

DATE: November 30, 1989

TO: Thomas Carlsen, P.E., Director
Transportation District 6
Attn: George McLeod, Dist. Chief Const. & Mat. Engr.

FROM: Gary C. Whited, P.E.
State Materials Engineer for Hwys.

SUBJECT: Site Investigation Report
Project I.D. 1538-01-00
USH 10/63 over Isabelle Creek
Ellsworth to Plum City Rd.
Structure B-47-104
Pierce County

The existing bridge B-47-985 carrying USH 10 and USH 63, station 36+70±, over Isabelle Creek is to be replaced by a twin reinforced concrete box culvert. The site is at the east edge of Ellsworth.

Two borings were made on the site in compliance with AASHTO Test Method T-206, Standard Penetration Test, to assess relative soil density, determine culvert support capability, investigate possible construction problems, and recover samples for soil textural identification and classification. Soil textural descriptions in the boring logs are driller's field identification.

Both borings were made near proposed culvert termini from surface elevations of 1033±. The upper 2± feet was loose black topsoil. Below this from elevation 1032± loose silt was encountered to 1025± where firm brown sand with little gravel and silt was noted to 1018 where dense weathered sand stone was logged.

At the time of drilling November 1989, the stream was a dry run with stream bed elevation at 1025. no ground water was noted in either boring.

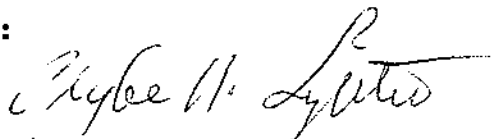
The boring request gave no information on either flow line, hence culvert grade, or overfill. However with stream bed near elevation 1025, it appears that culvert grade should be near

Thomas Carlsen
November 30, 1989
Page 2

elevation 1024. If so the procedures set forth in Standard Specification 206.2.91 are appropriate for design and construction with normal inspection for pockets of loose silt.

With roadway grade near 1036 and culvert grade near 1024, it appears that overfill will be such that camber is not needed.

by:



Clyde N. Laughter, P.E.
Chief Soils Engineer

CNL:k10415

cc: District 6 (Original plus 3)
Bridge (2)
CO Design
GCW
CO Files
☒ Soil Files

Checked by	Final	Boring No.
		2