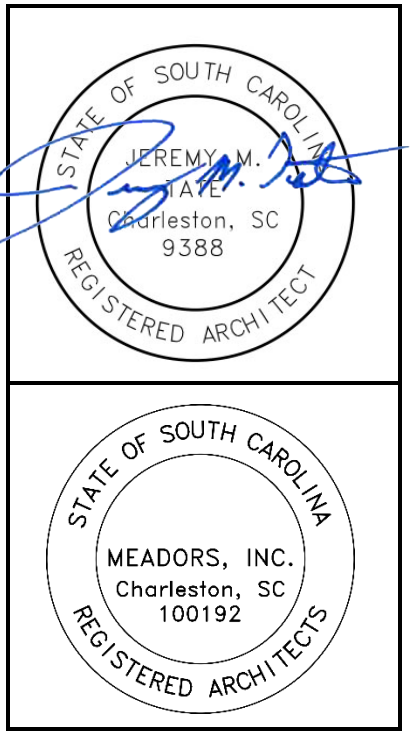
PROJECT MANUAL VOLUME 3
WELDON AUDITORIUM RENOVATIONS

Manning, South Carolina
Architect's Project No. 21-0024
County's Project No. ITB 2024-014

Bid Document Set
January 31, 2025



MEADORS, Inc.

2811 Azalea Drive, Charleston SC, 29405
PHONE: 843-723-8585 | WEBSITE: meadorsinc.com

November 24, 2021

Jeremy Tate, AIA
Meadors, Inc.
2811 Azalea Drive
North Charleston, SC 29405

Re: Testing Observations & Results
Weldon Auditorium
7 Maple Street
Manning, SC 29102
Elkin Project No. 1000.13004

Dear Mr. Tate;

Pursuant to your request, representatives of Elkin Engineering & Diagnostics, LLC (Elkin) performed a field investigation at the subject property from September 27, 2021 to September 30, 2021. This investigation included infrared (IR) thermography, water spray testing and destructive test cuts at locations of suspected water intrusion. The purpose of this investigation was to identify and evaluate areas of possible water and/or air intrusion through the building's exterior envelope. This document presents our results.

Background

The subject structure is 1093-seat auditorium that was originally built in 1954 as part of a high school. It has since been repurposed into a commercial auditorium whose most recent renovations were completed around 2010. The structure is built on a concrete slab foundation and features double wythe solid brick exterior walls and eight connected roof assemblies. Each roof is identified and labeled from an aerial view in Photograph 2. For orientation purposes, the front elevation of the auditorium will be known as the East Elevation.

Procedure

Our field investigation included the following:

- Visual surveys of interior and exterior building components
- Infrared thermography
- Destructive test cuts (DT's) to interior and exterior building components
- Water spray tests (ST's) to exterior building components

Photo 1: Front (East) Elevation of subject structure

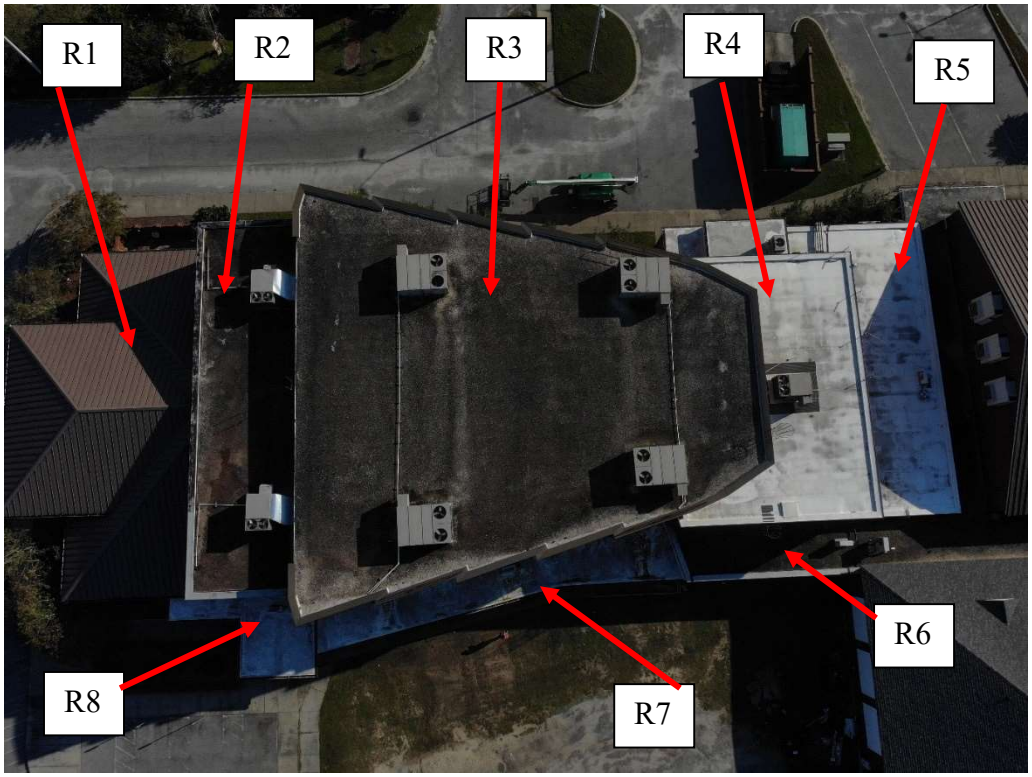


Photo 2: Aerial view of subject structure with each roof area labeled

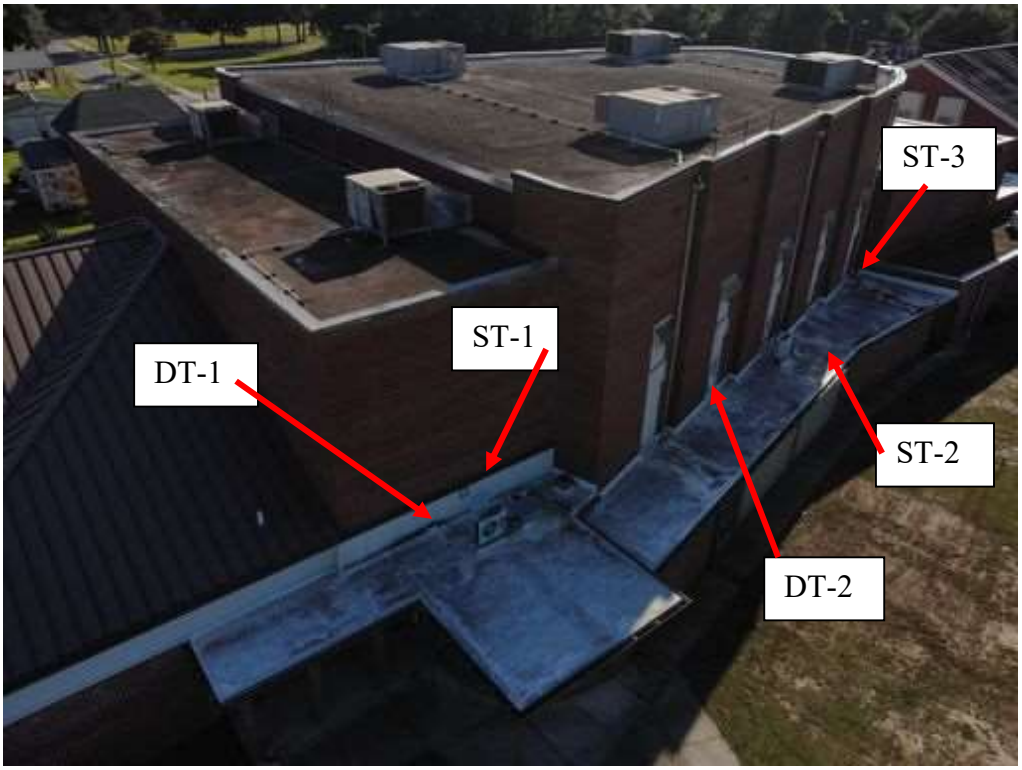
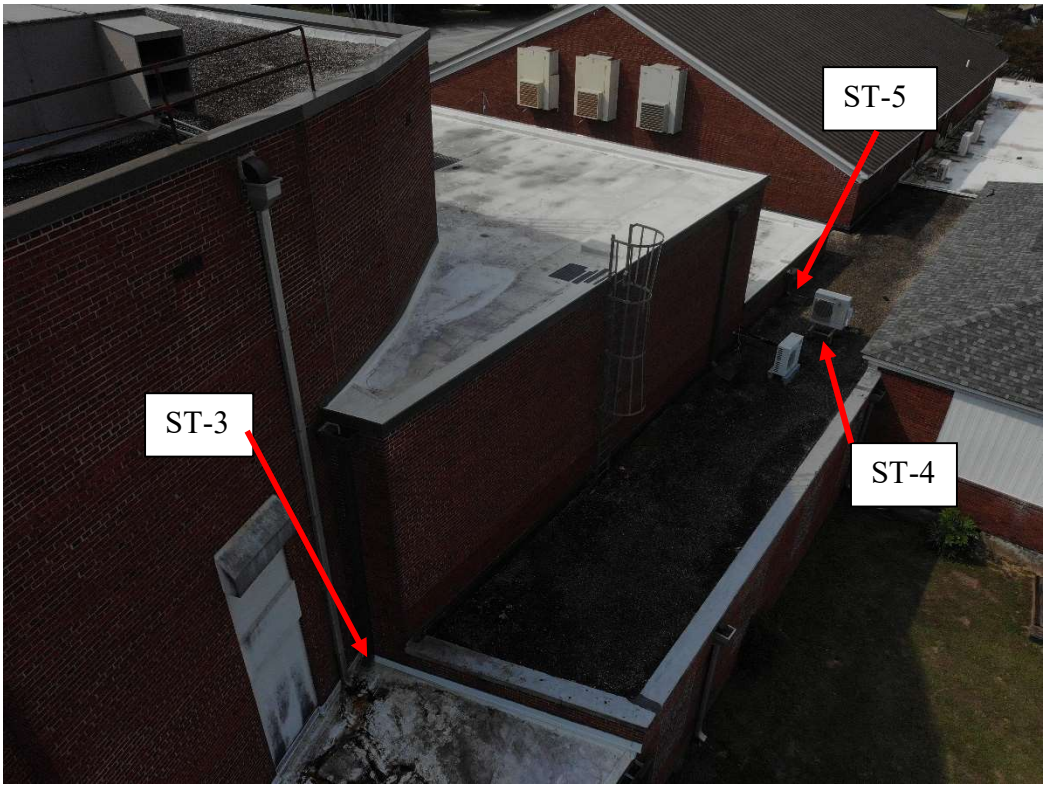


Photo 3: DT & ST locations at R8 & R7



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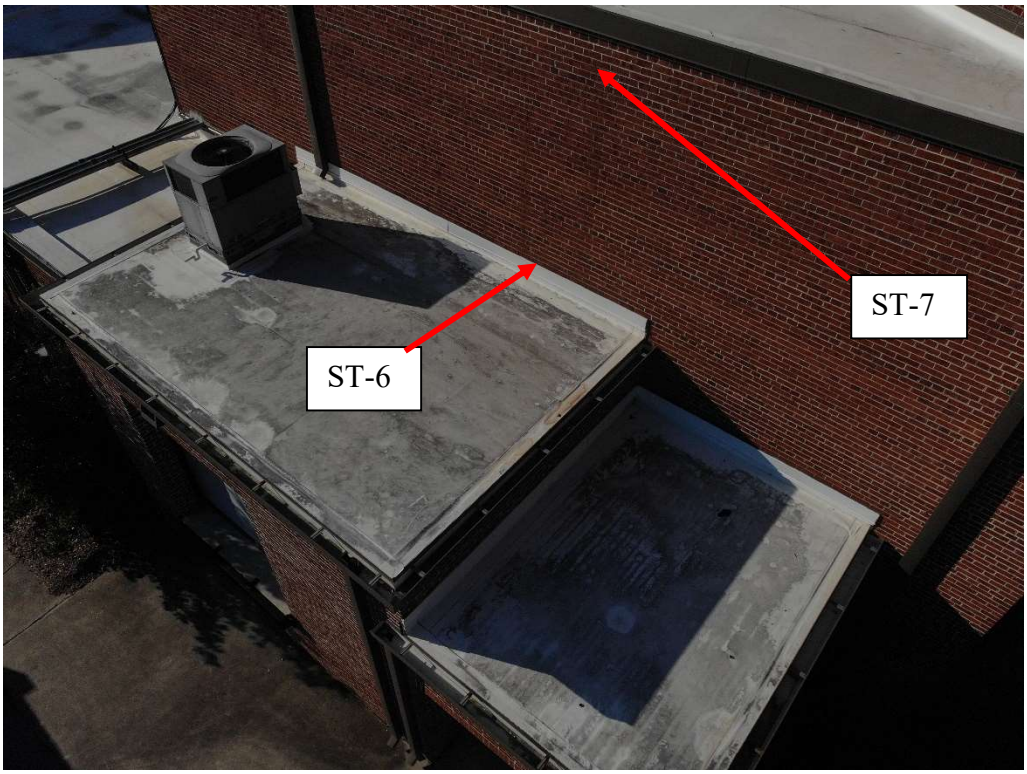


Photo 5: DT & ST locations at R5

Photo 6: DT & ST locations at R3

Photo 7: DT & ST locations at R2

Infrared Thermography

A FLIR T420 thermal imaging camera was used during our testing procedures to help identify areas for spray testing and/or DT's. Thermal tracing indicative of air infiltration was most significant at the exterior walls at the south elevation. Air appeared to infiltrate the space most significantly from the attic.

A DJI Mavic 2 Enterprise Dual unmanned aircraft system (drone) equipped with an infrared camera was flown around the exterior of the auditorium at sundown. IR photos taken during this drone survey revealed thermal tracing indicative of water within the roof system over the main auditorium. The water was most severe around the rooftop air handling units. During our visual inspections, numerous deficiencies were found with the condensate disposal systems for air handlers RTHP-4 and RTHP-6. Additionally, leakage indicative of unit malfunction was noted at the air handler labeled RTHP-5.

Photos 8-9: IR Photos at interior of south-facing exterior wall

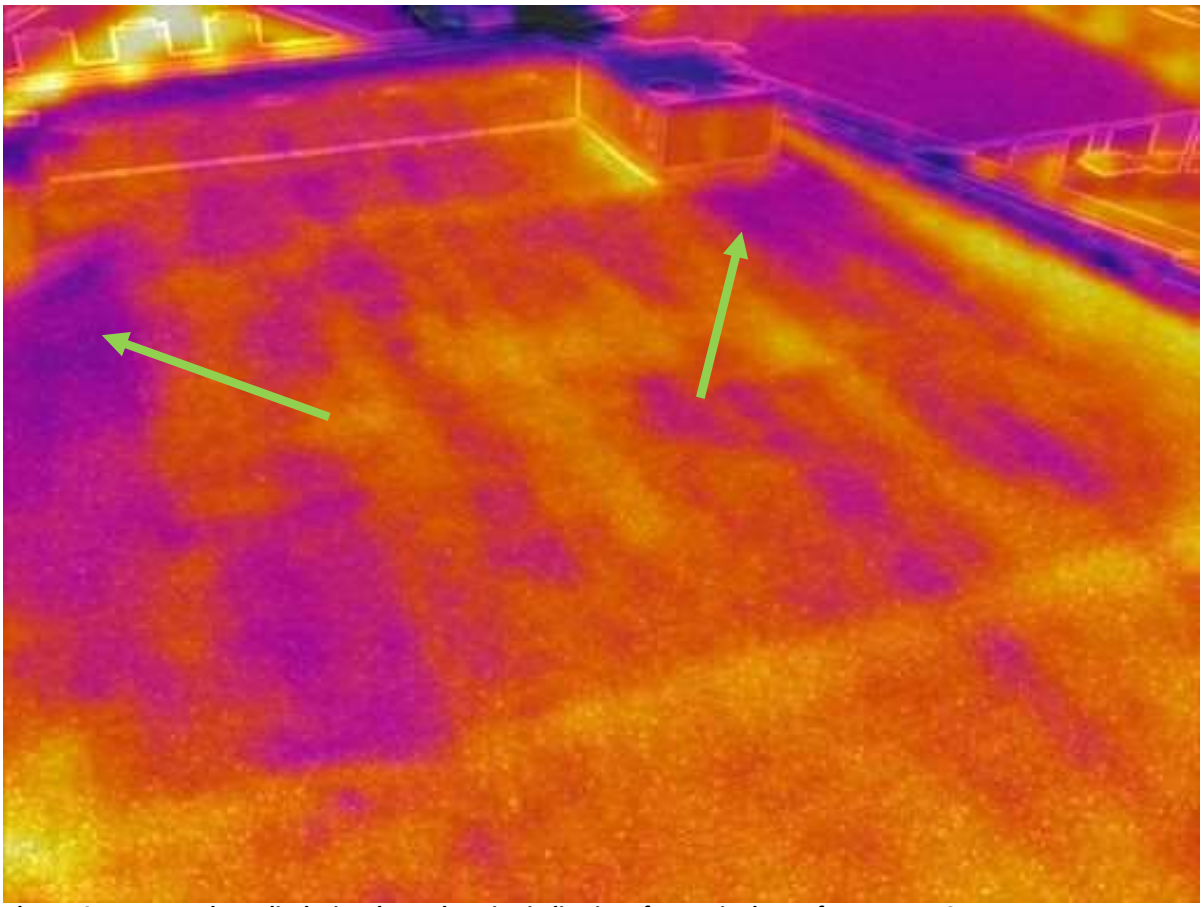


Photo 10: Drone IR photo displaying thermal tracing indicative of water in the roof system at R3

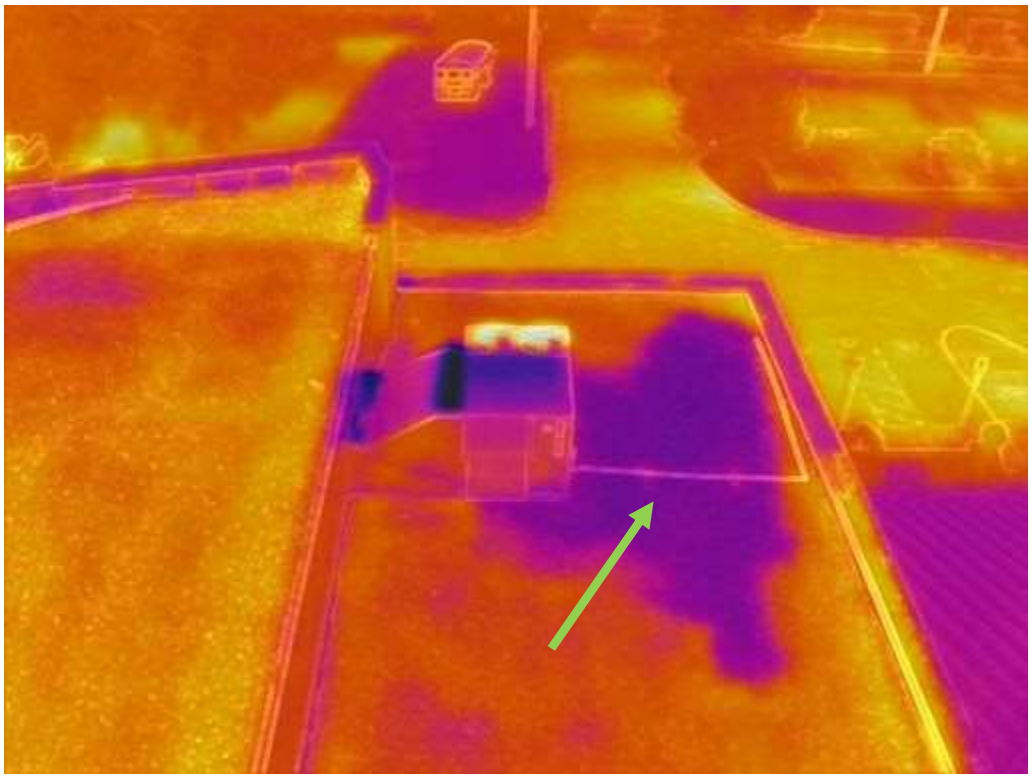


Photo 11: Typical view of thermal tracing indicative of standing water around air handling unit (RHTP-5 at R2)

Destructive Test Cuts

Nearly all DT's were executed into drywall to allow clearance to observe results from spray testing. Three exploratory test cuts to were performed outside of these spray testing procedures:

1. Drywall was removed at an interior bump-out in the hall of fame area (DT-3). It was found that behind this drywall was an unsupported brick wall spanning over the interior walkway between the hall of fame and the gallery. It was noted that steel lintels were installed but provided no support at the auditorium-side of the hallway. (Ref Photograph 6)

2. One section (roughly a 12"x12" square) of exterior cladding (DT-1) was removed from just below the stucco-to-brick transition at the wall accessible by R8. It was found that the exterior cladding was cement board with a stucco-like textured top coat. The assembly behind the stucco included exterior grade gypsum sheathing (no weather barrier) supported by steel studs with fiberglass bath insulation. Despite this being a barrier wall assembly, no damage was found in the immediate area.
    a. This procedure was repeated at the enclosed window at the wall accessible by R7 (DT-2) and similar results were achieved.

Photo 13: View from below unsupported brick wall at DT-3

Photo 14: View of DT-2 at exterior cladding

Spray Testing

Eleven locations were spray tested using an AAMA 501.2 spray nozzle in general accordance to the procedures set forth by AAMA and ASTM standards. Photographs referenced from each test may be found through the Photo Log included at the end of this document.

ST-1: Water was directed towards the metal flashing located at the cement-to-brick transition proximate to R8. After roughly 5 minutes of testing, water was observed from within the ceiling assembly near the east-facing entrance to the Hall of Fame.

Photos 15-16: Exterior and interior views of ST-1

ST-2: Water was directed towards a section of TPO on R7 that appeared to have the letter “E” carved through the membrane. No water intrusion was observed.

Photo 17: Location of ST-2

ST-3: Water was sprayed towards the parapet wall that joined R6 and R7. After approximately 5 minutes of testing, water was observed entering the space through the unsupported brick wall in the hallway between the Hall of Fame and the auditorium.

Photos 18-19: Exterior and interior views of ST-3

ST-4: The floorline intersection of R5 and R6 was sprayed. Water was observed entering the space from above the ceiling tiles in the galley.

