corps of Engineers (HDCOE) while employed by Triad Engineering during 1988- 1996. Work performed on those projects and current projects for which she is responsible at Civil Tech Engineering include:

- Geotechnical Investigation and Analysis
- Civil Design
- Hydrologic/hydraulic Analysis
- Stability Analysis using UTEXAS2, PCStable5, and HDCOE Hand Check Methods
- Seepage Analysis using graphical flow net and HDCOE mathematical methods
- Preparation of Project Narratives, Design Drawings, Specifications, Construction Schedules, Erosion and Sediment Control Plans, and Construction Cost Estimates.

Since the company was formed, Civil Tech Engineering has performed numerous dam safety inspections, dam breach analysis and risk assessments, geotechnical studies, and dam rehabilitation design projects. Civil Tech has also completed 18 AML projects since 2008. Ms. Pennington has been responsible for project management on these and many other large scale projects including geotechnical and foundation investigations. She is proficient in organizing and maintaining scheduling during the course of long term projects.

Ms. Pennington is responsible for technical review of all work produced by Civil Tech. In this capacity, she reviews and approves all work produced by the company including AML, civil design, and dam safety projects.

RESUME OF H. THOMAS BROWN SENIOR ENGINEER

EDUCATION

BSCE - Civil Engineering - 1982 - West Virginia University

CERTIFICATION/REGISTRATION

Registered Professional Engineer – West Virginia Professional Surveyor – West Virginia

EMPLOYMENT HISTORY

| Senior Engineer | Civil Tech Engineering Inc. January 2009 to Present |
|--|--|
| Director of Community and Public Works | City of Bridgeport, WV 2004 to Present |
| Office Manager/Chief Estimator | Harmon Construction/WV Paving 1991-2004 |
| Project Engineer | Advanced Surveys Inc. 1987-1991 |
| Estimator | Trible Construction, Inc. 1986-1987 |
| Estimator | Driggs Corporation 1986-1986 |
| Chief Estimator | Maryaco, Inc. 1985-1986 |
| Manager | CMX Industrial Ceramics 1984-1985 |
| Estimator | Hopke Company, Inc. 1983-1984 |
| Technician | Soil Conservation Service 1981-1983 |

RESUME OF H. THOMAS BROWN CONTINUED

PROFESSIONAL EXPERIENCE

Mr. Brown has nearly 35 years experience in the construction industry as an estimator, superintendent, and owner's representative. He has also been responsible for engineering design involving dams, utility infrastructure, storm drainage, roadways, parking lots, walls, earthwork, etc. In 2001 he served as project manager for the Teter Creek Dam Modification while employed by West Virginia Paving. The Teter Creek project involved approximately 20,000 of earth construction, drain pipe repair, and 3000 CY of roller compacted concrete. As director of community and public works for the City of Bridgeport, his responsibilities include managing city departments, GIS, public works, public utilities, community development, and Parks & Recreation. As a project engineer for Civil Tech, Mr. Brown's responsibilities include construction contract management, engineering design, and preparation of construction specifications and cost estimates. He is currently administering the construction contract for the Thomas Sewer-Stormwater Segregation project located in the City of Thomas. He was most recently responsible for preparation of specifications for the Thomas Mine Drain Blowout Project for AML and served as project manager for the Mt. Top PSD Dam Modification project.

RESUME OF CHARLES D. ARTHUR, Jr. SENIOR DESIGNER/SURVEY PART CHIEF 05 - 27 - 15

EDUCATION:

| June 2000 | Benjamin Franklin Career and Technical Education Center Computer-aided Drafting/1080 hours Honor roll in computer drafting, experience with Microstation 95 SE, 3D drawings, mechanical/architecture drawings, isometric/ob projections | /SE, AutoCAD 2000, Windows 98 |
|-----------|--|-------------------------------|
| June 1997 | Benjamin Franklin Career and Technical Education Center Welding/1,320 hours Honors included a second place finish in the State Welding Comp sponsored by the Vocational Industrial Clubs of America, Certific with SMAW, GMAW, GTAW and TB | |
| Dec 1993 | Richmond Technical Center Welding/72 hours Honor roll in welding, experience with SMAW, GMAW, GTAW | Richmond, VA and TB |
| June 1990 | Dunbar High School Diploma | Dunbar, WV |

EMPLOYMENT HISTORY

| June 2000 to Present | Civil Tech Engineering, Inc. Senior Designer/Survey Party Chief | Hurricane, WV |
|-----------------------------|--|--|
| | Responsible for preparation of design drawin and evaluation of mine maps and subsidence | ngs using Autocad Civil3D software, survey party chief, |
| July 1999 to June 2000 | Custom Upholstery Helper/Deliverer Part Time | St. Albans, WV |
| | 1 | and related sales, tearing down furniture to be upholstered |
| Aug 1997 to June 1999 | American Commercial Barge Line Deck Hand | Jeffersonville, IN |
| | Experience rigging barges together, making quarters and maintaining tug boats/chemical | locks, chipping, grinding, painting, working in close barges |
| Jan 1995 to Aug 1997 and | Pizza Hut Inc. Shift Manager | South Charleston, WV |

RESUME OF CHARLES D. ARTHUR, Jr. Continued

July 1989 toExperience updating customer data, completing close of daily receipts, insuring that paperworkJune 1993balances, operating computerized cash register and possessing exemplary customer and employee
relations

| June 1993 to | First Choice Equipment | Ashland, VA |
|--------------|--|--|
| Dec 1994 | Mechanic | |
| | Experience maintaining tractor-trailers, various | s welding jobs, paint preparation and painting |

PERTINENT EXPERIENCE:

Since joining Civil Tech in 2000, Mr. Arthur has been responsible for preparation of design drawings using Autocad for a variety of civil engineering, AML, mine subsidence claims, hotel site development, and dam modification projects. A partial list of projects including recent AML experience follows:

- > Thomas (Sunrise Sanitation) Mine Drainage Project (DEP14171).
- > Thomas Sunrise Sanitation Mine Blowout (Emergency Project).
- Prospect Valley Highwall #4 (DEP 14433).
- > Winifrede (McFann) Portals (DEP 14479).
- > Pines County Club (Ponds) Subsidence (DEP14633).
- > Douglas Water Line Extension (DEP14951).
- > Cambria Portals & Drainage Design (DEP 14845).
- Birds Creek Portals (DEP 15065).
- Nellis (Smith) Drainage (DEP15002).
- > Zebb's Creek Highwall #2 (DEP14991).
- > Hawkinberry Hollow Portals and Drainage (DEP 15220).
- ▶ Fairfield Inn and Suites, Weirton, WV
- ➢ Holiday Inn Express, Mineral Wells, WV
- > Thomas Sunrise Sanitation Mine Drain
- ➢ Old Pond 11 Dam Rehabilitation
- Anawalt Flood Damage Repair
- Teter Creek Dam Modification
- ➢ Wells Lock and Dam Repair
- Wilson Big Hollow Dam
- ▶ Winterplace Dam Modification 1 and 2.
- Cedar Lakes Dam No. 2 Flood Damage Repair
- Bailey and Lemley Dam Modifications
- Deegan and Hinkle Dam Modifications
- Thomas Storm Water Improvements
- Thomas Sewer/Storm Water Segregation Project
- > Amish Exchange
- Mine Subsidence and Insurance Investigations
- Landslide corrections
- Geotechnical Investigations

Mr. Arthur also serves as survey crew chief for survey control and topographic mapping projects for Civil Tech Engineering. During his employment he has also provided construction inspection and testing services for civil and dam modification projects and has inspected subsurface investigation projects for geotechnical projects.

Mr. Arthur is also certified by the State of West Virginia as a pre-blast inspector.

