



CORPORATION  
**TERRADON**

STATEMENT OF QUALIFICATIONS

TO PROVIDE

ENGINEERING SERVICES

TO THE

WEST VIRGINIA  
DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

FOR

STANDARD/PAINT CREEK/  
COLLINSDALE  
WATERLINE DESIGN  
DEP14383

OCTOBER 8, 2008

RECEIVED

08 OCT -7 AM 11:42

PURCHASING DIVISION  
STATE OF WV



CORPORATION  
**TERRADON**



P.O. Box 519  
Nitro, WV 25143  
Tel: (304) 755-8291  
Fax: (304) 755-2636  
www.terradon.com

P.O. Box 1635  
Lewisburg, WV 24901  
Tel: (304) 645-4636  
Fax: (304) 645-7614

5310 Markel Road  
Suite 102  
Richmond, VA 23230  
Tel: (804) 673-2560  
Fax: (804) 673-2561

October 6, 2008

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

Re: Expression of Interest  
Standard/Paint Creek/Collinsdale Waterline Design  
(DEP14383)

Dear Mr. Bowman:

TERRADON is pleased to submit this Expression of Interest to provide professional engineering services to the WV Department of Environmental Protection, Office of Abandoned Mine Lands and Reclamation (WVDEP/AML&R) for the Standard/Paint Creek/Collinsdale Waterline Extension project in Kanawha and Fayette Counties, West Virginia. TERRADON specializes in this type of project.

TERRADON has an extensive history in the design of water extensions. In 1997 the firm designed its first water extension project, Century/Volga, in Barbour County for the WVDEP AML&R Section. The project included the design of 17,776 feet of 8" main, 54,223 feet of 6" main, and 7,415 of 2" main. Since then the firm has designed 74 projects with over 1,000,000 LF (over 216 miles) of water lines. Other AML water extension design projects successfully completed by TERRADON include: Pond Gap in Kanawha County, Town Run in Lewis County, and Witcher Creek in Kanawha County.

We have the technical, managerial and financial resources to provide these services at a cost favorable to WVDEP/AML&R. We look forward to an opportunity to interview for this project. Should you have any questions regarding the submittal or TERRADON, please do not hesitate to contact me.

Sincerely,

Steven T. Engelhardt  
Director of Marketing & Personnel



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  
 DEP14383

PAGE  
 1

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

RFQ COPY  
 TYPE NAME/ADDRESS HERE

VENDOR

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	UQP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	JB		906-94		
STANDARD/PAINT CK/COLLINSDALE WATERLINE DESIGN						
EXPRESSION OF INTEREST						
<p>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.</p> <p>BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THIS CONTRACT IS AUTOMATICALLY NULL AND VOID AND IS TERMINATED WITHOUT FURTHER ORDER.</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>[Signature]</i>	TELEPHONE 304-755-8291	DATE 10-6-2008
TITLE Dir. of Marketing	FEIN 550687626	ADDRESS CHANGES TO BE NOTED ABOVE

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

RFQ No. \_\_\_\_\_

STATE OF WEST VIRGINIA  
Purchasing Division

**PURCHASING AFFIDAVIT**

**VENDOR OWING A DEBT TO THE STATE:**

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

**PUBLIC IMPROVEMENT CONTRACTS & DRUG-FREE WORKPLACE ACT:**

*West Virginia Code §21-1D-5* provides that: Any solicitation for a public improvement construction contract shall require each vendor that submits a bid for the work to submit at the same time an affidavit that the vendor has a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the West Virginia Code. A public improvement construction contract may not be awarded to a vendor who does not have a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the West Virginia Code and who has not submitted that plan to the appropriate contracting authority in timely fashion. For a vendor who is a subcontractor, compliance with Section 5, Article 1D, Chapter 21 of the West Virginia Code may take place before their work on the public improvement is begun.

**ANTITRUST:**

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

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

**LICENSING:**

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

**CONFIDENTIALITY:**


The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures and rules. Vendors should visit [www.state.wv.us/admin/purchase/privacy](http://www.state.wv.us/admin/purchase/privacy) for the Notice of Agency Confidentiality Policies.

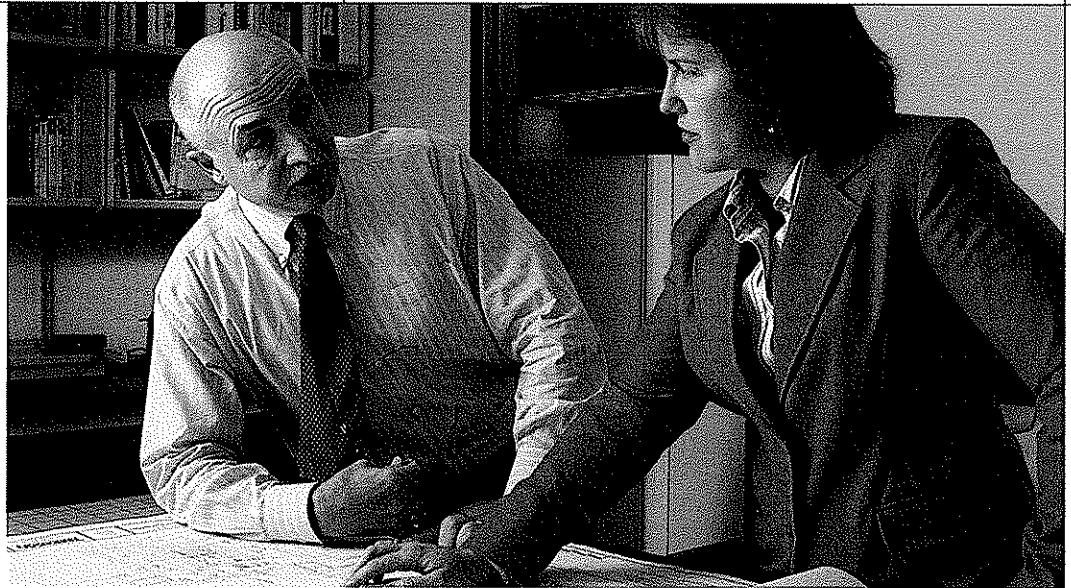
Under penalty of law for false swearing (West Virginia Code §61-5-3), it is hereby certified that the vendor acknowledges the information in this said affidavit and is in compliance with the requirements as stated.

Vendor's Name: TERRADON CORPORATION

Authorized Signature: [Signature] Date: 10-6-2008

## STATEMENT OF QUALIFICATIONS

  
**TERRADON**  
is regarded  
as one of the  
region's leading  
land and  
infrastructure  
planning and  
design firms.



TERRADON routinely works with various public and private utilities to plan, develop, design and construct water and wastewater system projects. (See Related Prior Experience.)

TERRADON employs over 60 professional engineers, technicians, surveyors and support staff at its main office, including the following licensed professional engineers:

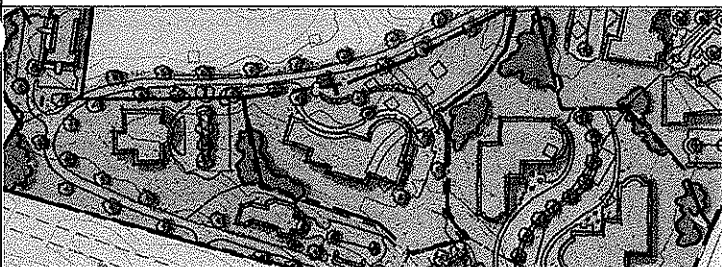
- **Harvey McCallister P.E.** is a senior civil engineer licensed in West Virginia, Virginia, Maryland, Ohio, and Kentucky
- **Jim Nagy, P.E.** is a civil engineer licensed in West Virginia.
- **Bill White, P.E.** is a senior structural engineer licensed in West Virginia, Ohio, Virginia, Florida, North Carolina, Arkansas, and Kentucky.

- **John James, P.E.** is a senior geotechnical engineer licensed in West Virginia.
- **Tim White, P.E.** is a senior transportation engineer licensed in West Virginia, Ohio, Kentucky, Arkansas, and Texas.

TERRADON employs professional surveyors, engineering interns, graduate engineering technicians, and design technicians/CADD operators to complete many-faceted projects.

We have additional offices at Lewisburg, West Virginia and Richmond, Virginia. These offices have professional engineers, staff engineers, registered land surveyors, and other professionals to complete projects in Southeastern West Virginia and Eastern Virginia.

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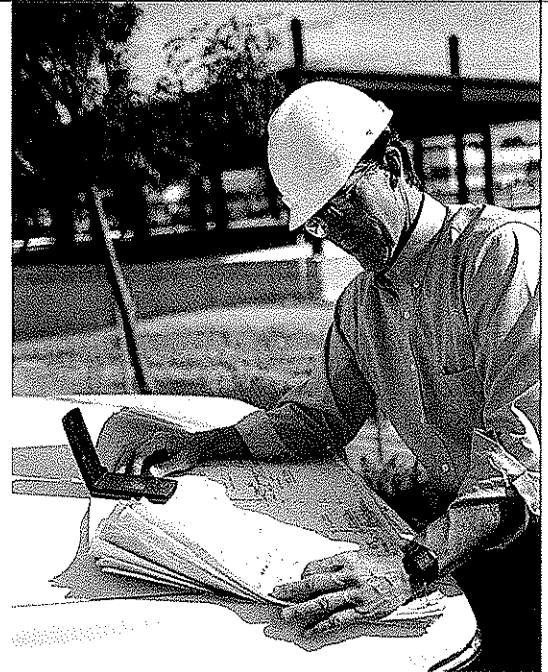


CORPORATION  
**TERRADON**

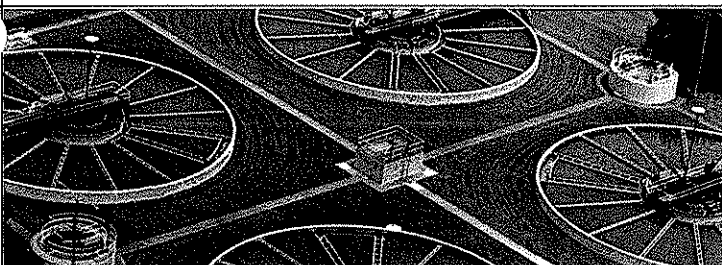
## STATEMENT OF QUALIFICATIONS

We are typically responsible for preliminary engineering, potential funding source applications, WV Infrastructure and Jobs Development Council application, WV Public Service Commission certificate of need application, WV Bureau for Public Health application and all supporting documentation for these applications. We also prepare environmental permit applications for National Environmental Policy Act, US Army Corps of Engineers, WV Division of Environmental Protection, WV Public Lands Corporation and WV National Pollutant Discharge Elimination System.

Basic engineering services include design; construction specifications; bid and contract documents; bidding phase, construction phase and post construction phase engineering/administration/project management.



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**TERRADON**  
CORPORATION

## TECHNICAL EXPERTISE

TERRADON offers a very professional and experienced staff to perform the tasks required for this project. We have assembled a professional team of experts with over 100 years of experience with water and wastewater system design and construction.

