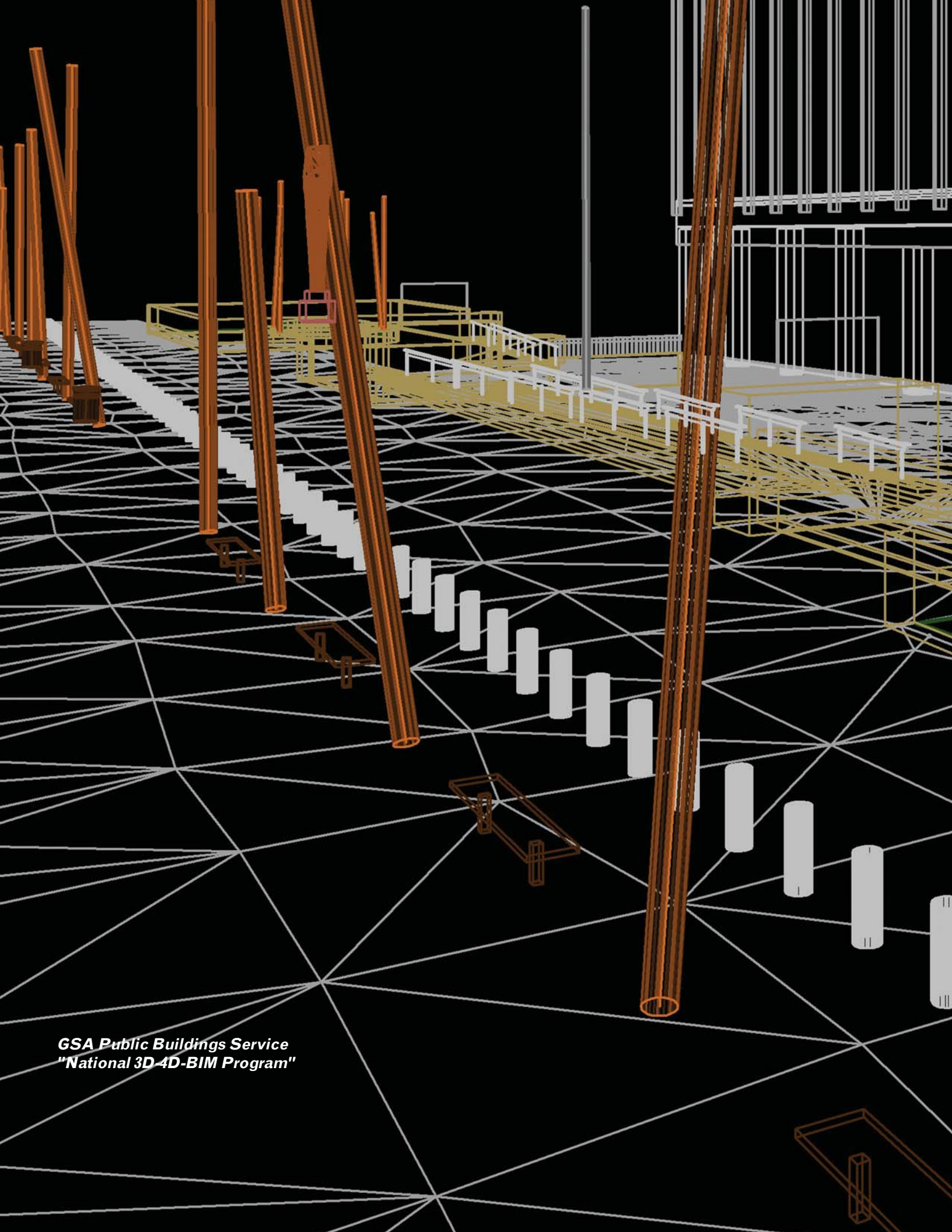




# Real Property Policysite

## Best Practices Special Edition 2007



**GSA Public Buildings Service**  
**"National 3D-4D-BIM Program"**

# Real Property Polycysite Special Edition

## Best Practices in Asset Management and Sustainability: Fall 2007

**T**he Best Practices Special Edition of POLICYSITE is made possible through the collaborative efforts of the General Services Administration's (GSA) Office of Real Property Management and the Federal agencies which participated in the 2007 GSA Achievement Award for Real Property Innovation program.

The Best Practices Special Edition POLICYSITE is an annual publication by the Office of Real Property Management (MP), Office of Governmentwide Policy, GSA, Washington, DC, led by Acting Deputy Associate Administrator, Becky Rhodes. POLICYSITE is produced by the Regulations Management Division, Stanley C. Langfeld, Director and Editor-in-Chief. This year's edition focuses specifically on asset management and sustainability.

For more information about POLICYSITE, contact the Managing Editor: Richard M. Ornburn at [richard.ornburn@gsa.gov](mailto:richard.ornburn@gsa.gov). The co-editor for this edition was Anne Oswald, GSA intern from Cornell University. Graphic design services are provided by GSA's Office of Citizen Services and Communications: Designer - David L. Alexander.

Please visit our website for more information about the Office of Real Property Management and its innovative real estate and workplace initiatives at: [www.gsa.gov/realpropertypolicy](http://www.gsa.gov/realpropertypolicy). ■

### *GSA Award Program Winners:*

- *GSA Public Buildings Service  
"National 3D-4D-BIM Program"*
- *U.S. Department of Justice,  
Federal Bureau of Prisons  
"Greening Prisons"*

[www.gsa.gov/realpropertypolicy](http://www.gsa.gov/realpropertypolicy)

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## A Message from Becky Rhodes Acting Deputy Associate Administrator for Real Property Management

The U.S. General Services Administration (GSA) is proud to advocate world-class innovation and leading practices in Federal asset management and sustainability. We originally established the GSA Achievement Award for Real Property Innovation in 1997 to serve as a catalyst for all Federal agencies to improve real property management in the Government.

Since its inception, the program has attracted hundreds of unique ideas from the entire Federal real property community. Ideas submitted cover a wide spectrum of real property areas, including business practices, asset management and planning, customer service, information systems, performance measures, security, sustainability, telework and workforce/human capital strategy.

For our eleventh year of the program, we focused on two specific topic areas for the awards program: Asset Management and Sustainability. We are pleased to present the practices submitted for this year's program in the Best Practices Special Edition of Real Property Polycysite.

Sharing your proven strategies, new approaches and creative ideas in real property asset management and sustainability is a winning step to enhancing the stewardship of Federal real property and supporting our Administration's goals.

You can get more information about this exciting award program and the best practices submitted by checking out our website at: [www.gsa.gov/realpropertypolicy](http://www.gsa.gov/realpropertypolicy) and clicking on "Award Program" and "Best Practices."

Please contact Award Program coordinator, Shirley Morris, at (202) 501-1145 or by e-mail to [shirley.morris@gsa.gov](mailto:shirley.morris@gsa.gov), with any questions on the award program.



Becky Rhodes

# 2007 GSA Achievement Award for Real Property Innovation

## Winning Entries

### Asset Management

#### WINNER

##### *GSA National 3D-4D-BIM Program*

U.S. General Services Administration, Public Buildings Service (PBS)

#### FINALIST

##### *Army Enhanced Use Leasing Program and Case Study – Yuma Proving Grounds, AZ*

U.S. Army Corps of Engineers

##### *USDA Forest Service Conveyance Program*

U.S. Department of Agriculture (USDA)

#### SPECIAL ACHIEVEMENT

##### *Armed Forces Retirement Home - RFP*

U.S. General Services Administration, PBS National Capital Region

### Sustainability

#### WINNER

##### *Greening Prisons*

U.S. Department of Justice, Federal Bureau of Prisons

#### SPECIAL ACHIEVEMENT

##### *A Demonstration of Low Impact Development by the U.S. EPA at Federal Triangle, Washington, DC*

U.S. Environmental Protection Agency (EPA)

##### *Byron G. Rogers Federal Courthouse Renovation*

U.S. General Services Administration, PBS Rocky Mountain Region

##### *Green Building Leads Economic Resurgence*

U.S. Department of Commerce, National Oceanic and Atmospheric Administration

##### *New England Solar: It's the Right Thing to Do*

U.S. General Services Administration, PBS New England Region

## 1. Architect of the Capitol

### *Integration of Facility Condition Assessments, Master Plans, and Capital Improvements Programming*

# A-11-07

**T**he U.S. Capitol Complex has been evolving for over two hundred years, beginning with the completion of the Capitol building in 1800. Since then, numerous facilities have been added under the jurisdiction of the Office of the Architect of the Capitol (AOC). The AOC is now responsible for maintaining the nearly fifteen million square feet of space on close to four hundred acres of land. The Capitol Complex has been in continuous operation since its construction and poses many unique challenges for its efficient operation, management and preservation. The AOC must succeed in this mission to assure transparent and continuous Congressional and Supreme Court operations.

As the Complex ages, the deferred maintenance, capital renewal, capital improvement, expansions and/or reconfigurations become critical to the continued success of the facilities' ability to support Congress and the Court. Until several years ago, data about the facilities was kept in various forms and locations, but a comprehensive database using a consistent lexicon that also reflected current information about the conditions of the facilities did not exist.

Prior to 2003, the Office of the Architect of the Capitol did not have a formalized Program Development Process, nor had it produced a Capital Improvement Plan (CIP) as a byproduct of such a process. >>>

*As this is being accomplished, and the cycles of providing information to Congress are becoming routine, the care and maintenance of the Capitol Complex is transcending individuals, and institutional processes are assuring continuity, anticipation of life cycle facilities requirements and adequate lead time for financial planning.*





>>> Projects and associated funding requests changed dramatically from year to year, leaving Congress without a clear vision of the AOC's long range capital requirements and priorities. As a result, the Architect was directed by Congress to establish a Program Planning Process and associated 5-year CIP.

Development of the component parts of this Program Planning Process, including new facilities management, project development and budget development processes, began several years ago. Since the start of the initiative, a cycle has been established for assembling project

nominations, assessing priorities, synchronizing the annual capital programs with the Capitol Complex Master Plan (CCMP) and completing the budget process. Integration of these data-driven sources has led to an increased confidence in the capital project information as it moves through the Congressional appropriations process, using the systems and source documents to produce objective, defensible budget requests.

Transforming the basic information resources available to the management and staff of the AOC is met as these tools and methodology are infused in the facilities

management culture at the AOC. Training and deliberate change management techniques are aiding to adopt the new methods. ■

### **CONTACT**

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## 2. Peace Corps

### *Platform for Peace Corps Capital Assets Management*

# A-14-07

**P**ease Corps recognized the need for the development of a division of Overseas Building Operations (OBO) two and a half years ago. The need was self-evident--there were no systems and never had been any systems that identified our capital assets in any one department or agency.

Its development from conception to a fully developed office, made it capable of not only recognizing the assets, their locations, their value and expenditures, and of acting in compliance with all Federal, presidential, and internal program divisions.

Initially, this required the development of an OBO database to store, manage, and monitor information on all overseas capital assets. This database allows OBO

to advise and to act in accordance with all internal and Federal agencies' information requirements. The work of OBO since its birth has had a significant impact on the agency's budget and allocation procedures, in conjunction with Federal agencies and laws, which impact the overall allocation to Peace Corps. OBO impacts, manages, and monitors approximately \$13 million of assets worldwide, a significant percentage of the overall Peace Corps budget.

#### **CONTACT**

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*“This database allows OBO to advise and to act in accordance with all internal and Federal agencies' information requirements.”*

### 3. U.S. Army Corps of Engineers

**Finalist**

#### *Army Enhanced Use Leasing Program and Case Study - Yuma Proving Grounds*

# A-12-07

ASSET MGMT

#### *Yuma Proving Grounds*



**T**he Army's Enhanced Use Leasing (EUL) Program is conducted under the authority provided in the National Defense Authorization Act for Fiscal Year 2001, which was enacted into law as

Pub. L. No. 106-398. An EUL is an opportunity for the Army to capitalize on non-excess real property assets by leasing these assets to private entities. EUL is an innovative business practice the Army is implementing to return value to its Soldiers and the American taxpayer. Military installations benefit from EUL by avoiding infrastructure costs, accepting a variety of facilities and services as in-kind consideration, and collecting cash rent to fund other Army real property requirements.

Under the forward-thinking and indefatigable Army EUL Team, the Army's EUL program has blossomed. About sixty EUL projects across the country have been initiated. Four EUL leases were signed last year. It is anticipated that the Army will receive through just the five currently executed EUL leases consideration, valued presently, in excess of \$215,000,000, for leasing property appraised at a total of \$46,000,000. Eleven other EUL projects have developers selected and are currently negotiating Leasing and Management Plans. Over thirty projects are currently in the project identification and concept development phase. EUL projects are diverse, ranging from typical mixed-use development to co-generation utility plants to laboratory and industrial buildings. They can be critical to the Global War on Terrorism. >>>

>>> The growth of the program is enabled by the team's innovative, efficient and economical procedures and practices. Essential requirements for the success of the program were determined to be communications management and community involvement. The lease development process was transformed. Developers are selected based on their qualifications and then contribute their expertise to development of the project. The developer is responsible to pay a transaction fee at the closing of a lease that reimburses the EUL team's and its consulting contractor's costs. Review of complex leases is conducted concurrently and limited to thirty days. Escrow accounts are established by the developer to improve the flexibility and management of in-kind services.

An exciting example of an Army EUL project is situated at Yuma Proving Grounds (YPG), AZ. YPG is the DOD Reliance Lead for Hot Weather testing of vehicles. YPG has a critical capability shortfall. Only one paved test course, constructed in the 1950s and badly deteriorated, exists. The Army has entered into an EUL

lease with General Motors Corporation (GM) that will create a world class "Hot Weather Test Complex" at YPG. Construction of this complex will provide a full spectrum of Hot Weather testing capabilities for all the Army's current vehicles, as well as those anticipated for the future. The Army will have access to the courses that will be constructed by GM. The value of this use is estimated to be \$26.8 million to the Government. GM's in-kind consideration of \$10.6 million, deposited in an Escrow Account, could fund construction of a new Army high-speed, dual-lane paved Oval Test Track, 4+ Miles in length, which will accommodate the Army's tracked and heaviest wheeled vehicles. ■

#### **CONTACT**

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## 4. U.S. Department of Agriculture

### *Agricultural Research Service (ARS) Asset Management Program*

# A-7-07

The Agricultural Research Service (ARS) in the U.S. Department of Agriculture recognized the need to adopt a structured, performance-based, long range facility planning approach to better manage the Agency's extensive inventory of real property assets and capital investments. Accordingly, ARS has been aggressive in Asset Management in the last few years.

Specific accomplishments include:

- Facility assessments and parametric estimates to meet Federal Real Property Council (FRPC) Guidance. ARS has also gone beyond FRPC requirements by estimating recapitalization, and 5-year and 10-year annual averages for maintenance and repair (sustainment).
- Improvements to the Real Property inventory. ARS has been the leader at USDA in understanding and using >>>

The screenshot shows the ARS website home page. At the top, there's a navigation bar with 'Home', 'About ARS', 'Help', 'Contact Us', and 'En Español'. Below that is a search bar and a 'Printable Version' link. The main content area features a 'Welcome to the Agricultural Research Service' message, a list of bullet points about their research, and a 'Spotlights' section with two featured articles: 'Virus link to vanishing bees' and 'Humble spuds are nutrient rich'. On the left, there's a 'Search' box and a 'Browse By Subject' menu. On the right, there's an 'I Want To...' section with various links like 'Find an ARS location' and 'Find a person'. The bottom of the page has a purple banner with the text 'Asset Management' and 'Real Property Polycysite'.

