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STAFFORD CONSULTANTS INCORPORATED

Engineering, Design, and Consulting
Planning and Environmental Services

October 8, 2008

File: 08-9998.00/B

Mr. Chuck Bowman, Buyer
State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street, East
Charleston, WV 25305-0130

Dear Mr. Bowman:

RE: RFQ No. DEP 14383
Standard/Paint Creek/Collinsdale
Waterline Extension Project
Opening 10-08-08 at 1:30 p.m.

We appreciate the opportunity of providing our qualifications for the Standard/Paint Creek/Collinsdale Water Project. Stafford Consultants has been a leader in the planning, design, and construction administration of water projects in southern West Virginia for over 25 years. If selected for this work, we will bring the following advantages to the Office of Abandoned Mine Lands for the project.

1. **Project Approach**: Stafford Consultants has a proven history of providing effective project management to bring projects to construction promptly. Our proposed project manager, Mr. Ed Shutt, P.E., is well known in the industry for developing and implementing detailed schedules outlining all tasks required for approvals to get projects to construction quickly. In today's climate, bringing projects to construction sooner can result in significant construction cost savings.

2. **Experience and Knowledge of Similar Water Systems:** Our proposal includes a sampling of our water system experience. Our work has been concentrated in southern West Virginia and includes numerous projects in rural, coal country very similar in character to the proposed project.

3. **Experience with the DEP - Office of Abandoned Mine Lands**: Stafford Consultants has extensive experience with the AML Program in the last three decades. We recently completed a feasibility study for water in the Keystone community and are designing for reclamation of the McComas Refuse Pile. We are therefore familiar with the AML operating procedures. We are working with the AML Program on the New Haven PSD, City of Summersville and McDowell County PSD water projects.

1105 Mercer Street • Post Office Box 5849 • Princeton, West Virginia 24740
Telephone (304) 425-9555 • Fax (304) 425-9557

4. **Location in Relation to the Project**: Stafford Consultants is located in Princeton, approximately 60 miles from the project site. As a result, we are well positioned to provide needed services efficiently. Stafford personnel regularly attend a monthly meeting of New Haven Public Service District and have worked for the Fayette County Commission and New Haven PSD in supplying water throughout a large portion of the county. We have staff that lives in Fayette County.

5. **Responsiveness to Client's Needs**: Your best assurance of our responsiveness to our clients is through contacting them. We encourage you to contact Pam Browning, General Manager at Oakvale Road Public Service District (304) 487-2750, Mayor Martha Moore at the City of Welch (304) 436-3113 or Dave Pollard (304) 574-4258 regarding our responsiveness and quality of work. Please feel free to contact any of our clients from the contact information provided in our proposal.

6. **Experience of Engineering and Technical Team**: Stafford's professional staff consists of registered profession engineers, each with over 25 years experience. Our design technicians and field representatives have similar extensive records of experience in projects similar to yours. Our project manager has worked directly with the West Virginia Department of Health and the Department of Environmental Protection on water and wastewater projects almost continuously for over 30 years. He therefore understands what is needed for prompt agency approvals.

Enclosed is one original plus one convenience copy and one copy on C.D.

I appreciate your consideration of our proposal and trust you will give our Firm your serious consideration for this important project. I will be pleased to respond to any questions you may have and will provide any additional information you may required. We will make ourselves available for an interview at your convenience.

Sincerely,

C. Dean Upton

C. Dean Upton, P.E.
President

National Society of Professional Engineers®

CDU/cld
Enclosures

RFQ No. DEP14383

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

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

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

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

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

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, and 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. Vendors should visit **www.state.wv.us/admin/purchase/privacy** for the Notice of Agency Confidentiality Policies.

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

Vendor's Name: Stafford Consultants Incorporated

Authorized Signature: C. Dean Upton Date: October 8, 2008

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	PAGE
DEP14383	1

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

VENDOR
RFQ COPY
TYPE NAME/ADDRESS HERE
Stafford Consultants, Inc.
1105 Mercer Street
P.O. Box 5849
Princeton, WV 24740

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

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
09/04/2008				

BID OPENING DATE: 10/08/2008 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	JB		906-94		

STANDARD/PAINT CK/COLLINSDALE WATERLINE 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 STANDARD/PAINT CREEK/COLLINSDALE WATERLINE EXTENSION PROJECT IN KANAWHA/FAYETTE COUNTIES, WV PER THE FOLLOWING BID REQUIREMENTS AND THE ATTACHED SPECIFICATIONS.

BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THIS CONTRACT IS AUTOMATICALLY NULL AND VOID AND IS TERMINATED WITHOUT FURTHER ORDER.

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE
C. Dean Upton	(304) 425-9555	10-8-08

TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE
President	55-065-6181	

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

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
AML CONSULTANT CONFIDENTIAL QUALIFICATION QUESTIONNAIRE

PROJECT NAME	DATE (DAY, MONTH, YEAR)	FEIN
STANDARD/PAINT CREEK/COLLINSDALE WATERLINE EXTENSION PROJECT RFQ NO. DEP14383	08 OCTOBER 2008	55-0656181

1. FIRM NAME	2. HOME OFFICE BUSINESS ADDRESS	3. FORMER FIRM NAME
STAFFORD CONSULTANTS, INC.	P.O. Box 5849 Princeton, WV 24740	

4. HOME OFFICE TELEPHONE	5. ESTABLISHED (YEAR)	6. TYPE OWNERSHIP	6a. WV REGISTERED DBE (Disadvantaged Business Enterprise)
(304) 425-9555	1985	Individual Partnership Corporation **X** Joint-Venture	YES NO **X**

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

P.O. Box 5849, Princeton, WV 24740 / 304-425-9555 / C. Dean Upton, P.E. / 8

8. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM	8a. NAME, TITLE, & TELEPHONE NUMBER - OTHER PRINCIPALS
C. Dean Upton, P.E., President Edward L. Shutt, P.E., Vice President	

9. PERSONNEL BY DISCIPLINE **(Bold Lettering Indicates Minimum Design Team Members)**

2 ADMINISTRATIVE	___ ECOLOGISTS	___ LANDSCAPE ARCHITECTS	___ STRUCTURAL ENGINEERS
___ ARCHITECTS	___ ECONOMISTS	___ MECHANICAL ENGINEERS	*1[2] **SURVEYORS**
___ BIOLOGISTS	___ ELECTRICAL ENGINEERS	1[1] **MINING ENGINEERS**	___ TRAFFIC ENGINEERS
2 **CADD OPERATORS**	___ ENVIRONMENTALISTS	___ PHOTOGRAMMETRISTS	___ OTHER
___ CHEMICAL ENGINEERS	** ESTIMATORS	___ PLANNERS: URBAN / REGIONAL	
4 **CIVIL ENGINEERS**	___ GEOLOGISTS	1 SANITARY ENGINEERS	
4 CONSTRUCTION INSPECTORS	___ HISTORIANS	___ SOILS ENGINEERS	
3 DESIGNERS	___ HYDROLOGISTS	** SPECIFICATION WRITERS	17 TOTAL PERSONNEL
1 DRAFTSMEN			

TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE: 5

(RPEs other than Civil and Mining must provide supporting documentation that qualifies them to supervise and perform this type of work.)

* This work will be performed by one of our Sub-Consultants.

1[1] Kenneth R. Crowe, P.E. primarily will perform Civil Engineering, but has Mining Engineering experience.

1[2] Edward L. Shutt, P.E. primarily will perform Quality Assurance/Constructability Reviews and Sanitary Engineering, but is also a Professional Land Surveyor.

** Estimating and Specification Writing is performed by RPEs in firm

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

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

NAME AND ADDRESS: True Line, Inc. P.O. Box 85 Thorpe, WV 24888	SPECIALITY: Surveying and Mapping	WORKED WITH BEFORE __X__ Yes ______ No
NAME AND ADDRESS: H.C. Nutting 912 Morris Street Charleston, WV 25301	SPECIALITY: Geotechnical	WORKED WITH BEFORE __X__ Yes ______ No
NAME AND ADDRESS:	SPECIALITY:	WORKED WITH BEFORE ______ Yes ______ No
NAME AND ADDRESS:	SPECIALITY:	WORKED WITH BEFORE ______ Yes ______ No
NAME AND ADDRESS:	SPECIALITY:	WORKED WITH BEFORE ______ Yes ______ No
NAME AND ADDRESS:	SPECIALITY:	WORKED WITH BEFORE ______ Yes ______ No
NAME AND ADDRESS:	SPECIALITY:	WORKED WITH BEFORE ______ Yes ______ No
NAME AND ADDRESS:	SPECIALITY:	WORKED WITH BEFORE ______ Yes ______ No
NAME AND ADDRESS:	SPECIALITY:	WORKED WITH BEFORE ______ Yes ______ No

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

YES Description and Number of Projects: Landslide Correction (2), Burning Refuse Piles (2), Refuse Pile Reclamation (7), Shaft Sealing (1), Portal Sealing (5), Highwall Elimination (4)

NO

B. Is you firm experienced in Soil Analysis?

YES Description and Number of Projects:

NO Any soils parameters required will be determined by an independent geotechnical engineer (H.C. Nutting).

C. Is your firm experienced in hydrology and hydraulics?

YES Bridge and dam hydraulics evaluation as related to design and permitting using HEC-RAS, HEC-1 and HEC-2. Storm runoff, drainage and pond design and routing using HydroCAD.

NO

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

YES

NO Contour mapping will be developed in-house or by our surveyor, True Line, Inc.

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 Over 30 water distribution and treatment projects throughout West Virginia, with one being a treatment plant at Danese PSD for AML. Four studies of water quality and mining practices to determine adverse affect of mining on supply an quality: Maplewood, Summersville (Rt. 39), Mod-Mahan and Keystone (Rt. 52). We provided design, construction administration and resident project representation for the AML funded New Haven PSD. We provided construction administration and resident project representation for the AML funded McDowell County PSD.

NO

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

YES Description and Number of Projects: Heizer Creek "A", severe acid mine drainage isolation and collection. Mason County Bond Forfeiture, acid mine drainage collection and treatment with a biological wetland. (Wetland planned but not constructed)

NO

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Upton, C. Dean President	3	33	33

Brief Explanation of Responsibilities

Mr. Upton is President of Stafford Consultants. As principal in charge, he monitors the planning, design, construction and financing of all projects. He designs and supervises public works projects such as water and wastewater systems and treatment plants, industrial parks, airports, dams, storm drainage, community planning and athletic and recreational projects. His management experience consists of design and construction projects such as large water and wastewater collection and treatment facilities. His design experience is primarily related to sanitary projects. However, he is experienced in all areas of civil engineering.

EDUCATION (Degree, Year, Specialization)

BS/1973/Civil Engineering/Marshall University

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)
National Society of Professional Engineers, West Virginia Society of Professional Engineers	Civil/1978/WV Civil/1986/VA

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Shutt, Edward L. Vice President	20	34	34

Brief Explanation of Responsibilities

Mr. Shutt is the Chief Environmental Engineer and is responsible for all water and wastewater projects and quality assurance. As a principal of the firm, he is the Chief Operations Officer. Some of Mr. Shutt's projects include design and construction administration of wastewater treatment plants, lift stations and sewage collection systems, design of water treatment plants, distribution systems and storage tanks, supervised design of an 120 acre industrial park including streets, storm drainage, sanitary sewage collection system, lift station, water distribution system, wastewater treatment plant and storage tank. He has served as an expert witness concerning construction claims, change orders and engineering standards of practice. He was project manager for a WVDoH highway project. He has provided quality assurance and constructability reviews of AML projects.

EDUCATION (Degree, Year, Specialization)

BS/1969/Civil Engineering/Virginia Polytechic Institute 1974-75/Sanitary Engineering/Virginia Polytechnic Institute

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)
National Society of Professional Engineers, American Water Works Association, WV Land Surveyors Assoc., WV Society of Professional Engineers, WV Rural Water Assoc.	Sanitary/1977/WV PLS/1996/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:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Crowe, Kenneth R. Chief Structural Engineer	21	31	0

Brief Explanation of Responsibilities

Mr. Crowe is responsible for all structural and roadway design required for bridge and highway projects. He has been project manager and chief designer for all 20 AML projects Stafford Consultants has completed. He performed all structural design for the $6 million Merriman Athletic Facility at Virginia Tech, structural design for the private box additions to WVU football stadium and structural design of the Chuck Mathena Center for the Performing Arts in Princeton. For the proposed project, Mr. Crowe will provide professional engineering services for any necessary structural work related to the project.

EDUCATION (Degree, Year, Specialization)

BS/1976/Civil Engineering/West Virginia Institute of Technology

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)
	Civil/1980/WV Civil/1981/VA

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Bolton, James R. Quality Assurance	10	31	31

Brief Explanation of Responsibilities

Mr. Bolton has over 30 years experience in the design and management of water projects, 23 of these with Stafford Consultants, Inc. He will serve as Q/A Officer for this project, reviewing all plans, specifications, and the project design. His water project experience includes the AML - funded Danese Water Plant, and approximately 20 water projects in Logan and McDowell Counties.

EDUCATION (Degree, Year, Specialization)

BS/1975/Civil Engineering Technology/Bluefield State College

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)
	Civil/1980/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:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Berry, Howard Designer/Contract Administrator	0	22	22

Brief Explanation of Responsibilities

Mr. Berry primarily assists in water and wastewater project design including line layout, quantity calculations, permitting and CADD work. In addition he has extensive experience in contract administration including change orders, processing pay requests, substantial and final completion inspections and project closeout. He also has several years experience as a resident project representative on both water and wastewater projects.

EDUCATION (Degree, Year, Specialization)

BA/1994/West Virginia Institute of Technology AS/1980/Mining Technology/Beckley College

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

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Burns, Sidney P. Sr. Resident Project Representative	20	49	27

Brief Explanation of Responsibilities

Mr. Burns presently serves as a senior resident project representative overseeing water projects including line installation, tank installation and treatment plant construction. As a inspection supervisor with the WVDoH he worked on several sections of I-64, I-77 and Corridor L.

EDUCATION (Degree, Year, Specialization)

1958/Diploma/Greenbrier High School

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

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Parsons, Don E. CADD Operator	11	16	0

Brief Explanation of Responsibilities

Mr. Parsons is our Chief Draftsman and primarily performs CADD work on bridge and roadway projects. He has also does CADD work on water and sewer treatment plants, buildings and airports.

EDUCATION (Degree, Year, Specialization)

Tazewell High School; Tazewell, VA/1968
Woodrow Wilson Rehabilitation Center; Fishersville, VA /1970 (School of Drafting – Technology) – Diploma

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

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Smith, Kevin G. CADD Operator	0	29	19

Brief Explanation of Responsibilities

Mr. Smith presently assists in the roadway design/grading required for industrial parks, bridge and highway projects. He has experience in earthwork calculations and drainage runoff and facility design. He is an advanced CADD operator and very knowledgeable in the usage of InRoads SelectCAD and AutoCAD Civil 3D, advanced 3D earthwork modeling programs primarily used for roadway design, but applicable to any project with cut and fill work.

EDUCATION (Degree, Year, Specialization)

Certificate for Civil Technology I and II/1979/Raleigh County Vocational Education Center

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

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Kemp, Reggie K. CADD Operator	0	16	16

Brief Explanation of Responsibilities

Mr. Kemp primarily performs CADD work on water and wastewater projects.

EDUCATION (Degree, Year, Specialization)

AAS/1987/Wytheville Community College/Mechanical and Machine Drafting

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

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
King, Clyde W. Resident Project Representative	0	28	28

Brief Explanation of Responsibilities

Mr. King presently serves as a resident project representative overseeing water projects including line installation, tank installation and treatment plant construction. He was trained in operation of heavy earthmoving equipment.

EDUCATION (Degree, Year, Specialization)

1970/Diploma/Ansted High School/1970 Oak Hill Vocational Technical School
Licensed: WV DoH Certified Compaction Technician; Troxler Certified Nuclear Density Gauge Operator

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

14. PROVIDE A LIST OF SOFTWARE AND EQUIPMENT AVAILABLE IN THE PRIMARY OFFICE WHICH WILL BE USED TO COMPLETE AML DESIGN SERVICES.
AutoCAD Release 2000i and AutoCAD Civil 3D – General drafting and earthwork modeling software.
InRoads SelectCAD – 3D surface modeling with plan layout, cross section development, cut and fill calculation capability.
HEC-RAS – US Army Corps of Engineers River Analysis System. Used for channel relocation or design.
HEC-1 and 2 – US Army Corps of Engineers Flood Hydrograph and Water Surface Profile programs.
HYDRAIN – FHWA family of hydraulics programs. Includes runoff calculations, pipe sizing, etc.
WinTR-55 – USDA Small Watershed Hydrology software.
EXCEL & WORD – Industry standard spreadsheet and word processing software.
WaterCAD – Waterline Design and Analysis software
HydroCAD – Surface runoff calculations and pond and retention structure analysis.
RETWALL, FOOTING, BeamPro, General Frame Analysis, etc. – Various structural design programs.
HP Plotters – HP800 and HP2800 for final tracing plotting on paper, vellum or film.
Leitz Set 4 total station with Carlson Explorer data collector.

