

**DRAFT ENVIRONMENTAL ASSESSMENT REPORT  
PROPOSED STATION 18 - MARLEY FIRE STATION  
7726 BALTIMORE-ANNAPOLIS BOULEVARD  
GLEN BURNIE, MARYLAND 21060**

**FEMA A.R.R.A FIRE STATION CONSTRUCTION GRANTS  
GRANT NUMBER EMW-2009-04550R – ANNE ARUNDEL COUNTY, MD**

***Prepared for:***

**US Department of Homeland Security  
Federal Emergency Management Agency  
Region III  
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**and**

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**June 4, 2010**

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## **1.0 INTRODUCTION**

Quality Environmental Solutions, Inc. (QES) was retained by WGM Architects + Interiors, on behalf of Anne Arundel County, Maryland, to complete a Draft Environmental Assessment (EA) of property proposed for development of a new fire station identified as the Marley Fire Station (the “subject property”). The Draft EA has been prepared in compliance with the National Environmental Policy Act of 1969 (NEPA), the President’s Council on Environmental Quality regulations implementing NEPA (40 CFR 1500-1508), and Federal Emergency Management Agency (FEMA) regulations implementing NEPA (44 CFR 10.9). The EA of the undeveloped 7.326 acre parcel follows the FEMA-funded project guidance as described in the FEMA “NEPA Desk Reference” (FEMA 1996) and FEMA “Interim EA Writing Guidance” (FEMA 2009). Federal funding has been approved under the FEMA Assistance to Firefighter’s Fire Station Construction Grants program, Grant Number EMW-2009-04550R.

The purpose of this Draft EA is to analyze potential environmental impacts of the proposed development of the property with a new fire station. FEMA will use the findings to determine whether to prepare an Environmental Impact Statement (EIS) or issue a Finding of No Significant Impact (FONSI).

### **1.1 Project Location and Description**

The subject property is an undeveloped wooded and vegetated parcel addressed 7726 Baltimore-Annapolis Boulevard (Maryland Route 648) in Glen Burnie, Anne Arundel County, Maryland. The subject property is located at the southwest intersection of Baltimore-Annapolis Boulevard and Holloway Road. The subject property is bordered by Marley Middle School to the south; Maryland Route 10 divided highway to the west; single-family residences on the north side of Holloway Road to the north; and, Baltimore-Annapolis Boulevard, commercial businesses and residences to the east. Appendix A includes the Grading Permit Plans for the Marley Fire Station. Plan Sheet C-01, Cover Sheet, includes a Vicinity Map (1” = 2,000’ scale) and an Overall Map (1” = 200’ scale). Figure 1 is an aerial photograph of the subject property and surrounding area. Appendix B contains photographs of the subject property and surrounding area.

## **1.2 Purpose and Need**

The proposed new Marley Fire Station will replace the current fire station building that was constructed in 1943. The existing station is located in a densely populated neighborhood with residential side streets utilized to access the area's main thoroughfare (Baltimore-Annapolis Boulevard). The existing station has been expanded numerous times over the years and has ceased to be functional. The rear half addition to the building was never attached to the front half. There is also heavy termite infestation and damage. The existing station is situated on a triangular-shaped lot at the confluence of two residential streets; Summit Avenue and Highland Road (see Figure 1). The front apron of the property is unable to accommodate two vehicles at the same time, adversely impacting emergency response times. On one occasion, an ambulance parked on the apron was hit by a passing car. The existing fire station no longer meets the emergency response needs of the community due to structural problems, size and layout of the station, and reduced response time due to the location in a residential neighborhood. More importantly, relocation of the existing station will increase firefighter and public safety. The existing station will be retained by Anne Arundel County pending future determination of property use in consultation with the local community.

