KAESTLE BOOS associates, inc. A R C H I T E C T 'S R E P O R T



HARWICH FS 2

149 Route 137 East Harwich, MA 02646 Prepared by: Todd M. Costa Date: February 20, 2018 Page: 1 of 1

KBA Project Updates:

- <u>Construction Document Update</u>
 - Coordination meeting held at our office with consultants and department to review building systems and coordinate.
 - Additional Survey points were completed by the Town to complete the documents for site plan review.
- Test Pits/Borings for Structural have been identified.
 - Geotech Exploration
 - Test Pits Completed February 8, 2018
 - Preliminary Report of 25% of the building footprint has general fill (unsuitable for bearing) to approximately 8'-0" below the grade.
 - Borings Completed February 19, 2018
- Existing Conditions Explorations, (hazardous material testing)
 - Hazmat Material Testing Completed February 7, 2018

Report Attached

- Exterior massing and material review
- Review Opinion of Probable Costs
- Meetings
 - Fire Department Meeting @ KBA Office Jan. 30, 2018 Completed
 - Review Exterior Materials
 - Mechanical Systems
 - Site Plan Review
 - Plan is to submit drawings by the end of the month for review / meeting. **Submitting** February 27, 2018
 - o Meeting with Highway Department & Engineering
 - Review rainwater from intersection flowing into site
 - Meeting was held, and it was determined that water from the road will need to be collected into our system. System will be sized accordingly.
 - Planning Board February 27, 2018
 - Zoning Board of Appeals Building Height Variance was Approved
 - Civil Engineer meetings with Health Department. Reuse of the existing system was determined acceptable for the temporary basis until the sewer systems is completed.
 - Electronic Bidding Proposed amount of \$1,000

Attachments:

- Draft Bid Opinion of Probable Costs
- Hazmat Testing Report



Harwich Fire Station 2

February 20, 2018

Draft Bid Opinion of Probable Costs

| Description | Subtotals Tota | l: Comments |
|---------------------------------------|----------------|--|
| Construction Costs | \$5,300,000 | |
| | | |
| Owner's Indirect Costs | | |
| Temp Relocation | \$0 | |
| Land Survey | \$0 | performed by Tos |
| Geotechnical Field Observation | \$11,000 | Allowance |
| Arch.& Eng.Fees (Phase II) | \$180,000 | Balance not including phase I Hired by town for field |
| Clerk of the Works | \$90,000 | observation |
| Hazardous Material Monitoring | \$4,100 | |
| Temp Facility Review | n/a | To be included/ |
| Traffic Engineering | n/a | Not required |
| Communications Equipment Design | n/a | |
| Project Management (4%) | n/a | |
| Firematic Equipment | \$50,000 | Allowance |
| Furniture & Furnishings | \$95,000 | Allowance |
| Communications Equipment | \$50,000 | To be determined |
| Network & Computers | \$50,000 | To be determined |
| Utility Backcharge | \$25,000 | Allowance |
| Moving | \$25,000 | |
| Bid Doc Reproduction / Miscellaneous | \$5,000 | Assume OnLine Service |
| Legal/Advertising | \$5,000 | |
| Material Testing | \$25,000 | |
| Owner's Contingency (6% of all costs) | \$354,900 | |
| Subtotal Indirect Costs: | \$970,000 | |
| Total Project Cost: | \$6,270,000 | |

FINAL REPORT FOR HAZARDOUS MATERIALS IDENTIFICATION STUDY AT THE FIRE STATION 2 HARWICH, MASSACHUSETTS

PROJECT NO: 218 077.00

Survey Date: February 7, 2018

CONDUCTED BY:

UNIVERSAL ENVIRONMENTAL CONSULTANTS 12 Brewster Road Framingham, MA 01702



February 15, 2018

Mr. Todd Costa Kaestle Boos Associates, Inc. 325 Harwich Boulevard, Suite 100 Harwich, MA 02035

 Reference:
 Report for Hazardous Materials Identification Study

 Fire Station 2, Harwich, MA

Dear Mr. Costa:

Thank you for the opportunity for Universal Environmental Consultants (UEC) to provide professional services.

Enclosed please find the report for the hazardous materials identification study at the Fire Station 2, Harwich, MA.

Please do not hesitate to call should you have any questions.

Very truly yours,

Universal Environmental Consultants

Ammar M. Dieb President

UEC:\218 077.00\Report.DOC

Enclosure

1.0 INTRODUCTION:

Universal Environmental Consultants (UEC) has been providing comprehensive asbestos services since 2001 and has completed projects throughout New England. We have completed projects for a variety of clients including commercial, industrial, municipal, and public and private schools. We maintain appropriate asbestos licenses and staff with a minimum of thirty years of experience.

