



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Solicitation No. CEOI DEP 1600000010

NOVEMBER 12, 2015



SITE CHARACTERIZATION STUDY, LEACHATE MANAGEMENT & CLOSURE CAP

for

ELKINS-RANDOLPH COUNTY LANDFILL

11/12/15 10:19:07
WV Purchasing Division

Hannah Engineering
PO Box 2058
Elkins, WV 26241
304 636 7777



November 12, 2015

Ms. Beth A. Collins
Purchasing Division
2019 Washington Street
Charleston, West Virginia 25305

Re: **Characterization Study, Leachate Management & Closure Cap**
Elkins-Randolph County Landfill

Hannah Engineering is a multi-disciplined civil engineering company with offices in Elkins and Lewisburg West Virginia. We are a small but versatile company, with experience and capabilities that can provide the professional level of service that is required to for the Elkins-Randolph Landfill Study.

We have recently completed the installation of a closure cap at the Greenbrier County Landfill, and our staff has been involved in the design and construction of solid waste cells and leachate ponds for this landfill for over 20 years.

Our Elkins office would be the primary office to service this project. This office has been in existence for 37 years under the direction of its founder and president, Dewayne N. Hannah. This office is conveniently located just a few miles from the landfill, enabling us to work efficiently and responsively without unnecessary travel time delays and costs.

We have our own soils and concrete testing facility and would utilize the expertise of REIC Consultants, Inc. for water and chemical testing services.

We have extensive surveying capabilities with Total Station and GIS equipment utilized on a daily basis. Hannah has performed a number of surveys in remote locations and has utilized the services of Blue Mountain Aerial Surveying when needed, and would use them for this project as required.

We will be utilizing the experience and capabilities of Enviroprobe Integrated Systems, Inc. to perform the subsurface investigations and well installations. They will also be providing the geologic and hydrologic expertise in the person of Dana A. Elkins, whose resume is attached.

Finally, will engage the services of William D. Swecker, Swecker Engineering, as a project consultant. Bill lived in Elkins for 42 years and is very familiar with the Elkins/Randolph County Landfill. He has provided engineering designs and construction inspection services for projects at the landfill.

Our approach to providing the engineering solutions needed for this project will be generally as follows:

- Review any existing design or construction plans and leachate data records
- Establish a base line survey of the entire site and downstream locations
- Formulate a plan to monitor and track leachate contamination in the surface and groundwater
- Perform soil borings to determine the extent of the landfill and install monitoring wells and begin tracking leachate contaminants.
- Develop the site characterization from the field and laboratory data obtained
- Develop plans to manage the leachate using long-term cost effective solutions
- Perform environmental analyses and obtain all appropriate permits
- Develop plans and specifications for Closure Cap construction and leachate management solutions
- Provide construction management services

We look forward to utilizing our experience and engineering expertise to provide a sound, cost effective strategy for management of the leachate and closure of the Elkins-Randolph Landfill.

Submitted by:
Hannah Engineering



Karl Dalenberg, P.E.
Engineering Manager

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Engineering Manager and Geotechnical Engineer - Karl Dalenberg	
Survey, Specifications and Technical Assistant - Bernard W. Holliday, Jr.	
Project Geologist and Hydrologist - Dana S. Elkins (EnviroProbe Integrated Systems)	
Project Consultant - William D. Swecker (Swecker Engineering)	

Qualifications Statement and Project Management

Hannah Engineering is in a unique position to provide the engineering services for the Elkins/Randolph County Landfill project.

1. **Experience** - we have assembled a team of professionals with the necessary experience to develop the characterization of the site, provide a plan for leachate management and design and implement construction of the closure cap. The resumes' of the key individuals are provided in the Appendix. The organization of our team will be as follows:

Project Manager

Dewayne Hannah, P.E., P.S.

Dewayne will provide the overall direction and coordination of the project. He brings 37 years of experience in the successful design and implementation of construction projects including sewage treatment plants, water storage and distribution systems, highways and roads and various projects for the gas well industry.

Geotechnical Engineer

Karl Dalenberg, P.E.

Karl worked for 12 years in the geotechnical consulting field. He worked on a variety of civil projects, providing designs, laboratory testing and construction inspection, including the Lynn Massachusetts Wastewater Treatment Plant built on the site of an existing landfill. He is currently the Engineer of Record for the Greenbrier County Landfill and provided the engineering oversight of the Cell #1 Cap closure.

Survey, Specifications and Technical Assistant Bernard W. Holliday, Jr.

Bernard has 30 years of experience overseeing construction projects and providing surveying expertise using Total Station instruments and GPS equipment. He served as project manager for the Greenbrier Landfill Cap Closure and has consulted with that the landfill for over 20 years as they developed 6 cells for solid waste disposal and leachate management.

Geology and Hydrology

Dana S. Perkins

Dana is a Senior Geologist and GIS Specialist for Enviroprobe Integrated Solutions, Inc. He has performed geologic and hydrologic studies for the mining industry and is experienced in surveying and mapping, Phase 1 and Phase 2 Environmental Site Assessments and soil and groundwater remediation.

