INVITATION TO BID

For

FLOORING ASBESTOS ABATEMENT AT DUFFY ELEMENTARY SCHOOL

BID #6706F



INFORMATION

FLOORING ASBESTOS ABATEMENT AT DUFFY ELEMENTARY SCHOOL BID #6706F 95 Westminster Road West Hartford, CT

ENVIRONMENTAL CONSULTANT

ASHIS ROYCHOWDHURY, VP EAGLE ENVIRONMENTAL Eagle Environmental, Inc. 8 South Main Street, Suite 3 Terryville, CT 06786

PROJECT MANAGER

MIKE LONGO, FACILITIES MANAGER

ALL QUESTIONS TO

PURCHASING SERVICES TAMMY BRADLEY SR. BUYER

All questions must be submitted in writing and e-mailed to the Purchasing Office to <u>Tammyb@westhartfordCT.gov</u> or faxed to 860-561-7492 prior to the established timeline for questions per these bidding documents. Please do not call the Engineer/Architect, Project Manager or Purchasing Office with questions.

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Project Narrative

The Town of West Hartford is seeking an abatement contractor for the removal of carpet, floor tiles and vinyl stripping in the Duffy Elementary School targeted Classrooms, Faculty Lounge, and adjacent Hallways totaling approximately 11,810 square feet.

INVITATION TO BID

Sealed bids marked "<u>FLOORING ASBESTOS ABATEMENT AT DUFFY ELEMENTARY SCHOOL BID #6706F</u>" will be received at the office of the Purchasing Division, Room 223, Town Hall, 50 South Main Street, West Hartford, Connecticut until <u>2:00</u> on <u>May 28, 2019</u> at which time they will be publicly opened and read.

Plans and specifications are available for downloading at www.westhartfordct.gov/bids. Any questions concerning this request for bid shall be addressed to the Purchasing Agent at the address above.

A pre-bid conference will be held on <u>May 14, 2019</u> at <u>1:30 PM</u> at <u>Duffy Elementary School, 95 Westminster Rd.</u>, <u>West Hartford, CT</u> at which time questions concerning the project will be answered. Prospective bidders are expected to attend the pre-bid meeting as this will be the only opportunity to verbalize questions relative to this project and view the job site with the Town's project team.

All Bidders must file with their bid a bid bond, certified or treasurer's check in the amount of 10% of the total of the base bid made payable to the Town of West Hartford.

Performance and Labor and Material Payment bonds in the amount of 100% of the contract price will be required of the successful bidder if the contract pursuant to this request for bids exceeds \$50,000.00.

No bid may be withdrawn for a period of ninety (90) days after the opening of bids without the approval and written consent of the Town of West Hartford.

The right is reserved to reject any and all bids, to waive any informalities in the bidding and to make awards in any manner that is the most beneficial to the Town.

Bidders are encouraged to attend the Town's bid opening at which time the public is afforded an opportunity to record bid prices received in response to the Town's solicitation. Bidders who would like the results of the bid but are unable to attend the bid opening, may check the Town website,

www.westhartfordct.gov/gov/departments/purchasing/bid_results_a week after the bid opening date. Bidders calling the Purchasing Office for bid results will be referred to the above procedure.

TOWN OF WEST HARTFORD PETER PRIVITERA PURCHASING AGENT

Bid of	, BIDDER,
(Name of Bidder)	
FOR "FLOORING ASBESTOS ABATEMENT AT DUI FOR THE TOWN OF WEST HARTFORD, CONNECTICU	
To: Town of West Hartford Peter Privitera, Purchasing Agent Purchasing Services	
The undersigned proposes to furnish all labor, materials and the Contract Bidding Documents for "FLOORING ASBES" ELEMENTARY SCHOOL BID #6706F" in accordance warmounts shown herein under Schedule of Bids.	TOS ABATEMENT AT DUFFY
Receipt acknowledged of the following addenda:	
Addendum No.	Dated
It is understood and agreed that the Owner has the privilege of in any Bid.	rejecting any or all Bids and of waiving informality
It is further understood and agreed that this Bid shall be irrevoodate.	able for ninety (90) calendar days after Bid receipt

SCHEDULE OF BIDS

	the Asbestos Ab	se Bid No. I for furnish all leatement in for "FLOOR SCHOOL BID #6706F" in	labor, materials, equipment and ING ASBESTOS ABATEN the sum of:	l services required for MENT AT DUFFY
	Dollars (\$	Vision Vi)
В.	Unit Prices per th Same Unit Prices with the project Scope of	will be <u>added to or deducted f</u>	orices include labor, disposal, ar from the Contract Sum by Chan	nd all necessary fees. ge Order in the event
Item	No. 1 - VINYL ASB including removal DISPOSAL	ESTOS FLOOR TILE AND a and disposal of carpet as	ASSOCIATED MASTIC (All la asbestos contaminated waste)	ayers to bare concrete, REMOVAL AND
	\$	per square fo	ot.	
Item	No. 2 – VINYL A concrete), REMOV	SBESTOS FLOOR TILE A AL AND DISPOSAL	AND ASSOCIATED MASTIC	(All layers to bare
	\$	per square foo	ot.	
Item			NMENT (for abating ACM >3 luding remobilization, if necessary	
	\$	per containme	ent.	
Item	No. 4 - PREPARATI LF/160 SF) WITH	ON OF A MEDIUM CONTA DECONTAMINATION UN	AINMENT (for abating ACM >1 VIT (including remobilization, if	0 LF/25 SF but <260 necessary)
	\$	per containme	ent.	
Item		ON OF A LARGE CONTAI TION UNIT (including remo	NMENT (for abating ACM >26 bilization, if necessary)	60 LF/160 SF) WITH
	\$	per containmo	ent.	
C.	The undersigned agafter presentation t	grees that, if selected as the A hereof by the Owner, execute	batement Contractor, he/she will be a contract in accordance with	ll, within five (5) days the terms of this bid.

CONTRACT TIME

The undersigned Bidder will accomplish all Work required by the Contract Bidding Documents and will provide Substantial completion by **July 10**, **2019**, and will provide the Project, ready for Final Completion, by **July 16**, **2019**.

BIDDER QUALIFICATIONS

A:	If the Bidder is a Corporation, fill out:	
	The Bidder is a Corporation, organized under the laws of, having its principal office at The Principal officers of said Corporation, with their titles and addresses, are as follows:	•
	All persons interested in the Bid as principals are to be named above.	
В.	Bid must be accompanied by either a certified check, treasurer's check or a Bid Bond, as provided Invitation to Bid. If a check is enclosed herein, fill out the following:	in the
	(Name of Bank) (Address of Bank) (Amount of Check)	
C.	Attached hereto are two forms entitled "Summary of Work History". The Bidder is required to comform 1 and 2.	ıplete
D.	The Bidder is required to submit a Certificate of Insurance in amounts and types specified in Insur Exhibit or provide a letter from the Bidder's insurance agent or broker that such insurance is obtain at the time of execution of the Agreement and that a Certificate of Insurance shall be provided to the effect not later than the date of Contract signing.	able
E.	Contract award will be by the Town. The parties shall enter into an Agreement in substantially the form as the attached subject to technical and other modifications as the parties mutually agree purchase order shall be issued by the Town subsequent to the execution of the Agreement.	same e. A
F.	The Contractor by executing this Bid agrees and represents that no person acting for or employed by	y the

Town of West Hartford is directly or indirectly interested in the Bid or proposed Agreement or in the

- supplies or works to which it relates, or will receive any part of the profit or any commission there from in any manner which is unethical or contrary to the best interest of the Owner.
- G. The Contractor agrees and warrants that in the performance of this Contract it will not discriminate or permit discrimination against any person or group of persons on the grounds of sex, race, color, religion, age, marital status, ancestry, national origin, past history of mental disorder, mental retardation or physical disability or other basis in any manner prohibited by the laws of the United States, the State of Connecticut, or the Town of West Hartford.
- H. The Contractor shall employ a full time, on-the-job Project Superintendent as his representative.
- I. The Contractor and/or Subcontractor offers and agrees to assign to the Town of West Hartford and/or the West Hartford Board of Education all rights, titles and interest in all causes of action it may have under Section 4 of the Clayton Act., 15 U.S.C. Section 15, or under Connecticut General Statutes 35-24 et. seq., as amended, arising out of the purchase of services, property, or intangibles of any kind pursuant to the Agreement, or Subcontracts thereunder. This assignment shall be made and become effective at the time the Town/Board awards or accepts such Agreement, without further acknowledgment by the parties. In the alternative, at the option of the Town, the Contractor and/or Subcontractor agrees to pay to the Town its proportionate share of recoveries for anti-trust violations which relate to purchases pursuant to this Contract, or Subcontracts hereunder. The Contractor and/or Subcontractor agrees promptly to notify the Purchasing Agent of the Town of West Hartford of suspected anti-trust violations and claims.
- J. The Bidder is aware of and agrees that, if awarded an Agreement, he is bound by the indemnification and insurance exhibit.
- K. Substantial completion must be achieved by <u>July 10, 2019</u> and final completion must be achieved by <u>July 16, 2019</u>. The Contractor shall pay the Owner liquidated damages in the amount of Three Hundred Dollars (\$300.00) per calendar day, which sum is hereby agreed upon, and shall be assessed not as a penalty, but as liquidated damages which the Owner shall suffer by reason of such default. The Owner and Contractor shall acknowledge that failure to effect substantial completion as noted above will precipitate inconvenience and disruption. The Owner and Contractor shall acknowledge that such damages are uncertain or difficult to prove and that the amounts established herein are reasonable assessment of these damages.

		BIDDER:
		COMPANY
Bidder must sign. Failure to provide an original signature will result in rejection	®	
of the bid.		SIGNATURE BY DULY AUTHORIZED (SEAL)
		PRINT OR TYPE NAME
The bidder agrees that by affixing their signature to bids, the authorized signatory grants approval to West Hartford to obtain third party credit repourpose of assessing the financial capacity of the buendering such bid to the Town.	the T orts	Fown of for the
		TITLE
		DATE
		ADDRESS
		TELEPHONE
		FAX#
		E-MAIL
		VENDOR FEIN #

BID FORMS TO BE SUBMITTED IN DUPLICATE

If you are not registered with the Town of West Hartford, please go to www.westhartfordct.gov/gov/departments/purchasing/vendor registration.asp and select register. Only registered vendors can be awarded the contract.

TO:	Town of West Hartford Peter Privitera Purchasing Agent
FROM:	
CLIENT:	
DATE:	
Dear Mr. Priv	itera:
or will have by	with page 00204-3, Paragraph D of the "Bid Form", please be advised that my client currently has y the date of the execution of the Agreement for this project, a Certificate of Insurance in amounts pecified in Insurance Exhibit.
	Signature
	Authorized Agent or Broker

Indemnification and Insurance Exhibit Asbestos Abatement Duffy Elementary School Bid #:6706F

For purpose of this Exhibit, the term "Contractor" shall also include their respective officers, agents, representatives, employees, and contractors of any tier; and the term "Town of West Hartford and West Hartford Board of Education" (hereinafter called the "Town") shall include their respective boards, commissions, officers, officials, employees, agents, representatives, and volunteers.

I. INDEMNIFICATION

- A. To the fullest extent permitted by law, the Contractor shall release, defend, indemnify, and hold harmless the Town of West Hartford, West Hartford Board of Education, and their respective boards, commissions, officers, officials, employees, agents, representatives and volunteers from any and all suits, claims, losses, damages, costs (including without limitation reasonable attorneys' fees), compensation, penalties, fines, liabilities or judgments of any name or nature for bodily injury, sickness, disease, or death; and/or damage to or destruction of real and/or personal property; and/or financial losses (including, without limitation, those caused by loss of use) sustained by any person or concern, including officers, employees, agents, contractors of any tier, or volunteers of the Town of West Hartford and West Hartford Board of Education, or the Contractor, or by the public, even if caused by the negligence of the Town, so long as the injury to person, property or financial losses is caused or alleged to have been caused in whole or in part by any and all negligent or intentional acts, errors or omissions of the Contractor, its officers, agents, contractors of any tier, or anyone directly or indirectly employed by them arising from or related to the performance of this Contract.
- B. To the fullest extent permitted by law, the Contractor shall release, defend, indemnify, and hold harmless the Town of West Hartford, West Hartford Board of Education, and their respective boards, commissions, officers, officials, employees, agents, representatives and volunteers from any and all suits, claims, damages, costs, (including without limitation reasonable attorneys' fees), compensation, penalties, fines, liabilities or judgments that may arise out of the failure of the Contractor, its officers, agents, contractors of any tier, or anyone directly or indirectly employed by them to comply with any laws, statutes, ordinances, building codes, and rules and regulations of the United States of America, the State of Connecticut, the Town of West Hartford, or their respective agencies.
- C. To the fullest extent permitted by law, the Contractor agrees to defend, indemnify and hold harmless Town of West Hartford, West Hartford Board of Education, and their respective boards, commissions, officers, officials, employees, agents, representatives and volunteers from any and all suits, claims, losses, damages, costs (including, without limitation, reasonable attorney's fees), compensations, penalties, fines, liabilities or judgments, on account of or in connection with any death of person or injury, loss or damage to any person, property, or to the environment, arising out of the activity of the type contemplated by this Contract, whether or not said activity complies strictly with the requirements of this Contract and, arises out of or in connection with;
 - a. the violation or breach, by any employee or person acting on behalf of the Contractor of any federal, state, or local environmental statute, rule, regulation, ordinance, or other law or any provision or requirement of the Contract dealing with hazardous substances or protection of the environment; or
 - b. the release or discharge, onto any public or private property, of any hazardous substances, regardless of the source of such hazardous substances, by any employee or person acting on behalf of the Contractor while present on, within, or in the vicinity of Town owned property; or
 - c. the subsequent storage, processing or other handling of such hazardous substances by any person or entity after they have been removed by the Contractor or persons acting on the Contractor's behalf from Town owned property.

D. This duty to indemnity shall not be constrained or affected by the Contractor's insurance coverage or limits, or any other portion of the Contract relating to insurance requirements. It's agreed that the Contractor's responsibilities and obligations to indemnify shall survive the completion, expiration, suspension or termination of the Contract.

II. INSURANCE

A. Insurance Requirements

- The Contractor shall obtain and maintain at its own cost and expense all the insurance described below continuously for the duration of the Contract, including any and all extensions, except as defined otherwise in this Exhibit.
- 2. Contractor's policies shall be written by insurance companies authorized to do business in the State of Connecticut, with a Best's rating of no less than A:VII, or otherwise approved by the Town.
- 3. All policies (with the exception of Worker's Compensation) shall be endorsed to include the Town of West Hartford, West Hartford Board of Education, and their respective boards, commissions, officers, officials, employees, agents, representatives, and volunteers as an Additional Insured. The coverage shall include, but not be limited to, investigation, defense, settlement, judgment or payment of any legal liability. Blanket Additional Insured Endorsements are deemed acceptable. Any Insured vs. Insured language shall be amended to eliminate any conflicts or coverage restrictions between the respective Insureds.
- 4. When the Town or the Contractor is damaged by failure of the Contractor to purchase or maintain insurance required under this Exhibit, the Contractor shall bear all reasonable costs including, but not limited to, attorney's fees and costs of litigation properly attributable thereto.

