

**THE  
TEMPLE  
GROUP,  
INC.**

Schedule Title:  
**PROFESSIONAL ENGINEERING SERVICES**

Contract:  
**GS-10F-0211V**

Contract Period:  
**6/03/09-6/02/14**

Contract Administrator:  
**MICHAEL OSAGHAE**

Sins Awarded:  
**871-7  
871-7RC**

**2011**



Federal Detention Center, Philadelphia, PA



IRS Headquarters Building, New Carrollton, MD



Aerial Rios Building, Washington, DC



Curran Fromhold Correctional Facility, Philadelphia, PA



Philadelphia Schools, Philadelphia, PA



Philadelphia International Airport, Philadelphia, PA



Blue Plains Wastewater Treatment Plant, Washington, DC



Historic Reading Terminal Train Shed Rehabilitation

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*Pennsylvania Convention Center  
Philadelphia, PA*

## COMPANY PROFILE

Established in 1985 under the leadership of Lorraine H. Brown, Ph.D., The Temple Group is a project management firm that provides comprehensive program management and construction management services. With major offices in Washington, DC and Philadelphia, PA, the firm has successfully managed more than \$6 billion of construction projects. At The Temple Group our primary goal is to ensure that our projects are completed within the established budget and schedule, while meeting the highest standards of quality.

The Temple Group employs a talented staff of professionals who understand and are able to respond to the many dimensions of construction. Each project is carefully analyzed for cost, schedule, client goals, and objectives. Our Engineering Management Services Department which includes registered architects and engineers, estimators and schedulers provide pre-construction phase services and support our projects during the construction phase. Our Project Managers are focused on planning, scheduling, controlling field activities, and providing the necessary leadership and skills for the team while maintaining working relationships with owners and other stakeholders. Our quality assurance program is implemented at the inception of each project to ensure the highest standards of construction are met without compromising safety.

Client satisfaction is a driving force at The Temple Group. We rely on state-of-the-art technology, flexibility, and creative solutions to meet the needs of our clients. As a result, we enjoy an exceptionally high rate of repeat business.



*Internal Revenue Service Headquarters  
New Carrollton, MD*

**BUILDINGS - NEW CONSTRUCTION**



**Internal Revenue Service Headquarters**  
New Carrollton, MD



**Federal Detention Center**  
Philadelphia, PA



**Pennsylvania Convention Center**  
Philadelphia, PA



**Sri Siva Vishnu Temple**  
Lanham, MD



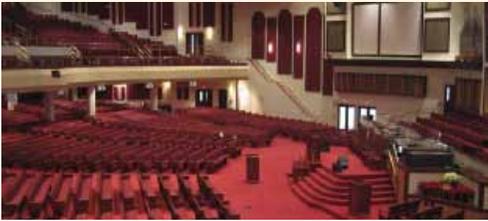
**William B. Bryant Annex, US Courthouse**  
Washington, DC



**The Barnes Museum**  
Philadelphia, PA



**Ward 1 Senior Wellness Center**  
Washington, DC



**Enon Tabernacle Baptist Church**  
Philadelphia, PA



**Columbia Heights Community Center**  
Washington, DC - LEED Silver



**Trinidad Recreation Center**  
Washington, DC - LEED Certified

**THE  
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## Internal Revenue Service Headquarters

New Carrollton, MD

The \$160 million New Internal Revenue Service Headquarters Consolidation “fast track” design/build project is located on a 30-acre site adjacent to residential communities and Metro Rail. The building is a steel structure with precast concrete and aluminum curtain wall containing 1.1 million gross square feet and 2,170 parking spaces, distributed into two levels below grade and into five levels above the precast parking garage. The project includes three buildings of nine floors each, interconnected by pedestrian bridges, above a two-level base of services and special spaces and an additional 550 foot pedestrian bridge connecting the main entrance to the Metro and Amtrak Stations across Ellin Road. Special spaces include training, health unit, child care, credit union, fitness center, television studios and an auditorium which is available for use by local community groups.



Client: **General Services Administration, National Capital Region**

Role: **Prime Construction Manager, providing Comprehensive Construction Management**

## Federal Detention Center

Philadelphia, PA



The construction of the 320,000 sf, \$70 million Detention Center was a “fast track” project with a 36-month schedule. The completed project was a 11-story building that included three basement levels. The lowest level provided direct access from the building to the inmate tunnel under Seventh Street. The tunnel was joined directly to the Federal Courthouse Building across the street for inmate transport.

Sixty-three concrete caissons were used in the foundation system for the concrete frame building. Approximately 22,500 cubic yards of concrete were placed in the building slabs and columns. Concrete slabs thickness for floors ranged from 12 inches to 14 inches.

The FDC site presented unique challenges in site logistics and construction. Special construction procedures were required for below grade site excavation for the tunnel, sub-basement, and basement level work so as to minimize disruption to city traffic and surrounding businesses.

Client: **Federal Bureau of Prisons**

Role: **Prime Construction Manager**

## Pennsylvania Convention Center

Philadelphia, PA

The \$250 million Pennsylvania Convention Center project included a new 1 million square foot convention center, with specialty spaces for ballroom, exhibition, registration and administrative areas. The Pennsylvania Convention Center is a Class A+++ facility, which is the highest classification by established industry standards (combining design and craftsmanship) that represents a classical convention center with the historic Reading Terminal ballroom. The Reading Terminal Train Shed included structural restoration of a series of wrought iron, three-hinged arches spanning a width of 267 feet and reaching a height of 88 feet, encapsulation of lead based paint, replacement of the roof and windows, and restoration of the exterior metal facade. In the basement, extensive systems of new concrete columns were built to underpin the tremendous added weight created by the new ballroom and meeting rooms.



Client: **Pennsylvania Convention Center Authority**

Role: **Program Manager**

## Philadelphia Youth Center

Philadelphia, PA



The new \$60 million Philadelphia Youth Center is a multi-story, 160,000 sf state-of-the-art 150 Bed detention facility designed for **LEED SILVER**. The multi-functioning facility combines youth assessment and detention, court rooms and judges chambers, probation, community-based detention alternative programs, portions of the family court justice system, shared community space, recreational facilities, classrooms, and a fully functioning kitchen and cafeteria.

Client: *City of Philadelphia, Capital Projects Office*

Role: *Prime Construction Manager, providing Comprehensive Construction Management*

## Ward 1 Wellness Center

Washington, DC

The \$5.3 million Ward 1 Wellness Center is a 15,224 sf new facility. The project consists of a 3 story building with a basement, useable green roof area and parking. The building is designed to achieve **LEED GOLD**. The facility features include Nutrition Counseling and Teaching Classrooms, Intake Room, Health Education Seminar Rooms, Exercise and Fitness Area, Massage Room, Computer Training Center, Multipurpose Rooms, offices for staff, and roof top terrace with walking space.



Client: *District of Columbia, Department of Real Estate Services*

Role: *Prime Construction Manager*

## Oak Hill Youth Center

Laurel, MD



Sited on 14.3-acres, this **LEED GOLD** \$47 million Oak Hill Youth Center project consisted of demolition of 3 large one-story structures, the existing utility infrastructure, and performing mass grading to accommodate 5 new buildings. The new buildings consist of a Campus Administration (46,960 sf); a combination Gymnasium/Warehouse (24,079 square feet); three Housing Units (6,938 sf) and a new utility infrastructure including a new storm management system, new sanitary sewer system, new domestic water service, new security system and fire service systems.

Client: *District of Columbia, Department of Real Estate Services*

Role: *Prime Construction Manager*

## Enon Tabernacle Baptist Church

Philadelphia, PA

The \$28.3 million New Enon Tabernacle Baptist Church Project was sited on 13.7 developed acres on Cheltenham Avenue, with a 5,000 seat Worship Space, Activity Building and Parking space for 400 -700 spaces. The features include Education Building, Sanctuary Area, Congressional Seating, Balcony and Fellowship Hall, General Administration, Dining Area and Commercial Kitchen; Rest Rooms; Telecommunications; Security System including interior and exterior cameras and Elevators. Design features were site utilities, parking facilities, HVAC, electrical, roofing systems, and stand-by generator.



Client: *Enon Tabernacle Baptist Church*

Role: *Prime Construction Manager*

## Trinidad Recreation Center

Washington, DC



Trinidad Recreation Center located at 1310 Childress Street in NE Washington, DC is a new \$7.2 million, 21,000 sf, **LEED** certified project. The site area is approximately 6.50 acres. Situated in the northern half of the site are ballfields, while the southern half of the site contains a recreation building with a gymnasium, weight room, computer learning center, entertainment center and audiovisual equipment. Other features included a 5,000 sq. ft green roof, playgrounds, a sitting area, and multi-use courts.

Client: *District of Columbia, Department of Parks & Recreation*  
Role: *Program Manager / Construction Manager*

## Turkey Thicket Recreation Center & Indoor Swimming Pool

Washington, DC

Located at 10th Street and Michigan Avenue, NE is a new \$12.5 million Turkey Thicket Recreation and Swimming Pool project, 19,000 sf recreation center with a 60' x 85' heated Olympic size swimming pool and a 20' x 20' heated wading pool and outdoor sports and activities areas. The new building is a one-story brick structure, scaled and detailed in a contemporary architectural style, consisting of split faced and red brick bearing walls. The roof is comprised of clear span steel joists supporting a clear plastic glazed dome. Site amenities include parking with ADA requirements, storm water management, storm drainage, storm sewer, site lighting, fencing and screening, site and building security, tennis courts and basket ball courts, upgraded baseball field and soccer field, children's play area, picnic area, jogging/walking paths, and parent's supervision area.

Major room and activity areas within the recreation center building include two vestibules, lobby, two offices, storage areas, gymnasium, bleachers, kitchen, women's lockers, men's lockers, women and men's toilets, janitor's closet, game room, exercise equipment room, mechanical and electrical room, classrooms and arts and crafts room.



Client: *District of Columbia, Department of Parks & Recreation*  
Role: *Program Manager / Construction Manager*

## Columbia Heights Community Center

Washington, DC



The new \$12.3 million, 47,395 sf community center with offices and other program amenities achieved **LEED SILVER** Certification.

The building is a structural steel building with metal sheet and concrete floor slab, the exterior of the building has a colorful mosaic of face bricks on the east, south and north elevation of the building with a striking glass curtain wall on the northeast corner. On the west elevation is a mixture of new face bricks, recycled brick and precast stone saved from the demolition of a pre-existing building at that location.

The interior has an environmental control system with CO<sub>2</sub> monitoring in each vent for automatic detection and adjustment of carbon dioxide. All light fixtures are sensor controlled to maximize energy efficiency.

Client: *District of Columbia, Department of Parks & Recreation*  
Role: *Program Manager / Construction Manager*

## Hillcrest Recreation Center

Washington, DC

Hillcrest Recreation Center located at 32nd and Denver Streets, SE, Washington, DC is a new \$5.3 million project, on a 16 acre site with outdoor volleyball, horseshoes, tot lot, badminton, water play sprinkler, putting green, and walking tracks through 9 acres of wooded area, and a 17,700 sf new Recreation Building with modern indoor basketball court, weight rooms, computer learning center, and multi-purpose rooms.



Client: *District of Columbia, Department of Parks & Recreation*  
Role: *Program Manager / Construction Manager*

## William H. Hunter Elementary School

Philadelphia, PA



The new and award winning 107,000 sf \$19 million William H. Hunter Elementary School for the School District of Philadelphia is a new state-of-the-art elementary school built at Front & York Streets replacing the 92 year old school building. The new kindergarten through 8th grade school was planned to house 750 students. The three-story structure encompasses an entire block and has elevator service.

The educational design for the school supported 28 K-8 classrooms, 2 special education classrooms, auditorium, cafeteria and other specialized areas. The building was wired for networking and internet access along with air conditioning throughout the school. Each classroom features an Interactive White Board (Smart Board), LCD projector, a PC computer to use with the web based curriculum and 3 Apple computers for students use.



Additional features included specialty rooms for Art, Music, Physical Education, Computer Class, Automated Instructional Materials Center (IMC), Science Laboratory, Technology Education Program and Family Life Program.

Client: *School District of Philadelphia*  
Role: *Prime Construction Manager*

## Bureau of the Census Computer Facility

Bowie, MD

Design review services for the \$35 million 140,000 square-foot, low-rise building housing the Census Bureau's central computer facility located on the University of Maryland's Campus included review services at the 50%, 75% and 100% completion stages utilizing the metric system in conformance with the Metric Conversion Act. Scope included site work, cast in place concrete, architectural concrete, unit masonry, and reinforced masonry, metals including structural steel, ornamental metal, and miscellaneous metal; rough carpentry and architectural woodwork, thermal and moisture protection, doors and windows, finishes, specialties, projection screens and loading dock equipment; mechanical, plumbing, fire protection, and electrical systems and accessories.



Client: *US General Services Administration, National Capital Region*  
Role: *Pre-Construction Phase Manager*



*Sri Siva Vishnu Temple  
Lanham, MD*

# BUILDINGS - RENOVATION

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**Suitland Federal Complex**  
Suitland, MD



**J. Edgar Hoover Building**  
Washington, DC



**Dept of Housing & Urban Development**  
Washington, DC



**Department of Energy**  
Washington, DC



**Department of the Interior Building**  
Washington, DC



**Ariel Rios Federal Building**  
Washington, DC



**E. Barrett Prettyman US Courthouse**  
Washington, DC



**Wilber Cohen Building**  
Washington, DC



**Hubert H. Humphrey Building**  
Washington, DC



**Mary E. Switzer Building**  
Washington, DC

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## US Office of Personnel Management

Washington, DC



Renovation of Suite 6460, included painting, new carpet and FF& E.

