SUMMIT
ENGINEERING • LABORATORY • TESTING

Date: February 5, 2020

To: Oliver Hudson
LGI Homes
Tel: (919) 520-8406
E-Mail: oliver.hudson@lgihomes.com

Re: Structural Framing Evaluation
Lot 84 Avery Pond
121 Old Head Way
Fuquay-Varina, NC 27526
The Avery Plan (Ref. 20993R2)
Summit Job No.: 1203-08R: 26637

To Whom It May Concern:

SUMMIT Engineering, Laboratory, & Testing, P.C. (**SUMMIT**) was contacted on February 1, 2020, by Chris Mertz with Builders FirstSource on behalf of LGI Homes to request a letter evaluating several framing issues at the home under construction on lot 84 of the Avery Pond community in Fuquay-Varina, NC. The home is based on the Burke plan, which was sealed by Wesley A. Jones, PE, on behalf of **SUMMIT**, dated October 9, 2019. All directions described in this letter are relative to the reader facing the front of the home from the street. Below is a summary of our findings:

Observations & Conclusions

Based on correspondence with Chris Mertz, the in-place framing does not match the sealed structural plans permitted for this site at several locations. These issues shall be addressed as follows:

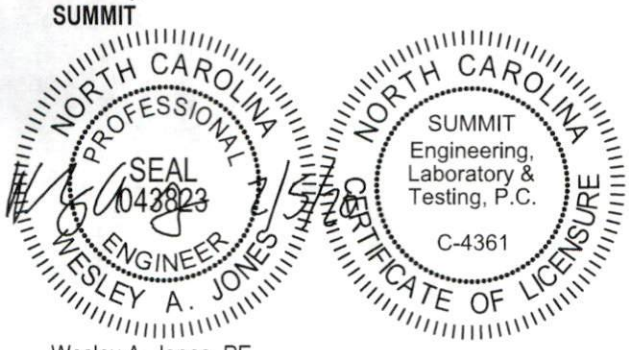
1. A (2) 2x12 header was framed over the rear sliding glass door in lieu of the plan specified (2) 9.25" LVL 'E' header. Based on our plan review and analysis, the installed header is structurally sufficient for the anticipated loading conditions. No repairs are required.
2. A (2) 2x6 header with one jack stud at each end was framed over the front door in lieu of the plan specified (2) 2x8 'B' header. Based on our plan review and analysis, the installed framing is structurally sufficient for the anticipated loading conditions, provided the header is attached to the king stud at each end with a Simpson Strong-Tie LTP4 lateral tie plate (or equivalent), installed per manufacturer specifications.
3. A (2) 2x6 header with two jack studs at each end was framed over each of the front and rear single windows on the second-floor in lieu of the plan specified (2) 2x8 'B' header. Based on our plan review and analysis the installed framing is structurally sufficient for the anticipated loading conditions. No repairs are required.
4. The roof trusses over the rear of the owner's bedroom are hangered onto a flush (2) 11.875" LVL beam in lieu of bearing on top of the wall between the bedroom and bathroom. The LVL beam is continuously supported by the wall along the portion of its length that is carrying roof trusses. Based on our plan review and analysis, the installed framing is structurally sufficient for the anticipated loading conditions, provided the flush beam is fastened to the supporting wall top plates per Table R602.3(1) of the 2018 NCRC.

No other foundation and/or framing members have been evaluated at this time and shall be framed in accordance with the sealed set of structural plans permitted for this site. Where applicable, if structural members are moved, modified or enhanced, all supported framing shall be temporarily braced/shored using means and methods as determined by a licensed general contractor. Contact **SUMMIT** if guidance is needed for temporary bracing/shoring.

Closing

Opinions, conclusions, and recommendations made in this report are based solely on the structural evaluation pertaining to the scope of work as stated in the opening paragraph of this report. Performance standards are based on minimum building code requirements and the knowledge of our staff as gained through experience and professional training. We appreciate the opportunity to assist you in this phase of your project and look forward to assisting you on future projects if possible. If you have any questions please do not hesitate to contact us.

Sincerely,
SUMMIT



Wesley A. Jones, PE
Structural Team Lead

Corey N. Barber, PE (peer review)
Senior Project Manager

Alteration of this seal without the express written consent of the sealing engineer is a violation of the provisions set forth in the North Carolina Engineering and Land Survey Act (G.S. 89C) and may result in legal action by the North Carolina Board for Engineers and Land Surveyors.