B. Required Insurance Coverages:

- Commercial General Liability: \$1,000,000 each occurrence / \$2,000,000 aggregate for premises/operations, products/ completed operations, contractual liability, personal injury and broad form property damage. Contractor shall continue to provide products/ completed operations coverage for two (2) years after final completion of the work.
- Automobile Liability and Physical Damage Coverage: \$1,000,000 each accident for any auto, including uninsured/underinsured motorist coverage and medical payments. Policy shall include collision and comprehensive physical damage coverage.
- 3. Umbrella Liability: \$2,000,000 each occurrence / \$4,000,000 aggregate, following form.
- 4. Workers' Compensation and Employer's Liability: Statutory coverage in compliance with the Workers' Compensation laws of the State of Connecticut or applicable to the work to be performed. Policy shall include Employer's Liability with minimum limits of \$1,000,000 each accident, \$1,000,000 disease/policy limit, \$1,000,000 disease/each employee.

The Contractor represents that they are currently in compliance with all requirements of the State of Connecticut Workers' Compensation Act and that it shall remain in compliance for the duration of the Contract. The Contractor agrees that Workers' Compensation is their sole remedy and shall indemnify and hold harmless the Town from all suits, claims, and actions arising from personal injuries to the Contractor, however caused. This indemnity shall not be affected by a lapse of Workers' Compensation coverage and/or if the Contractor failed, neglected, refused or is unable to obtain Workers' Compensation insurance.

5. Personal Property: All personal property of the Contractor are the sole risk of the Contractor. The Contractor agrees to indemnify, defend and hold harmless the Town from any and all losses or damages, however caused, to any and all personal property belonging to the Contractor.

- 6. Contractor's Pollution Coverage: \$3,000,000 each occurrence project specific limit / \$6,000,000 aggregate dedicated to work performed under this Contract only, unless otherwise approved by the Town's Risk Manager. Policy must specifically include pollution coverage for bodily injury, property damage, cleanup costs, defense costs, contractual liability and completed operations for all work performed by or on behalf of the Contractor under the Contract. Exclusions or limitations affecting work performed must be deleted. Policy form must be "pay on behalf of rather than "indemnity" and insurance company must have the "right and duty" to defend. The policy shall not contain any provision or definition that would serve to eliminate third party action over claims for employees of the Contractor. Policy shall state that insolvency or bankruptcy of the insured or the insured's estate will not relieve the insurance company of its obligations. The Contractor shall maintain completed operations coverage for two (2) years following the termination or expiration of the Contract, including any extensions.
- 7. Hazardous Waste Transporter Coverage: The Contractor shall have automobile liability coverage written for not less than \$1,000,000 each accident or as specified in the Motor Carrier Act of 1980, whichever coverage is greater. The policy shall include an Amended Pollution Exclusion to cover loading, unloading and transportation activities including hauling of waste to the final disposal location and a Non-Owned Disposal Site Endorsement (claims-made) with the scheduled landfill, or provide evidence of insurance from disposal site operator. Policy shall be endorsed to include the MCS-90 endorsement and the reimbursement provision of the MCS-90 endorsement will be borne by the Contractor. The Contractor must submit to the Town a list of transfer and disposal sites to be used, along with the waste manifest provided by the disposal facility identifying ability to accept the type of waste being delivered and limits of financial responsibility, including closure/post closure bonds. Contractor must comply with all applicable D.O.T. and E.P.A. requirements.
- 8. Pollution Legal Liability (claims-made): \$3,000,000 each loss / \$3,000,000 aggregate. Policy shall provide pollution coverage for sudden and non-sudden occurrences resulting in on-site and off-site bodily injury, property damage, cleanup costs and defense costs arising out of the consolidation, transfer, storage or disposal of waste by the Contractor or others contemplated by this Contract.

C. Additional Terms

1. Minimum Scope and Limits: The required insurance shall meet the minimum scope and limits of insurance specified in this Exhibit, or required by applicable federal, state and/or municipal law, regulation or requirement, whichever coverage is greater. Providing proof of compliance with the insurance requirements described in this Exhibit is not intended, and shall not be construed to exclude the Town from additional limits and coverage available to the Contractor.

Acceptance by the Town of insurance submitted by the Contractor does not relieve or decrease in any manner the liability of the Contractor arising out of or in connection with this Contract. The Contractor is responsible for any losses, claims and costs of any kind which exceed the Contractor's limits of liability, or which may be outside the coverage scope of the policies, or a result of non-compliance with any laws including, but not limited to, environmental laws. The requirements herein are not intended, and shall not be construed to limit or eliminate the liability of the Contractor that arises from the Contract.

- Certificates of Insurance: The Contractor shall provide certificates of insurance, policy endorsements, declaration page(s) or provisions acceptable to the Town confirming compliance with this Exhibit and thereafter upon renewal or replacement of each required policy of insurance. Upon request, the Contractor agrees to furnish complete copies of the required policies.
- 3. <u>Subcontractors:</u> Contractor shall cause all contractors of any tier, acting on its behalf, to comply with this Exhibit. The Contractor shall either include its contractors as an Insured under its insurance policies or furnish separate certificates of insurance and endorsements for each subcontractor.
- Premiums, Deductibles and Other Liabilities: Any and all related costs, including but not limited to, deductibles, retentions, losses, claim expenses, premiums, taxes, and audit charges earned are the sole responsibility of the Contractor.
- Occurrence Form, Primary and Non-Contributory: All required insurance coverage shall be written on an occurrence basis, except as defined otherwise in this Exhibit. Each required policy of insurance shall be primary and non-contributory with respect to any insurance or self-insurance maintained by the Town.

- 6. <u>Claims-made Form</u>: Insurance coverage written on a claims-made basis shall have a retroactive date that precedes the effective date of this Contract. The Contractor shall maintain continuous coverage or obtain an extended reporting period in which to report claims following end of the Contract, for a minimum of two (2) years, except as defined otherwise in this Exhibit.
- 7. <u>Waiver of Rights of Recovery</u>: Both the Contractor and Contractor's insurers shall waive their rights of recovery or subrogation against the Town.
- 8. <u>Claim Reporting</u>: Any failure of the Contractor to comply with the claim reporting provisions of the required insurance policies shall not relieve the Contractor of any liability or indemnification in favor of the Town for losses which otherwise would have been covered by said policies.
- Cancellation Notice: Each required insurance policy shall not be suspended, voided, cancelled or reduced except after thirty (30) days prior written notice has been given to the Town, ten (10) days for non-payment of premium.
- 10. <u>Compliance</u>: Failure to comply with any of the indemnification or insurance requirements may be held a willful violation and basis for immediate termination of the Contract

LABOR REQUIREMENTS

This project will meet prevailing wage criteria as the total project includes asbestos abatement and new tile installation.

PREVAILING WAGE RATES

The Contractor shall certify in writing and under oath to the Labor Commissioner the pay scale to be used by the Contractor and any Subcontractors. The provisions of this section shall not apply where the total cost of all work to be performed by ALL Contractors and Subcontractors in connection with new construction of any public works project is less than FOUR HUNDRED thousand dollars or where the total cost of all work to be performed by ALL Contractors and Subcontractors in connection with any remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works project is less than ONE HUNDRED thousand dollars. The Contractor shall fully comply with all provisions of Connecticut General Statutes (CGS) 31-53 and shall be subject to such sanctions mandated for violations of said Public Act.

The wages paid on an hourly basis to any mechanic, laborer or workman employed upon the work herein contracted to be done and the amount of payment or contribution paid or payable on behalf of each such employee to any employee welfare fund, as defined in CGS 31-53 shall be at a rate equal to the rate customary or prevailing for the same work in the same trade or occupation in the Town in which such public works project is being constructed. Any contractor who is not obligated by agreement to make payment or contribution on behalf of such employees to any such employee welfare fund shall pay to each employee as part of his wages the amount of payment or contribution for his classification on each pay day.

The contractor shall not be paid in accordance with the payment provisions of these Contract Bidding Documents unless the contractor is in full compliance with the mandates of CGS 31-53.

Bidders are further advised that if the initial consideration due and payable pursuant to the Contract exceeds the mandatory limits at which prevailing wages rates are required, then the contractor and any subcontractors shall pay the appropriate prevailing wages retroactive to the date of commencement of work on the project. The contractor shall not receive any additional compensation from the Owner as a result of an occurrence of the aforementioned event.

Minimum Rates and Classifications for Building Construction

ID#: B 26004

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: West Hartford

State#: FAP#:

Project: Asbestos Abatement At Duffy Elementary School

CLASSIFICATION	Hourly Rate	Benefits
la) 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	38.25	27.96
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	40.21	29.30

2) Boilermaker	38.34	26.01
3a) Bricklayer, Cement Mason, Concrete Finisher (including caulking), Stone Masons	34.72	32.55 + a
3b) Tile Setter	34.90	25.87
3c) Terrazzo Mechanics and Marble Setters	31.69	22.35
3d) Tile, Marble & Terrazzo Finishers	26.70	21.75
3e) Plasterer	33.48	32.06

Project: Asbestos Abatement At Duffy Elementary School			
LABORERS			
4) Group 1: Laborers (common or general), acetylene burners, concrete specialists, wrecking laborers, fire watchers.	30.05	20.10	
4a) Group 2: Mortar mixers, plaster tender, power buggy operators, powdermen, fireproofer/mixer/nozzleman (Person running mixer and spraying fireproof only).	30.30	20.10	5
4b) Group 3: Jackhammer operators/pavement breaker, mason tender (brick), mason tender (cement/concrete), forklift operators and forklift operators (masonry).	30.55	20.10	
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 who primary task is to actually perform the mating of pipe sections) P6 and P7 rate is \$26.80.	30.55	20.10	
4d) Group 5: Air track operator, sand blaster and hydraulic drills.	30.55	20.10	

Project: Asbestos Abatement At Duffy Elementary School		
4e) Group 6: Blasters, nuclear and toxic waste removal.	31.80	20.10
4f) Group 7: Asbestos/lead removal and encapsulation (except it's removal from mechanical systems which are not to be scrapped).	31.05	20.10
4g) Group 8: Bottom men on open air caisson, cylindrical work and boring crew.	28.38	20.10
4h) Group 9: Top men on open air caisson, cylindrical work and boring crew.	27.86	20.10
4i) Group 10: Traffic Control Signalman	16.00	20.10
5) Carpenter, Acoustical Ceiling Installation, Soft Floor/Carpet Laying, Metal Stud Installation, Form Work and Scaffold Building, Drywall Handing, Modular Furniture Systems Installers, Lathers, Piledrivers,	32.60	25.34

Resilient Floor Layers.

Hanging, Modular-Furniture Systems Installers, Lathers, Piledrivers,

Project: Asbestos	Abatement At Duffy	Elementary School
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5a) Millwrights	33.14	25.74
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)	40.00	25.97+3% of gross wage
7a) Elevator Mechanic (Trade License required: R-1,2,5,6)	53.37	33.705+a+b
LINE CONSTRUCTION		
Groundman	26.50	6.5% + 9.00
Linemen/Cable Splicer	48.19	6.5% + 22.00

Project: Asbestos Abatement At Duffy Elementary School		
8) Glazier (Trade License required: FG-1,2)	37.18	21.05 + a
9) Ironworker, Ornamental, Reinforcing, Structural, and Precast Concrete Erection	35.47	35.14 + a
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)	39.55	24.30 + a
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)	39.23	24.30 + a
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)	38.49	24.30 + a

Project:	Asbestos	Abatement A	t Duffy	Elementary	School
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Group 4: Trenching Machines; Lighter Derrick; Concrete Finishing Machine; CMI Machine or Similar; Koehring Loader (Skooper).	38.10	24.30 + a
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)	37.51	24.30 + a
Group 5 continued: Side Boom; Combination Hoe and Loader; Directional Driller; Pile Testing Machine.	37.51	24.30 + a
Group 6: Front End Loader (3 up to 7 cubic yards); Bulldozer (rough grade dozer).	37.20	24.30 + a
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).	36.86	24.30 + a
Group 8: Mechanic, grease truck operator, hydroblaster; barrier mover; power stone spreader; welding; work boat under 26 ft.; transfer machine.	36.46	24.30 + a

Project: Asbestos	Abatement At Duffy	Elementary School
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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).	36.03	24.30 + a
Group 10: Vibratory hammer; ice machine; diesel and air, hammer, etc.	33.99	24.30 + a
Group 11: Conveyor, earth roller, power pavement breaker (whiphammer), robot demolition equipment.	33.99	24.30 + a
Group 12: Wellpoint operator.	33.93	24.30 + a
Group 13: Compressor battery operator.	33.35	24.30 + a
Group 14: Elevator operator; tow motor operator (solid tire no rough terrain).	32.21	24.30 + a

Project: Asbestos Abatement At Duffy Elementary School		
Group 15: Generator Operator; Compressor Operator; Pump Operator; Welding Machine Operator; Heater Operator.	31.80	24.30 + a
Group 16: Maintenance Engineer/Oiler.	31.15	24.30 + a
Group 17: Portable asphalt plant operator; portable crusher plant operator; portable concrete plant operator.	35.46	24.30 + a
Group 18: Power safety boat; vacuum truck; zim mixer; sweeper; (Minimum for any job requiring a CDL license).	33.04	24.30 + a
PAINTERS (Including Drywall Finishing)		
10a) Brush and Roller	33.62	21.05

Project: Asbestos	Abatement At Duffy	Elementary School
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10b) Taping Only/Drywall Finishing	34.37	21.05
10c) Paperhanger and Red Label	34.12	21.05
10e) Blast and Spray	36.62	21.05
11) Plumber (excluding HVAC pipe installation) (Trade License required: P-1,2,6,7,8,9 J-1,2,3,4 SP-1,2)	42.62	31.21
12) Well Digger, Pile Testing Machine	37.26	24.05 + a
13) Roofer (composition)	36.70	19.85

Project: Asbestos Abatement At Duffy Elementary School		
(4) Roofer (slate & tile)	37.20	19.85
15) Sheetmetal Worker (Trade License required for HVAC and Ductwork: SM-1,SM-2,SM-3,SM-4,SM-5,SM-6)	37.50	36.79
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)	42.62	31.21
TRUCK DRIVERS		
17a) 2 Axle	29.13	23.33 + a
17b) 3 Axle, 2 Axle Ready Mix	29.23	23.33 + a

17c) 3 Axle Ready Mix	29.28	23.33 + a
17d) 4 Axle, Heavy Duty Trailer up to 40 tons	29.33	23.33 + a
17e) 4 Axle Ready Mix	29.38	23.33 + a
17f) Heavy Duty Trailer (40 Tons and Over)	29.58	23.33 + a
17g) Specialized Earth Moving Equipment (Other Than Conventional Type on-the-Road Trucks and Semi-Trailers, Including Euclids)	29.38	23.33 + a
		*
18) Sprinkler Fitter (Trade License required: F-1,2,3,4)	43.92	15.84 + a

Project: Asbesto	s Abatement	At Duffy	Elementary	School	
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19) Theatrical Stage Journeyman

25.76 7.34

Project: Asbestos Abatement At Duffy Elementary School

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 \$4.00 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 journeyperson 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.

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

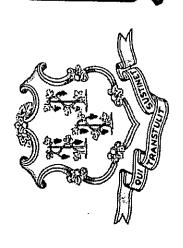
All Person who perform work ON SITE must be paid prevailing wage for the appropriate mechanic, laborer, or worker classification.

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.





