



April 26, 2016

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

Attention: A. Fox, P.E. / R. Levesque, P.E.

Subject: On-Call Asbestos, Lead, Air Quality & Demolition Compliance  
Agreement No. 04.27-01(15)  
HazMat Inspection - Bridge No. 01766, I-84 WB over Amtrak & Local Roads, Hartford,  
CT  
ConnDOT Assignment No. 514-5229  
ConnDOT Project No. 63-701  
TRC Project No. 222165.5229.0710

Dear Mr. Bonsignore:

TRC performed a limited survey for hazardous building materials associated with the rehabilitation of Bridge No. 01766 in Hartford, Connecticut. Results of the survey identified lead paint to be present on the structural steel/metal bridge components (0.1 mg/cm<sup>2</sup> and 0.13% by weight) of Bridge No. 01766. Results obtained from TCLP waste stream sampling and analysis for leachable lead from the paint on the structural steel/metal bridge components (12 mg/L) characterized the paint waste stream at Bridge No. 01766 as EPA RCRA/CTDEEP hazardous waste. Dark gray caulking on the abutment wall and black railing support pad were sampled and found to contain no asbestos. No bird/pigeon guano accumulations were observed around in accessible areas of the bridge. Homeless activity was observed at Bridge No. 01766, including but not limited to bedding and trash with potential for sharps which could contain blood borne pathogens. Associated laboratory data, project description, site map and site photos are attached.

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

Very Truly Yours,

TRC

A handwritten signature in black ink, appearing to read "Erik R. Plimpton".

Erik R. Plimpton, P.E., CHMM, CMC  
Vice President - Program Manager

A handwritten signature in black ink, appearing to read "E. Burke".

E. Burke, P.E.  
Engineer in Charge



**Lead Based Paint Measurement Summary Table**

Device(s): Niton XLP301-A (Serial #24792) X Ray Fluorescence (XRF) Spectrum Analyzer  
 Site: DOT Bridge #1766 Hartford, CT  
 Project #: 222165.5229.00710  
 Date(s): 1/28/2016  
 Inspector: Bryce Aston (Lead Inspector #001838)

Number	Interior/ Exterior	Location	Bridge No.	Structure	Feature	Material	Color	Condition	Reading (mg/cm2)	Precision (mg/cm2)	Depth Index	Duration (sec)	Date/Time
1			Self Calibration						1.5	0.0		210.71	1/27/2016 9:59
2			Self Calibration						1.5	0.0		218.12	1/28/2016 11:33
3			3.6 Calibration						4.1	0.4	1.4	4.45	1/28/2016 11:34
4			1.5 Calibration						1.7	0.2	1.2	5.37	1/28/2016 11:35
5			0.3 Calibration						0.3	0.1	1.0	5.18	1/28/2016 11:35
6	Exterior	Hartford	Bridge No. 01766	Bearing Pad		Metal	Gray	Defective	0.0	0.1	1.0	0.19	1/28/2016 12:07
7	Exterior	Hartford	Bridge No. 01766	Bearing Pad		Metal	Gray	Defective	0.0	0.0	1.0	5.19	1/28/2016 12:07
8	Exterior	Hartford	Bridge No. 01766	Bearing Pad		Metal	Gray	Defective	0.0	0.0	1.1	3.88	1/28/2016 12:08
9	Exterior	Hartford	Bridge No. 01766	Main I-Beam		Metal	Gray	Defective	0.0	0.0	2.9	5.2	1/28/2016 12:08
10	Exterior	Hartford	Bridge No. 01766	Main I-Beam		Metal	Gray	Defective	0.0	0.0	2.9	6.52	1/28/2016 12:09
11	Exterior	Hartford	Bridge No. 01766	Cross Beam		Metal	Gray	Defective	0.0	0.0	2.5	5.93	1/28/2016 12:10
12	Exterior	Hartford	Bridge No. 01766	Cross Beam		Metal	Gray	Defective	0.0	0.0	3.2	5.18	1/28/2016 12:10
13			3.6 Calibration						3.6	0.4	1.3	4.43	1/28/2016 12:25
14			0.3 Calibration						0.3	0.1	1.0	5.2	1/28/2016 12:25
15			3.6 Calibration						3.5	0.4	1.2	4.62	1/28/2016 12:26