The new fire station will be located on the main thoroughfare, Baltimore-Annapolis Boulevard, away from the densely populated residential neighborhood. The new location affords easy access to main highways that run both north-south and east-west, which will reduce emergency response times. Baltimore-Washington International (BWI) Thurgood Marshall Airport, US Coast Guard Hawkins Point Station, two power plants and other industrial and commercial facilities will be easily accessible from the new location. The firefighters will be housed in a safe and efficient building, utilizing a previously proven design. The new fire station will include as many "green" features as possible.

In summary, the purpose of the project is the replacement of a deteriorating and undersized fire station located in a residential neighborhood with a new, "green" facility with a design and location that will improve emergency response times and public safety of emergency response personnel and the public.

## **2.0 ALTERNATIVES CONSIDERED**

Alternatives to the construction of a new fire station at the proposed location have been considered and evaluated. There are alternatives that were considered and dismissed (Section 2.1), the no action alternative (Section 2.2), the proposed action (Section 2.3) and other action alternatives (Section 2.4).

### **2.1 Alternatives Considered and Dismissed**

The existing Marley Fire Station has structural problems, compromises the health and safety of emergency response personnel and the public served, is located in a densely populated residential neighborhood and lacks easy and safe access to major transportation routes. The following alternatives were considered and dismissed:

- *Continued use of the current station:* Continued long-term use of the current station is not considered a viable alternative due to structural problems with the building, compromised health and safety of emergency response personnel, compromised safety of the residents of the immediate residential neighborhood, and reduced emergency response times. According to the Anne Arundel County FEMA grant application, in 2008 the County commissioned TriData, a division of System Planning Corporation, to perform a Fire Services Deployment Study. The study recommended the replacement of the existing station and endorsed the new proposed location. The existing station no longer meets the mission-critical needs of the community that has grown over the past decade and the expanded fire service area. The existing structure has no historical or cultural significance and the ultimate disposition has no impact on the EA conclusions and recommendation.
- *Construction of new station at the existing location:* Aside from the adverse effects of the existing station location in a residential neighborhood, the property is not large enough to construct a new station that meets federal, state and Anne Arundel County requirements. The existing structure can no longer safely be remodeled.

- *Closing of the current fire station with no replacement facility.* This alternative is not considered viable due to the need for an emergency response facility in this portion of Anne Arundel County. The facility not only serves the fire and medical emergency needs of a densely populated residential area, but also provides first responder and support response to numerous federal and state government facilities (e.g., BWI Thurgood Marshall Airport, US Coast Guard Station, Fort Meade, National Security Agency, US Naval Academy, several penitentiaries, and Chesapeake Bay Bridge), industrial facilities, industrial parks, shopping malls, and major East Coast transportation corridors (e.g., AMTRAK, MARC, CSX and several interstate highways).

## **2.2 No Action Alternative**

The no action alternative is not considered viable due to the age and condition of the existing fire station, inadequate emergency response times due to existing facility design and access constraints, compromised health and safety of emergency response personnel, compromised safety of the local neighborhood community, and insufficient property size to construct a new or remodeled fire station on the current parcel. A new fire station is needed, as documented and recommended in the Fire Services Deployment Study. Other existing Anne Arundel County fire stations cannot accommodate the number of responses handled by the existing station (average of 6,900 calls each year) and the local, residential, governmental and industrial population would be inadequately served if the existing station is closed without a replacement facility.

## **2.3 Proposed Action**

The proposed action includes the construction of new fire station in close proximity to the existing station, with three important benefits: the new station will be located on a major thoroughfare, Baltimore-Annapolis Boulevard; the new station will not be imbedded in a densely populated residential neighborhood; and, the new station will include a proven design to optimize the safety and responsiveness of the emergency personnel. The subject property is currently owned by Anne Arundel County and is contiguous to County-owner property with the recently constructed Marley Middle School. There is a demonstrated need for the new fire station in the same vicinity as the existing station with improved access to major transportation routes. Anne Arundel County has been working on the new Marley Fire Station project for more than nine years. County permits have been secured and the project is “shovel ready.” Anne Arundel County has committed to contribute or co-fund a full 50% of the projected \$1.69 million cost.

