

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

Request for Quotation

DNR209057

::::PA	3 E ()
	1

ADDRESS CORRESPONDENCE TO ATTENTION OF FRANK WHITTAKER

3.04-558-2316

RFQ COPY
TYPE NAME/ADDRESS HERE
HADISON SIENCER ARCHITECTS
222 Cooit Square
Charlotte, Lille, VA 22302

DIVISION OF NATURAL RESOURCES PARKS & RECREATION SECTION BUILDING 3, ROOM 719
1900 KANAWHA BOULEVARD, EAST CHARLESTON, WV
25305-0662 304-558-2775

ARCHITECT/ENGINEERING SERVICES, PROFESSIONAL EXPRESSION OF INTEREST THE WEST VIRGINIA PURCHASING DIVISION, FOR THE AGENCY, THE WEST VIRGINIA DIVISION IF NATURAL RESOURCES. IS	T
ARCHITECT/ENGINEERING SERVICES, PROFESSIONAL EXPRESSION OF INTEREST THE WEST VIRGINIA PURCHASING DIVISION, FOR THE AGENCY, THE WEST VIRGINIA DIVISION IF NATURAL RESOURCES, IS	<u> </u>
THE WEST VIRGINIA PURCHASING DIVISION, FOR THE AGENCY, THE WEST VIRGINIA DIVISION IF NATURAL RESOURCES. IS	
SOLICITING EXPRESSIONS OF INTEREST FOR ARCHITECTURAL AND ENGINEERING SERVICES FOR LODGE EXPANSION AND PARK IMPROVEMENTS AT CACAPON RESORT STATE PARK LOCATED IN BERKELEY SPRINGS WV, PER THE ATTACHED SPECIFICATIONS. TECHNICAL QUESTIONS MUST BE SUBMITTED IN WRITING TO FRANK WHITTAKER IN THE WEST VIRGINIA PURCHASING DIVISION VIA FAX AT 304-558-4115 OR VIS EMAIL AT FRANK.M.WHITTAKER@WV.GOV. DEADLINE FOR ALL TECHNICAL QUESTIONS IS NOVEMBER 21, 2008 AT 3:00 PM. ALL TECHNICAL QUESTIONS RECEIVED, IF ANY WILL BE ANSWERED BY ADDENDUM AFTER THE DEADLINE.	
QUESTIONS CONCERNING THE PROCESS BY WHICH A VENDOR MAY SUBMIT AN EXPRESSION OF INTEREST TO THE STATE OF WEST VIRGINIA ARE NOT CONSIDERED TECHNICAL QUESTIONS AND MAY BE SUBMITTED AT ANY TIME PRIOR TO THE BID OPENING DATE AND TIME.	
ADDENDUM ACKNOWLEDGEMENT	
I HEREBY ACKNOWLEDGE RECEIPT OF THE FOLLOWING CHECKED ADDENDUM(S) AND HAVE MADE THE NECESSARY REVISIONS TO SEEREVERSE SIDE FOR TERMS AND CONDITIONS	
TELEPHONE 257-3581 DATE 12108 108	
WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'	/E



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

Request for MFG NUMBER Quotation

DNR209057

ADDRESS:CORRESPONDENCE:(10:AT) ENTION:OF

FRANK WHITTAKER 804-558-2316

RFQ COPY TYPE NAME/ADDRESS HERE MADISON STENCER ARCHITECTS 222 Court Square Charlottesville, VA 22902

DIVISION OF NATURAL RESOURCES PARKS & RECREATION SECTION BUILDING 3, ROOM 719 1900 KANAWHA BOULEVARD, EAST CHARLESTON, WV 304-558-2775 25305-0662

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N. J.A	SEE REVERSE SIDE FOR TER	MS AND CONDITIONS	DATE /2/08/08
SIGNATURE		LEPHONE 297 - 3881	SS CHANGES TO BE NOTED ABOVE
ITTLE for Architect	FEIN 54-2036567	ADDITION	

PROPOSAL FOR:

CACAPON RESORT STATE PARK

A/E Services for Lodge Expansion and Park Improvements
Berkeley Springs, West Virginia

Prepared for:
West Virginia Division of Natural Resources
Parks & Recreation Section



FDR with children at Romney, WV

1935



9 December 2008

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- 7- Hurd & Obenchain, Inc. Selected Projects & Resumes

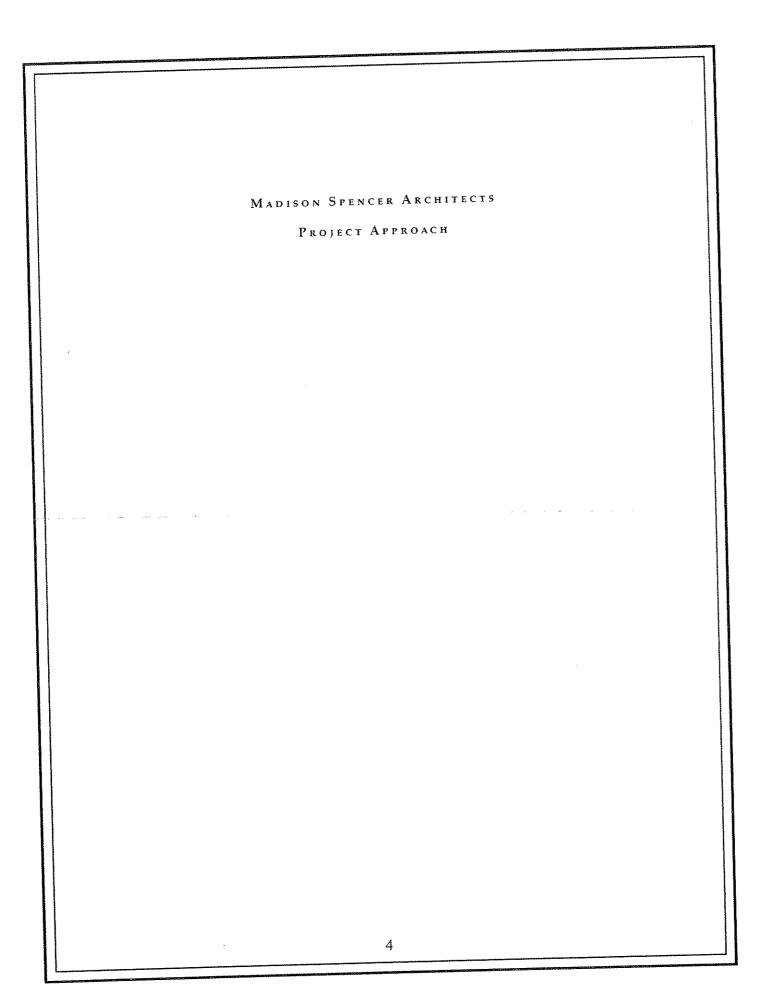


2007 Virginia Association for the Preservation of Virginia Antiquities Blue Ridge Farm, Afton, Virginia

2006 United States Department of the Interior National Register of Historic Places For Restoration of Blue Ridge Farm, Afton, Virginia



Association for the Preservation of Virginia Antiquities



PROJECT APPROACH

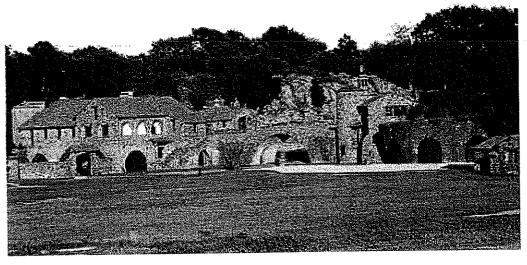
We appreciate that the proposed improvements represent a considerable undertaking on the part of the West Virginia Division of Natural Resources. While Madison Spencer Architects is a highly capable architecture, planning and interior design firm, we welcome and include the support of several specialists outside our organization in order to ensure that all facets of the project are addressed in a comprehensive way. By compiling a team of diverse, highly respected professionals, many of whom have prior working relationships, we will be able to approach the myriad issues associated with the project in an efficient, economical and technically superior manner.

The project will be administrated by Madison Spencer Architects. All project team members will report directly to Madison Spencer Architects who will serve as the point of contact for the client and repository of all project data. Overseeing the design and development of the project shall be Madison Spencer. Mr. Spencer has over twenty five years of award winning design and management experience. Nominated in 2001 to the "Classicist 100" he was also in 2005 elected to the INTBAN (London) College of Traditional Practitioners. He presently serves as Director of Design for the Historic Greenbrier Sporting Club in White Sulphur Springs and for the Turks & Caicos Sporting Club in the British West Indies. Mr. Spencer was appointed by the Governor of Virginia to serve on the Commonwealth Historic Resources Board in 2001. Managing the project for MSA will be John Voight. Mr. Voight has a working knowledge of every profession involved in this undertaking and a keen appreciation of the role each must play in the overall program. His position requires him to oversee multiple, complex projects and coordinate and monitor the efforts of both in-house and outside professionals on a daily basis. His thirteen years of experience in this capacity will be brought to bear on the execution of this endeavor.

Beyond project management and coordination, MSA will bring to the effort comprehensive master planning expertise and thoughtful design of spaces. We have substantial experience in providing services in conformance with the State's Construction and Capital Outlay procedures and in interfacing with any architectural review boards and various governmental agencies. Madison Spencer Architects will also bring the talents of Dunbar, Milby, Williams, Pittman and Vaughan for structural engineering, Hurd and Obenchain for plumbing, mechanical and electrical engineering and Terradon for civil engineering and landscape architecture.

The MSA team will compile a comprehensive schedule for the project and report regularly to the Department's representative regarding progress. Throughout the process the MSA team will provide input on design alternatives and associated construction costs if need be. We will coordinate with local and state agencies, as well as utility service providers to ensure that the infrastructure needs of the project are met.

In the end, a complete design and specification package will be developed and the team will provide necessary assistance during the project bidding and awards efforts if desired by the West Virginia Division of Natural Resources. Our involvements during the construction process will be tailored to meet the envisioned needs of the West Virginia Division of Natural Resources, Parks and Recreation Section, and the contractor of their choice.



2003 Rhode Island Historical Preservation & Heritage Commission Swiss Village, Newport, Rhode Island





MADISON SPENCER ARCHITECTS

TEAM HISTORY AND QUALIFICATIONS

TEAM HISTORY AND QUALIFICATIONS

The following is a brief description of each team members firm. More detailed information has been provided on the paragraph 7 Appendices, Section a. and b.

Madison Spencer Architects

The offices of Madison Spencer Architects opened in 2001. The founding of the office by Mr. Spencer was another chapter in a career that began in 1982 with involvement in several award winning architectural practices. Madison's vision for the practice is founded on the premise that great architecture springs from solid collaboration between the troika of; Owner and Architect; Architect and Builder; Builder and Craftsman. The collaboration is fused with an expectation that the needs of the Client will be reflected in a structure that is simple in its elegance and practical in its fashion while meeting every need of the Client's program brief. Achieving such collaboration requires an extraordinary relationship preceded upon communication, service and response to our Clients . . . an uncommon effort which has become the office code at Madison Spencer Architects.

MSA Clients share our commitment to carefully designed and finely detailed environments conceived in a classical manner with regard for traditional cleft and an eye for modern circumstances. In addition, most completed projects are located in sensitive natural settings, encompassing the design of residential, institutional, and agrarian structures. Protection of our environment is in the fore front of all designs at Madison Spencer Architects. Designs for both historic preservation and new buildings include consideration of materials that are authentic, dependable, and maintainable. In addition, our practice emphasizes on going research of advances in new technology where applicable: for instance, geothermal heating systems, wind, and solar technologies.

Serving our clients from offices in Charlottesville, VA and Newport, RI the firm maintains projects on a national and international scope with a vibrant and active staff of architects and support personnel. The office operations utilize current computer standards, in drafting and organization, and in many cases, hand drawings continue to be used in order to maintain a link with the notion of craft.

Our field of practice and experience is broad, encompassing projects as large as a master plan for a Caribbean resort village as well as individual furnishings to suit a client's specific needs. Our work is rooted in a classical aesthetic even when circumstances necessitate a more modern approach. Proportion, balance, and a sound knowledge of craft and materials - these fundamental notions of the building arts guide us in all that we accomplish.

Dunbar, Milby, Williams, Pittman & Vaughan

Dunbar, Milby, Williams, Pittman & Vaughan has provided structural engineering services continuously from offices in Charlottesville and Richmond, Virginia since 1975. Of the firm's twenty-eight full-time employees, fourteen are registered Professional Engineers and six are graduate engineers. The firm is the largest in our geographic area dedicated to structural design. Services provided range from schematic design through the preparation of construction documents and construction phase services.