UEC was contracted by Kaestle Boos Associates, Inc. to conduct the following services at the Fire Station 2, Harwich, Massachusetts:

- Asbestos Containing Materials (ACM) determination inspection and sampling;
- Polychlorinated Biphenyls (PCB's)-Electrical Equipment and Light Fixtures inspection;
- Lead Based Paint (LBP) inspection.

The scope of work included the inspection of accessible ACM at limited areas scheduled for renovation, collection of bulk samples from materials suspected to contain asbestos, determination and quantities of types of ACM found and cost estimates for remediation. Bulk samples analyses for asbestos were performed using the standard Polarized Light Microscopy (PLM) Method in accordance with Environmental Protection Agency (EPA) standard. Bulk samples were collected by a Massachusetts licensed asbestos inspector Mr. Leonard J. Busa (AI-030673) and analyzed by a Massachusetts licensed laboratory Asbestos Identification Laboratory, Woburn, MA.

Samples results are attached.

2.0 FINDINGS:

Asbestos Containing Materials (ACM):

The regulations for asbestos inspection are based on representative sampling. It would be impractical and costly to sample all materials in all areas. Therefore, representative samples of each homogenous area were collected and analyzed or assumed.

All suspect materials were grouped into homogenous areas. By definition a homogenous area is one in which the materials are evenly mixed and similar in appearance and texture throughout. A homogeneous area shall be determined to contain asbestos based on findings that the results of at least one sample collected from that area shows that asbestos is present in an amount greater than 1 percent in accordance with EPA regulations. Per the Department of Environmental Protection (DEP) any amount of asbestos found must be disposed as asbestos. No additional suspect and accessible ACM were found during this survey.

Hidden ACM may be found during the renovation and demolition activities.

Number of Samples Collected:

Fifty two (52) bulk samples were collected from materials suspected of containing asbestos, including:

Type and Location of Suspect Material

- 1. Light tan vinyl floor tile type I at front hallway
- 2. Brown mastic for light tan vinyl floor tile type I at front hallway
- 3. Light tan vinyl floor tile type I at hallway by custodian closet
- 4. Brown mastic for light tan vinyl floor tile type I at hallway by custodian closet
- 5. Grey vinyl floor tile type II at kitchen
- 6. Adhesive for grey vinyl floor tile type II at kitchen
- 7. Grey vinyl floor tile type II at lockers
- 8. Adhesive for grey vinyl floor tile type II at lockers
- 9. Fancy linoleum floor covering at closet
- 10. Adhesive for fancy linoleum floor covering at closet

- 11. Fancy linoleum floor covering at custodian closet
- 12. Adhesive for fancy linoleum floor covering at custodian closet
- 13. Insulation board in concrete floor at engine bay
- 14. Insulation board in concrete floor at dispatch room
- 15. Damproofing for sink at kitchen
- 16. Joint compound at engine bay chase
- 17. Joint compound at bathroom hallway
- 18. Joint compound at kitchen dividing wall
- 19. Joint compound at front hallway
- 20. Joint compound at kitchen by door
- 21. Adhesive for yellow glazed wall tile at weight room
- 22. Grout for yellow glazed wall tile at weight room
- 23. Adhesive for yellow glazed wall tile at laundry/shower room
- 24. Grout for yellow glazed wall tile at laundry/shower room
- 25. Joint compound at laundry/shower room
- 26. Adhesive for ceramic floor at men's room
- 27. Adhesive for ceramic wall at custodian closet
- 28. Carpet glue at dispatch room
- 29. Carpet glue at dispatch room
- 30. Carpet glue at television room
- 31. Carpet glue at television room
- 32. 2' x 4' suspended acoustical tile type I at front hallway
- 33. 2' x 4' suspended acoustical ceiling tile type I at laundry/shower room
- 34. 2' x 4' suspended acoustical ceiling tile type II at lockers
- 35. 2' x 4' suspended acoustical ceiling tile type II at bathroom hallway
- 36. 2' x 4' suspended acoustical ceiling tile type III at men's room
- 37. 2' x 4' suspended acoustical ceiling tile type III at men's room
- 38. 2' x 2' suspended acoustical ceiling tile type IV at kitchen
- 39. 2' x 2' suspended acoustical ceiling tile type IV at kitchen
- 40. 2' x 4' suspended acoustical ceiling tile type V at boiler room
- 41. 2' x 4' suspended acoustical ceiling tile type V at boiler room
- 42. 2' x 4' suspended acoustical ceiling tile type VI at dispatch room
- 43. 2' x 4' suspended acoustical ceiling tile type VI at dispatch room
- 44. Tectum roof deck above ceiling in men's room
- 45. White plaster at truss above ceiling in men's room
- 46. Tectum roof deck above ceiling by lockers
- 47. White plaster at truss above ceiling by lockers
- 48. Chimney cement around flue pipe in boiler room
- 49. Grey window framing caulking on exterior parking lot side
- 50. Grey window framing caulking on exterior parking lot side behind metal frame
- 51. Grey framing caulking for roll up door at exterior front of engine bay
- 52. Grey window framing caulking on exterior bay side behind metal frame

