

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

RFQ COPY TYPE NAME/ADDRESS HERE The Thrasher Group, Inc. 600 White Oaks Blvd Bridgeport, WV 26330

Solicitation

NUMBER DEP16435 PAGE 1

ADDRESS CORRESPONDENCE TO ATTENTION OF

FRANK WHITTAKER 304-558-2316

ENVIRONMENTAL PROTECTION DEPARTMENT OF

OFFICE OF AML&R

601 57TH STREET SE

CHARLESTON, WV

25304 304-926-0499

DATE PRINTED 12/03/2013

LINE	QUANTITY	UOP CAT.		UNIT PRICE	AMOUNT
001	1	JВ	906-29		
1	_	IRPORT SU	JBSIDENCE II DESI	GN	
		EXPRESSI	ON OF INTEREST		
	THE WEST VIR PROTECTION, PROFESSIONAL CONSTRUCTION AIRPORT SUBS	GINIA DEP IS SOLICI ENGINEER MONITORI II IN M WWING BID	CHASING DIVISION PARTMENT OF ENVIRON TING EXPRESSIONS ING DESIGN SERVICES AT THE CONONGALIA COUNTY REQUIREMENTS AND	OMMENTAL OF INTEREST F CES AND HE MORGANTOWN , WEST VIRGINI	OR
			01/02/14 10:34:51Ar West Virginia Purch	l asing Division	
	***** THIS	IS THE E	ND OF RFQ DEP16	5435 ***** TO	TAL:
					*
TURE 1	11/16/ Ox		TELEPHONE .	304-624-4108	DATE 12/31/2013

EXPRESSION OF INTEREST for MORGANTOWN AIRPORT SUBSIDENCE II MONONGALIA COUNTY, WEST VIRGINIA

DEP 16435 DECEMBER 31, 2013



THRASHER

600 WHITE OAKS BLVD. BRIDGEPORT, WV 26330 www.thrashereng.com Jecember 31, 2013

Department of Administration, Purchasing Division 2019 Washington Street East Charleston, WV 25305-0130

RE: DEP 16435, Morgantown Airport Subsidence II

Dear Members of the Selection Committee:

Thrasher is no stranger to DEP AML projects. Our attention to detail and project execution speak for itself. Like most projects we undertake, Thrasher has visited the Morgantown Airport Subsidence II project site. We understand the depth and breath of this project and believe we will provide timely, cost effective improvements. Our experience in reclamation projects paired with our understanding of airport regulations assures project success.

As the Principal-In-Charge, I have assembled a team of professionals who will deliver based on the following competencies:

- detailed review of the existing conditions of the project area,
- ability to provide recommendations and options for the improvements,
- preparation of itemized cost estimates,
- review of estimate and design concepts,
- development of drawings, showing all required work, and
- construction administration.

Thrasher has built a business reputation that stands on integrity, experience, efficiency and judgment. In taking this approach, we have carefully and concisely responded to your request. We have assembled an experienced group of professionals to meet the various needs of this project. Our knowledge of the area and proximity to the site will prove to be advantageous to the successful completion of this project.

Sincerely,

CHADWICK D. BILLER, PE

Partner, Principal-in-Charge

had Bell

SELECTION CRITERIA

A. WV Professional Engineers in the Primary Office: Thrasher employs 14 registered PE's at our company headquarters located in Bridgeport, WV.

- H. Wood "Woody" Thrasher, PE
- Chad Biller, PE
- · Mike Nestor, PE
- Daniel Ferrell, PE
- · Ken Moran, PE
- Clay Riley, PE
- · Matt Fluharty, PE
- Tom Urquhart, PE, BCEE
- Chad Riley, PE
- · Jeff Gola, PE
- Doug Forni, PE
- Rob Milne, PE
- · Richard Hovatter, PE
- Brad Messenger, PE
- Garrett Grubb, PE
- B. Our reclamation engineering design experience as it relates to the specific project:
 - Chad Biller, PE, Principal-in-Charge. Chad has more than 19 years of civil engineering experience with specific emphasis in mine reclamation, site development, highways, roads, bridges, and airports. Mr. Biller has managed the design and construction administration for a number of large grading and drainage projects in West Virginia. These projects have included design for mine reclamation, industrial and business parks, highways, and airports. Mr. Biller is also familiar with reclamation of mine portals, using either wet or dry seals.
 - April Rohrbaugh, Staff Engineer has completed the design of four AML projects, under the direction of Chad Biller.
 - Richard "RI" Hovatter, PE has extensive experience in grouting projects for the WVDEP.
- C. Available AML Design Team:

Civil PE's: Chad Biller, Richard Hovatter, Mike Nestor, Dan Ferrell, Ken Moran, Clay Riley, Matt Fluharty, Tom Urquhart, Chad Riley, Jeff Gola and Doug Forni

CAD: Cliff Cleavenger, Brandon Hinkle, John Pitman, Jason Heflin, Joe Lowther, Phil Lantz, John Sirianni, Robert Hebb, Mike Oldaker, Zack Gain and Tudy Heil

BACKGROUND

irasher is a privately owned engineering firm that specializes in multidisciplinary engineering services. Established in 1983, Thrasher is built on stable leadership, financial strength and reputation. Our dedication to creative design solutions, well-managed projects and customer service has made Thrasher West Virginia's largest privately owned engineering firm and an industry leader in the Mid-Atlantic region.

Since our formation, the company has grown to a firm of more than 250 employees. Our diverse staff has the resources to handle many projects, both large and small, simultaneously. Our client base is diverse and includes municipalities, state and federal government agencies, secondary and higher education, pubic and private entities, etc.

Principals:

H. Wood "Woody" Thrasher, PE

Kenneth P. Moran, PE, PS

Chad M. Riley, PE

Daniel E. Ferrell, PE

Wm. Randy Watson, PE

Clay P. Riley, PE

Jonathan Carpenter, PE

Chadwick D. Biller, PE

Craig Baker, Associate AIA

Robert R. Milne, PE

Ron Stanley, CPA

Jenelle Armstrong, PE

Matt Fluharty, PE

Our Locations:

Bridgeport, West Virginia Charleston, West Virginia Beckley, West Virginia Princeton, West Virginia Oakland, Maryland Canton, Ohio Fredericksburg, Virginia

Multi-Disciplinary Services:

Civil Engineering

Utility Services

Land and Site Development

Roadways

Bridges

Streetscapes

Airports

Storm Water Systems

Environmental Services

Architecture

Land Planning

Landscape Architecture

Construction Monitoring

Materials Testing

Pipeline Inspection

GIS Mapping

OUR APPROACH TO AML

West Virginia Department of Environmental Protection (WVDEP). While the scope of the projects varies, Thrasher has the experience and resources to apply the following design aspects:

Reclaim Refuse Piles: refuse piles were incorporated into the backfill of re-graded highwalls. These areas are then covered with soil and re-seeded.

Highwall Re-Grading: miles of highwalls have been backfilled and re-graded utilizing plans developed by Thrasher. Balancing the amount of cut and fill and keeping the amount of disturbance to a minimum is a challenge on any AML project. Thrasher has successfully met these challenges on other projects.

Sealing of Portals: Thrasher has developed plans for dozens of wet and modified mine seals for AML projects, including bat gate mine seals.

Sink Hole Repair: shallow mine voids cause sink holes that divert natural streams underground. Thrasher evaluates each site and develops a plan to backfill the voids, thereby reestablishing the original property.

**indslide Repair: two different landslide repair projects have been completed by Thrasher. Each repair required extensive geo-technical design for soldier pile and concrete lagging and concrete segmental gravity block walls. Both projects were in close proximity to residential areas that required special care during construction.

Drainage Design: all of the AML projects completed by Thrasher have required design of drainage structures. These have included vegetated, grouted, riprap, as well as culverts and storm sewers. Drainage calculations were completed to properly size all conveyences.

Permitting: the permitting process can delay projects if they are not submitted correctly or in a timely manner. Thrasher takes pride in on our ability to quickly obtain permits for our clients. We are able to utilize our excellent relationship with the WVDEP for NPDES permits as well as our relationship with the West Virginia Division of Highways for entrance and drainage permits. We are also experienced in obtaining ACE permits for stream bank restoration.



MORGANTOWN AIRPORT SUBSIDENCE II

hrasher has taken steps to adequately respond to the WVDEP's expression of interest by visiting the job site. Our assessment of the site reveals this project will require the following steps:

- Step 1. Adequate Mapping
- Step 2. Project Development and Design
- Step 3. Environmental and Permitting
- Step 4. Bidding
- Step 5. Construction Management









ADDITONAL RELATED SERVICES

TE DEVELOPMENT

Projects ranging from sites for residential housing to business and industrial parks to multi-purpose "live, work and play" communities are included in our range of site development projects.

Services Include:

- Planning and Conceptual Design
- Grading Plans
- Utility Layout and Mapping

STORM WATER, SEDIMENT AND EROSION

Our experience includes development of Sediment and Erosion Control measures on all types of construction sites as required by the WV Division of Environmental Protection, design of drainage facilities including piping, intake structures, etc. for site stabilization and flood control.

Capabilities Include:

- Hydrology Studies / Hydrographic Mapping
- Storm Water Collection Systems
- Detention Ponds
- Injection Wells
- Underground Storage
- Combined Sewer Overload (CSO) separation

SURVEY

In addition to a full service professional engineering staff, we maintains a surveying department which includes 10 licensed professional land surveyors, twenty full-time survey crews, CADD technicians, and office support staff.

ENVIRONMENTAL REPORTING SERVICES

Thrasher provides full environmental assessment and clearance services. We have more than 20 years of experience conducting environmental and natural resource compliance consultation with both state and federal agencies.