**Harvey McCallister, P.E.**, will be the Project Manager and brings a mix of consulting and regulatory experience to the team. During his 36 years of experience he has worked on a wide variety of water projects.

Specific examples of Mr. McCallister's experience include water line replacement projects in Glenville, Burnsville, West Union, Ravenswood, Buckhannon, Parsons, and Fairmont.

**Jim Nagy, P.E.**, is a member of the water/wastewater team and brings a mix of consulting and utility experience to the team. While with West Virginia American Water Company Mr. Nagy was involved in determining water line replacement projects, project management, and emergency repairs to the distribution system.

**Mr. Kevin Garnes** is an experienced design technician/CAD operator. Kevin also has been responsible for all water extension projects that TERRADON has done. Kevin has 27 years of experience, primarily in water and wastewater systems.

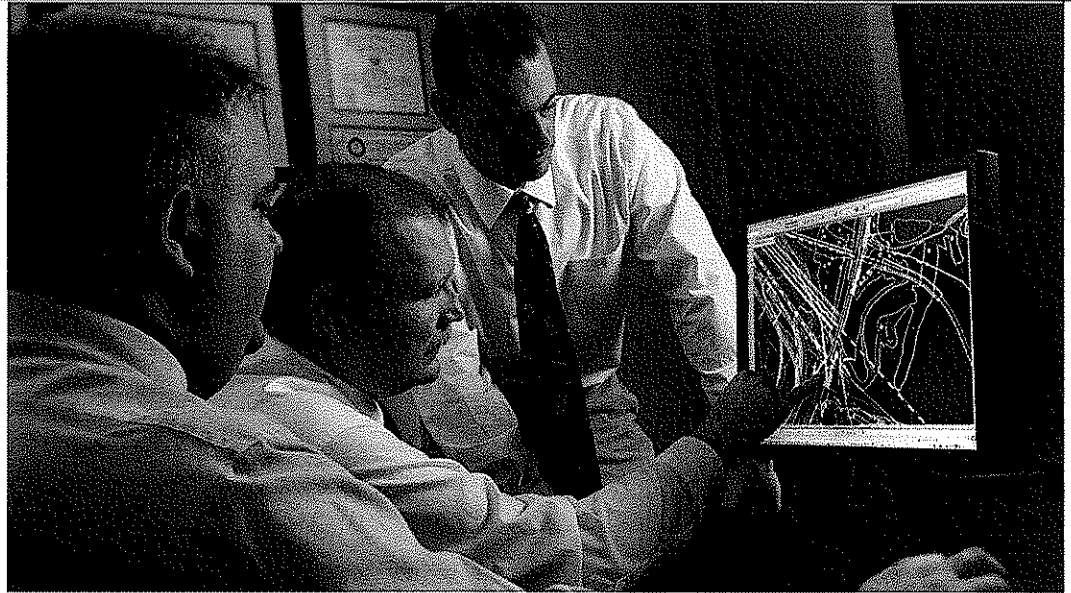
TERRADON offers a very diverse staff of engineers, technicians, scientists and support personnel. We provide a wide range of support services for water system projects on an as-needed basis. Examples include geotechnical investigations for landslides, subsurface investigation for booster stations and water storage tanks; site and right of way acquisition; environmental due diligence investigations and permitting; boundary/topographic surveys and elevation certificates; and quality control material testing of soils and concrete.

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**TERRADON**  
CORPORATION

## MANAGEMENT AND STAFFING CAPABILITIES



TERRADON currently employs over 60 individuals of various disciplines and expertise. This staffing provides the client tremendous resources to professionally and cost-effectively plan, design and construct a variety of public works projects.

TERRADON has the financial, managerial and technical resources to provide the services necessary to deliver a highly successful project for the West Virginia Department of Environmental Protection (WVDEP).

TERRADON has a tremendous history of water line extension projects all over the State of West Virginia. We have designed over 216 miles of water lines, water storage tanks ranging in size from 139,000 gallons to 1,000,000 gallons, and

11 water booster stations. We have provided a table in the following pages that details our experience with water line extension and storage design projects.

Harvey McCallister, P.E. will be the project manager/responsible party for this project. He will be responsible for all technical, financial, managerial aspects of the project and will report directly to the WVDEP.

Jim Nagy, P.E., and Harvey McCallister, P.E. will perform the design, prepare bid documents, and complete the West Virginia Bureau of Public Health permit application.



**MANAGEMENT AND STAFFING  
CAPABILITIES**

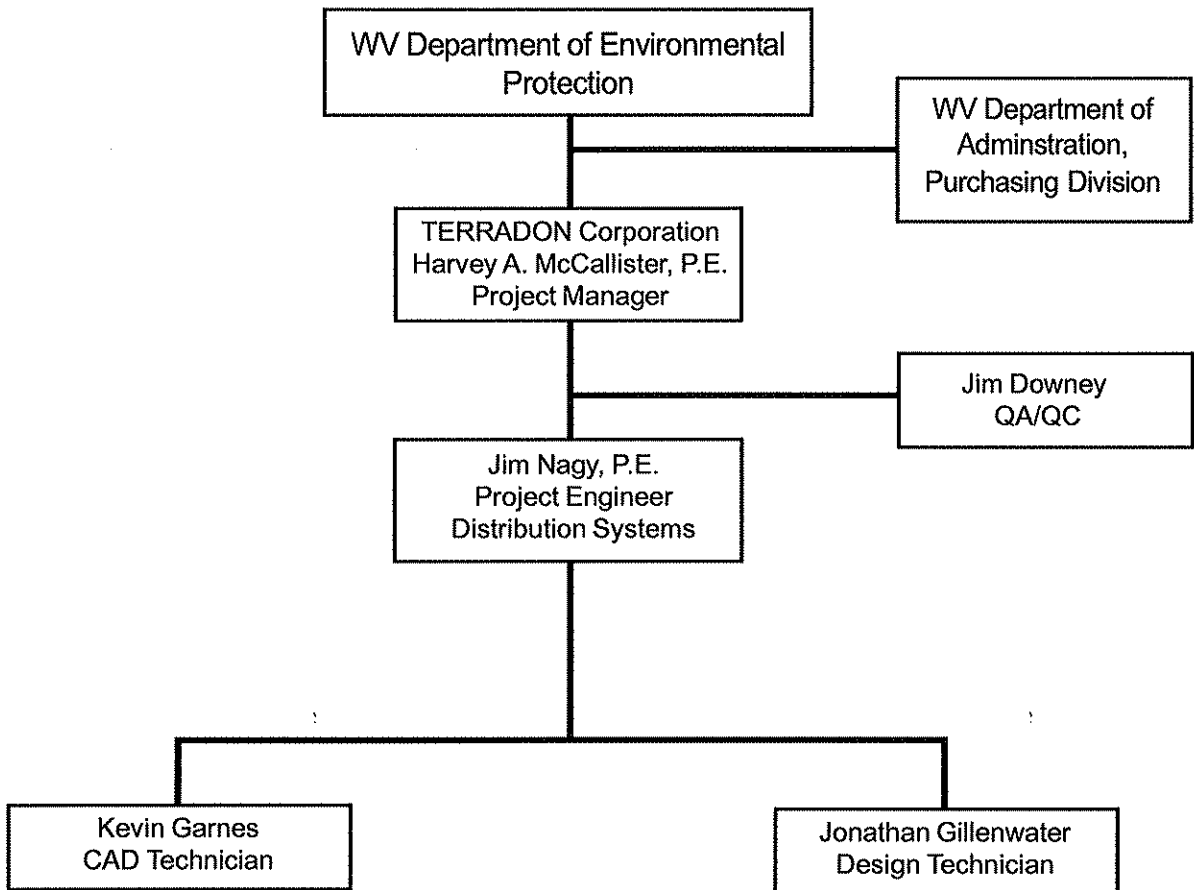
Kevin Games will provide primary technical support and CADD services. Kevin also has available three or more experienced CADD technicians, if necessary.

These individuals will provide the majority of the services needed on this project. TERRADON has sufficient staff to provide additional project support as needed.

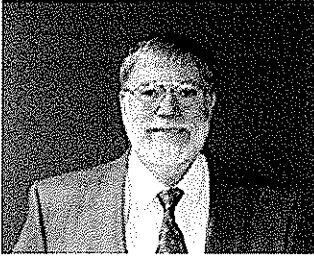
MANAGEMENT AND STAFFING  
CAPABILITIES

STANDARD/PAINT CREEK/  
COLLINSDALE  
WATERLINE DESIGN

**TERRADON CORPORATION  
PROJECT ORGANIZATION CHART**



## MANAGEMENT AND STAFFING CAPABILITIES



Harvey A. "Bud" McCallister, P.E. will be assigned as **Project Manager** on this project. Mr. McCallister has nearly 36 years experience in the design of drinking water systems and wastewater systems. He has extensive experience in the design of distribution systems.

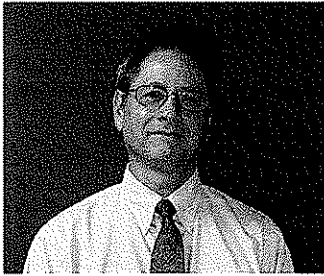
Mr. McCallister's duties on this project will be to lead the design team on all aspects evaluation and design of the water distribution system. He will provide senior leadership to the design team and lead the team through process design and equipment selection so that the most cost-effective solutions for the project are implemented.

A brief list of examples of water distribution systems on which Mr. McCallister has served as project engineer in urban areas of West Virginia are as follows:

- **Town of Burnsville** – Project Manager and Design Engineer for distribution system upgrades and line extension to Burnsville Lake.
- **City of Logan** – Project Manager and Design Engineer for 12 inch water line in down town Logan to replace existing line.
- **City of Glenville** – Project Manager and Design Engineer for renovations to distribution system and extensions to serve new areas.
- **City of Fairmont** – Design Engineer for 4 projects with 16, 12, 8, & 6 inch replacements through the city.
- **Buckhannon** - Design Engineer for distribution system line replacements throughout town.
- **West Union** - Design Engineer for distribution system improvements connecting new water treatment plant with existing system.
- **Ravenswood** - Design Engineer for replacement of undersized lines.

Mr. McCallister's full resume may be viewed in the attached resume section of this submittal.

MANAGEMENT AND STAFFING  
CAPABILITIES



James A. "Jim" Nagy, P.E. will serve as Design Engineer on this project. Mr. Nagy has over 30 years experience in various Civil Engineering projects, with 25 years experience in mainly water distribution system engineering.

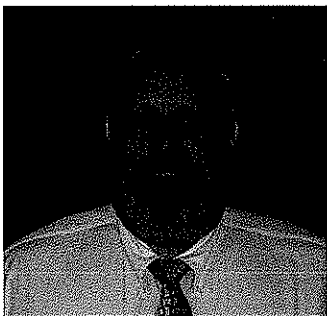
Mr. Nagy will be assigned to provide professional engineering services with regard to the water distribution system and wastewater collection system needs. For 25 years prior to joining Terradon Corporation, Mr. Nagy was Operations Supervisor for a large privately owned water utility. His duties included overseeing the construction of water line extensions, determining and meeting fire service needs, and overseeing the inventory for the Kanawha Valley District for the utility.

