

Sibley Business Site

Exhibit 14  
Geotechnical Letter





## Geotechnical Testing Laboratory, Inc.

Engineering and Construction Materials Testing Services

September 13, 2023

**Cothran, Graff, Smoak Engineering, Inc.**  
6305 Westport Avenue  
Shreveport, Louisiana. 71129

Attention: Ms. Julianne Smoak

**RE: LED Site Certification**  
**Sibley, Webster Parish, Louisiana**

Dear Ms. Smoak:

**Geotechnical Testing Laboratory, Inc.** is pleased to submit this letter of certification for the above referenced project. I have practiced geotechnical engineering across the State of Louisiana for almost 40 years and have performed analyses for at least eight (8) projects in this general area. I am familiar with the general subsurface conditions in the geographic area and have provided recommendations for both shallow and deep foundations.

Based on a review of the available soil borings in the general area, a site in the Sibley area would most likely be underlain by stiff to very stiff lean clays and fat clays with layers and stratum of medium dense to dense clayey sand to silty sand. Groundwater can be anticipated at shallow depths between approximately ten (10) and 20 feet and is generally under little or no hydrostatic pressure.

The average strength profiles indicate very good bearing values for shallow foundations, and for end-bearing and skin friction for drilled shafts or driven piles. Typical allowable bearing pressures for shallow foundations are on the order of 2,000 to 2,500 psf for shallow spread footings and 1,500 to 1,850 psf for continuous footings. Drilled shafts having an average diameter of 36 inches can provide up to 125 kips or more between depths of 25 and 50 feet below ground surface.

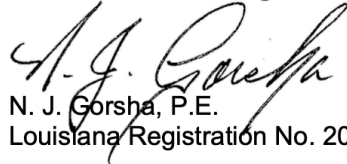
The potential for swelling soils in this general area is moderate to low. Typical values vary from less than one (1) inch to approximately 1.5 inches, resulting in moderate excavations to replace active clay soils and limit the potential for swell to one (1) inch or less, which is generally accepted as the maximum allowable value for design and construction in the geographical area.

In summary, it is our opinion that a site in the Sibley, Louisiana area should be able to be economically developed for industrial-grade projects. We feel that both shallow and deep foundations should perform satisfactorily for virtually any anticipated loading condition.

The above statements are only opinions that are based on average random site conditions across the subject area. On the ground due diligence and data collection must be completed for any further site analysis.

We appreciate the opportunity to have provided you with our geotechnical engineering services. If you have any questions concerning this letter, or if we may be of further service, please contact our office.

Respectfully submitted,  
**Geotechnical Testing Laboratory, Inc.**



N. J. Gorsha, P.E.  
Louisiana Registration No. 20082



Ken Gorsha  
President

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