

## December 15, 2025 Newberry County Purchasing Department

## ADDENDUM ONE Invitation for Bids No.: 2025-18 Newberry County Museum Roof Renovations

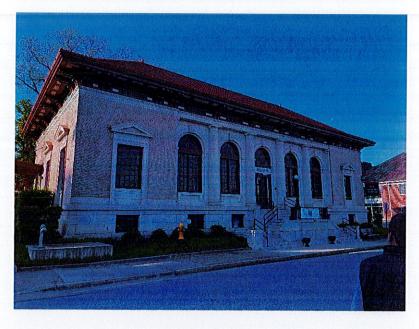
### The following shall become part of the original solicitation:

- Revise all "New Standing Seam Copper roof System" notes, all "New Copper Gutter System" notes, and all "New Copper Downspouts" to "new Aluminum with Copper-Cote Kynar Finish".
   New Aluminum Standing Seam with a Copper-Cote Kynar Finish, New Aluminum Gutter System with a Copper-Cote Kynar Finish.
- 2. The wood replacement will be a lump sum amount.
- 3. The preference for the tile color will be determined by the City of Newberry Architectural Review Board.
- 4. Mandatory pre-bid meeting sign in sheet attached.
- 5. Roof Assessment Report provided by JLA Architects, dated April 25, 2025 is attached.

# Roof Assessment & Report

# Newberry Museum

1300 Friend Street Newberry, SC 29108



# Prepared for

Everett Harbeson III, PLA Johnson, Laschober & Associates, P.C. 1296 Broad Street Augusta, GA 30901

Prepared by



Columbia/Charleston

WMBE Project No. 2025-93

Issued: April 25, 2025



Columbia Area Office

1611 Chapin Road Chapin, SC 29036 (803) 260-4532 / (803) 422-7493 Charleston Area Office 217 North Live Oak Drive Moncks Corner, SC 29461 (843) 499-2756

wmbeconsultants.com

April 25, 2025

Everett Harbeson III, PLA Johnson, Laschober & Associates, P.C. 1296 Broad Street Augusta, GA 30901

Re:

Consulting Services – Roof Assessment & Report Newberry Museum 1300 Friend Street

Newberry, SC 29108

WMBE Project No: 2025-93

**Enclosures:** 

1. Roof Assessment Photographs

2. Sheet R-1.1, Existing Roof Plan

Mr. Harbeson,

Per your request, Chris Waites of WM Building Envelope Consultants visited the subject facility on April 18, 2025, to perform a visual assessment of the roof systems at the subject facility.

Our findings during our visual assessment as well as representative photographs of deficiencies found, recommendations and cost estimates for recommended work are included in our assessment report.

#### **GENERAL BUILDING INFORMATION**

- 1. Based on information found on the Newberry Museum's website, the Newberry Museum was originally constructed as a Federal Building and United States Post Office in 1911.
- 2. The building is a two-story structure constructed primarily of brick masonry and limestone panels.
- 3. The roof system at the facility consists primarily of clay barrel roof tile that drains to a built-in gutter system. There is also a low sloped thermoplastic roof membrane system and two small roof areas of flat seam metal roofing. One of the flat seam metal roofing systems consists of copper roofing and the other terne roofing.

#### **INTERIOR OBSERVATIONS**

1. An interior review was performed during our assessment to review any ongoing leaks.

The only leak that was noted during our assessment was reported to be dripping from a drain line coming down from the thermoplastic roof area above. No other roof leaks were reported by the building occupant.

#### **ROOF SYSTEMS**

- 1. General Description and Condition of the Roof Systems:
  - A. The main roof system at the facility consists primarily of a clay barrel roof tile that drains to a built-in gutter system that is approximately 5,570 SF in size. The built-in gutter system for the clay barrel roof tile system appears to have only 4 drainage points at each corner of the building which is most likely not enough. The clay barrel roof tile system is in fair to poor condition and should be replaced when funds become available.
  - B. The low sloped thermoplastic roof membrane system at the facility drains to a single internal roof drain and is approximately 620 SF in size. The thermoplastic roof membrane system is in fair condition with repairs needed at roof system penetrations and terminations as a minimum. When the clay tile replacement takes place, replacement of the thermoplastic roof membrane system should also be considered.
  - C. The flat seam copper roof system at the facility drains to the roof's edge and is approximately 75 SF in size. The flat seam copper roof system is in good condition with no evident repairs needed at this time.
  - D. The flat seam terne roof system at the facility drains to a built-in gutter system and is approximately 75 SF in size. The flat seam terne roof system is in fair condition with repairs needed as a minimum.

