

BEST OF

2006

Washington MTA Rail Yard and Garages, Washington, D.C.

AWARD OF MERIT - Industrial



The Washington Metropolitan Transit Authority recognized the need to expand subway service to meet the demands of a growing population and decided one option was to expand from six-car to eight-car trains. The subsequent changes to 103 miles of track, 56 stations, and surrounding infrastructure may

seem formidable, but the first completed projects on WMATA's Capital Plan point toward a clear and logical expansion.

A \$93 million project included a new Service and Inspection Shop at the New Carrollton Rail Yard and two new above-ground parking structures at New Carrollton and College Park metro stations, overseen by design-build team leader Hensel Phelps Construction Co. of Chantilly, Va. The S&I shop consisted of major utility work relocation and track work. The shop supports up to 20 trains at a time, and includes repair pits, truck and body hoists, wheel turning machines, and an overhead bridge crane.

The eight-level New Carrollton garage

Key Players

Owner: Washington Metropolitan Area Transit Authority, Washington, D.C.

Design-Build Team Leader/General

Contractor: Hensel Phelps Construction Co., Chantilly, Va.

Designer of Record: HDR, Inc., Alexandria, Va.

Mechanical, Electrical, HVAC & Plumbing, Industrial, Fire at Shop: SYSTRA Consulting, Philadelphia, Pa.

Parking Engineers: Walker Parking Consultants, Wayne, Pa.

Electrical and Fire at Garages: Diversified Engineering, Washington, D.C.

Automatic Train Control: Alstom Transport Information Solution, Rochester, N.Y.

includes 1,818 parking spots, while the College Park garage has six levels with 1,345 spots. Both garages are precast concrete with glass elevator cores. Construction was completed last December.

BEST OF

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National Museum of the Marine Corps, Quantico, Va.

AWARD OF MERIT - Cultural Institution



Planned as a lasting tribute to Marines, the National Museum of the Marine Corps in Quantico, Va., features gallery space, an orientation theater, offices, a gift shop and entry lobby.

Centex Construction LLC of Fairfax, Va., began the \$45.6 million, 120,000-

sq.-ft. museum in April 2004 and substantially completed it in August. During the project, the owner expanded the scope of work to include lighting, hard-scaping and landscaping at Semper Fidelis Park, and that work wrapped up in October.

Designed as a contemporary depiction of the flag raising at Iwo Jima, a 240-ft., tilted, stainless-steel-clad pipe truss mast soars through the museum's 160-ft., three-sided glass and steel atrium, perched above a 45-ft. central gallery.

The mast arrived onsite in three pieces, was assembled on the ground and lifted into place with two cranes. A falsework tower provided temporary

Key Players

Owner/Developer: Marine Corps Heritage Foundation, Quantico, Va.

Construction Manager: Jacobs Facilities, Arlington, Va.

General Contractor: Centex Construction LLC, Fairfax, Va.

Architect: Fentress Bradburn Architects, Denver

Structural Engineer: Weidlinger Associates, Washington, D.C.

Mechanical and Electrical Engineers: Hankins and Anderson Inc., Glen Allen, Va.

support until the placement of the atrium's major steel erection.

To support the atrium, the team placed structural two-ft.-thick concrete walls, while the walls around the central gallery are topped with a 10-ft. wide, three-ft. deep concrete ring beam.