Photos 20-21: Exterior and interior views of ST-4

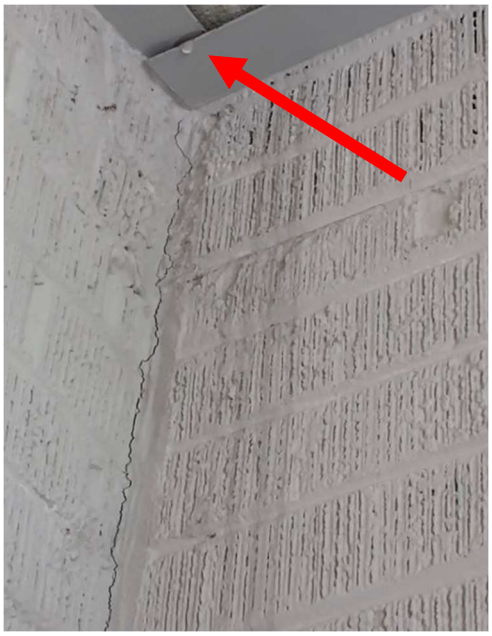
ST-5: Water was directed towards a mechanical penetration at R6. Water intrusion was observed within five minutes of testing.

Photos 22-23: Interior and exterior views of ST-5

ST-6: The white flashing at the intersection of the roof of the loading dock and brick was sprayed. Water was observed entering the space and entering through the roof of the loading dock.

Photos 24-25: Exterior and interior views of ST-6

ST-7: Testing was conducted at the mid-section of the wall structure above the location of ST-6. Water was observed entering the space through the ceiling assembly at the entrance doors at the south elevation.



Photos 26-27: Interior and exterior views of ST-7

ST-8: Water was directed below the parapet at the metal railing at the south elevation. Water was found entering through the brick and into the attic through the attic vent openings. This water was accumulating and dripping down the wall into electrical components and eventually into the conditioned space through the openings for the electrical components.

Photos 28-29: Interior and exterior views of ST-8

ST-9: Water was sprayed from the head of the enclosed window to the field of wall just above the window. After approximately 30 minutes, water leaked through the wall assembly and was visible on the interior of the wall.

Photos 30-31: Interior and exterior views of ST-9

ST-10: Testing was conducted at the south elevation of R2. The brick wythe was tested with the stone cap of the parapet isolated. Water was observed entering the envelope directly through imperfections in the brick masonry.

Photos 32-33: Interior and exterior views of ST-10

ST-11: Testing was conducted at the wall-to-parapet intersection proximate to the location used for ST-11. The stone cap of the parapet was covered with plastic sheeting. Water was directed at the brick wall above the parapet. After 10 minutes, water was observed entering the envelope directly through imperfections in the brick masonry.

Photos 34-35: Interior and exterior views of ST-11

This concludes the results of our testing procedures. This report was prepared based on information available at the time. Procedures given in this document were based upon the information referenced, our education, training, and experience with similar issues. We reserve the right to make revisions should additional information become available that affects our recommendations.

Please let us know if you have any questions.

Best regards,

Elkin Engineering & Diagnostics, LLC

J. Lawrence Elkin, PE

Larry Marks

C. Reid Phillips

Weldon Auditorium
Manning, SC

2021-2022 Assessment

Prepared for:
Ted Felder
Deputy Administrator
Clarendon County
Manning, SC 29102

Prepared By:
Meadors, Inc.
po box 21758
charleston, sc 29413

date: 02.18.2022

Project History and Previous Findings

The following is a summary of the project history at Weldon Auditorium in Manning, SC prior to the assessment during the week of September 16, 2021.

Building History

Weldon Auditorium was constructed in 1954 as the auditorium for the Manning High School. The auditorium was initially constructed as a separate structure to the west of the high school. Manning High School destroyed by fire in 1984. After the fire, the building continued to be used for productions. In 2008-2009, the Auditorium was renovated, and a new Grand Atrium Lobby and Hall of Fame were added to the building.

Project History

In 2013, Meadors, Inc. and Elkin Engineering conducted a field assessment of the Auditorium. The objective of the assessment was to determine the causes of moisture intrusion and to specify remedies for these conditions. The assessment report dated August 13, 2013 identified multiple locations of water intrusion along the Art Hall, main roof, parapet walls, and HVAC penetrations. Steel lintels supporting the brick masonry above the infill windows were found to be actively corroding. An infrared roof survey completed by Meadors in 2015 identified areas of moisture intrusion in several different locations throughout the Weldon Auditorium roofs. In 2016, Meadors, Inc. completed an update to the original 2013 assessment and performed selective demotion of the exterior stucco and Art Walk roof flashing to evaluate the construction details from the 2008/2009 renovation. Meadors provided an additional assessment report dated April 7, 2016.

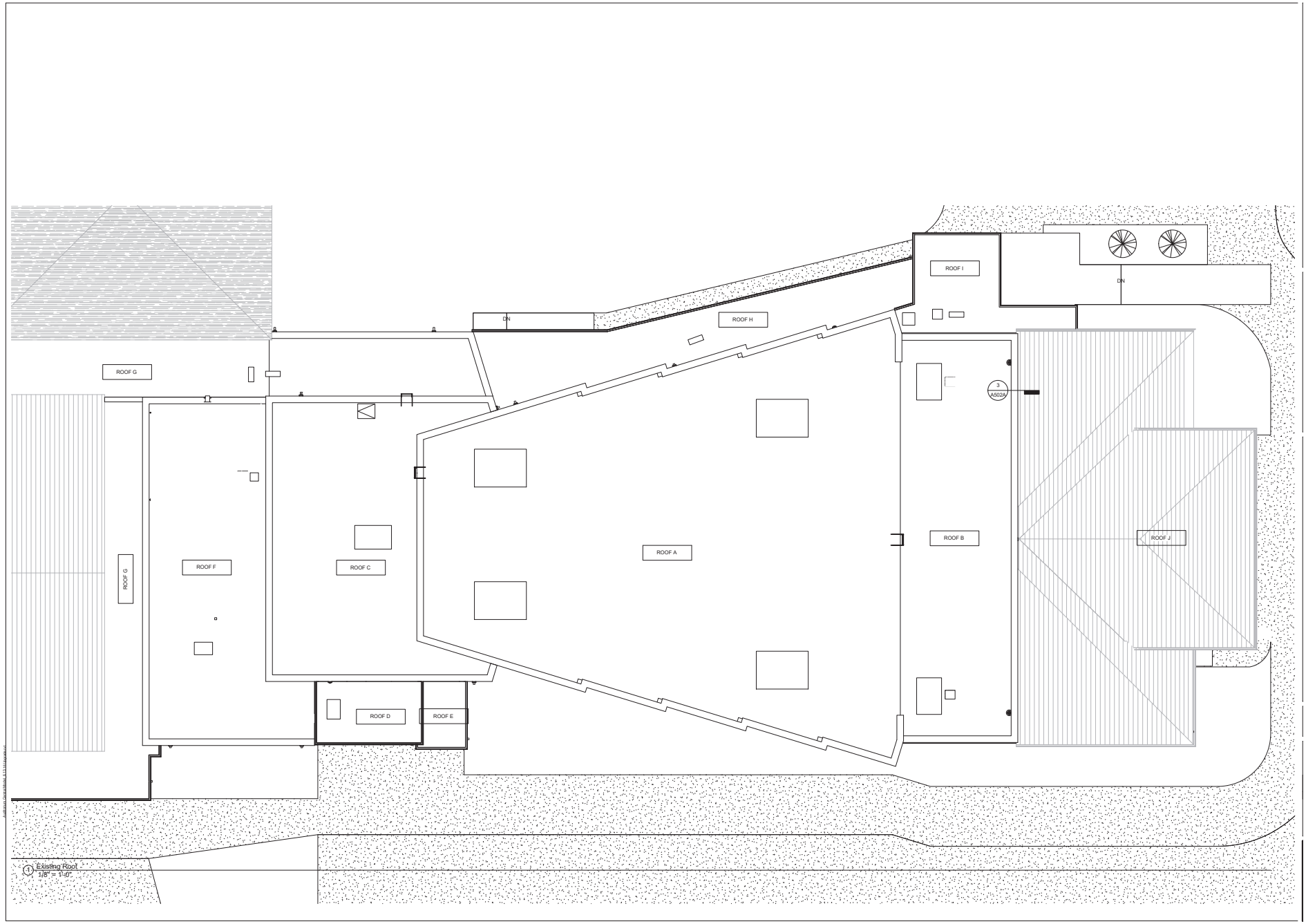
Meadors issued Bid Documents for limited roof replacement on May 9, 2018. The Bid Documents contain drawings, specifications, and the two assessments mentioned above. Meadors will continue to reference these Bid Documents and especially the drawing set in conjunction with this Executive Summary.

The Clarendon County engaged the services of Guy Roofing in 2019 to replace the roofs over the stage and dressing rooms (Roof C and F on sheet A001 in the drawing set). The main auditorium roof parapet coping stones were covered in metal cap flashing in the summer of 2020. However, Weldon retains the existing gravel built-up roofs over the main auditorium (Roof A), balcony (Roof B), and Art Walk and corridor (Roof G). The

roof over the Hall of Fame (Roof H & I) is a membrane roof applied around 2008-2010 as part of the most recent renovation work to convert the previously vacant former school auditorium into the Weldon Auditorium. Roofs D and E are membrane roofs over loading dock and south auditorium egress doors that were part of the 2008-2010 renovation project. The roof over the Social Services building has been more recently replaced with new Asphalt Shingles. The roof over the Breeden Garden Room (Roof K) is a newer membrane roof that exhibits severe ponding water issues.

The 2021 assessment was conducted in order to confirm the ongoing issues and to establish a baseline condition of the building. The assessment was conducted over the week of September 16, 2021. A detailed explanation of the described conditions and accompanying photographs can be found in the respective assessment sections. Where possible, a hands-on inspection was performed to determine the condition of the exterior and interior elements.

Roof Reference Drawing


ROOF I
DN
DN
ROOF H
ROOF G
3
A502A
ROOF F
ROOF G
ROOF C
ROOF A
ROOF B
ROOF J
ROOF D
ROOF E
1 Existing Roof
1/8" = 1'-0"

2021 Existing Conditions: Exterior

Figure 1: Weldon Auditorium: Overview of the East Front Facade.

Figure 2: Weldon Auditorium: View of Southeast Corner.

Figure 3: Weldon Auditorium: South Elevation.

Figure 4: Weldon Auditorium: South Auditorium Elevation.

Figure 5: Weldon Auditorium: South Elevation and Loading Dock.

Figure 6: Weldon Auditorium: Southwest Corner.

Figure 7: Weldon Auditorium: Overview of the Northeast Corner.

Figure 8: Weldon Auditorium: North Auditorium Elevation.

Figure 9: Weldon Auditorium: Northwest Corner.

2021 Existing Conditions: Interior

Figure 10: Weldon Auditorium: Overview of the Main Lobby.

Figure 11: Weldon Auditorium: Lobby looking North to the Art Walk.

Figure 12: Weldon Auditorium: Overview of the Front Lobby.

Figure 13: Weldon Auditorium: Overview of the Auditorium from the Balcony.

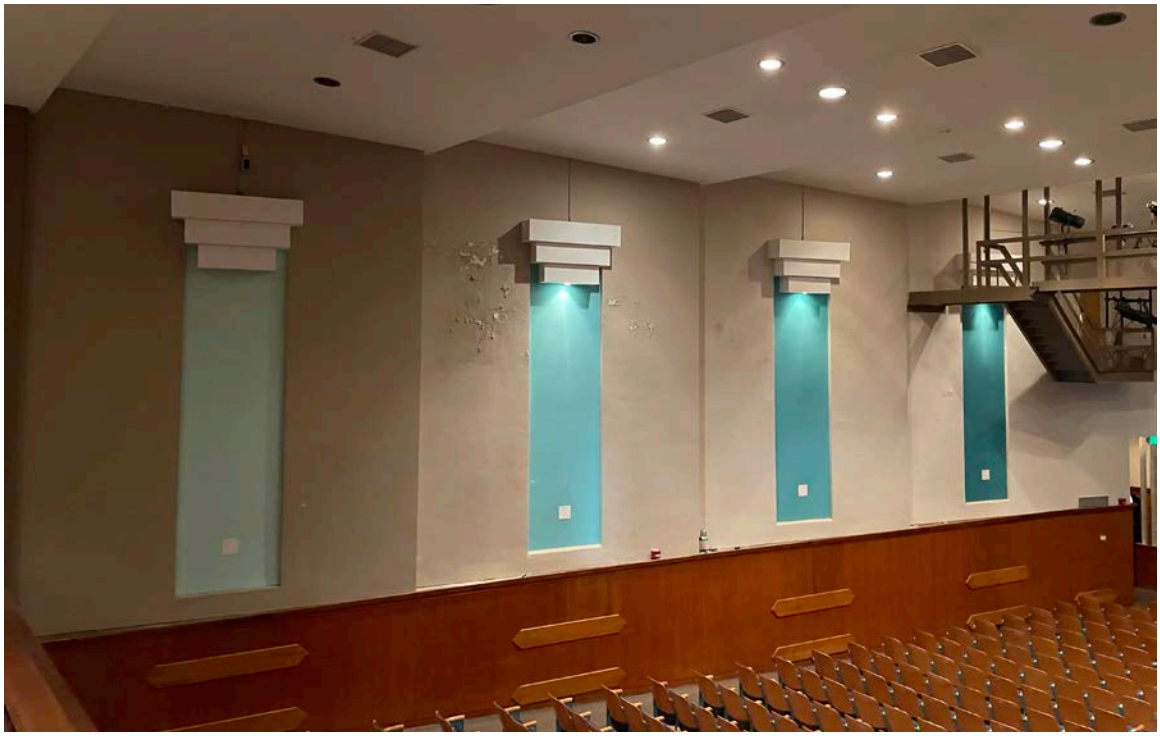


Figure 14: Weldon Auditorium: Auditorium Interior, Looking South.

Figure 15: Weldon Auditorium: Auditorium Interior, Looking North.

Figure 16: Weldon Auditorium: Art Walk Interior, Looking East.

Figure 17: Weldon Auditorium: Hall Of Fame Corridor Looking East.

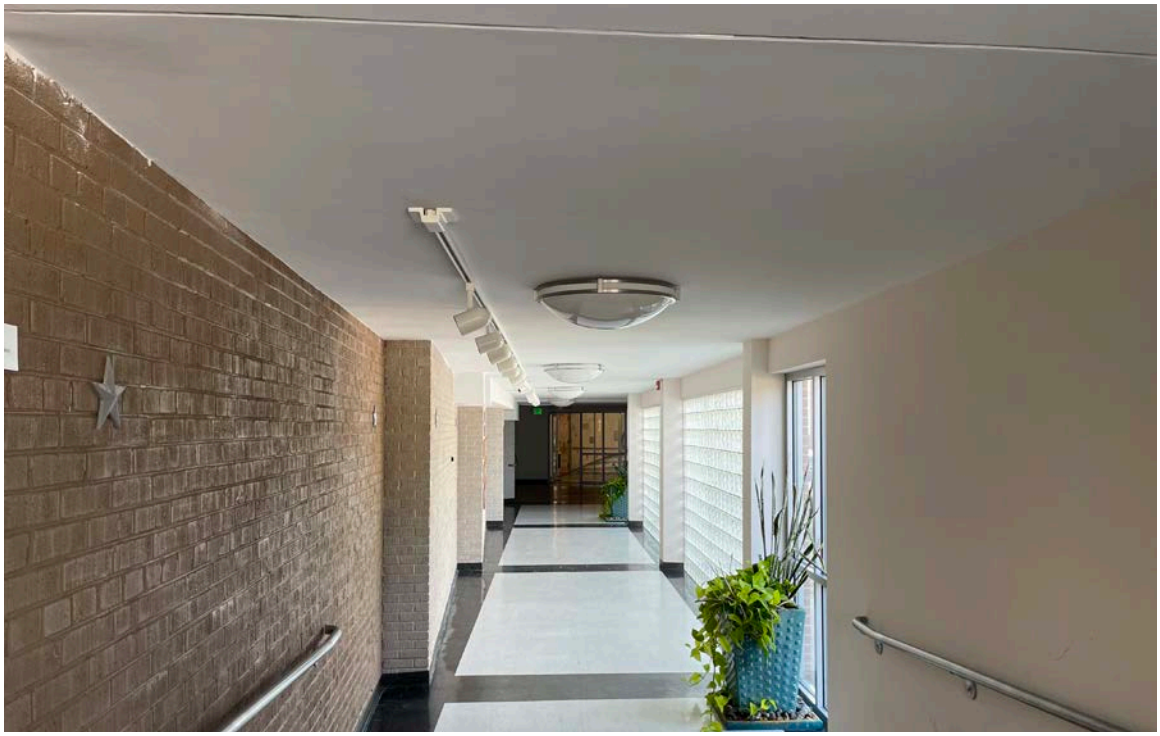


Figure 18: Weldon Auditorium: Hall of Fame Corridor Looking West.

Figure 19: Weldon Auditorium: View of Ceiling Damage in Corridor Looking Southwest.

2021 Findings: Elkin Engineering & Diagnostics Report

November 24, 2021

Jeremy Tate, AIA
Meadors, Inc.
2811 Azalea Drive
North Charleston, SC 29405

Re: Testing Observations & Results
Weldon Auditorium
7 Maple Street
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Elkin Project No. 1000.13004

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Weldon Auditorium
Elkin Project No. 1000.13004

Photo 1: Front (East) Elevation of subject structure

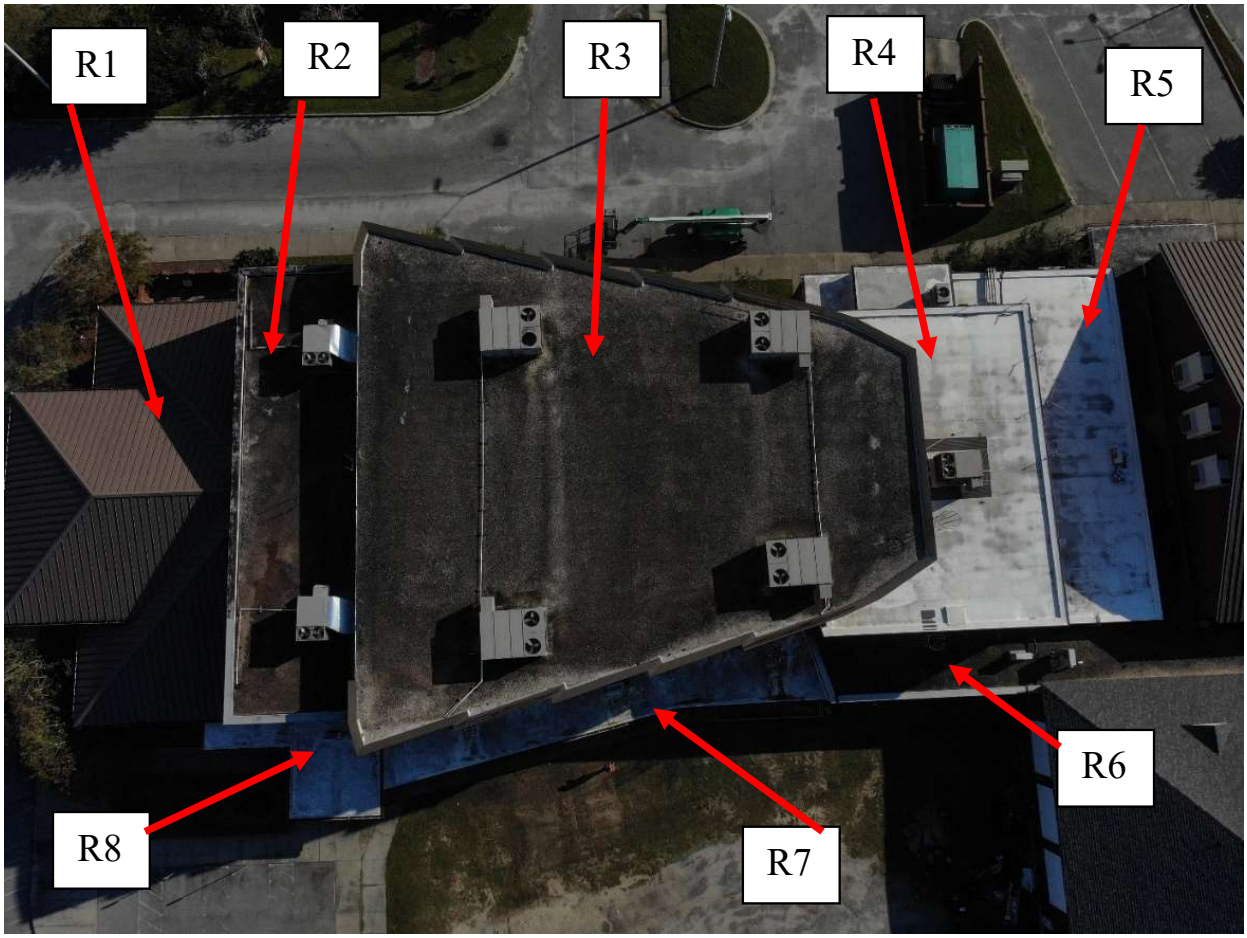
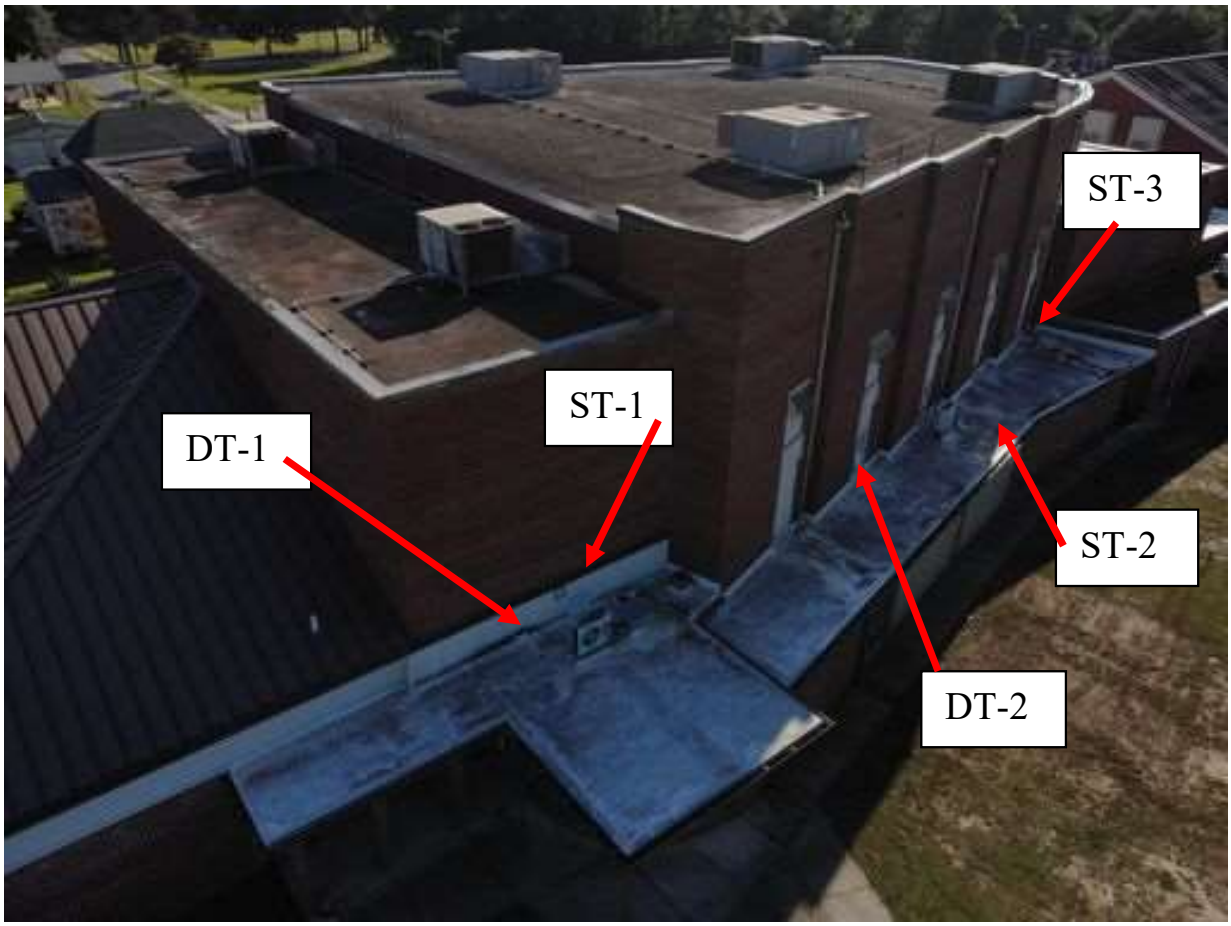


