



UNIVERSAL

ENGINEERING SCIENCES

**REPORT OF
PROFESSIONAL CONSULTING SERVICES**

**FORMER HOSPITAL BUILDING
COMMUNITY SERVICES BUILDING
901 EAST MOODY BOULEVARD
BUNNELL, FLORIDA**

Prepared for

**FLAGLER COUNTY
1769 East Moody Boulevard
Bldg 2, Suite 309
Bunnell, Florida 32110**

Prepared by

**UNIVERSAL ENGINEERING SCIENCES, INC.
Jacksonville, Florida
PROJECT NUMBER 0940.1300057.0000**

July 17, 2013

CONSULTANTS:

**Geotechnical Engineering ▪ Environmental Engineering ▪ Construction Materials Testing
Threshold Inspection ▪ Private Provider Inspection ▪ Geophysical Studies**

OFFICES: Daytona Beach, FL ▪ Fort Myers, FL ▪ Fort Pierce, FL ▪ Gainesville, FL ▪ Jacksonville, FL ▪ Leesburg, FL ▪ Miami, FL ▪ Norcross, GA ▪ Ocala, FL ▪ Orange City, FL
Orlando, FL ▪ Palm Coast, FL ▪ Panama City, FL ▪ Pensacola, FL ▪ Rockledge, FL ▪ Sarasota, FL ▪ St. Augustine, FL ▪ Tampa, FL ▪ West Palm Beach, FL



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July 17, 2013

Flagler County
1769 East Moody Boulevard
Bldg 2, Suite 309
Bunnell, Florida 32110

Attention: Mr. Richard Gordon, P.E.

Subject: **Report of Professional Consulting Services
Former Hospital Building and Community Services Building
901 East Moody Boulevard
Bunnell, Florida
UES Project No. 0940.1300057.0000, UES Report Number 1051526**

Dear Mr. Gordon:

Universal Engineering Sciences, Inc. (UES) is pleased to present this report of our Professional Consulting Services for the former hospital building / community services building located at 901 East Moody Street in Bunnell, Florida. The purpose of our services was to perform asbestos surveys, lead-based paint surveys, visual mold surveys and hazardous material reviews within each of the two buildings.

This report is intended for the use of Flagler County and its designees only. The contents should not be relied upon by any other parties without the express written consent of UES. The findings are relevant to the dates of our site work and may not represent conditions at substantially earlier or later dates.

We appreciate the opportunity to be of service on this project. Please contact us if any questions arise or if we may be of further assistance.

Sincerely,

UNIVERSAL ENGINEERING SCIENCES, INC.

James E. Blythe, CIEC
EPA AHERA Asbestos Inspector
Florida Mold Assessor # MRSA2169



JEB/RK:jb

Florida Asbestos Business License Number ZA-0000017

cc: Addressee (2)
File (one - Jacksonville)

Rick G. Kushner, P.E.
Vice President
Florida P.E. No. 38705

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EXECUTIVE SUMMARY

Former Hospital Building /Community Services Building
 901 East Moody Boulevard
 Bunnell, Florida

Flagler County has engaged Universal Engineering Sciences, Inc. (UES) to perform Professional Consulting Services at the subject property. Our consulting services included studies pertaining to asbestos, lead-based paint, mold, and hazardous material issues. UES has performed this assessment in accordance with Contract No: RFP#FC-09-R01 and our Work Authorization No. 13-08E dated June 20, 2013. Authorization for our services was provided by Mr. Craig M. Coffey, County Administrator.

The former hospital building was constructed in 1979 and is approximately 60,000 square feet in size. An asbestos survey of the building was performed in September, 2000 by PbO3 Environmental Testing & Service Company and it is our understanding that abatement of the materials found to be asbestos-containing were removed from the former hospital building by Bradco Abatement Contractors in 2006. A copy of the survey report that was provided to UES is presented in Appendix C. The former hospital building is vacant and has not been occupied in many years. There is no electrical or water service. Demolition of the majority of ceilings, finishes and equipment was performed by the current owner and wiring and some other materials were removed by theft. Multiple windows are broken and A/C units have been removed. There is no functional mechanical or electrical equipment in the building.

The community services building was constructed in 1985 and is approximately 4,100 square feet and is adjacent to the former hospital building. This building is currently occupied by a non-profit organization and is used to provide services to the community. No documents were provided to UES that indicated that an asbestos survey of this building has been performed. UES performed the following consulting services:

LIMITED ASBESTOS SAMPLING

UES performed limited asbestos sampling within each of the two buildings located on the property. UES collected 10 bulk samples of suspect materials from the former hospital building and 10 bulk samples from the community services building. Suspect materials sampled included floor coverings, pipe insulation, drywall and joint compound, cement board and roofing materials. The following samples obtained and analyzed were found to contain asbestos:

Building ID	Material Sampled	Asbestos Type/ Content	Approximate Amount of Material Observed /Overall Condition Observed
Former Hospital	12"x12" Floor Tile and Black Mastic (Some below Vinyl Sheet Flooring)	8% Chrysotile (black mastic only)	4,200 SF/G
Former Hospital	Chilled Water Pipe Insulation (Foam Glass) / Mastic	5-8% Chrysotile (black and white mastics only)	400 LF/G
Former Hospital	Roof Equipment Flashing	5% Chrysotile	600 SF/G
Food Bank/Community Center	12"x12" Floor Tile and Yellow Mastic	4-5% Chrysotile (tile layer only)	650 SF/G
Food Bank/Community Center	Cement Board Ceiling Material	25% Chrysotile	650 SF/G
Food Bank/Community Center	Roof Shingle/Felt/Mastic	5% Chrysotile (black mastic only)	4,100 SF/G

Material Quantities are estimated and should be used at the reader's discretion.

Legend

SF = Square Feet G = Good
 LF = Linear Feet D = Damaged
 EA = Each SD=Significantly Damaged



The material quantities presented in the table above are field approximated based on limited visual observations and are provided in square feet (s.f.) and/or linear feet (l.f.). These quantities should be used at the reader's discretion. It is recommended that any contractors performing work on the property field verify material quantities prior to placing bids on work.

UES did not collect samples of fire-rated doors; therefore, these materials have been assumed to contain asbestos. Also, a small amount of black duct mastic identified in the asbestos survey report prepared by others was observed on several wall penetration areas within the hospital building. This material is also assumed to be asbestos-containing.

LEAD-BASED PAINT SURVEY

UES performed a lead based paint survey within the two buildings located on the property. The survey was conducted using the U.S. Department of Housing and Urban Development (HUD) Interim Guidelines as a general guide. During the survey, no lead based paint was detected in any of the building components at the locations tested.

VISUAL MOLD OBSERVATIONS

UES performed visual mold observations within the two buildings. The former hospital building was not conditioned and has not been maintained. There were many broken windows and open holes where air conditioning units had been removed. There were many areas of water intrusion around windows, door, air conditioner ports, etc. Visual mold was present throughout the structure mainly on the interior of the building exterior walls and the mold was concentrated around penetrations to the exterior of the building. The exterior of the building was finished with an exterior insulation finish system (EIFS). This system was observed to have many damaged areas where moisture could penetrate behind the system and potentially cause mold related issues.

The community services building was observed to be in good condition at the time of our observations. The building did not have a central air conditioning system and the spaces were observed to be humid. A small window unit was being used to cool a small office on the north side of the building. No areas of visual mold growth were observed in the building interior at the time of our observations.

Other Hazardous Materials

There were some fluorescent lighting tubes and lighting fixtures observed, however, no other hazardous materials were observed at the time of our site observations.

RECOMMENDATIONS

Asbestos Survey

Based on the results of our limited sampling, three of the materials sampled in the former hospital building were found to contain asbestos and three materials in the community services building were also found to contain asbestos. Each of these asbestos-containing materials (ACMs) identified were observed to be non-friable and in generally good condition at the time of our survey and would not pose a hazard unless disturbed. A survey by others was performed in 2000 and black mastic on duct insulation was identified as being asbestos-containing. It appeared that this material was abated with the exception of several wall penetration areas where UES observed residual black mastic remaining. Photographs have been provided in the attachments. UES recommends that these ACMs be included in an Operations and Maintenance Program (OMP) for asbestos.



Should the potential exist for ACM to be disturbed by renovation or demolition activities, these materials should be removed by qualified personnel.

In addition to the sampled asbestos concerns noted above, UES recommends that the buildings' fire rated doors, which have been assumed to contain asbestos, be included in an OMP for asbestos until sampling can be performed in order to refute or confirm these materials as asbestos-containing. It is our current understanding that the facility will be renovated and all existing doors will be removed. The fire rated doors may be assumed to contain asbestos without laboratory testing and be disposed of as an asbestos-containing material by qualified personnel prior to their disturbance.

Lead Based Paint Survey

Based on the results of our surveys, coatings with lead levels at or above the HUD action level (1.0 mg/cm²) were not detected on any of the tested building components in either of the two buildings.

Visual Mold

Former Hospital Building:

Visible mold was observed to be present throughout the former hospital building. Based on the results of our visual mold observations, it is recommended that the interior water damaged materials be removed and that any visible mold be removed by a Florida Licensed Mold Remediation company. The Florida Department of Business and Professional Regulation, Construction Industry Board issued a declaratory statement that allows a Certified Division I Contractor to perform the work as part of their services provided they are not representing themselves as a person or entity who specializes as a "Mold Remediator". Wallpaper within areas on the front of the building was observed to have mold growth between the paper and drywall. It appears that the paper is acting as a vapor barrier and allowing moisture and mold to form on the wall surfaces. It is recommended that damaged drywall be removed and remaining materials cleaned or removed. The exterior of the building was observed to have an Exterior Insulation Finish System (EIFS). Many damaged areas were observed and present locations for moisture intrusion and mold growth to occur. It is recommended that this EIFS system be removed and replaced if the building is to be renovated. In addition, damaged areas of roof flashing, guttering systems and downspouts were observed. These items will require repair to prevent future water intrusion.

Food Bank / Community Service Building:

No visible mold growth was observed at the time of our visible observations of the building. It is recommended that the building be conditioned and that the interior building temperatures be maintained in the range of 73-79 degrees Fahrenheit during the summer months and between 68 and 74.5 degrees Fahrenheit during the winter months and relative humidity is recommended to be in the range of 30% to 65%.

Other Hazardous Materials

There were some fluorescent lighting tubes and lighting fixtures observed however, no other hazardous materials were observed at the time of our observations. These materials should be removed and recycled prior to renovation or demolition activities. A Phase I Environmental Site Assessment (ESA) was performed by UES and is issued under separate cover. No further assessment was recommended in the ESA.

**** This document should be read in its entirety to ascertain particular facts and information that led to our opinion. ****



1.0 PROJECT INFORMATION

This report presents the findings of professional consulting services performed at the former hospital building and community services building located in Bunnell, Florida. The subject site is developed with two buildings. A walk-through of the buildings was performed by James Blythe of UES, Richard Gordon of Flagler County and the owner's representative on Tuesday June 4, 2013. The purpose of the walk-through was to obtain information necessary to prepare a proposal for professional services for Flagler County. Following our site visit, UES prepared a proposal for Flagler County to perform professional services. Our Work Authorization No. 13-08E dated June 20, 2013 was authorized by Mr. Craig M. Coffey, County Administrator. UES has an existing contract, Contract No: RFP#FC-09-R01, with Flagler County.

The opinions included herein are based upon the information obtained during the study and our professional experience. In the event that other relevant information becomes available, we request the opportunity to review the information, and to modify our opinions, if warranted.



2.0 LIMITED ASBESTOS SAMPLING

2.1 BACKGROUND INFORMATION

A previous asbestos survey of the former hospital building was performed by PbO3 Environmental Testing and Service Company in 2000. The report identified asbestos-containing non-friable thermal system insulation (TSI) wrap in the boiler room and asbestos-containing non-friable black mastic on ductwork throughout the hospital. It is the understanding of UES that these materials were removed by an abatement contractor in 2006. No information was available for the food bank / community services building and it is our understanding that a survey of this building has not been performed. The purpose of this limited asbestos sampling was to locate and identify asbestos-containing material (ACMs) that may remain in the buildings. The procedures utilized during this sampling included visual observations, material sampling, and laboratory analysis of suspect ACM. This report presents the general description of samples and the general locations where samples were collected and the results of laboratory analysis of these collected samples.

2.2 METHODOLOGY

Walk-Through and Visual Survey - Our limited sampling began with a walk-through and visual survey of the facilities. The purpose of our sampling was to identify the locations and approximate quantities of suspect ACM.

Bulk Sampling - The next phase of the limited sampling was the selection of sampling areas and collection of bulk samples. Material sampling areas were grouped based on material homogeneity. A homogeneous area is one which contains material that appears by texture, color, function, and wear to be uniform and applied during the same general time period. Bulk samples were not collected of suspect fire-rated doors.

UES performed a walk-through of the facilities on July 2, 2013 and July 8, 2013 to observe the suspect asbestos-containing materials and collect samples as necessary. Once sample areas were determined, samples of suspect ACM were obtained. Samples were collected by UES's representative, James Blythe, an Environmental Protection Agency (EPA) AHERA-trained Asbestos Building Inspector working under the direction of Lindsey Weaver, P.E., Florida Licensed Asbestos Consultant No. 0000046. Samples were labeled and appropriate chain of custody documentation was completed. The samples were sent to EMSL Analytical laboratory in Orlando, Florida for analysis.

Samples were collected from readily accessible and representative materials which were considered suspect ACM. UES collected 10 bulk samples from the hospital building and 10 bulk samples from the community services building. Sampled materials included pipe insulation, floor coverings, drywall and joint compound, cement board and roofing materials.

UES did not collect samples of fire-rated doors, therefore, these materials have been assumed to contain asbestos.



2.3 ANALYSIS OF BULK SAMPLES

A total of 20 bulk samples were collected by UES between July 2, 2013 and July 8, 2013 and transported to EMSL Analytical laboratory in Orlando, Florida for visual inspection and microscopic analysis. The Laboratory has been accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) and has been assigned the NVLAP number 101151-0. The samples were analyzed using Polarized Light Microscopy (PLM), coupled with Dispersion Staining as outlined in the Environmental Protection Agency "Interim Method for the Determination of Asbestos in Material Insulation Samples." PLM is an analytical method that uses the optical crystallographic properties of the various crystalline forms to identify asbestos in samples. These properties are unique to individual crystalline forms and therefore can be used to identify the different asbestos mineral types: chrysotile, amosite, crocidolite, anthophyllite, tremolite, and actinolite.

