Construction Plans and Specifications
Of
O.L. PEACOCK LAKE PARK
MULTI-USE TRAIL
For
The City of Port St. Lucie
Parks & Recreation Department
Lying In
Secs. 14, 23 Twp. 37 S., Rng. 39 E.
St. Lucie County, Florida

LOCATION MAP

NOTES:
THESE PLANS ARE IN ENGLISH UNITS. ALL ELEVATIONS HEREIN REFERENCE N.A.V.D. 1988 DATUM. ADD 1.48 FEET TO CONVERT TO N.G.V.D. 1929 DATUM. ALL CONSTRUCTION IS TO BE IN ACCORDANCE WITH FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS. CITY OF PORT ST. LUCIE UTILITY STANDARDS MANUAL 2019 ADDITION WITH 2024 AMENDMENT

NOTES:
THESE PLANS ARE IN ENGLISH UNITS
ALL ELEVATIONS HEREIN REFERENCE N.A.V.D. 1988 DATUM.

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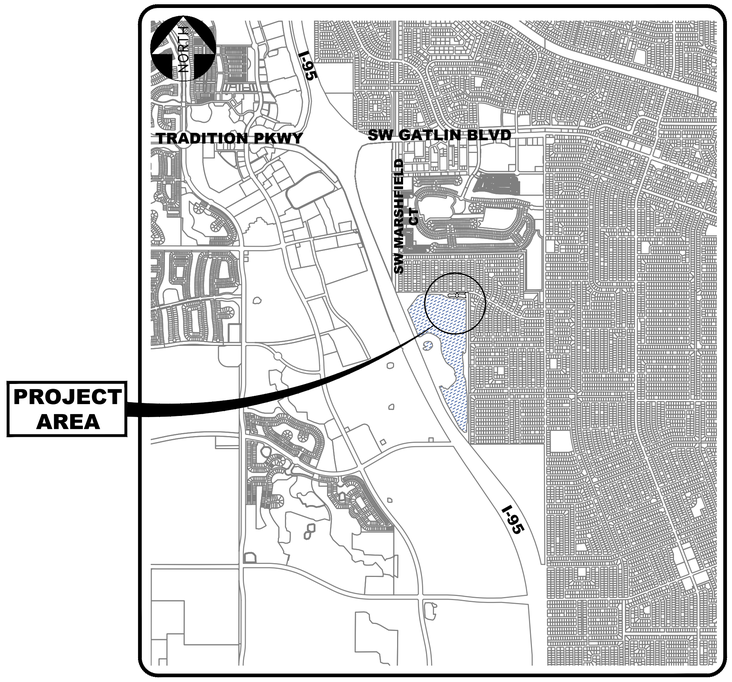
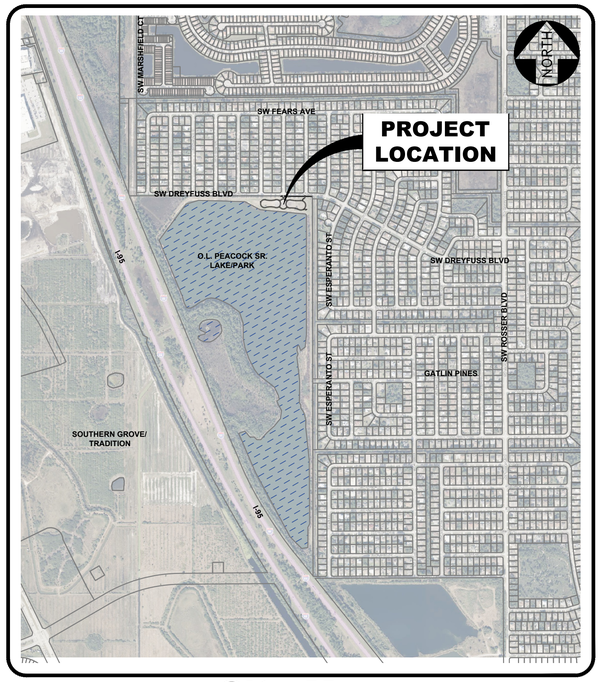


PROJECT AREA

Vicinity Map
N.T.S.



Site Map
N.T.S.

FDOT 2025-26 STANDARD SPECIFICATIONS, FDOT 2023-24 STANDARD PLANS

CPSLUSD PLANNING & ZONING #P24-221 **CPSLUSD UTILITY FILE #5001-32**

PORT ST. LUCIE
HEART OF THE TREASURE COAST

SHEET INDEX

SHEET NUMBER	SHEET TITLE/DESCRIPTION
1	COVER
2	CIVIL SITE PLAN
3	EROSION CONTROL PLAN
4	STORMWATER POLLUTION PREVENTION PLAN
5	HORIZONTAL CONTROL
6	PAVING, SIDEWALK-TRAIL GRADING DRAINAGE PLAN. WEST
7	PAVING, SIDEWALK-TRAIL GRADING DRAINAGE PLAN. EAST
8	SECTIONS
9	SECTIONS
10	GENERAL NOTES
11	GENERAL NOTES
12	PAVING & DRAINAGE DETAILS
13	WATER SERVICE - LPFM SERVICE - UNDERGROUND SERVICE
14	UTILITY PROFILES
15	UTILITY DETAILS
16	UTILITY DETAILS
SURVEY	1-3
LANDSCAPE ARCHITECT	L1-L6
IRRIGATION	IR-1 - IR-6
ARCHITECTURE + DESIGN	A2.1-S1.1

100% BID SET
PLANS 08/27/2025

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Project No. 2026.4 **PSL Project No. 20230079**

PSL Project No. 20230079 Project No. 2026.4

P:\20052026.4 - OL Peacock Sr Park\DWG\2026.4 COVER.dwg, 8/27/2025 11:02:27 AM, CAPTEC Engineering, Inc.

DRAINAGE STATEMENT

THE PROPOSED IMPROVEMENTS WILL MEET BOTH SFWMD AND CITY OF PORT ST. LUCIE DESIGN CRITERIA. DRAINAGE SWALES WILL BE UTILIZED FOR WATER QUALITY TREATMENT FOR TMDL REDUCTIONS. STORMWATER IS DISCHARGED TO O.L. PEACOCK, SR. LAKE, WHICH IS A 100–ACRE LAKE. DISCHARGE FROM THE PARK AREA HAS HISTORICALLY DRAINED TO THE LAKE. THERE IS NO DISCHARGE FROM O.L. PEACOCK, SR. LAKE.

UTILITY STATEMENT

THE PROPOSED SITE IS LOCATED WITHIN THE CITY OF PORT ST. LUCIE UTILITY DEPARTMENT SERVICE AREA. POTABLE WATER SUPPLY IS AVAILABLE VIA AN 8" WATER MAIN AND DOMESTIC WASTEWATER COLLECTION IS AVAILABLE VIA A 4" FORCE MAIN ALONG DREYFUSS BLVD.
WATER SUPPLY AND FORCEMAIN ARE BEING INSTALLED WITH THIS CONSTRUCTION TO SERVICE A FUTURE FACILITY

ON–STREET PARKING STATEMENT

ON–STREET PARKING WILL MEET CITY OF PORT ST. LUCIE CODE OR ORDINANCES AND DESIGN CRITERIA. NINE (9) PARALLEL PARKING STALLS, AND ONE (1) HANDICAP PARKING STALL ARE PROVIDED ON THE PROJECT ON DREYFUSS BLVD.THE CITY OF PORT ST. LUCIE 10–YEAR PARKS AND RECREATION SYSTEM MASTER PLAN REFERS TO O.L. PEACOCK SR. PARK AS A NATURE PRESERVE. THE PARK IS OPEN ONLY DURING DAYLIGHT HOURS. THE 10–YEAR PARKS AND RECREATION SYSTEM MASTER PLAN DISCUSSES OPPORTUNITIES FOR NEIGHBORHOOD USERS TO WALK TO PARKS LIKE O.L. PEACOCK SR. PARK. FOR ALL OF THESE REASONS, TEN PARKING STALLS ARE ADEQUATE AT THIS TIME TO ACCOMMODATE PARK USERS.

TRAFFIC STATEMENT

THE MAINTENANCE OF TRAFFIC PLAN (MOT) SHALL BE IN ACCORDANCE WITH THE APPLICABLE FDOT INDEX (600 SERIES) AND THE MANUAL ON UNIFORM TRAFFIC CONTROL FOR STREETS AND HIGHWAYS (MUTCD). THE MAJORITY OF VISITORS TO THE PARK ARE BY LOCAL NEIGHBORHOOD RESIDENTS TYPICALLY ON FOOT OR BICYCLE. DAILY VEHICULAR SITE VISITS ARE DURING DAYLIGHT HOURS ONLY GENERALLY BY NEIGHBORHOOD RESIDENTS. PRIOR TO CONSTRUCTION, OFF–STREET PARKING WAS AVAILABLE ON THE PARK SITE. AFTER CONSTRUCTION, TEN (10) ON–STREET PARKING STALLS WILL BE AVAILABLE.

PROPOSED LAND USE SUMMARY

CATEGORY	TOTAL SQUARE FOOTAGE (SF)	TOTAL ACREAGE (AC)	% OF TOTAL ACREAGE
BUILDING DATA			
SHADE PAVILION	205	0.005	0.11%
SHADE PAVILION	205	0.005	0.11%
SITE DATA			
SHADE PAVILIONS	410	0.010	0.22%
TRAIL / CURB & SIDEWALK	27,560	0.633	15.05%
PLAY AREA	4,183	0.096	2.28%
PARKING/ASPHALT	1,958	0.045	1.07%
TOTAL IMPERVIOUS	34,111	0.783	18.62%
OPEN SPACE/ LANDSCAPE AREA	144,388	3.315	78.82%
ACCESS ROAD - STABILIZED TURF	4,685	3.377	2.56%
TOTAL PERVIOUS	149,073	3.422	81.38%
OVERALL PROJECT SITE	183,184	4.205	100%

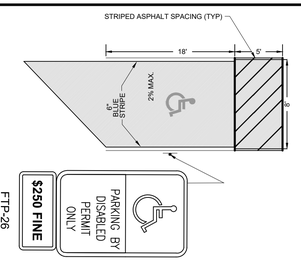
ENVIRONMENTAL ASSESSMENT STATEMENT

AN ENVIRONMENTAL ASSESSMENT HAS BEEN CONDUCTED FOR THIS SITE. A GOPHER TORTOISE BURROW IS PRESENT. DUE TO THE LOCATION OF THE BURROW, THE LAYOUT AND CONSTRUCTION OF THE TRAIL HAS AN IMPACT ON THE BURROWS. A RELOCATION PLAN HAS BEEN INITIATED FOR THE PROJECT. THERE ARE NO OTHER DETRIMENTAL ENVIRONMENTAL IMPACTS ON THE PROJECT.

SITE DEVELOPMENT REGULATIONS

SITE ADDRESS	1999 SW DREYFUSS BLVD
TOTAL GROSS PROJECT AREA	4.205 (AC)
TOTAL PARK AREA	166.31 (AC)
FUTURE LAND USE	OSC/OSR
ZONING	GU
EXISTING USE	O.L. PEACOCK SR. PARK
PROPOSED USE	O.L. PEACOCK SR. PARK

FUTURE PARK AREA	162.11 (AC)
TOTAL PARK AREA	166.31 (AC)

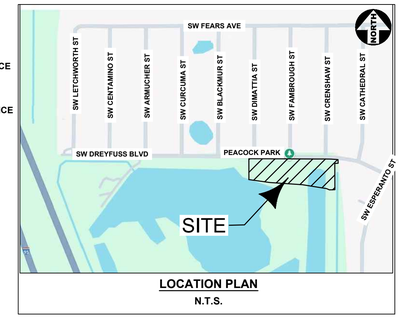


HANDICAP PARKING DETAIL REFERENCE:

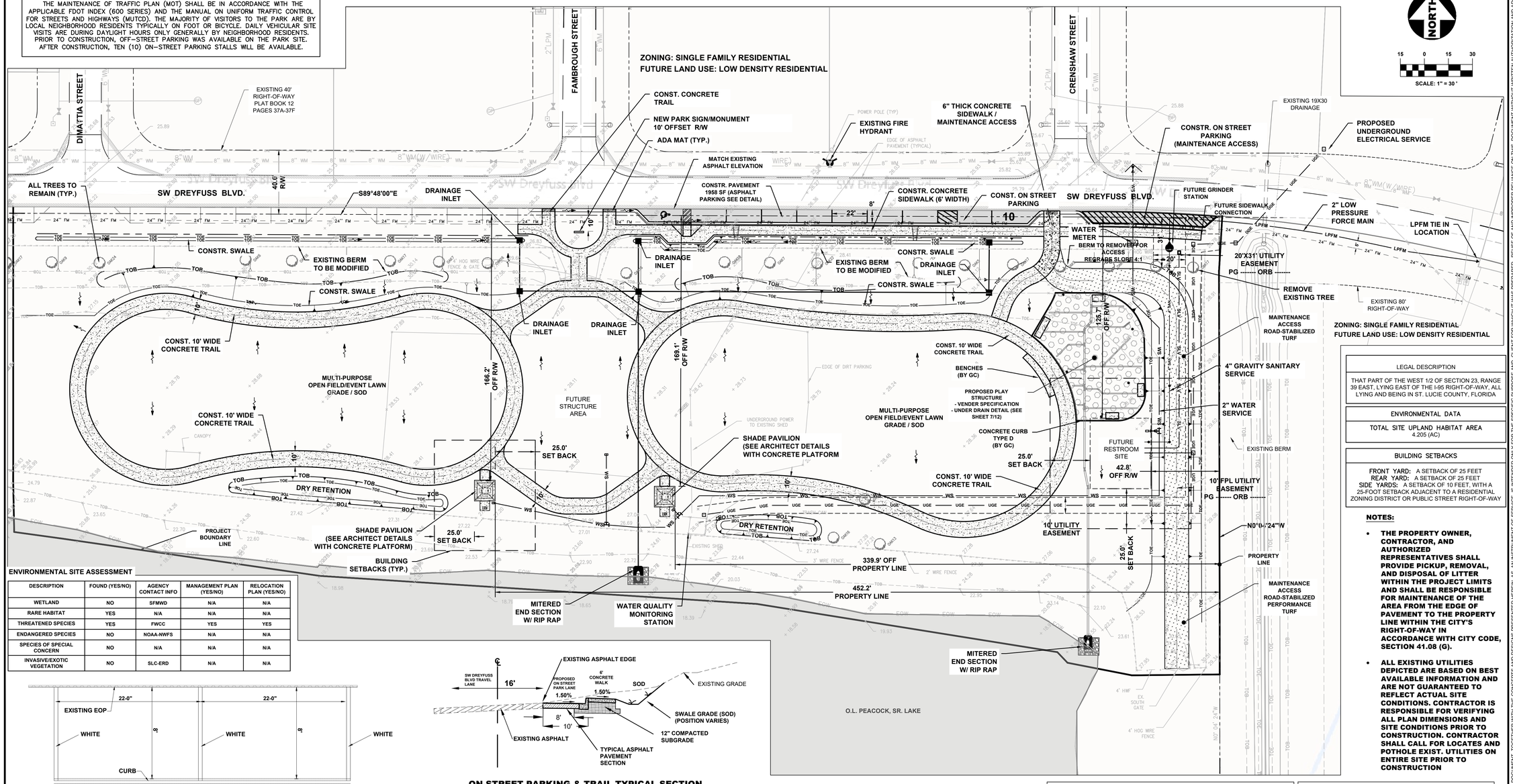
1. HANDICAP PARKING SPACES TO BE CONSTRUCTED AND STRIPED PER FDOT STANDARD PLANS INDEX 711-001 AND 700-102
2. HANDICAPPED PARKING SIGN TO BE PROVIDED (REFERENCE F.D.O.T. STANDARD INDEX #700-102) WITH ADDITIONAL SIGN STATING "$250 FINE". THE MINIMUM HEIGHT MEASURED VERTICALLY FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SHALL BE 7 FEET.

LEGEND

- PROJECT BOUNDARY LINE
- CENTERLINE
- EXISTING RIGHT-OF-WAY
- WS — POTABLE WATER SUPPLY SERVICE
- LPFM — LOW PRESSURE FORCEMAIN WASTEWATER SERVICE
- UGE — UNDERGROUND ELECTRIC SERVICE
- OHE — OVERHEAD ELECTRIC SERVICE
- UTILITY EASEMENT
- CONCRETE TRAIL
- PAVEMENT/ASPHALT
- PLAY STRUCTURE SURFACE
- EXISTING GRADE
- DRAINAGE ARROWS
- STABILIZED TURF/ SOD



LOCATION PLAN
N.T.S.



ENVIRONMENTAL SITE ASSESSMENT

DESCRIPTION	FOUND (YES/NO)	AGENCY CONTACT INFO	MANAGEMENT PLAN (YES/NO)	RELOCATION PLAN (YES/NO)
WETLAND	NO	SFMWD	N/A	N/A
RARE HABITAT	YES	N/A	N/A	N/A
THREATENED SPECIES	YES	FWCC	YES	YES
ENDANGERED SPECIES	NO	NOAA-NWFS	N/A	N/A
SPECIES OF SPECIAL CONCERN	NO	N/A	N/A	N/A
INVASIVE/EXOTIC VEGETATION	NO	SLC-ERD	N/A	N/A

22' PARKING STALL DETAIL
NOT TO SCALE

ON-STREET PARKING & TRAIL TYPICAL SECTION

CPSLUSD PLANNING & ZONING #P24-221 | **CPSLUSD UTILITY FILE #5001-32**

LEGAL DESCRIPTION

THAT PART OF THE WEST 1/2 OF SECTION 23, RANGE 39 EAST, LYING EAST OF THE I-95 RIGHT-OF-WAY, ALL LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA

ENVIRONMENTAL DATA

TOTAL SITE UPLAND HABITAT AREA
4.205 (AC)

BUILDING SETBACKS

FRONT YARD: A SETBACK OF 25 FEET
REAR YARD: A SETBACK OF 25 FEET
SIDE YARDS: A SETBACK OF 10 FEET, WITH A 25-FOOT SETBACK ADJACENT TO A RESIDENTIAL ZONING DISTRICT OR PUBLIC STREET RIGHT-OF-WAY

NOTES:

- **THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY IN ACCORDANCE WITH CITY CODE, SECTION 41.08 (G).**
- **ALL EXISTING UTILITIES DEPICTED ARE BASED ON BEST AVAILABLE INFORMATION AND ARE NOT GUARANTEED TO REFLECT ACTUAL SITE CONDITIONS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PLAN DIMENSIONS AND SITE CONDITIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL CALL FOR LOCATES AND POTHOLE EXIST. UTILITIES ON ENTIRE SITE PRIOR TO CONSTRUCTION**

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Fax: (772) 692-4341
Engineering Business No.: EB-0007657

DATE: 08/27/2025
DRAWN BY: JFK
DESIGNED BY: CS
CHECKED BY: JWC
PROJECT No.: 2026.4
HORZ. SCALE: 1" = 30'
VERT. SCALE: N/A
CADD FILE: 2614 Sp Rec-need

NO.	DATE	BY	REVISIONS
01	08/27/2025	JWC	BID SET

SCALE VERIFICATION
0 1
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

O.L. PEACOCK LAKE PARK MULTI-USE TRAIL
CITY OF PORT ST. LUCIE

OVERALL IMPROVEMENT CIVIL SITE PLAN

JOSEPH W. CAPRA
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37638

Printed Date:

JOB No.: 2026.4
SHEET 2 OF 16

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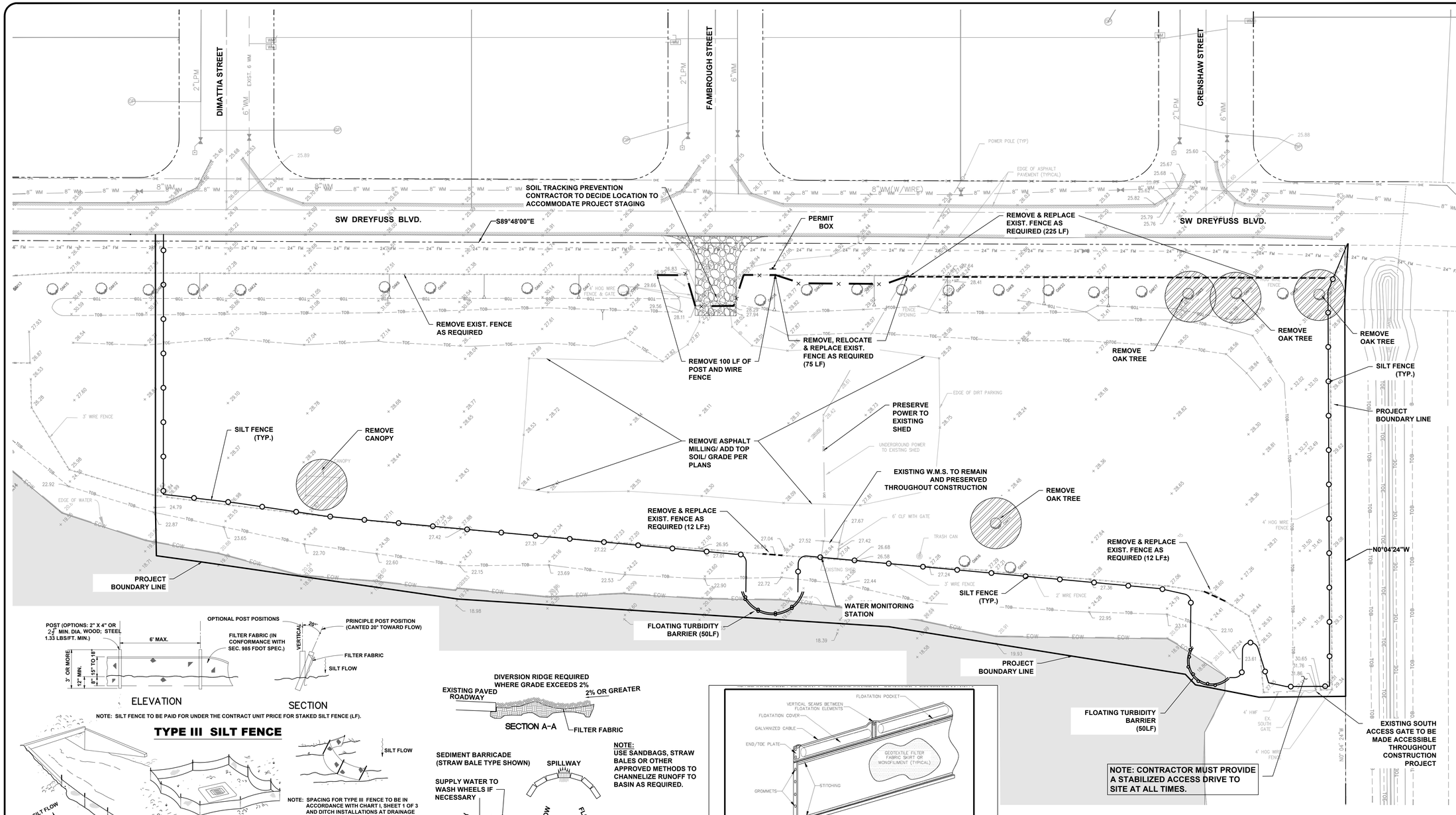
P:\2026\02626.4 - OL Peacock Sr Park\DWG\02626.4 Site Plan - overall.dwg, 8/27/2025 11:02:34 AM, CAPTEC Engineering, Inc.



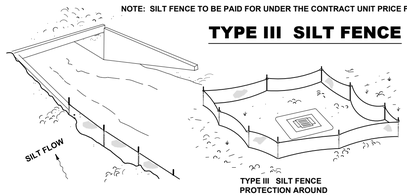
POST (OPTIONS: 2" X 4" OR 2½" MIN. DIA. WOOD; STEEL 1.33 LBS/FT. MIN.)
6' MAX.
OPTIONAL POST POSITIONS
FILTER FABRIC (IN CONFORMANCE WITH SEC. 985 FDOT SPEC.)
3' OR MORE
12" MIN.
8" TO 15" TO 18"
VERTICAL
20°
PRINCIPLE POST POSITION (CANTED 20° TOWARD FLOW)
FILTER FABRIC
SILT FLOW

ELEVATION

SECTION

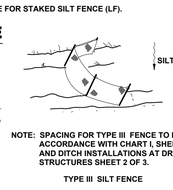
NOTE: SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE (LF).

TYPE III SILT FENCE



TYPE III SILT FENCE

TYPE III SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS.



NOTE: SPACING FOR TYPE III FENCE TO BE IN ACCORDANCE WITH CHART I, SHEET 1 OF 3 AND DITCH INSTALLATIONS AT DRAINAGE STRUCTURES SHEET 2 OF 3.

TYPE III SILT FENCE

DO NOT DEPLOY IN A MANNER THAT SILT FENCES WILL ACT AS A DAM ACROSS PERMANENT FLOWING WATERCOURSES. SILT FENCES ARE TO BE USED AT UPLAND LOCATIONS AND TURBIDITY BARRIERS USED AT PERMANENT BODIES OF WATER.

SILT FENCE APPLICATIONS

(FDOT INDEX NO. 102, SHT. 3)

NOTES:

1. PROJECT BOUNDARY CORNERS SHALL BE LOCATED BY A LICENSED LAND SURVEYOR AND CLEARLY MARKED IN THE FIELD PRIOR TO THE ENGINEERING DEPARTMENT'S PRE-CONSTRUCTION MEETING FOR SITE DEVELOPMENT.
2. AUTHORIZATION TO INSTALL EROSION CONTROL DEVICES AND PRESERVE BARRICADES WILL BE GRANTED AT THE PRE-CONSTRUCTION MEETING.
3. NO ADDITIONAL LAND CLEARING SHALL COMMENCE UNTIL A SATISFACTORY INSPECTION OF THE REQUIRED CONTROL STRUCTURES AND BARRICADES HAS BEEN OBTAINED.
4. A SITE PREPARATION PERMIT MAY BE OBTAINED SUBSEQUENT T0 THE SATISFACTORY INSPECTION OF THE EROSION CONTROL DEVICES. THIS PERMIT SHALL BE POSTED IN THE PERMIT BOX, IT'S LOCATION SHOWN ELSEWHERE ON THIS PAGE.
5. ALL CONSTRUCTION BARRICADES AND SILT FENCES WILL REMAIN IN PLACE AND BE MONITORED FOR COMPLIANCE BY THE PERMIT HOLDER DURING PERMITTED DEVELOPMENT ACTIVITIES.
6. FOLLOWING CERTIFICATION OF OCCUPANCY FOR THE DEVELOPMENT, ALL BARRICADES AND EROSION CONTROL DEVICES SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
7. ALL DEBRIS TO BE DISPOSED OF AT TIME OF CLEARING.
8. ALL AREAS TO BE STABILIZED (SODDED) FOLLOWING CLEARING, GRUBBING AND GRADING.

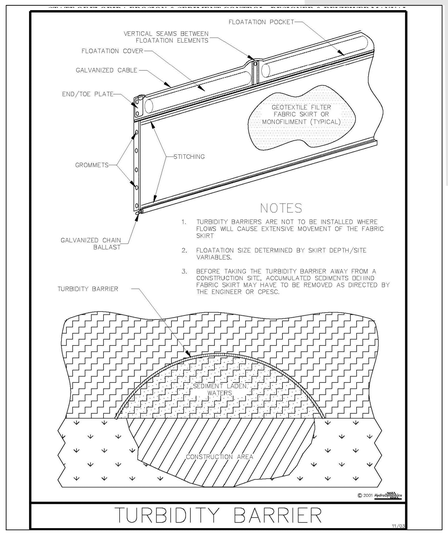
DIVERSION RIDGE REQUIRED WHERE GRADE EXCEEDS 2%
EXISTING PAVED ROADWAY
2% OR GREATER
SECTION A-A
FILTER FABRIC

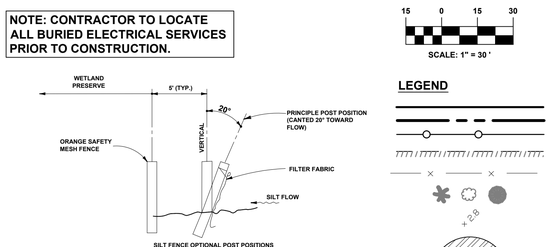
SEDIMENT BARRICADE (STRAW BALE TYPE SHOWN)
SPILLWAY
SUPPLY WATER TO WASH WHEELS IF NECESSARY
FLOW
EXISTING PAVED ROADWAY
2"-3" COURSE AGGREGATE MIN. 6" THICK
12" MIN.
DIVERSION RIDGE
50' MIN.

NOTE: USE SANDBAGS, STRAW BALES OR OTHER APPROVED METHODS TO CHANNELIZE RUNOFF TO BASIN AS REQUIRED.

NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT BASIN.

STABILIZED CONSTRUCTION ENTRANCE





SILT FENCE/SAFETY FENCE POSITIONING DETAIL

15 0 15 30
SCALE: 1" = 30 '

NORTH

LEGEND

- PROJECT BOUNDARY LINE
- RIGHT-OF-WAY LINE
- SILT FENCE
- EXISTING ROAD
- EXISTING BOX WIRE FENCE
- EXISTING TREES (TO REMAIN)
- EXISTING GRADE
- TREE REMOVAL

CPSLUSD PLANNING & ZONING #P24-221 | **CPSLUSD UTILITY FILE #5001-32**

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CADD FILE: 2026 Estate Cutest

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01	08/27/2025	JWC	BID SET

SCALE VERIFICATION
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SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

O.L. PEACOCK LAKE PARK MULTI-USE TRAIL
CITY OF PORT ST. LUCIE

EROSION CONTROL PLAN

JOSEPH W. CAPRA
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Stuart, Florida 34994
P.E. No. 37638

Printed Date:

JOB No.: 2026.4
SHEET 3 OF 16

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Section 1	Project Name and location information:	OL Peacock Lake Park Multi-use Trail Section 23, Township 37 South, Range 39 East St. Lucie County, Florida
Section 2	Describe the nature of the construction activity:	City Park
Section 3	Describe the intended sequence of major soil disturbing activities:	• 0-2 days, site prep and stabilized construction entrance; • 3-6 days, install perimeter sediment and erosion controls; • 7-60 days, install stormwater retention basin • 7-10 days, clearing/grubbing over all areas • 11-90 days, site grading; • 90-150 days, install storm sewer and utilities • 150-180 days, stabilize site.
Section 4	Total area of the site:	More of less 166.31 Acres
Section 5	Total area of the site to be disturbed:	More of less 4.205 Acres
Section 6	Existing data describing the soil or quality of any stormwater discharge from the site:	Thin mantle of top soil followed by loose to medium dense soils (SP) and occasionally slightly clayed fine sands (SP-SC)
Section 7	Estimate the drainage area size for each discharge point:	4.205 Acres
Section 8	Latitude and longitude of each discharge point and identify the receiving water or MS4 for each discharge point:	DISCHARGE 1 Longitude W80°24'29.23" Latitude N27°14'56.88" OL PEACOCK SR. LAKE DISCHARGE 2 Longitude W80°24'32.35" Latitude N27°14'57.29" OL PEACOCK SR. LAKE
Section 9	Give a detailed description of all controls, Best Management Practices (BMPs) and measures that will be implemented at the construction site for each activity identified in the intended sequence of major soil disturbing activities section. Provide time frames in which the controls will be implemented. NOTE: All controls shall be consistent with performance standards for erosion and sediment control and stormwater treatment set forth in s. 62-40.432, F.A.C., the applicable Stormwater or Environmental Resource Permitting requirements of the Department or a Water Management District, and the guidelines contained in the State of Florida Erosion and Sediment Control Designer and Reviewer Manual, FDOT, FDEP, and any subsequent amendments.	
	• Prior to clearing, a silt fence (trenched 6 inches deep and backfilled on the uphill side), shall be installed around the perimeter of the site. A rock entrance road (that is 60ft long with a 6 inch depth of FDOT #1 stone and lined with filter fabric) shall be constructed to minimize the effects of truck traffic and sedimentation tracking both on and off of the site. There will be only one construction entrance at this site. • After the inital site grading work, all proposed inlet(s)/outfalls, once installed, shall be protected from erosion and sediment runoff by the use of filter fabric and properly installed inlet filters. Disturded portions of the site where construction activites have permanently ceased shall be stabilized with sod or other permanent stabilization methods (if other methods are used, this SWPPP will be modified) no later than 7 days after the last construction activity. Seeding shall be the same as in temporary seeding. • All installation shall be commenced as depiced on the attached site map and installation "typicals" sheet.	
Section 10	Describe all temporary and permanent stabilization practices. Stabilization practices include temporary seeding, mulching, permanent seeding, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, vegetative preservations, etc.	
	• Temporary seeding shall be rye grass or other appropriate ground covers depending upon season of installation that is applied at manufacturer's recommendations to any disturbed areas that are inactive more than 7 days. • Sod shall be used to stabilize the sides of the detention basins. • Filter fabric shall be placed under the rock entrance/exit. • Vegetative buffers shall be left undisturbed along the boundaries of the property, with the exception of exotic vegetation removal.	
Section 11	Describe all structural controls to be implemented to divert stormwater flow from exposed soils and structural practices to store flows, retain sediment on-site or in any other way limit stormwater runoff. These controls include silt fences, earth dikes, diversions, swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, coagulating agents and temporary or permanent sediment basins.	
	• A silt fence (with the same installation as indicated under the Best Management Practices heading) shall be placed around the entire perimeter of each construction phase. • A wet detention basin shall be constructed which may be used as a temporary sediment basin (prior to being connected to a discharge structure) if needed. Care shall be taken to assure the removal of accumulated fine sediments and that the excessive compaction of soil by construction machinery is avoided. • Inlet(s)/Outfalls shall be protected with filter fabric and properly installed inlet filters (with the same installation as indicated under the Best Management Practices heading).	
Section 12	Describe all sediment basins to be implemented for areas that will disturb 10 or more acres at one time. The sediment basins (or an equivalent alternative) should be able to provide 3,600 cubic feet of storage for each acre drained. Temporary sediment basins (or an equivalent alternative) are recommended for drainage areas under 10 acres.	
	No temporary sediment basins are proposed. The detention basins (prior to being connected to a discharge structure) may be used as a temporary sediment basin if needed.	
Section 13	Describe all permanent stormwater management controls such as, but not limited to, detention or retention systems or vegetated swales that will be installed during the construction process.	
	Storm water conveyance swales and dry detention areas.	

Section 14	Waste disposal, this may include construction debris, chemicals, litter, and sanitary wastes:	All construction materials and debris will be placed in a dumpster and hauled off site to a landfill or other proper disposal site. No materials will be buried on site.
Section 15	Offsite vehicle tracking from construction entrances/exits:	Off site vehicle tracking of sediments and dust generation will be minimized via a rock construction entrance, street sweeping and the use of water to keep dust down.
Section 16	The proper application rates of all fertilizers, herbicides and pesticides used at the construction site:	Florida-friendly fertilizers and pesticides will be used at a minimum and in accordance with the manufacturer's suggested application rates.
Section 17	The storage, application, generation and migration of all toxic substances:	All paints and other chemicals will be stored in a locked covered shed.
Section 18	Other:	Port-o-lets will be placed away from storm sewer systems, storm inlet(s), surface waters and wetlands. No vehicle maintenance shall be conducted on-site. A washdown area shall be designated at all times and will not be located in any area that will allow for the discharge of polluted runoff.
Section 19	Provide a detailed description of the maintenance plan for all structural and non-structural controls to assure that they remain in good and effective operating condition.	
	Contractor shall provide routine maintenance of permanent and temporary sediment and erosion control features in accordance with the technical specifications or as follows, whichever is more stringent: • Silt fence shall be inspected at least weekly. Any required repairs shall be made immediately. Sediment deposits shall be removed when they reach approximately one-half the height of the barrier. • Maintenance shall be performed on the rock entrance when any void spaces are full of sediment. • Inlet(s)/outfalls shall be inspected immediately after each rain event and any required repairs to the filter inlets, silt fence, or filter fabric shall be performed immediately. • Bare areas of the site that were previously seeded shall be reseeded per manufactures' instructions. • Mulch and sod that has been washed out shall be replaced immediately. • Maintain all other areas of the site with proper controls as necessary.	
Section 20	Inspections: Describe the inspection and inspection documentation procedures, as required by the FDEP NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities.	
	Qualified personnel will inspect all points of discharges, all disturbed areas of construction that have not been stabilized, constructed areas and locations where vehicles enter and exit the site, and all BMPs at least once every 7 calendar days and within 24 hours of the end of a rainfall event that is 0.5 inches or greater. Where sites have been finally stabilized, said inspections shall be conducted at least once every month until the Notice of Termination is filed.	
Section 21	Identify and describe all sources of non-stormwater discharges as allowed by the FDEP NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities.	
	It is expected that the following non-stormwater discharges may occur from the site during construction period: wash water (where no spills or leaks of toxic or hazardous materials have occurred), and uncontaminated groundwater (from dewatering excavation). Dewatering shall be done in accordance with the requirements of the SFWMD Water UsePermit. If said discharges do occur, they will be directed to the temporary sediment basin prior to discharge. Turbid water from the stormwater pond shall not be pumped directly into the receiving waters. Any pumped water from the stormwater pond shall be treated so as to not allow discharge of polluted stormwater. Treatment can include silt fences, settling ponds, the proper use of flocculating agents or other appropriate means.	
Section 22	All contractor(s) and subcontractor(s) identified in the SWPPP must sign the following certification:	
	"I certify under penalty of law that I understand, and shall comply with, the terms and conditions of the State of Florida Generic Permit for Stormwater Discharge from Large and Small Construction Activities and this Stormwater Pollution Prevention Plan prepared thereunder."	

Section 22	Name	Title	Company Name, Address and Phone Number	Date

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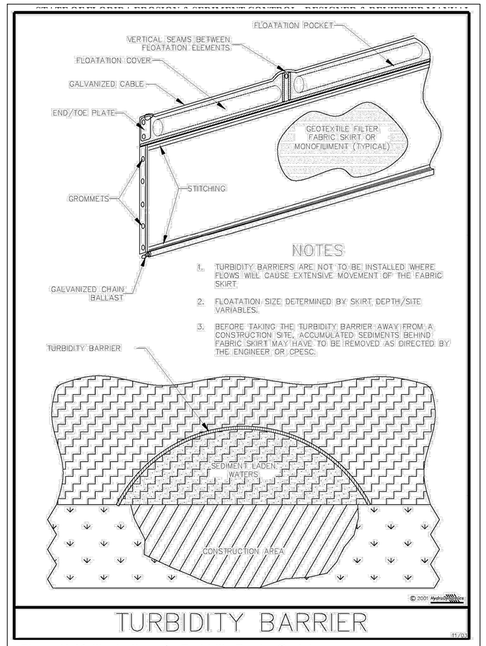

Figure V-44: Illustration of a Turbidity Barrier Curtain

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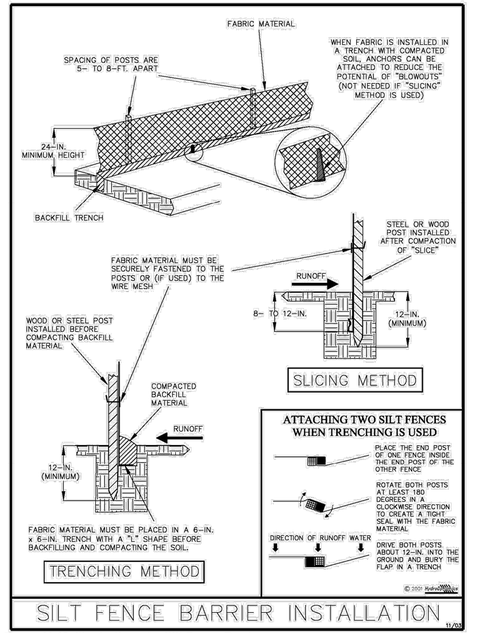

Figure V-40: Illustration of a Silt Fence Barrier

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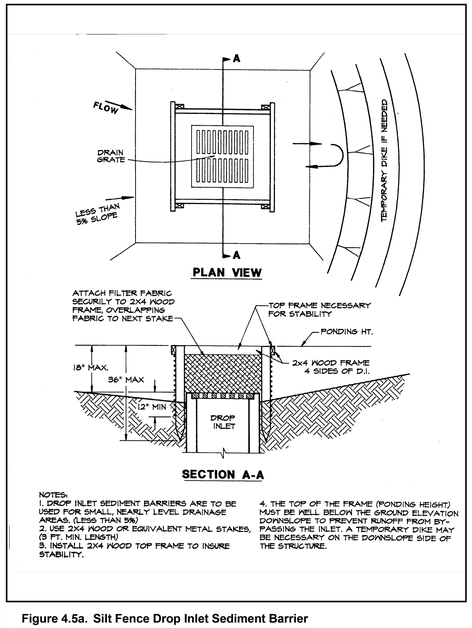

Figure 4.5a. Silt Fence Drop Inlet Sediment Barrier
Source: Erosion Draw

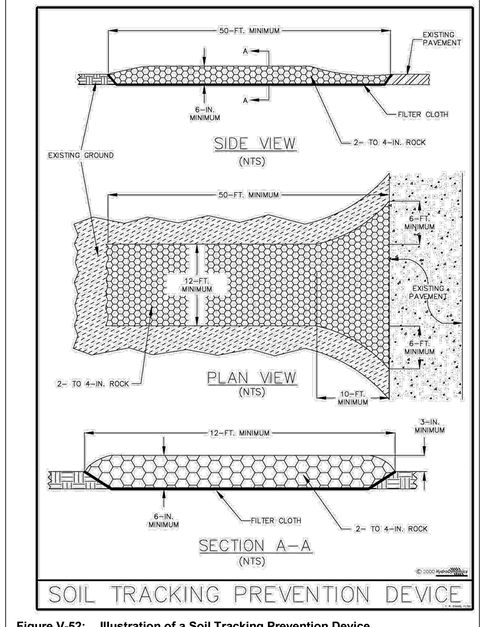

Figure V-52: Illustration of a Soil Tracking Prevention Device

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Engineering Business No. EB-0007657

DATE: 08/27/2025
DRAWN BY: JFK
DESIGNED BY: CS
CHECKED BY: JWC
PROJECT No.: 2026.4
HORZ. SCALE: N/A
VERT. SCALE: N/A
CADD FILE: 2026.4 General Notes

NO.	DATE	BY	REVISIONS
01	08/27/2025	JWC	BID SET

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O.L. PEACOCK LAKE PARK
MULTI-USE TRAIL
CITY OF PORT ST. LUCIE

STORMWATER POLLUTION PREVENTION PLAN

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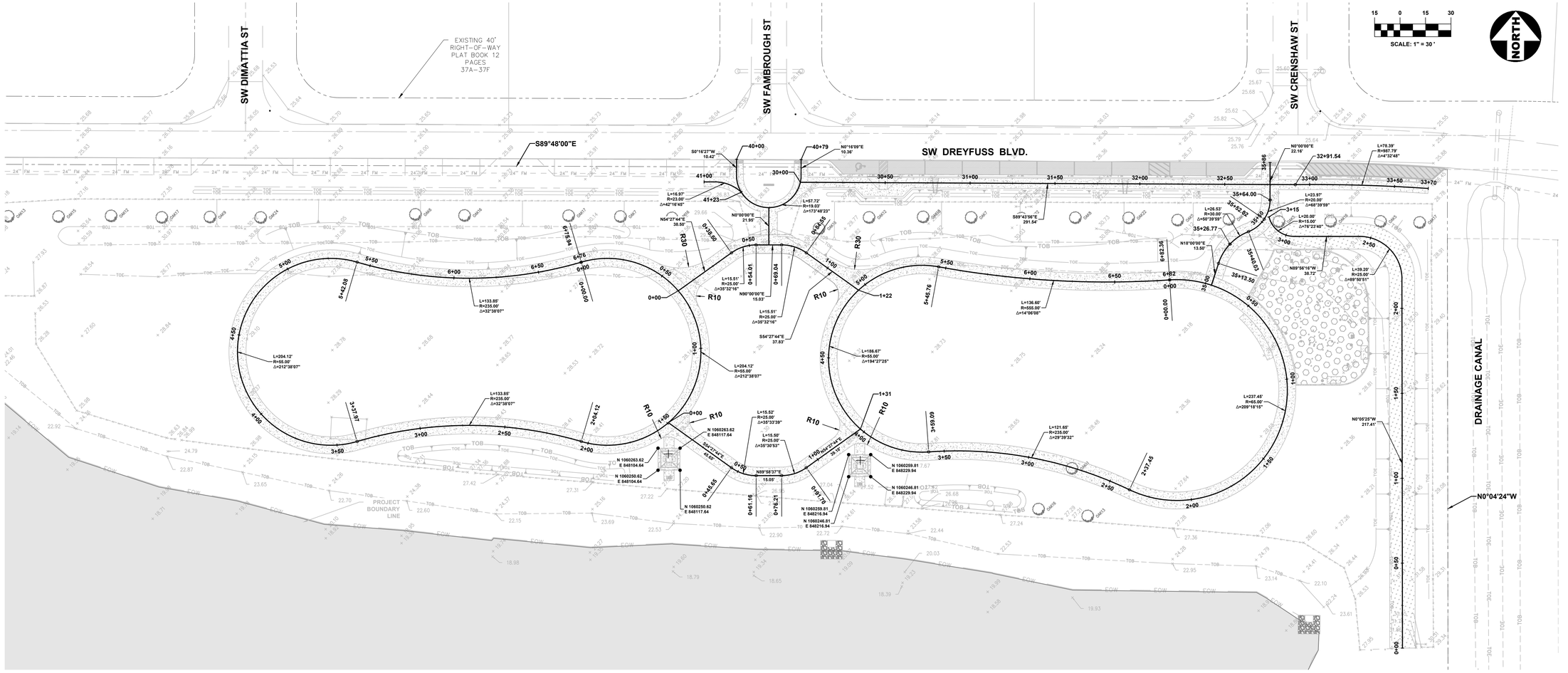

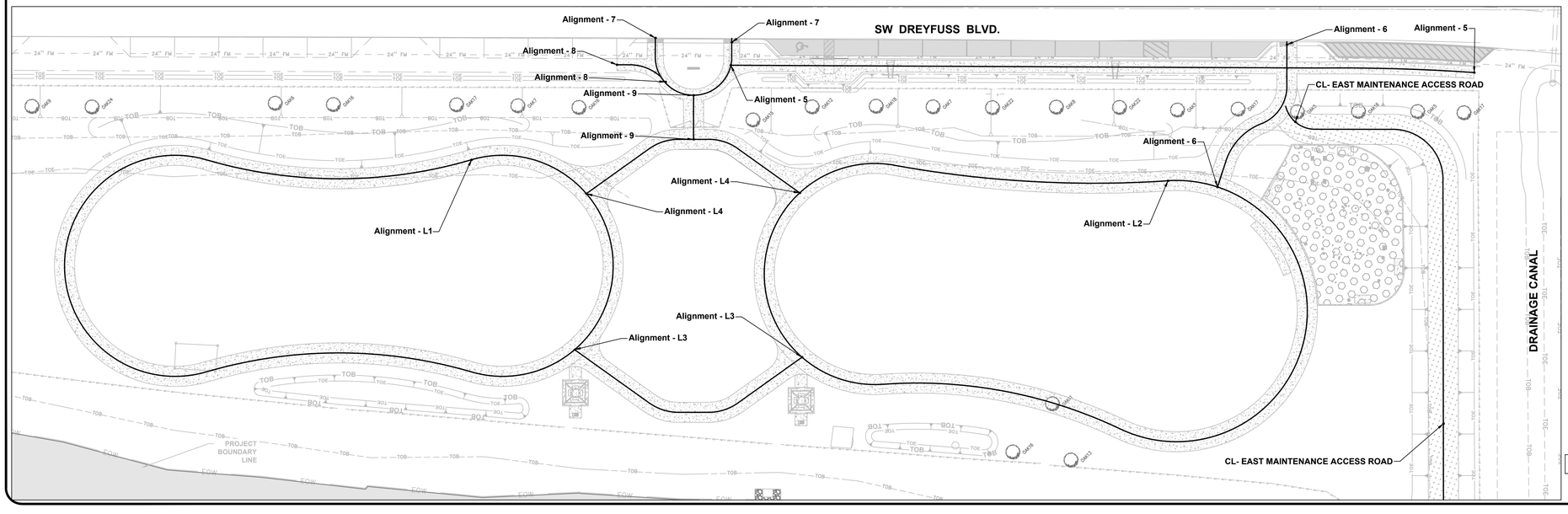

Name	Starting Station	Ending Station	Length
Alignment - L1	0+00.00'	6+75.94'	675.94'
Alignment - L2	0+00.00'	6+82.36'	682.36'
Alignment - L3	0+00.00'	1+30.88'	130.83'
Alignment - L4	0+00.00'	1+22.38'	122.37'
Alignment - 5	30+00.00'	33+70.73'	370.73'
Alignment - 6	35+00.00'	35+86.16	86.16'
Alignment - 7	40+00.00'	40+76.55'	76.59'
Alignment - 8	41+00.00'	41+26.78'	26.77'
Alignment - 9	42+00.00'	42+21.95'	21.95'
CL- EAST MAINTENANCE ACCESS ROAD	0+00.00'	3+15.00	315'

LEGEND

- PROPERTY LINE
- CENTERLINE
- CONCRETE WALK
- PAVEMENT
- PLAY STRUCTURE
- MAINTENANCE ACCESS ROAD
- EXISTING GRADE (+ 25.5)

CPSLUSD PLANNING & ZONING #P24-221

CPSLUSD UTILITY FILE #5001-32

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CAPTEC Engineering, Inc.
Civil Engineering Professionals

Engineering Business No. EB-0007657

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DESIGNED BY:	CS
CHECKED BY:	JWC
PROJECT No.:	2026.4
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VERT. SCALE:	N/A
CADD FILE:	2634-00PE

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CITY OF PORT ST. LUCIE

HORIZONTAL CONTROL

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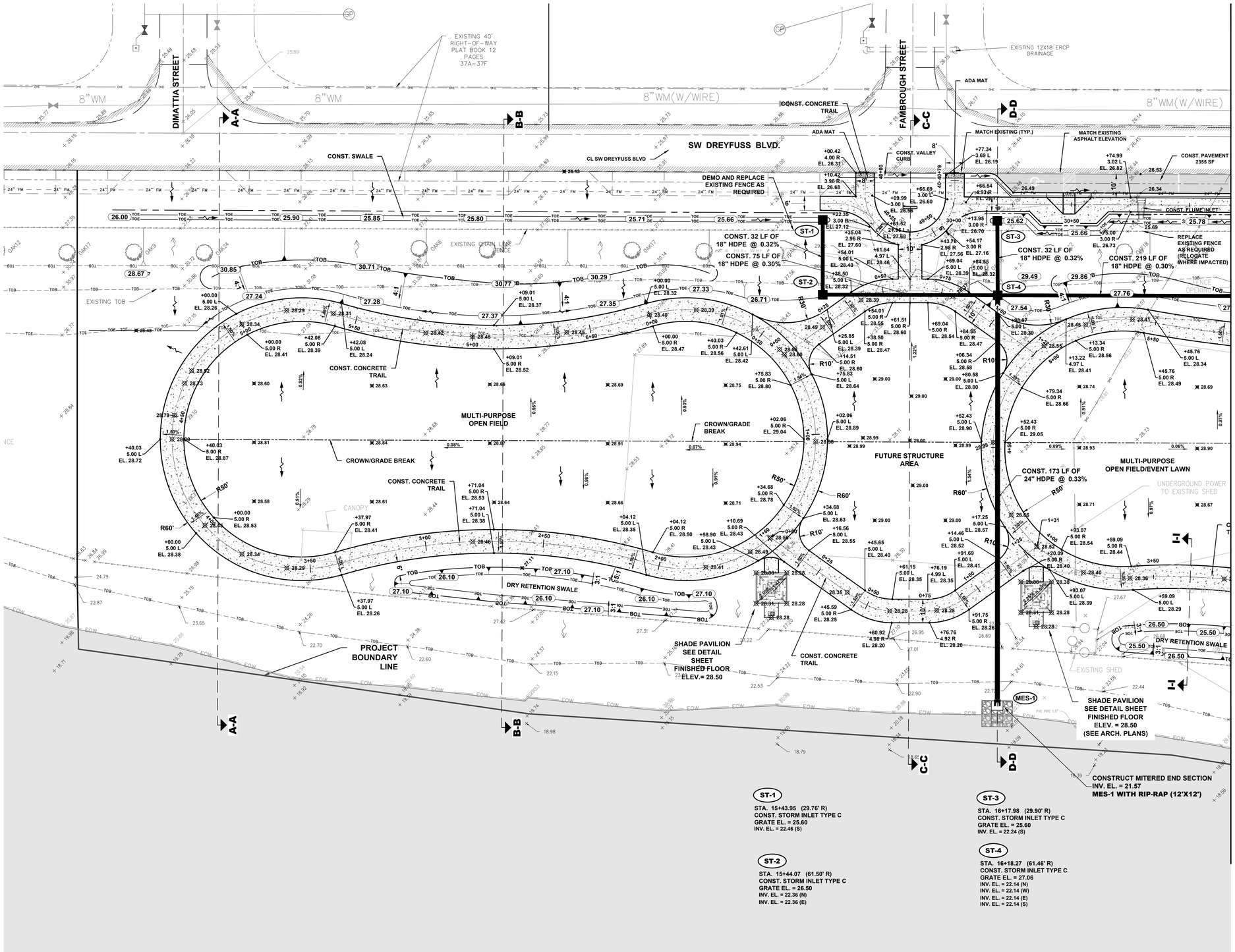

ST-1
STA. 15+43.95 (29.76' R)
CONST. STORM INLET TYPE C
GRATE EL. = 25.60
INV. EL. = 22.46 (S)

ST-2
STA. 15+44.07 (61.50' R)
CONST. STORM INLET TYPE C
GRATE EL. = 26.50
INV. EL. = 22.35 (N)
INV. EL. = 22.36 (E)

ST-3
STA. 16+17.98 (29.90' R)
CONST. STORM INLET TYPE C
GRATE EL. = 25.60
INV. EL. = 22.24 (S)

ST-4
STA. 16+18.27 (61.46' R)
CONST. STORM INLET TYPE C
GRATE EL. = 27.06
INV. EL. = 22.14 (N)
INV. EL. = 22.14 (W)
INV. EL. = 22.14 (E)
INV. EL. = 22.14 (S)

MATCH SHEET 7

SCALE: 1" = 20 '

NORTH

LEGEND

- PROPERTY LINE
- CENTERLINE
- CONCRETE TRAIL/SIDE WALK
- PAVEMENT
- SURFACE SLOPE
- PROPOSED SURFACE GRADE ELEVATION
- EXISTING GRADE
- TOE OF BANK
- TOP OF BERM
- PLAY STRUCTURE
- MITERED END STRUCTURE
- STORM INLET/ PIPE
- STABILIZED TURF

ALL EXISTING UTILITIES DEPICTED ARE BASED ON BEST AVAILABLE INFORMATION AND ARE NOT GUARANTEED TO REFLECT ACTUAL SITE CONDITIONS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PLAN DIMENSIONS AND SITE CONDITIONS PRIOR TO CONSTRUCTION.
CONTRACTOR SHALL CALL FOR LOCATES AND POTHOLE EXIST. UTILITIES ON ENTIRE SITE PRIOR TO CONSTRUCTION.

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Civil Engineering Professionals
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CHECKED BY: JWC
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CITY OF PORT ST. LUCIE

PAVING/SIDEWALK-TRAIL GRADING DRAINAGE WEST

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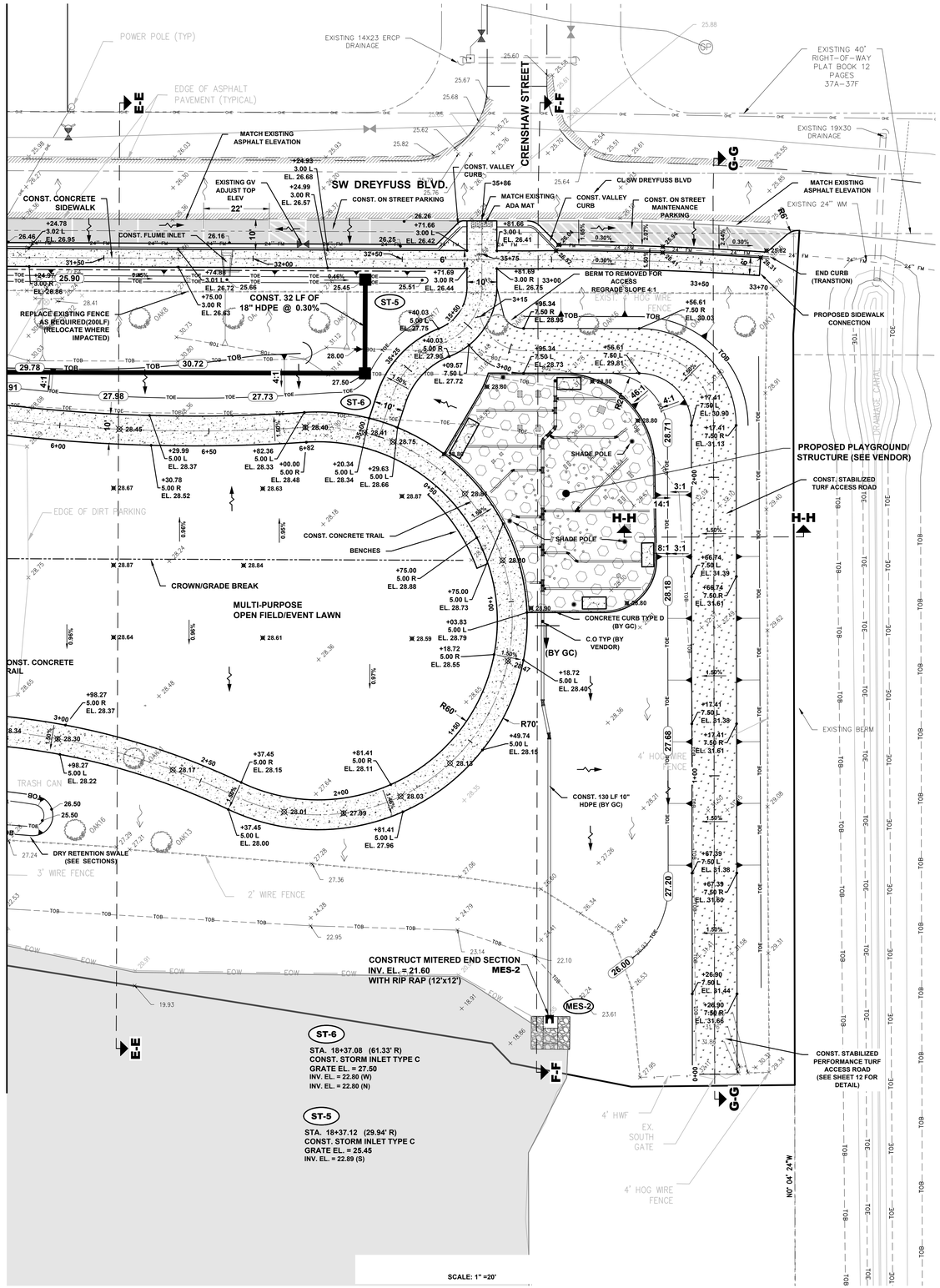

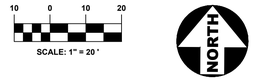

LEGEND

- PROPERTY LINE
- CENTERLINE
- CONCRETE TRAIL/SIDE WALK
- PAVEMENT
- SURFACE SLOPE
- PROPOSED SURFACE GRADE ELEVATION
- EXISTING GRADE
- TOE OF BANK
- TOP OF BERM
- PLAY STRUCTURE (VENDOR)
- MITERED END STRUCTURE
- STORM INLET/ PIPE
- STABILIZED TURF

1. **CONTRACTOR TO PROVIDE ACCESS AT ALL TIMES TO THE EXISTING SOUTH GATE FOR CITY OF PORT ST LUCIE MAINTENANCE VEHICLES TO TRAVEL FROM DREYFUSS BLVD TO CITY OWNED PROPERTY LYING TO THE SOUTH OF THE EXISTING SOUTH GATE.**
2. **CONTRACTOR TO STAGE CONSTRUCTION OF THE PROPOSED PARK ENTRANCE AT SW FAMBROUGH ST AND CONSTRUCTION OF THE PROPOSED PARK ENTRANCE AT SW CRENSHAW ST TO ALLOW ACCESS TO THE EXISTING SOUTH GATE BY MAINTENANCE VEHICLES**
3. **PLAYGROUND AREA DRAINAGE, PIPING, AND GRADING TO BE PROVIDED BY VENDER**

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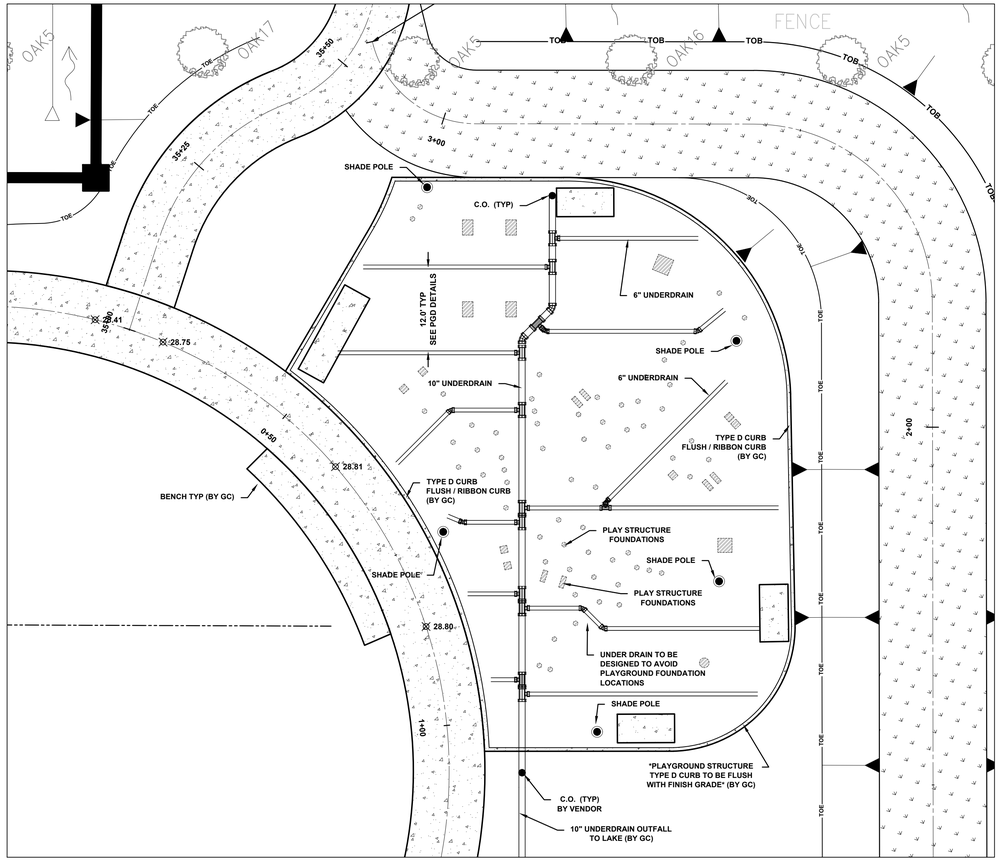

PLAY STRUCTURE ENLARGED PLAN
SCALE: 1" =10'

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Engineering Business No. EB-0007657

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CITY OF PORT ST. LUCIE

PAVING/SIDEWALK-TRAIL GRADING DRAINAGE EAST

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P.E. No. 37638

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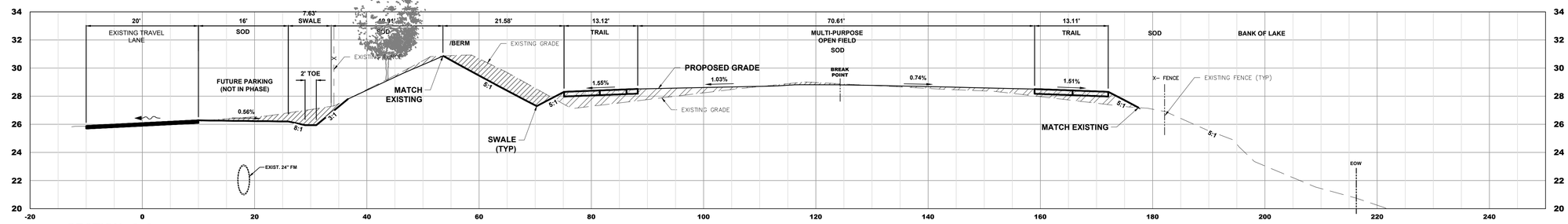

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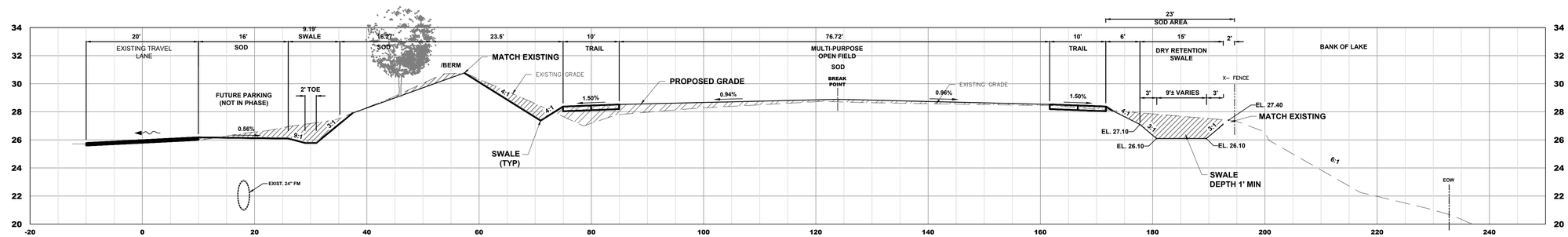

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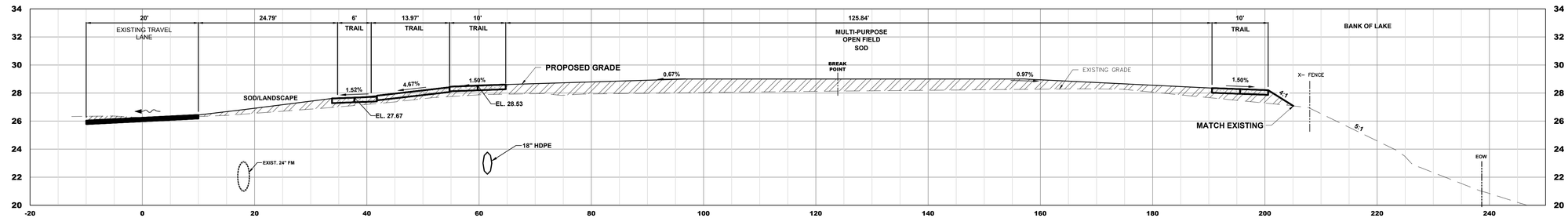

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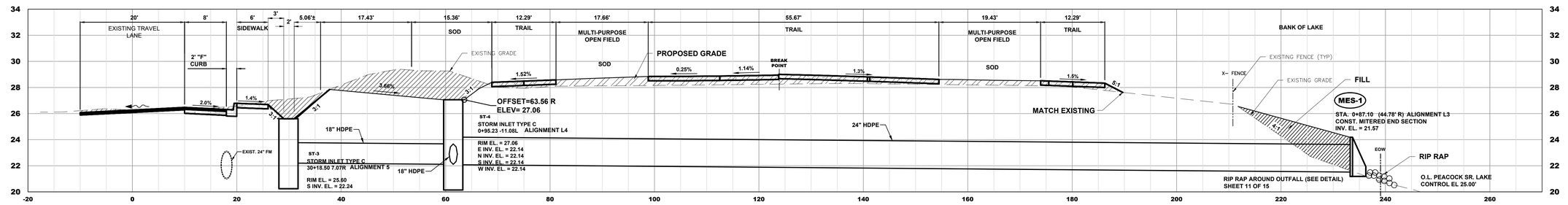

SECTION **D-D**

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CHECKED BY: JWC
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VERT. SCALE: 1"=4'
CADD FILE: 2026.4 Cross Sections

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CITY OF PORT ST. LUCIE

SECTIONS

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P.E. No. 37638

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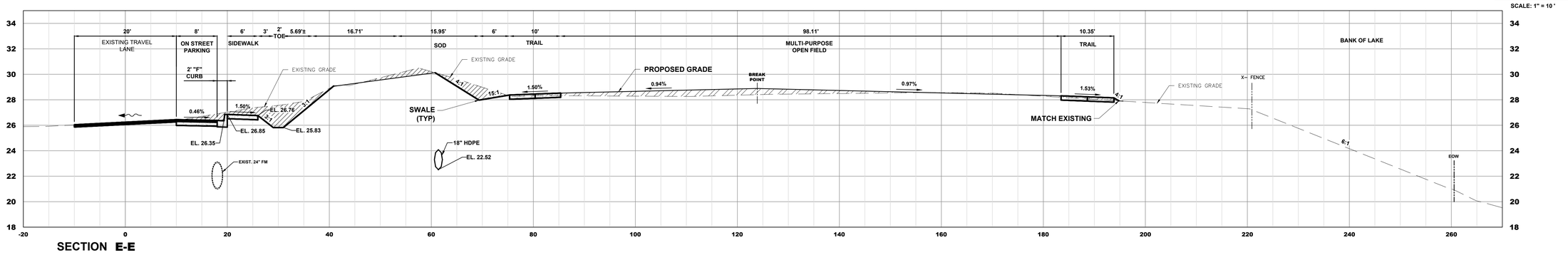

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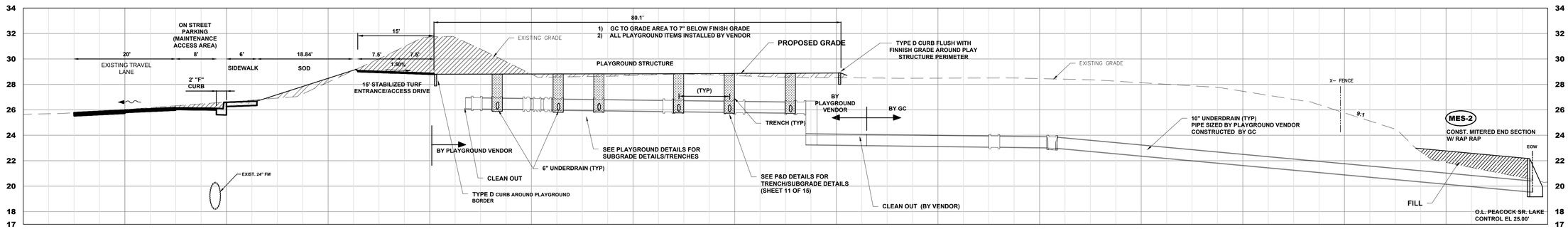

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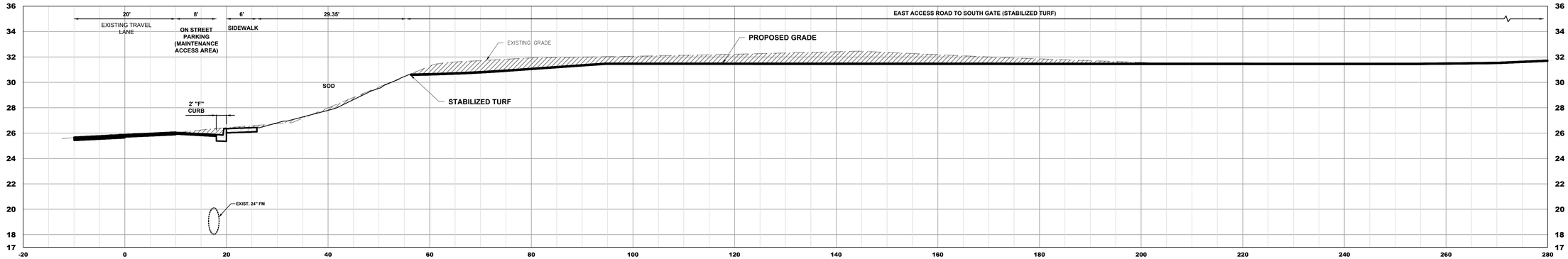

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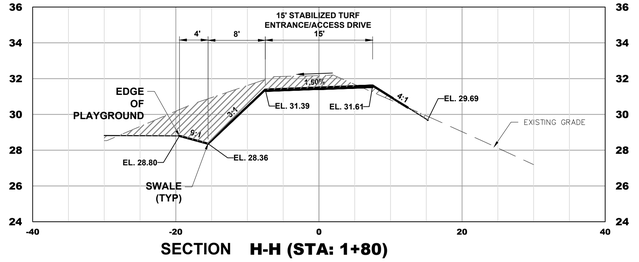

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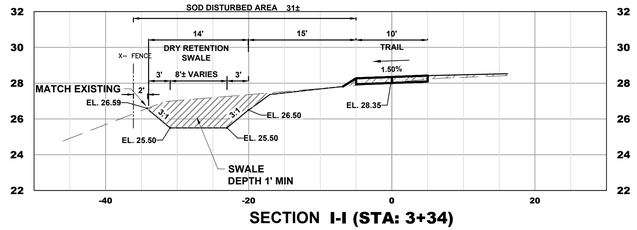

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Civil Engineering Professionals
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Fax: (772) 692-4341
Engineering Business No. EB-0007657

DATE: 08/27/2025
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DESIGNED BY: CS
CHECKED BY: JWC
PROJECT No.: 2026.4
HORZ. SCALE: 1" = 10'
VERT. SCALE: 1"=4'
CADD FILE: 2026.4 Cross Sections

NO.	DATE	BY	REVISIONS
01	08/27/2025	JWC	BID SET

SCALE VERIFICATION
0 1
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING, ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

O.L. PEACOCK LAKE PARK MULTI-USE TRAIL
CITY OF PORT ST. LUCIE

SECTIONS

JOSEPH W. CAPRA
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37638

Printed Date:

JOB No.: 2026.4
SHEET 9 OF 16

P:\2000\2026.4 - OL Peacock Sr Park\DWG\2026.4 Cross Sections.dwg, 8/27/2025 11:03:07 AM, CAPTEC Engineering, Inc.