Experience includes:

- Permitting Related Activities (401 and 404)
- NEPA document preparation
- Wetland Delineation and Mitigation
- Rare, threatened and endangered species
 Section 7 Informal Consultation
- Rare, threatened and endangered species Section 10 Habitat Conservation Plans
- Water Use and Water Quality
- Air and Noise Impacts, Assessments, and Controls
- Soils and Geological Resources
- Cultural Resources
- Hazardous Materials
- Sediment and Erosion Control
- Consent Orders
- Compliance Schedules
- Site investigations
- SPCC Plans, Contingency Plans, Ground Water
- Protection Plans and Storm Water Pollution
- Prevention Plans
- Waste Treatment and Site Remediation
- Waste Disposal
- Channel Restoration
- Stream Bank Stabilization
- Enforcement Actions



ADDITIONAL RELATED SERVICES

INSTRUCTION MANAGEMENT AND INSPECTION

Thrasher knows how projects should be built. We provide the knowledge and experience necessary to manage the construction of your project. Our project managers and inspectors are experienced in all types of construction activities. Many of our construction managers and inspectors have years of experience, and our are certified by the West Virginia Department of Transportation, Division of Highways for roadwork and materials testing.

MATERIALS TESTING

Thrasher's Materials Testing Department is capable of performing a wide range of field and laboratory tests. Our laboratory at our Bridgeport, WV office is one of only three nationally certified facilities in the State of West Virginia. Additionally, our engineers

d technicians who perform tests both in the field and in the lab are certified by the State of WV.

EQUIPMENT AND SOFTWARE

Thrasher provides one of the largest networks of computer aided design (CAD) equipment, software and trained personnel in the State of West Virginia. Civil 3D, Carlson and Microstation V8 software is utilized at 70 CAD stations within the Group. Additionally, equipment includes 10 large format (size E) plotters and 5 large format plotter / scanners. CAD plans are prepared by both dedicated CAD employees and by staff engineers and engineering technicians in each of the firm's offices. This equipment allows our design department to perform accurate work quickly and efficiently.



April Rohrbaugh, Project Manager reviews project designs and answers questions with a group of contractors on a recent site visit to Roger Camp Hill.







Chad Biller, PE Principal-In-Charge

Education:

BS, Civil Engineering, West Virginia University

Registrations:

- · Registered Professional Engineer (PE) State of West Virginia
- Registered Professional Engineer (PE) State of Pennsylvania
- Registered Professional Engineer (PE) State of Ohio
- American Society of Civil Engineers
- American Society of Highway Engineers
- Society of American Military Engineers
- National Society of Professional Engineers

ANGLINS RUN and ROARING CREEK:

Anglins Run: Thrasher provided preliminary plans and final design for two WVDEP AML projects. Anglins Run included a total of eight collapsed mine portals with at least five of them having discharges ranging from one 1 gpm. Total flows were estimated to be between 25 and 30 gpm. Thrasher's plan for this project included construction of an access road, excavation and wet seal of at least eight deep mine portals and the re-grade and fill of subsidence sinkholes. To carry water safely off site, drainage control channels, conveyance pipe and under drain was constructed.

Roaring Creek: This project involved the elimination of subsidence depressions, the closure of open portals and the treatment of AMD. The Roaring Creek Watershed was heavily deep mined and surfaced mined prior to 1977. The project area consisted of three open and three closed portals discharging AMD, AMD seeps along the unnamed tributary and an area of subsidence, which drains surface water into the mine workings. AMD flow from the deep mine portals ranges from 10gpm to 100 gpm with PH ranging from 3.1 to 5.0. Preliminary plans included re-grading the subsidence area to prevent surface water from entering the mine workings, and installing an emergency spillway on the existing pond to handle the additional flow.

OVERFIELD AND SQUIRES CREEK: These projects consisted of engineering design for portal sealing, drainage and retaining walls for the Overfield - Lafferty Site and engineering design for portal sealing, drainage and backfilling of the highwall with refuse for the Squires Creek Site.

RALEIGH COUNTY AIRPORT INDUSTRIAL PARK: This multi-phased project consisted of all preliminary design, permitting, final design and construction management for the development of a 300+ acre business and industrial park adjacent to the Raleigh County airport. Engineering design consisted of mass grading, E&S plans, stormwater, public utilities, roadways, sidewalks and building pads.





April Rohrbaugh Project Manager

Education:

BS, Civil Engineering Technology, West Virginia University

Project Manager on the following:

- Squires Creek: Reclaim Refuse Piles; Highwall Re-grading
- · Anglin's Run: Seal Portals
- · Roaring Creek: Sink Hole Repair
- Overfield (Lafferty): Landslide Repair
- Laurel Run: Bat Gates
- Clarksburg Lyons Landslide: Retaining Wall
- Pleasant Valley: Highwall
- Roger Camp Hill: Access Road; Drainage and Culverts

ANGLINS RUN and ROARING CREEK:

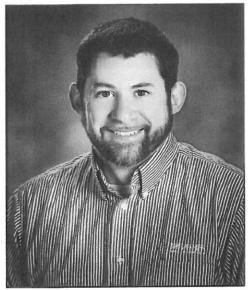
Anglins Run: Thrasher provided preliminary plans and final design for two WVDEP AML projects. Anglins Run included a total of eight collapsed mine portals with at least five of them having discharges ranging from one to ten gpm. Total flows were estimated to be between 25 and 30 gpm. Thrasher's plan for this project included truction of an access road, excavation and wet seal of at least eight deep mine portals and the re-grade and subsidence sinkholes. To carry water safely off site, drainage control channels, conveyance pipe and under drain was constructed.

Roaring Creek: This project involved the elimination of subsidence depressions, the closure of open portals and the treatment of AMD. The Roaring Creek Watershed was heavily deep mined and surfaced mined prior to 1977. The project area consisted of three open and three closed portals discharging AMD, AMD seeps along the unnamed tributary and an area of subsidence, which drains surface water into the mine workings. AMD flow from the deep mine portals ranges from 10gpm to 100 gpm with PH ranging from 3.1 to 5.0. Preliminary plans included re-grading the subsidence area to prevent surface water from entering the mine workings, and installing an emergency spillway on the existing pond to handle the additional flow.

OVERFIELD AND SQUIRES CREEK: These projects consisted of engineering design for portal sealing, drainage and retaining walls for the Overfield - Lafferty Site and engineering design for portal sealing, drainage and backfilling of the highwall with refuse for the Squires Creek Site.

WV DEP Shinns Run Portals: Mr. Hovatter served as Project Engineer and was responsible for the design, drawings along with the construction documents on an AML project outside of Shinnston on Shinns Run Road. The project consisted of a total seven open mine portals that needed to be sealed. Three of the portals were required to have bat gates installed and the others were to be piped for drainage. During the subsurface investigation it was determined that the section of Shinns Run that passed over three of the portals was constructed over significant mine voids. This resulted in a grout stabilization design to be added to the project scope.





Richard Hovatter, PE Project Engineer

Education:

• BS, Civil Engineering Technology, Fairmont State University

Registrations:

- · Registered Professional Engineer (PE) State of West Virginia
- Registered Professional Engineer (PE) State of Pennsylvania
- Level I Rosgen Natural Stream Construction
- Level II Rosgen Natural Stream Construction
- HEC—RAS Operator Training Short Course
- Annual Oil & Gas Training Pennsylvania
- MSHA Training

ODOT Route 2, Gypsum Mine Stabilization: Mr. Hovatter served as Project Engineer and was responsible for developing a grout stabilization plan for approximately two miles of Route 2 in Sandusky, Ohio. The plan was to stabilize all four lanes of highway where it crossed over an abandoned gypsum mine. The mined gypsum seam was approximately twelve to fifteen feet thick and was completely mined out. As part of the plan, Mr. Hovatter was onsible with acquiring an underground injection permit through the Ohio Department of Natural Resources.

WV DEP Shinns Run Portals: Mr. Hovatter served as Project Engineer and was responsible for the design, drawings along with the construction documents on an AML project outside of Shinnston on Shinns Run Road. The project consisted of a total seven open mine portals that needed to be sealed. Three of the portals were required to have bat gates installed and the others were to be piped for drainage. During the subsurface investigation it was determined that the section of Shinns Run that passed over three of the portals was constructed over significant mine voids. This resulted in a grout stabilization design to be added to the project scope.

Charleroi Drainage Project: Mr. Hovatter served as Project Engineer and was responsible for the site design and all construction documents at the Charleroi Liquid Propane load out facility. The site was constructed so that the scales set at the low point of the site and all the site drainage settled under the scales.

JK Alfred Property: Mr. Hovatter served as Project Engineer and was responsible for analyzing the existing drainage system and determining if it was adequate to pass the design storm runoff from the site. He was also responsible for obtaining a modification to the existing NPDES permit.

Grafton National Cemetery: Taylor County, WV. Mr. Hovatter served as Project Engineer for this design build project to re-mediate the discharge of the storm collection system at the cemetery. The discharge was released out on to an unstabilized slope and had caused significant erosion below the pipe. Mr. Hovatter designed a concrete sump along with a grouted riprap channel to collect the discharge and convey it downslope to a stable are for discharge.





Michael Nestor, PE, CFM Project Engineer

Education:

BS, Civil Engineering Technology, Fairmont State University

Registrations:

- Registered Professional Engineer (PE) State of West Virginia
- Current President of American Society of Highway Engineers, North Central West Virginia Chapter
- American Society of Civil Engineers

Anglins Run and Roaring Creek: Mr. Nestor served as Project Engineer for the design of wet mine seal for abandoned mine portals and downstream conveyance of water associated with abandoned mines. Mr. Nestor worked closely with the DEP to identify sinkholes associated with abandoned mines and developed a site grading to restore collapsed areas and re-route drainage around problem areas.