#### 2. Findings:

- A. Clay Barrel Roof Tile Area:
  - a. Repairs have been performed using sealants, mastics and coatings in several areas indicating past problem areas.
  - b. Copper step flashing does not cover the adjacent flashing piece and has left an opening for moisture intrusion to occur.
  - c. Substantial deterioration of the built-in gutter system is evident. Several repairs have been attempted using mastics, coatings, sealants and thermoplastic membrane indicating that this is a past problem area.
  - d. The built-in gutter system does not have provisions for expansion and contraction which puts undue stress on the gutter system. Provision for expansion and contraction needs to be provided, which will require the addition of new drainage points. New drainage points could be easily provided if an external gutter and downspout system are installed.
  - e. Random areas of missing, broken and dislodged tiles were noted. A couple of areas were noted where different hip tiles were used.
  - f. Some random areas of substantial freeze/thaw damage to the clay tiles were evident.
  - g. One area was noted where the hip tiles were missing where they are supposed to span over the built-in gutter system.

- h. There are several areas where dissimilar materials come into contact with each other that can cause premature deterioration/failure.
- i. Deterioration of sealants was noted in a couple of locations.
- j. Debris was noted in the built-in gutter system obstructing proper drainage.

#### B. Thermoplastic Roof Membrane Area:

- a. The thermoplastic roof membrane is likely manufactured by Firestone Building Products due to the Firestone Building Products sticker being placed at the roof access hatch.
- b. Minor ponding water was evident on the roof membrane.
- c. Roof penetration flashings have some deterioration evident and should be replaced.
- d. A couple of areas were noted where wrinkles run through a lap of the roof membrane.

#### C. Flat Seam Metal Roof Areas:

- a. The soldering of the flat seam copper roofing system seams is not smooth in most locations. Smooth soldered seams are an indication of a fully soldered joint. However, it's possible that the joints have been soldered fully even though they do not appear smooth, and no leaks were reported in this area.
- b. Deterioration of the paint/coating system on the flat seam terne roofing system was evident.
- Debris was noted in the built-in gutter system of the flat seam terne roofing system obstructing proper drainage.
- d. Some random sealant deterioration was noted on the flat seam terne roofing system.

#### 3. Recommendations:

- A. Replacement of the clay barrel roof tile system at the subject facility is recommended when funds become available. We would also recommend that the built-in gutter system be bypassed, and an external gutter and downspout system be installed if allowed by the historical review committee. This would allow for the addition of new drainage points for the roof system.
- B. We also recommend that random repairs be performed on the other roof areas when this work takes place. Although we do recommend that the thermoplastic roof areas be repaired as a minimum, this area should also be considered for replacement when the replacement of the tile roofing is performed due to the overall size being minimal and the difficulty in getting to it.

#### C. Cost Estimate for Roof Replacement:

- a. Replacement of the clay barrel roof tile system with a new clay barrel roof tile system should be anticipated to cost approximately \$375,000 \$385,000.
- D. When replacement occurs, replacement should adhere to the following standards as a minimum:
  - a. Building code in place when the roof system is replaced.

- NRCA Roofing and Waterproofing Manual, Latest Edition.
- SMACNA Architectural Sheet Metal Manual, Latest Edition.
- d. All materials to be disturbed need to be tested for asbestos containing materials. If these materials are found to be present, an additional 10% - 15% should be added to the cost estimate for abatement.
- Repairs to the remaining roof areas is recommended when funds become available.
- Cost Estimate for Roof Repairs:
  - a. Repairs of the to the remaining roof systems should be anticipated to cost approximately \$8,000 - \$10,000 if performed in conjunction with the replacement of the clay barrel roof tile system.
- G. When repairs occur, they should adhere to the following standards as a minimum:
  - a. Building code in place when the roof system is repaired.
  - b. NRCA Roofing and Waterproofing Manual, Latest Edition.
  - SMACNA Architectural Sheet Metal Manual, Latest Edition.
  - d. All materials to be disturbed need to be tested for asbestos containing materials. If these materials are found to be present, an additional 10% - 15% should be added to the cost estimate for abatement.