O.L.PEACOCK LAKE PARK PROJECT GENERAL NOTES

1. BENCHMARK ELEVATIONS SHOWN ON THE PLANS ARE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 1988).

2. ALL DRAINAGE INFRASTRUCTURE IS TO REMAIN UNLESS OTHERWISE NOTED.

3. ALL GRADES SHOWN ARE FINISHED GRADES, UNLESS OTHERWISE NOTED.

4. STATIONING AND OFFSETS REFER TO THE BASELINE OF CONSTRUCTION, UNLESS OTHERWISE NOTED.

5. EXISTING UTILITIES ARE TO REMAIN IN PLACE UNLESS OTHERWISE NOTED.

6. ANY PUBLIC LAND CORNER WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED AND HAS NOT BEEN PROPERLY REFERENCED, THE ENGINEER SHOULD NOTIFY THE CITY SURVEYOR , WITHOUT DELAY, BY TELEPHONE (772) 871-5178.

7. EXISTING IMPACTED DRIVEWAYS WITHIN THE LIMITS OF THIS PROJECT ARE TO BE RESTORED TO THE CITY OF PORT ST. LUCIE (CITY OF PSL) STANDARDS AT THE SAME LOCATION AND WIDTH, UNLESS OTHERWISE SHOWN IN THE PLANS. RESIDENTIAL ACCESS MUST BE MAINTAINED AT ALL TIMES. LIMITS OF DRIVEWAY REMOVAL ARE TO BE DETERMINED BY THE PROJECT MANAGER AT THE TIME OF CONSTRUCTION. IN WHICH CASE, CONTRACTOR WILL NOTIFY HOMEOWNER 48 HOURS IN ADVANCE AND WILL COMPLETE DRIVEWAY RECONSTRUCTION WITHIN ONE WEEK OF THIS NOTIFICATION.

8. NO CONSTRUCTION SHALL COMMENCE UNTIL ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN SECURED AND THE CONTRACTOR IS ISSUED A "NOTICE TO PROCEED".

9. DURING CONSTRUCTION, SHOULD ANY DRAINAGE STRUCTURES (INCLUDING PIPES) BE FOUND THAT ARE NOT SHOWN ON THE PLANS, NOTIFY THE ENGINEER IMMEDIATELY.

10. IN REFERENCE TO EXISTING UTILITIES AND UTILITY ADJUSTMENTS:

A. THE LOCATION OF UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE EXACT HORIZONTAL AND VERTICAL LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY IF "OTHER" UTILITIES (NOT SHOWN ON THE PLANS) EXIST WITHIN THE AREA OF CONSTRUCTION. SHOULD THERE BE UTILITY CONFLICTS, THE CONTRACTOR SHALL INFORM THE ENGINEER AND NOTIFY THE RESPECTIVE UTILITY OWNER(S) TO RESOLVE UTILITY CONFLICTS AND UTILITY ADJUSTMENTS AS REQUIRED.

B. ALL UTILITY WORK SHALL BE IN ACCORDANCE WITH PORT ST LUCIE UTILITY SYSTEMS DEPARTMENT. WATER AND SANITARY SEWER UTILITY WORK SHALL BE IN CONFORMANCE WITH ALL WATER AND SANITARY SEWER UTILITY WORK SHALL BE IN CONFORMANCE WITH ALL CODES, STANDARDS, AND ORDINANCES CURRENTLY ADOPTED BY THE STATE OF FLORIDA D.E.P. AND PORT ST. LUCIE UTILITY SYSTEMS DEPARTMENT (PSLUSD). UTILITY STANDARDS MANUAL 2019 EDITION WITH 2024 AMENDMENT.

11. THE CONTRACTOR SHALL NOTIFY UTILITY OWNERS THROUGH SUNSHINE STATE ONE CALL OF FLORIDA (1-800-432-4770) AND UTILITY OWNERS LISTED BELOW IN TWO BUSINESS DAYS (OR 10 DAYS IF ON THE JOB SITE).

COMPANY	CONTACT	TEL. NO.
ATT	DANIEL KOENIG	(772)-971-7136
COMCAST	ANTHONY SPRINGSTEEL	(561)-804-0973
CPSL TRAFFIC	PAUL JOHNSON	(772)-871-5182
CPSL UTILITIES	LANEY SOUTHERLY	(772)-873-6442
CROWN CASTLE	KELLY KLINEFELTER	(724)-743-6085
FL CITY GAS	ALEXANDER LOPEZ	(305)-835-3647
FPL	MARTIN MIKHAIL	(561)-993-6825

12. IF DEWATERING PERMIT IS REQUIRED FOR THIS PROJECT, THE CONTRACTOR WILL BE REQUIRED TO OBTAIN A DEWATERING PERMIT OR WATER USE PERMIT AND ALLOW TIME FOR THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT AND/OR FDEP TO REVIEW AND APPROVE THE PERMIT PRIOR TO THE CONSTRUCTION START DATE.

13. WORK HOURS ARE FROM 7:00 AM TO DUSK, MONDAY-FRIDAY. WORK WILL NOT BE ALLOWED ON WEEKENDS OR HOLIDAYS OBSERVED BY THE CITY OF PORT ST. LUCIE UNLESS WRITTEN APPROVAL IS OBTAINED FROM THE CITY. THE CONTRACTOR MUST RECEIVE WRITTEN PERMISSION FROM THE CITY AND PROVIDE AN APPROVED MOT PLAN BEFORE ANY LANE CLOSURES OCCUR.

14. THE CONTRACTOR SHALL COORDINATE SELECTION AND REVIEW OF ANY PROPOSED STAGING AREAS ASSOCIATED WITH THIS PROJECT WITH CPS PUBLIC WORKS DEPT.

15. EXISTING LANDSCAPE IMPROVEMENT THAT ARE IN CONFLICT WITH THE PROPOSED IMPROVEMENTS ARE TO BE RELOCATED PER THE DIRECTION OF THE PROJECT MANAGER. VACANT LOTS WITH VEGETATION SUCH AS INVASIVE PLANTS AND EXOTICS SHALL BE CLEARED IN THE LOCATION IN CONFLICT WITH THE PROPOSED SIDEWALK AND SWALE-LINER INSTALLATION.

16. LANE CLOSURES SHALL BE COORDINATED WITH ST. LUCIE COUNTY SCHOOL BOARD, ST.LUCIE COUNTY FIRE RESCUE AND THE CITY OF PORT ST. LUCIE AT LEAST 48 HOURS IN ADVANCE.

17. FINAL ADJUSTMENT OF ANY STORM STRUCTURE TOPS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. DRAINAGE STRUCTURES SHALL BE PROVIDED IN 2 PARTS.

TRAFFIC CONTROL PLAN - GENERAL NOTES:

1. ALL EXISTING PAVEMENT MARKINGS AND REFLECTIVE PAVEMENT MARKERS WHICH ARE DISTURBED OR REMOVED DUE TO TEMPORARY DETOURS AND/OR CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR IN ACCORDANCE WITH FDOT DESIGN STANDARDS, INDEX 17346 AND 17352 AT NO ADDITIONAL COST TO THE CONTRACT.
2. WRITTEN NOTIFICATION TO CITY OF PORT ST. LUCIE PUBLIC WORKS DEPARTMENT OF PROPOSED LANE CLOSURE OR TEMPORARY DETOURS SHALL BE ACCOMPLISHED 30 WORKING DAYS IN ADVANCE OF CLOSURE OR DETOUR. TWO WEEKS BEFORE LANE CLOSURES, THE CONTRACTOR SHALL THEN CONTACT:

   CITY OF PORT ST. LUCIE PUBLIC WORKS DEPARTMENT
   121 SW PORT ST. LUCIE BLVD.
   PORT ST. LUCIE, FL 34984
   PHONE: (772) 871-5177
3. LANE CLOSURE MAY BE REQUIRED AT CERTAIN TIMES TO ALLOW FOR CONCRETE TRUCKS, BULLDOZERS AND GRADING EQUIPMENT PICKING UP AND DROPPING OFF MATERIALS AS THEY ACCESS THE ROADSIDE SIDEWALK PROJECT (FLAGGING AND PROPER MOT PROCEDURES SHALL BE FOLLOWED). LANE CLOSURE ALSO WILL ALSO BE REQUIRED FOR DRAINAGE CULVERT REPLACEMENTS THAT MAY REQUIRE ROAD DETOURS. LANE CLOSURE AND DETOURS SHALL BE COORDINATED WITH SPECIAL EVENTS AND HOLIDAYS WHICH WOULD IMPACT TRAFFIC FLOW, ARROW PANELS SHALL BE PROVIDED BY THE CONTRACTOR AS REQUIRED AT NO ADDITIONAL COST FOR LANE CLOSURE.
4. THE PROVISIONS FOR TRAFFIC DISRUPTIONS WHICH ARE NOT ANTICIPATED IN THE TRAFFIC CONTROL PLAN, BUT WHICH ARE NECESSARY TO CONSTRUCT THE PROJECT, SHALL BE SUBMITTED IN WRITING TO THE ENGINEER AND APPROVAL SHALL BE OBTAINED 30 DAYS PRIOR TO THE COMMENCEMENT OF WORK. SUBMITTAL MATERIALS SHALL INCLUDE SKETCHES, CALCULATIONS, AND OTHER DATA REQUIRES BY THE ENGINEER.
5. TRAFFIC CONDITIONS, ACCIDENTS AND OTHER UNFORESEEN EMERGENCY CONDITIONS MAY REQUIRE THE CITY OF PORT ST. LUCIE TRAFFIC OPERATIONS ENGINEER TO MODIFY CHANNELIZATION. THE CONTRACTOR SHALL MAKE THE NECESSARY ADJUSTMENTS AS DIRECTED BY THE TRAFFIC OPERATIONS ENGINEER WITHOUT DELAY.
6. THE CONTRACTOR SHALL COORDINATE ALL TEMPORARY DRIVEWAYS AND SIDE STREET CLOSURES WITH BUSINESS AND PROPERTY OWNERS. ACCESS TO ADJACENT BUSINESSES AND PROPERTIES SHALL BE MAINTAINED AT ALL TIMES. TEMPORARY DRIVEWAY CONNECTIONS MAY BE CONSTRUCTED USING RAP (RECYCLED ASPHALT PAVEMENT) MATERIAL.
7. THE LENGTH OF OPEN TRENCH SHALL NOT EXCEED 450 FEET. ALL TRENCHES SHALL BE BACKFILLED COMPLETELY TO PROVIDE SAFE CROSSING AT PROPERTY ACCESS POINTS BY THE END OF EACH WORK DAY OR WHENEVER THE WORK ZONE BECOMES INACTIVE.
8. THE CONTRACTOR SHALL MAINTAIN DRAINAGE DURING CONSTRUCTION AT ALL TIMES BY USING EXISTING, PROPOSED AND TEMPORARY DRAINAGE SYSTEMS. THE COST OF FLUSHING, INSTALLING AND REMOVAL OF THE TEMPORARY DRAINAGE SYSTEMS SHALL BE INCLUDED IN THE PAY ITEM NO. 102-1, MAINTENANCE OF TRAFFIC.
9. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE UTILITY COMPANY FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY EXCAVATION INVOLVING UTILITY SO THAT A COMPANY REPRESENTATIVE CAN BE PRESENT. THE LOCATION OF THE UTILITIES SHOWN IN THE PLANS ARE APPROXIMATE ONLY. THE EXACT LOCATION SHALL BE DETERMINED BY THE CONTRACTOR DURING CONSTRUCTION. REFER TO THE GENERAL NOTES ON THE SUMMARY OF PAY ITEMS FOR THE APPROPRIATE UTILITY CONTACT INFORMATION.
10. THE CONTRACTOR SHALL PLACE VIDEO MESSAGE BOARDS IN COMPLIANCE WITH FDOT 2021 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 990-3 PRIOR TO CONSTRUCTION AND TO ACCOMMODATE ANY SHIFTS OR CHANGES IN TRAFFIC PATTERNS.
11. LANE CLOSURES TIME PERIODS ARE RESTRICTED DURING SCHOOL HOURS. ALLOWED ONLY BETWEEN 9:00 AM AND 4:00 PM.

18. ANY KNOWN OR SUSPECT HAZARDOUS MATERIAL FOUND ON THE PROJECT BY THE CONTRACTOR SHALL BE IMMEDIATELY REPORTED TO THE PROJECT MANAGER, WHO SHALL DIRECT THE CONTRACTOR TO PROTECT THE AREA OF KNOWN OR SUSPECT HAZARDOUS MATERIAL FROM FURTHER ACCESS. THE PROJECT ENGINEER IS TO NOTIFY THE PROPER REGULATORY AUTHORITY OF THE DISCOVERY. THE PROPER REGULATORY AUTHORITY WILL ADVISE/DIRECT THE PROJECT ENGINEER IN THE INVESTIGATION, IDENTIFICATION AND/OR REMOVAL/REMEDIATION OF THE MATERIAL IN QUESTION AS NEEDED. THE CONTRACTOR SHALL NOT RETURN TO THE AREA OF SUSPECTED CONTAMINATION UNTIL APPROVAL IS PROVIDED BY THE PROJECT MANAGER.

19. THE CONTRACTOR SHALL NOT BRING ANY HAZARDOUS MATERIALS ONTO THE PROJECT. SHOULD THE CONTRACTOR REQUIRE SUCH FOR PERFORMING THE CONTRACTED WORK, THE CONTRACTOR SHALL REQUEST, IN WRITING, WRITTEN PERMISSION FROM THE PROJECT MANAGER IN ACCORDANCE WITH THE MATERIAL SAFETY DATA SHEET (MSDS) FOR EACH HAZARDOUS MATERIAL PROPOSED FOR USE.

20. EXISTING MAILBOXES SHALL BE MAINTAINED AT ALL TIMES. CONTRACTOR IS RESPONSIBLE FOR REPLACING DAMAGED MAILBOXES WITH LIKE KIND AT NO ADDITIONAL COST.

21. ALL WORK ASSOCIATED WITH THIS PROJECT IS TO BE PERFORMED WITHIN THE RIGHT-OF-WAY LIMITS AS DEPICTED ON THE PLAN SHEETS.

22. ALL CONCRETE SIDEWALK JOINTS SHALL BE TOOLED WITHOUT EXPANSION JOINTS.

23. ALL WORK, CONCRETE AND MATERIALS SHALL COMPLY WITH THE LATEST EDITION, INCLUDING ALL REVISIONS, OF THE FOLLOWING STANDARDS AND PUBLICATIONS: -AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) -AMERICAN CONCRETE INSTITUTE (ACI) -AMERICAN SOCIETY FOR TESTING MATERIAL (ASTM) -AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG) -FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS -FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION -FDOT STRUCTURES STANDARD INDEX.

24. ALL DISTURBED AREAS SHALL BE REPAIRED TO EXISTING CONDITIONS OR BETTER. THE CONTRACTOR SHALL ONLY BE ENTITLED FOR PAYMENT OF AUTHORIZED AREAS WITHIN THE PROJECT WORK LIMITS. THE PROJECT WORK LIMITS SHALL BE ESTABLISHED BY THE CITY OF PORT ST. LUCIE PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO MINIMIZE UNNECESSARY DAMAGE. ALL DAMAGED AREAS OUTSIDE THE PROJECT WORK LIMITS MUST BE REPAIRED TO EXISTING CONDITIONS (INCLUDING IRRIGATION LINES AND EQUIPMENT) OR BETTER, THE COST OF THE CONTRACTOR, PRIOR TO FINAL PAYMENT.

25. ALL SOD SHALL HAVE A WARRANTY OF 45 DAYS AFTER THE FINAL COMPLETION DATE OF THE PROJECT. SOD REPLACED BY THE CONTRACTOR MUST BE THE SAME TYPE AS REMOVED.

26. ROADSIDE GRADING NOTES:
   a. SIDEWALK LAYOUT SHALL BE TYPICALLY A 6' OFFSET FROM THE EDGE OF THE TRAVEL WAY ALONG ONE SIDE OF THE ROAD OR AS SHOWN ON PLAN.
   b. SIDEWALKS ARE TO BE 4 IN. THICK CONCRETE TYPICALLY.
   c. SIDEWALKS WITHIN 6' OF INTERSECTIONS SHALL BE 6 IN. THICK.
   d. SIDEWALK CROSS-SLOPE SHALL NOT EXCEED 2% IN ANY LOCATION.
   e. SIDEWALK LONGITUDINAL SLOPE SHALL NOT EXCEED 5% AT ANY LOCATION.
   f. GRADING BASE LINE IS CONSIDERED EDGE OF PAVEMENT.
   g. SOD SHALL BE SET 0.5 IN. BELOW IN GRADE BELOW THE EDGE OF PAVEMENT. SWALE FORESLOPE AND BACKSLOPE SHALL BE 3:1 MAX, 4:1 TYP. (MINIMAL GRADING PREFERRED).
   h. SWALE GRADING (GUTTER-LINE) IS 0.15% MIN. 0.20% PREFERRED.
   i. 12" SUBGRADE SHALL BE COMPACTED TO 98% OF MODIFIED PROCTOR (ASTM D1557/AASHTO T-180).
   j. ALL AREAS ADJACENT TO THE PROPOSED SIDEWALK SHALL BE RE-GRADED TO REPAIR ANY EROSION, POTENTIAL DROP OFFS, OR TRIPPING HAZARDS.

SUB CONTRACTORS

ARCHITECT: NIKI NORTON - N2 ARCHITECTURE AND DESIGN (772)220-4411

LANDSCAPE ARCHITECT: MICHAEL FLAUGH – MIKE FLAUGH LANDSCAPE ARCHITECT (772)419-0024

ENVIRONMENTAL CONSULTANT: BOB WEIGT – HOBE SOUND ENVIRONMENTAL (772)545-3676

GEOTECHNICAL CONSULTANT: PETER ANDERSEN – ANDERSEN ANDRE CONSULTING ENGINEERING (772)507-9191

PERMITS

PSL RW

PSL EXCAVATION

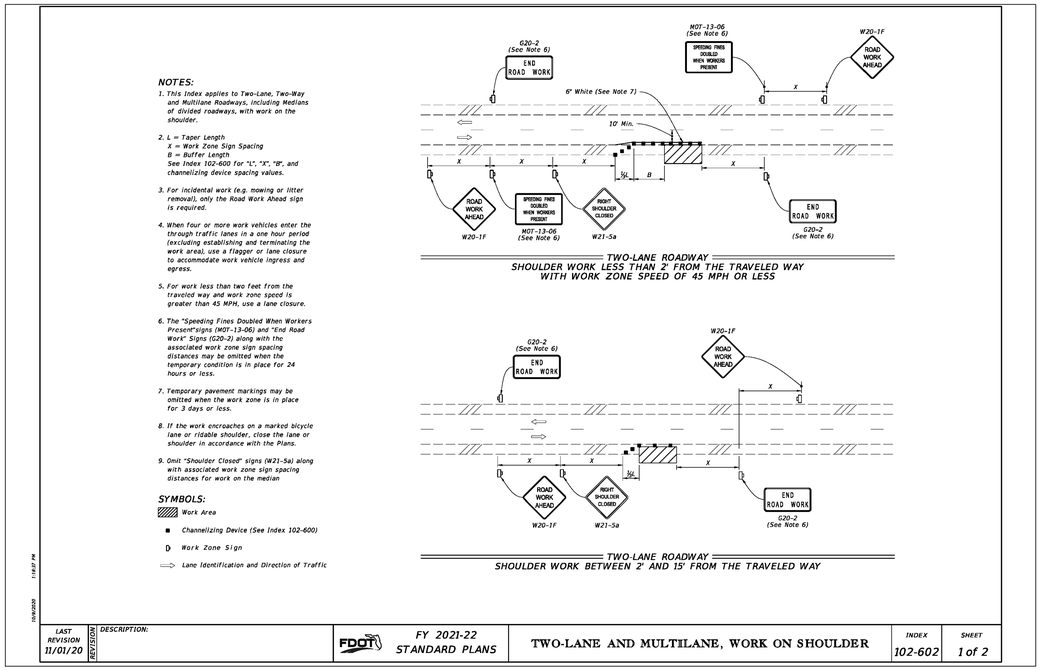
PSL BUILDING

PSL SOUTH FLORIDA WATER MANAGEMENT DISTRICT

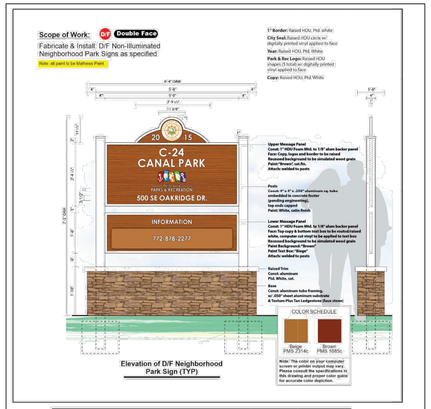
PLAYGROUND STRUCTURE/SUBRGRADE DETAILS (BY OTHERS) VENDER

BENCH DETAIL (LANDSCAPE) BY GENERAL CONTRACTOR

PLAYGROUND SHADE DETAILS (BY OTHERS) VENDER



LAST REVISION	DESCRIPTION:	FDOT FY 2021-22 STANDARD PLANS	TWO-LANE AND MULTILANE, WORK ON SHOULDER	INDEX	SHEET
11/01/20				102-602	1 of 2



(1) TOTAL PARK MONUMENT SIGN ALONG THE TRAIL
-PREVIOUS PARK SIGN EXAMPLE SHOWN
-FINAL CONTENT TO BE APPROVED VIA SHOP DRAWING SUBMITTAL
-SIGN TO BE PROVIDED AND INSTALLED BY:
DON BELL SIGNS LLC (OR EQUAL)
368 OAK PLACE
PORT ORANGE, FL 32127
PH: 386-788-8084

SEE SHEET 2 FOR LOCATION

CONTRACTOR TO MEANDER SIDEWALK TO AVOID ANY VALVES (WATER AND SEWER) FOUND ON-SITE IN CONFLICT WITH SIDEWALK.

10 DAYS PRIOR TO CROSSING EXISTING CONFLICTS, THE CONTRACTOR WILL POTHOLE THE LOCATION OF ALL EXISTING UTILITIES TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATIONS.

ENGINEER OF RECORD INSPECTION REQUIREMENTS CONTRACTOR TO CALL CONTRACT ENGINEER OF RECORD 48 HOURS ADVANCE FOR FOLLOWING INSPECTIONS:
1. PRE CONSTRUCTION MEETING
2. STAKE-OUT
3. INSTALL UTILITY/DRAINAGE
4. GRADE SITE
5. BUILD PAVILION(S)
6. ON-STREET PARKING (SUBGRADE/BASE/ASPHALT AND TRAIL FORM-WORK / CONCRETE
7. FINAL SOD
SEE NOTE SHEET 11 FOR MORE DETAIL

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CPSLUSD PLANNING & ZONING #P24-221 | **CPSLUSD UTILITY FILE #5001-32**

CAPTEC Engineering, Inc.
Civil Engineering Professionals
• 301 N.W. Flagler Ave.
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Engineering Business No. EB-0007657

DATE: 08/27/2025
DRAWN BY: JFK
DESIGNED BY: CS
CHECKED BY: JWC
PROJECT No.: 2026.4
HORZ. SCALE: N/A
VERT. SCALE: N/A
CADD FILE: 2026.4 General Notes

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O.L. PEACOCK LAKE PARK MULTI-USE TRAIL
CITY OF PORT ST. LUCIE

GENERAL NOTES

JOSEPH W. CAPRA
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37638

Printed Date:

JOB No.: 2026.4
SHEET 10 OF 16

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADOPTION BY CAPTEC ENGINEERING, INC. SHALL BE WITHOUT LIABILITY TO CAPTEC ENGINEERING, INC.

GEOTECHNICAL ENGINEERING EVALUATION

7.1 GENERAL
BASED ON THE FINDINGS OF OUR SITE EXPLORATION, OUR EVALUATION OF SUBSURFACE CONDITIONS, AND JUDGMENT BASED ON OUR EXPERIENCE WITH SIMILAR PROJECTS, WE CONCLUDE THAT THE SOILS UNDERLYING THIS SITE ARE GENERALLY SATISFACTORY TO SUPPORT THE PROPOSED LIGHTLY-LOADED STRUCTURES (RESTROOM BUILDING AND PAVILIONS) ON CONVENTIONAL SPREAD FOUNDATIONS OR MONOLITHIC (THICKENED-EDGE) CONCRETE SLABS. SIMILARLY, THE PROPOSED ON-STREET PARKING AND CONCRETE-PAVED WALKING TRAILS CAN BE SUPPORTED ON THE ENCOUNTERED SOILS. HOWEVER, IN OUR OPINION, THE BEARING CAPACITY OF THE LOOSE NEAR-SURFACE SOILS SHOULD BE IMPROVED IN ORDER TO REDUCE THE RISK OF UNSATISFACTORY FOUNDATION AND PAVEMENT PERFORMANCE. THE GENERAL SOIL IMPROVEMENT WE RECOMMEND INCLUDES PROOFROLLING THE INDIVIDUAL BUILDING SITES SITE WITH A HEAVY VIBRATORY ROLLER.
FOLLOWING ARE SPECIFIC RECOMMENDATIONS FOR SITE PREPARATION PROCEDURES, FOUNDATION DESIGN, AND PAVEMENT SYSTEMS FOR THE PROJECT.

7.2 SITE PREPARATION RECOMMENDATIONS
7.2.1 CLEARING
THE SITE SURFACE SHOULD BE CLEARED, GRUBBED AND STRIPPED OF ALL VEGETATION, TOPSOIL, TRASH AND DEBRIS. STUMPS (IF ANY) SHOULD BE REMOVED ENTIRELY AND THEIR EXCAVATIONS BACKFILLED WITH CLEAN GRANULAR SOILS PLACED IN 6-12 INCH LIFTS, AND WITH EACH LIFT COMPACTED TO A DRY DENSITY NOT LESS THAN 95 PERCENT OF THE MODIFIED PROCTOR (ASTM D1557) MAXIMUM DRY DENSITY OF THE COMPACTED MATERIAL.

7.2.2 COMPACTION PROCEDURES
FOLLOWING CLEARING, THE PROPOSED BUILDING AND PAVEMENT/TRAIL AREAS SHOULD BE PROOFROLLED WITH A 10 TON (MINIMUM) VIBRATORY ROLLER; ANY SOFT, YIELDING SOILS DETECTED SHOULD BE EXCAVATED AND REPLACED WITH CLEAN, COMPACTED BACKFILL THAT CONFORMS WITH THE RECOMMENDATIONS BELOW. SUFFICIENT PASSES SHOULD BE MADE DURING THE PROOFROLLING OPERATIONS TO PRODUCE DRY DENSITIES NOT LESS THAN 95 PERCENT OF THE MODIFIED PROCTOR (ASTM D1557) MAXIMUM DRY DENSITY OF THE COMPACTED MATERIAL TO DEPTHS OF 1 FOOT BELOW THE COMPACTED SURFACE, OR 1 FOOT BELOW THE BOTTOM OF FOOTINGS, WHICHEVER IS LOWER. IN ANY CASE, THE BUILDING AND PAVEMENT AREAS SHOULD RECEIVE NOT LESS THAN 10 OVERLAPPING PASSES, HALF OF THEM IN EACH OF TWO PERPENDICULAR DIRECTIONS.

WE RECOMMEND THAT THE SITE PREPARATION CONTRACTOR CLOSELY MONITOR THE VIBRATIONS PRODUCED DURING THE PROOFROLLING OPERATIONS SO THAT THEY DO NOT ADVERSELY AFFECT ANY NEARBY STRUCTURES.

AFTER THE EXPOSED SURFACE HAS BEEN PROOFROLLED AND TESTED TO VERIFY THAT THE DESIRED DRY DENSITY HAS BEEN OBTAINED, THE BUILDING AND PAVEMENT/TRAIL AREAS MAY BE FILLED TO THE DESIRED GRADES. ALL FILL MATERIAL SHOULD CONFORM TO THE RECOMMENDATIONS BELOW. IT SHOULD BE PLACED IN UNIFORM LAYERS NOT EXCEEDING 12 INCHES IN LOOSE THICKNESS. EACH LAYER SHOULD BE COMPACTED TO A DRY DENSITY NOT LESS THAN 95 PERCENT OF ITS MODIFIED PROCTOR (ASTM D1557) MAXIMUM VALUE.

AFTER COMPLETION OF THE GENERAL SITE PREPARATIONS DISCUSSED ABOVE, THE BOTTOM OF FOUNDATION EXCAVATIONS DUG THROUGH THE COMPACTED NATURAL GROUND, FILL OR BACKFILL, SHOULD BE COMPACTED SO AS TO DENSIFY SOILS LOOSENED DURING OR AFTER THE EXCAVATION PROCESS, OR WASHED OR SLOUGHED INTO THE EXCAVATION PRIOR TO THE PLACEMENT OF FORMS. A VIBRATORY, WALK-BEHIND PLATE COMPACTOR CAN BE USED FOR THIS FINAL DENSIFICATION IMMEDIATELY PRIOR TO THE PLACEMENT OF REINFORCING STEEL, WITH PREVIOUSLY DESCRIBED DENSITY REQUIREMENTS TO BE MAINTAINED BELOW THE FOUNDATION LEVEL.

FOLLOWING REMOVAL OF FOUNDATION FORMS, BACKFILL AROUND FOUNDATIONS SHOULD BE PLACED IN LIFTS SIX INCHES OR LESS IN THICKNESS, WITH EACH LIFT INDIVIDUALLY COMPACTED WITH A PLATE TAMPER. THE BACKFILL SHOULD BE COMPACTED TO A DRY DENSITY OF AT LEAST 95 PERCENT OF THE MODIFIED PROCTOR (ASTM D1557) MAXIMUM DRY DENSITY.

7.2.3 FILL MATERIAL
ALL FILL MATERIAL UNDER THE BUILDINGS AND PAVEMENT SHOULD CONSIST OF CLEAN SANDS FREE OF ORGANICS AND OTHER DELETERIOUS MATERIALS. THE FILL MATERIAL SHOULD HAVE NOT MORE THAN 12 PERCENT BY DRY WEIGHT PASSING THE U.S. NO. 200 SIEVE, AND NO PARTICLE LARGER THAN 3 INCHES IN DIAMETER.

7.3 BUILDING FOUNDATION AND SLAB DESIGN
AFTER THE FOUNDATION SOILS HAVE BEEN PREPARED AS RECOMMENDED ABOVE, THE SITE SHOULD BE SUITABLE FOR SUPPORTING THE PROPOSED RESTROOM AND PAVILION CONSTRUCTION ON CONVENTIONAL SHALLOW FOUNDATIONS (OR MONOLITHIC, THICKENED-EDGE CONCRETE SLABS) PROPORTIONED FOR AN ALLOWABLE BEARING STRESS OF 2,500 POUNDS PER SQUARE FOOT [PSF], OR LESS.

TO PROVIDE AN ADEQUATE FACTOR OF SAFETY AGAINST A SHEARING FAILURE IN THE SUBSOILS, ALL CONTINUOUS FOUNDATIONS SHOULD BE AT LEAST 16 INCHES WIDE, AND ALL INDIVIDUAL COLUMN FOOTINGS (IF ANY) SHOULD HAVE A MINIMUM WIDTH OF 24 INCHES. EXTERIOR FOUNDATIONS SHOULD BEAR AT LEAST 16 INCHES BELOW ADJACENT OUTSIDE FINAL GRADES.

BASED UPON THE BORING INFORMATION AND THE ASSUMED LOADING CONDITIONS, WE ESTIMATE THAT THE RECOMMENDED ALLOWABLE BEARING STRESS WILL PROVIDE A MINIMUM FACTOR OF SAFETY IN EXCESS OF TWO AGAINST BEARING CAPACITY FAILURE. WITH THE SITE PREPARED AND THE FOUNDATIONS DESIGNED AND CONSTRUCTED AS RECOMMENDED, WE ANTICIPATE TOTAL SETTLEMENTS OF ONE INCH OR LESS, AND DIFFERENTIAL SETTLEMENT BETWEEN ADJACENT SIMILARLY LOADED FOOTINGS OF LESS THAN ONE-QUARTER OF AN INCH. BECAUSE OF THE GRANULAR NATURE OF THE SUBSURFACE SOILS, THE MAJORITY OF THE SETTLEMENTS SHOULD OCCUR DURING CONSTRUCTION; POST-CONSTRUCTION SETTLEMENT SHOULD BE MINIMAL.

AFTER THE GROUND SURFACE IS PROOFROLLED AND FILLED, IF NECESSARY, AS RECOMMENDED IN THIS REPORT, THE FLOOR SLAB CAN BE PLACED DIRECTLY ON THE PREPARED SUBGRADE. FOR DESIGN PURPOSES, WE RECOMMEND USING A SUBGRADE REACTION MODULUS OF 150 POUNDS PER CUBIC INCH (PCI) FOR THE COMPACTED SHALLOW sands. IN OUR OPINION, A HIGHLY POROUS BASE MATERIAL IS NOT NECESSARY. WE RECOMMEND TO USE A MINIMUM OF 10 MIL POLYOLEFIN FILM AS THE MAIN COMPONENT OF A VAPOR BARRIER SYSTEM.

PAVEMENT RECOMMENDATIONS

8.1 ON-STREET PARKING
ACTUAL PAVEMENT SECTION THICKNESS SHOULD BE PROVIDED BY THE PROJECT CIVIL ENGINEER BASED ON TRAFFIC LOADS, VOLUME, AND THE OWNERS DESIGN LIFE REQUIREMENTS. THE FOLLOWING SECTIONS REPRESENT MINIMUM THICKNESSES REPRESENTATIVE OF TYPICAL LOAD AND CONSTRUCTION PRACTICES AND AS SUCH PERIODIC MAINTENANCE SHOULD BE ANTICIPATED. IN ADDITION, RECOMMENDATIONS FOR A RIGID PAVEMENT DESIGN ARE PRESENTED FOR USE IN DELIVERY AREAS, DUMPSTER PADS, ETC.

WE RECOMMEND A PAVEMENT SECTION CONSISTING OF AN ASPHALTIC CONCRETE WEARING SURFACE ON A CALCAREOUS BASE COURSE SUPPORTED ON STABILIZED SUBBASE OVER WELL-COMPACTED SUBGRADE.

AFTER CLEARING AND PROOFROLLING THE SITE SURFACE AS PREVIOUSLY RECOMMENDED, THE SURFICIAL SOILS SHOULD BE SUITABLE TO SUPPORT THE PAVEMENT SECTIONS. THE EMBANKMENT MATERIAL SHOULD BE COMPACTED TO A DRY DENSITY OF 98 PERCENT OF THE MODIFIED PROCTOR (ASTM D1557/AASHTO T-180) MAXIMUM DRY DENSITY OF THE COMPACTED SOIL TO A DEPTH OF ONE FOOT BELOW THE SURFACE.

THE SUBBASE MATERIAL TO A DEPTH OF 12 INCHES SHOULD HAVE A MINIMUM LIMEROCK BEARING RATIO (LBR) VALUE (FDOT FM 5-515) OF 40 AND IT SHOULD BE COMPACTED TO AT LEAST 98 PERCENT OF ITS MODIFIED PROCTOR (ASTM D1557 OR AASHTO T-180) MAXIMUM DRY DENSITY.

THE BASE COURSE MAY CONSIST OF CRUSHED LIMEROCK OR COQUINA AND SHOULD HAVE A MINIMUM LIMEROCK BEARING RATIO (LBR) VALUE (FDOT FM 5-515) OF 100. WE RECOMMEND A BASE COURSE AT LEAST 8 INCHES THICK WICH MAY BE PLACED AND COMPACTED IN A SINGLE LAYER. ALL BASE COURSE MATERIAL SHOULD BE COMPACTED TO AT LEAST 98 PERCENT OF ITS MODIFIED PROCTOR MAXIMUM DRY DENSITY.

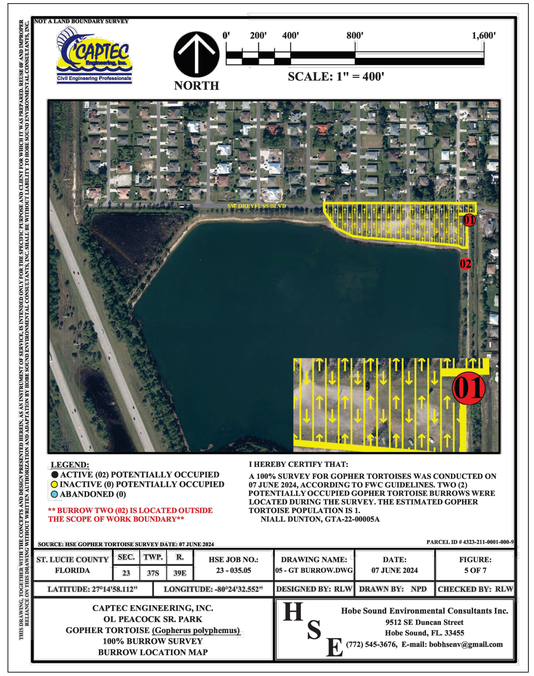
WE RECOMMEND AN FDOT TYPE SP-9.5 OR SP-12.5 ASPHALTIC WEARING SURFACE WITH A MINIMUM THICKNESS OF 1.5 INCHES THICK. CARE MUST BE EXERCISED TO PLACE THE ASPHALT OVER DRY, WELL PRIMED BASE MATERIAL.

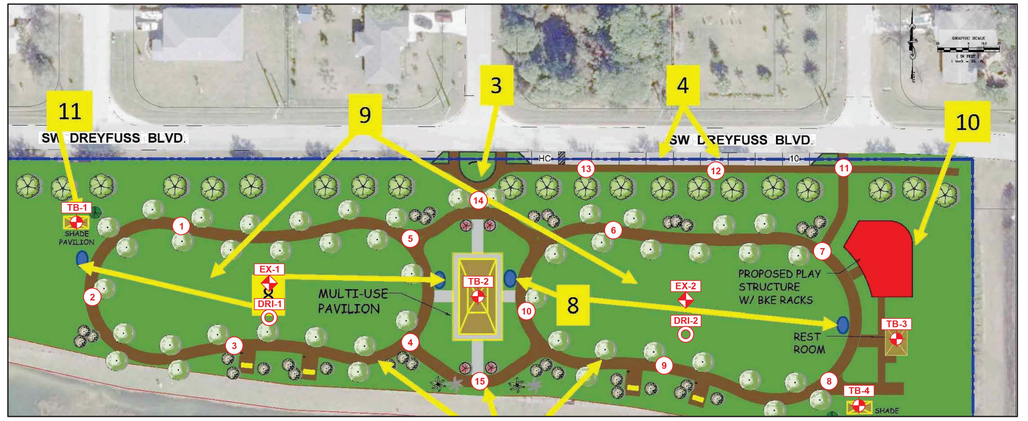
THE PAVEMENT SECTION PROPOSED ABOVE IS IN ACCORDANCE WITH THE CITY OF PORT ST. LUCIE "ENGINEERING STANDARDS FOR LAND DEVELOPMENT" (DECEMBER 2020). WE REMAIN AVAILABLE TO EVALUATE ANY ALTERNATIVE PAVEMENT SECTIONS SHOULD IT BE NEEDED.

8.2 PARK WALKING TRAILS
AFTER CLEARING AND PROOFROLLING THE SITE SURFACE AS PREVIOUSLY RECOMMENDED, THE SURFICIAL SOILS SHOULD BE SUITABLE TO SUPPORT THE PROPOSED CONCRETE-PAVEMENT WALKING TRAIL PAVEMENT SECTION.

THE SUBGRADE MATERIAL SHOULD BE COMPACTED TO A DRY DENSITY OF 98 PERCENT OF THE MODIFIED PROCTOR (ASTM D1557 OR AASHTO T-180) MAXIMUM DRY DENSITY OF THE COMPACTED SOIL TO A DEPTH OF TWO FEET BELOW THE SURFACE. THE SUBGRADE SURFACE SHOULD BE SATURATED IMMEDIATELY PRIOR TO CONCRETE PLACEMENT TO PROVIDE ADEQUATE MOISTURE FOR CURING OF THE CONCRETE.

WE RECOMMEND A FOUR-INCH THICK PAVEMENT SECTION OF PORTLAND CEMENT CONCRETE. THE CONCRETE SHOULD HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI. CONSTRUCTION CONTROL JOINTS SHOULD BE PLACED NO MORE THAN 15 FEET APART IN EITHER DIRECTION AND SHOULD BE AT LEAST ONE-QUARTER OF THE THICKNESS OF THE CONCRETE. THEY SHOULD BE CUT AS SOON AS THE CONCRETE WILL SUPPORT THE CREW AND EQUIPMENT (8 TO 12 HOURS). THE CONCRETE SHOULD BE CURED BY MOIST CURING OR BY APPLICATION OF A LIQUID CURING COMPOUND. THE STEEL REINFORCEMENT WITHIN THE CONCRETE PAVEMENT SHOULD BE DESIGNED BY THE PROJECT CIVIL OR STRUCTURAL ENGINEER.



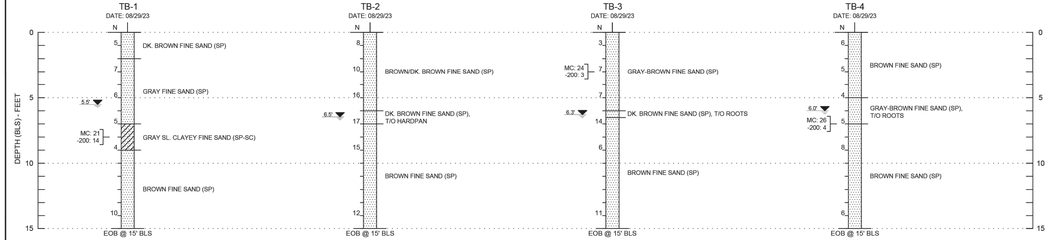


NORTH
NOT TO SCALE
Source: Provided Site Schematic

LEGEND
TB-# Standard Penetration Test Boring
(#) Hand Auger Boring (HAB-#)
EX-# Exfiltration Test
DRI-# Double-Ring Infiltrometer Test

NOTES
Shown and noted boring/test locations are approximate. All locations were located using the provided site schematic, aerial photographs, existing site features, and a hand-held, sub-meter GPS unit. Atmospheric disturbances and local weather conditions may affect the accuracy of the GPS instrument readings. The shown boring/test locations should be considered accurate only to the degree implied by the method of measurement used.

ANDERSEN ANDRE CONSULTING ENGINEERS, INC.
834 SW Swan Avenue, Port St. Lucie, FL 34983 772-807-9191 www.AACEinc.com
FIELD WORK LOCATION PLAN (LAYOUT IS NOT ACCURATE)
SUBSURFACE SOIL EXPLORATION AND GEOTECHNICAL ENGINEERING EVALUATION
PROPOSED IMPROVEMENTS TO O. L. PEACOCK SR. PARK
1950 SW DREYFUSS BOULEVARD
PORT ST. LUCIE, ST. LUCIE COUNTY, FLORIDA
Drawn by: PGA | Date: August 2023
Checked by: DPA | Date: August 2023
AACE File No: 23-210
Figure No. 2



SOIL GRAPHICAL LEGEND:
FINE SAND (SP)
SLIGHTLY CLAYEY FINE SAND (SP-SC)
NOTE: 3"-6" of topsoil encountered in most borings (not shown on boring profiles)

DRILLING NOTES:
TB-# STANDARD PENETRATION TEST [SPT] BORING (ASTM D1586)
N SPT RESISTANCE IN BLOWS PER FOOT
HAB HAND AUGER BORING (ASTM D1452)
▽ GROUNDWATER TABLE (FT-BLS) AT TIME OF DRILLING
EOB END OF BORING
BLS BELOW LAND SURFACE
FRGM FRAGMENTS
SP, SP-SC UNIFIED SOIL CLASSIFICATION SYSTEM [USCS] USCS GROUPS DETERMINED BY VISUAL CLASSIFICATION EXCEPT FOR NOTED LABORATORY TESTS
MC NATURAL MOISTURE CONTENT IN PERCENT (ASTM D2216)
-200 PERCENT FINES PASSING THE NO. 200 SIEVE (ASTM D1140)
DRILL CREW CHIEF: DT
DRILL RIG: CME-45
DRILLING METHOD: ROTARY-WASH/BENTONITE SLURRY
SPLIT-SPOON SAMPLER:
INSIDE DIAMETER: 1.375"
OUTSIDE DIAMETER: 2.0"
LENGTH: 24"
SPT HAMMER:
AVERAGE DROP: 30"
WEIGHT: 140 LBS
TYPE: SAFETY/MANUAL

ANDERSEN ANDRE CONSULTING ENGINEERS, INC.
834 SW Swan Avenue, Port St. Lucie, FL 34983 772-807-9191 www.AACEinc.com
SOIL BORING PROFILES
SUBSURFACE SOIL EXPLORATION AND GEOTECHNICAL ENGINEERING EVALUATION
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Drawn by: PGA | Date: August 2023
Checked by: DPA | Date: August 2023
AACE File No: 23-210
Sheet No. 1

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CPSLUSD PLANNING & ZONING #P24-221 | **CPSLUSD UTILITY FILE #5001-32**

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Fax: (772) 692-4341
Engineering Business No. EB-0007657

DATE: 08/27/2025
DRAWN BY: JFK
DESIGNED BY: CS
CHECKED BY: JWC
PROJECT No.: 2026.4
HORZ. SCALE: N/A
VERT. SCALE: N/A
CADD FILE: 2026.4 General Notes

NO.	DATE	BY	REVISIONS
01	08/27/2025	JWC	BID SET

SCALE VERIFICATION
0 1
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST IF PLOTTED DIMENSIONS ACCORDINGLY

O.L. PEACOCK LAKE PARK MULTI-USE TRAIL
CITY OF PORT ST. LUCIE

GENERAL NOTES

JOSEPH W. CAPRA
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37638

Printed Date:

JOB No.: 2026.4
SHEET 11 OF 16

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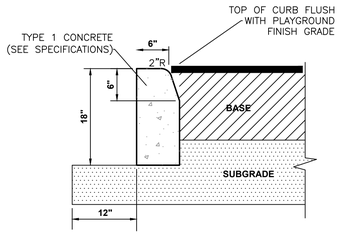


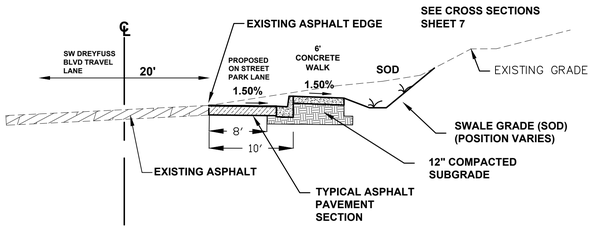
SECTION VIEW

NOTES:

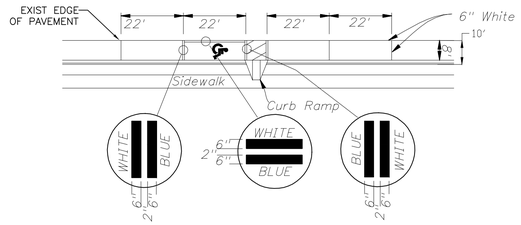
1. SAW CUT CONTRACTION JOINTS ON 10' CENTERS MAX. WITHIN 48 HOURS AFTER POURING CURB.
2. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH FDOT SPECIFICATIONS SECTION 520 AND FDOT ROADWAY & TRAFFIC DESIGN STANDARDS INDEX NUMBER 300.

FDOT INDEX 300 TYPE "D" CURB

N.T.S.

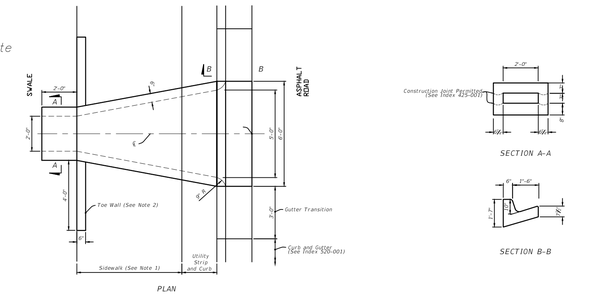


ON-STREET PARKING & TRAIL TYPICAL SECTION



TYPICAL PARKING & MARKING DETAIL

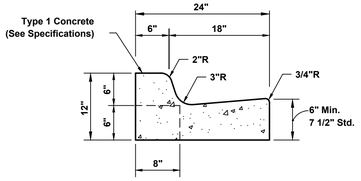
N.T.S.



TYPE-I DIMENSIONAL DETAILS

CLOSED FLUME INLET

N.T.S.

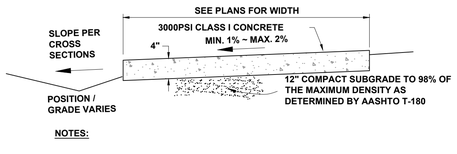


SECTION VIEW

NOTES:

1. SAW CUT CONTRACTION JOINTS ON 10' CENTERS MAX. WITHIN 48 HOURS AFTER POURING CURB.
2. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH FDOT SPECIFICATIONS SECTION 520 AND FDOT ROADWAY & TRAFFIC DESIGN STANDARDS INDEX NUMBER 300.
3. WHEN USED ON HIGH SIDE OF ROAD, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT AND THE THICKNESS OF THE LIP SHALL BE 6", UNLESS OTHERWISE SHOWN ON PLANS.

FDOT INDEX 300 TYPE F CURB & GUTTER

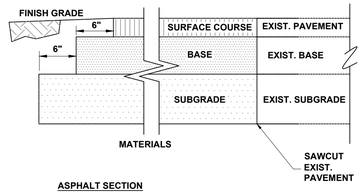


NOTES:

1. PROVIDE CONTRACTION JOINTS 5' CENTER TO CENTER. (TOOL JOINT ONLY)
2. SOD SHALL BE PLACED BELOW EDGE OF SIDEWALK TO ALLOW DRAINAGE.

TYPICAL SIDEWALK 6' WIDTH / TRAIL 10' WIDTH

N.T.S.



ASPHALT SECTION

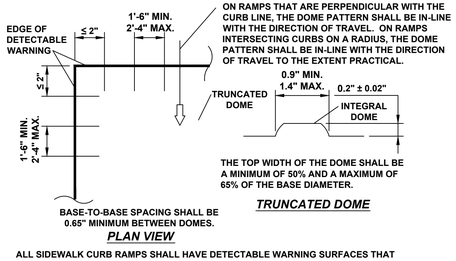
SURFACE COURSE: 2" TYPE SP-12.5 ASPHALT PAVEMENT

BASE: 8" COQUINA BASE, LBR 100, UNIFORMLY COMPACTED TO 98% OF THE T-180 MAX. DRY DENSITY

SUBGRADE: 12" STABILIZED SUBGRADE, LBR 40, TYPICAL (TYPE B STABILIZATION) COMPACTED TO 98% OF THE T-180 MAX. DRY DENSITY

TYPICAL PAVEMENT-PARKING STALLS SECTION

N.T.S.



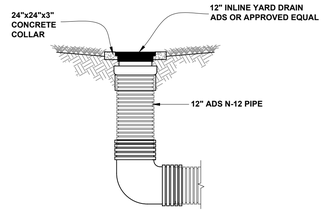
ON RAMPS THAT ARE PERPENDICULAR WITH THE CURB LINE, THE DOME PATTERN SHALL BE IN-LINE WITH THE DIRECTION OF TRAVEL. ON RAMPS INTERSECTING CURBS ON A RADIUS, THE DOME PATTERN SHALL BE IN-LINE WITH THE DIRECTION OF TRAVEL TO THE EXTENT PRACTICAL.

THE TOP WIDTH OF THE DOME SHALL BE A MINIMUM OF 50% AND A MAXIMUM OF 65% OF THE BASE DIAMETER.

ALL SIDEWALK CURB RAMPS SHALL HAVE DETECTABLE WARNING SURFACES THAT EXTEND THE FULL WIDTH OF THE RAMP AND IN THE DIRECTION OF TRAVEL 24" FROM THE BACK OF CURB.

CURB RAMP DETECTABLE WARNING DETAIL

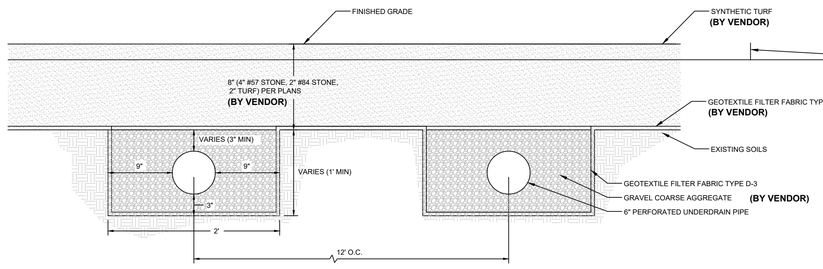
N.T.S.



INSTALLATION PER MANUFACTURER'S SPECIFICATIONS

TYPICAL YARD DRAIN DETAIL

N.T.S.

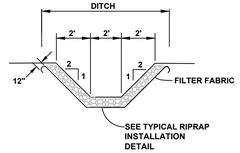


UNDERDRAIN TYPE II DETAIL (INDEX 440-001)

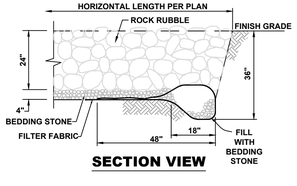
N.T.S.

CONSTRUCTION NOTES

1. INSTALL UNDERDRAIN TYPE II IN ACCORDANCE WITH SPECIFICATION 440.
2. INSTALL UNDERDRAIN PIPE THAT IS EITHER 6" SMOOTH OR 8" CORRUGATED TUBING UNLESS OTHERWISE SHOWN IN THE PLANS. THE SIZE TO BE FURNISHED WILL BE BASED ON THE NOMINAL INTERNAL DIAMETER OF A PIPE WITH A SMOOTH INTERIOR WALL.
3. INSTALL PIPE AT MINIMUM SLOPE OF 0.5%.
4. COARSE AGGREGATE SHALL BE GRAVEL OR STONE MEETING THE REQUIREMENTS OF SECTIONS 901-2 OR 901-3. THE GRADATION SHALL MEET SECTION 901, GRADES 4, 467, 5, 56 OR 57 STONE UNLESS OTHERWISE SHOWN RESTRICTED IN THE PLANS.
5. FILTER FABRIC SHALL BE TYPE D-3 (SEE SPECIFICATIONS SECTION 985).
6. ALL FILTER FABRIC JOINTS SHALL OVERLAP A MINIMUM OF 1'.
7. INSTALL CLEANOUT STRUCTURES (C.O.) FOR ACCESS WHERE CALLED FOR IN THE PLANS.
8. UNDERDRAIN OUTLET PIPES SHALL BE NONPERFORATED.
9. PAY ITEM SHALL BE BASED ON THE SIZE OF THE SMOOTH INTERIOR PRODUCTS. THE CONTRACT UNIT PRICE FOR UNDERDRAIN, LF, SHALL INCLUDE THE COST OF PIPE, FITTINGS, AGGREGATE, SOCK, FILTER FABRIC, UNDERDRAIN CLEANOUTS, CONCRETE APRONS, AND TRENCH EXCAVATION. THE CONTRACT UNIT PRICE FOR UNDERDRAIN OUTLET PIPE, LF, SHALL BE FULL COMPENSATION FOR TRENCH EXCAVATION PIPE AND FITTINGS, CONCRETE APRONS, HARDWARE CLOTH FOR CONCRETE APRONS, CONNECTIONS TO EXISTING DRAINAGE SYSTEM INCLUDING CONCRETE JACKETS PER INDEX 430-001, BACKFILL IN PLACE, AND DISPOSAL OF EXCESS MATERIALS.



TYPICAL RIP-RAP FLUME SECTION



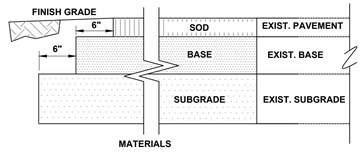
SECTION VIEW

TYPICAL RIPRAP INSTALLATION

N.T.S.

NOTES:

1. INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 530-1 OF THE FDOT SPECIFICATIONS. THE AREAS TO RECEIVE RIPRAP SHALL BE LINED WITH FILTER FABRIC AND 4" INCHES OF BEDDING STONE. ROCK RUBBLE SHALL BE PLACED IN 2 LAYERS FOR A TOTAL DEPTH OF 24" TO PRODUCE A REASONABLY WELL GRADED MASS OF STONE WITH THE MINIMUM PRACTICAL PERCENTAGE OF VOIDS.
2. THE ROCK RUBBLE SHALL BE BROKEN STONE CONFORMING TO SECTION 530-2.1.3 OF THE FDOT SPECIFICATIONS. BROKEN CONCRETE SHALL NOT BE ALLOWED.
3. THE BEDDING STONE SHALL CONFORM TO SECTION 901-1 OF THE FDOT SPECIFICATIONS FOR NUMBER 4 COURSE AGGREGATE.
4. THE CONTRACTOR SHALL USE WOVEN GEOTEXTILE AMOCO FABRIC TYPE 2044 OR EQUAL NON-BIODEGRADABLE.



ASPHALT SECTION

SURFACE COURSE: SOD

BASE: 8" COQUINA BASE, LBR 100, UNIFORMLY COMPACTED TO 98% OF THE T-180 MAX. DRY DENSITY

SUBGRADE: 12" STABILIZED SUBGRADE, LBR 40, TYPICAL (TYPE B STABILIZATION) COMPACTED TO 98% OF THE T-180 MAX. DRY DENSITY

TYPICAL STABILIZED TURF

N.T.S.

SEQUENCE OF CONSTRUCTION

1. EROSION CONTROL
2. CLEARING AND GRUBBING
3A. REGRADE SITE - SLOPES - INSTALL STORM PIPE
3B. INSTALL WATER MAIN SERVICE/ SANITARY SEWER LINES/ LPFM/UNDERGROUND ELECTRIC.
4A. GC INSTALL - GRADE TO 7" BELOW FINAL GRADE IN PLAYGROUND AREA
   - PARKING
   - MULTI-USE PATH/FLUMES
   - PAVILION
4B. VENDOR INSTALL
   - PLAYGROUND UNDERDRAINAGE
   - FABRIC
   - SYNTHETIC TURF
   - SHADED STRUCTURE
5. INSTALL IRRIGATION
6. STABILIZE SITE - SOD/TURF/VEGITATION
7. PAVEMENT MARKING/SIGNAGE

CPSLUSD PLANNING & ZONING #P24-221 | **CPSLUSD UTILITY FILE #5001-32**

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Engineering Business No. EB-0007657

DATE: 08/27/2025
DRAWN BY: JFK
DESIGNED BY: CS
CHECKED BY: JWC
PROJECT No.: 2026.4
HORZ. SCALE: N/A
VERT. SCALE: N/A
CADD FILE: 2026.4 - General Notes

NO.	DATE	BY	REVISIONS
01	08/27/2025	JWC	BID SET

SCALE VERIFICATION
0 1
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST AS REQUIRED DIMENSIONS ACCORDINGLY

O.L. PEACOCK LAKE PARK MULTI-USE TRAIL
CITY OF PORT ST. LUCIE

PAVING & DRAINAGE DETAILS

JOSEPH W. CAPRA
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37638

Printed Date:

JOB No.: 2026.4
SHEET 12 OF 16

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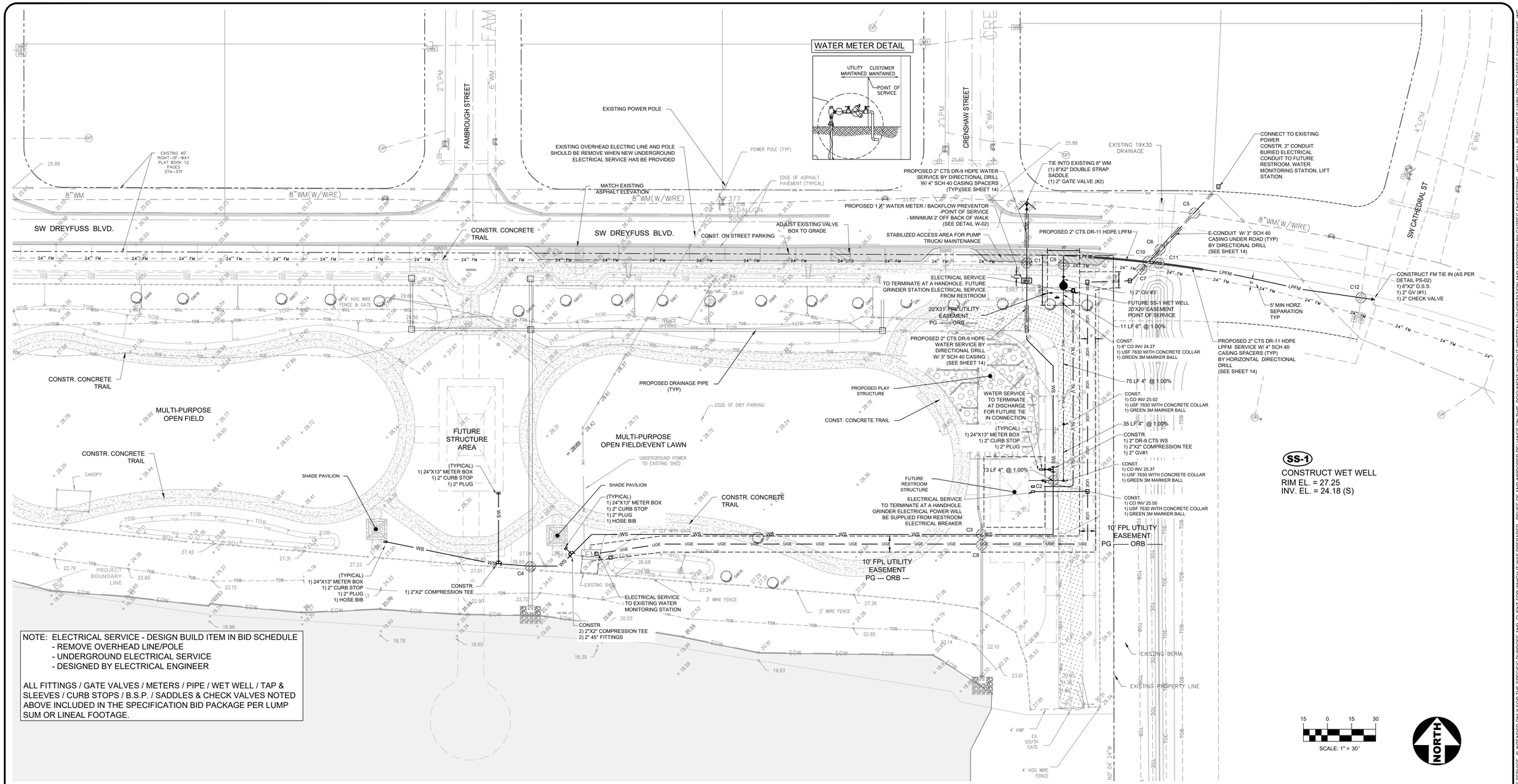
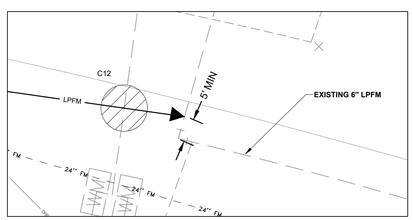
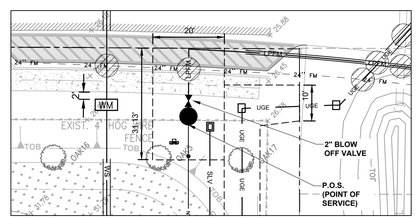


CONFLICT TABLE			
PLAN ID	UTILITY	INFO	SEPERATION
C1	WS	TOP OF X-24"-FM 20.15 BOTTOM OF WS 22.37	2.22
C2	WS	BOTTOM OF SAN- 25.73 TOP OF WS - 24.23	1.5
C3	WS	BOTTOM OF DRAINAGE PIPE 25.20 TOP OF WS 23.7	1.5
C4	WS	TOP OF DRAINAGE 23.29 BOTTOM OF WS 24.79	1.5
C5	UGE	BOTTOM OF 8" WM 21.75 TOP OF UGE 20.25	1.5
C6	UGE	BOTTOM OF DRAINAGE 21.02 TOP OF UGE 19.52	1.5
C7	UGE	BOTTOM OF FM 18.06 BOTTOM OF UGE 16.26	2.3
C8	UGE	BOTTOM OF DRAINAGE PIPE 25.10 TOP OF UGE 23.6	1.5
C9	LPFM	TOP OF X-24"-FM 20.15 BOTTOM OF LPFM 21.65	1.5
C10	LPFM	BOTTOM OF LPFM 18.5 TOP OF LPFM 16.75	1.75
C11	LPFM	BOTTOM OF DRAINAGE 21.02 TOP OF LPFM 19.52	1.5
C12	LPFM	BOTTOM OF X-WS 23.40 TOP OF LPFM 21.90	1.5

VALVE TABLE							
PLAN ID	SIZE (IN)	TYPE	FLUID	MANUFACTURER	DATE SET	# TURNS	PSLUSD#
GV#1	2	GATE VALVE	WW				
GV#2	2	GATE VALVE	WATER				
GV#3	2	GATE VALVE	WW				



LPFM CONNECTION DETAIL



EASEMENT DETAIL

LEGEND

- PROPERTY LINE
- CENTERLINE
- CONCRETE SIDEWALK
- PAVEMENT
- EXISTING GRADE
- WS — WATER SERVICE
- LPFM — LPFM SERVICE
- UGE — UGE — UNDERGROUND ELECTRICAL SERVICE
- SLV — SLV — FUTURE CONDUIT SLEEVE
- CONFLICT 18" MIN SEPARATION AT CROSSINGS
- STABILIZED TURF

CPSLUSD PLANNING & ZONING #P24-221 **CPSLUSD UTILITY FILE #5001-32**

• 301 N.W. Flagler Ave.
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
Engineering Business No. EB-0007657
CAPTEC Engineering, Inc.
Civil Engineering Professionals

DATE: 08/27/2025
DRAWN BY: JFK
DESIGNED BY: CS
CHECKED BY: JWC
PROJECT No.: 2026.4
HORZ. SCALE: 1" = 30'
VERT. SCALE: N/A
CADD FILE: 2514.dgn

NO.	DATE	BY	REVISIONS
01	08/27/2025	JWC	BID SET

SCALE VERIFICATION
0 1"
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALES ACCORDINGLY

O.L. PEACOCK LAKE PARK
MULTI-USE TRAIL
CITY OF PORT ST. LUCIE

UTILITIES
WATER SERVICE - LPFM SERVICE - UNDERGROUND SERVICE

JOSEPH W. CAPRA
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37638

Printed Date:

JOB No.: 2026.4
SHEET 13 OF 16

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADOPTION BY CAPTEC ENGINEERING, INC. SHALL BE WITHOUT LIABILITY TO CAPTEC ENGINEERING, INC.

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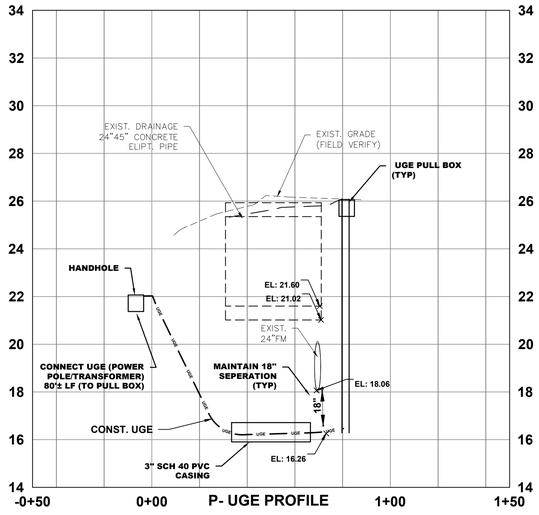

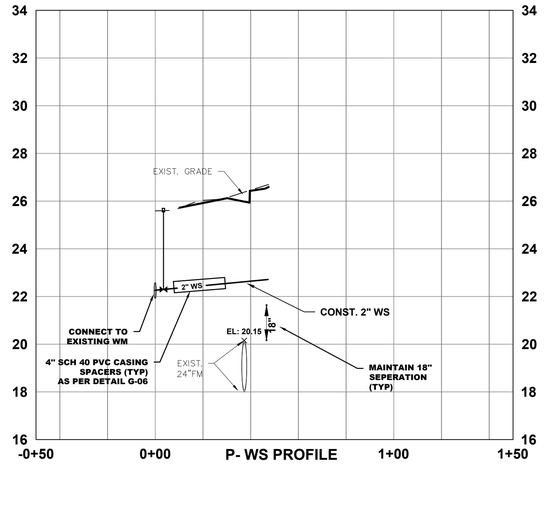

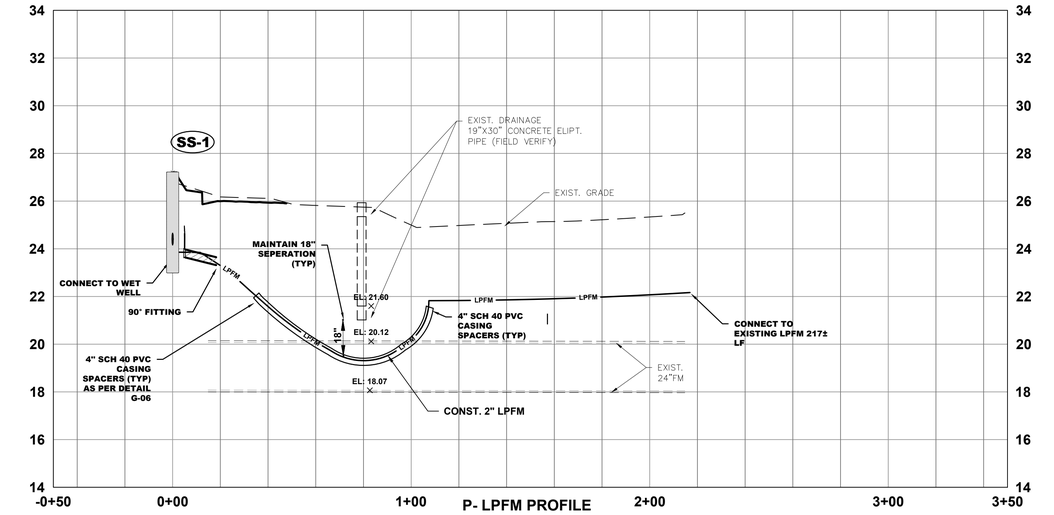

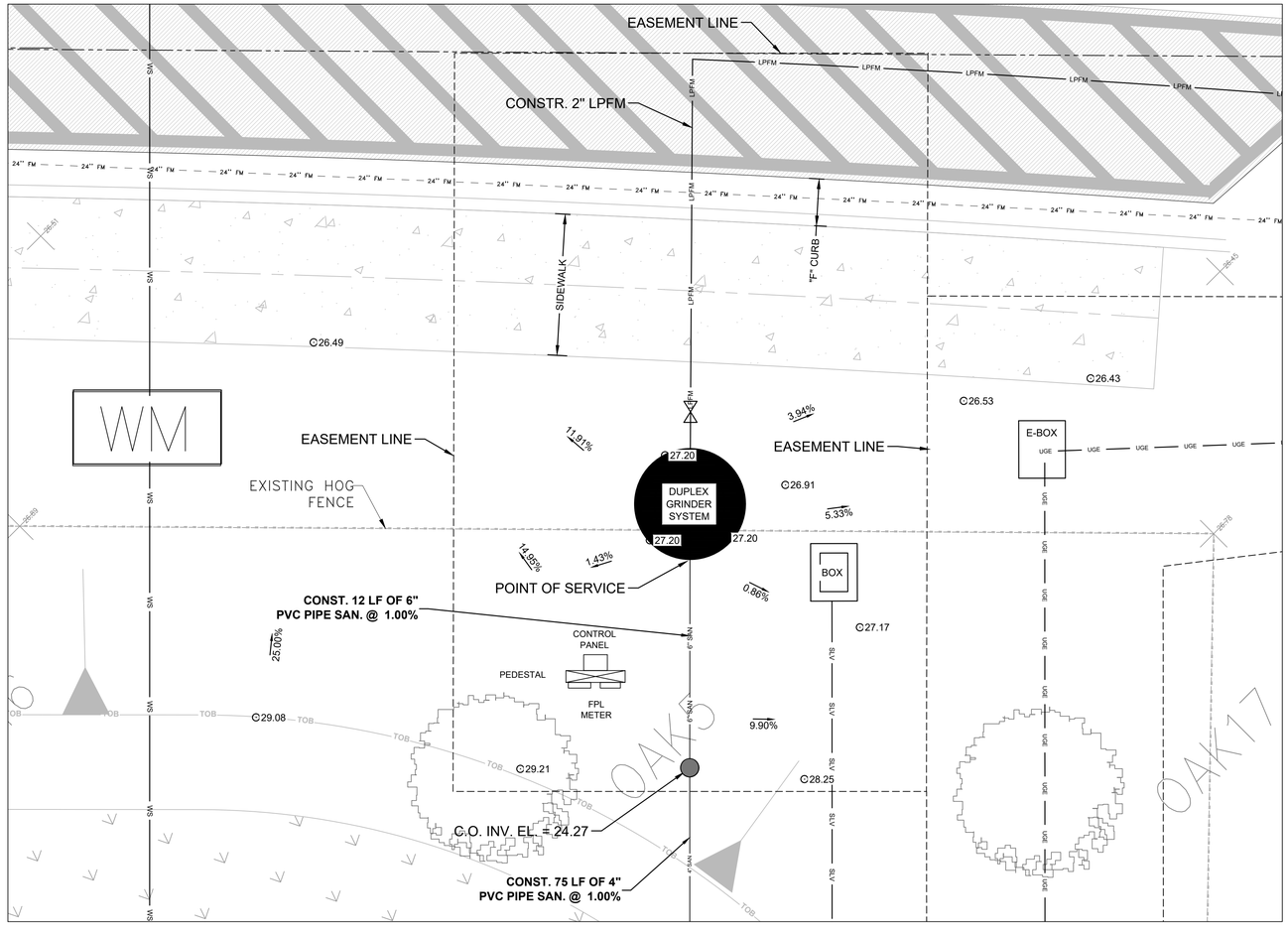

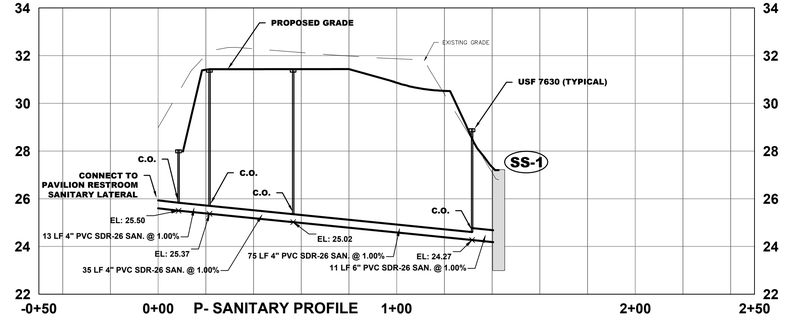

15 0 15 30
SCALE: 1" = 30'

ALL ELEVATIONS REFERENCE (NAVD 88) DATUM

CPSLUSD PLANNING & ZONING #P24-221 | **CPSLUSD UTILITY FILE #5001-32**

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Stuart, Florida 34994
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Engineering Business No. EB-0007657

CAPTEC Engineering, Inc.
Civil Engineering Professionals

DATE:	08/27/2025
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DESIGNED BY:	CS
CHECKED BY:	JWC
PROJECT No.:	2026.4
HORZ. SCALE:	1" = 30'
VERT. SCALE:	1:3
CADD FILE:	2634.dgn

NO.	DATE	BY	REVISIONS
01	08/27/2025	JWC	BID SET

SCALE VERIFICATION
0 1
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALES ACCORDINGLY

O.L. PEACOCK LAKE PARK MULTI-USE TRAIL
CITY OF PORT ST. LUCIE

UTILITY PROFILES

JOSEPH W. CAPRA
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Stuart, Florida 34994
P.E. No. 37638

Printed Date:

JOB No.: 2026.4
SHEET 14 OF 16

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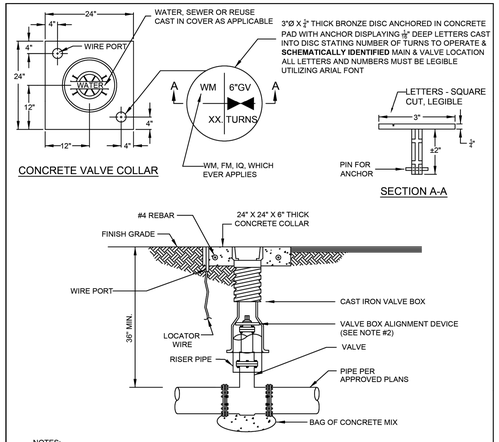
P:\2005\2026.4 - OL Peacock Sr Park\DWG\2026.4 Utility.dwg, 8/27/2025 11:03:33 AM, CAPTEC Engineering, Inc.



