





Expression of Interest for Architectural Services
For

Additional Parking Apron
West Virginia Army National Guard
Fixed Wing Army Aviation Training Site

Bridgeport, West Virginia RFQ # DEFK11008 August 18, 2010



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WY PURCHASING DIVIGION

TEL: 304.624.4108 FAX: 304.624.7831 EMAIL: thrasher@thrashereng.com



August 17, 2010

West Virginia Army National Guard Division of Engineering and Facilities c/o West Virginia Department of Administration Purchasing Division 2019 Washington Street East Charleston, WV 253085

RE: Expression of Interest – RFQ # DEFK11008

Additional Parking Apron – Fixed Wing Training Site – Bridgeport, WV

To the Members of the Selection Committee:

Thrasher Engineering, Inc. greatly appreciates the opportunity to state our expression of interest and present our qualifications to provide architectural services to the West Virginia Army National Guard for an Additional Parking Apron at the Bridgeport Fixed Wing Training Site. We believe our architectural and engineering expertise and dedication to quality service will be beneficial to the West Virginia Army National Guard's improvement and expansion projects.

Our qualifications meet and exceed the criteria for selection of the architectural / engineering firm for this project. In summary, we offer the following reasons why:

ш	<b>Depth and Variety of Staff Disciplines:</b> From our Clarksburg, West Virginia location
	alone, Thrasher Engineering provides a work force of over 120 employees, with
	disciplines including engineering, architecture, survey, construction management
	and materials testing. Only Mechanical –Electrical – Plumbing engineering for this
	project will require the services of a sub-consultant.
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Ш	Experience in the Design and Construction of Hanger Facilities and Building
	Renovations/ Additions: As the engineering firm of record for the North Central
	West Virginia Airport and the Mid Atlantic Aerospace Complex, Thrasher
	Engineering, Inc. has provided engineering and architectural services at both
	facilities. These projects are described in the previous experience section of this
	EOI. That experience, along with our close proximity to the project site will be of
	great benefit to the Army National Guard.

Accurate Project Estimating: Our approach to architecture is different from that of
most firms: we take an engineering approach to your project. Our designs are
aesthetically pleasing, but we focus on maintainability and functionality and most
importantly we focus on design that meets the budgetary requirements of our
clients. Our track record of accurately estimating construction costs is one of the
strongest reasons we have repeat customers and long-term relationships with our

clients. Through good design and careful estimating, we save our clients time and money. This benefit is specifically important when utilizing state and federal funding in order to avoid project overruns.

☐ **Priority:** The architectural division of Thrasher Engineering, Inc. is a young and growing firm. Our current work load will allow us to place your project as a priority and meet the deadlines required.

We are aware of, and comply with Title VI of the Civil Rights Act of 1954, Executive Order 11246, Section 109 of the Housing and Urban Development Act of 1968, Conflict of Interest Statement and Access to Records provisions and all other requirements as they relate to federal and state funded projects

Per your request, enclosed please find two (2) three ring binders containing our proposal along with a PDF file on compact disc.

We look forward to the opportunity of meeting with representatives of the West Virginia Army National Guard to discuss your needs and how Thrasher Engineering can provide the services necessary.

Sincerely,

THRASHER ENGINEERING, INC.