#### **2.4 Other Action Alternatives**

The alternatives considered included do nothing, remodel or rebuild at the same location, closure of the existing fire station with no new facility, and construction of a new fire station on the subject property. One additional alternative considered was the construction of new fire station on an alternate property. This alternative was readily dismissed as the subject property is surplus property already owned by Anne Arundel County and the subject property is located within the existing service area on a major thoroughfare. There are no other nearby County-owned properties that meet the new facility requirements relative to lot size, zoning, building construction suitability, access, utilities, and location relative to the optimal emergency response area.

### **3.0 AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS**

The subject property is an undeveloped primarily wooded parcel with frontage on Baltimore-Annapolis Boulevard and Holloway Road. Site development plans include the construction of an 11,153 square foot fire station building with vehicle access drives on Baltimore-Annapolis Boulevard, vehicle parking, bioretention areas and reforestation areas. The remainder of the subject property will remain wooded with natural enhancements including new reforestation areas and a recent stream restoration project completed in conjunction with the construction of the adjacent Marley Middle School.

The subject property is located within the Chesapeake Bay Critical Area, which includes areas within 1,000 feet of the Chesapeake Bay or designated tributaries to the Bay. The Critical Area designation requires separate County approval for development and tree removal along with standards for storm-water management controls and limits to impervious surfaces. The Critical Area regulations include three designations: the most restrictive Resource Conservation Area (RCA), less restrictive Limited Development Area (LDA) and the least restrictive Intensely Developed Area (IDA). The majority of the subject property is located within a LDA (6.26 acres of the total 7.33 acres) with a portion of the property along Baltimore-Annapolis Boulevard designated as being within an IDA (see Plan Sheet C-21 of the Grading Permit Plans in Appendix A). The total area to be disturbed is 2.25 acres with 42,515 square feet of impervious surface. Appendix C contains a copy of an August 7, 2009 letter to Anne Arundel County from the State of Maryland Critical Area Commission stating that the proposed project is consistent with the County's Critical Area program.

#### **3.1 Physical Resources**

The subject property is located in the Coastal Plain physiographic province consisting of alluvial sediments deposited in proximity to the Chesapeake Bay. The subject property is located in an upland area adjacent to Marley Creek, a tributary of Curtis Creek, Curtis Bay and ultimately the Chesapeake Bay. The majority of the surrounding area is developed with residential subdivisions, commercial properties and major transportation corridors.

### *3.1.1 Topography*

The construction of the new fire station will occur on the portion of the subject property adjacent to Baltimore-Annapolis Boulevard. This portion of the subject property is relatively flat with an approximate five-foot elevation change south to north (51 to 46 feet above mean sea level). The eastern half of the subject property slopes to the northwest toward Holloway Road. The topography steepens to the west and northwest of Holloway Road towards Marley Creek. The western half of the subject property is characterized by steeper slopes trending primarily to the west toward Maryland Route 10 and Marley Creek. Figure 2 is a USGS Topographic Map of the site area. The Anne Arundel County Department of Public Works (DPW) topographic map of the subject property and surrounding area is included as Figure 3. The area and subject property topography are also shown on the Grading Permit Plans in Appendix A (Plan Sheet C-01, Cover Sheet Overall Map and Plan Sheet C-02, Overall Site Plan). Plan Sheet C-03 provides greater topographic detail, including areas with 15 to 25% slopes and areas with > 25% slopes.

### *3.1.2 Geology and Soil*

The subject property and surrounding area are underlain by unconsolidated sediments formed along uplands and lowlands adjacent to Chesapeake Bay tributaries. According to the Natural Resources Conservation Service the subject property soil is classified as the Patapsco-Fort Mott-Urban Land Complex, consisting of well-drained coarse sand and gravel, silty sand and clayey sand. The subject property soil mapping is depicted on Plan Sheet C-03 of the Grading Permit Plans (Appendix A).

