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

BORING NUMBER: B-310
SHEET 1 of 1
DATE STARTED: 6/10/09
DATE COMPLETED: 6/10/09

PROJECT NAME: BARRE CITY
SITE NAME: US-302
STATION: 602+62.00
OFFSET: -40.00
VTSPG NAD83: N 618438.13 ft E 1640086.47 ft

PROJECT NUMBER: FEGC F 026-1(34)
SITE NUMBER:
GROUND ELEVATION: 608.78 ft
GROUNDWATER DEPTH: 16.2 ft 6/10/09
PROJECT PIN NUMBER: 85B010

BORING CREW
CREW CHIEF: GARROW
DRILLER: GARROW
LOGGER: MAHMUTOVIC

BORING RIG: LARGE SKID RIG w/AUTO HAMMER
BORING TYPE: HOLLOW STEM AUGER
SAMPLE TYPE: SPLIT BARREL
CHECKED BY: CAA

DEPTH (ft)	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. (%)	GRAVEL (%)	SAND (%)	FINES (%)
5		A-1-b, SiGrSa, blk, Moist, Rec. = 1.1 ft	17	13.4	25.3	49.9	24.8
		A-1-b, GrSa, blk, Moist, Rec. = 1.2 ft	18	9.8	32.5	48.5	19.0
		A-1-b, SiGrSa, blk, Moist, Rec. = 1.1 ft	15	6.9	39.3	39.7	21.0
10		A-1-b, SiSaGr, blk, Moist, Rec. = 1.0 ft	19	7.1	48.6	31.3	20.1
		A-1-a, SaGr, blk, Moist, Rec. = 1.3 ft	71	5.4	55.4	31.1	13.5
		A-1-b, SaGr, blk, MTW, Rec. = 1.2 ft	14	7.7	49.0	36.1	14.9
15		A-1-a, SaGr, blk, Wet, Rec. = 0.6 ft	11	15.0	59.9	28.0	12.1
20		A-1-b, Sa, brn, Wet, Rec. = 1.0 ft	46	21.2	17.7	66.8	15.5
		Hole stopped @ 22.0 ft					

DRILLER'S NOTES:
1. Could not penetrate further.

LOG OF BORING BARRE CITY FEGC F 026-1(34) GRP VT ADT GDT 6/15/09

STATE OF VERMONT
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MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING NUMBER: B-311
SHEET 1 of 1
DATE STARTED: 6/10/09
DATE COMPLETED: 6/10/09

PROJECT NAME: BARRE CITY
SITE NAME: US-302
STATION: 603+37.20
OFFSET: 29.50
VTSPG NAD83: N 618345.62 ft E 1640038.95 ft

PROJECT NUMBER: FEGC F 026-1(34)
SITE NUMBER:
GROUND ELEVATION: 609.99 ft
GROUNDWATER DEPTH: 16.5 ft 6/10/09
PROJECT PIN NUMBER: 85B010

BORING CREW
CREW CHIEF: GARROW
DRILLER: GARROW
LOGGER: MAHMUTOVIC

BORING RIG: LARGE SKID RIG w/AUTO HAMMER
BORING TYPE: HOLLOW STEM AUGER
SAMPLE TYPE: SPLIT BARREL
CHECKED BY: CAA

DEPTH (ft)	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. (%)	GRAVEL (%)	SAND (%)	FINES (%)
		Field Note:, No Recovery. Appears to be sand	15				
5		A-2-4, SiSa, Dk/brn, Moist, Rec. = 1.4 ft	4	17.7	6.5	66.9	26.6
		A-2-4, SiSa, Dk/brn, Moist, Rec. = 1.5 ft	4	12.9	0.7	65.8	33.5
10		A-4, SaSi, brn, Moist, Rec. = 1.6 ft	6	21.6	0.0	49.3	50.7
		A-3, Sa, brn, Moist, Rec. = 1.5 ft	6	10.2	0.7	89.9	9.4
		A-2-4, SiGrSa, blk, MTW, Rec. = 1.2 ft	4	18.9	25.1	53.7	21.2
15		A-1-b, SiGrSa, blk, MTW, Rec. = 1.2 ft	16	11.9	34.5	44.7	20.8
20		A-1-b, SiGrSa, brn, Wet, Rec. = 1.6 ft	20	18.9	36.7	39.8	20.5
		A-1-b, GrSa, brn, Wet, Rec. = 1.7 ft	22	16.9	37.8	46.4	15.8
25		Hole stopped @ 25.0 ft					

