

# STATEMENT OF **QUALIFICATIONS**

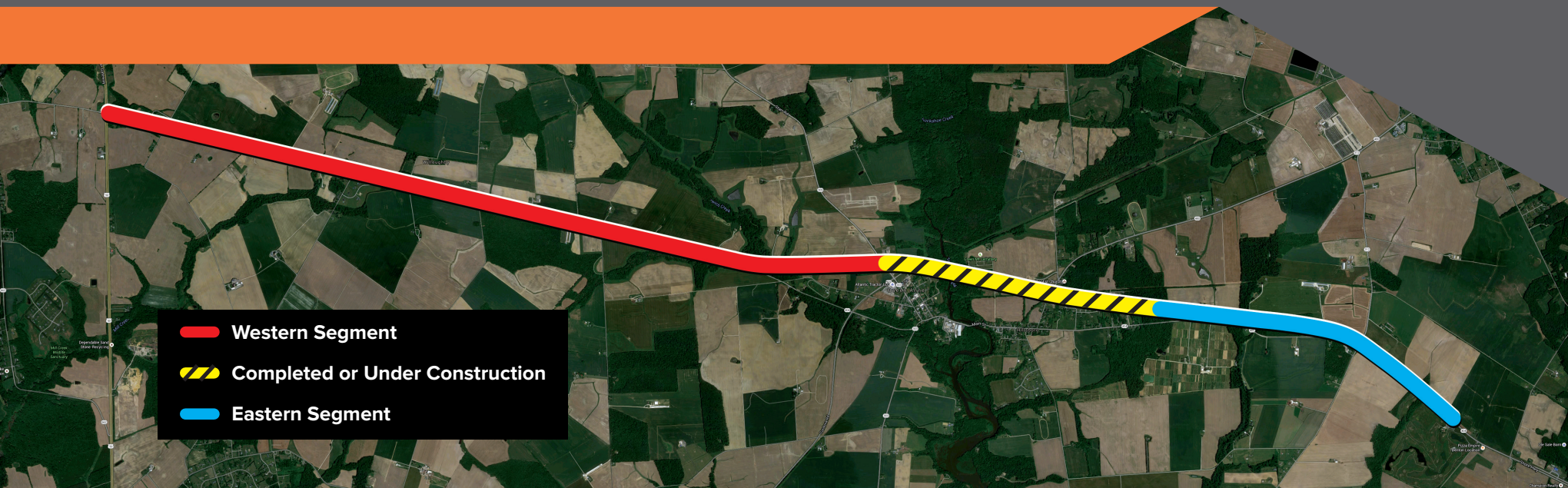
DESIGN-BUILD

**MD 404 – US 50 to East of Holly Road**

**Caroline, Queen Anne's, and Talbot Counties**

**Contract No. AW8965170**

**FAP No. AC-NHPP-G-300-1(53)N**



MARYLAND

**404**

**404 Corridor Safety Constructors**

A Joint Venture of Wagman Heavy Civil,  
David A. Bramble, and Allan Myers



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# **A.**

# **LEAD DESIGN FIRM EXPERIENCE/QUALIFICATIONS AND PAST PERFORMANCE**

- i. KEY STAFF EXPERIENCE
- ii. PAST PERFORMANCE



**404 Corridor Safety Constructors**  
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A.  
i. KEY STAFF EXPERIENCE



**404 Corridor Safety Constructors**  
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David A. Bramble, and Allan Myers

**EDUCATION**

BS in Civil Engineering,  
University of Pittsburgh, 1990

**EXPERIENCE**

22 with Firm, 25 in Industry

**PROFESSIONAL REGISTRATION**

MD Registered PE #25414

**QUALIFICATIONS & EXPERIENCE**

Eric is a MD Registered PE offering over 25 years of experience in designing and managing both Design-Build and Design-Bid-Build transportation projects including new roadways and interchanges, expressway-arterial realignments and capacity improvements, and roadway multi-modal retrofits. Eric is skilled in the development of studies, designs and construction documents. He is vastly familiar with SHA specs, standards and policies along with AASHTO and

MUTCD Criteria. Eric's areas of expertise include road geometrics and drainage design, construction staging/MOT development, and traffic engineering along with extensive working knowledge of structural, SWM, E&SC and environmental permitting. **Related to the MD 404 Design-Build Project, Eric will utilize his extensive understanding in managing multi-disciplined Design-Build transportation projects to anticipate potential design pitfalls and develop a rolling submittals approach for maintaining project objectives, critical paths and a continual, substantial flow of construction.**

**PROJECT EXPERIENCE**

**US 113 Dualization (Phase 3) Design-Build, WO6365170, Worcester County, MD (\$32M) – Project Design Manager.** Overseeing the complete design efforts for the **Allan Myers** Team for this safety and traffic operations project to convert 4 miles of US 113 from a 2-lane to a 4-lane divided median highway. Design includes highway, H&H/SWM, E&SC, TMP/MOT, structural, pavement/geotech, traffic (lighting, signal, signs/markings), landscaping, construction plans development and securing permits. Coordinated design with Delmarva Power, Choptank Electric, Verizon and MD Broadband for concurrent facility relocations. **Developed 5 ATCs providing \$1M in cost savings and safety & mobility enhancements.** Substantially complete design (Final Roadway, Drainage/SWM) of the Project is scheduled for March 2016.

**I-95 Interchange at Contee Road Design-Build, PG4195172, Prince George's County, MD (\$34M) – Project Design Manager.** Oversaw the complete design efforts for the **Allan Myers** Design-Build Team's construction of Contee Road, a divided 4-lane arterial road, and its grade separated partial cloverleaf interchange connection with I-95. Design efforts included: highway, structural, H&H, SWM, E&SC, MOT, geotechnical, traffic (lighting, signals, signing & marking, ITS), utilities, landscaping, construction plans development, securing permits, and ensuring environmental compliance. **Developed 2 ATCs providing \$1.6M in cost savings.**

Also, developed a design/construction approach & schedule resulting in the opening of the new I-95 overpass bridge 1½ months ahead of the interim milestone date.

**US 113 Dualization (Phase 3 North), WO7475170, Worcester County, MD (\$11M) – Highway Engineer.** Responsible for development of roadway geometrics of this 2.5 mile roadway dualization project to a 4-lane divided highway from Jarvis Road to the Delaware Line. Incorporated partial control of access and 1.5 miles of service roads. Assisted SHA OHD in development of the project's Design-Build Advertisement Contract Documents. Provided GEC services during construction.

**I-95 Greenbelt Metro Interchange, PG3335172, Prince George's County, MD (\$95M) – Project Manager.** Responsible for overall management of this multi-disciplined engineering project for the modification of the I-95/I-495 and Greenbelt Metro Station interchange with the addition of two new ramps, including a semi-direct flyover ramp, and traffic operation improvements along the Capital Beltway. Includes bridges/culvert extensions, and SWM/E&SC approvals through SHA PRD. Providing hands-on efforts with the development of typical sections, interchange geometrics, construction staging, and application of practical design to provide cost-effective designs and reduced funding requirements. Substantially complete design (Final Review) of the Project is scheduled for May 2016.

**EDUCATION**

BS in Civil Engineering, Cornell University, 1992

**EXPERIENCE**

16 with Firm, 23 in Industry

**PROFESSIONAL REGISTRATION**

MD Registered PE #24591

**QUALIFICATIONS & EXPERIENCE**

Diane specializes in H&H analyses and design including SWM, E&SC, drainage, bridge and culvert design, bridge scour, TR-55 & TR-20 modeling, HEC-RAS & HY-8 modeling, and stream restoration. She has performed inspections of existing SWM facilities and has design experience with MD Pond 378 criteria for dam safety. In addition, Diane has H&H experience in scour evaluations, floodplain analyses, flood investigations, roadway drainage, environmental permitting, fish passage structures, and channel stabilization. **For the MD 404**

**Design-Build Project, Diane provides a vast understanding of MDE SWM and E&SC criteria and guidelines and SHA Plan Review Division (PRD) procedures and policies as she is an approved MDE Sediment and Stormwater Plans Reviewer and has also performed reviews on behalf of SHA PRD. She is currently leading the SWM/E&SC design efforts of a large significant Project through the PRD review process.**

**PROJECT EXPERIENCE**

**US 113 (Phase 3) Design-Build, WO6365170, Worcester County, MD (\$32M) – H&H Design Engineer.** Project work is broken into several design packages for **Allan Myers** concurrent construction of 4 miles of US 113. Design packages included concept SWM; rough grading; small structure design; and final roadway design, including SWM, E&SC, and cross culvert design; each requiring SWM/E&SC approval from MDE. Concept SWM design proposes 77 facilities including multiple wet swales, grass swales, bio-swales, submerged gravel wetlands, and micro-bioretenion. Coordinating drainage designs with utilities for their concurrent facility relocations while minimizing impacts.

**I-95 Interchange at Contee Road Design-Build, PG4195172, Prince George's County, MD (\$34M) – H&H Design Engineer.** Responsible for design of SWM, E&SC for multiple construction stages, cross culvert, coordinating storm drain design based on SWM needs, and environmental permitting for each construction stage (NPDES, Wetlands, SWM, E&SC) for the construction by **Allan Myers** of Contee Road and grade separated connection with I-95. Included 8 ponds and 53 ESD micro-scale practices, primarily bio-swales.

**US 301 at MD 304, QA2655170, Queen Anne's County, MD (\$36M) – H&H Design Engineer.** Developed H&H design for this interchange project requiring subconsultant coordination and QA/QC. SWM design includes 56 ESD facilities, primarily

wet swales. E&SC design includes 7 construction phases. H&H analysis of proposed impacts to 5 existing and 2 new cross culverts. Design of plunge pool systems and riprap protection for cross culvert outfall stabilization, QA/QC of stream relocation and restoration design, including HEC-RAS for existing and proposed channels. Construction was awarded to **David A. Bramble, Inc.**

**I-95 Greenbelt Metro Interchange, PG3335172, Prince George's County, MD (\$95M) – H&H Design Engineer.** Securing SWM/E&SC approval through SHA PRD for the modification of the I-95/I-495 and Greenbelt Metro Station interchange. SWM design includes 40 facilities including multiple micro-bioretenion, rain gardens, bio-swales, grass swales, and ponds. Coordinating/assisting PRD with establishing computational criteria through the course of the Project's SWM design efforts.

**MD 5 Branch Ave Metro Access Phases 1 & 2, PG4135172 & PG4945172, Prince George's County, MD (\$65M) – H&H Design Engineer.** Responsible for H&H/SWM/E&SC design for each phase to modify the MD 5/I-495/I-95 interchange (Phase 1) and construct a new access road from MD 5 to the Metro Station (Phase 2). Includes design of SWM wet ponds and grass channels, multi-phase E&SC construction, drainage, construction phasing of the storm drain installation to meet E&SC requirements, environmental permits, dam breach analysis, and dam hazard classification.

## EDUCATION

MS in Civil Engineering, George Washington University, 1984  
BS in Civil Engineering, University of Dayton, 1979

## EXPERIENCE

8 with Firm, 35 in Industry

## PROFESSIONAL REGISTRATION

MD Registered PE #13725

## QUALIFICATIONS & EXPERIENCE

Mike has over 35 years of experience in geotechnical investigation, analysis and design, pavement engineering and construction inspection and testing services. **He has managed hundreds of geotechnical projects including leading geotechnical efforts for all JMT's Design-Build efforts throughout the mid-Atlantic region. Also led the geotechnical engineering for the US 113 Corridor (2 segments) on the Eastern Shore of Maryland.** Projects have included field investigation programs including test borings and test pits, geotechnical engineering analysis, and preparation of reports to provide geotechnical design information for highways, bridges, culvert crossings, rock and soil slopes, rock fall, reinforced slopes, retaining wall systems, and utilities.

