18 - GEOTECHNICAL

INDEX OF DRAWINGS

DRAWING NUMBER	DRAWING TITLE
GDI-01	DRAWING INDEX
GDP-01	WALLINGFORD STATION - BORING LOCATIONS
GDP-02	WALLINGFORD STATION - BORING LOCATIONS
GDB-01	WALLINGFORD STATION - BORING LOGS
GDB-02	WALLINGFORD STATION - BORING LOGS
GDB-03	WALLINGFORD STATION - BORING LOGS

DESIGNED BY:

STV 100 Years

STV INCORPORATED
80 FERRY BLVD.
STRATFORD, CT 06615

STATE OF CONNECTICUT JAMES E. SHERWONIT #12172 LICENSED PROFESSIONAL ENGINEER

James Sherwonit
2014.01.29
12:18:41-05'00'

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 1/29/2014

DESIGNER/DRAFTER: MN

CHECKED BY: JFP

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\FA..CGR..CPS..0170-2296..148...07..GDI...001.dgn

SIGNATURE/
BLOCK:

PROJECT TITLE:
NEW HAVEN - HARTFORD
SPRINGFIELD
RAIL CORRIDOR

TOWN: WALLINGFORD

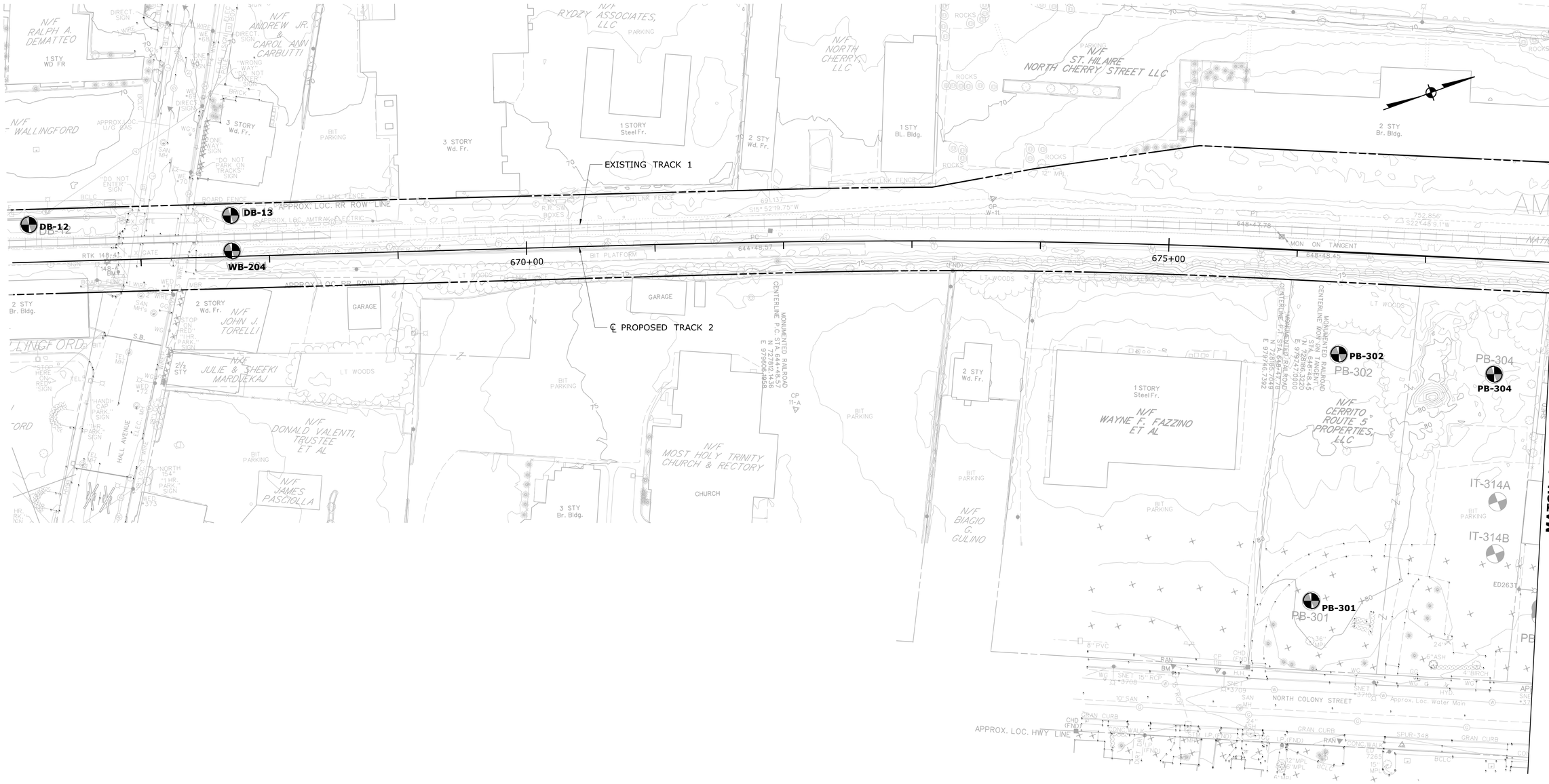
DRAWING TITLE: DRAWING INDEX

PROJECT NO. 170-3155

DRAWING NO. GDI-01

SHEET NO. 04.18.001

Connecticut Department of Transportation
QA/QC Format Check



REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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DESIGNER/DRAFTER: **MN**

