May 4, 2018

Mr. Adam Fox, P.E.
Principal Engineer
Environmental Compliance Section
Bureau of Engineering and Construction
State of Connecticut Department of Transportation
2800 Berlin Turnpike, P.O. Box 317546
Newington, CT 06131-7546

Attention: Jason Coite, P.E. / Mandy Socolosky

Subject: On-Call Asbestos, Lead, Air Quality & Demolition Compliance
Agreement No. 04.27-01(15)
HazMat Inspection – Ten (10) District 1 Traffic Signal Intersections, Nine (9) Cities/Towns, CT
ConnDOT Assignment No. 514-5709
ConnDOT Project No. 171-402
TRC Project No. 222165.5709.0710

Dear Mr. Fox:

TRC performed a limited survey for hazardous building materials associated with traffic signals and pedestrian control equipment at 10 Traffic Signal Intersection Sites in 9 cities/towns (Bloomfield, Cheshire, East Hartford, New Britain, Plainville, Rocky Hill, Southington, Wethersfield & Windsor Locks) in District 1, Connecticut. Results of the survey identified the following at the traffic signal span poles, mast arms, pedestals, crosswalk signal hoods/push buttons and controller cabinet replacements at the following Intersections:

Traffic Signal Int. No. 011-209, Route 218 at North Drive to CIGNA, Bloomfield

- One span pole was wood (unpainted). Detectable amounts of lead in paint were found on the second grey/red painted metal span pole. There were no pedestrian crosswalk pedestals/hoods. The paint associated with the metal traffic lights themselves are presently presumed to be lead containing. Controller cabinet was unpainted.
- Projected paint waste debris associated with the grey/red painted span pole was characterized as non-hazardous, non-RCRA waste.
- Any paint waste generated from the metal traffic lights themselves should be tested for TCLP lead to determine waste disposal.

Traffic Signal Int. No. 025-225, Route 10 at Maplecroft Shopping Center, Cheshire

- One span pole was wood (unpainted). No detectable amounts of lead in paint were found on the second grey painted metal span pole. Pedestrian crosswalk pedestals were galvanized (unpainted). The paint associated with the metal traffic lights themselves are presently presumed to be lead containing. Detectable amount of lead were identified on the yellow crosswalk hoods/push buttons. No detectable amounts of lead were identified on the painted metal controller cabinet.
- Projected paint waste debris associated with the yellow crosswalk hoods/push buttons was characterized as non-hazardous, non-RCRA waste.
- Since no detectable amounts of lead were present on painted metal surfaces of the grey painted

span pole and the controller cabinet, any paint waste generated would be classified as non-hazardous, non-RCRA waste.

- Any paint waste generated from the metal traffic lights themselves should be tested for TCLP lead to determine waste disposal.
- Tan brittle caulking at the base of the controller cabinet was sampled and found to be non-ACM.

Traffic Signal Int. No. 042-251, S.R. 502 at Rolling Meadow Drive, East Hartford

- One span pole was wood (unpainted). No detectable amounts of lead in paint were found on the second grey painted metal span pole. Pedestrian crosswalk pedestals were galvanized (unpainted). The paint associated with the metal traffic lights themselves are presently presumed to be lead containing. Detectable amount of lead were identified on the yellow traffic light on pole. No detectable amounts of lead were identified on painted metal controller cabinet.
- Projected paint waste debris associated with the yellow traffic light on pole was characterized as non-hazardous, non-RCRA waste.
- Since no detectable amounts of lead were present on painted metal surfaces of the grey painted span pole and the controller cabinet, any paint waste generated would be classified as non-hazardous, non-RCRA waste.
- Any paint waste generated from the metal traffic lights themselves should be tested for TCLP lead to determine waste disposal.

Traffic Signal Int. No. 088-247, Route 71 at Paul J. Manafort Drive & Francis Street, New Britain

- All span poles were galvanized (unpainted). Pedestrian crosswalk pedestals were galvanized (unpainted). The paint associated with the metal traffic lights themselves are presently presumed to be lead containing. Detectable amounts of lead were identified on the yellow painted crosswalk hoods/push buttons. No detectable amounts of lead in paint were identified on the painted metal controller cabinet.
- Since no detectable amounts of lead were present on the painted metal surfaces of the metal controller cabinet any paint waste generated would be classified as non-hazardous, non-RCRA waste.
- Any paint waste generated from the metal traffic lights themselves and yellow painted crosswalk hoods/push buttons should be tested for TCLP lead to determine waste disposal.

Traffic Signal Int. No. 088-279, Route 71 at Firehouse Lane, New Britain

- One span pole was wood (unpainted). No detectable amounts of lead in paint were found on the second grey painted metal span pole. There were no pedestrian crosswalk pedestals/hoods. The paint associated with the metal traffic lights themselves are presently presumed to be lead containing. Detectable amount of lead were identified on the black/yellow traffic light on span pole & yellow/green crosswalk push buttons. No detectable amounts of lead were identified on the painted metal controller cabinet.
- Projected paint waste debris associated with the black/yellow traffic light on span pole was characterized as non-hazardous, non-RCRA waste.
- Since no detectable amounts of lead were present on painted metal surfaces of the grey painted span pole and the controller cabinet, any paint waste generated would be classified as non-hazardous, non-RCRA waste.

- Any paint waste generated from the metal traffic lights themselves and yellow/green crosswalk push buttons should be tested for TCLP lead to determine waste disposal.
- Grey pliable caulking and black fibrous material near controller cabinet were sampled and found to be non-ACM.

Traffic Signal Int. No. 109-201, Route 10 at Whiting Street, Plainville

- All span poles were galvanized (unpainted). There were no pedestrian crosswalk pedestals/hoods. The paint associated with the metal traffic lights themselves are presently presumed to be lead containing. No detectable amounts of lead in paint were identified on the painted metal controller cabinet.
- Since no detectable amounts of lead were present on the painted metal surfaces of the metal controller cabinet any paint waste generated would be classified as non-hazardous, non-RCRA waste.
- Any paint waste generated from the metal traffic lights themselves should be tested for TCLP lead to determine waste disposal.

Traffic Signal Int. No. 118-209, Route 99 at Town Line Road, Rocky Hill

- One (1) span pole was galvanized (unpainted) and 1 span pole was wood (unpainted). Pedestrian crosswalk pedestals were galvanized (unpainted). The paint associated with the metal traffic lights themselves are presently presumed to be lead containing. Detectable amounts of lead paint were found on yellow painted metal surfaces of the crosswalk hoods/push buttons. No detectable amounts of lead in paint were found on the painted metal controller cabinet.
- Since no detectable amounts of lead were present on the painted metal controller cabinet any paint waste generated would be classified as non-hazardous, non-RCRA waste.
- Any paint waste generated from the metal traffic lights themselves and crosswalk hoods/push buttons should be tested for TCLP lead to determine waste disposal.

Traffic Signal Int. No. 131-233, Route 322 at Interstate 691 WB Off-Ramp, Southington

- No detectable amounts of lead in paint were found on the three (3) grey painted metal span poles. There were no pedestrian crosswalk pedestals/hoods. The paint associated with the metal traffic lights themselves are presently presumed to be lead containing. No detectable amounts of lead were identified on the painted metal controller cabinet.
- Since no detectable amounts of lead were present on painted metal surfaces of the grey painted span poles and the controller cabinet, any paint waste generated would be classified as non-hazardous, non-RCRA waste.
- Any paint waste generated from the metal traffic lights themselves should be tested for TCLP lead to determine waste disposal.
- Black/grey flexible caulking at the base of the controller cabinet was sampled and found to be non-ACM.

Traffic Signal Int. No. 159-230, Route 175 at Goff Road, Wethersfield

- One span pole was wood (unpainted). No detectable amounts of lead in paint were found on the 2

grey painted metal span poles. Pedestrian crosswalk pedestals were galvanized (unpainted). The paint associated with the metal traffic lights themselves and yellow crosswalk push buttons are presently presumed to be lead containing. No detectable amounts of lead in paint was found on the grey painted metal controller cabinet.

- Since no detectable amounts of lead were present on painted metal surfaces of the grey painted span poles and the metal controller cabinet, any paint waste generated would be classified as non-hazardous, non-RCRA waste.
- Any paint waste generated from the metal traffic lights themselves and yellow crosswalk push buttons should be tested for TCLP lead to determine waste disposal.
- Hard white caulking at the base of the controller cabinet was sampled and found to be non-ACM.

Traffic Signal Int. No. 165-213, Route 140 at Route 159 – South Junction, Windsor Locks

- All span poles were galvanized (unpainted). Pedestrian crosswalk pedestals were galvanized (unpainted). The paint associated with the metal traffic lights themselves are presently presumed to be lead containing. No detectable amounts of lead in paint were identified on the yellow/black painted crosswalk hoods, yellow push buttons or painted metal controller cabinet.
- Since no detectable amounts of lead were present on the yellow/black painted crosswalk hoods, yellow push buttons or painted metal controller cabinet, any paint waste generated would be classified as non-hazardous, non-RCRA waste.
- Any paint waste generated from the metal traffic lights themselves should be tested for TCLP lead to determine waste disposal.
- Hard white caulking at the base of the controller cabinet was sampled and found to be non-ACM.

Potential universal waste (UW) and Connecticut Regulated Waste (CRW) items associated with the traffic lights themselves, crosswalk signal hoods/buttons and controller cabinets (i.e. Hg lamps/PCB ballasts and/or printed circuit boards) are also likely present at the Intersection sites.

Laboratory data, inspector notes & project description information are attached.

If you have any questions, please call TRC at (860) 298-9692.

Very Truly Yours,

TRC

Reviewed By:

Stephen R. Arienti, CHMM
Senior Project Manager – Program Manager

Erik R. Plimpton, P.E., CHMM, CMC
Vice President – Engineer in Charge

Lead Based Paint Measurement Summary Table

Device(s): Niton XLP301-A (Serial #24792) X Ray Fluorescence (XRF) Spectrum Analyzer
Site: ConnDOT - 10 District 1 Traffic Signal Intersections, Statewide
Project # : 222165.5709.0710
Date(s): 1/29/2018 & 1/30/2018
Inspectors: Zac Smith & Eric Gitberg

Number	Interior/ Exterior	Location	Int No.	Side	Structure	Feature	Material	Color	Condition	Reading (mg/cm^2)	Precision (mg/cm^2)	Depth Index	Duration (sec)	Date/Time
1			**Self Calibration**										80.1	1/29/2018 10:13
2			**0.0 Calibration**							0.0	0.0	1.8	2.0	1/29/2018 10:15
3			**0.7 Calibration**							0.7	0.1	1.0	3.4	1/29/2018 10:15
4			**1.6 Calibration**							1.4	0.1	1.0	5.1	1/29/2018 10:15
5						**VOID**								
6						**VOID**								
7	Exterior	Cheshire	intersection 25-225	nw	signal hood		Metal	Yellow	Intact	**0.1**	**0.2**	5.0	2.0	1/29/2018 10:18
8	Exterior	Cheshire	intersection 25-225	nw	signal hood		Metal	Yellow	Intact	**0.1**	**0.1**	3.4	2.8	1/29/2018 10:18
9						**VOID**								
10						**VOID**								
11						**VOID**								
12						**VOID**								
13	Exterior	Cheshire	intersection 25-225	ne	signal hood		Metal	Yellow	Intact	**0.9**	**0.1**	1.1	4.2	1/29/2018 10:22
14	Exterior	Cheshire	intersection 25-225	ne	signal hood		Metal	Yellow	Intact	**0.9**	**0.2**	1.1	2.6	1/29/2018 10:22
15	Exterior	Cheshire	intersection 25-225	ne	signal hood		Metal	Yellow	Intact	**0.9**	**0.1**	1.1	4.2	1/29/2018 10:23
16	Exterior	Cheshire	intersection 25-225	ne	push to cross		Metal	Yellow	Intact	0.0	0.0	1.5	3.7	1/29/2018 10:24
17	Exterior	Cheshire	intersection 25-225	nw	signal hood		Metal	Yellow	Intact	**0.1**	**0.0**	3.1	22.3	1/29/2018 10:28
18	Exterior	Cheshire	intersection 25-225	nw	signal hood		Metal	Yellow	Intact	**1.0**	**0.1**	1.1	20.7	1/29/2018 10:29
19						**VOID**								
20	Exterior	Cheshire	intersection 25-225	nw	signal hood		Metal	Black	Intact	**0.1**	**0.0**	3.0	21.2	1/29/2018 10:31
21	Exterior	Cheshire	intersection 25-225	sw	controller cabinet		Metal	Grey	Intact	0.0	0.0	1.0	2.8	1/29/2018 10:35
22	Exterior	Cheshire	intersection 25-225	ne	span pole		Metal	Grey	Intact	0.0	0.0	1.0	7.6	1/29/2018 10:37
23						**VOID**								
24	Exterior	Southington	intersection 131-233	ne	controller cabinet		Metal	Grey	Intact	0.0	0.0	1.9	4.2	1/29/2018 11:14
25	Exterior	Southington	intersection 131-233	ne	controller cabinet		Metal	Grey	Intact	0.0	0.0	2.5	3.7	1/29/2018 11:14
26	Exterior	Southington	intersection 131-233	ne	span pole		Metal	Grey	Intact	0.0	0.0	2.0	4.2	1/29/2018 11:15
27	Exterior	Southington	intersection 131-233	nw	span pole		Metal	Grey	Intact	0.0	0.0	1.0	2.6	1/29/2018 11:16
28	Exterior	Southington	intersection 131-233	se	span pole		Metal	Grey	Intact	0.0	0.0	1.0	1.7	1/29/2018 11:17
29	Exterior	Plainville	intersection 109-201	e	controller cabinet		Metal	Grey	Intact	0.0	0.0	1.0	3.4	1/29/2018 11:56
30	Exterior	Plainville	intersection 109-201	e	controller cabinet		Metal	Grey	Intact	0.0	0.0	1.0	2.5	1/29/2018 11:56
31	Exterior	New Britain	intersection 088-247	ne	controller cabinet		Metal	Grey	Intact	0.0	0.0	1.0	2.5	1/29/2018 12:23
32	Exterior	New Britain	intersection 088-247	ne	controller cabinet		Metal	Grey	Intact	0.0	0.0	1.0	3.1	1/29/2018 12:23
33	Exterior	New Britain	intersection 088-247	ne	signal hood		Metal	Yellow	Intact	0.0	0.0	1.9	6.8	1/29/2018 12:27
34	Exterior	New Britain	intersection 088-247	ne	signal hood		Metal	Yellow	Intact	**1.2**	**0.1**	1.1	5.4	1/29/2018 12:27
35	Exterior	New Britain	intersection 088-247	se	signal hood		Metal	Yellow	Intact	0.0	0.0	2.3	4.8	1/29/2018 12:28
36	Exterior	New Britain	intersection 088-279	sw	controller cabinet		Metal	Grey	Intact	0.0	0.0	1.1	2.5	1/29/2018 13:29
37	Exterior	New Britain	intersection 088-279	sw	controller cabinet		Metal	Grey	Intact	0.0	0.0	1.0	3.7	1/29/2018 13:29
38	Exterior	New Britain	intersection 088-279	se	span pole		Metal	Grey	Intact	0.0	0.0	1.0	2.8	1/29/2018 13:32
39	Exterior	New Britain	intersection 088-279	se	span pole		Metal	Grey	Intact	0.0	0.0	1.3	4.5	1/29/2018 13:32
40	Exterior	New Britain	intersection 088-279	se	push to cross sign		Metal	Green	Intact	**0.1**	**0.2**	4.8	2.5	1/29/2018 13:39

Lead paint includes paint found to contain **any detectable** amount of lead
by Atomic Absorption Spectrophotometry (AAS) or X-Ray Fluorescence (XRF).

Side A = Street side; Sides B,C,D follow clockwise

TRC

Lead Based Paint Measurement Summary Table

Device(s): Niton XLP301-A (Serial #24792) X Ray Fluorescence (XRF) Spectrum Analyzer
Site: ConnDOT - 10 District 1 Traffic Signal Intersections, Statewide
Project # : 222165.5709.0710
Date(s): 1/29/2018 & 1/30/2018
Inspectors: Zac Smith & Eric Gitberg

Number	Interior/ Exterior	Location	Int No.	Side	Structure	Feature	Material	Color	Condition	Reading (mg/cm^2)	Precision (mg/cm^2)	Depth Index	Duration (sec)	Date/Time
41	Exterior	New Britain	intersection 088-279	se	push to cross sign		Metal	Green	Intact	0.0	0.0	1.0	4.0	1/29/2018 13:40
42	Exterior	New Britain	intersection 088-279	se	traffic signal		Metal	Green	Intact	**0.1**	**0.0**	1.6	7.3	1/29/2018 13:42
43			**0.0 Calibration**							0.0	0.0	1.0	2.0	1/29/2018 14:44
44			**0.7 Calibration**							0.8	0.1	1.1	12.1	1/29/2018 14:45
45			**1.6 Calibration**							1.5	0.1	1.1	4.8	1/29/2018 14:45
46	Exterior	Meriden	intersection 079-210	ne	controller cabinet		Metal	Grey	Intact	0.0	0.0	1.0	2.3	1/29/2018 14:48
47	Exterior	Meriden	intersection 079-210	ne	controller cabinet		Metal	Grey	Intact	0.0	0.0	1.0	2.8	1/29/2018 14:48
						VOID								
49	Exterior	Meriden	intersection 079-210	ne	signal hood		Metal	Yellow	Intact	0.0	0.0	3.1	3.9	1/29/2018 14:49
50	Exterior	Meriden	intersection 079-210	ne	signal hood		Metal	Yellow	Intact	0.0	0.0	2.8	20.9	1/29/2018 14:52
51	Exterior	Rocky Hill	intersection 118-209	ne	signal hood		Metal	Yellow	Intact	0.0	0.0	2.3	8.7	1/29/2018 15:32
52	Exterior	Rocky Hill	intersection 118-209	ne	signal hood		Metal	Yellow	Intact	**0.6**	**0.2**	1.0	2.0	1/29/2018 15:33
53	Exterior	Rocky Hill	intersection 118-209	sw	controller cabinet		Metal	Grey	Intact	0.0	0.0	1.0	2.3	1/29/2018 15:44
54	Exterior	Rocky Hill	intersection 118-209	sw	controller cabinet		Metal	Grey	Intact	0.0	0.0	1.1	2.8	1/29/2018 15:44
55			**0.0 Calibration**					,		0.0	0.0	1.0	2.0	1/29/2018 15:48
56			**0.7 Calibration**					,		0.7	0.2	1.1	3.1	1/29/2018 15:48
57			**1.6 Calibration**					,		1.6	0.1	1.2	6.5	1/29/2018 15:48
58			**Self Calibration**										78.3	1/30/2018 11:11
59			**0.0 Calibration**							0.0	0.0	1.8	2.5	1/30/2018 11:13
60			**0.7 Calibration**							0.6	0.2	1.0	1.7	1/30/2018 11:14
61			**0.3 Calibration**							0.3	0.1	1.0	4.3	1/30/2018 11:14
62	Exterior	Wethersfield	int 159-230		span pole		Metal	Grey	Defective	0.0	0.0	1.0	2.3	1/30/2018 11:17
63	Exterior	Wethersfield	int 159-230		span pole		Metal	Grey	Defective	0.0	0.0	1.2	2.5	1/30/2018 11:18
64	Exterior	Wethersfield	int 159-230		ctrl box		Metal	Grey	Defective	0.0	0.0	1.0	3.1	1/30/2018 11:19
65	Exterior	Wethersfield	int 159-230		ctrl box		Metal	Grey	Defective	0.0	0.0	1.0	3.4	1/30/2018 11:19
66	Exterior	East Hartford	int 42-251		ctrl box		Metal	Grey	Intact	0.0	0.0	1.0	3.1	1/30/2018 11:59
67	Exterior	East Hartford	int 42-251		ctrl box		Metal	Grey	Intact	0.0	0.0	1.0	4.5	1/30/2018 12:01
68	Exterior	East Hartford	int 42-251		span pole		Metal	Grey W Red	Intact	0.0	0.0	2.2	8.5	1/30/2018 12:02
69	Exterior	East Hartford	int 42-251		span pole		Metal	Grey W Red	Intact	0.0	0.0	1.0	1.4	1/30/2018 12:02
70	Exterior	East Hartford	int 42-251		light		Metal	Yellow	Intact	**1.1**	**0.1**	1.2	3.9	1/30/2018 12:22
71	Exterior	East Hartford	int 42-251		light		Metal	Yellow	Intact	**1.1**	**0.1**	1.2	7.9	1/30/2018 12:23
72	Exterior	East Hartford	int 42-251		light		Metal	Yellow	Intact	**1.1**	**0.1**	1.0	6.5	1/30/2018 12:23
73	Exterior	Bloomfield	011-209		span poles		Metal	Grey W Red	Intact	**0.1**	**0.0**	1.9	8.2	1/30/2018 13:07
74	Exterior	Bloomfield	011-209		span poles		Metal	Grey W Red	Intact	0.0	0.0	1.3	5.4	1/30/2018 13:07
75	Exterior	Windsor Locks	int 165-213		ctrl box		Metal	Grey	Intact	0.0	0.0	1.0	2.8	1/30/2018 13:42
76	Exterior	Windsor Locks	int 165-213		ctrl box		Metal	Grey	Intact	0.0	0.0	1.0	3.9	1/30/2018 13:43
77	Exterior	Windsor Locks	int 165-213		light hood		Metal	Yellow	Intact	0.0	0.0	1.3	3.9	1/30/2018 13:45
78						**VOID**								
79	Exterior	Windsor Locks	int 165-213		light hood		Metal	Yellow	Intact	0.0	0.1	1.0	0.3	1/30/2018 13:46
80	Exterior	Windsor Locks	int 165-213		light hood		Metal	Yellow	Intact	0.0	0.0	1.0	1.4	1/30/2018 13:46

Lead paint includes paint found to contain **any detectable** amount of lead
by Atomic Absorption Spectrophotometry (AAS) or X-Ray Fluorescence (XRF).

