

**WALLACE,  
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& ASSOCIATES, LLP**

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**CIVIL AND STRUCTURAL ENGINEERS**

*OVER 30 YEARS OF ENGINEERING EXCELLENCE*

STATEMENT OF CAPABILITIES  
FEDERAL TRANSIT ADMINISTRATION  
PROJECT MANAGEMENT OVERSIGHT (PMO) PROGRAM

Introduction

Wallace, Montgomery & Associates, LLP is a civil/structural transportation engineering firm located in Towson, Maryland. Founded in 1975, our 90 person firm has been providing design and construction services to regional transit and highway agencies for over thirty years.

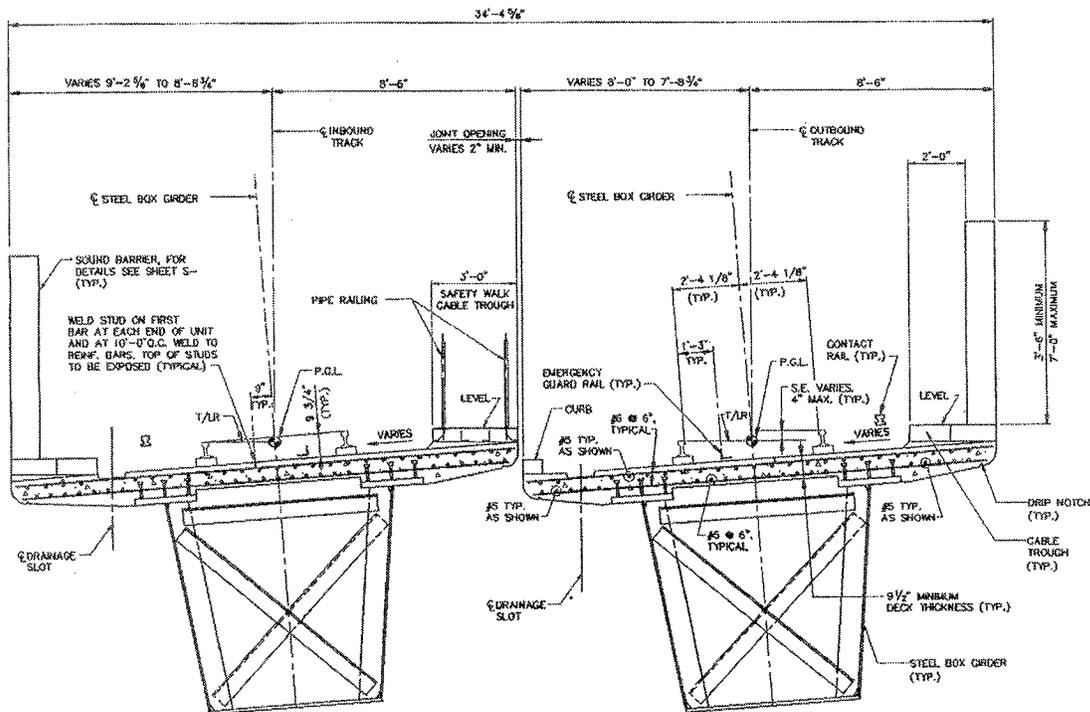
Our staff includes design engineers and construction management personnel who have delivered quality services to both the Maryland Transit Administration and WMATA. We are fortunate to have on staff two former Directors of Engineering for the Maryland Transit Administration. Collectively these gentlemen had the responsibility to deliver the Administration's Capital Program from 1993 through 2004 whose value ranged from \$200 million to \$350 million. Projects included extensions to Baltimore's Subway System, MARC Commuter Rail and the Central Light Rail; improvements to the Bus system; purchases of rolling stock; and many system preservation projects.

WMA engineers have worked on many projects both large and small for these agencies and know what is required deliver projects on time and on budget. Listed below is are sample projects designed by WMA as well as detailed resumes of selected individuals.

Sample Projects

**WMATA Aerial Structure over  
I-95 Capital Beltway  
Prince George's County, MD  
Contract Number 1G0042**

Wallace, Montgomery & Associates, LLP was selected to design WMATA's aerial crossing Washington's Capital Beltway as part of the Addison Route in Landover, Maryland. The project represented WMATA's first expansion outside of Metropolitan Washington and was subject to review by the Maryland State Highway Administration (SHA). WM&A was recommended to WMATA by the Maryland State Highway Administration for this assignment because of our extensive bridge design experience and knowledge of the SHA's Policies and Procedures. The new structure was a dual, 2 span steel box girder bridge 324' long by a total of 34' wide and adjoined a steel through girder bridge on the west side of I-95 and a Concrete Segmental Post-Tensioned Box Girder on the east.