RESUME OF ROBERT R. KESSLER GEOLOGIST 05 - 27 - 15

EDUCATION:

B.S. - Geology - 1965 - Ohio University Post Graduate Work - 1965 to 1966 - Geology - Ohio University
B.S. - Mathematics - 1980 - University of Charleston

CERTIFICATIONS:

Certified Aggregate Inspector - WVDOH Certified Concrete Inspector - WVDOH Certificate of Completion - Wetland Training - WVDOH Certificate of Completion - Techniques for Pavement Rehabilitation - WVDOH Certificate of Completion - Aerial Photo Interpretation - WVDOH Certificate of Completion - Alkali Silica Reactivity in Concrete - FHWA

EMPLOYMENT HISTORY:

| Geologist - | Civil Tech Engineering, Inc. 1996 – present Responsible for all geologic studies/investigations. Typical projects include mining subsidence investigations, Teter Creek Dam, Thomas Dam, Old Pond 11 Dam, and Seneca Dam. |
|-------------------------------------|---|
| Geologist - Group Leader | Aggregate Group, West Virginia Division of Highways August 1998 to Present, Materials Control Division |
| | Division Reorganization |
| Geologist - Testing Group Leader | All Materials Testing Sections & Roadway Analysis West Virginia Division of Highways April 1992 to August 1998, Materials Control Division |
| | Division Reorganization |
| Geologist - Technical Advisor | West Virginia Department of Transportation January 1986 to April 1992, Materials Control Division |
| | Division Reorganization |
| Geologist - Assistant Director | Aggregate Section, West Virginia Department of Highways May 1984 to January 1986, Materials Control Division |

RESUME OF ROBERT KESSLER CONTINUED

| Geologist Section Leader | - | Aggregate Section, West Virginia State Road Commission May 1969 to May 1984, Materials Control Division |
|-----------------------------|---|---|
| Geologist | - | Aggregate Section, West Virginia State Road Commission July 1966 to May 1969, Materials Control Division |

PERTINENT EXPERIENCE

Mr. Kessler has performed geologic study on eleven mine subsidence claims investigated by Civil Tech for BRIM since 1996. Geologic investigation has included review of available mining maps and the county geologic reports providing important information concerning mining history and geologic formations and mine subsidence potential.

In addition to his duties reviewing mine subsidence claims, Mr. Kessler has also been responsible for the geologic study and investigation for over 40 dam rehabilitation projects in West Virginia.

Mr. Kessler has an intimate knowledge of geologic formations in the state of West Virginia and has recently authored and published a book on the geology of the Kanawha Valley.

SECTION B.2 - **CIVIL DESIGN**

- Design: Our principals and key personnel have been responsible for developing civil design drawings including site grading plans, highway access, storm water and mine drain piping and controls, highwall and portal reclamation, storm water, rail road crossings, erosion control, sanitary sewer collection and treatment, lift stations, retaining walls, parking layout, sidewalks, handicap access, utilities, boat launch facilities, fishing piers, permits, specifications, and bid documents for various projects including:
 - □ Bluestone Lake Boat Launch
 - □ Laurel Lake Fishing Pier
 - Dents Run WMA Shooting Range
 - □ Mason Dam Parking and Boat Launch Facilities
 - 48 Dam Rehabilitation Projects in WV and NC
 - Means and Methods, Pipe Crossings CSX Railroad, Rt. 10, Rita to Midway Plaza Highway Project
 - □ Storm/Sanitary Segregation, City of Thomas, WV
 - □ Storm Water Improvements, Thomas, WV
 - □ First Church of God, Charleston, WV
 - □ Mt. Vernon Baptist Parking Lot Expansion
 - □ Holiday Inn Express, Mineral Wells, WV
 - □ Fairfield Inn & Suites, Weirton, WV
 - □ Various large residential developments
 - Robert C. Byrd Federal Court House Sidewalks, Utilities, and Drainage
 - Haddad Riverfront Park, Charleston, WV
 - Southridge Centre 100 acre Commercial Development
 - Ridgeline 50 acre Commercial Development
 - Commercial developments including: Amish Exchange, Wendy=s, Texas Steakhouse, Kenny Rogers, etc.
 - □ Various Hazardous Waste and Sanitary Landfills
 - □ Various Abandoned Mine Land Projects
 - □ Various Landslide Stabilization Projects throughout West Virginia
 - □ Thomas Sunrise Sanitation Mine Drain
 - □ Thomas Sunrise Sanitation Mine Blowout
 - □ Prospect Valley Highwall #4
 - □ Winifrede (McFann) Portals
 - Dines Country Club (Ponds) Subsidence.
 - Douglas WL Extension
 - Cambria Portals & Drainage
 - □ Zebb's Creek Highwall #2
 - □ Bird's Creek Portals Design
 - Development Replacement Design Mt. Storm Power Station

Statement of Qualifications Civil Tech Engineering, Inc. Last Revised September 2015

Cost Estimating: Cost estimates are routinely prepared for our civil design projects. Most recent experience in preparing cost estimates includes:

- Thomas Sunrise Sanitation Mine Drain Project Cost \$ 325,000
- Thomas Sumise Sanitation Mine Blowout Project Cost \$ 250,000
- Pines Country Club (Ponds) Subsidence Project Cost \$ 2.6 million
- Winifrede (McFann) Portals Project Cost \$ 450,000.
- □ Cambria Portals Project Cost \$ 682,000
- Douglas WL Extension Project Cost \$ 250,000
- Storm/Sanitary Segregation Project, City of Thomas Project Cost \$ 3 million
- Storm Water Improvements, City of Thomas Project Cost \$ 750,000
- Ansinelli Retaining Wall Replacement, Private Project Cost \$ 50,000
- Fleming Street Stabilization, City of Monongah Project Cost \$ 70,000
- Mt. Vernon Baptist Parking Lot Expansion Project Cost \$ 50,000
- Holiday Inn Express, Mineral Wells Project Cost Unknown
- Teter Creek Dam Modifications, WVDNR, Wildlife Resources Project Cost \$ 1.2 Million
- Old Pond 11, WVDNR, Wildlife Resources Project Cost \$ 150,000
- Moncove Dam Rehabilitation, WVDNR Project Cost \$ 600,000
- Burches Run Dam Rehabilitation, WVDNR Project Cost \$ 600,000
- Deegan and Hinkle Dam Modifications Project Cost \$ 1.5 Million
- Bailey and Lemley Dam Modifications Project Cost \$ 1.2 Million
- □ Wilson Dam Modification Project Cost \$250,000
- Belington Dam Modification Project Cost \$ 50,000
- □ Mill Run Dam Modification Project Cost \$ 200,000
- □ Stony River Dam Breach Project Cost \$ 250,000.
- □ Temperature and Flow Monitoring Weir Project Cost \$ 250,000
- □ Jimmy Lewis Dam Modification Project cost \$ 500,000

Our engineers have extensive experience in cost estimating and bidding gained on projects which were bid and successfully constructed. This experience was gained by Mark Pennington and John Hildreth estimating costs for construction projects for competitive bidding while working for Heeter Construction, of Spencer, West Virginia. See Resume for Mark Pennington. <u>Our construction experience is invaluable in the development of accurate cost estimates for budgeting, and development of practical designs which are "buildable" without significant field changes, change order, and cost over-runs.</u>

Construction Contract Administration: We have, or are providing contract administration on virtually all of the civil projects listed herein. Our experience has been gained administering contracts on projects ranging in size and complexity from a few hundred thousand to upwards of 30 million plus for the Southridge Centre/Ridgeline developments. Mark Pennington also served as assistant project manager on a 10 million dollar flood levee construction project for the City of Moorefield, West Virginia in 1996, while employed with Heeter Construction.

- Civil Project Photographs: Photographs of some of our recent projects follow this section of the submittal.
- Sample Project Drawings: Typical design drawings from some of our projects are enclosed to illustrate our capabilities.