Sample Results:

Type and Location of Suspect Material

- 1. Light tan vinyl floor tile type I at front hallway
- 2. Brown mastic for light tan vinyl floor tile type I at front hallway
- 3. Light tan vinyl floor tile type I at hallway by custodian closet
- 4. Brown mastic for light tan vinyl floor tile type I at hallway by custodian closet
- 5. Grey vinyl floor tile type II at kitchen
- 6. Adhesive for grey vinyl floor tile type II at kitchen
- 7. Grey vinyl floor tile type II at lockers

Sample Result

No Asbestos Detected No Asbestos Detected No Asbestos Detected No Asbestos Detected 2% Asbestos No Asbestos Detected

No Asbestos Detected

No Asbestos Detected

No Asbestos Detected No Asbestos Detected No Asbestos Detected No Asbestos Detected No Asbestos Detected No Asbestos Detected No Asbestos Detected No Asbestos Detected No Asbestos Detected

No Asbestos Detected

No Asbestos Detected No Asbestos Detected

No Asbestos Detected

No Asbestos Detected

No Asbestos Detected

35% Asbestos

35% Asbestos

5% Asbestos

5% Asbestos

| 8. | Adhesive for grey vinyl floor tile type II at lockers |
|-----|--|
| 9. | Fancy linoleum floor covering at closet |
| 10. | Adhesive for fancy linoleum floor covering at closet |
| 11. | Fancy linoleum floor covering at custodian closet |
| 12. | Adhesive for fancy linoleum floor covering at custodian closet |
| 13. | Insulation board in concrete floor at engine bay |
| 14. | Insulation board in concrete floor at dispatch room |
| 15. | Damproofing for sink at kitchen |
| 16. | Joint compound at engine bay chase |
| 17. | Joint compound at bathroom hallway |
| 18. | Joint compound at kitchen dividing wall |
| 19. | Joint compound at front hallway |
| 20. | Joint compound at kitchen by door |
| 21. | Adhesive for yellow glazed wall tile at weight room |
| 22. | Grout for yellow glazed wall tile at weight room |
| 23. | Adhesive for yellow glazed wall tile at laundry/shower room |
| 24. | Grout for yellow glazed wall tile at laundry/shower room |
| 25. | Joint compound at laundry/shower room |
| 26. | Adhesive for ceramic floor at men's room |
| 27. | Adhesive for ceramic wall at custodian closet |
| 28. | Carpet glue at dispatch room |
| 29. | Carpet glue at dispatch room |
| 30. | Carpet glue at television room |
| 31. | Carpet glue at television room |
| 32. | 2' x 4' suspended acoustical tile type I at front hallway |
| 33. | 2' x 4' suspended acoustical ceiling tile type I at laundry/shower room |
| 34. | 2' x 4' suspended acoustical ceiling tile type II at lockers |
| 35. | 2' x 4' suspended acoustical ceiling tile type II at bathroom hallway |
| 36. | 2' x 4' suspended acoustical ceiling tile type III at men's room |
| 37. | 2' x 4' suspended acoustical ceiling tile type III at men's room |
| 38. | 2' x 2' suspended acoustical ceiling tile type IV at kitchen |
| 39. | 2' x 2' suspended acoustical ceiling tile type IV at kitchen |
| 40. | 2' x 4' suspended acoustical ceiling tile type V at boiler room |
| 41. | 2' x 4' suspended acoustical ceiling tile type V at boiler room |
| 42. | 2' x 4' suspended acoustical ceiling tile type VI at dispatch room |
| 43. | 2' x 4' suspended acoustical ceiling tile type VI at dispatch room |
| 44. | Tectum roof deck above ceiling in men's room |
| 45. | White plaster at truss above ceiling in men's room |
| 46. | Tectum roof deck above ceiling by lockers |
| 47. | White plaster at truss above ceiling by lockers |
| 48. | Chimney cement around flue pipe in boiler room |
| 49. | Grey window framing caulking on exterior parking lot side |
| 50. | Grey window framing caulking on exterior parking lot side behind metal frame |

- 51. Grey framing caulking for roll up door at exterior front of engine bay
- 52. Grey window framing caulking on exterior bay side behind metal frame

Observation and Conclusions:

The condition of ACM is very important. ACM in good condition does not present a health issue unless it is disturbed. Therefore, it is not necessary to remediate ACM in good condition unless it will be disturbed through renovations, demolition or other activity.