Asset Management

Real Property Polycysite

> > > the USDA Corporate Property Automated Information System (CPAIS). As a result, ARS has a complete and accurate real property inventory, reporting “no gaps” since December 2006.

- ARS Facilities Division (FD) reorganization in April 2005. As a result of this reorganization, two deputy directors were established, Design and Construction, and Asset Management. Broadly speaking, the Design and Construction position assumed responsibility for the Engineering and Contracting functions within FD, and the Asset Management position assumed responsibility for Real Property, Space Management, Safety, Health, and Environmental Management, as well as special programs including implementation of E.O. 13327 - Real Property Asset Management.
- ARS' state of Asset Management. One of the first items that ARS completed because of E.O. 13327 was the ARS Building Block Plan

(BBP). The BBP documents the “as-is” state of Asset Management within ARS and is updated annually.

- Capital Planning. Accordingly, the ARS 5-Year Capital Projects and Repair Plan (CPRP) incorporates performance measures and other requirements supporting the goals and objectives of E.O. 13327, USDA Asset Management Plan (AMP), ARS BBP, and the ARS Strategic Plan. Effective fiscal year 2007, each proposed facility project costing \$25,000 and above shall be reviewed and approved by the appropriate Asset Management Review Board (AMRB).
- Capture Operation and Maintenance (O&M) costs by asset. A team was convened to develop a strategy for capturing costs by asset. This team included headquarter, area, and location personnel; and administrators, facility managers, and financial type personnel. As a result, a

policy was written to define O&M costs and provide direction for capturing them separately in the official accounting system.

- Executive Steering Committee. ARS has established an Executive Steering Committee for Asset Management to oversee the implementation of the program within ARS. One of the first charges to the steering committee was to develop a charter and task a sub team to address roles and responsibilities and to propose changes to these roles and responsibilities to align with new requirements because of E.O. 13327 and FRPC Guidance.

## **CONTACT**

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**Finalist**

## *USDA Forest Service Conveyance Program*

*# A-13-07*

**T**he Forest Service Facility Realignment and Enhancement Act of 2005 (P.L. 109-54) provided the Forest Service limited duration authority to convey an unlimited number of

administrative sites and retain the proceeds for building maintenance, rehabilitation, and construction. In fiscal year 2006, nationally conveyance proceeds provided \$34 million to eliminate critical health and safety issues and to right-size the Agency's infrastructure to meet its evolving mission and organizational structure. The Agency estimates the authority will generate proceeds of \$100 million or greater over its duration.

The authority is novel within the Federal government because the Agency can retain one hundred percent of the proceeds to fund its administrative infrastructure program and fund the cost of processing conveyance projects. The ability to retain all of the conveyance proceeds provides a significant incentive to local managers to actively manage the infrastructure portfolio for efficiency, public service, and employee health and safety. Additionally, the authority will help the Agency lower the long-term cost structure of providing administrative infrastructure. For example, the Agency is currently leasing many administrative buildings because it does not have adequate appropriated funds to construct buildings in all locations where ownership is the lowest cost alternative to government. The conveyance proceeds are being used to construct buildings in many >>>



*USDA Forest Service Red Rock  
Facility Construction*

**Asset Management**

**Real Property  
Policysite**

***“The Agency estimates the authority (the Forest Service Facility Realignment and Enhancement Act) will generate proceeds of \$100 million or greater over its duration.”***

>>> high cost lease areas to lower the cost to government and preserve the Agency’s appropriated funds for natural resource programs. Conveyance funds are also important for consolidation of district offices, many of which were constructed in close proximity before efficient communication and transportation infrastructure was available.

The Red Rock Ranger Station facility development project illustrates the benefit the Forest Service’s unique conveyance authority provides. Originally constructed in the early 1900’s, the Sedona Ranger Station of the Coconino National Forest in Arizona was a remote outpost in an area frequented only by local ranchers on horseback. In recent years the facility had been surrounded by the skyrocketing growth of the Sedona community and is now hidden down narrow roads that are difficult to reach from the major highways. Public service has suffered as the facility has become harder to locate and visit; the Ranger Station was no longer able to

effectively or efficiently meet the resource management or customer service needs of the growing community.

The cost of constructing a new facility that could meet public service needs was beyond the reach of the forest budget, and competition for limited regional capital investment dollars was intense. The Forest decided to use conveyance

authority to competitively sell the existing facility and associated property on the open market. The sale generated \$8.4 million to construct a new facility and improve the condition of many other facilities on the Forest. The improvement to public service, employee health and safety, and the condition of the asset portfolio was achieved. ■

#### **CONTACT**

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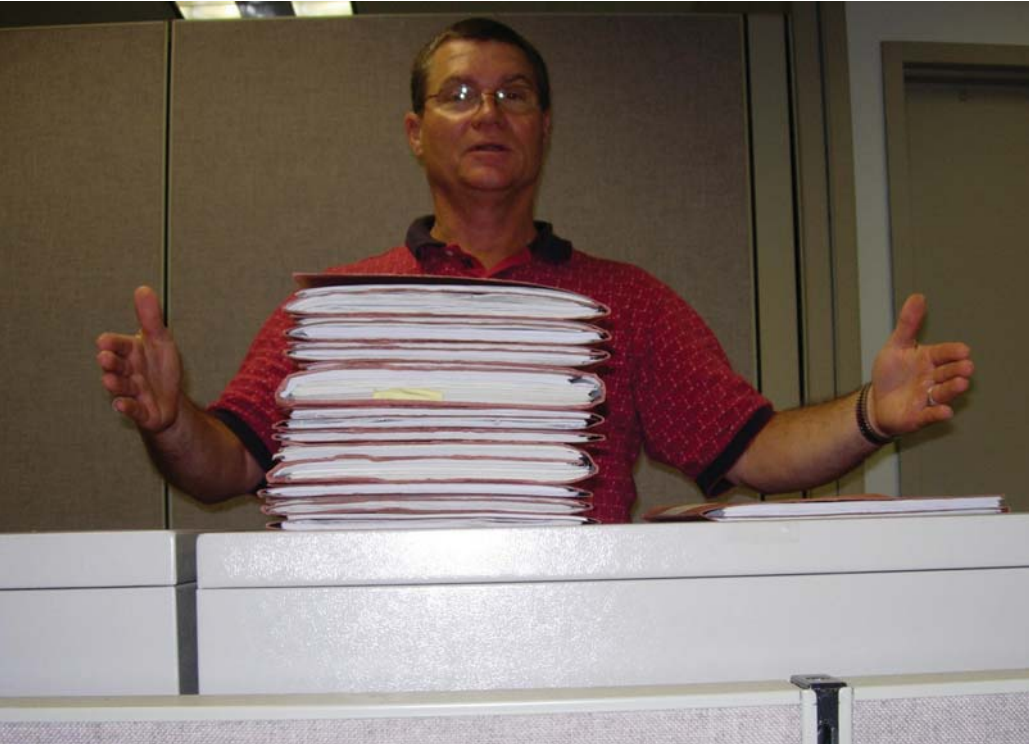


## 5. U.S. Department of the Air Force

### *Consolidation of 11 Credit Union Licenses*

*#A-3-07*

*Lackland Air Force Base  
associate shows change from  
eleven licenses to one.*



**T**he Real Property Office at Lackland AFB is always looking for ways to improve the current system. When it came to their attention that one of the Credit Unions on base had 11 separate

licenses for its automated teller machines, the Real Property Office was spurred into action.

Through scrupulous planning and effective communicating to all parties, the team was able to consolidate all eleven licenses into one license package despite differences in beginning and expiration dates. This initial leg-work will now provide a stream-lined process for years to come.

Consolidation of Real Estate instruments could very well become a new way of doing business in the Real Property arena. As multi-year licenses reach the end for renewal, the opportunity is there to realize the benefits of consolidation into only one license.

In this particular case, a complex, duplicative process was simplified and a more efficient and concise process was created. No matter how small the consolidation may seem on the surface, it will create savings that add up over time with repetitive efforts. ■

#### **CONTACT**

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*U.S. Department of the Air Force*

*37th Civil Engineer Squadron*

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#### **Project Benefits:**

- *The consolidation saved an estimated 352 workhours a year!*
- *In monetary terms that is \$10,135.84 per year!!*

## 6. U.S. Department of the Interior

### *Data Management for Real Property Reporting and Beyond*

# A-4-07

*Do you want to do these benefits for your agency? Paperwork is reduced. Reporting time is enhanced. Data accuracy is improved. And all records are merged into one location nationwide?*

**T**hen check out what the National Park Service (NPS) has developed for its portfolio. It is an innovative process using an in-house team that included partners and contractors that automates the Federal Real Property (FRP) reporting through a single, existing Service-wide asset management database that leverages the power of existing data, updates data for both systems

seamlessly and certifies Federal real property constructed asset data accuracy. The team initiated a new computer application within the Facility Management Software System (trade name Maximo®) that allows for consistent, verifiable data collection. The FRP information application also consolidates additional data elements beyond the Federal Real Property reporting requirements that provide a means to make further management decisions.

A number of the 24 FRP data elements are derived from other data sources, such as Asset Priority Index (Mission Dependency Index) ratings and the Federal Financial System. Because the Federal real property data now resides in the 'live' FMSS environment, which allows park personnel and NPS real property managers to easily review, manage, and update Federal real property data, paperwork is reduced, reporting time is enhanced, data accuracy is improved and all records are merged into one location nationwide. These factors increase the efficiency, effectiveness, productivity and records management functions of Federal real property in the NPS.

Other benefits of the FRP information application that have alleviated challenges in asset management include the following:

- Provides a single location for Federal real property and asset-level data making data easier to obtain;
- Allows FMSS users to query asset and Federal real property information easily making FRP data easily accessible and usable;
- The database is compatible with the Departmental Financial and Business Management System (FBMS) and the single Facility Maintenance Management System (FMMS) database guidelines.

Data required in FRP is also used in the Park Asset Management Plan (PAMP) assuring data accuracy. Parks capture and maintain information that will address the performance measures required by EO 13327 including Utilization, Condition Index, Mission Dependency and Annual Operating Costs. ■

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## 7. U.S. General Services Administration, Public Buildings Service

Special  
Achieve  
ment

*Armed Forces Retirement Home - RFP*

*#A-9-07*

*Public Buildings Service National Capital Region*

ASSET MGMT

The Armed Forces Retirement Home (the Home or AFRH) was established in 1851 as an independent agency to provide services to eligible members of the Armed Forces. In recent years, the Home's financial situation began to steadily deteriorate. To remedy the problem, the National Defense Authorization Act of 2002 granted AFRH the authority to sell or lease its excess property, and then use any proceeds for its operating trust fund.

After an intensive search for the best team to lead the redevelopment planning effort, AFRH selected GSA PBS NCR's (National Capital Region) Real Property Disposal Division (WPR). In most projects of this magnitude, GSA typically serves as both owner and manager. However, the AFRH project is unique; for it, WPR serves as the redevelopment project manager in a consulting role.

WPR began by completing a strategic analysis of alternatives and initiating a two-phase competitive process to select entities to

undertake the redevelopment. During the first phase, a Request for Qualifications (RFQ) to solicit qualifications and proposals, AFRH identified three highly qualified development entities. Then in the second phase a Request for Proposals (RFP) was issued to the three most qualified developers.

GSA incorporated several innovative practices into the RFP evaluation process, one of which was the use of the Analytical Hierarchy Process (AHP) for the actual RFP evaluation process. The AHP is a powerful decision-making process that reduces complex multi-criteria decisions to a series of one-on-one comparisons. It helps capture both subjective and objective evaluation measures, provides a useful mechanism for checking the consistency of the evaluation measures and reducing bias in decision making, and improves the analytical accuracy of the selection process.

Innovation was also displayed on this project through the use of an organizationally diverse selection board. The board was comprised of representatives from agencies outside GSA and AFRH, which greatly increased the scope of organizational expertise brought to bear on the project. In addition to a diverse board, a broad cross-segment of internal (GSA) and private sector resources was >>>

*Historic AFRH Washington, DC  
Facilities*

*The Armed Forces Retirement Home needed a redevelopment project manager. What agency did it turn to? GSA!*

Asset Management

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Policysite

> > > tapped to provide the board members technical expertise during evaluation. An example of a combination of “One GSA” in action and the competitive sourcing concepts enshrined in the President’s Management Agenda, the GSA Small Business Division Director and the Director of Urban Design and Planning from Skidmore Owings & Merrill both served on technical evaluation teams.

Ultimately, the use of these innovative practices resulted in reduced cycle time for the RFP evaluation process, a more robust and analytically correct evaluation methodology, and the application of an organizationally diverse body of

knowledge to the evaluation process. These innovative practices, which are easily replicable at any agency, have resulted in high client satisfaction and a successful developer selection process. ■

**CONTACT**

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# Asset Business Plan

# A-2-07

## Public Buildings Service Central Office

The Asset Business Plan (ABP) is an integral tool for asset management for GSA's Public Buildings Service (PBS). The ABP provides comprehensive information not only to GSA's associates but to the Government Accountability Office and the Office of Management and Budget.

The ABP - which is a web based application - lists a description, location, function, photo, and Federal use for each asset. It establishes financial information for rent, operating costs, repair and alteration. ABP provides market, rental rates, space availability, absorption, and vacancy information.

ABP compares PBS rental rates

with local market rates to ensure that PBS rental rates are equitable. ABP develops building strategies to ensure assets support Federal missions.

ABP also received the International Development Research Center's (IDRC ) 1999 best practices award. It was the first time that a Federal agency received this award. ■

### CONTACT

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The screenshot shows a web browser window titled "Building Profile - Microsoft Internet Explorer provided by General Services Administration". The address bar shows the URL: http://web16.pbs.gsa.gov/abp\_bis/abp5/abphome.aspx?sub=bldg&strType=0. The page content includes a search bar with "DC0021ZZ" entered, a navigation menu with tabs for "Building", "Regional", "National", and "Links", and a section titled "Owned Building Profile" for building DC0021ZZ. The address is listed as 18TH AND F STS NW, WASHINGTON, DC 20405-0001. A table of metrics is displayed on the right side of the page.

GSF:	764,124
GSA RSF:	704,337
USF:	515,634
R/U Factor:	1.37
Indoor Parking:	0
Outdoor Parking:	146
No. of Floors:	7
Land Acreage:	4.0
Year Built:	1917
Historic Status:	NATIONAL REGISTER LISTED

Asset Management

Real Property Polycysite

## *Governmentwide Real Property Information Sharing Program (GRPIS)*

# A-5-07

*Public Buildings Service Central Office*

**T**he purpose of the Governmentwide Real Property Information Sharing (GRPIS) program is to encourage and facilitate the sharing of real property information among Federal agencies, resulting in better real property asset management decisions, cost effective use of resources, and improved efficiencies. The Program revolves around the formation of real property councils within major Federal communities nationwide.