Since joining Terradon, Mr. Nagy has been Senior Design Engineer on water system and sewer system on large private development projects throughout the state.

Mr. Nagy's complete resume may be found in the resume section of this submittal.



Kevin Games has over 31 years experience in design of water and sewer projects.



Mr. Gillenwater is a graduate technician with over 21 years of experience related to utility and infrastructure development projects.

# WATER DISTRIBUTION AND STORAGE RELATED PRIOR EXPERIENCE

## TERRADON CORPORATION WATER SYSTEM EXTENSIONS

#	YEAR	PROJECT	COUNTY	20" MAIN	16" MAIN	12" MAIN	8" MAIN	6" MAIN	2" MAIN	BOOSTER	TANK	GALLONS
1	1997	CENTURY/VOLGA EXTENSION - AML	BARBOUR				17776	54223	7415			
2	1998	RT 34 SOUTH / PUTNAM EXTENSION	PUTNAM			28900						
3	1999	CABELL COUNTY EXTENSIONS	CABELL				68568	24293	11610			
4	1999	RT 60 WEST EXTENSION	CABELL		51110							
5	1999	LENS CREEK BOOSTER	KANAWHA							1		
6	1999	LONDON TANK	KANAWHA								1	500,000
7	1999	RT 34 SOUTH / HAMLIN EXTENSION	LINCOLN			36750	916		820			
8	2000	MELISSA ROAD RELOCATION	CABELL			12722	770					
9	2000	KANAWHA COUNTY EXTENSIONS	KANAWHA			1351	16310	3702	3763	1	1	150,000
10	2000	PUTNAM COUNTY EXTENSIONS	PUTNAM				5850	2372				
11	2000	POND GAP EXTENSION - AML	KANAWHA				4200	38000	1250	1	1	100,000
12	2000	ROBY ROAD BRIDGE WATER RELOCATION	CABELL	835								
13	2001	AVIS BRIDGE WATER RELOCATION	SUMMERS			400						
14	2001	TOWN RUN - AML	LEWIS				6500	800	1600			
15	2001	WITCHER CREEK - AML	KANAWHA			4040	15350		1890			
16	2002	GARRISON AVE. BOOSTER	KANAWHA							1		
17	2002	HAL GREER BLVD. RELOCATION	CABELL		4000	125	500	125	475			
18	2002	LEFT FORK UNION RIDGE EXTENSION	CABELL				36500	8500	7000			
19	2002	KANAWHA CO 2003 EXTENSIONS	KANAWHA				24500	19000	10500			
20	2003	LINCOLN CO. 911 CENTER EXTENSION	LINCOLN				2765	35	25			
21	2003	GLEN JEAN ARMORY EXTENSION	FAYETTE				2200					
22	2003	UPPER FRAME PHASE I EXTENSION	KANAWHA				58000	7000	6000	1	1	150,000
23	2003	PENNSYLVANIA AVE. REINFORCEMENT	KANAWHA	1250								
24	2003	BELLE AVE. / DUPONT REINFORCEMENT	KANAWHA	1810	20							
25	2004	ROBINSON CREEK RELOCATION	BOONE				860		180			
26	2004	MARTHA BRIDGE RELOCATION	CABELL					1800				
27	2004	ELK TWO MILE RELOCATION	KANAWHA			620			205			
28	2004	BELLPOINT BRIDGE RELOCATION	SUMMERS			1110						
29	2004	HICKORY RIDGE TANK	CABELL								1	139,000
30	2004	YATES CROSSING RELOCATION	CABELL				975		85			
31	2005	FORT LEE REINFORCEMENT	Hopewell, VA			3740	3765	130	160			
32	2005	ROCK BRANCH RELOCATION	PUTNAM					670				
33	2005	PINCH TANK	KANAWHA								1	750,000
34	2005	DOW WATER RELOCATION	KANAWHA	3500	508							
35	2005	OAK HILL WATER MAIN REINFORCEMENT	FAYETTE			1770	1695					
36	2005	LINCOLN CO. HIGH SCHOOL EXTENSION	LINCOLN			2060	1530					
37	2005	ELK RIVER 16" REINFORCEMENT	KANAWHA		9850	500	120					
38	2005	LOCHGELLY ROAD RELOCATION	FAYETTE			1650	1100	500				
39	2005	HERBERT HOOVER HIGH SCHOOL EXTENSION	KANAWHA			2800	250					
40	2005	MT. ZION EXTENSION	SUMMERS				2280	80	580	1		
41	2005	SEGAR HILL EXTENSION	WAYNE				11500		750			
42	2005	RT 60 REINFORCEMENT	CABELL		9500		200					
43	2005	POCOTALICO BOOSTER	KANAWHA							1		
44	2005	BACK FORK ELK RIVER EXTENSION	WEBSTER				10850	2945	2110			
45	2005	3RD AVENUE REINFORCEMENT	CABELL		5300		450	100				
46	2006	ELK RIVER 12" REINFORCEMENT	KANAWHA			11500		100				
47	2006	KELLYS CREEK RELOCATION	KANAWHA				105		260			
48	2006	CHESAPEAKE RELOCATION	KANAWHA				890		115			
49	2006	PEYTONA ESTATES	BOONE					1040	4155	1		
50	2006	WEST HAMLIN REINFORCEMENT	LINCOLN			1670						
51	2006	QUEEN SHOALS BOOSTER	CLAY							1		
52	2006	ASHFORD BRIDGE RELOCATION	BOONE					731				
53	2006	ELEANORE EXTENSION	PUTNAM					3650				
54	2006	BALL OIL EXTENSION	FAYETTE				775					
55	2006	UPPER FRAME PHASE II EXTENSION	KANAWHA				35600	23730	10700			
56	2006	CABELL CO 2006 EXTENSIONS	CABELL				19276	63574	15652			
57	2006	NEW HOPE TANK	MERCER								1	1,000,000
58	2006	HOPEWELL REINFORCEMENT	Hopewell, VA			2465						
59	2006	SEVENMILE CREEK RELOCATION	CABELL				150					
60	2006	RABEL MOUNTAIN EXTENSION	KANAWHA			14300						
61	2006	UPPER FISHERS BRANCH / GUTHRIE	KANAWHA			2800	8700	7600	1750	1	1	200,000
62	2006	CLENDENIN EXTENSION	KANAWHA			15000	3350	700	500			
63	2006	PUTNAM CO 2007 EXTENSIONS	PUTNAM				24000	33000	6310			
64	2007	RT 2 REINFORCEMENT	CABELL			5500						

Continued →

WATER DISTIBUTION AND STORAGE  
RELATED PRIOR EXPERIENCE

TERRADON CORPORATION  
WATER SYSTEM EXTENSIONS

#	YEAR	PROJECT	COUNTY	20" MAIN	16" MAIN	12" MAIN	8" MAIN	6" MAIN	2" MAIN	BOOSTER	TANK	GALLONS
65	2007	FORT LEE REINFORCEMENT	Hopewell, VA			3550		220				
66	2007	SISSONVILLE DRIVE RELOCATION	KANAWHA			5600		250				
67	2007	CATHCART DEVELOPMENT	PUTNAM			3639	7654					
68	2007	WASHINGTON WOODS SUBDIVISION	JACKSON				620	3119	2912	1		
69	2007	FAIRMONT WATER PARK	MARION			3600	345					
70	2008	WV TURNPIKE COMMISSION EXTENSION	MERCER				6600					
71	2008	OAK HILL MAIN STREET REINFORCEMENT	FAYETTE			2300						
72	2008	SAWMILL VILLAGE / SNOWSHOE	POCAHONTAS				2800					
73	CURRENT	KANAWHA CO 2009 EXTENSIONS	KANAWHA				12000	39000	11000			
74	CURRENT	DERRICKS CREEK EXTENSION	KANAWHA					22000	1500			
<b>TOTALS</b>				<b>7395</b>	<b>80388</b>	<b>170162</b>	<b>419025</b>	<b>352399</b>	<b>111292</b>	<b>11</b>	<b>8</b>	<b>2,989,000</b>
				<b>20" MAIN</b>	<b>16" MAIN</b>	<b>12" MAIN</b>	<b>8" MAIN</b>	<b>6" MAIN</b>	<b>2" MAIN</b>	<b>BOOSTER</b>	<b>TANK</b>	<b>GALLONS</b>

1,140,661	216.0
TOTAL LF	MILES

**RELATED PRIOR EXPERIENCE -  
CURRENT WATER PROJECTS**

<p><b>Upper Fishers Branch/Guthrie Water Main Extension, Kanawha County RDA/WVAW</b> \$2.6 million      2008 Completion</p>	<p><b>Putnam County Master Plan for Water Extensions</b> Putnam County Commission</p>
<p><b>1,000,000-Gallon Prince William Elevated Water Storage Tank , Virginia American Water</b> \$1.5 million      2008 Completion</p>	<p><b>Cabell County Master Plan for Water Extensions</b> Cabell County Commission</p>
<p><b>Rabel Mountain Water Main Extension</b> WVAW \$600,000      April 2007 Completion</p>	<p><b>Montgomery Water Facilities Study</b> WVAW</p>
<p><b>Back Fork Water Main Extension</b> Webster County/WVAW \$750,000      August 2007 Completion</p>	<p><b>Spring Fork Water Feasibility Study</b> WVDEP/AML</p>
<p><b>Putnam County 2006 Water Main Extensions</b> Putnam County/WVAW \$3.3 million      2008 Completion</p>	<p><b>Birch River Water Feasibility Study</b> WVDEP/AML</p>
<p><b>110,000-Gallon Capon Bridge Water Storage Tank, Hampshire County Schools</b> \$400,000      January 2007 Completion</p>	<p><b>Muddlety Creek Water Feasibility Study</b> WVDEP/AML</p>
<p><b>Kanawha County Master Plan for Water Extensions, Kanawha County Commission</b> Ongoing study</p>	<p><b>Upper Winifrede Water Feasibility Study</b> WVDEP/AML</p> <p><b>Logan County PSD / Holden Water Feasibility Study, WVDEP/AML</b></p>