FIRST CHURCH OF GOD – CHARLESTON, WV PROJECT COST UNKNOWN – COMPLETE 2001

- □ TOPOGRAPHIC MAPPING
- □ SUBSURFACE INVESTIGATION
- □ STORM WATER CONTROLS
- PERMITTING
- □ UTILITY LOCATION & DESIGN
- □ WASTE WATER TREATMENT RECIRCULATING SAND FILTER
- PAVEMENT AND WALKS
- PLANS AND SPECIFICATIONS





Erosion Repair – Rip Rap Armored Ditch STORM WATER IMPROVEMENTS – THOMAS, WV PROJECT COST \$ 750,000 – COMPLETE 2007

- **TOPOGRAPHIC MAPPING**
- □ STORM WATER CONTROLS & EROSION REPAIR
- □ PERMITTING
- PLANS AND SPECIFICATIONS
- BIDDING
- CONSTRUCTION CONTRACT ADMINISTRATION



<u>HOLIDAY INN EXPRESS – MINERAL WELLS, WV</u> <u>PROJECT COST UNKNOWN – COMPLETE 2007</u>

- □ TOPOGRAPHIC MAPPING
- STORM WATER CONTROLS
- PERMITTING
- □ UTILITY LOCATION & DESIGN
- □ WASTE WATER LIFT GRINDER STATION DESIGN
- PAVEMENT AND WALKS
- PLANS AND SPECIFICATIONS





MT. VERNON BAPTIST PARKING LOT EXPANSION – HURRICANE, WV PROJECT COST \$ 50,000 – COMPLETE 2007

- □ TOPOGRAPHIC MAPPING
- STORM WATER CONTROLS
- PERMITTING
- PAVEMENT AND WALKS
- PLANS AND SPECIFICATIONS

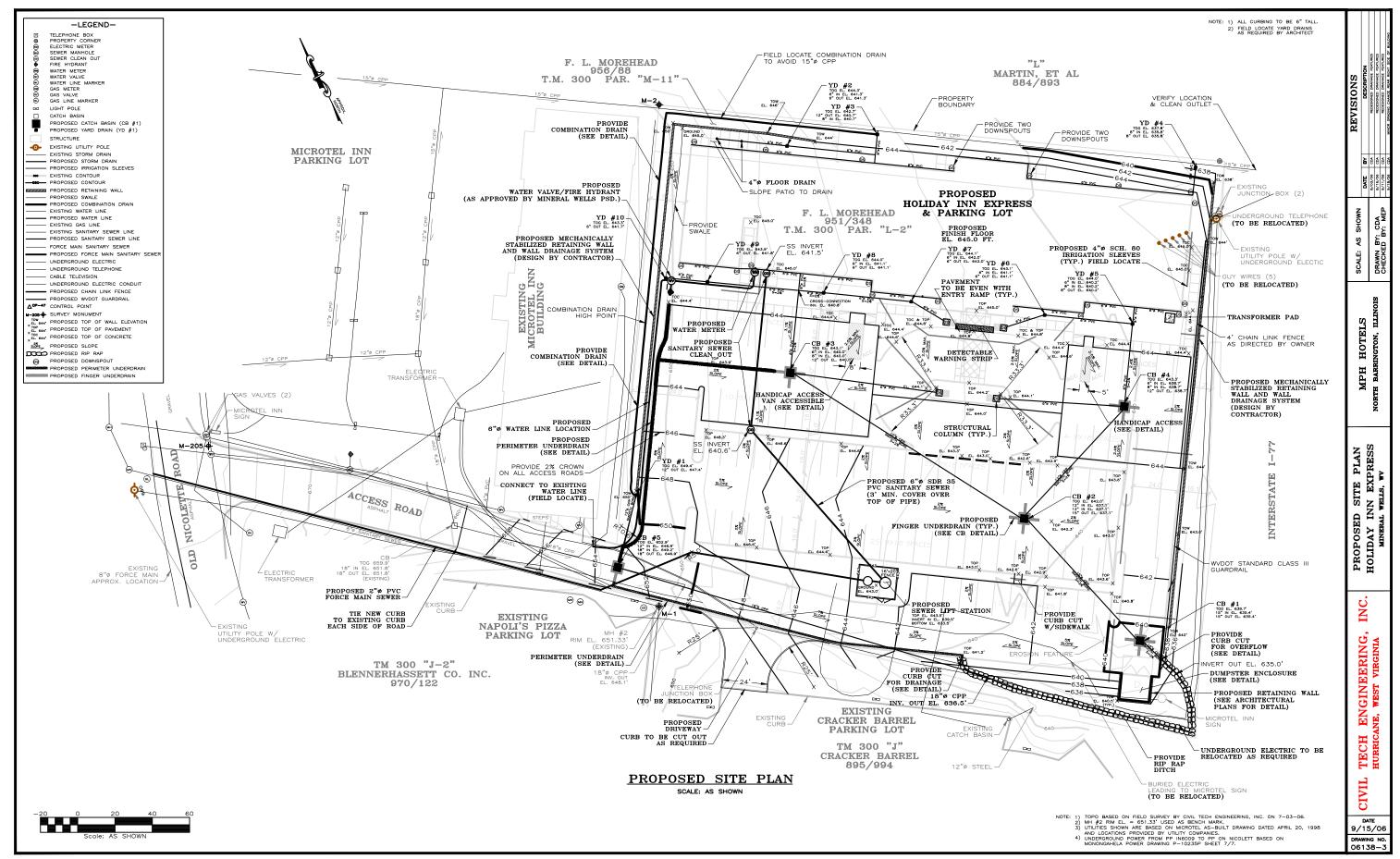
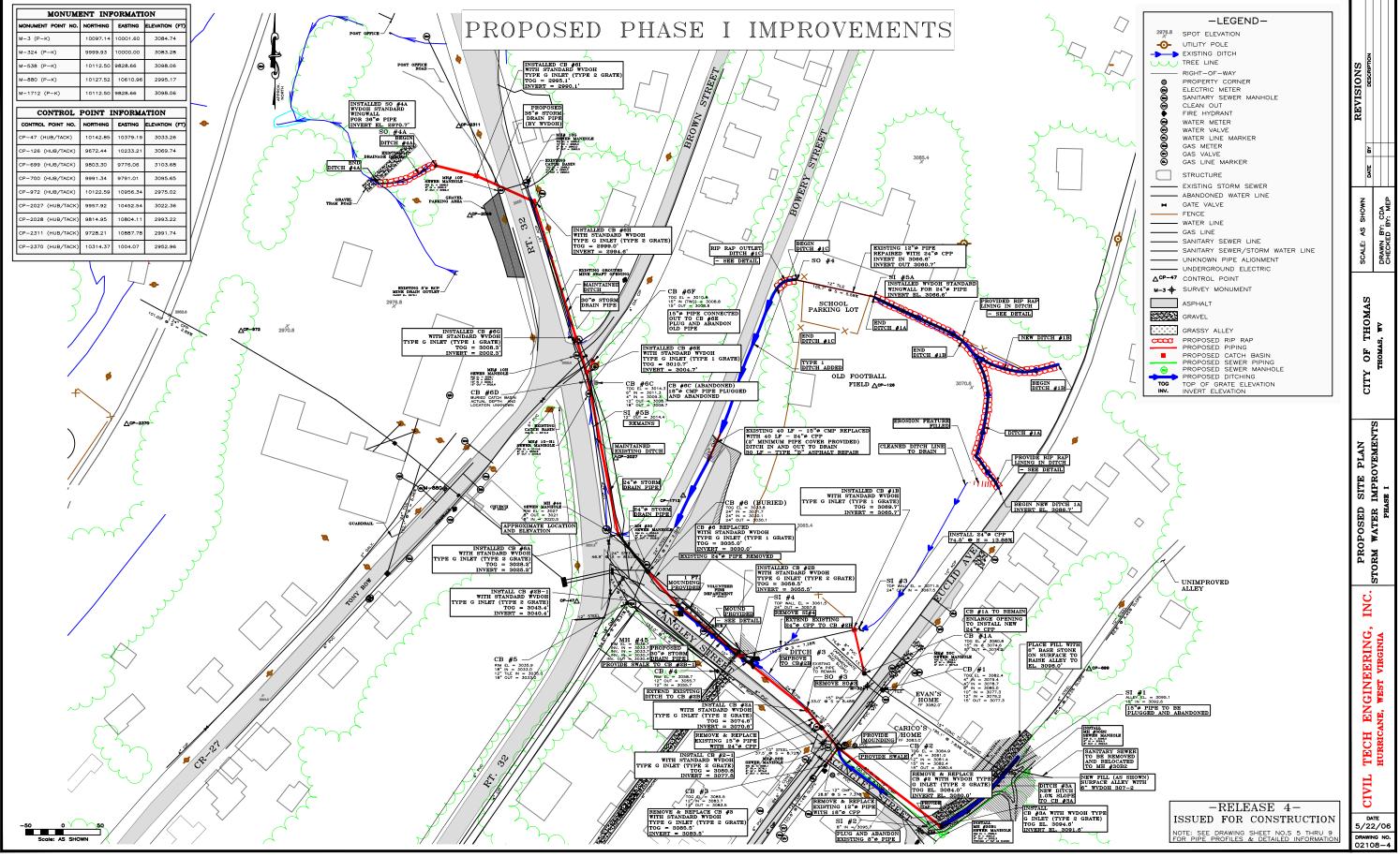
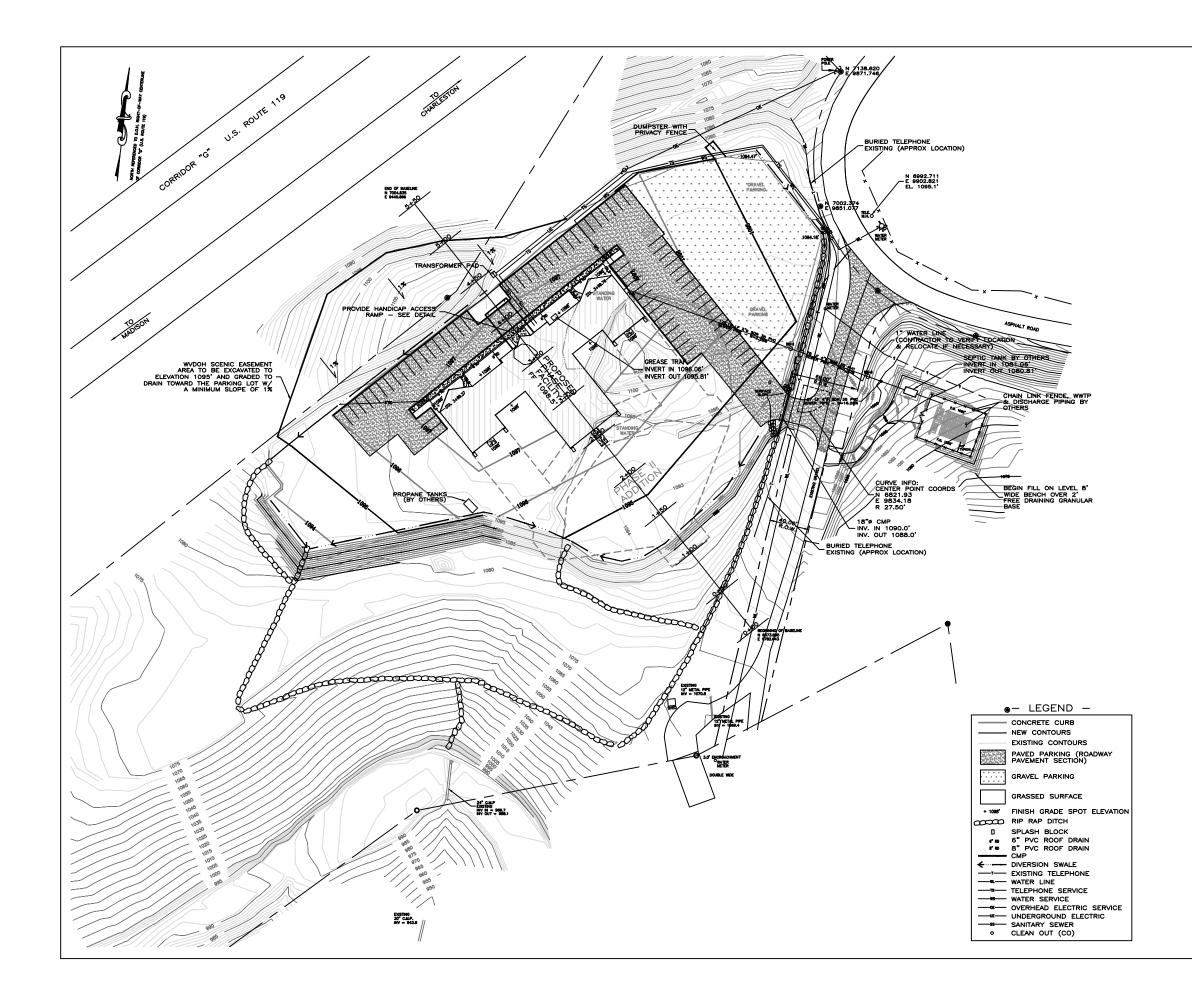