## PROJECT EXPERIENCE

**US 113 Dualization Phase 2B Design-Build, WO6345270, Worcester County, MD (\$12.1M)** – Geotechnical Design Engineer. Worked with our Design-Build partner **David A. Bramble, Inc.** to design and construct two additional lanes along existing US 113 alignment to create a 4-lane divided highway similar to MD 404. Provided pavement and geotechnical engineering evaluation and analysis.

**US 113 Dualization Phase 2A Design-Build, WO6345170, Worcester County, MD (\$14.3M)** – Geotechnical Design Engineer. Worked with our Design-Build partner **David A. Bramble, Inc.** to design and construct two additional lanes along existing US 113 alignment to create a 4-lane divided highway similar to MD 404. Mike provided pavement and geotechnical engineering evaluation and analysis.

**US 40 at MD 715 Interchange Improvements Design-Build, HA2705171, Harford County, MD (\$17.7M)** – Geotechnical Design Engineer. Worked with our Design-Build partner **Allan Myers** to help alleviate local traffic congestion resulting from BRAC. Responsible for geotechnical evaluation and analysis for this interchange consisting of the design and construction of the widening of the bridge and the associated ramps. Also reviewed borings/coring information, QC of the data received from the field, and analysis of the field data. Prepared geotechnical recommendations for general earthwork and for the design of proposed MSE walls, stability of slopes, infiltration characteristics of the soils for SWM

purposes and deep foundations supporting the widened abutments for the bridge.

**Fairfax County Parkway Extension Design-Build, Springfield, VA (\$112.5M)** – Geotechnical Design Engineer. **This award-winning project was completed ahead of schedule due to JMT prepared ATCs that improved the overall project design and provided significant reductions in construction costs.** Similar to MD 404 this project included a new 4-lane divided limited access highway, new bridges, traffic/ITS, drainage/E&SC/ SWM, environmental, utility coordination and an extensive public outreach program. Responsible for managing interpretation of the subsurface exploration, bridge foundations, culvert crossings, slope stability and retaining wall designs. Due to geologic conditions adjusted profiles to reduce soil and rock excavation and minimize disturbance of contaminated material around Fort Belvoir EPG.

**11<sup>th</sup> St. Corridor Bridges over Anacostia River and Interchanges Design-Build to Budget-Stipulated Sum, DDOT, Washington, DC (\$375M)** – Geotechnical Design Engineer. JMT served as the lead designer on this award-winning Design-Build project. JMT refined the planning document alignments and interchanges to reduce costs, environmental/community impacts, maintained traffic, and built public support through extensive public involvement. **70% of this project was constructed without major interruption to vehicular traffic.** Mike managed interpretation of the subsurface exploration and provided geotechnical consultation.



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**EDUCATION**

MLA in Landscape Architecture,  
Morgan State University, 1994  
BS in Horticulture, University of  
Maryland, 1984

**EXPERIENCE**

22 with Firm, 30 in Industry

**PROFESSIONAL REGISTRATION**

MD Registered LA #2088  
LEED Accredited Professional®

**QUALIFICATIONS & EXPERIENCE**

Jon has over 30 years of experience in landscape architecture design and permitting for transportation improvement projects. He has experience at all levels of project development from conceptual engineering alternatives through final construction documents including plans, specifications, and estimates in accordance with SHA, FHWA, and AASHTO standards/policies. His experience includes serving as Contract Manager for seven different Open End Contracts with SHA’s Office of Environmental Design over a 20 year period. He has served as Project Landscape Architect and Visual Quality Manager for numerous Major Design-Build projects in MD and DC. **Jon has a wealth of**

**experience on the Eastern Shore of Maryland including leading the landscape architecture components of the US 113 Corridor (4 segments); and other highlighted projects including MD 404 SWM Visual Quality Monitoring, MD 528 Streetscape, and various Landscape Sustainability V Site services.**

**PROJECT EXPERIENCE**

**Landscape Architectural Services, BCS 2007-17, 2003-09 and 98-13, Statewide, MD (\$4M Total) – Project Manager/Landscape Architect.** Managed three consecutive statewide contracts including over 48 task order assignments for SHA’s Office of Environmental Design-Landscape Architecture Division (LAD). Assignments included roadside vegetation design and management, providing on-site staff for SHA’s LAD, and preparation of contract documents for streetscape and community enhancement projects.

**US 113 Dualization Phase 2B, 2A, Southern and Northern Section Design-Builds, WO6345270, WO6345170, WO7675170 and W07475170, Worcester County, MD (\$41.8M Total) – Landscape Architect.** Worked with our Design-Build partner **David A. Bramble, Inc.** to design/construct two additional lanes along existing US 113 alignment to create a 4-lane divided highway similar to MD 404. Prepared landscape plans for roadside areas and SWM facilities on all four Phases of the overall project. SWM facility planting plans were designed to the SHA’s Guidelines. Coordinated with DNR/SHA for compliance with Section 5-103 of the State Reforestation Law and prepared reforestation plans.

**MD 924 Streetscape Improvements from MD 22 to Maulsby Avenue Design-Build, HA1865184, Harford County, MD (\$8.6M) – Landscape Architect.** Worked on this award-winning project to renovate

Bel Air’s Main Street quickly and dramatically with minimal construction disruption to the community. Similar to MD 404 this project required constant communication to help keep stakeholders well informed. Regular project updates allowed citizens to review the proposed project phasing, specific design elements and the construction schedule. Worked with local businesses to understand their needs, particularly to maintain access for patrons and deliveries during construction. **The Bel Air Economic & Community Development Commission later honored the project team with an award for meeting these key goals.** Led the landscape architecture design elements and provided support with the design and development of the pedestrian facility improvements.

**11<sup>th</sup> St. Corridor Bridges over Anacostia River and Interchanges Design-Build to Budget-Stipulated Sum, DDOT, Washington DC (\$375M) – Visual Quality Manager/Landscape Architect.** Responsible for the implementation of all aesthetic elements and plantings for the largest transportation project in DDOT history. The project included multi-use trail systems, low impact development stormwater solutions, roadside plantings, reforestation, and integration of all aesthetic elements in a cohesive family of design treatments. Presentations were made to the US Commission of Fine Arts, the National Capital Planning Commission, and DDOT.



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### EDUCATION

BS in Civil Engineering,  
Virginia Tech, 1997

### EXPERIENCE

18 with Firm, 19 in Industry

### PROFESSIONAL REGISTRATION

MD Registered PE #27047

### CERTIFICATIONS/TRAINING

DBIA Certified Professional

### QUALIFICATIONS & EXPERIENCE

Eric has 19 years of progressive engineering experience for major transportation projects including Lead Designer/Highway Engineer roles for Design-Build and Design-Bid-Build projects. He has led the design of new roadways, rehabilitations, interchanges, and intersections for a variety of roadway classifications using SHA, AASHTO, MUTCD requirements, and other requirements. As an active DBIA member, Eric is a proponent of Design-Build best practices and also understands Design-Build from the Owner's perspective based on his GEC Project Management roles on the ICC, Purple Line LRT P3, and SR 72/SR 1 Design-Build projects. **As Highway Engineer for the**

**MD 404 Project, Eric will use his experience with multi-phased, interdisciplinary, task force based design to ensure the highway design supports safety, mobility and customer satisfaction goals, and will accommodate the reviews and permitting necessary to support the aggressive construction schedule.**

### PROJECT EXPERIENCE

***MD 216 Relocated Design-Build, HO3065171, Howard County, MD (\$23M) – Highway Engineer.***

This project included design and construction of two miles of 4-lane, median separated highway on new alignment, including one interchange and three intersections. The project included noise walls, multi-phased E&SC/SWM, permitting, stream restoration, box culverts, utility coordination, phased MOT, and stakeholder outreach.

Responsible for all highway and MOT design and coordination of multi-disciplinary team in the production of multiple design, construction and permit packages to achieve on-time completion for this award-winning project. Eric was a key participant in stakeholder outreach efforts and project partnering and issue resolution.

***MD 32/Linden Church Rd Interchange Design-Build, HO3915170, Howard County, MD (\$11M) – Project Manager.*** Similar to the MD 404, MD 32 is a 2-lane roadway with heavy peak usage and a history of safety concerns. This Design-Build project consolidated entrance points, improved safety, increased mobility, provided SWM, and facilitated the planned dualization of MD 32. Eric provided Design-Build coordination and execution guidance, QA/QC, compliance reviews, issue resolution and partnering to achieve efficient design, permitting, and project completion.

***Monroe Bypass Design-Build, NCDOT, Mecklenburg County, NC (\$367M) – Section 2C Highway Lead.*** This new 19.7-mile, 4-lane, limited access, median separated toll road was designed over flat terrain with a high water table and includes 7 interchanges and numerous frontage roads. Eric led the highway design and plan production for the first five mile segment of this roadway. He was responsible for roadway alignments, typical sections, two new interchanges, frontage roads, and MOT for all intersecting roadways. Special attention was given to the minimal clearance over numerous stream crossings, coordination with phased implementation of stream work, grading, SWM, E&SC, and safety for the traveling public.

***ICC Contract A Design-Build, AT3765960, Montgomery County, MD (\$464M) – Owner Design Manager.*** This 7.2 mile Design-Build included an environmentally sensitive four lane toll highway, MOT, SWM, E&SC, permitting, bridge structures, noise walls, utility relocations, stream relocation, box culverts, and challenging stakeholder interaction. Eric was responsible for design oversight, managing design quality assurance reviews, conflict resolution, stakeholder coordination, and facilitated the permitting process between the Design-Build contractor (which included **Wagman**) and the permitting agencies.

**EDUCATION**

ME in Civil Engineering,  
 University of MD, 2007  
 BS in Civil Engineering,  
 University of MD, 1999

**EXPERIENCE**

15 with Firm, 15 in Industry

**PROFESSIONAL REGISTRATION**

MD Registered PE #25173  
 PTOE # 1852

**QUALIFICATIONS & EXPERIENCE**

John has over 15 years experience in all facets of Traffic Engineering, including traffic engineering design, traffic engineering studies & analyses, and ITS design. He oversees the design and development of traffic control plans, signing plans, pavement marking plans, signal plans, ITS design plans, and roadway lighting plans. He is also tasked with overseeing and coordinating the development of traffic analysis studies and reports, including corridor and freeway operational and safety analyses, capacity analyses, sight distance evaluations, geometric improvement studies, and Transportation Management Plans (TMP). **For the MD 404 Design-Build Project, John offers considerable experience in traffic engineering design (Signals,**

**Lighting, Signing & Marking, ITS) on SHA projects through the Office of Traffic & Safety and extensive expertise in phased construction staging and MOT for major roadway projects.**

**PROJECT EXPERIENCE**

**US 113 (Phase 3) Design-Build, WO6365170, Worcester County, MD (\$32M) – Traffic Engineer.**

Overseeing the traffic design efforts under the **Allan Myers** Design-Build Team for this safety and traffic operations Project to upgrade 4 miles of US 113 from a 2-lane to a 4-lane divided median highway. Design efforts include TMP, MOT and final traffic control devices (lighting, signal, signing, pavement markings, signal removal/modifications).