Ten soil borings were completed at the subject property in July 2007 ranging in depth from 10 to 50 feet below land surface. The soil lithology characterized in the field consisted of surficial sand with silt (SP-SM) over silty sand (SM) and sandy silt (ML). Bedrock was not encountered during the drilling of the borings. Drill Hole Logs for the borings are included on Plan Sheet C-14 of the Grading Permit Plans (Appendix A).

The existing soil is suitable for site development, reforestation, and construction and operation of bioretention basins.

### *3.1.3 Air Quality*

The entire Baltimore-Washington region is located within an EPA-designated non-attainment area. There will be no overall impact to air quality due to the relocation of the existing fire station. There will be a localized improvement in air quality with the transfer of diesel and gasoline fueled vehicles from within a residential neighborhood to the well-traveled major thoroughfare.

### *3.1.4 Climate Change*

The relocation of the existing fire station will not have a negative impact relative to climate change. The new facility will include a reduced carbon footprint due to the incorporation of “green” technology in the building design and reforestation of areas currently with sparse or no tree growth.

## **3.2 Water Resources**

The subject property is located within the Chesapeake Bay Critical Area (1,000 feet of the Bay or Bay tributary). Marley Creek is located to the northwest and west of the subject property. Storm water runoff infiltrates into the ground through pervious surface areas or is directed to a storm-water management system associated with a recent stream restoration project completed as part of the new Marley Middle School. The subject property and surrounding area are serviced by Anne Arundel County public water and sewer systems.

### *3.2.1 Ground Water*

Ground water in the Coastal Plain physiographic province tends to mimic the surface topography with flow towards surface water bodies and lowland areas. Ground water was encountered during the completion of the deep soil test boring in July 2007. The zone of saturation was observed during drilling at a depth of approximately 30 feet; the depth to water was 23 feet following equilibration 24 hours later (see Plan Sheet C-14 of the Grading Permit Plans in Appendix A). Ground-water flow is expected to be to the west and northwest towards Marley Creek. Figure 4 is an Anne Arundel County DPW map showing the locations of water and sewer lines in the site area. Ground water is not used in the immediate site area for potable water supplies.

### *3.2.2 Surface Water*

Marley Creek is located to the west and northwest of the subject property. The portion of Marley Creek near the subject property receives storm-water runoff from the immediate area, including the adjacent Baltimore-Annapolis Boulevard, Maryland Route 10 and Maryland Route 2. The upper reach of the tidal portion of Marley Creek located closest to the subject property is shallow due to sedimentation

associated with area-wide development. The Maryland Department of Natural Resources (DNR) Biological Stream Survey for Marley Creek summarizes the conditions of the waterway:

- Watershed area of 670 acres;
- 82% urban, 5% agricultural and 13% forested;
- In-stream habitat listed as marginal;
- Epifaunal substrate listed as poor;
- Velocity and depth diversity listed as suboptimal;
- Pool quality listed as suboptimal; and,
- Health of fish assemblage listed as poor.

Storm-water runoff from the impervious portions of the proposed fire station will be directed to a series of two connected bioretention areas for sedimentation and removal of pollutants. The treated storm water will be directed to the existing storm drain on the Marley Middle School property. Storm water is directed to a recent stream restoration project with outflow from the subject property into Marley Creek. Storm-water management controls are designed to ensure no adverse impact to the receiving waters. Reforestation, enhanced storm-water management controls and the recent stream restoration project will result in less channelization of runoff, thereby reducing erosion and sedimentation of a Chesapeake Bay tributary. Plan Sheets C-02 (Overall Site Plan), C-05 (Grading & Storm Drain Plan) and C-06 (Sediment & Erosion Control Plan) of the Grading Permit Plans (Appendix A) provide details of the storm-water management, sedimentation and erosion controls included as part of the permitted site design.

