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

BORING LOG

Brookfield Floating Bridge
BRF FLBR(2)

Boring No.: B-4
Page No.: 1 of 1
Pin No.: 12e134
Checked By: DTH

Boring Crew: J. Leonhardt (TransTech), J.Wimett (GeoDesign)
Date Started: 2/22/13 Date Finished: 2/22/13
VTSPG NAD83: N 562185.00 ft E 1613005.00 ft
Station: 13+90 Offset: 12'R
Ground Elevation: 1275 ft

	Casing	Sampler
Type:	FJ	SS
I.D.:	4 in	1.38 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Safety/AWJ	
Rig:	CME 45C SKID	CE = 1

Groundwater Observations

Date	Depth (ft)	Notes

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
		Water Column										
5												
10												
15		S1 (13.5' – 15.5'): Very loose, black/brown PEAT and ORGANIC SILT and fine to medium SAND, some Wood Pieces, wet. (Lake Bottom Sediment) Rec. = 0.6 ft (AASHTO M145 Classification: A-4.)				2/24" (1)	115.8	4.5	36.4	59.1	NP	NP
20		S2 (20' – 20.2'): Refusal, black ORGANIC SILT and WOOD PIECES and fine to coarse SAND, trace Debris (Beer Cap), little fine Gravel, wet. (Lake Bottom Sediment). Rec. = 0.2 ft (AASHTO M145 Classification: A-4.)				50/2" (R)	98.2	22.6	32.4	45.0	NP	NP
		Inferred Lake Bottom Sediment.	C1	100 (100)	5 8							
25		C1) Excellent quality, moderately hard, fresh, moderately jointed, gray with white banding LIMESTONE. Moderate to strong reaction to diluted HCl. Jointing at 38 degrees from horizontal.	C2	96 (65)	7 8 8 9							
30		C2) Fair quality, moderately hard, fresh, closely to moderately jointed gray with white banding LIMESTONE. Moderate to strong reaction to diluted HCl. Jointing between 0 and 35 degrees from horizontal with one joint at 65 degrees.	C3	100 (100)	8 8 7 10							
35		C3) Excellent quality, moderately hard, fresh, widely jointed, gray with white banding LIMESTONE. Moderate to strong reaction to diluted HCl. Jointing nearly horizontal.										
40		Hole stopped @ 33.0 ft										
45												

Top of Bedrock @ 23.0 ft

Remarks:
1) Ground surface elevation, northing, easting, and stationing are estimated from concept plans provided by TY Lin dated December 17, 2012. Borehole performed ~10' west of proposed hinge point due to accessibility.
2) Hammer correction factor is assumed to be 1.0 (rope and cathead safety hammer).
3) Performed borehole through lake ice. Lake bottom sediments noted to begin at 13.5' below ice level.
4) After hitting sample S1 with 2 blows, both the rod and casing began sinking through the lake bottom sediments.
5) Split spoon refusal at 20.2' deep on inferred cobble.
6) Driller notes increase in rollerbit resistance on inferred bedrock at 23' deep.
7) Stopped core C1 at 24.5' deep to add a drill rod and immediately had core blockage upon attempting to restart core run. End core run C1 at 24.5'.
8) Stopped core C2 at 29' (4.5' long run) due to drill stroke. Begin C3 at 29'.
9) Stopped core C3 after 4' of penetration for a total of 10' of rock core.
10) Visual soil descriptions are per the Burmister system. Lab testing gradations reported are per AASHTO M145.

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 888-04.5 FLOATING BRIDGE VTRANS FORMAT.GPJ VERMONT AOT.GDT 5/7/13

PROJECT NAME: BROOKFIELD
PROJECT NUMBER: BRF FLBR(2)

T·Y·LIN INTERNATIONAL

FILE NAME: z12e134bdr_bor_log.dgn
PROJECT LEADER: J. OLUND
DESIGNED BY: J. OLUND
BORING LOGS 6

PLOT DATE: 12/3/2013
DRAWN BY: S. MORGAN
CHECKED BY: J. OLUND
SHEET 28 OF 70