



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

BORING LOG

Hyde Park Bridge #42  
STP CULV (26)

Boring No.: B-3 (OW)

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Pin No.:

Checked By: DTH

Boring Crew: J. Wimett (GeoDesign), J. Leonhardt (TransTech)  
Date Started: 8/16/12 Date Finished: 8/16/12  
VTSPG NAD83: N 762732.00 ft E 1612226.00 ft  
Station: 2+71 Offset: 21' L  
Ground Elevation: 636.0 ft

Casing Type: FJ  
Sampler Type: SS  
I.D.: 4 in / 1.38 in  
Hammer Wt: 140 lb. / 140 lb.  
Hammer Fall: 30 in. / 30 in.  
Hammer/Rod Type: Auto/NWJ  
Rig: CME 75 TRACK CE = 1.43

Groundwater Observations

Date	Depth (ft)	Notes
08/16/12	12.0	Wet soil.
08/16/12	19.5	In well (1.5 hr)
08/16/12	19.5	In well (4 hrs).

Depth (ft)	Strata (t)	CLASSIFICATION OF MATERIALS (Description)	Well Diagram	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
5	XXX	Visual Description (Burmister), S1 (0'-2'): Medium dense, brown fine to coarse SAND, some fine to coarse Gravel, little (-) Silt, moist, Rec. = 1.08 ft, (AASHTO M145 Classification: A-1-b)		2-5-6-10 (11)	5.0	44.3	47.0	8.7		
5	XXX	Visual Description (Burmister), S2 (5'-7'): Medium dense, brown fine SAND and SILT, moist, Rec. = 0.92 ft, (AASHTO M145 Classification: A-4)		7-6-6-5 (12)	11.7	0.3	61.9	37.8		
10	XXX	Visual Description (Burmister), S3 (10'-12'): Loose, gray SILT, some Clayey Silt, trace fine Sand, very moist, Rec. = 1.0 ft, (AASHTO M145 Classification: A-4)		3-3-3-4 (6)	28.5	4.8	3.4	91.8	29	4
15	XXX	Visual Description (Burmister), S4 (15'-17'): Very loose, gray SILT, little Clayey Silt, trace Silty Clay, trace fine Sand, wet, Rec. = 1.08 ft, (AASHTO M145 Classification: A-4)		3-2-2-2 (4)	30.4	0.9	8.6	90.5	23	2
20	XXX	Visual Description (Burmister), S5 (20'-22'): Loose, gray-brown grading to gray with occasional black spots SILT, little fine Sand, trace fine Gravel, trace Organic Fibers, occasional layering towards bottom of sample, very moist, Rec. = 1.33 ft, (AASHTO M145 Classification: A-4)		6-4-5-3 (9)	23.8	4.6	21.8	73.6		
25	XXX	Visual Description (Burmister), S6 (25'-27'): Medium dense, gray fine to medium SAND and SILT, some fine Gravel, wet, (AASHTO M145 Classification: A-2-4) Rec. = 1.17 ft		1-5-5-4 (10)	10.7	29.1	38.4	32.5		
30	XXX	Visual Description (Burmister), S7 (30'-32'): Medium dense, gray fine to medium SAND and fine to coarse GRAVEL, little Silt, wet, (AASHTO M145 Classification: A-1-b) Rec. = 0.83 ft		18-10-12-16 (22)	8.0	54.5	30.7	14.8		
35	XXX	Visual Description (Burmister), S8 (35'-35.8') Refusal, fine to coarse SAND, some fine to coarse Gravel, little (+) Silt, wet, Rec. = 0.83 ft, (AASHTO M145 Classification: A-1-b)		38-50/4"	11.7	36.9	43.0	20.1		
40	XXX	Visual Description (Burmister), S9 (38'-38.1'): Refusal, gray WEATHERED ROCK, wet. Rec. = 0.08 ft Hole stopped @ 38.1 ft Roller bit refusal in inferred bedrock.		50/1"						

- Remarks:
- 1) Ground surface elevation, coordinates, and stationing are estimated from an electronic site plan provided by TY Lin and taped measurements in the field and taped measurements in the field.
  - 2) Infer natural soils at 22' based on slight increase in roller bit resistance.
  - 3) Increase in rig chatter noted beginning at 28' deep through denser soils.
  - 4) Infer cobble or small boulder from 33.5' to 34' deep based on roller bit resistance.
  - 5) Infer top of bedrock at 36.5'. Roller bit into rock to 38' deep.
  - 6) SPT N-values were performed according to ASTM D1586.
  - 7) 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.

BROGIN LOG (EDITED) 888-04.2 HYDE PARK.GPJ VERMONT AOT.GDT 10/12/12