

**DISTRICT WIDE SCHOOL UPGRADES
NAUGATUCK, CONNECTICUT 06770**

S/P+A PROJECT NO. 16.041

Date Issued: June 29, 2016

The following changes to the Drawings and Project Specifications shall become a part of the Drawings and Project Specifications; superseding previously issued Drawings and Project Specifications to the extent modified by Addendum No. 1.

General Information:

- The prebid meeting sign-in sheet is attached for reference. (1)
- An additional addendum (#2) will be forthcoming.

New Specifications:

- HILLSIDE IS LIMITED ADDITIONAL HAZARDOUS MATERIAL SURVEY REPORT, dated June 2016, has been added and is attached as part of this addendum (17).

Changes to the Specifications:

- TABLE OF CONTENTS:
 - Page 1, Division 0 – Bidding and Contract Documents, Prevailing Wage Rate Information, Pages, add “34”.
 - Page 2, Division 2 – Existing Conditions, add the following:

“Hillside IS Limited Additional Hazardous Material Survey Report, June 2016 17”
- BID FORM, Page 1, revise “August 22, 2016” to read “October 31, 2016”.
- PREVAILING WAGE RATE INFORMATION, Wage Rates, dated June 17, 2016 have been added and are attached at part of this addendum. (15)

The bid date is changed to Monday, July 11, 2016 at 2:00pm by this addendum.

The addendum consists of thirty-four (34) pages of 8½”x11” text.

End of Addendum ‘1’



Project: Naugatuck District Wide School Upgrades (16.041)

June 21, 2016 @ 1:30 PM (Andrew Ave School)

[illegible]

LIMITED ADDITIONAL HAZARDOUS MATERIAL SURVEY REPORT

for

**Hillside Intermediate School
51 Hillside Avenue
Naugatuck, Connecticut**

Prepared For:

**Silver/Petrucelli & Associates
3190 Whitney Avenue
Building 2
Hamden, Connecticut 06518**

Prepared By:

**Langan CT, Inc.
555 Long Wharf Drive
New Haven, CT 06511**



**Matthew A. Myers
Senior Hazmat Specialist**

**15 June 2016
140141601**

LANGAN

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ACRONYMS

USEPA	United States Environmental Protection Agency
AHERA	Asbestos Hazard Emergency Response Act
OSHA	Occupational Safety and Health Administration
PPE	Personal Protective Equipment
CFR	Code of Federal Regulation
NESHAPS	National Standards for Hazardous Air Pollutants
HUD	Housing and Urban Development
CTDPH	Connecticut Department of Public Health
RCRA	Resource Conservation and Recovery Act
PLM	Polarized Light Microscopy
TEM	Transmission Electron Microscopy
ACM	Asbestos-Containing Materials
LBP	Lead-Based Paint
PCB	Polychlorinated Biphenyls (PCB)
SF	Square Feet
LF	Linear Feet
TCLP	Toxicity Characteristic Leaching Procedure
mg/cm ²	Milligrams per square centimeter
XRF	X-ray Fluorescence
AAS	Atomic Absorption Spectrometry

1.0 INTRODUCTION

Langan CT, Inc. (Langan) prepared this limited additional Hazardous Materials (Hazmat) Survey Report on behalf of the Silver Petrucelli & Associates Architects and the Town of Naugatuck to identify possible asbestos containing/contaminated ceiling tiles/grid support system that may exist in limited portions of Hillside Intermediate School at 51 Hillside Avenue in Naugatuck, Connecticut. The survey was limited to the ceilings in the main building - second and third floor and limited areas of the addition. Naugatuck reported that the majority of the ceilings on the first floor are being replaced by another project.

Previous AHERA and NESHAP inspection data had conflicting information about the ceiling tiles. The last three year AHERA re-inspection assumed the ceiling tiles throughout contain asbestos. TRC was reported to have taken ceiling tile bulk samples from throughout the school and asbestos containing ceiling tiles were only identified in the lower floor corridor of the main building. Langan obtained bulk samples from the third and second floors and these appeared to be the same as the first floor so additional samples were obtained from limited areas in the first floor to compare the results against the ceiling tiles in the upper two floors. No ceilings were tested in the basement floor.

Langan's April bulk sampling found the ceiling tiles did not contain asbestos in the main building (excluding asbestos containing ceiling tiles sampled in first floor corridor by TRC), however a couple areas of amosite asbestos containing ceiling tiles were found in the building addition. Due to the conflicting results and the possibility that older ceiling tiles (possibly asbestos containing) may have been replaced throughout, Langan obtained confirmatory bulk samples of the different types of ceiling tiles throughout the second and third floor and the first floor addition corridor. The other areas of the first floor addition and main building are being replaced by another project. Langan also obtained four samples of dust to test for possible asbestos contamination of the ceiling tiles/grid support system.