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

80 Lupes Drive  
Stratford, CT 06615



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# 6010523

Report Date: February 02, 2016  
Project: CTDOT  
Project Number: DOT Bridge 1766  
PO Number: 222165-5229-0710

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



New York Certification: 11982  
Rhode Island Certification: 199

CET # : 6010523

Project: CTDOT

Project Number: DOT Bridge 1766

**SAMPLE SUMMARY**

The sample(s) were received at 14.7°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
1 Bridge 1766	6010523-01	Paint Chip	1/28/2016 11:24	01/29/2016

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

**Analyst: SS**

**Prep: EPA 3050B**

**Matrix: Paint Chip**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
6010523-01	1 Bridge 1766	0.13	0.10	%	1	B6B0113	02/01/2016	02/02/2016 11:10	

CET # : 6010523

Project: CTDOT

Project Number: DOT Bridge 1766

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

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.

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 the specified detection 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 # : 6010523  
Project: CTDOT  
Project Number: DOT Bridge 1766

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>EPA 6010C in Solid</i>	
Lead	CT

Complete Environmental Testing operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Public Health	PH0116	09/30/2016



80 Lupes Drive  
Stratford, CT 06615



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# 6030697

Report Date: April 06, 2016  
Project: CTDOT  
Project Number: Bridge 1766,  
PO Number: 222165.5229.0710

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



New York Certification: 11982  
Rhode Island Certification: 199

CET # : 6030697

Project: CTDOT

Project Number: Bridge 1766,

**SAMPLE SUMMARY**

The sample(s) were received at 23.3°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
1	6030697-01	Paint Chip	3/31/2016 11:25	03/31/2016

**Analyte: TCLP Lead [EPA 6010C]**

**Analyst: SS**

**Prep: EPA 3005A-1311**

**Matrix: Extract**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
6030697-01	1	12	0.013	mg/L	1	B6D0530	04/05/2016	04/05/2016 16:20	

CET # : 6030697

Project: CTDOT

Project Number: Bridge 1766,

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

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.

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 the specified detection 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 # : 6030697

Project: CTDOT

Project Number: Bridge 1766,

**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<i>EPA 6010C in Soil</i>	
Lead	CT,NY

Complete Environmental Testing operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Public Health	PH0116	09/30/2016
NY	New York Certification (NELAC)	11982	04/01/2016





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

## ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

Edition: October 2009  
 Supersede Previous Edition

LAB ID #. 47490

PROJECT NUMBER 222165-5229-0710		PROJECT NAME CT DOT Bridge #1766 Hartford, CT		INSPECTOR Hilton Hernandez		PARAMETERS					TURNAROUND TIME									
						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)	PLM:	8hr	24hr	48hr	3day	TEM:	24hr	48hr	3day	5day
FIELD SAMPLE NUMBER	DATE	TIME	TYPE	GRAB	SAMPLE LOCATION	MATERIAL														
						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)	Joint caulk	Joint caulk	Railing support pad top side white	Railing support pad top side white						
01	01/28/16	11:05	X	X	Bridge #1766 abutment wall	X					X									
02	01/28/16	11:06	X	X	Bridge #1766 abutment wall	X														
03	01/28/16	10:50	x		Bridge #1766 rail support pad	X														
04	01/28/16	10:50	x		Bridge #1766 rail support pad	x														

Relinquished by: (Signature) 	Date: 01/28/16	Received by: (Signature) 	Date: 1/28/16
(Printed) Hilton Hernandez	Time: 15:00	(Printed) Erik Plimpton	Time: 1500
Remarks: Results to Erik Plimpton and Hilton Hernandez		Condition of Samples: Acceptable: Yes <input type="checkbox"/> No <input type="checkbox"/>	
		Page 1 of 1	

**BULK ASBESTOS ANALYSIS REPORT**

CLIENT: CT Department of Transportation

Lab Log #: 0047490  
 Project #: 222165.5229.0710  
 Date Received: 01/28/2016  
 Date Analyzed: 01/29/2016

Site: Bridge #1766, Hartford, 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	Dark Grey	Yes	No	--	---	ND	None
02	Dark Grey	Yes	No	--	---	ND	None
03	Black	Yes	No	--	---	ND	None
04	Black	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), and the EPA recommended Method for the Determination of Asbestos in Bulk Building Materials (EPA/600/R-93/116), July 1993, R.L. Perkins and B.W. Harvey which utilizes 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, 2016. TRC is an American Industrial Hygiene Association (AIHA) accredited lab for PLM effective through October 1, 2016. Asbestos content is determined by visual estimate unless otherwise indicated. Quality Control is performed in-house on at least 10% of samples and the QC data related to the samples is available upon written request from the client.

