

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT SECRETARY

July 12, 2004

STATE PROJECT:

33240 (B-3700)

F.A. PROJECT:

BRZ-1214(3)

COUNTY: DESCRIPTION:

Stanly

Bridge No. 187 over Long Creek on SR 1214

SUBJECT:

Geotechnical Report – Inventory

PROJECT DESCRIPTION

The project is an in-place replacement of the existing bridge. The proposed grade for the replacement bridge will increase the grade about five feet (maximum), at the north approach. The geotechnical investigation consisted of a site reconnaissance, one roadway boring, and four structure foundation borings.

AREAS OF SPECIAL GEOTECHNICAL CONCERN

There are no areas of particular concern.

SOILS

Alluvium: Much of the approach roadway is on fill over the floodplain of Long Creek. The floodplain runs from approximately Station 12+00 to 18+00. Alluvial soils were generally five feet or less in thickness and consisted of med. stiff to stiff sandy clay and sandy silt.

Residuum: Residual soils outside the floodplain areas are hard and dry sandy silts. Below the alluvium, there may be a thin zone of softer, wet saprolite with a rapid transition to weathered and hard rock.

Fill Soils: Much of the existing roadway is embankment. The fill soils are soft to medium stiff sandy clay or sandy silt. There is some debris type material on and at the toe of slope, right side, in the vicinity of the existing end bents on both sides of the stream. The materials consist of soil, rocks, and asphalt debris. The quantities are minor and the materials are probably suitable for embankment construction.

Respectfully Submitted,

Clint Little

Engineering Geologist

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