LOG OF BORING BARRE CITY FEGC F 026-1(34) GRP VT ADT GDT 6/15/09

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

BORING NUMBER: B-322
SHEET 1 of 1
DATE STARTED: 7/02/09
DATE COMPLETED: 7/02/09

PROJECT NAME: BARRE CITY
SITE NAME: US-302
STATION: 423+05.00
OFFSET: -37.00
VTSPG NAD83: N 619357.72 ft E 1640396.98 ft

PROJECT NUMBER: FEGC F 026-1(34)
SITE NUMBER:
GROUND ELEVATION: 613.57 ft
GROUNDWATER DEPTH: 11.9 ft 7/02/09
PROJECT PIN NUMBER: 85B010

BORING CREW
CREW CHIEF: GARROW
DRILLER: GARROW
LOGGER: MAHMUTOVIC

BORING RIG: LARGE SKID RIG w/AUTO HAMMER
BORING TYPE: HOLLOW STEM AUGER
SAMPLE TYPE: SPLIT BARREL
CHECKED BY: CAA

DEPTH (ft)	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. (%)	GRAVEL (%)	SAND (%)	FINES (%)
5		A-2-4, GrSiSa, brn, Moist, Rec. = 0.9 ft	4	21.4	30.5	37.0	32.5
		A-4, SaSi, brn, Moist, Rec. = 1.0 ft	2	24.2	14.0	35.8	50.2
		A-4, SaSi, brn, Moist, Rec. = 0.4 ft	2	22.1	12.6	31.6	55.8
10		Visual Classification, GrSiSa, brn, MTW, Rec. = 0.1 ft, Insufficient sample for testing.	6	19.4			
		A-1-b, GrSa, brn, Wet, Rec. = 0.8 ft	39	14.4	38.9	44.1	17.0
		A-2-4, SiGrSa, brn, Wet, Rec. = 0.7 ft	39	19.7	31.1	43.4	25.5
15		A-1-b, GrSa, brn, Wet, Rec. = 1.5 ft	18	18.3	26.6	56.2	17.2
20		A-4, SaGrSi, brn, MTW, Rec. = 1.3 ft	66	15.4	32.0	30.7	37.3
		Hole stopped @ 21.5 ft					

DRILLER'S NOTES:
1. Drilled to ledge or boulder.

LOG OF BORING BARRE CITY FEGC F 026-1(34) GRP VT ADT GDT 6/15/09

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

BORING NUMBER: B-323
SHEET 1 of 1
DATE STARTED: 7/01/09
DATE COMPLETED: 7/01/09

PROJECT NAME: BARRE CITY
SITE NAME: US-302
STATION: 707+00.00
OFFSET: 28.00
VTSPG NAD83: N 619301.54 ft E 1640360.83 ft

PROJECT NUMBER: FEGC F 026-1(34)
SITE NUMBER:
GROUND ELEVATION: 609.72 ft
GROUNDWATER DEPTH: 8.8 ft 7/01/09
PROJECT PIN NUMBER: 85B010

