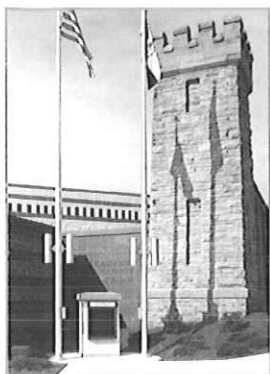


CRABTREE, ROHRBAUGH & ASSOCIATES ARCHITECTS

ARCHITECTURE, PLANNING, INTERIOR DESIGN



PROPOSAL PREPARED FOR:

STATE OF WEST VIRGINIA DEPARTMENT OF ADMINISTRATION ANTHONY CORRECTIONAL CENTER

RFQ COR61515

RECEIVED

2012 MAY 11 AM 10:34

ORIGINAL

WV PURCHASING
DIVISION

CR



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

Request for Quotation

REQ NUMBER
COR61515

PAGE
1

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

RFQ COPY

TYPE NAME/ADDRESS HERE
Crabtree, Rohrbaugh & Associates
401 E. Winding Hill Road
Mechanicsburg, PA 17055

ANTHONY CORRECTIONAL CENTER
BOX N-1, HC 70

ROUTE 92 (NEOLA)
WHITE SULPHUR SPRINGS, WV
24986 304-536-4151

DATE PRINTED	TERMS OF SALE	SHIP VIA	FOB	FREIGHT TERMS
04/04/2012				
BID OPENING DATE:	05/17/2012			
			BID OPENING TIME	01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
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 ISSUES OF WATER LEAKING INSIDE OF THE BUILDING AT THE ANTHONY CORRECTIONAL CENTER LOCATED IN WHITE SULPHUR SPRINGS, WV, PER THE ATTACHED BID REQUIREMENTS AND 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 05/01/2012 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 04/24/2012 AT 10:00 AM AT THE ANTHONY CORRECTIONAL CENTER LOCATED IN WHITE SULPHUR SPRINGS, WV. 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						

Date	4/11/12	# of pages	17
Post-it® Fax Note	7671	From	Tara
To	To Ann	Co.	
Co/Dept.		Phone #	
Fax #	717-458-9468		

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE
Chairman, Board of Dir.	717-458-0272	May 10, 2012
TITLE	FAX	ADDRESS CHANGES TO BE NOTED ABOVE
	232303190	

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



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From	Tara	Co.	
Phone #		Fax #	
Post-it Fax Note	7671	To	John
		Co./Dept.	
		Phone #	
		Fax #	717-458-9468

SIGNATURE	SEE REVERSE SIDE FOR TERMS AND CONDITIONS	TELEPHONE	717-458-0272	DATE	May 10, 2012
TITLE	Chairman, Board of Dir.	FAX	232303190	ADDRESS CHANGES TO BE NOTED ABOVE	

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State of West Virginia
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Purchasing Division
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Post Office Box 50130
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Request for Quotation

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3

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304-558-2544

RFQ COPY

TYPE NAME/ADDRESS HERE

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24986 304-536-4151

DATE PRINTED	TERMS OF SALE	SHIP VIA	FOB	FREIGHT TERMS		
04/04/2012						
BID OPENING DATE: 05/17/2012		BID OPENING TIME 01:30PM				
LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
<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>NOTICE</p> <p>A SIGNED BID MUST BE SUBMITTED TO:</p> <p>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.: ----- COR61515 -----</p> <p>BID OPENING DATE: ----- 05/17/2012 -----</p> <p>BID OPENING TIME: ----- 1:30 PM -----</p>						
SEE REVERSE SIDE FOR TERMS AND CONDITIONS						
SIGNATURE		TELEPHONE 717-458-0272		DATE May 10, 2012		
TITLE Chairman, Board of Dir.		FED 232303190		ADDRESS CHANGES TO BE NOTED ABOVE		

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



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
COR61515

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4

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Mechanicsburg, PA 17055

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DATE PRINTED	TERMS OF SALE	SHIP VIA	FOB	FREIGHT TERMS
04/04/2012				

BID OPENING DATE: **05/17/2012** BID OPENING TIME **01:30PM**

LINE	QUANTITY	UOP	QTY NO	ITEM NUMBER	UNIT PRICE	AMOUNT
PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY TO CONTACT YOU REGARDING YOUR BID: 717458-0047						
CONTACT PERSON (PLEASE PRINT CLEARLY): Brian Haines, AIA, LEED AP						
***** THIS IS THE END OF RFQ COR61515 ***** TOTAL:						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS			
SIGNATURE 		TELEPHONE	DATE
		717-458-0272	May 10, 2012
TITLE	Chairman, Board of Dir.	FEIN	232303190
		ADDRESS CHANGES TO BE NOTED ABOVE	

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

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Correctional Facility Experience Listing
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Project Team Organizational Chart
Project Team Resumes - CRA
Consultant Information:
 CenterPoint Engineering –MEP Services
 Dedicated Roof and Hydro-Solutions, LLC – Roofing Consultant

4 – PROJECT APPROACH

Project Approach
Construction Administration
Adherence to Project Schedules



**Crabtree, Rohrbaugh & Associates
Architects**

793 Main Street East, Suite 200B
White Sulphur Springs, West Virginia 24986
phone: (304) 536-4200

May 10, 2012

Ms. Tara Lyle
Department of Administration
Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130

RFQ – COR61515 Anthony Correctional Center Roof Repairs Due to Water Leaks

Dear Ms. Lyle:

Crabtree, Rohrbaugh & Associates is pleased to submit our response to provide architectural services for the Anthony Correctional Center – Roof Repair Project. Our Firm brings incomparable strength to your project in the following areas:

- **NATIONALLY RECOGNIZED IN-HOUSE CORRECTIONAL FACILITIES PLANNER & SECURITY EXPERTS**
- **CORRECTIONAL /DETENTION CENTER EXPERIENCE & EXPERTISE** – The project team has completed numerous correctional and detention center, jails and police stations throughout the Mid-Atlantic Region.
- **CLIENT ORIENTED APPROACH** – Focusing on our client's needs allows Crabtree, Rohrbaugh & Associates to provide improvements geared to the needs and goals of the client; one that will offer solutions to the challenges identified through an approach with the client clearly in mind. Additionally, by understanding these needs Crabtree Rohrbaugh and Associates will provide an appropriate level of architecture that will provide solutions to the identified challenges, meet the needs of the client and provide a cost-effective facility for the community.
- **COST SAVINGS** – Taking the time to truly understand the client's needs, and designing appropriately to these needs, has allowed our firm to successfully design our projects with cost savings to every client.

Thank you for the opportunity to present our qualifications and we hope to have an opportunity to present our approach to accomplish renovations to your facility safely and cost effectively. Please feel free to contact either myself or Brian Haines if have any questions or comments regarding our information.

Sincerely,

Thomas C. Crabtree, AIA
President

Brian Haines, AIA, LEED AP
Studio Director - Corrections



Welcome to Crabtree, Rohrbaugh & Associates.



WHO WE ARE

Crabtree, Rohrbaugh & Associates is a nationally recognized design firm employing more than ninety leaders in the fields of architecture design, planning and project management. We are recognized as a Top 100 Architectural Firm by Architectural Record and a Top 500 Design Firm by Engineering News-Record. We have the resources to provide our clients with the highest quality architectural design services and through our management approach provide the personal attention associated with a small firm.

Our people are our greatest asset.

Our Project Managers and Directors are among the most talented and diversified in the country, and the environment we have created at the firm has kept our core members growing with us.

The firm has no turnover of project management staff and in fact the project team responsible for our first county project in 1984 continues to produce county facilities design services throughout the Commonwealth. The depth of their experience—together over 425 years across the United States and abroad—translates into impressive, well-executed projects and the highest level of hands-on support for all of our clients.

Our progressive approach to management has earned us recognition as a top 100 places to work in Pennsylvania.

WHAT WE DO

Crabtree, Rohrbaugh & Associates has designed and administered the construction of facilities for our clients in thirty-nine states and counting. Our talented design staff of over 90 professionals can handle any project type, regardless of size. The scope of our experience includes corrections, detention, judicial, historical, educational, retail, health care, religious, governmental, warehousing, distribution, manufacturing, corporate office, commercial office, professional office, multi-family housing, residential, hotel, restaurant, recreational and banking facilities.

The common thread running through all of our projects is our collaborative design process. We work with our clients from day one to incorporate their needs and goals into the design of the building and place the emphasis on the people who use the facilities.



WHAT MAKES US DIFFERENT

Twenty-seven years ago, Tom Crabtree and Doug Rohrbaugh founded the firm based on a simple mission of providing “**a client-oriented approach to architecture.**” This dedication to placing the client first in the design process sets us apart. The quality of our design, the completeness of our construction documents

and our ability to provide the resources to complete projects on schedule and on budget plays a major role in our success. Eighty percent of our current workload is with repeat clients. Our projects are appropriate, on-budget, on-schedule, well-executed and work well with their surroundings to give our clients and their communities the best in architectural design. At the end of the day, our clients are happy and our designs are continually recognized for excellence by the American Institute of Architects.

SUSTAINABLE DESIGN



**CENTRAL
PENNSYLVANIA**
Silver Organization Sponsor



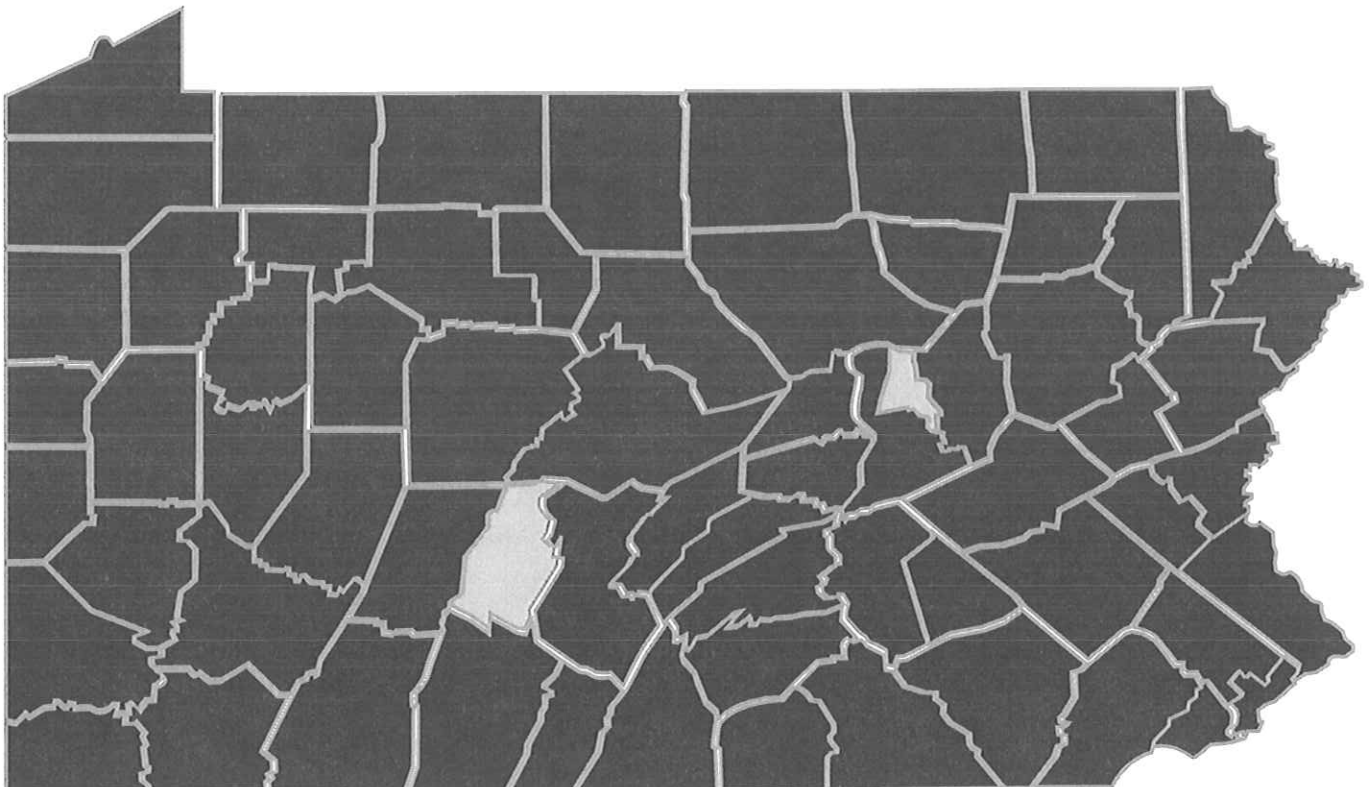
The firm historically has had a talent for recognizing a need and responding with innovation. Based on the need for more efficient and better performing buildings, we create sustainable designs for our clients. Our LEED Accredited Professionals incorporate efficient green building solutions into their designs. We maintain the highest standards in technology, training, education and innovation so that our work is always on the leading edge.



PENNSYLVANIA EXPERIENCE

Crabtree, Rohrbaugh & Associates has provided professional, design and project management services to a variety of municipalities across the Commonwealth. The firm has also provided services in 65 of the 67 counties in the Pennsylvania.

The areas highlighted in Blue represent Crabtree, Rohrbaugh & Associates' Pennsylvania Experience.