FOR SANORS PROFEE

Covered by the

CT General Statutes Section 31-53

If you have QUESTIONS regarding your wages CALL (860) 263-6790 Section 31-55 of the CT State Statutes requires every contractor or subcontractor performing work for the state to post in a prominent place the prevailing wages as determined by the Labor Commissioner. Sec. 31-53b. Construction safety and health course. New miner training program. Proof of completion required for mechanics, laborers and workers on public works projects. Enforcement. Regulations. Exceptions. (a) Each contract for a public works project entered into on or after July 1, 2009, by the state or any of its agents, or by any political subdivision of the state or any of its agents, described in subsection (g) of section 31-53, shall contain a provision requiring that each contractor furnish proof with the weekly certified payroll form for the first week each employee begins work on such project that any person performing the work of a mechanic, laborer or worker pursuant to the classifications of labor under section 31-53 on such public works project, pursuant to such contract, has completed a course of at least ten hours in duration in construction safety and health approved by the federal Occupational Safety and Health Administration or, has completed a new miner training program approved by the Federal Mine Safety and Health Administration in accordance with 30 CFR 48 or, in the case of telecommunications employees, has completed at least ten hours of training in accordance with 29 CFR 1910.268.

- (b) Any person required to complete a course or program under subsection (a) of this section who has not completed the course or program shall be subject to removal from the worksite if the person does not provide documentation of having completed such course or program by the fifteenth day after the date the person is found to be in noncompliance. The Labor Commissioner or said commissioner's designee shall enforce this section.
- (c) Not later than January 1, 2009, the Labor Commissioner shall adopt regulations, in accordance with the provisions of chapter 54, to implement the provisions of subsections (a) and (b) of this section. Such regulations shall require that the ten-hour construction safety and health courses required under subsection (a) of this section be conducted in accordance with federal Occupational Safety and Health Administration Training Institute standards, or in accordance with Federal Mine Safety and Health Administration Standards or in accordance with 29 CFR 1910.268, as appropriate. The Labor Commissioner shall accept as sufficient proof of compliance with the provisions of subsection (a) or (b) of this section a student course completion card issued by the federal Occupational Safety and Health Administration Training Institute, or such other proof of compliance said commissioner deems appropriate, dated no earlier than five years before the commencement date of such public works project.
- (d) This section shall not apply to employees of public service companies, as defined in section 16-1, or drivers of commercial motor vehicles driving the vehicle on the public works project and delivering or picking up cargo from public works projects provided they perform no labor relating to the project other than the loading and unloading of their cargo.

History: P.A. 08-83 amended Subsec. (a) by making provisions applicable to public works project contracts entered into on or after July 1, 2009, replacing provision re total cost of work with reference to Sec. 31-53(g), requiring proof in certified payroll form that new mechanic, laborer or worker has completed a 10-hour or more construction safety course and adding provision re new miner training program, amended Subsec. (b) by substituting "person" for "employee" and adding "or program", amended Subsec. (c) by adding "or in accordance with Federal Mine

Safety and Health Administration Standards" and setting new deadline of January 1, 2009, deleted former Subsec. (d) re "public building", added new Subsec. (d) re exemptions for public service company employees and delivery drivers who perform no labor other than delivery and made conforming and technical changes, effective January 1, 2009.

Informational Bulletin

THE 10-HOUR OSHA CONSTRUCTION SAFETY AND HEALTH COURSE

(applicable to public building contracts entered into on or after July 1, 2007, where the total cost of all work to be performed is at least \$100,000)

- (1) This requirement was created by Public Act No. 06-175, which is codified in Section 31-53b of the Connecticut General Statutes (pertaining to the prevailing wage statutes);
- (2) The course is required for public building construction contracts (projects funded in whole or in part by the state or any political subdivision of the state) entered into on or after July 1, 2007;
- (3) It is required of private employees (not state or municipal employees) and apprentices who perform manual labor for a general contractor or subcontractor on a public building project where the total cost of all work to be performed is at least \$100,000;
- (4) The ten-hour construction course pertains to the ten-hour Outreach Course conducted in accordance with federal OSHA Training Institute standards, and, for telecommunications workers, a ten-hour training course conducted in accordance with federal OSHA standard, 29 CFR 1910.268;
- (5) The internet website for the federal OSHA Training Institute is http://www.osha.gov/fso/ote/training/edcenters/fact_sheet.html;
- (6) The statutory language leaves it to the contractor and its employees to determine who pays for the cost of the ten-hour Outreach Course;
- (7) Within 30 days of receiving a contract award, a general contractor must furnish proof to the Labor Commissioner that all employees and apprentices performing manual labor on the project will have completed such a course;
- (8) Proof of completion may be demonstrated through either: (a) the presentation of a bona fide student course completion card issued by the federal OSHA Training Institute; or (2) the presentation of documentation provided to an employee by a trainer certified by the Institute pending the actual issuance of the completion card;
- (9) Any card with an issuance date more than 5 years prior to the commencement date of the construction project shall not constitute proof of compliance;

- (10) Each employer shall affix a copy of the construction safety course completion card to the certified payroll submitted to the contracting agency in accordance with Conn. Gen. Stat. § 31-53(f) on which such employee's name first appears;
- (11) Any employee found to be in non-compliance shall be subject to removal from the worksite if such employee does not provide satisfactory proof of course completion to the Labor Commissioner by the fifteenth day after the date the employee is determined to be in noncompliance;
- (12) Any such employee who is determined to be in noncompliance may continue to work on a public building construction project for a maximum of fourteen consecutive calendar days while bringing his or her status into compliance;
- (13) The Labor Commissioner may make complaint to the prosecuting authorities regarding any employer or agent of the employer, or officer or agent of the corporation who files a false certified payroll with respect to the status of an employee who is performing manual labor on a public building construction project;
- (14) The statute provides the minimum standards required for the completion of a safety course by manual laborers on public construction contracts; any contractor can exceed these minimum requirements; and
- (15) Regulations clarifying the statute are currently in the regulatory process, and shall be posted on the CTDOL website as soon as they are adopted in final form.
- (16) Any questions regarding this statute may be directed to the Wage and Workplace Standards Division of the Connecticut Labor Department via the internet website of http://www.ctdol.state.ct.us/wgwkstnd/wgemenu.htm; or by telephone at (860)263-6790.

THE ABOVE INFORMATION IS PROVIDED EXCLUSIVELY AS AN EDUCATIONAL RESOURCE, AND IS NOT INTENDED AS A SUBSTITUTE FOR LEGAL INTERPRETATIONS WHICH MAY ULTMATELY ARISE CONCERNIG THE CONSTRUCTION OF THE STATUTE OR THE REGULATIONS.

November 29, 2006

Notice

To All Mason Contractors and Interested Parties Regarding Construction Pursuant to Section 31-53 of the Connecticut General Statutes (Prevailing Wage)

The Connecticut Labor Department Wage and Workplace Standards Division is empowered to enforce the prevailing wage rates on projects covered by the above referenced statute.

Over the past few years the Division has withheld enforcement of the rate in effect for workers who operate a forklift on a prevailing wage rate project due to a potential jurisdictional dispute.

The rate listed in the schedules and in our Occupational Bulletin (see enclosed) has been as follows:

Forklift Operator:

- Laborers (Group 4) Mason Tenders operates forklift solely to assist a mason to a maximum height of nine feet only.
- Power Equipment Operator (Group 9) operates forklift to assist any trade and to assist a mason to a height over nine feet.

The U.S. Labor Department conducted a survey of rates in Connecticut but it has not been published and the rate in effect remains as outlined in the above Occupational Bulletin.

Since this is a classification matter and not one of jurisdiction, effective January 1, 2007 the Connecticut Labor Department will enforce the rate on each schedule in accordance with our statutory authority.

Your cooperation in filing appropriate and accurate certified payrolls is appreciated.

- SPECIAL NOTICE -

To: All State and Political Subdivisions, Their Agents, and Contractors

Connecticut General Statute 31-55a - Annual adjustments to wage rates by contractors doing state work.

Each contractor that is awarded a contract on or after October 1, 2002, for (1) the construction of a state highway or bridge that falls under the provisions of section 31-54 of the general statutes, or (2) the construction, remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works project that falls under the provisions of section 31-53 of the general statutes shall contact the Labor Commissioner on or before July first of each year, for the duration of such contract, to ascertain the prevailing rate of wages on an hourly basis and the amount of payment or contributions paid or payable on behalf of each mechanic, laborer or worker employed upon the work contracted to be done, and shall make any necessary adjustments to such prevailing rate of wages and such payment or contributions paid or payable on behalf of each such employee, effective each July first.

- The prevailing wage rates applicable to any contract or subcontract awarded on or after October 1, 2002 are subject to annual adjustments each July 1st for the duration of any project which was originally advertised for bids on or after October 1, 2002.
- Each contractor affected by the above requirement 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 Web Site. The
 annual adjustments will be posted on the Department of Labor Web page:
 www.ctdol.state.ct.us.
 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.

Any questions should be directed to the Contract Compliance Unit, Wage and Workplace Standards Division, Connecticut Department of Labor, 200 Folly Brook Blvd., Wethersfield, CT 06109 at (860)263-6790.

Connecticut Department of Labor Wage and Workplace Standards Division FOOTNOTES

Please Note: If the "Benefits" listed on the schedule for the following occupations includes a letter(s) (+ a or + a+b for instance), refer to the information below.

Benefits to be paid at the appropriate prevailing wage rate for the listed occupation.

If the "Benefits" section for the occupation lists only a dollar amount, disregard the information below.

Bricklayers, Cement Masons, Cement Finishers, Concrete Finishers, Stone Masons (Building Construction) and

(Residential-Hartford, Middlesex, New Haven, New London and Tolland Counties)

a. Paid Holiday: Employees shall receive 4 hours for Christmas Eve holiday provided the employee works the regularly scheduled day before and after the holiday. Employers may schedule work on Christmas Eve and employees shall receive pay for actual hours worked in addition to holiday pay.

Elevator Constructors: Mechanics

- a. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, Christmas Day, plus the Friday after Thanksgiving.
- b. Vacation: Employer contributes 8% of basic hourly rate for 5 years or more of service or 6% of basic hourly rate for 6 months to 5 years of service as vacation pay credit.

Glaziers

a. Paid Holidays: Labor Day and Christmas Day.

Power Equipment Operators

(Heavy and Highway Construction & Building Construction)

a. Paid Holidays: New Year's Day, Good Friday, Memorial day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day, provided the employee works 3 days during the week in which the holiday falls, if scheduled, and if scheduled, the working day before and the working day after the holiday. Holidays falling on Saturday may be observed on Saturday, or if the employer so elects, on the preceding Friday.

Ironworkers

a. Paid Holiday: Labor Day provided employee has been on the payroll for the 5 consecutive work days prior to Labor Day.

Laborers (Tunnel Construction)

a. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. No employee shall be eligible for holiday pay when he fails, without cause, to work the regular work day preceding the holiday or the regular work day following the holiday.

Roofers

a. Paid Holidays: July 4th, Labor Day, and Christmas Day provided the employee is employed 15 days prior to the holiday.

Sprinkler Fitters

a. Paid Holidays: Memorial Day, July 4th, Labor Day, Thanksgiving Day and Christmas Day, provided the employee has been in the employment of a contractor 20 working days prior to any such paid holiday.

Truck Drivers

(Heavy and Highway Construction & Building Construction)

a. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas day, and Good Friday, provided the employee has at least 31 calendar days of service and works the last scheduled day before and the first scheduled day after the holiday, unless excused.

Specifications for Asbestos Abatement

Duffy Elementary School Targeted Classrooms and Hallways

95 Westminster Drive West Hartford, Connecticut

April 11, 2019

Eagle Environmental, Inc. 8 South Main Street, Suite 3 Terryville, Connecticut (860) 589-8257

SECTION 010150 - GENERAL REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 <u>SECTION INCLUDES</u>

- A. Abatement Contractor's use of site and premises.
- B. Work Sequence.
- C. Owner Occupancy.

1.3 ABATEMENT CONTRACTOR (HMAC) QUALIFICATIONS

- A. All bidders shall submit a record of prior experience in asbestos abatement listing no less than three (3) completed jobs in the past year, with all projects of similar size and scope. The Asbestos Abatement Contractor (AAC) shall list the experience and training of the site supervisor and all on-site workers. The information that shall be included is as follows:
 - 1. Project Name and Address
 - 2. Owner's Name and Address
 - 3. Architect/Consultant/Consultant
 - 4. Contract Amount
 - 5. Date of Completion
 - 6. Extras and Change Orders
- B. The AAC selected must appear on the approved list of Asbestos Abatement contractors on file at the State of Connecticut Department of Public Health (CTDPH) and have a current license in good standing.
- C. Submit a written statement regarding whether the AAC has ever been found outof-compliance with federal or state asbestos and/or lead regulations pertaining to worker protection, removal, transport, or disposal.
- D. Award of this Contract may not necessarily be based solely on the submitted lowest Base Bid amount. The Owner reserves the right to award this Contract to the Bidder who best meets all AAC qualifications.

1.4 CONTRACTORS (AAC) USE OF SITE AND PREMISES

- A. Limit use of site and premises as follows:
 - 1. Owner occupancy.
 - 2. Work by Owner.
 - 3. Use of site and premises by public.

- B. Coordinate use of the premises under direction of Owner.
- C. Assume full responsibility for protection and safekeeping of products under this Contract.

1.5 WORK PHASING

- A. Work under this project may be performed in phases to accommodate Owner's requirements and construction phases. Coordinate abatement schedule and operations with the Owner /Consultant and other trades.
- B. No abatement work shall be performed within the building while school is in session and children under eighteen (18) years of age are present in the building without prior written approval from the State of Connecticut Department of Public Health of a Variance Application.

1.6 OWNER'S OPERATIONS

- A. Schedule the Work to accommodate this requirement.
- B. Maintain means of egress.
- C. Coordinate Work with the Owner, the Architect, and the Consultant.
- D. Maintain the fire alarm and fire detection systems active at all time during construction.
- E. Maintain permanent means of egress during construction. Provide and maintain temporary means of egress as required by Fire Marshall.

1.7 CLOSEOUT AND PUNCH LIST

- A. The AAC shall carefully check his/her own work and that of any Subcontractor as the work is being performed. Unsatisfactory work shall be corrected immediately.
- B. When the AAC determines that he is substantially complete, that is, has less than one percent of his Contract remaining to be completed, he shall prepare for submission to the Consultant, a list of items to be completed or corrected. The failure to include any items on such list does not alter the responsibility of the AAC to complete all work in accordance with the Contract Documents.
- C. Upon receipt of the AAC's list of items to be completed or corrected, the Consultant will promptly make a thorough inspection and prepare a "punch list" setting forth in accurate detail any items on the AAC's list and any additional items that are not acceptable.
- D. When the "punch list" has been prepared, the Consultant will arrange a meeting with the AAC to identify and explain all punch list items and answer questions on the work that must be completed before final acceptance.
- E. The AAC shall correct all "punch list" items or shall cause the correction of the "punch list" items within a time frame to be established when the "punch list" is made. The time frame for the completion of the "punch list" shall not exceed the

- completion date of the Contract. Should the "punch list" not be completed within the specified time frame, the Owner may invoke the rights given under the General Conditions.
- F. The Consultant shall not be expected to inspect any area more than once for the preparation of the "punch list" items. If, during an inspection, the Consultant discovers five (5) or more deficient conditions, then the area shall be declared "Not Ready" for Inspection.
- G. All inspections and sampling required for hazardous materials abatement compliance will be performed by the Consultant.

1.8 CLEANING

A. Throughout the construction period, the AAC shall maintain the building and the site free of rubbish, debris, surplus materials, and other items not required for the Work. Remove such material from the site daily to prevent accumulations. Remove all construction debris from work areas, and remove all hazardous waste and asbestos waste as required by the most current federal, state, and local regulations and the requirements of the specifications.

