

SILVA CELL SPECIFICATIONS

Silva Cells and related products shall be installed by a qualified installer whose work has resulted in successful installation of planting soils and planter drainage systems, underground piping, chambers and vault structures. Prior to the start of Work, prepare a detailed schedule of the work for coordination with other trades. Schedule all utility installations prior to beginning work in this section. Where possible, schedule the installation of Silva Cells after the area is no longer required for use by other trades and work. Protect installed Silva Cells from damage in the event that work must occur over or adjacent to the completed Silva Cells.

Carefully examine the civil, record, and survey drawings to become familiar with the existing underground conditions before digging. Verify the location of all aboveground and underground utility lines, infrastructure, other improvements, and existing trees, shrubs, and plants to remain including their root system, and take proper precautions as necessary to avoid damage to such improvements and plants. In the event of conflict between existing and new improvements notify the landscape architect in writing and obtain written confirmation of any changes to the work prior to proceeding. When new or previously existing utility lines are encountered during the course of excavation, notify the landscape architect in writing and make recommendations as to remedial action. Proceed with work in that area only upon approval of appropriate remedial action. Coordinate all work with the appropriate utility contractors, utility company or responsible public works agency.

LAYOUT APPROVAL

Prior to the start of work, layout and stake the limits of excavation and horizontal and vertical control points sufficient to install the Silva Cells and required drainage features in the correct locations.

EXCAVATION

Excavate to the depths and shapes indicated on the drawings. Base of excavation

shall be smooth soil, level and free of lumps or debris. Confirm that the width and length of the excavation is a minimum of 6 inches (150mm) in all directions, beyond the edges of the Silva Cells.

SUBGRADE COMPACTION

Check compaction of the subgrade below the Silva Cells and confirm that the subgrade

soil is compacted to a minimum of 95% of maximum dry density at optimum moisture content in accordance with ASTM D 698 Standard Proctor Method. Proof compact the subgrade with a minimum of three passes of a suitable vibrating compacting machine or apply other compaction forces as needed to achieve the required subgrade compaction rate. Apply additional compaction forces at optimum water levels.

INSTALLATION OF GEOTEXTILE OVER SUBGRADE

Where indicated on drawings, install geotextile over compacted subgrade. Removal of the geotextile as a standard component of the Silva Cell system must be determined by professional civil or geotechnical engineer. Install the geotextile with a minimum joint overlap of 18 inches (450 mm) between sections of material. Ensure geotextile is laid flat with no folds or creases.

INSTALLATION OF INSPECTION RISERS FOR DRAINAGE

Cut PVC pipe to fit vertically from Silva Cell deck to finish surface. Manually perforate riser. Pipe should be rigid at level of pavement section, and perforated through level of Silva Cell system. Wrap pipe in geotextile and secure with zip ties. Brace riser for the remainder of installation to secure its location and elevation. Install caps on top of each riser flush with grade.

INSTALLATION OF AGGREGATE SUB BASE BELOW SILVA CELL FRAME  
Install aggregate sub base to the depths indicated on the drawings, under the first layer of Silva Cell frames. Sub base aggregate shall extend a minimum of 6 inches (150mm) beyond the edge of the Cell frames. Compact aggregate sub base layer to a minimum of 95% of maximum dry density at optimum moisture content in accordance with ASTM D 698 Standard Proctor Method. Compact the subgrade with a minimum of three passes of a suitable vibrating compacting machine or apply other compaction forces as needed to achieve the required subgrade compaction rate. The maximum slope on the surface of the sub base shall be 5%.

INSTALLATION OF SILVA CELLS, PLANTING SOIL, GEOGRID, AND BACKFILL

Place frames no less than 1 inch (25 mm) and no more than 3 inches (75 mm) apart at base. In the event that spacing between Cells exceeds 3 inches (75 mm), bridging slab details and methods shall be used to span these gaps. Install Silva Cell frames around, over, or under existing or proposed utility lines as indicated on plans. Install and compact backfill material in the space between the Silva Cells and the sides of the excavation in lifts that do not exceed 8 inches (200 mm). Compact backfill to 95% of maximum dry density using a powered mechanical compactor. Install backfill in alternating lifts with the planting soil inside the Silva Cells.