TEAM HISTORY AND QUALIFICATIONS

Dunbar, Milby, Williams, Pittman & Vaughan also provides services to architects, governmental institutions and agencies, other engineers, industry, and the general public. Professional services constitute the entire activity of the firm. The firm provides direct consultation, investigations, structural condition surveys and activity studies, investigations of structural failures, designs, plans, specifications and construction administration.

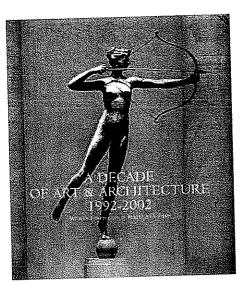
The firm provides services for an average of \$35 million of construction each month. Most of the firm's projects are in Virginia. However, work is on-going throughout the eastern U.S. Structures include wood, light gauge metal, structural steel, cast-in-place and precast concrete, and reinforced masonry. Field of specialty include universities, commercial, industrial, institutional, municipal, residential buildings, and parking structures.

Terradon Corporation

Terradon Corporation offers a wide range of engineering and environmental services, and is particular suited to land and infrastructure design and development in Virginia, West Virginia, and the Eastern United States. The company was founded in 1989. The staff of over 70 persons includes engineers, land-scape architects, surveyors, planners, environmental scientists, designers, and technicians. The firm oper-scape architects, surveyors, planners, environmental scientists, designers, and technicians. The firm oper-scape architects in Richmond, Virginia, Charleston, West Virginia and Lewisburg, West Virginia. Services include: Civil Engineering, Surveying and Mapping, Land Planning and Site Design, Geotechnical Engineering, Environmental Engineering, Highway and Roadway design, Material Testing and Construction Monitoring.

Hurd & Obenchain

Hurd & Obenchain, Inc. is a well established Professional Engineering Firm who has been providing quality engineering services since 1959. The firm specializes in mechanical, electrical, plumbing, fire protection and information technology engineering services for educational (K-12 and higher education), local government, commercial, courthouses, retirement facilities, and healthcare facilities. The firm provides planning, design and consulting engineering services to Owners, Architects and other Engineers. Professional Engineerand service constitutes the entire activity of the firm which produces plans, specifications, studies, reports, ing service constitutes the entire activity of the firm which produces plans, specifications, studies, reports, energy analysis and construction administration services. As an additional service, Hurd & Obenchain, Inc. offers commissioning services for mechanical and electrical systems.



2002 The Institute of Classical Architecture Selection as one of the "Classicist 100"



MADISON SPENCER ARCHITECTS TEAM RESUMES 11

TEAM RESUMES

Madison Spencer, AIA, architect and planner, began his career writing the guidelines for the redevelopment of the Miller Park District in historic Chattanooga, Tennessee while in the office of Koetter Kim Associates in Boston. In 1986 he joined Eisenman Robertson Architects in New York directing and assisting in the design of several award winning architectural competitions in the United States and abroad. Two of these were featured in the 1988 Museum of Modern Art exhibit of "New Architecture". In 1991 Mr. Spencer founded Train & Spencer Architects and went on to establish Madison Spencer Architects in 2001. Along the way he has received several preservation and American Institute of Architecture awards for his designs. In 2002, Mr. Spencer was selected as one of the "Classicist 100".

More recently he has been elected to the membership in the International Network for Traditional Building, Architecture and Urbanism (INTBAU), and its College of Overseers and Practitioners. Mr. Spencer presently serves as Director of Design for The Greenbrier Sporting Club at the Historic Greenbrier Hotel in White Sulphur Springs in West Virginia as well as The Turks and Caicos Sporting Club in The British West India.

His work has been featured in S. Allen Chambers, Building of West Virginia (Society of Architecture historians, 2004).

He has lectured at the University of Colorado and has served as a guest critic and juror at Columbia University, Princeton University and The Cooper Union. Licensed to practice in several states, he has built as well in the Caribbean, Germany, and Japan. Mr. Spencer currently serves on the Board of the Department of Historic Resources for the Commonwealth of Virginia.

Mr. Spencer received his B.A. from Washington & Lee University, studied at the Institute for Architecture and Urban Studies, and completed his M.A. at the University of Virginia where he was a Governor's Fellow.

Architectural Registration:

NEW YORK	#122902	1989
VIRGINIA	#0401010799	1998
PENNSYLVANIA	#RA-016266-B	2000
WEST VIRGINIA	#2645	1998
RHODE ISLAND	#2460	1998
VIRGIN ISLANDS		

Affiliations

DPS Greenbrier DPS Turks & Caicos

DHR

INTBAU - The International Network for Traditional Building, Architecture, and Urbanism

ICOMOS - The International Council on Monuments and Sites

AIA - The American Institute of Architects

ICA - The Institute of Classical Architecture

TEAM RESUMES

Awards and Honors:

2007 Virginia Association for the Preservation of Virginia Antiquities Award for Blue Ridge Farm

2006 United States Department of the Interior National Register of Historic Places For restoration of Blue Ridge Farm Afton, Virginia

2003 Rhode Island Historical Preservation & Heritage Commission Honor Award for Swiss Village, Newport, Rhode Island

2002 The Institute of Classical Architecture Selection as one of the "Classicist 100"

2001 Newport Historical Society Annual Award

2001 Department of Historic Resources, Virginia Landmarks Register For restoration of Abell-Gleason House, Charlottesville, Virginia

2001 Rhode Island Historical Preservation & Heritage Commission Honor Award for Wildacre, Newport, Rhode Island

2001 American Institute of Architects, West Virginia Chapter Honor Award

2001 American Institute of Architects, West Virginia Chapter Craftsmanship Award

2001 United States Department of the Interior National Register of Historic Places For restoration of Abell-Gleason House, Charlottesville, Virginia

1997 American Institute of Architects, Virginia Society Award of Excellence

1996 American Institute of Architects Central Virginia Chapter Honor Award

TEAM RESUMES

John K. Voight

Education:

1995 Virginia Polytechnic Institute and State University Bachelor of Architecture

Academic Honors:

First Place: 1995 Virginia Concrete Masonry Association Design Competition

Architectural Registration:

2001 Virginia N# 011369

Professional Experience:

Madison Spencer Architects: Architect/Senior Associate	2001-Present
Heyward, Boyd and Anderson, PC: Project Architect	June 1999- August 2001
FPW Architects: Project Architect/ Construction Administrator	June 1995- June 1999

Projects:

Commercial/Institutional Virginia Community College System: Moumoaw Hall Dabney S. Lancaster Community College	1997
Business Training Center Blue Ridge community College	1999
Space Planning Study for Piedmont Virginia Community College	
County of Albemarle: Space Planning Study for Burley Elementary School	2000
Historic Preservation and Rehabilitation	
Town of Orange, VA: Transportation Museum (Orange Train Depot Renovation)	1996
Town of Culpepper, VA: Culpepper Depot Renovation	1998
Town of Purcellville, VA/ Purcellville Preservation Society: Purcellville Depot Adaptive Re-use	1999
National Railway Historical Society: Hull Street Station Renovations	1998

Estate/ Master Planning

Blue Ridge Farm, Afton, Virginia Greenwood Historic District, Greenwood, Virginia Belvedere, Montpelier, Virginia Ridgeway Farm, Brookneal, Virginia

Development/ Master Planning

Vineyard Estates, Charlottesville, Virginia Turks and Caicos, West Indies The Greenbrier Sporting Club, White Sulphur Springs, West Virginia

TEAM RESUMES

John C. Rhode

	Education:	- · ·	1991
	Master of Architecture Bachelor of Architecture	Virginia Polytechnic Institute and State University Virginia Polytechnic Institute and State University	1986
	Academic Awards:		1983
	American Brick Association O. Pendleton Wright Schola	n Award: First place design competition arship: Excellence in the study of Architecture	1985
	Professional Experience:		2006-Present
	Madison Spencer Architect Independent Contractor: P Rau & Associates: Project A		2001-2005 1998-2001
	Projects:		1999
	New Residence - Hot Spri	ings, Virginia	1999
	Golf Learning Center – Pi	nehurst Resort	1999
	Conference Center – Dauf	fuski Island Resort	2000
	West Wing Renovation –	The Homestead Resort	2000
	Spa Lobby & Great Hall I	Renovations – The Homestead Resort	2000
	Spa Expansion Proposal		2001
	Lodge for Village at No.	9 Proposal – Pinehurst Resort	2001
į	Wachovia Securities Buil	ding Renovation for New Tenant – Richmond, Virginia	
	Joule Condominium – A	rlington, Virginia	2004
	Old Town Historic Resid	dence Renovation and Addition – Alexandria, Virginia	2004
	Spa Addition and Renov	vation – Colonial Williamsburg Foundation	2005
-		rier Sporting Club – The Greenbrier Resort	2008
1			

TEAM RESUMES

Robert M. Czekner

Education:	:
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Master of Architecture	University of Virginia Ohio State University	-	.999 .995
Bachelor of Architecture	Offic State Office Const		

Academic Awards:

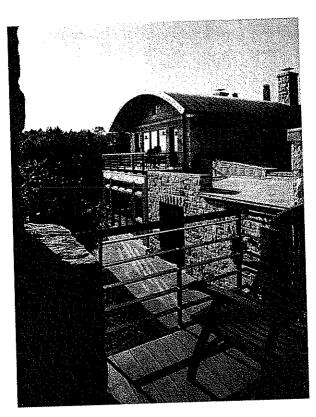
Richard Scott Smith Scholarship

Professional Experience:

	2002-Present
Madison Spencer Architects: Project Manager	1999-2002
noo Architecte Baltimore, Maryland: Project Architect	1998-1999
Train & Spencer, Charlottesville, Virginia: Intern Architect	1996-1997
NBBJ, Columbus, Ohio: Intern Architect	

Projects:

Projects.	1997
Cincinnati College Conservatory of Music, Additions and Renovation	
University of Maryland, Baltimore, Thurgood Marshall Law Library	2000
	2000
Lyric Opera House Renovation, Baltimore, Maryland	2001
The Marcus Institute, Atlanta, Georgia	
Frostburg State University, Compton Science Center, Frostburg, Maryland	2002
	2002
Annapolis Area Christian School Master Plan, Annapolis, Maryland	2003
Mason Taylor New Room, Renovation, Washington & Lee University, Lexington, Virginia	2000
Fuel Restaurant, Renovation, Charlottesville, Virginia	2003
	2004
James Madison Museum, Renovation, Orange County, Virginia	2005
Richards Insurance, New Office, Lynchburg, Virginia	2005
Residence, Farmington, Virginia, Renovation and Additions	2007
	2008
New Residence, Turks & Caicos	2008
Residence, Roaring Gap, North Carolina renovation and additions	2006



2001 American Institute of Architects, West Virginia Chapter, Honor Award

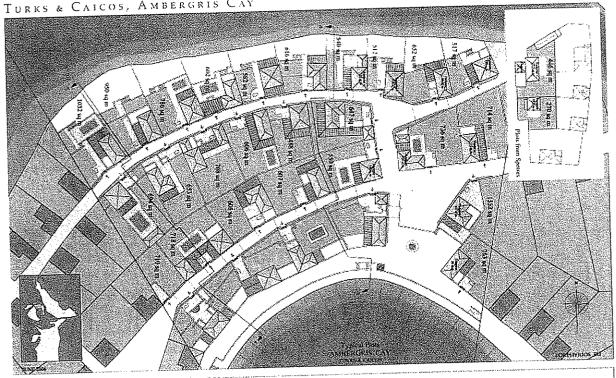


MADISON SPENCER ARCHITECTS
SELECTED PROJECTS

SELECTED PROJECTS

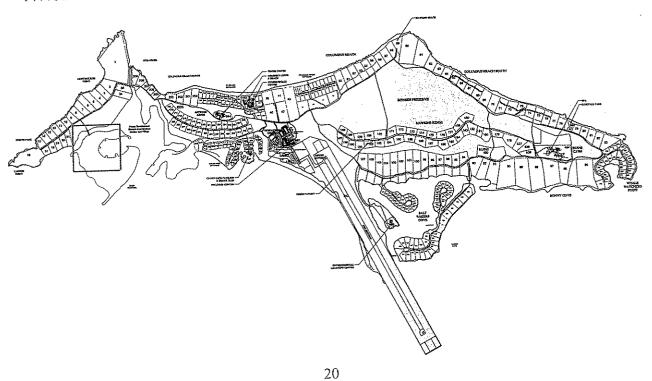
1- Turks & Caicos, Ambergris Cay, British West Indies	Master Planning	2008
2- Turks & Caicos, Ambergris Cay, British West Indies	Private Residence	2008
3- Vineyard Estates, Charlottesville, Virginia	Master Planning	2008
4- Vineyard Estates, Charlottesville, Virginia	Lot V Residence	2005
5- St. Lucia, West Indies	Royal Louvet Resort	
6- The Greenbrier Sporting Club, White Sulphur Springs West Virginia		2007

