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October 27, 2023

Attn: Mr. Dave Smith
HICAPS
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Re: Indoor Environmental Quality Assessment Report
Southport Former City Hall
201 E. Moore Street
Southport, North Carolina 28461
Terracon Project No. K6237078

Dear Mr. Smith:

The purpose of this report is to present the results of the limited indoor environmental quality assessment performed on October 17, 2023, at the Southport Former City Hall located at 201 E. Moore Street in Southport, North Carolina. This assessment was conducted in general accordance with Terracon proposal PK6237078, dated October 5, 2023, and authorized on October 16, 2023.

Terracon appreciates the opportunity to provide these services to HICAPS. If you have questions regarding this report, please contact the undersigned at (910) 478 -9915.

Sincerely,

Terracon Consultants Inc.

A handwritten signature in black ink, appearing to read 'Amy C. DeSaix'.

Amy C. DeSaix, REM, CIEC
Environmental Department Manager

A handwritten signature in black ink, appearing to read 'Russell Harrings'.

Russell Harrings, CIH
Senior Industrial Hygienist

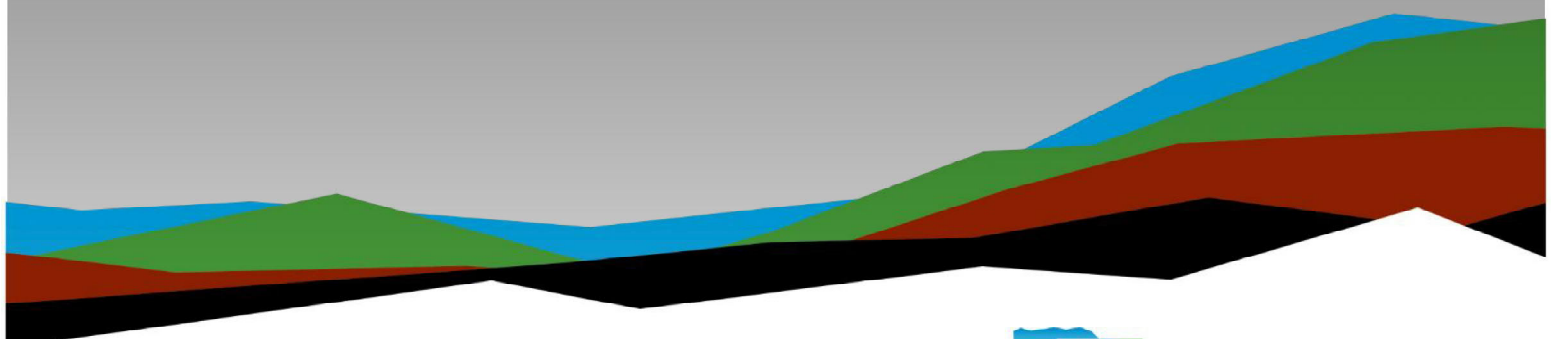
Indoor Environmental Quality Report

Southport Former City Hall

201 E. Moore Street

Southport, North Carolina 28461

October 27, 2023 | Terracon Project No. K6237078



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1.0 Introduction

Terracon Consultants, Inc. (Terracon) conducted an Indoor Environmental Quality (IEQ) assessment at the Southport Former City Hall located at 201 E. Moore Street in Southport, North Carolina. The assessment was conducted October 17, 2023, by Terracon representatives Amy DeSaix and Shaenaz Mirmohamed in general accordance with Terracon proposal PK6237078, dated October 5, 2023, and authorized on October 16, 2023.

1.1 Project Objective

Terracon also understands the client has been contracted to perform facility inspections and is concerned about employee exposure to mold spores and other airborne contaminants. Terracon understands that no asbestos inspection has been performed in the building, however, based on the age of the building, it is assumed that asbestos-containing materials may be present. We understand the purpose of this assessment consisted of two objectives. The first objective was the evaluation of the air quality at the Southport Former City Hall due to concerns for personnel required to perform building inspection activities. The second objective was to document the general microbial impact and water damage to assist in determining the future of the building, such as whether the building will be renovated or demolished.

The building was reportedly constructed in 1854 as the County Courthouse and was later renovated in 1983. The building is two story and consists of approximately 8,500 square feet. The building is listed on the National Register of Historic Places as Old Brunswick County Courthouse (BW0007). Terracon was provided with a mold inspection report dated December 10, 2018, and prepared by Fire Water and Mold. The report provided photographs of water intrusion and visible mold growth in numerous locations within the structure. Information in the report stated the building had been unoccupied for "quite some time" and had "recently received a new roof". Air samples collected at that time within the building indicated elevated airborne mold spore concentrations of *Aspergillus/Penicillium* (193,000 counts/m³), *Chaetomium* (40 counts/m³), and *Stachybotrys/Memnoniella* (400 counts/m³).

Terracon's IEQ assessment consisted of a physical inspection and indoor environmental observations limited to accessible areas of the Southport Former City Hall. Areas which were not accessible included the crawlspace, the attic, and the first office on the right on the first floor (supervisors office). Visibility of additional areas was limited due to furniture, equipment, and office supplies. The physical inspection and assessment included building hygiene and maintenance. Terracon measured the following indoor environmental

parameters: temperature, relative humidity, and carbon dioxide (CO₂). We also performed airborne sampling for mold spores and for asbestos fibers.

1.2 Standard of Care

This assessment was conducted based on information provided to Terracon relating to existing conditions and was conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the same locale. The results, findings, conclusions, and recommendations expressed in this report are based on conditions observed during our assessment.

1.3 General Conditions and Limitations

This IEQ assessment was conducted at the subject site on October 17, 2023. The level of effort and associated tasks completed for this evaluation were limited to the request from the Client to evaluate the accessible areas of the Southport Former City Hall, as stated in our proposal PK6237078, dated October 5, 2023, and authorized on October 16, 2023. Terracon did not attempt to identify every potential exposure or hazard present in the subject building; but focused on typical hazards present in a building of this age and condition.

Molds are common to the environment, are naturally occurring, and have specific requirements for survival and growth. Elevated mold concentrations in indoor environments occur when both moisture and food sources are present. Indoor food sources for mold growth can include organic materials such as those resulting from a flood or sewer backup, dust, and other airborne particulates, or building materials high in cellulose such as, but not limited to, carpet backing, drywall paper, or ceiling panels. Moisture sources inside buildings can occur because of leaks from water or sewer lines, moisture intrusion through windows, roofs, walls, and foundations, as condensation in heating, ventilation, and air conditioning (HVAC) systems, or as condensation on windows. In areas of the United States, relative humidity during certain times of the year is high enough to serve as a moisture source. In order to reduce the potential occurrence or recurrence of mold growth in indoor environments, sources of indoor moisture must be eliminated or controlled. In addition, no mandatory regulations or standards have been established for the maximum allowable concentration of bioaerosols such as mold spores.

The results, findings, and conclusions expressed in this report are based on conditions observed during our October 17, 2023, assessment activities. Many factors such as weather conditions, building occupancy, ventilation patterns, and seasonal variations in mold levels can affect the conditions observed. The information contained in this report should not be relied upon to represent conditions that existed previously or a later date. Terracon does not warrant the services of regulatory agencies, laboratories, or other third parties supplying

information that may have been used in the preparation of this report. No warranty, express or implied, is made.

1.4 Reliance

This report is prepared for the exclusive use and reliance of HICAPS (Client). Use or reliance by any other party is prohibited without the written authorization of the Client and Terracon.

Reliance on the report by the client and all authorized parties will be subject to the terms, conditions, and limitations stated in Terracon's proposal.

2.0 Evaluation Criteria and Methods

2.1 Visual Assessment

Based on the multiple sources of potential indoor and outdoor contaminants that can affect indoor air quality, the visual assessment is conducted to evaluate general indoor hygiene, building maintenance practices, moisture intrusion, uncontrolled condensate formation, and odors. The assessment focuses primarily on collecting observational data (i.e., information obtained by visual assessment of the accessible sections of the building and interviews with the building management, owners, and occupants). The visual assessment can help to formulate plans for more in-depth investigation.

The visual assessment included:

- an observation of the physical structure and potential indoor and outdoor sources of indoor air pollutants;
- the determination of the type of enclosure (walls, windows, roof, and foundation), age, location, and condition;
- the determination of the types of finishes on walls, floors, and ceilings, the types of furnishings;
- an observation of readily accessible heating, ventilation, and air conditioning (HVAC) equipment serving the designated areas for microbial growth; and,
- the identification of noticeable discoloration or odor that could indicate moisture intrusion, water damage, and microbial growth.

Destructive sampling or testing to inspect interior wall cavity spaces or mechanical enclosures was not within the scope of work for this project. A summary of general building information and results of the visual assessment are contained in Table 1.0 in Section 3.1. A general site location map and diagrams are included in Appendix A.

2.2 Temperature and Relative Humidity

Indoor air temperature and relative humidity are physical conditions important to the perception of comfort. American National Standards Institute (ANSI) / American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Standard 55-2021, Thermal Environmental Conditions for Human Occupancy, recommends a temperature range between 73 and 79 degrees Fahrenheit (°F) and relative humidity between 20 and 60 percent (%) for persons performing “office” work and wearing light summer clothing. Higher temperatures require lower humidity for comfort. For persons in winter clothing, temperatures can range between 68 and 75°F, with relative humidity between 20% and 60%, with preferred conditions falling between 30% and 50% for both winter and summer temperatures.

Temperature and relative humidity were monitored using a TSI Q-Track Indoor Air Quality meter at locations where air samples were collected.

2.3 Carbon Dioxide and Outside Air

Carbon dioxide (CO₂) concentrations are often measured to evaluate the effectiveness of the building ventilation system to dilute and control bioeffluents (body odors) and other odors from cosmetics, perfumes, and products carried in by building occupants. ASHRAE Standard 62.1-2019, Ventilation for Acceptable Indoor Air Quality (Appendix C), states that, in terms of the control of odors, maintaining a steady-state CO₂ concentration no greater than about 700 parts per million (ppm) above the outdoor concentration will ensure that most people entering the space will be satisfied with respect odors and available fresh air. Indoor CO₂ concentrations that exceed the recommended indoor/outdoor differential are likely to result in higher rates of odor complaints and may indicate inadequate outdoor air delivery and/or air exchange. The Occupational Safety and Health Administration (OSHA) has established a permissible exposure limit (PEL) for CO₂ in the workplace at 5,000 parts per million as an 8-hour time-weighted average (TWA).

The CO₂ concentrations were measured using a TSI Q-Track Indoor Air Quality meter at locations where air samples were collected.

2.4 Microbial Air Sampling

There are no State or Federal limits established for fungal growth in, or contamination of, building materials. There are currently no regulatory standards, medically based threshold limits, or dose-response relationships for exposure to airborne or surface concentrations of fungal spores. Terracon relies upon experience, professional judgment, current scientific literature, guidelines, and recommendations made by professional organizations and experts in interpreting fungal sampling results.

Building materials or building surfaces commonly have resident fungal spores that have settled out of the air or have been filtered out of the air with other particles. Fungal structures, such as hyphae and conidiophores (or other fruiting bodies) seen microscopically in surface samples, typically indicate fungal growth on surfaces and are associated with the presence of moisture.

High variability in mold spore concentrations will exist in different geographic locations, during different seasons and weather patterns, and over the course of a given day. Generally, indoor mold spore concentrations in a typical, HVAC-supplied building are usually less than, but generally qualitatively similar to, spore concentrations found in the outside environment.

Samples for airborne fungi are interpreted by comparing total airborne concentrations and the distributions of fungal genera in samples from indoor locations to samples from outdoor locations. The following comparisons are performed. Other information may be used for interpretation on a case-by-case basis.

In general, total airborne fungal concentrations measured at indoor test locations should be lower than those outdoors. If total indoor air fungal concentrations are higher than those measured outdoors, indoor fungal sources may be suspected. In general, airborne fungal genera distributions observed in samples at indoor test locations should be similar to those at outdoor locations. The dominating presence of one or more kinds of moisture indicator fungal spores at test locations and the absence of the same types of spores at background reference locations typically indicates an indoor source and potentially degraded air quality.

Fungal (mold) spore trap samples were collected at representative locations using Air-O-Cell[®] sampling cassettes and a Zefon Bio-Pump[®] Plus at a flow rate of 15 liters per minute for five minutes. The samples were labeled with unique identifiers. Sample locations are shown on the figures included in Appendix A.

After air sample collection, the sample cassettes were delivered under chain-of-custody (COC) protocol to EMSL Analytical, Inc., accredited by the American Industrial Hygiene Association (AIHA[®]) Laboratory Accreditation Programs, LLC under the Environmental Microbiology Laboratory Accreditation Program (EMLAP #192283). The samples were analyzed for fungal spore and particulates by Optical Microscopy using ASTM D7391 and EMSL's internal MICRO-SOP-201.