**RELATED PRIOR EXPERIENCE -  
RECENTLY COMPLETED  
WATER PROJECTS**

<p><b>Mt. Zion Water Booster and Main Extension</b> WVAW \$300,000</p>	<p><b>Pond Gap Water Main Extension</b> Kanawha County/WVAW/AML \$2.0 million</p>
<p><b>Peytona Estates Water Booster and Main Extension, WVAW</b> \$150,000</p>	<p><b>Kanawha County 2003 Water Main Extensions</b> Kanawha County/WVAW \$2.5 million</p>
<p><b>Oak Hill Water Main Reinforcement</b> WVAW \$750,000</p>	<p><b>Left Fork of Union Ridge Water Main Extensions</b> Salt Rock Water PSD/Cabell County/WVAW/HUD \$1.5 million</p>
<p><b>Fort Lee, Virginia Water Distribution System Upgrade, Virginia American Water</b> \$1 million</p>	<p><b>Adkins Fork, Bridge Creek, Trace Fork &amp; Ryder Creek, Correction of defective work, Construction observation, Putnam County/WVAW</b> \$400,000</p>
<p><b>750,000-Gallon Pinch Water Storage Tank</b> WVAW \$600,000</p>	<p><b>Putnam County 1999 Water Main Extension</b> Putnam County/WVAW, Responsible for <u>all</u> bidding and construction documents, Construction observation of two contracts, Lead consultant for construction administration/management</p>
<p><b>Hickory Ridge Water Storage Tank Relocation</b> WVAW \$250,000</p>	<p><b>Upper Frame Water Main Extension</b> Kanawha County/WVAW/HUD \$2.6 million</p>
<p><b>Witcher Creek Water Main Extension</b> Kanawha County/WVAW/AML \$800,000</p>	<p><b>Kanawha County 1999 Water Main Extension</b> Responsible for <u>all</u> bidding and construction documents. Construction observation of five contracts. Lead consultant for construction administration/management</p>
<p><b>Town Run Water Main Extension</b> Lewis County/WVAW/AML \$200,000</p>	

Continued →



RELATED PRIOR EXPERIENCE -  
RECENTLY COMPLETED  
WATER PROJECTS

Kanawha County/WVAW \$18.0 million

**Cabell County 1999 Water Main Extensions**

Responsible for all bidding and construction documents. Construction observation of three contracts. Lead consultant for construction administration/management.

Cabell County/WVAW \$18.0 million

**Boone County Regional Water Supply System**

Responsible for construction specifications, bidding and contract documents, and bidding phase services. Boone County/WVAW/HUD/ARC/AML/EDA et. al. \$31.5 million

**WV Route 34 to Hamlin Water Supply**

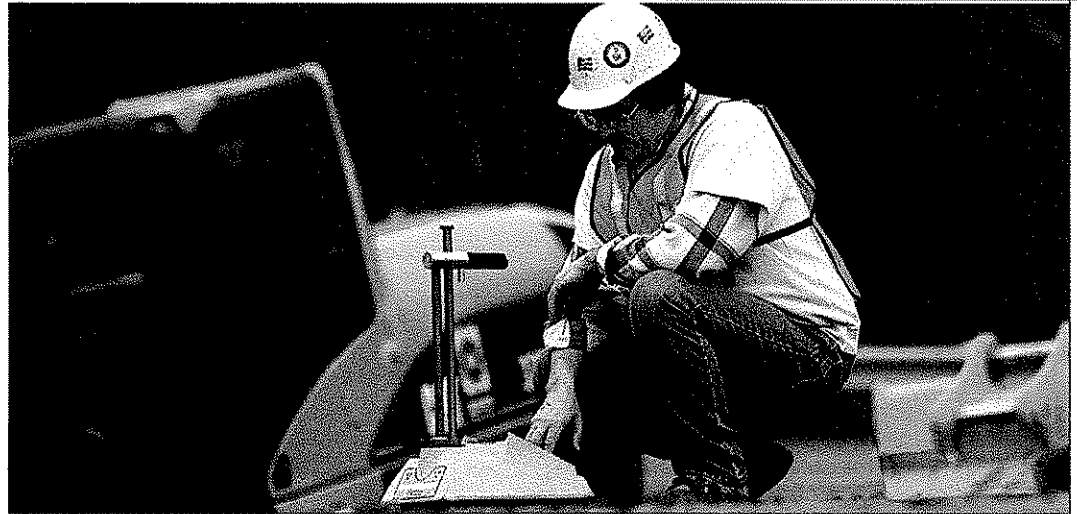
**Extension** Responsible for all basic engineering services including bidding phase, construction phase and construction observation. WVAW \$1.0 million

**North Cabell Ridge Water Main Extensions**

Construction observation only.

Cabell County/WVAW \$1.0 million

## EQUIPMENT



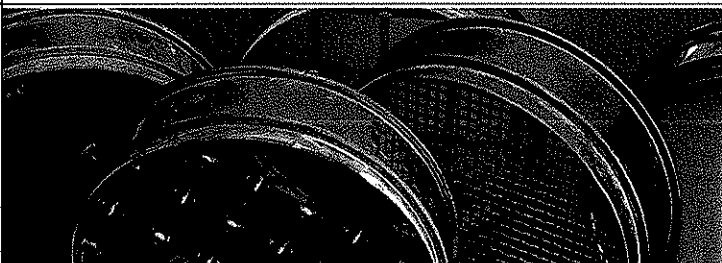
▲  
TERRADON's  
certified  
technicians are  
knowledgeable in  
the latest  
construction  
practices and  
procedures.



TERRADON offers materials testing and construction monitoring to document compliance with project design specifications and regulatory requirements. The firm provides construction monitoring for utility, highway, and commercial construction projects. TERRADON also provides laboratory and field testing of construction materials. Engineers and technicians at TERRADON are West Virginia Department of Highways certified in Portland Cement Concrete, Hot mixed Asphalt, Compaction, and Aggregates.

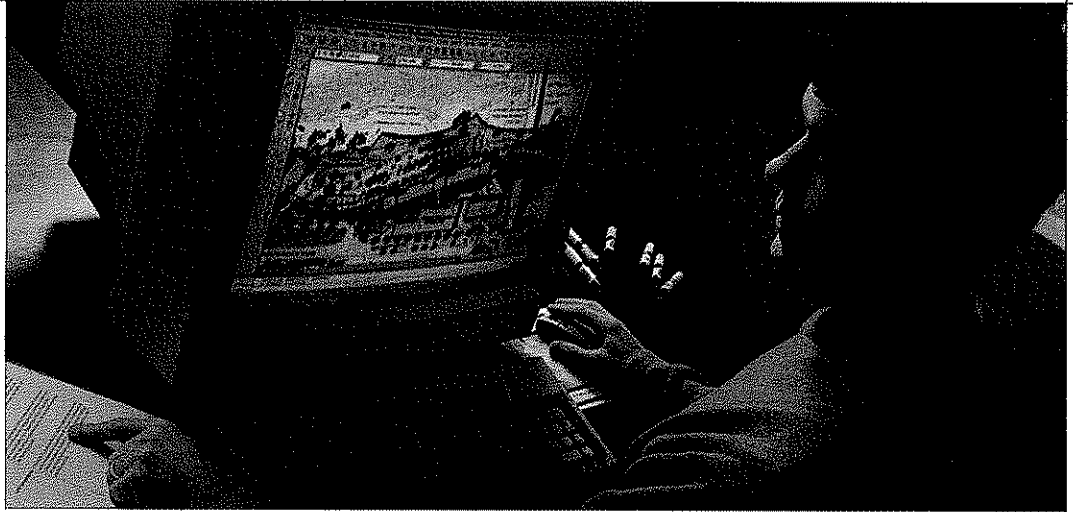
Testing and Monitoring Services include:

- Slump of Portland Cement Concrete (AASHTO-T119)
- Air Content of Freshly Mixed Concrete (AASHTO-T196 and T152)
- Unit Weight and Yield (AASHTO-T121)
- Making and Curing of Concrete Test Specimens (AASHTO-T23)
- Compressive Strength of Concrete Specimens (AASHTO-T22)
- Fine and Course Aggregate Gradations (AASHTO-T11 and T27)
- Specific Gravity of Aggregates (AASHTO-T84 and T85)
- Atterberg Limits (ASSHTO-T89 and T90)
- Moisture Content of Soil (ASTM-D2216)
- Nuclear Compaction Testing of Soil, Stone, and Hot Mixed Asphalt
- Preparation of Certification Forms and Construction Reports



**TERRADON**  
CORPORATION

## REFERENCES



The firm has built its reputation by providing cost effective design solutions and maintaining the highest level of customer service



The following references are specifically provided as having particular knowledge of TERRADON's work on similar projects.

Brian Donat  
County Administrator  
Putnam County Commission  
304-586-0201

Dave Broschart, P.E.  
Construction Engineer  
WVDEP - Office of Abandoned Land Mines &  
Reclamation, Philippi Office  
304-457-3219

Mark Sankoff, P.E.  
Director of Engineering  
West Virginia American Water  
304-340-2974

Patty Lee  
Salt Rock Water PSD  
304-736-6315

David Thomas  
General Manager  
Montgomery Sanitary Board  
Montgomery, WV  
304-442-8182

**TERRADON**  
CORPORATION

PERSONNEL RESUMES

**HARVEY "BUD" MCCALLISTER, JR., P.E.**  
**SENIOR CIVIL ENGINEER**

Mr. McCallister has more than 35 years of experience in planning, design, funding, permitting, and construction management of water and wastewater projects throughout West Virginia. He has worked for various West Virginia based consulting firms as well as regulatory agencies. His experience includes all types of water and wastewater projects, from collection and distribution to design of treatment plants.

**EDUCATION** B.S. Civil Engineering, 1969, West Virginia University  
M.S. Civil Engineering - Sanitary Engineering, 1972, West Virginia University

**REGISTRATION** Professional Engineer: West Virginia, Ohio

**WORK EXPERIENCE** 2007 - Present TERRADON Corporation  
1977 - 2007 Various consulting firms and WV-DEP, WV-BPH

**PROJECTS** Project Engineer and/or Project Manager for distribution system improvements in rural settings including booster stations, water storage tank and 6 inch or larger transmission lines include Clay Roane PSD, Walton PSD, Newton PSD, City of St. Marys, Salt Rock PSD, and Sissonville PSD.

Project Engineer and/or project manager for distribution system improvements in urban settings and within existing systems include City of Buckhannon, City Parsons, City of Fairmont, City of Ravenswood, Town of West Union, City of Logan, and City of Glenville.

PERSONNEL RESUMES

**JAMES A NAGY, PE**  
**CIVIL ENGINEER**

Mr. Nagy performs civil engineering related to water and waste water projects at TERRADON. He specializes in the design of water treatment and distribution systems. He has over 23 years of on-hand experience providing engineering for the largest private water company in West Virginia.

**REGISTRATION** Professional Engineer: West Virginia

**EDUCATION** B. S. Civil Engineering, 1974, West Virginia University

<b>WORK</b>	2007 - Present	TERRADON Corporation
<b>EXPERIENCE</b>	1984 - 2007	West Virginia American Water
	1982 - 1984	WV DNR
	1978 - 1982	VTN, Inc, Consulting Engineers
	1975 - 1978	Various Engineering Positions

**PROJECT EXPERIENCE** **West Virginia American Water Company**  
Responsible for completion of comprehensive planning studies for operating companies to evaluate their systems and make recommendations for capital improvements.

Analysis of transmission & distribution systems by computerized hydraulic modeling techniques.

