ADDENDUM NUMBER 3 ON INVITATION TO BID ITB20KO-117

TITLE: Chilled Water Pipe Replacement – Dental Science Building Floors 8, 9 and 10

Mandatory pre-bid meeting was held at the site on August 19, 2019 at 10:30 AM. Bid opening will be held September 24, 2019 at 3:00 PM in UF Procurement Services, 971 Elmore Drive, Gainesville, FL 32611.

This addendum shall be considered part of the Contract Documents for the above-mentioned project as though it had been issued at the same time and incorporated integrally therewith. Where provisions of the following supplementary data differ from those of the original Contract documents, this addendum shall govern and take precedence. Bidders are hereby notified that they shall acknowledge receipt of the addendum.

NOTES:


Karen Olitsky
Procurement Agent III

PLEASE ACKNOWLEDGE RECEIPT OF THIS ADDENDUM 3 AND RETURN WITH YOUR BID. FAILURE TO ACKNOWLEDGE THIS ADDENDUM COULD CONSTITUTE REJECTION OF YOUR BID.
September 16, 2019

Mr. Robert Hatker
Planning, Design and Construction
University of Florida
P.O. Box 115050
232 Stadium Road
Gainesville, Florida 32611

RE: Asbestos Abatement Work Plan
Dental Science Chilled Water Pipe Replacement – Floors 8-10
MP-04810
University of Florida
Gainesville, Florida

GLE Project No.: 19140-01824

Dear Mr. Hatker:

GLE Associates, Inc. (GLE) has prepared the attached Work Plan for the removal of asbestos-containing materials from within the Dental Science Building, Building 205, located at the University of Florida, in Gainesville, Florida.

GLE appreciates the opportunity to work with you on this project. Should you have questions regarding the Work Plan, please do not hesitate to contact our office.

Sincerely,

GLE Associates, Inc.
Asbestos Business License ZA0000034

Artiom Chacon
Senior Project Manager

Robert B. Greene PE, PG, CIH, LEED AP
President
Florida LAC# EA000009

cc: Tom Ladun, Environmental Health and Safety

G:\Work\Asbestos\19\19140-UF\01824 UF PDC DSB Floors 8-10 Plenum Survey\Report\Work Plan\wp01.doc
ASBESTOS ABATEMENT WORK PLAN

Dental Science Chilled Water Pipe Replacement
Floors 8-10
MP-04810
University of Florida
Gainesville, Florida

GLE Project No.: 19140-01824

Prepared for:

Mr. Robert Hatker
Planning, Design and Construction
University of Florida
P.O. Box 115050
232 Stadium Road
Gainesville, Florida 32611

September 2019

Prepared by:

GLE
2228 NW 40th Terrace, Suite C
Gainesville, Florida 32605
352-335-6648 • Fax 352-335-6187
1.0 INTRODUCTION

A. This work plan is an abbreviated description of task requirements prepared for the removal of asbestos-containing black mastic associated with foamglass thermal systems insulation, coinciding with the renovations to the Dental Science Building, Building 205, located at the Gainesville Campus of the University of Florida.

B. All work shall be performed in strict accordance with all federal, state and local regulations and ordinances, and in a manner which conforms to the intent of all health and safety laws.

C. All work must comply with abatement procedures described in the Annual Contract for Asbestos Abatement and Re-insulation dated 2017, herein referred to the Master Specification developed for University of Florida, and to sections applicable to the scope of the work, which are to be used as primary requirements in conjunction with the Work Plan.

2.0 SCOPE OF THE WORK

A. This project involves the removal and disposal of asbestos-containing thermal systems insulation from Dental Science Building - Building 205, as shown in the attached drawings AA-1 through AA-2. The work may be conducted in multiple phases as determined by the Owner.

The CONTRACTOR shall be responsible for field verification of existing quantities and conditions.

B. For the purpose of this Work Plan, "start date" shall mean the "day CONTRACTOR arrives on-site", and "complete date" shall mean the "day CONTRACTOR leaves the project site", work area tear down, etc. The Owner shall determine the start and completion dates for this project.

Under no circumstances shall the CONTRACTOR disrupt the daily operations of the Owner.
3.0 GENERAL REQUIREMENTS

A. Existing conditions are reflected correctly to the best of the OWNER REPRESENTATIVE'S knowledge. Refer to Section 01 11 00 - SUMMARY OF WORK of the Specifications for CONTRACTOR'S responsibility for verification of existing conditions.

B. In the event that conditions are encountered in the field which were not identified in the Work Plan, the OWNER'S REPRESENTATIVE shall be notified immediately.

C. Modifications of this Work Plan can be made in writing by the OWNER'S REPRESENTATIVE.

D. If CONTRACTOR proceeds, without written notification from the OWNER'S REPRESENTATIVE, CONTRACTOR shall be solely and completely liable for those efforts.

E. Power and water for this specific project will be provided by the OWNER. The cost of all utilities shall be paid by the Owner. Coordinate any utility outages as applicable with the appropriate university personnel.

F. PRE-JOB SUBMITTALS

1. Prior to commencement of the work, CONTRACTOR shall submit one copy of the required information, as per Section 01 32 19 of the Master Specification, to the OWNER'S REPRESENTATIVE. No work will be allowed to commence without required submittals.

2. In reference to section 01 32 19 of the Master Specification and in conjunction with pre-job submittals, Contractor shall furnish OWNER'S REPRESENTATIVE all MSDS information.

   No products or equipment shall be utilized in the performance of abatement without prior approval by OWNER'S REPRESENTATIVE. Contractor shall provide documentation to the Owner that describes any necessary replacement materials.
4.0 PROJECT COORDINATION

A. GENERAL

1. The project will be coordinated with the OWNER'S PROJECT MANAGER in conjunction with the OWNER'S REPRESENTATIVE. CONTRACTOR SHALL PERFORM NO WORK UNLESS APPROVAL BY THE OWNER OR OWNER'S REPRESENTATIVE HAS BEEN RECEIVED. UNDER NO CIRCUMSTANCES SHALL CONTRACTOR DISRUPT THE DAILY ACTIVITIES OF ANY FACILITY WITHOUT PRIOR APPROVAL BY THE OWNER.

2. CONTRACTOR shall not perform any work in the absence of OWNER'S REPRESENTATIVE, who shall decide, in his absolute discretion, as to the meaning and applicability of any part of this Work Plan and/or the Master Specification.

5.0 ASBESTOS ABATEMENT REQUIREMENTS

A. PERSONNEL AND RESPIRATORY PROTECTION

1. During isolation and preparation of the Work Area, workers are not required to wear respiratory protection, as outlined in Section 01 57 19 of the Master Specifications.

2. During removal and final cleaning, workers shall wear half-face respiratory protection as a minimum, as outlined in Section 01 57 19 of the Master Specifications.

3. All personnel shall wear disposable coveralls during all abatement activities.

B. REMOVAL OF ASBESTOS-CONTAINING MATERIALS

1. CONTRACTOR shall utilize Section 02 82 00 of the Master Specifications – Conventional Removal, or Glove Bag Removal in performance of black mastic associated with foamglass insulation removal and disposal. In addition to these requirements, Contractor shall maintain a minimum of 0.02 column inches of water pressure differential, relative to outside pressure, within the negative pressure enclosure (NPE) as evidenced by manometric measurements. All other applicable sections of the Master Specification shall additionally be utilized.
Asbestos Abatement Work Plan
Dental Science Chilled Water Pipe Replacement, Floors 8-10
GLE Project No.: 19140-01824

2. CONTRACTOR shall be responsible for securing the facility to original status prior to start of abatement procedures.

C. PROJECT MONITORING AND WORK AREA CLEARANCE CRITERIA

1. GLE will perform project monitoring during all abatement activities. Project Clearance shall be determined with respect to size and scope of the work area. Reference Section 01 74 23.1 of Master Specifications.

