

TO: Halcyon Homes

P.O. Box 33578

Raleigh, NC 27636-3578

PROJECT #: 23-1180-A

PAGE: 1 of 2

DATE: February 19, 2024

LOCATION: Lot 54, Cotton Farm

PLANS REF: Lot 54, Cotton Farm by Murphy Garnow Design Group Project #: 23-1180



Garage Beam Support: Page seven of the plans shows (6)2x6 studs for support of the right end of the W-16x31 beam in the garage. Page 3 of the plans shows a 12" foundation wall extending 3'-0" back from the front-left corner of the front porch to support the (6)2x6 stud column. Based on information provided to Southern Engineers, the stud column was framed with 2x4 studs instead of 2x6 studs and the foundation wall was only 8" in that area.

Response: The above noted garage beam support is structurally acceptable with being reframed as follows: Cut out 2x4 sole plate, subfloor, and rimjoist (band) to allow for a new full height column. Install a new 3.5"x7" PSL column extending from directly under the steel beam and down to the treated sill plate. Install a 1.75"x3.5" LVL king stud on each side of PSL extending from the top plate of the wall down to the treated sill plate. Attach the LVL studs to the PSL with (2) staggered rows of 12d nails @ 6" O.C. Box out the floor with blocking to ensure support where the rimjoist was cut out. Install a horizontal 30" long, CS16 strap to attach the sole plate of the wall across the new stud column. Install the type of strap to attach the top and bottom of the rimjoist across the stud column. A regular 2x4 stud of the wall attaches to the LVL king studs.

Breakfast Beam Support: Page seven of the plans shows a (3)1.75x16 LVL spanning left-to-right above the breakfast nook. The left end of the beam is shown to be supported by (7) studs with direct stud bearing under the beam per detail "206A/SD". The right end of the beam is noted to be supported by (7) studs and to "provide 6" min bearing length for the front (2) plies of the LVL". Based on information provided to Southern Engineers, the right end of the beam was not extend and only has $3\frac{1}{2}$ " of bearing length on the wall.

Response: Please note that since the right end of the beam was not extended along the wall, the top plate of the wall shall be cut out and new studs with direct bearing under the beam installed in the same manner as the left end of the beam per detail "206A/SD".



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In closing, I trust that this letter fulfills your requirements at this time. Please do not hesitate to call if you have any further questions.

Sincerely,

Mark Minshew, P.E. Southern Engineers, P.A.