PROJECT INFORMATION

Client Name:	Silver/Petrucelli & Associates 3190 Whitney Avenue Building 2 Hamden, Connecticut	Property Visit Date:	3 June 2016
Professional's project #:	140141601	Construction Dates:	Approximately 1904 and Renovated/ Addition in 1961
Consultant's Project Manager:	Matthew A. Myers	No. Buildings:	One
Phone No.:	203-562-5571	No. of Stories:	Three Story and Basement
Email:	mmyers@langan.com	Bldgs. Gross Footage:	62,000 Square Feet
Property Address:	51 Hillside Avenue		
Property Town, State:	Naugatuck, Connecticut	Property Use:	Intermediate School

The following sections summarize Hazmat findings for the limited areas of the building surveyed.

2.0 ASBESTOS-CONTAINING MATERIALS (ACM)

Terminology

Suspect Asbestos-Containing Materials

Asbestos was used in certain types of construction and building materials. Until a material is examined by using polarized light microscopy (PLM) or a similar technique, the building material is considered as a suspect asbestos-containing material. A few examples of these materials include wall and ceiling plasters, sheetrock/taping compound, flooring materials, cove base and adhesives, ceiling panels, thermal system insulation, fireproofing insulation, roofing materials, adhesives, damp-proofing/waterproofing materials, caulking and glazing compounds, etc. Any suspect ACM and/or building material of unknown asbestos content should be assumed to be an asbestos containing material and handled and disposed of accordingly. Demolition, renovation, maintenance or daily activities should not disturb building materials that are found to contain asbestos, assumed to contain asbestos or that have not been tested for possible asbestos content.

Asbestos-Containing Material

A material with an asbestos concentration greater than one percent by weight is considered as ACM by the United States Environmental Protection Agency (USEPA). Thus, a material which contains asbestos in concentrations greater than 1% by weight is considered as “positive” while materials that do not contain asbestos or asbestos is detected in concentrations less than one percent by weight are considered as “negative”.

Regulatory Guidelines and Requirements

Federal

In accordance with the Clean Air Act (CAA), the U.S. Environmental Protection Agency (EPA) established National Emission Standards for hazardous Air Pollutants (NESHAP) to protect the public from exposure to airborne pollutants. Asbestos was one of the air pollutants, which was addressed under the NESHAP 40 CFR Part 61. The purpose of asbestos NESHAP regulations is to protect the public health by minimizing the release of asbestos when facilities, which contain ACM, are being renovated or demolished. EPA is responsible for enforcing regulations related to asbestos during renovation and demolition activities, however, the CAA allows the EPA to delegate this authority to State and Local Agencies. Even after EPA delegates responsibility to a state or Local agency, EPA retains the authority to oversee agency performance and to enforce NESHAP regulations as appropriate. OSHA considers any amount of asbestos to be regulated.

State

Asbestos in Connecticut is regulated by the State of Connecticut Department of Public Health (CTDPH), under Standards for Asbestos Abatement – Section 19a-333a-1 through 16 of Regulations of Connecticut State Agencies (RCSA) and Licensing and Training Requirements for Persons Engaged in Asbestos Abatement and Asbestos Consulting Services – Section 20-440-1 through 9 and Section 20-441 of RCSA.

Limited Asbestos Survey

During this limited survey, suspect ACM were separated into three USEPA categories. These categories are: thermal system insulation (TSI), surfacing materials and miscellaneous materials. State of Connecticut DPH licensed asbestos inspector Matthew Myers (#000041) performed the survey.

ACM Results Summary

A total of ten additional bulk samples were collected and were analyzed for possible asbestos content. Detailed bulk sampling results are included as Tables 1 and 2 below. A total of four microvacuum samples were collected to analyze dust containing possible asbestos fibers (contamination) on the ceiling tile/grid support systems. Analytical asbestos laboratory data can be found in Appendix A.

Bulk samples of the suspect asbestos-containing materials (ACM) were analyzed using the Polarized Light Microscopy (PLM) analytical methodology in accordance with EPA Protocol 600/R-93/116. Dust samples were collected and analyzed using ASTM D 5755. The samples were analyzed by EMSL of Cinnaminson, New Jersey. EMSL is accredited by the National Voluntary Laboratory Program (NVLAP) and American Industrial Hygiene Association (AIHA).