2.5 Asbestos Air Sampling

Due to the age of the building, asbestos-containing materials (ACMs) were likely used in the building process. These materials could include wall materials (wallpaper, plaster, drywall and joint compound), ceiling tiles, flooring materials, insulation, glues, caulks, etc. Based

on condition of the building with damaged suspect ACMs, a potential health concern would be the presence of airborne asbestos fibers as a result of disturbance of ACMs.

A Terracon North Carolina accredited air monitor performed asbestos air sampling at the site at representative locations during our assessment to determine if airborne asbestos fibers were present. Five high volume air sampling pumps with cassettes were placed within the building following an initial walk-thru to determine if airborne asbestos fibers would be created by a non-destructive building assessment. After air sample collection, the sample cassettes were delivered under COC protocol to EMSL Analytical, Inc., accredited by the National Voluntary Laboratory Accreditation Program (NVLAP Lab Code 200841-0).

The samples were analyzed for asbestos fibers using Transmission Electron Microscopy (TEM) analysis using AHERA 40 CFR, Part 763. The analytical results are compared the North Carolina Asbestos Exposure Standard for Public Areas, which is 70 structures per square millimeter (s/mm²). Sample locations are shown on the figures included in Appendix A.

3.0 Findings

This section includes the findings and a discussion of our physical assessment, indoor air quality sampling, and surface sampling. Appendix B includes photographs of notable features and/or findings associated with this assessment.

3.1 Physical Inspection and Assessment

Table 1.0 contains an overview of findings from the physical assessment performed on October 17, 2023. Detailed findings are discussed in the section that follows. Photographs showing the site conditions are included in Appendix B.

Table 1.0 - Physical Assessment Findings

Assessment Parameter	Observations/Comments
Year Constructed	1854
Type of Occupancy	Unoccupied – Furniture and general office and personal items remain; however, HVAC system was operational
Major Renovations	East and West wings appear to be additions
Floors Above/Below Grade	Crawlspace with two stories
Physical Examination (odors, housekeeping)	Noticed areas of concern, see bullets below

Assessment Parameter	Observations/Comments
Types of Finishes	
Walls	Drywall, plaster, wood paneling, brick and concrete masonry unit (CMU) with brick on the original exterior walls and CMU on the addition exterior walls
Ceilings	Suspended ceiling tiles 69.5 throughout the original section, above which is the original wood ceiling panels. Ceiling panels on the east and west wing additions open to the roof deck. The ceiling in the meeting room/court room appears to be metal ornamental panels
Floors	Carpet, numerous styles of vinyl floor tile, and ceramic tile
Exterior	Brick and CMU
Discoloration/Water Staining/Other	Noticed areas of concern, see bullets below
Average Outside Temperature and Relative Humidity	69.5°F and 41.6%
Occupancy Periods	Currently not occupied

The rooms listed below were identified based on field designations or markings identified on the door. The room identifications are labeled on the figures included in Appendix A. It should be noted the surficial, humidity related mold growth was observed on most of the furniture, clothing, papers, and personal items left within the building. In addition, the majority of the ceiling fans were observed to be dropped, indicative of elevated humidity.

First Floor Hallway

- Contains carpeted floors, wooden baseboards, plaster walls, suspended drop ceiling tiles with original wooden ceiling above. HVAC duct work is located between the suspended ceiling tiles and the original wooden ceiling.
- Water damage was observed on the carpet, ceiling tiles, plaster walls, and lower metal door casings.

Room 1 – First floor, First room on the left

- Room contains carpeted floors over vinyl floor tile, wood panel wainscoting and plaster walls and suspended ceiling tiles.
- Water damage was observed on the carpet, ceiling tiles, plaster walls, window framing, and on the wooden panels, especially around the phone jack. The paint on the plaster walls was bubbling and water damaged.

Room 2 – First floor, second room on the left

- Room contains carpeted floors over residual floor tile mastic, wood panel wainscoting and plaster walls and suspended ceiling tiles.
- Water damage was observed on the carpet, ceiling tiles, plaster walls, window framing, and on the wooden panels. The paint on the plaster walls was bubbling and water damaged.

Rooms 3– Mechanical Room, First floor, third room on the left

- Room contains carpeted and concrete floor, CMU and brick walls, possible cement board ceiling.
- Water damage was observed to plaster and brick walls.
- Rust and damage were observed along door frame.

Rooms 4 – First floor, fourth room on the left (third office on the left)

- Room contains carpeted floors, plaster walls, suspended ceiling tiles with original wood roof above. The floor slopes down.
- Signs of elevated humidity were observed.

Room 5 – First floor, fifth room on the left (accessible from Room 6)

- Room contains carpeted floors, suspended ceilings tile, plaster and brick walls.
- Water damage was observed on the exterior and interior walls with cracking walls.
- Water damage was observed on the ceiling tiles and the wooden window frames.
- Visible suspected mold was present.
- The evidence and ammunitions vault connecting to this room was inaccessible.

Room 6 – First floor, sixth room on the left

- Room contains carpeted floors, suspended ceilings tile, plaster and brick walls.
- Water damage was observed on the exterior and interior walls with cracking walls.
- Water damage was observed on the ceiling tiles and the wooden window frames.
- Visible suspected mold was present.

Rooms 7a and 7b – First floor, last rooms on the left

- Room contains floor tiles, suspended ceilings tile, wood paneling over CMU walls.
- Water damage was observed on the exterior and interior walls with cracking walls.
- Water damage was observed on the ceiling tiles and the wooden window frames.
- Visible suspected mold was present.

Vestibule – First floor, end of the hallway

- Area contains carpeted floors, plaster and brick walls, suspended ceiling tiles with original wooden ceiling above. A previously cut hole was observed in the ceilings showing cast iron plumbing pipes and additional piping with suspect ACM pipe insulation.
- Water damage was observed on the ceiling tiles and the wooden doors frames.

First floor front bathrooms

- Rooms contain ceramic floor tiles with plaster walls
- Gypsum lath observed behind the plaster in the understairs closet
- Residual 9"x9" floor tile (likely ACM) present in the under stairs closet
- Suspected mold was observed on the backside of gypsum walls in the understairs closet
- Water damage was observed around windows

Room 9

- Contains carpeted floors with suspended ceiling tiles
- Appears to be former electronics room

Room 10 – Right Central Room – Former Squad Room

- Room contains carpeted floors over vinyl floor tile, wall texture on the plaster walls, and a vaulted ceiling

Rooms 11, 12, and 13 – First floor, far rooms on the right

- Rooms contain carpeted and concrete floors, plaster, CMU and brick walls with wood panel wainscoting in Room 11, and suspended ceiling tiles.
- Water damage was observed on the exterior CMU walls.
- Significant water damage and suspected mold was observed on the ceiling tiles.
- Water damage was observed on the carpet and around the windows
- Significant suspected mold was observed on the exterior wall in Room 12. Appears to be possible ceiling leak which corresponds with damage in second floor room above this one.

Room 14 and Hallway

- The rooms contain vinyl floor tile, drywall and CMU walls, and suspended ceiling tiles.
- Room 14 appears to be used as a storage locker. Visibility behind the lockers was limited and mold growth should be assumed to be present behind the lockers.
- Water damage was observed was observed on the floors, walls, and ceiling.

Room 15 and Adjacent Bathroom

- The rooms contain vinyl floor tile in Room 15 with sheet vinyl floor in the bathroom, drywall and CMU walls, and suspended ceiling tiles.
- Significant suspected mold was observed on the drywall in Room 15 along with water damage to the CMU wall.

Second floor stairwell

- This area had wallpaper and wood wainscoting and plaster walls, carpet floors, and wood panel ceiling.

- The attic access was visible in the 2nd floor landing; however, significant water damage was visible on the carpeted floor under the access.
- Water damage was observed on the wood panel walls, plaster walls and the wood ceiling at the light fixture.
- There appears to have been a prior roof leak at this location.
- Suspected mold was observed on the duct chase located above the courtroom door.

2nd floor room off of landing/second floor mechanical room

- This room contains vinyl floor tiles covering a plywood floor, overlaying additional floor tiles. The walls consist of wallpaper over plaster. The ceiling consists of suspended ceiling tiles.
- The wall, floor, and ceiling near the front of the room contains significant damage.
- Water damage was observed on the ceiling tiles, on the brick wall, and on the wooden window frames.

Courtroom

- This room contains carpeted floors, wood wainscoting, and plaster walls with an ornamental tiled ceiling.
- Water damage was observed on the wood wainscoting and plaster walls on the exterior walls.
- Water damage was observed on the wooden portions of the windows (framing and panes)
- Rust was observed on the ceiling tiles

Room 203 and 205

- These rooms contain vinyl floor tile floors, CMU exterior walls, and suspended ceiling tiles.
- Water damage was observed to the ceiling tiles and exterior walls

Room 207

- This room contains carpeted floors, wood panel walls, and suspended ceiling tiles
- Suspected mold growth on carpet
- Suspected mold along the base of the wood panel walls
- CMU efflorescence adjacent to wood paneling

2nd Floor Restrooms

- This room contains ceramic flooring and walls tile, plaster walls and suspended ceiling tile.
- No significant damage

2nd Floor Hallway and Back Door

- Vinyl floor tile and wooden plywood floor with plaster walls and suspended ceiling tiles.

- Evidence of interstitial space between the plaster walls and the brick exterior wall.
- Water damage observed around the base of the back door.

2nd floor rear right rooms

- This room contains carpeted floors, CMU wall and suspended ceiling tiles.
- Significant water damage and suspected mold growth to ceiling tiles with efflorescence on CMU walls.
- Potential animal activity above the ceiling tiles.
- Sunlight was observed at the penetrations above the ceiling tiles and cracks were present at the junction of the original building and the wing addition.

2nd floor conference room

- This room contains carpeted floor, plaster walls and suspended ceiling tiles
- Water damage was observed to the ceiling tiles
- Significant damage was observed to wall adjacent to courtroom, at the junction of the wing addition and the original structure.

3.2 Temperature, Relative Humidity, and Carbon Dioxide Measurements

A summary of temperature and relative humidity measurements collected during the site visit are presented in Table 2.0.

Table 2.0 - Temperature, Relative Humidity, and CO₂ Measurements

Location	Temperature	Relative Humidity	CO ₂
Indoor Target Levels	68°-75°F	20%-60%	<1,197 ppm
Exterior	69.5°F	41.6%	463 ppm
2 nd room on the left	72.8°F	43.1%	487 ppm
Hallway – Towards the end of the 1 st floor	72.1°F	43.0%	473 ppm
Far back right room 1 st floor	71.1°F	45.6%	486 ppm
Courtroom	70.0°F	45.2%	478 ppm
Far back right room 2 nd floor	69.7°F	45.8%	477 ppm

Temperature and relative humidity were monitored at representative indoor and outdoor locations. The outdoor temperature was 69.5 °F and the outdoor relative humidity was 41.6%. In the indoor areas that were assessed, the temperature ranged from 69.7° F to 72.8° F, and the relative humidity ranged from 43.0% to 45.8% with an average of 44.4% across the monitored areas. The relative humidity measurements in the selected locations did not exceed

the referenced ASHRAE guideline for thermal comfort (maximum recommended relative humidity of 60%). The interior temperatures were within the range of acceptable guidelines during the assessment (68° F -75° F).

The outdoor CO₂ concentration measured was 463 ppm. Therefore, based on ASHRAE Standard 62.1-2019, indoor locations with CO₂ concentrations greater than 1,163 ppm (463 ppm {outdoor CO₂ concentration} + 700 ppm) may have insufficient outdoor air delivery. The CO₂ concentrations measured at the referenced indoor locations ranged from a low of 473 ppm to a high of 487 ppm and were within ASHRAE recommended values. It should be noted that the building was unoccupied during our assessment and the above measurements do not representative conditions during normal occupancy.

3.3 Microbial Air Sampling

Terracon collected five interior mold air samples during the October 27, 2023, site visit. The samples were collected from rooms selected by Terracon personnel. Two exterior mold air samples were collected for comparison purposes. Table 3.0 on the following pages summarizes the results of the spore trap sampling. The results are reported in counts per cubic meter of air (count/m³).