CORPORATE INFORMATION

Firm

Crabtree, Rohrbaugh &
Associates Architects

Years of Experience in the Field

27 years

Location

Pennsylvania (Headquarters)
401 East Winding Hill Road
Mechanicsburg, Pennsylvania 17055

Telephone Number

(717) 458-0272

Fax Number

(717) 458-0047

Maryland

180 Avondale Lane
Sudlersville, Maryland 21668

E-mail Address

cra@cra-architects.com

West Virginia

793 Main Street East
Suite 200B
White Sulphur Springs, West Virginia 24983

Web Site

www.cra-architects.com

Date of Incorporation

July 1984

Virginia

250 West Main Street
Suite 200
Charlottesville, Virginia 22902

State of Incorporation

Pennsylvania (also foreign
incorporation in Maryland and Virginia)

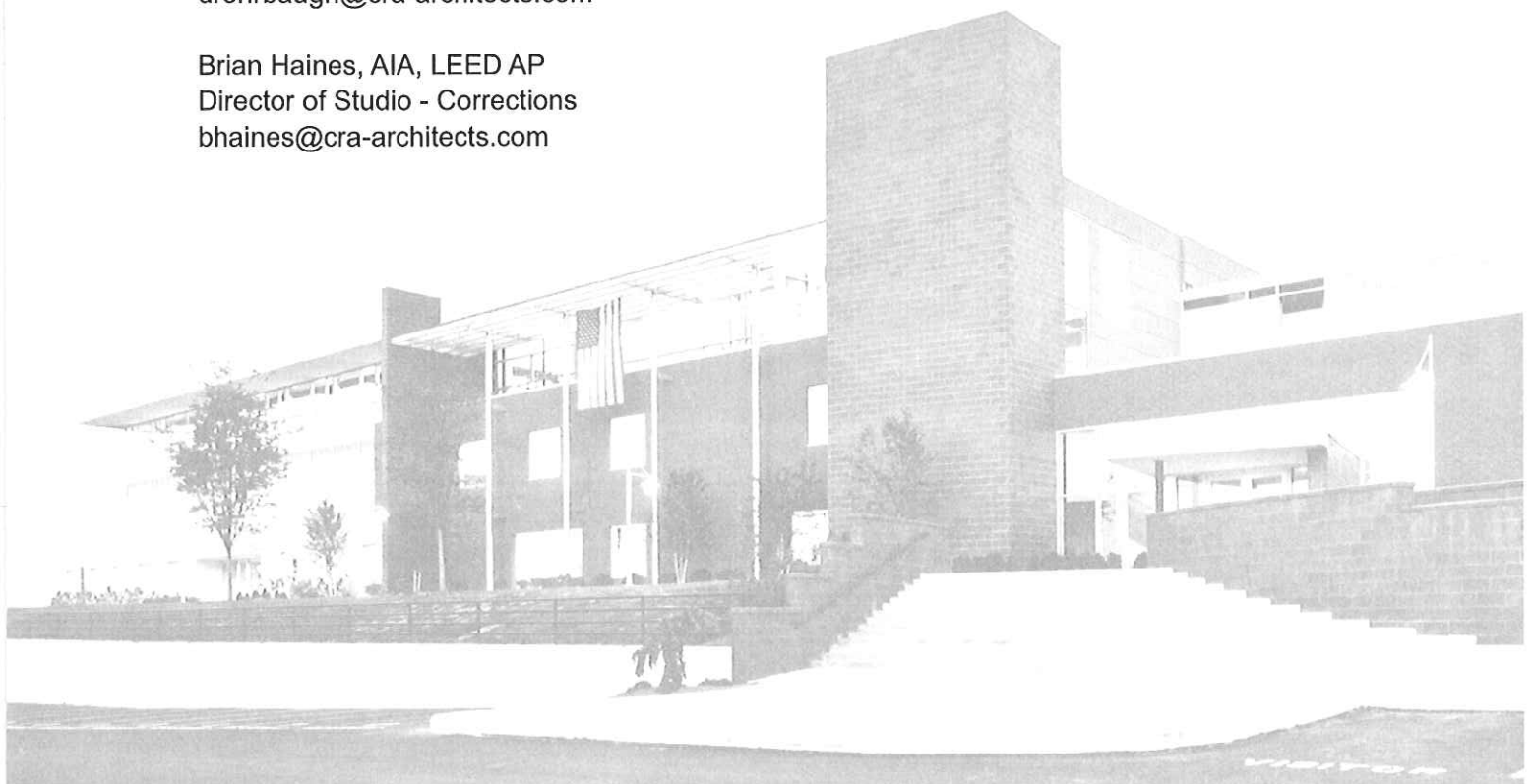
Contact Persons:

G. Douglas Rohrbaugh
Chairman, Board of Directors
drohrbaugh@cra-architects.com

Officers of the Company

Thomas C. Crabtree, President
G. Douglas Rohrbaugh, Vice President/Secretary

Brian Haines, AIA, LEED AP
Director of Studio - Corrections
bhaines@cra-architects.com



CAPABILITIES

Thanks to the diversity and experience of the architects at Crabtree, Rohrbaugh & Associates, we are able to handle every project type that comes our way, regardless of size. We cultivate partnerships with our clients and take them through the entire process, from inception to completion and beyond. As a full-service architectural firm, Crabtree, Rohrbaugh & Associates takes pride in the relationships we build as well as the structures we create.

I PRE-DESIGN

- Programming
- Facilities Assessment
- Master Planning
- Space Planning
- Capital Improvement Planning
- Facility Survey
- Market Study
- Feasibility Study
- Development Scheduling
- Project Budgeting

II SITE ANALYSIS

- Evaluation and Selection
- Master Planning
- Development Planning
- Utilization Study
- Utility Study
- Environmental Study
- Zoning Processing
- Field Observation
- Office Administration
- Inspection
- Project Consultation

III DESIGN AND CONSTRUCTION DOCUMENTS

- Architectural Design
- Structural Design
- Civil Design
- Landscape Design
- Interior Design
- Mechanical Design
- Electrical Design
- Equipment Planning
- Materials Research
- Warranty Review
- Post Construction Evaluation

IV BID & NEGOTIATION

- Bid Administration
- Bid Evaluation
- Contract Preparation

V CONSTRUCTION ADMINISTRATION

- Project Representation

VI POST-CONSTRUCTION

- Maintenance/Operational Programming
- Occupancy Assistance
- Record Document

VII SPECIALTY

- Renderings
- Models
- Life Cycle Cost Analysis
- Value Analysis
- Quantity Survey
- Energy Studies
- Certificate of Need Preparation Assistance
- Americans with Disabilities Act Survey
- Americans with Disabilities Act Implementation
- Code and Regulatory Agency Approvals

TECHNOLOGY APPLICATIONS

The state of art in architectural design is an integrated process in which all team members interact through the use of collaborative technology. Crabtree Rohrbaugh & Associates uses the latest technological tools to implement these **Building Information Model (BIM)** and Integrated Project Delivery (IPD) methodologies, including AutoCAD Architecture 2010, Autodesk Revit Architecture 2012 and the Attolist web-based construction management administration system.

Unlike the Design-Build project delivery method which places the Contractor in the leading role on a building project, IPD represents a return to the "Master Builder" concept where the entire building team including the owner, architect, general contractor, building engineers, fabricators, and subcontractors work collaboratively throughout the construction process.

All of these tools combine to enable 3d design to become 4d and 5d design by incorporating the elements of time (4d) and cost (5d) with geo-spatial (3d) information. Photo-realistic digital renderings and animations/walk-throughs, as well as lighting studies/simulations, are provided through the use of Autodesk 3d Studio Max. Our network consists of Xeon workstations, running 64 bit Windows 7 Professional, which are connected, via gigabit Ethernet with fiber backbone, to servers in a virtual machine environment. Our 10Mbps internet connection provides high speed communication with clients, consultants and contractors.

Our on-site Information Technology Director and our **BIM/CAD** Manager provides training and support to ensure that construction documents are complete and on schedule. We also utilize a vast library of standard details and equipment to produce drawings in a reliable, cost-effective and timely manner. Our standard CAD library holds the latest technical materials available from manufacturers and suppliers of building systems, ranging from sophisticated HVAC and mechanical systems to the latest technology in energy efficient windows, insulation and roofing systems.

Our Web Based Project Management System allows the architect, consultants and clients to collaborate efficiently and securely. The architect and the client use the site as a means of communication for minutes, drawings, documentation and track revisions. The architect and their consultants use the site as a platform for sharing R.F.I.'s, meeting minutes, drawings, requests for information, and change orders. The client may use the site to communicate with the public through questionnaires, presentations and announcements. By constantly upgrading and enhancing our systems Crabtree, Rohrbaugh & Associates continues to streamline the design process which benefits all our clients.



CORRECTIONAL FACILITY EXPERIENCE OVER TWO DECADES OF CORRECTIONAL FACILITY EXCELLENCE

Crabtree, Rohrbaugh & Associates is a full service architectural firm that has specialized in correctional facility design since our inception in 1984; the firm has extensive experience in the programming, planning and design of correctional facilities. Crabtree, Rohrbaugh & Associates is a leader in correctional facility design having completed over 33 county correctional facility projects and 6 State Correctional Institution projects, including the following:

State of West Virginia – Regional Jail System

- Eastern Regional Jail – New Construction
- Northern Regional Jail – New Construction
- Central Regional Jail – New Construction
- Southern Regional Jail – New Construction
- North Central Regional Jail – New Construction
- Southwestern Regional Jail – New Construction
- West Central Regional Jail – New Construction
- Western Regional Jail – New Construction
- Tygart Valley Regional Jail – New Construction
- Eastern Regional Jail – Additions
- Potomac Highlands – New Construction

West Virginia Eastern Regional Jail System

Thomas C. Crabtree, President of the firm, has personally programmed and designed more than sixty prison and detention facility projects. They range in size from twelve-bed juvenile detention centers to one-thousand cell state prisons and have a total bed count in excess of seventeen thousand.

Thomas C. Crabtree, RA, AIA is the Principal in Charge for all Correctional Facility Projects and is a nationally recognized security planner and has served as the lead designer for projects throughout the United States. Most notable national projects include the conversion of the West Virginia Regional Jail System which involved a conversion from a county based correctional system to the design of ten jail Regional Correctional system valued at over \$120 Million Dollars.

Principals and Directors of the firm have spoken nationally in regards to security and correctional facility design. In 1979 the Federal Government recognized Thomas C. Crabtree as a leader in the field of prison design and had him review the first draft of the proposed "1980 Standards for Prison Facilities." Tom was one of 20 architects selected nationwide for this review and the only architect in Pennsylvania. His recommendations have been incorporated into today's Federal Standards.

In 1979 the Law Enforcement Assistance Administration cited Thomas C. Crabtree's exemplary design solution to the difficult task of renovating an archaic existing facility and incorporating both today's physical and programmatic standards and awarded Juniata County a grant for the construction of the alterations and additions to their existing county jail. This was one of only two such grants awarded nationwide.

In 1981 and 1983, Thomas C. Crabtree was invited to participate in a special seminar on Planning New Institutions conducted by the National Institute of Corrections in Boulder, Colorado. This extensive in-depth training session adds special strength to the level of professional service we offer our clients in this field.

In 1983 the Commonwealth of Pennsylvania invited Thomas C. Crabtree to conduct a special training seminar on the utilization and interpretation of the National Fire Protection Association Life Safety Code (NFPA 101) included in the new Fire and Panic Act scheduled to be adopted for the design of correctional facilities within the Commonwealth. Tom presented this comprehensive seminar to senior plan examiners of the Buildings Division of the Pennsylvania Department of Labor and Industry and representatives of the Pennsylvania Department of Justice and Pennsylvania Department of General Services.

In 2004 the Construction Maintenance Institute for Criminal Justice Agencies (CMI) Invited Thomas C. Crabtree to provide a special seminar on Medical Issues in Correctional Facility Design. CMI has invited Mr. Crabtree to present in 2005 on Courthouse Design for Safety and Security.

Crabtree, Rohrbaugh & Associates focus on the design of correctional facilities is to not only design a cost effective facility, but more importantly design an operationally efficient facility. The study process employed when designing the facility will take into account all aspects of the project. The study will include all operational and facility costs and it creates a per diem cost broken down by inmate. This analysis will show the client which design solution will be the most cost effective to build and operate.

