BEA **Belka Engineering Associates, Inc.**

7 Clusters Court, Suite 201 Phone (803) 731-0650 Fax (803) 731-2880
Columbia, SC 29210 email: cestringfield@bellsouth.net

ADDENDUM NO. 1

PROJECT: USC BARNWELL COLLEGE FIRE ALARM

STATE PROJECT NO.: H27-I851

BEA PROJECT NO.: US21207

DATE OF ISSUE: SEPTEMBER 11, 2015

TO: ALL BIDDERS OF RECORD, CONSULTANTS, AND OWNER:
The following items shall take precedence over the drawings and specifications for the above named project and shall become a part of the contract documents. Where any item called for in the specifications, or indicated on the drawings, is not supplemented hereby, the original requirements shall remain in effect. Where any original item is amended, voided, or superseded hereby, the provisions of such item not specifically amended, voided or superseded shall remain in effect.

CONTRACTOR SHALL ACKNOWLEDGE RECEIPT OF ADDENDUM.

ADDENDUM ITEMS:

This addendum consists of 2 pages and the following attachments:

- Haz-Mat Report (by Crossroads Environment, LLC dated 12/17/13) – 56 pages.
- Copy of Pre-Bid Attendees List – 1 page.

I. FOR CLARIFICATION – The following items were discussed at pre-bid meeting conducted on 9/3/15 at USC Facilities – 743 Greene Street:

A. Last Day for Questions – Wednesday, September 9, 2015 – 2 p.m.

B. Last Day for Addenda – Friday, September 11, 2015 – 2 p.m.

C. Haz-Mat Report was requested. See Attachment.

D. Contact Person for Building Access – Ms. Vickie Lewter – (803) 777-4263
lewterv@mailbox.sc.edu

E. Parking – Availability may be limited during construction. Bidders should anticipate costs for metered street parking.

F. End User's Occupancy of Building – Faculty and students will occupy building construction and some after-hours work may be required to comply with class schedules. USC will coordinate with selected Contractor on final schedule.

G. Delivery of Bids – All bids shall be mailed to the attention of Ms. Aimee Rish.

H. Pre-Bid Attendance – Copy of pre-bid attendees is attached.

END OF ADDENDUM NO. 1

crossroads
environmental, llc

LIMITED ASBESTOS AND LEAD INSPECTION REPORT

CLIENT
Pete Fisher
University of South Carolina
743 Greene Street
Columbia, South Carolina 29208

LOCATION
University of South Carolina
Barnwell College (Limited Areas)
1512 Pendleton Street
Columbia, South Carolina 29208

DATES
INSPECTION DATES: December 5 and 11, 2013
REPORT DATE: December 17, 2013

INSPECTORS
Kay Horton—SC-DHEC License #ASB-23394, Exp. 02/26/14
(864) 680-5537
Evans Harris – SC-DHEC License #BI-01224, Exp. 02/13/14
(864) 680-1233
Kay Horton—U.S.E.P.A. LBPP License #SC-I-117167-1, Exp. 10/14/2014

For

Crossroads Environmental, LLC
1258 Boiling Springs Road
Spartanburg, South Carolina 29303
(864) 541-8736
CRE Project #12771-IN

crossroads
environmental, llc

December 17, 2013

Mr. Pete Fisher
University of South Carolina
743 Greene Street
Columbia, South Carolina 29208

Re: Limited Asbestos and Lead Inspection Report
Barnwell College- Fire Alarms System
1512 Pendleton Street, Columbia, South Carolina 29208
CRE Project Number: 12771-IN

Dear Mr. Fisher:

Crossroads Environmental, LLC (CRE) completed a limited asbestos and lead inspection of Barnwell College, located at 1512 Pendleton Street, on December 5 and December 11, 2013. The scope of work included testing all materials to be disturbed during the implementation of a new fire alarms system. The inspection was performed by two SC-DHEC Licensed Asbestos Inspectors, and in accordance with South Carolina Department of Health and Environmental Control (SC-DHEC) and Environmental Protection Agency (EPA) Requirements. **A detailed summary table of the asbestos sampling and results is included in Attachment I; however, this report should be read in its entirety.**

Building/Area Description

Barnwell College, which houses the University of South Carolina's (USC) Department of Psychology, was originally constructed in 1910 out of a need for more student classrooms. The structure houses 5 floors, accessed by an elevator system or stairwells on either side. The main entrance is stationed on the second floor, although there is a first floor access on the side of the building. Throughout Barnwell College, drywall frames in the walls and a drop grid of 2' x 2' tiles forms the ceilings. The first floor features vinyl flooring throughout the hallways while the other floors feature carpet. The stairwells and transitions also feature vinyl floor tile. Most of the classrooms and offices are carpeted as well, excluding many of the laboratories on the first floor. Throughout the building, a thick wall paper covers the majority of the wall space and above the

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ceiling different mastics and adhesives can be found on the extensive duct work. Above the duct work, uniform fireproofing can be found on all floors except the fifth.

This report addresses the sampling performed to prepare for the implementation of a new fire alarms system in Barnwell College. As part of that project, penetrations will need to be made through walls, floors and ceilings.

Inspection Strategy/Sampling Protocol

Asbestos

The asbestos inspection consisted of grouping suspect asbestos containing materials into homogeneous areas based on the color and texture of the material, and then performing representative sampling of the materials included in those homogeneous areas. SC-DHEC has requirements for the minimum number of samples that can be collected from each homogeneous area (three samples of each miscellaneous material, three samples of each type of thermal system insulation, and the sample requirements for surfacing are based on square footage).

Following completion of the on-site inspection/sampling, samples were submitted to an accredited laboratory for analysis. Stop positive analysis was requested on all materials except for surfacing (materials that have been sprayed-on or troweled-on), which means that if one sample of a material in a homogeneous area is found to contain asbestos, then the other samples of that material are not analyzed, but are assumed to contain asbestos based on the results from the first sample analyzed.

As of June 27, 2008, SC-DHEC requires that any non-friable organically bound (NOB) material that is suspect to contain asbestos, such as floor tile, mastics, roofing material, and caulking must be analyzed by transmission electron microscopy (TEM) if polarized light microscopy (PLM) analyses of that material indicate that no asbestos was detected.

Lead

The lead testing was performed utilizing an Innov-X XRF Analyzer (Model #: DC-2000, Serial # 560920). Testing was performed on painted surfaces that could be impacted by renovation activities.

Results

Asbestos

EPA recognizes a material as Asbestos Containing Material (ACM) if an asbestos content of greater than one percent asbestos is detected in a representative sample analyzed by polarized light microscopy.

Results indicated that greater than one percent asbestos was detected in both the grey and tan duct adhesives/mastics above the drop ceiling, as well as the pebble patterned vinyl roll flooring in Rooms 123 and 123-A.

Lead

According to the Environmental Protection Agency (EPA), paint containing ≥ 1 mg/cm^2 of lead (by XRF) or 0.5% by weight (paint chip analysis) is considered lead-based paint (LBP).

Where worker protection is concerned, OSHA does not specify a lead level content in paint chips. The OSHA standard (Lead in Construction Interim Final Rule, 29 CFR 1926.62) indicates that if airborne lead levels exceed the Action Level (AL is 30ug/mm^3) from a potential disturbance, then OSHA trained personnel must perform the work, and an employee exposure assessment would be required.

Results indicated that paint that meets EPA's definition of LBP, as well as paint containing lead as defined by OSHA, was found sporadically on the walls throughout the building. The wallpaper material, however, can be used as a surface indicator to aid in distinguishing the areas that contain lead from the areas where no lead was detected because as you will see in the table, all but one of the positive results came on surfaces featuring the wallpaper material, and the majority of wallpaper material tests concluded a positive result.

Relevant Definitions and Regulatory Requirements/Recommendations

Friability-Friable materials are defined as materials that can be reduced to powder by hand pressure. It should be noted that non-friable materials may become friable depending on the method of removal. All non-friable materials must be removed by properly accredited asbestos personnel. If the non-friable materials are removed in a friable manner, then all regulations in regards to friable abatement will apply, and the abatement must be performed by a SC-DHEC Licensed Asbestos Contractor, and in accordance with all state and federal regulations.

Closing Statements and Limitations

Attachment I includes a table with descriptions, results, and sample locations of the suspect asbestos-containing materials, and a table containing all lead results. Attachment II includes a copy of the analytical results from the laboratory. Attachment III includes a sketch and/or photographs of the sample locations. Attachment IV includes a copy of the SC-DHEC Asbestos Inspectors' Licenses.

The scope of work included materials that could be impacted by the renovation. If any materials are scheduled to be disturbed that were not included in this inspection report, then they should be sampled prior to disturbance.

This document has been prepared by Crossroads Environmental, LLC at the request of and for the exclusive use of the University of South Carolina. This report represents the findings from the dates that it was inspected, and is limited in scope to that indicated above.

Crossroads Environmental, LLC appreciates the opportunity to provide the University of South Carolina with our consultative services. Should you have any questions or need additional information, please do not hesitate to contact us.

Sincerely,

Kay H. Horton
Licensed Inspector

Evans Harris
Licensed Inspector

Attachments (4)

ATTACHMENT I
ASBESTOS & LEAD SUMMARY TABLES

CROSSROADS ENVIRONMENTAL, LLC LIMITED ASBESTOS INSPECTION REPORT		CRE JOB # 12771-IN
Location:	**Barnwell College**	
Client:	**University of South Carolina, Columbia, SC**	**DATE: 12/5/13**

Key: A=Amosite, C=Chrysotile, Cr=Crocidolite, Tr=Tremolite, Ac=Actinolite Asbestos, Misc.=Miscellaneous, HA#=Homogeneous Area #, PLM=Polarized Light Microscopy, TEM=Transmission Electron Microscopy, /=PLM and/or TEM Analysis Not Required
sq.ft.=Square Feet, cu.ft.=Cubic Feet, ln.ft.=Linear Feet, HJI=Hard Joint Insulation, TSI=Thermal System Insulation, BUR=Built-up Roofing, Surf=Surfacing
NAD=No Asbestos Detected, SP=Stop Positive

HA#	Type of Material TSI, Surf, Misc	Material Type	Photo	Sample Info	PLM Asbestos %	TEM Asbestos %	Location of Sample	Approx. Quantity	Physical Condition	Location/ Comments
01	Surf	Drywall & Joint Compound		201- Joint Compound 201- Drywall	NAD NAD	/ /	1st floor	>5,000 sq. ft.	Good; Non-Friable	Located throughout entire building. Drywall encompasses entire wall system within Barnwell College and drywall extends approximately 2' above drop ceilings. No plaster could be located.
				202- Joint Compound 202- Drywall	NAD NAD	/ /	1st floor			
				203- Joint Compound 203- Drywall	NAD NAD	/ /	2nd floor by elevator			
				204- Joint Compound 204- Drywall	NAD NAD	/ /	2nd floor by womens' RR			
				205- Joint Compound 205- Drywall	NAD NAD	/ /	3rd floor by room 341			
				206- Joint Compound 206- Drywall	NAD NAD	/ /	4th floor by room 410			
				207- Joint Compound 207- Drywall	NAD NAD	/ /	5th floor by RR			

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NAD=No Asbestos Detected, SP=Stop Positive

HA#	Type of Material TSI, Surf, Misc	Material Type	Photo	Sample Info	PLM Asbestos %	TEM Asbestos %	Location of Sample	Approx. Quantity	Physical Condition	Location/ Comments
02	Surf	Spray-Applied Fireproofing		208	NAD	/	1st floor	25,200 sq. ft.	Good; Friable	Located above drop ceilings throughout entire building.
				209	NAD	/	1st floor			
				210	NAD	/	2nd floor			
				211	NAD	/	2nd floor by womens' RR			
				212	NAD	/	3rd floor by room 341			
				213	NAD	/	4th floor by room 410			
				214	NAD	/	5th floor by RR			
03	Misc	2' x 2' Ceiling Tile (Small Holes)		215	NAD	/	1st floor	28,000 sq. ft.	Good; Friable	Located throughout the building on all floors.
				216	NAD	/	2nd floor			
				217	NAD	/	3rd floor			