Table 3.0 – Mold Air Sampling Results

Sample Number and Location:	Average of Outside Samples	A2 1 st floor 2 nd room on left	A3 1 st floor hallway	A4 1 st floor back right	A5 Courtroom	A6 2 nd floor back right
Sample volume (liters)	75	75	75	75	75	75
Mold Species						
Alternaria	5	40	-	-	80	-
Ascospores	120	200	100	200	300	40
Aspergillus / Penicillium	100	3600	7670	3300	2000	570
Basidiospores	3840	2200	2300	900	2900	940
Bipolaris	20	80	40	40	100	10
Chaetomium	-	-	-	-	10*	-
Cladosporium	250	690	1300	740	1600	80
Curvularia	5	80	-	-	100	40
Epicoccum	20	10*	-	-	40	-
Ganoderma	5	-	10	-	40	40
Myxomycetes	40	200	100	100	200	80
Pithomyces	15	-	-	-	40	10

Sample Number and Location:	Average of Outside Samples	A2 1 st floor 2 nd room on left	A3 1 st floor hallway	A4 1 st floor back right	A5 Courtroom	A6 2 nd floor back right
Sample volume (liters)	75	75	75	75	75	75
Mold Species						
Rusts	-	40	-	-	-	-
Stachybotrys	-	40	10	100	40	-
Arthrospores	-	-	300	-	-	-
Cercospora	-	10*	-	10	10	-
Nigrospora	20	-	-	-	80	-
Pestalotia	-	-	-	-	80	-
Pyricularia	-	-	-	-	-	40
Spegazzinia	-	-	-	-	40	-
Torula	-	-	40	-	10	-
Total Fungi	4440	7190	11,870	5390	7670	1850
Insect Fragments	-	40	30	40	80	80
Pollen Count	-	-	10	-	80	-
Hyphal Fragments	-	-	-	-	-	-

- Total indoor airborne fungal spore concentrations were elevated when compared to the average total outdoor airborne fungal spore concentration.
- Most of the interior samples collected **had elevated indoor airborne fungal spore concentrations of *Aspergillus/Penicillium* and *Cladosporium*** compared to the average concentrations of the outdoor samples. In addition, concentration of ***Aspergillus/Penicillium*** were greater than six times the outside concentration. However, it should be noticed that the concentrations were less than those detected in 2018.
- There were indoor spore concentrations for other fungal genera that were slightly elevated when compared to the average outdoor spore concentrations of the outdoor samples; however, they were considered to be within the same order of magnitude as outdoor concentrations.

The analytical report is provided in Appendix C.

3.4 Asbestos Air Sampling

Five asbestos air samples were collected by (Terracon) representative Shaenaz Mirmohamed (North Carolina Air Monitor Accreditation No. 80882). Samples were placed in sealable containers and labeled with unique sample numbers using an indelible marker. The selection

of sample locations was based on Terracon's observations as a part of the above referenced IEQ assessment. Samples were analyzed by Transmission Electron Microscopy (TEM).

Samples were collected within the 1st floor hallway, the 1st floor rear right room (Room 12), the 2nd floor rear right room, the mechanical room off of the landing, and in the landing. Based on the results of laboratory analyses, **asbestos was not detected** in the samples collected. The analytical report is provided in Appendix C.

In addition, Terracon observed potentials ACMs that could be disturbed by future renovations or demolition. These included, but are not limited to:

- Black pipe wrap above original wood ceiling
- Carpet mastic – 1st and 2nd Floors
- Acoustic Ceiling tiles
- Vinyl floor tiles and Mastic
- Residual floor tile mastic
- Wall paper
- Window caulking
- Door Caulking
- Plaster Walls
- Gypsum Lath
- Drywall and Joint Compound
- Window caulks and glazing
- Exterior caulks, stucco, texture

4.0 Conclusions and Recommendations

4.1 Conclusions

Terracon has concluded the following based on this IEQ assessment:

- **Suspect mold growth and apparent water damage was observed throughout the building.**
- Total indoor airborne fungal spore concentrations were elevated when compared to the average total outdoor airborne fungal spore concentration. However, the concentrations were less than those detected in 2018.
- Airborne asbestos fibers were not detected in the interior samples which were collected in areas of significant damage.
- The interior relative humidity measurements did not exceed the referenced ASHRAE guideline for thermal comfort (maximum recommended relative humidity of 60%).
- The interior temperatures were generally within the range of acceptable guidelines during the assessment (68° -75° F).

- The CO₂ concentrations measured at the referenced indoor locations were within ASHRAE recommended values.

4.2 Recommendations

For the first objective, which was to determine the safety of facilities inspection personnel for non-destructive assessments, as it pertains to potential mold and asbestos materials, Terracon makes the following recommendations.

- Due to the elevated airborne mold spore concentrations and suspected asbestos-containing materials, the building would be reasonable to occupy for nondestructive assessments.
- Terracon recommends that personnel entering the building wear personal protective equipment to include, at minimum an N95 respirator protection, hand protection (nitrile gloves), and eye protection. This recommendation is based on OSHAs recommendation for remediation of isolated areas or areas in which mold disturbance would be less than 10 square feet total.

For the second objective, which was to assist in determining the salvageability of the structure, Terracon makes the following recommendations.

- Due to the age and history of the building, Terracon recommends having a Historical Preservationist conduct an assessment and provide further regulatory guidance in regards to historical requirements. Additional ramifications could be present for demotion of a historical structure in regards to future funding.
- Due to the elevated indoor airborne fungal spore concentration, Terracon recommends mold remediation be conducted to include removal of the interior building materials (flooring, walls, ceiling tiles, interior plaster, and gypsum walls, etc.). We recommend coordinating the work through a historical preservationist to determine if architectural details of significance could be salvaged. A rough cost estimate for an interior gut, not included potential asbestos abatement, cleaning of architectural components, or cleaning of structural or components to remain is estimated at \$150,000. It should be noted this estimate is purely based on square foot and not based on a remediation protocol or site visits. The final price will vary based on conditions observed and finalized scope.
- Additional cleaning/remediation should follow ANSI/IICRC S520 Standard and Reference Guide for Professional Mold Remediation (latest edition). This should include air scrubbing using HEPA filtration and cleaning semi-porous and non-porous remaining materials

For either option, demolition or renovation, an asbestos inspection would be required along with abatement of asbestos-containing materials prior to any renovation or demolition.

APPENDIX A

FIGURES



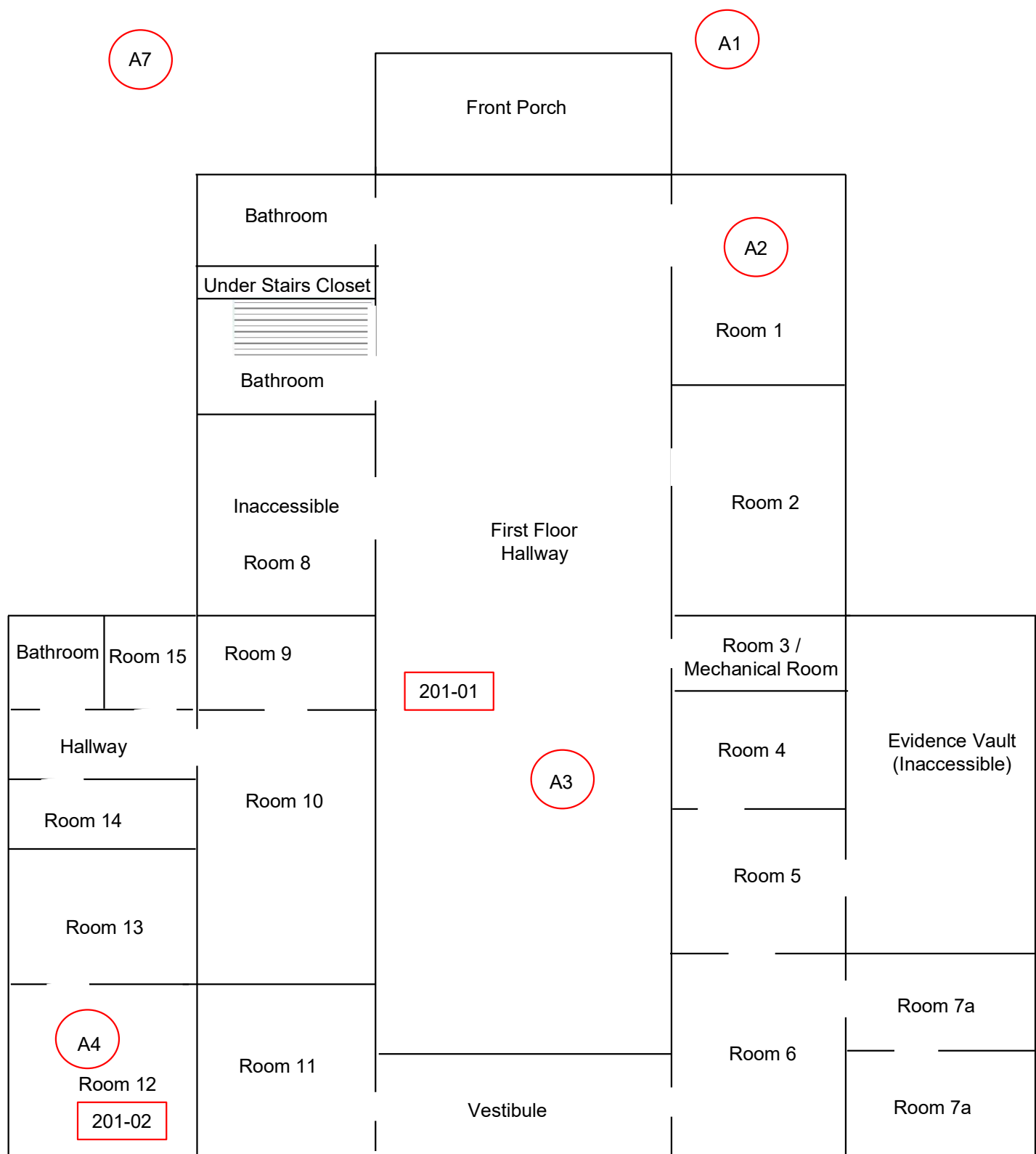
Aerial photograph provided by Brunswick County GIS, year 2023

Project Manager:	ACD	Project No.	K6237078
Drawn by:	ACM	Scale:	N.T.S.
Checked by:	SJM	File Name:	FIGURES
Approved by:	RH	Date:	10/27/2023


Terracon
 2108 Capitol Drive, Suite 103
 Wilmington, NC 28405

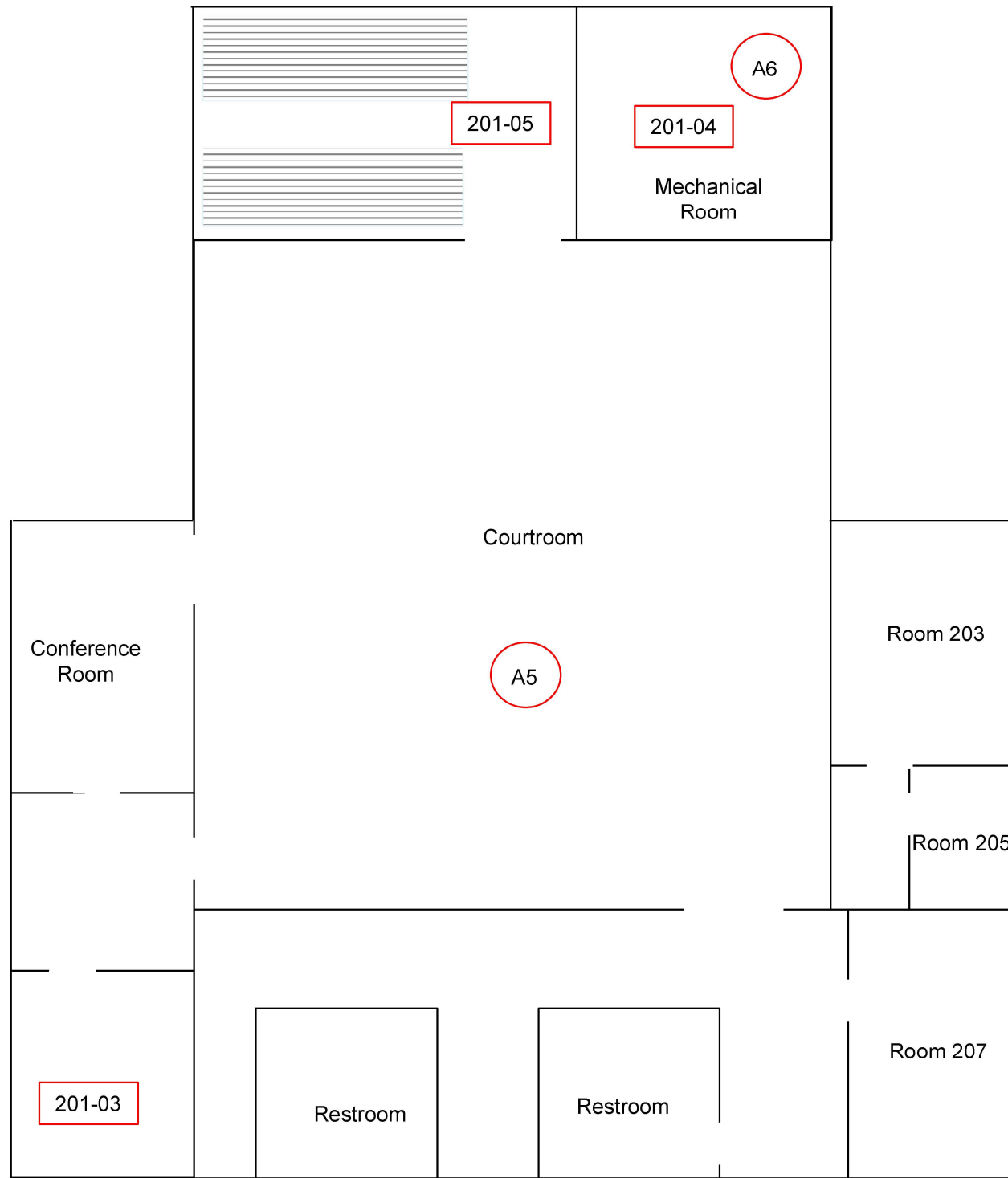
SITE LOCATION MAP
Southport Former Town Hall 201 E. Moore Street Southport, North Carolina

