E²S
ENGINEERING & ENVIRONMENTAL SCIENCE COMPANY
3008 ANDERSON DRIVE, SUITE 102
RALEIGH, NC 27609
(919) 781-7798

June 6, 2024

Mr. Jon Woosley
Mabus Farm and General Contracting

RE: Density Testing
Residential Building and Garage
1621 Matthews Mill Pond Road
Angier, NC

Dear Mr. Woosley:

The following discusses the subgrade observations and density test results at the building pad for the above referenced site.

On June 5, 2024, Engineering & Environmental Science Company (E^2S) conducted five (5) density tests at the building pad. Figure 1, Attachment A shows the locations of the density tests and Attachment B provides the density test data. Soil density tests ranged from 95.4% to 97.6% of Standard Proctor Maximum Dry Density (ASTM-D-698) at the locations and depths tested. The test results exceed the project requirement of 95% of Standard Proctor.

We appreciate serving you on this project. Please contact us if you have any questions.

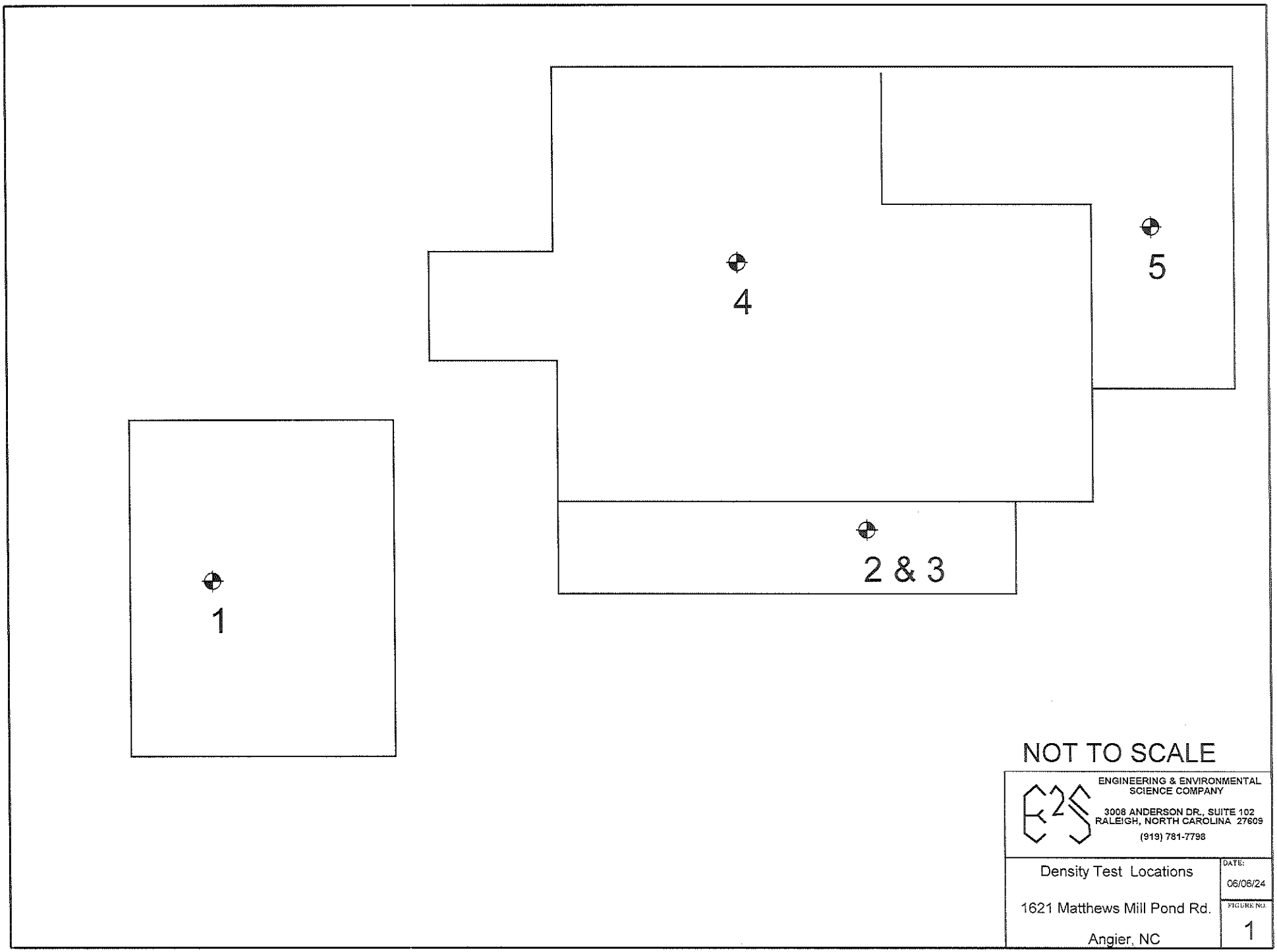
Sincerely,

T. Patrick Shillington, P.E.
President

Attachment A: Density Test Locations
Attachment B: Density Test Results

NORTH CAROLINA PROFESSIONAL SEAL 15472 ENGINEER T. PATRICK SHILLINGTON
06/6/24

ATTACHMENT A: Density Test Locations



NOT TO SCALE

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Density Test Locations

1621 Matthews Mill Pond Rd.

Angier, NC

DATE: 06/06/24

FIGURE NO. 1

Attachment B: Density Tests Results

Summary of Density Test Results
Residential Building and Garage
1621 Matthews Mill Pond Road
Angier, NC