1.9 ADDITIONAL GENERAL REQUIREMENTS

- A. The AAC shall employ a competent and English-speaking Asbestos Abatement Supervisor with at least three (3) years of experience on projects of similar scope and magnitude. The Supervisor shall be responsible for all work involving asbestos abatement as described in the specifications and defined in the applicable regulations, and have full time daily supervision of the same. The Supervisor shall be the "Competent Person" as defined by OSHA regulations.
- B. The AAC shall allow the work of this contract to be inspected, if required, by local, state, federal, and any other authorities having jurisdiction over such work. The AAC shall immediately notify the Owner and Consultant and shall maintain written evidence of such inspection for review by the Owner and Consultant.
- C. The AAC shall incur the cost of all fines resulting from regulatory non-compliance as issued by federal, state, and local agencies. The AAC shall incur the cost of all work requirements mandated by federal, state, and local agencies as a result of regulatory non-compliance or negligence.
- D. The AAC shall immediately notify the Owner and Consultant of the delivery of all permits, licenses, certificates of inspection, of approval or occupancy, etc., and any other such instruments required under codes by authorities having jurisdiction, regardless to who issued, and shall cause them to be displayed to the Owner and Consultant for verification and recording.
- E. Prevailing Wage: Wages and contributions to be paid to the workers to be employed on this project shall not be less than those established by a schedule issued by the Connecticut Department of Labor, Wage & Workplace Standards Division (prevailing wage rates) in accordance with Connecticut General Statutes Section 31-53 inclusive. The AAC must submit Certified Payroll with the invoice.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01015

SECTION 010160 - SCHEDULING AND PHASING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 GENERAL REOUIREMENTS

- A. The abatement work for this project may be conducted in phases. The work of this project shall begin upon receipt of the "Notice to Proceed" from the Owner/Consultant and after the start of the school's summer recess. A Pre-Construction Meeting shall be scheduled by the Owner/Consultant and must be attended by the AAC and any Sub-Contractors. The assigned Site Supervisor(s) must also attend this meeting.
- B. A working schedule for each phase of work shall be presented by the AAC at the Pre-Construction Meeting. Variations, amendments, and corrections to the presented schedule will be discussed and the Owner/Consultant will inform the AAC of additions or changes in the scheduling requirements for the project.
- C. As a result of the Pre-Construction Meeting, the AAC shall submit a revised schedule no later than three (3) business days from the Pre-Construction Meeting. Upon approval from the Owner/Consultant, the AAC will receive a "Notice to Proceed" with the work of the Contract.
- D. No work shall be performed within the building while school is in session and the students or children under eighteen (18) years of age are present in the building without prior written approval from the State of Connecticut Department of Public Health through an approved Variance Application.
- E. Refer to all other applicable sections of the specification for coordination with other trades. The AAC shall coordinate work with all other activities at this occupied site.

1.3 TIME FOR COMPLETION AND WORKING HOURS

- A. Upon award of contract from the Owner, the AAC shall immediately order materials, supplies, and components for the work of this project.
- B. The last day of the school before the summer recess begins is June 14, 2019. The AAC shall begin the work on June 20, 2019 and shall complete the abatement no later than July 16, 2019 including the air clearance. The date of the commencement of the work is termed the "Construction Start Date." The date of the completion of the work is termed as "Contract Completion Date." The AAC will be required to complete all work of this Contract within the time period stipulated in the finalized schedule.
- C. If conditions arise that are beyond the control of the AAC and force delays in the performance of the Work, the Owner/Consultant shall be immediately notified.

The AAC shall state the reason for the delay and shall estimate the expected duration of the delay. Any application for an extension of the Contract completion date shall be made under proper change order procedures. The acceptance of the cause for delay and change order is subject to the Owner's review and approval.

- D. Work hours will be established in coordination with the Owner/Consultant/Consultant.
- E. Any extra hours or days per week worked by the AAC or Sub-Contractors shall be at no extra cost to the Owner. Denial of extra hours or days per week by the Owner shall not be grounds for extra time allotted to the overall Contract time. The AAC shall be responsible for all overtime payment to cover Consultant's overtime fees for work performed above and beyond normal working hours.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01016

SECTION 010170 - CONTRACT CLOSEOUT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 FINAL CLEANING

- A. Unless otherwise specified under Sections of this Specification, the AAC shall perform final cleaning operations as herein specified prior to final inspection.
- B. Maintain the project site free from accumulations of waste, debris and rubbish caused by operations. At the completion of the work, remove waste materials, rubbish, tools, equipment, machinery and surplus materials, and clean all sight-exposed surfaces; leave the project clean and ready for work of other trades.
- C. Cleaning shall include all surfaces, interior and exterior, in which the AAC has had access.
- D. Use only those materials that will not create hazards to health or property.

1.3 ABATEMENT CLOSEOUT DOCUMENTS

- A. Submit to the Owner/Consultant, final completed hard copies, via mail, all asbestos Waste Shipment Records (WSR), signed by all transporters and the designated disposal site owner/operator. WSR's shall be submitted to Consultant within thirty-five (35) calendar days from shipment of waste from site.
- B. Submit to the Owner/Consultant, final completed hard copies, via mail, all Site Logs, Supervisor's/Workers' licenses, training certificates (initial and current refresher), medical and respirator fit tests and OSHA personal air sampling record.
- C. Refer to asbestos abatement section for specific post-project submittal requirements.
- D. Submit Certified Pay Roll with the invoice.
- E. Final payment will be withheld until receipt of all the above documentations to Owner's/Consultant's satisfaction.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 0101

SECTION 020760 - SELECTIVE DEMOLITION FOR ASBESTOS ABATEMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. Related Sections:
 - 1. Section 020800 Asbestos Abatement

1.2 SUMMARY

A. The AAC shall be responsible for performing selective demolition, as directed by the Owner's Consultant, to determine the presence of concealed materials throughout the work area. This will include all restrictive molding to remove the carpet and access the floor tiles and associated mastic. The AAC shall also remove the radiator covers to facilitate removal of floor tiles that exist underneath. Radiator covers shall be secured for future use by the Owner. The non-movable storage cabinets, counters and lockers will be left in place and the AAC does not need to dismantle them to access the floor tile that may exist underneath. Removal of all layers of floor tile and associated adhesives and other flooring materials down to bare concrete, whether or not shown on abatement plan drawings and whether or not an ACM, is included in the base work. No change order will be accepted. The AAC shall flush cut the tiles around the floormounted cabinets and lockers without damaging the cabinets.

1.3 PROJECT CONDITIONS

- A. Occupancy:
 - 1. Areas of the building in which selective demolition will occur will be unoccupied during work.
- B. Existing Conditions:
 - 1. After the project has begun, the AAC is responsible for the condition of the structures to be selectively demolished.
 - 2. Unforeseen Conditions: Should unforeseen conditions be encountered that affect design or function of project, investigate and fully submit an accurate, detailed, written report to the office of the Consultant. While awaiting a response, reschedule operations if necessary to avoid delay of overall project.
- C. Work under this project may be performed in phases to accommodate Owner's/Architect's requirements and remaining construction phases. Coordinate abatement schedule and operations with the Owner/Architect/Consultant and other trades.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 <u>EXAMINATION</u>

- A. Verify that utilities have been disconnected and sealed.
- B. Insofar as is practicable, arrange operations to reveal unknown or concealed conditions for examination and verification before removal or demolition.
- C. Verify actual conditions to determine, in advance, whether removal or demolition of any element will result in structural deficiency, overloading, failure, or unplanned collapse.
 - 1. Demolish and remove connections to all electrical and plumbing fixtures if required to remove asbestos containing materials (ACM).
 - 2. Demolish all building materials as required to access ACM for abatement and remediation. Selective demolition that impacts ACM shall be performed with engineering controls in place.

3.2 PREPARATION

A. Traffic: Do not obstruct walks or public ways without the written permission of governing authorities and of the Owner. Where routes are permitted to be closed, provide alternate routes if required.

B. Protection:

- 1. Provide for the protection of persons passing around or through the area of demolition.
- 2. Perform demolition so as to prevent damage to adjacent improvements and facilities to remain.
- 3. Protect walls and other new or existing work from damage during demolition operations.

3.3 POLLUTION CONTROLS

- A. Control as much as practicable the spread of dust and dirt.
- B. Observe environmental regulations.
- C. Do not allow water usage that results in freezing or flooding.
- D. Do not allow adjacent improvements to remain to become soiled by demolition operations.

3.4 DEMOLITION - GENERAL

A. Remove: Items indicated to be removed shall be removed by the AAC.

- B. Existing to Remain: Construction or items indicated to remain shall be protected against damage during demolition operations. Where practical, and with the Owner's permission, the AAC may elect to remove items to a suitable storage location during demolition and then properly clean and reinstall the items.
- C. Perform work in a systematic manner.
- D. Demolish and remove existing structures only to the extent required, as indicated in the Contract Documents.
- E. Perform selective demolition using methods that are least likely to damage work to remain and which will provide proper surfaces for patching.
- F. Remove debris daily.
- G. Use any methods permitted by governing regulations and the requirements of the Contract Documents.

3.5 <u>DISPOSAL OF DEMOLISHED MATERIALS</u>

- A. Promptly dispose of materials resulting from demolition operations. Non-contaminated material may be disposed of as construction waste. Do not allow materials to accumulate on site.
- B. All rubbish and waste material from the Work shall be neatly stacked or kept in suitable containers and removed from the premises daily. The premises shall be kept clean and in an orderly condition at all times to the satisfaction of the Owner and the Consultant.
- C. Transport materials resulting from demolition operations and legally dispose of off-site.
- D. Off-site disposal location shall not be within one-half mile of any portion of the project site or within sight of the project site.
- E. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
- F. All disposal containers, receptacles, dumpsters shall be properly labeled and sealed from the onset of waste accumulation. Exterior waste containers shall be locked.

3.6 <u>CLEANING</u>

A. Throughout the abatement and remediation period, the AAC shall maintain the building and site free of rubbish, debris, surplus materials, and other items not required for the work. Remove such material from the site daily to prevent accumulations. Remove all construction debris from work areas, and remove all hazardous waste and asbestos waste as required by the most current federal, state, and local regulations and the requirements of the specifications.

END OF SECTION 020760

SECTION 020800 - ASBESTOS ABATEMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

B. Related Sections:

1. Section 020760 – Selective Demolition for Abatement

1.2 GENERAL PROVISIONS

- A. The existing Duffy Elementary School building located at 95 Westminster Drive in West Hartford, Connecticut will be undergoing renovation to support the replacement of floors in targeted classrooms and hallways.
- B. Testing has identified flooring materials in these areas that are scheduled for renovation to contain asbestos. The work covered in this section includes the minimum procedures that shall be employed for the abatement of the asbestos-containing materials (ACM).
- C. Refer to other Sections of these Specifications to determine the type and extent of work therein affecting the work of this Section, whether or not such work is specifically mentioned herein.
- D. Ashis Roychowdhury of Eagle Environmental, Inc. is the designer of this Specification. Mr. Roychowdhury is a State of Connecticut Department of Public Health (CTDPH) Licensed Asbestos Project Designer (License #000145).
- E. The Base asbestos abatement work of this project is listed on the Asbestos Containing Materials Scope of Work and Abatement Plan ASB-1.
- F. The work of this project shall be performed during summer recess. There shall be no student or children under eighteen (18) years of age present in the building during the abatement work.

1.3 PROJECT DESCRIPTION

- A. The work to be performed includes but is not limited to the proper removal, handling, and disposal of all ACM contained within areas of renovation at the Louis Duffy Elementary School building located at 95 Westminster Drive in West Hartford, Connecticut. Detailed description of materials and locations of ACM scheduled for removal are shown on the Table 1 below and on the Abatement Plan ASB-1 enclosed as Attachment A.
- B. The asbestos abatement work shall include but not be limited to the ACM identified in the following Table 1. It is the sole responsibility of the Asbestos Abatement Contractor (AAC) to visit the site, review the Contract Documents

and determine the quantities of ACM to be removed when developing their bid. Locations and estimated quantities of specific items noted in paragraph A above include:

TABLE I

LOCATION(S)	MATERIAL	ESTIMATED QUANTITY
Classrooms 10-16, Stairwell Landings, Custodian Closet, Math Tutor's Office, Faculty Lounge & Room by Girl's Bathroom	Floor Tiles and Associated Mastic (All Layers)*	7,500 SF
Front Lobby & Hallways		4,310 SF

Note: * The carpet covering the floor tiles, where exists, needs to be disposed of as asbestos-contaminated waste.

- C. The AAC shall coordinate the work of the Asbestos Abatement Section with that of the work of the flooring contractor. It is the AAC's responsibility to become familiar with the flooring contractor's construction phasing plan for the project and to include, if any, remobilization fees to support the phasing. It is anticipated that the abatement work of this project will be completed in one phase within the overall project schedule. Coordinate abatement schedule and operations with the Owner/Flooring Contractor/Consultant and other trades.
- D. The AAC shall determine the quantities of asbestos-containing materials requiring removal prior to submission of bid. Any discrepancies must be submitted in writing in RFI format to the Consultant for interpretation prior to submission of bid.
- E. The AAC shall be responsible for the removal of any restrictive molding to facilitate asbestos removal. Refer to Section 020760 Selective Demolition for Asbestos Abatement for additional requirements.
- F. The AAC is directed to review the overall project schedule to assist them in developing their bid.
- G. The adhesives associated with the carpet, cove base (assorted types), rubber sheet flooring (assorted types), sheetrock/joint compound, ceramic floor and wall tile (assorted types) adhesive, grout and mudset, rough and skim coat plaster, and the flooring materials in portable classrooms have been determined to be non-asbestos containing.

1.4 OUALITY ASSURANCE

- A. The AAC must be licensed by the State of Connecticut Department of Public Health (DPH) to perform asbestos abatement. The license must be current and in good standing.
- B. The Asbestos Abatement Supervisor(s) and Asbestos Abatement Workers shall be accredited in accordance with EPA regulation 40 CFR Part 763, subpart E, Appendix C; and shall be licensed by the State of Connecticut Department of Public Health.

1.5 APPLICABLE CODES

- A. The AAC shall be solely responsible for conducting this project and supervising all work in a manner that will be in conformance with all federal, state and local regulations and guidelines pertaining to asbestos abatement. Specifically, the AAC shall comply with the requirements of the following:
 - 1. USEPA AHERA Regulation (40 CFR 763 Final Rule and Notice);

2. USEPA NESHAP Regulations (40 CFR 61, Subpart M);

- 3. OSHA Asbestos Regulations (29 CFR 1910.1001 and 1926.1101);
- 4. Connecticut DEEP Regulations (Section 22a-209-8 (I) and Section 22a-220 of the Connecticut General Statutes);
- 5. Connecticut DPH Standards for Asbestos Abatement Sections 19a-332a-1 to 19a-332a-16;
- 6. Connecticut DPH Asbestos-Containing-Materials in Schools Regulations (19a-333-1 through 19a-333-13);
- 7. Connecticut DPH Licensure and Training Requirements Section 20-440-1 to Section 20-440-9.
- 8. Connecticut Basic Building Code (BOCA);

9. Connecticut Fire Safety Code (NFPA);

10. Local health and safety codes, ordinances or regulations pertaining to asbestos remediation and all national codes and standards including ASTM, ANSI, and Underwriter's Laboratories.