Stream Modeling: Various Counties, WV. Mr. Nestor has performed several stream evaluations utilizing HEC-RAS stream modeling software for projects located in Monongalia, Harrison and Hampshire counties.

Town of Oak Hill Storm Water Project: Fayette County, WV. Mr. Nestor served as Project Manager for the design of storm sewer upgrades for the Town of Oak Hill. The project included the addition of a 2'x6' box culvert under Trump Avenue, construction drawings and specifications.

Hawks Nest Sub-Division: Garrett County, MD. Mr. Nestor served as Project Engineer for the development of a storm water management plan for a residential subdivision using low impact development methods. The scope of the project included site grading, storm water management, erosion and sediment control plans.

Fairmont State University Storm Water Management Plan: Marion County, WV. Mr. Nestor served as Project Engineer for the development of a storm water management program for the FSU campus, which is classified as an MS4 entity. The scope of this project included meeting all MS4 requirements in addition to preparing and submitting all necessary permit applications to the WV DEP.

City of Clarksburg Storm Water Management Plan: Harrison County, WV. Mr. Nestor served as Project Engineer for the development of a storm water management program for the entire city. Mr. Nestor assisted the city in getting all permitting required and the application to the WV DEP.



SQUIRES CREEK



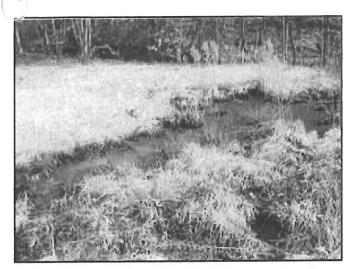


SQUIRES CREEK

This job site included two refuse piles covering about two to three acres in total. There were remains of one mine building, unvegetated coal refuse, deep mine portals and acid mine drainage. Nearly all of this land was unvegetated with signs of severe erosion, the toe of the eastern pile extended down to the creek. Both piles had very steep outslopes nd several well used 4-wheeler (ATV) trails extended up and down the face, thereby using public safety hazards.

There were also six open and collapsed deep mine portals. Of these portals, one was open enough to easily allow entrance by either a child or adult. This opening was 4 to 5 feet high by 20 feet in width. Inside the portal were mine props that were clearly visible and the mine appeared to extend for a considerable distance into the hill. The remaining five portals, all located along a 200 LF mine face-up or highwall, approximately 10 to 15 ft. in height, were collapsed with only one discharging about 2 to 3 gpm of acid mine drainage (AMD).

ANGLINS RUN & ROARING CREEK





ANGLINS RUN

The project area included a total of eight collapsed mine portals with at least five of them having discharges ranging from 1 to 10 gpm. Total flows were estimated to be between 25 and 30 gpm. Thrasher's scope and plans for this project included construction of an access road into the site, excavation and wet seal of at least eight deep mine portals and the re-grade and fill of subsidence sinkholes. To carry water safely off site, drainage ontrol channels, conveyance pipe and under drain were constructed. All areas disturbed by construction were soil covered, conditioned and re-vegetated.

ROARING CREEK

This project involved the elimination of subsidence depressions, the closure of open portals and the treatment of AMD. The Roaring Creek Watershed was heavily deep mined and surfaced mined prior to 1977. The project area consisted of 3 open and 3 closed portals discharging AMD. The AMD seeped along the unnamed tributary and an area of subsidence, which drained surface water into the mine workings. AMD flow from the deep mine portals ranged from 10 gpm to 100 gpm with PH ranging from 3.1 to 5.0. The seeps along the UNT showed an average PH of 3.3. Thrasher's design plans called for the construction and rehabilitation of access roads to the site, and installation of wet seals at the portal locations. The plans also included re-grading the subsidence area to prevent surface water from entering the mine workings, and installing an emergency spillway on the existing pond which was designed to handle the additional flow.



LAUREL RUN #1



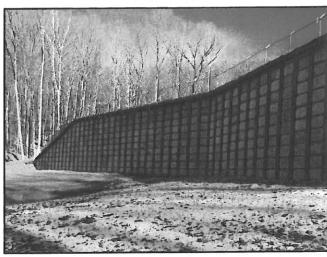


LAUREL RUN #1

This project site consisted of seven sections of highwall that totaled approximately 5,700 feet in length and averaged 20 feet in height. There were three collapsed portals adjacent to one another discharging approximately 25 gpm. One open portal entrance measured 2 foot by 3 foot and had no known discharge associated with it. Approximately 230 feet fabandoned railroad tracks remained on the project site and they did not connect to by existing tracks. The project site covered a total area of six acres and suffered from a lack of vegetation and toeing into Laurel Run.

CLARKSBURG LYONS LANDSLIDE





LYONS LANDSLIDE

The project site is located in Clarksburg, WV off of Route 19. There was a two acre slide mass composed of strip mine spoil and natural slip prone material located above and behind a the Lyons residence. The scope of work consisted of constructing a soldier pile and concrete lagging retaining wall with appurtenances to stabilize the slope above the visting residence and pond, as well as, regarding the slip area while installing underdrains and channels to carry water safely through or around the slip area.

, v	VEST VIRGIN	IA DEPARTMEN			L PR	OTECTIO	ON
	No experience of the second	QUALIFICATIO		TIONNAIRE		Attachi	ment "B"
PROJL NAME		ATE (DAY, MONT	A, LEAR)	F	EIN	
1. FIRM NAME		ANUARY 1, 2014			5	5-0633596-	6
1. C.		. HOME OFFICE			3	. FORMER	FIRM NAME
THE THRASHER GROUP, INC.		00 WHITE OAKS BOU	LEVARD, E	BRIDGEPORT, WV 263	330	THRASHE	ER ENGINEERING, INC.
4. HOME OFFICE TELEPHONE	5. ESTABLIS	HED (YEAR	6. TYP	E OWNERSHIP			6a. WV REGISTERED DBE
304-624-4108	1983		Indi	vidual Corp	orati	on X	(Disadvantaged Business
			Part	nership Join	nt-Ven	ture	Enterprise)
7. PRIMARY AMI, DESIGN OFFICE.	ADDRECC / TE	TEDUONE / PERGO					YES NO X
7. PRIMARY AML DESIGN OFFICE: 600 WHITE OAKS BOULEVARD, BRIDGEPO	OPT WAY 26220 /	204 634 4100 / CLAP	N IN CH	ARGE/ NO. AML I	DESIG	N PERSON	NEL EACH OFFICE
300 ASSOCIATION DRIVE CHARLESTON A	MN / 201 212 760	1 / IONATUAN CARR	D. BILLEI	R, P.E., PARTNER / 12	2		
300 ASSOCIATION DRIVE, CHARLESTON, N 3000 THAYER PLACE, OAKLAND, MD/301-3	221.2066 / CUAD I	I / JUNATHAN CARP	ENTER, M	ANAGING PARTNER /	/ 2		
380 AIRPORT CIRCLE, BEAVER, WV 2581	2 /204 960 4024	KILEY, PE / 1					
4150 RELDEN VILLAGE STREET SLUTE 101	5 / 304-860-1924 /	KOBERT CRADDOCK	/0				
4150 BELDEN VILLAGE STREET, SUITE 101,	CANTON, OHIO 42	4/18 / 330-491-8170/	STEVE H	AMIT, P.E./2			
236 CAMBRIDGE STREET, FREDERICKSBUI	KG, VA 22405 / 54	0-372-3499/DOUGLA	S RICHMO	OND, L.S./9			
1428 MAIN STREET, PRINCETON, WV 2474			PE /39				
8. NAMES OF PRINCIPAL OFFICER	S OR MEMBERS	OF FIRM	8a. NA	ME, TITLE, & T	ноя.тя	ONE NUMB	SER - OTHER PRINCIPALS
H. WOOD THRASHER, P.E. – PRESIDENT			WM. RAN	IDY WATSON-PARTNER	R (304) 6	ONE NOME 24-4108	BER - OTHER PRINCIPALS
KENNETH P. MORAN, P.E. – VICE PRESIDEN	∤T		CHAD M.	RILEY, P.E PARTNER ((304) 624	1-4108	
RONALD STANLEY, CPA — CHIEF FINANCIA	AL OFFICER		CHADWIG	K BILLER, P.E PARTNE	IER (304)	624-4108	
			CLAY P. R	ILEY, P.E PARTNER (3	304) 624	4108	
			DAN FERI	RELL, P.E PARTNER(304	04) 624-4	108	
			CRAIG BA	KER, ASSOCIATE AIA -	PARTNE	R (304) 624-4	1108
			ROBERT	MILNE, P.E PARTNER	(304) 62	4-4108	
			JONATHA	N CARPENTER, P.EPAI	ARTNER (304) 343-760	1
			MATTHE	W FLUHARTY, PE - PART	TNER (30	04) 624-4108	
9. PERSONNEL BY DISCIPLINE			JEINELLE A	ARMSTRONG, PE – PART	TNER (30	04)326-7601	
44 ADMINISTRATIVE	- ECOLOGIS	TS	2	LANDSCAPE ARCHIT	TECTS		CERTICETED T
7 ARCHITECTS	— ECONOMIS		-	MECHANICAL ENG		00	STRUCTURAL ENGINEERS
- BIOLOGIST		AL ENGINEERS		MINING ENGIN		CD.	72 SURVEYORS — TRAFFIC ENGINEERS
18 CADD OPERATORS	2 ENVIRONME		5	PHOTOGRAMMETR			1 GIS SPECIALIST
- CHEMICAL ENGINEERS	- ESTIMATO		_	PLANNERS: URBA		TONAL.	1 PIPELINE INSPECTOR
38 CIVIL ENGINEERS	GEOLOGIS'		-	SANITARY ENGIN	NEERS	22011111	24 MATERIALS TESTING TECH.
37 CONSTRUCTION INSPECTORS	HISTORIAHYDROLOG		_	SOILS ENGINEER	RS		The state of the s
DESIGNERS	III DROLOG.	1515		SPECIFICATION	6		257 TOTAL PERSONNEL
- DRAFTSMEN				WRITERS			
TOTAL MUNICIPAL OF THE PROPERTY.							
TOTAL NUMBER OF WV REGI	STERED PROFE	SSIONAL ENGINE	ERS IN	PRIMARY OFFICE:	: 18		
perform this type of wo	na Mining mu	st provide supp	porting	documentation	that	qualifi	es them to supervise and
Porrorm curs type or wo	IK.						
10. HAS THIS JOINT-VENTURE WO	RKED TOGETHE	R BEFORE?	€ YES	X NO NOT AT	DDI TO	DIE	

