



**Statement of Qualifications**  
**for**  
**Professional Engineering Services**  
**to the**  
**West Virginia Department**  
**of Environmental Protection**  
**Office of Abandoned Mine Lands & Reclamation**  
**for the**  
**Burnwell (Standard/Paint Creek/Collinsdale)**  
**Waterline Extension**  
**Kanawha/Fayette Counties**

**October 8, 2008**

200 Sixth Avenue  
St. Albans, WV 25177

304.727.5501  
FAX 304.727.5580

Buckhannon, WV  
Martinsburg, WV

[www.chaptech.com](http://www.chaptech.com)



Chapman  
Technical  
Group

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**WVDEP  
AML CCQQ**

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PURCHASING DIVISION  
STATE OF WV

**WVDEP  
AML RPEM**

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: Chapman Technical GroupAuthorized Signature:  Date: October 8, 2008

## Executive Summary



Selecting a firm to provide professional services can be difficult in today's market. Many firms offer computer services and technical skills; however, Chapman Technical Group offers qualities that other firms may lack. Summarized below are the benefits of selecting Chapman Technical Group.

Since 1984, Chapman Technical Group has been responsible for the planning, administration, design, and construction of over \$300 million of water, wastewater, and stormwater system improvements projects throughout West Virginia involving both new construction and rehabilitation/renovation of existing facilities.

We are a true West Virginia firm, and our personnel have a wealth of experience in the potable water, wastewater, and stormwater fields in West Virginia, and are adept at dealing with the many challenges our unique terrain presents.

Chapman Technical Group's staff of nearly 40 personnel, including environmental, civil, structural, and electrical engineers, as well as architects, landscape architects, surveyors, technicians, and construction representatives are available to begin work immediately.

Computer Aided Design and Drafting (CADD) is our primary means of production. Most of our design work is completed by design professionals working directly on CADD workstations, supported by qualified CADD technicians and designers.

With offices in north, south and central West Virginia and a corporate airplane on hand, Chapman Technical Group can access the entire state on short notice.

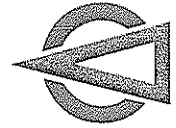
Most Chapman Technical Group employees are natives of West Virginia and are graduates of West Virginia colleges and universities.

Preparation of preliminary engineering reports and feasibility studies are frequent tasks that Chapman Technical Group regularly provides. Our experience in the water, wastewater, and stormwater engineering fields, our knowledge and experience with all funding agencies, and our working relationship with regulatory agencies all provide invaluable resources towards the successful development of any project.

Our reputation for providing innovative and cost-effective design solutions, our commitment to client satisfaction, and our proven track record in meeting schedules and budgets have all combined to make Chapman Technical Group the clear leader in the environmental engineering consulting field in West Virginia.



## Company Overview



*Chapman Technical Group's St. Albans Office*

Chapman Technical Group is a full-service consulting firm with offices in St. Albans, Buckhannon, and Martinsburg, West Virginia offering an extensive range of professional architectural, engineering, interior design and landscape architectural services. Established in 1984, Chapman Technical Group has steadily grown to a diverse firm of professionals, many of whom were educated in West Virginia colleges and universities. We have achieved an outstanding reputation for providing high-quality design projects, while meeting client schedules and budgets and have received numerous awards for our work.

Our facilities are both state-of-the-art and architecturally significant. Our St. Albans office is a former post office and is now on the National Register of Historic Places. We also have a corporate airplane to better access our project sites.

*Chapman Technical Group offers a broad range of professional services.*

- Airport Design
- Architecture
- Civil Engineering
- Fire Puming & Protection
- Interior Design
- Landscape Architecture
- Recreational Facilities
- Roads, Highways, & Bridges
- Site Development
- Space Planning
- Surveying
- Water & Wastewater Systems

# Awards



**AMERICAN INSTITUTE OF ARCHITECTS - HONOR AWARD FOR EXCELLENCE IN ARCHITECTURE, 2008** - Upshur County Courthouse Restoration and Renovations

**AMERICAN COUNCIL OF ENGINEERING COMPANIES-WV - ENGINEERING EXCELLENCE AWARD, 2007**, Silver Award - Structures Category for the Mercer County Airport Runway Safety Area Project.

**GARY KING COMMUNITY SERVICE AWARD, 2006.**

**GOOD SCOUT RECIPIENT, 2005.**

**AMERICAN COUNCIL OF ENGINEERING COMPANIES-WV - ENGINEERING EXCELLENCE AWARD, 2003**, Gold Award - Water Treatment Category for the City of Fairmont Water Treatment Plant Project.

**AMERICAN COUNCIL OF ENGINEERING COMPANIES-WV - ENGINEERING EXCELLENCE AWARD, 2002**, Gold Award - Transportation Category for the Raleigh County Memorial Airport Runway Rehabilitation Project.

**WINNER - "COMMISSIONER'S ENGINEERING ACHIEVEMENT AWARD", 2000**, The WVDOT - Division of Highways - Large Bridge Category for WV10 Buffalo Creek Bridge, Logan County, West Virginia.

**FINALIST - "COMMISSIONER'S ENGINEERING ACHIEVEMENT AWARD", 1999**, The WVDOT - Division of Highways - Large Roadway Category for WV10 Buffalo Creek - Taplin Project and 2000 for WV10 Buffalo Creek - Huff Junction Project, both in Logan County, West Virginia.

**AMERICAN COUNCIL OF ENGINEERING COMPANIES-WV - ENGINEERING EXCELLENCE AWARD, 1999**, Silver Award - Water and Wastewater Category, for the City of Beckley Piney Creek Wastewater Treatment Plant Project.

**ENTREPRENEUR OF THE YEAR AWARD - FINALIST, 1999 and 2000**, Sharon L. Chapman, President, was named one of twenty finalists in the West Virginia Area Entrepreneur of the Year Award. Sharon was recognized for leading Chapman Technical Group to become one of the most highly regarded engineering firms in the state after the death of her husband and company founder, Harvey R. Chapman.

**"EXPECT THE BEST FROM WEST VIRGINIA AWARD", 1998**, Charleston Regional Chamber of Commerce. The Expect the Best program was created to recognize West Virginia businesses and organizations that promote quality of life at home, work, and in the community so that individuals and organizations will implement quality principles and practices leading to unprecedented pride and economic growth in West Virginia.

**HONOR AWARD, West Virginia Chapter of the American Society of Landscape Architects, 1994**, Shrewsbury Street Area Redevelopment Plan, for excellence in planning and design projects. Joseph E. Bird, ASLA, Project Manager.

**"GOVERNOR'S AWARD FOR ENGINEERING EXCELLENCE", 1990**, The West Virginia Chapter of the American Public Works Association, in recognition of outstanding Public Works Engineering and Design of Projects within West Virginia.

**DUNDEE CEMENT COMPANY ANNUAL DESIGN AWARD, 1988**, Yeager Airport Taxiway Overlay Project. Harvey R. Chapman, P.E., Project Manager.

**AUSTIN C. PALMER "OUTSTANDING FACILITY DESIGN AWARD", 1988**, City of Bridgeport Swimming Pool Complex. Harvey R. Chapman, P.E., Project Manager.

**"GEORGE WARREN FULLER AWARD", Harvey R. Chapman, 1984**, Robert G. Belcher, P.E., 2001, and Sharon L. Chapman, 2005, American Water Works Association, for distinguished service in the water supply field in the State of West Virginia.

# Water Storage and Distribution



## Fola/Lizemore/Independence Waterline Extensions

95005



**Clay County Public Service District**  
Post Office Box 130  
Clay, West Virginia 25043

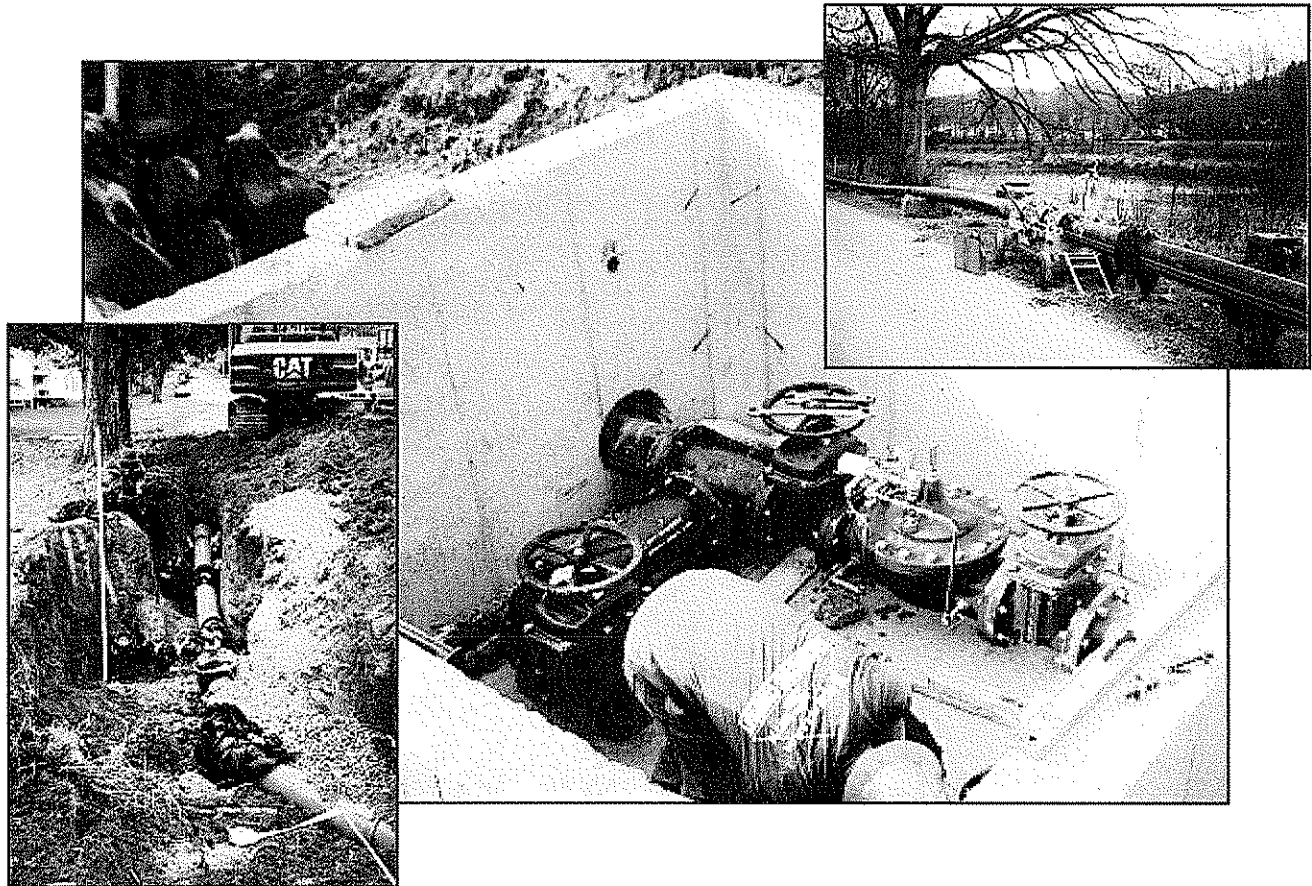
Design and construction observation services for a waterline system extension project which included 101,000 linear feet of water mains, three (3) booster stations (30 gpm, 85 gpm and 90 gpm), one (1) 65,000 gallon water storage tank, one (1) 108,000 gallon water storage tank, and one (1) 137,000 gallon water storage tank. Also included was a tank level/booster control telemetry system with central controls at the Public Service District office.

# Water Storage and Distribution



## Belington Water System Improvements

97065



### City of Belington

Post Office Box 926

Belington, West Virginia 26201

Chapman Technical Group provided design and construction observation services for the City of Belington's water distribution system improvements project. The project consisted of upgrading undersized waterlines to increase fire protection, reducing unaccounted for water losses by replacing deteriorated waterlines, and to improve water quality in the distribution system. The improvements consisted of the construction of approximately 3,500 L.F. of 10" PVC C-900 waterline; 440 L.F. of 10" PE directional bore river crossing pipe; 12,500 L.F. of 8" PVC C-900 waterline; 6,300 L.F. of 6" PVC C-900 waterline; 60 L.F. of 6" DIP restrained joint stream crossing; 275 L.F. of 4" PVC C-900 waterline; 1,030 L.F. of 2" PVC SDR-21 waterline; 58 connections to the existing distribution system; 80 gate valves; and 28 fire hydrants. Other improvements consisted of the installation of 6' perimeter chain link fences around the City's existing two (2) water storage tanks and the installation of tank level monitoring system that was incorporated into the City's new water treatment plant SCADA system.

# Water Storage and Distribution



## Triplett Ridge/Hartland Water System Improvements

92004

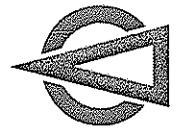


**Clay County Public Service District**  
Post Office Box 130  
Clay, West Virginia 25043

Design and construction observation services for a water system improvements project which included 60,500 linear feet of water mains, 2 booster stations, a 76,000 gallon water storage tank and a 55,000 gallon water storage tank, and one river crossing. Also included was a tank level/booster control telemetry system with central controls at the existing water treatment plant.

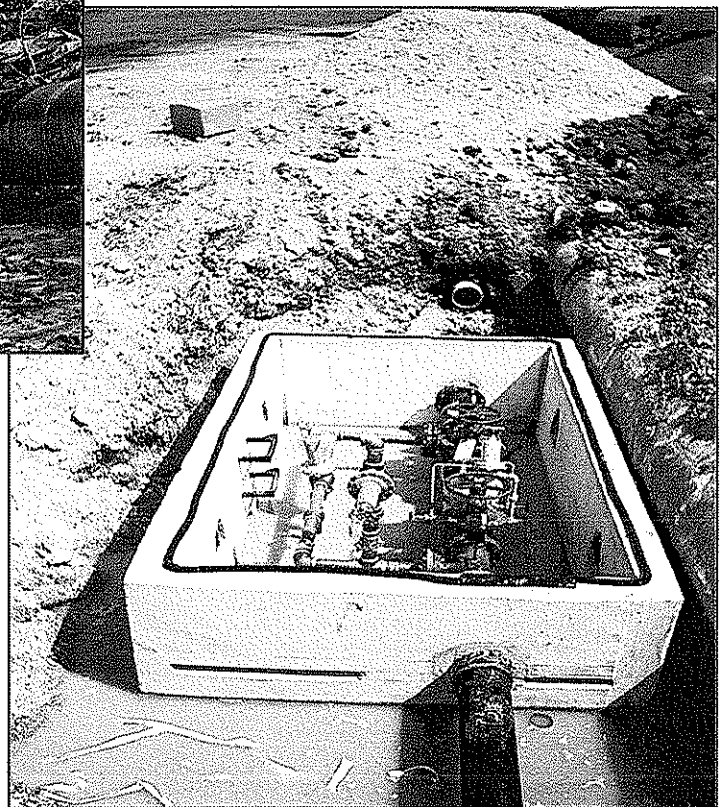
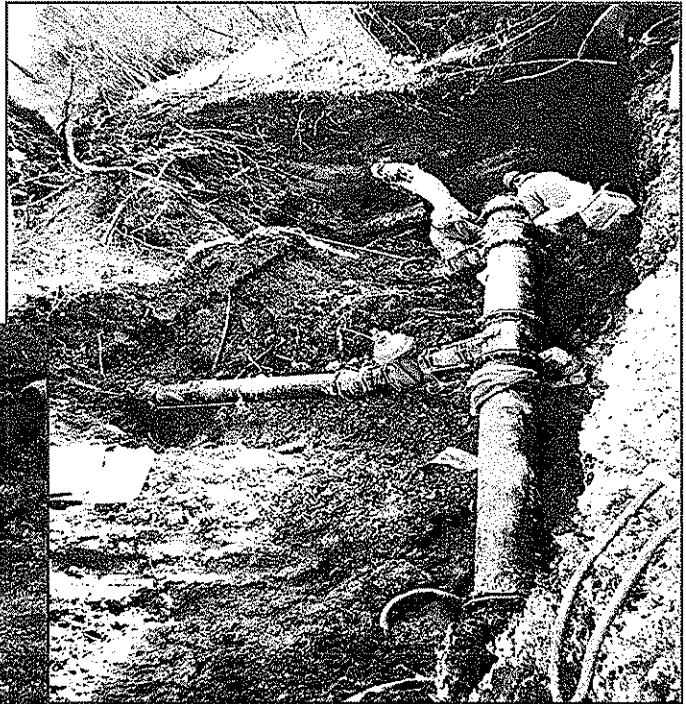


# Water Storage and Distribution



## Fairmont Water Distribution and Transmission System

97024



City of Fairmont  
Post Office Box 1428  
Fairmont, West Virginia 26555

# Water Storage and Distribution



## Walnut Street and Route 250 Water System Improvements

92016

City of Philippi  
108 North Main Street  
Philippi, West Virginia 26416

Design and construction observation services for a water system improvements project which included approximately 11,000 linear feet of 12" and 8" water main, renovation of two existing booster pumping stations and a new 244,000 gallon factory-coated bolted steel water storage tank.