CONCRETE VALVE COLLAR

NOTES:

1. WHEN TOP OF OPERATING NUT IS DEEPER THAN 30", A HIGH STRENGTH STEEL EXTENSION WILL BE REQUIRED TO BRING OPERATING NUT 24"-30" BELOW FINISHED GRADE. A STEEL CENTERING PLATE, WELDED TO THE EXTENSION, IS ALSO REQUIRED.

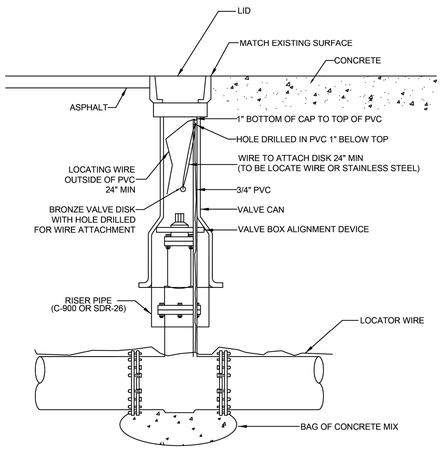
2. A VALVE BOX ALIGNMENT DEVICE SHALL BE PROVIDED TO ELIMINATE SHIFTING OF THE VALVE BOX AGAINST THE OPERATING NUT.

3. C900 OR SDR-26 P.V.C. RISER PIPE SHALL BE ADDED TO EXTEND THE VALVE BOX IF NEEDED.

4. RPM'S SHALL NOT BE INSTALLED IN CROSSWALKS OR PEDESTRIAN WALKWAYS.

5. THE TOP SIDE OF THE VALVE BOX COVER AND THE INSIDE OF TOP SECTION OF THE VALVE BOX SHALL BE PAINTED BLUE FOR WATER MAINS, GREEN FOR SEWER MAINS AND PURPLE FOR RECLAIMED WATER MAINS.

MINIMUM CONSTRUCTION STANDARDS FOR CITY OF PORT ST. LUCIE 1001 PRINEVILLE ST. PORT ST. LUCIE, FL. 34983 PHONE (772) 873-6400 FAX (772) 873-6433	TYPICAL VALVE BOX AND COLLAR IN UN-PAVED AREA	DETAIL: G-07
		DATE: 2024
		SCALE: N.T.S.
		SHEET: 1 OF 2



MINIMUM CONSTRUCTION STANDARDS FOR CITY OF PORT ST. LUCIE 1001 SE PRINEVILLE ST. PORT ST. LUCIE, FL. 34983 PHONE (772) 873-6400 FAX (772) 873-6433	TYPICAL VALVE BOX IN PAVED AREA	DETAIL: G-07
		DATE: 2024
		SCALE: N.T.S.
		SHEET: 2 OF 2

NOTES

1. FDOT "STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION, SHALL APPLY TO THE DESIGN AND CONSTRUCTION OF FACILITIES SHOWN ON THIS SET OF PLANS, UNLESS SPECIFICALLY NOTED OR DETAILED OTHERWISE.

2. FDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION, SHALL APPLY TO THE DESIGN AND CONSTRUCTION OF FACILITIES ON THIS SET OF PLANS, UNLESS SPECIFICALLY NOTED OR DETAILED OTHERWISE.

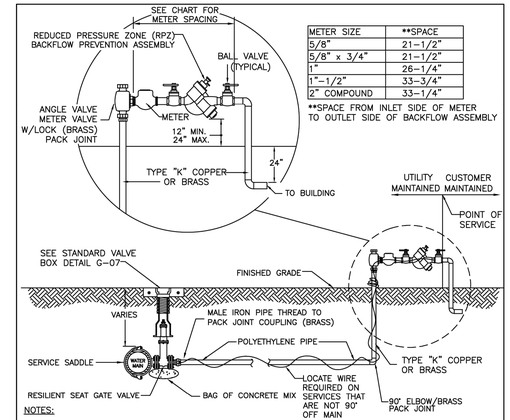
3. THE FHWA "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION, SHALL APPLY TO THE DESIGN AND CONSTRUCTION OF ALL PAVEMENT MARKINGS, SIGNS, REFLECTIVE MARKERS, SIGNALS, TRAFFIC CONTROL DEVICES, ETC. UNLESS SPECIFICALLY NOTED OR DETAILED OTHERWISE.

4. THE FDOT "MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION, AND MAINTENANCE FOR STREETS AND HIGHWAYS", LATEST EDITION, SHALL APPLY TO THE DESIGN AND CONSTRUCTION OF FACILITIES SHOWN ON THIS SET OF PLANS, UNLESS SPECIFICALLY NOTED OR DETAILED OTHERWISE.

5. THE FDOT "DESIGN MANUAL", LATEST EDITION, SHALL APPLY TO THE DESIGN AND CONSTRUCTION OF FACILITIES SHOWN ON THIS SET OF PLANS, UNLESS SPECIFICALLY NOTED OR DETAILED OTHERWISE.

(NOTES ARE TO BE INCLUDED ON CONSTRUCTION PLANS FOR ALL ROADWAY PROJECTS)

ENGINEERING STANDARDS FOR LAND DEVELOPMENT COMMERCIAL, RESIDENTIAL SUBDIVISION, AND CAPITAL IMPROVEMENT PROJECTS	ROAD CONSTRUCTION PLAN NOTES	DATE: 6/13/2020
		SHEET: 1 OF 1



METER SIZE	**SPACE
5/8"	21–1/2"
5/8" x 3/4"	21–1/2"
1"	26–1/4"
1"–1/2"	33–3/4"
2" COMPOUND	33–1/4"

**SPACE FROM INLET SIDE OF METER TO OUTLET SIDE OF BACKFLOW ASSEMBLY

NOTES:

1. THE ENGINEER–OF–RECORD SHALL SIZE THE PIPE, FITTINGS, VALVES AND APPURTENANCES; THE MINIMUM SHALL BE 2" UP TO THE ANGLE VALVE. METER SIZE CALCULATIONS TO BE SUBMITTED BASED ON AWWA RECOMMENDATIONS (MANUAL M–22)

2. BOTH RISERS SHALL BE BRASS OR TYPE "K" COPPER TUBING (HARD DRAWN) WITH COPPER/BRASS THREADED FITTINGS AND ADAPTERS.

3. ADDITIONAL SUPPORT SHALL BE PROVIDED AS NECESSARY TO SECURELY SUPPORT THE BACK FLOW PREVENTION ASSEMBLY.

4. VALVE, SADDLE AND APPURTENANCES SHALL BE PER THE QUALIFIED PRODUCTS LIST.

5. METERS AND BACKFLOW PREVENTERS 2" OR SMALLER SHALL BE INSTALLED BY PSLUSD. SEE SHEET 2 FOR MULTI–SERVICE METER BANK ASSEMBLY.

6. AT THE DIRECTION OF THE PSLUSD, BOLLARDS MAY BE REQUIRED TO PREVENT DAMAGE FROM ACCIDENTS. REFER TO DETAIL G–15 FOR BOLLARD INSTALLATION.

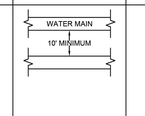
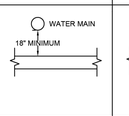
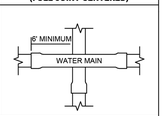
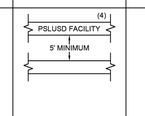
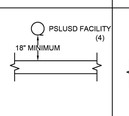
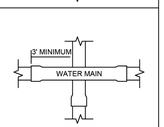
MINIMUM CONSTRUCTION STANDARDS FOR CITY OF PORT ST. LUCIE 1001 SE PRINEVILLE ST. PORT ST. LUCIE, FL. 34983 PHONE (772) 873-6400 FAX (772) 873-6433	COMMERCIAL WATER SERVICE CONNECTION	DETAIL: W-02
		DATE: 2024
		SCALE: N.T.S.
		SHEET: 1 OF 2

MINIMUM CONSTRUCTION STANDARDS FOR CITY OF PORT ST. LUCIE 1001 SE PRINEVILLE ST. PORT ST. LUCIE, FL. 34983 PHONE (772) 873-6400 FAX (772) 873-6433

STANDARD SEPARATION REQUIREMENTS

DETAIL G-01
DATE: 2024
SCALE: N.T.S.
SHEET: 1 OF 1

MINIMUM SEPARATION BETWEEN PSLUSD FACILITIES AND OTHER UTILITIES

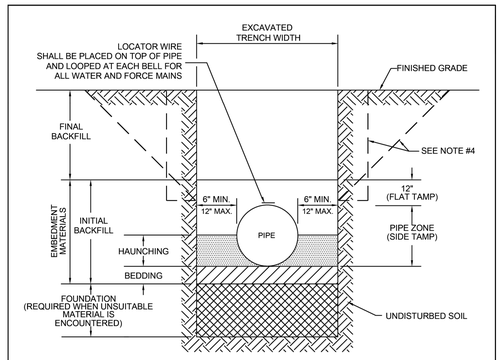
OTHER PIPE	HORIZONTAL SEPARATION	CROSSINGS (1)	JOINT SPACING @ CROSSINGS (FULL JOINT CENTERED)
GRAVITY OR PRESSURE SANITARY SEWER, SANITARY SEWER FORCE MAIN, RECLAIMED WATER (2), (3), VACUUM SANITARY SERVICE, STORM SEWER, STORM SEWER FORCE MAIN			
ALL OTHER FACILITIES, INCLUDING BUT NOT LIMITED TO: TELEPHONE, CABLE TV, POWER, ETC.			
ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM	10' MINIMUM	-----	-----

(1) WATER MAIN SHOULD CROSS OVER OTHER PIPE. WHEN WATER MAIN MUST BE BELOW OTHER PIPE, THE MINIMUM SEPARATION IS 18".

(2) RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

(3) RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

(4) A PSLUSD FACILITY INCLUDES MAINS AND STRUCTURES FOR POTABLE WATER, WASTEWATER AND RECLAIMED WATER.



NOTES:

1. FOR TRENCHES REQUIRING SHEETING, SHORING, STAY BRACING, TRENCH JACKS OR TRENCH BOX, DIMENSIONS SHALL BE TAKEN FROM THE INSIDE FACE OF THE SUPPORTS.

2. IF THE MAXIMUM TRENCH WIDTH MUST BE EXCEEDED, THE AREA OUTSIDE OF THE MAXIMUM EMBEDMENT SHALL BE COMPACTED TO FINAL BACKFILL REQUIREMENTS. IF THE PIPE IS INSTALLED IN A COMPACTED EMBANKMENT, THE EMBANKMENT SHALL BE IN PLACE AND COMPACTED TO 12" MIN. COVER BEFORE INSTALLATION OF PIPE.

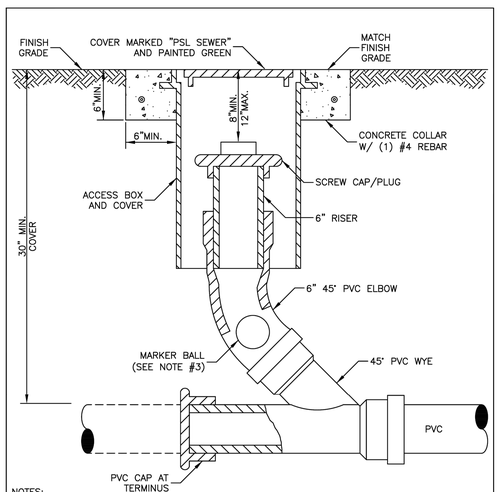
3. IF BEDDING IS REQUIRED TO BRING TRENCH BOTTOM UP TO GRADE AND PROVIDE UNIFORM AND ADEQUATE LONGITUDINAL SUPPORT UNDER THE PIPE, THEN A MINIMUM COMPACTED DEPTH OF 4 TO 6 INCHES OF SELECT EMBEDMENT MATERIAL IS REQUIRED.

4. THE CONTRACTOR SHALL COMPLY WITH REQUIREMENTS OF THE FLORIDA TRENCH SAFETY ACT.

5. AN APPROVED LOCATOR WIRE SHALL BE USED.

6. EARTHWORK, EXCAVATION, BACKFILL AND COMPACTION SHALL BE IN ACCORDANCE WITH PSLUSD STANDARDS.

MINIMUM CONSTRUCTION STANDARDS FOR CITY OF PORT ST. LUCIE 1001 SE PRINEVILLE ST. PORT ST. LUCIE, FL. 34983 PHONE (772) 873-6400 FAX (772) 873-6433	STANDARD PIPE TRENCH CROSS SECTION	DETAIL: C-04
		DATE: 2024
		SCALE: N.T.S.
		SHEET: 1 OF 1



NOTES:

1. AN ACCESS BOX AND COVER SHALL BE USED.

2. CLEANOUT ASSEMBLY SHALL BE INSTALLED AT A MAXIMUM 75' INTERVALS AND AT TERMINAL POINT OF THE PSLUSD RESPONSIBILTY. THE LOCATION SHALL BE IN ACCORDANCE WITH THE PSLUSD UTILITY STANDARDS.

3. MARKER BALL SHALL BE STRAPPED TO THE ELBOW.

MINIMUM CONSTRUCTION STANDARDS FOR CITY OF PORT ST. LUCIE 1001 SE PRINEVILLE ST. PORT ST. LUCIE, FL. 34983 PHONE (772) 873-6400 FAX (772) 873-6433	SANITARY SEWER CLEANOUT	DETAIL: WW-05
		DATE: 2024
		SCALE: N.T.S.
		SHEET: 1 OF 1

CPSLUSD PLANNING & ZONING #P24-221 **CPSLUSD UTILITY FILE #5001-32**

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HORZ. SCALE: N/A
VERT. SCALE: N/A
CADD FILE: 2026-General Notes

NO.	DATE	BY	REVISIONS
01	08/27/2025	JWC	BID SET

SCALE VERIFICATION
0 — 1
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING, ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

O.L. PEACOCK LAKE PARK MULTI-USE TRAIL
CITY OF PORT ST. LUCIE

UTILITY DETAILS

JOSEPH W. CAPRA
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37638

Printed Date:

JOB No.: 2026.4
SHEET 15 OF 16

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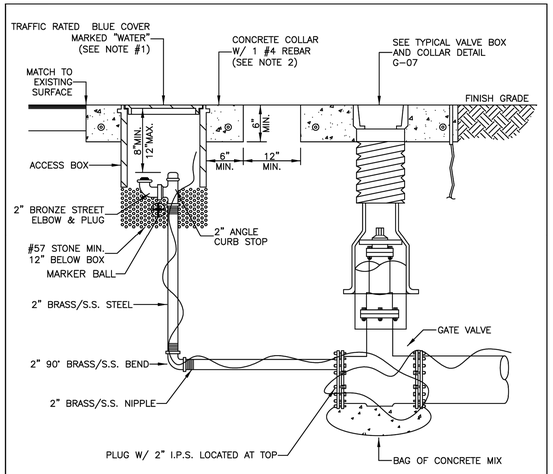
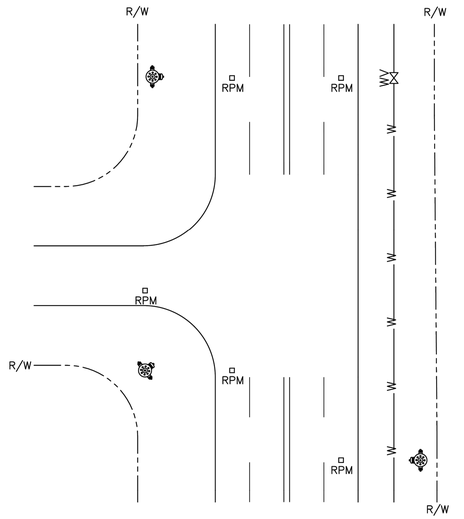


NOTES:

1. COVER SHALL BE PAINTED BLUE FOR "WATER".
2. NO CONCRETE COLLAR IF LOCATED IN ASPHALT OR CONCRETE.
3. LOCATE WIRE NOT REQUIRED IF SEPARATION BETWEEN THE VALVE BOX AND ACCESS BOX IS 6' OR LESS.

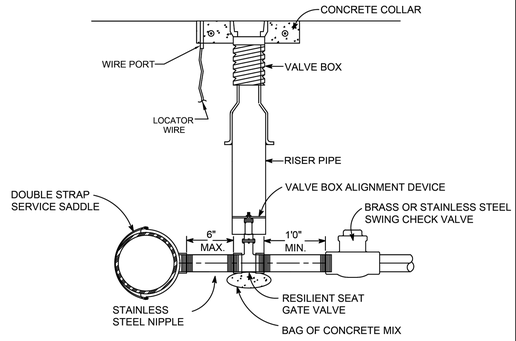
MINIMUM CONSTRUCTION STANDARDS FOR CITY OF PORT ST. LUCIE 1001 SE PRINEVILLE ST. PORT ST. LUCIE, FL 34983 PHONE (772) 873-6400 FAX (772) 873-6433	**BLOW-OFF ASSEMBLY**	DETAIL: W-04 DATE: 2024 SCALE: N.T.S. SHEET: 1 OF 1



NOTES:

1. MARKER COLOR IS BLUE. PLACE IN CENTER OF THE LANE CLOSEST TO THE HYDRANT.
2. IF HYDRANT IS LOCATED WITHIN THE RADIUS OF AN INTERSECTION PLACE A MARKER ON EACH ROADWAY IN THE CENTER LANES CLOSEST TO THE HYDRANT.
3. MARKER IS PLACED PERPENDICULAR (90 DEGREES) TO THE HYDRANT.

MINIMUM CONSTRUCTION STANDARDS FOR CITY OF PORT ST. LUCIE 1001 SE PRINEVILLE ST. PORT ST. LUCIE, FL 34983 PHONE (772) 873-6400 FAX (772) 873-6433	**FIRE HYDRANT REFLECTIVE PAVEMENT MARKER PLACEMENT GUIDELINE**	DETAIL: W-08 DATE: 2024 SCALE: N.T.S. SHEET: 1 OF 1

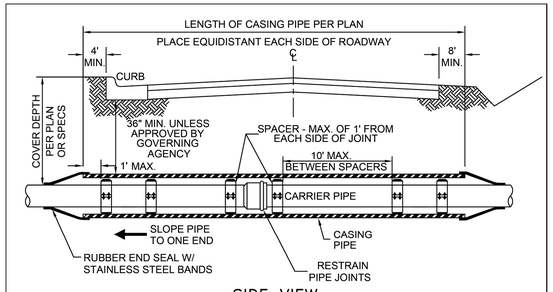


GRINDER SERVICE CONNECTION

NOTES:

1. THIS DETAIL SHALL BE USED IN CONJUNCTION WITH DETAIL G-07 FOR TYPICAL BOX VALVE.

MINIMUM CONSTRUCTION STANDARDS FOR CITY OF PORT ST. LUCIE 1001 SE PRINEVILLE ST. PORT ST. LUCIE, FL 34983 PHONE (772) 873-6400 FAX (772) 873-6433	**GRINDER SYSTEM SERVICE LINE TAP TO MAIN LINE**	DETAIL: PS-03 DATE: 2024 SCALE: N.T.S. SHEET: 1 OF 1



SIDE VIEW

CARRIER PIPE SIZE	STEEL CASING	MINIMUM WALL THICKNESS
4"	12"	.188
6"	14"	.250
8"	16"	.250
10"	20"	.250
12"	24"	.250
16"	32"	.375
20"	40"	.375
24"	48"	.500
30"	60"	.625
36"	72"	.625
42"	84"	.625
48"	96"	.625

NOTES:

1. ALL WORKMANSHIP AND MATERIAL TO MEET PSLUSD UTILITY STANDARDS MANUAL.
2. INSULATOR SHALL BE SIZED TO ALLOW CLEARANCE BETWEEN BELL JOINT AND CASING WALL OR RESTRAINT DEVICE AND CASING WALL.
3. PETROLEUM PRODUCTS SHALL NOT BE USED FOR LUBRICATION ON ANY PORTION OF THIS ASSEMBLY WITH PVC CARRIER PIPE.

MINIMUM CONSTRUCTION STANDARDS FOR CITY OF PORT ST. LUCIE 1001 SE PRINEVILLE ST. PORT ST. LUCIE, FL 34983 PHONE (772) 873-6400 FAX (772) 873-6433	**PIPE CASING FOR JACK AND BORE**	DETAIL: C-06 DATE: 2024 SCALE: N.T.S. SHEET: 1 OF 1

CPSLUSD PLANNING & ZONING #P24-221 **CPSLUSD UTILITY FILE #5001-32**

• 301 N.W. Flagler Ave.
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341

Engineering Business No. EB-0007657

CAPTEC Engineering, Inc.
Civil Engineering Professionals

DATE: 08/27/2025
DRAWN BY: JFK
DESIGNED BY: CS
CHECKED BY: JWC
PROJECT No.: 2026.4
HORZ. SCALE: N/A
VERT. SCALE: N/A
CADD FILE: 2026-1-General Notes

NO.	DATE	BY	REVISIONS
01	08/27/2025	JWC	BID SET

SCALE VERIFICATION
0 — 1
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

O.L. PEACOCK LAKE PARK MULTI-USE TRAIL
CITY OF PORT ST. LUCIE

UTILITY DETAILS

JOSEPH W. CAPRA
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37638

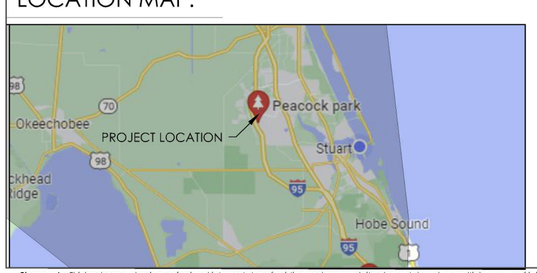
Printed Date:

JOB No.: 2026.4
SHEET 16 OF 16

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADOPTION BY CAPTEC ENGINEERING, INC. SHALL BE WITHOUT LIABILITY TO CAPTEC ENGINEERING, INC.

P:\2026\2026.4 - OL Peacock St Park\DWG\2026.4 - General Notes.dwg, 8/27/2025 11:03:41 AM, CAPTEC Engineering, Inc.

LOCATION MAP:



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L6 - FURNISHINGS

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IR-2 IRRIGATION PLAN PHASE EAST
IR-3 IRRIGATION PLAN PHASE WEST
IR-4 IRRIGATION DRIP DETAILS
IR-5 IRRIGATION DETAILS
IR-6 IRRIGATION SPECIFICATIONS

100% BID SET
PSL PROJECT #P24-221
PSLUSD PROJECT #5001-32

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Michael Flaugh
LANDSCAPE ARCHITECT
Fl. Reg. #LA0001728
772.419.0024
www.MikeFlaughLA.com
STUART | ST.LAMORADA | NAPLES

Landscape Plan
PEACOCK LAKE PARK
1950 SW Dreyfuss Blvd, Port St.Lucie, FL 34953

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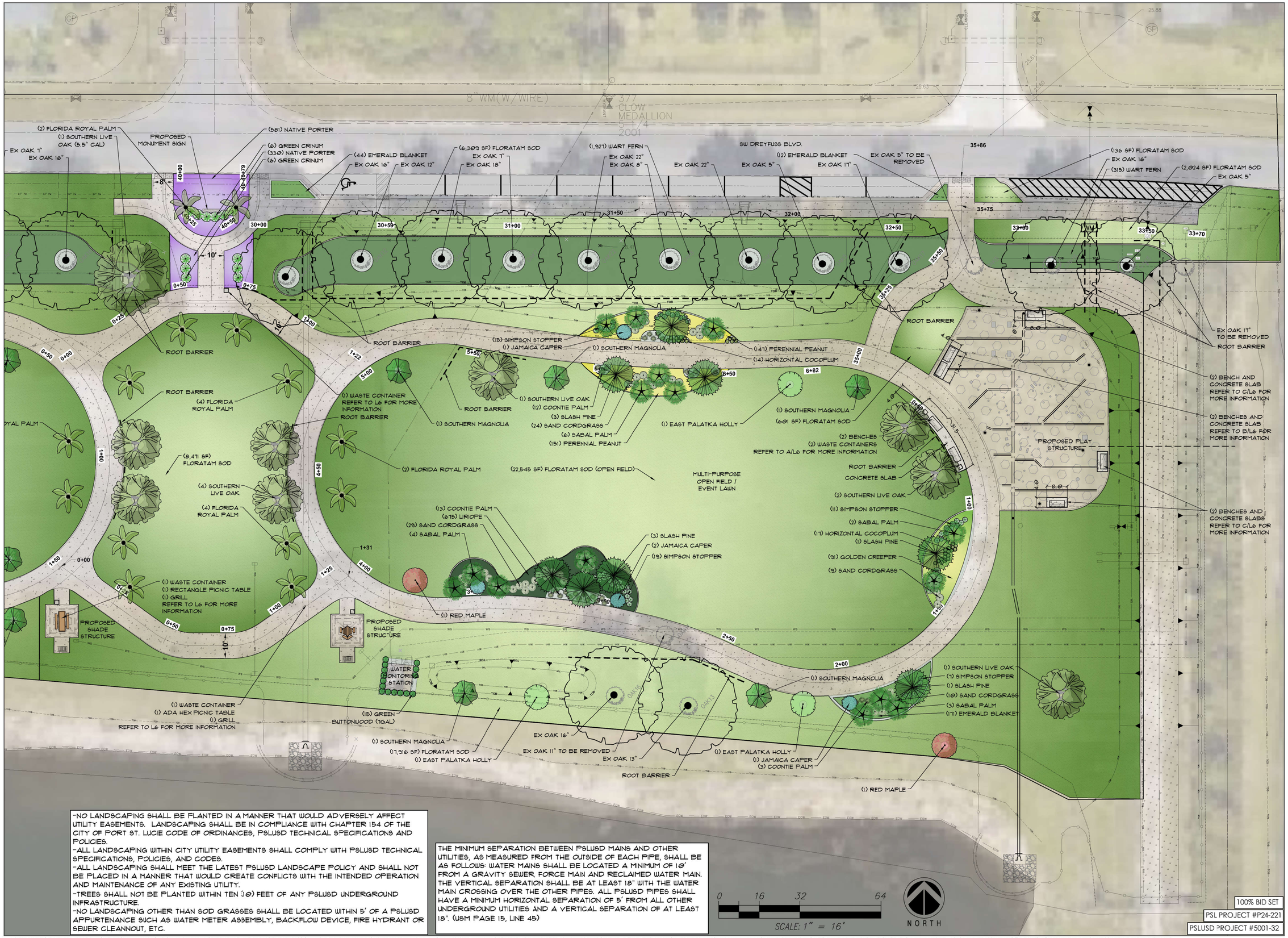
2	MISC. REVS.	05/12/2025
1	BID SET	03/31/2025
-	-	-

Date: 02/05/2025
Design by: MF, PA
Reviewed by: MF

Sheet
L1
TITLE SHEET



-NO LANDSCAPING SHALL BE PLANTED IN A MANNER THAT WOULD ADVERSELY AFFECT UTILITY EASEMENTS. LANDSCAPING SHALL BE IN COMPLIANCE WITH CHAPTER 154 OF THE CITY OF PORT ST. LUCIE CODE OF ORDINANCES, PSLUSD TECHNICAL SPECIFICATIONS AND POLICIES.
-ALL LANDSCAPING WITHIN CITY UTILITY EASEMENTS SHALL COMPLY WITH PSLUSD TECHNICAL SPECIFICATIONS, POLICIES, AND CODES.
-ALL LANDSCAPING SHALL MEET THE LATEST PSLUSD LANDSCAPE POLICY AND SHALL NOT BE PLACED IN A MANNER THAT WOULD CREATE CONFLICTS WITH THE INTENDED OPERATION AND MAINTENANCE OF ANY EXISTING UTILITY.
-TREES SHALL NOT BE PLANTED WITHIN TEN (10) FEET OF ANY PSLUSD UNDERGROUND INFRASTRUCTURE.
-NO LANDSCAPING OTHER THAN SOD GRASSES SHALL BE LOCATED WITHIN 5' OF A PSLUSD APPURTENANCE SUCH AS WATER METER ASSEMBLY, BACKFLOW DEVICE, FIRE HYDRANT OR SEWER CLEANNOUT, ETC.

THE MINIMUM SEPARATION BETWEEN PSLUSD MAINS AND OTHER UTILITIES, AS MEASURED FROM THE OUTSIDE OF EACH PIPE, SHALL BE AS FOLLOWS: WATER MAINS SHALL BE LOCATED A MINIMUM OF 10' FROM A GRAVITY SEWER. FORCE MAIN AND RECLAIMED WATER MAIN. THE VERTICAL SEPARATION SHALL BE AT LEAST 18" WITH THE WATER MAIN CROSSING OVER THE OTHER PIPES. ALL PSLUSD PIPES SHALL HAVE A MINIMUM HORIZONTAL SEPARATION OF 5' FROM ALL OTHER UNDERGROUND UTILITIES AND A VERTICAL SEPARATION OF AT LEAST 18". (USM PAGE 15, LINE 45)

0 16 32 64
SCALE: 1" = 16'

NORTH

100% BID SET

PSL PROJECT #P24-221

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Reviewed by: MF

Sheet
L2
LANDSCAPE PLAN
EAST

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Sheet
L3
LANDSCAPE PLAN
WEST

RED MAPLE

EAST PALATKA HOLLY

SOUTHERN MAGNOLIA

SLASH PINE

LIVE OAK

ROYAL PALM

SABAL PALM

JAMAICA CAPER 3

HORIZONTAL COCOPLUM

GREEN CRINUM LILY

SIMPSON'S STOPPER

SAND CORDGRASS

DWARF WALTERS VIBURNUM

COONTIE PALM

PERENNIAL-PEANUT

EMERALD BLANKET

BLUEBERRY FLAX LILY

GOLDEN CREEPER

BIG BLUE LIRIOPE

WART FERN

PICKEREL WEED

NATIVE PORTER

BERMUDA SOD

PLANT SCHEDULE

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	SIZE	NOTES
TREES							
	5	ACER RUBRUM	RED MAPLE	B & B	4"CAL	14 - 16' OA HT., 6' SPRD.	NATIVE
	9	ILEX X ATTENUATA 'EAST PALATKA'	EAST PALATKA HOLLY	B & B	4"CAL	14 - 16' OA HT., 6' SPRD.	NATIVE
	11	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	B & B	4"CAL	14 - 16' OA HT., 6' SPRD.	NATIVE
	13	PINUS ELLIOTTI	SLASH PINE	B & B	4"CAL	14 - 16' OA HT., 6' SPRD.	NATIVE
	11	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	B & B	4"CAL	14 - 16' OA HT., 6' SPRD.	NATIVE
	4	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK (5.5" CAL)	B & B	5.5"CAL	18 - 20' OA HT., 10-12' SPRD.	NATIVE
PALMS							
	14	ROYSTONEA ELATA	FLORIDA ROYAL PALM	B & B		10' GW	NATIVE
	38	SABAL PALMETTO	SABAL PALM	B & B	SLICK	10' CT	NATIVE

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	CONT	SPACING	SIZE	NOTES
SHRUBS							
	11	CAPPARIS CYNOPHALLOPHORA	JAMAICA CAPER	15 GAL	AS SHOWN	48" HT., FULL	NATIVE
	57	CHRYSOBALANUS ICACO 'HORIZONTALIS'	HORIZONTAL COCOPLUM	3 GAL	18" O.C.	8"X12"	NATIVE
	15	CONOCARPUS ERECTUS	GREEN BUTTONWOOD (1GAL)	7 GAL	AS SHOWN	36"HT., FULL	NATIVE
	12	CRINUM ASIATICUM	GREEN CRINUM	7 GAL	AS SHOWN	36"X36"	
	78	MYRCIANTHES FRAGRANS NATIVE	SIMPSON STOPPER	3 GAL	AS SHOWN	24" HT., FULL	NATIVE
	164	SPARTINA BAKERI NATIVE	SAND CORDGRASS	3 GAL	AS SHOWN	24" HT., FULL	NATIVE
	40	ZAMIA FLORIDANA	COONTIE PALM	3 GAL	30" O.C.	24"X24"	NATIVE

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	CONT	INSTALL	SPECS	NOTES
GROUND COVERS							
	508	ARACHIS GLABRATA 'ECOTURF'	PERENNIAL PEANUT	1 GAL	18" O.C.	12" SPRD.	
	732	CARISSA MACROCARPA	EMERALD BLANKET	1 GAL	18" O.C.	6"X8"	
	91	ERNODEA LITTORALIS	GOLDEN CREEPER	1 GAL	24" O.C.	4"X8"	NATIVE
	953	LIRIOPE MUSCARI 'BIG BLUE'	LIRIOPE	1 GAL	12" OC	6"X8"	
	5,021	MICROSORUM SCOLOPENDRIUM	WART FERN	1 GAL	18" O.C.	12" X 12"	
	911	STACHYTARPHETA JAMAICENSIS	NATIVE PORTER	1 GAL	12" O.C.	8"X12"	NATIVE
OTHER							
	59,219 SF	STENOTAPHRUM SECUNDATUM 'FLORATAM' ALLOWANCE FOR REPAIR AS NEEDED. WEED AND DISEASE FREE TIGHTLY FITTED STAGGERED JOINTS	FLORATAM SOD	SOD	TIGHT		
	42,972 SF	STENOTAPHRUM SECUNDATUM 'FLORATAM' ALLOWANCE FOR REPAIR AS NEEDED. WEED AND DISEASE FREE TIGHTLY FITTED STAGGERED JOINTS	FLORATAM SOD (OPEN FIELD)	SOD	TIGHT		

PLANTING

SYMBOL	CODE	DESCRIPTION	QTY	DPT. / HT.	SPECS	INSTALLATION
	PL-02	SOIL	241 CY	4"	1:1 SCREENED COMPOST AND TOPSOIL	TILLED IN, REMOVE EX SOIL AS NEEDED
	PL-03	MULCH	119 CY	3"	BLACK, SHREDDED, HARDWOOD, NON-CYPRESS	

HARDSCAPE

SYMBOL	CODE	DESCRIPTION	QTY	DEPTH / SIZE	SPECIFICATIONS	INSTALLATION
	H-01	ROOT BARRIER	782 LF	30"	GRAVEL: #57 STONE, BARRIER: RIDGID, MIN 30" HT.	LEVEL/ BELOW ADJOINING HARDSCAPES

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Sheet
L4
PLANT SCHEDULE
/ PLANT PICTURES

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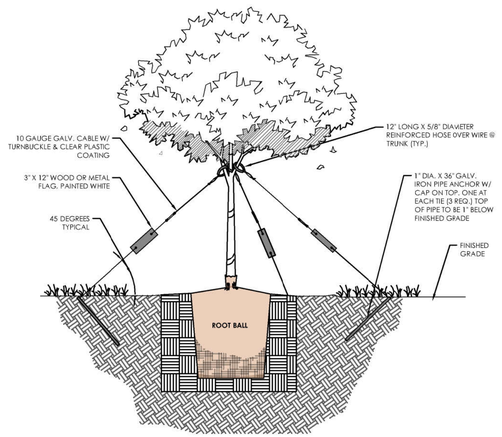
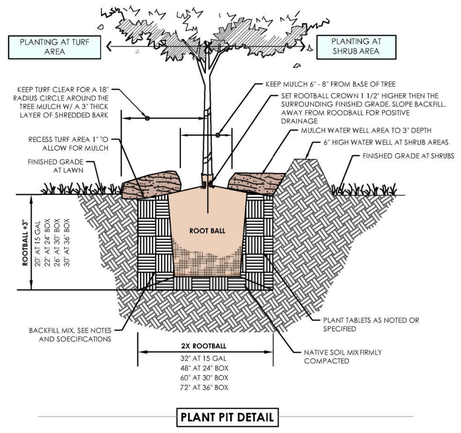
LANDSCAPE INSTALLATION NOTES:

1. The landscape contractor shall designate an English speaking, skilled crew foreman for the project, who will be available and accessible for the duration of the landscape installation.
2. All specifications must be satisfied. If there is a problem locating a material with given specifications, the contractor shall contact the landscape architect by email prior to installation. At the discretion of the landscape architect, a substitution may be made.
3. Landscape contractor is responsible to review and reconcile plan with landscape materials list, and analyze site conditions and access prior to submitting a proposal.
4. Landscape contractor must provide evidence of workman's compensation and liability insurance in proposal package.
5. The landscape contractor shall comply with all local and State laws, codes and ordinances.
6. All plant material furnished by the landscape contractor shall be Florida #1 or better (Grades and Standards for Nursery Plants, Florida Department of Agriculture and Consumer Services, Latest Edition), unless otherwise noted on the landscape materials list. As many species tolerate both sunny and shady growing conditions, The landscape contractor is responsible for acquiring all plant material grown in similar conditions to the site.
7. The landscape contractor shall complete all work according to the Florida Green Industries Best Management Practices.
8. The landscape contractor must specify start and completion dates, if awarded the project.
9. The landscape contractor is responsible for locating all underground utilities prior to commencing work.
10. All planting areas shall be prepared by removing all debris, including asphalt, concrete, or similar materials not suited for landscape planting.
11. Planting soil shall be clean of rocks, sticks, roots and weeds, and shall be well-draining.
12. All landscaped areas shall be finish graded such that finished elevation will be flush and level with surrounding paved surfaces. The finished grade after planting and mulching shall not impede the flow of drainage into landscaped areas and to prevent the backwash of mulch and debris into paved areas.
13. All planting beds must drain sufficiently prior to planting. If existing soil is not adequate for establishment of plant materials due to poor drainage or chemical properties, soil amendments shall be added prior to planting.
14. Plants shall not be placed too close to one another or any hardscapes. See landscape materials list and planting details for spacing and placement of all plants. A mulch strip shall be left between the plantings and walls, edge of sod, driveway or walkways. All plants shall be placed outside the eaves of the roof, unless otherwise indicated on the landscape plan.
15. All plants to be relocated shall be properly root pruned 6 to 10 weeks prior to relocation.
16. All new landscape plants shall be planted slightly higher than the existing grade leaving top of the root ball exposed.
17. All plant materials shall be thoroughly watered in at the time of planting.
18. 3" layer of organic mulch shall be laid in all landscape beds. No mulch shall be laid near tree trunks. No mulch shall be laid on top of citrus tree root balls.
19. Newly planted trees shall be staked only if the root ball moves in the wind or the trees are located in an area of windy conditions. All palms shall be staked. All wood braces and brace frames shall be stained dark brown. No nails shall be driven into any palm or tree.
20. Planting plan takes precedence over plant list.
21. The landscape bid shall include irrigation on a separate contract, expressed as a line-item proposal.
22. All landscape areas shall be irrigated with fully automatic irrigation system. The irrigation contractor shall provide 100% coverage in all irrigated planting areas. The irrigation system shall be designed according to accepted irrigation standards using water conservation principles with low-volume irrigation system. The system shall accommodate easy adjustments for seasonal irrigation need changes or local watering restrictions.
23. All sod and shrub areas shall be irrigated on separate zones, whenever possible. Planting areas with different watering needs shall be placed on separate zones.
24. All shrub & ground cover areas shall be irrigated with drip line or mist heads; trees and palms shall have bubblers. All heads in a given zone must have the same precipitation rate.
25. Spray heads shall be placed and adjusted to minimize over-spray on paved areas, roadways and curbing. No over-spray on buildings is acceptable.
26. If not installed per plan or if no irrigation plan has been provided as part of the landscape plan, at project closeout the contractor shall provide the owner with an irrigation record drawing.
27. The contractor(s) shall keep all work areas neat and tidy on a daily basis. At completion of the installation, the contractor shall remove from the property all temporary structures and garbage at his/her own expense.
28. The contractor(s) shall keep all plants watered, fertilized, mulched, pruned, staked and guyed as necessary to assure specified minimum grade of Florida #1 throughout the duration of the project construction period. Planting beds shall be kept free of litter and undesirable vegetation. The contractor(s) is responsible for keeping all the plant material healthy, vigorous, and undamaged throughout the duration of the project construction period.
29. at project closeout the contractor shall provide the owner with manuals and warranty information for all installed Furniture, fixtures and equipment.
30. The final payment is made upon completion of project and execution of lien release affidavit.
31. All shrubs and ground covers shall be warrantied for 90 days; all trees and palms shall be warranted for 1 year from the date of final acceptance and payment.



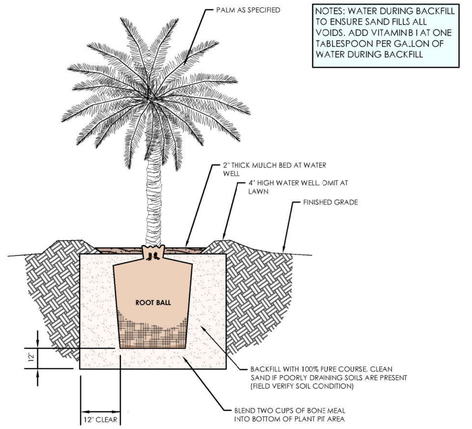
STAKING DETAIL



PLANT PIT DETAIL

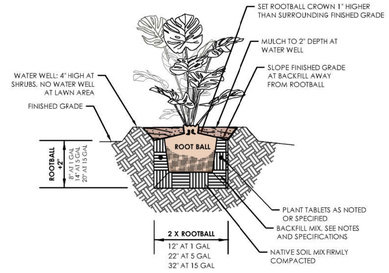
1 TREE GUY WIRING PLANTING

NOT TO SCALE



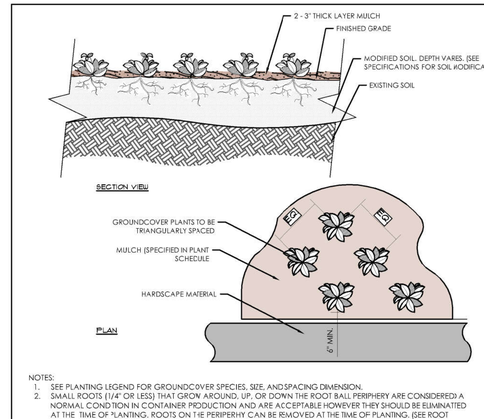
2 PALM PLANTING

NOT TO SCALE



3 SHRUB PLANTING

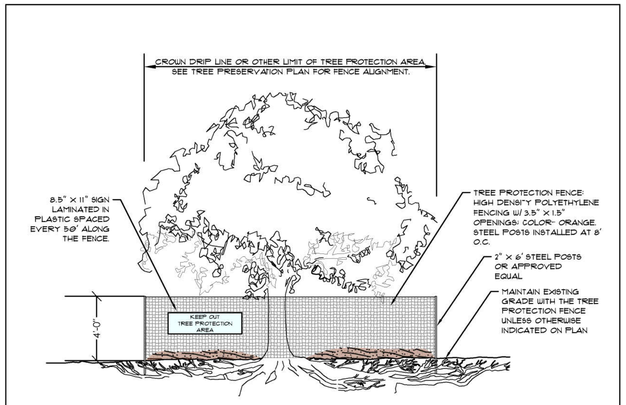
NOT TO SCALE



NOTES:
1. SEE PLANTING LEGEND FOR GROUNDCOVER SPECIES, SIZE, AND SPACING DIMENSION.
2. SMALL ROOTS (1/4" OR LESS) THAT GROW AROUND, UP, OR DOWN THE ROOT BALL PERIPHERY ARE CONSIDERED A NORMAL CONDITION IN CONTAINER PRODUCTION AND ARE ACCEPTABLE HOWEVER THEY SHOULD BE ELIMINATTED AT THE TIME OF PLANTING. ROOTS ON THE PERIPERHY CAN BE REMOVED AT THE TIME OF PLANTING. (SEE ROOT BALL SHAVING CONTAINER DETAIL).
3. SETTLE SOIL AROUND ROOT BALL OF EACH GROUNDCOVER PRIOR TO MULCHING.

4 GROUNDCOVER

NOT TO SCALE



5 TREE PROTECTION

NOT TO SCALE

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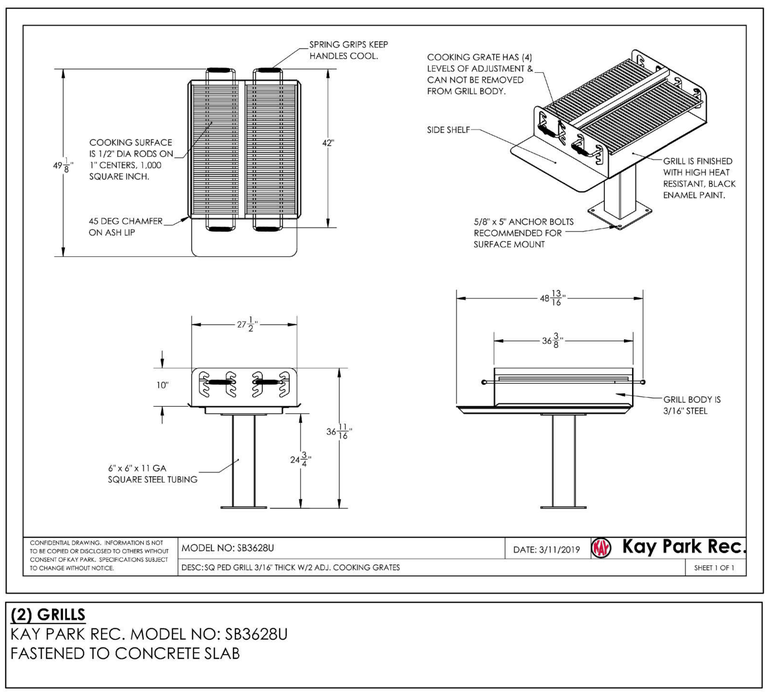
(7) TOTAL BENCHES ALONG THE TRAIL
6' WIDE LAGUNA BENCHES "CEDAR" (MODEL NUMBER H-6570C)
FASTENED TO CONCRETE SLAB

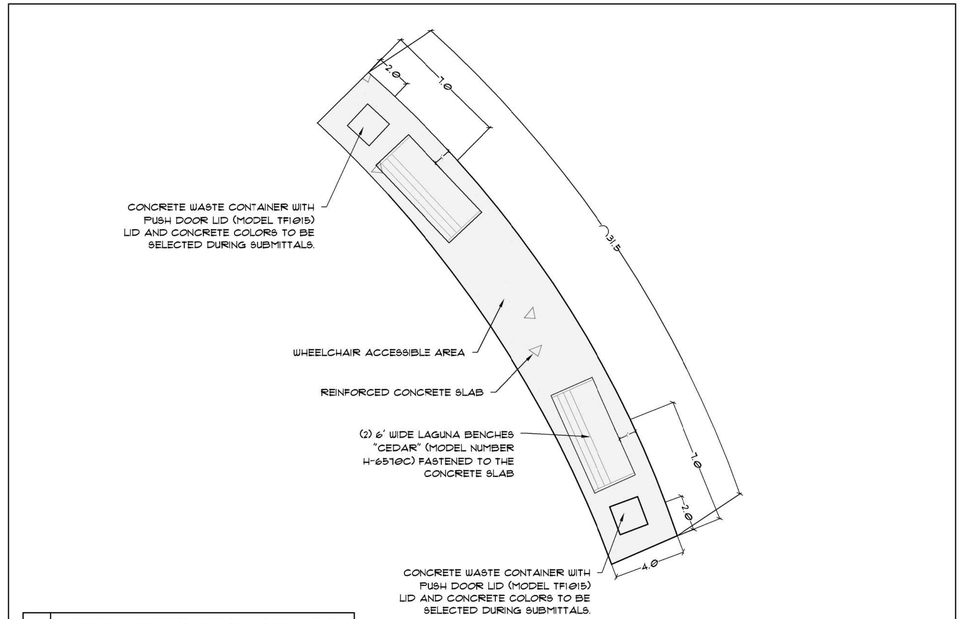
(5) TOTAL WASTE CONTAINERS ALONG THE TRAIL
CONCRETE WASTE CONTAINER WITH PUSH DOOR LID (MODEL TF1015)

(1) RECTAGULAR PICNIC TABLE
8' LONG ULINE RECYCLED RECTANGLE PICNIC TABLE
FASTENED TO CONCRETE SLAB

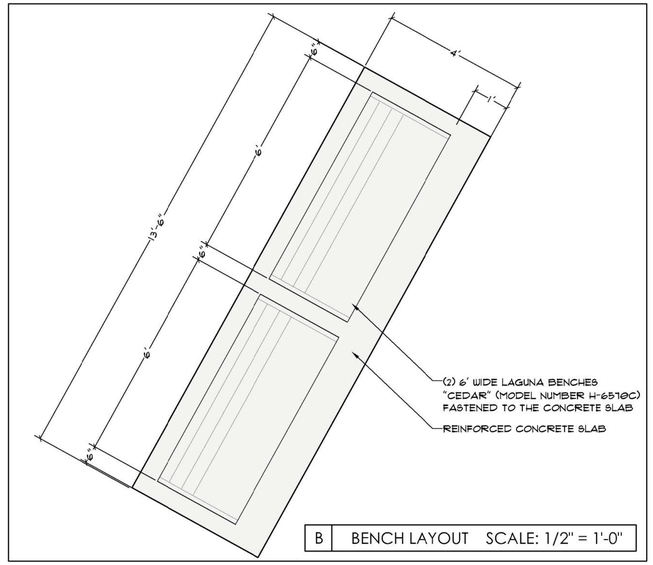
(1) HEX ADA PICNIC TABLE
ULINE RECYCLED HEX, ADA PICNIC TABLE
FASTENED TO CONCRETE SLAB



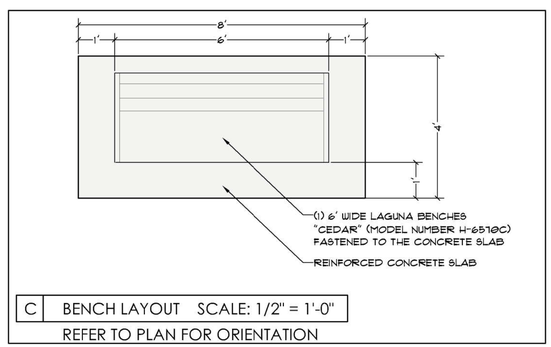
(2) GRILLS
KAY PARK REC. MODEL NO: SB3628U
FASTENED TO CONCRETE SLAB



A BENCH LAYOUT SCALE: 1/4" = 1'-0"



B BENCH LAYOUT SCALE: 1/2" = 1'-0"



C BENCH LAYOUT SCALE: 1/2" = 1'-0"
REFER TO PLAN FOR ORIENTATION

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2	MISC. REVS.	05/12/2025
3	100% BID SET	05/30/2025
4	100% BID SET	07/18/2025

Date: 02/05/2025
Design by: MF, PA
Reviewed by: MF

Sheet
L6
FURNISHINGS

100% BID SET
PSL PROJECT #P24-221
PSLUSD PROJECT #5001-32

Please note: This landscape plan is a professional interpretation of existing and proposed site elements based on multiple sources of information. These sources may include property surveys, architectural plans, google aerial imagery, site observations, photographs and site plans. At times, these supporting documents are inaccurate or approximate at best and on-site adjustments to the design during installation are necessary. ***It is the contractors' responsibility to verify all measurements and quantities prior to commencing work.***

NOTES:

1. PIPE AND EQUIPMENT SHOWN OUTSIDE PROPERTYLINE IS FOR GRAPHIC CLARITY ONLY.
2. ALL UTILITIES MUST BELOCATED, CAREFULLY HAND DUG TO VERIFY UTILITY DEPTH BEFORE RUNNING IRRIGATION MAINLINE PIPE & WIRE CONDUIT ACROSS.
3. TWO-WIRE CONDUIT MINIMUM SIZE 1.5-INCHES. HDPE MAINLINE SHALL NOT BE SLEEVED. CONTRACTOR SHALL INSTALL CONDUIT AND MAINLINE IN SUB-GRADE AS SHOWN IN DETAILS BEFORE ROADWAY ROCK LAYER IS SPREAD.
4. ALL PIPE RUNNING INTO PHASE SHALL BE CAPPED AND MARK ON ASBUILT DRAWING. WRAP A 14 GAUGE AROUND PIPE END AND RUN WIRE INTO A 10" ROUND VALVE BOX OVER PIPE END.

UTILITY NOTE:
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3. ALL PSLUSD PIPES SHALL HAVE A MINIMUM HORIZONTAL SEPARATION OF 5-FEET FROM ALL OTHER UNDERGROUND UTILITIES AND A VERTICAL SEPARATION OF AT LEAST 18-INCHES.
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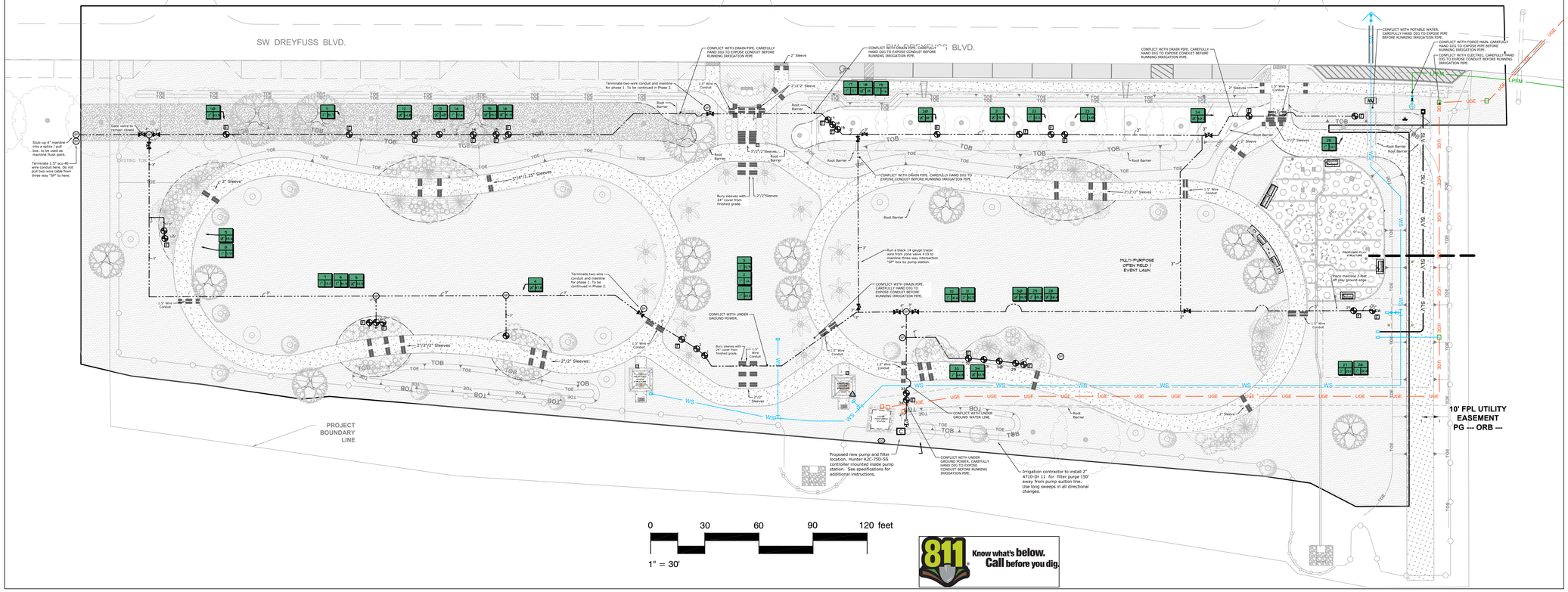


IRRIGATION_SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
⑥ ⑥ ⑧ Ⓦ Ⓥ Ⓨ Ⓦ	HUNTER PROS-06-PRS30-CV ADJ SERIES TURF SPRAY, 30 PSI REGULATED 6IN. POP-UP, WITH DRAIN CHECK VALVE.
Ⓣ	HUNTER MP CORNER PROS-06-PRS30-CV TURF ROTATOR, 6IN. POP-UP WITH CHECK VALVE, PRESSURE REGULATED TO 30 PSI, T=TURQUOISE ADJ ARC 45-105.
Ⓛ Ⓢ Ⓡ LBT SBT RBT	HUNTER MP STRIP PROS-06-PRS30-CV TURF ROTATOR, 6IN. POP-UP WITH CHECK VALVE, PRESSURE REGULATED TO 30 PSI, LCS=IVORY LEFT STRIP, SS=BROWN SIDE STRIP, RCS=COPPER RIGHT STRIP.
Ⓜ Ⓛ Ⓞ	HUNTER MP1000 PROS-06-PRS30-CV TURF ROTATOR, 6IN. POP-UP WITH CHECK VALVE, PRESSURE REGULATED TO 30 PSI, M=MAROON ADJ ARC 90 TO 210, L=LIGHT BLUE 210 TO 270 ARC, O=OLIVE 360 ARC.
Ⓚ Ⓖ Ⓡ	HUNTER MP2000 PROS-06-PRS30-CV TURF ROTATOR, 6IN. POP-UP, WITH CHECK VALVE, PRESSURE REGULATED TO 30 PSI, K=BLACK ADJ ARC 90-210, G=GREEN ADJ ARC 210-270, R=RED 360 ARC.
Ⓑ Ⓨ Ⓐ	HUNTER MP3000 PROS-06-PRS30-CV TURF ROTATOR, 6IN. POP-UP WITH CHECK VALVE, PRESSURE REGULATED TO 30 PSI, B=BLUE ADJ ARC 90-210, Y=YELLOW ADJ ARC 210-270, A=GRAY 360 ARC.
Ⓑ	HUNTER MP3500 PROS-06-PRS30-CV TURF ROTATOR, 6IN. POP-UP WITH CHECK VALVE, PRESSURE REGULATED TO 30 PSI, LB=LIGHT BROWN ADJUSTABLE ARC, 90-210.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	
① ① 800 A800 P	HUNTER MP800SR PROS-06-PRS30-CV TURF ROTATOR, 6IN. POP-UP WITH CHECK VALVE, PRESSURE REGULATED TO 30 PSI, ADJ=ORANGE AND GRAY (ARC 90-210), 360=LIME GREEN AND GRAY (ARC 360)	
25 Ⓛ Ⓞ	HUNTER MP815 PROS-06-PRS30-CV TURF ROTATOR, 6IN. POP-UP WITH CHECK VALVE, PRESSURE REGULATED TO 30 PSI, M=MAROON AND GRAY ADJ ARC 90 TO 210, L=LIGHT BLUE AND GRAY 210 TO 270 ARC, O=OLIVE AND GRAY 360 ARC.	
1401 1402 1404	RAIN BIRD 1804-SAM-1400 FLOOD FLOOD BUBBLER 4.0IN. POPUP WITH CHECK VALVE. INSTALL W/ PA-80 ADAPTER.	
35 25	HUNTER I-20-06-SS-PRB-MPR 35-30-25 TURF ROTOR, 6IN. POP-UP. ADJUSTABLE AND FULL CIRCLE. STAINLESS STEEL RISER. DRAIN CHECK VALVE. MPR NOZZLE. PRESSURE REGULATING BODY.	37
Ⓕ	NETAFIM TLFV-1 AUTOMATIC FLUSH VALVE, WITH INSERT INLET	37
OI	RAIN BIRD OPERIND DRIP SYSTEM OPERATION INDICATOR, STEM RISES 6IN. FOR CLEAR VISIBILITY WHEN DRIP SYSTEM IS CHARGED TO A MINIMUM OF 20PSI.	
	NETAFIM TLHCVXR-CS-0.11-12 TECHLINE HCVXR-CS PRESSURE COMPENSATING LANDSCAPE DRIPLINE WITH COPPER STRIPE, CHECK VALVE AND ANTI-SIPHON FEATURE. 0.71 GPH EMITTERS AT 12" O.C. DRIPLINE LATERALS SPACED AT 12" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. 17MM.	18,604 SQ/FT

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	
	RAIN BIRD PESB 1IN., 1-1/2IN., 2IN., 3IN., 4IN. PLASTIC INDUSTRIAL REMOTE CONTROL VALVE. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION. WITH SCRUBBER TECHNOLOGY FOR RELIABLE PERFORMANCE IN DIRTY WATER IRRIGATION APPLICATIONS.	
	AQUAFUSE CONTROLFLOW AQUAFUSE DDUCTILE IRON GATE VALVE. SAME SIZE AS HDPE PE4710 DR 11 MAINLINE.	
C	HUNTER PED-SS-A2C-150D-SS 150-STATION DECODER CONTROLLER WITH ONE (1) A2C-D75 MODULE IN AN OUTDOOR STAINLESS STEEL PEDESTAL	
	HUNTER WSS WIRELESS SOLAR, RAIN FREEZE SENSOR INSTALL AS NOTED. GUTTER MOUNT BRACKET.	
	HUNTER HY-100 1IN. MPT X MPT THREADED INLET AND OUTLET FILTER WITH 150 MESH STAINLESS STEEL SCREEN	
GG	CONTROLLER GROUNDING GRID GROUNDING GRID SHALL BE INSTALLED PER DETAIL DRAWING AND SPECIFICATIONS.	
SP	PULL / SPICE BOX CARSON RECTANGULAR VALVE BOX MODEL # 1017. FOR ZONE CONTROL WIRES, BOXES SHALL HAVE A MAXIMUM SPACING OF 300-FEET. LEAVE MINIMUM 24-INCHES ADDITIONAL LOOSE WIRE IN VALVE BOX. USE ONLY 3M DBY/R-6 SPLICE KITS.	
PS	POINT OF CONNECTION HOOVER PUMP STATION, SEE SPECIFICATIONS.	

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	IRRIGATION LATERAL LINE: PVC CLASS 200 SDR 21 CLASS 200 SDR 21 SOLVENT WELD BELL END PVC PIPE. USE ONLY WELD-ON MEDIUM BODY 721 BLUE GLUE WITH P-70 PURPLE PRIMER. APPLY SOLVENT WELD GLUE PER MANUFACTURES INSTRUCTIONS. SEE SPECIFICATIONS AND DETAILS FOR ADDITIONAL INSTALLATION INSTRUCTIONS.
	IRRIGATION MAINLINE: HDPE PE4710 DR 11
	PIPE SLEEVE: PVC SCHEDULE 40 SOLVENT WELD BELL END PVC PIPE. USE ONLY WELD-ON MEDIUM BODY 721 BLUE GLUE WITH P-70 PURPLE PRIMER. APPLY SOLVENT WELD GLUE PER MANUFACTURES INSTRUCTIONS. SLEEVING SIZES 1.5-INCH THRU 4-INCH SHALL BE SCH-40, 6-INCH AND LARGER SHALL BE CLASS 200 PVC PIPE.

VALVE CALLOUT
— VALVE NUMBER
#" #+ — VALVE FLOW
VALVE SIZE

BID SET

PSL Project #P24-221
100% Plans
PSLUSD Project # 5001-32

VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	PSI @ POC	PRECIP
1	RAIN BIRD PESB	1"	TURF ROTOR	22.23	53.2	0.72 IN/H
2	RAIN BIRD PESB	1"	BUBBLER	14	36.6	N/A
3	RAIN BIRD PESB	1"	TURF ROTARY	22.87	38.8	0.39 IN/H
4	RAIN BIRD PESB	1-1/2"	TURF ROTOR	41.78	54.2	0.72 IN/H
5	RAIN BIRD PESB	1-1/2"	TURF ROTARY	24.95	39.9	0.49 IN/H
6	RAIN BIRD PESB	2"	TURF ROTOR	51.91	55.6	0.69 IN/H
7	RAIN BIRD PESB	1"	TURF ROTARY	13.25	38.2	0.26 IN/H
8	RAIN BIRD PESB	1"	TURF ROTARY	7.77	36.1	0.26 IN/H
9	RAIN BIRD PESB	1-1/2"	TURF ROTOR	45.63	54.2	0.64 IN/H
10	RAIN BIRD PESB	2"	DRIPLINE	43.55	33.6	1.23 IN/H
11	RAIN BIRD PESB	2"	TURF ROTARY	51.73	41.1	0.59 IN/H
12	RAIN BIRD PESB	1-1/2"	DRIPLINE	34.76	34.5	1.23 IN/H
13	RAIN BIRD PESB	1-1/2"	BUBBLER	40	40	N/A
14	RAIN BIRD PESB	1"	TURF ROTARY	12.58	38.2	0.23 IN/H
15	RAIN BIRD PESB	1-1/2"	TURF ROTARY	29.18	40.0	0.51 IN/H
16	RAIN BIRD PESB	1-1/2"	DRIPLINE	41.45	32.5	1.23 IN/H
17	RAIN BIRD PESB	1"	DRIPLINE	2.1	28.9	1.23 IN/H
18	RAIN BIRD PESB	1-1/2"	BUBBLER	25	38.9	N/A
19	RAIN BIRD PESB	1"	DRIPLINE	11.6	31.2	1.23 IN/H
20	RAIN BIRD PESB	1-1/2"	DRIPLINE	38.67	31.2	1.23 IN/H
21	RAIN BIRD PESB	1-1/2"	TURF ROTARY	29.65	38.6	0.59 IN/H
22	RAIN BIRD PESB	1"	TURF ROTARY	12.28	37.6	0.46 IN/H
23	RAIN BIRD PESB	1"	TURF ROTARY	12.97	37.8	0.26 IN/H
24	RAIN BIRD PESB	1-1/2"	DRIPLINE	36.18	32.9	1.23 IN/H
25	RAIN BIRD PESB	1"	TURF ROTARY	13.95	37.0	0.7 IN/H
26	RAIN BIRD PESB	1"	TURF ROTARY	10.43	35.6	0.39 IN/H
27	RAIN BIRD PESB	2"	TURF ROTARY	29.13	39.1	0.34 IN/H
28	RAIN BIRD PESB	1-1/2"	DRIPLINE	38.39	32.1	1.23 IN/H
29	RAIN BIRD PESB	2"	TURF ROTOR	55.28	53.0	0.67 IN/H
30	RAIN BIRD PESB	1-1/2"	BUBBLER	35.5	31.2	N/A
31	RAIN BIRD PESB	2"	TURF ROTOR	52.89	52.3	0.69 IN/H
32	RAIN BIRD PESB	1"	TURF ROTARY	18.51	36.0	0.26 IN/H
33	RAIN BIRD PESB	2"	TURF SPRAY	64.84	37.6	1.36 IN/H
34	RAIN BIRD PESB	1-1/2"	TURF ROTARY	33.93	36.6	0.39 IN/H

Scale:	1" = 30'
Design Date:	02-17-25
Drawn By:	RT
Last Date: Modified	07-22-2025

Revisions:
1. 03-07-25: Modified per P.S.I. comments.
2. 03-31-25: Modified per P.S.I. comments.
3. 05-19-25: Modified per P.S.I. Utility modification
4. 06-30-25: Modified irrigation for park benches.
5. 07-17-25: Removed irrigation on grass drive.
6. 07-22-25: Removed irrigation in new roadway parking

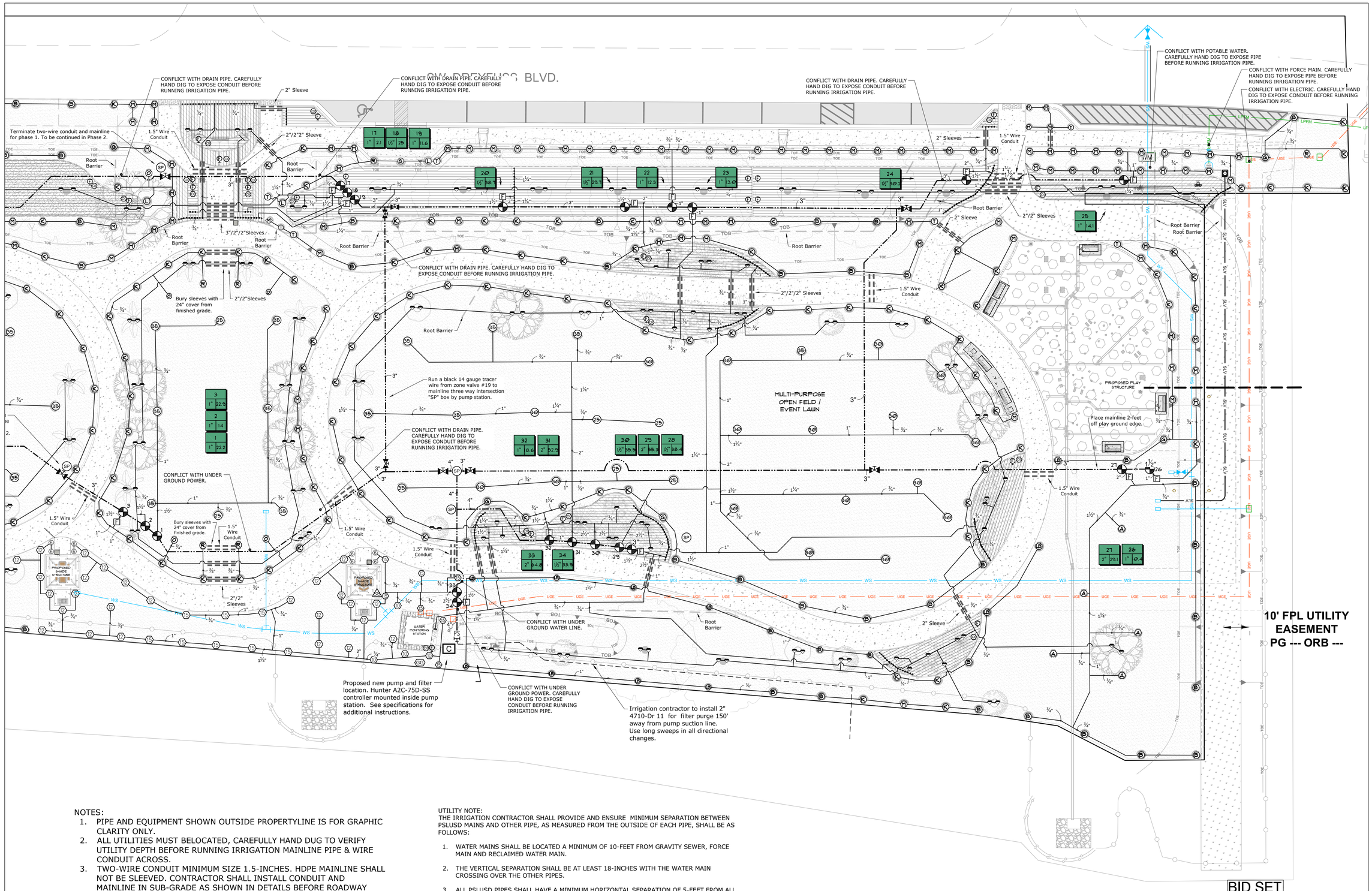
COVER SHEET & IRRIGATION LEGEND

NORTH

Peacock Lake Park
1950 SW Dreyfuss Blvd.
Port ST. Lucie, FL., 34953

IR-1
of 6

Project #



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0 16 32 48 64 feet
1" = 16'

811 Know what's below. Call before you dig.

BID SET

PSL Project #P24-221
100% Plans
PSLUSD Project # 5001-32

Scale:	1" = 16'
Design Date:	02-17-25
Drawn By:	RT
Last Date: Modified	07-22-2025

Revisions:
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IRRIGATION PLAN

Peacock Lake Park
1950 SW Dreyfuss Blvd.
Port ST. Lucie, FL., 34953

NORTH

IR-2
of 6

SW DREYFUSS BLVD.