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
Jumping Branch/Nimitz PSD Madams Creek Water Project Summers County, WV	Jumping Branch/Nimitz PSD P.O. Box 69 Nimitz, WV 25978	Report - Preliminary Engineering Report	N/A	Report 97%
Mercer County Commission South Eastern Mercer Water Study Mercer County, WV	Mercer County Commission 1501 W. Main Street Princeton, WV 24740	Preliminary Engineering Report	N/A	Report – 100%
City of Summersville Glade Ck - Phase IIA Waterline Nicholas County, WV	City of Summersville P.O. Box 525 Summersville, WV 26651	Report, Design, Construction Administration & Resident Project Representation	$6,000,000	Report - 100% Preliminary Design – 100% Final Design – 50%
New Haven PSD Contracts 15/16 Water Fayette County, WV	New Haven PSD Route 1, Box 123C Fayetteville, WV 25840	Report, Design, Construction Administration & Resident Project Representation	$3,200,000	Final Design - 100% Contract 15 – Advertising for Bid Contract 16 – Awaiting Funding
City of Welch Indian Ridge/Industrial Park McDowell County, WV	City of Welch 88 Howard Street Welch, WV 24901	Report, Design, Construction Administration & Resident Project Representation	$6,800,000	Report - 100% Design - 100% Bidding/Negotiations - 100% Construction – 15%
Town of Alderson Water Plant Improvements Greenbrier County, WV	Town of Alderson P.O. Box 179 Alderson, WV 24910	General Consulting	N/A	As Needed
Logan County PSD Phase IIA Sewer Logan County, WV	Logan County PSD P.O. Box 506 Logan, WV 25601	Report, Design, Construction Administration & Resident Project Representation	$6,000,000	Construction - ___%
McDowell County PSD Coalwood Wastewater Treatment & Collection System McDowell County, WV	McDowell County PSD HC 31 Box 436 J Welch, WV 24801	Feasibility Study	$2,500,000	Feasibility Study – 100%
McDowell County PSD Iaeger Water System Replacement McDowell County, WV	McDowell County PSD HC 31 Box 436 J Welch, WV 24801	Design, Construction Administration & Resident Project Representation	$2,800,000	Construction – 85%
Big Bend PSD Ballangee, Barger Springs & Forest Hill Water System Summers County, WV	Big Bend PSD P.O. Box 114 Talcott, WV 24981	Report and Study	$4,300,000	Report - 100%
Town of Renick / Falling Springs Renick Water System Greenbrier County, WV	Falling Springs Corporation P.O. Box 116 Renick, WV 24966	Report, Design, Construction Administration & Resident Project Representation	$2,390,000	Report - 100% Design - 100%
Logan County PSD Northfork Water Logan County, WV	Logan County PSD P.O. Box 506 Logan, WV 25601	Plan, Design and Construction phase engineering for waterline extension.	$2,000,000	Construction - 27%

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
Coalfields Expressway Highway & Bridge Design McDowell County, WV	WV Division of Highways Building 5, Room A317 1900 Kanawha Boulevard E. Charleston, WV 25305	Design and preparation of contract documents for 5.25 miles of four-lane highway including two bridges and two access roads.	$150,000,000	Design - 80%
City of Princeton Wastewater Treatment Plant Expansion Princeton, WV	Princeton Sanitary Board 227 South Wickham Avenue Princeton, WV 24740	Design and preparation of contract documents needed to expand existing aeration capacity and construct additional aerobic digester.	$6,500,000	Study - 100% Design – 5%
Glade Springs Utilities, East Beckley, WV	Cooper Land Development 903 North 47th Street Rogers, AR 72756	Design and preparation of Contract Documents for waterline construction.	$6,700,000	98%
Douthat Water Extension Alleghany County, VA	Alleghany County Low Moore, VA	Plan, Design and Construction phase engineering for waterline extension and booster station.	$1,200,000	Construction - 50%
Big Bend PSD Armory/Wiggins Water Summers County, WV	Big Bend PSD P.O. Box 114 Talcott, WV 24981	Plan, Design and Construction phase engineering for waterline extension.	$1,000,000	Report – 100%
Rolfe Arch Bridge Bridge Replacement Project Rolfe, McDowell County, WV	WV Division of Highways Building 5, Room A317 1900 Kanawha Boulevard E. Charleston, WV 25305	Design and preparation of contract documents for a new bridge over North Fork of Elkhorn Creek at Rolfe.	$900,000	Design – 100% Construction – 100%
Cass Arch Bridge Bridge Replacement Project Cass, Pocahontas County, WV	WV Division of Highways Building 5, Room A317 1900 Kanawha Boulevard E. Charleston, WV 25305	Design and preparation of contract documents for a new bridge over the Greenbrier River at Cass.	$1,100,000	Bidding – 15%

TOTAL NUMBER OF PROJECTS: 19

TOTAL ESTIMATED CONSTRUCTION COSTS: $203,390,000

16. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A SUB-CONSULTANT TO OTHERS					
PROJECT NAME, TYPE AND LOCATION	NATURE OF FIRM'S RESPONSIBILITY	NAME AND ADDRESS OF OWNER	ESTIMATED COMPLETION DATE	ESTIMATED CONSTRUCTION COST	
				ENTIRE PROJECT	YOUR FIRMS RESPONSIBILITY
Epic Event Center Mercer County, WV	Feasibility Study – Site Civil and Utilities	City of Princeton 100 Courthouse Road Princeton, WV 24740	Project on Hold	$60,000,000	$20,000,000

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	YEAR	CONSTRUCTED (YES OR NO)
Oakvale Road PSD Contract No. 1 - Pisgah Road/Old Athens Road Waterline / Booster Station Mercer County, WV	Oakvale Road PSD P.O. Box 1061 Princeton, WV 24740	$1,380,000	2003	Yes
Oakvale Road PSD Contract No. 2 - Water Storage Mercer County, WV	Oakvale Road PSD P.O. Box 1061 Princeton, WV 24740	$240,000	2003	Yes
Oakvale Road PSD Contract No. 4 - Water Storage Mercer County, WV	Oakvale Road PSD P.O. Box 1061 Princeton, WV 24740	$181,700	2003	Yes
Summers County Commission Sand Knob/Cave Ridge Waterline Summers County, WV	Summers County Commission P.O. Box 97 Hinton, WV 25951	$482,000	2003	Yes
Oakvale Road PSD Contract no. 3 - Waterline Summers County, WV	Oakvale Road PSD P.O. Box 1061 Princeton, WV 24740	$650,000	2003	Yes
Danese PSD Water System Ext. & Replacement Fayette County, WV	Danese PSD P.O. Drawer C Danese, WV 25831	$1,200,000	2003	Yes
Garrett Fork Water System Extension Project Logan County, WV	Logan County PSD P.O. Box 506 Logan, WV 25601	$1,800,000	2003	Yes
Lewisburg City Hall Renovations Project Greenbrier County, WV	City of Lewisburg P.O. Box 548 Lewisburg, WV 24901	$1,120,000	2003	Yes
Camden Avenue I-77 Bridge Bridge Widening Project Wood County, WV	WV Division of Highways Building 5, Room A317 1900 Kanawha Boulevard Charleston, WV 25305	$2,500,000	2003	No
New Haven PSD - Contract 12 Saturday Road Waterline Fayette County, WV	New Haven PSD Route 1 Box 123 C Fayetteville, WV 25840	$1,290,000	2004	Yes
New Haven PSD - Contract 12/13 Paint Creek / Plum Orchard Fayette County, WV	New Haven PSD Route 1 Box 123 C Fayetteville, WV 25840	$1,067,000	2004	Yes

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	YEAR	CONSTRUCTED (YES OR NO)
Wilderness PSD Old Nicholas Road/Hominy Falls Waterline/Storage Tank Nicholas County, WV	Wilderness PSD P.O. Box 37 Mt. Nebo, WV 26679	$3,500,000	2004	Yes
City of Hinton Area Sewer Extension - Phase IIIB - Armory - Route 3 Waterline Summers County, WV	Hinton Sanitary Board 322 Summers Street Hinton, WV 25951	$1,450,000	2004	Yes
City of Summersville Regional Water Plant/Intake Contracts 1, 2 and 3 Nicholas County, WV	City of Summersville P.O. Box 525 Summersville, WV 26651	$9,100,000	2004	Yes
Logan County PSD Huff Creek Water System Extension Logan County, WV	Logan County PSD P.O. Box 506 Logan, WV 25601	$3,775,000	2004	Yes
Town of Oakvale Road Public Service District Sidewalk & Drainage Improvement Project Oakvale, Mercer County, WV	Town of Oakvale Road Public Service District P.O. Box 187 Oakvale, WV 24739	$210,000	2004	Yes
Grapevine Creek Bridge Bridge Replacement Project Near Matewan Mingo County, WV	WV Division of Highways Building 5, Room A317 1900 Kanawha Boulevard E. Charleston, WV 25305	$861,000	2004	Yes
Hutchinson Branch Bridge Bridge Replacement Project Gilboa, Nicholas County, WV	WV Division of Highways Building 5, Room A317 1900 Kanawha Boulevard E. Charleston, WV 25305	$1,225,000	2004	Yes
Wiggins Bridge Bridge Replacement Project Hinton, WV	WV Division of Highways Building 5, Room A317 1900 Kanawha Boulevard E. Charleston, WV 25305	$1,415,000	2004	Yes
Town of Matoaka - Sewer System Improvements Project Mercer County, WV	Town of Matoaka P.O. Box 528 Matoaka, WV 24736	$600,000	2005	Yes
Town of Athens Wastewater Plant Athens, WV	Town of Athens 202 State Street Athens, WV 24712	$3,500,000	2005	Yes

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	YEAR	CONSTRUCTED (YES OR NO)
Weight Training Facility Marshall University Huntington, WV	Marshall University Sorrell Maintenance Building 20th Street Huntington, WV 25755	$2,900,000	2006	Yes
Chapmanville High School Site Development Logan County, WV	Logan Co. Board of Education Logan, WV 25601	$150,000	2006	Yes
Oakvale Road PSD Pisgah Road - Elgood Water Extension Project Mercer County, WV	Mercer County Commission 1501 W. Main Street Princeton, WV 24740	$800,000	2006	Yes
Center PSD WWTP Improvements Wyoming County, WV	Center PSD P.O. Box 760 Pineville, WV 24874	$200,000	2006	Yes
Logan County PSD Caney-Rocky Waterline Extension Project Logan County, WV	Logan County PSD P.O. Box 506 Logan, WV 25601	$2,000,000	2006	Yes
Rolfe Arch Bridge Bridge Replacement Project Rolfe, McDowell County, WV	WV Division of Highways Building 5, Room A317 1900 Kanawha Boulevard, E. Charleston, WV 25305	$900,000	2007	Yes
City of Princeton Various Sidewalk Projects Mercer County, WV	City of Princeton 100 Courthouse Road Princeton, WV 24740	$350,000	2005-2007	Yes
City of Welch Tom's Mountain Water/Sewer McDowell County, WV	City of Welch 88 Howard Street Welch, WV 24901	$2,300,000	2007	Yes
Glade Springs Village - West Water & Sewer Raleigh County, WV	Cooper Land Development 903 North 47th Street Rogers, AR 72756	$2,000,000	2007	Yes
Paradise Park Grading and Utilities Princeton, WV	P&G Hospitality, LLC P.O. Box 1715 Princeton, WV 24740	$500,000	2007	Yes
Welch Sewer Improvements Welch, WV	City of Welch 88 Howard Street Welch, WV 24801	$1,000,000	2007	Yes

18. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM HAS BEEN A SUB-CONSULTANT TO OTHER FIRMS (INDICATE PHASE OF WORK FOR WHICH YOUR FIRM WAS RESPONSIBLE)

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH
N/A					

19. Use this space to provide any additional information or description of resources supporting your firm's qualifications to perform work for the West Virginia Abandoned Mine Lands Program.

Please refer to the following attachments:

Attachment 19A – Abandoned Mine Lands Experience (TAB 5)
Attachment 19B – Proposed Project Management Plan (TAB 6)
Attachment 19C – Project Quality Control (TAB 7)
Attachment 19D – Project Cost Control (TAB 8)
Attachment 19E – Resumes (TAB 9)
Attachment 19F – Water System Experience (TAB 10)

20. The foregoing is a statement of facts.

Signature: C. Dean Upton Title: President Date: October 8, 2008

Printed Name: C. Dean Upton, P.E.

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
AML CONSULTANT CONFIDENTIAL QUALIFICATION QUESTIONNAIRE

PROJECT NAME	DATE (DAY, MONTH, YEAR)	FEIN
Standard / Paint Creek / Collinsdale Waterline Extension Project RFQ DEP14383	**08/10/2008**	**55-065-1663-001**

1. FIRM NAME	2. HOME OFFICE BUSINESS ADDRESS	3. FORMER FIRM NAME
True Line, Inc.	**P. O. Box 85, Rt. 103** **Thorpe, WV 24888**	None

4. HOME OFFICE TELEPHONE	5. ESTABLISHED (YEAR)	6. TYPE OWNERSHIP	6a. WV REGISTERED DBE (Disadvantaged Business Enterprise)
(304) 448-2116	**1985**	Individual Partnership ✔ **Corporation** Joint-Venture	**NO**

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

P.O. Box 85, Thorpe, WV 24888 / 304-448-2116 / Dwight Gillespie / Surveying only

8. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM	8a. NAME, TITLE, & TELEPHONE NUMBER - OTHER PRINCIPALS
Dwight Gillespie – President **Vera Gillespie - Secretary & Treasurer**	**John E. Caffrey, P.E. & PLS** **James H. Corner, EIT & PLS** **Stacey B. Mullens, P. E.**

9. PERSONNEL BY DISCIPLINE (Bold Lettering Indicates Minimum Design Team Members)

___ ADMINISTRATIVE	___ ECOLOGISTS	___ LANDSCAPE ARCHITECTS	___ STRUCTURAL ENGINEERS
___ ARCHITECTS	___ ECONOMISTS	___ MECHANICAL ENGINEERS	2 **SURVEYORS**
___ BIOLOGISTS	___ ELECTRICAL ENGINEERS	2 **MINING ENGINEERS**	___ TRAFFIC ENGINEERS
6 **CADD OPERATORS**	___ ENVIRONMENTALISTS	___ PHOTOGRAMMETRISTS	___ OTHER
___ CHEMICAL ENGINEERS	___ ESTIMATORS	___ PLANNERS: URBAN / REGIONAL	
1 **CIVIL ENGINEERS**	___ GEOLOGISTS	___ SANITARY ENGINEERS	
___ CONSTRUCTION INSPECTORS	___ HISTORIANS	___ SOILS ENGINEERS	
___ DESIGNERS	___ HYDROLOGISTS	___ SPECIFICATION WRITERS	25 TOTAL PERSONNEL
___ DRAFTSMEN			

TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE: 2

* RPEs other than Civil and Mining must provide supporting documentation that qualifies them to supervise and perform this type of work.

None

10. HAS THIS JOINT-VENTURE WORKED TOGETHER BEFORE? **YES**

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

NAME AND ADDRESS: **N/A**	SPECIALITY:	WORKED WITH BEFORE _______ Yes _______ No
NAME AND ADDRESS:	SPECIALITY:	WORKED WITH BEFORE _______ Yes _______ No
NAME AND ADDRESS:	SPECIALITY:	WORKED WITH BEFORE _______ Yes _______ No
NAME AND ADDRESS:	SPECIALITY:	WORKED WITH BEFORE _______ Yes _______ No
NAME AND ADDRESS:	SPECIALITY:	WORKED WITH BEFORE _______ Yes _______ No
NAME AND ADDRESS:	SPECIALITY:	WORKED WITH BEFORE _______ Yes _______ No
NAME AND ADDRESS:	SPECIALITY:	WORKED WITH BEFORE _______ Yes _______ No
NAME AND ADDRESS:	SPECIALITY:	WORKED WITH BEFORE _______ Yes _______ No
NAME AND ADDRESS:	SPECIALITY:	WORKED WITH BEFORE _______ Yes _______ No

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

YES Description and Number of Projects: **Surveying only**

NO

B. Is you firm experienced in Soil Analysis?

YES Description and Number of Projects: **Surveying only**

NO

C. Is your firm experienced in hydrology and hydraulics?

YES **Surveying only**

NO

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

YES **Surveying and Contour Mapping**

NO

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

YES **Surveying only**

NO

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

YES Description and Number of Projects: **Surveying only**

NO

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
James H. Corner	**0**	**6**	**0**

Brief Explanation of Responsibilities

Plot Surveys
Produce Site plans
Overburden calculations
Hydrologic designs
Property Plats
Gas Well Plats

EDUCATION (Degree, Year, Specialization)

B.S. Civil Engineering (Graduation Dec. 2004)
B. S. Mining Engineering (Graduation Dec. 2006)

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)
WV Secretary of Professional Surveyors	**Professional Surveyor (2006) WV# 213750** **Engineer Intern (2004) WV# 8649**

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Stacey B. Mullens	**0**	**17**	**0**

Brief Explanation of Responsibilities

Plot Surveys
Produce Site plans
Overburded calculations
Hydrologic designs

EDUCATION (Degree, Year, Specialization)

B.S. Civil Engineering (Graduation 1995)
B. S. Mining Engineering (Graduation 2007)

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)
None	**Professional Engineer (2002) WV# 15423** **Professional Engineer (2003) VA# 039682**

14. PROVIDE A LIST OF SOFTWARE AND EQUIPMENT AVAILABLE IN THE PRIMARY OFFICE WHICH WILL BE USED TO COMPLETE AML DESIGN SERVICES.
Leica Single Frequency GPS System
Sokkia Set 610 Total Station
Sokkia Set 630R Total Station
Sokkia Set 4B Total Station
Carlson Explorer Data Collector (SurvCE 2.0 software)
HP 48 / SMI Data Collector (version 5.0 software)
AutoCAD 2005
SurvCADD 2006 for Auto CAD (COGO, DTM, Profile & Mining Modules)
SKI GPS Post Processing Software
SEDCAD 4.0
Corpscon 6 (Coordinate Conversion Software)

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
	Surveying only			

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

16. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A SUB-CONSULTANT TO OTHERS

PROJECT NAME, TYPE AND LOCATION	NATURE OF FIRM'S RESPONSIBILITY	NAME AND ADDRESS OF OWNER	ESTIMATED COMPLETION DATE	ESTIMATED CONSTRUCTION COST	
				ENTIRE PROJECT	YOUR FIRMS RESPONSIBILITY
Bradshaw School / Road Re-location		Potesta & Associates, Inc. 7012 MacCorkle Ave., S.E. Charleston, WV 25304	11/01/07		Project Oversite
City of Welch water tank site		Clark Construction Group 101 Federal Drive Welch, WV 24801	2007		Surveying

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	YEAR	CONSTRUCTED (YES OR NO)
	Surveying only			

18. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM HAS BEEN A SUB-CONSULTANT TO OTHER FIRMS (INDICATE PHASE OF WORK FOR WHICH YOUR FIRM WAS RESPONSIBLE)

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH
Toms Mountain Wastewater Collection system extension project	Stafford Consulting P. O. Box 5849 Princeton, WV 24740		2005		Surveying
Layout weight room at Marshall University	Stafford Consulting P. O. Box 5849 Princeton, WV 24740		2005		Surveying
Logan County PSD, Phase II	Stafford Consulting P. O. Box 5849 Princeton, WV 24740		2006		Surveying
Logan County PSD, North Fork Water distribution System extension	Stafford Consulting P. O. Box 5849 Princeton, WV 24740		2007		Surveying

19. Use this space to provide any additional information or description of resources supporting your firm's qualifications to perform work for the West Virginia Abandoned Mine Lands Program.