Utilizing the USEPA protocols and criteria, the following materials were determined to be **ACM**:

Table 1 – Asbestos Containing Materials

Material	Location	% Asbestos and Sample ID	Estimated Quantity of ACM
Light Backing Insulation – Miscellaneous Material	Toilet Room 31C and Limited Locations in Building Addition	ACM 20% Chrysotile 060301	Approximately 10 Square Feet
Pipe/Fitting/Roof Drain Insulation – Thermal System Insulation	Above Ceilings Throughout Second and Third Floors Main Building and Music Areas and Adjacent Corridors in Building Addition	Assumed	Approximately 175 Square Feet

Utilizing the USEPA protocol and criteria, the following materials were determined to be **non-ACM**:

Table 2 – Non-Asbestos Containing Materials

Material	Location	Sample ID
Ceiling Tiles (mix of grey and pink – six different types sampled) – Miscellaneous Material	Main Building (second and third floors) and Addition Corridors (see chain of custody for location of samples)	060302
		060303
		060304
		060305 A, B
		060306 A, B
		060307 A, B

Ceiling Tile/Grid Support System Microvacuum Dust Samples

Four samples were obtained (three from the main building - second and third floors – corridor, stairwell and a classroom and one from the building addition corridor adjacent music areas). Analysis indicated all four samples had a high dust loading and a loading of 1,000 structures/cm² could not be obtained for each sample. The analysis indicates there are no asbestos structures that were noted in the three main school dust samples. However, the building addition corridor sample did have amosite asbestos fibers detected.

3.0 CONCLUSIONS AND RECOMMENDATIONS

Langan provides the following conclusions and recommendations, based on the findings of this limited additional Hazardous Building Materials Survey:

Asbestos was not identified in the additional ceiling tiles bulk sampled (six different types/ages sampled) throughout the main building second and third floors, and building addition corridor.

Asbestos containing light backing insulation was found in the areas of work and they should be removed as part of the project by a licensed asbestos abatement contractor (will be disturbed by ceiling replacement). Assumed asbestos containing pipe/fitting/roof drain insulation was found above the ceilings throughout and they could be removed as part of the project by a licensed asbestos abatement contractor. The pipe/fitting/roof drain insulation, if intact, and will not be disturbed by the ceiling replacement, are not required to be removed.

The limited dust sampling analysis found no asbestos fibers detected in the three main building samples, however, amosite asbestos fiber contamination in the building addition corridor ceilings (tiles/grid support system) was detected. In the opinion of Langan, the building

addition corridor ceilings should be removed as an asbestos abatement project (containment, air sampling, etc.), including pre-cleaning and decontamination of the areas/materials found in the corridors (below and above suspended ceiling - lighting, ducts, mechanical and electrical, grids (if not being removed and replaced), decking above, etc.). It is not known if any surfaces below the ceilings are contaminated with asbestos containing fibers.

4.0 LIMITATIONS

The conclusions and recommendations presented in this report are professional opinions based solely upon Langan's visual observations, laboratory test data, and current regulatory requirements. These conclusions and recommendations are intended exclusively for the purpose stated herein, at the site indicated, and for the project indicated.

It is important to recognize that even the most comprehensive scope of services may fail to detect all hazmat that may be associated with the property. Therefore, Langan cannot act as insurers and cannot "certify" that all hazmat associated with the property have been identified, and no expressed or implied representation or warranty is included or intended in our report, except that our services were performed, within the limits prescribed by our client, with the customary thoroughness and competence of our profession.

Any suspect material that is not listed in this report must be assumed as ACM until confirmed otherwise via laboratory testing.

PCB sampling was not included as part of this survey.

Appendix A

Analytical Laboratory Results and Chain of Custody – Asbestos Samples



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Bulk Building Material Chain of Custody

EMSL Order Number (Lab Use Only):

EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE: (800) 220-3675
FAX: (856) 786-5974