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SCALE IN FEET 0 40 80

SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\FA..CGR..CPS..0170-2296..148...07..GDP...01.dgn

SIGNATURE/BLOCK:

STV Incorporated
80 Ferry Boulevard
Stratford, CT 06615

PROJECT TITLE:

NEW HAVEN - HARTFORD SPRINGFIELD RAIL CORRIDOR

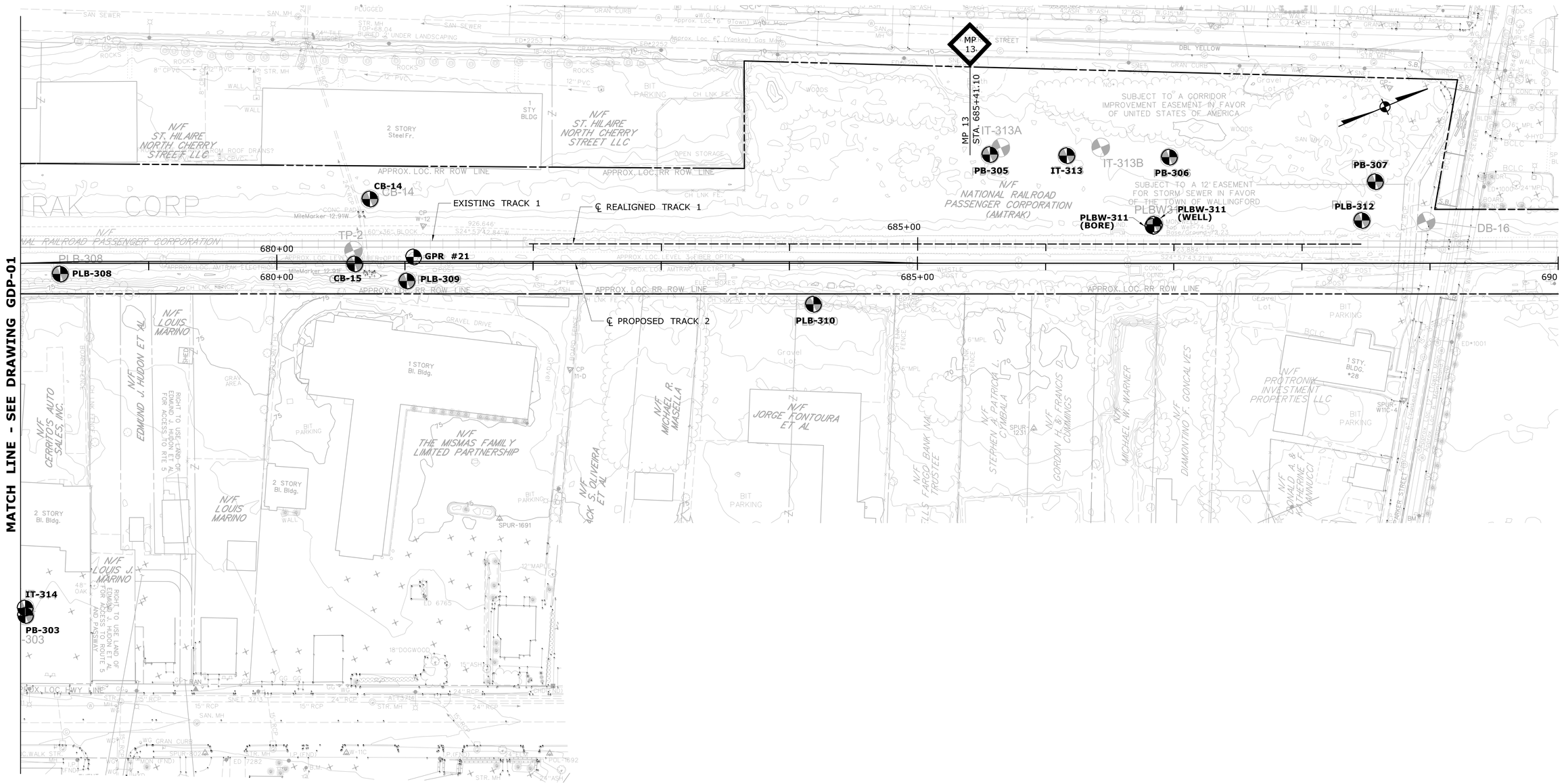
TOWN: **WALLINGFORD**

DRAWING TITLE: **WALLINGFORD STATION BORING LOCATIONS**

PROJECT NO. **170-3155**

DRAWING NO. **GDP-01**

SHEET NO. **04.18.002**



REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 1/29/2014

DESIGNER/DRAFTER: **MN**

CHECKED BY: **JFP**

SCALE IN FEET 0 40 80

SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\FA_CGR_CPS_0170-2296_148__07_GDP__02.dgn

