October 17, 2017

Bid Clerk
Department of Administration
Purchasing Division
2019 Washington Street E
Charleston, WV 25305

10/16/17 11:58:24 TV Purchasina Division

REL Parks-A/E Services for Tomlinson Run Bathhouse

Dear Members of the Selection Committee,

Thrasher has a long history of working with the West Virginia Department of Natural Resources. The dedication of this department to the State of West Virginia is unlike any other. This is something that both entities share, commitment to West Virginia.

Tomlinson Run State Park is a gem in the northern panhandle and typically receives a large number of visitors that use the facilities annually. With that comes areas for improvement and renovations. Currently, the existing bathhouse is coming to the end of its life and the park is in need of a new bathhouse to accommodate the visitors. Thrasher is committed to maintaining Tomlinson Run to be functional throughout this process. Visitors will not be disturbed as construction of a new bathhouse is underway.

The Thrasher/Miller Engineering team was carefully selected to fulfill your goals and objectives. Miller Engineering will take care of the MEP portion of your project. The architects and engineers at Thrasher will be a great partner to guide you to your ultimate goal of a new, functional bathhouse.

Thank you for your time and consideration. We look forward to partnering with the West Virginia Department of Natural Resources and Tomlinson Run State Park.

Sincerely,

THE THRASHER GROUP, INC.

Joe Sinclair, AIA, NCARB, LEED, AP BD+C, CDT

Project Manager

STATE OF WEST VIRGINIA Purchasing Division

PURCHASING AFFIDAVIT

CONSTRUCTION CONTRACTS: Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

ALL OTHER CONTRACTS: Under W. Va. Code §5A-3-10a, 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: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. 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.

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.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the

"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 exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

Vendor's Name: The Throsher Group Authorized Signature: Typid. Side of W County of Harrison , to-wit: Taken, subscribed, and sworn to before me this 10 day of October , 2017. My Commission expires May 4 2021

AFFIX S



WITNESS THE FOLLOWING SIGNATURE:

NOTARY PUBLIC

Purchasing Affidavit (Revised 07/07/2017)

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

Joe Sinclair, Project Manager (Name, Title)
(Name, Title)
TOE SINCLAIR, PM (Printed Name and Title)
(Printed Name and Title)
600 White Oaks Blvd Bridgeport WV 26230
(Address)
304-624-4108
(Phone Number) / (Fax Number)
ISINCIAIT (a) the thrasherary Do com
(email address)

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

The Thrasher Group
(Company)
Cynd Sill JOE SINCLAIR, PM
(Authorized Signature) (Representative Name, Title)
Toe Sinclair, Project Manager (Printed Name and Title of Authorized Representative)
(Printed Name and Title of Authorized Representative)
October 16, 2017
(Date)
304-624-4108 304-624-7831
(Phone Number) (Fax Number)

Disclosure of Interested Parties to Contracts

Contracting business entity: The Throsher Group, Inc.
Address: 600 White Oaks Blvd Bridgeport WV 26330
Contracting business entity's authorized agent: Ronald Stanley
Address: 600 White Oaks Blud Bridgeport WV 26330
Number or title of contract: <u>CFO - 304 - 624 - 4108</u>
Type or description of contract: Tom linson Run State Park Bathhouse
Governmental agency awarding contract: DNR 180000000
Names of each Interested Party to the contract known or reasonably anticipated by the contracting busines entity (attach additional pages if necessary):
Signature: Royald W Hanlys Date Signed:
Verification
I, Ronal of Stanton, County of Harrison, the authorized agent of the contracting business entity listed above, being duly sworn, acknowledges that the Disclosure herein is being made under oath and under the penalty of perjury.
Taken, swom to and subscribed before me this day of day of
OFFICIAL SEAL NOTARY PUBLIC STATE OF WEST VIRGINIA CAROLINE E. MARION 131 5th Street Bridgeport, WV 26330 My commission expires May 04, 2021 To be completed by State Agency:
Date Provided Land 1
Date submitted to Ethics Commission:
Governmental agency submitting Disclosure:

The Thrasher Group, Inc.

With over 35 years of experience in the architecture/engineering industry, The Thrasher Group, Inc. has grown into one of the Mid-Atlantic Region's largest full-service and privately-owned firms. Thrasher's long standing commitment to building business through "successful projects and repeat clientele" remains the goal of our ownership.

At Thrasher, we pride ourself on the wide array of services provided to our clientele. The ability to continuously adapt and be successful is a testament to the over 300 employees Thrasher employees. Each employee is committed to maintaining the highest standards of professional services. Our standards are reflected throughout the quality work of our employees. This commitment to excellence has resulted in establishing offices in Maryland, Virginia, Ohio, Kentucky and expanded our West Virginia footprint. All of the efforts from our employees and clients like you, result in a positive economic impact.