Company: Langan CT		EMSL-Bill to: <input type="checkbox"/> Same <input checked="" type="checkbox"/> Different	
Street: 555 Long Wharf Drive		If Bill to is Different note instructions in Comments** Langan InvoiceCapture@ConcurSolutions.com	
City: New Haven	State/Province: CT	Zip/Postal Code: 06511	Country: USA
Report To (Name): Matthew Myers		Telephone #: 203.562.5771	
Email Address: MMyers@Langan.com		Fax #: 203.789.6142	Purchase Order:
Project Name/Number: 140141601 Hillside		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email	
U.S. State Samples Taken: CT School		CT Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hour <input type="checkbox"/> 6 Hour <input type="checkbox"/> 24 Hour <input checked="" type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week			
*For TEM Air 3 hr through 6 hr, please call ahead to schedule. There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.			
PLM - Bulk (reporting limit)		TEM - Bulk	
<input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input checked="" type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) If <3% Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NIOSH 9002 (<1%) <input type="checkbox"/> NY ELAP Method 198.1 (friable in NY) <input type="checkbox"/> NY ELAP Method 198.6 NOB (non-friable-NY) <input type="checkbox"/> OSHA ID-191 Modified <input type="checkbox"/> Standard Addition Method		<input type="checkbox"/> TEM EPA NOB - EPA 600/R-93/116 Section 2.5.5.1 <input type="checkbox"/> NY ELAP Method 198.4 (TEM) <input type="checkbox"/> Chatfield Protocol (semi-quantitative) <input type="checkbox"/> TEM % by Mass - EPA 600/R-93/116 Section 2.5.5.2 <input type="checkbox"/> TEM Qualitative via Filtration Prep Technique <input type="checkbox"/> TEM Qualitative via Drop Mount Prep Technique Other <input type="checkbox"/>	
<input checked="" type="checkbox"/> Check For Positive Stop - Clearly Identify Homogenous Group		Date Sampled: 6/3/16	
Samplers Name: Matt Myers		Samplers Signature: <i>Matt Myers</i>	
Sample #	HA #	Sample Location	Material Description
060301		Room 31A Toilet	Light Backing Paper
060302		Addition Corridor	2x4 Ceiling tile Gray
060303		Room 38	2x4 Ceiling tile - Pink
060304		Entrance - 31A - USG	2x4 Ceiling tile - Gray
060305A		3rd Flr middle stairs	2x4 Ceiling tile Gray
B		↓ stairs by rm 36	
06A		3rd Flr Corridor near middle stairs	
B		Room 35 B	
07A		3rd Floor Corridor (34)	
B		↓ near middle stairs	
Client Sample # (s):		Total # of Samples: 10	
Relinquished (Client): <i>[Signature]</i>		Date: 6/6	Time: 5pm
Received (Lab):		Date:	Time:
Comments/Special Instructions:			



EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077
 Tel/Fax: (800) 220-3675 / (856) 786-5974
 http://www.EMSL.com / cinnaslab@EMSL.com

EMSL Order: 041615069

Customer ID: LANG78

Customer PO:

Project ID:

Attention: Matthew Myers
 Langan Engineering & Environ. Services
 Long Wharf Maritime Center
 555 Long Wharf Drive
 New Haven, CT 06511

Project: 140141601 Hillside School

Phone: (203) 562-5771

Fax: (203) 789-6142

Received Date: 06/07/2016 9:45 AM

Analysis Date: 06/08/2016

Collected Date:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
060301 041615069-0001	Room 31A Toilet - Light backing Paper	White Fibrous Homogeneous		80% Non-fibrous (Other)	20% Chrysotile
060302 041615069-0002	Addition - 2X4 Ceiling tile gray	Gray Fibrous Homogeneous	50% Cellulose 30% Min. Wool	20% Non-fibrous (Other)	None Detected
060303 041615069-0003	Room 38 - 2X4 tile pink	Pink Fibrous Homogeneous	45% Cellulose 35% Min. Wool	20% Non-fibrous (Other)	None Detected
060304 041615069-0004	Entrance-31A - 2X4 ceiling tile gray	Gray Fibrous Homogeneous	55% Cellulose 25% Min. Wool	20% Non-fibrous (Other)	None Detected
060305A 041615069-0005	3rd Floor Middle Stairs - 2X4 ceiling tile gray April	Gray Fibrous Homogeneous	50% Cellulose 25% Min. Wool	25% Non-fibrous (Other)	None Detected
060305B 041615069-0006	Downstairs by room 36 - 2X4 ceiling tile gray	Gray Fibrous Homogeneous	50% Cellulose 35% Min. Wool	15% Non-fibrous (Other)	None Detected
060306A 041615069-0007	Room 35 B - 2X4 ceiling tile gray July	Gray Fibrous Homogeneous	55% Cellulose 30% Min. Wool	15% Non-fibrous (Other)	None Detected
060306B 041615069-0008	3rd Floor Corridor (34) - 2X4 ceiling tile gray	Gray Fibrous Homogeneous	50% Cellulose 35% Min. Wool	15% Non-fibrous (Other)	None Detected
060307A 041615069-0009	Near middle Stairs - 2X4 ceiling tile gray August	Gray Fibrous Homogeneous	50% Cellulose 30% Min. Wool	20% Non-fibrous (Other)	None Detected
060307B 041615069-0010	2X4 ceiling tile gray	Gray Fibrous Homogeneous	50% Cellulose 30% Min. Wool	20% Non-fibrous (Other)	None Detected

Analyst(s)

Amy Johnson (3)

Kelly Mulholland (7)

Benjamin Ellis, Laboratory Manager
 or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036, PA ID# 68-00367

Initial Report From: 06/08/2016 09:32:52

EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

041615093

EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE: (856)858-4800
FAX: (856)858-1292

