

St. Marys Correctional Center Facility Infrastructure Improvements

West Virginia Division of Corrections

St. Marys, West Virginia

Proposal to Provide Engineering Services

RFQ# COR61531

June 12, 2012



**Chapman
Technical
Group**



June 12, 2012



Ms. Tara Lyle
State of West Virginia
Purchasing Division
Post Office Box 50130
2019 Washington Street, East
Charleston, West Virginia 25305-0130

**Re: St. Marys Correctional Center
Facility Infrastructure Improvements
RFQ# COR61531**

Dear Ms. Lyle and Selection Committee:

Chapman Technical Group is extremely interested in providing professional engineering services to the Division of Corrections for the proposed St. Marys Correctional Center improvements project listed in your Expression of Interest. We are a full-service engineering and architectural consulting firm with offices located in St. Albans, Buckhannon, and Martinsburg, West Virginia, with the ability to perform all of the required work with our current in-house staff of over 40 personnel.

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

I am enclosing one (1) original and six (6) copies of our Statement of Qualifications outlining our capabilities, representative project experience listings, resumes on the professionals in our firm, and other information regarding our ability to provide professional engineering services in a timely manner and within budget. For references, we encourage you to contact representatives involved with any of the projects listed in the Project Experience or References sections of this proposal concerning our performance on past or present projects. For additional information on our firm, please visit our website at www.chaptech.com.

Chapman Technical Group has the experience, technical qualifications, and commitment to client satisfaction needed to assist you with the successful completion of your projects. We would welcome the opportunity to personally present our firm's capabilities to your selection committee and look forward to hearing from you.

Very truly yours,

CHAPMAN TECHNICAL GROUP

Robert G. Belcher, P.E.
Senior Vice President, Engineering

200 Sixth Avenue
St. Albans, WV 25177

304.727.5501
FAX 304.727.5580

Buckhannon, WV
Martinsburg, WV

www.chaptech.com

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WV PURCHASING
DIVISION



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

Request for Quotation

RFQ NUMBER
 COR61.531

PAGE
 1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
 TARA LYLE
 304-558-2544

RFQ COPY
 TYPE NAME/ADDRESS HERE

VENDOR

Chapman Technical Group
 200 Sixth Avenue
 St. Albans, WV 25177

SHIP TO

DIVISION OF CORRECTIONS
 ST. MARYS CORRECTIONAL CENTER
 (COLIN ANDERSON CENTER)
 STATE ROUTE 2
 ST. MARYS, WV
 26170 304-558-2036

| DATE PRINTED | TERMS OF SALE | SHIP VIA | F.O.B. | FREIGHT TERMS |
|--------------|---------------|----------|--------|---------------|
| 04/20/2012 | | | | |

BID OPENING DATE: 06/12/2012 BID OPENING TIME 01:30PM

| LINE | QUANTITY | UOP | CAT. NO. | ITEM NUMBER | UNIT PRICE | AMOUNT |
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| 0001 | 1 | JB | | 906-00-00-001 | | |
| ARCHITECT/ENGINEERING SERVICES, PROFESSIONAL | | | | | | |
| EXPRESSION OF INTEREST (EOI) | | | | | | |
| THE WEST VIRGINIA PURCHASING DIVISION FOR THE AGENCY, WV DIVISION OF CORRECTIONS, IS SOLICITING EXPRESSIONS OF INTEREST FOR PROFESSIONAL ARCHITECTURAL ENGINEERING DESIGN SERVICES TO CORRECT VARIOUS ISSUES DEALING WITH A GREASE TRAP, MUFFIN MONSTER, STORM WATER LINES, SEWER LINES AND OTHER PROJECTS AT THE ST. MARYS CORRECTIONAL CENTER PER THE ATTACHED SPECIFICATIONS. | | | | | | |
| TECHNICAL QUESTIONS MUST BE SUBMITTED IN WRITING TO TARA LYLE VIA MAIL AT THE ADDRESS SHOWN IN THE BODY OF THIS EOI, VIA FAX AT 304-558-4115, OR VIA EMAIL AT TARA.L.LYLE@WV.GOV. | | | | | | |
| DEADLINE FOR ALL TECHNICAL QUESTIONS IS 05/23/2012 AT THE CLOSE OF BUSINESS. ANY TECHNICAL QUESTIONS RECEIVED WILL BE ANSWERED BY FORMAL ADDENDUM ISSUED BY THE PURCHASING DIVISION AFTER THE DEADLINE HAS LAPSED. | | | | | | |
| MANDATORY PRE-BID | | | | | | |
| A MANDATORY PRE-BID WILL BE HELD ON 05/15/2012 AT 10:30 AM AT THE ST. MARYS CORRECTIONAL CENTER. ALL INTERESTED PARTIES ARE REQUIRED TO ATTEND THIS MEETING. FAILURE TO ATTEND THE MANDATORY PRE-BID SHALL RESULT IN DISQUALIFICATION OF THE BID. NO ONE PERSON MAY | | | | | | |

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| SEE REVERSE SIDE FOR TERMS AND CONDITIONS | | | | | | |
| SIGNATURE | | | TELEPHONE | | DATE | |
| TITLE | | FEIN | | ADDRESS CHANGES TO BE NOTED ABOVE | | |

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



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| TARA LYLE 304-558-2544 |

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| <p>REPRESENT MORE THAN ONE BIDDER.</p> <p>AN ATTENDANCE SHEET WILL BE MADE AVAILABLE FOR ALL POTENTIAL BIDDERS TO COMPLETE. THIS WILL SERVE AS THE OFFICIAL DOCUMENT VERIFYING ATTENDANCE AT THE MANDATORY PRE-BID. FAILURE TO PROVIDE YOUR COMPANY AND REPRESENTATIVE NAME ON THE ATTENDANCE SHEET WILL RESULT IN DISQUALIFICATION OF THE BID. THE STATE WILL NOT ACCEPT ANY OTHER DOCUMENTATION TO VERIFY ATTENDANCE. THE BIDDER IS RESPONSIBLE FOR ENSURING THEY HAVE COMPLETED THE INFORMATION REQUIRED ON THE ATTENDANCE SHEET. THE PURCHASING DIVISION AND THE STATE AGENCY WILL NOT ASSUME ANY RESPONSIBILITY FOR A BIDDER-S FAILURE TO COMPLETE THE PRE-BID ATTENDANCE SHEET. IN ADDITION, WE REQUEST THAT ALL POTENTIAL BIDDERS INCLUDE THEIR E-MAIL ADDRESS AND FAX NUMBER.</p> <p>ALL POTENTIAL BIDDERS ARE REQUESTED TO ARRIVE PRIOR TO THE STARTING TIME FOR THE PRE-BID. BIDDERS WHO ARRIVE LATE, BUT PRIOR TO THE DISMISSAL OF THE TECHNICAL PORTION OF THE PRE-BID WILL BE PERMITTED TO SIGN IN. BIDDERS WHO ARRIVE AFTER CONCLUSION OF THE TECHNICAL PORTION OF THE PRE-BID, BUT DURING ANY SUBSEQUENT PART OF THE PRE-BID WILL NOT BE PERMITTED TO SIGN THE ATTENDANCE SHEET.</p> <p>CANCELLATION: THE DIRECTOR OF PURCHASING RESERVES THE RIGHT TO CANCEL THIS CONTRACT IMMEDIATELY UPON WRITTEN NOTICE TO THE VENDOR IF THE COMMODITIES AND/OR SERVICES SUPPLIED ARE OF AN INFERIOR QUALITY OR DO NOT CONFORM TO THE SPECIFICATIONS OF THE BID AND CONTRACT HEREIN.</p> <p>BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THE STATE MAY DEEM THE CONTRACT NULL AND VOID, AND TERMINATE SUCH CONTRACT WITHOUT FURTHER ORDER.</p> | | | | | | |