## Beckley Water System Improvements

91032

Beckley Water Company  
Post Office Drawer U  
Beckley, West Virginia 25801

In the fall of 1993, construction was completed on nearly five miles of 18" and 24" ductile iron water transmission lines for the Beckley Water Company as a part of an \$8.8 million dollar water system improvements project. Over 9,500 feet of 24" ductile iron pipeline was installed from the new 5.0 MGD water treatment plant in order to connect this alternate source into the existing distribution system. Due to extremely high pressures within portions of this pipeline (over 280 psi), a restrained joint piping system was utilized in lieu of conventional thrust restraint devices. The use of concrete thrust blocking was prohibitive on this pipeline due to its large diameter, remote location, and physical constraints. An additional 14,000 feet of 18" ductile iron pipe was installed in order to transport this flow into the main distribution system which is allocated by a remote-controlled 14" rate-of-flow control valve located in a separate reinforced concrete vault. This construction included boring and jacking 350 LF of 36" casing under I-77 at the Beckley Plaza. Included in this project was a complete hydraulic analysis of the entire water system to ensure the recommended improvements would eliminate the most serious flow and pressure problems within the existing system.



# Water Storage and Distribution



## Cabell County Waterline Extensions

99039



**West Virginia - American Water Company**  
1600 Pennsylvania Avenue  
Charleston, West Virginia 25302

Design and construction phase services for the waterline extensions project was completed in 2001. The project included approximately 86,560 feet of primarily 2", 6" and 8" water mains, gate valves, and connections to the existing water system. The project provided water service to Charleys Creek/Hudson Hollow/Wolfpen Hollow, Little Ridges Creek, Ridges Creek to Suzannah, Cavill Creek, Tyler Creek at Bells Gap, Hinchman-Bend/Donald Gue, Toler/Trace Creek, Childress Hollow Road, and Little Two Mile in Cabell County and Upper Bear Creek in Lincoln County.

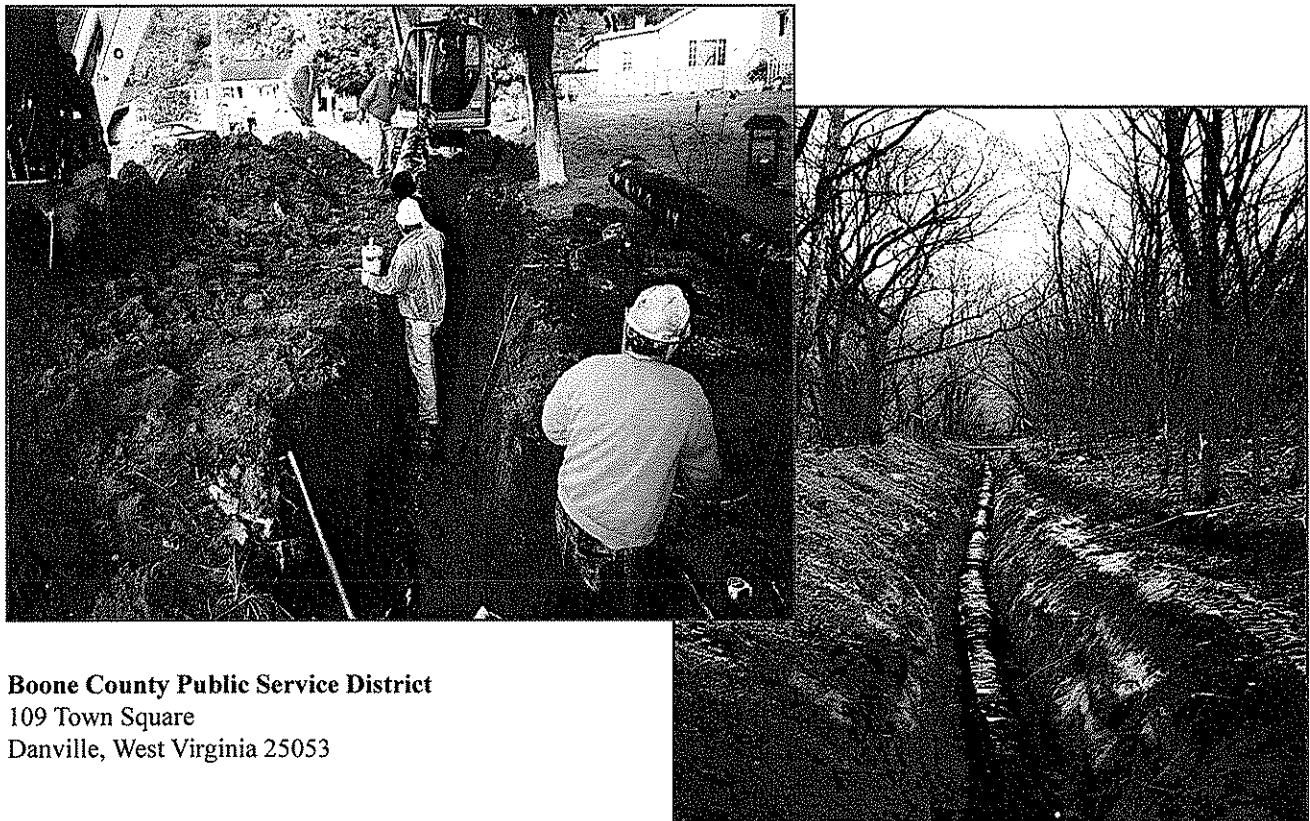


# Water Storage and Distribution



## Julian Waterline Extension

02013



**Boone County Public Service District**  
109 Town Square  
Danville, West Virginia 25053

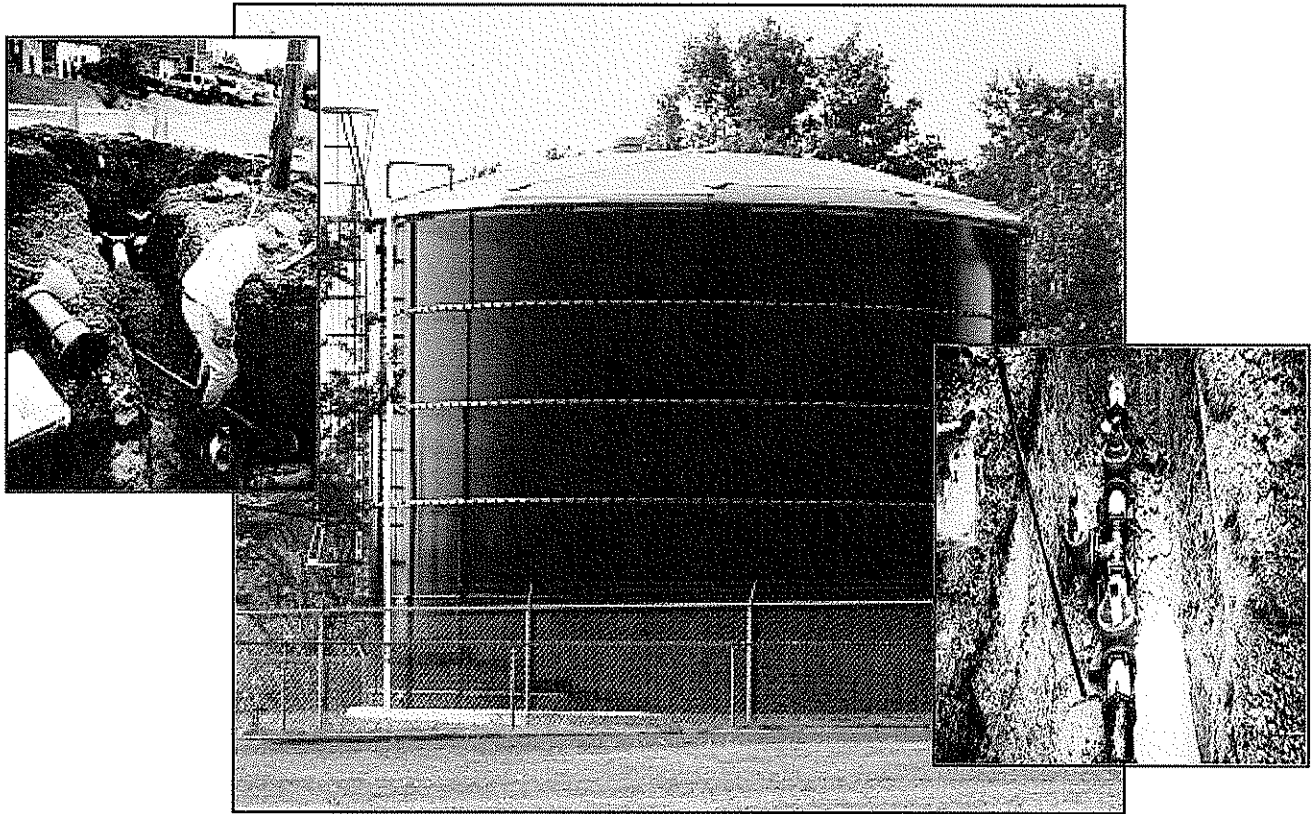
Design and construction phase services for the Julian Waterline Extension project was completed in 2004. The project included approximately 133,260 feet of primarily 2", 6", 8" and 12" water mains, fire hydrants and connections to existing water system. The project provided water service to approximately 207 customers located in Julian and Hill Valley. The project was funded in part by West Virginia-American Water Company, Boone County Commission, Small Cities Block Grant (SCBG) and Appalachian Regional Commission (ARC) Grant. The project was designed and construction completed in two (2) years and the construction was approximately \$591,400 lower than budgeted.

# Water Storage and Distribution



## Thomas Water System Improvements

95087



**City of Thomas**  
Post Office Box 248  
Thomas, West Virginia 26250

Chapman Technical Group provided design and construction observation services for this water system improvements project. The water system improvements project consisted of improvements to the water distribution system, water storage tanks and water treatment plant. The project was undertaken in two distinct phases, namely Phase I and Phase II. Phase I improvements consists of upgrading undersized waterlines to increase fire protection, removal of existing fire hydrants on existing 4" waterlines and installation of new fire hydrants on new 6" and 8" waterlines, reducing unaccounted for water losses by replacing deteriorated waterlines, replacement of the City's main water storage tank with a new 157,000 gallon storage tank, and to improve water quality in the distribution system. Approximately 19,000 LF of 6", 8" and 10" waterlines were installed in the distribution system.

Phase II of this project consisted of the renovation of the City's existing 200 GPM package water treatment system with a new 200 GPM package pressure filter system featuring Macrolite ceramic media installed in pressure tanks. Phase II construction cost was \$1.1 million.

# Water Storage and Distribution



## Ivydale Water System Improvements

90049



**Clay County Public Service District**  
Post Office Box 130  
Clay, West Virginia 25043

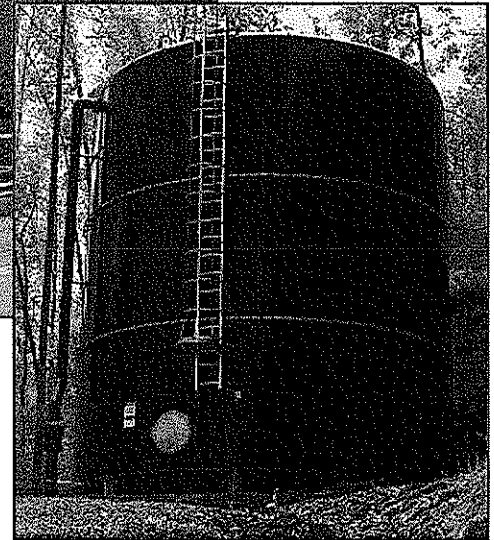
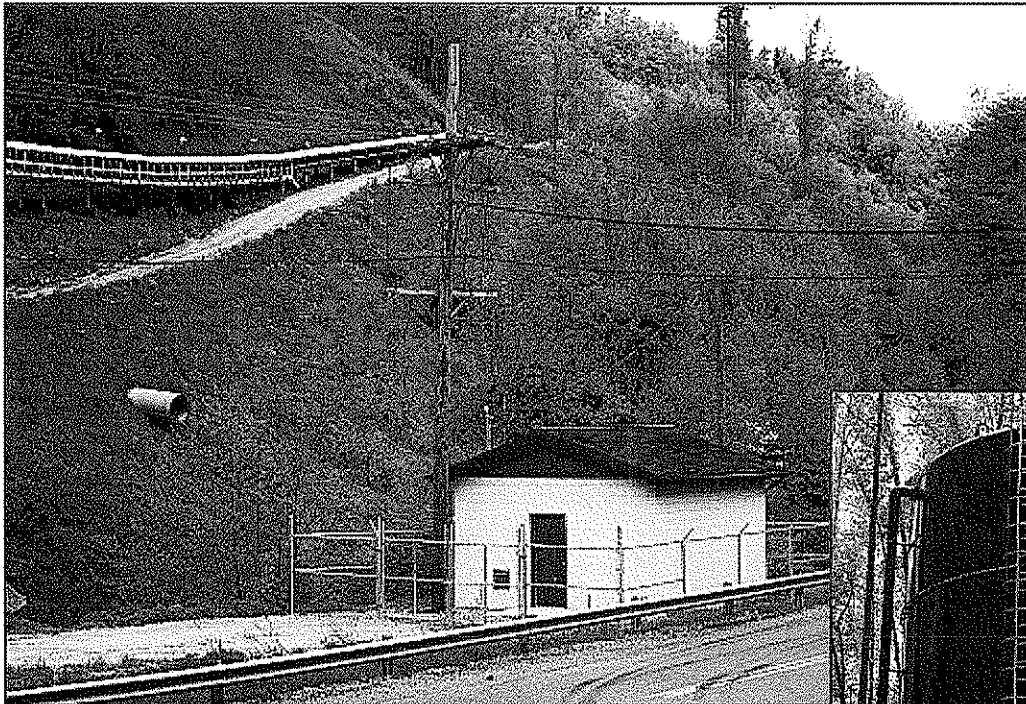
Design and construction observation services for a water system improvements project which included 53,100 linear feet of water mains, fire hydrants, a 100,000 gallon water storage tank, two booster stations, and tank level/booster control telemetry system with remote control ability from the existing water treatment plant.