FIGURE
1




MOLD AND ASBESTOS TEM SAMPLE LOCATIONS	SYMBOL
MOLD AIR SAMPLE LOCATIONS	A#
TEM SAMPLE LOCATIONS	201-#

Project Manager: ACD	Project No. K6237056	 2108 Capitol Drive, Suite 103 Wilmington, NC 28405	1 ST FLOOR SAMPLE LOCATION MAP	FIGURE
Drawn by: SJM	Scale: N.T.S.		Southport Former Town Hall 201 E. Moore Street Southport, North Carolina	2
Checked by: ACD	File Name: FIGURES			
Approved by: CM	Date: 10/27/2023			



MOLD AND ASBESTOS TEM SAMPLE LOCATIONS	SYMBOL
MOLD AIR SAMPLE LOCATIONS	A2
TEM SAMPLE LOCATIONS	201-#

Project Manager: ACD	Project No. K6237056	 2108 Capitol Drive, Suite 103 Wilmington, NC 28405	2 ND FLOOR SAMPLE LOCATION MAP	FIGURE
Drawn by: ACD	Scale: N.T.S.		Southport Former Town Hall 201 E. Moore Street Southport, North Carolina	3
Checked by: SJM	File Name: FIGURES			
Approved by: RH	Date: 10/27/2023			

APPENDIX B

PHOTOGRAPHS



Photograph 1 – View of the front of the building.



Photograph 2 – View of the rear of the building.



Photograph 3 – View of typical exterior window damage on the east side of the building of the original section.



Photograph 4 – View of typical exterior on the east or west wing additions.



Photograph 5 – View of typical water damage in Rooms 1 and 2.



Photograph 6 – View of typical humidity impacted ceiling fan in Rooms 1 and 2.



Photo 7 – View of the first floor mechanical room.



Photo 8 – View of suspect ACM cement board ceiling in the mechanical room.



Photo 9 – View of water damage on wall in the first floor hallway.

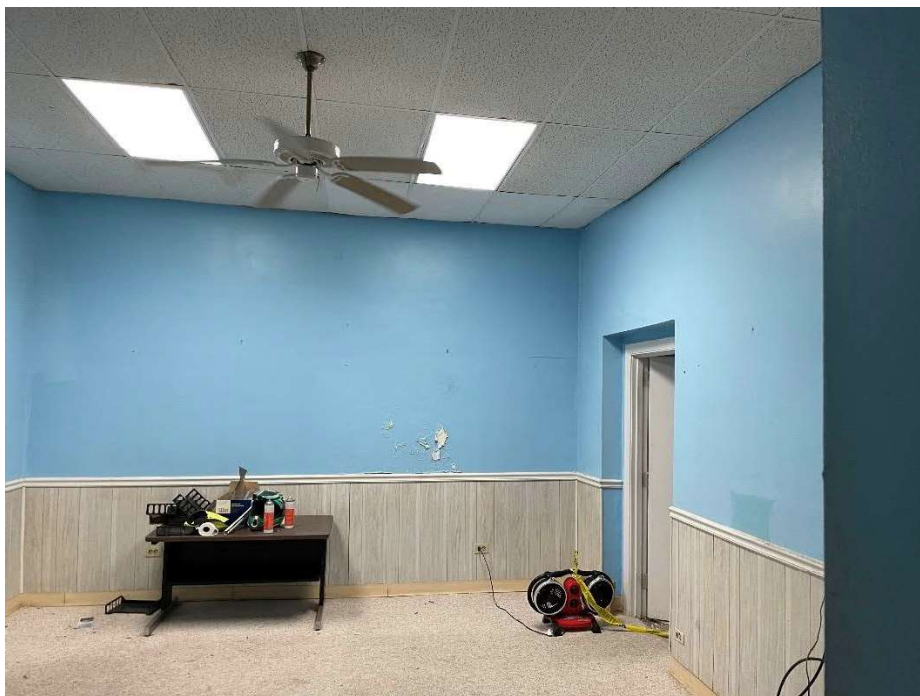


Photo 10 – View of Room 11 with exterior wall water damage.



Photo 11 – View of Rooms 9 and 10.



Photo 12 – View of the suspected mold and water intrusion in Room 12.



Photo 13 – View of suspected mold and water damage ceiling in Room 12.

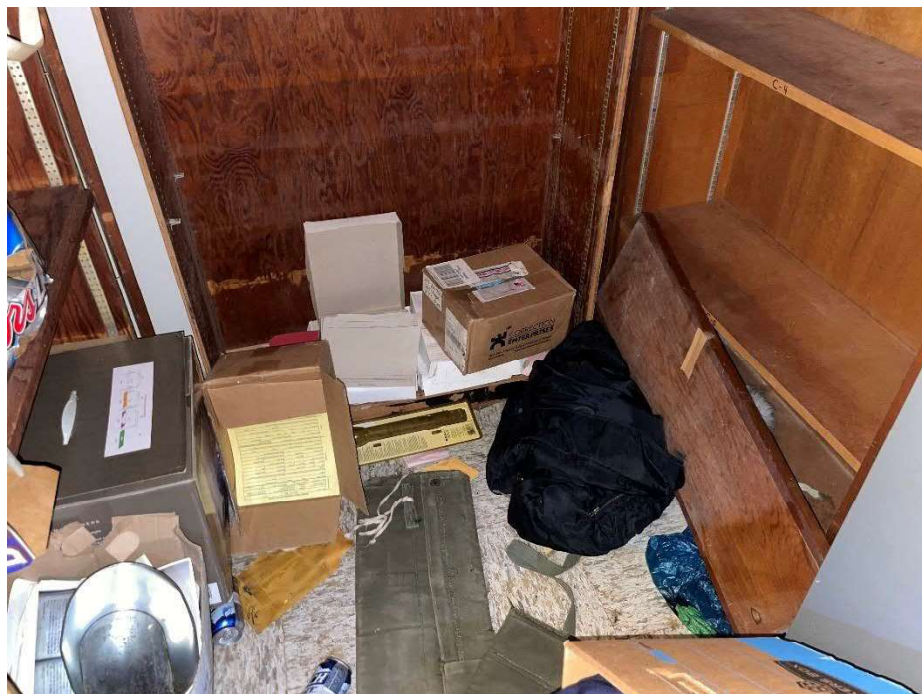


Photo 14 – View of the humidity related suspected mold growth on furniture in Room 14.

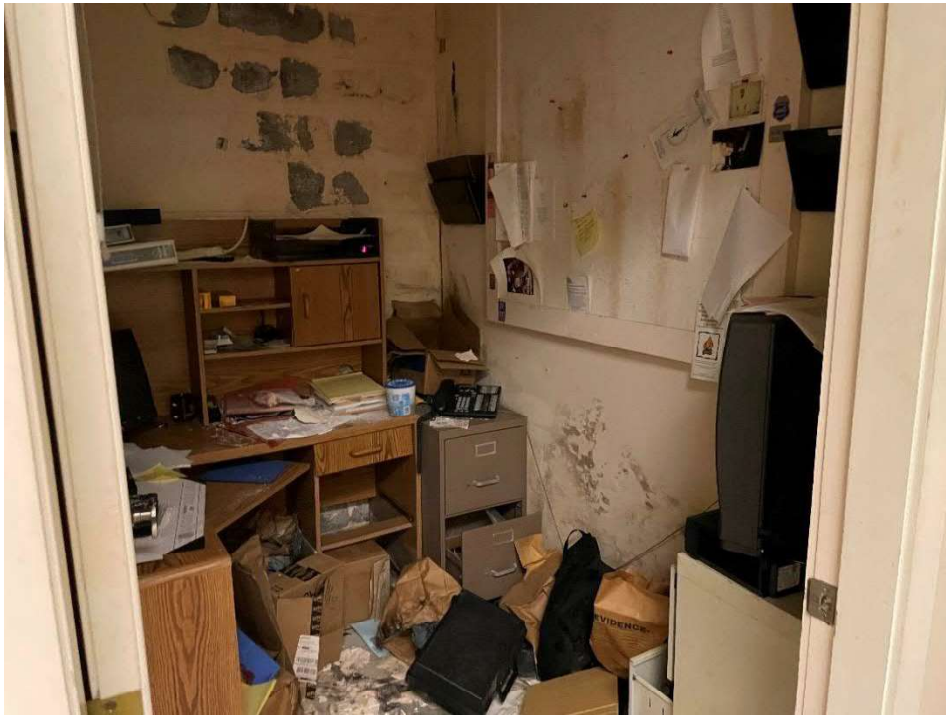


Photo 15 – View of the water damage and suspected mold growth in Room 15.



Photo 16 – View of the understairs closet by the bathroom with suspected mold growth on the gypsum lath.



Photo 17 – View of the understairs closet by the bathroom with suspected mold growth on the gypsum lath.



Photo 18 – View of the suspect ACM pipe insulation (black wrap) within the interstitial space between the first and second floor, above the wooden ceiling.

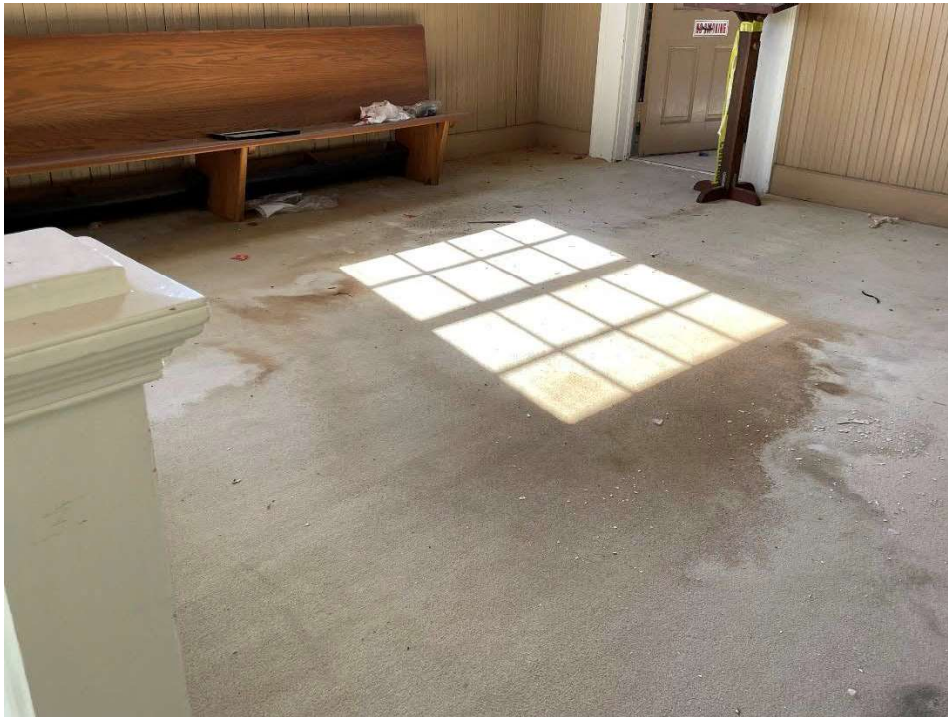


Photo 19 – View of water damage on floor on the second floor landing from a presumed roof leak.

