



Allegheny

Design Services

Consulting Engineers

ADS BUILDING NEWS

Specializing in Building Systems Design and Analysis

- [ADS - Forensic Engineering Services](#)
- [ADS featured in West Virginia Executive Magazine](#)
- [WVU Athletic Performance Center Design Renovation](#)
- [Morgantown Ice Arena Upgrades](#)
- [Beckley Fire Department - Station #3](#)
- [Black Oak 2 Office Building](#)
- [Potomac Valley Hospital](#)
- [Cacapon Resort Addition](#)
- [Employee News](#)

[Visit our Website](#)



Did You Know that ADS
offers:
Forensic Engineering
Services?



Forensic Engineering

Forensic engineering is the investigation of materials, products, structures or components that fail or do not operate or function as intended, causing **personal injury** or damage to property. We provide these investigative and assessment services to building owners, law firms and property & Casualty Insurance Industries.

As Structural and MEP engineers, Allegheny Design Services can offer expert investigation of failed systems. Our sister company— **CF Forensics** —is dedicated to provide our clients with comprehensive, cost-effective and fastidious claims settlement. Contact us today at cforensics.com!

[Link to CF Forensics](#)

Click Below

ADS featured In:

"West Virginia Executive Magazine Spring/Summer 2020 Issue"

Development 2020 - Enhancing Our Economy"

Development 2020

Enhancing Our Economy

As lovers and admirers of the Mountain State and those who are dedicated to enhancing it, West Virginia Executive (WVE) magazine created a special advertising section—Development 2020: Enhancing Our Economy—for its blended Spring/Summer 2020 issue. This section highlights workforce and economic development, construction and infrastructure in West Virginia and explores opportunities companies and corporations are taking to continue improving their home state, especially when it comes to economic impact. It also showcases the people and companies behind the projects and how the developments will benefit West Virginians now and well into the future. These businesses are doing their part to create growth, and this section allowed them to show off their innovation, determination and successes.



Innovative Designs, Practical Solutions



David Simpson, PE, SECB, MBA, established Allegheny Design Services (ADS) in 2002 in response to the region's lack of local structural engineering design access. Over the past 18 years, he has built a small, agile team of native West Virginians who provide structural and mechanical, electrical and plumbing (MEP) engineering services on a variety of projects, including sports and recreation, health care, higher education, industrial, K-12, government, office and commercial buildings.

More than 80 percent of ADS clients are repeat customers, and some of its noteworthy patrons include West Virginia University (WVU), Mylan Pharmaceuticals, Mon General Hospital and many area architects. The ADS staff is particularly proud of its work on Dominion Energy Transmission Inc.'s office building in Bridgeport, WV.

"We've designed dozens of buildings in the region, but this was a great project because it was a design-build done in conjunction with March-Weiss as the general contractor and The Thrasher Group as the architect," says Simpson. "We performed the structural and MEP system designs. This project is a prime example of why ADS was established. A local design and construction team was instrumental in delivering the project on schedule and on budget. Our employees are all West Virginia natives, with engineering graduates from WVU and West Virginia Tech's Montgomery campus. Our team gets a sense of pride from helping improve our community."

The plan for the 106,000-square-foot, four-story office building, located in the White Oaks Office Park, included high-efficiency packaged DX rooftop equipment, VAV units with hot water heat from a modular condensing boiler system, a precision cooling server room air conditioning system and water conserving plumbing fixtures.

The \$35 million project also came with unique challenges in meeting Leadership in Energy and Environmental Design, or LEED, standards, which measure a building's sustainability and resource efficiency. Upon completion, the Dominion building was the first privately owned LEED Gold certified project in West Virginia.

"I was in charge of the mechanical and plumbing design for this project," says Project Manager David Cottori, PE, LEED AP. "This project had some unique energy goals to meet the LEED certification. It has a high-efficiency HVAC system, comfort controls, increased ventilation and outside air monitoring. It also has a high-efficiency condensing central boiler system for heating, and the air conditioning is provided by a central rooftop mounted unit with variable compressors, multiple compressor circuits and variable speed fans. On the plumbing side, there are natural gas condensing water heaters that provide the hot water for the building, and the plumbing fixtures are high efficiency, low flow to reduce water usage."

MEP Department Manager Mike Chancey, PE, LEED AP, served as the project's electrical engineer of record.