Project Consultant

William D. Swecker

Bill has lived in Elkins for 42 years and is very familiar with the Elkins/Randolph County Landfill. He has provided engineering designs and construction inspection services for projects at the landfill including a 4 acre liner expansion.

2. **Location** - Hannah Engineers Elkins office is a few short miles away from the project site. We will be able to respond quickly and efficiently to the needs of the project, saving travel costs and delayed response to project needs. And, our project consultant, Bill Switzer, has performed both design and construction projects at the Elkins/Randolph County landfill. Our local experience and proximity to the project will provide the DEP with a cost efficient project.

3. **Communication** - Hannah Engineering is a small company with a skilled staff and open doors to all team members for regular communication on the progress of the project. Regular internal communication and reporting to the WVDEP will be an important element of our work.

**WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
CONSULTANT QUALIFICATION QUESTIONNAIRE**

PROJECT NAME Elkins-Randolf Co Landfill		DATE (DAY, MONTH, YEAR) 12 November 2015	FEIN 55-0581301
1. FIRM NAME Hannah & Associates, Inc. dba Hannah Engineering	2. HOME OFFICE BUSINESS ADDRESS PO Box 2058, Elkins, WV 26241		3. FORMER FIRM NAME
4. HOME OFFICE TELEPHONE 304 636 7777	5. ESTABLISHED (YEAR) 1978	6. TYPE OWNERSHIP INDIVIDUAL, CORPORATION, PARTNERSHIP, JOINT-VENTURE Corporation	6A. WV REGISTERED DBE (DISAVANTAGED BUSINESS ENTERPRISE) YES NO X
7. PRIMARY OFFICE: ADDRESS/ TELEPHONE/ PERSON IN CHARGE/ NO. (name particular type) PERSONNEL EACH OFFICE Dewayne Hannah, P.E., P.S. President and Engineer in Charge at home address above Karl Dalenberg, P.E. Engineering Manager at PO Box 1725, Lewisburg WV 24901 Phone 681-318 3527			
8. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM President - Dewayne Hannah		8a. NAME, TITLE, & TELEPHONE NUMBER-OTHER PRINCIPALS	
9. NUMBER OF PERSONNEL BY DISPLINE (Bold Lettering Indicates Minimum Design Team Members) Detailed information On Team To Be Included			
3 ADMINISTRATIVE	ECOLOGISTS	LANDSCAPE	STRUCTURAL
ARCHITECTS	ECONOMISTS	ARCHITECTS	ENGINEERS
1 BIOLOGIST	ELECTRICAL	MECHANICAL	4 SURVEYORS
3 CADD OPERATORS	ENGINEERS	ENGINEERS	
CHEMICAL ENGINEERS	ENVIRONMENTALISTS	MINING	OTHER
2 CIVIL ENGINEERS	1 ESTIMATORS	ENGINEERS	
3 CONSTRUCTION	* GEOLOGIST	PHOTOGRAMMETRISTS	
INSPECTORS	HISTORIANS	PLANNERS:	20 TOTAL
3 DESIGNERS	* HYDROLOGISTS	URBAN/REGIONAL	PERSONNEL
DRAFTSMEN		SANITARY	
	*Subconsultant	ENGINEERS	
		1 SOILS ENGINEERS	
		SPECIFICATION	
		WRITERS	
TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE: <u>1</u>			
*RPEs other than Civil must provide supporting documentation that qualifies them to supervise and perform this type of work.			
10. If submittal is by joint venture, list participating firms & outline specific areas of responsibility (including administrative, technical, & financial) for each firm. Each participating firm must complete a "Consultant Confidential Qualification Questionnaire".			
10a. HAS THIS JOINT-VENTURE WORKED TOGETHER BEFORE?		YES	NO

11. OUTSIDE KEY CONSULTANTS/ SUB-CONSULTANTS ANTICIPATED TO BE USED.		
NAME AND ADDRESS: Enviroprobe Integrated Systems, Inc. 109 Bradley Drive Cross Lanes, WV 25313	SPECIALTY: Environmental and geotechnical drilling	WORKED WITH BEFORE x YES NO
NAME AND ADDRESS: Enviroprobe Integrated Systems, Inc. 109 Bradley Drive Cross Lanes, WV 25313	SPECIALTY: Geology & Hydrology	WORKED WITH BEFORE x YES NO
NAME AND ADDRESS: Blue Mountain Aerial Mapping 10125 Mason Dixon Highway Burton, WV 26562	SPECIALTY: Aerial Mapping	WORKED WITH BEFORE x YES NO
NAME AND ADDRESS: William D. Swecker Swecker Engineering 120 South Randolph Ave. Elkins, WV 26241	SPECIALTY: Civil engineering - personal knowledge of and experience providing engineering services to the Elkins/Randolph Co. Landfill.	WORKED WITH BEFORE x YES NO
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE YES NO
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE YES NO
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE YES NO
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE YES NO
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE YES NO

our firm experienced in (Solid Waste Landfill Closure Design)?