### **GRPIS Mission**

- To collaborate with General Services Administration's (GSA) Public Buildings Service (PBS) program offices and all other Federal agencies;
- To facilitate and promote GSA services to Federal agencies;
- To explore interagency partnering opportunities, through the GRPIS network of councils;
- To advance real property asset management efforts, including those required by legislation, GSA

initiatives, and Executive Orders, particularly E.O. 13327 Federal Real Property Asset Management.

### **GRPIS Vision**

GRPIS councils are the platforms from which established interagency relationships flourish between Federal agencies. The councils function as two-way conduits for sharing information between Federal real property professionals in the regions and National Offices, and provide a means for PBS and other agencies to promote their services. The sharing of information is augmented by the GRPIS-Gram newsletter.

### **Why is GRPIS Special?**

The GRPIS Program is a Federal interagency networking tool that addresses the needs of field level real property professionals. The GRPIS Team is continually assessing the Program to better meet the needs of Federal agencies. The Program aims to improve real property asset management by focusing on customers, sharing information, and facilitating collaboration.

GRPIS participants include GSA and other Federal agency real property professionals (i.e., realty specialists, planners, facility managers, designers, contracting officers, > > >

*“GRPIS councils are the platforms from which established interagency relationships flourish between Federal agencies.”*

>>> administrators, security specialists, energy experts, and other interested representatives) who improve their knowledge and understanding of: programs, issues, regulations, and opportunities related to asset management.

## GRPIS Accomplishments

The GRPIS Team has supported local councils by: facilitating the sharing of real property information, identifying opportunities for collaboration and partnerships among agencies,

providing administrative support, and maintaining a continuous network of communications through the GRPIS Councils and the GRPIS-Gram newsletter.

The GRPIS-Gram has a circulation of over 1,300 subscribers across all agencies around the U.S. The GRPIS Program has been the catalyst responsible for many reported benefits to Federal agencies in particular and the government in general; and most likely even more unreported benefits that agencies don't make known, because they

*GRPIS Councils are active in the areas of:*  
*Atlanta,*  
*Denver,*  
*Kansas City,*  
*New Mexico,*  
*New Orleans,*  
*Portland, OR,*  
*Puget Sound, WA,*  
*San Francisco, and*  
*South Florida.*

are associated with cost avoidance realized, but not identified as such. ■

### CONTACT

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## *GSA Backfill Marketing Program*

*# A-6-07*

*Public Buildings Service National Capital Region*

**G**SA's Backfill Marketing Program proactively markets the availability of vacant Government space both within GSA and directly to their customers or prospective Federal agencies, where permissible, through various program activities, in order to reduce the Government's vacancy rates.

Backfill opportunities are not immediately posted onto GSA's monthly vacancy reports and this program permits GSA to become more aggressive in their marketing internally.

A secondary component of this program enhances GSA's customer service focus, which coincides with GSA's new RealtyWork Pod initiative through the efforts of the Realty

Service Specialists (RSS). This program enhances the relationship management between the GSA representative and their customer. Subsequently a GSA Customer Pledge is issued as a commitment to excellence through performance known as 'Great Service Always'.

The GSA Customer Pledge is implemented by providing solutions to the needs of Federal agencies in a timely fashion utilizing real estate industry best practices, innovative approaches and achieving the best value to the satisfaction of the customer. GSA Customer Pledge continuously monitors an up to date status on project's progress through utilization of Earned Value Management, which determines the value of the work completed to date.

GSA Customer Pledge affirms in being a customer service professional and in becoming a trusted advisor. As a result, GSA commits to numerous

>>>



> > > fiduciary responsibilities, such as competent actions; financial accountability; operate efficiently and effectively; quality assurance and responsible asset management.

## Strategy

1. Optimal opportunity for GSA's RSSs to get closer to their customers and develop that personal relationship, toward becoming a trusted advisor.
2. The best source of market-ing is your current customer and therefore, it is imperative to have one that is very happy or satisfied.
3. To generate favorable buzz or conversation about the GSA vacancy.
4. Brand the GSA name to be synonymous with 'Great Service Always'.
5. Continue to educate GSA's customer about the real estate industry, the process of procuring real estate through the Federal government and validation for the PBS fee.

There are five (5) program elements of the GSA Backfill Marketing Program:

**Space Assessment** - GSA's RSS makes a site visit to the vacancy to make an assessment of the building/space

amenities and to take digital photos of vacant space.

**GSA Backfill Alert Notification** - An initial notice of availability is e-mailed to existing Service Center personnel/NCR Service Centers' Realty Coordinators for distribution. A Monthly summary list of backfills is also sent electronically thereafter.

**GSA Backfill Book** - RSS provides copy of a detailed space availability sheet to their customer for their provided GSA Backfill Book. Initiate benefits selling through the presentation of the GSA Realty (Show) Book, illustrating the services that GSA offers.

**Communication Publication** - Establish a GSA quarterly real estate newsletter, as a means of keeping in touch with our customers.

**Bus Tour** - Position as the 'must see' annual event among GSA's customers and the commercial real estate industry within the Washington Metro area over the next 3 years. ■

## CONTACT

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*"[A] GSA Customer Pledge is issued as a commitment to excellence through performance known as 'Great Service Always.'"*



**Winner**

## *GSA National 3D-4D-BIM Program*

*# A-15-07*

*Public Buildings Service Central Office*

In 2003, the General Services Administration's (GSA) Public Buildings Service (PBS) Office of the Chief Architect (OCA) established the National 3D-4D-BIM (Building Information Modeling) Program.

3D, 4D, and BIM are innovative technologies that offer virtual design and construction during the planning phase of the project. They represent three separate, but synergistic, ways in which computer technologies can aid GSA to manage its capital assets throughout a project's lifecycle.

The National 3D-4D-BIM Program has been recognized widely by the design and construction industry for its leadership and its primary mission of promoting virtual design

and construction through:

- value-adding digital visualization,
- simulation, and
- optimization technologies

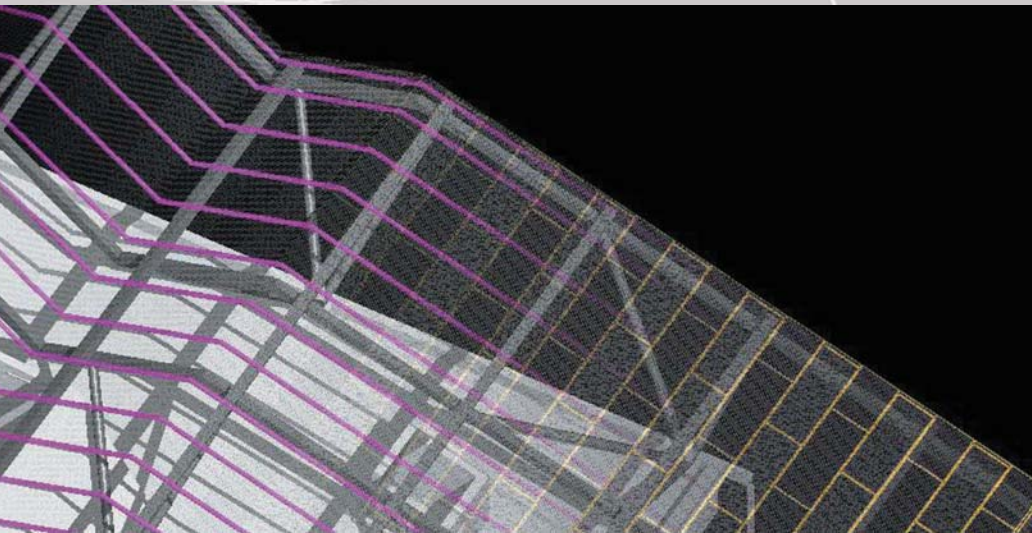
to increase quality and efficiency in developing and managing GSA's capital assets.

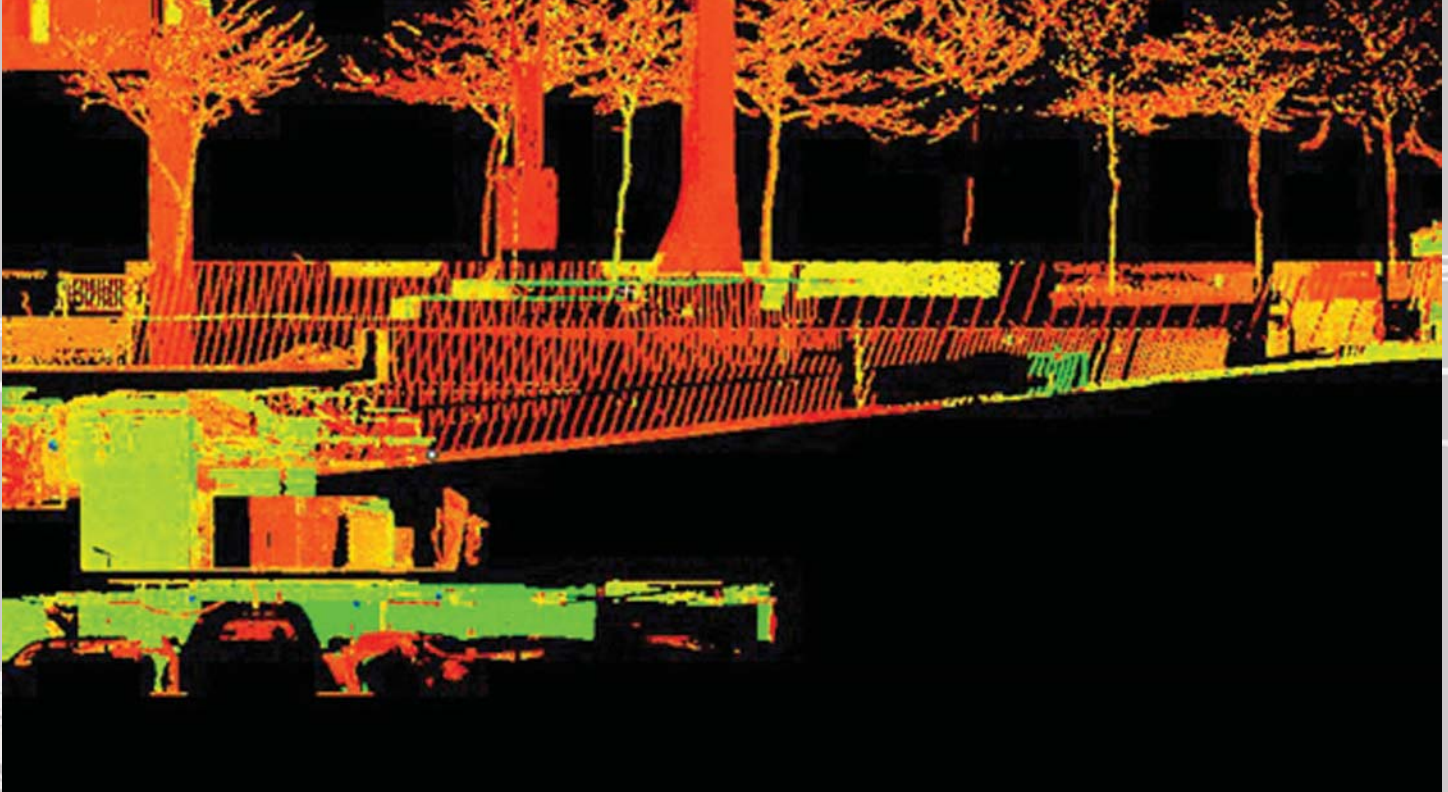
Since 2003, GSA has initiated over 60 capital projects across the country using an array of 3D, 4D, and BIM technologies in support of GSA business needs.

Some of these projects include: spatial program BIM models for spatial program validation, 4D phasing for schedule optimization, 3D-laser scanning for accurate as-built documentation, and BIM-based energy analysis for predicting a facility's future energy performance.

**Highlights of the GSA National 3D-4D-BIM Program are:**

- **Establishing policy to incrementally adopt 3D, 4D, and BIM for all major projects >>>**





>>>

- **Leading 3D-4D-BIM pilot applications and incentives for current and future capital projects**
- **Providing expert support and assessment for ongoing capital projects to incorporate 3D, 4D, and BIM technologies**
- **Assessing industry readiness and technology maturity**
- **Partnering with BIM vendors, professional associations, open standard organizations, and academic/research institutions**

To help replicate GSA successes, GSA has developed a BIM Guide Series on best practices, a public website ([www.gsa.gov/bim](http://www.gsa.gov/bim)), an internal GSA web-based portal, a community of regional BIM Champions, and national contractual language and deliverables. ■

#### **CONTACT**

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*“The long-term objective is to use innovative 3D, 4D, and BIM technologies to complement, leverage, and improve existing technologies to achieve major quality and productivity improvements.”*  
*([www.gsa.gov/bim](http://www.gsa.gov/bim))*

## *Lease Administration/Overtime Utility*

# A-1-07

*Public Buildings Service  
Northeast and Caribbean Region*

*This tool, which now contains over 700 leases and 8,000 inspections, has enabled GSA to focus its efforts in addressing tenant concerns which has resulted in improved customer satisfaction scores.*

**T**he Lease Administration program was developed in response to the Public Buildings Service's (PBS) Region 2's (Northeast and Caribbean Region) need to document its lease inspections. There was no way for offices to effectively track tenant concerns as well as lessor performance.

The Overtime Utilities Tool was developed as part of a National initiative. Nationally, GSA needed a consistent method for developing overtime utility estimates. The GSA Senior Property Manager had previously developed a tool which had been used throughout Region 2 for nearly ten years. This tool became the template for the National tool. Additional features were incorporated into the tool to help GSA recover all of its actual costs. While there was a bit of a learning curve in rolling the tool out, GSA was able to recover more of its actual costs than in any previous year. Tenants also expressed their appreciation to GSA in finally providing a consistent and accurate means for calculating these costs.

### **Lease Administration and Management Program**

The automated lease administration program is both secure and

interactive. The system was designed to be both a repository of critical information as well as a tool for tracking lease deficiencies with the ultimate goal of improving customer satisfaction scores in leased locations. It is anticipated that this program developed and utilized in Region 2 will become a National program. Initial work has begun on this effort.

As an informational tool, each of the service centers can input items such as the name, address and telephone numbers of the customer and landlords, the square footage, lease and building numbers, full time employees (FTE's), locations' customer satisfaction scores and even the services that are provided by the government. The system then allows the user to intelligently analyze the leased inventory by office. Those locations that are performing below the national average can now be identified with the touch of a button. Need to know what has been done in the past to improve the scores? Take a look at the actions taken to resolve customers concerns.

As a tool to improve the customer satisfaction scores, the system was designed for the service centers to input the complaints, by location, in a chronological sequence together with the specific actions taken to rectify the problem. There is a >>>

>>> field that enables other divisions to also document responses/solutions to our customers needs. When the lease comes up for renewal and the location is considered as a possible offeror, the Realty Specialist can use this system as an additional tool to analyze past performance.

## OT (Overtime) Utility Tool

The purpose of this tool is to provide our managers with a standardized format and methodology for developing overtime utility estimates. Our customers have repeatedly informed us that consistency in our regional and

agency wide transactions is very important to them. This tool promotes consistency in our regional and agency wide transactions with your agency.