2.4 RESULTS OF LABORATORY ANALYSIS

Of the 20 samples obtained by UES between July 2, 2013 and July 8, 2013, six materials were found to contain asbestos. The material quantities presented in the table below are field approximated based on limited visual observations and are provided in square feet (s.f.) and/or linear feet (l.f.). These quantities should be used at the reader's discretion. It is recommended that any contractors performing work on the property field verify material quantities prior to placing bids on work.

A summary by homogeneous area of the materials found to contain asbestos is included in the table below. In addition, the fire-rated doors have been assumed to contain asbestos.

Building ID	Material Sampled	Asbestos Type/ Content	Approximate Amount of Material Observed /Overall Condition Observed
Former Hospital	12"x12" Floor Tile and Black Mastic (Some below Vinyl Sheet Flooring)	8% Chrysotile (black mastic only)	4,200 SF/G
Former Hospital	Chilled Water Pipe Insulation (Foam Glass) / Mastic	5-8% Chrysotile (black and white mastics only)	400 SF/G
Former Hospital	Roof Equipment Flashing	5% Chrysotile	600 SF/G
Food Bank/Community Center	12"x12" Floor Tile and Yellow Mastic	4-5% Chrysotile (tile layer only)	650 SF/G
Food Bank/Community Center	Cement Board Ceiling Material	25% Chrysotile	650 SF/G
Food Bank/Community Center	Roof Shingle/Felt/Mastic	5% Chrysotile (black mastic only)	4,100 SF/G

Material Quantities are estimated and should be used at the reader's discretion.

Legend

SF = Square Feet G = Good
 LF = Linear Feet D = Damaged
 EA = Each SD = Significantly Damaged

Copies of the individual bulk sample laboratory analysis forms are included in Appendix A.



3.0 LEAD-BASED PAINT SURVEY

3.1 BACKGROUND INFORMATION

The purpose of the survey was to identify lead-based paint (LBP) on major building components of the former hospital building and food bank / community service building. The testing of the selected areas was performed in general conformance with the United States Department of Housing and Urban Development Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, (HUD Guidelines) dated June 1995. The survey included visual observations and X-Ray Fluorescence (XRF) test readings of suspect LBP. This report presents our findings.

3.2 METHODOLOGY

Walk-Through and Visual Survey - Our survey began with a walk through and visual survey of the facility to identify components with suspect lead-based paint. Areas selected for XRF testing were at random in most cases, but based on availability.

XRF Readings - The next phase of the survey was obtaining XRF readings. The XRF used for this survey was a Lead Paint Analyzer (LPA-1). The XRF operator was Mr. James Blythe, a factory-trained XRF operator from UES's Jacksonville, Florida office. Typical building components from which readings were obtained in this survey included walls, doors, door frames, window frames and ceilings.

The portable RMD LPA-1 XRF Analyzer was operated utilizing the "Quick Mode" (95% confidence) sampling mode with an "action" level of 1.0 mg/cm^2 as described in the EPA/HUD Guidelines. Each XRF result (K-Shell reading) was categorized as negative or positive. XRF readings equal to or greater than 1.0 mg/cm^2 are classified as positive. XRF readings less than 1.0 mg/cm^2 are classified as negative as described in the EPA/HUD Guidelines.

3.3 RESULTS OF XRF TESTING

"POSITIVE" XRF READINGS

None of the XRF readings of component coatings tested had XRF readings equal to or greater than the "positive" classification of 1.0 mg/cm^2 . A summary of the XRF readings is presented in Appendix B.

"NEGATIVE" XRF READINGS IN THE RANGE OF 0.1 mg/cm^2 TO 0.9 mg/cm^2

A total of fifty-one (51) component coatings tested in the hospital building and seventeen (17) component coatings in the food bank / community service building had XRF readings in the "negative" range of 0.1 mg/cm^2 to 0.9 mg/cm^2 , which is below the HUD "positive" standard of 1.0 mg/cm^2 . A summary of the XRF readings are presented in Appendix B. Should these color/components be disturbed, they may be subject to regulation by OSHA.

All other component coatings had XRF readings below the portable XRF detection limit for lead.



4.0 MOLD AND HAZARDOUS MATERIALS OBSERVATIONS

4.1 MOLD OBSERVATIONS

UES performed visual mold observations within the two buildings. The former hospital building was not conditioned and has not been maintained. There were many broken windows and open holes where air conditioning units had been removed. There were many areas of water intrusion around windows, door, air conditioner ports, etc. Visual mold was present throughout the structure mainly on the interior of the exterior walls and concentrated around penetrations to the exterior of the building. The exterior of the building was finished with an exterior insulation finish system (EIFS). This system was observed to have many damaged areas where moisture could penetrate behind the system and potentially cause mold related issues.

The community services building was observed to be in good condition at the time of our observations. The building did not have a central air conditioning system and the spaces were observed to be humid. A small window unit was being used to cool a small office on the north side of the building. No areas of visual mold growth were observed in the building interior at the time of our observations.

4.2 OTHER HAZARDOUS MATERIALS

There were some fluorescent lighting tubes and lighting fixtures observed however, no other hazardous materials were observed at the time of our observations. These materials should be removed and recycled prior to renovation or demolition activities. A Phase I Environmental Site Assessment (ESA) was performed by UES and is issued under separate cover. No further assessment was recommended in the ESA.



5.0 CONCLUSIONS

5.1 ASBESTOS SURVEY

UES performed limited asbestos sampling within each of the two buildings on the subject property. UES collected 10 bulk samples of suspect materials from the former hospital building and 10 bulk samples from the food bank / community services building. Suspect materials sampled included pipe insulation, floor coverings, drywall and joint compound, cement board and roofing materials. Of the samples obtained and analyzed, three materials in the former hospital building and three materials in the community services building were found to contain asbestos. The table below

Building ID	Material Sampled	Asbestos Type/ Content	Approximate Amount of Material Observed /Overall Condition Observed
Former Hospital	12"x12" Floor Tile and Black Mastic (Some below Vinyl Sheet Flooring)	8% Chrysotile (black mastic only)	4,200 SF/G
Former Hospital	Chilled Water Pipe Insulation (Foam Glass) / Mastic	5-8% Chrysotile (black and white mastics only)	400 SF/G
Former Hospital	Roof Equipment Flashing	5% Chrysotile	600 SF/G
Food Bank/Community Center	12"x12" Floor Tile and Yellow Mastic	4-5% Chrysotile (tile layer only)	650 SF/G
Food Bank/Community Center	Cement Board Ceiling Material	25% Chrysotile	650 SF/G
Food Bank/Community Center	Roof Shingle/Felt/Mastic	5% Chrysotile (black mastic only)	4,100 SF/G

Material Quantities are estimated and should be used at the reader's discretion.

Legend

SF = Square Feet G = Good
 LF = Linear Feet D = Damaged
 EA = Each SD=Significantly Damaged

UES did not collect samples of fire-rated doors, therefore, these materials have been assumed to contain asbestos.

5.2 LEAD-BASED PAINT SURVEY

UES performed a lead based paint survey within the two buildings on the subject property. The survey was conducted using the U.S. Department of Housing and Urban Development (HUD) Interim Guidelines as a general guide. During the survey, lead based paint was not detected on any of the building components tested.



5.3 MOLD AND HAZARDOUS MATERIALS OBSERVATIONS

5.3.1 Mold

UES performed observations for mold within the former hospital building and the community services building. Visual mold was found to be present throughout the former hospital building. Doors, windows, and air conditioner openings were observed to be a main source of water intrusion within this building. Visible mold was also observed behind wallpapered walls along the front of the building. The exterior EIFS wall system is suspect to have moisture intrusion due to damage and possible mold at water intrusion locations.

No visible mold growth was observed in the community services building at the time of our site observations.

Mold - General Data:

Molds are simple, microscopic fungi that grow on surfaces of objects, within pores, and on deteriorated materials. Mold is required to digest organic compounds. Mold spores are relatively small, lightweight, and are abundant in nature. The majority of indoor mold originate from the outdoors. For example, mold spores may enter a building through open doorways and windows or through HVAC systems. Additional ports of entry may include human distribution through clothing and/or shoes, on pets, or on virtually any item entering a building. On this basis, indoor mold genera and concentrations are primarily a function of outdoor migration and proliferation. Detectable indoor and outdoor mold genera and associated concentrations may change rapidly due to temperature fluctuations, changes in wind speed and direction, weather changes, rainfall, etc. The following conditions are generally necessary for mold growth to occur:

- A temperature range between 40 and 100 degrees Fahrenheit
- A nutrient base consisting of dust, soil, leaves, wood and/or paper (Cellulose Products)
- Humidity or moisture. Relative humidity levels above 60% generally provide the appropriate amount of moisture for proliferation

Generally, mold spores behave as allergens and may produce mycotoxins as they digest cellulose in water damaged building materials. Sensitivity to these molds and their metabolic mycotoxins is individualized. Persons with impaired immune systems or chronic respiratory diseases, the elderly, and children are typically more sensitive than healthy adults. In some rare cases, persons who are otherwise perfectly healthy will develop unexplained acute hypersensitivity to these molds and/or their metabolic by-products.

5.3.2 Other Hazardous Materials

Fluorescent light tubes and lighting fixtures were observed, however, no other hazardous materials were observed during our site observations.



6.0 RECOMMENDATIONS

6.1 ASBESTOS

Based on the results of our survey, three of the materials sampled in the former hospital building and three materials sampled in the community services building were found to contain asbestos. Each of these asbestos-containing materials (ACMs) identified was observed to be non-friable and in generally good condition at the time of our survey and would not pose a hazard unless disturbed. UES recommends that these ACMs be included in an Operations and Maintenance Program (OMP) for asbestos.

Should the potential exist for ACM to be disturbed by renovation or demolition activities, these materials should be removed by qualified personnel.

In addition to the sampled asbestos concerns noted above, UES recommends that the buildings' fire rated doors, which have been assumed to contain asbestos, be included in an OMP for asbestos until sampling can be performed in order to refute or confirm these materials as asbestos-containing. It is our current understanding that the facility will be renovated and all existing doors will be removed. The fire rated doors may be assumed to contain asbestos without laboratory testing and be disposed of as an asbestos-containing material by qualified personnel prior to their disturbance.

6.2 LEAD-BASED PAINT

Based on the results of our surveys, coatings with lead levels at or above the HUD action level (1.0 mg/cm²) were not detected.

6.3 MOLD AND OTHER HAZARDOUS MATERIALS

Visual mold was observed to be present in the former hospital building. Based on the results of our observations, UES recommends that all water damaged materials and areas of mold growth within this building be removed by a Florida Licensed Mold removal company. The Florida Department of Business and Professional Regulation, Construction Industry Board issued a declaratory statement that allows a Certified Division 1 Contractor to perform the work as part of their services provided they are not representing themselves as a person or entity who specializes as a "Mold Remediator". Removal of the exterior EIFS system is also recommended and any mold or water damaged areas are recommended to be cleaned and or repaired. The potential sources of moisture intrusion through the exterior walls should be further investigated to confirm that the water intrusion is corrected prior to completing the restoration of the structure. The mold/fungal cleaning and removal should be performed in accordance with the Institute of Inspection, Cleaning and Restoration Certification (IICRC) S520 Mold Remediation Standard (August 2008).

UES recommends that the community services building be conditioned and that inside comfort parameters for temperature and relative humidity be maintained. ASHRAE has recommended that general indoor temperatures ranges between 70° and 80° Fahrenheit (F) during most conditions and indoor relative humidity should be 65% or less. The EPA's *Mold Remediation in Schools and Commercial Buildings* recommends that the indoor relative humidity should be below 60% to prevent mold growth and should ideally be between 30% and 50%.

UES recommends that fluorescent lighting tubes and lighting fixtures with ballast be recycled.



7.0 QUALIFICATIONS OF THE REPORT

The opinions and recommendations included herein are based on information obtained during the site visit(s) and from previous experience. It must be emphasized that it was not possible to observe all areas within the building(s) and that unreported asbestos and lead may be present within machinery, wall voids or other areas not accessed by our field personnel. It must also be emphasized that there is the possibility that some areas containing asbestos or lead were overlooked or inaccessible, or were different from those at specified test locations. If additional information becomes available which might impact our conclusions or recommendations, UES requests the opportunity to review the information, reassess the potential concerns, and modify opinions, if warranted.

The scope of this survey was not intended to provide the detailed information generally necessary to appropriately determine the scope of work for a particular abatement operation. If our services included a review of reports prepared by others, it must be recognized that UES cannot assume responsibility for the accuracy of information contained in those reports.