Management of large scale water projects involving supervision of engineering consultants and coordination with local operating companies, through planning, design and construction.

Preparation of contract documents, plans & specifications, miscellaneous agreements, etc. required for construction of water transmission and distribution projects, booster stations, and water storage tanks.

Review of proposed capital projects and prepare supporting memoranda documenting need, scope of project, budget/schedule, detailed cost estimate, etc.

**Cathcart - Devonshire Development, Scott Depot, WV**  
Designed sanitary sewer and water distribution system to serve over 900 housing units in this private development.

PERSONNEL RESUMES

**JAMES L DOWNEY**  
**CIVIL ENGINEERING MANAGER**

TERRADON's Civil Engineering manager is Jim Downey. Mr. Downey has more than 30 years of experience in planning, design, funding, permitting, construction management and operations of wastewater treatment, pumping and collection systems. His current assignments include water pumping, storage and distribution systems, wastewater treatment projects, and several public and private sanitary landfill construction projects.

**EDUCATION** A.S. Civil Engineering Technology, 1975, WV Institute of Technology  
B.A. Regents, 2001, West Virginia University Institute of Technology  
17 Post-Graduate Hours in Environmental Engineering, Marshall University Graduate School

**WORK EXPERIENCE** 2006 - Present TERRADON Corporation  
1993 - 2006 Charleston Sanitary Board, Operations Manager  
1976 - 1993 Kelley Gidley Blair & Wolfe, Senior Project Manager, and Vice President of Engineering Production

**AFFILIATIONS** Water Environment Federation  
West Virginia Environmental Association, State Vice-President

**RELEVANT PROJECTS** **Elk-Pinch PSD Sewer Project**  
Served as Project Manager for the \$12 million sewer project. Served as primary writer of the 201 Facility Plan for the project, and assumed the role of designer for the sewer construction contract for the Pinch area which included the design of eight sewage pumping stations. (While at KGB&W)

**City of Montgomery WWTP And Morris Creek Pump Station Upgrade**  
Project Manager of the 0.5 MGD WWTP and Morris Creek Pump Station Upgrade. Served as primary designer and design team leader for the WWTP. (While at KGB&W). Upgrade consisted of new oxidation ditch with boat clarifier, innovative aeration and mixing, and a vacuum sludge drying bed.

**City of Elkins WWTP**  
Served as Project Manager and primary designer for the 2.0 MGD new wastewater treatment plant. New plant consisted of 2.0 MGD boomerang shaped oxidation ditch, new clarifiers, screw pumps for return sludge, post aeration, ultraviolet light disinfection and belt filter press. (While at KGB&W)



PERSONNEL RESUMES

**JAMES L DOWNEY**  
**CIVIL ENGINEERING MANAGER**

RELEVANT  
PROJECTS  
CONTINUED

**City of Buckhannon WWTP**

Participated in the design of the new 1.5 MGD dual oxidation ditch design. Design responsibilities were for the oxidation ditches and clarifiers. (While at KGB&W)

**Union Public Service District - 40<sup>th</sup> Street Plant Upgrade**

Served on design team to upgrade plant to a 0.4 MGD contact stabilization activated sludge plant. Responsibilities were for sizing the contact stabilization process and aerators. (While at KGB&W)

**Flatwoods Canoe-Run PSD - Sewage Pumping Stations**

Primary designer of six sewage pumping stations to convey sewage from the town of Gassaway to the Town of Sutton for treatment. (While at KGB&W)

**City of Charleston Elk Two Mile - Sewer and Sewage Pumping Station**

Designed three miles of sewer and a sewage pumping station to serve Capitol High School, Coonskin Drive, and the residents along Elk Two-Mile Creek in Charleston. (While at KGB&W)

**City of Charleston Sanitary Board - Ruthdale Sewer Extension**

Served as Project Manager for the \$8 million project to extend sewers into Corridor G to serve the new Southridge Centre. (While at KGB&W).

**Corridor G Pump Station Upgrade**

Designed upgrades to the sewage pumping stations and force main for the Corridor G area of Charleston. The project included a 1000 foot long, butt-fused polyethylene force main across Kanawha River. A total of four sewage pump stations were upgraded at a cost of \$2.5 million. (While at CSB).

**Belt Filter Press Replacement**

Designed a new 2 meter belt filter press, polymer system, wash water booster station, conveyors, and sludge feed pumps. Cost was \$800,000 (While at CSB).

**Porter's Hollow Pump Station And River Crossing Upgrade**

Designed an upgrade to the Porter's Hollow Pump Station and 1000 foot river crossing across Kanawha River. Project included two 2000 gpm pumps, variable frequency drives, odor scrubbers, hoist and trolley to remove pumps, magnetic flow meter, and 1,500 feet of 24" gravity sewer. (While at CSB)

PERSONNEL RESUMES

JAMES L DOWNEY  
CIVIL ENGINEERING MANAGER

RELEVANT  
PROJECTS  
CONTINUED

**Verizon Boat Ramp Retaining Wall**

Designed a segmented block retaining wall at the Verizon (formerly known as C&P) boat ramp in Charleston. (While at CSB)

**Pump Station Telemetry Replacement**

Participated in the design of a sewage pump station telemetry replacement project to serve 75 sewage pumping stations in the City of Charleston. System has full SCADA capabilities and cost \$1.3 million. (While at CSB).

**25th Street and 26th Street Pump Station Upgrade Project**

Participated in the design of the upgrade of two sewage pumping stations in City of Charleston to feed the Charleston WWTP. Each station was 750 gpm and included SCADA. Construction cost was \$350,000 (While at CSB).

**21st Street Sewer Replacement Project and Storm Sewer Project**

Participated in the design of a sewer replacement project to serve approximately 15 customers in the 21st Street area of Kanawha City. Project included a 25 gpm grinder sewage pumping station with SCADA. Construction cost was \$500,000. (While at CSB).

**Northwest Landfill Leachate Pumping System**

Designed leachate pumping system to pump leachate from a collection pond to the Parkersburg sanitary sewer. Project included stainless steel pumps, metering, and dual containment force main. (While at KGB&W).

**City of Montgomery WWTP Upgrade Project**

Served as Project Manager and primary designer of a new 1.0 meter belt filter press system and building, replacement of the headworks fine screening system, and upgrades to the sludge holding tank.

**City of Montgomery WWTP Upgrade Project**

Served as Project Manager and primary designer for a combined sewer separation project in downtown Montgomery.

**Town of Handley Emergency Pump Station Repair Project**

Served as Project Manager and assisted with the design of an emergency repair to the main sewage pumping station serving the Town of Handley.

**Tucker County Landfill**

Served as Project Manager and assisted with design of a 6 acre landfill cell at Davis, West Virginia.



**PERSONNEL RESUMES**

**ROBERT THAW, P S  
SURVEY MANAGER**

Mr. Thaw is Manager of Surveying Services for TERRADON. He organizes and supervises survey crews; designs commercial sites for drainage, building site locations, parking and utility easements; reviews project plans; and creates base mapping.

Mr. Thaw has more than 20 years of experience in a wide range of land surveying applications. He is experienced with the day-to-day operation of the business and management of personnel.

**REGISTRATION** Professional Surveyor, West Virginia

**EDUCATION** B.A., Survey Technology, 1981, West Virginia Institute of Technology  
B.S., Surveying, 1985, West Virginia Institute of Technology

**FIELDS OF COMPETENCE** Control Surveys - Conventional and G.P.S.  
Topographic Surveys  
- Commercial Sites under ALTA Standards  
- Abandoned Mine Lands

Waste Management Facilities  
Boundary Surveys  
Right of Way Plans (Highways and Utilities)  
Site Design (Commercial and Urban Developments)  
Gas Well Locations and Permitting  
Construction Stakeout  
- Commercial Buildings  
- Sanitary Sewer  
- State and Federal Highways  
Geographic Information Systems

PERSONNEL RESUMES

**KEVIN GARNES**  
**SENIOR CADD DESIGNER**

Mr. Garnes is vastly experienced in the design, specification development and preparation of construction documents for water and wastewater treatment plants, water storage tanks, distribution systems, sanitary sewer pump stations, sewer collection systems including stormwater, and stormwater retention structures.

**EDUCATION** Various Engineering and Technical Classes, 1984-Present  
Attended West Virginia State College  
Attended West Virginia Institute of Technology

<b>WORK EXPERIENCE</b>	1994-Present	TERRADON Corporation
	1993-1994	Chapman Technical Group
	1979-1993	Kelley, Gidley, Blair & Wolfe, Inc.
	1977-1979	Geotech Engineers

**PROJECT  
EXPERIENCE** Water treatment plant, water storage tanks and distribution systems:

Gassaway/Sutton Water Treatment Plant  
Madison Water Treatment Plant Renovations  
West Virginia - American Water Company

Hooverson Heights Water Treatment Plant  
Hooverson Heights P.S.D.

Brunswick Water Treatment Plant Renovations  
Brunswick, Maryland

Charles Town Water Treatment Plant  
City of Charles Town, West Virginia

City of Grafton Water System Improvements  
Grafton, West Virginia

Sissonville Public Service District  
Sissonville, West Virginia

Clay/Roane Public Service Districts  
Clay and Roane Counties, West Virginia

PERSONNEL RESUMES

**JONATHAN GILLENWATER**  
**PROJECT TECHNICIAN**

Jonathan Gillenwater is TERRADON'S Project Technician for water and wastewater projects. He has 20 years of experience in utility administration, construction, and inspection. Since joining TERRADON he has been responsible for overseeing construction of water and wastewater construction projects.

<b>WORK EXPERIENCE</b>	2008 - Present	TERRADON
	2005 - 2007	Landair Transportation
	2002 - 2005	M. B. Kahn Construction
	2000 - 2002	Jones Lang LaSalle
	1999 - 2000	Charleston Housing Authority
	1997 - 1999	Putnam County Development Authority
	1996 - 1997	Putnam County Office of Planning and Infrastructure
	1987 - 1996	Kelly Gidley Blair & Wolfe Consulting Engineers

**PROJECT  
EXPERIENCE**

Coordinated activities of numerous groups to complete construction of \$8.5 waste treatment facilities for Toyota Motor Manufacturing of West Virginia. Project also addressed short-term and long-term waste treatment needs of the Town of Buffalo.

Initiated master plans for water and sewer construction within Putnam County, coordinating efforts between public and private companies vying for same service areas. Prepared draft ordinances addressing issues with storm-water management in developed areas of Teays Valley.

PERSONNEL RESUMES

**WALTER FREDERICK HALSTEAD**  
**CHIEF RESIDENT PROJECT**  
**REPRESENTATIVE**

Fred Halstead is TERRADON'S Chief Resident Project Representative. He has 23 years of experience in utility administration, construction, and inspection. Since joining TERRADON in 1999 he has been responsible for overseeing construction of many water and wastewater construction projects.

