

February 10, 2024

# MEMO

**RE: 1585 3 Bridge Rd- Dunn, NC**  
**Project No: IN023367**

As requested, an assessment of the framing construction at said residence has been completed to verify compliance with 2018 North Carolina Residential Code and the following determinations have been made:

- The replacement 2x4@16" studs installed are structurally sufficient.
- The 2x6@16" floor joists with a maximum unsupported span of 7'9" are structurally sufficient<sup>1</sup>.
- To ensure the structural sufficiency<sup>2</sup> of the front porch and rear deck roof framing, consisting of 2x6 rafters @16" oc with 2x8 ridge board and double 2x10 support band, the following should be implemented:
  1. 2x4 collar ties should be installed every other rafter.
  2. H2.5A hurricane ties<sup>3</sup> should be installed at every rafter.
  3. Double 2x10 band to be supported by 6x6 post<sup>4</sup> at maximum spacing of 9'0.

Please give me a call if you have any further questions.

Regards,



Jerome Rufaro Redmond, PE  
Principal Structural Engineer

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<sup>1</sup> Based on Floor Live Load of 40 psf

<sup>2</sup> Roof Live 20 psf and Ceiling Live of 10 psf.

<sup>3</sup> Or Equivalent

<sup>4</sup> Attach to post with (2) 5/8" carriage bolts. Notching not to exceed 50% of post