



# Plans & Profiles

Quarterly Newsletter from William H. Gordon Associates

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## WHGA Awarded GSA Schedule Contract Service Offerings Include Focus on Homeland Security

WHGA has proven over the last 30 years to be a leader in providing professional consulting services to both our public and private sector clients. Our core services have evolved over the years to meet our clients' needs, address ever-changing regulatory environments, and embrace emerging technologies. In recent years WHGA's service offerings have expanded to include site security consulting, GIS, and 3-D visualization. A highly skilled team of subject matter experts have been assembled to provide these specialized services.

In April of 2006, WHGA was awarded a General Services Administration (GSA) schedule contract to provide the US Federal Government several of these service offerings. The GSA schedule, long-term contract is government-wide and can be used anywhere in the world where the US Federal Government conducts business. The two sections of the GSA Schedule 899 that WHGA were awarded are 899-1 Environmental Planning



Services and Documentation, and 899-7 Geographic Information Services (GIS). Specific services provided by WHGA under each section include the following:

### **GSA 899-1 Environmental Planning Services and Documentation**

- Crime Prevention Through Environmental Design (CPTED) Surveys
- Identification of Threats and Protective Measures to Mitigate Threats
- Vulnerability Assessments
- Watershed Management Plans

WHGA's Site Security Consulting Group provides CPTED Surveys to address Homeland Security issues for existing and proposed facilities. These surveys evaluate

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## A Message from Our CEO



William H. Gordon Associates, Inc.  
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To Our Valued Clients:

Since the founding of William H. Gordon Associates, Inc. (WHGA) in 1976, the company's mission has been to provide value-added professional services associated with the development and redevelopment of properties and facilities. Civil engineering, surveying, landscape architecture, and land planning are the core services provided to our public and private sector clients within our Land Use Practice. In order to meet our clients' needs in an ever-growing geographic market area, WHGA has established full-service offices in Chares Town, WV; Winchester, VA; and Prince William County, VA to augment our regional offices in Chantilly, VA and Leesburg, VA. Our local presence in these markets has been essential to acquiring valuable expertise and achieving a leadership position in the local business community.

WHGA recognizes that our core services must be expanded to meet the changing priorities of today's world and utilize technological advances. This has led to the development of specialized service offerings in recent years to include site security consulting, GIS, and 3D visualization. Additionally, construction management and sub-surface utility engineering are services provided by WHGA through our affiliated companies.

The Site Security Consulting Group, the Geospatial Services Group, the Engineering Services Group, and the Visualization Group are part of WHGA's new Federal Consulting Practice. The creation of the Federal Consulting Practice illustrates our continuing commitment to provide value-added services to our public and private sector clients. I invite you to contact us and explore how these specialized services can address your needs.

Sincerely,

WILLIAM H. GORDON ASSOCIATES, INC.

R. Steven Hulsey, PE  
Chief Executive Officer

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Civil Engineering • Survey • Land Planning • Landscape Architecture  
Site Security Consulting • GIS

# WHGA Awarded GSA Schedule Contract

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the built environment to identify opportunities to incorporate CPTED principles into the site security program for existing and/or proposed facilities. In addition, the Site Security Consulting Group supports Vulnerability Assessments by applying the key principles of CPTED to determine possible mitigation measures for identified threats. These principles focus on the need for: (1) natural surveillance; (2) natural access control; and (3) natural territorial reinforcement.

WHGA's Water Resources staff will apply their expertise to services associated with compilation, analysis and modeling of watershed data in support of the creation of Watershed Management Plans. These environmental planning tools may be utilized in many areas of study, including surface and groundwater quality and quantity; land use planning; floodplain management; and stormwater master plans.

## **GSA 899-7 Geographic Information Services (GIS)**

- 3D Visualization Packages
- Mapping and Cartography
- Data Interpretation
- Site Selection
- Topographic Data

WHGA's GIS services are designed to improve operational efficiency and productivity through the leveraging of all information resources. Our expertise is the collection, storage, retrieval and analysis of GIS data, including creating customized management strategies to meet the client's goals. WHGA's needs analysis services identifies the environmental databases necessary, and the opportunities to integrate with other spatial databases and operational programs. In addition, our survey personnel offer extensive mapping and cartography support services associated with topographic data needs and interpretation. These WHGA support services include the creation of 3D visualization packages.

