

Request for Qualifications (RFQ) # 220214-222

Structural Engineering Services

**Response Due:
March 17, 1:00 p.m.**

Submit Responses by 1pm EST on March 17, 2022 by email to:

Allen Vann, Assistant County Manager, Pender County Government
avann@pendercountync.gov

Project Overview:

The Pender County Howard Holly building located at 300 East Fremont Street, Burgaw, NC is showing obvious signs of foundation settlement. This process started several years ago but seemed to have plateaued (for the most part) until recent weeks. Suddenly, this issue has accelerated with signs of stress cracks in the interior and exterior walls as well as other physical damages to various construction components of the building. Pursuant to N.C. Stat. Sec. G.S. 143-64.31, Pender County is seeking qualifications from structural engineering firms to perform a structural assessment of this building as outlined in subsequent sections.

General Background and Description:

The Howard Holly building houses the Register of Deeds, Tax Assessing and Tax Collections. The building consists of an original building with wings on the eastern and western ends, which are interconnected with a center covered foyer entrance and a building addition which was constructed in the original rear courtyard area. According to architectural drawings by Altobellis & Associates, the original building was constructed in 1976 and the courtyard addition was constructed in 1997.

The building is a single-story structure. Exterior walls consist of 8" CMU (stack bond) backup walls with a brick veneer and an upper precast parapet. Small reinforced concrete stoop overhangs are located above several exterior window openings. The cell reinforcement of the original CMU walls has not been determined as to if they are reinforced or not as the drawings on hand are limited.

The roofing is generally flat for the original building and consists of what appears to be a modified bitumen roof membrane with gravel ballast stone and rigid insulation over metal roof decking. The metal roof decking is supported by 14" steel roof joists, spaced at approximately 4' on center and spanning in the north-south direction. The joists are supported at the northern and southern ends by flange columns at approximately mid-depth of the building. A short parapet extends around the exterior perimeter of the roof, with a roofing membrane turned up along the inside face to terminate under a metal roof cap. There are roof drains with thru wall scuppers. The roof system for the courtyard addition consists of a standing seam metal roofing system over rigid insulation and plywood sheathing. The sheathing is supported by pre-engineered timber roof (Howe type) trusses, which are spaced at approximately 2' on center and span the east-west direction. A gable end truss is on the rear

northern end of this roofing system. A girder truss is located approximately 9' in from the front (south) side of the roof addition, which provides support for hip jacks and end jack trusses along the front edge. A ridgeline extends from the rear of the roof to intersect with hip lines extending from the front concerns to provide a 4:12 roof slope along the southern, eastern, and western sides of the roof. Metal gutters exist along the sloped edges and are collected by downspouts, which extend across the original roof to discharge at a roof drain. The roof trusses are supported at the ends by the load-bearing CMU walls and at the intermediate interior supports by 14" deep timber multi-ply LVL beams, spanning the north-south direction, at two interior locations. The LVL beams are supported at approximately mid-span by steel tube columns.

A drop-in suspended ceiling is located throughout the entire building.

The ground floor system consists of a concrete slab-on-grade, which is raised above grade with retaining walls incorporated into the CMU walls system along the rear and eastern ends of the building.

The original building construction provides a footprint of approximately 8,230 SF in gross floor area, while the courtyard building addition provides a footprint of approximately 1,290 SF gross floor area for a total gross building area of approximately 9,520 SF.

Scope of Services:

Perform an extensive structural conditions assessment and provide said findings in a report format which can be utilized by the Board of Commissioners and Management for decision making related to the overall structural integrity of the Howard Holly Administration building. *Note: This report (outlining all findings and recommendations) must be presented to the Board of County Commissioners in a public meeting.*

The assessment must include:

- Professional opinions or conclusions related to the buildings' ability to resist structural loads in the building code at the time of original design or in the current effective building Code as well as calculation of structural capacities.
- Geological, geotechnical, or hydrological conditions that may be affecting the condition(s) of the building. Various soil and materials testing services may be subcontracted to structural engineer's firm of choice with pricing included in overall proposal.
- Wind/seismic analysis of the building
- Any visual examinations of the building related to maintenance issues that should be rectified
- Professional determination of feasibility and cost effectiveness to perform any and all required structural repairs/modifications

Qualification Criteria:

To be considered for this project the Engineer Consultant must meet minimum requirements set forth below. The firm must exhibit a high level of competence with a demonstrated ability to provide high quality services on time and within budget. The selected Engineer Consultant should have a proven ability to work effectively with public agencies and other stakeholders.

Qualifications statements (with included proposal fees for services) should be limited to 30 pages excluding attachments and shall include, at a minimum, the following:

- 1) Firm information.** Include information about the firm's size, history, office locations and service offerings.
 - Include number of years the firm has been in business under its present business name.
 - List the point of contact and contact information.
 - Provide at least (5) references to substantiate qualifications to perform this type of work.

- 2) Project Approach.** Include a comment/response to each of the following:
 - Provide a brief statement of your understanding of the project.
 - Provide your firm's proposed approach, to the project (as well as means and methods) based on the information provided herein.
 - Provide a probable timeline.

- 3) Experience.** Provide a description of your firm's experience in working with similar projects. Please include the following items:
 - Name, location and brief description of project
 - Name, address, and telephone number of the Owner (indicate contact person)

- 4) Key Personnel Resumes.**

Procurement Schedule:

Submit Questions by 1pm EST on March 3, 2022 by email to avann@pendercountync.gov. Answers will be provided in the form of an Addendum no later than March 8, 2022.

Responses are due by 1pm EST on March 17, 2022 by email to avann@pendercountync.gov. Pender County reserves the right to reject any/all responses.

Pender County will select and contact the firm of choice on Tuesday, April 5, 2022 with a Notice to Proceed. It will be imperative to move forward with the scope of work as quickly as possible upon this notification.