

## **PROPOSED SCOPE OF WORK: GEOTECHNICAL SERVICES**

### **Boring Locations**

Suggested boring locations are represented by the circular symbols on attached proposed Boring Plans, SB-01 (Roy L. Schneider Hospital) and SB-02 (Charlotte Kimelman Cancer Institute). The actual number, location and depth of borings shall be determined by the geotechnical engineer based upon his judgment and project site conditions. The responsibility for obtaining adequate information to produce a thorough geotechnical report is the geotechnical engineer's. Proposed borings are related to the building construction. Additional borings may be required for sitework, pavement design, and the work of other design disciplines.

### **Foundation Loads - Roy L. Schneider Hospital: SB-01**

Anticipated maximum foundation loads (service) for the project are as follows:

- Interior Column: 400 kips (250k dead load, 150k live load)
- Exterior Column: 230 kips (150k dead load, 80k live load)
- Walls: 1.5 kips/foot

### **Report Requirements- Roy L. Schneider Hospital:**

The report shall be in accordance with the requirements of AIA Document C202 and 2018 IBC, Chapter 18. Specifically, it shall address the following issues (in addition to any others which in the opinion of the geotechnical engineer are relevant to the proposed development):

- Foundation recommendations for the support of columns, walls and slabs.
- Anticipated settlements.
- Deep foundation lateral capacities (if applicable). Lateral deep foundation analyses shall be provided as an Addendum to the Report.
- Lateral earth pressures for the design of soil retaining walls.
- Soil compaction requirements for foundations, pavements, slabs on ground, and site fill.
- Slope stability.
- Seismic Site Class in accordance with ASCE 7-16 based on average standard penetration method. Provide pricing alternate for shear wave velocity method.
- Provide pricing alternate for seismic risk-based hazard analysis in accordance with ASCE 7-16.
- The modulus of subgrade reaction for the design of slabs on grade.
- Elevation of water table, if encountered. Recommendations regarding the management of groundwater both during construction and for the completed project.
- Discussion of the potential for difficult excavation and/or blasting of rock. Include a top of rock contour map if difficult excavation is anticipated.
- Discussion of anticipated temporary bracing and underpinning.
- Analysis of soils to ascertain presence of potentially expansive, deleterious, chemically active or corrosive materials or conditions.

### **Foundation Loads – Charlotte Kimelman Cancer Institute: SB-02**

Anticipated maximum foundation loads (service) for the project are as follows:

- Interior Column: 150 kips (100k dead load, 50k live load)
- Exterior Column: 75 kips (50k dead load, 25k live load)
- Walls: 12 kips/foot

## **Report Requirements- Charlotte Kimelman Cancer Institute:**

The report shall be in accordance with the requirements of AIA Document C202 and 2018 IBC, Chapter 18. Specifically, it shall address the following issues (in addition to any others which in the opinion of the geotechnical engineer are relevant to the proposed development):

- Foundation recommendations for the support of columns, walls, and slabs.
- Anticipated settlements.
- Soil compaction requirements for foundations, pavements, slabs on ground, and site fill.
- Slope stability.
- Seismic Site Class in accordance with ASCE 7-16 based on average standard penetration method. Provide pricing alternate for shear wave velocity method.
- Provide pricing alternate for seismic risk-based hazard analysis in accordance with ASCE 7-16.
- The modulus of subgrade reaction for the design of slabs on grade.
- Elevation of water table, if encountered. Recommendations regarding the management of groundwater both during construction and for the completed project.
- Discussion of the potential for difficult excavation and/or blasting of rock. Include a top of rock contour map if difficult excavation is anticipated.
- Discussion of anticipated temporary bracing and underpinning.
- Analysis of soils to ascertain presence of potentially expansive, deleterious, chemically active, or corrosive materials or conditions.

### **ATTACHMENTS**

Attachment 1: Site plan with proposed buildings and soil boring locations.