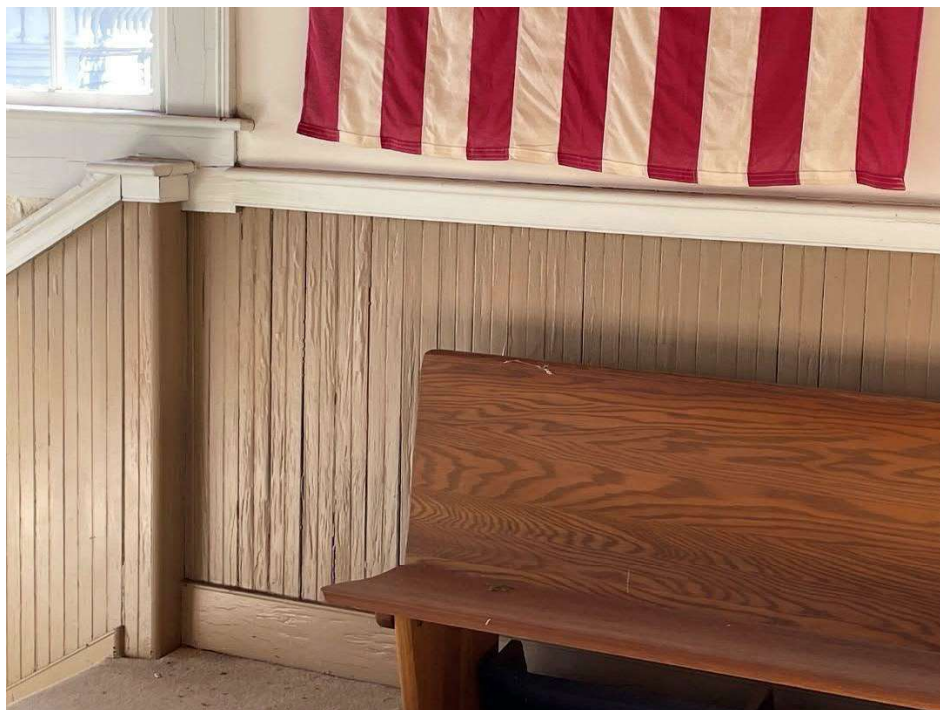


Photo 20 – View of water damage on wainscoting on the second floor landing.



Photo 21 – View of water damage to the wood ceiling on the second floor landing. This ceiling is present throughout the first floor original section.



Photo 22 – View of suspected mold on the duct insulation leading into the courtroom.



Photo 23 – View of significant water damage in the mechanical room on the second floor.



Photo 24 – View of water damaged plaster on the second floor landing.



Photo 25 – View of plaster on the second floor landing behind the wallpaper.



Photo 26 – View of plaster damage on the second floor landing.



Photo 27 – View of courtroom on the second floor. Assume porous materials are mold impacted (carpet, fabric, benches, etc.).



Photo 28 – View of rust on the ceiling tiles in the courtroom.

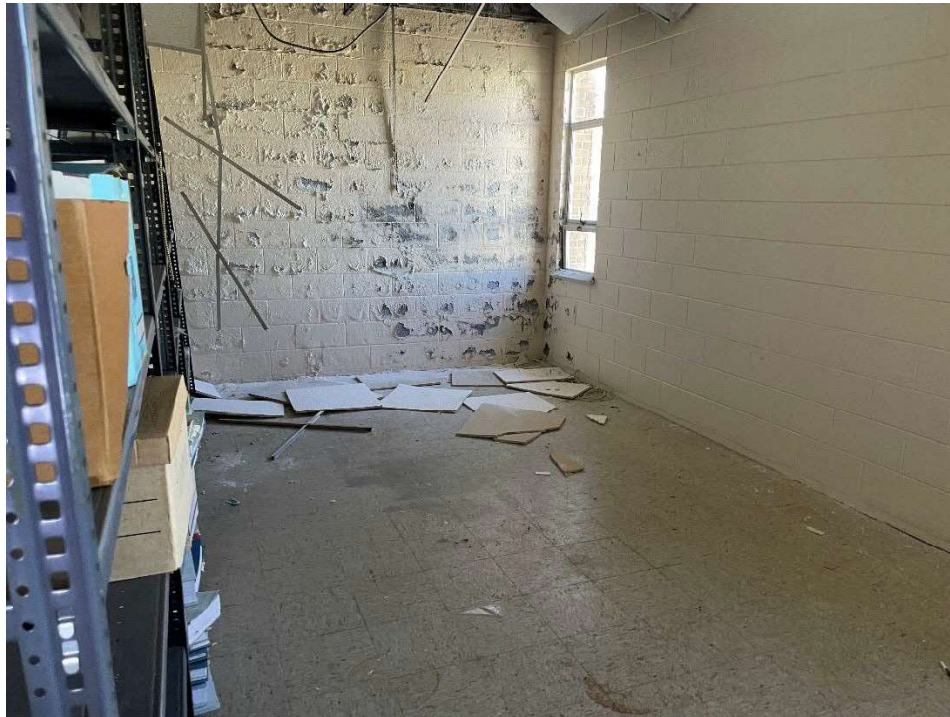


Photo 29 – View of room 203 with water damaged CMU walls.

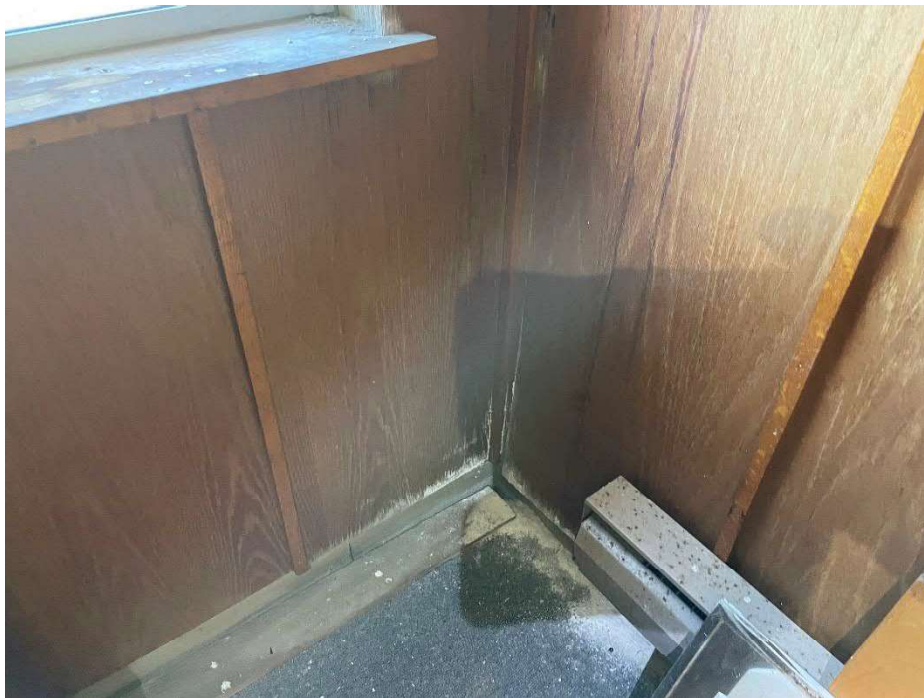


Photo 30 – View of room 207 with suspected mold on the wood paneling and carpet with evidence of CMU wall damage behind.



Photo 31 – View of the second floor back door with evidence of water damage around the base.

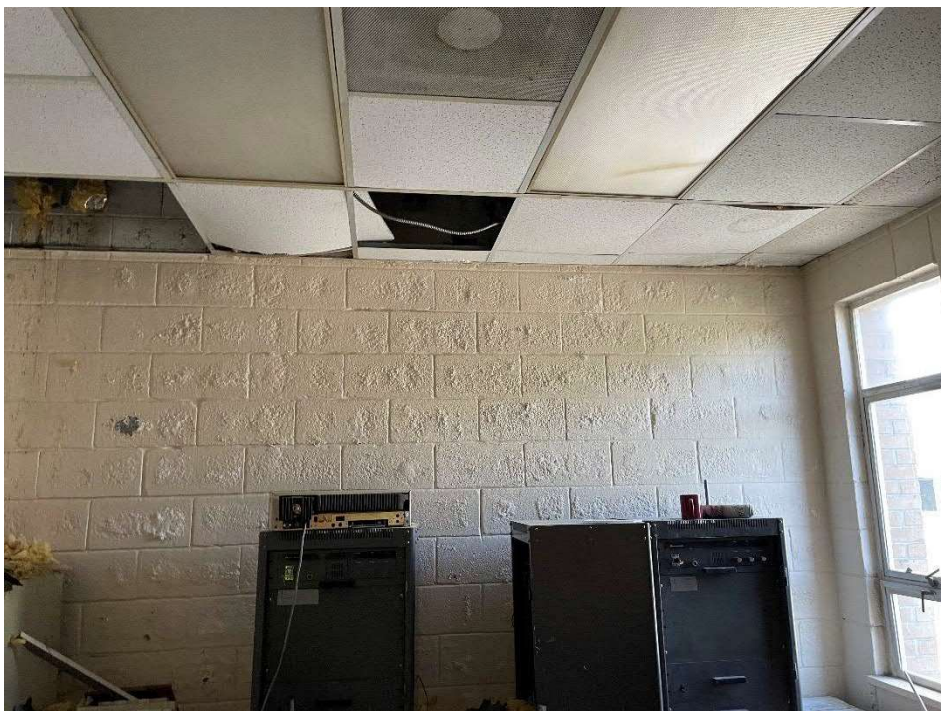


Photo 32 – View of the second floor back room to the right where sunlight (exterior penetrations) were observed along with animal activity.



Photo 33 – View of the second floor back area joint of original building to east wing addition, area of suspected mold growth on the first floor.

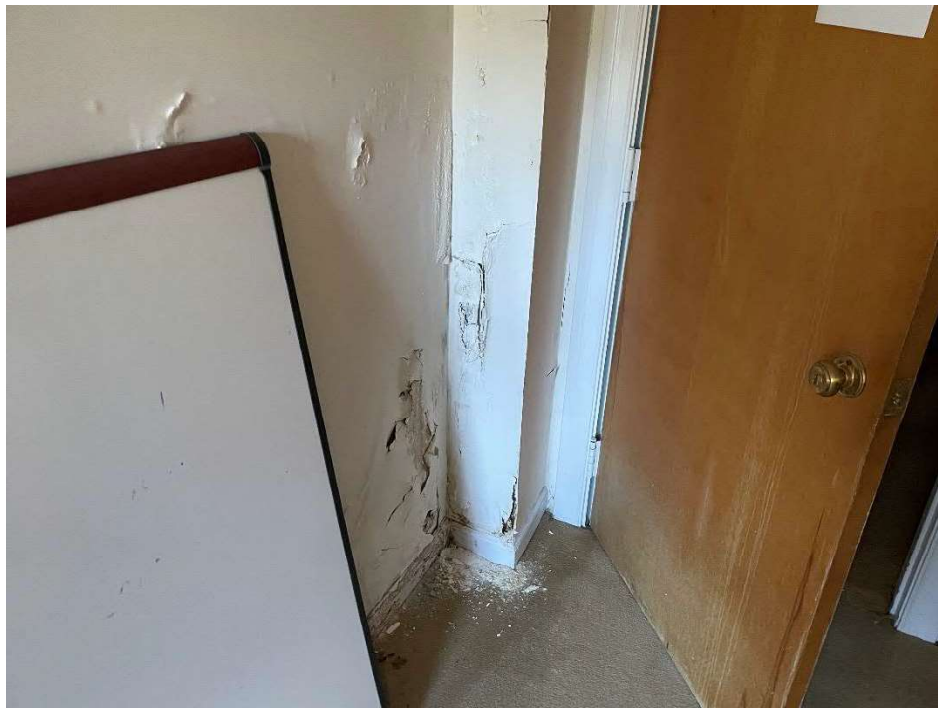


Photo 34 – View of the water damage at second floor conference room, where the east wing abuts the original structure.

APPENDIX C

ANALYTICAL LABORATORY REPORTS



EMSL Analytical, Inc.