- 1. Adhesive for grey vinyl floor tile type II at kitchen was found to contain asbestos.
- 2. Fancy linoleum floor covering at closet was found to contain asbestos.
- 3. Adhesive for yellow glazed wall tile was found to contain asbestos.

- 4. Door framing caulking was assumed to contain asbestos.
- 5. Roofing material was assumed asbestos. Roofing material does not have to be removed by a licensed asbestos contractor. However, the General Contractor must comply with OSHA regulation during removal and with state regulations for proper disposal. A non-traditional abatement plan would have to be prepared and submitted to the DEP for approval.
- 6. All other suspect materials were found not to contain asbestos. Hidden ACM may be found during renovations and demolition activities.

Polychlorinated Biphenyls (PCB's)-Electrical Equipment and Light Fixtures:

Observations and Conclusions

Visual inspection of various equipments such as light fixtures, thermostats, exit signs and switches was performed for the presence of PCB's and mercury. Ballasts in light fixtures were assumed not to contain PCB's since there were labels indicating that "No PCB's" was found. Tubes in light fixtures, thermostats, signs and switches were assumed to contain mercury. It would be very costly to test those equipments and dismantling would be required to access. Therefore, the above mentioned equipments should be disposed in an EPA approved landfill as part of the demolition project.

Lead Based Paint:

Observations and Conclusions

LBP was assumed to exist on painted surfaces. A Fire Station is not considered a regulated facility. All LBP activities performed, including waste disposal, should be in accordance with applicable Federal, State, or local laws, ordinances, codes or regulations governing evaluation and hazard reduction. In the event of discrepancies, the most protective requirements prevail. These requirements can be found in OSHA 29 CFR 1926-Construction Industry Standards, 29 CFR 1926.62-Construction Industry Lead Standards, 29 CFR 1910.1200-Hazards Communication, 40 CFR 261-EPA Regulations. According to OSHA, any amount of LBP triggers compliance.

3.0 COST ESTIMATES:

| Location | Material | Approximate Quantity | Cost Estimate (\$) |
|-------------------------|---|-------------------------------|--------------------------------|
| Kitchen Area Closets | Vinyl Floor Tiles and Mastic Linoleum Floor Covering | 360 SF 35 SF | 3,600.00 700.00 |
| Various Locations | Glazed Wall Tiles and Adhesive Miscellaneous Hazardous Materials Light Fixtures | 220 SF Unknown 30 Total | 2,200.00 1,000.00 900.00 |
| Exterior | Doors | 4 Total | 500.00 |
| Estimated costs for Des | ign, Construction Monitoring and Air Sampling Serv | ices | 4,100.00 |
| | | TOTAL: | \$ 13,000.00 |

The cost includes removal and disposal of all accessible ACM, other hazardous material and an allowance for removal of inaccessible or hidden ACM that may be found during renovations or demolition project

4.0 DESCRIPTION OF SURVEY METHODS AND LABORATORY ANALYSES:

Asbestos samples were collected using a method that prevents fiber release. Homogeneous sample areas were determined by criteria outlined in EPA document 560/5-85-030a. Bulk material samples were analyzed using PLM and dispersion staining techniques in accordance with EPA method 600/M4-82-020.

5.0 LIMITATIONS AND CONDITIONS:

This report has been completed based on visual and physical observations made and information available at the time of the site visits, as well as an interview with the Owner's representatives. This report is intended to be used as a summary of available information on existing conditions with conclusions based on a reasonable and knowledgeable review of evidence found in accordance with normally accepted industry standards, state and federal protocols, and within the scope and budget established by the client. Any additional data obtained by further review must be reviewed by UEC and the conclusions presented herein may be modified accordingly.

This report and attachments, prepared for the exclusive use of Owner for use in an environmental evaluation of the subject site, are an integral part of the inspections and opinions should not be formulated without reading the report in its entirety. No part of this report may be altered, used, copied or relied upon without prior written permission from UEC, except that this report may be conveyed in its entirety to parties associated with Owner for this subject study.

