

# FIELD DENSITY TEST REPORT



Report Number: 70211165.0004  
Service Date: 09/13/21  
Report Date: 09/14/21  
Task: Soils-Utility Backfill Observations-Testing

2401 Brentwood Rd Ste 107  
Raleigh, NC 27604-3686  
919-873-2211 Reg No: F-0869

## Client

Harnett County Schools  
Attn: Steve Matthews  
1008 S. 11th St  
Lillington, NC 27546

## Project

Johnsonville ES Phase 1  
18495 NC Highway 27 West  
Cameron, NC

Project Number: 70211165

## Material Information

Mat. No.	Proctor Ref. No.	Classification and Description	Laboratory Test Method	Lab Test Data		Project Requirements	
				Optimum Water Content (%)	Max. Lab Density (pcf)	Water Content (%)	Compaction (%)
1	70211165.0003	Screenings	ASTM D698	9.8	128.6	6.8 - 12.8	Min 98
2	70211165.0003	Screenings	ASTM D698	10.0	129.5	5.2 - 13.0	Min 98

## Field Test Data

Test No.	Test Location	Lift / Elev.	Mat. No.	Probe Depth (in)	Wet Density (pcf)	Water Content (pcf)	Water Content (%)	Dry Density (pcf)	Percent Compaction (%)
<b>Building Pad</b>									
1	Station 0+50 North Side	SG	1	6	135.8	6.7	5.2 *	129.1	100
1.1	Station 0+50 North Side 1.1	SG	1	6	136.2	8.9	7.0	127.3	99
2	Station 0+50 South Side	SG	1	6	141.4	12.9	10.0	128.5	100
3	Station 0+75 South Side	SG	1	6	140.9	11.0	8.5	129.9	100+

Datum: Std. Cnt. M: 750 Std. Cnt. D: 2434  
S/N: 817 Make: Instrrotek Model: Xplorer 3500 Last Cal. Date: 03/08/2021

Comments: Test and/or retest results on this report meet project requirements as noted above.

Services: Perform in-place density and moisture content tests to determine degree of compaction and material moisture condition.

Terracon Rep.: Danny Vena

Reported To: Harrold at Engineered Construction Company

Contractor: Engineered Construction Company

### Report Distribution:

- (1) Harnett County Schools, Steve Matthews
- (1) LHC Structural Engineers, Inc., Ben Mielke
- (1) SFLA Architects, Jaclin Wawak

Reviewed By:

Alex Bullard  
Assistant Project Manager

Test Methods: ASTM D698, ASTM D6938, VTM-1

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

# FIELD DENSITY TESTING REPORT

# Terracon

**Report Number:** 70211165.0004  
**Service Date:** 09/13/21  
**Report Date:** 09/14/21  
**Task:** Soils-Utility Backfill Observations-Testing

2401 Brentwood Rd Ste 107  
Raleigh, NC 27604-3686  
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## Client

Harnett County Schools  
Attn: Steve Matthews  
1008 S. 11th St  
Lillington, NC 27546

## Project

Johnsonville ES Phase 1  
18495 NC Highway 27 West  
Cameron, NC

Project Number: 70211165

**Services Requested By:** Scott Dawson

**Earthwork Contractor:** East Coast Civil Group

**Observed Location(s):** Building Pad

**Subgrade Review:** Prior to the placement of fill the subgrade was reviewed and consisted of Screenings. The subgrade was observed to be firm and stable.

**Fill Type Placed:** Structural Fill

**Proctor No.(s):** 70211165.0001

**Fill Description:** Screenings

**Source Of Fill:** Imported from Martin Marietta – Lemon Spring Quarry

**Fill Placement:** The fill was observed to be placed in an approximately 12-inch thick lift. Compactive efforts were applied with a vibratory sheepsfoot roller and vibratory smooth-drum roller. The fill placed appeared firm and stable during the application of compactive efforts.

**Field Density Test Results:** Field density tests were conducted on the fill placed today utilizing the nuclear method (ASTM D6938). 4 field density tests were performed. All test results meet the minimum specified compaction required of 98%. 1 of the test results was out of specification for moisture content but was retested area water was added and found to be within project specifications.. Refer to the attached Field Density Test Summary for individual test data.

**Reported To:** Harold Scott

**Services:** Perform in-place density and moisture content tests to determine degree of compaction and material moisture condition.

**Terracon Rep.:** Danny Vena

**Reported To:** Harrold at Engineered Construction Company

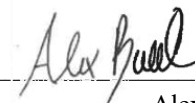
**Contractor:** Engineered Construction Company

### Report Distribution:

(1) Harnett County Schools, Steve Matthews  
(1) SFLA Architects, Jaclin Wawak

(1) LHC Structural Engineers, Inc. , Ben Mielke

**Reviewed By:**




Alex Bullard

Assistant Project Manager

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Johnsonville ES Phase 1	Site Plan: Building pad In-Place Field Density Testing.	
	Report Number: 70211165.0004	
18495 NC Highway 27 West	Technician: Danny Vena	2401 Brentwood Rd Ste 107
Cameron, NC	Date: 09/13/21	Raleigh, NC 27604-3686
	Scale: Not to Scale	919-873-2211 Reg No: F-0869