Description and Number of Projects:

2015, Hannah Engineering opened an office in Lewisburg, WV. We hired several key individuals from Engineering & Testing 2000, who closed their doors on June 1. ET 2000 has over 20 years of history as the Engineer of Record for the Greenbrier County Landfill. This responsibility has now been given to Hannah Engineering. Karl Dalenberg, Engineering Manager of our Lewisburg office, is now the Engineer of Record for the Greenbrier County Landfill. Bernard Holliday, who is now employed by Hannah Engineering, was the primary person involved in the landfill projects for ET2000. He assisted in the closure cap design for Cell No.1 while at ET2000, and Hannah Engineering provided the engineering, surveying and inspection of the construction of the closure cap

B. Is your firm experienced in Solid Waste landfill site characterization assessment and evaluation?

YES Description and Number of Projects:

Bernard Holliday was involved in the development of the Greenbrier County landfill from its early days. He has been involved in the development of all 6 cells at the landfill and has worked on the expansion of the Ham Landfill.

C. Is your firm experienced in landfill closure construction inspection?

YES Description and Number of Projects:

Yes - we recently completed the closure of the Cell No. 1 at the Greenbrier Co. Landfill

D. Is your firm experienced in Aerial Photography and the Development of Contour Mapping?

YES Description and Number of Projects:

We have done about 10 projects requiring Aerial Photography. We have engaged 2 companies for this work, Blue Mountain and Aercon. Hannah Engineering has provided the ground controls for this work and the necessary ground surveying.

E. Is your firm experienced in evaluating ground water contamination, such as may be associated with landfills?

YES Description and Number of Projects:

Our consultant Enviroprobe Integrated Systems would be taking care of this aspect of the project. They have experience in groundwater contamination and evaluation.

F. Is your firm experienced in Landfill Closure cost estimating?

YES Description and Number of Projects:

Yes. Hannah personnel provided the Engineers Estimate for the Greenbrier Co. Landfill Cell No. 1 closure.

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR LANDFILL CLOSURE DESIGN (describe project) (Furnish Complete data but keep to essentials)			
NAME& TITLE (Last, first, Middle Int.)		YEARS OF EXPERIENCE	
Holliday, Bernard W. Survey, Specifications and Technical Assistant		43	
		YEARS OF Surveying EXPERIENCE: 18 yrs	YEARS OF Engineering Tech EXPERIENCE: 25 yrs
YEARS OF (name type) EXPERIENCE:			
Brief Explanation of Responsibilities: Bernard has been the co-owner of Engineering and Testing 2000 until they closed the business in June 2015. He assisted in the design of the new landfill cells for the Greenbrier Co Landfill, Part 1 and Part 2 Permitting for the landfill closure design, QA/QC of landfill construction and project manager for the closure of Cell #1.			
EDUCATION (DEGREE, YEAR, SPECIALIZATION) 2 Yr AS degree specializing in Forestry at Glenville State.			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS: N/A		REGISTRATION (Type, Year, State) N/A	
13a. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR LANDFILL CLOSURE DESIGN (name type of design or work) (Furnish complete data but keep to essentials)			
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
Peter A. Tenney CADD Operator/Civil Designer		YEARS OF Civil CADD EXPERIENCE	YEARS OF civil design and survey EXPERIENCE
		12 yrs	23 yrs
YEARS OF EXPERIENCE (name type):			
Brief Explanation of Responsibilities: Peter is currently the CADD designer for the Home office in Elkins. He has experience in water and sewer designs, roadway designs and surveying projects of many types. He oversees the surveying team and processes all of the data collected and completes the calculation of quantities and development of designs and presentation of plans as appropriate.			
EDUCATION (Degree, Year, Specialization) Associate Degree in Forestry from Potomac State in 1980.			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS N/A		REGISTRATION (Type, Year, State) N/A	