Photo 2: Aerial view of subject structure with each roof area labeled

Weldon Auditorium
Elkin Project No. 1000.13004



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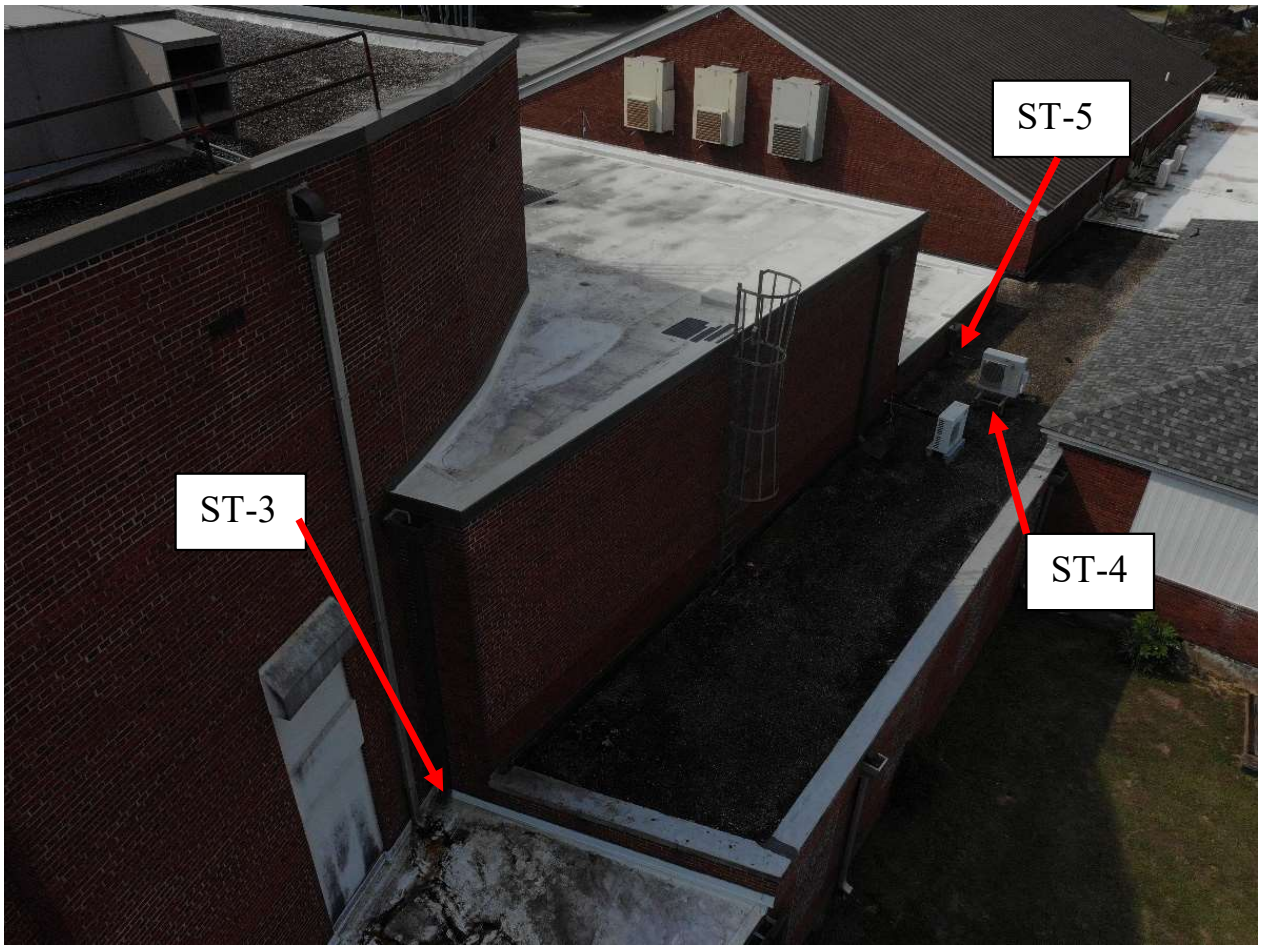

Photo 4: DT & ST locations at R7

Weldon Auditorium
Elkin Project No. 1000.13004

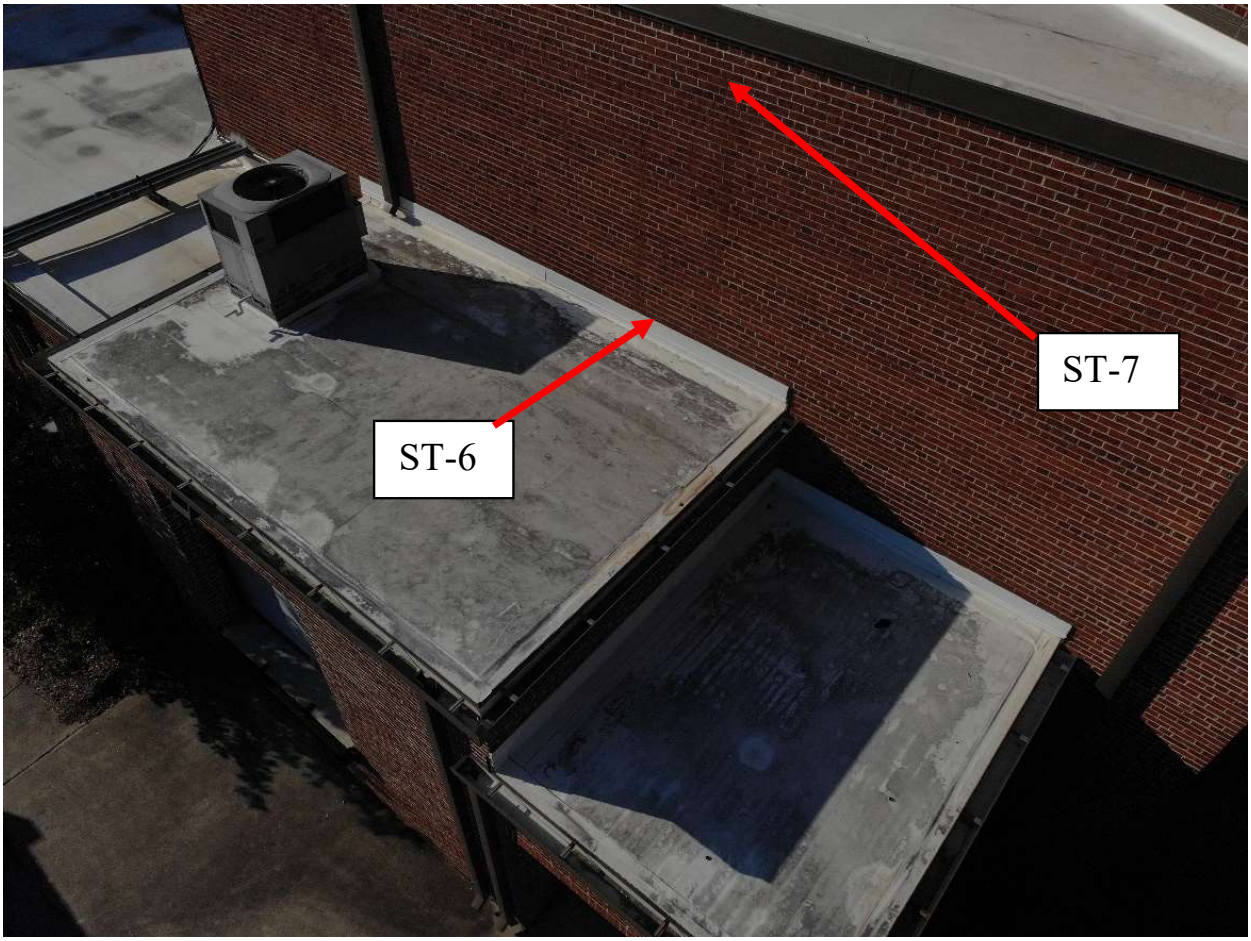

Photo 5: DT & ST locations at R5

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Weldon Auditorium
Elkin Project No. 1000.13004

Photo 7: DT & ST locations at R2

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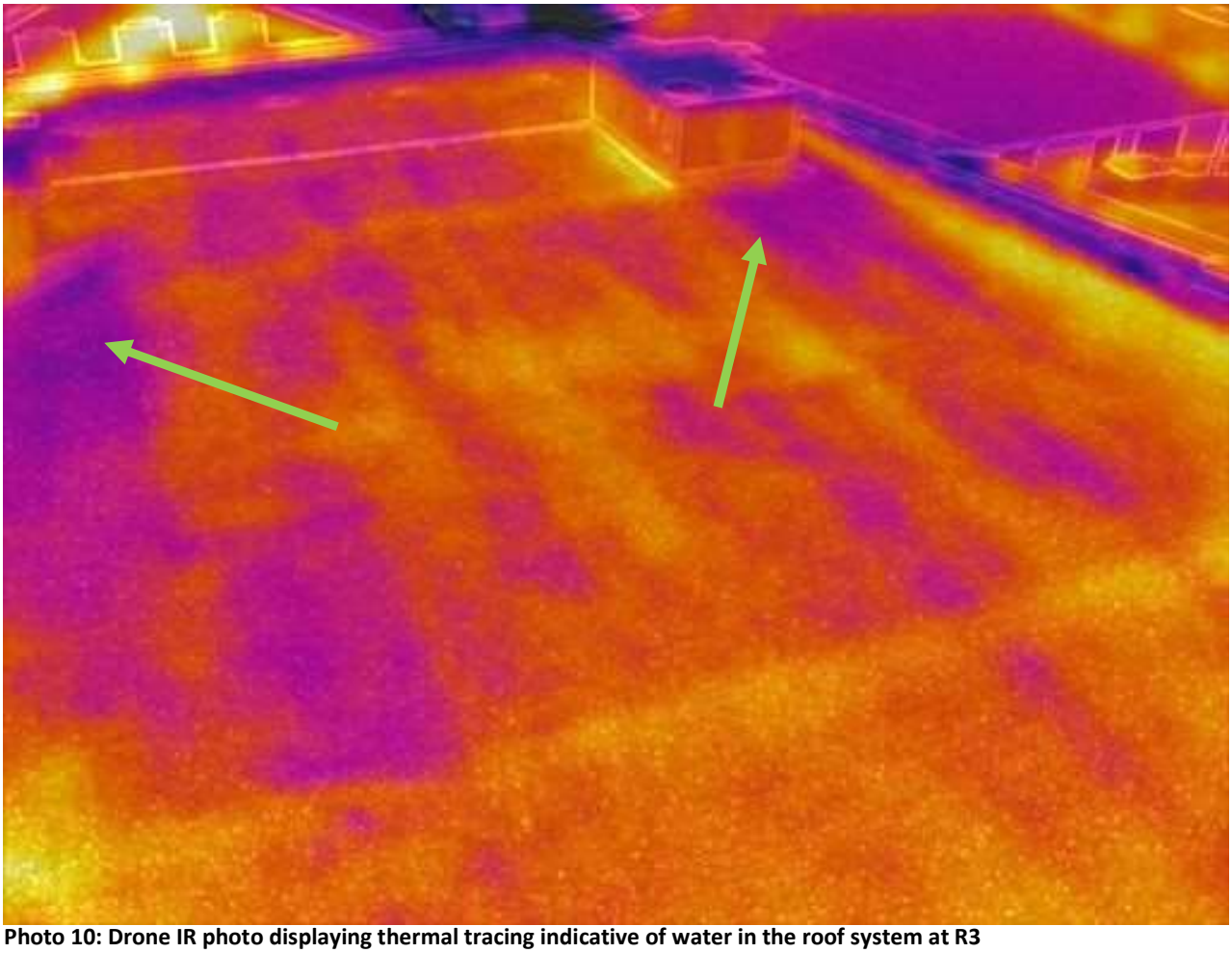
Photos 8-9: IR Photos at interior of south-facing exterior wall



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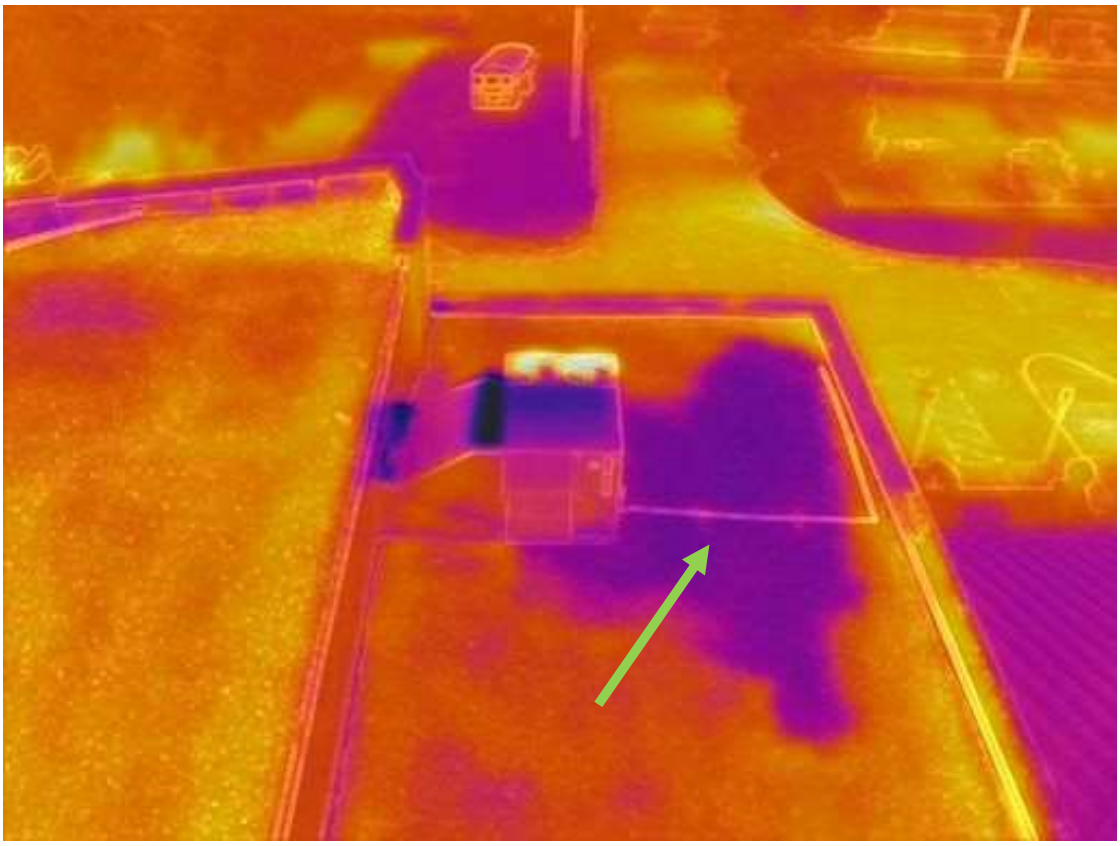

Photo 11: Typical view of thermal tracing indicative of standing water around air handling unit (RHTP-5 at R2)

Destructive Test Cuts

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    a. This procedure was repeated at the enclosed window at the wall accessible by R7 (DT-2) and similar results were achieved.

Weldon Auditorium
Elkin Project No. 1000.13004

Photo 13: View from below unsupported brick wall at DT-3

Photo 14: View of DT-2 at exterior cladding

Weldon Auditorium
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Spray Testing

Eleven locations were spray tested using an AAMA 501.2 spray nozzle in general accordance to the procedures set forth by AAMA and ASTM standards. Photographs referenced from each test may be found through the Photo Log included at the end of this document.

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ST-7: Testing was conducted at the mid-section of the wall structure above the location of ST-6. Water was observed entering the space through the ceiling assembly at the entrance doors at the south elevation.

Photos 26-27: Interior and exterior views of ST-7

ST-8: Water was directed below the parapet at the metal railing at the south elevation. Water was found entering through the brick and into the attic through the attic vent openings. This water was accumulating and dripping down the wall into electrical components and eventually into the conditioned space through the openings for the electrical components.

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Photos 32-33: Interior and exterior views of ST-10

Weldon Auditorium
Elkin Project No. 1000.13004

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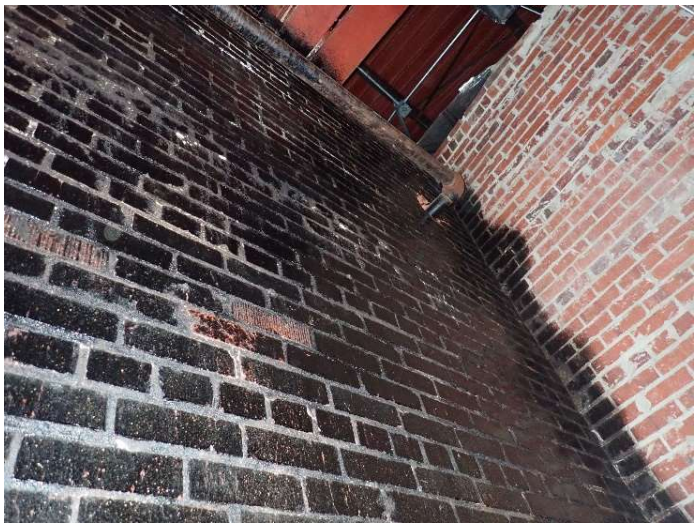

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Please let us know if you have any questions.

Best regards,

Elkin Engineering & Diagnostics, LLC

J. Lawrence Elkin, PE

Larry Marks

C. Reid Phillips

2021 Findings: Additional Assessment Images

Figure 20: Weldon Auditorium: Hall of fame ceiling damage.

Figure 21: Weldon Auditorium: Damage is present at the intersection of the original auditorium building and the Hall of Fame Addition.

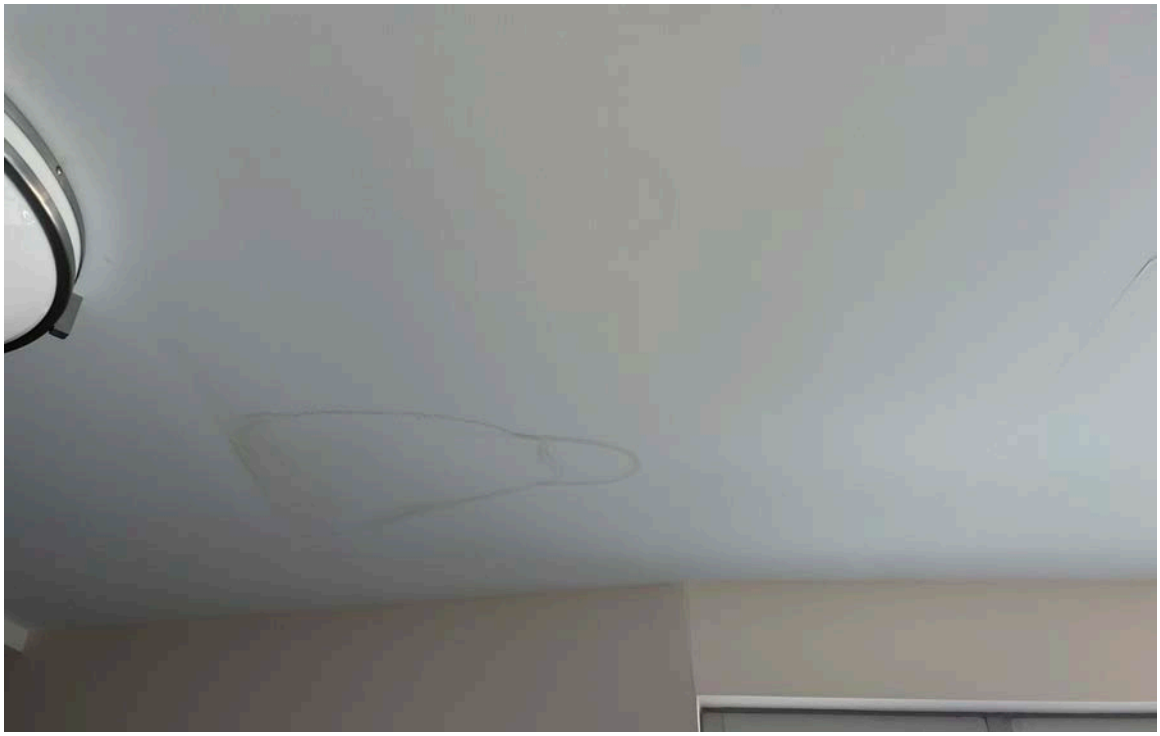

Figure 22: Weldon Auditorium: View of staining within ceiling.