Company: <u>Langan CT</u>		EMSL-Bill to: <input type="checkbox"/> Same <input checked="" type="checkbox"/> Different	
Street: <u>555 Long Wharf Drive</u>		If Bill to is Different note instructions in Comments** <u>hangan - Invoice Capture @ concursolutions.com</u>	
City: <u>New Haven</u>	State/Province: <u>CT</u>	Zip/Postal Code: <u>06511</u>	Country: <u>USA</u>
Report To (Name): <u>Matthew Myers</u>		Fax #: <u>203 789 6142</u>	
Telephone #: <u>203 562 5771</u>		Email Address: <u>mmyers@langan.com</u>	
Project Name/Number: <u>140141661</u>		<u>Hillside School - Montpelier</u>	
Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email <input type="checkbox"/> Purchase Order:		U.S. State Samples Taken: <u>CT</u>	
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hour <input type="checkbox"/> 6 Hour <input type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input checked="" type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week			
*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.			
PCM - Air <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA PLM - Bulk (reporting limit) <input type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)		TEM - Air <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	
TEM - Dust <input checked="" type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167)		Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative)	
Other: <input type="checkbox"/>			
<input type="checkbox"/> Check For Positive Stop - Clearly Identify Homogenous Group			
Samplers Name: <u>Matt Myers</u>		Samplers Signature: <u>Matt Myers</u>	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
060301	3rd Flr Corridor	2 LPM 100cm ²	6/3/16 5:40-5:42 PM
060303	3rd Flr Stairwell (3C)	1 L	6/3/16 5:45-5:47 PM
060304	Classroom 2C	1 L	6/3/16 6:30-6:34 PM
060306	Blank - Don't analyze w/o permission from client		6/3/16
060307	Addition Corridor	2 LPM 100cm ²	6/3/16 7:45-7:47 PM
Client Sample # (s):		Total # of Samples: <u>5</u>	
Relinquished (Client): <u>Lang</u>		Date: <u>6/6</u>	Time: <u>5pm</u>
Received (Lab): <u>B. Beatty</u>		Date: <u>6/7/16</u>	Time: <u>945</u>
Comments/Special Instructions:			

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (800) 220-3675 / (856) 786-5974

<http://www.EMSL.com>cinnaslab@EMSL.com

EMSL Order: 041615093

CustomerID: LANG78

CustomerPO:

ProjectID:

Attn: **Matthew Myers**
Langan Engineering & Environ. Services
Long Wharf Maritime Center
555 Long Wharf Drive
New Haven, CT 06511

Phone: (203) 562-5771
Fax: (203) 789-6142
Received: 06/07/16 9:45 AM
Analysis Date: 6/13/2016
Collected: 6/3/2016


Project: 140141601 / Hillside School

Test Report: Asbestos Analysis via Transmission Electron Microscopy ASTM Method D5755

SAMPLE ID	AREA SAMPLED (cm ²)	ASBESTOS TYPE	ASBESTOS STRUCTURES	Sensitivity (str/cm ²)	CONCENTRATION (str/cm ²)	COMMENTS
060301 041615093-0001	100	None Detected	<3	21900	<65700	Due to excessive particulate the analytical sensitivity of 1000 str/cm ² as required by the method was not reached
060303 041615093-0002	100	None Detected	<3	21900	<65700	Due to excessive particulate the analytical sensitivity of 1000 str/cm ² as required by the method was not reached
060304 041615093-0003	100	None Detected	<3	11000	<33000	Due to excessive particulate the analytical sensitivity of 1000 str/cm ² as required by the method was not reached
060307 041615093-0005	100	Amosite	<3	21900	<65700	Due to excessive particulate the analytical sensitivity of 1000 str/cm ² as required by the method was not reached

Analyst(s)

Wayne Froehlich (4)


Benjamin Ellis, Laboratory Manager
or other approved signatory

The above report relates only to the items tested. This report may not be reproduced, except in full, without written approval by EMSL Analytical, Inc. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ

Initial report from 06/13/2016 21:14:17

Appendix B

Langan Certifications and Accreditations

EMPLOYER'S COPY

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH



NAME
MATTHEW A. MYERS

VALIDATION NO
03-436509

CERTIFICATE NO
000191

CURRENT THROUGH
04/30/17

PROFESSION
LEAD INSPECTOR RISK ASSESSOR

SIGNATURE  
COMMISSIONER

EMPLOYER'S COPY

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

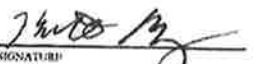

NAME
MATTHEW A. MYERS

VALIDATION NO
03-436510

CERTIFICATE NO
000041

CURRENT THROUGH
04/30/17

PROFESSION
ASBESTOS CONSULTANT-INSPECTION/MGMT PLANNER

SIGNATURE  
COMMISSIONER

EMPLOYER'S COPY

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH



NAME
MATTHEW A. MYERS

VALIDATION NO
03-437365

CERTIFICATE NO
000077

CURRENT THROUGH
04/30/17

PROFESSION
ASBESTOS CONSULTANT-PROJECT MONITOR

SIGNATURE  
COMMISSIONER

EMPLOYER'S COPY

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

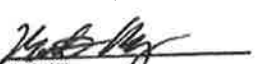

NAME
MATTHEW A. MYERS

VALIDATION NO
03-437366

CERTIFICATE NO
000058

CURRENT THROUGH
04/30/17

PROFESSION
ASBESTOS CONSULTANT-PROJECT DESIGNER

SIGNATURE  
COMMISSIONER

Ques&T

Quality Environmental Solutions & Technologies, Inc
1376 Route 9, Wappingers Falls, NY 12590
Phone 845-298-6031 Fax 845-298-6251

HEREBY CERTIFIES THAT

MATTHEW MYERS

HAS SUCCESSFULLY COMPLETED A TRAINING SEMINAR IN:

NYS/EPA INSPECTOR REFRESHER

MEETING THE REQUIREMENTS OF NYSDOH 10 NYCRR, PART 73 AND
TSCA TITLE 11 AND RECEIVED THIS CERTIFICATE BY:



KENNETH C. ECK
TRAINING DIRECTOR

NOTE: Official record of successful completion is DOH 2832 Certificate of Completion of
Asbestos Safety Training

Note: DOH 2832 - A \$20 fee shall be charged for replacement of Certificate of Completion DOH 2832

ON THIS DATE: 08/12/2015

CERTIFICATE NUMBER: 734718

EXPIRATION DATE 08/12/2016

Project: District Wide School Upgrades

**Minimum Rates and Classifications
for Building Construction**

ID# : B 22300

**Connecticut Department of Labor
Wage and Workplace Standards Division**

By virtue of the authority vested in the Labor Commissioner under provisions of Section 31-53 of the General Statutes of Connecticut, as amended, the following are declared to be the prevailing rates and welfare payments and will apply only where the contract is advertised for bid within 20 days of the date on which the rates are established. Any contractor or subcontractor not obligated by agreement to pay to the welfare and pension fund shall pay this amount to each employee as part of his/her hourly wages.

Project Number:

Project Town: Naugatuck

State#:

FAP#:

Project: District Wide School Upgrades

CLASSIFICATION	Hourly Rate	Benefits
1a) Asbestos Worker/Insulator (Includes application of insulating materials, protective coverings, coatings, & finishes to all types of mechanical systems; application of firestopping material for wall openings & penetrations in walls, floors, ceilings	35.75	28.82
1b) Asbestos/Toxic Waste Removal Laborers: Asbestos removal and encapsulation (except its removal from mechanical systems which are not to be scrapped), toxic waste removers, blasters.**See Laborers Group 7**		
1c) Asbestos Worker/Heat and Frost Insulator	37.15	27.56

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2) Boilermaker	35.24	25.01
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3a) Bricklayer, Cement Mason, Concrete Finisher (including caulking), Stone Masons	33.48	29.16 + a
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3b) Tile Setter	34.30	24.15
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3c) Terrazzo Mechanics and Marble Setters	31.69	22.35
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3d) Tile, Marble & Terrazzo Finishers	26.43	20.59
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3e) Plasterer	33.48	29.16
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-----LABORERS-----

4) Group 1: Laborers (common or general), acetylene burners, carpenter tenders, concrete specialists, wrecking laborers, fire watchers.	28.55	18.90 + a
4a) Group 2: Mortar mixers, plaster tender, power buggy operators, powdermen, fireproofers/mixer/nozzlemans (Person running mixer and spraying fireproof only).	28.80	18.90 + a
4b) Group 3: Jackhammer operators/pavement breaker, mason tender (brick), mason tender (cement/concrete), forklift operators and forklift operators (masonry).	29.05	18.90 + a
4c) **Group 4: Pipelayers (Installation of water, storm drainage or sewage lines outside of the building line with P6, P7 license) (the pipelayer rate shall apply only to one or two employees of the total crew whose primary task is to actually perform the mating of pipe sections) P6 and P7 rate is \$26.80.	28.80	18.90 + a
4d) Group 5: Air track operator, sand blaster and hydraulic drills.	29.30	18.90 + a