NOTES CONTINUED: SILVA CELL SOIL SPECIFICATIONS

AGGREGATE SUB BASE AND BASE COURSE (BELOW CELL FRAME AND ABOVE CELL DECK)

- A. Aggregate meeting one of the following specifications:
- ASTM D1241-07, Type 1, Gradation B Standard Specification for Materials for Soil-Aggregate Sub base, Base, and Surface Courses.
    - Type I mixtures shall consist of stone, gravel, or slag with natural or crushed sand and fine mineral particles passing a No. 200 sieve.

Sieve	Percent Passing
1.5" (37.5 mm)	100
1" (25 mm)	75-95
3/8" (9.5 mm)	40-75
No 4 (4.75 mm)	30-60
No 10 (2.0 mm)	20-45
No 40 (425 µm)	15-30
No 200 (75 µm)	5-15
    - Local Department of Transportation virgin aggregate that most closely meets the gradation of ASTM D1241-07.
    - Ontario Provincial Standard Specification (OPSS) 1010 Granular A. Dense graded aggregates intended for use as granular base within the pavement structure, granular shouldering, and backfill.

Sieve	Percent Passing
26.5 mm	100
19.0 mm	85-100
13.2 mm	65-90
9.5 mm	50-73
4.75 mm	35-55
1.18 mm	15-40
300 µm	5-22
75 µm	2-8

SETTING BED FOR UNIT PAVERS (ABOVE CELL DECK)

- A. Aggregate meeting one of the following specifications:
- American Society for Testing and Materials (ASTM) D 448, No. 8

Sieve	Percent Passing
1/2" (12.5 mm)	100
3/8" (9.5mm)	85-100
No 4 (4.75 mm)	10-30
No 8 (2.36 mm)	0-10
No 16 (1.18 mm)	0-5