Stub-up 4" mainline into a splice / pull box. to be used as mainline flush point.

Terminate 1.5" scu-40 wire conduit here. Do not pull two-wire cable from three way "SP" to here.

Gate valve to remain closed

EXISTING TREE

2" Sleeve

3"/4"/1.25" Sleeves

2"/3"/2" Sleeves

2"/2" Sleeves

1.5" Wire Conduit

Terminate two-wire conduit and mainline for phase 1. To be continued in Phase 2.

CONFLICT WITH DRAIN PIPE. CAREFULLY HAND DIG TO EXPOSE CONDUIT BEFORE RUNNING IRRIGATION PIPE.

2"/2"2" Sleeve

Root Barrier

3"/2"/2"Sleeves

Bury sleeves with 24" cover from finished grade.

2"/2"Sleeves

Terminate two-wire conduit and mainline for phase 1. To be continued in Phase 2.

CONFLICT WITH UNDER GROUND POWER.

2"/2" Sleeves

Run a black 1 wire from zon mainline thre "SP" box by p

CONFLICT WITH DRA CAREFULLY HAND D EXPOSE CONDUIT BE RUNNING IRRIGATIO

Proposed new pump and filter location. Hunter A2C-75D-SS controller mounted inside pump station. See specifications for additional instructions.

PROJECT BOUNDARY LINE

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BID SET

PSL Project #P24-221
100% Plans
PSLUSD Project # 5001-32

Know what's below. Call before you dig.

0 16 32 48 64 feet
1" = 16'

Scale:	1" = 16'
Design Date:	02-17-25
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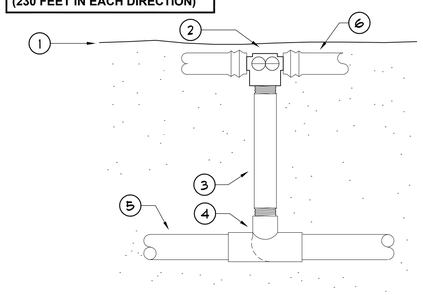
IRRIGATION PLAN

Peacock Lake Park
1950 SW Dreyfuss Blvd.
Port ST. Lucie, FL., 34953

NORTH

IR-3
of 3

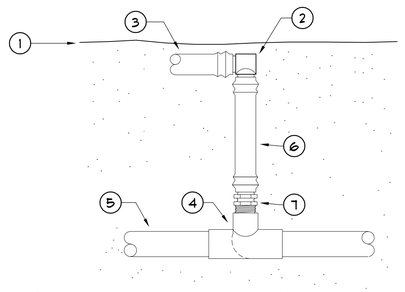
MAX 6.90 GPM FLOW PER RISER.
(230 FEET IN EACH DIRECTION)



1. FINISHED GRADE
2. NETAFIM COMBINATION TEE MOD TL075MA.
3. 3/4" SCH-80 NIPPLE, LENGTH AS REQUIRED.
4. SCH-40 PVC TEE, (S X S X FPT).
5. PVC PIPE, DRIPLINE SUPPLY / EXHAUST HEADER.
6. DRIPLINE 4-INCHES BELOW FINISHED GRADE.

1 DRIPLINE SUPPLY HEADER CENTER FEED RISER

N.T.S. DRIPLINE SUPPLY HEADER CENTER FEED RISER

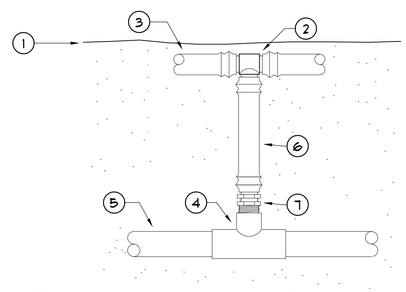


1. FINISHED GRADE
2. NETAFIM TLELL, ELBOW.
3. DRIPLINE, SEE SPECIFICATIONS FOR TYPE. PLACE 4-INCHES UNDER MULCH.
4. SCH-40 PVC ¾" TEE, (S x S x FPT) OR ¾" (S x FPT) ELBOW
5. PVC PIPE, DRIPLINE SUPPLY / EXHAUST HEADER.
6. BLANK TUBING.
7. NETAFIM TL075MA ADAPTOR.

MAX 3.45 GPM FLOW PER BLANK TUBING RISER.

2 DRIPLINE SUPPLY / EXHAUST HEADER CONNECTION

N.T.S. DRIPLINE SUPPLY / EXHAUST HEADER CONNECTION



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2. NETAFIM TLTEE.
3. DRIPLINE, SEE SPECIFICATIONS FOR TYPE. PLACE 4-INCHES BELOW FINISHED GRADE.
4. SCH-40 PVC ¾" TEE, (S x S x FPT).
5. PVC PIPE, DRIPLINE SUPPLY / EXHAUST HEADER.
6. BLANK TUBING.
7. NETAFIM TL075MA ADAPTOR.

MAX 3.45 GPM FLOW PER BLANK TUBING RISER.

3 DRIPLINE SUPPLY / EXHAUST HEADER CONNECTION

N.T.S. DRIPLINE SUPPLY / EXHAUST HEADER CONNECTION

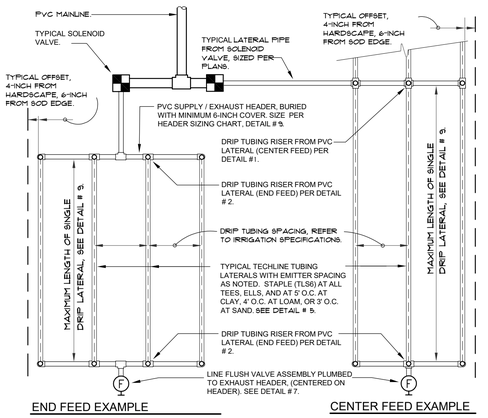
DRIP SPECIFICATIONS:

1. DRIP TUBING; NETAFIM TECHLINE-CV, ROW SPACING 12-INCHES. DRIP GRID LAY-OUT IS BASED ON 30 PSI. ALL DRIP ZONE VALVES HAVE A RAIN BIRD PRS-D PRESSURE REGULATOR ON SOLENOID VALVE SET TO PRESSURE NOTED IN VALVE SCHEDULE.

2. INSTALL DRIP SYSTEM IN THE FOLLOWING ORDER: A). WITH ALL MAINLINE AND IT'S ASSOCIATE EQUIPMENT COMPLETELY INSTALLED, FLUSH MAINLINE TILL FREE AND CLEAR OF DEBRIS. B). INSTALL ALL LATERALS TO THE VARIOUS DRIP GRIDS, AND SUPPLY HEADERS WITH RISERS EXTENDED ABOVE GROUND. CENTER FEED RISERS, TEMPORARY EXTEND NIPPLES WITH PIPE AND COUPLINGS (DO NOT GLUE). FLUSH TILL FREE AND CLEAR OF DEBRIS, TEMPORARY CAP NIPPLES, SEAL BLANK TUBING (RISERS) WITH TAPE. C). INSTALL EXHAUST HEADERS - RISERS - FLUSH POINTS. D). INSTALL DRIP GRID, STAPLE TUBING PER DETAIL #5, CONNECT DRIP TUBING TO SUPPLY HEADER RISERS. FLUSH TILL FREE AND CLEAR OF DEBRIS. E). CONNECT DRIP GRID TO EXHAUST HEADER RISERS, FLUSH SYSTEM USING "FLUSH VALVE". PVC DISCHARGE AND EXHAUST HEADERS MUST BE BURIED WITH MINIMUM 6" COVER. MULCH IS NOT CONSIDERED AS COVERAGE.

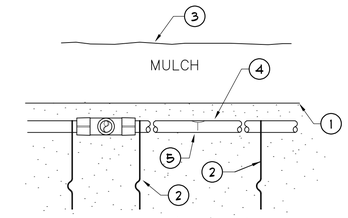
3. INSTALL OPERATION INDICATORS "OI" WITHIN 12-INCHES OF FLUSH POD, ONE AT END OF EACH DRIP GRID. SEE DETAIL #6. ACTIVATE DRIP ZONE, ENSURE ALL OPERATION INDICATORS ARE FULLY EXTENDED, ADJUST STREAM SPRAY TO WHERE IT CAN EASILY BE SEEN BY MAINTENANCE PERSON.

4. PRESSURE TEST WITH OWNERS REPRESENTATIVE PRESENT; PER ZONE, TEMPORARY INSTALL (2) PRESSURE GAUGES (LIQUID FILLED PRESSURE GAUGES) ON (2) FLUSH POINTS, (1) ON LARGEST GRID "FLUSH POINT" AND THE OTHER ON FARTHEST GRID "FLUSH POINT". ACTIVATE ZONE, AFTER FLOW HAS STABILIZED, VERIFY ALL ZONE OPERATION INDICATORS ARE FULLY EXTENDED, CHECK PRESSURE ON BOTH GAUGES, PRESSURE MUST BE 20 PSI OR HIGHER TO PASS TEST. IF TEST FAILS, CONTRACTOR TO LOCATE AND CORRECT PROBLEM AND RETEST. IT IS IN THE CONTRACTORS BEST INTEREST TO PERFORM HIS OWN TEST BEFORE HE CALLS OWNERS REPRESENTATIVE PRESENTS TO AVOID RE-INSPECTION FEE'S



4 GENERAL DRIP EQUIPMENT PLACEMENT

N.T.S.



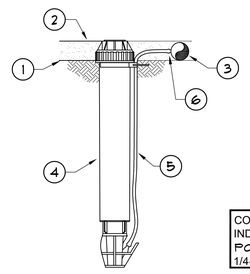
NOTES:

1. PLACE TIE DOWN STAKES EVERY 3-FEET IN SAND, 4-FEET IN LOAM, AND EVERY 5-FEET IN CLAY.
2. PLACE (1) DRIP STAKE ON EACH FITTING. IN LOOSE SANDY SOIL, PLACE DRIP STAKES ON A 60-DEGREE ANGLE (ALONG DRIPLINE), AND (2) STAKES ON 60 DEGREE ANGLE ON EACH DRIP FITTING.

1. FINISHED GRADE.
2. TIE DOWN STAKE: RAIN BIRD TDS-050 WITH BEND.
3. 3-INCH MULCH.
4. DRIPLINE.
5. DRIPPER.

5 RAIN BIRD TDS-050 (WITH BEND) DRIP STAKES

N.T.S.



1. FINISHED GRADE.
2. TOP OF MULCH.
3. ON SURFACE DRIP TUBING.
4. OPERATION INDICATOR.
5. 1/4" TUBING - PROVIDED WITH POP-UP.
6. CONNECT TO DRIP TUBING. RAIN BIRD 1/4" XBFICONN.

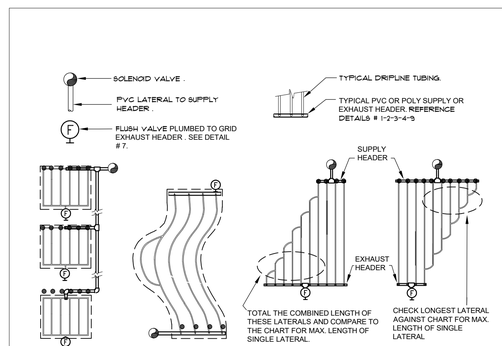
CONTRACTOR MUST PLACE OPERATION INDICATOR WITHIN 12-INCHES OF FLUSH POINT / VALVE ASSEMBLY. EXTEND 1/4-INCH TUBING AS NECESSARY.

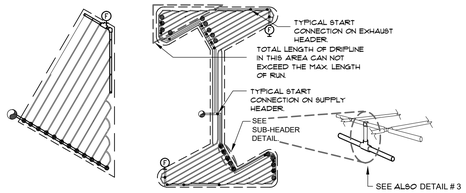
NOTES:

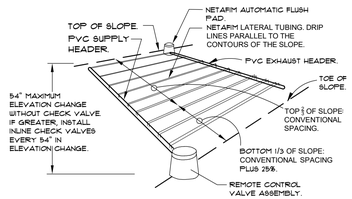
1. USE XERIMAN TOOL XM-TOOL TO INSERT BARB TRANSFER FITTING DIRECTLY INTO DRIPLINE TUBING.
2. VAN NOZZLE MAY BE SET TO CLOSE, OR IF IT IS DESIRED TO SEE SPRAY FROM NOZZLE, SET THE ARC TO ¾ PATTERN. THE FLOW FROM NOZZLE MUST BE DIRECTED WITHIN PLANTING AREA, VISIBLE ENOUGH TO BE SEEN / LOCATED BY MAINTENANCE PERSON.

6 RAIN BIRD OPERATION INDICATOR

N.T.S.







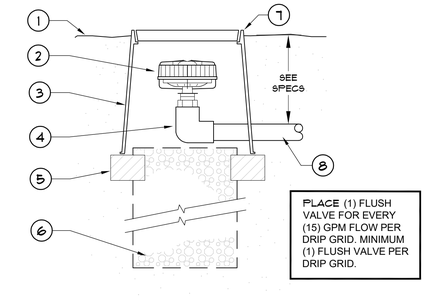
SLOPE FEED LAYOUT

NOTES:

1. THESE TYPICAL LAY-OUT DRAWINGS ARE TO SHOW HOW THE WATER MOVEMENT IN DRIP LINES FLOW TOWARDS EXHAUST HEADER, AND WHAT REQUIRED CALCULATIONS ARE NEEDED TO BE PERFORMED BY CONTRACTOR.
2. MOST LANDSCAPE BEDS ARE IRREGULAR AND MAY NOT REFLECT THE SHAPE AND SIZE AS SHOWN IN THESE DETAILS. CONTRACTOR SHALL LAY-OUT SHRUB BED DRIP GRID BASE ON THE PRINCIPLES SHOWN IN THIS DETAIL AND ACCORDING TO ALL OTHER DETAILS SHOWN ON THIS SHEET.

10 TYPICAL DRIP GRID LAY-OUT

N.T.S.



1. FINISHED GRADE.
2. NETAFIM LINE FLUSH VALVE. TL050MFV-1 FOR FLOWS ABOVE 3.64 GPM. TLFV-1 FOR FLOWS UP TO 3.64 GPM .
3. RAIN BIRD VB-10RND VALVE BOX.
4. 1" SCH-40 ELBOW (S x FPT), WITH 1" X ¾" BUSHING.
5. BRICKS - ONE OF THREE.
6. 3/4" GRAVEL SUMP (1 CUBIC FOOT).
7. RAIN BIRD PVB-6RND VALVE BOX. TOP OF VALVE BOX FLUSH WITH TOP OF MULCH.
8. 1-INCH PVC LATERAL FROM EXHAUST HEADER.

7 NETAFIM FLUSH VALVE - PLUMBED TO PVC

N.T.S.

TECHLINE-CV DRIPLINE GENERAL GUIDELINES FOR WATERING TIME

	TURF			SHRUB & GROUND COVER		
	CLAY	LOAM	SANDY	CLAY	LOAM	SANDY
DIPPER FLOW (GPH)	0.40	0.60	0.90	0.40	0.60	0.90
DRIPPER INTERVAL	24"	12"	12"	24"	18"	12"
LATERAL (ROW) SPACING	18"–24"	12"	9"–12"	18"–24"	18"–24"	12"–18"
APPLICATION RATE (IN/HR)	.22–.17	.96	.93–1.44	.22–.17	.43–.32	1.44–.96
TIME TO APPLY 1/4"	68–88	16	8 –10	68–88	35–47	10–16

8 NETAFIM TECHLINE-CV DRIPLINE TABLE -1

N.T.S.

BID SET

PSL Project #P24-221
100% Plans
PSLUSD Project # 5001-32

NETAFIM TECHLINE-CV MAXIMUM LENGTH OF SINGLE LATERAL (FEET)

DRIPPER SPACING			12"			18"			24"	
DRIPPER FLOW RATE (GPH)			0.42	0.61	0.92	0.42	0.61	0.92	0.61	0.92
INLET PRESSURE (PSI)	20	–	242	190	144	468	270	204	342	260
	25	–	302	238	180	429	388	257	430	326
	35	–	380	299	227	540	426	323	542	412
	45	–	436	343	260	620	489	371	622	472

NETAFIM TECHLINE FLOW PER 100 FEET

DRIPPER SPACING			0.42 GPH DRIPPER		0.61 GPH DRIPPER		0.92 GPH DRIPPER	
	GPH	GPM	GPH	GPM	GPH	GPM	GPH	GPM
12"	–	–	42.30	0.71	60.8	1.01	92.5	1.54
18"	–	–	28.20	0.47	40.50	0.68	61.6	1.03

SUPPLY AND EXHAUST HEADER SIZING CHART (UNLESS NOTED ON PLANS)

STEP 1: ADD LENGTH OF ALL TECHLINE LATERAL TUBING CONNECTED TO THE HEADER.
STEP 2: DIVIDE THIS TOTAL LENGTH BY 100 TO INDICATE THE LENGTH IN UNITS OF 100.
STEP 3: LOCATE THE GPM THAT APPLIES FOR EACH UNIT OF 100 FEET LENGTH ON THE CHART "TECHLINE FLOW PER 100 FEET". MULTIPLY THIS GPM NUMBER TIMES THE UNITS OF 100 FEET FOR THE TOTAL GPM AT THIS HEADER.
STEP 4: SIZE THE HEADER WITH THE FOLLOWING:
1 TO 6 GPM: 3/4" HEADER. 6 TO 10 GPM: 1" HEADER.
10 TO 20 GPM: 1 1/4" HEADER. 20 TO 30 GPM: 1 1/2" HEADER.

9 NETAFIM TECHLINE-CV DRIPLINE TABLE - 2

N.T.S.

Scale:	1" = 16'
Design Date:	02-17-25
Drawn By:	RT
Last Date: Modified	07-22-2025

Revisions:
1. 03-07-25: Modified per P.S.I. comments.
2. 03-31-25: Modified per P.S.I. comments.
3. 05-19-25: Modified per P.S.I. Utility modification
4. 05-30-25: Modified irrigation for park benches.
5. 07-17-25: Removed irrigation on grass drive.
6. 07-22-25: Removed irrigation in new railway parking

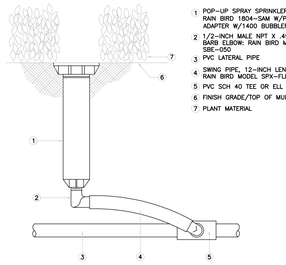
DRIP DETAILS

Peacock Lake Park
1950 SW Dreyfuss Blvd.
Port St. Lucie, FL., 34953

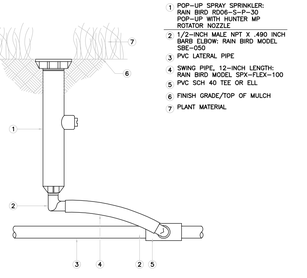
NORTH

IR-4
of 6

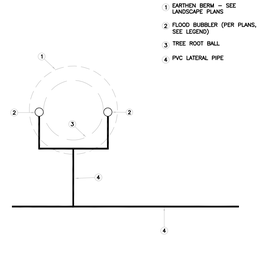
Project #



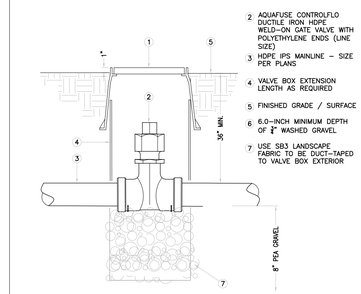
20 RAIN BIRD 1804-SAM
W/ PA-8 and 1400 Series Bubbler



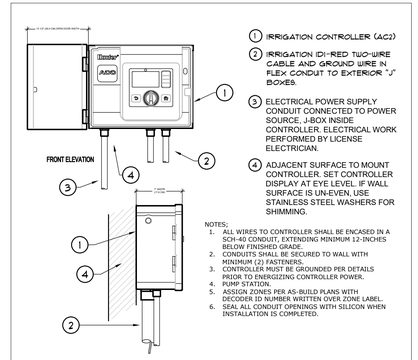
21 RAIN BIRD 1806-SAM-PRS



22 BUBBLER PLACEMENT



23 AQUAFUSE CONTROLFLO
DUCTILE IRON GATE VALVE



32 ACC2 DECODER - Wall Mount Stainless Steel Cabinet
NTS

24 SLEEVING

25 Mainline and Lateral Placement

26 Pipe Back Filling

27 RAIN BIRD PESB Zone Control Valve
W/ Nibco T-113 Gate Valve

28 HDPE DIRECTIONAL BORING

29 Zone Control Wire Splice

30 Pipe and Trenching

31 CONTROLLER GROUNDING DETAIL
NTS.

BID SET

PSL Project #P24-221
100% Plans
PSLUSD Project # 5001-32

Scale:	1" = 16'
Design Date:	02-17-25
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4. 06-30-25: Modified irrigation for park benches.
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DETAILS

Peacock Lake Park
1950 SW Dreyfuss Blvd.
Port ST. Lucie, FL., 34953

NORTH

IR-5
of 6

Project #

SPECIFICATIONS

The system has been designed to conform with the requirements of; City of Port ST. Lucie city irrigation codes /ordinances. Should any conflict exist, the requirements of the codes / ordinances shall prevail. It is the responsibility of the owner/installation contractor to ensure the entire system is installed as designed. Irrigation contractor responsible for obtaining all required permits according to federal, state and local laws. Contractor is required to obtain LA & Utility when commencing his work and work closely with owner for locating tree location and new utilities.

In all cases these specifications shall govern. In instances or situations not specifically addressed by these specifications, the it shall be the irrigation contractors sole responsibility to ensure the installation meets or exceeds the Florida Building Code, Plumbing, Appendix "F", Florida Irrigation Society Irrigation Design Standards, Irrigation Association Best Management Practices, and the American Society of irrigation Consultants electrical grounding requirements and design standards. In the event there is a conflict among these standards, the most conservative and restrictive shall govern, with out exception.

THE WORK

The work specified in this section consists of furnishing all components necessary for the installation, testing, and delivery of a complete, fully functional automatic landscape irrigation system that complies with the irrigation plans, specifications, notes, and details. This work shall include, but not be limited to, the providing of all required material if applicable (pump(s), back-flows, pipes, valves, fittings, controllers, wire, primer, glue, etc.), layout, protection to the public, excavation, assembly, installation, back filling, compacting, repair of road surfaces, controller and low voltage feeds to valves, cleanup, maintenance, guarantee and as-built plans.

All irrigated areas shall provide 100% head-to-head coverage from a fully automatic irrigation system with a rain/freeze shut off device. The shut off device shall be installed to prevent activation by adjacent heads and in a visually un-obtrusive location approved by owner. Zones are prioritized first by public safety and then by hydraulic concerns. This sequencing will be a mandatory punch list item.

These plans have been designed to satisfy/exceed the Florida Building Code (FBC) Appendix F and the Florida Irrigation Society Standards and Specifications for Turf and Landscape Irrigation Systems, fourth edition. All products must be installed per manufacturer's recommendation. Contractor shall verify all underground utilities 72 hours prior to commencement of work.

It is the responsibility of the irrigation contractor to familiarize themselves with all grade differences, location of walls, retaining walls, structures and utilities. Do not willfully install the sprinkler system as shown on the drawings when it is obvious in the field that unknown obstruction, grade differences or differences in the area dimensions exist that might not have been considered in the engineering. Such obstructions, or differences, should be brought to the attention of the owner's authorized representative. In the event this notification is not performed, the irrigation contractor shall assume full responsibility for any revisions necessary.

Irrigation contractor shall repair or replace all items damaged by their work. Irrigation contractor shall coordinate their work with other contractors for the location and installation of pipe sleeves and laterals through walls, under roadways and paving, etc.

The contractor shall take immediate steps to repair, replace, or restore all services to any utilities which are disrupted due to their operations. All costs involved in disruption of service and repairs due to negligence on the part of the contractor shall be their responsibility.

PUMP STATION & WATER SOURCE

Contractor shall work with Hoover Pumping System for coordinating pump / filter quipment installation. He shall also provide fencing around pump stations per per city requirements. Contractor to obtain the service of a Master Electrician to hardwire power to pump station and controller. Electrical power, meter, main disconnect and riser (rack) to be provided by others.

A new Hoover Pumping System Centrifugal Pump station with an 'Apollo' self-cleaning 140 mesh discfilter providing 120 gpm @ 65 psi (See IR-7).The water supply is a on site lake. South Florida water use permit to be provided by others, contractor to owner with irrigation information as needed.

PUMP

Pump station to be manufactured by Hoover Pumping Systems, and shall be UL listed packaged pump stations and control panels. Per City specifications; Pump station shall be placed inside a six (6) foot high, black vinyl, 9 gauge chain link fence with a 3' man gate. Fencing shall ensure a minimum of 4' of access space around the entire perimeter of the pump station and electrical panel. The entire enclosed area shall have a 6" deep layer of 3/4" washed gravel installed and compacted with a vibratory plate . The electrical meter box and uni-strut rack shall be installed:

- outside of the fenced in area when the electrical meter is to be manually read, or
- inside of the fenced in area when the electrical meter is to be remotely read.

Pump must be pressure demand activated. Pump stations shall be controlled by a variable frequency drive. Pump station shall have an electric, normally closed, master valve (MV), or pump shut off circuit, with a magnetic flow meter on the discharge header. MV (or circuit) shall be connected to an adjacent controller. The magnetic flow meter must have an output signal compatible with Hunter ACC2 controllers. The exact signal and routing requirements shall be coordinated between the pump manufacturer and the installation contractor.

1. Water quality analysis – All lake water must be tested by an approved laboratory for 'landscape suitability'. The test results must be submitted to the City for approval.

2. Water 'particle size' analysis – All lake water must be tested for a particle size analysis, by a reputable lab experienced in conducting such tests. The results shall be provided to the City of PSL for review and approval.

A "HUNTER" A2C75D-SS shall be installed in pump station; with surge protected power, wired for flow sensing and wireless rain sensor. Pump manufacturer shall run a #6 ground wire and Rain Bird two-wire cable from controller (in pump station) to a water tight "J" box out-side of pump station housing.Two-wire cable and ground wire shall be in separate "J" boxes. Irrigation contractor to install controller grounding grid per detail #31 on sheet IR-5.

FILTRATION REQUIREMENTS

Any water test deemed to require filtration (at the sole discretion of the City of PSL) will require primary filtration at the point of connection (POC):

1. If filtration is required, Netafim 'Apollo' disc filter technology shall be utilized with 140 mesh disc and automated 'pressure differential' flushing.

2. Utilize the Netafim sizing chart below, to determine which model to utilize.

3. All flushing must return to the surface water body from which it came (lake draw) or into a nearby storm drain (well draw). On lake draw filtration, discharged/filtrate water must be discharged a minimum of 300' from the suction line of any pump station pulling from that surface water body.

See IR-7 for additional pump notes and specifications.

THE PIPE

Pipe locations shown on the plan are schematic and shall be adjusted in the field. When laying out mainlines, place a minimum of 18" away from either the back of curb, edge of walk way, or other hardscape to allow for ease in locating and protection from physical damage. Install all lateral pipe 1.5-feet off edge of pavement and buildings to allow space for plant root balls. Always install piping inside project's property boundary.

All pipes are to be placed in sod areas. If it is necessary to have piping under hardscape's, such as roads, walks, and patios, lateral pipes must be sleeved using Sch-40 for pipe sizes up to 4-inch, and Class 200 PVC for pipe sizes 6-inch or larger. Sleeve diameter shall be minimum twice the size of the pipe it is carrying, minimum sleeve size shall be 2-inches. No sleeve shall have turns or fittings that prevent a pipe from being manually pushed/pulled through after it is installed. All directional bores shall be HDPE per plans.

Pipe sizes shall conform to those shown on the drawings. No substitutions of smaller pipe sizes shall be permitted, but substitutions of larger sizes may be approved. All damaged and rejected pipe shall be removed from the site at the time of said rejection.

LATERAL LINE

Lateral line shall be designed and sized to ensure a maximum water velocity of five (5) feet-per-second (f.p.s.) while ensuring a maximum of 10% variation in pressures within the piping network using the 'friction factor' limiting method. All lateral lines shall be backfilled with a 6" deep layer of coarse sand above, below, and on both sides of the pipe. The remainder of the backfill material can be native material but nothing larger than 1" in diameter (native material to be sifted as necessary). Lateral pipe shall have the following depths of coverage:

1. 24" for pipes 4" and larger.
2. 18" for pipes 3" and smaller.

Lateral lines shall be CL 200 PVC solvent weld with SCH 40 PVC solvent weld fittings - must be 3/4" or larger; no 1/2" lateral is allowed. Pressure Testing – Lateral lines must be filled and visually checked for leaks. Any leaks detected must be repaired. No pressure test of the lateral lines is required. All solvent welded pipe and fittings from 2-1/2" and above shall be welded together utilizing Weld-On purple ECO primer and 711 ECO Gray cement. Pipes 2" and smaller may be welded together using Weld-On purple ECO primer with 705 ECO gray glue.

MAINLINE

Mainlines shall be designed and sized to ensure a maximum velocity of five (5) feet per second (f.p.s.) while ensuring a maximum of 10% variation in pressures within the mainline piping network using the 'friction factor' limiting method. Metallic marking tape shall be placed one (1) foot above the entire length of all mainline piping. All mainlines shall be backfilled with a 6" thick layer of coarse sand above, below, and on both sides of the pipe. The remainder of the backfill material can be native material but nothing larger than 1" in diameter. Mainlines shall have 36" of cover.

Mainlines shall be DR11-4710 IPS H.D.P.E. with fusion welded fittings(or approved equal). All mainlines shall be installed by trained HDPE fusion weld technicians in strict accordance with the manufacturer's specifications and recommendations, including quality control 'random sampling' of fusion joints.

Story Poles – When installing irrigation mainlines, they must be inspected for pipe material type, pipe size, trenching depth/width/pipe spacing, backfill and workmanship. To properly inspect for these parameters, 'open trench' inspections are required. However, it is recognized, on RARE OCCASIONS, it maybe necessary to backfill a section of mainline before it can be inspected (safety reasons). In such occasions, the mainline may be backfill provided the following is approved and completed as follows:

1. Install story poles (1.5" SCH 40 PVC pipes which are cut long enough to sit on top of the mainline and extend to at least 1.0' above finished grade. Story poles must be set every 50' along the entire mainline run plus at all changes of direction and end points of piping.

2. Photos of the installation which clearly show the required inspection parameters noted above, which are time/date stamped must be provided to the City of PSL.

Notes:
All butt and electrofusion HDPE processes shall be recorded and documented, on site as the welds are being conducted,using a compatible data logger (such as a McElroy data logger model #DL 6303 or 6304 or JEA approved equal). This information shall be displayable in textual and graphical format. All data shall be provided to the projects owner/owner representative on the day the fusion processes are completed.

PRESSURE TESTING HDPE:

Pressure testing shall be conducted in accordance with ASTM F2164, Field Leak Testing of Polyethylene Pressure Piping Systems Using Hydrostatic Pressure. The HDPE pipe shall be filled with water, raised to test pressure and allowed to stabilize. The test pressure shall be 1.5 times the operating pressure at the lowest point in the system. In accordance with section 9.8, the pipe shall pass if the final pressure is within 5% of the test pressure for 1 hour. For safety reasons only hydrostatic testing only may be used. The results shall be provided to the City of PSL for review and approval.

SLEEVING

- All sleeving shall be Class 200 PVC with SCH 40 PVC fittings.
- All solvent weld sleeving pipe and fittings from 2-1/2" and above shall be welded together utilizing Weld-On purple ECO primer and 711 ECO Gray glue. Pipes 2" and smaller may be welded together using Weld-On purple ECO primer with 705 ECO gray glue.
- All roadway sleeving must have 36" of cover.
- All other sleeving must have the depth of coverage required for the pipe type and size it is carrying.
- Sleeves shall be a minimum of 2X the size of the pipe it is carrying.
- Only one pipe shall be included per irrigation sleeve.
- Metallic marking/tracing tape shall be placed one (1) foot above all irrigation sleeves, for the entire length of each sleeve.
- Sleeves shall extend a minimum of 18" back-of-curb or beyond edge of hardscape and terminate in an easily accessible green space.
- 2"x 2" Wooden stakes shall be placed at the end of each sleeve, from the bottom of the trench extending 24" above grade. The entire wood stake, above grade, shall be painted fluorescent orange. After the orange paint has dried the installing contractor shall use a black indelible marker and note the size of the sleeve and size of the pipe it carries.
- HDPE mainlines do not need to be sleeved but they shall have a 2" HDPE 'wire sleeve' run alongside the mainline at hardscape crossings.
- All CL 200 PVC mainline shall have one 2" wire sleeve run alongside the mainline at all hardscape crossings.

Electrical Supply for Control Components and Pump Station

- All irrigation system designs shall show existing or proposed power infrastructure to be utilized to provide power to the irrigation system components. This is a requirement for irrigation permitting and must meet the City of PSL Building department requirements as well as all National Electrical Code (NEC) requirements.
- Electrical services for controller, pump station, etc. are required.

Grounding

- All irrigation controllers, flow stations and pump control panels must be grounded utilizing two copper grounding plates (4" wide x 8' long x 1/8" thick), a 10' copper clad grounding rod, and # 6 insulated copper wire. All connections shall be made using 'one strike' CAD welds; clamps are not allowed. See details and American Society of Irrigation Consultants (ASIC) grounding guidelines for additional information.

- All decoders shall utilize 4"wide x 4' long x 1/8" thick) copper grounding plates at all locations as required by Hunter ACC2 installation manual AND per Two-wire installation manual.

All electrical work is to comply with the National Electrical Code and any, and all, other applicable electrical codes, laws and regulations. A licensed electrician shall perform all electrical hook-ups. Power for each controller shall be a dedicated 120 volt, 20 amp circuit unless otherwise specified in the plans.

WIRING

Irrigation two-wire cable (14 gauge Maxi-Wire) shall be thermoplastic solid copper, two conductor cable; suitable for direct burial and continuous operation at rated voltages. Two-wire shall be incased in a 1.5-inch Sch-40 gray conduit, using sweep ells in all directional changes.

In all valve boxes coil two-wire using 30 linear inches of loose wire. Make electrical connections with 3M DBR/Y-6 connectors.

TRACER WIRE

Run a 12 gauge purple tracer wire along mainline where ever two-wire conduit leaves the mainline. Tracer wire shall start and end in a Carson 1419 valve box.

CONTROLLER AND PUMP STATION CONTROL PANEL GROUNDING

Contractor to utilize (2) 4"X96"X0.0625" copper grounding plates, (1) 5/8"X10' copper clad grounding rods, 'One Strike' CAD welds at all connection points, #6 insulated copper wire, and earth contact material. Install these and other required components as outlined in the detail. Contractor to verify that the earth to ground resistance does not exceed 10 ohms. Contractor shall provide a written certification, on a licensed electrical contractors letter head, showing the date of the test, controller/pump location, and test results. Each controller/pump shall be so grounded and tested. Each component must have its own separate grounding grid, unless they are sitting side by side, in which case up to two controllers can share a common grounding grid.

LAYOUT

Lay out irrigation system mainlines and lateral lines. Make the necessary adjustments as required to take into account all site obstructions and limitations prior to excavating trenches.

Stake all sprinkler head locations. Adjust location and make the necessary modifications to nozzle types, etc. required to ensure 100% head to head coverage. Refer to the Edge of Pavement Detail on the Irrigation Detail Sheet.

Spray heads shall be installed 4" from sidewalks or curbed roadways and 18" from uncurbed roadways and building foundations.

Locate valves prior to excavation. Ensure that their location provides for easy access and that there is no interference with physical structures, plants, trees, poles, etc. Valve boxes must be placed a minimum of 12" and a maximum of 13" from the edge of pavement, curbs, etc. and the top of the box must be 2" above finish grade. No valve boxes shall be installed in turf areas without approval by the irrigation designer - only in shrub beds.

VALVES

Sequence all valves so that the farthest valve from the P.O.C. operates first and the closest to the P.O.C. operates last. The closest valve to the P.O.C. should be the last valve in the programmed sequence. Adjust the flow control on each RCV to ensure shut off in 10 seconds after deactivation by the irrigation controller.

Using an electric branding iron, brand the valve I.D. letter/number on the lid of each valve box. This brand must be 2"-3" tall and easily legible.

EQUIPMENT

All pop-up heads and shrub risers shall be pressure compensating. All pop-up heads shall be mounted on flex-type swing joints. All sprinkler equipment, not otherwise detailed or specified on these plans, shall be installed as per manufacturer's recommendations and specifications, and according to local and state laws.

TRENCHING

Excavate straight and vertical trenches with smooth, flat or sloping bottoms. Trench width and depth should be sufficient to allow for the proper vertical and horizontal separation between piping as shown in the pipe installation detail on the detail sheet.

Protect existing landscaped areas. Remove and replant any damaged plant material upon job completion. The replacement material shall be of the same genus and species, and of the same size as the material it is replacing. The final determination as to what needs to be replaced and the acceptability of the replacement material shall be solely up to the owner or owner's representative.

INSTALLATION

Solvent Weld Pipe: Cut all pipe square and deburr. Clean pipe and fittings of foreign material; then apply a small amount of primer while ensuring that any excess is wiped off immediately. Primer should not puddle or drip from pipe or fittings. Next apply a thin coat of PVC cement; first apply a thin layer to the pipe, next a thin layer inside the fitting, and finally another very thin layer on the pipe. Insert the pipe into the fitting. Insure that the pipe is inserted to the bottom of the fitting, then turn the pipe a 1/4 turn and hold for 10 seconds. Make sure that the pipe doesn't recede from the fitting. If the pipe isn't at the bottom of the fitting upon completion, the glue joint is unacceptable and must be discarded.

Pipes must cure a minimum of 30 minutes prior to handling and placing into trenches. A longer curing time may be required; refer to the manufacturer's specifications. The pipe must cure a minimum of 24 hours prior to filling with water.

HDPE4710-DR11-NP MAINLINE PIPE;

Refer to current; Port St Lucie public works Irrigation Standards.

BACK FILL

The Back fill 6" below, 6" above, and around all piping shall be of clean sand and anything beyond that in the trench can be of native material but nothing larger than 2" in diameter. In all planting beds backfill all trenches to 85% Proctor and all trenches under hardscape's to be backfilled and compacted to 95% Proctor.

Main line pipe depth measured to the top of pipe shall be:

- 36" minimum for 3" & 4" PVC with a 36" minimum at vehicular crossings.
- 36" minimum for 6" PVC with a 36" minimum at vehicular crossings.

Lateral line depths measured to top of pipe shall be:

- 18" minimum for 3/4"-3" PVC with a 30" minimum at vehicular crossings.

Contractor shall backfill all piping, both mainline and laterals, prior to performing any pressure tests. The pipe shall be backfilled with the exception of 2' on each side of every joint (bell fittings, 90's, tees, 45's, etc.). These joints shall not be backfilled until all piping has satisfactorily passed its appropriate pressure test as outlined below.

FLUSHING

Prior to the placement of valves, flush all mainlines for a minimum of 13 minutes or until lines are completely clean of debris, whichever is longer.

Prior to the placement of heads, flush all lateral lines for a minimum of 13 minutes or until lines are completely clean of debris, whichever is longer.

Use screens in heads and adjust heads for proper coverage avoiding excess water on walls, walks and paving.

INSPECTIONS:

Irrigation system installed shall be inspected for strict compliance with the approved irrigation design plan. The minimum number and types of inspections will be noted on the approved irrigation system design plan. All inspections noted and required shall be "Open Trench" and shall be completed by a City of Port ST. Lucie employee and/or its assigned representative, without exception.

TESTING

Soil: At a minimum of 2 locations on the site, soil tests for infiltration and texture shall be performed according to the USDA Soil Quality Test Kit Guide. The tests shall be documented in a USDA Soil Worksheet.

All of the above is available at:
https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/health/assessment/?cid=nrcs142p2_053873

The completed worksheet shall be submitted to the owners representative for review/approval. Do not proceed without written direction from the owner/owner's representative.

Schedule testing with Owner's Representative a minimum of three (3) days in advance of testing.

Contractor to utilize soil test data to inform the irrigation scheduling at the project, using BMP's issued by the Irrigation Association which can be download on line at:
https://irrigation.org/IA/Advocacy/Standards-Best-Practices/Landscape-Irrigation-BMPs/IA/Advocacy/Landscape-Irrigation-BMPs.aspx?hkey=93b546ad-c87a-41b8-bf70-8c4fd2cff931 (link at bottom of the webpage).

Read pages 47-52 in Appendix C for how to create irrigation schedules.

If these parameters are exceeded, locate the problem; repair it; wait 24 hours and retry the test. This procedure must be followed until the mainline passes the test.

Lateral Lines: The lateral lines must be fully filled to operational pressure and visually checked for leaks. Any leaks detected must be repaired.

Operational Testing -Once the mainline and lateral lines have passed their respective tests, and the system is completely operational, a coverage test and demonstration of the system is required. The irrigation contractor must demonstrate to the owner, or his/her representative, that proper coverage is obtained and the system works automatically from the controller. This demonstration requires each zone to be turned on, in the proper sequence as shown on the plans, from the controller. Each zone will be inspected for proper coverage and function. The determination of proper coverage and function is at the sole discretion of the owner or owner's representative.

Upon completion of the operational test, run each zone until water begins to puddle or run off. This will allow you to determine the number of irrigation start times necessary to meet the weekly evapotranspiration requirements of the planting material in each zone. In fine sandy soils, it is possible no pudding will occur. If this is experienced, then theoretical calculations for run times will be required for controller programming.

SUBMITTALS

Pre-Construction: Deliver five (5) copies of submittals to Owner's Representative within ten (10) working days from date of Notice to Proceed. Furnish information in 3-ring binder with table of contents and index sheet. Index sections for different components and label with specification section number and name of component. Furnish submittals for components on material list. Indicate which items are being supplied on catalog cut sheets when multiple items are shown on one sheet. Incomplete submittals will be returned without review. In lieu of hardcopies, an electronic package in PDF format can be submitted.

AFTER PROJECT COMPLETION

As a condition of final acceptance, the irrigation contractor shall provide the owner with:

1. Irrigations As-built's - shall be provided utilizing a sub-foot Global Navigation Satellite System (GNSS) to accurately locate all mainlines, sleeves, remote control valves, gate valves, independent wire runs, wire splice boxes, controllers, high voltage supply sources/conduit path, control mechanisms, sensors, wells and water source connections in Florida East State Plane, NAD 83, and CORS 96 format. The data collected shall be in POINT format and include an ID for each data point with Manufacturer, Type, Size, and Depth. All mainline and independent runs of wire shall be located every 30' for straight runs and at every change of direction. Sleeves will be located at end points and every 20' of length. All underground items shall include depth in inch format. These POINTS once collected shall be imported into an AutoCAD DWG geo-referenced base file to be labeled accordingly. The completed AS-Built shall be a Geo-Referenced DWF file and delivered to the owner on a compact disk (CD).
2. Controller charts - Upon completion of "as-built" prepare controller charts; one per controller. Indicate on each chart the area controlled by a remote control valve (using a different color for each zone). This chart shall be reduced to a size that will fit inside of the controller door. The reduction shall be hermetically sealed inside two 2ml pieces of clear plastic.
3. Grounding Certification - Provide ground certification results for each controller and pump panel grounding grid installed. This must be on a licensed electrician letter head indicating location tested (using IR plan symbols), date, time, test method, and testing results.

INSPECTIONS AND COORDINATION MEETINGS REQUIRED - Contractor is required to schedule, perform, and attend the following, and demonstrate to the owner and/or owners representative to their satisfaction, as follows:

Pre-Construction Meeting

Before any work can begin on the project, a pre-construction meeting must be conducted. The process for conducting this meeting and the contents of it, are as follows:

- Installing contractor shall contact the City of Port St. Lucie and request a pre-construction meeting. Contractor to allow one week from request to actual date of meeting.
- The following parties are required to attend the pre-construction meeting:

1. Installing licensed irrigation contractor
2. General contractor
3. Installing landscape contractor
4. Representative of the City of Port St. Lucie

- The pre- construction meeting shall be conducted on site and by the City of Port St. Lucie representative.The contents of the meeting shall include:

1. A sign in sheet for all participants to sign in on.
2. Introductions of all parties.
3. Confirmation the 'approved' irrigation plans are the plans all parties are working from. Confirming most current dates on plans.
4. PSL representative will go over the approved irrigation plans and give a general review of the requirements of the plans and highlight key items. A comprehensive review is not intended as it is the installing contractors responsibility (and ultimately the general contractor, if different) to know and comply with all requirements of the approved irrigation plans. A review the irrigation inspection protocol required by the City of Port St. Lucie, covering the time from the pre-construction meeting to the final punch list inspection and eventual approval of the installed irrigation system by the City of Port St. Lucie. The general contractor will offer any comments and/or concerns they have. The irrigation contractor will offer any comments and/or concerns they have. The landscape contractor will offer any comments and/or concerns they have. All issues raised shall be resolved and/or a resolution pathway assigned to the pertinent parties with dates the issues are to be resolved by.

Progress Inspections

Each project will have a minimum of three progress inspections; more can be required as directed by the PSL inspector. Each progress inspection shall be conducted by a City of Port St. Lucie representative. They must be scheduled a minimum of one week in advance and shall be coordinated by the installing contractor. Each progress inspection shall include a representative from the companies:

1. Irrigation contractor
2. General contractor
3. Landscape contractor
4. PSL representative

Progress inspections shall be 'open trench' inspections to allow the inspector to see the following:

1. All mainline and lateral line piping to include:
a. Pipe material and fittings.
b. Bedding sand.
c. Depth of coverage.
d. Restraints, if required.

2. Sleeving is correct for material, size, depth and assembly.
3. All remote control valves for proper material and assembly.
4. All remote control and sensor wiring for proper material and assembly.
5. Controller, sensors and grounding.
6. Proper emission device materials, installation, operation and coverage.
7. Proper POC components are installed.

Final Inspection

The final inspection is to be requested at substantial completion but only after all previous issues noted on each progress inspection report, has been correctly addressed.The installing contractor shall request a final inspection by contacting the City of Port St. Lucie. Allow one week for the scheduling of the final inspection.

- This inspection will be a comprehensive inspection requiring every zone to be operated from the controller and checking for proper operation and coverage.
- All sensors shall be tested to verify proper operation.
- The contact of the site from a remote location shall be verified.
- All POC's are operating correctly.
- All 'project completion' submittals are to be turned in. These include, at a minimum, the following:
1. GPS as-built's
2. Color coded controller charts
3. Grounding certification by licensed electrician
4. Backflow certification – if applicable
5. Flow meter calibration certification
6. USDA soil test results
7. Warranty letter to include name, address, phone number of installing contracting company along with verbiage warranting the installed system for a period of one year from date of final acceptance.

- A 'punch list' of issues observed by the City of Port St. Lucie, during the final inspection, which are deemed to not comply with the requirements of the approved irrigation plans will be created. The contractor shall satisfactorily address all punch list items within thirty days. Once all items are completed and verified by the installing contractor, the installing contractor shall request a 'punch list' inspection by contacting the City of Port St. Lucie. Contractor to allow one week for the scheduling of the punch list inspection.

Punch List Inspection

A punch list inspection is limited to verifying all noted 'punch list' items developed at the final inspection have been satisfactorily addressed.

Reports

A written report shall be generated by the City of Port St. Lucie inspector after each progress, final and punch list inspection. These reports shall be submitted to the installing contractor within two business days of an inspection. The reports shall include:

1. Date, times of inspection.
2. Map showing the areas of the project inspected.
3. Names of all attendees.
4. Itemized list of components inspected noting whether they are in compliance with the approved plans or not. Notes to include what page of the plans the noted issue(s) are related to.
5. A comprehensive list of issues noted shall conclude the report. These items must be addressed prior the next scheduled inspection.

Turn over protocol to PSL Maintenance and Management

Once the installation of the entire system has been accepted by the City of Port St. Lucie, the installing contractor shall submit a form, on their company letterhead title PROJECT COMPLETION AND TURNOVER NOTIFICATION stating the following:

- The project name, location, plans date, and contractor name.
- Date final acceptance was received and name of PSL inspector.
- Landscape maintenance contractor/installation contractor name and contact information for warranty issues.
- Irrigation maintenance/installation contractor name and contact information for warranty issues.
- A note stating the irrigation system has been installed in compliance with the approved irrigation plans and all applicable local, state and federal laws.
- Sign and date and submit, with the warranty and other end of project submittals, to the City of Port St. Lucie.

Maintenance – Standards and Requirements

Once the City of Port St. Lucie receives the signed PROJECT COMPLETION AND TURNOVER NOTIFICATION form from the irrigation system installation company, the irrigation maintenance will be handed over to the City of Port St. Lucie, unless the installation contractor has a contractual obligation to continue maintenance for the duration of their warranty period.

Regardless of who is maintaining the irrigation system, the following concepts and requirements are to be strictly adhered to:

- All maintenance shall follow the original irrigation system design intent, without exception. This includes, but is not limited to:

1. Materials – when items are replaced, for whatever reason, they shall be replaced with the same materials as in the original design
2. If the irrigation system is modified or added onto, the materials, concepts and practices of the original design must be strictly adhered to.

- Irrigation maintenance is a dynamic process as the irrigation system must be modified as the landscape changes due to plant growth, landscape changes, use changes, law changes, etc. All such modifications must comply with the original design intent. These requirements should be addressed in all maintenance contracts between the City of Port St. Lucie and the maintaining entity.
- Any time the materials, concepts, or flows for an irrigation zone (or entire system) are modified, due to changes 'approved' by PSL, the PSL water manager must be contacted and informed of any/all such changes.
- Irrigation systems shall maintain a minimum of a 95% uptime operational capability as determined on a 'percentage of zones' operational each month vs total zone count.
- All Baseline controllers must have 'native' irrigation schedules programmed into them which will ensure sufficient irrigation occurs during times when the controller loses cell communication with monitoring computer.
- Whenever an irrigation maintenance company wishes to turn on an irrigation zone, they must contact the City of Port St. Lucie's water management personnel. It is highly recommended such coordination occur one hour before it is required as water management personnel have one hour to respond to any request for service. This is a very convenient and effective operational practice ifproperly managed and coordinated.
- Daily Maintenance Requirements
1. Wet check requisite zones as required by monthly wet check requirement: all zones must be wet checked monthly.
2. Repair all issues found during the wet check or arrange for future repair, as required, by PSL contract.
- Annual Maintenance Requirements Insure all backflow are tested and certified. Verify all grounding grids test to 10 ohms or less.

BID SET

PSL Project #P24-221
100% Plans
PSLUSD Project # 5001-32

Scale: 1" = 30'

Design Date: 02-17-25

Drawn By: RT

Last Date: Modified 07-22-2025

Revisions:
1. 03-07-25: Modified per P.SL comments.
2. 03-31-25: Modified per P.S.L comments.
3. 05-19-25: Modified per P.S.L Utility modification
4. 05-30-25: Modified irrigation for park benches.
5. 07-17-25: Removed irrigation on grass drive.
6. 07-22-25: Removed irrigation in new railway parking

Specifications

Peacock Lake Park
1950 SW Dreyfuss Blvd.
Port ST. Lucie, FL., 34953

NORTH

IR-6
of 6

Project #

O.L. PEACOCK PARK

SW DREYFUSS BLVD., PORT SAINT LUCIE, FLORIDA 34953

CAPTEC ENGINEERING, INC.

WETLAND AND WILDLIFE ASSESSMENT REPORT (WWA)

REVISED APRIL 2024

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NOTE: This Report, together with the concepts and design presented herein, as an instrument of service, is intended only for the specific purpose and Client for which it was prepared. Reuse of and improper reliance on this Report without written authorization and adaptation by Hobe Sound Environmental Consultants, Inc. shall be without liability to Hobe Sound Environmental Consultants, Inc.

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O. L. PEACOCK PARK
SW DREYFUSS BLVD., PORT SAINT LUCIE, FLORIDA 34953
CAPTEC ENGINEERING, INC.
WETLAND AND WILDLIFE ASSESSMENT REPORT (WWA)

1.00 INTRODUCTION

The following Wetland and Wildlife Assessment Report (WWA) of the O. L. Peacock Park project site has been prepared by Hobe Sound Environmental Consultants, Inc. (HSE). The purpose of this report is to provide the methodologies and results of a scientific wetland and wildlife assessment for the site. This report addresses the following environmental issues: protected species, wildlife, vegetative communities, wetlands, soils, and topography. The report is based on field data collected on 13 March and 17 April 2024. The project work site consists of approximately 10.48 acres of land located south of SW Dreyfuss Blvd, east of I-95 and west of SW Rosser Blvd. The site is situated in Section 23, Township 37S, Range 39E in St. Lucie County, Florida. The center of the project site is located at coordinates N 27°14'57.84" and W -80°24'32.55" (**Appendix A: Figures 1-3 of 17**).

2.00 METHODOLOGY

2.01 Protected Species/Wildlife Survey

2.01.1 Objective

Conduct a systematic survey for flora and fauna that may occur within the project site and note the presence of any protected species listed in *Florida's Official Endangered and Threatened Species List* Updated June 2021, Florida Fish and Wildlife Conservation Commission (FFWCC).

The state lists of animals are maintained by the FFWCC and categorized as threatened in accordance with rule 68A-27.003 of the Florida Administrative Code (F.A.C.). The state lists of plants are categorized into endangered, threatened, and commercially exploited, and are maintained by the Florida Department of Agriculture

and Consumer Services (DOACS) via Chapter 5B-40, F.A.C.

The federal agencies that share the authority to list species as Endangered and Threatened are the National Oceanic and Atmospheric Administration-National Marine Fisheries Service (NOAA-NMFS) and the U.S. Fish and Wildlife Service (USFWS). The NOAA-NMFS is responsible for listing most marine species. The federal list of animals and plants is administered by the USFWS, and is published in 50 CFR 17 (animals) and 50 CFR 23 (plants).

2.01.2 Methodology

Following are the methodologies biologists used to conduct the wildlife/protected species survey.

- Biologists conducted pedestrian transects throughout the project site.
- The transects meandered through areas of suitable habitat within the entire project area.
- Biologists recorded sightings, tracks, scat, tree markings, nests, cavities, and burrows.

2.02 Gopher Tortoise and Other Burrow Commensals

2.02.1 Objective

Conduct a 100% systematic survey within and around the boundaries of the project site to locate any gopher tortoise (*Gopherus polyphemus*) burrows and the eastern indigo snake (*Drymarchon corais couperi*).

2.02.2 Methodology

Biologists followed the survey protocol as recommended in *Ecology and Habitat Protection Needs of Gopher Tortoise (Gopherus polyphemus) Populations Found on Lands Slated for Large-scale Development in Florida*; Non-game Wildlife

Program, Technical Report #4, Florida Game and Fresh Water Fish Commission (FGFWFC), now known as FFWCC, Tallahassee, Florida, December 1987, and *Gopher Tortoise Permitting Guidelines*, FFWCC, Tallahassee, Florida April 2008 (Updated April 2023).

- Biologists conducted pedestrian transects on 13 March and 17 April 2024 **(Appendix A: Figure 4 of 17)**;
- All gopher tortoise burrows located were flagged as either abandoned or potentially occupied, if appropriate;
- All gopher tortoise burrows located were assigned an identification number and recorded, if appropriate;
- Biologists field located all gopher tortoise burrows on an aerial photograph, if appropriate (**Appendix A: Figure 5 of 17**);
- Additional data and notes were collected by biologists for the occurrence of the eastern indigo snake.

2.03 FWC Florida Land Cover Classification System (FLCCS)

2.03.1 Objective

To map vegetation within the boundaries of the project site according to the *Florida Land Cover Classification System* (FLCCS) and comparing it to the *Cooperative Land Cover Classification System* (CLC) map.

2.03.2 Methodology

Biologists used the following methodology to map vegetation found on the project site:

- Biologists used the *Cooperative Land Cover Classification System* (CLC).
- Biologists based vegetative community descriptions on field surveys, United States Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS) soil maps, and aerial photograph interpretations.
- Numerical community designations were carried to Levels III or IV, as determined to be appropriate, according to CLC.

2.04 Jurisdictional Wetlands

2.04.1 Objective

To identify and locate State of Florida (South Florida Water Management District; SFWMD) and Federal (U. S. Army Corps of Engineers; COE) jurisdictional wetlands that may occur within the boundaries of the project site.

2.04.2 Methodology

Biologists used the following methodologies to locate State of Florida and Federal jurisdictional wetlands on-site.

- Biologists delineated wetlands according to Florida Administrative Code (F.A.C.) 62-340, as appropriate.
- Biologists delineated wetlands according to the COE Wetland Delineation Manual, January 1987, Technical Report Y-87-1, as appropriate; Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Version 2.0.
- Biologists flagged the wetlands with consecutively numbered flagging tape marked "Wetland Delineation", as appropriate.
- Biologists marked the approximate wetland locations on a St. Lucie County aerial photograph, if appropriate.

2.05 Soils

2.05.1 Objective

To identify project soil types according to the NRCS.

2.05.2 Methodology

Biologists used the following methodology to identify soil types found on the project sites.

- The project site soils were mapped according to the *Natural Resources Conservation Service (NRCS), United States Department of Agriculture (USDA), Survey, http://websoilsurvey.sc.egov.usda.gov*

2.06 Topography

2.06.1 Objective

To identify the topography of the project sites.

2.06.2 Methodology

Biologists used the following methodologies to identify the topography of the project site.

- Biologists used the *U.S. Geological Survey* (USGS) *Topographic Map, Indiantown NW, FLA. Quadrangle* to determine on-site topography.

3.00 RESULTS

3.01 Protected Species/Wildlife Survey

3.01.1 Gopher Tortoise and Other Burrow Commensals

The gopher tortoise is designated as threatened (T) by the State of Florida. The eastern indigo snake is designated as threatened (T) by the State of Florida and the USFWS. These species are protected under regulations set forth in the Florida Administrative Code (F.A.C.) of the State of Florida, Chapter 68 Fish and Wildlife Conservation Commission., Rule 68A-3.001 and 68A-25.002, as well as Chapter 68A-27. One (1) potentially occupied gopher tortoise burrows were located by biologists during the gopher tortoise and commensal species survey **(Appendix A: Figure 5 of 17).** The estimated gopher tortoise population is one (1). Commensal species such as the eastern indigo snake were not observed on-site, suitable habitat does not exist. HSE biologists applied an Eastern Indigo Snake Determination key as follows, as per USFWS memo dated 25 January 2010, updated 13 August 2013 and revised 01 August 2017.

3.01.2 Eastern Indigo Snake Determination Key

A. Project is not located in open water or salt marsh.....go to B

Project is located solely in open water or salt marsh....."no effect"

B. Permit will be conditioned for use of the Service's *Standard Protection Measures for the Eastern Indigo Snake* during site preparation and project construction..... go to C

Permit will not be conditioned as above for the eastern indigo snake, or it is not known whether an applicant intends to use these measures and consultation with the Service is requested[2]....."may effect"

C. The project will impact less than 25 acres of eastern indigo snake habitat (eg., sandhill, scrub, pine flatwoods, pine rocklands, scrubby flatwoods, high pine, dry prairie, coastal prairie, mangrove swamps, tropical hardwood hammocks, hydric hammocks, edges of freshwater marshes, agricultural fields [including sugar cane fields and active, inactive or abandoned citrus groves], and coastal dunes).....go to D

The project will impact more than 25 acres of xeric habitat (eg., sandhill, scrub, pine flatwoods, pine rocklands, scrubby flatwoods, high pine, dry prairie, coastal prairie, mangrove swamps, tropical hardwood hammocks, hydric hammocks, edges of freshwater marshes, agricultural fields [including sugar cane fields and active, inactive or abandoned citrus groves], and coastal dunes)....."may affect"

D. The project has no known holes, cavities, active or inactive gopher tortoise burrows, or other underground refugia where a snake could be buried, trapped and/or injured.....NLAA

The project has holes, cavities, active or inactive gopher tortoise burrows, or other underground refugia where a snake could be buried, trapped and/or injured.....go to E

E. Any permit will be conditioned such that all gopher tortoise burrows, active and inactive, will be evacuated prior to site manipulation in the vicinity of the burrow[1]. If an eastern indigo snake is encountered, the snake must be allowed to vacate the area prior to additional site manipulation in the vicinity. Any permit will also be conditioned such that holes, cavities, and snake refugia other than gopher tortoise burrows will be inspected each morning before planned site manipulation of a particular area, and, if occupied by an eastern

indigo snake, no work will commence until the snake has vacated the vicinity of proposed work.....NLAA[2]

Permit will not be conditioned as outlined above.....may affect

End Key

[1] If excavating potentially occupied burrows, active or inactive, individuals must first obtain state authorization via Florida Fish and Wildlife Conservation Commission Authorized Gopher Tortoise Agent permit. The excavation method selected should also minimize the potential for injury of an indigo snake. Applicants should follow the excavation guidance provided within the most current Gopher Tortoise Permitting Guidelines found at http://myfwc.com/gophertortoise

[2]Please note, if the proposed project will impact less than 25 acres of vegetated eastern indigo snake habitat (not urban/human-altered) completely surrounded by urban development, and an eastern indigo snake has been observed on site, NLAA is not the appropriate conclusion. The Service recommends formal consultation for this situation because of the expected increased value of the vegetated habitat within the individual's home range.

No eastern indigo snakes were observed on-site by HSE biologists and the key has determined that the proposed project not likely to adversely affect "NLAA" this species. Full precautionary measures should be taken to avoid harming any indigo snakes during all on-site activities. Educational posters will be placed at the truck entry points to the site and pamphlets will be handed out to all on-site personnel during a pre-construction educational meeting explaining that all possible refugia shall be checked daily prior to initiation of construction activities**.** Additionally, if an indigo snake is spotted, all activities shall cease and it shall be allowed to vacate the site of its own accord**.**

3.01.2 Other Protected Fauna

Various species of fauna were observed on-site during the pedestrian transect survey and are listed in **Table 1**. Protected species that potentially occur in St. Lucie County are listed in **Table 2**. Likelihood of these species occurrence within the project site according to the Florida Natural Areas Inventory (FNAI) Biodiversity Matrix is also listed in **Table 2**.

The project site is within the distribution area of the state protected Florida pine snake (*Pituophis melanoleucus mugitus*) **(Appendix A: Figure 6 of 17).** These

Table 1: Wildlife Observed on the O.L. Peacock Sr. Project Site

A. Fish & Aquatic Macro-invertebrates

Common Name	Scientific Name	Protected Species	
		State	Federal
Blue tilapia	*Oreochromis aureus*	---	---
Apple snail	*Ampullariidae spp.*	---	---
mosquito fish	*Gambusia affinis*	---	---

B. Reptiles & Amphibians

Common Name	Scientific Name	Protected Species	
		State	Federal
Brown anole	*Anolis sagrei*	---	---
Black racer	*Coluber constrictor*	---	---
Gopher tortoise	*Gopherus polyphemus*	T	C

C. Birds

Common Name	Scientific Name	Protected Species	
		State	Federal
Great-blue heron	*Ardea herodias*	---	---
Moorhen	*Gallinula chloropus*	---	---
White ibis	*Eudocimus albus*	---	---
Boat-tailed grackle	*Quiscalus major*	---	---

D. Mammals

Common Name	Scientific Name	Protected Species	
		State	Federal
Raccoon	*Procyon lotor*	---	---
Gray squirrel	*Sciurus carolinensis*	---	---

*T = Threatened (State or Federal), C = Candidate for Endangered and/or Threatened, SAT = Threatened due to similarity of appearance

Table 2: O.L. Peacock Sr.: 2023 Federal/State Listed Fauna and Flora Potentially Found in St. Lucie County, FL

A. Fish/ Aquatic Macroinvertebrates

COMMON NAME	SCIENTIFIC NAME	FEDERAL STATUS+	STATE STATUS++ (FLORIDA)	EXISTING HABITAT ON-SITE	LIKELIHOOD OF OCCURRENCE	NOTES
Opossum pipefish	*Oostethus brachyurus*	SC	N	No	not likely	not observed during preliminary pedestrian transects

B. Reptiles & Amphibians

COMMON NAME	SCIENTIFIC NAME	FEDERAL STATUS+	STATE STATUS++ (FLORIDA)	EXISTING HABITAT ON-SITE	LIKELIHOOD OF OCCURRENCE	NOTES
American alligator	*Alligator mississipiensis*	SAT	FT(S/A)	No	not likely	not observed during preliminary pedestrian transects
Loggerhead sea turtle	*Caretta caretta*	T	FT	No	not likely	not observed during preliminary pedestrian transects
Green sea turtle	*Chelonia mydas*	T	FT	No	not likely	not observed during preliminary pedestrian transects
Leatherback turtle	*Dermochelys coriacea*	E	FE	No	not likely	not observed during preliminary pedestrian transects
Eastern indigo snake	*Drymarchon corais couperi*	T	FT	No	not likely	not observed during preliminary pedestrian transects
Hawksbill sea turtle	*Eretmochelys imbricata*	E	FE	No	not likely	not observed during preliminary pedestrian transects
Gopher tortoise	*Gopherus polyphemus*	C	ST	Yes	likely	observed during preliminary pedestrian transects
Kemp's Ridley Sea Turtle	*Lepidochelys kempii*	E	FE	No	not likely	not observed during preliminary pedestrian transects

Table 2, continued

Pine Snake	*Pituophis melanoleucus*	---	ST	No	not likely	not observed during preliminary pedestrian transects

C. Birds

COMMON NAME	SCIENTIFIC NAME	FEDERAL STATUS+	STATE STATUS++ (FLORIDA)	EXISTING HABITAT ON-SITE	LIKELIHOOD OF OCCURRENCE	NOTES
Florida Scrub-Jay	*Aphelocoma coerulescens*	T	FT	No	not likely	not observed during preliminary pedestrian transects
Florida Burrowing Owl	*Athene cunicularia floridana*	---	ST	No	not likely	not observed during preliminary pedestrian transects
Crested Caracara	*Caracara cheriway*	T	FT	No	not likely	not observed during preliminary pedestrian transects
Little Blue Heron	*Egretta caerulea*	---	ST	Yes	likely	not observed during preliminary pedestrian transects
Bald eagle*	*Haliaeetus leucocephalus*	--	N	No	not likely	not observed during preliminary pedestrian transects
Tri-colored Heron	*Egretta tricolor*	---	ST	Yes	likely	not observed during preliminary pedestrian transects
American Oystercatcher	*Haematopus palliatus*	---	ST	No	not likely	not observed during preliminary pedestrian transects
Wood stork	*Mycteria americana*	T	FT	Yes	likely	not observed during preliminary pedestrian transects
Snail kite	*Rostrhamus sociabilis plumbeus*	E	FE	No	not likely	not observed during preliminary pedestrian transects
Black skimmer	*Rynchops niger*	--	ST	No	not likely	not observed during preliminary pedestrian transects
Roseate spoonbill	*Ajaia ajaja*	--	ST	Yes	likely	not observed during preliminary pedestrian transects
Least tern	*Sterna antillarum*	N	ST	No	not likely	not observed during preliminary pedestrian transects

Table 2, continued
D. Mammals

COMMON NAME	SCIENTIFIC NAME	FEDERAL STATUS+	STATE STATUS++ (FLORIDA)	EXISTING HABITAT ON-SITE	LIKELIHOOD OF OCCURRENCE	NOTES
Southeastern Beach Mouse	*Peromyscus polionotus niveiventris*	T	FT	No	not likely	not observed during preliminary pedestrian transects
West Indian manatee	*Trichechus manatus*	T	FT	No	not likely	not observed during preliminary pedestrian transects
Southeastern fox squirrel	*Sciurus niger shermani*	--	N	No	not likely	not observed during preliminary pedestrian transects

E. Plants and Lichens

COMMON NAME	SCIENTIFIC NAME	FEDERAL STATUS+	STATE STATUS++ (FLORIDA)	EXISTING HABITAT ON-SITE	LIKELIHOOD OF OCCURRENCE	NOTES
Sand-dune spurge	*Chamaesyce cumulicola*	--	E	No	not likely	not observed during preliminary pedestrian transects
Piedmont jointgrass	*Coelorachis tuberculosa*	--	T	No	not likely	not observed during preliminary pedestrian transects
Many-flowered grass-pink	*Calopogon multiflorus*	--	T	No	not likely	not observed during preliminary pedestrian transects
Perforated reindeer lichen	*Cladonia perforata*	E	E	No	not likely	not observed during preliminary pedestrian transects
Large-flowered rosemary	*Conradina grandiflora*	--	T	No	not likely	not observed during preliminary pedestrian transects
Lakela's mint	*Dicerandra immaculata*	E	E	No	not likely	not observed during preliminary pedestrian transects
Coastal vervain	*Glandularia maritima*	--	E	No	not likely	not observed during preliminary pedestrian transects
Johnson's seagrass	*Halophila johnsonii*	DL	E	No	not likely	not observed during preliminary pedestrian transects

Table 2, continued

Sea rosemary	*Heliotropium gnaphalodes*	--	E	No	not likely	not observed during preliminary pedestrian transects
Burrowing four-o'clock	*Okenia hypogaea*	--	E	No	not likely	not observed during preliminary pedestrian transects
Hand fern	*Ophioglossum palmatum*	--	E	No	not likely	not observed during preliminary pedestrian transects
Terrestrial peperomia	*Peperomia humilis*	--	E	No	not likely	not observed during preliminary pedestrian transects
Blunt-leaved peperomia	*Peperomia obtusifolia*	--	E	No	not likely	not observed during preliminary pedestrian transects
Tiny polygala	*Polygala smallii*	E	E	No	not likely	not observed during preliminary pedestrian transects
Giant orchid	*Pteroglossaspis ecristata*	--	T	No	not likely	not observed during preliminary pedestrian transects
Coastal hoary-pea	*Tephrosia angustissima var. curtissii*	--	T	No	not likely	not observed during preliminary pedestrian transects
Savanna balm	*Dicerandra immaculata var. savannarum*	E	E	No	not likely	not observed during preliminary pedestrian transects
Fragrant prickly apple	*Harrisia fragrans*	E	E	No	not likely	not observed during preliminary pedestrian transects
Scrub bluestem	*Schizachyrium niveum*	--	E	No	not likely	not observed during preliminary pedestrian transects

+Federal Status: U.S. Fish and Wildlife Service (USFWS)

E - Endangered
PE - Proposed for Endangered
T - Threatened
PT - Proposed for Threatened
C - Candidate for Endangered and/or Threatened
E (S/A) - Endangered due to similarity of appearance
T (S/A) - Threatened due to similarity of appearance

* Protected under the Bald and Golden Eagle Protection Act.

++State of Florida Status: Florida Fish and Wildlife Conservation Commission (FFWCC)

Animals:

E - Endangered
T - Threatened
SSC - Species of Special Concern
N - Not currently listed
FT - Federally threatened
ET - Federally endangered

Plants:

E- Endangered
T- Threatened
N- Not currently listed

snakes occupy a variety of upland habitats around the state, but they prefer dry habitats with moderate to open canopy cover and sandy, well-drained soils, mostly pines and scrubby oaks. It is HSE's professional opinion that no suitable habitat exists on-site for the Florida pine snake.

The site is within the core foraging area of three (3) wood stork (*Mycteria americana*) colonies **(Appendix A: Figure 7 of 17)**, but no wood storks have been observed on-site. There is one isolated wetland and one OSW on the project site. During the site assessment biologists observed standing water within the OSW but not the wetland. Suitable foraging habitat may be impacted during construction. The wood stork key was utilized below to determine if the project would affect the species.

There are zero (0) known bald eagle (*Haliaeetus leucocephalus*) nests within one (1) mile of the project site (**Appendix A: Figure 8 of 17**). Bald eagles have not been observed flying over the site, and there is no suitable forging habitat on-site for this species. It is HSE's opinion that the proposed project will not adversely impact any suitable foraging habitat.