Side A = Street side; Sides B,C,D follow clockwise

Lead Based Paint Measurement Summary Table

Device(s): Niton XLP301-A (Serial #24792) X Ray Fluorescence (XRF) Spectrum Analyzer
Site: ConnDOT - 10 District 1 Traffic Signal Intersections, Statewide
Project # : 222165.5709.0710
Date(s): 1/29/2018 & 1/30/2018
Inspectors: Zac Smith & Eric Gitberg

Number	Interior/ Exterior	Location	Int No.	Side	Structure	Feature	Material	Color	Condition	Reading (mg/cm^2)	Precision (mg/cm^2)	Depth Index	Duration (sec)	Date/Time
81	Exterior	Windsor Locks	int 165-213		light hood		Metal	Black	Intact	0.0	0.0	3.4	10.4	1/30/2018 13:47
82	Exterior	Windsor Locks	int 165-213		light hood		Metal	Black	Intact	0.0	0.0	1.2	1.7	1/30/2018 13:47
83			**0.0 Calibration**							0.0	0.0	1.0	3.7	1/30/2018 14:11
84			**0.7 Calibration**							0.7	0.1	1.0	3.7	1/30/2018 14:12
85			**0.3 Calibration**							0.3	0.1	1.1	5.9	1/30/2018 14:12

Lead paint includes paint found to contain **any detectable** amount of lead
by Atomic Absorption Spectrophotometry (AAS) or X-Ray Fluorescence (XRF).

Side A = Street side; Sides B,C,D follow clockwise

80 Lupes Drive
Stratford, CT 06615

COMPLETE ENVIRONMENTAL TESTING, INC.

Tel: (203) 377-9984
Fax: (203) 377-9952
e-mail: cet1@cetlabs.com

Client: Mr. Erik Plimpton
TRC Environmental Consultants
21 Griffin Rd., North
Windsor, CT 06095

Analytical Report

CET# 8010766

Report Date:February 02, 2018
Project: DOT, Intersections-Signals
Project Number: 222165.5709.0710

Connecticut Laboratory Certificate: PH 0116
Massachusetts laboratory Certificate: M-CT903

New York NELAP Accreditation: 11982
Rhode Island Certification: 199

SAMPLE SUMMARY

The sample(s) were received at 22.0°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
01 Intersection 011-209 Span Pole	8010766-01	Paint Chip	1/30/2018 12:10	01/31/2018

Analyte: Total Lead [EPA 6010C] **Analyst: SS**

Matrix: Paint Chip

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8010766-01	01 Intersection 011-209 Span Pole	**0.24**	0.10	%	1	B8B0130	02/01/2018	02/01/2018 17:58	

CET # : 8010766
Project: DOT, Intersections-Signals
Project Number: 222165.5709.0710

All questions related to this report should be directed to David Ditta, Timothy Fusco, or Robert Blake at 203-377-9984.

Sincerely,

David Ditta
Laboratory Director

This technical report was reviewed by Timothy Fusco

Project Manager

Report Comments:

Sample Result Flags:
E- The result is estimated, above the calibration range.
H- The surrogate recovery is above the control limits.
L- The surrogate recovery is below the control limits.
B- The compound was detected in the laboratory blank.
P- The Relative Percent Difference (RPD) of dual column analyses exceeds 40%.
D- The RPD between the sample and the sample duplicate is high. Sample Homogeneity may be a problem.
+- The Surrogate was diluted out.
*C1- The Continuing Calibration did not meet method specifications and was biased low for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased low.
*C2- The Continuing Calibration did not meet method specifications and was biased high for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased high.
*F1- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the low side.
*F2- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the high side.
1- The Analyte exceeds %RSD limits for the Initial Calibration. This is a non-directional bias.

All results met standard operating procedures unless indicated by a data qualifier next to a sample result, or a narration in the QC report.

For Percent Solids, if any of the following prep methods (3050B, 3540C, 3545A, 3550C, 5035 and 9013A) were used for samples pertaining to this report, the percent solids procedure is within that prep method.

Complete Environmental Testing is only responsible for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt.

ND is None Detected at or above the specified reporting limit
RL is the Reporting Limit.
All analyses were performed in house unless a Reference Laboratory is listed.
Samples will be disposed of 30 days after the report date.

CET # : 8010766
Project: DOT, Intersections-Signals
Project Number: 222165.5709.0710

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 6010C in Solid	
Lead	CT

Complete Environmental Testing operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Public Health	PH0116	09/30/2018

011 - 209

8010766

TRC
21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

Edition: November 2013
Supersede Previous Edition

TCLP CHAIN OF CUSTODY

LAB ID #.

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
222165.5709.0710	DOT Intersections - Signals		24hr ☐ 48hr ☐ 3day ☒ 5day ☐
			24hr ☐ 48hr ☐ 3day ☒ 5day ☐

INSPECTOR: (SIGNATURE) [signature] (PRINTED) Zachary Smith

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	RCRA Pb	RCRA Pb, AS, CR, CD	8 RCRA Metals	TCLP Pb	SPLP Pb	Total Pb	MATERIAL
01	1/31/18	1210	X		Intersection 011-209 Span Pole						X	grey paint with red undercoat
02	↓	1212	X		" "				X			

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
[signature]	1/31/18	[signature] 22°	[signature]	1/31/18	[signature]
(Printed) Zachary Smith	Time: 1200	(Printed) GREG GILMAN	(Printed) GREG GILMAN	Time: 1525	(Printed) Courtney Eplington

If Total Pb is positive then analyze TCLP Send results to EPlington@TRCsolutions.com

80 Lupes Drive
Stratford, CT 06615

COMPLETE ENVIRONMENTAL TESTING, INC.

Tel: (203) 377-9984
Fax: (203) 377-9952
e-mail: cetl@cetlabs.com

Client: Mr. Erik Plimpton
TRC Environmental Consultants
21 Griffin Rd., North
Windsor, CT 06095

Analytical Report

CET# 8020044

Report Date:February 07, 2018
Project: DOT, Intersections-Signals
Project Number: 222165.5709.0710

Connecticut Laboratory Certificate: PH 0116
Massachusetts laboratory Certificate: M-CT903

New York NELAP Accreditation: 11982
Rhode Island Certification: 199

SAMPLE SUMMARY

The sample(s) were received at 22.0°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
02 Intersection 011-209 Span Pole	8020044-01	Paint Chip	1/30/2018 12:12	01/31/2018

Analyte: TCLP Lead [EPA 6020A] **Analyst: CED**

Prep: EPA 3005A-1311 **Matrix: Extract**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8020044-01	02 Intersection 011-209 Span Pole	**0.89**	0.013	mg/L	1	B8B0613	02/06/2018	02/06/2018 17:17	

All questions related to this report should be directed to David Ditta, Timothy Fusco, or Robert Blake at 203-377-9984.

Sincerely,

David Ditta
Laboratory Director

This technical report was reviewed by Timothy Fusco

Project Manager

Report Comments:

Sample Result Flags:
E- The result is estimated, above the calibration range.
H- The surrogate recovery is above the control limits.
L- The surrogate recovery is below the control limits.
B- The compound was detected in the laboratory blank.
P- The Relative Percent Difference (RPD) of dual column analyses exceeds 40%.
D- The RPD between the sample and the sample duplicate is high. Sample Homogeneity may be a problem.
+- The Surrogate was diluted out.
*C1- The Continuing Calibration did not meet method specifications and was biased low for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased low.
*C2- The Continuing Calibration did not meet method specifications and was biased high for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased high.
*F1- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the low side.
*F2- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the high side.
I- The Analyte exceeds %RSD limits for the Initial Calibration. This is a non-directional bias.

All results met standard operating procedures unless indicated by a data qualifier next to a sample result, or a narration in the QC report.

For Percent Solids, if any of the following prep methods (3050B, 3540C, 3545A, 3550C, 5035 and 9013A) were used for samples pertaining to this report, the percent solids procedure is within that prep method.

Complete Environmental Testing is only responsible for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt.

ND is None Detected at or above the specified reporting limit
RL is the Reporting Limit.
All analyses were performed in house unless a Reference Laboratory is listed.
Samples will be disposed of 30 days after the report date.

CET # : 8020044
Project: DOT, Intersections-Signals
Project Number: 222165.5709.0710

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 6020A in Water	
Lead	NY,CT

Complete Environmental Testing operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Public Health	PH0116	09/30/2018
NY	New York Certification (NELAC)	11982	04/01/2018

8020044

011 - 209

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21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

Edition: November 2013
Supersede Previous Edition

TCLP CHAIN OF CUSTODY

LAB ID #.

PROJECT NUMBER	PROJECT NAME	TURNAROUND TIME
222165.5709.0710	DOT Intersections - Signals	24hr 48hr X 3day 5day
		24hr 48hr X 3day 5day

INSPECTOR: (SIGNATURE) (PRINTED) Zachary Smith

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	RCRA Pb	RCRA Pb, AS, CR, CD	8 RCRA Metals	TCLP Pb	SPLP Pb	Total Pb	MATERIAL
01	1/31/18	1210	X		Intersection 011-209 Span Pole						X	grey paint with red undercoat
02	↓	1212	X		"				X			

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	1/31/18	22°		1/31/18	
(Printed) Zachary Smith	Time: 1200	(Printed) GREG GILMAN	(Printed) GREG GILMAN	Time: 1525	(Printed)

If Total Pb is positive then analyze TCLP Send results to EPlimpton@TRCsolutions.com

80 Lupes Drive
Stratford, CT 06615

COMPLETE ENVIRONMENTAL TESTING, INC.

Tel: (203) 377-9984
Fax: (203) 377-9952
e-mail: cet1@cetlabs.com

Client: Mr. Erik Plimpton
TRC Environmental Consultants
21 Griffin Rd., North
Windsor, CT 06095

Analytical Report

CET# 8010767

Report Date:February 05, 2018
Project: DOT, Intersections-Signals
Project Number: 222165.5709.0710

Connecticut Laboratory Certificate: PH 0116
Massachusetts laboratory Certificate: M-CT903

NELAP ACCREDITED TNI LABORATORY

New York NELAP Accreditation: 11982
Rhode Island Certification: 199

CET # : 8010767
Project: DOT, Intersections-Signals
Project Number: 222165.5709.0710

SAMPLE SUMMARY

The sample(s) were received at 22.0°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
01 Intersecion 025-225 Controller Box	8010767-01	Paint Chip	1/29/2018 9:36	01/31/2018
03 Intersecion 025-225 Span Pole	8010767-02	Paint Chip	1/29/2018 9:41	01/31/2018
05 Intersecion 025-225 Traffic Signal	8010767-03	Paint Chip	1/29/2018 9:30	01/31/2018

Analyte: Total Lead [EPA 6010C] **Analyst: SS**

Matrix: Paint Chip

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8010767-01	01 Intersecion 025-225 Controller Box	ND	0.10	%	1	B8B0130	02/01/2018	02/01/2018 18:10	
8010767-02	03 Intersecion 025-225 Span Pole	ND	0.10	%	1	B8B0130	02/01/2018	02/01/2018 18:15	

Analyte: TCLP Lead [EPA 6020A] **Analyst: CED**

Prep: EPA 3005A-1311 **Matrix: Extract**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8010767-03	05 Intersecion 025-225 Traffic Signal	**4.3**	0.013	mg/L	1	B8B0216	02/02/2018	02/02/2018 16:25	

CET # : 8010767
Project: DOT, Intersections-Signals
Project Number: 222165.5709.0710

All questions related to this report should be directed to David Ditta, Timothy Fusco, or Robert Blake at 203-377-9984.

Sincerely,

David Ditta
Laboratory Director

This technical report was reviewed by Robert Blake

R Blake J.

Project Manager

Report Comments:

Sample Result Flags:
E- The result is estimated, above the calibration range.
H- The surrogate recovery is above the control limits.
L- The surrogate recovery is below the control limits.
B- The compound was detected in the laboratory blank.
P- The Relative Percent Difference (RPD) of dual column analyses exceeds 40%.
D- The RPD between the sample and the sample duplicate is high. Sample Homogeneity may be a problem.
+- The Surrogate was diluted out.
*C1- The Continuing Calibration did not meet method specifications and was biased low for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased low.
*C2- The Continuing Calibration did not meet method specifications and was biased high for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased high.
*F1- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the low side.
*F2- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the high side.
I- The Analyte exceeds %RSD limits for the Initial Calibration. This is a non-directional bias.

All results met standard operating procedures unless indicated by a data qualifier next to a sample result, or a narration in the QC report.

For Percent Solids, if any of the following prep methods (3050B, 3540C, 3545A, 3550C, 5035 and 9013A) were used for samples pertaining to this report, the percent solids procedure is within that prep method.

Complete Environmental Testing is only responsible for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt.

ND is None Detected at or above the specified reporting limit
RL is the Reporting Limit.
All analyses were performed in house unless a Reference Laboratory is listed.
Samples will be disposed of 30 days after the report date.

CET # : 8010767
Project: DOT, Intersections-Signals
Project Number: 222165.5709.0710

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 6010C in Solid	
Lead	CT
EPA 6020A in Water	
Lead	NY,CT

Complete Environmental Testing operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Public Health	PH0116	09/30/2018
NY	New York Certification (NELAC)	11982	04/01/2018

025 -225

8010767

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21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

Edition: November 2013
Supersede Previous Edition

TCLP CHAIN OF CUSTODY

LAB ID #.

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
222165.5709.0710	DOT Intersections - Signals		24hr 48hr X 3day 5day
			24hr 48hr X 3day 5day

INSPECTOR: (SIGNATURE) (PRINTED) Zachary Smith

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	RCRA Pb	RCRA Pb, AS, CR, CD	8 RCRA Metals	TCLP Pb	SPLP Pb	Total Pb	MATERIAL
01	1/29/18	0936	X		Intersection 025-225 Controller box						X	grey paint
02		0935	X		" "				X			" "
03		0944	X		Intersection 025-225 Span Pole						X	grey paint with red undercoat
04		0940	X		" "				X			" "
05		0930	X		Intersection 025-225 traffic Signal				X			yellow paint

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	1/31/18			1/31/18	
(Printed) Zachary Smith	Time: 1200	(Printed) GARG GILDAY	(Printed) GARG GILDAY	Time: 1525	(Printed) Courtney Cattarulla

If Total Pb is positive then analyze TCLP Send results to EPlimpton@TRCSolutions.com

80 Lupes Drive
Stratford, CT 06615

COMPLETE ENVIRONMENTAL TESTING, INC.

Tel: (203) 377-9984
Fax: (203) 377-9952
e-mail: cet1@cetlabs.com

Client: Mr. Erik Plimpton
TRC Environmental Consultants
21 Griffin Rd., North
Windsor, CT 06095

Analytical Report

CET# 8010764

Report Date:February 05, 2018
Project: DOT, Intersections-Signals
Project Number: 222165.5709.0710

Connecticut Laboratory Certificate: PH 0116
Massachusetts laboratory Certificate: M-CT903

NELAP ACCREDITED TNI LABORATORY

New York NELAP Accreditation: 11982
Rhode Island Certification: 199

CET # : 8010764
Project: DOT, Intersections-Signals
Project Number: 222165.5709.0710

SAMPLE SUMMARY

The sample(s) were received at 22.0°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
01 Intersection 042-251 Span Pole	8010764-01	Paint Chip	1/30/2018 11:41	01/31/2018
03 Intersection 042-251 Controller Box	8010764-02	Paint Chip	1/30/2018 11:31	01/31/2018
05 Intersection 042-251 Traffic Signal	8010764-03	Paint Chip	1/30/2018 11:30	01/31/2018

Analyte: Total Lead [EPA 6010C] **Analyst: SS**

Matrix: Paint Chip

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8010764-01	01 Intersection 042-251 Span Pole	ND	0.10	%	1	B8B0130	02/01/2018	02/01/2018 17:49	
8010764-02	03 Intersection 042-251 Controller Box	ND	0.10	%	1	B8B0130	02/01/2018	02/01/2018 17:53	

Analyte: TCLP Lead [EPA 6020A] **Analyst: CED**

Prep: EPA 3005A-1311 **Matrix: Extract**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8010764-03	05 Intersection 042-251 Traffic Signal	**4.4**	0.013	mg/L	1	B8B0216	02/02/2018	02/02/2018 16:20	

CET # : 8010764
Project: DOT, Intersections-Signals
Project Number: 222165.5709.0710

All questions related to this report should be directed to David Ditta, Timothy Fusco, or Robert Blake at 203-377-9984.

Sincerely,

David Ditta
Laboratory Director

This technical report was reviewed by Robert Blake

R Blake J.

Project Manager

Report Comments:

Sample Result Flags:
E- The result is estimated, above the calibration range.
H- The surrogate recovery is above the control limits.
L- The surrogate recovery is below the control limits.
B- The compound was detected in the laboratory blank.
P- The Relative Percent Difference (RPD) of dual column analyses exceeds 40%.
D- The RPD between the sample and the sample duplicate is high. Sample Homogeneity may be a problem.
+- The Surrogate was diluted out.
*C1- The Continuing Calibration did not meet method specifications and was biased low for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased low.
*C2- The Continuing Calibration did not meet method specifications and was biased high for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased high.
*F1- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the low side.
*F2- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the high side.
1- The Analyte exceeds %RSD limits for the Initial Calibration. This is a non-directional bias.

All results met standard operating procedures unless indicated by a data qualifier next to a sample result, or a narration in the QC report.

For Percent Solids, if any of the following prep methods (3050B, 3540C, 3545A, 3550C, 5035 and 9013A) were used for samples pertaining to this report, the percent solids procedure is within that prep method.

Complete Environmental Testing is only responsible for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt.

ND is None Detected at or above the specified reporting limit
RL is the Reporting Limit.
All analyses were performed in house unless a Reference Laboratory is listed.
Samples will be disposed of 30 days after the report date.

CET # : 8010764
Project: DOT, Intersections-Signals
Project Number: 222165.5709.0710

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 6010C in Solid	
Lead	CT
EPA 6020A in Water	
Lead	NY,CT

Complete Environmental Testing operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Public Health	PH0116	09/30/2018
NY	New York Certification (NELAC)	11982	04/01/2018

042-251

8010764

TRC

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

Edition: November 2013
Supersede Previous Edition

TCLP CHAIN OF CUSTODY

LAB ID #.

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
222165.5709.0710	DOT Intersections - Signals		24hr ☐ 48hr ☒ 3day ☐ 5day
			24hr ☐ 48hr ☒ 3day ☐ 5day

INSPECTOR: (SIGNATURE) (PRINTED) Zachary Smith

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	RCRA Pb	RCRA Pb, AS, CR, CD	8 RCRA Metals	TCLP Pb	SPLP Pb	Total Pb	MATERIAL
01	1/30/18	1141	X		Intersection 042-251 Span pole						X	grey paint with red undercoat
02	↓	1140	X						X	X		" "
03	↓	1131	X		Intersection 042-251 Controller Box						X	grey paint
04	↓	1130	X						X			" "
05	↓	1130	X		Intersection 042-251 traffic Signal				X			yellow paint
												"

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	1/31/18			1/31/18	
(Printed) Zachary Smith	Time: 1200	(Printed) GREG GILBERT	(Printed) GREG GILBERT	Time: 1525	(Printed) COURTNEY CATTANEO

If Total Pb is positive then analyze TCLP Send results to EPlimpton@TRCSolutions.com

80 Lupes Drive
Stratford, CT 06615

COMPLETE ENVIRONMENTAL TESTING, INC.

Tel: (203) 377-9984
Fax: (203) 377-9952
e-mail: cet1@cetlabs.com

Client: Mr. Erik Plimpton
TRC Environmental Consultants
21 Griffin Rd., North
Windsor, CT 06095

Analytical Report

CET# 8010769

Report Date:February 02, 2018
Project: DOT, Intersections-Signals
Project Number: 222165.5709.0710

Connecticut Laboratory Certificate: PH 0116
Massachusetts laboratory Certificate: M-CT903

New York NELAP Accreditation: 11982
Rhode Island Certification: 199

SAMPLE SUMMARY

The sample(s) were received at 22.0°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
01 Intersection 088-247 Traffic Signal	8010769-01	Paint Chip	1/29/2018 11:25	01/31/2018
03 Intersection 088-247 Controller Box	8010769-02	Paint Chip	1/29/2018 11:30	01/31/2018

Analyte: Total Lead [EPA 6010C] **Analyst: SS**

Matrix: Paint Chip

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8010769-01	01 Intersection 088-247 Traffic Signal	ND	0.10	%	1	B8B0130	02/01/2018	02/01/2018 18:36	
8010769-02	03 Intersection 088-247 Controller Box	ND	0.10	%	1	B8B0130	02/01/2018	02/01/2018 18:46	

All questions related to this report should be directed to David Ditta, Timothy Fusco, or Robert Blake at 203-377-9984.

Sincerely,

David Ditta
Laboratory Director

This technical report was reviewed by Timothy Fusco

Project Manager

Report Comments:

Sample Result Flags:
E- The result is estimated, above the calibration range.
H- The surrogate recovery is above the control limits.
L- The surrogate recovery is below the control limits.
B- The compound was detected in the laboratory blank.
P- The Relative Percent Difference (RPD) of dual column analyses exceeds 40%.
D- The RPD between the sample and the sample duplicate is high. Sample Homogeneity may be a problem.
+- The Surrogate was diluted out.
*C1- The Continuing Calibration did not meet method specifications and was biased low for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased low.
*C2- The Continuing Calibration did not meet method specifications and was biased high for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased high.
*F1- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the low side.
*F2- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the high side.
I- The Analyte exceeds %RSD limits for the Initial Calibration. This is a non-directional bias.

