ASBESTOS ABATEMENT
PLANS & SPECIFICATIONS

Carpet, Floor Tile, Cove Base & Mastic

[700 s.f.]

Within the:

Classroom #100

at the:

NARRAGANSETT HIGH SCHOOL

Prepared for :

Narragansett Public Schools
25 Fifth Avenue
Narragansett, RI 02882

Abatement project designed by:

John Carbone

Vortex Inc.
P.O. Box 6060
Warwick, R.I. 02887-6060
1-800-VORTEXX

Submitted:
2014

INSTRUCTIONS TO BIDDERS

General Bidding Requirements

This project is scheduled to commence on JUNE 25, 2014 and completed within ten (10) work days. The ability for the asbestos abatement contractor to begin/complete work on the dates specified is critical. The asbestos abatement contractor is required to complete all "blank" line items on the attached BID FORM I.

Permits & Fees:

The contractor shall pay for all permits pertaining to his/her work. The contractor will apply for the proper permits/notifications before any work is started. A copy of such permit will be hand-delivered to Vortex Inc. for his/her approval prior to the start of the project.

Laws and Regulations:

The bidder's attention is directed to the fact that all applicable federal, state laws, municipal ordinances and the rules and regulations of all authorities having jurisdiction over the proposed work, shall apply to the contract throughout, and they will be deemed to be included in the contract the same and though herein written out in full.

Attention of Bidders is particularly called to the requirements as to conditions of employment to be observed and wage rates to be paid under the contract. In conformity with the provisions of State Labor laws for Public Works Projects, General Laws of Rhode Island, Revision of 1956, Chapters 37-12 and 37-13 as amended the minimum wages for the day's work paid to a craftsman, teamster, and laborers shall not be paid less than the customary and prevailing rate of wages for a day's work in the locality where the work is undertaken. Such a schedule of wages has been established on a minimum hourly basis and is on file in the office of the State Department of Labor. The asbestos contractor is responsible for the identification and payment of the correct hourly wage rate and benefit wage rate (if applicable) to employees assigned to this project. The asbestos industry has two (2) labor wage rates that may apply to this project and the rates are based on the types of ACBM abated.

In accordance with Rhode Island General Law 37-13-14, bidders for public works/public buildings contracts in excess of $5,000.00 shall furnish a performance and payment bond, upon conditional award of the contract, at one hundred percent (100%) of the contract price, conditioned upon faithful performance of the contract and the payment for labor performed and material furnished in connection therewith.

Bidders must be licensed as an Asbestos Abatement Contractor by the State of Rhode Island throughout the duration of the project/contract. All work shall be in accordance with all applicable Local, State and Federal codes and standards including but not limited to RI State Building Code, The RI State Fire Code, RI Department of Health, OSHA, AHFRA, Americans with Disabilities Act etc. The provisions shall apply equally and specifically to all contractors and subcontractors supplying labor and/or equipment, and/or materials.

Insurance

A. The contractor shall purchase and maintain insurance throughout the duration of the project/contract which will protect him/her from claims arising out of or resulting from his/her activities under this contract, whether those activities are performed by himself/herself, by any subcontractor or by anyone directly or indirectly employed by any one of them or by anyone whose acts may be liable.

B. Bidders shall submit proof of coverage under the Workman's Compensation insurance system of the State of Rhode Island or other similar benefits acts.

C. Bidders shall submit a valid certificate of insurance naming the Town of Narragansett School Department and Vortex Inc. as additionally insured. All coverage shall be on an "Occurrence" form with minimum acceptable coverage as follows ("claims made" coverage and sunset clauses will not be accepted):

Workers Compensation:	
State and Federal	Statutory
Employer's Liability	$100,000 per accident
	$500,000 Disease Policy Limit
	$100,000 Disease Each Employee
Builders Risk Insurance	Insurance of existing building by owner, loss of materials toe be included in contractor's insurance.

Comprehensive or Commercial General Liability (including Premises-Operations: Independent Contractors' Protective: Products and Completed Operations: Broad Form Property Damage):

Bodily Injury:	$1,000,000 each occurrence
	$2,000,000 aggregate
Property Damage:	$1,000,000 each occurrence
	$2,000,000 aggregate
Products and Completed Operations:	
	$1,000,000 each occurrence
`	$2,000,000 aggregate
Contractual Liability:	
Bodily Injury:	$1,000,000 each occurrence
	$2,000,000 aggregate
Property Damage:	$1,000,000 each occurrence
	$2,000,000 aggregate
Comprehensive Automobile:	$1,000,000 Bodily Injury/Property Damage
Business Automobile:	$1,000,000 Combined Single Limit Liability

Asbestos materials handling and hazardous materials insurance coverage:
$1,000,000 each occurrence, $2,000,000 aggregate.

The company providing insurance and bonds shall be a duly authorized insurance company with a rating of "A" or greater as rated by the A.M. Best Co., and must be listed on Department of Treasury Circular #570, and which is satisfactory to the owner and authorized to do business in the State of Rhode Island.

D. As a prerequisite to signing the contract and prior to the expiration of ten (10) days following notification of award, the bidder shall have furnished certificates of insurance. At no time shall the abatement contractor cancel or let lapse the insurance coverage as stated within this specification for the duration of the entire project.

Time, Completion and Damages

It is hereby understood and mutually agreed, by and between the contractor and the owner that the work will begin on JUNE 25, 2014 and be completely demobilized no later than JULY 11, 2014. The contractor agrees that said work shall be prosecuted regularly, diligently and uninterruptedly. It is expressly understood and agreed, by and between the contractor and owner, that the time for the completion of the work described herein in the specification is a reasonable time for the completion of the same. Taking into consideration the average climatic range and usual industrial conditions prevailing in this locality.

It is further agreed that time is of the essence. Failure to perform within the time limit specified could result in substantial damages. The bidder should be prepared to take any and all measures to complete the job within the time specified. The bidder agrees to the time of completion as scheduled. Work is to commence during the course of the normal business day **(7:00 am – 3:30 pm), Monday thru Friday**, excluding holidays.

Bid Surety

All proposals (on attached BID FORM I) must be accompanied by a certified check or Cashier's Check (payable to the Narragansett Public Schools) or a Bid Bond (AIA A310) in the amount of 5% of the Lump Sum proposal.

Bidder Submittal Requirements

All perspective asbestos abatement contractors shall submit the following documentation as part of the bid submittal requirements with the completed BID FORM I.

a) A completed BID FORM I (all blank line items must be completed and tabulated)

b) Certified/Cashier's check (payable to the Narragansett Public Schools) or a Bid Bond (AIA A310) in the amount of 5% of the Total Lump Sum bid.

c) Bidder Qualification Statement to include the following;

1) Name, address, and telephone number of the bidder.