The site is not within any nesting areas or critical habitat for the Everglade snail kite (*Rostrhamus sociabilis*). No snail kites were observed on-site, there is no suitable habitat, and it is HSE's opinion that the proposed project is not likely to adversely affect the Everglade snail kite **(Appendix A: Figures 9 of 17)**.

The site is not within any known locations of the red-cockaded woodpecker (*Dryobates borealis*) but does not contain suitable habitat for this species (**Appendix A: Figure 10 of 17**).

3.01.4 Wood Stork Key for South Florida

A. Project within 0.76 km (0.47 mile)[2] of an active colony site[3]..... may affect[4]

Project impacts Suitable Foraging Habitat (SFH) at a location greater than 0.76 km (0.47 mile) from a colony site....."go to B"

Project does not affect SFH [5]..... "no effect.[1]"

B. Project impact to SFH is less than 0.20 hectare (0.5 acre)[6]....."NLAA[1]"

Project impact to SFH is greater in scope that 0.20 hectare (one-half acre)....."go to C"

C. Project impacts to SFH not within the CFA (29.9 km, 18.6 miles) of a colony site ..... "go to D"

Project impacts to SFH within the CFA of a colony site....."go to E"

D. Project impacts to SFH have been avoided and minimized to the extent practicable, and compensation (Service approved mitigation bank or as provided in accordance with Mitigation Rule 33 CFR Part6 332) for unavoidable impacts is proposed in accordance with the CWA section 404(b)(1) guidelines and habitat compensation replaces the foraging value matching the hydroperiod[7] of the wetlands affected and provides foraging value similar to, or higher than, that of impacted wetlands. See Appendix 3 for a detailed discussion of the hydroperiod foraging values, an example, and further guidance[8]....."NLAA"

Project not as above..... "may affect[4]"

E. Project provides SFH compensation in accordance with the CWA section 404(b)(1) guidelines and is not contrary to the HMG; habitat compensation is within the appropriate CFA or within the service area of a Service-approved mitigation bank; and habitat compensation replaces foraging value, consisting of wetland enhancement or restoration matching the hydroperiod[6] of the wetlands affected, and provides foraging value similar to, or higher than, that of impacted wetlands. See Appendix 3 for a detailed discussion of the hydroperiod foraging values, as example, and further guidance[8]..... "NLAA"

Project does not satisfy these elements..... "may affect"

End Key

* This Wood Stork Key does not apply to Comprehensive Everglades Restoration Plan projects, as they will require project-specific consultations with the Service.

[1] With an outcome of "no effect" or "NLAA" as outlined in this key, and the project has less than 20.2 hectares (50 acres) of wetland impacts, the requirements of section 7 of the Act are fulfilled for the wood stork and no further action is required. For projects with greater than 20.2 hectares (50 acres) of wetland impacts, written concurrence of NLAA from the Service is necessary.

[2] Within the secondary zone (the average distance from the border of a colony to the limits of the secondary zone is 0.76 km (2,500 feet, or 0.47 mi).

[3] An active colony is defined as a colony that is currently being used for nesting by wood storks or has historically over the last 10 years been used for nesting by wood storks.

[4] Consultation may be concluded informally or formally depending on project impacts.

[5] Suitable foraging habitat (SFH) are wetland that typically have shallow-open water areas that are relatively calm and having a permanent or seasonal water depth between 5 to 38 cm (2 to 15 inches) deep. Other shallow non-wetland water bodies are also SFH. SFH supports and concentrates, or is capable of supporting and concentrating small fish, frogs, and other aquatic prey. Examples of SFH include, but are not limited to freshwater marshes, small ponds, shallow, seasonally flooded roadside or agricultural ditches, seasonally flooded pastures, narrow tidal creek or shallow tidal pools, managed impoundments, and depressions in cypress heads and swamp sloughs.

[6] On an individual basis, SFH impacts to wetlands less than 0.20 hectares (one-half acre) generally will not have a measurable effect on wood storks, although we request that the Corps require mitigation for these losses when appropriate. Weed storks are a wide ranging species, and individually, habitat change form impacts to SFH less than one-half acre are not likely to adversely affect wood storks. However, collectively they may have an effect and therefore regular monitoring and reporting of these effects are important.

[7] Several researchers (Fleming et al. 1994; Ceilley and Bortone 2000) believe that the short hydroperiod wetlands provide a more important pre-nesting foraging food source and a greater early nestling survivor value for wood storks than the foraging base (grams of fish per square meter) that short hydroperiod wetlands provide. Although the short hydroperiod wetlands may provide less fish, these prey bases historically were more extensive and met the foraging needs of the pre-nesting storks and the early-age nestlings. Nest productivity may suffer as a result of the loss of short hydroperiod wetlands. We believe that most wetland fill and excavation impacts permitted in south Florida are in short hydroperiod wetlands. Therefore, we believe that it is especially important that impacts to these shore hydroperiod wetlands within CFAs are avoided, minimized, and compensated fro by enhancement/restoration of short hydroperiod wetlands.

[8] For this Key, the Service requires an analysis of foraging prey base losses and enhancements from the proposed action as shown in the examples in Appendix 3 for projects with greater that 2.02 hectares (5 acres) of wetland impacts. For projects with less that 2.02 hectares (5 acres) of wetland impacts, an individual foraging prey base analysis is not necessary although type for type wetland compensation is still a requirement of the Key.

This key was completed under the presumption that all impacts to Suitable Foraging Habitat (SFH) on-site will be mitigated through the creation of additional SFH, in which case, a determination of *not likely to adversely affect* ("NLAA") is made concerning the wood stork for this project. If the proposed project does not result in a net gain of SFH, the key will need to be reassessed and additional compensatory mitigation may be required.

The site is not within any known locations of the Florida scrub-jay (*Aphelocoma coerulescens*) and does not contain suitable habitat. No scrub-jays were observed on-site (**Appendix A: Figure 11 of 17**), so a Florida scrub-jay survey will not be necessary.

The site is not within 1,500 meters of any crested caracara (*Caracara cheriway*) nests. No crested caracara have been observed. (**Appendix A: Figure 12 of 17**). The site does not contain suitable nesting habitat.

The project site is not within the vicinity of a known burrowing owl (*Athene cunicularia*) location (**Appendix A: Figure 13 of 17**). Burrowing owls are some of the smallest owls reaching a maximum height of nine inches. These birds tend to live in treeless areas such as open prairies, agriculture fields, and airports where they feed primarily on insects and small lizards. Based on the habitat and observations made during the site visit, it is HSE's opinion that the proposed project will not impact the burrowing owl.

3.02 FWC Florida Land Cover Classification System (FLCCS)

Vegetation associations present on-site were mapped using the *Florida Land Cover Classification System* and comparing it to the *Cooperative Land Cover* (CLC) map. The classifications used to represent the closest facsimile possible to the natural community present. The vegetation map is depicted in **Appendix A: Figure 15 of 18.**

1311 - ***Mesic Flatwoods (±0.52 acres)***

Along the southern and western border of an onsite wetland is a strip of wooded vegetation that exists within the project boundary. This community is dominated by a canopy of slash pine (*Pinus elliottii*), a sub canopy comprised of cabbage palm (*Sabal palmetto*) and wax myrtle (*Morella cerifera*) and a ground-cover made up of saw palmetto (*Serenoa repens)*.

2120 - <u>Marshes (±3.60 acres)</u>

One (1) freshwater wetland exists in the northwest corner of the project boundary. This wetland appears to experience enough annual innundation to support a wide variety of hydrophytic herbaceous vegetation. Observed species include, but are not limited to St. John's wort (*Hypericum fasciculatum*), largeleaf marsh pennywort (*Hydrocotyle bonariensis*), coastal plain yellow-eyed grass (*Xyris ambigua*), fragrant flatsedge (*Cyperus odoratus*), Carolina redroot (*Lachnanthes caroliniana*), corkwood (*Stillingia aquatica*), flattened pipewort (*Eriocaulon compressum*), wax myrtle, slash pine, cabbage palm and isolated cases of melaleuca (*Melaleuca quinquenervia*).

4420 - <u>Ditch/Artificial Stream (±0.22 acres)</u>

There is one (1) ditch that runs along the northern edge of the property and along the wetland located onsite. The ditch was heavily inundated, suggesting it holds water year round. The dominant species within the ditch was spatterdock (*Nuphar advena*), also commonly known as yellow pond lily.

182131 - <u>Parks (±6.14 acres)</u>

The majority of the site consists of a newly developed park. This park currently contains a gravel parking lot, a kiosk with a picnic table, garbage and pet waste bins, with wooden guardrails around the perimeter. The majority of the flora observed was bahia grass (*Paspalum notatum*) and planted live oak (*Quercus virginiana*). Along the perimeter of the lake were populations of chalky bluestem (*Andropogon virginicus*), bushy bluestem (*A. glomeratus*), slash pine and wax myrtle saplings and Caesarweed (*Urena lobata*).

3.02.1 <u>Tree Protection</u>

The St. Lucie County Land Development Code (SLCLDC), Chapter VI, Section 6.00.03, states that no person shall remove or alter protected vegetation from

or on any lot or parcel of land in the unincorporated area of St. Lucie County without first obtaining a Vegetation Removal Permit. Protected vegetation includes all native vegetation. Section 6.00.05(D) requires that mitigation will be required for native trees that meet the minimum threshold of Table 1 of the Code. This minimum threshold is based on the diameter of the tree at breast height (DBH) and varies according to the species of tree. It is HSE's opinion that protected trees, including live oak and slash pine with a DBH of 12" or greater, and cabbage palm with 10' or more clear trunk all exist on the project site. Mitigation for all trees, except cabbage palm, shall be at a 2:1 ratio. Cabbage palm ratio is 1:1 for clear trunk.

The SLCLDC, Chapter XI**,** Section 11.05.06 (B)(3) states that all trees that meet the above requirements and are located within all areas of proposed improvement and within twenty (20) feet of all proposed improvement areas shall be shown on an illustrative plan. This plan shall show the existing vegetation superimposed onto a plan identifying what areas will be impacted by the proposed development activity and what areas are proposed for protection, relocation or preservation.

3.03 Jurisdictional Wetlands

It is HSE's professional opinion that there is one (1) jurisdictional wetland on the project site. **(Appendix A: Figure 15 of 17)**. Permits are required if this wetland is to be impacted. All construction should be conducted under Best Management Practices (BMP) and, if possible, all jurisdictional wetlands including a 50' upland buffer, should be avoided to prevent any and all potential impacts, and eliminate the necessity of mitigation. There is also one (1) man-made "Other Surface Waters" (OSW) on the project site. The wetlands and OSWs have not yet been verified by State or Federal agencies.

3.04 Soils

NRCS soil types are mapped in **Appendix A: Figure 16 of 17** and **Table 3** below. The USDA, NRCS, has mapped the surficial soil types within the project site. The resulting soil delineations were published in the *Soil Survey of St. Lucie County Area, Florida*, 25 August 2021. Detailed and complete descriptions of each of these soil communities are presented in the St. Lucie County Soil Survey, and therefore are not included herein. However, a general description of the soils is included in **Table 3**. Soil types mapped by the NRCS are generally limited to the upper 60 to 72 inches of the soil profile and are distinguished by several factors. These factors include soil drainage, topography, presence or absence of restrictive or clayey hardpan type soils, and the depth and range in fluctuation of the groundwater table associated with each soil type.

3.05 Topography

According to the *United States Geographical Survey (USGS)* website *(*https://ngmdb.usgs.gov/topoview/ *)* site elevations range from 20'-27' NGVD. **Appendix A: Figure 17 of 17** depicts the USGS Topographic Map for the project site.

4.00 CONCLUSIONS

- There was one (1) potentially occupied gopher tortoise burrow located during the pedestrian transects. The estimated gopher tortoise population in one (1).

- No eastern indigo snakes were observed on-site by HSE biologists, and the key has determined that the proposed project is *not likely to adversely affect* this species. Coordination with federal agencies will be needed. EIS educational posters will be installed at all entryways to the construction site and contractor sensitivity training will be required for all personnel prior to onset of construction activities.

- The project site is within the core foraging area of three (3) wood stork colonies. The site does contain suitable foraging habitat. Proposed impacts to suitable foraging

habitat will be less than 0.5 acres. It is therefore HSE's professional opinion that this project will *not likely to adversely affect* this species.

- There are zero (0) known bald eagle nests within a one (1) mile radius of the project site. It is HSE's opinion that the proposed project will not adversely affect any eagle nests or activities during project construction.

- It is HSE's opinion that the proposed project is *not likely to adversely affect* Florida pine snake, Everglade snail kite, crested caracara, nor the red-cockaded woodpecker. There is no suitable habitat on-site for these any of these species, and none were observed on-site.

- No Florida scrub-jays were observed on-site and suitable habitat does not exist, so a scrub-jay survey is not recommended.

- Vegetation associations present on-site were mapped using the *Cooperative Land Cover* map and the *Florida Land Cover Classification System.*

- The project site may contain protected trees per St. Lucie County LDC. A tree survey will be needed prior to issuance of a vegetation removal permit.

- One (1) jurisdictional wetland occur within the project. This site has not yet been verified by State or Federal agencies.

- The surficial soils within the project site were mapped according to the NRCS. Five (5) different soil types were located on the project site.

- Site elevations range from 20'-27' NGVD according to the USGS.

Table 3: Soil Descriptions*

Map Unit #	Map Unit Name	Order	Suborder	Drainage	Hydric Rating	Hydric Group
21	Lawnwood and Myakka sands	Spodosols	Aquods	Poorly drained	No	A/D
37	Riviera sand, frequently ponded, 0 to 1 percent slopes	Alfisols	Aqualfs	Very poorly drained	Yes (neither wooded nor farmable under natural conditions)	C/D
49	Wabasso fine sand, gravelly substratum	Spodosols	Aquods	Poorly drained	No	C/D
54	Winder sand, frequently ponded, 0 to 1 percent slopes	Alfisols	Aqualfs	Very poorly drained	Yes (neither wooded nor farmable under natural conditions)	C/D
99	Water	N/A	N/A	N/A	N/A	N/A

*Source: U.S. Department of Agriculture, Soil Conservation Service, Soil Survey of St. Lucie County Area, Florida; August 2021.

APPENDIX A

PROJECT FIGURES

THIS DRAWING, TOGETHER WITH THE CONCEPTS AND DESIGN PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE 0F AND IMPROPER RELIANCE ON THIS DRAWING WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY HOBE SOUND ENVIRONMENTAL CONSULTANTS, INC. SHALL BE WITHOUT LIABILITY TO HOBE SOUND ENVIRONMENTAL CONSULTANTS, INC.

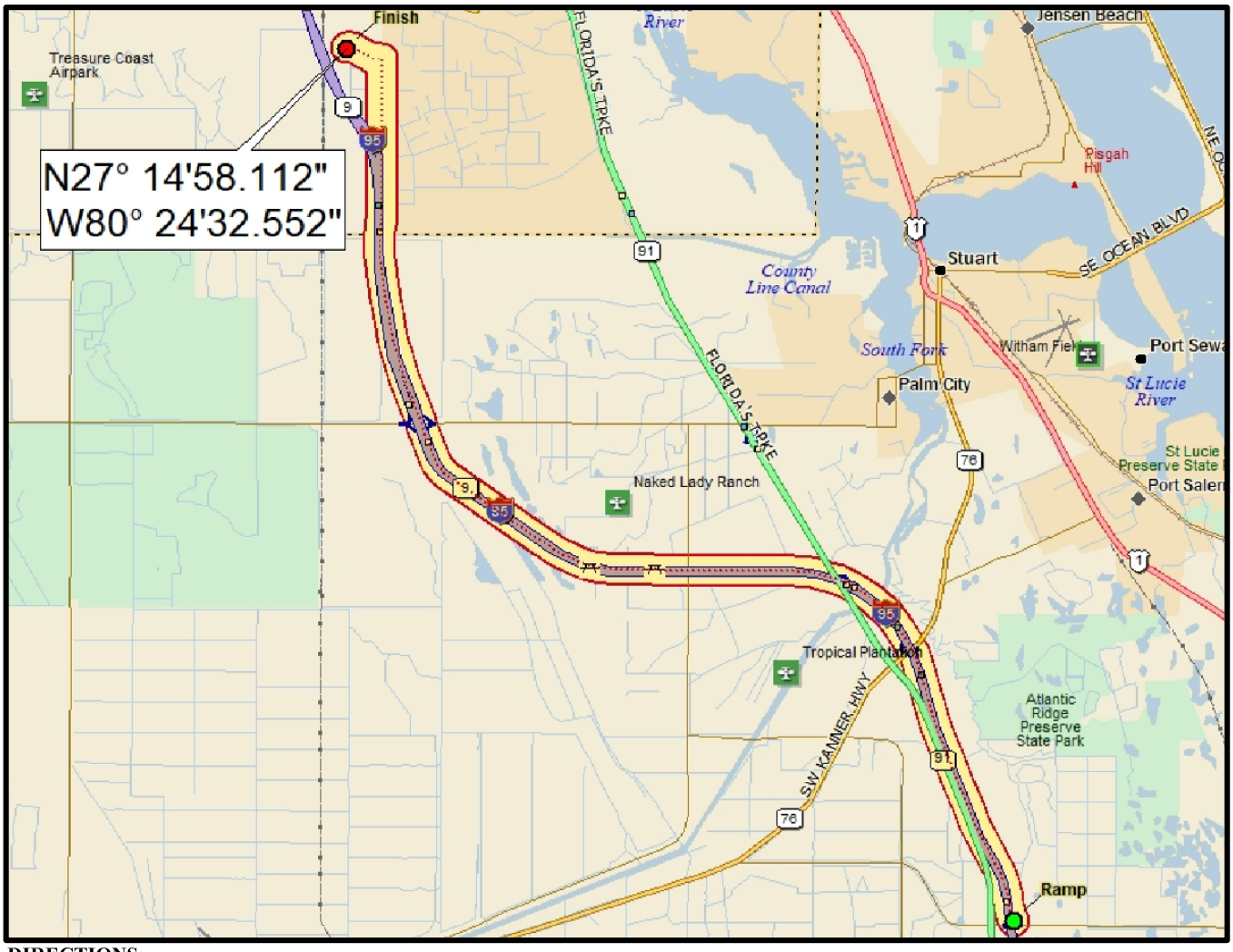
NOT A LAND BOUNDARY SURVEY

CAPTEC Engineering, Inc.
Civil Engineering Professionals

NORTH

0' 7,500' 15,000' 30,000' 60,000'

SCALE: 1" = 15,000'



DIRECTIONS:

		Dist	Turn		Road	Exit	Total Time	Total Dist
			Start	at	Ramp		00:00:00	0.00 mi
			Go straight (NW)	on	I-95 N (SR 9) ramp		00:00:00	0.00 mi
	in	17.34 mi	Keep right (N)	on to	SW Becker Rd ramp	114	00:17:21	17.34 mi
	in	0.20 mi	Turn right (E)	on to	SW Becker Rd		00:17:52	17.54 mi
	in	0.02 mi	Turn left (N)	on to	SW Rosser Blvd		00:17:54	17.56 mi
	in	2.58 mi	Turn left (WNW)	on to	SW Dreyfuss Blvd		00:24:53	20.14 mi
	in	0.61 mi	Finish	at	Finish		00:26:35	20.75 mi

Total Time: 00:26:35 Total Distance: 20.75 mi

SOURCE: DELORME STREET ATLAS USA, 2015.

PORTION OF PARCEL ID # 4323-211-0001-000-9

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 23 - 035.01	DRAWING NAME: 01 - VIC MAP.DWG	DATE: 15 MARCH 2024	APPENDIX A FIGURE: 1 OF 17
	23	37S	39E				
LATITUDE: 27°14'58.112"	LONGITUDE: -80°24'32.552"				DESIGNED BY: RLW	DRAWN BY: NPD	CHECKED BY: FRP

CAPTEC ENGINEERING, INC.
O.L. PEACOCK LAKE PARK
WETLAND AND WILDLIFE ASSESSMENT (WWA)
PROJECT VICINITY MAP AND DIRECTIONS

HSE
Hobe Sound Environmental Consultants Inc.
9512 SE Duncan Street
Hobe Sound, FL. 33455
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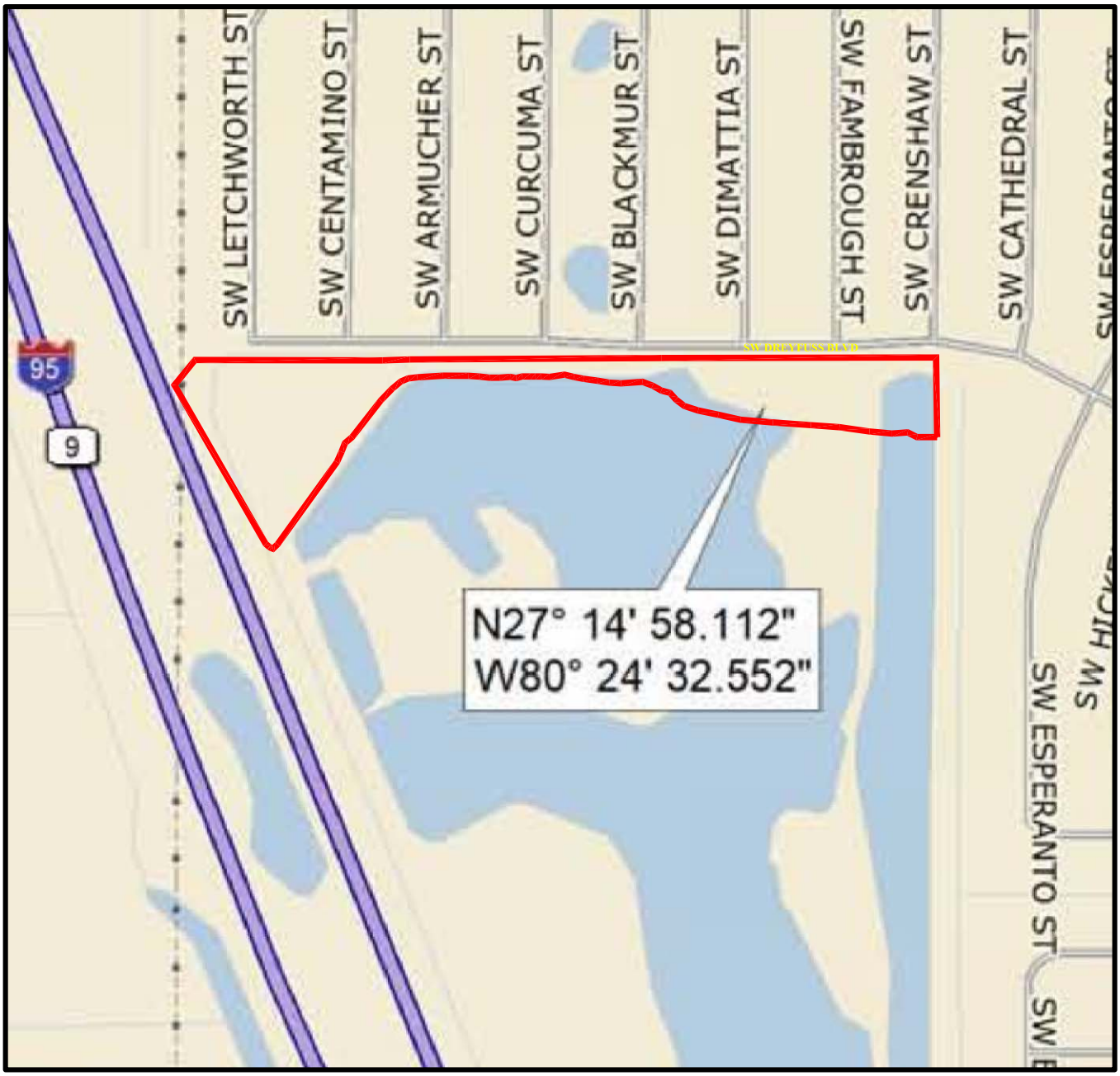
NOT A LAND BOUNDARY SURVEY

CAPTEC Engineering, Inc.
Civil Engineering Professionals

NORTH

0' 250' 500' 1,000' 2,000'

SCALE: 1" = 500'



SOURCE: DELORME STREET ATLAS, 2015

PORTION OF PARCEL ID # 4323-211-0001-000-9

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 23 - 035.01	DRAWING NAME: 02 - LOC MAP.DWG	DATE: 15 MARCH 2024	APPENDIX A FIGURE: 2 OF 17
	23	37S	39E				
LATITUDE: 27°14'58.112"	LONGITUDE: -80°24'32.552"				DESIGNED BY: RLW	DRAWN BY: NPD	CHECKED BY: FRP

CAPTEC ENGINEERING, INC.
O.L. PEACOCK LAKE PARK
WETLAND AND WILDLIFE ASSESSMENT (WWA)
PROJECT LOCATION MAP

HSE
Hobe Sound Environmental Consultants Inc.
9512 SE Duncan Street
Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

THIS DRAWING, TOGETHER WITH THE CONCEPTS AND DESIGN PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DRAWING WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY HOBE SOUND ENVIRONMENTAL CONSULTANTS, INC. SHALL BE WITHOUT LIABILITY TO HOBE SOUND ENVIRONMENTAL CONSULTANTS, INC.

NOT A LAND BOUNDARY SURVEY

CAPTEC Engineering, Inc.
Civil Engineering Professionals

NORTH

0' 200' 400' 800' 1,600'

SCALE: 1" = 400'

SOURCE: 2023 FDOT AERIAL PHOTOGRAPH

PORTION OF PARCEL ID # 4323-211-0001-000-9

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 23 - 035.01	DRAWING NAME: 03 - AERIAL.DWG	DATE: 15 MARCH 2024	APPENDIX A FIGURE: 3 OF 17
	23	37S	39E				
LATITUDE: 27°14'58.112"	LONGITUDE: -80°24'32.552"				DESIGNED BY: RLW	DRAWN BY: NPD	CHECKED BY: FRP

CAPTEC ENGINEERING, INC.
O.L. PEACOCK LAKE PARK
WETLAND AND WILDLIFE ASSESSMENT (WWA)
2023 FDOT AERIAL PHOTOGRAPH

HSE
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Hobe Sound, FL. 33455
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NOT A LAND BOUNDARY SURVEY

CAPTEC Engineering, Inc.
Civil Engineering Professionals

NORTH

0' 200' 400' 800' 1,600'

SCALE: 1" = 400'

LEGEND:

- PEDESTRIAN BELT TRANSECTS (30 FT) AND DIRECTION TRAVELED

SOURCE: HSE SITE VISIT 13 MARCH AND 17 APRIL 2024

PORTION OF PARCEL ID # 4323-211-0001-000-9

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 23 - 035.01	DRAWING NAME: 04 - PED TRANS.DWG	DATE REVISED: 17 APRIL 2024	APPENDIX A FIGURE: 4 OF 17
	23	37S	39E				
LATITUDE: 27°14'58.112"	LONGITUDE: -80°24'32.552"				DESIGNED BY: RLW	DRAWN BY: NPD	CHECKED BY: FRP

CAPTEC ENGINEERING, INC.
O.L. PEACOCK LAKE PARK
WETLAND AND WILDLIFE ASSESSMENT (WWA)
PEDESTRIAN BELT TRANSECT MAP

H S E
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9512 SE Duncan Street
Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

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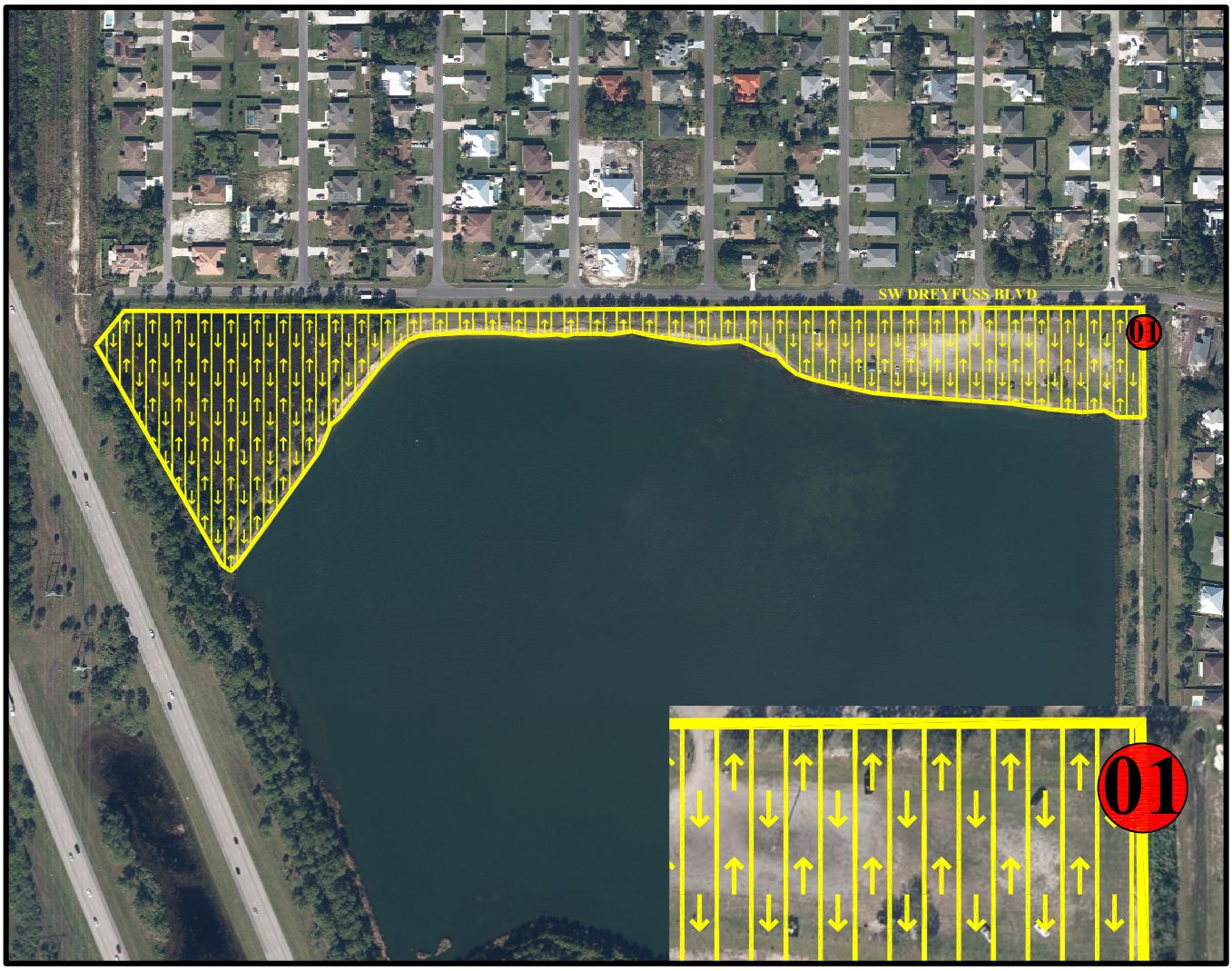
NOT A LAND BOUNDARY SURVEY

CAPTEC Engineering, Inc.
Civil Engineering Professionals

NORTH

0' 200' 400' 800' 1,600'

SCALE: 1" = 400'



LEGEND:

- ACTIVE (01) POTENTIALLY OCCUPIED
- INACTIVE (0) POTENTIALLY OCCUPIED
- ABANDONED (0)

I HEREBY CERTIFY THAT:

A 100% SURVEY FOR GOPHER TORTOISES WAS CONDUCTED ON 17 APRIL 2024, ACCORDING TO FWC GUIDELINES. ONE (1) POTENTIALLY OCCUPIED GOPHER TORTOISE BURROWS WERE LOCATED DURING THE SURVEY. THE ESTIMATED GOPHER TORTOISE POPULATION IS 1.

NIALL DUNTON, GTA-22-00005A

SOURCE: HSE GOPHER TORTOISE SURVEY DATE: 13 MARCH AND 17 APRIL 2024.

PORTION OF PARCEL ID # 4323-211-0001-000-9

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE REVISED:	APPENDIX A FIGURE:
	23	37S	39E	23 - 035.01	05-GTBURROW.DWG	17 APRIL 2024	5 OF 17
LATITUDE: 27°14'58.112"	LONGITUDE: -80°24'32.552"				DESIGNED BY: RLW	DRAWN BY: NPD	CHECKED BY: FRP

CAPTEC ENGINEERING, INC.
O.L. PEACOCK LAKE PARK
WETLAND AND WILDLIFE ASSESSMENT (WWA)
GOPHER TORTOISE (Gopherus polyphemus)
100% BURROW SURVEY
BURROW LOCATION MAP

HSE
Hobe Sound Environmental Consultants Inc.
9512 SE Duncan Street
Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

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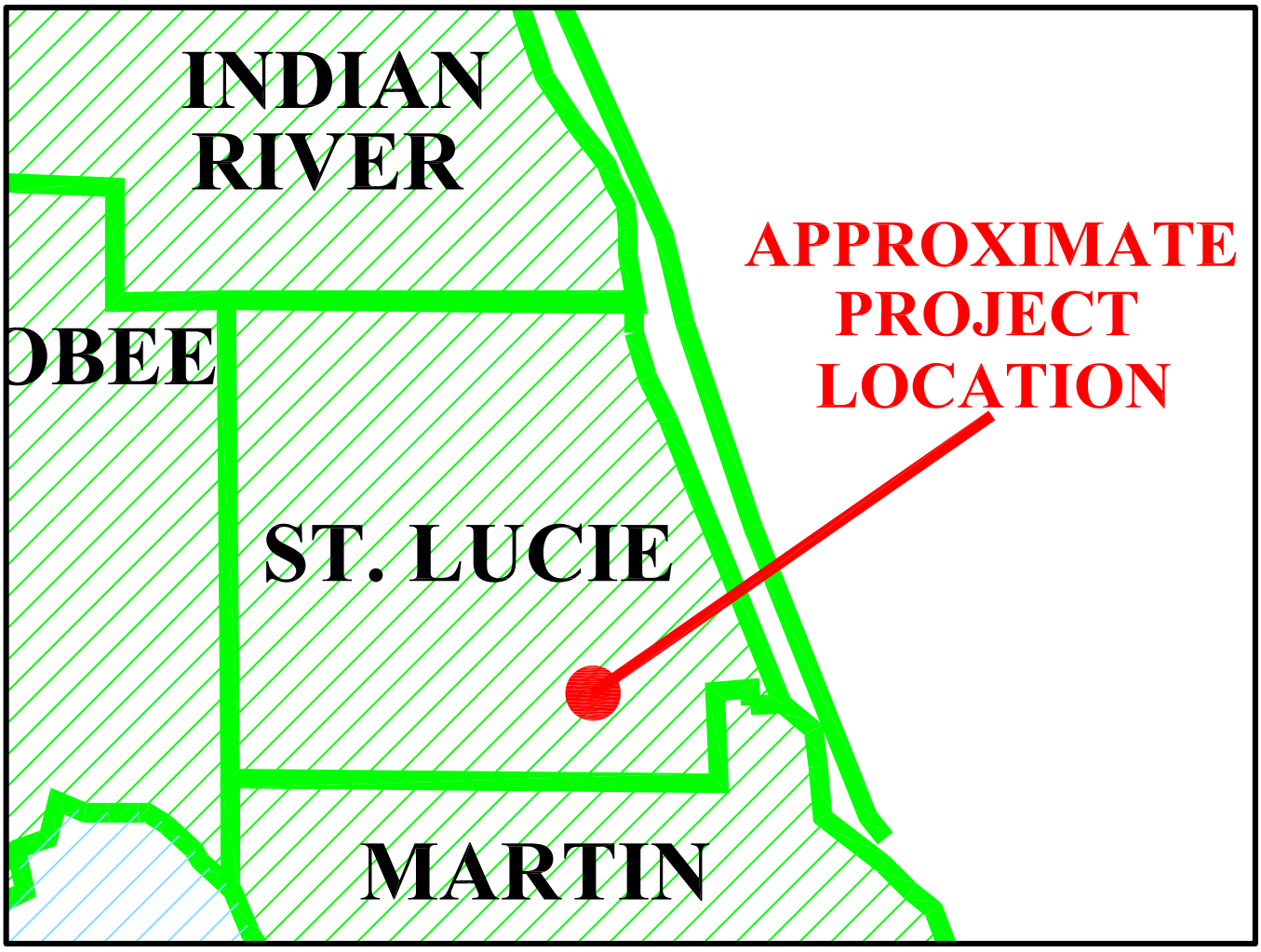
NOT A LAND BOUNDARY SURVEY

CAPTEC Engineering, Inc.
Civil Engineering Professionals

NORTH

0' 25,000' 50,000' 100,000' 200,000'

SCALE: 1" = 50,000'



FLORIDA PINE SNAKE
Pituophis melanoleucus mugitus

- DISTRIBUTION

SCALE 1:1

PRINCIPLE GEOGRAPHIC RANGE OF THE FLORIDA PINE SNAKE, INCLUDING INTERVENING AREAS OF UNOCCUPIED HABITAT. THIS MAP IS FOR INFORMATIONAL PURPOSES ONLY AND NOT FOR REGULATORY USE.

COUNTIES: ALL EXCEPT FOR MONROE. COLLIER AND HENDRY.

FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION
DATE: 28 JUNE 2014
SOURCE: FWC

**IT IS HSE'S OPINION THAT NO SUITABLE HABITAT EXISTS FOR THE FLORIDA PINE SNAKE ON-SITE.

SOURCE: FWC 2014

PORTION OF PARCEL ID # 4323-211-0001-000-9

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	APPENDIX A FIGURE:
	23	37S	39E	23 - 035.01	06 - FL PINE SNAKE.DWG	15 MARCH 2024	6 OF 17
LATITUDE: 27°14'58.112"		LONGITUDE: -80°24'32.552"			DESIGNED BY: RLW	DRAWN BY: NPD	CHECKED BY: FRP

CAPTEC ENGINEERING, INC.
O.L. PEACOCK LAKE PARK
WETLAND AND WILDLIFE ASSESSMENT (WWA)
FLORIDA PINE SNAKE (Pituophis melanoleucus mugitus)
FLORIDA PINE SNAKE DISTRIBUTION MAP

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9512 SE Duncan Street
Hobe Sound, FL. 33455
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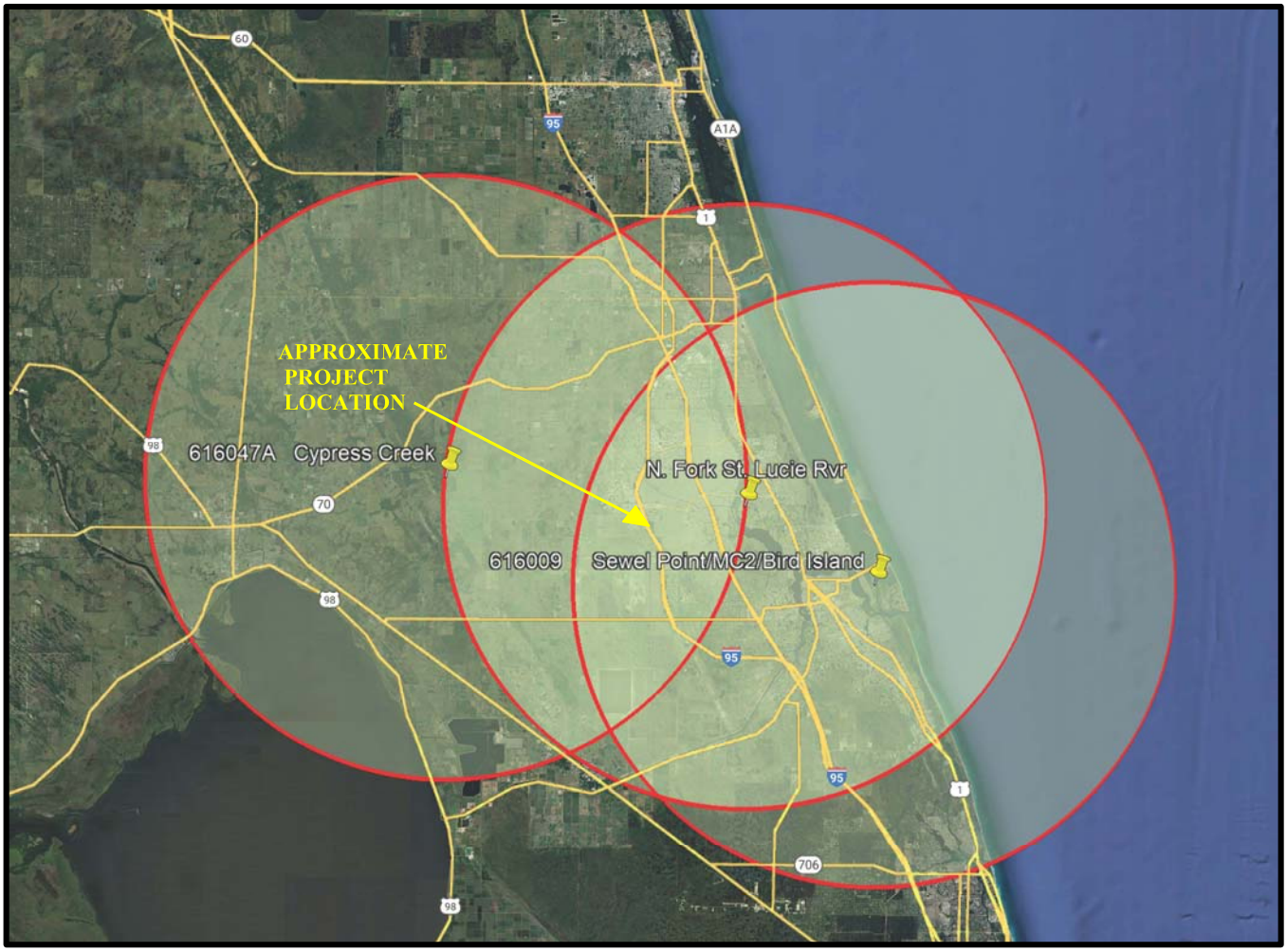
NOT A LAND BOUNDARY SURVEY

CAPTEC Engineering, Inc.
Civil Engineering Professionals

NORTH

0' 30,000' 60,000' 120,000' 240,000'

SCALE: 1" = 60,000'



LEGEND:

- WOOD STORK COLONY

- CORE FORAGING AREA

WOOD STORK (Mycteria americana) NESTING COLONIES

NOTES:
COUNTY INFORMATION ACQUIRED FROM THE FLORIDA GEOGRAPHIC DATA LIBRARY WEBSITE.

WOOD STORK NESTING COLONIES WERE ACQUIRED FROM USFWS NOVEMBER 2018 AND ARE CURRENT TO 2017.

****IT IS HSE'S OPINION THAT SUITABLE HABITAT EXISTS FOR THE WOOD STORK ON-SITE.**

SOURCE: USFWS

PORTION OF PARCEL ID # 4323-211-0001-000-9

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	APPENDIX A FIGURE:
	23	37S	39E	23 - 035.01	07 - WOOD STORK.DWG	15 MARCH 2024	7 OF 17
LATITUDE: 27°14'58.112"		LONGITUDE: -80°24'32.552"			DESIGNED BY: RLW	DRAWN BY: NPD	CHECKED BY: FRP

CAPTEC ENGINEERING, INC.
O.L. PEACOCK LAKE PARK
WETLAND AND WILDLIFE ASSESSMENT (WWA)
WOOD STORK (Mycteria americana)
NESTING COLONIES & CORE FORAGING AREAS

HSE
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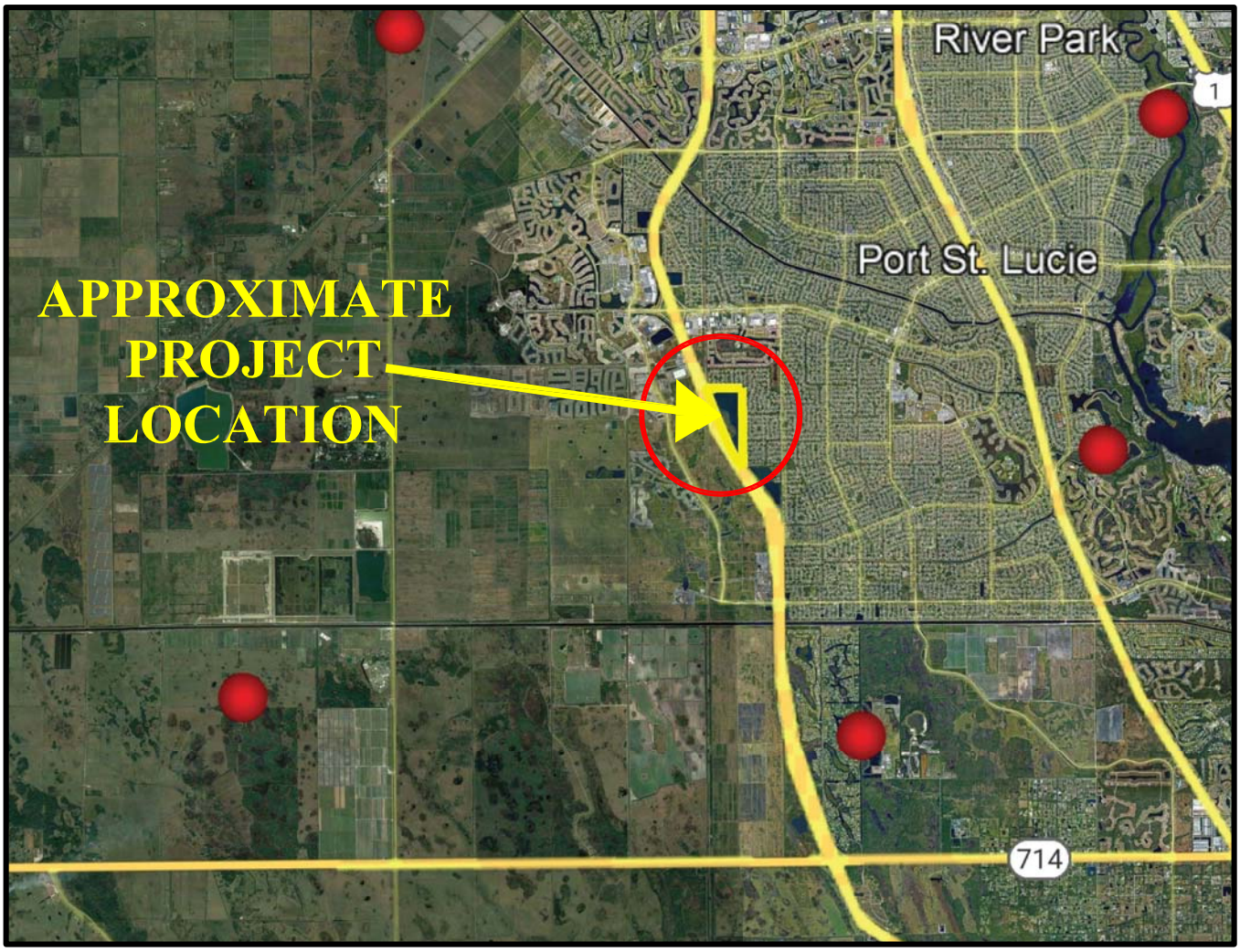
NOT A LAND BOUNDARY SURVEY

CAPTEC Engineering, Inc.
Civil Engineering Professionals

NORTH

0' 6,000' 12,000' 24,000' 48,000'

SCALE: 1" = 12,000'



LEGEND:

- EAGLE NEST

- 1 MILE RADIUS

AMERICAN BALD EAGLE (Haliaeetus leucocephalus) NESTS

NOTE:
COUNTY INFORMATION WAS ACQUIRED FROM THE FLORIDA GEOGRAPHIC DATA LIBRARY WEBSITE.

EAGLE NEST LOCATIONS WERE ACQUIRED FROM THE USFWS 2007

****IT IS HSE'S OPINION THAT NO SUITABLE HABITAT EXISTS FOR THE AMERICAN BALD EAGLE ON-SITE.**

SOURCE: USFWS

PORTION OF PARCEL ID # 4323-211-0001-000-9

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	APPENDIX A FIGURE:
	23	37S	39E	23 - 035.01	08 - EAGLE NEST.DWG	15 MARCH 2024	8 OF 17
LATITUDE: 27°14'58.112"		LONGITUDE: -80°24'32.552"			DESIGNED BY: RLW	DRAWN BY: NPD	CHECKED BY: FRP

CAPTEC ENGINEERING, INC.
O.L. PEACOCK LAKE PARK
WETLAND AND WILDLIFE ASSESSMENT (WWA)
AMERICAN BALD EAGLE (Haliaeetus leucocephalus)
NEST LOCATIONS

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9512 SE Duncan Street
Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

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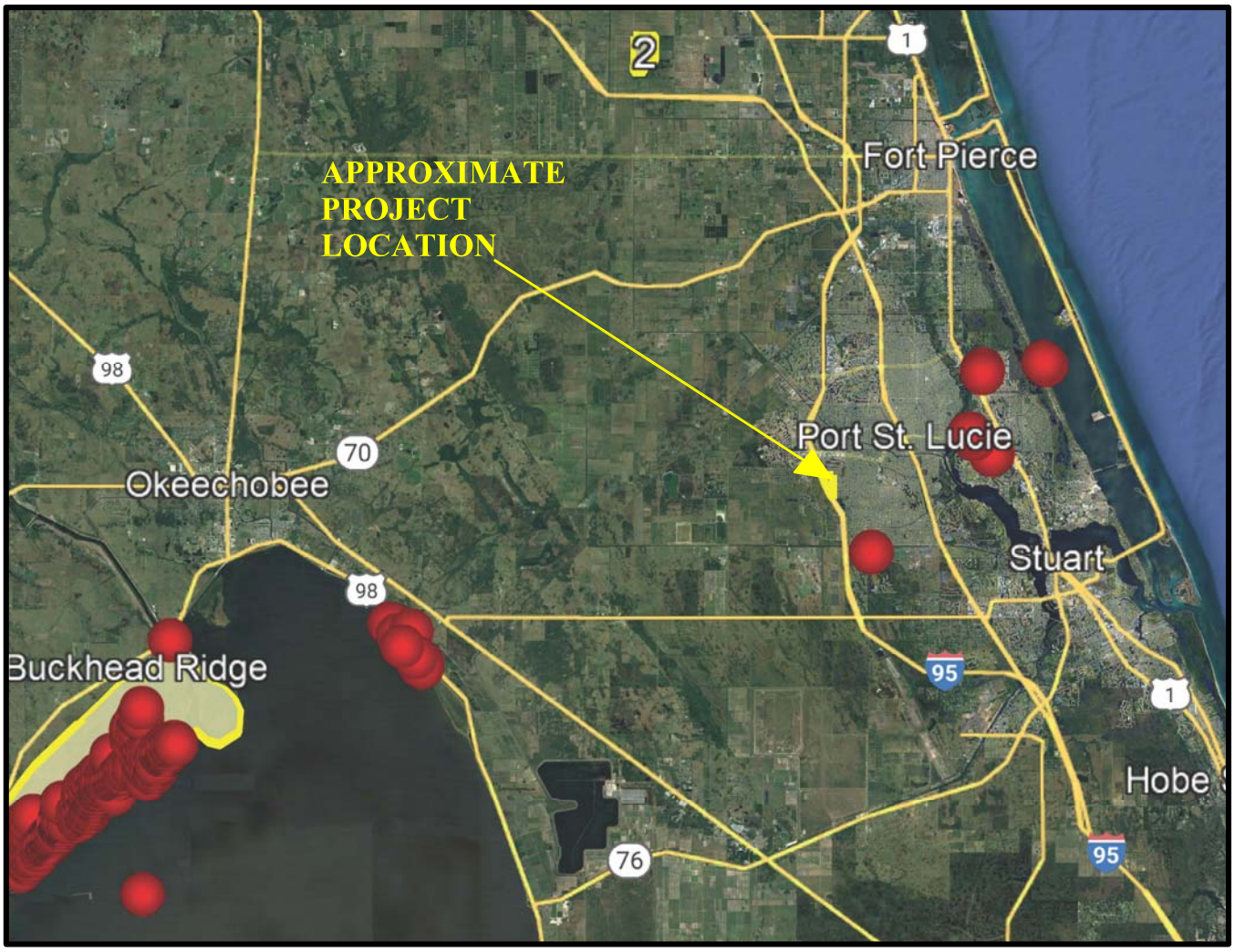
NOT A LAND BOUNDARY SURVEY

CAPTEC Engineering, Inc.
Civil Engineering Professionals

NORTH

0' 20,000' 40,000' 80,000' 160,000'

SCALE: 1" = 40,000'



LEGEND:

- SNAIL KITE NEST
- SNAIL KITE CRITICAL HABITAT

EVERGLADE SNAIL KITE (Rostrhamus sociabilis plumbeus) CRITICAL HABITAT AND NESTS LOCATIONS

NOTE:
COUNTY INFORMATION WAS ACQUIRED FROM THE FLORIDA GEOGRAPHIC DATA

SNAIL KITE HABITAT LOCATIONS WERE ACQUIRED FROM THE USFWS 2007

**IT IS HSE'S OPINION THAT NO SUITABLE HABITAT EXISTS FOR THE EVERGLADE SNAIL KITE ON-SITE.

SOURCE: USFWS

PORTION OF PARCEL ID # 4323-211-0001-000-9

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	APPENDIX A FIGURE:
	23	37S	39E	23 - 035.01	09 - SNAIL KITE.DWG	15 MARCH 2024	9 OF 17
LATITUDE: 27°14'58.112"		LONGITUDE: -80°24'32.552"			DESIGNED BY: RLW	DRAWN BY: NPD	CHECKED BY: FRP

CAPTEC ENGINEERING, INC.
O.L. PEACOCK LAKE PARK
WETLAND AND WILDLIFE ASSESSMENT (WWA)
EVERGLADE SNAIL KITE (Rostrhamus sociabilis plumbeus)
SNAIL KITE NESTS AND CRITICAL HABITAT MAP

H S E
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Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

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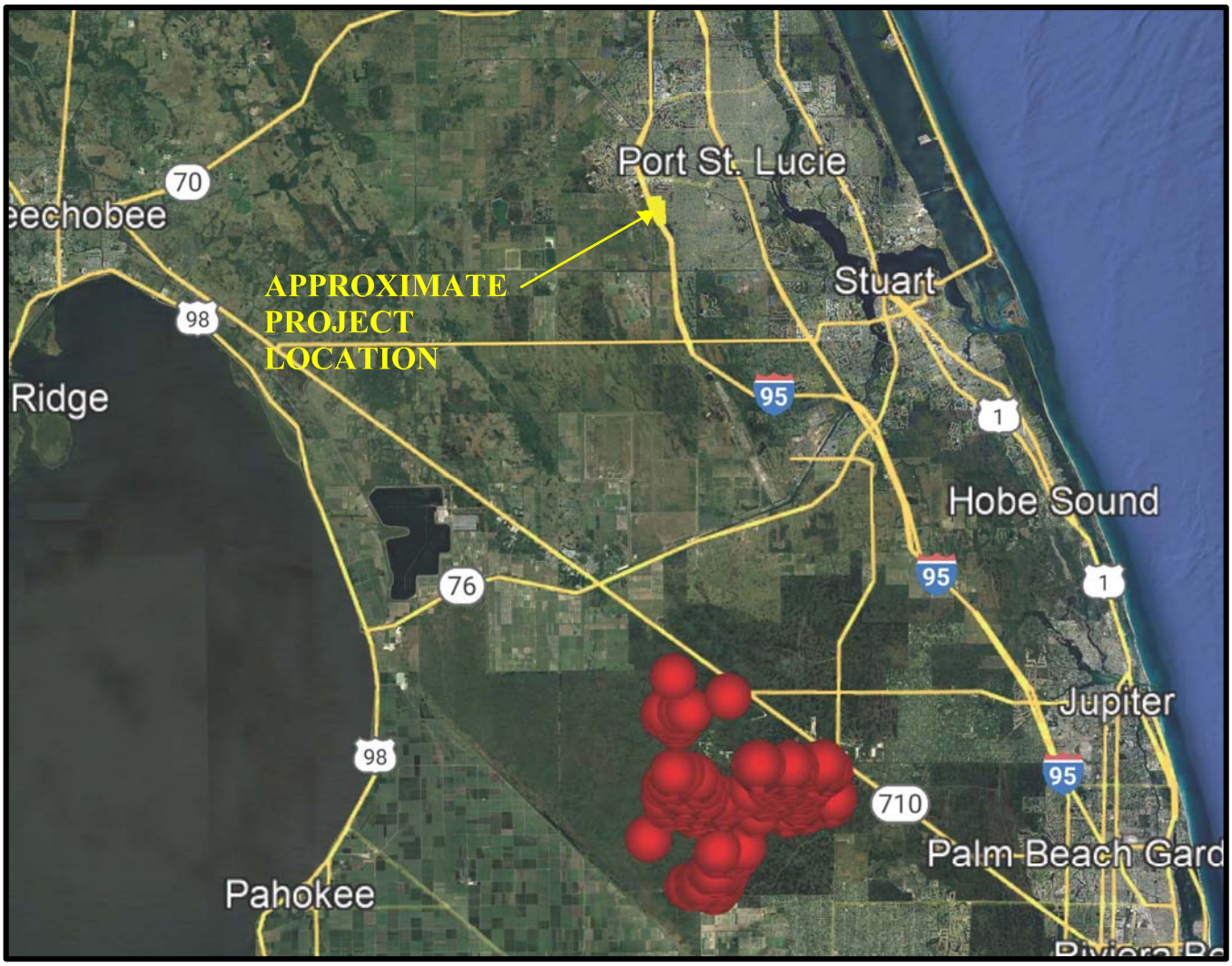
NOT A LAND BOUNDARY SURVEY

CAPTEC Engineering, Inc.
Civil Engineering Professionals

NORTH

0' 20,000' 40,000' 80,000' 160,000'

SCALE: 1" = 40,000'



LEGEND:

- RED-COCKADED WOODPECKER

RED-COCKADED WOODPECKER (Dryobates borealis) LOCATIONS

NOTES:
COUNTY INFORMATION ACQUIRED FROM THE FLORIDA GEOGRAPHIC DATA LIBRARY WEBSITE.

RED-COCKADED WOODPECKER LOCATIONS WERE ACQUIRED

**IT IS HSE'S OPINION THAT NO SUITABLE HABITAT EXISTS FOR THE RED-COCKADED WOODPECKER ON-SITE.

SOURCE: USFWS

PORTION OF PARCEL ID # 4323-211-0001-000-9

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	APPENDIX A FIGURE:
	23	37S	39E	23 - 035.01	10 - RED COCK WP.DWG	15 MARCH 2024	10 OF 17
LATITUDE: 27°14'58.112"		LONGITUDE: -80°24'32.552"			DESIGNED BY: RLW	DRAWN BY: NPD	CHECKED BY: FRP

CAPTEC ENGINEERING, INC.
O.L. PEACOCK LAKE PARK
WETLAND AND WILDLIFE ASSESSMENT (WWA)
RED-COCKADED WOODPECKER (Dryobates borealis)
RED-COCKADED WOODPECKER LOCATIONS

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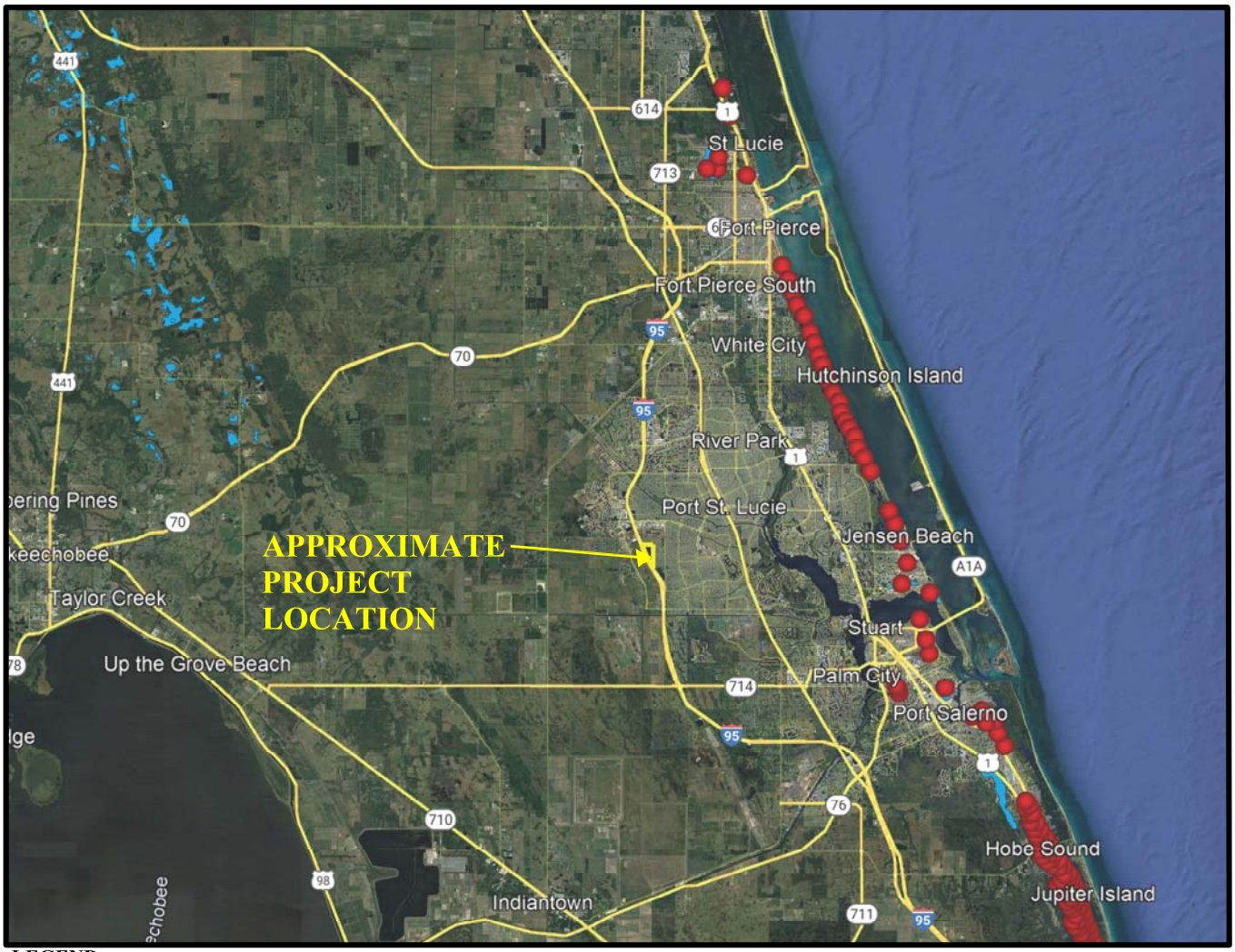
NOT A LAND BOUNDARY SURVEY

CAPTEC Engineering, Inc.
Civil Engineering Professionals

NORTH

0' 10,000' 20,000' 40,000' 80,000'

SCALE: 1" = 40,000'



LEGEND:

- SCRUB JAY OBSERVATION

- SCRUB JAY HABITAT

FLORIDA SCRUB-JAY (Aphelocoma coerulescens) LOCATIONS

NOTES:
COUNTY INFORMATION ACQUIRED FROM THE FLORIDA GEOGRAPHIC DATA LIBRARY WEBSITE.

FLORIDA SCRUB-JAY LOCATIONS WERE ACQUIRED FROM THE USFWS AUGUST 2017

****IT IS HSE'S OPINION THAT NO SUITABLE HABITAT EXISTS FOR THE FLORIDA SCRUB-JAY ON-SITE.**

SOURCE: USFWS

PORTION OF PARCEL ID # 4323-211-0001-000-9

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 23 - 035.01	DRAWING NAME: 11 - SCRUB JAY.DWG	DATE: 15 MARCH 2024	APPENDIX A FIGURE: 11 OF 17
	23	37S	39E				
LATITUDE: 27°14'58.112"	LONGITUDE: -80°24'32.552"				DESIGNED BY: RLW	DRAWN BY: NPD	CHECKED BY: FRP

CAPTEC ENGINEERING, INC.
O.L. PEACOCK LAKE PARK
WETLAND AND WILDLIFE ASSESSMENT (WWA)
FLORIDA SCRUB-JAY (Aphelocoma coerulescens)
SCRUB-JAY LOCATIONS AND HABITAT

H S E
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9512 SE Duncan Street
Hobe Sound, FL. 33455
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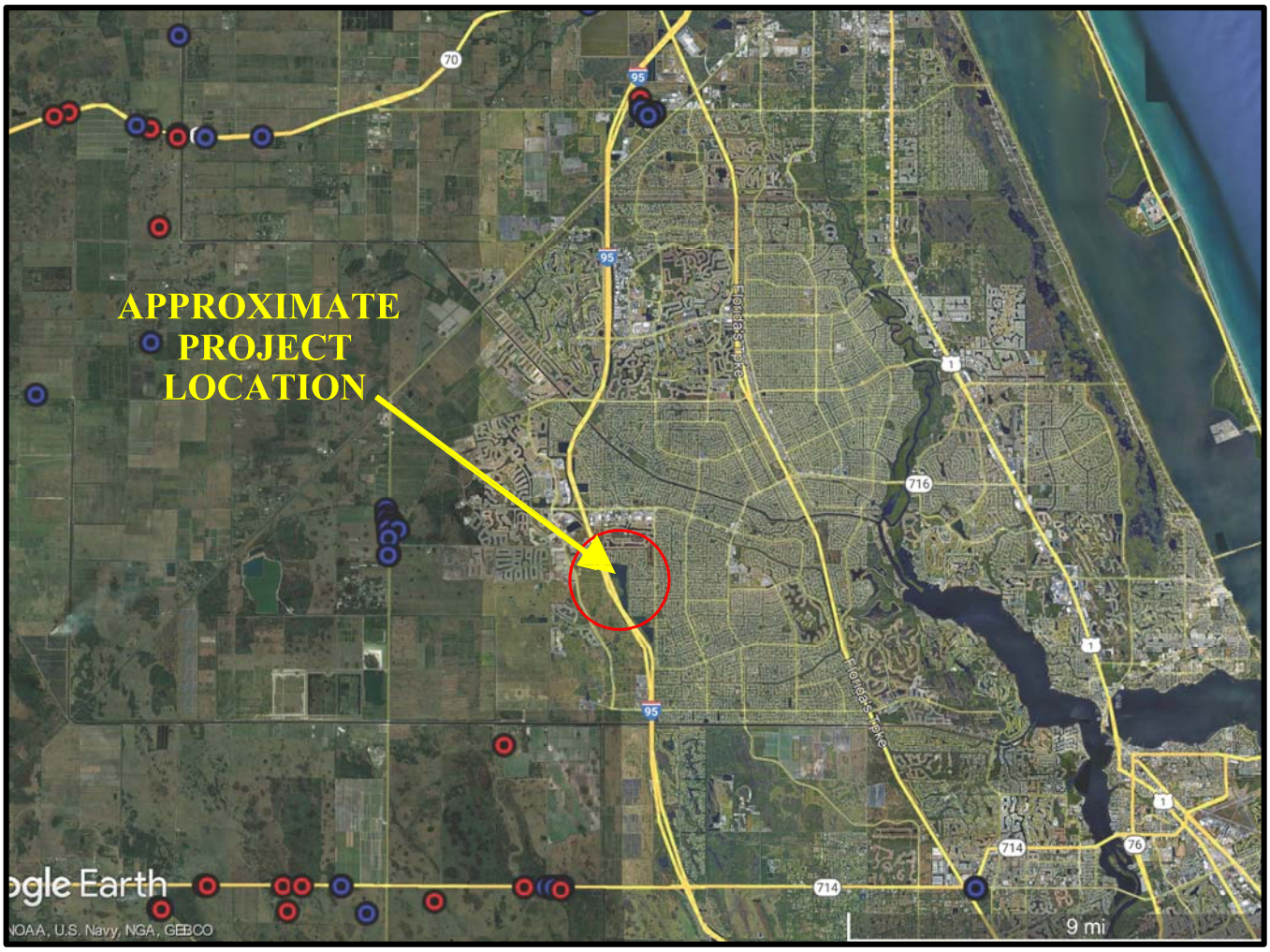
NOT A LAND BOUNDARY SURVEY

CAPTEC Engineering, Inc.
Civil Engineering Professionals

NORTH

0' 9,000' 18,000' 36,000' 72,000'

SCALE: 1" = 18,000'



LEGEND:

- CARACARA NEST
- CARACARA OBSERVATION
- 1,500 METER RADIUS

CRESTED CARACARA (Polyborus plancus audubonii) NEST AND OBSERVATION LOCATIONS

NOTE:
COUNTY INFORMATION WAS ACQUIRED FROM THE FLORIDA GEOGRAPHIC DATA LIBRARY WEBSITE.

CRESTED CARACARA LOCATIONS WERE ACQUIRED FROM THE USFWS 2007

****IT IS HSE'S OPINION THAT NO SUITABLE HABITAT EXISTS FOR THE CRESTED CARACARA ON-SITE.**

SOURCE: USFWS

PORTION OF PARCEL ID # 4323-211-0001-000-9

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 23 - 035.01	DRAWING NAME: 12 - CARACARA.DWG	DATE: 15 MARCH 2024	APPENDIX A FIGURE: 12 OF 17
	23	37S	39E				
LATITUDE: 27°14'58.112"	LONGITUDE: -80°24'32.552"				DESIGNED BY: RLW	DRAWN BY: NPD	CHECKED BY: FRP

CAPTEC ENGINEERING, INC.
O.L. PEACOCK LAKE PARK
WETLAND AND WILDLIFE ASSESSMENT (WWA)
CRESTED CARACARA (Polyborus plancus audubonii)
CARACARA NESTS AND OBSERVATIONS

HSE
Hobe Sound Environmental Consultants Inc.
9512 SE Duncan Street
Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

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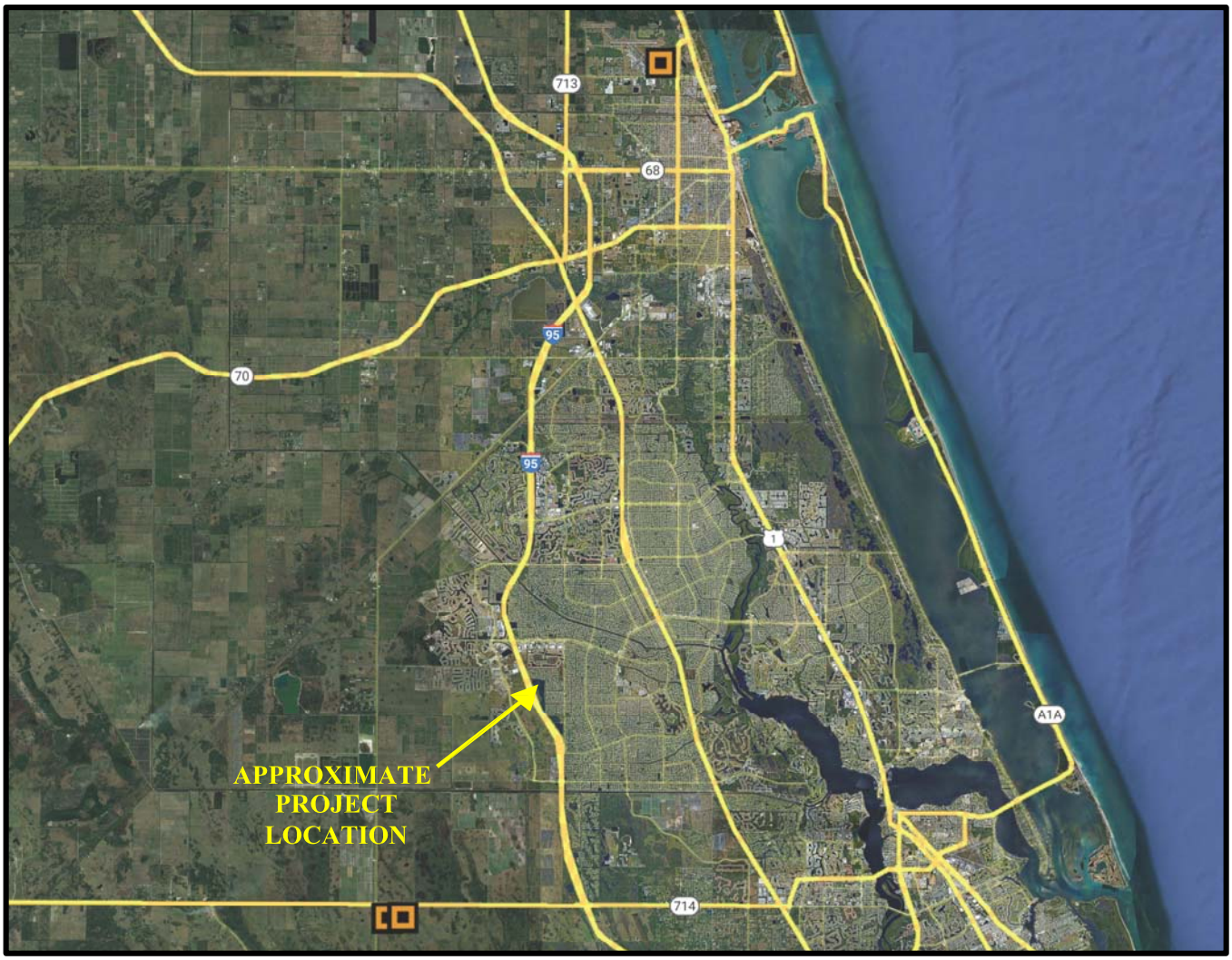
NOT A LAND BOUNDARY SURVEY

CAPTEC Engineering, Inc.
Civil Engineering Professionals

NORTH

0' 12,500' 25,000' 50,000' 100,000'

SCALE: 1" = 25,000'



LEGEND:

- BURROWING OWL LOCATION

BURROWING OWL (Athene cunicularia) NEST LOCATIONS

NOTE:
COUNTY INFORMATION WAS ACQUIRED FROM THE FLORIDA GEOGRAPHIC DATA LIBRARY WEBSITE.