Working with Thrasher means we cover all of the professional services needed to deliver successful projects to both public and private clientele. Our firms' roots were planted in civil engineering and consulting services for public utility projects, but our success has allowed us to branch out, expanding our services to meet the ever growing needs of our clients.



Main Point of Contact: Joe Sinclair Project Manager jsinclair@thethrashergroup.com office: 304-343-7601

cell: 304-518-9304

Thrasher Information: www.thethrashergroup.com Established in 1983

Headquarters: Bridgeport, WV

Office Locations:
Bridgeport, WV
Charleston, WV
Beaver, WV
Fredericksburg, VA
Canton, OH
Oakland, MD
Lexington, KY

Project Approach

4.1 Goal/Objective 1: Review existing plans and conditions as well as the operation of the park and evaluate while communicating effectively with the owner to determine a plan that can be implemented in a manner that will minimize disruption to concurrent operation of the facility and meet all objectives.

The Thrasher Group will begin by assessing site conditions for the proposed location of the new bathhouse and independent septic system, which are in conjunction with the Owner's needs and objectives. An initial design meeting will be conducted with all participants to discuss the Owner's objectives and concurrent operations of the facility. A follow-up design meeting will be conducted with all participants to review the proposed design. Revisions may be made in order to meet or realign with the Owner's objectives. Any proposed design element that interferes with concurrent operation of the facility will be subject to revision in a way that minimizes any disruption to facility operations. It is our intent to maintain operation of the existing bathhouse until the new facility is operational. If necessary, temporary facilities could be utilized until the new facility is substantially complete.

4.2 Goal/Objective 2: As a portion of this process outlined in Objective 1, provide all necessary services to design the facilities described in this EOI in a manner that is consistent with The Division of Natural Resources needs, objectives, current law, and current code; while following the plan to design and execute the project within the project budget.

Thrasher will meet the Owner's objectives, West Virginia State building code, and design to execute a facility within the Owner's budget. Estimating services will be used at each design milestone to keep the project on budget. Facility size and quality will be monitored and revisited throughout design to maintain the Owner's budget objectives.

4.3 Goal/Objective 3: Provide Construction Contract Administration Services with competent professionals that ensures the project is constructed and functions as designed.

The Thrasher Group is comprised of a large and experienced architectural staff with personnel dedicated to construction contract administration. Thrasher's experienced construction administrator works proactively with the Owner, Architects, Engineers, and Contractor to ensure the Owner's needs and Objectives are being met during construction.



TOMLINSON RUN STATE PARK



Craig Baker, CEFP Principal-in-Charge 304-669-3022



Joe Sinclair, AIA, NCARB, LEED, AP BD+C, CDT Project Manager 304-518-9304

MEP SERVICES





Kylea Radcliff, EIT Sewage Specialist

Thrasher In-House Utility Services



Bill Ratcliffe, REFP Construction Contract Administrator

Thrasher In-House Construction Services

Craig Baker, CEFP Principal-in-Charge



Mr. Baker has extensive experience in designing, renovating and planning building additions for academic clients. Mr. Baker has designed, managed and completed many projects during his tenure at Thrasher. He has a vast knowledge centered on the following: sports complexes, administrative office space, classroom design, academic building expansion, government buildings, residences, medical facilities and restaurants.

Craig is experienced in all CADD and building information modeling design programs relative to architecture. Craig has excellent client communication, coordination of construction, detailed construction document preparation, bidding, construction management and contract administration and is an experienced project manager.

Education:

- Bachelor of Science, Architectural Engineering Fairmont State University
- Advanced Certificate, Educational Facilities Planning San Diego State University

Registrations and Certifications:

- American Institute of Architects Associate, West Virginia and National Chapters
- Certified Educational Facilities Planner (CEFP)
- · Council of Educational Facilities Planner
- West Virginia Energy Services Coalition

- WVDOH Statewide On-Call Architecture Contract Statewide, West Virginia
- McDowell County Board of Education Open End Architecture McDowell County, West Virginia
- Boy Scouts of America Welcome Center Fayette County, West Virginia
- Barbour County Board of Education Open End Architecture Barbour County, West Virginia
- WVDOH I-64 New Weigh Stations Putnam County, West Virginia
- City of Oak Hill New Police Station Facility Fayette County, West Virginia

Joe Sinclair, AIA, NCARB, LEED, AP BD+C, CDT Project Manager



Joe brings over ten years of architectural experience in all phases of design ranging from commercial renovations, additions, and new construction to historic preservation and multi- and single-family residential projects. Joe's resume is built with architectural experience from Savannah, GA, Atlanta, GA, Charleston, WV, and North Central West Virginia. Joe joined the Thrasher team in 2017.