Renovation of Suites 3400-3420, 3425, 4312 and 4351 included carpet, asbestos tile abatement, ceilings, lighting, and drywall partitions.

The \$1.4 million Rooftop Emergency 350 KW Generator installation and Basement Fire Alarm System Upgrade included revising and reconnection of basement fire alarm to existing first floor Simplex Fire Panel.

The \$1.8 million Elevator Controller Replacement scope included the complete replacement of controllers on two elevator banks of five cars each, and the

replacement of elevator cables and rope grippers.

The \$1.3 million Emergency Parking Garage Project included Concrete Slab Repairs.

Client: *US General Services Administration, National Capital Region*

Role: *Construction Manager*

## Pentagon Roof Replacement

Arlington, VA

The scope of work for the \$9 million 230,000 sf Pentagon Roof Restoration design/build project includes built-up roof renovation with complete replacement of the 5-ply coal tar built-up roof assembly and associated flashings, drains and coping in kind and installation of new fall protection. Slate roof replacement includes complete replacement of the slate, wood sleepers and plywood underlayment and associated flashings and guttering, and catwalks as well as installation of new ice and water shield, fire breaks, roof vents and fall protection.



Client: *Defense Facilities Directorate*

Role: *Construction Manager*

## US General Services Administration Regional Office Building

Washington, DC



Scope included the \$1 million replacement of all high voltage conduit and the medium distribution feeders with RGS conduits painted 'orange' and labeled with painted letters per NEC and OSHA codes; and the \$400,000 replacement of three existing 1,000 AMP Automatic Transfer Switches with three new Automatic Transfer Switches.

Client: *US General Services Administration, National Capital Region*

Role: *Construction Manager*

## US Courthouse for the Southern Division of the Judicial District of Maryland

Greenbelt, MD

The \$1.4 million renovation included reconfiguring the second floor office space into a new courtroom, judges' chambers, jury room and supportive offices for the judge, deputy clerk, and holding block cell. Renovation was performed after hours to avoid disruption of the court's business day.



Client: *US General Services Administration, National Capital Region*

Role: *Construction Manager*

## National Court of Appeals

Washington, DC

The \$1.5 million basement conversion project required complete removal of the basement concrete slab on grade, excavation of 1-2 feet of sub-grade material and placement of a new concrete floor slab to provide additional ceiling height. Once this was accomplished, the entire space was converted from a storage area to office space plus locker facilities for court security personnel. All excavated material and debris plus new concrete had to be brought in through a single window access point that was partially below grade.

The \$1.4 million renovation and alteration of approximately 7,000 sf of the third floor was successfully accomplished to accommodate new Judge's chambers. The scope of work required extensive new millwork in addition to partition changes, new ceilings, HVAC work, and the addition of private toilets. All work had to be performed at night to minimize disruptions to court activities.

The \$700,000 renovation and upgrade of 7,000 sf on the fifth floor included demolition, asbestos abatement, upgrade of the security system, installation of raised flooring in the courtwell areas, new carpet, door revisions, installation of new conduit systems as necessary to install state-of-the-art audio-visual equipment. The renovations included the addition of new courtrooms and five judges chambers. The work was performed after business hours to maintain the operational and functional requirements of the court.

Client: *US General Services Administration, National Capital Region*

Role: *Construction Manager*



## Housing and Urban Development

Washington, DC



The \$2.4 million Plaza Waterproofing and Enhancements project consisted of demolishing 68,000 square feet of plaza paving, removal and replacement of waterproofing membrane, placement of lightweight concrete topping slab and new colored concrete finished surface. Additional work included the installation of precast planters, pedestrian benches, overhead circular lighted aluminum canopies, new streetscape, sprinkler irrigation system and drainage system.

Client: *US General Services Administration, National Capital Region*

Role: *Construction Manager*

## Department of Energy

Washington, DC

The Forrestal Building Complex consists of Buildings A, B, C, D and E for a total of 1,632,000 sf. The \$ 1.5 million Miscellaneous Fire and Life Safety Repairs project consisted of asbestos abatement, replacing existing expansion joint covers at 26 floor locations, installation of fire-rated accordion doors at four locations, to provide a 1½ hour fire-resistive separation between Buildings B and C at the escalator/elevator lobbies; installation of new protective guard rails on both sides of all interior glass panels; and installation of an automatic wet pipe sprinkler system in specified areas, and tie the system into the buildings existing fire alarm system.



The HVAC and plumbing improvements/renovations of the Physical Fitness Center included new lighting, HVAC and sprinkler systems, replacement of heat exchanger tubing and piping work at eight hot water storage tanks together with new electronic controls, and replacement of six sewage ejector tanks, pumps and piping. Since this is an occupied building, most of the repair work was performed after normal work hours.

Client: *US General Services Administration, National Capital Region*

Role: *Construction Manager*

## J. Edgar Hoover Building

Washington, DC



The \$5.3 million repair and alteration projects included:

The HVAC Systems Modification project which required the demolition and replacement of the existing exhaust fan and distribution system for the gymnasium locker and toilet rooms; the air handling supply unit and distribution for the active sports areas; the addition of a new air handling supply unit for the lobby, office and locker areas; the replacement of filter gauges and filter bags on ten other air handling units; the replacement of ten exhaust fans and motors on units located throughout the building; the installation of a carbon monoxide monitoring system in the garage; and, other interior finishing activities.

The Structural Slab project required the identification and removal of all deteriorated concrete on the second and third levels of the parking garage. The reinforcement bars were inspected for corrosion and loss of thickness and those with substantial deterioration were spliced/ replaced. The entire floor was then covered with a protective concrete floor sealer.

The work was divided into twenty phases and required approximately 15,000 sf of concrete repair. The entire garage lighting, wiring, and conduit were replaced including new service panel breakers.

The Steam and Condensate Piping Replacement project scope required the demolition of the existing steam piping under size of 3 inches and condensate piping under size of 10 inches and related equipments, insulation, supports, steam traps and all related items in the 1st, 2nd and 3rd basement mechanical rooms, 3rd, 7th and 12th floor. The related equipment included factory fabricated field erected storage tanks, receiving tanks, condensate pumping, flash tanks and controls.

The Domestic Water Pump and Cooling Tower Pumps Replacement project was a design/build project. The scope required demolition of existing water pumps, valves and support and installation of a new concrete pad, pumps and control panel, including installation and insulation of the suction and discharge piping lines and fittings, and a flex connection on the suction and discharge piping line.

Other projects included Garage Lighting Replacement and the Pistol Fire-Range Renovation and Upgrade.

Client: *US General Services Administration, National Capital Region*  
Role: *Construction Manager*

## Suitland Federal Complex

Suitland, MD

The Suitland Federal Complex, Suitland, MD, is a secured seven-building, 250 acre site of various federal agencies.

The following task orders required alteration, renovation, repair, demolition and new construction involving architectural, civil, electrical, mechanical and environmental support services:

- Replacement of 2400 linear feet of high temperature hot water piping including the welding and x-ray of all joints in accordance with nuclear power plant specifications at the Census Building (Federal Office Building Three), \$600,000.
- Replacement of fourteen hundred lighting fixtures for energy-efficient lighting, installation of three hundred motion detectors and light sensors. Tasks included removal of hazardous material and PCB ballasts at the Census Building (FOB Three), \$860,000.
- Demolition and removal of the Naval Intelligence Command (NIC-1) three-story 96,000 sf concrete building. Work includes asbestos abatement, PCB removal, extraction of three 10,000 gallon fuel oil tanks and 1000 cubic yards of contaminated soil, \$1.2 Million.
- Interior renovations of the Presidential Inaugural Headquarters (Federal Office Building-2) including asbestos and PCB removal, electrical upgrade, HVAC, fire alarms, smoke detectors, finishes, and plumbing, \$892,000.
- Storm drain system improvements involving installation of a two and a half million gallon retention pond, 600 linear feet of storm drains, and installation of three 13,000-gallon concrete underground sediment tanks, \$1.3 Million.
- Improvements to the 800,000sf Records Center Building sprinkler system consisting of installation of 10" underground fire main and a new sprinkler pipe system, \$1 Million.
- Upgrade of fire detection system which included installation of fire rated interior sliding doors and other architectural improvements at the 800,000sf Records Center, \$796,000.
- Two 3,000-horsepower high-temperature hot-water converters were completely rebuilt to 300 psi operating pressure at the Suitland Federal Central Heating Plant, including replacement of 1100 linear feet of 22" diameter high-temperature piping. Installation was completed in accordance with nuclear power plant specifications, \$1.2 Million.
- Rebuild two 2400-hp heat converters and replace 900 linear feet of HTHW 4" to 26" diameter piping (300 psi) in accordance with nuclear power specifications including x-raying pipe welds and asbestos abatement at the Central Heating and Refrigeration Plant, \$908,000.
- Install cooling towers serving two 2400-ton, one 1600-ton and one 600 ton chillers at the Central Heating and Refrigeration Plant, including asbestos abatement and lead-based paint removal, \$2 Million.

Client: **US General Services Administration, National Capital Region**  
Role: **Construction Manager**



## Silver Spring Metro Center

Silver Spring, MD



The \$1.3 million project scope included removal and replacement of hazardous floor materials, renovation of floors 2 through 5 of the nine story building, reconfiguration of tenant spaces and upgrading of mechanical and electrical systems, including structural and architectural finishes. Removal of the floor leveling compound Morritex without affecting the structural integrity of the building was complicated because of the highly toxic phenol gas that is emitted and the varying thickness and location of the compound. No standard containment procedures were available for the removal of this hazardous material. Other known containment and testing methods were tried out and used successfully.

Client: **US General Services Administration, National Capital Region**  
Role: **Construction Manager**

## Storage Depot Building A & B

Springfield, VA

The General Services Administration Depot in Springfield, VA is a warehouse space facility of 13 buildings totaling 1.4 million square feet. The extensive \$17.9 million renovation included heating system upgrade, which consisted of demolition of all existing heaters, boilers, conversion burners, duct furnaces, fuel oil piping and electrical conduit and wiring. New installation included new industrial heaters, boilers, conversion burners, duct furnaces, natural gas piping, electrical conduit, wiring and smoke detection system.



The emergency truss repair involved shoring ten existing wood trusses and removing the top and bottom chords. Additional work included installation of new engineered wood beams for the bottom and top chords and installation of knee bracing to support the roof.

The Truss repair project required the replacement of all bottom chords on trusses in Buildings A & B. The trusses are bow string construction 70' in length. This work included the removal and reinstallation of electrical, mechanical, plumbing, and sprinkler systems.

Roof Replacement Buildings A & B - Building A is 500 ft x 2000 ft. equaling 1 million sq.ft. under roof. Building B is 500 ft. X 500 ft. equaling 250,000 sq.ft. under roof. The Springfield Depot warehouse structures are concrete walls and columns supporting a wood frame roof consisting of wood arch trusses and wood joists. Building A consists of nine 222.5 ft. long arches supported by concrete walls at each end and concrete columns, creating eight valleys at the concrete walls. The project consisted of bridging the eight valleys creating a flat roof and extending the concrete support walls, supporting the existing structure while the work was in progress, roof removal at the valleys, extending the concrete support walls, installing new steel joists, metal decking and membrane roofing, and minor electrical and sprinkler work. The alterations were performed on both building while the building inventory was moved and protected from damage as the work progressed on a five month schedule.

Client: *US General Services Administration, National Capital Region*

Role: *Construction Manager*



## US Tax Court

Washington, DC

The scope of services for this \$2.3 million project included the emergency power system upgrade, roof replacement, and fan coil unit replacement. All work was performed on the weekends to avoid disruption to court functions.

Client: *US General Services Administration, National Capital Region*

Role: *Construction Manager*

## Hubert H. Humphrey Building

Washington, DC

### \$8.1 million Plaza Repairs and Sprinkler Upgrades Projects

The plaza repair project scope included removal and replacement of 90,000 square feet of granite pavers. The parking garage waterproofing was completely replaced. A new pedestal system for the pavers was installed, consisting of Styrofoam insulation board filler, plastic shims, and pedestal supports.

The sprinkler project consisted of demolition of all existing ceilings, light fixtures, HVAC diffusers and fire alarm. New work consisted of installation of new 2' x 2' ceiling grid, ceiling tiles, light fixtures, HVAC diffusers, fire sprinklers and fire alarm system.

Client: *US General Services Administration, National Capital Region*

Role: *Construction Manager*



## Defense Information Systems Agency

Arlington, VA

The \$7.8 million Global Operation and Security Center renovation of approximately 7500 sf. of Sensitive Compartmented Information Facilities space involved the demolition of existing space and installation of new electric, HVAC, communications, LAN, raised flooring, walls, ceiling, sprinkler and office furnishings to meet the Department of Defense standards.

The D1 Project renovation of approximately 9,000 sf. of office space, included all corridors on the first floor and cafeteria dining room. The work performed was the demolition of existing spaces and installation of walls, ceilings, electric, communications, LAN, finishes and office furnishings. The Mylar Window Protection involved the installation of 10 mil clear and 2 mil reflective Mylar on all exterior windows at the DISA command for blast and security protection.