SIGNATURE/BLOCK:

STV Incorporated
80 Ferry Boulevard
Stratford, CT 06615

PROJECT TITLE:

NEW HAVEN - HARTFORD SPRINGFIELD RAIL CORRIDOR

TOWN: **WALLINGFORD**

DRAWING TITLE: **WALLINGFORD STATION BORING LOCATIONS**

PROJECT NO. **170-3155**

DRAWING NO. **GDP-02**

SHEET NO. **04.18.003**

Driller: Gary Twombly Jr.	**Connecticut DOT Boring Report**	Hole No.: PB-301
Inspector: Robert Smoko	Town: Wallingford	Stat./Offset: 676+25
Engineer: STV Incorporated	Project No.: 52550 NRRA	Northing: 728109.54
Start Date: 11/20/2012	Route No.:	Easting: 980020.55
Finish Date: 11/20/2012	Bridge No.:	Surface Elevation: 80.44 ft
Project Description: New Haven-Hartford-Springfield (NHSS) Rail Corridor		
Casing Size/Type:	Sampler Type/Size: SPT/24"	Core Barrel Type:
Hammer Wt.: Fall:	Hammer Wt.: 140 lb Fall: 30"	
Groundwater Observations @ DRY after 0 hours, @ after hours, @ after hours		

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
0	S-1	2 3 4 3	24	20		f. SAND	Brown fine SAND, loose, dry	80.5
	S-2	3 5 4 6	24	17			SAME	
5	S-3	6 12 24 50	24	16			Brown fine SAND, loose, dry, pc. Gravel in spoon tip	75.5
	S-4	7 50/3"	9	4			Brown fine SAND, very dense, dry	
							End of Boring 6.75 ft.	
10								70.5
15								65.5
20								60.5
25								55.5
30								50.5

Sample Type: S=Split Spoon C=Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in Earth: 6.9 ft Rock: 0ft	NOTES: CME-75 Safety hammer used.	Sheet 1 of 1
No. of Samples: 4	Hole moved 9.5 ft west.	SM-001-M REV. 1/02

Driller: Gary Twombly Jr.	**Connecticut DOT Boring Report**	Hole No.: PB-302
Inspector: Robert Smoko	Town: Wallingford	Stat./Offset: 676+36/80' RT
Engineer: STV Incorporated	Project No.: 52550 NRRA	Northing: 728195.20
Start Date: 11/19/2012	Route No.:	Easting: 979847.39
Finish Date: 11/19/2012	Bridge No.:	Surface Elevation: 77.6 '
Project Description: New Haven-Hartford-Springfield (NHSS) Rail Corridor		
Casing Size/Type:	Sampler Type/Size: SPT/24"	Core Barrel Type:
Hammer Wt.: Fall:	Hammer Wt.: 140 lb Fall: 30"	
Groundwater Observations @ DRY after 0 hours, @ after hours, @ after hours		

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
0	S-1	1 2 1 3	24	18		f. SAND	Brown fine SAND, very loose, dry	77.5
	S-2	1 2 2 6	24	11			Brown fine SAND, loose, dry	
5	S-3	10 10 9 11	24	15		f-m SAND	Brown f-m SAND, medium dense, moist	72.5
	S-4	12 14 9 15	24	17			Reddish brown f-m SAND, trace Silt, medium dense, moist	
							End of Boring 8.0 ft.	
10								67.5
15								62.5
20								57.5
25								52.5
30								47.5

Sample Type: S=Split Spoon C=Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in Earth: 8 ft Rock: 0ft	NOTES: CME-75 Safety hammer used.	Sheet 1 of 1
No. of Samples: 4		SM-001-M REV. 1/02

Driller: Gary Twombly Jr.	**Connecticut DOT Boring Report**	Hole No.: PB-304
Inspector: Robert Smoko	Town: Wallingford	Stat./Offset: 677+58
Engineer: STV Incorporated	Project No.: 52550 NRRA	Northing: 728303.45
Start Date: 11/20/2012	Route No.:	Easting: 979903.33
Finish Date: 11/20/2012	Bridge No.:	Surface Elevation: 76.91 ft
Project Description: New Haven-Hartford-Springfield (NHSS) Rail Corridor		
Casing Size/Type:	Sampler Type/Size: SPT/24"	Core Barrel Type:
Hammer Wt.: Fall:	Hammer Wt.: 140 lb Fall: 30"	
Groundwater Observations @ DRY after 0 hours, @ after hours, @ after hours		