The tool is based on a standard MS Excel spreadsheet and includes an estimate form and instructions on its use, as well as the rationale for the calculations. A web based version will be rolled out in FY08.

This initiative is part of GSA's effort to provide our customers with improved customer service, and with a nationally consistent approach in addressing the issue of overtime utilities use. Despite GSA's aggressive energy conservation measures, energy costs continue to

represent an ever increasing percentage of the operating costs for the buildings your agency occupies. This initiative is intended to provide our customers with information that will allow them to more readily address, understand, evaluate, and approve reimbursable work authorizations for overtime utility expenses incurred. ■

### CONTACT

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The screenshot shows a web browser window displaying the 'View Details for Lease 944' page. The page header includes the GSA logo and the title 'U. S. General Services Administration Lease Administration'. The breadcrumb trail is: Home > Search Lease Database > Lease Search Results > View Details for Lease 944. The main content area is titled 'LEASE/BUILDING INFORMATION' and contains several sections:

- Lease Information:** Lease Number (NY0270ZZU), Bldg Number (NY0270ZZ), Org Code (P0225300), Client ABCode, Lease Status (Active), Total Sqft (323833), Agency Sqft (300000), % Occupied by Agency (92.64%), and Vacant Sqft (0).
- Address:** Address 1: 225 Cadman Plaza East, Address 2: (empty).
- Location:** City: Brooklyn, State: NY, Zip: 11201.
- Lease Dates:** Lease Start Date (mm/dd/yyyy) and Lease Expiration Date (mm/dd/yyyy).
- Gov't Services:** A table listing services and their expiration dates.
 

Gov't Services	Expiration Date (mm/dd/yyyy)
1, Electricity (ConEd)	6/30/2012
2, Electricity (Hess)	6/30/2012
3, Water (NYCWB)	9/30/2009
4, Gas (Keyspan)	3/31/2008
5, (empty)	
- Periodic Services' Due Dates (mm/dd/yyyy):** A table listing services and their due dates.
 

Periodic Services' Due Dates (mm/dd/yyyy)	Due Date (mm/dd/yyyy)
Carpet Cleaning	
Carpet Replacement	
Painting	
Window Blinds Replacement	
Window Washing	
Other(specify):	
- Customer Satisfaction:** A table showing survey results.
 

FY Suveyed	Score
2003	89 %
Select	%
Select	%
Select	%
Select	%
- GSA INFORMATION:** Region: 02, Service Center: BOLI.
- AGENCY INFORMATION:** Agency: UD DIST COURT, FTE: 350, Emergency #: 1, 2.

## *Real Property Asset Listing Portal*

# A-10-07

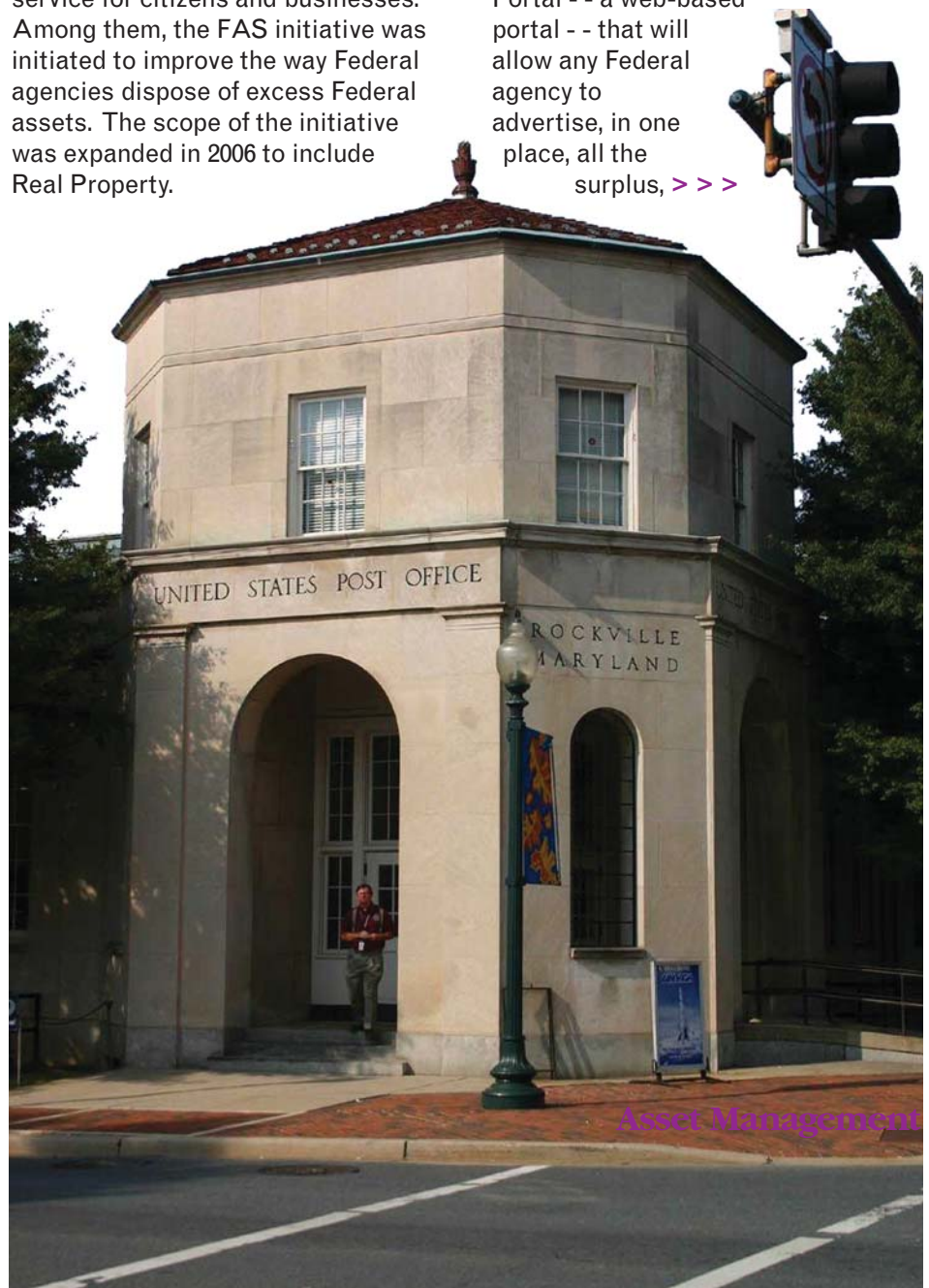
### *Public Buildings Service Central Office*

In 2001, the President's Management Council used information from the Quicksilver task force to adopt 24 electronic government initiatives to eliminate redundancy and improve quality of service for citizens and businesses. Among them, the FAS initiative was initiated to improve the way Federal agencies dispose of excess Federal assets. The scope of the initiative was expanded in 2006 to include Real Property.

A team, comprised of members from GSA's Public Buildings Service, the Department of Agriculture, and the Department of Housing and Urban Development, has worked to develop the Real Property Asset Listing Portal - - a web-based portal - - that will allow any Federal agency to advertise, in one place, all the surplus, >>>

*"...this portal provides the citizen with a single simple location where the vast majority of surplus government real property is advertised for sale."*

Real Property  
Policysite



Asset Management

*“This is a true win-win for both the citizen and the government.”*

>>> forfeited and foreclosed (surplus) property available for sale. In addition to developing this portal, the team has worked with other Federal agencies with real property disposal authority to list their property for sale on the portal.

As a result of this team’s success, the vast majority of surplus Federal real property is already listed for sale and property from additional agencies will be listed over the next year. The benefit to the citizen looking for government real property to buy is that instead of having to find and search a dozen or more sites advertising surplus Federal real property, this portal provides the citizen with a single simple location where the vast majority of surplus



government real property is advertised for sale.

The benefit to the government is that surplus government real property will now be better advertised to a wider audience. This will lead to more bidders, more competition, and, likely, higher auction prices for the thousands of foreclosed and forfeited houses and farms, surplus government land and buildings that are sold each year. ■

**CONTACT**

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- [Home](#)
  - [Houses](#)
  - [Buildings and Land](#)
  - [Farms](#)
  - [International Real Estate](#)
- [Other Auctions & Sales](#)

**Commercial Real Estate and Land for Sale by the U.S. Government**

This Federal Asset Sales Real Property (FAS-RP) web site was developed to provide citizens easy access to real estate properties currently offered for sale by the federal government.

Select a state from map or list. Text lists states with properties for sale.

- [Alabama \(1\)](#)
- [California \(3\)](#)
- [Delaware \(1\)](#)
- [Florida \(6\)](#)
- [Georgia \(1\)](#)
- [Idaho \(1\)](#)
- [Illinois \(6\)](#)
- [Indiana \(1\)](#)



### *Senate Rain Garden*

# S-14-07

**T**he Senate Rain Garden, built in 2004, is an exemplary initiative and innovation for replicable low-impact, sustainable projects for stormwater management. It represents a new and improved way of doing business in our agency.

Broadly, rain gardens take advantage of gravity and processes of nature, enabling certain plants to filter runoff from parking lots, reducing storm flooding into urban streets and sewer systems, and to keep pollutants from entering local streams, rivers, and the Chesapeake Bay. Rain gardens, with their teeming, sturdy, flowering plants are an attractive, low-impact, and low-cost way to protect and enhance our environment.

Environmentally, these “bog” plantings, places in an elongated, porous “bathtub,” capture not only water that sheet drains from a parking lot at a high velocity but also filter out pollutants from the parking lot (dripping oil and transmission fluid; exhaust exudate from tailpipes, and tire particles). Also, the flowering plants attract birds and butterflies,

adding animation and natural interest.

Financially, our agency is enabled by this project to relieve the District of Columbia of the costly burden of treating storm water. This rain garden provides the opportunity of work crews to devote their time to other projects while nature gracefully provides sustainability to capture and filter water.

Aesthetically, these durable plants flourish in water up to their knees and in droughts. While nearby lawn areas turn brown in hot weather, the rain garden plants remain lushly green and in flower.

Quantitatively, the project is a success. Calculations of water runoff volumes and velocities have been the basis of the configuration and size of the rain garden. Summer storms that used to flood the nearby intersection no longer do so. There has been no safety threat caused by street flooding since the rain garden was built in 2004.

Replicability-wise, a site on the Capitol Grounds has already been identified as a candidate for another rain garden. Others will follow within our 400 acres of land, and potentially the properties of other agencies.

Financially, this replicability improves the business practices of our agency, and we will continue to share our lessons learned with other agencies. The Capitol Grounds will be more attractive when parking lots are >>>

*“It represents a new and improved way of doing business in our agency.”*



*Architect of the Capitol  
Sustainable Senate Rain Garden*

>>> partially obscured with plantings that are healthy during various extremes of climate. Erosion will be reduced, preventing catch basins from quickly silting up. The costly expense of emptying and cleaning by maintenance crews will be reduced.

Customer satisfaction: phenomenal. Environmental groups have come to visit this rain garden, described the District of Columbia environmental official as the most beautiful one in the Washington region. Mayor Bloomberg

of NYC sent his chief urban planner to visit the rain garden for replicability. Passersby provide unsolicited praise for the beauty, sensibility, and teaching value of how rain gardens can be developed for sustainability in urban, suburban, and rural settings. ■

**CONTACT:**

**Matthew Evans**

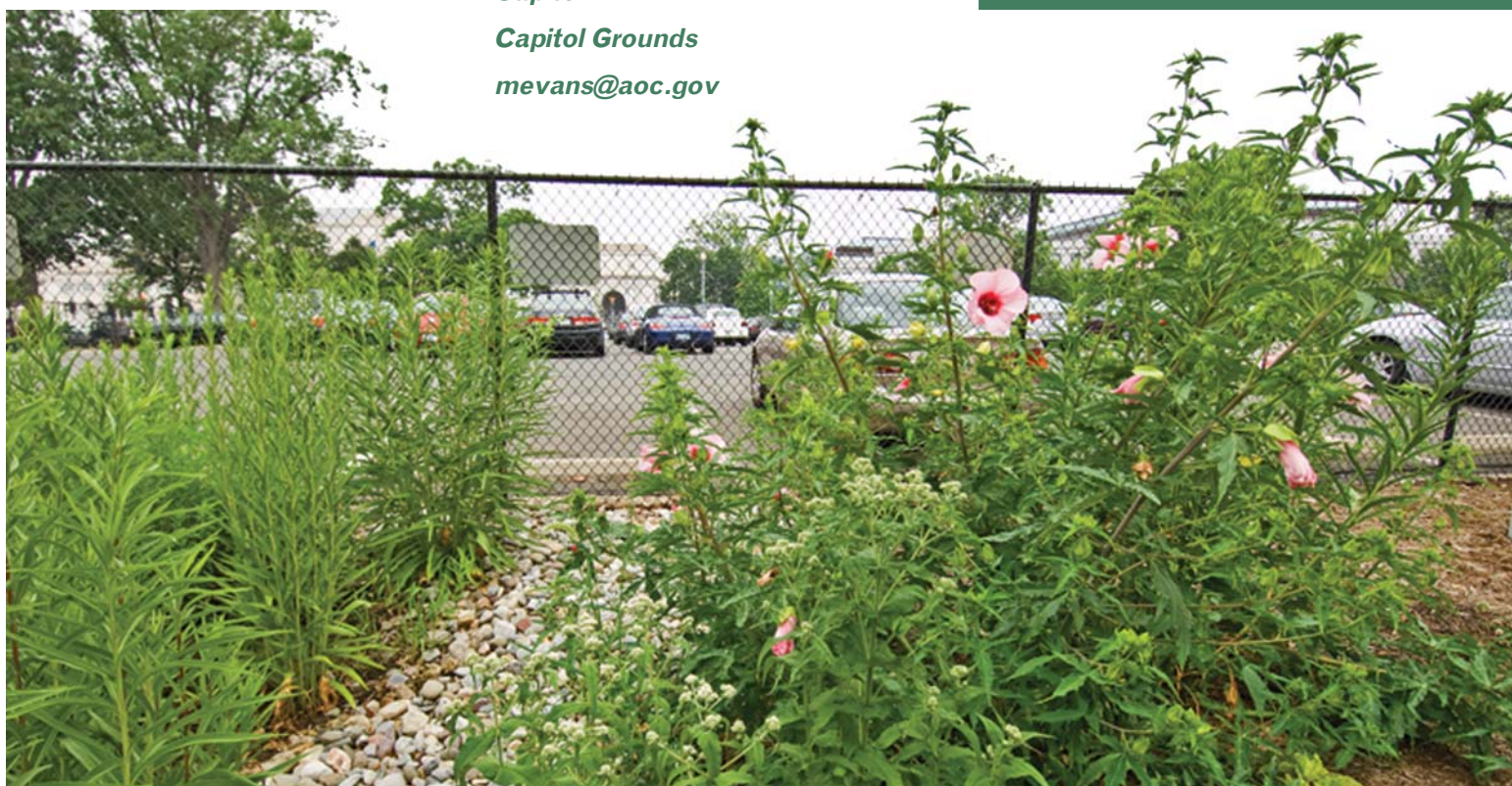
**Senior Landscape Architect and Horticulturist**

**Office of the Architect of the Capitol**

**Capitol Grounds**

**[mevans@aoc.gov](mailto:mevans@aoc.gov)**

*“This Senate Rain Garden, and future ones, will convey a powerful sustainability and stewardship message to our three million visitors annually, 25,000 Hill staff, and constituents, and dignitaries and guests from around the globe.”*



## 2. U.S. Army Corps of Engineers

### *GPS Enabled Real Property Picture Labeling System*

# S-5-07

**G**PS (Global Positioning System) Enabled Real Property Picture Labeling System which was developed for the Omaha District has saved a minimum of \$15,000 a year in labor/travel costs due to its simplicity and ease of use. It allows 5 individual memo lines of specific data (property identification number, structure number, location, type of asset, and description) along with 13 optional lines of useful data (lat, long, elev., date, time, direction, title, datum, comment, filename, photo seq. #, logo1, and logo2) to be watermarked onto each real property picture which enhances the ability of all users to properly identify and maintain the over \$2 Billion in real property they are assigned.