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NAD=No Asbestos Detected, SP=Stop Positive

HA#	Type of Material TSI, Surf, Misc	Material Type	Photo	Sample Info	PLM Asbestos %	TEM Asbestos %	Location of Sample	Approx. Quantity	Physical Condition	Location/ Comments
04	Misc	12" White VFT w/ Tan Streaks		218- Floor tile 218- Leveling Comp. 218- Mastic	NAD NAD NAD	/ / /	1st floor storage closet	1,332 sq. ft.	Good; Non-Friable	Located throughout entire 1st floor hallway and storage room.
				219- Floor tile 219- Leveling Comp. 219- Mastic	NAD NAD NAD	/ / /	1st floor entrance at elevator			
				220- Floor tile 220- Leveling Comp. 220- Mastic	/ NAD /	NAD / NAD	1st floor by water tank			
05	Misc	12" Beige and Crème VFT		221- Floor tile 221- Mastic	NAD NAD	/ /	1st floor stairwell	1,445 sq. ft.	Good; Non-Friable	Located throughout the East and West stairwells and stairwell transitions.
				222- Floor tile 222- Mastic	NAD NAD	/ /	5th floor stairwell			
				223- Floor tile 223- Mastic	/ /	NAD <1%C	Stairwell transition between floors 3-4			

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NAD=No Asbestos Detected, SP=Stop Positive

HA#	Type of Material TSI, Surf, Misc	Material Type	Photo	Sample Info	PLM Asbestos %	TEM Asbestos %	Location of Sample	Approx. Quantity	Physical Condition	Location/ Comments
06	**Misc**	**Duct Sealant (Tan)**		**224**	**2%C**	**/**	**2nd floor by womens' RR**	**610 ln. ft.**	**Good; Non-Friable**	**Located throughout building above drop ceiling on all floors except the 5th.**
				225	**S/P**	**/**	**3rd floor**			
				226	**S/P**	**/**	**4th floor by room 456**			
07	**Misc**	**Duct Sealant (Gray)**		**227**	**3%C**	**/**	**2nd floor by womens' RR**	**2,040 ln. ft.**	**Good; Non-Friable**	**Located throughout building above drop ceiling on all floors except the 5th.**
				228	**S/P**	**/**	**3rd floor by room 341**			
				229	**S/P**	**/**	**4th floor by room 410**			

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HA#	Type of Material TSI, Surf, Misc	Material Type	Photo	Sample Info	PLM Asbestos %	TEM Asbestos %	Location of Sample	Approx. Quantity	Physical Condition	Location/ Comments
08	Misc	Carpet Glue		230	NAD	/	2nd floor hallway	2,880 sq. ft. (hallways only)	Good; Non-Friable	Located throughout hallways of floors 2, 3, 4, and 5. Also located throughout numerous classrooms on all floors except the 1st.
				231	NAD	/	3rd floor hallway			
				232	/	NAD	4th floor hallway			
09	Misc	12" Gold VFT w/ Glue		233- Floor tile 233- Mastic 233- Leveling Comp.	NAD NAD NAD	/ / /	Room 237	416 sq. ft.	Good; Friable	Located in Room 237 on 2nd floor.
				234- Floor tile 234- Mastic 234- Leveling Comp.	NAD NAD NAD	/ / /	Room 237			
				235- Floor tile 235- Mastic 235- Leveling Comp.	/ / NAD	NAD NAD /	Room 237			
10	Misc	2' x 2' Ceiling Tile (Squiggle/Dots)		236	NAD	/	Outside room 534	200 sq. ft.	Good; Friable	Used as replacement tiles in 5th floor hallway.
				237	NAD	/	Outside room 553			
				238	NAD	/	Outside room 555			

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NAD=No Asbestos Detected, SP=Stop Positive

HA#	Type of Material TSI, Surf, Misc	Material Type	Photo	Sample Info	PLM Asbestos %	TEM Asbestos %	Location of Sample	Approx. Quantity	Physical Condition	Location/ Comments
11	**Misc**	**Pebble Patterned Vinyl Roll Flooring**		**239- Vinyl flooring** **239- Mastic**	**25%C** **3%C**	**/** **/**	**Room 123**	**216 sq. ft.**	**Good; Non-Friable**	**Rooms 123 and 123-A.**
				240- Vinyl flooring **240- Mastic**	**S/P** **S/P**	**/** **/**	**Room 123**			
				241- Vinyl flooring **241- Mastic**	**S/P** **S/P**	**/** **/**	**Room 123-A**			
12	Misc	Confetti Pattern Vinyl Roll Flooring		242- Vinyl flooring 242- Mastic	NAD NAD	/ /	Main research lab	432 sq. ft.	Good; Non-Friable	Located in the lab rooms within the 1st floor research lab.
				243- Vinyl flooring 243- Mastic	NAD NAD	/ /	Main research lab			
				244- Vinyl flooring 244- Mastic	/ /	NAD NAD	Main research lab			
13	Misc	2' x 2' Ceiling Tile (Smooth)		245	NAD	/	Room 144	1,200 sq. ft.	Good; Non-Friable	Located throughout lab/research rooms on 1st floor.
				246	NAD	/	Room 106			
				247	NAD	/	Room 144			

Table I. Lead Results

Date	Time	Reading	LBP Result	LBP Concentration (mg/cm2)	Side	Room	Substrate	Floor	Int./Ext.	Color	Wallpaper/ Paint	Structure
12/11/2013	14:06:52	#14	Negative	0	B	Room 237	Drywall	2nd	INTERIOR	Yellow	Paint	Wall
12/11/2013	14:07:04	#15	Negative	0	D	Room 237	Drywall	2nd	INTERIOR	Yellow	Paint	Wall
12/11/2013	14:08:34	#16	Negative	0.0170147	C	Left end hallway at stairwell exit	Drywall	2nd	INTERIOR	Eggshell	Paint	Wall
12/11/2013	14:10:31	#17	Negative	0.0114389	D	Beside room 224 entrance	Drywall	2nd	INTERIOR	Eggshell	Paint	Wall
12/11/2013	14:12:46	#18	Negative	0	C	Front lobby	Drywall	2nd	INTERIOR	Eggshell	Paint	Wall
12/11/2013	14:12:59	#19	Negative	0	A	Front lobby	Drywall	2nd	INTERIOR	Eggshell	Paint	Wall
12/11/2013	14:13:43	#20	Negative	0.0196691	D	Front lobby	Drywall	2nd	INTERIOR	Eggshell	Paint	Wall
12/11/2013	14:15:53	#21	Negative	0.0313927	D	Front lobby	Drywall	2nd	INTERIOR	Eggshell	Paint	Wall
12/11/2013	14:17:12	#22	Negative	0	A	Welsh Conference Room	Drywall	2nd	INTERIOR	White	Paint	Wall
12/11/2013	14:17:30	#23	Negative	0	C	Welsh Conference Room	Drywall	2nd	INTERIOR	White	Paint	Wall
12/11/2013	14:17:38	#24	Negative	0	D	Welsh Conference Room	Drywall	2nd	INTERIOR	White	Paint	Wall
12/11/2013	14:19:40	#25	Negative	0.0228646	D	Right end of hallway	Drywall	2nd	INTERIOR	Eggshell	Paint	Wall
12/11/2013	14:20:22	#26	Positive - Estimated Result	1	B	Right end of hallway	Drywall	2nd	INTERIOR	Eggshell	Paint	Wall
12/11/2013	14:22:32	#27	Negative	0	B	Elevator lobby	Drywall	2nd	INTERIOR	White	Paint	Wall
12/11/2013	14:22:42	#28	Negative	0	C	Elevator lobby	Drywall	2nd	INTERIOR	White	Paint	Wall

Table I. Lead Results

Date	Time	Reading	LBP Result	LBP Concentration (mg/cm2)	Side	Room	Substrate	Floor	Int./Ext.	Color	Wallpaper/ Paint	Structure
12/11/2013	14:22:51	#29	Negative	0	D	Elevator lobby	Drywall	2nd	INTERIOR	White	Paint	Wall
12/11/2013	14:25:35	#30	Negative	0	B	Elevator lobby	Drywall	3rd	INTERIOR	White	Paint	Wall
12/11/2013	14:25:43	#31	CCcC	0	C	Elevator lobby	Drywall	3rd	INTERIOR	White	Paint	Wall
12/11/2013	14:25:52	#32	Negative	0	D	Elevator lobby	Drywall	3rd	INTERIOR	White	Paint	Wall
12/11/2013	14:27:08	#33	Positive - Estimated Result	1	B	Right end of hallway @ elevator exit	Drywall	3rd	INTERIOR	Beige	Wallpaper	Wall
12/11/2013	14:28:37	#34	Positive - Estimated Result	1	D	Right end of hallway @ elevator exit	Drywall	3rd	INTERIOR	Beige	Wallpaper	Wall
12/11/2013	14:29:42	#35	Negative	0	B	Room 363-365 hallway	Drywall	3rd	INTERIOR	Off-white	Paint	Wall
12/11/2013	14:29:56	#36	Negative	0	B	Room 363-365 hallway	Drywall	3rd	INTERIOR	Off-white	Paint	Wall
12/11/2013	14:30:04	#37	Negative	0	D	Room 363-365 hallway	Drywall	3rd	INTERIOR	Off-white	Paint	Wall
12/11/2013	14:30:17	#38	Negative	0	D	Room 363-365 hallway	Drywall	3rd	INTERIOR	Off-white	Paint	Wall
12/11/2013	14:32:25	#39	Positive - Estimated Result	1	B	Hallway @ entry to 363-365	Drywall	3rd	INTERIOR	Beige	Wallpaper	Wall
12/11/2013	14:34:51	#40	Negative	0.018942	B	Hallway @ room 361	Drywall	3rd	INTERIOR	Beige	Wallpaper	Wall
12/11/2013	14:37:03	#41	Positive - Estimated Result	1	A	Hallway @ room 360	Drywall	3rd	INTERIOR	Beige	Wallpaper	Wall
12/11/2013	14:38:11	#42	Positive - Estimated Result	1	B	Hallway @ room 351	Drywall	3rd	INTERIOR	Beige	Wallpaper	Wall

Table I. Lead Results

Date	Time	Reading	LBP Result	LBP Concentration (mg/cm2)	Side	Room	Substrate	Floor	Int./Ext.	Color	Wallpaper/ Paint	Structure
12/11/2013	14:39:21	#43	Positive - Estimated Result	1	C	Hallway @ room 347	Drywall	3rd	INTERIOR	Beige	Wallpaper	Wall
12/11/2013	14:41:32	#44	Positive - Estimated Result	1	B	Hallway @ room 346	Drywall	3rd	INTERIOR	Beige	Wallpaper	Wall
12/11/2013	14:43:35	#45	Positive - Estimated Result	1	D	Hallway @ entrance to rooms 311-321	Drywall	3rd	INTERIOR	Beige	Wallpaper	Wall
12/11/2013	14:44:56	#46	Positive - Estimated Result	1	D	Hallway @ electrical room	Drywall	3rd	INTERIOR	Beige	Wallpaper	Wall
12/11/2013	14:46:05	#47	Positive - Estimated Result	1	A	Hallway @ elevator exit	Drywall	3rd	INTERIOR	Beige	Wallpaper	Wall
12/11/2013	14:49:20	#48	Negative	0	B	Elevator lobby	Drywall	4th	INTERIOR	White	Paint	Wall
12/11/2013	14:49:28	#49	Negative	0	C	Elevator lobby	Drywall	4th	INTERIOR	White	Paint	Wall
12/11/2013	14:49:37	#50	Negative	0	C	Elevator lobby	Drywall	4th	INTERIOR	White	Paint	Wall
12/11/2013	14:49:46	#51	Negative	0	D	Elevator lobby	Drywall	4th	INTERIOR	White	Paint	Wall
12/11/2013	14:52:16	#52	Positive - Estimated Result	1	A	Hallway @ elevator exit	Drywall	4th	INTERIOR	Khaki	Wallpaper	Wall
12/11/2013	14:54:16	#53	Positive - Estimated Result	1	D	Front hallway	Drywall	4th	INTERIOR	Khaki	Wallpaper	Wall
12/11/2013	14:55:41	#54	Positive - Estimated Result	1	B	Front hallway	Drywall	4th	INTERIOR	Khaki	Wallpaper	Wall
12/11/2013	14:57:24	#56	Positive - Estimated Result	1	C	Front hallway	Drywall	4th	INTERIOR	Khaki	Wallpaper	Wall

