OAK POINT ■ ASSOCIATES

ADDENDUM NO. 2

Date: June 15, 2015

Project: Maine State Building Repairs at the Massachusetts Eastern States "Big E"
1305 Memorial Drive
West Springfield, MA

This addendum is issued prior to receipt of the bids and does hereby become a part of the contract documents, and in case of conflict, it shall supersede original project manual and drawings.

Each bidder shall be responsible for issuing information contained herein to sub-contractors and suppliers to ensure that his/her proposal covers all work required by the contract documents including this addendum.

Each bidder shall acknowledge receipt of this addendum on the Contractor Bid Form where indicated.

GENERAL

1. As of the date of issuance of this Addendum, the question and answer period is closed.
2. The attached sign sheet is a record of attendance at the mandatory pre-bid meeting held on June 10, 2015.
3. Attachment "PRELIMINARY ASBESTOS AND LEAD-CONTAINING PAINT SURVEYS" dated May 2015, and completed by GZA GeoEnvironmental Services is provided for reference. Contractors shall complete work in compliance with Federal, State and local regulatory agencies.

CLARIFICATIONS

Question: *In regards to Options 1 - 6, do the go in sequence, or can you pick and choose which Option you would like to accept, such as skip Option 1, 2 then take Option 3.*
Response: *The Options are not listed in order of preference, Owner will select Options based on overall Bid.*

Question: *We are writing to request a plan holder list from this job.*
Response: *Plan holder list is only available for documents picked up from New England Blue.*

Question: *Do you have a list of General Contractors bidding on this project?*
Response: *Attached Pre-Bid Conference sign in has General Contractors who attended.*

Question: *Since we can only bid on the epoxy flooring we will have to bid through a general contractor so they can bid the alternates.*
Response: *Yes.*

SPECIFICATIONS

Specification Section 02 41 19 "Selective Demilition"

1. Section 1.07 FIELD CONDITIONS, Paragraph D – **Delete** text in its entirety and add:

   "D. Hazardous Materials: Present in buildings and structures to be selectively demolished. A report on the presence of hazardous materials is on file for review and use. Examine report to become aware of locations where hazardous materials are present.

      1. Do not disturb hazardous materials or items suspected of containing hazardous materials except under procedures approved by Governing Agencies and as recommended in hazardous materials report."

DRAWINGS

G-001 COVER SHEET

1. GENERAL NOTES – **Add** note "12. A "PRELIMINARY ASBESTOS AND LEAD-CONTAINING PAINT SURVEYS" report completed by GZA Environmental, Inc. indicates the presence of asbestos and lead-containing paint. Work associated with removal of materials indicated shall be completed in compliance with Federal, State and local regulatory agencies."

AD101 REMOVALS FIRST AND SECOND FLOOR PLANS

1. Refer to clarification sketch AD-A1 for **changes**.
2. Removals Keynote 1: - **Add** "ABATE/" before the word "REMOVE."
3. Removals Keynote 2: - **Add** "ABATE/" before the word "REMOVE."

AD201 REMOVALS EXTERIOR ELEVATIONS

1. Refer to clarification sketch AD-A2 for **changes**.
2. Removals Keynote 1: - **Add** "ABATE/" before the word "REMOVE."
3. Removals Keynote 2: - **Add** "ABATE/" before the word "REMOVE."
4. **Add** Removals Keynote - "7. ABATE/REMOVE LEAD BASED PAINT IN PREPERATION FOR PAINTING."

AE101 FIRST & SECOND FLOOR PLANS

1. Refer to clarification sketch AD-A3 for **changes**.

AE202 EXTERIOR ELEVATIONS AND BUILDING SECTION

1. Refer to clarification sketch AD-A4 for **changes**.

AE401 INTERIOR ELEVATIONS AND MISC DETAILS

1. Keynote 1 – **Add** to note "Assume 25% of surface area being painted requires abatement of lead-containing paint."
2. Keynote 4 – **Add** to note "Paint exposed plumbing lines to match existing wall and ceiling colors."

MEP101 WATER AND ELECTRICAL PLAN

1. Refer to clarification sketch AD-P1 for **changes**.

MEP102 SANITARY MECHANICAL AND ELECTRICAL PLAN

1. Refer to clarification sketch AD-P2 for **changes**.

END OF ADDENDUM No. 2

OAK POINT ■ ASSOCIATES

PROJECT SIGN-IN SHEET

Date: June 9, 2015

Project: Maine State Building Repairs

Attendee	Representing	Tel / Fax	E-mail Address
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PRELIMINARY ASBESTOS AND LEAD-CONTAINING PAINT SURVEYS
MAINE BUILDING
EASTERN STATES EXPOSITION FAIRGROUNDS
1305 MEMORIAL AVENUE
WEST SPRINGFIELD, MASSACHUSETTS

PREPARED FOR:
Safety & Environmental Services
Augusta, Maine

PREPARED BY:
GZA GeoEnvironmental, Inc.
Bedford, New Hampshire

May 2015
File No. 04.0190234.00

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GZA
GeoEnvironmental, Inc.

Engineers and Scientists

VIA EMAIL

May 29, 2015
File No. 04.0190234.00

Mr. Larry Mare
Safety & Environmental Services
77 SHS
Augusta, Maine 04333

Re: Preliminary Asbestos and Lead-Containing Paint Surveys
Maine Building
Eastern States Exposition Fairgrounds
1305 Memorial Avenue
West Springfield, Massachusetts

5 Commerce Park North
Suite 201
Bedford, New Hampshire
03110-6984
603-623-3600
FAX 603-624-9463
www.gza.com

Dear Mr. Mare:

GZA GeoEnvironmental, Inc. (GZA) has prepared this report to present the findings of the preliminary Asbestos and Lead-Containing Paint Surveys conducted for the above-referenced site associated with the Maine building located on the Eastern States Exposition Fairgrounds at 1305 Memorial Avenue in West Springfield, Massachusetts. The survey and testing was conducted on April 28, 2015 in general accordance with GZA's Proposal No. 04.P000601.16 dated April 10, 2015. This report is subject to the *Limitations* in **Appendix A**.

If you have any questions regarding this assessment, please do not hesitate to contact the undersigned at (603) 623-3600.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

David G. Oliver, CMI
Project Manager

Jeffrey D. Rowell, P.E.
Associate Principal

John C. Murphy, CCM, CHMM
Consultant/Reviewer

DGO/JDR/JCM:tmd
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Attachment

An Equal Opportunity Employer M/F/V/H

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APPENDIX E LEAD-CONTAINING PAINT INSPECTION REPORT

1.0 INTRODUCTION AND PURPOSE

1.1 INTRODUCTION

This report presents the findings of the Preliminary Asbestos and Lead Survey and suspect materials testing conducted by GZA GeoEnvironmental, Inc. (GZA) for the Maine building located on Avenue of States within the Eastern States Exposition Fairgrounds at 1305 Memorial Avenue in West Springfield, Massachusetts (Site). The survey was conducted April 28, 2015 in general accordance with GZA's Proposal No. 04.P000060.16 dated April 10, 2015. This report is subject to the Limitations in **Appendix A**.

1.2 PROJECT OBJECTIVE

GZA understands that current redevelopment plans include the renovation of the subject building.

The objective of GZA's Scope of Work was to conduct an asbestos and lead paint survey of the building to identify materials that would require special handling and disposal prior to commencement of the renovation project. No assessment for poly-chlorinated biphenyls or other universal wastes was performed as part of our work.

1.3 PROJECT STRATEGY

This preliminary assessment was limited to materials that were visible and accessible during the survey within the building. Efforts were made to access the interiors of pipe chases and wall cavities by using available access hatches, but it should be noted that certain interstitial building voids and spaces could not be accessed without disassembly of the building or use of destructive methods. Charged electrical systems and energized mechanical and pneumatic equipment were not sampled as part of this survey. GZA did not dismantle mechanical equipment within the building. In addition, the assessment of roofing areas of the building was beyond our current scope of work. Although reasonable effort was made to survey accessible suspect materials, additional suspect but un-sampled materials could be located in walls, voids, or in other concealed areas.

2.0 SITE DESCRIPTION

The Maine building is an approximately 9,500-square-foot, 2-story, steel-framed structure on a concrete slab foundation. The building exterior is finished with a brick facade and wood upper trim with a painted finish. An addition consisting of an attached lean-to structure is finished with wood logs with wood upper trim treated with a clear sealant finish. The gable roofing system is comprised of slate shingles with an asphaltic membrane on the flat roof sections and asphalt shingles on the attached lean-to.

The first floor consists of an opened exhibition area with mechanical and storage rooms. Interior ceilings are finished with suspended ceiling tiles and gypsum board with a painted finish, and the ceiling is open exposing the floor joists and wood slat underlayment in the exhibition area. The interior walls are gypsum board and brick with a painted finish. Windows throughout the building are wood double-hung units with painted trim.

The second floor consists of offices, break room, bathrooms, and mezzanine with an access corridor. Interior ceilings are finished with suspended ceiling tiles, with gypsum board with a painted finish in the corridor. Wall surfaces consist of painted gypsum board and brick. Flooring surfaces consist of carpet and vinyl floor tiles.

A cooling and heating system was not present in the building.

3.0 SCOPE OF SERVICES

The scope of work involved visually identifying and classifying conditions within the building areas, collecting representative samples of suspect materials for analysis, and integrating and reporting our findings in a written report. GZA observed building structural components; utility systems (electrical, mechanical, and plumbing); interior spaces, and building contents.

4.0 INVESTIGATION PROCEDURES AND RESULTS

Results of the investigation are described below.

4.1 PRELIMINARY ASBESTOS ASSESSMENT

The asbestos sampling conducted at the site on April 28, 2015 was performed by Mr. David G. Oliver, a Commonwealth of Massachusetts-certified Asbestos Inspector (Certificate #AI032164). A copy of Mr. Oliver's asbestos inspector certificate is attached as **Appendix B**.

4.1.1 Preliminary Asbestos Assessment

Asbestos-containing material (ACM) sampling was conducted throughout the interior and exterior of the building scheduled to be impacted by the scheduled renovation work. Accessible interior and exterior building components were surveyed and homogeneous areas of suspect ACMs were visually identified and documented. Procedures for locating and identifying ACM were based on guidelines published by the United States Environmental Protection Agency (USEPA).[1] A homogeneous area consists of building materials that appear similar throughout in terms of color, texture and date of application. Building materials identified as concrete, glass, wood, masonry, metal or rubber were not considered suspect ACM.

A physical assessment of each homogeneous area of suspect ACM was conducted to assess the friability and condition of the materials. A friable material is defined by the USEPA as a material which can be crumbled, pulverized or reduced to powder by hand pressure when dry. Friability was assessed by physically touching suspect materials.

Based on results of our visual assessment, bulk samples of suspect ACM were collected in general accordance with the sampling protocols outlined in USEPA Regulation 40 CFR 763 Asbestos Hazard Emergency Response Act. It was assumed that discrete suspect ACM were sufficiently uniform in composition to permit random samples to be collected of suspect materials in each homogeneous area. GZA collected bulk samples wearing appropriate personal protection

[1] Environmental Protection Agency, Guidelines for Controlling Asbestos-Containing Materials in Buildings, Office of Pesticides and Toxic Substances, EPA Report Number 560/5-85-024, June 1985.

equipment and using wet methods as applicable to reduce the potential for fiber release. Samples were placed in individual re-sealable plastic bags, wet wiped of visible debris, labeled with unique sample numbers using an indelible marker recorded and dispatched to an accredited laboratory for analysis following chain-of-custody (COC) protocol. In total, 61 bulk samples were collected from 28 homogeneous areas of suspect ACM. A summary of suspect ACM samples collected during the survey are presented in **Table 1**.

4.1.2 Sample Analysis

Bulk samples were submitted under COC to EMSL Analytical, Inc. of Woburn, Massachusetts (EMSL) for analysis by using polarized light microscopy (PLM) with dispersion staining techniques per USEPA methodology (40 CFR 763, Subpart F) for friable materials and non-friable materials. The percentage of asbestos, where applicable, was determined by microscopical visual estimation. The laboratory was instructed to analyze samples from each homogeneous area until the first sample containing asbestos was identified. A copy of the EMSL laboratory accreditations is provided in **Appendix B**.