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4e) Group 6: Blasters, nuclear and toxic waste removal.	31.55	18.90 + a
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4f) Group 7: Asbestos/lead removal and encapsulation (except it's removal from mechanical systems which are not to be scrapped).	29.55	18.90 + a
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4g) Group 8: Bottom men on open air caisson, cylindrical work and boring crew.	28.38	18.90 + a
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4h) Group 9: Top men on open air caisson, cylindrical work and boring crew.	27.86	18.90 + a
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4i) Group 10: Traffic Control Signalman	16.00	18.90 + a
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5) Carpenter, Acoustical Ceiling Installation, Soft Floor/Carpet Laying, Metal Stud Installation, Form Work and Scaffold Building, Drywall Hanging, Modular-Furniture Systems Installers, Lathers, Piledrivers, Resilient Floor Layers.	31.45	23.54
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5a) Millwrights	31.84	23.99
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6) Electrical Worker (including low voltage wiring) (Trade License required: E1,2 L-5,6 C-5,6 T-1,2 L-1,2 V-1,2,7,8,9)	37.62	23.00 + 3% of gross wage
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7a) Elevator Mechanic (Trade License required: R-1,2,5,6)	49.00	29.985+a+b
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-----LINE CONSTRUCTION-----

Groundman	24.99	6.25%+11.81
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Linemen/Cable Splicer	45.43	6.25%+20.70
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8) Glazier (Trade License required: FG-1,2)	35.08	19.35 + a
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9) Ironworker, Ornamental, Reinforcing, Structural, and Precast Concrete Erection	34.47	31.09 + a
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----OPERATORS----

Group 1: Crane handling or erecting structural steel or stone, hoisting engineer 2 drums or over, front end loader (7 cubic yards or over), work boat 26 ft. and over and Tunnel Boring Machines. (Trade License Required)	38.55	23.55 + a
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Group 2: Cranes (100 ton rate capacity and over); Excavator over 2 cubic yards; Piledriver (\$3.00 premium when operator controls hammer); Bauer Drill/Caisson. (Trade License Required)	38.23	23.55 + a
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Group 3: Excavator; Backhoe/Excavator under 2 cubic yards; Cranes (under 100 ton rated capacity), Grader/Blade; Master Mechanic; Hoisting Engineer (all types of equipment where a drum and cable are used to hoist or drag material regardless of motive power of operation), Rubber Tire Excavator (Drott-1085 or similar); Grader Operator; Bulldozer Fine Grade. (slopes, shaping, laser or GPS, etc.). (Trade License Required)	37.49	23.55 + a
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Group 4: Trenching Machines; Lighter Derrick; Concrete Finishing Machine; CMI Machine or Similar; Koehring Loader (Skooper).	37.10	23.55 + a
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Group 5: Specialty Railroad Equipment; Asphalt Paver; Asphalt Reclaiming Machine; Line Grinder; Concrete Pumps; Drills with Self Contained Power Units; Boring Machine; Post Hole Digger; Auger; Pounder; Well Digger; Milling Machine (over 24" Mandrell)	36.51	23.55 + a
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Group 5 continued: Side Boom; Combination Hoe and Loader; Directional Driller; Pile Testing Machine.	36.51	23.55 + a
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Group 6: Front End Loader (3 up to 7 cubic yards); Bulldozer (rough grade dozer).	36.20	23.55 + a
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Group 7: Asphalt roller, concrete saws and cutters (ride on types), vermeer concrete cutter, Stump Grinder; Scraper; Snooper; Skidder; Milling Machine (24" and under Mandrell).	35.86	23.55 + a
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Group 8: Mechanic, grease truck operator, hydroblaster; barrier mover; power stone spreader; welding; work boat under 26 ft.; transfer machine.	35.46	23.55 + a
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Group 9: Front end loader (under 3 cubic yards), skid steer loader regardless of attachments, (Bobcat or Similar): forklift, power chipper; landscape equipment (including Hydroseeder).	35.03	23.55 + a
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Group 10: Vibratory hammer; ice machine; diesel and air, hammer, etc.	32.99	23.55 + a
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Group 11: Conveyor, earth roller, power pavement breaker (whiphammer), robot demolition equipment.	32.99	23.55 + a
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Group 12: Wellpoint operator.	32.93	23.55 + a
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Group 13: Compressor battery operator.	32.35	23.55 + a
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Group 14: Elevator operator; tow motor operator (solid tire no rough terrain).	31.21	23.55 + a
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Group 15: Generator Operator; Compressor Operator; Pump Operator; Welding Machine Operator; Heater Operator.	30.80	23.55 + a
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Group 16: Maintenance Engineer/Oiler.	30.15	23.55 + a
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Group 17: Portable asphalt plant operator; portable crusher plant operator; portable concrete plant operator.	34.46	23.55 + a
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Group 18: Power safety boat; vacuum truck; zim mixer; sweeper; (Minimum for any job requiring a CDL license).	32.04	23.55 + a
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-----PAINTERS (Including Drywall Finishing)-----