True Line, Inc. has been providing surveying, mapping, site design and permit surface coal mining applications for operations in McDowell and Wyoming counties since 1985. The applications include overburden balance and storage areas, ditch and culvert designs, sediment structure designs and final reclamation plans.

True Line, Inc. has also provided pre-surveying and post surveying services and mapping for several companies that have been awarded contracts to complete AML projects in southern West Virginia for over ten years.

20. The foregoing is a statement of facts.

Signature: _____ Title: President

Printed Name: Dwight Gillespie

Date: October 8, 2008

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
AML CONSULTANT CONFIDENTIAL QUALIFICATION QUESTIONNAIRE

Attachment "B"

PROJECT NAME	DATE (DAY, MONTH, YEAR)	FEIN
Standard/Paint Creek/Collinsdale Water Line Extension Project - #DEP14383	08-10-08	31-0394550

1. FIRM NAME	2. HOME OFFICE BUSINESS ADDRESS	3. FORMER FIRM NAME
H. C. Nutting A Terracon Company	**611 Lunken Park Drive, Cincinnati, OH 45226**	

4. HOME OFFICE TELEPHONE	5. ESTABLISHED (YEAR)	6. TYPE OWNERSHIP	6a. WV REGISTERED DBE (Disadvantaged Business Enterprise)
513.321.5816	**1921**	Individual **X** Corporation Partnership Joint-Venture	YES **X** NO

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

611 Lunken Park Drive, Cincinnati, OH 45226 / 513.321.5816 / Jess A. Schroeder / 158
912 Morris Street, Charleston, WV 25301 / 304.344.8021 / John Blair / 11
790 Morrison Road, Columbus, OH 43230 / 614.863.3113 / Prasad Rege / 43
349 Walnut Street, Suite 8, Lawrenceburg, IN 47025 / 812.539.4300 / Fred Erdmann / 7
470-B Conway Court, Suite B-8, Lexington, KY 40511 / 859.455.8530 / Jess A. Schroeder / 11
1414 E Schaaf Rd, Brooklyn Heights, OH 44131 / 216.459.8378 / Jim Princic / 20

8. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM	8a. NAME, TITLE, & TELEPHONE NUMBER - OTHER PRINCIPALS
R. Jackson Scott, James P. Cahill, Jess A. Schroeder, George C. Webb, Ronald J. Ebelhar, Swaminathan Srinivasan, James Wang, Terry Stransky, Steve Rucker, Jason Sander, Jessica Lech, Ron Lech	

9. PERSONNEL BY DISCIPLINE

61 ADMINISTRATIVE	— ECOLOGISTS	— LANDSCAPE ARCHITECTS	— STRUCTURAL ENGINEERS
— ARCHITECTS	— ECONOMISTS	— MECHANICAL ENGINEERS	2 **SURVEYORS**
— **BIOLOGIST**	— ELECTRICAL ENGINEERS	1 **MINING ENGINEERS**	— TRAFFIC ENGINEERS
3 **CADD OPERATORS**	8 ENVIRONMENTALISTS	— PHOTOGRAMMETRISTS	— OTHER
— CHEMICAL ENGINEERS	1 ESTIMATORS	— PLANNERS: URBAN/REGIONAL	
8 **CIVIL ENGINEERS**	8 **GEOLOGISTS**	— SANITARY ENGINEERS	
50 CONSTRUCTION INSPECTORS	— HISTORIANS	1 SOILS ENGINEERS	
— DESIGNERS	1 HYDROLOGISTS	— SPECIFICATION WRITERS	279 TOTAL PERSONNEL
C. DRAFTSMEN			

TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE: 2

***RPEs other than Civil and Mining must provide supporting documentation that qualifies them to supervise and perform this type of work.**

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

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

NAME AND ADDRESS: **None Anticipated**	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. Is your firm experienced in Abandoned Mine Lands Remediation/Mine Reclamation Engineering?

YES Description and Number of Projects: HCN has extensive experience on site grading and landslide repair projects, many of them associated with AML projects. HCN routinely performs mine subsidence investigations for the Ohio Mine Subsidence Insurance Underwriting Association, and has designed several mine grouting programs to mitigate the effects of future mine subsidence in Kentucky, Ohio and West Virginia.

B. Is your firm experienced in Soil Analysis?

X YES Description and Number of Projects: Over 80 years experience on thousands of projects in Geotechnical, Environmental and Materials Engineering.

NO

C. Is your firm experienced in hydrology and hydraulics?

X YES Description and Number of Projects: Commercial, industrial, and residential storm water drainage projects for landfill development and closure, dam/lake spillway structures, site development drainage design, erosion and sediment control, stormwater pollution prevention plans. Dam spillway structures.

NO

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

YES Description and Number of Projects: _____

X NO

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

YES Description and Number of Projects: _____

X NO

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

YES Description and Number of Projects: _____

X NO

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Bruce, Rome E.	0	30	0

Brief Explanation of Responsibilities

Responsibilities include conceptual and final design, report and drawing preparation, development of construction specifications, construction bidding and contract documents, coordination and management of construction observation, volume and cost estimate calculations, hydrologic analysis, and hydraulic analysis of drainage channels, spillways, and detention ponds.

EDUCATION (Degree, Year, Specialization)

Bachelor of Science, CEE, University of Wisconsin-Madison 1979
A.A.S., Degree (proper), Discipline, Year, School Civil, Gateway Technical Institute, Racine, WI 1974

MSCE/1976/Civil Engineering

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)
American Society of Civil Engineers	Professional Engineer in Indiana, Kentucky, Michigan, Ohio,and Wisconsin

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Erdmann, Fred W.	1	40	0

Brief Explanation of Responsibilities

Senior Consultant and Branch Manager of the Lawrenceburg, Indiana Office

West Virginia Experience in Mining Engineering, Geotechnical Engineering, Groundwater Engineering, and Waste Management.

EDUCATION (Degree, Year, Specialization)

B.S., 1967, Geological Engineering
M.S., 1971, Geological Engineering

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)
Association of Engineering Geologists American Institute of Professional Geologists	P.E., 1982, West Virginia/P.E., 1982, Ohio/P.E., 1989, Florida/P.E., 1982, Kentucky/P.E., 1990, Pennsylvania/P.E., 1990, Indiana/P.G., 1993,Kentucky/ P.E., 1982, Missouri/ P.G., 1988, Tennessee

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

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

Brief Explanation of Responsibilities

EDUCATION (Degree, Year, Specialization)

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

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

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

Brief Explanation of Responsibilities

EDUCATION (Degree, Year, Specialization)

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

14. PROVIDE A LIST OF SOFTWARE AND EQUIPMENT AVAILABLE IN THE PRIMARY OFFICE WHICH WILL BE USED TO COMPLETE AML DESIGN SERVICES
AutoCAD 2007 / Land Development Desktop
Microstation Version 8
Microsoft 2003 Office Suite - (Word, Excel, Access, PowerPoint, Publisher)
Slope Stability Analyses (STABL, ReSLOPE, etc.)
SHAKE2000 - Seismic Site Response Analyses
PLAXIS - Finite Element Analysis Software
AutoCAD Workstations (4)
Desktop Computers (100+)
Laptop Computers (200+)
Laser Printers (50)
Plotters - HP750C (3) OCE TDS450 Plotter - Large Format Flat Bed Scanner (1 ea.)

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

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE

TOTAL NUMBER OF PROJECTS:	TOTAL ESTIMATED CONSTRUCTION COSTS: $

16. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A SUB-CONSULTANT TO OTHERS

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

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	YEAR	CONSTRUCTED (YES OR NO)
Mayo Mine Emergency Slope Failure Field Repair, Martin, KY	U.S. Army Corps of Engineers, Huntington District	$16,000		Yes
Proposed New Dormitories, Mine Subsidence Assessment and Grouting Specifications	Hocking College, Nelsonville, Ohio	Unknown		(Ask Kevin Ernst)
Mine Grouting Specifications for the Proposed Marion County 911 Building, Fairmont, WV	WVDOH C/O Burgess & Niple 4424 Emerson Avenue Parkersburg, West Virginia 26104	Unknown		No
Ventilation Tunnel Remediation and Sealing, Marathon Fuel Terminal, Covington, KY	Marathon Petroleum, LLC Finley, Ohio	Unknown		Yes
Investigation of Acid Seeps at a Former AML site, Revegetation Study, Wellston, Ohio	(Ask Bruce)	Unknown		Yes
Mine Subsidence Assessment, Melody Mountain Development Project, Ashland, KY	R.G. Properties 8163 Old Yankee Road Suite B Dayton, Ohio 45458	Unknown		Yes
Peoples Bank of Mullens, Mine Subsidence Assessment and Preparation of Grouting Specifications	Peoples Bank of Mullens P.O. Box 817 Mullens, WV 25882	Unknown	2007	No

18. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM HAS BEEN A SUB-CONSULTANT TO OTHER FIRMS (INDICATE PHASE OF WORK FOR WHICH YOUR FIRM WAS RESPONSIBLE)

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH
Danhart AML Project, Martins Ferry, Ohio				Yes	R.D. Zande & Associates
Mine Subsidence Assessment, Mountain View High School Addition, Welch, WV				Yes	ZMM, Inc.
Highwall Stability Assessment and Rock Fall Protection Design, (Somewhere), WV	U.S. Bureau of Prisons (Ask Webb)			Yes	(Ask Webb)
Stabilization of Mine Spoil by Dynamic Compaction for Substations and Transmission Towers.	GenPower Longview Power Project Maidville, WV and Dunkard, PA			Not Yet	Beta Engineering

19. Use this space to provide any additional information or description of resources supporting your firm's qualifications to perform work for the West Virginia Abandoned Mine Lands Program.

20. The foregoing is a statement of facts.

Signature: _____ Title: Operations Manager/Appalachian Region

Printed Name: John T. Blair

Date: October 8, 2008

AML and RELATED PROJECT EXPERIENCE MATRIX

PROJECT	Exp. Basis C=Corp P=Personal *	Additional Info Provided in Section(s) **	PROJECT EXPERIENCE REQUIREMENTS															PRIMARY STAFF PARTICIPATION/CAPACITY *** M=Management P=Professional					
			Abandoned Surface Mine Reclamation	Abandoned Deep Mine Reclamation	Portal/Shaft Closure	Hydrologic/Hydraulic Design/Evaluation	Remining Evaluation	Mine/Refuse Fire Abatement	Subsidence Investigation/ Mitigation	Hazardous Waste Disposal	Project Specifications	Water Quality Evaluation/ Mitigation/Replacement	Construction Inspection/ Management	Water Treatment	Equipment/Structure Removal	Stream Restoration	Geotechnical/Stability	Jack D. Stafford, P.E.	C. Dean Upton, P.E.	Edward L. Shutt, P.E.	Kenneth R. Crowe, P.E.	James R. Bolton, P.E.	
Williamson Nursing Home Slide	C	19		X	X						X		X				X	M			P	P	
Mason County Bond Forfeiture	C	19	X	X	X	X					X	X		X	X			M			P		
Weyanoke Portals	C	19		X	X						X							M		P	P		
Sarah Ann Drainage	C	19	X	X	X						X				X			M		P	P		
Heizer Creek "A"	C	19		X	X	X					X	X						M		P	P	P	
Canebrake Complex	C	19		X	X			X			X				X		X	M		P	P		
Millersville Road Refuse	C	19	X	X	X						X							M		P	P		
Milburn Red Dog	C	19						X			X						X	M		P	P		
Charleston Portals	C	19		X	X						X							M		P	P		
Mill Branch Refuse	C	19									X					X	X	M			P		
Ameagle Complex	C	19								X	X				X			M		P	P		
Cabin Branch Refuse	C	19									X						X	M		P	P		
Shoemaker Landslide	C	19									X						X	M			P		
Birds Creek Refuse	C	19	X	X	X						X							M			P		
Kermit (Hatcher) Drainage	C	19									X							M			P		
Maplewood Study	C	19										X						M			P		
Summersville (Rt 39) Study	C	19										X						M			P		
Mod-Mahan Study	C	19										X						M		P	P		
Danese Water Treatment Plant	C	19									X			X				M		P		P	
Blue Pennant Complex	C	19		X	X		X				X				X		X	M		P	P		
Keystone (US 52) Study	C	19										X							M	P	P		
New Haven PSD	C	19									X		X	X					P	M/P		M/P	
McDowell PSD	C	19											X	X					P			M	
Logan County PSD	C	19											X	X									
Prairie Hill Mine AEC, Inc.	P																	M					

* List whether project experience is corporate or personal 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.

ATTACHMENT 19A

ABANDONED MINE LANDS EXPERIENCE

ABANDONED MINE LANDS EXPERIENCE

Stafford Consultants has performed Engineering and Design for twenty (20) projects for the West Virginia Department of Environmental Protection – Division of Abandoned Mine Lands and Reclamation. Each design was delivered on schedule and within budget. These projects are as follows:

1) **Williamson Nursing Home Slide** (Mingo County): This project consisted of corrections to a major slide that was endangering the building and parking lot at the Williamson Nursing Home. Stafford provided subsurface investigations, preparation of contract plans and specifications, and construction inspection. Final design fee was 76 percent of the approved design fee.

2) **Mason County Bond Forfeiture:** This project involved several areas of unreclaimed highwalls, spoil piles, and mine portals, and is unique because a large pond was relocated and acid drainage is being treated by the use of a biological wetland, planted with specialized plants. This project is extensive in nature and size. Final design fee was 83 percent of the approved design fee.

3) **Weyanoke Portals** (Mercer County): This project consisted of sealing existing portals and providing for draining which was being used for a water supply. This project involved both dry and wet seals, and was constructed within budget and on time. Final design fee was 40 percent of the approved design fee.

4) **Sarah Ann Drainage** (Logan County): This project consisted of elimination of several highwalls, a refuse pile, entries and an abandoned shaft. The project is complete and is an excellent example of Abandoned Mine Reclamation at its best. This project utilized pneumatic backstowing in its construction. Final design fee was 88 percent of the approved design fee.

5) **Heizer Creek "A"** (Putnam County): This project consisted of elimination of four large entries that were discharging acid mine water. In addition to these, more than 15 other openings were eliminated. This project involved wet and dry seals, grading and major water problems. The project is complete and looks very good. Final design fee was 67 percent of the approved design fee.

6) **Canebrake Complex** (McDowell County): This project includes several large refuse piles (one of which is burning) placed on very steep mountainsides, and the removal of abandoned mining structures. Also, this work is adjacent to a stream whose banks and water must be protected. Final design fee was 58 percent of the approved design fee.

7) **Millersville Road Refuse** (Upshur County): This project consisted of elimination of refuse piles, highwalls, and spoil piles located in a hollow directly above a populated area. It also included the consideration that a mine directly below the piles was full of water. Although it proved that mine water was not a serious problem, provisions were made in the design to deal with the problem if it had arisen. That project is complete and is very attractive. The

final design fee was 86 percent of the approved design fee. We have included this projects' Plans and Specifications as an example of our work.

8) **Milburn Red Dog Refuse Pile** (Fayette County): This refuse pile lies along the side of the WV Turnpike and has been burning and slipping for several years. The final design fee was 39 percent of the approved design fee.

9) **Charleston Portals** (Kanawha County): This project consists of the elimination of some fifteen mine openings located above a populated area. The work consists of wet and dry seals and grading. The final design fee was 83 percent of the approved design fee.

10) **Mill Branch Refuse Piles** (Wyoming County): This project consists of the elimination of two refuse piles placed on a steep mountainside above Bud, West Virginia. This was a straightforward grading, drainage and revegetation project, but required extreme care because of the steepness of the terrain. The final design fee was 81 percent of the approved design fee.