Table I. Lead Results

Date	Time	Reading	LBP Result	LBP Concentration (mg/cm2)	Side	Room	Substrate	Floor	Int./Ext.	Color	Wallpaper/ Paint	Structure
12/11/2013	14:58:43	#57	Positive - Estimated Result	1	B	436 Hallway	Drywall	4th	INTERIOR	Cream	Wallpaper	Wall
12/11/2013	14:59:25	#58	Negative	0.036579	C	436 Hallway	Drywall	4th	INTERIOR	Cream	Wallpaper	Wall
12/11/2013	15:00:06	#59	Positive - Estimated Result	1	D	436 Hallway	Drywall	4th	INTERIOR	Cream	Wallpaper	Wall
12/11/2013	15:01:36	#60	Positive - Estimated Result	1	A	436 Hallway	Drywall	4th	INTERIOR	Cream	Wallpaper	Wall
12/11/2013	15:02:23	#61	Positive - Estimated Result	1	B	Back hallway	Drywall	4th	INTERIOR	Khaki	Wallpaper	Wall
12/11/2013	15:04:02	#62	Negative	0.0229991	B	Back hallway @ room 460	Drywall	4th	INTERIOR	Khaki	Wallpaper	Wall
12/11/2013	15:04:46	#63	Negative	0.0193401	A	Back hallway @ room 465	Drywall	4th	INTERIOR	Khaki	Wallpaper	Wall
12/11/2013	15:05:49	#64	Positive - Estimated Result	1	D	Back hallway @ room 459	Drywall	4th	INTERIOR	Khaki	Wallpaper	Wall
12/11/2013	15:07:01	#65	Positive - Estimated Result	1	D	Back hallway @ room 445	Drywall	4th	INTERIOR	Khaki	Wallpaper	Wall
12/11/2013	15:09:39	#66	Positive - Estimated Result	1	C	Hallway @ stairwell exit	Drywall	5th	INTERIOR	Beige	Wallpaper	Wall
12/11/2013	15:11:30	#67	Positive - Estimated Result	1	D	Back hallway @ room 539	Drywall	5th	INTERIOR	Beige	Wallpaper	Wall
12/11/2013	15:13:26	#68	Positive - Estimated Result	1	C	Back hallway @ restrooms	Drywall	5th	INTERIOR	Beige	Wallpaper	Wall
12/11/2013	15:14:43	#69	Positive - Estimated Result	1	A	Back hallway @ restrooms	Drywall	5th	INTERIOR	Beige	Wallpaper	Wall

Table I. Lead Results

Date	Time	Reading	LBP Result	LBP Concentration (mg/cm2)	Side	Room	Substrate	Floor	Int./Ext.	Color	Wallpaper/ Paint	Structure
12/11/2013	15:16:09	#70	Positive - Estimated Result	1	B	Front hallway	Drywall	5th	INTERIOR	Beige	Wallpaper	Wall
12/11/2013	15:17:27	#71	Positive - Estimated Result	1	B	Front hallway	Drywall	5th	INTERIOR	Beige	Wallpaper	Wall
12/11/2013	15:25:16	#72	Negative	0.00579008	C	Adjacent to elevator closet	Drywall	1st	INTERIOR	White	Wallpaper	Wall
12/11/2013	15:26:06	#73	Negative	0	D	Hallway @ fire hose	Drywall	1st	INTERIOR	White	Paint	Wall
12/11/2013	15:26:15	#74	Negative	2.04896E-05	A	Hallway @ elevator lobby exit	Drywall	1st	INTERIOR	White	Paint	Wall
12/11/2013	15:27:40	#75	Negative	0	A	Storage room (equipment)	Drywall	1st	INTERIOR	Off-white	Acrylic	Wall
12/11/2013	15:27:49	#76	Negative	0	B	Storage room (equipment)	Drywall	1st	INTERIOR	Off-white	Acrylic	Wall
12/11/2013	15:27:57	#77	Negative	0	C	Storage room (equipment)	Drywall	1st	INTERIOR	Off-white	Acrylic	Wall
12/11/2013	15:30:45	#78	Negative	0	B	Boiler room	Drywall	1st	INTERIOR	White	Paint	Wall
12/11/2013	15:33:16	#79	Negative	0	D	Hallway adjacent to room 142	Drywall	1st	INTERIOR	White	Paint	Wall
12/11/2013	15:34:26	#80	Negative	0	A	Middle hallway	Drywall	1st	INTERIOR	White	Wallpaper	Wall
12/11/2013	15:34:36	#81	Negative	0	B	Middle hallway	Drywall	1st	INTERIOR	White	Wallpaper	Wall
12/11/2013	15:34:46	#82	Negative	0	C	Middle hallway	Drywall	1st	INTERIOR	White	Wallpaper	Wall
12/11/2013	15:36:55	#83	Negative	0	A	Main laboratory	Drywall	1st	INTERIOR	White	Paint	Wall
12/11/2013	15:37:07	#84	Negative	0	B	Main laboratory	Drywall	1st	INTERIOR	White	Paint	Wall

Table I. Lead Results

Date	Time	Reading	LBP Result	LBP Concentration (mg/cm2)	Side	Room	Substrate	Floor	Int./Ext.	Color	Wallpaper/ Paint	Structure
12/11/2013	15:37:19	#85	Negative	0	C	Main laboratory	Drywall	1st	INTERIOR	White	Paint	Wall
12/11/2013	15:37:30	#86	Negative	0	D	Main laboratory	Drywall	1st	INTERIOR	White	Paint	Wall
12/11/2013	15:38:58	#87	Negative	0.0178142	A	118 lab hallway	Drywall	1st	INTERIOR	White	Wallpaper	Wall
12/11/2013	15:39:11	#88	Negative	0	C	118 lab hallway	Drywall	1st	INTERIOR	White	Wallpaper	Wall
12/11/2013	15:39:21	#89	Negative	0.0383738	D	118 lab hallway	Drywall	1st	INTERIOR	White	Wallpaper	Wall
12/11/2013	15:39:36	#90	Negative	0.0385667	B	118 lab hallway	Drywall	1st	INTERIOR	White	Wallpaper	Wall
12/11/2013	15:41:59	#91	Positive - Estimated Result	1	A	123 hallway	Drywall	1st	INTERIOR	White	Wallpaper	Wall
12/11/2013	15:42:39	#92	Positive - Estimated Result	1	B	123 hallway	Drywall	1st	INTERIOR	White	Wallpaper	Wall
12/11/2013	15:43:18	#93	Positive - Estimated Result	1	C	123 hallway	Drywall	1st	INTERIOR	White	Wallpaper	Wall
12/11/2013	15:43:58	#94	Positive - Estimated Result	1	D	123 hallway	Drywall	1st	INTERIOR	White	Wallpaper	Wall
12/11/2013	15:45:40	#95	Negative	0	Floor	Brown painted concrete floor adj. to 123 hallway entry	Cement	1st	INTERIOR	Brown	Paint	Floor
12/11/2013	15:47:25	#96	Negative	0	B	1st floor stairwell	Drywall	1st	INTERIOR	White	Paint	Wall
12/11/2013	15:47:34	#97	Negative	0	C	1st floor stairwell	Drywall	1st	INTERIOR	White	Paint	Wall
12/11/2013	15:47:41	#98	Negative	0	D	1st floor stairwell	Drywall	1st	INTERIOR	White	Paint	Wall

Table I. Lead Results

Date	Time	Reading	LBP Result	LBP Concentration (mg/cm2)	Side	Room	Substrate	Floor	Int./Ext.	Color	Wallpaper/ Paint	Structure
12/11/2013	15:48:04	#99	Negative	0	B	2nd floor stairwell	Drywall	1st	INTERIOR	White	Paint	Wall
12/11/2013	15:48:12	#100	Negative	0	C	2nd floor stairwell	Drywall	1st	INTERIOR	White	Paint	Wall
12/11/2013	15:48:20	#101	Negative	0	D	2nd floor stairwell	Drywall	1st	INTERIOR	White	Paint	Wall

ATTACHMENT II
LABORATORY REPORT

ASBESTOS LABORATORY REPORT

Prepared for

Crossroads Environmental

PROJECT: USC - Barnwell College; 12771-IN

CEI LAB CODE: A13-14640

DATE ANALYZED: 12/09/13

DATE REPORTED: 12/10/13

TOTAL SAMPLES ANALYZED: 38

 # SAMPLES >1% ASBESTOS: 4

TEL: 866-481-1412

www.ceilabs.com

Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: USC - Barnwell College; 12771-IN **CEI LAB CODE:** A13-14640

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
201	Layer 1	A1610382	White	Joint Compound	None Detected
	Layer 2	A1610382	Off-white	Drywall	None Detected
202	Layer 1	A1610383	White	Joint Compound	None Detected
	Layer 2	A1610383	Off-white	Drywall	None Detected
203	Layer 1	A1610384	White	Joint Compound	None Detected
	Layer 2	A1610384	Off-white	Drywall	None Detected
204	Layer 1	A1610385	White	Joint Compound	None Detected
	Layer 2	A1610385	Off-white	Drywall	None Detected
205	Layer 1	A1610386	White	Joint Compound	None Detected
	Layer 2	A1610386	Off-white	Drywall	None Detected
206	Layer 1	A1610387	White	Joint Compound	None Detected
	Layer 2	A1610387	Off-white	Drywall	None Detected
207	Layer 1	A1610388	White	Joint Compound	None Detected
	Layer 2	A1610388	Off-white	Drywall	None Detected
208		A1610389	Light Grey	Fireproofing	None Detected
209		A1610390	Light Grey	Fireproofing	None Detected
210		A1610391	Light Grey	Fireproofing	None Detected
211		A1610392	Light Grey	Fireproofing	None Detected
212		A1610393	Light Grey	Fireproofing	None Detected
213		A1610394	Light Grey	Fireproofing	None Detected
214		A1610395	Light Grey	Fireproofing	None Detected
215		A1610396	White,Tan	Ceiling Tile	None Detected
216		A1610397	White,Tan	Ceiling Tile	None Detected
217		A1610398	White,Tan	Ceiling Tile	None Detected
218		A1610399A	White,Tan	Floor Tile	None Detected
	Layer 1	A1610399B	Light Yellow	Mastic	None Detected
	Layer 2	A1610399B	Grey	Leveling Compound	None Detected
219		A1610400A	White,Tan	Floor Tile	None Detected
	Layer 1	A1610400B	Light Yellow	Mastic	None Detected
	Layer 2	A1610400B	Grey,Off-white	Leveling Compound	None Detected

Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: USC - Barnwell College; 12771-IN **CEI LAB CODE:** A13-14640

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
220		A1610401A		Sample Submitted for TEM Analysis	
	Layer 1	A1610401B		Sample Submitted for TEM Analysis	
	Layer 2	A1610401B	Grey	Leveling Compound	None Detected
221		A1610402A	Beige,Cream	Floor Tile	None Detected
		A1610402B	Yellow	Mastic	None Detected
222		A1610403A	Beige,Cream	Floor Tile	None Detected
		A1610403B	Yellow	Mastic	None Detected
223		A1610404A		Sample Submitted for TEM Analysis	
		A1610404B		Sample Submitted for TEM Analysis	
224		A1610405	Tan	Duct Sealant	Chrysotile 2%
225		A1610406		Sample Not Analyzed per COC	
226		A1610407		Sample Not Analyzed per COC	
227		A1610408	Grey	Duct Sealant	Chrysotile 3%
228		A1610409		Sample Not Analyzed per COC	
229		A1610410		Sample Not Analyzed per COC	
230		A1610411	Yellow	Carpet Glue	None Detected
231		A1610412	Yellow	Carpet Glue	None Detected
232		A1610413		Sample Submitted for TEM Analysis	
233		A1610414A	Gold	Floor Tile	None Detected
	Layer 1	A1610414B	Yellow	Mastic	None Detected
	Layer 2	A1610414B	Grey	Leveling Compound	None Detected
234		A1610415A	Gold	Floor Tile	None Detected
	Layer 1	A1610415B	Yellow	Mastic	None Detected
	Layer 2	A1610415B	Grey	Leveling Compound	None Detected
235		A1610416A		Sample Submitted for TEM Analysis	
	Layer 1	A1610416B		Sample Submitted for TEM Analysis	

Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: USC - Barnwell College; 12771-IN **CEI LAB CODE:** A13-14640

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
	Layer 2	A1610416B	Grey	Leveling Compound	None Detected
236		A1610417	White,Tan	Ceiling Tile	None Detected
237		A1610418	White,Tan	Ceiling Tile	None Detected
238		A1610419	White,Tan	Ceiling Tile	None Detected
239	Layer 1	A1610420	Beige,Pebble Pattern	Vinyl Flooring	Chrysotile 25%
	Layer 2	A1610420	Beige	Mastic	Chrysotile 3%
240		A1610421		Sample Not Analyzed per COC	
241		A1610422		Sample Not Analyzed per COC	
242	Layer 1	A1610423	Confetti Pattern	Vinyl Flooring	None Detected
	Layer 2	A1610423	Beige	Mastic	None Detected
243	Layer 1	A1610424	Confetti Pattern	Vinyl Flooring	None Detected
	Layer 2	A1610424	Beige	Mastic	None Detected
244	Layer 1	A1610425		Sample Submitted for TEM Analysis	
	Layer 2	A1610425		Sample Submitted for TEM Analysis	
245		A1610426	White	Ceiling Tile	None Detected
246		A1610427	White	Ceiling Tile	None Detected
247		A1610428	White	Ceiling Tile	None Detected

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Crossroads Environmental
1258 Boiling Springs Road
Spartanburg, SC 29303

CEI Lab Code: A13-14640
Date Received: 12-09-13
Date Analyzed: 12-09-13
Date Reported: 12-10-13

Project: USC - Barnwell College; 12771-IN

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID / Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS Fibrous		Non-Fibrous		ASBESTOS %
201	Joint Compound	Homogeneous			70%	Calc Carb	**None Detected**
Layer 1		White			15%	Binder	
A1610382		Non-fibrous			15%	Silicates	
		Loosely Bound					
Layer 2	Drywall	Heterogeneous	15%	Cellulose	80%	Gravel	**None Detected**
A1610382		Off-white			5%	Silicates	
		Fibrous					
		Loosely Bound					
202	Joint Compound	Homogeneous			70%	Calc Carb	**None Detected**
Layer 1		White			15%	Binder	
A1610383		Non-fibrous			15%	Silicates	
		Loosely Bound					
Layer 2	Drywall	Heterogeneous	15%	Cellulose	80%	Gravel	**None Detected**
A1610383		Off-white			5%	Silicates	
		Fibrous					
		Loosely Bound					
203	Joint Compound	Homogeneous			70%	Calc Carb	**None Detected**
Layer 1		White			15%	Binder	
A1610384		Non-fibrous			15%	Silicates	
		Loosely Bound					
Layer 2	Drywall	Heterogeneous	15%	Cellulose	80%	Gravel	**None Detected**
A1610384		Off-white			5%	Silicates	
		Fibrous					
		Loosely Bound					
204	Joint Compound	Homogeneous			70%	Calc Carb	**None Detected**
Layer 1		White			15%	Binder	
A1610385		Non-fibrous			15%	Silicates	
		Loosely Bound					

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Crossroads Environmental
1258 Boiling Springs Road
Spartanburg, SC 29303

CEI Lab Code: A13-14640
Date Received: 12-09-13
Date Analyzed: 12-09-13
Date Reported: 12-10-13

Project: USC - Barnwell College; 12771-IN

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID / Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS Fibrous		Non-Fibrous		ASBESTOS %
Layer 2 A1610385	Drywall	Heterogeneous Off-white Fibrous Loosely Bound	15%	Cellulose	80% 5%	Gravel Silicates	**None Detected**
205 Layer 1 A1610386	Joint Compound	Homogeneous White Non-fibrous Loosely Bound			70% 15% 15%	Calc Carb Binder Silicates	**None Detected**
Layer 2 A1610386	Drywall	Heterogeneous Off-white Fibrous Loosely Bound	15%	Cellulose	80% 5%	Gravel Silicates	**None Detected**
206 Layer 1 A1610387	Joint Compound	Homogeneous White Non-fibrous Loosely Bound			70% 15% 15%	Calc Carb Binder Silicates	**None Detected**
Layer 2 A1610387	Drywall	Heterogeneous Off-white Fibrous Loosely Bound	15%	Cellulose	80% 5%	Gravel Silicates	**None Detected**
207 Layer 1 A1610388	Joint Compound	Homogeneous White Non-fibrous Loosely Bound			70% 15% 15%	Calc Carb Binder Silicates	**None Detected**
Layer 2 A1610388	Drywall	Heterogeneous Off-white Fibrous Loosely Bound	15%	Cellulose	80% 5%	Gravel Silicates	**None Detected**

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Crossroads Environmental
1258 Boiling Springs Road
Spartanburg, SC 29303

CEI Lab Code: A13-14640
Date Received: 12-09-13
Date Analyzed: 12-09-13
Date Reported: 12-10-13

Project: USC - Barnwell College; 12771-IN

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID / Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS Fibrous		Non-Fibrous		ASBESTOS %
208 A1610389	Fireproofing	Homogeneous Light Grey Fibrous Loosely Bound	80%	Fiberglass	10% 10%	Binder Calc Carb	**None Detected**
209 A1610390	Fireproofing	Homogeneous Light Grey Fibrous Loosely Bound	80%	Fiberglass	10% 10%	Binder Calc Carb	**None Detected**
210 A1610391	Fireproofing	Homogeneous Light Grey Fibrous Loosely Bound	80%	Fiberglass	10% 10%	Binder Calc Carb	**None Detected**
211 A1610392	Fireproofing	Homogeneous Light Grey Fibrous Loosely Bound	80%	Fiberglass	10% 10%	Binder Calc Carb	**None Detected**
212 A1610393	Fireproofing	Homogeneous Light Grey Fibrous Loosely Bound	80%	Fiberglass	10% 10%	Binder Calc Carb	**None Detected**
213 A1610394	Fireproofing	Homogeneous Light Grey Fibrous Loosely Bound	80%	Fiberglass	10% 10%	Binder Calc Carb	**None Detected**
214 A1610395	Fireproofing	Homogeneous Light Grey Fibrous Loosely Bound	80%	Fiberglass	10% 10%	Binder Calc Carb	**None Detected**

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Crossroads Environmental
1258 Boiling Springs Road
Spartanburg, SC 29303

CEI Lab Code: A13-14640
Date Received: 12-09-13
Date Analyzed: 12-09-13
Date Reported: 12-10-13

Project: USC - Barnwell College; 12771-IN

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID / Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS Fibrous		Non-Fibrous		ASBESTOS %
215 A1610396	Ceiling Tile	Heterogeneous White,Tan Fibrous Loosely Bound	65% 15%	Cellulose Fiberglass	15% 5%	Binder Paint	**None Detected**
216 A1610397	Ceiling Tile	Heterogeneous White,Tan Fibrous Loosely Bound	65% 15%	Cellulose Fiberglass	15% 5%	Binder Paint	**None Detected**
217 A1610398	Ceiling Tile	Heterogeneous White,Tan Fibrous Loosely Bound	65% 15%	Cellulose Fiberglass	15% 5%	Binder Paint	**None Detected**
218 A1610399A	Floor Tile	Homogeneous White,Tan Non-fibrous Tightly Bound			100%	Vinyl	**None Detected**
Layer 1 A1610399B	Mastic	Homogeneous Light Yellow Non-fibrous Tightly Bound			95% 5%	Mastic Silicates	**None Detected**
Layer 2 A1610399B	Leveling Compound	Homogeneous Grey Non-fibrous Bound			75% 25%	Binder Silicates	**None Detected**
219 A1610400A	Floor Tile	Homogeneous White,Tan Non-fibrous Tightly Bound			100%	Vinyl	**None Detected**

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Crossroads Environmental
1258 Boiling Springs Road
Spartanburg, SC 29303

CEI Lab Code: A13-14640
Date Received: 12-09-13
Date Analyzed: 12-09-13
Date Reported: 12-10-13

Project: USC - Barnwell College; 12771-IN

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID / Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS Fibrous		Non-Fibrous		ASBESTOS %
Layer 1 A1610400B	Mastic	Homogeneous Light Yellow Non-fibrous Tightly Bound			95% 5%	Mastic Silicates	**None Detected**
Layer 2 A1610400B	Leveling Compound	Homogeneous Grey,Off-white Non-fibrous Bound			75% 25%	Binder Silicates	**None Detected**
220 A1610401A	Sample Submitted for TEM Analysis						
Layer 1 A1610401B	Sample Submitted for TEM Analysis						
Layer 2 A1610401B	Leveling Compound	Homogeneous Grey Non-fibrous Bound			75% 25%	Binder Silicates	**None Detected**
221 A1610402A	Floor Tile	Homogeneous Beige,Cream Non-fibrous Tightly Bound			100%	Vinyl	**None Detected**
A1610402B	Mastic	Homogeneous Yellow Non-fibrous Tightly Bound	<1%	Cellulose	95% 5%	Mastic Silicates	**None Detected**
222 A1610403A	Floor Tile	Homogeneous Beige,Cream Non-fibrous Tightly Bound			100%	Vinyl	**None Detected**

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Crossroads Environmental
1258 Boiling Springs Road
Spartanburg, SC 29303

CEI Lab Code: A13-14640
Date Received: 12-09-13
Date Analyzed: 12-09-13
Date Reported: 12-10-13

Project: USC - Barnwell College; 12771-IN

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID / Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS Fibrous		Non-Fibrous		ASBESTOS %
A1610403B	Mastic	Homogeneous Yellow Non-fibrous Tightly Bound	<1%	Cellulose	95% 5%	Mastic Silicates	**None Detected**
223 A1610404A	Sample Submitted for TEM Analysis						
A1610404B	Sample Submitted for TEM Analysis						
224 A1610405	Duct Sealant	Homogeneous Tan Non-fibrous Bound			98%	Binder	**2% Chrysotile**
225 A1610406	Sample Not Analyzed per COC						
226 A1610407	Sample Not Analyzed per COC						
227 A1610408	Duct Sealant	Homogeneous Grey Non-fibrous Bound			97%	Binder	**3% Chrysotile**
228 A1610409	Sample Not Analyzed per COC						
229 A1610410	Sample Not Analyzed per COC						
230 A1610411	Carpet Glue	Homogeneous Yellow Non-fibrous Bound	<1%	Synthetic Fiber	95% 5%	Mastic Silicates	**None Detected**

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Crossroads Environmental
1258 Boiling Springs Road
Spartanburg, SC 29303

CEI Lab Code: A13-14640
Date Received: 12-09-13
Date Analyzed: 12-09-13
Date Reported: 12-10-13

Project: USC - Barnwell College; 12771-IN

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID / Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS Fibrous		Non-Fibrous		ASBESTOS %
231 A1610412	Carpet Glue	Homogeneous Yellow Non-fibrous Bound	<1%	Synthetic Fiber	95% 5%	Mastic Silicates	**None Detected**
232 A1610413	Sample Submitted for TEM Analysis						
233 A1610414A	Floor Tile	Homogeneous Gold Non-fibrous Bound			100%	Vinyl	**None Detected**
Layer 1 A1610414B	Mastic	Homogeneous Yellow Non-fibrous Bound			100%	Mastic	**None Detected**
Layer 2 A1610414B	Leveling Compound	Homogeneous Grey Non-fibrous Bound			75% 25%	Binder Silicates	**None Detected**
234 A1610415A	Floor Tile	Homogeneous Gold Non-fibrous Bound			100%	Vinyl	**None Detected**
Layer 1 A1610415B	Mastic	Homogeneous Yellow Non-fibrous Bound			100%	Mastic	**None Detected**
Layer 2 A1610415B	Leveling Compound	Homogeneous Grey Non-fibrous Bound			75% 25%	Binder Silicates	**None Detected**

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Crossroads Environmental
1258 Boiling Springs Road
Spartanburg, SC 29303

CEI Lab Code: A13-14640
Date Received: 12-09-13
Date Analyzed: 12-09-13
Date Reported: 12-10-13

Project: USC - Barnwell College; 12771-IN

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID / Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS Fibrous		Non-Fibrous		ASBESTOS %
235 A1610416A	Sample Submitted for TEM Analysis						
Layer 1 A1610416B	Sample Submitted for TEM Analysis						
Layer 2 A1610416B	Leveling Compound	Homogeneous Grey Non-fibrous Bound			75% 25%	Binder Silicates	**None Detected**
236 A1610417	Ceiling Tile	Heterogeneous White,Tan Fibrous Loosely Bound	65% 15%	Cellulose Fiberglass	15% 5%	Binder Paint	**None Detected**
237 A1610418	Ceiling Tile	Heterogeneous White,Tan Fibrous Loosely Bound	65% 15%	Cellulose Fiberglass	15% 5%	Binder Paint	**None Detected**
238 A1610419	Ceiling Tile	Heterogeneous White,Tan Fibrous Loosely Bound	65% 15%	Cellulose Fiberglass	15% 5%	Binder Paint	**None Detected**
239 Layer 1 A1610420	Vinyl Flooring	Heterogeneous Beige,Pebble Pattern Fibrous Bound	10%	Cellulose	50% 15%	Vinyl Binder	**25% Chrysotile**
Layer 2 A1610420	Mastic	Homogeneous Beige Fibrous Bound	2%	Cellulose	95%	Mastic	**3% Chrysotile**

Lab Notes: Analyst opinion: mastic contaminated from positive flooring material.