13b. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR LANDFILL CLOSURE QA/QC (Furnish complete data but keep to essentials)			
NAME & TITLE (last, first, middle Int.)	YEARS OF EXPEIRENCE		
	YEARS OF EXPERIENCE (name type):	YEARS OF EXPEIRENCE (name type):	YEARS OR EXPEIRENCE (name type):
Karl Dalenberg Engineering Manager Geotechnical Engineer	12 yrs Geotechnical Eng. for Consulting Firm	7 yrs Bridge Design Eng for WVDOH	
<p>Brief Explanation of Responsibilities: He is the Engineer of Record for the Greenbrier Co. Landfill. He was responsible for overseeing the Construction of the Final Cap for the recently closed portion of the landfill. As a Geotechnical Engineer, he has been involved in several large construction projects. He served as the project manager for the \$6 million foundation construction for a 40 story building in Boston.</p>			
<p>EDUCATION (Degree, Year, Specialization) BS-1973 @ Northeastern University Civil Engineering MS-1976 @ Massachusetts Institute of Technology - Civil Engineering</p>			
<p>MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS ASCE</p>		<p>REGISTRATION (Type, Year, State) P.E. 1979 Massachusetts (retired) P.E. 2007 West Virginia P.E. 2015 Virginia</p>	
13c. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES REPOSIBLE FOR HEAVY EARTH WORK CONSTRUCTION PROJECTS (Furnish complete data but keep to essentials)			
NAME & TITLE (last, first, middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF EXPERIENCE (name type):	YEARS OF EXPERIENCE (name type):	YEARS OF EXPERIENCE (name type):
Dewayne N. Hannah President of Hannah Engineering	3 years earthworks, fills, testing, Inspection, specification on Nuclear Power Station	37 years direct supervision of designs, specifications, plans, bids, testing & supervision of fills, roads, foundation evaluation, design bridge abutments, slip repairs.	
<p>Brief Explanation of Responsibilities Supervise designs, Specifications, plans for various earthwork fills, bridge abutments, soil bearings, slip repair design and construction supervision.</p>			
<p>EDUCATION (Degree, Year, Specialization) Bachelor of Science, 1972 Civil Engineering</p>			
<p>MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS N/A</p>		<p>REGISTRATION (Type, Year, State) P.E. 1976 WV P.S. 1995 WV</p>	

14. PROVIDE A LIST OF SOFTWARE AND EQUIPMENT AVAILABLE IN THE PRIMARY OFFICE WHICH WILL BE USED TO COMPLETE THIS PROJECT -Elkins/Randolph County Landfill	
Software	
AutoCADD Civil 3D 2015	
HECRAS	
Geostructural Excavation Analysis	
Microsoft Office Suite	
Field Equipment	
Topcon Total Station surveying equipment, GIS Rovers, Data Collectors	
Troxlner Nuclear Gage Moisture and Density Test Equipment	
Proctor density test equipment	
Four wheel drive vehicles	
Dynamic Cone Penetrometer and Hand Augers	
Concrete Slump, Air Meters, Windsor Probe	
Lab Equipment (located in our Lewisburg Office)	
Standard and Modified Proctor Compaction	
Atterberg Limits	
Aggregate and soil sieves, splitters	
Drying Ovens	
Concrete Cylinder Water Baths and Break Machines	

15. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATED ENGINEER OF RECORD ASSOCIATED WITH OR RELATING TO LANDFILL CLOSURE OR CONSTRUCTION.

PROJECT NAME,TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESOPNSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
Greenbrier County Landfill Cell No 1 Final Cap	Wayne Childers PO Box 1664 Lewisburg, WV 24901	Engineer of Record Construction Inspection-As built-QA/QC	\$500,000	98%
TOTAL NUMBER OF PROJECTS: # <u>1</u>			TOTAL ESTIMATED CONSTRUCTION COSTS: \$ <u>500,000</u>	

16. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A SUB-CONSULTANT TO OTHERS RELATING TO LANDFILL CLOSURE AND CONSTRUCTION.

PROJECT NAME, TYPE, AND LOCATION	NATURE OF FIRMS RESPONSIBILITY	NAME AND ADDRESS OF OWNER	ESTIMATED COMPLETION DATE	ESTIMATED CONSTRUCTION COST:	
				ENTIRE PROJECT	YOUR FIRMS RESPONSIBILITY
N/A					

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD (List 5 to 7)				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
Hartley East Drill Pad, Access Rd., Bridge, Spoil Area & Tank Pad Design & Inspection	Antero Resources 1615 Wynkoop St. Denver CO. 80202	\$2,000,000	2012	Yes
Sugar Run Rd Improvement Project Ritchie Co. Design & Inspection	Antero Resources 1615 Wynkoop St. Denver CO. 80202 W/Approval of WVDOH	\$1,000,000	2015	Yes
Wolf Pen Rd. Improvement Project Doddridge Co. Design & Inspection	Antero Resources 1615 Wynkoop Rd Denver, CO. 80202 W/Approval of WVDOH	\$1,200,000	2014	Yes
Durbin Sanitary & Storm Sewer, Design, Bid & Inspection	Town of Durbin Durbin, WV Pocahontas Co.	\$3,200,000	2010-2015	In Funding Process
Ramsey's Ridge Rd. Improvement Project Design & Inspection Doddridge, Co.	Antero Resources 1615 Wynkoop St, Denver, CO 80202 W/Approval of WVDOH	\$1,300,000	2013	Yes

19. Use this space to provide any additional information or description of resources supporting your firm's qualifications to perform work for the WV Department of Environmental Protection.

The staff at Hannah Engineering has a long and successful history of completing design and construction projects on time and within budget. As a small firm, we have a very versatile and talented staff of engineers, designers, CADD operators, surveyors and field personnel ready to serve our clients in a cost efficient manner.

Our Elkins office is within a few minutes of the project site, saving the DEP travel and lodging expenses that other firms may incur. And we are readily available to travel to the site on short notice.

