PIEDMONT
GEOTECHNICAL
1669 Jimmie Kerr Rd., Haw River, NC 27258
336-516-8634, NC Firm No. C-1634

April 20, 2024

Oakwood Homes
3005 Gillespie St.
Fayetteville, NC 28306

Attention: Mr. Chris Milligan

Reference: Subgrade Testing, Footing Modifications, 3rd Party Footing Excavation Prep
817 Reynor McLamb Rd., Bunn Level, NC 28323
Project No. 024mh45, Harnett County Permit No. BRES 2307-0028

Dear Mr. Milligan,

The site was visited on March 21, 2024 and April 16, 2024 to observe, measure, test and evaluate the subgrade for the wall footings and the interior piers for the proposed modular home, and the preparation of the footing excavations for placing concrete. The original footings and new footing excavations were observed and compared to the design drawings by Champion Homes, customer project Nieves, titled "Foundation Loading PF-101" dated 5-20-21, referred to in this report as "The Plan".

On March 21, 2024 a perimeter footing had been constructed about 24 in. wide by at least 8 in. thick. The original perimeter footing was constructed with a sloped top. The subgrade adjacent to the bottom of the footing was tested with a Static Cone Penetrometer (SCP) test and was found to be on adequate bearing soil. The original footing was probed and was found to be about 8 in. thick.

On April 16, 2024, new fill had been placed up to about 30 in. deep over approximately the right 40 ft. of the back side of the house and the right 50 ft. of the front side of the house area. The new fill was placed over some of the original fill and original footings.

Per our recommendation, compacted fill consisting of quarry screenings was placed over the original building pad and footings. The original fill was tested prior to placing new fill and was determined to be of adequate bearing capacity to support the new fill. The new fill was tested at the new footing excavations and was determined to be adequate to support 2,000 psf throughout the home area. The pier footing excavations were at least 30 in. by 30 in. by 8 in. The grade marks for the perimeter footing and the pier footings indicated an 8 in. minimum footing thickness. Per our recommendation, (2) no. 4 steel reinforcing bars were properly placed in the new section of the perimeter footing. The bars were turned down into 4 in. drilled vertical holes in the original footings and held with epoxy.

Based on testing and observation, the subgrade is of adequate bearing capacity to support the proposed loads (2,000 psf) of the home. The repaired footings were of the correct size, number and general location according to The Plan and meet or exceed the requirements of The Plan. The subgrade and footings have been constructed in accordance with the 2018 NC Residential Code.

Sincerely,

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

DESIGN PROFESSIONAL INSPECTION FORM

RECORD OF THE INSPECTION OF A **COMPONENT OR ELEMENT** BY A NC LICENSED ARCHITECT OR ENGINEER

Project Information:

Residential Single-Family Project: ✓ Y N	Commercial Project: Y N ✓
Code Enforcement Project No:	Permit No: Harnett County Permit No. BRES 2307-0028
Project Name: 024mh45, Subgrade Testing, Footing Modifications, 3rd Party Footing Excavation Prep	Owner:
Project Address: 817 Reynor McLamb Rd., Bunn Level, NC 28323	Suite No:
Date Inspected: March 21, 2024 and April 16, 2024	Contractor Name: Oakwood Homes
Component Inspected: Subgrade Testing, Footing Modifications, 3rd Party Footing Excavation Prep	

Responsible Licensed NC Architect or NC Engineer

Name:	D. Allen Hughes, PE
Firm Name:	Piedmont Geotechnical, Inc. PA, NC Firm no. C-1634
Phone Numbers:	Office: Mobile: 336-516-8634
Email Address:	piedmontgeotech@gmail.com
Mailing Address:	1669 Jimmie Kerr Rd., Haw River, NC 27258

APPLICABLE CODE: 2018 NC RESIDENTIAL CODE

2018 NCBC = 2018 NC Building Code; 2018 NCRC = 2018 NC Residential Code

Describe Element/Component/Type of Inspection: *

Subgrade Testing, Footing Modifications, 3rd Party Footing Excavation Prep

*(subgrade form/letter may also be required)

Attestation/Signature: By signing below, I certify that the component and/or element of the building as identified on this form has been inspected by me or someone under my direct supervision per subsection (b2) of NC G.S. 153A-352 and is in compliance with the approved plans & specifications for the project. This inspection is in compliance with all of the requirements of the above referenced code. Attach any additional documents if needed.

D. Allen Hughes, PE

Licensed Architect or Engineer

Inspection Department disclaimer: Upon the receipt of a signed written document as required under subsection (a) of Article 160A-413.5., Code Enforcement shall be discharged and released from any liabilities, duties and responsibilities imposed by this article or in common law from any claim arising out of or attributed to the component or element in the construction of the building for which the signed written document was submitted. Be aware that this inspection will be noted in all inspection records including the Certificate of Occupancy or Certificate of Compliance. This inspection does not address any local ordinances or zoning requirements.