BURROWING OWL LOCATIONS WERE ACQUIRED FROM THE USFWS 2006

****IT IS HSE'S OPINION THAT NO SUITABLE HABITAT EXISTS FOR THE BURROWING OWL ON-SITE.**

SOURCE: USFWS

PORTION OF PARCEL ID # 4323-211-0001-000-9

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	APPENDIX A FIGURE:
	23	37S	39E	23 - 035.01	13 - BURROWING OWL.DWG	15 MARCH 2024	13 OF 17
LATITUDE: 27°14'58.112"		LONGITUDE: -80°24'32.552"			DESIGNED BY: RLW	DRAWN BY: NPD	CHECKED BY: FRP

CAPTEC ENGINEERING, INC.
O.L. PEACOCK LAKE PARK
WETLAND AND WILDLIFE ASSESSMENT (WWA)
BURROWING OWL (Athene cunicularia)
FL BURROWING OWL MAP

HSE
Hobe Sound Environmental Consultants Inc.
9512 SE Duncan Street
Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

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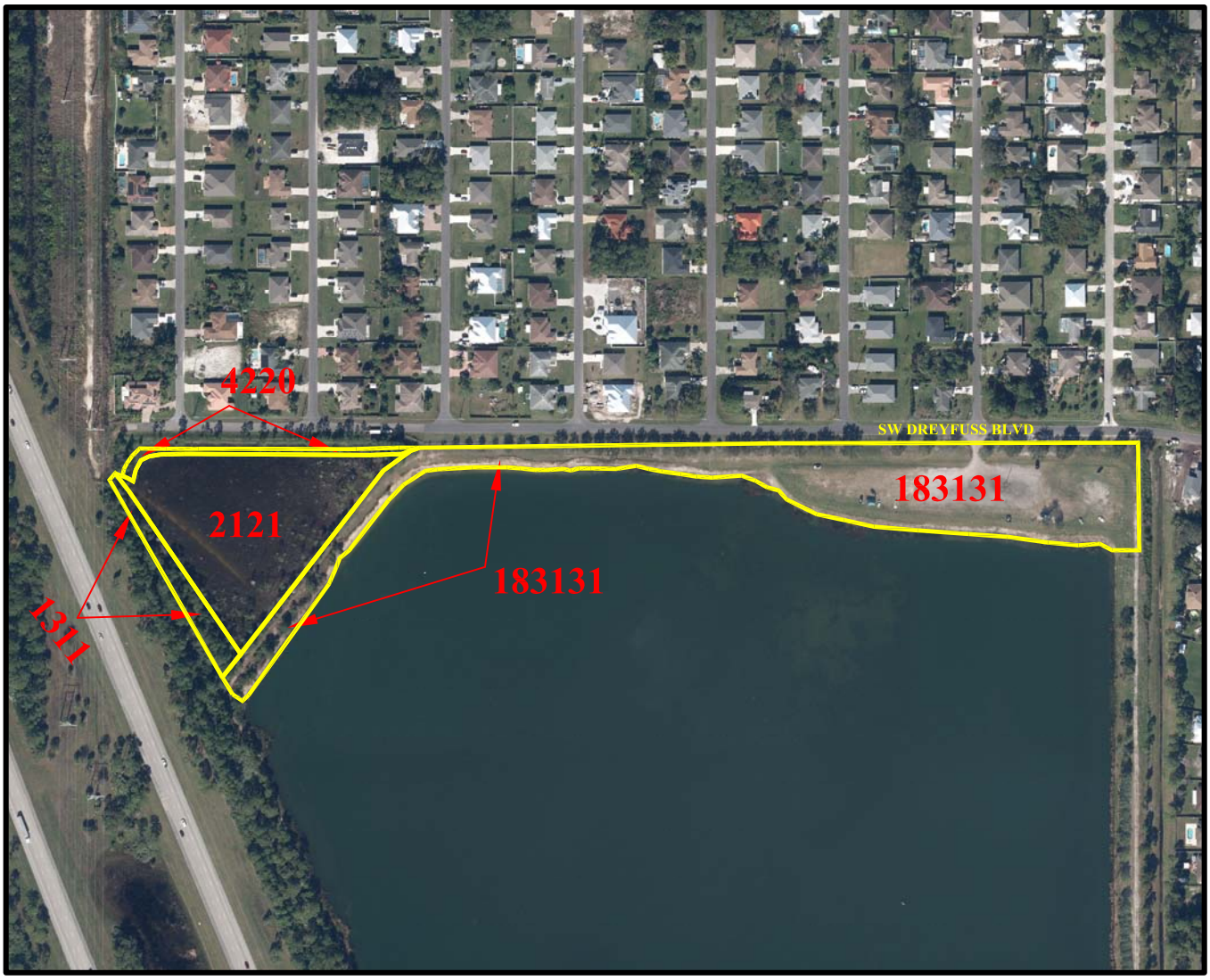
NOT A LAND BOUNDARY SURVEY

CAPTEC Engineering, inc.
Civil Engineering Professionals

NORTH

0' 200' 400' 800' 1,600'

SCALE: 1" = 400'



LEGEND

1311 - MESIC FLATWOODS: ±0.52 ACRES

2120 - MARSHES: ±3.60 ACRES

4420 - DITCH/ARTIFICIAL STREAM : ±0.22 ACRES

182131 - PARKS : ±6.14 ACRES

TOTAL: ±10.48 ACRES

SOURCE: 2023 AERIAL; FLORIDA LAND COVER CLASSIFICATION SYSTEM

PORTION OF PARCEL ID # 4323-211-0001-000-9

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 23 - 035.01	DRAWING NAME: 14-CLC.DWG	DATE: 15 MARCH 2024	APPENDIX A FIGURE: 14 OF 17
	23	37S	39E				
LATITUDE: 27°14'58.112"	LONGITUDE: -80°24'32.552"				DESIGNED BY: RLW	DRAWN BY: NPD	CHECKED BY: FRP

CAPTEC ENGINEERING, INC.
O.L. PEACOCK LAKE PARK
WETLAND AND WILDLIFE ASSESSMENT (WWA)
CLC (VEGETATION) MAP

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(772) 545-3676, E-mail: bobhsenv@gmail.com

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NOT A LAND BOUNDARY SURVEY

CAPTEC Engineering, Inc.
Civil Engineering Professionals

NORTH

0' 200' 400' 800' 1,600'

SCALE: 1" = 400'

LEGEND

WETLAND A (± 3.60 ACRES) -

OSW (± 0.22 ACRES) -

*** IT IS HSE'S OPINION THAT THERE IS ONE (1) JURISDICTIONAL WETLAND AND ONE (1) OSW WITHIN THE BOUNDARIES OF THE PROJECT SITE.**
**** THIS SITE HAS NOT YET BEEN REVIEWED BY STATE OR FEDERAL AGENCY PERSONNEL.**

SOURCE: 2023 AERIAL; HSE SITE VISIT 13 MARCH 2024

PORTION OF PARCEL ID # 4323-211-0001-000-9

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 23 - 035.01	DRAWING NAME: 15-WETLAND.DWG	DATE: 15 MARCH 2024	APPENDIX A FIGURE: 15 OF 17
	23	37S	39E				
LATITUDE: 27°14'58.112"	LONGITUDE: -80°24'32.552"				DESIGNED BY: RLW	DRAWN BY: NPD	CHECKED BY: FRP

CAPTEC ENGINEERING, INC.
O.L. PEACOCK LAKE PARK
WETLAND AND WILDLIFE ASSESSMENT (WWA)
WETLAND AND OSW MAP

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Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

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CAPTEC Engineering, Inc.
Civil Engineering Professionals

NORTH

0' 200' 400' 800' 1,600'

SCALE: 1" = 400'

LEGEND

21 - LAWNWOOD AND MYAKKA SANDS
37 - RIVIERA SAND, FREQUENTLY PONDED, 0 TO 1 PERCENT SLOPES
49 - WABASSO FINE SAND, GRAVELLY SUBSTRATUM
54 - WINDER SAND, FREQUENTLY PONDED, 0 TO 1 PERCENT SLOPES
99 - WATER

SOURCE:https://websoilsurvey.sc.egov.usda.gov/app/HomePage.htm

PORTION OF PARCEL ID # 4323-211-0001-000-9

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 23 - 035.01	DRAWING NAME: 04-SOIL.DWG	DATE: 15 MARCH 2024	APPENDIX A FIGURE: 16 OF 17
	23	37S	39E				
LATITUDE: 27°14'58.112"	LONGITUDE: -80°24'32.552"				DESIGNED BY: RLW	DRAWN BY: NPD	CHECKED BY: FRP

CAPTEC ENGINEERING, INC.
O.L. PEACOCK LAKE PARK
WETLAND AND WILDLIFE ASSESSMENT (WWA)
NRCS SOIL MAP

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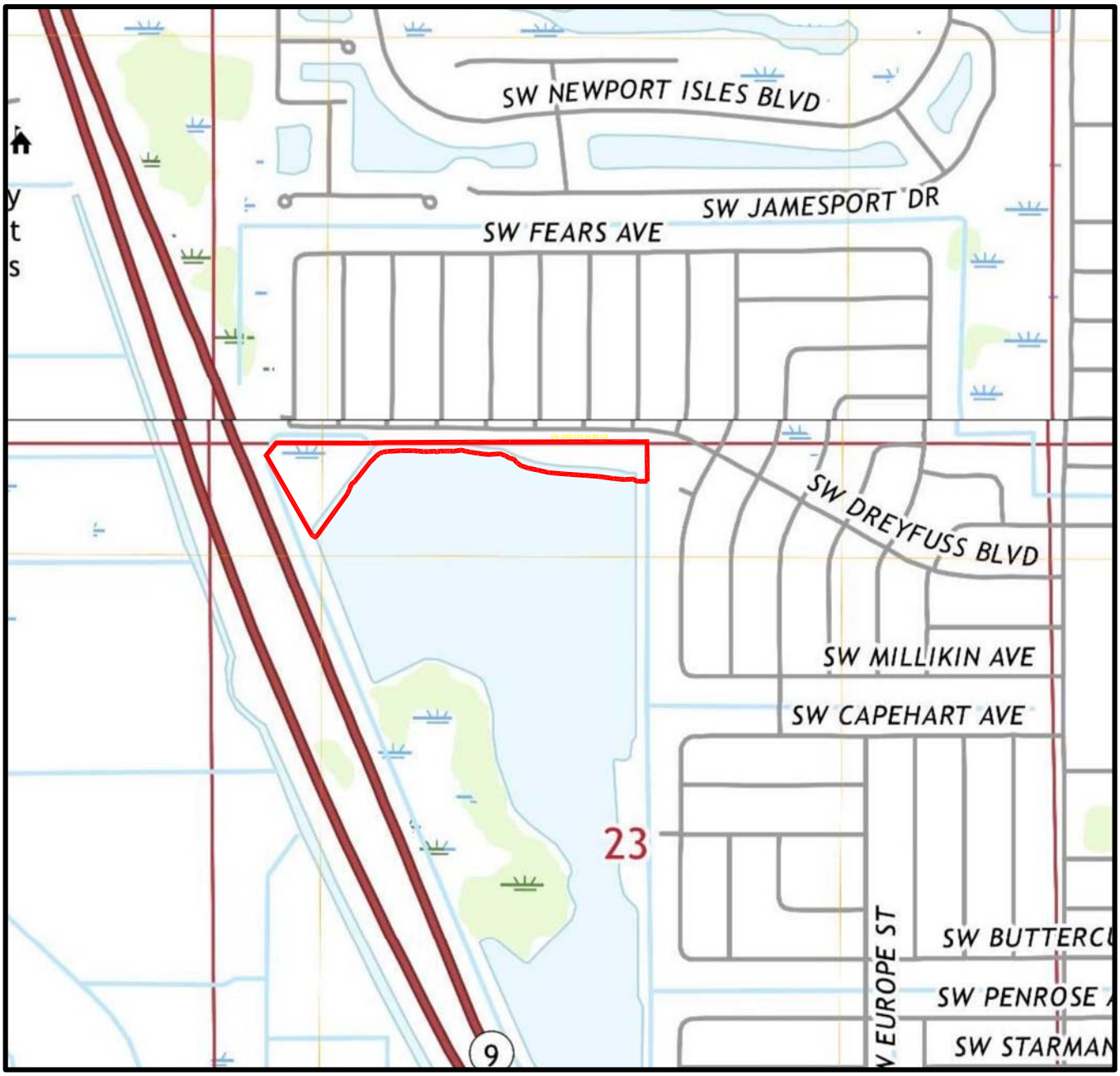
NOT A LAND BOUNDARY SURVEY

CAPTEC Engineering, Inc.
Civil Engineering Professionals

NORTH

0' 500' 1,000' 2,000' 4,000'

SCALE: 1" = 1,000'



SOURCE: USGS INDIANTOWN NW QUADRANGLE, 7.5 MINUTE SERIES

PORTION OF PARCEL ID # 4323-211-0001-000-9

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 23 - 035.01	DRAWING NAME: 17-TOPO.DWG	DATE: 15 MARCH 2024	APPENDIX A FIGURE: 17 OF 17
	23	37S	39E				
LATITUDE: 27°14'58.112"	LONGITUDE: -80°24'32.552"				DESIGNED BY: RLW	DRAWN BY: NPD	CHECKED BY: FRP

CAPTEC ENGINEERING, INC.
O.L. PEACOCK LAKE PARK
WETLAND AND WILDLIFE ASSESSMENT (WWA)
USGS TOPOGRAPHIC MAP

H S E
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Hobe Sound, FL. 33455
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APPENDIX B

SITE PHOTOGRAPHS

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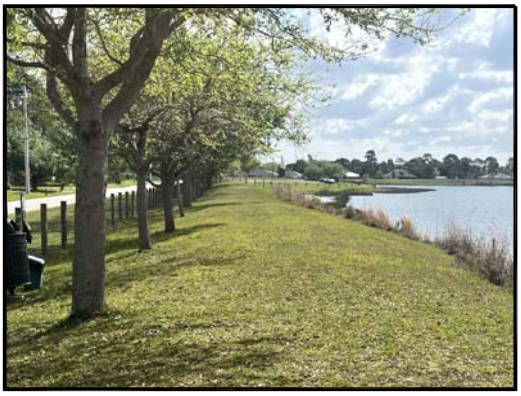
CAPTEC Engineering, Inc.
Civil Engineering Professionals

SCALE: = NTS

PHOTOGRAPH #01: AERIAL PHOTOGRAPH OF GRAVEL PARKING LOT, FAQCING SOUTH.

PHOTOGRAPH #02: AERIAL PHOTOGRAPH OF WETLAND A AND OSW LOCATED ON THE NORTHWEST PORTION OF THE PROJECT SITE, FACING NORTHWEST.



PHOTOGRAPH #03: BERM/WALKING PATH GOING AROUND THE LAKE, FACING EAST.

PHOTOGRAPH #04: GROUND VIEW OF WETLAND A, FACING EAST.

SOURCE: HSE SITE VISIT; 18 MARCH 2024

PARCEL ID # 4323-211-0001-000-9

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 23 - 035.01	DRAWING NAME: APP B - PHOTOS.DWG	DATE: 15 MARCH 2024	APPENDIX B FIGURE: 1 OF 1
	23	37S	39E				
LATITUDE: 27°14'57.84"		LONGITUDE: -80°24'32.55"			DESIGNED BY: RLW	DRAWN BY: NPD	CHECKED BY: RLW

CAPTEC ENGINEERING, INC.
OL PEACOCK SR. PARK
WETLAND AND WILDLIFE ASSESSMENT REPORT (WWA)
PROJECT PHOTOGRAPHS 1 - 4

H S E
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Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

SUBSURFACE SOIL EXPLORATION AND GEOTECHNICAL ENGINEERING EVALUATION PROPOSED IMPROVEMENTS TO O. L. PEACOCK SR. PARK PORT ST. LUCIE, ST. LUCIE COUNTY, FLORIDA

AACE FILE NO. 23-210

ANDERSEN ANDRE CONSULTING ENGINEERS, INC.

834 SW Swan Avenue
Port St. Lucie, Florida 34983
Ph: 772-807-9191 Fx: 772-807-9192
www.aaceinc.com

SUBSURFACE SOIL EXPLORATION AND GEOTECHNICAL ENGINEERING EVALUATION PROPOSED IMPROVEMENTS TO O. L. PEACOCK SR. PARK PORT ST. LUCIE, ST. LUCIE COUNTY, FLORIDA

AACE FILE NO. 23-210

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- Appendix II — General Notes (Soil Boring, Sampling and Testing Methods)
- Appendix III — Exfiltration Test and DRI Test Reports
- Appendix IV — AACE Project Limitations and Conditions

ANDERSEN ANDRE CONSULTING ENGINEERS, INC.
Geotechnical Engineering
Construction Materials Testing
Environmental Consulting

AACE File No. 23-210
August 31, 2023

CAPTEC Engineering, Inc.
301 NW Flagler Avenue
Stuart, FL 34994

Attention: Mr. Craig Seger

SUBSURFACE SOIL EXPLORATION AND
GEOTECHNICAL ENGINEERING EVALUATION
PROPOSED IMPROVEMENTS TO O. L. PEACOCK SR. PARK
PORT ST. LUCIE, ST. LUCIE COUNTY, FLORIDA

1.0 INTRODUCTION

In accordance with your request and authorization, Andersen Andre Consulting Engineers, Inc. (AACE) has completed a subsurface exploration and geotechnical engineering analyses for the above referenced project. The purpose of performing this exploration was to explore shallow soil types and groundwater levels as they relate to the proposed park improvement features, and restrictions which these soil and groundwater conditions may place on the proposed site development. Our work included Standard Penetration Test (SPT) borings, hand auger borings, soil hydraulic conductivity and infiltration testing, laboratory testing, and engineering analysis. This report documents our explorations and tests, presents our findings, and summarizes our conclusions and recommendations.

2.0 EXECUTIVE SUMMARY

The following summary is intended to provide a brief overview of our findings and recommendations; however, the report should be read in its entirety by the project design team members.

- The proposed restroom and pavilion building sites, at the locations explored, were found to be underlain by soils which are generally satisfactory to support the structures on conventional spread foundations or monolithic (thickened-edge) concrete slabs. A maximum design foundation bearing pressure of 2,500 pounds per square foot (psf) is recommended for the proposed structures.

- Similarly, the encountered soil conditions are suitable to support the proposed on-street parking and concrete-paved trail loops. A typical pavement section consisting of an asphaltic wearing surface atop a calcareous base (followed by a stabilized or simply compacted subgrade) is considered appropriate for the on-street parking areas. Further, a 4-inch thick concrete section atop compacted subgrade will be sufficient for the proposed walking trails.

- Site preparation procedures will include clearing, stripping and grubbing of all surface vegetation and organic topsoil, followed by proofrolling of building and pavement/trail areas.

- The groundwater table was encountered at depths of 5.0 to 6.5 feet below the existing grades.

3.0 SITE INFORMATION AND PROJECT UNDERSTANDING

3.1 Site Location and Description

The O. L. Peacock Sr. Park is located at 1950 SW Dreyfuss Boulevard in Port St. Lucie, St. Lucie County, Florida (Parcel ID 4323-211-0001-000-9, Sections 14 & 23, Township 37 South, Range 39 East). The location of the subject site is graphically depicted on the Site Vicinity Map (2022 aerial photograph) as well as on a reproduction of the USGS Topographic Quadrangle Map of "Indiantown NW, Florida", both presented on our Figure No. 1. The USGS Quadrangle Map depicts the subject property as being relatively level with an average surface elevation of about 28 feet relative to the National Geodetic Vertical Datum of 1929.

The ±165-acre O. L. Peacock Sr. Park consists mainly of a water-filled former sand mine/borrow pit with an approximately 4-acre upland, grass-covered section of land located within the northeast portion of the park. This upland portion (i.e. the site) is the subject of the main features of the proposed park improvements.

Subject upland portion of O. L. Peacock Sr. Park (source: cityofpsl.com)

3.2 Review of USDA Soil Survey

According to the USDA NRCS Web Soil Survey, the predominant surficial soil type located within the site boundaries is the *Lawnwood and Myakka sands (USDA NRCS Map Unit 21)*. In brief, this composite soil type is noted by the USDA NRCS to consist of poorly drained sandy marine deposits originating from within flatwoods on historic marine terraces, with sands present to depths in excess of 80 inches below grade.

The approximate location of the subject site was superimposed on an aerial photograph obtained from the USDA Web Soil Survey and is shown on Figure No. 1. Further, the USDA Web Soil Survey summary report is included in Appendix I.

3.3 Project Understanding

Based on our conversations and our review of the forwarded site schematic, we understand that it is proposed to design and construct improvements in multiple phases for the subject site. We further understand that the main features of the proposed park improvements include concrete-paved trail loops, an entryway off Dreyfuss Boulevard, on-street parking on Dreyfuss Boulevard, a restroom building plus three shade pavilions.

We have not been provided with any specific structural or architectural information for the proposed restroom building, however, we expect that it will have maximum wall loads of 1-2 kips per lineal foot. The proposed pavilions are expected to be supported on concrete slab-on-grades.

4.0 FIELD EXPLORATION PROGRAM

To explore subsurface conditions at the site, the exploration program summarized in Table 1 below was completed:

Table 1 - Field Exploration Program

Field Work Type	Standard	# of Borings	Depth Below Grade [feet]	Location
Standard Penetration Test (SPT)	ASTM D1586	4	15	Refer to Figure No. 2
Auger	ASTM D1452	15	7	Refer to Figure No. 2
Soil Hydraulic Conductivity Test	SFWMD ERPIM(1)	2	6	Refer to Figure No. 2
Double-Ring Infiltrometer Test	ASTM D3385	2	N/A	Refer to Figure No. 2

Note to Table 1: (1) SFWMD Environmental Resource Permit Information Manual (2020 edition)

Our site visits and field work were completed in the period August 23-29, 2023. The field work locations shown on Figure No. 2 were determined in the field by our field crew using the provided site plan, aerial photographs, existing site features, and a hand-held GPS instrument. The locations should be considered accurate only to the degree implied by the method of measurement used. We preliminarily anticipate that the actual locations are within 15 feet of those shown on Figure No. 2.

Summaries of AACE's field procedures are presented in Appendix II and the individual boring profiles are presented on the attached on Sheets No. 1 and 2. Samples obtained during performance of the borings were visually classified in the field, and representative portions of the samples were transported to our laboratory in sealed sample jars for further classification. The soil samples recovered from our explorations will be kept in our laboratory for 60 days, then discarded unless you specifically request otherwise.

5.0 OBSERVED SUBSURFACE CONDITIONS

5.1 General Soil Conditions

Detailed subsurface conditions are illustrated on the soil boring profiles presented on the attached Sheets No. 1 and 2. The stratification of the boring profiles represents our interpretation of the field boring logs and the results of laboratory examinations of the recovered samples. The stratification lines represent the approximate boundary between soil types. The actual transitions may be more gradual than implied.

In general, at the locations and depths explored, our soil borings encountered a thin mantle of topsoil (sands with roots/organics) followed by loose to medium dense fine sands (SP) and occasionally slightly clayey fine sands (SP-SC) reaching the termination depths of our borings.

The above soil profile is outlined in general terms only. Please refer to the attached Sheets No. 1 and 2 for individual soil profile details.

5.2 Measured Groundwater Level

The groundwater table depth as encountered in the borings during the field investigations is shown adjacent to the soil profiles on the attached Sheets No. 1 and 2. As can be seen, the groundwater table was generally encountered at depths of about 5.0 to about 6.5 feet below the existing ground surface, with this range likely associated with similar topographic variations across the site. Fluctuations in groundwater levels should be anticipated throughout the year primarily due to seasonal variations in rainfall and other factors that may vary from the time the borings were conducted.

5.3 Soil Hydraulic Conductivity Testing

Two (2) soil hydraulic conductivity tests were performed at the locations shown on Figure No. 2. In general, these tests were performed in substantial accordance with methods described in the South Florida Water Management District (SFWMD) Environmental Resource Permit Information Manual (2020 edition), and yielded the following results (Table 2).

Table 2 - Soil Hydraulic Conductivity Test Results

Test No.	Groundwater Depth (ft-bls)	Flow Rate, Q (cfs)	Hydraulic Conductivity, K (cfs/sqf - ft head)
EX-1	Not Encountered (>6')	1.7×10^{-3}	5.7×10^{-5}
EX-2	Not Encountered (>6')	2.7×10^{-3}	9.1×10^{-4}

The soil hydraulic conductivity test reports are included in Appendix III.

5.4 Double-Ring Infiltrometer Testing

Two (2) double-ring infiltrometer (DRI) tests were performed at the locations shown on Figure No. 2. These tests were completed in general accordance with the procedures recommended in ASTM D3385. The results of the DRI tests are presented in Table 3.

Table 3 - DRI Test Results

Test No.	Inner Ring Infiltration Rate, V_{IR} [in/hr]	Annular Space Infiltration Rate, V_A (in/hr]
DRI-1	6.2	4.5
DRI-2	6.8	8.7

The DRI test reports are included in Appendix III.

6.0 LABORATORY TESTING PROGRAM

Our drillers observed the soil recovered from the SPT sampler and the augers, placed the recovered soil samples in moisture proof containers, and maintained a log for each boring. The recovered soil samples, along with the field boring logs, were transported to our Port St. Lucie soils laboratory where they were visually examined by AACE's project engineer to determine their engineering classification. The visual classification of the samples was performed in accordance with the Unified Soil Classification System, USCS.

Further, representative samples were selected for index laboratory testing, consisting of moisture content tests (ASTM D2216) and percent fines tests (ASTM D1140). These tests were performed to aid in classifying the soils and to help evaluate the general engineering characteristics of the site soils.

The results of our classifications and laboratory analyses are presented on the soil boring profiles presented on Sheets No. 1 and 2.

7.0 GEOTECHNICAL ENGINEERING EVALUATION

7.1 General

Based on the findings of our site exploration, our evaluation of subsurface conditions, and judgment based on our experience with similar projects, we conclude that the soils underlying this site are generally satisfactory to support the proposed lightly-loaded structures (restroom building and pavilions) on conventional spread foundations or monolithic (thickened-edge) concrete slabs. Similarly, the proposed on-street parking and concrete-paved walking trails can be supported on the encountered soils. However, in our opinion, the bearing capacity of the loose near-surface soils should be improved in order to reduce the risk of unsatisfactory foundation and pavement performance. The general soil improvement we recommend includes proofrolling the individual building sites site with a heavy vibratory roller.

Following are specific recommendations for site preparation procedures, foundation design, and pavement systems for the project.

7.2 Site Preparation Recommendations

7.2.1 Clearing

The site surface should be cleared, grubbed and stripped of all vegetation, topsoil, trash and debris. Stumps (if any) should be removed entirely and their excavations backfilled with clean granular soils placed in 6-12 inch lifts, and with each lift compacted to a dry density not less than 95 percent of the modified Proctor (ASTM D1557) maximum dry density of the compacted material.

7.2.2 Compaction Procedures

Following clearing, the proposed building and pavement/trail areas should be proofrolled with a 10 ton (minimum) vibratory roller; any soft, yielding soils detected should be excavated and replaced with clean, compacted backfill that conforms with the recommendations below. Sufficient passes should be made during the proofrolling operations to produce dry densities not less than 95 percent of the modified Proctor (ASTM D1557) maximum dry density of the compacted material to depths of 1 foot below the compacted surface, or 1 foot below the bottom of footings, whichever is lower. In any case, the building and pavement areas should receive not less than 10 overlapping passes, half of them in each of two perpendicular directions.

We recommend that the site preparation contractor closely monitor the vibrations produced during the proofrolling operations so that they do not adversely affect any nearby structures.

After the exposed surface has been proofrolled and tested to verify that the desired dry density has been obtained, the building and pavement/trail areas may be filled to the desired grades. All fill material should conform to the recommendations below. It should be placed in uniform layers not exceeding 12 inches in loose thickness. Each layer should be compacted to a dry density not less than 95 percent of its modified Proctor (ASTM D1557) maximum value.

After completion of the general site preparations discussed above, the bottom of foundation excavations dug through the compacted natural ground, fill or backfill, should be compacted so as to densify soils loosened during or after the excavation process, or washed or sloughed into the excavation prior to the placement of forms. A vibratory, walk-behind plate compactor can be used for this final densification immediately prior to the placement of reinforcing steel, with previously described density requirements to be maintained below the foundation level.

Following removal of foundation forms, backfill around foundations should be placed in lifts six inches or less in thickness, with each lift individually compacted with a plate tamper. The backfill should be compacted to a dry density of at least 95 percent of the modified Proctor (ASTM D1557) maximum dry density.

7.2.3 Fill Material

All fill material under the buildings and pavement should consist of clean sands free of organics and other deleterious materials. The fill material should have not more than 12 percent by dry weight passing the U.S. No. 200 sieve, and no particle larger than 3 inches in diameter.

7.3 Building Foundation and Slab Design

After the foundation soils have been prepared as recommended above, the site should be suitable for supporting the proposed restroom and pavilion construction on conventional shallow foundations (or monolithic, thickened-edge concrete slabs) proportioned for an allowable bearing stress of 2,500 pounds per square foot [psf], or less.

To provide an adequate factor of safety against a shearing failure in the subsoils, all continuous foundations should be at least 16 inches wide, and all individual column footings (if any) should have a minimum width of 24 inches. Exterior foundations should bear at least 16 inches below adjacent outside final grades.

Based upon the boring information and the assumed loading conditions, we estimate that the recommended allowable bearing stress will provide a minimum factor of safety in excess of two against bearing capacity failure. With the site prepared and the foundations designed and constructed as recommended, we anticipate total settlements of one inch or less, and differential settlement between adjacent similarly loaded footings of less than one-quarter of an inch. Because of the granular nature of the subsurface soils, the majority of the settlements should occur during construction; post-construction settlement should be minimal.

After the ground surface is proofrolled and filled, if necessary, as recommended in this report, the floor slab can be placed directly on the prepared subgrade. For design purposes, we recommend using a subgrade reaction modulus of 150 pounds per cubic inch (pci) for the compacted shallow sands. In our opinion, a highly porous base material is not necessary. We recommend to use a minimum of 10 mil polyolefin film as the main component of a vapor barrier system.

8.0 PAVEMENT RECOMMENDATIONS

8.1 On-Street Parking

Actual pavement section thickness should be provided by the project civil engineer based on traffic loads, volume, and the owners design life requirements. The following sections represent minimum thicknesses representative of typical load and construction practices and as such periodic maintenance should be anticipated. In addition, recommendations for a rigid pavement design are presented for use in delivery areas, dumpster pads, etc.

We recommend a pavement section consisting of an asphaltic concrete wearing surface on a calcareous base course supported on stabilized subbase over well-compacted subgrade.

After clearing and proofrolling the site surface as previously recommended, the surficial soils should be suitable to support the pavement sections. The embankment material should be compacted to a dry density of 98 percent of the modified Proctor (ASTM D1557/AASHTO T-180) maximum dry density of the compacted soil to a depth of one foot below the surface.

- The subbase material to a depth of 12 inches should have a minimum Limerock Bearing Ratio (LBR) value (FDOT FM 5-515) of 40 and it should be compacted to at least 98 percent of its modified Proctor (ASTM D1557 or AASHTO T-180) maximum dry density.

- The base course may consist of crushed limerock or coquina and should have a minimum Limerock Bearing Ratio (LBR) value (FDOT FM 5-515) of 100. We recommend a base course at least 8 inches thick wich may be placed and compacted in a single layer. All base course material should be compacted to at least 98 percent of its modified Proctor maximum dry density.

- We recommend an FDOT Type SP-9.5 or SP-12.5 asphaltic wearing surface with a minimum thickness of 1.5 inches thick. Care must be exercised to place the asphalt over dry, well primed base material.

The pavement section proposed above is in accordance with the City of Port St. Lucie “Engineering Standards for Land Development” (December 2020). We remain available to evaluate any alternative pavement sections should it be needed.

8.2 Park Walking Trails

After clearing and proofrolling the site surface as previously recommended, the surficial soils should be suitable to support the proposed concrete-pavement walking trail pavement section. The subgrade material should be compacted to a dry density of 98 percent of the modified Proctor (ASTM D1557 or AASHTO T-180) maximum dry density of the compacted soil to a depth of two feet below the surface. The subgrade surface should be saturated immediately prior to concrete placement to provide adequate moisture for curing of the concrete.

We recommend a four-inch thick pavement section of Portland cement concrete. The concrete should have a minimum 28-day compressive strength of 4,000 psi. Construction control joints should be placed no more than 15 feet apart in either direction and should be at least one-quarter of the thickness of the concrete. They should be cut as soon as the concrete will support the crew and equipment (8 to 12 hours). The concrete should be cured by moist curing or by application of a liquid curing compound. The steel reinforcement within the concrete pavement should be designed by the project civil or structural engineer.

9.0 QUALITY CONTROL PROGRAM

We recommend establishing a robust quality control program to verify that all site preparation and foundation and pavement construction is conducted in accordance with the appropriate plans and specifications. Materials testing and inspection services should be provided by Andersen Andre Consulting Engineers, Inc.

10.0 CLOSURE

The geotechnical evaluation submitted herein is based on the data obtained from the soil boring and test profiles presented on Sheets No. 1 and 2, and our understanding of the project as previously described. Limitations and conditions to this report are presented in Appendix IV.

This report has been prepared in accordance with generally accepted soil and foundation engineering practices for the exclusive use of CAPTEC Engineering, Inc. and the City of Port St. Lucie. No other warranty, expressed or implied, is made.

We are pleased to be of assistance to you on this phase of your project. When we may be of further service to you or should you have any questions, please contact us.

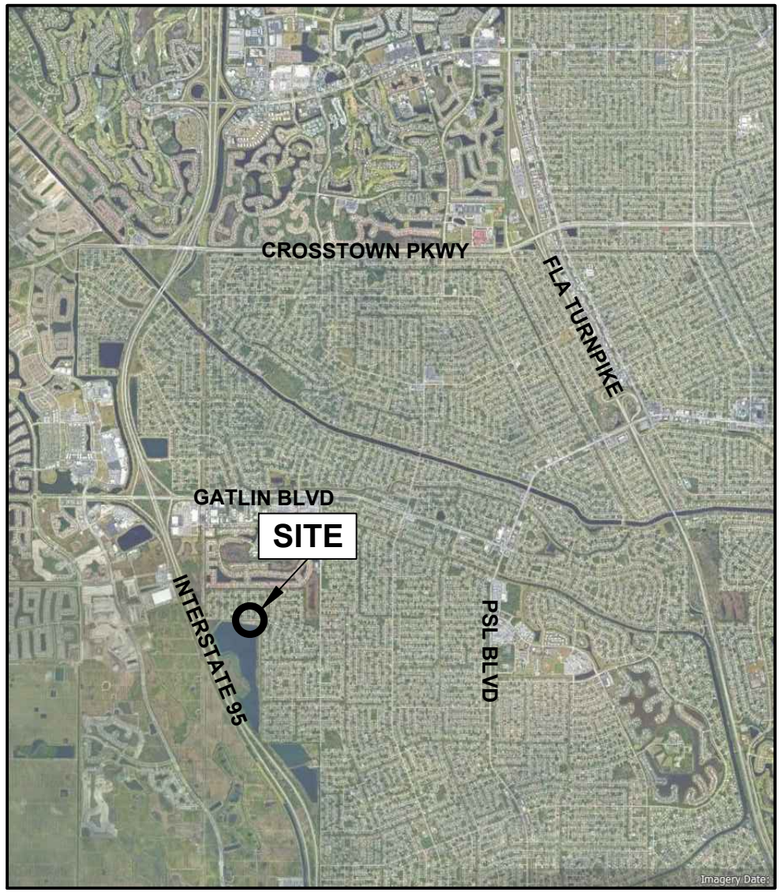
Sincerely,
ANDERSEN ANDRE CONSULTING ENGINEERS, INC.

Peter G. Andersen, P.E.
Principal Engineer
Fla. Reg. No. 57956

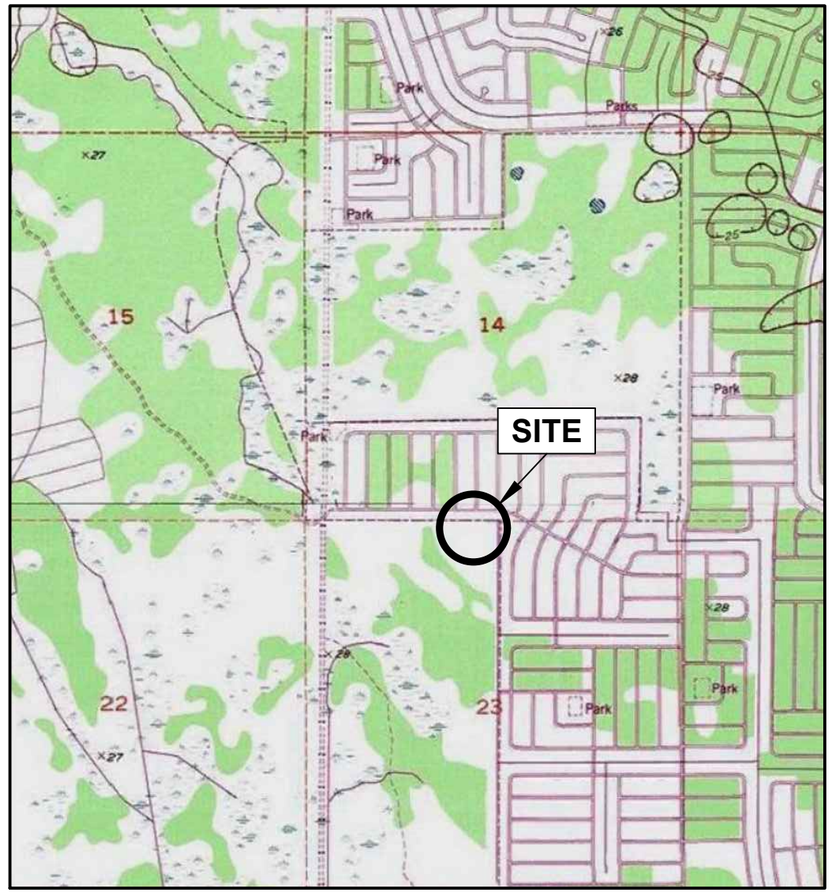
David P. Andre, P.E.
Principal Engineer
Fla. Reg. No. 53969

This report has been digitally signed by Peter G. Andersen, P.E. on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

2022 AERIAL PHOTOGRAPH



USGS TOPOGRAPHIC QUADRANGLE MAP OF "INDIANTOWN NW, FL"



USDA SOIL SURVEY MAP

PUBLIC LAND SURVEY SYSTEM

Sections 14 & 23, Township 37 South, Range 39 East

ST. LUCIE COUNTY PROPERTY APPRAISER

Parcel ID 4323-211-0001-000-9

USDA NRCS SOIL TYPES WITHIN SITE

21: Lawnwood and Myakka sands

NORTH

NOT TO SCALE

Sources:
- Google Earth Pro
- QUADS/Earth Survey
- USDA NRCS Web Soil Survey

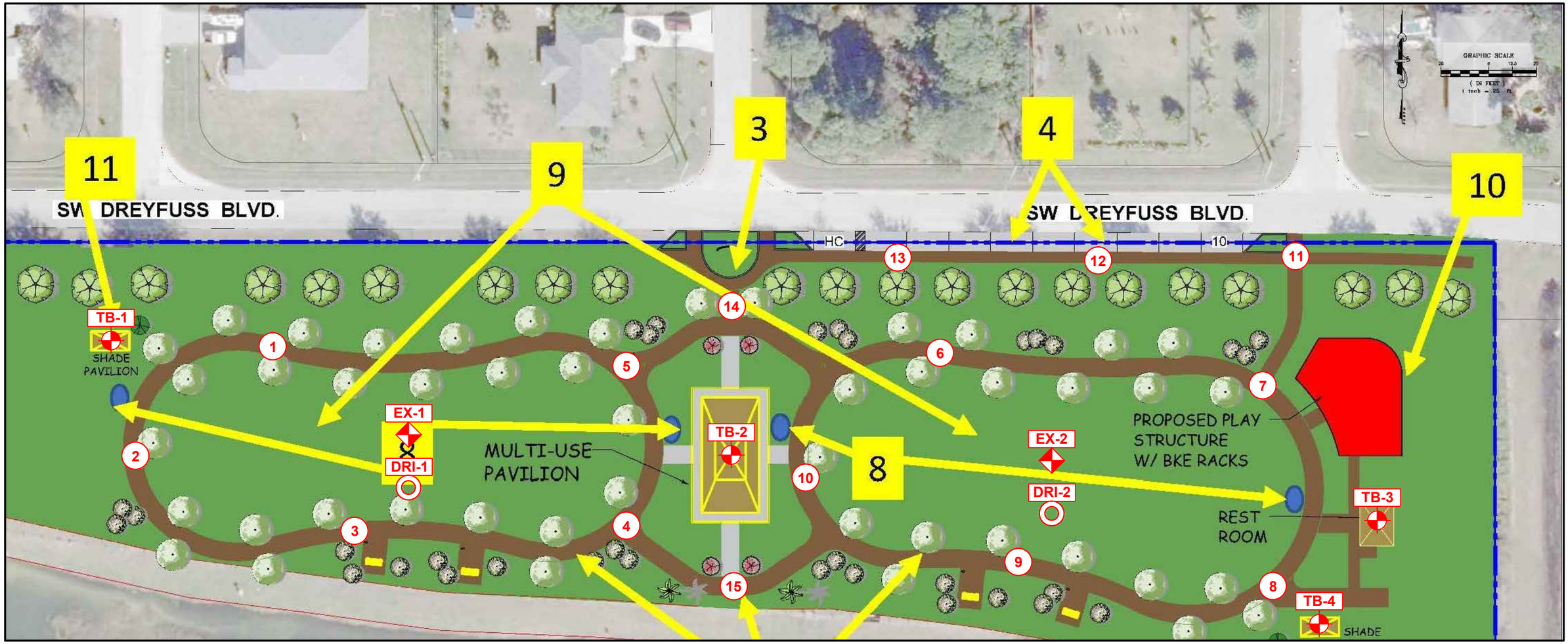
ANDERSEN ANDRE CONSULTING ENGINEERS, INC.

834 SW Swan Avenue, Port St. Lucie, FL 34983 772-807-9191 www.AACEinc.com

SITE VICINITY MAPS

SUBSURFACE SOIL EXPLORATION AND
GEOTECHNICAL ENGINEERING EVALUATION
PROPOSED IMPROVEMENTS TO O. L. PEACOCK SR. PARK
1950 SW DREYFUSS BOULEVARD
PORT ST. LUCIE, ST. LUCIE COUNTY, FLORIDA

Drawn by: PGA	Date: August 2023
Checked by: DPA	Date: August 2023
AACE File No: 23-210	**Figure No. 1**



NOT TO SCALE

Source: Provided Site Schematic

LEGEND

- TB-# — Standard Penetration Test Boring
- # — Hand Auger Boring (HAB-#)
- EX-# — Exfiltration Test
- DRI-# — Double-Ring Infiltrometer Test

NOTES

Shown and noted boring/test locations are approximate. All locations were located using the provided site schematic, aerial photographs, existing site features, and a hand-held, sub-meter GPS unit. Atmospheric disturbances and local weather conditions may affect the accuracy of the GPS instrument readings. The shown boring/test locations should be considered accurate only to the degree implied by the method of measurement used.

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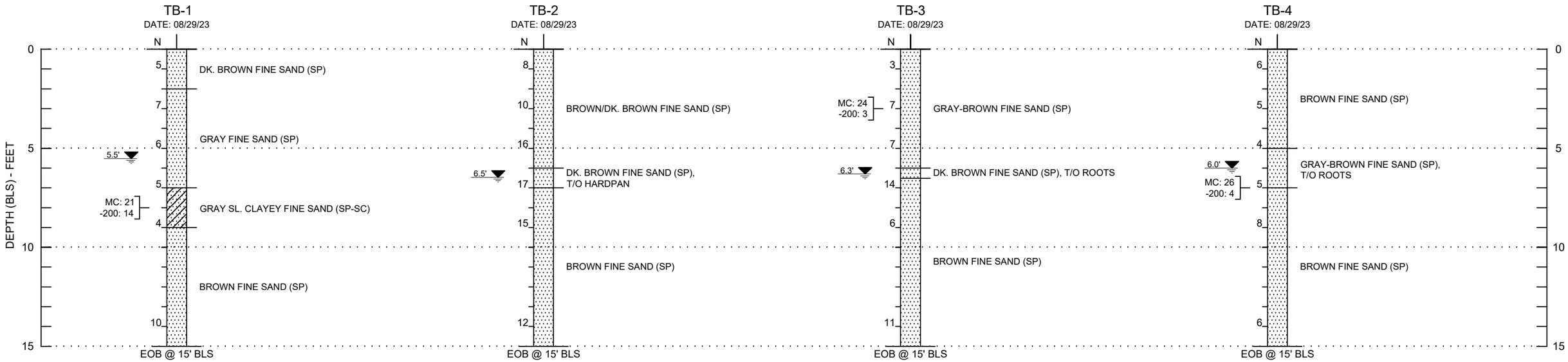
FIELD WORK LOCATION PLAN

SUBSURFACE SOIL EXPLORATION AND
GEOTECHNICAL ENGINEERING EVALUATION
PROPOSED IMPROVEMENTS TO O. L. PEACOCK SR. PARK
1950 SW DREYFUSS BOULEVARD
PORT ST. LUCIE, ST. LUCIE COUNTY, FLORIDA

Drawn by: PGA	Date: August 2023
Checked by: DPA	Date: August 2023
AACE File No: 23-210	Figure No. 2



SOIL GRAPHICAL LEGEND:

FINE SAND (SP)

SLIGHTLY CLAYEY FINE SAND (SP-SC)

NOTE: 3"-6" of topsoil encountered in most borings
(not shown on boring profiles)

DRILLING NOTES:

TB-#	STANDARD PENETRATION TEST [SPT] BORING (ASTM D1586)
N	SPT RESISTANCE IN BLOWS PER FOOT
HAB	HAND AUGER BORING (ASTM D1452)
X.X'	GROUNDWATER TABLE (FT-BLS) AT TIME OF DRILLING
EOB	END OF BORING
BLS	BELOW LAND SURFACE
FRGM	FRAGMENTS
SP, SP-SC	UNIFIED SOIL CLASSIFICATION SYSTEM [USCS]
	USCS GROUPS DETERMINED BY VISUAL CLASSIFICATION
	EXCEPT FOR NOTED LABORATORY TESTS
MC	NATURAL MOISTURE CONTENT IN PERCENT (ASTM D2216)
-200	PERCENT FINES PASSING THE NO. 200 SIEVE (ASTM D1140)

DRILL CREW CHIEF: DT
DRILL RIG: CME-45
DRILLING METHOD: ROTARY-WASH/BENTONITE SLURRY
SPLIT-SPOON SAMPLER:
- INSIDE DIAMETER: 1.375"
- OUTSIDE DIAMETER: 2.0"
- LENGTH: 24"

SPT HAMMER:
- AVERAGE DROP: 30"
- WEIGHT: 140 LBS
- TYPE: SAFETY/MANUAL

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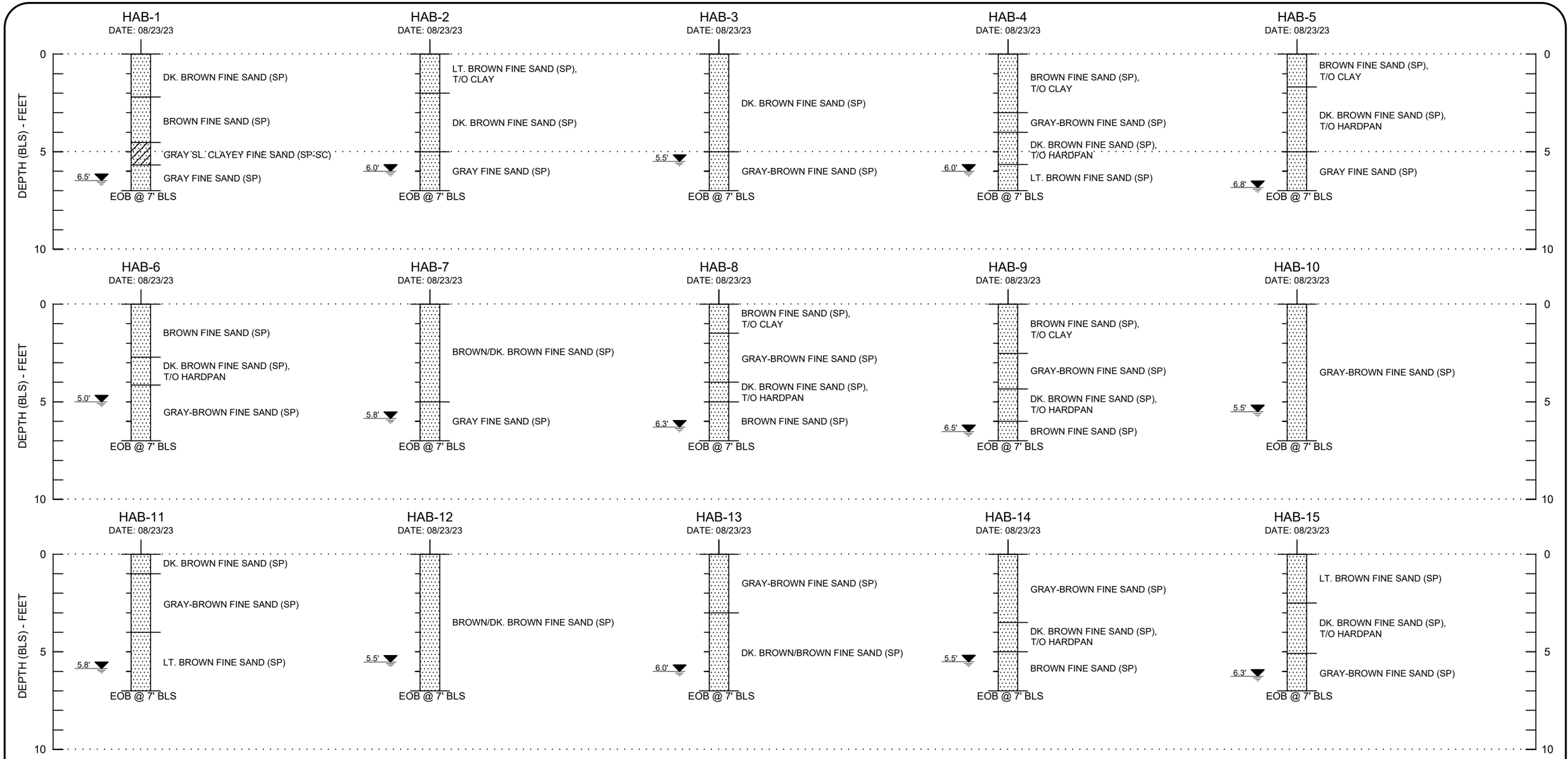
SOIL BORING PROFILES

**SUBSURFACE SOIL EXPLORATION AND GEOTECHNICAL ENGINEERING EVALUATION
PROPOSED IMPROVEMENTS TO O. L. PEACOCK SR. PARK
1950 SW DREYFUSS BOULEVARD
PORT ST. LUCIE, ST. LUCIE COUNTY, FLORIDA**

Drawn by: PGA	Date: August 2023
Checked by: DPA	Date: August 2023
AACE File No: 23-210	**Sheet No. 1**



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SOIL BORING PROFILES

SUBSURFACE SOIL EXPLORATION AND GEOTECHNICAL ENGINEERING EVALUATION
PROPOSED IMPROVEMENTS TO O. L. PEACOCK SR. PARK
1950 SW DREYFUSS BOULEVARD
PORT ST. LUCIE, ST. LUCIE COUNTY, FLORIDA

Drawn by: PGA	Date: August 2023
Checked by: DPA	Date: August 2023
AACE File No: 23-210	**Sheet No. 2**

APPENDIX I

USDA Soil Survey Information

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for St. Lucie County, Florida

OL Peacock Lake Park

August 10, 2023

Custom Soil Resource Report
Soil Map (OL Peacock Lake Park)

Map Scale: 1:1,440 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 20 40 80 120

Feet
0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: St. Lucie County, Florida
Survey Area Data: Version 16, Sep 2, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 18, 2022—Jan 30, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend (OL Peacock Lake Park)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
21	Lawnwood and Myakka sands	4.1	99.5%
99	Water	0.0	0.5%
Totals for Area of Interest		**4.1**	**100.0%**

Map Unit Descriptions (OL Peacock Lake Park)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the

development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

St. Lucie County, Florida

21—Lawnwood and Myakka sands

Map Unit Setting

National map unit symbol: 1jpvg
Elevation: 0 to 200 feet
Mean annual precipitation: 49 to 58 inches
Mean annual air temperature: 70 to 77 degrees F
Frost-free period: 350 to 365 days
Farmland classification: Farmland of unique importance

Map Unit Composition

Lawnwood and similar soils: 41 percent
Myakka and similar soils: 39 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lawnwood

Setting

Landform: Marine terraces on flatwoods
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile

A - 0 to 8 inches: sand
E - 8 to 28 inches: sand
Bh1 - 28 to 52 inches: sand
Bh2 - 52 to 58 inches: sand
C - 58 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 10 to 31 inches to ortstein
Drainage class: Poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Very low (about 0.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Ecological site: F156BY040FL - Sandy Pine Flatwoods and Hammocks
Forage suitability group: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)
Hydric soil rating: No

Description of Myakka

Setting
Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile
A - 0 to 7 inches: sand
E - 7 to 27 inches: sand
Bh - 27 to 38 inches: sand
C - 38 to 80 inches: sand

Properties and qualities
Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 4.5 inches)

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Ecological site: F156BY040FL - Sandy Pine Flatwoods and Hammocks
Forage suitability group: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)
Hydric soil rating: No

Minor Components

Ankona
Percent of map unit: 7 percent
Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F156BY040FL - Sandy Pine Flatwoods and Hammocks
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)
Hydric soil rating: No

Electra

Percent of map unit: 7 percent
Landform: Knolls on marine terraces, rises on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F156BY045FL - Sandy Scrubby Flatwoods on Rises and Knolls
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G156BC131FL)
Hydric soil rating: No

Waveland

Percent of map unit: 6 percent
Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F156BY040FL - Sandy Pine Flatwoods and Hammocks
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)
Hydric soil rating: No

99—Water

Map Unit Composition

Water: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Water

Interpretive groups

Land capability classification (irrigated): None specified
Ecological site: R156BY100FL - Subaqueous Freshwater Riverine Habitats
Forage suitability group: Forage suitability group not assigned (G156BC999FL)
Other vegetative classification: Forage suitability group not assigned (G156BC999FL)
Hydric soil rating: Unranked

APPENDIX II

General Notes
(Soil Borings, Sampling and Testing Methods)

ANDERSEN ANDRE CONSULTING ENGINEERS, INC.

SOIL BORING, SAMPLING AND TESTING METHODS

GENERAL

Andersen Andre Consulting Engineers, Inc. (AACE) borings describe subsurface conditions only at the locations drilled and at the time drilled. They provide no information about subsurface conditions below the bottom of the boreholes. At locations not explored, surface conditions that differ from those observed in the borings may exist and should be anticipated.

The information reported on our boring logs is based on our drillers' logs and on visual examination in our laboratory of disturbed soil samples recovered from the borings. The distinction shown on the logs between soil types is approximate only. The actual transition from one soil to another may be gradual and indistinct.

The groundwater depth shown on our boring logs is the water level the driller observed in the borehole when it was drilled. These water levels may have been influenced by the drilling procedures, especially in borings made by rotary drilling with bentonitic drilling mud. An accurate determination of groundwater level requires long-term observation of suitable monitoring wells. Fluctuations in groundwater levels throughout the year should be anticipated.

The absence of a groundwater level on certain logs indicates that no groundwater data is available. It does not mean that groundwater will not be encountered at that boring location at some other point in time.

STANDARD PENETRATION TEST

The Standard Penetration Test (SPT) is a widely accepted method of in situ testing of foundation soils (ASTM D-1586). A 2-foot (0.6m) long, 2-inch (50mm) O.D. split-barrell sampler attached to the end of a string of drilling rods is driven 24 inches (0.60m) into the ground by successive blows of a 140-pound (63.5 Kg) hammer freely dropping 30 inches (0.76m). The number of blows needed for each 6 inches (0.15m) increments penetration is recorded. The sum of the blows required for penetration of the middle two 6-inch (0.15m) increments of penetration constitutes the test result of N-value. After the test, the sampler is extracted from the ground and opened to allow visual description of the retained soil sample. The N-value has been empirically correlated with various soil properties allowing a conservative estimate of the behavior of soils under load. The following tables relate N-values to a qualitative description of soil density and, for cohesive soils, an approximate unconfined compressive strength (Qu):

Cohesionless Soils:	**N-Value**	**Description**
	0 to 4	Very loose
	4 to 10	Loose
	10 to 30	Medium dense
	30 to 50	Dense
	Above 50	Very dense

Cohesive Soils:	N-Value	Description	Qu
	0 to 2	Very soft	Below 0.25 tsf (25 kPa)
	2 to 4	Soft	0.25 to 0.50 tsf (25 to 50 kPa)
	4 to 8	Medium stiff	0.50 to 1.0 tsf (50 to 100 kPa)
	8 to 15	Stiff	1.0 to 2.0 tsf (100 to 200 kPa)
	15 to 30	Very stiff	2.0 to 4.0 tsf (200 to 400 kPa)
	Above 30	Hard	Above 4.0 tsf (400 kPa)

The tests are usually performed at 5 foot (1.5m) intervals. However, more frequent or continuous testing is done by AACE through depths where a more accurate definition of the soils is required. The test holes are advanced to the test elevations by rotary drilling with a cutting bit, using circulating fluid to remove the cuttings and hold the fine grains in suspension. The circulating fluid, which is bentonitic drilling mud, is also used to keep the hole open below the water table by maintaining an excess hydrostatic pressure inside the hole. In some soil deposits, particularly highly pervious ones, flush-coupled casing must be driven to just above the testing depth to keep the hole open and/or prevent the loss of circulating fluid. After completion of a test borings, the hole is kept open until a steady state groundwater level is recorded. The hole is then sealed by backfilling, either with accumulated cuttings or lean cement.

Representative split-spoon samples from each sampling interval and from different strata are brought to our laboratory in air-tight jars for classification and testing, if necessary. Afterwards, the samples are discarded unless prior arrangement have been made.

POWER AUGER BORINGS

Auger borings (ASTM D-1452) are used when a relatively large, continuous sampling of soil strata close to the ground surface is desired. A 4-inch (100 mm) diameter, continuous flight, helical auger with a cutting head at its end is screwed into the ground in 5-foot (1.5m) sections. It is powered by the rotary drill rig. The sample is recovered by withdrawing the auger our of the ground without rotating it. The soil sample so obtained, is classified in the field and representative samples placed in bags or jars and returned to the AACE soils laboratory for classification and testing, if necessary.

HAND AUGER BORINGS

Hand auger borings are used, if soil conditions are favorable, when the soil strata are to be determined within a shallow (approximately 5-foot [1.5m]) depth or when access is not available to power drilling equipment. A 3-inch (75mm) diameter hand bucket auger with a cutting head is simultaneously turned and pressed into the ground. The bucket auger is retrieved at approximately 6-inch (0.15m) interval and its contents emptied for inspection. On occasion post-hole diggers are used, especially in the upper 3 feet (1m) or so. Penetrometer probings can be used in the upper 5 feet (1.5m) to determine the relative density of the soils. The soil sample obtained is described and representative samples put in bags or jars and transported to the AACE soils laboratory for classification and testing, if necessary.

UNDISTURBED SAMPLING

Undisturbed sampling (ASTM D-1587) implies the recovery of soil samples in a state as close to their natural condition as possible. Complete preservation of in situ conditions cannot be realized; however, with careful handling and proper sampling techniques, disturbance during sampling can be minimized for most geotechnical engineering purposes. Testing of undisturbed samples gives a more accurate estimate of in situ behavior than is possible with disturbed samples.

Normally, we obtain undisturbed samples by pushing a 2.875-inch (73 mm) I.D., thin wall seamless steel tube 24 inches (0.6 m) into the soil with a single stoke of a hydraulic ram. The sampler, which is a Shelby tube, is 30 (0.8 m) inches long. After the sampler is retrieved, the ends are sealed in the field and it is transported to our laboratory for visual description and testing, as needed.

ROCK CORING

In case rock strata is encountered and rock strength/continuity/composition information is needed for foundation or mining purposes, the rock can be cored (ASTM D-2113) and 2-inch to 4-inch diameter rock core samples be obtained for further laboratory analyses. The rock coring is performed through flush-joint steel casing temporarily installed through the overburden soils above the rock formation and also installed into the rock. The double- or triple-tube core barrels are advanced into the rock typically in 5-foot intervals and then retrieved to the surface. The barrel is then opened so that the core sample can be extruded. Preliminary field measurements of the recovered rock cores include percent recovery and Rock Quality Designation (RQD) values. The rock cores are placed in secure core boxes and then transported to our laboratory for further inspection and testing, as needed.

SFWMD EXFILTRATION TESTS

In order to estimate the hydraulic conductivity of the upper soils, constant head or falling head exfiltration tests can be performed. These tests are performed in accordance with methods described in the South Florida Water Management District (SFWMD) Permit Information Manual, Volume IV. In brief, a 6 to 9 inch diameter hole is augered to depths of about 5 to 7 feet; the bottom one foot is filled with 57-stone; and a 6-foot long slotted PVC pipe is lowered into the hole. The distance from the groundwater table and to the ground surface is recordedand the hole is then saturated for 10 minutes with the water level maintained at the ground surface.

If a constant head test is performed, the rate of pumping will be recorded at fixed intervals of 1 minute for a total of 10 minutes, following the saturation period.

LABORATORY TEST METHODS

Soil samples returned to the AACE soils laboratory are visually observed by a geotechnical engineer or a trained technician to obtain more accurate description of the soil strata. Laboratory testing is performed on selected samples as deemed necessary to aid in soil classification and to help define engineering properties of the soils. The test results are presented on the soil boring logs at the depths at which the respective sample was recovered, except that grain size distributions or selected other test results may be presented on separate tables, figures or plates as discussed in this report.

THE PROJECT SOIL DESCRIPTION PROCEDURE FOR SOUTHEAST FLORIDA

CLASSIFICATION OF SOILS FOR ENGINEERING PURPOSES

The soil descriptions shown on the logs are based upon visual-manual procedures in accordance with local practice. Soil classification is performed in general accordance with the United Soil Classification System and is also based on visual-manual procedures.

BOULDERS (>12" [300 MM]) and COBBLES (3" [75 MM] TO 12" [300 MM]):

GRAVEL: Coarse Gravel: 3/4" (19 mm) to 3" (75 mm)
Fine Gravel: No. 4 (4.75 mm) Sieve to 3/4" (19 mm)

Descriptive adjectives:

0 - 5%	– no mention of gravel in description
5 - 15%	– trace
15 - 29%	– some
30 - 49%	– gravelly (shell, limerock, cemented sands)

SANDS:

COARSE SAND: No. 10 (2 mm) Sieve to No. 4 (4.75 mm) Sieve
MEDIUM SAND: No. 40 (425 µm) Sieve to No. 10 (2 mm) Sieve
FINE SAND: No. 200 (75 µm) Sieve to No. 40 (425 µm) Sieve

Descriptive adjectives:

0 - 5%	– no mention of sand in description
5 - 15%	– trace
15 - 29%	– some
30 - 49%	– sandy

SILT/CLAY: < #200 (75µM) Sieve

SILTY OR SILT: $PI < 4$
SILTY CLAYEY OR SILTY CLAY: $4 \leq PI \leq 7$
CLAYEY OR CLAY: $PI > 7$

Descriptive adjectives:

< - 5%	– clean (no mention of silt or clay in description)
5 - 15%	– slightly
16 - 35%	– clayey, silty, or silty clayey
36 - 49%	– very

ORGANIC SOILS:

Organic Content	**Descriptive Adjectives**	**Classification**
0 - 2.5%	Usually no mention of organics in description	See Above
2.6 - 5%	slightly organic	add “with organic fines” to group name
5 - 30%	organic	SM with organic fines
		Organic Silt (OL)
		Organic Clay (OL)
		Organic Silt (OH)

THE PROJECT SOIL DESCRIPTION PROCEDURE FOR SOUTHEAST FLORIDA

CLASSIFICATION OF SOILS FOR ENGINEERING PURPOSES

Organic Clay (OH)

HIGHLY ORGANIC SOILS AND MATTER:

Organic Content	**Descriptive Adjectives**	**Classification**
30 - 75%	sandy peat	Peat (PT)
	silty peat	Peat (PT)
> 75%	amorphous peat	Peat (PT)
	fibrous peat	Peat (PT)

STRATIFICATION AND STRUCTURE:

Descriptive Term		**Thickness**
with interbedded		
seam	--	less than ½ inch (13 mm) thick
layer	--	½ to 12-inches (300 mm) thick
stratum	--	more than 12-inches (300 mm) thick
pocket	--	small, erratic deposit, usually less than 1-foot
lens	--	lenticular deposits
occasional	--	one or less per foot of thickness
frequent	--	more than one per foot of thickness
calcareous	--	containing calcium carbonate (reaction to diluted HCL)
hardpan	--	spodic horizon usually medium dense
marl	--	mixture of carbonate clays, silts, shells and sands

ROCK CLASSIFICATION (FLORIDA) CHART:

Symbol	Typical Description
LS	Hard Bedded Limestone or Caprock
WLS	Fractured or Weathered Limestone
LR	Limerock (gravel, sand, silt and clay mixture)
SLS	Stratified Limestone and Soils

THE PROJECT SOIL DESCRIPTION PROCEDURE FOR SOUTHEAST FLORIDA

CLASSIFICATION OF SOILS FOR ENGINEERING PURPOSES

LEGEND FOR BORING LOGS

N:	Number of blows to drive a 2-inch OD split spoon sampler 12 inches using a 140-pound hammer dropped 30 inches
R:	Refusal (less than six inches advance of the split spoon after 50 hammer blows)
MC:	Moisture content (percent of dry weight)
OC:	Organic content (percent of dry weight)
PL:	Moisture content at the plastic limit
LL:	Moisture content at the liquid limit
PI:	Plasticity index (LL-PL)
qu:	Unconfined compressive strength (tons per square foot, unless otherwise noted)
-200:	Percent passing a No. 200 sieve (200 wash)
+40:	Percent retained above a No. 40 sieve
US:	Undisturbed sample obtained with a thin-wall Shelby tube
k:	Permeability (feet per minute, unless otherwise noted)
DD:	Dry density (pounds per cubic foot)
TW:	Total unit weight (pounds per cubic foot)

APPENDIX III

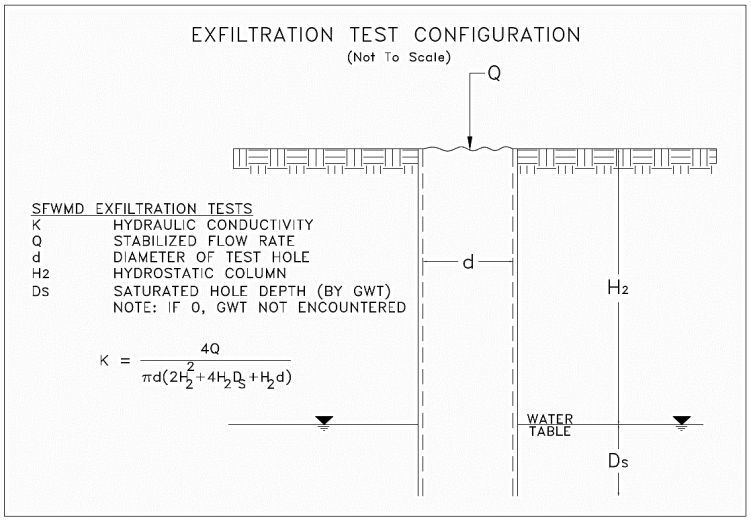
Exfiltration Test and DRI Test Reports

ANDERSEN ANDRE CONSULTING ENGINEERS, INC.

SFWMD Usual Open Hole Test

Test Number	**EX-1**	**Project Name**	**OL Peacock Lake Park**	**Weather Conditions**	Overcast
		Project Number	**23-210**	**Temperature**	95F
		Test Location	**Refer to Figure No. 2**	**Technician**	DT
		Date	**8/29/2023**	**Engineer**	PA

DIAMETER OF TEST HOLE (FEET): **d** =	0.5	
DEPTH OF TEST HOLE (FEET): H_1 =	6	
DEPTH TO WATER TABLE (FEET): H_2 =	6	+
SATURATED HOLE DEPTH (FEET): D_s =	0	
METER READING (Gallons): V_i =	0	@ 0.00 MIN
METER READING (Gallons): V_F =	7.5	@ 10.00 MIN
AVERAGE FLOW RATE (GPM) =	0.75	
"STABILIZED" FLOW RATE (CFS): Q =	**1.7E-03**	
HYDRAULIC CONDUCTIVITY (CFS / FT^2 - FT. HEAD): K =	**5.7E-05**	



Soil Profile	
Depth (in-bls)	**Description**
0 - 36	Gray-brown fine sand (SP)
36 - 50	Dark gray fine sand (SP)
50 - 62	Gray slightly clayey fine sand (SP-SC)
62 - 72	Gray fine sand (SP)
Groundwater not encountered (>72")	

NOTES:

The hydraulic conductivity test was performed in general accordance with the methods described in the South Florida Water Management District (SFWMD) Environmental Resource Permit Information Manual (Volume IV).

The K-value was calculated based on the exfiltration test procedure as shown hereon.

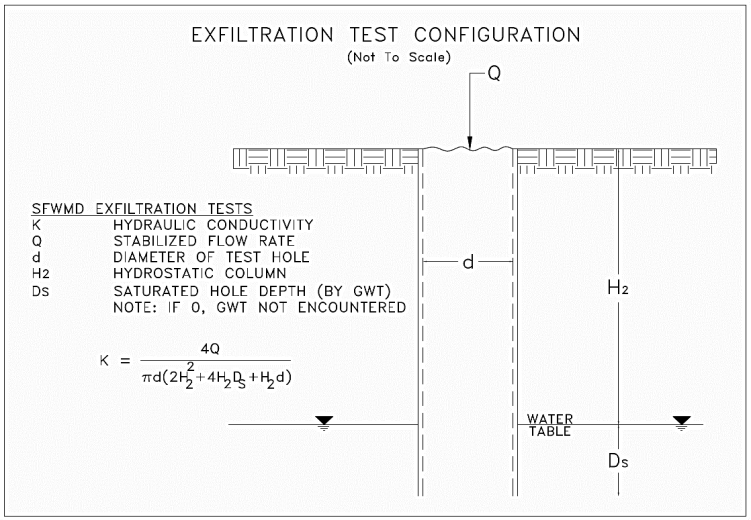
The presented hydraulic conductivity (K) value is applicable for an exfiltration trench installed at the same depth as the borehole test. The K-value represents an ultimate value. The designer should decide on the required factor of safety (minimum of 2, per SFWMD).

ANDERSEN ANDRE CONSULTING ENGINEERS, INC.

SFWMD Usual Open Hole Test

Test Number	**EX-2**	**Project Name**	**OL Peacock Lake Park**	**Weather Conditions**	Overcast
		Project Number	**23-210**	**Temperature**	95F
		Test Location	**Refer to Figure No. 2**	**Technician**	DT
		Date	**8/29/2023**	**Engineer**	PA

DIAMETER OF TEST HOLE (FEET): **d** =	0.5	
DEPTH OF TEST HOLE (FEET): H_1 =	6	
DEPTH TO WATER TABLE (FEET): H_2 =	6	+
SATURATED HOLE DEPTH (FEET): D_s =	0	
METER READING (Gallons): V_i =	0	@ 0.00 MIN
METER READING (Gallons): V_F =	12	@ 10.00 MIN
AVERAGE FLOW RATE (GPM) =	1.20	
"STABILIZED" FLOW RATE (CFS): Q =	**2.7E-03**	
HYDRAULIC CONDUCTIVITY (CFS / FT^2 - FT. HEAD): K =	**9.1E-05**	



Soil Profile	
Depth (in-bls)	**Description**
0 - 30	Brown fine sand (SP)
30 - 72	Gray fine sand (SP)
Groundwater not encountered (>72")	

NOTES:

The hydraulic conductivity test was performed in general accordance with the methods described in the South Florida Water Management District (SFWMD) Environmental Resource Permit Information Manual (Volume IV).

The K-value was calculated based on the exfiltration test procedure as shown hereon.

The presented hydraulic conductivity (K) value is applicable for an exfiltration trench installed at the same depth as the borehole test. The K-value represents an ultimate value. The designer should decide on the required factor of safety (minimum of 2, per SFWMD).

ANDERSEN ANDRE CONSULTING ENGINEERS, INC.