FIGURE 3





| | REVISIONS | | |
|---------|-----------|--|--|
| DATE | BY | DESCRIPTION | |
| 6/6/00 | BDJ | CHANGED SEWER PIPE LOCATION EXITING THE BUILDING | |
| 9/20/00 | RKM | RELOCATED WATER AND SEWER LINES ENTERING/EXITING BUILDING. ADDED WWTP SURVEY/PLANT LOCATION | |
| | | | |

SITE WORK GENERAL NOTES:

Utility locations are approximate. Contractor to verify before beginning work. Utilities: Electric: American Electric Power – Phone: 304-746-2655 Water: Wy American Water Co. – Phone: 304-345-8660 Telephone: Bell Atlantic – Phone: 304-954-6202

A foundation investigation was performed by Civil Tech Engineering, fer is referred to the Foundation Investigation" report dated Decembe is. The results of the investigation is not a warranty of subsurface locion area, and the Engineer or Owner will not be responsible for a drawn therefrom by the Contractor. The Contractor is responsible in documents, examining the site, determining the conditions under rformed, and conducting such additional investigations as he deems ing, and execution of the work. n Investigation: A for 1997. The reader is 1 apecific details. T

cavation: Excavation of both soil and rock will be necessary to develop the site. Hard rock key be encountered in the excavation. Blasting to facilitate the excavation, if allowed, must oproved by Engineer. Trenching shall be performed in accordance with OSHA regulations. Into excavations deeper than 5 feet is not allowed without approved shoring or sloping.

4. Fill: Fill shall consist of suitable soil or rock materials available from site excavations as approved by the Engineer. Fill shall be placed in maximum 9 inch loose, level lifts and compacted to 95% of the maximum dry density as determined by ASTM D698, or as approved by the Engineer. The molsture content of the fill material shall be plus or minus 2% of optimum. Fill shall not be placed in standing water or on frazen ground. Control of water whether it be surface or groundwater shall be the responsibility of the Contractor. Subgrade must be approved by the Engineer before fill placement begins. Care shall be taken not to over-compact the includy subgrade fill placement. Fill shall not be placed on existing fill areas due to potential for landelides to develop.

