Sheet 3A of 11

Roadway Embankment Soils: The embankment fill soil consists of very stiff, moist sandy clay (A-6).

Alluvial Soils: Alluvial soil was encountered in the former floodplain of Swift Creek. The alluvial soil occurs at the ground surface left and right of -L-, from Sta.38+25 to 40+75. The alluvial soils underlie artificial fill from -L- Sta. 40+75 to 42+95. The alluvial soil ranges from 6 to 16 feet in thickness. In places, the upper 6 feet of alluvial soil consists of soft to medium stiff, sandy silt (A-4). The sandy silt is underlain by 5 to 12 feet of loose to medium dense, moist to wet sand (A-2-4) with minor amounts of gravel. The alluvial soils overlie residual soil. The alluvial soils are expected to settle quickly due to their sandy nature.

ROCK PROPERTIES

Weathered rock was encountered in two borings (see Cross-section Sheet No. 11). The weathered rock was derived from metamorphosed granitic rock.

GROUNDWATER

The area noted above in "Areas of Special Geotechnical Interest: Groundwater" was found to exhibit either a high water table, seasonal high groundwater, or the potential for groundwater-related construction problems.

CULVERTS

<u>-L- Sta. 40+04</u>: This 112-foot long 11' by 9' reinforced concrete box culvert is located at the reservoir outlet of Lake Wheeler (see Plan and Profile Sheet No. 4 and Cross-section Sheet No. 7). This culvert will replace Bridge No. 301. Approximately 8 feet of fill is to be placed over the culvert. Loose, silty alluvial sand (A-2-4) occurs at the base of the proposed culvert. The alluvial sand overlies residual soil.

Respectfully submitted,

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Project Geologist