Figure 23: Weldon Auditorium: Detail of drywall tape failure due to moisture intrusion.

Figure 24: Weldon Auditorium: Detail of corrosion within the decking above the drop tile ceiling.

Figure 25: Weldon Auditorium: Overview of the catwalk and ceiling above the stage. Plaster damage is evident along this wall.

Figure 26: Weldon Auditorium: Detail of ceiling above the catwalk. Note ceiling damage.

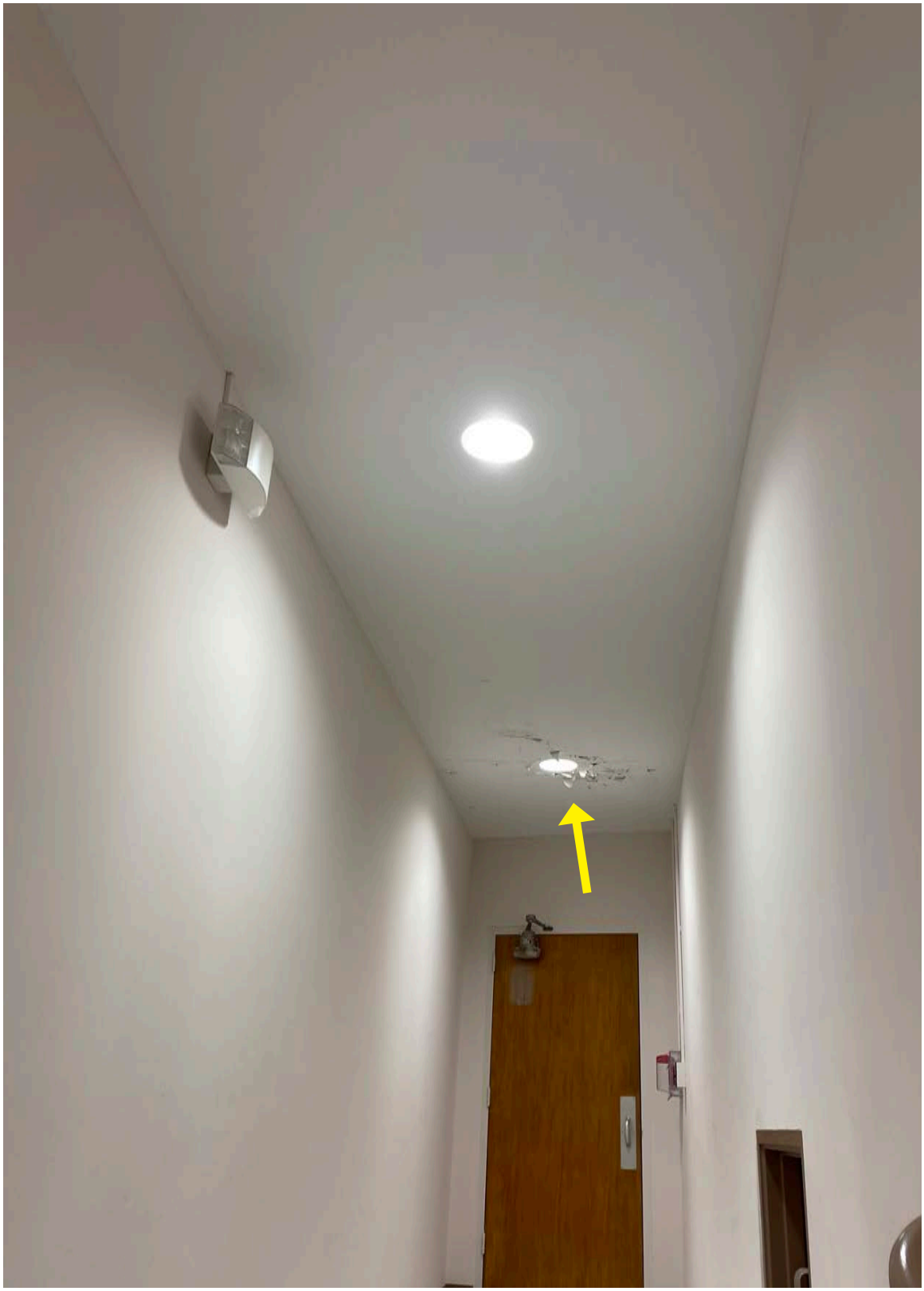

Figure 27: Weldon Auditorium: South stair to balcony. ceiling damage present at the balcony level.

Figure 28: Weldon Auditorium: View above balcony stair ceiling. The exterior masonry wall is at left and has been waterproofed with a black coating. White efflorescence is visible within the mortar joints indicating active water intrusion through the masonry and black coating.

Figure 29: Weldon Auditorium: Exterior view of water testing above the south balcony stair hall.

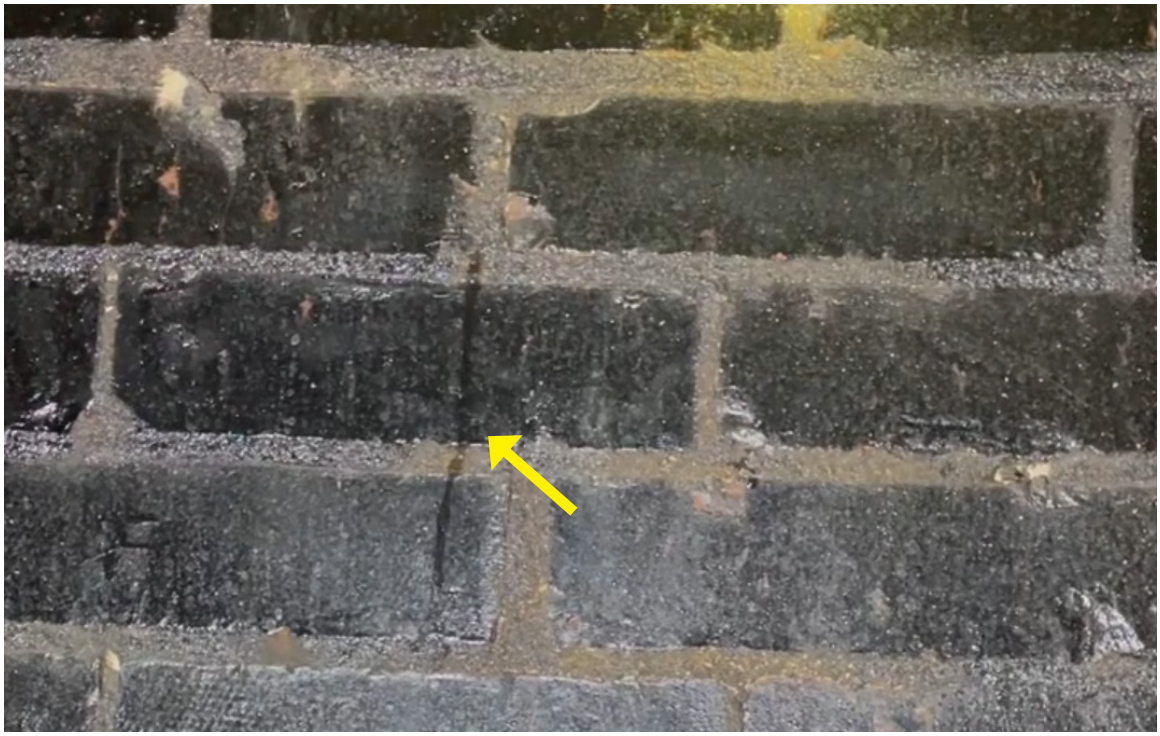

Figure 30: Weldon Auditorium: View of water actively migrating through the masonry above the balcony ceiling (arrow) during the dynamic water testing.

2021 Existing Conditions Exposed Unsupported Lintel

Figure 31: Weldon Auditorium: Detail of the ceiling within the vestibule between the lower and upper galley.

Figure 32: Weldon Auditorium: Detail of masonry following removal of the drywall. The existing steel lintel and masonry were found to be unsupported and were structurally unsafe.

Figure 33: Weldon Auditorium: Additional view of existing orange steel lintel and unsupported masonry.

Figure 34: Weldon Auditorium: View of temporary stabilization.

FINDINGS AND RECOMMENDATIONS

2021-2022 Findings

The following deficiencies were noted during the September 2021 Assessment.

- The exterior mortar on all elevations was observed to allow liquid water to enter the interior of the building. While the mortar is designed to be a sacrificial element in the masonry, mortar should prohibit liquid water from entering the building. Elkin Engineering noted that the masonry leaked at numerous locations during dynamic water testing. Approximately 60% of the mortar throughout the Auditorium was found to be deficient.
- Metal flashing at the cement to brick transition above the Art Walk & Hall of Fame roof was observed to leak during dynamic water testing.
- Infrared thermography confirmed the presence of wet insulation around the rooftop air handling units. Deficiencies were noted on the condensate drains at units RTHP-4 and RTHP-6 and a unit malfunction at RTHP-5.
- Gym window infill and exterior stucco cladding was found to contain exterior grade gypsum sheathing with steel studs and fiberglass insulation. No weather barrier was found at this location. This is considered an inappropriate detail and should be replaced.
- Humid unconditioned air was observed to enter attic space above the auditorium via the open vents. Evidence of active condensation was observed during the assessment.
- During selective demolition of the art walk ceiling, an unsupported brick lintel was found within in Art Walk space at the transition between the 1954 building and the 2008/2009 addition. The unsupported lintel was temporarily stabilized at the end of the assessment field work.
- Dynamic Water testing identified water intrusion at the following locations:
    - Top of enclosed windows
    - Art Walk roof flashing to brick wall
    - Art Walk roof parapet wall flashing
    - Mechanical penetrations on Art Walk roof
    - Loading Dock Roof addition roof
    - Main Roof Parapet wall (water entered attic)
    - Brick wall at south balcony interior stair
    - The wall to parapet intersection above south balcony interior stair

Recommendations

The following recommendations have been adapted from the Executive Summary and Scope of Work memo produced by Meadors dated March 1, 2021. The on-site assessment found that the existing roof deficiencies were still active and moisture pathways through the brick masonry were more extensive than previously thought. The following recommendations need to be addressed as part of a comprehensive repair project. It is imperative to the health of the building and the success of the Weldon Auditorium that each of these areas are properly addressed in an upcoming repair project.

1. Roof A – Main Auditorium Roof: The existing gravel built-up roof system shall be completely removed down to metal pan decking. A new PVC membrane roof shall be installed consisting of appropriate layers of rigid insulation, cover board, air barrier, membrane, and all terminations and associated flashings to create watertight and weathertight system. As part of this work four HVAC roof mounted units will need to be lifted and reset during the roof work. New roof system shall flash into existing "new" metal coping cap on perimeter parapet walls.

2. Roof B – Balcony Roof: The existing gravel built-up roof system shall be completely removed down to metal pan decking. A new PVC membrane roof system shall be installed consisting of appropriate layers of rigid insulation, cover board, air barrier, membrane, and all terminations and associated flashings to create a watertight and weathertight system. As part of this work two HVAC roof mounted units will need to be lifted and reset during the work. New metal parapet wall coping flashing to be installed. New metal wall panels to be installed at the west edge of roof where roof transitions up to Roof A Main Auditorium Roof (This wall is currently penetrated with electrical and HVAC and is a current source of water infiltration to the finished spaces below.

3. Main Auditorium Attic and Balcony Attic: The current attic vents are still in use and allowing non climate-controlled air to enter the attic where it mixes with conditioned air from the auditorium below. This causes a dew point that condenses and allows moisture to deteriorate the interior finishes. All attic vents to be sealed off and rendered inactive. Dehumidification systems to be sized and installed in attics to "condition" the attic to prevent condensation.

4. Main Auditorium Infilled Windows: The lack of weather barrier in the infilled windows in combination with rusted and failing steel lintels above the openings is a source of water migration and infiltration into the finished spaces behind. All ten (10) openings shall have their steel lintels replaced with stainless steel or Hot-Dipped Galvanized (HDG) lintels. The associated brick work shall be repaired. Note: there are two lintels per opening (back-to-back); one to hold the exterior veneer and the second pointing interior to hold the inner wythes. Lintels are spot welded together. All infill cement board to be removed down to sheathing. An appropriate liquid applied Weather Resistive Barrier (WRB) to be installed

and flashed properly onto and within brick veneer. Closed spray foam should be installed within the cavity to insulate the openings. New EIFS to be installed over proper weep channels and tied into base of wall weeps at existing windowsills or at through wall flashing above Roof H on the north side.

5. Main Auditorium Masonry Walls: The existing masonry walls have localized areas mortar loss throughout the building. As shown during the dynamic water testing, the existing mortar provides a direct pathway for liquid water to enter the masonry. Mortar shall be repointed (contractor to plan for 60 percent of wall surface area). Due to the porous nature of the existing mortar, a sealant is not recommended. The repointing shall not alter the appearance of the masonry but shall act to repel and slow the absorption of water. Of significant concern is the solar drive of water on the south façade caused by high amounts of rainwater on that exposure and then the sun warming the surface to drive the vapor inward. The repointing selected should be vapor permeable to allow for proper drying of the wall assembly to both the interior and exterior.

6. Main Auditorium and Balcony downspouts on north wall: The downspouts on the north wall form the upper main auditorium, stage, and balcony roofs dump significant amounts of water on the lower art walk and hall of fame roofs (Roofs G, H, and I). These downspouts should be piped over the lower roofs and into larger collection boxes/leader heads to allow this discharged water to bypass the roofs below. This will prolong the life of these lower roofs.

7. Roof H and I over Hall of Fame and north entry: The membrane roof covering over Roof H and I are two of the newest roofs dating from the 2008-2010 renovation project. However, due to their north exposure, lack of slope, and discharge from upper roofs A and B, these membranes are experiencing significant aging and penetration/failure issues. Meadors recommends the complete removal of the roof covering and associated cover board. Any damaged insulation shall be replaced. It is advisable that new tapered insulation is installed to increase the slope of the roof to encourage water runoff and prevent ponding. This will require the counter flashings along the masonry wall and EIFS to be raised. It is imperative that this work is performed in conjunction with scope item 4 above. With the implementation of scope item 6 above, the new roof will have more longevity than currently exists. The existing roof is littered with gravel from the upper gravel built-up roof. This gravel travels down the downspouts at a high velocity and deteriorates the existing membrane roof covering.

8. Roof G over Art Walk and back corridor: The existing gravel built-up roof system shall be completely removed down to metal pan decking. A new PVC membrane roof system shall be installed consisting of appropriate layers of rigid insulation with proper tapered insulation to slope water off roof, cover board, air barrier, membrane, and all terminations and associated flashings to create a watertight and weathertight system. Special attention should be directed to the flashing at the Art Walk roof parapet wall and the roof flashing to Auditorium wall.

As part of this work one (1) HVAC roof mounted units will need to be properly incorporated into this work. New metal parapet wall coping flashing to be installed.

9. Social Services Building: To provide better long-term outlook for Roof G, a gutter and downspout shall be installed on the south and portions of the east and west edges of the Social Services Building. The gutter is to divert runoff water away from being discharged on the Art Walk (Roof G). Downspouts should be placed along the east and west sides of the building so that they travel vertically down to grade avoiding Roof G.

10. Gymnasium and Breeden Garden Room: To prolong the roof over the Breeden Garden Room (Roof K), it is advisable to install a gutter on the north roof edge of the gymnasium building. Currently half the roof of the gymnasium dumps water onto Roofs K and G which adds significant water to these low and improper sloped roofs. Roof K is a membrane roof that was installed in 2012/2013 and has significant ponding water along the gymnasium intersection and intersection to Roof G. This has led to ongoing roof leaks. A gutter on the gymnasium with downspouts installed to carry the water over and off Roof K and avoid Roof G will assist in the current issues. Cvili engineering may be necessary to ensure the downspout runoff drains away from the building without affecting the adjacent buildings.

Roof K was installed with very little slope and in many cases, a negative slope that does not shed the water off. At a minimum these low spots should be opened, and tapered insulation added to shed the water. However, due to the minimal slope, this may push ponding water around and the best solution is to replace the entire roof covering and add tapered insulation across entire surface. This will raise the roof at the gymnasium, Social Services Building, and other locations and will need proper coordination.

11. Interior Repairs: Once all exterior water intrusion issues are dealt with as outlined above, the County could proceed with interior repairs. Interior repairs involve the following scope of work:

a. Repair auditorium plaster walls and repaint

b. Repair auditorium plaster ceilings and repaint. Note the existing plaster ceilings are structurally supported off steel runners and channels and suspended from the roof framing. During the 2010 renovation project, many of these structural runners were inappropriately cut to install recessed lighting and HVAC supply/return grilles. The cutting of these supports leads to cracking of the plaster ceiling and compromises the integrity of the ceiling. The contractor shall make repairs as necessary to correct these issues. Interior scaffolding will be necessary to repair the plaster walls and ceiling following repointing and roof repair.

c. Repair and repaint plaster and gypsum in the stair leading to the balcony

d. Repair and repaint gypsum in the Hall of Fame

e. Replace minimal floor tile at north entry lobby of the Hall of Fame

f. Replace ceiling tile in the Art Walk and back (west) corridor adjacent to gymnasium

12. Unsupported Interior Lintel: During selective demolition of the art walk ceiling, an unsupported brick lintel was found within in Art Walk at the transition between the 1954 building and the 2008/2009 addition. The unsupported lintel should be adequately supported. The stabilization should be designed by a licensed structural engineer.

13.. Miscellaneous: There are minor parts of the project that will be complied and included in the bid set. One large item is the requirement for scaffolding within the auditorium to provide access to repair plaster ceiling. Scaffolding will also be required for the exterior repointing mentioned above.

Proposed Costs

This section outlines the probable construction costs associated with repairing Weldon Auditorium in accordance with the previous recommendations. When preparing the cost analysis submittal, Meadors reviews current market conditions. Annual inflation is a key driver of construction costs. Increases in global demand for construction products, cost of raw materials, and the unavailability of scaled labor make forecasting the total cost of construction challenging. Additional project-specific factors to consider (when applicable) are difficult conditions, phasing, Liquidated Damages, limited or set-aside contracting requirements, etc. These multiple factors should be considered whenever the project is delayed and/or market conditions change significantly.

Meadors, Inc. cannot guarantee that proposals, bids, or actual construction costs will be within a certain range of the probable cost estimate developed for this project. The probable cost estimate provided is intended for planning purposes.

In response to the dynamic construction and planning costs, it is anticipated that the total repair costs for Weldon Auditorium will be in a range between $1,250,000.00 to $1,450,000.00. The range includes all major items including exterior and interior scaffolding, exterior repointing, all recommended roofing and drainage repairs, and restoration of the interior plaster.

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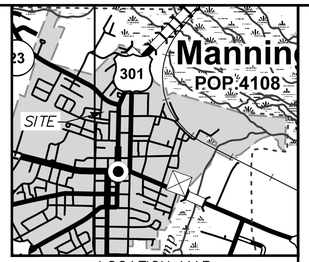
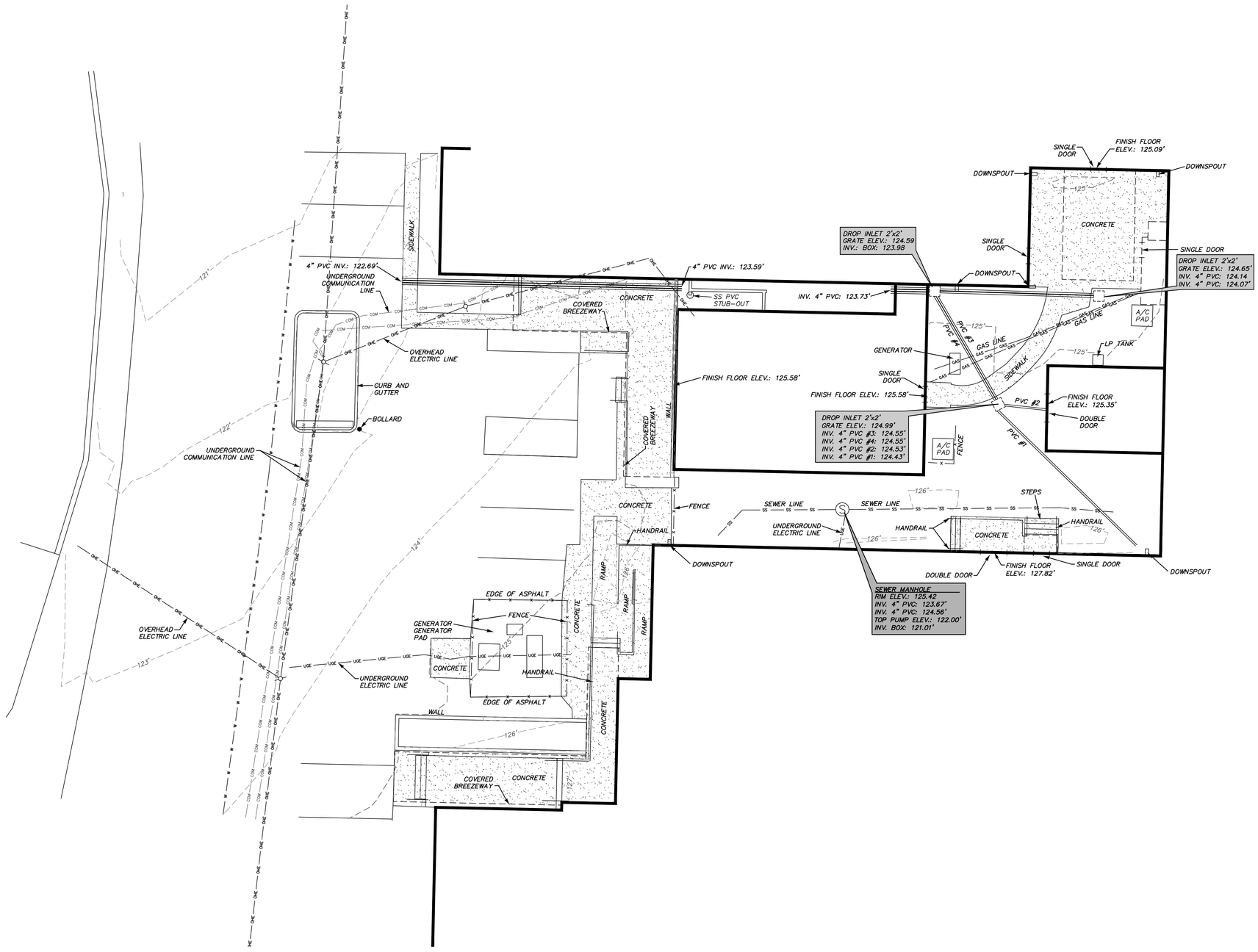
SOUTH CAROLINA
STATE PLANE NORTH
BY GNSS VRS
SCVRS NAD'83 (2011)



LOCATION MAP
NOT TO SCALE



SURVEY NOTES

1. THIS PROPERTY IS LOCATED IN FLOOD ZONE "X" AS INDICATED ON FLOOD INSURANCE RATE MAP #45027C0254C DATED 8/19/2013.
2. NO WETLANDS WERE LOCATED DURING THE COURSE OF THIS SURVEY.
3. CONSIDERABLE EFFORT HAS BEEN MADE TO DETERMINE THE LOCATION OF UNDERGROUND UTILITIES. SOME LOCATIONS ARE ACTUAL FIELD MEASUREMENTS AND SOME ARE TAKEN FROM LOCATIONS MARKED IN THE FIELD BY GEL SOLUTIONS. THIS SURVEY DOES NOT WARRANT THAT UTILITIES ARE SHOWN ACCURATELY NOR THAT ALL UTILITIES ARE SHOWN. CONTACT SCB11 LOCATING SERVICE A MINIMUM OF THREE (3) WORKING DAYS BEFORE DIGGING.