5. Rip Rap: Rip rap shall consist of a durable hard rock material produced from onsite excavations as approved by the Engineer. If suitable rip rap material is not available from ansite excavations, rip rap may be obtained from an offsite or commercial source. Rip rap hall consist of a durable sandstone or limestone well graded with a maximum and minimum particle size of 6 to 18 inches.

6. Waste Material: Excess soll/rock material not needed for site development shall be disposed offsite at an approved borrow area, unless an onsite waste area is approved by the Engineer. The Contractor shall comply with all environmental and erosion/sediment control requirements for the waste area imposed by the regulatory agencies.

7. Povement: Base stone shall consist of of WVDOT 307-1 (Class 1) Stone. Asphatic base shall consist of WVDOT Base 1 mix. Asphatic wearing course shall consist of WVDOT Wearing 1 mix. Asphatic materials, placement, and compaction shall comply with WVDOT specifications. Subgrade to be compacted to 95% of the maximum dry density as determined by ASTM D698. Base Stone to be underlain by a suitable stabilization fabric as approved by the Engineer.

3. Dumpster Pad: The dumpster pad shall be constructed of concrete with a minimum 28 day compressive strength of 4000 psi. Concrete shall be air entrained and shall comply with ACI 318 for material, mixing, placement, testing, and acceptance. Rebor shall be grade 60.

wer Piping (Building to Septic Tank Only): Piping shall consist of SDR 35 PVC with bell and t connections. Fittings shall be molded plastic suitable for solvent welding. Install with um slope 0.5% and provide a cleanout with sanitary Wye where the piping leaves the ng and at 250 foot intervals thereafter. Bedding and backfill to be in accordance with the facturers recommendations. Pipe to be installed with a minimum cover of 3 feet over the of the pipe. The Contractor will be responsible for installing the sanitary sever line complete ning 5 feet from the building and extending to within 5 feet of the septic tank as shown e Design Drawings.

The Design Drawings. Water Service Piping: Water service piping shall extend from the water meter to be installed WV American Water to within 5 feet of the building as shown on the pions. Water service shall be installed at a minimum depth of 4 feet below finish grade. Service piping shall nply with AWWA (SQ01 or C902 for Polyethylene (PE) pressure pipe and tubing or Polybutylene) Pressure pipe and tubing ½ inch thru 3 inch for water service. Coper piping may be d as opproved by the Engineer. Pipe shall be installed in accordance with ASTM D2754. Pipe ta shall comply with ASTM D2657 Technique II - Butt Fusion. If the service lines is not medicately connected to the main or the supply line for the building, the line shall be closed by adards and as approved by the Engineer. After pressure testing the service line shall be infected as required by the Engineer.

11. Curb: WVDOT Plain Curb -Type I as modified on the detail.

12. Foundations: Design foundations for allowable bearing pressure of 3000 psf. Extend all foundations to bear on bedrock. Minimum foundation depth is 30 inches below exterior grade for frast protection. Where depth to rack exceeds 30 inches use lean concrete to extend the foundation to rack. Foundation bearing surface to be approved by the Engineer prior to placement of concrets.

13. Building Floor Slab: The slab shall be underlain by 6 inches of compacted dry bed materia to be approved by the Engineer.

m Water Piping shall consist of corrugated metal. Piping shall be fully asphalt coated nished with a wall thickness of 0.079 inches and corrugations of 2-2/3 x ½ inches.

The contraction will be will includes of body incluses and contrigations of 2-2/5 4/2 incluse. The general contractor will pay for this work directly at the agreed upon price. The underground coble will be pulled through plastic conduit to be installed by the Contractor as part of site work. The contractor will also construct the transformer pad in accordance with AEP requirements. Below grade extending between the power pole and within 5 feet of the building as shown on the Drawings. Underground electric shall be separated a minimum of 5 feet from other underground utilities. The location and alignment of the conduit and transformer pad to be approved by AEP before installation. All electrical work shall be planned and executed by a licensed electrician and shall comply with applicable codes.

chone: Underground telephone cable shall be installed in conduit as required by Bell The Contractor will provide the trench and conduit. Trenching shall be a minimum o is deep and conduit shall be as required by the telephone company.

17. Roof drain piping to consist of Schedule 40 PVC with molded fittings and couplings suitable for solvent welding. Piping to be installed with a minimum slope of 1%.

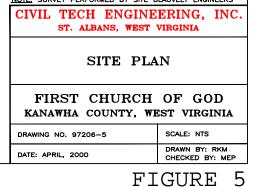
18. Refer to architectural drawings for building dimensions and layout.

19. All disturbed areas to be revegetated in accordance with the WVDOT Section 652. Lawn area to be Type C–2. Fill and cut slopes to be Type D. Table 652.5-Seed Mixtures

20. E & S measures to comply with the approved General Permit issued by the WVDEP OWR.

21. Refer to sheets 97206-2 thru 97206-3.

NOTE: SURVEY PERFORMED BY SITE BLAUVELT ENGINEERS



SECTION B.3 - DAM SAFETY EXPERIENCE

- <u>Civil Tech Experience</u>: Civil Tech's dam experience over the last 19 years has included 37 Dam Modification Projects ranging in cost from \$ 50,000 to \$ 1,500,000. All dam projects involve civil, environmental, geotechnical, surveying/mapping, construction monitoring, and contract administration. We believe this experience makes our firm uniquely qualified for AML Design Work. Civil Tech Dam Projects are listed below.
 - 1. Rollins Dam, Evans, WV
 - 2. Seneca Dam, Pocahontas Co., WV
 - 3 Teter Creek Dam, Barbour Co. WV
 - 4. Wells Lock and Dam, Elizabeth, WV
 - 5. Handley Dam, Handley WMA, Pocahontas Co., WV
 - 6. Anawalt Flood Damage Repair, Anawalt, WV
 - 7. Old Pond 11, McClintic WMA, Mason Co., WV
 - 8. Burches Run Breach Plan, Moundsville, WV
 - 9. Edwards Run Dam, Cacapon Bridge, WV
 - 10. Culloden PSD Dam, Culloden, WV
 - 11. Belington Water Supply Dam, Belington, WV
 - 12. Cedar Lakes Dam No.s 1 and 2, Ripley, WV
 - 13. Joyce Lake Dam, Clarksburg, WV
 - 14. Tailings Pond No. 2, Bessemer City, NC
 - 15. City of Thomas Dam, Thomas, WV
 - 16. Fly Ash Dam, FMC Peroxide Plant, So. Charleston, WV
 - 17. Dickenson Dam, FMC Sportsman's Club, Hurricane, WV
 - 18. Brood Pond Dam, FMC Sportsman's Club, Hurricane, WV
 - 19. Winterplace Dam Modification, Winterplace Ski Resort
 - 20. Wilson Big Hollow Dam, Hampshire Co. WV
 - 21. Burches Run Dam, Marshall Co., WV
 - 22. Moncove State Park Dam, Monroe Co., WV
 - 23. Winterplace Dam Reservoir Enlargement, Winterplace Ski Resort
 - 24. Bailey Dam Rehab, Monongalia Co. WV
 - 25. Lemley Dam Rehab, Monongalia Co. WV
 - 26. Deegan Dam Modification, Bridgeport, WV
 - 27. Hinkle Dam Modification, Bridgeport, WV
 - 28. Stony River Dam Breach, Grant Co., WV
 - 29. Mill Run Dam Modification, Mt. Top PSD, Grant Co., WV
 - 30. Mt. Storm Lake Dam Flip Bucket Stabilization, Dominion Generation
 - 31. Temperature and Flow Measurement Weir Design, Dominion Generation
 - 32. White Dam Modification, Private Owner, Sissonville, West Virginia
 - 33. Berwind Dam Modification, Berwind WMA

