

ROBERT J. BRACKEN, P.E.

PLEASE NOTE  **ADDRESS CHANGE**

3768 CARBONTON RD.
SANFORD, N.C. 27330
TELEPHONE (919) 774-6074
BJBRACKEN@WINDSTREAM.NET

SERVICES RENDERED THRU _____

PROJECT NO. 15418

INVOICE DATE 8-24-18

DEBORAH MCALILEY
371 PAGE RD.
BROOKWAY, NC
27505

ALL ACCOUNTS DUE IN 30 DAYS.

PLEASE DETACH AND MAIL TOP PORTION WITH YOUR REMITTANCE.

ENGINEERS LETTER FOR INSPECTIONS
PUNCH LIST

Ref: 371 PAGE RD

Thanks

AMOUNT DUE \$ 700⁰⁰

ROBERT J. BRACKEN, P.E., SANFORD, NORTH CAROLINA 27330

An 18% annual service charge will be added to all accounts not paid within 30 days of invoice date.

RJB, P.E., P.A.

C-0269

ROBERT J. BRACKEN
ENGINEER * SURVEYOR

3768 Carbonton Road • Sanford, North Carolina 27330

(919) 774-6074 • bjbracken@windstream.net

August 20, 2018

Harnett County Inspections
P.O. Box 65
Lillington, NC 27546

REF: Deborah McAliley, Res.
371 Page Rd.
Broadway, NC 27505

Dear Sir/Madam:

I made onsite visits to the Residential building referenced above during August, 2018. The purpose of the visit was to examine items that were on an Inspections punch list. The items are listed below with my comments or recommendations:

- Item #1** Footings. I had the contractor remove soil from round the footings so they could be examined. All of the footings were adequate.
- Item #2** Remove siding to expose construction connections. The siding was removed when I made my first visit. The connections at the deck, porch & carport roof were attached to the roof truss extensions. I recommended that LVL beams with 6x6 columns with footings be placed adjacent to the rear wall of the residence under the rafter bearing to take the load off of the modular roof trusses.
- Item #3** Roof at front porch. The roof rafters were bearing on the modular roof trusses. There is not that much additional load applied the trusses, however I recommended that 2) vertical blocks be placed at each rafter at the exterior modular wall to reduce the load from the porch rafters bearing on the trusses.
- Item #4** Hanger screws. I have no problem using screws. The screws have a much higher shear stress and have a higher "pull out" factor than the recommended 10-D nails.
- Item #5** The over span roof trusses. The roof spans over the carport area are over spanned for the 2x8 spf lumber used. I recommended that a 2x8, 12 feet long be scabbed to all of the existing rafters over the carport. The additional 2x12 will increase the section modulus therefor reducing the bending stress on the rafters.
- Item #6** Roof pitch. The roof pitch is approximately 3:12. The shingle application instructions say that 3:12 is acceptable if the under layment is placed per their specifications. I have no way of certifying the under layment without tearing off the roof shingles. Because of the type of areas under the roof, ie, carport and open screen porch. I have no problem with the slope.
- Item #7** Carport slab. The carport slab shall be a minimum of 4 inches deep and have a concrete compressive strength of 3000 psi.

Item #8 All of the other materials, construction procedures & connections observed during my visits are acceptable.

I made a return visit to the site and all of the recommendations had been completed. The materials and construction procedures used meet or exceeds the requirement per the NC State Residential Building Code, 2012,ed.

If you have any questions please feel free to call me at 919-774-6074.

Sincerely,

Robert J. Bracken

Robert J. Bracken, PE

RJB:jeb