The system revolves around using a state of the art GPS enabled digital camera and a software program developed for the camera that is commercially available. The camera and its associated software is simple to use and understand and in less than one year, the Real Property Administrator Roger Miller, quickly captured, organized and implemented a supplementary photograph based real property asset management system to complement our real property database. He currently maintains 5000 plus real property items (structures/buildings) for the 40

different civil projects in the Omaha District U.S. Army Corps of Engineers (covers 6 states).

Capturing all of their specific data the processing program also automatically gathers a couple of different aerial photos from the sites they designate it to pull from (Tiger, USGS Topo, USGS Image, Hi-Res Urban, or MS Windows Live) which would be based on the embedded GPS information the camera captured when taking pictures. Along with the watermarked picture it produces individual html files, overview and index html files and other useful files (such as GPS exchange files, ESRI shape files, Excel text files, and Google Earth files) that greatly enhance the ability for everyone that views or uses them to get a clear picture of "what the item is," "where it is at," and "what condition it is in." The software automatically names all pictures and their associated files with a name that the user specifies which makes it very simple to set up an organized and consistent way of maintaining the pictures and files. In Mr. Miller's system, the processed files are then copied to a network server into individual project and sub-project folders to ensure they will always be kept up-to-date and allow interested personnel access to any specific project's information they might need to view if they have access to the network. >>>

*(opposite) USACE Omaha GPS Picture Labeling System Sample*

**BEAR-20850 - HRH 250000  
Structure 2010**

**Bear Creek Lake  
115 - Cottontail**



US Army Corps  
of Engineers  
Omaha District



**Picnic Shelter  
N 39° 39' 08.00" W 105° 10' 03.635587 ft**

**Govt Expensed  
06/19/2006 9:55:41 AM**

>>> Real Property binders with data discs are constructed for the different managers that do not have access to the network (they contain inventory listings, information and all watermarked real property pictures for their individual areas of responsibility). This ensures all

personnel have the same tools and information at their fingertips. This system was so well accepted that the Operations Division bought 8 GPS enabled cameras for the Division's use in the field. Now the Division personnel directly email Mr. Miller with their additions/updates.

**CONTACT**

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U.S. Army Corps of Engineers*

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**Sustainability**

**Real Property  
Policysite**

### 3. U.S. Department of Commerce

Special  
Achieve  
ment

#### *Green Building Leads Economic Resurgence*

# S-12-07

*“Is your agency looking for ways to create high performance buildings through building renovation projects as well as to help stimulate the local economy? Check out how the NOAA is doing this and demonstrating sustainable building use to the general public.”*

The redevelopment of a portion of the former Fletcher Paper Mill in Alpena, Michigan turned a derelict building into a high quality Federal operations center and community resource known as the Great Lakes Maritime Heritage Center for the Thunder Bay National Marine Sanctuary (TBNMS). The utilization of existing infrastructure represents sustainable and innovative asset management for the TBNMS and serves as a model for National Oceanic and Atmospheric Administration’s (NOAA) National Marine Sanctuary Program (NMSP) site operations. Of even greater significance are the lessons learned from this project about the benefits that result from high performance building design.

The greatest and most easily measured benefit from this high performance building is the energy savings that result from many innovations, with the geothermal system its feature element. Monthly energy bills have averaged less than \$2K/month while other Alpena buildings of comparable size are roughly \$8K/month. This allows more of the tight TBNMS budget to be devoted to programmatic needs such as research, public education and outreach, and resource protection. The excellent quality of the indoor environment stimulates greater productivity and higher morale on the part of TBNMS staff, volunteers, and

visiting scientists using the research and dormitory facilities. In addition, TBNMS has attracted visiting K-12 school classes and other members of the local community to use the classroom facility and take advantage of the theater and exhibits hall.

Exhibits are placed throughout the building to demonstrate to visitors the various innovative techniques used to reuse/recycle materials, save energy, reduce water consumption, employ rapidly renewable materials, take advantage of solar heat and light, and use landscaping and exterior design to reduce energy requirements.

The creation of the Great Lakes Maritime Heritage Center has stimulated close cooperation between the Federal Government, State of Michigan, City of Alpena, County of Alpena, and local community leaders. This cooperation has resulted in an economic revitalization of the community. Outside funding has been attracted to expand the utility infrastructure leading into the site and to build a Heritage Riverwalk (opening July 4, 2007). Alpena has also been designated as a Preserve America city and a Michigan “Cool City.”

The excitement and enthusiasm generated by this building within the NMSP has helped to contribute to an even broader “green ethic” movement within the program. The NMSP includes Leadership in Energy >>>

*NOAA Energy-saving Great Lakes  
Maritime Heritage Center*



>>> and Environmental Design (LEED) building techniques in all construction activities, seeks LEED certification when possible, and highlights LEED features in its building to the public by use of exhibits. The NMSP currently occupies or seeks access to older buildings owned by other coastal oriented Federal agencies such as the National Park Service and United States Coast Guard. NMSP attempts through building renovation projects to create high performance buildings

that meet programmatic needs, but also help stimulate the local economy, and demonstrate sustainable building use to the general public. ■

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## 4. U.S. Department of Justice

Winner

### *Greening Prisons*

# S-1-07

In adhering to Executive Orders 13123, 13432 and the Energy Policy Act 2005, the Federal Bureau of Prisons at FCC (Federal Correctional Complex) Victorville, CA actively responded by installing a 750 kW wind turbine and a 74.5kW photovoltaic array with new integrated HVAC controls for a total savings of 13.2 billion BTU's since construction to FY 2006.

The Federal Bureau of Prisons awarded an Energy Savings Performance Contract (ESPC) to NORESKO LLC, in FY 2004 for the purpose of implementing energy conservation measures at FCC Victorville. This concept was to bring clean renewable energy to a secure Federal prison site. This task was the first of its kind incorporating renewable energy with originality, effectiveness, and replication for the Bureau.

The Bureau of Prisons has installed the first Wind Turbine and photovoltaic array for the Department of Justice with triumphant success. This forward

thinking approach has been written about in the Boston Business Journal (<http://boston.bizjournal.com/boston/stories/2005/03/07daily6.html>) and on the FEMP web pages ([http://www1.eere.energy.gov/femp/newsevents/fempfocus\\_article.cfm/news\\_id=7366](http://www1.eere.energy.gov/femp/newsevents/fempfocus_article.cfm/news_id=7366)). This innovation and forward thinking has fostered the replication of eight new national ESPC projects for the Bureau in FY 2006.

FCC Victorville measured and verified energy savings of \$1.1 million from conception to FY 2006 with:

- combined BTU savings of 13.2 billion,
- environmental CO<sub>2</sub> reduction of approximately 2230 tons,
- SO<sub>x</sub> reduction of 468 lbs and
- NO<sub>x</sub> reduction of 22 lbs.

Once the contract term expires the Federal Bureau of Prisons will take control of the wind turbine and photovoltaic system thus ensuring the production of renewable energy at a Federal site.

FCC Victorville installed this technology under the DOE Super Energy Savings Performance Contracting agreement that is costing the BOP, FCC Victorville, the taxpayers, no Federal funding. This installation is being paid in full by energy savings, rebates, and >>>

*“This task was the first of its kind incorporating renewable energy with originality, effectiveness, and replication for the Bureau (of Prisons).”*

*Photos: FCC Victorville, CA, site and energy saving wind turbine example*

>>> incentives from the State of California and the local utility company. A related local outreach energy program has been implemented for both staff and inmates. ■

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## 5. U.S. Department of State

### *Green Team - Overseas Buildings Operations (OBO)*

# S-7-07

**T**he Department of State, Overseas Buildings Operations (OBO), established an energy and sustainable design program (GREEN TEAM) that has proved to be a powerful innovation and catalyst toward compliance with Federal Mandates.

The program primarily addresses Executive Order (EO) 13423 - Strengthening Federal Environmental, Energy, and Transportation Management and the Federal Leadership in High Performance and Sustainable Buildings – Memorandum of Understanding (MOU). The GREEN TEAM has engaged, influenced, and transformed OBO's business model for designing, constructing, and

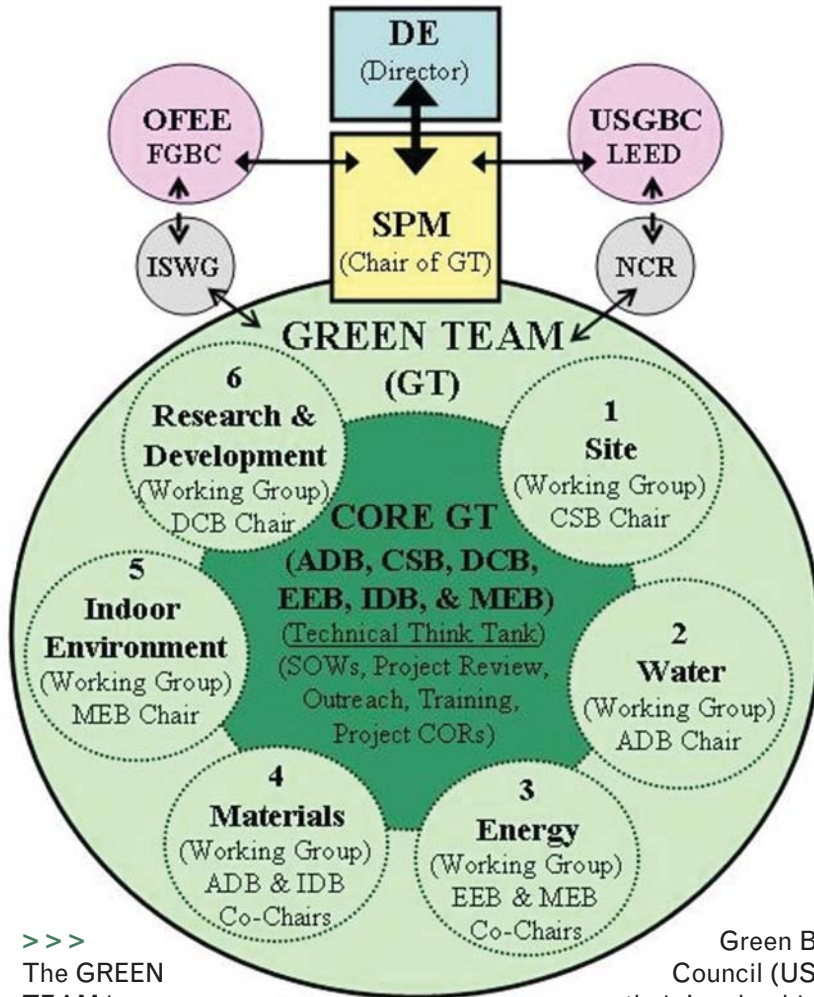
maintaining our 266 facilities (60 million square feet) around the world.

The program's success is evident in the depth and breadth of dissemination of knowledge and understanding of energy and sustainability, and can be measured by long-term cost savings of facilities operations and maintenance. The program was conceived and developed internally by a diverse team of technical experts and was approved by upper management. The program has had substantial and measurable results in energy and sustainable design, construction, and maintenance. These achievements have immediate and lasting benefits for the government. >>>

*“The GREEN TEAM has engaged, influenced, and transformed OBO’s business model for designing, constructing, and maintaining our 266 facilities... around the world.” Find out how the State Department modeled the organization of its team to deal with such a diverse portfolio.*



# Energy & Sustainable Design Program (Organizational Chart)



>>>  
The GREEN TEAM is a consortium of professional experts in their respective fields and is led by the Sustainability Program Manager (SPM) who reports directly to the Design and Engineering (DE) Division Director. The SPM is the liaison to the Office of the Federal Environmental Executive (OFEE), Federal Green Building Council (FGBC), Interagency Sustainable Working Group (ISWG), and the US

Green Building Council (USGBC) and their Leadership in Energy and Environmental Design (LEED) program.

The GREENTeam models its organization and working groups after the industry's recognized categories of concern: Site, Water, Energy, Materials, Indoor Quality, and Innovation (or Research and Development), with professionals representing the technical

DE – Design & Engineering Division

SPM – Sustainability Program Manager

OFEE – Office of the Federal Environmental Executive

FGBC – Federal Green Building Council

USGBC – U.S. Green Building Council  
LEED – Leadership in Energy & Environmental Design, Green Building Rating System

### GT CORE & WORKING GROUP CHAIRS

ADB – DE's Architectural Design Branch

MEB – DE's Mechanical Engineering Branch

EEB – DE's Electrical Engineering Branch

CSB – DE's Civil Structural Branch

IDB – DE's Interiors Design Branch

DCB – DE's Design Coordination Branch

disciplines of civil, architectural, structural, mechanical, electrical, plumbing, and interiors. (See above.) ■

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## 6. U.S. Department of Transportation

### *FAA “SAVES” with “Green” Acquisition Innovation*

# S-4-07

In 2006 the Federal Aviation Administration (FAA) awarded a new office supply contract to Office Depot that provides products at considerable cost savings.

The 5-6 million dollars per year contract is part of the FAA Strategic Sourcing for the Acquisition of Various Equipment and Supplies (SAVES) program. The mandatory nationwide contract is expected to save 30% annually or more in office supplies.

The contract language developed and implemented serves as a template for other agencies (including GSA) contemplating a similar cost-savings office supply contract. A required “green” office products component was included that allows employees access to over 1,000 items serving to fulfill FAA’s

RCRA, previous EO 13101, “Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition”, and now EO 13423, “Strengthening Federal Environmental, Energy, and Transportation Management” requirements.

