



September 25, 2008

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Charleston, WV
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Krista Ferrell, Buyer
State of West Virginia
Purchasing Division
2019 Washington Street, East
PO Box 50130
Charleston, WV 25305-0130

**Reference: Expression of Interest
Architectural and Engineering Services for Renovations of
Three Existing Office Buildings, Kanawha County
RFQ No. GSD096410**

Dear Ms. Ferrell:

Buchart Horn, Inc., in association with **ZDS Design/Consulting Services**, is pleased to present our qualifications to provide services to the West Virginia Department of Administration, General Services Division for the design of renovations to three office buildings. Our team offers a full range of architectural and engineering capabilities including LEED® certified design, space programming, landscape architecture, electrical, mechanical, and structural design, as well as an outstanding record of service to other West Virginia entities on related projects. Our recent experience includes the design of an environmentally friendly, LEED®-certified office and maintenance facility for the Canaan Valley Institute in Davis, WV, design for the addition of offices and boarding lobbies at Yeager Airport, and design of the award winning PE Tech Office Building in the Northgate Business Park.

Mr. Michael M. Phillips, AIA, LEED® AP will serve as your Project Manager and Lead Architect, will be your lead point of contact, and will oversee the project team and serve as the technical lead in the development of all design documents. He has served in a similar capacity for the Canaan Valley, Yeager Airport and PE Tech Building projects mentioned above, as well as for our current project for the design of repairs to the Capitol Campus Parking Garage. Should you have any questions regarding the material contained in this package, please contact Mr. Phillips or me at (304) 346-1176. Thank you again for your consideration of Buchart Horn for this assignment. We look forward to the opportunity to serve the State of West Virginia on this important endeavor.

Sincerely,

BUCHART HORN, INC.

Kenneth D. Bryant, Jr., PE, PS
Regional Manager

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PURCHASING DIVISION
STATE OF WV

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Concept/Approach

Scope of Services

Buchart Horn understands that the scope of services for this project is to provide Architectural and Engineering services for the renovation of three existing office buildings located in Kanawha County. The buildings to be renovated are:

The South Charleston Building - approximately 36,000 square feet

The Cornerstone Building - Approximately 22,000 square feet

The Cassis Building - Approximately 21,000 square feet.

The scope of services is similar for each building, and includes programming of interior spaces, design of layouts, demolition of interior spaces, and general renovation including finishes, walls, partitions, HVAC and safety systems, electrical updates, ADA updates, roofing, and miscellaneous other modifications. Buchart Horn, in association with ZDS Design / Consulting Services, brings a strong record of performance in the rehabilitation of governmental office facilities, including several County Courthouse and administrative facilities. Our team will utilize a project approach that stresses early and open communication with review agencies to ensure that the design satisfies regulatory requirements while meeting an aggressive design and construction schedule. Our proposed schedule of services will include:

- On site Investigation, Audit and report
- Schematic Design and Design Development Documents
- Construction Documents
- Plan Review and Approvals
- Bidding Phase Services including input into Contractor selection
- Overall Project Management

Generally, Buchart Horn would start the project by performing an Existing Building Condition Survey for each facility.

The survey will typically review all available building drawings and specifications; it will include building square footage, and evaluation of mechanical, electrical, and plumbing (MEP) system conditions and capacities, and capacity and layout of the HVAC system. A structural evaluation if necessary, an environmental assessment (looking for materials such as asbestos, etc.) ADA compliance, fire protection, and security features. The condition survey will determine the existing buildings conditions and capabilities to meet the client's goals and objectives and if it does not, the preparation of a cost estimate to bring the building to an acceptable standard.

Upon completion of the Existing Building Condition Survey, Buchart Horn will request a meeting with the state to present the findings and evaluate those findings against the stakeholder's goals and objectives. Modifications to the projects goals and objectives and/or condition survey would be made at this time with the consensus of the stakeholders.

The next general step in Buchart Horn's project approach would be to perform Facility Programming.

The Programming task would include conducting interviews with representatives of participating agencies, as directed by the DGS. The needs analysis will determine the present number of employees in each agency and their total number of square feet including common areas and workable space. These numbers will determine the baseline from which all projections will be made against.

Further, all special needs of the agency will be identified, such as storage space, computer requirements, security provisions, and anticipated programs.

After the baseline has been established for each agency, future employee populations and additional square footage projections will be made. These projections will be based on the agencies historic trends, expected growth, and newly anticipated lottery programs.

The projections can be made for any number of years that the stakeholders determine.

At the completion of the needs analysis, another meeting will be held with the stakeholders to review the results and make modifications as directed by the stakeholders. At the same meeting, the feasibility study process will be discussed.

A Feasibility Study is defined as taking the differences in requirements (and other special need components) between existing conditions (building survey report) and needs analysis requirements as determined by the stakeholders.

The feasibility study will be performed by developing various conceptual design, schematic alternatives, and cost estimates to find the preferred solution. These schematics will define the working relationship between the various lottery agencies and is known as adjacency diagram planning.

Upon completion of the design schematics, another meeting will be requested with the stakeholders to review the work and to select an alternative for conceptual design development, refined cost estimates, construction phasing, and schedules.

This same concept of meeting with the stakeholders to review and approve the work in progress at the completion of preliminary and final design stages would continue. In this manner, the client committee (stakeholders) is involved at each milestone of the project and is fully aware and in concert with the decisions made. By utilizing the Consensus Building methodology, the client's chances of achieving a successful project are greatly enhanced.

At the stakeholders' discretion, meetings may continue during the bid advertisement, bid evaluation, and bid award phases.

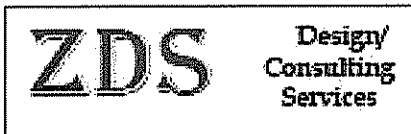
Firm/Team Qualifications

Buchart Horn is extremely excited to present our firm and team qualifications to provide architectural and engineering services for the rehabilitation of three state owned office buildings in Kanawha County. This excitement is rooted in our belief that we have assembled a quality team for the performance of a project that will, upon completion, help to improve the efficiency and effectiveness of state government. Our team includes planning, programming and design expertise, a good working relationship with the Department of Administration General Services Division, and experience in related projects. Following these descriptions we have provided contact information and statements as outlined in your Request for Qualifications. More detailed profiles of each firm are included at the end of this section.



Buchart Horn, Inc. has been providing engineering and architectural services through our Charleston operations since the mid 1960's. We offer full service capabilities for architectural and engineering planning and design, site development, hazardous waste remediation, vehicular and pedestrian traffic plans, construction management and administration, planning, programming and cost estimating. Our staff includes a number of LEED accredited architects and engineers who brings expertise in energy conservation and green

design. Our Project Manager, Michael Phillips, AIA, LEED, has been involved in a number of related projects, and is currently managing our assignment for the design of the rehabilitation of the Capitol Campus Parking Garage.



ZDS Design / Consulting Services is one of the leading mechanical and electrical design firms in West Virginia. They bring significant experience in the design of state facilities including recent work on the Capitol Complex as part of Johnson Control's Performance

Contracting team. ZDS also provided master planning and HVAC/electrical renovations for the WV Cultural Center while solving significant Indoor Air Quality issues and restoring comfort to the building. Buchart Horn and ZDS have worked very successfully together on the design of renovations to the Kanawha County Judicial Annex in Charleston.

a. Contact Information

Charles Kinney, PG, is the responsible Principal for Buchart Horn's West Virginia operations. Mr. Kinney has the authority to execute a binding contract on behalf of Buchart Horn, Inc. His contact information is as follows:

Contact Name: Charles Kinney, PG
Address: Buchart Horn, Inc.
Suite 110
400 Tracy Way
Charleston, WV 25311
Telephone: (304) 346-1127
e-mail: ckinney@bh-ba.com

Signature:



b. Project Team

We believe that the goal of every successful project is a fully satisfied client and workable, cost effective solutions to problems. The element that enables a successful project is the *people* – skilled and experienced technical personnel committed to a successful project and supported by the management and owners of the firms. We have assembled an exceptional group of professionals to work on the design of repair/refurbishment to the South Charleston, Cornerstone and Cassis Buildings.

A chart showing the organizational structure and technical responsibilities of the project team is included within this submittal. Detailed resumes for all project personnel are also included.

Michael Phillips, AIA, LEED, will serve as Project Manager and Lead Architect. In this role, Mr. Phillips will serve as the lead point of contact with the State. As Lead Architect for Buchart Horn's West Virginia operations, Mike has served as Project Manager and Lead Architect for all of our recent West Virginia facilities. As Project Manager, Mike's responsibilities will include:

- Formulating the Project Work Plan.
- Establishing the Project Schedule.
- Ensuring that all project milestones are met through the coordination and monitoring of the project schedule and budget for the entire project team.
- Conducting meetings with the State to document decisions or open items (project issues) and to publish meeting minutes that document those decisions/open items.
- Identifying and monitoring all open items/project issues so that all key project information is acted upon/ responded to in a timely and professional manner.
- Participating with the team in site visits in order to assess existing conditions and to collect and verify all appropriate program needs and requirements.
- Confirming that all work is being performed in accordance with the project scope and guidelines.
- Coordinating and monitoring of project engineers/ architects to ensure consistency and quality of work via regular meetings.
- Communicating among all members of the project team to ensure the consistent application of all project standards, schedules and date decisions.
- Responding to inquiries by the State.

c. Subconsultants

As noted previously, **ZDS Design / Consulting Services** will serve as a subconsultant, providing Mechanical / Electrical / Plumbing system design. A profile of their firm describing their capabilities is included in this submittal, along with resumes of some key staff.

d. Ability to Handle Project in its Entirety

The Buchart Horn/ZDS team is completely capable of handling all architectural / engineering elements of this project in its entirety. Our capabilities include project management, architecture, mechanical, electrical, plumbing, structural, and civil/site engineering, as well as bidding phase and construction inspection and administration. Our overall staff numbers at over 350 personnel.

e. Required Statements

Buchart Horn understands that any and all work produced as a result of the contract will become property of the Agency and can be used as the Agency deems appropriate.

f. Ability to Design in Accordance with Applicable regulations

The Buchart Horn/ZDS team has the ability to provide designs in accordance with all appropriate standards and regulations, as evidenced by the recently completed projects that are detailed within this package. As noted, we bring extensive experience in helping similar organizations meet their needs for additional or improved space. In the past five years, we have provided architectural and engineering services for the following:

- Planning and design for the new PE Tech office building in Charleston.
- Planning and design for additional administrative and office space to house the Transportation Safety Administration at Yeager Airport.
- Programming and design for conversion of an existing building for use as a Courthouse Annex for Preston County in Kingwood.
- Programming and design for renovations to the Kanawha County Judicial Annex in Charleston.
- Programming and schematic design for expansion of the Monongalia County Courthouse in Morgantown.
- Programming and schematic design for a new Courthouse Annex for Lewis County in Weston.
- Programming and schematic design for conversion of the former Marion County jail into a parking and storage facility to support the operations of the Marion County Commission in Fairmont.

We also bring outstanding capabilities for LEED® and Green Building design. In fact, Buchart Horn has recently been named as one of the **Top 75 Green Design Firms** by the Engineering News Record. A number of our key design staff, including our Project Manager, Mike Phillips, along with our lead Electrical and Mechanical reviewers, are LEED® accredited.

g. Current Litigation or Arbitration Proceedings

Buchart Horn has no current litigation or arbitration cases related to the delivery of design services within the state of West Virginia, including vendor complaints filed with the State's Purchasing Division. We do have several cases outstanding in other states, none of which will impact our ability to provide services for this assignment.

Buchart Horn, Inc. is a multi-disciplinary organization with a staff of over 330 professionals that provides architectural, engineering, environmental, planning, project management, construction services, and administrative services to a wide variety of clients.

Our experience and resources facilitate cost effective solutions. Our strong Project Manager approach clarifies project responsibilities and promotes project communication.

Background

Established in 1945, Buchart Engineering Corporation evolved into Buchart Horn, Inc., Consulting Engineers, Architects, and Planners. Today, *Engineering News Record* ranks us among the top consulting firms. From our domestic offices and two in Germany, we serve public and private clients around the world:

- West Virginia: *Charleston, Morgantown*
- New Jersey: *Marlton*
- Pennsylvania: *York (headquarters), Coatesville, Harrisburg, Hershey, King of Prussia, New Cumberland, Pittsburgh, State College, Stroudsburg*
- Maryland: *Baltimore*
- Virginia: *Chantilly*
- Louisiana: *Baton Rouge*
- Tennessee: *Memphis, Nashville*
- Florida: *Pensacola*
- Mississippi: *Batesville*
- Germany: *Frankfurt/Main, Kaiserslautern*

Services

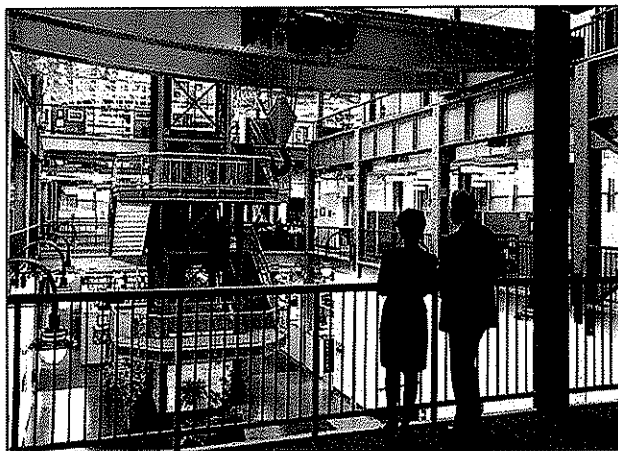
We specialize in designing, improving, and solving the problems of infrastructure and structures, and in helping our clients comply with environmental, life safety, and other codes and regulations. Our work includes:

- Architecture
- Mechanical systems-HVAC, plumbing, energy conservation
- Electrical systems and computer wiring
- Telecommunications
- Civil/site development
- Construction phase services
- Energy conservation
- Environmental planning, engineering, compliance
- Geographic Information Systems (GIS)
- Highways, roads, streets
- Landscape architecture design
- Structural design
- Surveys/mapping
- Traffic and traffic management

Contact

Mr. Michael M. Phillips, AIA LEED® AP will serve as Project Manager on the State Office Building Project. He is based on our Charleston office. Work performed for this project will be performed from the Charleston office, with support from our Pittsburgh, PA office as necessary.

Buchart Horn
400 Tracy Way, Suite 110
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Architectural Services

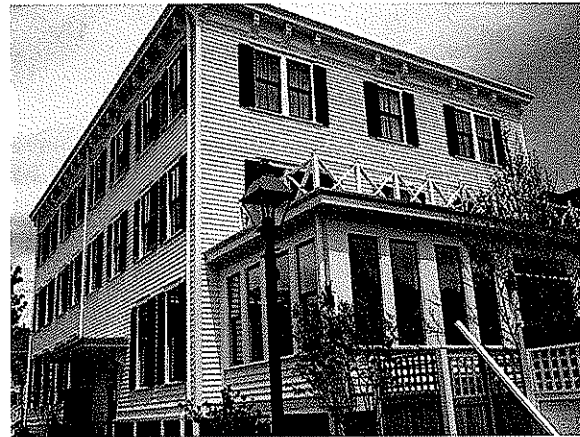
Buchart Horn offers our clients complete architectural design capabilities including site selection and feasibility analysis.

