ADDRESS . : 135 HEATHERWOOD DR SUBDIV: OAKMONT PH 2 SECT 1 30LTS
CONTRACTOR : PHONE :
OWNER . . : MCKEE HOMES LLC PHONE :
PARCEL . . : 03-9589-01- -1021- -10-
APPL NUMBER: 17-50041778 CP NEW RESIDENTIAL (SFD)
DIRECTIONS : T/S: 07/06/2017 08:53 AM JBROCK ----
OAKMONT #178 - 135 HEATHERWOOD DR

STRUCTURE: 000 000 38.4X64.4 3BDR MONO W/ GARAGE & PATIO
FLOOD ZONE . . . . : FLOOD ZONE X
BEDROOMS . . . . . : 3000000.00 PROPOSED USE . . . . . : SFD
SEPTIC - EXISTING? . . . . : NEW TANK WATER SUPPLY . . . . . : COUNTY

PERMIT: CPSF 00 CP * SFD

TYP/SQ	REQUESTED COMPLETED	INSP RESULT	DESCRIPTION RESULTS/COMMENTS
P309 01	8/24/17	JLP	R*PLUMB UNDER SLAB VRU #: 003016441
	8/24/17	DA	Head test down.
B104 01	8/25/17	TI	R*FOUND & SETBACK VERIF SURVEY VRU #: 003017225
	8/24/17	CA	
A814 01	8/28/17	SB	ADDRESS CONFIRMATION TIME: 17:00 VRU #: 003018470
	8/29/17	AP	135 HEATHERWOOD DR LILLINGTON 27546
			T/S: 08/29/2017 08:59 AM SBENNETT ----------
			T/S: 08/29/2017 09:03 AM SBENNETT ----------
P309 02	8/28/17	JH	R*PLUMB UNDER SLAB TIME: 17:00 VRU #: 003017654
	8/28/17	AP	T/S: 08/25/2017 02:35 PM LLUCAS ----------
			T-POLE PASSED ----------
B114 01	8/31/17	JH	R*BLDG MONO SLAB/TEMP SVC POLE VRU #: 003019205
	8/31/17	CA	PER CHRIS ----------
B114 02	9/08/17	TI	R*BLDG MONO SLAB/TEMP SVC POLE VRU #: 003022605

9-8-17 APJH Per Engineer letter

---------- COMMENTS AND NOTES ----------

SUMMIT
ENGINEERING • LABORATORY • TESTING

September 7, 2017

Mr. Chris Morgan
McKee Homes, LLC
101 Hay Street
Fayetteville, North Carolina 28301

Subject: **Summary of Foundation Bearing Material Evaluation**
Lot No. 178 – (135 Heatherwood Drive)
Oakmont Subdivision
Lillington, North Carolina
Permit Number: N/A
Project Number: 4240.500 (15343-00)

Dear Mr. Morgan:

On August 31 and September 7, 2017, a representative of SUMMIT Engineering, Laboratory and Testing, P.C. (**SUMMIT**) visited the subject site for the purpose of observing the near surface foundation bearing materials for the proposed residential structure. The following is a summary of our onsite observations and evaluation.

The proposed exterior wall residential foundations were excavated approximately 18 inches wide and approximately 20 inches below the existing ground surface prior to our site visit.

Our work included testing and evaluation of the in-place soil in the bottom of the foundation excavations. Also, at selected locations, auger borings were incrementally advanced by manually twisting a sharpened steel auger into the soil. The soil consistency in the bottom of the footing excavation and in the bottom of selected intervals of the auger borings were evaluated with a Dynamic Cone Penetrometer (DCP). The conical point of the DCP was first seated to penetrate any loose cuttings and then driven three additional 1-3/4 inch increments with blows from a 15-pound hammer falling 20 inches. The soil's strength characteristics and foundation supporting capability was evaluated based on the average blows per increment (bpi) over the last two increments required to achieve this penetration. Additionally, the entire excavated foundation is probed with a ½ inch diameter steel probe rod to check for soft areas at the surface intermediate of our hand auger boring locations.

The materials exposed at the bottom of excavations generally consisted of tan-orange, silty-sand (fill soils) and were free of significant quantities of organics and debris. It should be noted that a slope was observed within 5 feet of the right rear exterior wall foundation corner. The contractor was informed and we recommended over-excavating approximately 3 feet below the planned foundation bearing elevation in areas designated in marking paint at the right rear corner.

SUMMIT returned on September 7, 2017 to observe that the recommended over-excavations were completed. We recommend backfilling the undercut areas with full depth concrete. If additional testing for the purpose of estimating volumetric change (shrink/swell) potential or to estimate consolidation is desired, **SUMMIT** can provide these services.

SUMMIT tested the four corners of the proposed residential foundation and fill soils were encountered to a minimum depth of 3 feet below the foundation bearing elevations. **SUMMIT** assumes that the fill placement was observed and tested to verify that the fill material was placed and compacted properly. Based on the results of our DCP testing, the completed remedial measures, and the assumption that the fill placed throughout the building pad is similar or better than the properly compacted fill material encountered in the hand auger borings, the soils encountered are suitable for support of the proposed residential structure utilizing a net allowable soil bearing pressure of **2,000 pounds-per-square-foot**.

If foundation bearing materials are exposed to inclement weather or adverse construction activities, **SUMMIT** should be contacted to re-evaluate the foundation bearing materials prior to concrete placement. If it is imminent that inclement weather is forecasted prior to concrete placement, then the footings can be over-excavated (deepened) 2 to 4 inches and a mud-mat (lean concrete) can be placed up to the foundation bearing elevation to help protect the foundation bearing materials from softening.

SUMMIT appreciates the opportunity to provide our professional services to you on this project. If you have any questions concerning the information in this report or if we can be of further service, please contact us.

Sincerely,
SUMMIT Engineering, Laboratory and Testing, P.C.

NORTH CAROLINA PROFESSIONAL SEAL 042148 ENGINEER JEFF A. TAYLOR

Jeff A. Taylor, P.E.
Geotechnical Engineer

Adam D. Perry, E.I.
Staff Professional