11) **Ameagle Complex** (Raleigh County): This project consists of the removal of a large coal preparation plant and associated facilities and several refuse piles. This would be a relatively straightforward demolition project. Except that the area is very cramped and the plant was sided with asbestos panels. The final design fee was 85 percent of the approved design fee.

12) **Cabin Branch Refuse Piles** (Logan County): This project consists of the grading, drainage, relocation and revegetation of three refuse piles. Extreme care was required because the piles were located on both sides of a road serving a community, gas compressor station and mining operation. Also, a stream runs along the piles and was protected. The final design fee was 66 percent of the approved design fee.

13) **Shoemaker Landslide** (Upshur County): This project included the construction of a soldier pile retaining wall and regrading of a previously reclaimed fill area which was slipping. The final design fee was 66 percent of the approved design fee.

14) **Birds Creek Refuse** (Preston County): Two refuse piles and 1200 linear feet of highwall were reclaimed in this project. Final design fee was 85 percent of the approved design fee.

15) **Kermit (Hatcher) Drainage** (Mingo County): This was not your normal AML project. An existing structure was located over a draining mine slope. The work consisted of installing a drainage pipe from the slope, through the building, and tying into the local storm sewer system. Some interior remodeling was also performed. Final design fee was 59 percent of the approved design fee.

16) **Maplewood (Route 41) Waterline Feasibility Study** (Fayette County): This study was conducted to determine if pre-1977 mining activity contributed to the degradation of the water supply for the Danese Public Service District. Final study fee was 64 percent of the approved study fee.

17) **Mod-Mahan Road Waterline Feasibility Study** (Marion County): This study was conducted to determine if pre-1977 mining activity contributed to the water quality problems of the wells used for water supply of the local residents. Final study fee was 64 percent of the approved study fee.

18) **City of Summersville (Route 39) Waterline Feasibility Study** (Nicholas County): This preliminary investigation was performed to determine if pre-1977 mining activities affected the local water supply wells. This project was completed using only 54 percent of the approved fee.

19) **Danese Water Treatment Plant Modifications** (Fayette County): As a result of the findings of project 16 (above) a new 350-gpm plant was designed. The old plant was in very poor shape and had insufficient capacity to meet the system demands. This project is complete and we used only 50 percent of the approval fee.

20) **Blue Pennant Complex** (Boone County): This reclamation project consists of the regrading of three refuse sites, one of which was burning. Several old conveyors and structures will also be demolished. Our effort on this project consumed only 81 percent of the approved fee.

21) **Keystone (US Route 52) Feasibility Study** (McDowell County): This preliminary investigation was performed to determine if pre-1977 mining activities affected the supply wells for the Town of Keystone's municipal water system. This project was completed using only 25 percent of the approved fee. (The fee included the Phase 2 study as well which was not required due to results of Phase 1 Study).

Our Design Fee Experience has been exceptional with no overruns. The maximum Design Fee used to date is 88% of the approved fee. All projects done to date have been completed on schedule. See following chart for performance on past projects.

In addition to these projects, we have provided design, construction administration and/or resident project representation for AML funded water projects for New Haven Public Service District, Logan County Public Service District, City of Summersville, and McDowell County Public Service District.

STAFFORD CONSULTANTS, INC.

ABANDONED MINE LANDS PROJECTS

DESIGN FEE HISTORY 1987-2008

WORK DIRECTIVE	PROJECT NAME	APPROVED DESIGN FEE	FINAL DESIGN COST	PERCENT OF APPROVED DESIGN FEE BILLED TO AML
1	Williamson Nursing Home (Mingo)	$48,476	$36,951	76
2	Weynoke Portals (Mercer)	15,260	6,165	40
3	Heizer Creek Portals (Putnam)	44,508	29,875	67
4	Mason County Bond Forfeiture (Mason)	101,892	84,656	83
5	Sarah Ann (Logan)	22,578	19,959	88
6	Canebrake Complex (McDowell)	108,196	63,006	58
7	Millersvile Road Refuse (Upshur)	35,828	30,891	86
8	Milburn Red Dog (Fayette)	31,485	12,149	39
9	Charleston Portals (Kanawha)	17,576	14,550	83
10	Mill Branch Refuse (Wyoming)	35,335	28,716	81
11	Ameagle Complex (Raleigh)	28,792	24,519	85
12	Cabin Branch Refuse (Logan)	26,495	17,636	66
13	Shoemaker Landslide (Upshur)	47,284	28,344	60
14	Birds Creek Refuse (Preston)	31,988	27,326	85
15	Kermit (Hatcher) Drainage (Mingo)	23,998	14,106	59
16	Maplewood (Route 41) Study (Fayette)	8,668	5,590	64
17	Mod-Mahan Road Study (Marion)	8,213	5,227	64
18	Summersville (Rt. 39) Study (Nicholas)	52,730	28,315	54
19	Danese Treatment Plant (Fayette)	87,672	43,550	50
20	Blue Pennant Complex (Boone)	46,412	37,399	81
21	Keystone (US Route 52) Study (McDowell)	45,767	11,377	25

ATTACHMENT 19B

PROPOSED PROJECT MANAGEMENT PLAN

PROPOSED PROJECT MANAGEMENT PLAN

Based on past experience, we have found that formation of an active project team results in successful projects. We recommend a project team including the following members be formed.

1. AML Project Manager
2. Public Service District
3. Project Attorney
4. Accountant/Bond Counsel
5. Kanawha and Fayette County Commissions
6. Region IV Planning and Development Council
7. Stafford Consultants, Incorporated

The project team should work together with the objective of providing the best solution to meet water needs in the Standard/Paint Creek/Collinsdale area. The above team can be modified to best suit the goals of the Project and to meet the needs of the AML program.

Because time delays usually result in increased construction costs, we recommend that as soon as a project team is together that Stafford prepare a preliminary schedule which would be reviewed and finalized by members of the project team. The schedule would provide critical dates for the project and how each member of the project team would operate within the schedule. It would provide AML with a tool to monitor the progress of the project and each member's performance so that corrective actions can be taken to assure that the project stays on schedule. It has been our experience that a detailed schedule which is constantly monitored results in projects staying **on schedule** and **within budget**.

One area of increasing concern in public projects is the amount of claims filed by contractors. You cannot stop claims from being filed; however, efforts should be taken by the project team prior to construction to minimize the financial impact of any potential claims. Stafford's quality Control program and Quality Assurance reviews will assist to minimize construction contractor claims.

Based upon our staff's experience during the past 30 years with over 50 water projects, we have developed an excellent working relationship with West Virginia Department of Environmental Protection, West Virginia Infrastructure and Jobs Development Council, West Virginia Bureau of Public Health, and other Government Agencies. This relationship has resulted in prompt approval of submissions such as permit applications, design reports, Plans, and Specifications. Our relationship and past experience with these agencies will be beneficial in gaining prompt approvals for this project.

Too often projects will be delayed as a result of lack of approval by the Public Service Commission. During the past 30 years our staff has developed an excellent and open relationship with staff members of the Public Service Commission. This has resulted in prompt approval of Certificates of Convenience and Necessity. We believe the key ingredient to prompt Public Service

Commission approvals is our practice of openly discussing the project with the PSC staff prior to submission of the application. Though the proposed project will be fully grant funded, PSC approval will be needed for the local utility to proceed with the Project.

For this project, Stafford has assembled a project team that consists of registered or certified personnel. The key members and their specific duties are presented on the Stafford Project Team Summary which follows.

The varied activities of the firm are guided by its principles. Mr. C. Dean Upton, P.E. will serve as Principal for Stafford on this project. Mr. Edward L. Shutt, P.E. will serve as Project Manager. He will provide overall monitoring of the progress of your project. Mr. Shutt has a strong engineering background relative to water systems. He is a native of West Virginia and is available to work closely with you throughout the course of your project. Mr. Shutt is known in the WV water and wastewater industry for his management skills in keeping projects on schedule.

Members of the project team include:

C. Dean Upton, P.E.	**Principal**
Edward L. Shutt, P.E.	**Project Manager**
James R. Bolton, P.E.	**Quality Control Reviews**
Kenneth R. Crowe, P.E.	**Chief Structural Engineer**
Christopher L. Perdue	**Assistant Project Manager**
Howard Berry	**Contract Administrator/Designer**
Kevin G. Smith	**Computer Application, Drafting**
Michael C. Martin, S.I.	**Engineering Technician**
Sid Burns	**Resident Project Representative**
Clyde W. King	**Resident Project Representative**

When selected by AML, Stafford would meet with the AML's Project Team to discuss the project in detail. This meeting would result in the mutual development of a scope of work for the Project and an Engineering Agreement.

Upon approval of the Engineering Agreement, Stafford Consultants will provide the Preliminary Engineering as set forth in the Engineering Agreement. We will:

1. Prepare preliminary design documents consisting of final design criteria, preliminary drawings and outline specifications. Stafford will review these documents with your staff and the Project Team, to incorporate any ideas they may have that will improve the ease of operations.

2. Based on the information contained in the Preliminary Design Documents, submit an opinion of probable project costs.

3. Present and review Preliminary Design Documents with your staff.

After written authorization to proceed with the Final Design Phase as contained in the Engineering Agreement, Stafford will:

1. On the basis of the accepted Preliminary Design Documents, prepare detailed drawings to show the character and scope of the work to be performed by Contractors on the Project and instructions to bidders, general conditions, special conditions and technical provisions.

2. Furnish to the AML such documents and design data as may be required for, and assist in the preparation of, the required documents so that the AML may secure approval of such governmental authorities as have jurisdiction over design criteria applicable to the Project.

3. Advise the AML of any adjustments to the cost estimate for the Project caused by changes in scope, design requirements, or construction costs based on the final Drawings and Specifications.

4. Prepare proposal forms and Notice to Bidders and assist in the preparation of Contract Documents.

5. Prepare for review and approval by the AML, its legal counsel and other advisors, Contract Agreement forms, General Conditions and Supplementary Conditions and Bid Forms, Invitations to Bid and Instructions to Bidders.

After written authorization to proceed with the Bidding or Negotiating Phase, Stafford will:

1. Assist the AML in obtaining and evaluating bids. Stafford's practice is to personally notify qualified contractors to increase project awareness and competition.

The Construction Phase will commence with the execution of the first of the prime construction contracts to be executed (or on such other date as may be specified by the AML for commencement of the work under any construction contract) and will terminate upon written approval of final payment by Stafford to all of the Contractor(s).

During the Construction Phase, Stafford will:

1. Consult with and advise the AML and act as its representative as provided in the General Conditions of the construction contract.

2. Make periodic visits to the site to observe the progress and quality of the executed work and to determine in general if the work is proceeding in accordance with the Contract Documents. We will keep the AML informed of the progress of the work, will endeavor to guard the AML against defects and deficiencies in the work of the Contractor(s), and may disapprove or reject work as failing to conform to the Contract Documents.

3. Review and approve shop drawings, diagrams, illustrations, brochures, catalog data, schedules, and samples, the results of tests and inspections and other data which any Contractor is required to submit, but only for conformance with the design concept of the Project and compliance with the information given in the Contract Documents; and receive and review maintenance and operating instructions, schedules, guarantees, bonds and certificate(s) of inspection which are to be assembled by the Contractor(s) in accordance with the Contract Documents.

4. Issue all instructions of the AML to the Contractor(s) and prepare routine change orders as required. We may, as the AML's representative, require special inspection or testing of the work. We will act as initial interpreter of the terms and conditions of the Contract Documents and judge of the performance thereunder by the parties thereto and will make decisions on all claims of the AML and the Contractor(s) relating to the execution and progress of the work and all other matters and questions related thereto.

5. Based on our on-site observations as an experienced and qualified design professional and on our review of the Contractor(s) applications for payment and supporting data, determine the amount owing to the Contractor(s) and approve in writing payment to the Contractor(s) in such amounts. Such approvals of payment shall constitute a representation to the AML based on such observations and review that the work has progressed to the point indicated and that to the best of our knowledge, information and belief, the quality of the work is in accordance with the Contract Documents (subject to an evaluation of the work as a functioning project upon substantial completion, to the results of any subsequent tests called for in the Contract Documents, to minor deviation from the Contract Documents, correctable prior to completion and to any qualifications stated in his approval), but by approving an application for payment Stafford shall not be deemed to have represented that he made any examination to determine how or for what purposes any Contractor has used the monies paid on account of the contract price.

6. Conduct inspections to determine if the Project is substantially complete and final inspection to determine if the Project has been completed in accordance with the Contract Documents and if each Contractor has fulfilled all of his obligations thereunder so that Stafford may approve in writing final payment to each Contractor.

7. Provide full time on-site representation, if requested and approved by the AML, which will include observation, testing, filing of daily reports, review of change orders, review of pay estimates and other duties required to assure the highest quality work possible.

All work associated with AML projects will be performed in our office in Princeton, West Virginia. Work subcontracted to consultants will be performed in the following locations:

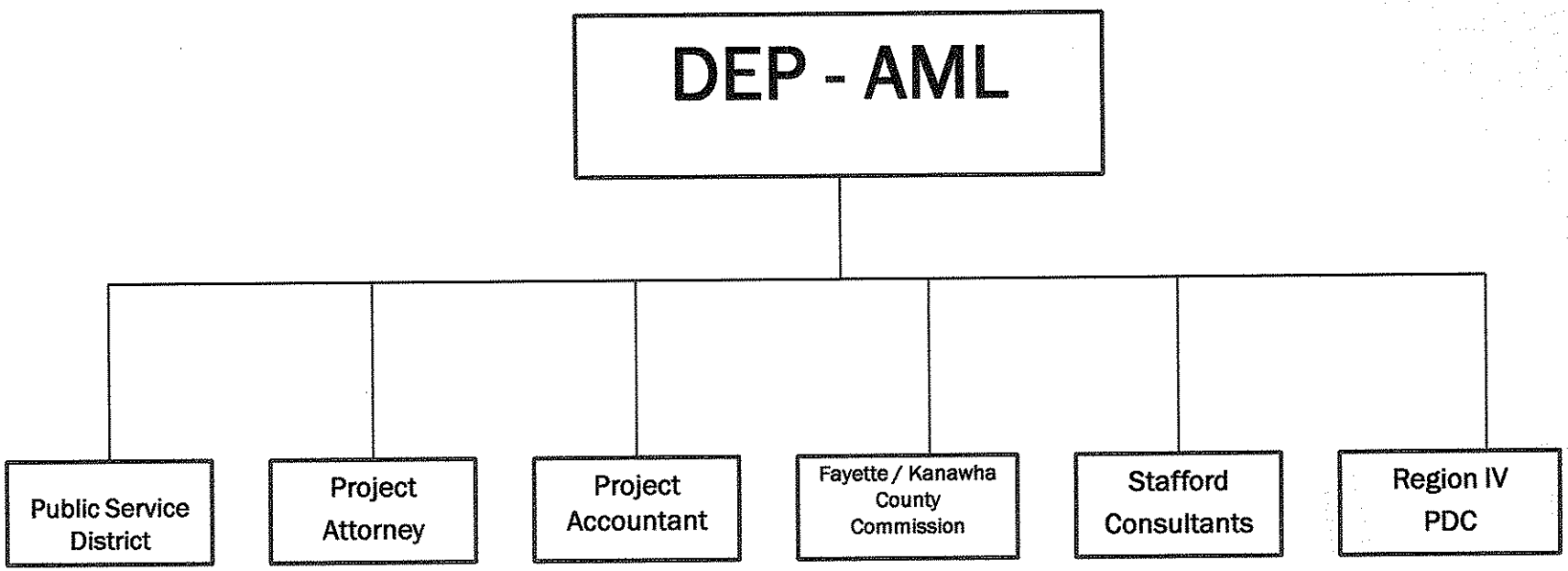
1.	True Line, Inc.	Thorpe, West Virginia
2.	H.C. Nutting	Charleston, WV