CERTIFICATION NOTE

I HEREBY STATE TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION AND BELIEF THE SURVEY SHOWN HEREON WAS MADE IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARD OF PRACTICE MANUAL FOR THE PRACTICE OF LAND SURVEYING IN SOUTH CAROLINA, AND MEETS OR EXCEEDS THE REQUIREMENTS FOR A CLASS "A" SURVEY AS SPECIFIED THEREIN.

GARREN B. MULLINAX — S.C. REG. # 27456
342 Riverchase Way, Lexington, SC 29072 — (843) 769-7378

GRAPHIC SCALE
0 10' 20' 30' 40'
1" = 10'
CONTOUR INTERVAL = 1-FOOT (NAVD 88)

GEL Engineering LLC
a member of THE GEL GROUP INC
ENVIRONMENTAL • ENGINEERING • SURVEYING
342 Riverchase Way
Lexington, South Carolina, 29072
Telephone: 803.908.4724
www.gel.com
problem solved

WELDON AUDITORIUM COURTYARD SURVEY

MANNING, SOUTH CAROLINA

NORTH CAROLINA LICENSURE — GEL ENGINEERING, LLC No.C02549 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — GARREN B. MULLINAX — No.27456 — REGISTERED LAND SURVEYOR

DATE SURVEYED
JUNE 26, 2024

DRAWING FILENAME
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PROJECT NUMBER
MECO00224

SHEET NUMBER
1
OF 1

GEL Engineering LLC

Environmental | Engineering | Surveying

LIMITED, PRE-RENOVATION ASBESTOS AND LEAD-BASED PAINT ASSESSMENT

WELDON AUDITORIUM
7 MAPLE STREET
MANNING, SOUTH CAROLINA 29102

Submitted to:
Meadors Construction Company, Inc.
2811 Azalea Drive
Charleston, South Carolina 29405

Prepared by:
GEL Engineering, LLC
2040 Savage Road
Charleston, South Carolina 29407
Phone: 843-769-7378

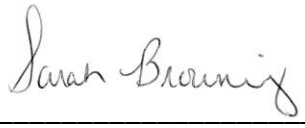
Asbestos Building Inspector: Sarah Browning, E.I.T., C.I.E.C.

Date Asbestos and Lead-Based Paint Assessment Performed: June 5, 2024
Date of Report: July 3, 2024

TABLE OF CONTENTS

SIGNATURE PAGE

This document titled, "Limited, Pre-Renovation Asbestos and Lead-Based Paint Assessment", has been prepared and reviewed by the undersigned at the request of and for the exclusive use of Meadors Construction Company, Inc. (Meadors), which is located at 2811 Azalea Drive in Charleston, South Carolina. It has been prepared in accordance with the United States Environmental Protection Agency (EPA), the United States Occupational Safety and Health Administration (OSHA), and the South Carolina Department of Health and Environmental Control (DHEC) asbestos and lead regulations.



Sarah Browning, E.I.T., C.I.E.C.
Project Manager and Asbestos Building Inspector

Ronald S. Sharpe, C.I.H., R.S.
EPA-Trained Lead inspector & Risk Assessor & Asbestos Building Inspector

EXECUTIVE SUMMARY

The following executive summary is a summation of the overall project and should not be used as a stand-alone document. This executive summary does not contain all of the information that is found in the full report. The report should be read in its entirety to obtain a more complete understanding of the information provided and to aid in any decisions made and/or actions taken based on this information.

GEL Engineering, LLC (GEL) conducted a limited, pre-renovation asbestos and Lead-Based Paint (LBP) assessment on June 5, 2024, of the Weldon Auditorium, which is located at 7 Maple Street in Manning, South Carolina. This report supplements our previously asbestos and LBP assessment of the window and wall materials as GEL report titled, "Pre-Renovation, Limited Asbestos and Lead Based Paint", dated February 21, 2013, which is attached in Appendix 5.2. This current 2024 asbestos and LBP assessment was limited solely to the areas of renovation as given, and as physically delineated to GEL by Mr. Jon Pennington, A.I.A., with Meadors on June 5, 2024.

No suspect Asbestos-Containing Materials (ACMs) sampled tested positive for the presence of asbestos in the 2024 and in the 2013 asbestos and LBP assessments.

Although reasonable effort was made to sample all suspect ACMs in the areas of renovation, there is a potential that some areas of suspect ACMs introduced into the areas of renovation by undocumented renovations, and/or repairs may not have been detected. If additional suspect ACMs are identified during repair, renovation, demolition, and/or any other disturbance activities, GEL should be notified, and all work should cease until the suspect ACM(s) is/are sampled by a licensed asbestos inspector and laboratory analysis results have been reviewed.

In addition to the limited, pre-renovation asbestos assessment, GEL performed an LBP assessment of the areas of renovation in the Weldon Auditorium on June 5, 2024. The concentration of lead in the paint chips collected and analyzed during the LBP assessment of the areas assessed during both the 2013 assessment and the 2024 assessment were all below the EPA limit of 0.5% and the DHEC limit of 0.06%, both defining LBP with the exception of the following painted surfaces:

1. Beige Paint on plaster wall system in Auditorium (0.24%)
2. White/Green Paint on plaster ceiling system in Auditorium (0.071%)

Please note, OSHA Lead regulations (29 CFR 1910.1025 and/or 29 CFR 1926.62) will apply to any person subject to disturbing these paint coatings.

The concentration of lead in the white paint on the plaster wall systems is 0.020%, which is below the EPA and DHEC limits defining LBP but is above the laboratory analytical limit of detection. In addition to the two paint coatings listed above, any person subject to disturbing this paint must comply with the applicable OSHA lead standards.

LIMITED, PRE-RENOVATION ASBESTOS & LBP ASSESSMENT

WELDON AUDITORIUM
7 MAPLE STREET
MANNING, SOUTH CAROLINA 29102

1.0 Introduction

Meadors requested that GEL perform a limited, pre-renovation asbestos and LBP assessment of the Weldon Auditorium, which is located at 7 Maple Street in Manning, South Carolina. This report supplements our previous asbestos and LBP assessment of the window and wall materials as GEL's report titled, "Pre-Renovation, Limited Asbestos and Lead Based Paint" and dated February 21, 2013, which is attached in Appendix 5.2. This current 2024 assessment was limited solely to the areas of renovation as given and as physically delineated to GEL by Mr. Jon Pennington, A.I.A., with Meadors on June 5, 2024.

GEL's Ms. Sarah Browning, E.I.T., C.I.E.C., and a licensed asbestos inspector in the State of South Carolina, performed the limited, pre-renovation asbestos assessment on June 5, 2024. Her SCDHEC asbestos license and USEPA asbestos training certificate are included in Appendix 5.4.

The areas of renovation as given to GEL include the following:

1. Select renovations to wall, flooring, and ceiling areas throughout the auditorium in areas of water damage.

2. Specific areas of the roofing systems (identified as Roof Identification letters A, B, C, D, E, F, G, H, I, J, and K by Meadors) will be removed and replaced. Please see Appendix 5.2 for a diagram of roof identification letter locations.

The flooring systems in the areas of renovation are vinyl floor tiles and associated mastic, both installed over a poured concrete floor slab.

The wall and ceiling systems in the areas of renovation are either a drywall system comprised of a drywall layer and a joint compound layer, or a plaster system comprised of a skim coat layer and a base coat layer.

The roof systems that are scheduled for replacement are either a roofing materials, consisting of a single-ply white TPO (thermoplastic polyolefin) membrane layer and a foam insulation layer, a Built-Up Roof (BUR) system with bituminous and asphalt layers, or a metal-seamed roof. No caulking is present along the seams of the metal seamed roofs.

A gray caulking material is present along the metal flashing in various areas of the roof systems.

A gray coating material is located along the parapet walls and coping in various areas of the roof systems.

Please note that Roof identification "L" is not included in GEL's asbestos assessment per Meadors. This roof system is a slightly pitched roof with asphalt shingles. If this material is disturbed during the upcoming renovation activities, GEL should be notified, and all work should cease until the roof materials are sampled by a licensed asbestos inspector and laboratory analysis results have been reviewed.

2.0 Limited, Pre-Renovation Asbestos Assessment

2.1 Asbestos Investigative Procedures

The asbestos assessment was performed by observing and sampling suspect ACMs in the areas of renovation in the Weldon Auditorium.

Although reasonable effort was made to sample all suspect ACMs in the areas of renovation, there is a potential that some areas of suspect ACMs introduced into the areas of renovation have not been detected. If additional suspect ACMs are identified during repair, renovation, demolition, and/or any other disturbance activities, GEL should be notified, and all work should cease until the suspect ACM(s) is/are sampled by a licensed asbestos inspector and laboratory analysis results have been reviewed.

Representative samples were collected from the areas of renovation. These samples were recorded on a Chain-of-Custody record and submitted to Scientific Analytical Institute, Inc. (SAI) laboratory in Greensboro, North Carolina for analysis. SAI is accredited with the National Voluntary Laboratory Accreditation Program (NVLAP), which is administered by the National Institute of Standards and Technology (NIST).

The bulk samples of suspect material were analyzed utilizing Polarized Light Microscopic (PLM) coupled with dispersion staining or Transmission Electron Microscopic (TEM)

techniques. The EPA recognizes a material as ACM if an asbestos content of greater than one percent by weight (> 1%) is detected in a representative sample.

2.2 Homogeneous Area Summary

The suspect ACMs were grouped into homogeneous areas. A homogeneous area is an area that contains suspect ACM that is uniform in color, texture, and appears identical in every respect. Also, each sample was determined to be either friable or non-friable. A friable material is one that, when dry, can be crumbled, pulverized, or reduced to powder by the forces expected to act upon it in the course of renovation, demolition, repair, and/or other disturbance activities. Non-friable materials are not expected to be crumbled, pulverized, or reduced to powder by the forces expected during renovation or demolition. Additionally, non-friable materials are those materials in which fibers have been "locked in" by a bonding agent, coating, binder, or other material so that the asbestos is bound and will not readily release fibers during normal handling or use. However, non-friable materials may become friable if improperly used, handled, and/or become deteriorated or disturbed.

2.3 Asbestos, Pre-Renovation Assessment Results

No suspect asbestos-containing materials sampled tested positive for the presence of asbestos.

The location, description, and condition of the suspect ACMs sampled are included in Appendix 5.1, Table 1 for the PLM and TEM analyses. The Chain-of-Custody record and the Certificates of Analyses are included in Appendix 5.3.

2.4 Conclusions and Recommendations

If additional suspect ACM(s) are identified during future repair, renovation, demolition, and/or any other disturbance activities, GEL should be notified, and all work should cease until the materials are sampled by a licensed asbestos inspector and laboratory results reviewed.

As mentioned above, the roof system as Roof Identification Number "L" was not included in GEL's asbestos assessment. If this section of roof is disturbed during the upcoming renovation activities, GEL should be notified, and all work should cease until the roof materials are sampled by a licensed asbestos inspector and laboratory analysis results have been reviewed.

3.0

LBP Assessment

3.1 LBP Investigative Procedures

GEL also conducted an LBP assessment, which included the collection of representative paint chip samples from both interior and exterior painted building materials/components in the areas of renovation that may be disturbed during future repair, renovation, and/or demolition activities in the structure.

The field LBP assessment was conducted by Ms. Browning, under the direct supervision of Ronald S. Sharpe, C.I.H., R.S., who is an USEPA-training lead inspector and risk assessor. Mr. Sharpe's EPA lead training certificates are included in Appendix 5.5. Mr. Sharpe is also a SCDHEC licensed asbestos building inspector.

Samples of each type of paint (based on the homogeneous color, substrate, and building component) were collected and submitted to SAI for analysis for lead content. The samples of paint chips were analyzed utilizing Flame Atomic Absorption Spectrometry (Flame AAS) as described in Solid Waste (SW) 846 Methods 3050B/6010C/7420.

3.2 LBP Results

The concentration of lead in the paint chips collected and analyzed during the LBP assessment of the areas assessed during both the 2013 assessment and the 2024 assessment were all below the EPA limit of 0.5% and the DHEC limit of 0.06%, both defining LBP with the exception of the following painted surfaces:

1. Beige Paint on plaster wall system in Auditorium (0.24%)
2. White/Green Paint on plaster ceiling system in Auditorium (0.071%)

Please note, OSHA Lead regulations (29 CFR 1910.1025 and/or 29 CFR 1926.62) will apply to any person subject to disturbing these paint coatings.

The concentration of lead in the white paint on the plaster wall systems is 0.020%, which is below the EPA and DHEC limits defining LBP but is above the laboratory analytical limit of detection. In addition to the two paint coatings listed above, any person subject to disturbing this paint must comply with the applicable OSHA lead standards.

Please see Table 2, in Appendix 5.1 for the location and description of each paint coating sampled.

3.3 LBP Conclusions and Recommendations

DHEC requires that any debris containing LBP, must be disposed of at a Class II Landfill [formally a Construction and Demolition (C&D) Landfill], that meets the May 2008 revised DHEC Land and Waste Management regulations.

4.0 Deviations or Limiting Conditions

GEL took representative, statistically representative samples of suspect ACMs and LBP from randomly selected homogeneous areas of the (painted) wall, flooring, ceiling, and roofing systems throughout the areas of renovation. Significant, complete destructive testing of the entire wall, flooring, ceiling, and roofing systems throughout the areas of renovation was not performed to visually confirm similar, homogeneously identified layer(s) and/or to discover additional suspect ACMs and LBP, and/or other hidden systems and/or components in the areas of renovation. Some areas of suspect ACMs and painted components may have been introduced into the areas of renovation by undocumented renovations, and/or repairs may not have been detected. As stated above, if additional, suspect ACM(s) are encountered during future repair, renovation, demolition, and/or any other disturbance activities, GEL should be notified and construction work must cease until a licensed asbestos inspector inspects, samples, and tests these additional, suspect ACMs.

This report has been prepared for the exclusive use of Meadors solely for their use and reliance and is subject to the terms and conditions agreed upon between GEL and Meadors for this specific project. These services have been provided in accordance with generally accepted environmental practices. No other warranty, expressed or implied, is made. Reliance on this report cannot be transferred without the written permission of Meadors and GEL, and only if the other party agrees to the Standard Terms and Conditions agreed upon for this project.

APPENDIX 5.1

TABLE 1 – ASBESTOS RESULTS: PLM AND TEM ASBESTOS ANALYSES

TABLE 2 – LEAD-BASED PAINT RESULTS

TABLE 1
ASBESTOS RESULTS - PLM AND TEM ANALYSES
WELDON AUDITORIUM
7 MAPLE STREET
MANNING, SOUTH CAROLINA 29102

Sample Number	Homogeneous Area Number	Material Description	Homogeneous Area Description	Type of Material	Estimated Amount	Type and % Asbestos	Condition
Sampled on June 5, 2024							
PL 1-1-A	1	Plaster System - Skim Coat Layer	Various Wall and Ceiling Systems in Areas of Renovation	SM	Greater Than (>) 5,000 SF	ND	NA
PL 1-1-B		Plaster System - Base Coat Layer	Various Wall and Ceiling Systems in Areas of Renovation	SM		ND	NA
PL 1-2-A		Plaster System - Skim Coat Layer	Various Wall and Ceiling Systems in Areas of Renovation	SM		ND	NA
PL 1-2-B		Plaster System - Base Coat Layer	Various Wall and Ceiling Systems in Areas of Renovation	SM		ND	NA
PL 1-3-A		Plaster System - Skim Coat Layer	Various Wall and Ceiling Systems in Areas of Renovation	SM		ND	NA
PL 1-3-B		Plaster System - Base Coat Layer	Various Wall and Ceiling Systems in Areas of Renovation	SM		ND	NA
PL 1-4-A		Plaster System - Skim Coat Layer	Various Wall and Ceiling Systems in Areas of Renovation	SM		ND	NA
PL 1-4-B		Plaster System - Base Coat Layer	Various Wall and Ceiling Systems in Areas of Renovation	SM		ND	NA

TABLE 1
ASBESTOS RESULTS - PLM AND TEM ANALYSES
WELDON AUDITORIUM
7 MAPLE STREET
MANNING, SOUTH CAROLINA 29102

Sample Number	Homogeneous Area Number	Material Description	Homogeneous Area Description	Type of Material	Estimated Amount	Type and % Asbestos	Condition
PL 1-5-A	1	Plaster System - Skim Coat Layer	Various Wall and Ceiling Systems in Areas of Renovation	SM	> 5,000 SF	ND	NA
PL 1-5-B		Plaster System - Base Coat Layer	Various Wall and Ceiling Systems in Areas of Renovation	SM		ND	NA
PL 1-6-A		Plaster System - Skim Coat Layer	Various Wall and Ceiling Systems in Areas of Renovation	SM		ND	NA
PL 1-6-B		Plaster System - Base Coat Layer	Various Wall and Ceiling Systems in Areas of Renovation	SM		ND	NA
PL 1-7-A		Plaster System - Skim Coat Layer	Various Wall and Ceiling Systems in Areas of Renovation	SM		ND	NA
PL 1-7-B		Plaster System - Base Coat Layer	Various Wall and Ceiling Systems in Areas of Renovation	SM		ND	NA

TABLE 1
ASBESTOS RESULTS - PLM AND TEM ANALYSES
WELDON AUDITORIUM
7 MAPLE STREET
MANNING, SOUTH CAROLINA 29102

Sample Number	Homogeneous Area Number	Material Description	Homogeneous Area Description	Type of Material	Estimated Amount	Type and % Asbestos	Condition
FT 2-8-A	2	12" x 12" White with Black Streaks Floor Tiles and Associated Yellow Mastic - *Floor Tiles Only*	Climate Controlled Storage Room Behind Stage	M	120 SF	ND	NA
FT 2-8-B		12" x 12" White with Black Streaks Floor Tiles and Associated Yellow Mastic - *Mastic Only*	Climate Controlled Storage Room Behind Stage	M		ND	NA
FT 2-9-A		12" x 12" White with Black Streaks Floor Tiles and Associated Yellow Mastic - *Floor Tiles Only*	Climate Controlled Storage Room Behind Stage	M		ND	NA
FT 2-9-B		12" x 12" White with Black Streaks Floor Tiles and Associated Yellow Mastic - *Mastic Only*	Climate Controlled Storage Room Behind Stage	M		ND	NA
FT 2-10-A*		12" x 12" White with Black Streaks Floor Tiles and Associated Yellow Mastic - *Floor Tiles Only*	Climate Controlled Storage Room Behind Stage	M		ND	NA
FT 2-10-B*		12" x 12" White with Black Streaks Floor Tiles and Associated Yellow Mastic - *Mastic Only*	Climate Controlled Storage Room Behind Stage	M		ND	NA

TABLE 1
ASBESTOS RESULTS - PLM AND TEM ANALYSES
WELDON AUDITORIUM
7 MAPLE STREET
MANNING, SOUTH CAROLINA 29102

Sample Number	Homogeneous Area Number	Material Description	Homogeneous Area Description	Type of Material	Estimated Amount	Type and % Asbestos	Condition
RF 3-11-A	3	Roofing Materials - White/*Black Roof Membrane Layer*	Roof Identification Letters [(1)] - C, F, H, I, and K	M	> 5,000 SF	ND	NA
RF 3-11-B		Roofing Materials - Yellow/*Black Foam Insulation Layer*	Roof Identification Letters [(1)] - C, F, H, I, and K	M		ND	NA
RF 3-12-A		Roofing Materials - White/*Black Roof Membrane Layer*	Roof Identification Letters [(1)] - C, F, H, I, and K	M		ND	NA
RF 3-12-B		Roofing Materials - Yellow/*Black Foam Insulation Layer*	Roof Identification Letters [(1)] - C, F, H, I, and K	M		ND	NA
RF 3-13-A*		Roofing Materials - White/*Black Roof Membrane Layer*	Roof Identification Letters [(1)] - C, F, H, I, and K	M		ND	NA
RF 3-13-B*		Roofing Materials - Yellow/*Black Foam Insulation Layer*	Roof Identification Letters [(1)] - C, F, H, I, and K	M		ND	NA
C 4-14	4	Gray Caulking Material	Along Seams of Roofs in Various Places	M	2,000 LF	ND	NA
C 4-15		Gray Caulking Material	Along Seams of Roofs in Various Places	M		ND	NA
C 4-16*		Gray Caulking Material	Along Seams of Roofs in Various Places	M		ND	NA

TABLE 1
ASBESTOS RESULTS - PLM AND TEM ANALYSES
WELDON AUDITORIUM
7 MAPLE STREET
MANNING, SOUTH CAROLINA 29102

Sample Number	Homogeneous Area Number	Material Description	Homogeneous Area Description	Type of Material	Estimated Amount	Type and % Asbestos	Condition
GC 5-17	5	Gray Coating Material	On Various Areas of Several Roofing Systems	SM	Less Than (<) 1,000 SF	ND	NA
GC 5-18		Gray Coating Material	On Various Areas of Several Roofing Systems	SM		ND	NA
GC 5-19*		Gray Coating Material	On Various Areas of Several Roofing Systems	SM		ND	NA
C 6-20	6	Gray Caulking Material	Roof Identification Letters [(1)] - F - Along Metal Flashing	M	400 LF	ND	NA
C 6-21		Gray Caulking Material	Roof Identification Letters [(1)] - F - Along Metal Flashing	M		ND	NA
C 6-22*		Gray Caulking Material	Roof Identification Letters [(1)] - F - Along Metal Flashing	M		ND	NA