1.6 EXEMPTIONS

- A. This project was designed by a State of Connecticut Department of Public Health licensed Asbestos Abatement Designer (Ashis Roychowdhury). Any deviation from these specifications requires the written approval and authorization from the Designer.
- B. Any deviations from CTDPH Standards for Asbestos Abatement Sections 19a-332a-1 through 19a-332a-16 and CTDPH Asbestos-Containing Materials in schools regulations 19a-333-1 through 19a-333-13 must be requested in writing and must be approved in writing by CTDPH.

1.7 NOTIFICATIONS, POSTINGS AND PERMITS

- A. The HMAC shall make the following notifications and provide the submittals to the following agencies prior to the commencement of removal work. This notification is required ten (10) days (10 calendar days for CTDPH and 10 business days for USEPA) prior to the start of the abatement project:
 - 1. State of Connecticut
 Department of Public Health
 Indoor Air Program, MS #12 AIR
 410 Capitol Avenue
 P.O. Box 340308
 Hartford, CT 06134-0308
 - 2. USEPA New England Headquarters 5 Post Office Square, Suite 100 Boston, Massachusetts 02109-3912

Note: Effective December 14, 2017, EPA needs to be notified directly for all asbestos abatement projects involving >160 square feet or >260 linear feet or >35 cubic feet of ACM.

- B. The minimum information included in the notification includes:
 - 1. Name and address of building owner/operator
 - 2. Building location
 - 3. Building size, age, and use
 - 4. Amount of friable asbestos
 - 5. Work schedule, including proposed start and completion date
 - 6. Asbestos removal procedures to be used
 - 7. Name and location of disposal site for generated asbestos waste, residue, and debris
- C. Ten day notifications shall be posted at the job site.

1.8 WORK SITE SAFETY PLAN

- A. The AAC shall establish a set of emergency procedures and shall post them in a conspicuous place at the work site. The safety plan should include provisions for the following:
 - 1. Evacuation of injured workers.
 - 2. Emergency and fire exit routes from all work areas.
 - 3. Emergency first aid treatment.
 - 4. Local telephone numbers for emergency services including ambulance, fire, and police.
 - 5. A method to notify workers in the event of a fire or other emergency requiring evacuation of the building.
 - 6. Confined space entry program.
 - 7. 24 hour site security program.
- B. The AAC is responsible for training all workers in these procedures.

1.9 ALTERNATIVE WORK PRACTICES (AWP)

- A. The State of Connecticut Department of Public Health (CTDPH) has approved an Alternative Work Practice (AWP) for this project. The AWP will allow the AAC to set up the containment with "critical" barriers" and one (1) layer of six-mil polyethylene sheeting on the walls. A copy of the AWP is enclosed as Attachment B.
- B. Any deviations from these specifications require the written approval and authorization from the Owner and Consultant. Any deviations from CTDPH Standards for Asbestos Abatement Sections 19a-332a-1 through 19a-332a-16 and CTDPH Asbestos-Containing Materials in schools regulations 19a-333-1 through 19a-333-13 must be requested in writing to CTDPH and must be approved in writing by CTDPH.

1.10 RE-OCCUPANCY CLEARANCE

A. Re-occupancy air clearance sampling will be required within the work area(s).

- B. The Owner shall be responsible for payment of the sampling and analysis of initial final air clearance samples only. The AAC shall be responsible for payment of all costs associated with the collection and analysis of additional final air clearance samples if the initial test fails. This shall also include the laboratory charges for preparation of slides for samples that are "overloaded" and become unreadable.
- C. Phase Contrast Microscopy (PCM) background air samples will be analyzed by Eagle Environmental on-site Asbestos Project Monitor (APM). Transmission Electron Microscopy (TEM) air samples will be analyzed by an outside laboratory on a twenty-four (24) hour turn-around time.

1.11 CONTROL OVER REMOVAL WORK

- A. All AAC work procedures shall be monitored by the AAC's "Competent Person" to ensure that areas outside the designated work locations do not become contaminated. The following controls shall be implemented each working day to help ensure this:
- B. Prior to work on any given day, the AAC's designated "Competent Person" shall evaluate job tasks with respect to safety procedures and requirements specified to prevent contamination of the building or the employees. This includes a visual survey of the work area and the decontamination enclosure systems.
- C. The AAC shall maintain control of and be responsible for access to all work areas to ensure the following requirements:
 - 1. Nonessential personnel are prohibited from entering the area;
 - 2. All authorized personnel entering the work area shall sign the work area entry log;
 - 3. All authorized personnel entering the work area shall read the "worker protection procedures" which are posted at the entry points to the enclosure system, and shall be equipped with properly fitted respirators and protective clothing;
 - 4. All personnel who are exiting from the decontamination enclosure system shall be properly decontaminated;
 - Asbestos waste that is taken out of the work area must be properly bagged and labeled in accordance with these specifications. The surface of the bags shall be decontaminated. Asbestos waste leaving the enclosure system must be transported off site or immediately placed in locked, posted temporary storage on site, and be removed within 24 hours of the project conclusion.
 - 6. Any material, equipment, or supplies that are brought out of the decontamination enclosure system shall be cleaned and decontaminated by wet cleaning and/or HEPA vacuuming of all surfaces.

1.12 SITE SECURITY

A. The AAC shall be responsible for the security of regulated areas. Post asbestos

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abatement warning signs at entrances to the work area including the waste load out and worker decontamination chamber. The AAC shall have a supervisor monitoring the entrance of the worker decontamination chamber during abatement work.

B. The supervisor shall maintain a work area access log for each work area. The access log shall document each person that enters the work area, the time entered and the time exited. Copies of the work area access logs shall be provided to the Owner's Consultant during the course of the project.

1.13 PERSONNEL PROTECTION

- A. Prior to commencing work, instruct all workers in all aspects of personnel protection, work procedures, emergency procedures use of equipment including procedures unique to this project.
- B. Respiratory protection shall meet the requirements of OSHA as required in 29 CFR 1910.134,29 CFR 1926.11,29 CFR 1926.62 and the requirements of the CTDPH Standards for Asbestos Abatement (19a-332a-1 through 16) A formal respiratory protection program must be implemented in accordance with 29 CFR 1926.1101 and 29 CFR 1910.134. The AAC shall conduct exposure assessment air sampling, analysis and reporting to ensure the workers are using appropriate respiratory protection.
- C. The AAC shall provide appropriate respiratory protection for each worker and ensure usage during potential asbestos exposure.
- D. The AAC shall provide respirators from among those approved as being acceptable for protection by the National Institute for Occupational Safety and Health (NIOSH) under the provisions of 30 CFR Part II.
- E. The AAC shall provide an adequate supply of filter for respirators in use.
- F. Minimum respiratory protection shall be as follows:

Air borne Asbestos Level:	Required Respirator:
Not in excess of 1 f/cc (10 x PEL)	Half mask air purifying or otherwise as required respirator other than a disposable respirator, equipped with HEPA P 100 filters.
Not in excess of 5 f/cc (50 x PEL)	Full face piece air purifying respirator equipped with HEPA P 100 filters.
Not in excess of 10 f/cc (100 x PEL)	Any powered air purifying respirator equipped with HEPA P 100 filters or any supplied air respirator operated in continuous flow mode.
Not in excess of 100 f/cc (1000 x PEL)	Full face piece supplied air respirator operated in pressure demand mode.

Greater than 100 f/cc (1000 x PEL)

Full face piece supplied air respirator unknown operated in pressure demand mode, equipped with an auxiliary positive pressure self-contained breathing apparatus.

Notes:

- 1. Respirators assigned for higher airborne fiber concentrations may be used at lower concentrations.
- 2. A high efficiency filter means a filter that is at least 99.97 percent efficient against mono-dispersed particles of 0.3 micrometers in diameter or larger.
- G. The AAC shall provide and require all workers to wear protective clothing in Work Areas where asbestos fiber concentration exceeds permissible limits established by the OSHA or where contamination exists. Protective clothing shall include impervious coveralls with elastic wrists and ankles, head covering, gloves and foot coverings.
- H. The AAC shall ensure that all authorized persons entering contaminated areas are equipped with proper respirators and protective clothing.

1.14 WORKER PROTECTION PROCEDURES

- A. The AAC shall monitor airborne asbestos concentrations in the workers' breathing zone to establish conditions and work procedures for maintaining compliance with OSHA Regulations 29 CFR 1910.1001 and 1926.1001.
- B. The AAC's air sampling professional shall document all air sampling results and provide all air sampling reports to the Consultant as soon as feasible. OSHA air monitoring results shall be posted at a conspicuous location at the job site.
- C. All personnel air sampling shall be conducted in accordance with methods described in OSHA standards 29 CFR 1910.1001 and 1926.1101.

1.15 SUBMITTALS

- A. The AAC will submit two (2) copies of the following submittals to the Owner's Representative five (5) calendar days prior to the commencement of removal work:
 - 1. AAC's construction schedule
 - 2. Shop drawings showing work area configuration with decontamination facility and negative air exhaust locations
 - 3. Waste generator label to be used
 - 4. Waste shipment and disposal form to be used with generated information.
 - 5. Waste hauling contractor
 - 6. Asbestos abatement training, licenses, medical and fit-test records of each employee who may be on the project site
 - 7. The qualifications of the hygiene firm that the AAC proposes to use for this project to analyze AAC employee OSHA monitoring samples and final visual inspections and re-occupancy air sampling
 - 8. Copies of all notifications and permits

- 9. Copies of the written respirator plan compliant with the most current issue of OSHA 1910.134
- 10. Copies of all MSDS sheets for materials to be used on site
- 11. Work Site Safety Plan
- 12. Negative Exposure Assessment
- 13. AAC's State of Connecticut Asbestos Contractor license
- 14. State and USEPA Notifications
- B. The AAC will submit the following to the Consultant during the work:
 - 1. Results of all personal air sampling
 - 2. Certificate, training, medical, and fit-test records for new employees to start work (24 hours in advance of work).
 - 3. Signed copy of the Certificate of Workers Acknowledgment found at the end of this section for each worker who will be at job site.
 - 4. AAC site logs and containment access logs
 - 5. Revised Notifications, if any.
- C. The following shall be submitted to the Consultant at the completion of work:
 - 1. Completed copies of Waste Shipment Records (WSR).
 - 2. Remaining personal air sampling results
 - 3. Remaining site logs.
- D. The following shall be submitted to the Owner with the application for payment
 - 1. Certified Payroll
- E. The AAC's final payment shall be withheld until receipt of all the documents.

1.16 DEFINITIONS

- A. ABATEMENT Procedures to control fiber release from asbestos-containing materials; includes removal, encapsulation, and enclosure.
- B. AIRLOCK A system for permitting ingress and egress while assuring air movement to a contaminated area from an uncontaminated area. Two curtained doorways spaced a minimum of six feet apart can form an airlock.
- C. AIR MONITORING The process of measuring the fiber concentration of an area or of a person.
- D. AIR SAMPLING PROFESSIONAL A licensed professional capable of developing air sampling protocols and conducting air monitoring and analysis. This individual should be an industrial hygienist, an environmental scientist, or an engineer with experience in asbestos air monitoring and worker protection equipment and procedures. This individual should have demonstrated proficiency in conducting air sample collection in accordance with 29 CFR 1910.1001 and 1926.1101.
- E. ADEQUATELY WETTED means sufficiently mixed or coated with water, amended or an aqueous solution; or the use of removal encapsulant to prevent dust emissions.

- F. AMENDED WATER Water to which a surfactant has been added.
- G. ASBESTOS The name given to a number of naturally occurring fibrous silicates. This includes the serpentine forms and the amphiboles and includes chrysotile, amosite, crocidolite, tremolite, anthophyllite, and actinolite, or any of these forms that have been chemically altered.
- H. ASBESTOS ABATEMENT Means the removal, encapsulation, enclosure, renovation, or repair of asbestos-containing materials except activities that are related to the removal or repair of asbestos cement pipe and are performed by employees of a water company as defined in Section 25-32a of the Connecticut General Statutes.
- I. ASBESTOS ABATEMENT SITE SUPERVISOR Means any licensed individual who is employed or engaged by an AAC to supervise an asbestos abatement project.
- J. ASBESTOS ABATEMENT WORKER Means any employee of an AAC who engages in asbestos abatement.
- K. ASBESTOS CONSULTANT Any person who engages in any activity directly involved with asbestos consultation services and who has been issued a certificate by the commissioner and a license by the department.
- L. ASBESTOS CONTAINING MATERIAL (ACM) A material composed of asbestos of any type and in an amount greater than one percent be weight, either alone or mixed with other fibrous or nonfibrous material.
- M. ASBESTOS CONTRACTOR Any person or entity engaged in asbestos abatement whose employees actually perform asbestos abatement work.
- N. ASBESTOS CONTROL AREA An area where asbestos abatement operations are performed which is isolated by physical boundaries to prevent the spread of asbestos dust, fibers, or debris.
- O. ASBESTOS FIBERS Those particles with a length greater than five (5) microns and a length to diameter ratio of 3: 1 or greater.
- P. ASBESTOS PERMISSIBLE EXPOSURE LIMIT (PEL) The maximum airborne concentration of asbestos fibers to which an employee is allowed to be exposed. The current level established by OSHA is 0.1 fibers per cubic centimeter of air as an eight (8) hour time weighted average and 1.0 fibers/cc averaged over a sampling period of 30 minutes as an excursion limit. The AAC is responsible for maintaining work areas in a manner that this standard is not exceeded.
- Q. ASBESTOS PROJECT MONITOR The licensed asbestos consultant who is certified as a project monitor and who functions as an on-site representative of the facility Owner or other persons by over-seeing the activities of the asbestos abatement contractor.
- R. AUTHORIZED VISITOR Any person authorized by the Owner to enter the building.

- S. BUILDING OWNER For this Contract only, the building Owner is the Town of West Hartford.
- T. CLEAN ROOM An uncontaminated area or room, which is a part of the workers' decontamination enclosure with provisions for storage of workers' street clothes and protective equipment.
- U. CLEARANCE SAMPLING Final air sampling performed aggressively after the completion of the abatement project in a regulated area. Five (5) air samples collected by the asbestos abatement project monitor inside the work area, and having a fiber concentration of less than 0.010 fibers/cc of air will denote acceptable clearance sampling by Phase Contrast Microscopy. Five air samples collected by the asbestos abatement project monitor having an average asbestos concentration of less than 70 asbestos structures mm/sq. will denote acceptable clearance sampling for Transmission Electron Microscopy.
- COMMISSIONER Means the Commissioner of the Connecticut Department of Health Services or his/her authorized agent.
- W. COMPETENT PERSON A representative of the AAC who is capable of identifying an asbestos hazard and who has the authority to take prompt corrective measures to eliminate the hazard during asbestos removal.
- X. CONFINED SPACE A work zone where access and egress are restricted, a potential for gaseous vapors to accumulate exist, or a potential for low oxygen content exists.
- Y. DECONTAMINATION ENCLOSURE SYSTEM A series of connected areas, with curtained doorways between any two adjacent areas, for the decontamination of workers and equipment. A decontamination enclosure system always contains at least one airlock and is adjacent and connected to the regulated area, where possible.
- Z. DEPARTMENT The Department of Public Health.
- AA. EPA Means the U.S. Environmental Protection Agency.
- BB. ENCAPSULANT A liquid material that can be applied to asbestos-containing material that controls the possible release of asbestos fibers from the materials by either creating a membrane over the surface (bridging encapsulant) or penetrating the material and binding its components together (penetrating encapsulant).
- CC. ENCAPSULATION A specified asbestos remediation strategy involving the application of an encapsulant to asbestos containing materials to control the release of asbestos fibers into the air.
- DD. EQUIPMENT DECONTAMINATION ENCLOSURE That portion of a decontamination enclosure system designed for controlling the transfer of materials and equipment, typically consisting of a washroom and a holding area.
- EE. EQUIPMENT ROOM A contaminated area or a room, which is part of the workers' decontamination enclosure with, provisions for storage of contaminated clothing and equipment.

