



gai consultants

**EXPRESSION OF INTEREST
ENGINEERING SERVICES REQUIRED
FOR THE
LITTLE LAUREL RUN HIGHWALL DESIGN
PRESTON COUNTY, WEST VIRGINIA
DEP14783**

Issuing Office:

West Virginia Department of Environmental Protection
Office of Abandoned Mine Lands and Reclamation
601 57th Street, S.E.
Charleston, West Virginia 25304

By:

GAI Consultants, Inc.
500 Summers Street, 3rd Floor
Charleston, West Virginia 25301
(304) 926-8100

RECEIVED

2009 OCT -1 A 11: 46

PROCUREMENT DIVISION
STATE OF WV

Project E091155

October 1, 2009

ORIGINAL

... transforming ideas into reality



GAI Consultants, Inc.
 Charleston Office
 500 Summers Street 3rd Fl Charleston, WV 25301
 Tel 304.926.8100 Fax 304.926.8180
 www.gaiconsultants.com

To: **Purchasing Division**
2019 Washington Street, East
Charleston, West Virginia 25305

Date: October 1, 2009

Project No.: E091155

Attn: **Chuck Bowman** Re: **Expression of Interest, Engineering Services Required for the Little Laurel Run Highwall Design, DEP14783**

VIA: _____ Anticipated Arrival Date: _____

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 Next Day Delivery
 Two-Day Delivery
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 Other: _____
 For Bids Due: _____

We are sending you the materials listed below:

Copies	Dated	Description
1	10/1/2009	Original of Expression of Interest
1	10/1/2009	Copy of Expression of Interest
1	10/1/2009	CD Copy of Expression of Interest

cc:

Remarks:

Signed: *Charles Straley*

Name: **Charles F. Straley, P.E., P.S.**

Title: **Engineering Manager**

Rev: 10/04

Transmittal Form

October 1, 2009

Project E091155

Purchasing Division
2019 Washington Street, East
Charleston, West Virginia 25305

**RE: Expression of Interest
Engineering Services Required for the
Little Laurel Run Highwall Design
DEP14783**

Gentlemen:

GAI Consultants, Inc. (GAI) welcomes the opportunity to submit our proposal in response to your Request for Expression of Interest DEP14783 to provide professional engineering services. These services will result in the development of mapping, engineering drawings, contract specifications, and other contract documents required for the **Little Laurel Run Highwall Design** project in Preston County, West Virginia.

GAI is exceptionally well qualified to provide the State with the above referenced services offered at the most favorable terms, from both a technical and cost standpoint. The work under this contract will be performed in our Charleston, West Virginia office. The Charleston office has provided the State with quality engineering services for the abatement of problems arising from abandoned mine lands since opening in 1985. We have served the State on previous West Virginia Department of Environmental Protection – Abandoned Mine Land (WVDEP-AML) open-end contracts and other contracts from 1986 to the present. As a result of this long-term experience, GAI can provide the required expertise, continuity and conformance to program guidelines established by the WVDEP-AML.

GAI welcomes you to visit our facilities located at 500 Summers Street, 3rd Floor, Charleston, West Virginia 25301.

GAI has:

- on staff four West Virginia registered civil and mining engineers who will review, stamp, and sign all work and contract documents;
- available staff of civil and mining engineers, CADD operators, surveyors, geologists, and biologists with extensive experience in reclamation engineering, hydrology, and geology; and
- extensive experience in surface and underground coal mining, environmental, ecological principles, stream restoration and mitigation, and contract administration.

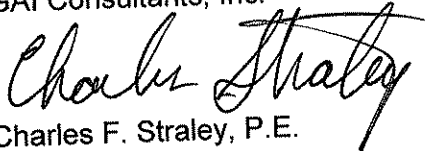
Purchasing Division
October 1, 2009

In summary, GAI will provide the most favorable terms as a result of:

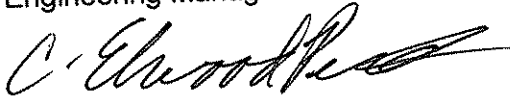
- Exceptional qualifications/previous 20 years of in-state AML experience'
- Local, Charleston presence with excellent access to the project site and AML offices; and
- Efficient and experienced personnel.

We look forward to continuing our relationship with WVDEP-AML.

Sincerely,
GAI Consultants, Inc.



Charles F. Straley, P.E.
Engineering Manager



C. Elwood Penn, IV, P.E.
Assistant Vice President
Managing Officer

Enclosure

**EXPRESSION OF INTEREST
ENGINEERING SERVICES REQUIRED
FOR THE
LITTLE LAUREL RUN HIGHWALL DESIGN
PRESTON COUNTY, WEST VIRGINIA
DEP14783**

Issuing Office:

West Virginia Department of Environmental Protection
Office of Abandoned Mine Lands and Reclamation
601 57th Street, S.E.
Charleston, West Virginia 25304

By:

GAI Consultants, Inc.
500 Summers Street, 3rd Floor
Charleston, West Virginia 25301
(304) 926-8100

October 1, 2009



gai consultants

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LIST OF ABANDONED MINE LANDS PROJECTS COMPLETED BY GAI CONSULTANTS,
INC., FOR THE STATE OF WEST VIRGINIA.



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

Request for Quotation

RFQ NUMBER
 DEP14783

PAGE
 1

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

VENDOR

RFQ COPY
 TYPE NAME/ADDRESS HERE
 GAI Consultants, Inc.
 500 Summers Street, 3rd Floor
 Charleston, WV 25301

S.H.P.T.O.

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

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
09/10/2009				

BID OPENING DATE: 10/01/2009 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	JB		906-29		
LITTLE LAUREL RUN HIGHWALL DESIGN						
EXPRESSION OF INTEREST						
THE WEST VIRGINIA PURCHASING DIVISION, FOR THE AGENCY, THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, IS SOLICITING EXPRESSIONS OF INTEREST FOR PROFESSIONAL ENGINEERING DESIGN SERVICES AND CONSTRUCTION MONITORING SERVICES AT THE LITTLE LAUREL RUN HIGHWALL PROJECT IN PRESTON COUNTY, WEST VIRGINIA, PER THE FOLLOWING BID REQUIREMENTS AND ATTACHED SPECIFICATIONS.						
BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THE STATE MAY DEEM THIS CONTRACT NULL AND VOID AND TERMINATE SUCH CONTRACT WITHOUT FURTHER ORDER.						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>C. Edward Ross</i>	TELEPHONE 304.926.8100	DATE 10/1/2009
TITLE Managing Officer	FEIN 25-1260999	ADDRESS CHANGES TO BE NOTED ABOVE

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

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

PROJECT NAME
 Little Laurel Run Highwall Design Project -
 DEP14783

DATE (DAY, MONTH, YEAR)
 01, October 2009

FEIN
 25-1260999

1. FIRM NAME
 GAI Consultants, Inc.

2. HOME OFFICE BUSINESS ADDRESS
 385 E. Waterfront Drive
 Homestead, Pennsylvania 15120

3. FORMER FIRM NAME
 NA

4. HOME OFFICE TELEPHONE
 412-476-2000

5. ESTABLISHED (YEAR)
 1958

6. TYPE OWNERSHIP
 Corporation

6a. WV REGISTERED DBE
 (Disadvantaged Business Enterprise)
 NO

7. PRIMARY AML DESIGN OFFICE: ADDRESS/ TELEPHONE/ PERSON IN CHARGE/ NO. AML DESIGN PERSONNEL EACH OFFICE
500 Summers Street, 3rd Floor, Charleston, WV 25301 / 304/926-8100 / C. Elwood Penn, IV, P.E. / 19 Charleston, 13 Pittsburgh

8. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM
 C. Elwood Penn, IV, P.E., Managing Officer / Asst. Vice President
 Gary M. DeJidas, P.E., President, 412/476-2000
 Lawrence R. Dadds, P.E., Senior Vice President, 412/476-2000

9. PERSONNEL BY DISCIPLINE (Bold Lettering Indicates Minimum Design Team Members)
- | | | |
|----------------------------|-----------------------------|-------------------------|
| 82 ADMINISTRATIVE | 4 LANDSCAPE ARCHITECTS | 18 STRUCTURAL ENGINEERS |
| 0 ARCHITECTS | 1 MECHANICAL ENGINEERS | 17 SURVEYORS |
| 8 BIOLOGIST | 2 MINING ENGINEERS | 4 TRAFFIC ENGINEERS |
| 47 CADD OPERATORS | 0 PHOTOGRAMMETRISTS | 145 OTHER |
| 2 CHEMICAL ENGINEERS | 10 PLANNERS: URBAN/REGIONAL | |
| 40 CIVIL ENGINEERS | 2 SANITARY ENGINEERS | |
| 93 CONSTRUCTION INSPECTORS | 18 SOILS ENGINEERS | 590 TOTAL PERSONNEL |
| 32 DESIGNERS | 4 SPECIFICATION WRITERS | |
| 0 DRAFTSMEN | | |

TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE: **4**
 *RPEs other than Civil and Mining must provide supporting documentation that qualifies them to supervise and perform this type of work.

GAI can field four separate teams (P.E. and CADD operator as defined by EOJ) from its Charleston office. However, only one team is expected for this project.
 GAI has completed all of its AML projects since 1986 from the Charleston office.

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

11. OUTSIDE KEY CONSULTANTS/SUB-CONSULTANTS ANTICIPATED TO BE USED. Attach "AML Consultant Confidential Qualification Questionnaire" for each if copy is not on file with AML.

NAME AND ADDRESS: None	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 _____
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 _____

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

YES Description and Number of Projects: GAI has completed 119 projects for the WV-AML Program (18 in the last five years). GAI has completed over 150 projects for all AML Programs (WV, PA, VA, MD, OSM). These projects include but are not limited to design of abandoned refuse piles, abandoned portals, demolition of facilities, design of drainage control structures, and revegetation plans.