#### **RECOMMENDATION AND COST SUMMARY**

<u>Area</u>	<b>Recommendation</b>	<b>Estimated Cost</b>
Clay Tile Roof Area	Replacement	\$375,000 - \$385,000
Remaining Roof Areas	Repairs	\$8,000 - \$10,000

#### **Cost Estimate Total**

\$383,000 - \$395,000

All costs mentioned in this report are based on replacement and/or proper long-term repairs in today's competitively bid environment and assuming all recommended work is performed at the same time. Interim or short-term repairs are less expensive but do provide less service life.

I have provided representative photographs of the general conditions of the building for your reference. Should you have any questions regarding this report, please do not hesitate to give me a call.

Additionally, if you need further assistance in creating a scope of work for the recommended work included in this report, let me know and we can provide you with a proposal to perform the requested work.

Thank You.

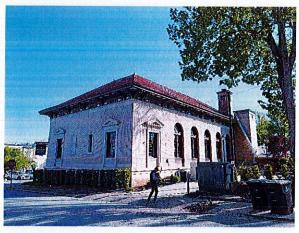
Chris Waites, RWC, RRC, RRO, CDT, SCACEM

(803) 260-4532 chris@wmbeconsultants.com

WM Building Envelope Consultants, LLC Columbia / Charleston wmbeconsultants.com



Overview of subject facility



Overview of subject facility



Overview of subject facility



Overview of subject facility



Overview of subject facility



Overview of subject facility



Repairs using sealants, mastics and coatings



Repairs using sealants, mastics and coatings



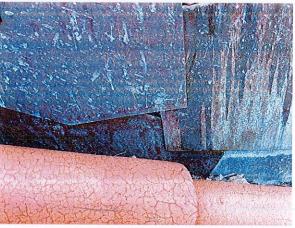
Repairs using sealants, mastics and coatings



Repairs rmed using sealants, mastics and coatings



Repairs using sealants, mastics and coatings



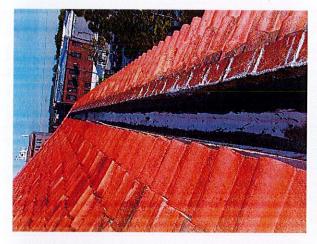
Copper step flashing does not cover the adjacent flashing piece



Substantial deterioration of the built-in gutter system



Substantial deterioration of the built-in gutter system



Substantial deterioration of the built-in gutter system



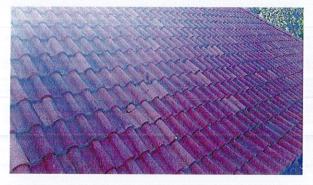
Substantial deterioration of the built-in gutter system



Substantial deterioration of the built-in gutter system



Broken and dislodged tiles





Broken and dislodged tiles

Broken and dislodged tiles





Broken and dislodged tiles

Broken and dislodged tiles





Substantial freeze/thaw damage to the clay tiles

Hip tiles were missing where they are supposed to span over the built-in gutter system



Dissimilar materials (lead and copper)



Dissimilar materials (steel and copper)



**Deterioration of sealants** 



Debris in the built-in gutter system



Membrane likely manufactured by Firestone Building Products



Minor ponding water was evident



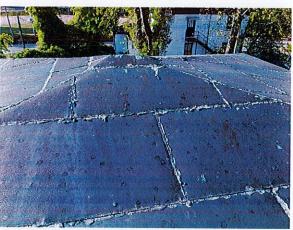
Penetration flashings have some deterioration evident



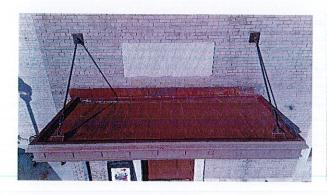
Penetration flashings have some deterioration evident



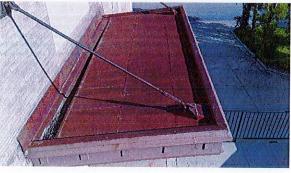
Wrinkles run through a lap of the roof membrane