D. DISPOSAL OF ASBESTOS-CONTAINING WASTE MATERIALS

1. Disposal of asbestos-containing waste material shall be performed in strict compliance with Section 02 82 00 of the Master Specifications.

2. Transport bagged ACM waste from the work area to a storage container or transportation vehicle in a covered cart. All transport must occur between the hours of 7:00 pm and 7:00 am, or at the discretion of the Owner.

E. POST-JOB SUBMITTALS

1. After successful completion of the project, submit one copy of required documentation, as per Section 01 32 19 of the Master Specification, to the OWNER'S REPRESENTATIVE. Final payment to CONTRACTOR will not be made until required post-job submittals have been received and approved by OWNER'S REPRESENTATIVE. All submittals must be received by the Owner's Representative, GLE, within 10 calendar days of project completion. All submittals shall be unbound and complete or shall be returned to the Contractor for correction.

6.0 UNIVERSITY OF FLORIDA ASBESTOS CONTRACTOR GENERAL LIABILITY INSURANCE POLICY

A. ASBESTOS ABATEMENT WORK

All projects including asbestos abatement work are required to comply with the following University policy as it pertains to the asbestos abatement portion of the work:

For all asbestos projects with work beginning after June 30, 2011 the University of Florida require asbestos contractors doing work for the University to carry asbestos general liability insurance in addition to all other insurance coverage’s (including but
not limited to automobile and workers compensation) required by the bid and contract documents. The asbestos related insurance policy must be procured through an underwriter with an A.M. Best rating of A, X or better lawfully authorized to do business in Florida as of the time of this bid (or, as of the time the asbestos abatement work is added to the contract). The insurance policy shall provide that the University of Florida is named as an additional insured. The University shall not be responsible for any sums of money associated with the policy, including any deductible. Coverage shall be on "occurrence" basis, rather than "claims made" and must protect Contractor from all claims arising out of the Contractor's asbestos abatement work for the University. The minimum limits of liability for the asbestos contractor general liability are:

Each Occurrence Limit................................................................. $1,000,000
Personal Injury and Advertising Injury Limit................................. $1,000,000
Fire Damage Limit (any one fire)................................................ $50,000
Medical Expense Limit (any one person)...................................... $5,000
Products and Completed Operations Aggregate Limit.................... $1,000,000
Aggregate Limit (other than Products/Completed Operations)........... $1,000,000

The Contractor shall file with the University a certificate of insurance and a copy of the policy acceptable to the University prior to the commencement of the work. The policy shall remain in force without interruption from the date of the commencement of the work until the work is completed and the Contractor is off site. The certificate and policy shall indicate that coverage’s afforded under the policy will not be canceled or allowed to expire until at least 30 days prior written notice has been given to the University.

END OF WORK PLAN
LIMITED PRE-RENOVATION
ASBESTOS SURVEY REPORT

Dental Science Chilled Water
Pipe Replacement – Floors 8-10
MP04810
University of Florida
Gainesville, Florida

GLE Project No.: 19140-01824

Prepared for:

Mr. Robert Hatker
Planning, Design and Construction
University of Florida
P.O. Box 115050
232 Stadium Road
Gainesville, Florida 32611

September 2019

Prepared by:
September 16, 2019

Mr. Robert Hatker
Planning, Design and Construction
University of Florida
P.O. Box 115050
232 Stadium Road
Gainesville, Florida 32611

RE: Limited Pre-Renovation Asbestos Survey Report
Dental Science Chilled Water Pipe Replacement – Floors 8-10
MP-04810
University of Florida
Gainesville, Florida

GLE Project No.: 19140-01824

Dear Mr. Hatker:

GLE Associates, Inc. (GLE) performed a limited pre-renovation survey for asbestos-containing materials (ACM) on August 25 and 26, 2019, at the Dental Science Building, located at the University of Florida in Gainesville, Florida. The survey was performed by Ms. Macy Van Cleave and Mr. Matt Guthrie with GLE. This report outlines the sampling and testing procedures, and presents the results along with our conclusions and recommendations.

GLE appreciates the opportunity to serve as your consultant on this project. If you should have any questions, or if we can be of further service, please do not hesitate to call.

Sincerely,
GLE Associates, Inc.

Macy Van Cleave
Junior Project Manager

Robert B. Greene, PE, PG, CIH, LEED AP
President
Florida LAC# EA 0000009

MVC/AC/PSZ/RBG/lr

GLE Associates, Inc.
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APPENDICES

Appendix A – Analytical Results and Chain of Custody
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1.0 INTRODUCTION

1.1 INTRODUCTION

The purpose of this limited pre-renovation survey was to identify accessible asbestos-containing materials (ACMs) and their general locations within the Dental Science Building, located at the University of Florida in Gainesville, Florida. This survey was limited to the plenums of Floors 8, 9, and 10 of the Dental Science Building. The survey was conducted pursuant to National Emission Standards for Hazardous Air Pollutants (NESHAP, 40 CFR 61) requirements, associated with the scheduled renovation plans. The survey was performed on August 25 and 26, 2019, by Ms. Macy Van Cleave and Mr. Matt Guthrie, Environmental Protection Agency/Asbestos Hazard Emergency Response Act (EPA/AHERA) accredited inspectors. The scope of this survey did not include demolition of any building components, evaluation of architectural plans.

1.2 FACILITY DESCRIPTION

A summary of the facility investigated is outlined in the table below. A representative view of the facility is shown in Appendix C.

<table>
<thead>
<tr>
<th><strong>Interior</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wall Substrate</td>
<td>Drywall and Joint Compound, Plaster</td>
</tr>
<tr>
<td>Ceiling System</td>
<td>Suspended Ceiling System</td>
</tr>
<tr>
<td>Ceiling Finishes</td>
<td>Suspended Ceiling Tiles</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Medical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Date</td>
<td>1975</td>
</tr>
<tr>
<td>Number of Floors</td>
<td>3 in Scope</td>
</tr>
</tbody>
</table>
2.0 RESULTS

2.1 ASBESTOS SURVEY PROCEDURES

The survey was performed by visually observing accessible areas within the scope of work. EPA/AHERA accredited inspectors performed the visual observations (refer to Appendix B for personnel qualifications).

After the overall visual survey was completed, representative sampling areas were determined. The surveyors delineated homogeneous areas of suspect materials and samples of each material were obtained, in general accordance with regulations as established by the Occupational Safety and Health Administration (OSHA) and NESHAP. The field surveyors determined sample locations based on previous experience. Both friable and non-friable materials were sampled. A friable material is one that can be crushed when dry by normal hand pressure. This survey did not include the demolition of building components to access suspect material.

After completion of the fieldwork, the samples were delivered to GLE’s National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory for analysis. The samples were analyzed by Polarized Light Microscopy (PLM) coupled with dispersion staining, in general accordance with EPA-600/R-93/116. Utilizing this procedure, the various asbestos minerals (chrysotile, amosite, crocidolite, actinolite, tremolite, and anthophyllite) can be determined. The percentages of asbestos minerals in the samples were visually determined by the microscopist. Please note that the EPA designates all materials containing greater than one percent asbestos as an “asbestos-containing material” (ACM).

Regulated Asbestos-Containing Material (RACM) is defined as (a) Friable asbestos materials, (b) Category I non-friable ACM that has become friable, (c) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II non-friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this subpart.