The Network Operations Center project was the installation of two (2) 200 sf. of Sensitive Compartmented Information Facilities areas within a secure area for computer operations. The scope of work involved demolition of existing space and installation of specialized HVAC and electrical systems, raised floors, ceilings, and office furnishings. The Joint Task Force for Computer Network Operations Command Center included renovation of 10,000 sf of existing office space for a new Department of Defense command. The area was for secure occupation and involved bringing the whole area to Sensitive Compartmented Information Facilities standards. Project involved demolition of existing space and installation of specialized electric and HVAC, walls, raised floors, ceilings and office furnishings.

The Upgrade of the Uninterrupted Power Source System included the replacement of an existing 400 KW system with two (2) new 500 KW UPS including batteries and relocation of a 600 KW Generator to an outside location. Project included demolition of existing system and installation of new UPS, including upgrade HVAC for the space. The project also included an upgrade to the HVAC control system. The Blast Survey examined the vulnerability of the site and made recommendations to correct deficiencies. The Lobby and Executive Dining Room renovation included the demolition of existing spaces and installation of walls, ceilings, electric, HVAC, communications, LAN and furnishings.

The Global Network Operation and Security Center renovation created a new 1000 sf Command Center. The project involved demolition and installation of specialized electric and HVAC, walls, raised floors, ceilings and office furnishings.

Client: *US General Services Administration, National Capital Region*

Role: *Construction Manager*

## Department of Veteran Affairs

Philadelphia, PA

The \$7 million Department of Veteran Affairs Photovoltaic project included the installation of a 49,755 square foot photovoltaic solar panel array system, consisting of 1,937 solar panels producing on average 455,195 kw of electrical power.



Client: *US General Services Administration, Region 3*

Role: *Construction Manager*



## Building 52 Renovation, University of the District of Columbia

Washington, DC

The work consists of base building modifications, including modifications to HVAC, Electrical, and Plumbing systems, and new finishes.

Client: *University of the District of Columbia*

Role: *Pre-Construction Manager*



*Federal Detention Center  
Philadelphia, PA*

# CORRECTIONAL FACILITIES



**Federal Detention Center**  
Philadelphia, PA



**Curran Fromhold Correctional Facility**  
Philadelphia, PA



**Philadelphia Youth Center**  
Philadelphia, PA



**Oak Hill Youth Center**  
Washington, DC



**Department of Corrections (DC Jail)**  
Washington, DC



**Correctional Treatment Facility**  
Washington, DC



**State Correctional Institute**  
Coal Township, PA



**State Correctional Institute**  
Somerset, PA



**State Correctional Institute**  
Mahanoy, PA



**State Correctional Institute**  
Albion, PA

## Oak Hill Youth Center

Laurel, MD

Sited on 14.3 acres, this **LEED GOLD** \$47 million Oak Hill Youth Center project consisted of demolition of 3 large one-story structures, the existing utility infrastructure, and performing mass grading to accommodate 5 new buildings: The new buildings consists of a Campus Administration (46,960 square feet); a combination Gymnasium/Warehouse (24,079 square feet); and three Housing units (6,938 square feet) and a new utility infrastructure including a new storm management system, new sanitary sewer system, new domestic water service, new security system, and fire service systems.

Client: *District of Columbia, Department of Real Estate Services*

Role: *Prime Construction Manager*



## Federal Detention Center

Philadelphia, PA

The construction of the \$70 million 320,000 SF Detention Center was a “fast track” project with a 36-month schedule. The completed project was a 11-story building that included three basement levels and an elevator penthouse above the 8th floor roof.

The lowest level provided direct access from the building to the inmate tunnel under Seventh Street. The tunnel was joined directly to the Federal Courthouse Building across the street for inmate transport. Sixty-three concrete caissons were used in the foundation system for the concrete frame building. Approximately 22,500 cubic yards of concrete were placed in the building slabs and columns.

Client: *Federal Bureau of Prisons*

Role: *Prime Construction Manager*

## State Correctional Institutes, Somerset, Coal Township, Mahanoy & Albion

in Somerset, Northumberland, Schuylkill & Erie Counties, PA

Four (4) 1000-cell prototypical medium-security State Correctional Institute facilities embodied a group of low rise buildings including one maximum security, one minimum security and six medium security housing units within a secure fenced area in a campus type layout. Also included within the secure fence area were support services and program services buildings consisting of the visiting/intake, health, dietary, laundry, commissary, maintenance shops, prison industries, chapel, learning resources, inmate activities and recreational services areas and two outdoor athletic fields and running tracks.

The Administrative Building, Warehouse and Central Utilities Plant are situated outside the fenced area in each 200 acre site. State of the art electronics and security features enabled monitoring and control of the entire facility from the Central Control Center in the Visiting Building.

Although the design was prototypical, each site presented unique challenges with regard to site conditions, environmental impact, local regulations, material and labor availability, caliber and structure of the development teams, and response to the prison from the local communities, thus resulting in four unique facilities but conforming to the States prototypical specifications.



State Correctional Institute, Somerset  
Somerset County, PA



State Correctional Institute, Coal Township  
Northumberland County, PA

Client: *Pennsylvania Department of General Services*

Role: *Construction Manager*

## Philadelphia Youth Center

Philadelphia, PA



The new Philadelphia \$60 million Youth Center is a multi-story, 160,000 sf state-of-the-art 150 Bed detention facility designed for **LEED Silver**. The multi-functioning facility combines youth assessment and detention, court rooms and judges chambers, probation, community-based detention alternative programs, portions of the family court justice system, shared community space, recreational facilities, classrooms, and a fully functioning kitchen and cafeteria.

Client: *City of Philadelphia, Capital Projects Office*

Role: *Construction Manager*

## Curran-Fromhold Correctional Facility

Philadelphia, PA



The \$130 million 2,000-bed, 701,500 square foot maximum/medium correctional facility for the City of Philadelphia consisted of four housing units and an administration/core building on a secured 25-acre site. Each housing unit contained four pods constructed out of precast concrete cells, clustered around a single electronic control center with state-of-the-art intrusion alarm, fire alarm, closed-circuit TV, and public address systems.

Client: *City of Philadelphia, Capital Projects Office*

Role: *Construction Manager*

## District of Columbia Correctional Treatment Facility

Washington, DC

The \$ 75 million District of Columbia Correctional Treatment Facility is a 480,000 square-foot, 800-bed facility set in an attractive, campus-like caisson-supported facility on a 10.5-acre site in the southeast section of Washington, DC on the grounds of the DC General Hospital complex.

This design/build project consisted of three pre-cast residential structures with waffle slab roofs interconnected to an administration building. Heat for the facility is derived from DC General Hospital's existing high pressure steam plant, and air conditioning provided from penthouse chillers. Two 2500 KVA transformers and a switch-pad were installed in the new electrical vault to supply power for two 3000A switchboards while a 350W diesel-fired emergency generator and transfer switch were installed to supply emergency power.



The building security system consisted of closed-circuit TV cameras and monitors that assisted central control in the performance of remote control functions. Perimeter security included a solid perimeter precast wall and a 25-foot buffer strip with interior 12-foot high security fences.

Sitework included new roadway, parking lots, curbs and gutters, sewer/water manhole frames and basin tops, catchbasins, wheelchair/bicycle ramps, necessary grading and excavation and traffic and lane markings.

Client: *District of Columbia, Department of Real Estate Services*

Role: *Prime Construction Manager*



*Hunter Elementary School  
Philadelphia, PA*

# EDUCATIONAL FACILITIES

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**Hunter Elementary School**  
Philadelphia, PA



**Benjamin Franklin Elementary School**  
Philadelphia, PA



**Delaplaine McDaniel Elementary School**  
Philadelphia, PA



**Lincoln University Student Union Building**  
Philadelphia, PA



**AJ Morrison School**  
Philadelphia, PA



**University of the District of Columbia**  
Washington, DC



**Carnell Elementary School**  
Philadelphia, PA



**Central High School**  
Philadelphia, PA



**Leeds Middle School**  
Philadelphia, PA



**Prince Hall School**  
Philadelphia, PA

## Penrose Elementary School/Motivation High School

Philadelphia, PA



The \$12 million Renovation and Addition to Penrose Elementary School and Motivation High School consists of a new 19,000 square foot gymnasium which will connect the existing Penrose Elementary School and the Existing Motivation High School.

The project includes a new exterior entrance for the Penrose Elementary School and other exterior safety improvements including a new 30 car parking lot, new asphalt porous bituminous paving, new storm and sanitary lines, new basketball court, and 4 new handicap ramps off of the new addition. The scope also includes Information Technology upgrades, access and upgrades into the new addition, painting, abatement of old chalkboards and installation of new marker boards.

The Motivation High School scope includes a new nurse's office, security office, library, counselor's suite and all other administrative offices; a new elevator, which was necessary for the ADA upgrades and access into the new addition, bathroom ADA upgrades, and a new fan unit to supply heat and cooling to the existing school.

Client: *School District of Philadelphia*  
Role: *Construction Manager*

## Delaplaine McDaniel Elementary School

Philadelphia, PA

The project is a \$19 million one and one-half story steel frame and masonry addition built on the south side of the existing building. The existing structure is a three-story, including a basement level and a fourth-level unoccupied plenum space (a new street level entry which includes elevator access to all floors and new secure entrance to the new administrative suite). The scope included rehabilitation to the HVAC and associated air conditioning systems, a new public address system, security cameras, improvements to the existing grounds and playground, a landscaped outdoor court, new trees on 22nd and Moore Streets and at the perimeter of the existing playground, new asphalt paving and concrete paving, a new trash dumpster screening structure, and a new perimeter steel fence. Interior work included new toilet rooms, cafeteria, warming kitchen, physical education office, storage rooms, a renovated multi-purpose room, a new administrative suite, faculty office, and renovations to six general-purpose classrooms.



Client: *School District of Philadelphia*  
Role: *Construction Manager*

## Morris E. Leeds School and Philadelphia Military Academy

Philadelphia, PA

The project scope included \$1.2 million window replacement.

Client: *School District of Philadelphia*  
Role: *Construction Manager*

## Lincoln University, a Historically Black College and University

Lower Oxford Township, Chester County, PA



Major renovations were made to Langston Hughes Memorial Library, The Student Union Building, Grimm Hall, and Wright Hall. The \$10 million renovations brought the buildings into ADA accessibility compliance and provided needed modernization upgrading to the mechanical and electrical systems as well as the exterior and interior finishes.





### William H. Hunter Elementary School

Philadelphia, PA

The award winning 107,000 sf \$19 million William H. Hunter Elementary School for the School District of Philadelphia is a new state-of-the-art elementary school built at Front & York Streets replacing the 92 year old school building. The new kindergarten through 8th grade school was planned to house 750 students. The three-story structure encompasses an entire block and has elevator service.

The educational design for the school supported 28 K-8 classrooms, 2 special education classrooms, auditorium, cafeteria and other specialized areas. The building was wired for networking and internet access along with air conditioning throughout the school. Each classroom features an Interactive White Board (Smart Board), LCD projector, a PC computer to use with the web based curriculum and 3 Apple computers for students use. Additional features included specialty rooms for Art, Music, Physical Education, Computer Class, Automated Instructional Materials Center (IMC), Science Laboratory, Technology Education Program and Family Life Program.



Client: *School District of Philadelphia*  
Role: *Construction Manager*

### Benjamin Franklin Elementary School New Addition

Philadelphia, PA

Benjamin Franklin Elementary School is a kindergarten through eighth grade school located in northeast Philadelphia. The \$7 million new Additions to Benjamin Franklin Elementary School accommodates 26 rooms including 16 classrooms, restroom facilities for staff and student, an Information Management Center (IMC), a Technology Lab, a faculty lounge, a cafeteria and kitchen, administrative offices and conversions of the former IMC into a classroom and the former kitchen area into a counselor's suite/conference room.

Client: *School District of Philadelphia*  
Role: *Construction Manager*



### A. J. Morrison Elementary School, New Additions

Philadelphia, PA

The \$3.5 million A. J. Morrison School, kindergarten through 8th grade school, renovation included two separate additions. The northern wing is a three-story, 12 classroom addition, consisting of kindergarten classrooms on the first floor, and second and third grade classrooms on the second floor. Specialty classrooms for the middle school students, including a Technology Laboratory and Computer and Science classrooms are on the third floor. The southern wing consists of a new one-story gymnasium. Renovation of the

existing building was also part of the scope. The renovations included upgrading several classrooms, including the modernization of the existing Home Economics Room, creation of a new Music Room and a new IMC Room (library).

Client: *School District of Philadelphia*  
Role: *Construction Manager*

### University of the District of Columbia

Washington, DC

The \$18 million University of the District of Columbia projects include steam line replacement, bathroom upgrades, repairs at various bridge levels, pool heater replacement, chiller replacement, boiler replacement, renovation of law library, modernization of elevators and escalators, repair/replacement of fire and exit doors, fire alarm system upgrade, renovation of law school lecture hall and offices, renovation of several classrooms in various buildings, renovation of several auditoriums, roof replacement. and ensuring ADA compliance.