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

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| <p>ANY INDIVIDUAL SIGNING THIS BID IS CERTIFYING THAT: (1) HE OR SHE IS AUTHORIZED BY THE BIDDER TO EXECUTE THE BID OR ANY DOCUMENTS RELATED THERETO ON BEHALF OF THE BIDDER, (2) THAT HE OR SHE IS AUTHORIZED TO BIND THE BIDDER IN A CONTRACTUAL RELATIONSHIP, AND (3) THAT THE BIDDER HAS PROPERLY REGISTERED WITH ANY STATE AGENCIES THAT MAY REQUIRE REGISTRATION.</p> <p style="text-align: center;">NOTICE</p> <p>A SIGNED BID MUST BE SUBMITTED TO:</p> <p style="text-align: center;">DEPARTMENT OF ADMINISTRATION PURCHASING DIVISION BUILDING 15 2019 WASHINGTON STREET, EAST CHARLESTON, WV 25305-0130</p> <p>THE BID SHOULD CONTAIN THIS INFORMATION ON THE FACE OF THE ENVELOPE OR THE BID MAY NOT BE CONSIDERED:</p> <p>SEALED BID</p> <p>BUYER:-----TL/32-----</p> <p>RFQ. NO.:-----COR61531-----</p> <p>BID OPENING DATE:-----06/12/2012-----</p> <p>BID OPENING TIME:-----1:30 PM-----</p> | | | | | | |

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|--|----------|-----|----------|-------------|------------|--------|
| PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY TO CONTACT YOU REGARDING YOUR BID: <p style="text-align: center;">----- 304-427-5580 -----</p> CONTACT PERSON (PLEASE PRINT CLEARLY): <p style="text-align: center;">----- Robert G. Belcher, PE, Vice President -----</p> | | | | | | |
| ***** THIS IS THE END OF RFQ COR61531 ***** TOTAL: _____ | | | | | | |

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

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| SIGNATURE | TELEPHONE | DATE |
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EXHIBIT 10

REQUISITION NO.: COR61531

ADDENDUM ACKNOWLEDGEMENT

I HEREBY ACKNOWLEDGE RECEIPT OF THE FOLLOWING CHECKED ADDENDUM(S) AND HAVE MADE THE NECESSARY REVISIONS TO MY PROPOSAL, PLANS AND/OR SPECIFICATION, ETC.

ADDENDUM NO.'S:

NO. 1 X - 5-31-12

NO. 2 X - 6-7-12

NO. 3

NO. 4

NO. 5

I UNDERSTAND THAT FAILURE TO CONFIRM THE RECEIPT OF THE ADDENDUM(S) MAY BE CAUSE FOR REJECTION OF BIDS. VENDOR MUST CLEARLY UNDERSTAND THAT ANY VERBAL REPRESENTATION MADE OR ASSUMED TO BE MADE DURING ANY ORAL DISCUSSION HELD BETWEEN VENDOR'S REPRESENTATIVES AND ANY STATE PERSONNEL IS NOT BINDING. ONLY THE INFORMATION ISSUED IN WRITING AND ADDED TO THE SPECIFICATIONS BY AN OFFICIAL ADDENDUM IS BINDING.

Robert G. Belcher

SIGNATURE

Chapman Technical Group

COMPANY

6-8-2012

DATE

RFQ No. COR01531

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

West Virginia Code §5A-3-10a states: No contract or renewal of any contract may be awarded by the state or any 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.

DEFINITIONS:

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

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

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

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

WITNESS THE FOLLOWING SIGNATURE

Vendor's Name: Chapman Technical Group

Authorized Signature: Robert C. Reiche Date: 6-8-2012

State of West Virginia

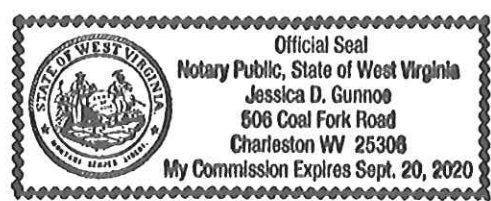
County of Kanawha, to-wit:

Taken, subscribed, and sworn to before me this 12th day of JUNE, 2012.

My Commission expires September 20, 2020.

AFFIX SEAL HERE

NOTARY PUBLIC Jessica D. Gunnoe





Chapman
Technical
Group

1

Plan of Approach

2

**Executive Summary
& Company Overview**

3

Project Experience

4

**Project Team
& Resumes**

5

Ability to Meet Budgets and Deadlines

6

References

7

Quality Control/Quality Assurance

8

Technology Resources

Plan of Approach



ST. MARYS CORRECTIONAL CENTER DESIGN SERVICES FOR FACILITY INFRASTRUCTURE IMPROVEMENTS

The following summary of task represents Chapman Technical Group's proposed plan of approach for the various issues to be corrected at the St. Marys Correctional Center. This listing should not be considered as all inclusive and is offered only as our initial approach to the project, in general terms. As the project scope is further defined as a result of consultation with the Center, its staff and the City of St. Marys, this outline will be expanded and refined and can be utilized to track the progress of the project. Each item is identified by the project description number utilized in RFQ Number COR61531.

3.2.1.1 Grease Trap for Kitchen

First, obtain from the Center all available information concerning the kitchen, possibly including building plans, utility information outside of building, water usage, number of population/staff served and the location of all inside drain lines from site visits and interviews with personnel.

We would anticipate sending the hot water from the dishwasher to a separate tank outside of the building in order to let the water cool before proceeding into the grease trap. Waste from the sinks and disposal would be sent directly to the grease trap. It appears to us that re-plumbing the drain lines inside to one side of the building is not feasible due to the limited amount of time the kitchen is allowed to be down. So, the majority of this work most likely would take place outside with the connections made inside during the kitchen downtime.

3.2.1.2 Muffin Monster®

Once again, through site visits and interview with personnel from the Center and also the City, field surveying, manhole inspections and also obtaining any information available from existing drawings of the collections system, we will evaluate the best alternative for removing/shredding/grinding solids from the waste stream. We feel that, initially and given the small amount of knowledge that we have about the system, the installation of a Muffin Monster® may prove to be a less feasible option than others, in particular at a depth of 12 feet. We feel the possibility of installing a lift station with chopper pumps to macerate the solids and pump the waste back into the gravity portion of the City's collection system should be explored.

3.2.1.3 Unit #83 Storm/Sanitary Water Lines

Preliminary investigation should take place including site visits, interviews, drawing review, smoke and dye testing, video inspection, flow testing, manhole inspections, etc., to determine the best course of action to separate the storm water from the sanitary sewer. The challenge will be in finding a suitable discharge point for the redirected storm water from the building.

We would also most likely recommend the removal and replacement of the two existing manholes with wooden tops in order to further reduce the amount of Inflow/Infiltration the Center sends to the City for treatment.

Plan of Approach



3.2.1.4 Unit #80 Foundation

A site visit to determine the extent of damage due to settlement and also establish the locations for test borings from a geotechnical engineer in order to obtain a soils report will be the first step. By either using existing drawings or field verifying the structural system, the existing structure will have a load analysis performed to determine the foundation loadings. The results of the load analysis and geotechnical report will be use to determine the reason for the settlement. A foundation repair, which may include micropiles, helical piers, compaction grouting, etc., will be designed from the results. A period of settlement monitoring may be required after the corrective measures are made to the foundation in order to establish that the settling issues have been abated. Once convinced that settlement has stopped, cosmetic repairs will be performed to floor slabs, doors, drywall partitions, exterior, masonry, etc.

All structural engineering performed on this project, with the exception of any geotechnical investigation that will take place, will be performed by the current staff of Chapman Technical Group.

3.2.1.5 Broken/Damaged Sewer Lines

Preliminary investigation should take place including site visits, interview, drawing review, smoke and dye testing, video inspection, flow testing, manhole inspections, visual lamping, etc., to determine the inadequacies of the existing collection system and what corrective measures need to take place. Options will include the removal and replacement of manholes and sewer lines, slip lining the existing lines, or the installation of new lines not in place of the old ones.

Addendum No. 1

Backflow Preventer Devices – Preliminary investigation should take including site visits, obtaining water demands for each service, verify residual operating pressures, obtain desired minimum operating pressures, perform hydraulic analysis on water system to determine type of backflow preventer to install, evaluate installing one (1) main backflow preventer on the main domestic service into the facility in lieu of installing individual valves.

Chapman Technical Group will assist the Center through all aspects of this project. Through preliminary to final design, construction administration and observation, and finally project close out. And upon completion of construction, Chapman Technical Group will deliver record drawings of all work that has been performed as part of this project.

Aside from the technical capabilities of our firm, another very important quality of Chapman Technical Group is our communications with our client throughout every project. A critical component of the success of this project will be the development of a close working relationship between the consultant, Correctional Center and its staff, and the City and its staff. Chapman Technical Group realizes the importance of this aspect of the project and our proven track record with client satisfaction has been a large part of our firm's reputation and success.