Inspected By:

erman Buss

Leonard J. Busa Asbestos Inspector

Asbestos Identification Laboratory

165 New Boston St., Ste 227 Woburn, MA 01801 781-932-9600

Web: www.asbestosidentificationlab.com Email: mikemanning@asbestosidentificationlab.com



29584

Lab Code: 200919-0

February 12, 2018

Ammar Dieb Universal Environmental Consultants 12 Brewster Road Framingham, MA 01702

Project Number: Project Name: Harwich Fire # 2 - Harwich, MA

Batch:

 Date Sampled:
 2018-02-08

 Work Received:
 2018-02-08

 Work Analyzed:
 2018-02-09

Analysis Method: BULK PLM ANALYSIS EPA/600/R-93/116

Dear Ammar Dieb,

Asbestos Identification Laboratory has completed the analysis of the samples from your office for the above referenced project .

The information and analysis contained in this report have been generated using the EPA /600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials. Materials or products that contain more than 1% of any kind or combination of asbestos are considered an asbestos containing building material as determined by the EPA. This Polarized Light Microscope (PLM) technique may be performed either by visual estimation or point counting. Point counting provides a determination of the area percentage of asbestos in a sample. If the asbestos is estimated to be less than 10% by visual estimation of friable material, the determination may be repeated using the point counting technique. The results of the point counting supersede visual PLM results. Results in this report only relate to the items tested. This report may not be used by the customer to claim product endorsement by NVLAP or any other U.S. Government Agency.

Laboratory results represent the analysis of samples as submitted by the customer. Information regarding sample location, description, area, volume, etc., was provided by the customer. Asbestos Identification Laboratory is not responsible for sample collection activities or analytical method limitations. Unless notified in writing to return samples, Asbestos Identification Laboratory discards customer samples after 30 days. Samples containing subsamples or layers will be analyzed separately when applicable. Reports are kept at Asbestos Identification Laboratory for three years. This report shall not be reproduced, except in full, without the written consent of Asbestos Identification Laboratory.

- NVLAP Lab Code: 200919-0
- Massachusetts Certification License: AA000208
- State of Connecticut, Department of Public Health Approved Environmental Laboratory Registration Number: PH-0142
- State of Maine, Department of Environmental Protection Asbestos Analytical Laboratory License Number: LB-0078(Bulk) LA-0087(Air)
- State of Rhode Island and Providence Plantations. Department of Health Certification: AAL-121
- State of Vermont, Department of Health Environmental Health License AL934461

Thank you Ammar Dieb for your business.

Michael Thank

Michael Manning Owner/Director



February 12, 2018

Ammar Dieb Universal Environmental Consultants 12 Brewster Road Framingham, MA 01702

Project Name: Harwich Fire # 2 - Harwich, MA

 Date Sampled:
 2018-02-08

 Work Received:
 2018-02-08

 Work Analyzed:
 2018-02-09

Project Number:

Analysis Method: BULK PLM ANALYSIS EPA/600/R-93/116

| Field | did | Material | Location | Color | Non-Asbestos % | % | Asbestos % |
|-------|--------|------------------------------------|----------------------|--------|--------------------------|----------|---------------------------|
| | LabID | | | | | | |
| 1 | | VT - I (Light Tan) | Front Hall | tan | Non-Fibrous | 100 | None Detected |
| | 333557 | | | | | | |
| 2 | | Brown Mastic # 1 | Front Hall | brown | Non-Fibrous 2 | 100 | None Detected |
| | 333558 | | | | | | |
| 3 | | VT - I | Hall by Cust. Closet | tan | Non-Fibrous 2 | 100 | None Detected |
| | 333559 | | | | | | |
| 4 | | BR (M) # 3 | Hall by Cust. Closet | yellow | Non-Fibrous 2 | 100 | None Detected |
| | 333560 | | | | | | |
| 5 | | VT - II (Grey) | Kitchen | gray | Non-Fibrous 1 | 100 | None Detected |
| | 333561 | | | | | | |
| 6 | | Adhesive # 5 | Kitchen | yellow | Non-Fibrous | 98 | Detected Chrysotile 2 |
| | 333562 | | | | | | |
| 7 | | VT - II | Lockers | gray | Non-Fibrous 1 | 100 | None Detected |
| | 333563 | | | | | | |
| 8 | | Adhesive # 7 | Lockers | yellow | Non-Fibrous 1 | 100 | None Detected |
| | 333564 | | | | _ | | |
| 9 | | Fancy Linoleum | Closet | multi | Cellulose Non-Fibrous | 5 60 | Detected Chrysotile 35 |
| | 333565 | | | | | 00 | _ |
| 10 | | Adhesive # 9 | Closet | yellow | Non-Fibrous 1 | 100 | None Detected |
| | 333566 | | | | | | |
| 11 | | Fancy Linoleum | Cust. Closet | multi | Cellulose | 5 | Detected Chrysotile 35 |
| | 333567 | | | | NOII-FIDEOUS | 00 | |
| 12 | | Adhesive # 11 | Cust. Closet | yellow | Non-Fibrous 1 | 100 | None Detected |
| | 333568 | | | | | | |
| 13 | | Insulation Board in Conc. Floor | Engine Bay | black | Non-Fibrous 1 | 100 | None Detected |
| | 333569 | | | | | | |
| 14 | | Insulation Board in Conc. | Dispatch Room | black | Cellulose Non-Fibrous | 75 25 | None Detected |
| | 333570 | | | | | 20 | |
| | | | | | | - | |