Category I and Category II non-friable ACM, as defined by the EPA:

- Category I non-friable ACM means asbestos-containing packings, gaskets, resilient floor covering, asphalt roofing products, and pliable sealants and mastics that are in good condition and not friable, containing more than one percent asbestos, as determined using the method specified in Appendix E, Subpart E, 40 CFR Part 763, Section 1, PLM.

- Category II non-friable ACM means any material, excluding Category I non-friable ACM, containing more than one percent asbestos as determined using the methods specified in Appendix E, Subpart E, 40 CFR Part 763 Section 1, PLM that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.
2.2 IDENTIFIED SUSPECT ASBESTOS-CONTAINING MATERIALS

A total of 81 samples of suspect building materials were collected from the facility during the survey, representing 27 different identified homogeneous areas. The results of the laboratory analyses are included in Appendix A, and photographs of the various materials sampled are included in Appendix C.

Due to accessibility issues, the following areas were not accessed at the time of the survey.

1. Rooms D8-58, D9-50, D9-51, D10-25, D10-52, and D10-53
2. Plenum in stairwells and Room D10-42

A summary of the homogenous sampling areas of suspect ACM determined to be present is outlined in the following table.
### TABLE 2.2-1: SUMMARY OF HOMOGENEOUS SAMPLING AREAS
DENTAL SCIENCE BUILDING – 10TH FLOOR PLENUM
UNIVERSITY OF FLORIDA
GAINESVILLE, FLORIDA

<table>
<thead>
<tr>
<th>HA #</th>
<th>Homogeneous Material Description</th>
<th>Homogeneous Material Location</th>
<th>FRIABILITY (F/NF)</th>
<th>% Asbestos*</th>
<th># of Samples Collected</th>
<th>Approximate Quantity</th>
<th>ACM Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT-01</td>
<td>2’ x 2’ White Fissured Ceiling Tile</td>
<td>Throughout Except D10-33 Suite</td>
<td>F</td>
<td>ND</td>
<td>3</td>
<td>NIS</td>
<td>NA</td>
</tr>
<tr>
<td>CT-02</td>
<td>2’ x 2’ White Recessed Ceiling Tile</td>
<td>D10-33 Suite</td>
<td>F</td>
<td>ND</td>
<td>3</td>
<td>NIS</td>
<td>NA</td>
</tr>
<tr>
<td>FP-01</td>
<td>Tan Fireproofing</td>
<td>South Office Suite</td>
<td>F</td>
<td>ND</td>
<td>3</td>
<td>NIS</td>
<td>NA</td>
</tr>
<tr>
<td>FP-02</td>
<td>Red Fireproofing</td>
<td>Throughout Except South Office Suite</td>
<td>F</td>
<td>ND</td>
<td>3</td>
<td>NIS</td>
<td>NA</td>
</tr>
<tr>
<td>MAS-03</td>
<td>Gray Mastic on Metal Duct</td>
<td>D10-15, D10-17, D10-18</td>
<td>NF</td>
<td>ND</td>
<td>3</td>
<td>NIS</td>
<td>NA</td>
</tr>
<tr>
<td>MAS-04</td>
<td>Gray Fume Hood Exhaust Mastic</td>
<td>D10-6D, D10-07, D10-07A, D10-09</td>
<td>NF</td>
<td>ND</td>
<td>3</td>
<td>NIS</td>
<td>NA</td>
</tr>
</tbody>
</table>

**ASBESTOS CONTENT**
Expressed as percent

* = The facility owner has the option of point-counting by Polarized Light Microscopy (PLM) those RACM whose asbestos content is less than 10% in order to more accurately determine the asbestos content therein.

**FRIABILITY**
F = Friable Material
NF = Non-Friable Material

**ACM CATEGORY**
RACM = Regulated ACM
CAT I = Category I non-friable ACM
CAT II = Category II non-friable ACM

**ABBREVIATIONS:**
HA = Homogeneous Area
SF = Square Feet
LF = Linear Feet
CF = Cubic Feet

PC = Results based on Point-Count analysis
TEM NOB = Transmission Electron Microscopy of Non-Friable Organically Bound Material
### TABLE 2.2-1: SUMMARY OF HOMOGENEOUS SAMPLING AREAS
**DENTAL SCIENCE BUILDING – 10TH FLOOR PLENUM**
**UNIVERSITY OF FLORIDA**
**GAINESVILLE, FLORIDA**

<table>
<thead>
<tr>
<th>HA #</th>
<th>HOMOGENEOUS MATERIAL DESCRIPTION</th>
<th>HOMOGENEOUS MATERIAL LOCATION</th>
<th>FRIABILITY (F /NF)</th>
<th>% ASBESTOS*</th>
<th># OF SAMPLES COLLECTED</th>
<th>APPROXIMATE QUANTITY</th>
<th>ACM CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSI-02</td>
<td>Tan Mastic on Fiberglass TSI</td>
<td>D10-9, D10-17</td>
<td>NF</td>
<td>ND</td>
<td>3</td>
<td>NIS</td>
<td>NA</td>
</tr>
<tr>
<td>TSI-03</td>
<td>White Mastic on Foamglass TSI</td>
<td>D10-C03</td>
<td>NF</td>
<td>ND</td>
<td>3</td>
<td>NIS</td>
<td>NA</td>
</tr>
</tbody>
</table>

**ASBESTOS CONTENT**
Expressed as percent

* = The facility owner has the option of point-counting by Polarized Light Microscopy (PLM) those RACM whose asbestos content is less than 10% in order to more accurately determine the asbestos content therein.

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RACM = Regulated ACM  
CAT I = Category I non-friable ACM  
CAT II = Category II non-friable ACM

**ABBREVIATIONS:**
NA = Not Applicable  
ND = None Detected  
NIS = Not in Scope  
C = Chrysotile  
A = Amosite  
HA = Homogeneous Area  
SF = Square Feet  
LF = Linear Feet  
CF = Cubic Feet
<table>
<thead>
<tr>
<th>HA #</th>
<th>Homogeneous Material Description</th>
<th>Homogeneous Material Location</th>
<th>Friability (F/NF)</th>
<th>% Asbestos*</th>
<th># of Samples Collected</th>
<th>Approximate Quantity</th>
<th>ACM Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT-03</td>
<td>2’ x 2’ White Fissured Ceiling Tile Throughout</td>
<td>F</td>
<td>ND</td>
<td>3</td>
<td>NIS</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>FP-03</td>
<td>Red Fireproofing</td>
<td>F</td>
<td>ND</td>
<td>3</td>
<td>NIS</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>MAS-07</td>
<td>Gray Mastic on Metal Duct</td>
<td>D9-09, D9-10, D9-15</td>
<td>NF</td>
<td>ND</td>
<td>3</td>
<td>NIS</td>
<td>NA</td>
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<td>TSI-05</td>
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<td>D9-40, D9-46</td>
<td>NF</td>
<td>ND</td>
<td>3</td>
<td>NIS</td>
<td>NA</td>
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<tr>
<td>TSI-06</td>
<td>Black Mastic on Foamglass TSI</td>
<td>D9-C07</td>
<td>NF</td>
<td>10% C</td>
<td>3</td>
<td>225 LF</td>
<td>CAT I</td>
</tr>
</tbody>
</table>

**Table 2.2-1: Summary of Homogeneous Sampling Areas**

Dental Science Building – 9th Floor Plenum

University of Florida

Gainesville, Florida

**Abbreviations:**
- HA = Homogeneous Area
- SF = Square Feet
- LF = Linear Feet
- CF = Cubic Feet

**Abbreviations:**
- NA = Not Applicable
- ND = None Detected
- NIS = Not in Scope
- C = Chrysotile
- A = Amosite

**Asbestos Content:**
* expressed as percent

* = The facility owner has the option of point-counting by Polarized Light Microscopy (PLM) those RACM whose asbestos content is less than 10% in order to more accurately determine the asbestos content therein.