- Design
- Building Evaluation
- ADA Compliance
- Environmental Assessments
- Historic Preservation
- Interior Design
- Restoration
- Site Engineering and Evaluation
- Space Planning

Electrical Engineering

From specialty lighting design and electrical power supply to completely automated systems development, our experienced electrical engineering staff can support a project from evaluation through system start-up and troubleshooting. Complete electrical engineering services are provided to architects, engineers, and industrial clients. Sophisticated instrumentation and control systems are often at the heart of today's electrical engineering projects. Our specialized experience brings cost-effective solutions to respond to client needs.

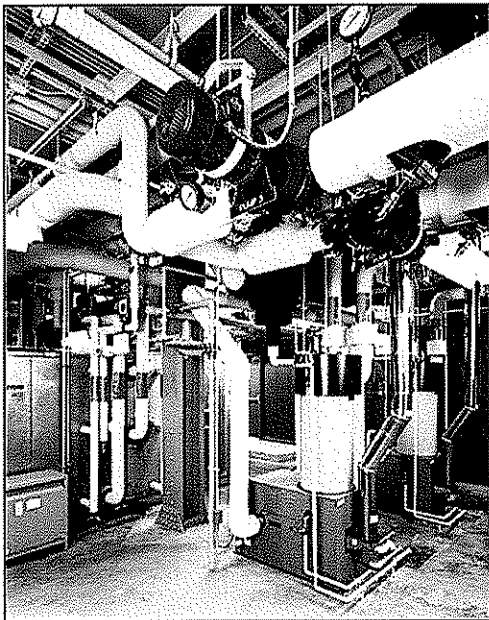
- Interior and Exterior Lighting
- Power Distribution
- Facility Systems
- Telecommunications and Networking
- Process Automation and Control
- Operation and Maintenance Evaluation
- Systems Commissioning, Field Inspection, and Start-up
- Electrical Studies and Analysis
- Highway and Airport Lighting
- Electric Deregulation Consulting



Mechanical Engineering

Buchart Horn provides complete system assessment, design and construction phase services for HVAC, plumbing and fire protection systems. Our design goal is to achieve a suitable balance of comfort, safety, health, and hygiene with sensitivity to client budgets and ease of maintenance. Our common sense approach to design integrates the building systems with the building occupants' needs for a flexible, responsive and energy-saving environment.

- Alternative Energy Sources (Geothermal/Solar)
- Automatic Temperature Control
- Building Management Systems
- Coal, Gas and Oil Burner Retrofits
- Compressed Air Systems
- Dust Collection Systems
- Energy Protection Systems
- High-Pressure Boiler Plants
- HVAC Systems
- Plumbing and Drainage Systems
- Steam Power Distribution
- Value Engineering and Life Cycle Analysis
- Ventilation Heat Recovery



Structural Engineering

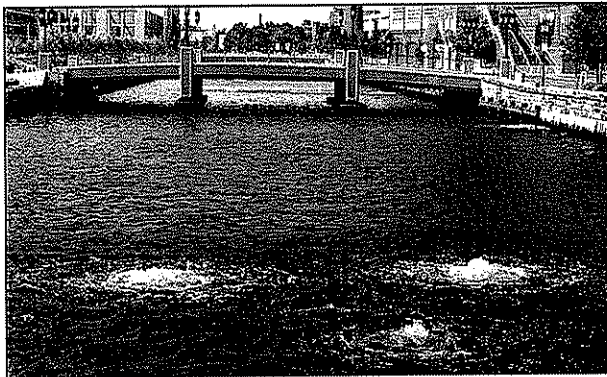
Our structural engineering services involve all types of materials and structural systems.

- Structural Studies, Reports, Investigations, Evaluations, and Design for Structural Systems
- Foundation Systems
- Retaining Walls
- Above- or Below-Ground Liquid Containment Structures
- Masonry Wall-Bearing Systems
- Steel Frames
- Cast-in-Place Concrete Frames
- Precast Concrete Framing Systems
- Wood Framing Systems

Civil Engineering

Our civil engineering group matches sophistication and execution to complex, project-specific, and regulatory requirements to leverage the latest technological and computer advances.

- Flood Studies
- Grading Plans
- Parking Studies and Design
- Right-of-Way Services
- Sediment and Erosion Control
- Signalization
- Site Development
- Stormwater Management
- Traffic Studies and Analyses
- Utilities Design



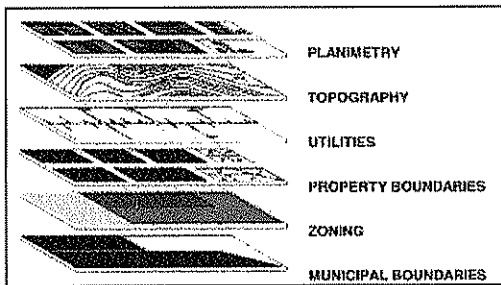
Site Development

Planning is not a separate discipline in our firm. It is an important component in our efforts to assist our clients in making knowledgeable project and programming decisions.

- Comprehensive Planning
- Economic Feasibility
- Environmental Planning
- Facilities Planning
- GIS/Mapping
- Land Planning
- Landscape Architecture
- Master Planning
- Public Meetings
- Recreational Planning
- Space Planning
- Zoning and Subdivision Ordinances

GIS Services

Experienced GIS Analysts and Technicians provide full GIS services to a variety of public and private clients. These services include consulting, needs analysis, database design and development, feature updating, GPS Mapping, software customization and spatial analysis. We routinely combine photogrammetric imagery with GIS to produce high quality base mapping, and we typically develop custom applications to meet clients' needs. In addition, we provide ESRI Authorized training and software and hardware technical support. We have the experience and knowledge to complete these services in a variety of software environments, including both ESRI and Intergraph.



Photogrammetry

Experienced flight crews, using the latest technology, provide superior aerial photography. The aerial cameras are equipped with forward image motion compensation and automatic exposure control, delivering the highest quality and resolution available.

The Photogrammetric Specialists utilize state-of-the-art stereo instruments and digital workstations to provide high quality based mapping for all types of projects. Under the direct supervision of an ASPRS Certified Photogrammetrist, we customize each project to meet our clients' needs for accuracy, scale, content, schedule and budget.

Digital orthophotos are developed using Z/I Imaging Softcopy work station. Digital elevation models produce contours, cut and fill volumes, stockpile quantities, and may be used for 3D visualization.

Customization

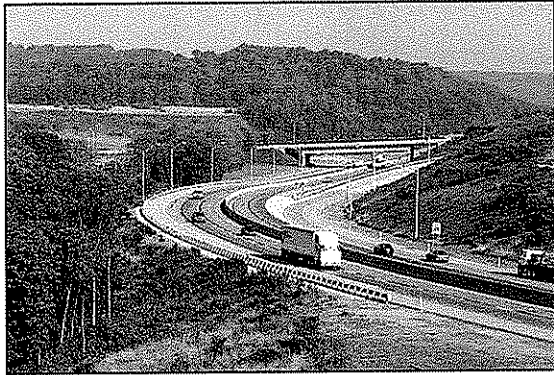
Buchart Horn has a wide range of GIS-related customization experience for development of user-friendly custom interfaces, data conversion, and the reduction of redundant tasks.

Our programming experience ranges from the Avenue, AML, and Visual Basic languages in Arcview, Arc/Info and ArcGIS.

We often tie-in outside datasets, such as MS Access, and write programming to run queries, produce automated maps, generate reports and perform spatial analysis. Our programming serves all GIS skill levels.

Mapping Services

- Aerial Photography
- Airborne GPS
- GPS Surveying
- Analytical Aerial Triangulation
- Photogrammetric Mapping
- High Resolution Scanning
- Digital Orthophotography
- Volumetric Surveys
- GIS Consulting
- GIS Needs Assessment
- Database Design/Development
- GIS Application Development
- Digitizing/Data Conversion
- Spatial Analysis
- ESRI Authorized Training
- Internet GIS



Transportation Services

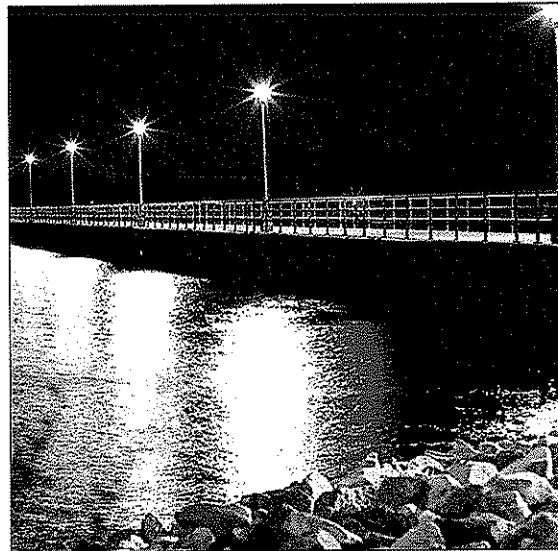
Our Transportation Division offers a full range of transportation-related experience including:

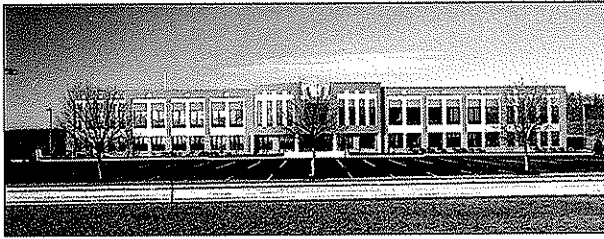
- Airport Design
- Bridge Design and Inspection
- Dam Design and Inspection
- Flood Studies and Hydrological Analyses
- General Structural Design
- Highway Design
- Railroad and Railroad Bridge Design
- Site Grading, Drainage and Stormwater Design
- Traffic Signal Design
- Traffic Studies

Environmental Services

The firm's environmental engineering services range from water treatment and sludge management to regulatory compliance issues. Services available include:

- Comprehensive Planning
- Environmental Assessments/Impact Studies
- Financial Analysis/Funding Assistance
- Highway Noise Analysis
- Infiltration/Inflow Studies
- Instrumentation, Telemetry, and Controls
- Permitting - New and Renewals
- Process and Piping Design
- Pumping Stations
- Sludge Management and Disposal
- Wastewater Collection/Treatment Systems
- Water Distribution/Storage Systems
- Water Treatment
- Wetlands Delineation and Permit Applications





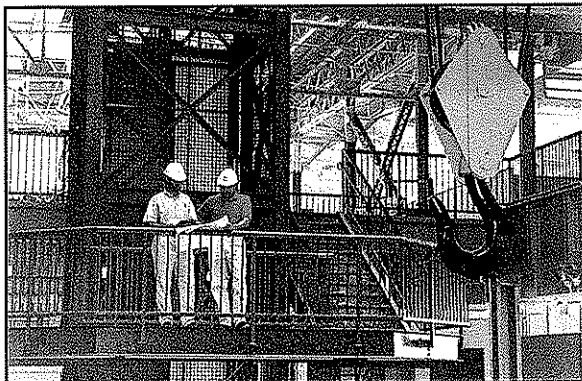
Construction Services

Buchart Horn/BASCO Associates established an independent Construction Services Division in 1968 specifically to provide comprehensive technical, managerial and financial guidance and to assure quality construction for all projects.

Corporately and individually, we possess extensive experience in all aspects required to transfer an owner's idea into a functioning facility.

Designated as a major division in our firm, the Construction Services Division provides the detailed attention and control procedures necessary for a successful project.

Our Construction Services Division is experienced in the management of any size project from \$10,000 to \$52,000,000 from constructability reviews through warranty inspections.



Value engineering was an integral part of the renovation of Buchart Horn, Inc. corporate headquarters.

Our range of services includes:

- Constructability Reviews
- Value Engineering
- Reports to Owner
- Scheduling
- Bidder Development
- Estimating
- Pre-Construction and Routine Job Conferences
- Full-time Site Representation
- Project Coordination
- Construction Management
- Submittal Processing
- Construction Monitoring and Documentation
- Document Management
- Quality Control Testing
- Application for Payment Processing
- Budget Updates
- Change Order Processing
- Independent Testing Coordination
- Request for Information Processing
- Claim Review
- Supplier Training Videotaping Services
- Substantial and Final Completion Services
- Coordination with Owner
- Record Drawings
- Warranty Period Coordination

ZDS offers an effective organizational structure; one that takes each project from inception through completion, working as an extension of the *Client* every step of the way.

In 1983, Todd A. Zachwieja founded ZECO Consultants. In 1994 ZDS Limited Liability Company was incorporated in WV using dba **ZDS Design/Consulting Services**. This company was founded to provide design and consulting services. Today there are five principals with over 100 years of technical expertise:

- **Todd A. Zachwieja, PE, C.E.M.**, Chief Executive Officer, brings with him over 25 years in the design and consulting business.
- **Ted T. Zachwieja**, Principal over Construction Administration services with over 40 years experience in the design and consulting business. He was owner of Ted T. Zachwieja & Company from 1962 to 1982.
- **Daniel H. Kim, Ph.D.**, Manager of Strategic Planning, brings with him over 20 years in the design and consulting business and is one of the nation's leading experts in organizational management. He is also owner/founder of Pegasus Communications, Inc. from 1991 to present.
- **Lori Zachwieja, CPA**, Chief Financial Officer and cofounder of ZECO Consultants.
- **Sandra W. Zachwieja**, Specification writer and former co-owner of Ted T. Zachwieja & Company.

ZDS is a consulting engineering firm specializing in the following areas:

**MECHANICAL
ELECTRICAL
INDOOR AIR QUALITY
COMMISSIONING
ENERGY**

Each new project is assigned to a principal in-charge who will follow the project from inception through commissioning.

We assign the production staff according to the nature of the project and the work force necessary to meet the schedule. The Principal in charge of that project determines if consultants are needed and coordinates all areas. After bidding, the same Principal of ZDS visits the job site regularly, all the way through the eight-month warranty inspection once the project is completed.

“Excellent mechanical and electrical design results from an experienced team, as well as, listening to the needs of the Client.”

ZDS believes in the team approach when providing engineering design and consulting services. We start with *our client* as the number one member on our team. We listen to the **needs** and **concerns** of our client and that becomes the basis for our design. Our design expertise includes:

MECHANICAL DESIGN

- Heating & Ventilation
- Air Conditioning
- Refrigeration
- Environmental Controls
- Process Controls
- Fire Protection
- Sprinklers
- Plumbing
- Medical Gases
- Master Planning

ELECTRICAL DESIGN

- Power Distribution
- Interior Lighting
- Exterior Lighting
- Emergency Power
- Communications
- Technology
- Fire Alarm
- Security
- Life Safety
- Master Planning

ZDS provides comprehensive design services. We have experience and specialties in indoor air quality, energy management and commissioning, along with traditional mechanical and electrical design experience dating back as far as 1958. We offer a complete package.