All results met standard operating procedures unless indicated by a data qualifier next to a sample result, or a narration in the QC report.

For Percent Solids, if any of the following prep methods (3050B, 3540C, 3545A, 3550C, 5035 and 9013A) were used for samples pertaining to this report, the percent solids procedure is within that prep method.

Complete Environmental Testing is only responsible for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt.

ND is None Detected at or above the specified reporting limit
RL is the Reporting Limit.
All analyses were performed in house unless a Reference Laboratory is listed.
Samples will be disposed of 30 days after the report date.

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 6010C in Solid	
Lead	CT

Complete Environmental Testing operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Public Health	PH0116	09/30/2018

088 - 247

8010769

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21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

Edition: November 2013
Supersede Previous Edition

TCLP CHAIN OF CUSTODY

LAB ID #.

PROJECT NUMBER	PROJECT NAME	TURNAROUND TIME
222145.5709.0710	DOT Intersections - Signals	24hr 48hr X 3day 5day
		24hr 48hr X 3day 5day

INSPECTOR: (SIGNATURE) (PRINTED) Zachary Smith

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	RCRA Pb	RCRA Pb, AS, CR, CD	8 RCRA Metals	TCLP Pb	SPLP Pb	Total Pb	MATERIAL
01	1/29/18	1125	X		Intersection 088-247 Traffic Signal						X	Yellow Paint
02	↓	1126	X		" "				X			" "
03		1130	X		Intersection 088-247 Controller Box						X	Grey Paint
04	↓	1132	X		" "				X			" "

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	1/31/18			1/31/18	
(Printed) Zachary Smith	Time: 1200	(Printed) GREG GILMAY	(Printed) GREG GILMAY	Time: 1525	(Printed) Courtney Cattanach

If Total Pb is positive then analyze TCLP Send results to EPlimpton@TRCsolutions.com

80 Lupes Drive
Stratford, CT 06615

COMPLETE ENVIRONMENTAL TESTING, INC.

Tel: (203) 377-9984
Fax: (203) 377-9952
e-mail: cet1@cetlabs.com

Client: Mr. Erik Plimpton
TRC Environmental Consultants
21 Griffin Rd., North
Windsor, CT 06095

Analytical Report

CET# 8010768

Report Date:February 02, 2018
Project: DOT, Intersections-Signals
Project Number: 222165.5709.0710

Connecticut Laboratory Certificate: PH 0116
Massachusetts laboratory Certificate: M-CT903

New York NELAP Accreditation: 11982
Rhode Island Certification: 199

SAMPLE SUMMARY

The sample(s) were received at 22.0°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
01 Intersection 088-279 Controller Box	8010768-01	Paint Chip	1/29/2018 13:15	01/31/2018
03 Intersection 088-279 Span Pole	8010768-02	Paint Chip	1/29/2018 13:10	01/31/2018
05 Intersection 088-279 Traffic Signal	8010768-03	Paint Chip	1/29/2018 13:05	01/31/2018
07 Intersection 088-279 Traffic Signal	8010768-04	Paint Chip	1/29/2018 13:01	01/31/2018

Analyte: Total Lead [EPA 6010C]

Analyst: SS

Matrix: Paint Chip

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8010768-01	01 Intersection 088-279 Controller Box	ND	0.10	%	1	B8B0130	02/01/2018	02/01/2018 18:19	
8010768-02	03 Intersection 088-279 Span Pole	ND	0.10	%	1	B8B0130	02/01/2018	02/01/2018 18:23	
8010768-03	05 Intersection 088-279 Traffic Signal	ND	0.10	%	1	B8B0130	02/01/2018	02/01/2018 18:27	
8010768-04	07 Intersection 088-279 Traffic Signal	**0.11**	0.10	%	1	B8B0130	02/01/2018	02/01/2018 18:32	

CET # : 8010768
Project: DOT, Intersections-Signals
Project Number: 222165.5709.0710

All questions related to this report should be directed to David Ditta, Timothy Fusco, or Robert Blake at 203-377-9984.

Sincerely,

David Ditta
Laboratory Director

This technical report was reviewed by Timothy Fusco

Project Manager

Report Comments:

Sample Result Flags:
E- The result is estimated, above the calibration range.
H- The surrogate recovery is above the control limits.
L- The surrogate recovery is below the control limits.
B- The compound was detected in the laboratory blank.
P- The Relative Percent Difference (RPD) of dual column analyses exceeds 40%.
D- The RPD between the sample and the sample duplicate is high. Sample Homogeneity may be a problem.
+- The Surrogate was diluted out.
*C1- The Continuing Calibration did not meet method specifications and was biased low for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased low.
*C2- The Continuing Calibration did not meet method specifications and was biased high for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased high.
*F1- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the low side.
*F2- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the high side.
I- The Analyte exceeds %RSD limits for the Initial Calibration. This is a non-directional bias.

All results met standard operating procedures unless indicated by a data qualifier next to a sample result, or a narration in the QC report.

For Percent Solids, if any of the following prep methods (3050B, 3540C, 3545A, 3550C, 5035 and 9013A) were used for samples pertaining to this report, the percent solids procedure is within that prep method.

Complete Environmental Testing is only responsible for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt.

ND is None Detected at or above the specified reporting limit
RL is the Reporting Limit.
All analyses were performed in house unless a Reference Laboratory is listed.
Samples will be disposed of 30 days after the report date.

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 6010C in Solid	
Lead	CT

Complete Environmental Testing operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Public Health	PH0116	09/30/2018

8010768

TRC
21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

Edition: November 2013
Supersede Previous Edition

TCLP CHAIN OF CUSTODY

LAB ID #.

PROJECT NUMBER	PROJECT NAME	TURNAROUND TIME
222165.5709.0710	DOT Intersections – Signals	24hr 48hr X 3day 5day
		24hr 48hr X 3day 5day

INSPECTOR: (SIGNATURE)	(PRINTED)
	Zachary Smith

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	RCRA Pb	RCRA Pb, AS, CR, CD	8 RCRA Metals	TCLP Pb	SPLP Pb	Total Pb	MATERIAL
01	1/29/18	1315	X		Intersection 088-279 Controller box						X	Grey Paint
02	1/29/18	1316	X		" "				X			" "
03	1/29/18	1310	X		Intersection 088-279 Span Pole						X	Grey paint with red undercoat
04	1/29/18	1312	X		" "				X			" "
05	1/29/18	1305	X		Intersection 088-279 traffic signal						X	Yellow Paint
06	1/29/18	1303	X		" "				X			" "
07	1/29/18	1301	X		Intersection 088-279 traffic Signal						X	Black Paint
08	1/29/18	1300	X		" "				X			" "

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	1/31/18			1/31/18	
(Printed) Zachary Smith	Time: 1200	(Printed) GREG GILDAY	(Printed) GREG GILDAY	Time: 1525	(Printed) Courtney Cattanach

If total Pb is positive then analyze TCLP Send results to EPlimpton@TRCSolutions.com

80 Lupes Drive
Stratford, CT 06615

COMPLETE ENVIRONMENTAL TESTING, INC.

Tel: (203) 377-9984
Fax: (203) 377-9952
e-mail: cetl@cetlabs.com

Client: Mr. Erik Plimpton
TRC Environmental Consultants
21 Griffin Rd., North
Windsor, CT 06095

Analytical Report

CET# 8020054

Report Date:February 07, 2018
Project: DOT, Intersections-Signals
Project Number: 222165.5709.0710

Connecticut Laboratory Certificate: PH 0116
Massachusetts laboratory Certificate: M-CT903

NELAP ACCREDITED TNI LABORATORY

New York NELAP Accreditation: 11982
Rhode Island Certification: 199

SAMPLE SUMMARY

The sample(s) were received at 22.0°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
08 Intersection 088-279 Traffic Signal	8020054-01	Paint Chip	1/29/2018 13:00	01/31/2018

Analyte: TCLP Lead [EPA 6020A] **Analyst: CED**

Prep: EPA 3005A-1311 **Matrix: Extract**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8020054-01	08 Intersection 088-279 Traffic Signal	**0.78**	0.013	mg/L	1	B8B0613	02/06/2018	02/06/2018 17:22	

All questions related to this report should be directed to David Ditta, Timothy Fusco, or Robert Blake at 203-377-9984.

Sincerely,

David Ditta
Laboratory Director

This technical report was reviewed by Timothy Fusco

Project Manager

Report Comments:

Sample Result Flags:
E- The result is estimated, above the calibration range.
H- The surrogate recovery is above the control limits.
L- The surrogate recovery is below the control limits.
B- The compound was detected in the laboratory blank.
P- The Relative Percent Difference (RPD) of dual column analyses exceeds 40%.
D- The RPD between the sample and the sample duplicate is high. Sample Homogeneity may be a problem.
+- The Surrogate was diluted out.
*C1- The Continuing Calibration did not meet method specifications and was biased low for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased low.
*C2- The Continuing Calibration did not meet method specifications and was biased high for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased high.
*F1- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the low side.
*F2- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the high side.
I- The Analyte exceeds %RSD limits for the Initial Calibration. This is a non-directional bias.

All results met standard operating procedures unless indicated by a data qualifier next to a sample result, or a narration in the QC report.

For Percent Solids, if any of the following prep methods (3050B, 3540C, 3545A, 3550C, 5035 and 9013A) were used for samples pertaining to this report, the percent solids procedure is within that prep method.

Complete Environmental Testing is only responsible for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt.

ND is None Detected at or above the specified reporting limit
RL is the Reporting Limit.
All analyses were performed in house unless a Reference Laboratory is listed.
Samples will be disposed of 30 days after the report date.

CET # : 8020054
Project: DOT, Intersections-Signals
Project Number: 222165.5709.0710

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 6020A in Water	
Lead	NY,CT

Complete Environmental Testing operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Public Health	PH0116	09/30/2018
NY	New York Certification (NELAC)	11982	04/01/2018

8020054

TRC
21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

Edition: November 2013
Supersede Previous Edition

TCLP CHAIN OF CUSTODY

LAB ID #.

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
222165.5709.0710	DOT Intersections – Signals		24hr / 48hr X / 3day / 5day 24hr / 48hr X / 3day / 5day

INSPECTOR: (SIGNATURE) (PRINTED) Zachary Smith

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	RCRA Pb	RCRA Pb, AS, CR, CD	8 RCRA Metals	TCLP Pb	SPLP Pb	Total Pb	MATERIAL
01	1/29/18	1315	X		Intersection 088-279 Controller box						X	Grey Paint
02	1/29/18	1316	X		"				X			" "
03	1/29/18	1310	X		Intersection 088-279 Span Pole						X	Grey paint with red undercoat
04	1/29/18	1312	X		" "				X			"
05	1/29/18	1305	X		Intersection 088-279 traffic signal						X	Yellow Paint
06	1/29/18	1303	X		" "				X			" "
07	1/29/18	1301	X		Intersection 088-279 traffic Signal						X	Black Paint
08	1/29/18	1300	X		" "				X			" "

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	1/31/18	22°		1/31/18	
(Printed) Zachary Smith	Time: 1200	(Printed) GREG GILDAY	(Printed) GREG GILDAY	Time: 1525	(Printed) COURTNEY CATTANEO

If total Pb is positive then analyze TCLP Send results to EPlimpton@TRCSolutions.com

80 Lupes Drive
Stratford, CT 06615

Tel: (203) 377-9984
Fax: (203) 377-9952
e-mail: cet1@cetlabs.com

COMPLETE ENVIRONMENTAL TESTING, INC.

Client: Mr. Erik Plimpton
TRC Environmental Consultants
21 Griffin Rd., North
Windsor, CT 06095

Analytical Report

CET# 8010771

Report Date:February 02, 2018
Project: DOT, Intersections-Signals
Project Number: 222165.5709.0710

Connecticut Laboratory Certificate: PH 0116
Massachusetts laboratory Certificate: M-CT903

New York NELAP Accreditation: 11982
Rhode Island Certification: 199

SAMPLE SUMMARY

The sample(s) were received at 22.0°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
01 Intersection 109-201 Controller Box	8010771-01	Paint Chip	1/29/2018 10:40	01/31/2018

Analyte: Total Lead [EPA 6010C]

Analyst: SS

Matrix: Paint Chip

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8010771-01	01 Intersection 109-201 Controller Box	ND	0.10	%	1	B8B0130	02/01/2018	02/01/2018 19:07	

CET # : 8010771
Project: DOT, Intersections-Signals
Project Number: 222165.5709.0710

All questions related to this report should be directed to David Ditta, Timothy Fusco, or Robert Blake at 203-377-9984.

Sincerely,

David Ditta
Laboratory Director

This technical report was reviewed by Timothy Fusco

Project Manager

Report Comments:

Sample Result Flags:
E- The result is estimated, above the calibration range.
H- The surrogate recovery is above the control limits.
L- The surrogate recovery is below the control limits.
B- The compound was detected in the laboratory blank.
P- The Relative Percent Difference (RPD) of dual column analyses exceeds 40%.
D- The RPD between the sample and the sample duplicate is high. Sample Homogeneity may be a problem.
+- The Surrogate was diluted out.
*C1- The Continuing Calibration did not meet method specifications and was biased low for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased low.
*C2- The Continuing Calibration did not meet method specifications and was biased high for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased high.
*F1- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the low side.
*F2- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the high side.
I- The Analyte exceeds %RSD limits for the Initial Calibration. This is a non-directional bias.

All results met standard operating procedures unless indicated by a data qualifier next to a sample result, or a narration in the QC report.

For Percent Solids, if any of the following prep methods (3050B, 3540C, 3545A, 3550C, 5035 and 9013A) were used for samples pertaining to this report, the percent solids procedure is within that prep method.

Complete Environmental Testing is only responsible for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt.

ND is None Detected at or above the specified reporting limit
RL is the Reporting Limit.
All analyses were performed in house unless a Reference Laboratory is listed.
Samples will be disposed of 30 days after the report date.

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 6010C in Solid	
Lead	CT

Complete Environmental Testing operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Public Health	PH0116	09/30/2018

109 -201

8010771

TRC
21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

Edition: November 2013
Supersede Previous Edition

TCLP CHAIN OF CUSTODY

LAB ID #.

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
222165.5709.0710	DOT Intersections - Signals		24hr 48hr X 3day 5day
			24hr 48hr X 3day 5day

INSPECTOR: (SIGNATURE)	(PRINTED)
	Zachary Smith

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	RCRA Pb	RCRA Pb, AS, CR, CD	8 RCRA Metals	TCLP Pb	SPLP Pb	Total Pb	MATERIAL
01	1/29/18	1040	X		Intersection 109-201 Controller box						X	grey paint
02	↓	1042	X		" "				X			" "

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	1/31/18			1/31/18	
(Printed) Zachary Smith	Time: 1200	(Printed) GREG GILNAY	(Printed) GREG GILNAY	Time: 1525	(Printed)

If Total Pb is positive then analyze TCLP Send results to EPlimpton@TRCSolutions.com

80 Lupes Drive
Stratford, CT 06615

COMPLETE ENVIRONMENTAL TESTING, INC.

Tel: (203) 377-9984
Fax: (203) 377-9952
e-mail: cet1@cetlabs.com

Client: Mr. Erik Plimpton
TRC Environmental Consultants
21 Griffin Rd., North
Windsor, CT 06095

Analytical Report

CET# 8010762

Report Date:February 02, 2018
Project: DOT, Intersections-Signals
Project Number: 222165.5709.0710

Connecticut Laboratory Certificate: PH 0116
Massachusetts laboratory Certificate: M-CT903

NELAP ACCREDITED TNI LABORATORY

New York NELAP Accreditation: 11982
Rhode Island Certification: 199

SAMPLE SUMMARY

The sample(s) were received at 22.0°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
01 Intersection 118-209 Signal Hood	8010762-01	Paint Chip	1/29/2018 14:36	01/31/2018
03 Intersection 118-209 Controller Box	8010762-02	Paint Chip	1/29/2018 14:46	01/31/2018

Analyte: Total Lead [EPA 6010C]

Analyst: SS

Matrix: Paint Chip

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8010762-01	01 Intersection 118-209 Signal Hood	ND	0.10	%	1	B8B0130	02/01/2018	02/01/2018 17:39	
8010762-02	03 Intersection 118-209 Controller Box	ND	0.10	%	1	B8B0130	02/01/2018	02/01/2018 17:44	

CET # : 8010762
Project: DOT, Intersections-Signals
Project Number: 222165.5709.0710

All questions related to this report should be directed to David Ditta, Timothy Fusco, or Robert Blake at 203-377-9984.

Sincerely,

David Ditta
Laboratory Director

This technical report was reviewed by Timothy Fusco

Project Manager

Report Comments:

Sample Result Flags:
E- The result is estimated, above the calibration range.
H- The surrogate recovery is above the control limits.
L- The surrogate recovery is below the control limits.
B- The compound was detected in the laboratory blank.
P- The Relative Percent Difference (RPD) of dual column analyses exceeds 40%.
D- The RPD between the sample and the sample duplicate is high. Sample Homogeneity may be a problem.
+- The Surrogate was diluted out.
*C1- The Continuing Calibration did not meet method specifications and was biased low for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased low.
*C2- The Continuing Calibration did not meet method specifications and was biased high for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased high.
*F1- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the low side.
*F2- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the high side.
I- The Analyte exceeds %RSD limits for the Initial Calibration. This is a non-directional bias.

All results met standard operating procedures unless indicated by a data qualifier next to a sample result, or a narration in the QC report.

For Percent Solids, if any of the following prep methods (3050B, 3540C, 3545A, 3550C, 5035 and 9013A) were used for samples pertaining to this report, the percent solids procedure is within that prep method.

Complete Environmental Testing is only responsible for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt.

ND is None Detected at or above the specified reporting limit
RL is the Reporting Limit.
All analyses were performed in house unless a Reference Laboratory is listed.
Samples will be disposed of 30 days after the report date.

CET # : 8010762

Project: DOT, Intersections-Signals

Project Number: 222165.5709.0710

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 6010C in Solid	
Lead	CT

Complete Environmental Testing operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Public Health	PH0116	09/30/2018

118-209

8010762

TRC
21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

Edition: November 2013
Supersede Previous Edition

TCLP CHAIN OF CUSTODY

LAB ID #.

PROJECT NUMBER	PROJECT NAME	TURNAROUND TIME
222165.5709.0710	DOT Intersections - Signals	24hr / 48hr / X 3day / 5day
		24hr / 48hr / X 3day / 5day

INSPECTOR: (SIGNATURE)	(PRINTED)
[signature]	Zachary Smith

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	RCRA Pb	RCRA Pb, AS, CR, CD	8 RCRA Metals	TCLP Pb	SPLP Pb	Total Pb	MATERIAL
01	1/29/18	1436	X		Intersection 118-209 Signal head						X	yellow paint
02	↓	1435	X		" "				X			" "
03		1446	X		Intersection 118-209 Controller box						X	grey paint
04	↓	1445	X		" "				X			" "

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
[signature]	1/31/18	[signature] 22°	[signature]	1/31/18	[signature]
(Printed) Zachary Smith	Time: 1200	(Printed) GREG GILMAN	(Printed) GREG GILMAN	Time: 1525	(Printed) [illegible]

If Total Pb is positive then analyze TCLP Send results to IEPlimpton@TRCSolutions.com

Page 1 of 1

80 Lupes Drive
Stratford, CT 06615

COMPLETE ENVIRONMENTAL TESTING, INC.

Tel: (203) 377-9984
Fax: (203) 377-9952
e-mail: cet1@cetlabs.com

Client: Mr. Erik Plimpton
TRC Environmental Consultants
21 Griffin Rd., North
Windsor, CT 06095

Analytical Report

CET# 8010772

Report Date:February 02, 2018
Project: DOT, Intersections-Signals
Project Number: 222165.5709.0710

Connecticut Laboratory Certificate: PH 0116
Massachusetts laboratory Certificate: M-CT903

New York NELAP Accreditation: 11982
Rhode Island Certification: 199

SAMPLE SUMMARY

The sample(s) were received at 22.0°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
01 Intersection 131-233 Span Pole	8010772-01	Paint Chip	1/29/2018 10:17	01/31/2018
03 Intersection 131-233 Controller Box	8010772-02	Paint Chip	1/29/2018 10:12	01/31/2018

Analyte: Total Lead [EPA 6010C]

Analyst: SS

Matrix: Paint Chip

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8010772-01	01 Intersection 131-233 Span Pole	ND	0.10	%	1	B8B0130	02/01/2018	02/01/2018 19:11	
8010772-02	03 Intersection 131-233 Controller Box	ND	0.10	%	1	B8B0130	02/01/2018	02/01/2018 19:16	

CET # : 8010772
Project: DOT, Intersections-Signals
Project Number: 222165.5709.0710

All questions related to this report should be directed to David Ditta, Timothy Fusco, or Robert Blake at 203-377-9984.

Sincerely,

David Ditta
Laboratory Director

This technical report was reviewed by Timothy Fusco

Project Manager

Report Comments:

Sample Result Flags:
E- The result is estimated, above the calibration range.
H- The surrogate recovery is above the control limits.
L- The surrogate recovery is below the control limits.
B- The compound was detected in the laboratory blank.
P- The Relative Percent Difference (RPD) of dual column analyses exceeds 40%.
D- The RPD between the sample and the sample duplicate is high. Sample Homogeneity may be a problem.
+- The Surrogate was diluted out.
*C1- The Continuing Calibration did not meet method specifications and was biased low for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased low.
*C2- The Continuing Calibration did not meet method specifications and was biased high for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased high.
*F1- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the low side.
*F2- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the high side.
I- The Analyte exceeds %RSD limits for the Initial Calibration. This is a non-directional bias.

All results met standard operating procedures unless indicated by a data qualifier next to a sample result, or a narration in the QC report.

For Percent Solids, if any of the following prep methods (3050B, 3540C, 3545A, 3550C, 5035 and 9013A) were used for samples pertaining to this report, the percent solids procedure is within that prep method.