Environmentally preferable purchases (EPP) are tracked on a monthly basis enabling a baseline to measure progress. ■

#### **CONTACT**

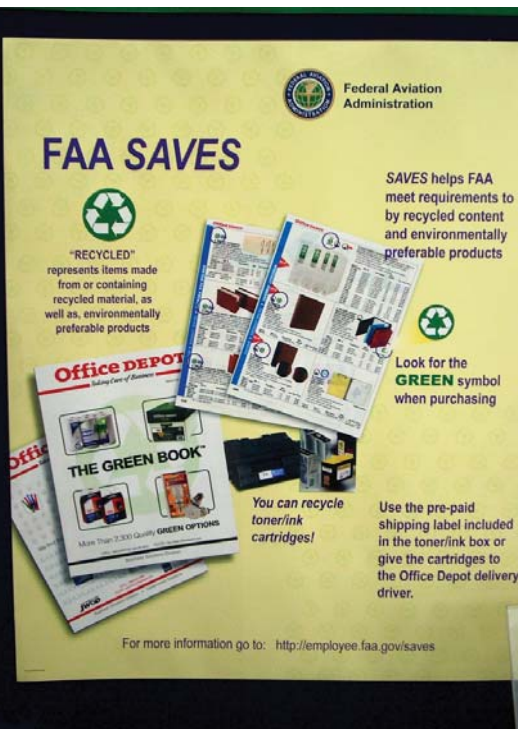
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*FAA not only saves on office supplies but goes “green” in its acquisition process. Is your agency looking for savings and sustainability too? Check out how FAA did it.*

## 7. U.S. Environmental Protection Agency

Special  
Achieve  
ment

### *EPA's "Low Impact Development" Project Improves Federal Triangle Sustainability*

# S-17-07

SUSTAINABILITY

**T**he U.S. Environmental Protection Agency (EPA) and U.S. General Services Administration (GSA) are demonstrating low impact development (LID) and sustainable stormwater management practices in a landscape renovation project at EPA's Federal Triangle Headquarters in Washington, DC. Initiated in May 2001, this multi-year project involves three landscape retrofit projects at EPA's Federal Triangle Headquarters complex.

The Federal Triangle complex's building roofs, sidewalks, courtyards, and parking areas make the area approximately 95 percent impervious to rain. Through this green infrastructure project, however, EPA will reduce the adverse impacts of stormwater flows from the 25-acre site. The Agency also hopes to reduce the peak volume and pollutant load of its stormwater runoff and serve as a model for future LID projects nationwide.

Completed in December 2006, the 8,600-square-foot Ariel Rios South Courtyard (see diagram), at the southeast corner of Federal Triangle, is the largest phase of the demonstration project. Showcasing the sustainable strategy of addressing targeted watershed goals and objectives by using LID stormwater management techniques, the courtyard demonstrates a wide

range of techniques in its 6,400 square feet of LID landscaping. Particularly, it includes two bioretention cells that provide more than 400 cubic feet of stormwater storage volume and a 1,128-gallon cistern to collect stormwater that is recycled for irrigation of the site.

Based on rainfall in 2006, it is estimated that the LID components divert approximately 70 percent of the rainwater that falls on the courtyard throughout the year from the >>>

*EPA is using this project to demonstrate that sustainable design and LID can be utilized in high profile, urban sites that must pass through rigorous aesthetic design reviews.*

*([www.epa.gov](http://www.epa.gov))*

>>> storm sewer. It is also estimated that reusing the rainwater collected in the cistern for irrigation will, in turn, reduce the need for potable water by approximately 30 percent.

The most publicly visible phase of the project is a retrofit of the landscaping that lies at the south end of the Federal Triangle complex, on Constitution Avenue. Completed in April 2005, the area includes 1,264 square feet of bioretention cells, which provide another 400 cubic feet of stormwater storage volume. The site demonstrates how disconnection, storage, evaporation, and

sustainable plantings, combined with high-efficiency irrigation systems, can be used on a large scale. EPA seized the opportunity to promote LID and proper stormwater management to passersby in this high foot traffic area and is awaiting final approval to integrate educational signage and materials on this site in Fall 2007.

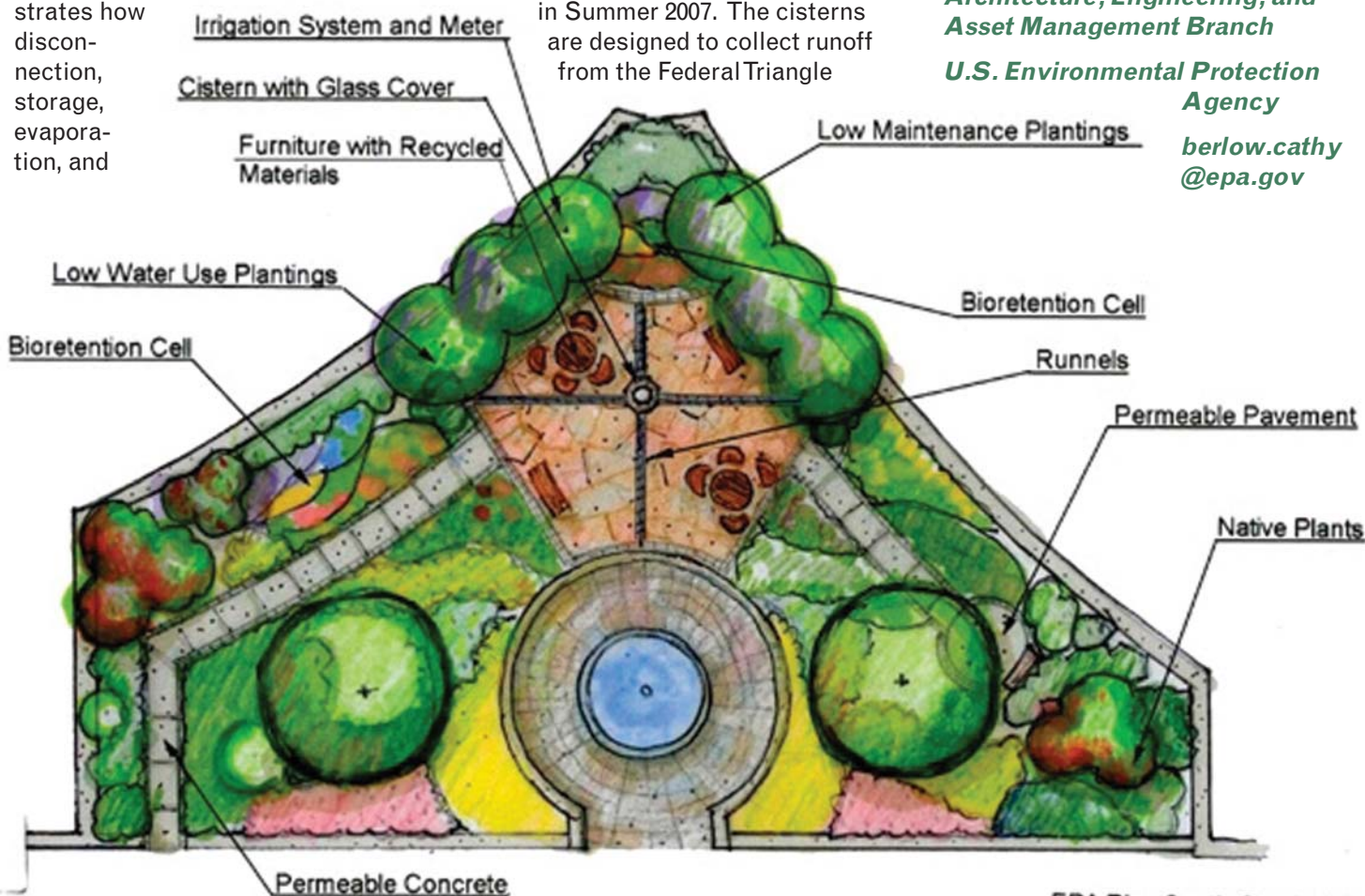
The construction contract for the final phase of the project—an installation of six cisterns, with a total capacity of 6,000 gallons, in the parking garage under the EPA West Building—is to be awarded in Summer 2007. The cisterns are designed to collect runoff from the Federal Triangle

complex roofs and reuse it for irrigation of a portion of the Constitution Avenue site.

Results for the entire project will not be available until the third phase of the project is complete. Using preliminary estimates from the courtyard as a guide, there is no doubt that the actual project results will indicate a substantial reduction in harmful stormwater runoff and potable water use. ■

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EPA Rios South Courtyard



*LID Project at EPA Federal Triangle Headquarters location*

## *EPA's Region 8 Office, Denver, Colorado - A Sustainable Showcase*

*# S-16-07*

*Taking an innovative and holistic approach, the winning design team integrated Denver's cool climate and abundant sunshine to save energy and improve building performance.*

In January 2007, the U.S. Environmental Protection Agency (EPA) began occupying its new Region 8 Office (see photo), located in historic, downtown Denver, Colorado. This 418,000-gross-square-foot (GSF) facility showcases an array of water and energy efficient features and sustainable design elements and serves as an example of the Agency's commitment to designing, constructing, and operating highly sustainable buildings. Designed to achieve both the ENERGY STAR building label and U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Gold certification, the facility is expected to yield an annual energy savings of more than 35 percent over the American Society of Heating, Refrigeration and Air-conditioning Engineers, Inc. (ASHRAE) Standard 90.1-1999, saving a total of nearly 12,000 British thermal units (Btu) per GSF.

The Region 8 office is the culmination of two and a half years of careful planning and construction, including a comprehensive, two-stage design competition conducted by EPA and the General Services Administration, who will lease the building to EPA for 10 years. Acknowledging the importance of smart planning early in the process, the agencies worked with competing design teams to develop a facility

that incorporates the best in overall design, work environment, performance, value, and security, while also reducing the building's environmental impact, >>>



>>> particularly on the surrounding Rocky Mountain region.

High-efficiency, building-wide systems, such as under-floor air delivery and air-side economizers save approximately 9,600 Btu/GSF/year and also improve indoor air quality. The building incorporates extensive daylighting, which exposes 85 percent of the building to natural light. Additional sustainable features include the use of water-efficient plumbing fixtures that are expected to reduce the facility's water consumption by 36

percent; construction materials that are made from renewable sources; and low volatile organic compound interior adhesives, paints, sealants, and caulk that will improve indoor air quality. Additionally, 80 percent of the building's construction wastes were recycled rather than disposed of in a landfill.

The rooftop features a 3"- 4" organic soil layer and drought-resistant plants that help to reduce rooftop and building temperatures, filter air pollution, and reduce stormwater runoff by 27 percent. A 48-panel

photovoltaic array, also on the roof, will contribute 10 kilowatts of green power, or nearly 14,000 kilowatt hours per year, in addition to the 4.7 million kilowatt hours of renewable energy certificates EPA purchases annually for the office. ■

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*Of the building's most unique and impressive attributes is its 19,200-square-foot, three-level "green roof" –the first of its kind in Denver.*

## 8. U.S. General Services Administration, Public Buildings Service

Special  
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ment

### *Byron G. Rogers Federal Courthouse Renovation*

# S-8-07

*Public Buildings Service Rocky Mountain Region*

SUSTAINABILITY

**R**enovating the Byron G. Rogers U.S. Courthouse (BRCH) building allowed GSA to save natural resources while making the surrounding environment healthier to tenants and the community at large. The key to the success of this project was that the project team used an integrated sustainable design approach throughout the design and construction process. They shared a vision of remodeling this building to earn a LEED-EB Gold Rating from the U.S. Green Building Council (USGBC) while recognizing the social advantage of recycling a historically significant building expected to qualify for the National Register of Historic Places. It is our responsibility as a Federal agency to invest ourselves in actions such as this project as to positively impact society and allowing the vision to manifest itself into reality.

The Byron Rogers U.S. Courthouse (BRCH) renovation project included careful integration of sustainable design features. This project was one

of the first 50 projects designated as a pilot project for the U.S. Green Building Council's (USGBC) LEED for Existing Buildings (EB) program. The Courthouse renovation project earned an official LEED-EB Pilot Gold Rating from the USGBC in 2006. This project is the first GSA-owned LEED Gold rated building and the first GSA LEED-EB rated building.

The BRCH consists of courtroom and office space on five levels and two levels of underground parking. Constructed in 1965 and designed by James Sudler Associates and Fisher and Davis, the Courthouse is considered to be a "Formalist masterpiece" by local historians. Over the past 40 years, very little has been done to upgrade the building's systems, functions or appearance. In 2002, GSA initiated a four-year design and construction process to modernize this tired, but sturdy structure. Working with Bennett Wagner & Grody Architects, a comprehensive interior renovation was planned and executed. >>>

*"Paving the Way for High Performance Building and Sustainable Building Practices"*



*Byron G. Rogers  
Federal Courthouse  
Renovation*

>>> Results of the effort include a new public entry and lobby; complete mechanical, electrical, security and technology upgrades; full asbestos abatement; ADA compliance; renovation of offices and public spaces; courtroom upgrades; rejuvenated exterior façade and site. The courthouse is believed to have historic significance, and it is projected that once it meets the 50-year ago requirement, it will qualify for the National Register of Historic Places.

This Courthouse exemplifies what might be considered the most important sustainable strategy a project could incorporate – building reuse. It also is a national example of how agencies can meet goals outlined in Executive Order 13423: Strengthening Federal

Environmental, Energy, and Transportation Management, specifically, the goal that, “new construction and major renovation of agency buildings comply with the Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings set forth in the Federal Leadership in High Performance and Sustainable Buildings Memorandum of Understanding (2006), and (ii) 15 percent of the existing Federal capital asset building inventory of the agency as of the end of fiscal year 2015 incorporates the sustainable practices in the Guiding Principles.”

The building shell and structure were reused, in addition to key interior materials in the building’s lobbies and courtrooms. Program verification began in January 2002,

and the building was occupied by February 2006. The project included demolition, asbestos abatement, and lead paint removal followed by renovation. ■

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## *U.S. Census Bureau Headquarters, Suitland, MD: “A Sustainable Showcase”*

*# S-10-07*

*Public Buildings Service National Capital Region*

*“...it demonstrates that building performance can be maximized without sacrificing beautiful architectural design or healthy and happy workforce considerations at a cost per square foot that rivals conventional building construction costs...”*

In October 2006 the General Services Administration (GSA) delivered a \$307 Million new home for the US Census Bureau. This magnificent state-of-the-art 1.4 million-square-foot building (along with 3,100 parking spaces in two garages) houses 6,000 employees and contains offices, an auditorium, training and conference areas, cafeterias, cafes, credit union, fitness center, library, and support space.

