



STATE OF VERMONT
 AGENCY OF TRANSPORTATION
 MATERIALS & RESEARCH SECTION
 SUBSURFACE INFORMATION

BORING LOG

Brattleboro Bridge #9 Replacement
 IM 091-1(65) BR 9

Boring No.: B-301
 Page No.: 1 of 1
 Pin No.: 12a026
 Checked By: JFW

Boring Crew: Joshua Gilman (GeoDesign), Tom Farrell (SJB)
 Date Started: 8/14/12 Date Finished: 8/14/12
 VTSPG NAD83: N 136333.00 ft E 1621304.00 ft
 Station: 564+58 Offset: 14' R
 Ground Elevation: 234.6 ft

Casing Sampler
 Type: FJ
 I.D.: 4 in
 Hammer Wt: 140 lb. N.A.
 Hammer Fall: 30 in. N.A.
 Hammer/Rod Type: Auto/NWJ
 Rig: CME 550X ATV CE = 1.5

Groundwater Observations (3)

Date	Depth (ft)	Notes

Depth (ft)	Strata(1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Blows/6" (N Value)(2)	Moisture Content %	Gravel %	Sand %	Fines %
5	x x x	Inferred to be Fill based on soil samples from nearby Boring B-204							
10	x x x	Inferred to be Silty Sand based on soil samples from nearby Boring B-204							
20		C1) Very poor quality, moderately hard, moderately weathered, very closely jointed dark gray with white banding PHYLLITE.	C1	88 (13)					
25		C2) Poor quality, moderately hard, moderately to slightly weathered, very closely to moderately jointed dark gray with white banding PHYLLITE.	C2	100 (46)					
30		C3) Poor quality, moderately hard, slightly weathered, closely jointed, dark gray with white banding PHYLLITE.	C3	91 (46)					
30.8		Hole stopped @ 30.8 ft							
35		Remarks: 1) Soil boring location and elevation shown are surveyed by VHB. 2) No groundwater observations were made due to wash-drive drilling method. 3) Soil strata is inferred from B-204 located 12 feet northwest of B-301. No soil samples were taken from Boring B-301. 4) Driller noted rig chatter at 5.5 feet deep on inferred cobble. 5) Increased roller bit resistance and grinding observed at 20 feet deep (inferred top of weathered bedrock). 6) Driller stopped coring C2 due to core barrel blockage. 7) 3" I.D. inclinometer casing installed to 23 feet deep with grout mix consisting of approximately 1.5 bags of cement (94# bag), 10# of bentonite, and 25 gallons of water. Length of casing installed was 24'-4" with 18" stick-up.							

Notes:
 1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
 2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor.
 3. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

GEODESIGN BORING LOG 750-09.6 BRATTLEBORO BR 9 SEISMIC VTRANS FORMAT.GPJ VERMONT AOT.GDT 12/2/13