# Water Storage and Distribution



## West Fork Water System Improvements

91015

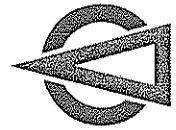


**Van Public Service District**  
Post Office Box 451  
Van, West Virginia 25206

Project included complete design and construction observation services for the \$1.56 million expansion of the existing Van Public Service District system along the West Fork of Pond Fork including the construction of approximately 65,700 LF of water mains, 11 fire hydrants, 220 meter assemblies, one 150 gallon per minute and one 75 gallon per minute booster station, one 105,000 gallon and one 74,000 gallon factory-coated bolted steel water storage tank, along with tank level/booster control telemetry system with central controls at the existing water treatment plant.

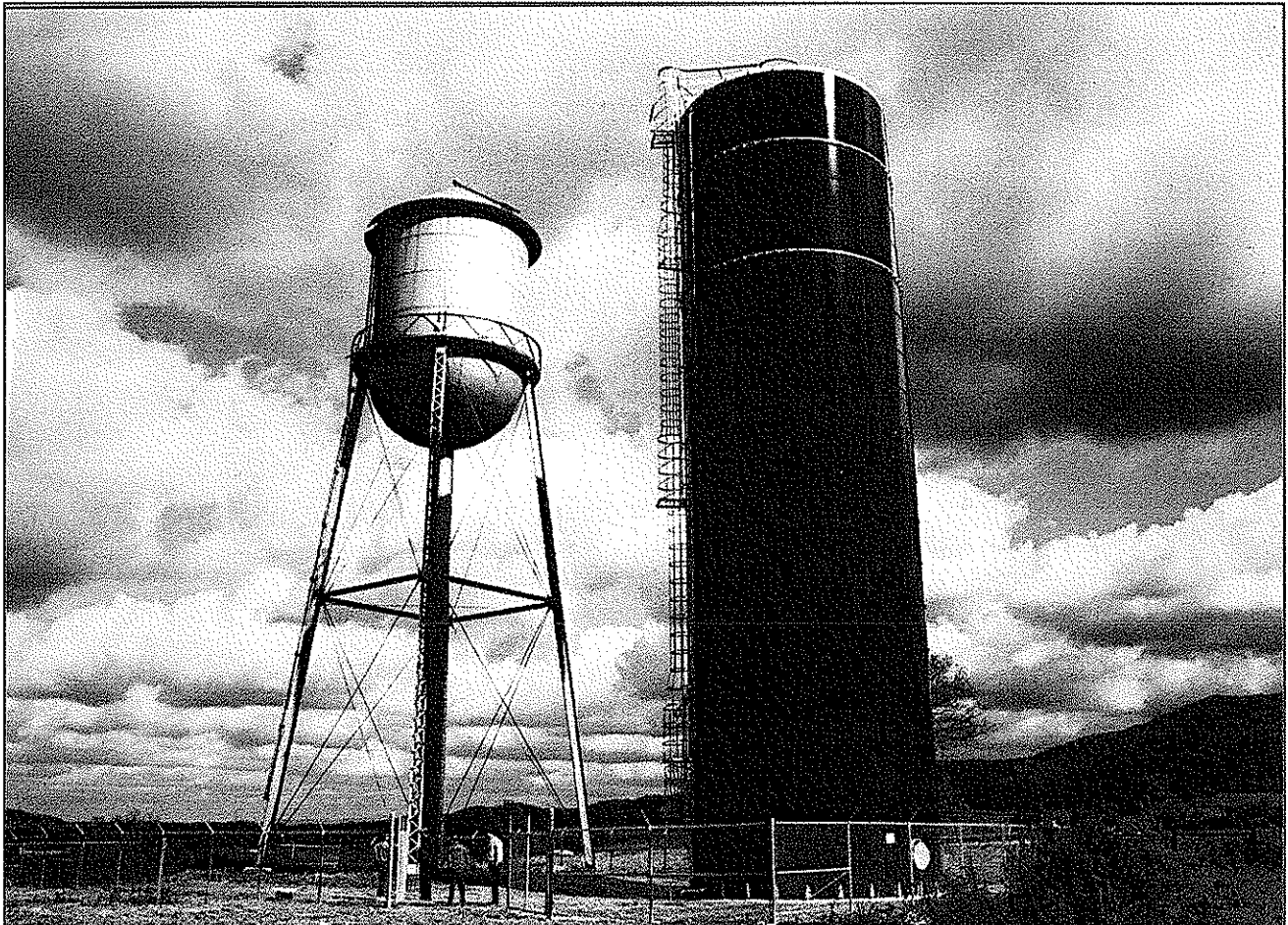


# Water Engineering Storage



## Huttonsville Correctional Center Water Tank

86024



**West Virginia Department of Corrections**  
Building 4, Room 300  
112 California Avenue  
Charleston, WV 25305

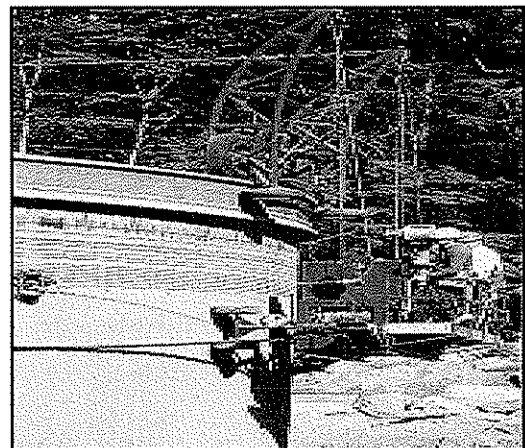
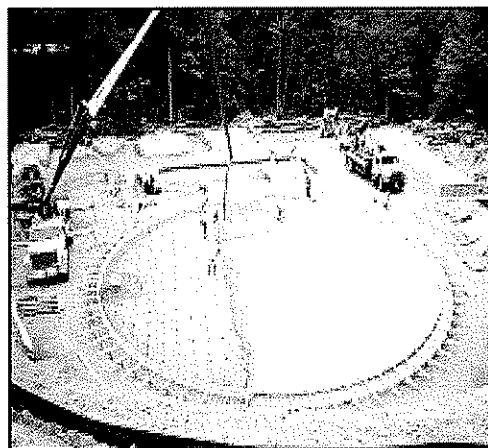
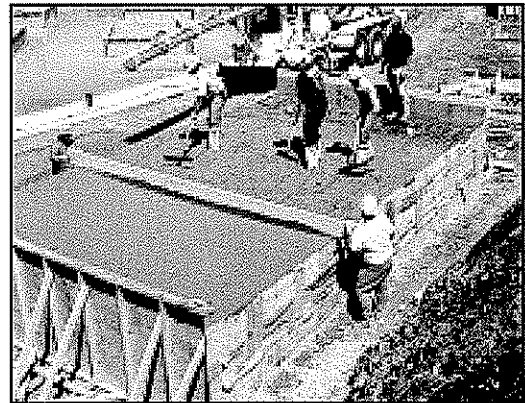
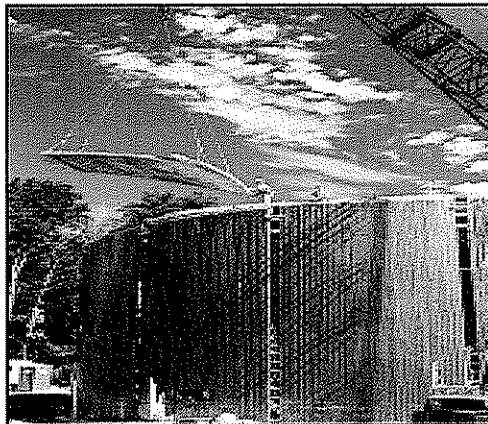
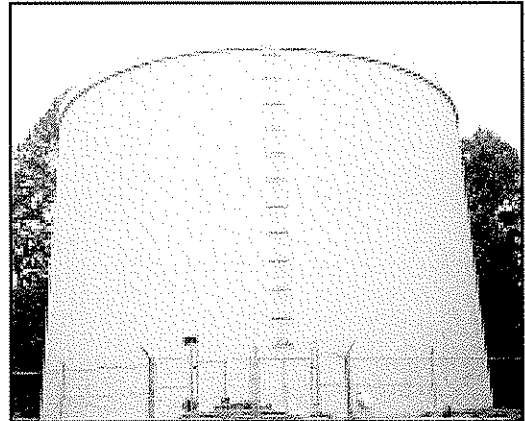
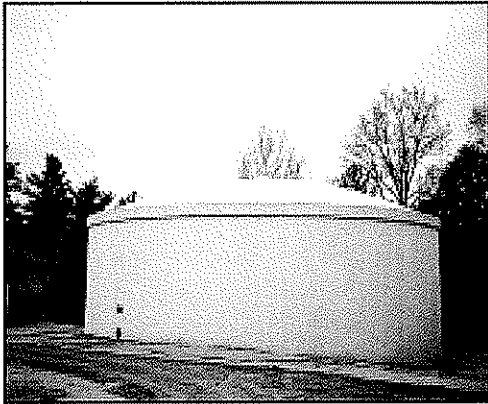
Project included complete design and construction services for a 25'-0" diameter by 89'-0" high 330,000 gallon factory-coated, bolted steel water storage tank and 1,500 LF of 12" ductile iron fire service line.

# Water Storage and Distribution

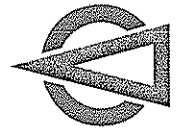


## Fairmont - 2.0 MG East Grafton Water Storage Tank 1.5 MG Clearwell

97024

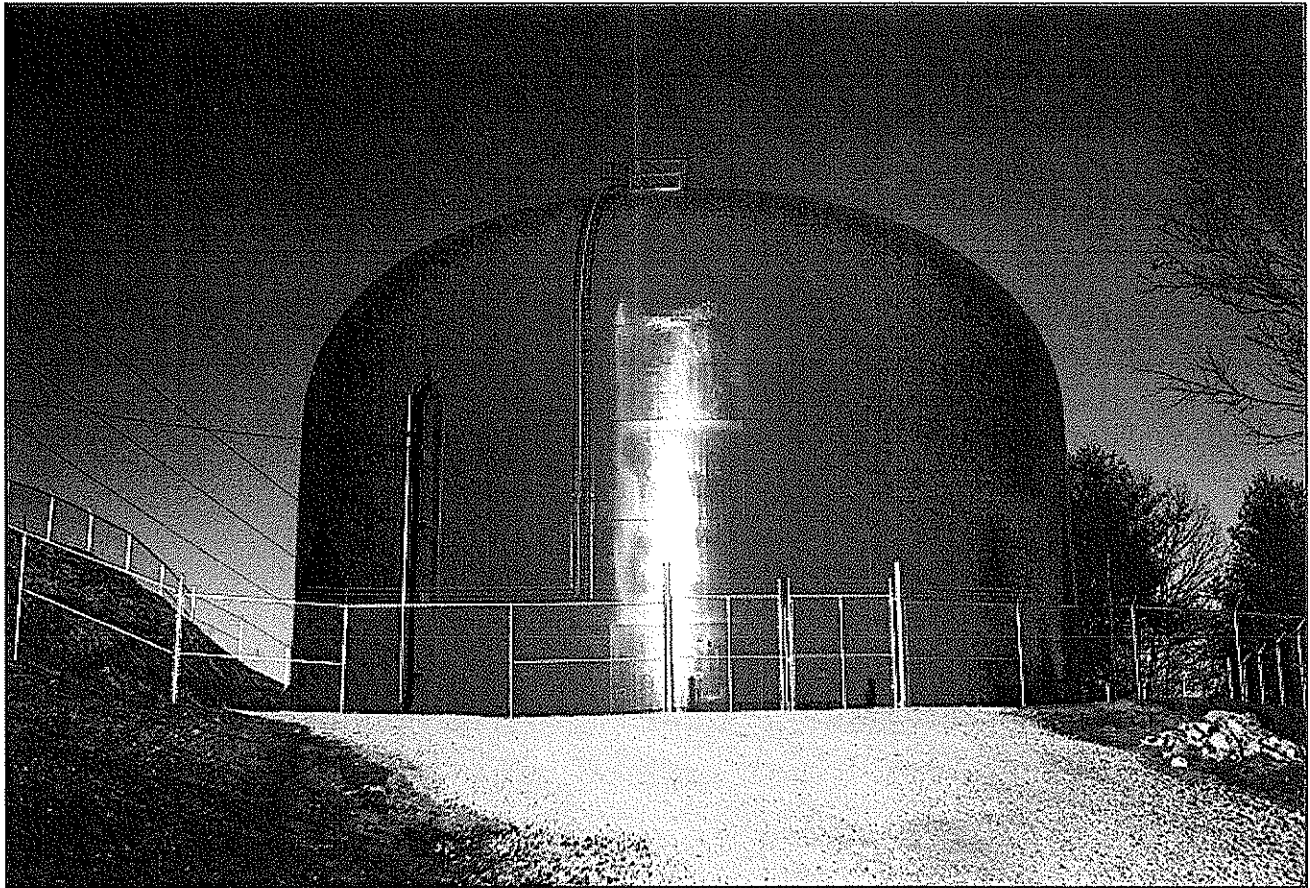


City of Fairmont  
Post Office Box 1428  
Fairmont, West Virginia 26555  
Construction Cost: \$1,921,772



## Phipps Knob Water Tank

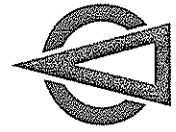
91032



**Beckley Water Company**  
Post Office Drawer U  
Beckley, West Virginia 25801

This new 83'-0" diameter by 50'-0" high, 2 million gallon tank replaced an aged 1.0 million gallon water storage tank which experienced a catastrophic failure in the 1970's and was subsequently repaired. The new tank is constructed of high-strength steel with a self supporting ellipsoidal roof, and is equipped with an oversized integral valve vault for the 24" ductile iron vault piping and valves. The vault also contains lighting, receptacles, access hatches, floor drains, and houses the radio telemetry equipment. The tank interior is finished with a two-component, instant setting, 100% solids, high-build polyurethane coating which allows direct application to metal and can obtain over 15 mils DFT in a one coat application.

# Water Engineering Storage



## Knob Hill Water Tank

91032



**Beckley Water Company**  
Post Office Drawer U  
Beckley, West Virginia 25801

This new 1.25 million gallon tank, 58'-7" in diameter and 62'-0" high, was completed in the fall of 1993. The new tank is constructed of high-strength steel with a self-supporting ellipsoidal roof, and replaced an aged and deteriorated 1.0 million gallon tank. The existing ringwall foundation was reused for the new structure after a thorough inspection. The new tank is constructed 12'-0" higher than the tank it replaced and the remaining adjacent 1.0 million gallon tank.

This additional height not only increases pressure and storage in this portion of downtown Beckley, but enhances system operation as this tank now operates on the same hydraulic gradient as four other main tanks in the system. The remaining 1.0 million gallon tank has been demolished. The tank interior is finished with a two-component, instant setting, 100% solids, high-build polyurethane coating which allows direct application to metal and can obtain a 15 mils DFT in a one coat application.