- 34. Long Branch Dam Modification, Pipestem State Park
- 35. Mt. Storm Gate Modification, Mt. Storm Power Station
- 36. Jimmy Lewis Drain Pipe Repairs, Pinnacle Rock State Park
- 37. Reservoir and Park Dams, Cacapon State Park
- Certificates of approval have been applied for and approved by the WVDEP on 26 projects.
- Our projects include; new dams, rehabilitation, flood damage repair, and emergency repair.
- □ Periodic Safety Inspections are routinely performed on over 60 dams.
- Past Experience: Prior to forming Civil Tech in 1996, our principals were responsible for:
 - 11 Dam Modification Projects ranging in cost from \$ 300,000 to \$ 1,300,000.
 These dams are listed below:
 - 1. Jimmy Lewis Dam, Mercer Co., WV
 - 2. Plum Orchard Dam, Fayette Co., WV
 - 3. Boley Dam, Babcock State Park
 - 4. Anawalt Dam, Anawalt, WV
 - 5. Warden Lake Dam, Hardy Co., WV
 - 6. Burches Run Dam, Moundsville, WV
 - 7. Castlemans Run Dam, Wheeling, WV
 - 8. No. 1 Impoundment, Union Carbide
 - 9. No. 2 Impoundment, Union Carbide
 - 10. No. 3, Impoundment, Union Carbide
 - 11. Mill Creek Dam, Columbia Gas
 - □ Certificates of Approval were obtained for all projects.
 - □ Numerous Safety Inspections were also performed.
- Innovation: Civil Tech specializes in the use of innovative techniques including the use of Roller Compacted Concrete in dam rehabilitation. We have successfully completed seven dam rehabilitation projects using RCC in West Virginia.
- Breach Analysis and Risk Assessment: Civil Tech has successfully used breach analysis and risk assessment to reduce the hazard classification of many of our dam projects. This analysis resulted in a reduction in the design storm and substantial savings for our

clients.

- ☐ <u>Facility Improvements:</u> Our dam rehabilitation projects have resulted in facility improvements including:
 - Access for Fishermen.
 - Boat Launching Ramps.
 - Access Roads.
 - Parking Facilities.
 - □ Walkways
 - Handicap Access.
 - □ Toilet facilities.
- ☐ <u>Maintenance of Facility</u>: Our personnel are sensitive to the dam setting and make every effort to complete our projects with minimal disruption of the facility. Our designs are practical and planned to fit the site.
- ☐ <u>Awards</u>: First recipient of the WVDEP Environmental Excellence Award 2010 Safe Dams Category. The WVDNR Parks and Recreation Section also received the WVDEP Environmental Excellence Award Safe Dams Category in 2014 for the Berwind Dam Modification Project. This project was completed in 2012 and was designed and administered by Civil Tech. These awards speak highly of our attention to detail and the quality of our work.
- <u>Project Photographs:</u> Representative photographs and sample drawings illustrating our Dam Rehabilitation experience are included herein.



THOMAS DAM MODIFICATION, THOMAS, WV



TETER CREEK DAM MODIFICATION, BARBOUR CO., WV



BELINGTON DAM MODIFICATION, BELINGTON, WV



WILSON DAM MODIFICATION, HAMPSHIRE CO., WV



OLD ANAWALT DAM FLOOD DAMAGE REPAIR, MCDOWELL CO., WV



BAILEY DAM MODIFICATION, MONONGALIA CO., WV



LEMLEY DAM MODIFICATION, MONONGALIA CO., WV



MONCOVE DAM MODIFICATION, MONROE CO., WV



SENECA DAM MODIFICATION, POCAHONTAS CO., WV



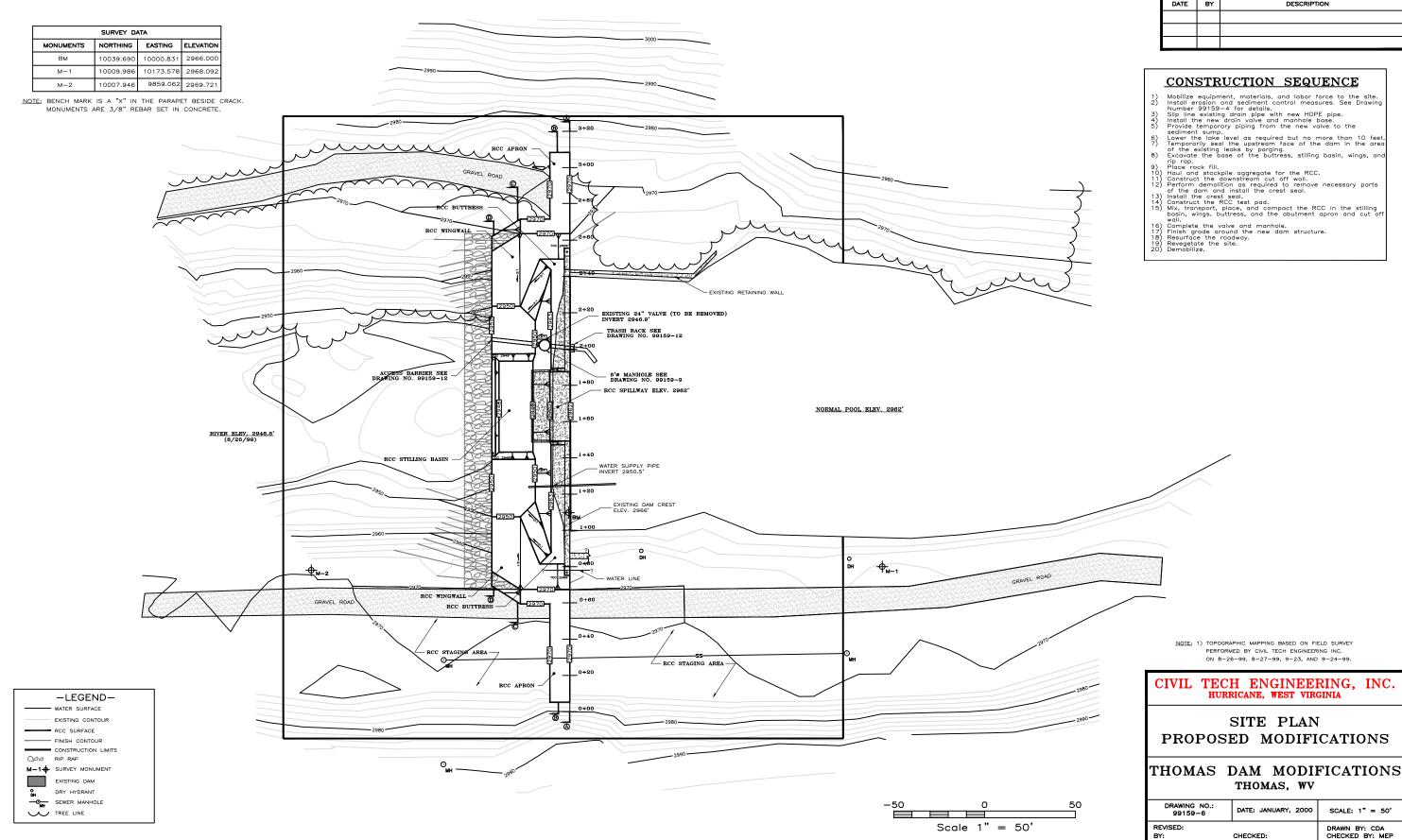
PLUM ORCHARD DAM MODIFICATION, FAYETTE CO., WV