4.1.3 Asbestos Analytical Results

Laboratory analysis confirmed that the caulk located on the exterior door frames of the south entrances of the building has been identified as containing 3% Chrysotile and, therefore, is considered ACM by the Commonwealth of Massachusetts and the EPA. A summary of suspect ACM samples collected during the limited asbestos screen is included in **Table 1**. Photographs of the identified ACM are included in **Appendix C**. The laboratory analytical reports are included as **Appendix D**. A summary of the confirmed ACM is included in **Table 2**.

4.2 PRELIMINARY LEAD-CONTAINING PAINT SURVEY

The lead-containing paint survey was performed by Mr. Mel Blackman, a Massachusetts-certified Master Lead Inspector (#M-1377).

An Occupational Health and Safety Administration (OSHA) lead paint survey was performed to evaluate the presence of lead on interior and exterior painted surfaces. The OSHA survey was performed in compliance with the United States Department of Labor OSHA Lead Exposure in Construction Standard (29 CFR 1926.62), and USEPA Hazardous Waste Disposal Regulations (40 CFR Parts 260 through 271). The intent of the lead-containing paint (LCP) survey was to identify building surfaces coated with lead paint, utilizing X-ray Fluorescence testing technology. The information collected, as a result of the testing, can be used to support OSHA compliance relative to worker exposure and proper disposal of renovation or demolition debris.

The test results were compared to USEPA guidance for lead-based paint (LBP). According to USEPA, lead based paint is defined as paint having a lead content of equal to or greater than 1.0 milligram per square centimeter (mg/cm^2). A copy of the Lead Paint Inspection Report for the building is attached as **Appendix E**.

The following paint coverings and materials were identified with lead content at the USEPA standard of 1.0 mg/cm^2 or greater:

- Window trim paint (white, gray), good condition;
- Metal I beams and support columns paint (white), good condition;
- Metal entry door trim paint (white), good condition;
- Brick wall paint, loose condition (white);

- Wood ceiling paint (white), loose condition;
- Wood door and trim paint, good condition;
- Exterior wood upper building trim paint (assumed, not accessible), loose condition;
- Exterior front entry door trim paint, loose condition; and
- Exterior wood window and trim paint, loose condition.

The following paint coverings and materials were identified with lead content from trace concentrations to 0.99 mg/cm^2:

- Mechanical room equipment paint (blue, red, black), good condition;
- Metal door and trim paint (white, gray, green), good condition;
- Wood doors and trim paint (white), good condition;
- Gypsum board wall and ceiling paint (white), good condition;
- Wood wall paint (brown), good condition;
- Concrete floor paint (gray), good condition;
- Wood ceiling paint (brown), good condition;
- Wood entry doors paint (white), good condition;
- Metal staircase handrail paint (green), loose condition;
- Wood window and trim paint (brown), loose condition;
- Exterior metal door and trim paint (white), good condition;
- Exterior wood rear doors and trim paint (white), good condition;
- Exterior Lean-too metal garage overhead door paint, good condition;
- Exterior wood front entry doors paint (white), good condition;
- Exterior wood columns paint (white), good condition; and
- Exterior wood flower boxes paint (white), good condition.

5.0 REGULATORY OVERVIEW

5.1 ASBESTOS

USEPA regulation 40 CFR 61, Subpart M, National Emission Standards for Hazardous Air Pollutants (NESHAP), and the Massachusetts Department of Environmental Protection (MADEP) regulate asbestos fiber emissions during renovation or demolition activities and asbestos waste disposal practices at both publicly and privately owned and operated facilities in the state. These regulations also require the identification and classification of existing building materials prior to demolition or renovation activity. Under NESHAP and Massachusetts regulations, asbestos-containing building materials are defined as materials containing 1% or more of asbestos content and are classified as either friable, Category I non-friable or Category II non-friable ACM. Friable materials are those that, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure. Category I non-friable ACM includes packings, gaskets, resilient floor coverings, and asphalt roofing products containing more than 1% asbestos. Category II non-friable ACM are any materials other than Category I materials that contain more than 1% asbestos.

Friable ACM, along with Category I and Category II non-friable ACM which is in poor condition and has become friable or which will be subjected to drilling, sanding, grinding, cutting or abrading and which could be crushed or pulverized during anticipated renovation or demolition activities are considered regulated ACM (RACM).

RACM must be removed prior to renovation or demolition activities which will disturb the materials. The owner or operator of a facility must provide the USEPA, MADEP, and Massachusetts Department of Labor (MA DOL) with written notification of planned removal activities at least 10 working days prior to the commencement of asbestos abatement activities. Removal of RACM must be conducted by a MA DOL-licensed asbestos abatement contractor. Third party visual and area air clearance air testing must be performed at the conclusion of the abatement activities and prior to re-occupancy of the removal areas.

The OSHA Asbestos standard for construction (29 CFR 1926.1101) and general industry (29 CFR 1910.1001) regulates workplace exposure to asbestos. The OSHA standards require that employee exposure to airborne asbestos fibers be maintained below 0.1 asbestos fibers per cubic centimeter of air as an 8-hour time weighted average. The OSHA standards classifies construction and maintenance activities which could disturb ACM, and specifies work practices and precautions which employers must follow when engaging in each class of regulated work. States which administer their own federally-approved State OSHA programs may require additional precautions.

5.2 LEAD-CONTAINING PAINT

Lead is regulated by the USEPA, the Commonwealth of Massachusetts, and OSHA. The USEPA and Massachusetts regulate the use, removal, and disposal of LBP and OSHA regulates lead exposure to workers. The USEPA and Massachusetts defines LBP as paint, varnish, stain, or other applied coating that contains lead equal to or greater than 1.0 mg/cm^2, 5,000 milligrams per kilogram, or 0.5% by dry weight as determined by laboratory analysis. For the purpose of the OSHA lead standard, lead includes metallic lead, all inorganic lead compounds, and organic lead soaps.

The Resource Conservation and Recovery Act (RCRA) gave the USEPA authority to regulate the waste status of demolition or renovation debris, including lead-containing materials. Specific notification and testing requirements must be addressed prior to transporting, treating, storing, or disposing of hazardous wastes. Lead-containing wastes are considered hazardous waste under RCRA if Toxicity Characteristic Leaching Procedure results exceed 5 milligrams per liter. USEPA exempts from most RCRA requirements those generators whose combined hazardous waste generation is less than 100 kilograms per month.

Detectable lead quantities may constitute a lead dust hazard during renovation/demolition activities. Personnel performing renovation/demolition activities that may disturb painted components with concentrations of lead above the designated analytical detection limit should comply with all current OSHA regulations in order to minimize employee exposure. OSHA defines lead-containing paint as a paint which contains lead, regardless of the concentration. Currently, any proposed renovation/demolition is subject to the OSHA regulations (29 CFR 1926.62 – Lead Exposure in Construction). The OSHA regulation defines specific training requirements, engineering controls and working practices for construction personnel subject to this standard. Occupational exposure to lead occurring in the course of construction work, including maintenance activities, painting, alteration and repairs is subject to the OSHA "Interim" Lead Exposure in Construction standard.

Construction work covered by 29 CFR 1926.62 includes any repair or renovation activities or other activities that disturb in-place lead-containing materials, but does not include routine cleaning and repainting where there is insignificant damage, wear, or corrosion of existing lead-containing coatings or substrates. Employers must assure that no employee will be exposed to lead at concentrations greater than 50 micrograms per cubic meter ($\mu g/m^3$) averaged over an eight-hour period without adequate protection. The OSHA Standard also establishes an action level of 30 $\mu g/m^3$ which if exceeded triggers the requirement for medical monitoring.

The above overview is not intended to be inclusive of all potentially pertinent regulatory information. The relevant USEPA, Massachusetts, and OSHA standards should be consulted prior to undertaking activities involving the demolition, renovation, or maintenance of surfaces coated with lead paints.

6.0 CONCLUSIONS

Based on the results of the preliminary asbestos and LCP materials survey detailed above, the following conclusions are made:

- Due to the presence of ACM and LCP identified within the Site building, GZA recommends that we be retained to develop project-specific abatement procedures and bid specifications for use in obtaining contractor pricing and developing construction sequencing;
- Prior to conducting renovation or demolition activities impacting confirmed or assumed ACM, a State-licensed asbestos abatement contractor should be retained to remove ACM; and
- Contractors should be notified of the potential asbestos and LCP hazards per OSHA's Hazard Communication rule (29 CFR 1910.1200).

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TABLES

TABLE 1
SUSPECT ACM SAMPLE INVENTORY
Eastern States Exposition Fairgrounds- Maine Building
1305 Memorial Avenue
West Springfield, Massachusetts

SAMPLE NUMBER	MATERIAL DESCRIPTION	MATERIAL LOCATION	ANALYTICAL RESULTS
042815B01 Gypsum board	Gypsum board, white, with tape, and joint compound	First floor, northeast utility closet	NAD
042815B01 Tape	Gypsum board, white, with tape, and joint compound	First floor, northeast utility closet	NAD
042815B01 Joint compound	Gypsum board, white, with tape, and joint compound	First floor, northeast utility closet	NAD
042815B01B Gypsum board	Gypsum board, white, with tape, and joint compound	First floor, northwest utility closet	NAD
042815B01B Tape	Gypsum board, white, with tape, and joint compound	First floor, northwest utility closet	NAD
042815B01B Joint compound	Gypsum board, white, with tape, and joint compound	First floor, northwest utility closet	NAD
042815B01C Gypsum board	Gypsum board, white, with tape, and joint compound	Second floor, northwest office, closet	NAD
042815B01C Tape	Gypsum board, white, with tape, and joint compound	Second floor, northwest office, closet	NAD
042815B01C Joint compound	Gypsum board, white, with tape, and joint compound	Second floor, northwest office, closet	NAD
042815B02	4" cove base, grey	First floor, northeast utility closet	NAD
042815B02B	4" cove base, grey	First floor, Maine Potatoes, kitchen	NAD
042815B03	Pipe paper insulation wrap (fiberglass insulation), white	First floor, northeast utility closet	NAD
042815B03B	Pipe paper insulation wrap (fiberglass insulation), white	First floor, northeast mechanical room	NAD
042815B04 Gypsum board	Gypsum board, white, with joint compound	First floor, Maine Potatoes, kitchen	NAD
042815B04 Joint compound	Gypsum board, white, with joint compound	First floor, Maine Potatoes, kitchen	NAD
042815B04B Gypsum board	Gypsum board, white, with joint compound	First floor, Maine Potatoes, kitchen	NAD
042815B04B Joint compound	Gypsum board, white, with joint compound	First floor, Maine Potatoes, kitchen	NAD
042815B04C Gypsum board	Gypsum board, white, with joint compound	First floor, southeast utility/electrical room	NAD
042815B04C Joint compound	Gypsum board, white, with joint compound	First floor, southeast utility/electrical room	NAD
042815B05	12" X 12" floor tile, white with beige streaks	Second floor, northeast hall bathroom	NAD
042815B05B	12" X 12" floor tile, white with beige streaks	Second floor, northwest elevator entrance	NAD
042815B06	Floor tile mastic, tan	Second floor, northeast hall bathroom, under B-05	NAD
042815B06B	Floor tile mastic, tan	Second floor, northwest elevator entrance, under B-05B	NAD
042815B07 Stair tread	Staircase tread, grey, with tan mastic	Northwest staircase	NAD
042815B07 Mastic	Staircase tread, grey, with tan mastic	Northwest staircase	NAD
042815B07B Stair tread	Staircase tread, grey, with tan mastic	Northeast staircase	NAD
042815B07B Mastic	Staircase tread, grey, with tan mastic	Northeast staircase	NAD
042815B08	Carpet mastic, yellow	Second floor, northeast meeting area	NAD
042815B08B	Carpet mastic, yellow	Second floor, northwest office, closet	NAD
042815B09	Door caulk, white-grey	Exterior, southwest entrance, double door	**3% Chrysotile**
042815B09B	Door caulk, white-grey	Exterior, southeast entrance, double door	**NA/PS**
042815B10	Window glazing, white	Exterior, first floor, east window	NAD
042815B10B	Window glazing, white	Exterior, first floor, west window	NAD

TABLE 1
SUSPECT ACM SAMPLE INVENTORY
Eastern States Exposition Fairgrounds- Maine Building
1305 Memorial Avenue
West Springfield, Massachusetts

