February 5, 2025

Mr. Johnny Puczylowski
Weaver Development Co.
350 Wagoner Drive
Fayetteville, North Carolina 28303

**Subject:** **Summary of Preliminary Subgrade Material Evaluations**
**Lot No.'s 16 (290 Thistle Ct), 44 (152 Boyce Ct.), & 47 (151 Boyce Ct.)**
**West Preserve Subdivision**
**Sanford, North Carolina**
**Project Number: 8984.F0001 (41955-00)**

Dear Mr. Puczylowski:

As requested, UES PROFESSIONAL SOLUTIONS 29, INC. (**UES**) has performed a preliminary subgrade material evaluation for Lots 16, 44, and 47 in the West Preserve subdivision in Sanford, North Carolina. The purpose of our preliminary subgrade material evaluation was to provide recommendations with respect to building pad support for a typical residential structure. Following is a brief summary of our observations, subgrade testing and foundation recommendations.

On January 23, 2025, **UES** visited the subject site and performed hand auger borings and Dynamic Cone Penetrometer (DCP) testing (ASTM STP-399) on the proposed building pads. **UES** also performed hand probing evaluations with a T-handle 1/2-inch diameter steel probe rod.

Our work included testing and evaluations of the in-place soil at existing site grade. Hand auger borings were incrementally advanced by manually twisting a sharpened steel auger into the soil at the front and rear portions of the building pad. The soil consistency at the existing grade and at one-foot selected intervals below existing grades were evaluated by Dynamic Cone Penetrometer (DCP) testing (ASTM STP-399). The conical point of the DCP was first seated to penetrate any loose soil 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 subgrade support capability was determined based on the average blows per increment (bpi) over the last two increments to achieve this penetration. Additionally, random locations on the building pad were evaluated by hand probing utilizing a ½ inch diameter steel probe rod to check for soft areas at the surface intermediate of our hand auger boring locations.

Based on the results of our hand auger borings and DCP testing, the soils encountered at the above-mentioned lots appeared generally suitable for support of a proposed residential structure. We recommend once footings are excavated that evaluations be performed by personnel from our office to determine if foundation support is available prior to concrete placement.

Due to the wide spacing of the hand auger borings and the preliminary nature of our evaluation, the possibility of deleterious inclusions and variable density material within the in-place soils still exists.

**UES** 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,
**UES** PROFESSIONAL SOLUTIONS 29, INC.

2/5/25

NORTH CAROLINA PROFESSIONAL SEAL 042148 ENGINEER JEFF A. TAYLOR

Jeff A. Taylor, P.E.
Geotechnical Engineer

Adam D. Perry, E.I.
Staff Professional