NO

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

YES Description and Number of Projects: GAI has completed many (over 200) projects that required soil analysis for revegetation plans, acid/base counts, foundation, stability analysis, engineering properties, etc. Most of the 119 WV-AML projects required some type of soil analysis. GAI has completed some analysis in-house and used subconsultants at other times depending on requirements.

NO

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

YES Description and Number of Projects: GAI has completed numerous (300+) projects which involve hydrology and hydraulics including projects that were AML/mining related. Most of the 119 WV-AML projects required hydrology and hydraulic evaluations and design for drainage control structures, mine hydraulic level, mainstream event, water transmission, sediment control, etc. GAI is also experienced and trained in natural stream restoration and wetland mitigation.

NO

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

YES Description and Number of Projects: GAI has produced contour mapping on most of its 119 AML projects. We subcontract our aerial photography, if none is available. We do not anticipate aerial photography being needed to complete this project.

NO

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

YES Description and Number of Projects: GAI has completed over 70 projects involving domestic waterline design of which 42 were for the WV-AML program. This has included aquifer degradation evaluation and waterline design, Public Service District interaction, PSC requirements, Health Department permits, etc. to include field surveys, field inspection, and public hearings and meetings. **Aquifer degradation and waterline design** was the primary components of these projects.

NO

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

YES Description and Number of Projects: GAI has completed over 100 AMD evaluations and abatement designs of which 25 were for the WV-AML program; however, AMD was a consideration on most of its 119 WV-AML projects. GAI is noted and published for some of its designs and projects to include grouting programs, SAP installations and other innovative abatement designs.

NO

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

NAME & TITLE (Last, First, Middle Int.) Penn, IV, C. Elwood Managing Officer	YEARS OF EXPERIENCE	
	YEARS OF AML DESIGN EXPERIENCE: 6	YEARS OF AML RELATED DESIGN EXPERIENCE: 26

Brief Explanation of Responsibilities
 Mr. C. Elwood Penn, IV, P.E., Branch Manager will serve as Contract Administrator. He will be responsible for the overall management and performance of the project. He will review the work directive, visit the site along with the WVDEP to better familiarize himself with site conditions and work requirements, and then guide the preparation of the scope of work and cost proposal by GAI staff. A written proposal including a detailed cost estimate (manhours and expenses associated with the project) will then be prepared and submitted to the WVDEP for their review. Upon WVDEP's approval of the proposal, Mr. Penn will arrange for the start of the work. Included will be project staffing, arrangement and detailing of the scope of services to be provided by GAI's subcontractors, and review of project budget and schedule. Mr. Penn will generally supervise the work in progress and review work products at intermediate points and finally prior to submittal to the WVDEP and will be responsible for maintaining liaison with the WVDEP Project Manager including project status reports as required.

EDUCATION (Degree, Year, Specialization)
 B.S. 1985 Civil Engineering

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS
 American Society of Civil Engineers
 Society of American Military Engineers
 National Society of Professional Engineers

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

NAME & TITLE (Last, First, Middle Int.) Straley, Charles F. Project Manager	YEARS OF EXPERIENCE	
	YEARS OF AML DESIGN EXPERIENCE: 17	YEARS OF AML RELATED DESIGN EXPERIENCE: 23

Brief Explanation of Responsibilities
 Mr. Straley will be responsible for day-to-day project activities and guidance of the GAI staff. His main activities will include development of detailed step-by-step project work plans to ensure the project activities are completed on-budget and on-time, review of the work products at intermediate points and at project completion, providing guidance and direction to project staff, as well as engineering and design work. Mr. Straley will be responsible for preparation of construction drawings, technical specifications, calculations and cost estimates. He will oversee the geotechnical aspects of the project, including but not limited to subsurface exploration, foundation and embankment design, and slope stability.

EDUCATION (Degree, Year, Specialization)
 B.S. 1986 Civil Engineering
 M.S. 1988 Geotechnical Engineering

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS
 Society of American Military Engineers

REGISTRATION (Type, Year, State)
 1992 Professional Engineer (WV, OH, KY, IN)
 1996 Professional Land Surveyor, WV

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE	
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:
Hemme, James A. Project Manager	11	19

Brief Explanation of Responsibilities
 Mr. Hemme will be responsible for preparation of construction drawings, technical specifications, calculations and cost estimates. He will oversee hydraulic/hydrology aspects of the project, including but not limited to stormwater management, erosion and sediment control, and mine discharge.

EDUCATION (Degree, Year, Specialization)
 B.S. 1989 Civil Engineering

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS
 REGISTRATION (Type, Year, State)
 1992 Professional Engineer (WV, KY, IN, OH)
 2000 Licensed Remediation Specialist WV

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE	
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:
Young, Mark D. Project Engineer	6	10

Brief Explanation of Responsibilities
 Mr. Young will be responsible for preparation of construction drawings, technical specifications, calculations and cost estimates. He will oversee hydraulic/hydrology aspects of the project, including but not limited to stormwater management, erosion and sediment control, and mine discharge.

EDUCATION (Degree, Year, Specialization)
 B.S. 1998 Civil Engineering

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS
 American Society of Civil Engineers
 Society of American Military Engineers

REGISTRATION (Type, Year, State)
 2002 Professional Engineer (WV, KY, IN, OH)
 National Environmental Protection (NEPA) Training

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

NAME & TITLE (Last, First, Middle Int.) <i>Prine, Joseph A., E.I. Project Engineer</i>	YEARS OF AML DESIGN EXPERIENCE: 6	YEARS OF AML RELATED DESIGN EXPERIENCE: 1	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 1
	YEARS OF EXPERIENCE		

Brief Explanation of Responsibilities

Mr. Prine will be responsible for preparation of construction drawings, technical specifications, calculations and cost estimates. He will oversee hydraulic/hydrology aspects of the project, including but not limited to stormwater management, erosion and sediment control, and mine discharge.

EDUCATION (Degree, Year, Specialization)

B.S. 2001 Civil Engineering

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

REGISTRATION (Type, Year, State)
2000 Nicet
2006 40 hour Hazwoper

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

NAME & TITLE (Last, First, Middle Int.) <i>Green, Jason T. CADD Operator/Designer</i>	YEARS OF AML DESIGN EXPERIENCE: 13	YEARS OF AML RELATED DESIGN EXPERIENCE: 13	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 13
	YEARS OF EXPERIENCE		

Brief Explanation of Responsibilities

Mr. Green will be responsible for activities that will include development of project drawings, transferring survey data to project plans, and development of project details.

EDUCATION (Degree, Year, Specialization)

A.A.S., 2002, Engineering Technology

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

Society of American Military Engineers

REGISTRATION (Type, Year, State)

NICET Level I & II

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE	
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Workman, David L. CADD Operator/Designer	8	1

Brief Explanation of Responsibilities
Mr. Workman will be responsible for activities that will include development of project drawings, transferring survey data to project plans, and development of project details.

EDUCATION (Degree, Year, Specialization)
 B.S. 2000 Industrial Engineering Technology
 MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS
 REGISTRATION (Type, Year, State)

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE	
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Pauley, Heather R. Environmental Specialist	1	0

Brief Explanation of Responsibilities
Ms. Pauley will be responsible for providing services related to natural resources, including but not limited to wetland delineation, benthic studies, wetland restoration or mitigation, endangered species and stream restoration.

EDUCATION (Degree, Year, Specialization)
 B.S. 2007 Environmental Science/Geology
 MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS
 REGISTRATION (Type, Year, State)

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE	
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Turka, Robert J. Senior Staff Hydrogeologist	20	26

Brief Explanation of Responsibilities
 Mr. Turka will provide expertise in areas of coal refuse reclamation, mine subsidence and AMD remediation.

EDUCATION (Degree, Year, Specialization)
 B.S. 1971 Earth Planetary Science
 MAT 1972 Secondary Education (Natural Science)

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS
 American Institute of Professional Geologists
 Association of Engineering Geologist
 International Association of Engineering Geologists
 Pittsburgh Geological Society
 National Ground Water Association

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE	
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Newman, F. Barry Manager – Geotechnical/Structural	20	11

Brief Explanation of Responsibilities
 Mr. Newman will provide expertise in the areas of geotechnical engineering, including but not limited to landslides, retaining wall design, slope stability and subsidence.

EDUCATION (Degree, Year, Specialization)
 B.S. 1968 Civil Engineering
 M.S. 1970 Civil Engineering

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS
 American Society of Civil Engineers

REGISTRATION (Type, Year, State)
 1974 Professional Engineer (PA, WV, CO, IN, MD, TX)

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Bruhn, Robert W. Staff Consultant	20	40	11

Brief Explanation of Responsibilities

Mr. Bruhn will provide expertise in the areas of subsurface investigation, soil and rock mechanics, and subsidence.

EDUCATION (Degree, Year, Specialization)

B.S. 1967 Geology
M.S. 1969 Civil Engineering
A.B.D. Civil Engineering

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

American Society of Civil Engineers
Association of Engineering Geologists
Society of Mining Engineers

REGISTRATION (Type, Year, State)
1982 Professional Engineer, (PA)

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Michalski, Stan R. Senior Staff Geologist	20	34	11

Brief Explanation of Responsibilities

Mr. Michalski will provide expertise in the areas of geologic studies, mine fire investigations and impoundments.

EDUCATION (Degree, Year, Specialization)

B.S. 1967 Earth and Planetary Science
M.A. 1975 Resource Management
MLIS 2004 Library and Information Science

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

Association of Engineering Geologist

REGISTRATION (Type, Year, State)
1995 Professional Geologist, (PA)

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE	
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Frech, Kerry L. Senior Staff Engineer	11	11

Brief Explanation of Responsibilities

Mr. Frech will provide expertise in the area of hydrology and hydraulics, including but not limited to stormwater management and modeling of drainage systems.