CORRECTIONAL CLIENTS

Crabtree, Rohrbaugh & Associates is a national leader in security and correctional facility design. The following is a list of projects that we have completed:

Correctional Facilities – United States

- State of West Virginia – Regional Jail System
 - Eastern Regional Jail – New Construction
 - Northern Regional Jail – New Construction
 - Central Regional Jail – New Construction
 - Southern Regional Jail – New Construction
 - North Central Regional Jail – New Construction
 - Southwestern Regional Jail – New Construction
 - West Central Regional Jail – New Construction
 - Western Regional Jail – New Construction
 - Tygart Valley Regional Jail – New Construction
 - Eastern Regional Jail – Additions
 - Potomac Highlands – New Construction
- West Virginia Eastern Regional Jail System
- Anne Arundel County New Sentenced Inmate Facility – Ordnance Road – New Construction
- Anne Arundel County Detention Center – Jennifer Road - Additions & Renovations
- Chesterfield County Jail, Virginia - Renovation
- Fannin County Georgia – New Facility
- State of West Virginia – Lakin State Hospital Conversion
- Hamilton County Tennessee – New Construction
- Northern Neck Regional Jail, Virginia – New Construction
- Harford County, Maryland – Feasibility Study – Adult Detention Center
- Harford County, Maryland – New Construction – Northern Precinct Sheriff's Headquarters
- Harford County, Maryland – New Construction – Southern Precinct Sheriff's Headquarters
- Lakin Correctional Facility for Women – Addition/Renovation
- State of West Virginia – Huttonsville – Additions
- State of Texas – Site Study
- State of New Hampshire – State Wide Master Plan
- Adams County Prison – Additions & Renovations
- Bradford County Prison – Additions & Renovations
- Carbon County – New Construction
- Chester County – Feasibility Study & Master Plan
- Chester County Prison – Additions & Renovations
- Chester County Work Release Center – New Construction
- Chester County Juvenile Detention Center – New Construction
- Clarion County Prison – New Facility
- Clinton County – Feasibility & Master Plan
- Clinton County Prison – New Construction
- Clinton County Prison – Additions & Renovations
- Crawford County Prison – New Construction

CORRECTIONAL CLIENTS

- Cumberland County Prison – Additions
- Dauphin County – Feasibility Study & Master Plan
- Dauphin County Pre-Release Center – Modular Construction
- Dauphin County Work Release Center – New Construction
- Dauphin County Work Release Center – Additions & Renovations
- Dauphin County Juvenile Detention Center – New Construction
- Elk County Prison – Additions & Renovations
- Lackawanna County – Additions & Renovations
- Lebanon County – Feasibility Study
- Lebanon County Prison – Additions & Renovations
- Mercer County – Feasibility Study
- Mifflin County Prison – Additions & Renovations
- Montgomery County – Feasibility Study
- Montgomery County Prison – Additions
- Northampton County Prison – New Construction
- Perry County Prison – New Construction
- Potter County Prison – Additions & Renovations
- Snyder County – Feasibility Study & Master Plan
- Snyder County Prison – Conversion of Facility into Prison
- Susquehanna County – New Construction
- Union County Prison – Feasibility Study
- Venango County Prison – Feasibility Study & Master Plan
- Venango County Prison – Additions & Renovations
- Wayne County – Feasibility Study & Master Plan
- Wayne County – New Construction
- York County Juvenile Detention Center – New Construction
- State Correctional Institution – Rockview – Additions & Renovations
- State Correctional Institution – Greene – New Construction
- State Correctional Institution – Camp Hill – Additions & Renovations
- State Correctional Institution – Chester – New Construction
- State Correctional Institution – Mahanoy – New Construction
- State Correctional Institution – Pittsburgh – Additions & Renovations
- DGS Juvenile Detention Facility – South Mountain – New Construction
- DGS Juvenile Detention Facility – Cresson – New Construction

Owner
West Virginia State

Project Location
West Virginia

Project Type
New Construction

Project Size
132,587 SF

Construction Estimate
\$100,000,000

Construction Cost
\$110,000,000

Construction Start
Spring 1992

Construction Completion
Summer 1995

Contact
Jack Roupe
Former Executive Director
304-254-2944



WEST VIRGINIA REGIONAL JAIL SYSTEM



Crabtree, Rohrbaugh & Associates developed the prototype for the West Virginia Regional Jail system.

Facilities Included:

Eastern Regional Jail
Northern Regional Jail
Central Regional Jail
Southern Regional Jail
North Central Regional Jail
Southwestern Regional Jail
West Central Regional Jail
Western Regional Jail
Tygart Valley Regional Jail
Eastern Regional Jail
Potomac Highlands

This project includes the prototypical development of the West Virginia Regional Jail System, replacing all existing county jails with new 200-, 300- and 400-cell regional jail facilities. The jails are designed with a full range of security types to accommodate different inmate classifications as required by the State of West Virginia. Conventional reinforced concrete masonry units with security hollow metal doors and frames and security

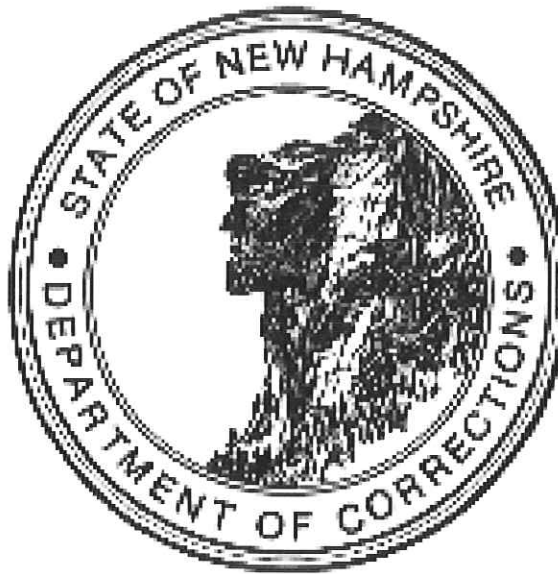
hardware are used throughout each building. A complete security management system allows for monitoring of all security and housing unit security functions from a central control point. Each building is designed for a two-phase expansion plan to increase the total capacity of the facilities by over 100%. All infrastructure and support facilities are designed to accommodate this expansion.

Owner
New Hampshire Department
of Administrative Services
& New Hampshire Department
of Corrections

Project Location
Concord, New Hampshire

Project Type
Comprehensive Master Plan/
Feasibility Study

Contact;
Bob Mullen, CPA
Director of Administration
STATE OF NEW HAMPSHIRE
Department of Corrections
281 No. State Street
Bureau of Services
Concord, NH 03303-3277
603-271-3294



NEW HAMPSHIRE DEPARTMENT OF CORRECTIONS

Master Plan prepared for the NHDOC will accommodate changes that can take place during the next 10 years.

Crabtree Rohrbaugh & Associates recently completed a comprehensive, statewide Master Plan to prepare the NHDOC to plan for and accommodate existing overcrowding, projected growth and program changes over the next 10 years. An Assessment of all existing facilities was conducted which included documenting floor plans for all buildings, noting the current use for each assignable space. Additionally, analyses for code compliance, design capacity by inmate classification, mechanical, electrical and plumbing systems and for conformance to the American Correctional Association standards were conducted for each separate building along with a review of the NHDOC's current and planned programs.

Following the Assessment, growth trends over the last 20 years were studied and documented and cause determinations made to these trends. Projections were calculated using multiple methods of analysis, resulting in probable minimum, mean and maximum growth expectations over the next 15 years. Multiple options were developed and for each, a fiscal analysis was prepared which included construction cost, staffing and operations estimates and recommendations made for each of the next 5 fiscal years.

Owner
Commonwealth of
Pennsylvania

Project Location
Cambridge Springs, PA

Project Type
Correctional Institution
Additions/Renovations

Square Footage
31,645 SF

Project Size
128 cells

Construction Cost
\$10,600,000

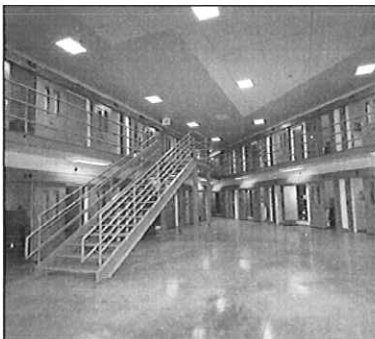
Construction Start
April 2010

Construction Completion
January 2011

Contact
Mr. Sam Pool
DGS Bureau of Construction
P: 717-783-3272
F: 717-772-2036
spool@state.pa.us



STATE CORRECTIONAL INSTITUTION - CAMBRIDGE SPRINGS



SCI - Cambridge Springs is the most recent example of Crabtree, Rohrbaugh & Associates' correctional experience. Since inception in 1984, the firm has designed several of the Commonwealth's largest State Correctional Institutes as well as various County prisons across the state.

LEED Silver Certified

SCI - Cambridge Springs is an existing, State run, women's detention center, located in, Crawford County. The facility is a general population, with medium security facilities laid out as a campus. Inmates move freely within the fenced compound from one building to another for various functions including housing, recreation, meals and visitation.

The 128 Cell Close Security L-3 (Level 3) Housing Unit is a general population housing unit based on the State of Pennsylvania's prototype butterfly housing design. This design allows corrections staff to move from facility to facility as needed, and already have full working knowledge on the building's layout upon their arrival on site, thus focusing on the security and safety of the inmates.

The layout and function of this building is primarily for inmate housing and general daily recreation, in a direct supervision security concept with security staff being located at desks located on the dayroom floor, as opposed to operating from a control room.

The building has two distinct but separate halves. As a medium security facility inmates spend the majority of their day outside of their cells, in the common day rooms for general recreation.

Support facilities within the building include several counselor's offices and two multi-purpose rooms.

Owner
Virginia Counties of
Westmoreland, Richmond &
The City of Warsaw

Project Location
Warsaw, VA

Project Type
New Construction

Project Size
102 Beds

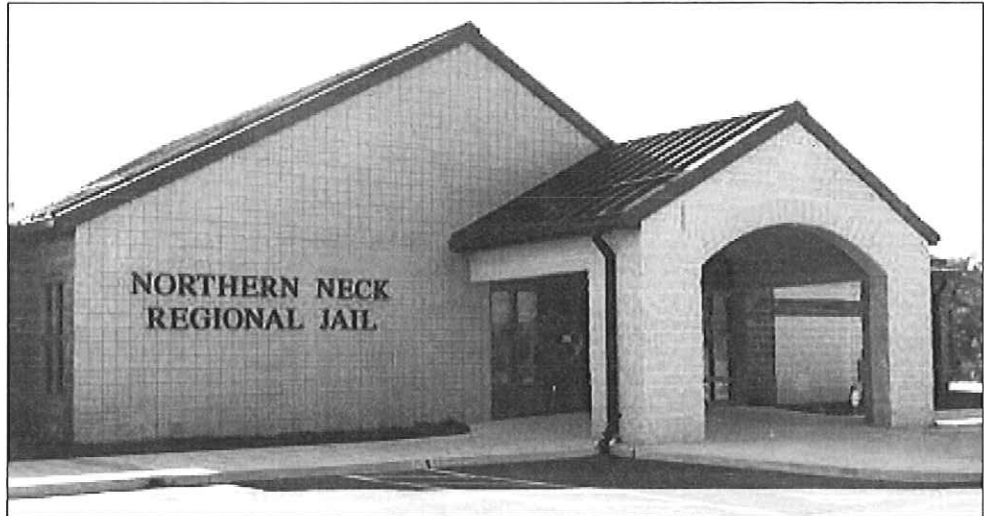
Construction Estimate
\$5,775,000

Construction Cost
\$5,895,000

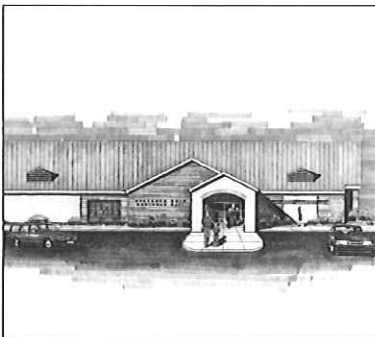
Construction Start
October 1992

Construction Completion
December 1994

Contact
Jeff Frazier
Warden



NORTHERN NECK REGIONAL JAIL



The Northern Neck Regional Jail is a state-of-the-art regional jail with a non-institutional exterior appearance.

The design incorporates traditional building forms and sloped standing seam metal roofing to create a structure that is in harmony with its rural surroundings. The facility is designed with a maximum security building perimeter and a fully-enclosed high security outdoor exercise areas. It features a complete security management system and a full range of secure building materials. The entire building exterior is maintenance free and all interior finishes are highly vandal-resistant and require

minimum maintenance. The facility and its support functions are designed to accommodate a 100% internal increase in capacity without the need for renovation or construction. Additionally, the building design permits physical expansion in a variety of areas to provide for long-term flexibility and population growth.



Owner
Harford County

Project Location
Harford County, MD

Project Type
Correctional Institution
Additions/Renovations

Project Size
76,000 SF Addition
14,000 SF Renovations

Construction Estimate
\$26,100,000

Construction Cost
\$25,000,000

Phase I
Construction Start
September 2008

Phase I
Construction Completion
September 2010



HARFORD COUNTY ADULT DETENTION CENTER - PHASE I



With the existing facility being constrained on all four sides from state highways, distressed streams and wetlands, Crabtree, Rohrbaugh and Associates developed a four story vertical solution to meet our clients needs within the budget established during the feasibility study.

Contact
Warden DeHaven
P: 410-638-3033

Crabtree, Rohrbaugh & Associates has provided design services for the 76,000 SF Addition to the existing Detention Center with 288 medium and maximum security beds to resolve the current overcrowding situation.

The new four story addition provides for the following program areas:

1. Medical Suite including medical and dental exam room and 14 medical cells
2. Classification Offices
3. Four 24 Cell medium security housing units.
4. Eight 6 Cell maximum security units.

The new one story addition provides for the following program areas:

1. IFC and Booking
2. Visitation
3. Storage
4. Expanded Administration

5. Laundry Facilities

6. District Court Commissioner's Hearing Rooms

The existing prison faces many site constraints having state highways on two sides and a stream and wetlands on the other sides. The constraints forced a vertical design solution to accommodate Harford County's program. Our solution met their needs without encroachment on any of the site limitations.

The addition and renovation will occur while the facility is occupied. CRA worked closely with Harford County to develop a multi-tiered phasing plan that avoided disruption to their day to day activities and did not compromise security or public access.

Owner
Harford County

Project Location
Harford County, MD

Project Type
Correctional Institution
Additions/Renovations

Project Size
76,000 SF Addition
14,000 SF Renovations

Total Project
Construction Estimate
\$26,100,000

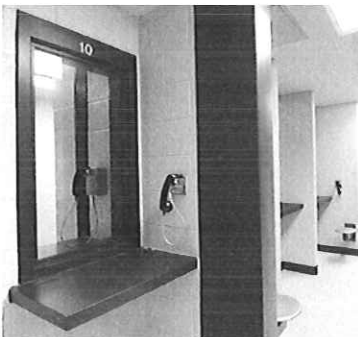
Total Project
Construction Cost
\$25,000,000

Phase II
Construction Start
October 2011

Phase II
Construction Completion
Summer 2011



HARFORD COUNTY ADULT DETENTION CENTER - PHASE II



With the existing facility being constrained on all four sides from state highways, distressed streams and wetlands, Crabtree, Rohrbaugh and Associates developed a four story vertical solution to meet our clients needs within the budget established during the feasibility study.