# Water Engineering Storage

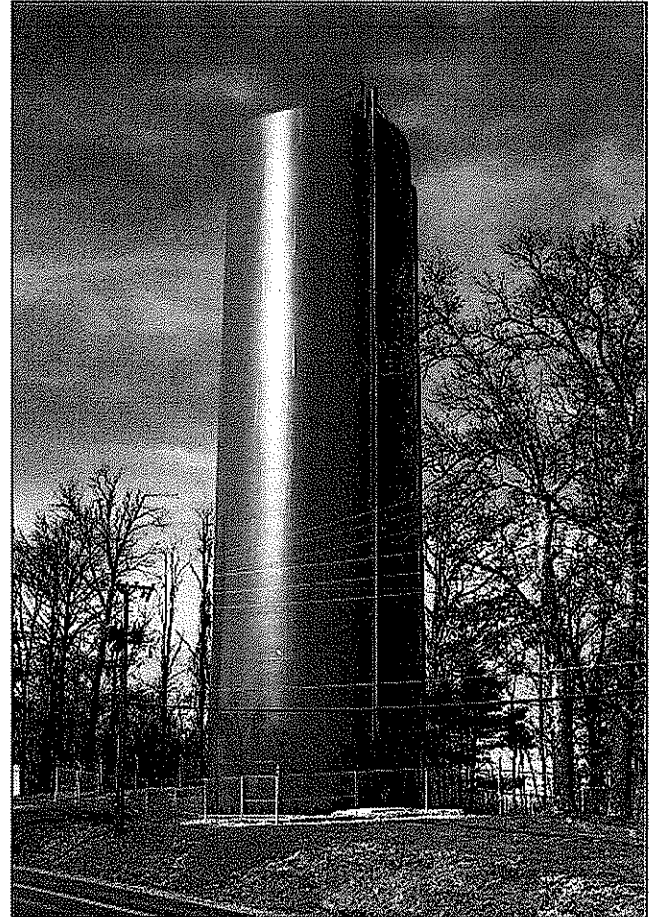


## Prosperity Water Tank

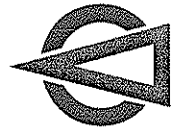
91032

This new 1.0 million gallon tank is 36'-0" diameter and 133'-0" high and was completed in the summer of 1993. The new tank is constructed of high-strength steel with a self supporting ellipsoidal roof. The foundation consists of nearly 250 cubic yards of concrete and nearly 73,000 pounds of reinforcing steel to resist overturning. The new tank was constructed with an overflow elevation of 50 feet higher than the tank which it replaced. This eliminated the need of the booster pump station that was used while the old tank was in service, as well as doubled the storage capacity in this portion of the system. The tank interior is finished with a two-component, instant setting, 100% solids, high-build polyurethane coating which allows direct application to metal and can obtain over 15 mils DFT in a one coat application.

**Beckley Water Company**  
Post Office Drawer U  
Beckley, West Virginia 25801

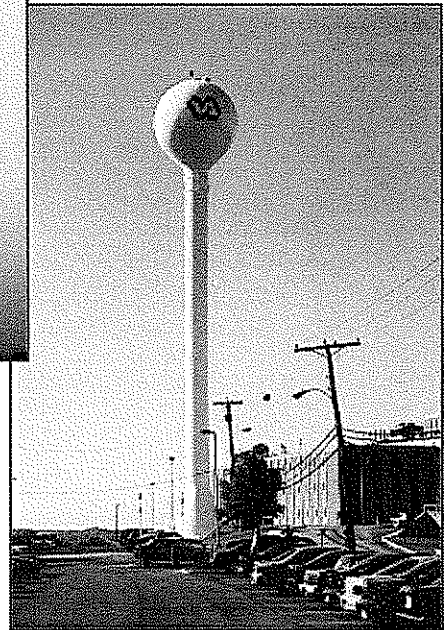
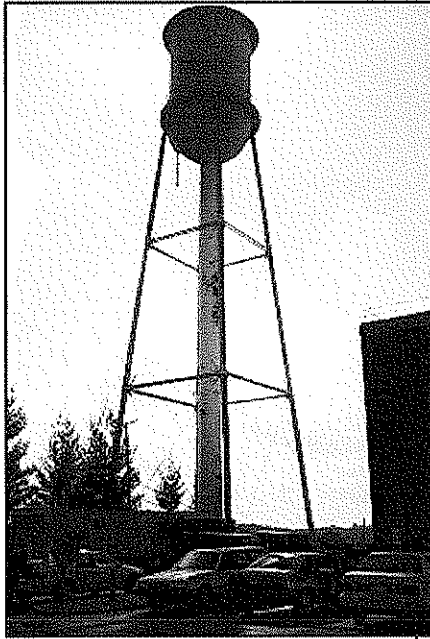


# Water Engineering Storage



## Huntington VA Water System Improvements

96065



**Huntington VA Medical Center**  
1540 Spring Valley Drive  
Huntington, West Virginia 25704

Project included design and periodic construction site visits for demolition of existing 100,000 gallon elevated water tank including lead-paint abatement, new 150,000 gallon single pedestal spherical water storage tank (150 feet low-water level) to provide increased pressure and storage volume, renovation of 500,000 gallon in-ground reservoir, installation of approximately 3,300 feet of polyethylene water main, miscellaneous improvements to existing booster pump house, site work for construction of an additional parking lot, and radio telemetry system with central controls for monitoring of tank levels and remote control of booster pump station, including alarm functions.

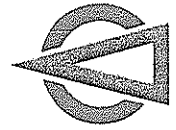


**Beckley Water Company**  
Post Office Drawer U  
Beckley, West Virginia 25801

Design and construction observation services for a new 3,500 gallon-per-minute (5 MGD) water treatment plant expandable to 7,000 gallon-per-minute (10 MGD) with a cost effective expansion scheme. The plant obtains source water from the extensive abandoned deep mines underlying the Beckley area. The plant was designed around an existing dewatering shaft located on the site which is over 280 feet deep and has a static water depth of 52 feet. The process design includes an innovative vortex aeration system at the plant headworks to

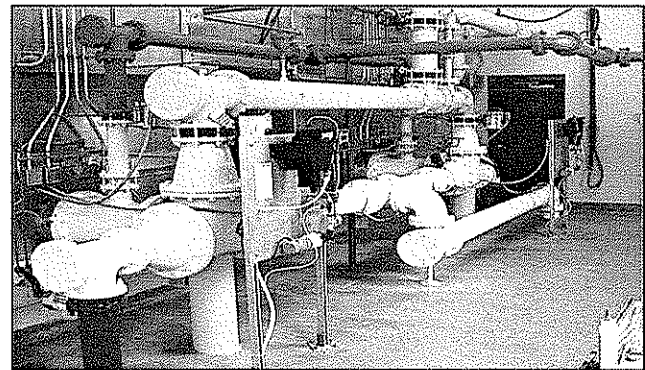
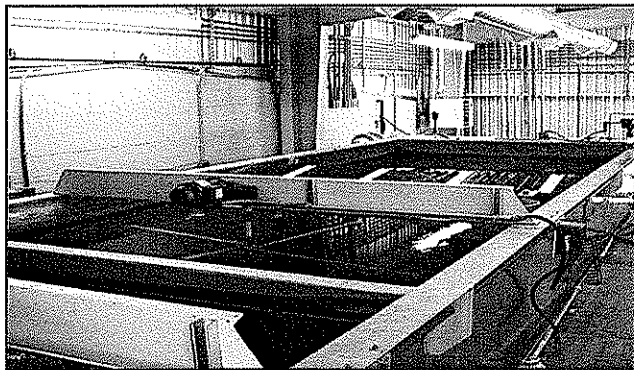
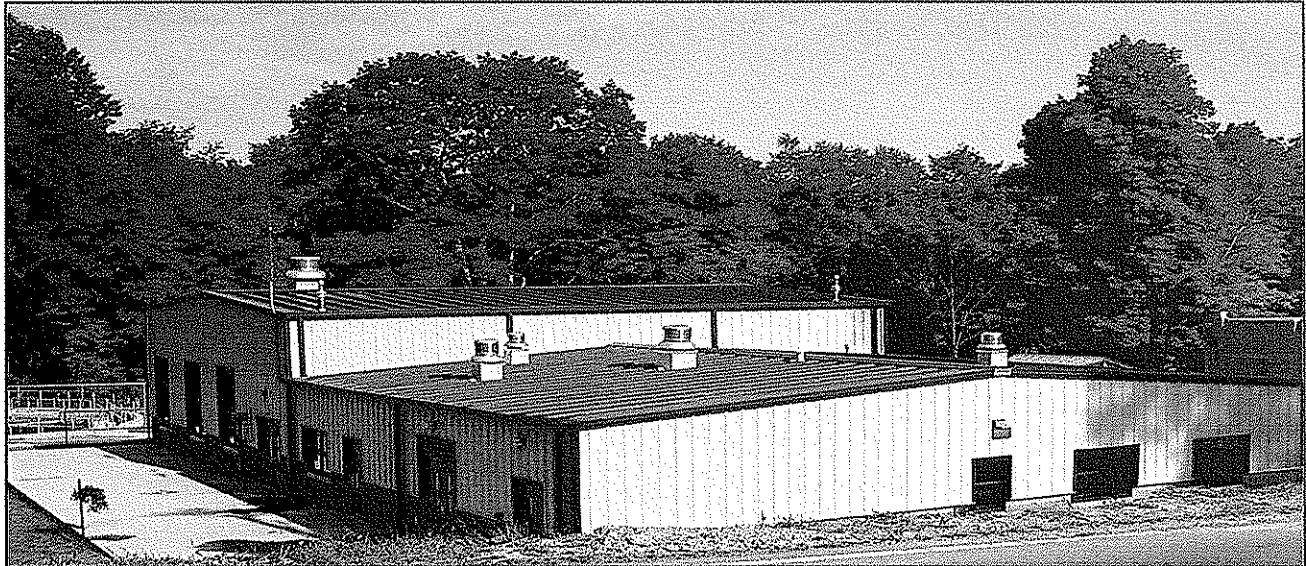
oxidize the high iron levels to allow precipitation. The application of this aeration equipment is the first known application of this technology in a potable water treatment facility in the nation. The process follows with tapered flocculation, inclined-plate high-rate lamella sedimentation units, and mixed media filtration. The raw water pump and high service pump for this facility are 350 HP and 700 HP respectively. Discharge pressure from the plant is in excess of 280 psi due to the plant's location.

# Water Engineering Treatment



## Belington Water Treatment Plant

97065



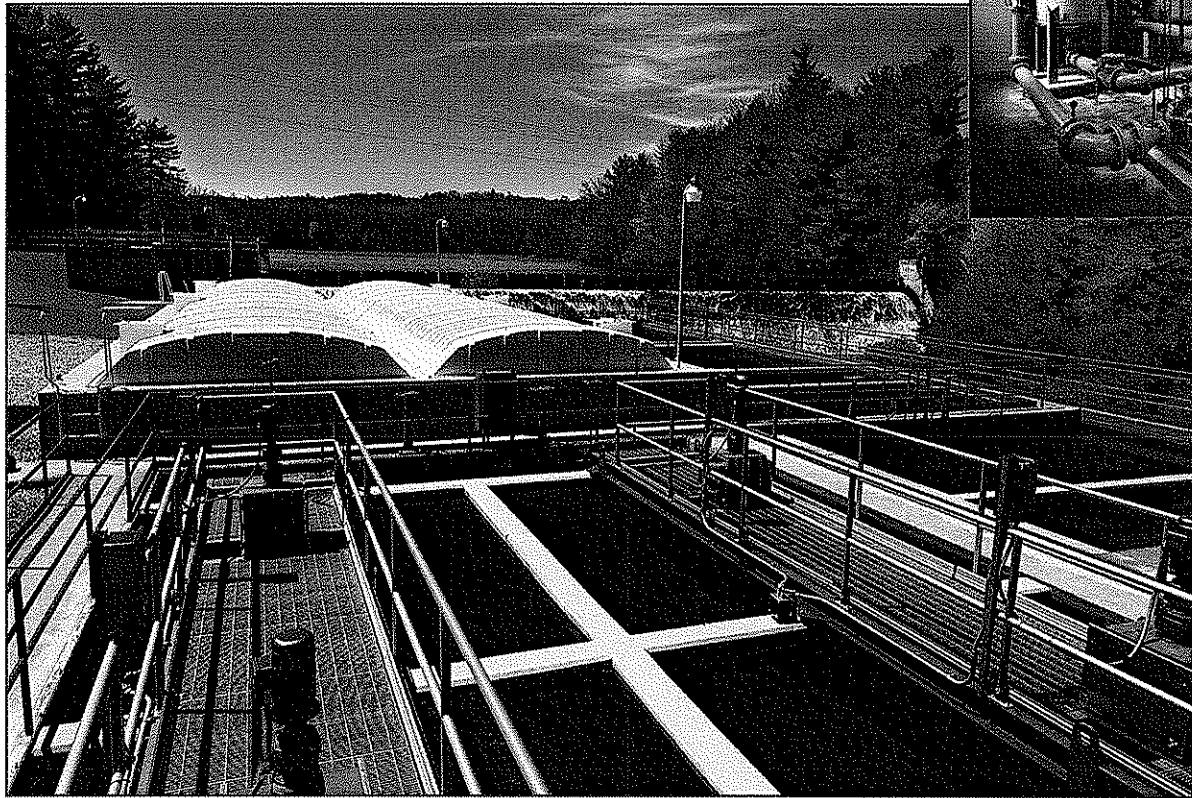
**City of Belington**  
Post Office Box 926  
Belington, West Virginia 26250

Chapman Technical Group provided design and construction observation services for the City of Belington's new water treatment plant. The new water treatment plant was designed for an initial capacity of 700 GPM utilizing two package treatment units, with provisions to accommodate a third unit for expansion to 1,050 GPM in the future. The treatment process consists of Stage I and II raw water intake structures, 50-foot diameter pre-sedimentation basin with a detention time of four hours; chemical injection building; two 350 GPM USFilter Aquarius AQ-150B aluminum water treatment units with two-stage flocculation, tube settlers and mixed media filters; two 1,050 GPM backwash pumps; two 700 GPM high service pumps; chemical feed building; 197,260 gallon below ground clearwell and 55,000 gallon below ground backwash holding tank. The treatment units are housed in a 5,100 square-foot pre-engineered metal building along with the laboratory, office, kitchen, bathroom, electrical room, high service and backwash pump rooms and pipe gallery. The plant also includes a plant-wide SCADA system that also monitors the City's two water storage tanks. The total construction cost for the water treatment plant was \$3,000,000.



## Glade Creek Water Treatment Plant

97054



**Beckley Water Company**  
Post Office Box 2400  
Beckley, WV 25802-2400

Design and construction phase services for upgrade of the Glade Creek Water Plant consisting of retrofitting the existing concrete settling basin with two parallel Dissolved Air Flotation (DAF) clarification systems each equipped with two-stage flocculation units, and converting the remainder of the basin to provide adequate chlorine contact time after clarification. Prior to these improvements, this plant suffered from moderate to high levels of Disinfection By-Products (DBP's) on the finished water, thus resulting in non-compliance with the Stage 1 D/DBP Rule. The design capacity of the plant is 5500 gpm, with a peak capacity of 7300 gpm. The project also included design to allow the plant to operate under gravity flow conditions when adequate storage of raw water is available, resulting in a significant operating cost savings. An electro-coagulation unit was also installed to treat belt filter press filtrate prior to recycling. Additional improvements consisted of a new emergency power generator and switchgear, and installation of sludge and backwash handling pumps.





**United States Department of Agriculture**  
**Soil Conservation Service**  
75 High Street, Room 301  
Morgantown, West Virginia 26505

Project included complete design services for a new 1,750 GPM (2.5 MGD) water treatment plant to serve the Towns of Harrisville, Pennsboro, Cairo, and North Bend State Park. The project also includes a 1.0 MG water storage tank, a 215,000 gallon water storage tank, one 500 gpm booster station, pressure reducing stations, and over 51,750 LF of 8" water distribution mains. The new plant

utilizes a new flood control/recreational impoundment on the North Fork of Hughes River as the source of supply. An in-depth comprehensive hydraulic analysis of each of the three existing major systems was performed in order to integrate and combine all three municipal systems into a regional water supply system.