SAMPLE NUMBER	MATERIAL DESCRIPTION	MATERIAL LOCATION	ANALYTICAL RESULTS
042815B11 Cove base	4" cove base, black, with yellow mastic	First floor, southeast main floor	NAD
042815B11 Mastic	4" cove base, black, with yellow mastic	First floor, southeast main floor	NAD
042815B11B Cove base	4" cove base, black, with yellow mastic	First floor, southeast main floor	NAD
042815B11B Mastic	4" cove base, black, with yellow mastic	First floor, southeast main floor	NAD
042815B12	Wall panel adhesive, white	First floor, northeast corridor	NAD
042815B12B	Wall panel adhesive, white	First floor, northeast corridor	NAD
042815B13	Sink undercoating, white	Second floor, northeast kitchenette	NAD
042815B13B	Sink undercoating, white	Second floor, northeast kitchenette	NAD
042815B14	2' X 4' ceiling tile, white, with small fissures pattern	Second floor, northeast meeting area	NAD
042815B14B	2' X 4' ceiling tile, white, with small fissures pattern	Second floor, northwest office	NAD
042815B15	2' X 4' ceiling tile, white	First floor, Maine Potatoes, kitchen, ceiling	NAD
042815B15B	2' X 4' ceiling tile, white	First floor, Maine Potatoes, kitchen, ceiling	NAD
042815B16	Door caulk, white	Exterior, east side, middle door	NAD
042815B16B	Door caulk, white	Exterior, east side, middle door	NAD
042815B17	Brick mortar, grey	First floor, west wall	NAD
042815B17B	Brick mortar, grey	Exterior, west wall	NAD
042815B18	Building joint caulk, tan	Exterior, west side, lean-to, north wall	NAD
042815B18B	Building joint caulk, tan	Exterior, west side, lean-to, south wall	NAD
042815B19	Building joint caulk, white	Second floor, north wall of mezzanine	NAD
042815B19B	Building joint caulk, white	Second floor, north wall of mezzanine	NAD
042815B20	Window caulk, white-grey	Second floor, northwest window	NAD
042815B20B	Window caulk, white-grey	Second floor, west window	NAD
042815B21	4" cove base, white	First floor, southeast booth	NAD
042815B21B	4" cove base, white	First floor, southeast booth	NAD
042815B22	Splash board adhesive, tan	First floor, southeast booth	NAD
042815B22B	Splash board adhesive, tan	First floor, southeast booth	NAD
042815B23	Floor sealant, red	First floor, west side	NAD
042815B23B	Floor sealant, red	First floor, east side	NAD

NOTES:
NAD = No Asbestos Detected
NA/PS = Sample Not Analyzed Due To Positive Stop

TABLE 2
CONFIRMED ASBESTOS-CONTAINING MATERIAL RESULTS
Eastern States Exposition Fairgrounds- Maine Building
1305 Memorial Avenue
West Springfield, Massachusetts

MATERIAL DESCRIPTION	MATERIAL LOCATION	PERCENT/TYPE ASBESTOS	USEPA CATEGORY	CONDITION	ESTIMATED QUANTITY
Door caulk, white-grey	Exterior, perimeter of south entrances	3% Chrysotile	Category I Non-friable	Damaged	100 LF

NOTES:

1. LF = Linear Feet, SF = Square Feet
2. RACM: Includes materials that, when dry, may be crumbled, pulverized or reduced to powder by hand pressure.
3. Category I Non-friable: Includes asbestos-containing packings, gaskets, asphaltic roofing products, resilient flooring, pliable sealants and mastics.
4. Category II Non-friable: Includes any non-friable materials other than Category I materials that contain more than 1% asbestos.

This summary includes the location, material type, and approximate quantities of accessible asbestos identified in the site building. Quantities of materials were assessed by a non-calibrated wheeled tape measure or visual estimation and should be considered as approximate values. It should be noted that these are only estimates, and are based on limited visual observations of accessible areas of the site.

APPENDIX A

LIMITATIONS

LIMITATIONS

1. GZA GeoEnvironmental, Inc.'s (GZA's) asbestos and lead materials evaluation was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same geographical area, and GZA observed the degree of care and skill generally exercised by other consultants under similar circumstances and conditions. GZA's findings and conclusions must be considered not as scientific certainties, but rather as our professional opinion concerning the significance of the limited data gathered during the course of the asbestos/lead paint/hazardous materials evaluation. No other warranty, expressed or implied, is made. Specifically, GZA does not and cannot represent that the proposed renovation areas contain no asbestos-containing materials, hazardous materials, polychlorinated biphenyls or other latent condition beyond that observed by GZA during its asbestos and lead materials evaluation.

2. This survey report, which presents our findings, is not to be used as a bid document/work plan, or in place of a work plan, for conducting asbestos, lead paint, and hazardous materials abatement. When an asbestos abatement work plan is prepared, the Commonwealth of Massachusetts requires that a MA DOL-certified accredited Asbestos Project Designer prepare the plan.

3. The observations described in this report were made under the conditions stated herein. The conclusions presented in the report were based solely upon the services described therein, and not on scientific tasks or procedures beyond the proposed Scope of Services.

4. The conclusions and recommendations contained in this report are based on limited environmental sampling and visual observations, and were arrived at in accordance with generally accepted standards of industrial hygiene practice. No other warranty, expressed or implied, is made.

5. Where sample analyses were conducted by an outside laboratory, GZA has relied upon the data provided, and has not conducted an independent evaluation of the reliability of these data.

6. The purpose of this report was to assess the physical characteristics of the subject Site with respect to the presence of hazardous materials in the Site building. No specific attempt was made to check on the compliance by any party with federal, State, or local laws and regulations.

7. Observations were made of the proposed renovation areas as indicated within the report. While it was GZA's intent to conduct a thorough survey, it is important to note that we cannot guarantee that all asbestos and lead paint within the surveyed area have been identified. ACMs and lead paint have frequently been used where detection is difficult until renovation, demolition, and/or abatement work begins and allows access to these remote areas. Where access to portions of the proposed renovation areas was unavailable or limited, GZA has provided an opinion as to the likely presence of hazardous materials consistent with the information available. Suspect materials made accessible during demolition/renovation activities must be assumed to be hazardous and handled as such, until testing proves otherwise.

APPENDIX B

CERTIFICATIONS

Commonwealth of Massachusetts
Department of Labor Standards
Heather E. Rowe, Director
Asbestos Inspector

DAVID G. OLIVER

Eff. Date 04/09/14
Exp. Date 04/09/15
AI032164
Member of C.O.N.E.S.
HVR

15

HV-RENEW

Certificate No: A043455

THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT

DEPARTMENT OF LABOR STANDARDS

19 STANIFORD STREET, BOSTON, MASSACHUSETTS 02114

CERTIFICATION FOR ASBESTOS ANALYTICAL SERVICES

EMSL ANALYTICAL, INC.
161 JOHN ROBERTS ROAD
SOUTH PORTLAND ME 04106

LICENSE: **AA000236** EXPIRES: **Saturday, December 12, 2015**

IN ACCORDANCE WITH MGL CH. 149 § 6B AND 453 CMR 6.08 THIS CERTIFICATE IS ISSUED BY THE DEPARTMENT OF LABOR STANDARDS TO THE ABOVE NAMED ENTITIY TO PROVIDE THE ASBESTOS ANALYTICAL SERVICES SPECIFICALLY LISTED BELOW.

CLA - CLASS A CERTIFICATE
CLC - CLASS C CERTIFICATE
CLD - CLASS D CERTIFICATE

HEATHER E. ROWE, DIRECTOR

Mailing Address:

EMSL ANALYTICAL, INC.
161 JOHN ROBERTS ROAD
SOUTH PORTLAND, ME 04106

AIHA Laboratory Accreditation Programs, LLC

acknowledges that

EMSL Analytical, Inc.

7 Constitution Way, Suite 107, Woburn, MA 01801

Laboratory ID: 180179

along with all premises from which key activities are performed, as listed above, has fulfilled the requirements of the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC accreditation to the ISO/IEC 17025:2005 international standard, *General Requirements for the Competence of Testing and Calibration Laboratories* in the following:

LABORATORY ACCREDITATION PROGRAMS

✓	**INDUSTRIAL HYGIENE**	Accreditation Expires: 10/01/2015
☐	**ENVIRONMENTAL LEAD**	Accreditation Expires:
✓	**ENVIRONMENTAL MICROBIOLOGY**	Accreditation Expires: 10/01/2015
☐	**FOOD**	Accreditation Expires:
☐	**UNIQUE SCOPES**	Accreditation Expires:

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached **Scope of Accreditation**. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 17025:2005 and AIHA-LAP, LLC requirements. This certificate is not valid without the attached **Scope of Accreditation**. Please review the AIHA-LAP, LLC website (www.aihaaccreditedlabs.org) for the most current Scope.

Larry S. Pierce
Chairperson, Analytical Accreditation Board

Cheryl O. Morton
Managing Director, AIHA Laboratory Accreditation Programs, LLC

Revision 13: 03/12/2013

Date Issued: 11/27/2013

AIHA Laboratory Accreditation Programs, LLC

SCOPE OF ACCREDITATION

EMSL Analytical, Inc.
7 Constitution Way, Suite 107, Woburn, MA 01801

Laboratory ID: **180179**
Issue Date: 11/27/2013

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or withdrawal of accreditation.

Industrial Hygiene Laboratory Accreditation Program (IHLAP)

Initial Accreditation Date: 05/01/2006

IHLAP Scope Category	Field of Testing (FoT)	Technology sub-type/ Detector	Published Reference Method/Title of In-house Method	Method Description or Analyte *(for internal methods only)*
Asbestos/Fiber Microscopy Core	**Phase Contrast Microscopy (PCM)**		NIOSH 7400	

A complete listing of currently accredited Industrial Hygiene laboratories is available on the AIHA-LAP, LLC website at: http://www.aihaaccreditedlabs.org

AIHA Laboratory Accreditation Programs, LLC

acknowledges that

EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Laboratory ID: 100194

along with all premises from which key activities are performed, as listed above, has fulfilled the requirements of the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC accreditation to the ISO/IEC 17025:2005 international standard, *General Requirements for the Competence of Testing and Calibration Laboratories* in the following:

LABORATORY ACCREDITATION PROGRAMS

✓ **INDUSTRIAL HYGIENE**	Accreditation Expires: 09/01/2016
✓ **ENVIRONMENTAL LEAD**	Accreditation Expires: 09/01/2016
✓ **ENVIRONMENTAL MICROBIOLOGY**	Accreditation Expires: 09/01/2016
☐ **FOOD**	Accreditation Expires:
☐ **UNIQUE SCOPES**	Accreditation Expires:

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached **Scope of Accreditation**. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 17025:2005 and AIHA-LAP, LLC requirements. This certificate is not valid without the attached **Scope of Accreditation**. Please review the AIHA-LAP, LLC website (www.aihaaccreditedlabs.org) for the most current Scope.

Gerald Schultz, CIH
Chairperson, Analytical Accreditation Board

Cheryl O. Morton
Managing Director, AIHA Laboratory Accreditation Programs, LLC

Revision 14: 03/26/2014

Date Issued: 10/31/2014

AIHA Laboratory Accreditation Programs, LLC

SCOPE OF ACCREDITATION

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077

Laboratory ID: **100194**
Issue Date: 10/31/2014

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or withdrawal of accreditation.

The EPA recognizes the AIHA-LAP, LLC ELLAP program as meeting the requirements of the National Lead Laboratory Accreditation Program (NLLAP) established under Title X of the Residential Lead-Based Paint Hazard Reduction Act of 1992 and includes paint, soil and dust wipe analysis. Air analysis is not included as part of the NLLAP.

Environmental Lead Laboratory Accreditation Program (ELLAP)

Initial Accreditation Date: 01/18/1995

Field of Testing (FoT)	Method	Method Description *(for internal methods only)*
Paint	EPA SW-846 3050B	
	EPA SW-846 7000B	
Soil	EPA SW-846 3050B	
	EPA SW-846 7000B	
Settled Dust by Wipe	EPA SW-846 3050B	
	EPA SW-846 7000B	
Airborne Dust	NIOSH 7082	

A complete listing of currently accredited Environmental Lead laboratories is available on the AIHA-LAP, LLC website at: http://www.aihaaccreditedlabs.org

APPENDIX C

PHOTOGRAPHS

Eastern States Exposition Fairgrounds - Maine Building
1305 Memorial Avenue
West Springfield, Massachusetts

PHOTOGRAPH NO. 1 - View of the front (north) exterior of the Site building.