APPENDICES

APPENDIX A

**ASBESTOS
LABORATORY ANALYSIS RESULTS
ASBESTOS SAMPLE LOCATION PLAN**

FORMER HOSPITAL BUILDING

341305018

Universal Engineering Sciences, Inc., 5561 Florida Mining Boulevard, Jacksonville, Florida 904-296-0757 - Fax 904-296-0748
ASBESTOS CONTAINING MATERIALS CHAIN-OF-CUSTODY

Client: Flagler County Project No.: 0940.1300057.0000 Collected By: Jim Blythe Page: 1 of 1
 Project: 0940 - Former Hosp: H-1 Bldg Analysis Method: PLM-Asbestos Date Collected: 7/2/13
 Location: Bunnell, FL Turn Around Time: **24-Hour**
 Special Instructions/Notes: _____ Batch No: _____

Sample Number	HSA	Sample Description	Material Type (S, TSI, M)	Sample Location	Material Condition			Disturbance Potential			Friable		Estimated Quantity
					G	D	SD	L	M	H	Yes	No	
1	A	Vinyl Sheet Flooring	M	Emergency Area	✓			✓				✓	4,200 sq
2	B	12"x12" Floor Tile / Mantle	M	" "	✓			✓				✓	4,200 sq
3	C	Vinyl Sheet Flooring	M	Wing A	✓			✓				✓	TBD
4	D	Vinyl Sheet Flooring	M	Wing B	✓			✓				✓	TBD
5	E	Chilled water Pipe Supply	TSI	Mech Rm (Pipe Insulation)	✓			✓				✓	TBD
6	F	Chilled water Return	TSI	" "	✓			✓				✓	TBD
7	G	Stairs / ST Compound	M	Emergency	✓			✓				✓	TBD
8	H	Roof Core	M	West Central	✓			✓				✓	TBD
9	I	Equipment Flooring (Roof)	M	Central	✓			✓				✓	TBD
10	H	Roof Core	M	East Central	✓			✓				✓	TBD
11													
12													
13													
14													
15													
16													
17													

Relinquished By: [Signature] Date: 7/2/13 Time: 17:00
 Received By: Brittain Diabatingo Date: 7/3/13 Time: 10:10am



UNIVERSAL ENGINEERING SCIENCES, INC. - REVISED 5/6/02

**EMSL Analytical, Inc.**

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EMSL Order: 341305018
 CustomerID: UESO56
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Attn: **Jim Blythe**
Universal Engineering Sciences
5561 Florida Mining Blvd. South
Jacksonville, FL 32257

Phone: (904) 296-0757
 Fax: (904) 296-0748
 Received: 07/03/13 10:10 AM
 Analysis Date: 7/3/2013
 Collected: 7/2/2013

Project: 0940.1300057.0000, Flagler County, Former Hospital Bldg, Bunnell FL

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1 341305018-0001	Emergency Area - Vinyl Sheet Flooring	Gray/Yellow Fibrous Heterogeneous	30% Cellulose	70% Non-fibrous (other)	None Detected
This is a composite result of both vinyl and backing layer					
2-Floor Tile 341305018-0002	Emergency Area - 12"x12" Floor Tile/Mastic	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
2-Black Mastic 341305018-0002A	Emergency Area - 12"x12" Floor Tile/Mastic	Black Non-Fibrous Homogeneous		92% Non-fibrous (other)	8% Chrysotile
2-Yellow Mastic 341305018-0002B	Emergency Area - 12"x12" Floor Tile/Mastic	Yellow Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (other)	None Detected
3-Flooring 341305018-0003	Wing A - Vinyl Sheet Flooring	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
3-Mastic 341305018-0003A	Wing A - Vinyl Sheet Flooring	Gray/Yellow Non-Fibrous Heterogeneous	2% Cellulose	98% Non-fibrous (other)	None Detected
Inseparable leveler layer included in analysis					
4-Flooring 341305018-0004	Wing B - Vinyl Sheet Flooring	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

Jerry Cherian (24)

Jonathan Teda, Asbestos Lab Manager
 or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Orlando, FL NVLAP Lab Code 101151-0

Initial report from 07/05/2013 09:46:55

**EMSL Analytical, Inc.**

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Phone: (904) 296-0757
 Fax: (904) 296-0748
 Received: 07/03/13 10:10 AM
 Analysis Date: 7/3/2013
 Collected: 7/2/2013

Project: 0940.1300057.0000, Flagler County, Former Hospital Bldg, Bunnell FL

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
4-Mastic 341305018-0004A	Wing B - Vinyl Sheet Flooring	Gray/Yellow Non-Fibrous Heterogeneous	3% Cellulose	97% Non-fibrous (other)	None Detected
Inseparable leveler layer included in analysis					
5-White Mastic 341305018-0005	Mech Rm (Pipe Insulation) - Chilled Water Supply	White Non-Fibrous Heterogeneous	3% Wollastonite	92% Non-fibrous (other)	5% Chrysotile
5-Insulation 341305018-0005A	Mech Rm (Pipe Insulation) - Chilled Water Supply	Black Non-Fibrous Heterogeneous		90% Perlite 10% Non-fibrous (other)	None Detected
5-Mastic On Insulation 341305018-0005B	Mech Rm (Pipe Insulation) - Chilled Water Supply	Black Non-Fibrous Homogeneous		92% Non-fibrous (other)	8% Chrysotile
6-White Mastic 341305018-0006	Mech Rm (Pipe Insulation) - Chilled Water Return	White Non-Fibrous Heterogeneous	10% Glass	85% Non-fibrous (other)	5% Chrysotile
6-Insulation 341305018-0006A	Mech Rm (Pipe Insulation) - Chilled Water Return	Black Non-Fibrous Heterogeneous		90% Perlite 10% Non-fibrous (other)	None Detected
6-Mastic On Insulation 341305018-0006B	Mech Rm (Pipe Insulation) - Chilled Water Return	Black Non-Fibrous Homogeneous		92% Non-fibrous (other)	8% Chrysotile

Analyst(s)

Jerry Cherian (24)

Jonathan Teda, Asbestos Lab Manager
 or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Orlando, FL NVLAP Lab Code 101151-0

Initial report from 07/05/2013 09:46:55

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Phone: (904) 296-0757
 Fax: (904) 296-0748
 Received: 07/03/13 10:10 AM
 Analysis Date: 7/3/2013
 Collected: 7/2/2013

Project: 0940.1300057.0000, Flagler County, Former Hospital Bldg, Bunnell FL

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
7-Drywall 341305018-0007	Emergency - Drywall/Jt Compound	Brown/White Fibrous Heterogeneous	40% Cellulose 2% Glass	40% Gypsum 18% Non-fibrous (other)	None Detected
7-Joint Compound 341305018-0007A	Emergency - Drywall/Jt Compound	White Non-Fibrous Heterogeneous		25% Ca Carbonate 75% Non-fibrous (other)	None Detected
7-Tape 341305018-0007B	Emergency - Drywall/Jt Compound	White Fibrous Heterogeneous	80% Glass	20% Non-fibrous (other)	None Detected
7-Paint 341305018-0007C	Emergency - Drywall/Jt Compound	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
8-Roofing 341305018-0008	West Central - Roof Core	Black Non-Fibrous Heterogeneous	15% Glass	85% Non-fibrous (other)	None Detected
8-Felt 341305018-0008A	West Central - Roof Core	Black Fibrous Heterogeneous	45% Cellulose	55% Non-fibrous (other)	None Detected
8-Mastic 341305018-0008B	West Central - Roof Core	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
9 341305018-0009	Central - Equipment Flashing (Roof)	Gray/Black Non-Fibrous Heterogeneous	20% Cellulose	75% Non-fibrous (other)	5% Chrysotile

Analyst(s)

Jerry Cherian (24)


 Jonathan Teda, Asbestos Lab Manager
 or other approved signatory

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 Samples analyzed by EMSL Analytical, Inc. Orlando, FL NVLAP Lab Code 101151-0

Initial report from 07/05/2013 09:46:55



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Phone: (904) 296-0757
Fax: (904) 296-0748
Received: 07/03/13 10:10 AM
Analysis Date: 7/3/2013
Collected: 7/2/2013

Project: 0940.1300067.0000, Flagler County, Former Hospital Bldg, Bunnell FL

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
10-Roofing 341305018-0010	East Central - Roof Core	Black Non-Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (other)	None Detected
10-Mastic 341305018-0010A	East Central - Roof Core	Black Non-Fibrous Homogeneous	2% Glass	98% Non-fibrous (other)	None Detected

Analyst(s)

Jerry Cherian (24)

Jonathan Teda, Asbestos Lab Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Orlando, FL NVLAP Lab Code 101151-0

Initial report from 07/05/2013 09:46:55

COMMUNITY SERVICES BUILDING

341305127

Universal Engineering Sciences, Inc., 5561 Florida Mining Boulevard, Jacksonville, Florida 904-296-0757 - Fax 904-296-0748
ASBESTOS CONTAINING MATERIALS CHAIN-OF-CUSTODY

Client: Flagler County Project No.: 0940.1300057.0000 Collected By: Jim Blythe Page: 1 of 1
 Former Hospital Property - Food Bank/Community Center Date Collected: 7/8/13
 Analysis Method PLM-Asbestos Turn Around Time: **24-Hour**
 Location: Bunnell, Florida Batch No: _____
 Special Instructions/Notes: _____

Sample Number	HSA	Sample Description	Material Type (S, TSI, M)	Sample Location	Material Condition			Disturbance Potential			Friable		Estimated Quantity
					G	D	SD	L	M	H	Yes	No	
1	A	12" x 12" Floor Tile / Mastic	M	Food Storage Room / Storage Room (E)	X			X				X	650 SF
2	A	12" x 12" Floor Tile / Mastic	M	Food Storage Room / Storage Room (W)	X			X				X	--
3	B	Cement Board	M	Storage Room / Food Storage Room (W)	X			X				X	650 SF
4	B	Cement Board	M	Storage Room / Food Storage Room (W)	X			X				X	--
5	C	12" x 12" Floor Tile / Mastic	M	Central Building Restroom (E)	X			X				X	25 SF
6	C	12" x 12" Floor Tile / Mastic	M	Central Building Restroom (W)	X			X				X	--
7	D	Drywall / Jt Compound	M	Central Building Hallway (N)	X			X				X	1,400 SF
8	D	Drywall / Jt Compound	M	Central Building Hallway (S)	X			X				X	--
9	E	Roof Shingle / Felt	M	Roof - North	X			X				X	4,100 SF
10	E	Roof Shingle / Felt	M	Roof - North	X			X				X	--
11													
12													
13													
14													
15													
16													
17													

(HSA = Heterogeneous Sampling Area) (S = Surfacing, TSI = Thermal Systems Insulation, M = Miscellaneous) (G = Good, D = Damaged, SD = Significantly Damaged)
 (L = Low, M = Medium, H = High) 7/8/13

Relinquished By: Jim Blythe Date: 7/9/13 Time: 17:00
 Received By: Roberto Diababano Date: 7/9/13 Time: 10:40 am



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EMSL Order: 341305127
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Attn: **Jim Blythe**
Universal Engineering Sciences
5561 Florida Mining Blvd. South
Jacksonville, FL 32257

Phone: (804) 296-0757
 Fax: (904) 296-0748
 Received: 07/09/13 10:40 AM
 Analysis Date: 7/10/2013
 Collected: 7/8/2013

Project: 0940.1300057.0000, Flagler County, Former Hospital Property - Food Bank/Community Center, Bunnell, Florida

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1-Floor Tile 341305127-0001	Food Storage Room/Storage Room (E) - 12"x12" Floor Tile/Mastic	Brown Non-Fibrous Homogeneous		96% Non-fibrous (other)	4% Chrysotile
1-Mastic 341305127-0001A	Food Storage Room/Storage Room (E) - 12"x12" Floor Tile/Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
2-Floor Tile 341305127-0002	Food Storage Room/Storage Room (W) - 12"x12" Floor Tile/Mastic	Brown Non-Fibrous Homogeneous		95% Non-fibrous (other)	5% Chrysotile
2-Mastic 341305127-0002A	Food Storage Room/Storage Room (W) - 12"x12" Floor Tile/Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
3 341305127-0003	Storage Room/Food Storage Room (W) - Cement Board	Gray Fibrous Heterogeneous		75% Non-fibrous (other)	25% Chrysotile

Analyst(s)

Jerry Cherian (11)
 Jonathan Teda (12)

Jonathan Teda, Asbestos Lab Manager
 or other approved signatory

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 Samples analyzed by EMSL Analytical, Inc. Orlando, FL NVLAP Lab Code 101151-0

Initial report from 07/10/2013 10:39:59

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Phone: (904) 296-0757
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 Received: 07/09/13 10:40 AM
 Analysis Date: 7/10/2013
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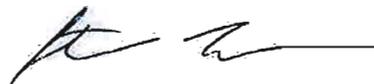
Project: 0940.1300057.0000, Flagler County, Former Hospital Property - Food Bank/Community Center, Bunnell, Florida

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
4 341305127-0004	Storage Room/Food Storage Room (W) - Cement Board	Gray Fibrous Homogeneous		80% Non-fibrous (other)	20% Chrysotile
5-Floor Tile 341305127-0005	Central Building Restroom (E) - 12"x12" Floor Tile/Mastic	Blue Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
5-Mastic 341305127-0005A	Central Building Restroom (E) - 12"x12" Floor Tile/Mastic	Yellow Non-Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (other)	None Detected
6-Floor Tile 341305127-0006	Central Building Restroom (W) - 12"x12" Floor Tile/Mastic	Blue Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
6-Mastic 341305127-0006A	Central Building Restroom (W) - 12"x12" Floor Tile/Mastic	Yellow Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
7-Drywall 341305127-0007	Central Building Hallway (N) - Drywall/Jt Compound	Brown/White Fibrous Heterogeneous	15% Cellulose <1% Glass	50% Gypsum 35% Non-fibrous (other)	None Detected

Analyst(s)

Jerry Cherian (11)
 Jonathan Teda (12)


 Jonathan Teda, Asbestos Lab Manager
 or other approved signatory

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 Samples analyzed by EMSL Analytical, Inc. Orlando, FL NVLAP Lab Code 101161-0

Initial report from 07/10/2013 10:39:59

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Phone: (904) 298-0757
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 Received: 07/09/13 10:40 AM
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Project: 0940.1300057.0000, Flagler County, Former Hospital Property - Food Bank/Community Center, Bunnell, Florida

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
7-Joint Compound 341305127-0007A	Central Building Hallway (N) - Drywall/Jt Compound	White Non-Fibrous Heterogeneous		10% Ca Carbonate 90% Non-fibrous (other)	None Detected
7-Tape 341305127-0007B	Central Building Hallway (N) - Drywall/Jt Compound	White Fibrous Heterogeneous	80% Glass	20% Non-fibrous (other)	None Detected
7-Paint 341305127-0007C	Central Building Hallway (N) - Drywall/Jt Compound	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
8-Drywall 341305127-0008	Central Building Hallway (S) - Drywall/Jt Compound	Brown/White Fibrous Homogeneous	25% Cellulose <1% Glass	60% Gypsum 15% Non-fibrous (other)	None Detected
8-Joint Compound 341305127-0008A	Central Building Hallway (S) - Drywall/Jt Compound	White Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (other)	None Detected
8-Tape 341305127-0008B	Central Building Hallway (S) - Drywall/Jt Compound	White Fibrous Homogeneous	95% Glass	5% Non-fibrous (other)	None Detected
8-Paint 341305127-0008C	Central Building Hallway (S) - Drywall/Jt Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)
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 Jonathan Teda (12)


 Jonathan Teda, Asbestos Lab Manager
 or other approved signatory

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Initial report from 07/10/2013 10:39:59

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
9-Shingle 341305127-0009	Roof - North - Roof Shingle/Felt	Black Fibrous Heterogeneous	15% Glass	85% Non-fibrous (other)	None Detected
9-Felt 341305127-0009A	Roof - North - Roof Shingle/Felt	Black Fibrous Heterogeneous	50% Cellulose	50% Non-fibrous (other)	None Detected
10-Shingle 341305127-0010	Roof - North - Roof Shingle/Felt	Various Fibrous Homogeneous	10% Glass	90% Non-fibrous (other)	None Detected
10-Felt 341305127-0010A	Roof - North - Roof Shingle/Felt	Black Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (other)	None Detected
10-Mastic 341305127-0010B	Roof - North - Roof Shingle/Felt	Black Non-Fibrous Homogeneous		95% Non-fibrous (other)	5% Chrysotile