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 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.

Chapman Technical Group offers a broad range of professional services.

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

Awards



WINNER - "COMMISSIONER'S ENGINEERING ACHIEVEMENT AWARD", WVDOT - DIVISION OF HIGHWAYS - 2011: Large Roadway Category for WV10 North Davy Branch to Rum Creek; 2000: Large Bridge Category for WV10 Buffalo Creek Bridge, Logan County, West Virginia.

AMERICAN INSTITUTE OF ARCHITECTS - MERIT AWARD FOR EXCELLENCE IN ARCHITECTURE, 2009 - Interstate 79 Rest Areas.

AMERICAN SOCIETY OF CIVIL ENGINEERS - NATIONAL - SUPERIOR EMPLOYER AWARD, 2009, Support of Young Professionals in the Private Sector.

AMERICAN COUNCIL OF ENGINEERING COMPANIES-WV - ENGINEERING EXCELLENCE AWARD, 2009, Gold Award - Special Projects Category for the Mercer County Airport Runway Safety Area Project.

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, 2008, Bronze Award - Wastewater Category for the Spring Run State Fish Hatchery Improvements.

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.

FINALIST - "COMMISSIONER'S ENGINEERING ACHIEVEMENT AWARD", WVDOT - DIVISION OF HIGHWAYS - 1999: Large Roadway Category for WV10 Buffalo Creek - Taplin Project; 2000: WV10 Buffalo Creek - Huff Junction Project, both in Logan County, West

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.

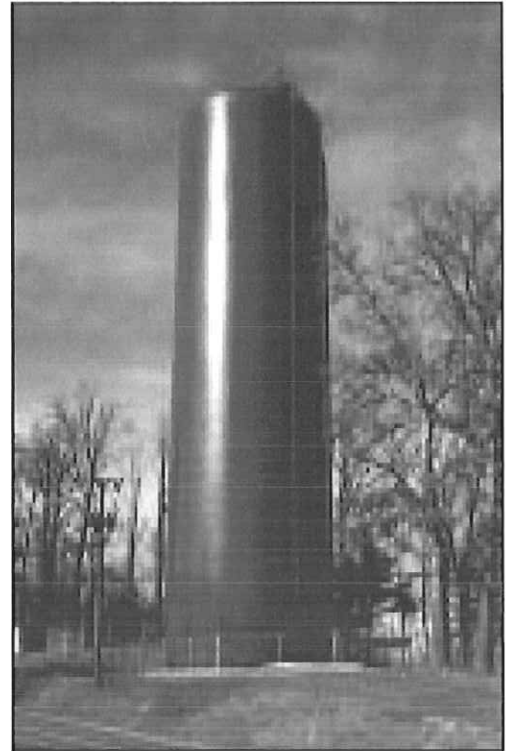
"GEORGE WARREN FULLER AWARD", Harvey R. Chapman, P.E., 1984, Robert G. Belcher, P.E., 2001, and Sharon L. Chapman, 2005, Jeffery D. Ekstrom, P.E., 2010, American Water Works Association, for distinguished service in the water supply field in the State of West Virginia.

Environmental Engineering



Environmental engineering at Chapman Technical Group primarily involves water and wastewater system analysis, planning, design, construction administration, and construction observation services for all aspects of municipal and commercial/industrial projects. Our vast experience in these areas has enabled our firm to become one of the clear leaders in the fields of water, wastewater, and stormwater engineering. This enables the development and betterment of our communities by improving our environment and providing for the public's health, safety, welfare, and convenience.

- Feasibility Studies/Facility Plans
- Water and Wastewater Treatment Design
- Water Distribution and Storage
- Wastewater Collection and Pumping
- Computerized Hydraulic Network Analysis
- I/I Analysis/SSES Studies/CSO Plans
- Stormwater Management Programs



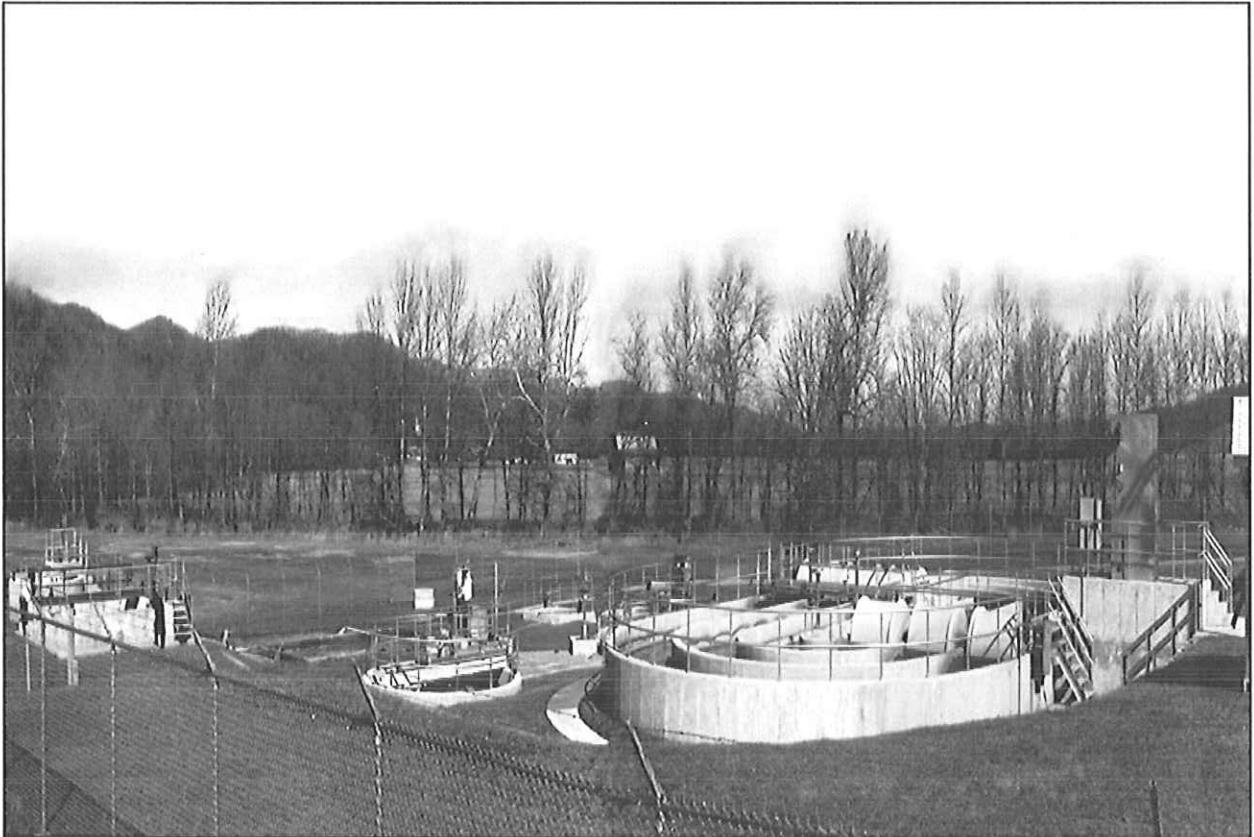
Water Engineering

Chapman Technical Group's experience with water system projects has encompassed new construction as well as renovations and rehabilitation of existing treatment, storage, pumping, and distribution facilities ranging in size from small on-site systems supplying only a handful of people to larger systems supplying approximately 100,000 people. Our firm also provides in-depth comprehensive planning studies, including source of supply studies relating specifically to record and recurring droughts, as well as detailed computerized hydraulic analyses of entire systems in order to identify and eliminate any significant flow and pressure constraints within those systems.