**I-95 Interchange at Contee Road Design-Build, PG4195172, Prince George’s County, MD (\$31M) – Traffic Engineer.**

Under **Allan Myers**, John oversaw the design and plans development of the TMP & MOT, 3 signals, signing & marking, lighting, and ITS for this new interchange project. The lighting and signal plans were developed in accordance with SHA design criteria, and the signals included APS/CPS. The signing and marking plans incorporated provisions for bicycle lanes.

**MD 5 Branch Avenue Metro Access Phase 2 (Access Road), PG4945172, Prince George’s County, MD (\$33M) – Traffic Engineer.**

Responsible for developing a comprehensive TMP and multi-phase MOT plans to construct a new 4-lane divided raised median access road connecting MD 5 to Branch Ave Metro Station, with a grade-separated bridge crossing of MD 5 NB, and capacity and multi-modal improvements to support WMATA and County collector roadway.

**US 301 at MD 304, QA2655170, Queen Anne’s County, MD (\$36M) – Traffic Engineer.**

Oversaw the development of a TMP, MOT alternative analyses and multi-phase staging along with plans for signing & marking, lighting, signal removal & modification, and ITS for this safety improvement interchange project. Construction was awarded to **David A. Bramble, Inc.**

**On-Call Support Services Contract, BCS 2007-12, SHA District 1, MD (\$2.5M) – Traffic Engineer.**

Responsible for managing this On-Call Contract that included a significant number of traffic engineering assignments. Representative projects include geometric designs (roundabouts and J-turns), final traffic control device designs (signal modifications and removals, signing, marking, and lighting), and intersection/corridor capacity and safety studies.

**Middletown Road Phase IB2 Design-Build, Charles County, MD (\$7M) – Traffic Engineer.**

Responsible for the completion of corridor-wide maintenance of traffic plans, signing, signing plans, pavement marking plans, and two separate signal designs along Middletown Road in Charles County due to localized geometric improvements. The MOT plans were developed to accommodate multiple phases of construction, all while ensuring existing traffic was maintained at all times. Signal designs were completed in accordance with MUTCD and SHA signal design criteria, and provided allowances for pedestrian ADA accessibility.

### EDUCATION

BS in Civil Engineering,  
University of Maryland, 1981

### EXPERIENCE

28 with Firm, 34 in Industry

### PROFESSIONAL REGISTRATION

MD Registered PE #14756

### QUALIFICATIONS & EXPERIENCE

Fred has over 34 years of structural engineering experience in the design of new structures, foundations, and analysis, evaluation and rehabilitation of existing structures. His bridge design experience has included small simple span structures and long multi-span curved steel girder structures in large complex interchanges as well as other structures such as retaining walls, tunnels, box culverts, sign and lighting structures and noise walls. **Fred has supervised and managed**

**teams on multi-structure and Design-Build contracts including leading the structural engineering components of the US 113 Corridor (4 segments) on the Eastern Shore of Maryland.**

### PROJECT EXPERIENCE

**US 113 Dualization Phase 2B Design-Build, WO6345270, Worcester County, MD (\$12.1M)** – Structural Engineer. Worked with our Design-Build partner **David A. Bramble, Inc.** to design and construct two additional lanes along existing US 113 alignment to create a 4-lane divided highway including 12-ft. lanes and 10-ft. outside shoulders similar to MD 404. Responsible for structural design of extending 14' x 6' single cell box culvert carrying Goody Hill Branch under the new roadway, a new 14' x 6' box culvert carrying Massey Branch, and a new dual cell, 54" reinforced concrete pipe culvert carrying Porter Creek extended.

**US 113 Dualization Phase 2A Design-Build, WO6345170, Worcester County, MD (\$14.3M)** – Structural Engineer. Worked with our Design-Build partner **David A. Bramble, Inc.** to design and construct two additional lanes along existing US 113 alignment to create a 4-lane divided highway including 12-ft. lanes and 10-ft. outside shoulders similar to MD 404. Fred was responsible for the design of a precast 9'-0" x 5'-0" box culvert extension on a cast in place foundation over timber piles beneath US 113. Work involved the complete design/plan preparation for this structure.

**US 113 Dualization Southern Section Design-Build, WO7675170, Worcester County, MD (\$15.4M)** – Structural Engineer. Worked with our Design-Build partner **David A. Bramble, Inc.** to design/construct two additional lanes along existing US 113 alignment to create a 4-lane divided highway including 12-ft. lanes and 10-ft. outside shoulders similar to MD 404. Designed an 8'-10" by 6'-1" structural plate pipe arch extension.

**US 40 at MD 715 Interchange Improvements Design-Build, HA2705171, Harford County, MD (\$17.7M)** – Structural Engineer. Worked with our Design-Build partner **Allan Myers** to help alleviate local traffic congestion resulting from BRAC. Similar services to MD 404 included drainage design, SWM, E&SC, traffic and lighting, landscaping, utility relocation design/coordination, and obtaining permits. Fred prepared the design plans for the widening of the existing 203' long, 2-span Bridge carrying MD 715 over US 40. The design combined aesthetic features on the bridge parapet/abutment wingwalls and ornamental lighting. A 300' long, MSE retaining wall was designed.

**11<sup>th</sup> Street Corridor Bridges over Anacostia River and Interchanges Design-Build to Budget-Stipulated Sum, DDOT, Washington, DC (\$375M)** – Structural Engineer. JMT refined the planning document alignments and interchanges to reduce costs, environmental and community impacts, maintained traffic, and built public support. **70% of this project was constructed without major interruption to vehicular traffic.** Responsible for the structural design of the 3 new major continuous steel bridges.

**Superstructure Replacement on I-70 over Black Rock Road, WA4375180, Washington County, MD (\$159K)** – Structural Engineer. **As part of the first project led by SHA's Office of Bridge Development to be let as a Design-Build contract,** JMT was tasked with aiding in the development of bid documents by assisting with the selection criteria and performing reviews of submittals prepared by the selected Design-Build team.

A.  
ii. PAST PERFORMANCE



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## OWNER CONTACT

MD State Highway Admin  
Mr. David Phillips, PM  
T 410-545-8823  
[dphillips@sha.state.md.us](mailto:dphillips@sha.state.md.us)

## CONTRACT/PROJECT NO.

WO6365170

## DELIVERY METHOD

Design-Build

## CONSTRUCTION COST

**Initial Contract Value:**  
\$32,157,777

**Final Contract Value:**  
\$32,157,777 Currently

## SCHEDULE PERFORMANCE

**Initial Completion Date:**  
October 2017

**Final Completion Date:**  
October 2017 – On Schedule

## PROJECT DESCRIPTION

**Wallace Montgomery (WM)** is teamed with **Allan Myers MD, Inc.** to partially realign and upgrade 4 miles of US 113 (Worcester Highway) for the Maryland State Highway Administration (SHA). **WM** is serving as the Engineer of Record on this Project. The project is located south of Berlin in Worcester County, and begins North of Massey Branch and continues to Five Mile Branch Road. The Project consists of the construction of two additional lanes along the existing US 113 alignment to create a dual four-lane divided highway. The Project also includes the construction of new service roads to maintain access to residential and commercial properties. Roadway improvements include new pavement construction and pavement rehabilitation of existing roadways and shoulders, reforestation, closed/open drainage systems, SWM facilities, roadway intersection lighting, signing & pavement markings, and culvert extensions and/or replacement. The Team was awarded the Project based on a “best value selection” process and a total bid price of \$32.1 million. Scope of services being provided by **WM** include surveys, highway and structural design, geotechnical engineering, storm drain and SWM design, MOT design, E&SC, traffic engineering analyses and design, landscaping design, utility coordination for the relocations and clearing of aerial and underground facilities by the utility owners throughout the corridor, and ensuring environmental compliance.

## SUCCESSFUL METHODS, APPROACHES, AND INNOVATIONS

The **Allan Myers/WM** Team applied innovative approaches and solutions, fully consistent with the Project RFP Performance Specifications that resulted in cost savings and enhanced safety and mobility. These innovative approaches and solutions included:

- **Cost** – With our pavement design approach developed a new mainline construction alternative pavement section through the RFP’s Phase ATC process that best matched the site soil types and that utilized the most cost-effective materials available to the site. Also minimized pavement rehabilitation wedge and leveling courses of the existing roadway while maintaining its “crowned” cross section. **This pavement design innovation resulted in over \$1.5 million in cost savings to the Project.** Our SWM design provides for all water quality treatment in Environmental Site Design (ESD) micro-scale practices along the proposed roadways. Maximizing the use of linear wet and grass swales in lieu of rectangular/square submerged gravel wetlands facilities greatly limited the disturbance footprint – specifically with reduced forest impacts and in addition utilized the most cost-effective materials available to the site. Designed 77 SWM facilities that include wet swales, grass swales, bio-swales, submerged gravel wetlands, micro-bioretenion, and bioretention.

- **Mobility** – The **Allan Myers/WM** Team sequenced the project in conjunction with environmental restriction (FIDS), SHA’s acquisition of the corridor’s right-of-way, and in conjunction with utility relocations to accomplish the work in the minimum number of stages. **WM** completed a comprehensive TMP with phase specific Traffic Control Plans. The TMP included operational analyses of each phase of construction to ensure proper operation and maintaining, at a minimum, existing (pre-construction) roadway levels of service during MOT operations. **WM** integrated a U-Turn movement into the Newark Road North connection, which introduces a return to US 113 SB from NB traffic; reducing NB vehicles’ trip distance to head SB by 3 miles. Integrated mountable curbs/Islands to enhance emergency and farm equipment movement through the intersection.

- **Safety** – **WM** integrated a U-Turn movement into the Newark Road South connection which eliminated an unsafe conflict of J-Turn movement with merging Newark Rd South to US 113 NB traffic. This was presented and approved through an ATC. To enhance multi-modal operations and safety through the Project limits, **WM** designers integrated corridor-wide bicycle facilities along US 113 utilizing the roadway’s 10 ft. wide shoulders and bicycle pocket lanes at right turn acceleration/deceleration lanes for intersections and access roads/drives and at J-Turn Loons/acceleration lanes.

- **Customer Satisfaction** – Instituted formal construction partnering/progress meetings to achieve Project goals and efficiently resolve issues. Performed separate monthly-bimonthly meetings with SHA District 1 and utility stakeholders to coordinate roadway and utility relocation design efforts and scheduling of overhead aerial and underground facility relocations. Developed and implemented a public outreach plan communicating to the traveling commuter through variable message signs, project web page, media and toll free number and with adjacent property owners through written notifications such as fliers, door hangers, etc. and through individual one-on-one meetings to coordinate crop plantings and harvesting and temporary and permanent access to fields, dwellings and properties.