WV DEPARTMENT OF ENVIRONMENTAL PROTECTION

Office of Abandoned Mine Lands

Standard / Paint Creek / Collinsdale Water Project

Project Team

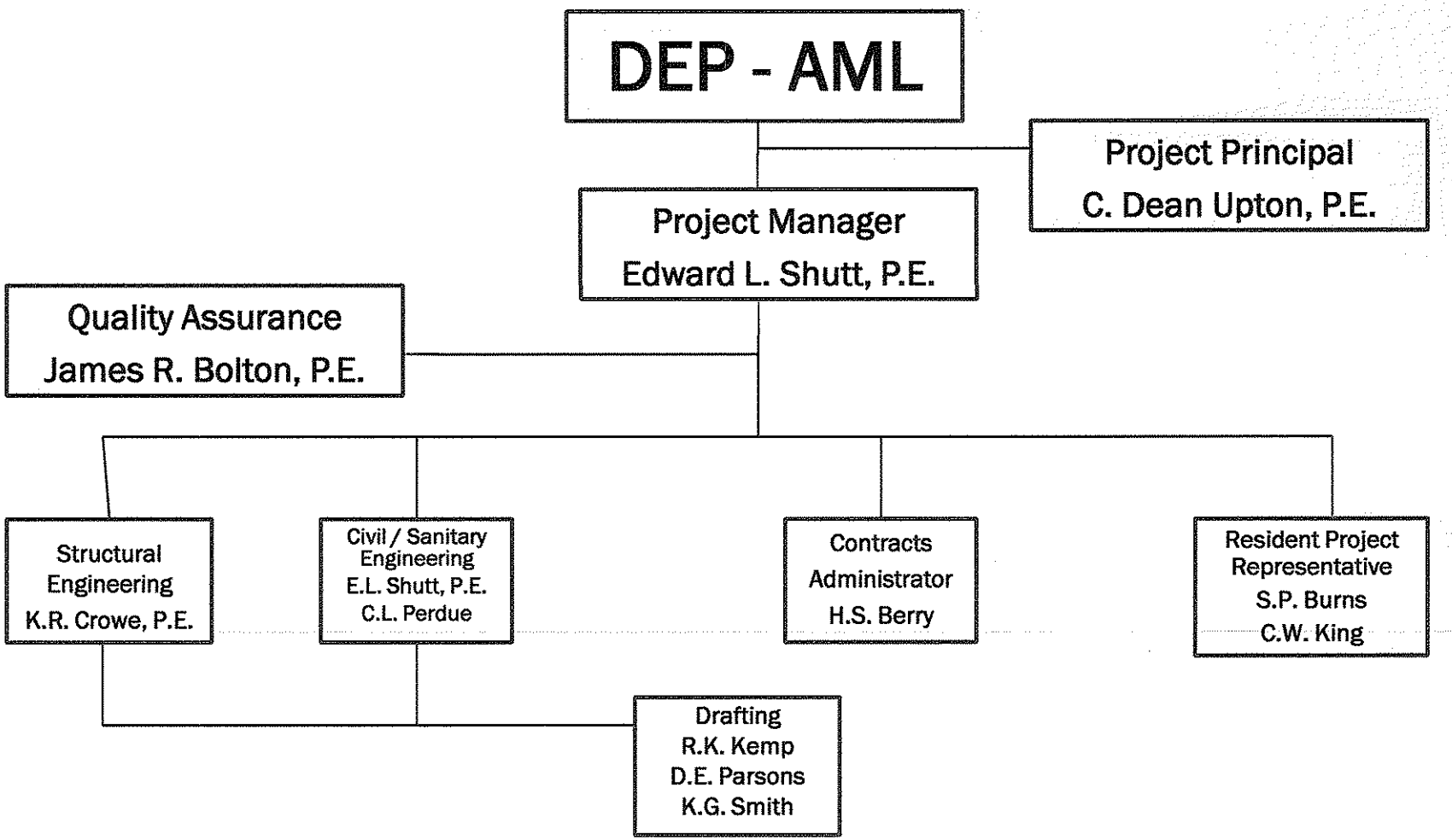


WV DEPARTMENT OF ENVIRONMENTAL PROTECTION

Office of Abandoned Mine Lands

Standard / Paint Creek / Collinsdale Water Project

Stafford Consultants Project Team



ATTACHMENT 19C

PROJECT QUALITY CONTROL

PROJECT QUALITY CONTROL

General: The following are general statements which are the underpinning of our quality control program. From planning to project completion, the emphasis must be on quality control.

I. PLANNING

Planning is the beginning. Quality in work is not an accident. The end result of such a program is a plan which guides the firm toward the delivery of quality professional services and a profitable operation.

II. ORGANIZING

Organize to determine, specify and structure tasks which will accomplish the desired objective – quality services. The clear assignment of responsibility and assumption of authority by those in each position in the firm, is the beginning of the implementation of the quality control program. The establishment of performance standards, policies and procedures by which tasks are to be performed, must be stated with clarity.

III. STAFFING

The careful selection and training of personnel to perform the specified tasks is essential.

IV. DIRECTING

Directing is the responsibility of management – firm and project – to coordinate performance of each and every task to make the quality control programs function as planned, organized and staffed.

V. CONTROLLING

Controlling is a top management responsibility. It is monitoring and measuring to assure that the "actual" results are consistent with the "planned" results. A critical element is the implementation of immediate corrective action when results are not in compliance with the planned predetermined program objectives.

VI. COORDINATION

The success of Stafford's quality control program depends on coordination among parties involved or individual projects. Professional associates – in-house or outside consultants – must be included in the decision making process during design and construction. Good communication and well-structured coordination are essentials to a successful project.

VII. RECORDATION AND RETENTION

All discussions with all parties – clients, outside consultants, contractors – should be recorded in **objective** detail and those records retained in the project file.

Summary: In summary, a quality control program is effective only if management is committed to it. Management is not only the principals but also design professionals at all levels with the firm. Achievement of quality control is first and last a management attitude transmitted to all within the firm.

Several elements are required for delivery of quality professional services. Following are the elements normally utilized by Stafford Consultants, Incorporated.

SECTION A

PRE-PROPOSAL SCOPE EVALUATION

I. ANALYSIS OF PROJECT CHARACTERISTIC

A. Pre-Proposal scope meeting with client.

B. Pre-Proposal site meeting to review clients' objectives and goals.

C. Verify ability to perform including:

1. Licensed Professionals

2. Project Team Personnel

a. knowledge
b. experience
c. current workload

SECTION B

I. PROJECT PRE-SCHEDULING

A. Outline of estimated work effort of each engineering discipline and prepare Gantt project summary charts.

1. Prime professional will not commit to schedule or budget limitations prior to coordination with consultants.

B. Analyze Project

1. List basic information required to perform each phase of the project.

2. Designate priority of services by discipline.

SECTION C

I. CONTRACT NEGOTIATIONS / EXECUTION

A. Prepare clearly written scope of work for clients approval.

B. Prepare a clearly written Project Schedule with project milestones including client reviews.

C. Prepare an estimate of all fees anticipated and costs for any additional services.

D. Use an accepted engineering agreement.

SECTION D

PROJECT MANAGER AND DESIGN TEAM SYSTEM

General: Because the performance of most Engineering designs requires the efforts of more than one individual and since a number of people will be working on a project simultaneously over an extended period of time, it is usually advisable to develop a team approach for accomplishing the work, with a project manager as team leader. The team approach offers a degree of continuity, awareness of the status of a project and a formal mechanism for exchange of information amount team members, whether they be in-house or outside consultants.

I. MANAGEMENT CONSIDERATIONS

A. A Project Manager and a representative of each applicable design discipline comprise the design team.

B. It is likely that an individual may simultaneously perform in more than one function on more than one design team.

C. It is the responsibility of management to determine that proper assignments have been made to accomplish each required activity for each project.

II. TEAM SELECTION

A. Identify key services to be provided on a project and select team members who are experienced and qualified in those particular areas.

B. The average experience on a project team is a valuable measure of the overall team ability.

1. Compute "Experience Quotient"

$$\text{E.Q.} - \frac{\text{Total Years of Experience (applicable to project)}}{\text{Number of Team Members}}$$

2. As a general rule, if the E.Q. is less than ten (10), consideration should be given to provide closer supervision and/or checking of that project.

C. Experienced personnel should be assigned as lead personnel of large projects.

D. Inexperienced personnel should be carefully assigned and work only under supervision of experienced personnel.

III. TEAM COMPOSITION

The following listed positions are normally designated for a large project:

A. Project Manager

B. Project Engineer

C. Design Engineer

D. Technicians

E. Draftsmen

F. Construction Administrator

G. Estimator/Specification Writer/Cost Estimator

H. Resident Project Representative

A. <u>Project Manager (PM)</u>

1. He is responsible to the client and the firm for the successful execution of the project. He has complete authority and responsibility for the project throughout the duration of the contract. The Project Manager may be an officer of the firm or assigned by the officers of the firm.

2. The Project Manager:

   a. Must be capable and experienced person with authority to speak for the firm in dealing with the client and to direct and expedite the work.

   b. Should be involved early in the negotiations and the establishment of the contracts with the owner.

   c. Should participate in establishing the total time requirements for project completion.

   d. Must be fully aware of the client's objective and must satisfy the client's goals.

   e. Reports to management.

   f. Must analyze the project for its scope and organize the work on the project.

   g. Must determine the skills required.

h. Participate in the selection of the project engineer and design team.

i. Must schedule the project through the office.

j. Should be responsible for recommending outside consultants or additional help.

k. Responsible for coordinating and scheduling outside consultants.

l. Monitors the progress of the project to determine percent complete versus money spent, versus design budget.

m. Is responsible for completing the project on time.

n. Is responsible for adhering to project budget.

o. Receives all information coming into the office on a project and disseminates it to in-house design team and outside consultants.

B. **Team Members**

1. The Project Engineer has the responsibility of carrying out the design work on a project for a specific discipline.

2. The Project Engineer:

a. Is responsible for quality control for the design function.

b. Is responsible to the Project Manager.

c. Establishes the design parameters together with the Project Manager.

d. Provides guidance to other members of that design discipline.

e. Must know the capabilities of the design team in order to obtain specialized help when needed.

f. Is responsible for the accuracy of each segment of the work as it is completed.

g. Is responsible for the final check of work product.

h. Assures that the office design policies, procedures, and standards are followed.

i. Is responsible for adherence to applicable codes.

j. Is responsible for the preparation of the technical specifications.

k. Will be responsible for processing of shop drawings.

l. Will analyze and respond to alternate designs.

m. Will respond to questions during construction and will make field visits.

n. Is responsible for keeping the work on schedule.

o. Establishes the manpower requirements.

p. Shall be registered engineer.

q. Should seal the plans for the team or be willing to do so.

r. Should remain with the project throughout its time in the office.

s. Is responsible for all drafting.

3. The Project Engineer is the vital key to implementation of the quality control program.

4. Other team members should be identified and their responsibilities defined.

SECTION E

WRITTEN PROJECT PROGRAM

General: The written project program follows immediately after the signing of the Owner/Engineering Agreement. A Written Project Program should be prepared for every job regardless of its size. This document will form the basis for all design work performed and should be approved by both the engineer and client.

A definitive outline of the scope of the project should be prepared before starting any work. This outline should be confirmed in writing by the client. It is absolutely essential that both the client and the engineer have a mutual understanding of the project requirements.

The responsibility of developing a written project program rests with the Project Manager. The written program must establish the design parameters for all Engineering disciplines and reflect the client's budgetary limitations.

I. PROJECT PROGRAM

The written Project Program should contain most, if not all, of the following:

A. Client Aims and Concepts

1. Define the function of the project.

2. Provide characteristics of the equipment used.

3. Indicate anticipated future expansion.

4. Set out other items resolved with the owner that would affect the project.

B. Cost Limitations

1. Total project limitations.

2. Cost limitations for the various segments of the project should be developed.

C. Space Requirements

1. Identify each individual function with its associated space requirements.

2. Designate all functional groupings or separations.

3. Describe each space giving occupancy load, ceiling height or head room, access points, crane loads, lighting and electrical requirements, etc.

D. Functional Description and Requirements

1. List construction materials and finishes.

2. Describe all site improvements.

3. Describe all structural, mechanical and electrical requirements.

E. Site Data

1. Boundary and topographical survey.

2. Soils Testing.

3. Location and size of existing utilities.

4. Zoning restrictions.

5. Access and traffic data.

6. Investigate history of drainage features.

F. Master Plan and Expansion

1. Include a drawing showing the location of the proposed facility on the site and show all planned future improvements and possibilities for expansion if the information is available.

G. Code Restrictions – Regulatory Permit Requirements

1. List all applicable codes.

2. List all restrictive code requirements which will affect the project.

H. Time Restriction

1. Establish a project time schedule listing dates for:

   a. Schematic design Phase

   b. Design Development Phase

   c. Contract Documents Phase

   d. Bid Period

   e. Construction Period

   f. Project Completion

2. List lead time required for major items requiring long delivery periods.

3. Consider potential time delays due to reviewing authorities.

I. Bidding and Contract Procedures

1. Determine contractor selection procedure (negotiated contract, competitive bid, and direct selection).

2. Determine client imposed alternates or requirements.

3. Determine A/E responsibilities at contract award.

II. ADMINISTRATION OF PROJECT PROGRAM

A. Distribution of Program

1. Establish a written distribution list with the name and position of each team member, including outside consultants.

2. Include the client or client representative on the distribution list.

B. Changes or Revisions

1. Any change which deviates from the formal written Project Program should be issued and distributed as a numbered and dated addendum to the program.

2. If changes are excessive, the entire program should be reviewed.

3. Clearly indicate to client the impact of requested changes.

C. Program Coordination

1. Responsibility for strict adherence to the program must be acknowledged at all levels including outside consultants.

2. Each discipline, in-house or outside consultant, must be responsible for its own activities.

3. At each distribution of program information, ample time should be given for a thorough review and acknowledgement by all disciplines prior to completion of the project phase.

4. A thorough check of the written Project Program should be accomplished at the completion of each phase and confirmed with the client.

ATTACHMENT 19D

PROJECT COST CONTROL

PROJECT COST CONTROL

Stafford Consultants, Incorporated recognizes the client desires to control project cost during design and construction.

Stafford Consultants, Incorporated has established a project management system which has successfully controlled design and construction costs.

Following is Stafford Consultants, Incorporated's Design Budget and Time Schedule Policy to control cost and assure quality.

SECTION A

DESIGN BUDGET AND TIME SCHEDULE

General: Prior to the preparation of budget and time schedule, the entire scope of the project has been defined, the design fee has been set, the contractual agreement has been signed, the project organization has been formed and the project program has been written and reviewed.

Before work commences, the Project Manager should budget both money and time for each phase thus providing each discipline with a yardstick against which to measure performance and monitor progress. Regardless of the office size or the size of the Project, quality tends to suffer when a Project runs behind schedule and/or over budget.

I. DESIGN BUDGET

A. Budget Determination

The total design fee should be broken down at the start of the Project to determine the design cost.

1. Design Cost is the budgeted figure for salary cost to all disciplines. Each discipline should receive a proportionate amount depending upon its estimated effort in the Project.

Note: Initial proportioning of design cost to the individual disciplines may be estimated by historical data from comparative past projects, by estimated man hour requirements, by estimated drawings to be produced, by estimated construction dollar values of each discipline, or by other reasonable process.

B. Other Factors Affecting Design Budget

1. Requirements for outside consultants.

2. Requirements for overtime as determined in computing time schedule.

3. The impact of a new project on the schedule of other projects in progress.

4. Project delays due to extended review periods or program changes resulting from such reviews.

II. TIME SCHEDULE

A. Review Owner's Requirements

1. The Owner naturally has strong recommendations for early project completion.

2. Management should be very careful at the outset not to "overstate" the capabilities of the firm at the time of negotiations. The client rarely forgets the first date mentioned for design completion.

3. "Fast-tracking" or split contracts is becoming commonplace. Firm should be aware of the great amount of coordination required and the inherent problems of control of manpower and finished product. Extra fees, top quality management and high priority over other projects are necessary for success when designing under these requirements.

B. Review Other In-House Project Commitments

1. Determine if overtime will be required to meet commitments.

2. Work priorities should be established by Firm Management for all projects.

C. Time schedule should be continually measured against man-hour effort computed in budget analysis. This shall be compared to the Gantt Project Summary Report or other management programs being utilized.

III. ADMINISTERING DESIGN BUDGET AND TIME SCHEDULE

A. Distribute final Design Budget and Time Schedule to all disciplines.

B. Require confirmation of both Design Budget and Time Schedule by each discipline.

C. Cost
Distribute and review current costs with each discipline periodically.

1. Compare dollars expended to percentage complete.

2. Do not permit any discipline to overspend without investigation.

D. Project Control

Without proper project control, the entire project may become a "panic situation" leading to "short cutting" and elimination of necessary checking time resulting in undetected errors.

E. Outside Consultants

If outside consultants are required, remember that their performance directly affects your own. Impose the same controls on them as imposed on disciplines within your own organization. Also involve them in the same communication and coordination procedures as applied to the in-house team.

F. Small Jobs

Schedule small jobs carefully. Remember that small projects are just as important to the firm as large projects.

Each employee assigned to the project must complete a daily time sheet which indicates the project name, project number, accounting code to match budget, time worked and description of work. Each employee's time sheet will be approved by the Project Engineer, Project Manager and Vice President.

Each employee must also complete an expense report form for each project which must be approved by Project Engineer, Project Manager and Vice President.

The Project Manager will negotiate a written subconsultant agreement with each subconsultant, which sets forth the scope of work, time schedule, and fees for each project. Prior to beginning work the President or Vice President must execute the Agreement and issue Notice to Proceed.

All subconsultant invoices must be approved by Project Manager and President. These are compared to budget and agreement prior to payment.

SECTION B

CONSTRUCTION COST CONTROL

Owners also desire to control construction costs and change order costs. Following is Stafford Consultants, Incorporated's Construction Cost Control recommendations to control construction costs.

I. DEVELOP REALISTIC CONSTRUCTION COST ESTIMATE

A. Develop contract bid documents that provide a clear scope of work by in-house and client review which focuses on issues which generate change orders.

B. Base estimates on past experience – keep current records of construction costs and trends.

C. Use known contractors to discuss cost saving options during design process.

D. Owner has option to employ a specialized, professional estimating firm.

II. CONTINGENCY FUND

A. Provide for a realistic contingency fund to allow for unanticipated conditions.

B. Minimize change orders. Change orders are a normal part of the construction process and consist of the following general categories:

1. Changes in market conditions.
2. Changes in owner's requirements (scope of work).
3. Design errors.
4. Uncovering undisclosed existing conditions.
5. Unknown existing (latent) conditions.
    a. unexpected soil conditions
    b. unknown conditions of an existing structure
6. Changes to initiate better, faster and less costly construction.
7. Design changes to improve final product.
8. Discrepancies in contract documents.
9. Changes in codes and government regulations.
10. Final adjustment of quantities.