Analyst(s)

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Jonathan Teda (12)

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Initial report from 07/10/2013 10:39:59

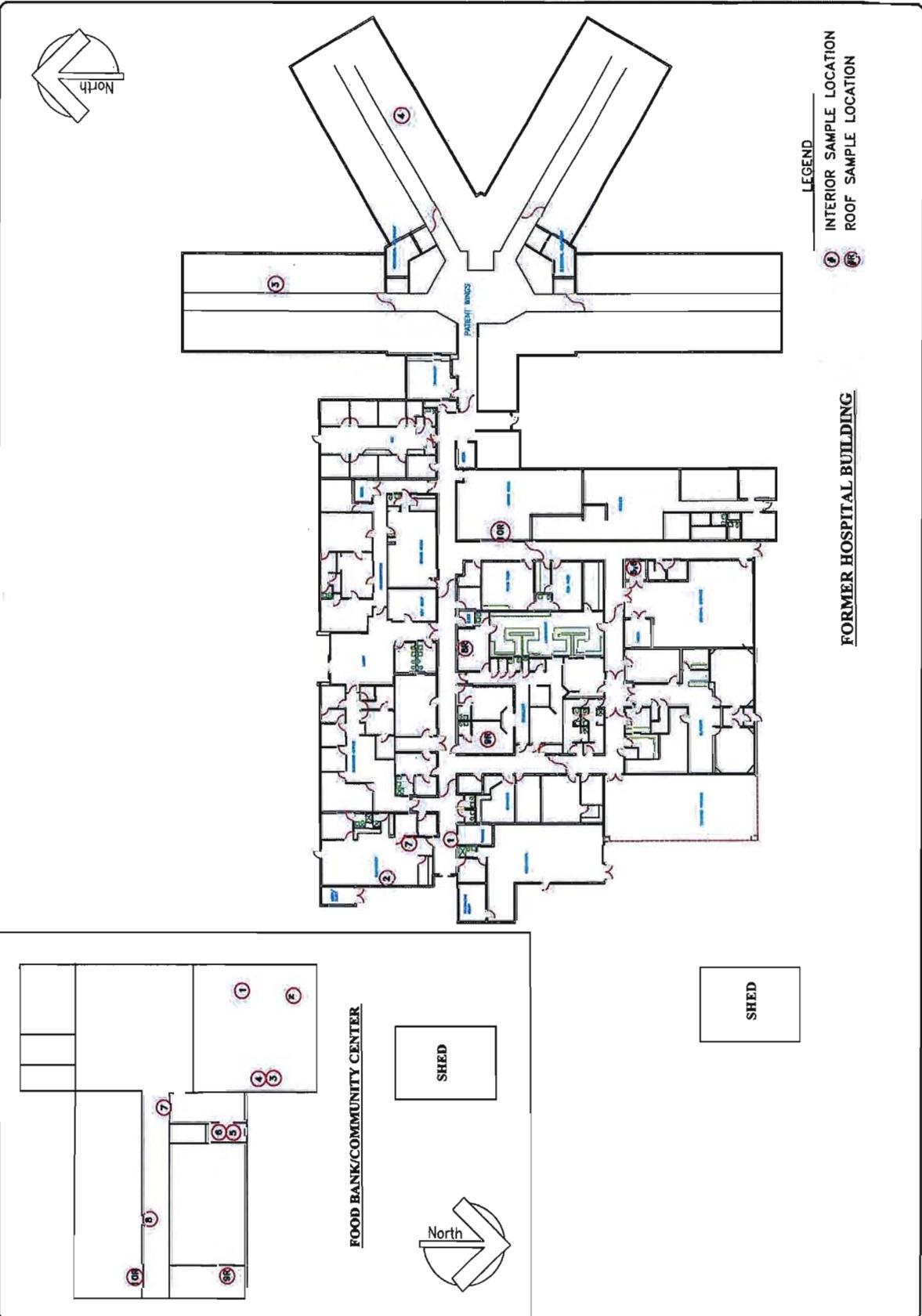
CLIENT: FLAGLER COUNTY	
DRAWN BY: TW	DATE: 7/3/13
CHECKED BY: JEB	DATE: 7/3/13
SCALE: 1" = 40'	
PROJECT NO: 0930.1300057.0000	

LIMITED ASBESTOS SAMPLING
 FORMER HOSPITAL BUILDING
 901 EAST MOODY BOULEVARD
 BUNNELL, FLORIDA
 ASBESTOS SAMPLE LOCATION PLAN



UNIVERSAL
ENGINEERING SCIENCES

PAGE NO: A-1



APPENDIX B

**LEAD-BASED PAINT
XRF TEST RESULTS
SAMPLE LOCATION PLAN**

FORMER HOSPITAL BUILDING

Universal Engineering Sciences, Inc.
 5561 Florida Mining Boulevard South, Jacksonville, Florida 32257 • 904-296-0757 • Fax 904-296-0748
XRF LEAD-BASED PAINT INSPECTION FORM

Unit # 1972 XRF Report No. FC-1 Building Name Former Hospital Building Page: 1 of 5
 Client Flagler County Project Number 0940.130057.0000 Date: 6/26/13
 Project Name 901 East Moody Boulevard Project Location Bunnell, Florida XRF Model No. LPA-1
 Notes/Comments: Inspector Name Jim Blythe

Reading Number	Room Number/Name	Substrate	Color	Paint Condition	Component	Test Location	XRF Reading	Units	Classification (Pos, Neg)
1	Test	--	--	--	--	<i>Equipment Test</i>	0.8	mg/cm ²	<i>Test - OK</i>
2	Test	--	--	--	--	<i>Equipment Test</i>	0.8	mg/cm ²	<i>Test - OK</i>
3	Test	--	--	--	--	<i>Equipment Test</i>	0.9	mg/cm ²	<i>Test - OK</i>
4	SW Hall	Concrete	Tan/Mott	I	Wall	West	0.3	mg/cm ²	Negative
5	Emergency	Drywall	White	I	Wall	North	-0.2	mg/cm ²	Negative
6	Emergency	Metal	White	I	Door Frame	East	0.0	mg/cm ²	Negative
7	Emergency	Metal	White	I	Door Frame	North	0.0	mg/cm ²	Negative
8	Office	Metal	Lt Blue/Gy	I	Door Frame	North	0.1	mg/cm ²	Negative
9	Office	Wood	Blue	I	Door	West	-0.4	mg/cm ²	Negative
10	Office	Metal	White	I	Door Frame	West	0.0	mg/cm ²	Negative
11	Bathroom	Drywall	White	I	Wall	North	-0.2	mg/cm ²	Negative
12	Radiology	Concrete	Green	I	Wall	South	0.5	mg/cm ²	Negative
13	Scanning Area	Drywall	Lt Blue	I	Wall	East	0.5	mg/cm ²	Negative
14	Scanning Area	Concrete	Yellow	I	Wall	North	0.4	mg/cm ²	Negative
15	Scanning Area	Metal	White	I	Door Frame	North	0.0	mg/cm ²	Negative
16	Hall	Concrete	White/Mott	I	Wall	South	0.0	mg/cm ²	Negative
17	Surgery Area	Metal	White	I	Wall	East	-0.1	mg/cm ²	Negative
18	Surgery Area	Drywall	White	I	Wall	East	0.0	mg/cm ²	Negative
19	Surgery Area	Metal	White	I	Door Frame	East	0.1	mg/cm ²	Negative
20	Surgery Area	Metal	White	I	Door	East	0.0	mg/cm ²	Negative

Paint Condition: I = Intact, F = Fair, P = Poor
 Classification: P = Positive, N = Negative



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XRF LEAD-BASED PAINT INSPECTION FORM

Unit # 1972 XRF Report No. FC-1 Building Name Former Hospital Building Page: 2 of 5
 Client Flagler County Project Number 0940.130057.0000 Date: 6/26/13
 Project Name 901 East Moody Boulevard Project Location Bunnell, Florida XRF Model No. LPA-1
 Notes/Comments: Inspector Name Jim Blythe

Reading Number	Room Number/Name	Substrate	Color	Paint Condition	Component	Test Location	XRF Reading	Units	Classification (Pos, Neg)
21	Surgery Area	Concrete	Peach	I	Wall	North	0.3	mg/cm ²	Negative
22	Hall	Concrete	White	I	Wall	East	0.0	mg/cm ²	Negative
23	Storage - Gen	Concrete	White	I	Wall	South	0.4	mg/cm ²	Negative
24	Office	Drywall	White	I	Wall	North	-0.1	mg/cm ²	Negative
25	Hall	Drywall	White	I	Door Frame	East	0.0	mg/cm ²	Negative
26	Hall	Metal	White	I	Door	East	0.2	mg/cm ²	Negative
27	Storage - Gen	Metal	Brown	I	Door Frame	East	0.1	mg/cm ²	Negative
28	Storage - Gen	Metal	Brown	I	Door	East	0.0	mg/cm ²	Negative
29	Kitchen	Concrete	White	I	Wall	North	0.2	mg/cm ²	Negative
30	Dining Rm	Metal	Gray	I	Door Frame	West	0.0	mg/cm ²	Negative
31	Dining Rm	Metal	Gray	I	Window Fr	South	0.3	mg/cm ²	Negative
32	ICU	Metal	White	Poor	Door	West	0.3	mg/cm ²	Negative
33	ICU	Metal	White	Poor	Door Frame	West	0.2	mg/cm ²	Negative
34	ICU	Concrete	White	I	Wall	North	0.1	mg/cm ²	Negative
35	ICU	Metal	Gray	I	Door Frame	West	0.5	mg/cm ²	Negative
36	Patient Wing A	Concrete	Blue	I	Wall	North	0.6	mg/cm ²	Negative
37	Patient Wing A	Metal	Blue	I	Door Frame	East	0.3	mg/cm ²	Negative
38	Patient Wing A	Concrete	Lt Blue	I	Wall	South	0.5	mg/cm ²	Negative
39	Patient Wing A	Concrete	White	I	Wall	North	0.1	mg/cm ²	Negative
40	Patient Wing B	Drywall	Lt Blue	I	Wall	West	0.2	mg/cm ²	Negative

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XRF LEAD-BASED PAINT INSPECTION FORM

Unit # **1972** XRF Report No. **FC-1** Building Name **Former Hospital Building** Page: **3** of **5**
 Client **Flagler County** Project Number **0940.130057.0000** Date: **6/26/13**
 Project Name **901 East Moody Boulevard** Project Location **Bunnell, Florida** XRF Model No. **LPA-1**
 Notes/Comments: **Inspector Name Jim Blythe**

Reading Number	Room Number/Name	Substrate	Color	Paint Condition	Component	Test Location	XRF Reading	Units	Classification (Pos, Neg)
41	Patient Wing B	Drywall	Lt Blue	I	Wall	West	0.2	mg/cm ²	Negative
42	Patient Wing B	Metal	White	I	Door	West	0.3	mg/cm ²	Negative
43	Patient Wing B	Concrete	White	Poor	Wall	West	0.3	mg/cm ²	Negative
44	Patient Wing B	Metal	White	I	Door Frame	East	0.1	mg/cm ²	Negative
45	Patient Wing B	Concrete	White	Poor	Wall	East	0.1	mg/cm ²	Negative
46	Patient Wing B	Metal	White	I	Door Frame	West	0.0	mg/cm ²	Negative
47	Patient Wing B	Concrete	White	I	Wall	West	0.1	mg/cm ²	Negative
48	Patient Wing B	Metal	White	I	Door Frame	East	-0.1	mg/cm ²	Negative
49	Patient Wing B	Concrete	White	I	Wall	East	0.1	mg/cm ²	Negative
50	Patient Wing C	Concrete	Lt Blue	Poor	Wall	North	0.5	mg/cm ²	Negative
51	Patient Wing C	Metal	White	I	Door Frame	North	0.2	mg/cm ²	Negative
52	Patient Wing C	Concrete	Lt Blue	Poor	Wall	South	0.5	mg/cm ²	Negative
53	Patient Wing C	Metal	Lt Blue	I	Door Frame	North	0.0	mg/cm ²	Negative
54	Patient Wing C	Concrete	Tan	I	Wall	North	0.0	mg/cm ²	Negative
55	Patient Wing D	Concrete	Lt Blue	I	Wall	East	0.2	mg/cm ²	Negative
56	Patient Wing D	Metal	Lt Blue	I	Door Frame	West	0.1	mg/cm ²	Negative
57	Patient Wing D	Concrete	Lt Blue	I	Wall	West	0.2	mg/cm ²	Negative
58	Patient Wing D	Metal	Lt Blue	I	Door Frame	East	0.1	mg/cm ²	Negative
59	Patient Wing D	Concrete	White	I	Wall	East	0.0	mg/cm ²	Negative
60	Patient Wing D	Metal	White	I	Door	South	0.2	mg/cm ²	Negative

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XRF LEAD-BASED PAINT INSPECTION FORM

Unit # 1972 XRF Report No. FC-1 Building Name Former Hospital Building Page: 4 of 5
 Client Flagler County Project Number 0940.130057.0000 Date: 6/26/13
 Project Name 901 East Moody Boulevard Project Location Bunnell, Florida XRF Model No. LPA-1
 Notes/Comments: _____ Inspector Name Jim Blythe