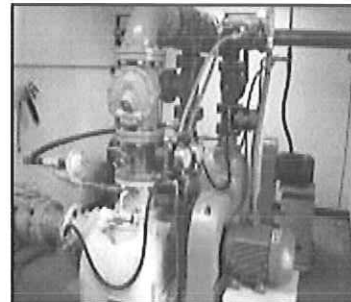
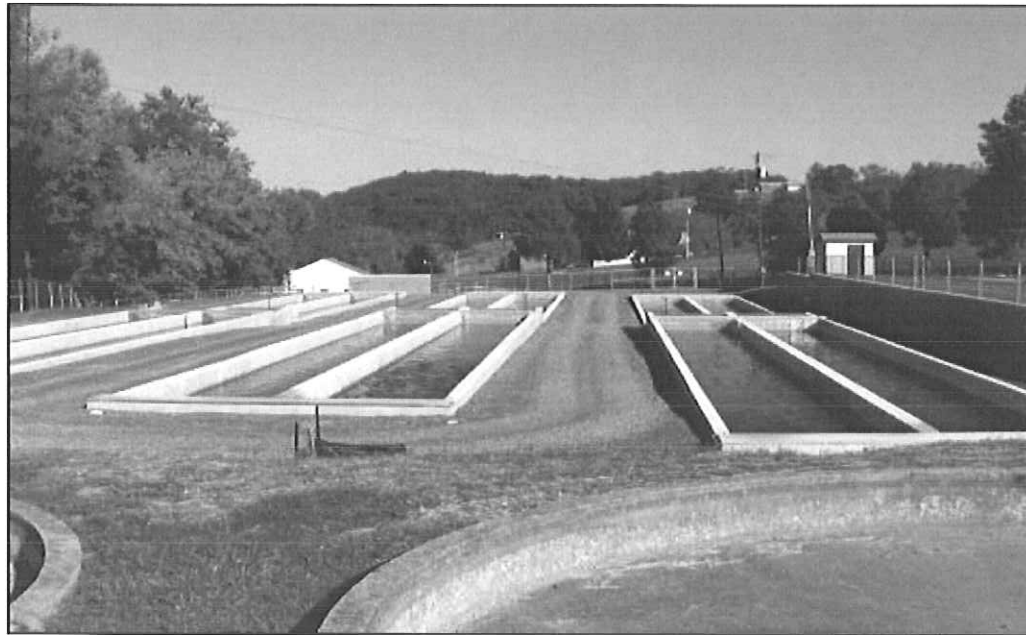
Wastewater Engineering

Chapman Technical Group's experience with wastewater system projects has encompassed new construction as well as renovations and rehabilitation of existing treatment, pumping, and collection facilities ranging in sizes from small on-site systems to larger systems supplying approximately 100,000 people. Our firm also provides in-depth comprehensive facility planning studies, including extensive field investigations for performing detailed infiltration/inflow analysis and subsequent sanitary sewer system evaluation surveys.



Silling Associates, Inc.
405 Capitol Street, Suite 300
Charleston, West Virginia 25301

Design and periodic construction observation services for a new 200,000 GPD wastewater treatment facility and a new main interceptor sewer to serve the Huttonsville Correctional Center including stormwater separation and infiltration/inflow reduction. Project included the renovation of portions of the existing primary treatment plant and incorporating these units in the new plant design to provide a cost savings to the owner. Responsibilities also included the interfacing and coordination with all regulatory agencies having jurisdiction.



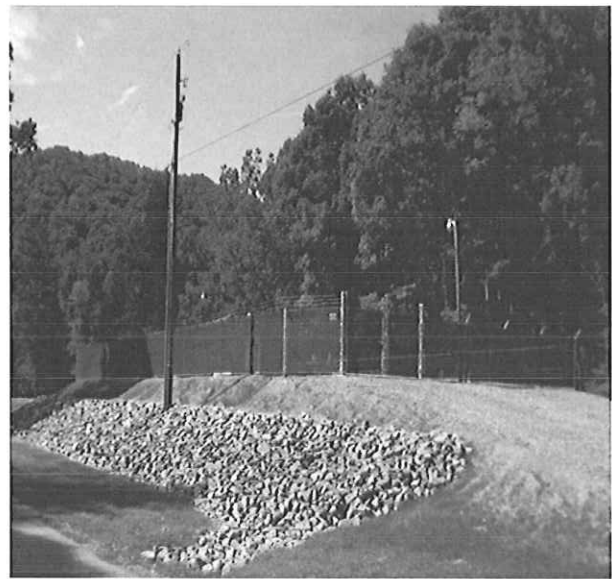
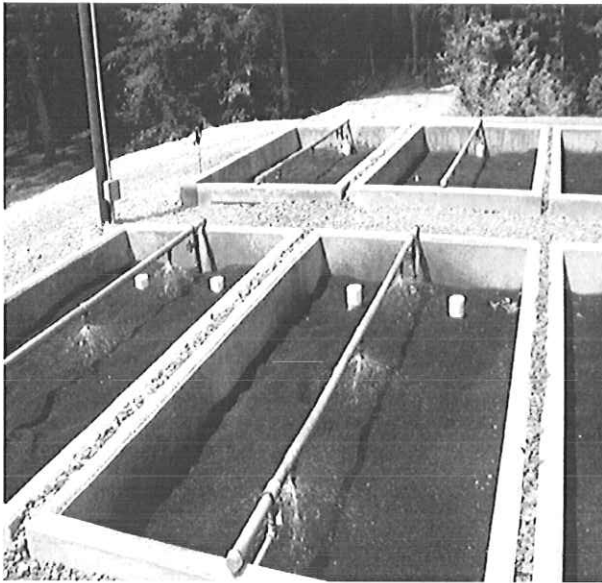
Division of Natural Resources
Building 3, Room 816
1900 Kanawha Boulevard, East
Charleston, West Virginia 25305

Chapman Technical Group provided design and construction observation services for the Spring Run Fish Hatchery project that was completed in 2007. The project consisted of one (1) 25'-0" diameter batch clarifier; one (1) 20'-0" diameter sludge holding tank; sludge transfer pump station with two (2) 350 GPM self priming, centrifugal solids handling pumps; new effluent composite sampling and flow measurement system; new outfall structure; 860 linear feet of 12" 15" and 18" HDPE/DIP gravity sewer pipe; 1,000 linear feet of 8", 10" 12" and 16" DIP waterlines; (27) 8", 10", 12" and 16" gate valves; 13 pre-cast concrete manholes; structural crack repairs to existing raceways; piping modifications to existing raceways; removal of two existing concrete rearing ponds and associated electrical work; three (3) new 2 pass concrete raceways and associated piping; and site work and access road improvements.



WV DNR – Camp Creek State Park Wastewater System Improvements

08062



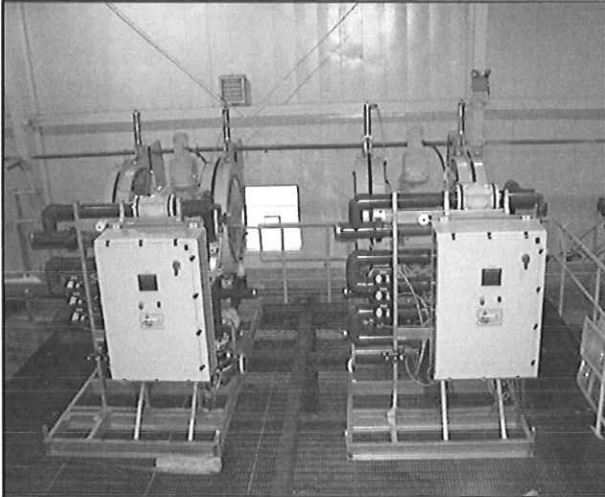
The West Virginia Division of Natural Resources, Parks and Recreation Department, retained Chapman Technical Group to provide design and construction phase services for a wastewater collection and treatment system at Camp Creek State Park in Mercer County, West Virginia. The existing facilities were served with septic tanks and leach fields which were failing due to shallow rock, a high groundwater table, and overloading during seasonal peak flows. The initial phase of the project was completed in July of 2010 and included a 6,400 GPD re-circulating sand filter wastewater treatment plant with UV disinfection and a grinder pump station which serves the superintendent's residence as well as the park's RV dump station. The treatment plant was constructed on engineered fill to elevate it above the historical high water level. Both the treatment plant and pump station were designed to facilitate future expansions of the wastewater system to pick up other park facilities when funding becomes available.

