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

BORING NUMBER: B311a
SHEET 1 of 5
DATE STARTED: 6/19/13
DATE COMPLETED: 6/20/13

PROJECT NAME: Newport City STP 134-3(22)
SITE NAME: Route 191 Landslide
STATION: -
OFFSET: -
VTSPG: N 888714.22 ft E 1721178.73 ft

PROJECT NUMBER: GAI 133-87312
SITE NUMBER: -
GROUND ELEVATION: 721.99 ft
GROUNDWATER DEPTH: Not measured
PROJECT PIN NUMBER: -

BORING CREW: Boart Longyear
DRILLER: Jason Koering
LOGGER: Noah Chinburg
BORING RIG: 600T Sonic

BORING TYPE: Sonic
SAMPLE TYPE: Continuous Core
HAMMER TYPE: N/A
CHECKED BY:

DEPTH (ft)	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	WELL DIAGRAM	BLOWS PER 6 IN (N VALUE)	M.C. (%)	AASHTO GRAVEL (%)	AASHTO SAND (%)	AASHTO FINES (%)	LL (%)	PI (%)
		Top of Well Elevation: 724.42 ft								
		0.0 ft - 0.5 ft, Root mat.								
		0.5 ft - 7.0 ft, A-4, medium brown, moist, dense, silty fine to medium SAND, some organics (roots), trace to little clay, (SM).								
		6.0 ft, Possible pulverized cobble (dry fine to coarse SAND and GRAVEL)								
		7.0 ft - 8.0 ft, A-1-a, light brown, moist, loose, medium to coarse SAND and GRAVEL, clean, (GW).								
		8.0 ft - 10.0 ft, A-1-a, dark brown, moist, loose, medium to coarse SAND and GRAVEL, clean, (GW).								
		10.0 ft - 11.0 ft, A-6, medium brown, moist, very stiff, silty CLAY, some fine to coarse sand, some fine to coarse gravel, (CL). P.P. = 1.8 tsf								
		11.0 ft - 12.0 ft, A-1-a, dark brown, loose, medium to coarse SAND and GRAVEL, (GW).								
		12.0 ft - 16.0 ft, A-6, brown-gray, very stiff, silty CLAY, little rounded gravel, fissured, (CL). Note: The amount of gravel decreases with depth. P.P. = 3.7 tsf								
		16.0 ft - 20.0 ft, Driller noted soft conditions (No Recovery).								
		20.0 ft - 26.0 ft, A-6, brown-gray, moist, very stiff, silty CLAY, trace gravel, (CL). P.P. = 0.7, 4.2 tsf								

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SHEET 2 of 5
DATE STARTED: 6/19/13
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PROJECT NAME: Newport City STP 134-3(22)
SITE NAME: Route 191 Landslide
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PROJECT NUMBER: GAI 133-87312
SITE NUMBER: -
GROUND ELEVATION: 721.99 ft
GROUNDWATER DEPTH: Not measured
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BORING CREW: Boart Longyear
DRILLER: Jason Koering
LOGGER: Noah Chinburg
BORING RIG: 600T Sonic

BORING TYPE: Sonic
SAMPLE TYPE: Continuous Core
HAMMER TYPE: N/A
CHECKED BY:

DEPTH (ft)	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	WELL DIAGRAM	BLOWS PER 6 IN (N VALUE)	M.C. (%)	AASHTO GRAVEL (%)	AASHTO SAND (%)	AASHTO FINES (%)	LL (%)	PI (%)
		26.0 ft - 31.0 ft, A-6, brown-gray, moist, very stiff, silty CLAY, trace gray fine sand in lenses, fissured, (CL). P.P. = 2.7, 4.5 tsf								
		31.0 ft - 41.0 ft, A-6, brown-gray, moist, very stiff to hard, silty CLAY, trace coarse rounded gravel (> 3" dia.), fissured, (CL). P.P. = 3.2, 3.5 tsf								
		39.0 ft, A-7-6, A-7-6, CLAY, (CH).			31.0	0.0	0.0	100.0	56	27
		41.0 ft - 51.0 ft, A-6, brown-gray, moist, very stiff to hard, silty CLAY, trace gray fine sand in layers, fissured, (CL). P.P. = 2.9, 2.6 tsf								

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BORING NUMBER: B311a
SHEET 3 of 5
DATE STARTED: 6/19/13
DATE COMPLETED: 6/20/13

PROJECT NAME: Newport City STP 134-3(22)
SITE NAME: Route 191 Landslide
STATION: -
OFFSET: -
VTSPG: N 888714.22 ft E 1721178.73 ft

PROJECT NUMBER: GAI 133-87312
SITE NUMBER: -
GROUND ELEVATION: 721.99 ft
GROUNDWATER DEPTH: Not measured
PROJECT PIN NUMBER: -

BORING CREW: Boart Longyear
DRILLER: Jason Koering
LOGGER: Noah Chinburg
BORING RIG: 600T Sonic