2) Proof of asbestos contractor licensed by the RIDOH at the time of submission of bid.

d) Sample certificate of Insurance

e) References

Factors for Award

1. Cost
2. Qualifications and Experience of Firm
3. References
4. Ability to meet schedule

SCOPE OF SERVICES

ASBESTOS ABATEMENT

Removal and disposal of cove base/glue & asbestos containing floor tile/mastic within Classroom #100 per attached Asbestos Abatement Plan designed by Vortex Inc.

General Information

Prospective bidders are required to visit the project site to confirm all conditions affecting the work area, including but not limited to; access to utilities, work site conditions, accessibility to work area, containment boundaries and obstacles, and accessibility of building occupants adjacent to the work area. The asbestos abatement contractor shall also familiarize themselves with the character and quantity of all surface and subsurface materials or obstacles to be encountered within or adjacent to the work area. Any failure by the abatement contractor to acquaint themselves with available information will not relieve them from the responsibly of successfully performing the work.

The asbestos removal contractor shall be financially responsible for any additional air samples that must be collected as a consequence of the abatement contractor not attaining satisfactory clearance air quality levels (criteria set forth by the R.I. Rules and Regulations and AHERA Rules and Regulations) and for any accidental fiber release that may occur during the project as a direct consequence of the abatement contractor's activities. The contractor shall also be financially responsible for all associated costs for the project monitor's time on the abatement site due to erroneous completion times (visual inspections beyond the one final visual inspection) based on the project schedule timeframe.

Materials and labor to be completed in accordance with all federal, state, local laws and regulations pertaining to this project. By submitting a bid, the bidder agrees and warrants that where the scope of work requires a given result to be produced, the requirements are adequate and can be produced. No claim for any extra or any alleged damage due to delay will be allowed because of impossibilities in the production of the results specified.

Plans, surveys, measurements, dimensions, calculations, estimates, and statements as to the conditions under which the work is to be performed are believed to be correct, but *the abatement contractor must examine site(s) for themselves as no allowance will be made for any errors or inaccuracies that may be found therein.* Vortex Inc, the Narragansett School Department, or their representatives do not guarantee that they are other than approximately correct.

If the building owner(s) representatives or any subcontractor of said owner permits the asbestos abatement contractor to use any of the owner's equipment, tools, and/or facilities, such use shall be considered gratuitous and the contractor (by submitting a bid) shall release the owner from any responsibility from claims of personal injuries, including death, arising out of the use of such equipment, tools, and/or facilities irrespective of the condition thereof, or any negligence on the part of the owner in permitting the use of equipment, tools, and/or facilities.

It is the sole responsibility of the asbestos contractor to obtain any and all licensing/patent licensing from the state and/or private agencies/firms. The building owner and Vortex, Inc., assumes no responsibility for the failure of the abatement contractor to fulfill these requirements. Copies of those licensing/patent licensing certificates shall accompany the asbestos abatement contractor's bid documents.

The asbestos abatement contractor should maintain documentation, including photographs as desired, to establish the conditions of the work-site area(s) prior to the start of asbestos abatement activities. If the abatement contractor does not document the work-site area(s) conditions, than all areas and structures located within the building are assumed to be in good and undamaged condition. In the event that areas and/or structures in the work area become damage due to the asbestos abatement activities, the abatement contractor will be financially liable for the repair and/or replacement (as decided by the building owner) of those damaged items at no cost to the building owner, Vortex, Inc., or the individual on-site project monitor.

Discrepancies - Should an abatement contractor find inaccuracies within the state asbestos abatement plan(s), drawings, documents, and/or these specifications, they must request clarification from the Narragansett School Department or Vortex, Inc. If formal clarification is necessary, then a written clarification document will be produced and mailed and/or facsimile to all perspective bidders.

The contractor shall also be financially responsible for all associated costs for the project monitor's time on the abatement site due to erroneous completion times (visual inspections beyond the one final visual inspection) and after projected scheduled dates.

WORK AREA PREPARATION

1) Posting of Signs:

ASBESTOS Warning signs to advise the public of the location(s) within the building where any asbestos abatement activity is in progress shall be posted at all building entrances and at least one other conspicuous place per floor. These signs shall be of the same size and dimensions as the Danger signs required as stated below.

ASBESTOS Danger signs in accordance with OSHA 29 CFR 1926.1101 shall be displayed at all approaches to any location where airborne fiber levels can be expected to exceed the Indoor Non-Occupational Air Exposure Standard as established within the R.I. Rules and Regulations for Asbestos Control.

Decontamination chamber postings shall consist of a fire escape diagram of the containment area as well as the building exits, procedures that employees must follow in the event of a fire, accident, or medical emergency, and the telephone numbers of 1.

the building owner representative, 2. local fire, rescue, and police, 3. building owner's contact person, environmental consulting firm, 4. project monitor, and 5. analytical laboratory.

2) Pre-Cleaning:

The asbestos abatement contractor shall clean all surfaces within the designated containment area of all dust and debris. Wet-wiping and HEPA vacuuming of all surfaces and items within designated containment area shall be completed prior to the construction of floor or wall polyethylene sheeting. All movable items within the containment area shall be removed from the work area by staff members of the Narragansett School Department. All non-movable items within the work area shall be covered with one (1) layer of 6-mil polyethylene sheeting.

3) Isolation Barriers:

Critical barriers shall be constructed by the asbestos abatement contractor to isolate contaminated areas from un-contaminated areas. These critical barriers shall be constructed of two (2) layers of 6-mil polyethylene sheeting and shall be secured in place with duct tape. These critical barriers consist of all openings or penetrations including, but not limited to, windows, doorways, elevator openings, corridor openings, drains, ducts, grills, grates, diffusers, and skylights.

4) HVAC Lockout/Tag-out:

All HVAC equipment in or passing through the abatement area shall be locked out/tagged out. All intake and exhaust openings, as well as any seams in the system components shall be covered with 6-mil polyethylene sheeting and tape.

5) Negative Pressure Ventilation

Negative pressure ventilation units with HEPA filtration, in sufficient number to provide one (1) work-place air change every fifteen minutes. These units shall operate continuously from the time of barrier construction through the time of acceptable clearance air sampling has been obtained. These units shall exhaust filtered air to the outside of the building at all times.

6) Electrical Requirements:

The asbestos abatement contractor shall be responsible for supplying the work-place with electrical power. The electricity can be obtained from other areas/phases (not associated with the abatement area) of the building/structure. Ground-fault interrupter (GFI) systems must be used by the contractor at all times. All circuits energizing the work-place area shall be lock-out/tag-out for the duration of the removal project.