# References



1. Honorable Dick Callaway  
Mayor  
City of St. Albans  
1488 MacCorkle Avenue  
St. Albans, WV 25177  
(304) 727-2971
2. Honorable Joe Drenning  
Mayor  
Town of Davis  
Post Office Box 207  
Davis, WV 26260  
(304) 259-5302
3. Honorable Damron Bradshaw  
Mayor  
City of Chesapeake  
12404 MacCorkle Avenue  
Chesapeake, WV 25315  
(304) 949-1496
4. Mr. Greg Fitzwater  
Chairman  
Clay County Public Service District  
Post Office Box 550  
Clay, WV 25043  
(304) 587-7579
5. Honorable Jerry Teter  
Mayor  
Town of Harman  
Post Office Box 125  
Harman, WV 26270  
(304) 227-4715

# Project Team



## WV DEP AML

**Robert G. Belcher, PE**  
Project Officer

**Jeffery D. Ekstrom, PE**  
Project Manager

**Kennon T. Chambers, PE**  
Project Engineer

**William B. Keaton, MA, PE**  
Project Engineer

**Brian G. Huffman**  
Project Engineer

**Shelley D. Watkins, EI**  
Project Engineer

**Shawn C. Stewart, PE**  
Project Engineer

**Shawn D. Tucker, EI**  
Project Engineer

**David C. Hoy, EI**  
Project Engineer

**Matthew G. Deal**  
Project Engineer

**Fred L. Brown**  
CADD Manager

**John R. Farnham**  
CADD Technician

**Lisa D. Acord**  
CADD Technician

**Dennis N. Duncan**  
CADD Technician

**Matthew B. Garton**  
CADD Technician

**Ashley N. Starcher**  
CADD Technician

**Richard L. Jones**  
CADD Technician

**Brian W. Lawrence, PS**  
Professional Land Surveyor

**Matthew G. Painter**  
Surveyor

**Arden L. Stull**  
Sr. Construction Observer

**Anthony C. Jackson**  
Construction Observer

**Charles D. Cash, Jr.**  
Construction Observer





**ROBERT G. BELCHER, P.E.**  
**Senior Vice President, Engineering  
and Project Officer**

**EDUCATION**

West Virginia Institute of Technology, BSCE, 1983

**REGISTRATION**

Civil Engineering, West Virginia, 1996  
Civil Engineering, Ohio, 2006

**PROFESSIONAL  
HISTORY**

**January 1987 to Present: Chapman Technical Group**  
Senior Vice President and Project Officer.

**June 1984 to January 1987: Regional Intergovernmental Council**  
Planning and Development Council for West Virginia Region III - Metropolitan  
Planning Organization for Charleston, WV, MSA.

24 years professional experience.

**PROJECT  
EXPERIENCE**

**Water Systems:** Design and project management for numerous water systems for both public and private water companies. Projects include new water treatment plants as large as 10 MGD, improvements to existing plants, water mains and distribution systems. Water storage projects include glass-lined steel tanks, welded high-strength steel tanks, and elevated pedestal tanks.

**Wastewater Systems:** Design and project management for numerous wastewater systems throughout West Virginia. Projects include new tertiary wastewater treatment plants as large as 4.5 MGD, improvements to existing plants, small-flow treatment plants, extensive wastewater collection systems, and facility plan updates.

**Miscellaneous:** Design and project management for large highway and bridge projects, airport improvements projects, large stormwater management projects, as well as potable water and wastewater system design for many site development projects throughout West Virginia.

**AFFILIATIONS**

Water Environment Association - WV Section  
Contractor's Association of West Virginia - Associate Member  
American Water Works Association - WV Section  
WV Society of Professional Engineers  
American Council of Engineering Companies - ACEC/WV  
WVUIT Civil Engineering Advisory Board

**AWARDS**

George Warren Fuller Award, 2001



**JEFFERY D. EKSTROM, P.E.**  
**Manager, Environmental Engineering**  
**and Project Manager**

**EDUCATION**

West Virginia Institute of Technology, BSCE, 1990

**REGISTRATION**

Civil Engineering, West Virginia, 1996

**PROFESSIONAL  
HISTORY**

**April 1991 to Present: Chapman Technical Group**  
Manager, Environmental Engineering and Project Manager.

**October 1990 to March 1991: City of Charleston, South Carolina**  
Civil Engineer.

**June 1990 to September 1990: Bechtel Savannah River Inc.**  
Civil Engineer for Reactor Restart Group.

18 years of professional experience.

**PROJECT  
EXPERIENCE**

**Water Systems:** Design and project management for numerous water systems for both public and private water companies. Projects include new water treatment plants as large as 10 MGD utilizing ultrafiltration membrane treatment technology, improvements to existing plants, water mains and distribution systems. Water storage projects include precast-prestressed concrete tanks, glass-lined steel tanks, welded high-strength steel tanks, and elevated pedestal tanks. Hydraulic analysis of water distribution/transmission systems utilizing water CAD by Haestad methods.

**Wastewater Systems:** Design and project management for numerous wastewater systems throughout West Virginia. Projects include new tertiary wastewater treatment plants as large as 4.5 MGD, improvements to existing plants, small-flow treatment plants, extensive wastewater collection systems, wastewater treatment facility and raceways for fish hatcheries, and facility plan updates.

**Miscellaneous:** Design and project management for large stormwater management projects, as well as potable water and wastewater system design for many site development projects throughout West Virginia.

**AFFILIATIONS**

Water Environment Federation (West Virginia)  
American Water Works Association



**KENNON T. CHAMBERS, P.E.**  
**Civil Engineer**

**EDUCATION**

West Virginia Institute of Technology, BSCE, 1998

**REGISTRATION**

Civil Engineering, West Virginia, 2003

**PROFESSIONAL  
HISTORY**

**October 2007 to Present: Chapman Technical Group**  
Civil Engineer, Environmental Engineering Department.

**March 2007 to October 2007: National Radio Astronomy Observatory**  
Facilities Engineer.

**February 2002 to February 2007: Chapman Technical Group**  
Civil Engineer, Environmental Engineering Department.

**July 1998 to February 2002: Taylor and Striegel, Inc.**  
Project Engineer for underground utility construction company in West Virginia.

**Summers 1994 to 1996: West Virginia Division of Highways**  
Co-op Engineer - Materials Control, Soils and Testing Division.

10 years professional experience.

**PROJECT  
EXPERIENCE**

**Water Systems:** Design, construction and construction administration/management of various public and private water system projects including line work, river crossings, and booster stations throughout West Virginia.

**Wastewater Systems:** Design, construction and construction administration/management of various public and private wastewater system projects throughout West Virginia.

**AFFILIATIONS**

Water Environment Association  
American Water Works Association  
West Virginia Rural Water Association

**MISCELLANEOUS**

Class A Commercial Drivers License with Hazardous Materials Endorsement  
PADI Certified Scuba Diver



**WILLIAM B. KEATON, M.A., P.E.**  
**Manager, Civil Engineering/Project Manager**

**EDUCATION**

West Virginia Institute of Technology, BA, 1987  
Webster University, MA, 1992  
West Virginia Institute of Technology, BSCE, 1993

**REGISTRATION**

Civil Engineering, West Virginia, 1999

**PROFESSIONAL HISTORY**

**March 2007 to Present: Chapman Technical Group**  
Project Manager/Senior Engineer.

**December 2005 to March 2007 and January 1997 to April 2000: HNTB Corporation.**  
Section Leader, Senior Engineer, Business Manager.

**May 2001 to September 2005: Buchart-Horn, Inc.**  
Regional Manager.

**April 2000 to May 2001: Environmental Design Group**  
Section Leader, Project Manager, Senior Engineer.

**June 1993 to January 1999: Kelley, Gidley, Blair and Wolfe, Inc.**  
Project Manager, Project Engineer.

16 years professional experience.

**PROJECT EXPERIENCE**

**Water Systems:** Design and project management for numerous water systems for both public and private water companies. Projects include new water treatment plants from 0.5 MGD to 2.5 MGD, improvements to existing plants, water mains and distribution systems, and water system modeling. Water storage systems have included bolted glass-lined tanks, concrete storage tanks, welded steel tanks and elevated tanks.

**Wastewater Systems:** Design and project management for numerous wastewater systems throughout WV and Ohio. Projects include SBR plants to serve large industry, conventional secondary treatment plants, anaerobic digesters, packaged treatment plant operation and maintenance, wastewater treatment plant lagoons, upgrades to head-works structures, pump station rehabilitation, Long Term Control Plan preparation, facility plan updates and SSES plans.

**Stormwater Systems:** Design and project a management on NPDES permit application, SWPPP preparation, SWM preparation, stormwater utility development and management. Projects include stormwater management detention/retention pond design, stormwater conveyance design, stormwater treatment options and erosion/sedimentation control options.

**Miscellaneous:** Project Manager on numerous large highway and bridge projects in WV and design of retaining wall projects consisting of soldier piles and MSE walls.

**AFFILIATIONS**

Water Environment Association - WV Section  
Society of Military Engineers  
American Water Works Association  
National Society of Professional Engineers  
West Virginia Society of Professional Engineers  
American Council of Engineering Companies - ACEC/WV



**BRIAN G. HUFFMAN**  
**Buckhannon Branch Office Manager**  
**Project Manager**

**EDUCATION**

West Virginia University, BSCE, 1974

**PROFESSIONAL  
HISTORY**

**September 1996 to Present: Chapman Technical Group**  
Buckhannon Office General Manager and Project Manager.

**October 1993 to July 1996: City of Buckhannon Water Board**  
Water Department Director.

**April 1991 to October 1993: Chapman Technical Group**  
Buckhannon Office Manager and Project Manager.

**1986 to 1991: Kelley, Gidley, Blair & Wolfe, Inc.**  
Buckhannon Office Manager and Project Manager.

**1983 to 1986: Erwin Industries**  
Civil Project Manager/Senior Design Engineer.

**1979 to 1983: FMC Corporation divested to Erwin Industries, Inc.**  
Senior Design Engineer.

35 years of professional experience.

**PROJECT  
EXPERIENCE**

**Water/Wastewater Systems:** Design and project management for numerous wastewater and potable water systems for both public and private utility companies.

**Airports:** Design and project management for a number of projects, including pavement rehabilitation, landslide repair, taxiway and apron construction, airfield drainage improvements, airfield lighting systems, SRE buildings, equipment purchases, perimeter fencing, and utility systems. Prepared airport Exhibit 'A's and assisted with DBE plans and updates in accordance with FAA requirements.

**Miscellaneous:** Design and project management for stormwater and sanitary sewer separation projects. City of Buckhannon Water Board Water Department Director and Buckhannon Upshur Airport Authority Member : Responsible for treatment plant and system operations and the development and implementation of a reservoir management and plant optimization program. Design and project management at a paper mill modernization project and numerous coal preparation plants and material handling systems.



**SHELLEY D. WATKINS, E.I.**  
**Civil Engineer**

**EDUCATION**

West Virginia University Institute of Technology, BSCE, 2006

**REGISTRATION**

E.I., West Virginia, 2006

**EXPERIENCE**

**December 2006 to Present: Chapman Technical Group**  
Civil Engineer

**Summers (2003, 2005, 2006):** WV Division of Highways (District 2) - Environmental compliance, bridge design, bridge inspection, drainage design and inspection.

1 year professional experience.

**PROJECT  
EXPERIENCE**

**Water Systems:** Design, construction, and construction administration/management of various public and private water system projects including line work, river crossings, treatment facilities, storage tanks, SCADA systems, and booster stations throughout West Virginia. Troubleshoot problems in existing systems. Evaluate proposed treatment systems. Distribution system modeling.

**Wastewater Systems:** Design, inspection, of various public and private wastewater system projects throughout West Virginia. Smoke testing existing collection systems, lift station design, infiltration/inflow analysis, and CSO compliance.

**AFFILIATIONS**

American Society of Civil Engineers  
American Water Works Association  
Order of the Engineer



**SHAWN C. STEWART, P.E.**  
**Civil/Environmental Engineer**

**EDUCATION**

Glennville State College, Associate in Arts in Administrative Science, 1996  
Fairmont State College, Associate in Civil Engineering Technology, 1999  
Fairmont State College, BSCE, 2000

**REGISTRATION**

E.I., West Virginia, 2002  
P.E., West Virginia, 2007

**PROFESSIONAL  
HISTORY**

**May 2000 to Present: Chapman Technical Group**  
Civil/Environmental Engineer.

8 years professional experience.

**PROJECT  
EXPERIENCE**

**Bridge and Highways:** Roadway projects include design of new four-lane high speed corridor in mountainous terrain. Bridge projects include bridge deck drainage design for a three-span bridge.

**Airports:** Project Engineer/Project Manager for several airport projects involving new airport design, runway extension, pavement rehabilitation, new apron and taxiway design, runway safety area improvements, automated weather observing stations (AWOS), obstruction removal, perimeter fencing, approach aids, fuel storage facilities, airfield lighting and marking, drainage improvements, property maps, and airport layout plans.

**Wastewater Systems:** Design/upgrades of existing Collection Systems.

**Structural:** Structural projects include layout, assistant design and construction management of retaining wall systems including mechanically stabilized earth (MSE) wall and soldier pile and lagging wall with tieback anchors.

**AFFILIATIONS**

American Society of Civil Engineers



**SHAWN D. TUCKER, E.I.**  
**Civil/Airport Engineer**

**EDUCATION**

Fairmont State College, Associate in Civil Engineering Technology, 2001  
Fairmont State College, B.S. degree in Civil Engineering Technology, 2003

**REGISTRATION**

Engineer Intern, West Virginia, 2005

**PROFESSIONAL  
HISTORY**

**May 2003 to Present: Chapman Technical Group**  
Civil/Airport Engineer.

5 years professional experience.

**PROJECT  
EXPERIENCE**

**Airports:** Project Engineer for several airport projects involving runway extension, pavement rehabilitation, new apron and taxiway design, runway safety area improvements, airfield lighting and marking and drainage improvements

**AFFILIATIONS**

American Society of Civil Engineers





**DAVID C. HOY, E.I.**  
**Civil/Structural Engineer**

**EDUCATION**

West Virginia University, BSCE, 2006

**REGISTRATION**

E.I., West Virginia, 2006

**PROFESSIONAL  
HISTORY**

**January 2007 to Present: Chapman Technical Group**  
Civil Engineer

**Summer 2005: Advantage Home and Environment**

Assisted structural engineer with home inspections, and report preparation.

1 year professional experience.

**PROJECT  
EXPERIENCE**

**Structural:** Investigation, analysis, and design of various building structural systems, including foundation design. Review shop drawings and performs periodic site visits.

**Civil:** Design of highways, bridges, and airport improvements projects throughout West Virginia.

**AFFILIATIONS**

Chi Epsilon, National Civil Engineering Honor Society



**MATTHEW G. DEAL**  
**Civil Engineer**

**EDUCATION**

West Virginia University Institute of Technology, BS, Civil Engineering  
Technology, 2007

**EXPERIENCE**

**December 2007 to Present: Chapman Technical Group**  
Civil Engineer

**May 2007 to December 2007: William H. Gordon & Associates, Inc.,**  
Civil Engineer

**January 2007 to May 2007: West Virginia Department of Highways, Inspector**

**Summers (2006, 2005): West Virginia Department of Highways, Designer  
Technician**

1 year professional experience.

**PROJECT  
EXPERIENCE**

**Civil Engineer:** Design of highways and airport improvements projects  
throughout West Virginia. Design of site development, including storm drainage,  
stormwater management, and utilities.

**AFFILIATIONS**

American Society of Civil Engineers



**FRED L. BROWN**  
**CADD Manager**

**EDUCATION**

Carver Career Center, Two Year Drafting/Cad Degree, 1997  
Glenville State College, 20 Hours Toward Forestry Degree, 1988  
Attended AUTOCAD14 Training Class Provided By Digital Graphics

**PROFESSIONAL  
HISTORY**

**2002 to Present: Chapman Technical Group**  
CADD Manager.

**1997 to 2002: Chapman Technical Group**  
Engineering Technician and CADD Designer.

11 years professional experience.