We work with all levels of the client’s staff: the building owner, the budget supervisor, the operating and maintenance staff and others impacted by the project. We recognize the maintenance and operating staff live with the design long after the project’s completion. We listen to and work with those who will continue to operate and maintain the equipment. We find that proper communication benefits the client throughout the design process and beyond.

ZDS design team provides a total system evaluation for cost effective selection, installation, and ease of maintenance for both new systems and retrofit of in-place systems.

Design begins with *our client*. Our staff meets with our client to review their concerns, budgets and schedules. The ZDS design team reviews the *entire* picture, and ends with “A Total Design.”

ZDS provides consulting engineering services for the indoor air quality (IAQ) environment. These services include; strategic planning for renovation and new construction projects; technical research and writing; specialized applications software development; corporate and professional training programs; publications support and fulfillment; and site-specific engineering and scientific consultation.

Todd Zachwieja, ZDS principal, is contributing editor for the following technical and IAQ publications:

- Contributing Editor and Technical Review Panel for the publication of the *ENVIRONMENT^o Handbook of Building Management and Indoor Air Quality*, by Chelsea Group and published for Powers Educational Services.
- Technical Review Panel for the Quarterly publication of the *ENVIRONMENT[™] Newsletter*, by Chelsea Group for Powers Educational Services.
- *Ventilation for a Quality Dining Experience: a Technical Bulletin for Restaurant Owners and Managers*, released in January 1993.
- *The New Horizon: Indoor Environmental Quality*, published as a supplement to the June 1993, issue of *Consulting Specifying Engineer* magazine, a trade magazine distributed to roughly 50,000 engineers.
- Editorial Advisory Board member reviewing the articles of the monthly publication *ENVIRONMENT[™] Professional*
- Editorial Advisory Board member of *POWER PRESCRIPTIONS[™] Indoor Air Quality* Publication by *Electric Power Research Institute*.

ZDS provides IAQ services for major corporations, government organization, and property owners to resolve their specific facility problems:

- Resolve the building's "sick building syndrome" complaints.
- Identify solutions to extensive biological contamination building related illnesses in renovated office buildings.
- Develop solutions for HVAC systems, temperature controls, equipment, operating and maintenance practices causing IAQ problems in schools and commercial buildings.
- Commission new and renovated facilities to minimize or eliminate IAQ issues before they become problems.
- Develop and establish master plans as well as conduct training seminars for IAQ of schools and commercial buildings.

As one of the Nation's leaders in Indoor Air Quality, ZDS produces sophisticated technical expertise that enables *Our Client* to be proactive in solving and preventing indoor environmental problems.

At ZDS, our engineering staff integrates energy efficiency into each project design to provide you, our client, with the added value that you expect and deserve. The ZDS team approach represents a tremendous amount of experience in designing energy efficient facilities. ZDS offers a comprehensive range of energy management services that includes:

- Providing detailed analysis of facilities.
- Recommending sound and proven energy saving solutions.
- Implementing energy management improvements
- Determine, quantify and assist in securing available Utility & Government grants.
- Evaluating and documenting utility savings.

The ZDS team members take pride in the quality of their projects and have been responsible for designing and implementing numerous energy management programs. These programs are providing significant energy improvements and include; optimizing, central utility plant equipment, control systems, air handling systems, lighting systems, and other energy consuming equipment. Recent projects include:

- Interconnecting boilers and chiller plant systems.
- Optimizing HVAC equipment and operating sequences.
- Installing Direct Digital Control (DDC) Energy Management Systems.
- Replacing inefficient lighting equipment with energy efficient ones.
- Converting constant speed air handling equipment and pumping systems to variable speed operation.
- Modifying air handling equipment from 100% outside air to return air operation.
- Implementing heat recovery units into HVAC equipment.
- Improving laundry, kitchen and other process application efficiencies.

In addition to the energy management projects outlined above, the ZDS team members have extensive experience in identifying and implementing energy efficient operating and maintenance measures. These are typically low cost or no cost measures that include:

- Inspecting, calibrating temperature controls and adjusting outdoor air dampers.
- Commissioning economizer cycle operation.
- Testing steam trap and pressure relief equipment operation.
- Enabling heating and cooling equipment only when required.

The ZDS team is trained and experienced in advising you of program options to incorporate energy efficiency and operational saving features into the design of your new construction and renovation projects. At ZDS, we view our role as helping you to define your own energy efficiency needs and goals through identifying energy saving options and providing supporting financial information. We then help you to fit your energy efficiency needs and goals into a workable budget and schedule, and then design a program to fill those needs.

The design and construction industry have had start-up problems when a facility is occupied and constructions' deficiencies that were not discovered until the contractors traditional one-year warranty period expires. The mechanical and electrical systems have continued to become more complex with sophisticated control systems and equipment, and a mountainous amount of changing technology. If not properly addressed, building Owners could face numerous operational problems from "Sick Building Syndrome," excessive energy costs, and uncomfortable indoor environments. Commissioning is the missing link between design and implementation.

Subsequent to joining ZDS, Todd Zachwieja established commissioning services for one of the nations largest energy service companies. Many utility companies and building Owners now require commissioning for the new or renovated facilities in order to maximize the use of their investments in their facilities. The commissioning process offers the following benefits:

- Improved comfort, serviceability and Owner understanding of systems and design intent.
- Added technical support for the Owner and being proactive in preventing new problems.
- Reduced maintenance and decreased expenses related to operating deficiencies.
- Early identification and resolution of system discrepancies while designers and contractors are still under contract and on the job.
- Verification of system performance while meeting financial restraints.
- Commission new and renovated facilities to minimize or eliminate IAQ issues before they become problems.

ZDS and its consultants, offer commissioning services for their commercial and institutional clients. These services include strategic planning operations assistance for renovation and new construction projects. Commissioning services consists of construction document review, equipment performance testing, documentation of design criteria, value engineering, operational fine tuning, professional operations training programs and site-specific engineering consultation. Our project team has the unique experience of in-depth design knowledge and hands-on operations knowledge that fills in the gap between traditional design services and the building Owners operational needs.

NATIONAL RECOGNITION

The Second National Conference on Building Commissioning invited Todd Zachwieja, ZDS's owner, to speak. He jointly presented a paper with the Director of Maintenance of Charleston Area Medical Center's Memorial division. The Tampa, Florida Conference was held in May 1994.

The principal owners of ZDS and their consultants have extensive experience in building commissioning and have saved their customers hundreds of thousands of dollars in construction costs and operating costs through their efforts.

The design team at **ZDS Design/Consulting Services** is the Best to provide engineering services for **your** project. Satisfying *our Client's* individual needs and distinct requirements is the foremost concern of ZDS.

The most important member of the design team is the client. We make every effort to involve our clients throughout the entire process, from the planning through the construction and beyond.

The ZDS design staff continuously provides engineering design services value well into the millions of dollars on a variety of project types. Designing expertise goes as far back as 1958. Through the efforts of our staff, project locations include:

West Virginia	Virginia	North Carolina	Georgia
Kentucky	Ohio	Pennsylvania	Florida
Illinois	Connecticut	Texas	Michigan
New York	Wisconsin	Massachusetts	Indiana
Colorado	Tennessee	Maryland	Washington DC
California	Hawaii		

Our clients can rest assured that the design team will be available. Not just for the year or two that we are involved in the initial design and construction, but also for years that follow as questions arise about your facility. A good-engineered system and its equipment should last 15 to 40 years. A design firm with staff committed to their projects of comparable duration is logical.

Our design team will provide comprehensive services utilizing experienced staff through planning; cost estimating, engineering, coordination of bidding, regular site visitation during construction and specifications for equipment. You, *our Client*, will greatly benefit from a *single point of responsibility* for every need your project may have.

Our staff has the expertise with codes and standards. We have extensive experience in conducting engineering code surveys of existing facilities. Our staff has excellent working relationships with the West Virginia Fire Marshal's Office and the West Virginia Department of Health.

In addition to comprehensive Engineering services from an experienced design team, another major consideration in the selection of your engineer and design staff should be their track record. ZDS organization has an unbeatable, long running, and well-known track record for meeting *our Client's* needs, on time and within budget with outstanding quality.

We view these characteristics as the foundation of Quality. We look forward to the opportunity to discuss our ideas with you and assist you by providing solutions for your needs with a full range of services from Planning to Commissioning.

Project Timeline

Buchart-Horn believes that the design for the renovations to the South Charleston, Cornerstone and Cassis Buildings can be accomplished within a 12 month timeline. In general, our proposed schedule is as follows:

<u>Task</u>	<u>Begin Task</u>	<u>End Task</u>
Existing Building Condition Surveys Including Structural Evaluations	Month 1	Month 2
Programming Phase	Month 2	Month 3
Conceptual Architecture (with reviews)	Month 3	Month 4
Schematic Design	Month 5	Month 6
<u>Design Development</u>		
Mechanical / Plumbing (with reviews)	Month 6	Month 8
Data / Communication Systems (with reviews)	Month 6	Month 8
Structural	Month 7	Month 8
Electrical	Month 6	Month 8
Outline Specs / Cost Estimates	Month 8	Month 8
Final Design Development	Month 9	Month 11
Construction Documents	Month 11	Month 12
Bidding Phase, Bid Evaluation and Award	Month 12	Month 12

**Architect/Engineering Services,
Renovations to Three Buildings
West Virginia Department of
Administration**

Principal-in-Charge

Anthony J Shinsky, AIA, LEED® AP

QA/QC Manager

Harry R Rutledge, FAIA, RIBA

Project Manager

Michael M Phillips, AIA, LEED® AP

Architect

**Michael M Phillips, AIA, LEED® AP
Stephanie A Schaefer, AIA**

Structural Engineer

**James M California, PE
Carol-Ann Denning-Spangler, PE**

Mechanical Engineer

**ZDS Design/Consulting Services
Michael G Miller, PE, LEED® AP (QA/QC)**

**Electrical Engineer &
Fire Protection**

**ZDS Design/Consulting Services
Jeffrey B Moreland, PE (QA/QC)**

Interior Design

Beth A Dermota, ASID

Technical support staff of over 300, including structural, civil, and cost estimating.

Michael M Phillips, AIA, LEED® AP
Project Manager / Lead Architect

Education:

*Bachelor of Architecture /
Architecture / University of
Tennessee*

Registrations:

*LEED 2.0® Accredited
Professional / 2006*

Registered Architect

Years' Experience:

Total: 21

Professional Affiliations:

*American Institute of Architects,
West Virginia Chapter*

*Mainstreet Ripley, Inc.: Board
Member and Chairman, Design
Committee*

Mr. Phillips graduated from the School of Architecture of the University of Tennessee in 1988. With a diverse background in project scale, type, and style, he has a strong record of successfully working within and integrating existing facilities into new designs and programs. The knowledge and experience gained from a strong background and practice in historic preservation and renovation bring a keen insight into dealing with the issues of adaptive re-use and the recycling of existing built elements. His wide-ranging experience has also helped fashion a working knowledge of resilient, lasting designs, structurally, functionally, and pragmatically as well as aesthetically.

He also was a founding board member, Vice President, and past President of the Greater Kanawha Community and Economic Development, a non-profit corporation dedicated to renovating affordable housing. Mr. Phillips currently serves as Chairman of Mainstreet Ripley's design committee, volunteering in their efforts as well as spearheading their recent streetscape program.

- Kanawha County Judicial Annex Renovations, Charleston, WV.
- Yeager Airport, Transportation Security Administration Offices, Charleston, WV.
- Lewis County Courthouse Annex Comprehensive Plan, Weston, WV.
- Monongalia County Courthouse Addition and Intermodal Parking Facility, Morgantown, WV.
- Old Main Auditorium Renovation, Marshall University, Huntington, WV.
- Elkins Maintenance Facility, WVDOT, Randolph County, WV.
- Yeager Airport New Passenger Boarding Bridge, Charleston, WV.
- Pocahontas County Jail Structural Evaluation, Pocahontas County Commission, Marlinton, WV.
- County Jail Building Adaptive Re-use, Pocahontas County Commission, Marlinton, WV.
- Administrative and Judicial Facilities Renovation Design, Preston County Commission, Kingwood, WV.
- Radisson Riverfront Hotel and Conference Center, Morgantown, WV.
- Investigation and Proposed Modifications to State Capitol Parking Facility, Charleston, WV.
- Corridor H Final Design, WVDOT, Grant County, WV.
- Yeager Airport Gate 10 Expansion, Central West Virginia Regional Airport Authority, Charleston, WV.

Anthony J Shinsky, AIA, LEED® AP
Principal-in-Charge

Education:
*Bachelor of
Architecture/Architecture/
Temple University*

Registrations:
Registered Architect

*LEED 2.0® Accredited
Professional/2005*

Years' Experience:
Total: 20

Professional Affiliations:
*American Institute of Architects
Pennsylvania Society of Architects
- Central Pennsylvania Chapter*

With 20 years in the Architectural and Construction fields, Mr. Shinsky's experience includes managing multi-discipline projects and personnel. His responsibilities have included facilities management, architectural firm and project management, architectural designer, technical oversight and coordination, quality review, and construction administration.

- Trexler Nature Preserve "Green" Environmental Center, Lehigh County, Allentown, PA.
- City of Thurmont, Design of Police Station, Thurmont, MD.
- Renovations/Additions Tyson Schoener Elementary School, Reading School District, PA.
- Shade Elementary School, Shade / Central City School District, PA.
- Elementary School Renovations and Additions, Annville Cleona School District, PA.
- Select Medical Health Education Pavilion Harrisburg Area Community College, PA.
- Early Childhood Development and Daycare Center, Harrisburg Area Community College, PA.
- Open End Contract for Campus Improvements, Harrisburg Area Community College, PA.
- Delaware Emergency Communications Center, Sussex County, DE.
- York County Emergency Operations Center, York, PA.
- Male Juvenile Detention Center, City of Philadelphia, Pennsylvania.
- Heilman Gymnasium and Arena, Lebanon Valley College, Lebanon, PA.
- Center for Sustainability Greenhouse, Pennsylvania State University, PA.
- Village Green Center, Masonic Homes of Elizabethtown, PA.
- Commissary and Food Services Center, Masonic Homes of Elizabethtown, PA.
- The Inn at Heritage Hills, Golf Resort and Hotel, York, PA.
- Women's Shelter Historic Rehabilitation, Access York, York, PA.
- Seven Central Office Facilities, Vanguard Cellular (Now AT&T Wireless), East Coast Region.
- Historic Restoration Project, York Arts, York, PA.
- Additions/Renovations to the UMES Library, University of Maryland.

Harry R Rutledge, FAIA, RIBA
Quality Assurance/Quality Control

Education:

MS/Rural and Regional Resource Planning/Aberdeen University, Scotland

Bachelor of Architecture/ Architecture/Kansas University

Registrations:

Registered Architect

RIBA/1974

FAIA/2001

Years' Experience:

Total: 42

Professional Affiliations:

American Institute of Architects (National Board of Directors - 1997-2001)

Royal Institute of British Architects

Pennsylvania Society of Architects, AIA (President, 1995)

National Council of Architectural Registration Boards

American Arbitration Association

Kansas Society of Architects, AIA

Council of Educational Facility Planners International

National School Board Association

Kansas University - School of Architecture (Visiting Design Juror; Preceptor)

Kansas State University - College of Architecture (Program Advisory Panel; Dean Selection Advisory Panel)

The winner of numerous architectural awards, Mr. Rutledge has provided clients with architectural design and construction management over a wide range of project types including office buildings, city and county facilities, churches, prisons, educational facilities, housing, elderly facilities, medical facilities, and retail/commercial facilities.