**SUPERSTRUCTURE SECTION**  
(SHOWN AT 08 STA. 607+00)

**CONSTRUCTION MANAGEMENT  
SERVICES FOR THE CENTRAL LIGHT RAIL DOUBLE TRACKING  
Baltimore, MD**

Wallace, Montgomery & Associates, LLP (WMA) as part of a joint venture provided overall project management and full time, on-site inspection services for constructing double tracks at various sections along the 29 mile corridor from Hunt Valley to Glen Burnie, Maryland. Duties include construction scheduling controls, inspection and testing, coordination between the MTA, FTA, City of Baltimore, the Maryland Stadium Authority and the Engineers. Frank Waesche was Project Manager for the Joint Venture and served on the project's Executive Council.

The project included the construction of double tracks for eight sections of the eleven that were single tracked for a total length of 9.4 miles of new track. The eight sections double tracked were split between the northern and southern portions of the system. The project involved the construction of three new bridges. One bridge crosses the Middle Branch of the Patapsco River, one above Kloman Street and the third adjacent to the Ferndale Trestle over Hollins Ferry Road. Stations were modified to include an additional platform to the Mount Washington, Linthicum, Baltimore Highlands and Cromwell Stations.

As the selected construction managers for this \$150 million project, our Joint Venture developed an overall management plan for this 5 year project. Our team developed:

- Master schedule for all construction supply and remaining design activities.
- Management team for the overall project.
- Reporting procedures for the project for project control and to support federal audit procedures.
- Project record keeping procedures.
- Project meetings at all levels to assure QA/QC procedures were in place and working.

Assignments involved complete construction management, inspection and materials testing services. Projects were inspected to assure compliance with project plans and specifications including all Federal, State or local codes and all pertinent environmental permits, such as Corps of Engineers, MDE, DNR, etc. Inspectors performed full-time inspection of all work, prepare daily reports, sketches, quantity measurements, on-site materials testing, and survey checks of Contractor's work and quantity measurements.

We the full range of construction management and inspection services to the Maryland Transit Administration from NTP through project completion including:

- Project Management including liaison with MTA
- Attend pre-construction meeting
- Review Contractor's proposed work plan including CPM schedule
- Establish and maintain coordination with Baltimore City, Stadium Authority and MTA
- Establish and maintain coordination with community members affected by construction
- Conduct monthly progress meetings
- Review Contractor's pay estimates
- Prepare change orders
- Maintain project records including IDR's
- Conduct materials tests, as applicable
- Conduct field observations of Contractor's construction methods
- Conduct semi-final inspection and prepare punch list
- Conduct final inspection and prepare final pay estimate
- Assist MTA with resolution of claims
- Assure compliance with codes and permits

#### **CONSTRUCTION MANAGEMENT SERVICES MARC TO FREDERICK EXTENSION**

Frederick, MD

As part of a Joint Venture provided complete construction management services for the Maryland Transit Administration's MARC commuter rail extension to Frederick. This \$56 million project provides a direct rail connection from Frederick, Maryland to Union Station in Washington, D.C.

The project featured the construction of continuously welded mainline rail, passing track, an overnight maintenance and storage yard, and two passenger stations. The downtown station had architecture designed to match the historic nature of the Frederick area and included a bus loop, landscaping, and ornamental lighting. The suburban station provided parking for 850 cars, access roads, and other amenities.

The storage yard allows for the overnight storage of trains and light maintenance. The four track facility includes crew reporting quarters, storage and garage facilities and support fueling, lubrication and cleaning activities. In addition to fuel and lubrication, compressed air, water, sewer and electrical services are provided.

Our team had first line quality control/quality assurance responsibilities for the project. Our staff monitored the project schedule, material certifications and installation activities. We made recommendations for payment, recommended and processed change orders and assisted in the defense of contractor's claims. Our duties included full contract closeout activities in compliance with all standard MTA and FTA regulations.

WM&A provided full construction management and inspection services to MTA from NTP through project completion including, but not limited to the following:

- Review plans, specifications and cost estimates
- Attend pre-construction meeting
- Review Contractor's proposed work plan including CPM schedule
- Establish and maintain coordination with community members affected by construction
- Conduct monthly progress meetings
- Review Contractor's pay estimates
- Prepare change orders

- Maintain project records including IDR's
- Conduct materials tests, as applicable
- Conduct field observations of Contractor's construction methods
- Conduct semi-final and prepare punch list
- Conduct final inspection and prepare final pay estimate
- Assist the MTA with resolution of claims

### Key Personnel

Frank S. Waesche III, PE

Mr. Waesche has over 35 years experience in the design, construction and management of transit and highway projects. He has served as designer, resident engineer and owner on many diverse transit projects during his career. Additionally, he spent four years on assignment with NTI as a lead instructor in its Design Build Training Seminar presented to Transit Agencies throughout the United States. He was selected by the FTA to participate in technology transfer conferences in Thailand, Australia and Ghana.

