

August 16, 2013  
AMEC Project No. 6151120084.001  
Addendum 1



National Cemetery Administration, 5E425  
425 I Street, NW  
Washington, DC 20001

Attn.: Mr. Stephen Davis

**RE: Geotechnical Study  
Fort Sam Houston Cemetery Restrooms  
San Antonio, Texas**

Dear Mr. Davis:

AMEC Environment & Infrastructure, Inc. (AMEC) submits this addendum to clarify earthwork and foundation recommendations presented for the above referenced project. This addendum is in response to an email from Regiment Group, Inc. dated August 6, 2013.

As presented in our geotechnical report, the existing native soils should be over excavated to a depth of 30-inches below the building area and foundation elements, which is intended to mean 30 inches below the deepest slab or foundation element. As stated in our report, footings should be founded at a minimum depth of 24 inches below final grade. The soil improvements are recommended to reduce the potential vertical rise (PVR) to less than 1-inch. As discussed in our geotechnical report, moisture protection and site drainage recommendations are considered critical to the satisfactory performance of the structure.

As requested in the email, AMEC presents post-tensioned slab recommendations for the project. Differential movements ( $Y_m$ ) of 1.75 inches for center lift and 2.30 inches for edge lift modes of possible movement should be used in design. Edge penetration distances ( $e_m$ ) of 5.2 feet and 2.7 feet should be assumed using center lift and edge lift modes, respectively. As presented in the geotechnical report, an allowable soil bearing pressure of 2,000 pounds per square foot should not be exceeded in design. A modulus of subgrade reaction of 200 pounds per cubic inch is recommended for slabs cast directly on compacted select fill.

Should you have any questions concerning this submittal, please contact our office.

Respectfully Submitted,  
**AMEC Environment & Infrastructure, Inc.**

*Texas Registered Engineering Firm F-0012  
Texas Registered Geoscience Firm 50184*

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