| FieldID | | Material | Location Co | | Non-Asbestos % | Asbestos % | |
|---------|--------|---|-----------------------|----------|------------------|--------------------------|--|
| | LabID | | | | | | |
| 15 | | Damp Proofing for Sink | Kitchen | black | Non-Fibrous 100 | None Detected | |
| | 333571 | | | | | | |
| 16 | | Joint Compound (JC) | Engine Bay Chase | white | Non-Fibrous 100 | None Detected | |
| | 333572 | | | | | | |
| 17 | | JC | Bathroom Hall | white | Non-Fibrous 100 | None Detected | |
| | 333573 | | | | | | |
| 18 | | JC | Kitchen Dividing Wall | white | Non-Fibrous 100 | None Detected | |
| | 333574 | | | | | | |
| 19 | | JC | Front Hall | white | Non-Fibrous 100 | None Detected | |
| | 333575 | | | | | | |
| 20 | | JC | Kitchen @ Door | white | Non-Fibrous 100 | None Detected | |
| | 333576 | | | | | | |
| 21 | | Adhesive for Yellow Glazed Wall Tile | Weight Room | brown | Non-Fibrous 95 | Detected Chrysotile 5 | |
| ļ | 333577 | | | | | | |
| 22 | | Grout # 21 | Weight Room | white | Non-Fibrous 100 | None Detected | |
| 00 | 333578 | | | | | | |
| 23 | | Glazed Wall Tile | Laundry/Snower Room | brown | Non-Fibrous 95 | Chrysotile 5 | |
| 24 | 333579 | Crout # 22 | Loundry/Chower Doom | white | Ner Fibrers 100 | None Detected | |
| 24 | | | Laundry/Snower Room | white | Non-Fibrous 100 | None Delected | |
| 25 | 333580 | IC on # 22 | Loundry/Shower Doom | white | Non Eibroug 100 | None Detected | |
| 25 | | | Laundry/Shower Room | white | Non-Fibrous 100 | None Detected | |
| 26 | 333581 | Adhesive for Ceramic | Mon's Room | vellow | Non Eibroug 100 | None Detected | |
| 20 | 222500 | Floor | Men's Koom | yenow | Non-Fibrous 100 | None Delected | |
| 27 | 333582 | Adhesive for Ceramic Wall | Cust. Closet | vellow | Non-Fibrous 100 | None Detected | |
| | | _ | | , | | | |
| 28 | 333583 | Carpet Glue | Dispatch Room | vellow | Non-Fibroug 100 | None Detected | |
| | | | | yenow | NOII-FIDIOUS 100 | | |
| 20 | 333584 | Corpot Cluo | Diapatah Room | vellow | Non Fibroug 100 | None Detected | |
| 29 | | | Dispatch Room | yellow | Non-Fibrous 100 | None Decected | |
| | 333585 | | | | | | |
| 30 | | Carpet Glue | TV Room | yellow | Non-Fibrous 100 | None Detected | |
| | 333586 | | | | | | |
| 31 | | Carpet Glue | TV Room | yellow | Non-Fibrous 100 | None Detected | |
| | 333587 | | | | | | |
| 32 | | 2 X 4 SAT - I (Small Side | Front Hall | multi | Mineral Wool 50 | None Detected | |
| | 333588 | | | | Non-Fibrous 10 | | |
| L | 333300 | | I | | | I | |

