

PERMIT -  
SFD - 2404 - 0028

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28 August 2024

**To: NC Custom Homes**

**Re: 1655 Ernest Brown Road Lillington JAMPE Job Number 2408-45**

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

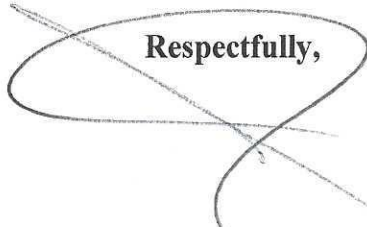
Live Loads: 800f/Limited Storage- 20 psf Upper Floors- 40 psf Main floors- 40 psf  
Dead loads as applicable. Allowable Soil Pressure- 2000psf Wind load- 27 psf.  
Allowable Stress: #2 SPF- 875 psi #2 SYP- 1050 psi LVL- 2900 psi

Builder has requested verification of the following issues to IRC 2015 NCRC 2018  
Design is to North Carolina Residential Building Code 2018 Chapter 4 R401.4 (Soils Testing)  
and R403.1

Soils with minor groundwater seepage in minor pockets. Ground water does not compromise soil integrity or bearing capacity

However, builder has over-excavated and backfilled with stone to provide drainage sump.  
Per my recommendations reinforce area over placed tone with (two) # 4 bars extending a  
minimum of 12 inches past file area each way

Respectfully,



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

Questions or Comments John A McRae [jampe@nc.rr.com](mailto:jampe@nc.rr.com)  
Design is to 2018 North Carolina Residential Code



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