10801 Southern Loop Blvd Pineville, NC 28134

Tel/Fax: (704) 525-2205 / (704) 525-2382

<http://www.EMSL.com> / charlottelab@emsl.com

EMSL Order: 412312223

Customer ID: TRHQ42N

Customer PO: K6237078

Project ID:

Attention: Shaenaz Mirmohamed
Terracon Consultants, Inc.
2108 Capitol Drive
Suite 103
Wilmington, NC 28405

Project: Southport Town Hall K6237078

Phone: (803) 427-5687

Fax:

Collected Date: 10/17/2023

Received Date: 10/18/2023 09:45 AM

Analyzed Date: 10/20/2023

Test Report: Air-O-Cell™ Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number: Client Sample ID: Volume (L): Sample Location:	412312223-0001 A1 75 Exterior Front			412312223-0002 A2 75 1st Fl, 2nd Rm on Left			412312223-0003 A3 75 1st Fl Hallway		
	Raw Count†	Count/m³	% of Total	Raw Count†	Count/m³	% of Total	Raw Count†	Count/m³	% of Total
Spore Types									
Alternaria (Ulodadium)	-	-	-	1	40	0.6	-	-	-
Ascospores	1	40	1	4	200	2.8	3	100	0.8
Aspergillus/Penicillium	4	200	4.9	88	3600	50.1	125(188)	7670	64.6
Basidiospores	88	3600	87.6	53	2200	30.6	57	2300	19.4
Bipolaris++	-	-	-	2	80	1.1	1	40	0.3
Chaetomium++	-	-	-	-	-	-	-	-	-
Cladosporium	4	200	4.9	17	690	9.6	32	1300	11
Curvularia	-	-	-	2	80	1.1	-	-	-
Epicoccum	1	40	1	1*	10*	0.1	-	-	-
Ganoderma	-	-	-	-	-	-	1*	10*	0.1
Myxomycetes++	-	-	-	4	200	2.8	3	100	0.8
Pithomyces++	2*	30*	0.7	-	-	-	-	-	-
Rust	-	-	-	1	40	0.6	-	-	-
Stachybotrys/Memnoniella	-	-	-	1	40	0.6	1*	10*	0.1
Arthrospores	-	-	-	-	-	-	8	300	2.5
Cercospora++	-	-	-	1*	10*	0.1	-	-	-
Nigrospora	-	-	-	-	-	-	-	-	-
Pestalotia++	-	-	-	-	-	-	-	-	-
Pyricularia	-	-	-	-	-	-	-	-	-
Spegazzinia	-	-	-	-	-	-	-	-	-
Torula++	-	-	-	-	-	-	1	40	0.3
Total Fungi	100	4110	100	175	7190	100	295	11870	100
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	1	40	-	2*	30*	-
Pollen	-	-	-	-	-	-	1*	10*	-
Analyt. Sensitivity 600x	-	41	-	-	41	-	-	41	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	1	-	-	1	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	-	-	2	-	-	2	-

† Due to method stopping rules, extrapolated raw counts are reported in parenthesis.

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

Lee Plumley, Laboratory Manager
or other Approved Signatory

No discernable field blank was submitted with this group of samples.

Skin Fragment and Fibrous Particulate ratings are based on the percent of non-fungal material they represent: 1 (1-25%), 2 (26-50%), 3 (51-75%), or 4 (76-100%). Background ratings are based on the total area covered by non-fungal particles: 1 (1-25%), 2 (26-50%), 3 (51-75%), 4 (76-99%), or 5 (100%; overloaded, prohibiting accurate detection and quantification). High levels of background will obscure spores and other particulates, leading to underestimation. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. **** Denotes particles found at 300X. *- Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed. EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. When the information supplied by the customer can affect the validity of the result, it will be noted on the report.

Samples analyzed by EMSL Analytical, Inc. Pineville, NC AIHA LAP, LLC-EMLAP Accredited #192283

Initial report from: 10/23/2023 08:28 AM

For information on the fungi listed in this report, please visit the Resources section at www.emsl.com



EMSL Analytical, Inc.

10801 Southern Loop Blvd Pineville, NC 28134

Tel/Fax: (704) 525-2205 / (704) 525-2382

<http://www.EMSL.com> / charlottelab@emsl.com

EMSL Order: 412312223

Customer ID: TRHQ42N

Customer PO: K6237078

Project ID:

Attention: Shaenaz Mirmohamed
Terracon Consultants, Inc.
2108 Capitol Drive
Suite 103
Wilmington, NC 28405

Phone: (803) 427-5687

Fax:

Collected Date: 10/17/2023

Received Date: 10/18/2023 09:45 AM

Analyzed Date: 10/20/2023

Project: Southport Town Hall K6237078

Test Report: Air-O-Cell™ Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number: Client Sample ID: Volume (L): Sample Location:	412312223-0004			412312223-0005			412312223-0006		
	A4			A5			A6		
	75			75			75		
	1st FI, Back Right			Courtroom			2nd FI Back Right		
Spore Types	Raw Count†	Count/m³	% of Total	Raw Count†	Count/m³	% of Total	Raw Count†	Count/m³	% of Total
Alternaria (Ulodadium)	-	-	-	2	80	1	-	-	-
Ascospores	6	200	3.7	8	300	3.9	1	40	2.2
Aspergillus/Penicillium	81	3300	61.2	48	2000	26.1	14	570	30.8
Basidiospores	22	900	16.7	71	2900	37.8	23	940	50.8
Bipolaris++	1	40	0.7	3	100	1.3	1*	10*	0.5
Chaetomium++	-	-	-	1*	10*	0.1	-	-	-
Cladosporium	18	740	13.7	38	1600	20.9	2	80	4.3
Curvularia	-	-	-	3	100	1.3	1	40	2.2
Epicoccum	-	-	-	1	40	0.5	-	-	-
Ganoderma	-	-	-	1	40	0.5	1	40	2.2
Myxomycetes++	3	100	1.9	6	200	2.6	2	80	4.3
Pithomyces++	-	-	-	1	40	0.5	1*	10*	0.5
Rust	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	3	100	1.9	3*	40*	0.5	-	-	-
Arthrospores	-	-	-	-	-	-	-	-	-
Cercospora++	1*	10*	0.2	1*	10*	0.1	-	-	-
Nigrospora	-	-	-	2	80	1	-	-	-
Pestalotia++	-	-	-	2	80	1	-	-	-
Pyricularia	-	-	-	-	-	-	1	40	2.2
Spegazzinia	-	-	-	1	40	0.5	-	-	-
Torula++	-	-	-	1*	10*	0.1	-	-	-
Total Fungi	135	5390	100	193	7670	100	47	1850	100
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	1	40	-	2	80	-	-	-	-
Pollen	-	-	-	2	80	-	2	80	-
Analyt. Sensitivity 600x	-	41	-	-	41	-	-	41	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	2	-	-	1	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	3	-	-	3	-	-	2	-

† Due to method stopping rules, extrapolated raw counts are reported in parenthesis.

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

Lee Plumley, Laboratory Manager
or other Approved Signatory

No discernable field blank was submitted with this group of samples.

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Initial report from: 10/23/2023 08:28 AM

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EMSL Analytical, Inc.

10801 Southern Loop Blvd Pineville, NC 28134

Tel/Fax: (704) 525-2205 / (704) 525-2382

<http://www.EMSL.com> / charlottelab@emsl.com

EMSL Order: 412312223

Customer ID: TRHQ42N

Customer PO: K6237078

Project ID:

Attention: Shaenaz Mirmohamed
Terracon Consultants, Inc.
2108 Capitol Drive
Suite 103
Wilmington, NC 28405

Project: Southport Town Hall K6237078

Phone: (803) 427-5687

Fax:

Collected Date: 10/17/2023

Received Date: 10/18/2023 09:45 AM

Analyzed Date: 10/20/2023

Test Report: Air-O-Cell™ Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number:	412312223-0007		
Client Sample ID:	A7		
Volume (L):	75		
Sample Location:	Exterior Front		
Spore Types	Raw Count†	Count/m³	% of Total
Alternaria (Ulodadium)	1*	10*	0.2
Ascospores	4	200	4.2
Aspergillus/Penicillium	-	-	-
Basidiospores	100	4080	85.5
Bipolaris++	1	40	0.8
Chaetomium++	-	-	-
Cladosporium	8	300	6.3
Curvularia	1*	10*	0.2
Epicoccum	-	-	-
Ganoderma	1*	10*	0.2
Myxomycetes++	2	80	1.7
Pithomyces++	-	-	-
Rust	-	-	-
Stachybotrys/Memnoniella	-	-	-
Arthrospores	-	-	-
Cercospora++	-	-	-
Nigrospora	1	40	0.8
Pestalotia++	-	-	-
Pyricularia	-	-	-
Spegazzinia	-	-	-
Torula++	-	-	-
Total Fungi	119	4770	100
Hyphal Fragment	-	-	-
Insect Fragment	-	-	-
Pollen	-	-	-
Analyt. Sensitivity 600x	-	41	-
Analyt. Sensitivity 300x	-	13*	-
Skin Fragments (1-4)	-	1	-
Fibrous Particulate (1-4)	-	1	-
Background (1-5)	-	1	-

† Due to method stopping rules, extrapolated raw counts are reported in parenthesis.

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

Lee Plumley, Laboratory Manager
or other Approved Signatory

No discernable field blank was submitted with this group of samples.

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Initial report from: 10/23/2023 08:28 AM

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EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

Microbiology Chain of Custody Form

EMSL Order Number / Lab Use Only

EMSL Analytical, Inc.
10801 Southern Loop Blvd

Pineville, NC 28134
PHONE: (704) 525-2205

EMAIL:
If Bill-To is the same as Report-To leave this section blank. Third-party billing requires written authorization.

412312223

Customer Information	Customer ID: TRHQ42N	Billing Information	Billing ID:
	Company Name: Terracon Consultants, Inc.		Company Name:
	Contact Name: Shaenaz Mirmohamed		Billing Contact:
	Street Address: 2103 Capital Drive, Suite 103		Street Address:
	City, State, Zip: Wilmington NC 28405 Country: US		City, State, Zip: _____ Country: _____
	Phone: 910-859-5390		Phone: _____
Email(s) for Report: Shaenaz.Mirmohamed@terracon.com	Email(s) for Invoice: _____		

Project Information	
Project Name/No: Southport Town Hall K6237078	Purchase Order: K6237078

EMSL LIMS Project ID: (If applicable, EMSL will provide)	State Samples Collected:	Zip Code Samples Collected:	State of Connecticut (CT) must select project location: <input type="checkbox"/> Commercial (Taxable) <input type="checkbox"/> Residential (Non-taxable)
--	--------------------------	-----------------------------	---

Sampled By Name: Amy DeSax Shaenaz Mirmohamed	Sampled By Signature: <i>[Signature]</i>	No. of Samples in Shipment
--	--	----------------------------

Sterile, Sodium Thiosulfate Preserved Bottle Used: Biocide Used in Source (specify) _____

Public Water Supply Samples: Note: All results may automatically be reported to DOH if required by State.

Turn-Around-Time (TAT) Please call ahead for large projects and/or turnaround times 6 Hours or Less. *32 Hour TAT available for select tests only; samples must be submitted by 11:30am.

3 Hour
 6 Hour
 24 Hour
 32* Hour
 48 Hour
 72 Hour
 96 Hour
 1 Week
 2 Week

MICROBIOLOGY TEST CODES			
M001 Air-O-Cell	M174 MoldSnap	M012 Pseudomonas aeruginosa (PIA***)	M115 Sewage Screen - Water (PIA***)
M030 Micro 5	M032 Allergenco-D	M024 Pseudomonas aeruginosa (MFT*)	M116 Sewage Screen - Water (MPN**)
M041 Fungal Direct Examination		M015 Heterotrophic Plate Count	M117 Sewage Screen - Swab (PIA***)
M169 Pollen ID & Enumeration		M017 Total Coliform & E. Coli (Colilert PIA***)	M013 Sewage Screen - Swab (MFT*)
M280 Dust Characterization Level-1		M018 Total Coliform & E. Coli (MFT*)	M730 Methicillin-resistant Steph. aureus (MRSA)
M281 Dust Characterization Level-2		M114 Total Coliform & E. Coli Enumeration (Colilert MPN**)	M031 Rapid-growing non-TB Mycobacteria Detection & Enumeration
M005 Viable Fungi-Air Samples (Genus ID & Count)		M019 Fecal Coliform (MFT*)	M014 Endotoxin Analysis
M006 Viable Fungi-Air Samples (Includes Penicillium, Aspergillus, Cladosporium, Stachybotrys Species ID & Count)		M020 Fecal Streptococcus (MFT*)	M044 Group Allergen (Cat, Dog, Cockroach, Dust Mite)
M007 Culturable Fungi-Surface Samples (Genus ID & Count)		M029 Enterococci (MFT*)	M095 Bacteroides
M008 Culturable Fungi-Surface Samples (Includes Penicillium, Aspergillus, Cladosporium, Stachybotrys Species ID & Count)		M129 Enterococci (Enterolert PIA***)	Other - See Analytical Price Guide for Test Code
M009 Bacteria Culture Gram Stain & Count		M180 Real Time qPCR-ERMI 36 Panel	Legionella Analysis Please use EMSL Legionella COC
M010 Bacteria Count & ID - 3 Most Prominent		M025 Sewage Screen - Water (MFT*)	
M011 Bacteria Count & ID - 5 Most Prominent		*MFT= Membrane Filtration Technique **MPN = Most Probable Number ***PIA = Presence/Absence	

Sample #	Sample Location/Description	Sample Type (Matrix)	Potable / Non-Potable (Only for Water)	Test Code	Volume/Area	Date / Time Collected	Temperature (Lab Use Only)
Example: Sample 1	Kitchen	Water	Potable	M017	1,000 ml	1/1/2021 3:30pm	
A1	Exterior Front	Air		M001	75L	1/17/23 11:19	
A2	1st fl, 2nd Rm on left	Air		M001	75L	11:30	
A3	1st fl hallway	Air		M001	75L	11:31	
A4	1st fl, back right	Air		M001	75L	11:40	
A5	Courtroom	Air		M001	75L	11:42	
A6	2nd fl back right	Air		M001	75L	11:43	

Special Instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.)