Reading Number	Room Number/Name	Substrate	Color	Paint Condition	Component	Test Location	XRF Reading	Units	Classification (Pos.,Neg)
61	Patient Wing D	Metal	White	I	Door Frame	South	0.0	mg/cm ²	Negative
62	Business Off	Metal	Lt Blue	I	Door Frame	North	0.2	mg/cm ²	Negative
63	Business Off	Metal	Lt Blue	I	Window Fr	South	0.2	mg/cm ²	Negative
64	Lobby	Metal	Lt Blue	I	Door Frame	South	0.0	mg/cm ²	Negative
65	Lobby	Metal	Gray	I	Window Fr	North	0.1	mg/cm ²	Negative
66	Admin Office	Metal	Brown	I	Door Frame	North	0.4	mg/cm ²	Negative
67	Admin Office	Drywall	White	I	Ceiling	Central	-0.2	mg/cm ²	Negative
68	Mechanical	Concrete	Lt Green	I	Wall	East	0.1	mg/cm ²	Negative
69	Mechanical	Metal	Lt Green	I	Door Frame	North	0.1	mg/cm ²	Negative
70	Exterior	EIFS	Tan	I	Wall	South	0.0	mg/cm ²	Negative
71	Exterior	EIFS	Tan	I	Wall	West	-0.5	mg/cm ²	Negative
72	Exterior	EIFS	Tan	I	Wall	West	0.1	mg/cm ²	Negative
73	Exterior	EIFS	Tan	I	Wall	North	-0.2	mg/cm ²	Negative
74	Exterior	Metal	Tan	Poor	Door	North	0.1	mg/cm ²	Negative
75	Exterior	EIFS	Tan	I	Wall	East	0.0	mg/cm ²	Negative
76	Exterior	EIFS	Tan	I	Wall	West	-0.3	mg/cm ²	Negative
77	Exterior	Metal	Tan	I	Door	West	0.0	mg/cm ²	Negative
78	Exterior	EIFS	Tan	I	Wall	North	-0.1	mg/cm ²	Negative
79	Exterior	EIFS	Tan	I	Wall	East	-0.2	mg/cm ²	Negative
80	Exterior	EIFS	Tan	I	Wall	East	0.1	mg/cm ²	Negative

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 5561 Florida Mining Boulevard South, Jacksonville, Florida 32257 • 904-296-0757 • Fax 904-296-0748
XRF LEAD-BASED PAINT INSPECTION FORM

Unit #	1972	XRF Report No.	FC-1	Building Name	Former Hospital Building		Page:	5	of	5	
Client	Flagler County	Project Number	0940.130057.0000	Project Location	Bunnell, Florida		Date:	6/26/13			
Project Name	901 East Moody Boulevard			Inspector Name	Jim Blythe						
Notes/Comments:											

Reading Number	Room Number/Name	Substrate	Color	Paint Condition	Component	Test Location	XRF Reading	Units	Classification (Pos.,Neg)
81	Exterior	Metal	Tan	I	Door	East	-0.1	mg/cm ²	Negative
82	Exterior	EIFS	Tan	I	Wall	East	-0.3	mg/cm ²	Negative
83	Exterior	EIFS	Tan	I	Wall	North	-0.1	mg/cm ²	Negative
84	Exterior	EIFS	Tan	I	Wall	North	0.1	mg/cm ²	Negative
85	Exterior	Metal	Tan	I	Door	North	0.0	mg/cm ²	Negative
86	Exterior	EIFS	Tan	I	Wall	East	0.0	mg/cm ²	Negative
87	Exterior	EIFS	Tan	I	Wall	North	-0.2	mg/cm ²	Negative
88	Exterior	Metal	Tan	I	Gutter	North	-0.1	mg/cm ²	Negative
89	Exterior	EIFS	Tan	I	Wall	East	0.0	mg/cm ²	Negative
90	Exterior	Metal	Tan	I	Door	South	0.1	mg/cm ²	Negative
91	Exterior	EIFS	Tan	I	Wall	East	-0.1	mg/cm ²	Negative
92	Exterior	EIFS	Tan	I	Wall	North	-0.2	mg/cm ²	Negative
93	Exterior	EIFS	Tan	I	Wall	West	-0.3	mg/cm ²	Negative
94	Exterior	EIFS	Tan	I	Wall	South	-0.1	mg/cm ²	Negative
95	Exterior	Metal	Tan	I	Door	South	0.1	mg/cm ²	Negative
96	Exterior	EIFS	Tan	I	Wall	South	-0.3	mg/cm ²	Negative
97	Exterior	EIFS	Tan	I	Wall	West	0.5	mg/cm ²	Negative
98	Exterior	EIFS	Tan	I	Wall	West	-0.5	mg/cm ²	Negative
99	Tool Shed	Wood	Tan	I	Wall	Detached Wooden Shed - North	0.1	mg/cm ²	Negative
100	Tool Shed	Wood	Brown	I	Eve	Detached Wooden Shed - North	0.1	mg/cm ²	Negative

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COMMUNITY SERVICES BUILDING

Universal Engineering Sciences, Inc.
 5561 Florida Mining Boulevard South, Jacksonville, Florida 32257 • 904-296-0757 • Fax 904-296-0748
XRF LEAD-BASED PAINT INSPECTION FORM

Unit # **1972** XRF Report No. **FC-2** Building Name **Community Services Building** Page: **1** of **3**
 Client **Flagler County** Project Number **0940.130057.0000** Date: **6/26/13**
 Project Name **901 East Moody Boulevard** Project Location **Bunnell, Florida** XRF Model No. **LPA-1**
 Notes/Comments: **Inspector Name Jim Blythe**

Reading Number	Room Number/Name	Substrate	Color	Paint Condition	Component	Test Location	XRF Reading	Units	Classification (Pos, Neg)
1	Food Storage	Concrete	Tan	I	Wall	East	0.1	mg/cm ²	Negative
2	Food Storage	Wood	Tan	I	Door Frame	North	-0.1	mg/cm ²	Negative
3	Food Storage	Metal	Gray	I	Door	West	0.0	mg/cm ²	Negative
4	Food Storage	Metal	Brown	I	Door	West	0.0	mg/cm ²	Negative
5	Storage	Metal	Brown	I	Door Frame	West	0.0	mg/cm ²	Negative
6	Storage	Wood	Green	I	Wall	East	-0.2	mg/cm ²	Negative
7	Storage	Concrete	Green	I	Wall	South	0.1	mg/cm ²	Negative
8	Storage	Concrete	White	I	Wall	East	0.3	mg/cm ²	Negative
9	Storage	Wood	Green	I	Door Frame	North	-0.1	mg/cm ²	Negative
10	Storage	Concrete	White	I	Wall	North	-0.1	mg/cm ²	Negative
11	Storage	Concrete	Green	I	Wall	North	0.2	mg/cm ²	Negative
12	Exterior	Wood	Yellow	I	Door	West	-0.1	mg/cm ²	Negative
13	Exterior	Wood	Brown	I	Door	West	0.2	mg/cm ²	Negative
14	Exterior	Concrete	Tan	I	Wall	West	0.1	mg/cm ²	Negative
15	SW Office	Concrete	Tan	I	Wall	South	0.1	mg/cm ²	Negative
16	Central Office	Concrete	Tan	I	Wall	South	0.2	mg/cm ²	Negative
17	Central Office	Concrete	Peach	I	Wall	East	0.1	mg/cm ²	Negative
18	Central Office	Drywall	Cream	I	Wall	North	0.1	mg/cm ²	Negative
19	SE Office	Concrete	Blue	I	Wall	South	0.1	mg/cm ²	Negative
20	SE Office	Drywall	Cream	I	Wall	South	0.1	mg/cm ²	Negative

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Unit # **1972** XRF Report No. **FC-2** Building Name **Community Services Building** Page: **2** of **3**
 Client **Flagler County** Project Number **0940.130057.0000** Date: **6/26/13**
 Project Name **901 East Moody Boulevard** Project Location **Bunnell, Florida** XRF Model No. **LPA-1**
 Notes/Comments: **Jim Blythe**

Reading Number	Room Number/Name	Substrate	Color	Paint Condition	Component	Test Location	XRF Reading	Units	Classification (Pos,Neg)
21	NW Room	Concrete	Tan	I	Wall	North	-0.2	mg/cm ²	Negative
22	NW Room	Concrete	Pink	I	Wall	North	-0.2	mg/cm ²	Negative
23	NW Room	Drywall	Tan	I	Wall	West	-0.2	mg/cm ²	Negative
24	NW Room	Concrete	White	I	Wall	West	0.0	mg/cm ²	Negative
25	NW Room	Concrete	Yellow	I	Wall	East	-0.1	mg/cm ²	Negative
26	NW Room	Wood	White	I	Door	West	-0.2	mg/cm ²	Negative
27	NW Room	Wood	White	I	Door Frame	South	0.0	mg/cm ²	Negative
28	SE Room	Concrete	Blue	I	Wall	North	0.0	mg/cm ²	Negative
29	SE Room	Concrete	White	I	Wall	South	-0.1	mg/cm ²	Negative
30	SE Room	Concrete	Gray	I	Wall	West	0.0	mg/cm ²	Negative
31	Hall	Wood	Tan	I	Wall	South	0.0	mg/cm ²	Negative
32	N Room	Concrete	White	I	Wall	West	0.2	mg/cm ²	Negative
33	N Room	Wood	Brown	I	Door Frame	West	0.1	mg/cm ²	Negative
34	N Room	Concrete	Tan	I	Wall	West	0.0	mg/cm ²	Negative
35	N Room	Drywall	Tan	I	Wall	South	-0.1	mg/cm ²	Negative
36	NE Office	Concrete	Tan	I	Wall	East	-0.2	mg/cm ²	Negative
37	NE Office	Drywall	Tan	I	Wall	West	0.0	mg/cm ²	Negative
38	Exterior	Metal	Brown	I	Door	West	-0.1	mg/cm ²	Negative
39	Exterior	Concrete	Tan	I	Wall	South	0.2	mg/cm ²	Negative
40	Exterior	Concrete	Tan	I	Wall	South	-0.1	mg/cm ²	Negative

Paint Condition: I = Intact, F = Fair, P = Poor
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Unit # **1972** XRF Report No. **FC-2** Building Name **Community Services Building** Page: **3** of **3**
 Client **Flagler County** Project Number **0940.130057.0000** Date: **6/26/13**
 Project Name **901 East Moody Boulevard** Project Location **Bunnell, Florida** XRF Model No. **LPA-1**
 Notes/Comments: **Inspector Name Jim Blythe**

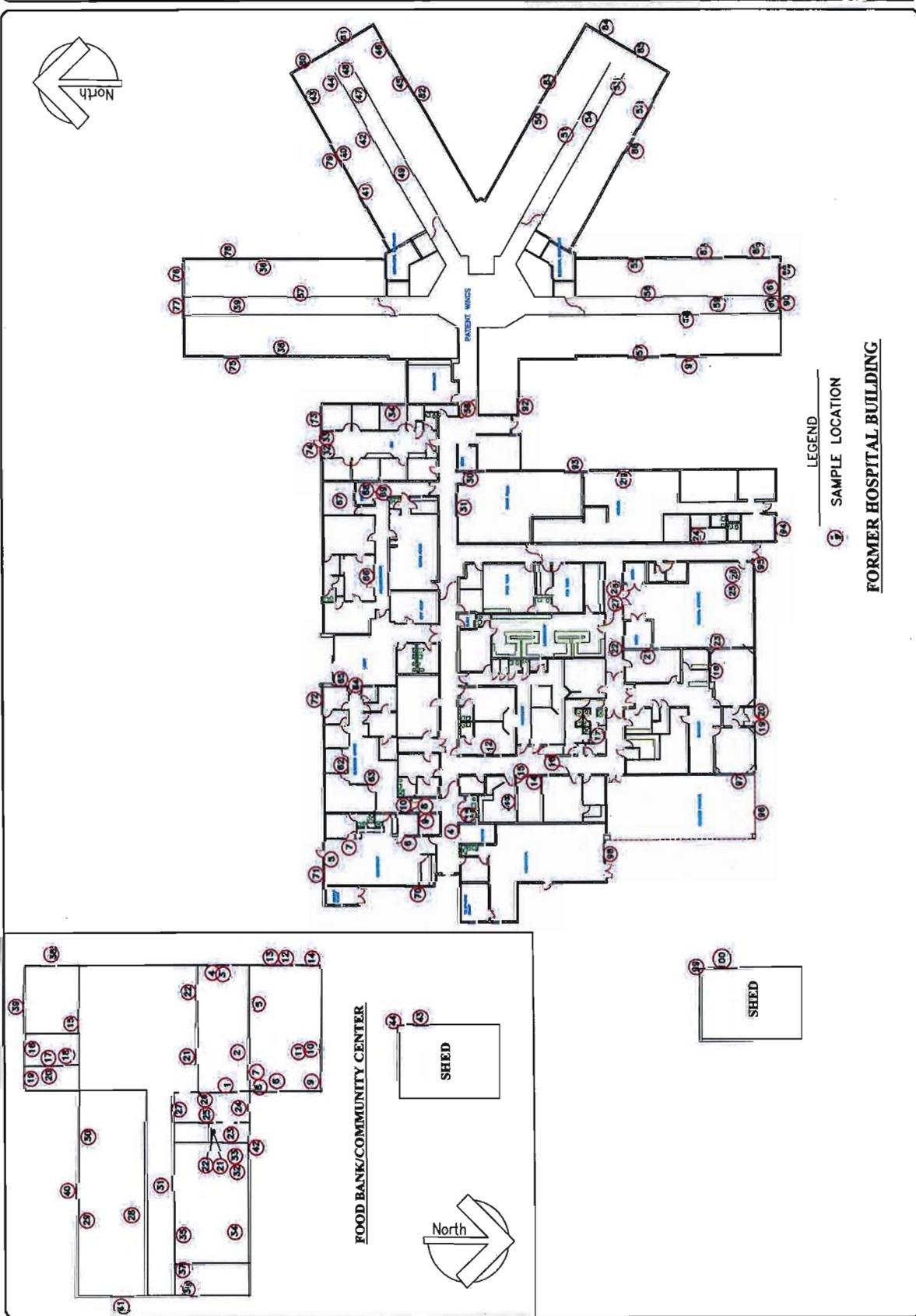
Reading Number	Room Number/Name	Substrate	Color	Paint Condition	Component	Test Location	XRF Reading	Units	Classification (Pos, Neg)
41	Exterior	Concrete	Tan	I	Wall	East	0.0	mg/cm ²	Negative
42	Exterior	Concrete	Tan	I	Wall	North	0.0	mg/cm ²	Negative
43	Exterior	Wood	Brown	I	Door	West	0.1	mg/cm ²	Negative
44	Exterior	Wood	Brown	I	Eve	West	0.0	mg/cm ²	Negative
45	Test	N/A	N/A	N/A	N/A	Equipment Test	1.0	mg/cm ²	OK
46	Test	N/A	N/A	N/A	N/A	Equipment Test	1.0	mg/cm ²	OK
47	Test	N/A	N/A	N/A	N/A	Equipment Test	1.0	mg/cm ²	OK
								mg/cm ²	
								mg/cm ²	
								mg/cm ²	
								mg/cm ²	
								mg/cm ²	
								mg/cm ²	
								mg/cm ²	
								mg/cm ²	

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 Classification: P = Positive, N = Negative



UNIVERSAL ENGINEERING SCIENCES, INC.