€ YES

X NO NOT APPLICABLE

Quescionnaire.	UNSULTANTS ANTICIPATED TO BE USED. Attach "F	AML Consultant Confidential Qualification
NAME ADDRESS: NOVEL GEO-ENVIRONMENTAL 650 MACCORKLE AVENUE WEST	SPECIALTY: GEO-TECHNICAL SERVICES	WORKED WITH BEF
NAME AND ADDRESS: RELIANCE LABORATORIES, INC	SPECIALTY:	NO WORKED WITH BEFORE
2044 MEADOWBROOK ROAD BRIDGEPORT, WV 26330	WATER SAMPLE ANALYZATION	XYes
NAME AND ADDRESS:	SPECIALTY:	No WORKED WITH BEFORE
NAME AND ADDRESS:	SPECIALTY:	Yes
	SI ECIAETT.	WORKED WITH BEFORE Yes
NAME AND ADDRESS:	SPECIALTY:	No WORKED WITH BEFORE
NAME AND ADDRESS:	SPECIALTY:	Yes
	SI ECIALIT.	WORKED WITH BEFOREYes
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
NAME AND ADDRESS:	SPECIALTY:	Yes
	SI ECIALIT.	WORKED WITH BEFOREYes
NAME AND ADDRESS:	SPECIALTY:	No WORKED WITH BEFORE
		Yes

- X YES Description and Number of Project: THR PERFORMS ENGINEERING DESIGN SERVICES TO THE WV DEP FOR DESIGN S
- B. Is your firm experienced in Soil Analysis?

 X YES Description and Number of Projects: THRASHER MAINTAINS AN AASHTO CERTIFIED MATERIALS TESTING AND ANALYSIS LAB AT BOTH THE CLARKSBURG AND BECKLEY OFFICES. SOIL ANALYSIS EXPERIENCE IS SPECIFICALLY IN GRADATIONS AND CLASSIFICATION.
- C. Is your firm experienced in hydrology and hydraulics?

 X YES Description and Number of Projects: THROUGH OUR WORK IN THE PLANNING AND DESIGN OF BRIDGES FOR THE WEST

 VIRGINIA DEPARTMENT OF HIGHWAYS AND WATER LINE EXTENSION PROJECTS THROUGHOUT THE STATE, THRASHER HAS EXTENSIVE EXPERIENCE IN HYDROLOGY. WE

 ALSO HAVE EXTENSION EXPERIENCE IN HYDRAULIC MODELING FOR WATER AND WASTEWATER PROJECTS THROUGHOUT WEST VIRGINIA.
- Does your firm produce its own Aerial Photography and Develop Contour Mapping?

 YES Description and Number of Projects: THRASHER SURVEY ONLY SUBCONTRACTS THE ACQUISITION OF AERIAL PHOTOGRAPHY.

 ALL OTHER SERVICES ASSOCIATED WITH MAPPING ARE PERFORMED IN-HOUSE INCLUDING AERO-TRIANGULATION, PLANIMETRIC COMPILATION, SURFACE MODELING,
 CONTOURING AND DIGITAL ORTHO-RECTIFIED IMAGERY. THRASHER MAPPING AND CONTROL SERVICES INCLUDE NGS "BLUE-BOOKING", PERMANENT MONUMENT
 POSITIONING AND INSTALLATION, GPS BASE STATION INSTALLATION, PRECISE LEVELING, CONTROL NETWORKS, AERIAL PHOTO CONTROL, VERTICAL SCALE MAPPING,
 STEREO PHOTOGRAMMETRY, ORTHO-RECTIFIED IMAGES, TRIANGULATED SURFACE MODELS, 3D MODELING AND ANIMATION. THRASHER PROVIDES THESE SERVICES
 FROM BOTH MANNED AND UNMANNED PLATFORMS. THRASHER LIDAR/REMOTE SENSING IS PERFORMED FROM TERRESTRIAL AND AIRBORNE PLATFORMS BOTH
 MANNED AND REMOTE CONTROLLED. THRASHER'S MODEL WHEN IT COMES TO ADVANCED TECHNOLOGIES IS TO EMPLOY TECHNICAL EXPERTISE, OWN SOFTWARE AND
 RENT/LEASE HARDWARE AS NEEDED SINCE TECHNOLOGY CHANGES ARE CONSTANT.
- E. Is your firm experienced in domestic waterline design? (Include any experience your firm has in evaluation of aquifer degradation as a result of mining.)

 YES Description and Number of Projects: THRASHER HAS DESIGNED MORE WATER LINE SYSTEMS THAN ANY OTHER WEST VIRGINIA FIRM. PROJECTS INCLUDE NEW SYSTEMS, EXTENSIONS AND REPLACEMENTS OF WATER LINE DISTRIBUTION SYSTEMS, MANY OF WHICH HAVE BEEN AFFECTED BY ABANDONED MINE LANDS. DESIGN OF THE PROJECTS INCLUDES INCLUDE LINES, BOOSTER STATIONS, WATER TREATMENT PLANTS, AND STORAGE FACILITIES.

 THRASHER'S ANALYSIS AND DESIGN ALSO INCLUDES IMPROVEMENTS AND ALTERNATIVES FOR WATER SOURCES DEEMED GROUND WATER UNDER THE DIRECT EFFECT OF SURFACE WATER.
 - F. Is your firm experienced in Acid Mine Drainage Evaluation and Abatement Design?
- YES Description and Number of Projects THRASHER HAS BEEN AWARDED AND HAS SUCCESSFULLY COMPLETED NUMEROUS RECLAMATION PROJECTS FOR WVDEP RELATED SPECIFICALLY TO ACID MINE DRAINAGE AND ABATEMENT. THE CHARLESTON WV BRANCH OF OUR COMPANY DESIGNED AN AWARD WINNING WATER TREATMENT PLANT FOR MARTINKA MINES IN MARION COUNTY, WEST VIRGINIA TO TREAT MINE DRAINAGE.