Contact
Warden DeHaven
P: 410-638-3033

Crabtree, Rohrbaugh & Associates has provided design services for the 76,000 SF Addition to the existing Detention Center with 288 medium and maximum security beds to resolve the current overcrowding situation.

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Owner
Harford County

Project Location
Harford County, MD

Project Type
Correctional Institution
Additions/Renovations

Project Size
76,000 SF Addition
14,000 SF Renovations

Construction Estimate
\$26,100,000

Construction Cost
\$25,000,000

Construction Start
September 2008

Construction Completion
December 2011

Contact
Warden DeHaven
P: 410-638-3033



HARFORD COUNTY ADULT DETENTION CENTER



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Owner
Anne Arundel County

Project Location
Anne Arundel County, MD

Project Type
Additions/Renovations

Project Size
Addition - 61,140 SF
Renovation - 76,700 SF

Construction Estimate
\$16,388,000

Construction Cost
\$15,725,000

Construction Start
November 1995

Construction Completion
January 1997

Contact
Terry Kokolis
Superintendent of Corrections
410-222-7084



ANNE ARUNDEL COUNTY DETENTION CENTER - JENNIFER ROAD FACILITY



Crabtree, Rohrbaugh & Associates met the unique challenges of this project, completing the additions and renovations to the occupied facility while maintaining a secure facility and a safe environment for the inmates.

The Jennifer Road Detention Center is the County's maximum security intake and pretrial detention facility. Its population consists primarily of persons arrested and awaiting trial in Anne Arundel County who do not make their bail, and persons who require special housing for medical, mental health or behavioral reasons. JRDC is designed to hold 631 inmates.

Crabtree, Rohrbaugh & Associates designed an addition and renovation to the Anne Arundel County Detention Center. Due to the site's proximity and runoff into the Chesapeake Bay, the firm had to complete the addition without disrupting local groundwater. The project also employed construction phasing to handle the unique issues related with renovating an occupied facility. The Center's medical facilities previously consisted of a holding space for inmates who would then be

treated off-site. The addition includes negative air holding cells for on-site treatment of communicable diseases, dental exam rooms, labs, a pharmacy, quarantine rooms, offices for medical counseling, a nurses office, a video room and infirmary dormitories for male and female inmate and a new kitchen facility.



Owner
Anne Arundel County
Project Location
Anne Arundel County, MD

Project Type
New Construction

Project Size
161,638 SF

Construction Estimate
\$20,000,000

Construction Cost
\$18,714,000

Construction Start
March 1995

Construction Completion
March 1997

Contact
Terry Kokolis
Superintendent of Corrections
410-222-7084



ANNE ARUNDEL COUNTY NEW SENTENCED INMATE FACILITY - ORDNANCE ROAD

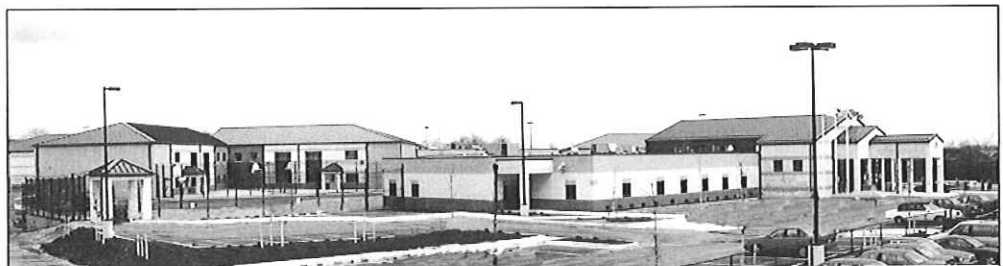


The campus plan design allows for efficient construction and maximum flexibility of the facility.

The Ordinance Road Correctional Center is the County's medium security for men and women who have been convicted and sentenced to terms up to 18 months. It houses inmates sentenced to the county system who have no charges pending adjudication. ORCC offers extensive programming designed to prepare inmates for successful re-entry to the community after they have completed their sentences.

The Anne Arundel County New Sentenced Inmate Facility was designed with a

campus plan for maximum flexibility and efficiency in construction. The 400 - bed dormitory housing accommodates male and female transitional, maximum security and work release inmates, with 250-bed expansion capability. Support services include facility administration, staff services, security operation, inmate processing, programs offices, dietary services, medical services, commissary, laundry, visiting, counseling services and facilities management.



Owner
Chesterfield County, Virginia

Project Location
Chesterfield, VA

Project Type
Renovation

Project Size
22,737 SF
200 Inmates

Estimated Construction Cost - Outside 3rd Party
\$2,513,000

Construction Cost
\$1,611,500 includes alternate of \$15,625

Construction Start
July 2009

Construction Completion
February 2010

Contact
Bob Rivers
Capital Projects Manager
804-796-7098



CHESTERFIELD COUNTY JAIL



The facility, built in 1995 is due for updates. Our Goal is to make all systems current so the facility will be compatible with a newer facility built in 2005.

In 1992, Chesterfield County opened a new, medium security annex to their main jail. In 2005, the main jail was then replaced, but the annex remained. The new jail incorporated touch screen technology for the security systems, a network based CCTV and data storage system and pneumatic locking systems which were incompatible with the older systems of the annex.

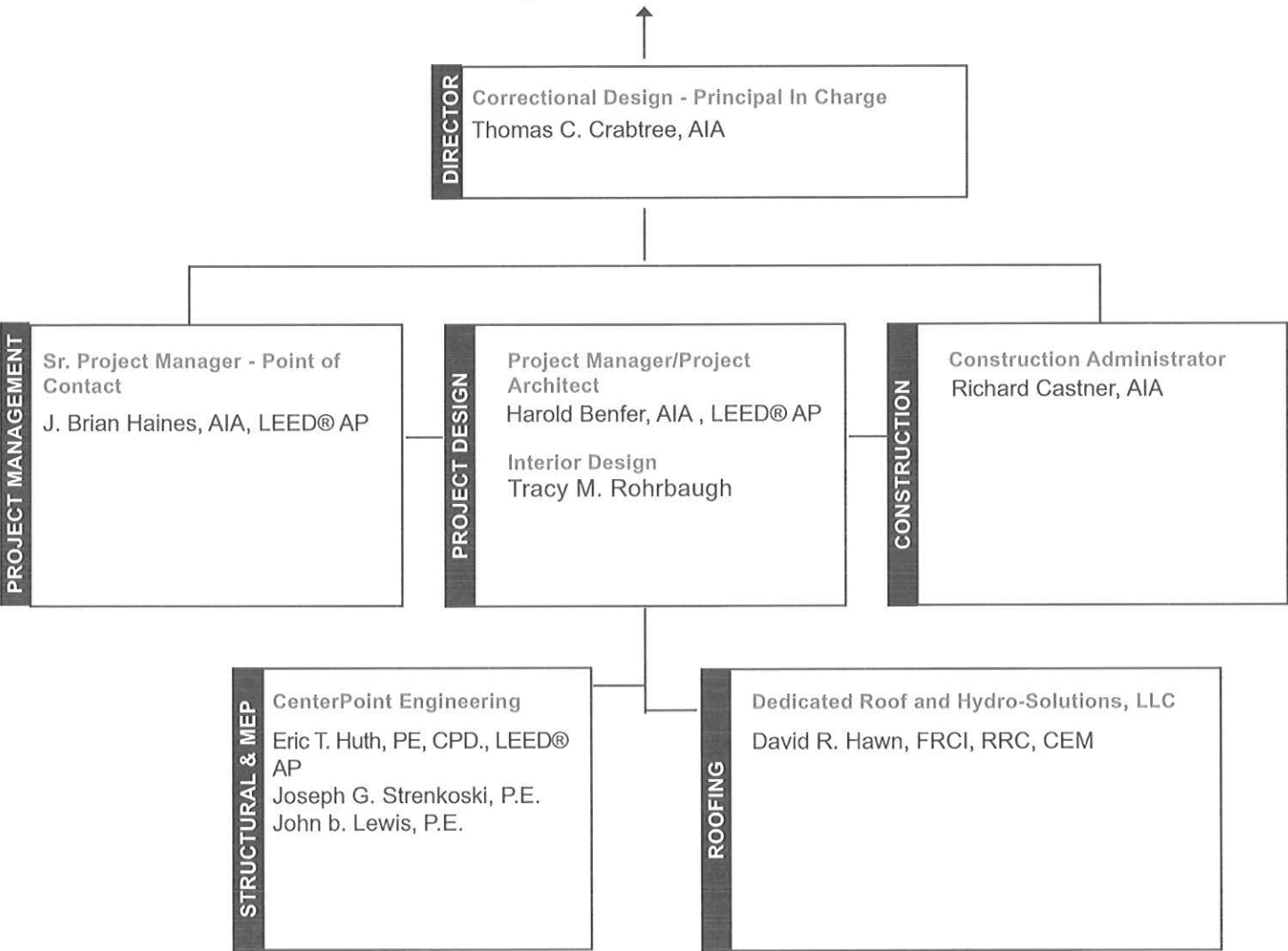
As a part of our Master Open Ended Agreement, CRA was assigned the design work to completely update and replace the security, intercom and CCTV systems, and to fully integrate the new systems of the annex to the main jail's systems, incorporating fixes to many things the County was unhappy about with their new jail, only three years old at the time. This project further included a complete replacement of all detention locking systems in the annex, a card access system, a complete replacement of the HVAC and electrical systems, all new emergency power and UPS protection of the critical systems and incorporation of a grounding system, based on a comprehensive grounding study due to frequent lightning strikes. The main jail would remain fully occupied during the renovation.

The biggest challenge was successfully integrating the ever-changing technology of security systems with systems that would be 5-years old by the time the renovations were complete.

The project was bid in July of 2009 and came in \$850,000 under budget on a \$3,000,000 project scope. CRA's scope of work included full design, bidding, all project permitting efforts and complete construction administration services, including on-site meetings every two weeks for nearly a year. Between the Owner, CRA and the contractor, the work was successfully completed in August 2010. A total of only 42 RFI's were generated by the contractor, most for minor clarifications. Change Orders totaled \$162,000, but due to the low bids, there were several large Owner-requested additions to the project scope such as a \$44,500 UPS for their main jail, \$29,200 in fire alarm upgrades, adding a Toilet Room to Central Control for \$14,000 and \$6,500 in upgrades to their small Kitchen. Change Orders associated with unforeseen conditions or design related issues amounted to less than 1-1/4% of the total contract amount.

Team Organization & Responsibilities

State of West Virginia Division of Corrections



THOMAS C. CRABTREE, AIA

PRINCIPAL-IN-CHARGE • DIRECTOR OF CORRECTIONAL DESIGN

Design is only good when it meets the client's needs. Therefore, good design must be on budget, on schedule, successful in function, well-executed, in harmony with its environment, and pleasing to the observer and to the people who use the structure.



Professional Role

Thomas C. Crabtree is co-founder and President of Crabtree, Rohrbaugh & Associates. As Principal-in-Charge of Technical Services, Mr. Crabtree will hold overall responsibility for directing the firm's architectural and planning commission.

Professional Experience

Principle-in-Charge
Crabtree, Rohrbaugh & Associates
1984 to Present

Associate
John M. Kostecky, Jr. & Associates
1974 to 1984

Draftman & Project Designer
Klaus Peter Netwig & Associates
1973 to 1974

Professional Registrations

Registered Architect in Pennsylvania, Ohio, Maryland, Tennessee, Delaware, New York, South Carolina, New Jersey, Texas, Virginia, West Virginia, Rhode Island, Maine, Indiana, California, Georgia, Michigan, Louisiana, Wisconsin, New Hampshire, Washington, D.C., Utah, Nevada, Colorado, Illinois, Minnesota, Arizona, Nebraska, Connecticut, Missouri, Idaho, Washington, Oregon, Montana, South Dakota, Kansas, Mississippi.

Registered with the National Council of Architectural Registration Boards

Project Experience

West Virginia Regional Jail System
Prototype Design
Lakin Correctional Facility for Women

Harford County
Adult Detention Center
Northern Sheriff's Precinct
Southern Sheriff's Precinct

Anne Arundel County
Facilities Assessment & Study
Ordnance Road Facility
Jennifer Road Facility

Cumberland County
Cumberland County Prison

Chester County
Chester County Prison

Chester County Juvenile Detention
State of New Hampshire DOC
Facility Assessment & Master Plan

State Correctional Institute
SCI - Chester
SCI - Rockview
SCI - Pittsburgh
SCI - Camp Hill
SCI - Greene
SCI - Cambridge Springs
SCI - Mahanoy

Chesterfield County, VA
Chesterfield County Jail

Wayne County
Wayne County Prison

Education

Bachelor of Architecture
The University of Tennessee
1974

Professional Awards

Fifteen buildings cited for
Design Excellence by the
American Institute of
Architects - 1975 to 2001

Affiliations

Pennsylvania Society of
Architecture

The American Institute of
Architects, National and Central
PA Chapter

The Preservation Fund of
Pennsylvania

Keystone Chapter of Associated
Builders and Contractors
Building Officials and Code
Administrators International

The International Code Council

Council of Educational
Facility Planners

National Fire Protection
Association

The U.S. Green Building
Council

JAMES BRIAN HAINES, AIA, LEED AP

PROJECT LEADER - SENIOR PROJECT MANAGER

It's quite a thrill to walk through a completed building with a client, when they realize that we are experiencing the vision that started in our minds just a short time ago.