NOTE: Change orders are not always bad and do not always result in a negative outcome. Many times the owner is able to provide for a better or expanded project by using available funds to initiate change orders.

III. RESPONSIVE CONSTRUCTION BIDS

This is accomplished by applying several rules.

A. Make sure all known contractors who have performed well on past projects are aware of the project well before bids are due.

B. Conduct mandatory Pre-Bid Conference with all interested contractors.

C. Be available and respond to all of contractors' questions.

D. Amend contract documents by addenda if problems are discovered prior to bidding, or to incorporate changes desired.

E. To the extent possible under funding guidelines, select only bids that are **responsive** and **realistic**.

IV. CONSTRUCTION ADMINISTRATION

A. Conduct Pre-Construction Conference with Owner, Contractor, Regulatory Agencies and other affected parties.

B. Require submission of pre-construction videos prior to beginning work.

C. Require Contractor's superintendent to prepare daily field report of construction activities using Stafford standard form.

D. Require Resident Project Representative to prepare daily field report using Stafford standard form.

E. Contractor's superintendent and Resident Project Representative shall agree weekly on quantities installed.

F. Conduct on-site monthly progress meetings to review project and discuss issues required for successful completion of project and review Contractor's monthly requisition for payment.

G. Promptly notify Owner of any potential change orders.

H. Promptly investigate and resolve all Contractor change order requests.

I. Notify Owner of status of change orders.

J. Resident Project Representative shall prepare a preliminary punch list for Contractor's assistance in achieving substantial completion.

K. Conduct substantial completion inspection with Contractor, Owner and Resident Project Representative and issue Definitive Certificate of Substantial Completion.

L. Conduct final inspection with Contractor, Owner and Resident Project Representative and issue recommendation for final payment.

ATTACHMENT 19E

RESUMES

STAFFORD CONSULTANTS INCORPORATED

Engineering, Design and Consulting
Planning and Environmental Services

C. Dean Upton, P.E.
President

Education: Marshall University Bachelor of Science in Civil Engineering, 1973	**Professional Registration Engineer** West Virginia Virginia

Professional Memberships: National Society of Professional Engineers; West Virginia Society of Professional Engineers, 1998 President; American Water Works Association.

Business and Civic Activi- Past President of Marie Ruritan Club and member New Hope United Methodist Church.

Experience:

2004 - Present Stafford Consultants Incorporated, President
1997 - 2004 Stafford Consultants Incorporated, Chief Sanitary Engineer

Mr. Upton's responsibilities at Stafford Consultants include administrative duties as chief executive officer and project management. Project management duties include the development of projects from conceptual planning through construction and initial operation of facilities.

Representative projects include:

- Water Treatment and Distribution Improvements, Gary Regional Water. Provided design and project engineering for 2.0 MGD plant improvements, three storage tanks, three pumping stations and 50,000 L.F. of water mains.
- Water System Extension, Gary Regional System Phase II, Pageton and Skygusty. Provide design and project engineering for booster station, 400,000-gallon storage tank, and water main extensions for McDowell County PSD.
- Pre-sedimentation Basin, Lewisburg, West Virginia. Provide planning, design, and construction assistance for 500,000 gallon pre-sedimentation basin for water treatment plant.
- Center PSD Wastewater Treatment Plant Improvements. Planning, design, and construction engineering for new decanters and UV disinfection system for existing wastewater treatment plant.
- Ansted Wastewater Improvements, Ansted, West Virginia. Prepare planning, design, funding applications and construction engineering for upgrade of 220,000-gpd wastewater plant and eight pumping stations.
- Athens Wastewater Plant Improvements, Athens, West Virginia. Prepare Wastewater Facilities Plan and design services for expansion and upgrade of wastewater plant to 0.5 MGD capacity.
- Wastewater Treatment Plant Modifications, Princeton, WV. Provide design and construction assistance for improvements to 3.6 MGD wastewater plant to enhance nitrification and solids handling.
- Flocculators and Sludge Removal System, Lewisburg, WV. Provided design and construction phase assistance for installation of horizontal, two-stage flocculators and sludge removal in existing 500,000-gallon concrete tank.
- City of Hinton, Gold Coast and Brooklin Sewer Extension. Planning and Design phase services for extension of sewer services to residential and commercial areas adjacent to Hinton.

- Marshall University Weight Training Facility, Huntington, WV. Design and construction phase services for 14,000 square foot weight training facility.
- Wastewater Pump Stations, Blacksburg, Virginia. Evaluate existing Shenandoah wastewater pumping station. Design, plans and specifications for Murphy and Highland Park Pump Stations.

1986 - 1997 Anderson & Associates, Project Manager

Responsible for numerous water and wastewater projects from planning through design and construction. Representative projects include:

- Wastewater Pumping Stations, Town of Blacksburg, Virginia. Four new wastewater pumping stations and expansion of the Cedar Run pumping station from 2.6 MGD to 3.1 MGD capacity.
- Alleghany County, Virginia. Four wastewater pumping stations and I/I rehabilitation of existing sewer systems. Three new water storage tanks and rehabilitation of three existing tanks.
- Wastewater Treatment Plant, Rich Creek, Virginia. New 150,000-gpd RBC wastewater treatment facility.
- Water System Improvements, Pearisburg, Virginia. Development of a 220 gpm well, extension of water system, two booster stations, and a 125,000-gallon storage tank.
- Wastewater Treatment Plant Expansion, Shawsville, Virginia. Expansion of plant from 100,000 gpd to 200,000-gpd capacity.
- Foxcroft Avenue Water Improvements, Martinsburg, West Virginia. Distribution system improvements to enhance fire protection.

1981 - 1985 G. A. Tice, Incorporated, Project Engineer/Chief Engineer

- Responsible for planning, design and construction administration for water and wastewater projects. Also responsible for coordination of activities for up to three field survey crews. Major municipal projects for which Mr. Upton provided construction administration services include the Shady Springs PSD's wastewater system and the Town of Pax wastewater system. The Shady Spring system included construction of approximately 50 miles of sanitary sewers, three pumping stations, and a 0.8 MGD wastewater treatment plant.

1974 - 1981 Holley Kenney Schott, Incorporated, Project Engineer

- Prepared wastewater facilities plans, design drawings and specifications for water and wastewater projects. Projects completed included numerous sewer system extensions for the City of Beckley and the North Beckley Public Service District. Facilities plans completed included the City of Beckley - Raleigh County Facilities Plan and the Red Sulphur Public Service District Facilities Plan. Design projects also included water and wastewater extensions to the Red Sulphur PSD system.

1973 - 1974 John E. Harms, Inc., Inspector

- Construction inspector for wastewater collection systems, wastewater pumping station, and storm water systems in Anne Arundel County, Maryland.

STAFFORD CONSULTANTS INCORPORATED

Engineering, Design and Consulting
Planning and Environmental Services

Edward L. Shutt, P.E./P.L.S.

Vice President

Education: Virginia Polytechnic Institute and State University
Bachelor of Science in Civil Engineering, 1969

Studies for graduate degree in Sanitary Engineering VPI 1974 & 1975; Water Storage Facilities Design - 1977, University of Wisconsin; Professional Liability/A/E Quality Control - 1980, Victor O. Schinnerer & Company; EPA Construction Grants Administration - 1980, The Cilren Company; Construction Claims and Disputes - 1984, Engineering News Record; Claims - Anticipation and Avoidance - 1986, WV Rural Water Association; Construction Contract Administration - 1994 American Institute of Architects; Understanding and Managing Risk - 1995 Victor O. Schinnerer and Company; Better Management – Leading Your Firm and it's Project Manager – The Picus Group; Balanced Evaluation of Public/Private Partnerships – AWWA Research Foundation; Management of Public Works Construction Project – American Public Works Association; West Virginia Construction Law: Can This Job Be Saved – Lorman Education Services – Ethics for Engineers – Chitester Management System, Inc. - 2000; Water Storage Tank Inspections – WVACE/WV Rural Water; Modern Contracting Practices for Infrastructure Projects – Professional Development Option. 2001 – Construction Issues in West Virginia – Lorman Education Services; 2005 - Victor O. Schinnerer and Company, Inc.- Contracts for Professional Services / Alternate Methods for Project Delivery / Insurance for Design Professionals / Dispute Prevention and Non-Adjudicative Resolution - Litigation on Arbitration / Planning for Success in the International Project Arena / Concepts in Risk Management / Legal Liability of Design Professionals / Developing the Capacity to Manage Risk / Evaluation of Projects and Clients / Planning Phase and Design Phase Risk Management / Bidding or Negotiation Phase Risk Management / Construction Phase Risk Management.

Professional Registration West Virginia (Engineer)

West Virginia (Surveyor)

Professional Memberships: National Society of Professional Engineers, American Water Works Association, West Virginia Rural Water Association and West Virginia Society of Professional Engineers.

Business and Civic Activities: Member Johnston Chapel Church, Past Member Finance Committee; Johnston Chapel Church, former Sunday School Teacher; Mercer County Democratic Executive Committee, Treasurer; Former member West Virginia Association of Consulting Engineers; Former member West Virginia Association of Consulting Engineers Infrastructure Committee.

Experience:

1985 - Present Stafford Consultants Incorporated, Vice President

- Operating officer in charge of design, construction administration activities and quality assurance. Responsibilities have involved conceptual planning, preliminary engineering, final design, financing, bidding and negotiations, construction administration, supervision of resident project representation and final closeout for water projects ranging from $250,000 to $44,000,000 in size.
- Design/Quality Assurance Review for various projects.
- Expert Witness in construction claims, change orders and engineering standards of practice.

1977 - 1985 **Gates Engineering Company, Chief Environmental Engineer, Chief Sanitary Engineer, Assistant Chief Engineer - Sanitary, and Civil Engineer**

- Responsible for the supervision of civil and sanitary projects, as well as the day-to-day supervision of three engineers and the coordination of designers and draftsmen.
- Assisted clients by performing preliminary engineering studies and cost estimates for grant applications to secure funding from various government agencies, as well as performing detailed work in financing through revenue bonds.
- Prepared feasibility studies, rate studies and operational and maintenance budgets.
- Design and construction administration services for water and wastewater systems.
- Supervised design of 1.1 miles of WV Route 290/1 for the WV Department of Highways.
- Participated in planning and design of the West Virginia University Stadium.
- Participated in planning and design of expansion of Martinsburg Veterans Administration Hospital.
- Provided engineer's services during construction and supervised resident project representatives.

1975 - 1977 **Region I Planning and Development Council, Sanitary Engineer**

- Prepared grant applications and assisted communities in obtaining funding for water and sewer projects.

1975 **Pentree Incorporated, Design Civil Engineer**

- Responsible for design of water treatment plant and distribution system.

1974 - 1975 **Virginia Polytechnic Institute and State University, Graduate Student and Graduate Research Assistant.**

1972 - 1974 **Pentree Incorporated, Design Civil Engineer**

- Coordination and supervision of all survey work. Survey work including topographic surveys, land surveys, control surveys for aerial mapping and construction surveys for contractors in the layout of their work.
- Design of wastewater plant, runway expansion and airport layout.

1970 - 1972 **United States Army, Draftsman**
Honorably discharged with the rank of Sergeant (E5)

Summer 1969 **Frank R. McGuire Construction Company, Draftsman**

- Responsible for preparation and obtaining approval of all working drawings from Architect/ Engineer on the Big Walker Mountain Tunnel Portal Building (I-77) in Wytheville, VA.

Summers 1966, 1967 & 1968 **West Virginia Department of Highways**

- Worked on survey crew in 1966, which was involved in layout of various highway projects. Also surveyed projects for final quantities. Worked as a laborer on bridge repair and as a survey taker for determining traffic counts.

STAFFORD CONSULTANTS INCORPORATED

Engineering, Design and Consulting
Planning and Environmental Services

James R. Bolton, P.E.
Manager, Municipal Design

Education:	Bluefield State College Bachelor of Science in Civil Engineering Technology, 1975	**Professional Registration**	West Virginia Engineer
Business and Civic Activities:	Member Westminister Presbyterian Church		

Experience:

1985 - 2008 Stafford Consultants Incorporated, Manager - Municipal Design

Mr. Bolton retired from full time employment with Stafford Consultants in June 2008. However, he provides Quality Assurance reviews as a part time employee.

Mr. Bolton is a partner in the firm and has served primarily as Project Manager for municipal and public service district water and wastewater system design, bidding, and construction period services. Also responsible for preparation of preliminary engineering reports and feasibility studies. He is experienced in the design of hydraulic structures as well as building and site structural design. Also has served as Project manager for numerous airport improvement projects. Notable project experience includes serving as project manager for fourteen water system extension projects for Logan County PSD, five water system extension projects for McDowell County Public Service District, water treatment plant projects for the Town of Alderson, Danese Public Service District and McDowell County PSD, and wastewater collection and treatment plant projects for the City of Hinton and Bramwell Public Service District. Mr. Bolton also served as a key project team member on the Marshall University Football Stadium Project.

In his capacity as Manager, Municipal Design, Mr. Bolton supervises the design and drafting staff as well as the resident project representative staff during construction. He is also responsible for day-to-day communications with our clients.

1978 - 1985 Gates Engineering Company, Civil Engineer

Served as Project Manager and design team member for miscellaneous water and wastewater systems design, bidding and construction period services. Duties also included structural design of water storage tanks and other hydraulic structures as well as all ground level structures for the a university football stadium project. Notable projects include the Town of Alderson, Phase II Wastewater Collection System Project, water treatment plant and distribution system for Logan County PSD, water system renovation for the Town of Rainelle and the West Virginia University Football Stadium Project.

1975 - 1978 J. H. Milam, Inc., Design Engineer

Served as design engineer for wastewater and water treatment plants, coordination of design drawings and preparation of specifications. Duties also included preparation of feasibility studies.

1975 Corte Construction Company, Draftsman-Designer

Responsible for structural and site design, drafting and reproduction work required in the construction of industrial and commercial buildings.

STAFFORD CONSULTANTS INCORPORATED

Engineering, Design and Consulting
Planning and Environmental Services

Kenneth R. Crowe, P.E.
Chief Structural Engineer

Education:	West Virginia Institute of Technology Bachelor of Science in Civil Engineering, 1976	**Professional Registration Engineer**	West Virginia Virginia Kentucky

Business and Civic Activities: Church Treasurer, Board of Trustees Chairman, and member of New Hope United Methodist Church

Experience: **1985 - Present Stafford Consultants Incorporated, Chief Structural Engineer**

Design Engineer and Project Manager for the following projects:

- West Virginia Department of Environmental Protection - Abandoned Mine Lands reclamation projects including Williamson Nursing Home Slide, Weyanoke Portals, Mason County Bond Forfeitures, Heizer Creek, Sarah Ann Drainage, Canebrake Complex, Milburn Red Dog Pile, Charleston Portals, Millersville Road Refuse Piles, Cabin Branch Refuse Pile, Mill Branch Refuse Piles, Ameagle Complex, Shoemaker Landslide, Kermit Drainage, Birds Creek Refuse and Blue Pennant Complex.
- Bridge design, roadway design and WVDoH coordination for Patterson Creek Bridge, Devils Backbone Bridge, Cassity Bridge, Reeses Mill Bridge, Tabbs Station Bridge, Bowles Bridge, Gardner Truss Bridge, Iaeger/Bradshaw Bridge, Mineral Wells Interchange Overpass Bridge, Camden Avenue I-77 Bridge, Mullens Overhead Bridge, Cass Arch Bridge, Gould Bridge, Wiggins Bridge, Hutchinson Branch Bridge, Grapevine Creek Bridge, Rolfe Arch Bridge, Craigsville Intersection Improvements, Webster Road Intersection Improvements, Hinton Road Intersection Improvements, Bellepoint Road Widening, North Lewisburg Road Widening and 5.25 miles of the four lane Coalfields Expressway in McDowell County.
- Roadway design and WVDoH coordination for Poca Bridge, Pax Bridge, Rock Truss Bridge, Welch Post Office Bridge, Buckhannon Truss Bridge and Buffalo Creek Bridge.
- WV Dept of Environmental Protection , Abandoned Mine Lands. Phase I Water Feasibility Studies for Route 41 (Maplewood), Fayette Co.; Mod and Mahan Road, Marion County; and Route 39, Summersville in Nicholas County.
- Structural design for Mathena Cultural Arts Center in Princeton.
- Structural design for Athletic Facilities Building at Virginia Tech.
- Structural design for skybox addition at West Virginia University.
- Structural design for Princeton Community Hospital's Behavioral Medicine Center.
- Structural design for clarifier at Welch Wastewater Treatment Plant.
- Structural design for sequencing batch reactor at Athens Wastewater Treatment Plant.
- Structural design for flocculator tank at Summersville Regional Water Treatment Plant.
- Preparation of contract plans and bidding documents for pedestrian underpass, Shott Building Elevator and Conley Hall Renovations at Bluefield State College.
- Preparation of contract plans and bidding documents for sidewalk replacement and drainage improvements for the Town of Oakvale.
- Preparation of contract plans and bidding documents for renovations to Married Student Housing Building at Marshall University.
- Preparation of contract plans and bidding documents for street paving and sidewalk construction for the Town of Peterstown.