EDUCATION (Degree, Year, Specialization)
 B.S. 1977 Civil Engineering
 M. Eng. 1978 Environmental Engineering

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS
 American Society of Civil Engineers
 American Water Resources Association

REGISTRATION (Type, Year, State)
 1983 Professional Engineer, (PA)

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE	
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Gower, Thomas R. Staff Geologist	17	11

Brief Explanation of Responsibilities

Mr. Gower will provide expertise in the area of geology and subsurface investigations.

EDUCATION (Degree, Year, Specialization)
 B.S. 1974 Geology

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS
 Association of Engineering Geologist

REGISTRATION (Type, Year, State)
 Professional Geologist, 1989 (AR, PA)

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

NAME & TITLE (Last, First, Middle Int.) Queen, Terry W. Senior Technician	YEARS OF AML DESIGN EXPERIENCE: 13	YEARS OF AML RELATED DESIGN EXPERIENCE: 30	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 13
	Brief Explanation of Responsibilities		

Mr. Queen will be responsible for collecting field data including but not limited to water samples, soil borrow samples, refuse samples, and verification of mapping.

EDUCATION (Degree, Year, Specialization) 1986 Math and Physical Education Classroom 1992 Drafting and Design	MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS Trowler Nuclear Densometer Certification WVDOT Portland Cement Concrete and Compaction
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13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.) Foster, Mark E. Technician	YEARS OF AML DESIGN EXPERIENCE: 2	YEARS OF AML RELATED DESIGN EXPERIENCE: 2	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 0
	Brief Explanation of Responsibilities		

Mr. Foster will be responsible for collecting field data including but not limited to water samples, soil borrow samples, refuse samples, and verification of mapping.

EDUCATION (Degree, Year, Specialization) B.A. Regents, Bachelor of Arts A.S. Applied Science (Occupational Development)	MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS 10 Hour OSHA, OSHA Construction Safety & Health, Foreman Leadership, Blueprint Reading, Line & Grade, Hazardous Waste Worker, Nuclear Radiation Safety, Portable Gage Safety Training, Pipelaying, Lead Abatement Worker, Asbestos Abatement Worker
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14. PROVIDE A LIST OF SOFTWARE AND EQUIPMENT AVAILABLE IN THE PRIMARY OFFICE WHICH WILL BE USED TO COMPLETE AML DESIGN SERVICES

Equipment: HP 1050C Plotter Software: AutoCAD

Digital Planimeters (2) MicroStation

HP Digital Cameras Microsoft Word

Minolta Photocopier/Printer Microsoft Excel

Nikon DTM-450 Total Stations Water CAD

Nikon DTM-550 Total Stations Sewer CAD

Gorman Global Positioning Unit Flowmaster

TR-55

Numerous Hydrology/Hydraulic Models

Maptech (Professional)

REAME (Slope Stability)

Hydrocalc Hydraulics

GeoPack Design

15. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATED ENGINEER OF RECORD

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
Romney Bridge Romney, WV	WV Division of Highways	Design of Bridge	15,000,000	98%
King Coal Highway Mingo County, WV	WE Division of Highways	Design of Roadway	\$60,000,000	90%
Willow Wood Bridge Summer County, WV	WV Division of Highways	Design of Bridge	\$5,200,000	98%
Heizer Creek Drainage/ Wolfpen Landslide Putnam and Kanawha Counties, WV	WV Department of Environmental Protection Office of Abandoned Mine Lands and Reclamation	Preparation of reclamation plan	\$2,500,000	99%
Duck Creek Landslide Harrison County, WV	WV Department of Environmental Protection Office of Abandoned Mine Lands and Reclamation	Preparation of reclamation plan	\$6,000,000	90%

TOTAL NUMBER OF PROJECTS: 5 (primary office) TOTAL ESTIMATED CONSTRUCTION COSTS: \$83,300,000.00

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST (in thousands)	YEAR	CONSTRUCTED (YES OR NO)
<p>Logan (Marcum) Drainage Emergency Project, Logan County, West Virginia</p> <p>The scope of work involves emergency evaluation and investigation to develop a method to collect and discharge the seepage from the coal seam and conveyance to a downstream drainage system. Construction plans and specifications were developed.</p>	<p>West Virginia Division of Environmental Protection, Abandoned Mine Lands Program Charleston, West Virginia</p>	<p>\$47 (Fee)</p>	<p>2006</p>	<p>YES</p>
<p>Bud/Alpoca Waterline Extension Feasibility Study, Wyoming County, West Virginia</p> <p>The scope of work included interviewing local residents and government officials; collecting and analyzing surface and private water supply samples; researching water quality records; designing and costing remedial measures; calculating the percentage of wells that had been degraded by mining activity; and summarizing the findings in a report.</p>	<p>West Virginia Division of Environmental Protection, Abandoned Mine Lands Program Charleston, West Virginia</p>	<p>\$32 (Fee)</p>	<p>2006</p>	<p>NA</p>
<p>Nuriva/Maben Waterline Extension Feasibility Study, Wyoming County, West Virginia</p> <p>The scope of work included interviewing local residents and government officials; collecting and analyzing surface and private water supply samples; researching water quality records; designing and costing remedial measures; calculating the percentage of wells that had been degraded by mining activity; and summarizing the findings in a report.</p>	<p>West Virginia Division of Environmental Protection, Abandoned Mine Lands Program Charleston, West Virginia</p>	<p>\$32 (Fee)</p>	<p>2006</p>	<p>NA</p>

<p>Herndon Heights Waterline Extension Feasibility Study, Wyoming County, West Virginia</p> <p>The scope of work included interviewing local residents and government officials; collecting and analyzing surface and private water supply samples; researching water quality records; designing and costing remedial measures; calculating the percentage of wells that had been degraded by mining activity; and summarizing the findings in a report.</p>	<p>West Virginia Division of Environmental Protection, Abandoned Mine Lands Program Charleston, West Virginia</p>	<p>\$32 (Fee)</p>	<p>2006</p>	<p>NA</p>
<p>Handley/Upper Creek Drainage Project, Kanawha County, West Virginia</p> <p>The reclamation plan included dewatering the underground impoundment(s) and creating diversion ditches to redirect the drainage around structures to the nearby stream. Regrading the areas behind the retaining wall, revegetating, and providing proper drainage for all disturbed areas is also included in the plan.</p>	<p>West Virginia Division of Environmental Protection, Abandoned Mine Lands Program Charleston, West Virginia</p>	<p>\$61 (Fee)</p>	<p>2005</p>	<p>YES</p>
<p>Latrobe (Gibson) Landslide Emergency Project, Logan County, West Virginia</p> <p>The scope of work involved emergency evaluation and investigation to develop alternatives to reduce slopes, eliminate instability, and provide for controlled drainage. Once an alternative was selected, construction plans and specifications were developed.</p>	<p>West Virginia Division of Environmental Protection, Abandoned Mine Lands Program Charleston, West Virginia</p>	<p>\$76 (Fee)</p>	<p>2005</p>	<p>YES</p>

<p>Ven's Run Maintenance Project, Harrison, County, West Virginia The scope of work involves stabilizing the slopes and provide for controlled drainage. It is GAI's initial approach to the abatement of the landslide is to provide a proposed reclamation plan that will grade the slide in place as much as practical and not conduct a total removal of material.</p>	<p>West Virginia Division of Environmental Protection, Abandoned Mine Lands Program Charleston, West Virginia</p>	<p>\$135 (Fee)</p>	<p>2007</p>	<p>No</p>
<p>Community of Preston - State Route 72 Waterline, Preston County, West Virginia The scope of work included the preparation of construction documents for a water transmission line. The total length of waterline is approximately 1.1 miles.</p>	<p>West Virginia Division of Environmental Protection, Abandoned Mine Lands Program Charleston, West Virginia</p>	<p>\$39 (Fee)</p>	<p>2007</p>	<p>YES</p>
<p>Kingwood 52/6 Water Supply Extension, Preston County, West Virginia The scope of work included the preparation of construction documents for a water transmission line. Included in the distribution system are a 96,000 gallon water storage and a booster pump station. The total length of waterline is approximately 13 miles.</p>	<p>West Virginia Division of Environmental Protection, Abandoned Mine Lands Program Charleston, West Virginia</p>	<p>\$121 (Fee)</p>	<p>2005</p>	<p>YES</p>
<p>Helen Portals, Raleigh County, West Virginia The scope of work included the preparation of construction documents for four sites, consisting of abandoned mine portals, unstable refuse piles, small impoundment, and demolition of a mining related structure. The project also included re-establishing a stream by natural stream techniques.</p>	<p>West Virginia Division of Environmental Protection, Abandoned Mine Lands Program Charleston, West Virginia</p>	<p>\$71 (Fee)</p>	<p>2004</p>	<p>YES</p>