| Fiel | dID | Material | Location | Color | Non-Asbestos % | 6 Asl | pestos % |
|------|----------------|--|------------------------|----------|--|---------------------|------------|
| | LabID | | | | | | |
| 33 | 222500 | SAT - I | Laundry/Shower Room | multi | Mineral Wool Cellulose Non-Fibrous | 50 Non 40 10 | e Detected |
| 34 | 333589 | 2 X 4 SAT - II (Small Spiral) | Lockers | multi | Mineral Wool Cellulose | 40 Non 40 | e Detected |
| 05 | 333590 | 0.4.T. II | | | Non-Fibrous | 20 | |
| 35 | 333591 | SAT - II | Bathroom Hall | multi | Mineral Wool Cellulose Non-Fibrous | 40 None 40 20 | e Detected |
| 36 | | 2 X 4 SAT - III (Small Hash Marks) | Men's Room | multi | Mineral Wool Cellulose | 40 Non 40 | e Detected |
| 37 | 333592 | SAT - III | Men's Room | multi | Non-Fibrous Mineral Wool Cellulose | 40 None 40 | e Detected |
| | 333593 | | | | Non-Fibrous | 20 | |
| 38 | 333594 | 2 X 2 SAT - IV (Long Side Fissures) | Kitchen | tan | Mineral Wool Cellulose Non-Fibrous | 40 None 40 20 | e Detected |
| 39 | 555571 | SAT - IV | Kitchen | multi | Mineral Wool Cellulose | 40 Non 40 | e Detected |
| | 333595 | | | | Non-Fibrous | 20 | |
| 40 | | 2 X 4 SAT - V (Side Fissures w/ Pinholes) | Boiler Room | multi | Mineral Wool Cellulose | 50 None 30 | e Detected |
| 41 | 333596 | SAT - V | Boiler Room | multi | Mineral Wool | 50 Non | - Detected |
| | 333597 | | | mana | Cellulose Non-Fibrous | 30 20 | |
| 42 | | 2 X 4 SAT - VI | Dispatch Room | multi | Mineral Wool Cellulose | 40 Non 40 | e Detected |
| | 333598 | | | | Non-Fibrous | 20 | |
| 43 | | SAT - VI | Dispatch Room | multi | Mineral Wool Cellulose | 40 None 40 | e Detected |
| 44 | 333599 | Tectum Roof Deck | Above SAT - Men's Room | multi | Cellulose Non-Fibrous | 90 Non 10 | e Detected |
| | 333600 | | | | | | |
| 45 | 333601 | White Plaster @ Truss by # 44 | Above SAT - Men's Room | white | Non-Fibrous 1 | .00 Non | e Detected |
| 46 | 555001 | Tectum Roof Deck | Above SAT - Lockers | multi | Cellulose Non-Fibrous | 90 Non 10 | e Detected |
| | 333602 | | | | 1 | | |
| 47 | 333603 | White Plaster @ Truss by # 46 | Above SAT - Lockers | white | Non-Fibrous 1 | .00 Non | e Detected |
| 48 | 333003 | Mud around Flue Pipe @ Chimney | Boiler Room | gray | Non-Fibrous 1 | .00 Non | e Detected |
| | 333604 | | | | | | |
| 49 | 333605 | Grey Window Frame Caulk | Parking Lot Side | gray | Mineral Wool Non-Fibrous | 2 Non 98 | e Detected |
| Mono | day 12 Februar | Гу ГУ | | <u> </u> | I | Page 3 | of 4 |

| FieldID | Material | Location | Color | Non-Asbestos % | Asbestos % |
|------------------|-----------------------------|--|-------|-----------------|---------------|
| LabID | | | | | |
| 50 | Grey Window Frame -Caulk | Parking Lot Side behind Metal Frame | gray | Non-Fibrous 100 | None Detected |
| 333606 | | | | | |
| 51 | Grey FR for Roll-up Door | Front of Engine Bay | gray | Non-Fibrous 100 | None Detected |
| 333607 | | | | | |
| 52 | Grey Window Frame -Caulk | Bay Side, behind Metal Frame | gray | Non-Fibrous 100 | None Detected |
| 333608 | | | | | |
| Monday 12 Februa | ry D | 2 End of Report | | Pa | ige 4 of 4 |
| Analyzed by: | Jan | Batch: 29584 | | | |