PHOTOGRAPH NO. 2 - View of the rear (south) exterior of the site building.
Note the two south entrances.

Eastern States Exposition Fairgrounds - Maine Building
1305 Memorial Avenue
West Springfield, Massachusetts

PHOTOGRAPH NO. 3 - View of the opened first floor area.

PHOTOGRAPH NO. 4 - View of the interior of the south entrance to the Site building.

Eastern States Exposition Fairgrounds - Maine Building
1305 Memorial Avenue
West Springfield, Massachusetts

PHOTOGRAPH NO. 5 - View of the exterior ACM door caulk located on the south entrances to the Site building.

PHOTOGRAPH NO. 6 - View of the exterior ACM door caulk located on the south entrances to the site building.

APPENDIX D

ASBESTOS LABORATORY ANALYTICAL REPORT

EMSL Analytical, Inc.
161 John Roberts Road, South Portland, ME 04106
Phone/Fax: (207) 517-6921 / (207) 517-6922
http://www.EMSL.com portlandlab@emsl.com

EMSL Order:	621500747
CustomerID:	GZAG51
CustomerPO:	6143
ProjectID:	

Attn: **David G. Oliver**
GZA GeoEnvironmental Inc (NH)
5 Commerce Park North
Suite 201
Bedford, NH 03110

Phone:	(603) 623-3600
Fax:	(603) 624-9463
Received:	05/04/15 12:38 PM
Analysis Date:	5/7/2015
Collected:	4/28/2015

Project: **040190234.00 / MAINE BLDG**

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

Sample	Description	Appearance	Non-Asbestos %	Fibrous	Non-Asbestos %	Non-Fibrous	Asbestos % Type
042815B-01-Gypsum Board *621500747-0001*	1ST FLOOR - GYPSUM BOARD, TAPE AND JOINT COMPOUND	Brown/White Fibrous Homogeneous	10% 3%	Cellulose Glass	87%	Non-fibrous (other)	**None Detected**
042815B-01-Tape *621500747-0001A*	1ST FLOOR - GYPSUM BOARD, TAPE AND JOINT COMPOUND	Yellow Fibrous Homogeneous	98%	Cellulose	2%	Non-fibrous (other)	**None Detected**
042815B-01-Joint Compound *621500747-0001B*	1ST FLOOR - GYPSUM BOARD, TAPE AND JOINT COMPOUND	White Non-Fibrous Homogeneous			100%	Non-fibrous (other)	**None Detected**
042815B-01B-Gypsum Board *621500747-0002*	1ST FLOOR - GYPSUM BOARD, TAPE AND JOINT COMPOUND	Brown/White Fibrous Homogeneous	10% 4%	Cellulose Glass	86%	Non-fibrous (other)	**None Detected**
042815B-01B-Tape *621500747-0002A*	1ST FLOOR - GYPSUM BOARD, TAPE AND JOINT COMPOUND	Yellow Fibrous Homogeneous	98%	Cellulose	2%	Non-fibrous (other)	**None Detected**
042815B-01B-Joint Compound *621500747-0002B*	1ST FLOOR - GYPSUM BOARD, TAPE AND JOINT COMPOUND	White Non-Fibrous Homogeneous			100%	Non-fibrous (other)	**None Detected**

Analyst(s)
Desiree Lunt (27)
Joshua Snyder (33)

CWalker
Christina Walker, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. South Portland, ME

Initial report from 05/07/2015 09:22:49

EMSL Analytical, Inc.
161 John Roberts Road, South Portland, ME 04106
Phone/Fax: (207) 517-6921 / (207) 517-6922
http://www.EMSL.com portlandlab@emsl.com

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Collected:	4/28/2015

Project: **040190234.00 / MAINE BLDG**

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

Sample	Description	Appearance	Non-Asbestos %	Fibrous	Non-Asbestos %	Non-Fibrous	Asbestos % Type
042815B-01C-Gypsum Board *621500747-0003*	2ND FLOOR - GYPSUM BOARD, TAPE AND JOINT COMPOUND	Gray/White Non-Fibrous Homogeneous	10% 4%	Cellulose Glass	86%	Non-fibrous (other)	**None Detected**
042815B-01C-Tape *621500747-0003A*	2ND FLOOR - GYPSUM BOARD, TAPE AND JOINT COMPOUND	Yellow Fibrous Homogeneous	98%	Cellulose	2%	Non-fibrous (other)	**None Detected**
042815B-01C-Joint Compound *621500747-0003B*	2ND FLOOR - GYPSUM BOARD, TAPE AND JOINT COMPOUND	White Non-Fibrous Homogeneous			100%	Non-fibrous (other)	**None Detected**
042815B-02 *621500747-0004*	1ST FLOOR - COVE BASE	Green Non-Fibrous Homogeneous			100%	Non-fibrous (other)	**None Detected**
042815B-02B *621500747-0005*	1ST FLOOR - COVE BASE	Green Non-Fibrous Homogeneous			100%	Non-fibrous (other)	**None Detected**
042815B-03 *621500747-0006*	1ST FLOOR - PAPER	White/Silver/Yellow Fibrous Homogeneous	60% 5%	Cellulose Glass	35%	Non-fibrous (other)	**None Detected**
042815B-03B *621500747-0007*	1ST FLOOR - PAPER	White/Silver/Yellow Fibrous Homogeneous	60% 10%	Cellulose Glass	30%	Non-fibrous (other)	**None Detected**

Analyst(s)
Desiree Lunt (27)
Joshua Snyder (33)

CWalker
Christina Walker, Laboratory Manager
or other approved signatory

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Received:	05/04/15 12:38 PM
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Collected:	4/28/2015

Project: **040190234.00 / MAINE BLDG**

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

Sample	Description	Appearance	Non-Asbestos %	Fibrous	Non-Asbestos %	Non-Fibrous	Asbestos % Type
042815B-04-Gypsum Board *621500747-0008*	1ST FLOOR - GYPSUM BOARD, FIBERGLASS TAPE AND JOINT COMPOUND	Brown/White Fibrous Homogeneous	10% 5%	Cellulose Glass	85%	Non-fibrous (other)	**None Detected**
042815B-04-Joint Compound *621500747-0008B*	1ST FLOOR - GYPSUM BOARD, FIBERGLASS TAPE AND JOINT COMPOUND	White Non-Fibrous Homogeneous			100%	Non-fibrous (other)	**None Detected**
042815B-04B-Gypsum Board *621500747-0009*	1ST FLOOR - GYPSUM BOARD, FIBERGLASS TAPE AND JOINT COMPOUND	Brown/White Fibrous Homogeneous	10% 5%	Cellulose Glass	85%	Non-fibrous (other)	**None Detected**
042815B-04B-Joint Compound *621500747-0009B*	1ST FLOOR - GYPSUM BOARD, FIBERGLASS TAPE AND JOINT COMPOUND	White Non-Fibrous Homogeneous			100%	Non-fibrous (other)	**None Detected**
042815B-04C-Gypsum Board *621500747-0010*	1ST FLOOR - GYPSUM BOARD, FIBERGLASS TAPE AND JOINT COMPOUND	Gray/White Non-Fibrous Homogeneous	8% 5%	Cellulose Glass	87%	Non-fibrous (other)	**None Detected**

Analyst(s)

Desiree Lunt (27)
Joshua Snyder (33)

CWalker

Christina Walker, Laboratory Manager
or other approved signatory

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Project: **040190234.00 / MAINE BLDG**

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

Sample	Description	Appearance	Non-Asbestos % Fibrous	Non-Asbestos % Non-Fibrous	Asbestos % Type
042815B-04C-Joint Compound *621500747-0010A*	1ST FLOOR - GYPSUM BOARD, FIBERGLASS TAPE AND JOINT COMPOUND	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
042815B-05 *621500747-0011*	2ND FLOOR - FLOOR TILE	Beige Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
042815B-05B *621500747-0012*	2ND FLOOR - FLOOR TILE	Beige Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
042815B-06 *621500747-0013*	2ND FLOOR - MASTIC	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
042815B-06B *621500747-0014*	2ND FLOOR - MASTIC	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
042815B-07-Stair Tread *621500747-0015*	STAIRS - STAIRCASE TREAD AND MASTIC	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
042815B-07-Mastic *621500747-0015A*	STAIRS - STAIRCASE TREAD AND MASTIC	Clear Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**

Analyst(s)
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Joshua Snyder (33)

CWalker
Christina Walker, Laboratory Manager
or other approved signatory

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Project: **040190234.00 / MAINE BLDG**

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

Sample	Description	Appearance	Non-Asbestos % Fibrous	Non-Asbestos % Non-Fibrous	Asbestos % Type
042815B-07B-Stair Tread *621500747-0016*	STAIRS - STAIRCASE TREAD AND MASTIC	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
042815B-07B-Mastic *621500747-0016A*	STAIRS - STAIRCASE TREAD AND MASTIC	Clear Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
042815B-08 *621500747-0017*	2ND FLOOR - MASTIC	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
042815B-08B *621500747-0018*	2ND FLOOR - MASTIC	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
042815B-09 *621500747-0019*	EXTERIOR - CAULK	Gray Non-Fibrous Homogeneous		97% Non-fibrous (other)	**3% Chrysotile**
042815B-09B *621500747-0020*	EXTERIOR - CAULK				**Stop Positive (Not Analyzed)**
042815B-010 *621500747-0021*	EXTERIOR - GLAZING	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
042815B-010B *621500747-0022*	EXTERIOR - GLAZING	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**

Analyst(s)
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EMSL Order:	621500747
CustomerID:	GZAG51
CustomerPO:	6143
ProjectID:	

Attn: **David G. Oliver**
GZA GeoEnvironmental Inc (NH)
5 Commerce Park North
Suite 201
Bedford, NH 03110

Phone:	(603) 623-3600
Fax:	(603) 624-9463
Received:	05/04/15 12:38 PM
Analysis Date:	5/7/2015
Collected:	4/28/2015

Project: **040190234.00 / MAINE BLDG**

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

Sample	Description	Appearance	Non-Asbestos % Fibrous	Non-Asbestos % Non-Fibrous	Asbestos % Type
042815B-011-Cove Base *621500747-0023*	1ST FLOOR - COVE BASE W/ MASTIC	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
042815B-011-Mastic *621500747-0023A*	1ST FLOOR - COVE BASE W/ MASTIC	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
042815B-011B-Cove Base *621500747-0024*	1ST FLOOR - COVE BASE W/ MASTIC	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
042815B-011B-Mastic *621500747-0024A*	1ST FLOOR - COVE BASE W/ MASTIC	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
042815B-012 *621500747-0025*	1ST FLOOR - ADHESIVE	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
042815B-012B *621500747-0026*	1ST FLOOR - ADHESIVE	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
042815B-013 *621500747-0027*	2ND FLOOR - UNDERCOATING	White Non-Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (other)	**None Detected**
042815B-013B *621500747-0028*	2ND FLOOR - UNDERCOATING	White Non-Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (other)	**None Detected**

Analyst(s)
Desiree Lunt (27)
Joshua Snyder (33)

CWalker
Christina Walker, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. South Portland, ME

Initial report from 05/07/2015 09:22:49

EMSL Analytical, Inc.
161 John Roberts Road, South Portland, ME 04106
Phone/Fax: (207) 517-6921 / (207) 517-6922
http://www.EMSL.com portlandlab@emsl.com

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Received:	05/04/15 12:38 PM
Analysis Date:	5/7/2015
Collected:	4/28/2015

Project: **040190234.00 / MAINE BLDG**

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

Sample	Description	Appearance	Non-Asbestos % Fibrous	Non-Asbestos % Non-Fibrous	Asbestos % Type
042815B-014 *621500747-0029*	2ND FLOOR - CEILING TILE	Tan/White Fibrous Homogeneous	65% Cellulose 10% Min. Wool	25% Non-fibrous (other)	**None Detected**
042815B-014B *621500747-0030*	2ND FLOOR - CEILING TILE	Tan/White Fibrous Homogeneous	65% Cellulose 15% Min. Wool	20% Non-fibrous (other)	**None Detected**
042815B-015 *621500747-0031*	1ST FLOOR - CEILING TILE	Gray/White Fibrous Homogeneous	60% Glass 20% Min. Wool	20% Non-fibrous (other)	**None Detected**
042815B-015B *621500747-0032*	1ST FLOOR - CEILING TILE	Gray/White Fibrous Homogeneous	60% Glass 20% Min. Wool	20% Non-fibrous (other)	**None Detected**
042815B-016 *621500747-0033*	EXTERIOR - CAULK	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
042815B-016B *621500747-0034*	EXTERIOR - CAULK	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
042815B-017 *621500747-0035*	1ST FLOOR - MORTAR	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
042815B-017B *621500747-0036*	EXTERIOR - MORTAR	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**