TABLE 1
ASBESTOS RESULTS - PLM AND TEM ANALYSES
WELDON AUDITORIUM
7 MAPLE STREET
MANNING, SOUTH CAROLINA 29102

Sample Number	Homogeneous Area Number	Material Description	Homogeneous Area Description	Type of Material	Estimated Amount	Type and % Asbestos	Condition
DW 7-23-A	7	Gypsum Board System - Drywall Layer	Various Wall and Ceiling Systems in Areas of Renovation	SM	< 1,000 SF	ND	NA
DW 7-23-B		Gypsum Board System - Joint Compound Layer	Various Wall and Ceiling Systems in Areas of Renovation	SM		ND	NA
DW 7-24-A		Gypsum Board System - Drywall Layer	Various Wall and Ceiling Systems in Areas of Renovation	SM		ND	NA
DW 7-24-B		Gypsum Board System - Joint Compound Layer	Various Wall and Ceiling Systems in Areas of Renovation	SM		ND	NA
DW 7-25-A		Gypsum Board System - Drywall Layer	Various Wall and Ceiling Systems in Areas of Renovation	SM		ND	NA
DW 7-25-B		Gypsum Board System - Joint Compound Layer	Various Wall and Ceiling Systems in Areas of Renovation	SM		ND	NA
CT 8-26	8	2' x 2' Pinhole Ceiling Tiles	Upper Gallery	M	2,000 SF	ND	NA
CT 8-27		2' x 2' Pinhole Ceiling Tiles	Upper Gallery	M		ND	NA
CT 8-28		2' x 2' Pinhole Ceiling Tiles	Upper Gallery	M		ND	NA

TABLE 1
ASBESTOS RESULTS - PLM AND TEM ANALYSES
WELDON AUDITORIUM
7 MAPLE STREET
MANNING, SOUTH CAROLINA 29102

Sample Number	Homogeneous Area Number	Material Description	Homogeneous Area Description	Type of Material	Estimated Amount	Type and % Asbestos	Condition
CT 9-29	9	2' x 2' Wormhole Ceiling Tiles	Upper Gallery	M	1,000 SF	ND	NA
CT 9-30		2' x 2' Wormhole Ceiling Tiles	Upper Gallery	M		ND	NA
CT 9-31		2' x 2' Wormhole Ceiling Tiles	Upper Gallery	M		ND	NA
FT 10-32-A	10	12" x 12" Blue Floor Tiles and Associated Yellow Mastic - *Floor Tiles Only*	Hall of Fame Entry Foyer	M	20 SF	ND	NA
FT 10-32-B		12" x 12" Blue Floor Tiles and Associated Yellow Mastic - *Mastic Only*	Hall of Fame Entry Foyer	M		ND	NA
FT 10-33-A		12" x 12" Blue Floor Tiles and Associated Yellow Mastic - *Floor Tiles Only*	Hall of Fame Entry Foyer	M		ND	NA
FT 10-33-B		12" x 12" Blue Floor Tiles and Associated Yellow Mastic - *Mastic Only*	Hall of Fame Entry Foyer	M		ND	NA
FT 10-34-A*		12" x 12" Blue Floor Tiles and Associated Yellow Mastic - *Floor Tiles Only*	Hall of Fame Entry Foyer	M		ND	NA
FT 10-34-B*		12" x 12" Blue Floor Tiles and Associated Yellow Mastic - *Mastic Only*	Hall of Fame Entry Foyer	M		ND	NA

TABLE 1
ASBESTOS RESULTS - PLM AND TEM ANALYSES
WELDON AUDITORIUM
7 MAPLE STREET
MANNING, SOUTH CAROLINA 29102

Sample Number	Homogeneous Area Number	Material Description	Homogeneous Area Description	Type of Material	Estimated Amount	Type and % Asbestos	Condition
FT 11-35	11	12" x 12" White with Black Streaks Floor Tiles and Associated Yellow Mastic - *Floor Tiles Only* (2)	Hall of Fame Entry Foyer	M	10 SF	ND	NA
FT 11-36		12" x 12" White with Black Streaks Floor Tiles and Associated Yellow Mastic - *Floor Tiles Only* (2)	Hall of Fame Entry Foyer	M		ND	NA
FT 11-37*		12" x 12" White with Black Streaks Floor Tiles and Associated Yellow Mastic - *Floor Tiles Only* (2)	Hall of Fame Entry Foyer	M		ND	NA
RF 6-22 (3)	12	Built-Up Roofing Material	Roof Identification Letters (1) - A, B, and G	M	3,000 SF	ND	NA
RF 6-23 (3)		Built-Up Roofing Material	Roof Identification Letters (1) - A, B, and G	M		ND	NA
RF 6-24 (3)*		Built-Up Roofing Material	Roof Identification Letters (1) - A, B, and G	M		ND	NA

TABLE 1
ASBESTOS RESULTS - PLM AND TEM ANALYSES
WELDON AUDITORIUM
7 MAPLE STREET
MANNING, SOUTH CAROLINA 29102

Sample Number	Homogeneous Area Number	Material Description	Homogeneous Area Description	Type of Material	Estimated Amount	Type and % Asbestos	Condition
Sampled on February 15 and 20, 2013							
1-1 DW-A	13	Gypsum Board Wall System - Drywall Only	Previously Existing Window Area	SM	800 SF	ND	NA
1-1 DW-B		Gypsum Board Wall System - Joint Compound Only	Previously Existing Window Area	SM		ND	NA
1-2 DW-A		Gypsum Board Wall System - Drywall Only	Previously Existing Window Area	SM		ND	NA
1-2 DW-B		Gypsum Board Wall System - Joint Compound Only	Previously Existing Window Area	SM		ND	NA
1-3 DW-A		Gypsum Board Wall System - Drywall Only	Previously Existing Window Area	SM		ND	NA
1-3 DW-B		Gypsum Board Wall System - Joint Compound Only	Previously Existing Window Area	SM		ND	NA

TABLE 1
ASBESTOS RESULTS - PLM AND TEM ANALYSES
WELDON AUDITORIUM
7 MAPLE STREET
MANNING, SOUTH CAROLINA 29102

Sample Number	Homogeneous Area Number	Material Description	Homogeneous Area Description	Type of Material	Estimated Amount	Type and % Asbestos	Condition
2-4 TC	14	Trowelled-On Concrete	Walls of Auditorium	SM	900 SF	ND	NA
2-5 TC		Trowelled-On Concrete	Walls of Auditorium	SM		ND	NA
2-6 TC		Trowelled-On Concrete	Walls of Auditorium	SM		ND	NA
3-7 BC	15	Bituminous Material	Previously Existing Window Area	M	900 SF	ND	NA
3-8 BC		Bituminous Material	Previously Existing Window Area	M		ND	NA
3-9 BC*		Bituminous Material	Previously Existing Window Area	M		ND	NA

TABLE 1

ASBESTOS RESULTS - PLM AND TEM ANALYSES

WELDON AUDITORIUM

7 MAPLE STREET

MANNING, SOUTH CAROLINA 29102

Sample Number	Homogeneous Area Number	Material Description	Homogeneous Area Description	Type of Material	Estimated Amount	Type and % Asbestos	Condition

NOMENCLATURE AND NOTES:

NA - Not Applicable; Entered into table when there is no asbestos detected in sample

*** - TEM Analysis**

(1) - See Attached Diagram for Roof Identification Letter Locations

(2) Please note the yellow mastic associated with these floor tiles is homogeneous to sample numbers:

FT 10-32-B, FT 10-33-B, and FT 10-34-B

(3) These bulk samples were invertedly left off the Chain of Custody

Type of Material	**Measurements**
M = Miscellaneous	SF=Square Feet
SM = Surfacing Material	LF= Linear Feet

TABLE 2
LEAD PAINT CHIP SAMPLE RESULTS
WELDON AUDITORIUM
7 MAPLE STREET
MANNING, SOUTH CAROLINA 29102

Sample Number	Sample Location	Lead Concentration (%)	EPA Standard (%)	SC DHEC Standard (%)
Sampled on June 5, 2024				
L-1	**White Paint on Interior Plaster Walls**	**0.020**	0.5	0.06
L-2	**White/Green Paint on Interior Plaster Ceilings**	**0.071**	0.5	**0.06**
L-3	Gray Paint on Interior Gypsum Board Wall Systems	Less Than (<) 0.0026	0.5	0.06
Sampled on February 15, 2013				
1- BL	Blue Paint on Previously Existing Window Area	< 0.008	0.5	0.06
2-BR	Brown Paint on Walls of Auditorium	< 0.006	0.5	0.06
3-CR	**Beige Paint on Walls of Auditorium**	**0.24**	0.5	**0.06**

SC DHEC - South Carolina Department of Health and Environmental Control
EPA - Environmental Protection Agency
% - percent by weight
Any Person Subject to disturbing paint coatings with concentrations of lead greater than the laboratory limit of detection must comply with the applicable OSHA Lead regulations.

APPENDIX 5.2

GEL'S "PRE-RENOVATION, LIMITED ASBESTOS AND LEAD-BASED PAINT ASSESSMENT" REPORT DATED FEBRUARY 21, 2023

GEL Engineering LLC
a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.769.7378 F 843.769.7397

www.gel.com

February 21, 2013

Mr. Jeremy Tate, LEED AP
Electronic Mail: jeremy@meadorsinc.com
Meadors, Inc.
2811 Azalea Drive
North Charleston, South Carolina 29405

Re: Report of Pre-Renovation, Limited Asbestos & Lead-Based Paint Assessment
Wall & Window Materials – Weldon Auditorium
7 Maple Street
Manning, South Carolina 29102

Dear Mr. Tate:

GEL Engineering, LLC (GEL) has completed the limited asbestos and lead-based paint (LBP) assessment of the wall and window materials of the above reference location in Manning, South Carolina. GEL understands that some windows and walls in the referenced auditorium are scheduled to be renovated to repair possible water intrusion issues in the building.

As discussed below, no materials sampled tested positive for the presence of asbestos. Beige paint on the gypsum board walls of the auditorium tested positive for lead on the day of the assessment. The details and findings of the assessment are described below.

LIMITED ASBESTOS ASSESSMENT

Ms. Sarah Browning, a licensed asbestos inspector in the State of South Carolina from GEL, performed the limited asbestos assessment on January 15, 2013.

The previously existing window area consisted of a gypsum board system consisting of two layers: drywall and joint compound. There was an approximate 6-inch wide air space behind the gypsum board system. The exterior wall of this area consisted of a plaster wall system comprised of a base and skim coat layers. The plaster wall was not tested in this inspection due to potential water intrusion in the area sampled.

The wall system in the auditorium consisted of a light weight cementitious material adhered to the exterior brick wall. A thin layer of bituminous water proofing material was noted in between the brick and light weight cementitious material.

The limited asbestos assessment was performed to satisfy the requirements set forth by the EPA Asbestos Hazard Emergency Response Act (AHERA), the National Emission

Standards for Hazardous Air Pollutants (NESHAP) and the South Carolina Department of Health and Environmental Control (DHEC) Asbestos Standard 61-86.1. During the limited asbestos assessment, samples were collected from each type of building component encountered and in the scope of renovation activities that might typically contain asbestos. The suspect ACMs sampled during the limited asbestos assessment included:

- miscellaneous materials (bituminous coating)
- surfacing materials (gypsum board system comprised of drywall and joint compound layers, and a light weight cementitious material)

Although every reasonable effort was made to sample all suspect ACMs in the scope of renovation of the above listed areas, there is a potential that areas of suspect materials introduced into the building by undocumented renovations or repairs were not identified during the limited asbestos assessment. Additionally, suspect materials may be located in inaccessible areas of the building, such as wall cavities and pipe chases. If additional suspect materials are identified during the renovation activities, all work in that area must cease until the material is sampled by a licensed asbestos inspector.

The suspect ACMs were grouped into homogeneous areas. A homogeneous area is an area that contains suspect material that is uniform in color, texture, and appears identical in every respect. Also, each sample was determined to be either friable or non-friable. A friable material is one that, when dry, can be crumbled, pulverized, or reduced to powder by the forces expected to act upon it in the course of demolition or renovation. Non-friable materials are not expected to be crumbled, pulverized, or reduced to powder by the forces expected during demolition or renovation. Additionally, non-friable materials are those materials in which fibers have been “locked in” by a bonding agent, coating, binder, or other material so that the asbestos is bound and will not readily release fibers during normal handling or use. However, non-friable materials may become friable if improperly used or handled.

Representative samples of the material in each suspect area were collected and submitted to CEI, Inc (CEI) in Cary, North Carolina for analysis. CEI is accredited with the National Voluntary Laboratory Accreditation Program (NVLAP) administered by the National Institute of Standards and Technology (NIST). The bulk samples of suspect material were analyzed utilizing Polarized Light Microscopy (PLM) coupled with dispersion staining. The EPA recognizes a material as ACM if an asbestos content of greater than one percent by weight (> 1%) is detected in a representative sample.

LIMITED ASBESTOS ASSESSMENT RESULTS

No asbestos was detected in any of the samples of the suspect ACMs collected during the limited asbestos assessment.

LIMITED LEAD BASED PAINT ASSESSMENT

Ms. Sarah Browning, from GEL, collected paint chip samples from the painted auditorium walls (brown and beige paint) and windows (blue paint) that may be disturbed during the renovation. EPA guidelines specify a positive determination of lead in paint when the lead content is equal to or greater than 0.5% by weight as measured by a laboratory analytical method. DHEC requires that any debris containing LBP, as determined by a laboratory analytical method to be greater than or equal to 0.06% by weight, must be disposed of at a Class II Landfill (formally a Construction and Demolition (C&D) Landfill), that meets the May 2008 revised DHEC Land and Waste Management regulations.

The samples of paint collected from above listed surfaces were submitted to CEI located in Cary, North Carolina for analysis. The samples of suspect material were analyzed utilizing Flame Atomic Absorption Spectrometry (Flame AAS) as described in Solid Waste (SW) 846 Methods 3050B and 7420.

LEAD-BASED PAINT RESULTS

Lead concentrations in the beige paint on the auditorium walls measured 0.24%, which exceeds the DHEC limit of 0.06%, defining lead-based paint. The lead concentrations in the blue (less than 0.008%) and brown (less than 0.006%) paints had lead concentrations less than the DHEC and EPA limits of 0.06% and 0.5%, respectively and less than the laboratory analytical limit of detection.

CONCLUSIONS & RECOMMENDATIONS

Asbestos-Containing Materials

If additional suspect ACM(s) are identified during the future repair, renovation, and/or demolition activities, all work must cease until the materials are sampled by a licensed asbestos inspector. Any ACM(s) identified should be handled in accordance with the applicable Occupational Safety & Health Administration (OSHA) and DHEC regulations.

Lead-Based Paint

If the LBP coated surfaces will be disturbed during renovations, the surfaces should be handled carefully to reduce the potential for releasing lead containing dust and must be disposed of in accordance with federal, state, and local regulations. DHEC requires that any debris containing LBP, as determined by a laboratory analytical method to be greater than or equal to 0.06% by weight must be disposed of at a Class II Landfill. Contractors likely to disturb LBP coated surfaces that contain lead concentrations above the laboratory analytical limit of detection must comply with the OSHA lead regulation concerning training, exposure, and other elements of the standard.

The locations, descriptions, and conditions of each suspect asbestos-containing material (ACM) sampled and surfaces tested for LBP are included in the attached Tables 1 and 2, respectively. Also included with this report are the Certificates of Analysis, the Chain-of-Custody records and the inspector's license and training certificate.

CLOSURE

On behalf of GEL, we want to thank you for the opportunity to assist you in meeting your environmental needs. If you have any questions or need additional information, please call Sarah Browning at (843) 300-4254 or on her cell phone at (704) 962-9974.

Sincerely,

Sarah Browning, E.I.T.
Project Manager

Enclosures
Fc: meco00213_022113_rpt

TABLE 1
ASBESTOS RESULTS - PLM & TEM ANALYSIS
WELDON AUDITORIUM
7 MAPLE STREET
MANNING, SOUTH CAROLINA 29102
02/15/13

Sample Number	Description	Material Location	Type of Material	Total Amount (SF)	Type and % Asbestos	Condition
1-1 DW-A	Drywall and Joint Compound- *Drywall Only*	Previously Existing Window Area	SM	800	ND	NA
1-1 DW-B	Drywall and Joint Compound- *Joint Compound Only*	Previously Existing Window Area	SM		ND	NA
1-2 DW-A	Drywall and Joint Compound- *Drywall Only*	Previously Existing Window Area	SM		ND	NA
1-3 DW-A	Drywall and Joint Compound- *Drywall Only*	Previously Existing Window Area	SM		ND	NA
1-3 DW-B	Drywall and Joint Compound- *Joint Compound Only*	Previously Existing Window Area	SM		ND	NA
2-4 TC	Trowelled on Concrete	Walls of Auditorium	SM	900	ND	NA
2-5 TC	Trowelled on Concrete	Walls of Auditorium	SM		ND	NA
2-6 TC	Trowelled on Concrete	Walls of Auditorium	SM		ND	NA
3-7 BC	Bituminous Coating	Underneath Trowelled On Concrete on Walls of Auditorium	M	900	ND	NA
3-8 BC	Bituminous Coating	Underneath Trowelled On Concrete on Walls of Auditorium	M		ND	NA
3-9 BC*	Bituminous Coating	Underneath Trowelled On Concrete on Walls of Auditorium	M		ND	NA

TABLE 1
ASBESTOS RESULTS - PLM & TEM ANALYSIS
WELDON AUDITORIUM
7 MAPLE STREET
MANNING, SOUTH CAROLINA 29102
02/15/13

Sample Number	Description	Material Location	Type of Material	Total Amount (SF)	Type and % Asbestos	Condition
Sampled on February 20, 2013						
1-2 DW-B	Drywall and Joint Compound- *Joint Compound Only*	Previously Existing Window Area	SM	800	ND	NA

NOMENCLATURE AND NOTES:

NA - Not Applicable; Entered into table when there is no asbestos detected in sample

*** TEM Analysis**

Sample Number Abbreviations

DW- Drywall and Joint Compound

TC- Trowelled on Concrete

BC- Bituminous Coating

Type of Material

M = Miscellaneous

SM= Surfacing Material

TSI = Thermal Surfacing Material

Measurements

SF=Square Feet

LF= Linear Feet

Type and Percent Asbestos

C= Chrysotile

A = Amosite

ND = None Detected

Condition of Material

NF = Non-friable, F = Friable

G = Good; D = Damaged; SD = Significantly Damaged

These categories above apply only when a material is identified as an ACM

TABLE 2
PAINT CHIP SAMPLE RESULTS
WELDON AUDITORIUM
7 MAPLE STREET
MANNING, SOUTH CAROLINA
February 15, 2013

Sample Number	Sample Location	Lab Concentration	EPA Standard	SC DHEC Standard
1- BL	Blue Paint on Previously Existing Window Area	< 0.008	0.5%	0.06%
2-BR	Brown Paint on Walls of Auditorium	< 0.006	0.5%	0.06%
3-CR	Beige Paint on Walls of Auditorium	0.24	0.5%	0.06%

SC DHEC= South Carolina Department of Health and Environmental Control
EPA - Environmental Protection Agency
% by weight

ASBESTOS LABORATORY REPORT

Prepared for

Gel Engineering, LLC

PROJECT: meco 00213

CEI LAB CODE: A13-1697

DATE ANALYZED: 02/16/13

DATE REPORTED: 02/16/13

TOTAL SAMPLES ANALYZED: 8

 # SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com

Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: meco 00213

CEI LAB CODE: A13-1697

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

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1-1 DW	Layer 1	A1419874	White	Joint Compound	None Detected
	Layer 2	A1419874	Off-white,Tan	Drywall	None Detected
1-2 DW		A1419875	Off-white,Tan	Drywall	None Detected
1-3 DW	Layer 1	A1419876	White,Blue	Joint Compound	None Detected
	Layer 2	A1419876	Off-white,Tan	Drywall	None Detected
2-4 TC		A1419877	Off-white,Grey	Trowelled On Concrete	None Detected
2-5 TC		A1419878	Off-white,Grey	Trowelled On Concrete	None Detected
2-6 TC		A1419879	Off-white,Grey	Trowelled On Concrete	None Detected
3-7 BC		A1419880	Black	Bituminous Coating Only	None Detected
3-8 BC		A1419881	Black	Bituminous Coating Only	None Detected

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Gel Engineering, LLC
2040 Savage Road
Charleston, SC 29407

CEI Lab Code: A13-1697
Date Received: 02-16-13
Date Analyzed: 02-16-13
Date Reported: 02-16-13

Project: meco 00213

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID / Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS Fibrous		Non-Fibrous		ASBESTOS %
1-1 DW		Homogeneous			90%	Calc Carb	**None Detected**
Layer 1	Joint Compound	White			10%	Mica	
A1419874		Non-fibrous					
		Bound					
Layer 2	Drywall	Heterogeneous	20%	Cellulose	80%	Gypsum	**None Detected**
A1419874		Off-white,Tan	<1%	Fiberglass			
		Fibrous					
		Bound					
1-2 DW	Drywall	Heterogeneous	20%	Cellulose	80%	Gypsum	**None Detected**
A1419875		Off-white,Tan	<1%	Fiberglass			
		Fibrous					
		Bound					
Lab Notes: No joint compound present.							
1-3 DW		Heterogeneous			85%	Calc Carb	**None Detected**
Layer 1	Joint Compound	White,Blue			10%	Mica	
A1419876		Fibrous			5%	Paint	
		Bound					
Layer 2	Drywall	Heterogeneous	20%	Cellulose	80%	Gypsum	**None Detected**
A1419876		Off-white,Tan	<1%	Fiberglass			
		Fibrous					
		Bound					
2-4 TC	Trowelled On Concrete	Heterogeneous	<1%	Cellulose	75%	Plaster	**None Detected**
A1419877		Off-white,Grey			25%	Gravel	
		Fibrous					
		Bound					
2-5 TC	Trowelled On Concrete	Heterogeneous	<1%	Cellulose	75%	Plaster	**None Detected**
A1419878		Off-white,Grey			25%	Gravel	
		Fibrous					
		Bound					

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Gel Engineering, LLC
2040 Savage Road
Charleston, SC 29407

CEI Lab Code: A13-1697
Date Received: 02-16-13
Date Analyzed: 02-16-13
Date Reported: 02-16-13

Project: meco 00213

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS Fibrous		 Non-Fibrous		ASBESTOS %
2-6 TC A1419879	Trowelled On Concrete	Heterogeneous Off-white,Grey Fibrous Bound	<1%	Cellulose	75% 25%	Plaster Gravel	**None Detected**
3-7 BC A1419880	Bituminous Coating Only	Homogeneous Black Fibrous Bound	<1%	Cellulose	100% <1%	Tar Mica	**None Detected**
3-8 BC A1419881	Bituminous Coating Only	Homogeneous Black Fibrous Bound	<1%	Cellulose	100% <1%	Tar Mica	**None Detected**

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

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

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

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

ANALYST: Anna Malmberg

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

NVLAP Lab Code 101768-0

CEI LABS

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

CHAIN OF CUSTODY

LAB USE ONLY:	
CEI Lab Code:	A13-1697 (8)
CEI Lab I.D. Range:	A1419874-A1419881

COMPANY CONTACT INFORMATION	
Company: GEL Engineering, LLC	Client #:
Address: 2040 Savage Rd	Job Contact: Sarah Browning
Charleston, SC 29407	Email: Sarah.browning@gel.com
	Tel: 843-300-4254
Project Name: meco 00213	Fax:
Project ID #:	P.O. #:

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

POSITIVE STOP ANALYSIS	☐
SOUTH CAROLINA SAMPLES	☒

TEM INSTRUCTIONS	
BEGIN TEM ANALYSIS AFTER NEGATIVE PLM	☐
ANALYZE TEM SAMPLES SIMULTANEOUSLY WITH PLM	☒

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

Please send results by Sunday, February 17 - evening

☑ Accept Samples
☐ Reject Samples

Relinquished By:	Date/Time	Received By:	Date/Time
	2-15-13		2/16/13 11:50

*Call to confirm RUSH analysis.