Client: *University of the District of Columbia*  
Role: *Construction Manager*





*Philadelphia International Airport  
Philadelphia, PA*

# TRANSPORTATION FACILITIES



**Philadelphia International Airport**  
Philadelphia, PA



**Lebanon Lancaster Interchange**  
Pennsylvania Turnpike, PA



**I-395 SE-SW Freeway, DDOT**  
Washington, DC



**Runway 17-35 Extension, Philadelphia International Airport**, Philadelphia, PA



**Asphalt Paving, 14th Street, DDOT**  
Washington, DC



**Scott Circle Concrete Pavement Placement**  
DDOT, Washington, DC



**Bethel Road Bridge, 6-Lane Widening of Pennsylvania Turnpike (A20-A30)**, PA



**Electrical Cables for 17th Street Streetscape**  
DDOT, Washington, DC



**Walton Road Bridge, 6-Lane Widening of Pennsylvania Turnpike (A20-A30)**, PA



**Brick Sidewalk on 22nd Street at Virginia Ave.**  
DDOT, Washington, DC



### Rehabilitation of O & P Streets, NW

from 37th Street to Wisconsin Avenue, NW

This \$11.3 million, 1.13 mile project consists of rehabilitation/reconstruction of O & P Streets, NW from Wisconsin Ave. to 37th St. and 33rd St., 34th St., 35th St., 36th St., and 37th St. from O St. to P St. The project located in Historic Georgetown district, includes restoration of historic railroad tracks, cobblestone paving, brick paving and call boxes, without causing damage to many historic buildings in the neighborhood. Vibration, sound and archeological monitoring, and replacement of water mains, duct banks and street lights are also part of the project.

Client: *District Department of Transportation, Washington, DC*  
 Role: *Construction Manager*

### Rehabilitation of 17th Street, NW

from New Hampshire Ave. to Massachusetts Ave.

The \$4.52 million 17th Street Streetscape ARRA project consisted of resurfacing of 17th Street, NW from New Hampshire Ave. to Massachusetts Ave. and reconstruction of streetscape, included numerous safety and aesthetic improvements:

Pedestrian and Bicycle Improvements including new bicycle lane; reconstruction of sidewalks and upgrade of sidewalk fixtures; reconstruction of wheelchair ramps to meet Americans with Disabilities Act (ADA) guidelines. Traffic and Parking Improvements included upgrade of streetlights and traffic signals; higher visibility pedestrian crosswalks; installation of multi-space, centralized block parking meters. Aesthetic Improvements included decorative lighting; enhanced landscaping; ADA compliant sidewalks; granite curbs and brick gutter pans; and new furnishings such as bicycle racks and trash receptacles.

This half mile stretch of 17th Street is a mixed neighborhood with residential, business, and commercial districts with extensive pedestrian traffic. Access to all existing properties and alleys were maintained throughout the construction period. Construction activities between P Street and Riggs Place were scheduled to allow for seasonal operation of sidewalk cafés and special events.

Our representatives attended local Advisory Neighborhood Commission (ANC) and chapter meetings to address any questions or concerns that arose from the public and built a website that the local residents accessed to update themselves on the progress of the project.

Client: *District Department of Transportation, Washington, DC*  
 Role: *Construction Manager*



### Foxhall Road, NW, Safety Improvements

from Canal Road to Nebraska Avenue, NW

This \$4.3 million, 2.1 mile stretch of the Foxhall Road project included the following improvements:

The intersection at Reservoir Road has been widened and a left-turn-only lane from eastbound Reservoir Road to northbound Foxhall Road has been added.

Unsafe and deteriorating sections of curbs and gutters, sidewalks, wheelchair ramps, pavement markings and traffic signs have been replaced.

A new retaining wall has been constructed at the northeast quadrant of the Foxhall Road intersection at Reservoir Road.

New traffic signals and street lighting have been installed at Reservoir Road and Foxhall Road.

The existing pavement on Foxhall Road from Canal Road to Nebraska Avenue has been milled and completely resurfaced.



Client: *District Department of Transportation, Washington, DC*  
 Role: *Construction Manager*

## Federal Aid Citywide Pavement Restoration

in Wards 1 & 2



The project consisted of restoration of pavements, sidewalks, curbs and gutters, handicap ramps, etc. throughout the city in Wards 1 and 2. Typical scope of work included sidewalk repairs, PCC and granite curb repairs, wheel chair ramp upgrade, pavement profiling and paving. In some instances, total reconstruction of roadways, including curb and gutter and sidewalks were undertaken.

Client: *District Department of Transportation, Washington, DC*  
Role: *Construction Manager*

## Reconstruction of Southern Avenue S.E.

from Pennsylvania Ave. to Suitland Rd.

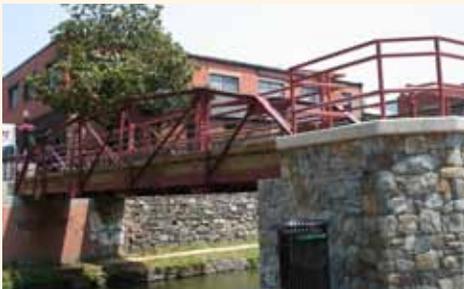
The \$1.9 million project scope included total removal and disposal of the existing roadway, construction of a new pavement consisting of 10 inch aggregate base course and 10 inch depth Superpave Asphalt concrete in lieu of 10 inch depth concrete pavement. New granite curb, concrete gutter, and wheelchair/bicycle ramps, storm drainage manholes and inlets with RCP connection, and roadway signals were also part of the work.

Client: *District Department of Transportation, Washington, DC*  
Role: *Construction Manager*



## Rehabilitation of Pedestrian Bridges over C&O Canal

Bridge No 147-P at Potomac St; Bridge No. 145-P at 33rd St; and Bridge No. 144-P at 34th St.



The \$1.2 million project consisted of replacing the pedestrian bridges over the C&O Canal at 33rd Street and Potomac Street, including rehabilitating the bridge supports, approach roads and brick sidewalks, curbs and gutters, and rehabilitating the pedestrian bridge at 34th Street. This federally aided DC Government project is situated over National Park Services property, in the heart of busy historic Georgetown neighborhood.

The challenge was to protect the live electric cables under the existing 33rd Street bridge during replacement, without interrupting the public boat rides in the C&O Canal and the pedestrian traffic on the canal's towpath.

Client: *District Department of Transportation, Washington, DC*  
Role: *Construction Manager*

## Street Lights Upgrade & Series Circuit Conversion of Street Lights

at Georgia Avenue, Mount Pleasant, Kalorama Heights, Good Hope Road & Wisconsin Avenue

The \$2.84 million Streetlights Upgrade project at Georgia Avenue, NW (U St. to South of Gresham Pl) & 4th/5th Streets, NW (W St. to Hobart Pl).

The Phase A and Phase B Streetlights Upgrade projects in historic Mount Pleasant District included most of the streets in the historic district. The total cost of both phases of the project was \$5.2 million.

Streetlights Upgrade and Series Circuit conversion projects at historic Georgia Avenue between Gresham Place and Quebec Place, Kalorama Heights including California Street, the Alley between California Street & Bancroft Place, Bancroft Place, 23rd Street, S Street, 24th Street, Massachusetts Avenue Alley, 22nd Street, Phelps Street, Good Hope Road, SE from Minnesota Avenue to 16th Street, SE and on Wisconsin Avenue, NW from K Street to M Street, NW in Georgetown were worth \$4.7 million. One of the major challenges faced on the Georgia Avenue project was addressing the old railroad tracks that were buried under the pavement and which were not accounted for in the design.

Client: *District Department of Transportation, Washington, DC*  
Role: *Construction Manager*



Mount Pleasant: Conduits being installed at Manhole



Streetlight on 4th/5th Streets

## Rehabilitation of 16th Street Underpass at Scott Circle & Scott Circle Roadway

Between 15th and 17th Streets and 16th Street, NW from M to P Streets

The work consisted of rehabilitation of the 16th Street Underpass Tunnels at Scott Circle; roadway construction of the 16th Street, NW from M to P Streets; and roadway improvements at Scott Circle between 15th and 17th Streets. Major components of this project were:

1. Rehabilitation of the two tunnels. This included removal of 2 exhaust fans at each tunnel, demolition of fan well walls and closing the hole at the ceiling of the tunnel with new concrete slab. Repair expansion joints in the base slab of each tunnel. Demolition of existing wearing surface in the tunnels and replacing with Latex Modified Concrete. Replacing gratings of the existing catch basins. Removal of damaged ceramic tiles on the wall and replacing them with new ones. Repairing of expansion joints in the walls and ceiling. Removal of the existing lighting, and install new luminaries and PLC. Repairing ceiling and coating with epoxy paint.
2. Installation of new electrical panels and controls in the control room adjacent to the pumping station.
3. Demolition of the existing pavement and replacing with new concrete pavement of 250 and 460 mm thickness at the tunnel approach roadways. Constructing new brick gutters. Repairing of joints at the approach walls. Cleaning the approach walls and sealing the granite panels. Repair of concrete sidewalk.
4. Installation of ducts, manholes, and pole bases for traffic signal and street lighting. Traffic signal modifications with new cabling, new signals with new poles. Installation of CCTV cameras.
5. Construction of handicap ramps with pavers; Concrete and Brick driveways; concrete sidewalk. Installation of new granite curbs, resetting granite curbs, brick gutters. Constructing new concrete sidewalks and brick paved walks. Resetting and replacing granite curbs. Installation of new attenuators.
6. Milling and resurfacing of the roadway to the contract limits to the project length of 466 meters. Removal of old catch basins and constructing new ones with new connect pipes. Implementing and monitoring of maintenance of traffic control plan for different stages for the project period.



Concrete Placement for Tunnel Entrance Pavement



Latex Modified Concrete Wearing Course application



Brick Pavement with Handicap Markings

Client: *District Department of Transportation, Washington, DC*  
Role: *Construction Manager*



Southwest Heritage Trail

## Heritage Trail Signage Programs

Washington, DC

The scope of this project included the fabrication and installation of several Heritage Trail Signs throughout selected neighborhoods in Washington, DC. The Southwest Heritage Trail and the Barracks Row Heritage Trail signage projects were completed in the first phase. The Mount Pleasant Heritage Trail, Adams Morgan Heritage Trail, and Shaw Heritage Trail signage programs were completed in the second phase.

Client: *District Department of Transportation, Washington, DC*  
Role: *Construction Manager*

## Way Finding Signage Programs

Washington, DC

The scope of this project included the fabrication and installation of Wayfinding Signs throughout Washington, DC. Pedestrian Signs and Maps, Vehicular and Gateway Signs were installed as part of this contract. The Signs included P-1 (Pedestrian Directional) Signs, P-2 (Pedestrian Map) Signs, P-3 (National Mall Map) Signs, V-1 (Vehicular-1) Signs, V-2 (Vehicular-2) Signs, and P-4 (Neighborhood ID) Signs.

Client: *District Department of Transportation, Washington, DC*  
Role: *Construction Manager*



P-1 Pedestrian Directional Sign

**Reconstruction of 16th Street and Storm Water Management System**  
 from Alaska Ave. to Primrose Rd. from Alaska Ave. and Sherrill Dr. to Rock Creek

This \$9.3 million project involved the total reconstruction of 1.50 kilometers of 4-lane 16th Street from Alaska Ave. to Primrose Rd. and Storm Water Management from Alaska Ave. to Rock Creek. The scope of work included installation of new storm water management system, demolition of existing road and median, curb, gutter and sidewalks, including its sub grade, construction of new sub grade, and concrete pavement, new granite curbs, concrete sidewalks with wheelchair ramps. In addition, all street light poles, electrical cables, electrical manholes, communication cables and new traffic light system were installed.

The most challenging aspect of the project was to continuously improvise on Maintenance of Traffic and Traffic Control Plans to maintain two lanes of traffic in one direction during rush hours and provide maximum time for Contractor to continue work activities without major disruptions on this major highway of the District.

The scope of work of Storm Water Management project included the installation of new storm water management system extending from Alaska Ave. south to Sherrill Drive following the roadway alignment to Rock Creek, including special manholes and structures, junction chambers and outfall at Rock Creek.

Client: *District Department of Transportation, Washington, DC*  
 Role: *Construction Manager*



View of PCC Pavement



Stormwater Manhole being installed



Eastern Avenue Bridge over CSX Railroad

**Reconstruction of Eastern Avenue Bridge**  
 over CSX Railroad bet Bladensburg Rd & Rhode Island Ave, NE

Project scope included removal and replacement of bridge decking, re-shoring and verification of all bridge abutment and girders and beams, walls, footings, pile locations, replacement of bridge beams, replacement of new curbs, guttering, and drain inlets, new fencing and relocation of gas main, telephone lines, electrical lines, water main, sewer lines and storm drains.

Client: *District Department of Transportation, Washington, DC*  
 Role: *Construction Manager*

**Rehabilitation of Alley Pavement, & New Storm Drains and Retaining Walls**  
 from 500 to 574 Foxhall Place, S.E.

Retaining walls were built to stabilize the soil on the steep slopes on the rear of the houses located on Foxhall Place, SE. Access was provided from the rear of the houses to a newly paved alley. Retaining walls were constructed with H-Piles and precast concrete panels. Retaining walls were also provided for the steps to each house from the alley.

Several houses had cracks due to soil failure and some of the houses had to be demolished. The existing houses were monitored for cracks with crack gauges and the movement of the soil was monitored by installing inclinometers.

Client: *District Department of Transportation, Washington, DC*  
 Role: *Construction Manager*



View of the Retaining Wall and Steps

**DDOT Lighting Asset Management Program**  
 Washington, DC

The scope involved developing a performance based specification for streetlight maintenance program. The resultant Request for Proposal reflected the industry best practice and specified a comprehensive approach to address the District's streetlight needs, including underground work and appropriate performance measures for all maintenance elements.