Double-Ring Infiltrometer Test Report (ASTM D3385)

Test Number	**DRI-1**	**Technician**	RL/TM
Project Name	OL Peacock Park	**Engineer**	PA
Project Number	23-210	**Weather Conditions**	Clear
Test Location	Refer to Figure No. 2	**Temperature**	90F
Date	8/28/2023	**Testing Liquid**	Water

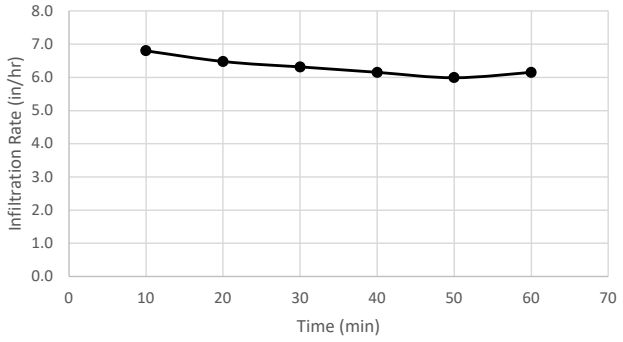
SOIL PROFILE	
Depth (in-bls)	**Description**
0 - 5	Topsoil (REMOVED)
5 - 30	Gray fine sand (SP)
30 - 48	Brown fine sand (SP)
Groundwater not encountered (>48")	

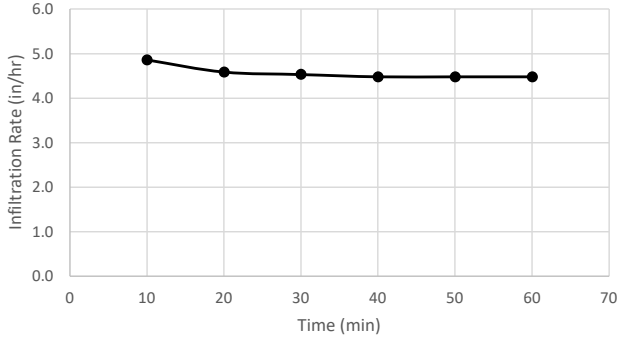
Area of Inner Ring (in^2):	113.1	**Test Depth (in):**	12	**Depth of Water - Inner Ring (in):**	6
Area of Annular Space (in^2):	339.3	**Ring Seating (in):**	6	**Depth of Water - Annular Space (in):**	6

Cycle No.	Incremental Test Time (min)	INNER RING			ANNULAR SPACE		
		Incremental Flow (ml)	Incremental Flow (in^3)	Infiltration Rate (in/hr)	Incremental Flow (ml)	Incremental Flow (in^3)	Infiltration Rate (in/hr)
1 (10 min)	1	210	12.8	6.80	450	27.5	4.86
2 (20 min)	1	200	12.2	6.47	425	25.9	4.59
3 (30 min)	1	195	11.9	6.31	420	25.6	4.53
4 (40 min)	1	190	11.6	6.15	415	25.3	4.48
5 (50 min)	1	185	11.3	5.99	415	25.3	4.48
6 (60 min)	1	190	11.6	6.15	415	25.3	4.48
		Stabilized Infiltration Rate (in /hr):		**6.2**	**Stabilized Infiltration Rate (in /hr):**		**4.5**

NOTES:
ASTM D3385 recommends using the rate of the inner ring as the vertical infiltration rate if the rates for the inner ring and the annular space differ, since such difference in rates is likely due to divergent flow.

The designer should include an appopriate factor of safety when using the presented infiltration rates in the design of drainage improvements.





ANDERSEN ANDRE CONSULTING ENGINEERS, INC.

Double-Ring Infiltrometer Test Report (ASTM D3385)

Test Number	**DRI-2**	**Technician**	RL/TM
Project Name	OL Peacock Park	**Engineer**	PA
Project Number	23-210	**Weather Conditions**	Clear
Test Location	Refer to Figure No. 2	**Temperature**	90F
Date	8/28/2023	**Testing Liquid**	Water

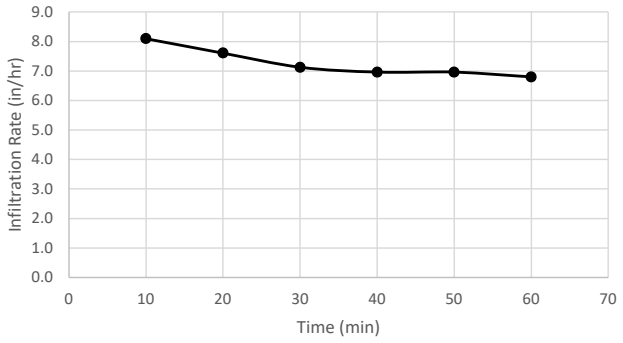
SOIL PROFILE	
Depth (in-bls)	**Description**
0 - 6	Topsoil (REMOVED)
6 - 48	Gray-brown fine sand (SP)
Groundwater not encountered (>48")	

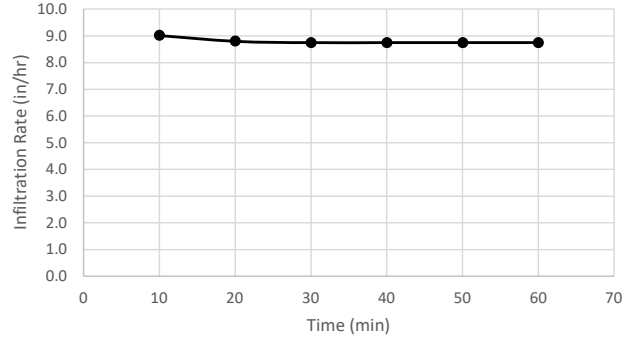
Area of Inner Ring (in^2):	113.1	**Test Depth (in):**	12	**Depth of Water - Inner Ring (in):**	6
Area of Annular Space (in^2):	339.3	**Ring Seating (in):**	6	**Depth of Water - Annular Space (in):**	6

Cycle No.	Incremental Test Time (min)	INNER RING			ANNULAR SPACE		
		Incremental Flow (ml)	Incremental Flow (in^3)	Infiltration Rate (in/hr)	Incremental Flow (ml)	Incremental Flow (in^3)	Infiltration Rate (in/hr)
1 (10 min)	1	250	15.3	8.09	835	51.0	9.01
2 (20 min)	1	235	14.3	7.61	815	49.7	8.79
3 (30 min)	1	220	13.4	7.12	810	49.4	8.74
4 (40 min)	1	215	13.1	6.96	810	49.4	8.74
5 (50 min)	1	215	13.1	6.96	810	49.4	8.74
6 (60 min)	1	210	12.8	6.80	810	49.4	8.74
		Stabilized Infiltration Rate (in /hr):		**6.8**	**Stabilized Infiltration Rate (in /hr):**		**8.7**

NOTES:
ASTM D3385 recommends using the rate of the inner ring as the vertical infiltration rate if the rates for the inner ring and the annular space differ, since such difference in rates is likely due to divergent flow.

The designer should include an appopriate factor of safety when using the presented infiltration rates in the design of drainage improvements.





APPENDIX IV

AACE Project Limitations and Conditions

ANDERSEN ANDRE CONSULTING ENGINEERS, INC.

Project Limitations and Conditions

Andersen Andre Consulting Engineers, Inc. has prepared this report for our client for his exclusive use, in accordance with generally accepted soil and foundation engineering practices. No other warranty, expressed or implied, is made herein. Further, the report, in all cases, is subject to the following limitations and conditions:

VARIABLE/UNANTICIPATED SUBSURFACE CONDITIONS

The engineering analysis, evaluation and subsequent recommendations presented herein are based on the data obtained from our field explorations, at the specific locations explored on the dates indicated in the report. This report does not reflect any subsurface variations (e.g. soil types, groundwater levels, etc.) which may occur adjacent or between borings.

The nature and extent of any such variations may not become evident until construction/excavation commences. In the event such variations are encountered, Andersen Andre Consulting Engineers, Inc. may find it necessary to (1) perform additional subsurface explorations, (2) conduct in-the-field observations of encountered variations, and/or re-evaluate the conclusions and recommendations presented herein.

We at Andersen Andre Consulting Engineers, Inc. recommend that the project specifications necessitate the contractor immediately notifying Andersen Andre Consulting Engineers, Inc., the owner and the design engineer (if applicable) if subsurface conditions are encountered that are different from those presented in this report.

No claim by the contractor for any conditions differing from those expected in the plans and specifications, or presented in this report, should be allowed unless the contractor notifies the owner and Andersen Andre Consulting Engineers, Inc. of such differing site conditions. Additionally, we recommend that all foundation work and site improvements be observed by an Andersen Andre Consulting Engineers, Inc. representative.

SOIL STRATA CHANGES

Soil strata changes are indicated by a horizontal line on the soil boring profiles (boring logs) presented within this report. However, the actual strata's changes may be more gradual and indistinct. Where changes occur between soil samples, the locations of the changes must be estimated using the available information and may not be at the exact depth indicated.

SINKHOLE POTENTIAL

Unless specifically requested in writing, a subsurface exploration performed by Andersen Andre Consulting Engineers, Inc. is not intended to be an evaluation for sinkhole potential.

MISINTERPRETATION OF SUBSURFACE SOIL EXPLORATION REPORT

Andersen Andre Consulting Engineers, Inc. is responsible for the conclusions and recommendations presented herein, based upon the subsurface data obtained during this project. If others render conclusions or opinions, or make recommendations based upon the data presented in this report, those conclusions, opinions and/or recommendations are not the responsibility of Andersen Andre Consulting Engineers, Inc.

CHANGED STRUCTURE OR LOCATION

This report was prepared to assist the owner, architect and/or civil engineer in the design of the subject project. If any changes in the construction, design and/or location of the structures as discussed in this report are planned, or if any structures are included or added that are not discussed in this report, the conclusions and recommendations contained in this report may not be valid. All such changes in the project plans should be made known to Andersen Andre Consulting Engineers, Inc. for our subsequent re-evaluation.

USE OF REPORT BY BIDDERS

Bidders who are reviewing this report prior to submission of a bid are cautioned that this report was prepared to assist the owners and project designers. Bidders should coordinate their own subsurface explorations (e.g.; soil borings, test pits, etc.) for the purpose of determining any conditions that may affect construction operations. Andersen Andre Consulting Engineers, Inc. cannot be held responsible for any interpretations made using this report or the attached boring logs with regard to their adequacy in reflecting subsurface conditions which may affect construction operations.

IN-THE-FIELD OBSERVATIONS

Andersen Andre Consulting Engineers, Inc. attempts to identify subsurface conditions, including soil stratigraphy, water levels, zones of lost circulation, “hard” or “soft” drilling, subsurface obstructions, etc. However, lack of mention in the report does not preclude the presence of such conditions.

LOCATION OF BURIED OBJECTS

Users of this report are cautioned that there was no requirement for Andersen Andre Consulting Engineers, Inc. to attempt to locate any man-made, underground objects during the course of this exploration, and that no attempts to locate any such objects were performed. Andersen Andre Consulting Engineers, Inc. cannot be responsible for any buried man-made objects which are subsequently encountered during construction.

PASSAGE OF TIME

This report reflects subsurface conditions that were encountered at the time/date indicated in the report. Significant changes can occur at the site during the passage of time. The user of the report recognizes the inherent risk in using the information presented herein after a reasonable amount of time has passed. We recommend the user of the report contact Andersen Andre Consulting Engineers, Inc. with any questions or concerns regarding this issue.

Important Information about Your

Geotechnical Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared *solely* for the client. No one except you should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. *And no one — not even you* — should apply the report for any purpose or project except the one originally contemplated.

Read the Full Report

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

A Geotechnical Engineering Report Is Based on A Unique Set of Project-Specific Factors

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical engineering report that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,
- elevation, configuration, location, orientation, or weight of the proposed structure,
- composition of the design team, or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

Subsurface Conditions Can Change

A geotechnical engineering report is based on conditions that existed at the time the study was performed. *Do not rely on a geotechnical engineering report* whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. *Always* contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

Most Geotechnical Findings Are Professional Opinions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ—sometimes significantly—from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most effective method of managing the risks associated with unanticipated conditions.

A Report's Recommendations Are *Not* Final

Do not overrely on the construction recommendations included in your report. *Those recommendations are not final,* because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations only by observing actual

subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's recommendations if that engineer does not perform construction observation.*

A Geotechnical Engineering Report Is Subject to Misinterpretation

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Lower that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing construction observation.

Do Not Redraw the Engineer's Logs

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

Give Contractors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure contractors have sufficient time* to perform additional study. Only then might you be in a position to give contractors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

Read Responsibility Provisions Closely

Some clients, design professionals, and contractors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations" many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The equipment, techniques, and personnel used to perform a *geoenvironmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any geoenvironmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else.*

Obtain Professional Assistance To Deal with Mold

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the *express purpose* of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, a number of mold prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; ***none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.***

Rely, on Your ASFE-Member Geotechncial Engineer for Additional Assistance

Membership in ASFE/The Best People on Earth exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a construction project. Confer with your ASFE-member geotechnical engineer for more information.

ASFE THE GEOPROFESSIONAL BUSINESS ASSOCIATION

8811 Colesville Road/Suite G106, Silver Spring, MD 20910
Telephone: 301/565-2733 Facsimile: 301/589-2017
e-mail: info@asfe.org www.asfe.org

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IIGER03135.0MRP

BOUNDARY SURVEY of O.L. PEACOCK LAKE

PREPARED FOR

CITY OF PORT ST. LUCIE

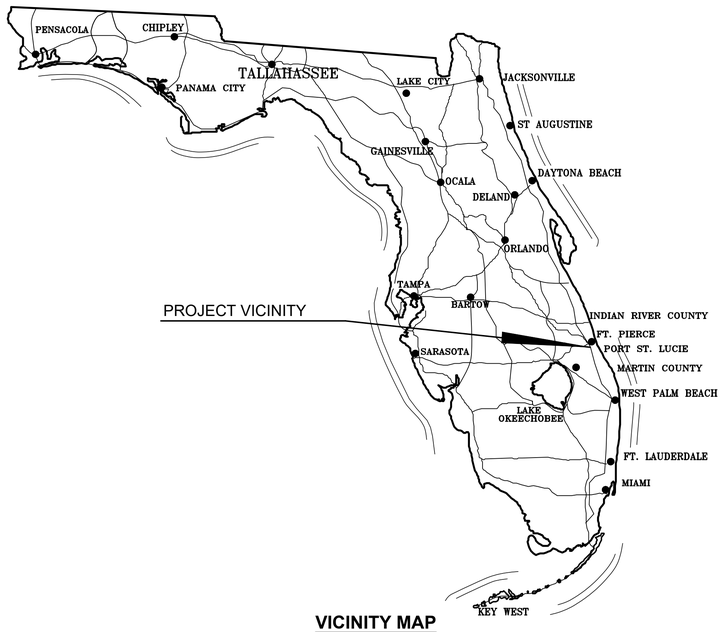
LYING IN SECTION 23
TOWNSHIP 37 SOUTH, RANGE 39 EAST
ST. LUCIE COUNTY, FLORIDA

LEGAL DESCRIPTION

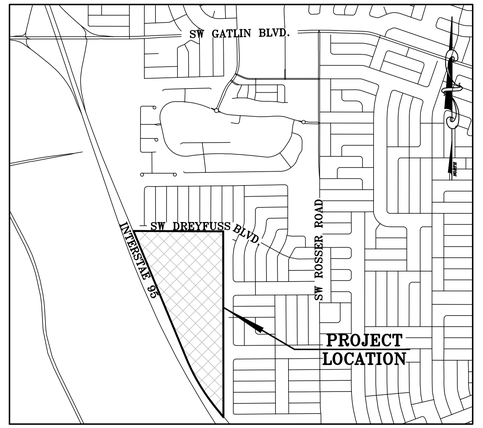
THAT PART OF THE WEST 1/2 OF SECTION 23, TOWNSHIP 37 SOUTH, RANGE 39 EAST, LYING EAST OF THE I-95 RIGHT-OF-WAY, ALL LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA.

SURVEYORS NOTES

1. THE LAST DATE OF DATA ACQUISITION WAS 5/28/2024.
2. THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE "STANDARDS OF PRACTICE", AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN RULE 5J-17.050 THROUGH 5J-17.053, OF THE FLORIDA ADMINISTRATIVE CODE.
3. THIS SURVEY MAP AND/OR REPORT OR THE COPIES THEREOF ARE NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND THE SEAL OR DIGITAL SIGNATURE OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
4. ADDITIONS OR DELETIONS TO SURVEY MAPS OR REPORTS BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.
5. THE BEARINGS SHOWN HEREON ARE BASED ON GRID NORTH, AND ARE REFERENCED TO THE FLORIDA STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983(2011). THE BASIS OF BEARING FOR THIS SURVEY IS THE WEST LINE OF SECTION 23, AS SHOWN, HAVING A BEARING OF NORTH 00°04'01" WEST AND ALL OTHER BEARINGS ARE RELATIVE THERETO.
6. THE FEATURES SHOWN HEREON ARE REFERENCED TO THE FLORIDA STATE PLAN COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983(2011 ADJUSTMENT), AS ESTABLISHED USING FLORIDA DEPARTMENT OF TRANSPORTATION FPRN.
7. ALL DISTANCES SHOWN HEREON ARE IN U.S. SURVEY FEET.
8. OVERALL PARCEL CONTAINS 166.31± ACRES, MORE OR LESS.
9. FOUNDATIONS AND UNDERGROUND IMPROVEMENTS, IF ANY, WERE NOT LOCATED EXCEPT AS SHOWN.
10. SYMBOLS SHOWN HEREON ARE NOT TO SCALE.
11. THIS SURVEY DOES NOT HAVE THE BENEFIT OF A CURRENT TITLE COMMITMENT, OPINION, OR ABSTRACT. DURING THE COURSE OF THE SURVEY SOME SEARCHES OF THE PUBLIC RECORDS WERE MADE, BUT THESE SEARCHES WERE NOT EXHAUSTIVE AND SHOULD NOT BE CONSIDERED A SUBSTITUTE FOR A PROPER TITLE COMMITMENT, OPINION, OR ABSTRACT OBTAINED FROM A TITLE AGENCY OR OTHER TITLE PROFESSIONAL.
12. THE DESCRIPTION OF THE LAND CONTAINED IN THIS BOUNDARY SURVEY WAS PROVIDED BY THE CLIENT OR THE CLIENTS REPRESENTATIVE.
13. THIS SURVEY DELINEATES THE BOUNDARY LOCATION ACCORDING TO THE LEGAL DESCRIPTION, BUT DOES NOT DETERMINE OWNERSHIP OR PROPERTY RIGHTS.
14. THE FEATURES SHOWN HEREON WERE ACQUIRED USING RTK GPS AND TRIGONOMETRIC METHODS AND WERE VERIFIED THROUGH A REDUNDANCY OF MEASUREMENTS FOR AN EXPECTED HORIZONTAL ACCURACY OF 0.10'.
15. NO JURISDICTIONAL OR WETLANDS WERE DETERMINED OR LOCATED AS PART OF THIS SURVEY.
16. THE PROPERTY SHOWN HEREON IS LOCATED WITHIN AREAS HAVING FLOOD ZONE DESIGNATIONS OF "X" AS SHOWN ON FLOOD RATE MAP NUMBER 12111C0400 J, MAP REVISED 2/15/2012, ST. LUCIE COUNTY, STATE OF FLORIDA, WHICH IS THE CURRENT FLOOD INSURANCE RATE MAPS FOR THE COMMUNITY IN WHICH SAID PREMISES IS SITUATED.
17. SUBMITTAL TO A JURISDICTIONAL AGENCY MAY REQUIRE ADDITIONAL FIELD AND/OR OFFICE WORK.
18. THERE ARE NO GAPS, GORES OR HIATUSES.



VICINITY MAP
NOT TO SCALE



LOCATION MAP
(INTENDED DISPLAY SCALE: 1"=2000')

LEGEND

(C)	= CALCULATED MEASUREMENT
(M)	= FIELD MEASUREMENT
CB	= CHORD BEARING
CD	= CHORD DISTANCE
CM	= CONCRETE MONUMENT
Δ	= DELTA
FDOT	= FLORIDA DEPARTMENT OF TRANSPORTATION
FND	= FOUND
HDPE	= HIGH DENSITY POLYETHYLENE
ID	= IDENTIFICATION
INFO.	= INFORMATION
IP	= IRON PIPE & CAP
IP&C	= IRON PIPE & CAP
IR&C	= IRON ROD & CAP
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R	= RADIUS
R/W	= RIGHT-OF-WAY
	= FENCE GATE POST
	= METAL UTILITY POLE
	= POLE ANCHOR
—OE—	= OVERHEAD ELECTRIC LINE

CERTIFICATION

I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEVE THIS IS TRUE, ACCURATE AND COMPLETE DEPICTION OF A FIELD SURVEY PERFORMED UNDER MY DIRECTION AND COMPLETED ON 5/28/2024. I FURTHER CERTIFY THAT SAID DRAWING IS IN COMPLIANCE WITH THE STANDARDS OF PRACTICE AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPER, IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE PURSUANT TO SECTION 472.027, FLORIDA STATUES.

THOMAS W. GRITTON
PROFESSIONAL SURVEYOR & MAPPER
FLORIDA CERTIFICATE NO. 7347

SIGNATURE DATE

PREPARED BY

CULPEPPER & TERPENING INC

CONSULTING ENGINEERS | LAND SURVEYORS
2980 SOUTH 25th STREET
FORT PIERCE, FLORIDA 34981
PHONE 772-464-3537 | FAX 772-464-9497
www.ct-eng.com
STATE OF FLORIDA BOARD OF PROFESSIONAL ENGINEERS AUTHORIZATION NO. 4286

P:\Proj-2021\21-037.100 Pilot Park Projects - Survey (Peacock & Duck)\Survey\21-037.100 Boundary.dwg Plotted: 1/9/2025 11:40 AM By: JOHN YANCY

GRAPHIC SCALE
200 0 200 400
(IN FEET)
Intended display scale:
1 inch = 200 feet

LEGEND

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	= FENCE GATE POST
	= METAL UTILITY POLE
	= POLE ANCHOR
OE	= OVERHEAD ELECTRIC LINE

DID NOT FIND OR SET. USING HISTORICAL COORDINATES OF 3"X3" LITERWOOD POST RECOVERED BY F.D.O.T.

N0°04'01"W 5339.86"(C) & (FDOT) (BEARING BASIS)
NORTH/SOUTH 1/4 SECTION LINE

DID NOT FIND OR SET. USED HISTORICAL COORDINATES OF CM RECOVERED BY F.D.O.T.

FND. 5/8" IR&C (ILLEGIBLE) 0.18'S..0.72'W.

SEE DETAIL "A" SHEET 3

FND. 5/8" IP&C (ILLEGIBLE) 0.50'S..0.93'E.

INTERSTATE - 95
FLORIDA DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP SECTION 94001-2412

6' HOG WIRE FENCE WITH BARBED WIRE 0.5' OUTSIDE SUBJECT PROPERTY

4' HOG WIRE FENCE CORNER 0.6' OUTSIDE SUBJECT PROPERTY

S22°32'49"E 3859.96'(M & FDOT)

4' HOG WIRE FENCE CORNER 2.3' OUTSIDE SUBJECT PROPERTY

SET 5/8" IR&C "C&T LB 4286"

APPROXIMATE EDGE OF WATER

"SPEED TABLE AHEAD"

"SPEED TABLE"

Letchworth Street

Centamino Street

Armucher Street

Curcuma Street

Blackmur Street

Diamattia Street

Fambrough Street

Crenshaw Street

Cathedral Street

N89°46'45"W 2508.07'

SEE DETAIL "B" SHEET 3

SW Dreyfuss Boulevard (40' R/W)

PORT ST. LUCIE SECTION SEVEN (PLAT BOOK 12, PAGES 37A THROUGH 37F)

S89°46'45"E 2660.91'(M) & (FDOT) SEC. COR TO 1/4 COR.

OWNER: CITY OF PORT ST. LUCIE
PID: 4323-211-0001-000-9
RECORDING INFO: ORB 1252, PG 1223
166.31 ACRES±

O.L. PEACOCK LAKE

R=5565.58' Δ=016°13'49" L=1573.74' CB=S30°39'43"E CD=1568.48"

7' HOG WIRE FENCE WITH BARBED WIRE 0.5' OUTSIDE SUBJECT PROPERTY

FND. 5/8" IP&C (ILLEGIBLE) 0.77'SW.

N0°03'59"W 67.86'

FN. 5/8" IR&C (ILLEGIBLE) 0.27'S..0.74'W.

4' HOG WIRE FENCE 1.3' INSIDE SUBJECT PROPERTY

EAST LINE OF THE WEST 1/2 OF SECTION 23

N0°03'59"W 5263.76'(C)

N00°04'00"W 5263.75(FDOT) 1/4 COR. TO 1/4 COR.

N0°03'59"W 5195.90'

4' HOG WIRE FENCE CORNER ON LINE OF SUBJECT PROPERTY

4' HOG WIRE FENCE CORNER 0.9' INSIDE SUBJECT PROPERTY

4' HOG WIRE FENCE CORNER 0.64' INSIDE SUBJECT PROPERTY

4' HOG WIRE FENCE CORNER 0.35' OUTSIDE SUBJECT PROPERTY

FND. 5/8" IR (NO ID)

FD 5/8IN RC PSM 5543

FND. 5/8" IR&C "AJP PSM 6330"

FND. 5/8" IR (NO ID, BENT)

DID NOT FIND OR SET. USED HISTORICAL COORDINATES OF 3"X3" CM RECOVERED BY F.D.O.T.

FND. 5/8" IR&C "VELCON LB 4942"

FND. 1/2" IR&C "KA SMITH LB 6425"

4' HOG WIRE FENCE CORNER 0.45' INSIDE SUBJECT PROPERTY

65' DRAINAGE RIGHT OF WAY
PORT ST. LUCIE SECTION NINETEEN (PLAT BOOK 13, PAGES 19A THROUGH 37F)

BLOCK 1920
PORT ST. LUCIE SECTION NINETEEN
(PLAT BOOK 13, PAGES 19, & 19A THROUGH 19K)

OWNER: CITY OF PORT ST. LUCIE
PID: 3420-590-2880-000-9

BLOCK 1870
PORT ST. LUCIE SECTION SEVEN
(PLAT BOOK 12, PAGES 37A THROUGH 37F)

BLOCK 1864
PORT ST. LUCIE SECTION SEVEN
(PLAT BOOK 12, PAGES 37A THROUGH 37F)

BLOCK 1863
PORT ST. LUCIE SECTION SEVEN
(PLAT BOOK 12, PAGES 37A THROUGH 37F)

OWNER: CITY OF PORT ST. LUCIE
PID: 3420-530-1287-000-9

OWNER: ROSSER LAKES, LLC
PID: 4308-111-0001-000-1
RECORDING INFO: ORB 4070, PG 2169

S89°32'55"W 2649.80'(M) & (FDOT)

S89°07'45"W 2626.14'(M & FDOT)

SW Open View Drive
SW Eflen Avenue
SW Lofgren Avenue
SW Whipple Avenue
SW Starman Avenue
SW Penrose Avenue
SW Esperanto Street
SW Buttercup Avenue
SW Ellis Street
SW Citation Avenue
SW Clambake Avenue
SW Capehart Avenue
SW Milkin Avenue
Esperanto Street
Hickenlooper Street
SW Crumpacker Street

65' DRAINAGE RIGHT OF WAY
PORT ST. LUCIE SECTION SEVEN (PLAT BOOK 12, PAGES 37A THROUGH 37F)

FND. NAIL & TIN-TAB (NO ID)

DID NOT FIND OR SET. USED HISTORICAL COORDINATES OF 3"X3" CM RECOVERED BY F.D.O.T.

FND. MAG NAIL & DISK (ILLEGIBLE)

SW Rosser Boulevard

S0°19'31"E 5282.88"(C) & (FDOT)

DID NOT FIND OR SET. USED HISTORICAL COORDINATES OF CM RECOVERED BY F.D.O.T.

P:\Proj-2021\21-037.100 Pilot Park Projects - Survey (Peacock & Duck)\Survey\21-037.100 Boundary.dwg Plotted: 1/9/2025 11:40 AM By: JOHN YANCY

GRAPHICS

COMPUTER FILE REF.	FIELD BK./PG.
XX-XXX	
Boundary Survey.dwg	

CULPEPPER & TERPENING INC
2980 SOUTH 25th STREET • FORT PIERCE, FLORIDA 34981
PHONE 772-464-3537 • FAX 772-464-9497 • www.ct-eng.com
STATE OF FLORIDA BOARD OF PROFESSIONAL ENGINEERS AUTHORIZATION NO. 4286

– REVISIONS –	BY	DATE
.	-	-
.	-	-
.	-	-
.	-	-
.	-	-
.	-	-

	BY	DATE
FIELD	SG	5/2/24
CALCS.	JDJ	
DRAWN	JHY	5/31/24
DETAILED		
CHECKED	JDJ	
APPROVED	TPK	

BOUNDARY SURVEY

PREPARED FOR

CITY OF PORT ST. LUCIE

DATE: 6/3/2024
HORIZ. SCALE: 1"=200'
VERT. SCALE: NONE
JOB No. 21-037.100
SHEET 2 of 3

LEGEND

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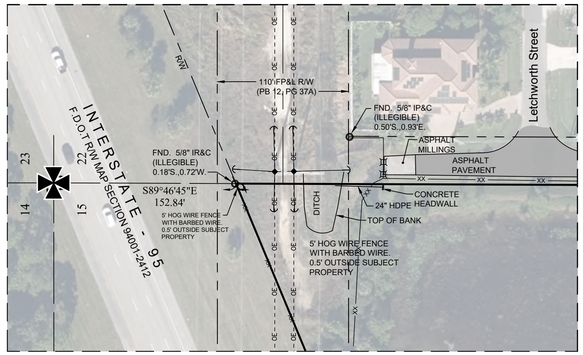
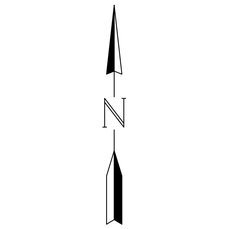
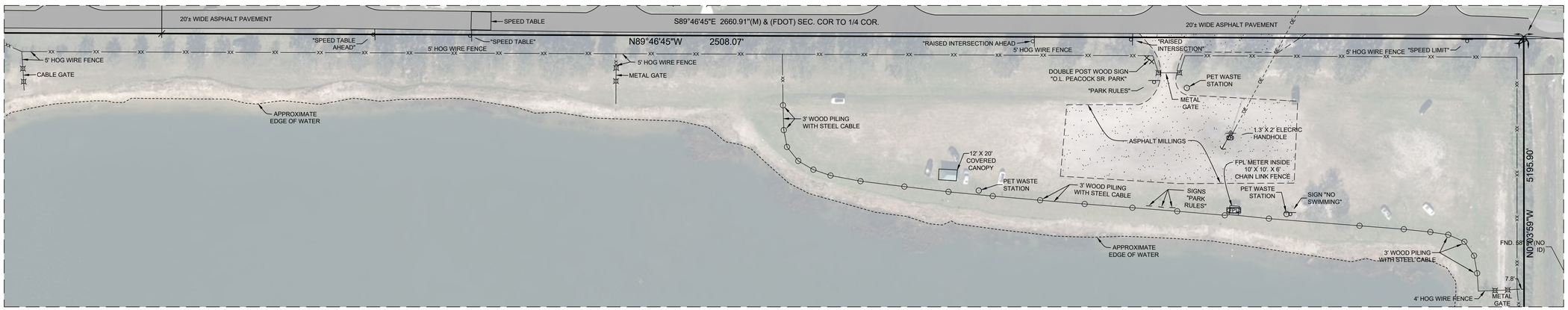


DETAIL "A"
INTENDED DISPLAY SCALE: 1"=60'





DETAIL "B"
INTENDED DISPLAY SCALE: 1"=60'

DETAILS

COMPUTER FILE REF.	FIELD BK./PG.

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– REVISIONS –	BY	DATE

	BY	DATE
FIELD	SG	5/2/24
CALCS.	JDJ	
DRAWN	JHY	5/31/24
DETAILED		
CHECKED	JDJ	
APPROVED	TPK	

BOUNDARY SURVEY

PREPARED FOR
CITY OF PORT ST. LUCIE

DATE: 6/3/2024
HORIZ. SCALE: 1"=200'
VERT. SCALE: NONE
JOB No. 21-037.100
SHEET 3 of 3

O.L. PEACOCK SR. LAKE PARK

TECHNICAL SPECIFICATIONS

PREPARED FOR:

CITY OF PORT ST. LUCIE
PARKS AND RECREATION DEPARTMENT

PREPARED BY:

CAPTEC ENGINEERING, INC.
301 NW FLAGLER AVENUE
STUART, FL 34994
(772) 692-4344 - PHONE
(772) 692-4341 - FAX

JULY 2025

TECHNICAL SPECIFICATIONS

O. L. Peacock Sr. Lake Park Improvements

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4. PROJECT SCHEDULE 1
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6. FISH AND WILDLIFE RESOURCES 3
7. GOPHER TORTOISES / INDIGO SNAKES 3
8. NPDES COMPLIANCE (EROSION CONTROL) 3
9. ENVIRONMENTAL PROTECTION 5
10. DUST CONTROL 5
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Attachment 1 – OL Peacock Lake Park Survey
Attachment 1 – OL Peacock Lake Park Landscape and Irrigation Plans and Specifications
Attachment 1 – OL Peacock Lake Park Architectural Plans and Specifications
Attachment 2 – OL Peacock Lake Park Env. Assessment Report
Attachment 3 – OL Peacock Lake Park Env. Gopher Tortoise Report
Attachment 4 – OL Peacock Lake Park SHPO Clearance Letter
Attachment 5 – OL Peacock Lake Park Geotechnical Report

BALANCE OF PAGE IS INTENTIONALLY LEFT BLANK

1. **STANDARD SPECIFICATIONS** - All work shall conform to the "Florida Department of Transportation Standard Specifications for Road and Bridge Construction" (Standard Specification, Latest Edition at time of bid), City of Port St. Lucie Engineering and City of Port St. Lucie Utilities Standards unless stated otherwise. Any reference in the FDOT and CITY Standard Specifications to the ENGINEER or Department shall mean the ENGINEER on this project. Specific references are made to certain portions of the FDOT and City Standard Specifications to facilitate the CONTRACTOR.

   Any reference to "FDOT Standard Indexes" shall mean the FDOT Standard Plans (Latest Edition at time of bid).

2. **SCOPE OF WORK –** This contract covers the proposed improvements to O. L. Peacock Lake Park. The CONTRACTOR shall dewater the excavations to provide a dry condition during construction and account for site drainage management.

3. MEASUREMENT AND BASIS OF PAYMENT

Progress Payments

1) Measurement of quantities for progress payments shall be made by the CONTRACTOR. Such measurements are subject to the ENGINEER's review and correction.

2) Measurements for progress payments shall be made on in-place quantities in accordance with the Contract Form General Requirements. Requests for partial payment for materials on order, in warehouse or yard, or stockpiled on the project site will be accepted or denied at the CITY's discretion.

3) No item will be accepted for progress payment until all required testing has been successfully completed.

Final Payment

1) Final payment will not be made on any portion of the contract until the entire scope of work under this contract is complete.

4. **PROJECT SCHEDULE -** Within twenty-one (21) calendar days after the execution of the Contract, or at the pre-construction meeting whichever is earlier, CONTRACTOR shall submit for approval, three copies of a schedule of work showing in detail satisfactory to the ENGINEER and CITY, the order in which the CONTRACTOR proposes to carry on the work, the interdependence of activities, the date on which it will start the individual activities, including procurement of materials, plans and equipment, submission and receipt of shop drawings, duration, monetary value, resource allocation, earliest and latest starting and completion dates for each operation. The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work schedule for completion at any time. All activities are to be described so that the work is readily identifiable and progress on each activity can be readily measured. The schedule shall be prepared in such a manner that all elements are contained in the schedule diagram (i.e., Early Start, Late Start, Early Finish, Late Finish and Duration). Separate detail sheets containing this information are not acceptable. If CONTRACTOR elects to use a computer-generated critical path method schedule (CPM) the selected software and output format (including size, color, order, etc.) is to be approved and accepted by the ENGINEER before CPM preparation. The schedule shall be accompanied by a working plan, which is a concise written description of CONTRACTOR's construction plan. This plan shall include but not be limited to the phasing, sequence, identification of work crews and summary

of the work. CONTRACTOR shall resubmit a revised schedule whenever requested to comply with such comments as may be required by the ENGINEER and/or CITY.

The CONTRACTOR shall enter on the above-mentioned chart the actual progress accompanied by a written description at monthly intervals and shall immediately deliver to the ENGINEER three copies thereof along with each progress payment request. If CONTRACTOR fails to submit a progress schedule within the time prescribed, the ENGINEER may withhold approval of progress payment request until the CONTRACTOR submits the required progress schedule.

If a majority of the activities have a float period of less than ten (10) days, then the CONTRACTOR must provide complete details on the resource allocation as requested by the ENGINEER.

The CONTRACTOR must provide letters from his sub-contractors that indicate their acceptance of the proposed schedule.

The CONTRACTOR shall submit a concise written explanation of the schedule impacts attached to the delay claim and the next schedule update.

All material, labor and equipment required to perform the work effort for this item shall be carried out by the CONTRACTOR as incidental to the bid price of the various bid items of this contract, with no additional cost to be incurred by the CITY.

5. WATER RESOURCES – The CONTRACTOR shall not discharge without permit into the waters of lakes, rivers, canals, waterways and ditches, any fuels, oils, bitumen's, garbage, sewage, or other materials which may be harmful to fish, wildlife, or vegetation, or that may be detrimental to outdoor recreation. The CONTRACTOR shall be responsible for investigating and complying with all applicable federal, state and local laws and regulations governing pollution of waters. All work under this contract shall be performed in such a manner that objectionable conditions will not be created in waters through or adjacent to the project areas. If a violation is noted during construction, all construction shall cease until the condition is corrected, at no additional cost to the CITY.

The CONTRACTOR shall exercise extreme care to minimize degradation of water quality at the site. All necessary provisions shall be taken to ensure compliance with the water quality standards of the State of Florida. Attention is called to Chapter 17-3, Florida Administrative Code. Adequate silt containment procedures and equipment shall be used to control turbidity within state standards.

When required by any Governmental Agency), the CONTRACTOR shall make water quality measurements and submit them to the Agency and ENGINEER, in addition to those required herein, assuring construction operations complies with the Standards of 17-3, F.A.C. All water quality measurements shall conform to the test methods specified in Chapter 40, Part 136 of the Code of Federal Regulations.

If any waste material is dumped in unauthorized areas, the CONTRACTOR shall remove the material and restore the area to the condition of the adjacent undisturbed area. If necessary, contaminated ground shall be excavated, disposed of as directed by the ENGINEER and replaced with suitable fill materials, compacted and finished with topsoil, all at the expense of the CONTRACTOR. Any notification for waste material dumping to Regulatory Agencies is the responsibility of the CONTRACTOR.

All materials, labor and equipment needed to prosecute the work required by this Specification shall be carried out by the CONTRACTOR as incidental to the bid price of the various bid items of this Contract, with no additional cost to be incurred by the CITY.

6. **FISH AND WILDLIFE RESOURCES** - The CONTRACTOR shall at all times perform all work and take such steps required to prevent any interference or disturbance to fish and wildlife. The CONTRACTOR shall not be permitted to alter water flows or otherwise significantly disturb native habitat adjacent to the project area, which are critical to fish, and wildlife except as may be indicated or specified.

All materials, labor and equipment needed to prosecute the work required by this Specification shall be carried out by the CONTRACTOR as incidental to the bid price of the various bid items of this Contract, with no additional cost to be incurred by the CITY.

7. **GOPHER TORTOISES / INDIGO SNAKES** – Should CONTRACTOR or Construction Engineering Inspector (CEI) discover any gopher tortoises / indigo snakes on the site, the CONTRACTOR shall notify the CITY and the CITY will take the measures necessary to relocate the gopher tortoise(s) / indigo snake(s). No extras or additional payments will be made to the CONTRACTOR for the protection of gopher tortoises / indigo snakes. Prior to construction, the CITY will attempt to have all known gopher tortoises / indigo snakes relocated from the project site.

8. **NPDES COMPLIANCE (EROSION CONTROL)** – The CONTRACTOR will provide, install, maintain, monitor, and remove the required erosion and sediment control measures on and around the project site as needed to prevent pollution of water, detrimental effects to public or private property or damage to the work of the project. The CONTRACTOR shall construct and maintain temporary erosion control features or, where practical, construct and maintain permanent erosion control features as directed by the CITY or ENGINEER. This item will include permitting, providing silt fence, turbidity barrier, inlet covers, monitoring, testing/reports.

Payment for permitting, plans and monitoring shall be made and distributed throughout the construction period and included within the silt fence / turbidity barrier linear footage item. The silt fence / turbidity barrier will be paid per linear footage installed and maintained during the duration of the project.

Earthwork brought to final grade shall immediately be finished as indicated and specified. All earthworks shall be planned and conducted in such a manner as to minimize the duration of exposure of unprotected soils. Protection to erosion shall be furnished by grassing exposed slopes and unprotected soils.

The CONTRACTOR shall employ adequate silt containment measures and/or procedures during construction activities to control turbidity within the limits required by local, state and/or federal law and/or permit requirements.

Separate pay items for some Temporary Erosion control items may be included in this Contract. The quantities to be paid under these items will be for the Contract Unit Bid price for the specific item. When other items for temporary erosion control are needed, but no provision has been made for separate items in this Contract, all materials, labor and equipment needed to prosecute the work

required by this Specification shall be carried out by the CONTRACTOR as incidental to the bid price of the various bid items of this Contract, with no additional cost to be incurred by the CITY.

The CONTRACTOR is responsible to obtain a National Pollutant Discharge Elimination System (NPDES) Stormwater Pollution Prevention Plan (SWPPP) permit from the Florida Department of Environmental Protection (FDEP). If the CONTRACTOR needs a dewatering permit through the South Florida Water Management District (SFWMD), this permit will need to be obtained by the CONTRACTOR and the cost shall be included within the mobilization pay item. The ENGINEER'S SWPPP is an example of items that partially may be needed to prevent erosion. The CONTRACTOR is responsible to enhance these items as needed to comply with the NPDES and State Water Quality Guidelines. Any enhancements are considered incidental to the cost of Erosion / Sediment Control.

The CONTRACTOR is responsible for any fees associated with the NPDES permitting process. The CONTRACTOR shall further; provide, install, maintain, monitor, and remove the required erosion and sediment control measures on and around the project site as needed to prevent pollution of water, detrimental effects to public or private property or damage to the work of the project. CONTRACTOR shall construct and maintain temporary erosion control features or, where practical, construct and maintain permanent erosion control features as shown in the plans or as may be directed by the ENGINEER. The CONTRACTOR shall use temporary erosion and water pollution control features that consist of, but are not limited to, temporary grassing, temporary sodding, temporary mulching, sandbagging, slope drains, sediment basins, sediment checks, berms, baled hay or straw, floating turbidity barrier, staked turbidity barrier and silt fence. 50% of the cost of this item is to be paid at installation, with 40% to be paid in equal monthly payments spread out over the remaining contract time, beginning in the 2nd month, and a final 10% paid at substantial completion.

Temporary Silt Fence: The CONTRACTOR shall furnish, install, maintain, and remove temporary silt fences in accordance with the manufacturer's directions, these Specifications, the details as shown on the plans. This item will be paid based on Lump Sum of silt fence installed.

Roadway Sweeping: The CONTRACTOR shall be responsible for the control of dust and erosion created by vehicular and construction traffic entering or exiting the construction area as required by the NPDES permit. Existing driveways and points of access may be utilized and modified for this use. The work area shall be stabilized to reduce the tracking of mud and dirt onto the public right of way; and additional sweeping will be required on as called for by the CEI. This item will be paid in the Lump Sum item for NPDES COMPLIANCE (EROSION CONTROL).

Turbidity Monitoring: After all rain events, CONTRACTOR to test the outfalls of the improvement area for turbidity. The Contract stipulates that the CONTRACTOR is responsible to make certain that during construction activities turbidity shall not exceed 29 NTU's above background for discharge into surface waters or 0 NTU's above background for discharge into Outstanding Florida Waters. CONTRACTOR shall determine background for turbidity monitoring upstream of the improvements. The cost of this item is incidental to the project work and should be included in the line item for NPDES Permitting.

The CONTRACTOR shall, as "operator of the facility" obtain an NPDES permit through the Florida Department of Environmental Protection for the Project. The ENGINEER'S erosion control plan is an example of items that partially may be needed to prevent erosion. The CONTRACTOR is responsible to enhance these items as needed to comply with the NPDES and State Water Quality Guidelines.

Any enhancements are considered incidental to the cost of Erosion / Sediment Control. The CONTRACTOR is responsible for any fees associated with the NPDES permitting process. The CONTRACTOR shall further; provide, install, maintain, monitor, and remove the required erosion and sediment control measures on and around the project site as needed to prevent pollution of water, detrimental effects to public or private property or damage to the work of the project. CONTRACTOR shall construct and maintain temporary erosion control features or, where practical, construct and maintain permanent erosion control features as shown in the plans or as may be directed by the ENGINEER). The CONTRACTOR shall use temporary erosion and water pollution control features that consist of, but are not limited to, temporary grassing, temporary sodding, temporary mulching, sandbagging, slope drains, sediment basins, sediment checks, berms, baled hay or straw, floating turbidity barrier, temporary pipe plugs, staked turbidity barrier and silt fence.

All required NPDES monitoring and inspection requirements shall be considered incidental to the cost of construction but noted in pay item NPDES COMPLIANCE (EROSION CONTROL).

9. ENVIRONMENTAL PROTECTION - In order to prevent and to provide for abatement and control of any environmental pollution arising from the work of the CONTRACTOR and his Subcontractors in the performance of this Contract, the CONTRACTOR shall comply with all applicable federal, state and local laws and regulations concerning environmental pollution control and abatement, and all applicable provisions of the Army Corps of Engineers manual, EM 385-1-1, entitled General Safety Requirements, in effect on the date of the work, as well as the specifications, including the Corps of Engineers and Florida Department of Environmental Protection permits, if applicable to this project.

The CONTRACTOR shall provide and maintain environmental protection during the term of the Contract. Environmental protection measures shall be provided to control pollution that develops during normal earthwork, dredging and/or construction practices. The CONTRACTOR's operations shall comply with all federal, state, and local regulations pertaining to water, air, solid waste and noise pollution. Compliance with the provisions of this Specification by Subcontractors shall be the responsibility of the CONTRACTOR.

All materials, labor and equipment needed to prosecute the work required by this Specification shall be carried out by the CONTRACTOR as incidental to the bid price of the various bid items of this Contract, with no additional cost to be incurred by the CITY.

10. DUST CONTROL - The CONTRACTOR will be responsible for continuously providing adequate dust control of the project. The CONTRACTOR at a minimum is required to provide watering of the project limits to avoid excessive dust. The CITY requests the use of non-potable water for dust control. The ENGINEER will only notify the CONTRACTOR one time of inadequate dust control. If the CONTRACTOR fails to respond within two (2) hours, then the CITY will provide dust control and back charge the CONTRACTOR. This item is considered incidental to the work.

11. MOBILIZATION – In accordance with Section 101 of the FDOT Standard Specifications, the CONTRACTOR shall perform preparatory work and operations in mobilizing for beginning work on the project, including, but not limited to, those operations necessary for the movement of personnel, equipment, supplies, and incidentals to the project site and for the establishment of temporary offices, buildings, safety equipment and first aid supplies, and sanitary and other facilities. This item includes the costs of bonds, Right-of-Way Permitting (CITY and/or FDOT), compliance with noise ordinance requirements, construction surveying and record drawings (as-builts), any required

insurance, and any other pre-construction expense necessary for the start of the work, including the cost of construction materials and services purchased between the Notice to Proceed and the first Pay Request. This item will be paid as a portion of the percentage of completed items until balance has reached total lump sum of completed project. The item will be paid as LUMP SUM under the bid item Mobilization.

12. SURVEY WORK - CONSTRUCTION LAYOUT, AND AS-BUILT DRAWINGS

Construction layout for horizontal and vertical control shall be performed by the CONTRACTOR. Horizontal and vertical control points are shown on the Construction Plans. CONTRACTOR shall keep one record copy of all specifications, prints, drawings, addenda, modifications and shop drawings at the site in order, and annotated to show all changes made during the construction process. CONTRACTOR shall provide ENGINEER and CITY one (1) digital file in AutoCAD format of the As-Built drawings for the entire project as well as six sets of prints signed and sealed by a licensed surveyor. The ENGINEER will provide a CADD drawing in AutoCAD as a basis for the record drawings. The As-Built drawings are to be delivered by the CONTRACTOR to the ENGINEER within seven (7) days of *Substantial* Completion. This is critical for the certification of the facilities to the CITY and various regulatory agencies. Final payment will not be made until As-Built drawings are received and approved by the CITY. For the purpose of this specification, the measurement unit is LUMP SUM and payment for this item will be based on the percentage of project completion. The item will be paid as LUMP SUM under the bid item Mobilization.

13. PRE-CONSTRUCTION VIDEO - The CONTRACTOR is required to videotape the project area prior to construction commencement. CONTRACTOR shall provide a copy of the videotape/DVD of the Project site to ENGINEER for approval once complete and prior to issuance of Notice to Proceed. The item will be paid as LUMP SUM under the bid item Mobilization.

14. EXISTING UTILITY POTHOLE LOCATES WITH SURVEY - The CONTRACTOR shall be required to coordinate all work, when necessary, with the various utility companies in order that utility service may be maintained. The CONTRACTOR shall exercise due caution when working adjacent to such utilities. Any damage to the utilities resulting from the CONTRACTOR's operations shall be repaired at his expense. The ENGINEER has reflected on the plans those utilities he is aware of; the locations shown are approximate only. Any work involving conflict with utility companies shall be coordinated promptly without any delay to the project. The CONTRACTOR shall perform Utility Pothole Locates with Survey at the locations shown on the plans. Payment for this work shall be included in the relative bid item necessitating this verification.

15. MAINTENANCE OF TRAFFIC / PARKING / DETOURS - The CONTRACTOR shall submit Maintenance of Traffic (MOT) Plan for the project, in accordance with FDOT and City of PSL requirements, for approval by the ENGINEER and prior to issuance of Notice to Proceed. The MOT Plan shall address the CONTRACTOR's material laydown, storage areas, and workmen parking areas, in addition to public roadway temporary traffic MOT patterns. Once ENGINEER's comments are addressed, the ENGINEER will forward the MOT Plan to the CITY for approval. Payment for this work shall include all related items in the LUMP SUM cost for **Maintenance of Traffic / Parking / Detours**.

16. EROSION & SEDIMENT CONTROL - Earthwork brought to final grade shall immediately be finished as indicated and specified. All earthworks shall be planned and conducted in such a manner as to minimize the duration of exposure of unprotected soils. Protection to erosion shall be furnished by grassing exposed slopes and unprotected soils.

Such methods as may be necessary shall be utilized on areas to effectively prevent erosion and control sedimentation.

The CONTRACTOR shall employ adequate silt containment measures and/or procedures during construction activities to control turbidity within the limits required by local, state and/or federal law and/or permit requirements.

Separate pay items for some Temporary Erosion control items may be included in this Contract. The quantities to be paid under these items will be for the contract Unit Bid price for the specific item. When other items for temporary erosion control are needed, but no provision has been made for separate items in this Contract, all materials, labor and equipment needed to prosecute the work required by this Specification shall be carried out by the CONTRACTOR as incidental to the bid price of the various bid items of this Contract, with no additional cost to be incurred by the CITY.

The ENGINEER'S (SWPPP) is an example of items that may be needed to prevent erosion. The CONTRACTOR is responsible for enhancing these items as needed to comply with the NPDES and State Water Quality Guidelines. Any enhancements are considered incidental to the cost of Erosion / Sediment Control. The CONTRACTOR is responsible for any fees associated with the NPDES permitting process. (The CONTRACTOR shall further; provide, install, maintain, monitor, and remove the required erosion and sediment control measures on and around the project site as needed to prevent pollution of water, detrimental effects to public or private property or damage to the work of the project. CONTRACTOR shall construct and maintain temporary erosion control features or, where practical, construct and maintain permanent erosion control features as shown in the plans or as may be directed by the ENGINEER). The CONTRACTOR shall use temporary erosion and water pollution control features that consist of, but are not limited to, temporary grassing, temporary sodding, temporary mulching, sandbagging, slope drains, sediment basins, sediment checks, berms, baled hay or straw, floating turbidity barrier, staked turbidity barrier and silt fence. 50% of the cost of this item is to be paid at installation, with 40% to be paid in equal monthly payments spread out over the remaining contract time, beginning in the 2nd month, and a final 10% paid at substantial completion.

Temporary Silt Fence: The CONTRACTOR shall furnish, install, maintain, and remove temporary silt fences in accordance with the manufacturer's directions, these Specifications, the details as shown on the plans. The item will be paid as LUMP SUM under the bid item **Silt Fence & Turbidity Barrier** based on silt fence installed during the construction period.

Turbidity Barrier: The CONTRACTOR shall install, maintain, and remove turbidity barriers to contain turbidity that may occur as the result of dredging, filling, or other construction activities, which may cause turbidity to occur in the waters of the State. Barriers should be placed prior to the commencement of any work that could affect the area of concern. Barriers shall be constructed and installed in accordance with the details shown in the plans, or as approved by the ENGINEER. Ensure that the type barrier used and the deployment and maintenance of the barrier will minimize discharge of turbid waters from the construction site. The ENGINEER may approve alternate methods or materials. Operate turbidity barriers in such a manner to avoid or minimize the degradation of the water quality of the surrounding waters. The item will be paid as LUMP SUM under the bid **item Silt Fence & Turbidity Barrier** based on barriers installed during the construction period.

Stabilized Construction Access/Roadway Sweeping: The CONTRACTOR shall be responsible for the control of dust and erosion created by vehicle and construction traffic entering or exiting the various construction areas as required by the CONTRACTOR's NPDES permit. Existing driveways and points of access may be utilized and modified for this use. The work area shall be stabilized to reduce the tracking of mud and dirt onto the public right of way; and additional sweeping will be required on a daily basis. This item will be included and paid for as LUMP SUM under the bid item **Soil Tracking Prevention Device**.

Turbidity Monitoring: After all rain events, CONTRACTOR shall test the outfalls of the improvement area for turbidity. The Contract stipulates that the CONTRACTOR is responsible to make certain that during construction activities turbidity shall not exceed 29 NTU's above background for discharge into surface waters or 0 NTU's above background for discharge into Outstanding Florida Waters. CONTRACTOR shall determine background for turbidity monitoring upstream of the improvements. The cost of this item is incidental to the project work and should be included in the line item for **Silt Fence & Turbidity Barrier**.

The CONTRACTOR shall, as "operator of the facility" obtain an NPDES permit through the Florida Department of Environmental Protection for the Project. The ENGINEER'S erosion control plan is an example of items that may be needed to prevent erosion. The CONTRACTOR is responsible for enhancing these items as needed to comply with the NPDES and State Water Quality Guidelines. Any enhancements are considered incidental to the cost of Erosion / Sediment Control. The CONTRACTOR is responsible for any fees associated with the NPDES permitting process. (The CONTRACTOR shall further; provide, install, maintain, monitor, and remove the required erosion and sediment control measures on and around the project site as needed to prevent pollution of water, detrimental effects to public or private property or damage to the work of the project. CONTRACTOR shall Construct and maintain temporary erosion control features or, where practical, construct and maintain permanent erosion control features as shown in the plans or as may be directed by the ENGINEER). The CONTRACTOR shall use temporary erosion and water pollution control features that consist of, but are not limited to, temporary grassing, temporary sodding, temporary mulching, sandbagging, slope drains, sediment basins, sediment checks, berms, baled hay or straw, floating turbidity barrier, temporary pipe plugs, staked turbidity barrier and silt fence.

All required NPDES monitoring and inspection requirements shall be considered incidental to the LUMP SUM cost of the pay item for **Erosion & Sediment Control**.

17. CLEARING AND GRUBBING / DEMOLITION / DISPOSE OF DEBRIS - This item includes the clearing, grubbing, removal, demolition and disposal of all trees, bushes, shrubs, grass, structures/valves, piping, and other vegetation/debris which is located within the limits of construction for the entire project including, but not limited to, the existing lateral ditches, proposed detention pond areas, and off-site construction areas unless otherwise specifically noted on the plans. This item also includes the leveling of the work area as depicted in the construction plans. This item shall include all costs associated with the proper removal and disposal of each item, including sanitary landfill fees. All work shall be performed in accordance with the appropriate governing jurisdictional requirements for material handling and disposal.

The construction site shall be cleared, grubbed, and leveled as required to complete all work described on the plans and all areas upon which utility piping, structures, concrete slabs, foundations or pavement is to be placed shall be cleared and grubbed. The CONTRACTOR is expected to visit the site of the work and determine for himself the extent of clearing and grubbing

necessary for his construction operations. This item will provide proper tree protection to include fencing, root pruning, water, root barrier and tree pruning.

Clearing and grubbing shall be as defined under Section 110 of the FDOT Standard Specifications. Standard Clearing and Grubbing shall be done in accordance with Sub-Sections 110-2 and 110-4 of the FDOT Standard Specifications. Debris resulting from clearing, or clearing and grubbing, operations shall be removed from the site and disposed of in an approved manner. Grubbing includes stripping or otherwise removing any soils that are not suitable for berm construction, as well as demucking of existing ditches and/or work areas.

Wastes shall be picked up and placed in containers that are emptied on a regular schedule. All handling and disposal shall be so conducted as to prevent contamination of the site and any other areas. On completion, the areas shall be left clean and natural looking. All sights of temporary construction and activities incidental to the construction of the required permanent work in place shall be obliterated. CONTRACTOR shall transport all waste off CITY property and dispose of it in a manner that complies with federal, state and local requirements.

When other clearing and grubbing or demolition items are needed, but no provision has been made for separate items in this Contact, all materials, labor and equipment needed to prosecute the work required by this Specification shall be carried out by the CONTRACTOR as incidental to the bid price of the various bid items of this Contract, with no additional cost to be incurred by the CITY.

There will be no additional compensation beyond the bid price of the Clearing and Grubbing pay item. The item will be paid per ACRE under the bid item **Clearing & Grubbing / Demolition / Dispose of Debris**.

18. EXOTIC VEGETATION REMOVAL

- CONTRACTOR shall remove all woody exotic vegetation, mostly Brazilian pepper and Peruvian primrose willow, within the project limits during the clearing and grubbing phase, if required. CONTRACTOR to up-root exotic vegetation and dispose off-site. The Contract Price for this work will be included and paid per ACRE under the bid item **Clearing & Grubbing / Demolition / Dispose of Debris**.

19. DEWATERING

Dewatering for Construction Operations consists of all materials, equipment and labor to perform the work described in the plans. The removal and disposal of any existing structures or portions of structures not covered by other items in the contract, including foundations, abutments, piers, wings, obstructions, etc., found necessary to clear the site for the proposed work which are not otherwise covered under other bid items; (4) backfilling, disposing of surplus material and final cleaning, as may be necessary for the proper execution of the work.

The CONTRACTOR shall provide adequate equipment for the removal of storm or subsurface waters that may accumulate in the excavation. If subsurface water is encountered, the CONTRACTOR shall utilize suitable equipment to adequately dewater the excavation so that it will be dry for work and pipe laying. A well point system or other ENGINEER approved dewatering method shall be utilized, if necessary, to maintain the excavation in a dry condition for preparation of the trench bottom and for pipe laying.

Dewatering by trench pumping will not be permitted if migration of fine-grained natural material from bottom, sidewalls or bedding material will occur. In the event that satisfactory dewatering cannot

be accomplished due to subsurface conditions or where dewatering could damage existing structures, the CONTRACTOR shall obtain the ENGINEER's written approval of wet trench construction procedure before commencing construction. Dewatering shall cease in a manner to allow the subsurface water to slowly return to normal levels.

Water pumped from the trench or other excavation shall be disposed of in storm sewers having adequate capacity, canals or suitable disposal pits. CONTRACTOR is responsible for acquiring all permits required to dewater and to discharge the water and shall protect waterways from turbidity during the dewatering operation. In areas where adequate disposal sites are not available, partially backfilled trenches may be used for water disposal only when the CONTRACTOR's plan for trench disposal is approved in writing by the ENGINEER. The CONTRACTOR's plan shall include temporary culverts, barricades and other protective measures to prevent damage to property or injury to any person or persons. No flooding of streets, roadways, driveways or private property will be permitted. Engines driving dewatering pumps shall be equipped with residential type mufflers.

It should be anticipated that the water table may need to be drawn down during excavation & filling. Therefore, the CONTRACTOR may be required to dewater in order to **maintain the water level at or below the required minimum of two (2) feet below the minimum elevation at which work will occur**. This dewatering shall be continuous until construction in the subject area is complete.

At the Pre-Construction meeting, the CONTRACTOR shall submit a sketch or detailed written description of the proposed dewatering system to the CITY/ENGINEER.

The basis of payment for **Dewatering** and associated activities shall be included in all bid items affected and is incidental to the bid item.

20. SITE ACCESS RESTORATION - The CONTRACTOR shall be responsible for the repair and restoration of any and all areas that are damaged as a result of construction activities/landscaping installation. This shall include, but is not limited to, repair of grading, sodding, mulching, improved soil, utilities, irrigation, drainage, pavement, curbing, etc. The quantities to be paid under this paragraph shall include all materials, labor, and equipment needed to prosecute the work required by this specification and will be paid for at the contract unit bid price for the specific item with no additional cost to be incurred by the CITY. This item is considered incidental to the work.

21. EXCAVATION & EMBANKMENT – Earthwork cut and fill consists of all materials, equipment and labor to perform excavation and embankment as defined in Section 120 of the FDOT Standard Specifications. In addition, the work covered under this specification consists of excavating, removing, regrading and satisfactorily disposing of all materials of whatever nature, within the limits of construction. Included in this specification is all excavation and finishing necessary for the construction, preparation and completion of all sub-bases, shoulders, ditches, slopes and intersections, all in accordance with the required alignment, grade and cross sections shown on the drawings or as directed by the ENGINEER.

The CONTRACTOR shall perform all excavation and embankment necessary to accomplish the construction indicated on the plans. The CONTRACTOR shall do all shoring necessary to perform and protect the excavation and, as necessary, for the safety of the workers and any existing facilities. Wherever excavations are made below the grades indicated on the plans, suitable material shall be used to restore the area to the proper grade and shall be compacted in accordance with these specifications. All excavation and embankment work shall conform to the Trench Safety Act Chapter

90-96 Laws of Florida. Trench safety shall be included in the overall bid incidental to the bid price of the various bid items of this Contract, with no additional cost to be incurred by the CITY.

The CONTRACTOR shall provide adequate equipment for the removal of storm or subsurface waters that may accumulate in the excavated areas. If subsurface water is encountered, the CONTRACTOR shall utilize approved means to adequately dewater the excavation so that it will be dry for working and pipe laying. A well point system or other approved dewatering method shall be utilized if necessary to maintain the excavation in a dry condition for preparation of the trench bottom and for pipe laying.

All existing improvements such as pavements, conduits, poles, pipes and other structures shall be carefully supported and fully protected from injury and, in case of damage; they shall be restored without compensation. Existing utilities and other underground obstructions are shown on the plans but the accuracy of the locations and depths is not guaranteed. The CONTRACTOR shall be responsible for damages to these existing utilities and restore them to their original condition in case they are damaged.

Unless specifically authorized by the ENGINEER, all pipe shall be laid in the dry, and the CONTRACTOR shall do such pumping as is required for proper execution of the work. The CONTRACTOR shall dispose of the water without damage or undue inconvenience of the work, the surrounding area, or the public. The CONTRACTOR shall not dam, divert or cause water to flow in excess in existing gutters, swales, pavements or other structures, and to this end may be required to transport or pipe the water to a suitable place of discharge. Well point systems or other approved equipment shall be used to maintain excavations in a dry condition for pipe laying.

Where muck, rock, clay or other material within the limits of construction is, in the opinion of the ENGINEER, unsuitable in its original position, the CONTRACTOR shall excavate such material and backfill the excavated area with suitable material, which shall be compacted and shaped to conform to the required section.

The CONTRACTOR is responsible for constructing a berm section of uniform material. There will be no additional cost for any mixing of materials that may be needed to achieve a berm of uniform material that is acceptable to the CEI and EOR.

It is the intent of this specification that all pipe and other structures shall be provided with a stable foundation and that any material, due to kind or condition, is not or cannot be made stable by drainage or compaction shall be removed or replaced. Any material encountered at the elevation shown on the drawings or specified for pipe that will not or cannot be improved to provide a stable foundation for the pipe shall be removed and replaced. All unstable material below the grade line of the pipe shall be removed for the full width of the trench and replaced with suitable select material, compacted as specified elsewhere in these specifications. For the purpose of this specification, muck, peat and other highly organic soils shall be considered unsuitable materials. In addition, any soil that is or might become wet to such a degree that its moisture content is equal to or greater than 90 percent of its liquid limit will have to be specifically approved by the ENGINEER with regard to stability, or it shall be considered unsuitable and required to be removed and replaced.

All backfill material shall be clean and free of lumber, trash or other debris and shall be thoroughly compacted in layers not to exceed six (6) inches and brought to an elevation above the finished grade sufficient to allow for settlement. Prior to placing backfill, the areas around structures upon which

the backfill is to be placed shall be cleaned of all trash and debris of any nature. Any sheeting and bracing allowed to be left in place shall be cut off a minimum of 2.5 ft. below finished grade.

Finishing shall consist of the preparation, trimming and shaping to the lines and grades shown on the drawings, and all areas outside the paved areas in such a manner to receive grassing, sod or planting without additional work.

Areas to be compacted shall be moistened or dried, as needed to satisfy moisture content requirements, and compacted by either rolling, tamping or any other method approved by the ENGINEER in order to obtain the desired density. The CONTRACTOR shall inspect all compacted areas prior to further construction operations to ensure that satisfactory compaction has been obtained.

All embankments, including backfill and embankment adjacent to structures, shall be compacted to a density of not less than 100 percent of the maximum density as determined by AASHTO T-180. If in the ENGINEER's opinion additional density tests are required, such tests shall be made as directed by the ENGINEER at the expense of the CITY. The CONTRACTOR shall instruct the testing laboratory to forward copies of all test reports to the ENGINEER.

The CONTRACTOR shall complete an initial topographical survey of the affected areas prior to construction. The CONTRACTOR shall complete a topographical survey after completion of finish grading. The difference between the initial survey and the final survey will be the quantities paid for the bid items.

The method of measurement shall be final grade and the quantity to be paid per completed CUBIC YARD (CY).

22. TYPE B STABILIZATION - The stabilization of roadway subgrade shall be in accordance with Section 160 of the FDOT Standard Specifications. All stabilization must provide a minimum LBR of 40 following installation. No tolerance is acceptable for this contract.

Payment for this item is included under the TYPE B STABILIZATION item per SQUARE YARD (SY).

23. OPTIONAL BASE GROUP 1; OPTIONAL BASE GROUP 9 - The Base Courses specified for this project shall be in accordance with Section 285 of the FDOT Standard Specifications. The Pay Area for all Base Material shall be equal to the designed surface area.

Payment for this item is included under the respective OPTIONAL BASE GROUP items per SQUARE YARD (SY).

24. SUPERPAVE ASPHALTIC CONCRETE, TYPE SP-12.5 TRAFFIC C - The Superpave Asphalt specified for this project shall be in accordance with Section 334 of the FDOT Standard Specifications. The Pay Area for all Asphalt shall be equal to the designed surface area.

Payment for this item is included under the SUPERPAVE ASPHALTIC CONCRETE, TYPE SP-12.5 TRAFFIC C item per TON.

25. **INLETS, DITCH BOTTOM, TYPE C-** The work specified under this paragraph shall be in accordance with Section 425 of the FDOT Standard Specifications.

Payment for this item will be based on EACH TYPE C DITCH BOTTOM INLET installed.

26. **CLOSED FLUME INLET -** The work specified under this paragraph shall be in accordance with Index 216 of the FDOT Roadway and Traffic Design Standards and with Section 425 of the FDOT Standard

Payment of inlets will be based on EACH Closed Flume Inlet installed.

27. **MANHOLES, P-8, <10' -** The work specified under this paragraph shall be in accordance with Section 425 of the FDOT Standard Specifications.

Payment for this item will be based on EACH MANHOLE installed.

28. **PIPE CULVERTS -** The work specified under this paragraph shall be in accordance with Section 430 of the FDOT Standard Specifications.

Payment for this item will be based on each LINEAR FOOT (LF) of each sized PIPE CULVERT installed.

29. **MITERED END SECTION** - Construct in accordance with the Plans and Standard Plans, Indexes 430-021, 430-022 and 430-030.

Payment for this item will be EACH MITERED END SECTION installed.

30. **RUBBLE RIP RAP -** The work specified under this paragraph shall be in accordance with Section 530 of the FDOT Standard Specifications and project plans. Price will include Rubble and bedding stone materials, filter fabric, hauling, excavation, grading and backfill and will be paid per ton of Rip Rap material.

Payment for this item will be per TON of RUBBLE RIP RAP installed.

31. **CONCRETE CURB AND GUTTER, TYPE F & Type D -** The work specified under this paragraph shall be in accordance with Section 520 of the FDOT Standard Specifications.

Payment for these items will be based on each LINEAR FEET (LF) of TYPE F & TYPE D installed.

32. **CONCRETE SIDEWALK AND DRIVEWAYS 4" -** The work specified under this paragraph shall be in accordance with Section 522 of the FDOT Standard Specifications and FDOT Standard Plans Indexes 522-001 and 522-002.

Payment for this item will be based on SQUARE YARD (SY) of CONCRETE SIDEWALK AND DRIVEWAYS 4" installed.

33. 6" CONCRETE ROADWAY MAINTENANCE ACCESS - The work specified under this paragraph shall be in accordance with Section 522 of the FDOT Standard Specifications and FDOT Standard Plans Indexes 522-001 and 522-002.

Payment of this item will be based on the SQUARE YARD (SY) of 6" CONCRETE ROADWAY MAINTENANCE ACCESS installed.

34. DETECTABLE WARNINGS (ADA MATS) - The work specified under this paragraph shall be in accordance with Section 527 of the FDOT Standard Specifications and FDOT Standard Plans Index 522-002. The color shall be high-visibility yellow.

Payment of this item will be based on the SQUARE FEET (SF) of detectable warnings installed.

35. PERFORMANCE TURF, SOD - All sodding work on this project shall be provided in accordance with Section 575 of the FDOT Standard Specification unless otherwise specified in the Plans, all sodding shall consist of Bahia grass sodding as per the Contract Plans. The CONTRACTOR is solely responsible for final acceptability of all sodded areas. All associated costs are included in the unit price of the sod. For issues not discussed in these specifications the CONTRACTOR shall refer to Sections 575, 981, 982 and 983 of the FDOT Standard specification for Road and Bridge Construction.

The quantities to be paid under this paragraph shall include all materials, labor, and equipment needed to prosecute the work required by this specification and will be paid for at the contract unit bid price for the specific item with no additional cost to be incurred by the CITY. For the purposes of this specification, additional items for fertilizer, watering, and mowing shall be considered incidental to the provisions of the sodding.

Type: Sod shall be locally grown unless otherwise specified to conform to surrounding existing turf and shall be; healthy, with well-matted roots, be free of weeds and be supplier certified to be free of Tropical Soda Apple (solanum viarum). The CONTRACTOR will replace turf with the same type Sod removed from any areas or as specified in the plans. If no sod is specified or existing, then Bahia Type sod should be used.

Dimensions: Sod pieces shall be 1 ft x 2 ft and a minimum of 1 ¼ inches thick. ¾ inch of the sod thickness shall be roots and topsoil.

Placement:

a) Sod shall be laid with the long side parallel to contours (perpendicular to the slope with the ends of the pieces butted together. Placement of sod shall proceed in this manner up the slope and end butts shall be staggered with adjoining rows.
b) The combined number of overlaps and one (1) inch or greater gaps between pieces shall not exceed five per 100 square feet.
c) The combined number of two (2) inches or greater overlaps and two (2) inches or greater gaps between pieces shall not exceed one per 100 square feet.
d) For final acceptance, no more than 10% of the sodded area may consist of dead spots of greater than one-half (½) foot square and no more than 5% of the sodded area shall consist of dead spots of greater than one (1) foot square.

Watering:

a) Sod shall be watered with ½ inch of water immediately upon placement. All sodded areas shall be maintained by watering (5 times per week minimum). The cost of this item shall be considered incidental to sod and plantings and is included in that line item.

Lime and Fertilizer: To assure rapid establishment of sod the CONTRACTOR is urged to apply fertilizer and lime as follows or as determined by soil testing. The fertilizer shall be applied in conformance with any COUNTY or CITY local fertilizer ordinances.
Fertilizer: 16-4-8 – 50% of Nitrogen to be slow release 265 lb/ac as placement; 135 lb/ac at 60 days after placement

Maintenance:

a) Mowing – Grass is to be mowed to 6-inch height for final acceptance. Mowing shall not remove any more than 1/3 of the grass leaves and be done with sharp blade mowers. Mowing shall not occur for three (3) weeks after planting.
b) Filling, leveling, repairing washouts or erosion – CONTRACTOR shall replace patches of dead sod and repair disturbed and damaged sod immediately upon being made aware of the condition.

Payment for this item shall be made under Item Performance Turf, Sod – per SQUARE YARD (SY).

36. SINGLE POST SIGN, FURNISH & INSTALL GROUND MOUNT, UP TO 12 SQUARE FEET (SF) -

The work specified under this paragraph shall be in accordance with Section 700 of the FDOT Standard Specifications and FDOT Standard Plans Indexes 700-010 and 700-101.