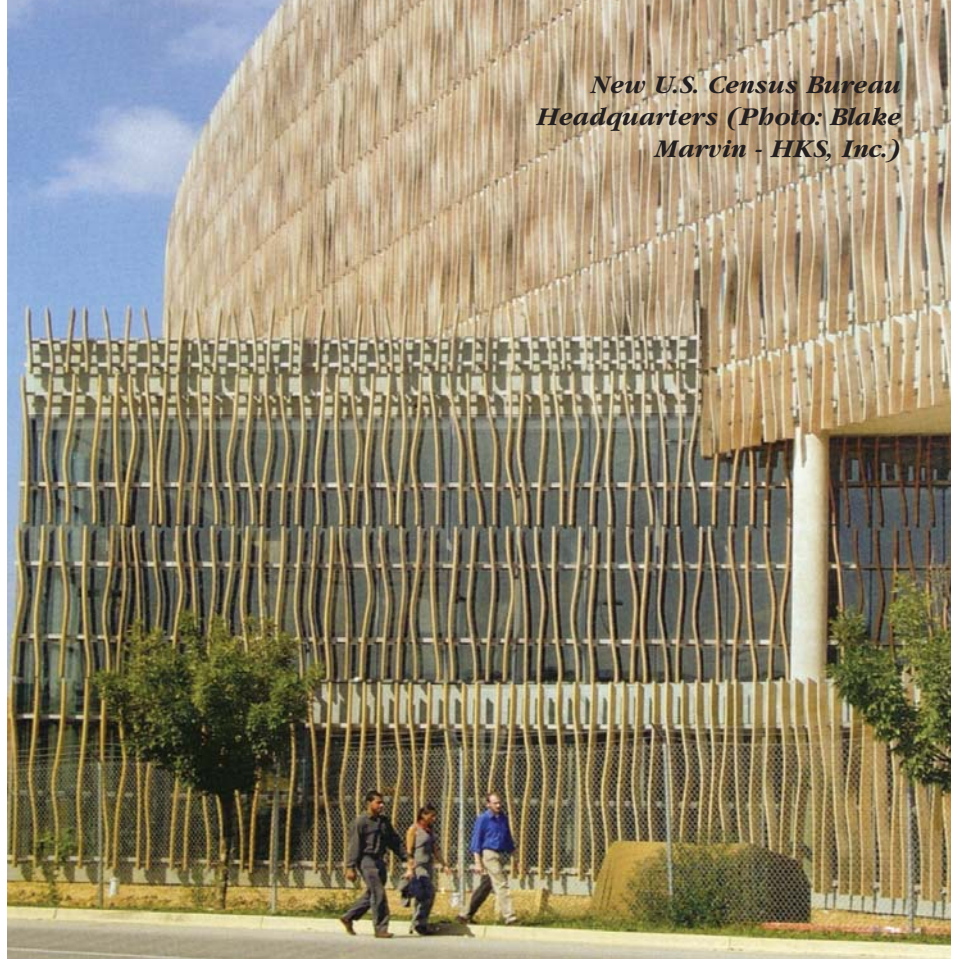
The GSA project team embraced the philosophy of sustainable design from the project's inception, and directed fellow team members to incorporate LEED® Silver level elements and sustainable design principles:

- optimizing site potential,
- minimizing non-renewable energy consumption,
- use of environmentally preferable products, >>>



*Breaking Ground - SUITLAND, Md. — (Left to right) Prince Georges County, Md., Executive Jack Johnson, General Services Administration (GSA) National Capital Administrator Donald Williams, Census Bureau Director Louis Kincannon, U.S. Rep. Steny Hoyer, D-Md., GSA Administrator Stephen Perry, Commerce Department Deputy Secretary Samuel Bodman, U.S. Rep. Steven LaTourette, R-Ohio, and F. Joseph Moravec, GSA Public Building Services Commissioner shovel sand at groundbreaking ceremony for new Census Bureau headquarters complex, Sept. 16, 2003. Photo by Hubert Dobson, U.S. Census Bureau.*

*New U.S. Census Bureau  
Headquarters (Photo: Blake  
Marvin - HKS, Inc.)*



>>>

- protecting and conserving water,
- enhancing indoor environmental quality, and
- optimizing operational and maintenance practices

into every square inch of the US Census Bureau Headquarters' complex.

Using a sustainable design philosophy encouraged decisions at each phase of the design process to reduce negative impacts on the environment and the health of the occupants, without compromising the bottom line. This integrated, holistic approach positively impacted the team's consideration of all phases of the complex's life-cycle, from design to construction to commissioning to operation.

This collaborative, integrated

approach resulted in the completion of a complex that is absolutely breathtaking inside and out. Even more relevant, the US Census Bureau Headquarters can serve as a model for future construction projects and substantial renovations because it demonstrates that building performance can be maximized without sacrificing beautiful architectural design or healthy and happy workforce considerations at a cost per square foot that rivals conventional building construction costs – even on a massive scale, such as this 1.4 million-square-foot building – and be built to last 100 years. In addition, after one year, another LEED review will be conducted in order to verify building performance, which is a very innovative feature which may be performed and replicated on other Government projects.

The vision, oversight, and financial commitment for a sustainable facility

was initiated and continually supported by the General Services Administration (GSA). GSA collaborated with several other organizations to see this project completed. Skidmore, Owings & Merrill (SOM), the design firm, contributed the initial concepts of siting, design, and sustainable features. The detail for the design was established by HKS, the architect of record. The construction delivery and field implementation was led by Skanska USA. Contact the GSA Project Executive for more information on the collaboration team. ■

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## *GSA Mid-Atlantic Regional Energy Program Saves Energy*

*# S-13-07*

*Public Buildings Service Mid-Atlantic Region*

*The mission of the Mid-Atlantic Regional Energy Team is to continuously reduce energy consumption for the region, focusing on opportunities that are in our control, well leveraged, and are compatible with wise business practices.*

**A**s the nation's largest energy consumer, the Federal government establishes policies for improving energy management in an effort to reduce building operations costs, lower emissions that contribute to air pollution and global warming, and conserve resources.

The Public Buildings Service (PBS) strives to operate efficiently and effectively to meet these energy conservation goals which provide the best value for both customer agencies and taxpayers. By reducing energy consumption and expanding the use of renewable energy, GSA is striving nationally to reduce energy usage by 2% per year for the next 10 years for a 20% reduction, using 2003 usage data as a baseline. GSA partners on a customer-by customer basis to provide specific conservation measures in order to meet this goal.

As an overall driving goal, the region's six field offices were challenged with achieving a 2% reduction in energy consumption over the 6-month period January 2006

- June 2006 (measured against the same 6 month period the previous year). Reviews of building operation plans to determine operational opportunities were conducted that balances consumption reduction without undo impact to our tenants. Particular focus was placed the on region's highest energy consuming buildings.

The team worked directly with the Mid-Atlantic Region's Public Buildings Service Field Offices to produce significant reductions in energy consumption at Federal facilities and leases under their charge. Their efforts brought about an 8.3% reduction in energy consumption in fiscal year 2006 as compared to fiscal year 2005. The consumption reduction efforts positioned the Mid-Atlantic Region 5.9% below its fiscal year 2006 energy consumption reduction performance measure target.

The operational conservation efforts exercised by the Mid-Atlantic Regional Energy Team, resulted in significant reductions in energy consumption. This initiative- >>>

*The Edward N. Cabn Federal Building and Courthouse in Allentown, Pennsylvania, has experienced a decrease in energy consumption of 21.5% between FY05-06 due the innovative retro-commissioning program.*

>>> which struck the balance between energy conservation and maintenance of high-service levels to the customer- is a prime example of employing sensible efficiency procedures in building operations to bring about significant reductions in energy consumption. ■

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## National 3D-4D-BIM Program Focuses on Sustainability

# S-11-07

Public Buildings Service Central Office

*“... better accuracy, transparency in assumptions, and reliability in estimations of energy performance and major savings through mechanical system optimization have been realized using BIM.”*

**G**SA's National 3D-4D-BIM (Building Information Models) Program includes a focus on sustainability. Established in 2003, the Program has been recognized widely by the design and construction industry for its leadership and its mission of promoting value-adding digital visualization, simulation, and optimization technologies to increase quality and efficiency in the delivery and management of GSA's capital assets.

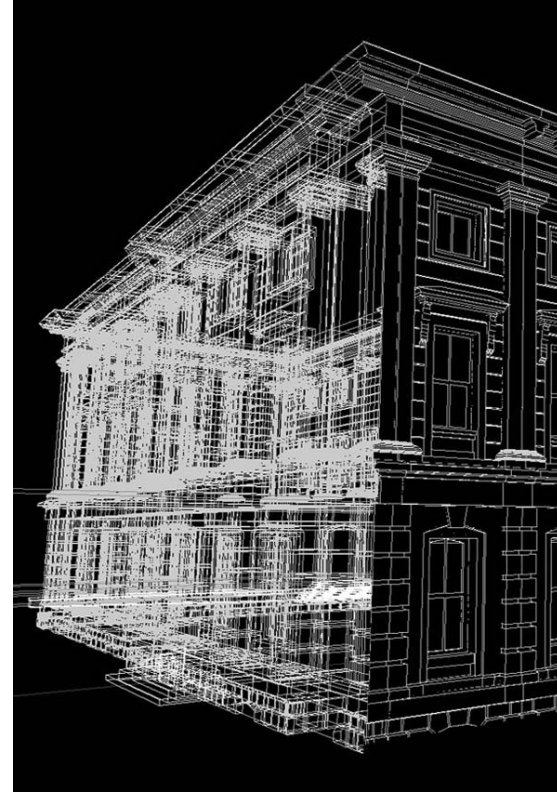
### What are 3D, 4D, and BIM?

3D, 4D, and BIM are innovative technologies that offer virtual design and construction during the planning phase of the project. They represent three separate, but synergistic, ways in which computer technologies can aid GSA to manage its capital assets throughout a project's lifecycle. 3D geometric models are the geometric representation of building components and typically serve as an aid for visualization. 4D models (3D + time) include information that can inform and analyze project phasing, tenant sequencing, and construction scheduling. Building Information Models (BIMs) include 3D geometric models, with specific information on a wide range of building elements and systems associated with a

building (e.g. Spaces, air handling units, and circulation zones) applicable to the full lifecycle of GSA's facilities.

### The Need for Sustainability in GSA Building Performance

GSA Public Building Service (PBS) provides and maintains quality >>>



>>> workplaces for over a million Federal agency associates in approximately 8,500 owned or leased buildings across the United States. Through its use and management of these facilities, the Federal Government is the largest consumer of energy in the Nation, resulting in significant opportunities to reduce its resource consumption by incorporating sustainable design methodologies.

*BIM "Pioneer Courthouse Model"*



## Innovation Benefits of BIM-Based Energy Analysis

One critical activity in the building design process is the prediction, analysis, and validation of building energy performance. A BIM-based model enables better, more detailed understanding of building performance (e.g. thermal behaviors of building spaces, thermal properties of walls, daylighting analysis). Once a baseline energy model is established, designers can analyze many more scenarios, as compared to the traditional 2-3 analyses.

To date, better accuracy, transparency in assumptions, and reliability in estimations of energy performance and major savings through mechanical system optimization have been realized using BIM. In one of our pilot projects, a courthouse building was analyzed at a detailed space by space level, while the traditional energy model was only capable to analyze the building using less detailed zones on each floor. The transparency of the modeling process enabled by using BIM allowed the modeling team to uncover several unreasonable assumptions that would not have been caught using the traditional energy model. The BIM-based

analysis (with revised assumptions) predicted 30-50% higher energy consumption than the traditional approach, and also resulted in more consistent simulation results.

## Replicating GSA Successes with Collaboration and Strategic Adoption of Technologies

To share lessons learned and promote replicability of our successes in the Regions and other organizations, GSA has developed a BIM Guide Series on best practices, a public website ([www.gsa.gov/bim](http://www.gsa.gov/bim)) with 14,000 hits and 900 BIM Guide downloads since November 2006, an internal GSA web-based portal, a community of regional BIM Champions, and national contractual language and deliverables. ■

### CONTACT

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## *New England Solar - It's the Right Thing to Do*

# S-3-07

*Public Buildings Service New England Region*

**T**he Frederick C. Murphy Federal Center in Waltham, MA is home to the Northeast Region Archives. The National Archives is the U.S. Government's collection of documents that records important events in American history. The National Archives and Records Administration (NARA) preserve and maintain these materials and make them available for research.

The GSA Energy Center of Expertise, Office of Applied Science and Technology had been looking to demonstrate new off the shelf renewable energy technology. They were looking for a facility within the GSA inventory nationally, that met the criteria of 1) need 2) size and 3) site (solar availability). The Murphy Federal Record Center fit all the stated criteria; the existing roof had exceeded its system useful >>>



*New Building Integrated  
Photovoltaic (BIPV) Solar Roof  
for Murphy Federal Record Center*



>>> life. Failure of this roof system could result in loss of irreplaceable Federal documents. It also met the size criteria; at 144,000 sq. ft, it was large enough to demonstrate the use of the large flat flexible amorphous silicon panels. Solar tracking is good; the roof area is in full sun, all day, with no shading.

The new roofing system needed to be of the highest durability to help preserve the NARA's mission, and would need to provide the latest in Energy Star (EPA) cool roof technology to maximize system payback through energy savings, per Executive Order 13423 and National Energy Policy Act of 2005.

The finished BIPV roof system has provided the NARA with unequalled protection of documents. The addition of a vapor barrier and added insulation has eliminated constant cycling of boilers and chillers to achieve the required precise humidity levels. The new roof has eliminated air stratification and provides unmatched space conditioning and air quality. The roof itself generates most of the needed electricity during daylight hours: the Integrated BIPV solar roofing system consists of a series of 10 x 40 foot solar electric roof panels – each of which has 12 flexible photovoltaic modules factory laminated to the surface of the membrane. These panels are then hot-air welded to Sarnafil

EnergySmart Roof membrane and wired to the building's electrical system.

This project also practiced construction waste management and the use of recycled content materials. In total, 105 tons of stone ballast and 15 tons of insulating material were recycled. The new membrane is manufactured with 100% recycled content product at a plant 15 miles from the Waltham building limiting energy consumption in material transport. These facts dovetail nicely with the NARA's own recycling program which recycles enough destroyed documents, to effectively save an estimated 300,000 trees per year.

The Record Center has become a touch point for education of countless, visitors, researchers, engineers, school children and educators by way of the public information kiosk in the lobby. The kiosk provides a virtual tour and real time information about the generation output from the array, educates the public. ■

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## *New San Francisco Federal Building Leads the Way*

# S-6-07

*Public Buildings Service Pacific Rim Region*

**T**he new San Francisco Federal Building is a demonstration of sustainable business practices and a model of how, through the use of sustainable design and execution, the Federal government is leading the way in developing healthy, high performance work environments.

The leadership and vision of GSA's project team coupled with the creativity and innovation of the Pritzker-winning design team of Morphosis resulted in a unique structure that capitalizes on San Francisco's temperate climate, relying heavily on natural ventilation and lighting for much of its cooling and lighting needs, thereby dramatically reducing energy consumption while providing a healthy environment for the building's 1,500 plus workers.

The building includes a slender 65-foot-wide tower rising 18 stories (240 feet) along the northern edge of the site that is adjoined by a four-story annex at its western edge. Together

*“...a unique structure that capitalizes on San Francisco’s temperate climate, relying heavily on natural ventilation and lighting for much of its cooling and lighting needs, thereby dramatically reducing energy consumption...”*



these structures help define a 34,000 square foot public plaza. In addition to the plaza, the facilities include a number of resources that are available for public use, >>>



*New "sustainable" San Francisco  
Federal Building*

efficiency that promises significant savings through reduced operating costs. ■

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>>> including a café, a child care center, and a conference center.

GSA's most ambitious sustainable design project to date, when fully

occupied, the building will house five Federal agencies in 605,000 rentable square feet of space. The \$144 million construction project is a marriage of design excellence and energy-

## *Social Security Administration Teleservice Center - A Sustainable Model*

*# S-2-07*

*Public Buildings Service Northwest Region*

**G**SA's adaptive reuse of the Social Security Administration (SSA) Teleservice Center based in Auburn, Washington became an exercise in reclaiming, salvaging and recycling an undervalued and minimally utilized asset from a bygone-era for conversion into workspace worthy of the 21st century. The facility is being hailed as a model of integrated and synergistic sustainability for projects of its type, and is currently on track for LEED Silver certification.