MASTER PLANNING TURKS & CAICOS, AMBERGRIS CAY

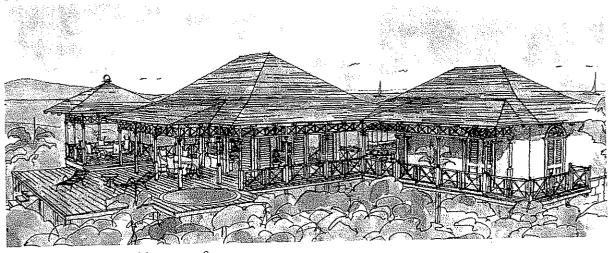




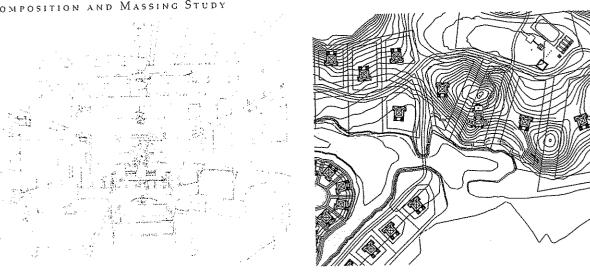
Typical Marina Plots at Ambergris Cay



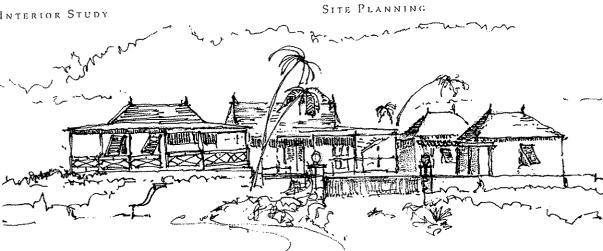
PRIVATE RESIDENCE TURKS & CAICOS, AMBERGRIS CAY



COMPOSITION AND MASSING STUDY

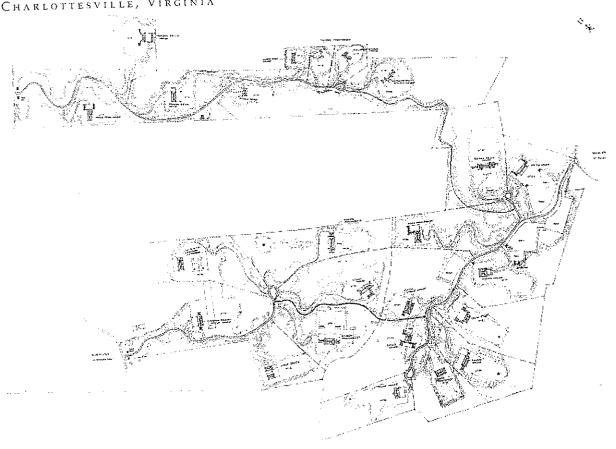


INTERIOR STUDY

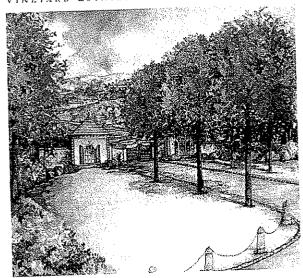


VIEW FROM BEACH

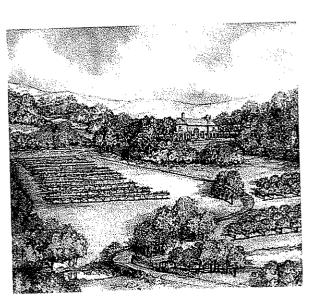




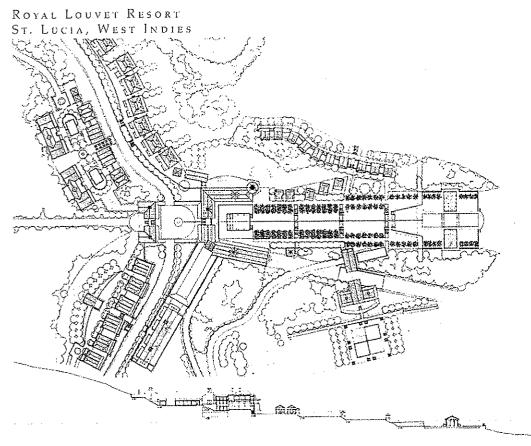
VINEYARD ESTATES MASTER PLAN



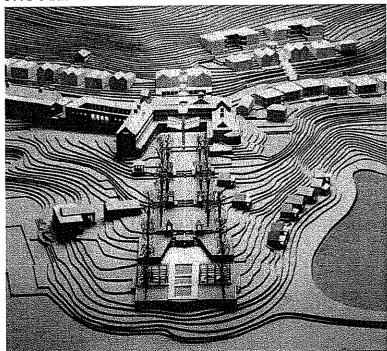
VIEW OF ENTRY



VIEW ACROSS THE LAWN



SITE PLAN AND SECTION FOR RESORT



DESIGN CONCEPT MODEL



IMAGE OF DINING

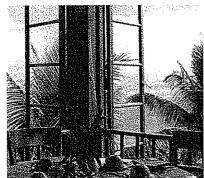
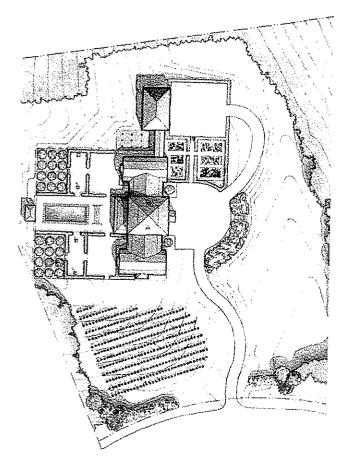


IMAGE OF RESORT LIVING

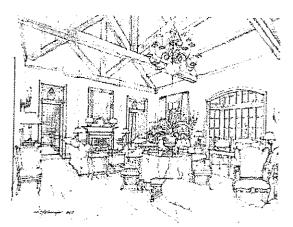
VINEYARD ESTATES LOT 5 RESIDENCE CHARLOTTESVILLE, VIRGINIA



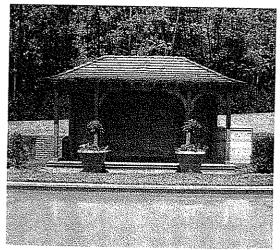
VIEW FROM EAST



SITE PLAN

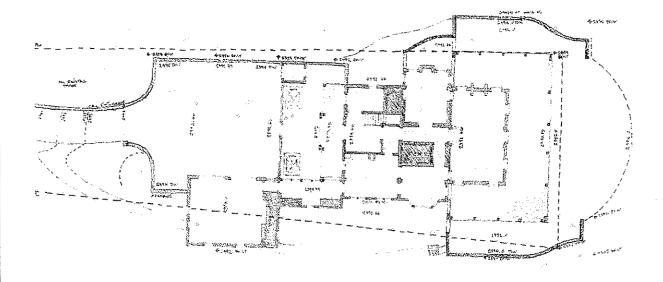


SITTING ROOM RENDERING

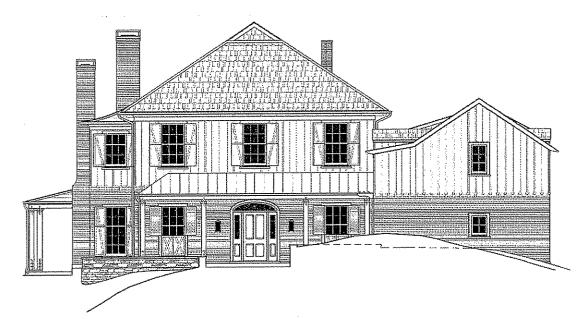


POOL PAVILION

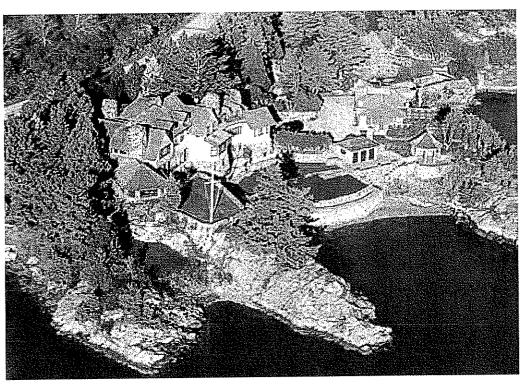
GREENBRIER SPORTING CLUB
WHITE SULPHUR SPRINGS, WEST VIRGINIA



SITE PLAN



FRONT ELEVATION



2001 Rhode Island Historical Preservation & Heritage Commission Honor Award for Wildacre, Newport, Rhode Island





DUNBAR MILBY WILLIAMS PITTMAN & VAUGHAN

STRUCTURAL ENGINEERING SERVICES

TEAM RESUMES / PROJECTS LIST

TEAM RESUMES

Alvin W. Dunbar, PE, SECB

Principal-in-Charge

Pete Dunbar will serve as Principal-in-Charge of the Structural Design. For 51 years, Pete has provided consulting structural engineering services to architects, governmental institutions and agencies, other engineers, industry and the general public. As Principal-in-Charge for the Structural Design Team, Pete's primary responsibility will be to oversee all phases of the structural portions of the project to include the Schematic Design, Design Development, Construction Document, Bidding or Negotiation and the Construction Administration Phases.

Education

B.S.C.E., University of Virginia, 1957

Registration

Professional	Engineer

VA DC GA	#2788 #749005642 #5810	NC SC IN	#09043 #04031 #60021055 #60680	MD FL NJ PA	#5045 #0030141 #29646 #034525-E
NY	#058947-1 #009518	OH	#60680	PA	#U34525-E
WVA	#002210				

SECB — Certified in the practice of structural engineering: Certification #1140-0705

Selected Project Experience

4-H Natural Resource Center • Holiday Lake, VA • 2-story wood-framed lodge building containing guest rooms, lounge and kitchen • New combination wood-framed and pre-engineered multi-purpose building containing office, conference rooms, meeting rooms, storage and large multi-purpose room • Existing facilities include cabins, bunkhouse, store, dining hall, pool and pool house. DEVELOPED THROUGH CON-STRUCTION DOCUMENTS

Elk Hill Farm - Goochland, VA - 3,600 SF - 4-bedroom cottages - Conference areas. A private residential facility for young men with emotional, educational and legal problems.

Missionary Learning Center • Rockville, VA

- * 2001. 7,550 SF expansion and 8,200 SF renovation of dining hall, a full kitchen, large serving areas, dishwashing/scullery, refrigerated storage, dry storage, loading dock, interior and exterior gathering spaces • Nine 4-unit apartment housing buildings • Two dormitories - 75 double bedrooms • Missionary Kids School
- Library Multi-purpose Building

* 1983. Duplex-type housing units for missionary students • Library • Classrooms • Administration Building • Dining Facilities • Storage Facilities

Women's Missionary Union • Lowesville, VA • 1984. 4,300 SF Camper Cabin Unit • 750 SF Camp Meeting Unit • 5,800 SF Administration Building • 3,300 SF Guest Lodge • 14,000 SF Assembly Dining Hall • 800 SF Canteen - Laundry.

Massanetta Springs Large Lodge • Harrisonburg, VA • 2000. 10,400 SF, two-story, wood framed structure. Reception facilities, 18 hotel rooms, 20-person conference room, 120-person conference area.

TEAM RESUMES

Stephen D. Barber, PE, SECB

Principal • Project Manager

Steve Barber will serve as Principal-in-Charge and Project Manager of the Structural Design Team. For 18 years, Steve has provided consulting structural engineering services to architects, governmental institutions and agencies, other engineers, industry and the general public. As Principal-in-Charge and Project Manager for the Structural Design Team, Steve's primary responsibility will be to lead the structural design team on a daily basis, working with the Project Architect in the Schematic Design, Design Development, Construction Document, Bidding or Negotiation and the Construction Administration Phases.