- Preparation of contract plans and bidding documents for sidewalk construction along Stafford Drive and Ingleside Road for the City of Princeton.
- Building, structure, pile foundation design and truss analysis for Celanese Celco Plant, Narrows, Virginia.
- Preparation of contract plans and bidding documents for parapet repair, roofing replacement and canopy construction projects for Princeton Community Hospital.
- Preparation of contract plans and bidding documents for roofing replacement project for Princeton Public Library.
- Updating of Master Plans for Greenbrier Valley Airport and Mercer County Airport.
- Bridge inspection and rating for United Coal Company.

1981 - 1985 Gates Engineering Company, Principal Consulting Mining Engineer and Civil Engineer II

- Responsible for all mine permitting, including DR-4 Surface Mine Applications, DR-14 Underground Opening Applications, DR-3 Prospecting Applications, NPDES Permit Applications and Department of Mines Opening Approval Applications. Performed all permit related design; haulroads, diversion ditches, sediment ponds, drainage control structures, valley fills and refuse disposal areas.
- Assisted in mine design and refuse disposal area design. Performed property evaluations including coal reserves and reclamation needs. Operated department microcomputer; wrote programs; and provided computer analysis for STRESS and COGO. Assisted on bridge and structural design projects.

1980 - 1981 Westmoreland Coal Company Central Engineering Department, Chief Environmental Engineer

- Responsible for all civil engineering design and mine permitting in Westmoreland's West Virginia Divisions. Supervised three engineers and two draftsmen. Prepared OSM Permit Applications, West Virginia Department of Natural Resources DR-4, DR-14 and DR-23 Surface and Deep Mine Applications, State Water Pollution Control Permit Applications and NPDES Permit Applications. Designed sediment ponds, drainage control structures, concrete footings and walls and steel columns and beams. Prepared run-off hydrographs for drainage design, performed flood routing and performed fill slope design.

1979 - 1980 Westmoreland Coal Company Central Engineering Department, Environmental Engineer

- Prepared OSM Permit Applications, West Virginia Department of Natural Resources DR-4, DR-14 and DR-23 Surface and Deep Mine Applications, State Water Pollution Control Permit Applications and NPDES Permit Applications. Designed sediment ponds, drainage control structures, concrete footings and walls, and steel columns and beams. Prepared run-off hydrographs for drainage design, performed flood routing and performed slope design.

1976 - 1979 Westmoreland Coal Company Imperial Smokeless Division, Mining Engineer

- Performed all steel and concrete design for the division - beams, footings, columns and walls. Performed surveying outside and underground. Prepared NPDES, State Water Pollution Control, and deep and surface mining permits.

STAFFORD CONSULTANTS INCORPORATED

Engineering, Design and Consulting
Planning and Environmental Services

Christopher L. Perdue
Assistant Project Manager

Education:	Bluefield State College Bachelor of Science in Civil Engineering Technology May, 2003	**Professional Registration** **R.L.D.**	Virginia #26145 (Exp. 10-30-09)

Professional Memberships: American Society of Civil Engineers (Since 2001), Engineers and Surveyors Institute (ESI)
Designated Plans Examiner (Fairfax and Loundoun Counties, and City of Alexandria, VA)

Experience:

January, 2008 - Present Stafford Consultants Incorporated, Assistant Project Manager

Mr. Perdue's responsibilities at Stafford Consultants include project design assistance and construction phase assistance for water, wastewater, stormwater management, and development projects.

Assignments include the following projects:

- ***Wastewater Collection System Expansion and Wastewater Plant Improvements, Hinton, WV.*** Preliminary design and project engineering for 2.0 MGD (peak flow) plant improvements, 2 pumping stations and 16,000 L.F. of Gravity Sewer and Sanitary Force Main.
- ***Anchor Road Water System, Logan County, WV.*** Design and project management assistance for $2,500,000 water system expansion project.
- ***Douthat Water System Extension, Alleghany County, Virginia.*** Prepare VMRC and Corps permit applications and assist with construction phase engineering services.

July, 2004 - October, 2007 VIKA, Incorporated, Project Manager/Project Engineer

Project Management responsibilities included; Initial Project Feasibility Studies, conceptual design, Final Design to include Sediment and Erosion Control Plans, Wet Utility Design, Storm Water Management Facilities (Wet and Dry Ponds, regional impoundments, Underground Facilities, etc.), Traffic Control Plans. Responsibilities also included Construction Administration services from construction commencement to project occupancy or completion.

- ***Fort Lincoln Townhomes, Washington, DC.*** Planning, design and construction administration services for 222 townhouse unit development. Project included stormwater management and retaining wall structures.
- ***The Villages at Washington Gateway, Washington, DC.*** Feasibility study and planned urban development preparation for 22 acre tract. Project included development of a regional stormwater management pond.
- ***Stonewall Estates, City of Fairfax, VA.*** Planning, design and construction administration services for 7-lot subdivision. Plan included utilities, roadway and storm water management.
- ***Riverside Park Apartments, Fairfax County, VA.*** Planning for new amenities to existing 1500-unit residential development. Amenities included new clubhouse, amphitheater, two swimming pools, leasing office and other site improvements.
- ***Southeast Federal Center, Washington, DC.*** Preliminary planning, site grading, hydraulic design related to floodplain issues and permitting for roadways and utilities in areas surrounding the Washington Nationals Stadium along the Anacostia River in Southeast D.C.

STAFFORD CONSULTANTS INCORPORATED

Engineering, Design and Consulting
Planning and Environmental Services

Howard "Sonny" Berry

Construction Administrator
Designer/Draftsman/Resident Project Representative

Education: West Virginia Institute of Technology
Bachelor of Arts, 1993

Beckley College
Associate of Science in Mining Technology, 1980

Fayette Plateau Vocational Technical Center - Drafting, 1974
WVU - Course work in Landscape Architecture, 1974

Licensed: West Virginia DoH
Compaction Technician

Troxler Certified Nuclear
Density Gauge Operator

Experience:

1985 - Present **Stafford Consultants Incorporated; Construction Administrator, Designer/ Draftsman, Resident Project Representative**

- Construction administration for various civil engineering projects. Work includes responsibility for writing change orders, reviewing pay estimates, maintaining construction project files, and serving as field person liaison. Prepares project cost estimates, permit applications, and performs shop drawing review and approval. Specific projects include New Haven PSD Regional Water Project, City of Welch Wastewater Collection System, Town of Alderson Wastewater Treatment Plant, City of Summersville Water Project and Oakvale Road PSD Mercer/Summers Water Project.
- Design layout and drafting various projects, including the City of Summersville Regional Water Treatment Plant, City of Welch Wastewater Treatment Plant, Big Bend PSD, New Haven PSD Waterline Extension Project, City of Mullens Street Paving Project, Wilderness PSD Nallen-Old Nicholas Road Waterline Extension Project and Oakvale Road PSD Water and Sewerline Improvements.
- Resident project observation for various project, including Wilderness PSD Waterline Extension Project, Town of Lester Water System Improvements, Raleigh County Airport Taxiway and Markings, Princeton Community Hospital Rehabilitation Center, Marshall University Fairfield Stadium Artificial Turf Replacement and City of Oak Hill Street Paving.

1984 - 1985 **Gates Engineering Company, Resident Project Representative**

- Resident project representative for Town of Alderson wastewater facilities.
- Checking shop drawings for West Virginia University Stadium Expansion.
- Resident project representative for the Crab Orchard-MacArthur PSD wastewater facilities.

1983 - 1984 **Trion Construction Company, General Laborer**

1981 - 1983 **Republic Supply Company, Field Sales Representative**

- Servicing oil and gas field supply accounts.
- Inventories and purchasing
- Valves and fitting make-up

1980 **Roger Hornsby Constructioin, General Laborer**

1977 - 1979 **Riverton Coal Company, Mine Clerk**

- Responsible for production records, time records, mine supplies, underground communications, EMT and other duties.

1975 - 1977 **Ben Bob, Inc., Survey Party**

- General rodman and chainman for survey party.

STAFFORD CONSULTANTS INCORPORATED

Engineering, Design and Consulting
Planning and Environmental Services

Kevin G. Smith
Designer/CAD Technician

Education:	Raleigh County Vocational Education Center, 1979 Lay Minister Certificate, School of Christian Studies of the West Virginia Baptist Convention	**Licensed:**	Civil I and Civil II Certificates

Experience: **1998 - Present** **Stafford Consultants Incorporated, Designer/CAD Technician**

- Design and drafting for water and wastewater projects including, Summers County Sewer Study for Summers County Commission, Summersville Water Treatment Plant, John Nash Boulevard Sewer for Bluefield Sanitary Board, Brooks Barksdale Water Extension for Mercer/Summers County Commissions.

- Design and drafting on bridge and highway road projects throughout the State of West Virginia including Grapevine Creek Bridge, Hutchinson Branch Bridge, Cass Arch Bridge, Mullens Bridge, Coalfields Expressway US 121, Wiggins Bridge, Mineral Wells Interchange Overpass Bridge, US Route 219 Lewisburg Widening, Bellepoint Road Widening, Route 41 and West Webster Road Intersection Improvement, Route 20 and 55 Intersection Improvement, and Gould Bridge.

- Design and drafting for drainage and civil work associated with Gardner Industrial Park for Mercer County Commission, Chapmanville High School, Williamstown Middle School, Parkersburg High School and Parkersburg South High School.

1998 **Computects and DBD Professional Group, Inc. – Beckley, WV**

- Performed civil site designs and civil layout of architectural projects including Oak Hill Days Inn, Gary Library and Medical Center, Ronceverte Voluntary Fire Department, Ronceverte City Hall, and Sun Mountain.
- Design and drafting on engineering projects including Glade Springs Sanitary Sewer Relocation.
- Site development for A&E Construction at the NW intersection of US 19 and WV16 north of Beckley.

1992-1997 **G. A. Tice Incorporated – Beckley, WV**

- Design and drafting on various civil engineering projects including subdivision layouts and Pinecrest Industrial Park at Beckley.
- Highway and roadway storm drainage systems.
- Sanitary sewer collection and extensions systems including Shady Spring PSD, Town of Mount Hope, and North Beckley PSD.
- Water distribution systems including Town of Pax and Crow area water extension project.
- Calculations for many residential, commercial and government survey projects including Canaan Valley State Park for USFW Service and the New River National Park Service.
- Civil site design for commercial and government projects including Beckley Holiday Inn Addition, Haz Mat Facilities Administration Building, Pinecrest Industrial Park, and Cool Ridge Post Office.

1986-1992 ESP Associates - Charlotte, NC

- Development of custom CAD packages for in-house use, including Storm Water, Sanitary Sewer, Subdivision Layout and Staking, and Roadway Design.
- Drafting and design for layout of subdivisions with the responsibility of the layout of lots, roads, sanitary sewer, storm drainage and final plats for recording.
- Calculations for up to four field crews for field layout for Outer Beltway Interstate 485, Sanitary Extension along I-77 North of Charlotte, Widening of Park Road, Relocation of 36" and 42" Gas Transmission at High Point, NC, Rock Hill, SC subdivision development, Widening of US Route 17 in NC, Cabarrus Industrial Complex including I-85 interchange and Airport, Riverrun Subdivision including golf course, Cameron Woods Subdivision Phases III-VII, many other smaller industrial, commercial and residential projects in the Charlotte area.

1981-1986 G. O. Bledsoe, Incorporated – Beckley, WV

- Supervised drawing of plats and maps by other employees. Design and drafting for engineering and surveying projects using CAD. Survey calculations and reductions for many residential, commercial and industrial projects. Advanced from rodman to crew chief to supervisory position.

1980-1981 HKS - Beckley, WV

- Advanced from rodman to instrument man including note keeping and field note reductions for various commercial and industrial projects.

STAFFORD CONSULTANTS INCORPORATED

Engineering, Design and Consulting
Planning and Environmental Services

Michael C. Martin, S.I.
Resident Project Representative/ Technician

Education: Bluefield State College
Associate of Science in Civil Engineering Technology, 1995

U.S. Army Corps of Engineers Training Course in Construction Quality Management, 1995

Mercer County Technical Education Center
Computer Aided Drafting and Design Course, 2000

License: West Virginia Board of Professional Surveyors, Surveyor Intern, October 2004

Experience:

2000 - Present **Stafford Consultants Incorporated, Resident Project Representative/Field Technician**

Surveying—Site Location, Boundary Surveys & Topography Surveys.

Reports: Environmental; Hazardous, Toxic & Radioactive Waste (HTRW); & Preliminary Engineering Reports.

Day to day observation of construction work, verifying pay estimate quantities, and preparing field reports for water, wastewater and sidewalk projects. Site stakeout of water lines, meters and field work for design effort. Specific project experience includes:

- Mercer County Sewer Project.
- Summers County Sewer Project.
- Fayette County Sewer Project.
- McDowell County Sewer Project.
- McDowell County Water Project.
- Nicholas County Water Project.
- New Haven PSD Water Project
- Wilderness PSD Water Project
- Logan County PSD Water Project
- City of Welch Water Project
- Summers County Commission Water Project
- West Virginia American Water Company - Fayette Regional Water Project
- City of Princeton, Town of Athens and Town of Oakvale Sidewalk Projects
- Mercer County Commission Water Project

1999 **Jordan and Jordan Engineering, Chief of Field Operations**

- Responsible for overseeing all work performed outside of the office. Land surveying, mine surveying, construction surveying and inspection.

1996-1999 **Engineering Services, Inc., Party Chief/Transitman**

- Property surveying including boundary surveys to establish proper boundary lines and corners. Control surveys for future site development. Construction layout including establishing building and foundation corners, manholes, drop inlets, sewer lines and water lines.

Topographic surveys for construction sites and for volume calculations of mine refuse piles and coal stockpiles.

- Underground mine surveying which includes setting spads for direction.
- Running control surveys to ensure proper section locations and running levels for elevation control.

1995 Swope Construction Company, Construction Layout

- Establishing subgrade and finish grade for parking areas. Establishing finish elevation and invert elevation for drop inlets and manholes and determining the proper location of each item. Establishing building corners and or curb corners and also ensuring the proper location and elevation of each item.

1989 - 1993 Swope Construction Company, General Laborer

Duties: General labor, carpenters assistant, masons assistant.

STAFFORD CONSULTANTS INCORPORATED

Engineering, Design and Consulting
Planning and Environmental Services

Sidney P. Burns
Senior Resident
Project Representative

Education: Greenbrier High School, Ronceverte, WV, 1958

Licensed: Certified Engineering Technician - Level IV

Troxler Certified Nuclear Density Gauge Operator

Experience:

1985 - Present Stafford Consultants Incorporated, Senior Resident Project Representative

- Responsible for inspection and documentation of work performed for various civil engineering construction projects including water treatment plants, wastewater treatment plants, collection lines, distribution lines, plant piping, pump stations, reclamation projects and street replacement. Specific projects include Mercer/Summers Water Project, City of Welch Wastewater Treatment Plant, Town of Alderson Wastewater Treatment Plant, City of Summersville Wastewater Treatment Plant, City of Mullens Streetscape Project, Wilderness PSD Waterline Extension Project, Williamson Nursing Home Slide AML Reclamation Project, and Danville PSD Wastewater Treatment Plant and Collection System.
- Assisted in preparation of cost estimates for construction projects including water plants wastewater plants, collection lines, distribution lines, street and pavement improvement projects.
- Performed field surveys for numerous projects including Mercer/Summers Water Project, Town of Athens Water Project, Oakvale Road PSD Sewer Project, Wilderness PSD Water Project, Greenbrier Valley Airport, Big Bend PSD water tank project, City of Welch Sewer Project, Logan County PSD Water Project, Impoundment for Bluewell PSD, Town of Bramwell Sewer Project, Mason County Bond Forfeiture AML Project, Millersville Road Refuse AML Project, Milburn AML Project, Sarah Ann AML Project, Welch Post Office Bridge Project, Town of Ansted Pump Stations and Big Bend PSD Sewer Project.

1980 - 1985 Gates Engineering Company, Contract Administrator

- Responsible for documentation and contract procedures for various construction projects related to water treatment and wastewater treatment facilities. Specific projects include Crab Orchard-MacArthur PSD Wastewater Treatment Plant, Town of Pineville Water Treatment Plant and distribution lines, and Mercer County Development Authority - Cumberland Industrial Park

1961 - 1980 West Virginia Division of Highways, Project Supervisor

- Responsible for inspection, documentation and testing of all material and work performed on several interstate highway and Appalachian Corridor construction projects.
- Coordinated all construction activities with the general public.
- Prepared all necessary change orders and coordinated construction with funding agencies and the Federal Highway Administration.

1958 - 1961 V. N. Green Company Incorporated

- Laborer and heavy equipment operator, highway construction. Instrument man on survey party at Armco Steel, Ashland, Kentucky. Survey Party Chief for construction stakeout and documentation of work performed on two major highway projects in Marion, Virginia and Grayson, Kentucky.

STAFFORD CONSULTANTS INCORPORATED

Engineering, Design and Consulting
Planning and Environmental Services

Clyde W. King
Resident Project Representative

Education: Ansted High School, 1970 Oak Hill Vocational Technical School, Drafting, 1970	**Licensed:** West Virginia Division of Highways Certified Compaction Technician Troxler Certified Nuclear Density Gauge Operator

Experience:

1985 - Present Stafford Consultants Incorporated, Resident Project Representative

Responsible for construction inspection and documentation of work performed for various civil engineering construction projects, primarily water and wastewater projects. Also performs survey work and layout work. Participated in many projects including the following:

- Field investigations, smoke testing, and data collection for Ansted Wastewater System Facilities Plan.
- Field representation and layout for New Haven PSD/West Virginia American water project, City of Summersville water project, Wilderness PSD water project, Mercer/Summers water project, and McDowell County PSD water project.
- Field layout for Bluewell PSD water project and the Town of Bramwell
- Field representation for West Virginia American's Oak Hill water treatment plant, Logan County PSD, Princeton Senior High School stadium project, City of War sidewalk project, Town of Athens sidewalk project and Crab Orchard-MacArthur wastewater project.