7) Worker Decontamination:

A worker decontamination enclosure system shall be adjacent to the work area, consisting of a clean room, shower room, and equipment room, each separated from

each other and from the work area by airlocks. It will also be accessible through doorways protected with two (2) overlapping polyethylene sheets, and shall be provided and operational in accordance with OSHA 29 CFR 1926.1101 and the RIDOH Rules and Regulations. Procedures for the utilization of this system shall be established which prevent contamination of areas outside the work area.

8) Respirator Protection:

All asbestos abatement workers on-site shall, at a minimum, utilize half-faced, HEPA filtered, negative pressure respirators and disposable clothing during the preparation procedures of the containment area(s). The use of powered air purifying respirators (or a high protection factor respirator, as mandated within the contractor's respiratory protection program) and protective clothing is required during gross removal and until final air clearance has been established. This requirement may be amended pending acceptable OSHA personal sampling results.

The asbestos abatement contractor must collect the required personal (OSHA Compliance) air samples during each shift and must make the results available (posted at the job site) to the asbestos abatement worker, project monitor, state and/or federal agency representative(s) within twenty-four hours of sample collection.

ASBESTOS ABATEMENT ACTIVITIES AND PROCEDURES

General Requirements

1) Pre-clean asbestos abatement work area in accordance with R.I. Rules and Regulations for Asbestos Control.

2) At no time shall protective polyethylene sheeting be allowed to dislodge from the attached location or be removed from the containment area, until the appropriate final air clearance sampling results have been obtained. All containment procedures and engineering controls shall remain in place at all times until final clearance air sampling data has been obtained and the project monitor has given a tear-down order.

3) The asbestos abatement contractor shall be responsible for the collection and analysis of personal air sampling of his work force. Personal air monitoring will be performed on the first initial workday on at least 25% of the work force. Periodic personal air monitoring will be performed on various workers in accordance with the abatement contractor's respirator protection program.

4) The asbestos abatement contractor shall be responsible for the abatement workers to comply with all safety and health regulations that pertain to asbestos abatement activities as described within this specification or any unforeseen duties that have not been mentioned within this specification.

5) The asbestos abatement contractor shall be responsible for the wetting of the asbestos-containing material during removal procedures. A continuous spray of amended water to the asbestos-containing material shall be applied. Saturate the material to a wet condition to the substrate without causing excessive dripping.

Maintain a high humidity within the containment area to reduce fiber release from the removed material.

6) The asbestos abatement workers shall not remove sections of asbestos-containing materials in sections greater than 50 square feet or linear feet at a time. All removed material should be immediately placed within the appropriate container following removal. At no time should removed material be allowed to dry.

7) The asbestos abatement contractor shall be financially responsible for repair to existing surfaces (walls, floors, ceilings, etc.) if they become damaged as a result of the abatement operations (duct tape and spray glue residue, etc.).

8) If at any time during the asbestos abatement procedure(s) the on-site project monitor considers the abatement contractor's representatives to be providing an unsafe work environment to his employees, jeopardizing the environment outside the work area, or endangering the safety and/or health of any individual or occupant within the building or work site, the project monitor may issue a verbal (followed by a written statement) **STOP WORK ORDER**. This order will remain in affect until the asbestos abatement contractor demonstrates compliance with the appropriate regulation and/or specific requirements as stated in the stop work order.

9) All polyethylene barriers within the work-place and associated with the asbestos abatement shall be inspected twice daily by the asbestos abatement contractor. The inspections will be conducted at the beginning of the work day and at the end of the work day. The abatement contractor shall inspect the polyethylene for openings to the non-contaminated areas of the building. If he/she finds an opening, it will be repaired immediately and brought to the attention of the on-site project monitor. These set inspections do not relieve the abatement contractor from maintaining the polyethylene containment barrier(s) integrity.

10) After the on-site project monitor has issued a clearance visual inspection, the asbestos abatement contractor shall apply a coating of a liquid encapsulate to all abated areas and surfaces within the containment. This encapsulant shall be compatible with the subsequent surfaces to which it is applied and shall not be water soluble.

11) If at any time during the abatement procedures, asbestos-containing materials is discovered behind the polyethylene barrier(s), the asbestos abatement contractor shall stop work immediately and clean-up the asbestos-containing material utilizing wet-wipe and HEPA vacuum techniques. The abatement contractor shall find and repair the polyethylene sheeting. After a thorough visual inspection of the area and polyethylene sheeting by the on-site project monitor, asbestos abatement work can continue.

MASTIC ABATEMENT – "SHOT BLAST" or SCARIFIER METHOD

The ACM mastic material shall be removed in its entirety utilizing the "shot blast" method to include all perimeter and field areas, including baseboard mastic within the designated work/abatement areas per attached asbestos plan designed by Vortex Inc. The contractor is required to hire a RI licensed electrician to connect and disconnect the shot blast unit from the existing electrical service or utilize their own generator to perform this project. Any damage to the existing stripped floor shall be patched and/or repaired at the expense of the asbestos contractor.

FAILURE OF VISUAL INSPECTIONS AND AIR TESTS

If the asbestos abatement contractor fails the visual inspection and/or clearance air sampling criteria, they will be financially responsible for re-cleaning and the subsequent clearance testing (PCM and/or TEM Method) performed by Vortex Inc.

POST ABATEMENT ACTIVITIES

Asbestos Abatement Project Monitoring

A) Compliance Monitoring

At a minimum, one (1) compliance air sample shall be collected by the on-site project monitor per day at each containment. These compliance air samples will be collected at various locations around the containment areas (i.e., decontamination chamber, clean room, critical barriers, negative pressure exhaust units, and/or free standing poly wall) or any location that the on-site project monitor deems necessary. These compliance air samples are to be collected to verify that the containment barriers, engineering controls, and work practices are in proper use and that fiber release from the containment is not occurring. If fiber concentrations are in excess of the non-occupational exposure level of 0.01 f/cc, the asbestos abatement contractor's work shall be stopped, and a visual inspection of the containment area barriers as well as work practices shall be inspected. The asbestos abatement contractor shall be responsible for the decontamination of the contaminated area. Refer to state asbestos abatement plan application for further information.

B) Visual Inspections

Visual inspections of the containment barriers shall be completed by the project monitor to spot check on the condition of the poly barriers, work practices utilized by the abatement contractor, proper use of engineering controls, required on-site asbestos abatement worker and site supervisor paper work, required project specific documentation, abatement process, and asbestos waste packaging. If at any time during these spot checks an inadequacy appears, the abatement contractor shall be required to correct or amend the problem and the project monitor shall be required to inform the building owner representative immediately.

Also, the on-site project monitor shall conduct final visual clearance inspection(s) of the asbestos abatement containment. These inspections consist of the visual observations of any debris within the containment work area. If, during the final clearance visual, the project monitor observes debris within the containment, the asbestos abatement contractor shall be responsible for the clean-up of that debris. Final aggressive clearance air samples will not be collected until the work area passes the visual inspection.

