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# Exhibit AA.
# Crosspoint South Site Preliminary Geotechnical Engineering Memo

LOUISIANA ECONOMIC DEVELOPMENT CERTIFIED SITE

GREATER NEW ORLEANS INC
REGIONAL ECONOMIC DEVELOPMENT

STRATUM ENGINEERING, LLC
Geotechnical Engineering ◆ Testing and Inspection Services

September 25, 2020

GNO, Inc.
1100 Poydras Street, Suite 3475
New Orleans, Louisiana 70163

Attn: Mr. Gary Silbert

# Crosspoint South Site Preliminary Geotechnical Engineering Memo

Re: Preliminary Geotechnical Desktop Memorandum
Crosspoint South Site
Tangipahoa Parish, Louisiana
SE Project No. G20-050

Dear Mr. Silbert:

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 Crosspoint South Site in Tangipahoa 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. G20-052, dated April 14, 2020.

## 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 10+ 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 and associated report must be completed prior to proceeding with any design and/or construction activities.

## Site & Project Description

The Crosspoint South parcel encompasses about 19 acres of partially developed property located on the south side of Destination Drive just west of Pumpkin Center Road in Tangipahoa Parish. The property is mostly cleared with a line of trees along the property perimeter. A small structure is situated near the center of the site which is accessed by a concrete road designated as McLaughlin Lane. No specific grading information was available. Therefore, it is assumed that two (2) to 3 feet of fill may be needed 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 a portion of the Prairie Terrace formation which makes up a significant portion of the southern portions of Livingston, Tangipahoa and St. Tammany Parishes. The formation is characterized by light gray to light brown clay, sandy clay, silt, sand and some gravel. However, variations may occur and should be expected across the site which may or may not exhibit the characteristics typically associated with this formation.

Based on the review of subsurface conditions encountered at other projects located within a 5 mile radius of this site, Stratum expects that the undeveloped virgin 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 clays with varying amounts of sand extending to at least 50 feet. Some thin zones of sand may also be encountered in the area, but typically vary greatly in depth, consistency and density.

## Groundwater Conditions

Groundwater levels in the area generally range from approximately 5 to 20 feet below the existing ground surface, but can be as shallow as 2 to 3 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 Crosspoint South 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 moisture sensitive soils general encountered near the surface and/or to reduce the potential for potential vertical movement due to moderately plastic clays.

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 an admixture to dry or be removed and replaced.

Furthermore, depending on the presence of high plasticity clays, which generally exhibit shrink and swell potential, in the active zone of 10 feet below the surface, a buffer zone of up to three (3) feet of low plasticity structural fill may be required below any grade supported floor slabs to mitigate the expansive soil condition.

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 150 kips and 8 to 10 kips per linear foot, respectively.

Heavier structures with column loads in excess of 150 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