## RELEVANCE OF WORK TO AW8965170

This project has relevance because of the Design-Build method of innovative project delivery involving the construction of two additional lanes to create a dual four-lane divided major corridor highway serving commuters, commercial trucking, adjacent farming and summer vacationers traveling along the Delmarva Region. Project also includes fully integrating and developing the proposed Maryland “T” and J-Turns intersection geometrics to eliminate right angle collisions by reducing the number of conflict points and protecting left-turning traffic to and from US 113. Designs of intersections and access points were fully checked and developed in consideration of sight distances and turning movements with not only standard SHA criteria design vehicles, but also with appropriate farm vehicles. The Project involved extensive coordination of proposed roadside & drainage/SWM designs with Delmarva Power, Choptank Electric, Verizon & Maryland Broadband for their concurrent aerial/UG facility relocations. Developed construction staging and CPM schedule along with design submittal packages to perform necessary clearing for the overhead aerial utility relocations. Advanced drainage/SWM final design efforts and coordinated proposed roadway cross culvert locations with underground utility facility relocations design efforts to eliminate/avoid conflicts between the future construction of roadway cross culverts and roadside grading with the relocated underground utilities.

*"I have never had a Design Build Team put forth the effort to assist, facilitate and coordinate the utility relocations on a Project as I have with the Allan Myers/Wallace Montgomery Team. Mark (Atkininstall) has been a pleasure to work with." - Mr. Bruce Poole, SHA D1 Utility Engineer*

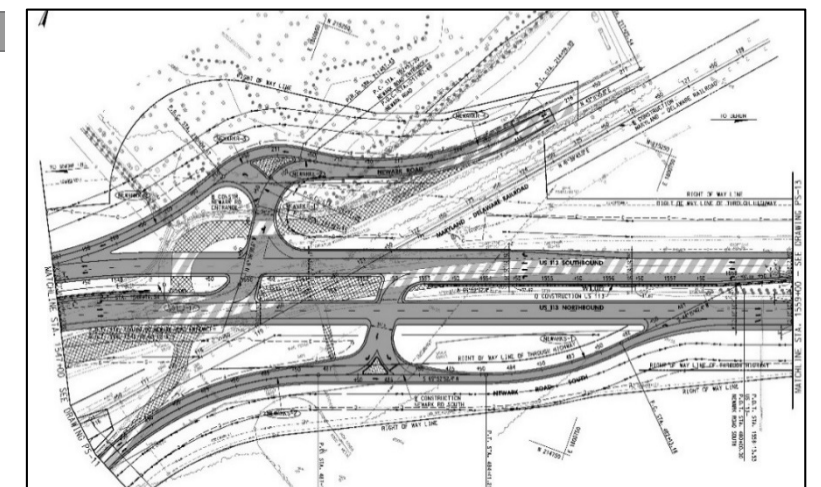
## Relevance to AW8965170

- ✓ 2-Lane to 4-Lane Divided Road
- ✓ Design-Build Delivery for SHA
- ✓ Delmarva Region Project
- ✓ Access Management
- ✓ Phased R/W Acquisition
- ✓ Concurrent Utility Relocations

## Proposed Staff Involvement

- Eric Sender, PE \*
- Diane Durscher, PE \*
- John Rectanus, PE, PTOE \*
- Robert Evans, PE, PTOE
- Roberto Barcena, PE
- Mark Atkininstall, PE
- Jessica Klinefelter, CEP
- Eric Cooper, PLS

\*Proposed Key Staff



## OWNER CONTACT

MD State Highway Admin  
Mr. David Phillips,  
Design Project Manager  
T 410-545-8823  
[dphillips@sha.state.md.us](mailto:dphillips@sha.state.md.us)

## CONTRACT/PROJECT NO.

WO6345170

## DELIVERY METHOD

Design-Build

## CONSTRUCTION COST

**Initial Contract Value:**

\$14,290,293

**Final Contract Value:**

\$14,501,410

## Reason for Difference:

Project incentives achieved including ESC and minimal disturbance to wetlands.

## SCHEDULE PERFORMANCE

**Initial Completion Date:**

December 2009

**Final Completion Date:**

December 2009

## PROJECT DESCRIPTION

**JMT was the lead designer for our Design-Build Partner, David A. Bramble, Inc. (DAB).** The project started north of Goody Hill Road (southern limit) and ended just north of Hayes Landing Road (northern limit), a distance of about 2.5 miles. The improvements included constructing US 113 (Worcester Highway) as a dualized divided highway. The two additional lanes were constructed on the west side of the existing US 113 roadway, ultimately becoming the southbound roadway. Intersection improvements included left and right turn lanes with acceleration and deceleration lanes. The typical section consisted of two, 24-foot roadways with 10-foot outside shoulders. The northbound and southbound traffic was separated by a 34 foot median, which included 4-foot paved shoulders, a 26-foot grass median and w-beam median traffic barrier. Access management roads were constructed to provide access to local businesses, farmers, and residences. Major project activities included new full depth pavement, wedge and leveling and resurfacing of the existing pavement and shoulders, reforestation, landscaping, drainage systems, erosion and sediment control (ES&C), SWM facilities, intersection lighting, signing and pavement markings. **JMT's** services included surveys, highway and structural design, geotechnical engineering, storm drain and SWM design, ES&C design, reforestation and landscaping design, traffic engineering analysis and design, environmental permit acquisition, and utility relocation coordination.

Detailed hydrological/hydraulics were performed for five drainage structures that were extended or rebuilt in the process of realigning the US 113 Corridor. New drainage structures included design and construction of the existing 9-foot x 5-foot single cell box culvert carrying Beaverdam Creek and Poplartown Branch was extended under the new roadway, and included design and construction of a metal plate pipe arch extension.

**JMT and DAB** have successfully completed three additional segments of the US 113 Corridor under separate Design-Build contracts.

## SUCCESSFUL METHODS, APPROACHES, AND INNOVATIONS

- **Schedule** – Despite the stringent level of environmental review and oversight the Design-Build Team was able to meet the aggressive schedule.
- **Cost** – The Design-Build Team was able to provide warm mix asphalt, which is better for the environment, for the project at no additional cost. Further cost reductions were realized by utilizing recycled crushed concrete, capping borrow and cement treated soil as base in lieu of trucking graded aggregate base from distance.
- **Safety** – The project separated the northbound and southbound traffic to make the US 113 corridor safer, and to alleviate the higher than normal traffic accident history. Our Maintenance of Traffic (MOT) plan provided for safe travel during construction with no accidents resulting from the MOT.
- **Customer Satisfaction** – The Design-Build Team went door-to-door to communicate with property owners to ensure access was maintained to properties and farm access. Additional care was taken where possible to preserve large trees and other landscape elements when requested by residents.
- **Mobility** – Access management roads were constructed to provide safe access for the local traffic. **DAB** effectively coordinated with the local farm community and emergency responders to minimize any construction impacts.

## Relevance to AW8965170

- ✓ Design-Build
- ✓ Roadway Dualization
- ✓ Structural Design
- ✓ New Pavement Construction
- ✓ Existing Pavement Rehabilitation
- ✓ Drainage/SWM/ES&C
- ✓ Reforestation/Landscaping
- ✓ Signing and Marking, Lighting
- ✓ Culvert Design and Rehabilitation
- ✓ Survey and Utility Coordination
- ✓ Environmental Permit Acquisition

## Proposed Staff Involvement

- Michael Leffler, PE\*
- Jon Conner, PLA, LEED AP\*
- Frederick Braerman, PE\*

\*Proposed Key Staff

## RELEVANCE OF WORK TO AW8965170

The project has relevance because of the Design-Build method of innovative project delivery, construction of two additional lanes along the US 113 alignment to create a 4-lane divided highway serving commuters, commercial trucking, adjacent farmers and summer travelers. The typical section consisted of two 24-foot roadways with 10-foot outside shoulders. The northbound and southbound traffic was separated by a 34-foot median which includes 4-foot paved shoulders, a 26-foot grass median and w-beam median traffic barrier. The geometrics of the roadway included Maryland T intersections to minimize right angle collisions, intersections and access points were developed using SHA design criteria and included accommodating farm vehicles and access management roads.

The extremely flat grade in this region of Maryland presented a challenge to coordinate the drainage and SWM needs with the MOT and ES&C requirements. Because of the abundance of wetlands in the area, an innovative approach to the removal of undercut was required. This was accomplished using a structural trenching box that is pulled along the grade to allow the contractor to work in the dry area behind the trench. Because of the aggressive schedule and the stringent State review process, **JMT's** managers and engineers were faced with the task of acquiring State approvals that allowed the contractor to start construction and meet the deadline schedules. This was accomplished by adopting an innovative "segmental" approach to design.

*"The Bramble-JMT Design-Build Team has partnered extraordinarily well with the SHA." - Mr. John Zanetti, Former SHA Project Manager*



US 113 Dualization (Worcester Highway)

## OWNER CONTACT

Virginia Department of Transportation (VDOT)  
Mr. Tom Fahrney, Manager of Special Project Development  
T 703-259-2381

[Tom.Fahrney@vdot.virginia.gov](mailto:Tom.Fahrney@vdot.virginia.gov)

## DELIVERY METHOD

Design-Build

## CONSTRUCTION COST

**Initial Contract Value:**

\$73,756,000

**Final Contract Value:**

\$112,416,000

**Reason for Difference:**

Received a significant owner generated contract modification increasing scope by 25%.

## SCHEDULE PERFORMANCE

**Initial Completion Date:**

July 2011

**Final Completion Date:**

June 2011

**Reasons for Difference:**

Completed project including owner generated contract modification ahead of schedule.

## PROJECT DESCRIPTION

The Fairfax County Parkway (FCP) completed a vital link to I-95 in northern Virginia. This Design-Build project was highly publicized as critical to the success of the region's BRAC initiative, as it provided the needed highway improvements to address traffic impacts of the U.S. Army relocating 8,500 jobs to the National Geospatial-Intelligence Agency (NGA) Campus East at the Fort Belvoir North Area. **JMT was the lead designer for this Design-Build project.** The design included new interchanges at access to the West North Loop Road of the NGA facility interior roadway network. Extensive design collaboration and coordination with the U.S. Army for this access point was required and included coordination for security lighting, overheight vehicle detection, geometry and utility connections. The FCP work included surveys, SUE, grading, drainage, SWM, pavement design, shared use paths, seven new bridges, upstream/downstream extensions of an 8' x 8' reinforced concrete box culvert, multiple sound walls, cast in place and MSE retaining walls, lighting, traffic signals, landscaping, signing/stripping, geotechnical engineering/exploration/stability analyses, utility relocations and coordination, ROW plats and extensive environmental services, including permitting and compliance monitoring.

The environmental challenges were by the fast-track schedule, challenges such as the presence of contaminated soil/groundwater, and possible unexploded ordnance in the Fort Belvoir EPG which the alignment traversed. These environmental issues required special coordination with Fort Belvoir environmental staff as well as environmental permitting with the USACE for bridge construction over Accotink Creek. All environmental impacts were successfully addressed. Addressed potential traffic safety concerns in and around long-term work zone closures and temporary lane closures through the development of an extensive TMP. Also initiated early meetings with utility owners and provided assistance in the development of their plan/estimate submittals by providing design plans and profiles in CAD. There were no project delays related to utility relocations.

The project received awards from several professional organizations including DBIA National and DBIA Mid-Atlantic; Virginia Transportation Construction Alliance; and ACEC local chapters in MD, VA and MW. Members of the Team received a "Star Partner" award for their exceptional dedication, teamwork, and professionalism in support of the project's goals.