Education

B.S.C.E., University of Virginia, 1990

Registration + Certification

Professional Engineer

VA	#025731	NC	#30216	SC	#23474
MD	#31085	PA	#71413	MA	#46797

SECB — Certified in the practice of structural engineering: Certification #1029-0705 National Council of Examiners for Engineering and Surveying (NCEES) #29448

Selected Project Experience

Alderman Road Student Housing and Dining Pavilion—University of Virginia – Charlottesville, VA • Two 6 story prestressed/precast concrete hollow core floor and steel framed roof structures on masonry bearing walls. Dining pavilion features exposed timber roof framing, structural steel and miscellaneous sub-framing to support extensive curtainwall systems.

Brandt Hall Dormitory – Virginia Commonwealth University – Richmond, VA • 19-story dormitory. Concrete flat plate with height of 202′. Belled caisson foundations.

Greenbridge – Mixed Use Development – Chapel Hill, NC • 12 and 10 story residential, retail and business mixed use buildings. A common two level below grade parking structure supports the buildings. The construction consists primarily of both post-tensioned and mild-reinforced cast in place concrete framing.

New Darden Business School – Phases I and II • University of Virginia – Charlottesville, VA • Structural Design Engineer for Phase I, 200,000 SF facility consisting of research libraries, classrooms, conference rooms and administrative offices; and for Phase II, multi-story office/classroom and auditorium additions, 141,000 SF.

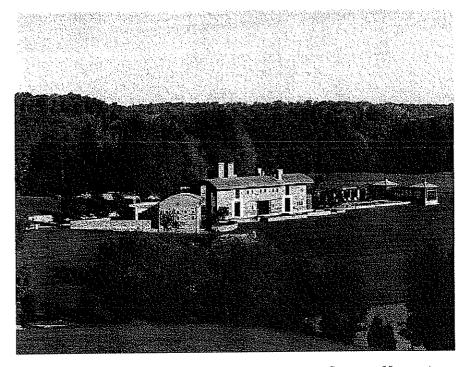
James River Dormitory – Christopher Newport University – Newport News, VA • Hollow-core floors and roof structure. Four-stories + mechanical penthouse. 54 suites, 34 apartments, 3 theme housing units, and 8 efficiency units.

Hereford College – Student Housing and Dining – University of Virginia – Charlottesville, VA • Prestressed/precast concrete hollow core and solid slab floor and roof structures on masonry bearing walls. Received the Award of Excellence by the Virginia chapter of the American Concrete Institute for creative use of concrete.

DUNBAR MILBY WILLIAMS PITTMAN & VAUGHAN

PROJECTS LIST

Hershey Country Club Hershey, PA Ballroom/Golf Club Dining Pavilion	\$9,000,000	Days Inn Hotel Chesterfield Mall Richmond, VA	\$3,328,000
Party Pavilion/Pool Deck		Governor's Square Best Western	\$1,900,000
Missionary Learning and Conference Center- Phase 1 Hanover County, VA	\$15,000,000	Midlothian, VA Williamsburg Lodge	\$12,000,000
Missionary Learning and Conference Center - Phase 2	\$14,000,000	Williamsburg, VA The Colonial Williamsburg Found 114-Room Addition	ation
Hanover County, VA Massanetta Springs Rockingham County, VA	\$3,100,000	Quarterpath Motel Williamsburg, VA	\$970,000
 Lodges Conference Center 		Missionary Learning and Conference Center- Phase 1 Hanover County, VA	\$15,000,000
Holiday Lake 4H Education Center Appomattox, VA	\$4,000,000	Harrisonburg Motel Harrisonburg, VA	\$2,400,000
LodgeConference Center		Boar's Head Inn Charlottesville, VA	\$2,500,000
Jefferson Hotel Richmond, VA	\$3,000,000	Guest Housing	
Boar's Head Inn & Sports Club & Spa Charlottesville, VA	\$1,800,000		
Comfort Inn Gloucester, VA	\$2,000,000		
Linden Row Inn \$3,000,000 Richmond, VA • Historic Renovation • 7 Row Houses			
Skyland Motel Skyline Drive, VA	\$930,000		



2001 American Institute of Architects, West Virginia Chapter, Honor Award



TERRADON CORPORATION

CIVIL ENGINEERING & ENVIRONMENTAL SERVICES

TEAM RESUMES / PROJECTS LIST



ERRADON

LAND PLANNING

CIVIL ENGINEERING

LANDSCAPE ARCHITECTURE

SURVEYING AND
MAPPING

ENVIRONMENTAL ENGINEERING

MATERIALS TESTING

C ONSTRUCTION MONITORING

> Richmond, Virginia P (804) 673-2560 F (804) 673-2561

Charleston, West Virginia P (304) 755-8291 F (304) 755-2636

Lewisburg, West Virginia P (304) 645-4636 F (304) 645-7614

www.terradon.com

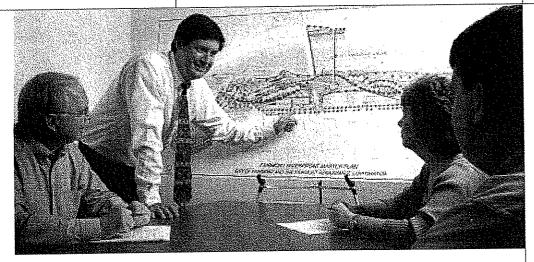


ABOUT TERRADON



TERRADON
is regarded
as one of the
region's leading
land and
infrastructure
planning and
design firms.





TERRADON CORPORATION offers a wide range of engineering and environmental services, and is particularly suited to land and infrastructure design and development in Virginia, West Virginia, and the Eastern United States.

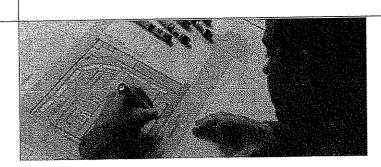
The company was founded in 1989 by Virginia King, and is certified as a "Woman Owned Business Enterprise" (WBE) by the National Women Business Owners Corporation (NWBOC). The firm is SWaM certified by the Virginia Department of Minority Business Enterprise (# 669221).

The staff of over 70 persons includes engineers, landscape architects, surveyors, planners, environmental scientists, designers, and technicians. The firm operates from offices located in Richmond Virginia, Charleston West Virginia, and Lewisburg West Virginia.

TERRADON's services are organized into the following seven service areas that work together or independently, depending on client needs and the scope of the project.

Services Include:

- Civil Engineering
- Surveying and Mapping
- Land Planning and Site Design
- · Geotechnical Engineering
- Environmental Engineering
- Highway and Roadway Design
- Materials Testing and Construction Monitoring
 Due to the breadth of services offered,
 TERRADON is regarded as one of the region's
 leading land and infrastructure planning and
 design firms. The firm has built its reputation by
 providing cost effective design solutions and
 maintaining the highest level of customer service.



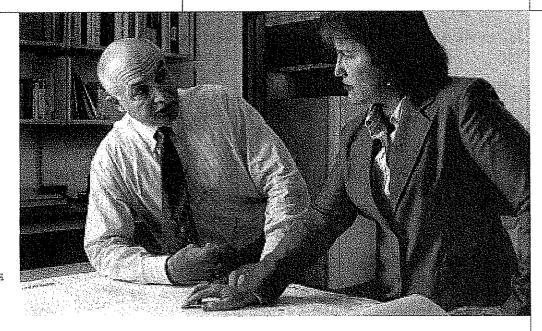


CIVIL ENGINEERING



The project engineer manages and controls all phases of the design process.





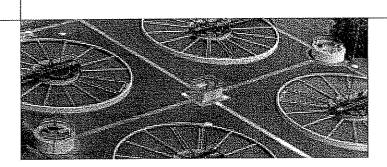
TERRADON provides a broad range of civil design services for private owners and public entities. TERRADON's staff of civil engineers combine the latest in computer technology with years of practical experience to deliver a quality, cost-efficient design solution. Projects are completed on time, in compliance with state and federal regulations and internal quality assurance/quality control guidelines.

Services include:

- · Water Treatment, Storage, and Distribution
- Wastewater Collection, Pumping, and Treatment
- Storm Water Management

- Natural Stream Design and Mitigation
- · Mine Reclamation
- · Utility Planning and Layout
- · Cut and Fill Analysis
- Erosion and Sediment Control

Our engineers have numerous resources within TERRADON to draw on, such as surveying, geotechnical engineering, environmental engineering, landscape architecture, materials testing, and construction monitoring. This allows the project engineer to manage and control all phases of the design process, from initial site reconnaissance through construction.



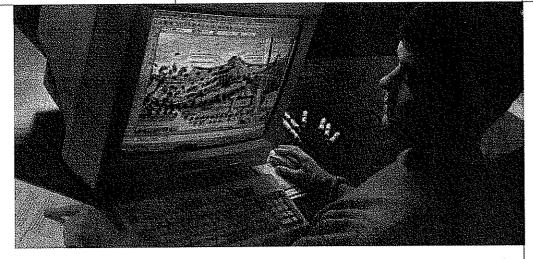


LANDSCAPE ARCHITECTURE



remation is experienced in providing a wide variety of engineering, environmental, and surveying services required for your project.





TERRADON is recognized as a leader in providing site design and land planning services. The firm's professional landscape architects work closely with the client from the project's initial phase, through schematic design, construction documents, and project delivery. Services provided include master planning, site feasibility studies, schematic design, layout plans, grading plans, stormwater management plans, erosion control plans, planting plans, presentation drawings/renderings, graphic design, and construction observation.

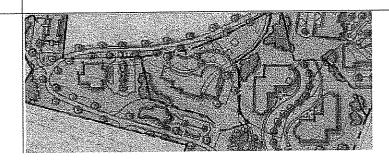
TERRADON is experienced in providing a wide variety of engineering, environmental, and surveying services required for your project.

These related services enhance and integrate with Landscape Architecture. This provides TERRADON with the opportunity to provide clients

across the region with the highest level of quality site design and landscape architecture available. The engineering and environmental services include identifying site constraints and conditions that could have an impact on the feasibility of a site.

Site design and land planning services are provided for a wide range of project types including:

- Recreation facilities
- Education institutions
- Commercial Developments
- · Government entities
- · Residential Development
- Environmental elements
- Medical facilities
- · Riverfront enhancement
- Greenway/greenspace projects
- Vehicular/Pedestrian circulation and storage facilities





SURVEYING AND MAPPING



TERRADON

is equipped

with the newest

surveying

instruments for

officient data

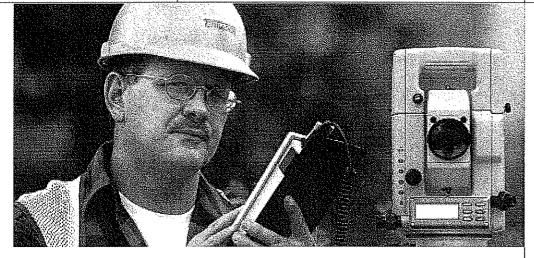
processing and

accurate gathering

of field

information.



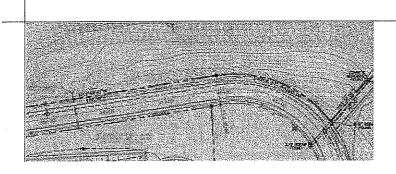


TERRADON has an experienced staff of professional surveyors who provide mapping, construction layout, ALTA surveys, topographic surveys, and boundary surveys.

TERRADON is equipped with the newest surveying instruments, ensuring the highest standards of efficiency and accuracy. Fully-equipped data collection stations are utilized for complete field-to-office automation, resulting in high productivity levels. The latest software is then used to process the data and achieve the desired end product/results.

Small mapping projects are completed inhouse, following the aforementioned process. Large projects are more economically mapped by aerial mapping with TERRADON providing the necessary control surveying. As a quality control measure, mapping is field checked for accuracy. Mapping information is then received in digital format for direct input into the CAD system.

TERRADON also offers Global Positioning System (GPS) services. Data acquisition is accomplished by visiting the point and recording its attributes for inclusion in a geographic information system or database. Labor costs are significantly reduced by a one-person operation. The more remote or geographically diverse your needs are, the greater the savings using TERRADON'S GPS services.





ENVIRONMENTAL SERVICES



TERRADON has a thorough understanding of state and federal environmental permitting processes and regulations.