This report shall not be reproduced, except in full, without the written approval of TRC. This report must not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report relates only to the items tested.

Analyzed by: K. Williamson Reviewed by: Aud Park Date Issued: 01/29/2016  
 Kathleen Williamson, Laboratory Manager Amanda Parkins, Approved Signatory

**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.

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

# Laboratory Report

**Batch:** NT 15593  
**Method:** NOB  
**Date Received:** 2/1/2016  
**Date Analyzed:** 2/2/2016  
**Date of Report:** 2/2/2016

**Client Project #:** 222165.5229.0710  
**Client Reference:** CT DOT - Bridge #1766, Hartford, CT  
**PO #:** C222165  
**Client #:** 297  
**Client Name:** TRC Environmental Corp. (CT)

LAB ID	Field ID	Description:	Color	Initial Weight	% Asbestos Types				TRE	ANT	Other Non-asp.	% Organic	% Carb.	Total % Asbestos	Prepared / Charged	
					CHR	AMO	ACT	CRO							Yes	No
NT118971	01	Joint caulk		.3406	.00	.00	.00	.00	.00	.00	12.12	60.16	27.72	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

STATE OF CONNECTICUT  
DEPARTMENT OF TRANSPORTATION

subject: State Bridge Program  
State Project No. 63-701  
Bridge No. 01766  
Interstate 84 WB over Amtrak and Local Roads  
Hartford

5229

*memorandum*

date: November 5, 2014

to:

Mr. Gregory M. Dorosh  
Transportation Principal Engineer  
Bureau of Engineering and Construction

from:

David A. Cutler  
Transportation Supervising Engineer  
Bureau of Engineering and Construction

Hazardous/Contaminated Materials Screening

This project consists of the following repairs:

- Partial and full depth deck patching and embedded zinc anodes
- Placement of a new waterproofing membrane and overlay
- Installation of new asphaltic plug joints in 2 locations and silicone deck joints in 5 locations
- Replacement of all expansion bearings with elastomeric bearings
- Structural steel web repairs at girder ends and pin and hanger assemblies
- Substructure patching
- Painting at the end 3' of girders and spot painting at pin and hanger assemblies
- Modification of the existing concrete parapets and removal of the steel bridge rail
- Cleaning of the scuppers and repairs to broken weep pipes
- Installation of bird spikes over the piers

No excavation is anticipated for the rehabilitation work on Bridge No. 01766.

Additional information is attached for your use in generating the screening evaluation for the subject bridge:

- Location Map
- Limits of Work

Please provide this office with the results of the screening evaluation for use in developing and advancing this project.

A reply by December 5, 2014 would be appreciated. If you have any questions or require additional information, please contact Mr. Andrew J. Cardinali, Transportation Engineer III, at Ext. 3315.