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
0	S-1	2 3 3 5	24	12		fine SAND	Brown fine SAND, loose, dry	76.9
	S-2	6 8 9 14	24	10			Brown fine SAND, some m-f-m Gravel, medium dense, dry	
5	S-3	10 15 13 14	24	5			Brown fine SAND, some Silt, medium dense, dry,	71.9
							End of Boring 6.0 ft.	
10								66.9
15								61.9
20								56.9
25								51.9
30								46.9

Sample Type: S=Split Spoon C=Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in Earth: 6 ft Rock: 0ft	NOTES: CME-75 Safety hammer used.	Sheet 1 of 1
No. of Samples: 3	Hole moved 3.5' NE due to O/H wires.	SM-001-M REV. 1/02

Driller: Gary Twombly Jr.	**Connecticut DOT Boring Report**	Hole No.: IT-314
Inspector: Robert Smoko	Town: Wallingford	Stat./Offset:
Engineer: STV Incorporated	Project No.: 52550 NRRA	Northing: 728275.54
Start Date: 11/20/2012	Route No.:	Easting: 980086.74
Finish Date: 11/20/2012	Bridge No.:	Surface Elevation: 78.1 '
Project Description: New Haven-Hartford-Springfield (NHSS) Rail Corridor		
Casing Size/Type: 4" HW	Sampler Type/Size: SPT/24"	Core Barrel Type:
Hammer Wt.: 300 Fall: 30"	Hammer Wt.: 140 lb Fall: 30"	
Groundwater Observations @ DRY after 0 hours, @ after hours, @ after hours		

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
0						ASPHALT	0.42 ft ASPHALT	78.1
	S-1	11 5 2 2	24	12		SAND	Brown fine SAND, loose, dry	
	S-2	3 2 3 6	24	11			SAME	
5	S-3	15 10 8 7	24	11			Brown fine SAND, medium dense, dry	73.1
							End of Boring 6.0 ft.	
10							Infiltration test performed at 6-ft depth.	68.1
15								63.1
20								58.1
25								53.1
30								48.1

Sample Type: S=Split Spoon C=Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in Earth: 6 ft Rock: 0ft	NOTES: CME-75 Safety hammer used.	Sheet 1 of 1
No. of Samples: 3		SM-001-M REV. 1/02

Driller: Gary Twombly Jr.	**Connecticut DOT Boring Report**	Hole No.: PB-303
Inspector: Robert Smoko	Town: Wallingford	Stat./Offset: 678+03
Engineer: STV Incorporated	Project No.: 52550 NRRA	Northing: 728273.46
Start Date: 11/19/2012	Route No.:	Easting: 980092.23
Finish Date: 11/19/2012	Bridge No.:	Surface Elevation: 78.05 ft
Project Description: New Haven-Hartford-Springfield (NHSS) Rail Corridor		
Casing Size/Type:	Sampler Type/Size: SPT/24"	Core Barrel Type:
Hammer Wt.: Fall:	Hammer Wt.: 140 lb Fall: 30"	
Groundwater Observations @ DRY after 0 hours, @ after hours, @ after hours		

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
0	S-1	7 3 3 1	24	16		fine SAND	Brown fine SAND, loose, dry	78
	S-2	3 2 3 3	24	15			SAME	
5	S-3	5 3 3 20	24	15			Brown fine SAND, loose, dry, pc. Gravel in spoon tip	73
							End of Boring 6.0 ft.	
10								68
15								63
20								58
25								53
30								48

Sample Type: S=Split Spoon C=Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in Earth: 6 ft Rock: 0ft	NOTES: CME-75 Safety hammer used.	Sheet 1 of 1
No. of Samples: 3	Hole moved 3.5' NE due to O/H wires.	SM-001-M REV. 1/02

Driller: Rich Leonard	**Connecticut DOT Boring Report**	Hole No.: PLB-308
Inspector: Sam Junno	Town: Wallingford	Stat./Offset: 678+30
Engineer: STV Incorporated	Project No.: 52550 NRRA	Northing: 728402.25
Start Date: 01/14/2013	Route No.:	Easting: 979857.29
Finish Date: 01/14/2013	Bridge No.:	Surface Elevation: 70.49 ft
Project Description: New Haven-Hartford-Springfield (NHSS) Rail Corridor		
Casing Size/Type: 4" HW	Sampler Type/Size: SPT/24"	Core Barrel Type:
Hammer Wt.: 300 Fall: 30"	Hammer Wt.: 140 lb Fall: 30"	
Groundwater Observations @ 10.6' after 14 hours, @ after hours, @ after hours		

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
0	S-1	1 1 1 2	24	20		SAND	Black fine SAND, little f Gravel, very loosee, dry	70.5
	S-2	2 2 7 9	24	18			Brown f-m SAND, little f Gravel, loose, dry	
5	S-3	6 6 8 9	24	21			Light brown fine SAND, medium dense, dry	65.5
	S-4	7 6 8 10	24	16			SAME	
	S-5	9 9 11 18	24	16			SAME	
10	S-6	9 30 18 18	24	9			Brown-red f-m SAND, some Silt, dense, wet	60.5
15	S-7	24 34 56 48	24	8			Brown-red f-m SAND, and Silt, little f-m Gravel, (TILL), very dense, wet	55.5
20	S-8	63 100/5"	11	6			SAME	50.5
							Hit ledge at 23.5', roller bit to 24.0 ft.	
25							End of boring 24.0 ft	45.5
30								40.5