Method of Shipment:	Sample Condition Upon Receipt:
Relinquished by: <i>[Signature]</i>	Received by: <i>[Signature]</i>
Date/Time: 1/17/23 5:00	Date/Time: 1/18/23
Relinquished by:	Received by: <i>[Signature]</i>
Date/Time:	Date/Time: 9:45A

Controlled Document - COC-34 Micro R13 03/02/2021

AGREE TO ELECTRONIC SIGNATURE (By checking, I consent to signing this Chain of Custody document by electronic signature)

EMSL Analytical, Inc.'s Laboratory Terms and Conditions are incorporated into this Chain of Custody by reference in their entirety. Submission of samples to EMSL Analytical, Inc. constitutes acceptance and acknowledgment of all terms and conditions by Customer.



EMSL Analytical, Inc.

10801 Southern Loop Blvd Pineville, NC 28134

Tel/Fax: (704) 525-2205 / (704) 525-2382

<http://www.EMSL.com> / charlottelab@emsl.com

EMSL Order: 412312177

Customer ID: TRHQ42N

Customer PO: K6237078

Project ID:

Attention: Shaenaz Mirmohamed
Terracon Consultants, Inc.
2108 Capitol Drive
Suite 103
Wilmington, NC 28405

Project: K6237078

Phone: (803) 427-5687

Fax:

Received Date: 10/18/2023 09:45 AM

Analysis Date: 10/19/2023

Collected Date: 10/17/2023

Test Report: Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by EPA 40 CFR Part 763 Appendix A to Subpart E

Sample	Location	Volume (Liters)	Area Analyzed (mm ²)	Non Asb	Asbestos Type(s)	#Structures		Analytical Sensitivity (S/cc)	Asbestos Concentration	
						≥0.5μ < 5μ	≥5μ		(S/mm ²)	(S/cc)
201-01 412312177-0001	1st Floor Hallway	1208.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
201-02 412312177-0002	1st Floor Rear Right Room	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
201-03 412312177-0003	2nd Floor Rear Right Room	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
201-04 412312177-0004	Mechanical Room Off Landing	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
201-05 412312177-0005	Landing	1206.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049

Analyst(s)

Maggie Pasour (5)

Lee Plumley, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. Results reported in structures/cm³ are not covered by the laboratory's NVLAP accreditation. Measurement of uncertainty available upon request.

Samples analyzed by EMSL Analytical, Inc. Pineville, NC NVLAP Lab Code 200841-0, VA 3333 00312

Initial report from: 10/20/2023 14:46 PM



Asbestos Chain of Custody (Air, Bulk, Soil)

EMSL Order Number / Lab Use Only

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

PHONE: (800) 220-3675
EMAIL: CinnAslab@EMSL.com

EMSL ANALYTICAL, INC.
TESTING LABS • PRODUCTS • TRAINING

412312177

If Bill-To is the same as Report-To leave this section blank. Third-party billing requires written authorization.

Customer Information Customer ID: Company Name: <u>TERRACON</u> Contact Name: <u>Shaeraz M. Miran</u> Street Address: <u>2108 Capital Drive Suite 103</u> City, State, Zip: <u>Wilmington NC</u> Country: Phone: Email(s) for Report: <u>shaeraz.miran@terracon.com</u>	Billing Information Billing ID: Company Name: <u>SAMPLE</u> Billing Contact: Street Address: City, State, Zip: Country: Phone: Email(s) for Invoice:
---	--

Project Information	
Project Name/No: <u>16237078</u>	Purchase Order:
EMSL LIMS Project ID: (If applicable, EMSL will provide)	US State where samples collected: <u>NC</u> State of Connecticut (CT) must select project location:
Sampled By Name: <u>Shaeraz M.</u>	<input type="checkbox"/> Commercial (Taxable) <input type="checkbox"/> Residential (Non-Taxable) No. of Samples in Shipment: <u>5</u>

Turn-Around-Time (TAT)

3 Hour 4-4.5 Hour (AHERA ONLY) 6 Hour 72 Hour 96 Hour 1 Week 2 Week

TEM Air 3-6 Hour, please call ahead to schedule. 32 Hour TAT available for select tests only; samples must be submitted by 11:30 am.

Test Selection

PCM Air <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> NIOSH 7400 w/ 8hr. TWA PLM - Bulk (reporting limit) <input type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) <input type="checkbox"/> POINT COUNT <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1,000 (<0.1%) POINT COUNT w/ GRAVIMETRIC <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1,000 (<0.1%) <input type="checkbox"/> NIOSH 9002 (<1%) <input type="checkbox"/> NYS 198.1 (Friable - NY) <input type="checkbox"/> NYS 198.6 NOB (Non-Friable - NY) <input type="checkbox"/> NYS 198.8 (Vermiculite SM-V)	TEM - Air <input checked="" type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312* TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (Non-Friable-NY) <input type="checkbox"/> TEM EPA 600/R-93/116 w Milling Prep (0.1%)	TEM - Settled Dust <input type="checkbox"/> Microvac - ASTM D5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Qualitative via Filtration Prep <input type="checkbox"/> Qualitative via Drop Mount Prep Soil - Rock - Vermiculite (reporting limit)* <input type="checkbox"/> PLM EPA 600/R-93/116 with milling prep (<0.25%) <input type="checkbox"/> PLM EPA 600/R-93/116 with milling prep (<0.1%) <input type="checkbox"/> TEM EPA 600/R-93/116 with milling prep (<0.1%) <input type="checkbox"/> TEM Qualitative via Filtration Prep <input type="checkbox"/> TEM Qualitative via Drop Mount Prep
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Other Test (please specify)

*Please call with your project-specific requirements.

Positive Stop - Clearly Identified Homogeneous Areas (HA)
 Filter Pore Size (Air Samples) 0.8um 0.45um

Sample Number	Sample Location / Description	Volume, Area or Homogeneous Area	Date / Time Sampled (Air Monitoring Only)
201-01	1st Floor Hallway	1208L	10/17/23
201-02	1st floor rear right room	1200L	
201-03	2nd floor rear right room	1200L	
201-04	mechanical room off landing	1200L	
201-05	landing	1206L	

Special Instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.)

Method of Shipment: <u>FedEx</u>	Sample Condition Upon Receipt:
Relinquished by: <u>[Signature]</u> Date/Time: <u>10/17/23</u>	Received by: <u>[Signature]</u> Date/Time: <u>10/18/23</u>
Relinquished by:	Received by: <u>[Signature]</u> Date/Time: <u>945AM</u>

Controlled Document - COC-05 Asbestos R18 10/28/2021 AGREE TO ELECTRONIC SIGNATURE (By checking, I consent to signing this Chain of Custody document by electronic signature.)

EMSL Analytical, Inc.'s Laboratory Terms and Conditions are incorporated into this Chain of Custody by reference in their entirety. Submission of samples to EMSL Analytical, Inc. constitutes acceptance and acknowledgment of all terms and conditions by Customer.



2108 Capital Drive, Suite 103
Wilmington, North Carolina 28405
P (910) 478-9915
Terracon.com

April 12, 2024

HICAPS
600 North Regional Road
Greensboro, North Carolina 27409

Attn: Dave Smith
P: (336) 420-6636
E: dave@hicaps.com

Re: Asbestos Inspection and Lead Paint Sampling Report
Southport Former City Hall
201 E. Moore Street
Southport, North Carolina
Terracon Project No. K6247038

Dear Mr. Smith:

The purpose of this report is to present the results of the asbestos inspection and lead paint sampling performed at the former Town Hall in Southport, North Carolina. These services were conducted in general accordance with Terracon Proposal No. PK6247038, dated February 27, 2024. We understand that these services were requested due to proposed renovation of the building.

Asbestos and lead were detected above laboratory reporting limits in some of the samples collected. Please refer to the attached report for details.

Terracon appreciates the opportunity to provide these services to HICAPS. If you have questions regarding this report, please contact the undersigned at (910) 939-7247.

Sincerely,
Terracon Consultants, Inc.

A handwritten signature in black ink, appearing to read 'Shaenaz J. Mirmohamed'.

Shaenaz J. Mirmohamed
Senior Staff Scientist

A handwritten signature in black ink, appearing to read 'Alicia Coley'.

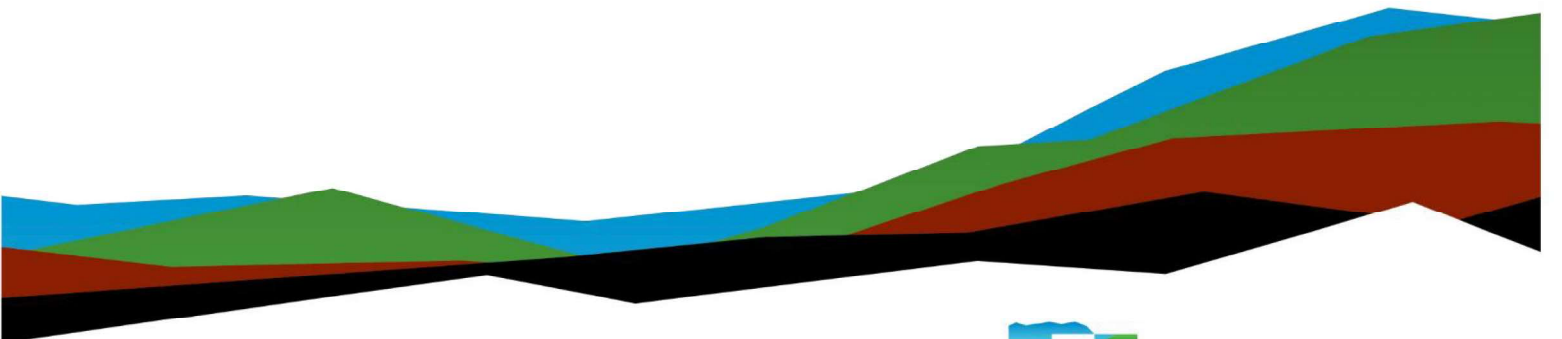
Alicia Coley, CIH
Authorized Project Reviewer

A handwritten signature in black ink, appearing to read 'Amy C. DeSaix'.

Amy C. DeSaix, REM, CIEC
Environmental Department Manager



Asbestos Inspection and Lead Paint Sampling Report
Southport Former City Hall
Southport, North Carolina
April 12, 2024 | Project Number: K6247038



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1.0 Introduction

Terracon Consultants, Inc. (Terracon) completed an asbestos inspection and lead paint sampling to of the former town hall located 201 E. Moore Street in Southport, North Carolina. These services were conducted in general accordance with Terracon Proposal No. PK6247038, dated February 27, 2024. The inspection and sampling were conducted by State of North Carolina Accredited Asbestos Building Inspectors.

Building components within the interior and exterior of the building, excluding the roof, were visually assessed and homogeneous areas of suspect asbestos-containing materials (ACM) and suspect lead-containing paint (LCP) were identified and documented. The inspection was limited to safely accessible areas. The vault and room 8 were inaccessible during the assessment. Additionally, destructive testing to observe above the wood ceiling was not performed. Suspect ACM samples were collected in general accordance with the sampling protocols outlined in Environmental Protection Agency (EPA) regulation 40 CFR 763 (Asbestos Hazard Emergency Response Act, AHERA). Suspect ACM samples were delivered to an accredited laboratory for analysis by Polarized Light Microscopy (PLM). Paint chip samples were collected from representative surfaces and delivered to an accredited laboratory to perform total lead analysis by Flame Atomic Absorption Spectrophotometry (Flame AAS).

1.1 Project Objective

We understand the asbestos inspection and lead paint sampling were requested due to the planned renovation of the building. EPA regulation 40 CFR 61, Subpart M, National Emission Standards for Hazardous Air Pollutants (NESHAP), prohibits the release of asbestos fibers to the atmosphere during renovation or demolition activities. The asbestos NESHAP requires that potentially regulated ACM be identified, classified, and quantified prior to planned disturbances, renovation or demolition activities.