Steven T. Engelhardt

**Director of Business Development** 

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RFQ COPY

TYPE NAME/ADDRESS HERE

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

## Request for Quotation

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BUYER 32 304-558-2544

DIV EN ARMORY

DIV ENGINEERING & FACILITIES ARMORY BOARD SECTION

1707 COONSKIN DRIVE CHARLESTON, WV 25311-1099 304-341-6368

DATE PRINTED TERMS OF SALE 07/21/2010 BID OPENING DATE: BID OPENING TIME 01:30PM 08/18/2010 UNITARICE **AMOUNT** ITEM NUMBER LINE QUANTITY JB 906-29 0001 ARCHITECTURAL DESIGN SERVICES -EXPRESSION OF INTEREST THE WEST VIRGINIA PURCHASING DIVISION, FOR THE AGENCY, THE WEST VIRGINIA ARMY NATIONAL GUARD'S DIVISION OF ENGINEERING AND FACILITIES, IS SOLICITING EXPRESSIONS OF INTEREST FOR PROFESSIONAL ARCHITECTURAL DESIGN SERVICES FOR THE DESIGN OF ADDITIONAL PARKING APRON AT THE WEST VIRGINIA ARMY NATIONAL GUARD FIXED WING TRAINING SITE IN BRIDGEPORT, WV, PER THE FOLLOWING BID REQUIREMENT AND ATTACHED SPECIFICATIONS. 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. THIS IS THE END OF REQ DEFK11008 \*\*\*\*\* TOTAL: SEE: REVERSE SIDE FOR TERMS (AND CONDITIONS

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**ADDRESS CHANGES TO BE NOTED ABOVE** 

RFQ No. DEFK11008

## 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 exceed 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

AFFIX SEAL HERE	NOTARY PUBLIC		
My Commission expires	, 20		
Taken, subscribed, and sworn to before me this _1	L8'TANy of AUGUST	20_10	
County of HARRISON , to-wit:			
State of WEST VIRGINIA			
Authorized Signature:	<b>2</b> °.	Date: AUGUST 18	_
Vendor's Name: THRA FR ENGINEE	RING, INC.		

### **FIRM OVERVIEW**

The mission of Thrasher Engineering, Inc. is to provide innovative solutions to our clients' challenges and offer every client the highest level of service possible while adhering to principled business practices. Since 1983, that has meant a hands-on approach to each and every project. Whether it is a multi-million dollar utility or site development project, or a site survey for a private individual – we utilize our talent and expertise, resulting in our on-going track record of success.

THE RESOURCES YOU NEED. THE SERVICE YOU DESERVE.

Our goal is to have satisfied clients – so we become our clients' partner project after project



Thrasher's Corporate Office is located in Clarksburg, WV, just minutes from the WVANG project site

Thrasher Engineering, Inc. provides you with the resources you need utilizing our **single source management approach.** By combining engineering, architectural, surveying, environmental, construction monitoring and materials testing staff, we have become the region's industry leader. We are able to pull together a wealth of experienced talent, bringing the best minds and proven methods to every job.

We believe in the value of cost effective and sustainable design. We also believe in responding to our clients in a timely fashion. We put these beliefs into practice on every project and with every client. That practice, and our value added service attitude is what makes Thrasher the right choice, project after project.

## BRINGING THE RIGHT RESOURCES TOGETHER

Our staff has the resources to handle multiple projects simultaneously. Experienced people with complementary skills, an all encompassing variety of disciplines, value added services and offices located to easily serve clients throughout the mid-Atlantic region. These are the resources Thrasher brings together resulting in "Successful projects. Repeat clientele."

We offer a variety of resources drawing upon the abilities and experience of a wide range of professionals, allowing us to create the right solutions to address any challenge.

#### PROFESSIONAL EXPERIENCE FROM CONCEPTION TO COMPLETION

Successful projects require more from an engineering firm than just technical design expertise. At Thrasher, our project managers and engineers focus on all aspects of "getting the job done."

Using a combination of technology and business acumen our personnel are involved in our projects to the extent requested by our clients.

Planning
Preliminary engineering
Funding direction & application assistance
Regulatory permitting
Design and construction document preparation
Bid documentation & process oversight
Construction administration & monitoring
Post construction service & on-going commitment

We understand you have a lot on the line. Thrasher has a lot on the line, as well. The success of your project is not only important to you and your community, its success is essential to us.



The KCI VI facility at North Central West Virginia Airport is one of recent renovation projects completed by the Thrasher team.

## **ARCHITECTURAL SERVICES OVERVIEW**

At Thrasher Engineering our architects recognize that specific project needs vary by client. For this reason we take a very different approach to client interaction. Being a good consultant goes far beyond putting ideas on paper; it also encompasses being able to assemble a team of professionals to handle every aspect of your architectural project from start to finish. As a multi-disciplinary firm, Thrasher does just that by utilizing our single source management system.

Our diverse background makes us the right firm for your project, no matter how large or small. We pride ourselves in our aesthetic design while working to excel in accurate cost estimating, budget control and sustainability. Proven through a record of successful projects, our creative design and engineering approach to project management is what sets us apart from other firms.