AML and RELATED PROJECT EXPERIENCE MATRIX														PRIMARY STAFF PARTICIPATION/CAPACITY *** M=Management P=Professional									
PROJECT	Exp. Basis C=Corp. P=Personnel	Additional Info Provided in Section(s) **	PROJECT EXPERIENCE REQUIREMENTS														C. Elwood Penn, IV, PE	Charles F. Straley, PE	James A. Hemme, PE				
			Abandoned Surface Mine Reclamation	Abandoned Deep Mine Reclamation	Portal/Shaft Closure	Hydrologic/Hydraulic Design/Eval.	Remining Evaluation	Mine/Refuse Fire Abatement	Subsidence Investigation Mitigation	Hazardous Waste Disposal	Project Specifications	Water Quality Evaluation/Mitigation/ Replacement	Construction/Management Inspection	Water Treatment	Equipment/Structure Removal	Stream Restoration				Geotechnical/Stability	Mapping		
Route 60 Drainage	C/P	3	X	X	X								X							X	M	M/P	P
Mallory Refuse	C/P	3	X		X			X												X	M	M/P	P
Lynch Run Highway #6	C/P	3	X		X								X							X	M	M/P	P
Duck Creek Landslide	C/P	3	X		X								X							X	M	M/P	M/P
Heizer Creek Drainage	C/P	3	X	X	X								X							X	M	M/P	P
Wolfpen Landslide	C/P	3	X	X	X								X							X	M	M/P	P
Hominy Creek	C/P	3	X		X															X	M	M/P	
Logan (Marcum) Drainage	C/P	3	X	X	X								X							X	M/P	M/P	P
Bud Alpoca	C/P	3			X								X								M/P	M/P	P
Nuriva Maben	C/P	3			X								X								M/P	M/P	P
Herridon Heights	C/P	3			X								X							X	M	M/P	
Handley/Upper Creek	C/P	3	X	X	X								X							X	M	M/P	
Titus Road	C/P		X		X								X							X	M	M/P	
American Legion	C/P		X		X								X								M	M/P	
Cogar	C/P			X	X								X							X	M	M/P	P
East Branch Phase II	C/P		X		X								X							X	M	M/P	P
West Branch Headwaters	C/P		X	X	X								X							X	M	M/P	
Lake Milton Reclamation	C/P		X		X								X							X	M	M/P	
Middleton Run Reclamation	C/P		X		X								X							X		M/P	
Latrobe (Gibson) Landslide	C/P	3	X	X	X								X							X	M	M/P	
Lodestar Energy	C/P		X	X	X								X							X	M	M/P	
Ven's Run Maintenance	C/P	3	X	X	X								X							X	M	M/P	
War Waterline	C/P	3			X								X								M	M/P	

* List whether project experience is corporate or personnel based or both
 ** Use this area to provide specific sections or pages if needed for reference
 *** List Primary Design personnel and their functional capacity for the projects listed

AML and RELATED PROJECT EXPERIENCE MATRIX													PRIMARY STAFF PARTICIPATION/CAPACITY *** M=Management P=Professional									
PROJECT	Exp. Basis C=Corp. P=Personnel	Additional Info Provided in Section(s)	PROJECT EXPERIENCE REQUIREMENTS													C. Erwood Penn, IV, PE	Charles F. Straley, PE	James A. Hemme, PE				
			Mine Reclamation	Abandoned Deep Mine Reclamation	Portal/Shaft Closure	Hydrologic/Hydraulic Design/Eval.	Remining Evaluation	Mine/Refuse Fire Abatement	Subsidence Investigation	Mitigation	Hazardous Waste Disposal	Project Specifications	Water Quality Evaluation/Mitigation/Replacement	Construction/Management	Water Treatment				Equipment/Structure Removal	Stream Restoration	Geotechnical/Stability	Mapping
Johnsons Knob	C/P	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			P	
Carolina	C/P	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	P	
Hutchinson	C/P	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	M/P	
Fairmont (Grandstaff)	C/P	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	M/P	
City of Summersville	C/P	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	P	
Reynoldsville	C/P	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	M/P	P
Mill Creek	C/P	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	P	
Majesty	C/P	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	P	
Wash. Hts to Jeffrey	C/P	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Gauley River Review	C/P	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	P	
Heizer/Manila Review	C/P	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	M/P	
Owings	C/P	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	P	
Omega	C/P	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	P	
Mill Creek - Isom	C/P	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Weaver-Junior	C/P	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	M/P	
Reynoldsville Phase II	C/P	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	P	
Mainella	C/P	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	M/P	
Glen Morgan	C/P	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	M/P	
Harris AMD	C/P	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	P	
Lefthand Fork	C/P	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	P	
Madison Street/Fairview	C/P	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	P	
Summerfee	C/P	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	M/P	
Cow Creek	C/P	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	P	
Godby Branch	C/P	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	P	

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

** Use this area to provide specific sections or pages if needed for reference

*** List Primary Design personnel and their functional capacity for the projects listed

INTRODUCTION

GAI Consultants, Inc. (GAI) proposes to provide engineering services to the West Virginia Department of Environmental Protection, Office of Abandoned Mine Lands and Reclamation (WVDEP - AML). These services will result in the development of mapping, engineering drawings, contract specifications, and other contract documents as may be required for the letting of construction project for the **Little Laurel Run Highwall Design** project. The project will include construction of: installation of mine seals; highwall regrading; refuse regrading; structure demolition; drainage; and revegetation.

This Expression of Interest is formatted in a clear, concise manner with the briefest description as possible conveying our expertise and knowledge. All components of the proposal follow in narrative and highlighted sections and as outlined in the AML Consultant Confidential Qualification Questionnaire (CCQQ).

The highlighted sections following are:

- Bidders Experience
- Subcontractors Discussion on:
 - Surveying and Mapping
 - Subsurface Investigation
 - Laboratory Services
- Design Engineering and Contract Document Preparation
- Qualifications of Personnel
- Corporate Specialized Experience and Demonstrated Experience
- Management Plan and Location of Facilities

GAI's Charleston, West Virginia office is exceptionally well qualified to provide the State with the above referenced services. GAI's Charleston office has a staff of **Five Professional Engineers, One Professional Surveyor**, and a team of geologists/hydrologists, environmental scientists, biologists, technicians, CADD operators, word processor operators, secretaries, and draftspersons. GAI's Charleston office has served the WVDEP on **previous AML Open-End** and other contracts from 1986 to the present as well as several other pre-1986 AML projects. These projects include:

- Coal refuse pile reclamation,
- Coal refuse reprocessing evaluations,
- Stream Restoration,
- Acid mine drainage (AMD) evaluation and treatment,
- Landslide investigations and repair,
- Demolition plans,
- Mine portal reclamation,
- Burning coal refuse piles, coal seams and underground mines,
- Subsidence investigations and stabilization plans,
- Wetlands replacement and development,
- Environmental liability assessments,

- Water quality surveys and feasibility reports,
- Water supply system reviews, and
- Water supply system designs.

GAI also provides engineering services to the mining industry including:

- Stream Restoration,
- Design of coal refuse disposal piles including impoundment structures,
- Hydrologic/hydraulic design of erosion and sediment control devices,
- Soil analysis and revegetation plans,
- Coal refuse reprocessing evaluations including mining and reclamation plans,
- Construction monitoring services,
- Design of excess overburden disposal fills, both conventional and durable rock fills,
- Detailed reclamation plans,
- Detailed subsurface/geotechnical investigations for foundation, subsidence, slope stability, and reserve analysis,
- Mine closure plans/post-reclamation land use,
- Permitting for deep and surface mine applications, NPDES, U.S. Army Corps of Engineers Section 404 permits, West Virginia Public Lands permits, air pollution control permits, etc.,
- Probable hydrologic consequences (PHC) statement preparation,
- Reclamation/environmental liability assessments in conjunction with property transfers, and
- Subsidence control plans.

As a result of this experience, GAI will provide the required expertise to complete reclamation projects in a timely, economical, and efficient manner and will not require any subconsultants to be utilized on this project. Our direct knowledge of the AML program guidelines and personnel will also benefit the State.

GAI will perform the work under this contract in our **Charleston, West Virginia** office.

BIDDER EXPERIENCE

GAI Consultants, Inc. provides consulting services in geotechnical engineering, civil engineering, environmental engineering, mining-related design engineering, geology, hydrogeology, environmental science, economics, transportation systems and land-use planning, urban and site engineering, structural engineering, engineering mechanics, agronomy, anthropology and archaeology, and various related professional disciplines. The firm has experienced steady growth in both size and capabilities; and for the past fourteen years has been **rated among the top 200 engineering** and environmental firms in the nation by Engineering News Record (ENR).

GAI Consultants, Inc., is a full service civil, environmental and mining engineering firm headquartered in suburban Pittsburgh, Pennsylvania, with offices in Charleston, West Virginia; Philadelphia, Pennsylvania; Ft. Wayne, Indiana; Orlando and Jacksonville, Florida; Cincinnati, Ohio; and Richmond, Virginia. Established in 1958, GAI and its subsidiaries comprise an organization of over 500 engineers, scientists, and support personnel. With our in-house soils laboratories, surveying services and competent staff of professionals, GAI offers a comprehensive approach to engineering problems requiring a wide range of interdisciplinary skills. In the past 40+ years, we have designed and monitored the construction of numerous facilities and have conducted thousands of related geotechnical and hydrological investigations, many of which involved reclamation of abandoned mine lands. By successfully completing so many reclamation projects, GAI has obtained "expertise" status on an international basis for many type projects. For example, GAI recently completed a very large investigation into delineating the extent of the world's largest mine fire in the country of India. GAI was selected for the country of India mine fire project based upon qualifications only.

GAI's Charleston, West Virginia office opened in 1985. Since opening, our Charleston office has experienced steady growth. Currently, the Charleston office has four registered professional engineers and other experienced disciplines on staff. Clients served by the Charleston office include mining and industrial companies; federal, state, and local governmental agencies; engineers and architects; and private developers.

GAI has successfully served the WVDEP on previous AML contracts from 1986 to the present. We propose to utilize most of the same Charleston and Pittsburgh staff. See attached CCQQ.

Surveying and Mapping

To provide cost efficient and timely services for this contract, surveying services will be conducted by GAI's in-house surveyors. GAI routinely performs the following types of surveys which are relevant to the work possibly associated with this project.

- Aerial mapping control surveys including horizontal and vertical control and reference monuments,
- Topographic and planimetric surveys,
- Construction surveys including work layout staking, establishment of baselines and cross sections, profiles, etc.,
- Construction quantity measurement surveys,
- Detailed as-built documentation surveys,
- Property surveys including both surface and mineral estates, and

- Oil and gas surveying.