Sample Type: S=Split Spoon C=Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in Earth: 23.5 ft Rock: 0.5 ft	NOTES: Mobile B-53 Safety hammer used.	Sheet 1 of 1
No. of Samples: 8		SM-001-M REV. 1/02

Driller: Chris Knight	**Connecticut DOT Boring Report**	Hole No.: PLB-309
Inspector: Robert Smoko	Town: Wallingford	Stat./Offset: 681+02/13.8 RT
Engineer: STV Incorporated	Project No.: 52550 NRRA	Northing: 728549.34
Start Date: 01/14/2013	Route No.:	Easting: 979967.65
Finish Date: 01/15/2013	Bridge No.:	Surface Elevation: 70.8 '
Project Description: New Haven-Hartford-Springfield (NHSS) Rail Corridor		
Casing Size/Type: 4" HW	Sampler Type/Size: SPT/24"	Core Barrel Type:
Hammer Wt.: 300 Fall: 30"	Hammer Wt.: 140 lb Fall: 30"	
Groundwater Observations @ after hours, @ after hours, @ after hours		

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
0	S-1	3 8 11 4	24	5		SAND	Black f-m SAND, some f Gravel, medium dense, dry	70.8
	S-2	16 4 6 6	24	17			Brown f-m SAND, trace f Gravel, loose, dry	
5	S-3	9 11 11 11	24	16			Brown f-m SAND, medium dense, dry	65.8
	S-4	11 9 8 7	24	15			SAME	
	S-5	9 11 13 15	24	17			SAME	
10	S-6	20 22 19 26	24	16		Sandy SILT	Red-Brown SILT, and f Sand, some f Gravel, dense, moist	60.8
15	S-7	12 30 32 25	24	12			Red-Brown SILT, and f Sand, some f Gravel, very dense, moist	55.8
20	S-8	25 39 50 46	24	1			Red-Brown SILT, and f Sand, some f Gravel, very dense, wet	50.8
25	S-9	11 17 21 30	24	15			Red-Brown SILT, and f Sand, some f Gravel, dense, wet	45.8
30	S-10	23 26 39 42	24	14			Red-Brown SILT, and f Sand, some f Gravel, very dense, wet - End of Boring 31.0 ft.	40.8

Sample Type: S=Split Spoon C=Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in Earth: 31.0 ft Rock: 0.ft	NOTES: Deitrich D-50 Safety hammer used.	Sheet 1 of 1
No. of Samples: 10		SM-001-M REV. 1/02

Driller: Chris Knight	**Connecticut DOT Boring Report**	Hole No.: PLB-310
Inspector: Robert Smoko	Town: Wallingford	Stat./Offset: 684+19/32' RT
Engineer: STV Incorporated	Project No.: 52550 NRRA	Northing: 728934.50
Start Date: 01/14/2013	Route No.:	Easting: 980107.87
Finish Date: 01/14/2013	Bridge No.:	Surface Elevation: 72.28 '
Project Description: New Haven-Hartford-Springfield (NHSS) Rail Corridor		
Casing Size/Type: 4" HW	Sampler Type/Size: SPT/24"	Core Barrel Type:
Hammer Wt.: 300 Fall: 30"	Hammer Wt.: 140 lb Fall: 30"	
Groundwater Observations @ after hours, @ after hours, @ after hours		

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
0	S-1	4 4 2 3	24	6		Silty SAND	Red-brown find SAND, some Silt, loose, dry	72.2
	S-2	4 2 4 6	24	17			Red-brown f-m SAND, some Silt, loose, dry	
5	S-3	7 7 8 6	24	13			SAME	67.2
	S-4	7 8 18 28	24	12			Light brown f-m SAND, medium dense, dry	
	S-5	14 15 19 20	24	10			Red-brown fine SAND, and Silt, dense, moist	
10	S-6	11 20 9 14	24	11			Red-brown fine SAND, and Silt, medium dense, moist	62.2
15	S-7	20 30 29 15	24	3			Red-brown fine SAND, and Silt, trace f Gravel, very dense, moist	57.2
20	S-8	11 10 12 14	24	17		Sandy SILT	Red-brown SILT, and fine SAND, medium dense, moist	52.2
25	S-9	36 43 100/5"	17	12		Silty SAND	Red-brown f-m SAND, and Silt, some f Gravel, very dense, wet	47.2
30	S-10	100/3 '	3	2			SAME Roller bit to 33'. End of Boring 33.0 ft	42.2

Sample Type: S=Split Spoon C=Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in Earth: 33.0 ft Rock: 0.ft	NOTES: Deitrich D-50 Safety hammer used.	Sheet 1 of 1
No. of Samples: 10		SM-001-M REV. 1/02