- FF. FACILITY Means any private or public building or structure including but not limited to those used for institutional, residential (including single family homes), commercial or industrial purposes and vessels while ashore or in dry-dock.
- GG. FIXED OBJECT A unit of equipment or furniture in the work areas which cannot be removed from the work area.
- HH. FRIABLE ASBESTOS MATERIAL Any material that contains more than 1% asbestos by weight, that can be crumbled, pulverized or reduced to powder by hand pressure.
- II. GLOVE BAG An impervious plastic bag-like enclosure affixed around asbestos containing material, with glove-like appendages through which materials and tools may be handled.
- JJ. HAZARDOUS MATERIALS ABATEMENT CONTRACTOR (AAC) Means the Asbestos Contractor, Lead Based Paint Abatement Contractor and or PCB/DEHP and Mercury Vapor Lighting Removal Contractor.
- KK. HEPA FILTER A high efficiency particulate air (HEPA) filter in compliance with ANSI Z9.2-1979.
- LL. HEPA VACUUM EQUIPMENT Vacuum equipment with a HEPA filter system for filtering the effluent air from the unit.
- MM. HOLDING AREA An air-locked chamber in the equipment decontamination enclosure located between the washroom and an uncontaminated area.
- NN. INSPECTOR (ASBESTOS ABATEMENT PROJECT MONITOR)- An individual, retained by the Building Owner, who is a "qualified asbestos abatement project monitor" as defined by the State of Connecticut Department of Public Health, and who will be responsible for monitoring the AAC during the asbestos abatement project.
- OO. MOVABLE OBJECT A unit of equipment or furniture in the work area, which can be removed from the work area.
- PP. NEGATIVE AIR FILTRATION EQUIPMENT A portable local exhaust system equipped with HEPA filtration used to create negative pressure in a regulated area (negative with respect to adjacent unregulated areas) and capable of maintaining a constant, low velocity air flow into regulated areas from adjacent unregulated areas.
- QQ. OWNER'S REPRESENTATIVE -The Asbestos Consultant for the project.
- RR. NESHAPS National Emissions Standard for Hazardous Air Pollutants regulations enforced by the EPA.
- SS. PLASTICIZE To cover floors and walls with plastic sheeting as specified herein.
- TT. SEPARATION BARRIER A rigid barrier sealed with two (2) layers of six (6) mil polyethylene sheeting installed between an occupied area and the asbestos abatement work area.

- UU. SHOWER ROOM A room between the clean room and the equipment room in the workers' decontamination enclosure with hot/cold running water and suitably arranged for employee showering during decontamination. The shower room is located in an airlock between the contaminated area and the clean area.
- VV. STRIPPING Removing asbestos materials from any structural member, pipe surface, HVAC, or other equipment.
- WW. WASHROOM A room between the work area and the holding area in the equipment decontamination enclosure with provisions for storage of contaminated clothing and equipment.
- XX. WET CLEANING The process of reducing asbestos contamination from building surfaces and objects by using cloths, mops, or other cleaning tools, which have been dampened by amended water, and by then disposing of these cleaning items as asbestos contaminated waste.
- YY. WORK AREA Designated rooms, spaces, or areas of the project in which asbestos abatement actions are occurring and which may become contaminated as a result of such abatement actions. The work area must be totally self-contained by sealing, plasticizing and equipping the area with a decontamination enclosure system.
- ZZ. WORKER DECONTAMINATION ENCLOSURE SYSTEM That portion of a decontamination enclosure system designated for controlled passage of workers, other personnel, and authorized visitors, typically consisting of a clean room, a shower room, and an equipment room.
- AAA. WORK STOPPAGE CLEANUP PROCEDURE A process following the issuance of a written stop work order, whereby the AAC thoroughly cleans and decontaminates the work area, the decontamination enclosure system, and any other areas of the building affected by the removal project, to the satisfaction of the Asbestos Project Monitor.
- BBB. WORK ZONE The area of the decontamination enclosure system where asbestos is being removed.

1.17 PRECONSTRUCTION MEETING

A. The AAC shall be required to attend a preconstruction meeting with his/her site supervisor, project manager and any subcontractor they employ on site for the purpose of reviewing the contract requirements.

PART 2 - MATERIALS AND EQUIPMENT

2.1 MATERIALS

- A. Deliver all materials in the original packages, containers, or bundles bearing the name of the manufacturer and the brand name and product technical description.
- B. Damaged or deteriorating materials shall not be used and shall be removed from the premises. Material that becomes contaminated with asbestos shall be decontaminated or disposed of as asbestos waste.

- C. Polyethylene sheet in a roll size to minimize the frequency of joints shall be delivered to job site with factory label indicating 4 or 6 mil.
- D. Polyethylene disposable bags shall be true six (6) mil with preprinted labels.
- E. Tape shall be capable of sealing joints in adjacent polyethylene sheets and for attachment of polyethylene sheets to finished or unfinished surfaces of dissimilar materials and capable of adhering under both dry and wet conditions, including use of amended water.
- F. Surfactant (wetting agent) shall consist of fifty (50) percent polyoxyethylene ether and fifty (50) percent polyoxyethylene ester, or equivalent, and shall be mixed with water to provide a concentration of one (1) ounce surfactant to five (5) gallons of water or as directed by manufacturer.
- G. Impermeable containers are to be used to receive and retain any asbestos-containing or contaminated materials until disposal at an acceptable disposal site. (The containers shall be labeled in accordance with OSHA Standard 29 CFR 1926-1101.) Containers must be both air and watertight.
- H. Labels and signs, as required by OSHA Standard 29 CFR 1926.1001 will be used.
- I. Encapsulant shall be bridging or penetrating type which has been found acceptable to Eagle Environmental. Usage shall be in accordance with manufacturer's printed technical data.
- J. Disposal labels shall be preprinted on self-adhesive labels with the generator name, abatement site and AAC's name and address. Labels shall not be photocopied and applied with spray adhesive.

2.2 TOOLS AND EQUIPMENT

- A. Provide suitable tools for asbestos removal, encapsulation and enclosure.
- B. The AAC shall have air monitoring equipment of type and quantity to monitor operations and conduct personnel exposure surveillance per OSHA requirements.
- C. The AAC shall have available sufficient inventory on site for materials necessary for the job including protective clothing, respirators, filter cartridges, polyethylene sheeting of proper size and thickness, tape, and air filters.
- D. The AAC shall provide temporary electrical power sources such as generators (when required).
- E. The AAC shall have available shower stalls and sufficient hose length and a drain system equipped with 5-micron filters.
- F. Exhaust air filtration system units shall contain HEPA filter(s) capable of sufficient air exhaust to create negative pressure of 0.02 inches of water within the enclosure with respect to the outside area. Equipment shall be checked for proper operation by smoke tubes or a differential pressure gauge before the start of each shift and at least twice during the shift. Adequate exhaust air shall be provided for a minimum of four (4) air changes per hour within the enclosure. No air movement system or air filtering equipment shall discharge unfiltered air outside.

- G. Vacuum units, of suitable size and capacities for project, shall have HEPA filter(s) capable of trapping and retaining at least 99.97 percent of all monodispersed particles of 0.3 micrometers in diameter or larger.
- H. The AAC will have reserve exhaust air filtration system units in order to maintain negative air filtration in the event that a unit malfunctions during use.
- I. The AAC shall have available and use recording manometers to monitor pressure differential between the work area and occupied areas of the building. A minimum negative pressure differential of 0.02 inches of water column shall be maintained.
- J. The AAC shall have available spray equipment capable of mixing a wetting agent with water and capable of generating sufficient pressure and volume and having sufficient hose length to reach all areas with asbestos.
- K. HEPA filtered local exhaust ventilation shall be utilized during the installation of enclosures and supports where asbestos-containing materials may be disturbed.

PART 3 - EXECUTION

3.1 INTERIOR WORK AREA PREPARATION - GENERAL

- A. Provide GFCI devices, temporary power, and temporary lighting installed in compliance with the applicable electrical codes. All temporary installations are to be made by a licensed electrician.
- B. Shut down electrical power, including receptacles and light fixtures. Lock and tag out circuits associated with the electrical components in the work area(s). Under no circumstances during the abatement will lighting fixtures be permitted to be energized.
- C. Shut down and/or isolate heating, cooling, and ventilation air systems or zones to prevent contamination and fiber dispersal to other areas of the structure. Lock and tag out circuits associated with heating and cooling units. During the work, vents within the work area shall be sealed with duct tape and polyethylene sheeting.
- D. Seal off all openings, including but not limited to windows, corridors, doorways, skylights, ducts, grills, diffuser, and any other penetration to and from the work areas, with polyethylene sheeting minimum of six (6) mils thick sealed with duct tape. This includes doorways and corridors which will not be used for passage to occupied areas. Install 5 micron water filtration socks in all floor drains prior to sealing.
- E. Pre-clean fixed objects within the work areas, using HEPA vacuum equipment and/or wet cleaning methods as appropriate, and enclose with minimum six (6) mil plastic sheeting sealed with duct tape.
- F. Pre-clean movable objects within the work areas, using HEPA vacuum equipment and wet cleaning methods as appropriate. Do not use methods that raise dust, such as dry sweeping or vacuuming with equipment not equipped with HEPA filters.

- G. After HEPA vacuum pre-cleaning, conduct work area preparation in accordance with this Specification section.
- H. Maintain emergency and fire exits from the work area, or establish alternative exits satisfactory to fire officials.
- I. Create pressure differential between work areas and occupied areas by the use of acceptable negative air pressure equipment. The AAC shall ensure required negative air pressure is obtained throughout the containment and the total volume of air within the work area is changed every fifteen (15) minutes.
- J. Post all approaches to the work area with Asbestos Warning signs. Warning signs shall be of size and type that are easily readable and are visible from all approaches to the work areas.

3.2 CONTIGUOUS PERSONNEL DECONTAMINATION SYSTEM

- A. The AAC shall establish contiguous to each work area, a personnel decontamination system consisting of equipment room, shower room and clean room in series. Access between the contaminated and uncontaminated areas shall be through this decontamination enclosure only. The decontamination system shall be constructed of two layers of six-mil polyethylene sheeting. Pre-fabricated "pop-up" decontamination chambers will not be permitted on this project.
- B. Access between rooms in decontamination system shall be through double flapcurtained openings. Clean room, shower room and equipment room within decontamination system shall be completely sealed ensuring that the sole source of air flow through this area originates from uncontaminated areas outside the work area.
- C. The shower unit shall be equipped with an adequate supply of both hot and cold water. A shower filtration pump containing two 5 micron sock filters or the best available technology shall be installed to filter shower water. Filtered shower water shall be discharged into sanitation drains and shall not be discharged into storm drains or onto floor or ground surfaces.
- D. The shower room shall have soap and an adequate supply of drying towels. Provide an adequate number of shower units in accordance with OSHA 29 CFR 1926.1101.

3.3 REMOTE PERSONNEL DECONTAMINATION SYSTEM

- A. The AAC may establish a remote personnel decontamination system where contiguous decontamination systems are not feasible. The use of such remote decontamination unit must be indicated in the Notifications. Access between the contaminated and uncontaminated areas shall be through this decontamination enclosure only. The decontamination system shall be constructed of two layers of six-mil polyethylene sheeting. Pre-fabricated "pop-up" decontamination chambers will not be permitted on this project.
- B. Access between rooms in decontamination system shall be through double flapcurtained openings. Clean room, shower room and equipment room within

decontamination system shall be completely sealed ensuring that the sole source of air flow through this area originates from uncontaminated areas outside the work area.

- C. The shower unit shall be equipped with an adequate supply of warm water. A shower filtration pump containing two 5 micron sock filters or the best available technology shall be installed to filter shower water. Filtered shower water shall be discharged into sanitation drains and shall not be discharged into storm drains or onto floor or ground surfaces.
- D. The shower room shall have soap and an adequate supply of drying towels. Provide an adequate number of shower units in accordance with OSHA 29 CFR 1926.1101.

3.4 WASTE LOAD OUT SYSTEMS

- A. The AAC shall establish waste load out systems, where feasible, attached to the work area. Waste load out systems shall consist of a minimum of two (2) chambers that are of suitable size for transporting waste out of the work area. Waste load out systems shall be constructed of two layers of six-mil polyethylene sheeting.
- B. Access between rooms in the waste load out system shall be through double flapcurtained openings. The waste load out system shall be used for decontaminating waste containers, bags, bundles, etc. prior to removal from the work area and transporting waste from the work area to the non-work area.
- C. Persons working inside the contaminated work area are not permitted to pass from the work area to the non-work area through the waste load out system. Persons inside the contaminated work area shall not be permitted to enter into the clean area of the waste load out system.
- D. The waste load out system shall remain sealed at all times except during decontamination of waste containers and transport of waste from the work area to the non-work area.

3.5 ASBESTOS REMOVAL PROCEDURE - GENERAL

- A. The AAC shall have a designated "Competent Person" on the job at all times to ensure establishment of a proper enclosure system and proper work practices throughout the project. At a minimum, the AAC Competent Person shall perform or supervise the following duties, as applicable:
 - 1. Ensure the integrity of the containment or enclosure.
 - 2. Set up procedures to control entry to and exit from the enclosure.
 - 3. Supervise employee exposure monitoring.
 - 4. Ensure that employees set up, use and remove engineering controls, use work practices and personal protective equipment in compliance with OSHA regulations.
 - 5. Ensure that employees use the worker decontamination facilities and observe decontamination procedures.

- B. Abatement work will not commence until all work area preparation is completed in accordance with this technical specification section and approved by the on-site Asbestos Project Monitor (APM).
- C. Spray asbestos materials with amended water using airless spray equipment or apply approved removal wetting agent to reduce the release of fibers during removal operation. The Owner's Representative will pre-approve use of amended water as the wetting agent.
- D. Spraying of amended water shall be adequate enough to allow the ACM to absorb the water. Actual removal of ACM shall not be allowed until all ACM has become adequately wet.
- E. Do not create any visible emissions during asbestos removal. Ensure all ACM is adequately wet prior to removal.
- F. Fill disposal containers as removal proceeds, seal filled containers before moving to waste load out system. Wet clean each container thoroughly, double bag, drum or use other approved containerization methods and apply a caution label before moving to holding area.
- G. Remove and containerize all visible accumulations of asbestos-containing and/or asbestos- contaminated debris.
- H. Solidify all liquid waste prior to containerization for disposal.
- I. Sealed disposal containers and all equipment used in the work area shall be included in the cleanup and shall be removed from work areas, via the waste load out system at an appropriate time in the cleaning sequence.
- J. The AAC shall remove from containment all abated asbestos containing materials at the end of each work shift. At no time the asbestos waste will be allowed to accumulate inside the containment.
- K. At any time during asbestos removal, should the Consultant's APM suspect contamination of areas outside the work area(s), they shall cause to stop all abatement work until steps to decontaminate these areas and eliminate causes of such contamination are completed. Unprotected individuals shall be prohibited from entering suspected contaminated areas until air sampling and visual inspections certify decontamination.
- L. Upon acceptance of the work area by the Owner's Representative, the AAC shall apply an even coating of bridging encapsulant with airless spray equipment to all exposed surfaces contained within the work area. Apply encapsulant in accordance with manufacturer's recommendation.