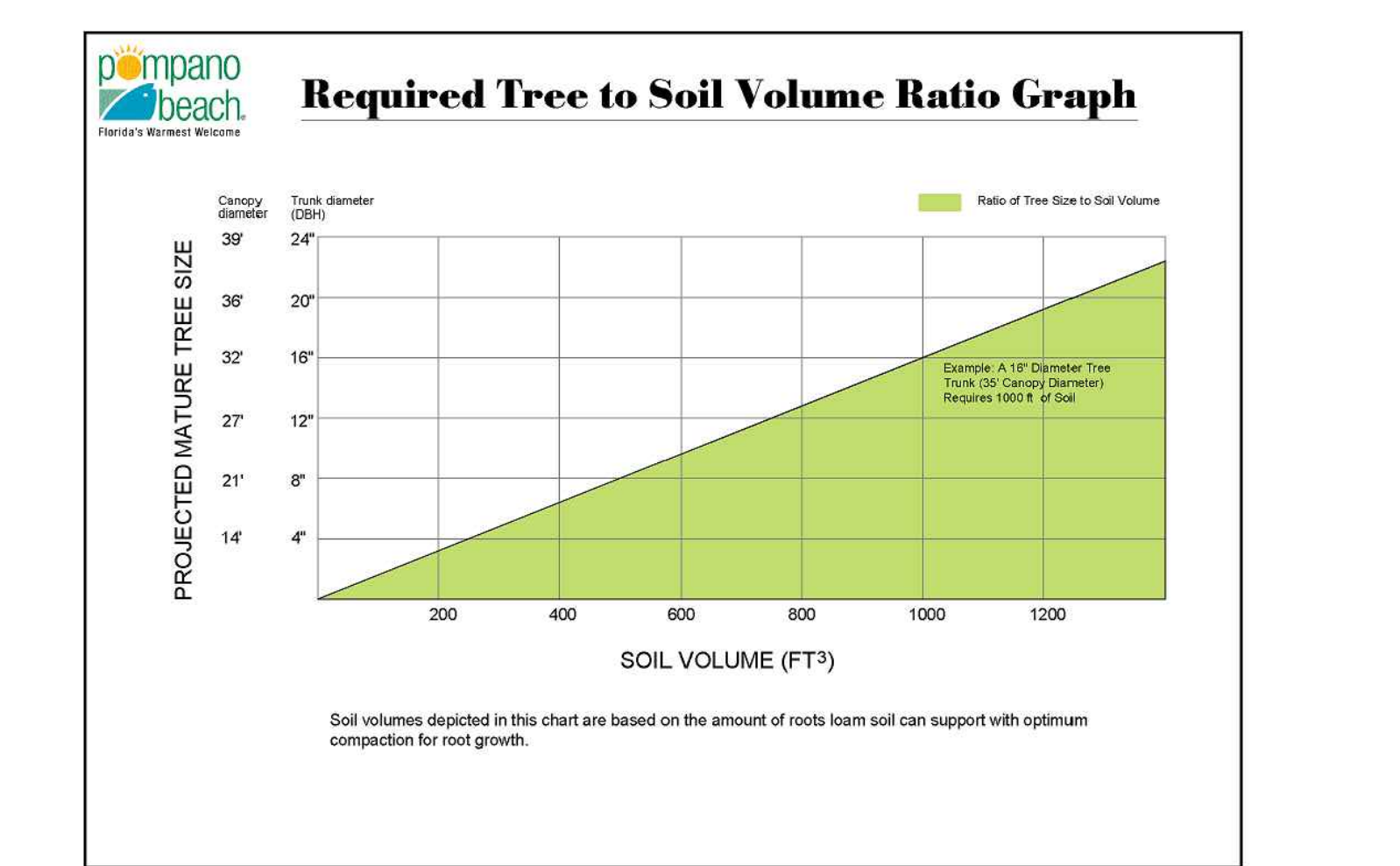
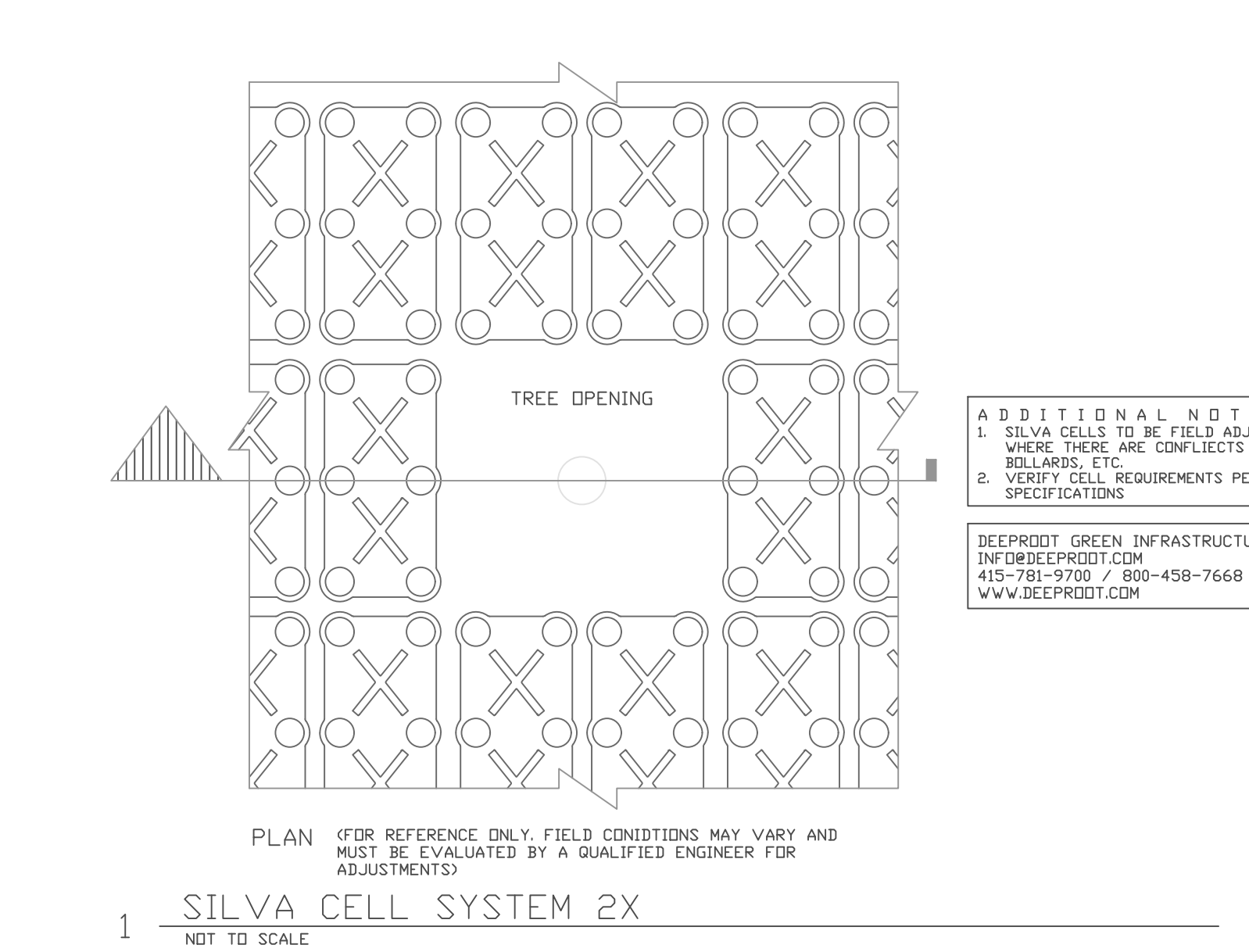