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 1/29/2014

DESIGNER/DRAFTER: **MN**
CHECKED BY: **JFP**

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\FA..CGR..CPS..0170-2296..148...07..GDB...16.dgn

SIGNATURE/BLOCK:

STV Incorporated
80 Ferry Boulevard
Stratford, CT 06615

PROJECT TITLE:
NEW HAVEN - HARTFORD SPRINGFIELD RAIL CORRIDOR

TOWN: **WALLINGFORD**

DRAWING TITLE: **WALLINGFORD STATION BORING LOGS**

PROJECT NO. **170-3155**
DRAWING NO. **GDB-01**
SHEET NO. **04.18.004**

Driller: Gary Twombly Jr.	**Connecticut DOT Boring Report**	Hole No.: PB-305
Inspector: Sam Junno	Town: Wallingford	Stat./Offset: 685+57/84.8' LT
Engineer: STV Incorporated	Project No.: 52550 NRRA	Northing: 729106.85
Start Date: 11/26/2012	Route No.:	Easting: 980053.86
Finish Date: 11/26/2012	Bridge No.:	Surface Elevation: 72.2 '
Project Description: New Haven-Hartford-Springfield (NHSS) Rail Corridor		
Casing Size/Type: 4" HW	Sampler Type/Size: SPT/24"	Core Barrel Type:
Hammer Wt.: 300 Fall: 30"	Hammer Wt.: 140 lb Fall: 30"	
Groundwater Observations @ DRY after 0 hours, @ after hours, @ after hours		

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
0	S-1	4 3 7 7	24	18		SAND	Brown f-m SAND, loose, dry	72.2
	S-2	3 3 6 8	24	14			Brown f-m SAND, trace f Gravel, loose, dry	
5	S-3	7 6 7 6	24	14			Brown f-c SAND, trace f Gravel, medium dense, dry	67.2
							End of Boring 6.0 ft.	
10								62.2
15								57.2
20								52.2
25								47.2
30								42.2

Sample Type: S=Split Spoon C=Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in Earth: 6 ft Rock: 0ft	NOTES: CME-75 Safety hammer used.	Sheet 1 of 1
No. of Samples: 3		SM-001-M REV. 1/02

Driller: Gary Twombly Jr.	**Connecticut DOT Boring Report**	Hole No.: IT-313
Inspector: Sam Junno	Town: Wallingford	Stat./Offset: 686+17/84.0' LT
Engineer: STV Incorporated	Project No.: 52550 NRRA	Northing: 729161.79
Start Date: 11/27/2012	Route No.:	Easting: 980078.01
Finish Date: 11/27/2012	Bridge No.:	Surface Elevation: 71.7 '
Project Description: New Haven-Hartford-Springfield (NHSS) Rail Corridor		
Casing Size/Type: 4" HW	Sampler Type/Size: SPT/24"	Core Barrel Type:
Hammer Wt.: 300 Fall: 30"	Hammer Wt.: 140 lb Fall: 30"	
Groundwater Observations @ DRY after 0 hours, @ after hours, @ after hours		

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
0	S-1	1 2 3 3	24	11		Gravelly SAND	Brown fine SAND, some fine Gravel, loose, dry	71.7
	S-2	4 7 7 8	24	16			Brown f-m SAND, some f Gravel, medium dense, dry	
5	S-3	6 6 11 12	24	14			SAME	66.7
	S-4	9 13 12 11	24	10		SAND	Brown f-c SAND, trace Silt, medium dense, dry	
							End of Boring 8.0 ft.	
10							Infiltration test performed at 6-ft depth.	61.7
15								56.7
20								51.7
25								46.7
30								41.7

Sample Type: S=Split Spoon C=Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in Earth: 8 ft Rock: 0ft	NOTES: CME-75 Safety hammer used.	Sheet 1 of 1
No. of Samples: 4		SM-001-M REV. 1/02

Driller: Rich Leonard	**Connecticut DOT Boring Report**	Hole No.: PLBW-311
Inspector: Sam Junno	Town: Wallingford	Stat./Offset: 686+84/28.8' LT
Engineer: STV Incorporated	Project No.: 52550 NRRA	Northing: 729202.11
Start Date: 01/11/2013	Route No.:	Easting: 980154.90
Finish Date: 01/11/2013	Bridge No.:	Surface Elevation: 72.2 '
Project Description: New Haven-Hartford-Springfield (NHSS) Rail Corridor		
Casing Size/Type: 4" HW	Sampler Type/Size: SPT/24"	Core Barrel Type:
Hammer Wt.: 300 Fall: 30"	Hammer Wt.: 140 lb Fall: 30"	
Groundwater Observations @ after hours, @ after hours, @ after hours		