**Friability:**
- F = Friable Material
- NF = Non-Friable Material

**ACM Category:**
- RACM = Regulated ACM
- CAT I = Category I non-friable ACM
- CAT II = Category II non-friable ACM

**Transmission Electron Microscopy of Non-Friable Organically Bound Material**

**Point-Count analysis**

**Not in Scope**

**Not Applicable**
<table>
<thead>
<tr>
<th>HA #</th>
<th>HOMOGENEOUS MATERIAL DESCRIPTION</th>
<th>HOMOGENEOUS MATERIAL LOCATION</th>
<th>FRIABILITY (F/NF)</th>
<th>% ASBESTOS*</th>
<th># OF SAMPLES COLLECTED</th>
<th>APPROXIMATE QUANTITY</th>
<th>ACM CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CT-04</td>
<td>2’ x 2’ White Fissured Ceiling Tile</td>
<td>Throughout Except D8-11, D8-46</td>
<td>NF</td>
<td>ND</td>
<td>3</td>
<td>NIS</td>
<td>NA</td>
</tr>
<tr>
<td>CT-05</td>
<td>2’ x 2’ White Recessed Ceiling Tile</td>
<td>D8-11</td>
<td>NF</td>
<td>ND</td>
<td>3</td>
<td>NIS</td>
<td>NA</td>
</tr>
<tr>
<td>CT-06</td>
<td>2’ x 2’ White Smooth Recessed Ceiling Tile</td>
<td>D8-46</td>
<td>NF</td>
<td>ND</td>
<td>3</td>
<td>NIS</td>
<td>NA</td>
</tr>
<tr>
<td>FP-04</td>
<td>Tan Fireproofing</td>
<td>Throughout</td>
<td>NF</td>
<td>ND</td>
<td>3</td>
<td>NIS</td>
<td>NA</td>
</tr>
<tr>
<td>MAS-08</td>
<td>Black Duct Mastic</td>
<td>D8-C03, D8-C07, D8-C13, D8-3, D8-5, D8-6, D8-6A, D8-6B, D8-6C, D8-6D, D8-7, D8-7A, D8-7B, D8-9, D8-10, D8-11, D8-12, D8-13, D8-15, D8-17, D8-18, D8-18A, D8-18B, D8-18C, D8-18D, D8-19, D8-20, D8-21, D8-22, D8-23, D8-24, D8-25, D8-26, D8-28, D8-29, D8-30, D8-31, D8-34, D8-35, D8-35A, D8-36, D8-37, D8-38, D8-39, D8-40, D8-42, D8-43, D8-44, D8-44A, D8-44B, D8-46, D8-46A, D8-48, D8-49, D8-50, D8-51, D8-53</td>
<td>NF</td>
<td>10% C</td>
<td>3</td>
<td>1,175 LF</td>
<td>CAT I</td>
</tr>
<tr>
<td>TSI-07</td>
<td>White Mastic on Fiberglass TSI</td>
<td>D8-C03, D8-C09, D8-5, D8-6, D8-6B, D8-6D, D8-11, D8-12, D8-13, D8-17, D8-18, D8-19, D8-21, D8-23, D8-25, D8-26, D8-29, D8-30, D8-31, D8-34, D8-36, D8-37, D8-38, D8-39, D8-42, D8-43, D8-44A, D8-48, D8-50</td>
<td>NF</td>
<td>ND</td>
<td>3</td>
<td>NIS</td>
<td>NA</td>
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<td>TSI-08</td>
<td>White Mastic on Foamglass TSI</td>
<td>D8-C07, D8-9</td>
<td>NF</td>
<td>ND</td>
<td>3</td>
<td>NIS</td>
<td>NA</td>
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<tr>
<td>TSI-09</td>
<td>Black Mastic on Foamglass TSI</td>
<td>D8-C01, D8-53, D8-57</td>
<td>NF</td>
<td>10% C</td>
<td>3</td>
<td>30 LF</td>
<td>CAT I</td>
</tr>
</tbody>
</table>

**TABLE 2.2-1: SUMMARY OF HOMOGENEOUS SAMPLING AREAS**

**DENTAL SCIENCE BUILDING – 8th FLOOR PLENUM**

**UNIVERSITY OF FLORIDA**

**GAINESVILLE, FLORIDA**

**ASBESTOS CONTENT**

Expressed as percent

* = The facility owner has the option of point-counting by Polarized Light Microscopy (PLM) those RACM whose asbestos content is less than 10% in order to more accurately determine the asbestos content therein.

**FRIABILITY**

F = Friable Material  
NF = Non-Friable Material

**ACM CATEGORY**

RACM = Regulated ACM  
CAT I = Category I non-friable ACM  
CAT II = Category II non-friable ACM

**ABBREVIATIONS:**

NA = Not Applicable  
ND = None Detected  
NIS = Not in Scope  
C = Chrysotile  
A = Amosite  
HA = Homogeneous Area  
SF = Square Feet  
LF = Linear Feet  
CF = Cubic Feet
3.0 CONCLUSIONS AND RECOMMENDATIONS

3.1 GENERAL

Asbestos-containing materials (ACMs) were identified in the scope of this survey. General and specific conclusions and recommendations are provided below.

The EPA, OSHA and the State of Florida have promulgated regulations dealing with asbestos. For commercial building owners, the EPA NESHAP (40 CFR 61) regulations require removal of RACM, prior to conducting activities which might disturb the material. They also deal with notification, handling and disposal of asbestos.

The EPA recommends that an Operations and Maintenance (O&M) Program be developed for any facilities with ACM, and this Program should address all ACM (known and/or assumed) present. The O&M Program establishes notification and training requirements along with special procedures for working around the ACM. The O&M Program would remain in effect until all asbestos is removed.

Category I and Category II non-friable materials, as defined by the EPA, may remain within a facility during demolition with no potential cessation of work, provided they remain non-friable and the appropriate engineering controls (i.e., wet methods) are utilized, with the resulting waste disposed of as asbestos-containing waste. However, there is no guarantee that these materials will remain non-friable. If the materials become friable, then they are classified as RACM.

RACM, as defined by the EPA, must be removed prior to renovation or demolition activities that may disturb the materials.

The OSHA regulations deal with employee exposure to airborne asbestos fibers. The regulations restrict employee exposure, and require special monitoring, training and handling procedures when dealing with asbestos. Additionally, OSHA has regulations that may supersede the EPA regulations. In order to protect the worker, OSHA has established a permissible exposure limit (PEL), which limits employee exposure to airborne fiber concentrations. OSHA requires objective evidence that the PEL will not be exceeded, as justification that personal air monitoring and engineering controls will not be required. OSHA has also established rules requiring the containerization and labeling of asbestos waste.

The State regulations require that anyone involved in asbestos consulting activities be a licensed asbestos consultant and that anyone involved in asbestos abatement, with the exception of roofing materials, be a licensed asbestos abatement contractor.
3.2 SPECIFIC

8th Floor – Black Duct Mastic
8th Floor – Black Mastic on Foamglass TSI
9th Floor – Black Duct Mastic
9th Floor – Black Mastic on Foamglass TSI
10th Floor – Black Duct Mastic

These materials are defined by the EPA as a Category I non-friable materials. These materials do not appear to present a significant issue, as observed, at the time of the survey. We recommend that the identified ACM be maintained as part of an O&M Program and periodically monitored for any changes in condition. Additionally, we recommend that a licensed asbestos abatement contractor properly remove and dispose of the ACM prior to conducting renovation activities that might disturb the ACM.