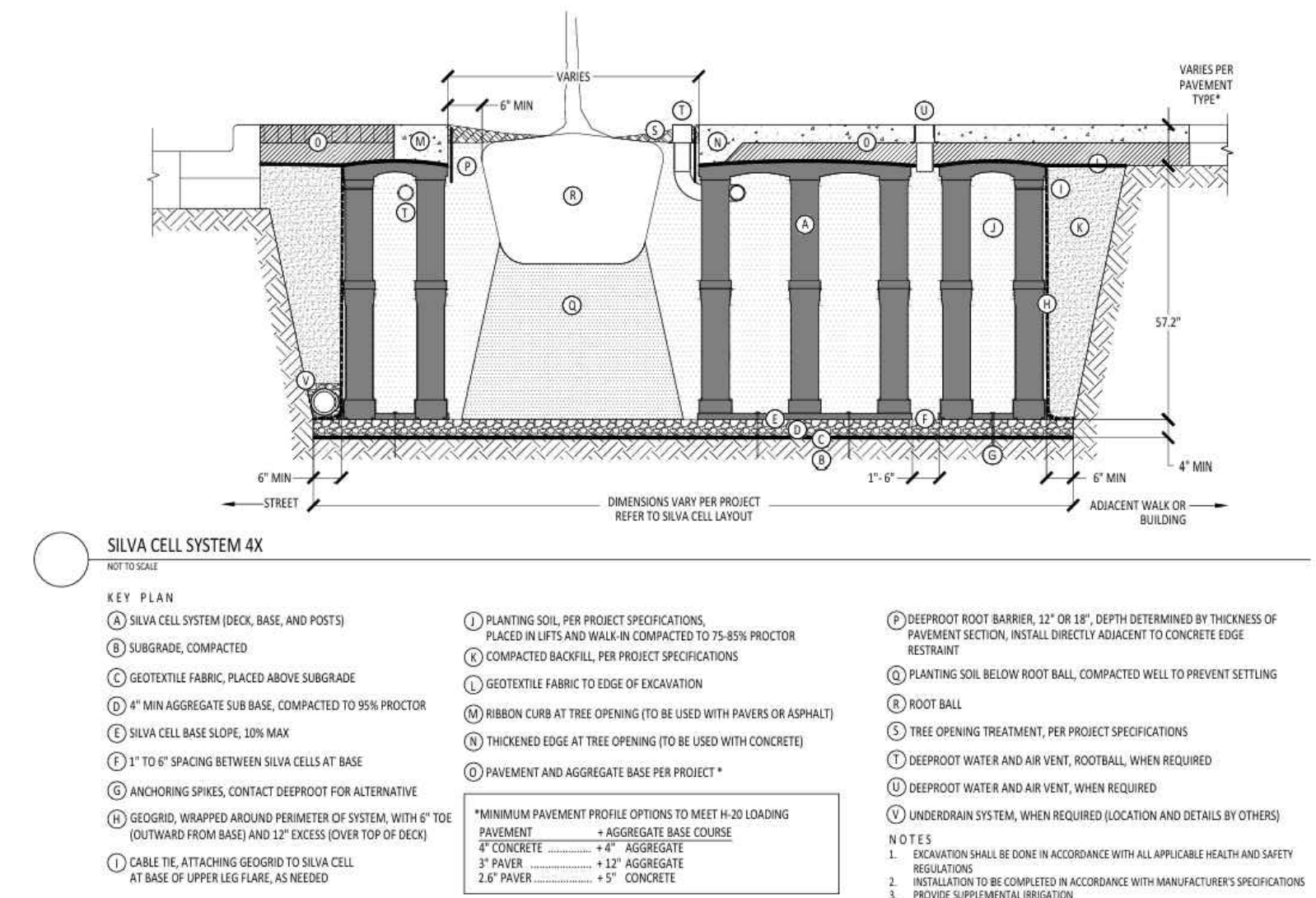
BACKFILL MATERIAL (ADJACENT TO SILVA CELLS)

