

October 20, 2022

Adams Homes 149 US 70 West Garner, NC 27529

Attn: Matt Galvin, 919-903-0735, matt.galvin@adamshomes.com, raleighadmin@adamshomes.com, raleighpermits@adamshomes.com, bjohnson@adamshomes.com

Engineering - Field Observation, Footing Projection Analysis Lot 14 Cameron Woods Subdivision 22 Red Pine Court, Sanford, NC Project No. 22PG-1010-A 1, Harnett County Permit No. SFD-2108-0084

Dear Mr. Galvin,

Thank you for using Piedmont Geotechnical. The site was visited on October 14, 2022 to observe the remedial repairs for the 16"x24" pier footing extensions. The plans (prepared by Engineering Tech Associates, PA -Project #: 21-18-188 dated 4-23-21) and the roof and floor truss layouts prepared by Carter Lumber Components Division - project 3320-B dated 6-25-21 were reviewed and analyzed for the loading paths to the foundation. Some of the piers were located eccentrically on the pier footings. The bearing pressures were calculated based on the eccentric loading conditions.

Based on the analysis, the largest pier footing (second from the front first to the left) requires an extension of 6 inches along the right side to provide adequate load capacity. The footing extension should at least match the footing thickness of the existing footing (minimum 10") and 6" of additional footing projection to the right side. The existing footing should have No. 4 steel reinforcing bars (dowels) at 12" spacing along the right side embedded 3" into drilled holes and epoxied. The dowels and should extend at least 3" into the extended footing projection to provide adequate load capacity.

Based on observation of the proper implementation of our recommendations, the repaired pier footings will have adequate footing projection for the pier to support the proposed loads (2,000 psf) of the home. The footing repairs were observed to properly prepared for placing concrete on October 14, 2022.

Sincerely,

D. Allen Hughes, P.E., President Piedmont Geotechnical, Inc., P.A.

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