The Thrasher architectural team has the means to provide exceptional service to all types of clients.

Our portfolio of architectural projects includes:

Public & private office buildings Financial institutions

Healthcare facilities Building additions & renovations

Recreational facilities Public safety buildings

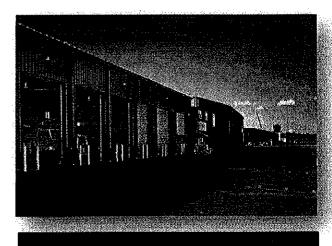
Educational facilities Single & multi-family residential

Successful projects take a collaborative effort from all parties involved. At Thrasher, our architects listen to your ideas, goals and aspirations and address these through creative and sustainable design.

Our architects bring over 30 years of experience to the project; a balance of aesthetics, functional design and maintainability is the base of their design. The civil engineering team, working with the architects,

offers the structural landscape architecture segments. These abilities have been demonstrated in projects shown as examples in this proposal including the KCI VI renovations at North Central West Virginia Airport along with the AARF building at the facility and the Mid Atlantic Aerospace Complex hanger project which is currently out to bid.

In addition to our ability to provide the necessary services for architecture, civil engineering and field services Thrasher Engineering, Inc.'s selection brings the following benefits To the West Virginia Army National Guard project:



The new AARF Building at NCWV airport was engineered by Thrasher

- ☐ We offer experience with Army National Guard projects. Our lead architect has provided structure inspection and repairs, along with fire code and ADA improvements at twelve (12) armory facilities in West Virginia.
- ☐ We offer the advantage of being located within ten (10) minutes of the project site, allowing for immediate response to any needs.
- □ We offer an approach to architectural projects different from that of other firms. Our engineering emphasis on the details of construction bidding documents for our design, in addition to the design itself, results in more accurate bids and fewer change orders bringing cost savings to our clients.
- We offer a solid track record of architectural design for federally and state funded renovation and additional projects in addition to new structures requiring integrated communication among design and construction teams.
- □ We offer a teamwork process. Whether we are serving as the civil engineer for architecture within our own company, as a sub-contractor to other architectural firms or, in a design-build team, we communicate with the project owner to provide design and construction services on-time and within budget.

Thrasher Engineering has provided feasibility studies, design, bidding and construction phase services for <u>over \$600 Million</u> in construction for infrastructure and building projects <u>within the State of West Virginia</u>.

Simply stated, there is no other West Virginia civil engineering firm that can surpass Thrasher Engineering in the quality of service and technical ability necessary to meet the needs of the West Virginia Army National Guard in their plans for this expansion.

## SITE DEVELOPMENT ENGINEERING

Engineering for site development is far from a "one size fits all" approach. Every project is unique. It requires a blend of technical expertise, combined with quality planning principles, efficient design, market realities, and flexibility to seize opportunities. With our diverse staff, Thrasher Engineering has the right blend of talent to make your project a success.

Thrasher Engineering understands that the design of a successful site development project must factor in economic, political, strategic and many other aspects that go well beyond engineering. We pride ourselves on being a partner in projects that improve the quality of life and economic prosperity of our communities.

The Thrasher Engineering team possesses expertise in every facet of site development: site selection and planning, grading, storm water management, erosion and sediment control, permitting and infrastructure design.

Our portfolio of site development projects includes:

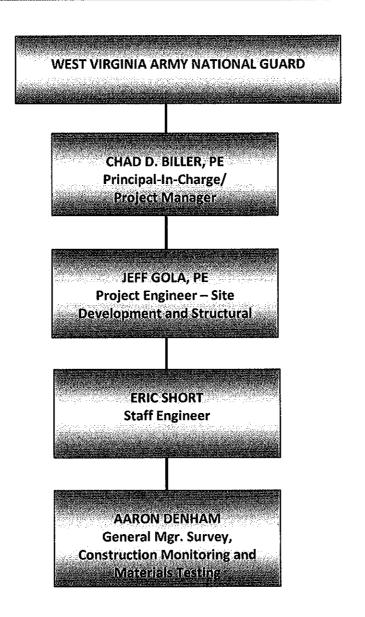
Industrial & business parks Streetscapes / Sidewalks
Mixed-use developments Commercial developments

Athletic facilities Single & multi-family residential development Federal correctional facilities Primary, secondary & higher education facilities

Recreational resorts / Lodging Shopping plazas

Whether it is a large-scale business park, commercial site, residential subdivision, or streetscape, Thrasher Engineering knows how to bring successful results to any development project.