Inaccessible Areas

Rooms D8-58, D9-50, D9-51, D10-25, D10-52, and D10-53, and the plenums in all stairwells and Room D10-42 were inaccessible at the time of the survey. Should planned renovation and/or demolition activities involve the disturbance materials in these areas, we recommend that the materials be sampled and analyzed for asbestos content, and if determined to be ACM, be properly removed and disposed by a licensed asbestos abatement contractor prior to conducting such activities.

3.3 ASBESTOS REMOVAL OPINION OF COST

The following opinion of cost can be used for determining approximate costs associated with the removal of ACM identified during the survey. Please note that the quantities outlined below reflect a combination of field verification of material locations, provided as-built documentation or previous survey experience of similar structures. Actual field verification was limited during the survey as a result of accessibility. The opinion of cost reflect typical industry standard removal rates, but can vary dependent upon the number of mobilizations required of the contractor, the timing of the project and accessibility restrictions to the material to be abated during the performance of these activities.
### TABLE 3.3-1: OPINION OF COST
**DENTAL SCIENCE BUILDING – FLOORS 8-10 PLENUM**

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Approximate Quantity</th>
<th>Unit Cost</th>
<th>Opinion of Cost</th>
</tr>
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<tr>
<td>MAS-02</td>
<td>Black Duct Mastic</td>
<td>1,125 LF</td>
<td>$16/LF</td>
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<td>TSI-06</td>
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<td>225 LF</td>
<td>$30/LF</td>
<td>$6,750.00</td>
</tr>
<tr>
<td>MAS-05</td>
<td>Black Duct Mastic</td>
<td>1,200 LF</td>
<td>$16/LF</td>
<td>$19,200.00</td>
</tr>
<tr>
<td>TSI-09</td>
<td>Black Mastic on Foamglass TSI</td>
<td>30 LF</td>
<td>$40/LF</td>
<td>$1,200.00</td>
</tr>
<tr>
<td>MAS-08</td>
<td>Black Duct Mastic</td>
<td>1,175 LF</td>
<td>$16/LF</td>
<td>$18,800.00</td>
</tr>
</tbody>
</table>

**TOTAL** $63,950.00

SF: square feet  LF: linear feet  CF: cubic feet

The opinion of cost provided assumes that much of the work will be performed in conjunction with any renovation activities, and that much of the demolition work required to gain access to the ACM is not part of the abatement contractor’s work. In addition to the opinion of cost outlined above, typical consulting fees for project design, contract administration, project monitoring and laboratory fees add 20-40% to removal costs for projects of similar size and expected duration.
4.0 LIMITATIONS AND CONDITIONS

As a result of previous renovations, there may be hidden materials, such as floor tile, sheet vinyl flooring, insulation, etc. These materials may be found in various areas hidden under existing flooring materials or in wall cavities. Any materials found during construction activities, either not addressed in this survey report, or similar to the ACM identified in this survey report should be assumed to be ACM until sampling and analysis documents otherwise.

Because of the hidden nature of many building components (i.e. within mechanical chases), it may be impossible to determine if all of the suspect building materials have been located and subsequently tested. Destructive testing in some instances is not a viable option. We cannot, therefore, guarantee that all potential ACM has been located. For the same reasons, estimates of quantities and/or conditions are subject to readily apparent situations, and our findings reflect this condition. We do warrant, however, that the investigations and methodology reflect our best efforts based upon the prevailing standard of care in the environmental industry.

The information contained in this report was prepared based upon specific parameters and regulations in force at the time of this report. The information herein is only for the specific use of the client and GLE. GLE accepts no responsibility for the use, interpretation, or reliance by other parties on the information contained herein, unless prior written authorization has been obtained from GLE.
APPENDIX A
Analytical Results and Chain of Custody
## SUMMARY OF BULK SAMPLE ANALYSIS
### UF; DBS Floors 8-10 Plenum Survey (9F)
#### 19140-01824

<table>
<thead>
<tr>
<th>Sample</th>
<th>Sample Type</th>
<th>Fiber Type</th>
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<tbody>
<tr>
<td>CT-03A</td>
<td>2’ X 2’ White Fissured Ceiling Tile</td>
<td>100% Mineral Wool</td>
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<tr>
<td>CT-03B</td>
<td>2’ X 2’ White Fissured Ceiling Tile</td>
<td>100% Mineral Wool</td>
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<td>CT-03C-QC</td>
<td>2’ X 2’ White Fissured Ceiling Tile</td>
<td>100% Mineral Wool</td>
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<tr>
<td>FP-03A</td>
<td>Red Fireproofing</td>
<td>100% Mineral Wool</td>
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<td>FP-03B</td>
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<td>100% Mineral Wool</td>
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<td>FP-03C</td>
<td>Red Fireproofing</td>
<td>100% Mineral Wool</td>
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<tr>
<td>MAS-05A</td>
<td>Black Duct Mastic</td>
<td>10% Chrysotile Asbestos 90% Bitumen</td>
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<tr>
<td></td>
<td>Brown Duct Insulation</td>
<td>100% Cellulose/paper</td>
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<tr>
<td>MAS-05B</td>
<td>Black Duct Mastic</td>
<td>Positive Stop/Sample not analyzed</td>
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<td></td>
<td>Brown Duct Insulation</td>
<td>100% Cellulose/paper</td>
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<tr>
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<td>Brown Duct Insulation</td>
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<td>White Duct Mastic</td>
<td>100% Polymer, Quartz, Calcite, Clay, Mica</td>
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* Polarized Light Microscopy coupled with dispersion is the technique used for identification in accordance with EPA 600/M4-82-020, EPA 600/R-93/116, and NIOSH Method 9002.
** The percentage of each component is visually estimated. The result of this analysis relate only to the material tested. The report shall not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. (>1% greater than one percent, <1% less than one percent) QC - Sample reanalyzed for QA/QC.
*** This report shall not be reproduced except in full, without the written approval of the laboratory. GLE Report # 24447 Analysis performed by GLE Associates, Inc. NVLAP Code 102003-0, CO AL-17485, TX 30-0337 Feedback regarding laboratory performance should be addressed to lab@gleassociates.com.

Report Date: 8/28/2019
SUMMARY OF BULK SAMPLE ANALYSIS
UF; DBS Floors 8-10 Plenum Survey (9F)
19140-01824

<table>
<thead>
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<td>100% Polymer, Quartz, Calcite, Clay, Mica</td>
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<td>100% Polymer, Quartz, Calcite, Clay, Mica</td>
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<tr>
<td>TSI-05C</td>
<td>White Mastic on Foamglass TSI</td>
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<td>Black Mastic on Foamglass TSI</td>
<td>10% Chrysotile Asbestos</td>
</tr>
<tr>
<td></td>
<td></td>
<td>90% Bitumen</td>
</tr>
<tr>
<td></td>
<td>Foamglass Insulation</td>
<td>100% Perlite, Quartz, Calcite</td>
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<td>TSI-06B-QC</td>
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<td></td>
<td>Foamglass Insulation</td>
<td>100% Perlite, Quartz, Calcite</td>
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</tbody>
</table>

Analyst / Approved Signatory: Darryl Neldner

* Polarized Light Microscopy coupled with dispersion is the technique used for identification in accordance with EPA 600/M4-82-020, EPA 600/R-93/116, and NIOSH Method 9002.
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## SUMMARY OF BULK SAMPLE ANALYSIS

**UF; DBS Floors 8-10 Plenum Survey (9F)**

19140-01824

<table>
<thead>
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<th>Sample</th>
<th>Sample Type</th>
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**Notes:**

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---

Report Date: 8/28/2019
### SAMPLE INFORMATION

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<th>SAMPLE #</th>
<th>DESCRIPTION</th>
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<td>CT-03 A-C</td>
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<td>FP-03 A-C</td>
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<td>MAS-06 A-C</td>
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**IMPORTANT: TOTAL NUMBER OF SAMPLES SUBMITTED**

24

**IMPORTANT: POSITIVE STOP ANALYSIS**

Yes

**IMPORTANT: E-MAIL RESULTS TO**

P. Zak, M. Van Cleave, M. Guthrie

**NOTE:**

Turnaround time starts at receipt by lab and does not include weekend or holidays.