PROFESSIONAL  
CERTIFICATIONS

- West Virginia Certified Portland Cement Concrete Technician
- West Virginia Certified Compaction Technician

WORK  
EXPERIENCE

1999 - Present	TERRADON
1989 -1999	Town of Eleanor, Class II Water System Operator
1989 -1989	Coralyn Water Company, Class II Water Sys. Operator
1979 - 1984	Putnam County Parks & Recreation

TRAINING

WVDOT Portland Cement	WVDOT Compaction
Hazardous Material Response	Lead & Copper Testing
Hazardous Materials Incident Analysis	OSHA Hazardous Materials
Firemanship II	Radiation Safety
Valve and Hydrant Maintenance	Arson Investigation

PROJECT  
EXPERIENCE

Mr. Halstead has been the lead Project Representative on most water and wastewater projects for TERRADON since starting with the company in 1999. He has overseen construction of numerous water distribution projects as well as sewer collection systems.

ACTIVITIES

Serving fourth term as Mayor of the Town of Eleanor, West Virginia  
Town of Eleanor Sanitation Department Board Chair  
Town of Eleanor Police Department Board Chair  
Town of Eleanor Fire Chief (over 10 years)

**PERSONNEL RESUMES**

**BRUCE FRAME  
TESTING & INSPECTION MANAGER**

Bruce Frame is TERRADON'S Manager of Construction Inspection and Materials Testing. He has 35 years of experience in materials testing in the Materials Section of the West Virginia Department of Transportation, Division of Highways. Since joining TERRADON in 2000 he has been responsible for material testing and inspection on a wide variety of construction projects.

**PROFESSIONAL  
CERTIFICATIONS**

- NICET Level 3 Engineering Technician
- West Virginia Certified Portland Cement Concrete Technician & Insp.
- West Virginia Certified Aggregate Inspector
- West Virginia Certified Hot Mix Asphalt Technician & Inspector
- Fairmont State College Engineering Technician/Technologist Certification Program #1727 Level III - TET

**WORK  
EXPERIENCE**

2000 - Present	TERRADON
1966- 2000	WV Department of Transportation, District 1

**PROJECT  
EXPERIENCE**

Notable recent projects Mr. Frame was responsible for include:

- WVDOH Materials Control, Soil and Testing Division Headquarters
- Point Pleasant River Front Park
- Upper Kanawha County Community Building
- State Route 34 Widening
- US 35 - Interstate 64 Interchange
- WV Corridor G
- WV Corridor H
- WV Corridor D
- Coalfields Expressway
- Merritts Creek Connector
- Odaville Bridge
- Dunlaugy Bridge
- Culloden Bridge
- WV Turnpike Signage
- Hal Greer Blvd Widening

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
CONSULTANT CONFIDENTIAL QUALIFICATION QUESTIONNAIRE

EXPERIENCE DATA		DATE (DAY, MONTH, YEAR) <b>January 1, 2008</b>	FEIN <b>55-0687626</b>
1. FIRM NAME <b>TERRADON Corporation</b>		3. FORMER FIRM NAME	
4. HOME OFFICE TELEPHONE <b>(304)-755-8291</b>		6. TYPE OWNERSHIP Individual <input checked="" type="checkbox"/> Corporation Partnership <input type="checkbox"/> Joint-Venture <input type="checkbox"/>	6a. WV REGISTERED DBE YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
5. ESTABLISHED (YEAR) <b>1989</b>		7. PRESENT OFFICES: ADDRESS/ TELEPHONE/ PERSON IN CHARGE/ NO. PERSONNEL EACH OFFICE <b>401 Jacobson Drive, Poca, WV 25159 / (304)-755-8291 / Thomas Y. Kittredge, President / 42 persons</b> <b>425 North Jefferson Street, Lewisburg, WV 24901/ (304) 645-4636 / Robert Ridgeway, Branch Manager / 10 persons</b>	
8. NAMES OF PRINCIPAL OFFICIALS OR MEMBERS OF FIRM <b>Thomas Y Kittredge, President</b> <b>Virginia L. King, CFO</b>		8a. NAME, TITLE, & TELEPHONE NUMBER - OTHER PRINCIPALS <b>Timothy T White, P.E., Principal Engineer</b>	
9. PERSONNEL BY DISCIPLINE			
5 ADMINISTRATIVE	—	5 LANDSCAPE ARCHITECTS	1 STRUCTURAL ENGINEERS
— ARCHITECTS	—	— MECHANICAL ENGINEERS	10 SURVEYORS
9 CADD OPERATORS	—	— MINING ENGINEERS	— TRAFFIC ENGINEERS
— CHEMICAL ENGINEERS	2	— PHOTOGRAMMETRISTS	1 TRANSPORTATION ENGINEERS
5 CIVIL ENGINEERS	—	— PLANNERS: URBAN/REGIONAL	3 OTHER
8 CONSTRUCTION INSPECTORS	—	1 SANITARY ENGINEERS	
— DESIGNERS, HIGHWAY	—	1 SOILS ENGINEERS	
— DRAFTSMEN	—	— SPECIFICATION WRITERS	
			52 TOTAL PERSONNEL

10. TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE: **6**

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

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

NAME AND ADDRESS	SPECIALITY	WORKED WITH BEFORE
<p>Triad Engineering 4980 Teays Valley Road Scott Depot WV 25560</p>	<p>Drilling, Soils Lab</p>	<p><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p>
<p>Bio-Chem Testing, Inc. PO Box 634 Teays WV 25569</p>	<p>Water Lab</p>	<p><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p>
<p>Photo Science 2670 Wilhite Drive Lexington, KY 40503</p>	<p>Aerial Photogrammetric Mapping</p>	<p><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p>

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

YES Description and Number of Projects: **35 projects for WVDEP/AML&R**

NO

B. Is your firm experienced in Soil Analysis?

YES Description and Number of Projects: **24 WVDEP/AML&R projects included some soil analysis, and nearly all projects for the last 5 years have included soils analysis for various purposes.**

NO

C. Is your firm experienced in hydrology and hydraulics?

YES Description and Number of Projects: **24 WVDEP/AML&R projects included hydrology and hydraulics and nearly all projects for the last 5 years have included hydrology and hydraulics.**

NO

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

YES Description and Number of Projects:

NO **We routinely provide photo control surveys and field edit the mapping provided.**

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: **9 WVDEP/AML&R projects included the evaluation of aquifer degradation as a result of mining. Four of those projects have been designed and constructed. TERRADON has also designed hundreds of miles of waterline in the last 5 years.**

NO

F. Is your firm experienced in Acid Mine Drainage?

YES Description and Number of Projects: **5 WVDEP/AML&R projects included acid mine drainage evaluation and abatement. In addition, TERRADON was 1 of only 2 firms evaluating and designing AMD abatement of special reclamation projects in 1992, 1993 and 1994.**

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 Initial)	YEARS OF EXPERIENCE		YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	
<b>James, John W., P.E. Project Manager</b>	7	27	7
Brief Explanation of Responsibilities <b>Geotechnical Project Manager for TERRADON Corporation. Responsible for contract administration and project management; peer review of design, construction drawings and specifications; constructability review and construction cost estimate. Responsible for resource management to assure project schedule and cost.</b>			
EDUCATION (Degree, Year, Specialization) <b>B.S., 1968, Civil Engineering</b>			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS <b>American Society of Civil Engineers (Past President, WV Section)</b>		REGISTRATION (Type, Year, State) <b>P.E., 1973, WV</b>	
NAME (Last, First, Middle Initial)	YEARS OF EXPERIENCE		YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	
<b>White, William, P.E. Senior Structural Engineer</b>	2	18	0
Brief Explanation of Responsibilities <b>Senior engineer responsible for structural analysis, design engineering, field investigation, specification writing, engineer's cost estimate, prebid and preconstruction meetings. Experienced in retaining wall design.</b>			
EDUCATION (Degree, Year, Specialization) <b>B.S., 1987, Civil Engineering</b>			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS <b>American Society of Civil Engineers</b>		REGISTRATION (Type, Year, State) <b>P.E., 1997, WV; P.E., 1996, OH; P.E., 1999, VA; P.E., 2000, FL; P.E., 2000, NC; P.E., 2000, AR; P.E., 2001, KY</b>	

Continued on next page.

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

NAME (Last, First, Middle Initial)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE
<b>White, Timothy T., P.E. Civil Engineer, Project Manager</b>	<b>2</b>	<b>15</b>	<b>0</b>
Brief Explanation of Responsibilities <b>Project Engineer responsible for grading, hydraulic design, erosion and sediment control, natural stream channel assessment and design.</b>			
EDUCATION (Degree, Year, Specialization) <b>B.S., 1992, Civil Engineering</b>			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS <b>American Society of Civil Engineers</b>			
REGISTRATION (Type, Year, State) <b>P.E. 1999, OH; P.E. 1999, WV; P.E. 2001, AR; P.E. 2002, KY; P.E. 2003, TX; P.E. 12006, VA; P.E. 2007, PA</b>			
NAME (Last, First, Middle Initial)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE
<b>Miller, Jennifer J., P.E. Civil Engineer, Project Engineer</b>	<b>2</b>	<b>0</b>	<b>7</b>
Brief Explanation of Responsibilities <b>Project Engineer responsible for hydrologic studies, hydraulic design, erosion and sediment control, water distribution modeling and water treatment.</b>			
EDUCATION (Degree, Year, Specialization) <b>B.S., 1985, Civil Engineering</b>			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS <b>P.E., 1990, MO; P.E., 1992, WV; P.E., 2007, VA</b>			

Continued on next page.

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials.)			
NAME (Last, First, Middle Initial)	YEARS OF EXPERIENCE		YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	
<b>Nagey, James A., P.E. Civil Engineer</b>	<b>2</b>	<b>0</b>	<b>23</b>
Brief Explanation of Responsibilities <b>He specializes in the design of water treatment and distribution systems.</b>			
EDUCATION (Degree, Year, Specialization) <b>B.S., 1974, Civil Engineering Technology</b>			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS <b>REGISTRATION (Type, Year, State) P.E., 1982, WV</b>			
NAME (Last, First, Middle Initial)	YEARS OF EXPERIENCE		YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	
<b>McCallister, Harvey "Bud", P.E. Civil Engineer</b>	<b>0</b>	<b>0</b>	<b>30</b>
Brief Explanation of Responsibilities <b>More than 30 years of experience in planning, design, funding, permitting, and construction management of water and wastewater projects throughout West Virginia</b>			
EDUCATION (Degree, Year, Specialization) <b>B.S., 1969, Civil Engineering M.S., 1972, Sanitary Engineering</b>			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS <b>REGISTRATION (Type, Year, State) P.E., 1976, WV; P.E., 2006, OH</b>			

Continued on next page.