10a) Brush and Roller	31.52	19.35
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10b) Taping Only/Drywall Finishing	32.27	19.35
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10c) Paperhanger and Red Label	32.02	19.35
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10e) Blast and Spray	34.52	19.35
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11) Plumber (excluding HVAC pipe installation) (Trade License required: P-1,2,6,7,8,9 J-1,2,3,4 SP-1,2)	40.62	28.91
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12) Well Digger, Pile Testing Machine	33.01	19.40 + a
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Roofer: Cole Tar Pitch	39.00	14.75 + a
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Roofer: Slate, Tile, Composition, Shingles, Singly Ply and Damp/Waterproofing	37.50	14.75 + a
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15) Sheetmetal Worker (Trade License required for HVAC and Ductwork: SM-1,SM-2,SM-3,SM-4,SM-5,SM-6)	35.74	33.22
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16) Pipefitter (Including HVAC work) (Trade License required: S-1,2,3,4,5,6,7,8 B-1,2,3,4 D-1,2,3,4, G-1, G-2, G-8 & G-9)	40.62	28.91
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-----TRUCK DRIVERS-----

17a) 2 Axle	28.83	21.39 + a
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17b) 3 Axle, 2 Axle Ready Mix	28.93	21.39 + a
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17c) 3 Axle Ready Mix	28.98	21.39 + a
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17d) 4 Axle, Heavy Duty Trailer up to 40 tons	29.03	21.39 + a
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17e) 4 Axle Ready Mix	29.08	21.39 + a
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17f) Heavy Duty Trailer (40 Tons and Over)	29.28	21.39 + a
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17g) Specialized Earth Moving Equipment (Other Than Conventional Type on-the-Road Trucks and Semi-Trailers, Including Euclids)	29.08	21.39 + a
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18) Sprinkler Fitter (Trade License required: F-1,2,3,4)	41.37	20.77 + a
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19) Theatrical Stage Journeyman	25.76	7.34
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Welders: Rate for craft to which welding is incidental.

**Note: Hazardous waste removal work receives additional \$1.25 per hour for truck drivers.*

***Note: Hazardous waste premium \$3.00 per hour over classified rate*

ALL Cranes: When crane operator is operating equipment that requires a fully licensed crane operator to operate he receives an extra \$3.00 premium in addition to the hourly wage rate and benefit contributions:

1) Crane handling or erecting structural steel or stone; hoisting engineer (2 drums or over)

2) Cranes (100 ton rate capacity and over) Bauer Drill/Caisson

3) Cranes (under 100 ton rated capacity)

Crane with 150 ft. boom (including jib) - \$1.50 extra

Crane with 200 ft. boom (including jib) - \$2.50 extra

Crane with 250 ft. boom (including jib) - \$5.00 extra

Crane with 300 ft. boom (including jib) - \$7.00 extra

Crane with 400 ft. boom (including jib) - \$10.00 extra

All classifications that indicate a percentage of the fringe benefits must be calculated at the percentage rate times the "base hourly rate".

Apprentices duly registered under the Commissioner of Labor's regulations on "Work Training Standards for Apprenticeship and Training Programs" Section 31-51-d-1 to 12, are allowed to be paid the appropriate percentage of the prevailing journeymen hourly base and the full fringe benefit rate, providing the work site ratio shall not be less than one full-time journeyman instructing and supervising the work of each apprentice in a specific trade.

The Prevailing wage rates applicable to this project are subject to annual adjustments each July 1st for the duration of the project.

Each contractor shall pay the annual adjusted prevailing wage rate that is in effect each July 1st, as posted by the Department of Labor.

It is the contractor's responsibility to obtain the annual adjusted prevailing wage rate increases directly from the Department of Labor's website.

The annual adjustments will be posted on the Department of Labor's Web page: www.ct.gov/dol. For those without internet access, please contact the division listed below.

The Department of Labor will continue to issue the initial prevailing wage rate schedule to the Contracting Agency for the project.

All subsequent annual adjustments will be posted on our Web Site for contractor access.

Contracting Agencies are under no obligation pursuant to State labor law to pay any increase due to the annual adjustment provision.

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Effective October 1, 2005 - Public Act 05-50: any person performing the work of any mechanic, laborer, or worker shall be paid prevailing wage

All Person who perform work ON SITE must be paid prevailing wage for the appropriate mechanic, laborer, or worker classification.

All certified payrolls must list the hours worked and wages paid to All Persons who perform work ON SITE regardless of their ownership i.e.: (Owners, Corporate Officers, LLC Members, Independent Contractors, et. al)

Reporting and payment of wages is required regardless of any contractual relationship alleged to exist between the contractor and such person.

~~Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clause (29 CFR 5.5 (a) (1) (ii)).

Please direct any questions which you may have pertaining to classification of work and payment of prevailing wages to the Wage and Workplace Standards Division, telephone (860)263-6790.

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