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
0	S-1	17 10 9 11	24	14		SAND	0"-7" Black coarse SAND, some f-m Gravel / Tan f-m SAND, little f Gravel, medium dense, dry	72.2
	S-2	15 12 14 16	24	14			Tan f-c SAND, and f-c Gravel, medium dense, dry	
5	S-3	17 16 17 27	24	21			SAME	67.2
	S-4	19 13 15 15	24	12			SAME	
	S-5	15 14 12 17	24	21			Tan f-c SAND, medium dense, dry	
10	S-6	19 19 15 15	24	18			SAME	62.2
15	S-7	10 8 13 15	24	24			SAME	57.2
20	S-8	12 22 100/5"	17	6		Silty SAND	Brown f-c SAND, some Silt, very dense, wet	52.2
25	S-9	66 35 27 31	24	16			Brown f-c SAND, some Silt, some f Gravel, very dense, wet	47.2
30								42.2

Sample Type: S=Split Spoon C=Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in Earth: 35.1 ft Rock: 0ft	NOTES: Mobile B-53 Safety hammer used.	Sheet 1 of 2
No. of Samples: 11		SM-001-M REV. 1/02

Driller: Rich Leonard	**Connecticut DOT Boring Report**	Hole No.: PLBW-311
Inspector: Sam Junno	Town: Wallingford	Stat./Offset: 686+84/28.8' LT
Engineer: STV Incorporated	Project No.: 52550 NRRA	Northing: 729202.11
Start Date: 01/11/2013	Route No.:	Easting: 980154.90
Finish Date: 01/11/2013	Bridge No.:	Surface Elevation: 72.2 '
Project Description: New Haven-Hartford-Springfield (NHSS) Rail Corridor		
Casing Size/Type: 4" HW	Sampler Type/Size: SPT/24"	Core Barrel Type:
Hammer Wt.: 300 Fall: 30"	Hammer Wt.: 140 lb Fall: 30"	
Groundwater Observations @ after hours, @ after hours, @ after hours		

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
30	S-10	22 25 78 100/3"	21	16		TILL	Brown-red f-m SAND, some Silt (TILL), very dense, wet	42.2
35	S-11	100/1"	1	1			Brown-red f-m SAND, and Silt (TILL), very dense, wet	37.2
							End of Boring 35.1 ft.	
40							Observation Well Readings:	32.2
45								27.2
50								22.2
55								17.2
60								12.2

Date	Depth	Elevation
1/18/2013	22.3'	49.9
1/28/2013	21.2'	51.0
2/18/2013	22.4'	49.8

Sample Type: S=Split Spoon C=Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in Earth: 35.1 ft Rock: 0ft	NOTES: Mobile B-53 Safety hammer used.	Sheet 2 of 2
No. of Samples: 11		SM-001-M REV. 1/02

Driller: Gary Twombly Jr.	**Connecticut DOT Boring Report**	Hole No.: PB-306
Inspector: Sam Junno	Town: Wallingford	Stat./Offset: 686+97/82.8' LT
Engineer: STV Incorporated	Project No.: 52550 NRRA	Northing: 729235.05
Start Date: 11/27/2012	Route No.:	Easting: 980110.22
Finish Date: 11/27/2012	Bridge No.:	Surface Elevation: 71.6 '
Project Description: New Haven-Hartford-Springfield (NHSS) Rail Corridor		
Casing Size/Type:	Sampler Type/Size: SPT/24"	Core Barrel Type:
Hammer Wt.: Fall:	Hammer Wt.: 140 lb Fall: 30"	
Groundwater Observations @ DRY after 0 hours, @ after hours, @ after hours		

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
0	S-1	3 3 4 3	24	24		SAND	Brown f-m SAND, loose, dry	71.5
	S-2	3 4 4 7	24	16			Brown f-m SAND, trace f Gravel, loose, dry	
5	S-3	5 6 7 7	24	14			Brown f-c SAND, trace f Gravel, medium dense, dry	66.5
							End of Boring 6.0 ft.	
10								61.5
15								56.5
20								51.5
25								46.5
30								41.5

Sample Type: S=Split Spoon C=Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in Earth: 6 ft Rock: 0ft	NOTES: CME-75 Safety hammer used.	Sheet 1 of 1
No. of Samples: 3		SM-001-M REV. 1/02

Driller: Rich Leonard	**Connecticut DOT Boring Report**	Hole No.: PLB-312
Inspector: Sam Junno	Town: Wallingford	Stat./Offset: 688+47/33.4' LT
Engineer: STV Incorporated	Project No.: 52550 NRRA	Northing: 729354.27
Start Date: 01/10/2013	Route No.:	Easting: 980214.24
Finish Date: 01/10/2013	Bridge No.:	Surface Elevation: 72.5 '
Project Description: New Haven-Hartford-Springfield (NHSS) Rail Corridor		
Casing Size/Type: 4" HW	Sampler Type/Size: SPT/24"	Core Barrel Type:
Hammer Wt.: 300 Fall: 30"	Hammer Wt.: 140 lb Fall: 30"	
Groundwater Observations @ after hours, @ after hours, @ after hours		