Client: *District Department of Transportation, Washington, DC*  
 Role: *Construction Manager*

## 'O' - Street Retaining Wall

Washington, DC



Client: *District Department of Transportation, Washington, DC*  
Role: *Construction Manager*

The project was built to safeguard residential houses built on a sloping landscape that were in danger of collapsing due to failure of an existing retaining wall supporting the soil on the higher side. The project involved building a new 1200 ft. long and up to 25 ft. high retaining wall adjacent to the existing, partially failed retaining wall, to stabilize the soil movement and installing a new drainage system to prevent soil erosion. The project also involved close monitoring and repair of cracks in the walls and floors of the houses and measuring settlement and movement of foundations of houses in the upper elevations, re-grading the slopes to minimize slope-stability soil failure. Close cooperation with neighborhood residents was a key part of this project. 133 steel H-beams 80 ft. long were installed and precast concrete panels were inserted between the H-beams for the retaining wall. Tiebacks were drilled and grouted at each beam. Drainage system was designed to collect and remove water away from the wall.

## Constructibility Review of Multiple Projects

in Wards 1, 2, 5, 6, 7 & 8 for the Transportation Improvement Program

The scope included reviewing Design Documents at various phases of the design, reviewing Engineer's Estimate and evaluating pricing, including coordination of quantities in the Drawings, Bid Forms and Engineer's Estimate. Preparing and submitting permit applications for the above work to DCRA. The Major portion of the work involved Roadway Upgrading, Reconstruction and Resurfacing of Local Streets in Wards 1, 2, 5, 6, 7, 8. The work in these six Wards were awarded as 7 different contracts, using the traditional design/bid/build project delivery system.

Client: *District Department of Transportation, Washington, DC*  
Role: *Construction Manager*

## Pedestrian Bridge Connecting IRS Headquarters To Metro & Amtrak Stations

New Carrollton, MD

The 1.1 million gross square feet, \$150 million, Internal Revenue Service Headquarters Office Building Consolidation Project, is located on a 30-acre site in New Carrollton, Maryland. The project consists of three buildings of nine floors each, interconnected by pedestrian bridges, above a two-level base of services and special spaces and an additional pedestrian bridge connecting the main entrance to the Metro.



Pedestrian Bridge at IRS Headquarters

A 550 foot long, \$6.0 million Pedestrian Bridge Connecting the IRS Headquarters Building Main Entrance to The Metro & Amtrak Stations at New Carrollton, MD was added to the contract at the end of the building construction contract. The Temple Group provided complete construction management services for the Bridge construction project also. Other additional scope added to the project were art-in-architecture features and the addition of a parking garage structure for which The Temple Group provided construction management services.

The main challenges on this project was to maintain the construction schedule without disrupting the traffic flow to the busy Metro and Amtrak stations while providing a safe environment to the workers, passengers and the public.

Client: *US General Services Administration, National Capital Region*  
Role: *Construction Manager*

## Resident Engineering and Inspection Services

Prince George's County, Maryland

The Bridge Maintenance and Repair, and Roadway Improvement projects included:

- Concrete Replacement and Hot Mix Asphalt Resurfacing – South Subdivisions D
- Concrete Replacement and Bituminous Concrete Resurfacing – North Subdivisions A
- Gateway Monuments and Amenity Improvements
- Rehabilitation of Bridges:
  - Bridge No. P0194: Greencastle Road over Little Paint Branch
  - Bridge No. P0407: Cedarville Road over Mattawoman Creek
  - Bridge No. P0495: Brandywine Road over Piscataway Creek
  - Bridge No. P0483: Livingston Road over Hunters Mill Branch
  - Bridge No. P0503: Croom Station Road over Charles Branch
  - Bridge No. P0597: White House Road over Southwest Branch
  - Bridge No. P0109: Ager Road over Northwest Branch
  - Bridge No. P0113P: Race Track Road over Tributary of Patuxent
  - Bridge No. P0199C: Ray Road over Tributary to Sligo Creek

Client: *Department of Public Works & Transportation, Prince George's County, MD*  
Role: *Construction Manager*

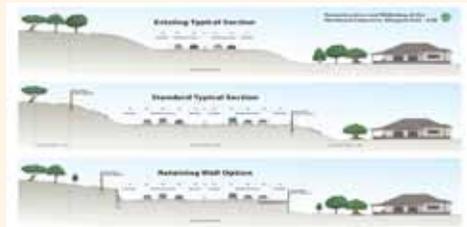
## Total Reconstruction and Six Lane Widening of Northeast Extension

Mileposts A20.0 – A30.4, Montgomery County, PA

This \$225 million project includes widening and reconstruction of ten (10) miles of limited access highway on existing alignment between the Mid-County Interchange (Exit 20) and Lansdale Interchange (Exit 31) in Montgomery County, Pennsylvania.

Six overhead bridges are being replaced prior to the start of construction on the Turnpike mainline. The first bridge replacement contract was for the Kriebel Road and Bethel Road Overpass Structures. The second bridge replacement contract is for the Walton Road (SR 3012) and DeKalb Pike (SR 0202) overhead structures. The third bridge replacement contract is for the Morris Road overhead structure. The Sumneytown Pike bridge is targeted for replacement in 2012. The Bustard Road bridge and the Lansdale Interchange Ramp will be rebuilt when construction begins on the northern section of the Turnpike mainline in 2014.

Improvements to the Lansdale Interchange are included as part of this Project. These improvements include: reconstructing the roadway from the Turnpike to the existing toll plaza; adding two more E-ZPass only ramps (called “auxiliary” ramps) between the Turnpike and Sumneytown Pike; and adding an auxiliary on-ramp from Towamencin Avenue to the toll plaza area. This project also includes the replacement of 11 mainline bridges, the lengthening of culverts, and the construction of stormwater detention basins and other drainage improvement applications at various locations throughout the project limits.



Before & After Cross Sections - Retaining Wall Option



New Bethel Road Bridge

Client: *Pennsylvania Turnpike Commission, Harrisburg, PA*  
Role: *Construction Manager*

## Lebanon-Lancaster Interchange Expansion

Milepost 266, in Lancaster County, Pennsylvania



Toll Booth Access

This \$11million project included the rehabilitation and reconfiguration of the existing toll facilities, roadway, and structures, at Interchange 266 on the Pennsylvania Turnpike in Lancaster County. The existing plaza, consisting of 5 toll lanes with a small utility building, was expanded to include 7 lanes and a new utility building. The bridge at Interchange 266 was replaced with a structure constructed parallel to the existing bridge. The ramps and roadways were modified to meet the alignment of the new bridge and toll facilities. The work was performed under four separate prime contracts – General, Plumbing, Electrical and HVAC work.

Client: *Pennsylvania Turnpike Commission, Harrisburg, PA*  
Role: *Construction Manager*

## Open-End Construction Inspection Services

Districts 3, 4, 5 and Northeast Extension, PA

The scope included open-end construction inspection services for various projects located within the Pennsylvania Turnpike’s Eastern Region (Milepost 247.00 – 358.00 and the NE Extension). Some are listed below:

- Roadway and Miscellaneous Repairs, from Mileposts 298.33 to 358.11
- Roadway and Bridge Reconstruction from MP A-115.00 to A-130.35
- Access Ramps at MP A-91.01
- Bituminous Overlay of Ramps at various locations

Client: *Pennsylvania Turnpike Commission, Harrisburg, PA*  
Role: *Construction Manager*



## Open-End Construction Documentation Services

Districts 3, 4, 5 and Northeast Extension, PA

The scope included open-end construction documentation services for various projects located within the Pennsylvania Turnpike’s Eastern Region (Milepost 247.00 – 358.00 and the NE Extension).

Client: *Pennsylvania Turnpike Commission, Harrisburg, PA*  
Role: *Construction Manager*

## AVIATION PROJECTS

**Carter Hayes Associates, PC**, an affiliate of **The Temple Group, Inc.**, is a 100% minority female owned firm organized in 1983 with an exemplary record of providing comprehensive construction management services on Aviation Projects. The resources of Carter Hayes are supplemented by those of The Temple Group on major projects. The projects listed here include those of The Temple Group, Inc. and of Carter Hayes Associates, PC.

### Runway 17-35 Extension Project

Philadelphia International Airport, Philadelphia, PA

This **\$65 million** construction project was to extend Runway 17-35 from its current length of 5,460 feet to a length of 6,500 feet by extending the runway 640 feet to the north and 400 feet to the south. The major components of the project included: Extension of Runway 17-35 to 6500 feet specifically the addition of 640 feet at the Runway 17 end and 400 feet at Runway 35 end with displaced landing thresholds; Relocation of Runway Safety Areas; Extension of parallel Taxiways D and E at the Runway 17 and Runway 35a ends; Construction of a high speed taxiway for Runway 35 landings exiting to Taxiway E; Construction of an aircraft holding apron at Runway 35 end; Relocation of airside perimeter service road at Runway 17 and Runway 35 ends; Installation of High Intensity Runway Lighting and Medium Intensity Taxiway Lighting for the extension of Runway 17-35 and Taxiways D and E; Modifications to airfield signs; Relocation/modification of navigational aids (NAVAIDS); Demolition of existing Taxiways D2 and E2; Modification to existing Economy Parking Lot; Re-designation of existing State Route (SR) 291 north of Airport; Modification to Bartram Avenue, SR 291 and I-95 ramps; Demolition of SR 291 at Runway 17 extension work area; and, the Construction of Landside Service Road adjacent to I-95 right of way limit. It also required relocation of the runway safety areas, connecting taxiways, navigational aides and lights, airport service roads, and a portion of the Economy Parking Lot. Additionally, it closed a portion of State Route 291. Traffic was redirected onto portions of Bartram Avenue and Island Avenue, which was redesigned as State Route 291.

The project included:

**Airside Package - General** - project completed in 2010  
(Including construction of High Speed Taxiway for Runway 35 landings exiting to Taxiway E)

**Airside Package - Electrical** - project completed in 2009  
(Including high intensity Runway Lighting and Medium Intensity Taxiway Lighting)

**Landside Package - General** - project completed in 2010  
(Including service road relocation to allow for entrance and exit to Runway on both ends)

**Landside Package - Electrical** - project completed in 2009  
(Including installation of MALSF System to account for Runway length)

**Landside Package - Mechanical** - project completed in 2009  
(Including relocation of 24" TETCO high pressure natural gas main)

**Embankment Package - General** - project completed in 2007  
(Including modifications to existing Economy Parking Facility)

**Embankment Package - Electrical** - project completed in 2007  
(Including relocation of 17 End PAPI, and the 17-35 Runway Glideslope antenna and shelter)

**Bartram Avenue Improvement** - project completed in 2006  
(Including relocation of Route 291 to allow proposed runway extension site)

Client: *City of Philadelphia, Department of Commerce, Division of Aviation*  
Role: *Prime Construction Manager*



Aerial view of the Runway 17-35 Extension Project



Bituminous Base from Taxiway-S to Taxiway-D



Taxiway D - Concrete Pavement



Excavation to Subgrade for Proposed Runway

### International Terminal A West

Philadelphia International Airport, Philadelphia, PA

**International Terminal A West** (formerly International Terminal One) is a \$325 Million, 700,000 sf, 4-level terminal with twelve new widebody international gates and include large public areas for ticketing, baggage claims, concessions, holdrooms, and Federal Inspection Services (FIS) facilities.

Client: *City of Philadelphia, Department of Commerce, Division of Aviation*  
Role: *Program Manager*



### Commuter Terminal F

Philadelphia International Airport, Philadelphia, PA

**Commuter Terminal F** is a \$75 Million, 190,000 sf, Regional Terminal with 28 commuter gates for commuter turbo-prop and regional jet aircraft and will accommodate US Airways Express operation. An enclosed second-level pedestrian bridge will connect the new terminal to Terminal E and the proposed "E" Parking Garage.

Client: *City of Philadelphia, Department of Commerce, Division of Aviation*  
Role: *Program Manager*

### Runway 8-26 - Airfield Expansion Program

Philadelphia International Airport, Philadelphia, PA

The Airfield Expansion Program at Philadelphia International Airport involved the construction of the new 5000-ft long Runway 8-26. The new runway was built on a swampy 230-acre site that required extensive earthwork including hazardous material removal, dewatering, controlled backfill and fill surcharge to achieve adequate compaction to receive aircraft landing. Preliminary projects in preparation for the construction of the runway included establishing a ground water quality monitoring and mitigation program, mitigation of over 32 acres of wetlands, relocation of the Philadelphia Police Department auto impound lot, relocation of corporate aircraft hangers, and demolition of industrial buildings on land acquired by the City for the expansion program.

Client: *City of Philadelphia, Department of Commerce, Division of Aviation*  
Role: *Construction Manager*



Runway 8-26



### Terminals B, C, D & E Renovation and Expansion Project

Philadelphia International Airport, Philadelphia, PA

\$30 Million Renovation and Expansion Project of Terminals B, C, D, and E at the Philadelphia International Airport, involved working without disrupting the daily activities of the airport. Access to many areas in the terminals was restricted during the construction phase; hence, a vigorous coordination effort with airport tenants and Division of Aviation representatives was maintained. The completed renovations resulted in a brighter, more harmonious ambience for passengers.

Client: *City of Philadelphia, Department of Commerce, Division of Aviation*  
Role: *Construction Manager*

### Pedestrian Bridge

Philadelphia International Airport, Philadelphia, PA

A pedestrian bridge was constructed between Baggage Claims D and E to facilitate access by passengers to Garage D and both baggage claim areas. The bridge was constructed using pre-cast structural members enclosed in glazed glass windows, new rigid insulated roofing, and five new air-handling units, including an elevator accessing Baggage Claim E. The interior was fitted with new lighting fixtures and new-carpeted floors.