Analyst(s)
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Joshua Snyder (33)

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Christina Walker, Laboratory Manager
or other approved signatory

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5 Commerce Park North
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Bedford, NH 03110

Phone:	(603) 623-3600
Fax:	(603) 624-9463
Received:	05/04/15 12:38 PM
Analysis Date:	5/7/2015
Collected:	4/28/2015

Project: **040190234.00 / MAINE BLDG**

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

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
042815B-018 *621500747-0037*	EXTERIOR - CAULK	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
042815B-018B *621500747-0038*	EXTERIOR - CAULK	Brown Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
042815B-019 *621500747-0039*	2ND FLOOR - CAULK	Brown Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
042815B-019B *621500747-0040*	2ND FLOOR - CAULK	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
042815B-020 *621500747-0041*	2ND FLOOR - CAULK	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
042815B-020B *621500747-0042*	2ND FLOOR - CAULK	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
042815B-021 *621500747-0043*	1ST FLOOR - COVE BASE	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
042815B-021B *621500747-0044*	1ST FLOOR - COVE BASE	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**

Analyst(s)
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EMSL Order:	621500747
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Attn: **David G. Oliver**
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Suite 201
Bedford, NH 03110

Phone:	(603) 623-3600
Fax:	(603) 624-9463
Received:	05/04/15 12:38 PM
Analysis Date:	5/7/2015
Collected:	4/28/2015

Project: **040190234.00 / MAINE BLDG**

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

Sample	Description	Appearance	Non-Asbestos % Fibrous	Non-Asbestos % Non-Fibrous	Asbestos % Type
042815B-022 *621500747-0045*	1ST FLOOR - ADHESIVE	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
042815B-022B *621500747-0046*	1ST FLOOR - ADHESIVE	Yellow Non-Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (other)	**None Detected**
042815B-023 *621500747-0047*	1ST FLOOR - SEALANT	Gray/Red Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
042815B-023B *621500747-0048*	1ST FLOOR - SEALANT	Gray/Red Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**

Analyst(s)
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Joshua Snyder (33)

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Samples analyzed by EMSL Analytical, Inc. South Portland, ME

Initial report from 05/07/2015 09:22:49

THIS IS THE LAST PAGE OF THE REPORT.

OrderID: 621500747

EMSL ANALYTICAL, INC.
LABORATORY•PRODUCTS•TRAINING

Asbestos Chain of Custody

EMSL Order Number *(Lab Use Only)*: 621500747

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

Company: G2A GEOENVIRONMENTAL	**EMSL-Bill to:** ☑ Same ☐ Different If Bill to is Different note instructions in Comments** *Third Party Billing requires written authorization from third party*
Street: 5 COMMERCE PARK NORTH, SUITE 201	
City: BEDFORD **State/Province:** NH	**Zip/Postal Code:** 03110 **Country:**
Report To (Name): DAVID OLIVER	**Telephone #:** 603.232.8745
Email Address: DAVID.OLIVER@G2A.Com	**Fax #:** **Purchase Order:** 6143
Project Name/Number: 04.0190234.00/Maine Bldg	**Please Provide Results:** ☐ Fax ☒ Email ☐ Mail
U.S. State Samples Taken: MA	**Connecticut Samples:** ☐ Commercial ☐ Residential

Turnaround Time (TAT) Options* – Please Check

☐ 3 Hour ☐ 6 Hour ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 96 Hour ☑ 1 Week ☐ 2 Week

*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

PCM - Air ☐ Check if samples are from NY
☐ NIOSH 7400
☐ w/ OSHA 8hr. TWA

PLM - Bulk (reporting limit)
☒ PLM EPA 600/R-93/116 (<1%)
☐ PLM EPA NOB (<1%)
Point Count
☐ 400 (<0.25%) ☐ 1000 (<0.1%)
Point Count w/Gravimetric
☐ 400 (<0.25%) ☐ 1000 (<0.1%)
☐ NYS 198.1 (friable in NY)
☐ NYS 198.6 NOB (non-friable-NY)
☐ NIOSH 9002 (<1%)

TEM – Air ☐ 4-4.5hr TAT (AHERA only)
☐ AHERA 40 CFR, Part 763
☐ NIOSH 7402
☐ EPA Level II
☐ ISO 10312

TEM - Bulk
☐ TEM EPA NOB
☐ NYS NOB 198.4 (non-friable-NY)
☐ Chatfield SOP
☐ TEM Mass Analysis-EPA 600 sec. 2.5

TEM – Water: EPA 100.2
Fibers >10µm ☐ Waste ☐ Drinking
All Fiber Sizes ☐ Waste ☐ Drinking

TEM- Dust
☐ Microvac - ASTM D 5755
☐ Wipe - ASTM D6480
☐ Carpet Sonication (EPA 600/J-93/167)

Soil/Rock/Vermiculite
☐ PLM CARB 435 - A (0.25% sensitivity)
☐ PLM CARB 435 - B (0.1% sensitivity)
☐ TEM CARB 435 - B (0.1% sensitivity)
☐ TEM CARB 435 - C (0.01% sensitivity)
☐ TEM Qual. via Filtration Technique
☐ TEM Qual. via Drop-Mount Technique

Other:
☐

☒ **Check For Positive Stop – Clearly Identify Homogenous Group** **Filter Pore Size (Air Samples):** ☐ 0.8µm ☐ 0.45µm

Samplers Name: David Oliver **Samplers Signature:**

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
042815 B-01	Gypsum board, tape, and Joint Compound / 1st Floor	LAYERED ANALYSIS	4/28/15
01B	/		
01C	/ 2nd Floor		
02	Cove base / 1st Floor	Analyze Cove base only	
02B			
03	Paper /		
03B			
* 04	Gypsum board, Fiberglass tape and Joint Compound	LAYERED Analysis	

Client Sample # (s): 042815 B-01 - 042815B-23B **Total # of Samples:** 61

Relinquished (Client): [signature] **Date:** 4/30/15 **Time:** 0945

Received (Lab): [signature] **Date:** 5/1/15 **Time:**

Comments/Special Instructions: * Do Not Analyze Fiberglass Tape. @ 9:55 Am

Controlled Document - Asbestos COC - 1/1/2012

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Page 1 of 3 pages

UPS
1Z0936672210 10

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EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number *(Lab Use Only)*: 621500747

PHONE:
FAX:

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
*042815B - 04B	Gypsum board, Fiberglass tape and Joint compound / 1st Floor	LAYERED Analysis	4/28/15
* 04C			
05	Floor tile / 2nd Floor	Analyze tile Only	
05B			
06	Mastic /		
06B	/		
07	Staircase tread and mastic / Stairs	LAYERED ANALYSIS	
07B	/		
08	Mastic / 2nd Floor		
08B	/		
09	Caulk / Exterior		
09B	/		
10	Glazing /		
10B	/		
11	Coveback w/ mastic / 1st Floor	LAYERED ANALYSIS	
11B	/		
12	Adhesive /		
12B	/		
13	Undercoating / 2nd Floor		
13B	/		
14	Ceiling tile /		
14B	/		
15	/ 1st Floor		
15B	/		

*Comments/Special Instructions: * Do Not Analyze Fiberglass tape.

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Page 2 of 3 pages

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OrderID: 621500747

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Asbestos Chain of Custody

EMSL Order Number *(Lab Use Only)*: 621500747

PHONE:
FAX:

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
042815B 16	Caulk / Exterior		4/28/15
16B	/		
17	Mortar / 1st floor		
17B	/ Exterior		
18	Caulk /		
18B	/		
19	/ 2nd Floor		
19B	/		
20	/		
20B	/		
21	Cove base / 1st Floor	Analyze Covebase only	
21B	/		
22	Adhesive /		
22B	/		
23	Sealant /		
23B	/		

***Comments/Special Instructions:**

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Page 3 of 3 pages

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APPENDIX E

LEAD-CONTAINING PAINT SURVEY REPORT

MEL BLACKMAN
MASTER LEAD INSPECTOR

OSHA PRE-RENOVATION LEAD BASED PAINT SURVEY

Project:

1305 Memorial Avenue
West Springfield, MA

Date:

AUGUST 28, 2015

Prepared For:

GZA GEO ENVIRONMENTAL, INC.
5 COMMERCE PARK NORTH, SUITE 201
BEDFORD, NH 03110
603-232-8745

Prepared & Inspected By:

MEL BLACKMAN
P O BOX 358
STONEHAM, MA 02180
781-820-8611

MEL BLACKMAN
MASTER LEAD INSPECTOR
P.O. BOX 358 - STONEHAM, MA. 02180
PHONE / FAX (781) 665-3806Uni

1 Executive Summary:

Mel Blackman was retained by GZA GeoEnvironmental, Inc. of Bedford, NH, to conduct an OSHA pre-renovation lead based paint survey at **1305 Memorial Avenue**, in **West Springfield, Massachusetts** on **April 28, 2015**. The survey included representative sampling of interior and exterior painted surfaces.

The intent of the lead paint survey was to identify building surfaces coated with lead based paint, utilizing XRF testing technology. The information collected, as a result of the testing, can be used to ensure OSHA compliance relative to worker exposure and proper disposal of renovation or demolition debris.

Many of the interior and exterior building components were found to have high concentrations of lead based paint. Components coated with lead based paint include specific:

- Walls
- Doors & trim
- "I" beams & support columns
- Windows & trim
- Ceilings
- Exterior doors & trim
- Exterior window trim
- Exterior upper building trim

A summary of components coated with lead based paint can be found in section5.

The information contained in this report summarizes the sampling and analytical methodologies, site description, materials found to contain lead, locations of surfaces, sample results and qualifications of personnel.

Massachusetts Childhood Lead Poisoning Prevention Program regulations 105 CMR 460.00 defines a dangerous level of lead for residential premises to be equal to or greater than 1.0 milligrams per square centimeter (mg/cm2). The New Hampshire Rules HeP-1600 agree with Massachusetts, however, refers to that level of lead content as a "lead based substance". OSHA believes that exposure with "any" lead content may cause a health risk to workers.

2 Site Description:

The building inspected for the presence of lead based paint is located at **1305 Memorial Avenue,** in **West Springfield, Massachusetts.** The site is known as the "**Maine" Building** of the **Eastern States Exposition.** The property is presently in use and major renovations are planned. The original building was constructed in approximately 1900.

The building exterior is brick with wood windows.

Surfaces tested consisted of walls, ceilings, doors and trim, windows & trim, baseboards, chair rail, support columns, staircase components, floors, structural steel, and exterior components.

3 Survey Personnel:

The OSHA survey for lead based paint was conducted by Mel Blackman, Massachusetts licensed Master Lead Inspector #M-1377, and New Hampshire Risk Assessor #RA-0026.

4 Testing Methodology:

Lead in paint sampling of representative interior and exterior building surfaces was conducted to assist with contractor compliance with the United States Department of Labor (US DOL) Occupational Safety and Health Administration (OSHA) Lead Exposure in Construction Standard (29 CFR 1936.62), and EPA Hazardous Waste Disposal Regulations (40 CFR Parts 260 through 271), as well as EPA's Renovation, Repair and Painting Final Rule (40 CFR 745), if applicable.

Representative surfaces from selected accessible areas of the buildings were analyzed using an X-Ray Fluorescence Analyzer (XRF). An RMD, LPA-1 Lead Paint Analyzer XRF, Serial Number 1409 was used, which is a complete lead paint analysis system that quickly, accurately, and non-destructively measures the concentration of LBP on surfaces.

An RMD X-Ray Fluorescence Analyzer, Model LPA-1, was used to perform the lead based paint survey. In conducting the determination, various representative architectural elements were tested. Not all painted surfaces in each functional space were tested for the presence of lead-based paint.

The contractor should assume that similar components that were not tested must be treated with the same caution and requirements as potentially having high lead concentrations. Surfaces which are listed as N/A were not reachable for testing, and therefore the condition of the paint was listed. At least three to ten readings were taken for all similar groups of components.