The Occupational Health and Safety Administration (OSHA) has promulgated a worker protection standard for the disturbance of LCP during renovation and demolition projects. The limited lead paint sampling was performed to meet informational needs to comply with the OSHA Lead in Construction Standard (29 CFR 1926.62). Currently, proposed renovation or demolition activities which may impact lead paint is subject to OSHA regulation 29 CFR 1926.62 – Lead Exposure in Construction for worker protection. If paint is removed from the substrate, it may be subject to disposal requirements.

1.2 General Conditions and Limitations

The limited asbestos inspection and lead paint sampling encompassed the interior and exterior of the building, excluding the roof. The level of effort and associated tasks performed for this service was limited to the scope of services outlined in Terracon's proposal. Terracon did not attempt to identify every potential exposure or hazard present in the structure.

1.3 Reliance

This report is prepared for the exclusive use and reliance of the Client. Use or reliance by any other party is prohibited without the written authorization of the Client and Terracon.

Reliance on the report by the client and all authorized parties will be subject to the terms, conditions and limitations stated in Terracon's proposal and the Agreement for Services. The limitation of liability defined in the Agreement for Services is the aggregate limit of Terracon's liability to the Client and all relying parties.

2.0 Building Descriptions

The building was reportedly constructed in 1854 as the County Courthouse and was later renovated to include the two rear wings. The building reportedly contains a new asphalt shingled pitched roof. The building is two-story and consists of approximately 8,500 square feet. The building is listed on the National Register of Historic Places as Old Brunswick County Courthouse (BW0007).

The original section of the building consists of a concrete floor on the first floor and wood floor on the second floor with multiple styles of vinyl floor tile and carpet flooring. The original walls are plaster with select areas of drywall covering the plaster. Select rooms also contain wooden wainscot molding. The original ceiling is wood paneling; however, drywall and suspended ceiling tiles have been installed over the ceiling to allow for mechanical duct systems. The ceiling in the courtroom consists of ornamental metal ceiling tiles. The exterior walls appear to consist of brick with a textured stucco-like coating on the exterior.

The additions consist of brick interior walls adjoining the original section with concrete masonry unit (CMU) exterior walls. Select walls are covered with drywall or wood paneling. The ceiling consists of suspended ceiling tiles covered with fiberglass insulation. The ceiling plenum space is open to the metal roof truss. The flooring of the addition consists of multiple styles of vinyl floor tiles and carpet with limited areas of sheet vinyl flooring.

3.0 Field Activities

3.1 Asbestos

The inspection was conducted by Shaenaz Mirmohamed (State of North Carolina Accreditation Number 13337) and Amy DeSaix (State of North Carolina Accreditation Number 12107) on March 21, 2024. A copy of their asbestos inspector accreditations are attached as Appendix H. The inspection was conducted in general accordance with the sample collection protocols established in EPA regulation 40 CFR 763 (ASHERA). A summary of inspection activities is provided below.

Visual Assessment

Our inspection activities began with visual observation of accessible areas of the interior and exterior to identify homogeneous areas of suspect ACM. A homogeneous area consists of building materials that appear similar throughout in terms of color, texture, and date of application. Building materials identified as concrete, glass, wood, masonry, metal, or rubber were not considered suspect ACM.

Physical Assessment

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

Sample Collection

Based on results of the visual observation, bulk samples of suspect ACM were collected in general accordance with ASHERA sampling protocols. Random samples of suspect materials were collected in each homogeneous area. Bulk samples were collected using wet methods as applicable to reduce the potential for fiber release. Samples were placed in sealable containers and labeled with unique sample numbers using an indelible marker.

Terracon collected 147 bulk samples from 45 homogeneous areas of suspect ACM. Figures depicting the sample locations are included in Appendix A. A summary of suspect ACM samples collected during the inspection is included as Appendix B.

Sample Analysis

Bulk samples were submitted under chain of custody to EMSL in Charlotte, North Carolina for analysis by PLM with dispersion staining techniques per EPA methodology (EPA Method 600/R-93/116). The percentage of asbestos, where applicable, was

determined by microscopic visual estimation. EMSL is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP Accreditation No. 200841-0). Terracon instructed the laboratory to utilize the 'positive stop' method where the laboratory would cease analyzing the rest of the samples in the homogeneous after the first sample was identified to contain greater than 1% asbestos.

3.2 Lead Paint

The lead paint sampling was conducted by Shaenaz Mirmohamed and Amy DeSaix of Terracon on March 21, 2024. Paint chip samples were collected from different testing combinations (component and substrate) to determine its lead content, measured by percent by weight. Suspect lead paint samples were collected in general accordance with the EPA's work practice standards for conducting lead paint activities (40 CFR 745.227). Currently, proposed renovation and demolition activities that could potentially disturb lead paint are subject to the OSHA regulations (29 CFR 1926.62 – Lead). Terracon collected 13 paint chip samples from homogeneous surfaces. Paint chip samples were submitted under chain of custody to EMSL in Charlotte, North Carolina. Paint chip samples were analyzed by Flame Atomic Absorption Spectrophotometry method SW846-3050B/7000B. EMSL is an AIHA® Environmental Lead Laboratory Accreditation Program (ELLAP) accredited laboratory (ELLAP Lab Code 192283), to perform Flame Atomic Absorption Spectrophotometry analysis.

4.0 Regulatory Overview

4.1 Asbestos

The following sections provide a general overview to the applicable asbestos regulations. Please refer to the complete current regulation to verify compliance before any actions are initiated on an ACM.

NESHAP

The asbestos NESHAP (40 CFR Part 61, Subpart M) regulates asbestos fiber emissions and asbestos waste disposal practices. It also requires the identification and classification of existing building materials prior to demolition or renovation activities. Under NESHAP, asbestos-containing building materials are classified as either friable, Category I non-friable, or Category II non-friable ACM. Friable materials are those that, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure. Category I non-friable ACM includes packings, gaskets, resilient floor coverings, and asphalt roofing products containing more than 1% asbestos. Category II non-friable ACM are any materials other than Category I materials that contain more than 1% asbestos.

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

North Carolina State Regulations

In the state of North Carolina, asbestos activities are regulated by the North Carolina Department of Health and Human Services, Health Hazards Control Unit (HHCU) under 10A NCAC 41C Section .0600 – Asbestos Hazard Management Program (AHMP). The AHMP requires that any asbestos-related activity conducted in a public building be performed by personnel accredited by the HHCU.

Asbestos abatement must be conducted under the direct supervision of a North Carolina accredited supervisor, except that permitted removals of roofing products may be conducted under the direct supervision of a North Carolina accredited roofing supervisor. An asbestos abatement design must be prepared by a North Carolina accredited abatement designer for each individually permitted removal of more than 3,000 square feet (281 square meters), 1,500 linear feet (462 meters) or 656 cubic feet (18 cubic meters) of regulated asbestos-containing materials conducted in public areas. Third-party air monitoring must be conducted during the abatement activities in accordance with AHMP requirements.

AHMP requires that no person remove more than 35 cubic feet (1 cubic meter), 160 square feet (15 square meters), or 260 linear feet (80 linear meters) of regulated asbestos containing material, without a permit issued by the HHCU. Applications must be postmarked or received by the HHCU at least ten working days prior to the scheduled removal start date.

OSHA

OSHA's general industry asbestos standard (29 CFR 1910.1001) requires employers to exercise due diligence in complying with the requirements to inform their employees and affected contractors working in the facility about the presence and location of both ACM and materials assumed to contain asbestos.

The OSHA Asbestos standard for construction (29 CFR 1926.1101) regulates workplace exposure to asbestos during construction and maintenance activities. The standard classifies construction and maintenance activities which could disturb ACM, and specifies work practices and precautions which employers must follow when engaging in each class of regulated work. States which administer their own federally-approved state OSHA programs may require additional precautions.

A full copy of the OSHA asbestos standard for general and construction industry may be found at OSHA's website (www.osha.gov) and should be referenced for specific information.

4.2 Lead Paint

The lead paint sampling activities were conducted in general accordance with EPA's work practice standards for conducting lead paint activities (40 CFR 745, and State and local regulations) to meet informational needs to comply with the OSHA Lead in Construction Standard. Lead is regulated by the Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA).

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

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

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

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

5.0 Findings and Recommendations

5.1 Asbestos

Asbestos **was identified** at concentrations greater than 1% in the following materials during the 201 E. Moore Street asbestos inspection:

- Exterior stucco texture
- Exterior concrete on window addition
- 9" x 9" Gray floor tile beneath carpet in the 1st floor original section
- 9" x 9" Black floor tile beneath carpet in the 1st floor original section
- 12" x 12" Gray streaked floor tile and mastic in the first and second floor
- CMU surface block filler
- Residual black mastic associated with the 12" x 12" off-white with gray streaks floor tile
- White bottom layer floor tile in the 2nd floor mechanical room
- Window addition – interior window glazing
- Original Windows – Residual Caulking

Asbestos **was identified** at concentrations less than 1% in the following materials:

- Exterior caulking on stone window apron
- 12" x 12" Tri-beige floor tile mastic
- 2' x 4' large squiggle ceiling tiles
- 2' x 4' small squiggle ceiling tiles

Due to not having access, the following material is assumed to contain asbestos in concentrations greater than 1%:

- Floor tiles and mastic in room 8 (inaccessible room)

Note: A sample labeled plaster skim and rough coat sample 13-6 collected as part of HA 13 from the conference room was initially identified in the laboratory data as containing 2% Chrysotile. However, following re-sampling, the materials was identified as drywall and asbestos was not present in the additional sample. Thus plaster, rough coat, and skim coat is not to be considered an asbestos-containing material.

Terracon recommends that the materials containing less than 1% asbestos are removed and disposed of by a State of North Carolina licensed asbestos abatement contractor

prior to renovation or demolition activities. Materials containing asbestos, but not greater than 1%, are not regulated by NESHAP. However, the OSHA personal exposure limits (0.1 fibers per cubic centimeter (f/cc) of air as an eight-hour time weighted average or 1.0 f/cc of air over 30 minutes) for asbestos apply when materials containing detectable concentrations of asbestos are disturbed during renovations or demolitions.

In addition, regarding materials with less than 1% asbestos, OSHA further regulates these materials and requires specified work practice requirements and prohibitions regardless of exposure levels to employees, including (but not limited to):

- Use of wet methods, prompt cleanup and disposal in leak-proof containers;
- Use of compressed air or high-speed abrasive disc saws not equipped with point-of cut ventilators or HEPA-filtered enclosures are prohibited;
- The employee is required to document employee exposures via a “competent person” relative to published permissible exposure limits to ascertain expected exposures to asbestos during the work operation.

Because the EPA does not consider the materials to be ACM, the waste from these materials may be transported as construction and demolition (C & D) debris and disposed at a certified C & D landfill. Landfills should be contacted prior to transporting waste to determine if the waste will be accepted.

If additional suspect materials are found during renovation or demolition activities, they should be assumed to contain asbestos until laboratory analysis can confirm or deny their asbestos content. Terracon recommends that the identified and assumed ACM be removed and disposed of by a North Carolina licensed asbestos abatement contractor prior to disturbance. A summary of materials containing asbestos is provided in Appendix B. The laboratory analytical report is provided in Appendix D. Photographs are provided in Appendix G.

5.2 Lead Paint

Lead was detected above laboratory reporting limits in seven of the 13 samples of paint coatings collected during the March 21, 2024 sampling event as listed below:

- White on exterior wood window frame
- White on exterior wood window sash
- White on wood handrail
- White on wood window apron
- White on wood window sash
- Brown on wood wainscoting
- Tan on wood flooring

Asbestos Inspection and Lead Paint Sampling Report

Southport Former City Hall | Southport, North Carolina

April 12, 2024 | Terracon Project No. K6247038



Based on the results, the wood and metal painted finishes in the original structure should be considered lead-containing paint. A summary of the paint chip samples collected during the sampling is presented in Appendix E. The lead paint laboratory analytical report is provided in Appendix F.

Contractors should be made aware of the presence of the identified lead coatings, so that they may maintain compliance with worker protection regulations, employ lead-safe work practices, and/or conduct a negative exposure assessment per OSHA (29 CFR 1926.62 – Lead Exposure in Construction).

6.0 General Comments

This limited asbestos inspection and lead paint sampling was conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the same locale. The results, findings, conclusions, and recommendations expressed in this report are based on conditions observed during our inspection of the building.

This report has been prepared on behalf of and exclusively for use by HICAPS for specific application to their project as discussed. This report is not a bidding document. Contractors or consultants reviewing this report must draw their own conclusions regarding further investigation or remediation deemed necessary. Terracon does not warrant the work of regulatory agencies, laboratories or other third parties supplying information, which may have been used in the preparation of this report. No warranty, expressed or implied is made.