### *3.2.3 Floodplains and Wetlands*

Figure 5 shows the location of designated wetlands, the 100-year flood zone and the 500-year flood zone. There are no designated wetlands on the subject property. Designated wetlands are present to the west and northwest of the subject property at the edges of Marley Creek. The 500-year flood zone extends to the corner of the subject property. Site development is confined to the upland area of the subject property with no development activity proposed or planned in the areas near Marley Creek. The proposed development will not result in a loss of wetlands or an increase in flooding potential.

### **3.3 Coastal Resources**

The Federal Consistency Coordinator for the MDE Wetlands and Waterways Program, Mr. Elder Ghigiarelli, was contacted regarding project consistency with Section 307 of the Federal Coastal Zone Management Act of 1972, as amended (CZMA). The proposed Marley Fire Station project was deemed to be consistent with Section 307 of the CZMA. A copy of the consistency determination is included in Appendix D.

### **3.4 Biological Resources**

The US Fish and Wildlife Service Office of Endangered Species (OES) maintains a list of endangered, threatened or extinct flora and fauna in accordance with the federal Endangered Species Act. The OES list includes three endangered, threatened or extinct species in Anne Arundel County, including:

- *Sensitive Joint-Vetch (aeschynomene virginica)* – This plant inhabits the intertidal zone of fresh to brackish tidal tributaries. The species is designated as threatened by OES and endangered by the Maryland Department of Natural Resources Wildlife and Heritage Service (DNRWHS). This species is not present on the subject property due to a lack of suitable habitat.
- *Swamp Pink (helonias bullata)* – This plant inhabits and requires habitat which is saturated, but not flooded, with water. The species is designated as threatened by OES and endangered by DNRWHS. This species is not present on the subject property due to a lack of suitable habitat.
- *American Chaffseed (schwalbea americana)* – This plant typically grows in sandy, acidic, seasonally moist to dry soil in habitats described as open, moist pine flatwoods. The suitable habitats were historically maintained by human or lightning-caused wildfires. The species is designated as threatened by OES. The DNRWHS lists the species as endangered extirpated, with no known naturally occurring populations existing in Maryland. This species is not present on the subject property due to a lack of suitable habitat.

The removal of trees and brush for the construction of the new fire station will reduce the available habitat for birds and small animals that may currently utilize the area. The relative area to be developed is small compared to remaining adjacent and nearby habitat and habit to be created with the bioretention and reforestation areas.

### **3.5 Cultural Resources**

The project site contains no buildings, structures or known resources. A *Project Review Form – Request for Comments from the Maryland Historical Trust/MDSHPO on State and Federal Undertakings* was submitted on February 2, 2010. On February 16, 2010, Beth Cole, Administrator for the MDSHPO signed and returned the Project Review Form with the determination of "...There are no historic properties in the area of the potential effect". The MDSHPO has also determined that the relocation of the existing fire station will have no impact to historical or culturally significant properties. A copy of Ms. Cole's determination (F – FEMA – EJC/ARA 201000718) is included in Appendix E.

### **3.6 Socioeconomic Resources**

The proposed project is expected to have positive socioeconomic benefits for the local community and Anne Arundel County. The new fire station will result in better traffic flow, reduced noise in the residential neighborhood with the closing of the existing station, upgraded utility services, improved emergency response times and increased protection of emergency response workers and improved public safety.

#### *3.6.1 Environmental Justice*

The closure of the existing fire station and construction of the new Marley Fire Station will not pose disproportionately high and adverse public health or environmental effects on minority and low-income populations.

