



J. SMITH STRUCTURAL ENGINEERING, PLLC
N.C. CERTIFICATE NUMBER P-2212

July 27, 2022

Brian Culver
Triangle Home Pros
6312 Lauraca Lane
Fuquay Varina, NC 27526

RE: Teralyn II – 32 Timber Rail Lane
I-joint repair over garage and rafter tiebacks

Dear Mr. Culver:

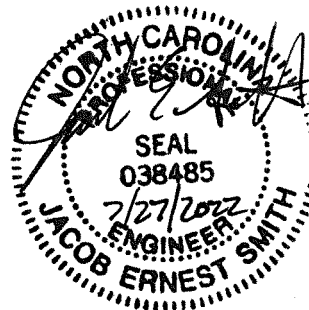
The above reference plans were reviewed to address the required repairs to the damaged I-joint over the garage below the jack and jill bathroom and to address the rafter tiebacks that were installed in lieu H2.5A hurricane ties at various locations. You provided images of the as-built framing and repairs. Review of the plans and as-built framing revealed the following:

1. At the double I-joint below the bathroom wall, the top chord of (1) I-joint ply was notched for a plumbing line. To reinforce the damaged I-joint, (1) layer of $\frac{3}{4}$ " OSB x 4' long was installed against the I-joint web centered at the notch and secured with (2) rows of 10d nails @ 4" o.c.. A 4' long 2 x 4 scab was secured to the face of the top chord and centered at the notch. The 2 x 4 scab was secured to the top chord with (1) staggered row of 10d nails @ 4" o.c.. This reinforcement configuration is adequate to support all applied loads.
2. In lieu of H2.5A hurricane ties at each rafter bearing, 2 x 4 rafter tie backs were installed on every other rafter in various attic locations. This framing configuration is adequate to support all applied loads and no additional hurricane ties are required.

Please call me if you have any questions.

Sincerely,

J. Smith Structural Engineering, PLLC
Jacob E. Smith, P.E.
Owner



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