Client: *City of Philadelphia, Department of Commerce, Division of Aviation*  
Role: *Program Manager*



## Expansion of Hammer Head C

Philadelphia International Airport, Philadelphia, PA



Hammerhead Expansion of Concourse "C" created additional tenant space for the US Air personnel. Construction of the expansion involved demolition of existing interior stairwells, and existing electrical and mechanical chases. Interior work included new walls, ceilings, and floor finishes, using ceramic tile and carpeting. Exterior work included exterior finishes, new rigid insulated roofing, and new jet-way bridge extension.

Client: *City of Philadelphia, Department of Commerce, Division of Aviation*  
Role: *Construction Manager*

## Terminal Improvements, Phase III

Philadelphia International Airport, Philadelphia, PA

\$5 Million Phase III Terminal Improvement included further expansion of concourse tenant spaces, enhanced public flight and land transportation information systems, and improved back-of-house support facilities. In order to complete this project which adjoined most tenant spaces, detailed schedule analysis and construction coordination was necessary to prevent disruption of airline operations

Client: *City of Philadelphia, Department of Commerce, Division of Aviation*  
Role: *Construction Manager*



## Toilet Renovation Project

Philadelphia International Airport, Philadelphia, PA



\$8.5 Million Toilet Renovation project involved demolition of existing facilities, and construction of eight new restroom facilities and renovating various existing restroom facilities throughout the terminals and concourses of B, C, D, & E. Restroom facilities included state of the art electronic sensor operated sinks and water closets. Carter Hayes Associates' scope of services included construction coordination, quality assurance and mechanical, electrical, plumbing and general construction inspection services for contract compliance.

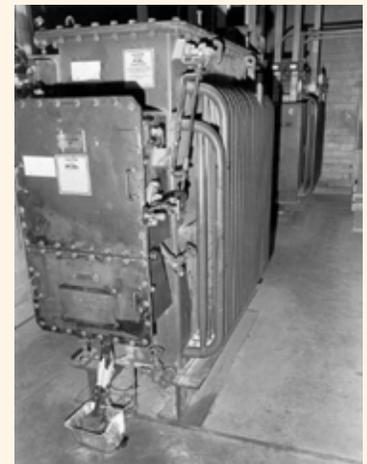
Client: *City of Philadelphia, Department of Commerce, Division of Aviation*  
Role: *Construction Manager*

## Rehabilitation of Emergency Generator System

Philadelphia International Airport, Philadelphia, PA

\$250,000 Rehabilitation of Emergency Generator System Project consisted of installation of a control system in a field lighting vault and a resistance load bank to operate throughout the Airport. Carter Hayes assisted in providing overall contract administration, change order control, quality assurance, and inspection services.

Client: *City of Philadelphia, Department of Commerce, Division of Aviation*  
Role: *Construction Manager*



## Environmental Assessment for Proposed UPS Facility

Philadelphia International Airport, Philadelphia, PA



A parcel of 212.6 acres of land was transferred by the Airport to United Parcel Service for construction of this major UPS East Coast Air Package handling hub.

The study consisted of a thorough presentation of the problems, identification and evaluation of viable alternatives, assessment of the impact of the project on the affected environment, and a review of environmental consequences. In August 1986, the Federal Aviation Administration made a Finding of No Significant Impact (FONSI) based on the information presented in this study.

Client: *City of Philadelphia, Department of Commerce, Division of Aviation*  
Role: *Construction Manager*

## Crash Fire Rescue Study

Philadelphia International Airport, Philadelphia, PA

Crash Fire Rescue Study provided the basis for selection of the site of the new crash fire rescue facility for the Philadelphia International Airport. This was done through the development of a matrix which utilized previously identified critical variables which were weighed according to their importance and clear alternatives were then presented to Airport staff.



Client: *City of Philadelphia, Department of Commerce, Division of Aviation*  
Role: *Construction Manager*

## Update of the Master Plan

Philadelphia International Airport, Philadelphia, PA



**Philadelphia International Airport Master Plan Update.** This Master Plan Update was based on an earlier Airport Master Plan which served as the guideline for the future development of the Philadelphia International Airport. The Update commenced in 1984. Horizon years of the Update are 5-year period, 1990; 10-year period, 1995; and 20-year period, 2005.

Existing forecast (basic forecast, annual aircraft operations/aircraft fleet mix; derivative forecast; carrier and commuter activities) was analyzed and compared to produce a revised forecast for the new planning horizon year 1990, 1995, and 2005. An analysis of the capacity of existing facilities at the Airport relative to future requirements for accommodating forecast activity levels was completed. Further, preliminary conceptual system and the Overseas Terminal were also presented, 1985-1986

Client: *City of Philadelphia, Department of Commerce, Division of Aviation*  
Role: *Construction Manager*



*Blueplains Wastewater Treatment Plant  
Washington, DC*

# WATER & WASTEWATER TREATMENT FACILITIES



**Blue Plains Wastewater Treatment Plant**  
Washington, DC



**Secondary Sedimentation Basins, Blue Plains**  
Washington, DC



**Williamsport Wastewater Treatment Plant**  
Williamsport, PA



**Secondary Sedimentation Basins, Blue Plains**  
Washington, DC



**Nitrification- Denitrification Facility Upgrade**  
Blue Plains, Washington, DC



**Raw Wastewater Pump Station 1 Upgrade.**  
Blue Plains, Washington, DC



**Rock Creek Sewage Pumping Station**  
Washington, DC



**Upper Anacostia Sewage Pumping Station**  
Washington, DC



**Washington Suburban Sanitary Commission**  
Washington, DC



**Williamsport Wastewater Treatment Plant**  
Williamsport, PA

## Nitrification-Denitrification Facilities Upgrade

Blue Plains Advanced Wastewater Treatment Plant

Nitrification-Denitrification Facilities Upgrade, \$107.3 million. This project is for improvement of denitrification related process components primarily in the reactors. This project will result in lowered maintenance and energy costs due to improved efficiency. Building C5-9 project includes preliminary work on Reactor 9 and equipment installation on Reactor 11.

Client: *DC Water, District of Columbia Water and Sewer Authority*  
Role: *Construction Manager*



## Filtration and Disinfection Facilities Upgrade

Blue Plains Advanced Wastewater Treatment Plant

Replacement of existing filter media and the addition of an air/water backwash system and improvements to pump operation will result in reduced power usage and treatment costs due to reduced backwash water usage. This project was split into two contracts in order to expedite the full rehabilitation of the facility, which has experienced filter failures. The first contract restored all the filters to operability with new filter underdrains and media. The second contract, currently under construction, will provide a new air-water wash system and improve backwashing controls and instrumentation. Filtration and Disinfection Facilities Upgrade Phase 2 – Backwash System \$28.5 million. The scope of services included masonry, roofing, ductwork, louvers, switchgear, electrical installation and finishing work in Blower Buildings.

Client: *DC Water, District of Columbia Water and Sewer Authority*  
Role: *Construction Manager*

## Raw Wastewater Pump Station 1 Upgrade

Blue Plains Advanced Wastewater Treatment Plant

The \$11 million Upgrade to the Raw Wastewater Pump Station 1 rehabilitates pumping equipment and appurtenances in one of the two stations that pump incoming wastewater into the plant. Work included: Lead paint removal, demolition, HVAC roof equipment installation and switchgear and transformer.

Client: *DC Water, District of Columbia Water and Sewer Authority*  
Role: *Construction Manager*



## Additional Dewatering Facilities – Centrifuge Facilities

Blue Plains Advanced Wastewater Treatment Plant

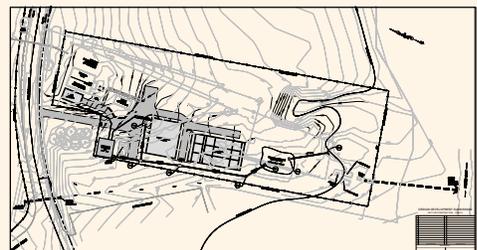
The \$61.8 million project for Additional Dewatering Facilities included additional dewatering facilities including seven new centrifuges and two new sludge storage vessels. Scope included structural steel corrective work.

Client: *DC Water, District of Columbia Water and Sewer Authority*  
Role: *Construction Manager*

## Wastewater Treatment Plant Upgrades, Cheyney University

Cheyney, Pennsylvania

Current wastewater needs of Cheyney University of Pennsylvania are served by a 0.27 mgd wastewater treatment plant operated under NPDES Permit. In February of 2008, EPA published the draft “Nutrient Total Maximum Daily Loads for the Chester Creek Watershed, Pennsylvania.” The existing treatment plant does not have the ability to achieve these effluent concentrations. The objective of this project is for the upgrade of the existing wastewater treatment plant to meet the proposed TMDL nutrient limits. There is no change in flow proposed from the existing NPDES permit. The existing treatment plant utilizes primary settling tanks, two trickling filters, intermediate settling tanks, two rotating biological contactors (RBCs) and final settling tanks for biological treatment of wastewater. The trickling filters, RBCs and settling tanks will be abandoned and replaced by a Membrane Bioreactor (MBR) treatment system. The existing influent flow equalization tank and sludge holding facilities will be retained for the plant upgrade. The new MBR treatment system will have the capability to produce effluent that will meet the new TMDL nutrient limits for the Chester Creek.



## Upgrade of Existing Sodium Hydroxide Facility

Blue Plains Advanced Wastewater Treatment Plant

Scope of work included: Demolition of existing CPVC fill piping. Removal of existing ultrasonic level sensing equipment. Installation of new steel fill piping. Installation of new pipe supports. Furnish, install and startup of new microwave level sensing equipment, including connection to the existing level indicator panel on the exterior of the building.

Client: *DC Water, District of Columbia Water and Sewer Authority*  
Role: *Construction Manager*



## Upgrade of Interim Sodium Hydroxide Facility

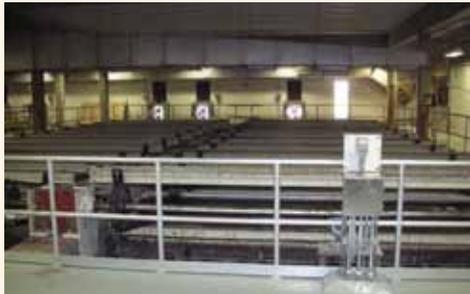
Blue Plains Advanced Wastewater Treatment Plant

Scope of work included: Demolition of an existing concrete slab, storm drainage structures and piping, north of Stair Head House #22. Construction of a new pre-engineered building to contain sodium hydroxide storage tanks, pumps and controls. Furnish, install, startup and test storage tanks, pumps, piping controls and appurtenant equipment. Construction of associated sitework, piping and electrical services associated with the Interim Sodium Hydroxide Facility. Furnish and install alternate 480-volt feeder and breaker to MCC-4 located at Electrical Building number 3 from the Secondary Sedimentation Unit Substation 1 and install a new circuit breaker in the Electrical Building number 3 with power feeder to the new facility. Install remote annunciator panels in the Secondary Control Room and Nitrification Control room, including instrumentation cable and raceways. Install fire suppression system, including fire pumps and sprinkler system, and fire alarm system. Installation of standby generator.

Client: *DC Water, District of Columbia Water and Sewer Authority*  
Role: *Construction Manager*

## PSW Improvements at the Central Maintenance Facility

Reclaimed Secondary Effluent Pump (RSEP) Station, Blue Plains Advanced Wastewater Treatment Plant



Scope of work included: Construct buried pipe chases and provide chemical feed piping. Provide new yard piping and site improvements. Provide chemical piping to the primary sludge supply to gravity thickening. Construct a new Chlorination Building for sodium hypochlorite. Construct a new Dechlorination Building for sodium bisulfite by expanding the former Excess Flow Dechlorination Building. Abandon Chlorine Building I. Perform demolition and provide new truck connections and chemical feed systems in the former Chlorine Building 2. The work includes sitework, electrical and control work, plumbing, heating, ventilating and air conditioning system, and fire alarm system. Installation of standby generator.

Client: *DC Water, District of Columbia Water and Sewer Authority*  
Role: *Construction Manager*

## Additional Chemical System and Transmission Improvements Phase I:

Metal Salts and Alternate Disinfection Facility, Blue Plains Advanced Wastewater Treatment Plant

Scope of work included the following major items: Construct a new Chemical Receiving Station for metal salts. Construct tunnels and interconnections providing chemical piping between galleries and facilities. Providing new local metal salts feed systems in the Chemical Building. Complete removal of polymer system in the Chemical Building. Improve and modify the metal salts storage system in the Chemical Building. Improve and modify the Chemical Building.

Client: *DC Water, District of Columbia Water and Sewer Authority*  
Role: *Construction Manager*

## Dewatered Sludge Loading Facility Odor Control System

Blue Plains Advanced Wastewater Treatment Plant

Scope of work included the following major items: Provide and install odor scrubber equipment including chemical feed systems. Provide and install ductwork from existing roof ventilator openings to the odor scrubber equipment. Provide and install supply air fans and ductwork. Provide all associated civil and sitework associated with above. Provide all associated electrical and instrumentation associated with above.

Client: *DC Water, District of Columbia Water and Sewer Authority*  
Role: *Construction Manager*

## Plant-wide Power Cable Replacement Phases I & II

Blue Plains Advanced Wastewater Treatment Plant

Scope of work included: Repairs to ten (10) electric manholes in the medium voltage (MV) power distribution system. Install a new handhole over an existing discontinuity in an existing ductbank at a construction joint. Replacement of 5kV power cable and ground conductors. Replacement of 15kV power cable in the discontinuous ductbank referenced above, based on the Engineer's evaluation of the existing condition of the cable.