CHAIN OF CUSTODY

| Universal Envi | ronmental Consultante | | | | | | | |
|---------------------------------------|---|-----------------------|--|--|--|--|--|--|
| 12 Brewster Ro | ad | | | | | | | |
| Framingham, M | A 01702 | | | | | | | |
| Tel: (508) 628-5 | Tel: (508) 628-5486 - Fax: (508) 628-5488 | | | | | | | |
| adieb@uec-en | /.com | | | | | | | |
| | | | | | | | | |
| Town/City: | Building Name | Harwich Fire C | | | | | | |
| Sample | | | | | | | | |
| A A A A A A A A A A A A A A A A A A A | | Sample Location | | | | | | |
| | VI-I Light tax) | Front hall | | | | | | |
| 2 | Brown mastic # 1 | <i>44 5</i> 7 | | | | | | |
| 3 | WTIT | hall by cust. closet | | | | | | |
| 4 | Br (m) # 3 | 48 (21 m | | | | | | |
| _5 | VT-II (grey) | Kitchen | | | | | | |
| 6 | Adhesive + 5 | 11 4 | | | | | | |
| _7 | VT-II | Lockers | | | | | | |
| 8 | Adh =7 | ii t | | | | | | |
| . 9 | FANGY Lino | clicat | | | | | | |
| 10 | Adh + g | 11 | | | | | | |
| 11 | LANCY LIND | aust clical | | | | | | |
| 12 | AdH+11 | 16 c. | | | | | | |
| 13 | insulation board : caye | | | | | | | |
| 14 | encul board in a child | La VI | | | | | | |
| 15 | democratica Con é de | or disparthim | | | | | | |
| 16 | doint Correct of SINK | Kitchen | | | | | | |
| 17 | IC | Engine BAY CHASE | | | | | | |
| 18 | | Bathem hall | | | | | | |
| iG I | | Kitchen dividing wall | | | | | | |
| 70 | ic . | Fronthall | | | | | | |
| | | Kitchen C. door | | | | | | |
| Reported By | Date: | 7-18 Due Date: 48 hr | | | | | | |
| Received By: | UMU Date: 2181 | 18 | | | | | | |

103

CHAIN OF CUSTODY

| liniversal F | nvironmontal Consultante | |
|---------------|-------------------------------|-------------------------|
| 12 Brewster | Road | |
| Framingham | , MA 01702 | |
| Tel: (508) 62 | 28-5486 - Fax: (508) 628-5488 | |
| adieb@uec- | env.com | <i>i</i> |
| Town/City: | Howich ma Building Name | Marwich Fire #2 |
| Sample Re | sult Description of Material | Sample Location |
| 21 | adhesive for yellow 9 | lazed wall file minhton |
| 22 | growt + 2 | usicht an |
| 23 | Adh for yellow glazed | vallfile lamidalchar |
| 24 | grout #23 | " " " |
| 25 | UC on # 23 | N 11 6 |
| 26 | Adh. for ceramic floor | men's m |
| 27 | Adh. for ceramic wall | eust alocal |
| 28 | CArpet glue | dispatcha |
| . 29 | CARP. glue | 14 II |
| 30 | CARDETalue | TV |
| 31 | CARD. glup | 11 11 |
| 32 | 2×4 SAT-I (small side + | Freynes) Frankhall |
| 33 | SAT-t | landa lat |
| 34 | 2×4 SAT-II (Smallsoi | all facility snower com |
| 35 | SAT-TL | Bathy hall |
| 36 | 2x4 SAT-TIT (sm hashm | Ve meniso |
| 37 | SAT-TTL | menico |
| 38 | ZXZ SAT-TE Cloniside | fissure Vili |
| 34 | SAT-TU | 1.41 |
| 40 | 2×4 SAT-I Sidefie | vres Taiphales 2.1 |
| Reported By: | Lend Bune Date: 2- | 7-18 Due Date: 48 hr |
| Received By: | Date: | |

5

2,3

CHAIN OF CUSTODY

3: _3

| Universa | Environm | iental Consultants | |
|-----------|-------------|---------------------------------------|------------------------------|
| 12 Brews | ster Road | 1702 | |
| Framingh | 1811, MA UI | Fox: (508) 628-5488 | |
| adieb@u | 1020-0400 | n | |
| aulentau | | | 1/2 + 2 |
| Town/City | | Building Name | erorwich Pite C |
| Sample | Result | Description of Material | Sample Location |
| 41 | | SAT-I | Boiler Rm |
| 42 | | 244 SAT TI | Dispatchim |
| 43 | | SAT TI | Tispatch rm |
| HU | | Terring out deck | ABOUR SAT. men's m |
| 4 | | white plaster & Taiss | h + 44 " " " |
| .75 | | Tak and der k | ARNIP SAT LOCKERS |
| 76 | | rector for the | # 11/ 11 11 L |
| 4/ | | WRITE OLA. C Tross by | 76 |
| - 48 | | mud Around flue pipe 6 | Chinney Obiler.rm |
| . 49 | | Grey aindow frame CASI. | parting but side |
| 50 | | Grey win Fr | pky lot side behind metal to |
| 51 | · | Gra, fi for roil-up doos | Frast of Engine Bay |
| 52 | | Gree win fr | Boy side, behind motal fr |
| | | 0 | 0 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | · · · · · · · · · · · · · · · · · · · | |
| | | | |
| | | | |
| Reported | B | Bun Date: 2-7 | 7-18 Due Date: <u>48-hr</u> |
| Received | d By: | Date: | |