## SUCCESSFUL METHODS, APPROACHES, AND INNOVATIONS

- **Schedule** – The initial FCP project was completed on an aggressive schedule of 750 calendar days. ARRA funding for the added increased Team's contract by 25% and resulted in the need to deliver all segments of the project on accelerated schedules concurrently. The Team met or achieved early completion of all contract milestones.
- **Cost** – During the bidding process, **JMT** prepared ATCs that improved the overall project design and provided significant reductions in construction costs. The most significant change identified was the "Fullerton Flip." The original design depicted Fullerton Road crossing over FCP. **JMT** was able to revise the profiles for both the FCP and Fullerton Road to take FCP over Fullerton Road. The benefits that raising the grade of FCP brought to the project were: reduced amount of soil/rock excavation; minimized disturbance of contaminated material; reduced the surplus material on the project; and resulted in a balanced earthwork project.
- **Safety** – Fullerton Road detour eliminated multiple phases of MOT, which allowed the contractor to work outside of traffic and provide a safer experience for the traveling public.
- **Customer Satisfaction** – Instituted formal partnering with stakeholders to address their goals. A project website was developed/implemented that provided weekly notifications.
- **Mobility** – The Design-Build Team recognized that it would benefit the public and minimize congestion during construction if a detour was provided to allow construction of the grade separation for Fullerton Road. Meetings were held to discuss the detour with nearby property and business owners and the school bus facility and acceptance was gained.

## RELEVANCE OF WORK TO AW8965170

This project has relevance because of the Design-Build method of innovative project delivery, involved new, widened, reconstructed and rehabilitated roadways and bridges carrying heavy traffic on an accelerated schedule. **Also through aggressive management practices, the projects original schedule was completed and opened to traffic two months ahead of schedule, while executing a significant owner generated contract modification, increasing scope by 25% the original contract. The added work was substantially completed one month ahead of schedule.**

- "I am extremely pleased with the performance of the Contractor and JMT in meeting these challenges and overcoming obstacles that could have seriously impacted the budget and schedule for the Parkway project. They proved to be extremely responsive to our needs and concerns throughout the project." - Tom Fahrney, Former VDOT/BRAC Coordinator (3-25-11)
- "Impressed with the solutions that were reached to counter the site constraints and the numerous ways the owner/client's expectations were obviously exceeded. Your work ethic and ingenuity on this project is impressive." - ACEC/MW Judging Panel (1-25-13)
- "I am amazed at the pace of the Fairfax County Parkway Extension project, and to all those who are involved in any aspect of this project, I want to thank you for all you are doing!" - J. Thompson (Citizen)

## Relevance to AW8965170

- ✓ Design-Build
- ✓ Roadway and Structural Design
- ✓ New Pavement Construction
- ✓ Existing Pavement Rehabilitation
- ✓ Drainage/SWM/E&SC
- ✓ Reforestation/Landscaping
- ✓ Signing/Marking/Lighting/ITS
- ✓ Culvert Design and Rehabilitation
- ✓ Survey and Utility Coordination
- ✓ Environmental Permit Acquisition
- ✓ Extensive Public Outreach

## Proposed Staff Involvement

- Michael Leffler, PE\*
  - Jon Conner, PLA, LEED AP\*
- \* Proposed Key Staff



Fairfax County Parkway at Barta Road (NGA)

# **B.**

## **LEAD CONSTRUCTION FIRM EXPERIENCE/QUALIFICATIONS AND PAST PERFORMANCE**

- i. KEY STAFF EXPERIENCE
- ii. PAST PERFORMANCE



**404 Corridor Safety Constructors**  
A Joint Venture of Wagman Heavy Civil,  
David A. Bramble, and Allan Myers



B.  
i. KEY STAFF EXPERIENCE



**404 Corridor Safety Constructors**  
A Joint Venture of Wagman Heavy Civil,  
David A. Bramble, and Allan Myers

**EDUCATION**

BS, Bucknell University, 1987

**EXPERIENCE**

16 with Firm, 28 in Industry

**CERTIFICATIONS/TRAINING**

DBIA Certified Professional  
ARTBA Project Management  
Academy, ASCE

**QUALIFICATIONS & EXPERIENCE**

As Vice President of Design-Build/Major Pursuits, Anthony is responsible for Design-Build projects from pursuit to final completion. He is assigned to major pursuits and organizes project pursuit teams, manages the design development process, establishes a collaborative environment, and coordinates with the construction team, designer, owner and stakeholders. Anthony is responsible for cost, schedule safety, customer satisfaction, and stakeholder coordination. Over the past 16 years Anthony has worked as a Design-Build Project Manager, Project Manager, Design-Build Coordinator, and Estimator on many

types of transportation projects including expressways, arterial re-alignments, major interchanges, intersection, capacity and safety improvement, and major structures. **He has unique experience with multiple construction joint ventures and understands the need for collaboration, coordination and communication with all team members and will bring “lessons learned” from large Design-Build fast track projects to MD 404. Anthony had the unique experience of working on ICC A and ICC B, and used “lessons learned” from ICC A to streamline processes for ICC B. He was involved in over \$1 billion in Design-Build projects in MD.**

**PROJECT EXPERIENCE**

**ICC Contract A Design-Build, AT3765960, Montgomery County, MD (\$484M) – Assistant Design-Build Project Manager.** Involved in development of ATCs, preliminary and final design, and through construction to final completion. Responsible for design coordination, project mobilization, and technical assistance to all disciplines, including acquisition of MDE permits, earthmoving, utilities, and structures; designing and constructing these work elements in three years. Anthony was instrumental in creating a collaborative environment to fully integrate the construction joint team of three separate contractors. This 8.5-mile long 6-lane divided highway Design-Build project included 18 structures, earthwork, box culverts, ITS and major sign structures, reforestation, environmental compliance/mitigation, and utility coordination.

**ICC Contract B Design-Build, AT3765B60, Montgomery & Prince George’s Counties, MD (\$570M) – Assistant Design Coordination Manager.** Anthony assisted with the formulation of a fully integrated construction joint venture with three separate contractors and was instrumental in the successful prosecution of Contract B. With primary attention to environmental compliance and MDE Permits, Anthony worked with designers and field

personnel to assure that the design met all environmental commitments, design requirements, and constructability constraints. He provided innovative assistance to design development and construction activities. His understanding of the MDE review process was a key element that kept the project on schedule. This 7-mile long Design-Build greenfield project included major structures and earthwork to construct a 6-lane divided highway and was designed and constructed in three years on a fast-track schedule. This project won numerous awards for safety and design excellence, including the DBIA National Design-Build Award and ENR Best Transportation Project.

**US Route 1 Widening Design-Build, VDOT, Northern VA (\$72M) – Project Executive.** Responsible for the design development and construction on this roadway improvement project. The project improved a single two-lane roadway into a dual highway with a large grass median for future transit. The project included right-of-way acquisition, utility relocation, bridge construction, culvert construction, reforestation, safety improvements, traffic control, bridge removal, increased mobility, stakeholder communication, Design-Build, and fast paced schedule for BRAC relocation.



**404 Corridor Safety Constructors**  
A Joint Venture of Wagman Heavy Civil,  
David A. Bramble, and Allan Myers

## EDUCATION

BA in Criminal Justice  
University of Maryland  
1979

## EXPERIENCE

29 with Firm, 33 in Industry

## CERTIFICATIONS/TRAINING

Erosion & Sediment Control  
MDE “Green Card” Certification

## QUALIFICATIONS & EXPERIENCE

During the last 29 years, Chuck has served as Vice President, Chief Estimator, Construction Manager and General Superintendent for David A. Bramble, Inc. He has extensive experience managing projects for: the Maryland State Highway Administration; the Maryland Transportation Authority; the Federal Aviation Administration; United States Department of Interior; and local counties and municipalities.

**As Construction Manager for the MD 404 Project, Chuck brings 33 plus years of construction management experience, as well as intimate knowledge of the 404 Corridor, due to his work on the AW8965270 project. This project has allowed him to acquire**

**experience with SHA and local residences, providing him with a complete understanding of the issues that impact work on MD 404, and how best to work through those issues.**

## PROJECT EXPERIENCE

***MD 404 Dualization from West of MD 309 to Cemetery Road Phase 1B, AW8965270, Caroline, Queen Anne’s, and Talbot Counties, MD (\$18M) – Construction Manager.*** This project is currently under construction and involves the dualization of 1.58 miles of MD 404 and the replacement of the Tuckahoe Creek Bridge. This is the second contract released by SHA on the 404 Corridor and contains identical design elements to AW8965710. As Construction Manager, Chuck is dealing with identical traffic volume, safety issues, and environmental concerns as will be found during the dualization of the remaining 9 miles of MD 404. **He has hands-on working knowledge of best practices for mitigation of construction issues, traffic control, public outreach, and environmental concerns in the 404 Corridor.**

***Offsite Wetland Mitigation for Replacement of Bridge No. 5012 MD 328 Over Tuckahoe Creek (Jester Property), CO4525280, Caroline County, MD (\$308K) – Construction Manager.*** Though small, this project was for the creation of new wetlands to fulfill the wetland compensatory requirements associated with the MD 328 Bridge Replacement Project, with the specific goals of creating a larger tidal wetland, increased Critical Area Buffer, water quality enhancement, and improved wildlife habitat. The wetland was formed using tidal and ground related hydrology, and required the planting of native vegetation. The project was inside the Critical Area, and therefore

there was heavy emphasis on E&SC. The project was provided with a “Designated Specialist” from the Environmental Program Division of SHA to ensure all aspects of the wetland, from channel grading to planting locations, were installed to specification. Chuck and his team successfully managed this work and completed the 96 working day job in 62 working days. **Like AW8965170, this project falls within the Tuckahoe Creek watershed, and provided Chuck with enhanced knowledge of the area’s E&SC mitigation requirements.**

***Road Improvements to Toll Plaza Approach, William Preston Lane, Jr. Memorial Bay Bridge, LB-345-000-006, Anne Arundel County, MD (\$3M) – Construction Manager.*** This project consisted of widening the approach road to the Chesapeake Bay Bridge Toll Plaza from the Sandy Point Interchange to the plaza. This was a complicated job due to the intense traffic at the toll. Like MD 404, the Bay Bridge is on a major vacation travel route. Because the Bridge is a chokepoint for tourists headed to the Delmarva Beaches, all work needed to be completed between Labor Day and Memorial Day. **Similar to AW8965170, the contract contained an Incentive/Disincentive Program as additional motivation to meet the time frame. Under Chuck’s leadership, the project earned an incentive for early completion.**

B.  
ii. PAST PERFORMANCE



**404 Corridor Safety Constructors**  
A Joint Venture of Wagman Heavy Civil,  
David A. Bramble, and Allan Myers

**OWNER CONTACT**

MD State Highway Admin  
Mr. Mark Coblentz  
Deputy Director  
T 443-844-9886  
[mcoblentz@sha.state.md.us](mailto:mcoblentz@sha.state.md.us)

**CONTRACT/PROJECT NO.**

AT3765960

**DELIVERY METHOD**

Design-Build

**CONSTRUCTION COST**

**Initial Contract Value:**

\$463,885,499

**Final Contract Value:**

\$484,104,216

**Reason for Difference:**

Environmental incentives to reduce impacts during design, environmental incentives to maintain compliance during construction and owner scope modifications.

