



500 Water Street – J350
Jacksonville, FL 32202

September 10, 2018

Mr. Joe Gordon
Rail Accident Investigator
National Transportation Safety Board

Dear Mr. Gordon,

Reference is made to your email of August 16, 2018 to Mr. Randy Daniels requesting a brief summary of findings of the post-derailment geotechnical survey in Alexandria, Virginia. This letter is intended to fulfill that request.

Soil borings were retrieved from both ends of the fill failure area and beyond along the track in either direction. The embankment fill in the failure area was composed of relatively weak and wet soil.

There was a concentration of water in a ballast pocket after the successive heavy rains in the area which saturated the slope in the failure location. This saturation in conjunction with the vibration induced by the train traffic above mobilized the slope.

The crib wall was approximately 2 feet high and 100 feet long. This structure was constructed from railroad ties stacked up to 3 ties high. It did not contribute significantly to slope stability.

Planned remediation is just underway with the poor fill material within the failure zone to be excavated and removed, a 70 foot long soldier pile retaining wall will be constructed, and the excavated slope fill will be replaced with a compactable structural backfill material.

Respectfully,

A black rectangular redaction box covers the signature of E.D. Sparks II.

E.D. Sparks II, P.E.
Asst. Chief Engineer - Structures