- County Administration Building Conversion, Dauphin County Commissioners, Harrisburg, PA.
- Historic County Courthouse Renovation, Dauphin County Commissioners, Harrisburg, PA.
- Health and Human Services Building Office Space Renovation, Dauphin County Commissioners, Harrisburg, PA.
- Indefinite Quantity Architectural/Engineering Services for Maryland Postal Facilities, US Postal Service, Eastern Facilities Service Office, Greensboro, NC.
- Open-End Contract for Architectural and Engineering Services, Millersville University, Millersville, PA.
- Willow Grove Naval Air Station, Joint Reserve Base, Hangar Repairs for Building 177, Willow Grove, PA.
- U.S. Department of State Energy Audits
- AAFES Landstuhl Military Hospital Food Court
- AAFES - PX Warehouse (Kitzingen, Germany).
- Indefinite Quantity A/E Contract, U.S. Army Corps of Engineers, Tobyhanna Army Depot, PA.
- Vicenza Life Cycle Costs, Utility Plants And Systems
- DELDOT Materials and Research Lab, Dover, DE.
- Pennsylvania State System of Higher Education Project Management Services, PA.
- Administration Building Renovations, Kutztown University/PA State System of Higher Education, Kutztown, PA.
- Rickenbaugh Research and Learning Center Renovation, Kutztown University/PA State System of Higher Education, Kutztown, PA.
- Vogelweh Commissary Renovation Title I, Vogelweh, Germany.
- Armstrong County Office Building, Kittanning, PA.
- Lancaster County Courthouse Design, Lancaster, PA.

Stephanie A Schaefer, AIA
Architect

Education:

*Bachelor of
Architecture/Architecture/
Virginia Polytechnic Institute and
State University*

*Graduate Coursework/Virginia
Polytechnic Institute and State
University*

Registrations:

Registered Architect

Years' Experience:

Total: 24

Professional Affiliations:

American Institute of Architects

Ms. Schaefer has more than 20 years of diverse experience in the field of architecture. She is responsible for managing projects as well as coordinating design teams. Her abilities encompass all phases of architecture from feasibility studies and conceptual design through the production of construction documents and construction administration.

- IQC for A/E Services: Repairs and Alterations and Small Standard Building Design/Medium Standard Building Design, Baltimore and Capital Districts, USPS, Eastern Facilities Service Office, Greensboro, NC.
- Indefinite Quantity Architectural/Engineering Services for Maryland Postal Facilities, US Postal Service, Eastern Facilities Service Office, Greensboro, NC.
- Indefinite Quantity A/E Contract, U.S. Army Corps of Engineers, Tobyhanna Army Depot, PA.
- U.S. Army Corps of Engineers, A/E DO #13, Design Building 1A HVAC, Tobyhanna Army Depot, PA.
- Public Works Building DD1391, Tobyhanna Army Depot, Tobyhanna, PA.
- Tobyhanna Army Depot Master Planning Contract, Tobyhanna, PA.
- Sixth Medical Logistics Management Center (6MLMC) Company Operations Facility, Ft Detrick, MD.
- PA DGS, Preconstruction CM Services for Convocation Center, Indiana University of PA.
- Montgomery County Police Vehicle Recovery Facility, Gaithersburg, MD.
- Fifth Regiment Armory Renovations and Upgrades, City of Baltimore, MD.
- Odyssey International, Building E-1356 Renovation Design, Edgewood Arsenal, MD.
- Odyssey International, Architectural, Mechanical, and Electrical Field Investigation for Building 4311 and E-1356 Complex, Aberdeen Proving Ground and Edgewood Arsenal, MD.
- Administration Classroom Renovation, Community College of Baltimore County Essex Campus, Baltimore, MD.
- Odyssey International, Building 4311 Renovation Design and Construction Phase Services, Aberdeen Proving Ground, MD.
- City of Baltimore Open-end Architectural and Engineering Services, Baltimore, MD.

James M California, PE
Structural Engineer

Education:

*Bachelor of Architectural
Engineering/ Structural
Engineering/ Pennsylvania State
University*

Registrations:

Professional Engineer

Years' Experience:

Total: 27

Professional Affiliations:

*American Institute of Steel
Construction (AISC) - #065709*

Mr. California is a Senior Structural Engineer and has extensive experience in structural building design on various educational, commercial, industrial, municipal, and government projects; field investigation and evaluation of existing structures; technical report preparation; shop drawing review; and technical support during construction. He has also designed various tanks, towers, equipment supports, and foundations.

- Kanawha County Judicial Annex Renovations, Charleston, WV.
- County Administration Building Conversion, Dauphin County Commissioners, Harrisburg, PA.
- County Courthouse Renovations and Upgrades, Dauphin County Commissioners, Harrisburg, PA.
- Health and Human Services Building Office Space Renovation, Dauphin County Commissioners, Harrisburg, PA.
- County Administration Building Conversion, Phase 3, Dauphin County Commissioners, Harrisburg, PA.
- Old Main Auditorium Renovation, Marshall University, Huntington, WV.
- American Automobile Association (AAA) Office Expansion and Renovation, State College, PA.
- New Maintenance Building and Yard, Canaan Valley Institute, Davis, WV.
- Investigation and Proposed Modifications to State Capitol Parking Facility, Charleston, WV.
- Open-End Contract for Architectural/Engineering Services, Defense Distribution Depot, Susquehanna, New Cumberland, PA.
- New Maintenance Garage, New Emergency Services Building, and Municipal Building Renovations, Hampden Township, PA.
- Tobyhanna Army Depot A/E DO #07, Bldg. #11, Wing C Computer Room Renovation, Tobyhanna, PA.
- Indefinite Quantity Architectural/Engineering Services for Maryland Postal Facilities, US Postal Service, Eastern Facilities Service Office, Greensboro, NC.
- Open-end A/E Consulting and Design Contract, USPFO for Pennsylvania, Statewide PA.
- IQC for A/E Services: Repairs and Alterations and Small Standard Building Design/Medium Standard Building Design, Baltimore and Capital Districts, USPS, Eastern Facilities Service Office, Greensboro, NC.



Carol-Ann Denning-Spangler, PE
Structural Engineer

Education:

*Bachelor of Architectural
Engineering/ Structural
Engineering/ Pennsylvania State
University*

*MBA/ Business Administration/
Pennsylvania State University*

Registrations:

Professional Engineer

Years' Experience:

Total: 20

Professional Affiliations:

*American Institute of Steel
Construction - #1002778*

During her 18 years in architectural engineering, Ms. Denning-Spangler has managed project design teams for new educational, municipal, industrial, and commercial facilities as well as renovations to many types of existing structures. She has the diverse background required for effective project management and has been responsible for design and construction administration of many projects. As a Professional Engineer with an architectural engineering degree, her experience includes structural engineering design as well as involvement in architectural programming, technical aspects of architectural design and project feasibility studies. She has performed quality control reviews of architectural and structural design documents including coordination with other design disciplines.

- Health and Human Services Building Office Space Renovation, Dauphin County Commissioners, Harrisburg, PA.
- Municipal Complex Design and Adaptive Re-Use, Township of Derry, Hershey, PA.
- Kanawha County Judicial Annex Renovations, Charleston, WV.
- Monongalia County Courthouse Addition and Intermodal Parking Facility, Morgantown, WV.
- Downtown Intermodal Transportation Facility, Derry Township Industrial & Commercial Development Authority, Hershey, PA.
- C.S. Davidson Inc., York County Courthouse, York, PA.
- New Maintenance Garage, New Emergency Services Building, and Municipal Building Renovations, Hampden Township, PA.
- Spring Garden Township, Master Planning and Design of Municipal Complex, York, PA.
- Open-End Contract for Project Management Services, Millersville University/PA State System of Higher Education, Millersville, PA.
- USPFO for Pennsylvania, Unmanned Aerial Vehicle Runway and Maintenance/Training Facility Design, Ft. Indiantown Gap, Annville, PA.
- Open-end A/E Consulting and Design Contract, USPFO for Pennsylvania, Statewide PA.
- USPFO for Pennsylvania, Battalion Storage Facility Design, Ft. Indiantown Gap, Annville, PA.
- USPFO for Pennsylvania, Mission Support Training Facility Design, Ft. Indiantown Gap, Annville, PA.
- USPFO for Pennsylvania, Stryker Battalion Training Complex, Ft. Indiantown Gap, Annville, PA.

Beth A Dermota, ASID
Interior Design

Education:

AA/Commercial Art/Antonelli
Institute of Design

AA/Interior Design/Fashion
Institute of Technology

Coursework/Interior Design/
Chamberlayne Junior College

Years' Experience:

Total: 16

Professional Affiliations:

Allied Member, American Society
of Interior Designers

Member of Interior Design Club

Ms. Dermota has extensive experience in interior design including space planning/programming (private office configurations and furniture layouts). She also has experience working with systems workstations/modular units; millwork design (reception stations, lunchrooms, private exam rooms, etc.); furniture specifications and selection; interior finishes (wallcovering, paint, tile, carpet, VCT, solid surface, etc.); construction documentation, and project management.

- Municipal Complex Design and Adaptive Re-Use, Township of Derry, Hershey, PA.
- Emergency and Municipal Services Center, Lower Allen Township, Camp Hill, PA.
- New Snyder County Maintenance Garage, PA DGS/PennDOT, Selinsgrove, PA.
- West Chester Hotel, Mixed-Use Project, Stan Zukin Properties, West Chester, PA.
- Design of New Elementary School, East Stroudsburg Area School District, PA.
- PA State System of Higher Education, Dixon University Center, Campus Enhancement Plan, Harrisburg, PA.
- PA American Water, Office Reconfiguration, Hershey and Mechanicsburg, PA.
- ARM Group Inc., Interior and Exterior Design Services for Office Building Expansion, Hershey, PA.
- Sigma Chi Fraternity House Renovations, Alpha Chi House Corporation, State College, PA.

Michael G Miller, PE, LEED® AP
Mechanical Engineering QA/QC

Education:

AS/ Engineering/ Pennsylvania State University

Registrations:

Professional Engineer

LEED 2.0® Accredited Professional / 2006

Years' Experience:

Total: 38

Professional Affiliations:

American Society of Heating, Refrigeration and Air-Conditioning Engineers

National Fire Protection Association, #000130913, received 4/30/2003

American Society of Plumbing Engineers

Mr. Miller is responsible for the overall design and quality control of mechanical engineering projects. In choosing economical and innovative plumbing, fire protection, and HVAC systems, Mr. Miller evaluates practicality of operation and application; energy conservation; compliance to building code, safety, and health issues; hygienic practice; energy reclamation devices and procedures; and estimates the economical construction, maintenance, and operating costs for life cycle value engineering analyses. He generates computer load-modeling to accurately project the value and feasibility of conservation alternatives. As Director of Buchart Horn's Mechanical Group, Mr. Miller oversees the quality control checking of mechanical calculations, equipment and distribution systems, drawings and specifications for conformance to orthodox industry standards and prudent engineering procedures.

- Kanawha County Judicial Annex Renovations, Charleston, WV.
- County Administration Building Conversion, Dauphin County Commissioners, Harrisburg, PA.
- Historic County Courthouse Renovation, Dauphin County Commissioners, Harrisburg, PA.
- Health and Human Services Building Office Space Renovation, Dauphin County Commissioners, Harrisburg, PA.
- IQC for A/E Services: Repairs and Alterations and Small Standard Building Design/Medium Standard Building Design, Baltimore and Capital Districts, USPS, Eastern Facilities Service Office, Greensboro, NC.
- Trexler Nature Preserve "Green" Environmental Center, Lehigh County, Allentown, PA.
- Sigma Chi Fraternity House Renovations, Alpha Chi House Corporation, State College, PA.
- American Automobile Association (AAA) Office Expansion and Renovation, State College, PA.
- Main Capitol Building, North Wing Basement Fit-Out, Pennsylvania State Senate, Harrisburg, PA.
- Administration Classroom Renovation, Community College of Baltimore County Essex Campus, Baltimore, MD.
- Post Office Renovation and Addition, US Postal Service, Ellicott City, MD.
- Perry Hall Mansion Renovations, Baltimore County, MD.
- Aircraft Systems Maintenance Hangar Repair and Renovation, Building 304, Pennsylvania Air National Guard/171st Air Refueling Wing, Coraopolis, PA.



Jeffrey B Moreland, PE
Electrical Engineering QAI/QC

Education:

*MSI Electrical
Engineering/University of
Pittsburgh*

*BS/Electrical
Engineering/Carnegie-Mellon
University, Pittsburgh*

Registrations:

Professional Engineer

NCEES Record/2007

Years' Experience:

Total: 24

Professional Affiliations:

*Institute of Electrical and
Electronics Engineers: Control
Systems, Instrumentation and
Measurement, and Digital Signal
Processing Societies*

Association of Energy Engineers

*Association of Iron and Steel
Engineers*

*Sigma XI Scientific Research
Society*

Mr. Moreland is an Electrical Engineer with a solid background in process control and signal processing including a 23-year record of achievement in applying new and innovative technologies. His broad business experience, having operated his own multi-million dollar business as well as large capital projects for a Fortune 500 manufacturing company, ranges from applied R&D, software design, IT and operations management to a variety of electrical design and project management functions.

- Administrative and Judicial Facilities Renovation Design, Preston County Commission, Kingwood, WV.
- Investigation and Proposed Modifications to State Capitol Parking Facility, Charleston, WV.
- Yeager Airport Gate 10 Expansion, Central West Virginia Regional Airport Authority, Charleston, WV.
- Yeager Airport New Passenger Boarding Bridge, Charleston, WV.
- Elkins Maintenance Facility, WVDOT, Randolph County, WV.
- WVDOT, Statewide Architectural Services, Statewide, WV.
- Bus Service Facility Additions and Alterations, Tri-State Transit Authority, Huntington, WV.
- Huse Memorial Park Administration/Maintenance Facility, Town of Fayetteville, WV.
- New Maintenance Building and Yard, Canaan Valley Institute, Davis, WV.
- Aircraft Systems Maintenance Hangar Repair and Renovation, Building 304, Pennsylvania Air National Guard/171st Air Refueling Wing, Coraopolis, PA.
- Squadron Operations Building 107 Repair, Pennsylvania Air National Guard/171st ARW, Coraopolis, PA.
- Combat Arms Training Simulator and Combat Arms Training and Maintenance Facility Design, Pennsylvania Air National Guard/171st ARW, Coraopolis, PA.
- I-55 Northbound Rest Area Renovation, Mississippi DOT, Holmes County, MS.
- Preconstruction CM Services for Convocation Center, PA DGS/Indiana University of PA.
- Combined Army National Guard Readiness Center, Pennsylvania DGS/PAANG, Waynesburg, PA.