Client: *DC Water, District of Columbia Water and Sewer Authority*

Role: *Construction Manager*

## Flotation Thickner Facility Rehabilitation

Blue Plains Advanced Wastewater Treatment Plant

Scope of work included: Replacement of new sludge collection equipment, assemblies, pumps, drives and VFDs.

Client: *DC Water, District of Columbia Water and Sewer Authority*

Role: *Construction Manager*



## Area Substation #5

Blue Plains Advanced Wastewater Treatment Plant

Scope of work included: Construction of four 160/480 Vv and 15/4 kv electrical substations, electrical manholes and duct banks. Modification and addition of new electrical distribution system. Demolition of electrical substation and removal of electrical transformers, switchgear and equipment. Also included roadway and site improvements.

Client: *DC Water, District of Columbia Water and Sewer Authority*

Role: *Construction Manager*



## Improvements to East Primary Effluent & Excess Flow Controls

Blue Plains Advanced Wastewater Treatment Plant

Scope of work included: Sandblasting and repainting of metal conduit, removal of hand railing and modification of guard railing surrounding the open channel, construction of new concrete containment walls around the perimeter of the open channel, rehabilitation of existing butterfly control valves. Upgrade of 480 VAC power and 120 VAC including control wiring, breakers, conduit, wiring, as well as the Programmable Logic Controller and associated control and power wiring and cabinets.

Client: *DC Water, District of Columbia Water and Sewer Authority*

Role: *Construction Manager*

## Nitrification Main Power Cable Replacement

Blue Plains Advanced Wastewater Treatment Plant

Scope of work included: Replacement of new dual leg feeders to perform the voltage breakdown tests and cable jacket testing. Repair of electrical manholes, installation of new electrical manholes, replacement of new 5KC and 15KV power cable, duct-bank, conduits and pull boxes.

Client: *DC Water, District of Columbia Water and Sewer Authority*

Role: *Construction Manager*

## Filter Diversion Conduits and Drop Shafts

Blue Plains Advanced Wastewater Treatment Plant

Scope of work included the following major items: Construct two (2) drop shafts and conduits, one located at the odd side filter influent channel and the other located at the even side filter influent channel, each equipped with an inverted sluice gate. Demolition, sitework, mechanical, electrical and instrumentation work required for the drop shafts. Sitework and electrical work required for the construction of Parking Lot 4.

Client: *DC Water, District of Columbia Water and Sewer Authority*

Role: *Construction Manager*

## Primary Sedimentation Tanks 1 & 2 and Associated Work

Blue Plains Advanced Wastewater Treatment Plant

Scope of work included: Demolition of two existing concrete Primary Sedimentation Tanks 1 & 2, associated piping, electrical, equipment, and site work.

Client: *DC Water, District of Columbia Water and Sewer Authority*

Role: *Construction Manager*

## Dewatered Sludge Conveyor Rehabilitation

Blue Plains Advanced Wastewater Treatment Plant

Scope of work included: Removal of existing trough liner and replace with a new centerless type conveyor.

Client: *DC Water, District of Columbia Water and Sewer Authority*

Role: *Construction Manager*

## Raw Wastewater Pump Station 2 Engine Replacement and Asbestos Abatement Project

Blue Plains Advanced Wastewater Treatment Plant

Scope of work included: Removal of three existing dual fuel engine drives and replacement of the same with new vertical electrical motors; replacement of the entire rotating assemblies of the wastewater pumps; replacement of the existing double ended medium voltage switchgear and feeders and associated structural, architectural, mechanical and electrical work.

Client: *DC Water, District of Columbia Water and Sewer Authority*

Role: *Construction Manager*

## Improvements to Secondary Treatment

Blue Plains Advanced Wastewater Treatment Plant

Scope of work included: Converting Secondary Reactors to Step Feed Reactors by adding influent gates and rebuilding the tank flow paths, new variable speed return sludge pumps and piping; constructing two new 4160 volt unit substations and two new electrical buildings; construction of two new rectangular Venturis with flow metering devices; and a new chlorine solution piping system and modifications to existing instrumentation control loops for secondary treatment.

Client: *DC Water, District of Columbia Water and Sewer Authority*

Role: *Construction Manager*

## Improvements to Filter Influent Pumps

Blue Plains Advanced Wastewater Treatment Plant

Scope of work included: Construction of two new reinforced concrete Filter Influent Pump structures, pumps, related piping and construction of channel modifications; rehabilitation of existing electrical equipment in two existing electrical buildings; replacement of 12 Butterfly valve operators with new modulating electric motor operators, and replacement of pump controls with a new PLC pump control system.

Client: *DC Water, District of Columbia Water and Sewer Authority*

Role: *Construction Manager*

## Improvements to Effluent Aeration Channel

Blue Plains Advanced Wastewater Treatment Plant

Scope of work included: Construction of the new reinforced concrete Effluent Aeration Channel (EAC) No. 2 loop channel; installation of five slide gates, air diffusers and new air piping in the EAC No. 1; new roadway improvements and relocation of electrical power systems that serve the compost area.

Client: *DC Water, District of Columbia Water and Sewer Authority*

Role: *Construction Manager*

## Upgrade of Filtration and Disinfection Facility

Blue Plains Advanced Wastewater Treatment Plant

Scope of work included: Replacement of filter underdrains, media, and washwater troughs to prepare filters for conversion to air-water wash system. All 40 filters and all the media have been replaced and are in service.

Client: *DC Water, District of Columbia Water and Sewer Authority*

Role: *Construction Manager*



*Ariel Rios Federal Building  
Washington, DC*

# HISTORIC PROJECTS



**Eastern Market**  
Washington, DC



**Pennsylvania Convention Center**  
Philadelphia, PA



**Military Court of Appeals**  
Washington, DC



**Federal Bureau of Prisons Headquarters**  
Washington, DC



**Baptist Temple at Temple University**  
Philadelphia, PA



**Robert C. Nix Federal Courthouse**  
Philadelphia, PA



**US Customs House**  
Philadelphia, PA



**Ariel Rios Federal Building**  
Washington, DC



**Department of the Interior**  
Washington, DC



**Pedestrian Bridges, Historic C & O Canal**  
Washington, DC

## Pennsylvania Convention Center

Philadelphia, PA



The \$250 million Pennsylvania Convention Center project included a new 1 million square foot convention center, with specialty spaces for ballroom, exhibition, registration, administrative areas, renovation of the 300,000 square foot one hundred year old historic Reading Terminal Train Shed, and rehabilitation of the 110,000 square foot historic Reading Terminal Market, built in 1892.

The Reading Terminal Train Shed rehabilitation included demolition, structural restoration of a series of cast iron, three-hinged arched trusses spanning a width of 267 feet and reaching a height of 88 feet. The scope of work included encapsulation of lead based paint, replacement of the roof and windows, and restoration of the exterior metal facade. In the basement, an extensive system of new concrete columns was built to underpin the tremendous added weight created by the new ballroom and meeting rooms. New plumbing, fire protection, electrical, and HVAC systems were installed in the newly restored facility.

The Reading Terminal Market renovation included new plumbing, fire protection, telephone, electrical, and HVAC systems; new exterior doors and windows; removal and encapsulation of lead based paint; demolition of existing interiors and rebuilding of 65 new merchant stalls; a refrigeration box; and a management office. The project also included construction of a 140 space parking garage.

Client: *Pennsylvania Convention Center Authority*  
Role: *Program Manager*



## Grace Baptist Church, Temple University

Philadelphia, PA

The Temple Group provided preconstruction phase services for the \$30 million renovation of the historically significant Grace Baptist Church called "The Temple" on the campus of Temple University. This 36,000 sf one-story building was built in the 1880's and will become a conference and arts center. The scope of services for the \$30 million renovation of the historically significant, 36,000 sf one-story building, built in 1889 - 1991, on the campus of Temple University, included meeting the operational and functional intent of the approved program for its use as a conference and performance center. Reviews included constructability, ease of construction, construction sequencing, ease of maintenance and access to elements requiring maintenance and or, possible replacement.



Additional reviews included clarity of design, completeness and coordination of design elements as well as the specifications; spatial coordination of systems and architectural elements of various systems for function, compatibility, life cycle, code review; alternate materials, economic materials and systems; cost effectiveness and multiple bid packaging; as well as ensuring the A/E design work strictly adhered to The Department of the Interior National Park Service Guidelines for Architectural and Engineering Documentation and incorporated Temple University's architectural, mechanical and lighting standards and historical preservation prerequisites.

Client: *Temple University*  
Role: *Pre-Construction Phase Manager*

## Eastern Market

Washington, DC

The 39,000 sf interior modernization of this \$22 million highly visible historic landmark included a new HVAC, electrical, plumbing, security and fire protection systems. New slate shingles were installed for the rehabilitated 6:12 roof over the 12,500 sf South Hall and the replacement of a 7:12 slate shingled roof, cornice, gutter and downspouts for the 4,000 sf North Hall. Exterior upgrade included site lighting, site utilities, and replacement of sidewalk pavers.

Client: *District of Columbia, Department of Real Estate Services*  
Role: *Prime Construction Manager*



## US Customs House

Philadelphia, PA

The scope of services include space alterations, garage ventilation, HVAC study, switch gear replacement, and electrical modifications/upgrades.

The \$2.6 million for the renovation of approximately 6,700 sf of Immigration and Customs Enforcement (ICE) office space on the 2nd floor include demolition, mechanical, electrical and plumbing design services.

ICE Space Renovations Phase 4 Task Order for a design/ build project consisted of space renovations of 14,400 sf. with a construction value of \$750,000.

The \$1.8 million Alcohol Tobacco and Firearms Demolition and Renovation of 25,000 sf on the 5th & 6th Floors, at the US Custom House consisted of removal of walls and reconstruction, HVAC replacement, voice and data lines, electrical wiring, restroom upgrade and roof replacement.

Client: *General Services Administration, Region 3*  
Role: *Prime Construction Manager*

## Ariel Rios Federal Office Building

Washington, DC

The \$10 million renovation of this designated historic landmark project was divided into two phases, covering a combined area of 166,000 sf to accommodate uninterrupted federal work in the building. The scope of work included lead and asbestos abatement, installation of a new HVAC plant, air handling unit, ductwork, cooling towers, two 900-ton chiller units, and upgrading light and power distribution. The project also included over 82,000 sf of structural, architectural, mechanical and electrical renovations.

Client: *General Services Administration, National Capital Region*  
Role: *Prime Construction Manager*



## Department of the Interior

Washington, DC

The \$10 million renovation tasks for this historic site included roof replacement, elevator modernization, lobby restoration, addition of an automatic sprinkler system, refurbish air conditioning system, replacement of cooling towers, foundation waterproofing, repairs to exterior sidewalks, and conservation of 25 murals.

Client: *General Services Administration, National Capital Region*  
Role: *Prime Construction Manager*

## Military Court of Appeals

Washington, DC

The \$1.5 million project included demolition, excavation, renovation and adaptive re-use of the basement level from a storage area to additional office space in the Military Court of Appeals, a building on the National Register of Historic Places.

Client: *General Services Administration, National Capital Region*  
Role: *Prime Construction Manager*



## US Navy Bureau of Medicine and Surgery

Washington, DC

Seven buildings on the US Navy Medical and Surgery Center Campus (a/k/a Potomac Annex) are on the National Historic Preservation Register. The \$7.5 million scope of work for the seven buildings included mechanical, electrical and architectural upgrades and renovation, exterior lead paint removal, repainting and stucco repair, historic window replacement, repair and/or replacement of the doors and hardware. An assortment of historical hardware such as closures, handicap push bars, hinges and knobs were installed. Additionally, all doors and finish trim had to have oil-base paint removed. (The doors varied in size and type from hollow metal with fire ratings to both hollow and solid core wood).

Client: *General Services Administration, National Capital Region*

Role: *Prime Construction Manager*



## US General Services Administration Central Office

Washington, DC

The \$500,000 GSA Central Office Cafeteria Renovation Project consisted of demolition, mechanical and electrical upgrades, new ceiling, wall finishes, doors and carpet flooring, including aluminum storefront windows with patterned glass, and new lighting fixtures including neon lighting and signs. The GSA Central Office Building, completed in 1917, is on the National Register of Historic Places.

The renovation also included new items of food service equipment and a walk-in refrigerator. The hot food counter was refinished with a new surface (Corian), and top and sneeze guards were installed. The dining area furniture was replaced with new furniture to seat 87 persons. The adjacent hallway and elevator lobby were renovated by providing new ceiling, wall finishes, lighting and signage.

Client: *General Services Administration, National Capital Region*

Role: *Prime Construction Manager*

## Lincoln Theater

Washington, DC

The renovation of the \$1.5 million Historic Lincoln Theater involved interior architectural renovation, complete mechanical and electrical system upgrade, lead and asbestos abatement, and roofing work. The roofing work included removal and replacement of built-up bituminous flat roofs at 3 different levels, water conveyance systems, coping, roof curbs, removal and replacement of damaged gypcrete decking. This roofing work was accomplished in conjunction with complete new roof mounted air ducts and reconfiguration of roof top dunnage for custom 110 ton Hunt Air unit.