3.6 <u>MINIMUM SPECIFIC ASBESTOS REMOVAL PROCEDURE – FLOOR TILE AND ASSOCIATED MASTIC</u>

- A. Provide selective demolition to remove restrictive moldings, furniture and plumbing fixtures to access all floor tiles as specified herein.
- B. Removal of all layers of floor tiles and associated mastic down to bare concrete, whether or not shown on abatement plan drawings and whether or not an ACM, is

included in the base work; no change order will be accepted. Floor leveling agents contaminated by asbestos-containing mastic shall be removed and disposed of as asbestos-contaminated waste. The carpet covering the floor tile, where exists, shall be disposed of as asbestos-contaminated waste.

- C. Minimum specific requirements relative to the removal of asbestos-containing non-friable flooring materials are as follows:
 - 1. Prior to the removal of any non-friable flooring products, the AAC shall ensure the work area is prepped in accordance with the requirements of Section 3.1 INTERIOR WORK AREA PREPARATION GENERAL.
 - 2. The AAC shall continuously mist the non-friable flooring products with amended water, removal encapsulant, or detergent solution, so that entire surface is wet. Do not allow wetting agent to puddle, or run off to other areas. If removal encapsulant is used, use in strict accordance with the manufacturer's instructions.
 - 3. Remove floor tiles using manual or mechanical methods. Continuously mist floor in area where flooring is being removed. Wet any debris generated as necessary to keep continuously wet.
 - 4. Continuously pick up tiles and place in lined drums or in nylon mesh bags. Place nylon mesh bags into six (6) mil thick disposal bags with pre-printed OSHA warning labels. Ensure that all waste is placed in six (6) mil disposal bags during waste load out operations.
 - 5. Following removal of floor tiles, the AAC shall remove the mastic remaining on the floor. The mastic must be removed using a blastrac machines; chemical use is not permitted. The adhesive along the edges, where the blastrac will not be able to reach, shall be removed by manual scraping methods or using a grinder.
 - 6. The AAC shall be responsible for removing all mastic and leveling compound from the floor and shall remove and dispose of the material as asbestos waste (except in the Auditorium where the mastic can be removed and disposed of as general construction waste.
 - 7. All liquid wastes shall be solidified once packaged for disposal. No liquid wastes shall be permitted to leave the site in liquid form.

3.7 FINAL CLEANING AND ENCAPSULATION

- A. Upon completion of gross removal of all ACM specified for removal, the AAC shall begin final cleaning of the effected work area. The AAC shall HEPA vacuum and wet wipe all surfaces contained within the work area.
- B. All tools or equipment that are not necessary for final cleaning shall be decontaminated or bagged and removed from the work area enclosure.
- C. The AAC shall begin final cleaning procedures at the furthest and highest most points from the personnel decontamination unit and move towards the unit. The AAC shall ensure that all exposed building components and or surfaces are thoroughly HEPA vacuumed and wet wiped.

- D. The AAC shall HEPA vacuum and wet wipe any component specified to remain inside the work area enclosure.
- E. The AAC shall thoroughly wet wipe all polyethylene sheeting inside the work area enclosure.
- F. Once all surfaces and components within the work area have been thoroughly cleaned, AND THE WORK AREA IS DRY, the AAC's Competent Person shall perform a visual inspection of all surfaces and components within the work area enclosure. The AAC's Competent Person shall sign off on the work area stating that all abatement has been completed for that portion of work and that the work area has met the no visible residue criteria.
- G. The AAC's Competent Person shall then request a final visual inspection to be performed by the Owner's Representative. The Owner's Representative shall visually inspect all surfaces and components in the work area for residual debris and or dust. Work areas must be dry for final visual inspection. Inspections will not be performed in work areas where there is standing water or wet surfaces. Additional cleaning shall be performed at the AAC's expense if the Owner's Representative identifies visual debris and/or dust during the visual inspection. Additional cleaning shall be performed until the work area meets the no visible residue/dust criteria.
- H. Upon acceptance of the work area by the Owner's Representative, the AAC shall apply an even layer of bridging encapsulant to all surfaces contained within the work area. The Owner's Representative shall verify the completeness of work area encapsulation.

3.8 <u>WASTE PACKAGING AND REMOVAL PROCEDURE</u>

- A. The AAC shall strictly adhere to the requirements of this section for ACM waste packaging and transporting waste from the work area enclosure to the disposal dumpster.
- B. Waste disposal bags and drums shall be affixed with pre-printed OSHA warning labels, DOT labels and NESHAP labels.
- C. Each container of ACM waste shall be made adequately wet prior to sealing the container. Bags shall be sealed immediately following additional wetting procedures. Bags of ACM waste shall not be permitted to remain unsealed while in the work area enclosure.
- D. Each bag of ACM waste shall be double-bagged during waste load out procedures. The following waste load out procedure shall be strictly adhered to:
 - 1. Wet wipe inner bag or drum to remove all ACM contamination. Ensure the inner bag is sealed.
 - 2. Transport bag or drum to the equipment room located in the worker decontamination enclosure.
 - 3. One worker, equipped with personal protective equipment, shall be inside the clean room of the worker decontamination enclosure.

- 4. The worker in the clean room of the decontamination enclosure shall open a six-mil disposal bag and hold it open inside the shower room where the inner bag containing the ACM waste shall be placed.
- 5. The outer bag shall be sealed with duct tape inside the shower room.
- 6. The double bagged or drummed waste shall be removed from the decontamination enclosure and waste generator labels shall be immediately affixed to the outer bag or drum.
- 7. Waste generator labels shall be printed self-adhering labels and shall contain the Owner's name, the site location address, and the AAC's name.
- 8. The properly labeled waste shall be transported directly to the lined waste container.
- 9. The waste container shall be double lined with 6-mil polyethylene sheeting.
- 10. OSHA warning signs shall be secured to the waste container prior to any loading and unloading operations.
- 11. The waste container shall be kept locked at all times other than loading and unloading.

3.9 DISPOSAL OF ASBESTOS AND ASBESTOS CONTAMINATED WASTE

- A. All disposal of asbestos containing and or asbestos contaminated material must be in compliance with requirements of the Office of the Department of Environmental Protection, State of Connecticut Department of Public Health and the USEPA NESHAP regulations.
- B. Disposal approvals shall be obtained from the CTDEEP before commencing asbestos removal if waste will be disposed of in Connecticut.
- C. Waste container storage locations shall be pre-approved by the Owner and Owner's Representative.
- D. A copy of approved disposal authorization shall be provided to the Owner and Owner's Representative and any required federal, state or local agencies.
- E. Copies of all landfill receipts will be retained by the Owner's Representative as part of the project file. The receipts will be signed by the landfill operator on receipt, and the quantity of asbestos debris leaving the job site and arriving at the landfill acknowledged.
- F. All asbestos debris shall be transported in covered, sealed vans, boxes or dumpsters, which are physically isolated from the driver by an airtight barrier. All vehicles must be properly licensed to meet United States Department of Transportation (USDOT) requirements.
- G. Friable ACM waste shall be placed in double lined enclosed waste containers equipped with a lockable hasp. Waste containers shall be posted with OSHA warning signs during loading and unloading.

- H. All liquid waste generated during the work shall be solidified. At no time will liquid wastes be permitted to be stored on site. Liquid waste generated during this project shall be solidified prior to the end of each work shift.
- I. Completed Waste Shipment Records (WSR) signed by the landfill owner/operator must be returned to the Owner or Owner's Representative no later than 45 days from the time the waste was transported off-site. Completed waste shipment records that are not received by the Owner within 35 days shall require the AAC to begin tracking the waste. The AAC must notify the Owner of intentions on tracking the waste.
- J. The AAC must take appropriate actions as outlined in 40 CFR Part 61 NESHAP regulations when completed WSR are not forwarded to the Owner or Owner's Representative within 45 days from the time the waste was transported off-site.

3.10 REOCCUPANCY AIR CLEARANCE MONITORING

- A. After the pre-sealant visual inspection has passed and all surfaces in the abatement area have dried, re-occupancy air clearance monitoring will be performed. The primary and secondary barriers, worker decontamination enclosure, and negative air filtration units shall remain in place. At no time shall tools, ladders, vacuums or waste remain inside the work area enclosure during final air clearance sampling.
- B. Once the work area(s) has dried, the Owner's Representative shall conduct reoccupancy air clearance testing. Aggressive air monitoring will be used.
 Selection of location and of samples shall be the responsibility of the Owner's
 Representative. Samples will be analyzed by Transmission Electron Microscopy
 (TEM) method because of the quantity of ACM being abated. Air monitoring
 volumes shall be sufficient to provide a detection limit of 0.005 s/cc (structure per
 cubic centimeter of air) using the AHERA Level II Yamate Method.
 - If the area does not comply with the re-occupancy air clearance criteria, it shall continue to be cleaned by and at the AAC's expense until the specified re-occupancy air clearance criteria is achieved as evidenced by results of air testing as previously specified.
- C. Laboratories conducting analysis of final air clearance samples shall be approved by the State of Connecticut Department of Health.

3.11 OWNER'S REPRESENTATIVE RESPONSIBILITY

- A. The Owner has retained the services of Eagle Environmental, Inc. to monitor this project. The Owner's Representative shall collect and analyze air samples to ascertain the integrity of controls, which protect the building from asbestos contamination. Independently, the AAC shall monitor air quality within the work area to ascertain the protection of employees and to comply with OSHA regulations.
- B. The Owner's Representative shall collect and analyze air samples during a minimum of three time periods:
 - 1. <u>Abatement Period:</u> The Asbestos Abatement Project Monitor shall collect samples on a daily basis during the work period. A sufficient number of

background samples shall be taken outside of the work area, at the exhaust of the negative pressure filtration equipment, and outside of the building to evaluate the degree of cleanliness or contamination of the building during asbestos removal. Additional samples may be taken inside the work area and decontamination enclosure system, at the discretion of the Asbestos Abatement Project Monitor.

- a. The Asbestos Abatement Project Monitor shall provide a continual evaluation of the air quality of the building during asbestos abatement, using his/her best professional judgments in respect to the State Department of Public Health guideline of 0.010 f/cc (fiber per cubic centimeter of air) and the background air quality established during the pre-abatement period.
- b. If the Asbestos Abatement Project Monitor determines that the building air quality has been compromised by the project, he/she shall immediately inform the AAC to cease all removal operations and implement a work stoppage clean up procedure. The AAC shall conduct a thorough cleanup of areas of the building designated by the Asbestos Abatement Project Monitor. No further asbestos abatement work shall take place until the Asbestos Abatement Project Monitor has determined that the building's air has been decontaminated.
- c. Abatement air samples shall be collected for a minimum period of ninety minutes at a minimum flow rate of 12 liters per minute, or as required to obtain a volume of 1,000 liters. Samples shall be analyzed by phase contrast microscopy (PCM) using the NIOSH 7400 protocol.
- 2. <u>Elevated fiber counts</u>: If elevated fiber counts exceeding the established pre-abatement level or 0.01 f/cc are recorded, the cause for such elevated readings shall be investigated. If necessary, the AAC shall be responsible for cleaning the affected area and will provide additional support to lower the air born fiber levels. All cost incurred by the AAC for the decontamination work shall be borne by the AAC.
- 3. <u>Re-occupancy Clearance Period:</u> The Asbestos Abatement Project Monitor shall conduct air sampling following the final cleanup phase of the project, once the "no visible residue" criterion as established by the site supervisor and the Asbestos Abatement Project Monitor has been met.
 - a. Transmission Electron Microscopy (TEM) For this work area containing greater than 260 linear feet or 160 square feet of ACM, post abatement analysis of the samples to determine if reoccupancy clearance standards have been met shall be conducted by TEM. A minimum of five (5) samples shall be collected inside containment utilizing aggressive methods to comply with State of Connecticut DPH Standard for Asbestos Abatement sections 19a-332a-12, and 19a-332a-13. An asbestos abatement project shall be considered complete when the average concentration of asbestos fibers of five air samples collected within the work area and analyzed by the TEM method in Appendix A of 40 CFR Part 763 subpart E is less than 70.0 structures per square millimeter (s/mm²)

of filter surface or is not statistically significantly different, as determined by the Z-test calculation found in Appendix A of 40 CFR Part 763, subpart E, from the average asbestos concentration of five air samples collected at the same time outside the work area and analyzed in the same manner, and the average asbestos concentration of the three field blanks described in Appendix A of 40 CFR Part 763, subpart E, is below the filter background level, as defined in Appendix A of 40 CFR Part 763 subpart E, of 70 s/mm².

- b. Phase Contrast Microscopy (PCM) For work areas containing less than 260 linear feet or 160 square feet of ACM, post abatement analysis of the samples to determine if re-occupancy clearance standards have been met shall be conducted by PCM. A minimum of five (5) samples shall be collected inside each containment utilizing aggressive methods to comply with State of Connecticut DPH Standard for Asbestos Abatement sections 19a-332a-12, and 19a-332a-13. The project shall be considered complete when the results of samples collected in the work area and analyzed by phase contrast microscopy using the most current National Institute for Occupational Safety and Health (NIOSH) method 7400, to show that the concentration of fibers for each of the five samples is less than or equal to a limit of quantitation for PCM (0.010 fibers per cubic centimeter of air).
- C. Inspections shall be conducted by the Owner's Representative throughout the progress of the abatement project. Inspections shall be conducted in order to document the progress of the abatement work as well as the procedures and practices employed by the AAC. The Asbestos Abatement Project Monitor shall perform the following inspections during the course of abatement activities.
 - 1. Pre-commencement Inspection: Pre-commencement inspections shall be performed at the time requested by the AAC. The Asbestos Abatement Project Monitor shall be informed 24 hours prior to the time the inspection is needed. During the course of the pre-commencement inspection, the Asbestos Abatement Project Monitor shall inspect the containment. This shall include, but not be limited to, inspection of barrier integrity, the worker decontamination, facility, negative air filtration equipment etc. If during the course of the pre-commencement inspection, deficiencies are found, the AAC shall perform the necessary adjustments in order to obtain compliance.
 - 2. Work Area Inspections: Work area inspections shall be conducted on a daily basis at the discretion of the Asbestos Abatement Project Monitor. During the course of the work area inspections, the Asbestos Abatement Project Monitor shall observe the AAC removal procedures, verify barrier integrity, monitor negative air filtration devices, assess project progress, and inform the AAC of specific remedial activities if deficiencies are noted.
 - 3. <u>Pre-sealant Inspection</u>: Upon the request of the AAC, The Asbestos Abatement Project Monitor shall conduct a pre-sealant inspection. The pre-sealant inspection shall be conducted after completion of the initial final cleaning procedures, but prior to work area encapsulation. The pre-

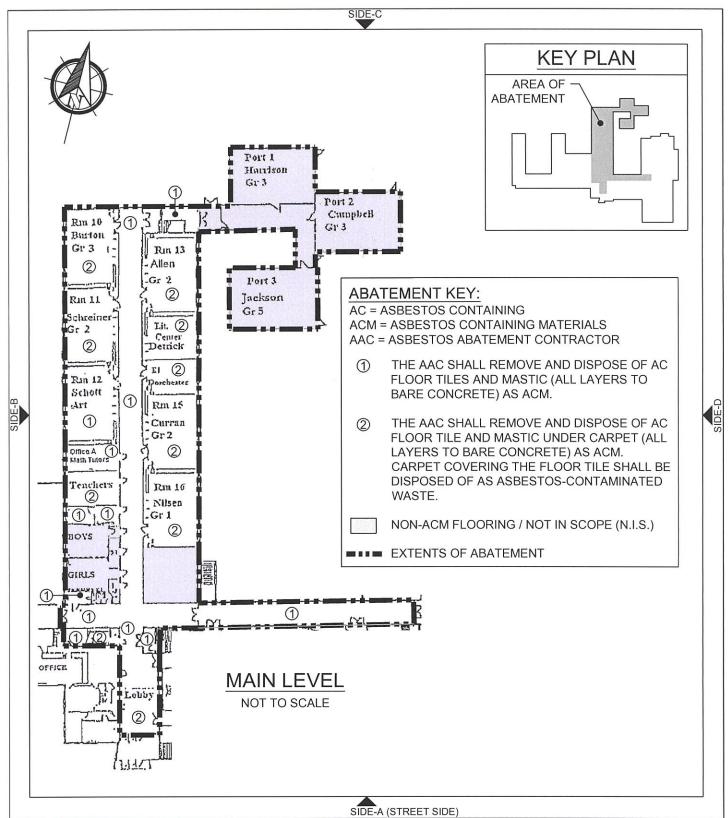
sealant inspection shall verify that all ACM and residual debris have been removed from the work area. If, during the course of the pre-sealant inspection, the Asbestos Abatement Project Monitor identifies residual dust or debris, the AAC shall comply with the request of the Asbestos Abatement Project Monitor, in order to render the area is free of visible residue.

