

**PIEDMONT
GEOTECHNICAL**



Oakwood Homes
3005 Gillespie St.
Fayetteville, NC 28306

March 4, 2019

Attention: Mr. Chris Milligan

Reference: Over Height Pier and Anchor Evaluation, Byron Residence
406 Tom Myers Rd., Lillington, NC
Hamett County Permit No. 30344
Project No. 019mh28

Dear Mr. Milligan:

Thank you for using Piedmont Geotechnical to conduct the evaluation for your project. As requested, the site was visited on February 25, 2019 to evaluate the structural stability of the pier and anchoring system for the above referenced mobile home.

Upon arrival, the approximate 76-ft by 16-ft mobile home had been placed on (11) rows of block piers (2 piers per row) on concrete block footings, and anchored with (2) Minute Man systems and (4) helical anchors (1 near each corner). Each Minute Man system includes a ground-rated galvanized steel footing. One Minute Man (MM) system is located at the second pier from the left on the front of the home and the other is located at the second pier from the right on the back of the home. All helical anchors used single straight straps oriented nearly vertical. The pier heights ranged from about 14 in. to 58 in.

The following issues were observed and recorded which need to be corrected:

- The left end of the home is set above the design limit of the MM system design of 48 in.
- The block pier at the MM system on the left end of the front of the home is about 54 in. tall and is a single stacked 8 in. by 16 in. pier.
- The Minute Man anchoring system on the left end of the home has a brace in the longitudinal (left/right) direction which is installed well above the MM design max. angle of 45 degrees.

The following is recommended to correct the above listed items:

- To increase the lateral stability of the home set at 58 in., it is recommended to add another pair of helical ground anchors with lateral straps within 15 ft. of the left end of the home. After adding the ground anchors, all (4) anchors on the left end should have double straps in a crossed pattern.
- The block pier at the MM system at the second pier from the left end on the front of the home should be replaced with a double stacked masonry pier.
- The longitudinal brace (parallel to the chassis beam) on the MM system on the left end of the front

of the home should be replaced with a brace long enough to achieve an angle less than 45 degrees above the horizontal.

- Items not listed in these recommendations should be installed according to the NC Regulations for Manufactured Homes.

Based on measuring, observation, and implementation of the recommendations, it is my professional opinion that once the recommendations have been properly implemented, the pier and anchoring system (including piers, anchors, straps, connectors, and Minute Man systems) installed for the mobile home at 406 Tom Myers Rd., Lillington, NC (Hamett County Permit No. 30344) will be structurally sound and adequate to support the proposed loads of the mobile home. Thank you for using Piedmont Geotechnical for your evaluation. If you should have any questions pertaining to this report, please call me.

Sincerely,




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