JIMMY LEWIS DAM MODIFICATION, MERCER CO., WV



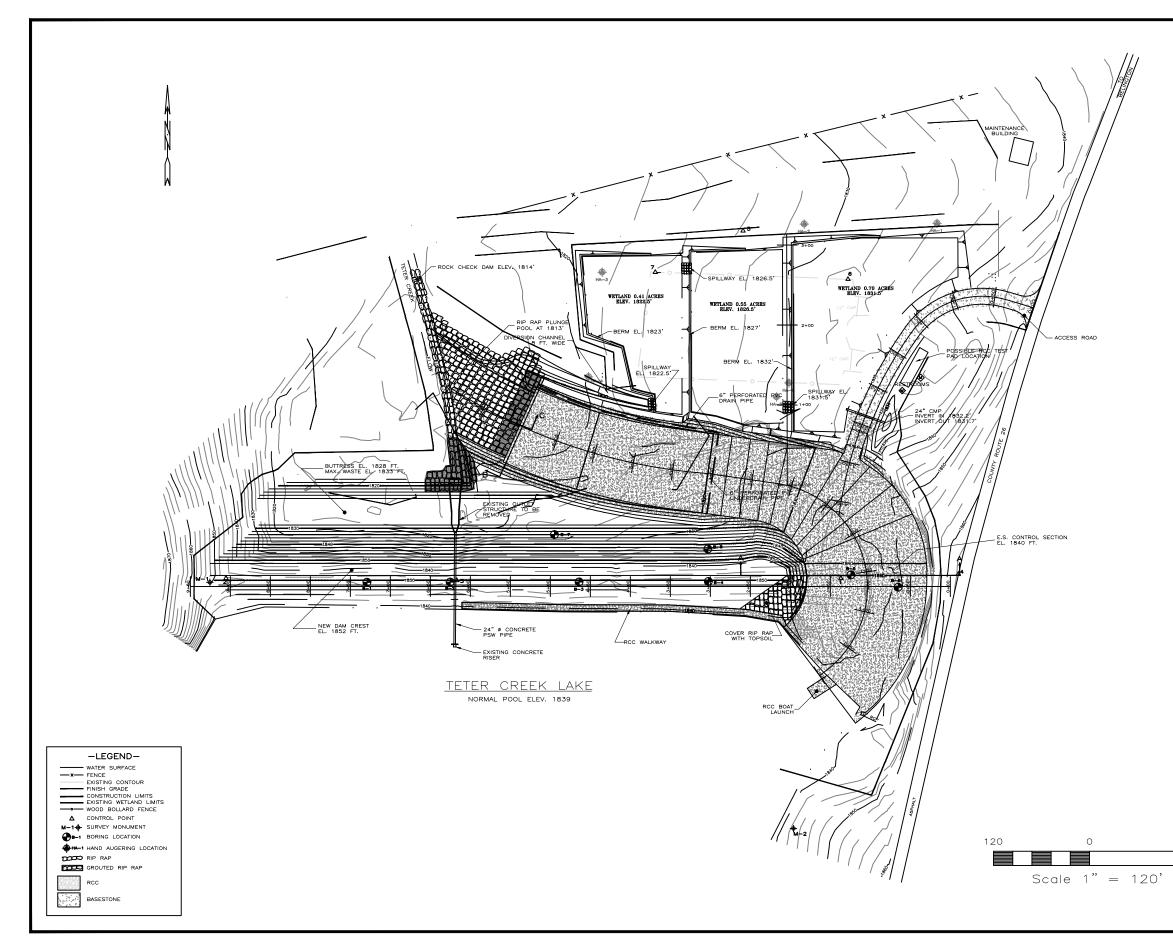
WARDEN LAKE DAM MODIFICATION, HARDY CO., WV



C:\AutoCAD Drawings\Submittal Drawings\Fig 6 99159 - Thomas Site Plan 11x17.dwg

| REVISIONS | | |
|-----------|----|-------------|
| DATE | BY | DESCRIPTION |
| | | |
| | | |
| | | |

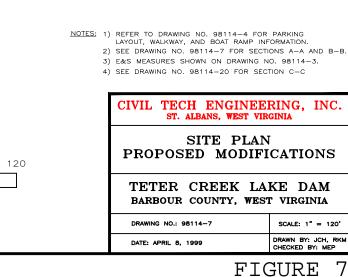
FIGURE 6

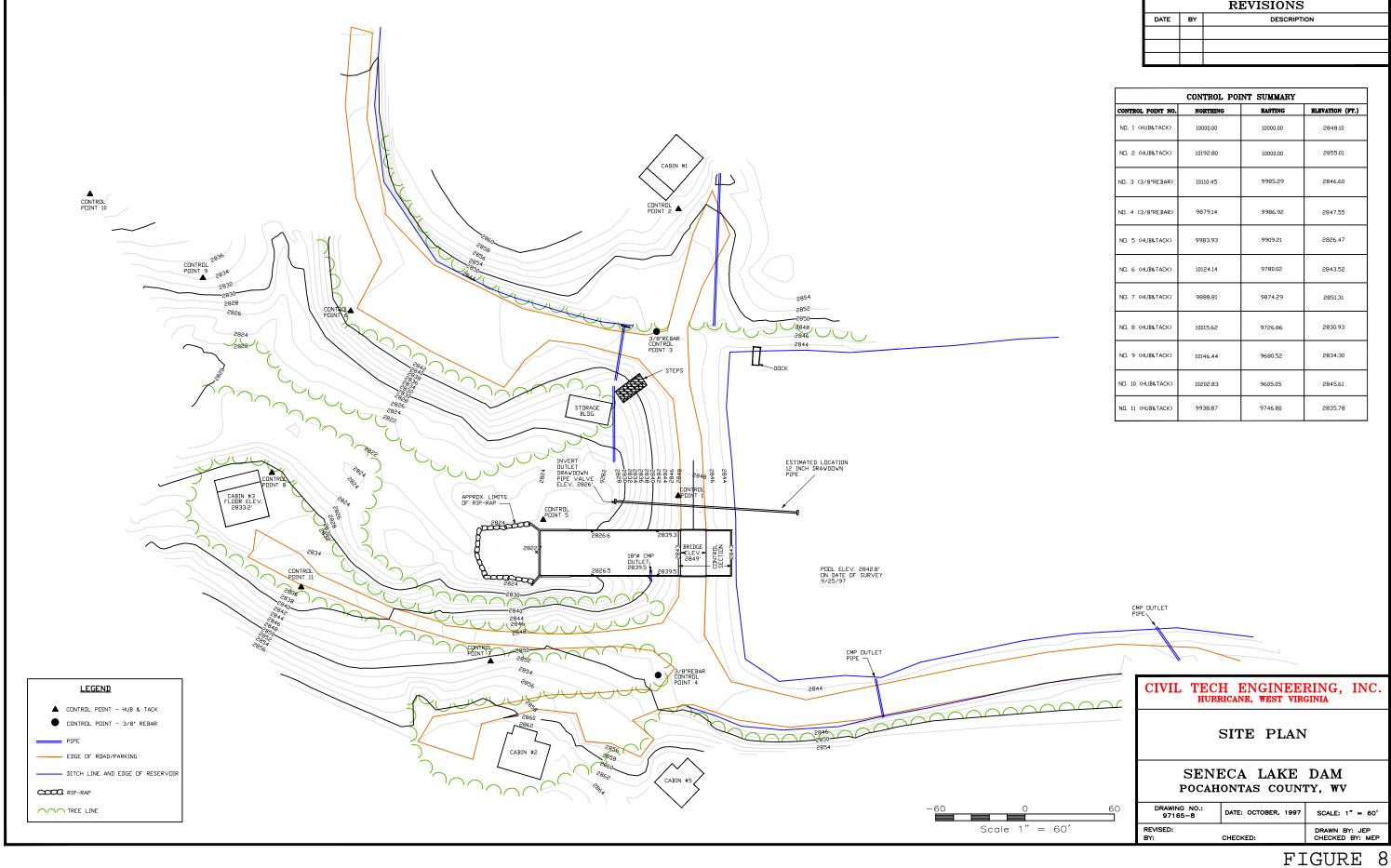


| REVISIONS | | |
|-----------|------------|--|
| DATE | BY | DESCRIPTION |
| 2/22/00 | RKM BDJ | ADDED PLUNGE POOL, RCC ON BEGINNING OF SPILLWAY, AND ADDED WETLAND. |
| 3/16/00 | BDJ | REMOVED BERM AND RIGHT CUT OFF WALL, AND ADDED RIP RAP. |
| | | |

| SURVEY DATA | | | |
|---------------|-----------|-----------|-----------|
| CONTROL POINT | EASTING | NORTHING | ELEVATION |
| 1 | 10000.000 | 10000.000 | 1846.990 |
| 2 | 9231.321 | 10000.084 | 1846.407 |
| 3 | 9519.762 | 9997.425 | 1846.647 |
| 4 | 10146.893 | 10005.343 | 1862.302 |
| 5 | 9877.703 | 10434.459 | 1826.188 |
| 6 | 10008.915 | 10373.994 | 1835.135 |
| 7 | 9767.961 | 10382.644 | 1826.185 |
| M-1 | 9211.162 | 9995.140 | 1850.663 |
| M-2 | 9940.742 | 9687.215 | 1844.266 |