The LPA-1 XRF relies on the measurement of the K-shell X-rays to determine the amount of lead present in the painted surface. K-shell X-rays can penetrate many layers of paint and allow a good measurement of the lead content of paint to be made without being significantly affected by the thickness or number of layers of paints on the surface of the sample.

The LPA-1 has the ability to analyze and compute corrections for the difference in the energy spectrums relating the different substrates. This analysis of the energy spectrum means that the lead paint reading displayed on the instrument already accounts for any substrate effects and no correction is required by the operator. The LPA-1's field of view is limited to a depth of 3/8", deep enough to handle virtually all painted surfaces, but not prone to detect lead objects located behind the surface.

There are two measurement modes of operation in the LPA-1 analyzer namely the "Standard Mode" and the "Quick Mode". In the "Standard" mode, the operator selects a fixed measurement time that remains constant irrespective of the lead signal.

In the "Quick" mode, the analyzer automatically adjusts the measurement time to be the least time that is needed to make a definitive measurement with a 95% confidence level (2 sigma). The LPA-1 analyzer will finish a measurement once the 2-sigma confidence level is achieved and the data is statistically meaningful. This time period for conclusive measurements is typically between 1 to 5 seconds, but can extend to a measurement of 60 seconds depending on the action level for abatement. I utilized the LPA-1 in the "Quick" mode to achieve a 95% confidence level down to 0.2 mg/cm2 for the testing performed at this unit. The highest level of LBP reported by the LPA-1 using the "Quick" mode is a result of >9.9 mg/cm2 (greater than 9.9 mg/cm2).

A "validations test" was performed to ensure that the instrument was operating properly. The validation test was performed on a calibration test block supplied by the manufacturer to determine if the instrument measured the lead content consistently on a day-to-day basis. A series of three standard measurements consisting of 60 seconds per measurement were taken on the test block. The individual readings were recorded and compared to the factory test data provided with the instrument. Calibrations conducted indicated the instrument was functioning within the standard deviation as defined by the manufacturer.

Following the manufacturers' requirements for calibration, here are the results:

Cal. In: 1.1, 1.1, 1.0 mg/cm2
Cal. Out: 1.2, 1.0, 1.1 mg/cm2

5 Summary of XRF Testing Results:

The following list is arranged by location and component type. Surfaces found to have higher lead concentrations are listed first in each section. The contractor should assume that similar components that were not tested should be treated with the same caution and requirements as potentially having high lead concentrations. Surfaces that are listed as N/A were not reachable for testing, and therefore it is assumed that they contain lead paint. The condition of that paint is indicated when it is loose. Most lead based painted surfaces contained some loose paint. There were at least 3 to 10 XRF readings for each group of components.

INTERIOR – FIRST FLOOR

Gray and white wood window trim 8.3 – 9.9 mg/cm2
White metal I beams and support columns 1.7 – 9.9 mg/cm2
White metal entry door trim 4.0 – 7.3 mg/cm2
White brick walls 1.0 – 4.1 mg/cm2 loose
White wood ceiling 0.5 – 1.2 mg/cm2 loose
Blue, red, and black metal mechanical room equipment 0.4 – 0.7 mg/cm2
White, gray, and green metal door and trim 0.4 – 0.7 mg/cm2
White wood doors and trim 0.2 – 0.5 mg/cm2
White sheetrock walls 0.0 – 0.3 mg/cm2
Brown wood walls 0.2 – 0.3 mg/cm2
Gray concrete floor 0.0 – 0.2 mg/cm2
Brown wood ceiling 0.0 – 0.1 mg/cm2
White wood entry doors 0.0 – 0.4 mg/cm2

INTERIOR – SECOND FLOOR

Green wood door and trim 4.6 – 8.0 mg/cm2
White brick walls 0.3 – 1.7 mg/cm2
Green and white metal door and trim 0.4 – 0.6 mg/cm2
Green metal staircase handrails 0.4 – 0.5 mg/cm2
White sheetrock walls 0.3 – 0.4 mg/cm2
Brown wood window and trim 0.0 – 0.2 mg/cm2
White sheetrock ceiling 0.1 – 0.2 mg/cm2
Gray treads and risers covered with rubber

EXTERIOR

White wood front entry door trim 9.9 mg/cm2 loose
White wood window and trim 0.7 – 9.9 mg/cm2 loose
White wood upper building trim N/A loose
White metal door and trim 0.3 – 0.4 mg/cm2
White wood rear doors and trim 0.0 – 0.4 mg/cm2
White metal garage overhead door 0.1 – 0.3 mg/cm2
White wood front entry doors 0.3 – 0.4 mg/cm2
White wood columns 0.2 – 0.3 mg/cm2
White wood flower boxes 0.0 – 0.2 mg/cm2

6 Conclusions and Recommendations:

Many of the surfaces tested contain high levels of lead paint. A composite sampling of the aggregate waste stream from demolition would be necessary to determine whether the TCLP testing is considered hazardous waste. Prior to renovation of this building an OSHA site specific lead compliance plan should be developed including wasted segregation to minimize the potential generation of hazardous waste.

In areas where demolition is to occur and lead is present, the demolition debris waste stream should be further analyzed during segregation for compliance with EPA and MA DES regulations to ensure proper disposal.

TCLP testing should be performed to characterize all waste prior to disposal. TCLP testing can be performed prior to waste segregation but results may not be indicative of the actual waste streams produced during demolition.

Demolition/renovation workers should be trained and protected in accordance with OSHA regulations 29 CFR 1926.62 and EPA's Renovation, Repair and Painting Final Rule (40 CFR 745), if applicable.

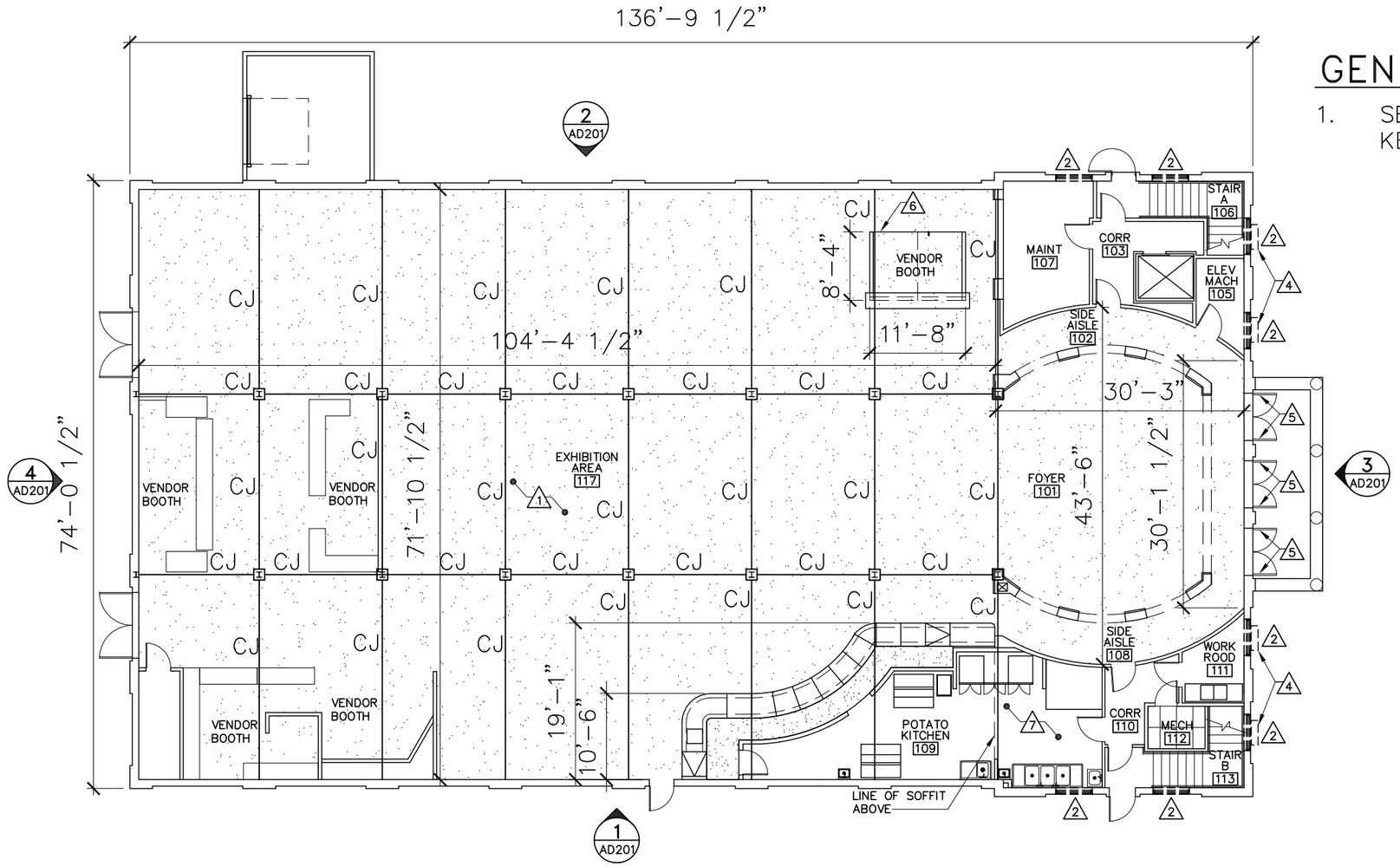
This section applies to all construction work where an employee may be occupationally exposed to lead. All construction work excluded from coverage in the general industry for lead by 29 CFR 1910.1025 (a) (2) is covered by this standard. Construction work is defined as work for construction, alteration and/or repair, including painting and decorating. It includes but is not limited to the following:

- Demolition or salvage of structures where lead or materials containing lead is present
- Removal or encapsulation of materials containing lead;
- New Construction, alteration, repair, or renovation of structures, substrates, or portions thereof that contain lead, or materials containing lead.

- Handlers of salvageable materials and the treatment/disposal facility must be informed of the material's lead content. All personnel involved must be trained in personal protection and proper work practice procedures in accordance with OSHA regulations.
- All waste contaminated with lead paint should be disposed of in accordance with all state, local, and federal regulations.

Respectfully submitted

Mel Blackman



1 REMOVALS FIRST FLOOR PLAN
AD101 AD-A1 SCALE: 1/16"=1'-0"

GENERAL NOTE:

1. SEE SHEET AD101 FOR KEYNOTES.

LEGEND:

FLOOR FINISH REMOVAL

CJ EXIST CONTROL JOINT

16' 8' 0 16' 32'
1/16"=1'-0"

15 Jun, 2015 - 3:08pm
Y:\21501.01\21501.01-AD-A1.dwg

OAK POINT ASSOCIATES
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DESIGNED BY: WVB
DRAWN BY: MDF
CHECKED BY: WVB
PROJECT: 21501.01

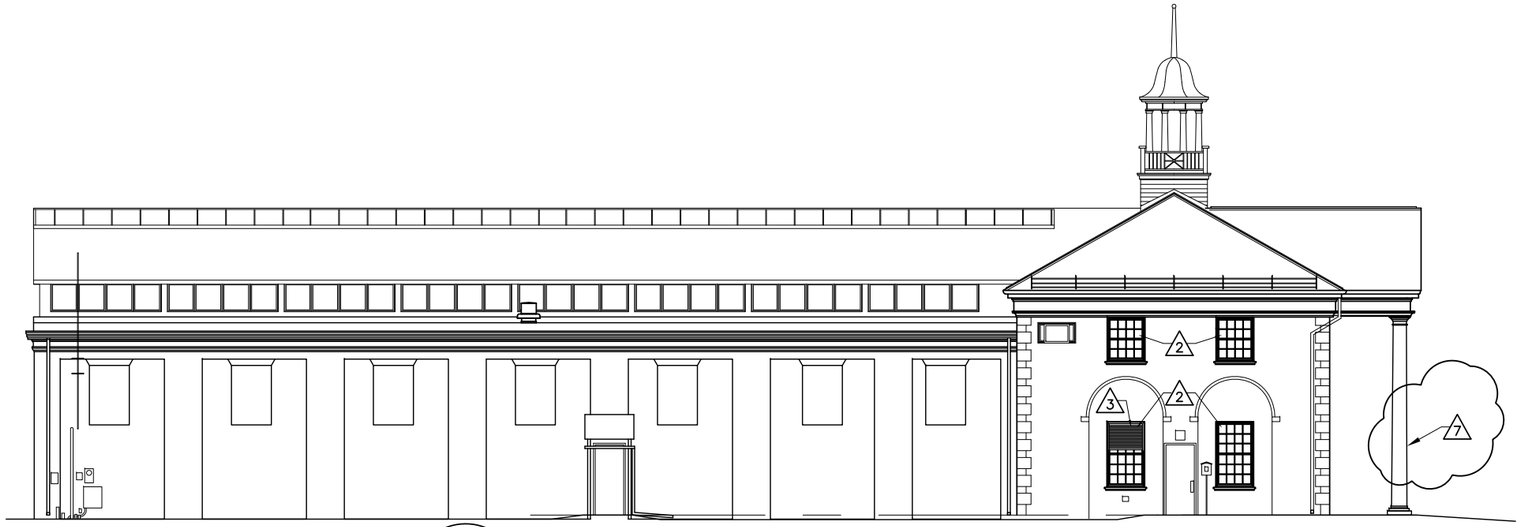
MAINE STATE BUILDING REPAIRS
MASSECHUSETTS EASTERN STATES "BIG E"
1305 MEMORIAL DRIVE
WEST SPRINGFIELD, MA