Samples will be disposed of 30 days after analysis

A13-1697

CEI LABS

SAMPLING FORM

COMPANY CONTACT INFORMATION	
Company: GEL Engineering LLC	Job Contact: Sarah Browning
Project Name: MEC000213	
Project ID #:	Tel: 843-300-4254

SAMPLE ID#	DESCRIPTION / LOCATION	TEST	
1-1 DW	Window - Drywall	PLM ☒	TEM ☐
1-2 DW	↓	PLM ☒	TEM ☐
1-3 DW	↓	PLM ☒	TEM ☐
2-4 TC	Trowelled on Concrete	PLM ☒	TEM ☐
2-5 TC	↓	PLM ☒	TEM ☐
2-6 TC	↓	PLM ☒	TEM ☐
3-7 BC	Bituminous Coating Only	PLM ☒	TEM ☐
3-8 BC	↓	PLM ☒	TEM ☐
3-9 BC	↓	PLM ☐	TEM ☒
		PLM ☐	TEM ☐
		PLM ☐	TEM ☐
		PLM ☐	TEM ☐
		PLM ☐	TEM ☐
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		PLM ☐	TEM ☐
		PLM ☐	TEM ☐
		PLM ☐	TEM ☐

ASBESTOS BULK ANALYSIS

By: TRANSMISSION ELECTRON MICROSCOPY

Client: Gel Engineering, LLC
2040 Savage Road
Charleston, SC 29407

Project: meco 00213

CEI Lab Code: T13-0190
Date Received: 02-16-13
Date Analyzed: 02-17-13
Date Reported: 02-17-13

TEM BULK CHATFIELD

Client ID Lab ID	Material Description	Sample Weight (g)	Organic Material %	Acid Soluble Material %	Acid Insoluble Material %	Asbestos %
3-9 BC T06447	Bituminous Coating	0.0904	33.5	35.5	31	**None Detected**

ANALYST: Tianbao Bai

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

T13-0190
T06447 (1)

CEI LABS

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

CHAIN OF CUSTODY

LAB USE ONLY:	
CEI Lab Code:	A13-1697 (8)
CEI Lab I.D. Range:	A1419874-A1419881

COMPANY CONTACT INFORMATION	
Company: SEL Engineering, LLC	Client #:
Address: 2040 Savage Rd	Job Contact: Sarah Browning
Charleston, SC 29407	Email: Sarah.browning@sel.com
	Tel: 843-300-4254
Project Name: meco 00213	Fax:
Project ID #:	P.O. #:

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

POSITIVE STOP ANALYSIS	☐
SOUTH CAROLINA SAMPLES	☒

TEM INSTRUCTIONS	
BEGIN TEM ANALYSIS AFTER NEGATIVE PLM	☐
ANALYZE TEM SAMPLES SIMULTANEOUSLY WITH PLM	☒

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

Please send results by Sunday, February 17 - evening

☑ Accept Samples
☐ Reject Samples

Relinquished By:	Date/Time	Received By:	Date/Time
	2-15-13		2/16/13 11:50

*Call to confirm RUSH analysis.

Samples will be disposed of 30 days after analysis

VERSION SCCC.06.12.1.1/2.LD

A13-1697

CEI LABS

SAMPLING FORM

COMPANY CONTACT INFORMATION	
Company: GEL Engineering LLC	Job Contact: Sarah Browning
Project Name: MEC000213	
Project ID #:	Tel: 843-300-4254

SAMPLE ID#	DESCRIPTION / LOCATION	TEST	
1-1 DW	Window - Drywall	PLM ☒	TEM ☐
1-2 DW	↓ ↓ ↓ ↓	PLM ☒	TEM ☐
1-3 DW	↓ ↓ ↓ ↓	PLM ☒	TEM ☐
2-4 TC	Trowelled on Concrete	PLM ☒	TEM ☐
2-5 TC	↓ ↓ ↓ ↓	PLM ☒	TEM ☐
2-6 TC	↓ ↓ ↓ ↓	PLM ☒	TEM ☐
3-7 BC	Bituminous Coating Only	PLM ☒	TEM ☐
3-8 BC	↓ ↓ ↓ ↓ ↓	PLM ☒	TEM ☐
3-9 BC	↓ ↓ ↓ ↓ ↓	PLM ☐	TEM ☒
		PLM ☐	TEM ☐
		PLM ☐	TEM ☐
		PLM ☐	TEM ☐
		PLM ☐	TEM ☐
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		PLM ☐	TEM ☐
		PLM ☐	TEM ☐
		PLM ☐	TEM ☐

VERSION SCCC 08.12.1 2/2 LD

ASBESTOS LABORATORY REPORT

Prepared for

Gel Engineering, LLC

PROJECT: Meco 00213

CEI LAB CODE: A13-1879

DATE ANALYZED: 02/21/13

DATE REPORTED: 02/21/13

TOTAL SAMPLES ANALYZED: 1

 # SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com

Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Meco 00213

CEI LAB CODE: A13-1879

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

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1-2 DW		A1422468	White	Joint Compound Only	None Detected

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Gel Engineering, LLC
2040 Savage Road
Charleston, SC 29407

CEI Lab Code: A13-1879
Date Received: 02-21-13
Date Analyzed: 02-21-13
Date Reported: 02-21-13

Project: Meco 00213

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS Fibrous	Non-Fibrous		ASBESTOS %
1-2 DW A1422468	Joint Compound Only	Homogeneous White Non-fibrous Bound		80% 20%	Calc Carb Binder	**None Detected**

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

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

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

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

ANALYST: Lynn Burkholder
Lynn Burkholder

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

NVLAP Lab Code 101768-0

CEI LABS

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

CHAIN OF CUSTODY

LAB USE ONLY:	
CEI Lab Code:	A13.1879 (1)
CEI Lab I.D. Range:	A1422468

COMPANY CONTACT INFORMATION	
Company: GEL Engineering, LLC	Client #:
Address: 2040 Savage Rd	Job Contact: Sarah Browning
Charleston, SC 29407	Email: Sarah.browning@gel.com
	Tel: 843-300-4254
Project Name:	Fax:
Project ID #: meco 00213	P.O. #:

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

POSITIVE STOP ANALYSIS	☐
SOUTH CAROLINA SAMPLES	☒

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

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

☒ Accept Samples
☐ Reject Samples

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	2/20/13	[signature]	02/21/13 10:20 am

*Call to confirm RUSH analysis.

Samples will be disposed of 30 days after analysis

CEI LABS

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

CHAIN OF CUSTODY

LAB USE ONLY:	
CEI Lab Code:	A13.1879 ①
CEI Lab I.D. Range:	A1424608

COMPANY CONTACT INFORMATION	
Company: GEL Engineering, LLC	Client #:
Address: 2040 Savage Rd	Job Contact: Sarah Browning
Charleston, SC 29407	Email: Sarah.browning@gel.com
	Tel: 843-300-4254
Project Name:	Fax:
Project ID #: meco 00213	P.O. #:

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

POSITIVE STOP ANALYSIS	☐
SOUTH CAROLINA SAMPLES	☒

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

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

☒ Accept Samples
☐ Reject Samples

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	2/20/13	Kristi Pruitt	02/13/10:20
			am

*Call to confirm RUSH analysis.

Samples will be disposed of 30 days after analysis

CEI LABS

SAMPLING FORM

A13.1879

COMPANY CONTACT INFORMATION	
Company: GCL Engineering	Job Contact: Sarah Browning
Project Name: mec00213	
Project ID #:	Tel: 843-300-4254

SAMPLE ID#	DESCRIPTION / LOCATION	TEST	
1-2 DW	Joint Compound*	PLM ☒	TEM ☐
	*please analyze	PLM ☐	TEM ☐
	joint compound only*	PLM ☐	TEM ☐
		PLM ☐	TEM ☐
		PLM ☐	TEM ☐
		PLM ☐	TEM ☐
		PLM ☐	TEM ☐
		PLM ☐	TEM ☐
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CEI Labs
107 New Edition Court, Cary, NC 27511
Phone: (919) 481-1413 Fax: (919) 481-1442

LABORATORY REPORT
LEAD IN PAINT

Client: **Gel Engineering, LLC**
2040 Savage Road
Charleston, SC 29407

CEI Lab Code: C13-0190
Received: 02-18-13
Analyzed: 02-18-13
Reported: 02-18-13

Project: mec000213

ANALYSIS METHOD: EPA SW846 7000B

CLIENT ID	CEI LAB ID	PPM (µg/g)	CONCENTRATION % BY WEIGHT
1-BL	CA43740	<80	**<0.008**
2-BR	CA43741	<60	**<0.006**
3-CR	CA43742	2400	**0.24**

Reviewed By:

Tianbao Bai, Ph.D.
Laboratory Director

This method has been validated for sample weights of 0.020g or greater. When samples with a weight of less than that are analyzed those results fall outside of the scope of accreditations.
*** The analysis of composite wipe samples as a single samples is not included under AIHA accreditation.**

Minimum reporting limit is 20 µg total lead. Sample results denoted with a “less than” (<) sign contain less than 20.0 µg total lead, based on a 40ml sample volume.

Lead samples are not analyzed by CEI Labs Lead samples are submitted to an AIHA ELLAP accredited laboratory for lead analysis of soil, dust, paint, and TCLP samples.
Laboratory results represent the analysis of samples as submitted by the client. Information regarding sample location, description, area, volume, etc., was provided by the client. Unless notified in writing to return samples, CEI Labs discards client samples after 30 days. This report shall not be reproduced, except in full, without the written consent of CEI Labs.

REGULATORY LIMITS
OSHA Standard: No safe limit.
Consumer Products Safety Standard: Greater than 0.06% lead by weight.
Federal Lead Standard / HUD: 0.5% lead by weight.

LEGEND
µg = microgram
ml = milliliter
ppm = parts per million
Pb = lead
g = grams
wt = weight

End of Report

C13-0190
CA43740-
CA43742 (3)
2/18/13

CHAIN OF CUSTODY

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

LAB USE ONLY:
CEI Lab Code:
CEI Lab I.D. Range:

COMPANY CONTACT INFORMATION	
Company: GEL Engineering	Client #:
Address: 2040 Savage Rd	Job Contact: Sarah Bowing
Charleston, SC 29407	Email: Sarah.bowing@gel.com
	Tel: 843-300-4254
Project Name: meco00213	Fax:
Project ID #:	P.O. #:

ASBESTOS	METHOD	TURN AROUND TIME 4 HR*	8 HR*	24 HR	2 DAY	3 DAY	5 DAY
PLM BULK	EPA 600	☐	☐	☐	☐	☐	☐
PLM POINT COUNT (400)	EPA 600	☐	☐	☐	☐	☐	☐
PLM POINT COUNT (1000)	EPA 600	☐	☐	☐	☐	☐	☐
PLM GRAVIMETRIC	EPA 600		☐	☐	☐	☐	☐
PLM GRAV w POINT COUNT	EPA 600		☐	☐	☐	☐	☐
PCM AIR	NIOSH 7400	☐	☐	☐	☐	☐	☐
TEM AIR	AHERA	☐	☐	☐	☐	☐	☐
TEM AIR	EPA Level II	☐	☐	☐	☐	☐	☐
TEM AIR	NIOSH 7402	☐	☐	☐	☐	☐	☐
TEM BULK	CHATFIELD		☐	☐	☐	☐	☐
TEM DUST WIPE	ASTM D6480-05	☐	☐	☐	☐	☐	☐
TEM DUST MICROVAC	ASTM D5755-03	☐	☐	☐	☐	☐	☐
TEM QUALITATIVE	CEI LABS	☐	☐	☐	☐	☐	☐
OTHER:		☐	☐	☐	☐	☐	☐
LEAD PAINT	**METHOD**	**4 HR***	**8 HR***	**24 HR**	**2 DAY**	**3 DAY**	**5 DAY**
LEAD PAINT	EPA SW846 7000B				☐	☐	☐
LEAD WIPE	EPA SW846 7000B				☐	☐	☐
LEAD SOIL	EPA SW846 7000B				☐	☐	☐
LEAD AIR	NIOSH 7082				☐	☐	☐
OTHER:					☐	☐	☐

REMARKS:
Please send results by Sunday Evening, Feb. 17th ✕
thanks!

☒ Accept Samples
☐ Reject Samples

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	2-15-13	[signature]	02/18/13 8:00 am
		[signature]	

*Call to confirm RUSH analysis.

Samples will be disposed of 30 days after analysis

C13-0190

CEI LABS

SAMPLING FORM

COMPANY CONTACT INFORMATION	
Company: GEL Engineering	Job Contact: Sarah Browning
Project Name: Meco 00213	
Project ID #:	Tel: 843-300-4254

SAMPLE ID#	DESCRIPTION / LOCATION	VOLUME/ AREA	COMMENTS
1 - BL	Blue - Windows		
2 - BR	Brown - Walls -		
3 - CR	Beige - Walls		

Trident Technical College

Continuing Education, 2001 Mabeline Rd., North Charleston, South Carolina 29406 • 843.574.6022

Sarah Browning
P.O. Box 30712, Charleston, SC 29417

9435

has completed the requisite training for asbestos accreditation under TSCA Title II and has met the requirements of and passed the examination for an EPA approved

Asbestos Inspector Refresher Training Course

North Charleston, SC

068-XENV 510-SS2-068
Certificate Number

November 29, 2012
Course Date(s)

November 29, 2012
Examination Date

TRIDENT TECHNICAL COLLEGE

Dan N. Infinger, Principal Instructor

Training Manager

November 29, 2013
Expiration Date

Trident Technical College

Continuing Education, 2001 Mabeline Rd., North Charleston, South Carolina 29406 • 843.574.6022

Sarah Browning
P.O. Box 30712, Charleston, SC 29417

9435

has completed the requisite training for asbestos accreditation under TSCA Title II and has met the requirements of and passed the examination for an EPA approved

Asbestos Supervisor Refresher Training Course

North Charleston, SC

093-XENV 509-SS2-093
Certificate Number

November 28, 2012
Course Date(s)

November 28, 2012
Examination Date

TRIDENT TECHNICAL COLLEGE

Dan N. Infinger, Principal Instructor

Training Manager

November 28, 2013
Expiration Date

SCDHEC ISSUED

Asbestos ID Card

Sarah Browning

Expires

CONSULTBI BI-01095 11/29/13

APPENDIX 5.3

CHAIN-OF-CUSTODY RECORDS AND CERTIFICATES OF ANALYSES

Bulk Asbestos Analysis
by Transmission Electron Microscopy

Semi-Quantitative
Chatfield SOP 1988-02 Rev. 1

Customer: GEL Engineering, LLC
2040 Savage Road
Charleston, SC 29407

Attn: Sarah Browning

Project: MEC000124

Lab Order ID: **10053343**
Analysis: TBS
Date Received: 06/07/2024
Date Reported: 06/10/2024
Date Amended: 06/20/2024

Sample ID / *Lab Sample ID*	Description / *Lab Notes*	Organic (Wt %)	Acid Soluble (Wt. %)	Asbestos (Wt %)	LCL-UCL (Wt. %)
FT2-10 - A	**Floor tiles and associated yellow mastic**	**21%**	**79%**	None Detected	
10053343_0010	*tile*				
FT2-10 - B	**Floor tiles and associated yellow mastic**	**30.%**	**0%**	None Detected	
10053343_0047	*mastic*				
RF3-13 - A	**Roofing materials- RFs H&I**	**80.%**	**0%**	None Detected	
10053343_0013	*membrane*				
RF3-13 - B	**Roofing materials- RFs H&I**	**85%**	**0%**	None Detected	
10053343_0050	*felt*				
C4-16	**Gray caulking material**	**73%**	**0%**	None Detected	
10053343_0016					
GC5-19	**Gray coating**	**70.%**	**0%**	None Detected	
10053343_0019					
C6-22	**Roof F - gray caulking**	**49%**	**0%**	None Detected	
10053343_0022					
FT10-34 - A	**12"x12" BLue floor tiles: yellow mastic**	**17%**	**83%**	None Detected	
10053343_0034	*tile*				

Daniel Schwartz (11)
Analyst

Approved Signatory

Bulk Asbestos Analysis
by Transmission Electron Microscopy

Semi-Quantitative
Chatfield SOP 1988-02 Rev. 1

Customer: GEL Engineering, LLC
2040 Savage Road
Charleston, SC 29407

Attn: Sarah Browning

Project: MEC000124

Lab Order ID: **10053343**
Analysis: TBS
Date Received: 06/07/2024
Date Reported: 06/10/2024
Date Amended: 06/20/2024

Sample ID / *Lab Sample ID*	Description / *Lab Notes*	Organic (Wt %)	Acid Soluble (Wt. %)	Asbestos (Wt %)	LCL-UCL (Wt. %)
FT10-34 - B	**12"x12" BLue floor tiles: yellow mastic**	**25%**	**0%**	None Detected	
10053343_0056	*mastic*				
FT11-37	**12"x12" White w/ black streaks floor tile- tile only**	**21%**	**77%**	None Detected	
10053343_0037					
RF-6-22		**89%**	**0%**	None Detected	
10053343_0057					

Daniel Schwartz (11)
Analyst

Approved Signatory

Scientific Analytical Institute
4604 Dundas Dr. Greensboro, NC 27407
Phone: 336.292.3888 Fax: 336.292.3313
www.sailab.com lab@sailab.com

Lab Use Only
Lab Order ID: 10053343
Client Code: _____

Company Contact Information		
Company: GEL Engineering	Contact: Sarah Browning	
Address: 2040 Savage rd Charleston, SC 29407	Phone ☐:	
	Fax ☐:	
	Email ☑: Sarah.browning@gel.com	

Billing/Invoice Information	Turn Around Times	
Company:	90 Min. ☐	48 Hours ☐
Contact: SAA	3 Hours ☐	72 Hours ☐
Address:	6 Hours ☐	96 Hours ☐
	12 Hours ☐	120 Hours ☐
	24 Hours ☒	144+Hours ☐

Asbestos Test Types	
PLM EPA 600/R-93/116 (PLM)	☒
Positive stop	☐
PLM Point Count 400 (PT4)	☐
PLM Point Count 1000 (PTM)	☐
PCM NIOSH 7400-A Rules (PCM)	☐
B Rules (PCB) ☐ TWA (PTA)	☐
TEM AHERA (AHE)	☐
TEM Level II (LII)	☐
TEM NIOSH 7402 (TNI)	☐
TEM Bulk Qualitative (TBL)	☐
TEM Bulk Chatfield (TBS)	☒
TEM Bulk Quantitative (TBQ)	☐
TEM Wipe ASTM D6480-05	☐
TEM Microvac ASTM D5755-02	☐
TEM Water EPA 100.2 (TW1)	☐
Other: _____	☐

PO Number:
Project Name/Number: MECO 00124

TEM=✓

Sample ID #	Description/Location	Volume/Area	Comments
PL 1-1	Plaster: Base and Skim Coats	Only	
PL 1-2	↓	↓	
PL 1-3	↓	↓	
PL 1-4	↓	↓	
PL 1-5	↓	↓	
PL 1-6	↓	↓	
PL 1-7	↓	↓	
FT 2-8	Floor Tiles and Associated	Yellow Mastic	
FT 2-9	↓	↓	
✓ FT 2-10	↓	↓	Accepted ☑
			Rejected ☐

Total # of Samples 37

Relinquished by	Date/Time	Received by	Date/Time
	6-5-24		10:30a

Scientific Analytical Institute
4604 Dundas Dr. Greensboro, NC 27407
Phone: 336.292.3888 Fax: 336.292.3313
www.sailab.com lab@sailab.com

Lab Use Only
Lab Order ID: L1053543
Client Code: _____

Sample ID #	Description/Location	Volume/Area	Comments
RF3-11	Roofing Materials - RFs	H : I	
RF3-12			
✓ RF3-13			
C4-14	Gray Caulking Material		
C4-15			
✓ C4-16			
GC5-17	Gray Coating		
GC5-18			
✓ GC5-19			
C6-20	ROOFF - Gray Caulking		
C6-21			
✓ C6-22			
DW7-23	Drywall : Joint Compound		
DW7-24			
DW7-25			
CT8-26	2'x2' Pinhole Ceiling Tiles		
CT8-27			
CT8-28			
CT9-29	2'x2' Wormhole Ceiling Tiles		
CT9-30			
CT9-31			
FT10-32	12"x12" Blue Floor Tiles : Yellow Mastic		
FT10-33			
✓ FT10-34			
FT11-35	12"x12" White w/ Black Streaks Floor Tile - Tile Only		
FT11-36			
✓ FT11-37			