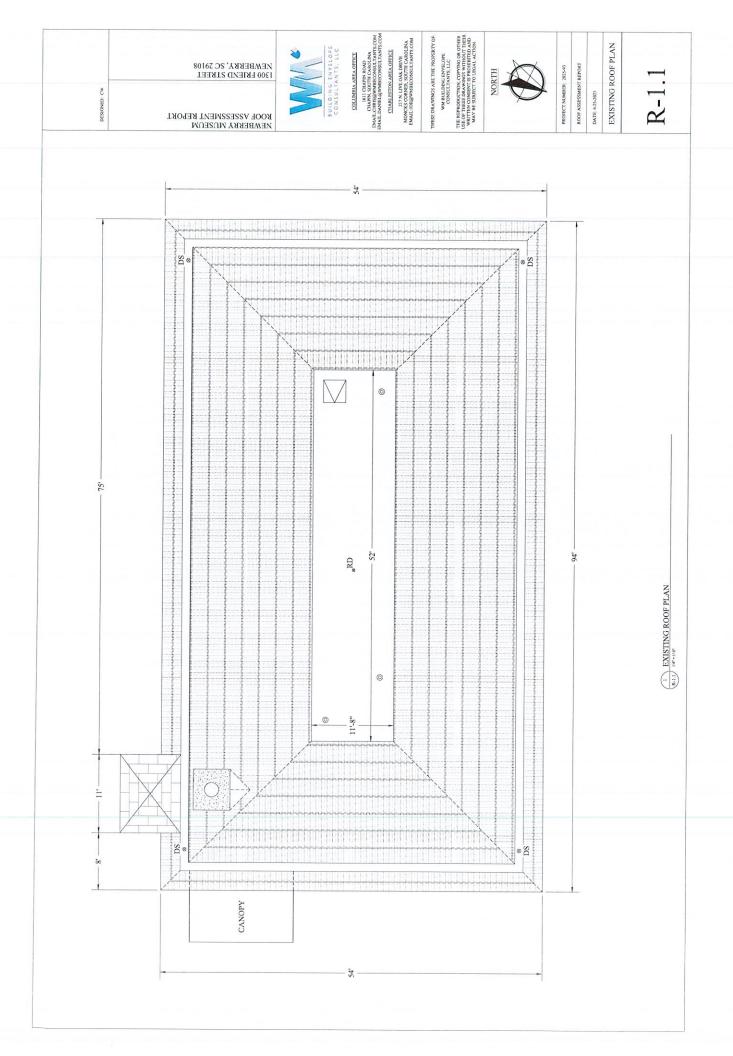
Soldering of the flat seam copper roofing system seams is not smooth



Deterioration of the paint/coating system on the flat seam terne roofing



Deterioration of the paint/coating system on the flat seam terne roofing. Debris was also noted in the built-in gutter system



	2025-18 Museum Roof Renovations	·	Pre-Bid Meeting
Project:	2022 CPST	Date:	December 10, 202
Time:	10:00 a.m.	Place:	Newberry Courthouse Annex Conference Room, 1309 College Street, Newberry
No.	Name and Firm Represented Email address	Mailing and Street Address	Telephone No. Fax No.
1	CAROLINA MADE CONST.	29 N BASILICA AVE	843-364-4279
	DAN HAMNER	HANAHAN, SC 29410	
	dAN. hAMNER GYALO, COM	,	
2	MATTHEW KRIDER	310 OSTWALT AMOUT RD	704-660-6957
	DRY-TICH ROSFING	TRAUTMAN, NC 28166	
	MATTHRIDERA DEVTECHROFING, CON	,	
3	obsiph Lloyd	Po Box 49308	824-223-3716
	Lloyd Roding Co Inc.	Greenwood 50	· A S 3 1 1 0
	joseph @ 11 by rating. com	29649	
4	RYAN SCHAEFER		(864)867-2533
	ALLCON ROOFING	PEFDMENT, SC 29673	(864)552-1365
	ZSCHMEFER @ ALLCON TOOK THE	i.com	(41))5-1340
5	Mac Bartlag	1309 College 51	803-944-0510
	Newhenny County facilities	Newsony SC	111 03.0
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6	BENTON POUFING INC.	814 TRACY GROVE NO.	(270) 770-9107
	DEAR SURCIA	FLATRACK, NC 28731	(828) 270-8102
	OSCOMESCE SENTON POOFINGING COM	1917-0917-01	
7	Pickens Contracting, Inc.	1 Century Place Greer, SC	864-436-2286
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