C) Clearance Air Monitoring Criteria

The on-site project monitor must complete a visual inspection of the containment area after the fine cleaning has been completed by the asbestos abatement contractor. The inspection involves the identification of any visual asbestos-containing debris located on any surface or substrate within the containment area. If asbestos-containing material

(or any debris) is observed, the asbestos abatement contractor shall be responsible for the clean-up of the debris. The on-site project monitor shall decide the cleanliness of the asbestos abatement area. After the containment passes the project monitor's visual inspection, the contractor will spray encapsulate all abated surfaces within the containment area.

ALL ASBESTOS WASTE (BAGS/DRUMS) MUST BE REMOVED FROM THE WORK AREA PRIOR TO VISUAL INSPECTION.

After the liquid encapsulant has completely dried, the on-site project monitor shall collect aggressive clearance air samples from within the containment area. Refer to attached RIDOH asbestos abatement plan for specific sampling quantities and methods.

If aggressive clearance air sampling results in fiber concentrations in excess of the R.I. Rules and Regulations clearance air sampling criteria, the project work area shall be wet-wiped, HEPA vacuumed, and/or encapsulated. A period of no less than twenty-four (24) hours shall elapse before the next set of clearance air samples can be collected. This sampling process will be repeated until fiber air concentrations are within regulatory limits. If clearance air sample results are not within allowable limits as set forth by the AHERA Regulations and the abatement plan, the asbestos abatement contractor shall be financially responsible for the cost of the additional air sampling analysis and project monitor's sampling time.

NOTIFICATIONS

The selected asbestos abatement contractor shall notify the proper authorities (RIDOH, EPA and local Fire Dept. etc.) on appropriate forms with the asbestos abatement start/completion dates.

WASTE DISPOSAL PROCEDURES

Asbestos-containing material waste shall be packaged in impermeable containers such as polyethylene sheeting, bags and/or fiber or metal drums. These containers shall be labeled so that the labels have the appearance of or are constructed in accordance with USDOT 49 CFR 172, Subpart E and OSHA 29 CFR 1926.1101.

Each container, bag, drum, or wrapped component shall also be labeled or tagged with the name and license number of the asbestos abatement contractor generating the asbestos-containing material waste, as well as the asbestos abatement project number (as issued by the R.I.DOH) and location at which the waste was generated.

TEMPORARY ON-SITE STORAGE

Once containerized asbestos-containing material waste has been removed from the containment area, the containers shall be transported into an enclosed truck or dumpster. These vehicles shall be appropriately labeled in accordance with 29 CFR 1926.1101 and USDOT 49 CFR 173.1300 and locked to prevent unauthorized entrance to the vehicle.

Personnel transporting the asbestos-containing material waste shall be protected as required by the contractor's respiratory protection program and any appropriate regulations regarding the transportation of the waste to a temporary storage area.

If any debris is observed either on the waste containers and/or on surfaces, the abatement contractor shall immediately clean-up the area utilizing wet-wipe techniques and HEPA vacuuming. The area shall be visually inspected for further contamination and evaluated for clearance air sampling.

WASTE DEPOSITION

Disposal must occur at an authorized site in accordance with regulatory requirements of NESHAP's, State, and Local agencies and guidelines. When transporting the asbestos-containing material waste to any disposal site, all state and federal DOT regulations must be followed.

Procedures that will be followed at the landfill will be dependent upon the federal (EPA), State, and Local regulations. The asbestos abatement contractor shall be responsible for the adherence to these regulations/requirements.

CONFIRMATION OF ASBESTOS DISPOSAL

For all asbestos-containing waste material transported off the abatement project site, the asbestos abatement contractor shall;

1) Maintain waste shipment records, using the most current revisions of the Agency's form (ASB-23) to provide the following information:

a) The name, address, and telephone number of the asbestos abatement contractor.
b) The approximate quantity in cubic yards.
c) The name and telephone number of the disposal site operation.
d) The name and physical site location of the disposal site.
e) The date of transportation.
f) The name, address, and telephone number of the transporter(s).
g) A certification that the contents of this consignment are fully and adequately described by proper shipping name and are classified, packaged, marked, and labeled, and are in all respects in proper condition for transportation by highway in accordance with applicable international and governmental regulations.

2) Provide a properly completed copy of the ASB-23 form to the disposal site owners or operators at the same time as the asbestos-containing material is delivered to the waste disposal site.

3) Provide the building owner with the original (white) copy of the ASB-23 form signed by the owner or operator of the designated disposal site. A copy of this form shall also be transmitted to the R.I.DOH. The asbestos abatement project

will not be considered complete and full payment for the asbestos abatement contractor's services will not be made unless all receipts are received and reviewed by Vortex Inc. and the Narragansett Public School Department.

RE-ESTABLISHMENT OF THE WORK AREA

Following the written approval from the on-site project monitor which states that the clearance air sampling results were within acceptable regulatory limits, the asbestos abatement contractor will remove all containment barriers from the work area and dispose of them as asbestos-contaminated material. The asbestos abatement contractor shall re-secure mounted objects which were removed due to regulatory requirements, relocate items which were temporarily moved back to their original location, and repair or replace (as decided upon by the building owner) all items which were damaged due to abatement activities. The cost of these repairs shall be incurred by the asbestos abatement contractor.

WORK COMPLETION REPORTS

Prior to Authorization of final payment to the Asbestos Contractor, the contractor shall submit the following documentation and reports to the building owner/representative.

1) Report any deviations in work procedures or containment engineering controls which were encountered during the removal process other than those outlined within the original specifications. Also, the abatement contractor will report any remedial actions taken, equipment failure, problems encountered, and any job-site injuries.

2) Submit copies of all transport manifests, trip tickets, and disposal receipts for all asbestos waste materials removed from the work area during the abatement process.

3) Copies of all personnel information associated with the asbestos abatement project. (RI Asbestos License, training certificate, medical, fit test and CPR/First Aid training certificates)

4) Copies of all Daily Journals and Sign-In Sheets

MEDICAL MONITORING OF PROCEDURES & REQUIREMENTS

Asbestos abatement workers are required by OSHA regulations to be included within a medical surveillance program. This medical program should be in accordance with OSHA 29 CFR 1926.1101. An asbestos abatement worker's medical should include the following;

1) An initial mandatory medical questionnaire.

2) A physical examination directed to the cardiovascular, pulmonary and gastrointestinal system.

3) Chest roentgenogram interpreted by a board-eligible radiologist.

4) Pulmonary function tests of FVC and FEV1, administered and interpreted by a certified pulmonary specialist.

Employees shall be given an opportunity to be evaluated by a physician to determine their capability to work safely while breathing through the added resistance of a respirator. The certificates issued by the reputable medical agency shall be kept on site at all times during the abatement activities.