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# Visualization Group Offers Real World Perspective

## 3D Computer Models Let Clients View Designs Prior to Construction

WHGA's new Visualization Group provides innovative three-dimensional computer graphics utilizing the latest technological tools. These tools allow the visualization staff to convey a design's intent by realistically modeling proposed improvements on actual sites to provide a real world context for evaluation. Clients can use the 3D computer models to communicate design concepts at various stages of the site or facility development. The Visualization Group can produce extraordinary products for many projects types, ranging from detailed artistic renderings to near realistic photo imagery and animation.



*Night time views let clients and designers evaluate the effectiveness of the lighting plan before it is ever installed. This realistic depiction allows placement changes during the design process, saving both time and expense.*

WHGA's Visualization Group breaks away from traditional graphic services to produce 3D computer models which offer opportunities for proactive analysis. Until now, the standard production graphic represented the landform as a flat plane, regardless of topographic relief, and did not offer sufficient opportunities to quickly and easily evaluate options or changes. WHGA's graphic products, however, have the ability to project the improvements onto the actual site, which offers a unique perspective for evaluating mass and scale, color and texture, viewshed and cross section, and a variety of other considerations.

The use of three-dimensional computer modeling gives clients the ability to evaluate the design's effectiveness through "line of sight" analysis. This feature is especially useful where security measures for a facility including cameras, walls, fences, gates, berms, guard posts, and even landscape designs must be analyzed. Project updates are able to be incorporated into new images that represent the design's evolution using much of the original graphic elements.

WHGA has focused its visualization products on supporting the graphic requirements of the land development community, including architects,

developers, builders, owners, and marketing departments. Using superior image quality, artistic creativity, photorealism, and image variety, WHGA's graphic artists can develop shadow studies, composite imagery, perspective studies, interior modeling, 3D floor plans, fly and walk throughs, and other applications that are limited only by the clients' imagination and budget. These services give clients a state-of-the-art tool to effectively communicate their vision not only to the public, but also stakeholders, financiers, and customers throughout the life cycle of the project.

## On the Boards

During the first half of 2006, WHGA has been selected to provide professional services for several significant public and private sector projects, including:

### **US Coast Guard Headquarters**

Washington, DC

Civil engineering services for the proposed USCG Headquarters to be located on the campus of the historic St. Elizabeth's Mental Hospital. The headquarters facility includes approximately 1 million SF of floor space and a separate parking structure. Site planning for the facility will take advantage of the spectacular views overlooking the Anacostia River and the DC skyline. The facility design will also be in accordance with the requirements for Silver LEED certification.

### **Q Street NE Extension and Roadway Plan**

Washington, DC

Civil engineering services for this roadway project located on approximately 4.3 acres in the District of Columbia. WHGA will provide roadway construction plans for the extension of approximately 800 LF of Q Street, N.E. and plans for anticipated associated development infrastructure based on the concept plan for future planned urban development.

### **Heating Operation and Transmission District IDIQ**

Washington, DC

Civil engineering and surveying services for the General Service Administration planned improvements to the steam service system serving many facilities within Washington, DC. The Heating Operation and Transmission District (HOTD) provides high-pressure steam to many federal facilities through a network of tunnels and direct buried piping. WHGA, in conjunction with Bowman-Foster, is providing design for the replacement and upgrade of the steam service to several of the buildings and facilities as the first phase of several planned upgrades to the existing system.

### **FBI Heliport**

Stafford County, VA

Civil engineering and surveying services for the design-build contract of a helicopter hanger upgrade for the FBI Academy at Quantico. To eliminate the potential for conflicts with non-metallic pipes, survey crews working with Mid-Atlantic Utility Locating, LLC utilized Ground Penetrating Radar equipment to map sewer force mains throughout the property.

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# WHGA Engineers Receive DPWES Champion Award

On May 17, 2006, WHGA engineers Harold Rodriguez, P.E. and Laura Miller, P.E. received a Fairfax County Department of Public Works and Environmental Services Champion Award in the Area of Partnering for their contributions in developing the adequate outfall amendments to the Public Facilities Manual (PFM).



*Laura Miller, above, and Harold Rodriguez, below, were recognized for their contributions to the Adequate Outfall Amendment to the Public Facilities Manual.*

The amendment clarifies the extent of downstream review, codifies the shear stress, capacity and the one-year detention methodologies, and revises



drainage divides and notice requirements. The Board made this amendment effective at 12:01am, February 7, 2006. Any submission not approved by August 7, 2006, must comply with the new requirements.