WV DNR
Parks & Recreation Department
Project Cost: \$525,723
Construction Cost: \$488,123

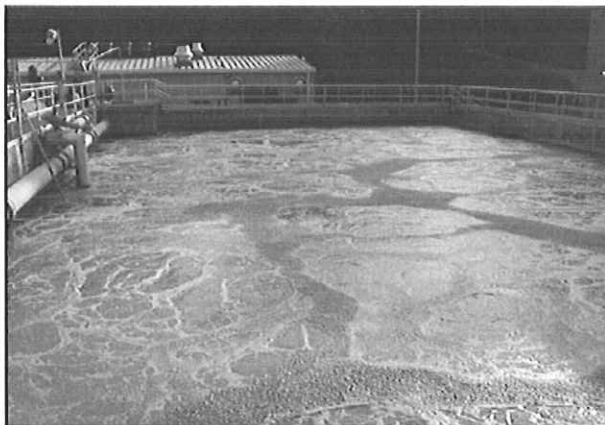


Sanitary Board of Bluefield - Wastewater Treatment Upgrades

09039



The team of Chapman Technical Group and Willis Engineering was hired in April of 2009 by the Sanitary Board of Bluefield to provide funding application preparation, design, bidding, construction administration, and construction observation services for the Westside Wastewater Treatment Plant Equipment Upgrade project. The Sanitary Board was seeking funding from the WV DEP's Clean Water SRF, Green Reserve program which was funded by the American Recovery and Reinvestment Act (ARRA) of 2009. The Chapman Technical Group / Willis Engineering project team was able to meet the application deadline by preparing and submitting the PER and IJDC funding application in May of 2009. The project involved replacement of existing EPDM membrane fine bubble diffusers, replacement of existing and outdated sludge presses, installation of post-lime feed with mixing screw conveyor, replacement of new aeration blowers, and installation of a dissolved oxygen control system. Each component of the project was evaluated and designed to improve energy efficiency of the facility which will ultimately result in higher quality effluent as well as significant savings on long term operation and maintenance costs.



Sanitary Board of Bluefield
Post Office Box 998
Bluefield, West Virginia 24701



Town of Harman - Wastewater Treatment Plant

00060



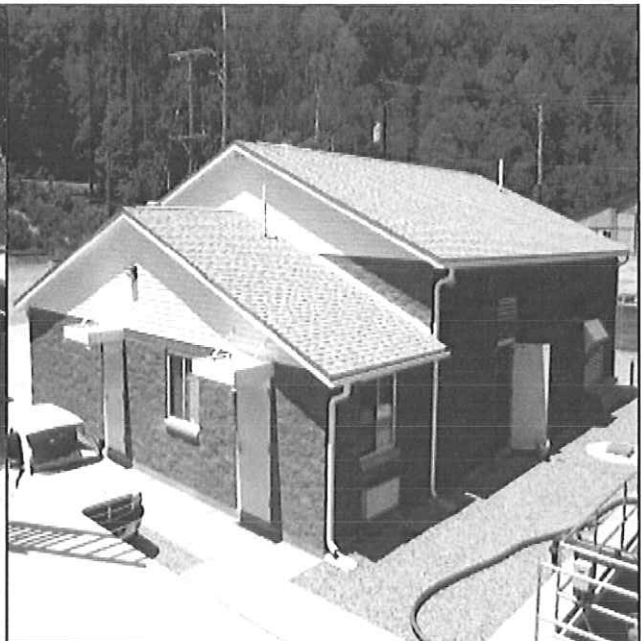
Chapman Technical Group provided design and construction observation services for the Wastewater System Improvements project that was completed in November 2009. The project consisted of the construction of a new wastewater treatment plant and gravity sewer system to serve the Town of Harman, which did not have a centralized public sewer system. The new wastewater treatment plant consists of a new 50,000 GPD wastewater treatment plant, expandable to 100,000 GPD, consisting of pre-screening system; a 50,000 GPD Sequencing Batch Reactor (SBR) system consisting of a Pre-Equalization basin, SBR basin, Post-Equalization basin, and aerobic digester; UV disinfection system; Control Building; plant lift station; site work; plant piping; electrical; emergency generator; and perimeter fencing.

Town of Harman
Post Office Box 125
Harman, West Virginia 26270
Project Cost: \$4,130,952
Construction Cost: \$1,810,000

Wastewater Engineering



Boone County Public Service District - Wastewater Treatment Plant 99031



Chapman Technical Group provided design and construction observation services for the Wastewater System Improvements project that was completed in June 2009. The project consisted of the construction of a new wastewater treatment plant and collection system renovations to transport wastewater to the plant. The new WWTP replaces an existing package plant and 14 septic tanks. The new 200,000 GPD wastewater treatment plant consists of pre-screening system; Control Building; a 200,000 GPD Sequencing Batch Reactor (SBR) system, 48,000 gallon aerobic digester and effluent tank; UV disinfection system; plant lift station; site work; plant piping, electrical; SCADA system; emergency generator; and perimeter fencing.

Boone County Public Service District
Post Office Box 287
Danville, West Virginia 25053
Project Cost: \$7,190,209
Construction Cost: \$2,802,111



Lowes Pump Station By Pass
Post Office Box 248
Shepherdstown, West Virginia 25443

Construction Cost: \$226,000
Project Cost: \$376,000



Chapman Technical Group provided design and construction observation services for the Lowes Pump Station By Pass project that was completed in July 2010. The project consisted of the construction of a 1,000 L.F. 12" PVC gravity sewer that replaced an existing pump station. The project was totally funded through an ARRA "Green Reserve" grant of \$376,000 administered by the WVDEP Clean Water State Revolving Fund Program. The gravity sewer system consisted of 1,000 L.F. of 12" PVC pipe, 10 manholes, 7 service reconnections, and 4 new service connections.



Town of Harman - Wastewater Collection System

00060



Chapman Technical Group provided design and construction observation services for the Wastewater System Improvements project that was completed in November 2009. The project consisted of the construction of a new wastewater treatment plant and gravity sewer system to serve the Town of Harman, which did not have a centralized public sewer system. The new collection system consisted of the construction of 1,304 L.F. of 12", 12,983 L.F. of 8", 4,922 L.F. of 6" and 1,395 L.F. of 4" PVC gravity sewer pipe; 710 L.F. of 8" DIP gravity sewer pipe; 534 L.F. of 8" DIP and 149 L.F. of 4" DIP restrained joint gravity sewer pipe; 90 L.F. of 16", 145 L.F. of 12" and 15 L.F. of 8" steel casing pipe, bore and jack; 95 new manholes; 95 service connections; and miscellaneous surface restoration.

Town of Harman
Post Office Box 126
Harman, West Virginia 26270
Project Cost: \$4,130,952
Construction Cost: \$1,626,446



Culloden Wastewater System Improvements

01022



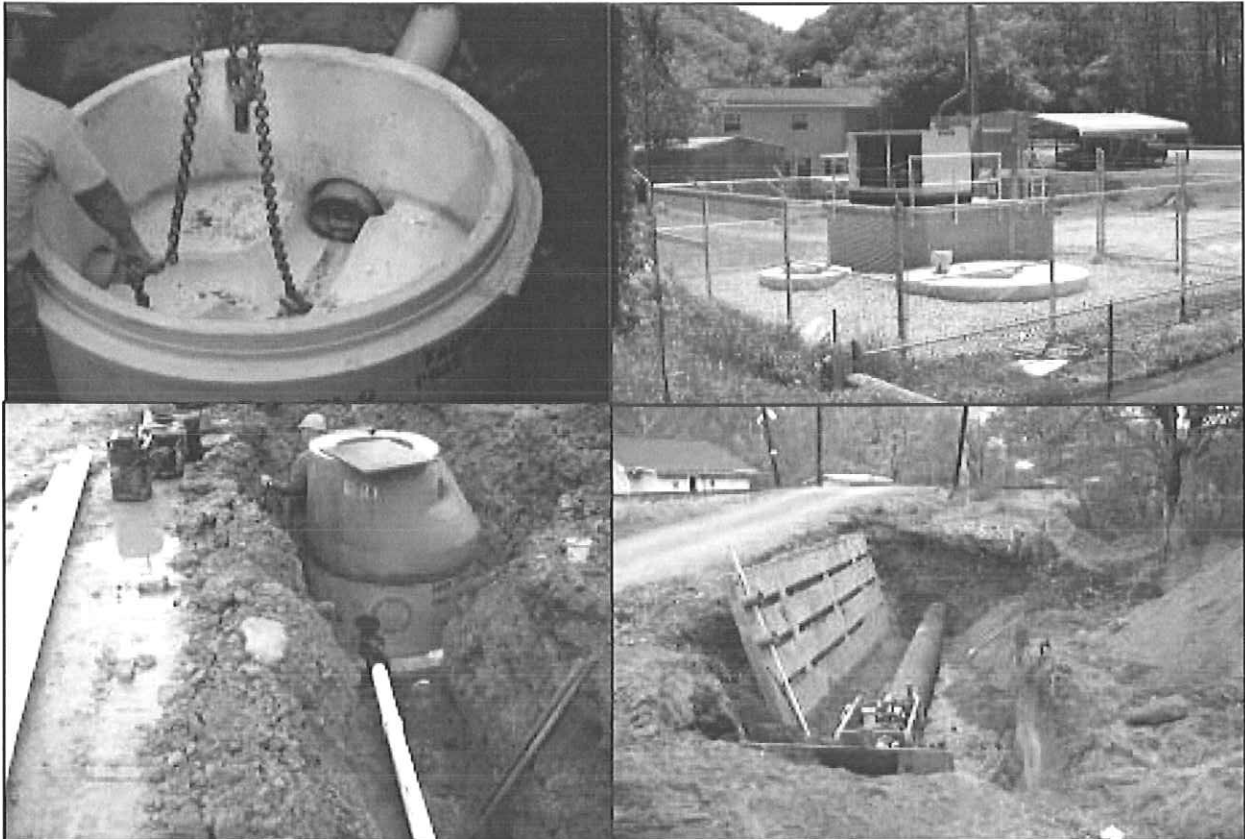
Culloden Public Service District
Post Office Box 405
Culloden, West Virginia 25510-0405