20. The foregoing is a statement of facts

Signature: K. Dalenberg
Title: Engineering Manager

Date: 11/10/15

Printed
Name: Karl Dalenberg



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
11/09/2015

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Jim Lively Ins (Charleston) 4702 MacCorkle Ave., S.W. South Charleston, WV 25309-0468	CONTACT NAME: Mary Beth Chapman PHONE (A/C, No, Ext): 304-766-1234 FAX (A/C, No): 304-766-7172 E-MAIL ADDRESS: mchapman@jimlively.com	
	INSURER(S) AFFORDING COVERAGE	
INSURED Hannah Engineering Hannah & Associates, Inc DBA PO Box 2058 Elkins, WV 26241	INSURER A: The Hartford	NAIC # 19682
	INSURER B: BrickStreet Mutual Ins.	NAIC # 12372
	INSURER C:	
	INSURER D:	
	INSURER E:	
	INSURER F:	

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADD'L SUBR INSD WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Business Owners GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:		40SBARU5473	03/01/2015	03/01/2016	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ \$
A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS		40UECTR5267	03/01/2015	03/01/2016	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$ 10,000		40SBARU5473	03/01/2015	03/01/2016	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000 \$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below Y/N <input type="checkbox"/> N/A		WCB1019354	05/23/2015	05/23/2016	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
JOB: ELKINS/RANDOLPH COUNTY LANDFILL

CERTIFICATE HOLDER

WVDEP
601 57th Street
Charleston, WV 25304

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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)

- | | |
|--|--|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6 |
| <input type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7 |
| <input type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8 |
| <input type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9 |
| <input type="checkbox"/> Addendum No. 5 | <input type="checkbox"/> 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.

Hannah Engineering
Company

K. Day
Authorized Signature

11/9/2015
Date

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

CERTIFICATION AND 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.

Hannah Engineering
(Company)

K. Dal Karl Dalenberg - Engineering Manager
(Authorized Signature) (Representative Name, Title)

681 318 3527 10/9/15
(Phone Number) (Fax Number) (Date)

APPENDIX
RESUMES' OF KEY INDIVIDUALS

President and Project Manager - Dewayne N. Hannah

Engineering Manager and Geotechnical Engineer - Karl Dalenberg

Survey, Specifications and Technical Assistant - Bernard W. Holliday, Jr.

Project Geologist and Hydrologist - Dana S. Elkins (EnviroProbe Integrated Systems)

Project Consultant - William D. Swecker (Swecker Engineering)

DEWAYNE N. HANNAH, P.E., P.S.
President, Hannah Engineering
April, 2015

EDUCATION B.S. Civil Engineering 1972 West Virginia University

PROFESSIONAL Professional Engineer 1975 West Virginia #7233
REGISTRATION Professional Surveyor 1995 West Virginia #1213

EXPERIENCE From March, 1978 to Present:

President of and Engineer for Hannah Engineering. The firm is a Consulting Engineering Company. Past projects have included Engineering, Drafting, Design, Specifications and Contract Documents preparation for Construction Bidding and/or Permit Applications of:

- 1) Natural Gas Drill Pads, Frac Pits and Road Designs
- 2) Wireless System Designs
- 3) Sewage Treatment Plants and Sewage Collection Lines
- 4) Water Storage Facilities and Water Distribution Lines
- 5) Subdivision and Multi-Family Units Planning
- 6) Highways and Roads
- 7) Underground Coal and Rock Mines
- 8) Building Design

Mr. Hannah has personally supervised the following projects:

NATURAL GAS FACILITIES DESIGN AND INSPECTION: Hannah Engineering began Inspection, Reporting and Testing on Frac Pond Construction in northern Pennsylvania. This work has now developed into Design, Surveys, Construction Stakeout, Inspection, Nuclear Soils Testing for Drill Pads, Frac Pits and Roads.

Current, 2015, Design, Bidding and Construction Stakeout, Inspection and As-Builts include several Department of Highways Rural Road Improvement projects. These projects include widening, hydraulics for new culverts, bridges and new road surfaces. Additional work includes Construction Certification and "As-Built" Drawings.

WIRELESS COMMUNICATION: Mr. Hannah was heavily involved with Wireless Communication from 2006 to 2009. During this time he developed and has a Patent on an Underground Wireless Communication System. Projects include design, equipment provision and installation of Multi-frequency Data Transfer Systems for Underground Coal Communication Systems.

WASTE WATER PROJECTS, including Permit, Design, Bid, Contract Administration and Inspection.

- **Sewage Treatment Plants**
 - A. Snowshoe Ski Resort
 - B. Marlinton Middle School
 - C. Pocahontas County Memorial Hospital
 - D. Town of Marlinton Plant upgrade

- **Sewage Extension**
 - A. Hawthorne Valley
 - B. West Ridge
 - C. Riverside
 - D. Campbelltown/Edray

POTABLE WATER PROJECTS, including Permit, Design, Bid, Contract Administration, Inspection and Tanks.