"It was part of anything that had a wire connected to it," he says. "In terms of the lighting and power, we designed using LED lighting and lighting controls like occupancy sensors and ensured there was only so much wattage per square foot of the building to meet the LEED standards. The sheer size of the building coupled with the LEED certification shows that we have the background and expertise for projects like this. I'm proud to say I was a part of it."

SPECIAL ADVERTISING SECTION



WVU Athletic Performance Center Design Renovation

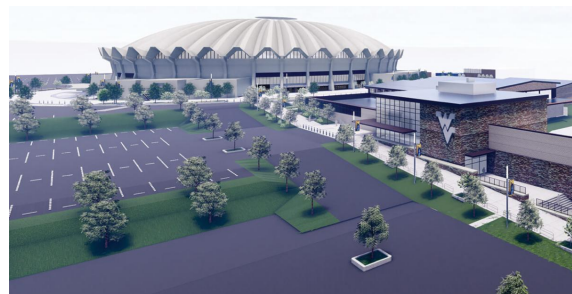
Architect:

Omni Associates-Architects, Inc., Fairmont, WV

Structural & MEP Engineers:

Allegheny Design Services, Morgantown, WV

ADS Structural & MEP Engineers are so proud to be on this wonderful addition to our community. The project consists of



converting the existing West Virginia University Natatorium into an Athletic Performance Center for Olympic Sports. The renovation areas consist of 25,650 SF renovation area and new spaces on level 2 – Performance Center Option 1, and 6,300 SF new spaces on level 3 – Performance Center. New spaces include 5,200 SF hydrotherapy training area, 2,500 SF cardio mezzanine, 3,800 SF player's lounge, and 9,500 SF strength and conditioning area. The Performance Center will become the home for strength and conditioning, training, rehabilitation and nutrition for all WVU Olympic sport programs. More than 400 student-athletes will benefit from the center and enhance WVU's commitment to compete at a national level.

The existing Natatorium will be converted and renovated to encompass a multi-level performance center in excess of 21,000 gross square feet.

In addition to new weight, training and rehabilitation rooms, the facility also will feature extensive cardio and plyometric areas, hydrotherapy and cryotherapy sections as well as locker rooms to become an all-inclusive home for WVU's Olympic sports. Multiple teams will be able to use the center at one time, alleviating scheduling concerns and providing time management flexibility in the areas of academics and team practices.

The facility will be used by the baseball, volleyball, gymnastics, rowing, golf, track and field, tennis, rifle, wrestling, swimming and diving, men's soccer and women's soccer teams.

[Take a Video Tour](#)

[Link to WVU Coliseum Complex](#)

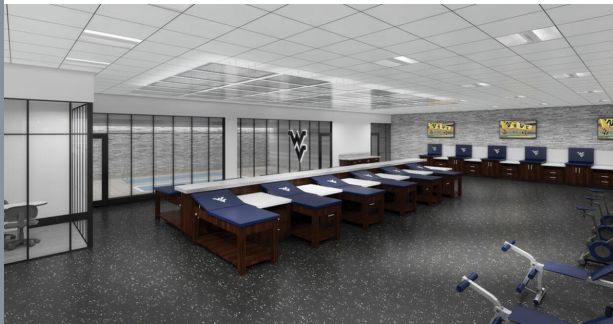
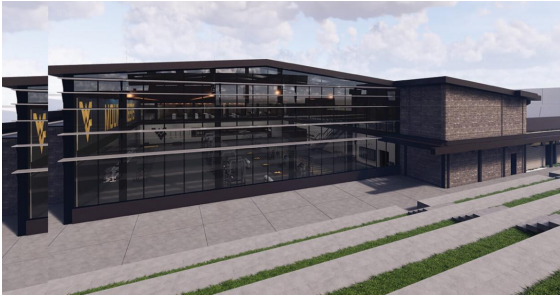
"The Coliseum Complex phase of the Master Plan will connect existing and future facilities, renovate underutilized facilities and bring a consistent aesthetic to all the buildings and plazas"

- Coliseum Apron
- Olympic Sports Weight Room
- Olympic Sports Training Room



- Shell Building Renovations
- Shell Connector
- Interior Coliseum Upgrades

Pictures courtesy of WVU Sports



MORE THAN TEN YEARS IN THE MAKING!

The 14,000-seat WVU Coliseum was more than 10 years in the making, dating back to the late 1950's.....now it's Celebrating 50 Years!!
Coliseum50.com

[Coliseum - 50 Years!](#)

Morgantown Ice Arena Morgantown, WV



Architect:

Mills Group, LLC

Structural Engineers:

Allegheny Design Services, Morgantown, WV

The project includes renovations to the existing facility of approximately 30,000 SF and new approximate 24,000 SF. Renovation of existing ice arena with addition of new arena seating, locker rooms, private party rooms, public entry area with restrooms, concessions, and pro-shop, Level 2 restaurant and balcony, mechanical room, and studio ice arena.