GAI presently operates up to three survey crews. GAI has made a commitment to provide timely surveying services.

GAI's survey crew utilizes Nikon DTM-450 and Nikon DTM-550 Total Stations. This is complimented by data collectors and Autocad workstations to generate plan views, profiles, cross sections and other engineering drawings. These CAD-generated drawings can then be utilized by GAI's CAD-drafting/design department for design.

All surveys conducted by GAI are completed under the supervision of a West Virginia licensed land surveyor. Surveying will also be performed under the general direction of a West Virginia registered professional engineer, the GAI project engineer and project manager. All surveys and mapping are completed to the standards as outlined by the National Map Standards, as well as other applicable quality standards to include AML specifications.

Subsurface Investigation

Based upon the information provided in the Expression of Interest, GAI is not proposing the use of any subsurface investigation subcontractor. If a subsurface exploration subcontractor is required, we have relationships with several drilling firms to provide an economical and available contractor to complete the project. Borrow area investigations will be conducted by GAI personnel, as has been the case in past projects.

Laboratory Services

GAI operates full-service soils and materials laboratories in our Philadelphia, Pennsylvania office.

GAI has the capability to analyze natural materials such as soil and rock, manufactured materials such as concrete and steel, and industrial waste materials. The soils and industrial waste analysis capabilities include classification tests, moisture content, grain size analysis, Atterberg limits, specific gravity, unit weight determinations, and chemical analyses. The characteristic test capabilities include relative density equipment for sample particle sizes to 3 inches in diameter; apparatus for constant- and falling-head permeability measurements in both horizontal and vertical directions, and for moisture-density relationships for both modified and standard densities. The compressibility of materials can be determined in a 2.5-inch diameter, one-dimensional consolidometer or a 2.5-inch diameter, one-dimensional Anteus consolidometer with back pressure and pore pressure capability. Also, volumetric consolidation can be determined isotropically or anisotropically. The strength parameters of soils and industrial/coal waste materials can be determined by unconfined compression, direct shear, or triaxial shear tests. The rock-testing capabilities include classification by visual inspections and petrographic analysis, unconfined compression, direct shear, and triaxial shear tests. GAI also maintains several nuclear densometer testing gauges to monitor field compaction.

Based upon the information provided in the Expression of Interest, GAI is not proposing the use of any other laboratory services.

Design Engineering and Contract Document Preparation

GAI has extensive experience in design engineering and the preparation of contract documents for AML reclamation and related projects. GAI prides itself in development of **simple, yet innovative, cost-efficient designs** that are easily implemented in the field during construction. Our experience gained on various types of West Virginia AML projects during the past 22 years will ensure this quality engineering continues.

GAI has prepared **over 80 construction packages** for WVDEP-AML since 1985. Other West Virginia AML projects completed by GAI did not result in the preparation of construction drawings such as water quality surveys and feasibility reports and landslide investigations where it was determined that the problems were not mining related. GAI is completely familiar with WVDEP's guidelines for preparing construction drawings, technical specifications, and supporting documents. We are able to draw on a large collection of typical construction details contained within our computer aided drafting (CAD) library for the above types of AML projects. GAI also has various master specifications which we are able to draw from to create project specific specifications.

During the design engineering phase of our projects, GAI develops alternatives for the reclamation program and schedules meetings with WVDEP-AML to review options and select a mutually acceptable plan. We feel that this approach results in a more workable plan at an ultimately lower cost. We also perform a constructability review of each construction package by technical staff familiar with actual methods of construction. This review also expedites the overall reclamation plan.

QUALIFICATIONS OF PERSONNEL

GAI has a staff of over 500 technical support personnel. GAI's staff is particularly well suited to investigate problems associated with abandoned mine lands. We propose to utilize a staff of engineers (civil and mining), geologists, biologists, surveyors, and CADD operators to conduct the investigatory and design work backed by a group of management professionals.

Mr. C. Elwood Penn, IV, P.E., Managing Officer will serve as Contract Administrator in the Charleston office. Mr. Penn has worked with the industry and their related problems for **25 years**. Mr. Penn is very knowledgeable with WVDEP - AML guidelines and project expectations. His qualifications will result in direct benefits to the State in terms of quality and cost efficient completion of the project.

Mr. Charles F. Straley, P.E. will serve as a Project Manager. Mr. Straley has managed and participated in the design and development of reclamation plans and feasibility studies for over **45 abandoned mine land projects** for the WVDEP, Abandoned Mine Lands and Reclamation Program. Mr. Straley has a complete understanding of WVDEP - AML guidelines, specifications, and project expectations. He has a good working relationship with many of the AML staff.

Mr. James A. Hemme, P.E. will serve as a Project Manager. Mr. Hemme has participated in the design and development of reclamation plans and feasibility studies for over **five (5) abandoned mine land projects** for the WVDEP, Abandoned Mine Lands and Reclamation Program. Mr. Hemme has a complete understanding of WVDEP - AML guidelines, specifications, and project expectations. He has a good working relationship with many of the AML staff.

Mr. Mark D. Young, P.E. will serve as a Project Engineer. Mr. Young has participated in the design and development of reclamation plans and feasibility studies for **eight (8) abandoned mine land projects** for the WVDEP, Abandoned Mine Lands and Reclamation Program. Mr. Young has a complete understanding of WVDEP - AML guidelines, specifications, and project expectations.

Mr. Joseph A. Prine, E.I. will serve as a Project Engineer. Mr. Prine has participated in the design and development of reclamation plans and feasibility studies for **three (3) abandoned mine land projects** for the WVDEP, Abandoned Mine Lands and Reclamation Program. Mr. Prine has a complete understanding of WVDEP - AML guidelines, specifications, and project expectations.

All have relevant direct experience with mine reclamation, grading/drainage, feasibility studies, water study and design, stream restoration, and preparation of construction documents.

A team of staff engineers, geologists/hydrologists, environmental scientists, biologists, technicians, CADD operators, word processor operators, secretaries, and draftspersons will provide the expertise and manpower to complete the project. For special needs we can call on planners, land use specialists, natural resource specialists, soil scientists, archaeologists, architectural historians, and structural and material engineers.

**CORPORATE SPECIALIZED EXPERIENCE
AND DEMONSTRATED ABILITIES**

GAI has provided a wide variety of services to governmental agencies related to the reclamation of AML problems. GAI has served the WVDEP on open-end and other contracts from 1986 to the present. We have also completed numerous projects for the Office of Surface Mining, Reclamation and Enforcement (OSMRE) and AML programs in Pennsylvania, Ohio, Maryland, and Virginia.

MANAGEMENT PLAN & LOCATION OF FACILITIES

Management Plan

GAI's proposed project management plan is presented on Figure 1. The work will be performed in **GAI's Charleston, West Virginia office** which will allow ready access to the project area. Assistance, if and when needed will be provided by staff located in the Pittsburgh, Pennsylvania office of GAI. GAI's Charleston location is also convenient with respect to the WVDEP's Charleston location.

GAI's professional, technical and support staff have extensive experience on AML and related design projects and are extremely well qualified to serve the WVDEP on this contract. GAI stands ready to commit the personnel and resources required to complete the project in a timely, technically sound and cost efficient manner.

Contract Administration will be provided by **Mr. C. Elwood Penn, IV, P.E.** as shown in Figure 1. Mr. Penn will be responsible for overall management and performance of the project. He will review the work directive, visit the site along with the WVDEP to better familiarize himself with site conditions and work requirements accompanied by Mr. Gray or other appropriate staff, and then guide the preparation of the scope of work and cost proposal by GAI staff. He will also generally supervise the work in progress and review work products at intermediate points and finally prior to submittal to the WVDEP. In addition, Mr. Fioravante will be in charge of any contractual negotiations necessary through the process of the project.

Project Management will be provided by **Mr. Charles F. Straley, P.E., P.S. or Mr. James A. Hemme, P.E.** as shown in Figure 1. Mr. Straley will be responsible for the day to day management and performance of the project. He will review the work directive and prepare the scope of work and cost proposal. A written proposal including a detailed cost estimate (manhours and expenses associated with the project) will then be prepared and submitted to the WVDEP for their review. Upon WVDEP's approval of the proposal, the Project Manager will arrange for the start of the work. Included will be project staffing, arrangement and detailing of the scope of services to be provided by GAI, and review of project budget and schedule. The Project Manager will generally supervise the work in progress and review work products at intermediate points and finally prior to submittal to the WVDEP and will be responsible for maintaining liaison with the WVDEP Project Manager including project status reports, as required.

Day-to-day project activities will be performed under the direction of the Project Manager by one of the **Project Engineers (Messrs. Mark D. Young, P.E. and Joseph A. Prine, E.I.)** as shown in Figure 1. They will be responsible for guidance of the GAI staff. Their main activities will include development of detailed step-by-step project work plans to ensure the project activities are completed on-budget and on-time, review of the work products at intermediate points and at project completion, providing guidance and direction to project staff, as well as engineering and design work.

GAI's large experienced staff permits us to respond quickly, provides flexibility, and permits high level input to the project's staff from in house experts. However, our method of staffing projects, as evidenced by our performance on prior projects for WVDEP-AML, is to assign a small team with total responsibility for completion of the work to the client's satisfaction and budget. Where necessary the team can draw on the expertise available within GAI's large staff.

Project Budget Control

The Project Manager will be responsible for monitoring the project budget. GAI's staff submits time sheets on a weekly basis. All charges including labor hours and other project expenses to a particular project are compiled in our data center and are distributed to the Project Manager by Wednesday of the following week. In this manner, we can keep close track of our project costs.