TODD (TED) A. ZACHWIEJA, PE, C.E.M.

**Chief Executive Officer
Principal-in-Charge, M/E Design Project Manager**

Education

Bachelor of Science in Mechanical Engineering from West Virginia Institute of Technology in 1982.
Masters of Science in Engineering Management from the University of West Virginia College of Graduate Studies in 1989.

Registrations

Professional Engineer, West Virginia, No. 10,127
Certified Energy Manager (C.E.M.), National Certification
Professional Engineer, Pennsylvania, No. PE-040929-R
Professional Engineer, Virginia, No. 0402 025427
Professional Engineer, Ohio, No. E-53587
Professional Engineer, North Carolina, No. PE-17,445
Professional Engineer, Kentucky, No. PE-17,961
Professional Engineer, Georgia, No. 18,253

Qualifications

Todd has more than 25 years of experience; in the design, construction management, and specifications for mechanical engineering, heating, ventilating, air conditioning, plumbing, electrical, and lighting; indoor air quality analysis and building system commissioning for institutional, commercial and industrial facilities. His specialties include mechanical engineering, HVAC systems master planning, conceptual design, energy conservation program development, commissioning and IAQ analysis relating to HVAC systems. He has extensive experience in industrial, commercial facilities, hospitals and school design including preparation of construction documents for millions in renovations and additions to facilities. Some of his project experience includes projects new Mercer County Courthouse, Princeton, WV, Kanawha County Commission – 120,000 sf additions/renovations for the Judicial Annex/Kanawha County Courthouse Charleston WV, Laidley Towers – Charleston WV, Renovations to Buildings #1, #3, #4, #5, #5, #7, #8, #9, #10 at the WV State Capitol complex, Cultural Center HVAC Renovation, Union Carbide, United Center - Charleston WV, Phillip Morris USA, Rhone-Poulenc, Toyota, Olin Corporation, Walker Machinery, WV Air & Army National Guard, Bank One, WV; Kohl's, Sears, WV Public Service Commission Headquarters, and Yeager Airport. He also designed one of the largest geothermal heat pump applications in the mid Atlantic region, commissioned HVAC systems and mechanical engineering at many General Motors facilities in North America.

Some of his health care experience includes millions in renovation and new construction design for Charleston Area Medical Center including commissioning of Charleston Area Medical Center's \$41 million Surgery Replacement center. Other health care experience includes Bluefield Medical Center, Hopemont Hospital, Monongalia General Hospital, Montgomery General Hospital, United Hospital Center, St. Mary's Hospital, Summersville Memorial Hospital, Thomas Memorial Hospital, Webster Memorial Hospital, Cabell Huntington Hospital, Welch

Emergency Hospital, Surgicare Center, VA Hospital - Clarksburg, Mercy Medical Center, Wayne Memorial Hospital and Webster Memorial Hospital.

He also has experience in providing M/E design for the following College and Universities including: Bluefield State College, Concord University, Fairmont State College, Marshall University, Ohio University's Athens & Chillicothe campuses, Southern WV Community & Technical College, Washington & Lee University, WV Wesleyan College, and West Virginia University. He was recognized nationally for his work with Ohio University in development of a performance contracting program that is anticipated to save between \$2 to \$2.5 million annually in energy and operating costs.

He also has experience in providing M/E design for the following schools: Clay, Grant, Hardy, Harrison, Jackson, Kanawha, McDowell, Mercer, Monroe, Ohio, Pocahontas, Raleigh, Randolph, Ritchie, Summers, Taylor, Tucker, Upshur, Webster, and Wyoming County Schools. Some of his project experience includes the development and design of a pilot geothermal heat pump HVAC with variable speed pumping system at Webster County High School which reduced electric bills by more than 40% while meeting indoor air quality requirements.

Prior to joining ZDS, Todd Zachwieja coordinated more than \$10 million in comprehensive energy conservation programs resulting in annual energy saving of over \$2 million per year and managed a profitable regional office for one of the countries largest energy service companies. He has also assisted in the development of computer programs for building energy analysis and monitoring and presented technical papers at regional and national conferences.

**Professional
Affiliations**

Charter member of and instrumental in establishing the West Virginia Mountaineer chapter of American Society of Heating Refrigeration and

Air conditioning Engineers (ASHRAE)

Served as ASHRAE's Energy and Technical Affairs Chairman for 6 years. Recognized by the International Who's Who of Professionals.

Recognized nationally as West Virginia's 2003 Business Man of the Year

Charter life member of the Association of Energy Engineers

Member of the American Association of Hospital Engineers

Member of the National Society of Professional Engineers

Member of National Society of Plumbing Engineers

Contributing editor and served on the Editorial Review Panel for "The Handbook of Building Management and Indoor Air Quality", "Ventilation for a Quality Dining Experience", INvironment Professional, Power Prescriptions and other publications and articles dealing with Indoor Air Quality (IAQ) and mechanical/electrical engineering systems.

Presented at regional and national conferences including the National System Commissioning Conference

TED T. ZACHWIEJA**Principal-in-Charge Construction Administration**

Education Bachelor of Science in Mechanical Engineering, West Virginia Institute of Technology, 1958.

Qualifications Ted's responsibilities include over 40 years of experience in mechanical and electrical systems design and construction administration. His specialties include the design and development of mechanical and electrical systems, master planning and budgeting for mechanical and electrical systems, and management of complex design and construction projects. He is also a Codes and Standards Specialist.

He has been involved in West Virginia since 1958 in all aspects of mechanical and electrical design and construction, including machine design, structural design and design of heating, ventilating, air conditioning, plumbing, fire protection and electrical systems. His experience includes work for U. S. Steel, Union Carbide, Rhone-Poulenc, Charleston Area Medical Center, United Hospital Center, Kanawha County Schools, Marshall University, most buildings on the West Virginia Capitol Complex, West Virginia Institute of Technology, West Virginia University, Bank One and many others in the private sector.

Ted's Design regarding Bank One, Charleston, formerly Charleston National Bank, including conducting a comprehensive energy audit, design of a Building Automation Energy Management System, HVAC renovations of floors LM and LM1, design of flat plate heat exchanger system for the perimeter fan coil units and design of the boiler replacement.

Ted has been involved in the Renovation Planning of West Virginia University's White Hall and Armstrong Hall, WVU's Wise Library Sprinkler System, WVU's Chilled Water Loop Interconnect, Morgantown, WV; Charleston Area Medical Center (CAMC), Memorial Division Chiller Replacement; CAMC's General Division Chiller Replacement, Variable Pumping System and Chillers Interconnect, Charleston, WV; and many others. He has worked on new and renovation projects such as West Virginia University Stadium and Forestry Building, Morgantown, WV; Addition and Renovation of the Air Conditioning System for the West Virginia State Capitol Building, Charleston, WV; Conley Hall and Science Building HVAC Renovations and Additions, West Virginia Institute of Technology, Montgomery, WV; Indoor air quality (IAQ) and HVAC Renovations of Andrew Jackson Junior High School for Kanawha County School Systems; Fume Hood Design and HVAC Additions and Renovations for Union Carbide, Charleston, WV; and Rhone Poulenc, Institute, WV; HVAC renovation for the Benedum Student Center at West Virginia Wesleyan College, Buchannon, WV; Greenbrier East and Greenbrier West Schools; Mingo County Schools; Raleigh County

Schools including Shady Springs Middle School, Trap Hill Junior High School, Academy of Career and Technology Center, Marsh Fork Elementary, Park Middle School, Woodrow Wilson High School and others, Pocahontas County High School (Geothermal), Wyoming County Schools; Tucker County Schools; Webster County High School & Webster Springs Elementary School HVAC Renovations (Geothermal) and Exterior Renovations, and various other secondary schools throughout the years.

Ted was involved with the mechanical and electrical renovations for the State of West Virginia Library Commission stacks and office spaces as part of a total \$4.5 million HVAC and Electrical Renovations for the Division of Culture and History, Charleston, WV. The indoor air quality, temperature and humidity each were not in accordance with good design practices for this type of structure. ZDS is commissioned to correct these deficiencies while conserving energy.

Ted was selected as one of three engineers to train and teach a course designed by the Department of Energy and American Society of Heating, Refrigeration and Air Conditioning Engineers for emergency building temperature restrictions.

Prior to forming ZDS, Ted was regional manager for a hospital design firm and responsible for designing, construction management and project management for over 200 million in hospital and health care facilities. The facilities were located over eastern United States. Some of his health care experience includes millions in renovation and new construction design for Charleston Area Medical Center's Special Care Facility. Other local health care experience includes Bluefield Medical Center, Hopemont Hospital, Monongalia General Hospital, Montgomery General Hospital, United Hospital Center, St. Mary's Hospital, Summersville Memorial Hospital, Thomas Memorial Hospital, Webster Memorial Hospital, Cabell Huntington Hospital, Welch Emergency Hospital, Surgicare Center, VA Hospital - Clarksburg, Mercy Medical Center, and Webster Memorial Hospital

**Professional
Affiliations**

Construction Specifications Institute (Charter Member)
American Society of Mechanical Engineers
American Society of Heating, Refrigeration & Air Conditioning Engineers
WV Mountaineer Chapter ASHRAE Past President and Charter Member
Association of Energy Engineers
Association of Hospital Engineers
WV Society of Hospital Engineers
Professional Affiliate Member of AIA
WV Association of Physical Plant Administrators

DANIEL H. KIM, PH.D.

Management Services

Education Ph.D. in Management from Massachusetts Institute of Technology Sloan School of Management in 1993
Bachelor of Science in Electrical Engineering from Massachusetts Institute of Technology in 1987

Qualifications Daniel brings with him a strong design and management experience with over 20 years of experience in consulting ranging from traditional electrical and mechanical systems design to being one of the nations leading experts in organizational issues including Total Quality Management and Systems Thinking.

His specialties include the management and design of HVAC systems for new building construction in the \$50 - 150 million range including the One Hundred and Fifty, Federal Streets, Boston, MA; the Becton Dickinson World Headquarters, NJ; Marketplace Center, Boston, MA.

Daniel has been an organizational consultant and public speaker who are committed to helping problem-solving organizations transforming into learning organizations. He has worked with numerous companies including DuPont, Ford Motor, Harley Davidson, Hanover Insurance, Healthcare Forum, CIGNA, Life Technologies, Ameritech Services, Brigham & Women's Hospital and General Electric among others.

Publications "Learning Laboratories: Designing Reflective Learning Environments," *Proceedings of 1989 International System Dynamics Conference*, Stuttgart.
"Experimentation in Learning Organizations: A Management Flight Simulator Approach," *European Journal of Operations Research*, May 1992.
"Systems Archetypes: Diagnosing Systemic Issues and Designing High-Leverage Interventions" 1992, Cambridge, MA: Pegasus Communications.
"Toward Learning Organizations: Integrating TQC and Systems Thinking," *Special Report Series*, Cambridge, MA: Pegasus Communications.
"The Leader with the "Beginner's Mind," *Healthcare Forum Journal*, July/August 1993.

Lectures Keynote speaker and/or concurrent session at several conferences, including those hosted by The Planning Forum, The Healthcare Forum, Institute for Healthcare Improvement, The Conference Board. Speaker at Hofstra University, Monmouth College, University of Houston, and U.C. Berkeley.

LORI L. ZACHWIEJA, CPA

Chief Financial Officer

Education Bachelor of Science in Accounting, Bachelor of Science in Business Management and a Bachelor of Science in Computer Management; all three degrees were with Honors, West Virginia Institute of Technology in 1983.
Master's Degree at Marshall University, December 2006.

Registrations Certified Public Accounting in 1988, No. 2542
Member of West Virginia Society of CPAs since 1985
Certificate Number 1949

Qualifications Lori has over 23 years experience in finance, business, and accounting including being a Partner in a consulting firm, a Senior Financial and Tax Analyst for the Corporate Financial Services and Small Systems Support Department at Blue Cross and Blue Shield of West Virginia, Inc. and Staff Accountant for Simpson and Osborne, a CPA firm located in Charleston WV. Lori also has worked with an architectural firm located in Charleston, WV.

SANDRA W. ZACHWIEJA

Administrative Assistant

Education West Virginia Institute of Technology, Montgomery, WV, West Virginia State College, Institute, WV
Dale Carnegie Leadership and Communications Skills.
Certified Energy Auditor in West Virginia.

Qualifications Sandy is Specs Coordinator and has worked with the specifications of engineering design for over twenty years. She is familiar with the construction process. She has also provided assistance with contracts and Construction Administration documents. She handled payroll, bookkeeping and other office management activities for a consulting firm. Sandy has helped in the planning and the conducting of training seminars and workshops on the local and state level for non-profit organizations. She has a diverse background through previous volunteer and charity work activities. She has been actively involved in Literacy Volunteers as a member of the Board of Directors and as a tutor. She has served as co-coordinator and officer for numerous local groups and charities.

MARK A. MOORE, E. I. T.**Project Manager: Electrical, Fire Protection & Plumbing**

Education BS in Electrical Engineering from West Virginia University Institute of Technology, Montgomery, WV in 2001

Registration EIT West Virginia #08010
West Virginia State Board of Registration for Professional Engineers

Qualifications Mark has more than 7 years of experience in the information systems and design for mechanical engineering, heating, ventilating, air conditioning, plumbing, electrical, lighting for institutional, commercial and historical facilities. He researches and applies, International Building Codes, NFPA, Illuminating Engineers Society standards and National Electric Code in design. Mark has a strong background in microprocessor and microcomputer use in design. Mark has Auto CAD through 2006 design experience and manages CAD operators. He handles electronic processing and replicating functions and is responsible for Information Technology functions for ZDS and our customers.

Mark is also an information systems and technology specialist and provides networking solutions and Windows based programming system solutions. He designed the engineering programs in Excel and created customized programming in ACT databases.

Mark specializes in power, security, fire alarm, lighting, plumbing, HVAC piping, and fire protection. Some of his institutional project experience includes: Bluefield High school renovations/Performing Art Center, Clay Elementary School HVAC Renovations, Concord University Technology Center, Elkins Middle School Renovations, H. J. Keiser Elem renovations, Hopemont State Hospital Fire Alarm renovations, James Monroe High School renovations, Ohio University Bennett Hall M/E Renovations, Park Middle School renovations, Ravenswood High Renovations, Tucker County High/Career Center renovations, Webster Springs Elementary School geothermal heap pump system, Winfield High School HVAC/Electrical renovations, Pocahontas Co High School Renovations/science center additions, new War K-8 school, Woodrow Wilson High School HVAC/Electrical renovations, United Hospital Center Wound Center and others.

His commercial experience includes; Cass Railroad Clubhouse renovations, DOT Rest Area prototype, 4-H Camp Muffly Training/Dining facility, Hardy Co. Daycare, Kanawha County Judicial Annex Renovations, Mercer County Courthouse Annex, multiple branch bank facilities, Camp Dawson Barracks security renovations, IMC office facilities, Pendleton County Courthouse additions/renovations, new Webster Co. Multi-tenant Bldg., WV Capitol Complex Performance Contracting HVAC retrofits, WV Capitol Complex Master Planning for Security/Fire Alarm/Life Safety systems and others.