Professional Role

James Brian Haines has the responsibility of tracking the project's progress by maintaining project schedules and budgets and assigning personnel as required to achieve cost and delivery results. As Director of Contract Administration, Brian prepares, negotiates and executes all of the firm's contracts.

Professional Experience

Director of Project Management/
Senior Project Architect/
Graduate Architect
Crabtree, Rohrbaugh & Associates
1989 to Present

Architectural Draftsman
John Powell, Architect
1986-1989

Professional Registrations

Registered Architect in Pennsylvania,
Virginia, Maryland, Georgia, Ohio,
Idaho, Illinois, Indiana, Louisiana, Maine,
Montana, Nevada, New Hampshire, South
Dakota, Washington, West Virginia

Registered with the National Council of
Architectural Registration Boards

LEED AP (Accredited Professional)

Education

Bachelor of Architecture
University of Tennessee
1989

Member of Tau Sigma Delta
Honor Society in Architecture

Affiliations

The American Institute
of Architects

National Trust for
Historic Preservation

Pennsylvania Society
of Architects

Vice Chair - Historical
Architecture Review Board,
Mechanicsburg, PA

Project Experience

Chesterfield County
Chesterfield County Jail

Chester County
Chester Juvenile Detention
Chester County Prison

Wayne County
Wayne County Prison

Cumberland County
Cumberland County Prison

State Correctional Institute
SCI - Greene
SCI - Mahanoy
SCI - Chester
SCI - Rockview

Snyder County
Snyder County Prison

Anne Arundel County
Facilities Assessment & Study

State of New Hampshire DOC
Facility Assessment & Master Plan

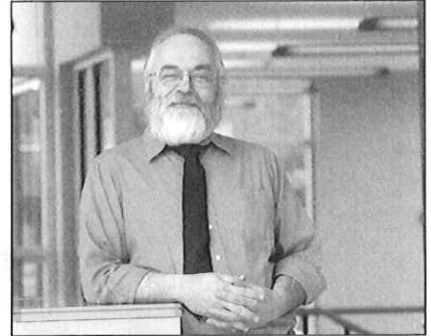
Harford County
Adult Detention Center

West Virginia State
Regional Jail System
Lakin Correctional Facility for Women

HAROLD B. BENFER, AIA, LEED AP

PROJECT MANAGER

A successful project requires assembling a good team. Bringing the client in as an integral part of the design team is indispensable to the success of the project. After all, it's their building.



Professional Role

Harold B. Benfer is responsible for all aspects of technical documentation including detailed coordination of all disciplines. During the development of construction documents, Mr. Benfer will be assisted by the Principals-in-Charge, Director of Project Management, Director of Design and other technical personnel within the firm.

Professional Experience

Senior Project Architect
Crabtree, Rohrbaugh & Associates
1985 to Present

Architectural Project Director
John M. Kostecky, Jr. & Associates
1980-1985

Architectural Project Director
McClellan and Smith
1978-1980

Professional Registrations

Registered Architect in Pennsylvania

LEED AP (Accredited Professional)

Draftsman
Lawrie and Green
1973-1978

Education

Bachelor of Architecture
Penn State University
1973

Affiliations

The American Institute
of Architects
The Pennsylvania Society
of Architects

Project Experience

Chester County
Chester County Prison
Chester County Juvenile Detention Center
Cumberland County
Cumberland County Prison
Public Safety Center
Courthouse
State Correctional Institute
SCI - Chester
SCI - Pittsburgh

Harford County
Adult Detention Center
Northern Sheriff's Precinct
Southern Sheriff's Precinct
Anne Arundel County
Facilities Assessment & Study
Ordnance Road Facility
Jennifer Road Facility

TRACY M. ROHRBAUGH

DIRECTOR OF INTERIOR DESIGN

Our designers work to enhance the quality of the experience for the people who use the facility. Integrating interior design elements into the building design ensures that our clients receive what they want and need in the interior spaces of a project.



Professional Role

Tracy M. Rohrbaugh is responsible for the coordination of interior furnishings, as well as the selection of interior finishes, materials, colors, fabrics and graphics.

Professional Experience

Director of Interior Design/
Interior Designer
Crabtree, Rohrbaugh & Associates
1990 to Present

Freelance Designer
Sanshar Commercial Interiors
1989

Education

Associates Degree in
Interior Design
Bradley Academy for
the Visual Arts
1990

Affiliations

American Society of
Interior Designers
Pennsylvania Green
Building Alliance

Project Experience

Chester County

Chester County Prison
Chester County Juvenile Detention Center

Cumberland County

Cumberland County Prison

State Correctional Institute

SCI - Chester
SCI - Rockview
SCI - Pittsburgh
SCI - Camp Hill
SCI - Greene
SCI - Cambridge Springs
SCI - Mahanoy

Wayne County

Wayne County Prison

Harford County

Adult Detention Center
Northern Sheriff's Precinct
Southern Sheriff's Precinct

Snyder County

Snyder County Prison

Montgomery County

Montgomery County Prison

Anne Arundel County

Ordnance Road Facility
Jennifer Road Facility

RICHARD T. CASTNER, AIA

QUALITY CONTROL AND FIELD OPERATIONS

We maintain open lines of communication between contractors and owner and monitor the progress of a project during the construction phase to ensure that it is completed according to the drawings and specifications.



Professional Role

Richard T. Castner ensures proper compliance and coordination with the contract documents during the construction phase between the Owners, Contractors and the construction documents. He will be assisted by the Director of Educational Facilities, Director of Design, Project Manager and Job Captain.

Professional Experience

Director of Quality Control and
Field Operations
Crabtree, Rohrbaugh & Associates
1987 to Present

Director of Field Services
John M. Kostecky, Jr. & Associates
1978 to 1987

Staff Architect
Lacy, Atherton & Davis
1978

Professional Registrations

Registered Architect in Pennsylvania

Education

Bachelor of Architecture
The University of Florida
1974

Affiliations

The American Institute
of Architects

Pennsylvania Society
of Architects

Project Experience

Chester County
Chester County Prison
Chester County Juvenile Detention Center
Cumberland County
Cumberland County Prison
State Correctional Institute
SCI - Chester
SCI - Rockview
SCI - Pittsburgh
SCI - Camp Hill
SCI - Greene
SCI - Cambridge Springs
SCI - Mahanoy

Wayne County
Wayne County Prison
Harford County
Adult Detention Center
Northern Sheriff's Precinct
Southern Sheriff's Precinct
Snyder County
Snyder County Prison
Montgomery County
Montgomery County Prison
Anne Arundel County
Ordnance Road Facility
Jennifer Road Facility

Incorporated in June 2003, CenterPoint Engineering is a full service engineering firm offering complete services in the areas of civil, structural, mechanical, electrical, plumbing, alternative energy, heating, ventilation, air conditioning, and fire protection, as well as lighting, power and technology systems. We currently have 28 experienced employees, including eight Registered Engineers, two of whom are LEED® Accredited Professionals, technicians and support staff. The firm's key personnel include:

James S. Bridges, SEO, President, Chief Executive Officer
Eric T. Huth, P.E., C.P.D., C.G.D., LEED AP, V.P., Chairman of the Board
William A. DeLoache, P.E., Principal, Senior Mechanical Engineer
John B. Lewis, P.E., Principal
Joseph G. Strenkoski, P.E., Principal
Bruce A. Andrews, P.E., Principal



CenterPoint's personnel have designed a wide variety of projects including educational, industrial, institutional, commercial, healthcare, correctional, government and residential. In addition to our primary service area covering Pennsylvania, Maryland, Virginia and West Virginia, we have completed projects in 27 other states.

The CenterPoint team provides services from feasibility studies through construction phase services, managing projects from conceptual beginnings through completion of construction. We have a strong resume of Design/Build experience and an in-house construction team.

In today's competitive market, quality work is not an added feature or benefit; it's an expectation from an engineering firm. Clients expect our engineering services to be top-notch and on time, and that's what the CenterPoint Engineering team delivers. It's the quality, dedication to better results and superior client service that sets us apart.

CORRECTIONAL AND PUBLIC SAFETY FACILITIES

CenterPoint Engineering has extensive experience with correctional and public safety projects, including studies, additions, renovations and new construction. The following is a partial list of those projects.

MARYLAND

Anne Arundel County Prison

- Ordnance Road Facility - Glen Burnie, MD
- Jennifer Road Facility - Annapolis, MD

Harford County

- Harford County Detention Center - Bel Air, MD
- Northern Precinct Sheriff's Office - Jarrettsville, MD
- Southern Precinct Sheriff's Office - Edgewood, MD

VIRGINIA

Chesterfield County Jail Annex - Chesterfield, VA

PENNSYLVANIA

Berks County Jail - Leesport, PA

Bradford County Prison - Bradford, PA

Carbon County Correctional Facility - Nesquehoning, PA

Chester County

- Chester County Prison - West Chester, PA
- Juvenile Detention Center - West Chester, PA

Cumberland County

- Cumberland County Prison - Carlisle, PA

Dauphin County

- Dauphin County Prison - Harrisburg, PA
- John J. Shumaker Public Safety Center @ HACC - Harrisburg, PA

Mifflin County Prison - Lewistown, PA

Monroe County

- Correctional Facility - Stroudsburg, PA

Schuylkill County Prison - Pottsville, PA

State Correctional Institution - Camp Hill, PA

Wayne County Prison - Honesdale, PA

Owner
Anne Arundel County

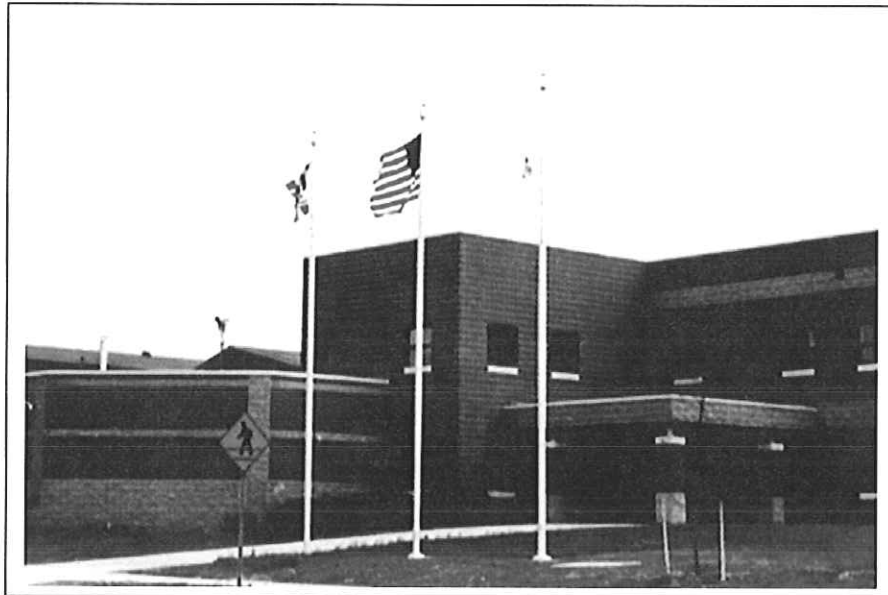
Project Location
Annapolis, MD

Project Type
Renovations and Addition

Project Size
Addition - 62,000 SF
Renovations - 76,700 SF

Capacity
750 Beds

Project Budget
\$15,725,000.00



ANNE ARUNDEL COUNTY DETENTION CENTER JENNIFER ROAD

The Jennifer Road facility of the Anne Arundel County Detention Center comprised 76,700 SF of renovations and an approximately 62,000 SF addition.

The construction of the project was phased to handle issues related to renovating an occupied facility.

The project included major renovations and upgrades to the facility's medical area, including labs, pharmacy, exam rooms, quarantine rooms, counseling offices, nurses' office and infirmary dormitories for both male and female inmates.

A new kitchen area was added to the 750 bed medium security facility allowing for supervised inmate food preparation.

CenterPoint Engineering provided the structural engineering design for this project.



*Photographs by
Crabtree, Rohrbaugh & Associates*

CENTERPOINT

ENGINEERING INC.

Owner
Anne Arundel County

Project Location
Glen Burnie, MD

Project Type
New Construction

Project Size
162,000 SF

Capacity
400 Beds

Project Budget
\$20,000,000.00



ANNE ARUNDEL COUNTY DETENTION CENTER - SENTENCED INMATE FACILITY ORDNANCE ROAD

The Anne Arundel County Detention Center Sentenced Inmate Facility at Ordinance Road is a new facility comprising approximately 162,000 SF of space, designed in a campus plan to maximize flexibility and efficiency in construction.

Support services include staff services, security operations, inmate processing, administration and facilities management areas, program offices, commissary, dietary and medical services, laundry, counseling service area and visitors' area.

The 400 bed dormitory area houses both male and female transitional, maximum security and work release inmates. The facility is capable of a 250 bed expansion if necessary.

CenterPoint Engineering provided the structural engineering design for this project.



*Photographs by
Crabtree, Rohrbaugh & Associates*

Owner
Chester County
Commissioners

Project Location
West Chester, PA

Project Type
Addition and Renovations

Project Size
Addition - 131,000 SF
Renovations - 150,000 SF



CHESTER COUNTY PRISON

CenterPoint Engineering provided the structural, mechanical, electrical and fire protection engineering design services for this project. The scope included a new, approximately 131,000 SF addition to the Chester County Prison as well as renovations to approximately 150,000 SF of the existing building.

Additions to the facility included two, four-level housing units, a one-story processing space, a two-story multipurpose area wing and connecting corridor, and a two-story office and medical wing.