Schedule Control

Direct responsibility for schedule control lies with the Project Manager. Initially, the Project Manager will review the work directive schedule requirements to see if they can be complied with given the anticipated scope of work. As the project progresses, the Project Manager will monitor progress and compare it with the established schedule on a weekly basis. In this manner, the Project Manager can make staff adjustments to maintain the project schedule. If circumstances develop that make it impossible to maintain the project schedule, the Project Manager will contact the WVDEP Project Manager to develop a mutually acceptable adjustment to the schedule.

Location of Facilities

GAI proposes to complete work under this contract in our **Charleston, West Virginia office**. We feel that our close proximity to the WVDEP's Charleston office and the project area will allow the project to be completed in a timely, efficient manner.

PROJECT MANAGEMENT PLAN

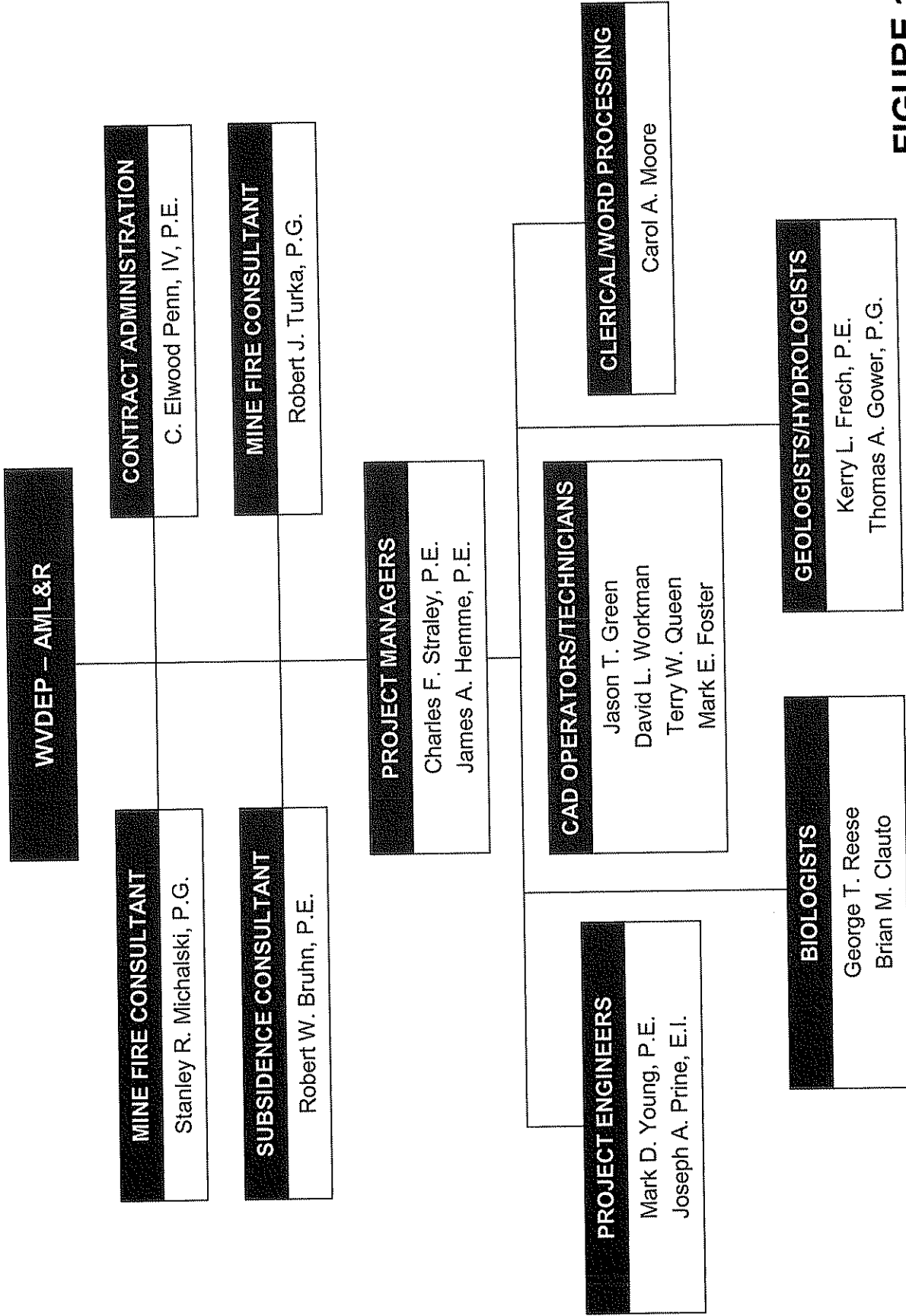


FIGURE 1

AML PROJECTS
WEST VIRGINIA DIVISION OF ENVIRONMENTAL PROTECTION

Project No.: E081338.00
Title: Lynch Run Highwall #6
Location: Gilmer County, West Virginia
Tasks: The project consists of at six collapsed and draining portals (two will receive bat gates), two highwalls, refuse located along a stream and subsidence holes. Natural stream design will also be required. Construction plans and technical specifications are being developed.

Project No.: E081294.00
Title: Route 60 Drainage
Location: Fayette County, West Virginia
Tasks: The scope of work involves providing seals for the collapsed portals and storm water drainage controls. Construction plans and technical specifications were developed.

Project No.: E081094.00
Title: Mallory Refuse
Location: Logan County, West Virginia
Tasks: The project consists of a small refuse pile and collapsed and draining portals, and streambank stabilization. The refuse pile is very steep and heavily eroded. The pile is unstable and shows evidence of sliding. Construction plans and technical specifications are being developed.

Project No.: E080494.00
Title: Duck Creek (Jenkins) Landslide
Location: Harrison County, West Virginia
Tasks: The scope of work involves the design of stabilization measures for the 7 acre slide and design of seepage and stormwater drainage controls. Construction plans and technical specifications were developed.

Project No.: E080354.02
Title: Wolfpen (McBurney) Landslide
Location: Kanawha County, West Virginia
Tasks: The scope of work involves stabilizing a slope, providing seals for collapsed portals, and providing controlled drainage. Construction plans and technical specifications were developed.

Project No.: E060183.10
Title: Herndon Heights Waterline Extension Feasibility Study
Location: Wyoming County, West Virginia
Tasks: The scope of work included interviewing local residents and government officials; collecting and analyzing surface and private water supply samples; researching water quality records; designing and costing remedial measures; calculating the percentage of wells that had been degraded by mining activity; and summarizing the findings in a report.

Project No.: E050470.10
Title: Handley/Upper Creek Drainage Project
Location: Kanawha County, West Virginia
Tasks: The reclamation plan included dewatering the underground impoundment(s) and creating diversion ditches to redirect the drainage around structures to the nearby stream. Regrading the areas behind the retaining wall, revegetating, and providing proper drainage for all disturbed areas is also included in the plan.

Project No.: E050287.10
Title: Latrobe (Gibson) Landslide Emergency Project
Location: Logan County, West Virginia
Tasks: The scope of work involved emergency evaluation and investigation to develop alternatives to reduce slopes, eliminate instability, and provide for controlled drainage. Once an alternative was selected, construction plans and specifications were developed.

Project No.: E050212.10
Title: Ven's Run Maintenance Project
Location: Harrison, County, West Virginia
Tasks: The scope of work involves stabilizing the slopes and provide for controlled drainage. It is GAI's initial approach to the abatement of the landslide is to provide a proposed reclamation plan that will grade the slide in place as much as practical and not conduct a total removal of material.

Project No.: E050126.10
Title: War Waterline Extension Feasibility Study
Location: McDowell County, West Virginia
Tasks: The scope of work included interviewing local residents and government officials; collecting and analyzing surface and private water supply samples; researching water quality records; designing and costing remedial measures; calculating the percentage of wells that had been degraded by mining activity; and summarizing the findings in a report.

Project No: 2003-154-10
Title: Bearwallow Branch Refuse Pile
Location: McDowell County, West Virginia
Tasks: The scope of work included the preparation of construction documents for reclamation of seven sites. The various sites consist of unstable refuse piles, abandoned mine portals, small impoundments, and miscellaneous structures.

Project No.: 2002-282-10
Title: Community of Preston - State Route 72 Waterline
Location: Preston County, West Virginia
Tasks: The scope of work included the preparation of construction documents for a water transmission line. The total length of waterline is approximately 1.1 miles.

Project No.: 2002-144-10
Title: Anchor Road Waterpumping, Storage and Distribution Feasibility Study
Location: Logan County, West Virginia
Tasks: The scope of work included interviewing local residents and government officials; collecting and analyzing surface and private water supply samples; researching water quality records; designing and costing remedial measures; calculating the percentage of wells that had been degraded by mining activity; and summarizing the findings in a report.

Project No.: 2002-143-10
Title: Standard, Paint Creek, Collinsdale Waterline Extension Feasibility Study
Location: Kanawha County, West Virginia
Tasks: The scope of work included interviewing local residents and government officials; collecting and analyzing surface and private water supply samples; researching water quality records; designing and costing remedial measures; calculating the percentage of wells that had been degraded by mining activity; and summarizing the findings in a report.

Project No.: 2002-138-10
Title: McAlpin Eroding Dump - Phase II
Location: Raleigh County, West Virginia
Tasks: The scope of work included the preparation of construction documents for eleven sites. The sites consisted of ten coal refuse piles (one of which is burning), numerous mine openings (both collapsed and open), old mine buildings, possible AMD, and various mine related debris.

Project No.: 2001-489-10
Title: McAlpin Eroding Dump - Phase I
Location: Raleigh County, West Virginia
Tasks: The scope of work included the preparation of construction documents for six sites. The sites consisted of six coal refuse piles, numerous mine openings (both collapsed and open), old mine buildings, possible AMD, and various mine related debris.