CLIENT: FLAGLER COUNTY		DRAWN BY: TW		DATE: 7/3/13
CHECKED BY: JEB		SCALE: 1" = 40'		PROJECT NO: 0930.130057.0000
LEAD-BASED PAINT SURVEY FORMER HOSPITAL BUILDING 901 EAST MOODY BOULEVARD BUNNELL, FLORIDA LEAD-BASED PAINT SAMPLE LOCATION PLAN				
 UNIVERSAL <small>ENGINEERING SCIENCES</small>			PAGE NO: A-1	



APPENDIX C
OTHER DOCUMENTS



BRADCO
Abatement Contractors, Inc.

5890 Stuart Avenue
Jacksonville, FL 32254
Fax: 904-783-1136

AUG. 24 06

RE. FLAGLER HOSPITAL

FOR YOUR RECORDS BRADCO ABATEMENT CONT.
HAS REMOVED AND DISPOSED OF A.C.M FROM BUILDING
IN BUNNEL FL THIS INCLUDES DUCT MASTIC THRUOUT
BUILDING ALL WORK WAS DONE IN ACCORDANCE TO ALL
LOCAL STATE AND FEDERAL GUIDELINES. ANY QUESTION
CONTACT JERRY BRADLEY AT 904 783 3242

JERRY F BRADLEY
PRESIDENT BRADCO ABATEMENT CONT, INC

A handwritten signature in black ink, appearing to read 'Jerry F Bradley', is written over the typed name and extends downwards and to the right.

**LIMITED ACCESS SURVEY FOR ASBESTOS CONTAINING MATERIALS (ACM)
MEMORIAL HOSPITAL - FLAGLER
ROUTE 1 MOODY BOULEVARD
BUNNELL, FLORIDA**

EXHIBIT 'B'

Prepared for:

**Mr. Frank Gidus
Hartman & Associates, Inc.
Suite 1000
Orlando, FL 32801**

Prepared by:

***PbO₃* Environmental Testing & Service Company
473 North Pine Meadow Drive
DeBary, Florida 32713
(407) 688-4545
#00A-09-214**



**Peter Swarr, PE No.44159
Licensed Asbestos Consultant No.63**

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	3.0)	Health Aspects of Asbestos.....
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II	Bulk Sample Analysis and Location Summary
III	Summary of Positive Asbestos Samples
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1.0) INTRODUCTION

Airborne asbestos contamination in a facility is a significant environmental problem. It has been determined and documented that inhalation of significant quantities of airborne asbestos fibers over an extended period of time can have serious health effects. In order to assess any potential health risks within a facility, it is necessary to conduct a survey of the facility to identify and locate any friable or non-friable asbestos-containing materials (ACM's) that may be located within it.

If and when ACM's are located within a facility, the ACM's must then be evaluated and assessed to determine whether any immediate health hazards are presented to the building occupants. It must be noted that the presence of asbestos does not necessarily mean that the health of the building occupants is endangered. As long as an ACM remains intact, in good condition and is not disturbed, damaged, or mutilated, exposure of asbestos fibers to the air is unlikely.

PbO₃ Environmental Testing & Services Co. (**PbO₃**) was contracted to perform a survey of the Memorial Hospital-Flagler, Bunnell, Florida.

PbO₃'s Asbestos Inspector(s), Mr. Kevin O'Malley and Mr. Joseph Frasher, conducted the inspection, which occurred September 5th through September 7th, 2000. The inspection identified areas where materials suspected of containing asbestos were located. Wherever such materials were found, data was collected regarding area quantities, conditions, and potential hazard concerns and deterioration factors. As necessary, samples of each type of material were taken in different locations to determine actual asbestos content.

All samples collected in this survey were analyzed for asbestos content. The analysis followed the Environmental Protection Agency's (EPA) recommended method of Polarized Light Microscopy (PLM), and the EPA-PLM protocol for the determination of asbestos fibers in bulk insulation materials.

2.0 REGULATORY REQUIREMENTS

Facility owners and operators are required to insure that employees or occupants of their facility are not exposed to unsafe levels of airborne asbestos. Allowable fiber levels are defined by the regulatory agencies and standards to be:

0.01 f/cc - Environmental Protection Agency (EPA) Clean Air Standard

-This standard was designed as a clearance criterion for asbestos removal projects in schools. This means that if a removal project occurs in a school, air testing must be conducted in the removal area after work is completed. The results of this sampling must be below this level in order to allow re-occupancy of this area.

0.10 f/cc - Occupational Safety and Health Administration (OSHA) Personal Exposure Level

-This is the OSHA permissible exposure limit (PEL) average over an 8-hour day. This means that this is the maximum level of asbestos that workers and/or employees can be exposed to without respirator protection and protective clothing. Should air sampling be at or near the PEL the employer will have to:

- Notify Workers
- Post Danger Signs
- Establish periodic air monitoring regulated areas, and decontamination facilities
- Provide respiratory protection and personnel protective clothing

For these reasons, it is important that the owner conduct a combination of a complete asbestos bulk survey and periodic air monitoring to determine what types of asbestos containing materials (ACM) are present in their building, what condition these materials are in and to what extent these materials have become airborne.

Although only schools are federally mandated to conduct asbestos surveys of their buildings, most private industry and governmental institutions are having asbestos surveys conducted to limit their liability with regards to ACM. Facility owner are also arranging for periodic air monitoring to be conducted in areas of the building where ACM exists and can not be immediately removed. These air results can be compared to current regulations as shown above to determine if the airborne concentrations are excessive.

3.0) HEALTH ASPECTS OF ASBESTOS

Asbestos is a generic term encompassing various fibrous mineral silicates, including chrysotile (hydrated magnesium silicate), amosite (iron magnesium silicate), crocidolite (sodium-iron silicate), tremolite (calcium-magnesium silicate), anthophyllite (another iron-magnesium silicate), and actinolite (calcium-magnesium-iron silicate).

The potential health hazards associated with exposure to asbestos results from inhalation of airborne fibers; small asbestos fibers can pass readily through the upper respiratory tract and be deposited in the terminal bronchioles of the lung. There they can produce a local irritation, which the body attempts to neutralize by initiating a tissue response. The resulting body response is encapsulation of the fibers and consequent formation of "asbestos nodules." Asbestos fibers are the causative agents in cases of asbestosis.

In its most severe form asbestosis can contribute to, and result in, death due to the inability of the body to obtain oxygen because of the heart's ability to pump blood through scarred lungs. Exposure to airborne asbestos fibers has also been associated with bronchogenic carcinoma (a malignancy of the interior of the lung), mesothelioma (a diffuse malignancy of the lining of the chest cavity or abdomen), and cancer of the stomach, colon, and rectum. Cigarette smoking can enhance the incidence of bronchogenic carcinoma.

A NIOSH/OSHA committee concluded that "evaluation of all available human data provides no evidence for a threshold or for a safe level of asbestos exposure. The committee goes on to recommend that, to the extent uses of asbestos cannot be eliminated or less toxic materials substituted for asbestos, worker exposure to asbestos must be controlled to the maximum extent possible."

In order to protect workers from such occupational hazards, OSHA has established a permissible exposure limit of 0.1 fibers (longer than 5 micrometers) per cubic centimeter of air (fibers/cc) with an 8-hour, time-weighted average (TWA) concentration limit.

4.0) COLLECTION OF DATA AND SURVEY OF FACILITY

All sample collection, analysis, and interpretation were completed in accordance with all federal, state, and local regulations affecting these procedures. The sampling and analytical techniques used during the survey are described below:

4.1) SAMPLING PROTOCOL

The Building and areas included within this contract were accessed and visually inspected for the presence of any ACM. This inspection included all electrical, mechanical and fireproofing systems and the materials thereof.

4.2) SITE INSPECTION

PbOs's Building Inspectors, Mr. Kevin O'Malley and Joseph Frasher, inspected the facility for ACM's. The site inspection involved three steps: (1) reviewing available blueprints, (2) arranging physical access and (3) conducting the actual inspection.

Inspection of available blueprints, building specifications, previous asbestos surveys, or floor plans to determine known or likely locations of asbestos. Copies of reproducible floor plans (if available) were made in order to mark the sample locations of suspected ACM's.

Arrangements for physical access. As necessary, arrangements were made to obtain keys, ladders, and access sites. If possible, time periods of low activity were selected to minimize interference with building users.

Initial inspection. Mr. O'Malley and Mr. Frasher inspected the facility, according to a predetermined search scheme and prepared a list of potential sampling sites. Along with this, pertinent data such as material condition, location, friability, quantity and factors used to determine exposure were gathered. Assessments of all friable ACMs were made.

4.3 **SAMPLE SITE SELECTION**

Potential sampling sites were selected by their ability to characterize the building's asbestos content and by their estimated exposure potential. Large surfaces with high exposure potential were frequently sampled more than once. This was done to allow for the possibility that the surface, appearing homogeneous, is in fact composed of more than one construction material.

4.4) **SEARCH PATTERN**

In an effort to determine a pattern, several steps were taken. The **PbO₃** Building Inspector relied on his own judgement as to whether more than one pipe or duct system supplied the site. When there was more than one system, the boundaries of those systems were inspected for changes in construction material.

In each room or area that was addressed, hidden locations were surveyed where possible. These included such locations as above suspended ceilings, crawlspaces and underground pipelines.

4.5 **SAMPLE TYPES AND CONCERNS**

Although asbestos is used for over 2000 commercial applications, only about ten of these forms are truly common. With these forms, a high degree of certainty can be obtained with a visual inspection. Other potential ACM's were selected for sampling based on the application for which they were used. These surfaces were selected from the following types:

1. Spray-on materials applied to surfaces in public places or in air plenums generally take top precedence. Those of a highly friable nature were considered highly appropriate for sampling. These surfaces typically included spray-on ceilings and beams with spray-on insulation.
2. Debris and dust, if found in great amounts and considered to be possible ACM (generally if found near a known ACM in poor condition), were given high priority for sampling. This is because dust and debris is generally cleaned up in a manner that encourages the creation of airborne asbestos dust, the very thing that should be avoided.
3. Pipe insulation, the most common of the ACM's.

4. Pipe joints associated with ACM pipe insulation but may also be found on fiberglass insulated pipelines.
5. Closely associated with pipes is boiler and tank insulation. These have the highest likelihood of being ACM's.
6. Duct insulation, where found, was commonly sampled.
7. Ceiling tile or panels.
8. Floor tiles are commonly asbestos particularly 9" x 9" tiles.
9. Transite Panels for heat protection.
10. Roofing Material
11. Expansion Materials between concrete
12. Flexible connectors between Metal Ducting

4.6 SAMPLE ACQUISITION

All samples were taken according to the following methodologies:

1. First wetting the surface of the material to prevent the release of fibers during the sampling procedure.
2. Extracting the sample with a corer or other appropriate tool, being careful to collect a representative sample of all layers encountered.
3. Placing the sample in a sealed impermeable container.
4. Labeling the sample container with appropriate information and logging the information into a field notebook.
5. Sealing the surface of the sampled area with duct tape or other appropriate means to prevent the release of fibers as a result of sampling techniques.
6. Delivering the sealed sample to the laboratory for analysis.

In addition to taking samples of the friable materials encountered during the survey, **PbO's** inspector also assessed the overall condition, friability, accessibility, types of damage, and factors affecting potential fiber release of each material.

5.0 ANALYSIS PROTOCOL

All bulk samples were analyzed using Polarized Light Microscopy (PLM). This is the method of choice, which was recognized by the Environmental Protection Agency (EPA). PLM serves several functions. Its main purpose is to identify fibrous asbestos in bulk samples. The PLM method is also used to distinguish between the various types of asbestos within the sample.

When a bulk asbestos sample is received, several representative portions of the sample are removed and put into a labeled petri dish. The sample parts are extracted using forceps. These extracted fibers are then placed on a microscopy slide and mounted using a liquid of similar refractive indices.

After mounting, the fibers are identified using Polarized Light Microscopy (PLM), supplemented by dispersion staining. After fiber identification by PLM, estimation is made as to the percent composition of asbestos. The estimated percentages are based on size, number, shape, density of each of the components, and on comparison to a standard set of samples previously quantitated by the interim Research Triangle Institute (RTI) method.

PbO₃ uses a laboratory, which participates in several quality assurance programs, including the EPA Bulk Sample Rounds. Bulk samples are sent to participating laboratories quarterly, for microscopic identification of asbestos content. The results of this Quality Assurance program are available for public review. The laboratory also, participates in the NIOSH-PAT Program for Asbestos Air Analysis. These samples are sent to participating laboratories quarterly as well. The samples are analyzed using Phase Contrast Microscopy and compared to results from other laboratories. All laboratories receive a "Proficient" or "Non-Proficient" rating, and the results are available for public review.

As of September 11, 2000 a QA/QC review of the analytical results (verifications) has not been completed for this project.

6.0 SURVEY LIMITATIONS AND PROBLEMS

Throughout the course of any asbestos survey, there are a number of problems and limitations that affect the quality of the final report. These limitations may be caused by access concerns, materials with conflicting analytical results, materials that can not be sampled, materials that can not be quantified and/or materials that were not surveyed due to recent renovations or instruction from the client.

6.1 INACCESSIBLE AREAS

There are certain spaces within a building that can not be accessed during the course of a normal survey without demolition activities. Those areas would include, but are not limited to:

- Pipe and pipe joint insulation and other potential ACMB behind and within walls; above and within plaster ceilings; below and within floors - that do not have access either through doors or by the raising of ceiling panels.
- Tunnels which are enclosed, very small or unsafe.
- Boiler Breaching and ducts that are enclosed with steel or other materials without access doors or panels.
- Inaccessible interior boiler insulation or gasket material.
- Floor tile located underneath carpeting, other floor tile or other materials that can not be destroyed or damaged.
- Materials located at a height not accessible by ladders or other means.
- Underground pipe lines.

As these areas are inaccessible and can not be surveyed without destroying building materials, **PbOs** did not survey these areas. If at some future point, access is gained to these areas for maintenance or other purposes, they should be inspected for ACM's.

Inaccessible Areas within this project include but are not limited to:

1. Pipe Chases Behind Walls, Cellings, Basements
2. Tile under Rolled Flooring, Tile and/or Carpet
3. All Secured Rooms
4. Patient Occupied Rooms

6.2 MATERIALS WITH CONFLICTING ANALYTICAL RESULTS

Throughout the course of an asbestos inspection, samples are taken of materials that might possibly contain asbestos. The number of samples taken and the locations from which the samples are taken is largely dependent on the type and quantity of the materials.