NOTE: MONUMENTS ARE 1/2" REBAR





| REVISIONS | | |
|-----------|----|-------------|
| DATE | BY | DESCRIPTION |
| | | |
| | | |
| | | |

| | CONTROL POI | NT SUMMARY | |
|-------------------|-------------|------------|-----------------|
| CONTROL POINT NO. | NORTHING | EASTING | ELEVATION (FT.) |
| ND. 1 (HUB&TACK) | 10000.00 | 10000.00 | 2848.10 |
| ND. 2 (HUB&TACK) | 10192.80 | 10000.00 | 2855.01 |
| ND. 3 (3/8"REBAR) | 10110.45 | 9985.29 | 2846.60 |
| ND. 4 (3/8"REBAR) | 9879.14 | 9986.92 | 2847.55 |
| ND. 5 (HUB&TACK) | 9983.93 | 9909.21 | 2826.47 |
| ND. 6 (HUB&TACK) | 10124.14 | 9780.02 | 2843.52 |
| ND. 7 (HUB&TACK) | 9888.81 | 9874.29 | 2851.31 |
| ND. 8 (HUB&TACK) | 10015.62 | 9726.86 | 2830.93 |
| NE. 9 (HUB&TACK) | 10146.44 | 9680.52 | 2834.30 |
| ND. 10 (HUB&TACK) | 10202.83 | 9605.05 | 2845.61 |
| ND. 11 (HUB&TACK) | 9938.87 | 9746.80 | 2835.78 |

SECTION B.4 - GEOTECHNICAL/SURVEYING

- □ <u>Civil Tech Experience</u>: Geotechnical engineering is a small, but important part of our business because so much of our work related to dams depends on geotechnical sampling, testing, and analysis. Our principals have a very strong background in this discipline from our history at Triad Engineering. Civil Tech has provided geotechnical services on a variety of projects including; mechanically stabilized walls, water and asphalt storage tanks, commercial buildings, churches, industrial equipment and buildings, etc. Typical projects for which Civil Tech has provided geotechnical engineering services include:
 - □ Steel of West Virginia Expansion, Huntington, WV
 - Service Wire Building Damage Evaluation, Culloden, WV
 - □ First Church of God, Charleston, WV
 - □ Various Water Storage Tanks, WV American Water Company
 - Asphalt Storage Tanks, MTI, Gallipolis, Ohio
 - Bridge Replacement, Elkem Metals, Alloy, WV
 - □ Zim Bagging, Wayne County, WV
 - □ Wurtland Marine Harbor, Wurtland, KY
 - □ Steel of West Virginia Warehouse Greenbottom, WV
 - □ HADCO Shell Building Huntington, WV
 - □ Service Wire Warehouse Expansion, Culloden and Huntington, WV
 - Countless Landslides Throughout WV
 - Service Wire Warehouse Expansion, Huntington and Culloden, WV
 - □ Waste Site Design, Means and Methods RR Crossings, Rt. 10 Rita to Midway Plaza Highway Project, Man, WV
 - Coal Handling and Rail Unloader Project, Mt. Storm Power Station Dominion Generation
- Past Experience: Our principals were directly responsible for large geotechnical projects including:
 - □ Southridge Centre, Charleston, WV
 - Ridgeline Development, Charleston, WV
 - Cabell East High School, Huntington, WV
 - Beckley Federal Prison, Beckley, WV
 - Rhodimet Plant, Rhone Poulenc, Institute, WV
 - Countless Highway Projects for the WVDOT
 - Hazardous and Sanitary Landfills throughout WV, KY, and Ohio
 - Over 120 Abandoned Mine Land Projects for the WVDEP
- □ <u>Surveying and Mapping:</u> Surveying and mapping services are performed by our inhouse crew using electronic instruments with onboard data collectors, and computer software to reduce data and develop drawings. The work is performed under the direction of one of our Professional Surveyors. Since forming Civil Tech, we have performed field surveying necessary to develop topographic mapping and locate existing site

Statement of Qualifications Civil Tech Engineering, Inc. Last Revised September 2015

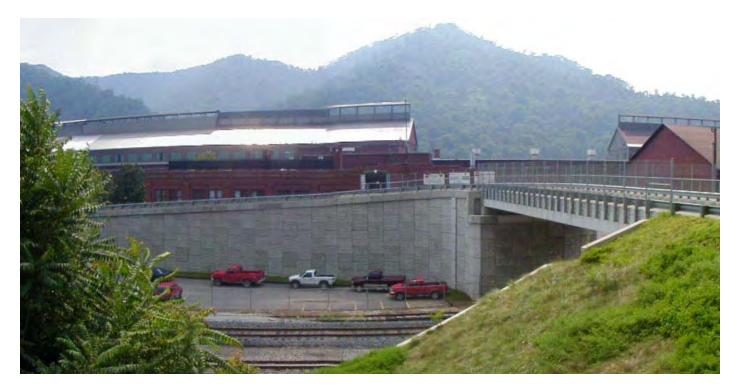
features for most of our ongoing and past engineering projects. Clients have included:

- □ Steel of West Virginia
- Service Wire
- □ FMC Peroxide
- Simpson Litman Builders
- □ WVDNR Wildlife Section
- □ Joyce Properties
- City of Thomas
- □ City of Belington
- □ City of Culloden
- □ WVDNR Parks & Recreation
- □ Winterplace Ski Resort
- □ Mt. Top PSD
- □ NewPage Corporation
- Dominion Generation
- □ WV American Water
- Private Concerns



ASPHALT STORAGE TANK FARM - MIDDLEPORT TERMINALS INC.

- □ SUBSURFACE INVESTIGATION
- GEOTECHNICAL ANALYSIS
- **FOUNDATION DESIGN**
- PLANS AND SPECIFICATIONS
- □ CONSTRUCTION CONSULTATION



ELKEM METALS BRIDGE APPROACH – ALLOY, WV

- □ SUBSURFACE INVESTIGATION
- GEOTECHNICAL ANALYSIS
- **GINERATION RECOMMENDATIONNS**
- □ CONSTRUCTION CONSULTATION



FLEMING STREET PROJECT – MONONGAH, WV

- □ TOPOGRAPHIC MAPPING
- □ SUBSURFACE INVESTIGATION
- □ EROSION AND SLIDE STABILIZATION
- PLANS AND SPECIFICATIONS
- BIDDING
- □ CONSTRUCTION CONTRACT ADMINISTRATION



SARVER LANDSLIDE PROJECT – HURRICANE, WV

- **TOPOGRAPHIC MAPPING**
- □ SUBSURFACE INVESTIGATION
- GEOTECHNICAL ANALYSIS
- DRILLED PILE WALL DESIGN AND GRADING OPTION
- PLANS AND SPECIFICATIONS
- BIDDING