REVISED REMOVALS FIRST FLOOR PLAN

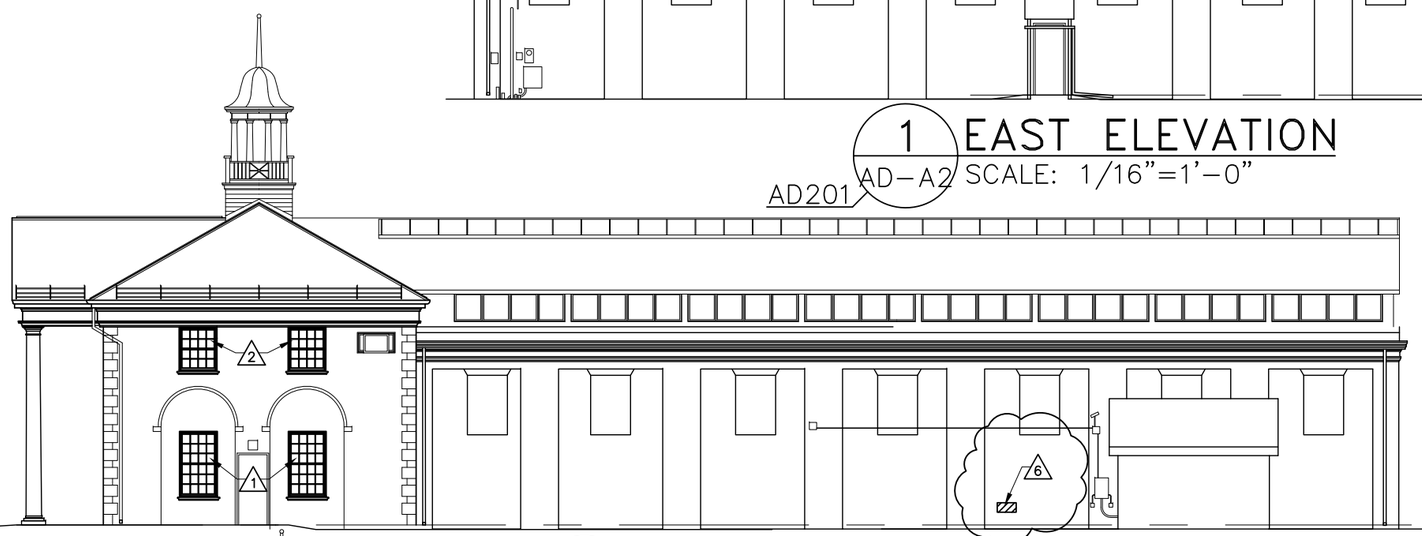
SCALE: AS NOTED
DATE: 06/15/15
REV: AD-A1
ADDENDUM SKETCH

GENERAL NOTE:

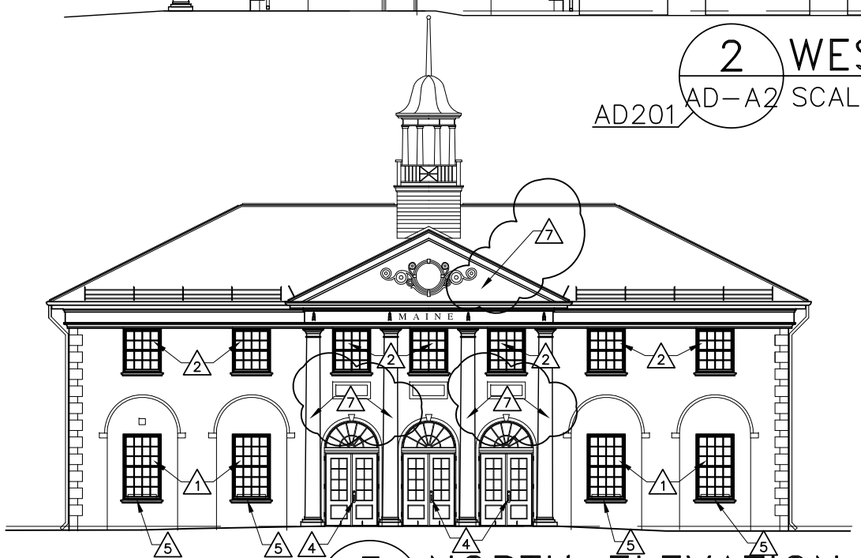
1. SEE SHEET AD201 AND ADDENDUM FOR KEYNOTES.



1 EAST ELEVATION
AD201 AD–A2 SCALE: 1/16"=1'–0"

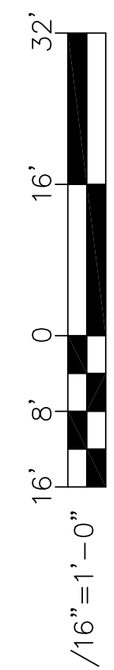


2 WEST ELEVATION
AD201 AD–A2 SCALE: 1/16"=1'–0"



3 NORTH ELEVATION
AD201 AD–A2 SCALE: 1/16"=1'–0"

4 SOUTH ELEVATION
AD201 AD–A2 SCALE: 1/16"=1'–0"



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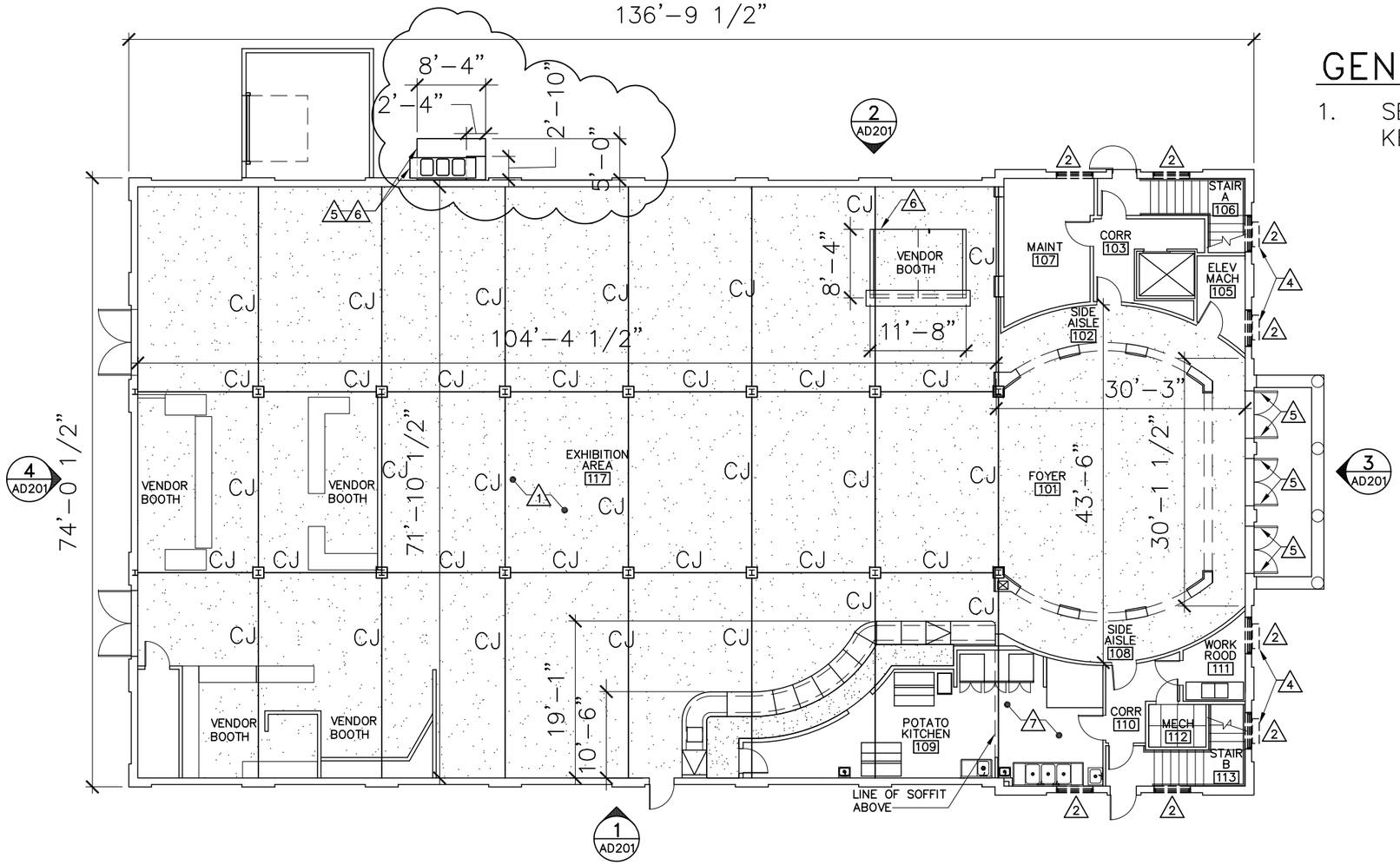
PROJECT: 21501.01

MAINE STATE BUILDING REPAIRS
MASSECHUSETTS EASTERN STATES "BIG E"

1305 MEMORIAL DRIVE
WEST SPRINGFIELD, MA

REVISED REMOVALS EXTERIOR ELEVATIONS

SCALE: AS NOTED
DATE: 06/15/15
REV: **AD-A2**
ADDENDUM SKETCH



1 FIRST FLOOR PLAN
AE101 AD-A3 SCALE: 1/16"=1'-0"

GENERAL NOTE:

1. SEE SHEET AE101 FOR KEYNOTES.

LEGEND:

FLOOR FINISH REMOVAL

CJ EXIST CONTROL JOINT

1/16"=1'-0" 16' 8' 0 16' 32'