William "Dean" McInnis, P.E.
Project Manager

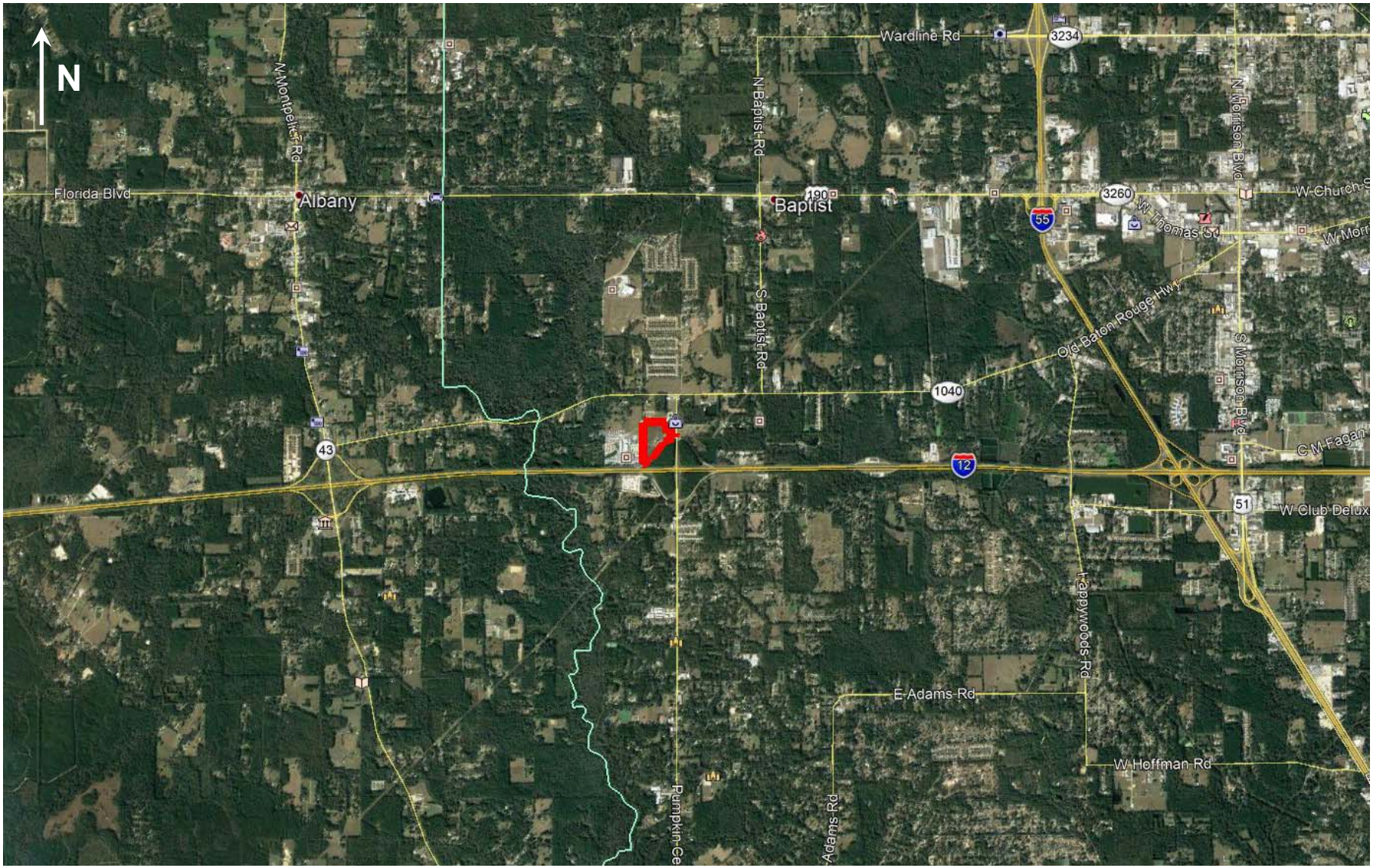
Tony Y. Maroun, P.E.
Principal

WDM/TYM

Appendix: Site Vicinity Map
General Site Plans

# APPENDIX

STRATUM ENGINEERING, LLC




STRATUM ENGINEERING, LLC

**SITE VICINITY MAP**

**SE PROJECT NO. G20-050**

GEOTECHNICAL ENGINEERING SERVICES

**PROPOSED CROSSPOINT SOUTH SITE**

TANGIPAHOA PARISH, LOUISIANA


STRATUM ENGINEERING, LLC

**GENERAL SITE PLAN**

**SE PROJECT NO. G20-050**

GEOTECHNICAL ENGINEERING SERVICES
**PROPOSED CROSSPOINT SOUTH SITE**
TANGIPAHOA PARISH, LOUISIANA


STRATUM ENGINEERING, LLC

**GENERAL SITE PLAN**

**SE PROJECT NO. G20-050**

GEOTECHNICAL ENGINEERING SERVICES
**PROPOSED CROSSPOINT SOUTH SITE**
TANGIPAHOA PARISH, LOUISIANA