	TNCTDALS AND ACCOUNTED BEGDO	TOTAL TOP 110 PROFILE	
13. PERSONAL HISTORY STATEMENT OF PR but keep to essentials)	INCITALIS AND ASSOCIATE RESPON	NSIBLE FOR AML PROJECT DESIGN	(Furnish compare
			2
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN	VENDO OF DOMESTIC
BILLER, CHADWICK D. P.E.	5		YEARS OF DOMESTIC
DIELLI, CHADERON D. P.L.	1	EXPERIENCE: 19	WATERLINE DESIGN
			EXPERIENCE: 19
P. 1 C. P. 1			
Brief Explanation of Responsibilitie	s: Mr. Biller has experience in all aspects	of engineering with specific emphasis on si	ite development, highways, roads
i briages, and airports. Ivir. biller joined i nrasner Engl	neering in 1999 and is a partner of Thrashi	er Fnaineering For Thracker Engineering &	In Dillowin was a well-to for tent man
AML project and public and private site developmen	t projects specializing in airports highway	s roads and bridges to During the	ii. Biller is responsible for WV DEP
projects, he has extensive knowledge of state and fe	donal building of an in the forest	s, rouas and briages. As Project Manager Jo	or all of the firm's WVDOT/DOH
projects, he has extensive knowledge of state and je	derai builaing standaras .		
EDUCATION (Degree, Year, Specializat	ion:		
☐ B.S., Civil Engineering, 1992 – West			
5.5., Civil Linguicering, 1992 – West	virginia University		
MEMBERSHIP IN PROFESSIONAL ORGANIZAT	IONS	REGISTRATION (Type, Year, Sta	ate)
American Society of Civil Engineers		D Pagistared Drafessian of Funiture	(mg) e
☐ Society of American Military Engineers		☐ Registered Professional Engineer	(PE),State of West Virginia
		#13620	
National Society of Professional Engineers		Registered Professional Engineer	(PF) State of Pennsylvania
		#PE056012E	())-sase of a consylvania
		Registered Professional Engineer	(PE),State of Ohio #64594
		1	The state of the s
13. PERSONAL HISTORY STATEMENT OF PR	TNCIPALS AND ASSOCIABLE PROPE		
13. PERSONAL HISTORY STATEMENT OF PR	INCIPALS AND ASSOCIATES RESPO	NSIBLE FOR AML PROJECT DESIGN	(Furnish complete
13. PERSONAL HISTORY STATEMENT OF PR data but keep to essentials)	INCIPALS AND ASSOCIATES RESPO	NSIBLE FOR AML PROJECT DESIGN	(Furnish complete
13. PERSONAL HISTORY STATEMENT OF PR data but keep to essentials) NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	(Furnish complete
and the need to essentials,		YEARS OF EXPERIENCE	
NAME & TITLE (Last, First, Middle Int.)	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN	YEARS OF DOMESTIC
and the need to essentials,		YEARS OF EXPERIENCE	YEARS OF DOMESTIC WATERLINE DESIGN
NAME & TITLE (Last, First, Middle Int.) NESTOR, MICHAEL - PROJECT ENGINEER	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 9	YEARS OF DOMESTIC WATERLINE DESIGN
NAME & TITLE (Last, First, Middle Int.) NESTOR, MICHAEL - PROJECT ENGINEER Brief Explanation of Responsibilitie	YEARS OF AML DESIGN EXPERIENCE: 3 S Mr. Nestor joined Thrasher Engineering	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 9	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9
NAME & TITLE (Last, First, Middle Int.) NESTOR, MICHAEL - PROJECT ENGINEER Brief Explanation of Responsibilitie range of experience in residential and commercial si	YEARS OF AML DESIGN EXPERIENCE: 3 S Mr. Nestor joined Thrasher Engineering the development projects, utilizing all aspects.	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 9 in 2005 and serves as Project Manager and	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9 HEngineer. Mr. Nestor has a wide
NAME & TITLE (Last, First, Middle Int.) NESTOR, MICHAEL - PROJECT ENGINEER Brief Explanation of Responsibilitie range of experience in residential and commercial si	YEARS OF AML DESIGN EXPERIENCE: 3 S Mr. Nestor joined Thrasher Engineering the development projects, utilizing all aspects.	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 9 in 2005 and serves as Project Manager and	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9 HEngineer. Mr. Nestor has a wide
NAME & TITLE (Last, First, Middle Int.) NESTOR, MICHAEL – PROJECT ENGINEER Brief Explanation of Responsibilitie range of experience in residential and commercial si extensions of public sewer and water systems, storn	YEARS OF AML DESIGN EXPERIENCE: 3 S Mr. Nestor joined Thrasher Engineering te development projects, utilizing all aspects water drainage, storm water management.	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 9 in 2005 and serves as Project Manager and ts of infrastructure design including street of the erosion and sediments sectod along.	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9 If Engineer. Mr. Nestor has a wide
NAME & TITLE (Last, First, Middle Int.) NESTOR, MICHAEL – PROJECT ENGINEER Brief Explanation of Responsibilitie range of experience in residential and commercial si extensions of public sewer and water systems, storm Mr. Nestor oversees all general operations within The	YEARS OF AML DESIGN EXPERIENCE: 3 S Mr. Nestor joined Thrasher Engineering the development projects, utilizing all aspects water drainage, storm water management perkeley Associates, directing administration.	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 9 in 2005 and serves as Project Manager and the state of infrastructure design including street ont, erosion and sediment control plans, and the staff CAD technicians, and staff control plans.	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9 If Engineer. Mr. Nestor has a wide
NAME & TITLE (Last, First, Middle Int.) NESTOR, MICHAEL – PROJECT ENGINEER Brief Explanation of Responsibilitie range of experience in residential and commercial si extensions of public sewer and water systems, storm Mr. Nestor oversees all general operations within The	YEARS OF AML DESIGN EXPERIENCE: 3 S Mr. Nestor joined Thrasher Engineering the development projects, utilizing all aspects water drainage, storm water management perkeley Associates, directing administration.	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 9 in 2005 and serves as Project Manager and the state of infrastructure design including street ont, erosion and sediment control plans, and the staff CAD technicians, and staff control plans.	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9 If Engineer. Mr. Nestor has a wide
NAME & TITLE (Last, First, Middle Int.) NESTOR, MICHAEL – PROJECT ENGINEER Brief Explanation of Responsibilitie range of experience in residential and commercial si extensions of public sewer and water systems, storn Mr. Nestor oversees all general operations within The completion of projects covering site development, see	YEARS OF AML DESIGN EXPERIENCE: 3 S Mr. Nestor joined Thrasher Engineering te development projects, utilizing all aspect water drainage, storm water management as Berkeley Associates, directing administrative ying, material testing, and environment	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 9 in 2005 and serves as Project Manager and the state of infrastructure design including street ont, erosion and sediment control plans, and the staff CAD technicians, and staff control plans.	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9 If Engineer. Mr. Nestor has a wide
NAME & TITLE (Last, First, Middle Int.) NESTOR, MICHAEL – PROJECT ENGINEER Brief Explanation of Responsibilitie range of experience in residential and commercial si extensions of public sewer and water systems, storn Mr. Nestor oversees all general operations within The completion of projects covering site development, see	YEARS OF AML DESIGN EXPERIENCE: 3 S Mr. Nestor joined Thrasher Engineering te development projects, utilizing all aspect water drainage, storm water management as Berkeley Associates, directing administrative ying, material testing, and environment	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 9 in 2005 and serves as Project Manager and the state of infrastructure design including street ont, erosion and sediment control plans, and the staff CAD technicians, and staff control plans.	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9 If Engineer. Mr. Nestor has a wide
NAME & TITLE (Last, First, Middle Int.) NESTOR, MICHAEL - PROJECT ENGINEER Brief Explanation of Responsibilitie range of experience in residential and commercial si extensions of public sewer and water systems, storm Mr. Nestor oversees all general operations within The completion of projects covering site development, see EDUCATION (Degree, Year, Specializate)	YEARS OF AML DESIGN EXPERIENCE: 3 S Mr. Nestor joined Thrasher Engineering te development projects, utilizing all aspect water drainage, storm water management Berkeley Associates, directing administrative ying, material testing, and environment ion)	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 9 in 2005 and serves as Project Manager and the state of infrastructure design including street ont, erosion and sediment control plans, and the staff CAD technicians, and staff control plans.	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9 If Engineer. Mr. Nestor has a wide
NAME & TITLE (Last, First, Middle Int.) NESTOR, MICHAEL - PROJECT ENGINEER Brief Explanation of Responsibilitie range of experience in residential and commercial si extensions of public sewer and water systems, storm Mr. Nestor oversees all general operations within The completion of projects covering site development, su EDUCATION (Degree, Year, Specializate B.S. Civil Engineering Technology - Fairmont State University of the service	YEARS OF AML DESIGN EXPERIENCE: 3 S Mr. Nestor joined Thrasher Engineering the development projects, utilizing all aspects water drainage, storm water management by Berkeley Associates, directing administrativelying, material testing, and environment tion) Iniversity, 2003	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 9 in 2005 and serves as Project Manager and the state of infrastructure design including street ont, erosion and sediment control plans, and the staff CAD technicians, and staff control plans.	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9 If Engineer. Mr. Nestor has a wide
NAME & TITLE (Last, First, Middle Int.) NESTOR, MICHAEL - PROJECT ENGINEER Brief Explanation of Responsibilitie range of experience in residential and commercial si extensions of public sewer and water systems, storm Mr. Nestor oversees all general operations within The completion of projects covering site development, see EDUCATION (Degree, Year, Specializate B.S. Civil Engineering Technology - Fairmont State UMEMBERSHIP IN PROFESSIONAL ORGANIZATE	YEARS OF AML DESIGN EXPERIENCE: 3 S Mr. Nestor joined Thrasher Engineering the development projects, utilizing all aspects water drainage, storm water management by Berkeley Associates, directing administrativelying, material testing, and environment tion) Iniversity, 2003	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 9 in 2005 and serves as Project Manager and its of infrastructure design including street ont, erosion and sediment control plans, and ative staff, CAD technicians, and staff engintal services.	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9 Il Engineer. Mr. Nestor has a wide and lot layout, street profiles, NPDES permitting. In addition, eers to ensure successful
NAME & TITLE (Last, First, Middle Int.) NESTOR, MICHAEL - PROJECT ENGINEER Brief Explanation of Responsibilitie range of experience in residential and commercial si extensions of public sewer and water systems, storm Mr. Nestor oversees all general operations within The completion of projects covering site development, see EDUCATION (Degree, Year, Specializate B.S. Civil Engineering Technology - Fairmont State UMEMBERSHIP IN PROFESSIONAL ORGANIZATE	YEARS OF AML DESIGN EXPERIENCE: 3 S Mr. Nestor joined Thrasher Engineering the development projects, utilizing all aspects water drainage, storm water management by Berkeley Associates, directing administrativelying, material testing, and environment tion) Iniversity, 2003	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 9 in 2005 and serves as Project Manager and its of infrastructure design including street ont, erosion and sediment control plans, and itive staff, CAD technicians, and staff engintal services. REGISTRATION (Type, Year, Sta	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9 If Engineer. Mr. Nestor has a wide and lot layout, street profiles, NPDES permitting. In addition, eers to ensure successful
NAME & TITLE (Last, First, Middle Int.) NESTOR, MICHAEL - PROJECT ENGINEER Brief Explanation of Responsibilitie range of experience in residential and commercial si extensions of public sewer and water systems, storn Mr. Nestor oversees all general operations within The completion of projects covering site development, so EDUCATION (Degree, Year, Specializat B.S. Civil Engineering Technology - Fairmont State UMEMBERSHIP IN PROFESSIONAL ORGANIZAT American Society of Civil Engineers	YEARS OF AML DESIGN EXPERIENCE: 3 S Mr. Nestor joined Thrasher Engineering the development projects, utilizing all aspects water drainage, storm water management are Berkeley Associates, directing administrative ying, material testing, and environment ion) ion) Iniversity, 2003	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 9 in 2005 and serves as Project Manager and its of infrastructure design including street ont, erosion and sediment control plans, and ative staff, CAD technicians, and staff engintal services.	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9 If Engineer. Mr. Nestor has a wide and lot layout, street profiles, NPDES permitting. In addition, eers to ensure successful
NAME & TITLE (Last, First, Middle Int.) NESTOR, MICHAEL - PROJECT ENGINEER Brief Explanation of Responsibilitie range of experience in residential and commercial si extensions of public sewer and water systems, storn Mr. Nestor oversees all general operations within The completion of projects covering site development, see EDUCATION (Degree, Year, Specializat B.S. Civil Engineering Technology - Fairmont State UMEMBERSHIP IN PROFESSIONAL ORGANIZAT American Society of Civil Engineers	YEARS OF AML DESIGN EXPERIENCE: 3 S Mr. Nestor joined Thrasher Engineering the development projects, utilizing all aspects water drainage, storm water management are Berkeley Associates, directing administrative ying, material testing, and environment ion) ion) Iniversity, 2003	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 9 in 2005 and serves as Project Manager and its of infrastructure design including street ont, erosion and sediment control plans, and itive staff, CAD technicians, and staff engintal services. REGISTRATION (Type, Year, Sta	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9 If Engineer. Mr. Nestor has a wide and lot layout, street profiles, NPDES permitting. In addition, eers to ensure successful
NAME & TITLE (Last, First, Middle Int.) NESTOR, MICHAEL - PROJECT ENGINEER Brief Explanation of Responsibilitie range of experience in residential and commercial si extensions of public sewer and water systems, storn Mr. Nestor oversees all general operations within The completion of projects covering site development, so EDUCATION (Degree, Year, Specializat B.S. Civil Engineering Technology - Fairmont State UMEMBERSHIP IN PROFESSIONAL ORGANIZAT American Society of Civil Engineers	YEARS OF AML DESIGN EXPERIENCE: 3 S Mr. Nestor joined Thrasher Engineering the development projects, utilizing all aspects water drainage, storm water management are Berkeley Associates, directing administrative ying, material testing, and environment ion) ion) Iniversity, 2003	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 9 in 2005 and serves as Project Manager and its of infrastructure design including street ont, erosion and sediment control plans, and itive staff, CAD technicians, and staff engintal services. REGISTRATION (Type, Year, Sta	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9 If Engineer. Mr. Nestor has a wide and lot layout, street profiles, NPDES permitting. In addition, eers to ensure successful