Joe is an Iraq War Veteran and former member of the West Virginia Army National Guard. In addition to working full-time as an Architect at Thrasher, Joe serves as an Adjunct Professor in the Construction Management program at BridgeValley Community & Technical College in South Charleston, WV. Joe's expertise lies in utilizing building information modeling (BIM) software for project development, documentation, and management.

Education:

- Master of Architecture Savannah College of Art & Design
- Bachelor of Science, Architectural Engineering Fairmont State University

Registrations and Certifications:

- Registered Architect West Virginia -
- LEED Accredited Professional, Building Design & Construction –
- NCARB Certificate
- Construction Documents Technologist (CDT) Construction Specifications Institute (CSI)
- Member American Institute of Architects (AIA) West Virginia Chapter
- Member United States Green Building Council (USGBC) West Virginia Chapter

- Design of the Beech Fork Lodge and Conference Center Wayne County, West Virginia
- West Virginia Turnpike Rest Area Exit 69
- WV Division of Weights and Measures HVAC & Envelope Retrofit Kanawha County, West Virginia
- Design of the Harrison/Taylor E911 Center Harrison County, West Virginia
- Boy Scouts of America Dining Hall and Bunkhouse Fayette County, West Virginia

Bill Ratcliffe, REFP Construction Contract Administrator





Bill Ratcliffe, REFP, joined the Thrasher team in 2016 and brings over 25 years experience to Thrasher's construction services and architectural divisions. Mr. Ratcliffe has spent the last 10 years of his career working as a construction administrator on both public and private projects. Bill also spent nearly 14 years of his career working for the West Virginia School Building Authority where he worked in educational facilities planning. This experience makes him a valued member of the Thrasher team.

Mr. Ratcliffe has built strong working relationships with countless regulatory and building entities all throughout the Mid-Atlantic region. These relationships and industry knowledge allow Mr. Ratcliffe to be a superb construction estimator and deliver accurate project oversight time and time again.

Education:

Regents Degree - WV State University

Registrations and Certifications:

• Recognized Educational Facility Planner (REFP)

- Convention & Visitors Bureau Addition and Renovations Jefferson County, West Virginia
- WV Public Service Commission Façade Replacement Kanawha County, West Virginia
- Fairmont State University Janes Hall Renovations Marion County, West Virginia
- WVU Robert C. Byrd Testing Center Renovations, Charleston Area Medical Center Kanawha County, West Virginia
- Moorefield High School Addition and Renovations Hardy County, West Virginia

Kylea Radcliff, EIT Septic Specialist



Kylea Radcliff utilizes her experience and education to provide engineering solutions in public utility applications. She is responsible for the development of projects, and takes them from the preliminary engineering report stages to final completion. Ms. Radcliff has written numerous engineering reports that have helped her clients secure funding to move these jobs to construction. She is also responsible for the design of water and wastewater projects, and works closely with the project managers to meet all of the client's needs.

Education:

• Bachelor of Science, Civil Engineering - West Virginia University

Awards:

ACEC Waste and Storm Water Gold Award

Registrations:

· Registered Engineer in Training

- Greater Harrison Public Service District Lost Creek Supply Replacement Harrison County, West Virginia
- Sun Valley Public Service District Water System Extension Harrison County, West Virginia
- Town of Rowlesburg Water Treatment Plant and Water Line Extension Preston County, West Virginia
- Hamrick Public Service District Water Line Extensions Tucker County, West Virginia
- The Town of Paw Paw Water System Upgrades and Extensions Morgan County, West Virginia
- Hardy County Public Service District Baker Water and Critestown Extension Hardy County,
 West Virginia

B. Craig Miller, PE President





Craig founded Miller Engineering in 2003, and serves as President and Principal Engineer. He has more than 20 years experience in design, specification, operations and project management. During his employment with WVU, Craig was directly involved with approximately \$130 million in new capital construction. His experience with a wide range of projects including HVAC, electrical, plumbing, infrastructure upgrades, building automation, energy efficiency and maintenance/renovation, among others, allows him to serve in multiple capacities within a given project. Craig will serve as the "Relationship Manager" for Miller Engineering as the main communication interface between the Owner, the design team, contractors and end users.

