## Gerald R. Baughman, P.E.

5133 Huntingdon Drive

**Raleigh, NC 27606** October 9, 2019

(919) 417-0951(C)

Mr. Bill Karras Patio Enclosures, Inc. 1030 Morrisville Parkway Morrisville, NC 27560

RE: 5 Turtle Point Drive Fuquay-Varina, NC 27520

Dear Mr. Karras,

As requested, visited the home at the above-mentioned site. My observations are contained in this letter and are based solely upon my general, visual review of the drawing and calculations that may be performed. My letter represents the opinions and observations of a Registered Professional Engineer.

Of particular concern to you were the following items:

The footing excavations at three locations had poor soil bearing capacity when inspected by the building inspector.

An inspection was made of the three footing excavations. At each location, when probed, the bearing capacity was inadequate as the soil probe entered the soil with very little resistance. Further probing to a greater depth revealed a soil layer with more than adequate soil bearing capacity at a depth approximately 16" below the current excavation depth.

I recommend that each of the affected footings be deepened approximately 16" to expose the soil good bearing capacity. To bring the footing excavation to the original depth, I recommend that clean gravel be placed in each footing up to the original excavation depth. Placing the gravel directly on the newly exposed soil surface will restore the soil bearing capacity at the desired depth.

This letter capsulizes the observations and calculations of the items you requested at this property. The comments Miller
5 Turtle Point Drive
October 9
Page 2 of 2

apply only to the items covered in this letter and approval or disapproval of the other items not covered in this letter should not be implied or concluded.

If you have any questions concerning this letter or if we may be of further service please contact us.

Sincerely,

Gerald R. Baughman

Professional Engineer