**SCHEDULE PERFORMANCE**

**Initial Completion Date:**

August 2010

**Final Completion Date:**

December 2010

**Reasons for Difference:**

Owner granted Change Orders

**PROJECT DESCRIPTION**

Contract A of the Intercounty Connector was a large Design-Build project in Montgomery County, Maryland. **Wagman** was an equity member of a fully integrated construction joint venture and financially responsible for the project. **RK&K** was the Team Designer and Eric Mellor and Anthony Bednarik co-located during design development. The project was 8.5 miles long with 18 structures; 350,000 SF of noise walls; utility relocations; right-of-way acquisition; environmental permitting and monitoring; drainage; over three million cubic yards of excavation; and construction of four interchanges. On the western end of the project, **Wagman** widened and rehabilitated 1.5 miles of existing I-370. After the bridges were widened, I-370 was widened and rehabilitated with an asphalt overlay. The project included reforestation, landscaping, context sensitive maintenance of stream flow, and E&SC. Major traffic control and traffic switches were required on the western end to minimize impacts to the traveling public, maintaining mobility and increasing safety. The project included extensive ITS, signalization, signage and markings within and beyond the project limits to inform the motorists and maintain traffic flow. The ATC process and risk allocation discussions were utilized to reduce costs.

**SUCCESSFUL METHODS, APPROACHES, AND INNOVATIONS**

- **Schedule** – The schedule was very aggressive, this \$484M project was designed and built in 40 months. The Design-Build Team utilized accelerated techniques such as early design packages and starting design during limited Notice-to-Proceed to advance the project schedule.
- **Cost** – Through the ATC Process, a three-level interchange was redesigned into a two-level trumpet interchange reducing bid cost and long-term maintenance costs, and improving safety and mobility. Other ATCs such as Jointless Bridge technology, steel diaphragms and adjusting roadway geometry reduced cost and time.
- **Mobility** – A Complete TMP was developed that included all phases of construction and improved safety during and after construction by creating temporary run arounds and employing advanced warning signs. Access and mobility were maintained for the many neighborhoods and communities that were bisected during construction of this project.
- **Safety** – The Design-Build Team worked over 2 Million man-hours without a fatality and incident rates well below the national averages. The ICC was open for over three years before the first motorist fatality occurred.
- **Customer Satisfaction** – Contract A was the first contract for this politically and environmentally sensitive project and began with heavy resistance. Through a robust Public Outreach program, the Design-Build Team proactively communicated with the stakeholders and addressed concerns to improve customer satisfaction; reducing negative press. A proactive partnering process created a collaborative environment and improved communications between the Design-Build Team and the Owner and improving Owner satisfaction.
- **Environmental** – The project utilized 3D modeling to assist with survey and earth moving operations. The vertical and horizontal alignments were adjusted to eliminate excess excavated material and reduce environmental impacts; saving forest, Champion Trees, and minimizing impacts to wetlands and floodplains. Through innovation and coordination with SHA, the designer, and environmental agencies, **Wagman** reduced impacts to wetlands, streams, floodplains and forests by utilizing open bottom culverts to allow natural stream bottom, underground SWM basins to reduce thermal impact and bio-swales for long-term water quality.

**RELEVANCE OF WORK TO AW8965170**

The project was comprised of extensive ITS, signalization and open road tolling. During the design and construction phase, the Design-Builder was responsible for quality control and environmental compliance and coordination. **Wagman's** design coordinators minimized utility impacts through active coordination with the designers and utility companies; relocating noise walls and redesigning alignment to avoid utilities. Through innovation and coordination with SHA, the designer and environmental agencies, **Wagman** reduced environmental impacts; the ICC as a whole, reduced environmental impact by more than 10% anticipated in the Environmental Impact Statement. Context Sensitive for elements such as bridges, noisewalls, retaining walls and culverts ensured compliance with aesthetic requirements and the project's commitment check list. Existing streams and stream flow was maintained and time of year restrictions were worked around for Class III and IV streams.

*"The whole project was eco-sensitive. The project also went above and beyond the industry's safety standards and demonstrated innovation and a creative way of addressing its challenges." – Esther D'Amico, Editor, Engineering News Record, Northeast Region Best Project of 2011 Award.*

**Relevance to AW8965170**

- ✓ Fast-Track Schedule
- ✓ Design-Build
- ✓ Completed on-Time
- ✓ TMP Minimized Impacts to Traveling Public
- ✓ Reduced Environmental Impacts from Original EIS Document

**Proposed Staff Involvement**

- Anthony Bednarik, DBIA\*
- Eric Mellor, PE, DBIA\*
- Dan Zeller

\*Proposed Key Staff



New bridge over stream with redundant E&SC



Looking west from Redland Road Bridge with completed noise wall



Open Bottom culvert to maintain natural stream bed



Interchange looking west toward I-370



Southbound view of Georgia Ave. Bridge

**OWNER CONTACT**

MD State Highway Admin  
Mr. William Embert  
Assistant District 2 Engineer  
T 410-778-3061  
[wembert@sha.state.md.us](mailto:wembert@sha.state.md.us)

**CONTRACT PROJECT NO.**

CO3235168

**DELIVERY METHOD**

Design-Bid-Build

**CONSTRUCTION COST**

**Initial Contract Value:**  
\$6,963,338

**Final Contract Value:**  
\$7,311,504

**Reason for Difference:**

Change order issued for additional work items, under-estimated quantities, redline revisions, and unplanned demolition of an existing building.

**SCHEDULE PERFORMANCE**

**Initial Completion Date:**  
June 7, 2012

**Final Completion Date:**  
December 14, 2011

**Reason for Difference:**

Partnering Issues were resolved at the field level, and permitted the project to move forward with minimal delays.

**PROJECT DESCRIPTION**

Dualization of a 1.3 mile portion of MD 404 from East of Tuckahoe Creek to East of MD 480 (Phase IA). The scope of work included construction of two westbound lanes; the rubbilization and reconstruction of the existing roadway; the addition of a 34 foot-wide median; and the provision of extended left turn storage lanes in both directions. Drainage ditches, cross culverts and SWM facilities were also constructed. The demolition of the railroad bridge of MD 404 and site vertical clearance concerns were also a part of this project. Due to a strong partnering relationship, **David A. Bramble (DAB)** and the SHA were able to prevent most issues from escalating into possible delays. The teamwork approach to the project allowed **DAB** to complete the project ahead of schedule.

**SUCCESSFUL METHODS, APPROACHES, AND INNOVATIONS**

- **Schedule** – Finished 7 months ahead of schedule due to an excellent partnering relationship between SHA and **DAB**. SHA’s inspection staff was professional and given the latitude to make onsite decisions that allowed **DAB** to move forward without delays.
- **Cost** – Project was completed over-budget by 5.5%, however, additional costs were due to post-bid redline revisions, items necessary to completion of the project that were not captured in the bid, and the natural over/under run of materials from the initial project bid estimate.
- **Safety** – The goal of the dualization of the corridor is to increase the safety of 404 through a divided highway. This project was the first step towards this goal. **DAB** was able to complete the project without any construction related accidents.
- **Customer Satisfaction** – Partnering approach allowed the project to complete ahead of schedule and receive an “A” rating. **DAB** extended the partnering approach to local residents and businesses to mitigate concerns, and provide as much notice as possible for any delay causing construction activities. **DAB**, was able to provide cost-effective ideas, for example, using millings in lieu of the topsoil for the shoulder edges, thus reducing maintenance costs for the SHA after project completion.
- **Mobility** – With the new lanes built outside of traffic, mobility impacts were relegated to lane switches. To alleviate confusion, prior to the lane switch, **DAB** made sure to incorporate face to face discussion with local residents and business owners to ensure that the transitions to traffic patterns would be smooth. Flyers were also utilized to assist in the spread of information for any possible delay causing events.

**Relevance to AW8965170**

- ✓ Phase 1A of 404 Corridor
- ✓ Identical MOT issues
- ✓ Identical Design Elements
- ✓ Local Knowledge
- ✓ Established Relationships with Local Residents
- ✓ Continuity of Construction Personnel

**Proposed Staff Involvement**

- Scott Smith, Superintendent

**RELEVANCE OF WORK TO AW8965170**

As Phase 1A of the 404 Corridor, this project had identical traffic volume, safety issues, and environmental concerns as AW8965170. The design aspects of CO3235168 are identical to the requests made for AW8965170, including, but not limited, to the following:

- Converting a 2-lane, undivided highway into a 4-lane, divided highway
- Acceleration and deceleration lanes
- 12-foot lanes, 4-foot paved inside shoulder, and 10-foot paved outside shoulders
- Rehabilitation of the existing roadway

Superintendent, Scott Smith, has worked extensively in District 2, and specifically on MD 404. Mr. Smith and his personnel would be assigned to AW8965170 and would bring their working knowledge of existing conditions on MD 404, and the best practices for reduction of any risks/concerns in regards to safety, the environment, and customer satisfaction.



The intersection of MD 404 & MD 480



The Service Road installed off MD 404



On-Site Wetland Mitigation area

**OWNER CONTACT**

MD State Highway Admin  
Mr. Kevin Oberheim, PE, CCM  
SHA District 3 Area Engineer  
T 301-513-7372  
[koberheim@sha.state.md.us](mailto:koberheim@sha.state.md.us)

**CONTRACT/PROJECT NO.**  
PG4195172

**DELIVERY METHOD**  
Design-Build

**CONSTRUCTION COST**

**Initial Contract Value:**  
\$30,700,000

**Final Contract Value:**  
\$33,744,188

**Reason for Difference:**  
Updated design requirements for bike lanes and discovery of an unknown WSSC water main conflict.

**SCHEDULE PERFORMANCE**

**Initial Completion Date:**  
October 2014

**Final Completion Date:**  
November 2014

**Reason for Difference:**  
Owner directed changes to scope and an approved schedule extension

**PROJECT DESCRIPTION**

Design and construction of an urban arterial roadway, Contee Road, which is known now as Konterra Drive, and its grade separated connection with I-95 using a partial cloverleaf interchange configuration. Contee Road was constructed parallel to the north and replace the existing Van Dusen Road and its crossing over I-95. The Contee Road (Konterra Drive) Interchange connects within the I-95 collector-distributor (CD) roadway system between MD 198 and the Intercounty Connector (ICC) - MD 200. The project limits along Konterra Drive are from east of the Van Dusen Road intersection to approximately 0.5 mile west of Sweitzer Lane for a distance of approximately 1¼ miles. The work included constructing a 4-span bridge over I-95, two interchange directional ramps and two cloverleaf ramps, and the relocated at-grade connections of Sweitzer Lane and Van Dusen Road to Konterra Drive. The SWM work includes 10,000 LF of bio-swales, 7 detention basins/ponds, and 8,000 lf of drainage pipe. The pavement section requires 35,000 tn of GAB, 75,000 tn of HMA, 26,000 lf of curb and gutter, and 18,000 lf of underdrain. Other work includes 55,000 SY of sidewalk, 18,000 lf of guardrail, 3 signalized intersections, roadway lighting, and signage.