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
0	S-1	7 9 9 9	24	8		SAND	Black f-m SAND, some f Gravel, medium dense, dry	72.5
	S-2	9 8 10 9	24	4			SAME	
5	S-3	9 8 11 10	24	18			Light brown fine SAND, little fine Gravel, medium dense, dry	67.5
	S-4	15 10 11 13	24	18			Brown f-m SAND, trace f Gravel, medium dense, dry	
	S-5	6 11 14 14	24	18			SAME	
10	S-6	8 9 10 13	24	12			Light brown f-c SAND, medium dense, wet	62.5
15	S-7	8 6 8 11	24	7			SAME	57.5
20	S-8	21 15 19 21	24	16			Brown-red f-c SAND, little f Gravel, trace Silt, dense, wet	52.5
25	S-9	6 6 6 6	24	16			Brown-red f-c SAND, trace f Gravel, trace Silt, medium dense, wet (TILL-like)	47.5
30								42.5

Sample Type: S=Split Spoon C=Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in Earth: 40.1 ft Rock: 0ft	NOTES: Mobile B-53 Safety hammer used.	Sheet 1 of 2
No. of Samples: 12		SM-001-M REV. 1/02

Driller: Rich Leonard	**Connecticut DOT Boring Report**	Hole No.: PLB-312
Inspector: Sam Junno	Town: Wallingford	Stat./Offset: 688+47/33.4' LT
Engineer: STV Incorporated	Project No.: 52550 NRRA	Northing: 729354.27
Start Date: 01/10/2013	Route No.:	Easting: 980214.24
Finish Date: 01/10/2013	Bridge No.:	Surface Elevation: 72.5 '
Project Description: New Haven-Hartford-Springfield (NHSS) Rail Corridor		
Casing Size/Type: 4" HW	Sampler Type/Size: SPT/24"	Core Barrel Type:
Hammer Wt.: 300 Fall: 30"	Hammer Wt.: 140 lb Fall: 30"	
Groundwater Observations @ after hours, @ after hours, @ after hours		

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
30	S-10	25 33 100/6"	18	15		TILL	Brown-red f-m SAND, some Silt, trace f-c Gravel, (TILL), very dense, wet	42.5
35	S-11	100/2"	2	2			Brown-red fine SAND, and Silt (TILL/Ledge Like), very dense, wet	37.5
40	S-12	100/1"	1	1			SAME	32.5
							End of Boring 40.1 ft.	
45								27.5
50								22.5
55								17.5
60								12.5

Sample Type: S=Split Spoon C=Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in Earth: 40.1 ft Rock: 0ft	NOTES: Mobile B-53 Safety hammer used.	Sheet 2 of 2
No. of Samples: 12		SM-001-M REV. 1/02

Driller: Rich Leonard	**Connecticut DOT Boring Report**	Hole No.: PB-307
Inspector: Sam Junno	Town: Wallingford	Stat./Offset: 688+57
Engineer: STV Incorporated	Project No.: 52550 NRRA	Northing: 729375.71
Start Date: 01/10/2013	Route No.:	Easting: 980190.46
Finish Date: 01/10/2013	Bridge No.:	Surface Elevation: 72.16 ft
Project Description: New Haven-Hartford-Springfield (NHSS) Rail Corridor		
Casing Size/Type: SS Auger	Sampler Type/Size: SPT/24"	Core Barrel Type:
Hammer Wt.: Fall:	Hammer Wt.: 140 lb Fall: 30"	
Groundwater Observations @ DRY after 0 hours, @ after hours, @ after hours		

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
0	S-1	3 5 4 4	24	6		SAND	Brown-black f-m SAND, lsome f Gravel, oose, dry	72.2
	S-2	3 2 3 4	24	10			Brown-red f-m SAND, trace Silt, loose, dry	
5	S-3	5 8 8 9	24	14			Brown f-c SAND, trace f Gravel, medium dense, dry	67.2
							End of Boring 6.0 ft.	
10								62.2
15								57.2
20								52.2
25								47.2
30								42.2

Sample Type: S=Split Spoon C=Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in Earth: 6 ft Rock: 0ft	NOTES: Mobile B-53 Safety hammer used. Hole moved 7-ft towards tracks.	Sheet 1 of 1
No. of Samples: 3		SM-001-M REV. 1/02

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 1/29/2014

DESIGNER/DRAFTER: **MN**

CHECKED BY: **JFP**

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\FA..CGR..CPS..0170-2296..148...07..GDB...17.dgn

SIGNATURE/BLOCK:

STV Incorporated
80 Ferry Boulevard
Stratford, CT 06615

PROJECT TITLE:

NEW HAVEN - HARTFORD SPRINGFIELD RAIL CORRIDOR

TOWN: **WALLINGFORD**

DRAWING TITLE: **WALLINGFORD STATION BORING LOGS**

PROJECT NO. **170-3155**

DRAWING NO. **GDB-02**

SHEET NO. **04.18.005**