TRAINING REQUIREMENTS OF ASBESTOS WORKERS AND SUPERVISORS

Licensed asbestos contractors shall not allow any asbestos abatement worker or asbestos abatement supervisor to participate in asbestos abatement activities or projects prior to receiving initial training as required by the R.I. Department of Health Rules and Regulations for Asbestos Control. The criteria for successful completion of a require training course must be include obtaining a passing score on the final course examination. All employees who are involved in this asbestos abatement project, shall be licensed to do so by the Rhode Island Department of Health.

APPLICABLE REGULATIONS, STANDARDS, AND GUIDELINES

All work under this contract will be conducted in strict accordance with all applicable state, federal, and local regulations, standards and codes governing asbestos abatement activities and any other trade work done in conjuncture with the abatement. The most recent addition of any relevant regulation, standard, document, or code will be in effect. Where conflict among these specifications or requirements exist, the most stringent requirements shall be utilized at no extra cost to the building owner or Vortex, Inc. Copies of this specification as well as those documents listed below will be on the work-site during the entire abatement project.

1. 29 CFR 1910:1001	The Construction Industry Standard
2. 29 CFR 1910.134:	Respiratory Protection Standard
3. 29 CFR 1910.145:	Accident Prevention Standard
4. 29 CFR 1910.38:	Asbestos Abatement Projects
5. 29 CFR 1910.22:	Surfaces
6. 29 CFR 1910.28:	Scaffolding
7. 29 CFR 1910.27:	Ladders
8. 40 CFR 61 Subparts A, B, & M	National Emissions Standard for Hazardous Air Pollutants
9. ANSI Z9.2-79	Design and Operation of Local Exhaust Systems
10. ANSI Z88.2-80	Practices for Respiratory Protection
11. 29 CFR 1910.1101	"New" OSHA Asbestos Standard
12. R 23-24.5-ASB	R.I. Rules and Regulations for Asbestos Control
13.1926 Subpart M	Fall Protection
14.1910 Subpart J, 1910.146	Confined Space

BID FORM I

NARRAGANSETT HIGH SCHOOL

ASBESTOS ABATEMENT PROJECT - CLASSROOM #100

CARPET, COVE BASE & FLOOR TILE/MASTIC

The prospective Asbestos Abatement bidders are required to complete all line items and tabulations on the attached **BID FORM I – LUMP SUM** for their bid to be considered valid. The bid shall be based on all applicable and accurate prevailing wage labor, compliance with work procedures, material, supplies, equipment, taxes, insurance, bid//performance/labor/material bonds, appropriate waste disposal, licensing, certifications, transportation, recordkeeping requirements, insurances, etc.

Sealed bids will be received on or before JUNE 9, 2014 AT 10:00 a.m. at the schools office located at:

Narragansett Schools
25 Fifth Avenue
Narragansett Rhode Island 02882

Prospective bidders for this Asbestos Abatement Project are required to provide a TOTAL LUMP SUM BID for the abatement and proper disposal per attached asbestos plan, RIDOH Asbestos Control, EPA and OSHA Regulations.

If there is a discrepancy between the TOTAL PROPOSAL PRICE *Numerical* and *Written* amount listed on this Bid Form, the written amount shall apply as their TOTAL PROPOSAL PRICE.

ADDENDUM ACKNOWLEDGEMENT

Bidder acknowledges receipt and acceptance of the following Addenda:

No: _____ Dated _____; No: _____ Dated _____

SUBMITTAL REQUIREMENTS

All perspective asbestos abatement contractors shall submit the following documentation as part of the bid submittal requirements.

a) A completed BID FORM I (all blank line items must be completed)

b) Certified/Cashier's check (payable to the Narragansett Public Schools) or a Bid Bond (AIA A310) in the amount of 5% of the Lump Sum proposal per school building.

c) Bidder Qualification Statement to include the following; 1) Name, address, and telephone number of the bidder; 2) Proof of asbestos contractor licensed by the RIDOH at the time of submission of bid; 3) Sample certificate of Insurance; 4) References

BIDDER INFORMATION

Company Name: _____

Address: _____

_____

Bidders Name: _____

Title of bidder: _____

Telephone No: _____

Facsimile No: _____

LUM SUM BID

The abatement and proper disposal of
Carpet, ACM floor tile, cove base and mastic
[700 s.f.] within Classroom #100
for the sum of ……. $_____._____
[Numerical Amount]

_____
[Written Amount]

_____RIDOH; _____ Owner: _____ Spare

VORTEX

ASBESTOS ABATEMENT PLAN –VAT/MASTIC

Office #100

Narragansett High School, Narragansett, RI

Rhode Island Department of Health
Notarized Certification of Asbestos Abatement Plan

Facility: **NARRAGANSETT HIGH SCHOOL OFFICE #100** Amend/Plan: **NEW**
Address: **245 SOUTH PIER ROAD**
City/Town: **NARRAGANSETT, RI** Zip Code: **02882**

Abatement plan written by: **JOHN CARBONE** Certification No: **177 PD/IS**

Summary of specific waivers/variances being requested; **WAIVER OF FLOOR POLYETHYLENE IN CARPET/VAT/MASTIC AREAS, WAIVER OF 2 - 4 MIL FOR WALLS-REQUEST 1-6 MIL THICK POLYETHYLENE.**

Type of Asbestos Abatement:

X Removal	Enclosure	Encapsulation	Other
Glovebag	Asphalt Roofing	Demolition	

Is this plan being submitted in response to a Notice of Violation and/or Notice of Requirement to Submit an Asbestos Abatement Plan?

YES **X** NO

If Yes, indicate Notice/Building Evaluation Number(s):

Contractor: **TO BE DETERMINED** License #: LAC - - 000
Estimated starting date: **JUNE 2014**

Pre-Abatement sampling information:

Bulk samples collected by: **JOHN CARBONE** Certification #: AAC- **177IS**
Bulk samples analyzed by: **EMSL** Certification #: AAL- **075T3**
Air samples analyzed by: **V-LAB** Certification #: AAL- **087A1**

Clearance air sampling information:

Air samples to be collected by: **VORTEX STAFF**
Air samples to be analyzed by: **EMSL** Certification #: AAL- **075T3**

CERTIFICATION

I certify that: this asbestos abatement plan is prepared and submitted under the provisions of Section 23-24.5-6 of the RI Asbestos Control Act and Parts A and C of the RI Rules and Regulations for Asbestos Control; all abatement/management activities performed in conjunction with this plan must be in compliance with the specifications prescribed in this plan (when approved) and the most current revision of all applicable federal and state regulations; and the asbestos abatement/management activities described in this plan must be performed by a RI licensed asbestos abatement contractor.