Project No.: 96-554-22
Title: Laurel Creek Subdivision Subsidence
Location: Raleigh County, West Virginia
Tasks: Preparation of construction documents for the Laurel Creek Subdivision Subsidence project in Beckley, West Virginia. Project involved subsurface investigation (including borehole camera work); sampling of mine water; injection plan layout for grouting under over 40 residences; surface water drainage structure, preparation of technical specifications, drawings, and engineer's cost estimate; and participation in pre-bid and pre-construction meetings.

Project No.: 96-554-21
Title: Superior (Poca Land) Complex
Location: McDowell County, West Virginia
Tasks: The assessment included a site reconnaissance, asbestos observations and sample analysis, lead-based paint observations and analysis, and limited surficial soil sample analysis. The assessment was concluded in a report to aid in evaluating the existing subsurface soil quality in the area to better understand the costs involved during reclamation efforts.

Project No.: 96-554-20
Title: Washington Heights to Jeffrey Waterline Extension
Location: Boone County, West Virginia
Tasks: The project involved a technical review plans and specifications presented by the WVAWC as part of the Boone County Public Service District: Regional Water Supply System. The plans included a total of seven contracts. The scope of work was to identify areas of the contracts that were within project limits set by a Phase II Water Feasibility Study conducted for the WVDEP and to determine the amount of the contract costs that were the responsibility of the WVDEP. Included were field reconnaissance, review of plans, hydraulic calculations, and cost estimating.

Project No.: 96-554-19
Title: Water Feasibility Study, Gaymont, Edmond, and Winona Study Area
Location: Fayette County, West Virginia
Tasks: Work included interviewing local residents and government officials; collecting and analyzing surface and private water supply samples; researching water quality records; designing and costing remedial measures; calculating the percentage of wells that had been degraded by mining activity; and summarizing the investigation in a report.

Project No.: 96-554-12
Title: Mahan Tipple and Refuse Maintenance
Location: Fayette County, West Virginia
Tasks: The scope of work included the preparation of construction documents for the repair of a sliding reclaimed coal refuse pile. The project consisted of installing a rock toe buttress and drainage channels

Project No.: 96-554-11
Title: Johnsons Knob
Location: Fayette County, West Virginia
Tasks: The scope of work included the preparation of construction documents for four sites. The sites consisted of five coal refuse piles totaling approximately twenty acres, numerous mine openings (consisting of auger hole and portals, both collapsed and open), six old mine buildings, possible AMD, and various mine related debris (including two old conveyors and a collapsed tipple).

Project No.: 96-554-10
Title: Carolina Refuse
Location: Marion County, West Virginia
Tasks: The project consisted of two sites. The sites consisted of a refuse pile totaling approximately three acres, various non-mine related debris, and two concrete mine shafts with some various debris.

Project No.: 96-554-09
Title: Omega Mine Complex Project
Location: Monongalia County, West Virginia
Tasks: The project involved writing a final report to the Electric Power Research Institute to include a comparison of the pre- and post-injection water quality data, the results of a post-construction benthic survey, and the results of an analysis of data from injection operations.

Project No.: 96-554-08
Title: Omega Mine Complex Completion
Location: Monongalia County, West Virginia
Tasks: The scope of work included the preparation of construction documents for a booster station upgrade as part of the Omega Mine Complex project. Hydraulic analyses were performed, new pumps were selected, and a demonstration was made that the new pumps had higher efficiencies than the old pumps. Construction documents for the booster station upgrade and pressure reducing assembly were prepared.

Project No.: 96-554-01
Title: Majesty Mine Complex
Location: Barbour County, West Virginia
Tasks: Preparation of construction documents for the reclamation of the Majesty Mine Complex. The Majesty Mine Complex was an abandoned mine site which included old mine structures, open mine portals, unreclaimed refuse piles and an extensive highwall, existing wetlands and ponds, and numerous seeps producing acid mine drainage (AMD).

Project No.: 93-198-25
Title: Phase II Water Feasibility Study, Washington Heights to Jeffrey Study Area
Location: Boone County, West Virginia
Tasks: Phase II water feasibility study for private water supplies in the Washington Heights to Jeffrey Study Area in Boone County, West Virginia. Work included interviewing local residents and government officials; collecting and analyzing surface and private water supply samples; researching water quality records; designing and costing remedial measures; calculating the percentage of wells that had been degraded by mining activity; and summarizing the findings in a report. Work was completed on a "fast track" schedule.

Project No.: 93-198-24
Title: Evaluation of Construction Documents, Gauley River Water Line Extension
Location: Fayette and Nicholas Counties, West Virginia
Tasks: Evaluation of construction documents for the Gauley River Water Line Extension, to be funded by AML. Evaluation included a review of technical specifications and drawings; evaluation of hydraulics; completion of letter summarizing the evaluation; and meetings to discuss the evaluation.

Project No.: 93-198-23
Title: Evaluation of Construction Documents, Heizer/Manila Creek Water Line Extension
Location: Putnam County, West Virginia
Tasks: Evaluation of construction documents for the Heizer/Manila Creek Water Line Extension, to be funded by AML. Evaluation included a review of technical specifications and drawings; evaluation of hydraulics; completion of letter summarizing the evaluation; and meetings to discuss the evaluation.

Project No.: 93-198-22
Title: Owings Mine Complex
Location: Harrison County, West Virginia
Tasks: (1) Evaluation of water quality and potential passive AMD treatment system design at the Owings Mine Complex Site. Project included identification of monitoring points (streams and AMD discharges); sampling and analysis of monitoring points for a 3-month period; preparation of a report summarizing the findings; and conceptual design of passive AMD treatment system including costs.

(2) Preparation of construction documents including subsurface investigation; surveying; refuse processing evaluation; grading and drainage design for

Project No.: 93-198-17
Title: Mainella Subsidence
Location: Marion County, West Virginia
Tasks: Preparation of construction documents for the Mainella Subsidence project in Fairmont, West Virginia. Project involved subsurface investigation (including borehole camera work); sampling of mine water; injection plan layout for grouting under three residences; preparation of technical specifications, drawings, and engineer's cost estimate; and participation in pre-bid and pre-construction meetings. Approximately 15 injection holes were proposed at an estimated construction cost of approximately \$138,000.

Project No.: 93-198-15
Title: Glen Morgan Subsidence
Location: Raleigh County, West Virginia
Tasks: Preparation of construction documents for the Glen Morgan Subsidence project near Beckley, West Virginia. Project included subsurface investigation (including borehole camera work); base mapping development; sampling of mine water; injection plan layout for grouting under one residence; preparation of technical specifications, drawings, and engineer's cost estimate; and participation in pre-bid and pre-construction meetings. Estimated construction cost was approximately \$164,000.

Project No.: 93-198-14
Title: Harris AMD
Location: Harrison County, West Virginia
Tasks: Preparation of construction documents for the Harris AMD site in Harrison County, West Virginia. Project included subsurface investigation; surveying; sampling of mine discharges; design of channels, wet seals, and drain pipes; preparation of technical specifications, drawings and engineer's cost estimate; and participation in pre-bid and pre-construction meetings. Bid construction cost was approximately \$65,000.

Project No.: 93-198-13
Title: Lefthand Fork (See) Burning Refuse
Location: Logan County, West Virginia
Tasks: Preparation of construction documents for Lefthand Fork (See) Burning Refuse project. Project included subsurface investigation including temperature probe readings; surveying; refuse processing evaluation; grading and drainage design for regrading of refuse pile; delineation of burning refuse areas; design of excess material disposal site; completion of IBR for relocating existing bonded haul road; preparation of technical specifications, drawings, and engineer's cost estimate; and participation in pre-bid and pre-construction meetings. Bid construction cost was approximately \$940,000.

Project No.: 93-198-07
Title: Phase II Water Feasibility Study, Gauley River Study Area
Location: Fayette and Nicholas Counties, West Virginia
Tasks: Phase II water feasibility study for private water supplies in the Gauley River Study Area in Fayette and Nicholas Counties, West Virginia. Work included interviewing local residents and government officials; collecting and analyzing surface and private water supply samples; researching water quality records; designing and costing remedial measures; calculating the percentage of wells that had been degraded by mining activity; and summarizing the investigation in a report.

Project No.: 93-198-06
Title: Phase II Water Feasibility Study, Heizer and Manila Creek Community
Location: Putnam County, West Virginia
Tasks: Phase II water feasibility study for private water supplies in the Heizer and Manila Creek Community in Putnam County, West Virginia. Work included interviewing local residents and government officials; collecting and analyzing surface and private water supply samples; researching water quality records; designing and costing remedial measures; calculating the percentage of wells that had been degraded by mining activity; and summarizing the findings in a report.

Project No.: 93-198-05
Title: Phase I Water Feasibility Study, Reynoldsville, Wallace, & Clarksburg Study Area
Location: Harrison County, West Virginia
Tasks: Phase I water feasibility study of the Reynoldsville, Wallace, & Clarksburg Study Area in Harrison County, West Virginia to evaluate the potential for pre-1977 mining activity to have degraded the water supplies of residents. Work included interviews, record searches, field reconnaissance, and preparation of remedial action cost estimates. A report summarizing the findings was submitted.

Project No.: 93-198-04
Title: Phase I Water Feasibility Study, Weaver-Junior Study Area
Location: Randolph and Upshur Counties, West Virginia
Tasks: Phase I water feasibility study of the Weaver-Junior Study Area in Randolph and Upshur Counties, West Virginia to evaluate the potential for pre-1977 mining activity to have degraded the water supplies of residents. Work included interviews, record searches, field reconnaissance, and preparation of remedial action cost estimates. A report summarizing the findings was submitted.

Project No.: 93-198-03
Title: Phase I Water Feasibility Study, Matheny Hill Study Area
Location: Harrison County, West Virginia
Tasks: Phase I water feasibility study of the Matheny Hill Study Area in Harrison County, West Virginia to evaluate the potential for pre-1977 mining activity to have degraded the water supplies of residents. Work included interviews, record searches, field reconnaissance, and preparation of remedial action cost estimates. A report summarizing the findings was submitted.