### **HEAVY RAIL**

\$350 million Section C extension of the Metro system from Charles Center Station to Johns Hopkins Hospital. This project 1.5 miles of pre-cast concrete tunnel sections with cast-in-place concrete tunnel lining. There were two stations included in the overall project scope. The Shot Tower Station is approximately 70 feet below grade and supports a triple box culvert which carries the Jones Falls, a major outlet into Baltimore Harbor with a 100 year storm flow of 18,000 GPM. The terminus station is located at the world renown Johns Hopkins Hospital and features a direct underground connection from the Metro station into the Hospital itself.

Cross-over Reconstruction Projects at Lexington Market, Charles Center and State Center which rehabbed the original trackwork in these areas.

ADA Compliance Contracts which modified several MTA Metro facilities for compliance with this legislation.

Resident Engineer: Laurens Street Station, Line and Finish Contracts, Baltimore Metro. \$47 Million project including 2 miles of rock tunnels, ½ mile of mixed-face, hand excavated tunnel, cut and cover station construction, reconstruction of 4 blocks of City street and utility system.

### **LIGHT RAIL**

Mr. Waesche spearheaded the first ever linear design/build transit project in the United States. The Central Light Rail Line Phase II project was a \$106 million effort to simultaneously construct three separate extensions for the original 22 mile mainline segment. These included the 4.5 mile Hunt Valley Extension, the 0.3 mile Penn Station Extension and the 2.5 mile BWI Airport Extension. This project was part of the FTA's Turnkey Demonstration Program and was the first of the four demonstration projects to begin and complete construction. The extensions opened for service in 1997.

During the construction management of the \$150 million project to double track Baltimore's Light Rail Line, Mr. Waesche served on the project's Executive Council, providing oversight to the on going work. He led a Risk Analysis of an agency decision to revise the construction methodology of the project which led to substantial cost and time savings.

Patapsco River Bridge Replacement was an \$8 million dollar project which was completed in three phases while maintaining mainline light rail service with only minimal interruption. The project included the construction of a two new 6 span pile supported structures and the demolition of an existing bridge.

Various projects for Signaling, Systems and Communications, Light Rail Vehicle Procurement, and miscellaneous upgrades.

### **COMMUTER RAIL**

Dorsey MARC Station project included the construction of a 750 car parking lot and commuter rail station. Station building included a customer waiting area, ticket agent space, utilities and a clock tower.

Frederick MARC Extension: \$56 million project which extends MARC service from the existing Point of Rocks Station into downtown Frederick. Included are two station buildings, one with parking for 500 vehicles, and a storage and fueling facility. Project includes 14 miles of trackwork and required close coordination with CSXT.

Edward W. Smith, PE  
40 Years Experience  
Wallace, Montgomery & Associates, LLP  
AS/Construction Technology/ 1972  
BS Studies/University of Baltimore/1982  
Maryland Registered Professional Engineer/19151/1992

**Summary:**

Mr. Smith has 40 years experience on highway and transit projects and is in charge of a design section in WM&A's Civil Engineering Division. He previously served as Director of the MTA's Office of Engineering, and was with the Maryland State Highway Administration for 28 years.

**Frederick Marc Extension, Maryland Transit Administration (MTA), Frederick, MD** - \$48 million project extending Marc service from the existing Point of Rocks Station to Downtown Frederick. The 14-mile project included two station buildings – one with parking for over 500 vehicles, an overnight storage/light maintenance facility, real estate transactions and coordination with developers.

**LTR Double Track, MTA** – As MTA's Director of Engineering Ed was responsible for assuring that resources were in place to deliver this \$230 million project. He was involved in tracking status & budget resolving engineering issues thru planning, engineering and construction

**MTA Parking Expansions, MTA** – The goal of this MTA project was to increase parking at key lots – one Metro, three light rail, 11 Marc lots. All locations involved some environmental and political issues, right-of-way acquisition and railroad coordination. Ed advocated these improvements and assisted in securing funding and oversaw planning, engineering and construction.

**ADA Voluntary Compliance Agreement, MTA** – Ed oversaw the definition, development, contract procurement and execution of the Voluntary Compliance Agreement with the Federal Transit Administration to bring MTA facilities into compliance with ADA regulations and standards; he supported the project manager in fulfillment of the agreement.