**SUCCESSFUL METHODS, APPROACHES, AND INNOVATIONS**

- **Schedule** – The completion of the new Contee Road Bridge and the demolition of existing bridge over I-95 to allow for the completion of the ICC's CD Roadways with I-95 was vital to the success of Project. The **Myers/WM** Team developed an Alternative Technical Concept that shortened the bridge over I-95 by 82 feet in length; resulting in completion of the new bridge 4 weeks ahead of the required interim milestone.
- **Cost** – The **Myers/WM** Team applied innovative and cost-effective solutions that resulted in over **\$2 million in cost savings**. These solutions included reducing bridge costs and refining roadway geometrics and SWM features to eliminate significant earthwork and pavement reconstruction, construction staging/sequencing simplification, minimize utility impacts, and reduction of impacts to environmental features.
- **Safety** – No traffic incidents occurred with the traveling public during construction due to the Team's proactive approach to safety and an additional Interim MOT Phase that properly maintained traffic for a water main betterment that conflicted with the proposed road alignment. **Myers** used detailed TMPs, limited construction access points, and isolated work to specific areas at a time in order to minimize safety risks to the traveling public.
- **Customer Satisfaction** – A partnering approach that included SHA representatives, utility owners, subcontractors, community stakeholders met customer and commuter needs. Weekly progress meetings were open and allowed for effective communication between stakeholders. A PR campaign provided regular updates, photos, and progress reports to the public.

**RELEVANCE OF WORK TO AW8965170**

The SWM plan was optimized during the design phase eliminating the need for two basins through the use of bio-swale and bio-retention treatment facilities. Forest impacts were reduced by 4.78 acres and reforestation was achieved for 13 acres above what was required. Utilities relocated under the contract include Verizon, Comcast, BGE Gas, BGE Electric, and WSSC 42", 30", 24" and 16" water mains. Monthly utility coordination meetings were a help to expedite relocations. Coordination of design and relocation of several private utilities was completed prior to final roadway grading and was a key component to meeting the milestone for bridge construction.

*"The Team delivered design and construction of the interchange with the innovations proposed by the Design-Build Team, therefore achieving its profitability, while maintaining mobility and access to adjacent projects and existing properties within the region. This resulted in a project that was welcomed by stakeholders." – Kevin Oberheim, District 3 Area Engineer*

**Relevance to AW8965170**

- ✓ SHA Design-Build Project
- ✓ Accelerated Schedule
- ✓ Traffic Management Plan minimized impacts to the traveling public
- ✓ Utilized ATC to reduce schedule and cost
- ✓ Reduced environmental impacts
- ✓ Two-lane to four-lane divided highway / Roadway widening
- ✓ New bridge construction

**Proposed Staff Involvement**

- Jamarr Jones
  - Bart Gibson
  - Chris Shertzer
  - Eric Sender, PE \*
  - Diane Durscher, PE \*
  - John Rectanus, PE, PTOE \*
- \*Proposed Key Staff



Before and after aerials of the project



One of five stormwater management basins



Widening of Sweitzer Lane

# C.

## PROJECT UNDERSTANDING AND DESIGN-BUILD APPROACH

- i. PROJECT UNDERSTANDING
- ii. APPROACH TO DESIGN-BUILD CONTRACTING
- iii. ORGANIZATIONAL CHART



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C.  
i. PROJECT UNDERSTANDING



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## UNDERSTANDING OF PROJECT SCOPE

MD 404 is a principal arterial connecting US 50 (Ocean Gateway) in Talbot, Queen Anne’s, and Caroline Counties that traverse Maryland and Delaware and serves commuters, commercial trucking, and summer vacationers traveling to and from the Delmarva Region. The AW8965170 MD 404 project limits extend from US 50 to east of Holly Road (located west of Denton) and consist of dualization of MD 404 to a four-lane divided highway.

The project scope consists of the design and construction of two additional lanes along the existing alignment to create a dual divided four-lane highway, implementation of “J” Turns and Maryland “T” intersections to eliminate unprotected left turns from side streets, and new service roads to consolidate access points to minimize direct access to MD 404. Additional improvements include roadway tie-ins to and from the existing dual highway, a bridge over Norwich Creek, culvert extensions/replacements, new/rehabilitated roadway pavement and shoulders, closed/open drainage systems, SWM and quantity facilities, roadway lighting, signing, pavement marking, and ITS devices.

The approximately 9.1 mile long Project logically divides into the following segments:

- Western Segment (Phases IV & IIB) – Approximately 5.4 Miles From US 50 to west of MD 309
- Eastern Segment (Phases IIA & III) – Approximately 3.7 Miles From east of MD 480 to east of Holly Road

Our Team will partner with SHA personnel and project stakeholders to execute design and construction means and methods that adhere to and focus on the following Project goals:

- **Schedule:** Implement and verify design and construction planning, risk management, and execution to ensure sufficient materials, equipment, and work forces to deliver AW8965170 by Thanksgiving 2017.
- **Cost:** Translate our Team’s successful MD 404 and SHA District 2 experience and relationships to implement and deliver a practical, cost-effective, and sustainable Project to our stakeholders.
- **Safety:** Using our collective culture of safety, implement a robust TMP focused on work zone safety to ensure safe passage to all roadway users. Our goal is to achieve zero user and worker injuries throughout and following construction.
- **Customer Satisfaction:** Through partnering with SHA, develop and implement a proactive Public Outreach Plan to communicate all planned construction activities to roadway users and continuously maintain safe and effective access to all adjacent properties and farms.
- **Mobility:** Through logical and systematic construction implementation, minimize potential roadway user delays during construction, including minimizing impacts to summertime beach traffic.
- **Permitting:** Expediently submit and obtain the required permits and approvals. Staff construction with an Independent Environmental Monitor (IEM) to ensure environmental compliance.

### **MD 404 Corridor Experience**

Team member David A. Bramble (DAB) successfully constructed the MD 404 Phase IA improvements (east of Tuckahoe Creek to east of MD 480) while DAB/Wagman are currently constructing MD 404 Phase IB improvements (west of MD 309 to east of Tuckahoe Creek).

## SIGNIFICANT ISSUES AND RISKS

In consideration of the significant issues and risks facing our Team and SHA, we have analyzed the existing conditions along the corridor, attended the November 10, 2015 public meeting, and reviewed the conceptual drawings. Our review of these materials confirm SHA’s goals are consistent with the significant issues and risks that face the Project. We will proactively identify, assign, avoid, mitigate, and manage the following Project risks to achieve SHA’s and our collective stakeholders Project Goals.



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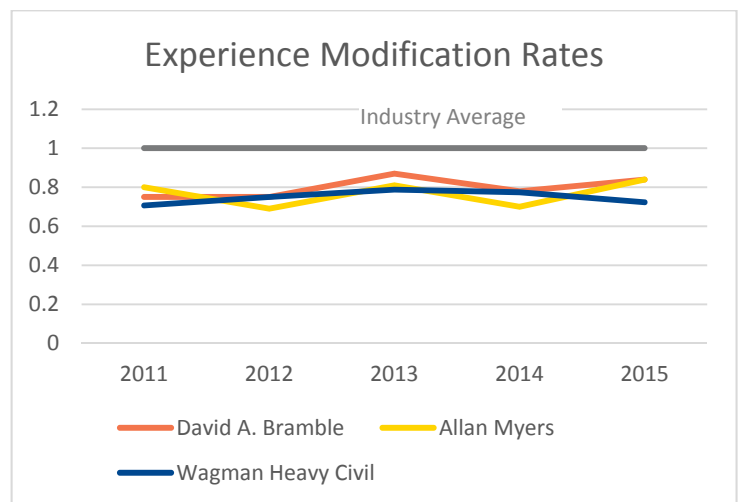


**Schedule:** Our Team accepts the criticality of the Project schedule and is focused on our charge to design, obtain permits, gain independent design approval, and construct nine miles of roadway; thus delivering four unobstructed traffic lanes along MD 404 by Thanksgiving 2017 to the traveling public. With SHA NTP anticipated on June 20, 2016, this will be no easy task as the Project also includes 14 time of year restricted stream crossings, a bridge over the Norwich Creek floodway, utility relocations, and reforestation. Due to these challenges, our Team was specifically formed because of our successful and established working relationships with SHA, local and practical design experience, collective knowledge of the MD 404 corridor, and a dedicated construction staff of over 2,800 individuals. To manage the inherent Project risks, especially schedule risk, we provide SHA the following solutions to critical design and construction issues:

MD 404 Design and Construction Milestones	
Clearing Plan Approval.....	August 2016
Grading/Drainage Approval.....	September 2016
Minor Structure Approval.....	October 2016
Segment A Construction.....	September 2016
Segment B Construction.....	September 2016
Segment C Construction.....	September 2016
Norwich Bridge Approaches Approval....	September 2016
Norwich Bridge Approval.....	November 2016
Beneficial Occupancy.....	Thanksgiving 2017
Reforestation Planting.....	February 2018

- Phased and concurrent design approach to facilitate simultaneous construction within the Western and Eastern Segments.
- Proactive Independent Quality Management oversight of roadway, bridge, and structure designs and their advanced review of E&SC plans prior to SHA Plans Review Division (PRD) for approval.
- Obtain plan approval for clearing activities as soon as practical to fast-track utility relocation efforts.
- Expedite grading/drainage/E&SC /SWM plan and roadway cross culverts design development and approval to allow multiple and concurrent construction within each project Segment.
- Develop and implement a TMP/Public Outreach plan that is fully compliant with SHA criteria, actively coordinated with emergency responders and CHART, and communicated with owners and farmers.

**Safety:** Our Team is committed to a safe MD 404 that results in no serious injuries, reportable incidents, or fatalities during construction. Our construction team members have a long history of providing safe working conditions as exhibited by our Experience Modification Rates (EMR) which are consistently below the industry average of 1.0. To promote safety, we will develop a project-specific Health and Safety Plan and our on-site Safety Manager will conduct safety training and discuss operation-specific job hazard analyses with construction crews prior to starting an operation and at end-of-shift huddles. Our corridor work experience reinforces the knowledge that accident rates increase during the peak usage summer months and MD 404 accident rates exceed the statewide average. As a member of the local community, we are all too familiar with the Route 404 Memorial Garden, constructed in memory of the more than 89 people who have lost their lives in traffic accidents in this



corridor. As safety for both the traveling public and our work is part of our Team’s culture, we will be vigilant in maintaining a zero injury work zone and a design that reduces incidents following construction.

Building upon the safety elements included in SHA’s conceptual design, our Team will optimize intersection controls to eliminate left turning movements and include service roads to combine driveways and farm access points. Our practical design approach will include 2-12’ lanes, inside and outside shoulders, open section median with traffic barriers, and acceleration/deceleration lanes to SHA criteria. We will ensure that work zones do not impair mobility, sight distances provided within work zones are adequate for safety, and that wide farm vehicle and oversized truck loads are accommodated.

**Mobility:** Maintenance of safe vehicular traffic during construction is a critical goal. As MD 404 is a major artery to the beach and serves the local residents and farming community on a daily basis, we understand why the SHA has included a provision to minimize travel delays during and following construction. A method to manage this risk is to develop and implement a staged construction approach coupled with easy to follow MOT practices, thus balancing mobility and safety. Our approach to successful development and execution of the Project’s TMP is as follows:

- Develop and implement a comprehensive TMP that addresses existing traffic users, patterns, and challenges and develop a MOT plan that is sensitive to those conditions;
- Maintain the existing 2-lane, 2-way traffic along MD 404 and existing intersection operations;
- Construct the new dualized roadway offset and parallel to the existing road to maximize traffic throughput and minimize conflicts with construction traffic entering/exiting the travel way;
- Implement construction staging and traffic control at roadway transitions and accelerate access road construction to minimize side streets tie-in, driveways, and farm access points; and
- Utilize advanced media, CHART notifications and VMS/temporary signage prior to the work zone.