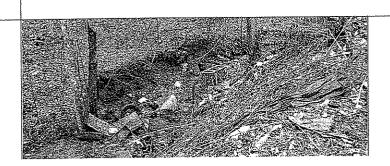




Constantly changing federal and state environmental requirements are difficult to track and can have a serious impact on businesses and other organizations. TERRADON closely follows environmental activities on the local, state, and federal level. TERRADON has a thorough understanding of state and federal environmental permitting processes and regulations. This expertise applies to both the initial permit preparations, as well as subsequent negotiations affecting the permit. The firm's strength in addressing environmental issues is built on the diversity of our staff with credentials in chemical engineering, chemistry, civil engineering, geotechnical engineering, and geology.

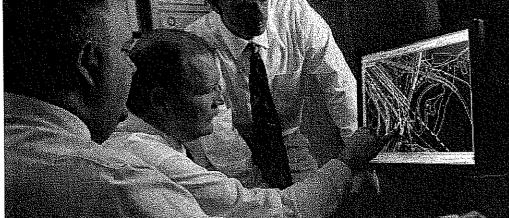
The company has experience in:

- · Environmental Site Assessments (Phase I, II)
- · Environmental Remediation (Phase III)
- Solid Waste
- Hazardous Waste
- · Process Water
- Wastewater
- Storm Water (SWPPP, GPP, Permitting)
- Groundwater
- Air Permitting (Tier II, Form R, Title V, Reg. 13)
- Wetland and Steam Investigations
- COE and State Permitting
- NEPA Compliance
- · Telecommunications Tower Compliance
- Emergency Response Plans





COMPUTER AIDED DESIGN CAPABILITY





TERRATION
maintains the
latest technology in
computer design
and office
management
software.



TERRADON maintains the latest office management and design software available. The firm also utilizes a state-of-the-art secured network tied directly to the internet though a T2 connection.

For site design, civil, and planning projects the firm utilizes AutoCAD Civil 3D 2008 along with Land Desktop Companion 2008. Additional AutoCAD modules include Raster 2008, Survey 2008, and Civil Design 2008. For highway, roadway, and structural projects, the firm uses Bentley MicroStation, Bentley InRoads, SAP2000, and MDX. This is the West Virginia Division of Highways preferred format.

TERRADON's library of design software also includes SedCad & Pond Pack for erosion/sediment control, StormCAD & HydroFlow for

drainage, WaterCAD for water distribution and management, and FlowMaster for hydraulic calculations.

TERRADON makes a significant investment in computers and related hardware. Our systems are consistently upgraded or replaced to maintain highly efficient CAD stations.

HP8000 laser printers located conveniently to the design stations provide quick 11X17 proof plots for designers. TERRADON uses the latest HP Design Jet plotters to provide the highest quality prints of plans available.

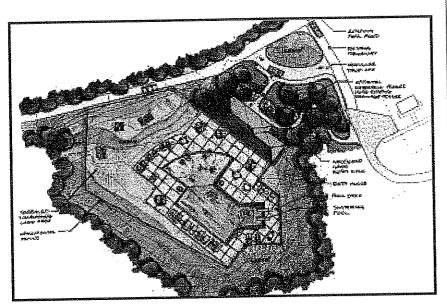


PARK PROJECTS



BLUESTONE STATE PARK

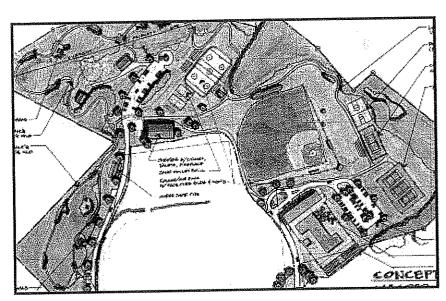
TERRADON was responsible for site master planning through construction documents for a new swimming pool at Bluestone State Park in Summers County, West Virginia.





UPSHUR COUNTY PARK

TERRADON prepared a recreational land use and site master plan to expand and upgrade the existing Upshur County Park. The site is located adjacent to Buchannon Upshur High School.



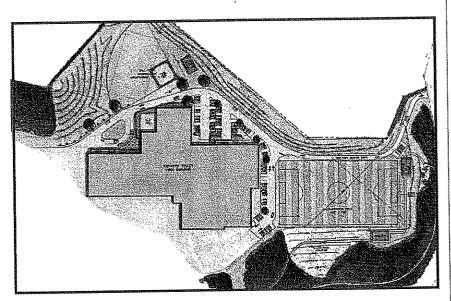


PARK PROJECTS



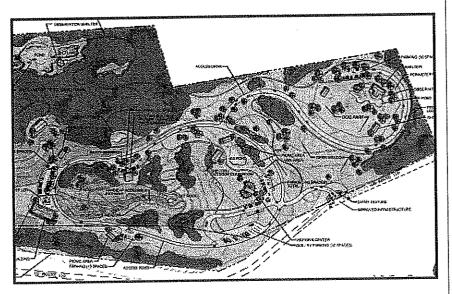
YMCA OF KANAWHA VALLEY - ATHLETIC FIELDS

TERRADON provided master planning through construction documents for the addition of athletic fields at the YMCA facility located on Hillcrest Drive in Charleston, West Virginia.





Dorsey's Knob Park and Visitors Center - Morgantown, West Virginia Terradon provided a site master plan for this multi-user facility. When completed the facility will provide recreation as well as a one-stop visitor center for the city, county, and West Virginia University visitors.

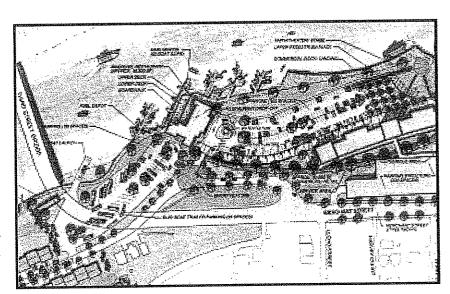




PARK PROJECTS

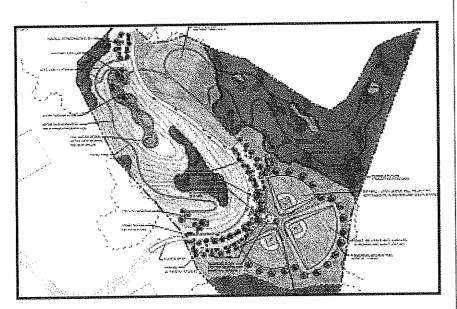
City of Fairmont Riverfront Development Master Plan

- Fairmont, West Virginia
TERRADON provided a land use
study and proposed land use master
plan for this 30 acre development
located on the Monongahela river in
Fairmont, West Virginia. TERRADON was awarded an Engineering
Excellence Award for this project by
the West Virginia Association of
Consulting Engineers in October
2002.



Roane County Park

- Spencer, West Virginia TERRADON provided master planning for this county park that includes a Civil War memorial, little league baseball complex, picnic areas, walking trails and public green space.

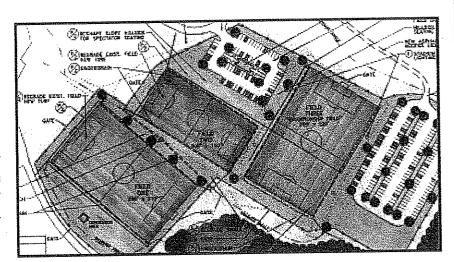




PARK PROJECTS

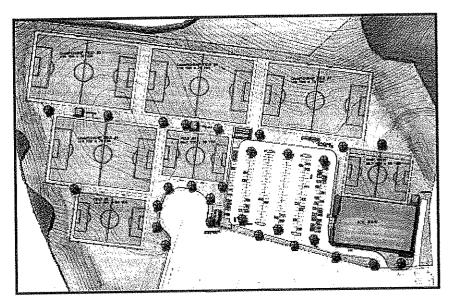
FAYETTE COUNTY YOUTH SOCCER COMPLEX

TERRADON provided full service master planning, design and construction document preparation for a three-field soccer complex adjacent to Oak Hill High School for the Fayette County Youth Soccer Association.



THE FIELDS AT TRACE FORK

TERRADON provided schematic design, master planning and construction document preparation for a six-field soccer complex in South Charleston for the Kanawha Charleston Soccer Association. The facility will be located adjacent to the Memorial Ice Arena in the Trace Fork Development.

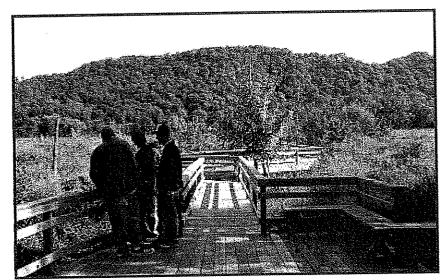




PARK PROJECTS



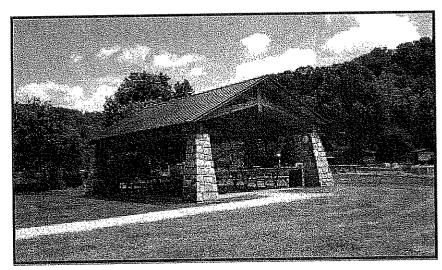
Wetlands of Winfield - Winfield. West Virginia TERRADON provided master planning through construction for this wetland education facility which includes such amenities as environmentally sensitive boardwalks and hiking trails, educational signage, and meeting platforms. TERRADON provided design-build services for the facility to Toyota Manufacturing and AEP who sponsored the project.





HARVEYTOWN PARK

TERRADON provided site analysis, inventory mapping, master planning, and construction documents for a neighborhood park to the Greater Huntington Park and Recreation District. Phase I construction included this Picnic Shelter.

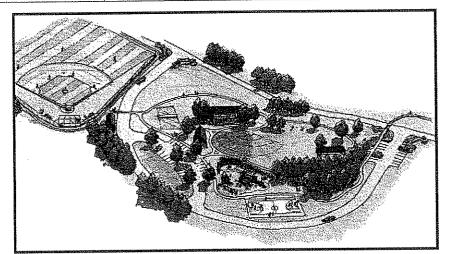






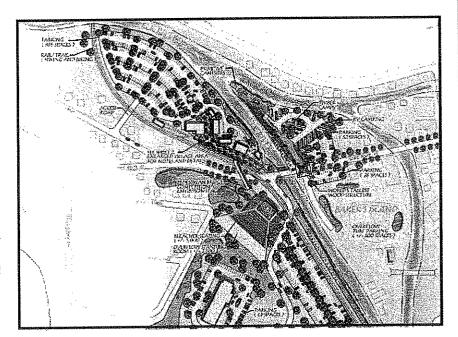
CURRY PARK

TERRADON prepared a master plan and recreational land use plan for 220 acres of undeveloped land. The site is located in Upshur County, West Virginia.



WOODCHOPPER'S VILLAGE

TERRADON developed a master plan and recreation feasibility study for the develpment of this lumberjack/ woodchopper's themed recreation destination park. Project amenities include a woodchopping/lumberjack arena to be used for world championship chopping contests, timber industry educational exhibits, arts & crafts village, cultural and history museum. railroad attractions, rail trails, and fishing amenities.





PROGRAMTEAMSTAFFING

GREGORY D FOX, ASLA LANDSCAPE ARCHITECT

TERRADON's Land Development Services are managed by Gregory D. Fox, ASLA. Mr. Fox, a native of West Virginia, has been responsible for a number of notable recreation, commercial, and educational site development projects since joining TERRADON in February of 2000. His group earned a 2001 Engineering Excellence Award from the West Virginia Association of Consulting Engineers for the master planning of an extreme sports park at WVUIT in Montgomery. They also earned a 2002 Engineering Excellence Award from the West Virginia Association of Consulting Engineers and a 2002 Merit Award from the American Society of Landscape Architects for the City of Fairmont Riverfront Master Plan project. Most recently, the 2005 Gold Award from the American Council of Engineering Companys and a 2005 Honor Award from the American Society of Landscape Architects was presented to the firm for the site design of the new West Virginia Division of Environmental Protection Headquarters Building.