**PROJECT  
EXPERIENCE**

**Bridge and Highway:** Responsible for CADD drafting on basemap, site development, construction plan sheets, signal plans, superelevation plans, existing and proposed utilities, utility relocation plans, lighting plans, boring construction plans, typical sections and details, mainline cross sections, bridge plans and details, attenuator details, guardrail plan layout and details, geometric plans, station and offsets of mainline centerline, stationing and curve geometric information, survey reference and control plans, point dump creations.

**Architectural/Structural:** Responsible for CADD drafting on existing and proposed building plans, structural framing plans and details, foundation plans and details, structural scheduling.

**Site Design:** Responsible for CADD drafting on proposed site layouts, site details and cross sections.

**Airport:** Responsible for CADD drafting on existing and proposed taxiways and runways, taxiway signage, hangar layout, and airport master plans.

**Mapping:** Responsible for CADD drafting for city street and zoning maps.

**Water and Wastewater:** Responsible for CADD drafting on treatment plants, improvements on existing and new facilities, stormwater plans and profiles, booster stations, meter vaults, water system updates for both public and private sectors, PRV plans and details.

**AFFILIATIONS**

Member, National Vocational-Technical Honor Society (NV-THS)

**ACHIEVEMENTS**

First place winner in Carver Career Center VICA skills competition and represented Carver at the state VICA competition for technical drafting.

Judge in 2001 State VICA skills competition for technical drafting.



**JOHN R. FARNHAM**  
**CADD Technician**

**EDUCATION**

Center College, Two Year Drafting Degree  
Ben Franklin Career Center, AutoCad Course, 1995

**PROFESSIONAL  
HISTORY**

**July 1996 to Present: Chapman Technical Group**  
Architectural Technician and CADD Designer.

**1986 to 1995: Jerry Goff Architecture**  
Draftsman.

**1976 to 1986: Gandee, Thomas & Sprouse - Architects**  
Draftsman.

**1974 to 1976: Don Moses - Architecture**  
Draftsman.

35 years professional experience.

**PROJECT  
EXPERIENCE**

**Bridge and Highway:** Responsible for CADD drafting on right-of-way plans, maintenance of traffic plans, signing and marking plans, boring plans and boring cross sections, typical sections and details.

**Water and Wastewater:** Responsible for CADD drafting on treatment plants, improvements on existing and new facilities, stormwater plans, booster stations, meter vaults, water system updates for both public and private sectors, PRV plans and details.

**Architectural/Structural:** Responsible for CADD drafting on schedules, details, floor plan designs, framing plans and details, foundation plans and details, renovation of buildings, reflected ceiling plans, cross sections, building interior and exterior elevations, roof plans and details, plumbing plans and details, HVAC plans and details, and building code implementation.



**LISA D. ACORD**  
**CADD Technician**

**EDUCATION**

West Virginia University Institute of Technology, BS, Industrial Technology, 1997  
West Virginia Institute of Technology, AS, Drafting and Design Engineering Technology, 1995

**PROFESSIONAL HISTORY**

**November 1998 to Present: Chapman Technical Group**  
Engineering Technician and CADD Designer.

**January 1998 to November 1998: GAI Consultants, Inc.**  
CADD Designer.

**May 1997 to November 1997: Commercial Welding & Fabrication**  
Design Engineer.

11 years professional experience.

**PROJECT EXPERIENCE**

**Bridge and Highway:** Responsible for CADD drafting of design and preparation of construction plans and details for roadway and bridge work. Involvement includes final design drawings for bridges, signing, pavement marking plans, maintenance of traffic plans, lighting plans, right-of-way plans, geotechnical boring logs and cross-sections.

**Site Design:** Drafting for site layout and proposed grading, including site access and parking areas. Also, assisted in construction documents for lake dredging projects, including dredging scheme, disposal site design, and a sediment control plan for both the dredging operations and the disposal site. Performed several presubsidece surveys in conjunction with a deep mines operation.

**Water and Wastewater:** Responsible for drafting profiles, site layout and proposed grading, booster stations, PRV's, master meter vaults, septic systems, plant valve pit, chemical feed vault, raw water intake and details, and various miscellaneous water treatment plant details.

**Mining:** Drafting for surface and deep mining permits, construction documents, and many detailed plans. Extensive research and drafting of property lines and ownership. Assisted with 100+ presubsidece surveys in West Virginia and Ohio.



**DENNIS N. DUNCAN**  
**CADD Technician**

**EDUCATION**

Mountain CAD, April 1996  
West Virginia State College, 1994  
Putnam County Vocational School, 1991-1992

**PROFESSIONAL  
HISTORY**

**September 1997 to Present: Chapman Technical Group**  
Architectural Technician and CADD Designer.

**June 1992 to August 1997: Connie Post Designs**  
CADD Designer.

16 years professional experience.

**PROJECT  
EXPERIENCE**

**Bridge and Highway:** Responsible for CADD drafting on mainline and side road profiles, maintenance of traffic, signing and marking plans, intersection details, survey reference and control plans, typical roadway sections, stormline profiles, bridge sections and details.

**Architectural/Structural:** Responsible for CADD drafting on recreational and commercial floor plans, building cross sections and details, structural framing plans, foundation plans and details, and building renovations.

**Water and Wastewater:** Responsible for CADD drafting on treatment plants, improvements on existing and new facilities, stormwater plans and profiles, booster stations, meter vaults, water system updates for both public and private sectors, PRV plans and details.





**MATTHEW B. GARTON**  
**CADD Technician**

**EDUCATION**

Fairmont State College, AAS, Drafting and Design Engineering Technology,  
2005

**PROFESSIONAL  
HISTORY**

**January 2007 to Present: Chapman Technical Group**  
Engineering Technician and CADD Designer.

**September 2006 to January 2007: Mountain State Log Homes**  
Drafter/Laborer.

**June 2004 to August 2005: Department of Highways**  
Bridge Safety Inspector.

1 year professional experience.

**PROJECT  
EXPERIENCE**

**Airport:** Responsible for CADD production and drafting on existing and proposed taxiways, taxiway signage, runway safety area improvements, lighting plans and details, site profiles and cross sections, marking plans, updated base maps to company standards, runway rehabilitation projects, perimeter fencing projects, record drawings, apron rehabilitation projects, obstruction removal, airport NAVIDS, construction resident observation, new runway grading plan (Mingo), constructing runway centerline alignments in land development desktop.

**Structural:** Responsible for production of drafting work on all log home packages, layout plans, foundation plans, roof framing layout plans and calculation of cost of materials.

**Bridge Safety:** Responsible for evaluation on all bridge structures, inspecting photos for comparison, and filed reports on findings.

**AFFILIATIONS**

Computer Aided Design and Drafting Certification



**ASHLEY N. STARCHER**  
**CADD Technician**

**EDUCATION**

Carver Career Center, Two Year Drafting/Cad Degree, 2007

**PROFESSIONAL  
HISTORY**

**February 2008 to Present: Chapman Technical Group**  
CADD Designer.

2 years professional experience.

**PROJECT  
EXPERIENCE**

**Architectural/Structural:** Responsible for CADD drafting on recreational and commercial floor plans, building cross sections and details, structural framing plans, foundation plans and details, and building renovations.

**Bridge and Highway:** Responsible for CADD drafting of design and preparation of construction plans and details for roadway and bridge work. Involvement includes final design drawings for bridges, signing, pavement marking plans, maintenance of traffic plans, lighting plans, right-of-way plans, geotechnical boring logs and cross-sections.

**Site Design:** Drafting for site layout and proposed grading, including site access and parking areas.

**Water and Wastewater:** Responsible for drafting profiles, site layout and proposed grading, booster stations, PRV's, master meter vaults, septic systems, plant valve pit, chemical feed vault, raw water intake and details, and various miscellaneous water treatment plant details.



**RICHARD L. JONES**  
**CADD Technician/Survey Rodman**

**EDUCATION**

Ben Franklin Vocational/Technical Center, 2003.

**PROFESSIONAL  
HISTORY**

**September 2004 to Present: Chapman Technical Group**  
CADD Technician/Survey Rodman.

**June 2004 to September 2004: Packaged Systems, Inc.**  
CADD Designer.

4 years professional experience.

**PROJECT  
EXPERIENCE**

**Bridge and Highway:** Responsible for CADD drafting on mainline and side road profiles, maintenance of traffic, signing and marking plans, intersection details, survey reference and control plans, typical roadway sections, stormline profiles, bridge sections and details.

**Architectural/Structural:** Responsible for CADD drafting on recreational and commercial floor plans, building cross sections and details, structural framing plans, foundation plans and details, and building renovations.

**Water and Wastewater:** Responsible for CADD drafting on treatment plants, improvements on existing and new facilities, stormwater plans and profiles, booster stations, meter vaults, water system updates for both public and private sectors, PRV plans and details.

**Mapping:** Responsible for CADD drafting for city street and zoning maps.



**BRIAN W. LAWRENCE, P.S.**  
**Professional Land Surveyor**

**EDUCATION**

Glennville State College, AS, Land Surveying, 1995

**REGISTRATION**

Professional Surveyor, West Virginia, 2002, P.S. No. 2056

**PROFESSIONAL  
HISTORY**

**August 2004 to Present: Chapman Technical Group**  
Professional Surveyor, Project Manager, Crew Chief, Draftsman

**December 2003 to August 2004: Point Surveying & Mapping**  
Professional Surveyor/Project Manager.

**December 1999 to November 2003: Terradon Corporation**  
Surveyor/Draftsman.

**January 1996 to December 1999: Board Land Surveying**  
Project Manager/Surveyor/Draftsman.

**May 1995 to December 1995: Smith Land Surveying**  
Crew Chief/Rodman.

13 years professional experience.

**PROJECT  
EXPERIENCE**

**Site Development:** Asbuilt/existing condition surveys and design surveys for numerous projects including water tank sites, cellular tower sites, water and sewer lines, subdivisions and commercial sites.

**Highways:** Provide preliminary site surveys of areas to be developed for highway construction. Set/layout points on the ground for the placement and/or construction of roadway surfaces, utility relocation, drainage structures, etc. Determine and set cut/fill stakes during the construction process.

**Boundary:** Numerous boundary surveys and ALTA/ACSM Land Title Surveys for commercial, residential clients on sites ranging from small lots to large commercial sites, and highway projects.

**AFFILIATIONS**

14 Year Member of the West Virginia Society of Professional Surveyors



**MATTHEW G. PAINTER**  
**Surveyor**

**EDUCATION**

Glenville State College, AS, Land Surveying, 1998

**PROFESSIONAL  
HISTORY**

**September 2008 to Present: Chapman Technical Group**  
Surveyor.

**April 2008 - September 2008: TNT Land Surveying**  
Party Chief.

**August 2007 - April 2008: Central Contracting**  
Surveyor.

**April 2007 - August 2007: Mountaineer Grading**  
Surveyor.

**July 2006 - April 2007: Walbridge RB, John Amos Retro Fit Project**  
Lead Surveyor.

**May 2000 - July 2006: Prine Land Surveying**  
Crew Chief.

**October 1999 - May 2000: Terradon**  
Rodman.

**June 1997 - October 1999: Board Land Surveying**  
Rodman/Assistant Project Manager

11 years professional experience.

**PROJECT  
EXPERIENCE**

**Site Development:** Asbuilt/existing condition surveys and design surveys for numerous projects including water tank sites, cellular tower sites, water and sewer lines, subdivisions and commercial sites.

**Highways:** Provide preliminary site surveys of areas to be developed for highway construction. Set/layout points on the ground for the placement and/or construction of roadway surfaces, utility relocation, drainage structures, etc. Determine and set cut/fill stakes during the construction process.

**Boundary:** Numerous boundary surveys and ALTA/ACSM Land Title Surveys for commercial, residential clients on sites ranging from small lots to large commercial sites, and highway projects.



**ARDEN L. STULL**  
**Senior Construction Representative**

**EDUCATION**

Morris Harvey College, Major-Psychology; Minor-Sociology, 1973  
West Virginia University, Environmental Science/Technology, 1998

**PROFESSIONAL  
HISTORY**

**December 2001 to Present: Chapman Technical Group**  
Construction Representative.

**July 1997 to December 2001: Charleston Sanitary Board**  
Compost Facility Superintendent.

**January 1994 to July 1997: Woolpert, LLP**  
Chief Construction Observer.

**June 1979 to December 1993: Kelley, Gidley, Blair & Wolfe, Inc.**  
Chief Inspector.

**1990 to 1992: Dunn Engineers, Inc.**  
Chief Inspector.

**1977 to 1979: Milam/BCM Engineering, Inc.**

**1975 to 1977: Rude & Associates, Inc.**

31 years professional experience.

**PROJECT  
EXPERIENCE**

Responsible for supervision of construction observers, field engineering, coordination of subcontractors, assisted project engineer, attended client/owner meetings, and administration of several contracts simultaneously. Also construction record keeping, documentation of as-built quantities, line testing, observation of concrete testing, soil density testing, compiling "punch lists," final inspections, review shop drawings, review and approve periodic estimates and resolve customer complaints.





**ANTHONY C. JACKSON**  
**Construction Representative**

**EDUCATION**

Carver Career and Technical Education Center, 2 Year Drafting Technology Degree, 1998

**PROFESSIONAL HISTORY**

**June 1998 to Present: Chapman Technical Group**  
Construction Representative.

**May 1988 to August 1993: West Virginia Division of Highways**  
Highway Maintenance Foreman.

**May 1985 to August 1988: Shook of West Virginia**  
Operating Engineer, Form Carpenter, Pipe Fitter, Lead Operator, Crew Leader.

**May 1976 to May 1985: Valley Development**  
Operating Engineer, Bore Jack Foreman, Foreman, Pipe Fitter,

10 years professional experience.

**PROJECT EXPERIENCE**

Responsibilities include all aspects of field construction coordination and observation from commencement of construction through project start-up. Maintains field diaries and construction log books; monitors shop drawing approvals and fabrication schedules; observes field testing of completed work; verifies contractor's periodic payment requests; verifies completed site work for as-built drawings; attends construction progress meetings; and updates clients on project progress.

**AWARDS**

Member of VICA - Vocational Industrial Clubs of America  
Member of the National Vocational Technical Honor Society  
Carver Passport - Shows Excellence in Training Area

**CERTIFICATIONS**

NICET - Level 2



**CHARLES D. CASH, JR.**  
**Construction Representative**

**EDUCATION**

South Charleston High School , 1983

Attended WV DOH Portland Cement Concrete Refresher Course, 1998

Attended WV DOH Hot-Mix Asphalt Refresher Course, 1998

Authorized Sample Collector for new water mains - WV Bureau of Public Health, 1997

**PROFESSIONAL  
HISTORY**

**November 1992 to Present: Chapman Technical Group**  
Construction Representative.

**June 1992 to October 1992: Business and Industrial Development Corporation (BIDCO).**  
Construction Representative.

**August 1990 to May 1992: Dunn Engineers, Inc.**  
Construction Representative.

18 years of professional experience.

**PROJECT  
EXPERIENCE**

Responsibilities include all aspects of field construction and observation from commencement of construction through project start-up. Maintains field diaries and construction log books; monitors shop drawing approvals and fabrication schedules; observes field testing of completed work; verifies contractor's periodic payment requests; verifies completed site work for as-built drawings; attends construction progress meetings; and updates clients on project progress.