Education:

- Bachelor of Science, Civil Engineering West Virginia University
- Bachelor of Arts, Mass Communication University of Charleston

Registrations:

- Registered Professional Engineer (PE)
 - States of West Virginia, Virginia, Pennsylvania, Ohio and Maryland
- Licensed Master Plumber
- LEED-AP Certified

- Bobtown Elementary HVAC
- Blackwater Falls State Park Lodge (Dining Room, 2nd Fl, Spa, Boiler)
- Hawks Nest/Twin Falls HVAC
- Mapletown High School HVAC Replacement Phase I & II
- McKeever Lodge HVAC Piping
- Holly River State Park Primary Electric Service Replacements Phase I & II
- Beech Fork State Park MEP New Construction Design
- Cheat Lake Elementary & Middle School Renovations
- Cacapon Old Inn

Robert Angus Construction Representative





20 Years of maintenance, operations, and construction management precede Rob's engagement with Miller Engineering. Professional expertise of construction project management was gained as an owner of his own contracting company specializing in residential and commercial construction, electrical, plumbing, and HVAC projects. Rob's hands-on approach, common sense and valuable work history knowledge enables him to interface with construction personnel seamlessly alongside engineers and architects. He is adept at preventing and handling issues. Rob is involved at the estimation phase to allow for continuity within the project's design and construction.

Education:

Heating, Cooling, and Refrigeration Certification Monongalia County Technical Education Center

Licenses and Certifications

- Licensed West Virginia General Contractor
- Licensed West Virginia HVAC Contractor
- Certified HVAC Mechanical Contractor

Related Experience Includes:

- 3RD Party Construction Observation Canaan Valley Resort •
- Hawks Nest/Twin Falls HVAC
- Cacapon Old Inn
- Suncrest Middle School Gym HVAC Upgrade

- Bachelor of Science in Recreation, Recreation and Parks Administration - West Virginia University
- Licensed West Virginia Journeyman Electrician
- · Licensed West Virginia Master Plumber
- OSHA 10-Hour Construction Safety & Health
- Freedom Dealerships (Ford, Kia, Volkswagen)
- Mapletown Jr./Sr. High School HVAC/Boiler Upgrade
- Blackwater Falls Lodge (Dining, 2nd Fl, Spa, Boiler)

Travis Taylor, PE MEP Designer



Experience in project management facilitates Travis's ability to create and design constructible projects. Prior to joining the Miller Engineering team he was directly responsible for managing \$10 million in electrical construction budgets. His experiences encompass both new construction and renovation. Travis maintains professional competencies by attending seminars and continuing education classes. As lead engineer he provides HVAC, mechanical, plumbing and electrical design solutions and services for our clients. In addition, he is part of our team's complete assessment process in both planning and MEP design through construction administration.

Education:

Bachelor of Science, Mechanical Engineering - West Virginia University

Registration:

- Registered Professional Engineer (PE)
 - State of West Virginia

Related Experience Includes:

- Suncrest Middle Gym HVAC
- Holly River State Park Primary Electric Service
 Replacements Phase I & II
- MHS Area 4 HVAC
- McKeever Lodge Fire Alarm

Licenses and Certifications

- OSHA 10-hour Course: Construction Safety & Health
- Pipestem Lodge McKeever Lodge HVAC Piping Replacement
- Blackwater Falls Lodge (2nd Fl, Spa, Boiler)
- Cacapon Old Inn
- Freedom Dealerships (Ford, Kia, Volkswagen)



Joseph Machnik MEP Designer





Joe has extensive experience with AutoCAD, MEP and Revit MEP. He provides design modeling, drafting and supervised design services and construction support for Miller Engineering.

Education:

- Associate of Science, Building Engineering Systems Technology: Building Environmental Systems
 - Technology Penn State University, Fayette, Pennsylvania
- Associate of Science, Building Engineering Systems Technology: Architectural Engineering Technology - Penn State University, Fayette, Pennsylvania

- Bobtown Elementary HVAC
- Suncrest Middle Gym HVAC
- MHS Area 4 HVAC
- North Elementary Boilers
- Freedom Dealerships (Ford, Kia, Volkswagen)
- Pipestem Lodge HVAC Piping Replacement
- Blackwater Falls Lodge (2nd Fl, Spa, Boiler)
- Cacapon Old Inn

Lost Creek Trailhead Related Experience





CONTACT:

Harrison County Parks and Recreation Terry Schulte - Executive Director of Planning Commission 304-624-0481

TYPE OF PROJECT:

Parks and Recreation - Trailhead

PROJECT STATUS:

Complete

PROJECT DESCRIPTION:

Rails to Trails trailhead and parking area, including a gravel parking area, restroom facilities and small pavilion.



WVU Natatorium Renovations

Thrasher's architectural division provided design and construction documentation and oversight services to allow for improvements and upgrades to the men's and women's locker rooms and coaches' offices at the Natatorium on the Evansdale Campus of WVU.