REGISTRATION

Professional Landscape Architect

West Virginia

Virginia

Ohio

Pennsylvania

EDUCATION

B. S. Landscape Architecture, 1988, West Virginia University B. A. Geography (Planning), 1994, West Virginia University

Work

2000 - Present TERRADON Corporation

EXPERIENCE

1996 - 2000

Martin Boal Anthony & Johnson Architects, Charlotte, NC

1993 - 1996

Site Design, Huntington, WV

1989 - 1993

E.G.&G., Inc., Akron, OH

1988 - 1989

PSC Engineers, Lancaster, PA

PROJECT EXPERIENCE Fairmont Coke Works Site Redevelopment, Fairmont, WV

Fountain Place Development, Logan, WV Southridge Center Phase II, Charleston, WV

Fairmont Riverfront Master Plan, Fairmont, WV

Blue Mountain Village, Bluefield, WV Ashland Development, Southern, WV

Quarry Creek Expansion, Charleston, WV

Lake of Egypt, Southern Illinois River Ridge, Gauley Bridge, WV

Leatherwood Crossing, Bluefield, VA

Black Diamond, Blacksburg, VA

The Homestead, Warm Springs, VA



PROGRAM TEAM STAFFING

PETER J WILLIAMS, ASLA LANDSCAPE ARCHITECT

Pete Williams, ASLA, brings over eleven years of experience, and has worked on a variety of projects located throughout West Virginia. His responsibilities include landscape architectural design, grading and storm water drainage design, the design of pedestrian circulation systems and related amenities, roadway design, site planning, and quality control. He has worked on a number of state parks, highway projects, and schools. He is the current State Chapter President of the American Society of Landscape Architects.

Professional Landscape Architect, West Virginia

B. S. Landscape Architecture, 1991, West Virginia University

2000 - Present TERRADON Corporation

Chapman Technical Group, St. Albans, WV 1992 - 2000 Landscapes Unlimited, Morgantown, WV 1991 - 1992

Over the course of his career, Mr. Williams has been involved in a number of notable projects:

Beech Fork State Park Campground Improvements Twin Falls State Park Lodge Expansion WVUIT Extreme Sports Park Master Plan Charleston Job Corps Marshall University Softball Field Buckhannon/Upshur High School Track Addition Trinity High School Phillip Barbour High School Fairmont Senior High School Addition and ADA Renovations Capon Bridge Middle School Winfield High School Addition Berkeley Intermediate School McDowell Co. Elementary

Huntington VA Hospital Beckley Federal Courthouse **Upshur County Courthouse**

Doddridge County High School Cass Elementary School



PERSONNEL RESUMES

HARVEY "BUD" Mc CALLISTER, JR., P.E. SENIOR CIVIL ENGINEER

Mr. McCallister has over 30 years of experience in water projects including regulatory compliance and permitting. His resume includes very successful water projects in many West Virginia cities and communities including: Town of Burnsville, City of Logan, City of Glenville, City of Salem, Town of West Union, Town of Fort Gay, Hooverson Heights Public Service District, City of St. Marys, City of Fairmont, Town of Ravenswood, Salt Rock Public Service District, City of Parsons, City of Charles Town, Flatwoods Canoe-Run Public Service District, City of Buckhannon, Walton PSD, Clay Roane PSD and many others.

In addition to his extensive experience in the consulting engineering field, Mr. McCallister has several years' experience working for regulatory agencies such as the WV Department of Environmental Protection and the WV Bureau for Public Health. In his role as a regulator, Mr. McCallister assisted many communities with compliance with regulatory issues and operational problems. This experience has been invaluable to his knowledge of regulations, system operations, and regulatory agency requirements for water and sewer projects.

Mr. McCallister's duties include being in responsible charge of the design teams as it relates to technical design of water projects and to provide oversight to operation and maintenance issues relating to the projects.

EDUCATION

B.S. Civil Engineering, 1969, West Virginia UniversityM.S. Civil Engineering - Sanitary Engineering, 1972, West Virginia University

REGISTRATION

Professional Engineer: West Virginia, Ohio

W ORK Experience 2007 - Present TERRADON Corporation

1977 - 2007 Various consulting firms and WV-DEP, WV-BPH

PROJECTS

Kanawha State Forest Wastewater Treatment Plant Replacement Project

Design engineer for the Kanawha State Forest Wastewater Treatment Plant Replacement. The project involved replacement of an existing septic tank at Kanawha State Forest in Kanawha County. The wasteload allocation required very low levels of suspended solids, BOD, nitrogen, and low levels of chlorine. A recirculating sand filter with ultra-violet light disinfection was designed to meet the discharge limits.

Bluestone State Park Wastewater Treatment Plant Replacement

Design engineer and Project Manager for a 26,500 GPD package extended aeration wastewater treatment plant at the camp ground. The project required removal of the existing package treatment plant and installation of ht new plant during the off-season.

State Park Study for the Department of Health

As an employee for the Department of Health, inspected water and wastewater facilities at a number of state parks and assisted in preparation of the report to the legislature.



PROGRAMTEAMSTAFFING

TIMOTHY T WHITE, PE HIGHWAY/ROADWAY ENGINEER

Mr. White manages TERRADON's Transportation Department and has twelve years experience in the design and project management of various transportation projects. His extensive project experience ranges from small urban intersections and streets to major interchanges, freeways and interstate highways. His capabilities include all aspects of highway design, including alignment studies, traffic control plans, and signing and pavement marking plans. He also has extensive experience in stormwater management, and environmental permitting.

REGISTRATION

Professional Engineer: West Virginia, Ohio, Kentucky, and Arkansas.

EDUCATION

B. S. Civil Engineering, 1992, West Virginia University

Work

2003 - Present

TERRADON Corportation

EXPERIENCE

1998 - 2003

Louis Berger Group, Charleston, WV

1995-1997

Chapman Technical Group, St. Albans, WV

1993 - 1995

Battleridge Construction Company, Belle, WV

1992 - 1993

WVDOH, Charleston, WV

PROJECT EXPERIENCE Project Manager for the following WVDOH projects since joining TERRADON in

2003: Four to six lane widening of Corridor L in Summersville

Martinsburg Drainage Study

Improvements of Grade Road in Berkeley County

Replacement of Sedalia Arch Bridge in Doddridge County

Replacement of Sleeths Run Bridge in Lewis County

City of Fairmont - Coke Works Site Traffic Impact and Roadway Improvement Study. Routes include Marion County Route 73 (Speedway Avenue), County Route 72/2 (Suncrest Boulevard) and the following local streets: Morgantown Avenue, Lafayette Street and Dixie Avenue.

Before joining TERRADON, Mr. White worked as a Senior Roadway Engineer for a large international firm. He was responsible for the design of 6.5 miles of four to six lane widening of Interstate 40 near Little Rock, Arkansas. The project is currently under construction with a projected cost of 63 million dollars.

Mr. White routinely designs access roads to large commercial developments to meet WVDOH Design Standards.

AFFILIATIONS

Member, American Council of Engineering Companies



PERSONNEL RESUMES

JOHN W JAMES, PE SENIOR GEOTECHNICAL ENGINEER

Senior engineer for various geotechnical, environmental, and mining projects. Prior to joining TERRADON in 2004, Mr. James was the proprietor of JAMES ENGINEER-ING, a one man consulting engineering company with projects in geotechnical, hydrological, environmental, foundation, structural and general civil engineering, as well as forensic engineering. Mr. James specializes in innovative and cost saving concepts for his projects. Typical projects include numerous foundation investigations, studies and designs for landfills and environmental facilities, surface and ground water studies and remediation, foundation investigations and designs ranging in size from houses to major industrial complexes, roads, highways and bridges, earth and rockfill dams, storm drainage facilities, airport facilities, landslide analysis and correction, and forensic engineering.

REGISTRATION

Professional Engineer: West Virginia

EDUCATION

B. S. Civil Engineering, 1968, West Virginia Institute of Technology 30 Post-Graduate Hours in Civil and Environmental Engineering

AFFILIATIONS

American Society of Civil Engineers
Past President of Charleston Branch and West Virginia Section
National and West Virginia Society of Professional Engineers
Past President (Charleston Chapter)
Young Engineer of the Year Award (Charleston Chapter)

PROJECT EXPERIENCE Geotechnical investigation and design of numerous water and wastewater treatment plants, including Charleston Wastewater Treatment Plant, North Beckley Wastewater Treatment Plant, Buckhannon Water & Wastewater Treatment Plant, Elkins Water & Wastewater Treatment Plant, Berkley Spring Water Treatment Plant, Morgantown Wastewater Treatment Plant, Elk Pinch Wastewater Treatment Plant, Parkersburg Wastewater Treatment Plant, St. Albans Water Treatment Plant.

Design and upgrade of water supply dams including Upper & Lower Dog Run water supply dams, Salem, West Virginia; Key Dam, Bluefield, West Virginia; Chatham Lake Dam (irrigation supply), Shady Springs, West Virginia. Involvement with geotechnical aspects included interaction with process and structural aspects and structural design of many components.



PROGRAMTEAMSTAFFING

WILLIAM G WHITE, PE SENIOR STRUCTURAL ENGINEER

Mr. White has more than eighteen years experience as a structural engineer. He has a strong background in structural analysis and design of bridge structures. Mr. White has experience designing various superstructure and substructure types. Superstructure design experience includes post-tensioned concrete box girders, curved plate girders, plate girders, rolled beams, pre-stressed concrete beams and timber. Substructure design experience includes integral abutments, semi-integral abutments, pile supported footings, spread footings, piers and drilled shafts.

His first position was as a Structural Design Engineer for the bridge section of the West Virginia Department of Transportation. While at the West Virginia Department of Transportation, Mr. White also served as a member of the Bridge Design Manual Task Force.

REGISTRATION

Professional Engineer: West Virginia, Virginia, North Carolina, Ohio, Kentucky, Florida, and Arkansas

EDUCATION

B.S. Civil Engineering, 1987 West Virginia Institute of Technology

Work

2004 - Present

TERRADON Corporation

EXPERIENCE

1998 - 2004

Louis Berger Group

1987 - 1998

WV Division of Highways

PROJECT EXPERIENCE Stonewood Arch Pedestrian Bridge, S317-58/1-0.19, Harrison County, WV. Mr. White was the structural engineer responsible for the design and details of this pedestrian bridge. He recommended a two span structure with a total bridge length of 127'-0". Each span had a length of 63'-6". The bridge had a total width of 6'-0". AASHTO Standard Specification for Highway Bridges specifics the live load to be 60 psf for design. Performed analysis of the bridge and determined the size of the box beam to be 21". Computed the total load of the bridge and designed the substructure units. Both abutments were supported on a single row of four HP12x53 piles. Designed a straight shaft pier with a width of 6'-0" and a 3'-0" thickness. From analysis of the core boring data, it was determined that bedrock was close to the bottom of the streambed. Analysis was performed on the pier and an 8'x 6'x 3' spread footing founded 1'-0" into rock was designed. Due to the steep slope of the riverbanks, z-sheet piles were placed around the front of the abutments and utilized as the wingwalls. All earth pressures were computed and from that analysis the z-sheet pile walls were designed. Based upon geotechnical analysis the depth the piles were to be driven was determined.



PROGRAM TEAM STAFFING

TERESA A SCHULLER, LRS Enviromental Manager

Environmental Manager for risk assessment, site assessment, and property transfer/due diligence assessment projects. Management and sales responsibilities for mergers and acquisitions, risk assessments, environmental permitting, and other management consulting services.

Twenty-six years of experience in environmental research, state, and consulting experience. As an analytical chemist, research included organic and inorganic compounds fate and degradation in soil, surface water, sediment, and ground water. Project management of multifaceted domestic and international mergers and acquisition projects. Management of manuals preparation (PPC, SPCC, Spill response, ground water protection plan, etc.). Conducted environmental and OSHA training. Conducted compliance audits at industrial facilities. Managed, prepared, and defended CERCLA and RCRA risk assessments. Managed more than 600 telecommunications tower siting projects in West Virginia, Kentucky, Ohio, and Virginia. More than 14 years of applicable risk assessment work conducting and managing over 100 various types of risk assessments for industry and PRP committees. Negotiations with agencies on No-Action risk assessments, risks during remediation, and cleanup levels. Project manager for various general civil engineering projects and construction management. Responsible for planning, design, permitting, and construction management of water distribution, storage and treatment; wastewater and storm water collection and treatment; fire protection systems; site development; and water impoundments.

REGISTRATION West Virginia Licensed Remediation Specialist #174

PROFESSIONAL Forty Hour HAZWOPER
CERTIFICATIONS OSHA HAZWOPER Instructor

EDUCATION B.S., Chemistry, Eastern Illinois University, 1979 M.S., Chemistry, West Chester University, 1983

Continued education in specialized training and management courses

ISO 9000 Quality Training

WORK 1998 - Present TERRADON Corporation

EXPERIENCE 1986 - 1998 Environmental Resource Management, Inc.