1980 - 1985 Gates Engineering Company, Field Representative and Inspector

Responsible for project coordination, inspection, reviewing pay estimates, preparing field orders and preparing project cost estimates on various projects including the following:

- Big Bend PSD, Summers County, WV.
- Mud Fork, Rum Junction/Lyburn and Sharples Water Projects in Logan County, WV.
- Wilderness PSD, Nicholas County, WV.
- Cumberland PSD and Cumberland Industrial Park, Mercer County, WV.
- Jenkin Jones PSD, McDowell County, WV.
- Raleigh County PSD (Arnett), and Crab Orchard - MacArthur PSD, Raleigh County, WV.

1976 - 1978 Southern West Virginia Regional Health Council, Landfill Operator

- Responsible for weighing in trucks and keeping records. Trained in operation of heavy earth moving equipment.

1971 - 1976 West Virginia Division of Highways - District 9, Highway Inspection Technician

- Responsible for the daily logging of construction work, recording of materials used, plotting cross sections, preparing estimates, et cetera.

ATTACHMENT 19F

WATER SYSTEM EXPERIENCE

SANITARY EXPERIENCE – WATER

New Haven Public Service District

Address: P.O. Box 89
Lansing, West Virginia 25862

Contact: Mr. Kenny Hayes (304) 658-4385
Mr. David Pollard (304) 574-4258
Mr. W. D. Smith (304) 872-4970

Project: **Phase IIH**
Est. Cost: $1,700,000
Status: Operational February 2005

Project: **Phase III**
Est. Cost: $8,000,000
Status: Seeking Funding

Project: **Phase IIG**
Est. Cost: $1,500,000
Status: Operational November 2003

Project: **Phase I**
Est. Cost: $1,000,000
Status: Operational September 1999

Project: **Phase IIA**
Est. Cost: $5,300,000
Status: Operational May 2001

Project: **Phase IIB**
Est. Cost: $7,000,000
Status: Operational August 2001

Project: **Phase IIC**
Est. Cost: $2,450,000
Status: Operational February 2002

Project: **Phase IID**
Est. Cost: $2,800,000
Status: Operational August 2001

Project: **Phase IIE**
Est. Cost: $2,400,000
Status: Operational May 2002

Project: **Phase IIF**
Est. Cost: $1,400,000
Status: Operational February 2001

Summers County Commission/Oakvale Road Public Service District

Address: P.O. Box 1061
Princeton, West Virginia 24740

Contact: Mr. Dave Cole, Project Administrator (304) 431-7228
Mr. Lyle Huntington, General Manager (304) 487-2750

Location: Mercer and Summers Counties, West Virginia

Project: Feasibility Study, Design, Construction Administration and Resident Project Representation to serve a two county area as part of a public/private partnership. The Project is divided into three phases.

Project: Phase I - 24-inch transmission main between True and Princeton.
- eight distribution lines
- Contracts to serve the rural area between True and Princeton

Est. Cost: $15,500,000
Status: Construction Complete, Operational - April 1997

Project: Phase II - 8-inch and 6-inch distribution lines to serve Camp Creek Road, Bent Mountain and other areas near Lerona
Est. Cost: $4,100,000
Status: Operational 1998

Project: Phase III - 8-inch and 6-inch distribution lines to serve Brooks, Barksdale, Beech Run, Gold Coast, River Ridge and Pisgah Road areas
Est. Cost: $4,000,000 - $5,000,000
Status: Operational 2003

Wilderness Public Service District

Address: P. O. Box 37
Mt. Nebo, West Virginia 26679

Contact: Mr. Greg Eary (304) 872-1598

Location: Nicholas County, West Virginia

Project: Feasibility, design construction administration and inspection of water systems consisting of the following projects:

Project: **Phase I**
- 100,000-gallon water storage facility
- 200,000-gallon water storage facility
- 350 gpm surface water treatment facility & raw water intake from Meadow River
- 20 mile distribution lines

Est. Cost: $2,000,000
Status: Begin 1977 - Operational 1981

Project: **Phase II** - Water Distribution System Expansion
Est. Cost: $150,000
Status: Begin 1982 - Operational 1983

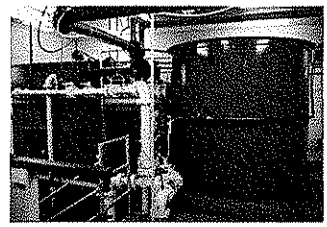
Project: **Phase III** - Water Distribution Expansion with Two Pressure Booster Stations, and rate of flow controllers.
Est. Cost: $1,100,000
Status: Begin 1984 - Operational 1986

Project: **Phase IV** - Water Distribution Expansion with Booster Station, Two Storage tanks and rate of flow controller.
Est. Cost: $1,400,000
Status: Complete - 1992

Project: **Phase V** - Water Distribution Expansion with Two Pressure Reducing Stations.
Est. Cost: $1,300,000
Status: Design Complete in April 1997 – Operational 1998

Project: **Phase VI** - Water Distribution Expansion with Two Elevated Storage Tanks, Booster Station and Two Pressure Reducing Stations.
Est. Cost: $3,700,000
Status: Operational 2003

McDowell County Public Service District



Address: HC 31 Box 436 J
Welch, West Virginia 24801

Contact: Mr. Jerry Stepp, Chairman (304) 297-2622
Location: McDowell County, West Virginia

Project: Town of Iaeger
- 80-gpm water treatment plant
- 100,000 gallon water storage tank
- 8", 6" and smaller water distribution lines

Est. Cost: $4,600,000
Status: Phase I Design Complete.

Project: City of War Water Project
- two 150,000-gallon water storage tanks
- 10", 8", 6" and smaller water distribution lines

Est. Cost: $4,800,000
Status: Preliminary Engineering Report Complete

Project: Caretta/Coalwood Water Systems Replacement
- 72-gpm water treatment plant
- 114-gpm water treatment plant
- two 100,000-gallon water storage tanks
- distribution systems in each community

Est. Cost: $2,965,000
Status: Complete

Project: Hemphill, Capels, Havaco, Wilcoe Water Systems
- 8", 6" and smaller water distribution lines
- One 30,000-gallon water storage tank

Est. Cost: $1,950,000

Status: Complete

Project: Bartley/English Water System
- 8", 6" and smaller water distribution lines
- 200 GPM water treatment plant
- One 183,000 gallon water storage tank

Est. Cost: $1,900,000
Status: Complete

Project: Atwell/Raysal Water System
- 8", 6" and smaller water distribution lines

Est. Cost: $1,020,000
Status: Complete

Project: Bartley/English Water System
- 8" and smaller water system connection between Bartley and Caretta

Est. Cost: $520,000
Status: Complete

Project: Pageton Water Project
- 12", 8", 6" and smaller water distribution lines
- 220,000-gallon storage tank
- Booster Pumping Station

Est. Cost: $2,000,000
Status: Complete

Logan County Public Service District

Address: P.O. Box 506
Logan, WV 25601

Contact: Mr. Rick Roberts, P.E. (304) 946-2641
Location: Logan County, West Virginia

Project: Study, preliminary and final design, construction administration and inspection of the following projects:

Project: Mud Fork/Rum Creek Water Distribution System with booster station and a 100,000-storage tank.
Est. Cost: $1,000,000
Status: Completed 1983

Project: **Phase I** of Huff Creek-Christian water system comprising a water distribution system, a 100,000-gallon water storage tank and a 350 gpm water treatment facility with an upgraded capacity of 700 gpm. Project also includes raw water intake and presedimentation basin
Est. Cost: $1,070,000
Status: Completed 1985

Project: **Phase II** of Huff Creek - Christian Water System comprising a water distribution system and a 150,000 gallon water storage tank.
Est. Cost: $694,000
Status: Completed 1986

Project: Water study for the communities of Sarah-Ann and Crystal Block
Est. Cost: $755,000
Status: Funding Pending

Project: Preliminary and final design, bidding and negotiating and construction administration for the Sharples emergency water system and replacement water system comprising well pump replacements, a water distribution system, a 100,000 gallon water storage tank and a 100 gpm pressure filter water treatment plant.
Est. Cost: $706,250
Status: Completed 1986

Project: Phase III of Huff Creek - Christian Water System comprising a water distribution system and a 200,000 gallon water storage tank.
Est. Cost: $840,300
Status: Completed 1990

Project: **Phase IV** of Huff Creek - Christian Water System comprising of a 200,000 gallon water storage tank, booster pump station and water distribution system.
Est. Cost: $1,000,000
Status: Completed 1993

Project: Dingess Run Waterline Extension Project comprising of water distribution lines, one 65,000-gallon water storage tank, one 200,000-gallon water storage tank and two booster pump stations.
Est. Cost: $1,250,000
Status: Completed 1996

Project: Whitman Creek Waterline Extension Project comprising of water distribution lines, one 140,000-gallon water storage tank, one 183,000-gallon water storage tank, and one booster pump station.
Est. Cost: $2,000,000
Status: Completed 1998

Project: Regional Jail Waterline Extension Project comprising of water distribution lines, one 250,000 gallon water storage tank and one high pressure booster pump station.
Est. Cost: $2,000,000
Status: Completed 1998

Project: Elk Creek – Verner Waterline Extension Project comprised of water distribution lines, one 88,000-gallon water storage tank and one 58,000-gallon water storage tank and one booster pump station.
Est. Cost: $1,270,000
Status: Completed 1999

Project: Garrett's Fork Water Distribution System Extension Project comprised of 12" and smaller water distribution lines and two pressure reducing stations.
Est. Cost: $2,050,000
Status: Completed 2002

Project: Crawley Creek Water Distribution System Extension Project comprised of 10" and smaller water distribution lines, one 300,000-gallon water storage tank, one 200,000-gallon water storage tank and one booster pump station.
Est. Cost: $3,900,000

Status: Completed 2000

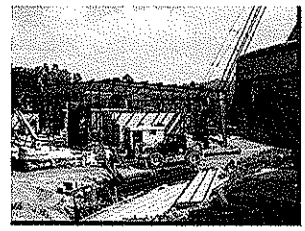
Project: Pine Creek Water Distribution System Extension Project comprised of 12" and smaller water distribution lines, one 300,000-gallon water storage tank and one high head booster pump station.
Est. Cost: $1,590,000
Status: Completed 2000

Project: Caney Branch/Rocky Branch Water Distribution System Extension Project comprised of 8" and smaller water distribution lines, one 115,000-gallon water storage tank and one booster pump station.
Est. Cost: $2,145,000
Status: Completed 2006

Project: Northfork Water Distribution System Extension Project comprised of 8" and smaller water distribution lines, one 154,000-gallon water storage tank and one booster pump station.
Est. Cost: $2,295,000
Status: Construction Funding Pending

Project: Huff Creek Water Distribution System Extension Project, Phase V comprised of 10" and smaller water distribution lines, one 142,000 gallon water storage tank, one 158,000 gallon water storage tank and two booster pump stations. This system serves into Wyoming County.
Est. Cost: $3,600,000
Status: Completed 2004

City of Summersville



Address: 400 North Broad Street
Summersville, West Virginia 26651

Contact: Mr. James Corbitt (304) 872-1211
Mr. Steve Acree (304) 872 5052

Project: U.S. Route 19 Economic Development Center Upgrading, study, design, construction administration and inspection of distribution lines, water storage facilities, sewage treatment plant upgrading & collection system.
Est. Cost: $3,200,000
Status: Complete

Project: **Glade Creek Phase I** – Waterlines
Est. Cost: $1,700,000
Status: Operational 1999

Project: **Summersville Regional Water Project**
Est. Cost: $11,000,000
Status: Operational 2004

Project: **Glade Creek Phase IIA – Waterlines**
Est. Cost: $4,800,000
Status: Seeking Funding
Project: **Glade Creek Phase IIB – Waterlines**

Est. Cost: $4,000,000
Status: Seeking Funding

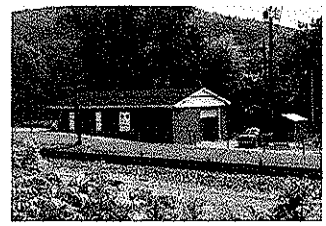
City of Gary

Address: City of Gary
P.O. Box 310
Gary, West Virginia 24836
Contact: Mayor Henry Paul (304) 448-2209
Location: Gary, West Virginia

Project: Gary Regional Water System, Design, Construction Administration & Inspection
- Upgrade 2.0 MGD Water Treatment Plant
- Approximately 60,000 feet of 12" through 6" water main
- Raw Water Pump Station
- Three Booster Pump Stations
- Rehabilitate Three Storage Tanks

Est. Cost: $4,000,000
Status: Complete

Big Bend Public Service District



Address: P.O. Box 114
Talcott, West Virginia 24981

Contact: Mrs. Wanda Ball (304) 466-3258
Mr. Dave Cole (304) 431-7228

Location: Summers County, West Virginia

Project: Ballagee, Barger Springs, Forest Hill, Wiggins and Browning Water Distribution System Extension
- 8", 6" and smaller water distribution lines
- four water storage tanks
- two lift stations

Est. Cost: $6,000,000
Status: Preliminary Engineering Report Complete

Project: Feasibility Study, Design, Construction Administration and Inspection
Phase I
- two 100,000-gallon water storage tanks
- 11 miles of distribution lines
- 200-gpm water treatment facility for surface water Greenbrier River Raw Water Intake

Est. Cost: $1,300,000
Status: Began 1977 - Operational 1980

Project: **Phase II**
- 2 miles of distribution lines
- 25,000 gallons per day package wastewater treatment plant, Lift Station

Est. Cost: $700,000
Status: Operational 1989

Project: **Phase III**
- 2 miles of distribution lines and one river crossing

Est. Cost: $450,000
Status: Operational 1993

Project: **Phase IV**
- 1.5 miles of distribution lines

Est. Cost: $240,000
Status: Project in Design Phase

Project: **Willowwood Waterline Extension**
- Two miles of Water Distribution System

Est. Cost: $210,000
Status: Operational 1998

Mercer County Commission

Address: Mercer County Courthouse
Princeton, West Virginia 24740

Contact: Mr. Lyle Huntington (304) 487-2750
Mr. Dave Cole (304) 431-7228

Location: Mercer County, West Virginia

Project: I-77/U.S. Route 460 Economic Development Project Study, Design Construction Administration and Inspection
- 150,000-gallon water storage tank
- distribution lines to serve private industrial development and tourist center with booster station system to be operated by WV American Water Company

Est. Cost: $1,300,000
Status: Complete

Town of Ansted

Contact: Mr. W. D. Smith (304) 872-4970
Location: Fayette County, West Virginia

Project: New River Raw Water Intake and Supplemental Finished Water Storage
- 200-gpm intake in New River
- ten-inch transmission line
- 330,000 gallon finished water storage tank

Est. Cost: $961,500
Status: Completed November 1991

Town of Athens

Address: Athens Town Hall
Athens, West Virginia 24712

Contact: Mayor Robert Richardson (304) 384-3525
Location: Mercer County, West Virginia

Project: Water Line Extension and Fire Protection Provisions to serve the Forest Products Marketing Laboratory
Est. Cost: $192,000
Status: Completed September 1991

Project: Water Line Extension to serve Springs Road and Interstate 77 Intersection
Est. Cost: $430,000
Status: Completed

Town of Lester

Address: P.O. Box 56
Lester, West Virginia 25865

Contact: Mayor Ivan Snuffer (304) 934-6301
Location: Lester, West Virginia

Project: Feasibility study, design, construction administration and inspection of water distribution system and renovation of storage facilities.
Est. Cost: $500,000
Status: Begin 1985 - Operational 1987

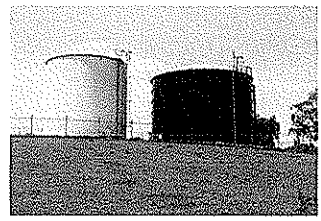
Town of Alderson

Address: P.O. Box 179
Alderson, West Virginia 24910

Contact: Mr. Luther Lewallen, Mayor (304) 445-2916
Location: Greenbrier and Monroe Counties, West Virginia

Project: Miscellaneous Consulting Services related to water treatment plant operation.
Est. Cost: Local funding
Status: On-going

Project: Comprehensive Water Treatment Plant and Distribution System Report and Study.
Status: Report Complete



Project: **Phase I**
Feasibility study, design, construction administration and inspection of two water storage facilities, raw water intake, 350-gpm facility and distribution system.
Est. Cost: $900,000
Status: Completed

Project: **Phase II**
Study Design, construction and inspection of water treatment plant expansion including presedimentation basin, raw water intake, and above ground storage.

Est. Cost: $1,000,000
Status: Completed January 1991

Town of Rainelle

Address: P.O. Box 648
Rainelle, West Virginia 25962

Contact: Mayor Eugene McKenzie (304) 438-7191
Location: Greenbrier County, West Virginia

Project: Design and Construction period services for water system and treatment plant renovations.
Est. Cost: $1,000,000
Status: Design Complete

Project: Design, construction administration and inspection for water system renovation.
- 150,000-gallon storage tank
- 4,500 feet of distribution lines

Est. Cost: $240,000
Status: Begin 1985 - Operational 1986