Chapman Technical Group provided design and construction observation services for the Wastewater System Improvements project that was completed in 2007. The project consisted of the removal and replacement of approximately 3,600 feet of existing 8" VCP with 10", 12" 15" and 18" PVC/DIP gravity sewer pipe; installation of approximately 4,670 feet of new 6", 8", 12" and 15" PVC/DIP gravity sewer; 755 feet of 3" PVC force main; 30 new pre-cast concrete manholes; removal and replacement of 17 existing manholes; one (1) new 55 GPM duplex submersible grinder lift station; and the replacement of one (1) existing 180 GPM lift station with a new 180 GPM top-mounted lift station.

Wastewater Engineering



Boone County Public Service District - Wastewater Collection System 99031



Chapman Technical Group provided design and construction observation services for the Wastewater System Improvements project that was completed in June 2009. The project consisted of the construction of a new wastewater treatment plant and collection system renovations to transport wastewater to the plant. The collection system consists of the construction of 437 L.F. of 12", 221 L.F. of 10", 1,328 L.F. of 8" and 55 L.F. of 6" DIP gravity sewer pipe; 2,757 L.F. of 10", 6,831 L.F. of 8" and 5,553 L.F. of 6" PVC gravity sewer pipe; removal and replacement of approximately 270 L.F. of 10" and 1,196 L.F. of 8" PVC; 238 L.F. of 4" DIP ball and socket force main; 2,825 L.F. of 4" and 2,501 L.F. of 3" PVC SDR 21 force main; 124 L.F. of 3" PVC YELOMINE™ force main; 45 L.F. of 1" PE SDR 11 force main 40 L.F. of 24", 110 L.F. of 20", 80 L.F. of 16", 140 L.F. of 12" and 275 L.F. of 8" steel casing pipe, bore and jack; 20 L.F. of 16" steel casing, open-cut; removal and replacement of 12 existing manholes; 81 new manholes; abandonment of existing sanitary sewer lines, manholes, septic tanks and one package plant; several service connections and reconnections; six (6) lift stations; and miscellaneous surface restoration.

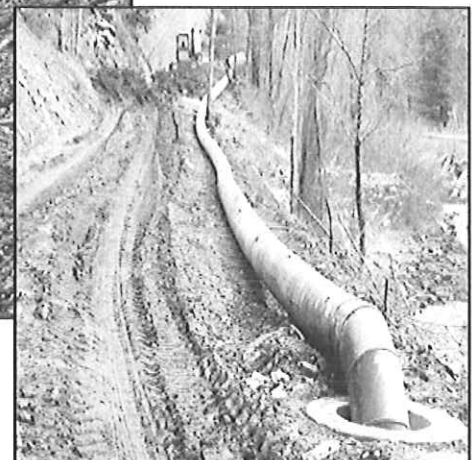
Boone County Public Service District

Post Office Box 287

Danville, West Virginia 25053

Project Cost: \$7,190,209

Construction Cost: \$2,669,884



City of Beckley Sanitary Board
301 South Heber Street
Beckley, West Virginia 25801

The Piney Creek Interceptor handles almost 80% of the flow to the city's wastewater treatment plant and extends nearly five miles from the treatment plant to the Mabscott area. The existing interceptor sewer was plagued with surcharge and overflow problems during storms and the Sanitary Board engaged Chapman Technical Group to design a replacement interceptor. Chapman Technical Group also provided construction observation services and construction administration for this project.

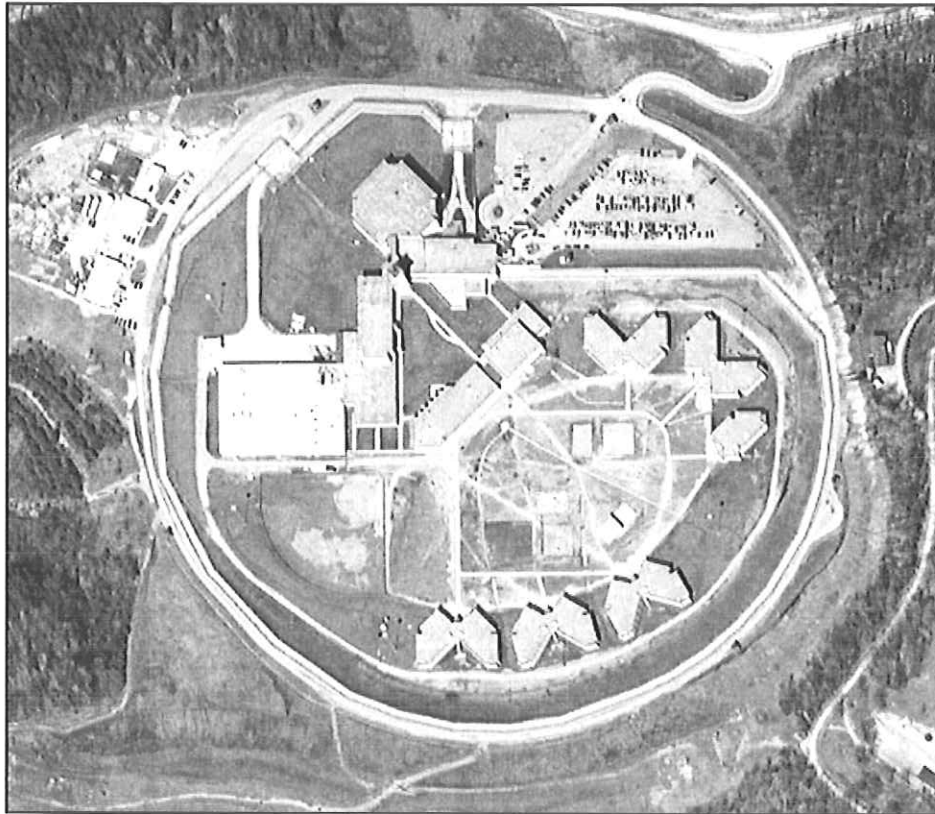
The new interceptor includes 10,700 feet of 30-inch Ductile Iron Pipe (DIP), 15,800 feet of 24-inch DIP, 1,700 feet of 18-inch DIP, and an additional 5,000 feet of collector sewer lines. Bypass pumping, at rates ranging from 6,000 to 11,000 gallons a minute, was used during construction to prevent unauthorized discharges.

The project was constructed in four contracts with a total construction cost of \$9.8 million. This project also eliminated the sole remaining permitted CSO discharge in the Sanitary Board's system.



Mount Olive Correctional Facility

90027



West Virginia Regional Jail and Correctional Authority

1325 Virginia Street, East
Charleston, West Virginia 25301

Design and construction inspection services for all site development project elements for a new 792 bed maximum and medium security state-of-the-art correctional center. Firm's responsibility encompasses all on-site (within the property boundaries of 110-acre site) project civil engineering and landscape architectural design including site grading and drainage, storm sewers, sanitary sewerage, potable and fire water supplies, roads and parking facilities, outdoor recreational facilities, and the interfacing and coordination with engineering consultants providing design of utilities to the property boundaries and with various regulatory agencies.

