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Metairie, LA 70001
504.434.6565
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Churchill Technology & Business Park

Exhibit 09

Geotechnical Memo

STRATUM ENGINEERING, LLC
Geotechnical Engineering ◆ Testing and Inspection Services

Geotechnical Memo

June 4, 2024

Duplantis Design Group PC
1 Galleria Boulevard, Suite 1506
Metairie, Louisiana 70001
Phone: (504) 434-6565

Attn: Mr. Scott Tabary, P.E.

Re: Preliminary Geotechnical Desktop Memorandum
JEDCO Site (Churchill Development)
Jefferson Parish, Louisiana
SE Project No. G24-066

Dear Scott:

Stratum Engineering, LLC (SE) is pleased to submit our desktop review for potential industrial and/or commercial types of projects at the JEDCO Site (Churchill Development) in Jefferson 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. G23-153, dated August 22, 2023.

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 15 projects which were completed by SE within a 5 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 must be completed prior to proceeding with any design and/or construction activities.

Site & Project Description

The JEDCO parcel encompasses about 25 acres of undeveloped land situated near the intersection of Nicolle Boulevard and Churchill Parkway in the Westwego area of Jefferson Parish. The property is mostly cleared and covered with short surface vegetation. An existing detention pond occupies a portion of the site. No specific grading information was available for the site. Therefore, it is assumed that 2 to 4 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 100 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 the St. Bernard Lobe of the Mississippi River Delta which primarily consists of deltaic deposits underlying the delta plain sediment formed by the meandering path of the Mississippi River. The formation is characterized by cyclically interbedded peat, clay, natural levee silt, and sand. 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 projects located within a 5 mile radius of this site, we expect that the near surface soils in the undeveloped areas of the site will likely consist of firm to stiff lean or fat clay extending 2 to 6 feet below the surface which will be followed by alternating layers of very soft to soft fat clay and organic clay with some traces of peat extending to a depth of 40 to 70 feet. Some sandy material may be encountered in the area below 70 feet, but will generally vary greatly in depth, consistency and density.

Groundwater Conditions

Groundwater levels in the area generally range from approximately 4 to 10 feet below the existing ground surface, but can be as shallow as 1 to 2 feet during periods of wet weather. 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 JEDCO Site is believed to be suitable for typical industrial/commercial development. However, the near surface soils are expected to be poor in bearing quality. This material will generally experience significant amounts of settlement with the addition of fill or application of moderate structural loads. Therefore, any potential improvements will likely need to be supported on a deep foundation system which is used to support heavily loaded structures by transferring the loads through the soft surficial soils to more adequate bearing strata and hence minimizing long term settlements.

Typical deep foundation systems used in the area include timber piles and timber/concrete composite piles. However, several other types of deep foundation systems have been utilized successfully in the area including auger cast in place piles, pre-cast concrete piles and helical piles. 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 80 feet for timber or timber/concrete composite piles and could be 80 feet or more for higher capacity auger cast or pre-cast 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 as well as considering specific tenant requirements.