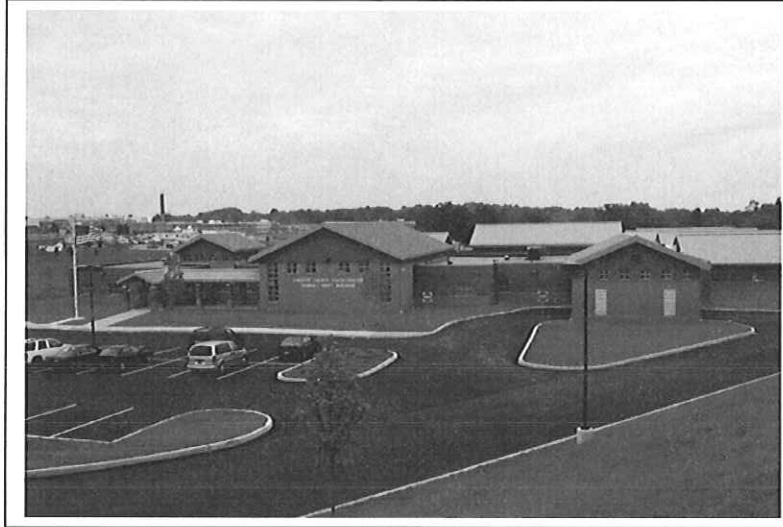


Owner
Chester County
Commissioners

Project Location
Pocopson Township, PA

Project Type
New Construction

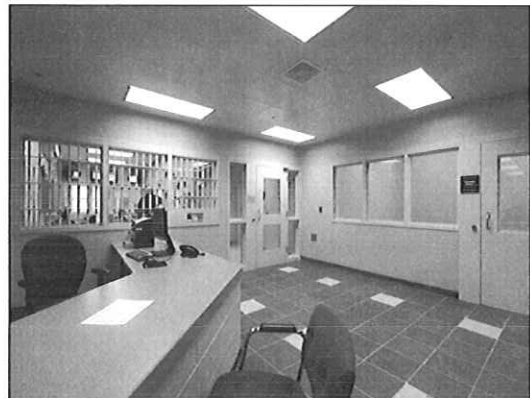
Project Size
53,000 SF



CHESTER COUNTY JUVENILE DETENTION CENTER

CenterPoint Engineering, Inc. was responsible for the structural, mechanical, electrical and plumbing design of the new Chester County Juvenile Detention Center. This 53,000 SF minimum security facility consists of four detention housing units and one shelter housing unit.

The project also included a program facilities wing, administrative and counselor offices, multi-purpose rooms, medical suite, kitchen, dining and recreation areas, classrooms, chapel, laundry room and shop area, as well as a gymnasium and outdoor exercise yard.



*Photographs by
Crabtree, Rohrbaugh & Associates*

CENTERPOINT

ENGINEERING INC.

Owner
Harford County
Sheriff's Office

Project Location
Bel Air, MD

Project Type
Addition and Renovations

Project Size
Addition - 76,146 SF
Renovations - 14,000 SF



Photograph by Crabtree, Rohrbaugh & Associates

HARFORD COUNTY DETENTION CENTER

CenterPoint Engineering was responsible for design of the structural, mechanical, electrical, plumbing and fire protection systems for this project. The expansion adds 76,146 SF and includes a medical housing unit, eight maximum security housing units and four minimum security housing units, for a total of 288 additional beds. An additional 14,000 SF will be renovated.

The HVAC system includes constant and variable air volume rooftop units with sheet metal distribution. Plumbing design includes domestic water systems, as well as drainage and vent systems.

Structural systems include deep foundation design, as well as structural steel framing.

The design also includes a separate building to house the domestic water meter and fire meter as well as the fire pump. The separate building will serve all buildings on the site which will be added during later projects.



Harford County
SHERIFF'S OFFICE

With courage, honor and integrity, we protect the rights of all citizens

Owner
Harford County

Project Location
Jarrettsville, MD

Project Type
Addition and Renovations

Project Size
Addition - 2,000 SF
Renovations - 10,000 SF

Project Budget
\$1,500,000.00



HARFORD COUNTY SHERIFF'S OFFICE NORTHERN PRECINCT

The Harford County Sheriff's Department Northern Precinct showcases the creative re-use of an existing facility, originally built as retail space in a small strip shopping center. The 10,000 SF renovated facility features state-of-the-art security and surveillance systems, separate state mandated processing areas for juvenile and adult offenders, and a conference room that can accommodate up to 30 people. A new roll call room is equipped with an overhead computer projection system and flat screen computers located at 15 workstations. Fifteen additional workstations can accommodate laptop computers.

The 2,000 SF addition to this project added a vehicle sally port, and at the entrance of the building, a sculpture garden was erected dedicated to fallen officers.

CenterPoint Engineering provided the structural design for the additions and renovations to this combination steel frame and load-bearing masonry building.



*Photographs by
Crabtree, Rohrbaugh & Associates*

Owner
Harford County, MD

Project Location
Joppa, MD

Project Type
New Construction

Completion
April 2012



HARFORD COUNTY SHERIFF'S OFFICE SOUTHERN PRECINCT

The Harford County Sheriff's Office Southern Precinct consists of over 42,000 SF and is home to approximately 120 Sheriff's Office personnel, including the Special Operations Division Command. The scope of this project was a newly constructed, state-of-the-art facility to replace the 1996 renovated 7-Eleven store that was no longer sufficient for the County's needs. The new facility was designed with extra space to better accommodate the community's growing needs for the next 20 years. It includes an area for fingerprinting, four holding cells (two of which are for juveniles), a back private entrance, a law compliant juvenile holding room equipped with a television and comfortable chairs, a community room with a capacity for 100 personnel, a fitness center, and a garage to house tactical equipment, complete with a shower to wash the Sheriff's Office canines.

CenterPoint Engineering provided the mechanical, electrical, plumbing, fire protection and structural engineering services for this project.



*Photos courtesy of
Harford County*

CENTERPOINT

ENGINEERING INC.

Owner
Harrisburg Area Community
College (HACC)

Project Location
Harrisburg, PA

Project Type
New Construction
Sustainable Design (LEED)

Size (Two Buildings)
44,959 SF

Project Budget
Phase 1
\$11,994,713



JOHN J. SHUMAKER PUBLIC SAFETY CENTER

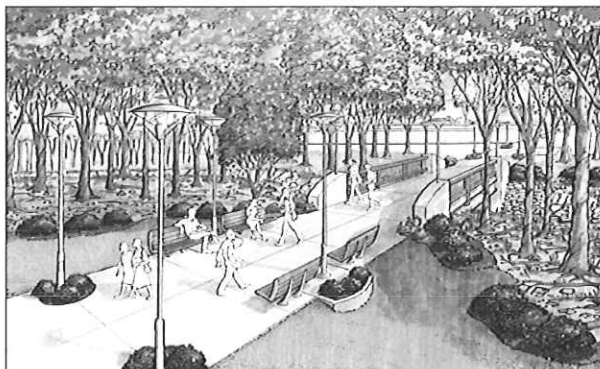


Construction Completion
September 2012 (estimate)

Contact
This project was a team effort
with Crabtree, Rohrbaugh &
Associates
717.458.0272

The Harrisburg Area Community College (HACC) Law Enforcement Program will be relocated to the new Law Enforcement Complex (LEC) building, allowing for the expansion of fire, EMS, healthcare and transportation programs. The LEC will contain a 15 lane pistol range and a 10 lane rifle range. The LEC will also include department offices, classrooms, support space and storage for the pistol and rifle ranges. A piece of the World Trade Center will be a memorial at the front of the facility.

The proposed Law Enforcement Complex building is one component of Phase 1 of HACC's Master Plan. The six other components include: repairs to and expansion of the fire training grounds; repairs to the existing North Hall to allow for expansion within the existing facility; construction of a PSC Campus Green to allow for outdoor physical fitness training; separation of incoming traffic, as well as the division of traffic into two entrances for the fire training grounds; relocation and expansion of the parking facilities; and enhancement of the existing Capital Area Greenbelt that runs through the facility. CenterPoint is providing the structural, mechanical, electrical, and plumbing design for this facility.



*Renderings by
Crabtree, Rohrbaugh & Associates*

CENTERPOINT

ENGINEERING INC.

Owner
Cumberland County
Commissioners

Project Location
Carlisle, PA

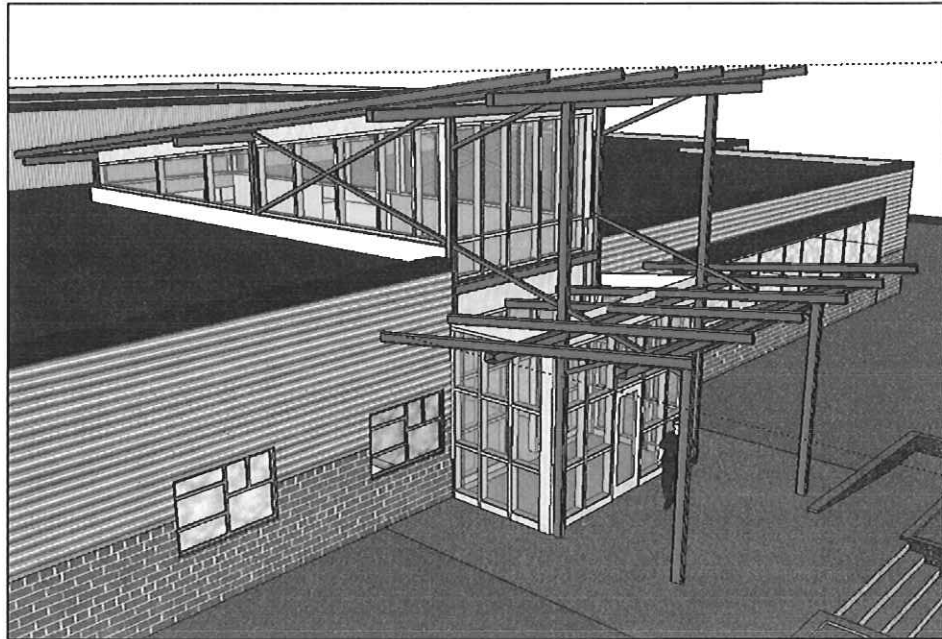
Project Type
New Construction

Project Size
21,340 SF Building
2,900 SF Parking Garage

Design Commenced
Approximately Fall 2009

Construction Completion
October 2011

Construction Cost
\$12,000,000



CUMBERLAND COUNTY PUBLIC SAFETY BUILDING

This project consists of a 21,340 SF single story building with a mechanical penthouse plus a 2,900 SF garage for parking emergency vehicles.

HVAC systems include a water-source heat pump system with indoor heat pump units and an electric boiler and indoor closed circuit cooler. All equipment serving this building was located indoors to minimize security risk. The energy efficient design includes the use of computer room style units for the main computer areas which are tied to the heat pump water loop. Since these units are always rejecting heat to the water loop, they are able to provide the majority of the heat for the remainder of the building year round, even on design winter days, which greatly reduces the load on the boiler.

Plumbing design includes domestic water, sewer, and vent piping systems, as well as both a wet sprinkler system and a clean agent fire protection system for the emergency operations and emergency control centers.

Electrical design includes lighting, power distribution, and low voltage systems.

The entire building is connected to a pair of emergency generators for a complete building backup in case of power failure.

CenterPoint Engineering provided the structural, mechanical, electrical, and plumbing engineering design services for this project.

Rendering by Crabtree, Rohrbaugh & Associates

ERIC T. HUTH, PE, CPD, CGD, LEED AP
VICE PRESIDENT, CHIEF OPERATING OFFICER
PRINCIPAL, MECHANICAL ENGINEERING

CENTERPOINT
ENGINEERING INC.

Buildings use 40% of the total United States energy consumption. This is why it is imperative that mechanical systems are appropriate for the building layout, efficient in energy usage, and relatively easy to maintain and operate. We work with the team to integrate the systems into the building to minimize distractions caused by noise, temperature fluctuations, and routine maintenance.



Professional Role

As Vice President and Chief Operating Officer, Eric is responsible for the daily operations of CenterPoint Engineering. In his position as Principal of the Mechanical Engineering Department, Eric is responsible for development of mechanical systems and studies, including HVAC, plumbing, ventilation and utilities. Additionally, he is responsible for project management and interdisciplinary coordination, mechanical design, specification writing, as well as studies, reports and analyses of building systems.

He has over 16 years of experience in HVAC, plumbing and fire protection design for institutional, commercial, industrial and educational facilities.

Eric is also responsible for the technical performance of the Mechanical Engineering Department and coordination with other disciplines.

Professional Experience

CenterPoint Engineering, Inc.
2011 - Vice President, COO
2003 to 2011- Principal, Mechanical Engineering

Professional Registrations

Registered Professional Engineer:
PA, MD, SC, NJ, IN, VA, TX

Project Experience

NEW CONSTRUCTION

Chesterfield County Jail Annex
Chesterfield, VA
Wayne County Prison
Honesdale, PA
Chester County JDC
West Chester, PA
Harford County Sheriff's Office
South Precinct
Edgewood, MD
Shumaker Public Safety Center at
Harrisburg Area Community College
Harrisburg, PA
Cumberland County Public Safety
Building - Carlisle, PA

ADDITIONS/RENOVATIONS/STUDIES

Harford County Detention Center
Bel Air, MD
Cumberland County Prison
Carlisle, PA
Penn Township Police Department
Hanover, PA
Schuylkill County Prison
Feasibility Study
Pottsville, PA
Carbon County Correctional Facility
Feasibility Study
Nesquehoning, PA
NH State Correctional Facilities
Feasibility Study

Education

Bachelor of Science
Mechanical Engineering
Pennsylvania State University

Affiliations

American Society of Heating,
Refrigeration and Air
Conditioning Engineers
(ASHRAE)

American Society for
Healthcare Engineering
(ASHE)

Association of Energy
Engineers (AEE)

American Society of
Plumbing Engineers (ASPE)

National Council of
Examiners for Engineering
and Surveying
(NCEES)

JOHN B. LEWIS, P.E.