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

NAME (Last, First, Middle Initial)		YEARS OF EXPERIENCE	
YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE
<b>Thaw, Robert F., P.S.</b> <b>Principal Surveyor</b>	<b>13</b>	<b>13</b>	<b>22</b>
Brief Explanation of Responsibilities <b>Responsible for all aspects of surveying including photogrammetry control, if required, field editing of mapping, topographic mapping, establishment of survey control monuments and establishing base lines for construction layout and quantity measurement. Also, tax map overlays and detailed property clarifications.</b>			
EDUCATION (Degree, Year, Specialization) <b>B.A., 1981, Surveying Technology</b> <b>B.S., 1985, Surveying</b>			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		REGISTRATION (Type, Year, State)	
<b>West Virginia Association of Land Surveyors</b>		<b>P.S. 1993, WV</b>	
NAME (Last, First, Middle Initial)		YEARS OF EXPERIENCE	
<b>Brown, David A., P.S.</b> <b>Professional Surveyor</b>		<b>5</b>	
Brief Explanation of Responsibilities <b>Responsible for all aspects of surveying including photogrammetry control, if required, field editing of mapping, topographic mapping, establishment of survey control monuments and establishing base lines for construction layout and quantity measurement. Also, tax map overlays and detailed property clarifications.</b>			
EDUCATION (Degree, Year, Specialization) <b>B.S., 1996, Engineering Technology</b>			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		REGISTRATION (Type, Year, State)	
<b>West Virginia Association of Land Surveyors</b>		<b>P.S. 2003, WV</b>	

Continued on next page.

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

NAME (Last, First, Middle Initial)		YEARS OF EXPERIENCE	
YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE
<b>Bakanas, Brian</b> Professional Surveyor	7		
Brief Explanation of Responsibilities <b>Field survey and office computations for field editing of mapping, topographic surveys, and establishing base lines for construction layout and quantity measurement. Tax map overlay and boundary surveys.</b>			
EDUCATION (Degree, Year, Specialization) <b>A.S., 1985, Surveying</b>			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		REGISTRATION (Type, Year, State)	
		<b>P.S. 1996, WV</b>	
NAME (Last, First, Middle Initial)		YEARS OF EXPERIENCE	
YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE
<b>Fox, Gregory D., ASLA</b> Land Development Manager	2	<b>14 (Grading &amp; Design)</b>	<b>0</b>
Brief Explanation of Responsibilities <b>Responsible for grading and drainage plans.</b>			
EDUCATION (Degree, Year, Specialization) <b>B.S., 1988, Landscape Architecture</b> <b>B.A., 1994, Geography (Planning)</b>			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		REGISTRATION (Type, Year, State)	
<b>American Society of Landscape Architects</b> <b>WV Chapter ASLA</b> <b>Associate Member AIA West Virginia</b>		<b>Landscapist Architect: 1991-OH, 1992-WV, 1993-KY,</b> <b>1997-SC, 1997-NC, 2002-VA</b>	

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

NAME (Last, First, Middle Initial) <b>Gerencir, William</b> <b>Designer, CADD Technician</b>		YEARS OF AML DESIGN EXPERIENCE: <b>14</b>	YEARS OF AML RELATED DESIGN EXPERIENCE: YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE <b>14</b>
Brief Explanation of Responsibilities <b>Design tasks include: drainage calculations consisting of hydrology and hydraulic calculations. Earthworks including (conceptual) site design, site grading and site balance, project coordination, coordination of all design drawing, Quality Control, and calculation brief, writing of specifications. Site work including surveying and site reconnaissance. Erosion and sediment control design. Environmental permits.</b>			
EDUCATION (Degree, Year, Specialization) <b>A.S., 1991, Civil Surveying Engineering Technology</b>			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS REGISTRATION (Type, Year, State)			
NAME (Last, First, Middle Initial) <b>Garnes, Kevin, D.</b> <b>Senior Designer/CADD Technician</b>		YEARS OF AML DESIGN EXPERIENCE: <b>14</b>	YEARS OF AML RELATED DESIGN EXPERIENCE: YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE <b>25</b>
Brief Explanation of Responsibilities <b>CADD Support: Site design, site grading and site balance. Design drawings and Quality Control. Field reconnaissance and layout of waterline feasibility studies and final design.</b>			
EDUCATION (Degree, Year, Specialization)			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS REGISTRATION (Type, Year, State)			
NAME (Last, First, Middle Initial) <b>Ratliffe, William M.</b> <b>Environmental Scientist</b>		YEARS OF AML DESIGN EXPERIENCE: <b>0</b>	YEARS OF AML RELATED DESIGN EXPERIENCE: YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE <b>3</b>
Brief Explanation of Responsibilities <b>Wetland delineations, design, permits, 401/404 certifications. Natural stream design, NPDES permits, NEPA permits and reports.</b>			
EDUCATION (Degree, Year, Specialization B.A., 2003, Environmental Geo-Science)			
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.

Software

Autodesk 2007 Land Development Desktop with Civil and Survey Design Modules

SedCad 4 - Erosion Control and Hydrology Software

Haested Method Flowmaster Software for Channel Design

Haested Methods – Water CADD (Pipe Network Analysis)

Slope Stability -

PC Stable

REAME

SBSLOPE

WinStable and WinStable 2003

Piling Walls, Anchors and Reinforced Earth Walls -

Lpile

HeliCAP

Anchor 400

KeyWall 2004

TR 55, TR 20, TR 66 (Sites) - Hydrology

Hec-1, Hec HMS 2.22, Hec R As 3.1.2 -- Hydrology

LC 58 + RP 61 – Structural (wall)

Microstation V8

Surveying Equipment

Trimble 4700 modular, RTK Global Positioning Total Station

Trimble Geomatics Office Software

Topcon Total Stations (3)

SMI Data Collectors (3)

Printing/Plotting/Reproduction

HP DesignJet 1050C Plotter

HP DesignJet 759C Plotter

HP LaserJet 8000 Printer (2)

HP Color LaserJet 3700

Sharp AR-550 Copier/Printer (2)

Sharp AR-C150 Full Color Copier/Printer

Océ 7056 Engineering Size Copier

15. PRESENT ACTIVITIES ON WHICH YOU ARE THE DESIGNATED ENGINEER OF RECORD

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
Sawmill Village Development Site/civil Design, Snowshoe, West Virginia	Summit III, LLC 295 Seven Farms Drive Charleston, WV 29492	\$100,000,000	50%
WV Route 2 Water Line Extensions Huntington, West Virginia	West Virginia American Water PO Box 1906 Charleston WV 25327	\$450,000	0%
New Hope 1 MG Water Storage Tank New Hope, West Virginia	West Virginia American Water PO Box 1906 Charleston WV 25327	\$600,000	99%
Salt Rock PSD Water Main Extensions Salt Rock, West Virginia	Salt Rock PSD & Cabell County Commission Huntington, West Virginia	\$2,000,000	50%
Derrick Creek Water Line Extensions Sissonville, West Virginia	West Virginia American Water PO Box 1906 Charleston WV 25327	\$1,500,000	0%
Charleston Replacement Housing Site/Civil for CRH 1-5 Charleston, West Virginia	Alan Ives Construction 10 South La Salle Street, Suite 3440 Chicago, Illinois 60603	\$20,000,000	50%
Putnam County 2006 Water Main Extensions, Putnam County, West Virginia	Putnam County Commission 3389 Winfield Road Winfield, WV 25213	\$3,300,000	98%

Continued on next page



15. PRESENT ACTIVITIES ON WHICH YOU ARE THE DESIGNATED ENGINEER OF RECORD

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
Fort Lee Hydraulic Study, Water Line Extensions, and New Fuel Tanks Hope Well, Virginia	Virginia American Water Company 900 Industrial Street Hopewell, VA 23860	\$450,000	99%
Fairmont Water Park Fairmont, West Virginia	City Fairmont 200 Jackson Street Fairmont, West Virginia 26554	\$3,000,000	90%
Yeager Airport Parking Deck Charleston, West Virginia	BBL Carlton PO Box 1153 Charleston, WV 25324	\$3,000,000	15%
Relocate CR 18, Eccles, Raleigh County, West Virginia	WVDOT Building 5, Room A-110 1900 Kanawha Blvd. East Charleston WV 25305	\$2,000,000	80%
Sleeths Run Bridge CR119/1 Lewis County West, Virginia	WVDOT Building 5, Room A-110 1900 Kanawha Blvd. East Charleston WV 25305	\$2,000,000	20%
44 Various Cell Tower Sites Throughout West Virginia	NTelos 1150 Shenandoah Village Drive Waynesboro, VA 22980	\$3,000,000	25%

TOTAL NUMBER OF PROJECTS: 13

TOTAL ESTIMATED CONSTRUCTION COSTS: \$141,300,000

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
Mingo Central High Sch Mingo County, West Virginia	Civil, Site Design, Surveying	Mingo County BOE Sycamore Street Williamson, WV 25661	2008	\$20,000,000	15%
Marshall Community & Technical College Huntington, West Virginia	Civil, Site Design, Surveying	Marshall University Facilities Planning & Management, Huntington, WV	2009	\$20,000,000	15%
New Teays Elementary Scott Depot, West Virginia	Civil, Site Design, Surveying	Putnam County BOE Winfield, WV 25213	2008	\$12,000,000	15%
Moorefield Intermediate School Moorefield, West Virginia	Civil, Site Design, Surveying,	Hardy County BOE 510 Ashby Street Moorefield, WV 26836	2009	\$12,000,000	15%
Marshall University, Health & Wellness Center, Dormitories Huntington, WV	Civil, Site Design, Hardscape	Marshall University Facilities Planning & Management, Huntington, WV	2008	\$27,000,000	10%
Twin Falls State Park Lodge Expansion McDowell County, WV	Civil, Site Design	WV Division of Natural Resources, Capitol Building 3, R663 Charleston, WV 25305	2008	\$5,500,000	15%
University High School Monongalia County, WV	Civil, Site Design	Monongalia County Schools, 668 River Rd Morgantown, WV 26507	2008	\$12,000,000.00	20%

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)
US 35 Value Engineering, Ramp 1, WV 34 Interchange Putnam County, West Virginia	WV DOT Building 5, Room A-110 1900 Kanawha Blvd. East Charleston WV 25305	Saving \$3,000,000	2007	Yes
Gypsy Bridge S317-19-23.25 00 Erection Plans Harrison County, West Virginia	Bilco Construction Company, Inc. 805 Wisteria Drive South Charleston, WV 25309	\$ 20,000 fee	2008	Under Construction
South Branch Potomac River Bridge, X316-H-100.40 04 Erection Plans Hardy County, West Virginia	Vecellio & Grogan, Inc. P.O. Box 2438 Beckley, WV 25902	\$31,000,000	2008	Under Construction
WV 73 Turning Lanes Fountain Place Development Logan County, West Virginia	WV DOT Building 5, Room A-110 1900 Kanawha Blvd. East Charleston WV 25305	\$ 600,000	2005	Yes
Sedalia Arch Bridge, Bridge Replacement Sedalia, West Virginia	WV DOT Building 5, Room A-110 1900 Kanawha Blvd. East Charleston WV 25305	\$890,000	2006	Yes
Fairmont Coke Works Redevelopment Traffic Study, Fairmont, West Virginia	City Fairmont 200 Jackson Street Fairmont, West Virginia 26554	\$20,000 fee	2006	No
St. Mary's (WV 16) Bypass Route Study Pleasants County, WV	WV DOT Building 5, Room A-110 1900 Kanawha Blvd. East Charleston WV 25305	\$120,000 fee	2004	Study
Hinton Landslide, Landslide Reclamation Hinton, West Virginia	WV DOT, Division of Highways Building 5, Room A-110 1900 Kanawha Boulevard East Charleston, WV 25305	\$1,000,000	2006	Yes