Complete Environmental Testing is only responsible for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt.

ND is None Detected at or above the specified reporting limit
RL is the Reporting Limit.
All analyses were performed in house unless a Reference Laboratory is listed.
Samples will be disposed of 30 days after the report date.

CET # : 8010772
Project: DOT, Intersections-Signals
Project Number: 222165.5709.0710

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 6010C in Solid	
Lead	CT

Complete Environmental Testing operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Public Health	PH0116	09/30/2018

8010772

TRC
21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

Edition: November 2013
Supersede Previous Edition

TCLP CHAIN OF CUSTODY

LAB ID #.

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
222165.5709.0710	DOT Intersections - Signals		24hr ☐ 48hr ☒ 3day ☐ 5day
			24hr ☐ 48hr ☒ 3day ☐ 5day

INSPECTOR: (SIGNATURE) (PRINTED) Zachary Smith

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	RCRA Pb	RCRA Pb, AS, CR, CD	8 RCRA Metals	TCLP Pb	SPLP Pb	Total Pb	MATERIAL
01	1/29/18	1017	X		Intersection 131-233 Span pole						X	grey paint with red undercoat
02	1/29/18	1015	X		"Intersection 131-233 Span Pole"				X			grey paint with red undercoat
03	1/29/18	1012	X		Intersection 131-233 Controller Box						X	grey paint
04	1/29/18	1010	X		Intersection 131-233 Controller Box				X			grey paint

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	1/31/18			1/31/18	
(Printed) Zachary Smith	Time: 1200	(Printed) GREG GILMAN	(Printed) GREG GILMAN	Time: 1525	(Printed)

If Total Pb is positive then do TCLP Send results to EPlimpton@TRCSolutions.com

80 Lupes Drive
Stratford, CT 06615

COMPLETE ENVIRONMENTAL TESTING, INC.

Tel: (203) 377-9984
Fax: (203) 377-9952
e-mail: cet1@cetlabs.com

Client: Mr. Erik Plimpton
TRC Environmental Consultants
21 Griffin Rd., North
Windsor, CT 06095

Analytical Report

CET# 8010770

Report Date:February 02, 2018
Project: DOT, Intersections-Signals
Project Number: 222165.5709.0710

Connecticut Laboratory Certificate: PH 0116
Massachusetts laboratory Certificate: M-CT903

New York NELAP Accreditation: 11982
Rhode Island Certification: 199

SAMPLE SUMMARY

The sample(s) were received at 22.0°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
01 Intersection 159-230 Span Pole	8010770-01	Paint Chip	1/30/2018 10:30	01/31/2018
03 Intersection 159-230 Controller Cabinet	8010770-02	Paint Chip	1/30/2018 10:40	01/31/2018

Analyte: Total Lead [EPA 6010C]

Analyst: SS

Matrix: Paint Chip

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8010770-01	01 Intersection 159-230 Span Pole	ND	0.10	%	1	B8B0130	02/01/2018	02/01/2018 18:50	
8010770-02	03 Intersection 159-230 Controller Cabinet	ND	0.10	%	1	B8B0130	02/01/2018	02/01/2018 19:03	

CET # : 8010770
Project: DOT, Intersections-Signals
Project Number: 222165.5709.0710

All questions related to this report should be directed to David Ditta, Timothy Fusco, or Robert Blake at 203-377-9984.

Sincerely,

David Ditta
Laboratory Director

This technical report was reviewed by Timothy Fusco

Project Manager

Report Comments:

Sample Result Flags:
E- The result is estimated, above the calibration range.
H- The surrogate recovery is above the control limits.
L- The surrogate recovery is below the control limits.
B- The compound was detected in the laboratory blank.
P- The Relative Percent Difference (RPD) of dual column analyses exceeds 40%.
D- The RPD between the sample and the sample duplicate is high. Sample Homogeneity may be a problem.
+- The Surrogate was diluted out.
*C1- The Continuing Calibration did not meet method specifications and was biased low for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased low.
*C2- The Continuing Calibration did not meet method specifications and was biased high for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased high.
*F1- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the low side.
*F2- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the high side.
I- The Analyte exceeds %RSD limits for the Initial Calibration. This is a non-directional bias.

All results met standard operating procedures unless indicated by a data qualifier next to a sample result, or a narration in the QC report.

For Percent Solids, if any of the following prep methods (3050B, 3540C, 3545A, 3550C, 5035 and 9013A) were used for samples pertaining to this report, the percent solids procedure is within that prep method.

Complete Environmental Testing is only responsible for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt.

ND is None Detected at or above the specified reporting limit
RL is the Reporting Limit.
All analyses were performed in house unless a Reference Laboratory is listed.
Samples will be disposed of 30 days after the report date.

CET # : 8010770
Project: DOT, Intersections-Signals
Project Number: 222165.5709.0710

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 6010C in Solid	
Lead	CT

Complete Environmental Testing operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Public Health	PH0116	09/30/2018

8010770

TRC
21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

Edition: November 2013
Supersede Previous Edition

TCLP CHAIN OF CUSTODY

LAB ID #.

PROJECT NUMBER	PROJECT NAME	TURNAROUND TIME
222165.5709.0710	DOT Intersections - Signals	24hr 48hr [X] 3day 5day
		24hr 48hr [X] 3day 5day

INSPECTOR: (SIGNATURE) (PRINTED) Zachary Smith

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	RCRA Pb	RCRA Pb, AS, CR, CD	8 RCRA Metals	TCLP Pb	SPLP Pb	Total Pb	MATERIAL
01	1/30/18	1030	X		Inter. 159-230 span pole						X	Grey paint with red undercoat
02	1/30/18	1032	X		Inter 159-230 span pole				X			Grey paint with red undercoat
03	1/30/18	1040	X		Inter 159-230 Controller Cabinet						X	Grey powder coating

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	1/31/18	cc 22°		1/31/18	
(Printed) Zachary Smith	Time: 1200	(Printed) GREG GILBAY	(Printed) GREG GILBAY	Time: 1527	(Printed)

If total Pb is positive then analyze TCLP Send Results to EPimpton@TRCSolutions.com

80 Lupes Drive
Stratford, CT 06615

COMPLETE ENVIRONMENTAL TESTING, INC.

Tel: (203) 377-9984
Fax: (203) 377-9952
e-mail: cet1@cetlabs.com

Client: Mr. Erik Plimpton
TRC Environmental Consultants
21 Griffin Rd., North
Windsor, CT 06095

Analytical Report

CET# 8010760

Report Date:February 02, 2018
Project: DOT, Intersections-Signals
Project Number: 222165.5706.0710

Connecticut Laboratory Certificate: PH 0116
Massachusetts laboratory Certificate: M-CT903

New York NELAP Accreditation: 11982
Rhode Island Certification: 199

SAMPLE SUMMARY

The sample(s) were received at 22.0°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
01 Intersection 165-213 Controller Box	8010760-01	Paint Chip	1/30/2018 12:56	01/31/2018
03 Intersection 165-213 Traffic Signal	8010760-02	Paint Chip	1/30/2018 13:01	01/31/2018
05 Intersection 165-213 Traffic Signal	8010760-03	Paint Chip	1/30/2018 13:06	01/31/2018

Analyte: Total Lead [EPA 6010C]

Analyst: SS

Matrix: Paint Chip

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8010760-01	01 Intersection 165-213 Controller Box	ND	0.10	%	1	B8B0130	02/01/2018	02/01/2018 17:26	
8010760-02	03 Intersection 165-213 Traffic Signal	ND	0.10	%	1	B8B0130	02/01/2018	02/01/2018 17:30	
8010760-03	05 Intersection 165-213 Traffic Signal	ND	0.10	%	1	B8B0130	02/01/2018	02/01/2018 17:35	

CET # : 8010760
Project: DOT, Intersections-Signals
Project Number: 222165.5706.0710

All questions related to this report should be directed to David Ditta, Timothy Fusco, or Robert Blake at 203-377-9984.

Sincerely,

David Ditta
Laboratory Director

This technical report was reviewed by Timothy Fusco

Project Manager

Report Comments:

Sample Result Flags:
E- The result is estimated, above the calibration range.
H- The surrogate recovery is above the control limits.
L- The surrogate recovery is below the control limits.
B- The compound was detected in the laboratory blank.
P- The Relative Percent Difference (RPD) of dual column analyses exceeds 40%.
D- The RPD between the sample and the sample duplicate is high. Sample Homogeneity may be a problem.
+- The Surrogate was diluted out.
*C1- The Continuing Calibration did not meet method specifications and was biased low for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased low.
*C2- The Continuing Calibration did not meet method specifications and was biased high for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased high.
*F1- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the low side.
*F2- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the high side.
I- The Analyte exceeds %RSD limits for the Initial Calibration. This is a non-directional bias.

All results met standard operating procedures unless indicated by a data qualifier next to a sample result, or a narration in the QC report.

For Percent Solids, if any of the following prep methods (3050B, 3540C, 3545A, 3550C, 5035 and 9013A) were used for samples pertaining to this report, the percent solids procedure is within that prep method.

Complete Environmental Testing is only responsible for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt.

ND is None Detected at or above the specified reporting limit
RL is the Reporting Limit.
All analyses were performed in house unless a Reference Laboratory is listed.
Samples will be disposed of 30 days after the report date.

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 6010C in Solid	
Lead	CT

Complete Environmental Testing operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Public Health	PH0116	09/30/2018

165-213

8010760

TRC
21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

Edition: November 2013
Supersede Previous Edition

TCLP CHAIN OF CUSTODY

LAB ID #.

PROJECT NUMBER	PROJECT NAME	TURNAROUND TIME
222165.5709.0710	DOT Intersections - Signals	24hr / 48hr / X 3day / 5day
		24hr / 48hr / 4 3day / 5day

INSPECTOR: (SIGNATURE) [signature]

(PRINTED) Zachary Smith

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	RCRA Pb	RCRA Pb, AS, CR, CD	8 RCRA Metals	TCLP Pb	SPLP Pb	Total Pb	MATERIAL
01	1/30/18	1256	X		Intersection 165-213 Controller Box						X	grey paint
02		1255	X		" "				X	X		" "
03		1301	X		Intersection 165-213 traffic Signal						X	black paint
04		1300	X		"				X	X		" "
05		1306	X		Intersection 165-213 traffic Signal						X	yellow paint
06	↓	1305	X		" "				X			" "

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
[signature]	1/31/18	[signature] 22°	[signature]	1/31/18	[signature]
(Printed) Zachary Smith	Time: 1200	(Printed) GARG GILDAY	(Printed) GARG GILDAY	Time: 1515	(Printed) Courtney Cattanach

If Total Pb. is positive then analyze TCLP Send results to EPlimpton@TRCsolutions.com

TRC

Edition: October 2009
Supersede Previous Edition

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

LAB ID #. 51888

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
222165-5709-0710	CTDOT – Intersection Inspection Cheshire, CT		PLM: [ ] 8hr [ ] 24hr [ ] 48hr [X] 3day TEM: [ ] 24hr [ ] 48hr [ ] 3day [X] 5day
SIGNATURE	INSPECTOR		
	Tom Martin		

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
1	1/29/18	0906			Cheshire, Intersection #:025-225	X					C1 – tan, brittle Control box caulk
2	1/29/18	0907			Cheshire, Intersection #:025-225	X				X	C1 – tan, brittle Control box caulk

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	1/30/18	1/30/18			
(Printed) Tom Martin	Time: 0933	(Printed) Cathryn Lemire 1030	(Printed)	Time:	(Printed)

Remarks:

Condition of Samples:
Acceptable: Yes ✓ No
Comments:

Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

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BULK ASBESTOS ANALYSIS REPORT

CLIENT: CT Department of Transportation

Lab Log #:	0051888
Project #:	222165.5709.0710
Date Received:	01/30/2018
Date Analyzed:	02/01/2018

Site: Intersection Inspection #025-225, Cheshire, CT

POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Color	Homogenous	Multi-Layered	Layer No.	Other Matrix Materials	Asbestos %	Asbestos Type
I	Tan/Colorless (caulk)	Yes	No	- -	- - -	ND	None
2	Tan/Colorless (caulk)	Yes	No	- -	- - -	ND	None

Reporting limit- asbestos present at 1%
ND - asbestos was not detected
Trace - asbestos was observed at level of less than 1%
NA/PS - Not Analyzed / Positive Stop
SNA- Sample Not Analyzed- See Chain of Custody for details

Note: Polarized-light microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. In those cases, EPA recommends, and certain states (e.g. NY) require, that negative results be confirmed by quantitative transmission electron microscopy.

The Laboratory at TRC follows the EPA's Interim Method for the Determination of Asbestos in Bulk Insulation 1982 (EPA 600/M4-82-020) Bulk Analysis Code 18/A01 and the EPA recommended Method for the Determination of Asbestos in Bulk Building Materials July 1993, R.L. Perkins and B.W. Harvey, (EPA/600/R-93/116) Bulk Analysis Code 18/A03, which utilize polarized light microscopy (PLM). Our analysts have completed an accredited course in asbestos identification. TRC's Laboratory is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP), for Bulk Asbestos Fiber Analysis, NVLAP Code 18/A01, effective through June 30, 2018. TRC is accredited by the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC in the Industrial Hygiene Program (IHLAP) for PLM effective through October 1, 2018. Asbestos content is determined by visual estimate unless otherwise indicated. Quality Control is performed in-house on at least 10% of samples and QC data related to the samples is available upon written request from client.

Analyzed by: K. Williamson — Kathleen Williamson, Laboratory Manager

Reviewed by: Cathryn Lemire — Cathryn Lemire, Approved Signatory

Date Issued 02/01/2018

TRC LABORATORY ASBESTOS ANALYTICAL ACCREDITATIONS

NVLAP Lab Code 101424-0 AIHA-LAP,LLC #100122 CT #PH-0426 ME LA-0075, LB-0071 MA #AA000052 NY #10980 WV# LT000411
RI #AAL-007 TX #300354 VT #AL014538 LA#050II VA #3333 000283 AZ #A20944 HI #L-09-004 NJ #CT004 CA #2907
CO# AL-15020 PHIL# 461 PA#68-03387

Proscience Analytical Services, Inc.

NT17035

22 Cummings Park, Woburn, MA 01801 Ph. 781-935-3212 Fax 781-932-4857

TEM Bulk Chain of Custody Record

Date: 02/01/17

PO#: **C222165**
Client: TRC
Client Job#: 222165.5709.0710
Client Job Ref./Loc.: CT DOT- Intersection, Cheshire, CT
Relinquished by: K.Williamson- KWilliamson@trcsolutions.com
Received by: Paula Coault-Cole 2/2/18 12:50
Report to: E. Plimpton- EPlimpton@trcsolutions.com & SArienti@trcsolutions.com
Samplers Name: T. Martin

Analysis Type: Chatfield **EPA N.O.B** Qualitative

Turnaround Time: <12 Hour <24 Hour **<48 Hour** <3 Day 5 Day Other:

				For Lab Use Only	
Client ID #	**Lab ID#**	**Description**	**Location**	**Acceptable on Receipt**	**Comments**
2	51888	Caulk	See COC		

For Lab Use Only	# Spies	Total	Client #	Batch #	Results Reported	Comments

ProScience Analytical Services, Inc.

22 Cummings Park, Woburn, Massachusetts 01801
781-935-3212 ~ Fax: 781-932-4857 ~ E-Mail general@proscience.net

Laboratory Report

Client Project #: 222165.5709.0710
Client Reference: CT DOT - Intersection, Cheshire, CT
PO #: N/A
Client #: 297
Client Name: TRC Environmental Corp. (CT)

Batch: **NT 17035**
Method: NOB
Date Received: 2/2/2018
Date Analyzed: 2/6/2018
Date of Report: 2/6/2018

LAB ID	Field ID	Description:	Color	Initial Weight	% Asbestos Types						% Other	%	%	Total %	Analyzed /	Preped /
					CHR	AMO	ACT	CRO	ANT	TRE	Non-asb.	Organic	Carb.	Asbestos	Charged	Charged
NT128594	2	Tan Brittle Control Box Caulk		.0681	.00	.00	.00	.00	.00	.00	.44	99.56	.00	**ND**	Yes	No

Comments:

Key: CHR = Chrysotile AMO = Amosite CRO = Crocidolite ACT = Actinolite TRE = Tremolite ANT = Anthophyllite TR = Trace = < 1% ND = None Detected

Mark Derosier, Analyst

TRC

Edition: October 2009
Supersede Previous Edition

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

LAB ID #. 518816

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
222165-5709-0710	CTDOT – Intersection Inspection New Britain, CT		PLM: [ ] 8hr [ ] 24hr [ ] 48hr [X] 3day TEM: [ ] 24hr [ ] 48hr [ ] 3day [X] 5day
SIGNATURE	INSPECTOR		
	Tom Martin		

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
1	1/29/18	1238			New Britain Intersection #:088-279	X					C1 – black, grey flexible caulk on walk signal attachment
2	1/29/18	1239			New Britain Intersection #:088-279	X				X	C1 – black, grey flexible caulk on walk signal attachment
3	1/29/18	1312			New Britain Intersection #:088-279	X					F1 – black, fibrous material located at base of Control box(trash+/debris)
4	1/29/18	1313			New Britain Intersection #:088-279	X					F1 – black, fibrous material located at base of Control box(trash+/debris)

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
Tom Martin	1/30/18	1/30/18			
(Printed) Tom Martin	Time: 0955	(Printed) Cathryn Lemire 1030	(Printed)	Time:	(Printed)

Remarks:

Condition of Samples:_____
Acceptable: Yes X No _____
Comments:

Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

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BULK ASBESTOS ANALYSIS REPORT

CLIENT: CT Department of Transportation

Lab Log #:	0051886
Project #:	222165.5709.0710
Date Received:	01/30/2018
Date Analyzed:	02/01/2018

Site: Intersection Inspection #088-279, New Britain, CT

POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Color	Homogenous	Multi-Layered	Layer No.	Other Matrix Materials		Asbestos %	Asbestos Type
1	Black/Grey (caulk)	Yes	No	- -	10%	cellulose	ND	None
2	Black/Grey (caulk)	Yes	No	- -	10%	cellulose	ND	None
3	Black (fibrous material)	Yes	No	- -	60%	cellulose	ND	None
4	Black (fibrous material)	Yes	No	- -	60%	cellulose	ND	None

Reporting limit- asbestos present at 1%
ND - asbestos was not detected
Trace - asbestos was observed at level of less than 1%
NA/PS - Not Analyzed / Positive Stop
SNA- Sample Not Analyzed- See Chain of Custody for details

Note: Polarized-light microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. In those cases, EPA recommends, and certain states (e.g. NY) require, that negative results be confirmed by quantitative transmission electron microscopy.

The Laboratory at TRC follows the EPA's Interim Method for the Determination of Asbestos in Bulk Insulation 1982 (EPA 600/M4-82-020) Bulk Analysis Code 18/A01 and the EPA recommended Method for the Determination of Asbestos in Bulk Building Materials July 1993, R.L. Perkins and B.W. Harvey, (EPA/600/R-93/116) Bulk Analysis Code 18/A03, which utilize polarized light microscopy (PLM). Our analysts have completed an accredited course in asbestos identification. TRC's Laboratory is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP), for Bulk Asbestos Fiber Analysis, NVLAP Code 18/A01, effective through June 30, 2018. TRC is accredited by the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC in the Industrial Hygiene Program (IHLAP) for PLM effective through October 1, 2018. Asbestos content is determined by visual estimate unless otherwise indicated. Quality Control is performed in-house on at least 10% of samples and QC data related to the samples is available upon written request from client.

Analyzed by: K. Williamson
Kathleen Williamson, Laboratory Manager

Reviewed by: Cathryn Lemire
Cathryn Lemire, Approved Signatory

Date Issued
02/01/2018

NT 17036

Proscience Analytical Services, Inc.

22 Cummings Park, Woburn, MA 01801 Ph. 781-935-3212 Fax 781-932-4857

TEM Bulk Chain of Custody Record

Date: 02/01/17

PO#: **C222165**
Client: TRC
Client Job#: 222165.5709.0710
Client Job Ref./Loc.: CT DOT- Intersection, New Britain, CT
Relinquished by: K.Williamson- KWilliamson@trcsolutions.com
Received by: Pamela Kenneth Cole 2/2/18- 10:50
Report to: E. Plimpton- EPlimpton@trcsolutions.com & SArienti@trcsolutions.com
Samplers Name: T. Martin

Analysis Type: Chatfield **EPA N.O.B** Qualitative

Turn Around Time: <12 Hour <24 Hour **<48 Hour** <3 Day 5 Day Other:

				For Lab Use Only	
Client ID #	**Lab ID#**	**Description**	**Location**	**Acceptable on Receipt**	**Comments**
2	51886	Caulk	See COC		

For Lab Use Only	# Spies	Total	Client #	Batch #	Results Reported	Comments

ProScience Analytical Services, Inc.

