TENNESSEE
Hamblen County
SERVICE • COMMUNITY • INDUSTRY

Architectural / Engineering Services for Historic Courthouse Portico (RFQ 2025-01)

Questions & Answers

Q - In Section 5 of Exhibit A titled “Project Description,” it mentions that a structural assessment has been performed of the existing portico. Will this assessment be made available to bidders prior to or only after the award of the project?

A – Please see below for the attached assessment letter.

Q - In Section 5 of Exhibit A titled “Project Description,” it lists Chris Meyers of Bennett & Pless as the Engineer who performed the preliminary assessment of the existing portico structure. Would their involvement in the preliminary assessment exempt them from being considered as consultants on the project?

A – No

Q - In Section 5 of Exhibit A titled “Project Description,” it mentions the possibility of reusing existing elements of the portico that are not damaged. How will the destructive analysis of these elements during the design phase be handled? Would this work be completed as part of a separate allowance?

A – The analysis of the material will be part of the scope of work of the architect/engineering firm. Compensation for the analysis will be part of the fee negotiation.

Q - Will respondents be able to visit the site to see the existing conditions of the portico prior to the award of the project?

A - A site visit is permitted before the submittal deadline. Schedule through the county mayor’s office by contacting Trish Bowmen. 423.586.1931 or by email at Trish.Bowman@co.hamblen.tn.us

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Experience Structural Expertise

June 16, 2024

Mr. Bill Brittain
Hamblen County Mayor
Hamblen County Courthouse
511 West Second North Street
Morristown, TN 37814

Re: Balcony Structure Assessment
Hamblen County Courthouse
Morristown, TN
B&P Project No. 24.04.074

Dear Mr. Brittain:

This letter is a follow-up to our onsite meeting and is intended to provide an assessment regarding the steps needed to address the structural issues with the existing balconies. It is our understanding that Hamblen County is in the process of preparing a grant application with the goal of obtaining funding to put toward addressing the balcony structure and an assessment is needed to determine whether this effort would be classified as a 'repair' or a 'replacement'.

The courthouse was constructed in 1874, however it is not known if the balconies were part of the original construction. While most of the structural elements are concealed by finishes, we were able to partially observe some elements onsite with yourself and Mr. Terry Myers. We were able to observe wood joist framing at the upper level where the wood sheathing had deteriorated and collapsed under foot traffic. We were also able to view wood joist framing at the building wall and near the column and beam framing opposite the building wall by way of photos you provided after partial finish removal for investigation purposes.

While a full structural assessment is difficult without significant finish removal, we do believe a reasonable recommendation regarding 'repair' vs. 'replacement' can be made based on our observations.

As mentioned, our on-site observations of the structure were limited the wood joists at the upper level. The floor at both levels was covered with a black membrane covering. At the area previously noted, the plywood was essentially disintegrated and the joists could be observed to be 2x10s spaced at 12" on center. The wood joist was probed with a pocket knife which easily penetrated the joist to the knife handle indicating significant deterioration. There was not an opportunity to observe the column and beam framing opposite the main building wall, however it was noted that the floor at each level had a significant slope. As positive drainage away from the building is desired, the fascia at the second level was constructed to account for this, and

the fact that we did not see any evidence of settlement at the column bases, we assume the floors were originally constructed in this manner or have been this way for some time. However, while viewing the balcony structure from the side. The columns appeared to be out of plumb between the two elevated levels, perhaps indicating excess deformation or deterioration at the floor levels.

While not structural in nature, we also observed that the wood finishes were in various levels of distress and deterioration. When probed with a pocket knife, similar results were observed as the knife easily penetrated to the handle. We also noticed the balcony rails do not extend to code required guardrail height and thus do not provide adequate fall protection.

Following these observations and discussions onsite, you provided photos to us showing the floor joists at the building wall and at the opposite end along the column and beam line. The joists appeared to be pocketed into the masonry wall at the main building. There did not appear to be deterioration due to moisture at this location, however there did appear to be splitting parallel to the wood grain at the bottom of the joists. This appeared to originate from a notched bearing condition at the wall. At the opposite end of the joist, the deterioration appears to be moisture related with significant damage. It appears the 'box' beam supporting the joists along the column line may also have some level of moisture damage. This condition supports the suspicion that there is deterioration of the column or column bearing condition at the floor levels.

Based on these observations, the balconies are not safe for occupancy and their access should continue to be restricted.

Given the distress to the structural components is primarily due to moisture exposure, repairs to the individual components would consist of replacement. A full removal of the finishes would be required to determine precisely which structural components would require replacement. However, based on these observations, it is reasonable to expect the following in addressing the structural system of the balconies:

- Full replacement of the floor sheathing at the upper level
- Full replacement of the floor joists at the upper level
- Full replacement of the beams at the upper level
- Full replacement of the columns at the upper level
- Replacement of a significant amount of floor sheathing at the lower level
- Full replacement of the floor joists at the lower level
- Possible replacement of the beams at the lower level
- Possible replacement of the columns at the lower level

In other words, it is reasonable to expect structural repairs would involve replacement of all or most of the structural components. All finish materials would need to be removed to further assess and to install replacement structural members. Given the current deterioration of much of this finish material, we do not expect these materials would be adequate for removal and re-use, much less provide protection of the replacement structural components relative to moisture and weathering.

It is our opinion that a replacement of the balcony structure would be more economical than a repair. Further, we suspect it likely that an undertaking to repair the balconies would essentially become a replacement once all conditions are properly addressed.

We appreciate the opportunity to perform this assessment and hope that it meets your needs in preparing the grant application. Should you need anything else including further discussion, please let me know. We are also available to assist you in moving to the next phase of this project. Please let us know if you have any comments or questions regarding our assessment and recommendations.

Sincerely,

BENNETT & PLESS, INC.

Christopher A. Myers, P.E.

Senior Engineer | Associate