1983 - 1986 E. I. DuPont Company



PROGRAMTEAMSTAFFING

ROBERT THAW, PS SURVEY MANAGER

Mr. Thaw is Manager of Surveying Services for TERRADON. He organizes and supervises survey crews; designs commercial sites for drainage, building site locations, parking and utility easements; reviews project plans; and creates base mapping.

Mr. Thaw has more than 20 years of experience in a wide range of land surveying applications. He is experienced with the day-to-day operation of the business and management of personnel.

REGISTRATION

Professional Surveyor, West Virginia

EDUCATION

B.A., Survey Technology, 1981, West Virginia Institute of Technology B.S., Surveying, 1985, West Virginia Institute of Technology

FIELDS OF COMPETENCE

Control Surveys - Conventional and G.P.S.

Topographic Surveys

- Commercial Sites under ALTA Standards
- Abandoned Mine Lands

Waste Management Facilities

Boundary Surveys

Right of Way Plans (Highways and Utilities)

Site Design (Commercial and Urban Developments)

Gas Well Locations and Permitting

Construction Stakeout

- Commercial Buildings
- Sanitary Sewer
- State and Federal Highways

Geographic Information Systems



REFERENCES

Jim McClelland, CPRP, Director Greater Huntington Parks & Recreation District, Harveytown Park (304) 696-5954

John E. Gibson, Braxton County Commission Braxton County Park (304) 765-2833 or (304) 765-5923

Jay Roberts, City Planner Fairmont Riverfront Park (304) 366-6211, Ext. 308

Thomas Flynn, Planner Fairmont Riverfront Park (410) 267-7220

Anne Cavalier, Vice President - Purchasing West Virginia University - Institute of Technology, Extreme Sports Park and Marina Study (Project received an Engineering Excellence Award) (304) 442-3049

David Cramer, PE, Assistant Deputy Commissioner WVDOT-DOH (304) 558-2804

Larry Lawrence, Director Physical Plant Fairmont State College Inter Campus Masterplan & Design (304) 367-4295





2001 American Institute of Architects, West Virginia Chapter, Craftsmanship Award



HURD & OBENCHAIN, INC. MECHANICAL, ELECTRICAL, PLUMBING ENGINEERING SERVICES TEAM RESUMES / PROJECTS LIST

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Hurd & Obenchain, Inc. Firm Overview

Professionalism • Experience • Commitment

Hurd & Obenchain, Inc. is a well established Professional Engineering Firm who has been providing quality engineering services since 1959. We specialize in mechanical, electrical, plumbing, fire protection and information technology engineering services for educational (K-12 and higher education), local government, commercial, courthouses, retirement facilities, and healthcare facilities. We provide planning, design and consulting engineering services to Owners, Architects and other Engineers. Professional Engineering service constitutes the entire activity of the firm which produces plans, specifications, studies, reports, energy analysis and construction administration services. As an additional service, Hurd & Obenchain, Inc. offers commissioning services for mechanical and electrical systems.

Professionalism

While it is true that Hurd & Obenchain, Inc. provides professional engineering services to a variety of clients, our goal is to provide our in a quality manner that makes you feel as if you were our only client. Our response to your requests and inquiries will be expeditious and thorough.

H&O Employment Quick Stats:

- Offices in Richmond & Roanoke, VA
- 33 Employees
- 22 Engineers
- 8 Licensed Professional Engineers
- 6 LEED Accredited Professionals
- 1 RCDD

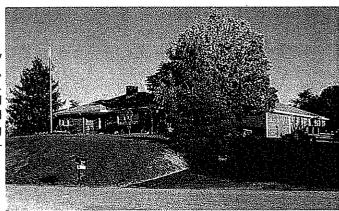
Our approach to mechanical and electrical engineering solutions combines innovative design concepts with proven technologies. Hurd & Obenchain, Inc. constantly is looking for ways to improve our engineered product, while exercising agility to ensure the systems are based on sound technical research and satisfactory past performance. We stand behind our designs; therefore, we are careful to recommend only the engineering solutions that we trust to be the best for each individual application.

We want every project we do to be the best project we do. Hurd & Obenchain, Inc. is committed to excellence, and we understand the importance of taking all necessary procedures to do the job correctly. Whether this entails taking time to explain a complex matter, or customizing engineering systems that meet our clients' specific needs, we'll take the time to be professionals.

Experience

We complete our projects with multiple delivery methods including: Design-Bid-Build, Design-Build, and PPEA. In addition, Hurd & Obenchain, Inc. has provided services as the prime professional and as sub-consultants. We are comfortable and confident with our work, and, hopefully—by judging our experience—you can see others are comfortable and confident with our work as well.

(Experience continued on next page)



H&O's Roanoke Office



4932 Frontage Rd, NW Roanoke, Virginia, 24019 Tel: 540-265-4444

Fax: 540-265-4445

11508 Allecingie Parkway Richmond, Virginia, 23235 Tel: 804-423-6444



H&O's Richmond Office

Hurd & Obenchain, Inc. is aware of Owners' cost concerns, whether it is first costs or operating costs that are of most concern. We know that Mechanical and Electrical systems are a major contributor to these costs, so our firm makes sure we are paying specific attention to how our designs and recommendations will affect our Owners. One thing we do for our clients is participate in life-cycle costing so nobody is blindsided by the best prices; instead, they get the industry's best quality for the price they pay. We do this by assessing the construction cost, utility (or operation) costs, and then the maintenance costs of the product. We'll make sure that if our clients expect a system to run effectively for 20 years or more, they've picked the best quality products to do just that. Hurd & Obenchain, Inc. makes sure all designs meet or exceed all IECC's standards. In addition, we are familiar with BCOM's standards and ensure all

of our work is extremely compatible with their values as well.

At Hurd & Obenchain, Inc., our standard design practices incorporate many components and features that are sustainable. This practice of sustainability has proliferated in recent years and we now take claim to many completed and soon-to-be completed LEED Certified buildings in the Mid-Atlantic region. This is the result of years of applying professional, high quality, engineering solutions that benefit our clients. Hurd & Obenchain, Inc. is also a proud Energy Star Partner. We feel green building is *just the right thing to do* so we make efforts to make it affordable and available, where possible, to our clients.

Commitment

Our goal is not simply to increase our number of projects or customers; we, instead, aim to improve our quality at every opportunity. We have always defined success as a satisfied client. It is a rarity that we do outside advertising since our satisfied client-base has given us such excellent referrals. We know that if you succeeds, we succeed. Hurd & Obenchain, Inc. has the expertise to design mechanical and electrical systems to meet our clients' needs, and we consistently strive to be on-time and on-budget with our projects. Our staff is of sufficient size to meet any reasonable schedule and will provide all services necessary to complete the specific project as outlined in the Request for Qualifications. We have been in the business for almost 50 years, and we know that, only with customers like you, can we continue for 50 plus years. We are committed to our clients, our offering and our industry.

We gladly offer our expert skill to make your project the best possible. We take ultimate pride in our work, ensuring that your project is completed to stand the test of time. We like to build relationships with our clients so they can relax, assured that we understand how they would like their work completed. Hurd & Obenchain, Inc. is committed to communicating openly, honestly and professionally. We realize you don't

Engineering Specialties:

Audio/Video Systems Building Automation (EMS) Systems **Building Renovations** Closed Circuit Television Commissioning **Economic Evaluations Electrical Power** Energy Management/Conservation Feasibility Studies Fire/Security/Alarm Systems Heating, Ventilating & Air Conditioning Indoor Air Quality Intra-Building Communications Systems Lighting Consultation Media Retrieval Systems Pre-Planning Studies **Process Piping** Refrigeration Solar Energy Utilization Thermal Storage Underground Storage Tanks Utilities

WAN/LAN Systems

have to work with us—you *choose* us. Hopefully the information above will help make your decision to select us that much easier. Thank you for your time and loyalty.



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J. B. Obenchain, Jr., P.E., LEED AP

Vice President/Chief Financial Officer · Electrical Engineer

EDUCATION

1979 - 1983

Virginia Tech; Blacksburg, VA

Bachelor of Science - Electrical Engineering



PROFESSIONAL EXPERIENCE

2005 – Present	Hurd & Obenchain, Inc.; Vice President/CFO, Electrical Engineer; Principal
1994 - 2004	Whitescarver, Hurd & Obenchain, Inc.; Principal, Director, Vice President
1991 - 1993	Whitescarver-Rodes & Associates, Inc.; Principal, Director, Vice President, Electrical Department Head
1989 - 1991	Mayes Engineering, Inc.
1987 - 1989	Allied Signal, Inc.
1985 - 1987	Mecklenburg Electric Cooperative
1983 – 1985	Newport News Shipbuilding & Drydock, Inc.

REGISTRATION - LICENSED PROFESSIONAL ENGINEER

Virginia

Kentucky

Maryland

North Carolina

CERTIFICATION

LEED® Accredited

ENGINEERING SPECIALTIES

Electrical Design Engineering; Project Management; and Construction Administration



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David L. Roller, P.E., LEEP AP

Mechanical Department Head · Mechanical Engineer

EDUCATION

1985

Virginia Tech; Blacksburg, VA

Bachelor of Science - Mechanical Engineering



PROFESSIONAL EXPERIENCE

2005 - Present	Hurd & Obenchain, Inc.; Mechanical Department Head, Mechanical Engineer; Principal
2003 – 2004	Whitescarver, Hurd & Obenchain, Inc.; Mechanical Department Head; Mechanical Engineer
2000 – 2002	Whitescarver, Hurd & Obenchain, Inc.; Mechanical Engineer
1997 – 2000	Alliant Techsystems, Inc.; Mechanical Facilities Engineer
1996 – 1997	Lotus Biochemical, Inc.; Facilities Manager
1987 – 1996	U. S. Navy; Military Service
1985 – 1987	Naval Ordnance Station; Project Engineer

REGISTRATION – LICENSED PROFESSIONAL ENGINEER

Virginia

CERTIFICATION

LEED® Accredited

ENGINEERING SPECIALTIES

HVAC Design Engineer

PROFESSIONAL ACTIVITIES

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



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Boyd G. Headley, III, P.E., LEED AP Mechanical Engineer · Commissioning

PROFESSIONAL EXPERIENCE

2005 – Present	Hurd & Obenchain, Inc.; Senior Mechanical Engineer; Commissioning Department Head; Principal
2001-2004	Whitescarver, Hurd & Obenchain, Inc., Mechanical Engineer
1994 – 2001	Whitescarver, Hurd & Obenchain, Inc.; HVAC Department Head, Mechanical Engineer
1991 - 1993	Whitescarver-Rodes & Associates, Inc.; Mechanical Engineer, HVAC Department Head
1988 - 1991	Whitescarver-Rodes & Associates, Inc.; Mechanical Engineer
1983 - 1988	Sherertz, Franklin, Crawford, Shaffner, Inc.
1980 - 1983	Hayes, Seay, Mattern & Mattern
1975 - 1980	Telepath Industries

REGISTRATION - LICENSED PROFESSIONAL ENGINEER

VIRGINIA, 1991

CERTIFICATION

LEED® Accredited

ENGINEERING SPECIALTIES

HVAC Design Engineering; Energy Management; Controls; Commissioning

PROFESSIONAL ACTIVITIES

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



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Benjamin C. Linkous, P.E., LEED AP **Electrical Engineer**

EDUCATION

1997 - 2000 Virginia Tech; Blacksburg, Virginia

Bachelor of Science - Electrical Engineering

1996 - 1997 **Emmanuel College**

PROFESSIONAL EXPERIENCE

Hurd & Obenchain, Inc.; Electrical Department Head; Electrical Engineer; 2007-present

Principal

Hurd & Obenchain, Inc.; Electrical Engineer 2005 - 2007

2001 - 2004 Whitescarver, Hurd & Obenchain, Inc.; Electrical Engineer

Summer 2000 Whitescarver, Hurd & Obenchain, Inc.; CAD Operator; Intern

REGISTRATION – LICENSED PROFESSIONAL ENGINEER

VIRGINIA

CERTIFICATION

LEED® Accredited

ENGINEERING SPECIALTIES

Electrical Design Engineering



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11508 Allecingie Parkway

Randall W. Daniels, E.I.T.