- A. Riverside Extension Project
- B. Campbelltown/Edray Extension Project
- C. Snowshoe 1.1 million gallon Tank
- D. Town of Marlinton – Three Tanks @ 100,000 gallons each
- E. Canaan Valley – 250,000 gallon Tank
- F. Tygart Valley Regional Jail Extension Project

HIGHWAY PROJECTS

- A. Supervised surveying of Moorefield By-Pass and alignment including river channel survey for bridge design on Potomac River and geotechnical exploration.
- B. Supervised and design of Dodson Run Bridge, including all hydrological studies and permitting. Supervised the stream surveying for design data as necessary for new bridge construction at Spangler Bridge and Potts Creak Bridge for WVDOT.

- C. Supervised route and intersection data collection for Franklin interchange, access to Purdue Hatchery and Purdue Farms.
- D. Supervised inspection and engineering for the construction for access road to Purdue Farms Hatchery and Bridge stream improvements project in Pendleton County for WVDOT.
- E. Supervised testing and quality control for access road and railroad for VC Summers Nuclear Power Facility in Parr, SC for SCE & G Utility Company.
- F. Design access road and haul ways on procured easements for numerous surface and underground coal mines involving miles of roadways.

From 1985 to 2011: Mr. Hannah served as Corporate Officer and Manager of Werner Mining Co., Inc. and from 1986 to 1989 as Officer and Manager of Quail Hollow Mining Co., Inc. Werner Mining Co., Inc., was a Coal Leasing and Development Company while Quail Hollow Mining Co., Inc., was an operating Surface Mining Company

March, 1975 to March, 1978:

Mr. Hannah was hired as Engineer for S.S. "Joe" Burford, Inc. and advanced to Chief Engineer after one year. This firm was involved in both Surface and Underground Coal Mining. Duties and responsibilities were broad, ranging from Mine Planning to Contract and Lease negotiations. Other duties included Mining Cost Analysis, Coordinating and Evaluating Core Drilling for Coal Reserves Evaluation and oversight of Mining Permits and Surveys.

July, 1972 to March, 1975:

Engineer for Greensboro, NC branch of Pittsburgh Testing Laboratory. Worked in several states, including Pennsylvania, Virginia, North Carolina and South Carolina. Interfaced with many Consulting Engineering and Construction firms. Familiar with and supervised various Field and Laboratory materials Tests and construction procedures, including Soils, Piles, Stone, Concrete, Asphalt, Soil Borings and Steel. Job generally required assurance that construction and/or materials met various job specifications. Worked at two Nuclear Power Stations under construction, spending 1-1/2 years at SCE&Gs V.C. Summer Nuclear Power Station. During this 1-1/2 year period, was working in contact with several major Contracting and Consulting firms. Initially, was in charge of both laboratory and Field Quality Control involving Subsurface Intrusion Grouting, Dam and Embankment construction, Blasting, Road and Road Construction for both Atomic Energy Commission categories of safety and non- safety. Later advanced to the position of Structural Quality Control Engineer.

May, 1972 to July, 1972:

Instrument Man on four-man Survey Crew with Green Construction Company of Des Moines, Iowa. This firm had the contract for the US I-68, US I-79 interchange at Uffington, West Virginia. This job was a major cut-fill situation, primarily in curve and included four bridges.

ORGANIZATIONS:

Member of AF & AM, Shriner, and B.P.O.E.

Karl Dalenberg, P.E.
Engineering Manager, Hannah Engineering
November 2015

EDUCATION	B.S. Civil Engineering , 1973 M.S. Civil Engineering, 1976	Northeastern University Massachusetts Institute of Tech.
PROFESSIONAL REGISTRATION	Professional Engineer 1979 Professional Engineer 2008 Professional Engineering 2015	Massachusetts (retired 2008) West Virginia #17412 Virginia #0402055311

EXPERIENCE **June 2015 - Present Hannah Engineering, Lewisburg, WV**

Engineering Manager for new branch office for Hannah Engineering.
Projects include:

1. Engineer of Record for the closure cap at the Greenbrier County landfill in Lewisburg WV.
2. Geotechnical investigations for new bank, industrial office building and historic Blue Sulphur Springs Pavilion.
3. Oversee construction monitoring for WV Osteopathic School's New Student Center and Ronceverte Wastewater Treatment Plant

**September 2007 to April 0082 WV Division of Highways,
Lewisburg, WV**

District 9 Bridge Design Engineer for 5 county area

1. Designed 25 to 30 bridges and prepared CADD plans for construction
2. Provided construction monitoring for most of the bridges designed.

