15. SOILS

A. 1. Provide a description of each of the soils indicated on Map E utilizing the following format:

TABLE 15-1 PARKLAND SOIL DESCRIPTION AND INTERPRETATIONS					
Soil Name and Map Symbol	Brief Soil Description	Seasonal High Water Table; Duration	Permeability Rate (In/hour)	Degree & Kind of Limitation for Proposed Uses*	Degree & Kind of Limitation for Pond Embankments*
Krome Very Gravelly Marly Loam, 0-2% Slopes (MUSYM 7)	Moderately well drained. Krome component makes up 85% of the map unit. Slopes are 0-2% Parent material consists of marly loamy residuum weathered from limestone over oolitic limestone.	Seasonal zone of water saturation is at 50 inches during Jun-Oct	Moderate (0.6-2.0)	Severe: depth to rock	Severe: thin layer

*Appropriate responses include slight, moderate, severe, and very severe.

The soil map unit characteristic of the subject property is Krome Very Gravelly Marly Loam according to the dataset of the soil survey prepared by the United States Department of Agriculture, National Resource Conservation Service (NRCS). The GIS dataset for the NRCS soil survey is available for download from the FGDL Metadata Explorer and the most recent version of the dataset was last updated for the State of Florida on October 1, 2021. Confirmation of the mapped soil type was performed via soil profile analysis during the joint agency site inspections conducted with the SFWMD and Miami-Dade County DERM on February 28, and May 12, 2023, respectively, both of which confirmed that the site does not consist of hydric soil.

2. Describe the potential for subsidence and any unique geologic features (such as sand dunes, bluffs, sinkholes, springs, steepheads, etc) on the site. Discuss what aspects of the site plan will be used to compensate for or take advantage of these features.

The existing soil type and substrate are relatively common of the regional landscape. The potential for subsidence or unique geologic features on the site is unlikely; therefore, the site plan does not include any aspects that will compensate or take advantage of such features.

B. Where a soil presents a limitation to the type of use proposed in the development, state how the limitation will be overcome. Specify construction methods that would be used for building, road, and parking lot foundations, and for lake or canal bank stabilization as relevant.

The developed site will be filled with construction grade fill material, appropriate for sub-base for roads and building foundations. Lake edges will be sloped appropriately and sodded or stabilized with appropriate materials (e.g. geofabric).

C. What steps will be taken during site preparation and construction to prevent or control wind and water soil erosion? Include a description of proposed plans for clearing and grading as related to erosion control.

Perimeter berms and traditional erosion controls will be used to control erosion. Prior to commencement of filling activity, silt fencing will be installed along the site perimeter as appropriate erosion control measures to prevent any impacts to adjacent properties. Silt fencing will remain in place and be maintained as necessary during the filling component of site construction. Silt fencing will not be removed until completion of the construction phase of the project.

D. To what degree and in what location(s) will the development site be altered by fill material? If known, specify the source location and composition of the fill. Also identify the disposal location for any overburden or spoil.

The existing substrate mostly consists of gravel material (85%) with some marly loam. The proposed site alteration via filling activity will only use clean fill material that will be sourced from a local quarry that is approved by Miami-Dade County DERM. Clean fill consists of limerock-based material of similar composition to the existing substrate. It is anticipated that overburden will be incorporated into the site plan; however, if necessary, overburden or spoil material will be disposed of as needed at an upland facility approved by Miami-Dade County DERM.

- E. Responses to Review Agency Requirements Detailed in the Agreement to Delete Questions, Appendix A
 - 1. The Applicant shall indicate the soils characteristics of the subject property using the available GIS dataset of the soil survey provided by the United States Department of Agriculture, National Resource Conservation Service (NRCS). The GIS data for the NRCS soil survey is available for download from the FGDL Metadata Explorer and the most recent version of the dataset was last updated for the State of Florida on October 1, 2021. Confirmation of the soil type shall be performed via soil profile analysis to be conducted during the proposed additional site inspection.

As detailed in Item A above, soils characteristic of the project site were described using the NRCS soil survey. The soil map units are depicted on Map E using the most recently updated version of the GIS data from the FGDL Metadata Explorer. The approximate locations of the soil profile data points are depicted on Map G. The soil profile analysis was conducted during field inspections with DERM and the SFWMD as part of the jurisdictional wetland determinations. The onsite soils were confirmed to be non-hydric.