Certified by: _____ Title: _____
(Signature of building owner or agent)

_____ Date:____/____/____
(typed/printed name of Certifier)

Subscribed and sworn before me this _____ day of _____, 201___

_____ My Commission expires: _____

AFFIX NOTARY SEAL HERE

Form ASB-16B (11/2003) replaces Form ASB-16B (3/92) Which is obsolete.

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
Department of Health
Division of Occupational and Radiological Health

APPLICATION FOR APPROVAL OF AN ASBESTOS ABATEMENT PLAN

1) Building Owner's name:

NARRAGANSETT SCHOOL SYSTEM

2) Application prepared by:

JOHN CARBONE
RI Cert. #: 177PD
(401) 738-7710

3) Building Owner's Mailing Address and Telephone Number:

DIRECTOR OF
FACILITIES & MAINTENANCE
Street: **25 FIFTH AVENUE**
City, State: **NARRAGANSETT**
Zip code: **02882**
Tel. #: **401-792-9416**

4) Person to be contacted regarding this application:

Name: **GARY MINETT**
Tel. #: **401-792-9416**

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5) Location where abatement work will be performed:

Name: **NARRAGANSETT HIGH SCHOOL**
CLASSROOM #606
Street: **245 SOUTH PIER ROAD**
City, State: **NARRAGANSETT,** Zip code: **02882**

---

6) is this application being submitted in response to a "Notice of Requirement to Submit and Asbestos Abatement Plan?

YES **X** NO

If yes, what is the due date for submittal of Asbestos Plan?

Evaluation Number on the notice:

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7) Contractor who will be performing abatement work (if selected):

Name: **TO BE DETERMINED** RI License #: LAC - - 000

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8) Estimated starting date of abatement work: **JUNE 2014**

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9) Estimated completion date of abatement work: **WITHIN 1 WEEK**

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10) Type of Asbestos Abatement (Check all that apply)

X Removal	Enclosure	Asphalt Roofing
Encapsulation	Demolition	Operations & Maintenance only
Other	Glovebag Removal	

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11) Type of Building:

X School Building
Privately owned building
Publicly owned building
Residence
Other (specify)

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12) Building Access:

Public Access (>25% of building area)
X Limited Public Access (<25% of building area)
No Public Access

---

13) Bulk Sample collection and analysis

A) Person collecting bulk samples

Name: **JOHN CARBONE** RI Certification #: **177IS**

B) Sampling Methodology:

X EPA AHERA Sampling Requirements [40 CFR 763.86]

EPA's Asbestos containing Material in Buildings: A Guidance Document (EPA-450/2-78-014) or Guidance for Controlling Asbestos Containing Materials - 1985 Edition (EPA-560-5-85-024).

Other (specify below)

C) Laboratory performing the analysis of the bulk samples.

Name: **EMSL**
RI Cert. #: **075T3**

D) Analytical Methodology

X EPA Interim Method for the determination of Asbestos in Bulk Insulation samples [PLM Method only]

Other (specify below)

---

14) Pre-abatement Air Sampling Collection and Analysis:

A) Person collecting pre-abatement air samples:
Name: **JOHN CARBONE** Affiliation: **VORTEX**

B) Laboratory performing analysis of pre-abatement air samples:
Name: **V-LAB** RI Cert. No: AAL- **087A1**

C) Methodology used in the collection and analysis of pre-abatement samples:

X NIOSH Method 7400 [Most Current Revision]
OSHA 29 CFR 1926.1101 - Appendix A & B
Other (specify below)

---

15) A) Indicate how the asbestos containing material (ACM) will be removed from the abatement site. If a hauler or broker will be used to transport the ACM to the disposal site, they must be identified.

REMOVED IN A CLOSED DUMPSTER, NO HAULER SELECTED YET.

B) Provide the name and location of the authorized asbestos waste facility to which the removed material will be transferred for disposal (if known)

UNKNOWN

16) Person designated as compliance monitor for abatement work. (Not required)

Name: **N/A**

Affiliation:

---

17) In-process & clearance air sampling **REFER TO ATTACHMENT #1**

a) Describe on an attachment the type, number and location of air samples that will be collected outside the work area during the abatement project.

b) Describe on an attachment, the plan of action to be followed if the Indoor Non-Occupational Air Exposure Standard for Asbestos (<0.01 f/cc) is exceeded outside the work area during the abatement project.

c) Describe on an attachment the type, number and location of air samples that will be collected as part of the final clearance testing.

d) Describe on an attachment, the plan of action to be followed if the Indoor Non-Occupational Air Exposure Standard for Asbestos (<0.01 f/cc) is exceeded during final clearance testing.

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18) A separate and fully completed Form ASB-16A must be submitted for each area to be abated. List below the entry in Item #1 from each attached ASB-16A.

AREA "A" - OFFICE #100

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19) I certify that this plan was prepared by me and I am responsible for its content:

Signature: _____ Date: 4/17/14

Name: **JOHN CARBONE**

Affiliation: **VORTEX INC.**

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20) Asbestos Abatement Plan Application Fee:

	Operations and Maintenance only	$75
	Up to one (1) NESHAP Units	$75
X	**Between one (1) and ten (10) NESHAP Units**	**$300**
	Between ten (10) and fifty (50) NESHAP Units	$600
	Over fifty (50) NESHAP Units	$900
	Amendment Fee	$150
	Waiver of Application Fee	

Agency Use only

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
Department of Health
Division of Occupational and Radiological Health

APPLICATION FOR APPROVAL OF AN ASBESTOS ABATEMENT PLAN
Supplemental Information: Area Description and Proposed remedy

BUILDING LOCATION: **GROUND FLOOR**

Instructions: All items on this form must be addressed. All references to attachments must be clearly identified. All attachments must be marked with the specific item numbers on this form to which they pertain.

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(1) Area Location/Identification (Room Name, Evaluation number, etc.)

AREA "A" - OFFICE #100

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(2) Attach a description of each type (e.g. pipe, ceiling, etc.) of regulated asbestos containing material (RACM) in this area, including condition, location, quantity and asbestos content. Attach a copy of the laboratory report(s) for all samples. (NOTE: All laboratory reports must include the name of the building(s) and the location(s) of the sample(s).

REFER TO ATTACHMENT #2

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(3) Attach a current scale drawing of this area, showing direction of North and East, which has been clearly annotated to show the type, location and quantity of all RACM in this area. This drawing must include a legend which acts as a guide to the scale, symbols and nomenclature used in the drawing. If a master plan or multiple drawings are provided, indicate the specific location(s) and drawing number(s) which depict this area. The location of the decontamination chamber must also be so indicated on the appropriate drawing(s).

REFER TO ATTACHED DRAWING A1

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(4) Proposed remedies:

A) Attach a description of the Operations and Maintenance Plan that will be implemented in accordance with C.1.2(b).