# Ability to Meet Budgets & Deadlines



## Representative Project Budgets

<b>1. City of Beckley Sanitary Board - Pinecrest Sewer Line Replacement</b>	
* Estimated Cost	\$517,550.00
* Actual Bid	\$435,922.00
* 15.77% Under Engineer's Estimate	
<b>2. VA Medical Center, Huntington West Virginia Water Storage Tank Replacement and Water System Improvements</b>	
* Estimated Cost	\$935,000.00
* Actual Bid	\$895,000.00
* 4.28% Under Engineer's Estimate	
<b>3. Van Public Service District - West Fork Water System Improvements</b>	
* Estimated Cost	\$1,433,251.00
* Actual Bid	\$1,389,105.00
* 3.08% Under Engineer's Estimate	
<b>4. Greater St. Albans Regional Wastewater Project</b>	
* Estimated Cost	\$3,900,000.00
* Actual Bid	\$3,838,180.58
* 1.59% Under Engineer's Estimate	
<b>5. Huttonsville Correctional Center 150,000 GPD Wastewater Treatment Plant</b>	
* Estimated Cost	\$1,290,000.00
* Actual Bid	\$1,249,360.00
* 3.15% Under Engineer's Estimate	

## Representative Project Schedules

	Project Cost	Scheduled Completion	Actual Completion
<b>1. Van PSD West Fork Water System Improvements</b>	\$1,389,000	120 days	120 days
<b>2. St. Albans 1.5 MG Steel Water Tank</b>	\$335,000	90 days	30 days
<b>3. Culloden PSD Water Storage Tank</b>	\$250,000	90 days	30 days
<b>4. Elkins Road PSD Water System Improvements</b>	\$3,500,000	120 days	120 days
<b>5. Greater St. Albans PSD Sewer System</b>	\$3,838,000	270 days	180 days
<b>6. Cabell County Commission T-Shirts International Water &amp; Sewer Ext.</b>	\$124,000	60 days	60 days
<b>7. Clay - Roane PSD Water System Improvements, Varneytown Extension</b>	\$274,000	120 days	45 days

# Technology Resources



To better serve the growing needs of the contemporary client, Chapman Technical Group has the following hardware and software selections available to its staff:

## Hardware

- **Backbone**
  - St. Albans Local Area Network (LAN)**  
96 Node Category 5 Twisted Pair Ethernet  
4 Hewlett Packard Gigabit Ethernet Managed Hubs
  - Buckhannon Local Area Network (LAN)**  
24 Node Category 5 Pair Ethernet  
1 Hewlett Packard Gigabit Ethernet Hub
  - Martinsburg Local Area Network (LAN)**  
12 Node Category 5 Twisted Pair Ethernet  
1 Hewlett Packard Gigabit Ethernet Hub
  - Corporate Wide Area Network (WAN)**  
T1/Frame Relay Digital Communications Link  
3-1.1 Megabit SDSL Lines
- 2 Cisco 1750 Routers  
2 Sonicwall firewalls  
Voice over IP Telecommunications links between the St. Albans and Buckhannon offices
- **Servers**
  - Sun Fire V-240 - UNIX based file server (St. Albans)
  - Sun Ultra 10 - UNIX based file server (Buckhannon)
  - Sun SPARC Station 10 - UNIX based e-mail server (Corporate)
- **Peripherals**
  - 2 Oce' TDS 400 Digital Wide Format Printers
  - 2 Hewlett Packard Designjet Plotters
  - 5 Hewlett Packard Laserjet Printers
  - Summagraphics 36" x 48" Digitizer
- **Workstations and Personal Computers**
  - 20 Pentium Systems with a minimum 1 GB ram and 21" monitors
  - 26 Pentium Systems with a minimum 512 MB ram and 17" monitors
  - 4 Notebook Computers
- **Hardware Surveying**
  - GPS - Leica SR20 survey grade, single frequency units with onboard data collection
  - Topcon GTS-300 total station, 1 second accuracy/0.5 second display
  - Topcon AT-G3 auto level
  - Carlson Explorer II data collector
  - HP48GX calculator/data collector

## Software

### Office/Business Administration

- **Accounting**
  - Deltek Systems/Advantage v 9.1
  - CCH Electronic Tax Library
  - Microsoft Access 2003
- **Operating Systems**
  - Sun Solaris v 10
  - Microsoft Windows XP Professional
  - Microsoft Windows 2000
  - Samba 3.0.10 Network Operating System
- **Marketing**
  - Adobe In Design E53
  - Adobe Pagemaker v 7
  - Adobe Photoshop v 7
  - Adobe Acrobat v 7
  - Microsoft PowerPoint 2003



- **Spreadsheets/Word Processing**
  - Microsoft Office 2007
  - Microsoft Office 2000
- **Transportation Engineering**
  - PCAPAV - Concrete Thickness Design
  - Comp Air - Life-Cycle Cost Comparison for Airports
  - Airport - Thickness Design of Asphalt Pavements
  - FAA Airport Design - Geometric Design of Airports
  - FAA Pavement Design - Thickness Design of Rigid and Flexible Pavements for Airports
  - Airport - Concrete Thickness Design
  - Autodesk Civil 3D 2008
- **Environmental Engineering**
  - Haestad Methods WaterCAD with AutoCAD
  - Haestad Methods StormCAD v 4.1.1
  - Haestad Methods Flowmaster PE v 6.1
  - Haestad Methods Culvert Master v 2.0
  - Haestad Methods NWS - Dam Breach Wave Analysis
  - KYPIPE3 - 4,000 Pipe Version
  - Sigma Flow Analysis and Data Collection Equipment
  - Uni-flange - Pipe Thrust Restraint Design Program
  - CIPP Designer 2.0
- **Structural Engineering**
  - Enercalc Structural Engineering Library v 5.1
  - Merlin Dash - Straight Girder Bridge Design v 3.0
  - Leap - CONSPAN - AASHTO Standard & LRFD v 3.1.0
  - DESCUS I - Curved Girder Bridge Design v 3.1
  - DESCON - Design of Structural Steel Connections v 2.0
  - GL Sizer - AITC Glulam Member Design
  - American Institute of Architects Masterspec Specifications System
- **Site Design, Civil Engineering and Landscape Architecture**
  - Autodesk Civil 3D 2008
  - Autodesk Raster Design 2008
  - Carlson SurvCADD 2000
  - Carlson SurvCE V.1.64
- **Architectural**
  - AutoCAD Architecture 2008
  - Autodesk Rivot Building 9.1
  - American Institute of Architects Masterspec Specifications System
  - Herman Miller - CAD Symbol Libraries
  - Steelcase CAD Furniture Symbol Library
  - Anderson Window - CAD Symbol Library
  - Butler Manufacturing - CAD Details
- **CAD Production**
  - AutoCAD 2008
  - Bentley MicroStation J
- **Surveying Software**
  - Carlson SurvCE data collection software
  - SMI version 7 data collection software
  - GPS - Leica SR20 post-processing software

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

PROJECT NAME Burnwell (Standard/PaintCreek/ Collinsdale) Waterline Extension  1. FIRM NAME <b>Chapman Technical Group</b>	DATE (DAY, MONTH, YEAR) 8/10/2008  2. HOME OFFICE BUSINESS ADDRESS 200 Sixth Avenue St. Albans, WV 25177	FEIN 55-0704766  3. FORMER FIRM NAME N/A	4. HOME OFFICE TELEPHONE (304) 727-5501  5. ESTABLISHED (YEAR) 1984  6. TYPE OWNERSHIP Individual <input checked="" type="checkbox"/> Corporation Partnership <input type="checkbox"/> Joint-Venture <input type="checkbox"/>  6a. WV REGISTERED DBE (Disadvantaged Business Enterprise) YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>  7. PRIMARY AML DESIGN OFFICE: ADDRESS/ TELEPHONE/ PERSON IN CHARGE/ NO. AML DESIGN PERSONNEL EACH OFFICE 200 Sixth Avenue, St. Albans, WV 25177/(304)727-5501/Sharon Chapman/29 Persons 43 East Main Street, Buckhannon, WV 26201/(304)472-8914/Brian Huffman/4 Persons  8. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM Sharon L. Chapman, President Robert G. Belcher, PE, Senior Vice President (304)727-5501 Joseph E. Bird, ASLA, Senior Vice President (304)727-5501
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9. PERSONNEL BY DISCIPLINE  6 ADMINISTRATIVE 3 ARCHITECTS 1 BIOLOGIST 7 CADD OPERATORS CHEMICAL ENGINEERS 10 CIVIL ENGINEERS 5 CONSTRUCTION INSPECTORS 1 DESIGNERS DRAFTSMEN	3 LANDSCAPE ARCHITECTS MECHANICAL ENGINEERS MINING ENGINEERS PHOTOGRAMMETRISTS PLANNERS: URBAN/REGIONAL SANITARY ENGINEERS SOILS ENGINEERS SPECIFICATION WRITERS	0 STRUCTURAL ENGINEERS 2 SURVEYORS 1 TRAFFIC ENGINEERS 1 OTHER  39 TOTAL PERSONNEL
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TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE: 5 (All Civil)  
 \*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  N/A

11. OUTS KEY CONSULTANTS/SUB-CONSULTANTS ANTICIPATED TO BE USED. Attach "AML Consultant Confidential Qualification Questionnaire". NONE

<p>NAME AND ADDRESS:</p>	<p>SPECIALTY:</p>	<p>WORKED WITH BEFORE</p> <p>Yes _____</p> <p>No _____</p>
<p>NAME AND ADDRESS:</p>	<p>SPECIALTY:</p>	<p>WORKED WITH BEFORE</p> <p>Yes _____</p> <p>No _____</p>
<p>NAME AND ADDRESS:</p>	<p>SPECIALTY:</p>	<p>WORKED WITH BEFORE</p> <p>Yes _____</p> <p>No _____</p>
<p>NAME AND ADDRESS:</p>	<p>SPECIALTY:</p>	<p>WORKED WITH BEFORE</p> <p>Yes _____</p> <p>No _____</p>
<p>NAME AND ADDRESS:</p>	<p>SPECIALTY:</p>	<p>WORKED WITH BEFORE</p> <p>Yes _____</p> <p>No _____</p>
<p>NAME AND ADDRESS:</p>	<p>SPECIALTY:</p>	<p>WORKED WITH BEFORE</p> <p>Yes _____</p> <p>No _____</p>
<p>NAME AND ADDRESS:</p>	<p>SPECIALTY:</p>	<p>WORKED WITH BEFORE</p> <p>Yes _____</p> <p>No _____</p>
<p>NAME AND ADDRESS:</p>	<p>SPECIALTY:</p>	<p>WORKED WITH BEFORE</p> <p>Yes _____</p> <p>No _____</p>
<p>NAME AND ADDRESS:</p>	<p>SPECIALTY:</p>	<p>WORKED WITH BEFORE</p> <p>Yes _____</p> <p>No _____</p>



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

YES Description and Number of Projects: \_\_\_\_\_

NO

B. Is your firm experienced in Soil Analysis?

YES Description and Number of Projects: \_\_\_\_\_

NO

C. Is your firm experienced in hydrology and hydraulics?

YES Description and Number of Projects: During the past 23 years, Chapman Technical Group has provided design and construction phase engineering services for numerous site development, roadway, stormwater, sanitary sewer and waterline extension projects. Refer to Experience Section for example projects.

NO

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

YES

NO Description and Number of Projects: We typically use Photo Science, Lexington, KY, and recently have utilized Statewide Mapping photography as a cost savings measure for our clients.

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: During the past 23 years, Chapman Technical Group has provided design and construction phase engineering services for numerous projects statewide. Refer to Experience

Section for example projects.

NO

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

YES Description and Number of Projects: \_\_\_\_\_

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 AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Belcher, Robert, G. Vice President, Engineering	0	0	21

Brief Explanation of Responsibilities  
 Project Officer for all Chapman Technical Group engineering projects including potable water projects consisting of treatment, storage, pumping, and water lines since 1996. Prior to 1996, Project Manager for all Chapman Technical Group potable water projects for design and construction phases.

EDUCATION (Degree, Year, Specialization)  
 BSCE/1983/Civil Engineering/West Virginia Institute of Technology  
 MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS  
 National Society of Professional Engineers  
 American Water Works Association  
 Water Environment Federation

REGISTRATION (Type, Year, State)	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Civil Engineering/1996/WV Civil Engineering/2006/OH	0	17

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Ekstrom, Jeffery, E. Department Manager, Environmental	0	0	17

Brief Explanation of Responsibilities  
 Environmental Engineering Department Manager for Chapman Technical Group, as well as Project Manager for potable water and sanitary sewer projects for the firm. Experience consists of treatment plant, storage tanks, pumping facilities, and water line design and construction phase services.

EDUCATION (Degree, Year, Specialization)  
 BSCE/1990/Civil Engineering/West Virginia Institute of Technology  
 MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS  
 Water Environment Federation  
 American Water Works Association

REGISTRATION (Type, Year, State)	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Civil Engineering/1996/WV	0	17

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Keaton, William B. Department Manager, Civil Engineering Brief Explanation of Responsibilities Civil Engineering Department Manager for Chapman Technical Group, as well as a Project Manager for all civil/site projects for the firm. Experience consists of water, storm, and sanitary sewer system design and construction phase services.	0	0	16
EDUCATION (Degree, Year, Specialization) BA/1987/Business/West Virginia Institute of Technology MA/1992/Management/Webster University BSCE/1993/Civil Engineering/West Virginia Institute of Technology			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS Water Environment Federation American Water Works Association National Society of Professional Engineers Society of Military Engineers			
13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)			
NAME & TITLE (Last, First, Middle Int.)	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Huffman, Brian G. Manager, Buckhannon Office Brief Explanation of Responsibilities Buckhannon Office Manager for Chapman Technical Group, as well as Project Manager for civil projects for the office. Experience consists of water, storm, and sanitary sewer system design and construction phase services.	0	0	29
EDUCATION (Degree, Year, Specialization) BSCE/1974/West Virginia University			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS American Water Works Association Water Environment Federation			

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:
Chambers, Kennon T. Brief Explanation of Responsibilities Project Engineer for sanitary and waterline extension projects for the firm. Experience includes preparation of construction plans and specifications, and permit applications.	0	0	10

EDUCATION (Degree, Year, Specialization)

BS/1998/Civil Engineering/West Virginia Institute of Technology

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

American Water Works Association  
Water Environment Federation

REGISTRATION (Type, Year, State)  
Civil Engineering/2003/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:
Watkins, Shelley D. Brief Explanation of Responsibilities Project Engineer for stormwater and waterline extension projects for the firm. Experience includes preparation of construction plans and specifications, and permit applications.	0	0	2

EDUCATION (Degree, Year, Specialization)

BSCE/2006/Civil Engineering/West Virginia University Institute of Technology

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

American Society of Civil Engineers  
American Water Works Association

REGISTRATION (Type, Year, State)  
Engineer Intern/2006/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 AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Stewart, Shawn C. Brief Explanation of Responsibilities	0	0	8
<p>Project Manager and Project Engineer for numerous airport improvements projects throughout the state. Also assists with site development drainage design and utility design. Experience includes preparation of construction plans and specifications, and permit applications.</p>			
<p>EDUCATION (Degree, Year, Specialization)                      BS/2000/Civil Engineering Technology/Fairmont State College                      AS/1999/Civil Engineering Technology/Fairmont State College                      AS/1996/General Business/Glenville State College</p>			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS			
American Society of Civil Engineers			
<p>13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)</p>			
NAME & TITLE (Last, First, Middle Int.)	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Tucker, Shawn D. Brief Explanation of Responsibilities	0	0	5
<p>Project Manager and Project Engineer for numerous airport improvements projects throughout the state. Also assists with site development drainage design and utility design. Experience includes preparation of construction plans and specifications, and permit applications.</p>			
<p>EDUCATION (Degree, Year, Specialization)                      AS/2001/Civil Engineering Technology/Fairmont State College                      BS/2003/Civil Engineering Technology/Fairmont State College</p>			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS			
American Society of Civil Engineers			

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Deal, Matthew G.	0	0	1

Brief Explanation of Responsibilities  
 Project Engineer for stormwater, utility, site development, and highway projects for the firm. Experience includes preparation of construction plans and specifications, and permit applications.