PRINCIPAL, MECHANICAL ENGINEERING

CENTERPOINT
ENGINEERING INC.

We take pride in listening to our clients and getting them the projects they are looking for and for the price they want to pay.



Professional Role

In his position as Principal of the Mechanical Engineering Department, John is responsible for development of mechanical systems and studies, including HVAC, plumbing, ventilation and utilities. Additionally, he is responsible for project management and interdisciplinary coordination, mechanical design, specification writing, as well as studies, reports and analyses of building systems.

John has over 26 years of experience in HVAC, plumbing and fire protection design for institutional, commercial, industrial and educational facilities.

Additionally, John is responsible for the technical performance of the Mechanical Engineering Department and coordination with other disciplines.

Professional Experience

Principal
CenterPoint Engineering, Inc.
2003 to Present

Professional Registrations

Registered Professional Engineer:
PA, MD, VA

Education

Bachelor of Science
Mechanical Engineering
Technology
Pennsylvania State University

Affiliations

American Society of Heating,
Refrigeration and
Air Conditioning (ASHRAE)

National Fire Protection
Association (NFPA)

Project Experience

NEW CONSTRUCTION

Chesterfield County Jail Annex
Chesterfield, VA
Harford County Sheriff's Office
Southern Precinct
Edgewood, MD
Chester County Juvenile Detention Center
West Chester, PA
Cumberland Co. Public Safety Building
Carlisle, PA
Shumaker Public Safety Center at
Harrisburg Area Community College
Harrisburg, PA

ADDITIONS/RENOVATIONS

Cumberland County Prison
Carlisle, PA
Bradford County Prison
Troy, PA
State Correctional Institution
at Cambridge Springs
Cambridge Springs, PA
State Correctional Institution
at Rockview
Bellefonte, PA

JOSEPH G. STRENKOSKI, PE

PRINCIPAL, ELECTRICAL ENGINEERING

CENTERPOINT
ENGINEERING INC.

I feel accomplished when a client's vision for an energy efficient and technologically state-of-the-art facility can be realized accurately and within budget.



Professional Role

In his position as Principal of the Electrical Engineering Department, Joe is responsible for development of electrical systems and studies, including the design of power, lighting, emergency power, technology and special systems.

Joe is also responsible for project management and interdisciplinary coordination, electrical design and specification writing, studies, reports and analyses of building systems, data networking design and layout, alternative power source design, and emergency generator evaluation and selection.

Joe is responsible for overseeing all discipline work and coordination efforts as well as technical support and design within the electrical department.

Professional Experience

Principal, Electrical Engineering
CenterPoint Engineering, Inc.
2003 to Present

Professional Registrations

Registered Professional Engineer:
PA, MD, VA, ID, WV

Education

Bachelor of Science
Electrical Engineering
Pennsylvania State University

Affiliations

National Council of
Examiners for Engineering
and Surveying
(NCEES)

Project Experience

NEW CONSTRUCTION

Chesterfield County Jail Annex
Chesterfield, VA
Wayne County Prison
Honesdale, PA
Chester County JDC
West Chester, PA
Harford County Sheriff's Office
South Precinct
Edgewood, MD
Shumaker Public Safety Center at
Harrisburg Area Community College
Harrisburg, PA
Cumberland County Public Safety
Building - Carlisle, PA

ADDITIONS/RENOVATIONS/STUDIES

Harford County Detention Center
Bel Air, MD
Cumberland County Prison
Carlisle, PA
Rockview State Correctional Institution
Rockview, PA
Schuylkill County Prison
Feasibility Study
Pottsville, PA
Carbon County Correctional Facility
Feasibility Study
Nesquehoning, PA
NH State Correctional Facilities
Feasibility Study

Dedicated Roof and Hydro-Solutions, LLC (DRH)

Firm Overview – Experience – Resumes

Firm Overview

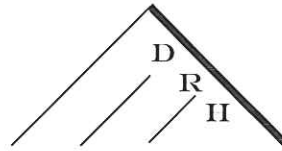
- ♦ **Dedicated Roof and Hydro-Solutions, LLC (DRH)** of Centreville (Fairfax County), VA for roof, waterproofing, and building exterior water entry consulting services. Dedicated Roof and Hydro-Solutions, LLC (DRH) was formed in July 1997 by David R. Hawn, FRCI, RRC, CEM, BEP, CSPD, CEA. The firm consists of three Registered Roof Consultant's (RRC) (previously certified roof consultants (CRC) changed to RRC in 1993) as recognized by RCI, Inc (formerly the Roof Consultants Institute). Roof programming, replacement solutions, and detailing for existing buildings that require new roofs is a special area of expertise offered by DRH to the project. Pertinent to this project DRH consultants are qualified as follows:
- ♦ Mr. Hawn has been providing water entry and roof consulting services since 1982 throughout the United States and Overseas. Mr. Hawn is an RRC # 95 issued 1992 by RCI, Inc.
- ♦ Richard L. Wagner has been providing water entry and roof consulting services since 1983 throughout the Eastern United States. Mr. Wagner is an RRC # 96 issued 1992 by RCI, Inc., Certified Construction Specifier (CCS), issued 1995 and Construction Documents Technologist (CDT) issued 1994 by CSI.
- ♦ John M. Ogaitis has been providing water entry and roof consulting services since 1987 throughout the Eastern United States. Mr. Ogaitis is an RRC # 314 issued 2003 by RCI, Inc.

Experience

DRH has successfully worked with Crabtree, Rohrbaugh & Associates on a number of projects over the last five years. We have provided similar services that would be required for this project to the benefit of providing economical long-term solutions the address the cause of problems present rather than simply covering those problems with a new layer of material. The solution starts with a thorough analysis by an experienced registered roof consultant to assure the solution addresses the cause of failure or problems and offers the best possible solution with a presentation of options and explanations of each approach to allow for informed decisions. Excess moisture in correctional institutions is a common problem we have encountered before. Proper insulation and ventilation that is balanced and meets the requirements of the facility is typically successful but each site and building is unique and requires site specific study. DRH has provided correctional facility solutions in New Jersey (Rahway, Clinton, & Trenton to name a few) and provided quality assurance and post installation testing of roofs at numerous Virginia correctional facilities (Staunton, Boydton, and Halifax to name a few). DRH recently worked to resolve existing roof issues inclusive of humidity problems at the Armstrong World Industries (Wood Floor Products) Plant in Beverly, WV.

Resumes

Resumes for each of the DRH Registered Roof Consultants listed above follow this page. We do not send anyone else out in the field to make assessments for roofing issues so the clients we serve get the experience they need on the roof.



Dedicated Roof and Hydro-Solutions, LLC

DAVID R. HAWN, FRCI, RRC, CEM President

FIELDS OF EXPERTISE

Since 1982 Mr. Hawn has been investigating and solving roof, waterproofing, building exterior, and related problems; developing repair and replacement scopes and specifications for commercial, industrial, institutional, and multi-unit residential projects; investigating and analyzing conditions, construction, failures and related problems.

Management experience includes operating as Vice President of Roof Consulting Services for PSI and as a Director of Roof Consulting Services Nationally for ATEC/ATC. Duties included coordinating all aspects of roof, exterior wall, and waterproofing investigation, testing, design and quality assurance observation; providing training and education to staff engineers/roof consultants and management support to Roof Department Managers. Mr. Hawn was a facility maintenance engineer controlling all phases of field construction planning and design engineering of roofing and building exterior projects at Iowa State University. Listed in several Who's Who Registries 1994-present.

EDUCATION

B.S., Construction Engineering, Iowa State University, Ames, Iowa, 1982

SPECIALIZED TRAINING

- Preventative Maintenance of Buildings and Grounds, University of Wisconsin, 1984.
- Repair of Concrete, University of Wisconsin, May 1984.
- Built-up Roof Institute, University of Wisconsin, March 1983.
- Numerous RCI & AEE Educational Programs.
- Certified Energy Manager, January 2000.
- AHERA Asbestos Inspector Course, August 1993 with annual refreshers till 2000.

REGISTRATION

- Registered Roof Consultant (RRC) by RCI (The Institute of Roofing Waterproofing and Building Envelope Professionals), Certificate Number 95, March 1992
- Certified Energy Manager (CEM) #007969, Business Energy Professional (BEP), Certified Energy Auditor (CEA), & Certified Sustainable Development Professional (CSDP) by The Association of Energy Engineers
- Engineer-In-Training, Number EIT 7244, Iowa, April 1982

PROFESSIONAL SUMMARY

Mr. Hawn is the President/Owner of Dedicated Roof and Hydro-Solutions, LLC (DRH). He is responsible for providing roof, building exterior, and waterproofing consultation services nationwide and internationally. He is also responsible for all aspects of the business operation. As a Registered Roof Consultant (RRC) and a professional member of RCI, Mr. Hawn continues to serve on the executive committee and board of RCI as the immediate past President 2010-2011. He is Fellow of RCI, Inc.

Mr. Hawn has performed roof, wall and waterproofing failure analyses, prepared and reviewed condition analysis reports and designs on related topics for existing buildings. He has developed and reviewed specifications and drawings, selected qualified contractors for bidding, conducted pre-bid conferences, and conducted pre-construction conferences for new, retrofit, and repair projects. He has made recommendations for roof and waterproofing system suitability for both new and existing facilities. In addition, he has managed and provided assistance with the selection, training, and continuing education of installation quality assurance observers and investigation and survey technicians. Mr. Hawn has established roof management, training, and maintenance programs for clients. Mr. Hawn has served as

DEDICATED ROOF AND HYDRO-SOLUTIONS, LLC
David R. Hawn – Continued

an expert numerous times concerning roof, water entry, and building exterior related issues.

PROFESSIONAL AFFILIATIONS

- RCI, Inc. (The Institute of Roofing Waterproofing and Building Envelope Professionals)
- Association of Energy Engineers (AEE)
- SPRI
- NRCA

SELECTED PROJECT EXPERIENCE

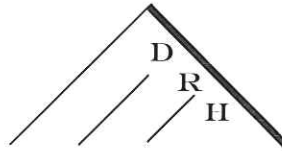
- University, educational, research, and health care facilities.
- Retail, industrial and commercial buildings.
- Manufacturing, chemical, and utility plants.
- Residential and planned development housing.
- State and government buildings.
- US Department of State Foreign Buildings Operations in over 25 countries.
- Correctional institutions.
- Museums and historical buildings.
- Parking and plaza decks.
- New construction, additions, and existing buildings/facilities.
- Expert Testimony

SPECIFIC PROJECT, PUBLICATION, PRESENTATION, AND REFERENCE INFORMATION IS AVAILABLE UPON REQUEST

Dedicated Roof and Hydro-Solutions, LLC (DRH) began as the sole practice of David R. Hawn, RRC founded in 1997 serving numerous clients on multiple projects throughout the United States. Additional information concerning DRH is available at www.drhroofsolutions.com.

David R. Hawn has also contracted with Federal Government on a Personal Service Contract agreement basis with the United States Department of State Office of Foreign Buildings August 1998 to May 2000. As the roof and waterproofing expert for the Office of Foreign Buildings, Mr. Hawn provided consultation to the United States Government exclusively for foreign US Government owned and occupied buildings. During that period, David was issued an Exemplary Honor Award (March 2000). Mr. Hawn has both active and inactive security clearance.

Mr. Hawn has been involved with the rehabilitation of numerous facilities as a sole provider and team member. Notable projects that included roofing, exterior wall restoration and waterproofing of sub-grade conditions include the Point Breeze Business Center in Dundalk, MD and the Montgomery Park Project in Baltimore, Maryland. These projects included deterioration masonry, stone, and concrete conditions with rusting metal components and aged fenestrations. The roofs required replacement and the sub-grade walls leaked and required solutions even including a building-to-rail tunnel condition. Both projects have been in service since 2001/2002.



Dedicated Roof and Hydro-Solutions, LLC

RICHARD L. WAGNER, RRC, CCS

Vice President

FIELDS OF EXPERTISE

Mr. Wagner has worked in the construction industry since 1983, and since 1986 he has concentrated on various aspects of the building envelope (roofs, walls, windows, waterproofing, and air barriers). This work has included inspections, evaluations, surveys, designs, and construction monitoring for a diverse clientele, both public and private. He has served as branch manager for roof consulting for 2 national engineering firms.

He has earned the credentials of **Registered Roof Consultant** through the RCI, Inc. (formerly the Roof Consultants Institute) a **Certified Construction Specifier** through the Construction Specifications Institute (CSI), and a **Certified Thermographer** through the Infrasppection Institute. These titles indicate the top level of accomplishment for the respective disciplines.

Mr. Wagner's experience with waterproofing and air barriers includes membranes, liquid-applied systems, and hot rubberized asphalt. He has worked with virtually all types of commercial roofing systems, including: asphalt and coal tar built-up roofs; SBS and APP modified bitumen roofs; EPDM, PVC, TPO, and other polymer single-ply roofs; spray polyurethane foam roofs; and metal roofs. His

He is responsible for all phases of building envelope consultation, from initial investigation and survey through preparation of design documents and construction period services. He has performed field evaluations on literally hundreds of facilities. These field evaluations have included roof and wall surveys utilizing infrared imaging equipment. These techniques can locate wet or missing insulation, air leaks, or other anomalies related to construction defects. Mr. Wagner has been a Certified Thermographer since 1987 and is very experienced with this type of work. He has also

performed roof moisture surveys using nuclear and capacitance methods.