A. Clean, compactable, coarse grained fill soil meeting the requirements of the Unified Soil Classification system for soil type GW, GP, GC with less than 30% fines, SW, and SC with less than 30% fines. Backfill material shall be free of organic material, trash and other debris, and shall be free of toxic material injurious to plant growth.

PLANTING SOIL

Planting soil shall consist of 50/50 sand/topsoil mix. Install planting soil and backfill per manufacturer directions. See General Planting Requirements.

ADDITIONAL LANDSCAPE REQUIREMENTS (J.3.a.)	REQUIRED (CF)	SUSPENDED SOIL PROVIDED (CF)	PLANTING AREA PROVIDED (CF)	TOTAL SOIL VOLUME PROVIDED (CF)
SUSPENDED PAVEMENT SYSTEMS MUST BE SPECIFIED FOR TREES IN LANDSCAPE AREA DIRECTLY ABUTTING PAVED AREAS				
1,200 CF SOIL VOLUME REQUIRED PER TREE TYPE: SUSPENDED PAVEMENT TO BE PROVIDED AS NEEDED TO MEET SOIL VOLUME REQUIREMENT.				
NE 23 <sup>RD</sup> AVE (EAST)	9,000	4,418	4,687	9,105
Live Oak 12" x 1,200 = 6,000	6,000			
Green Buttonwood 3 X 1,000 = 3,000	3,000			
EAST ATLANTIC BOULEVARD	900	496	474	970
Existing Bridal Veil 12" x 900 = 2,700 N/A				
Existing Date Palm 1 x 700 = 700 N/A				
New Bridal Veil 1 X 900 = 900				
CANOPY TREES SOIL VOLUME PER TREE				
LIVE OAK	1,200 CF			
BRIDAL VEIL	900			
Green Buttonwood	1,000			



REVISION / DATE

EnviroScope

4132 SW 51 ST  
Dania Beach FL 33314

  
EnviroScope

Multi-Family Residence

2217,2219,2223 E Atlantic Blvd  
Pompano Beach FL

DRAWN BY:	
CHECKED BY:	
JOB NUMBER:	AF2475
DATE:	8/27/2025

N

SCALE 1/8"=1'

REGISTERED LANDSCAPE ARCHITECT  
LA 6668897  
JAMES BRIAN RUFFELL  
STATE OF FLORIDA

SEAL

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