22 Cummings Park, Woburn, Massachusetts 01801
781-935-3212 ~ Fax: 781-932-4857 ~ E-Mail general@proscience.net

Laboratory Report

Client Project #: 222165.5709.0710
Client Reference: CT DOT - Intersection, New Britain, CT
PO #: C222165
Client #: 297
Client Name: TRC Environmental Corp. (CT)

Batch: **NT 17036**
Method: NOB
Date Received: 2/2/2018
Date Analyzed: 2/6/2018
Date of Report: 2/6/2018

LAB ID	Field ID	Description:	Color	Initial Weight	% Asbestos Types						% Other	%	%	Total %	Analyzed /	Preped /
					CHR	AMO	ACT	CRO	ANT	TRE	Non-asb.	Organic	Carb.	Asbestos	Charged	Charged
NT128595	2	Black/Grey Flexible Caulk		.2661	.00	.00	.00	.00	.00	.00	37.28	21.27	41.45	**ND**	Yes	No

Comments:

Key: CHR = Chrysotile AMO = Amosite CRO = Crocidolite ACT = Actinolite TRE = Tremolite ANT = Anthophyllite TR = Trace = < 1% ND = None Detected

Mark Derosier, Analyst

TRC

Edition: October 2009
Supersede Previous Edition

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

LAB ID #. 51887

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
222165-5709-0710	CTDOT – Intersection Inspection Southington, CT		PLM: [ ] 8hr [ ] 24hr [ ] 48hr [X] 3day TEM: [ ] 24hr [ ] 48hr [ ] 3day [X] 5day
SIGNATURE: Tom Martin	INSPECTOR: Tom Martin		

FIELD SAMPLE NUMBER	DATE	TIME	TYPE: COMP	TYPE: GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
1	1/29/18	1020			Southington, Intersection #:131-233	X					C1 – black, grey flexible Control box caulk
2	1/29/18	1021			Southington, Intersection #:131-233	X				X	C1 – black, grey flexible Control box caulk

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
Tom Martin	1/30/18	Cathryn Lemire 1/30/18			
(Printed) Tom Martin	Time: 0933	(Printed) Cathryn Lemire 1030	(Printed)	Time:	(Printed)

Remarks:

Condition of Samples: _____
Acceptable: Yes X No _____
Comments:

Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

TRC
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BULK ASBESTOS ANALYSIS REPORT

CLIENT: CT Department of Transportation

Lab Log #:	0051887
Project #:	222165.5709.0710
Date Received:	01/30/2018
Date Analyzed:	02/01/2018

Site: Intersection Inspection #131-233, Southington, CT

POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Color	Homogenous	Multi-Layered	Layer No.	Other Matrix Materials	Asbestos %	Asbestos Type
1	Black/Grey (caulk)	Yes	No	--	---	ND	None
2	Black/Grey (caulk)	Yes	No	--	---	ND	None

Reporting limit- asbestos present at 1%
ND - asbestos was not detected
Trace - asbestos was observed at level of less than 1%
NA/PS - Not Analyzed / Positive Stop
SNA- Sample Not Analyzed- See Chain of Custody for details

Note: Polarized-light microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. In those cases, EPA recommends, and certain states (e.g. NY) require, that negative results be confirmed by quantitative transmission electron microscopy.

The Laboratory at TRC follows the EPA's Interim Method for the Determination of Asbestos in Bulk Insulation 1982 (EPA 600/M4-82-020) Bulk Analysis Code 18/A01 and the EPA recommended Method for the Determination of Asbestos in Bulk Building Materials July 1993, R.L. Perkins and B.W. Harvey, (EPA/600/R-93/116) Bulk Analysis Code 18/A03, which utilize polarized light microscopy (PLM). Our analysts have completed an accredited course in asbestos identification. TRC's Laboratory is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP), for Bulk Asbestos Fiber Analysis, NVLAP Code 18/A01, effective through June 30, 2018. TRC is accredited by the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC in the Industrial Hygiene Program (IHLAP) for PLM effective through October 1, 2018. Asbestos content is determined by visual estimate unless otherwise indicated. Quality Control is performed in-house on at least 10% of samples and QC data related to the samples is available upon written request from client.

Analyzed by: K. Williamson — Kathleen Williamson, Laboratory Manager

Reviewed by: Cathryn Lemire — Cathryn Lemire, Approved Signatory

Date Issued 02/01/2018

Proscience Analytical Services, Inc.

NT17037

22 Cummings Park, Woburn, MA 01801 Ph. 781-935-3212 Fax 781-932-4857

TEM Bulk Chain of Custody Record

Date: 02/01/17

PO#: **C222165**

Analysis Type: Chatfield **EPA N.O.B** Qualitative

Client: TRC

Client Job#: 222165.5709.0710

Client Job Ref./Loc.: CT DOT- Intersection, Southington, CT

Relinquished by: K.Williamson- KWilliamson@trcsolutions.com

Received by: Paula Leavitt Cole 2/2/18 12:50

Report to: E. Plimpton- EPlimpton@trcsolutions.com & SArienti@trcsolutions.com

Samplers Name: T. Martin

Turnaround Time: <12 Hour <24 Hour **<48 Hour** <3 Day 5 Day Other:

				For Lab Use Only	
Client ID #	**Lab ID#**	**Description**	**Location**	**Acceptable on Receipt**	**Comments**
2	51887	Caulk	See COC		

For Lab Use Only	# Spies	Total	Client #	Batch #	Results Reported	Comments

ProScience Analytical Services, Inc.

22 Cummings Park, Woburn, Massachusetts 01801
781-935-3212 ~ Fax: 781-932-4857 ~ E-Mail general@proscience.net

Laboratory Report

Client Project #: 222165.5709.0710
Client Reference: CT DOT - Intersection, Southington, CT
PO #: C222165
Client #: 297
Client Name: TRC Environmental Corp. (CT)

Batch: NT 17037
Method: NOB
Date Received: 2/2/2018
Date Analyzed: 2/6/2018
Date of Report: 2/6/2018

LAB ID	Field ID	Description:	Color	Initial Weight	% Asbestos Types						% Other	%	%	Total %	Analyzed /	Preped /
					CHR	AMO	ACT	CRO	ANT	TRE	Non-asb.	Organic	Carb.	Asbestos	Charged	Charged
NT128596	2	Black/Grey Flexible Control Box Caulk		.2741	.00	.00	.00	.00	.00	.00	6.97	90.40	2.63	ND	Yes	No

Comments:

Key: CHR = Chrysotile AMO = Amosite CRO = Crocidolite ACT = Actinolite TRE = Tremolite ANT = Anthophyllite TR = Trace = < 1% ND = None Detected

Mark Derosier, Analyst

159-230 Wethersfield

TRC

Edition: October 2009
Supersede Previous Edition

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

LAB ID #. 51890

PROJECT NUMBER	PROJECT NAME
222165.5709.0710	DOT Intersections - Signals

SIGNATURE	INSPECTOR
	Zachary Smith

PARAMETERS

TURNAROUND TIME

PLM:		8hr		24hr		48hr	X	3day
TEM:		24hr		48hr		3day	X	5day

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
01	1/30/18	1027		X	Intersection 159-230 Controller Cabinet	X					C1 - Hard white caulk
02	1/30/18	1027		X	Intersection 159-230 Controller Cabinet					X	C1 - Hard white caulk

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	1/30/18	1/30/18			
(Printed) Zachary Smith	Time: 1500	(Printed) Cathryn Lemire 1530	(Printed)	Time:	(Printed)

Remarks:
Send results to EPlimpton@TRCSolutions.com

Condition of Samples: _____
Acceptable: Yes X No _____
Comments:

Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

TRC
Results you can rely on

BULK ASBESTOS ANALYSIS REPORT

CLIENT: CT Department of Transportation

Lab Log #:	0051890
Project #:	222165.5709.0710
Date Received:	01/30/2018
Date Analyzed:	02/01/2018

Site: Intersection Inspection #159-230, Wethersfield, CT

POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Color	Homogenous	Multi-Layered	Layer No.	Other Matrix Materials	Asbestos %	Asbestos Type
01	White (caulk)	Yes	No	- -	- - -	ND	None
02	White (caulk)	Yes	No	- -	- - -	ND	None

Reporting limit- asbestos present at 1%
ND - asbestos was not detected
Trace - asbestos was observed at level of less than 1%
NA/PS - Not Analyzed / Positive Stop
SNA- Sample Not Analyzed- See Chain of Custody for details

Note: Polarized-light microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. In those cases, EPA recommends, and certain states (e.g. NY) require, that negative results be confirmed by quantitative transmission electron microscopy.

The Laboratory at TRC follows the EPA's Interim Method for the Determination of Asbestos in Bulk Insulation 1982 (EPA 600/M4-82-020) Bulk Analysis Code 18/A01 and the EPA recommended Method for the Determination of Asbestos in Bulk Building Materials July 1993, R.L. Perkins and B.W. Harvey, (EPA/600/R-93/116) Bulk Analysis Code 18/A03, which utilize polarized light microscopy (PLM). Our analysts have completed an accredited course in asbestos identification. TRC's Laboratory is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP), for Bulk Asbestos Fiber Analysis, NVLAP Code 18/A01, effective through June 30, 2018. TRC is accredited by the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC in the Industrial Hygiene Program (IHLAP) for PLM effective through October 1, 2018. Asbestos content is determined by visual estimate unless otherwise indicated. Quality Control is performed in-house on at least 10% of samples and QC data related to the samples is available upon written request from client.

Analyzed by: K. Williamson
Kathleen Williamson, Laboratory Manager

Reviewed by: Cathryn Lemire
Cathryn Lemire, Approved Signatory

Date Issued
02/01/2018

TRC LABORATORY ASBESTOS ANALYTICAL ACCREDITATIONS

NVLAP Lab Code 101424-0 AIHA-LAP,LLC #100122 CT #PH-0426 ME LA-0075, LB-0071 MA #AA000052 NY #10980 WV# LT000411
RI #AAL-007 TX #300354 VT #AL014538 LA#05011 VA #3333 000283 AZ #A20944 HI #L-09-004 NJ #CT004 CA #2907
CO# AL-15020 PHIL# 461 PA#68-03387

Proscience Analytical Services, Inc.

NT17033

22 Cummings Park, Woburn, MA 01801 Ph. 781-935-3212 Fax 781-932-4857

TEM Bulk Chain of Custody Record

Date: 02/01/17

PO#: **C222165**
Client: TRC
Client Job#: 222165.5709.0710
Client Job Ref./Loc.: CT DOT- Intersection Signals, 159-230 Controller
Relinquished by: K.Williamson- KWilliamson@trcsolutions.com
Received by: Paula Leavitt Cole 2/6/18 12:50
Report to: E. Plimpton- EPlimpton@trcsolutions.com & SArienti@trcsolutions.com
Samplers Name: Z. Smith

Analysis Type: Chatfield **EPA N.O.B** Qualitative

Turnaround Time: <12 Hour <24 Hour **<48 Hour** <3 Day 5 Day Other:

				For Lab Use Only	
Client ID #	**Lab ID#**	**Description**	**Location**	**Acceptable on Receipt**	**Comments**
02	51890	Caulk	See COC		

For Lab Use Only	# Spies	Total	Client #	Batch #	Results Reported	Comments

ProScience Analytical Services, Inc.

22 Cummings Park, Woburn, Massachusetts 01801
781-935-3212 ~ Fax: 781-932-4857 ~ E-Mail general@proscience.net

Laboratory Report

Client Project #: 222165.5709.0710
Client Reference: CT DOT - Intersection Signals, 159-230 Controller
PO #: C222165
Client #: 297
Client Name: TRC Environmental Corp. (CT)

Batch: NT 17033
Method: NOB
Date Received: 2/2/2018
Date Analyzed: 2/6/2018
Date of Report: 2/6/2018

LAB ID	Field ID	Description:	Color	Initial Weight	% Asbestos Types						% Other	%	%	Total %	Analyzed /	Preped /
					CHR	AMO	ACT	CRO	ANT	TRE	Non-asb.	Organic	Carb.	Asbestos	Charged	Charged
NT128592	02	Hard White Caulk		.1297	.00	.00	.00	.00	.00	.00	2.31	22.13	75.56	ND	Yes	No

Comments:

Key: CHR = Chrysotile AMO = Amosite CRO = Crocidolite ACT = Actinolite TRE = Tremolite ANT = Anthophyllite TR = Trace = < 1% ND = None Detected

Mark Derosier, Analyst

165-213 Windsor Locks

TRC

Edition: October 2009
Supersede Previous Edition

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

LAB ID #. 51889

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
222165.5709	DOT Intersections - Signals		PLM: 8hr 24hr 48hr X 3day TEM: 24hr 48hr 3day X 5day

SIGNATURE: [signature]

INSPECTOR: Zachary Smith

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
01	1/30/18	1230		X	Intersection 165-213 Controller Cabinet	X					C1 - Hard white caulk
02	1/30/18	1232		X	Intersection 165-213 Controller Cabinet					X	C1 - Hard white caulk

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
[signature]	1/30/18	[signature] 1/30/18			
(Printed) Zachary Smith	Time: 1500	(Printed) Cathryn Lemire 1530	(Printed)	Time:	(Printed)

Remarks: Send Results to EPlimpton@TRCSolutions.com

Condition of Samples: _____
Acceptable: Yes X No _____
Comments:

Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

TRC
Results you can rely on

BULK ASBESTOS ANALYSIS REPORT

CLIENT: CT Department of Transportation

Lab Log #:	0051889
Project #:	222165.5709.0710
Date Received:	01/30/2018
Date Analyzed:	02/01/2018

Site: Intersection Inspection 165-213, Windsor Locks, CT

POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Color	Homogenous	Multi-Layered	Layer No.	Other Matrix Materials	Asbestos %	Asbestos Type
01	White (caulk)	Yes	No	- -	- - -	ND	None
02	White (caulk)	Yes	No	- -	- - -	ND	None

Reporting limit- asbestos present at 1%
ND - asbestos was not detected
Trace - asbestos was observed at level of less than 1%
NA/PS - Not Analyzed / Positive Stop
SNA- Sample Not Analyzed- See Chain of Custody for details

Note: Polarized-light microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. In those cases, EPA recommends, and certain states (e.g. NY) require, that negative results be confirmed by quantitative transmission electron microscopy.

The Laboratory at TRC follows the EPA's Interim Method for the Determination of Asbestos in Bulk Insulation 1982 (EPA 600/M4-82-020) Bulk Analysis Code 18/A01 and the EPA recommended Method for the Determination of Asbestos in Bulk Building Materials July 1993, R.L. Perkins and B.W. Harvey, (EPA/600/R-93/116) Bulk Analysis Code 18/A03, which utilize polarized light microscopy (PLM). Our analysts have completed an accredited course in asbestos identification. TRC's Laboratory is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP), for Bulk Asbestos Fiber Analysis, NVLAP Code 18/A01, effective through June 30, 2018. TRC is accredited by the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC in the Industrial Hygiene Program (IHLAP) for PLM effective through October 1, 2018. Asbestos content is determined by visual estimate unless otherwise indicated. Quality Control is performed in-house on at least 10% of samples and QC data related to the samples is available upon written request from client.

Analyzed by: K. Williamson — Kathleen Williamson, Laboratory Manager

Reviewed by: Cathryn Lemire — Cathryn Lemire, Approved Signatory

Date Issued 02/02/2018

TRC LABORATORY ASBESTOS ANALYTICAL ACCREDITATIONS

NVLAP Lab Code 101424-0 AIHA-LAP,LLC #100122 CT #PH-0426 ME LA-0075, LB-0071 MA #AA000052 NY #10980 WV# LT000411
RI #AAL-007 TX #300354 VT #AL014538 LA#05011 VA #3333 000283 AZ #A20944 HI #L-09-004 NJ #CT004 CA #2907
CO# AL-15020 PHIL# 461 PA#68-03387

NT17034

Proscience Analytical Services, Inc.

22 Cummings Park, Woburn, MA 01801 Ph. 781-935-3212 Fax 781-932-4857

TEM Bulk Chain of Custody Record

Date: 02/01/17

PO#: **C222165**
Client: TRC
Client Job#: 222165.5709.0710
Client Job Ref./Loc.: CT DOT- Intersection Signals, 165-233 Controller
Relinquished by: K.Williamson- KWilliamson@trcsolutions.com
Received by: Pamela Cowitt-Cole 2/2/18 12:50
Report to: E. Plimpton- EPlimpton@trcsolutions.com & SArienti@trcsolutions.com
Samplers Name: Z. Smith

Analysis Type: Chatfield **EPA N.O.B** Qualitative

Turnaround Time: <12 Hour <24 Hour **<48 Hour** <3 Day 5 Day Other:

				For Lab Use Only	
Client ID #	**Lab ID#**	**Description**	**Location**	**Acceptable on Receipt**	**Comments**
02	51889	Caulk	See COC		

For Lab Use Only	# Spies	Total	Client #	Batch #	Results Reported	Comments

ProScience Analytical Services, Inc.

22 Cummings Park, Woburn, Massachusetts 01801
781-935-3212 ~ Fax: 781-932-4857 ~ E-Mail general@proscience.net

Laboratory Report

Client Project #: 222165.5709.0710
Client Reference: CT DOT - Intersection Signals, 165-233 Controller
PO #: C222165
Client #: 297
Client Name: TRC Environmental Corp. (CT)

Batch: NT 17034
Method: NOB
Date Received: 2/2/2018
Date Analyzed: 2/6/2018
Date of Report: 2/6/2018

LAB ID	Field ID	Description:	Color	Initial Weight	% Asbestos Types						% Other Non-asb.	% Organic	% Carb.	Total % Asbestos	Analyzed / Charged	Preped / Charged
					CHR	AMO	ACT	CRO	ANT	TRE						
NT128593	02	Hard White Caulk		.5000	.00	.00	.00	.00	.00	.00	2.62	21.96	75.42	ND	Yes	No

Comments:

Key: CHR = Chrysotile AMO = Amosite CRO = Crocidolite ACT = Actinolite TRE = Tremolite ANT = Anthophyllite TR = Trace = < 1% ND = None Detected

Mark Derosier, Analyst

SHEET NO. _____ OF _____

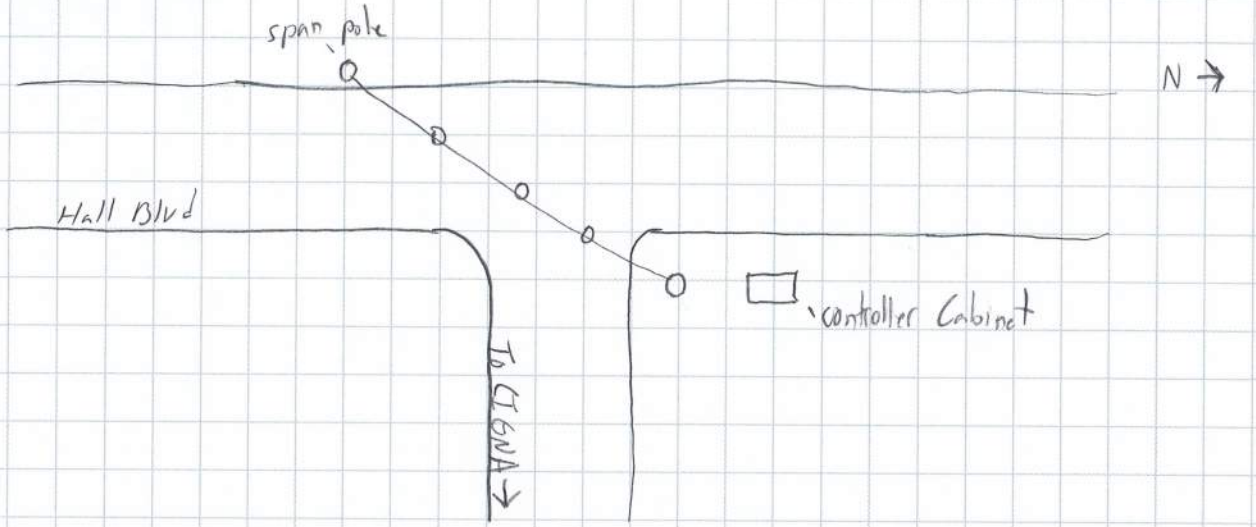
PROJECT NO. _____

DATE 1/30/18

BY ZS EG

CHK'D _____

SUBJECT Intersection 011-209



Span poles - 2 painted metal poles

Controller Cabinet is not painted, silicon around base

No Crosswalk

A

SHEET NO. 1 OF 7

PROJECT NO.