Project No.: 88-460-22
Title: Phase II Water Feasibility Study, Godby Branch Community
Location: Logan County, West Virginia
Tasks: Phase II water feasibility study for private water supplies in the Godby Branch Community in Logan County, West Virginia. Work included interviewing local residents and government officials; collecting and analyzing surface and private water supply samples; researching water quality records; designing and costing remedial measures; calculating the percentage of wells that had been degraded by mining activity; and summarizing the findings in a report.

Project No.: 88-460-21
Title: Madison Street/Fairview Route 218 Portals
Location: Marion County, West Virginia
Tasks: Preparation of construction documents for the Madison Street/Fairview Route 218 Portals project. Work included subsurface investigation; surveying; design of wet mine seals and associated drains at multiple sites; preparation of technical specifications, drawings, and engineer's cost estimate; and participation in pre-bid and pre-construction meetings.

Project No.: 88-460-20
Title: Summerlee Refuse Project
Location: Fayette County, West Virginia
Tasks: Preparation of construction documents for the Summerlee Refuse pile project. Project included subsurface investigation; surveying; water quality sampling; grading and drainage design for regrading and revegetation of 60 acre refuse pile, 2 impoundments, and 2 ponds; preparation of technical specifications, drawings, and engineer's cost estimate; and participation in pre-bid and pre-construction meetings.

Project No.: 88-460-19
Title: Putnam County Phase I Water Studies
Location: Two communities in Putnam County, West Virginia
Tasks: Preliminary investigation of the Manila Creek and Heizer Creek areas of Putnam County to determine the possibility of pre-1977 mining activity degrading water supplies. Study included review of historical mining records, geological data, and resident interviews to assess possible impacts. Report prepared documenting findings and a cost estimate for extending public water supply system.

Project No.: 88-460-18
Title: Boone County Phase I Water Studies
Location: Various communities in Boone County, West Virginia
Tasks: Preliminary investigation of the Greenview/Big Branch, Ramage/Six Mile Creek, Secoal/Jeffrey/Obes Branch, Hewett Creek/Missouri Fork, and Meadowfork communities of Boone County to determine the possibility of pre-1977 mining activity degrading water supplies. Study included review of historical mining records, geological data, and resident interviews to assess possible impacts. Reports prepared documenting findings and cost estimates for extending public water supply systems.

Project No.: 88-460-12
Title: Vivian Refuse Pile
Location: Vivian, West Virginia
Tasks: Subsurface investigation, surveying, and design for reclamation of a large coal refuse pile and two mine entries. Plans, specifications, cost estimate, coal refuse reprocessing evaluation, and supporting documents for regrading over 150,000 cubic yards of refuse, surface water control, mine seals, and riprap toe protection were completed.

Project No.: 88-460-11
Title: Kimball Refuse Piles
Location: Kimball, West Virginia
Tasks: Subsurface investigation, surveying and design for reclamation of 3 coal refuse piles and six mine entries. Design included replacement of a water well and related supply piping for the town of Kimball. Completed preparation of plans, specifications, cost estimate, coal refuse reprocessing report, West Virginia Department of Health permit for new well, and other supporting documents for reclaiming this large site with over ½ million cubic yards of regrading.

Project No.: 88-460-10 & 88-460-09
Title: Hampden (Smith) Bridge
Location: Mingo County, West Virginia
Tasks: Design of metal arch culvert to replace a bridge to allow access to a landslide repair project. Development of plans and specifications were on a fast-track schedule.

Project No.: 88-460-08
Title: Bear Run Refuse
Location: Gilmer County, West Virginia
Tasks: Field reconnaissance to establish project limits, develop reclamation options, and collect water quality information to design a wetlands reclamation project. Subsurface investigation, surveying, and development of aerial mapping for 160 acres were conducted. Plans, specifications, cost estimate, reprocessing evaluation and report, and permit application assistance to develop reclamation plan for 13 former coal refuse disposal ponds/impoundments and 3 refuse piles were completed. Plan included developing and enhancing wetlands.

Project No.: 88-460-07
Title: Beaver Creek Waterline Extension
Location: Barbour and Randolph Counties, West Virginia
Tasks: The project included design of a 1.5 mile, 6-inch diameter water line extension including fire hydrants, stream crossings, and service to 13 residents. Preparation of plans, specifications, cost estimate, and supporting documents were completed.

Project No.: 86-181-23
Title: Courtright Highwall
Location: Bridgeport, West Virginia
Tasks: The project included a subsurface investigation to determine extent of landslide and whether mining related, field surveying to establish topographic mapping and control, and subsequent design of landslide repair alternatives. Design ultimately selected included a reinforced slope using stabilizing grid. Landslide contained 400,000 cubic yards of material.

Project No.: 86-181-22
Title: Jonben (Haga) Subsidence
Location: Jonben, West Virginia
Tasks: Subsidence control on an emergency basis including sinkhole backfilling and drainage control. Project included drilling to determine the extent of mining and subsidence, field surveying to develop topographic mapping, and development of a backfilling and drainage plan.

Project No.: 86-181-21
Title: Belle (Malcolm) Landslide
Location: Belle, West Virginia
Tasks: Landslide stabilization including excavation of slide mass, sealing of several mine entries, and drainage controls. Project included drilling, sampling, and piezometer installation and monitoring to develop project plans and specifications.

Project No.: 86-181-20
Title: Holden (Padgett) Subsidence
Location: Whitman Junction, West Virginia
Tasks: The project included subsurface investigation to determine extent of mine workings, development of stabilization plan including drainage channels/pipes, and mine seals. Construction documents were prepared, and participation in pre-bid and pre-construction meetings was completed.

Project No.: 86-181-19
Title: Minden Mine Fire
Location: Minden, West Virginia
Tasks: The project included subsurface investigation to determine source and extent of underground fire.

Project No.: 86-181-12
Title: Route 19/28 Subsidence
Location: Harrison County, West Virginia
Tasks: The project included subsurface investigation and development of construction specifications and drawings, and topographic mapping for remedial work on mine subsidence affecting a road.

Project No.: 86-181-10
Title: Omar Refuse Piles
Location: Logan County, West Virginia
Tasks: The project included subsurface investigation and development of specifications and construction drawings for remedial work on regrading 5 refuse piles with over 330,000 cubic yards of earthwork, and sealing 6 mine portals and a large vertical shaft.

Project No.: 86-181-09
Title: Mt. Hope (Sawyer) Subsidence
Location: Fayette County, West Virginia
Tasks: The project included subsurface investigation and development of construction specifications and drawings, and topographic mapping for remedial work on mine subsidence affecting 1 home.

Project No.: 86-181-08
Title: Morgantown Airport Drainage
Location: Morgantown, West Virginia
Tasks: The project included subsurface investigation and development of construction specifications and drawings, and some topographic mapping for remedial work on mine subsidence effecting a day care center and an airport access road, and for closure of 4 mine portals below the end of a runway.

Project No.: 86-181-07
Title: Logan Drainage Project
Location: Logan, West Virginia
Tasks: The project included subsurface investigation and development of construction specifications and drawings, and some topographic mapping for remedial work on 4 mine portals, a mine seep, and 400 feet of abandoned conveyor with its headhouse and loadout platform.

Project No.: 86-181-06
Title: Huffman Street Subsidence
Location: Fairmont, West Virginia
Tasks: The project included subsurface investigation and development of construction specifications and drawings for remedial work on mine subsidence affecting 20 homes.

Project No.: 85-354
Title: Rebrook Street Drainage
Location: Clarksburg, West Virginia
Tasks: The project included subsurface investigation and development of construction specifications and drawings for remedial work on acid mine drainage from 2 mine portals which was effecting a house and its garage, and subsequent construction monitoring.

Project No.: 85-289
Title: Hurricane Fork/Five-Mile Fork Burning Coal Seams
Location: Kanawha County, West Virginia
Tasks: The project included subsurface investigation and development of costs which would be associated with extinguishment.

Project No.: 84-192
Title: Duck Creek Landslide
Location: Gilmer County, West Virginia
Tasks: The project included subsurface investigation, development of construction specifications and drawings, and construction monitoring for remedial work on a landslide resulting from uncompacted strip bench spoils.

STATE OF WEST VIRGINIA
Purchasing Division**PURCHASING AFFIDAVIT****VENDOR OWING A DEBT TO THE STATE:**

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

PUBLIC IMPROVEMENT CONTRACTS & DRUG-FREE WORKPLACE ACT:

If this is a solicitation for a public improvement construction contract, the vendor, by its signature below, affirms that it has a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the *West Virginia Code*. The vendor **must** make said affirmation with its bid submission. Further, public improvement construction contract may not be awarded to a vendor who does not have a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the *West Virginia Code* and who has not submitted that plan to the appropriate contracting authority in timely fashion. For a vendor who is a subcontractor, compliance with Section 5, Article 1D, Chapter 21 of the *West Virginia Code* may take place before their work on the public improvement is begun.

ANTITRUST:

In submitting a bid to any agency for the state of West Virginia, the bidder offers and agrees that if the bid is accepted the bidder will convey, sell, assign or transfer to the state of West Virginia all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the state of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the state of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to the bidder.

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

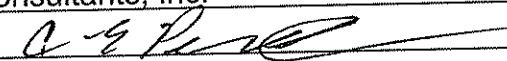
LICENSING:

Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agencies or political subdivision. Furthermore, the vendor must provide all necessary releases to obtain information to enable the Director or spending unit to verify that the vendor is licensed and in good standing with the above entities.

CONFIDENTIALITY:

The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in <http://www.state.wv.us/admin/purchase/privacy/noticeConfidentiality.pdf>.

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

Vendor's Name: GAI Consultants, Inc.Authorized Signature: Date: October 1, 2009