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

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

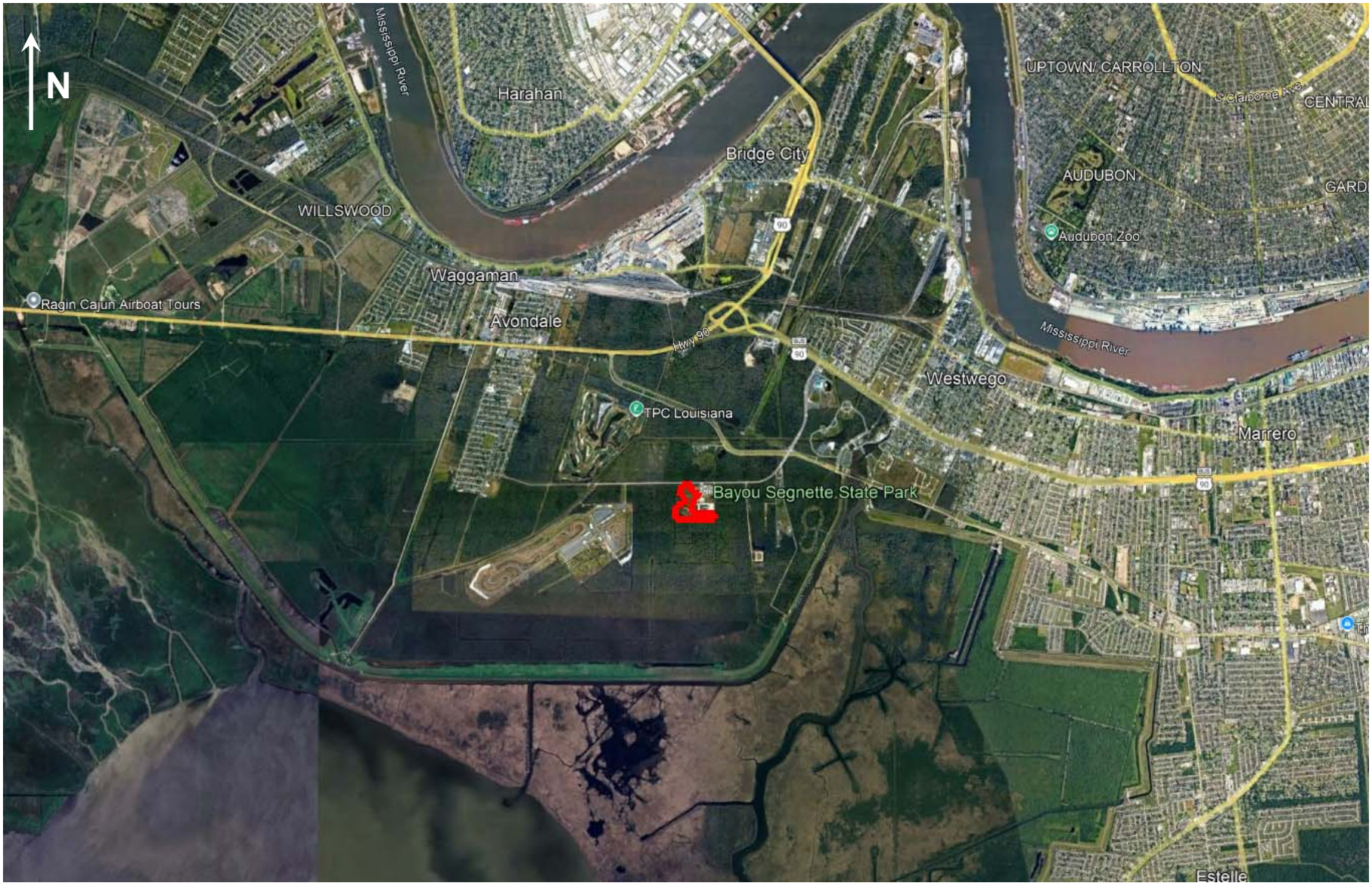
Tony Y. Maroun, P.E.
Principal

WDM/TYM

Appendix: Site Vicinity Map
General Site Plans

APPENDIX

STRATUM ENGINEERING, LLC



STRATUM ENGINEERING, LLC

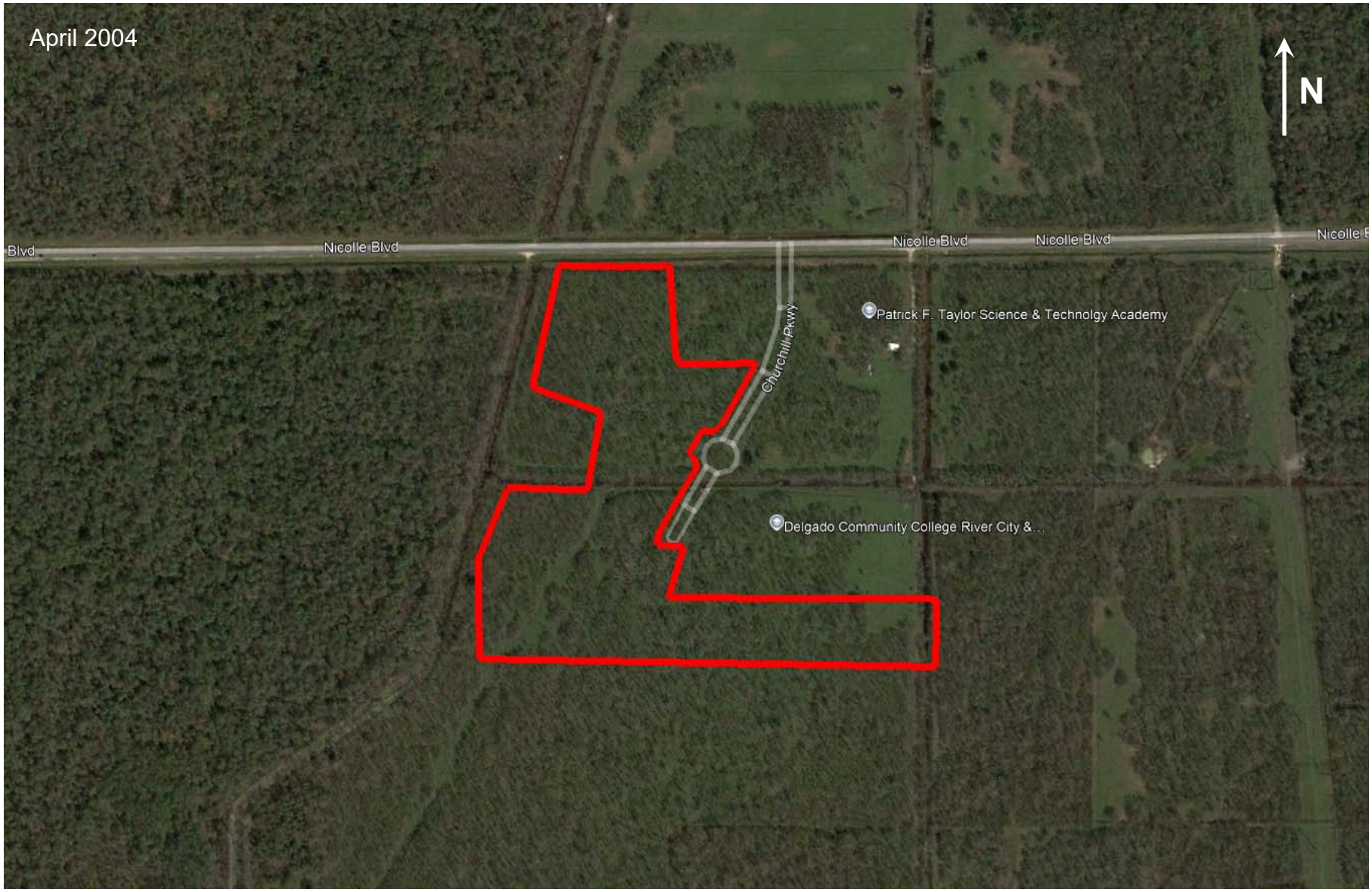
SITE VICINITY MAP

SE PROJECT NO. G24-066

GEOTECHNICAL ENGINEERING SERVICES

PROPOSED JEDCO SITE

JEFFERSON PARISH, LOUISIANA



STRATUM ENGINEERING, LLC

GENERAL SITE PLAN

SE PROJECT NO. G24-066

GEOTECHNICAL ENGINEERING SERVICES
PROPOSED JEDCO SITE
JEFFERSON PARISH, LOUISIANA

STRATUM ENGINEERING, LLC

GENERAL SITE PLAN

SE PROJECT NO. G24-066

GEOTECHNICAL ENGINEERING SERVICES

PROPOSED JEDCO SITE

JEFFERSON PARISH, LOUISIANA