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Crossroads Environmental
1258 Boiling Springs Road
Spartanburg, SC 29303

CEI Lab Code: A13-14640
Date Received: 12-09-13
Date Analyzed: 12-09-13
Date Reported: 12-10-13

Project: USC - Barnwell College; 12771-IN

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID / Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS Fibrous		Non-Fibrous		ASBESTOS %
240 A1610421	Sample Not Analyzed per COC						
241 A1610422	Sample Not Analyzed per COC						
242 Layer 1 A1610423	Vinyl Flooring	Homogeneous Confetti Pattern Non-fibrous Bound			100%	Vinyl	**None Detected**
Layer 2 A1610423	Mastic	Homogeneous Beige Non-fibrous Bound	<1%	Cellulose	95% 5%	Mastic Silicates	**None Detected**
243 Layer 1 A1610424	Vinyl Flooring	Homogeneous Confetti Pattern Non-fibrous Bound			100%	Vinyl	**None Detected**
Layer 2 A1610424	Mastic	Homogeneous Beige Non-fibrous Bound	<1%	Cellulose	95% 5%	Mastic Silicates	**None Detected**
244 Layer 1 A1610425	Sample Submitted for TEM Analysis						
Layer 2 A1610425	Sample Submitted for TEM Analysis						
245 A1610426	Ceiling Tile	Heterogeneous White Fibrous Loosely Bound	15%	Cellulose	75% 5% 5%	Gypsum Silicates Binder	**None Detected**

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Crossroads Environmental
1258 Boiling Springs Road
Spartanburg, SC 29303

CEI Lab Code: A13-14640
Date Received: 12-09-13
Date Analyzed: 12-09-13
Date Reported: 12-10-13

Project: USC - Barnwell College; 12771-IN

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID / Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS Fibrous		Non-Fibrous		ASBESTOS %
246 A1610427	Ceiling Tile	Heterogeneous White Fibrous Loosely Bound	15%	Cellulose	75% 5% 5%	Gypsum Silicates Binder	**None Detected**
247 A1610428	Ceiling Tile	Heterogeneous White Fibrous Loosely Bound	15%	Cellulose	75% 5% 5%	Gypsum Silicates Binder	**None Detected**

LEGEND: Non-Anth = Non-Asbestiform Anthophylite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: **EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020**

The detection limit for the method is <1% by visual estimation and 0.25% by 400 point counts or 0.1% by 1,000 point counts.

Due to the limitations of the EPA 600 Method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarizing light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation.

ANALYST: Susannah Small

APPROVED BY: Tianbao Bai, Ph.D.
Laboratory Director

NVLAP Lab Code 101768-0

CEI LABS
107 New Edition Court, Cary, NC 27511
Tel: 866-481-1412; Fax: 919-481-1442

CHAIN OF CUSTODY

LAB USE ONLY:	
CEI Lab Code:	A13-14640 (47)
CEI Lab I.D. Range:	A1610382. A1610428

COMPANY CONTACT INFORMATION	
Company: CROSSROADS ENVIRONMENTAL, LLC	Client #:
Address: 1258 BOILING SPRINGS RD.	Job Contact: Evans Harris
SPARTANBURG, SC 29303	Email: RESULTS@CROSSROADSENV.NET
	Tel: 864-541-8736
Project Name: USC- Barnwell College	Fax: 864-541-8776
Project ID #: 12771-IN	P.O. #:

ASBESTOS	METHOD	4 HR*	8 HR*	24 HR	2 DAY	3 DAY	5 DAY
PLM BULK	EPA 600			X			
TEM BULK	CHATFIELD			X			
PLM POINT COUNT (400)	EPA 600						
PLM POINT COUNT (1000)	EPA 600						
PLM GRAVIMETRIC	EPA 600						
PLM GRAV w POINT COUNT	EPA 600						
OTHER:							

POSITIVE STOP ANALYSIS	X
SOUTH CAROLINA SAMPLES	X
NORTH CAROINA SAMPLES	

TEM INSTRUCTIONS	
BEGIN TEM ANALYSIS AFTER NEGATIVE PLM	X
ANALYZE TEM SAMPLES SIMULTANEOUSLY WITH PLM	

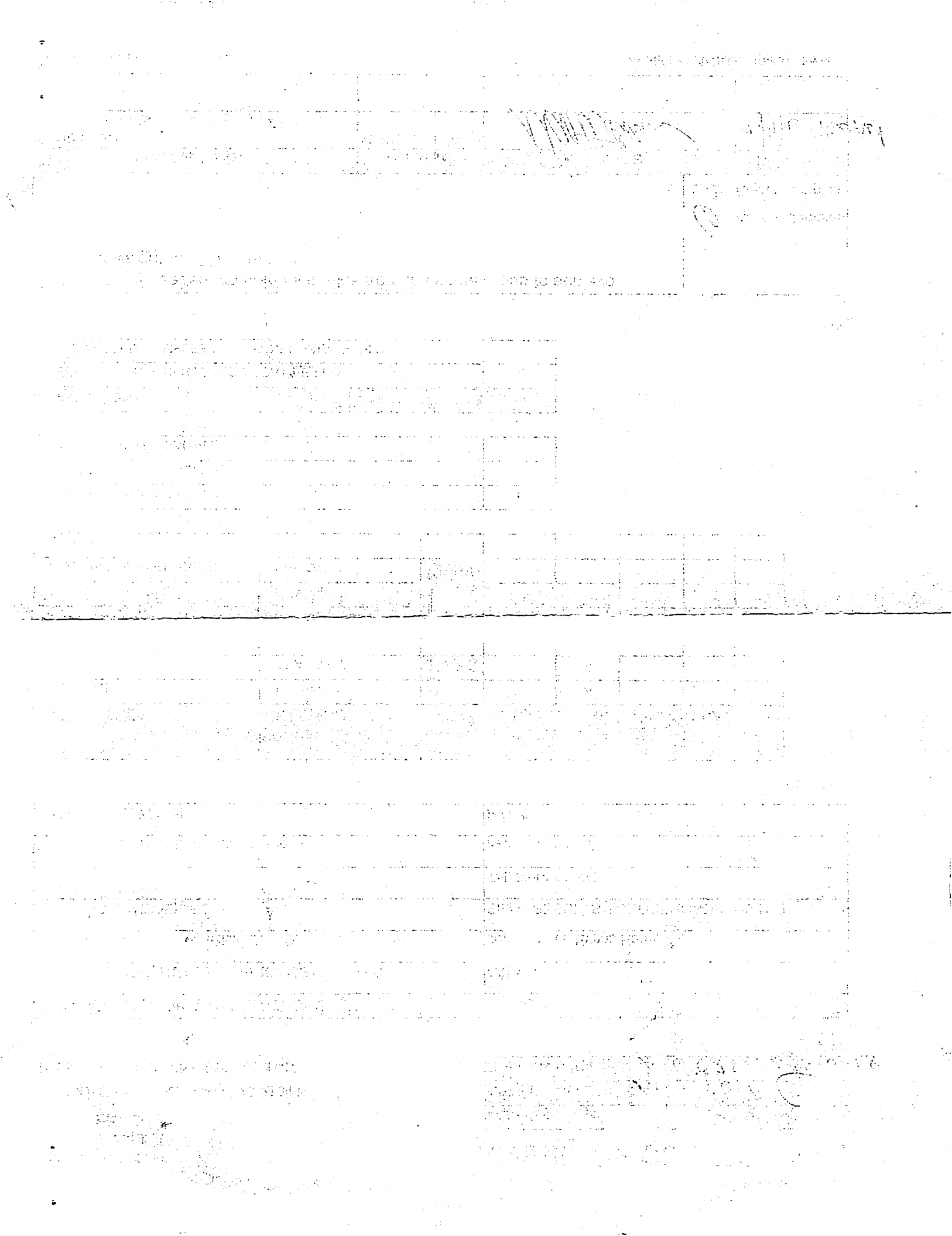
REMARKS: If needed, combine samples from the same group to achieve sufficient weight for TEM analysis.

☑ Accept Samples
☐ Reject Samples

Relinquished By:	Date/Time	Received By:	Date/Time
Evans Harris	12/6/2013 17:00	[signature]	12/9/13 9:20 AM

*Call to confirm RUSH analysis.

Samples will be disposed of 30 days after analysis



CEI LABS

SAMPLING FORM

A13-14640

COMPANY CONTACT INFORMATION	
Crossroads Environmental, LLC	Job Contact: Evans Harris
Project Name: USC- Barnwell College	
Project ID #: 12771-IN	Tel: 864-541-8736

SAMPLE ID#	HA	DESCRIPTION / LOCATION	TEST			
201	01	drywall w/ joint compound/ 1st floor	PLM	X	TEM	
202	01	drywall w/ joint compound/ 1st floor	PLM	X	TEM	
203	01	drywall w/ joint compound/ 2nd floor	PLM	X	TEM	
204	01	drywall w/ joint compound/ 2nd floor	PLM	X	TEM	
205	01	drywall w/ joint compound/ 3rd floor	PLM	X	TEM	
206	01	drywall w/ joint compound/ 4th floor	PLM	X	TEM	
207	01	drywall w/ joint compound/ 5th floor	PLM	X	TEM	
208	02	Fireproofing/ 1st floor	PLM	X	TEM	
209	02	Fireproofing/ 1st floor	PLM	X	TEM	
210	02	Fireproofing/ 2nd floor	PLM	X	TEM	
211	02	Fireproofing/ 2nd floor	PLM	X	TEM	
212	02	Fireproofing/ 3rd floor	PLM	X	TEM	
213	02	Fireproofing/ 4th floor	PLM	X	TEM	
214	02	Fireproofing/ 5th floor	PLM	X	TEM	
215	03	Ceiling tile/ 1st floor	PLM	X	TEM	
216	03	Ceiling tile/ 2nd floor	PLM	X	TEM	
217	03	Ceiling tile/ 3rd floor	PLM	X	TEM	
218	04	12" white w/ tan VFT/ 1st floor	PLM	X	TEM	
219	04	12" white w/ tan VFT/ 1st floor near elevator	PLM	X	TEM	
220	04	12" white w/ tan VFT/ 1st floor at water tank	PLM		TEM	X
221	05	Beige w/ cream VFT/ 1st floor stairwell	PLM	X	TEM	
222	05	Beige w/ cream VFT/ 5th floor stairwell	PLM	X	TEM	
223	05	Beige w/ cream VFT/ 3-4th floor stairwell transition	PLM		TEM	X
224	06	Duct sealant (tan)/ 2nd floor	PLM	X	TEM	
225	06	Duct sealant (tan)/ 3rd floor	PLM	X	TEM	
226	06	Duct sealant (tan)/ 4th floor	PLM		TEM	X
227	07	Duct sealant (grey)/ 2nd floor	PLM	X	TEM	
228	07	Duct sealant (grey)/ 3rd floor	PLM	X	TEM	
229	07	Duct sealant (grey)/ 4th floor	PLM		TEM	X
230	08	Carpet glue/ 2nd floor	PLM	X	TEM	
231	08	Carpet glue/ 3rd floor	PLM	X	TEM	
232	08	Carpet glue/ 4th floor	PLM		TEM	X
233	09	12" gold VFT w/ glue/ room 237	PLM	X	TEM	