### *3.6.2 Traffic*

Traffic Concepts, Inc. has completed a traffic study of the proposed project. The net impact of relocating the Marley Fire Station will be positive since the existing station is located along a residential street and must interact with local traffic by activating a flashing traffic signal to red and then entering onto Baltimore-Annapolis Boulevard with another red-activated traffic signal. The new station will have a flashing traffic signal located at the intersection of Baltimore-Annapolis Boulevard and McGuirk Drive. When activated red, local traffic will be forced to stop at the intersection, which is the same as the current configuration. There will be no net increase in traffic associated with the relocation of the fire station. A copy of an April 13, 2010 Traffic Concepts summary letter and determination of net positive impact is included in Appendix F along with their Traffic Signal Plans.

### *3.6.3 Noise*

The proposed project will have a positive noise impact by moving the fire station out of the densely populated residential neighborhood to a major thoroughfare. Once a call is received and an emergency response is initiated, the starting of diesel vehicles and the use of sirens result in a significant increase in short-term noise levels in the current residential neighborhood. The egress road from the neighborhood intersects with Baltimore-Annapolis Boulevard at the location of the proposed new fire station. There will not be a net increase in noise as the current noise associated with the operating fire station will be transferred from the neighborhood to a major thoroughfare with primarily commercial businesses.

### *3.6.4 Public Service and Utilities*

Existing utility services along Baltimore-Annapolis Boulevard are sufficient to meet the needs of the new fire station. The existing fire station traffic signal at the intersection of Summit Avenue and Baltimore-Annapolis Boulevard will be relocated to the intersection with McGuirk Drive (as described in Section 3.6.2). The location of the new fire station will result in improved emergency response times for the served community and expanded emergency service support area.

3.6.5 *Public Health and Safety*

The proposed project will have a positive benefit to public health and safety due to an improvement in emergency response times, improved emergency response personnel safety with a move out of the existing fire station, and improved public safety with the move of emergency response vehicles out of the densely populated residential neighborhood.

**3.7 Cumulative Impacts**

The cumulative impacts of the proposed project are positive. The new fire station will be constructed on current Anne Arundel County land, will benefit the health and safety of emergency response personnel and current residents, will result in improved emergency response times in the service area, and is not expected to have a net negative impact to physical, water, biological, cultural or socioeconomic resources. Some wooded habitat will be removed, with the impacts minimized by the installation of bioretention areas for storm-water management and treatment along with the reforestation of several areas.

#### **4.0 AGENCY COORDINATION AND PERMITS**

The proposed project has successfully navigated through the Maryland and Anne Arundel County permitting process and the project is “shovel ready.” The following permits and approvals have been secured:

- Anne Arundel County Grading Permit No. G02013138.
- Anne Arundel County Building Permit No. B02243739.
- Maryland Critical Area Commission Notice of Compliance with Critical Area Program.
- Maryland Department of the Environment, Water Management Administration, Notice of Intent (for discharges associated with construction activity).
- Maryland State Highway Administration, approval of traffic signal removal and installation of new signals on Baltimore-Annapolis Boulevard.
- MDSHPO, determination of no historical properties in the area of potential effect.
- Maryland Department of the Environment, Wetlands and Waterways Program, determination of consistency with the federal Coastal Zone Management Act.

#### **5.0 PUBLIC INVOLVEMENT**

The Anne Arundel County permitting process allows for public input during budgeting phases and prior to permit issuance. The existing Fire Station is located within 200 yards of the proposed site for the replacement fire station. The local community has been active in seeking this replacement station be constructed.

## **6.0 CONDITIONS AND MITIGATION MEASURES**

Anne Arundel County has strict permitting procedures to ensure compliance with property development standards, storm-water management particularly within the 1,000-foot Critical Areas buffer, and building codes. The proposed project has been issued the required County permits to start construction. The proposed project includes the incorporation of “green” technology with site development, building design and building infrastructure. The primary environmental concern within the Critical Areas buffer is the management of storm-water runoff to ensure no additional sediment or pollutant loading to surface water. The bioretention areas will provide sedimentation and storm-water biological treatment prior to discharge into the existing storm-water system. A recent stream restoration project completed in conjunction with the construction of the adjacent Marley Middle School not only provides added treatment and sedimentation, but also improved the local biological habitat.