The project entailed creating more open locker rooms, adding privacy walls at the entrances from the main exterior corridor, adding additional drainage in the shower areas, improved ventilation within the locker rooms and numerous cosmetic improvements throughout the area.

Additionally, in the second floor coaches' offices and reception area, cosmetic improvements were made including the removal and replacement of existing carpet, and repairs to, and painting of walls.

Thrasher's scope of service included: Project management, preliminary design, design and construction documentation, oversight of MEP sub-consultant Harper Engineering, Inc. and management during construction.

In initial planning stages, the parties involved in the project

developed a a program of needs for the renovation, which included, in addition to the items completed. a new ventilation system and renovations to the vestibule and hallway. Due to the limited budget of the project, all items could not be completed. Thrasher's architects applied "value" engineering" analysis to the project, determining the items within the scope to eliminate. In doing so, the most pressing items within the project were addressed within the budget parameters.



CONTACT:

West Virginia University Intercollegiate Athletics PO Box 877 Morgantown, WV 26507 304-293-5621

City of Bridgeport

Recreation Complex

Thrasher had the pleasure of working with the City of Bridgeport to develop the City's state of the art recreation complex which opened in 2012. The complex hosts a wide array of events and amenities include:

Ball Fields

Features on each field:

- Irrigated grass areas
- Warning track around all fence
- Large brick dugouts with storage rooms
- Intercom to the scorekeeper in each dugout
- Bullpens
- Electrical outlets at each mound for pitching machines (Field #2 only)
- Musco Sports Lighting to minimum levels of 50 foot-candles in the infields and 30 foot-candles in the outfields
- Loudspeaker system
- Scoreboards
- Bleacher seating
- Two batting cages

Restroom/Concession/Press Box

- Size 3,626 square feet.
- The first floor includes: a large concession stand with three serving windows; large restrooms; family restroom; and office.
- The second floor press box area includes an umpire changing room, restroom, and the scorekeepers' station overlooking each field is equipped with an intercom to the dugouts, loudspeaker system, and scoreboard controls.

All Purpose Field: 2.5 acres

Size - 3,626 square feet.

- Multipurpose field for soccer, football or Lacrosse
- Large Picnic Shelter
- 1 mile Walking trail
- Full size Basketball court



Harrison County Board of Education

High School Fieldhouses

Liberty High School Fieldhouse

The project was the design and construction of a 5,500 square foot fieldhouse. The one story concrete masonry unit (CMU) walled unit includes roll up service doors and counter shutters. The structure houses two (2) team locker rooms, an officials' locker room, men's and women's restrooms, and the concession stand. Construction cost for this aspect totaled \$967,503.00.



South Harrison High School Fieldhouse

The project was the design and construction of a 4,400 square foot masonry field house, weight room, and the associated site work. Included in this project was the demolition of the existing 6,000 square foot field house and press box. The demolition required Thrasher to remove the floor slab, below grade footings, foundations, and utilities.



United States Marine Corps Camp Upshur Marine Core Base = Quantico, VA

BATH HOUSE:

Renovations to the on-site bath house and restroom facility included exterior painting, roofing, and windows. Interior upgrades were all new flooring, restroom and shower layouts, new fixtures, ceilings, lighting, and updated HVAC equipment as needed.







Tomlinson Run State ParkPool Repair

The existing pool was constructed in approximately 1980 by a local pool contractor. The owner indicated they were experiencing significant leaking and could not determine the precise cause. Additionally, the pool was experiencing significant cracking at the tops of the pool walls. The water slide was reportedly difficult to keep in operation due to various maintenance issues. The pool also had a rather unique CMU (concrete block) and tension rod wall configuration which was evaluated for the potential to perform an extensive repair. As part of the repair, the owner wished to significantly alter the depth profile of the pool and make the pool ADA accessible. The repair also included the installation of a new filtration system, gutter system, PVC liner and addressed several longer term maintenance concerns.



Greenbrier State Park

Pool Replacement

A field study and assessment determined that several plumbing and mechanical systems were inadequate and needed more efficient, code-compliant replacement. The goal of the project was to efficiently use existing piping tunnels that were in good condition and place a new basin within the existing one in order to meet budget demands. The innovative isolation method saved on excavation cost and construction time. New filtration and heating systems were designed for the wading pool and an attractive aquatic design element was also added to increase water movement. The filtration and heating systems were sized and configured not just for the existing pool but also to accommodate a larger pool renovation that was planned during our design process and implemented the following year. High-rate fiberglass sand filters provide circulation and filtration of the pool water.