CEI LABS

SAMPLING FORM

A13-14640

COMPANY CONTACT INFORMATION	
Crossroads Environmental, LLC	Job Contact: Evans Harris
Project Name: USC- Barnwell College	
Project ID #: 12771-IN	Tel: 864-541-8736

SAMPLE ID#	HA	DESCRIPTION / LOCATION	TEST			
234	09	12" gold VFT w/ glue/ room 237	PLM	X	TEM	
235	09	12" gold VFT w/ glue/ room 237	PLM		TEM	X
236	10	2' x 2' ceiling tile (squiggle)/ 5th floor hallway	PLM	X	TEM	
237	10	2' x 2' ceiling tile (squiggle)/ 5th floor hallway	PLM	X	TEM	
238	10	2' x 2' ceiling tile (squiggle)/ 5th floor hallway	PLM	X	TEM	
239	11	Pebble pattern vinyl flooring/ room 123	PLM	X	TEM	
240	11	Pebble pattern vinyl flooring/ room 123	PLM	X	TEM	
241	11	Pebble pattern vinyl flooring/ room 123-A	PLM		TEM	X
242	12	Confetti pattern vinyl flooring/ research lab	PLM	X	TEM	
243	12	Confetti pattern vinyl flooring/ research lab	PLM	X	TEM	
244	12	Confetti pattern vinyl flooring/ research lab	PLM		TEM	X
245	13	2' x 2' ceiling tile (smooth)/ 1st floor	PLM	X	TEM	
246	13	2' x 2' ceiling tile (smooth)/ 1st floor	PLM	X	TEM	
247	13	2' x 2' ceiling tile (smooth)/ 1st floor	PLM	X	TEM	
			PLM		TEM	
			PLM		TEM	
			PLM		TEM	
			PLM		TEM	
			PLM		TEM	
			PLM		TEM	
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			PLM		TEM	
			PLM		TEM	
			PLM		TEM	

ASBESTOS BULK ANALYSIS

By: TRANSMISSION ELECTRON MICROSCOPY

Client: Crossroads Environmental
1258 Boiling Springs Road
Spartanburg, SC 29303

CEI Lab Code: T13-2042
Date Received: 12-09-13
Date Analyzed: 12-10-13
Date Reported: 12-10-13

Project: USC - Barnwell College; 12771-IN

TEM BULK CHATFIELD

Client ID Lab ID	Material Description	Sample Weight (g)	Organic Material %	Acid Soluble Material %	Acid Insoluble Material %	Asbestos %
220 T18077	Floor Tile	0.2365	14.7	81.6	3.7	**None Detected**
220 T18078	Mastic	0.1	41.4	44.3	14.3	**None Detected**
223 T18079	Floor Tile	0.1969	17.3	82.5	.2	**None Detected**
223 T18080	Mastic	0.1028	77.3	21.5	1.2	**<1% Chrysotile**
232 T18081	Carpet Glue	0.5416	51.9	15.1	33	**None Detected**
235 T18082	Floor Tile	0.2091	19.9	39.1	41	**None Detected**
235 T18083	Mastic	0.1041	18.7	40.1	41.2	**None Detected**
244 T18084	Vinyl Flooring	0.1753	63.4	36.5	.1	**None Detected**
244 T18085	Mastic	0.1076	61.1	22.7	16.2	**None Detected**

ANALYST: Kamila Reichert
Kamila Reichert

APPROVED BY:
Tianbao Bai, Ph.D.
Laboratory Director

T13.2042 (9)
T18077. T18085

CHAIN OF CUSTODY

CEI LABS
107 New Edition Court, Cary, NC 27511
Tel: 866-481-1412; Fax: 919-481-1442

LAB USE ONLY:	
CEI Lab Code:	A13-14640 (47)
CEI Lab I.D. Range:	A1610382. A1610428

COMPANY CONTACT INFORMATION	
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SPARTANBURG, SC 29303	Email: RESULTS@CROSSROADSENV.NET
	Tel: 864-541-8736
Project Name: USC- Barnwell College	Fax: 864-541-8776
Project ID #: 12771-IN	P.O. #:

ASBESTOS	METHOD	4 HR*	8 HR*	24 HR	2 DAY	3 DAY	5 DAY
PLM BULK	EPA 600			X			
TEM BULK	CHATFIELD			X			
PLM POINT COUNT (400)	EPA 600						
PLM POINT COUNT (1000)	EPA 600						
PLM GRAVIMETRIC	EPA 600						
PLM GRAV w POINT COUNT	EPA 600						
OTHER:							

POSITIVE STOP ANALYSIS	X
SOUTH CAROLINA SAMPLES	X
NORTH CAROINA SAMPLES	

TEM INSTRUCTIONS	
BEGIN TEM ANALYSIS AFTER NEGATIVE PLM	X
ANALYZE TEM SAMPLES SIMULTANEOUSLY WITH PLM	

REMARKS: If needed, combine samples from the same group to achieve sufficient weight for TEM analysis.

☑ Accept Samples
☐ Reject Samples

Relinquished By:	Date/Time	Received By:	Date/Time
Evans Harris	12/6/2013 17:00		12/9/13 9:20 AM
	12/9/13 15:40		12/9/13 4:00 PM

*Call to confirm RUSH analysis.

Samples will be disposed of 30 days after analysis

T13.2042

CEI LABS

SAMPLING FORM

A13-14640

COMPANY CONTACT INFORMATION	
Crossroads Environmental, LLC	Job Contact: Evans Harris
Project Name: USC- Barnwell College	
Project ID #: 12771-IN	Tel: 864-541-8736

SAMPLE ID#	HA	DESCRIPTION / LOCATION	TEST			
201	01	drywall w/ joint compound/ 1st floor	PLM	X	TEM	
202	01	drywall w/ joint compound/ 1st floor	PLM	X	TEM	
203	01	drywall w/ joint compound/ 2nd floor	PLM	X	TEM	
204	01	drywall w/ joint compound/ 2nd floor	PLM	X	TEM	
205	01	drywall w/ joint compound/ 3rd floor	PLM	X	TEM	
206	01	drywall w/ joint compound/ 4th floor	PLM	X	TEM	
207	01	drywall w/ joint compound/ 5th floor	PLM	X	TEM	
208	02	Fireproofing/ 1st floor	PLM	X	TEM	
209	02	Fireproofing/ 1st floor	PLM	X	TEM	
210	02	Fireproofing/ 2nd floor	PLM	X	TEM	
211	02	Fireproofing/ 2nd floor	PLM	X	TEM	
212	02	Fireproofing/ 3rd floor	PLM	X	TEM	
213	02	Fireproofing/ 4th floor	PLM	X	TEM	
214	02	Fireproofing/ 5th floor	PLM	X	TEM	
215	03	Ceiling tile/ 1st floor	PLM	X	TEM	
216	03	Ceiling tile/ 2nd floor	PLM	X	TEM	
217	03	Ceiling tile/ 3rd floor	PLM	X	TEM	
218	04	12" white w/ tan VFT/ 1st floor	PLM	X	TEM	
219	04	12" white w/ tan VFT/ 1st floor near elevator	PLM	X	TEM	
220	04	12" white w/ tan VFT/ 1st floor at water tank	PLM		TEM	X
221	05	Beige w/ cream VFT/ 1st floor stairwell	PLM	X	TEM	
222	05	Beige w/ cream VFT/ 5th floor stairwell	PLM	X	TEM	
223	05	Beige w/ cream VFT/ 3-4th floor stairwell transition	PLM		TEM	X
224	06	Duct sealant (tan)/ 2nd floor	PLM	X	TEM	
225	06	Duct sealant (tan)/ 3rd floor	PLM	X	TEM	
226	06	Duct sealant (tan)/ 4th floor	PLM		TEM	X
227	07	Duct sealant (grey)/ 2nd floor	PLM	X	TEM	
228	07	Duct sealant (grey)/ 3rd floor	PLM	X	TEM	
229	07	Duct sealant (grey)/ 4th floor	PLM		TEM	X
230	08	Carpet glue/ 2nd floor	PLM	X	TEM	
231	08	Carpet glue/ 3rd floor	PLM	X	TEM	
232	08	Carpet glue/ 4th floor	PLM		TEM	X
233	09	12" gold VFT w/ glue/ room 237	PLM	X	TEM	

T13.2042

CEI LABS

SAMPLING FORM

A13-14640

COMPANY CONTACT INFORMATION	
Crossroads Environmental, LLC	Job Contact: Evans Harris
Project Name: USC- Barnwell College	
Project ID #: 12771-IN	Tel: 864-541-8736

SAMPLE ID#	HA	DESCRIPTION / LOCATION	TEST			
234	09	12" gold VFT w/ glue/ room 237	PLM	X	TEM	
235	09	12" gold VFT w/ glue/ room 237	PLM		TEM	X
236	10	2' x 2' ceiling tile (squiggle)/ 5th floor hallway	PLM	X	TEM	
237	10	2' x 2' ceiling tile (squiggle)/ 5th floor hallway	PLM	X	TEM	
238	10	2' x 2' ceiling tile (squiggle)/ 5th floor hallway	PLM	X	TEM	
239	11	Pebble pattern vinyl flooring/ room 123	PLM	X	TEM	
240	11	Pebble pattern vinyl flooring/ room 123	PLM	X	TEM	
241	11	Pebble pattern vinyl flooring/ room 123-A	PLM		TEM	X
242	12	Confetti pattern vinyl flooring/ research lab	PLM	X	TEM	
243	12	Confetti pattern vinyl flooring/ research lab	PLM	X	TEM	
244	12	Confetti pattern vinyl flooring/ research lab	PLM		TEM	X
245	13	2' x 2' ceiling tile (smooth)/ 1st floor	PLM	X	TEM	
246	13	2' x 2' ceiling tile (smooth)/ 1st floor	PLM	X	TEM	
247	13	2' x 2' ceiling tile (smooth)/ 1st floor	PLM	X	TEM	
			PLM		TEM	
			PLM		TEM	
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			PLM		TEM	

CEI LABS

Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: USC - Barnwell College; 12771-IN **CEI LAB CODE:** A13-14640

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
201	Layer 1	A1610382	White	Joint Compound	None Detected
	Layer 2	A1610382	Off-white	Drywall	None Detected
202	Layer 1	A1610383	White	Joint Compound	None Detected
	Layer 2	A1610383	Off-white	Drywall	None Detected
203	Layer 1	A1610384	White	Joint Compound	None Detected
	Layer 2	A1610384	Off-white	Drywall	None Detected
204	Layer 1	A1610385	White	Joint Compound	None Detected
	Layer 2	A1610385	Off-white	Drywall	None Detected
205	Layer 1	A1610386	White	Joint Compound	None Detected
	Layer 2	A1610386	Off-white	Drywall	None Detected
206	Layer 1	A1610387	White	Joint Compound	None Detected
	Layer 2	A1610387	Off-white	Drywall	None Detected
207	Layer 1	A1610388	White	Joint Compound	None Detected
	Layer 2	A1610388	Off-white	Drywall	None Detected
208		A1610389	Light Grey	Fireproofing	None Detected
209		A1610390	Light Grey	Fireproofing	None Detected
210		A1610391	Light Grey	Fireproofing	None Detected
211		A1610392	Light Grey	Fireproofing	None Detected
212		A1610393	Light Grey	Fireproofing	None Detected
213		A1610394	Light Grey	Fireproofing	None Detected
214		A1610395	Light Grey	Fireproofing	None Detected
215		A1610396	White,Tan	Ceiling Tile	None Detected
216		A1610397	White,Tan	Ceiling Tile	None Detected
217		A1610398	White,Tan	Ceiling Tile	None Detected
218		A1610399A	White,Tan	Floor Tile	None Detected
	Layer 1	A1610399B	Light Yellow	Mastic	None Detected
	Layer 2	A1610399B	Grey	Leveling Compound	None Detected
219		A1610400A	White,Tan	Floor Tile	None Detected
	Layer 1	A1610400B	Light Yellow	Mastic	None Detected
	Layer 2	A1610400B	Grey,Off-white	Leveling Compound	None Detected

Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: USC - Barnwell College; 12771-IN **CEI LAB CODE:** A13-14640

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
220		A1610401A		Sample Submitted for,TEM Analysis	
	Layer 1	A1610401B		Sample Submitted for TEM Analysis	
	Layer 2	A1610401B	Grey	Leveling Compound	None Detected
221		A1610402A	Beige,Cream	Floor Tile	None Detected
		A1610402B	Yellow	Mastic	None Detected
222		A1610403A	Beige,Cream	Floor Tile	None Detected
		A1610403B	Yellow	Mastic	None Detected
223		A1610404A		Sample Submitted for TEM Analysis	
		A1610404B		Sample Submitted for TEM Analysis	
224		A1610405	Tan	Duct Sealant	Chrysotile 2%
225		A1610406		Sample Not Analyzed per COC	
226		A1610407		Sample Not Analyzed per COC	
227		A1610408	Grey	Duct Sealant	Chrysotile 3%
228		A1610409		Sample Not Analyzed per COC	
229		A1610410		Sample Not Analyzed per COC	
230		A1610411	Yellow	Carpet Glue	None Detected
231		A1610412	Yellow	Carpet Glue	None Detected
232		A1610413		Sample Submitted for TEM Analysis	
233		A1610414A	Gold	Floor Tile	None Detected
	Layer 1	A1610414B	Yellow	Mastic	None Detected
	Layer 2	A1610414B	Grey	Leveling Compound	None Detected
234		A1610415A	Gold	Floor Tile	None Detected
	Layer 1	A1610415B	Yellow	Mastic	None Detected
	Layer 2	A1610415B	Grey	Leveling Compound	None Detected
235		A1610416A		Sample Submitted for TEM Analysis	
	Layer 1	A1610416B		Sample Submitted for TEM Analysis	

Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: USC - Barnwell College; 12771-IN **CEI LAB CODE:** A13-14640

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
	Layer 2	A1610416B	Grey	Leveling Compound	None Detected
236		A1610417	White,Tan	Ceiling Tile	None Detected
237		A1610418	White,Tan	Ceiling Tile	None Detected
238		A1610419	White,Tan	Ceiling Tile	None Detected
239	Layer 1	A1610420	Beige,Pebble Pattern	Vinyl Flooring	Chrysotile 25%
	Layer 2	A1610420	Beige	Mastic	Chrysotile 3%
240		A1610421		Sample Not Analyzed per COC	
241		A1610422		Sample Not Analyzed per COC	
242	Layer 1	A1610423	Confetti Pattern	Vinyl Flooring	None Detected
	Layer 2	A1610423	Beige	Mastic	None Detected
243	Layer 1	A1610424	Confetti Pattern	Vinyl Flooring	None Detected
	Layer 2	A1610424	Beige	Mastic	None Detected
244	Layer 1	A1610425		Sample Submitted for TEM Analysis	
	Layer 2	A1610425		Sample Submitted for TEM Analysis	
245		A1610426	White	Ceiling Tile	None Detected
246		A1610427	White	Ceiling Tile	None Detected
247		A1610428	White	Ceiling Tile	None Detected

ATTACHMENT III
SAMPLE LOCATION SKETCHES

4. COORDINATE EXACT LOCATION OF
SWITCH WITH EXISTING FIRE SPR
VERIFY EXACT LOCATION.

5. PROVIDE DUCT TYPE SMOKE DET
EXISTING AIR HANDLERS. COORI
PROVIDE TEST STATIONS WITH PE

CONNECT AIU TO MONITOR EXISTING TROUBLE ALARM CONTACTS OF EXISITNG GENERATOR SET/TRANSFER SWITCH.

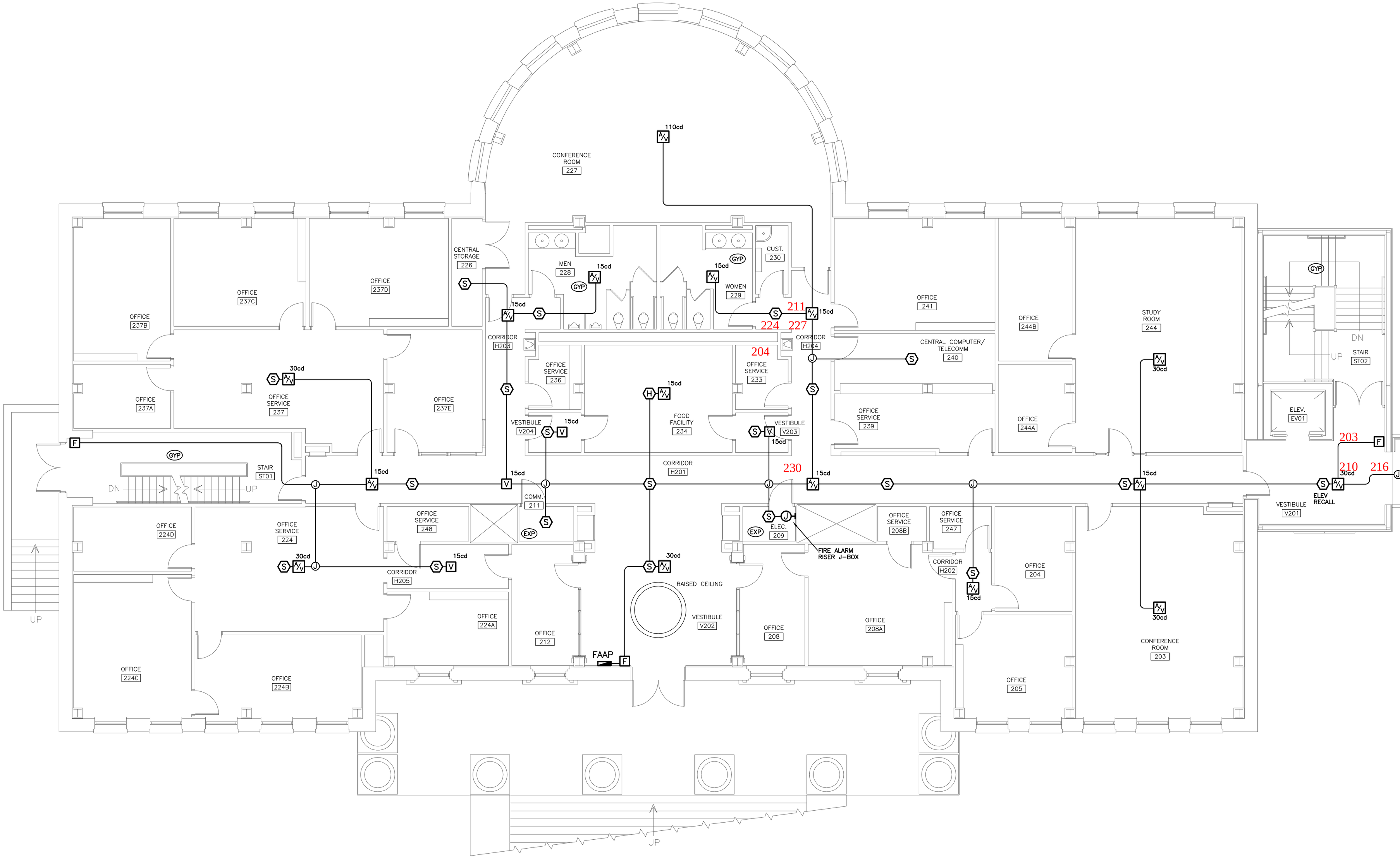
EXISTING FIRE A
SYSTEM HAS BE
TEMPORARY CO
PUT ON LINE T
NEW SYSTEM IS
INCLUDING CON
DEVICE BOXES/
PROVIDE BLANK
AND WHERE SU
WALL/CEILING.