Although the inspector constantly endeavors to place the materials into homogeneous groups, the analytical results often come back with conflicting results with some being positive and others being negative. When this occurs, the inspector will return to the area and attempt to take more samples of the material or define where the barrier between the positive material and negative material exists.

In some circumstances, it is impossible to determine a difference between the positive and negative materials with either building dates or physical appearance. When this dilemma occurs, the inspector must review the available data and make generalizations as to asbestos content. It is important that these materials be addressed on a case by case basis and be tested if they have been assumed to be positive.

Materials within the Project which have conflicting analytical results include but are not limited to:

1. NONE

6.3 MATERIALS THAT CAN NOT BE SAMPLED

In most asbestos survey projects, there are some materials that can not be sampled. These materials are either not able to be accessed (i.e. above plaster ceilings), would require significant damage to sample (i.e. roofing systems, fire doors) or are located behind, beneath or around other materials that are not to be disturbed (i.e. floor tile located beneath other floor tile or carpeting).

These materials that could not be sampled must be assumed to contain asbestos until they can be properly accessed and sampled. Once this follow up sampling has occurred, that facility should update the data regarding this material.

The materials within the project buildings that could not be sampled but must be assumed to be asbestos until tested otherwise include but are not limited to:

1. Roofing system
2. Multi-layer flooring

6.4 MATERIALS THAT WERE SAMPLED BUT NOT QUANTIFIED

During the course of this survey, there were materials, which **PbO₃** was able to sample but was not able to quantify. This occurred due to materials that were too extensive to quantify (i.e. mastics, glues, paints, etc.); materials that routinely do not contain asbestos (i.e. drywall, plaster, etc.) or materials that are not currently regulated (i.e. roofing, floor tile, etc.).

For the materials that were not quantified during the survey, the facility should follow the analytical results that are presented and treat each material accordingly. Should quantification be required at a future time, **PbO₃** will return to the site and quantify these materials as in the form of an Abatement Plan. All quantities in this survey are approximates and should not be used for abatement activities without field verification.

Sampled materials that were not quantified within the project include but are not limited to:

1. All Materials that were reported to be Non-Asbestos Containing
2. Duct Mastics
3. Flooring and most non-friable materials

6.5 STAIRWELLS & AREAS THAT COVER MORE THAN ONE FLOOR

Some areas are not simply categorized due to their locations. These materials usually encompass more than one floor or building within the facility. Given this, they are not easily grouped or sorted in the computerized program provided for this facility.

The facility must endeavor to acknowledge these materials and/or areas when determining which areas to address for removal, repair or encapsulation.

Materials encompassing a variety areas throughout the facility of within the project include but are not limited to:

1. Thermal System Insulation
2. Flooring

6.6 AREAS NOT SURVEYED (PER INSTRUCTIONS)

The survey for this project required **PbO₃** to survey all accessible areas; however, there were some areas, which were excluded due to recent renovation or instructions from the client not to survey these areas. These areas are not included in the hard copy of this report nor are they included within the computer program.

It is important to reiterate that **PbO₃** can not be held liable for asbestos containing materials that may be located with these areas as we were specifically instructed not to survey or include these areas within the survey.

Areas that were not surveyed within the project include but are not limited to:

1. Roofing System

6.7 AREAS WITH LIMITED ACCESS

There are some specific rooms and areas with the project, which could be initially accessed, but a full survey and sampling was not possible. This usually occurred in sensitive areas such as presidents' offices, accounting areas and personnel offices.

These areas have limited accuracy and all materials within these areas may not be properly identified. Each of these areas should be carefully reviewed and checked prior to renovation or removal activities.

Areas which could be accessed but could not be completely surveyed and addressed within the project buildings include but are not limited to:

1. They were a very large number of rooms that could not be accessed due to secured locks or patient occupied. It is assumed the rooms not sampled contained ACM identified in other areas accessed.

7.0 DATA COLLECTION FORM DESCRIPTION

The field inspection data collection sheets found in **Appendix I** contain information regarding the materials within the survey of each area. Each material sampled is listed by Sample ID Number, Sample Description and Sample Location. This allows **PbO₂** to distinguish areas of the building where the same type of material may be found in different conditions or present different levels of concern. Every line of data pertains to one material within one room or functional area.

Appendix I provides the Data Collection Chain of Custody for the sampling conducted throughout the facility. Also, included in this appendix is the laboratory analysis report for all samples taken.

Appendix II provides a summary of all sample results.

Appendix III provides summary of positive sample results.

Appendix IV provides the building drawings (*if available*) indicating where each material sample was taken. These are general drawings and not drawn to scale. This will prove helpful when planning or scheduling renovation or repair projects.

8.0 BULK SAMPLE RESULTS FORM DESCRIPTION

Appendix II contains the results of the bulk samples taken during the survey.

9.0 FACILITY FINDINGS

Asbestos containing materials were found to be present in the sampled materials listed below.

Please see **Appendix III** for quantity, condition and fiber count.

- 1) Thermal System Insulation (TSI) Wrap-Non-Friable Asbestos- Boiler Room**
- 2) Duct Mastic (Black) -Non-Friable- Through-out**

10.0 SUMMARY, CONCLUSIONS and RECOMMENDATIONS

PbO₃ Environmental Testing & Service Co., Inc. was contracted by Hartman and Associates, Inc. to conduct an Asbestos Survey of the Memorial Hospital - Flagler. The property is located at Route 1, Moody Boulevard in Bunnell, Florida.

The Hospital is a (81) bed facility. The facility is mainly constructed of concrete and block with a peaked roof. The building was originally constructed in 1970 with no additions and minimal renovations.

PbO₃'s Asbestos Inspector(s), conducted the inspection on September 5th through September 7th, 2000. The inspection identified areas where materials suspected of containing asbestos were located. Wherever such materials were found, data was collected regarding, conditions, and potential hazard concerns and deterioration factors. As necessary, samples of each type of material were taken in different locations (excluding the roofing system) to determine actual asbestos content.

All samples collected in this survey were analyzed for asbestos content. The analysis followed the Environmental Protection Agency's (EPA) recommended method of Polarized Light Microscopy (PLM), and the EPA-PLM protocol for the determination of asbestos fibers in bulk insulation materials. The samples were analyzed by a National Institute for Standards and Technology/National Voluntary Laboratory Accreditation Program (NIST/NVLAP) accredited laboratory.

There was a total of (18) bulk samples (excluding of all potential sub-samples) of suspect materials collected and (21) samples were analyzed by EPA 600/R-93/116 Method. Based upon our visual observations, bulk sampling of suspect materials and subsequent microscopic analysis, we have determined that regulated and non-regulated amounts of asbestos minerals were detected in (03) samples.

The following asbestos containing materials were identified in the building. (Reference-"Summary of Positive Asbestos Samples")

- **Black Duct Mastic**
- **TSI (Thermal System Insulation)- Non-Friable**

CONCLUSION:

This survey should be used to identify asbestos containing material and components prior to any planned demolition, renovation, and/or maintenance activities.

LIMITED ASBESTOS SURVEY
Memorial Hospital-Flagler
Bunnell, FL

The asbestos containing materials (all non-friable) identified in this survey were observed to be generally intact and in good condition. (Reference - "Bulk Sample Analysis and Location Summary").

RECOMMENDATIONS:

- Operation and Maintenance Plan (for the management of asbestos in place) should be implemented to protect all occupants and maintenance/ service workers from the potential releases of asbestos. This plan should remain in effect until such time the asbestos containing material is abated. The Operation and Maintenance Plan shall be designed by a Florida Licensed Asbestos Consultant to comply with federal, state, and local regulatory requirements including but not limited to OSHA Standard (29CFR 1926.1101)
- Conduct Asbestos Awareness Training for all personnel working within areas of Asbestos containing Materials, in accordance with Asbestos Standard 29CFR 1926.1101.

APPENDIX I

LIMITED ASBESTOS SURVEY
Memorial Hospital-Flagler
Bunnell, FL

APPENDIX I

DATA COLLECTION CHAIN OF CUSTODY SHEETS AND LABORATORY BULK ASBESTOS SAMPLE ANALYSIS REPORTS

CAROLINA ENVIRONMENTAL, INC.
 102-N Commonwealth Court, Cary, NC 27511
 Phone: (919) 481-1413 Fax: (919) 481-1442

LABORATORY REPORT
ASBESTOS BULK ANALYSIS

Client: **Pb03 Environmental Testing Service Co., Inc.**
 473 N. Pine Meadow Drive
 Debary, FL 32713

CEI Lab Code: **A00-3491**
 Received: **09-08-00**
 Analyzed: **09-08-00**
 Analyst: **Scott Minyard**

Project: **Memorial Hospital - Flagler**

CLIENT ID	CEI LAB ID	SAMPLE DESCRIPTION	% ASBESTOS
FH-01	A42512	DRYWALL Off-white, Blue, Fibrous, Loosely Bound GYPSUM 75 % CELL 10 % BIND 5 % FBGL 5 % PAINT 8 %	ND
FH-02	A42513	ROOFDECK MATERIAL Tan, Beige, Non-fibrous, Loosely Bound BIND 75 % CELL <1 % MOA 25 %	ND
FH-03	A42514	CEILING TILE Grey, Off-white, Fibrous, Loosely Bound BIND 40 % CELL 25 % PAINT 5 % FBGL 15 % PERL 15 %	ND
FH-04	A42515	MASTIC Tan, Off-white, Fibrous, Bound MAST 90 % CELL 3 % PAINT 7 %	ND
FH-05	A42516	VINYL FLOORING AND MASTIC Beige, Off-white, Non-fibrous, Bound VINYL 90 % CELL <1 % BIND 5 % MAST 5 %	ND
FH-06	A42517	MASTIC Black, Fibrous, Bound CHRY 8 % MAST 92 % CELL <1 %	CHRY 8 %

CAROLINA ENVIRONMENTAL, INC.
 102-N Commonwealth Court, Cary, NC 27511
 Phone: 919-481-1413 Fax: 919-481-1442

Project: Memorial Hospital - Flagler

Lab Code: A00-3491

CLIENT ID	CEI LAB ID	SAMPLE DESCRIPTION	% ASBESTOS			
FH-07	A42518	<u>WALL PENETRATION MASTIC</u> Red, Fibrous, Bound MAST 85 % SYNT 15 %	ND			
FH-08	A42519	<u>ISI WRAP</u> Tan, Silver, Fibrous, Loosely Bound BIND 45 % CELL 25 % FOIL 20 % FBGL 10 %	ND			
FH-09	A42520A	<u>FLOOR TILE</u> Off-white, Blue, Non-fibrous, Tightly Bound VINYL 97 % CELL <1 % MICA 3 %	ND			
	A42520B	<u>MASTIC</u> Yellow, Non-fibrous, Bound MAST 100 % CELL <1 %	ND			
FH-10	A42521	<u>DUCT MASTIC</u> Off-white, Fibrous, Bound MAST 80 % SYNT 10 % WOLL 10 %	ND			
FH-11	A42522	<u>DUCT MASTIC</u> Grey, Non-fibrous, Bound MAST 100 % CELL <1 %	ND			
FH-12	A42523	<u>CEILING TILE</u> Grey, Off-white, Fibrous, Loosely Bound BIND 45 % CELL 25 % PAINT 2 % FBGL 15 % PERL 13 %	ND			
FH-13	A42524	<u>VENT HOOD DUCT</u> Off-white, Fibrous, Loosely Bound BIND 60 % CELL 25 % SYNT 15 %	ND			

CAROLINA ENVIRONMENTAL, INC.
 102-N Commonwealth Court, Cary, NC 27511
 Phone: 919-481-1413 Fax: 919-481-1412

Project: Memorial Hospital - Flagler
 Lab Code: A00-3481

CLIENT ID	CEI LAB ID	SAMPLE DESCRIPTION	% ASBESTOS
FH-14	A42525	DUCT MASTIC Off-white, Fibrous, Bound MAST 85 % CELL 5 %	ND
FH-15	A42526	DUCT MASTIC Black, Fibrous, Bound CHRY 8 % MAST 92 % CELL <1 %	CHRY 8 %
FH-16	A42527	DRYWALL AND JOINT COMPOUND Off-white, Beige, Fibrous, Loosely Bound GYPSUM 70 % CELL 15 % BIND 10 % PAINT 5 %	ND
FH-17	A42528	CEILING TILE Beige, Off-white, Fibrous, Loosely Bound BIND 43 % CELL 35 % PAINT 2 % FBGL 10 % PERL 10 %	ND
FH-18	A42529A	FLOOR TILE Beige, Tan, Non-fibrous, Tightly Bound VINYL 95 % CELL <1 % MOA 5 %	ND
	A42529B	MASTIC Yellow, Fibrous, Bound MAST 88 % CELL 2 %	ND
FH-20	A42530	WRAP Blue, Off-white, Fibrous, Bound CHRY 10 % BIND 70 % CELL <1 % PAINT 10 % PERL 10 %	CHRY 10 %

The following definitions apply to the abbreviations used in the ASBESTOS BULK ANALYSIS REPORT:

CHRY = Chrysotile	CELL = Cellulose	DEBR = Debris
AMOS = Amosite	FBGL = Fibrous Glass	BIND = Binder
CROC = Crocidolite	ORGN = Organics	SILI = Silicates
TREM = Tremolite	SYNT = Synthetics	GRAV = Gravel
ANTH = Anthophyllite	WOLL = Wollastonite	MAST = Mastic
ACTN = Actinolite	CERWL = Ceramic Wool	PLAS = Plaster
ND = None Detected	NTREM = Non-Asbestiform Tremolite	PERL = Perlite
NANTH = Non-Asbestiform Anthophyllite		RUBR = Rubber

CLIENT: Pb03 Environmental Testing Service Co., Inc.

PROJECT: Memorial Hospital - Flagler

CEI LAB CODE: A00-3491

Stereoscopic microscopy and polarized light microscopy coupled with dispersion staining is the analytical technique used for sample identification. The percentage of each component is visually estimated by volume. These results pertain only to the samples analyzed. The samples were analyzed as submitted by the client and may not be representative of the larger material in question. Unless notified in writing to return samples, Carolina Environmental, Inc. will discard all bulk samples after 90 days.