2005 - 2007 New Start Home Building and Inspections, Union, WV

Self Employed construction and inspection company

1. Residential construction of homes and additions
2. Residential inspections of buildings during real estate transactions

1985 - 2005 His Mansion Ministries, Hillsboro, NH

A residential Christian rehabilitation facility for young adults with drug and alcohol issues

1. Served as Director of New Horizons program designed to facilitate transition of adult students back into society.

**BERNARD W. HOLLIDAY, JR.,
SENIOR ENGINEERING TECHICHIAN**

**P.O Box 1725
Lewisburg, WV 24901
(681)318-3527**

EDUCATION:

A.S., Forest Technology, Glenville State College, Glenville, West Virginia 1970
Smoot High School, West Virginia

AREAS OF EXPERTISE:

Project Management, Supervision of Construction Projects, Field Surveying for Construction, Boundary, Photo Control, Control Surveys and Topographic Surveys.

SUMMARY OF EXPERIENCE:

Mr. Holliday has over thirty years of experience in all aspects of surveying and is familiar with modern surveying instruments and GPS equipment. Responsible for QA/QC of Construction Projects such as Landfill Construction, Water and Sewer Projects. Supervision and Management of Multi-Surveying Projects.

CERTIFICATION/TRAINING:

Troxler Electronics Laboratories, Inc., Nuclear Testing Equipment.
WV Division of Highways Certified Compaction Technician. 1994

EMPLOYMENT HISTORY:

2015 - Present:

HANNAH ENGINEERING
Lewisburg, West Virginia
Engineering Technician.

1998 - 2015:

Vice-President
Engineering & Testing 2000
Lewisburg, West Virginia
Survey Coordinator.

1977 - 1998:

Brackenrich & Associates, Inc.
Lewisburg-Sutton, West Virginia
Surveyor.

1972 - 1977:

West Virginia Department of Natural Resources, Charleston, West Virginia
Instrument Man/Field Surveyor.



Dana A. Elkins
Sr. Geologist/GIS Specialist
daelkins@enviroprobeinc.com

AREAS OF SPECIALIZATION

Mr. Elkins is a Sr. Geologist and Graphical Information Systems (GIS) Specialist for EnviroProbe Integrated Solutions, Inc. (EnviroProbe), a drilling/direct-push, professional engineering, and environmental consulting firm.

Mr. Elkins has worked in the mining and engineering/environmental consulting industries as well as state government (WV Bureau for Public Health – Office of Environmental Health Service, Source Water Protection Program).

Mr. Elkins offers a combination of project management, technical expertise and leadership experience in the mineral extraction and environmental consulting industry. He possesses extensive experience providing solutions to variety of complex engineering and environmental projects for various private, retail/commercial, and industrial clients, as well as state and federal government agencies. His related experience and expertise is comprised of nearly 14 years completing numerous projects which have included:

- Groundwater Protection Plans
- Solid/Hazardous Waste Management
- Storm/Wastewater Management & Treatment
- Phase I/II Environmental Site Assessments
- “Brownfield” Voluntary Remediation
- GIS and related applications
- Database development and application
- SPCC Plans and Spill Response
- Surveying and mapping
- Watershed delineation and mapping
- Remediation Planning
- Site layout and roadway design
- Staff Training and Development
- Health and Safety Plan Monitoring
- Soil - Groundwater Remediation
- Environmental Compliance Audits
- Groundwater fate and transport modeling
- Permitting and Regulatory Liaison

EDUCATION AND REGISTRATION

- **B.S. Geology**, Marshall University - 1993
- 40 Hour OSHA Hazardous Waste and Emergency Response (Current 8-hour Refresher)
- 40 Hour MSHA Surface and Underground
- Actively participate in ongoing professional development



Dana A. Elkins
Sr. Geologist/GIS Specialist
daelkins@enviroprobeinc.com

EMPLOYMENT HISTORY

September 2006 - Present	EnviroProbe Integrated Solutions, Inc.
2003 - September 2006	Potesta & Associates, Inc.
2002 - 2003	Snap Creek Mining, Inc.
1999 - 2002	WV Bureau for Public Health Office of Environmental Health Services, Source Water Protection Program
1997 - 1999	Christopher Consultants, Ltd.
1994 - 1997	Guyandotte Consultants, Inc.
1991 - 1994	Ark Land Company

PROFESSIONAL ORGANIZATIONS/AFFILIATIONS

- National Ground Water Association

PROFESSIONAL EXPERIENCE

DRILLING AND RELATED PROJECTS

- Managed drilling program for large surface coal mine, including obtaining property exploration permits, scheduling road construction and working with drilling company.
- Experienced drilling helper on rotary, air rotary, hollow stem auger, and direct-push rigs

MINING AND PERMITTING PROJECTS

- Generated mapping for mine subsidence and hydrologic conditions in support of mine permitting.
- Generated bedrock geology mapping for the mine permit areas using borehole data and cross sections.
- Performed Baseline Hydrologic assessments and predictions for surface and deep mines.
- Used Geologic information to reveal the location, thickness, and areal extent of aquifers that might be affected by an operation.
- Collected baseline ground and surface water data and for monitoring plans
- Collected and analyzed geochemical properties of rock materials and coal to identify acid and toxic forming zones.
- Determined the probable hydrologic consequences for mine permit areas using geologic and hydrologic conditions.