JAMES W. LOWRY, E. I. T.**HVAC, Plumbing & Fire Protection Designer**

Education BS in Mechanical Engineering from West Virginia University Institute of Technology, Montgomery, WV in 2004

Registration EIT West Virginia # 8376
West Virginia State Board of Registration for Professional Engineers

Qualifications James has completed 4 weeks of HVAC design training at Carrier Training Center, Syracuse, NY and hydronic design/applications at the B&G training center, Chicago, IL. He also had special courses in: Finite Element Analysis, Vibration Analysis, Fluid Power, Automatic Controls, Industrial Instrumentation, and Programmable Logic Controllers (PLCs).

Some of his education experience included; Sterling Engine Design where he was responsible for design calculations and project organization; Brick Lift Design where he was responsible for motor/pulley system & controls including performing finite-element analysis on ladder structure; Mechanical Press Design of Machine Elements including screw mechanism and performed finite-element analysis.

James has about 2 years of experience in the design for mechanical engineering, heating, ventilating, air conditioning, plumbing, electrical, and lighting for institutional and commercial facilities. He specializes in HVAC and Plumbing design. He researches and applies International Building Codes, NFPA and ASHRAE standards in design.

His commercial experience includes Pendleton County Courthouse additions/renovations, Cass Railroad Clubhouse renovations, DOT Rest Area prototype, 4-H Camp Muffly Training/Dining facility, Hardy Co. Daycare, multiple branch bank facilities, Webster Co. Multi-tenant build-out, WV Capitol Complex Performance Contracting HVAC retrofits & Master Planning for Security/Fire Alarm/Life Safety systems and others.

Some of his institutional project experience includes: Concord University Technology Center, Elkins Middle School Renovations, James Monroe High School renovations, Park Middle School renovations, Tucker County High/Career Center renovations, new War K-8 School, and Woodrow Wilson High School HVAC/Electrical renovations.

Professional Affiliations American Society of Mechanical Engineers

MARSHALL COCHRAN
MEP CAD Designer/Technical Analyst

Education Associate Degree in Computer-Aided Drafting, ITT Technical Institute, Murray, Utah, 1990. Has completed various courses at Parkersburg Community College, Parkersburg, WV and at Arch Moore Vo-Tech, Frozen Camp, WV

Qualifications Marshall has specialized in Computer-Aided Drafting and design since 1988 and is presently working with AutoCAD 2005. He has a comprehensive knowledge of AutoCAD and Integraph.

Marshall has been involved with the design and production of mechanical and electrical drawings including HVAC, plumbing, fire protection, lighting, power and piping systems. He has worked with Engineers in the design of HVAC systems for schools and commercial buildings in the state of Utah and in West Virginia: determining CFM's to size ductwork, HVAC load calculations, plumbing design, computer rooms, gymnasiums, and auditoriums. He determined type, size and directional flow of diffusers; ductwork sizing, equipment selection and details. He has also worked on architectural and structural design of buildings, the design of blowout panels to be installed in hazardous buildings and civil drawings for layout of new roadways.

Some of Marshall's HVAC, plumbing, fire protection and electrical design project experience includes Kanawha County Judicial Annex HVAC Renovations, M/E renovations for schools in Clay County, Jackson, Kanawha, Grant, Hardy, Harrison, McDowell, Mercer, Monroe, Raleigh, Pocahontas, Summers, Tucker, Webster, and Wyoming County. Some of his college and University experience includes Bluefield College, Bluefield State College, Concord University, Marshall University, Ohio University, Southern WV Community & Technical College, WV Wesleyan College, Washington & Lee University, and West Virginia University. Some of his health care and commercial experience includes the Bank One of Charleston, Charleston Area Medical Center, Hopemont State Hospital, General Motors, Toyota, WV Cultural Center HVAC Renovations, Webster Memorial Hospital, and WV Public Service Commission Headquarters Building.

DAVID G. DIAL, P. E.**Senior MEP Engineer**

Education Bachelor of Science Mechanical Engineering, WV University, 1978
Masters of Science Environmental Engineering, WV University, 1980

Registration Professional Engineer, West Virginia, No. 11692

Qualifications David has over twenty-seven years of experience in the design and commissioning of Mechanical and Electrical systems. He provides HVAC, electrical and plumbing design services for a variety of clients in West Virginia. His background also includes managing operating and maintenance repair and construction services for HVAC, plumbing, electric, and maintenance. David has managed grounds maintenance, security staff, information technology, IT NASA network, video surveillance and telephone systems. These areas provide inherent coordination expertise.

David has experience in Maintenance Engineering in plumbing, HVAC, clean room design, dust collector selections, steam and condensate flow measurement, transfer of steam production from in-house to private contractor, athletic field lighting design, farm pump water design, and even completed a successful energy grant application from the US Department of Energy.

Environmental Design experience includes PCB remediation, Air Pollution Control Commission annual reporting, removal of underground fuel storage tanks/pumps, installation & testing for radioactive material, conversion of a fleet of vehicles to operated dual fuel (gasoline and natural gas) including training, designing a filling station, custom built compressor station, cylinder operations area, filling post and monitoring of natural gas usage.

He has been involved in the design, document development, contract administration and recommissioning of the structural, mechanical, and electrical disciplines of several WVU projects including: Downtown Steam Tunnel Assessment, Coliseum Tunnel Redesign, Towers exercise room, Brooks Clean Room, lighting retrofits at Brooks Hall, exterior lighting for Mountainlair Parking Garage, cooling towers replacement at the Chemistry Annex, replacement of electric hot water boilers with natural gas pulse steam boilers, HVAC controls for Allen Hall, measure flow for sub metering/billing for campus steam/condensate systems, PCB removal from electrical equipment on campus, and power/cooling for a data Center at the WVU/NASA facility.

Other project experience includes design for Trinity High School's HVAC, plumbing and electric system, industrial dust collector system for the Percival Dust Collector, replacement of rigging of a 2500 seat Auditorium. As a production engineer, David optimized design of medical quality cryogenic freezers, incubator and shaker including scheduling the freight trucks, quality assurance of sheet metal shipments, writing repair manuals and set up insulation.

MARK W. ESTEP, PE
ME Consulting Engineers Inc.
Mechanical/Electrical/Plumbing Engineer

Education BS in Mechanical Engineering from West Virginia University Institute of Technology, Montgomery, WV in 1999
B.S. Architectural Engineering Technology and A.S. Mechanical Engineering Technology from Fairmont State College, Fairmont, WV 1990

Registration Professional Engineer, West Virginia #16199

Qualifications Mark has more than 15 years of experience in design for mechanical engineering, heating, ventilating, air conditioning for Public Housing, institutional and commercial facilities. He specializes in HVAC and supporting architectural design. Mark has a strong background in both architectural and mechanical design and continues to strengthen his piping, plumbing, lighting and power electrical design founded ME Consulting Engineers and New Dimensions. Mark has Auto CAD 14 through 2005 design experience.

Mark's Public Housing design experience includes modernization projects for 64 apartments and 10 community spaces plus a new 9,000 ft² community facility for Charleston Housing, modernization projects for 50 apartments at Sunset Terrace and Elizabeth Cather Towers for Grafton Housing, modernization projects for 504 handicapped accessible renovations to three separate complexes for the Point Pleasant Housing Authority and renovations to 13 separate structures and an addition of a new community room for the Huntington Housing Authority.

Mark's commercial, university and school experience includes Harris Hall HVAC & Electrical renovations for Marshall University, HVAC renovations to the WV Capitol Complex Buildings #3 and #5, Woodrow Wilson High School HVAC Renovations in Beckley WV and a new War K-8 School for McDowell County Schools through ZDS. Additional experience includes Upshur County Courthouse Annex for the 24,000 ft² three-story annex to the existing courthouse, Buckhannon WV City Hall renovations, Child Development Center of Central WV located in Buckhannon, new 2,000 ft² building for Elkins-Randolph County Airport Authority in Elkins, a new 28,000 ft² Maintenance Hanger for Crown Airways in Parkersburg WV.

Mark's industrial experience includes the design of 16 natural gas dispensing service stations located throughout WV, MD and Washington D.C., Design/Build for a 6,000 ft² two-story laboratory facility for Union Carbide in Charleston WV, and a new 50,000 ft² pre-engineered facility for multi-tenant at the Philippi Industrial Facility.

Professional Affiliations American Society of Professional Engineers
National Fire Protection Agency

CRAIG MILLER, PE
Miller Engineers, Inc.
Mechanical & Electrical Engineer

Education Bachelor of Science in Mechanical Engineering, WV University, 1995
Bachelor of Arts in Mass Communication, University of Charleston 1988

Registration Professional Engineer, West Virginia, No: 15184
Professional Engineer, Pennsylvania, No: PE062308
Professional Engineer, Maryland, No: 32894

Qualifications Craig has more than 12 years of experience in the design, specification, and construction/ project management of mechanical, electrical, and plumbing systems and 10 years experience in facilities operations, maintenance, management and “operational engineering”. He has worked extensively in the commercial & institutional facilities including experience as an electrician and HVAC systems mechanic prior to obtaining his engineering education which gives him a distinctive “hands on” approach to engineering application and design.

Craig’s MEP design experience includes Marion County Courthouse, Davis & Elkins Student Union, Charleston Area Medical Center Women’s and Children’s Hospital, Wetzel County Hospital and some retrofits at the WV Capitol Complex.

Craig’s experience at West Virginia University included infrastructure upgrade projects, performed engineering design, assisted maintenance personnel with operational issues, and managed the University’s Energy Program. Additionally, he served as the Owner’s design review engineer on numerous capital construction projects including a new \$30 million Life Sciences Building and \$35 million Student Recreation Center. The Life Science and Rec. Center construction which required \$6 million in high voltage electrical and high pressure steam infrastructure improvements. \$4 million Downtown Campus Electrical Upgrade and Substation (23 & 4kv), \$2 million Coliseum Substation Replacement (23 & 4kv), \$2.5 million Stadium Electric and Lighting Upgrade, Natatorium HVAC replacement, Knapp Hall Heating retrofits, Natatorium Chemical Controllers, and others.

Professional Affiliations ICC International Code Commission
National Fire Protection Agency
American Society of Heating, Refrigeration & Air Conditioning Engineers
BACNET Interest Group

Dauphin County Administration Building Harrisburg, Pennsylvania

Client:

Dauphin County Commissioners
Front & Market Streets
PO Box 1295
Harrisburg, PA 17108

Design Completion Date:
2001

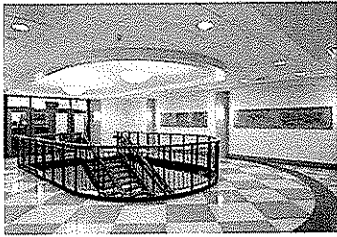
Construction Cost:
\$8,900,000



Dauphin County acquired the 25-year-old Mellon Bank and office building, adjacent to the historic Dauphin County Courthouse, to expand the existing downtown campus and centralize services. The five-story, 84,000-s.f. structure complemented the courthouse for required space utilization and adjacency, but not the existing classic architecture. A new entry with a high impact visual emphasis was designed to relate to a major square in downtown Harrisburg and give the Administration Building a new identity.

The programming and space analysis phase was initiated by Oversight Commissioners who gave philosophical direction for the project. Each department manager and key staff member was consulted and interviewed to develop a sense of existing and future staffing levels, as well as the consideration for new technologies and reorganization. The process was inclusive and open, utilizing on-site one-on-one contact meetings. Inventories of existing furniture and equipment were prepared, as were projections for new equipment and technology. All programming was reviewed with the Oversight Commissioners for concurrence.

Along with the programming effort, the mechanical, electrical, structural, and plumbing engineering design staff evaluated all existing systems to ascertain the necessity for repair, renovation, or replacement. All mechanical, plumbing, and electrical components were at the end of their respective life cycles and required replacement. The opportunity for central, purchased, steam and chilled water was studied and recommended for the project, which eliminated the acquisition of new main major components and future maintenance. Standardization of mechanical, plumbing, and electrical items was also studied and put into effect as part of the project. Long lead items were identified for pre-purchase.



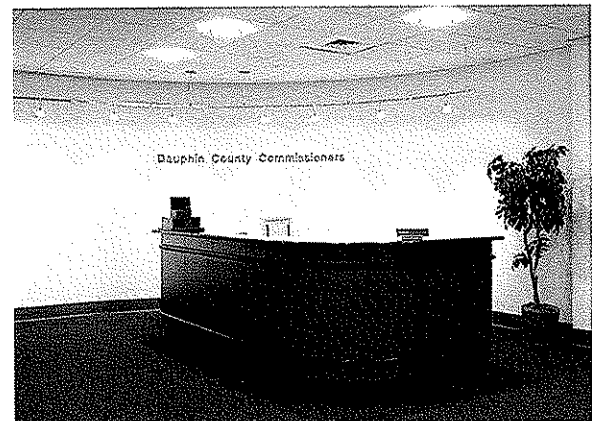
The existing two elevators were studied in relation to the new occupancy and required service characteristics. An additional elevator was required for passengers and large deliveries such as computer equipment. Buchart Horn/BASCO determined that the elevator package was an extremely long lead item and was, therefore, separately bid and pre-purchased. Aspects of a new philosophy towards security were studied and designed into the renovation.

To maintain momentum for a fast track project, the demolition of all existing walls, ceilings, carpet, tile, mechanical, plumbing and electrical construction was bid early. Also included in this bid was asbestos abatement.

Offices that were included in the work were the County Commissioners' Offices; Commissioners' Hearing Room; Chief Clerk/Chief of Staff; Area Agency on Aging; Buildings and Grounds; Community and Economic Development; Cooperative Extension Office; Criminal Investigation Division; Human Services Director's Office; Information Technology; Mail Room; Municipal Solid Waste Management; Personnel and Payroll; Public Defender's Office; Purchasing; Safety and Security; Solicitor's Office; Tax Assessment; Tax Claim; and also a new main entrance and security vestibule.



The responsibilities of the design team included programming; comprehensive planning; presentations; project scheduling and phasing; Information Technology planning and design; architectural, structural, HVAC, plumbing, fire protection, and electrical design; signage; security programming and planning; finish selection; partial interior design and furniture selection; and construction administration.



Dauphin County Courthouse Renovation Harrisburg, Pennsylvania

Client:

Dauphin County Commissioners
Front & Market Streets
PO Box 1295
Harrisburg, PA 17108

Design Completion Date:
2003

Construction Cost:
\$11,187,000



The Historic Dauphin County Courthouse is prominently located in the downtown business district of Harrisburg and within walking distance of the State Capitol. Erected in 1941, the six-story, 140,000 square foot marble landmark is recognized on the National Register of Historic Places.

The County Commissioners, the President Judge, and Buchart Horn/BASCO, through extensive planning and consensus building, determined the short-term and future needs for the courthouse. In order to maintain all courtrooms on the third and fifth floors, the fourth floor being jury deliberation and upper portions of courtrooms on the third level, the new courtroom displaces the law library on the fifth floor. Great care was taken to maintain all artifacts and incorporate them into the new courtroom, while assuring proper traffic flows, courtroom technology, and courtroom security. The displacement has created a "domino" progression, affecting Jury Assembly and other minor spaces. The renovation program was phased and the building was occupied and functioning during construction.