13 DEDCONAL HIGTORY CHATEMENT OF DE	TIGERIA			
13. PEPSONAL HISTORY STATEMENT OF PR	RINCIPALS AND ASSOCIATE RESPO	ONSIBLE FOR A	ML PROJECT DESIGN	(Furnish comple
The second secon				
NAME & TITLE (Last, First, Middle Int.)			EXPERIENCE	
ROHRBAUGH, APRIL	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML EXPERIENCE:	RELATED DESIGN 8	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: -
Brief Explanation of Responsibilities	es			
Ms. Rohrbaugh joined Thrasher Engineering in Janu	ary of 2006 and serves as Staff Engineer in	the site develope	nent department of Three	ther with a consentant's
Her responsibilities with AML projects include: Design sediment control. Ms. Rohrbaugh's other responsible planning for residential, commercial, and recreation drainage, storm water management, erosion and sediments.	vis. Ronrbaugh has experience in all aspec an of wet and modified mine seals, grading ilities include: design surveying consisting hal developments. Site/Land Development ediment control, and various regulatory pe	its of site engineer g associated with of both field trave engineering: geo ermitting requiren	ing, taking projects from reclaiming, storm water i rsing and survey location metric layout of sites, sul tents.	survey to concept to construction. management, and erosion and s and aerial mapping. Conceptual odivisions, and roads, grading,
EDUCATION (Degree, Year, Specializat	zion) B.S. Civil Engineering – West V	irginia Universit	y, 2005, Civil Engineeri	ng
MEMBERSHIP IN PROFESSIONAL ORGANIZATION	TIONS	REGISTRATIO	N (Type, Year, St	
		REGISTRATIO	M (Type, Teat, St	ace)
13. PERSONAL HISTORY STATEMENT OF PR	RINCIPALS AND ASSOCIATES RESPO	ONSTRUE FOR A	MT. DROTECT DEGTON	(T
data but keep to essentials)		SHOTDIE FOR A	MIL PROJECT DESIGN	(Furnish complete
NAME & TITLE (Last, First, Middle Int.)		VEADS OF	EXPERIENCE	
	YEARS OF AML DESIGN EXPERIENCE:		RELATED DESIGN	VENDS OF DOWNS
HOVATTER, RICHARD (RJ) – PROJECT MANAGER	9	EXPERIENCE:	9	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:9
Brief Explanation of Responsibilitie	s: Richard Hovatter Jr. joined Thrasher	Fnaineerina Inc. ii	2011 and coming as Duci	
as landslides and mine subsidence of abandoned m erosion control plans and waterline feasibility studi	nu previous experience Mr. Hovatter has a ine land. Mr. Hovatter is responsible for th es.	ovtoncius knowles	an of abandoned at the local	
EDUCATION (Degree, Year, Specializat	cion)			
☐ Bachelor of Science, 2002, Civil Engineering T				
MEMBERSHIP IN PROFESSIONAL ORGANIZAT	TIONS	REGISTRATIO	N (Type, Year, Sta	ute)
				E.), 2009, State of West Virginia
				.E.), 2010, State of Pennsylvania
			, , , , , , , , , , , , , , , , , , , ,	

14. PROVIDE A LIST OF SOFTWARE AND EQUIPMENT AVAILABLE IN THE PRIMARY OFFICE WHICH WILL BE USED TO COMPLETE GN SERVICES

THRASHER ENGINEERING, INC. WILL DESIGN WORK FOR AML UTILIZING ONE OF THE LARGEST NETWORKS OF COMPUTER AIDED DESIGN (CAD) EQUIPMENT, SOFTWARE AND TRAINED PERSONNEL IN THE STATE OF WEST VIRGINIA.

CONNECTED THROUGH A VIRTUAL PRIVATE NETWORK, OUR CAD STAFF HAS THE ABILITY TO SHARE NECESSARY PLANS AMONG OUR LOCATIONS. THIS WILL ALLOW WORK DESIGNED FOR AML TO BE PREPARED AND UPDATED AT THE OFFICE LOCATION THAT BEST MEETS THE NEEDS OF THE SCOPE OF SERVICES.

CIVIL 3D, CARLSON AND MICROSTATION V8 SOFTWARE IS UTILIZED AT 70 CAD STATIONS THROUGHOUT OUR LOCATIONS. ADDITIONALLY, EQUIPMENT INCLUDES 10 LARGE FORMAT (SIZE E) PLOTTERS AND 5 LARGE FORMAT PLOTTER / SCANNERS.CAD PLANS ARE PREPARED BY BOTH DEDICATED CAD EMPLOYEES AND BY STAFF ENGINEERS AND ENGINEERING TECHNICIANS IN EACH OF THE FIRM'S OFFICES.

THRASHER ENGINEERING, INC. ALSO UTILIZES TOP-OF-THE LINE SURVEY EQUIPMENT. OUR SURVEY WORK IS ACCOMPLISHED WITH GLOBAL POSITIONING SYSTEMS (GPS)

AND ELECTRONIC DISTANCE MEASURING (EDM) SURVEY STATIONS WITH DATA GATHERING CAPABILITIES. THE SURVEY CREWS AND OFFICE SUPPORT STAFF
GENERATE MAPPING DELIVERABLES IN VIRTUALLY ANY DIGITAL FORMAT REFERENCED TO SPECIFIED PROJECTION SYSTEMS.

ADDITIONAL SURVEY SERVICES INCLUDE: HIGH ACCURACY MONUMENTATION, ASTRONOMIC OBSERVATIONS / ORIENTATION, NGS BLUE BOOKING, HYDROGRAPHIC, TERRESTRIAL SCANNING, 3D AS-BUILTS, 3D MONITORING, SUB-SURFACE UTILITY LOCATION / DESIGNATION. THE FIELD CREWS ARE ALL EQUIPPED WITH LATE MODEL FOUR WHEEL DRIVE VEHICLES STOCKED WITH THE MOST MODERN EQUIPMENT AVAILABLE TO PERFORM PROFESSIONAL LAND SURVEYING SERVICES.

_63 TRIMBLE GNSS UNITS
6 TRIMBLE ROBOTS
2 PRECISE DIGITAL FIRST ORDER LEVELS WITH INVAR RODS
25 LEICA, NIKON OR TOPCON TOTAL STATIONS ALL MANAGED BY
TRIMBLE TSC3 FIELD COMPUTERS
REMOTE CONTROLLED/UNMANNED MAPPING AERIAL PLATFORM
HYDROGRAPHIC SURVEY VESSEL
3D SUB-SURFACE UTILITY LOCATORS

CIVIL 3D
CARLSON AND MICROSTATION V8 SOFTWARE
70 CAD STATIONS
10 LARGE FORMAT (SIZE E) PLOTTERS AND
5 LARGE FORMAT PLOTTER / SCANNERS.

15. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATED ENGINEER OF RECORD:						
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER		YOUR FIRM'S	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE	
MINERAL WELLS ROUTE 2 WOOD COUNTY	WVDOT / DOH BLDG. 5, ROOM A-109 1900 KANAWHA BLVD., EAST CHARLESTON, WV 25305	CIVIL ENGINEERING SURVEY, CONSTRU DOCUMENTS		\$6,000,000.00	DESIGN STUDY 100% ENGINEERING DESIGN – 0%	
BASNETTVILLE BRIDGE MARION COUNTY	WVDOT / DOH BLDG. 5, ROOM A-109 1900 KANAWHA BLVD., EAST CHARLESTON, WV 25305	CIVIL ENGINEERING SURVEY, CONSTRU DOCUMENTS		\$1,800,000.00	15%	
US ROUTE 119 BRIDGES ROANE COUNTY	WVDOT / DOH BLDG. 5, ROOM A-109 1900 KANAWHA BLVD., EAST CHARLESTON, WV 25305	CIVIL ENGINEERING DESIGN, SURVEY, CONSTRUCTION DOCUMENTS		\$1,500,000.00	10%	
TOTAL NUMBER OF PROJECTS: 3			TOTAL ESTIMATE	ED CONSTRUCTION COSTS: 3 PROJEC	CTS = \$9.3 MILLION	

15. CRENT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNAL ENGINEER OF RECORD: ESENT ACTIVITIES - WATER AND WASTEWATER PROJECTS - SIGNATED ENGINEER OF RECORD

THRASHER IS CURRENTLY THE DESIGNATED "ENGINEER OF RECORD" ON MORE THAN 200 ON-GOING PROJECTS. THESE PROJECTS RANGE FROM SIMPLE BOUNDARY SURVEYS WHICH ARE COMPLETED WITHIN A FEW DAYS' TIME TO COMPLETE MUNICIPAL PROJECTS WHICH ARE COMPLETED OVER AN EXTENDED AMOUNT OF TIME. THE FOLLOWING LIST OF SELECTED CURRENT PROJECTS REPRESENTS THOSE WHICH HAVE BEEN AWARDED TO THRASHER WITHIN THE PAST THREE (3) YEARS AND DEMONSTRATES THE RANGE OF SERVICES PROVIDED BY THRASHER.

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
MALDEN PUBLIC SERVICE DISTRICT WASTEWATER TREATMENT PLANT KANAWHA COUNTY, WV	MALDEN PUBLIC SERVICE DISTRICT P.O. BOX 350 TAD, WV 25201-0350	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$13,600,000.00	50%
CITY OF RIPLEY, WV WASTEWATER TREATMENT PLANT & SYSTEM IMPROVEMENTS IACKSON COUNTY, WV	CITY OF RIPLEY, WV 203 SOUTH CHURCH STREET RIPLEY, WV 25271	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$13,000,000.00	50%
FOUNTAIN PUBLIC SERVICE DISTRICT NATER SYSTEM PROJECT MINERAL COUNTY, WV	FOUNTAIN PUBLIC SERVICE DISTRICT PO BOX 146 / ROUTE 46 EAST KEYSER, WV 26726	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$10,500,000.00	45%
CITY OF ROMNEY WASTEWATER FREATMENT PLANT, ROMNEY, WV	CITY OF ROMNEY 340 E MAIN STREET ROMNEY, WV 26757	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$9,000,000.00	60 %
TOWN OF FLEMINGTON SANITARY SEWER EXTENSION FLEMINGTON, WV	TOWN OF FLEMINGTON PO BOX 443 FLEMINGTON, WV 26347	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION		
CITY OF CLARKSBURG NASTEWATER TREATMENT PLANT UPGRADES FOR LTCP	CITY OF CLARKSBURG 222 WEST MAIN STREET CLARKSBURG, WV 26301	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION		
PRESTON COUNTY SEWER PUBLIC SERVICE DISTRICT WASTEWATER TREATMENT PLANT AND COLLECTION SYSTEM	PRESTON COUNTY SEWER PUBLIC SERVICE DISTRICT PO BOX 89 BRUCETON MILLS, WV 26525	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION		

TOTAL NUMBER OF PROJECTS: 7 SHOWN – 200+ COMPANY-WIDE

TOTAL ESTIMATED CONSTRUCTION COSTS:

TOTAL ESTIMATED CONSTRUCTION COSTS: \$60,350,000.00 SHOWN - TOTAL PROJECTS APPROXIMATELY \$750,000,000.00

15. CUENERT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNAT NGINEER OF RECORD: ESENT ACTIVITIES - WATER AND WASTEWATER PROJECTS SIGNATED ENGINEER OF RECORD

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION	PERCENT COMPLETE
CHESTNUT RIDGE PSD BARBOUR/PRESTON EXTENSION BARBOUR COUNTY, WV	CHESTNUT RIDGE PSD 209 S MAIN STREET P.O. BOX 386 PHILIPPI, WV 26416	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION.	\$4,500,000	90%
GILMER COUNTY PSD WATER LINE EXTENSION	GILMER COUNTY PSD PO BOX 729 GLENVILLE, WV 26351	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$3,200,000.00	85%
MINGO COUNTY PSD WATER LINE EXTENSION	MINGO COUNTY PSD PO BOX 98 NAUGATUCK, WV 25685	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$1,075,000.00	60%
HAMRICK PSD MOORE/PORTERWOOD EXTENSION TUCKER COUNTY, WV	HAMRICK PSD PO BOX 228 HENDRICKS, WV 26271	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$1,100,000.	35%
LINCOLN COUNTY PSD WATER LINE EXTENSION PROJECTS	LINCOLN PSD P.O. BOX 38 240 LITTLE COAL RIVER RD. ALUM CREEK, WV 25003	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$6,920,000.	25%
TOWN OF CAPON BRIDGE WATERLINE AND PUMP STATION REPLACEMENT	TOWN OF CAPON BRIDGE PO BOX 183 FRANK, WV 24920	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$1,925,000.00	50%
CITY OF SALEM, WEST VIRGINIA WATER LINE REPLACEMENT	SALEM, CITY OF P.O. BOX 352 229 W. MAIN SALEM, WV 26426	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$1,500,000.	80%

CURRENTLY IN PRELIMINARY / DESIGN OR CONSTRUCTION PHASES

TOTAL ESTIMATED CONSTRUCTION COSTS:

\$18,220,000.00 REPRESENTED

ESTIMATED COST OF ALL JOBS APPROXIMATELY \$150,000,000.00

THRASHER ENGINEERING IS CURRENTLY THE DESIGNATED "ENGINEER OF RECORD"

IRVEYS WHICH ARE COMPLETED WITHIN A FEW DAYS' TIME TO COMPLETE MUNIC.

PROJECTS WHICH ARE COMPLETED OVER AN EXTENDED AMOUNT OF THE

PROJECTS WHICH ARE COMPLETED OVER AN EXTENDED AMOUNT OF TIME. A . ARTIAL LISTING

OF CURRENT PROJECTS FOLLOWS WHICH DEMONSTRATES THE RANGE OF SERVICES PROVIDED BY THRASHER ENGINEERING.

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
KINGWOOD SEWER REPLACEMENT AND SERVICE EXTENSIONS KINGWOOD, WV	CITY OF KINGWOOD 313 TUNNELTON STREET KINGWOOD, WV 26537	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$10,000,000.00	50%
GREATER HARRISON COUNTY PSD PHASE II-B HARRISON COUNTY, WV	GREATER HARRISON COUNTY PSD P.O. BOX 190 WEST MILFORD, WV 26451	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$6,000,000.00	65%
TENNERTON PSD PHASE III SANITARY SEWER EXTENSION UPSHUR COUNTY, WV	TENNERTON PSD 188 FAYETTE ST. BUCKHANNON, WV 26201	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$6,800,000.00	5%
ENLARGED HEPZIBAH PSD SANITARY SEWER EXTENSION HARRISON COUNTY, WV	ENLARGED HEPZIBAH PSD DRAWER H HEPZIBAH, WV 26369	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$2,666,000.00	50%
CITY OF WEIRTON, WV PHASE II SEWER PROJECT	CITY OF WEIRTON 3031 BIRCH DRIVE WEIRTON, WV 26062	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$5,728,000.00	40%
TOWN OF JUNIOR WASTEWATER TREATMENT PLANT JUNIOR, WV	TOWN OF JUNIOR PO BOX 247 JUNIOR, WV 26275	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$2,332,000.00	45%
TOTAL NUMBER OF PROJECTS: TOTAL ACTIVE SANITRY SEWER PROJECT	7 REPRESENTED CTS APPROXIMATELY 38	TOTAL ESTIN	MATED CONSTRUCTION COSTS: \$46,000,0	00.00
		TOTAL FOR ALL	PROJECTS APPROXIMATELY \$150,000,000	

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	
BERKELEY COUNTY PUBLIC SERVICE SEWER DISTRICT WASTEWATER TREATMENT PLANT BERKELY COUNTY,WV	DESIGN SUPPORT CONSTRUCTION ADMIN.	BERKELEY COUNTY PSSD PO BOX 944 MARTINSBURG, WV 25402	2015	\$20,000,000.00	\$10,000,000.00	
RD BAILY WATER SYSTEM MCGRAWS, WV	DESIGN SUPPPORT CONSTRUCTION ADM.	RAVENCLIFF-MCGRAWS- SAULSVILLE PSD P.O. BOX 217 MCGRAWS, WV 25875	2016	\$30,000,000.00	\$12,000,000.00	

COMP ED WORK - WVDEP OFFICE OF AML&R - PROJECTS DESIGN. D ENGINEER OF RECORD

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOU WERE THE DESIGNATED ENGINEER OF RECORD THRASHER HAS DESIGNED, BID AND PROVIDED CONSTRUCTION SERVICES FOR MORE THAN 200 PUBLICLY FUNDED PROJECTS WITHIN THE PAST 10 YEARS. THE FOLLOWING LIST IS COMPRISED OF PROJECTS COMPLETED WITHIN THE LAST THREE (3) YEARS THAT DEMONSTRATE THE RANGE OF DISCIPLINES PROVIDED BY THRASHER