BORING TYPE: Sonic
SAMPLE TYPE: Continuous Core
HAMMER TYPE: N/A
CHECKED BY:

DEPTH (ft)	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	WELL DIAGRAM	BLOWS PER 6 IN (N VALUE)	M.C. (%)	AASHTO GRAVEL (%)	AASHTO SAND (%)	AASHTO FINES (%)	LL (%)	PI (%)
		51.0 ft - 65.0 ft, A-6, brown-gray, moist, very stiff to hard, silty CLAY, trace fine gray sand in layers, fissured, (CL).								
		55.0 ft, 1/2" soft layer (possible silp zone).								
		59.0 ft, No softening in layers above the silp/mixing zone as observed in B-316.								
		60.0 ft, Increasing thickness of fine sand layers. Suspected silp/mixing zone.								
		64.0 ft - 65.0 ft, Increasing thickness of sand layers. Suspected silp/mixing zone similar to 60 ft.								
		65.0 ft - 65.5 ft, A-4, gray, silty fine SAND layer, (SM).								
		65.5 ft - 73.0 ft, A-6, brown-gray, firm to hard, silty CLAY, little fine sand in layers, fissured, (CL).								
		66.0 ft - 71.0 ft, Layered fine sand increasing.								
		70.0 ft, Suspected slip/mixing zone similar to 64 ft.								
		71.0 ft, P.P. = 3.1 tsf								
		73.0 ft - 78.0 ft, A-4, mixing/interbedded transition to: gray-brown, moist, compact, SILT, trace fine sand, (ML). P.P. = 1.0 tsf			28.0	0.0	3.3	96.7		

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SHEET 4 of 5
DATE STARTED: 6/19/13
DATE COMPLETED: 6/20/13

PROJECT NAME: Newport City STP 134-3(22)
SITE NAME: Route 191 Landslide
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VTSPG: N 888714.22 ft E 1721178.73 ft

PROJECT NUMBER: GAI 133-87312
SITE NUMBER: -
GROUND ELEVATION: 721.99 ft
GROUNDWATER DEPTH: Not measured
PROJECT PIN NUMBER: -

BORING CREW: Boart Longyear
DRILLER: Jason Koering
LOGGER: Noah Chinburg
BORING RIG: 600T Sonic

BORING TYPE: Sonic
SAMPLE TYPE: Continuous Core
HAMMER TYPE: N/A
CHECKED BY:

DEPTH (ft)	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	WELL DIAGRAM	BLOWS PER 6 IN (N VALUE)	M.C. (%)	AASHTO GRAVEL (%)	AASHTO SAND (%)	AASHTO FINES (%)	LL (%)	PI (%)
		75.0 ft, Grading to gray-brown, fine SAND, little silt.								
		76.0 ft, Grading to medium-brown, moist, medium dense, fine SAND, little silt.								
		78.0 ft - 84.0 ft, A-1-b, gray, moist, medium dense, fine SAND, little silt, (SM). P.P. = 1.3 tsf								
		84.0 ft - 87.0 ft, A-4, Grading to gray, moist, medium dense to dense, fine SAND and SILT, trace black fine sand in 1/8" layers throughout, (SM).								
		87.0 ft - 95.0 ft, A-1-b, brown gray, moist, medium dense, gravelly fine to coarse SAND, (SP).								
		91.0 ft, Grading to brown-gray, moist, dense, gravelly fine to coarse SAND, little silt.								
		95.0 ft - 97.0 ft, A-1-b, brown-gray, moist, very dense, fine to coarse SAND, little gravel, little silt. (SP).								
		97.0 ft - 102.0 ft, A-4, rusty mixing with dark gray, very dense, fine SAND and SILT, little gravel, (SM).								
		98.0 ft - 100.0 ft, Angular rock fragments. Possible pulverized boulder.								

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BORING NUMBER: B311a
SHEET 5 of 5
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BORING CREW: Boart Longyear
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LOGGER: Noah Chinburg
BORING RIG: 600T Sonic

BORING TYPE: Sonic
SAMPLE TYPE: Continuous Core
HAMMER TYPE: N/A
CHECKED BY:

DEPTH (ft)	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	WELL DIAGRAM	BLOWS PER 6 IN (N VALUE)	RUN	M.C. (%)	REC (%)	AASHTO GRAVEL (%)	RQD (%)	AASHTO SAND (%)	Drill Rate (min/ft)	AASHTO FINES (%)	UCS (psi)	LL (%)	PI (%)
		101.0 ft - 102.0 ft, Possible pieces of weathered cobble throughout.													
		102.0 ft - 103.0 ft, A-1-a, gray, moist, fine to coarse SAND and GRAVEL, (GW).													
		Top of Bedrock @ 103.0 ft													
		103.0 ft - 110.0 ft, PHYLLITE.													
		Hole stopped @ 110.0 ft													

Notes:
- 3.34" Inclinometer casing installed in fully grouted borehole.
- Densities indicated in soil descriptions are based on adjacent SPT values and field experience.

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