## TEAM MANAGEMENT AND PERSONNEL QUALIFICATIONS



The expertise of the Thrasher Engineering staff is a combination of education and experience; it is reflected in all aspects of our services. The firms are led by a talented group of Principals and Partners who are dedicated to the success of our projects and the satisfaction of our clients.

The principals and project team members from Thrasher Engineering who will be involved with the project include:

Chad D. Biller, PE is a partner of the firm and specializes in airport facility engineering. Chad serves as Principal in Charge of all of Thrasher's services for the North Central West Virginia Airport in addition to the Mid-Atlantic Aerospace Complex. He is extremely experienced and knowledgeable of all regulatory aspects of air facilities and will serve as Principal-in-Charge and Project Manager for the project. Chad holds a Bachelor of Science degree in Civil Engineering from West Virginia University.

Pavement Design and site development aspects of your project will be the responsibility of Jeff Gola, P.E. as Project Engineer. Mr. Gola joined Thrasher Engineering in 1998 and is responsible for the structural aspects of engineering design, as well as airport, road, bridge, sidewalk, storm water management and demolition projects. Mr. Gola is a Summa Cum Laude graduate of West Virginia University's College of Engineering and Mineral Resources. He is a Registered Professional Engineering in the State of West Virginia.

**Eric Short** joined Thrasher Engineering in 2003 and serves as **Staff Engineer** on transportation projects, as well as commercial and residential site development projects. Mr. Short has experience in all aspects of site engineering, taking projects from concept to construction.

The Thrasher Engineering, Inc. team also offers the field services necessary to meet the entire scope of your project. Survey, along with construction management and materials testing will also be provided by our team.

Field services, consisting of survey, construction inspection and materials testing are under the direction of **Aaron Denham.** Mr. Denham joined Thrasher Engineering in 2000 and was named a Partner in the firm in 2010. He serves as General Manager of the field services departments and has managed both Quality Control and Quality Assurance Programs for many federally funded construction projects. Mr. Denham's staff includes over 40 project representatives and inspectors, based throughout the State, which brings time and cost efficiencies to our projects. He is a graduate of Fairmont State University with a Bachelor of Science degree in Civil Engineering Technology.

Resumes of these team members follow.

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## CHADWICK D. BILLER, P.E. - PRINCIPAL-IN-CHARGE / PROJECT MANAGER

## **QUALIFICATIONS SUMMARY**

Chad Biller has experience in all aspects of engineering. His primary emphasis has been on highways, roads, bridges and airports. Chad joined Thrasher Engineering, Inc. in 1999 and is a partner of Thrasher Engineering. Since joining the firm, Chad has served as Principal-in-Charge and Project Manager for the Benedum Airport Authority (North Central West Virginia Airport) and the Raleigh County Airport Authority. His airport experience includes all aspects of the development and update of Master Plans and Airport Improvement Plans, including the oversight of engineering design and construction for projects within those plans. Specific project scopes have included runways, de-icing and run-up pads, obstruction removal and environmental studies including assessments and wildlife management.

Chad manages and designs the following disciplines:

- Manage and design engineering projects for the WVDOH. The projects included 4 lane divided highways, bridges, 2-lane roads and road widening projects.
- Site Development projects for private and public clients. These projects included mass grading, roads, drainage, storm water management, erosion and sediment control and numerous regulatory permitting activities.
- Airport Engineer for North Central WV Airport. Involved in the day to day and long term upgrades of the airport to promote safety and develop airport properties.
- Responsible for managing 7 full time survey crews. Responsibilities include cost estimating, scheduling and supervision of 30 employees.