Continued on next page

17. COMPLETE 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)
Corridor L Widening Design US Route 19 Summersville, West Virginia	WVDOT, Division of Highways Building 5, Room A-110 1900 Kanawha Boulevard East Charleston, WV 25305	\$12,100,000	2005	No
Upper Fishers Branch/Guthrie Water Main Extension Kanawha County, West Virginia	West Virginia American Water PO Box 1906 Charleston WV 25327	\$2,800,000	2008	Under Const.
Upper Frame Phase 2 Water Main Extension Kanawha County, West Virginia	Kanawha County RDA & West Virginia American Water PO Box 1906 Charleston WV 25327	\$2,100,000	2008	Under Const.
Tucker County Landfill Expansion Design of Cell 6 Thomas, West Virginia	Tucker County Solid Waste Authority PO Box 58 Thomas WV 26292	\$2,500,000	2007	Yes
Montgomery Wastewater Treatment Plant Upgrade, Design Montgomery, West Virginia	City of Montgomery 706 3 <sup>rd</sup> Avenue Montgomery WV 25136	\$2,800,000	2009	Under Const.
Back Fork Water Main Extension Webster County, West Virginia	West Virginia American Water PO Box 1906 Charleston WV 25327	\$800,000	2008	Under Const.
Rabel Mountain Water Main Extensions Kanawha County, West Virginia	WV American Water PO Box 1906 Charleston WV 25327	\$600,000	2007	Yes
Fort Lee Water Distribution System Upgrade Fort Lee, Virginia	WV American Water PO Box 1906 Charleston WV 25327	\$1,000,000	2006	Yes

Continued on next page

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)
Prince Williams 1 Million Gallon Elevated Water Storage Tank Prince Williams County, Virginia	WV American Water PO Box 1906 Charleston WV 25327	\$1,500,000	2006	Yes
Hickory Ridge Water Storage Tank Relocation, County, West Virginia	WV American Water PO Box 1906 Charleston WV 25327	\$1,000,000	2006	Yes
Winfield High School Expansion Winfield, West Virginia	Putnam County BOE Winfield, WV 25213	\$2,000,000	2006	Yes
Fountain Place Mall Phase 2 Site/Civil Design Logan, West Virginia	Fountain Place Mall PO Box 794 Logan, WV 25601	\$10,000,000	2005	Yes
Jenkin Jones Refuse Piles Mine Reclamation McDowell County, West Virginia	WVDEP/AML&R 601 57 <sup>TH</sup> Street SE Charleston WV 25304	\$4,000,000	2005	Yes
Bendale Dam Repair Design Lewis County, West Virginia	WV American Water PO Box 1906 Charleston WV 25327	\$100,000	2005	Yes
RDA of Charleston Olcott Water Study Kanawha County	WVDEP/AML&R 601 57 <sup>TH</sup> Street SE Charleston WV 25304	\$50,000	2004	Study
Stonecoal Creek Complex Refuse AML&R Raleigh County	WVDEP/AML&R 601 57 <sup>TH</sup> Street SE Charleston WV 25304	\$4,000,000	2004	Yes
Pond Gap Waterline Extension Kanawha County	WV American Water/RDA of Charleston-Kanawha Co.	\$2,000,000	2004	Yes
Tri-State Gaming Parking Expansion Commercial Site Development Kanawha County	Tri-State Gaming Center PO Box 7118 Cross Lanes WV 25356	\$1,500,000	2004	Yes
Union Ridge Waterline Extension Cabell County	WV American Water/RDA of Charleston-Kanawha Co.	\$2,000,000	2004	Yes

Continued on next page

17. COMPLETE 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)
Witcher Creek Water Line Design	WV American Water PO Box 1906 Charleston WV 25327	\$550,000	2004	Yes
Southridge Expansion Commercial Site Development Kanawha County	RidgeLine, Inc. 400 Second Avenue So. Charleston, WV 25303	\$8,000,000	2003	Yes
Home Depot Commercial Site Development Kanawha County	Ridge Line, Inc. 400 Second Avenue So. Charleston, WV 25303	\$2,000,000	2003	Yes
WV Osteopathic Medical School, Site Development, Greenbrier County	WV School of Osteopathic Medicine 400 North Lee Street Lewisburg, WV 24901	\$50,000	2003	Yes
Toyota Wetland Wetland Mitigation Putnam County	Toyota Motor Corporation of WV, Inc. 1 Sugar Maple Lane Buffalo, WV 25033	\$120,000	2003	Yes

18. COMPLETE ALL 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 AS 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
Fairmont State University Campus Improvements Fairmont, West Virginia	Fairmont State University 1201 Locust Avenue Fairmont, WV 26554	\$1,000,000	2007	Yes	Omni Associates
New Teays Elementary Civil, Site Design, Surveying Scott Depot, West Virginia	Putnam County BOE Winfield, WV 25213	\$1,000,000	2008	Yes	Williamson Shriver Architects
Mountain State University Health Science Building Civil/Site/Surveying Beckley, WV	Mountain State University PO Box 9003 Beckley, WV 25802-9003	\$1,500,000	2007	Yes	Dan Sneed Architects
WVU Recreation Center Master Plan Morgantown, WV	West Virginia University	\$2,000,000	2006	No	Omni Associates
Doddridge County High School Doddridge County, West Virginia	Doddridge County BOE 104 Sistersville Pike West Union, WV 26456	\$1,500,000	2006	Yes	Williamson Shriver Architects
Capon Bridge Intermediate School Hampshire County, West Virginia	Hampshire County BOE 46 South High Street Romney, WV 26757	\$1,000,000	2006	Yes	Williamson Shriver Architects
Fairmont Public Safety Building, Fairmont, West Virginia	City Fairmont 200 Jackson Street Fairmont, West Virginia 26554	\$4,000,000	2005	Yes	Omni Associates
Jefferson High School Jefferson County, West Virginia	Jefferson County Schools 110 Mordington Ave. Charles Town, WV 25414	\$2,000,000	2005	No	Helbing Lipp, Ltd.
Lincoln County 911 Center Civil, Site Design Lincoln County, WV	Lincoln County Commission Courthouse Offices Hamlin, West Virginia 25523	\$400,000	2004	Yes	Omni Associates

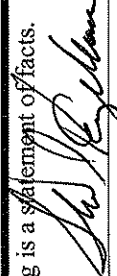
18. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM HAS BEEN A SUB-CONSULTANT TO OTHER FIRMS (INDICATE PHASE OF WORK FOR WHICH YOUR FIRM AS RESPONSIBLE)

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
WVDEP Headquarters Building, Site/Civil, Survey Kanawha County, WV	WVDEP 601 57 <sup>th</sup> Street SE Charleston WV 25304	\$30,000,00.00	2004	Yes	BBL-Carlton
Grafton High School Civil, Site Design Grafton, WV	Taylor Co. BOE 1 Prospect Street Grafton WV 26354	\$1,000,000	2004	Yes	Williamson Shriver Architects, Inc.
Fairmont Middle School Civil, Site Design Fairmont, WV	Marion Co. BOE 200 Gaston Avenue Fairmont WV 26554	\$1,600,000	2004	Yes	Omni Associates
Kanawha Co. 911 Civil, Site Design Kanawha Co., WV	Kanawha County Commission 407 Virginia Street E Charleston WV 25301	\$800,000	2004	Yes	Kreps & Kreps
WV Parking Garage, Site Plan, Geotech Charleston, WV	WV Public Service Commission 201 Brooks Street Charleston, WV 25301	\$500,000.00	2003	Yes	Associated Architects

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.

TERRADON has extensive experience in the design of water extensions. In 1997 the firm designed its first water extension project, Century/Volga, in Barbour County for the WVDEP AML section. The project included the design of 17,776 feet of 8" main, 54,223 feet of 6" main, and 7,415 of 2" main. Since then the firm has designed over 1,000,000 LF (over 216 miles) of water lines. Other AML water extension design projects successfully completed by TERRADON include: Pond Gap in Kanawha County, Town Run in Lewis County, and Witcher Creek in Kanawha County.  
West Virginia Department of Environmental Protection, Office of Abandoned Mine Lands & Reclamation has been and continues to be one of TERRADON's most important clients. We will go the extra mile to gain your satisfaction.

20. The foregoing is a statement of facts.

Signature:  Title: Director of Personnel Date: October 6, 2008

Printed Name: Steven T. Engelhardt



### Standard/Paint Creek/Collinsdale Waterline Design DEP14383

**TERRADON AML and RELATED PROJECT EXPERIENCE MATRIX**

PROJECT NAME	Exp. Basis C=Corp. P=Personal *	Additional Info Provided in Section (s) **	PROJECT EXPERIENCE														PRIMARY STAFF PARTICIPATION/CAPACITY M=Management P=Professional ***																													
			Abandoned Surface Mine Reclamation	Abandoned Deep Mine Reclamation	Portal/Shaft Closure	Hydrologic/Hydraulic Design/Eval.	Remining Evaluation	Mine/Refuse Fire Abatement	Subsidence Investigation Mitigation	Hazardous Waste Disposal	Project Specifications	Water Quality Evaluation/Mitigation/ Replacement	Construction Inspection/Management	Water Treatment	Equipment/Structure Removal	Stream Restoration	Geotechnical/Stability	John James, P.E.	Harvey "Bud" McCallister, P.E.	James Nagy, P.E.	Bill Gerencir	Robert Thaw, P.S.	Kevin Games																							
Stonecoal Creek Complex	C/P	yes	X	X	X	X							X	X	X	X							P	P	P	P	P	P																		
Stonecoal Creek Complex #2	C/P	yes	X	X	X								X	X	X	X																														
Stonecoal Creek Complex #3	C/P	yes	X	X	X								X	X	X	X																														
Jenkin Jones	C/P	yes	X	X	X								X																																	
Century/Volga Water Ext., Barbour Cty (WVAML)	C/P	yes																				X																								
Pond Gap Water Ext., Kanawha Cty (WVAML)	C/P	yes																				X																								
Town Run Water Ext., Lewis Cty (WVAML)	C/P	yes																				X																								
Witcher Creek Water Ext., Kanawha Cty (WVAML)	C/P	yes																				X																								
WV Turnpike Commission Water Ext., Mercer Cty	C/P	yes																				X																								
New Hope Water Storage Tank, Mercer Cty	C/P	yes																				X																								
Putnam County Water Extensions	C/P	yes																				X																								

\* 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 "C"