Director · Project Manager/Plumbing Department Head

EDUCATION

1986 - 1991 Virginia Tech; Blacksburg, VA

Bachelor of Science - Building Construction



PROFESSIONAL EXPERIENCE

2007-present	Hurd & Obenchain, Inc.; Corporate Secretary, Director; Plumbing and Fire Protection Engineer; Plumbing Department Head; Principal
2005 – 2007	Hurd & Obenchain, Inc.; Corporate Secretary, Director of Operations, Plumbing and Fire Protection Engineer
2001 – 2004	Whitescarver, Hurd & Obenchain, Inc.; Director, Secretary and Production & Studio Manager
1994 – 2001	Whitescarver, Hurd & Obenchain, Inc.; Director, Secretary and Plumbing Department Head
1985 - 1993	Whitescarver-Rodes & Associates, Inc.; Plumbing and Fire Protection Engineer

CERTIFICATION - ENGINEER IN TRAINING

Virginia

ENGINEERING SPECIALTIES

Plumbing and Fire Protection Design Engineering, Project Manager and Cost Estimating

PROFESSIONAL ACTIVITIES

American Society of Plumbing Engineers (ASPE)

Vice President - Membership 1991 – 1993 | President 1993 – 1995 | Past President 1995

National Engineers Week - Steering Committee 1995



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Randall O. Spencer, P.E., RCDD Technology Systems Department Head · Electrical Engineer

EDUCATION

1984-1988

Old Dominion University; Norfolk, Virginia Bachelor of Science - Electrical Engineering

and Computer Science



PROFESSIONAL EXPERIENCE

2005 - Present	Hurd & Obenchain, Inc.; Technology Department Head; Electrical Engineer; Principal
2002 – 2004	Whitescarver, Hurd & Obenchain, Inc.; Technology Department Head; Electrical Engineer
1994 - 2002	Whitescarver, Hurd & Obenchain, Inc.; Electrical Engineer
1993	Whitescarver-Rodes & Associates, Inc.; Electrical Engineer

Newport News Shipbuilding & Drydock Inc.; Electrical Engineer II

REGISTRATION - LICENSED PROFESSIONAL ENGINEER

Virginia

1985 - 1993

CERTIFICATION

Registered Communications Distribution Designer (RCDD)

ENGINEERING SPECIALTIES

Lighting, Power Distribution, Automatic Fire Detection, Security and Access Systems, Standby and Emergency Power Generation, Alarm Systems - Digital and Analog, Announcing Systems, Control/Signaling Systems, Fiber Optic Communication Systems, Local Area Networks, Power Conditioning, Telecommunication Systems, Uninterrupted Power systems (UPS)

PROFESSIONAL ACTIVITIES

IEEE Member; BICSI Member



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Housing Project Experience

- Apple Orchard Mountain Air Force Station, Family Housing FY-58, Bedford, VA
- Ashton Square Apartments (Domestic Hot Water Assessment; Fire Assessment), Richmond, VA
- Boar's Head Inn (AC Renovations; Bakery; Sports Club Gym Air Conditioning Study), Charlottesville, VA
- Bridgewater Homes Assisted Living, Bridgewater, VA
- Burrell Home for Adults, Roanoke, VA
- Convalescent & Geriatric Care Center, Charlottesville, VA
- Covenant Woods Richmond Home for Ladies, Richmond, VA
- Eastlake Commons, Smith Mountain Lake, VA
- Elderly Housing, Project VA-16-3, Air Conditioning, Charlottesville, VA
- Grace Ridge Retirement Community, Morganton, NC
- Hearthwood Amenity Building, Concord, NC
- Heatherstone Amenity Building, Charlotte, NC
- · Heron Point of Chestertown, Chestertown, MD
- Hurt Park Low Rent Housing, Project VA-16-1, Charlottesville, VA
- Jamestown Plaza, Roanoke Housing Authority Renovations, Project CIAP VA-11-905, Roanoke, VA
- Kings Grant Retirement Community, Martinsville, VA
- Landsdown Public Housing for the Elderly, Project VA-11-4, Roanoke, VA
- · Laurel Meadows Nursing Home, Meadows of Dan, VA
- Liberty View Housing, Modernization of Low Rent Housing, Project VA-10-2, Danville, VA
- Low Rent Housing, Project VA-10-3, Danville, VA
- Low Rent Housing for the Elderly, Project VA-16-3, Charlottesville, VA
- Melrose Towers, Public Housing for the Elderly, Project VA-11-6, Roanoke, VA
- · Odd Fellows Home of Virginia, Lynchburg, VA
- Quarryville Presbyterian Home, Quarryville, PA
- Richfield Retirement Community, Salem, VA
- River Towers Apartments (Boiler Replacement; Chiller Plant Study; HVAC Replacement Study/ Service Valve Replacements/Riser Replacements), Richmond, VA
- Roanoke Methodist Home, Roanoke, VA
- Shenandoah Nursing Home, Shenandoah, VA
- Springdale Housing, Waynesboro Elderly Housing, Project VA-22-5, Waynesboro, VA
- Sunnyside Presbyterian Retirement Community, Harrisonburg, VA
- Sweet Briar College Conference Center Cost Cutting, Sweet Briar, VA
- The Chesapeake Virginia Baptist Homes, Newport News, VA
- The Hermitage at Cedarfield Plumbing Review, Richmond, VA
- Virginia Baptist Home, Lakewood Manor, Richmond, VA
- Weatherstone Amenity Building, Charlotte, NC
- Wesley Gardens, Rochester, NY
- Wintergreen Resort Hotel Wintergreen Spa Expansion, Wintergreen, VA

Commercial Project Experience

ACAC Fitness & Wellness Centers

Allied Concrete Showroom

Alvin York Bandy Complex - Electronic Marquee

Ashton Square Apartments

- Domestic Hot Water Assessment
- Fire Assessment

Buffalo Street Professional Center

Barr Laboratories Cafeteria & Locker Room Expansion

Circuit City Mechanical Punchlist Services (locations: Akers Mill, GA; Lady Lake, Ocala, FL; Winchester, VA; Greenville Point, SC; Orlando, FL; Keene, NH; Waterford Lakes, FL)

Cultural Arts Center at Glen Allen – Study

Eastlake Commons

First Market Bank—Commissioning

GRTC New Vehicle Maintenance Facility

Hearthwood Amenity Building

Holiday Lake - Lodge & Educational Building

IGA Foodrite Store Fire Investigation

Investigation of Existing Grand Piano Building (New CIT Facility)

Lanford Brothers Office LEED Commissioning Services

MARC Workshop Addition. Martinsville, VA

Martinsville Welcome Center

Moseley Architects Office Building Commissioning

OneBeacon Insurance—HVAC Evaluation, Salem, VA

Pine Hill Plaza Electrical Service Study

Telephia—New Office

Tuckahoe YMCA Boiler Replacement

Northern Neck Insurance Company

Trailer Fire Investigation

Red Cross Parking Deck Study

Luck Stone Corporate Office

- Additions & Renovations
- HVAC Study

Richmond International Airport—Concourse C—Study of Rooftop Air Handlers

River Towers Apartments

- Boiler Replacement
- Chiller Plant Study
- HVAC Replacement Study/Service Valve Replacements/Riser Replacements

Roanoke Regional Airport Commission

- Lower Level Office Improvements—Phase 3
- Family Assistance Program Phone Installation
- Plaza Security
- Motorized Shades
- FIDS/Intercom
- Server Room Project



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Commercial Project Experience Cont'

Ronile Boiler Explosion Investigation
Route 220 Automotive Complex
SHW Group Office Renovations
Roanoke Valley Federal Credit Union HVAC Replacement
Pine Hill Plaza Electrical Service Study
Tidewater Quarry – Site Lighting Analysis
Virginia Beach SPCA Phase II
Weatherstone Amenity Building
West Window Company Office Addition
Wintergreen Resort Hotel – Wintergarden Spa Expansion
W.M. Jordan Company, Office Building Commissioning

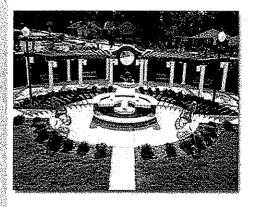
Retirement Housing Facilities Project Experience

Bridgewater Homes Assisted Living

Burrell Home for Adults Roanoke, Virginia

Convalescent & Geriatric Care Center Charlottesville, Virginia

Covenant Woods - Richmond Home for Ladies Richmond, Virginia



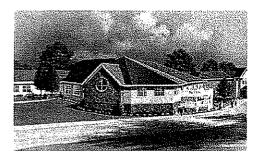
Construction of a new Retirement Community containing approximately 30 cottages; 54 Independent Living Apartments; 43 Assisted Living Units; 13 Dementia Units; 16 nursing beds; community and support spaces, and all related sitework. We provided complete Professional Engineering Services for all Mechanical, Electrical and Plumbing Systems in the Main Building, each Cottage, Guardhouse and Maintenance/ Garden/Storage Building; fire alarm systems, all low voltage conduit and coordination with the Low Voltage Consultant: site lighting and power distribution.

Grace Ridge Retirement Community Morganton, North Carolina

The Hermitage at Cedarfield - Plumbing Review

Heron Point of Chestertown Chestertown, Maryland

Kings Grant Retirement Community Martinsville, Virginia



We provided mechanical, electrical, and plumbing engineering services for a 1999 Addition to the existing facility. The Addition serves as a Meeting Room and Chapel Space. Later, in 2000, we provided mechanical and electrical design services for a chiller upgrade.



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Retirement Housing Facilities Project Experience Cont'

Lakewood Manor Assisted Living

Laurel Meadows Nursing Home

Richfield Retirement Community Roanoke, Virginia

Roanoke Methodist Home Roanoke, Virginia

Shenandoah Nursing Home Shenandoah, Virginia

Silver Maples Senior Retirement Center - MP Checking

Westminster-Canterbury on the Chesapeake Bay

Sunnyside Presbyterian Retirement Community Harrisonburg, Virginia

The Chesapeake - Virginia Baptist Homes

Newport News, Virginia



We provided full mechanical, electrical and plumbing engineering design services for The Chesapeake. The construction was broken up into 2 Phases; Phase I consisted of a New Healthcare Facility and a New Assisted Living Building (Seq. 'A'), New Independent Living Building (Seq. 'B'), New Multipurpose/Office Facility and Renovation of Original Independent Living Building (Seq. 'C'), New Dementia Wing (Seq. 'D'). Phase II consisted of a New Independent Living Building.

Virginia Baptist Homes, Lakewood Manor Richmond, Virginia

Sustainable Experience

- Allied Concrete Showroom, Culpeper, VA (Sustainable design features)
- Charles County High School #2, Charles County, MD (LEED Design; pursuing LEED® certification)
- Culpeper High School—Culpeper Public School Systems, Culpeper County, VA (Registered LEED)
- Dixon-Smith Middle School 2008, HVAC Commissioning, Stafford, VA (Lighting controls and domestic hot water system in accordance with LEED)
- Gari Melchers Elementary School—LEED Study, Stafford County, VA
- First Market Bank, LEED Commissioning, Richmond, VA
- Fluvanna County High School, Fluvanna, VA (Registered LEED; Pursuing LEED certification)
- Franklin Federal Building, Commissioning, Richmond, VA (Pursuing LEED certification)
- Kirkpatrick Farms Elementary School—Loudoun County Public Schools, Loudoun, VA (LEED certification considered, but not implemented; however, H&O designed much of school for possible implementation)
- Lanford Brothers—Office Building, Roanoke, VA (Construction Phase; LEED Silver is expected)
- Loudoun County High School #3 (Implementing sustainable design features)
- Loudoun County Public Schools—LEED Study, Loudoun, VA
- Moorefield Station Elementary School, Loudoun, VA (Owner considering pursuing LEED certification)
- Moseley Architects Office Building—LEED Commissioning, Richmond, VA (Design Phase Only)
- Orange County Middle School, Orange County, VA (LEED Design; pursuing LEED certification)
- Petersburg Library, LEED Commissioning, Petersburg, VA
- Roanoke Williamson Road Fire Station, Roanoke, VA (LEED Design; Pursuing Certification)
- Sandusky Middle School, Lynchburg, VA (Designed for LEED certification)
- Southwest Virginia Higher Education Center Addition, Abingdon, VA (LEED Design)
- Spotsylvania County Elementary School #18, Spotsylvania, VA (Registered LEED; pursuing LEED certification)
- Stafford High School 2010—LEED Study, Stafford, VA
- Stafford Pupil Transportation Building, Stafford, VA (Pursuing Energy Star certification)
- University of Richmond—Weinstein Center (LEED Certified), Richmond, VA
- Virginia Tech—Henderson Hall, Blacksburg, VA (LEED Silver)
- W.M. Jordan Office Building Addition, Commissioning (LEED Certified)

(*We are also experienced in the LEED On-Line credit submittal process)