REFER TO ATTACHMENT #3

4) Proposed remedies [continued]

B) Will any portion of this area be abated by use of B.8 Work Procedures?

X YES NO

If yes, indicate below which ACM in this area will be abated by use of the following B.8 Work Procedures:

X	B.8.2 & B.8.3	(REMOVAL)
	B.8.2 & B.8.4	(ENCAPSULATION)
	B.8.2 & B.8.5	(ENCLOSURE)
	B.8.6	(DEMOLITION)
	B.8.7	(GLOVEBAG)
	B.8.8	(ASPHALT ROOFING)

C) Are you proposing any waivers to the above selected B.8 procedures for any of the abatement activities in this area.

X YES NO

If yes, attach a detailed description of the waivers requested and/or the alternative procedures you are proposing to utilize. All items must be keyed to the specific section(s) of the regulations for which waivers are requested.

REFER TO ATTACHMENT #4

D) Are you proposing alternative procedures under B.11 for any of the abatement activities in this area?

YES X NO

If yes, attach a detailed description of the alternate procedures requested you are proposing to utilize. Alternate procedures must include a justification for not following specific section(s) of the regulations and be as protective of public health.

E) Will any RACM remain in this area after abatement?

YES X NO Beyond scope of inspection

If Yes, attach a description of the RACM that will remain and the details of the on-going Operations and Maintenance Plan that will be implemented in accordance with C.1.2(b).

AGENCY USE ONLY

ATTACHMENT # 1

In Progress and Clearance Air Sampling

A minimum of (1) compliance air sample will be collected outside of each containment area(s) each day for the duration of the asbestos removal project. The compliance air samples shall be collected at random locations adjacent to the work area

If there is a deviation in proper procedures on the part of the asbestos abatement contractor during set-up, removal, or final clean-up, the asbestos abatement workers shall be stopped, the problem rectified, and the building owner shall be notified immediately of the situation. These deviations include inadequate on-site paperwork, deviations in outlined work procedures, or if compliance air sampling outside the work area indicate fiber concentrations in excess of the non-occupational exposure limit 0.01 f/cc. If fiber concentrations are in excess of 0.01 f/cc, the asbestos abatement contractor and the on-site project monitor shall determine the source as well as the extent of the contamination, and the asbestos abatement contractor shall be responsible for extending the existing containment area to include the contaminated area and initiating the clean-up.

Clearance Air Sampling

A visual clearance inspection of each asbestos abatement work area shall be performed prior to clearance air sampling. The visual inspection will include an inspection of all vertical and horizontal surfaces within the containment area as well as all polyethylene sheeting. The on-site project monitor shall determine cleanliness of the work area. After the containment has passed the on-site project monitors visual clearance inspection, the asbestos abatement contractor shall encapsulate all surfaces within the containment area with an approved liquid encapsulant. After the liquid encapsulant has dried, the on-site project monitor shall collect the following number of clearance air samples.

AREA "A" - OFFICE #100 - This area shall have air clearance testing performed per AHERA - TEM protocol. There shall be a total of 13 TEM air samples collected/analyzed that includes 5 inside, 5 outside and 3 blanks per AHERA protocol.

Clearance air monitoring results in fiber concentrations in excess of the non-occupational exposure limit of less than the average of 70 st/mm3 for the 5 TEM samples, the asbestos abatement contractor shall be responsible for the re-cleaning (i.e., wet-wiping, HEPA vacuuming...etc.) and re-encapsulating of the work area. A period of no less than 24 hours shall elapse prior to the collection of the next set of clearance air samples. This process shall be repeated until the air sample fiber concentrations are less than the average of 70 st/mm3 for the 5 TEM samples collected inside the containment area.

ATTACHMENT #2

DESCRIPTION OF ASBESTOS CONTAINING MATERIALS

This project involves the abatement of a total of **704 s.f.** of asbestos containing floor tile/mastic and carpeting. The carpeting is located over the VAT and is glued to the VAT underneath. Therefore the carpeting shall be abated within the containment area and also disposed as ACM waste. The covebag and glue shall be assumed to contain asbestos and disposed as ACM waste also. The ACM floor tile is hidden under the carpet and assumed to be in fair condition.

ATTACHMENT #3

Interim and On-Going Operations and Maintenance Program

The building occupants are aware of the **VAT/mastic** within these areas. These people have been or will be educated and advised not to disturb the asbestos-containing materials due to the potential health effects if asbestos fibers become airborne.

Any outside contractor will sign a document stating that he has been made aware of the presence and location of the asbestos-containing materials within these areas. Also, the building owner representative(s) are responsible for presenting information to the building occupants of any asbestos abatement activities being conducted. This will be accomplished by posting memo's and/or posting of caution/warning signs at the all entrances to the building during such activities.

Accidental Disturbance of Asbestos-Containing Materials

At the time of the inspection, they were all aware of the potential presence of ACBM within the areas of concern. The information below outlines the procedures that will be followed in an event of an accidental asbestos fiber release within the building.

If an asbestos-containing material becomes disturbed within the criteria of a minor fiber release (less than 3 linear feet or 3 square feet of ACBM), a trained "R.I. Competent Person" may perform the clean-up, removal, encapsulation, or enclosure abatement activities utilizing spot repair/removal techniques. During these spot abatement techniques, access to the area shall be restricted to only those trained individuals, signs shall be posted, and HVAC (if applicable) shall be shut down and locked out. If a major fiber release occurs (greater than 3 linear feet or 3 square feet of ACBM), the clean-up, removal, encapsulation, or enclosure abatement activities must be completed by a R.I. Department of Health (R.I. DOH) certified asbestos abatement contractor. Regardless of the amount of asbestos to be abated, the effected area must be isolated and entry to the area restricted to only those trained/certified personnel.

Employee Training

Any employee of the company, firm, agency, or other organization as well as any outside contractor employed by the building owner who, as a consequence of their work activities, disturbs asbestos-containing building materials must be properly trained and certified by the R.I. Department of Health as a "R.I. Competent Person" in accordance with the R.I. Rules and Regulations for Asbestos Control.

ATTACHMENT #4

WAIVER & ALTERNATE PROCEDURES – FLOOR TILE/MASTIC

We are requesting a *waiver* of floor polyethylene [B.8.2(c)] in VAT/mastic due to removal of the carpet/floor tile/ACM mastic and request an *alternate procedure* [B.8.2(d)] for one (1) layer of 6 mil thick polyethylene for wall preparation instead of the standard 2 layers of 4 mil polyethylene. All other B.8.2 and B.8.3 Work Practices shall apply.