15 Jun, 2015 – 3:11pm
Y:\21501.01\21501.01-AD-A3.dwg

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DESIGNED BY: WVB
DRAWN BY: MDF
CHECKED BY: WVB
PROJECT: 21501.01

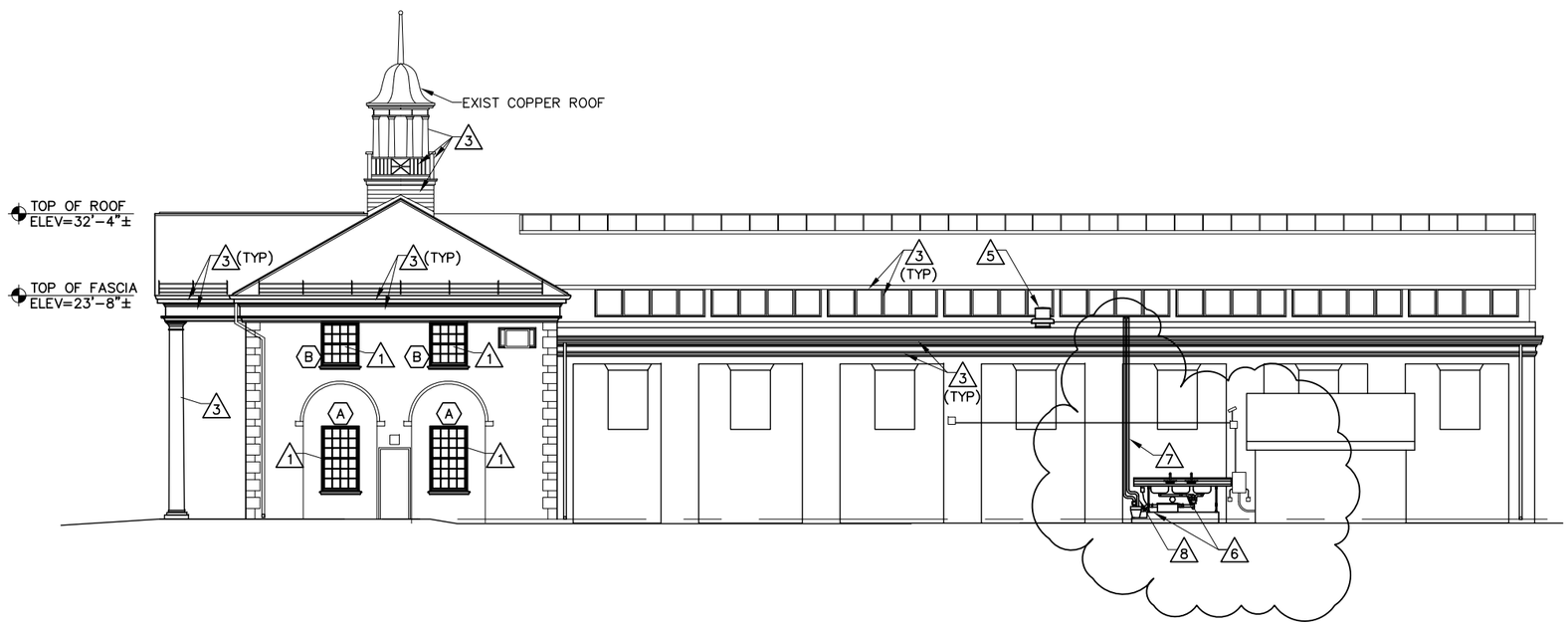
MAINE STATE BUILDING REPAIRS
MASSECHUSETTS EASTERN STATES "BIG E"
1305 MEMORIAL DRIVE
WEST SPRINGFIELD, MA

REVISED FIRST FLOOR PLAN

SCALE: AS NOTED
DATE: 06/15/15
REV: AD-A3
ADDENDUM SKETCH

GENERAL NOTE:

1. SEE SHEET AE202 FOR KEYNOTES.



1 WEST ELEVATION

AE202 AD-A4 SCALE: 1/16"=1'-0"

1/16"=1'-0"

16' 8' 0 16' 32'

15 Jun, 2015 - 3:12pm
Y:\21501.01\21501.01-AD-A4.dwg

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DRAWN BY: MDF
CHECKED BY: WVB

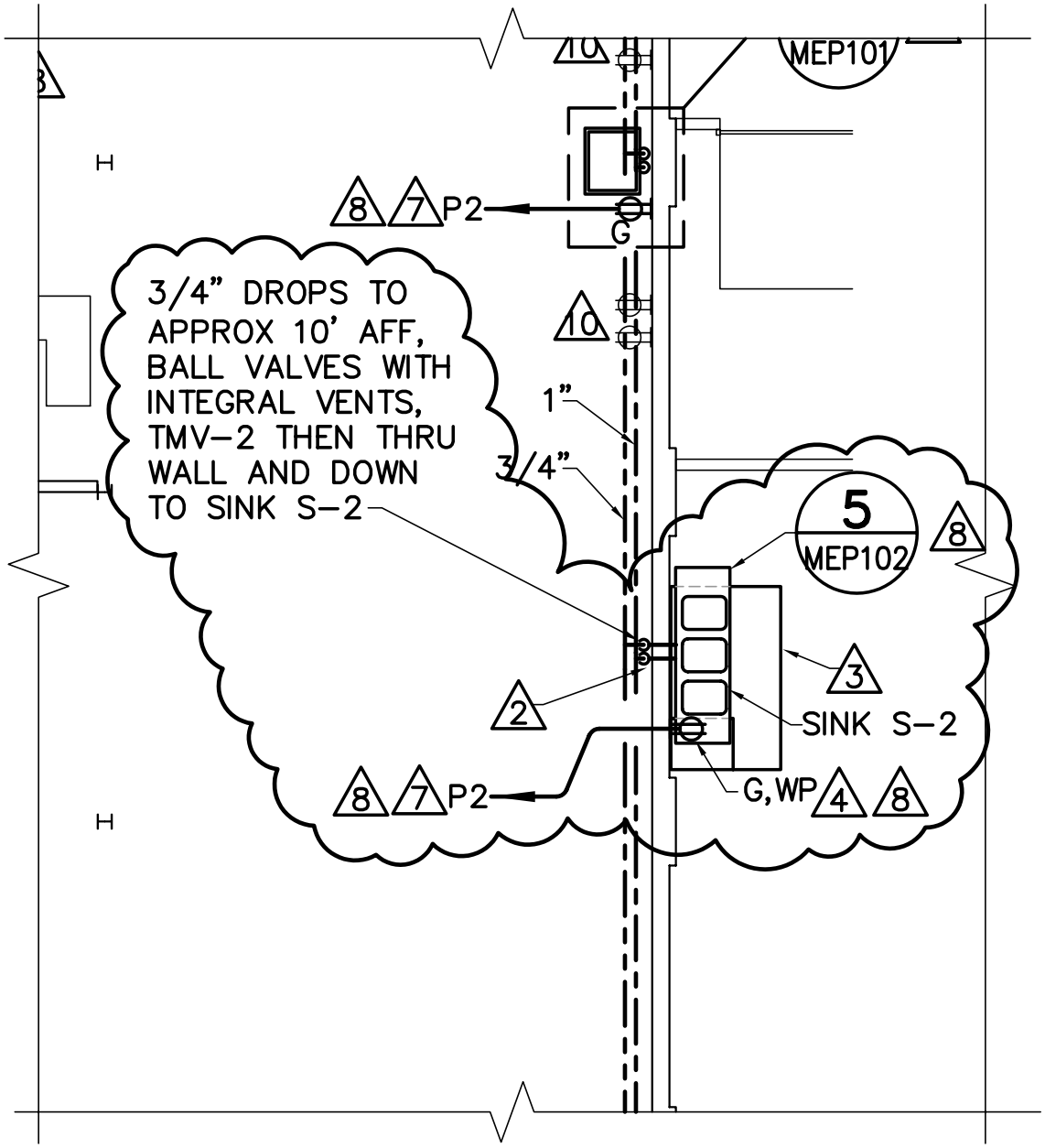
PROJECT: 21501.01

MAINE STATE BUILDING REPAIRS
MASSECHUSETTS EASTERN STATES "BIG E"

1305 MEMORIAL DRIVE
WEST SPRINGFIELD, MA

REVISED EXTERIOR WEST ELEVATION

SCALE: AS NOTED
DATE: 06/15/15
REV: AD-A4
ADDENDUM SKETCH



CHANGE LOCATION OF SINK S-2 AS SHOWN

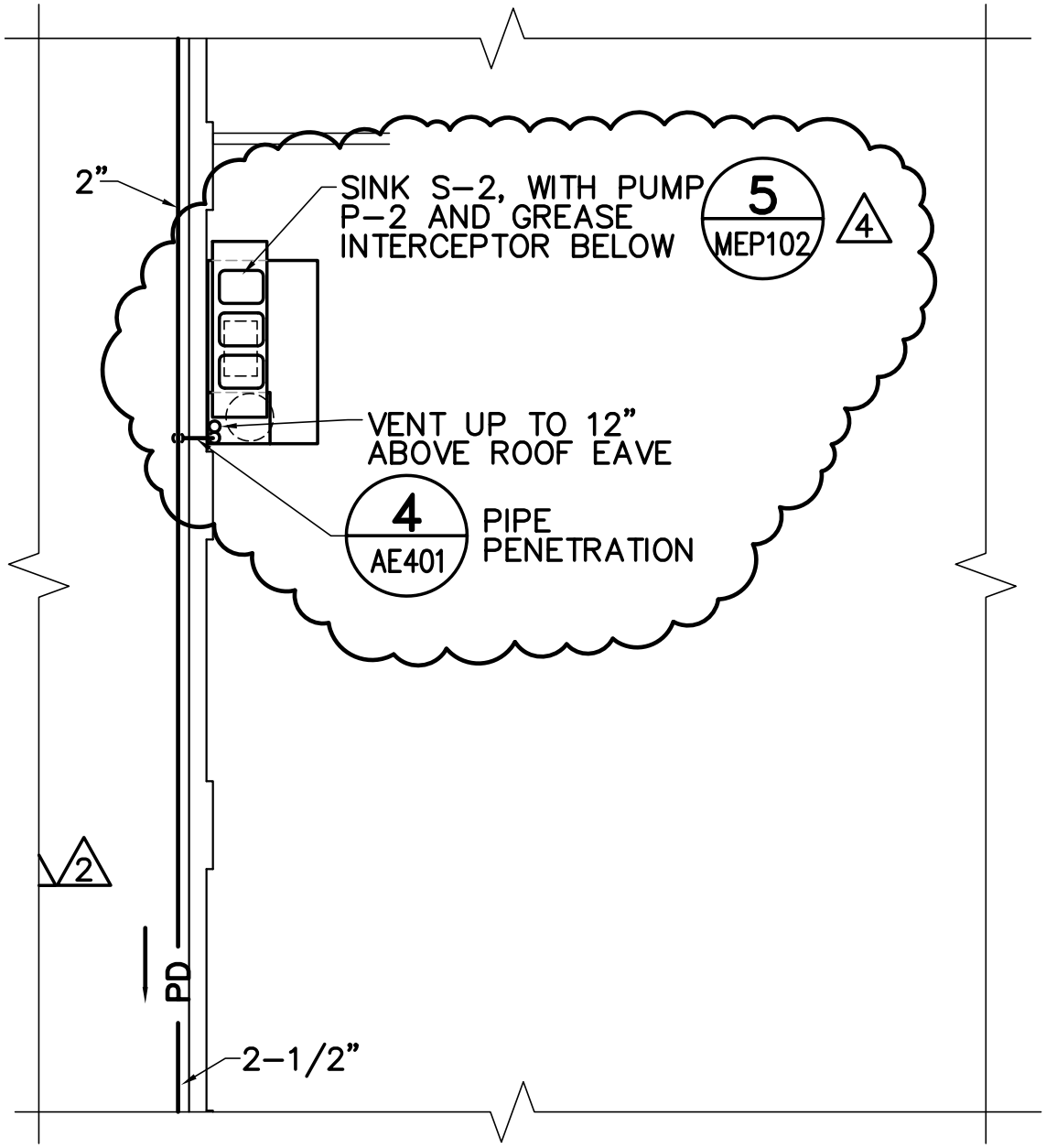
1 / MEP101 REVISED PLUMBING PART PLAN

SCALE: 1/8"=1'-0"

N

PLAN NORTH

SCALE: AS NOTED DATE: 06-15-15 REV: **AD-P1** **REVISION SKETCH**	**REVISED PLUMBING FLOOR PLAN**	**MAINE STATE BUILDING REPAIRS** **MASSACHUSETTS EASTERN STATES "BIG E"** 1305 MEMORIAL DRIVE WEST SPRINGFIELD, MASSACHUSETTS	DESIGNED BY: JWC DRAWN BY: RDA CHECKED BY: JWC PROJECT: 21501.01	OAK POINT ASSOCIATES ARCHITECTURE ■ ENGINEERING ■ PLANNING 231 Main Street, Biddeford, Maine 04005 (T) 207.283.0193 (F) 207.283.4283 www.oakpoint.com



CHANGE LOCATION OF SINK S-2 AS SHOWN

1 / MEP102 REVISED PLUMBING PART PLAN

SCALE: 1/8"=1'-0"

N
PLAN NORTH

SCALE: AS NOTED DATE: 06-15-15 REV: **AD-P2** **REVISION SKETCH**	**REVISED PLUMBING FLOOR PLAN**	**MAINE STATE BUILDING REPAIRS** **MASSACHUSETTS EASTERN STATES "BIG E"** 1305 MEMORIAL DRIVE WEST SPRINGFIELD, MASSACHUSETTS	DESIGNED BY: JWC DRAWN BY: RDA CHECKED BY: JWC PROJECT: 21501.01	OAK POINT ASSOCIATES ARCHITECTURE ■ ENGINEERING ■ PLANNING 231 Main Street, Biddeford, Maine 04005 (T) 207.283.0193 (F) 207.283.4283 www.oakpoint.com