TEST NO.	DATE SAMPLED	LOCATION	[3]SAMPLE DEPTH., FT.	[1]MAX LAB DRY DEN., PCF	[2]IN-PLACE WET DEN., PCF	[2]WATER CONTENT	[2]IN-PLACE DRY DEN.,PCF	PERCENT COMPACTION
1	06/05/24	See Drawing	0.5	120.9	120.6	4.7	115.2	95.4
2	06/05/24	See Drawing	0.5	120.9	120.3	3.0	116.8	96.6
3	06/05/24	See Drawing	1.75	120.9	121.2	4.1	116.4	96.3
4	06/05/24	See Drawing	0.5	120.9	122.4	4.8	116.8	96.6
5	06/05/24	See Drawing	1.0	111.3	119.4	9.9	108.6	97.6

(1) Standard Proctor (ASTM D-698)
(2) Tests were conducted by the Push Tube Method (ASTM D-2937)
(3) Depth below finished soil subgrade level.

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MOISTURE DENSITY RELATIONSHIP

Job No. _____ Date 06/06/24

Project Name and Location House and Garage

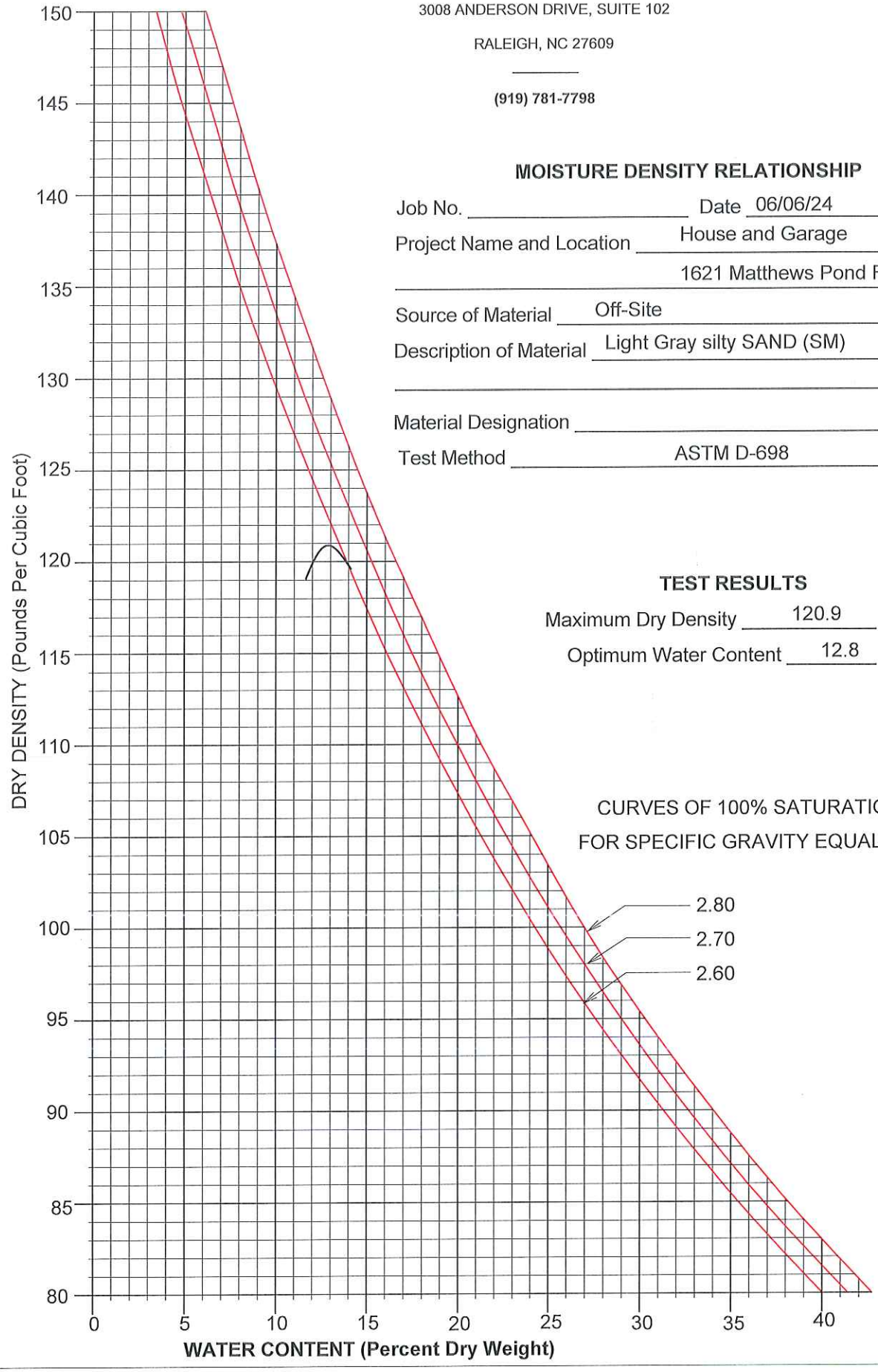
1621 Matthews Pond Rd. NC

Source of Material Off-Site

Description of Material Light Gray silty SAND (SM)

Material Designation _____

Test Method ASTM D-698



TEST RESULTS

Maximum Dry Density 120.9 PCF

Optimum Water Content 12.8 %

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MOISTURE DENSITY RELATIONSHIP

Job No. _____ Date 06/06/24

Project Name and Location House and Garage

1621 Matthews Pond Rd. NC

Source of Material On-Site

Description of Material Brown clayey SAND (SC)

Material Designation _____

Test Method ASTM D-698

TEST RESULTS

Maximum Dry Density 111.3 PCF

Optimum Water Content 16.7 %