*Before and After photos of SSA  
Teleservice Center*



The SSA 800 number call center serving citizens and residents of the Pacific Time Zone was slated to be housed in Warehouse 7, a drab former military structure on the 138-acre GSA Auburn Campus -- one of eight virtually identical World War II-era warehouses comprising the regional Federal complex. GSA recognized that an adaptive reuse of the existing structure offered a unique opportunity to fulfill its mandate to provide sustainable government buildings, while giving taxpayers added value by transforming a minimally used Federal asset into a first-class, contemporary office space. The rationale followed that the renovation could serve as a model for the revitalization of the entire GSA Auburn Campus.

The project was intended to be housed in 80,000 square feet of the original building, which consisted of an asbestos-clad 160,000 square foot timber-framed warehouse, supported by bare trusses and columns. The addition of a 40,000 square foot mezzanine expanded the project to a total of 120,000 square feet, and increased the occupied area by 50 percent. Over 75 percent of the original building structure was preserved, while completely abating the hazardous asbestos siding and removal or encapsulation of all lead paint. >>>

*“The facility is being hailed as a model of integrated and synergistic sustainability for projects of its type, and is currently on track for LEED Silver certification.”*

>>> An underfloor air distribution system provides supply air. This system also provides individual adjustable diffuser controls, greatly enhancing the personal comfort and productivity of each employee. The mechanical and electrical infrastructures are concealed below the floor, freeing the open volume and preserving the dynamic structural truss system. A milestone for this project is proving that, unlike past GSA experiences, an efficient and effective raised access floor system can be successfully installed to meet or exceed expectations, and to minimize air leakage.

Other sustainable features include stormwater management, increased water efficiency, low VOC products and the use of regional high-recycled content products, indoor air quality and monitoring. Indigenous plant materials and the implementation of a drip irrigation system helped reduce landscape water by 50 percent. Overall water usage is projected to be reduced by over 30 percent via ultra efficient fixtures

and dual flush valve control on all toilets. Excavated soils were either recycled into the project or used for other projects -- in one instance, a

local school. In addition, GSA has purchased renewable energy certificates to cover 100 percent of the building's electricity for a two-year period. ■

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## *New Service Center a Win-Win for USDA with Sustainable Design*

# S-9-07

*Public Buildings Service Heartland Region*

**T**he new USDA project was designed to consolidate two separate leases in two locations under one roof, thereby streamlining their functionality. It was also a win-win situation since the project also achieved sustainability goals. The GSA Heartland (Region 6) Realty Services Division (RSD) accepted delivery in 2006 of the new 13,000 square-foot build-to-suit leased building on behalf of the U.S. Department of Agriculture (USDA) in Manhattan, KS.

Embracing the goals of creating energy-efficient, environmentally-friendly buildings, the leasing team and building designers also had the objective of obtaining LEED® (Leadership in Energy and Environmental Design) certification with silver designation.

Because the USDA is operating under tight budgetary constraints, the consolidation was driven by economic factors. The LEED concept was welcomed, but not initially a priority for USDA. For the USDA to agree to the project, the LEED component had to be economically feasible.

This project strengthened the commitment GSA Region 6 RSD made to the new mandate for Federal agencies to design and construct LEED certified buildings. This direction, in essence, raised the bar on the quality and efficiency of GSA

buildings. All build-to-suit projects, whether small single-agency buildings or complex, prospectus-level, multi-tenant, multi-floor projects, are encouraged to pursue LEED certification.

To meet both objectives, the designers integrated the agency's desire for LEED certification but kept it within the strict USDA budget. By adhering to requirements, designers were still able to capture the beauty and colors of the indigenous landscape while overcoming land and area limitations. Overlooking the Flint Hills, the USDA facility sits on a small, oddly-shaped lot. To maximize open space, the building and surrounding parking area were kept as tight to the front of the site as possible, minimizing the impact to the land while reducing overall building materials.

Materials were selected for their durability, regional source, and sustainable features such as recycled content and low emissions. With over 30 percent of the building utilizing recycled material, the USDA project makes great progress toward LEED certification and meets requirements needed in that area. Some recycled materials used include steel, toilet partitions, building insulation, and ceiling tile. The carpet used in the building contained 62 percent post-consumer recycled material, and doors >>>

>>> used were manufactured from post-industrial wheat and rice fiber.

To improve the indoor environmental quality and further assist the LEED certification goal, large windows starting at work surface height and extending to the ceiling were used to provide the greatest amount of natural light. Work and service areas not regularly occupied were placed in the center of the building with office spaces placed along the perimeter to maximize outside views for

employees. A high-performance, green-tinted glass was used to enhance light transmittance with low solar heat gain.

A Low-E glaze was selected throughout the building to temper the glare and heat. This also lessened the energy consumption while negating the need for shades on the windows. Also, on the exterior, a white, reflective thermoplastic polyolefin, or TPO, roof was used to save additional energy costs. ■

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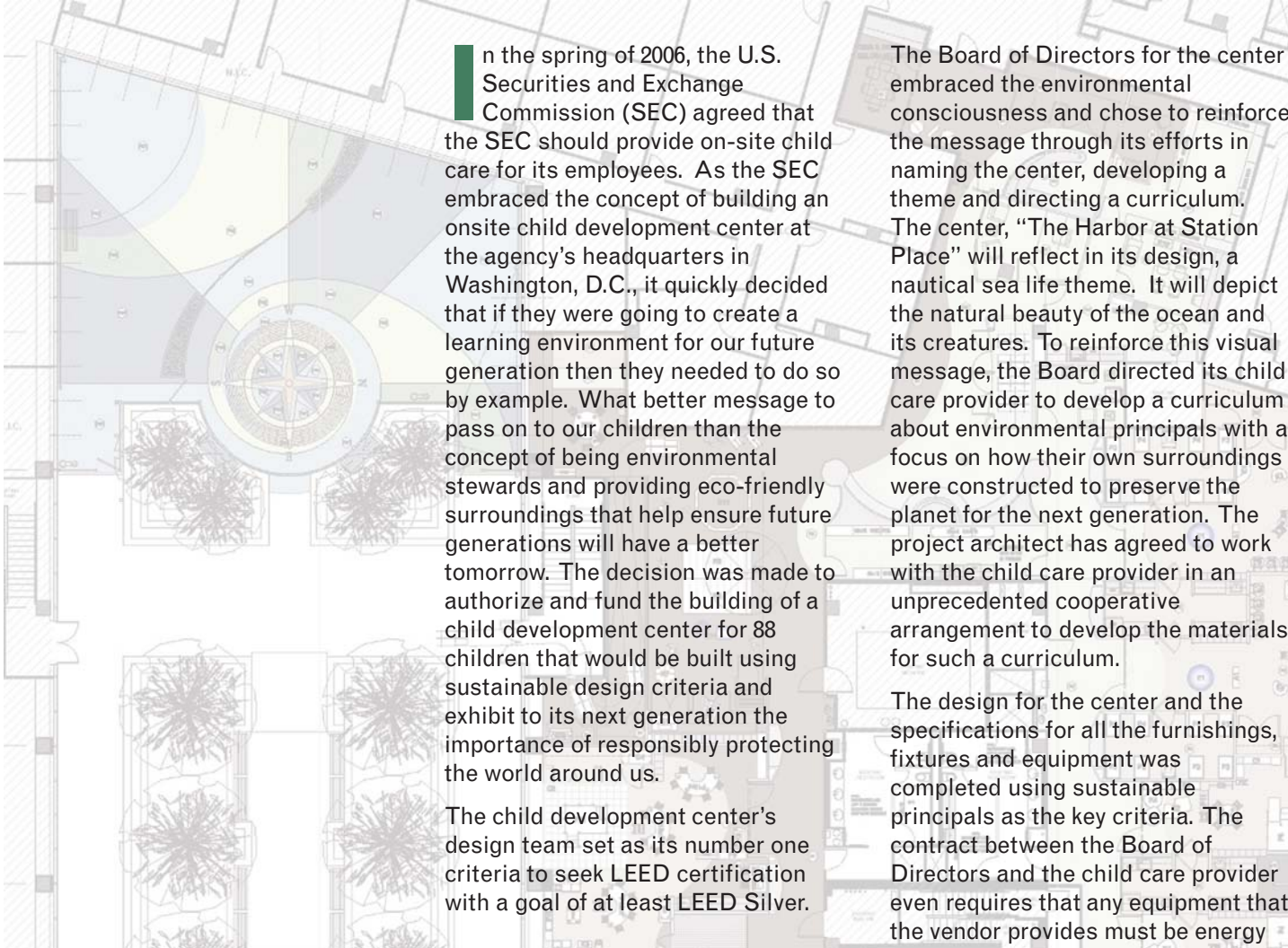
***Consolidated, sustainable  
Manhattan, KS USDA Service  
Center***



## 9. U.S. Securities and Exchange Commission

### *SEC Child Development Center - Providing Sustainability for the Next Generation*

# S-15-07



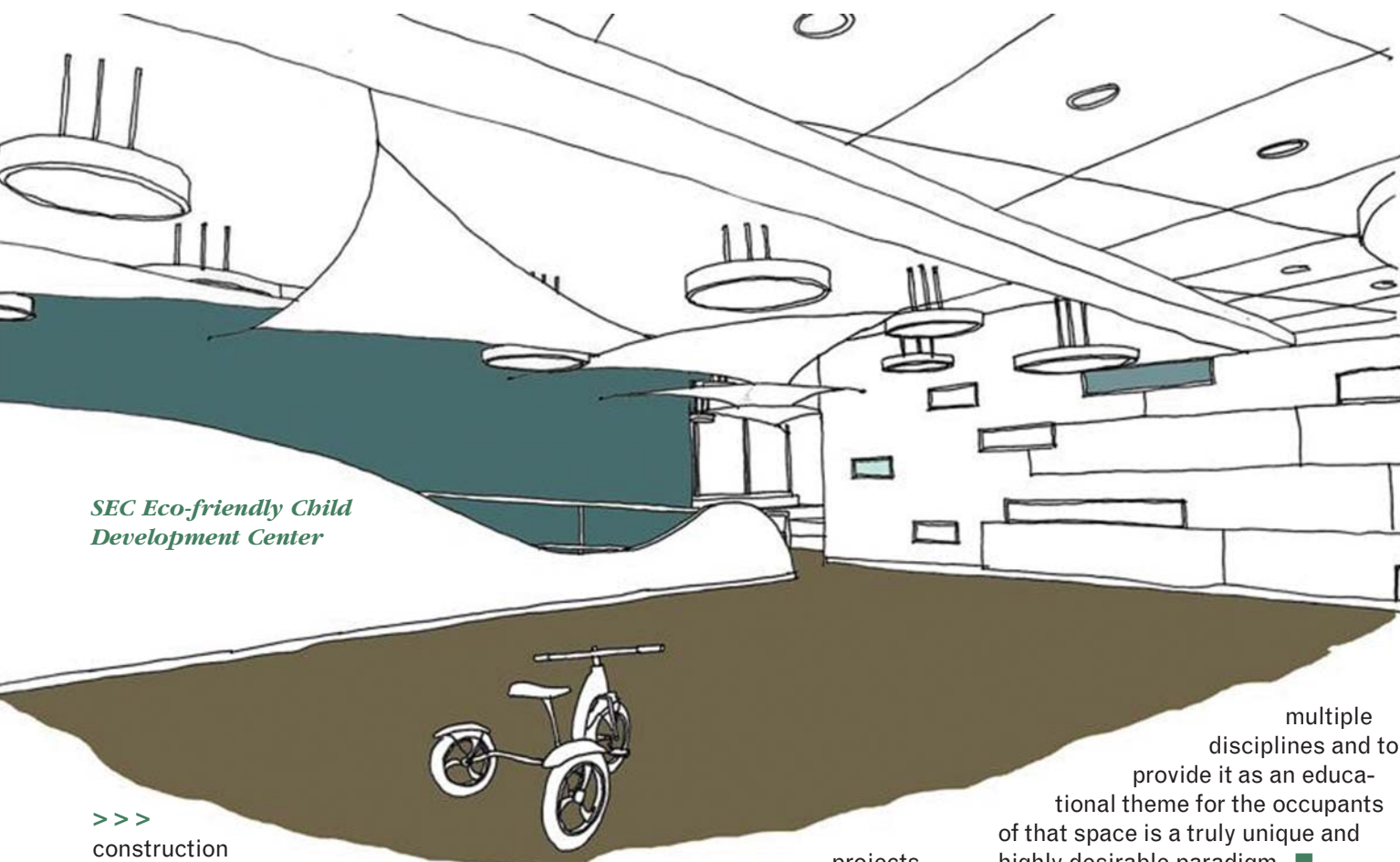
In the spring of 2006, the U.S. Securities and Exchange Commission (SEC) agreed that the SEC should provide on-site child care for its employees. As the SEC embraced the concept of building an onsite child development center at the agency's headquarters in Washington, D.C., it quickly decided that if they were going to create a learning environment for our future generation then they needed to do so by example. What better message to pass on to our children than the concept of being environmental stewards and providing eco-friendly surroundings that help ensure future generations will have a better tomorrow. The decision was made to authorize and fund the building of a child development center for 88 children that would be built using sustainable design criteria and exhibit to its next generation the importance of responsibly protecting the world around us.

The child development center's design team set as its number one criteria to seek LEED certification with a goal of at least LEED Silver.

The Board of Directors for the center embraced the environmental consciousness and chose to reinforce the message through its efforts in naming the center, developing a theme and directing a curriculum. The center, "The Harbor at Station Place" will reflect in its design, a nautical sea life theme. It will depict the natural beauty of the ocean and its creatures. To reinforce this visual message, the Board directed its child care provider to develop a curriculum about environmental principals with a focus on how their own surroundings were constructed to preserve the planet for the next generation. The project architect has agreed to work with the child care provider in an unprecedented cooperative arrangement to develop the materials for such a curriculum.

The design for the center and the specifications for all the furnishings, fixtures and equipment was completed using sustainable principals as the key criteria. The contract between the Board of Directors and the child care provider even requires that any equipment that the vendor provides must be energy star rated and all furnishings must meet LEED criteria. During the demolition of the existing office space, all materials were recycled or reused, with much of the materials being utilized elsewhere in the facility or being returned to attic stock for future renovations. The >>>

*"What better message to pass on to our children than the concept of being environmental stewards and providing eco-friendly surroundings..."*



*SEC Eco-friendly Child Development Center*

>>>  
construction of the center is near completion and monthly LEED construction meetings have monitored progress towards sustainability throughout all trades and the commissioning process. The project's LEED scorecard is now scored to the project reaching a LEED gold certification.

While sustainability in new building

projects is certainly not novel these days, the concept of a child development center with all of its unique requirements also reaching a level of exceptional sustainability is. Couple that with the partnership reached among the owner, architect, general contractor, Board of Directors and child care provider to manage sustainability across

multiple disciplines and to provide it as an educational theme for the occupants of that space is a truly unique and highly desirable paradigm. ■

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