

APPENDIX G
DESIGN PROFESSIONAL INSPECTION FORM

RECORD OF THE INSPECTION OF A COMPONENT OR ELEMENT BY A NC LICENSED ARCHITECT OR ENGINEER

Project Information:

| | |
|---|---|
| Residential Single-Family Project: <input checked="" type="radio"/> Y <input type="radio"/> N | Commercial Project: <input type="radio"/> Y <input type="radio"/> N |
| Code Enforcement Project No: | Permit No: |
| Project Name: <u>Broadwell Project</u> | Owner: |
| Project Address: <u>4173 Benson Rd.</u> | Suite No: |
| Date Inspected: <u>8/18/25</u> | Contractor Name: |
| Component Inspected: <u>MEP</u> | |

Responsible Licensed NC Architect or NC Engineer

| | |
|--|-------------------------------------|
| Name: <u>Thomas J. Faulkner</u> | |
| Firm Name: <u>Faulkner engineering & design</u> | |
| Phone Numbers: | Office: Mobile: <u>919-946-1196</u> |
| Email Address: <u>tfaulkner@faulkneredc.com</u> | |
| Mailing Address: <u>2053 Herbert Atkins Rd., Fuquay Varina, NC 27526</u> | |

APPLICABLE CODE:

2018 NCBC = 2018 NC Building Code; 2018 NCRC = 2018 NC Residential Code

Describe Element/Component/Type of Inspection: *

Electrical, plumbing and mechanical systems were inspected to current code standards and have been found to meet or exceed.

*(subgrade form/letter may also be required)

Attestation/Signature:

By signing below, I certify that the component and/or element of the building as identified on this form has been inspected by me or someone under my direct supervision per G.S. 160D-11-6 and is in compliance with the Code or other proposal of the architect or engineer for the project. This inspection is in compliance with all of the requirements of the above referenced code. Attach any additional documents if needed.



Licensed Architect or Engineer



Inspection Department disclaimer:

Upon the receipt of a signed written document as required under subsection (a) of G.S. 160D-11-1, Code Enforcement shall be discharged and released from any liabilities, duties and responsibilities imposed by this article or in common law from any claim arising out of or attributed to the component or element in the construction of the building for which the signed written document was submitted. Be aware that this inspection will be noted in all inspection records including the Certificate of Occupancy or Certificate of Compliance. This inspection does not address any local ordinances or zoning requirements.

John Alexander McRae, P.E., Inc. (NC C-2298)
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P O Box 1466 Apex, North Carolina, 27502
(919) 210-5749 jampe86@gmail.com

28 MARCH 2025

To: Whom It May Concern

Re: 4173 Benson Road Angier

Permit #

JAMPE Job Number 2503-42

The following design and recommendation is based on the latest edition of the North Carolina Building Code and any local codes that may be in effect at the time of this letter.

Live Loads: Roof/Limited Storage- 20 psf Upper Floors- 40 psf Main floors- 40 psf
Dead loads as applicable. Allowable Soil Pressure- 2000psf Wind load- 27 psf.
Allowable Stress: #2 SPF- 875 psi #2 SYP- 1050 psi LVL- 2900 psi

Homeowner has requested verification of the following issues:

Verify Structural Integrity and Compliance with Code Requirements Code Used for Evaluation 2018 Residential Code Site Evaluation 1430 28 March 2025.

Century Old Home has been raised and new 16" x 8" Concrete footing retro-fitted to support pier and curtain original construction and new piers on level and properly sized pads.

Foundation is sufficient to support 30 foot by 30 foot structure and has code required two inch minimum projection and is located at mid-third of footing.

Floor system is supported by a centerline pier and dropped girder. Girder and Floor Joist Framing are "True" 2 x material and is sufficient for expected loads and soils conditions

. Probe and Auger for verifying projection and footing size reveals native clay silts, silty clay and sandy loams. Maximum load - 1320 plf / 16 / 12 = 1000 psf and soils are sufficient for expected loads.

Crawl space has been converted to sealed conditioned space with insulated walls and fully encapsulated with recommended vapor, condensation, and moisture barrier. Conditioned source provided from heat pump servicing the home.

Wall construction is of true two by four material and has been retro-fitted with R-15 or above insulation. Sufficient bracing is provided by period appropriate let-in diagonal members and sheathing.

Roof construction meets or exceeds code requirements and my recommendations.

Home construction meets and often exceeds code requirements and my recommendations ON Site. Framing is in good condition or better and shows only minor signs of fungal growth (inert) (most likely prior to conditioning of space

Respectfully,

John A. McRae
NCPE 20081 (NC C-2298)

Questions or Comments John A McRae jampe86@gmail.com
Design and Soils Evaluation is to 2018 North Carolina Residential Code