The design included a new state of the art courtroom; Judges' chamber suites; relocation of the law library to include electronic retrieval systems; and relocation and expansion of jury assembly to accommodate a larger juror pool.

Also included were two new 5,000 lb. elevators to accommodate secure juror movement. The new elevators can be controlled to coordinate with the existing passenger elevators or be taken off line to provide secure passage of the jurors to the appropriate levels of the courthouse.

Courthouse security and upgrades in both new and existing areas were phased with the construction. New and replacement infrastructure assemblies were accomplished in a phased construction process to include asbestos abatement, fire protection, voice data distribution, electrical distribution and lighting, plumbing, and HVAC. All affected areas were brought up to ADA standards.



Dauphin County Health and Human Services Building Renovations Harrisburg, Pennsylvania

Client:

Dauphin County Commissioners
Front & Market Streets
PO Box 1295
Harrisburg, PA 17108

Design Completion Date:
2004

Construction Cost:
\$3,620,000

The building consists of eight floors of parking garage and two floors of office space on the top floors. Buchart Horn/BASCO designed a complete renovation of 44,000 square feet of office space, including conversion of mechanical systems to district steam and chilled water, renovations to the electrical systems, installation of new voice/data system, security system, new walls/partitions, and new roof. Services included programming through construction management.

The project involved complete renovation and remodeling of this eight-story facility; the top two floors are the office area, the first six provide parking. Included in this effort was the development of the design associated with the re-use of an existing engine/generator set to provide emergency/stand-by power for multiple functions in the building. These included the development of automatic transfer switch schemes for the County's network equipment, selected HVAC equipment/systems, the elevator system as well as the life-safety means of egress lighting, fire alarm, security and other essential building services. The use of the generator set to serve all of these systems was done in accordance with all applicable Codes and Standards. The fire pump on this project was an existing diesel engine-driven unit.

As well as this system, we also developed the structured cabling and backbone systems for integrating the County's technology equipment and desk-top application network. This work was done in complete coordination with the County's IT Department and provided a high speed, fiber-optic backbone throughout the complex and CAT 5e to the desk-top for individual PC and/or support equipment connection.

Other systems included a complete replacement of the power distribution system, development of "clean power" for the technology-based equipment, special grounding, and transient voltage surge suppression on the power system. In addition, a Transient Voltage Surge Suppression (TVSS) system was also incorporated into the power system design in order to mitigate the effects of switching and other voltage spikes from affecting the sensitive electronic equipment / systems.

The lighting systems were also replaced. This involved close coordination with the Owner and Architect to develop a cost effective solution which met the special and aesthetic considerations of the overall design.

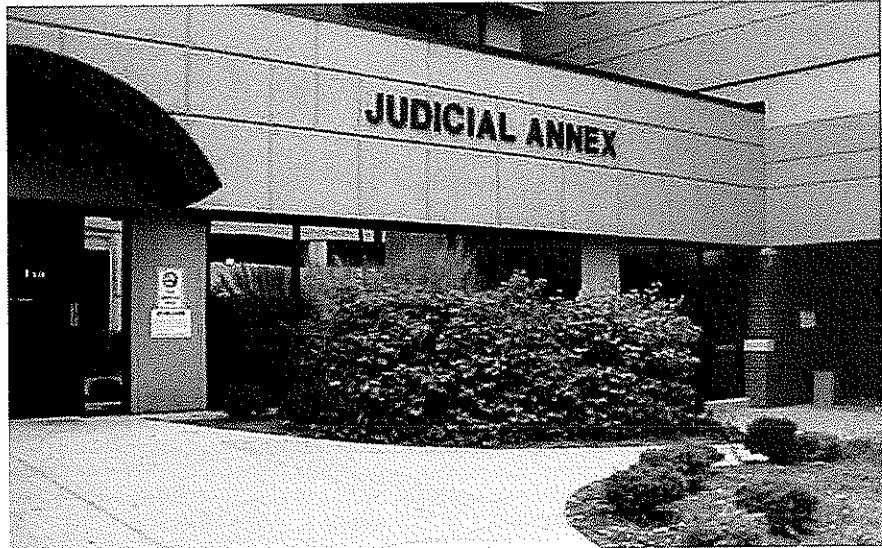
Kanawha County Courthouse Renovation *Charleston, West Virginia*

Client:

Kanawha County Commission
PO Box 3627
Charleston, WV 25336

Design Completion Date:
2005

Construction Cost:
\$9,000,000



Buchart Horn, Inc. was commissioned to prepare an Initial Planning Study, describing immediate and short-term needs; a Comprehensive Plan projected five to ten years into the future; and to design the renovations and additions to the existing Judicial Annex.

The surveys, interviews, analyses, project budgeting, ADA recommendations, and concept were prepared for review by the Judiciary and the Kanawha County Commission.

The project focused on a new entrance, security checkpoint, and lobby to alleviate a very overcrowded situation; renovations to seven courtrooms to improve function and image; renovations to the associated judicial suites to assure proper circulation, functionality, and security; and a building expansion for Juvenile Probation and a newly established Family Court.

Other services provided included vertical transportation planning, security consultation, and technology planning such as video conferencing, data and voice communications, and evidence display systems.

Renovations included seven Circuit Court courtrooms; jury deliberation restrooms; Court Clerks offices and public research area; adult probation offices; Court Administration offices; and all public areas.

Additions included main entrance, security vestibule, and lobby; Voter Registration work room; four Family Court Suites; holding cell; and a central security control room.

Support services and building infrastructures improvements include new and modified HVAC systems, with VAV boxes and controls; complete voice and data wiring systems, including wiring for LAN; new power distribution for clean and normal power; and new lighting systems that complement the computer environment.

Buchart Horn, Inc.

Building security improvements included a central security control room, staffed twenty-four hours a day; security vestibule with screening stations; closed circuit monitoring and card access admission systems; secured private judges suites connected to a private elevator; secured prisoner transfer from sally port to courtrooms; emergency call system from courtrooms, chambers and other public-interface points; and development of a policy and procedure manual. Provisions were made for video monitor use, video projection, palatial recording, and teleconferencing. Emergency call buttons were designed for Judges' bench and Court Clerks' stations were wired for telephone and data connection to other chambers. A central control panel in the Court Clerks' station includes an ADA-compliant sound reinforcement system, public address system, and lighting controls.



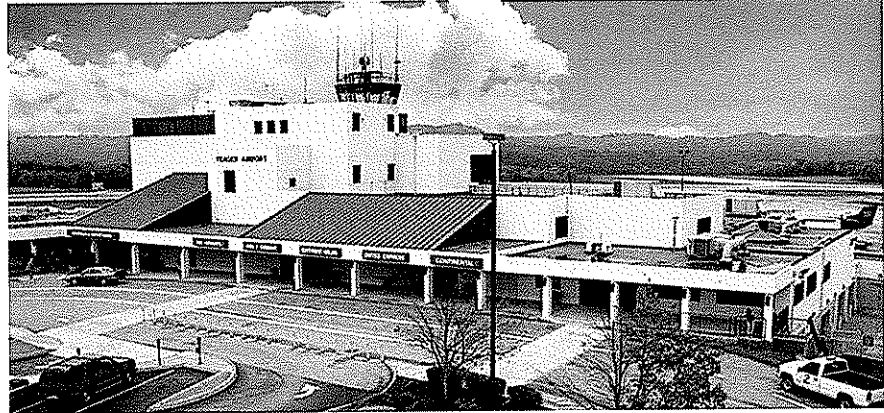
Yeager Airport, Transportation Security Administration Offices Charleston, West Virginia

Client:

Central WV Regional Airport
Authority
100 Airport Road, Suite 175
Charleston, WV 25311-1080

Design Completion Date:
2003

Construction Cost:
\$1,250,000



Buchart Horn was commissioned by the Central West Virginia Airport Authority to design secure administrative offices for the Transportation Security Administration (TSA), a division of the U.S. Department of Homeland Security. The Administration is responsible for airport baggage screening. The offices serve as management offices for the screeners at Yeager Airport, and also as the statewide center for TSA's airport security operations. With an ideal location atop the existing 1950s-era concrete terminal building, the new offices have direct secure access via a new secure elevator. Determining the new location required extensive analysis of the existing structure and sophisticated design to allow the original building to carry the additional load of another floor.

An innovative solution was developed by Buchart Horn to add space on the existing rooftop of the 1940's terminal building. This created much needed office space (4,500 s.f.) immediately adjacent to the airports executive offices, a requirement of the TSA, to allow close coordination of security, paramount in the event of emergencies.

The space is utilized by the General Services Administration for the central offices of the Transportation Security Administration, for their West Virginia operations. The solution includes:

- Biometric and Proximity Security Devices
- Director's and Administrative Offices
- Conference/Emergency Operations Area
- Outside Runway Observation Deck and Interior Runway Observation Bridge
- Secure Private Elevator
- Training Areas
- I.T. Room
- Kitchenette and Breakroom

The project also included modifications to other existing spaces for ADA and sprinkler as well as adding HVAC to certain areas.

Marshall University, Old Main Auditorium Renovation Huntington, West Virginia

Client:

Marshall University
2nd Floor, Sorrell Maintenance
Bldg.
20th Street & 3rd Avenue
Huntington, WV

Design Completion Date:
2004

Construction Cost:
\$864,700



Marshall University's challenge was a need for more administrative space than the available facilities in the historic Old Main building, which is on the National Register of Historic Places, could provide. Buchart Horn/BASCO Associates' challenge was to design for constructing four floors of new office space within the 110-year-old auditorium while preserving its external appearance, walls, and roof structure.

With careful application of new steel structure inside, and by adjusting floor and ceiling heights to adapt to the building's window wells and atriums, we were able to provide 14,400 square feet of new administrative space and, through modifications to underutilized space, add 4,800 square feet of premium office space.

The existing auditorium was stripped of its stage, proscenium arch, sloped timber-frames floor, and suspended balcony to accommodate new interior steel framing; only the existing exterior brick walls and substantial roof framing systems were retained. New internal steel columns and concrete footings supported the vast majority of the new framing and concrete deck floor loads. Floor framing was typically cantilevered to the existing walls, but only lateral attachments were made to these walls. The design was governed by the need to minimize the lengths and weights of individual steel members due to the difficulty of installation through side windows.

The project included structural construction drawings after the asbestos and lead-based paint removal portions of the work were finished and the University approved phasing and budgeting.

Preston County Administrative and Judicial Facilities Space Needs Analysis and Design Kingwood, West Virginia

Client:

Preston County Commission
101 W. Main Street
Kingwood, WV

Design Completion Date:
2005

Construction Cost:
\$500,000



Faced with overcrowding and paying rent to house County functions and in an effort to streamline their operations and serve their community more efficiently, Preston County hired Buchart Horn to perform a space needs analysis and a facilities inventory and assessment of their current facilities; as well as perform a feasibility study for remodeling a former bank building across from their courthouse into a County Administrative Office building.

Buchart Horn's analysis and feasibility study provided convincing evidence that this was indeed feasible and would be financially beneficial to the County for several reasons: the County would no longer have to rent space as all functions could be accommodated on County property; administrative offices which were currently scattered over 3 1/2 floors, could be located adjacent to each other on one floor. This alone would greatly reduce the amount of duplicate files, printers and storage necessary to fulfill their tasks as well as potentially eliminate needs for additional staff in the short term. Not to mention that the renovated modernized offices would be designed for their respective functions instead of 'making-do' with existing space. With unanimous approval, Buchart Horn was asked to continue into making the necessary modifications to the buildings.

West Virginia Department of Administration, In-Depth Inspection/Repair Design, State Capitol Parking Garage

Charleston, West Virginia

Client:

West Virginia Department of
Administration
General Services Division
Building 1, Room MB 60
1900 Kanawha Boulevard East
Charleston, WV 25305

Design Completion Date:
2008

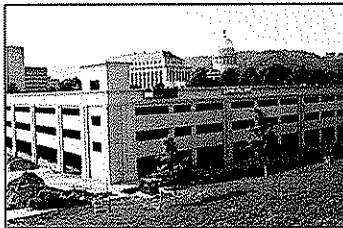
Project Cost:
\$383,255



Buchart Horn is providing repair/refurbishment investigation services on the Capitol Campus Parking Garage (Phase I) and preparing proposals and contract documents for upgrades to the fire detection and protection systems and other modifications that may be appropriate (Phase II). At this time, the scope of work is limited to the investigative phase of the entire 250,000 s.f.- garage (780 spaces with 2 elevated decks) and preparation of a repair guidance document with order-of-magnitude costs. Phase I tasks include:

- Pre-Investigation Coordination
- Site Investigation, including inspection of concrete surfaces; spalled areas; cracks; underside deficiencies; efflorescence; rusted reinforcement, and similar defects. Also included are weld inspection, location of exposed prestressing tendons; determining the scope of sealant replacement, sealant testing, maintenance, and available warranty programs; as well as investigation of the electrical, mechanical, and plumbing systems.
- Compilation of Information
- Investigation Report
- Owner Review

Buchart Horn completed the investigation and report phase, and have since been hired to prepare construction and bidding documents for repairs and maintenance.



References

Buchart Horn encourages the West Virginia Division of General Services to contact the references listed below concerning our ability to undertake and complete similar projects on time and within budget.