EDUC	ATION	
	B.S.,	Civil Engineering – West Virginia University, 1992
CERTI	FICAT	IONS
	Regis Regis Amei Amei	tered Professional Engineer (PE), State of West Virginia #13620 tered Professional Engineer (PE), State of Pennsylvania #PE056012E tered Professional Engineer (PE), State of Ohio #64594 ican Society of Civil Engineers ican Society of Highway Engineers ber of the Taylor County Economic Development Authority
REPRE	SENT	ATIVE PROJECT EXPERIENCE
I	<u> </u>	Benedum Airport Authority: Provided a grading, drainage, and erosion and sediment control package for improving the North Central WV Airport runway safety area approach slopes. The project is now proceeding to the design of an 800 foot runway extension.  Mid-Atlantic Aerospace Complex: Design of approximately 5,400 linear feet of a storm water system and a detention pond. The proposed system will provided drainage infrastructure for future development along an existing airport taxiway.
		Raleigh County Memorial Airport — Served as Project Manager for the 2004 Airport Master Plan and Airport Layout Plan, overseeing the study and final plan development including inventory, forecast, demand capacity and environmental overview. Also serves as the Project Manager for the design and construction of the Raleigh County Airport Industrial Park, adjacent to the airport.
		Grafton Hospital, Helipad Relocation: Served as Project Manager for the siting study and ultimate relocation of the helipad serving the Taylor County based regional hospital.

## JEFF GOLA, PE - PROJECT ENGINEER - SITE DEVELOPMENT AND STRUCTURAL

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EDUCATION

Jeff Gola joined Thrasher Engineering in 1998 and serves as Project Manager and Project Engineer with focus on management and design of transportation sector projects, including airport facilities and highways, roadways and bridges. He also provides services for feasibility studies for site development, and storm water projects along with structural engineering. Since joining the firm, Jeff has been assigned as Project Engineer for the Benedum Airport Authority (North Central West Virginia Airport) and the Raleigh County Airport Authority. His airport experience includes study and report development for Master Plans and Airport Improvement Plans, including engineering design within those plans. Specific project scopes have included runways, de-icing and run-up pads and obstruction removal among others.

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	Bachelor Of Science-Civil Engineering, West Virginia University, 1998 Summa cum Laud
CERTI	FICATIONS
	Registered Professional Engineer (PE), State of West Virginia
	Registered Professional Engineer (PE), State of Maryland
	American Society of Civil Engineers
	American Society of Highway Engineers
۵	City of Mannington Code Enforcement Appeal Board
REPRE	SENTATIVE PROJECT EXPERIENCE
	Benedum Airport Authority: Provided a grading, drainage, and erosion and sediment control package for improving the North Central WV Airport runway safety area approach slopes. The project is now proceeding to the design of an 800 foot runway extension.
	Raleigh County Memorial Airport Industrial Park: Designed the roadway and drainage for a 100 acre industrial park. The project included a detailed erosion and sediment control plan. The job was unique to me in that I took the role in handling all invoices and project administration between the owner, contractor, and funding agencies.
	Fairmont State University, Locust Avenue Demolition: This project was broken down into two phases, which included the demolition of nine (9) residential structures. Once the structures were demolished, a parking lot was installed in the vacant area.
۵	City of Mannington, Buffalo Street Demolitions: The goal of the project was to demolish four structures, ranging from three to four story buildings. Once the structures were removed, Thrasher Engineering was able to restore and stabilize an adjacent stream bank and provide off-street parking.
	Fairmont State University, Engineering Technology Building: For this project we were working with the architect who was renovating the existing technology building on campus. Our portion of the Job was to provide grading and utility plans for the renovation. As the plans progressed, the owner decided to include a retaining wall. The wall was designed as a segmental block wall which had grating that spanned between the wall and the proposed building.
	Harrison County Commission, Handicap Ramp and Sidewalk: The goal of the design was to improve the handicap entrance to the county courthouse by making a wider ramp and gentler slope. The sidewalk that makes up Court Street, adjacent to the courthouse was designed to remove all existing uneven pavers, slate and concrete and replace with a concrete sidewalk with a brick paver border.
	Buffalo Wild Wings, Site Preparation: Performed the design of site preparation for a developer in Charleston, WV for construction of the franchise restaurant. The work included grading, drainage, parking layout, landscaping, and utilities.