Select Turnaround Time

- 3 hour
- 6 Hour
- 24 Hour
- 48 Hour
- 3 Day
- 4 Day

### REPORT RESULTS TO THE ADDRESS ABOVE

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<th>CHAIN OF CUSTODY: LABORATORY</th>
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<td>SAMPLES RECEIVED BY:</td>
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CHAIN OF CUSTODY: RETURNED TO GLE ASSOCIATES, INC.

RECEIVED BY:                                  DATE:           
INVENTORIED BY:                              DATE:           
REPACKAGED AND SEALED BY:                    DATE:           
PAGE: 1 OF 1
## SUMMARY OF BULK SAMPLE ANALYSIS

**UF; DBS Floors 8-10 Plenum Survey (8F)**

19140-01824

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<thead>
<tr>
<th>Sample</th>
<th>Sample Type</th>
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(>1% greater than one percent, <1% less than one percent) QC - Sample reanalyzed for QA/QC.

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Analysis performed by GLE Associates, Inc. NVLAP Code 102003-0, CO AL-17485, TX 30-0337

Feedback regarding laboratory performance should be addressed to lab@gleassociates.com.
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<tr>
<td>MAS-08A-QC</td>
<td>Black Duct Mastic</td>
<td>10% Chrysotile Asbestos</td>
</tr>
<tr>
<td></td>
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<td>90% Bitumen</td>
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<tr>
<td></td>
<td>Brown Duct Insulation</td>
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<td>Brown Duct Insulation</td>
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<tr>
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<td>White Mastic on Fiberglass TSI</td>
<td>100% Polymer, Quartz, Calcite, Clay, Mica</td>
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<tr>
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<td>TSI-08A</td>
<td>White Mastic on Foamglass TSI</td>
<td>100% Polymer, Quartz, Calcite, Clay, Mica</td>
</tr>
<tr>
<td>TSI-08B</td>
<td>White Mastic on Foamglass TSI</td>
<td>100% Polymer, Quartz, Calcite, Clay, Mica</td>
</tr>
<tr>
<td>TSI-08C</td>
<td>White Mastic on Foamglass TSI</td>
<td>100% Polymer, Quartz, Calcite, Clay, Mica</td>
</tr>
</tbody>
</table>

* Polarized Light Microscopy coupled with dispersion is the technique used for identification in accordance with EPA 600/M4-82-020, EPA 600/R-93/116, and NIOSH Method 9002.
** The percentage of each component is visually estimated. The result of this analysis relate only to the material tested.
The report shall not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.
(>1% greater than one percent, <1% less than one percent) QC - Sample reanalyzed for QA/QC.
*** This report shall not be reproduced except in full, without the written approval of the laboratory. GLE Report # 24448
Analysis performed by GLE Associates, Inc. NVLAP Code 102003-0, CO AL-17485, TX 30-0337
Feedback regarding laboratory performance should be addressed to lab@gleassociates.com.

Report Date: 8/28/2019
### SUMMARY OF BULK SAMPLE ANALYSIS

**UF; DBS Floors 8-10 Plenum Survey (8F)**

19140-01824

<table>
<thead>
<tr>
<th>Sample</th>
<th>Sample Type</th>
<th>Fiber Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSI-09A</td>
<td>Black Mastic on Foamglass TSI</td>
<td>10% Chrysotile Asbestos</td>
</tr>
<tr>
<td></td>
<td>Foamglass TSI</td>
<td>90% Bitumen</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100% Perlite, Quartz, Calcite</td>
</tr>
<tr>
<td>TSI-09B-QC</td>
<td>Black Mastic on Foamglass TSI</td>
<td>Positive Stop/Sample not analyzed</td>
</tr>
<tr>
<td></td>
<td>Foamglass TSI</td>
<td>100% Perlite, Quartz, Calcite</td>
</tr>
<tr>
<td>TSI-09C</td>
<td>Black Mastic on Foamglass TSI</td>
<td>Positive Stop/Sample not analyzed</td>
</tr>
<tr>
<td></td>
<td>Foamglass TSI</td>
<td>100% Perlite, Quartz, Calcite</td>
</tr>
</tbody>
</table>

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Analysis performed by GLE Associates, Inc. NVLAP Code 102003-0, CO AL-17485, TX 30-0337

Feedback regarding laboratory performance should be addressed to lab@gleassociates.com.

Report Date: 8/28/2019
# Chain of Custody/Sample Transmittal Form

**Client:** UF  
**Project #:** 19140-01824  
**Project:** DSB Floors 8-10 Plenum Survey (8F)  
**Laboratory Sent To:** GLE Tampa  
**Date:** 8/27/19

## Sample Information

<table>
<thead>
<tr>
<th>Sample #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT-04 A-C</td>
<td>2' x 2' White Fissured Ceiling Tile</td>
</tr>
<tr>
<td>CT-05 A-C</td>
<td>2' x 2' White Recessed Ceiling Tile</td>
</tr>
<tr>
<td>CT-06 A-C</td>
<td>2' x 2' White Smooth Recessed Ceiling Tile</td>
</tr>
<tr>
<td>FP-04 A-C</td>
<td>Tan Fireproofing</td>
</tr>
<tr>
<td>MAS-08 A-C</td>
<td>Black Duct Mastic</td>
</tr>
<tr>
<td>TSI-07 A-C</td>
<td>White Mastic on Fiberglass TSI</td>
</tr>
<tr>
<td>TSI-08 A-C</td>
<td>White Mastic on Foamglass TSI</td>
</tr>
<tr>
<td>TSI-09 A-C</td>
<td>Black Mastic on Foamglass TSI</td>
</tr>
</tbody>
</table>

### Important: Total Number of Samples Submitted

24

### Important: Positive Stop Analysis

Yes

### Important: E-mail Results To

P. Zak, M. Van Cleave, M. Guthrie

**Note:**

Turnaround time starts at receipt by lab and does not include weekend or holidays.

Select Turnaround Time

- [ ] 3 hour
- [ ] 6 Hour
- [ ] 24 Hour
- [ ] 48 Hour
- [ ] [ ] 3 Day
- [ ] 4 Day

## Report Results to the Address Above

**Chain of Custody: GLE Associates, Inc.**  
**Packaged By:** M. Guthrie  
**Date Packaged:** 8/27/19  
**Method of Transmittal:** FedEx

**Chain of Custody: Laboratory**  
**Samples Received By:**  
**Date:**  
**Time:**  
**Condition of Packaged Samples:**

**Chain of Custody: Returned to GLE Associates, Inc.**  
**Received By:**  
**Date:**  
**Inventoryed By:**  
**Date:**  
**Repackaged and Sealed By:**  
**Date:**