1. Mr. Richard Atkinson, III, Airport Director
Central West Virginia Regional Airport Authority
100 Airport Road, Suite 175
Charleston, WV 25311
(304) 344-8033

2. Mr. F. Scott Mason, PE, Engineering Manager
West Virginia Department of Administration
General Services Division
Building 1, Room MB 60
1900 Kanawha Boulevard East
Charleston, WV 25305
(304) 558-0897

3. Mr. Paul Davis, General Manager
Tri-State Transit Authority
PO Box 7965
1120 Virginia Avenue, West
Huntington, WV 25704-1618
(304) 529-6094

4. Mr. Michael Gossert, Township Manager
Hampden Township
230 South Sporting Hill Road
Mechanicsburg, PA 17050
(717) 761-0119

5. Mr. H. Edward Black, Commissioner
Lower Allen Township
Municipal Services Center
2233 Gettysburg Road
Camp Hill, PA 17011
(717) 975-7575



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:
 GSD096410

PAGE:
 1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
 KRISTA FERRELL
 304-558-2596

RFQ COPY
 TYPE NAME/ADDRESS HERE

Buchart Horn, Inc.
 400 Tracy Way, Suite 110
 Charleston, WV 25311

DEPARTMENT OF ADMINISTRATION
 GENERAL SERVICES DIVISION
 JOBSITE
 SEE SPECIFICATIONS

304-558-2317

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
09/04/2008				

BID OPENING DATE: 09/25/2008 BID OPENING TIME 01:30PM

LINE	QUANTITY	UQF	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	JB		906-07		
<p>A&E SERVICES TO DESIGN RENOVATIONS TO THREE BLDGS</p> <p>EXPRESSION ON INTEREST</p> <p>THE WEST VIRGINIA PURCHASING DIVISION FOR THE AGENCY, THE WEST VIRGINIA DIVISION OF GENERAL SERVICES IS SOLICITING EXPRESSIONS OF INTEREST FOR ARCHITECTURAL AND ENGINEERING SERVICES TO RENOVATE THREE EXISTING OFFICE BUILDINGS LOCATED IN KANAWHA COUNTY, WEST VIRGINIA PER THE ATTACHED SPECIFICATIONS.</p> <p>TECHNICAL QUESTIONS CONCERNING THIS PROJECT MUST BE SUBMITTED IN WRITING TO KRISTA FERRELL IN THE WEST VIRGINIA PURCHASING DIVISION VIA FAX AT 304-558-4115 OR VIA EMAIL AT KRISTA.S.FERRELL@WV.GOV. DEADLINE FOR ALL TECHNICAL QUESTIONS IS TUESDAY, SEPTEMBER 16, 2008 AT THE CLOSE OF BUSINESS. ALL TECHNICAL QUESTIONS RECEIVED, IF ANY, WILL BE ANSWERED BY ADDENDUM AFTER THE DEADLINE.</p> <p>QUESTIONS CONCERNING THE PROCESS BY WHICH A VENDOR MAY SUBMIT AN EXPRESSION OF INTEREST TO THE STATE OF WV ARE NOT CONSIDERED TO BE TECHNICAL QUESTIONS AND MAY BE SUBMITTED AT ANY TIME PRIOR TO THE EOI OPENING DATE AND IN ANY FORMAT.</p> <p>EXHIBIT 10</p> <p>REQUISITION NO.: GSD096410</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS			
SIGNATURE <i>Kenneth D. Bynum</i>	TELEPHONE (304) 346-1127	DATE September 25, 2008	
TITLE Regional Manager	FEIN 23-1498326	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:
 GSD096410

PAGE:
 2

ADDRESS CORRESPONDENCE TO ATTENTION OF:
 KRISTA FERRELL
 304-558-2596

RFQ COPY
 TYPE NAME/ADDRESS HERE

VENDOR

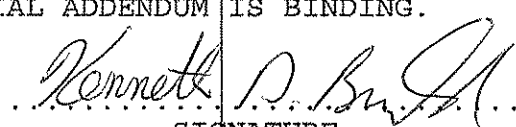
Buchart Horn, Inc.
 400 Tracy Way, Suite 110
 Charleston, WV 25311

SHIP TO

DEPARTMENT OF ADMINISTRATION
 GENERAL SERVICES DIVISION
 JOBSITE
 SEE SPECIFICATIONS

304-558-2317

DATE PRINTED	TERMS OF SALE	SHIP VIA	FOB	FREIGHT TERMS
09/04/2008				
BID OPENING DATE: 09/25/2008		BID OPENING TIME 01:30PM		

LINE	QUANTITY	UQP	CAT NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
ADDENDUM ACKNOWLEDGEMENT						
I HEREBY ACKNOWLEDGE RECEIPT OF THE FOLLOWING CHECKED ADDENDUM(S) AND HAVE MADE THE NECESSARY REVISIONS TO MY PROPOSAL, PLANS AND/OR SPECIFICATION, ETC.						
ADDENDUM NO. S:						
NO. 1 . . . ✓						
NO. 2						
NO. 3						
NO. 4						
NO. 5						
I UNDERSTAND THAT FAILURE TO CONFIRM THE RECEIPT OF THE ADDENDUM(S) MAY BE CAUSE FOR REJECTION OF BIDS.						
VENDOR MUST CLEARLY UNDERSTAND THAT ANY VERBAL REPRESENTATION MADE OR ASSUMED TO BE MADE DURING ANY ORAL DISCUSSION HELD BETWEEN VENDOR'S REPRESENTATIVES AND ANY STATE PERSONNEL IS NOT BINDING. ONLY THE INFORMATION ISSUED IN WRITING AND ADDED TO THE SPECIFICATIONS BY AN OFFICIAL ADDENDUM IS BINDING.						
 SIGNATURE						
Buchart Horn, Inc. COMPANY						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>Kenneth D. Buchart</i>	TELEPHONE (304) 346-1127	DATE September 25, 2008
TITLE Regional Manager	FEIN 23-1498326	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
 GSD096410

PAGE
 3

ADDRESS CORRESPONDENCE TO ATTENTION OF
 KRISTA FERRELL
 304-558-2596

RFQ COPY
 TYPE NAME/ADDRESS HERE

VENDOR
 Buchart Horn, Inc.
 400 Tracy Way, Suite 110
 Charleston, WV 25311

SHIP TO
 DEPARTMENT OF ADMINISTRATION
 GENERAL SERVICES DIVISION
 JOBSITE
 SEE SPECIFICATIONS

304-558-2317

DATE PRINTED	TERMS OF SALE	SHIP VIA	FOB	FREIGHT TERMS
09/04/2008				

BID OPENING DATE: 09/25/2008 BID OPENING TIME 01:30PM

LINE	QUANTITY	UQP	QAT NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
September 25, 2008 DATE						
REV. 11/96						
BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THIS CONTRACT MAY BE DEEMED NULL AND VOID, AND TERMINATED WITHOUT FURTHER ORDER.						
NOTICE						
A SIGNED PROPOSAL MUST BE SUBMITTED TO:						
DEPARTMENT OF ADMINISTRATION PURCHASING DIVISION BUILDING 15 2019 WASHINGTON STREET, EAST CHARLESTON, WV 25305-0130						
THE EOI SHOULD CONTAIN THIS INFORMATION ON THE FACE OF THE ENVELOPE OR THE EOI MAY NOT BE CONSIDERED:						
SEALED EOI						
BUYER:-		KRISTA FERRELL-FILE 21				
EOI. NO.:		GSD096410				
EOI OPENING DATE:		09/25/2008				

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>Kenneth D. Burgh</i>	TELEPHONE (304) 346-1127	DATE September 25, 2008
TITLE Regional Manager	FEIN 23-1498326	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
 GSD096410

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 4

ADDRESS CORRESPONDENCE TO ATTENTION OF:
 KRISTA FERRELL
 304-558-2596

VENDOR

RFQ COPY
 TYPE NAME/ADDRESS HERE
 Buchart Horn, Inc.
 400 Tracy Way, Suite 110
 Charleston, WV 25311

SHIP TO

DEPARTMENT OF ADMINISTRATION
 GENERAL SERVICES DIVISION
 JOBSITE
 SEE SPECIFICATIONS
 304-558-2317

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS		
09/04/2008						
BID OPENING DATE: 09/25/2008		BID OPENING TIME 01:30PM				
LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
EOI OPENING TIME: 1:30 PM PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY TO CONTACT YOU REGARDING YOUR EOI: (304) 346-7295 ----- CONTACT PERSON (PLEASE PRINT CLEARLY): Kenneth D. Bryant, Jr., PE, PS ----- ***** THIS IS THE END OF RFQ GSD096410 ***** TOTAL: _____						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE *Kenneth D. Bryant* TELEPHONE (304) 346-1127 DATE September 25, 2008
 TITLE Regional Manager FEIN 23-1498326 ADDRESS CHANGES TO BE NOTED ABOVE

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

GSD096410

RFQ No. _____

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

VENDOR OWING A DEBT TO THE STATE:

West Virginia Code §5A-3-10a provides that: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate.

PUBLIC IMPROVEMENT CONTRACTS & DRUG-FREE WORKPLACE ACT:

West Virginia Code §21-1D-5 provides that: Any solicitation for a public improvement construction contract shall require each vendor that submits a bid for the work to submit at the same time an affidavit that the vendor has a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the West Virginia Code. A public improvement construction contract may not be awarded to a vendor who does not have a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the West Virginia Code and who has not submitted that plan to the appropriate contracting authority in timely fashion. For a vendor who is a subcontractor, compliance with Section 5, Article 1D, Chapter 21 of the West Virginia Code may take place before their work on the public improvement is begun.

ANTITRUST:

In submitting a bid to any agency for the state of West Virginia, the bidder offers and agrees that if the bid is accepted the bidder will convey, sell, assign or transfer to the state of West Virginia all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the state of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the state of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to the bidder.

I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership or person or entity submitting a bid for the same materials, supplies, equipment or services and is in all respects fair and without collusion or fraud. I further certify that I am authorized to sign the certification on behalf of the bidder or this bid.

LICENSING:

Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agencies or political subdivision. Furthermore, the vendor must provide all necessary releases to obtain information to enable the Director or spending unit to verify that the vendor is licensed and in good standing with the above entities.

CONFIDENTIALITY:

The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures and rules. Vendors should visit www.state.wv.us/admin/purchase/privacy for the Notice of Agency Confidentiality Policies.

Under penalty of law for false swearing (West Virginia Code §61-5-3), it is hereby certified that the vendor acknowledges the information in this said affidavit and is in compliance with the requirements as stated.

Vendor's Name: Buchart Horn, Inc.

Authorized Signature:  Date: September 25, 2008



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:
 GSD096410

PAGE:
 1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
 KRISTA FERRELL
 304-558-2596

RFQ COPY
 TYPE NAME/ADDRESS HERE

Vendor
 Buchart Horn, Inc.
 400 Tracy Way, Suite 110
 Charleston, WV 25311

Ship To
 DEPARTMENT OF ADMINISTRATION
 GENERAL SERVICES DIVISION
 JOBSITE
 SEE SPECIFICATIONS

304-558-2317

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
09/18/2008				

BID OPENING DATE: 09/25/2008 BID OPENING TIME 01:30PM

LINE	QUANTITY	UQP	CAT NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
				ADDENDUM NO. 1		
				THIS ADDENDUM IS ISSUED TO ANSWER ALL TECHNICAL QUESTIONS RECEIVED PRIOR TO THE DEADLINE FOR TECHNICAL QUESTIONS.		
				EOI OPENING DATE REMAINS: 09/25/2008		
				EOI OPENING TIME REMAINS: 1:30 PM		
				***** END ADDENDUM NO. 1 *****		
0001	1	JB		906-07		
				A&E SERVICES TO DESIGN RENOVATIONS TO THREE BLDGS		
				***** THIS IS THE END OF RFQ GSD096410 ***** TOTAL:		

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>Kenneth D. Burt</i>	TELEPHONE (304) 346-1127	DATE September 25, 2008
TITLE Regional Manager	FEIN 23-1498326	ADDRESS CHANGES TO BE NOTED ABOVE

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

GENERAL TERMS & CONDITIONS
REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)

1. Awards will be made in the best interest of the State of West Virginia.
2. The State may accept or reject in part, or in whole, any bid.
3. All quotations are governed by the *West Virginia Code* and the *Legislative Rules* of the Purchasing Division.
4. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division and have paid the required \$125 fee.
5. All services performed or goods delivered under State Purchase Order/Contracts are to be continued for the term of the Purchase Order/Contracts, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods, this Purchase Order/Contract becomes void and of no effect after June 30.
6. Payment may only be made after the delivery and acceptance of goods or services.
7. Interest may be paid for late payment in accordance with the *West Virginia Code*.
8. Vendor preference will be granted upon written request in accordance with the *West Virginia Code*.
9. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
10. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller.
11. The laws of the State of West Virginia and the *Legislative Rules* of the Purchasing Division shall govern all rights and duties under the Contract, including without limitation the validity of this Purchase Order/Contract.
12. Any reference to automatic renewal is hereby deleted. The Contract may be renewed only upon mutual written agreement of the parties.
13. **BANKRUPTCY:** In the event the vendor/contractor files for bankruptcy protection, this Contract may be deemed null and void, and terminated without further order.
14. **HIPAA BUSINESS ASSOCIATE ADDENDUM:** The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, and available online at the Purchasing Division's web site (<http://www.state.wv.us/admin/purchase/vrc/hipaa.htm>) is hereby made part of the agreement. Provided that, the Agency meets the definition of a Cover Entity (45 CFR §160.103) and will be disclosing Protected Health Information (45 CFR §160.103) to the vendor.
15. **WEST VIRGINIA ALCOHOL & DRUG-FREE WORKPLACE ACT:** If this Contract constitutes a public improvement construction contract as set forth in Article 1D, Chapter 21 of the West Virginia Code ("The West Virginia Alcohol and Drug-Free Workplace Act"), then the following language shall hereby become part of this Contract: "The contractor and its subcontractors shall implement and maintain a written drug-free workplace policy in compliance with the West Virginia Alcohol and Drug-Free Workplace Act, as set forth in Article 1D, Chapter 21 of the West Virginia Code. The contractor and its subcontractors shall provide a sworn statement in writing, under the penalties of perjury, that they maintain a valid drug-free work place policy in compliance with the West Virginia and Drug-Free Workplace Act. It is understood and agreed that this Contract shall be cancelled by the awarding authority if the Contractor: 1) Fails to implement its drug-free workplace policy; 2) Fails to provide information regarding implementation of the contractor's drug-free workplace policy at the request of the public authority; or 3) Provides to the public authority false information regarding the contractor's drug-free workplace policy."

INSTRUCTIONS TO BIDDERS

1. Use the quotation forms provided by the Purchasing Division.
2. **SPECIFICATIONS:** Items offered must be in compliance with the specifications. Any deviation from the specifications must be clearly indicated by the bidder. Alternates offered by the bidder as **EQUAL** to the specifications must be clearly defined. A bidder offering an alternate should attach complete specifications and literature to the bid. The Purchasing Division may waive minor deviations to specifications.
3. Complete all sections of the quotation form.
4. Unit prices shall prevail in case of discrepancy.
5. All quotations are considered F.O.B. destination unless alternate shipping terms are clearly identified in the quotation.
6. **BID SUBMISSION:** All quotations must be delivered by the bidder to the office listed below prior to the date and time of the bid opening. Failure of the bidder to deliver the quotations on time will result in bid disqualifications: Department of Administration, Purchasing Division, 2019 Washington Street East, P.O. Box 50130, Charleston, WV 25305-0130

RFQ# GSD096410: EOI for Design of Renovations for South Charleston (324 Fourth Avenue, "Cornerstone" Building (1409 Greenbrier Street, Charleston), and Cassis Building (1615 East Washington Street, Charleston)

Technical Questions & Answers

Question#1: May we visit the individual buildings? If so, who should we contact to make arrangements for these visits?

Answer#1: Only the exterior of the buildings can be visited at this time. No arrangements need made to do so.

Question#2: Have environmental assessments been made, especially as pertain to asbestos-containing materials?

Answer#2: No. These will be done by the Owner, and any subsequent required remediation will also be done by the Owner under separate contract.

Question#3: Site work is not mentioned in the Project Services section of the EOI, yet all three buildings have parking lots. Are any site renovations to be considered for these buildings other than utility connections?

Answer#3: Extensive site work is not anticipated. At this point, the State is primarily concerned with the building renovation. Any site work or repairs required due to utilities, damage during construction or required modifications – such as handicapped accessibility—will be included in the project.

Question#4: Will all three buildings be awarded to one design team or will they be spread among three firms?

Answer#4: It is the intent to award all three buildings to one submitting team. There is no intent to split the project.