Other areas of Mr. Wagner's expertise include onsite construction monitoring services during roof and building envelope renovation projects to assure compliance with contract documents and provide quality control during construction. These duties consist of preparation of reports of construction activities outlining project progress, review of material installation practices to ensure the project proceeds in accordance with contract documents, and performance of final inspection of the construction project.

EDUCATION

University of Wisconsin

Bachelor of Business Administration

SPECIALIZED TRAINING:

- Construction document preparation through CSI
- Analysis of building materials using infrared techniques through Infrasppection Institute
- Numerous courses, seminars, and conferences related to roof and wall systems and products through RCI, NRCA, and manufacturers

REGISTRATION

- Registered Roof Consultant (RRC), #96/1992
- Certified Construction Specifier (CCS), 1995
- Certified Thermographer, 1987
- Construction Documents Technologist (CDT), 1994
- Accredited Roof Inspector: SPI-SPFD, 1990

PROFESSIONAL SUMMARY

Mr. Wagner is Vice President of DRH and serves as a building envelope consultant. He has performed failure analyses on many types of

DEDICATED ROOF AND HYDRO-SOLUTIONS, LLC
Richard L. Wagner – Continued

wall, window, roof, and sub-grade waterproofing systems, and provided detailed work scopes for correcting the problems. He often works as a consultant to architects during the design phase of new buildings.

Mr. Wagner has been active with the RCI and has helped to develop educational programs, testing, and standards for the organization. He served on RCI's Board of Directors from 1998 to 2001, RCI's Chapter development & *Interface* peer review committees, and is a Past President of RCI's Mid Atlantic Chapter.

PROFESSIONAL AFFILIATIONS

- Roof Consultants Institute (RCI)
- Construction Specifications Institute (CSI)
- National Roofing Contractors Association (NRCA)

SELECTED PROJECT EXPERIENCE

- University, educational, research, and health care facilities.
- Retail, industrial and commercial buildings.
- Manufacturing, chemical, and utility plants.
- Residential and planned development housing.
- State and government buildings.
- Correctional institutions.
- Museums and historical buildings.
- Parking and plaza decks.
- New construction, additions, and existing buildings/facilities.
- Expert Testimony

**SPECIFIC PROJECT, PUBLICATION,
PRESENTATION, AND REFERENCE
INFORMATION IS AVAILABLE UPON
REQUEST**

Dedicated Roof and Hydro-Solutions, LLC (DRH) was founded in 1997, and continues to serve numerous clients on multiple projects throughout the United States. Additional information concerning DRH is available at www.drhroofsolutions.com.



Dedicated Roof and Hydro-Solutions, LLC

JOHN M. OGAITIS, RRC

Vice President

FIELDS OF EXPERTISE

Mr. Ogaitis is an experienced roof and building envelope consultant, providing services in the building and roof construction industry since 1987. He has formal industry training with many of the roof and waterproofing material and system manufacturers and leading industry education sources, including the credentials of Registered Roof Consultant (RRC) through RCI, Inc., and Certified Thermographer through the Infrasppection Institute

His responsibilities have included performance of roof system design and specification; roof and building envelope evaluation, survey, testing, failure analysis; and construction monitoring of roof and waterproofing systems. Additionally, testing and survey duties have included non-destructive testing of building materials and systems using infrared imaging, nuclear gauge, and capacitance meter methods. As a Certified Thermographer, he has performed infrared thermographic analysis of roof insulating systems (moisture intrusion surveys), electrical systems, and building envelopes including air barriers and masonry construction. In support of the above duties, extensive contract document review, field notations and documentation, and report preparation are usually required.

EDUCATION

Bachelor of Arts in Communication, University of Maryland at College Park, Maryland, 1986.

Associate of Arts in General Studies, Howard County Community College, Columbia, Maryland, 1984.

SPECIALIZED TRAINING

- Advanced Roof Consulting, Roof Consultants Institute, 2002.
- Applied Infrared Thermography – Level 1, Infrasppection Institute, 1990.
- Greenbelt Certified - Six Sigma & TQ Leadership Training, Honeywell, 2003.
- Accredited Roof Inspector #6019, SPI-SPFD, 1992.

- Certified Nuclear Gauge Operation and Radiological Safety, Troxler Corporation, 1986.
- Numerous RCI & AIA Educational Programs.
- AHERA Asbestos Inspector Course, August 1989 with annual refreshers till 1999.
- GPS-Based Electronic Roof Survey System

REGISTRATIONS AND PROFESSIONAL AFFILIATIONS

- Registered Roof Consultant (RRC) by RCI (The Institute of Roofing Waterproofing and Building Envelope Professionals), Certificate Number 314, August 2003
- Certified Thermographer – Level I, Infrasppection Institute, 1990.
- NRCA
- SPRI

PROFESSIONAL KNOWLEDGE AND EXPERIENCE

Mr. Ogaitis' knowledge and experience in the industry comes from the exposure to most all types of commercial roofing and waterproofing materials and systems including asphalt and coal tar built-up; EPDM, PVC, TPO, and other single-ply membranes; coal tar and asphalt based modified bitumen roofs; hot liquid-applied modified asphalt membranes; spray-applied polyurethane foam and coating roofs; and steep-sloped asphalt shingle, metal, tile, and slate roofs. In his 20-plus years of experience, Mr. Ogaitis has been involved with large and small-scale projects including local and federal government projects, high rise buildings, churches, professional sports stadium projects, public and private schools, industrial plants, and shopping centers nationwide.

Mr. Ogaitis has been actively involved in the Roof Consultants Institute since 1995 and participates in educational seminars, national conventions, and local chapter activities annually. Currently serving on the local chapter

DEDICATED ROOF AND HYDRO-SOLUTIONS, LLC
John M. Ogaitis – Continued

Board of Directors as the Immediate Past President of the Mid Atlantic Chapter – RCI.

Mr. Ogaitis has provided building envelope consulting of roof, wall and sub-grade waterproofing services since 1987, and has worked on numerous major projects over the years.

SELECTED PROJECT EXPERIENCE

- University, educational, research, and health care facilities.
- Retail, industrial and commercial buildings.
- Manufacturing, chemical, and utility plants including nuclear plants.
- Residential and planned development housing.
- State and government buildings.
- Hospitals
- Museums and historical buildings.
- Parking and plaza decks.
- New construction, additions, and existing buildings/facilities.
- Stadiums and sports complexes.
- Coast Guard and Navy facilities

SPECIFIC PROJECT AND REFERENCE INFORMATION IS AVAILABLE UPON REQUEST

Dedicated Roof and Hydro-Solutions, LLC (DRH) was founded in 1997, and continues to serve numerous clients on multiple projects throughout the United States. Additional information concerning DRH is available at www.drhroofsolutions.com.

PROJECT APPROACH

Construction Management/Construction Administration

Crabtree, Rohrbaugh & Associates provides construction administration services for all of our projects. We employ a Registered Architect as our Director of Construction Administration. The Construction Administration Field Representative assigned to your project will be involved from the beginning of design and will be responsible to conduct a constructability review of the bidding documents prior to the release for bid. This will give them an intimate working knowledge of the project which will provide for a seamless transition from the design to the construction phases. The Construction Administration Field Representative will be assigned for the duration of construction and will attend and conduct formal job construction meetings every two weeks with the contractors and the Owner's representative. These meetings will be held to discuss the current status of construction and any construction-related issues requiring clarification, including general construction, trade inspections, structural, HVAC and electrical construction. Crabtree, Rohrbaugh & Associates will include all necessary consultants at these meetings to address issues related to their specific disciplines and to take prompt corrective action. Construction Conference Meeting Reports outlining the project status, construction issues and walk-thru observations will be issued following each meeting.

Specific to the Anthony Correctional Center Roof Repairs and scope of this project, Crabtree, Rohrbaugh & Associates will work to determine the source of the leaks and cause of the condensation being experienced. We will engage qualified and competent consultants, as may be required, to study the specific causes and perform the necessary testing in order to make recommendations for appropriate solutions to your problems. Following these recommendations and approval by the Department of Administration on the course of action and budget to execute repairs, Crabtree, Rohrbaugh & Associates will prepare all construction documentation and specifications and conduct competitive bidding for the Work. Crabtree, Rohrbaugh & Associates is committed to deliver your project on or under your approved budget and, if necessary, we will recommend and make appropriate scope revisions and either negotiate or re-bid the project in order to meet budget, at no additional cost.

Crabtree, Rohrbaugh & Associates has the depth of experience and available professional staff to meet your project timeline. We employ architects and designers with extensive experience in corrections and detention facility projects, as well as senior architects with a wealth of knowledge on difficult waterproofing and building performance challenges. Each of our projects goes through an extensive quality control review of the scope of work by this team of senior architects, prior to issuance of the bid documents followed by our Construction Administrative Field Representative conducting quality assurance reviews throughout the construction phase.

Basic construction administrative services provided by Crabtree, Rohrbaugh & Associates:

- Evaluate the completeness of all bids received for the Work and investigate the competency of the contractors and the responsiveness of their bids. We will require all bidders to provide a Contractor's Qualification Statement along with their financial capabilities to validate their ability to successfully complete the Work.
- Write the Agreement between the contractor and the Owner, and follow this process through until full execution of the contract.

- Advise and consult with the Owner throughout the construction phase and work to insure that the Work, when finally completed, is in conformance with the contract documents.
- Review and approve the contractor's cost breakdown, proposed list of subcontractors, construction progress schedules, material samples, shop drawings, bonds and other required submissions.
- Review the contractor's applications for payment, determination and verification of the amounts owed to the contractor and issuance of certificates of payment for such amounts.
- Prepare supplemental drawings and sketches that may be required and issue any necessary change orders covering approved changes to the Work.
- Conduct pre-final and final inspections at the time of substantial and final completion and receive and turn over to the Owner any written guarantees, operation and maintenance manuals and as-built drawings of the contractor.
- Process contractor's final application for payment if all Work is satisfactorily completed.

PROJECT APPROACH – CORRECTIONAL FACILITY SUMMARY

STEP 1 - Needs Identification

- Determination of Needs
- Assessment of Facilities

STEP 2 - Data Analysis

- Review previous Studies & Master Plans
- Review applicable Current Codes & Standards
- Review Program Compliance
- Review Population Statistics

STEP 3 - Program Interviews

- County Personnel
 - Prison Board
 - Judges
 - Warden
 - County Commissioners
- Facility Administrators
- Directors of Security
- Directors of Treatment
- Medical Directors
- Food Service Administrators
- Maintenance Directors
- Admissions
- Intake Personnel
- Classification Personnel
- Correctional Officers
- Outside Service Providers

STEP 4 - Statistical Analysis

- Inmate Profile
 - Age Distribution
 - Type of Offense
 - Duration of Sentencing
 - Admission Trends
 - Medical History
 - Eligibility for on-site Work Program
 - Eligibility for off-site Work Program
- Staffing Patterns & Analysis
- Administrative Philosophies

STEP 5 - Code Analysis

- Develop Code Profile
 - International Building Code
 - NFPA 101
 - Local Building Codes

STEP 6 - Existing Facility Analysis

- Spatial Analysis
- Structural Analysis
- System Analysis
- Building Documentation
 - Laser Survey
 - Site Plan
 - Floor Plans
 - Elevations
 - Floor Plans

STEP 7 - Correctional Standards Analysis

- PA Standards for Cons. Operation and Maintenance of Jails & Prisons
- ACA Standards for Adult Correctional Institutions
- USDJ Standards
- American Bar Association Standards
- American Medical Association Standards

STEP 8 - Building Program

- Function and Area Summary
- Program Data Sheets

STEP 9 - Design Alternatives

- Master Plan for Growth & Expansion
- Schematic Drawings
- Outline Specifications

STEP 10 - Cost Analysis

- Staffing Cost Analysis
- Construction Cost
- Operating Budget Analysis
- Debt Service Analysis
- Total Cost Analysis

STEP 11 - Design and Const. Phase

- Design Development
- Construction Document
- Optional Pre-Bid Demolition
- Bidding & Negotiation
- Construction Administration

COST AND SCHEDULE CONTROL

Project budgets for all correctional facilities developed by Crabtree, Rohrbaugh & Associates are the responsibility of Thomas C. Crabtree, President. Mr. Crabtree is a Registered Architect who is nationally recognized as a Correctional Facility Planner.

The cost estimates are based on hard bid costs compiled from the design and construction of more than 30 correctional facilities for which construction was completed during the last eight years. Most of the prisons designed by Crabtree, Rohrbaugh & Associates have had pre-established construction budgets based on the subdivision of the government's ability to finance the project. In all of these projects, Crabtree, Rohrbaugh & Associates has been able to meet the project budget while fulfilling the facility requirements based on the Facility Program approved by the respective county or state officials.

Crabtree, Rohrbaugh & Associates has an established track record of delivering correctional facilities on time and on budget, with an absolute minimum of requirements for addenda, change orders, and requests for clarification.

Most recently, the State Correctional Institutions at Schuylkill and Greene Counties, as well as the West Virginia Regional Jail System projects, have been bid and are under budget by amounts ranging from 4% to 8%. In each case, the project budgets were established by outside entities and delivery of the project within budget was essential.

Our extensive experience in correctional facilities in this region of the country has provided us with an extensive case history library of cost data that enables us to maintain our successful track record. In the history of the firm, no project has gone to construction exceeding its budget by more than 9% and the vast majority has been under budget. Additionally, no correctional facility project has failed to go to construction upon completion of the bidding phase.