

STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH DIVISION SUBSURFACE INFORMATION		HOLE NO.: B-3 SHEET OF DATE STARTED: 3-31-03 DATE COMPLETED: 4-03-03						
PROJECT NAME: BARRE CITY SITE NAME: GRANITE STREET BRIDGE STATION: GROUND EL.:		PROJECT NUMBER: HDP 9281(1) SITE NO.: OFFSET: G.W. DEPTH:						
BORING CREW: NEW HAMPSHIRE BORING CREW CHIEF: KEN SMITH DRILLER: LOGGER: J. GAUDREAU		BORING RIG: DIEDRICH D-50 REMOTE RIG NX CORE BARREL BORING TYPE: SAMPLE TYPE: SPLIT BARREL						
DEPTH	STRATUM DESC.	CLASSIFICATION OF MATERIALS (Description)	NO.	PEN./ REC. (in)	DEPTH (ft)	BLOWS (1/6")	N VALUE	REMARKS
5	FILL	Loose, dark gray, fine to medium SAND, little silt, (A-1-b)	S-1	24/22	0.0-2.0	2-1	4	1 2
		Loose, dark gray, fine to medium SAND, little silt, (A-1-b)	S-2	24/22	2.0-4.0	2-3	6	
		Medium dense, gray-black, fine to coarse SAND, trace silt w/ coal tar in bottom 6" of sample. Strong odor. (A-1-a)	S-3	24/22	4.0-6.0	8-14	23	3
		Medium dense, brown black, GRAVEL and fine to coarse sand with brick fragments, coal tar and oily sheen. Strong odor. (A-1-a)	S-4	24/23	6.0-8.0	23-8	19	
		Loose, black, fine to coarse SAND, little gravel, trace silt with brick fragments and coal tar and oily sheen. Odor. (A-1-a)	S-5	24/12	8.0-10.0	8-3	7	
		Medium dense, dark gray, fine to coarse SAND, little gravel, trace silt with coal tar and oily sheen. Slight odor. (A-1-a)	S-6	24/2	10.0-12.0	9-12	26	
		Medium dense, dark gray, fine to coarse SAND, little gravel, trace silt with coal tar and oily sheen. Slight odor. (A-1-a)	S-7	24/6	12.0-14.0	9-5	12	
		Loose, dark gray, fine to coarse SAND and gravel, little silt with coal tar. (A-1-b)	S-8	24/4	14.0-16.0	9-5	9	
		Loose, dark gray, fine to coarse SAND and silt. (A-1)	S-9	24/4	16.0-18.0	3-4	10	
		Loose, gray, SILT and fine sand. (A-4)	S-10	24/8	21.0-23.0	6-5	9	4 5
		Loose, gray, SILT and fine sand. (A-4)	S-11	24/18	26.0-28.0	4-4	6	
		Very loose, gray, SILT and fine sand. (A-4)	S-12	24/19	30.0-33.0	2-3	4	
		Loose, gray, fine SAND, some silt. (A-4)	S-13	24/24	36.0-38.0	4-2	6	
		Loose, gray, fine SAND, some silt. (A-4)	S-14	2/2	40.0-43.0	4-3	7	
REMARKS								
1. Drove 5-inch casing to 22.5 feet below ground surface.								
2. AASHTO Classifications estimated from visual observations.								
3. Evidence of coal tar contamination observed from 4 to 16 feet below ground surface.								
4. Placed a cement bentonite slurry from 20 feet to 22.5 feet below ground surface inside the casing to form a seal.								
5. Telescoped 4-inch casing to 61.5 feet below ground surface.								

STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH DIVISION SUBSURFACE INFORMATION		HOLE NO.: B-3 SHEET OF DATE STARTED: 3-31-03 DATE COMPLETED: 4-03-03						
PROJECT NAME: BARRE CITY SITE NAME: GRANITE STREET BRIDGE STATION: GROUND EL.:		PROJECT NUMBER: HDP 9281(1) SITE NO.: OFFSET: G.W. DEPTH:						
BORING CREW: NEW HAMPSHIRE BORING CREW CHIEF: KEN SMITH DRILLER: LOGGER: J. GAUDREAU		BORING RIG: DIEDRICH D-50 REMOTE RIG NX CORE BARREL BORING TYPE: SAMPLE TYPE: SPLIT BARREL						
DEPTH	STRATUM DESC.	CLASSIFICATION OF MATERIALS (Description)	NO.	PEN./ REC. (in)	DEPTH (ft)	BLOWS (1/6")	N VALUE	REMARKS
45	SAND AND SILT	Medium dense, gray fine SAND, little silt. (A-2-4)	S-15	24/12	46.0-48.0	8-6	14	
50		Dense, gray, fine to medium SAND, some gravel, little silt. (A-2-4)	S-16	24/8	50.0-53.0	8-23	43	
55	GLACIAL TILL	Medium dense, gray, fine to medium SAND, little gravel and clayey silt. (A-4)	S-17	24/12	56.0-58.0	14-5	15	
60	WEATHERED ROCK	Very dense, gray, rock fragments, some fine to coarse sand, trace silt (A-4) Top of rock at 61.5 feet. Refer to Core Boring Report.	S-18	2/2	61.0-62.0	100/2	>100	
LEDGE CORE BORING REPORT (B3)								
DEPTH	STRATUM DESC.	CLASSIFICATION OF MATERIALS (Description)	RUN NO.	DEPTH (ft)	DRILLING RATE (in/ft)	REC./ ROD (in)	REC./ ROD (ft)	REMARKS
60		C-1: Hard, slightly weathered gray, fine-grained siliceous LIMESTONE. Slightly fractured. Joints are rust stained.	C-1	61.5-66.5	6	54/49	90/82	
65	BEDROCK	C-2: Hard, slightly weathered gray, fine-grained siliceous LIMESTONE. Massive.	C-2	61.5-66.5	3	60/59	100/98	
70		Bottom of boring at 71.5 feet below ground surface.						
75								

STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH DIVISION SUBSURFACE INFORMATION		HOLE NO.: B-4 SHEET OF DATE STARTED: 4-7-03 DATE COMPLETED: 4-10-03						
PROJECT NAME: BARRE CITY SITE NAME: GRANITE STREET BRIDGE STATION: GROUND EL.:		PROJECT NUMBER: HDP 9281(1) SITE NO.: OFFSET: G.W. DEPTH:						
BORING CREW: NEW HAMPSHIRE BORING CREW CHIEF: MARK D'AMBROSIA DRILLER: LOGGER: J. GAUDREAU		BORING RIG: MOBILE DRILL B-57 NX CORE BARREL BORING TYPE: SAMPLE TYPE: SPLIT BARREL						
DEPTH	STRATUM DESC.	CLASSIFICATION OF MATERIALS (Description)	NO.	PEN./ REC. (in)	DEPTH (ft)	BLOWS (1/6")	N VALUE	REMARKS
5	FILL	Medium dense, brown, fine to coarse SAND little silt with roots. (A-1-b)	S-1	24/2	0.0-2.0	11-6	14	1 2
		Medium dense, brown, fine to coarse SAND little gravel, trace silt. (A-1-a)	S-2	24/6	2.0-4.0	16-10	19	
		Loose, brown, fine to coarse SAND, little silt, trace gravel. (A-1-b)	S-3	24/3	4.0-6.0	6-6	10	
		Medium dense, brown, fine to coarse SAND little gravel, trace silt. (A-1-a)	S-4	24/6	6.0-8.0	8-8	22	
10	BOULDER	Very dense, brown, fine to coarse SAND, some gravel, little silt with metal pieces and roots. (A-1-b)	S-5	12/2	8.0-10.0	18-100/6	>100	
		Loose, brown, GRAVEL and fine to coarse sand, little silt. (A-1-b)	S-6	24/1	10.0-12.0	5-4	7	
		Medium dense, brown, fine to coarse SAND, some gravel, little silt. Odor. (A-1-b)	S-7	24/7	12.0-14.0	3-3	12	
		Medium dense, gray-brown, fine to coarse SAND, some gravel, little silt. Odor. (A-1-b)	S-8	24/5	14.0-16.0	21-11	22	3
		Medium dense, gray-brown, fine to coarse SAND, some gravel, little silt. Odor. (A-4)	S-9	24/7	19.0-20.0	7-8	26	
		No Recovery.	S-10	24/0	24.0-26.0	8-6	11	
		Loose, gray, fine SAND and silt. (A-2-4)	S-11	24/6	29.0-30.0	3-4	9	4 5
		Medium dense, gray, SILT and fine sand, trace gravel. (A-4)	S-12	24/12	35.0-37.0	6-5	11	
		Loose, gray, SILT and fine sand. (A-4)	S-13	24/17	40.0-42.0	4-3	6	
REMARKS								
1. Drove 5-inch casing to 22.5 feet below ground surface.								
2. AASHTO Classifications estimated from visual observations.								
3. Evidence of coal tar contamination observed from 4 to 16 feet below ground surface.								
4. Placed a cement bentonite slurry from 20 feet to 22.5 feet below ground surface inside the casing to form a seal.								
5. Telescoped 4-inch casing to 61.5 feet below ground surface.								

STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH DIVISION SUBSURFACE INFORMATION		HOLE NO.: B-4 SHEET OF DATE STARTED: 4-7-03 DATE COMPLETED: 4-10-03						
PROJECT NAME: BARRE CITY SITE NAME: GRANITE STREET BRIDGE STATION: GROUND EL.:		PROJECT NUMBER: HDP 9281(1) SITE NO.: OFFSET: G.W. DEPTH:						
BORING CREW: NEW HAMPSHIRE BORING CREW CHIEF: MARK D'AMBROSIA DRILLER: LOGGER: J. GAUDREAU		BORING RIG: MOBILE DRILL B-57 NX CORE BARREL BORING TYPE: SAMPLE TYPE: SPLIT BARREL						
DEPTH	STRATUM DESC.	CLASSIFICATION OF MATERIALS (Description)	NO.	PEN./ REC. (in)	DEPTH (ft)	BLOWS (1/6")	N VALUE	REMARKS
45	SAND AND SILT	Loose, gray, fine SAND, some silt. (A-4)	S-14	24/18	45.0-47.0	4-5	10	
50		Very dense, gray, fine SAND, little silt. (A-2-4)	S-15	24/16	50.0-52.0	9-11	61	
55	SAND	Medium dense, gray, fine SAND, little silt. (A-2-4)	S-16	24/18	55.0-57.0	13-10	19	
60	GLACIAL TILL	Dense, gray, fine to medium SAND, little gravel, little silt. (A-2-4)	S-17	24/7	60.0-62.0	33-22	44	
70	WEATHERED ROCK	Very dense, gray, ROCK fragments, little fine to coarse sand, trace silt. (A-1-a)	S-18	9/2	65.0-65.8	33-100/3	>100	
LEDGE CORE BORING REPORT (B4)								
DEPTH	STRATUM DESC.	CLASSIFICATION OF MATERIALS (Description)	RUN NO.	DEPTH (ft)	DRILLING RATE (in/ft)	REC./ ROD (in)	REC./ ROD (ft)	REMARKS
70		C-1: Hard, slightly weathered gray, fine-grained siliceous LIMESTONE. Five-inch vertical fracture.	C-1	68.5-69.8	3	5/0	33/0	
		C-2: Hard, slightly weathered gray, fine-grained siliceous LIMESTONE. Slightly fractured. Joints are rust stained.	C-2	70.3-72.3	3	52/4	87/68	
75	BEDROCK	C-3: Hard, slightly weathered gray, fine-grained siliceous LIMESTONE. Slightly fractured. Joints are rust stained.	C-3	75.3-80.3	3	60/59	100/98	
80.3 ft		Bottom of boring at 80.3 feet below ground surface.						
85								

BORING LOGS

PROJECT NAME: BARRE CITY
PROJECT NUMBER: HDP 9281(1)

FILE NAME: /str5/92j099/sj099bor.dgn PLOT DATE: 16-JUN-2004
PROJECT LEADER: C. KELLER DRAWN BY: K. RUTTER
DESIGNED BY: K. RUTTER CHECKED BY: T.A. SUMNER
sj099borlog.l SHEET 18 OF 58