## **7.0 CONCLUSIONS AND RECOMMENDATION**

An Environmental Assessment has been completed for the proposed new Marley Fire Station, which will replace an existing poor quality station imbedded in a residential neighborhood. The results of the assessment do not indicate significant environmental impact due to the proposed project. Specifically,

- The net impact to physical resources (topography, geology and soil, air quality and climate change) will be minimal (limited land disturbance in conjunction with strict site development environmental controls) to positive (improvement in air quality for the residential area with the current fire station and a reduction in the carbon footprint with use of “green” technology and less energy usage with the new fire station).
- The net impact to water resources (ground water, surface water, floodplains and wetlands) will be minimal to positive (limited land disturbance in conjunction with strict site development environmental controls and use of bioretention areas for storm-water sedimentation and treatment prior to discharge). There will be no adverse impact to ground-water or wetland resources and the area to be developed is outside flood prone areas.
- The net impact to biological resources will be minimal. The subject property is not known to support habitat for listed threatened and endangered species.
- The net impact to cultural resources will be minimal. There are no known historical or archeological resources on the subject property.
- The net impact to socioeconomic resources (traffic, noise, public service and utilities, and public health and safety) will be positive (less traffic and noise in the residential neighborhood with the

existing fire station and no increase in traffic or noise overall, improvement in emergency response times, and improved emergency response personnel and public health and safety).

Based on the EA conclusions, a FEMA Finding of No Significant Impact is recommended. The attached Table provides a summary of the Affected Environment and Environmental Consequences Matrix.

#### **8.0 STATEMENT OF QUALIFICATIONS**

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professionals as defined in 40 CFR Part 312.10 and are qualified to prepare this Environmental Assessment.

We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. A resume for the Environmental Professional is included in Appendix G.

A handwritten signature in black ink on a light yellow background. The signature is cursive and appears to read "Donald E. Jones".

Donald E. Jones, C.P.G.  
Vice President, for QES

## **9.0 REFERENCES**

- Anne Arundel County, Department of Public Works, Water and Sewer Distribution Maps and Topographic Map.
- Anne Arundel County, Department of Public Works, FEMA Grant Application Project Description.
- FEMA, Flood Map 2400080012C.
- FEMA, Interim Environmental Assessment Writing Guidance, 2009.
- FEMA, NEPA Desk Reference, 1996.
- Maryland Critical Area Commission Determination, 2009.
- Maryland Department of Natural Resources, [www.dnr.state.md.us/streams/data/gmap.html](http://www.dnr.state.md.us/streams/data/gmap.html).
- Maryland Department of Natural Resources, Wildlife and Heritage Service, Current and Historical Rare, Threatened and Endangered Species of Anne Arundel County, Maryland, 2007.
- Maryland Geological Survey, Geologic Map of Anne Arundel County, Maryland.
- Maryland State Historic Preservation Office, Project Review Form, 2010.
- Traffic Concepts, Inc., Negative Impact Statement Letter, 2010.
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- US Department of Agriculture, Soil Conservation Service, National Cooperative Soil Survey.
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- US Geological Survey, Curtis Bay Topographic Map, 1974.
- US National Wetlands Inventory.
- WGM Architects and Bay Engineering Inc., Grading Permit Plans, 2009.

## FIGURES

TABLE

***APPENDIX A***

**Grading Permit Plans for the Marley Fire Station**

***APPENDIX B***  
**Photographs**

***APPENDIX C***  
**Critical Area Commission Letter**

*APPENDIX D*

**Coastal Zone Management Program Consistency Determination**

*APPENDIX E*

**Maryland Historical Trust Project Review**

***APPENDIX F***

**Traffic Concepts Letter and Traffic Signal Plans**

***APPENDIX G***

**Resume of the Environmental Professional**