Mr. Rodriguez's efforts in this endeavor continue through his participation in a committee of the Engineers and Surveyors Institute (ESI) that is developing a certified spreadsheet for use by designers and reviewers in order to standardize analysis of storm outfalls from development sites. The spreadsheet will be available on the ESI website in the near future.

For additional information about the Adequate Outfall amendment to the PFM, please visit Fairfax County's Department of Public Works and Environmental Services' website at [www.fairfaxcounty.gov/dpwes](http://www.fairfaxcounty.gov/dpwes).

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# Virginia Amends Professional Architect & Engineer Education Requirements



On April 15, 2006, the Virginia General Assembly approved legislation requiring continuing education for Professionals in Virginia. The Governor signed the law, effective July 1, 2006, requiring the Board for Architects, Professional Engineers, Land Surveyors, Certified Interior Designers and Landscape Architects to announce regulations governing continuing education requirements for architects, professional engineers, and land surveyors.

Regulations will require the completion of 16 hours per biennium of Board-approved continuing education activities as a prerequisite to the renewal or reinstatement of a license issued to an architect, professional engineer, or land surveyor. The bill also provides for waivers of this requirement in cases of certified illness or undue hardship. For more information, please visit [www.state.va.us/dpor](http://www.state.va.us/dpor).

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# Mark Dyck Appointed Seat on Advisory Committee

## Committee to Advise Charles Town on Revisions to Comprehensive Plan

On May 10, 2006, Mr. Mark Dyck, CLA, was appointed to sit on the newly formed Citizens' Advisory Committee for the City of Charles Town, West Virginia. The mayor, Ms. Peggy Smith, appointed all members of the committee, who were chosen to represent a



*Mark Dyck, CLA, was appointed based on his expertise in local Land Planning and as a Charles Town Resident.*

cross section of residents from both the City of Charles Town and Jefferson County, West Virginia. The committee has been tasked with providing the City Council with input on their proposed Urban Growth Boundary and Comprehensive Plan. The goal is for the committee to assess whether the plan adequately addresses the issues facing the city. Mr. Dyck, a senior associate and WHGA's Charles Town office director, was appointed to the committee both as a resident of Charles Town and as a local expert in land planning and development. The committee is comprised of five

citizens from the city and Jefferson County, four representatives from local government agencies, two county commissioners, and two City Council members.

The city is revising its Comprehensive Plan to comply with the new state planning and zoning laws and to create more realistic and effective policies to coordinate development in the Charles Town area. The plan addresses issues such as infrastructure needs, land use patterns, and strategies to save critically sensitive areas before they are developed. The document includes Land Use and Transportation Plans, which address strategies for maintaining adequate levels of service for all city residents that will likely be impacted by future development, and identify new roads that are anticipated to be needed if the areas inside the study area are developed. Furthermore, the plan clearly looks to the development community to pay for the majority of future infrastructure needs in order to minimize financial costs of new development on the community at large.

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# Asia Trail to Open at the National Zoo

The National Zoo is scheduled to open the new Asia Trail in October 2006. This project, which broke ground in April 2004, is the first to open during the Zoo's 10-year renovation project, and the first of three planned phases that highlight Asian animals at the park. The highly awaited Asia Trail spans nearly a third of a mile and makes up almost a quarter of the Zoo's public viewing area, with new exhibits for giant pandas, sloth bears, clouded leopards, fishing cats, giant salamanders, red pandas, and small-clawed otters. WHGA's design for the Asia Trail includes an additional indoor holding area for the pandas, a temperature controlled bamboo

storage facility, an ADA accessible bridge linking the Asia Trail to the Wetlands/Bird House exhibit, and a redesigned pedestrian walkway from Olmsted Walk to the existing Panda Exhibit.

WHGA provided surveying and civil engineering services for numerous infrastructure improvements at the National Zoo. These include the Kids Farm Exhibit, renovation of the Mane Restaurant and adjacent Picnic Pavilion, the Tapir and Bongo Yards, the Australia Exhibit, the Duck Ponds, the Giant Panda House, and the Elephant House. WHGA is also providing utility mapping and modeling services in support of the development of a comprehensive GIS for the park.

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