A-F-017

Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and
40 CFR, Part 763, Subpart E, App.E

NVLAP LAB CODE 200664-0

Lab ID # 173190

Customer: GEL Engineering, LLC
2040 Savage Road
Charleston, SC 29407

Attn: Sarah Browning

Project: MEC000124

Lab Order ID: **10053343**
Analysis: PLM
Date Received: 06/06/2024
Date Reported: 06/07/2024

Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
PL1-1 - A	Plaster: base and skim coats only	**None Detected**		**100% Other**	White Non-Fibrous Homogeneous
10053343_0001	*finish*				Crushed
PL1-1 - B	Plaster: base and skim coats only	**None Detected**		**100% Other**	Gray Non-Fibrous Homogeneous
10053343_0038	*base*				Crushed
PL1-2 - A	Plaster: base and skim coats only	**None Detected**		**100% Other**	White Non-Fibrous Homogeneous
10053343_0002	*finish*				Crushed
PL1-2 - B	Plaster: base and skim coats only	**None Detected**		**100% Other**	Gray Non-Fibrous Homogeneous
10053343_0039	*base*				Crushed
PL1-3 - A	Plaster: base and skim coats only	**None Detected**		**100% Other**	White Non-Fibrous Homogeneous
10053343_0003	*finish*				Crushed
PL1-3 - B	Plaster: base and skim coats only	**None Detected**		**100% Other**	Gray Non-Fibrous Homogeneous
10053343_0040	*base*				Crushed
PL1-4 - A	Plaster: base and skim coats only	**None Detected**		**100% Other**	White Non-Fibrous Homogeneous
10053343_0004	*finish*				Crushed
PL1-4 - B	Plaster: base and skim coats only	**None Detected**		**100% Other**	Gray Non-Fibrous Homogeneous
10053343_0041	*base*				Crushed

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogenous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Byron Stroble (59)
Analyst

Approved Signatory

Scientific Analytical Institute, Inc. 4604 Dundas Dr. Greensboro, NC 27407 (336) 292-3888

Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and
40 CFR, Part 763, Subpart E, App.E

NVLAP LAB CODE 200664-0

Lab ID # 173190

Customer: GEL Engineering, LLC
2040 Savage Road
Charleston, SC 29407

Attn: Sarah Browning

Project: MEC000124

Lab Order ID: **10053343**
Analysis: PLM
Date Received: 06/06/2024
Date Reported: 06/07/2024

Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
PL1-5 - A	Plaster: base and skim coats only	**None Detected**		**100% Other**	White Non-Fibrous Homogeneous
10053343_0005	*finish*				Crushed
PL1-5 - B	Plaster: base and skim coats only	**None Detected**		**100% Other**	Gray Non-Fibrous Homogeneous
10053343_0042	*base*				Crushed
PL1-6 - A	Plaster: base and skim coats only	**None Detected**		**100% Other**	White Non-Fibrous Homogeneous
10053343_0006	*finish*				Crushed
PL1-6 - B	Plaster: base and skim coats only	**None Detected**		**100% Other**	Gray Non-Fibrous Homogeneous
10053343_0043	*base*				Crushed
PL1-7 - A	Plaster: base and skim coats only	**None Detected**		**100% Other**	White Non-Fibrous Homogeneous
10053343_0007	*finish*				Crushed
PL1-7 - B	Plaster: base and skim coats only	**None Detected**		**100% Other**	Gray Non-Fibrous Homogeneous
10053343_0044	*base*				Crushed
FT2-8 - A	Floor tiles and associated yellow mastic	**None Detected**		**100% Other**	White Non-Fibrous Homogeneous
10053343_0008	*tile*				Dissolved
FT2-8 - B	Floor tiles and associated yellow mastic	**None Detected**		**100% Other**	Yellow Non-Fibrous Homogeneous
10053343_0045	*mastic*				Dissolved

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Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and
40 CFR, Part 763, Subpart E, App.E

NVLAP LAB CODE 200664-0

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Attn: Sarah Browning

Project: MEC000124

Lab Order ID: **10053343**
Analysis: PLM
Date Received: 06/06/2024
Date Reported: 06/07/2024

Sample ID / *Lab Sample ID*	Description / *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes / Treatment
FT2-9 - A	Floor tiles and associated yellow mastic	**None Detected**		**100% Other**	Gray Non-Fibrous Homogeneous
10053343_0009	*tile*				Dissolved
FT2-9 - B	Floor tiles and associated yellow mastic	**None Detected**		**100% Other**	Yellow Non-Fibrous Homogeneous
10053343_0046	*mastic*				Dissolved
FT2-10 - A	Floor tiles and associated yellow mastic	**Not Analyzed**			
10053343_0010	*tile - TEM*				
FT2-10 - B	Floor tiles and associated yellow mastic	**Not Analyzed**			
10053343_0047	*mastic - TEM*				
RF3-11 - A	Roofing materials- RFs H&I	**None Detected**		**100% Other**	White, Black Non-Fibrous Homogeneous
10053343_0011	*membrane*				Ashed
RF3-11 - B	Roofing materials- RFs H&I	**None Detected**	**80% Cellulose**	**20% Other**	Yellow, Black Fibrous Homogeneous
10053343_0048	*felt on foam*				Dissolved, Teased
RF3-12 - A	Roofing materials- RFs H&I	**None Detected**		**100% Other**	White, Black Non-Fibrous Homogeneous
10053343_0012	*membrane*				Ashed
RF3-12 - B	Roofing materials- RFs H&I	**None Detected**	**80% Cellulose**	**20% Other**	Black, Yellow Fibrous Homogeneous
10053343_0049	*felt on foam*				Dissolved, Teased

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Analyst

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Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and
40 CFR, Part 763, Subpart E, App.E

NVLAP LAB CODE 200664-0

Lab ID # 173190

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Charleston, SC 29407

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Project: MEC000124

Lab Order ID: **10053343**
Analysis: PLM
Date Received: 06/06/2024
Date Reported: 06/07/2024

Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
RF3-13 - A	Roofing materials- RFs H&I	**Not Analyzed**			
10053343_0013	*membrane - TEM*				
RF3-13 - B	Roofing materials- RFs H&I	**Not Analyzed**			
10053343_0050	*felt on foam - TEM*				
C4-14	Gray caulking material	**None Detected**		**100% Other**	Gray Non-Fibrous Homogeneous
10053343_0014					Ashed
C4-15	Gray caulking material	**None Detected**		**100% Other**	Gray Non-Fibrous Homogeneous
10053343_0015					Ashed
C4-16	Gray caulking material	**Not Analyzed**			
10053343_0016	*TEM*				
GC5-17	Gray coating	**None Detected**	**20% Cellulose**	**80% Other**	Black, Silver Non-Fibrous Heterogeneous
10053343_0017					Dissolved
GC5-18	Gray coating	**None Detected**	**20% Cellulose**	**80% Other**	Black, Silver Non-Fibrous Heterogeneous
10053343_0018					Dissolved
GC5-19	Gray coating	**Not Analyzed**			
10053343_0019	*TEM*				

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Byron Stroble (59)
Analyst

Approved Signatory

Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and
40 CFR, Part 763, Subpart E, App.E

NVLAP LAB CODE 200664-0

Customer: GEL Engineering, LLC
2040 Savage Road
Charleston, SC 29407

Attn: Sarah Browning

Project: MEC000124

Lab Order ID: **10053343**
Analysis: PLM
Date Received: 06/06/2024
Date Reported: 06/07/2024

Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
C6-20	Roof F - gray caulking	**None Detected**		**100% Other**	Gray Non-Fibrous Homogeneous
10053343_0020					Ashed
C6-21	Roof F - gray caulking	**None Detected**		**100% Other**	Gray Non-Fibrous Homogeneous
10053343_0021					Ashed
C6-22	Roof F - gray caulking	**Not Analyzed**			
10053343_0022					
DW7-23 - A	Drywall & joint compound	**None Detected**	**10% Cellulose**	**90% Other**	White, Brown Non-Fibrous Homogeneous
10053343_0023	*drywall*				Teased
DW7-23 - B	Drywall & joint compound	**None Detected**		**100% Other**	White Non-Fibrous Homogeneous
10053343_0051	*joint compound*				Teased
DW7-24 - A	Drywall & joint compound	**None Detected**	**10% Cellulose**	**90% Other**	Brown, White Non-Fibrous Homogeneous
10053343_0024	*drywall*				Teased
DW7-24 - B	Drywall & joint compound	**None Detected**		**100% Other**	White Non-Fibrous Homogeneous
10053343_0052	*joint compound*				Teased
DW7-25 - A	Drywall & joint compound	**None Detected**	**10% Cellulose**	**90% Other**	Brown, White Non-Fibrous Homogeneous
10053343_0025	*drywall*				Teased

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Analyst

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Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and
40 CFR, Part 763, Subpart E, App.E

NVLAP LAB CODE 200664-0

Lab ID # 173190

Customer: GEL Engineering, LLC
2040 Savage Road
Charleston, SC 29407

Attn: Sarah Browning

Project: MEC000124

Lab Order ID: **10053343**
Analysis: PLM
Date Received: 06/06/2024
Date Reported: 06/07/2024

Sample ID / *Lab Sample ID*	Description / *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes / Treatment
DW7-25 - B	Drywall & joint compound	**None Detected**		**100% Other**	White Non-Fibrous Homogeneous
10053343_0053	*joint compound*				Teased
CT8-26	2'x2' Pinhole ceiling tiles	**None Detected**	**45% Mineral Wool** **45% Cellulose**	**10% Other**	Gray Fibrous Homogeneous
10053343_0026					Ashed, Teased
CT8-27	2'x2' Pinhole ceiling tiles	**None Detected**	**45% Mineral Wool** **45% Cellulose**	**10% Other**	Gray Fibrous Homogeneous
10053343_0027					Teased, Ashed
CT8-28	2'x2' Pinhole ceiling tiles	**None Detected**	**45% Cellulose** **45% Mineral Wool**	**10% Other**	Gray Fibrous Homogeneous
10053343_0028					Teased, Ashed
CT9-29	2'x2' Wormhole ceiling tiles	**None Detected**	**45% Cellulose** **45% Mineral Wool**	**10% Other**	Gray Fibrous Homogeneous
10053343_0029					Teased, Ashed
CT9-30	2'x2' Wormhole ceiling tiles	**None Detected**	**45% Cellulose** **45% Mineral Wool**	**10% Other**	Gray Fibrous Homogeneous
10053343_0030					Teased, Ashed
CT9-31	2'x2' Wormhole ceiling tiles	**None Detected**	**45% Cellulose** **45% Mineral Wool**	**10% Other**	Gray Fibrous Homogeneous
10053343_0031					Teased, Ashed
FT10-32 - A	12"x12" BLue floor tiles: yellow mastic	**None Detected**		**100% Other**	Blue Non-Fibrous Homogeneous
10053343_0032	*tile*				Dissolved

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Byron Stroble (59)
Analyst

Approved Signatory

Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and
40 CFR, Part 763, Subpart E, App.E

NVLAP LAB CODE 200664-0

Customer: GEL Engineering, LLC
2040 Savage Road
Charleston, SC 29407

Attn: Sarah Browning

Project: MEC000124

Lab Order ID: **10053343**
Analysis: PLM
Date Received: 06/06/2024
Date Reported: 06/07/2024

Sample ID / *Lab Sample ID*	Description / *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes / Treatment
FT10-32 - B	12"x12" BLue floor tiles: yellow mastic	**None Detected**		**100% Other**	Yellow Non-Fibrous Homogeneous
10053343_0054	*mastic*				Dissolved
FT10-33 - A	12"x12" BLue floor tiles: yellow mastic	**None Detected**		**100% Other**	Blue Non-Fibrous Homogeneous
10053343_0033	*tile*				Dissolved
FT10-33 - B	12"x12" BLue floor tiles: yellow mastic	**None Detected**		**100% Other**	Yellow Non-Fibrous Homogeneous
10053343_0055	*mastic*				Dissolved
FT10-34 - A	12"x12" BLue floor tiles: yellow mastic	**Not Analyzed**			
10053343_0034	*tile - TEM*				
FT10-34 - B	12"x12" BLue floor tiles: yellow mastic	**Not Analyzed**			
10053343_0056	*mastic - TEM*				
FT11-35	12"x12" White w/ black streaks floor tile- tile only	**None Detected**		**100% Other**	Gray Non-Fibrous Homogeneous
10053343_0035					Dissolved
FT11-36	12"x12" White w/ black streaks floor tile- tile only	**None Detected**		**100% Other**	Gray Non-Fibrous Homogeneous
10053343_0036					Dissolved
FT11-37	12"x12" White w/ black streaks floor tile- tile only	**Not Analyzed**			
10053343_0037	*TEM*				

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Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and
40 CFR, Part 763, Subpart E, App.E

NVLAP LAB CODE 200664-0

Lab ID # 173190

Customer: GEL Engineering, LLC
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Charleston, SC 29407

Attn: Sarah Browning

Project: MEC000124

Lab Order ID: **10053343**
Analysis: PLM
Date Received: 06/06/2024
Date Reported: 06/07/2024

Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
RF-6-22		None Detected	20% Fiber Glass 20% Cellulose	60% Other	Black Non-Fibrous Heterogeneous
10053343_0057	*built up roofing - not on COC*				Dissolved
RF-6-23		None Detected	20% Fiber Glass 20% Cellulose	60% Other	Black Non-Fibrous Heterogeneous
10053343_0058	*built up roofing - not on COC*				Dissolved
RF-6-24		Not Analyzed			
10053343_0059	*built up roofing - not on COC - TEM*				

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Lab Use Only
Lab Order ID: 10053343
Client Code: _____

Company Contact Information		
Company: GEL Engineering	Contact: Sarah Browning	
Address: 2040 Savage rd Charleston, SC 29407	Phone ☐:	
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	Email ☑: Sarah.browning@gel.com	

Billing/Invoice Information	Turn Around Times	
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Contact: SAA	3 Hours ☐	72 Hours ☐
Address:	6 Hours ☐	96 Hours ☐
	12 Hours ☐	120 Hours ☐
	24 Hours ☒	144+Hours ☐

Asbestos Test Types	
PLM EPA 600/R-93/116 (PLM)	☒
Positive stop	☐
PLM Point Count 400 (PT4)	☐
PLM Point Count 1000 (PTM)	☐
PCM NIOSH 7400-A Rules (PCM)	☐
B Rules (PCB) ☐ TWA (PTA)	☐
TEM AHERA (AHE)	☐
TEM Level II (LII)	☐
TEM NIOSH 7402 (TNI)	☐
TEM Bulk Qualitative (TBL)	☐
TEM Bulk Chatfield (TBS)	☒
TEM Bulk Quantitative (TBQ)	☐
TEM Wipe ASTM D6480-05	☐
TEM Microvac ASTM D5755-02	☐
TEM Water EPA 100.2 (TW1)	☐
Other: _____	☐

PO Number:
Project Name/Number: MECO 00124

TEM=✓

Sample ID #	Description/Location	Volume/Area	Comments
PL 1-1	Plaster: Base and Skim Coats	Only	
PL 1-2	↓	↓	
PL 1-3	↓	↓	
PL 1-4	↓	↓	
PL 1-5	↓	↓	
PL 1-6	↓	↓	
PL 1-7	↓	↓	
FT 2-8	Floor Tiles and Associated	Yellow Mastic	
FT 2-9	↓	↓	
✓ FT 2-10	↓	↓	Accepted ☑
			Rejected ☐

Total # of Samples 37

Relinquished by	Date/Time	Received by	Date/Time
	6-5-24		10:30a

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Lab Use Only
Lab Order ID: L1053543
Client Code: _____

Sample ID #	Description/Location	Volume/Area	Comments
RF3-11	Roofing Materials - RFs	H : I	
RF3-12			
✓ RF3-13			
C4-14	Gray Caulking Material		
C4-15			
✓ C4-16			
GC5-17	Gray Coating		
GC5-18			
✓ GC5-19			
C6-20	ROOFF - Gray Caulking		
C6-21			
✓ C6-22			
DW7-23	Drywall : Joint Compound		
DW7-24			
DW7-25			
CT8-26	2'x2' Pinhole Ceiling Tiles		
CT8-27			
CT8-28			
CT9-29	2'x2' Wormhole Ceiling Tiles		
CT9-30			
CT9-31			
FT10-32	12"x12" Blue Floor Tiles : Yellow Mastic		
FT10-33			
✓ FT10-34			
FT11-35	12"x12" White w/ Black Streaks Floor Tile - Tile Only		
FT11-36			
✓ FT11-37			

A-F-017

Analysis for Lead Concentration in Paint Chips

by Flame Atomic Absorption Spectroscopy
EPA SW-846 3050B/6010C/7000B

Customer: GEL Engineering, LLC
2040 Savage Road
Charleston, SC 29407

Attn: Sarah Browning

Project: MEC000124

Lab Order ID: **10053311**
Analysis: PBP
Date Received: 06/06/2024
Date Reported: 06/07/2024

Sample ID *Lab Sample ID*	Description *Lab Notes*	Mass (g)	Concentration (ppm)	Concentration (% by weight)
L-1 *10053311_0001*	**White paint on plaster walls**	0.0617	200	**0.020%**
L-2 *10053311_0002*	**White paint on plaster ceiling**	0.0673	710	**0.071%**
L- *10053311_0003*	**Gray paint on drywall**	0.1523	<26	**<0.0026%**

Disclaimer: Unless otherwise noted blank sample correction was not performed on analytical results. Scientific Analytical Institute participates in the AIHA ELPAT program. ELPAT Laboratory ID: 173190. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. Analytical uncertainty available upon request. The quality control samples run with the samples in this report have passed all EPA required specifications unless otherwise noted. RL: (Report Limit for an undiluted 50ml sample is 4µg Total Pb).

Matthew Caffey (3)
Analyst

Approved Signatory

Scientific Analytical Institute
4604 Dundas Dr. Greensboro, NC 27407
Phone: 336.292.3888 Fax: 336.292.3313
www.sailab.com lab@sailab.com

Lab Use Only
Lab Order ID: 1005331
Client Code: _____

Contact Information

Company Name: GEL Engineering
Address: 2040 Savage Rd
Charleston, SC 29407

Contact: Sarah Browning
Phone ☐:
Fax ☐:
Email ☑: Sarah.Browning@gel.com
PO Number:
Project Name/Number: MECO 00124

Billing/Invoice Information

Company:
Address:
SAME
Contact:
Phone ☐:
Fax ☐:
Email ☐:

Turn Around Times

3 Hours	☐	72 Hours	☐
6 Hours	☐	96 Hours	☐
12 Hours	☐	120 Hours	☐
24 Hours	☒	144+ Hours	☐
48 Hours	☐		

Lead Test Types

Paint Chips by Flame AA (PBP) ☒	Soil by Flame AA (PBS) ☐	Other ☐
Wipe by Flame AA (PBW) ☐	Air by Flame AA (PBA) ☐	

Sample ID #	Description/Location	Volume/Area	Comments
L-1	White Painton Plaster Walls		
L-2	White Painton Plaster Ceiling		
L-3	Gray Paint on Drywall		
		Accepted ☑	

Total Number of Samples 3

Relinquished by	Date/Time	Received by	Date/Time
	6-5-24		10:30am

A-F-020

APPENDIX 5.4

ASBESTOS INSPECTOR'S LICENSE AND TRAINING CERTIFICATE

[redacted]

SCDHEC ISSUED

Asbestos ID Card

Sarah Browning

CONSULTBI **BI-01095**

Expiration Date:
09/04/24

Greenville Technical College

PO Box 5616, 738 S. Pleasantburg Drive, Greenville, South Carolina 29606-5616 (864) 250-8800

SARAH BROWNING

PO Box 30712, Charleston, SC 29417

9435

has completed the requisite training for asbestos accreditation under TSCA Title II and has met the requirements of and passed the examination for an EPA approved

Asbestos Inspector Refresher Training Course

Greenville, SC

231 - EVT502 - 108

Certificate Number

September 5, 2023

Course Date(s)

September 5, 2023

Examination Date

Attended and Satisfactorily Completed Course Exam with a Passing Score of 70% or Better

Greenville Technical College
Economic Development and Corporate Training

Michael Zavislak, Principal Instructor

Joy N. Finch, Training Manager

September 5, 2024

Expiration Date

Approved for Remote Delivery

APPENDIX 5.5

LEAD INSPECTOR & RISK ASSESSOR TRAINING CERTIFICATES

Greenville Technical College

Economic Development and Corporate Training

RONALD S. SHARPE

has completed 8 hours of instruction in

Lead Supervisor Refresher

from March 9, 2023 to March 9, 2023

and is awarded 0.8 C.E. units

Keith Miller

Dr. Keith Miller
President

Greenville
Technical College
Economic Development
and Corporate Training

Jennifer L. Moorefield

Jennifer Moorefield
Associate Vice President

Greenville Technical College

Economic Development and Corporate Training

RONALD S. SHARPE

has completed 8 hours of instruction in

Lead Risk Assessor Refresher

from March 8, 2023 to March 8, 2023

and is awarded 0.8 C.E. units

Keith Miller

Dr. Keith Miller
President

Greenville Technical College
Economic Development and Corporate Training

Jennifer Moorefield

Jennifer Moorefield
Associate Vice President

Greenville Technical College

PO Box 5616, 738 S. Pleasantburg Drive, Greenville, South Carolina 29606-5616 (864) 250-8800

RONALD S. SHARPE

2040 Savage Rd, Charleston, SC 29407

6740

has met the requirement and passed the examination and hands-on skills assessment for

Lead Project Designer Initial Training Course

Greenville, SC

232 - EVT534 - 007
Certificate Number

March 31, 2023
Course Date(s)

March 31, 2023
Examination Date

Greenville Technical College
Economic Development and Corporate Training

Jeff Gurrie, Principal Instructor

Joy Finch, Training Manager

September 30, 2023
EPA Interim Certification Expiration Date

March 31, 2025
NC Expiration Date

Greenville Technical College

Economic Development and Corporate Training

RONALD S. SHARPE

has completed 8 hours of instruction in

Lead Inspector Refresher

from March 7, 2023 to March 7, 2023

and is awarded 0.8 C.E. units

Dr. Keith Miller
President

Greenville
Technical College
Economic Development
and Corporate Training

Jennifer Moorefield
Associate Vice President