

Takla Engineering, PLLC

NC Firm License # P-1952

Consulting | Design | Efficiency

PO Box 71298 Durham, NC 27722 | Office@TaklaEngr.com

Alfred A. Takla, PE

Andy A. Takla, PE

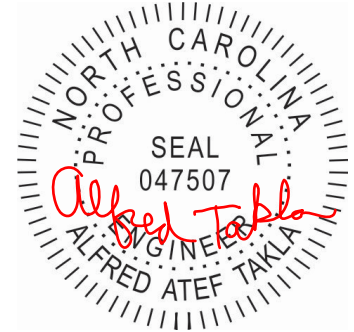
AlfredTakla@TaklaEngr.com

AndyTakla@TaklaEngr.com

NC PE License # 047507

NC PE License # 050695

Project: Serenity Lot 317
Location: 348 Inspiration Way Fuquay-Varina, NC
Company: ICG Homes
Care Of: Will Dodge
Subject: Footing and 3rd Party Inspection
Job Number: 1-0689-25



As requested, Alfred Takla, PE visited the aforementioned site on January 29th, 2025 to evaluate bearing capacity of the sub-grade soils supporting:

- Foundation wall and/or interior pier footings
- Turndown slab on grade and lug footings
- Attached one-car and two-car garage foundation wall footings
- Front porch foundation wall footings
- Rear porch post lug footings

*Patio slabs with no thickened or lug footings are outside the scope of our inspection.

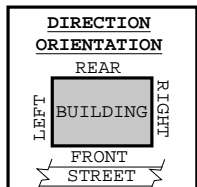
Observations of lot topography, vegetation, and soil characteristics were made to characterize the site. In-situ subgrade soil bearing capacity was evaluated by means of probing excavation bottoms with a 1/2" diameter steel probe rod and/or a static cone penetrometer (SCPT) with a 60 degree cone assembly, friction sleeve, and pressure gauge readings correlating with blow counts from a Dynamic Cone Penetrometer (DCP).

The evaluations indicate the average bearing capacity of the soils directly supporting the above referenced elements meet or exceed the minimum 2000 pounds per square foot as referenced by NCRC 2018, Chapter 4 and engineered specifications. It is important to note that this evaluation did not include mechanical soil borings, standard Proctor tests, or density testing. Additionally, this assessment does not address site drainage, which is crucial for maintaining long-term bearing capacity. Drainage design and implementation are outside the scope of this evaluation.

We also performed a 3rd party inspection in-lieu of municipal inspections department. We inspected the footings using sealed plans provided by builder. We verify footings preparations comply with North Carolina Residential Code 2018 per applicable code sections Chapter 4 (Sections R401, R402, R403 and R404) as well as our previous engineering recommendations. Specifically we verified:

- Depth and size of all footing excavations mentioned above meet or exceeds per plan specifications and code requirements.
- Locations of all footing excavations mentioned above are found to be per plans.
- Front porch and rear porch footing excavations mentioned above are per plans, of acceptable depth / dimensions, and per code.
- Footings are cut per NCRC 2018 Chapter 4, Sections R401, R402, R403, R404 as mentioned above.
- All footing layouts are per the permitted plan, all conditions are acceptable to receive concrete.

Limitations of Inspection: Services provided are in accordance with the standard of practice for structural engineering, the North Carolina Residential Code (2018 edition) and within the limits imposed by scope, schedule and budget. The determinations contained in this report are based on conditions observed at the time of the evaluation. No guarantees or warranties, expressed or implied, under this agreement or otherwise, shall be construed in connection with services provided. Sequencing, shoring, means and methods of construction are considered beyond the scope of this report. All information used to form decisions and recommendations provided to engineer are taken as truthful. Takla Engineering assumes no responsibility for untruthful statements provided by any party. Lastly, while every effort has been made to ensure accuracy in the preparation of this document, the maker cannot guarantee against human error nor evaluations of structural elements which are concealed from visual inspection.



Harnett County Inspections Department

3RD PARTY 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.: SFD2412-0076
Project Name: Serenity Lot 317 Owner:
Project Address: 348 Inspiration Way Suite No.:
Date Inspected: 1-29-2025 Contractor Name: ICG Homes (Dodge)
Component Inspected: Footing and 3rd Party Inspection, Job Number 1-0689-25

Responsible Licensed NC Architect or NC Engineer

Name: Alfred A Takla, PE
Firm Name: Takla Engineering, PLLC
Phone No.: Office 919-258-2648 Mobile 919-332-7903
Email Address: alfredtakla@taklaengr.com
Mailing Address: PO Box 71298 Durham, NC 27722

APPLICABLE CODE SECTION: NCRC 2018

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

Describe Element/Component/Type of Inspection: *

Footing and 3rd Party Inspection for house, attached one-car and two-car garages, front porch and rear porch

*(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 Code or other proposal of the architect or engineer for the project. This inspection is in compliance with all of the requirements of the above referenced Code. Attach any additional documents if needed.

LICENSED ARCHITECT OR ENGINEER

Alfred Takla



Inspection Department disclaimer: