

DAVID MILLER, PE

6300 Creedmoor Rd, STE 170#363

Raleigh, NC 27612

(919) 422-8932 (Office); DAVE@DMA-PA.COM

September 5, 2017

WYNN CONSTRUCTION

2550 CAPITAL DRIVE

SUITE 105

CREEDMOOR, NC 27522

Oliver Hudson

919-520-8406

e-mailed to: oliver@wynnhomes.com ; sean@wynnhomes.com

RE: Engineering - Field Observation

Lot 41 Avery Pond Subdivision; Fuqua Varina, NC

Project No.: 17DDM-0830Ar

To Whom It May Concern/Inspections Dept.:

The undersigned arrived on-site 8-30-17 to observe, measure and analyze the following for the above referenced site.

1) The valleys over the garage should be supported. The support can be a 19ft 10in beam to support the valleys approximately 3 ft from the apex to a (2) 1.75X11-7/8 or (3) 1.75X9.25 LVL beam to bear on a (3) 2X4 stud column at each end. The interior end should be solid blocked to a (2) 2X10 6ft long header at the wall below.

2) The 2X6 ceiling joists in lue of the 2X8's (maximum spans of approximately 11 feet) are adequate as is.

3) The rafters at the rear right broke over a knee wall instead of running to the rear plate. The rafters should bear on a knee wall to be constructed over the load bearing wall at the stairway in order to minimize the loading conditions to allow for the underlying floor truss to support the loading conditions.

4) The rear overarmed roof rafters were changed to allow a 2X10 valley at each side approximately 5.5 feet from the rear wall. Based on the analysis of the valleys the load transferred at this location can be adequately transferred and supported by the load bearing wall at the right and over the (2) 1.75X16 LVL on the left.

Sincerely,

David Miller, PE

DEM/17DDM-0830Ar