ARCVIEW AND GIS MAPPING PROJECTS

- Developed multi-well database and performed Capture Zone Analysis for the U.S. Army Corps of Engineers. Project involved groundwater fate and transport modeling using GMS Software in support of MDA.

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DRILLING • ENGINEERING • ENVIRONMENTAL PROFESSIONALS

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- Developed mapping in support of litigation related to flooding.
- Implemented GPS programs, trained field staff using Trimble GeoExplorer and Trimble Pocket Global Positioning System (GPS). Training included data collection methods, environmental assessments, and mapping
- Generated mapping for mine subsidence and hydrologic conditions in support of mine permitting. Also mapped geology for the permitted mine area.
- Built GIS data layers of Zones of Special Concern and Wellhead Protection Areas for public water supplies in West Virginia.
- Developed the West Virginia Source Water Information System (WVSWIS), Microsoft Access module which incorporated GPS data, digital photographs, and other site specific information into a single GIS using Microsoft SQL and ArcSDE to store spatial data in a geodatabase model.
- Delineated watershed areas for surface water systems.
- Trained field staff to perform environmental assessments, use of GPS, notebook PCs, and Microsoft Access module.
- Delineated Zones of Critical Concern (ZCC) for WV Bureau of Health based on 5-hour travel time at 90% of high flow using GIS.
- Created and maintained a database for the locations of public water supply facilities, including water intakes, wells, and springs.
- Created mine planning and reserve maps. Mapped and reported coal reserves. Generated mine-specific maps of roof and floor geology. Calculated overburden ratios for surface mines.
- Created and maintained spatial database on coal reserve holdings and managed core hole database for quantitative and qualitative coal modeling.
- Planned large-scaled GPS project for survey control and mine construction.
- Determined reclamation cost estimates for old deep mines.
- Coordinated with field surveyors on several designs on a railroad crossing, several valley fills, mine punch-outs and road construction.
- Worked with PLS and performed boundary surveys.
- Worked with design team to design roads and travel ways to meet WVDOT specifications.
- Generated detailed topographic maps based on survey notes and SCR-33 electronic data collector using Carlson's SurvCADD 200 field to finish features.

ENVIRONMENTAL SITE ASSESSMENTS, RISK ASSESSMENTS, AND REMEDIATION

Mr. Elkins has performed or performed tasks in support of the following project types related to environmental assessment and remediation:

- *Leaking Underground Storage Tank (UST) Sites*
- *Phase I ESAs – Property Transactions*
- *Phase II ESAs*
- *Spill Cleanup and Emergency Response*

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DRILLING + ENGINEERING + ENVIRONMENTAL PROFESSIONALS

- *CERCLA/Superfund*
- *Energy and Resource Extraction*
- *Permitting and Compliance*

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VOLUNTARY REMEDIATION AND REDEVELOPMENT (WVDEP "BROWNFIELD")

Mr. Elkins performed various site assessment and data management on behalf of Licensed Remediation Specialists, for various Brownfield/Voluntary Remediation Program (VRP) sites in West Virginia.

These multi-disciplinary projects involved environmental site assessment, risk assessment, remediation work plan preparation/design, remediation work plan implementation, and follow-up reporting and/or monitoring.

SWECKER ENGINEERING

*120 South Randolph Ave.
Elkins, W. Va. 26241*

Expression of Interest-Elkins Randolph County Landfill

Description of Firm

Swecker Engineering is located in Elkins, W. Va. at 120 South Randolph Avenue. We have been in business in Elkins since 1973 in the field of Civil Engineering, Structural Engineering and Surveying. We maintain a small soils laboratory, concrete testing laboratory along with various construction testing equipment. In the past Twenty years we have converted to e-Engineering via the use of a four computer network system where all work is performed, stored and utilized electronically.

Employment has varied from as high as 8 employees to the present level of 2. Employees. Work on this Project, if we are successful, will be completed in Elkins by regularly employed people of Swecker Engineering.

Qualifications of Principal Engineer.

WILLIAM D. SWECKER, RPE,LLS

TYGART VALLEY HIGH SCHOOL - 1961

WV UNIVERSITY – B.S. IN CIVIL ENGINEERING - 1966

LICENSED PROFESSIONAL ENGINEER # 5953 – West Virginia

LICENSED LAND SURVEYOR # 500 – West Virginia

Private practice since 1973, in the field of Civil Engineering and Surveying. Our primary emphasis is on the design and construction of water, sewer, drainage, street and structural facilities, as well as Site and Boundary Surveys and Landfills. We have continually maintained an office in Elkins, Randolph County for the past 42 years.

Experience in Landfills includes various items of work at the Elkins Randolph County Landfill since the early 1980's including yearly reports and the design and construction inspection of a 4 acre Liner expansion in 2004 along with a partial capping of a portion of the existing Landfill.

Additional Landfill work includes the design and construction inspection of the capping of the Pocahontas County Commission Howe Leather Company 5 Acre Pond Closure in 2012..