DATE 1/29/18

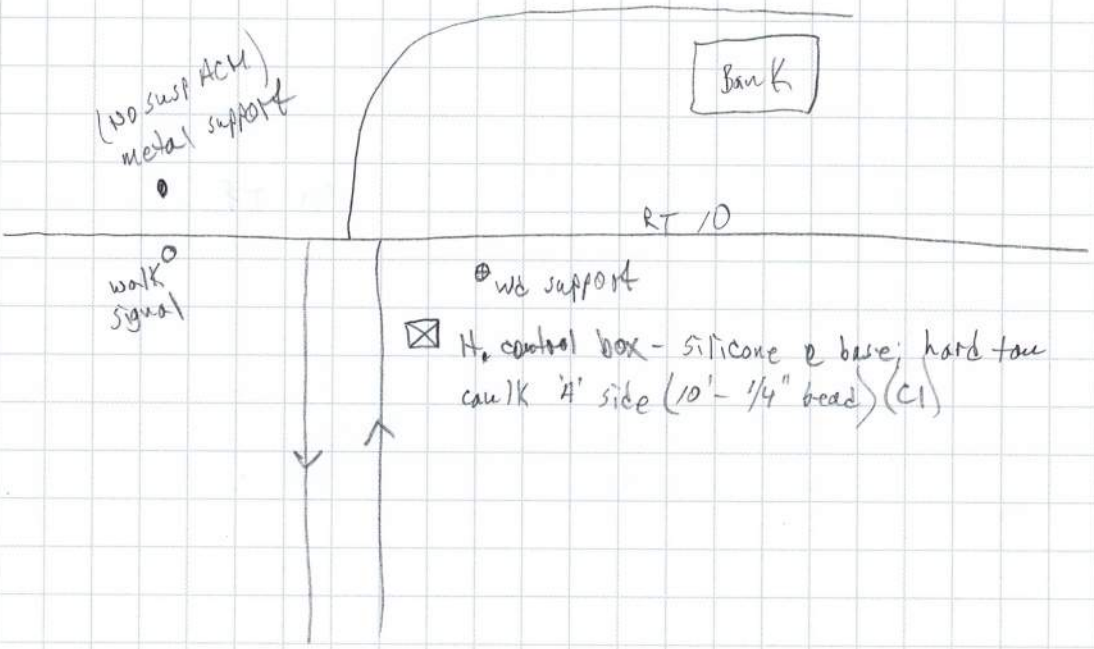
BY SM, ZS

CHK'D

SUBJECT DOT - Intersection ing's

Cheshire, int#: 025-225

RT 10 @ Maplecroft shopping ~~Center~~



shopping plaza

C1 - tan, brittle control box caulk

A

SHEET NO. _____ OF _____

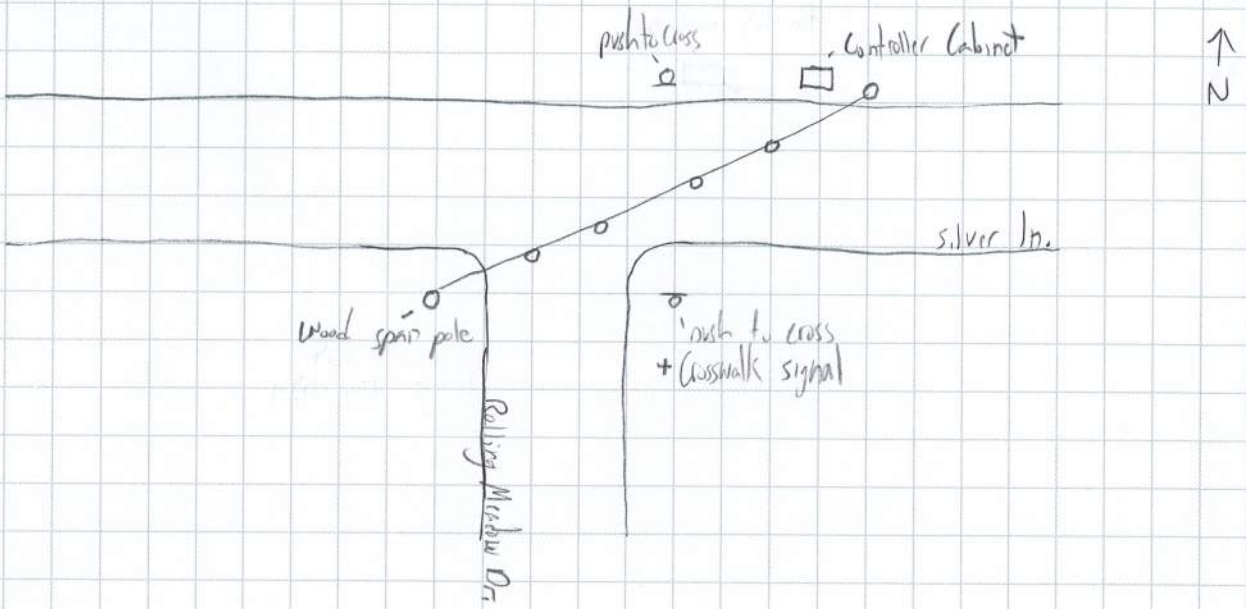
PROJECT NO. _____

DATE 1/30/18

BY JS EG

CHK'D _____

SUBJECT Intersection 042-251 East Hartford



Span poles - 1 painted metal, 1 wood

Controller Cabinet has silicone around base

A

SHEET NO. 4 OF 7

PROJECT NO.

DATE 1/29/18

BY RM, ZS

CHK'D

SUBJECT DOT - Intersection insp's

088-247, New Britain
RT 71 @ Paul Manafort Dr & Francis st

galvanized metal pole spun w/walk sign

galvanized walk-sign

Hanley St

walk sign

galvanized
metal pole spun w/ walk sign

☒ lt. control box

* NO susp ACM on any structure *

CCSU

Paul Manafort St

A

SHEET NO. 5 OF 7

PROJECT NO.

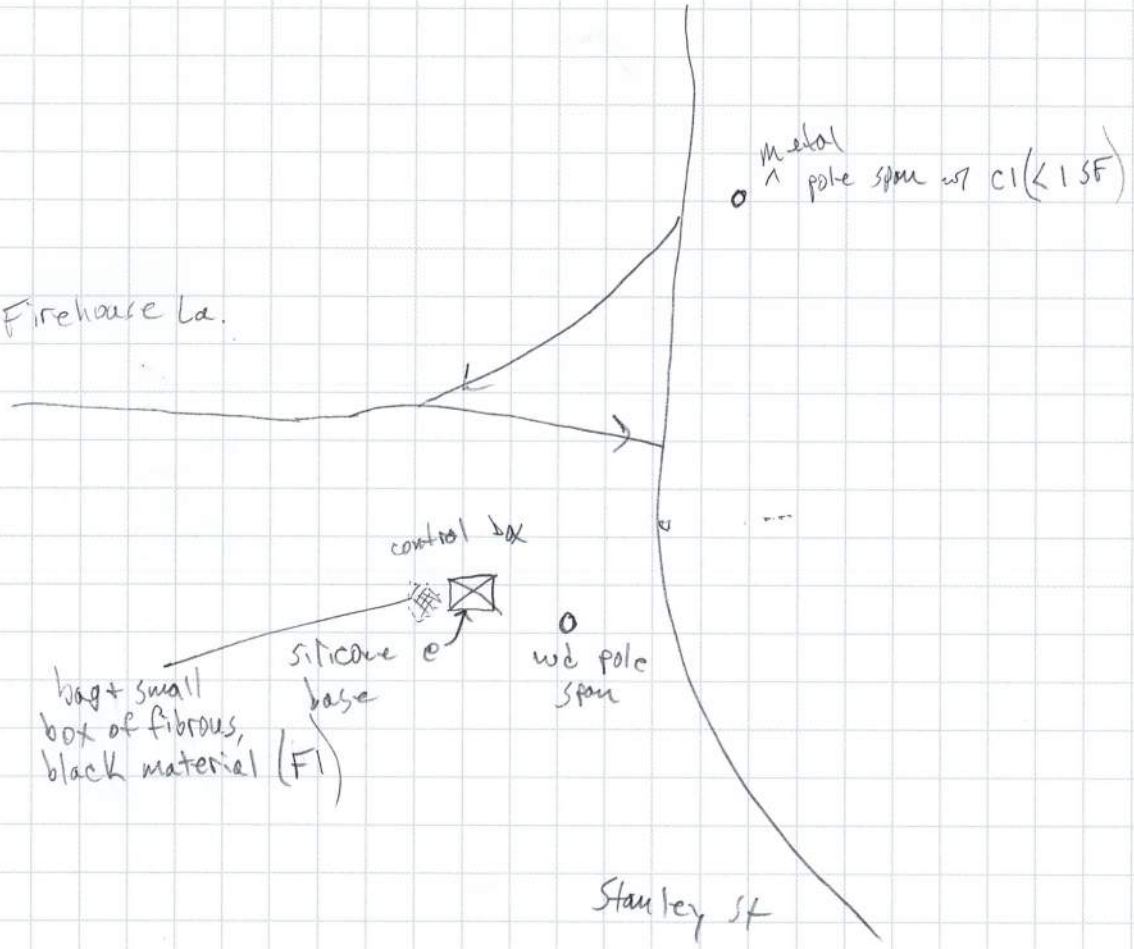
DATE 1/29/18

BY [illegible]

CHK'D

SUBJECT DOT - Intersection insp's

#: 088-279, New Britain
RT 71 @ Firehouse La.



C1 - grey, pliable caulk on light arm (< 1 SF)
F1 - black, fibrous material (F1)

A

TRC Results you can rely on

PROJECT NO.

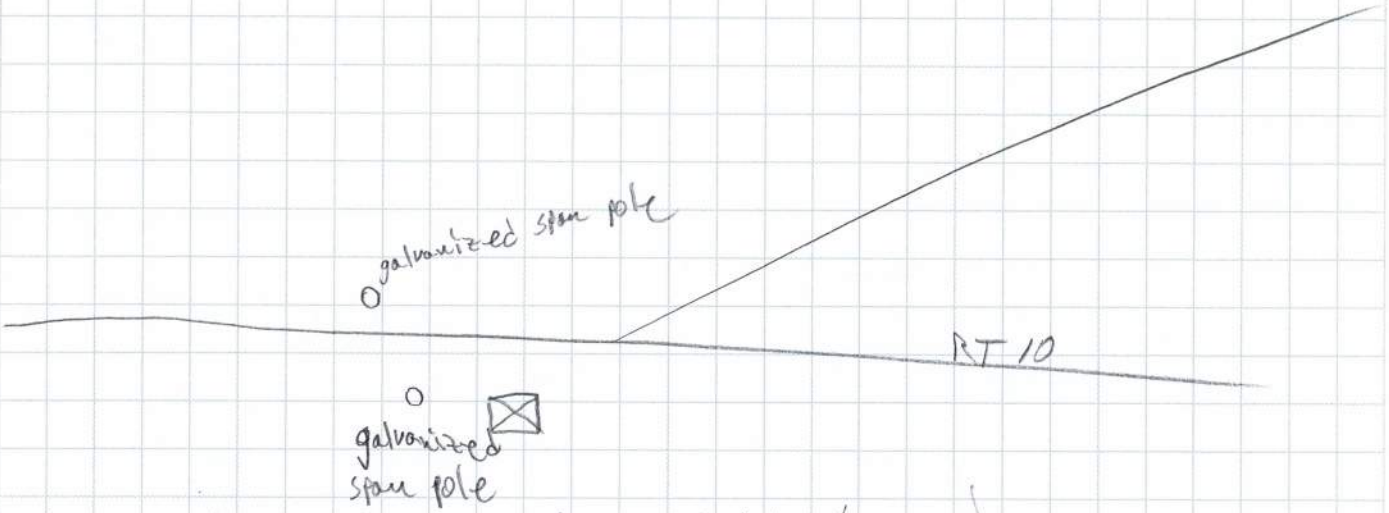
DATE 1/29/18

BY SM, TS

SUBJECT DOT - Intersection insp's

CHK'D

109-201, Plainville
RT 10 @ Whiting St



* silicone @ base of both span poles + control box (non-susp)
* No susp ACM *

SHEET NO. 7 OF 7

PROJECT NO.

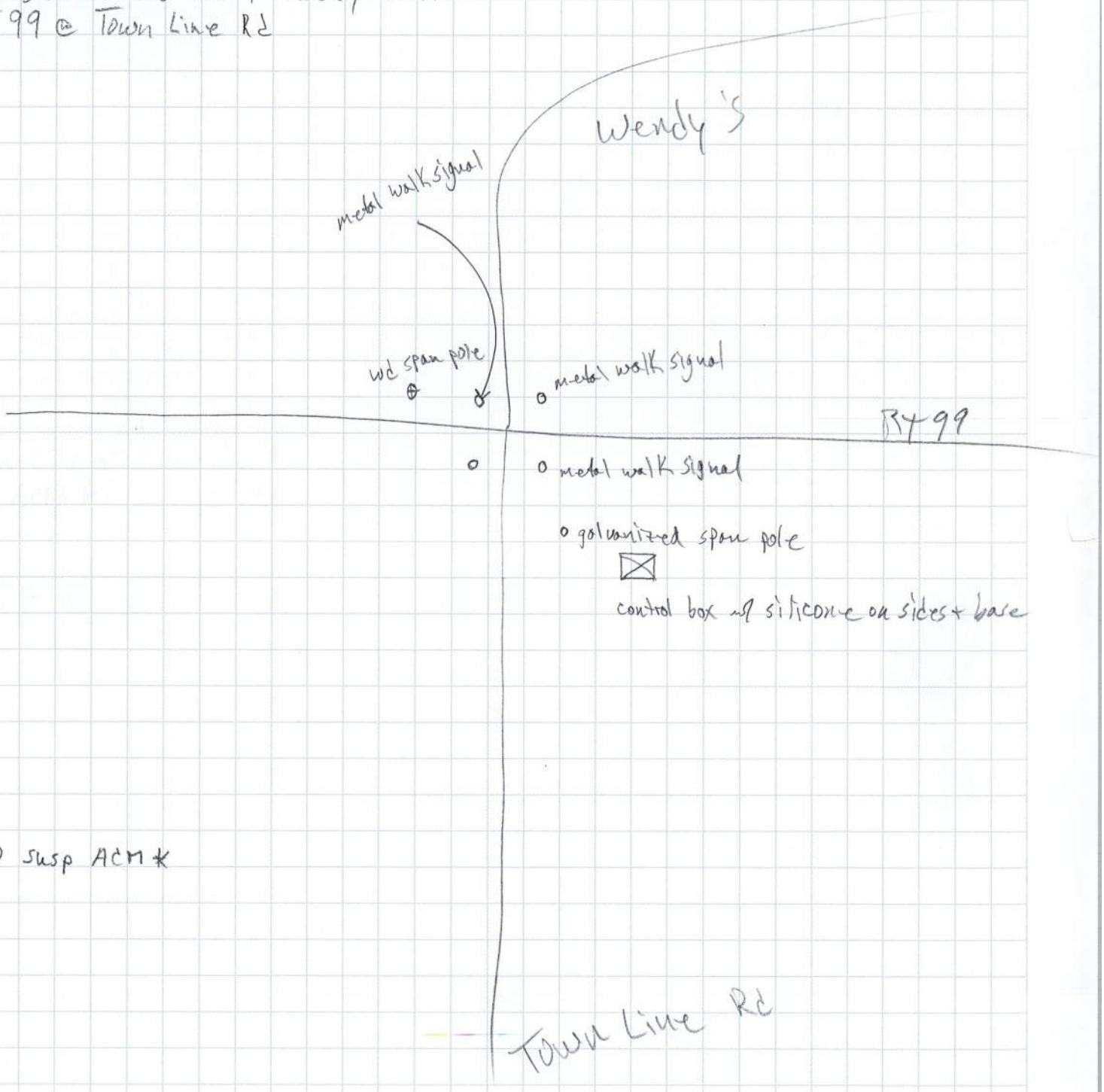
DATE 11/29/18

BY TM, TS

CHK'D

SUBJECT DOT - Intersection insp's

Intersection #118-209, Rocky Hill
RT 99 @ Town Line Rd



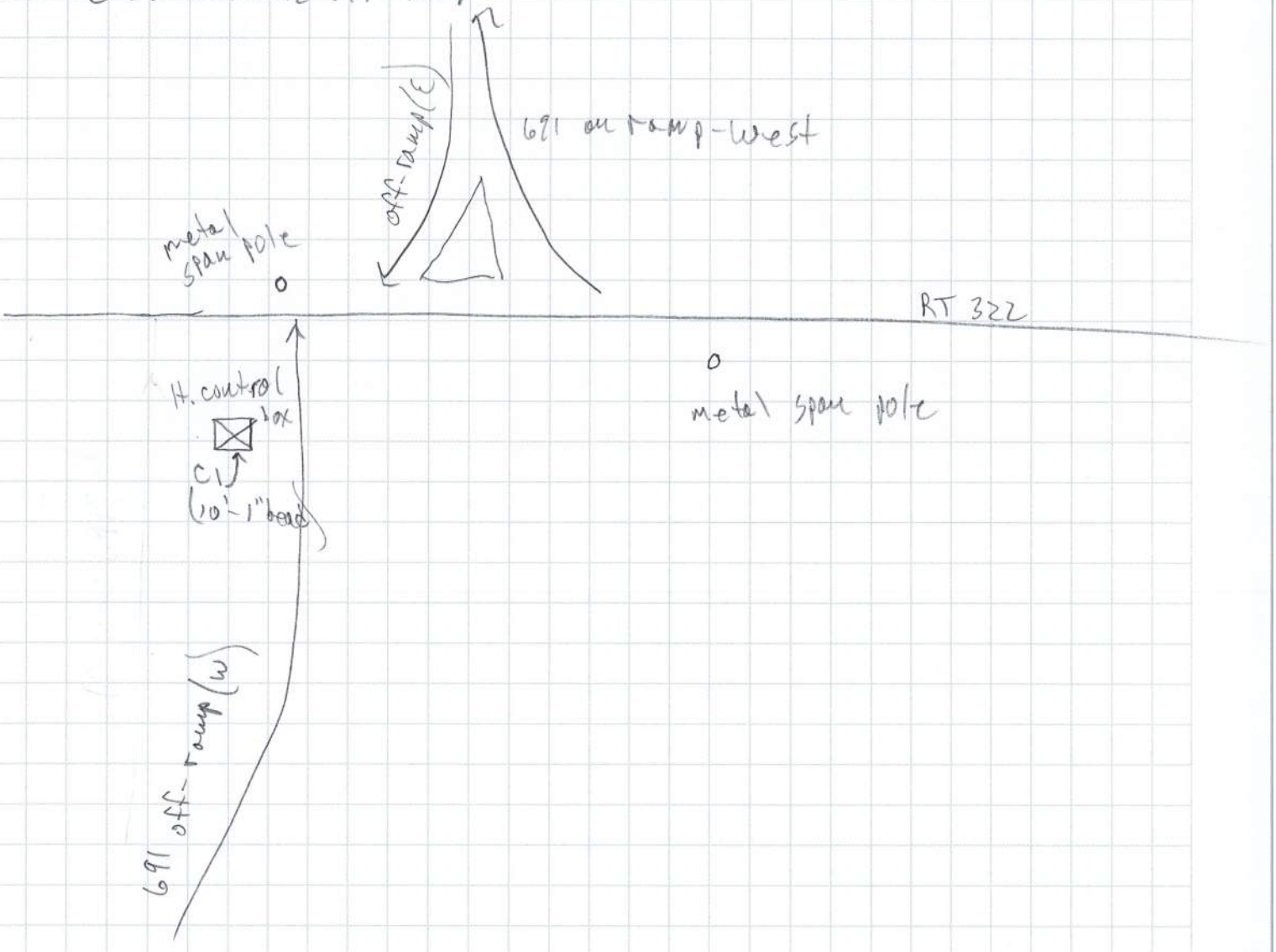
NO susp ACM

A

TRC Results you can rely on

SUBJECT DOT - Intersection insp's

131-233, southington
RT 322 @ 691 westbound off-Ramp



C1- black/grey, flexible control box caulk

SHEET NO. _____ OF _____

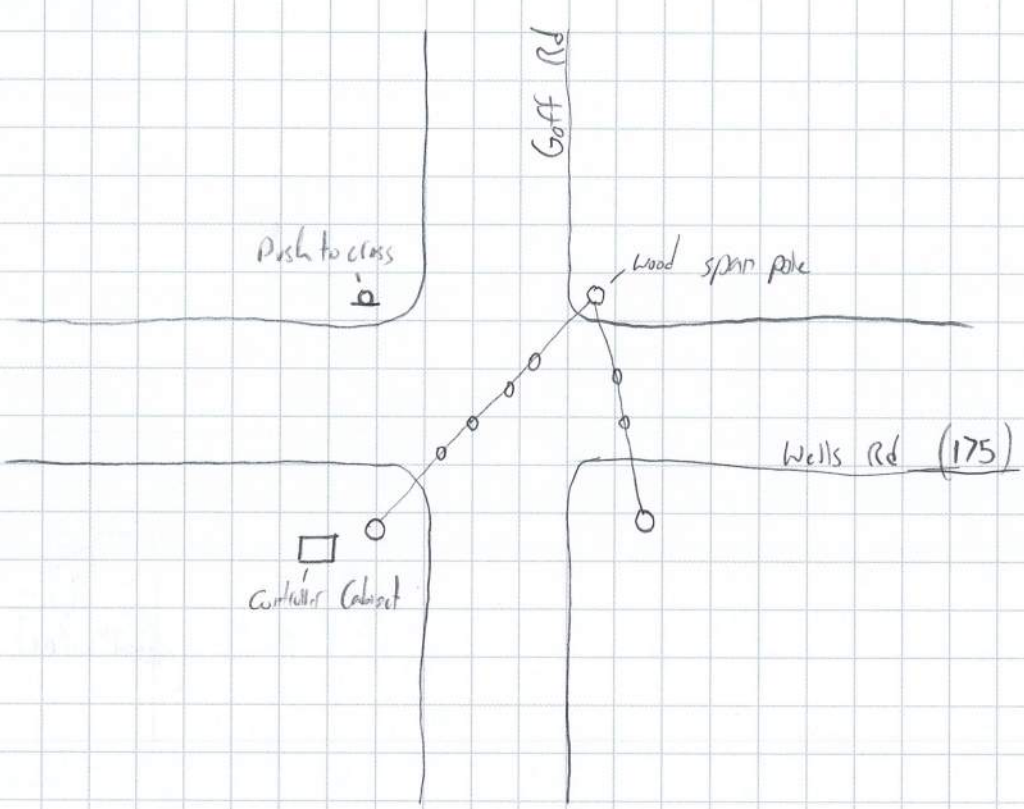
PROJECT NO. _____

DATE 1/30/18

BY ZS EG

CHK'D _____

SUBJECT Intersection 159-230 Wethersfield



Controller Cabinet - Only thin, powder coat on door - only enough for Total Pb
Span poles - 2 painted, 1 wood

C1 - hard white caulk on Controller Cabinet base

SHEET NO. _____ OF _____

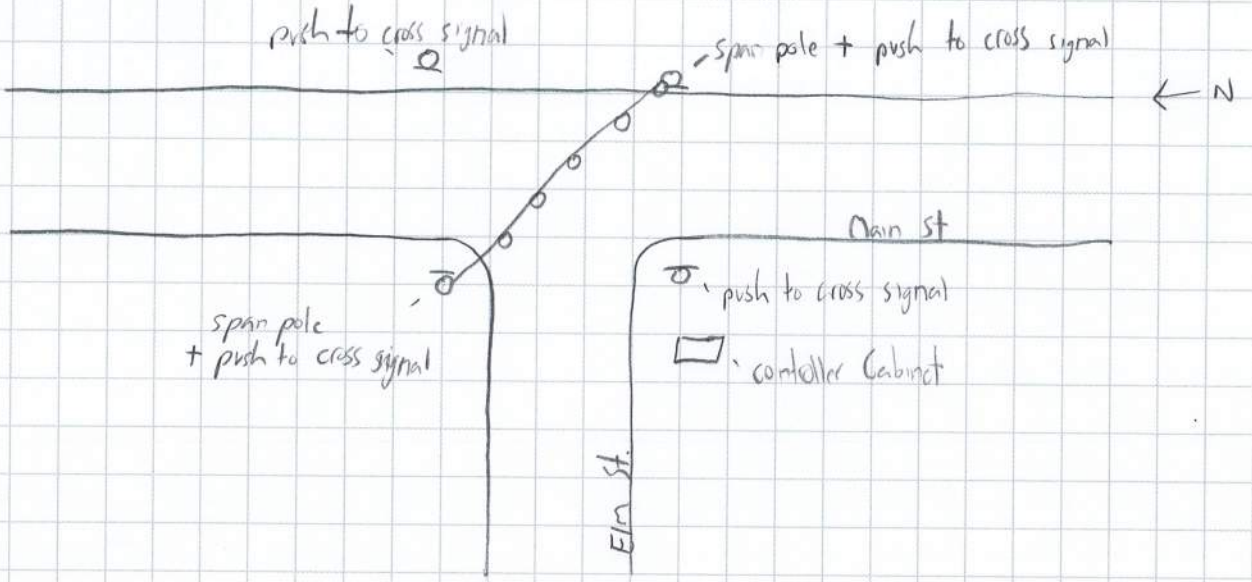
PROJECT NO. _____

DATE 1/30/18

BY ZS EG

CHK'D _____

SUBJECT Intersection 165 - 213



Span poles and push to cross signal posts are not painted

Controller Cabinet has caulk around base

c - Hard white caulk around base of Controller Cabinet ~ 10 linear feet

Project Title: Installation of Traffic Control Signals in District 1

Project Number:

- CN Project Number: 171-402
- PE Project Number: 171-402

Detailed Project Description: Installation of traffic control signals will require excavation of existing equipment as well as excavation for new foundations (span pole, mast arm, pedestal, controller cabinet, etc.) and trenching (i.e. conduit) as required. In addition to excavation for traffic signal equipment, excavation will be required for sidewalk ramps that will be installed or reconstructed to meet current ADA standards. In areas of an excavation where there is existing signal equipment, excavation will take place in areas that have undergone extensive ground disturbance in the past. In areas of an intersection where there is no existing signal equipment, excavation may be in areas where there may not have been extensive ground disturbance in the past. There is significantly less than one acre of disturbance for each location.