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
PLEASANT VALLEY AML RECLAMATION MARION COUNTY, WV	WV DEP, OFFICE OF AML&R 601 57 TH STREET, SE CHARLESTON, WV 25304	\$764,000.00	2013	YES YES
ROGER (CAMP HILL) AML RECLAMATION TUCKER COUNTY, WV	WV DEP, OFFICE OF AML&R 601 57 TH STREET, SE CHARLESTON, WV 25304	\$210,000.00	2013	YES
ANGLINS RUN PORTALS AML RECLAMATION BARBOUR COUNTY, WV	WV DEP, OFFICE OF AML&R 601 57 TH STREET, SE CHARLESTON, WV 25304	\$321,000.00	2010	YES
ROARING CREEK SUBSIDENCE AML RECLAMATION RANDOLPH COUNTY, WV	WV DEP, OFFICE OF AML&R 601 57 TH STREET, SE CHARLESTON, WV 25304	\$353,000.00	2010	YES
SQUIRES CREEK PORTALS REFUSE AML RECLAMATION	WV DEP, OFFICE OF AML&R 601 57 TH STREET, SE CHARLESTON, WV 25304	\$260,000.00	2011	YES
OVERFIELD (LAFFERTY) CS&P AML RECLAMATION	WV DEP, OFFICE OF AML&R 601 57 TH STREET, SE CHARLESTON, WV 25304	\$492,000.00	2011	YES
LAUREL RUN #1 REFUSE / HIGHWALL AML RECLAMATION MONONGALIA COUNTY, WV	WV DEP, OFFICE OF AML&R 601 57 TH STREET, SE CHARLESTON, WV 25304	\$1,558,000.00	2012	YES
CLARKSBURG (LYONS) LANDSLIDE AML RECLAMATION HARRISON COUNTY, WV	WV DEP, OFFICE OF AML&R 601 57 TH STREET, SE CHARLESTON, WV 25304	\$1,492,000.00	2012	YES

PROJECT NAME, TYPE	ST 5 YEARS ON WHICH YOUR FIRM W	AS THE DESIGNATED ENGINEER OF RECOR	D	
AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	(YES OR NO)
MCHENRY BUSINESS PARK SITE DEVELOPMENT AND UTILITIES GARRETT COUNTY, MD	GARRETT COUNTY EDA 203 SOUTH 4TH STREET COURTHOUSE ROOM 208 OAKLAND, MD 21550	\$3,500,000.00	2011	YES
WHITE OAKS BUSINESS PARK SITE DEVELOPMENT AND UTILITIES HARRISON COUNTY, WV	HIGH TECH CORRIDOR DEVELOPMENT,LLC MR. JACK KEELEY PO BOX 1532 CLARKSBURG, WV 26302	\$12,100,000.00	2010	YES
CANYON PUBLIC SERVICE DISTRICT SANITARY SEWER UPGRADE AND EXT MONONGALIA COUNTY, WV	CANYON PSD 12 WICHITA STREET MORGANTOWN, WV 26508	\$6,500,000.	2009	YES
HEPIZIBAH PSD SANITARY SEWER EXTENSION HARRISON COUNTY, WV	ENLARGED HEPZIBAH DRAWER H HEPZIBAH, WV 26369	\$3,400,000	2010	YES
SUN VALLEY WATER AND SEWER SYSTEM IMPROVEMENTS REYNOLDSVILLE, WV	SUN VALLEY PSD PO BOX 95 REYNOLDSVILLE, WV 26422	\$12,500,000	2010	YES
BROOKE COUNTY PSD REPLACEMENT AND EXTENSION BROOKE COUNTY, WV	BROOKE CO. PSD 711 CHARLES ST. P. O. BOX 150 WELLSBURG, WV 26070	\$10,000,000	2009	YES
HUTTONSVILLE PSD PHASE II RANDOLPH COUNTY, WV	HUTTONSVILLE PSD P.O. BOX 277 MILL CREEK, WV 26280	\$4,300,000	2009	YES
POCAHONTAS COUNTY PSD WWTP AND COLLECTION SYSTEM POCAHONTAS COUNTY, WV	POCAHONTAS COUNTY PSD HC 63 BOX 122 FRANK, WV 24920	\$11,600,000	2009	YES
HARDY COUNTY WATER SYSTEM IMPROVEMENTS HARDY COUNTY, WV	HARDY COUNTY PSD 223 N. MAIN STREET MOOREFIELD, WV 26836	\$8,000,000	2010	YES

PROJECT NAME, TYPE AND LOCATION	5 YEARS ON WHICH YOU WERE THE DUIGN NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED
LEWIS COUNTY ECONOMIC DEVELOPMENT	LEWIS COUNTY EDA			(YES OR NO)
AUTHORITY	16 GARTON PLAZA			
BLOODY RUN WATER LINE EXTENSION	WESTON, WV 26452	\$167.165.00		
		\$167,165.00	2013	YES
HEPIZIBAH PSD	ENLARGED HEPZIBAH			
SANITARY SEWER EXTENSION	DRAWER H			
HARRISON COUNTY, WV	HEPZIBAH, WV 26369	\$3,400,000	2010	YES
COLITINATESTERN DOD	SOUTHWESTERN WATER PUBLIC SERVICE			
SOUTHWESTERN PSD WATER LINE EXTENSION / REPLACEMENT	DISTRICT			
WATER LINE EXTENSION / REPLACEIVIENT	P. O. BOX 98 FLEMINGTON, WV 26347	\$10,430,000	2012.	YES
	reciving for, wv 2634/			
CITY OF SALEM	CITY OF SALEM			
WATER LINE REPLACEMENT AND DAM	229 WEST MAIN STREET			
IMPROVEMENTS HARRISON COUNTY, WV	SALEM, WV 26426	\$981,595.00	2013	YES
TOWN OF ROWLESBURG WATER TREATMENT PLANT/ EXT.	TOWN OF ROWLESBURG			
PRESTON COUNTY, WV	PO BOX 458 42 POPLAR STREET			
, , , ,	ROWLESBURG, WV 26425	\$4,500,000.	2010	YES
COUNTY LINE BRIDGE	WVDOT / DOH			
MARSHALL COUNTY, WV	BLDG. 5, ROOM A-109			
•	1900 KANAWHA BLVD., EAST	\$1,800,000.00	2012	
	CHARLESTON, WV 25305	V1,000,000.00	2013	YES
WVDOH DISTRICT 7 HEADQUARTERS	Wallet / Law			
LEWIS COUNTY, WV	WVDOT / DOH BLDG. 5, ROOM A-109			-
	1900 KANAWHA BLVD., EAST	\$2,300,000.00	-	-
	CHARLESTON, WV 25305		2013	YES
1-64 WEIGH STATION	WVDOT / DOH			
PUTNAM COUNTY, WV	BLDG. 5, ROOM A-109			
	1900 KANAWHA BLVD., EAST CHARLESTON, WV 25305	\$800,000.00	2013	YES
	J. W. H. C. C. T. O. T. V. V. V. 2.3.003			

18. COMPLETED WORK W	ITHIN LAST 5 YEARS ON WHICH	VOU MUSE A STEED WITH COMME					
WAS SPONSIBLE)	THIN DASI S TEARS ON WHICH	YOU WIRE A. ATED WITH OTHER FIRM	AS (INDICA	TE PHASE OF WORK	FOR WH YOUR FIRM		
PROJECT NAME, TYPE	NAME AND ADDRESS	ESTIMATED CONSTRUCTION COST OF	YEAR	CONSTRUCTED	ETDM AGGGGTA		
AND LOCATION	OF OWNER	YOUR FIRM'S PORTION	TEAR	(YES OR NO)	FIRM ASSOCIATED WITH		
MC DOWELL COUNTY FEDERAL	US DEPARTMENT OF JUSTICE	,		(125 011 110)	WIIII		
PRISON	FEDERAL BUREAU OF PRISONS		-				
WELCH, WV	500 FIRST STREET NW	\$25,000,000.00			BELL JUSTICE FACILITIES		
SITE DEVELOPMENT	WASHINGTON, DC 20534		2010	YES	DELEGIOSTICE FACILITIES		
CITY OF BECKLEY INTERMODAL	CITY OF BECKLEY						
GATEWAY	409 S. KANAWHA STREET	\$250,000.00	2012	VEC			
	BECKLEY, WV 25801	\$250,000.00	2012	YES	PARSONS BRINCKERHOFF		
			==				
				-			
	_		1				
10 LISS TIME SPACE TO SECURE							
19. USE THIS SPACE TO PROVID	DE ANY ADDITIONAL INFORMATION	OR DESCRIPTION OF RESOURCES SUPPORTING	YOUR FIRM'S	QUALIFICATIONS TO	PERFORM WORK FOR THE		
19. USE THIS SPACE TO PROVIDE ANY ADDITIONAL INFORMATION OR DESCRIPTION OF RESOURCES SUPPORTING YOUR FIRM'S QUALIFICATIONS TO PERFORM WORK FOR THE WV ABANDONED MINE LANDS PROGRAM							
SEE ATTACHMENT – STATEMENT OF QUALIFICATIONS							
20. THE FOREGOING IS A STATEMENT OF FACTS. 5							
SIGNATURE: Thad Bella TITLE PARTNER / PRINCIPAL IN CHARGE							
PRINTED NAME: CHADWICK D. BILLED. D. F.					112013		
PRINTED NAME: CHADWICK D. BILLER, P.E.							

CERTIFICATION AND SIGNATURE PAGE

By signing below, I certify that I have reviewed this Solicitation in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this bid or proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

The Thrasher (Group, Inc.
(Company)	
Chad Brc	Cer
(Authorized Signature)	
Chadwick D. Biller, PE	- Pricnipal-In-Charge
(Representative Name, Title)	
304-624-4108	304-624-7831
(Phone Number)	(Fax Number)
12/31/2013	
(Date)	