Pictures courtesy of Mills Group, LLC

[Link to Ice Arena](#)

Beckley Fire Department - Station # 3

Beckley, WV





Project Architect:

The Thrasher Group, Inc., Bridgeport, WV.

Structural & MEP Engineers:

Allegheny Design Services, LLC, Morgantown, WV

Contractor:

Swope Construction Company, Inc., Bluefield, WV

ADS is proud to be involved with [#TeamThrasher](#) on this great project for the city of Beckley. Project Scope: 18,600 GSF, 1-Story, Fire Station Building Station #3 is located along the Beckley Bypass. A New 3-story, 20' x 70' Training Tower. Approximate 8,500 SF PEMB Apparatus Bay and 2nd Floor Mezzanine in the Apparatus Bay. A Generator / Dumpster Enclosure. The new building houses the fire department, the code enforcement office, and a training tower. The main building is equipped with both meeting and training doors, four bay doors, and an emergency path to enter the bypass.

Project Completion: July 2020

[Link to the Video](#)

Black Oaks 2 Office Building Morgantown, WV



Architect:
Mills Group, LLC
Structural Engineers:
Allegheny Design
Services, Morgantown,
WV

Project consists of a 3-story, 30,000 SF Office Building. The building will provide 30,000 sq. ft of office and retail space on three levels. A multi-purpose third floor outdoor patio with a pergola offers great views. ADS Structural Engineers services included the design of the Helical Pier Foundation System.

Pictures courtesy of Mills Group, LLC

[Link to Black Oaks 2](#)

Potomac Valley Hospital, Keyser, WV HVAC Replacement



Potomac Valley Hospital HVAC Replacement

Our MEP Engineers have just started and are busy working on an engineering design for HVAC equipment replacement at the Potomac Valley Hospital, located in Keyser, WV.

Potomac Valley Hospital is a 25 bed critical access hospital serving the needs of Mineral County, WV and surrounding communities.

What is a Critical Access Hospital?

To establish a Critical Access Hospital designation, a hospital must:

- Be located in a state that is identified to have a State Medicare Rural Hospital Flexibility Program
- Be designated by the state as a Critical Access Hospital
- Be located in a rural area or be treated as rural area
- Provide 24-hour emergency care services seven days a week
- Retain no more than 25 inpatient beds (beds may also be used for swing bed services)
- Provide acute inpatient care for a period that does not exceed 96 hours per patient on an annual averaged basis
- Demonstrate compliance with the Critical Access Hospital Conditions of Participation
- Be located more than 35 miles from any hospital or other Critical Access Hospital or be located more than a 15-mile drive from any hospital or Critical Access Hospital in an area with mountainous terrain

For more on our **Healthcare projects** experience click link below.

[MEP Healthcare Projects](#)



Cacapon Resort State Park
Berkley Springs, WV

Now that Summer is in full swing, check out the new addition and accommodations at the Cacapon Resort!

Architect:

Paradigm Architecture, Morgantown, WV

Structural Engineers:

Allegheny Design Services, Morgantown, WV

Coming to Completion, ADS & Paradigm are very excited to see the vision become a reality. Located in the eastern panhandle of West Virginia, Cacapon Resort State Park is available for both family vacations and business retreats, offering access to golf, lake, and camping activities. The facility functions as the main lodging and meeting center of the resort and offers a mix of hotel rooms and suites, and a conference center. The new addition provides an additional 79 guest rooms, swimming pools, new dining facilities and commercial kitchen, and a spa and fitness area. Additional renovations to the resort includes golf course upgrades, as well as water and wastewater treatment upgrades.

Pictures courtesy of Paradigm Architecture





Brady Hillegas **Structural Intern**

ADS would like to Welcome our newest family member as well as introduce him to all of you.

Brady attended West Virginia University and will be receiving his B.S. in Civil Engineering in August of 2020.

While at WVU, he was actively involved with Chi Epsilon, The Civil Engineering Honor Society, and was the President his senior year.

He has experience in construction, both labor and project management. Brady grew up in Bridgeport, WV before coming up to Morgantown for college.

In his free time, Brady enjoys hiking, mountain biking, skiing, and watching WVU Sports.