Purpose and Need Statement: This project will install new traffic signal equipment, which may include span poles, mast arms, signal heads, span wires, conduits, loops, pedestrian countdown heads, signing and pavement markings, to meet current department standards.

All intersections below consist of new signal equipment being installed at existing signalized locations:

1. Bloomfield – Route 218 at North Drive to CIGNA (Int. No. 011-209)
2. Cheshire – Route 10 at Maplecroft Shopping Center (Int. No. 025-225)
3. East Hartford – S.R. 502 at Rolling Meadow Drive (Int. No. 042-251)
4. New Britain – Route 71 at Paul J. Manafort Drive and Francis Street (Int. No. 088-247)
5. New Britain – Route 71 at Firehouse Lane (Int. No. 088-279)
6. Plainville – Route 10 at Whiting Street (Int. No. 109-201)
7. Rocky Hill – Route 99 at Town Line Road (Int. No. 118-209)
8. Southington – Route 322 at Interstate 691 Westbound Off-Ramp (Int. No. 131-233)
9. Wethersfield – Route 175 at Goff Road (Int. No. 159-230)
10. Windsor Locks – Route 140 at Route 159 - South Junction (Int. No. 165-213)

The intersection below consists of new signal equipment being installed at the existing unsignalized location:

1. Bloomfield – Route 178 at Crestview Drive (Int. No. 011-252)

The intersection below consists of a revision to existing signal equipment at the existing signalized location. The revision is for new pedestrian amenities and detection; existing span poles and span pole foundations will remain:

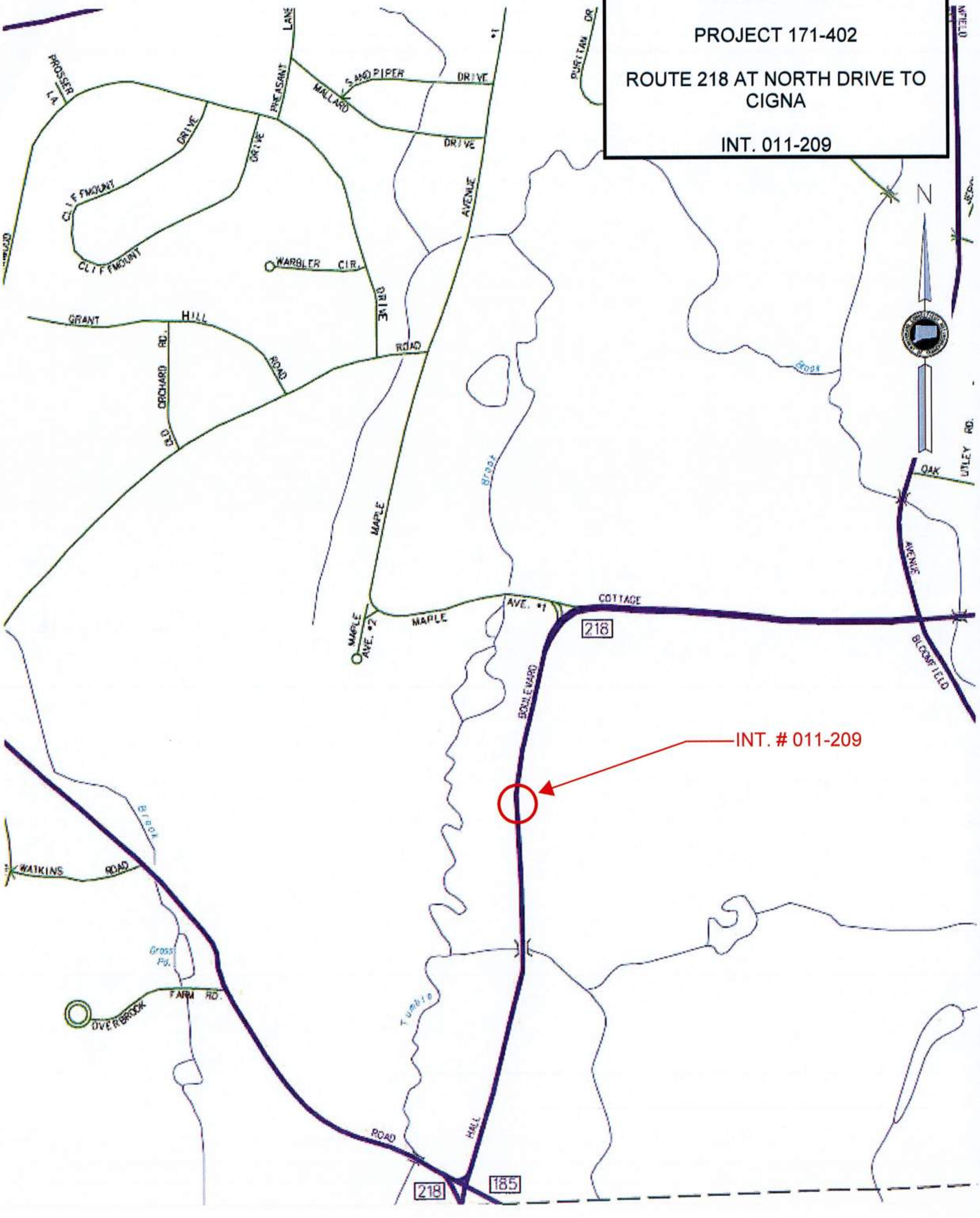
1. New Britain – Route 372 at Stanwood Drive and Wooster Street (Int. No. 088-221)

BLOOMFIELD

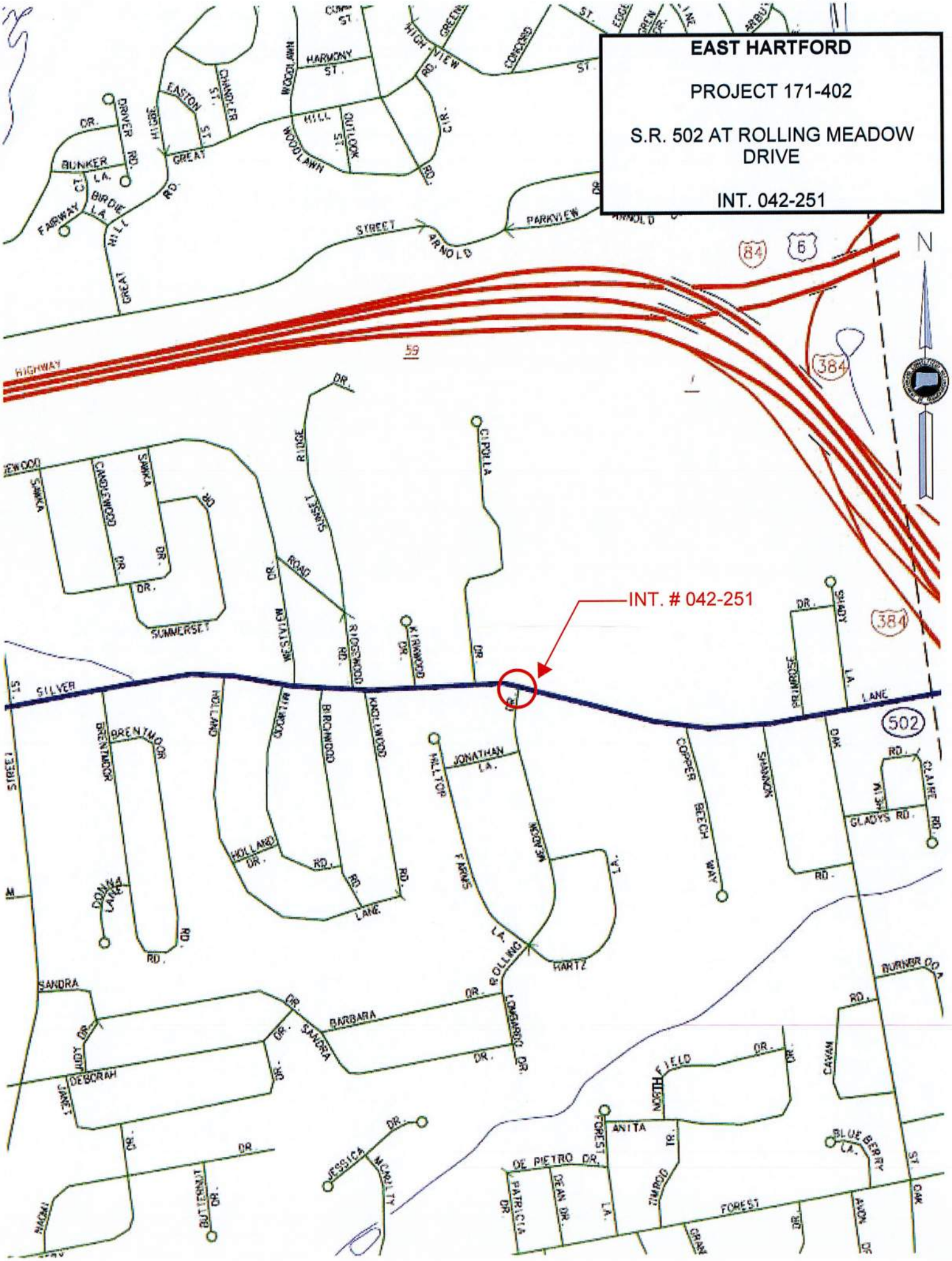
PROJECT 171-402

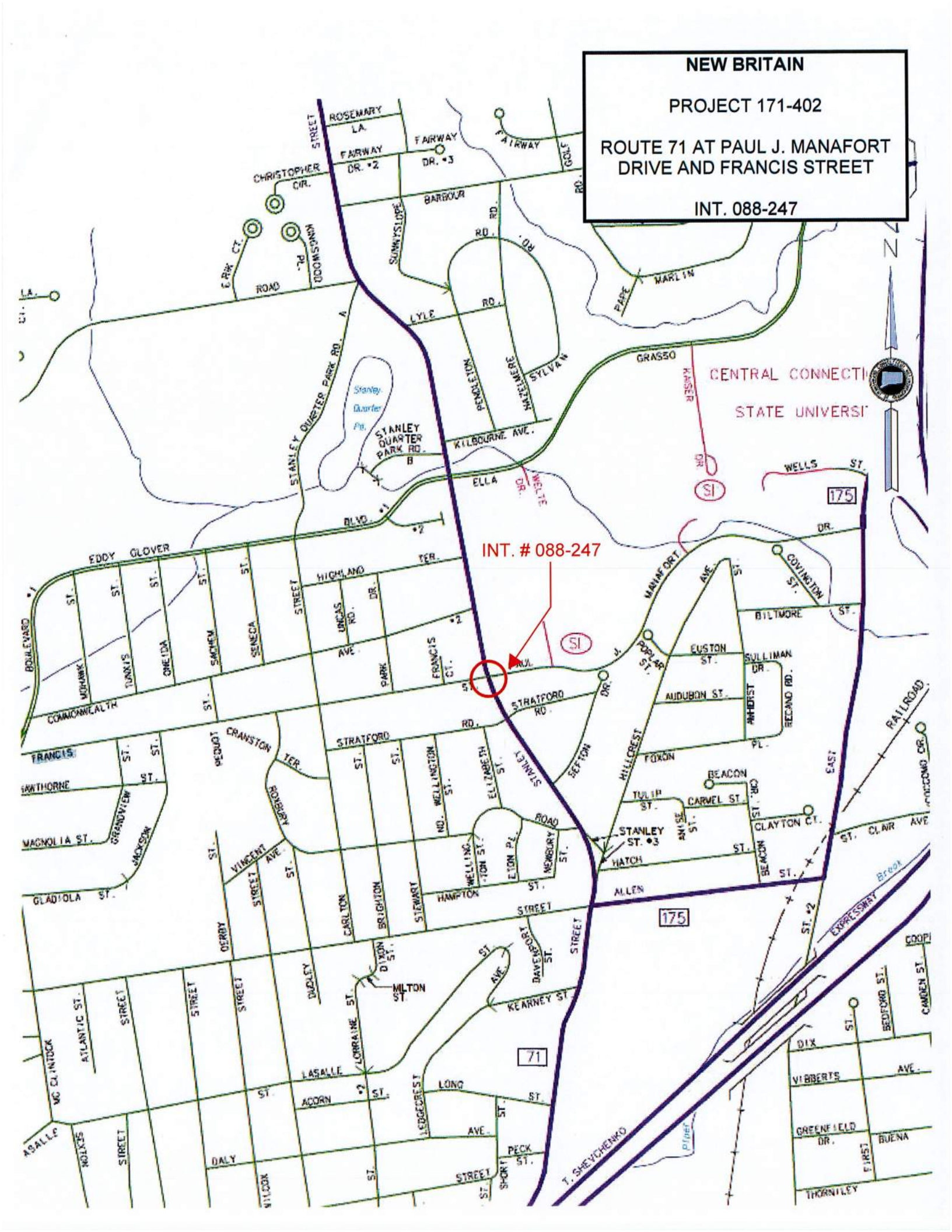
ROUTE 218 AT NORTH DRIVE TO CIGNA

INT. 011-209




CHESHIRE
PROJECT 171-402
ROUTE 10 AT MAPLECROFT SHOPPING CENTER
INT. 025-225
INT. # 025-225
Cheshire
10
68
70
N


EAST HARTFORD
PROJECT 171-402
S.R. 502 AT ROLLING MEADOW DRIVE
INT. 042-251
INT. # 042-251
N
84
6
384
502
59
SILVER LANE
ROLLING HILLS DR.
ROLLING HILLS LA.
HILLTOP FARMS
JONATHAN LA.
BRENTMOOR DR.
HOLLAND DR.
KNOLLWOOD DR.
BIRCHWOOD DR.
RIDGEWOOD RD.
WESTVIEW DR.
SUNSET RIDGE DR.
CIPOLLA DR.
KIRKWOOD DR.
SUMMERSET RD.
CANDLEWOOD DR.
SAWKA DR.
HIGHWAY
ARNOLD STREET
PARKVIEW DR.
GREAT HILL RD.
BUNKER HILL RD.
FAIRWAY CT.
BIRDIE LA.
DRIVER RD.
EASTON ST.
CHANDLER ST.
WOODLAWN CIR.
HARMONY ST.
HIGH VIEW RD.
OUTLOOK ST.
COPPER BEECH WAY
SHANNON RD.
SHADY LA.
JESSAMINE
GLADYS RD.
CLAIRE RD.
OAK RD.
BURNER DR.
SANDRA DR.
BARBARA DR.
LOMBARDO DR.
HARTZ LA.
DEBORAH DR.
JANET RD.
JUDY DR.
JESSICA DR.
McCARTY DR.
NORTH FIELD DR.
CAYAN RD.
ANITA DR.
FOREST DR.
DE PIETRO DR.
PATRICIA DR.
DEAN DR.
TIMROD LA.
BLUE BERRY LA.
FOREST ST.
AMON DR.
OAK ST.

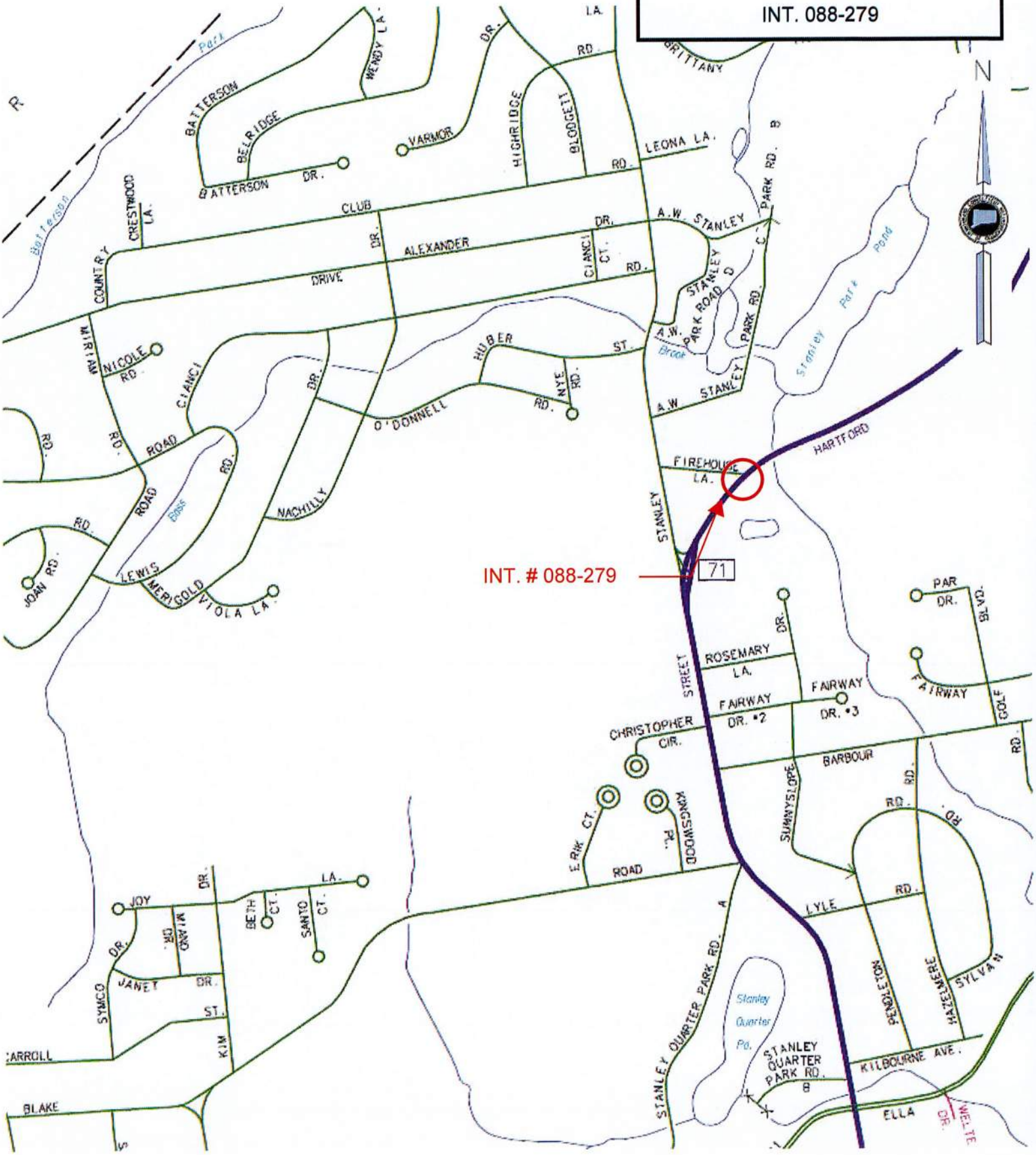

NEW BRITAIN
PROJECT 171-402
ROUTE 71 AT PAUL J. MANAFORT DRIVE AND FRANCIS STREET
INT. 088-247
INT. # 088-247
N
CENTRAL CONNECTI
STATE UNIVERSI
ROSEMARY LA.
FAIRWAY DR. #2
FAIRWAY DR. #3
AIRWAY
CHRISTOPHER CIR.
BARBOUR RD.
SUNNYSLOPE
E. RIV. CT.
ROAD
DOWNSMAN PL.
LYLE RD.
PAPE
MARLIN
GRASSO
RESSER DR.
RENDLETON
HAZELMERE
SYLVAN
STANLEY QUARTER PARK RD. A
STANLEY QUARTER PARK RD. B
KILBOURNE AVE.
ELLA
WELLS ST.
175
EDDY GLOVER BOULEVARD
HIGHLAND TER.
UNCAS RD. DR.
MANAFORT AVE.
COVINGTON ST.
BILTMORE ST.
EUSTON ST.
SULLIMAN DR.
AUDUBON ST.
AMHERST
BECAND RD.
FOXON PL.
COMMONWEALTH ST.
FRANCIS CT.
PARK AVE.
STRATFORD RD.
HILLCREST DR.
POPLAR ST.
SEFTON DR.
STANLEY
FRANCIS ST.
HAWTHORNE ST.
MAGNOLIA ST.
GRANDVIEW
JACKSON
GLADIOLA ST.
CRANSTON TER.
RANSOM
VINCENT AVE.
WELLINGTON ST.
ELIZABETH ST.
ELTON PL.
NEWBURY ST.
HAMPTON ST.
BEACON
TULIP ST.
CARMEL ST.
ANISE ST.
CLAYTON CT.
ST. CLAIR AVE
HATCH ST.
ALLEN ST.
RAILROAD
EAST
CARLTON
BRIGHTON
STEWART
DERBY
DUDLEY
DIXON ST.
MILTON ST.
DAVENPORT ST.
KEARNEY ST.
LORRAINE ST.
LASALLE ST.
ACORN ST.
LEDGECREST
LONG ST.
DALY
PECK ST.
SHORT ST.
WILCOX
ATLANTIC ST.
MC CLINTOCK
ASALLE
ROLLINS
71
T. SHEVCHENKO
EXPRESSWAY
DIX ST.
BEDFORD ST.
CAMDEN ST.
VIBBERTS AVE.
GREENFIELD DR.
BUENA
FIRST
THORNLEY