EDUCATION (Degree, Year, Specialization)

BS/2007/Civil Engineering Technology/West Virginia University Institute of Technology

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS  
 American Society of Civil Engineers

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Hoy, David, C.	0	0	2

Brief Explanation of Responsibilities  
 Project Engineer for the investigation, analysis, and design of various structural systems including foundation design. Also, assists with site development, drainage design and utility design. Experience includes preparation of construction plans, and specifications, and permit applications.

EDUCATION (Degree, Year, Specialization)

BS/2006/Civil Engineering/West Virginia University

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS  
 American Society of Civil Engineers  
 Engineer Intern/2006/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 DOMESTIC WATERLINE DESIGN EXPERIENCE:
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	
Brown, Fred L. Brief Explanation of Responsibilities CADD Manager for Chapman Technical Group. Duties and responsibilities include production of construction plans for all work of firm, including waterline extension projects. EDUCATION (Degree, Year, Specialization) AS/1997/Drafting/CAD/Carver Career Center Forestry Degree (20 Hours Completed)/1988/Glenville State College AUTOCAD14 Training Class	0	0	11
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS National Vocational-Technical Honor Society (NV-THS)			
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 DOMESTIC WATERLINE DESIGN EXPERIENCE:
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	
Farnham, John R. Brief Explanation of Responsibilities CADD Technician responsible for preparation of construction plans for all types of work for Chapman Technical Group including waterline extension plans. EDUCATION (Degree, Year, Specialization) ASET/1971/Drafting and Design Technology/Center College	0	0	34
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS			

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:
Duncan, Dennis N.	0	0
Brief Explanation of Responsibilities		
CADD Technician responsible for preparation of construction plans for all types of work for Chapman Technical Group, including <u>waterline extension plans</u> .		
EDUCATION (Degree, Year, Specialization)		
1996/Mountain CADD		
1994/West Virginia State College		
1992/Putnam County Vocational School		
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		
American Drafting and Design Association		
13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)		
NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE	
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:
Acord, Lisa D.	0	0
Brief Explanation of Responsibilities		
CADD Technician responsible for preparation of construction plans for all types of work for Chapman Technical Group including <u>waterline extension plans</u> .		
EDUCATION (Degree, Year, Specialization)		
BS/1997/Industrial Technology/West Virginia University Institute of Technology		
AS/1995/Drafting and Design Engineering Technology/West Virginia University Institute of Technology		
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		
American Drafting and Design Association		

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)			
NAME & TITLE (Last, First, Middle Int.)	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Garton, Matthew B.	0	0	2
Brief Explanation of Responsibilities CADD Technician responsible for preparation of construction plans for all types of work for Chapman Technical Group, including waterline extension plans.			
EDUCATION (Degree, Year, Specialization)			
AAS/2005/Drafting and Design Engineering Technology/Fairmont State University			
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 AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Starcher, Ashley N.	0	0	2
Brief Explanation of Responsibilities CADD Technician responsible for preparation of construction plans for all types of work for Chapman Technical Group, including waterline extension projects.			
EDUCATION (Degree, Year, Specialization)			
AS/2007/Drafting/CAD/Carver Career 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 DOMESTIC WATERLINE DESIGN EXPERIENCE:
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	
Jones, Richard L. Brief Explanation of Responsibilities CADD Technician responsible for preparation of construction plans for all types of work for Chapman Technical Group, including waterline inspection plans.	0	0	4
EDUCATION (Degree, Year, Specialization)			
2003/Ben Franklin Vocational/Technical 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 DOMESTIC WATERLINE DESIGN EXPERIENCE:
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	
Lawrence, Brian W. Brief Explanation of Responsibilities Professional Surveyor for Chapman Technical Group, experience includes mapping related surveying, boundary surveying, plat preparation, deed descriptions, etc. for all work of the firm including waterline extension projects.	0	0	13
EDUCATION (Degree, Year, Specialization)			
AS/1995/Land Surveying/Glenville State College			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS			
REGISTRATION (Type, Year, State)			
West Virginia Association of Land Surveyors Professional Surveyor/2002/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:
Painter, Matthew G. Brief Explanation of Responsibilities Surveyor for Chapman Technical Group, experience includes mapping, related surveying, boundary surveys, plat preparation, deed descriptions, etc., for all work of the firm including waterline extension projects. EDUCATION (Degree, Year, Specialization) AS/1999 Land Surveying/Glenville State College MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS REGISTRATION (Type, Year, State)	0	0	0
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

Environmental Engineering:

Haestad Methods WaterCAD with AutoCAD

Haestad Methods StormCAD v 4.1.1

Haestad Methods Flowmaster PE v 6.1

Haestad Methods Culvert Master v 2.0

Haestad Methods NWS - Dam Breach Wave Analysis

KYPIPE3 - 4,000 Pipe Version

Sigma Flow Analysis and Data Collection Equipment

Uni-flange - Pipe Thrust Restraint Design Program

CIPP Designer 2.0

Hardware Surveying:

GPS - Leica SR20 Survey Grade, Single Frequency Units with Onboard Data Collection

Topcon GTS-300 Total Station, 1 Second Accuracy/0.5 Second Display

Topcon AT-G3 Auto Level

Carlson Explorer II Data Collector

HP48GX Calculator/Data Collector

CAD Production:

AutoCAD 2008

Bentley MicroStation J

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
Corporation of Shepherdstown Wastewater System Improvements	Corporation of Shepherdstown Post Office Box 248 Shepherdstown, WV 25443	Design and Construction Phase Services	\$15,000,000	10%
Corporation of Shepherdstown Wastewater System Improvements	Corporation of Shepherdstown Post Office Box 248 Shepherdstown, WV 254443	Design and Construction Phase Services	\$ 7,813,950	30%
Elkins Road Phase III Water System Improvements	Elkins Road Public Service District RR 2 Box 105 Buckhannon, WV 26210	Design and Construction Phase Services	\$ 8,600,000	10%
City of Elkins Water Department Water System Improvements	City of Elkins 401 Davis Avenue Elkins, WV 26241	Design and Construction Phase Services	\$24,000,000	60%
Town of Monongah Water System Improvements	Town of Monongah Post Office Box 9119 Monongah, WV 26554	Design and Construction Phase Services	\$ 5,000,000	75%
Boone County PSD Wastewater System Improvements	Boone County PSD Post Office Box 287 Danville, WV 25053	Design and Construction Phase Services	\$ 5,600,000	85%
City of Belington Wastewater System Improvements	City of Belington Post Office Box 926 Belington, WV 26250	Design and Construction Phase Services	\$ 4,000,000	50%
Town of Harman Wastewater System Improvements	Town of Harman Town Hall Post Office Box 131 Harman, WV 26270	Design and Construction Phase Services	\$ 3,400,000	75%
City of Lewisburg Water System Improvements	City of Lewisburg Post Office Box 548 Lewisburg, WV 24901	Design and Construction Phase Services	\$ 2,000,000	50%
City of St. Albans Water System Improvements	City of St. Albans Post Box 1270 St. Albans, WV 25177	Design and Construction Phase Service	\$ 8,000,000	10%
TOTAL NUMBER OF PROJECTS: 10			TOTAL ESTIMATED CONSTRUCTION COSTS: \$83,413,950	



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
Rehabilitate Runway 6-24	Logan County Airport Authority Post Office Box 1973 Logan, WV 25601	Design and Construction Phase Services	\$ 2,137,507	25%
Install Main Apron Lighting	Wyoming County Commission Main and Bank Street Post Office Box 309 Pineville, WV 24874	Design and Construction Phase Services	\$ 129,174	50%
Relocate Runway Threshold and Navids for GPS Approach	Philippi-Barbour County Regional Airport Authority 124 North Main Street Philippi, WV 26416	Design and Construction Phase Services	\$ 185,305	90%
Construct Runway Safety Area	Mercer County Airport Authority Route 5, Box 202 Bluefield, WV 24701	Design and Construction Phase Services	\$ 2,942,000	20%
Construct New Airport (Runway 8-26)	Mingo County Airport Authority Post Office Box 1408 Williamson, WV 25661	Design and Construction Phase Services	\$ 3,919,016	10%
Construct Runway 17-35	Eastern WV Regional Airport Authority 180 Aviation Way Martinsburg, WV 25401	Design and Construction Phase Services	\$ 3,416,000	10%
Rehabilitate Main Apron	Raleigh County Airport Authority 176 Airport Circle Beaver, WV 25813	Design and Construction Phase Services	\$ 485,515	90%
TOTAL NUMBER OF PROJECTS: 7		TOTAL ESTIMATED CONSTRUCTION COSTS:	\$ 13,211,517	

16. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A 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
U.S. Department of Energy Records Storage Facility	Site/Civil Design Landscape Architecture	Einhorn Yaffee Prescott Architecture & Engineering 1000 Potomac Street, NW Washington, DC 20007	2008	\$ 7,400,000	\$1,000,000
Huntington VA Medical Center	Site/Civil Design Landscape Architecture	Huntington VA Medical Center Huntington, WV	2008	\$ 3,000,000	\$2,000,000
Statewide Fish Hatchery Assessment	Civil Design Surveying	WVDNR Fish & Wildlife Resources Capitol Complex Charleston, WV 25305	2010	\$20,000,000	\$4,000,000

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	COMPLETED (YES OR NO)
Clay County PSD Water System Improvements	Clay County PSD Post Office Box 130 Clay, WV 25043	\$5,700,000	2007	Yes
Beckley Water Company Glade Creek WTP Renovation	Beckley Water Company Post Office Box 2400 Beckley, WV 25802	\$4,500,000	2007	Yes
Spring Run Fish Hatchery Wastewater System Improvements	WVDNR Fish and Wildlife 1900 Kanawha Boulevard, East Charleston, WV 25305	\$3,000,000	2007	Yes
Construct Exit Taxiways	Raleigh County Airport Authority 176 Airport Circle Beaver, WV 25813	\$ 692,097	2006	Yes
Rehabilitate Runway 14-32	Elkins-Randolph County Airport Authority Route 1, Box 271-1 Elkins, WV 26241	\$ 517,100	2006	Yes
Construct Runway Safety Area	Mercer County Airport Authority Route 5, Box 202 Bluefield, WV 24701	\$ 395,670	2006	Yes
Construct Portion Taxiway E	Eastern WV Regional Airport Authority 180 Aviation Way Martinsburg, WV 25401	\$1,446,512	2006	Yes
Construct Runway Safety Area	Wyoming County Commission Post Office Box 309 Pineville, WV 24874	\$ 468,466	2006	Yes
Vienna Senior Center	City of Vienna Vienna City Building 609 29 <sup>th</sup> Street Vienna, WV 26105	\$5,600,000	2006	Yes
City of Belington Water System Improvements	City of Belington Post Office Box 926 Belington, WV 26250	\$5,600,000	2006	N/A
City of Elkins Water Department Comprehensive Report	City of Elkins 401 Davis Avenue Elkins, WV 26241	\$ 150,000 (Fee)	2006	N/A

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM HAS THE DESIGNATED ENGINEER OF RECORD		NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	COMPLETED (YES OR NO)
PROJECT NAME, TYPE AND LOCATION					
City of Beckley Piney Creek Interceptor Sewer Replacement		City of Beckley Sanitary Board Post Office Box AC 301 South Heber Street Beckley, WV 25802	\$12,000,000	2006	Yes
Eastern WV Regional Airport Authority Terminal Building		Eastern WV Regional Airport Authority 180 Aviation Way Martinsburg, WV 25401	\$ 1,200,000	2005	Yes
Elkins Road PSD Phase II Improvements		Elkins Road PSD Route 2, Box 105 Buckhannon, WV 26201	\$ 5,000,000	2005	Yes Water System
City of Thomas Water System Improvements		City of Thomas Thomas, WV 26292	\$ 3,200,000	2005	Yes
Culloden PSD Wastewater System Improvements		Culloden PSD Post Office Box 405 Culloden, WV 25510	\$ 1,100,000	2005	Yes
WV Route 85 Lacey Branch Bridge Replacement		WV Department of Transportation Division of Highways 1900 Kanawha Boulevard, East Charleston, WV 25305	\$ 1,200,000	2004	No
Stepping Stones Boys Home Renovation of Residence		WV Department of Transportation Division of Highways 1900 Kanawha Boulevard, East Charleston, WV 25305	\$ 600,000	2004	Yes
Babcock & Camp Creek State parks Water Tank Replacement		WVDNR Parks & Recreation 1900 Kanawha Boulevard, East Charleston, WV 25305	\$ 150,000	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	COMPLETED (YES OR NO)
Upshur County Regional Airport Runway Extension	Buckhannon-Upshur County Airport Authority Upshur County Courthouse Annex 38 West Main Street Buckhannon, WV 26201	\$ 1,228,000	2004	Yes
Boone County PSD Julian Water Extension	Boone County PSD Post Office Box 287 Danville, WV 25053	\$ 3,000,000	2004	Yes
Fairmont District I Office	WVDNR - Wildlife Division Building 3, Room 819 1900 Kanawha Boulevard, East Charleston, WV 25305	\$ 1,777,000	2003	Yes
Mason County Fish Hatchery	WVDNR - Wildlife Resources Building 3, Room 819 1900 Kanawha Boulevard, East Charleston, WV 25305	\$ 1,300,000	2003	Yes
WVSSC Office Addition	WV Soil Conservation District 1900 Kanawha Boulevard, East Charleston, WV 25305	\$ 250,000	2003	Yes
Mountaineer Challenge Academy	WV Army National Guard 1703 Coonskin Drive Charleston, WV 25311	\$ 100,000	2003	Yes
City of Fairmont Water System Improvements	City of Fairmont Water Department Post Office Box 1428 Fairmont, WV 26555	\$24,000,000	2003	Yes

18. CHECKED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM IS BEEN A SUB-CONSULTANT TO OTHER FIRMS (INDICATE CASE OR 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
Job Corps Center Site & Utility Design	US Department of Labor Division of Acquisition & Assistance 200 Constitution Avenue, NW Washington, DC 20210	\$ 1,500,000	1997	Yes	ZMM, Inc.
West Virginia University National Resources Center Site Development	West Virginia University Morgantown, WV 26506	\$ 675,000	1997	Yes	Architectural Planning & Design
Yeager Airport, Terminal Expansion & Renovations Mechanical, Structural, Electrical, Civil Engineering	Central WV Regional Airport Yeager Airport Charleston, WV 25312	\$ 3,100,000	1997	Yes	Black & Veatch
Beckley Federal Courthouse Site Design & Landscape Architecture	GSA/Mid Atlantic Region The Wannamaker Building 100 Penn Square, East Philadelphia, PA 19107-3396	\$27,000,000	1997	Yes	Einhorn, Yaffee & Prescott

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.

Since 1984, Chapman Technical Group has been responsible for the planning, design, and construction phase engineering services on numerous water system improvements projects throughout West Virginia. Our experience with water system improvements projects ranges from small systems serving only a small number of customers, to some of the largest systems in the state serving nearly 50,000 people, and includes rehabilitation of existing facilities.

20. The foregoing is a statement of facts.

Signature: Robert G. Belcher Title: P.E., Vice President, Engineering Date: October 8, 2008

Printed Name: Robert G. Belcher