## **ERIC SHORT - STAFF ENGINEER**

Mr. Short joined Thrasher Engineering in 2003 and serves as Staff Engineer on Residential and Commercial Site Development Projects as well as Transportation projects. Mr. Short has experience in all aspects of site engineering, taking projects from concept to construction.

EDUCA	ATION
` <b>_</b>	Bachelor of Science in Civil Engineering Technology, Fairmont State University, Fairmont, West Virginia, 2003
	Associate of Science in Architectural Engineering Technology, Fairmont State University, Fairmont, West Virginia, 2003
REPRES	SENTATIVE PROJECT EXPERIENCE
	WVDOH Corridor "H": Assisted in design of Roadways, Bridges, and erosion/sediment control.
	Mid-Atlantic Aerospace Complex: Assisted in design of Storm water system in accordance with City of Bridgeport regulations.
	North Central West Virginia Airport: Design of Malsar Light Tower pads along WV Rt. 279.
ū	Raleigh County Memorial Airport & Industrial Park: Design of Roadway, Drainage and Erosion and Sediment Control Plan.
	Mike Mason Chiropractic Office Building: Complete Site Design Package, including building and parking layout, utility extensions, and underground storm water management facility in accordance with the City of Bridgeport regulations.
	Cambridge Place Business Park: Complete Site Design Package, multiple tenant building and parking layout, utility extensions, and storm water system in accordance with the City of Bridgeport regulations.
	Charles Pointe Development: Various tasks, including plan review, parking layouts, and stormwater management review to meet local city code.
	Cherry Ridge Wind Farm: Project included design of 1.5 miles of access road and the design of crane erection pads for wind turbines in Mount Storm, WV. Project highlights include the use of low impact development storm water management features (use of grass swales with level spreader outlet protection).
	Creekside Meadows: Assisted design concept for large mixed-residential subdivision in Berkeley County, WV. Included layout scenarios for townhouse lots, single-family lots, and a mix of both. Designed Road and Utility extension once layout was accepted by owner.

# AARON W. DENHAM – PARTNER / GENERAL MANAGER MATERIALS TESTING AND INSPECTION

Mr. Denham joined Thrasher Engineering in 2000 and serves as Manager of all Construction Inspection and Materials Testing projects for the firm. Mr. Denham is responsible for all construction inspection for water, sewer, site development, and WVDOH projects, and the daily activities of the materials testing department for highway, airport, site development, structural and public utilities projects.

EDUCA	ATION
	B.S. Civil Engineering Technology, 1999 – Fairmont State University
CERTII	CATIONS
	Fairmont State University Level V Certification – Transportation Engineering Technologist – Engineering Specialization
	WVDOH Compaction Inspector
	WVDOH Concrete Inspector/Technician
	WVDOH Aggregate Sampling Inspector
	WVDOH Aggregate Technician/Inspector WVDOH Bituminous Inspector/Technician
<u> </u>	WVDOH Radiation Safety
ā	Troxler Basic Safety – Nuclear Compaction Gauge
AFFIL	ATIONS
	ASHE – American Society of Highway Engineers
REPRE	SENTATIVE PROJECT EXPERIENCE
	Rubenstein Center for Youth – Davis, WV [Project Manager]: Responsibilities including reviewing asphalt and concrete mix designs. Coordinating with contractor on assigning field technicians and any special testing. Reviewing field technician's daily reports, field testing reports, and all laboratory testing results before being submitted to owner.
	Mountaineer Challenge Academy – Camp Dawson, WV [Project Manager]: Responsibilities including reviewing asphalt and concrete mix designs. Coordinating with contractor on assigning field technicians and any special testing. Reviewing field technician's daily reports, field testing reports, and all laboratory testing results before being submitted to owner. Construction began September 2007 and completed January 2010.
٥	Fairmont State University (Parking Garage, Bryant Place Dormitory, Campus Renovations, Engineering Building Addition, and Falcon Center) [Materials Testing Technician]: Responsibilities included materials testing and inspection of all material used in the construction all the renovations and new construction for Fairmont State University. Performed compaction testing, with nuclear gauge, on soils, stone, and asphalt, tested concrete for air content, slump, temperature, and compressive strength of cylinders,
_	mortar cubes and grout prisms; rebar inspection, and fireproofing testing which included density and thickness.
	Glenville State College Dormitory — Glenville, WV [Project Manager]: Responsibilities including reviewing asphalt and concrete mix designs. Coordinating with contractor on assigning field technicians and any special testing. Reviewing field technician's daily reports, field testing reports, and all laboratory testing results before being submitted to owner. Construction began October 2009 and completed May 2011. Construction cost was \$100 million.
	Bio Medical Research Facility – Morgantown, WV [Project Manager]: Responsibilities including reviewing asphalt and concrete mix designs. Coordinating with contractor on assigning field