NEW BRITAIN

PROJECT 171-402

ROUTE 71 AT FIREHOUSE LANE

INT. 088-279

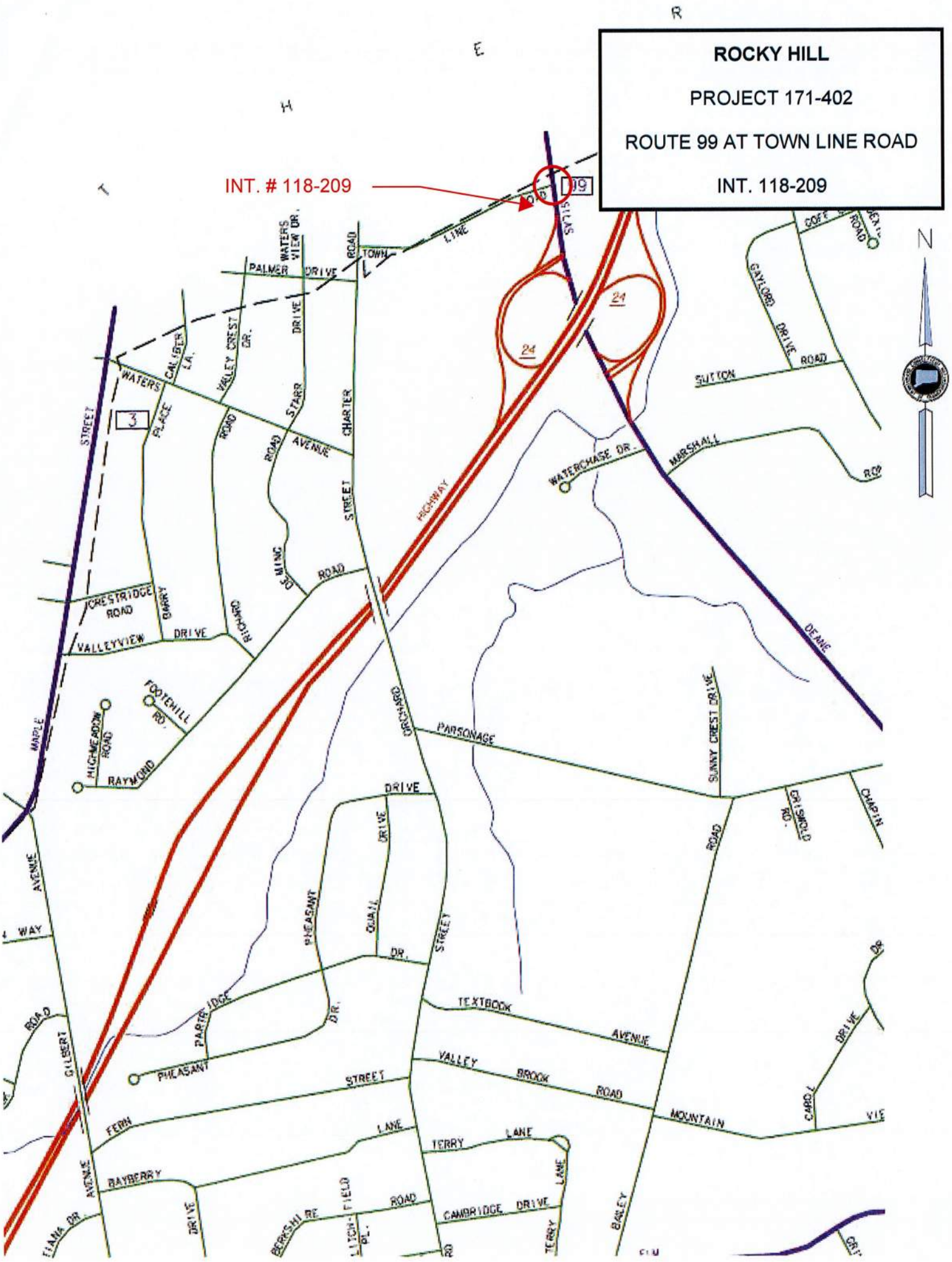


PLAINVILLE

PROJECT 171-402

ROUTE 10 AT WHITING STREET

INT. 109-201

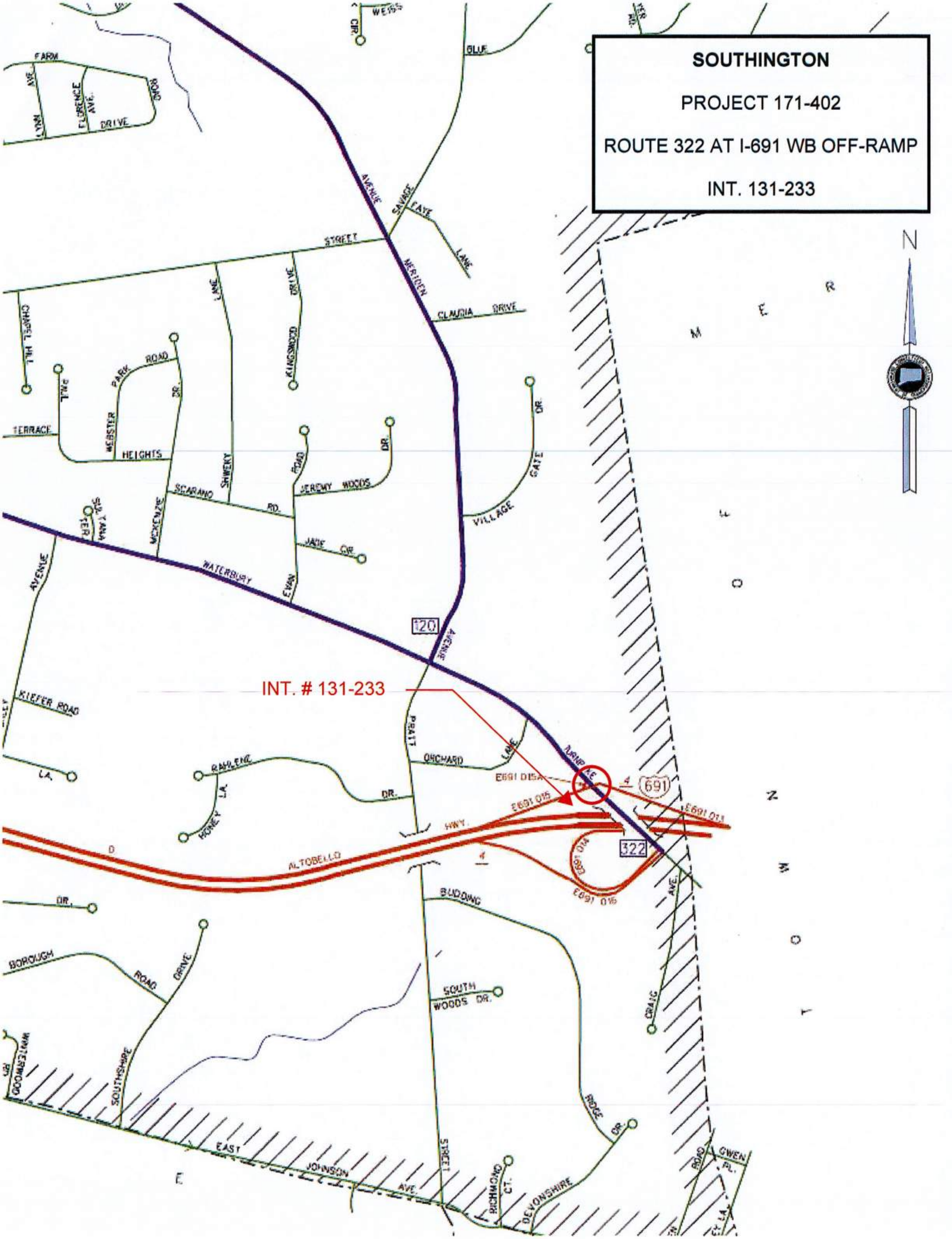

ROCKY HILL
PROJECT 171-402
ROUTE 99 AT TOWN LINE ROAD
INT. 118-209
INT. # 118-209
N
TOWN LINE
PALMER DRIVE
WATERS VIEW DR.
VALLEY CREST DR.
CALIBER LA.
WATERS PLACE
STARR ROAD
CHARTER OAK AVENUE
STREET
HIGHWAY
WATERCHASE DR.
MARSHALL
SUTTON ROAD
GAYLORD DRIVE
GOFF ROAD
DEANE
CRESTRIDGE ROAD
BARRY DRIVE
VALLEYVIEW DRIVE
RICHARD ROAD
OLD MING ROAD
FOOTEHILL RD.
HIGHMEADOW ROAD
RAYMOND
MAPLE AVENUE
ORCHARD
PARSONAGE
SUNNY CREST DRIVE
CRISWOLD RD.
CHAPIN
DRIVE
PHEASANT DR.
QUAIL DR.
PARTRIDGE DR.
PHEASANT STREET
TEXTBOOK AVENUE
VALLEY BROOK ROAD
MOUNTAIN
GILBERT ROAD
FERN LANE
BAYBERRY DRIVE
TERRY LANE
CAMBRIDGE DRIVE
BERKSHIRE ROAD
BARLEY
21
24
3

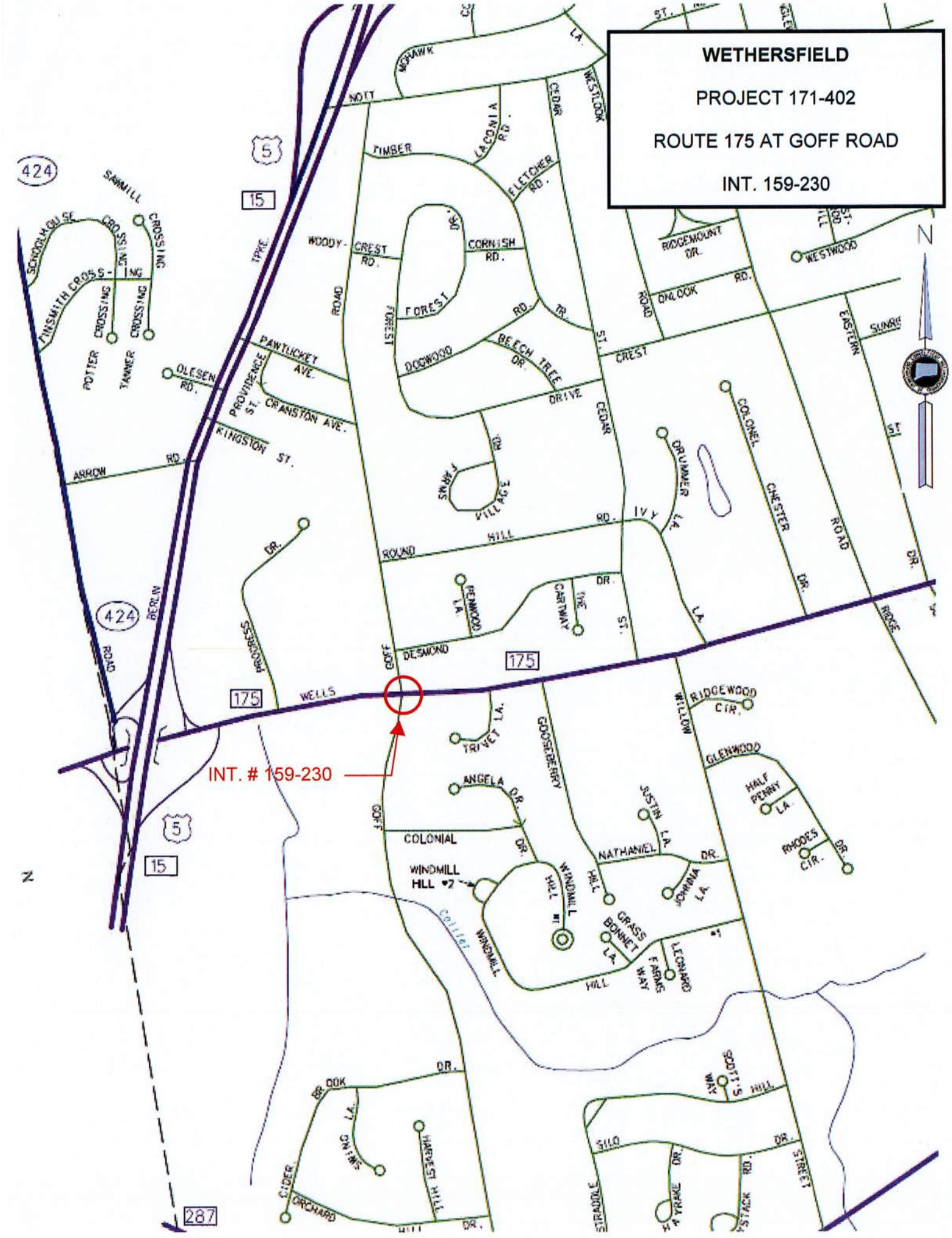
SOUTHINGTON

PROJECT 171-402

ROUTE 322 AT I-691 WB OFF-RAMP

INT. 131-233


INT. # 131-233
120
322
691
ALTOBELLO HWY.
WATERBURY
MERIDEN AVENUE
SAVAGE
STREET
CLAUDIA DRIVE
KINGSWOOD DRIVE
CHAPEL HILL
PARK ROAD
WEBSTER HEIGHTS
TERRACE
SCARANO RD.
SHWERY LANE
JEREMY WOODS DR.
VILLAGE GATE DR.
JADE CIR.
EVAN
MCKENZIE
AVENUE
KIEFER ROAD
ORCHARD LANE
RAHLENZ DR.
HONEY LA.
PRATT
E691 016
E691 013
E691 014
BUDDING
BOROUGH ROAD
DRIVE
SOUTH WOODS DR.
SOUTHSHIRE
WATERWOOD
EAST JOHNSON AVE.
STREET
RICHMOND CT.
DEVONSHIRE
RIDGE DR.
CRAIG AVE.
GWEN PL.
FAYE LANE
BLUE
FARM
FLORENCE AVE.
LYNN AVE.
DRIVE
WEISS
CIR.
M E R I D E N
N
N O T W O

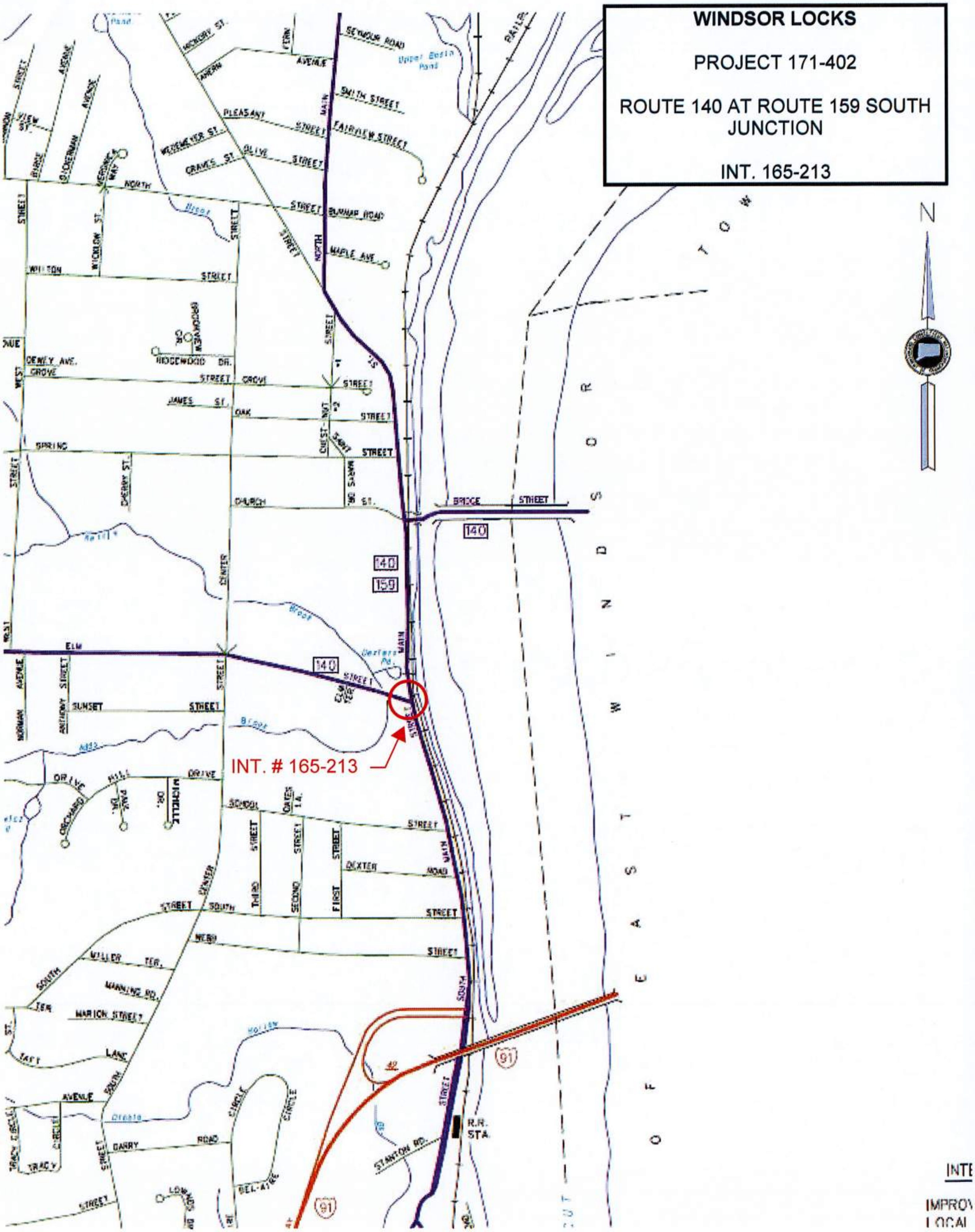

WETHERSFIELD
PROJECT 171-402
ROUTE 175 AT GOFF ROAD
INT. 159-230
INT. # 159-230
N
175
424
5
15
287
WELLS
COLONIAL
GOFF
ROUND HILL RD.
CEDAR
WOODY-CREST RD.
CORNISH RD.
FOREST RD.
BEECH TREE DR.
DOGWOOD DR.
PANTUCKET AVE.
PROVIDENCE ST.
CRANSTON AVE.
KINGSTON ST.
ARROW RD.
OLESEN RD.
POTTER
TANNER
TINSMITH CROSSING
SCHOOLHOUSE CROSSING
SAWMILL CROSSING
TPKE.
BERLIN ROAD
PROGRESS DR.
FARMS VILLAGE RD.
DRUMMER LA.
IVY LA.
COLONEL CHESTER ROAD
EASTERN
SUNRISE
CREST ST.
RIDGEMOUNT DR.
WESTWOOD
WESTLOOK
LACONIA RD.
FLETCHER RD.
TIMBER
MOHAWK
NOTT
RIDGEWOOD CIR.
GLENWOOD
HALF PENNY LA.
RHODES CIR.
WILLOW
GOOSEBERRY
TRIVET LA.
ANGELA DR.
WINDMILL HILL
WINDMILL HILL MT
JUSTIN LA.
NATHANIEL DR.
JOHNNIA LA.
GRASS BONNET LA.
FARMS WAY
LEONARD
SCOTT'S HILL
SILO DR.
STACK RD.
STRAWBERRY
CIDER ORCHARD HILL DR.
HARVEST HILL
CRIMS
BROOK DR.
PENWOOD LA.
CARTWAY
THE
DR.
ST.
LA.
RD.
CT.
CIR.
WAY
PL.

WINDSOR LOCKS

PROJECT 171-402

ROUTE 140 AT ROUTE 159 SOUTH JUNCTION

INT. 165-213


INT. # 165-213
SEYMOUR ROAD
SMITH STREET
FAIRVIEW STREET
PLEASANT STREET
OLIVE STREET
NORTH STREET
MAPLE AVE
WILTON STREET
DEWEY AVE.
GROVE STREET
JAMES ST.
OAK STREET
SPRING STREET
CHURCH ST.
BRIDGE STREET
140
159
ELM STREET
SUNSET STREET
MAIN STREET
SCHOOL STREET
DEXTER ROAD
SOUTH STREET
WEBB STREET
MILLER TER.
MANNING RD.
MARION STREET
CENTER STREET
STANTON RD.
R.R. STA.
91
N
E A S T   W I N D S O R
INTE
IMPROV
LOCAL