FDP 6/08/16

Attachments

Tracey A. Brais / tab

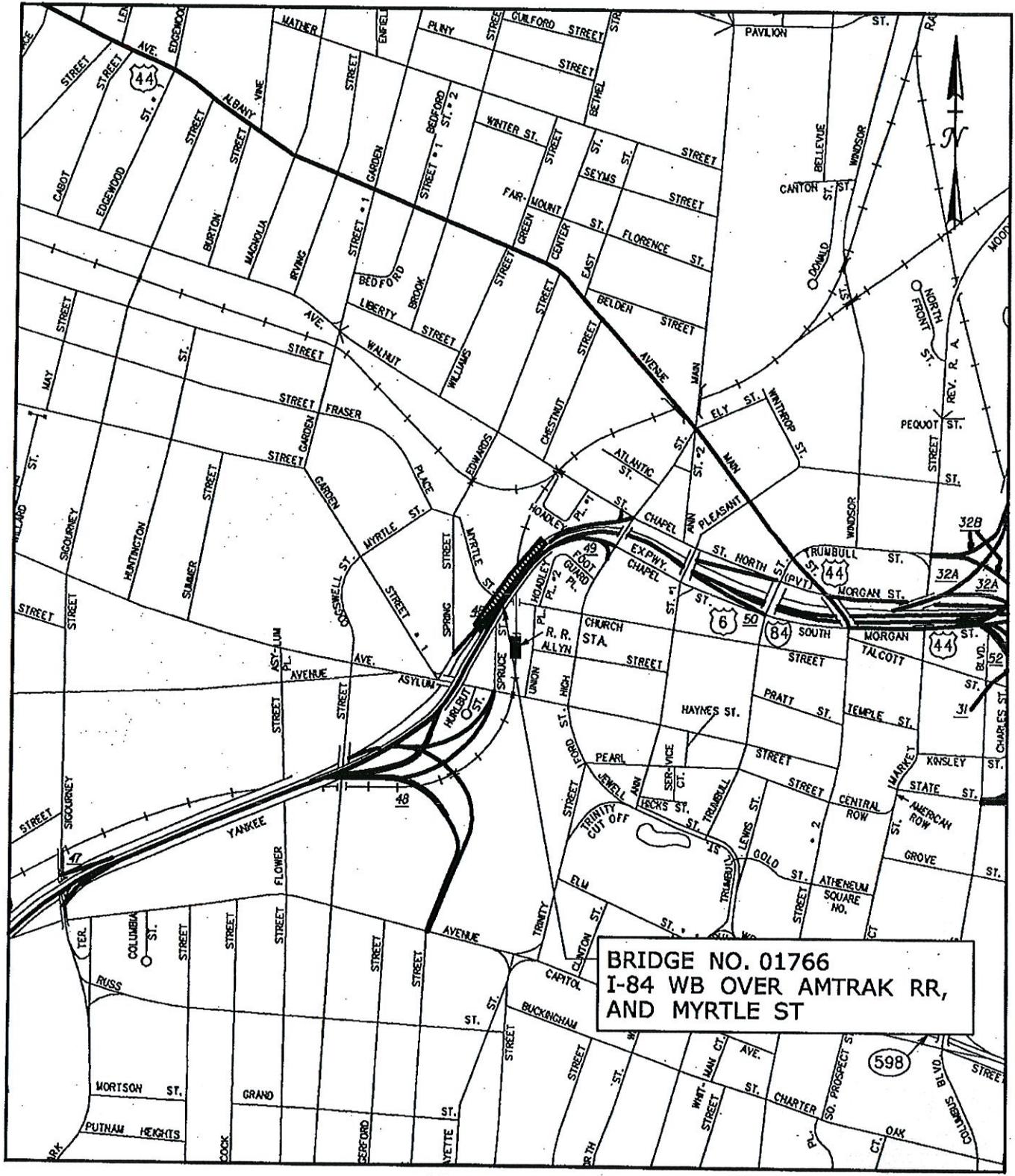
cc: Timothy D. Fields – David A. Cutler – Andrew J. Cardinali  
Jacob J. Argiro – Donald P. Wurst (CME)

RECEIVED

NOV 17 2014

Division of Environmental Compliance

11/18/14



**BRIDGE NO. 01766  
I-84 WB OVER AMTRAK RR,  
AND MYRTLE ST**

SCALE IN FEET



STATE PROJECT NO.:  
**63-701**  
CITY/TOWN:  
**HARTFORD**

**STATE OF CONNECTICUT**  
DEPARTMENT OF TRANSPORTATION




**BRIDGE NO. 01766**  
**LOCATION MAP**



CME Associates, Inc.  
CONSULTING ENGINEERS &  
ENVIRONMENTAL PLANNERS  
335 E. RYAN DR., SUITE 400  
EAST HARTFORD, CT 06104

DATE:  
**08/2014**  
SHEET NO.:  
**1 OF 2**



**PHOTO 1**  
Bridge #01766 Underside View