Throughout the design, Brian Sluder (Construction Traffic Manager) will work hand-in-hand with John Rectantus (Traffic Engineer) and Robert Evans (TMP Coordinator), performing MOT constructability reviews to ensure that implementation of traffic patterns during construction will meet all performance specifications. During construction, Brian will reach back to John and Robert to develop methods to improve traffic operations and/or delays that actually occur along the corridor. This Traffic “Task Team” will communicate with emergency responders and stakeholders throughout design and construction. In addition to door-to-door conversations with local residents, advanced VMS/temporary signage will be provided to assist with corridor mobility.

**Customer Satisfaction:** Our goal is to achieve 100% customer satisfaction. In order to achieve this goal we must focus on specific customer satisfaction challenges which include minimal construction impacts and delays (particularly in the summer months), continuous access for farmers, safe entrance/ egress from side street and driveways, right-of-way acquisition, seamless utility relocations, and safe and timely movement through the corridor. In order to address these challenges, we need an effective forum for our customers to voice complaints and a timely means to reply to these complaints. Accordingly, our Team offers a robust public outreach plan implemented by a seasoned public outreach team, effective communications tools and strategies for public information.

**Robust Public Outreach Plan** – The goal of a successful Public Outreach Plan is to outline a program that minimize inconveniences resulting from Project activities, address protocols, and provide a plan for on-going, transparent information to the public. Partnering with SHA, Shannon Moody, our PR Manager, will develop a proactive Outreach Plan which is flexible and responsive to the changing Project needs.

**Experienced Public Outreach Team** – In coordination with the DBPM, CM and DM, Shannon will facilitate and support public relations efforts on the Project. As she has done on three recent Design-Build projects, Shannon will attend pre-planning and monthly progress meetings to stay informed of current activities, coordination efforts, impacted stakeholders, and schedule progress.

**Effective Communications Tools and Strategies** – Fully coordinated with SHA, our Team will implement the following tools to ensure transparent, two-way communications with Project stakeholders:

- **Stakeholder Meetings** – Town-hall type stakeholder, one-on-one construction meetings to discuss access issues, project schedule and progress, lane closures, and other impacts, ensuring business owners, property owners, and farmers are aware of planned activities.
- **Electronic/Social Media** – Provide timely and comprehensive content for the SHA MD 404 Project website, the “Road Ready” e-brochure project schedule, construction impacts and project progress; and link with WAZE through twitter to allow for local, organic traffic alerts and updates.
- **Media** – Provide timely, comprehensive content to the SHA Communications Team to support media outreach activities.
- **Collateral** – Fliers, postcards and door hangers will support outreach efforts.
- **E-mail updates** – Establish and maintain an electronic stakeholder email database to provide regular community and traveling public updates concerning upcoming Project construction activities.
- **Project hotline** – Forum for public to relay questions and voice concerns using our public project hotline telephone number. A log of all calls will include date, time, caller’s name, and reason for call.
- **Emergency response telephone tree** – Appropriate emergency response agencies will be included on this telephone tree for immediate response in the event of an emergency.



**Environmental:** All of our Team’s environmental permitting efforts will focus on proactive and timely permit design, evaluation, review, and submission efforts for the SHA PRD issued SWM/E&SC approvals. To assist with PRD’s SWM/E&SC review, our Team will commit to pre-submittal reviews by qualified members of the Independent Design Quality Team. These reviews will ensure that the plans/reports submitted to PRD have been reviewed for compliance and that any comments have been addressed, thus reducing overall PRD efforts. Also, we will meet with reviewers as formal design efforts commence and coordinate thereafter to confirm design/calculations criteria and to fully understand special conditions. We will comply with all permit conditions and requirements included within the SHA obtained Joint MDE/USACE Permit, MD Reforestation Law approval, and MDE Water Appropriates Permit. Our Team will review and thoroughly understand these permits to ensure compliance of our designs. To ensure environmental compliance throughout construction, our Team will provide an Independent Environmental Monitor. Our IEM will work closely with construction forces and SHA’s environmental management staff to closely monitor construction, complete checklists/rating forms to ensure superior ratings are maintained. Our Team’s successful experience on MD 404 and District 1 and 2 projects includes the use of sustainable/low cost and schedule effective grass and wet swales for SWM treatment and temporary ditches and dikes to divert clear or convey sediment laden runoff. Finally, we understand the challenges of adhering to in-stream Time of Year restrictions and have applied practical means to protect the existing habitat while still allowing schedule critical construction to continue.

C.  
ii. APPROACH TO DESIGN-BUILD  
CONTRACTING



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## APPROACH TO DESIGN-BUILD CONTRACTING

The 404 Corridor Safety Constructors was assembled with the sole intention of joining an established, well-respected, and local group of contractors with specific resources, materials, and asphalt plants on the eastern shore that have delivered successful Design-Build and Design-Bid-Build projects to SHA. Over the past 10 years, there is not a group of contractors with more hands-on experience delivering successful projects to District 1 and 2. The Team's approach to Design-Build contracting includes:

- Developing a Design-Build Team based on the project requirements and goals.
- Partnering with SHA and project stakeholders to coordinate effectively and promptly resolve issues.
- Selecting the most qualified key personnel to manage and mitigate the project risks.
- Involving construction staff during the design phase to incorporate construction means and methods into the phasing/work sequencing during design development.
- Engaging design staff during construction to confirm design assumptions and oversee field changes.

**Design-Build Team Development:** To accelerate construction, the Project will be segmented and concurrently constructed in each segment utilizing the resources of the **404 Corridor Safety Constructors**. DBPM, Anthony Bednarik, will be responsible for oversight of the design and construction of the corridor-wide improvements. The ability of our Team to self-perform and supply asphalt for paving will directly contribute to quality, customer satisfaction, and timely construction of the Project. To support our construction team, we considered our shared work history with SHA's preferred designers.

Wallace Montgomery, JMT, and RK&K, the **404 Corridor Safety Designers** Joint Venture, have a long history providing Districts 1 and 2 with Design-Build and Design-Bid-Build design and construction phased services. Additionally, each has worked successfully with Wagman, David A. Bramble, and Myers on Design-Build projects throughout the State.

**Partnering with SHA and Project Stakeholders:** Early initiation of the partnering process will establish relationships that will continue throughout the life of the Project. Involving project management, safety representatives, field managers, and project stakeholders will foster open communication at all levels, facilitate prompt issue resolution, and clearly delineate responsibilities in managing project risk.

**Selecting Qualified Key Personnel:** When selecting key personnel for this project, our Team evaluated the best candidates from each member of our design and construction teams. Individual leads were selected based on their Design-Build experience, work history with SHA, and relevant experience on similar type projects. The staff presented will ensure the project risks are effectively managed and a safe, cost-effective project is constructed while minimizing inconvenience to the roadway users and the local community.

**Design and Construction Staff Integration:** Our DBPM and CM will provide constructability reviews during every stage of design development. A formal program will be utilized for construction staff and key subcontractors/suppliers to provide written reviews with comments and recommendations. Design-Build Team meetings will address project phasing/sequencing, earthwork/hauling, MOT and E&S early in the design phase and as construction progresses. During construction, design staff will attend progress meetings, answer questions, and resolve field issues as they arise.

### **404 Corridor Safety Constructors Project Mission Statement**

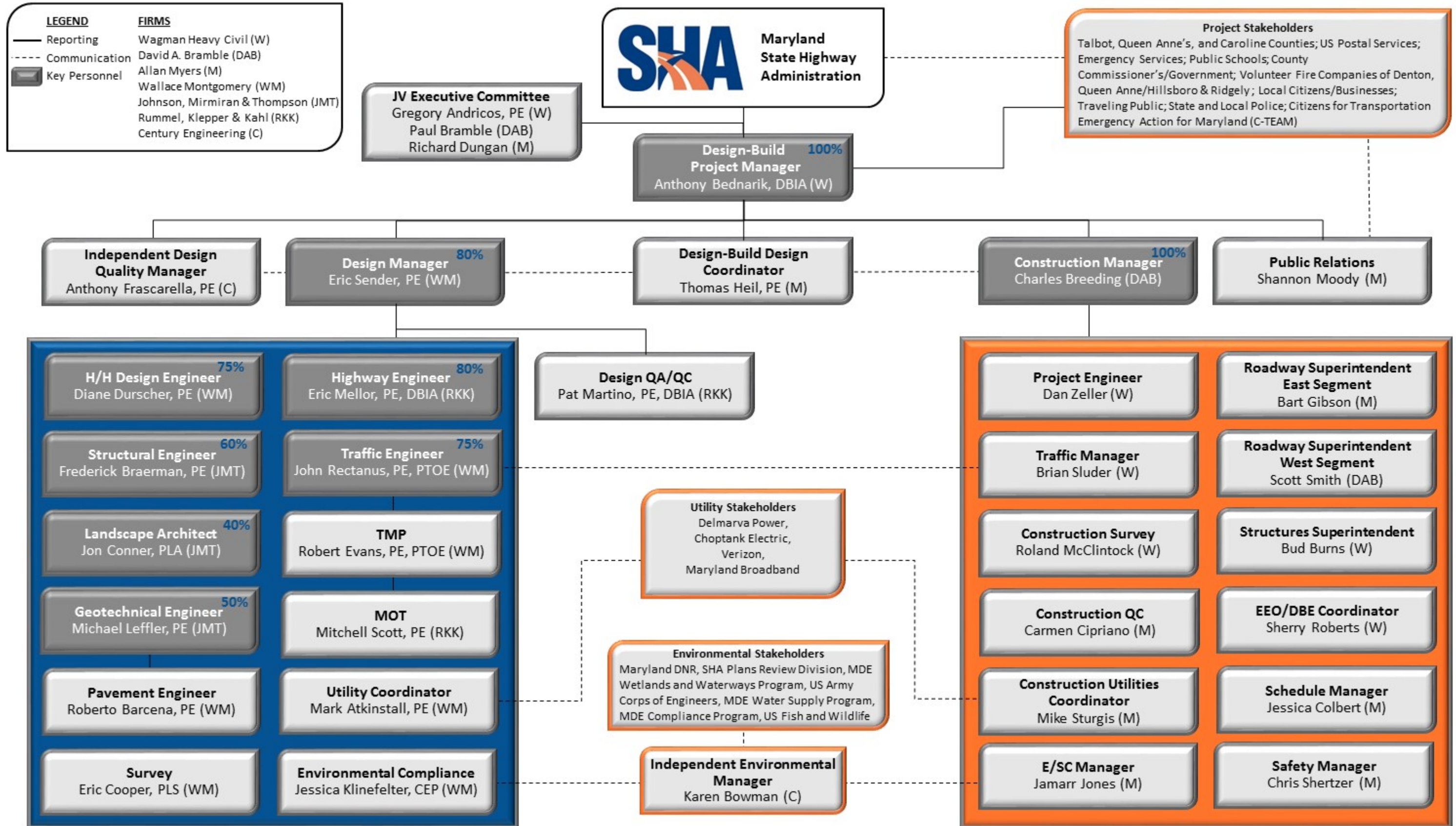
"Our Team will construct a high quality project, with emphasis on public and workplace safety, environmental stewardship, workmanship and contract compliance. We will strive to achieve this mission through the use of open communications, accountability, continuity of key personnel and teamwork. This project will be completed on schedule, profitable, and will be of value to all stakeholders"

C.  
iii. ORGANIZATIONAL CHART



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