**Page:** 1 of 1
# SUMMARY OF BULK SAMPLE ANALYSIS

UF; DSB Floors 8-10 Plenum Survey (10F)
19140-01824

<table>
<thead>
<tr>
<th>Sample</th>
<th>Sample Type</th>
<th>Fiber Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT-01A</td>
<td>2' X 2' White Fissured Ceiling Tile</td>
<td>100% Mineral Wool</td>
</tr>
<tr>
<td>CT-01B</td>
<td>2' X 2' White Fissured Ceiling Tile</td>
<td>100% Mineral Wool</td>
</tr>
<tr>
<td>CT-01C-QC</td>
<td>2' X 2' White Fissured Ceiling Tile</td>
<td>100% Mineral Wool</td>
</tr>
<tr>
<td>CT-02A</td>
<td>2' X 2' White Recessed Ceiling Tile</td>
<td>100% Mineral Wool</td>
</tr>
<tr>
<td>CT-02B</td>
<td>2' X 2' White Recessed Ceiling Tile</td>
<td>100% Mineral Wool</td>
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<tr>
<td>CT-02C</td>
<td>2' X 2' White Recessed Ceiling Tile</td>
<td>100% Mineral Wool</td>
</tr>
<tr>
<td>FP-01A</td>
<td>Tan Fireproofing</td>
<td>100% Mineral Wool</td>
</tr>
<tr>
<td>FP-01B</td>
<td>Tan Fireproofing</td>
<td>100% Mineral Wool</td>
</tr>
<tr>
<td>FP-01C</td>
<td>Tan Fireproofing</td>
<td>100% Mineral Wool</td>
</tr>
<tr>
<td>FP-02A</td>
<td>Red Fireproofing</td>
<td>100% Mineral Wool</td>
</tr>
<tr>
<td>FP-02B</td>
<td>Red Fireproofing</td>
<td>100% Mineral Wool</td>
</tr>
<tr>
<td>FP-02C</td>
<td>Red Fireproofing</td>
<td>100% Mineral Wool</td>
</tr>
<tr>
<td>MAS-01A-QC</td>
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<td>100% Polymer, Quartz, Calcite, Clay, Mica</td>
</tr>
<tr>
<td>MAS-01B</td>
<td>White Duct Mastic</td>
<td>100% Polymer, Quartz, Calcite, Clay, Mica</td>
</tr>
</tbody>
</table>

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** The percentage of each component is visually estimated. The result of this analysis relate only to the material tested. The report shall not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. (>1% greater than one percent, <1% less than one percent) QC - Sample reanalyzed for QA/QC.
*** This report shall not be reproduced except in full, without the written approval of the laboratory. GLE Report # 24449

Analysis performed by GLE Associates, Inc. NVLAP Code 102003-0, CO AL-17485, TX 30-0337
Feedback regarding laboratory performance should be addressed to lab@gleassociates.com.

Report Date: 8/29/2019
### SUMMARY OF BULK SAMPLE ANALYSIS

**UF; DSB Floors 8-10 Plenum Survey (10F)**

19140-01824

<table>
<thead>
<tr>
<th>Sample</th>
<th>Sample Type</th>
<th>Fiber Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAS-01C</td>
<td>White Duct Mastic</td>
<td>100% Poly, Quartz, Calcite, Clay, Mica</td>
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<tr>
<td>MAS-02A</td>
<td>Black Duct Mastic</td>
<td>10% Chrysotile Asbestos, 90% Bitumen</td>
</tr>
<tr>
<td></td>
<td>Brown Duct Insulation</td>
<td>100% Cellulose/paper</td>
</tr>
<tr>
<td>MAS-02B</td>
<td>Black Duct Mastic Positive Stop</td>
<td>Sample not analyzed</td>
</tr>
<tr>
<td></td>
<td>Brown Duct Insulation</td>
<td>100% Cellulose/paper</td>
</tr>
<tr>
<td>MAS-02C</td>
<td>Black Duct Mastic Positive Stop</td>
<td>Sample not analyzed</td>
</tr>
<tr>
<td></td>
<td>Brown Duct Insulation</td>
<td>100% Cellulose/paper</td>
</tr>
<tr>
<td>MAS-03A</td>
<td>Gray Mastic on Metal Duct</td>
<td>100% Poly, Quartz, Calcite, Clay, Mica</td>
</tr>
<tr>
<td>MAS-03B</td>
<td>Gray Mastic on Metal Duct</td>
<td>100% Poly, Quartz, Calcite, Clay, Mica</td>
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<td>100% Poly, Quartz, Calcite, Clay, Mica</td>
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<td>MAS-04A</td>
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<td>100% Poly, Quartz, Calcite, Clay, Mica</td>
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<tr>
<td>MAS-04C</td>
<td>Gray Fume Hood Exhaust Mastic</td>
<td>100% Poly, Quartz, Calcite, Clay, Mica</td>
</tr>
<tr>
<td>TSI-01A</td>
<td>White Mastic on Fiberglass TSI</td>
<td>100% Poly, Quartz, Calcite, Clay, Mica</td>
</tr>
</tbody>
</table>

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**UF; DSB Floors 8-10 Plenum Survey (10F)**

19140-01824

<table>
<thead>
<tr>
<th>Sample</th>
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<th>Fiber Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSI-01B</td>
<td>White Mastic on Fiberglass TSI</td>
<td>100% Polymer, Quartz, Calcite, Clay, Mica</td>
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<tr>
<td>TSI-01C</td>
<td>White Mastic on Fiberglass TSI</td>
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</tr>
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<td>TSI-02A</td>
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<td>TSI-02B</td>
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<td>TSI-03A</td>
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<td>100% Polymer, Quartz, Calcite, Clay, Mica</td>
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<td>TSI-03B</td>
<td>White Mastic on Foamglass TSI</td>
<td>100% Polymer, Quartz, Calcite, Clay, Mica</td>
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<tr>
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<td>White Mastic on Foamglass TSI</td>
<td>100% Polymer, Quartz, Calcite, Clay, Mica</td>
</tr>
</tbody>
</table>

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Feedback regarding laboratory performance should be addressed to lab@gleassociates.com.

Report Date: 8/29/2019  
Page 3 of 3
**CHAIN OF CUSTODY/SAMPLE TRANSMITTAL FORM**

GLE Associates, Inc.
2228 NW 40th Terrace, Suite C
Gainesville, FL 32605
PHONE: (352) 335-6648  FAX: (352) 335-6187

**CLIENT:** UF
**PROJECT #:** 19140-01824
**PROJECT:** DSB Floors 8-10 Plenum Survey (10F)
**LABORATORY SENT TO:** GLE Tampa
**DATE:** 8/27/19

### SAMPLE INFORMATION

<table>
<thead>
<tr>
<th>SAMPLE #</th>
<th>DESCRIPTION</th>
<th>SAMPLE #</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT-01 A-C</td>
<td>2' x 2' White Fissured Ceiling Tile</td>
<td>CT-02 A-C</td>
<td>2' x 2' White Recessed Ceiling Tile</td>
</tr>
<tr>
<td>FP-01 A-C</td>
<td>Tan Fireproofing</td>
<td>FP-02 A-C</td>
<td>Red Fireproofing</td>
</tr>
<tr>
<td>MAS-01 A-C</td>
<td>White Duct Mastic</td>
<td>MAS-02 A-C</td>
<td>Black Duct Mastic</td>
</tr>
<tr>
<td>MAS-03 A-C</td>
<td>Gray Mastic on Metal Duct</td>
<td>MAS-04 A-C</td>
<td>Gray Fume Hood Exhaust Mastic</td>
</tr>
<tr>
<td>TSI-01 A-C</td>
<td>White Mastic on Fiberglass TSI</td>
<td>TSI-02 A-C</td>
<td>Tan Mastic on Fiberglass TSI</td>
</tr>
<tr>
<td>TSI-03 A-C</td>
<td>White Mastic on Foamglass TSI</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**IMPORTANT: TOTAL NUMBER OF SAMPLES SUBMITTED** 33

**IMPORTANT: POSITIVE STOP ANALYSIS** Yes

**IMPORTANT: E-MAIL RESULTS TO** P. Zak, M. Van Cleave, M. Guthrie

**NOTE:**

Turnaround time starts at receipt by lab and does not include weekend or holidays.