Project Team



St. Marys Correctional Center

Robert G. Belcher, PE
Project Officer

Jeffery D. Ekstrom, PE
Project Manager

Kennon T. Chambers, PE
Project Engineer

Stephen M. Johnson, PE
Project Engineer

Shelley Watkins Porter, PE
Project Engineer

David C. Hoy, PE
Project Engineer

Fred L. Brown
CADD Manager

John R. Farnham
CADD Technician

Lisa D. Acord
CADD Technician

Jason E. Brown, PS
Professional Surveyor

Arden L. Stull
Sr. Construction Observer

Anthony C. Jackson
Construction Observer

Charles David Cash
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.

29 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, secondary and tertiary wastewater treatment plants as large as 4.5 MGD, improvements to existing plants, small-flow treatment plants, new and rehabilitation of 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 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
WV Qualifications Based Selection (QBS) Council

AWARDS

George Warren Fuller Award, 2001



JEFFERY D. EKSTROM, P.E.
Group Manager
Civil/Environmental Engineering

EDUCATION

West Virginia Institute of Technology, BSCE, 1990

REGISTRATION

Civil Engineering, West Virginia, 1996

Civil Engineering, Kentucky, 2011

Civil Engineering, Ohio, 2011

Civil Engineering, Virginia, 2012

**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.

22 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, EPA Net and KY Pipe.

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, MBR treatment plants to meet Chesapeake Bay treatment requirements, improvements to existing plants, small-flow treatment plants, wastewater collection systems and lift stations, wastewater treatment facility and raceways for fish hatcheries, facility plan updates, and CSO long term control 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, Secretary-Treasurer/WV Section

AWARDS

AWWA George Warren Fuller Award, 2010



KENNON T. CHAMBERS, P.E.
Group Manager
Civil/Environmental Engineering

EDUCATION

West Virginia Institute of Technology, BSCE, 1998

REGISTRATION

Civil Engineering, West Virginia - 2003, Kentucky - 2011, and Virginia - 2012

Model Law Engineer as determined by the National Council of Examiners for Engineering and Surveying (NCEES) with a NCEES record established

PROFESSIONAL HISTORY

January 2010 to Present: Chapman Technical Group
Civil/Environmental Group Manager.

October 2007 to January 2010: 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.

14 years professional experience.

PROJECT EXPERIENCE

Water Systems: Design, construction and construction administration/management of various public and private water system projects including distribution and transmission systems, river crossings, storage tanks, treatment processes, booster stations and automatic meter reading (AMR) systems throughout West Virginia. Hydraulic analysis and modeling of water distribution/transmission systems using WaterCAD.

Wastewater Systems: Design, construction and construction administration/management of various public and private wastewater system projects including collection systems, lift stations and treatment processes throughout West Virginia. Hydraulic analysis of wastewater transmission systems including lift stations using WaterCAD.

AFFILIATIONS

Water Environment Association
American Water Works Association - WV, OH, KY and TN Sections
West Virginia and Ohio Rural Water Associations

MISCELLANEOUS

Class A Commercial Drivers License
PADI Certified Scuba Diver



STEPHEN M. JOHNSON, PE
Group Manager
Civil/Environmental Engineering

EDUCATION

West Virginia Institute of Technology, BSCE, 2004

REGISTRATION

Civil Engineering, West Virginia, 2009
Civil Engineering, North Carolina, 2008
Civil Engineering, Virginia, 2011

EXPERIENCE

January 2009 to Present: Chapman Technical Group
Civil Engineer

October 2006 to January 2009: McKim and Creed
Civil Engineer

May 2004 to October 2006: Chapman Technical Group
Civil Engineer

June 2001 to May 2004: Allegheny Power
Gas Support Technician/Intern

8 years professional experience.

**PROJECT
EXPERIENCE**

Water Systems: Overall experience includes planning, design, bidding, and construction administration/management of various public and private water system projects throughout West Virginia, Virginia, and North Carolina. Specific project experience includes distribution systems, river crossings, horizontal directional drills, wells, raw water intakes, transmission lines, booster stations, treatment plants, ground and elevated water storage tank design, painting, and rehab, SCADA systems computer modeling, treatment process evaluation, and problem troubleshooting in existing systems.

Wastewater Systems: Overall experience includes comprehensive system master plans, design, bidding, construction administration/management of various public and private wastewater system projects throughout West Virginia, Virginia, and North Carolina. Specific project experience includes gravity and low-pressure collection systems, pump stations and force main transmission systems, treatment plant process evaluation and design, trenchless pipeline rehabilitation, bypass pump system design, odor and corrosion control, effluent infiltration ponds, decentralized and alternative on-site disposal systems, and SCADA systems.

Stormwater Systems: Overall experience includes comprehensive system master plans, design, bidding, construction administration/management of various public and private stormwater system projects throughout West Virginia, Virginia, and North Carolina. Specific project experience includes drainage basin hydraulic analysis, stormwater collection, detention and BMP system design, construction stormwater management plan preparation, and MS4 permit guidance.



SHELLEY WATKINS PORTER, P.E.
Civil Engineer

EDUCATION

Marshall University, Huntington, WV
Master of Science in Engineering, 2010
Environmental Engineering Emphasis & Engineering Management Emphasis

West Virginia University Institute of Technology, Montgomery, WV
Bachelor of Science in Civil Engineering, 2006

REGISTRATION

Environmental Engineering, West Virginia, 2012

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.

6 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, treatment facilities, storage tanks, SCADA systems, and
booster stations throughout West Virginia. Troubleshoot problems in existing
systems. Evaluate proposed treatment systems. Distribution system modeling.
Federal and state funding application assistance.

Wastewater Systems: Design, inspection, and construction administration/
management of various public and private wastewater system projects throughout
West Virginia. Video inspection and smoke testing existing collection systems. Lift
station design. Infiltration/inflow analysis. CSO Long Term Control Plan
development and compliance. NPDES permitting. Pond/lagoon treatment evaluation
and design. Energy efficiency upgrade evaluations. Ultra-violet disinfection
evaluation and design. Unit headworks screening design. Preliminary and
Comprehensive Engineering Report development. Federal and state funding
application assistance.

Stormwater Systems: MS4 plan development and stormwater utility development
assistance and compliance.

AFFILIATIONS

American Society of Civil Engineers
American Water Works Association
Order of the Engineer
Engineer's Club of Huntington
Water Environment Federation



DAVID C. HOY, P.E.
Civil/Structural Engineer

EDUCATION

West Virginia University, BSCE, 2006

REGISTRATION

P.E., West Virginia, 2011

**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.

5 years 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

ASCE, Member

WV Section YMF, Treasurer



FRED L. BROWN
CADD Manager

EDUCATION

Carver Career Center, Two Year Drafting/Cad Degree, 1997
Glennville 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.

15 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.

38 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.

15 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 presubsidence 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+ presubsidence surveys in West Virginia and Ohio.



JASON E. BROWN, PS
Professional Surveyor

EDUCATION

West Virginia State College, General Studies, 1991 to 2002
West Virginia Institute of Technology, Paramedic Science, May 1994
Glennville State College, A.S. Land Surveying, 1997 to 2002

REGISTRATION

Professional Surveyor, West Virginia, 2009.

PROFESSIONAL HISTORY

January 2010 to Present: Chapman Technical Group
Professional Surveyor/Survey Project Manager.

January 2008 to January 2010: S&S Engineers
Surveyor Assistant/CADD Technician.

July 2005 to January 2008: Brown Drafting
Owner/Operator.

September 2003 to July 2005: Garcelon Surveying
Surveyor Assistant/CADD Technician.

May 2002 to September 2003: Triad Engineering
Survey Party Chief.

January 1995 to December 2001: Chapman Technical Group
Survey Technician/Junior Construction Representative.

17 years professional experience.

PROJECT EXPERIENCE

Highways: Established control, site surveying, topographic surveying, courthouse research, drawing production, Right-of-Way Questionnaires, bore hole stake out, and all surveying associated with the initial design of West Virginia highways for numerous highway projects throughout the state.

Site Development: All types of surveying associated with site development, to include control, topographic boundaries, research, and drawing production. Projects include military complexes, public housing, commercial development, industrial and institutional complexes, churches, resorts and public facilities throughout the state.