V Lab
3670 West Shore Road - Suite #1 • Warwick, RI 02886 401-738-7710 Fax: 401-738-7869

Date Received: **4/16/2014** Project # ***2014-04-009***
Date Analyzed: **4/16/2014**

The following shows fiber concentrations for submitted air samples:

VORTEX INC.
PO BOX 6060
WARWICK, RI

Air Sample results are within the acceptable Indoor Non-occupational Air Standards of <0.01 f/cc

Samples Submitted by: **JOHN CARBONE**

Presented below are the results of air sample(s) analyzed for fiber concentration utilizing PCM Analytical methods. Phase Contrast Microscopy, NIOSH Manual of Analytical Methods, U.S. Department of Health and Human Services 3rd, as revised May 15, 1989. Method 7400, Counting Rule A. RI DOH certification # AAL-087A1
If there are any questions regarding this report, please contact our V Lab representative.

LOCATION: **PRE-ABATEMENT AIR SAMPLES**
NARRAGANSETT HIGH SCHOOL
NARRAGANSETT, RI

Analyst
John Carbone

Sample Number	CLASSROOM NUMBER	V Lab sample#	REPORTED VOLUME (L)	FIBER COUNT	FIELD COUNT	FIBER DENSITY FIBER/MM^2	Q.L. F/CC	F/CC
PA-1	OFFICE #100	165873	1260	9.5	100	11.875	0.004	**0.004**
	BLANK 1	165874		1	100			WITHIN ALLOWABLE LIMITS
	BLANK 2	165875		1	100			WITHIN ALLOWABLE LIMITS

EMSL Analytical, Inc.
107 Haddon Ave., Westmont, NJ 08108
Phone: (856) 858-4800 Fax: 8568584803 Email: westmontlab@EMSL.com

Attn: Vortex, Inc.
P.O. Box 6060
Warwick, RI 02887-6060

Fax: (401) 738-7869 Phone: (401) 738-7710
Project: 07-154-NHS#2

Customer ID: VORT50
Customer PO:
Received: 04/20/07 9:20 AM
EMSL Order: 040707971
EMSL Proj:
Analysis Date: 4/20/2007
Report Date: 4/20/2007

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

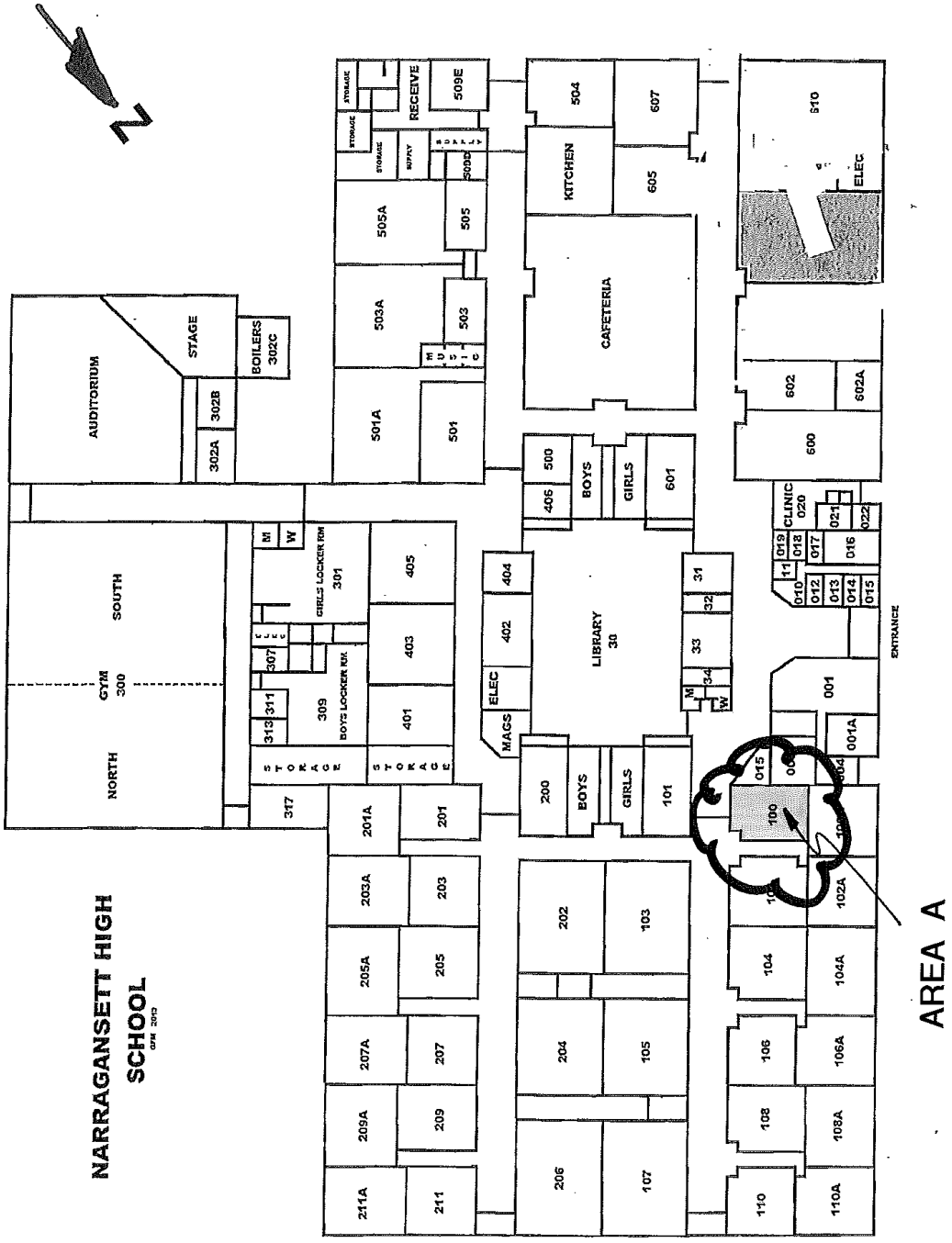
Sample	Location	Appearance	Non-Asbestos % Fibrous	Non-Asbestos % Non-Fibrous	Asbestos % Type
11A *040707971-0001*		Green Fibrous Homogeneous		92% Non-fibrous (other)	8% Chrysotile
11B *040707971-0002*		Black Fibrous Homogeneous		97% Non-fibrous (other)	3% Chrysotile
12A *040707971-0003*	12" Floor Tile	Green Fibrous Homogeneous		92% Non-fibrous (other)	8% Chrysotile
12B *040707971-0004*	Mastic	Black Fibrous Homogeneous		97% Non-fibrous (other)	3% Chrysotile
13A *040707971-0005*		White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
13B *040707971-0006*		Black Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (other)	None Detected
14A *040707971-0007*		White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
14B *040707971-0008*		Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)
Natalie Baker (13)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. Samples reported as <1% or none detected may require additional testing by TEM to confirm asbestos quantities. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted.
Analysis performed by EMSL Westmont (NYLAP #101048-0), NY ELAP 10872

PLM-1



NOT TO SCALE

DRAWING A1