Select Turnaround Time

- [ ] 3 hour
- [ ] 6 Hour
- [ ] 24 Hour
- [ ] 48 Hour
- [x] 3 Day
- [ ] 4 Day

### REPORT RESULTS TO THE ADDRESS ABOVE

<table>
<thead>
<tr>
<th>CHAIN OF CUSTODY: GLE ASSOCIATES, INC.</th>
<th>CHAIN OF CUSTODY: LABORATORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>PACKAGED BY: M. Guthrie</td>
<td>SAMPLES RECEIVED BY:</td>
</tr>
<tr>
<td>DATE PACKAGED: 8/27/19</td>
<td>DATE:</td>
</tr>
<tr>
<td>METHOD OF TRANSMITTAL: FedEx</td>
<td>TIME:</td>
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<td>TRANSMITTED BY: FedEx</td>
<td>CONDITION OF PACKAGED SAMPLES:</td>
</tr>
<tr>
<td>CHAIN OF CUSTODY: RETURNED TO GLE ASSOCIATES, INC.</td>
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</tr>
<tr>
<td>RECEIVED BY:</td>
<td>DATE:</td>
</tr>
<tr>
<td>INVENTORIZED BY:</td>
<td>DATE:</td>
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<td>REPACKAGED AND SEALED BY:</td>
<td>DATE:</td>
</tr>
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</table>

PAGE: 1 OF 1
APPENDIX B
Personnel and Laboratory Certifications
STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

ASBESTOS LICENSING UNIT

THE ASBESTOS BUSINESS ORGANIZATION HEREIN IS LICENSED UNDER THE
PROVISIONS OF CHAPTER 469, FLORIDA STATUTES

GLE ASSOCIATES INC
ROBERT BLAIR GREENE
5405 CYPRESS CENTER DRIVE
SUITE 110
TAMPA, FL 33609

LICENSE NUMBER: ZA0000034
EXPIRATION DATE: NOVEMBER 30, 2019

Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.

This is your license. It is unlawful for anyone other than the licensee to use this document.
STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
ASBESTOS LICENSING UNIT
THE ASBESTOS CONSULTANT - ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 469, FLORIDA STATUTES

GREENE, ROBERT BLAIR
GLE ASSOCIATES INC
5405 CYPRESS CENTER DR
SUITE 110
TAMPA, FL 33609

LICENSE NUMBER: EA0000009
EXPIRATION DATE: NOVEMBER 30, 2020
Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.
This is your license. It is unlawful for anyone other than the licensee to use this document.
Vern Roberts Environmental Training, Inc.
13987 94th Avenue N Seminole, FL 33776
727-593-3067
Asbestos Survey & Mechanical (Inspector) Initial Training

This is to Certify that

Matthew Guthrie

Training was in accordance with Title II of TSCA, 40 CFR Part 763. Appendix C to Subpart E as revised
Date of Examination 6/27/2019

Date of Course: 6/25/2019-6/27/2019
Expiration Date 6/27/2020
Certificate # 06271902
Course # FL490006318 Provider # FL490003810

[Signature]
Instructor
certifies

Macy Van Cleave

GLE Associates, Inc., 5405 Cypress Center Dr., Ste. 110 Ste. 110 Tampa, FL 33609

has successfully met certificate requirements for the

Asbestos: Inspector

Approval: FBPR Asbestos Licensing Unit: Provider #0000995; Course #FL49-0002859 (3 Days; 21 Contact Hours)
(Accreditation for Inspector Under TSCA Title II/AHERA)

Conducted

10/01/2018 to 10/03/2018

Certificate #: 190051-7367
CEUs: 2.1
EPA accreditation expires: 10/03/2019
Principal Instructor: Russell E. Stauffer, PE, LAC
FBPE CEHs: 0009087/Educational Institutions: 21.0

Carol Hinton, Associate Director

University of Florida TREEO Center • 3900 SW 63 Boulevard • Gainesville, FL 32608-3800 • 352-392-9570 • www.treeo.ufl.edu
United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 102003-0

GLE Associates, Inc.
Tampa, FL

is accredited by the National Voluntary Laboratory Accreditation Program for specific services,
listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated January 2009).

2019-04-01 through 2020-03-31
Effective Dates

For the National Voluntary Laboratory Accreditation Program
## SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

**GLE Associates, Inc.**  
5405 Cypress Center Drive  
Suite 110  
Tampa, FL 33609  
Mr. Darryl S. Neldner  
Phone: 813-241-8350 x247  
Fax: 813-241-8737  
Email: dneldner@gleassociates.com  
http://www.gleassociates.com

### ASBESTOS FIBER ANALYSIS

**NVLAP LAB CODE 102003-0**

**Bulk Asbestos Analysis**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>18/A01</td>
<td>EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples</td>
</tr>
<tr>
<td>18/A03</td>
<td>EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials</td>
</tr>
</tbody>
</table>

*For the National Voluntary Laboratory Accreditation Program*

*Effective 2019-04-01 through 2020-03-31*
APPENDIX C
Photographs
Upper Photo: CT-01-2’ x 2’ White Fissured Ceiling Tile
Lower Photo: CT-02-2’ x 2’ White Recessed Ceiling Tile
Upper Photo: FP-01-Tan Fireproofing
Lower Photo: FP-02-Red Fireproofing
Photograph Date: September 4, 2019
Prepared By: GLE Associates, Inc.
Upper Photo: MAS-01-White Duct Mastic
Lower Photo: MAS-02-Black Duct Mastic

Prepared By: GLE Associates, Inc.

Photograph Date: September 4, 2019
Upper Photo: MAS-03-Gray Mastic on Metal Duct

Lower Photo: MAS-04-Gray Fume Hood Exhaust Mastic

Photograph Date: September 4, 2019

Prepared By: GLE Associates, Inc.
Upper Photo: TSI-01-White Mastic on Fiberglass TSI

Lower Photo: TSI-02-Tan Mastic on Fiberglass TSI

Photograph Date: September 4, 2019

Prepared By: GLE Associates, Inc.
Upper Photo: TSI-03-White Mastic on Foamglass TSI

Lower Photo: DSB Floor 9 Hallway

Photograph Date: September 4, 2019

Prepared By: GLE Associates, Inc.
Upper Photo: CT-03-2’ x 2’ White Fissured Ceiling Tile
Lower Photo: FP-03-Red Fireproofing

Photograph Date: September 4, 2019
Prepared By: GLE Associates, Inc.

Job No. 19140-01824
UF DSB 8-10 Plenum
Upper Photo: MAS-07-Gray Mastic on Metal Duct

Lower Photo: TSI-04-White Mastic on Fiberglass TSI

Photograph Date: September 4, 2019

Prepared By: GLE Associates, Inc.
Upper Photo: TSI-05-White Mastic on Foamglass TSI

Lower Photo: TSI-06-Black Mastic on Foamglass TSI

Photograph Date: September 4, 2019

Prepared By: GLE Associates, Inc.

UF DSB 8-10 Plenum
Upper Photo: CT-06-2’ x 2’ White Smooth Recessed Ceiling Tile

Lower Photo: FP-04-Tan Fireproofing

Photograph Date: September 4, 2019

Prepared By: GLE Associates, Inc.
Upper Photo: MAS-08-Black Duct Mastic
Lower Photo: TSI-07-White Mastic on Fiberglass TSI

Photograph Date: September 4, 2019
Prepared By: GLE Associates, Inc.

UF DSB 8-10 Plenum
19140-01824
Photograph Date: September 4, 2019
Prepared By: GLE Associates, Inc.

Upper Photo: TSI-08-White Mastic on Foamglass TSI
Lower Photo: TSI-09-Black Mastic on Foamglass TSI