technicians and any special testing. Reviewing field technician's daily reports, field testing reports, and all laboratory testing results before being submitted to owner. Construction began July 2006 and completed October 2007. Construction cost was \$30 million. (
Mon General Hospital Hazel Ruby McQuain Tower – Morgantown, WV [Project Manager]: Responsibilities including reviewing asphalt and concrete mix designs. Coordinating with contractor on assigning field technicians and any special testing. Reviewing field technician's daily reports, field testing reports, and all laboratory testing results before being submitted to owner. Construction began September 2006 and completed August 2008. Construction cost was \$90 million.
West Virginia University Cancer Center – Morgantown, WV [Project Manager]: Responsibilities including reviewing asphalt and concrete mix designs. Coordinating with contractor on assigning field technicians and any special testing. Reviewing field technician's daily reports, field testing reports, and all laboratory testing results before being submitted to owner. Construction began March 2007 and completed May 2008. Construction cost was \$18 million.
West Virginia University Alumni Center – Morgantown, WV [Project Manager]: Responsibilities including reviewing asphalt and concrete mix designs. Coordinating with contractor on assigning field technicians and any special testing. Reviewing field technician's daily reports, field testing reports, and all laboratory testing results before being submitted to owner. Construction began September 2007 and completed July 2008. Construction cost was \$20 million.
Health Science Learning Center – Morgantown, WV [Project Manager]: Responsibilities including reviewing asphalt and concrete mix designs. Coordinating with contractor on assigning field technicians and any special testing. Reviewing field technician's daily reports, field testing reports, and all laboratory testing results before being submitted to owner. Construction began May 2005 and completed May 2006. Construction cost was \$12 million.
Ruby Memorial Hospital NE Addition – Morgantown, WV [Project Manager]: Responsibilities including reviewing asphalt and concrete mix designs. Coordinating with contractor on assigning field technicians and any special testing. Reviewing field technician's daily reports, field testing reports, and all laboratory testing results before being submitted to owner. Construction began January 2004 and completed May 2005. Construction cost was \$70 million.

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### **EXPERIENCE WITH SIMILAR PROJECTS – AIRPORT RELATED PROJECTS**

# ADDITIONAL NORTH CENTRAL WEST VIRGINIA AIRPORT PROJECTS

NORTH CENTRAL WEST VIRGINIA AIRPORT 20-YEAR MASTER PLAN

AIP Project #3-54-0005-2301 —Thrasher Engineering has served as the Engineer for the North Central West Virginia Airport (formerly Harrison -Marion Regional Airport / Benedum Airport) for over seven years. The working team relationship we have established has allowed for on-going improvements to the

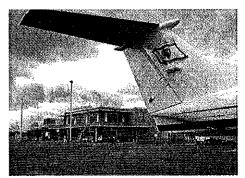
The Development of this Plan Included:

- · Inventory of Existing Facilities
- · Historic Data and Projections for Aviation Demand
- Demographic Trends
- Commercial Service Industry Trends
- · Aviation Forecasts

facility.

- Demand / Capacity Analysis
- · Accommodation Requirements
- · Alternatives and Planned Layout

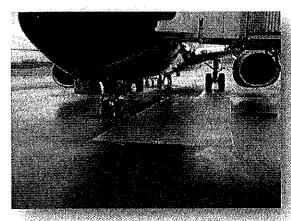




AIP PROJECT #3-54-0005-2301 – DESIGN AND PREPARATION OF CONSTRUCTION PLANS FOR DE-ICING PAD AND

RUN-UP PAD.