The EPA has no approved test method for the identification of asbestos in vinyl floor tiles. Many vinyl floor tiles have been manufactured using greater than 1% asbestos. Often the asbestos was milled to a fiber size below the detection limit of polarized light microscopy. Therefore, a "None Detected" (ND) reading on vinyl floor tile does not necessarily exclude the presence of asbestos. Transmission electron microscopy provides a more conclusive form of analysis for vinyl floor tiles.

It is certified by the signature below that Carolina Environmental, Inc. is accredited by the National Voluntary Accreditation Program (NVLAP) for the analysis of asbestos in bulk materials. The accredited test method is EPA/600/M4-82/020 for the analysis of asbestos in building materials. Procedures described in EPA/600/R-83/116 have been incorporated where applicable. Carolina Environmental, Inc.'s NVLAP accreditation number is #101768-0. This report is not to be used to claim product endorsement by NVLAP or any agency of the U.S. Government. This report and its contents are only valid when reproduced in full.

ANALYST

Settin Linyard

REVIEWED BY

Tianbao Bai

Tianbao Bai, Ph.D.
Laboratory Director



ENVIRONMENTAL TESTING & SERVICE

LEAD-ASBESTOS-INDUSTRIAL HYGIENE/IAI

CLIENT: Naetman & Assoc.

PROJECT: Memorial Hospital - Flasler

SAMPLE DATE: 09/05/00

Flasler FH

MELBOURNE / COCOA
(407) 722-4663
ORLANDO
(407) 677-8888

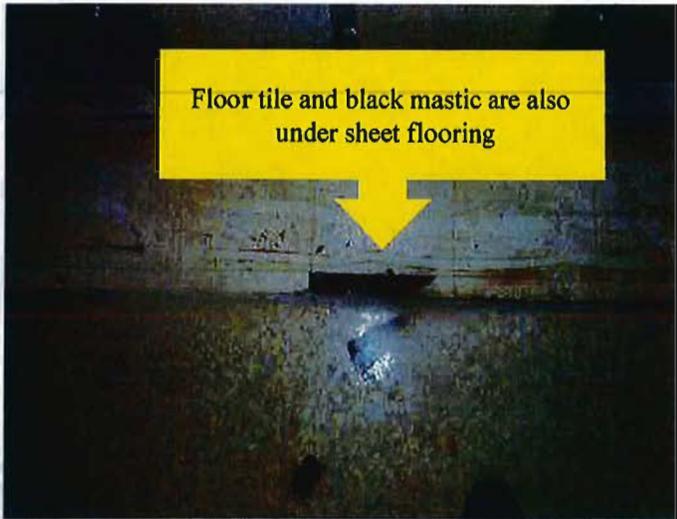
473 N. PINE MEADOW
SUITE 101
DEBARY, FL 32713
(407) 668-4545
(407) 668-4566

SAMPLED MATERIAL

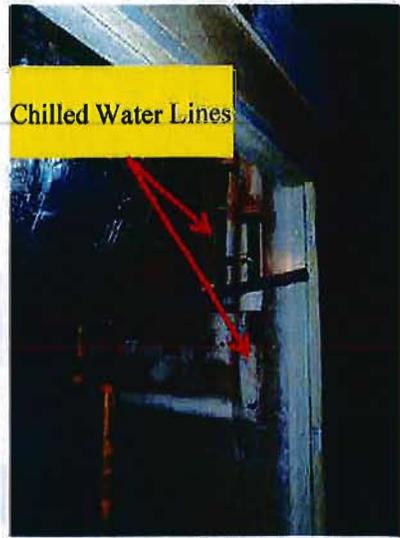
FLA	Sample No.	Material/System ID	Location	Lab Results Asbestos Present
	FH-01	Drywall	Rm 102	
	02	ref deck Material	hall by 102	
	03	2'x4' CT-drop - Flasler	Rm 102	
	04	Base coat Mastic	" " bathroom	
	05	rolled flooring	" " bathroom	
	06	Duct Mastic - blk	hall by 106	
	07	Wall Penetration Mastic - Red	hall by notes station	
	08	TSI-4" wrap	hall by Rm 204	
	09	12"x12" FT	Rm 301	
	10	Duct Mastic - wht.	hall by 303	
	11	Duct Mastic - Grey metal	" "	
	12	2'x4' CT-drop - Flasler	hall by ICU	
	13	Vent hood Duct	Cafe	
	14	Duct Mastic - wht	hall by	
	15	" " - blk		
	16	Drywall/Mod System ^{Composite}	hall by ER	
	17	12"x12" FT	X-Ray	
	18	2'x4' CT-drop - Flasler		

APPENDIX D
PHOTOGRAPHS

FORMER HOSPITAL BUILDING



1. View of asbestos-containing floor tile mastic (black) in Emergency Area of former hospital building.



2. View of chilled water supply and return piping with asbestos mastic located in former hospital building.



3. View of black duct mastic at wall penetration (tested positive for asbestos in previous survey by others)



4. Typical view of asbestos-containing equipment flashing area on roof.

REFERENCE: PHOTOGRAPHS

UNIVERSAL ENGINEERING SCIENCES, INC.

DATED: 7/2/13



UNIVERSAL ENGINEERING SCIENCES, INC.

5561 FLORIDA MINING BOULEVARD SOUTH

JACKSONVILLE, FL 32257

(904) 298-0757

SITE PHOTOGRAPHS
Former Hospital Property
901 East Moody Boulevard
Bunnell, Florida

DRAWN: JEB

DATE: 7/11/13

SCALE: N.T.S.

CHECKED: JB

PROJ. NO. 940.1300057

PHOTOS 1-4



5. View of mold on walls on north side of building behind wall covering.



6. Typical view of mold growth on wall around window and A/C unit. (Condition was observed throughout the building.)



7. Typical view of water intrusion area (observed throughout building)



8. Typical view black mold growth on interior wall.

REFERENCE: PHOTOGRAPHS
 UNIVERSAL ENGINEERING SCIENCES, INC.
 DATED: 7/2/13



UNIVERSAL ENGINEERING SCIENCES, INC.
 5581 FLORIDA MINING BOULEVARD SOUTH
 JACKSONVILLE, FL 32257
 (904) 298-0757

SITE PHOTOGRAPHS
 Former Hospital Property
 901 East Moody Boulevard
 Bunnell, Florida

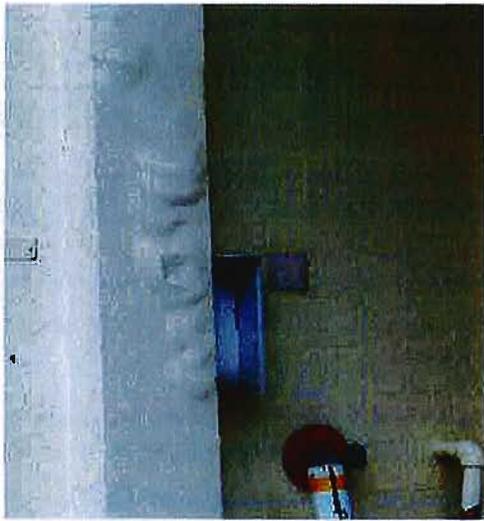
DRAWN: JEB	DATE: 7/11/13	SCALE: N.T.S.
CHECKED: JB	PROJ. NO. 940.1300057	PHOTOS 1-4



9. Typical view of water intrusion and active mold growth within building.



10. Typical view of front of building with damaged Exterior Insulation Finish System (EIFS) exterior.



11. Typical view of damaged EIFS system on building exterior.



12. Typical view mold growth on exterior wall.

REFERENCE: PHOTOGRAPHS

UNIVERSAL ENGINEERING SCIENCES, INC.

DATED: 7/2/13



UNIVERSAL ENGINEERING SCIENCES, INC.
5661 FLORIDA MINING BOULEVARD SOUTH
JACKSONVILLE, FL 32257
(904) 296-0757

SITE PHOTOGRAPHS

Former Hospital Property
901 East Moody Boulevard
Bunnell, Florida

DRAWN: JEB

DATE: 7/11/13

SCALE: N.T.S.

CHECKED: JB

PROJ. NO. 940.1300057

PHOTOS 9-12



9. Typical view of water intrusion and active mold growth within building.



10. Typical view of front of building with damaged Exterior Insulation Finish System (EIFS) exterior.



11. Typical view of damaged EIFS system on building exterior.



12. Typical view mold growth on exterior wall.

REFERENCE: PHOTOGRAPHS

UNIVERSAL ENGINEERING SCIENCES, INC.

DATED: 7/2/13



UNIVERSAL ENGINEERING SCIENCES, INC.
 5561 FLORIDA MINING BOULEVARD SOUTH
 JACKSONVILLE, FL 32257
 (904) 298-0757

SITE PHOTOGRAPHS
 Former Hospital Property
 901 East Moody Boulevard
 Bunnell, Florida

DRAWN: JEB

DATE: 7/11/13

SCALE: N.T.S.

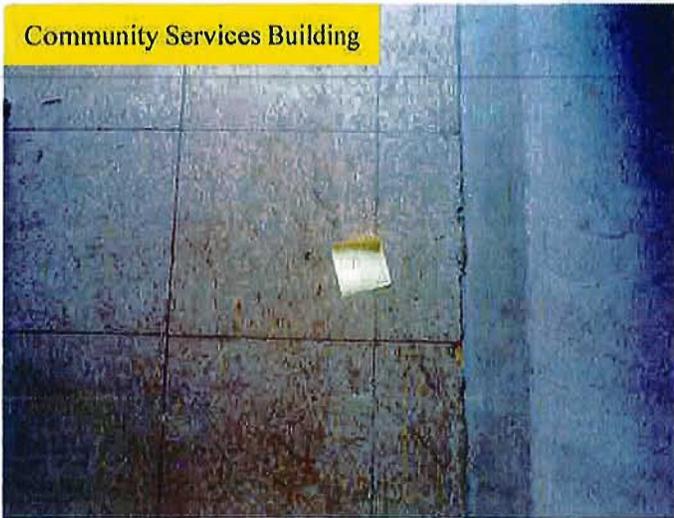
CHECKED: JB

PROJ. NO. 940.1300057

PHOTOS 9-12



COMMUNITY SERVICES BUILDING



Community Services Building

13. Typical view asbestos-containing floor tile in community services building.



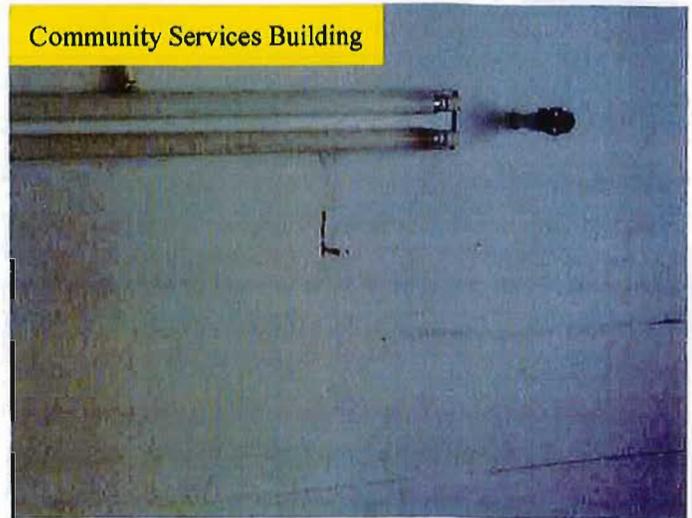
Community Services Building

14. Typical view of asbestos-containing cement board in community services building.



Community Services Building

15. Typical view of roof at community services building. Asbestos-containing mastic was found in roofing felt.



Community Services Building

16. Typical view fluorescent lighting fixture in community services building.

REFERENCE: PHOTOGRAPHS

UNIVERSAL ENGINEERING SCIENCES, INC.

DATED: 7/8/13



UNIVERSAL ENGINEERING SCIENCES, INC.
5881 FLORIDA MINING BOULEVARD SOUTH
JACKSONVILLE, FL 32257
(904) 296-0757

SITE PHOTOGRAPHS
Former Hospital Property
901 East Moody Boulevard
Bunnell, Florida

DRAWN: JEB

DATE: 7/11/13

SCALE: N.T.S.

CHECKED: JB

PROJ. NO. 940.1300057

PHOTOS 13-16

APPENDIX E
QUALIFICATIONS

AC# 6139441

STATE OF FLORIDA

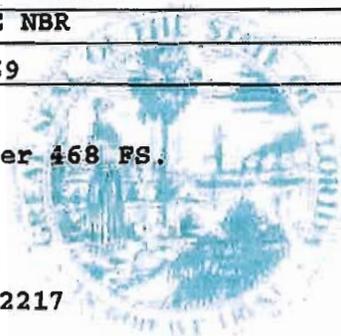
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
MOLD-RELATED SERVICES LICENSING PROGRAM

SEQ# L12052401115

DATE	BATCH NUMBER	LICENSE NBR
05/24/2012	110397019	MRSA2169

The MOLD ASSESSOR
Named below IS CERTIFIED
Under the provisions of Chapter 468 FS.
Expiration date: JUL 31, 2014

BLYTHE, JAMES EARL
3809 SAN REMO DRIVE
JACKSONVILLE FL 32217



RICK SCOTT
GOVERNOR

DISPLAY AS REQUIRED BY LAW

KEN LAWSON
SECRETARY



M·E·T·A

Mayhew Environmental Training Associates
I N C O R P O R A T E D

Certificate # ME15EC2DA64799474

James E. Blythe

has on 1/29/2013, in Jacksonville, FL
completed the requirements for asbestos accreditation under Section 206 of TSCA Title II, 15 U.S.C. 2646

4-hr. Asbestos Building Inspector Refresher

as approved by FL,
and the US E.P.A. under 40 C.F.R. 763 (AHERA)
on 1/29/2013 - 1/29/2013 and passed the associated examination on 1/29/2013
with a score of 70% or better
CM = 1.0 PTS.



Bill Young

Bill Young
Instructor

Thomas Mayhew

Thomas Mayhew
President

Training Provider #: FL49-0001221
Course #: 130129ASBIRFL91

SSN: XXX-XX-1525
Expiration: 1/29/2014

P.O. Box 786 - Lawrence, KS. 66044 - 800.444.6382

Certificate of Achievement

This is to certify that

James E. Blythe
of **Law Engineering and Environmental Services, Inc.**

on the 13th day of Sept. 1996 successfully completed the factory training for

RMD's LPA-1 Lead Paint Inspection System

including, but not limited to, the topics of Radiation Safety
and the Proper Use of the Instrument.



Jacob Paster, Vice-President of RMD
44 Hunt St., Watertown, Massachusetts