N
PLAN NORTH

1 / E2.1 FIRST FLOOR FIRE ALARM PLAN

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

1/8"=1'-0" 4 0 4 8 16 scale feet



N

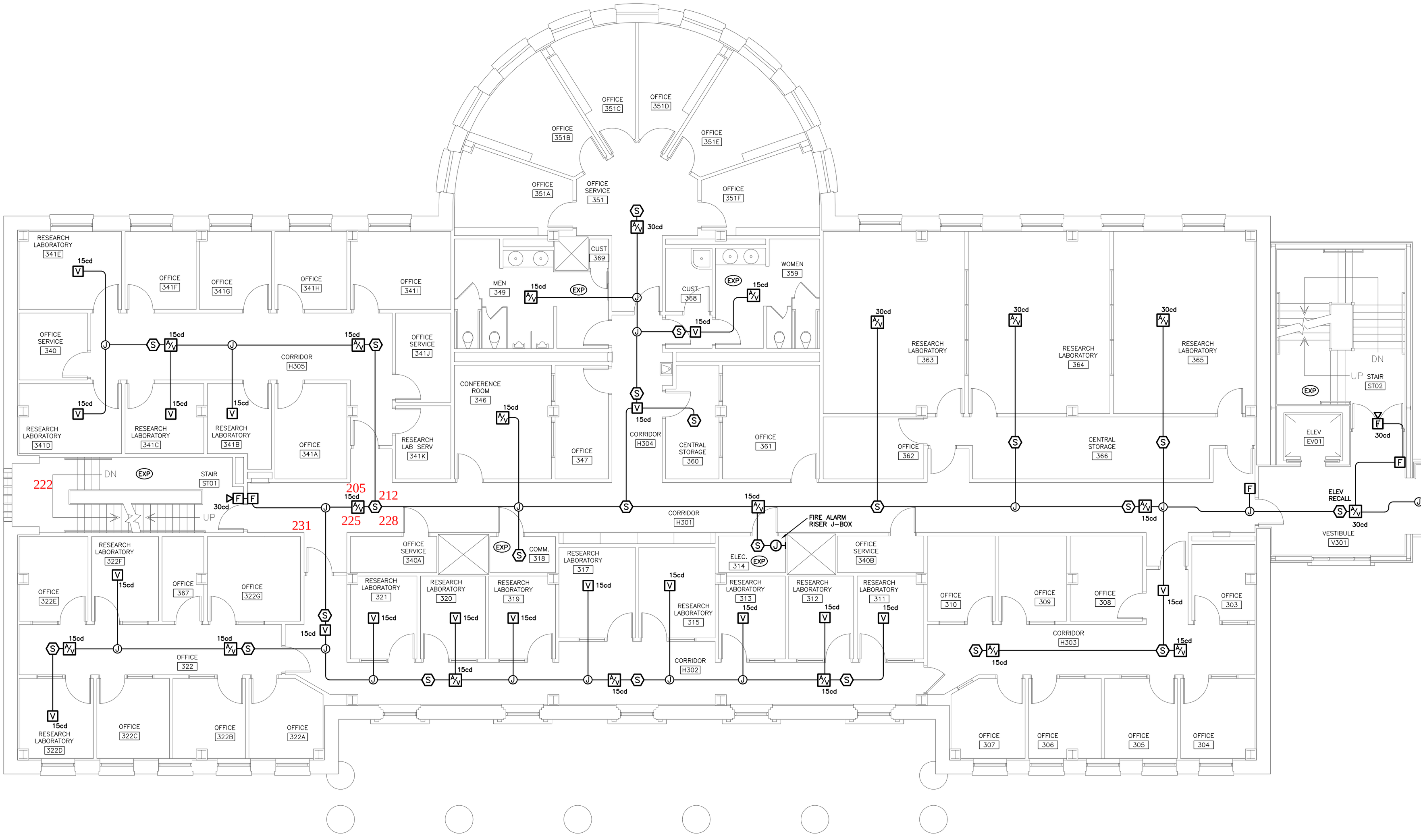
PLAN NORTH

1 / E2.2

SECOND FLOOR FIRE ALARM PLAN

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

1/8"=1'-0" scale 4 0 4 8 16 feet



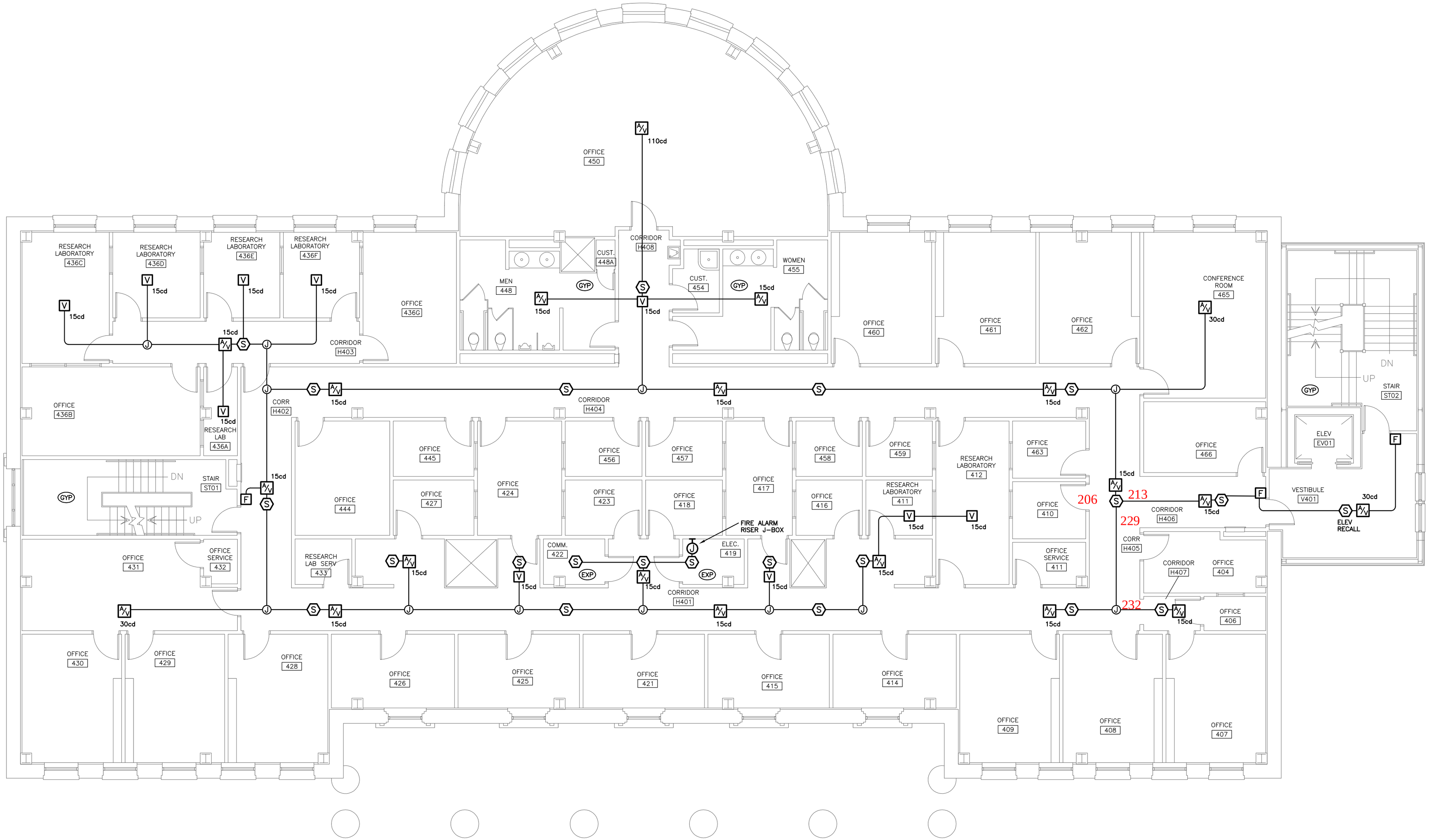
N

PLAN NORTH

1 E2.3 THIRD FLOOR FIRE ALARM PLAN

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

1/8"=1'-0" 4 0 4 8 16 scale feet



N

PLAN NORTH

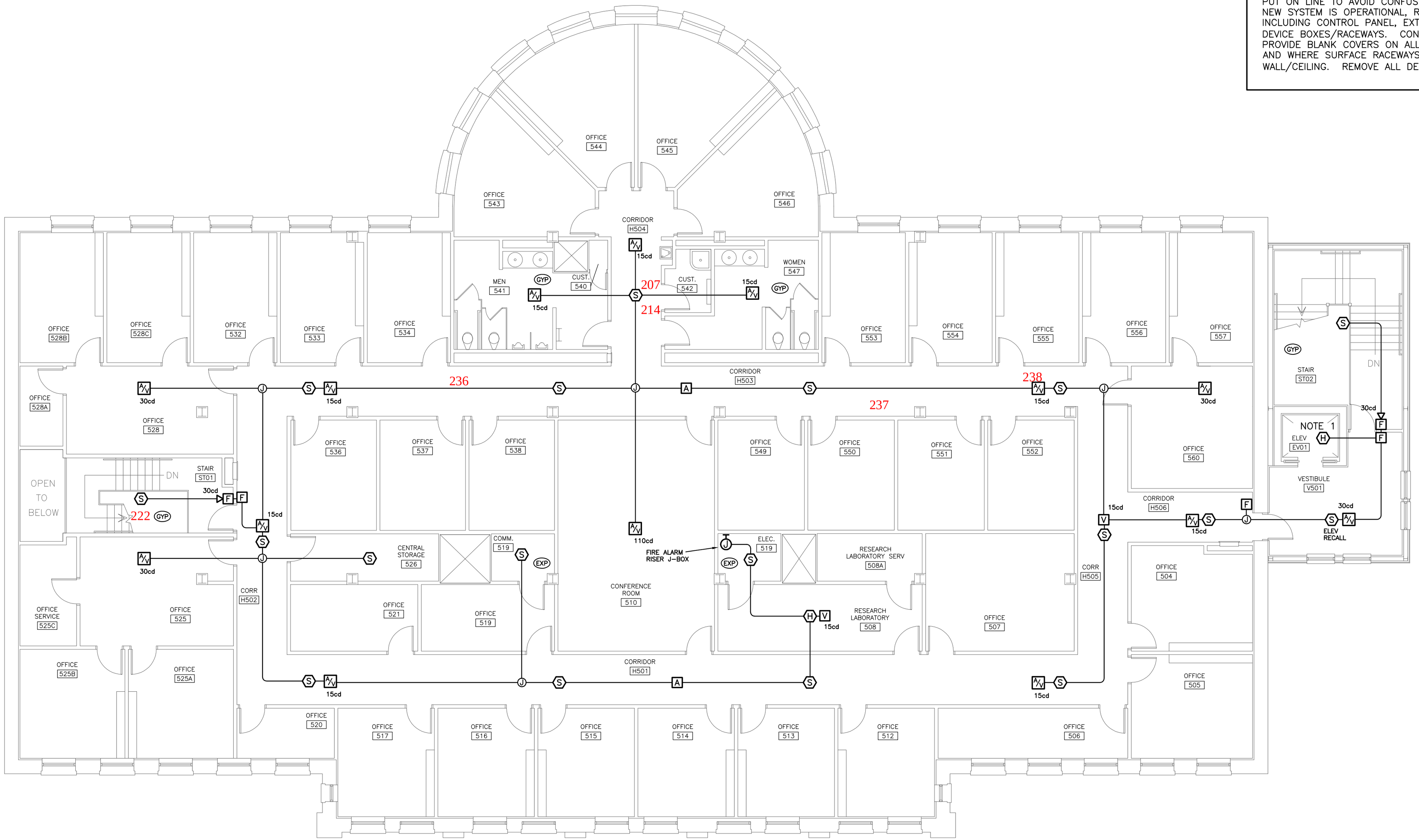
1 / E2.4

FOURTH FLOOR FIRE ALARM PLAN

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

1/8"=1'-0" scale 4 0 4 8 16 feet

SYSTEM HAS BEEN INSTALLED, COMMISSIONED, AND
TEMPORARY COVERS ON ALL NEW MANUAL PULL STA
PUT ON LINE TO AVOID CONFUSION OF WHICH SYSTE
NEW SYSTEM IS OPERATIONAL, REMOVE ALL COMPON
INCLUDING CONTROL PANEL, EXTENDER PANEL, DEVIC
DEVICE BOXES/RACEWAYS. CONCEALED CONDUITS C
PROVIDE BLANK COVERS ON ALL EXISTING UNUSED
AND WHERE SURFACE RACEWAYS ARE REMOVED TO
WALL/CEILING. REMOVE ALL DEMOLISHED MATERIAL



N
PLAN NORTH

1 / E2.5 FIFTH FLOOR FIRE ALARM PLAN

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

1/8"=1'-0" 4 0 4 8 16 scale feet

ATTACHMENT IV
INSPECTORS' SC-DHEC LICENSES

SCDHEC ISSUED

Asbestos ID Card

Evans Harris

Expires

AIRSAMPLER AS-00383 02/08/14

CONSULTBI BI-01224 02/13/14

South Carolina
INSPECTOR

Certified Lead-Based
Paint Professional

Certification No. **SC-I-117167-1**

Date of Birth	Expiration Date
07/24/1975	**10/14/2014**

Address
140 Horton Rd.
Chesnee, SC 29323

Badge Holder's Name
Kay Hodges Horton

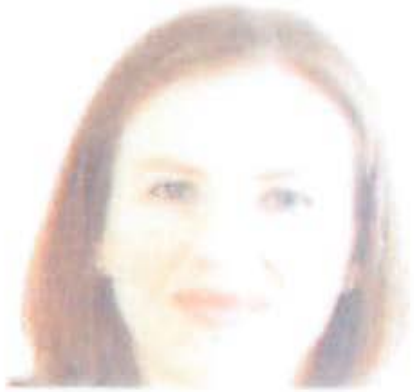
Badge Holder's Signature
Kay H. Horton

If found, drop in any mailbox
Postmaster: Please return to:

US EPA
1200 Pennsylvania Ave, NW
(MC-74040T)
Washington, DC 20460
or call 1-800-424-LEAD

SCDHEC ISSUED
Asbestos ID Card

Kay H Horton



		Expires
CONSULTMP	ASB-23394	02/26/14
AIRSAMPLER	ASB-23067	12/17/13
CONSULTPD	ASB-23184	03/08/14

University of South Carolina Pre Bid Conference Sign In Sheet

Columbia, SC

Project Name, Number & Project Manager: Barnwell College Fire Alarm Project/H27-I851/Pete Fisher

Pre Bid Conference Date & Time: September 3, 2015 10AM/743 Greene St Conf Room 053 Columbia, SC 29208

Name	Company	Address	Phone #	Email
John Boukwight	Precision Fire	2229 Leaphart Rd W. Col SC 29169	803 796 2722	JBoukwight@precision-fire.com
Randy Bundrick	Palmetto State Elec.	135 Chapin Rd	803 345-1233	PSE135@Bellsouth.net
Tony Carr	Burriss Elec.	1251 Northlake Dr	803 609-4808	Tony@burrisselectrical.com
Tara Jordan	1x1 Design	221 Pickens St.	803-834-4048	tjordan@1x1design.com
Aimee Rish	USC Procurement Facilities	743 Greene St 29208	803-777-226	arish@fmc.sc.edu
Thatcher Huth	USC	743 Greene St	457-5138	Huthth@mailbox.sc.edu
Pete Fisher	USC		777-9346	pfisher@fmc.sc.edu

*Please make sure you list your company name as registered with LLR.

* By signing and providing your email address, you are authorizing the University of South Carolina to send you information electronically.