4. <u>Final Visual Inspection:</u> Following receipt of acceptable re-occupancy air monitoring results and concurrent with removal of the work area containment, the Asbestos Abatement Project Monitor shall conduct a final visual inspection. If residual dust or debris is identified during the course of the final inspection, the AAC shall comply with the request of the Asbestos Abatement Project Monitor, in order to render the area free of visible residue.

END OF SECTION 020800

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ATTACHMENT A ASBESTOS ABATEMENT PLAN ASB-1





8 SOUTH MAIN STREET, SUITE 3 TERRYVILLE, CONNECTICUT 06786 860-589-8257

SHEET NO.

DATE: 04/01/2019 PROJECT NO.: 19-041.11T2 DRAWN BY: BB

REVIEWED BY: AR

ASBESTOS CONTAINING MATERIALS ABATEMENT TOWN OF WEST HARTFORD LOUISE DUFFY ELEMENTARY SCHOOL

95 WESTMINSTER DRIVE
WEST HARTFORD, CONNECTICUT

ASB-1

SHEET 1 OF 1

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ATTACHMENT B
APPROVED AWP

STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH

Renée D. Coleman-Mitchell, MPH Commissioner-Designate



Ned Lamont Governor Susan Bysicwicz Lt. Governor

Environmental Health Section

April 11, 2019

Mr. Ashis Roychowdhury Eagle Environmental, Inc. 8 South Main Street, Suite 3 Terryville, CT 06786

Re: Application for Approval of Alternative Work Practice at 95 Westminster Drive, West Hartford, CT (Louise Duffy Elementary School)

Dear Mr. Roychowdhury:

This letter is provided in response to an application received on April 4, 2019 requesting approval of an alternative work practice for the abatement of 11,810 square feet (SF) of asbestos-containing flooring materials including floor tile, associated mastic and carpet from the subject property. This application relates to the removal of asbestos-containing flooring materials from Rooms 10 through 16, Faculty Lounge, Front Lobby and adjacent hallways, as marked on the drawing attached to this application.

Based upon the information provided in the application describing the proposed alternative work practice to be used on this project, approval is granted by the Department of Public Health (DPH). This approval is based upon the understanding that the application requests a variance from the requirements of Subsection 19a-332a-5(e) of the Standards for Asbestos Abatement regulation. In lieu of the requirements of Subsection 19a-332a-5(e), the work area is to be isolated from the non-work area by barriers as outlined in Subsection 19a-332a-5(c). Additionally, a single layer of four (4) or six (6) mil polyethylene sheeting shall be used to seal the wall surfaces in the work area. Where there is no fixed wall and containment must be constructed, a layer of six-mil polyethylene sheeting shall compose the wall surface and shall have one additional layer of four mil polyethylene sheeting attached to it.

Except as noted in this letter, all other work practices specified in the Standards for Asbestos Abatement regulation are mandatory. This approval is specific for the removal of asbestos-containing materials in locations and at the facility identified in this application.





Mr. Ashis Roychowdhury – Eagle Environmental, Inc. 95 Westminster Drive, West Hartford, CT (Louise Duffy Elementary School) April 11, 2019 – Page 2

Please note that, in accordance with the provisions of Subsection 19a-333-7(a) of the Asbestos-Containing Materials in Schools regulation, no asbestos abatement shall be performed in a school building while school is in session without the prior written approval of the DPH.

This approval does not relieve the contractor or the facility owner from satisfying the requirements of any other federal, state or municipal regulation. The DPH reserves the right to rescind this approval should it determine that equivalent means of asbestos emission control are not maintained.

Please contact me at (860) 509-7367 should you wish to discuss this matter further.

Sincerely,

Joanna Golos

Environmental Sanitarian II

Asbestos Program

Year Goly

Environmental Health Section



STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH

APPLICATION FOR ALTERNATIVE WORK PRACTICES

STATE	USE ONLY
Date Received	4/2/19
Check#	15418
Trans#	19-583
Entered	

Please provide the following information as required by the Regulations of Connecticut State Agencies, Section 19a-332a-11.

Be sure to note if there are any attachments. An incomplete application will result in a delayed response.

1, Project Designer Information															
Date of Application April 1, 2019															
Name of Project Designer Ashis R						Ashis Roychow	nis Roychowdhury								
License # 000145 L					Lice	icense Expiration Date			31-2020)	Phone	Phone # (860) 589-8257			
Address Eagle Environmental, Inc.															
City, State, Zip Code 8 South						n Main Street, Suite 3, Terryville CT 06786									
Signature Andrewshire															
2. PROPERTY INFORMATION															
Facility Owner West Hartford Public Schools/Town of West Hartford								_							
Address		17	7 Brix	ton S	tree	t. West Hartfor	d CT						•		
Phone	860	-561-	7921			Contact Person	1	Ms. Catherine Rose							
Address	of Fa	cility	I	ouis	e D	uffy Elementar	y Sch	ool -	95 Wes	tmins	ter Drive				
City, Sta	ite an	d Zip (Code		W	est Hartford, C	T 06	107							···
					3. A	SBESTOS ABATEM	ENT C	ONTRA	CTOR INF	ORMAT	ION (IF KNOWN))			
Asbesto	s Aba	temer	nt Conf	racto	r							СТ	Lice	nse#	
Address														· · · · · · · · · · · · · · · · · · ·	
City, Sta	ite Zip	Code	9												
Phone Contact Person															
						4. P	ROJE	T Sui	MARY						
Nature of Abatement			T	Renovation	\boxtimes	Den	nolition		Both []			···· · · · ·		
Type of Asbestos Abatement				Removal	×	Enc	losure		Encapsulation	on		Spot Repairs			
Start Date (if known)															
Type and Amount of Asbestos Material Pertaining to AWP (Use additional attachment if necessary) fill in below															
Floor Tile (FT²) Linc			nole	oleum (FT²) Tran			nsite (FT²) Other Non-I			n-Frl	Friable (specify)				
11,810															
Window	Caul	king (L	LF)	Pi	pe li	e Insulation (LF) Pipe			ttings (ea	Other Fri	Other Friable (specify)				
										F: "	<u>\ \ </u>				

MTI ~ 4 2019

Phone: (860) 509-7367, Fax: (860) 509-7378
Telephone Device for the Deaf (860) 509-7191
410 Capitol Avenue - MS #51-AIR
P.O. Box 340308 Hartford, CT 06134
An Equal Opportunity Employer

			5. Desc	RIPTION OF FACI	LITY	
Building Data	Size	80,420	Age	67 Years	Facility Use	School
		Square Feet		Estimate, if un	known	
				NATIVE WORK RE		
proposed:	ibsections o	t the Standards for ,	Asbestos	s Abatement reg	gulation for which alt	ernative work practice(s) is/are
				· · · · · · · · · · · · · · · · · · ·		
Description of Alt	araettus läksi	ris Depoting/oly Diag		1 1 *L E		
or similar informa	tion in order	to provide an accur	se provid ate revie	ie additional ink w. Please ident	ormation such as dr lify the specific work	awings, photographs, work plans area/s of the facility.
See Attached						
					****	· · · · · · · · · · · · · · · · · · ·
					·····	
				<u> </u>		
OPH STAFF			Apr	olication Status		
		TEWED BY F.D			D/DENIED/SET AS	DESESSE
	10 1 1 1 man 1 / 1	The state of the s	Company Control Mark	en in the state of	Commencer State Commence Transfer Transfer State	Comment was to see
IL COMPLETE	D FORM	ГО:	DEF	PARTMENT	OF PUBLIC HEA	LTH - EHS
		***************************************	410	CAPITOL AV	/E, MS# 51 AIR	
			PO I	BOX 340308		

HARTFORD, CT 06134-0308



- Industrial Hygiene / IAQ
- Hazardous Building Materials
- Environmental Assessments
- Laboratory Services & Training

April 1, 2019

Mr. Stephen P. Dahlem
Supervising Environmental Analyst
Asbestos Program
Division of Environmental Health
State of Connecticut Department of Public Health
410 Capital Avenue, MS #12AIR
P. O. Box 340308
Hartford, Connecticut 06134-0308

Re:

Application for Alternative Work Practice Duffy Elementary School-Classrooms and Hallways 95 Westminster Drive West Hartford, Connecticut Eagle Project No. 19-041.11T2

Dear Mr. Dahlem:

Enclosed please find an application for the approval of an Alternative Work Practice (AWP) for removal of asbestos-containing materials (ACM) in Classrooms 10 through 16, Teachers Lounge, Front Lobby and adjacent hallways of Louis Duffy Elementary School located at 95 Westminster Drive West Hartford, Connecticut.

We look forward to your approval of this AWP.

Sincerely,

Eagle Environmental, Inc.

Samuel ony Hander

Ashis Roychowdhury Executive Vice President

(Asbestos Project Designer License #000145)

cc: Catherine Rose, Service Response Manager, Town of West Hartford

Z:\2019 Files\2019 AWP\West Hartford, Town of\Duffy ES\Front Lobby, Classrooms and Hallways-AWP application.doc

ALTERNATIVE WORK PRACTICE APPLICATION LOUIS DUFFY ELEMENTARY SCHOOL -CLASSROOMS & HALLWAYS 95 WESTMINSTER DRIVE WEST HARTFORD, CT April 1, 2019

West Hartford Public Schools plans to abate asbestos-containing floor tiles and associated mastic from Rooms 10 through 16, Faculty Lounge, Front Lobby and adjacent hallways of Louis Duffy Elementary School located at 95 Westminster Drive in West Hartford, Connecticut. The project involves removal of approximately eleven thousand eight hundred ten (11,810) square feet of flooring materials. The abatement is scheduled to happen during the summer recess of 2019 when there will be no student or children under eighteen (18) years of age present in the building. Please see attached floor plan identifying the work areas.

Requested Exemption

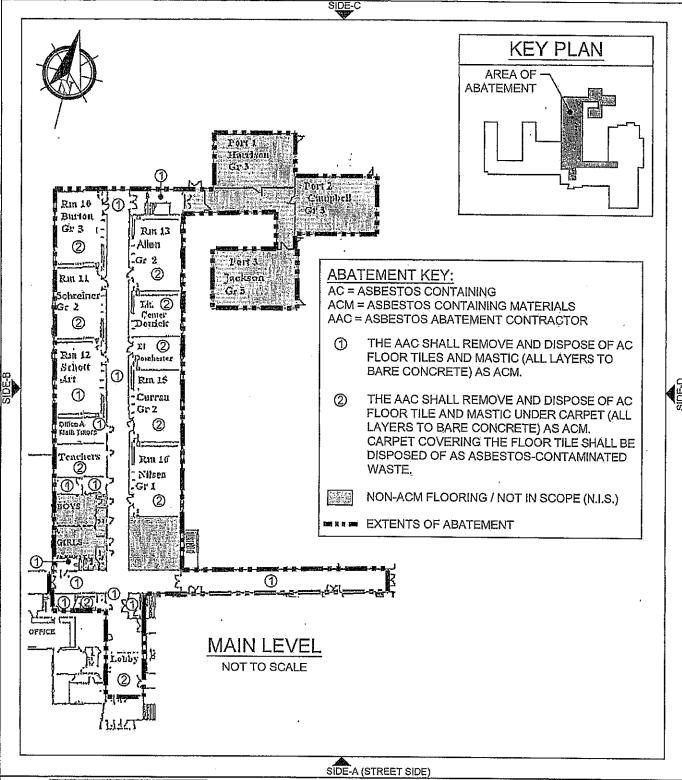
In lieu of the requirements of Section 19a-332a-5e of the Standards for Asbestos Abatement, the work areas are to be isolated from the non-work areas by critical barriers as outlined in Section 19a-332a-5c. In addition, a single layer of 6-mil polyethylene sheeting shall be used to seal the wall surfaces in the entire work area.

Work Procedure

- A. The Contractor shall establish temporary electrical service, including receptacles and lighting sufficient to provide power and lighting throughout the work areas. The entire work area is planned to be abated within one (1) containment; however it might be broken into smaller work areas for convenience purpose. The Contractor shall use GFCI devices, temporary power, and temporary lighting installed in compliance with the applicable electrical codes. All installations are to be made by a licensed electrician.
- B. The work areas will be isolated from the rest of the building by "critical barriers" as outlined in section 19a-332a-5(c) of the Standards of Asbestos Abatement,
- C. In lieu of the requirements of section 19a-332a-5(e), the wall surfaces within the work areas shall be covered by a single layer of 6-mil polyethylene sheeting. The Abatement Contractor shall establish negative air within the work area to achieve four (4) air exchanges per hour and a decontamination unit abutting the containment(s).
- D. Upon completion of the setup in each work area, a licensed Project Monitor from Eagle shall be present to verify the containment integrity before the Abatement Contractor starts removing any asbestos containing materials.
- E. Upon completion of the removal in each work area, the Project Monitor shall conduct a final visual inspection.
- F. Following final visual inspection and encapsulation, the Project Monitor shall conduct reoccupancy final air clearance sampling utilizing Transmission Electron Microscopy (TEM) in each work area.

EAGLE ENVIRONMENTAL, INC. 8 SOUTH MAIN STREET, SUITE 3 • TERRYVILLE, CT 06786 PHONE (860) 589-8257 • FAX (860) 585-7034

ATTACHMENT A WORK AREA DIAGRAM





8 SOUTH MAIN STREET, SUITE 3 TERRYVILLE, CONNECTICUT 06786 860-589-8257

SHEET NO.

DATE: 04/01/2019
PROJECT NO.: 19-041.11T2
DRAWN BY: BB
REVIEWED BY: AR

ASBESTOS CONTAINING MATERIALS ABATEMENT
TOWN OF WEST HARTFORD
LOUISE DUFFY ELEMENTARY SCHOOL
95 WESTMINSTER DRIVE
WEST HARTFORD, CONNECTICUT

ASB-1

SHEET 1 OF 1