BORING CREW
CREW CHIEF: GARROW
DRILLER: GARROW
LOGGER: MAHMUTOVIC

BORING RIG: LARGE SKID RIG w/AUTO HAMMER
BORING TYPE: HOLLOW STEM AUGER
SAMPLE TYPE: SPLIT BARREL
CHECKED BY: CAA

DEPTH (ft)	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. (%)	GRAVEL (%)	SAND (%)	FINES (%)
		A-4, SaSi, brn, Moist, Rec. = 1.6 ft	5	18.3	6.6	43.1	50.3
5		A-2-4, SiSa, brn, Moist, Rec. = 1.6 ft	5	13.8	9.1	59.7	31.2
		A-2-4, SiSa, brn, Moist, Rec. = 1.0 ft	19	13.5	17.7	51.7	30.6
10		A-2-4, SiSa, brn, MTW, Rec. = 1.3 ft	6	26.9	10.4	67.3	22.3
		A-2-4, SiSa, brn, Wet, Rec. = 0.7 ft	14	26.9	5.6	74.1	20.3
		A-3, Sa, brn, Wet, Rec. = 1.5 ft	9	27.4	0.1	91.5	8.4
15		A-3, Sa, brn, Wet, Rec. = 2.0 ft	4	27.5	0.0	93.4	6.6
20		A-4, SiSa, brn, Wet, Rec. = 0.9 ft	35	36.9	0.5	60.4	39.1
		A-2-4, SiGrSa, brn, Wet, Rec. = 0.7 ft	R	24.4	26.4	49.9	23.7
25		Hole stopped @ 23.7 ft					

DRILLER'S NOTES:
1. Drilled to ledge or boulder.

LOG OF BORING BARRE CITY FEGC F 026-1(34) GRP VT ADT GDT 6/15/09

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

BORING NUMBER: B-324
SHEET 1 of 1
DATE STARTED: 6/30/09
DATE COMPLETED: 6/30/09

PROJECT NAME: BARRE CITY
SITE NAME: US-302
STATION: 421+97.00
OFFSET: 40.00
VTSPG NAD83: N 619328.22 ft E 1640298.96 ft

PROJECT NUMBER: FEGC F 026-1(34)
SITE NUMBER:
GROUND ELEVATION: 607.78 ft
GROUNDWATER DEPTH: 4.0 ft 6/30/09
PROJECT PIN NUMBER: 85B010

BORING CREW
CREW CHIEF: GARROW
DRILLER: GARROW
LOGGER: MAHMUTOVIC

BORING RIG: LARGE SKID RIG w/AUTO HAMMER
BORING TYPE: HOLLOW STEM AUGER
SAMPLE TYPE: SPLIT BARREL
CHECKED BY: CAA

DEPTH (ft)	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT / RUN	M.C. (%) / REC (%)	GRAVEL (%) / RQD (%)	SAND (%) / Dip (deg)	FINES (%) / Drill Rate (min/ft)
2.5		A-2-4, GrSiSa, brn, Moist, Rec. = 1.4 ft	2	13.6	22.9	45.6	31.5
5.0		A-1-b, SiGrSa, brn, Moist, Rec. = 1.2 ft	9	9.8	37.5	41.2	21.3
7.5		A-1-b, SiGrSa, brn, Moist, Rec. = 1.1 ft	9	11.7	36.1	42.1	21.8
		A-1-b, GrSa, brn, Wet, Rec. = 1.0 ft	13	22.9	39.0	41.9	19.1
10.0		A-2-4, SiSa, brn, Wet, Rec. = 0.4 ft	R	30.5	14.0	62.3	23.7
		Top of Bedrock @ 11.8 ft					
12.5		Meta-Limestone, (Geologist's determination), BXDC, 11.8 ft - 14.8 ft					10
							10
15.0							10
		Hole stopped @ 14.8 ft					
17.5							

LOG OF BORING BARRE CITY FEGC F 026-1(34) GRP VT ADT GDT 6/15/09

DATUM
VERTICAL NAVD 1929
HORIZONTAL NAD 27

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/I

FILE NAME: z09B240_ALIPT.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
BORING LOGS

PLOT DATE: 4/5/2010
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 31 OF 95