This project involved site work to accommodate a new run-up pad to the east side of the existing runway. The ramp area was completely repaved and a collection system for de-icing fluid was installed allowing drainage into the sanitary and storm sewer systems. This project also included terminal renovations with a new secure waiting area, new restrooms and a baggage carousel.



AIP Project #3-54-0005-2301 — Design and Preparation of Construction Plans for a New Segmented Circle with Wind Cone, 2 New Snow Plow Vehicles, F.O.D. Removal Equipment with Vehicle and a Passenger Boarding Ramp.

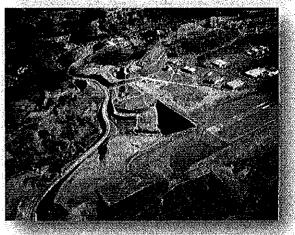
This project included the preparation of contract documents for equipment including a 6-wheel truck with a 16' wide snowplow and spreader box, a ½ ton pick-up with utility trailer, a utility vehicle with tow behind F.O.D. equipment and a passenger boarding ramp.

AIP Project #3-54-0005-2200 – Design and Preparation of Construction Plans for Taxiway Widening a nd R amp Paving, Installation of Perimeter Fencing a nd D oor Replacement for ADA Compliance.

This project consisted of preparing construction plans for paving of grass medians located between the taxiway and apron areas in addition to widening taxiways on both ends of the runway to accommodate larger aircraft. This project included installing perimeter chain link fencing and ADA compliant terminal doors.

Obstruction Removal & Runway Expansion. Thrasher Engineering has designed and provided survey, construction management and materials testing services for runway expansion and improvement projects at the North Central Regional Airport. These projects included the following:

Removal of 2 Obstructive Knolls – This project is required earthwork consisting of 160,000 CY from each of two locations, totaling 320,000 CY, to remove two obstructive knolls in order to expand the Runway 21 approximately 800



feet to the north. The dirt removed was used to fill in low laying areas, providing taxiways to and from this runway.

**Expansion of a Runway from 5,200 feet t o 7,000 f eet** — This project required cutting away a mountainside to make way for the runway expansion. During this project 10.7 million CY of stone and soil was moved and recycled on site. This soil was used to fill in low lying areas which opened up 250 new acres of land on which the Mid-Atlantic Aerospace Complex (Industrial Park) sits.

**Resurfacing the Existing Apron-** Designed a complete replacement of the 5 acre apron at Harrison-Marion Regional Airport (CKB) in 2004. Pavement on the apron was completely replaced. Additionally parts of the subsurface were replaced with new stone and made to handle larger and heavier aircraft.

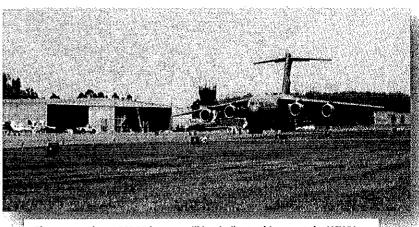
**Environmental Assessment.** Thrasher conducted investigation and developed an assessment in conjunction with a runway safety study and consequential runway expansion. The information presented and analyses performed relative to environmental issues allowed FAA to determine what the level of significance the environmental effects of the proposed project were. The significance of the impacts allowed FAA to determine if impacts could be mitigated or if a higher level of review was required for the proposed action. The HMRA EA detailed the following: background and proposed action, purpose and need, alternatives, affected environment, environmental consequences and mitigation

## MID ATLANTIC AEROSPACE COMPLEX - HANGER BUILDING

Thrasher Engineering has been the engineer of record for numerous projects within the campus of the Mid Atlantic Aerospace Complex. The scope for the most recent project, which is currently out to bid, included the development of preliminary plans, permitting and design, and construction document preparation for a 100' x 200' pre-engineered metal hanger and the necessary site preparation

#### PROJECT OWNER'S INFORMATION -

MID ATLANTIC AEROSPACE COMPLEX
MS. TRACY MILLER, EXECUTIVE DIRECTOR
TELEPHONE NUMBER: 304-842-304-842-9415



The proposed new MAAC hanger will be similar to this one at the NCWV airport.