Client: *District of Columbia, Department of Real Estate Services*

Role: *Prime Construction Manager*



## Conversion of Historic Hayes School to Ward Six Senior Wellness Center

Washington, DC



This project involves the construction and integration of the \$6.5 million Senior Wellness Center and Office on Aging Offices. The Ward Six Senior Wellness Center is a 23,000 square foot structure that is being constructed as a renovation and restoration of the existing historic Hayes School Building and the addition of a new structure at the north side of the building in the northeast section of Washington, D.C. The project consists of demolition and construction of new architectural, structural, mechanical, plumbing, electrical, civil and landscape elements. In addition to providing controlled interior space of approximately 23,000 sq ft for various activities, the facility also includes a roof top garden with a deck and fountain.

The building addition components include structural steel framing, timber, concrete, and masonry, architectural, mechanical, electrical, plumbing, fire alarm and security elements.

Client: *District of Columbia, Department of Real Estate Services*

Role: *Prime Construction Manager*

## Federal Bureau of Prisons Headquarters

Washington, DC

The Home Owners' Loan Corporation (HOLC) building, Headquarters for the Bureau of Prisons, US Department of Justice \$3.5 million project included a major plumbing upgrade including asbestos abatement of all the water piping insulation; a waterproofing project at the loading dock and the new paving included protecting the existing historical curb and sidewalk; and, the steam system replacement of existing main pressure reducing air station in the storage room.

Client: *General Services Administration, National Capital Region*  
Role: *Prime Construction Manager*



## Robert C. Nix Federal Courthouse

Philadelphia, PA

The \$2.1 million renovation and historic restoration project included an upgrade of the security standards to the prudent precautions for any Federal building and the specific considerations of a courthouse. Because of the historic layout, separate zones were created by using the existing entrances fronting on three streets for the public, the courts and the US Postal Service. Within the courts area, the main historic corridors were treated as public streets with suites opening off of them.

Another challenge was the incorporation of sophisticated technology services into the historic courtroom settings. The historic courtrooms were completely restored, computers on the bench were concealed, historic lighting levels were enhanced, and microphones and electronic recording systems were designed into the bench and jury boxes. Existing benches were modified and restored, and historic bench recreations were designed using the original millwork details. The integrity of the historic design was kept intact while upgrading technology and meeting ADA standards.

Client: *General Services Administration, Region 3*  
Role: *Prime Construction Manager*



## The Wilson Building

Washington, DC

The \$18 million scope of services included evaluation of the existing infrastructure, space planning, A/E design services including audiovisual, telecommunications and security, procurement of requisite furniture and hardware, construction management/general contractor and move coordination.

Client: *District of Columbia, Department of Real Estate Services*  
Role: *Prime Construction Manager*



## Rehabilitation of Pedestrian Bridges over the Historic C & O Canal

Washington, DC



The \$1.2 million project consisted of replacing the pedestrian bridges over the Historic C&O Canal at 33rd Street and Potomac Street, including rehabilitating the bridge supports, approach roads and brick sidewalks, curbs and gutters, and rehabilitating the pedestrian bridge at 34th Street.

Client: *District Department of Transportation, Washington, DC*  
Role: *Prime Construction Manager*

**Price Proposal**

Basis:

The Temple Group customer pricing presented below is based on Commercial Market Prices.

Our price list to GSA presented below includes the Industrial Funding Fee, currently at .75%.

Escalation:

We propose annual price adjustments consistent with EPA clause I-FSS-969 (b) (2) “Adjustments based on an agreed-upon market indicator prior to award”

| <u>LABOR CATEGORY</u>              | <u>PRICE OFFERED TO GSA (including IFF)</u> |
|------------------------------------|---|
| <u>SENIOR PROJECT MANAGER</u>      | <u>\$117.50</u>                             |
| <u>PROJECT MANAGER</u>             | <u>\$107.03</u>                             |
| <u>CLAIMS ANALYST/SCHEDULER</u>    | <u>\$ 99.00</u>                             |
| <u>COST ESTIMATOR</u>              | <u>\$ 98.00</u>                             |
| <u>SCHEDULER</u>                   | <u>\$ 84.60</u>                             |
| <u>MECHANICAL ENGINEER</u>         | <u>\$102.46</u>                             |
| <u>ELECTRICAL ENGINEER</u>         | <u>\$102.46</u>                             |
| <u>CIVIL / STRUCTURAL ENGINEER</u> | <u>\$101.28</u>                             |
| <u>SENIOR ARCHITECT</u>            | <u>\$102.46</u>                             |
| <u>GENERAL INSPECTOR</u>           | <u>\$ 92.12</u>                             |
| <u>INSPECTOR</u>                   | <u>\$ 89.90</u>                             |
| <u>OFFICE ENGINEER</u>             | <u>\$ 78.02</u>                             |
| <u>ADMINISTRATIVE ASSISTANT</u>    | <u>\$ 49.82</u>                             |

# THE TEMPLE GROUP, INC.

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New Carrollton, MD*

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**THE  
TEMPLE  
GROUP,  
INC.**

**GENERAL SERVICES ADMINISTRATION  
Federal Supply Service  
Authorized Federal Supply Schedule Price List**

**2011**

**Pricing Table/Labor Categories:**

| <b>SERVICE</b>                  | <b>PRICE OFFERED TO GSA (including IFF)</b> |
|---------------------------------|---|
| <i>SR. PROJECT MANAGER</i>      | <i>\$117.50</i>                             |
| <i>PROJECT MANAGER</i>          | <i>\$107.03</i>                             |
| <i>CLAIMS ANALYST/SCHEDULER</i> | <i>\$99.00</i>                              |
| <i>COST ESTIMATOR</i>           | <i>\$98.00</i>                              |
| <i>SCHEDULER</i>                | <i>\$84.60</i>                              |
| <i>MECHANICAL ENGINEER</i>      | <i>\$102.46</i>                             |
| <i>ELECTRICAL ENGINEER</i>      | <i>\$102.46</i>                             |
| <i>CIVIL/STRUCT. ENGINEER</i>   | <i>\$101.28</i>                             |
| <i>SENIOR ARCHITECT</i>         | <i>\$102.46</i>                             |
| <i>GENERAL INSPECTOR</i>        | <i>\$92.12</i>                              |
| <i>INSPECTOR</i>                | <i>\$89.90</i>                              |
| <i>OFFICE ENGINEER</i>          | <i>\$78.02</i>                              |
| <i>ADMINISTRATIVE ASSISTANT</i> | <i>\$49.82</i>                              |

**Labor Categories Descriptions, Experience and Education:****1. Senior Project Manager**

**Minimum/General Experience:** Ten years of continuous experience performing as a Project Manager. Senior Project Manager's are expected to provide leadership expertise in all phases of project activity, techniques, concepts and methods.

**Functional Responsibility:** Liaison with senior level client representatives. Integrate competing and/or conflicting program objectives into the planning and execution processes. Communicate effectively, orally and in writing. Manage all project staff and off site staff assigned to the project. Responsible for budget development, and cost control, project schedule and overall project quality. Experience and knowledge with federal and local government procedural, review, and approval requirements.

**Minimum Education:** Senior Project Manager must be a graduate of an accredited college/university with a degree in engineering or architecture.

**2. Project Manager**

**Minimum/General Experience:** Five years continuous senior level experience in Construction Management / engineering.

**Functional Responsibility:** Must communicate effectively, orally and in writing. Prepare correspondence, write reports, make presentations, and brief client/management personnel. Schedule and coordinate project activity. Coordinate project activity. Manage inter-disciplinary teams of professionals and supporting labor categories.

Experience and knowledge with federal and local government procedural, review, and approval requirements.

**Minimum Education:** Project Manager must be a graduate of an accredited college/university with a degree in engineering or architecture or have a minimum of 10 years of construction management / engineering experience.

### 3. Claims Analyst / Scheduler

**Minimum/General Experience:** Ten years continuous senior level experience in construction / construction management.

**Functional Responsibility:** Develop/update master schedule. Review General Contractor's project schedule and comment based on master schedule. Review project schedule monthly and issue monthly progress report. Identify potential issues on the critical path and develop alternatives to mitigate schedule impact. Assess whether Architect's/designers schedule is practical, effective and enforceable, modify as required and lock-in for successful and timely completion of the project. Provide claim avoidance strategy, Analyze claims and assist in claims resolution. Communicate effectively, orally and in writing.

Experience and knowledge with federal and local government procedural, review, and approval requirements.

**Minimum Education:** Graduate of an accredited college/university.

### 4. Cost Estimator

**Minimum/General Experience:** Five years of experience in construction / construction management.

**Functional Responsibility:** Accurately calculate project price, costs and value. Develop, control, and maintain budgets. Knowledge of local and national codes. Perform and evaluate engineering economical analyses. Ability to interpret plans and specifications. Communicate effectively, orally and in writing. Prepare correspondence and write reports.

Experience and knowledge with Federal and Local Government procedural, review, and approval requirements.

**Minimum Education:** It is preferred, but not required, the Estimator be a graduate of an accredited college/university with a degree. Education can be substituted with ten years continuous and progressive technical experience.

### 5. Scheduler

**Minimum/General Experience:** Five years of experience in construction / construction management.

**Functional Responsibility:** Develop/update master schedule. Review General Contractor's project schedule and comment based on master schedule. Develop two week look ahead schedule. Update

project schedule monthly and issue monthly progress report. Identify potential issues on the critical path and develop alternatives to mitigate schedule impact. Communicate effectively, orally and in writing.

Experience and knowledge with Federal and Local Government procedural, review, and approval requirements.

**Minimum Education:** Must be a graduate of an accredited college/university with a degree in engineering.

## 6. Mechanical Engineer

**Minimum/General Experience:** Five years of experience in construction / construction management.

**Functional Responsibility:** Evaluate engineering systems identified in scope. Interpret plans and specifications of same systems. Review products and applications conformity to contract documents. Communicate effectively, orally and in writing. Prepare correspondence; write reports, and brief client/management personnel

Experience and knowledge with federal and local government procedural, review, and approval requirements.

**Minimum Education:** Graduate of an accredited college/university with a degree in engineering and possess or be able to obtain a professional registration.

## 7. Electrical Engineer

**Minimum/General Experience:** Five years of experience in construction / construction management.

**Functional Responsibility:** Evaluate engineering systems identified in scope. Interpret plans and specifications of same systems. Review products and applications conformity to contract documents. Communicate effectively, orally and in writing. Prepare correspondence; write reports, and brief client/management personnel

Experience and knowledge with federal and local government procedural, review, and approval requirements.

**Minimum Education:** Graduate of an accredited college/university with a degree in engineering and possess or be able to obtain a professional registration.

## 8. Civil/Structural Engineer

**Minimum/General Experience:** Five years of experience in construction / construction management.

**Functional Responsibility:** Evaluate engineering systems identified in scope. Interpret plans and specifications of same systems. Review products and applications conformity to contract documents. Communicate effectively, orally and in writing. Prepare correspondence; write reports, and brief client/management personnel

Experience and knowledge with federal and local government procedural, review, and approval requirements.

**Minimum Education:** Graduate of an accredited college/university with a degree in engineering and possess or be able to obtain a professional registration.

9. **Commercial Job Title:** Senior Architect

**Minimum/General Experience:** Five years of experience in construction / construction management.

**Functional Responsibility:** Communicate effectively, orally and in writing. Prepare correspondence and write reports. Assist in maintaining project schedule, assist in coordination of project activity, and monitor code compliance. Manage inter-disciplinary teams of professionals and supporting labor categories. Ability to interpret plans and specifications.

Experience and knowledge with federal and local government procedural, review, and approval requirements.

**Minimum Education:** Senior Architect must be a graduate of an accredited college/university with a degree in architecture, and possess or be able to obtain a professional registration.

10. **Commercial Job Title:** General Inspector

**Minimum/General Experience:** Five years of experience in construction / construction management.

**Functional Responsibility:** Communicate effectively, orally and in writing. Prepare correspondence, write reports, and perform quality assurance inspections on all aspects / disciplines of work. Ability to interpret plans and specifications.

Experience and knowledge with federal and local government procedural, review, and approval requirements.

**Minimum Education:** Graduate of an accredited college/university or seven years of construction experience.

11. **Commercial Job Title:** Inspector

**Minimum/General Experience:** Three years of continuous on-site technical experience.

**Functional Responsibility:** Communicate effectively, orally and in writing. Prepare correspondence, written reports, presentations, and in briefing clients and management personnel. Provide quality assurance inspections and verify work in place. Ability to interpret plans and specifications. Experience and knowledge with federal and local government procedural, review, and approval requirements.

**Minimum Education:** It is preferred, but not required, Inspectors be a graduate of an accredited college/university or have 3 years of experience in the field of construction.

12. **Commercial Job Title:** Office Engineer

**Minimum/General Experience:** One year of construction management or construction experience. Must be proficient in the use of Primavera and expedition software.

**Functional Responsibility:** Prepare correspondence, written reports, presentations. Update Schedule, log and track RFI's and maintain all project records. Communicate effectively, orally and in writing. Ability to interpret plans and specifications.

Experience and knowledge with federal and local government procedural, review, and approval requirements.

**Minimum Education:** Must have an engineering degree from an accredited college/university.

13. **Commercial Job Title:** Administrative Assistant

**Minimum/General Experience:** One year of administrative support experience.

**Functional Responsibility:** Prepare correspondence, written reports, presentations. Schedule and coordinate project activity. Communicate effectively, orally and in writing.

Experience and knowledge with federal and local government procedural, review, and approval requirements.

**Minimum Education:** It is preferred the Administrative Assistant has a high school diploma, which includes courses providing general office activity.