Parks and Recreation: Associated surveying for projects including swimming pools, bathhouses, cabins and support facilities for the West Virginia Division of Natural Resources and similar facilities for county and municipal park systems.

Water and Wastewater Systems: Associated surveying for the design of water systems, sewer systems and water and wastewater facilities for private and public water companies. Projects include water treatment plants, water mains and distribution systems, and collection systems throughout the state.

Airports: Associated surveying for the design of runways, airport facilities, lighting, and asphalt design for holding pads for small and large airport facilities throughout the state.

Boundary Surveys: Provided full boundary surveys and ALTA surveys for military complexes, private residences, prison facilities, commercial sites, and all boundaries associated with various engineering projects throughout the state.

Construction Observation: Provided construction observation, field engineering and testing for numerous water, wastewater and airport projects throughout the state.

AFFILIATIONS

West Virginia Society of Professional Surveyors.



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.

37 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,

36 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.

22 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

| | |
|---|----------------|
| 1. City of St. Albans Water Distribution System Improvements | |
| * Estimated Cost | \$6,000,000.00 |
| * Actual Bid | \$4,853,711.00 |
| * 19.10% Under Engineer's Estimate | |
| 2. City of Beckley Sanitary Board - Pinecrest Sewer Line Replacement | |
| * Estimated Cost | \$467,500.00 |
| * Actual Bid | \$379,000.00 |
| * 15.77% Under Engineer's Estimate | |
| 3. City of Lewisburg Water Storage Tank | |
| * Estimated Cost | \$935,000.00 |
| * Actual Bid | \$895,000.00 |
| * 4.28% Under Engineer's Estimate | |
| 4. Corporation of Shepherdstown Water Storage Tanks | |
| * Estimated Cost | \$3,700,000.00 |
| * Actual Bid | \$3,506,848.00 |
| * 5.22% Under Engineer's Estimate | |
| 5. Huttonsville Correctional Center 150,000 GPD Wastewater Treatment Plant | |
| * 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 |
|--|--------------|----------------------|-------------------|
| 1. Corporation of Shepherdstown Lowes Bypass (Green Reserve) | \$376,000 | 60 days | 45 days |
| 2. St. Albans 1.5 MG Steel Water Tank | \$335,000 | 90 days | 30 days |
| 3. Culloden PSD Water Storage Tank | \$250,000 | 90 days | 30 days |
| 4. Elkins Road PSD Water System Improvements | \$3,500,000 | 120 days | 120 days |
| 5. Greater St. Albans PSD Sewer System | \$3,838,000 | 270 days | 180 days |
| 6. Town of Davis Stormwater System Improvements (Green Reserve) | \$271,000 | 60 days | 30 days |
| 7. Clay - Roane PSD Water System Improvements, Varneytown Extension | \$274,000 | 120 days | 45 days |

References



1. Mr. Frank Welch
Public Works Director

Corporation of Shepherdstown
104 North King Street
Shepherdstown, WV 25443
304-876-3322
2. Honorable Dick Callaway
Mayor

City of St. Albans
1488 MacCorkle Avenue
St. Albans, WV 25177
(304) 727-2971
3. Honorable Joe Drenning
Mayor

Town of Davis
Post Office Box 207
Davis, WV 26260
(304) 259-5302
4. Mr. Greg Fitzwater
Chairman

Clay County Public Service District
Post Office Box 550
Clay, WV 25043
(304) 587-7579
5. Ms. Bonnie Osburn
Office Manager

Culloden Public Service District
100 Spanish Oak Drive
Culloden, WV 25510
(304) 743-6349
6. Mr. Brad Leslie, PE
Assistant Chief

WV Division of Natural Resources
State Parks Section
324 Fourth Avenue, Room 201
South Charleston, WV 25303
(304) 558-2764

Quality Control/ Quality Assurance (QC/QA)



- Chapman Technical Group has an established quality control/quality assurance program enacted through a procedural scheme for acquiring and generating all of our engineering and surveying projects by means of our STARS© Project Manual. This proprietary system is in place to demonstrate to potential and existing clients that we have a quality assurance program in place.
- STARS© is a five-point quality assurance program wherein:
 - o **S** – stands for SCREENING. Chapman Technical Group will only respond to Request for Proposal's (RFP's) from who we believe to be "value-oriented" clients and will not respond to public agencies who are in violation of Chapter 5G of the West Virginia Code.
 - o **T** – stands for TEAMBUILDING. The appropriate Chapman Technical Group personnel are assigned to each project including a Project Manager in accordance with the STARS© Project Manual. Sub-consultants and Resident Construction Observers are identified as well.
 - o **A** – stands for APPROACH. Approach consists of establishing a Project Scope, a preliminary budget and project schedule, assigning duties or tasks to individual team members, and contracting with Owners and sub-consultants.
 - o **R** - stands for REVIEW. Plans, reports, specifications and all addenda released for bidding purposes are stamped by the Registered Professional Engineer responsible for the preparation thereof. Chapman Technical Group's Tech-Check© quality assurance review process document is prepared for and signed off on by the Registered Professional Engineer in charge of project upon his or her exhaustive review.
 - o **S** – stands for SECOND LOOK. The Project Manager shall meet with other key personnel to complete the STARS Completed Project Review Form. Chapman Technical Group also prepares Record Drawings as part of this step as well as preparing the project to be properly archived.

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)
40 Node Category 5 Pair Ethernet
2 Hewlett Packard Gigabit Ethernet Hub
 - Martinsburg Local Area Network (LAN)
12 Node Category 5 Twisted Pair Ethernet
1 Hewlett Packard Gigabit Ethernet Hubs
 - Corporate Wide Area Network (WAN)
T1/Frame Relay Digital Communications Link
3-7.1 Megabit ADSL Lines
2 Cisco 1841 Routers
2 Sonicwall firewalls
Voice over IP Telecommunications links between both offices
- **Servers**
 - HP x 1800 File Server (St. Albans)
 - Sun Fire V-240 - UNIX based file server (St. Albans)
 - HP x 1400 File Server (Buckhannon)
 - Sun Ultra 10 - UNIX based file server (Buckhannon)
- **Peripherals**
 - 2 Oce' TDS 400 Digital Wide Format Printers
 - 2 Hewlett Packard Designjet Plotters
 - 5 Hewlett Packard Laserjet Printers
 - Contex HD 3650 Color Scanner
- **Workstations and Personal Computers**
 - 12 Xeon Systems with a minimum 12 GB ram and dual 21" monitors
 - 28 Core 2 Systems with a minimum 3 GB ram and 17" monitors
 - 6 Notebook Computers

Software

Office/Business Administration

- **Accounting**
 - Deltak Vision v 6.1
 - CCH Electronic Tax Library
 - Microsoft Access 2007
- **Operating Systems**
 - Sun Solaris v 10
 - Microsoft Windows 7 Professional
 - Microsoft Windows XP Professional
- **Marketing**
 - Adobe In Design CS4
 - Adobe Photoshop CS4
 - Adobe Acrobat Professional 9
 - Microsoft PowerPoint 2007
- **Spreadsheets/Word Processing**
 - Microsoft Office 2007
- **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 2011



- **Environmental Engineering**
 - Bentley WaterCAD v8i with AutoCAD
 - Bentley StormCAD v8i 4.1.1
 - Bentley Flowmaster PE v 8.11
 - Bentley Culvert Master v 3.03
 - Bentley 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**
 - RISA - 3D v8.0
 - 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 2011
 - Autodesk Raster Design 2011
 - ESRI ArcGIS Desktop 10
 - **Architectural**
 - AutoCAD Revit Architecture 2011
 - 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 2011
 - Bentley MicroStation v 8i
- ## Surveying Software & Hardware
- Magellan Mobile Mapper CX Sub Meter GIS Grade GPS handheld unit
 - 2 Topcon Hiper GA L1/L2 Survey Grade Sub-Centimeter GPS Units
 - Topcon Tools V.8 Processing Software
 - 4 Leica AT501 L1 GPS Receivers (with data collectors)
 - Topcon 300GTS Total Station
 - Topcon 3000LW Total Station
 - Leica Sprinter Digital Level
 - Carlson Explorer II & Carlson Surveyor (with data collectors)
 - Carlson SurvCE-2 Data Collection Software