

# Exhibit M. Chemin 2 Site Preliminary Desktop Geotechnical Review



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One Acadiana  
804 East St. Mary Boulevard  
Lafayette, Louisiana 70503

Attn: Ms. Megan Duhon

Re: Preliminary Geotechnical Desktop Memorandum  
Chemin 2 Business Site  
Lafayette Parish, Louisiana  
SE Project No. G25-115

Dear Ms. Duhon:

Stratum Engineering, LLC (SE) is pleased to submit the results of a desktop review for potential industrial and/or commercial types of projects at the Chemin 2 Business Site in Lafayette Parish, Louisiana. The purpose of the review was to provide generalized subsurface information based on SE's experience in the vicinity of the project area. The desktop review was accomplished in general accordance with SE Proposal No. G25-100, dated June 13, 2025.

### **Technical & Relevant Local Project Experience**

Stratum Engineering is a multi-disciplinary, locally owned Geotechnical Engineering and Construction Materials Testing and Inspection firm which has been in operation since 2009. Over the last 15 years, the firm has engaged in over a thousand projects ranging from single story retail stores to large distribution facilities and high rise structures throughout Louisiana and the Mississippi Gulf Coast region.

The generalized information presented in subsequent sections of this memorandum is based on the review of approximately 12 projects which were completed by SE within a 3.2 mile radius of the proposed development area. The information from these projects as well as past experience with other projects in the general site vicinity make Stratum relatively confident with the generalized information provided below. However, it should be noted that this information is only our opinion based on past experience at other locations and no site specific data was collected or analyzed. These opinions are for informational purposes only and a full geotechnical investigation and associated report must be completed prior to proceeding with any design and/or construction activities.

### **Site & Project Description**

The Chemin 2 Business Site parcel encompasses about 25 acres of undeveloped land situated on the north side of Chemin Metairie Parkway just east of Mayor Lucas Denais Drive in the Youngsville area of Lafayette Parish. The property is currently covered with short surface vegetation. No specific grading information was available for the site. Therefore, it is assumed that 2 to 3 feet of fill may be needed across the property to reach the design grades.

We understand that typical industrial/commercial projects could include the construction of a 100,000 square foot building which may be single or multi-story. Maximum column and wall loads could be on the order of 300 kips and 5 kips per foot, respectively.

Traffic associated with industrial facilities of this size could consist of heavy tractor trailers with an average daily traffic (ADT) of about 20 to 30 trucks per day for a design life of 20 years. For these types of facilities, rigid pavements are widely considered for their longevity and ability to support the high volume of traffic.

### **Site Geology & Generalized Subsurface Conditions**

Based on information obtained from Louisiana Geological Survey maps, the site is situated in a portion of the Prairie Allogroup (Avoyelles alloformation) which consists of sediment deposited by the Mississippi River known as the Lafayette meander belt. The formation is characterized by gray, tan and brown clay silt and sand. Light gray to dark brown silt and silty clay are also associated with the Peoria Loess deposits in the area. However, variations may occur and should be expected across the site which may or may not exhibit the characteristics typically associated with these formations.

Based on the review of subsurface conditions encountered at other projects located within a roughly 3 mile radius of this site, we expect that the near surface soils in the undeveloped areas of the site will likely consist of moisture sensitive silt or silty clay extending 2 to 4 feet below the surface which will be followed by alternating layers of stiff to very stiff lean and fat clay extending to a depth of 40 to 50 feet. Some sandy material may be encountered in the area below 20 feet, but the soil will generally vary greatly in depth, consistency and density.

### **Groundwater Conditions**

Groundwater levels in the area generally range from approximately 10 to 20 feet below the existing ground surface, but can be as shallow as 3 to 4 feet during periods of wet weather due to perched water conditions. It should also be noted that groundwater levels will fluctuate with seasonal variations in rainfall, extended periods of drought and surface runoff as well as water levels in any nearby waterways.

### **Typical Foundation Options**

Selection of a foundation system depends on several factors including the subsurface soil conditions, type of structure and magnitude of structural load as well as the cost of the foundation and the criteria set by the Design Engineer with respect to vertical and differential movement which the structure can withstand without damage.

Based on our experience in the area and a review of other local geotechnical information, the Chemine 2 Business Site is believed to be suitable for typical industrial/commercial development. The near surface soils are expected to be fair in bearing quality, but may require some mitigation to improve the condition of the moisture sensitive soils prior to fill placement.

Mitigation of the moisture sensitive silty material may be accomplished by providing adequate site drainage and performing earthwork activities during periods of dry weather. Otherwise, the near surface silty material may have to be treated with a chemical admixture to dry or be removed and replaced with compacted structural fill.

Assuming the site is prepared as outlined above, it is believed that the subsurface soil conditions will be suitable to support the type of structures in question on spread and continuous wall footings using maximum allowable bearing pressures of 2,500 psf and 2,000 psf, respectively, provided maximum column and wall loads do not exceed 175 kips and 8 to 10 kips per linear foot, respectively.

Heavier structures with column loads in excess of 175 kips could experience some settlements necessitating the structures be supported on deep foundations. Several types of deep foundation systems have been utilized successfully in the area including driven piles, auger cast in place piles, helical piles and drilled piers. Allowable capacities for these types of deep foundation elements vary greatly and can be optimized by the designer based on cost effectiveness and design limitations. Depending on the type of pile selected, the penetration depth could range from 40 to 65 feet for timber piles or up to 80 feet for higher capacity auger cast in place piles.

### **Limitations**

In accordance with the LED's Small Sites program, an industry standard subsurface investigation and associated geotechnical report is not required during the preliminary stages of certifying a potential site. Instead, a preliminary geotechnical letter discussing the anticipated subsurface conditions and potential foundation options is acceptable.


Therefore, this geotechnical desktop review memorandum was prepared based on SE's knowledge of the immediate project area as well as other locally available information. No site specific data was obtained or utilized in preparation of the memorandum. As such, the information provided is for guidance to certify the site only and should not be relied upon for designing or budgeting of any future projects at the site. A detailed subsurface investigation and report should be completed for any proposed developments, as needed, based on local codes and industry standards.

We appreciate the opportunity to perform this desktop review and look forward to assisting you in the design of future development at the site. If you have any questions pertaining to this memorandum, or if we may be of further service, please contact our office.

Respectfully submitted,  
STRATUM ENGINEERING, LLC



Alex R. Hontiveros  
Project Manager



William "Dean" McInnis, P.E.  
Vice President

Reviewed by: Tony Y. Maroun, P.E.  
Principal

Appendix: Site Vicinity Map  
General Site Plans

APPENDIX