Payment for this item will be based on LUMP Sum furnished & installed.

37. THERMOPLASTIC PAVEMENT MARKING AND PREFORMED PAVEMENT MARKING -

The work specified under this paragraph shall be in accordance with Section 711 of the FDOT Standard Specifications and applicable FDOT Standard Plans Indexes detailing pavement marking standards. Raised reflective pavement markers are required to be installed with the pavement markings. The cost of raised reflective pavement markers in conjunction with pavement markings, final surface, shall be incidental to this item.

Payment for this item will be based on a LUMP Sum of thermoplastic and preformed pavement markings installed.

38. UTILITY TECHNICAL SPECIFICATIONS

FORCE MAIN CONNECTION

Payment of the applicable unit price shall be full compensation for furnishing all materials, labor, equipment and constructing the Low Pressure Force Main (LPFM) Connection from the existing 6" LPFM to the proposed wet well location shown on contract documents, 6" by 2" Double Strap Saddle (D.S.S.), nipples, 2" gate valve, valve box, bolts, nuts, valve box alignment device, cover, concrete pad/ pad reinforcement, colored reflector, locate wire box, medallion, valve nut extension, swing check valve, excavation and backfill thereof, together with the disposal of all excess materials, bracing, sheeting and dewatering, installation, LPFM tap, compaction, hydrostatic testing, maintaining uninterrupted flow of existing utilities, cleaning the site of the work location and

protection of utilities and structures, and all other work required for the complete furnishing and installation. All work shall be in accordance with City of Port St. Lucie Specifications.

The basis of payment for **FORCE MAIN CONNECTION** shall be LUMP SUM.

2" LOW PRESSURE FORCE MAIN
Payment of the applicable unit price per linear foot shall be full compensation for furnishing all materials, labor, equipment, and constructing the 2" Low Pressure Force Main complete utilizing horizontal direction drilling construction, including: the 2" HDPE DR-11 Low Pressure Force Main, tracer wire, wire connectors, 2" 90 degree fitting, the excavation of pipe entrance and exit pits, all appurtenances, including drilling mud and mud disposal together with the disposal of all excess materials, bracing, sheeting, dewatering, backfilling and compacting drilling pits, hydrostatic testing, connections, furnishing and cleaning the site of work and protection of utilities and structures and all other work required for the complete installation of the water main. All work shall be in accordance with the City of Port St. Lucie Specifications.

The basis of payment for **2" LOW PRESSURE FORCE MAIN** shall be per linear feet.

4" & 6" GRAVITY SEWER
Payment of the applicable unit price shall be full compensation for furnishing all material, labor, and equipment and constructing the 4" & 6" Gravity Sewer complete with 4" & 6" SDR-26 green sewer pipe, stub out plugs for future connections, all necessary testing and ground water pumping (wet well point systems), excavation and backfill thereof, together with the disposal of all excess materials, bracing, sheeting and dewatering, cleaning the site of the work location and protection of utilities and structures, and all other work required for the complete furnishing and installation. All work shall be in accordance with City of Port St. Lucie Specifications.

The basis of payment for the **4" & 6" GRAVITY SEWER** shall be per linear feet.

4" & 6" CLEANOUT
Payment of the applicable unit price shall be full compensation for furnishing all material, labor and equipment and constructing the 4" & 6" cleanout complete with wye branch, bend, Green marker ball, SDR-26 riser pipe, screw cap, excavation and backfill thereof, together with the disposal of all excess materials, bracing, sheeting and dewatering, cleaning the site of the work location and protection of utilities and structures, and all other work required for the complete furnishing and installation. All work shall be in accordance with City of Port St. Lucie Specifications.

The basis of payment for the **4" & 6" CLEANOUT** shall be each.

4" & 6" USF 7630 WITH CONCRETE COLLAR
Payment of the applicable unit price shall be full compensation for furnishing all materials, labor and equipment and constructing the 4" & 6" USF 7630 with concrete collar to finish grade complete with the U.S. Foundry 7630 ring and cover, wooden forms, rebar, concrete pad, excavation and backfill thereof, together with the disposal of all excess materials, bracing, sheeting and dewatering, cleaning the site of the work location and protection of utilities and structures, and all other work required for the complete furnishing and installation. All work shall be in accordance with City of Port St. Lucie Specifications.

The basis of payment for the **4" & 6" USF 7630 WITH CONCRETE COLLAR** shall be each.

2" GATE VALVE

Payment of the applicable unit price for each valve shall be full compensation for furnishing all materials, labor, equipment and installing the valve, including: excavation for the valve(s), together with the disposal of all excess materials, bracing, sheeting, dewatering, valve boxes, bolts, nuts, gasket, tracer wire and wire connectors, valve box alignment device, cover, stainless steel nipple, concrete pad, colored reflectors, locate wire box, trace wire and wire connector, valve information marker, valve nut extension, backfilling, hydrostatic testing, disinfection, connections, cleaning the site of work and protection of utilities and structures and all other work required for the complete installation of the gate valve. All work shall be in accordance with City of Port St. Lucie Specifications.

The basis of payment for the **2" GATE VALVE** shall be each.

2" BLOW-OFF ASSEMBLY

Payment of the applicable unit price for each valve shall be full compensation for furnishing all materials, labor, equipment and installing the valve, including: excavation for the valve(s), together with the disposal of all excess materials, bracing, sheeting, dewatering, connection to gate valve, 2" brass pipe and fittings, #57 stone, traffic rated blow-off box, 2" bronze elbow and plug, 2" angle curb stop, gasket, tracer wire and wire connectors, cover, concrete pad, colored reflectors, locate wire box, trace wire and wire connector, backfilling, hydrostatic testing, disinfection, connections, cleaning the site of work and protection of utilities and structures and all other work required for the complete installation of the blow-off assembly. All work shall be in accordance with City of Port St. Lucie Specifications.

The basis of payment for the **2" BLOW-OFF ASSEMBLY** shall be each.

2" COMMERCIAL WATER SERVICE (TO METER)

Payment of the applicable unit price shall be full compensation for furnishing all materials, labor, equipment and constructing the 2" commercial SDR-9 HDPE CTS water service from the existing water main to the proposed water meter assembly and making connection to existing water main shown on contract documents, including as specified herein and as directed by the Engineer with oversight provided by the City of Port St. Lucie Representative, but limited to the SDR-9 HDPE CTS service pipe, tracer wire, wire connector, service saddle, nipple, 2" gate valve, valve box, bolts, nuts, valve box alignment device, cover, concrete pad/ pad reinforcement, colored reflector, locate wire box, medallion, valve nut extension, water works brass fittings, 2" Angle Valve with lock feature, Type K copper pipe, inserts, 3" casing pipe, all appurtenance, excavation and backfill thereof, together with the disposal of all excess materials, bracing, sheeting and dewatering, installation, water service tapping, water main compaction, hydrostatic testing, disinfection, maintaining uninterrupted flow of existing utilities, cleaning the site of the work location and protection of utilities and structures, and all other work required for the complete furnishing and installation. All work shall be in accordance with City of Port St. Lucie Specifications.

The basis of payment for **2" COMMERCIAL WATER SERVICE (TO METER)** shall be LUMP SUM.

2" WATER SERVICE (BEYOND METER)

Payment of the applicable unit price shall be full compensation for furnishing all materials, labor, equipment and constructing the 2" SDR-9 HDPE CTS water service from the discharge of the proposed water meter assembly to each of the four service points shown on contract documents, including as specified herein and as directed by the Engineer with oversight provided by the City of Port St. Lucie Representative, but limited to the SDR-9 HDPE CTS service pipe, tracer wire, wire

connector, inserts, 3” casing pipe, excavation and backfill thereof, together with the disposal of all excess materials, bracing, sheeting and dewatering, installation, water service tapping, compaction, hydrostatic testing, disinfection, maintaining uninterrupted flow of existing utilities, cleaning the site of the work location and protection of utilities and structures, and all other work required for the complete furnishing and installation. All work shall be in accordance with City of Port St. Lucie Specifications.

The basis of payment for **2” WATER SERVICE (BEYOND METER)** shall be per linear feet.

2” WATER SERVICE CONNECTION/STUB OUT

Payment of the applicable unit price shall be full compensation for furnishing all materials, labor, equipment and constructing the 2” SDR-9 HDPE CTS water service from the discharge of the proposed water meter assembly to each of the service connection/stub out shown on contract documents, including as specified herein and as directed by the Engineer with oversight provided by the City of Port St. Lucie Representative, but limited to 5 feet 2” SDR-9 HDPE CTS service pipe, tracer wire, wire connector, inserts, 2” Tee, 2” Curb Stop, plug/plug transition (reducer), 24” by 13” Meter Box, ¾ type K copper pipe,¾ inch hose bib, hose bib attachment to Shad Pavilion (where applicable), excavation and backfill thereof, together with the disposal of all excess materials, bracing, sheeting and dewatering, installation, compaction, hydrostatic testing, disinfection, maintaining uninterrupted flow of existing utilities, cleaning the site of the work location and protection of utilities and structures, and all other work required for the complete furnishing and installation. All work shall be in accordance with City of Port St. Lucie Specifications.

The basis of payment for the **2” WATER SERVICE CONNECTION/STUB OUT** shall be LUMP Sum.

ELECTRIC SERVICE(S)

Payment of the applicable unit price shall be full compensation for furnishing all materials, labor, equipment and permits required to install a dedicated electrical service from the FPL Secondary Distribution Point to the water monitoring station. The Contractor is required to provide FPL specified handholes, conduit, chase(s), wire, at locations shown on the contract documents. Cost shall include transferring electrical power, for the water monitoring station, from above ground power to underground power. Additionally, the contractor will be required to install an additional breaker in the existing water monitoring breaker panel and extend power from this breaker to each of the two shade pavilions (including all wire, conduits, junction boxes for connection). All electrical equipment and installations shall meet the most current adopted edition of the Florida Building Code 2020 and/or National Electrical Code 20147 and all applicable state and local codes and ordinances and all costs associated with meeting these requirements shall be included in this line item.

The basis of payment for **ELECTRIC SERVICE(S)** shall be LUMP SUM.

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SPECIAL CONDITIONS

1. **CITY FURNISHED ITEMS -** The CONTRACTOR shall bid all items for the project listed in the "Bid Form" based upon the material, labor, etc. necessary to complete each of the items.

2. **SURVEY CONTROL -** The benchmarks for survey control for the project have been indicated in the construction plans. The location of these control points may at times be located within the construction area. It is the responsibility of the CONTRACTOR to locate, preserve, or offset these points as required to maintain proper survey control for the project for the duration of the construction efforts. Control points shall be re-established upon completion of construction at the expense of the CONTRACTOR. All monuments (public or private) located within the construction area must be protected during the construction duration or reinstalled after completion.

3. **CONSTRUCTION ITEMS IN THE BID FORM** - Construction items in the Bid Form may be increased, decreased or deleted at the direction of the ENGINEER & CITY with no unit price adjustment.

4. **SEQUENCE OF CONSTRUCTION** - The construction sequence shall be established by the CONTRACTOR and forwarded to the CITY and ENGINEER for approval through the Project Schedule. The Schedule shall be prepared using a Critical Path Method or other approved project-scheduling tool.

5. **CONTRACT SUPERVISOR** - The Contract Supervisor for the CITY is Carrie Wilbur of the City of Port St. Lucie Parks and Recreation Department, (772) 344-4102.

6. **ENGINEER (DESIGN)** - The "Engineer of Record" is Joseph W. Capra, P.E., CAPTEC Engineering, Inc., (772) 692-4344, a Professional Engineer duly licensed and registered in the State of Florida and designated by the CITY as the Design Engineer.

7. **ENGINEER (CEI)** - The "CEI Engineer" is Gary LS Jones, P.E., CAPTEC Engineering, Inc., (772) 692-4344, a Professional Engineer duly licensed and registered in the State of Florida and designated by the CITY as the Construction Engineering Inspection (CEI) Engineer.

8. **PROJECT PROGRESS MEETINGS** - Project progress meetings will be held weekly or bi-weekly at the City Parks and Recreation Department, or other mutually convenient location as designated by the ENGINEER. Representatives of CITY, ENGINEER, CEI, and CONTRACTOR are required to attend. Other representatives, such as utility company personnel, may attend as necessary.

9. **PROTECTION OF GOPHER TORTOISES / INDIGO SNAKES -** Should the CONTRACTOR discover any tortoises / indigo snakes on the site, the CONTRACTOR shall notify the CITY and the CITY will take the measures necessary to relocate the tortoise(s) / indigo snake(s). No extras or additional payments will be made to the CONTRACTOR for the protection of Gopher Tortoises / Indigo Snakes. Prior to construction, the CITY will have all known gopher tortoises / indigo snakes relocated from the project site.

10. **CONSTRUCTION DEBRIS LOCATED WITHIN PROJECT LIMITS** - The CONTRACTOR is advised that any existing construction and demolition debris located within the project limits should be removed and the costs to be included in the lump sum price of clearing and grubbing. The material shall be disposed of in accordance with these specifications.

11. **RETESTS AND STANDBY TIME FOR SOILS TESTING COMPANY** – The costs for all retests and standby time for the testing companies will be paid by the CONTRACTOR.

12. **VIDEO TAPE/DVD -** The CONTRACTOR is required to videotape the project area prior to construction commencement. CONTRACTOR shall provide a copy of the videotape/DVD of the Project site to the ENGINEER for approval once complete and prior to issuance of Notice to Proceed. The cost of this shall be included in the Lump Sum item for Pre-Construction Video.

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ATTACHMENT 1

Construction Plans and Specifications for
O.L. Peacock, Sr. Lake Park
For
Parks and Recreation Department
City of Port St. Lucie, Florida

Prepared by CAPTEC Engineering, Inc.

Description	Pages / Sheets
Cover	Sheet 1
Civil Site Plan	Sheet 2
Erosion Control Plan	Sheet 3
Stormwater Pollution Prevention Plan	Sheet 4
Horizontal Control	Sheet 5
Paving, Sidewalk-Trail Grading Drainage Plan, West	Sheet 6
Paving, Sidewalk-Trail Grading Drainage Plan, East	Sheet 7
Sections	Sheet 8
Sections	Sheet 9
General Notes	Sheet 10
General Notes	Sheet 11
P & D Details	Sheet 12
Water Services – LPFM Service – Underground Service	Sheet 13
Utility Profiles	Sheet 14
Utility Details	Sheet 15
Utility Details	Sheet 16
Survey	1 thru 3
Landscape/Irrigation	L-1 thru IR-6
Architecture + Design	A2.1thru S1.1

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ATTACHMENT 2

O.L. Peacock, Sr. Lake Park

Wetland and Wildlife Assessment Report
Port St. Lucie, Florida
Dated April 2024

Hobe Sound Environmental Consultants, Inc.
(41 pages follow as separate attachments)

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ATTACHMENT 3

O.L. Peacock, Sr. Lake Park

Gopher Tortoise Report
Port St. Lucie, Florida
Dated June 2024

Hobe Sound Environmental Consultants, Inc.
(13 pages follow as separate attachments)

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ATTACHMENT 4

O.L. Peacock, Sr. Lake Park

SHPO Clearance Letter
Port St. Lucie, Florida
Dated April 2024

State of Florida
Division of Historic Resources
(1 page follow as separate attachments)

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ATTACHMENT 5

Subsurface Soil Exploration & Geotechnical Engineering Evaluation
O.L. Peacock, Sr. Lake Park
August 31, 2023

Anderson Andrew Consulting Engineers, Inc.
(38 pages follows as a separate attachment)

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HOBE SOUND
ENVIRONMENTAL CONSULTANTS, INC.
9512 S.E. DUNCAN STREET
HOBE SOUND, FLORIDA 33455
PHONE: (772) 545-3676 CELL (772) 260-0857
E-MAIL: bobhsenv@gmail.com

07 June 2024

Craig Seger P.E
Captec Engineering, Inc.
301 NW Flagler Ave, Suite 201
Stuart, Fl 34994

Via email: cseger@gocaptec.com

Ref: Gopher Tortoise (*Gopherus polyphemus*) Survey for O.L Peacock Park; (Port Saint Lucie, Florida) Parcel ID's: 4323-211-0001-000-0. Sec 23, Twp 37S, R 39E. Legal description : 23 37 39 THAT PART OF W 1/2 OF SEC LYG E OF I-95 R/W AS IN OR 311-2946 (OR 1252-1223 : 1308-2663).

Dear Mr. Seger:

Hobe Sound Environmental Consultants, Inc. (HSE) was retained by you to conduct a gopher tortoise (*Gopherus polyphemus*) 100% burrow survey at O.L. Peacock Park, located south of Dreyfus Blvd. and east of Interstate 95. Project coordinates are: Latitude: 27°14'58.112" and Longitude: -80°24'32.552" in Section 23, Township 37S, Range 39E, Port Saint Lucie, Florida (**Figures 1-3 of 7)**.

The gopher tortoise is designated as threatened (T) by the State of Florida. This species is protected under regulations set forth in the Florida Administrative Code (F.A.C.) of the State of Florida, Chapter 68 Fish and Wildlife Conservation Commission., Rule 68A-4.001 and 68A-25.002, as well as Chapter 68A-27.

1.00 METHODOLOGY

1.01 Gopher Tortoise and Other Burrow Commensals

1.01.1 Objective

Conduct a 100% systematic survey within and around the boundaries of the project site to locate any gopher tortoise (*Gopherus polyphemus*) burrows and the eastern indigo snake (*Drymarchon corais couperi*).

1.01.2 Methodology

Biologists followed the survey protocol as recommended in *Ecology and Habitat Protection Needs of Gopher Tortoise (Gopherus polyphemus) Populations Found on Lands Slated for Large-scale Development in Florida*; Non-game Wildlife Program, Technical Report #4, Florida Game and Fresh Water Fish Commission (FGFWFC), now known as FFWCC, Tallahassee, Florida, December 1987, and *Gopher Tortoise Permitting Guidelines*, FFWCC, Tallahassee, Florida April 2008 (Updated April 2023).

- Biologists conducted pedestrian transects on 07 June 2024 **(Figure 4 of 7)**;
- All gopher tortoise burrows located were flagged as either abandoned or potentially occupied, if appropriate;
- All gopher tortoise burrows located were assigned an identification number and recorded, if appropriate;
- Biologists field located all gopher tortoise burrows on an aerial photograph, if appropriate (**Figure 5 of 7**);
- Additional data and notes were collected by biologists for the occurrence of the eastern indigo snake.

1.02 Soils

1.02.1 Objective

To identify project soil types according to the NRCS.

1.02.2 Methodology

Biologists used the following methodology to identify soil types found on the project sites.

- The project site soils were mapped according to the *Natural Resources Conservation Service (NRCS), United States Department of Agriculture (USDA), Survey, http://websoilsurvey.sc.egov.usda.gov*

2.00 RESULTS

Two (2) potentially occupied gopher tortoise burrows were located by biologists during the gopher tortoise and commensal species survey **(Figure 5 of 7)**. Gopher tortoise burrow #01 is located within the scope of work boundary. Burrow #02 is outside the scope of work boundary. Commensal species were not observed on-site. The estimated gopher tortoise population for the project site is one (1).

According the NRCS soil survey, the soil on site is *21 - Lawnwood and Myakka sands* (**Figure 6 of 7**).

The property appraisers card can be found as **Figure 7 of 7.**

3.00 CONCLUSION

One (1) potentially occupied gopher tortoise burrow was located within the scope of work boundary by biologists during the gopher tortoise and commensal species survey. Commensal species were not observed on-site. Eastern indigo snake habitat does exist on site. The estimated gopher tortoise population for the project site is one (1).

Due to the nature of the project, it is recommended by HSE to have the gopher tortoise relocated to an off-site gopher tortoise mitigation bank (GTMB) prior to construction. This will require a relocation permit from FFWCC to relocate the tortoises to a GTMB approved by the agency. If construction will not come within 25' of a burrow apron, the client can install a silt-fence around the burrow (25' radius) so construction efforts do not harm the gopher tortoise. The silt-fence must be open ended on at least one or more sides to allow the tortoise to leave or regain access to the burrow. If the gopher tortoises cannot be moved for any reason, and construction infringes on the 25' radius around the burrows, the other alternative is the no build alternative. If construction does not begin within 90 days of the initial survey, then an additional gopher tortoise survey must be conducted to ensure no additional tortoises have moved onto the project site.

4.00 Certification by Consultant

I certify that the referenced property was surveyed for state and federally listed species with the potential to be found on site, in accordance with the appropriate survey methodologies by the listing wildlife agencies.

Signature / Date:

If you have any questions or concerns, please do not hesitate to contact us at your earliest convenience.

THIS DRAWING, TOGETHER WITH THE CONCEPTS AND DESIGN PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DRAWING WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY HOBE SOUND ENVIRONMENTAL CONSULTANTS, INC. SHALL BE WITHOUT LIABILITY TO HOBE SOUND ENVIRONMENTAL CONSULTANTS, INC.

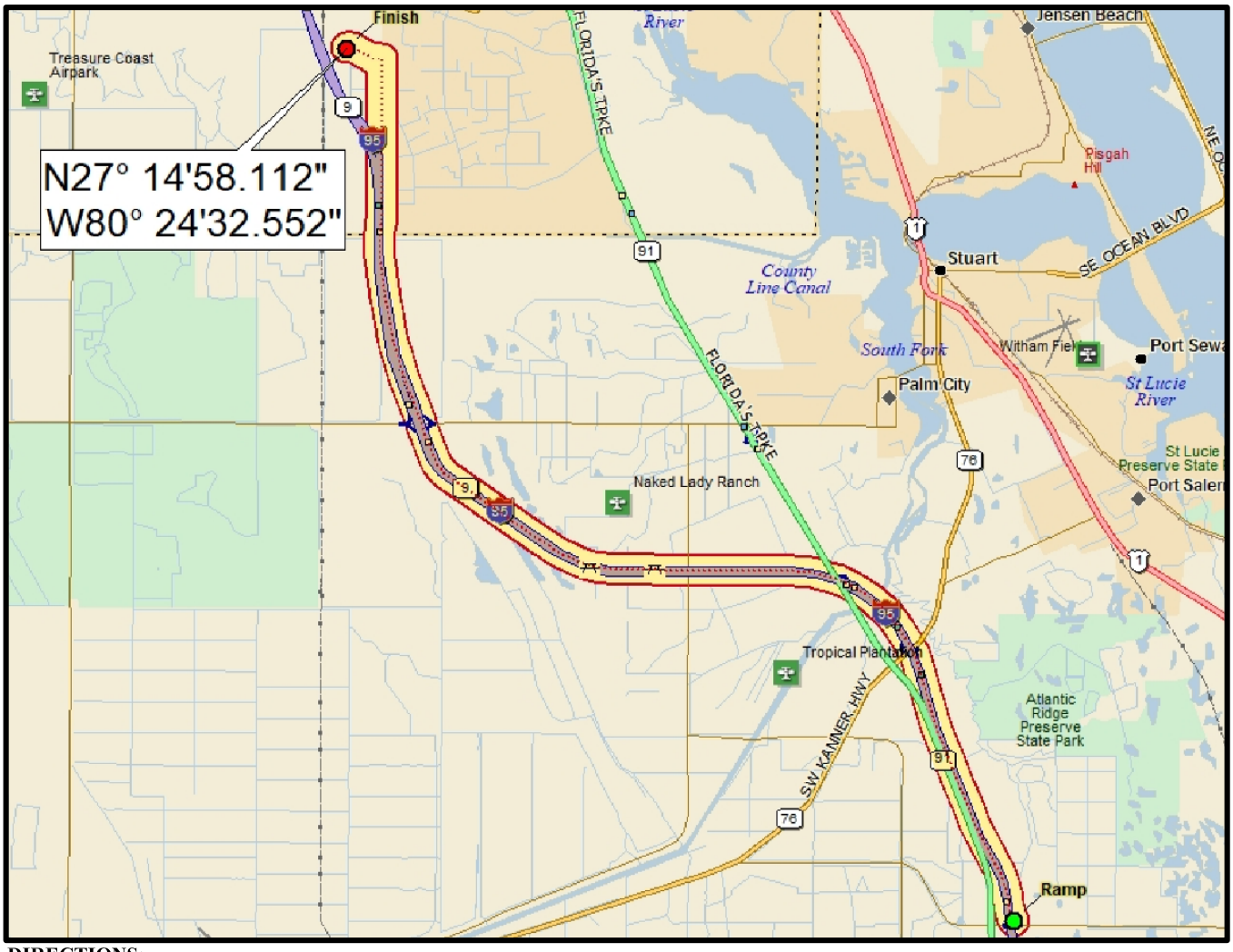
NOT A LAND BOUNDARY SURVEY

CAPTEC Engineering, Inc.
Civil Engineering Professionals

NORTH

0' 7,500' 15,000' 30,000' 60,000'

SCALE: 1" = 15,000'



DIRECTIONS:

		Dist	Turn		Road	Exit	Total Time	Total Dist
●			Start	at	Ramp		00:00:00	0.00 mi
			Go straight (NW)	on	I-95 N (SR 9) ramp		00:00:00	0.00 mi
	in	17.34 mi	Keep right (N)	on to	SW Becker Rd ramp	114	00:17:21	17.34 mi
	in	0.20 mi	Turn right (E)	on to	SW Becker Rd		00:17:52	17.54 mi
	in	0.02 mi	Turn left (N)	on to	SW Rosser Blvd		00:17:54	17.56 mi
	in	2.58 mi	Turn left (WNW)	on to	SW Dreyfuss Blvd		00:24:53	20.14 mi
●	in	0.61 mi	Finish	at	Finish		00:26:35	20.75 mi

Total Time: 00:26:35 Total Distance: 20.75 mi

SOURCE: DELORME STREET ATLAS USA, 2015.

PARCEL ID # 4323-211-0001-000-9

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 23 - 035.05	DRAWING NAME: 01 - VIC MAP.DWG	DATE: 07 JUNE 2024	FIGURE: 1 OF 7
	23	37S	39E				
LATITUDE: 27°14'58.112"	LONGITUDE: -80°24'32.552"				DESIGNED BY: RLW	DRAWN BY: NPD	CHECKED BY: RLW

CAPTEC ENGINEERING, INC.
OL PEACOCK SR. PARK
GOPHER TORTOISE (Gopherus polyphemus)
100% BURROW SURVEY
PROJECT VICINITY MAP

HSE
Hobe Sound Environmental Consultants Inc.
9512 SE Duncan Street
Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

THIS DRAWING, TOGETHER WITH THE CONCEPTS AND DESIGN PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE 0F AND IMPROPER RELIANCE ON THIS DRAWING WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY HOBE SOUND ENVIRONMENTAL CONSULTANTS, INC. SHALL BE WITHOUT LIABILITY TO HOBE SOUND ENVIRONMENTAL CONSULTANTS, INC.

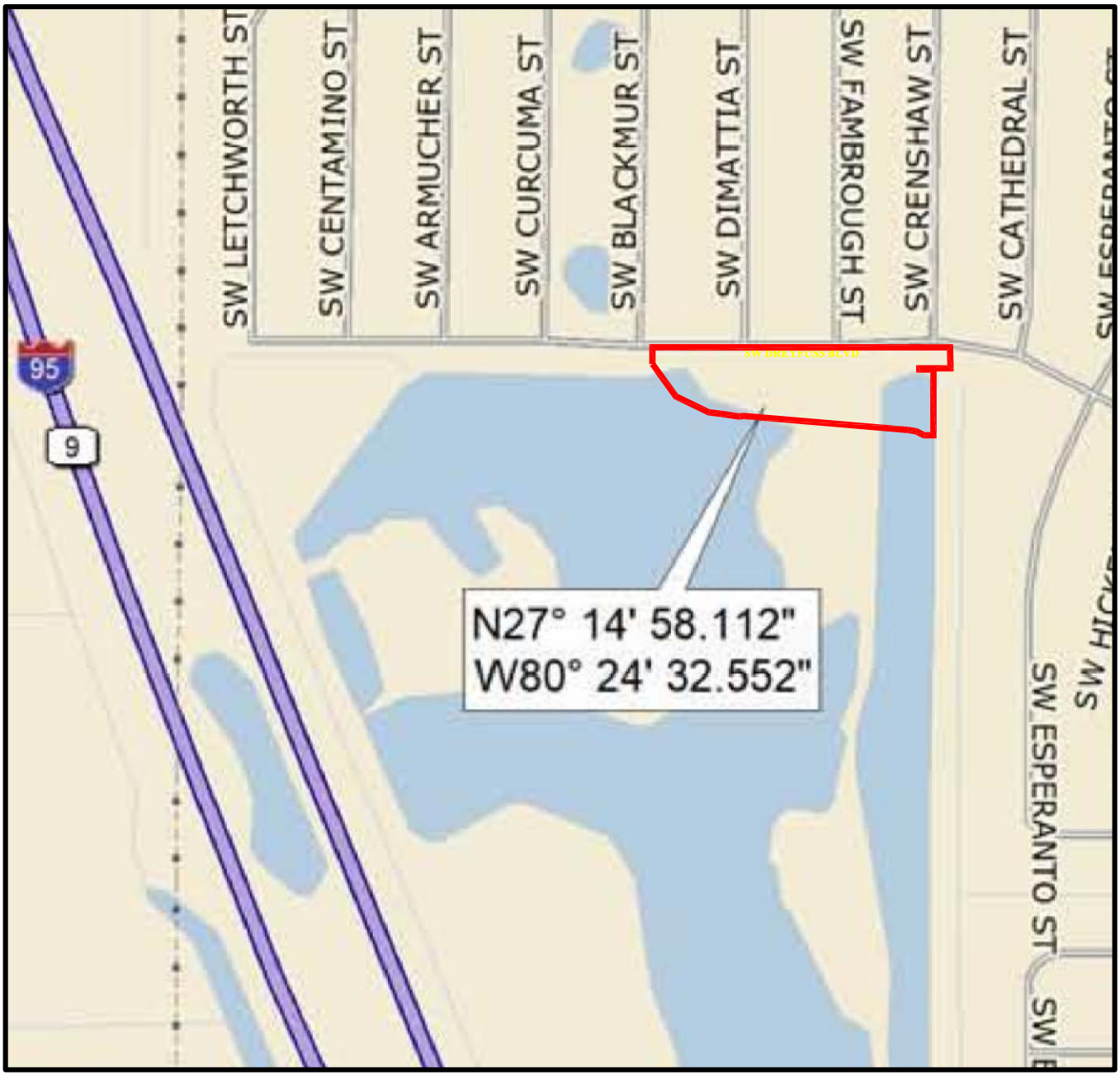
NOT A LAND BOUNDARY SURVEY

CAPTEC Engineering, Inc.
Civil Engineering Professionals

NORTH

0' 250' 500' 1,000' 2,000'

SCALE: 1" = 500'



SOURCE: DELORME STREET ATLAS, 2015

PARCEL ID # 4323-211-0001-000-9

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 23 - 035.05	DRAWING NAME: 02 - LOC MAP.DWG	DATE: 07 JUNE 2024	FIGURE: 2 OF 7
	23	37S	39E				
LATITUDE: 27°14'58.112"	LONGITUDE: -80°24'32.552"				DESIGNED BY: RLW	DRAWN BY: NPD	CHECKED BY: RLW

CAPTEC ENGINEERING, INC.
OL PEACOCK SR. PARK
GOPHER TORTOISE (Gopherus polyphemus)
100% BURROW SURVEY
PROJECT LOCATION MAP

H S E
Hobe Sound Environmental Consultants Inc.
9512 SE Duncan Street
Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

NOT A LAND BOUNDARY SURVEY

CAPTEC Engineering, Inc.
Civil Engineering Professionals

NORTH

0' 200' 400' 800' 1,600'

SCALE: 1" = 400'

SOURCE: 2023 FDOT AERIAL PHOTOGRAPH

PARCEL ID # 4323-211-0001-000-9

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 23 - 035.05	DRAWING NAME: 03 - 2023 AERIAL.DWG	DATE: 07 JUNE 2024	FIGURE: 3 OF 7
	23	37S	39E				
LATITUDE: 27°14'58.112"	LONGITUDE: -80°24'32.552"				DESIGNED BY: RLW	DRAWN BY: NPD	CHECKED BY: RLW

CAPTEC ENGINEERING, INC.
OL PEACOCK SR. PARK
GOPHER TORTOISE (Gopherus polyphemus)
100% BURROW SURVEY
2023 AERIAL PHOTOGRAPH

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NOT A LAND BOUNDARY SURVEY

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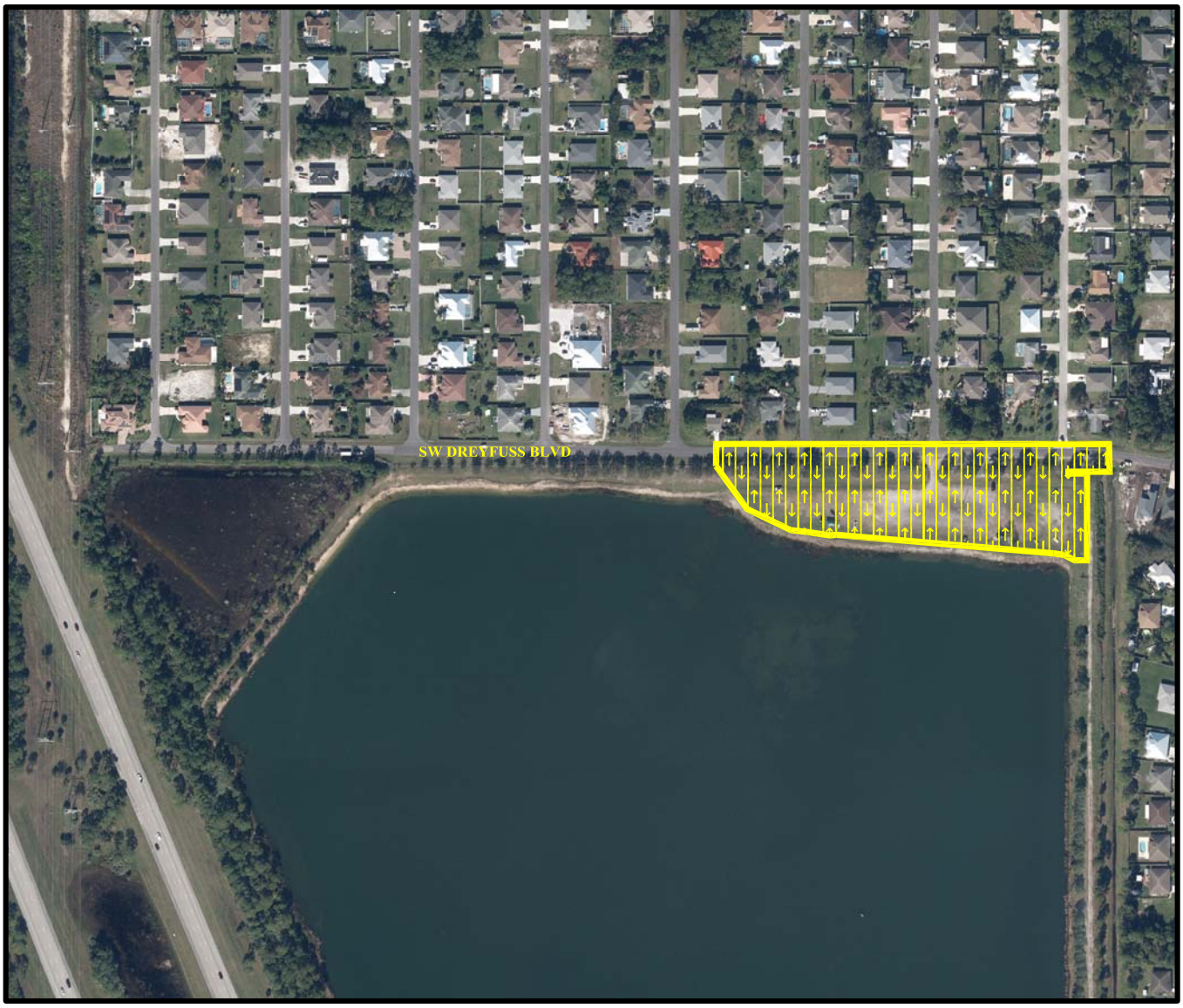
Civil Engineering Professionals

NORTH

0' 200' 400' 800' 1,600'

SCALE: 1" = 400'



LEGEND:

- PEDESTRIAN BELT TRANSECTS (30 FT) AND DIRECTION TRAVELED

SOURCE: HSE SITE VISIT 07 JUNE 2024

PARCEL ID # 4323-211-0001-000-9

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 23 - 035.05	DRAWING NAME: 04 - PED TRANS.DWG	DATE: 07 JUNE 2024	FIGURE: 4 OF 7
	23	37S	39E				
LATITUDE: 27°14'58.112"	LONGITUDE: -80°24'32.552"				DESIGNED BY: RLW	DRAWN BY: NPD	CHECKED BY: RLW

CAPTEC ENGINEERING, INC.
OL PEACOCK SR. PARK
GOPHER TORTOISE (Gopherus polyphemus)
100% BURROW SURVEY
PEDESTRIAN TRANSECTS MAP

HSE
Hobe Sound Environmental Consultants Inc.
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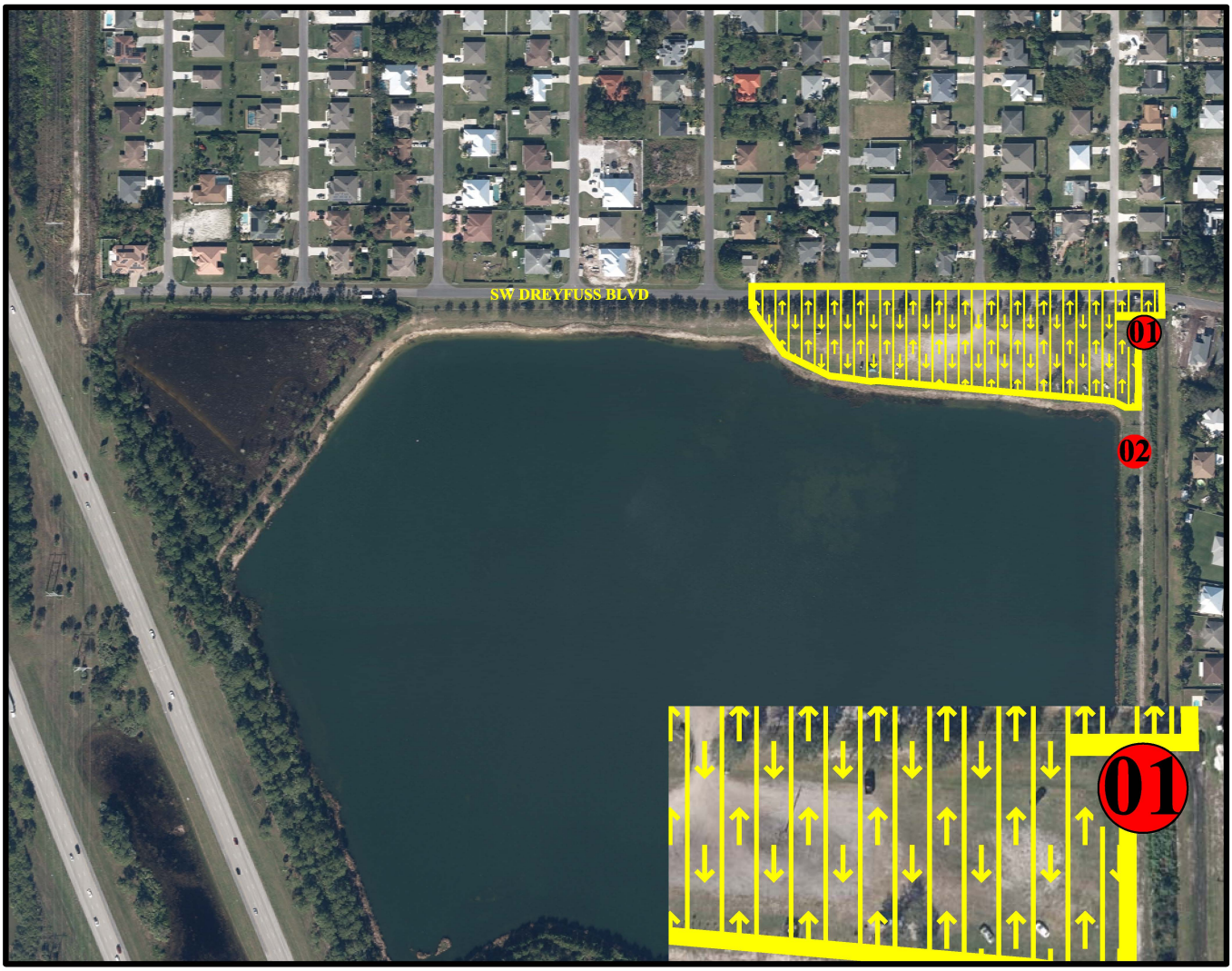
NOT A LAND BOUNDARY SURVEY

CAPTEC Engineering, Inc.
Civil Engineering Professionals

NORTH

0' 200' 400' 800' 1,600'

SCALE: 1" = 400'



LEGEND:
- ACTIVE (02) POTENTIALLY OCCUPIED
- INACTIVE (0) POTENTIALLY OCCUPIED
- ABANDONED (0)

** BURROW TWO (02) IS LOCATED OUTSIDE THE SCOPE OF WORK BOUNDARY**

I HEREBY CERTIFY THAT:

A 100% SURVEY FOR GOPHER TORTOISES WAS CONDUCTED ON 07 JUNE 2024, ACCORDING TO FWC GUIDELINES. TWO (2) POTENTIALLY OCCUPIED GOPHER TORTOISE BURROWS WERE LOCATED DURING THE SURVEY. THE ESTIMATED GOPHER TORTOISE POPULATION IS 1.

NIALL DUNTON, GTA-22-00005A

SOURCE: HSE GOPHER TORTOISE SURVEY DATE: 07 JUNE 2024

PARCEL ID # 4323-211-0001-000-9

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	23	37S	39E	23 - 035.05	05 - GT BURROW.DWG	07 JUNE 2024	5 OF 7

LATITUDE: 27°14'58.112"	LONGITUDE: -80°24'32.552"	DESIGNED BY: RLW	DRAWN BY: NPD	CHECKED BY: RLW

CAPTEC ENGINEERING, INC.
OL PEACOCK SR. PARK
GOPHER TORTOISE (Gopherus polyphemus)
100% BURROW SURVEY
BURROW LOCATION MAP

HSE
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NOT A LAND BOUNDARY SURVEY

CAPTEC Engineering, Inc.
Civil Engineering Professionals

NORTH

0' 200' 400' 800' 1,600'

SCALE: 1" = 400'

LEGEND

21 - LAWNWOOD AND MYAKKA SANDS

SOURCE: NRCS SOIL SURVEY

PARCEL ID # 4323-211-0001-000-9

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 23 - 035.05	DRAWING NAME: 06 - SOIL MAP.DWG	DATE: 07 JUNE 2024	FIGURE: 6 OF 7
	23	37S	39E				
LATITUDE: 27°14'58.112"	LONGITUDE: -80°24'32.552"				DESIGNED BY: RLW	DRAWN BY: NPD	CHECKED BY: RLW

CAPTEC ENGINEERING, INC.
OL PEACOCK SR. PARK
GOPHER TORTOISE (Gopherus polyphemus)
100% BURROW SURVEY
NRCS SOIL MAP

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Hobe Sound, FL. 33455
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NOT A LAND BOUNDARY SURVEY

CAPTEC Engineering, Inc.
Civil Engineering Professionals

SCALE: = NTS

Saint Lucie County
Property Appraiser
Michelle Franklin CFA

Report generated: Tuesday, March 12, 2024

Parcel Report

Parcel

PARCELNO: 4323-211-0001-000-9
Property ID: 117189
Owner1: Port St Lucie City of
SiteAddress: TBD

Owner

Owner1: Port St Lucie City of
Owner2:
Owner3:
MailingAddress: 121 SW Port St Lucie BLVD Port St Lucie, FL 34984-5042

Overview

PrimaryLandUse: 8900 - Mncpal Prop
DistrictGroup: 0011 - Port Saint Lucie
Subdivision: Metes and Bounds
Just/Market Value: $3,077,400
FinishedArea:
Acres: 165.37
TotalArea: 7,203,517.2

Legal Description

LegalDescription: 23 37 39 THAT PART OF W 1/2 OF SEC LYG E OF I-95 R/W AS IN OR 311-2946 (165.37 AC) (OR 1252-1223 : 1308-2663)

Value History

Year	Just/Market Value	Building Value	Land Value	SFYI Value	Assessed Value	Exemption Amount	County Taxable	Save Our Home OR 10% Cap Differential	Ag Credit
2023	$3,077,400	$0	$3,077,400	$0	$3,077,400	$3,077,400	$0	$0	$0
2022	$3,077,400	$0	$3,077,400	$0	$3,077,400	$3,077,400	$0	$0	$0
2021	$3,077,400	$0	$3,077,400	$0	$3,077,400	$3,077,400	$0	$0	$0
2020	$3,077,400	$0	$3,077,400	$0	$3,077,400	$3,077,400	$0	$0	$0

Tax Links

SLC Tax Collector's Office taxes for this parcel
Download TRIM notice for this parcel

Exemptions

Description	Tax Year	Grant Year	Amount
City of Port St Lucie	2023	2000	$3,077,400

SOURCE: SLCPA

PARCEL ID # 4323-211-0001-000-9

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 23 - 035.05	DRAWING NAME: 07 - PROP CARD.DWG	DATE: 07 JUNE 2024	FIGURE: 7 OF 7
	23	37S	39E				
LATITUDE: 27°14'58.112"	LONGITUDE: -80°24'32.552"				DESIGNED BY: RLW	DRAWN BY: NPD	CHECKED BY: RLW

CAPTEC ENGINEERING, INC.
OL PEACOCK SR. PARK
GOPHER TORTOISE (Gopherus polyphemus)
100% BURROW SURVEY
PROPERTY APPAISERS CARD

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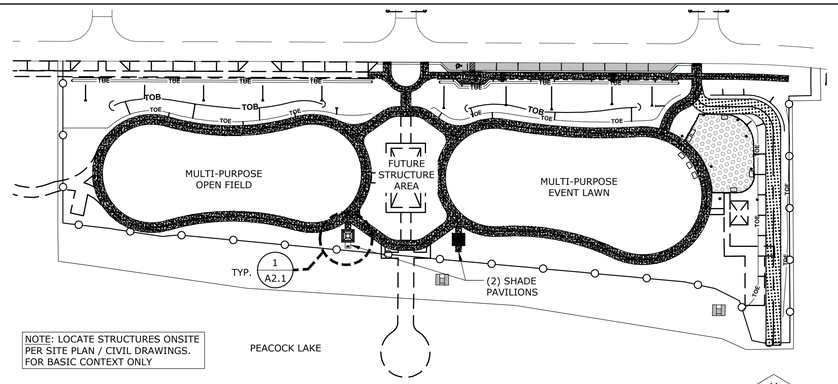


NOTE: LOCATE STRUCTURES ONSITE PER SITE PLAN / CIVIL DRAWINGS. FOR BASIC CONTEXT ONLY

VICINITY MAP

SCALE: NTS

N

ROOFING SPECIFICATION

Roofing shall be standing seam metal 24-gauge Kynar 500 finish roofing with powder coated frames and conceal fastener over peel-n-stick roof membrane (or approved equal) over exterior tongue & groove sheathing. Install roofing as per manufacturer specifications and Product Approval Requirements.

ⓧ ROOF KEY NOTES

1. New metal roofing over approved underlayment. Refer to Cover Sheet for product selection.
2. Steel tube structure shall be fabricated powder-coated steel, color selected By City.
   - 2.1. Hardware (bolts, nuts, washers, etc.) to be hot-dipped galvanized. Shop to verify hole tolerances and tolerances of threaded parts for compatibility of the galvanized parts only.
   - 2.2. Refer to Structural Drawings for hardware / steel requirements

GENERAL NOTES

1. Field verify all existing dimensions prior to construction. Notify Architect of any discrepancies.
2. Dimensions are to framing.
3. Seating to be selected by Port Saint Lucie Parks and Recreation.
4. Pedestal grill to be selected by Port Saint Lucie Parks and Recreation.
5. All finishes and colors to be selected by Port St. Lucie Parks and Recreation.
6. Provide all warranties for installed products and materials that provide limited or extended warranties upon completion with closeout documents.
7. Refer to Civil Drawings for location of pavilions.

[##] PLAN KEY NOTES

1. (4) steel tube columns. Concrete footing size By Others.
2. Pedestal grill.
3. New 4" concrete slab on grade. Refer to Civil Drawings for slab and sidewalk details. Provide 1/2" expansion joints between adjacent slab.
4. Stub up for water line @ 18" for water spigot. Provide stainless steel straps and bolts to secure pipe to column. Provide cold water piping connection to water service within (5) feet.
5. Pavilion bench.
6. Line of structure above.
7. Provide j-box w/ conduit to install (2) duplex outlets, 18" above slab (typ.) w/ spring-loaded weather resistant cover.
8. Stub 1" conduit to center of ceiling for light fixture, 14" square luminare (weatherproof), NRG4000 series by "Hubbell."

Product Approval Submittal Affidavit

Address: S.W. Dreyfuss Boulevard; Port St. Lucie, FL 34953

Schedule: Roofing & Underlayments

FL# or Miami-Dade	Product	Model #	Manufacturer	Attachment Method Type, Size, Spacing, & Embedment	Building Design Pressure	Product Design Pressure
FL# 5259.2	ROOFING UNDERLAYMENTS	Polystick MTS Plus	Polyglass USA	Installation shall strictly adhere to Product Approval	By Others	-622.5
FL# 1832.7	ROOFING MATERIAL	Medallion Lok	McElroy Metal, Inc	Batten clips & caps, slipped over ribs formed by roof deck panels. One piece assembly, with four legs and two arms, formed to engage rib panels, spaced 48" o.c.. Provide bearing plates @ ea. clip. Fasteners used to attach panel clips to be no. 14 Ø, self drilling steel screws Phillips or square drive head, two screws per clip, inserted through 1/4" Ø guide holes.	By Others	-52.5

I have reviewed the above product approval information and and approved it.
Name: Nicole L. Norton/n2 architecture + design
Signature:
Certification Number: AR 91827/ AA26002853
Date:

PROJECT INFORMATION

JURISDICTION:
Unincorporated Saint Lucie County

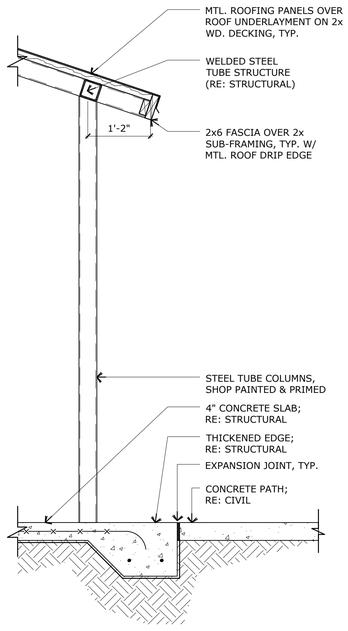
OCCUPANCY:
Group 'U' - Utility & Miscellaneous

CONSTRUCTION:
Building Type: V-B
Fire Protection: Unsprinklered
Fire Alarm: Unalarmed
Exterior Bearing Walls: Metal Tube Framing
Roofing Structure: Tongue & Groove Sheathing
Roofing Material: Metal Roofing over Underlayment

DESIGN PARAMETERS:
Ultimate Wind Speed: See Structural
Nominal Wind Speed: See Structural
Wind Exposure: C
Building Risk Category: II
Building Mean Roof Height: 9'-0"
Roof Overhang: 1'-2"

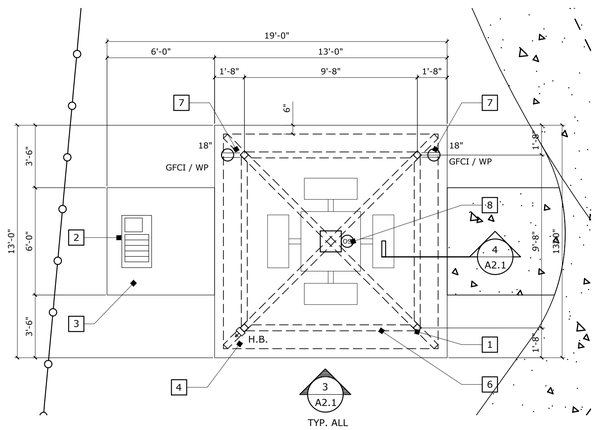
Florida Building Code (8th Edition, 2023)
2020 Florida Electrical Code

AREA TABULATION:
205 GSF



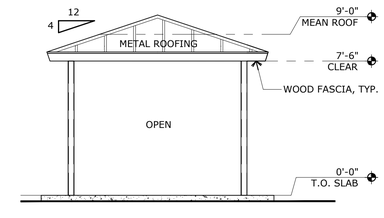
4 - WALL SECTION

SCALE: 3/4" = 1'-0"



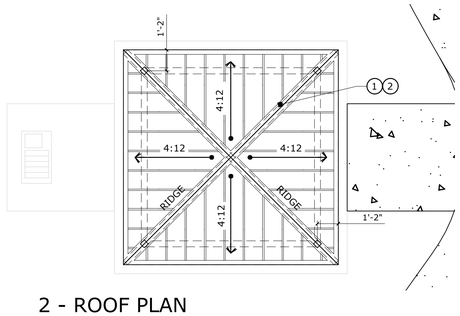
1 - FLOOR / ELECTRICAL PLAN

SCALE: 1/4" = 1'-0"



3 - TYPICAL ELEVATION

SCALE: 1/4" = 1'-0"



2 - ROOF PLAN

SCALE: 1/4" = 1'-0"

LOCATION MAP

PROJECT CONTACTS

CLIENT:
CAPTEC Engineering, Inc.
Craig Seger
301 NW Flagler Avenue
Stuart, FL 34994
(772) 692-4344

ARCHITECT:
n2 architecture + design
Niki L. Norton, R.A.
710 SE Ocean Blvd.
Stuart, Florida 34994
(772) 220-4411

STRUCTURAL:
Accord Engineering
Aida L. Baez, P.E.
433 Plaza Real, Ste. 275
Boca Raton, FL 33432
(833) 421-2327

INDEX OF DRAWINGS

Sheet	Sheet Title	02-May-2025 ISSUE	xx-xx-xx REV. 1	xx-xx-xx REV. 2	xx-xx-xx REV. 3	xx-xx-xx REV. 4	xx-xx-xx REV. 5
A2.1	Plans, Details, Sections + Notes	■					
S0.1	Abbreviations & General Notes	■					
S1.1	Structural Plans	■					

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Commercial + Residential
710 SE Ocean Blvd.
Stuart, FL 34994
O. (772) 220-4411
www.n2ardesign.com

n2 architecture + design

Niki L. Norton, R.A.
AR91827

CPSL P&Z: #P24-221
CPSLUSD FILE: #5001-32

O.L. Peacock Park Pavilions
SW Dreyfuss Boulevard
Port St. Lucie, FL 34953
Craig Seger, CAPTEC Engineer, Inc.
(772) 692-4344

Rev. #	Date

Project Number	24-0977
Status	100% Bid Set
Issue date	02-May-2025
Sheet	A2.1

Plans, Details Sections + Notes

ABBREVIATIONS

ACI	AMERICAN CONCRETE INSTITUTE
ADDL	ADDITIONAL
AFF	ABOVE FINISHED FLOOR
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AISI	AMERICAN IRON AND STEEL INSTITUTE
ALT	ALTERNATE
ARCH	ARCHITECT, ARCHITECTURAL
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASTM	ASTM INTERNATIONAL
BLDG	BUILDING
BM	BEAM
BO, B/	BOTTOM OF
BOB	BOTTOM OF BEAM
BOF	BOTTOM OF FOOTING
BOT	BOTTOM
BRG	BEARING
BTWN	BETWEEN
CANT	CANTILEVER
CIP	CAST IN PLACE
CJ	CONTROL JOINT
CL	CENTERLINE
CLR	CLEAR/ CLEARANCE
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
COORD	COORDINATE
CTR	CENTER
CC	CENTER TO CENTER
D	DEEP, DEPTH
DBL	DOUBLE
DEMO	DEMOLISH / DEMOLITION
DIA	DIAMETER
DIAG	DIAGONAL
DIFF	DIFFERENT
DIM	DIMENSION
DWG	DRAWING
EA	EACH
EF	EACH FACE
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRIC / ELECTRICAL
EMB	EMBEDMENT
ENGR	ENGINEER
EOS	EDGE OF SLAB
EOD	EDGE OF DECK
EQ	EQUAL
EW	EACH WAY
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
FDN	FOUNDATION
FFE	FINISHED FLOOR ELEVATION
FLR	FLOOR
FMG	FRAMING
FO	FACE OF
FT	FOOT / FEET
FTG	FOOTING
GA	GAGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
H	HIGH
HDG	HOT DIP GALVANIZED
HK	HOOK
HORIZ	HORIZONTAL
HP	HIGH POINT
HS	HEADED STUD
HSS	HOLLOW STRUCTURAL SECTION
HT	HIP TRUSS
ID	INSIDE DIAMETER
IJ	ISOLATION JOINT
IN	INCH / INCHES
INFO	INFORMATION
INT	INTERIOR
K	KILO/ KIPS
L	LENGTH / LONG, ANGLE
LF	LINEAR FOOT
LONG	LONGITUDINAL
LPT	LOW POINT
MAX	MAXIMUM
MECH	MECHANICAL
MEP	MECHANICAL, ELECTRICAL AND PLUMBING
MIN	MINIMUM
MISC	MISCELLANEOUS
MNFR	MANUFACTURER
N/A	NOT APPLICABLE
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
NWT	NORMAL WEIGHT
OC	ON CENTER
OPH	OPPOSITE HAND
OPNG	OPENING
OPP	OPPOSITE
PERP	PERPENDICULAR
PL	PLATE, PLAN, PROPERTY LINE
PLYWD	PLYWOOD
PREFAB	PREFABRICATED
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
QTY	QUANTITY
REINF	REINFORCED / REINFORCEMENT
REQD	REQUIRED
REQMTS	REQUIREMENTS
REV	REVISION
RO	ROUGH OPENING
SCHED	SCHEDULE
SECT	SECTION
SEOR	STRUCTURAL ENGINEER OF RECORD
SF	SQUARE FOOT / SQUARE FEET
SIM	SIMILAR
SOG	SLAB ON GRADE
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
STIFF	STIFFENER
STRUCT	STRUCTURE / STRUCTURAL
SYM	SYMMETRICAL
T&B	TOP AND BOTTOM
TEMP	TEMPORARY, TEMPERATURE
TG	TRUSS GIRDER
THRU	THROUGH
TO, T/	TOP OF
TOB	TOP OF BEAM
TOW	TOP OF WALL
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
VERT	VERTICAL
VIF	VERIFY IN FIELD
W	WIDE, WIDTH
W/	WITH
WTS	WOOD-TO-STEEL

STRUCTURAL GENERAL NOTES

PART 1 - STRUCTURAL DESIGN CRITERIA

APPLICABLE CODES AND STANDARDS

1. 2023 FLORIDA BUILDING CODE (FBC)
2. ASCE 7-22 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES W/ SUPPLEMENT NO. 1
3. ANSI/AISC 360-16 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS
4. AWS D1.1 STRUCTURAL WELDING CODE - STEEL
5. ASTM MATERIAL STANDARDS AS NOTED
6. ANSI/AWC SDPWS - 2015 SPECIAL DESIGN PROVISIONS FOR WIND AND SEISMIC

DESIGN LOAD DATA

1. SUPERIMPOSED DESIGN GRAVITY LOADS

DESCRIPTION	LIVE LOAD (PSF)	DEAD LOAD (PSF)
ROOF	20	12

2. WIND DESIGN DATA
   - A. ULTIMATE DESIGN WIND SPEED V_{ult} = 145 MPH
   - B. NOMINAL DESIGN WIND SPEED V_{asd} = 139 MPH
   - C. RISK CATEGORY II
   - D. WIND EXPOSURE C
   - E. INTERNAL PRESSURE COEFFICIENT 0.0
3. GEOTECHNICAL INFORMATION
   MAXIMUM DESIGN LOAD BEARING PRESSURE IS 2500 PSF PER THE FBC PRESCRIPTIVE METHOD.
4. ROOF RAIN LOAD DATA
   RAIN INTENSITY i = 4.5 IN

PART II CONSTRUCTION NOTES

GENERAL

1. THE FOLLOWING REQUIREMENTS TOGETHER WITH THE PROJECT PLANS AND SPECIFICATIONS SHALL APPLY TO THE STRUCTURES IN THIS CONTRACT. NOTES ON THE INDIVIDUAL DRAWINGS SHALL TAKE PRIORITY OVER GENERAL STRUCTURAL NOTES HEREIN.
2. TYPICAL NOTES AND DETAILS SHOWN ON STRUCTURAL TYPICAL DETAILS SHALL BE APPLICABLE TO ALL PARTS OF THE STRUCTURAL WORK EXCEPT WHERE SPECIFICALLY REQUIRED OTHERWISE ON THE CONTRACT DOCUMENTS. DETAILS NOT SPECIFICALLY SHOWN SHALL BE SIMILAR TO THOSE SHOWN FOR THE MOST NEARLY SIMILAR CONDITION ON THE DRAWINGS AS DETERMINED BY THE ENGINEER.
3. STRUCTURAL DRAWINGS SHOULD NOT BE SCALED. PRINTED DIMENSIONS TAKE PRECEDENCE OVER SCALED DRAWINGS AND LARGE SCALE DETAILS OVER SMALL SCALE.
4. FOR ELEVATIONS REFER TO THE PLAN SHEETS.
5. IN THE EVENT OF A GRID LINE DIMENSION CONFLICT, THE ARCHITECTURAL DRAWINGS SHALL GOVERN AND THE STRUCTURAL ENGINEER SHALL BE NOTIFIED OF SUCH A CONFLICT TO DETERMINE IMPACT ON STRUCTURAL PERFORMANCE.
6. LOADS ON THE STRUCTURE SHALL NOT EXCEED THE DESIGN LOADS INDICATED IN THE DRAWINGS.
7. ALTERNATES FOR SPECIFIED ITEMS MAY BE SUBMITTED TO THE ENGINEER FOR APPROVAL. CONTRACTOR SHALL BUDGET FOR ASSOCIATED ENGINEERING FEES FOR REVIEWING THESE SUBMITTALS.
8. UNLESS NOTED OTHERWISE, TESTING AND INSPECTION SERVICES CALLED FOR SHALL BE PAID BY THE OWNER, AND ARE NOT PART OF THE BASIC DESIGN SERVICES OF THE STRUCTURAL ENGINEER.

NON-STRUCTURAL ITEMS SHOWN ON DRAWINGS

1. THE FOLLOWING NON-STRUCTURAL ITEMS MAY BE SHOWN ON THE STRUCTURAL AND/OR FOUNDATION DRAWINGS FOR THE PURPOSE OF CLARITY IN INTERFACE WITH STRUCTURAL AND/OR FOUNDATION WORK. ITEMS BELOW MAY NOT BE FULLY DEFINED ON THE STRUCTURAL/FOUNDATION DRAWINGS. THE INFORMATION FOR NON-STRUCTURAL ELEMENTS IS FURNISHED BY OTHER CONSULTANTS AS LISTED BELOW. ALL RFI AND SHOP DRAWINGS RELATED TO THESE NON-STRUCTURAL ITEMS SHALL BE SUBMITTED TO THE CONSULTANTS LISTED BELOW FOR THEIR REVIEW AND APPROVAL

   ARCHITECT OF RECORD:
   - WATERPROOFING/DAMPPROOFING APPLIED TO EXPOSED SURFACES, ELEVATOR OR SUMP PIT INTERIOR SURFACES
   - PAINT
   - FIREPROOFING
   - ROOFING SYSTEMS, DRAIN LOCATIONS, SLOPES TO DRAINS
   - FILLS, INSULATION, PAVERS OR GRAVEL
   - FLOATING/SECONDARY SLABS

   MECHANICAL, ELECTRICAL, & PLUMBING ENGINEERS:
   - HVAC EQUIPMENT
   - EQUIPMENT SUPPORT CURBS
   - GENERATORS
   - DUCTS & PIPES FOR PENETRATIONS IN STRUCTURE
   - FIRE SPRINKLERS

COORDINATION

1. THE STRUCTURAL DRAWINGS ARE PART OF THE CONSTRUCTIONS DOCUMENTS AND DO NOT PROVIDE ALL THE INFORMATION TO PROPERLY COMPLETE THE PROJECT STRUCTURE. THE CONTRACT DOCUMENTS CONSIST OF DRAWINGS AND DESIGN INFORMATION PREPARED BY MULTIPLE DISCIPLINES AND MUST BE USED AS A WHOLE AND IN COORDINATION WITH EACH OTHER.
2. REFER TO THE ARCHITECTURAL DRAWINGS FOR ELEVATIONS, DOORS, WINDOW, NON-LOAD BEARING WALLS, CURTAIN WALLS, ELEVATORS, STAIRS, SLOPES, CURBS, DRAINS, DEPRESSIONS, RAILINGS, WATERPROOFING, FINISHES, ETC. NOT INCLUDED IN THE STRUCTURAL DRAWINGS.
3. STRUCTURAL DRAWINGS AND SPECIFICATIONS SHALL BE USED IN CONJUNCTION WITH THE CIVIL, ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS AND SPECIFICATIONS FOR LOCATION AND SIZE OF OPENINGS, BLOCKOUTS, FLOOR DEPRESSIONS, CURBS, EMBEDDED SLEEVES AND INSERTS, SPECIAL FLOOR FINISHES, DOOR THRESHOLDS, SLOPES TO DRAWINGS, NAILERS, MISCELLANEOUS DETAILS, ETC.
4. THE LOCATIONS AND SIZE OF OPENINGS IN STRUCTURAL ELEMENTS SHALL BE COORDINATED BY THE CONTRACTOR. THE CONTRACTOR IS TO PROVIDE ALL ADDITIONAL FRAMING AND/OR REINFORCING TO ACCOMMODATE OPENINGS AS REQUIRED BY THE APPLICABLE STANDARD DETAILS SHOWN ON THE STRUCTURAL DRAWINGS OR PROVIDED BY THE SPECIALTY ENGINEER.
5. NO HOLES, NOTCHES, BLOCKOUTS, OPENINGS, ETC. ARE ALLOWED IN STRUCTURAL ELEMENTS UNLESS DETAILS ON THE STRUCTURAL DRAWINGS OR CUTOUTS APPROVED BY THE STRUCTURAL ENGINEER OF RECORD.
6. THE CONTRACTOR SHALL REFER TO ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR EXACT WEIGHT AND/OR LOCATION ELECTRICAL AND MECHANICAL ROOF MOUNTED OR SUSPENDED EQUIPMENT.
7. WHERE DIMENSIONS ARE PROVIDED FOR OPENINGS, BLOCKOUTS, FLOOR DEPRESSIONS, CURBS, ETC., BUT MAY BE AFFECTED BY THE EQUIPMENT PURCHASED, THE CONTRACTOR SHALL VERIFY THE INFORMATION PROVIDED PRIOR TO CONSTRUCTION.
8. PRIOR TO ORDERING MATERIALS OR DOING ANY WORK, THE CONTRACTOR SHALL VERIFY ALL MEASUREMENTS TO PROPERLY SIZE OR FIT THE WORK. NO EXTRA CHARGE OR COMPENSATION WILL BE ALLOWED BY THE OWNER RESULTING FROM THE CONTRACTOR'S FAILURE TO COMPLY WITH THIS REQUIREMENT.
9. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND ENGINEERS OF ANY APPARENT DISCREPANCIES OR OMISSIONS OF INFORMATION NOT SHOWN ON THE STRUCTURAL DRAWINGS DURING THE SHOP DRAWINGS SUBMITTAL PROCESS AND BEFORE PROCEEDING WITH ANY WORK. THE CONTRACTOR IS RESPONSIBLE FOR CORRECTING ERRORS RESULTING FROM A LACK OF COORDINATION OF DOCUMENTS.
10. IN CASE OF DISCREPANCIES BETWEEN THE PLANS, SPECIFICATIONS, REFERENCE STANDARDS, AND GOVERNING CODE, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
11. IN CASE OF OMISSIONS AND CONFLICTS BETWEEN THE PLANS, SPECIFICATIONS, AND SITE CONDITIONS THE ENGINEER SHALL BE NOTIFIED BEFORE PROCEEDING WITH THE WORK.

CONTRACTOR RESPONSIBILITIES

1. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PROCEDURES. THE STRUCTURAL ENGINEER OF RECORD IS NOT RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION OR FOR RELATED SAFETY PROCEDURES.
2. THE CONTRACTOR IS RESPONSIBLE FOR THE SURVEY AND FIELD VERIFYING ALL DIMENSIONS, ELEVATIONS, AND EXISTING SITE CONDITIONS PRIOR TO STARTING WORK. THE ARCHITECT/ENGINEER SHALL BE NOTIFIED IMMEDIATELY, IN WRITING, OF ANY DISCREPANCIES. MODIFICATION OF DETAILS OF CONSTRUCTION SHALL NOT BE MADE WITHOUT WRITTEN APPROVAL OF THE ENGINEER.
3. CONTRACTOR SHALL PROTECT EXISTING FACILITIES, STRUCTURES AND UTILITIES FROM DAMAGE; PROTECT THE WORK, ADJACENT PROPERTY, AND THE PUBLIC. THE CONTRACTOR SHALL PROVIDE AND BE RESPONSIBLE FOR THE REPAIR OF ADJACENT EXISTING SURFACES AND AREAS WHICH MAY BE DAMAGED BY NEW WORK.
4. ALL STRUCTURES HAVE BEEN DESIGNED TO RESIST THE DESIGN LOADS LISTED ONLY AS COMPLETED STRUCTURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STRUCTURAL STRENGTH AND STABILITY OF ALL PARTLY COMPLETED STRUCTURE, INCLUDING SHORING AND TEMPORARY BRACING OF ALL INTERMEDIATE CONDITIONS DURING CONSTRUCTION. THE GENERAL CONTRACTOR SHALL ALSO ENSURE THAT ITS OPERATIONS AND PROCEDURES PROVIDE NO LOADING GREATER THAN THE DESIGN LOADS LISTED.
5. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE ERECTION PROCEDURE AND SEQUENCE TO ENSURE THE SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF WHATEVER TEMPORARY BRACING, GUYS, TIE-DOWNS, AND/OR SHORING MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER THE COMPLETION OF THE PROJECT.
6. THE GENERAL CONTRACTOR SHALL SUPPLY CALCULATIONS AND SHOP DRAWINGS TO THE EOR PRIOR TO CONSTRUCTION FOR ALL SHORING AND RE-SHORING DESIGNED BY A DELEGATED ENGINEER EXPERIENCE IN SUCH WORK AND LICENSED IN THE STATE OF **FLORIDA**. SUBMIT DRAWINGS TO THE ARCHITECT, ENGINEER, SPECIAL INSPECTOR, AND BUILDING OFFICIAL FOR RECORD ONLY.
7. THE DELEGATED ENGINEER WHO PREPARES THE SHORING AND RESHORING DRAWINGS SHALL INSPECT THE SHORING AND RESHORING. THEY SHALL PROVIDE A FIELD REPORT OF EACH INSPECTION TO THE CONTRACTOR AND ARCHITECT.

INSPECTIONS

1. A MINIMUM OF ONE FIELD OBSERVATION BY THE ENGINEER OF RECORD IS REQUIRED NEAR THE COMPLETION OF THE BUILDING STRUCTURE AND PRIOR TO OCCUPANCY, FOR DETERMINING GENERAL PERFORMANCE OF THE DESIGN. ADDITIONAL OBSERVATIONS SHALL BE ARRANGED AS DESCRIBED IN NOTE BELOW.
2. NO LATER THAN 24 HOURS IN ADVANCE, THE STRUCTURAL ENGINEER SHALL BE NOTIFIED TO OBSERVE THE WORK AS ARRANGED WITH THE BUILDING DEPARTMENT OR REQUIRED BY THE OWNER WHICH WILL BE DETERMINED AT THE PRE-CONSTRUCTION MEETINGS.
3. THIS STRUCTURE IS A THRESHOLD BUILDING AS DEFINED BY THE FLORIDA BUILDING CODE. REFER TO THRESHOLD INSPECTION PLAN FOR ADDITIONAL INFORMATION.

SHOP DRAWINGS

1. THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS FOR ALL PARTS OF THE WORK INCLUDING DESCRIPTION OF DEMOLITION, TEMPORARY BRACING, CONSTRUCTION METHODS AND SEQUENCING, WHERE APPLICABLE. NO PERFORMANCE OF WORK SHALL COMMENCE WITHOUT REVIEW OF THE SHOP DRAWINGS BY THE ENGINEER.
2. WHERE SHOP DRAWINGS, MILL TESTS, OR OTHER ITEMS ARE REQUESTED, SUBMITTAL SHALL BE MADE TO THE STRUCTURAL ENGINEER BEFORE FABRICATION OR INSTALLATION IN THE STRUCTURE, UNLESS SPECIFICALLY NOTED.
3. REVIEW OF SUBMITTALS BY THE STRUCTURAL ENGINEER IS FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT AS PRESENTED BY THE CONTRACT DOCUMENTS. NO DETAILED CHECK OF QUANTITIES OR DIMENSIONS WILL BE MADE. ONLY THOSE SHOP DRAWINGS REQUIRED BY THE CONTRACT DOCUMENTS TO BE SUBMITTED WILL BE REVIEWED. ALL OTHERS WILL BE RETURNED WITHOUT COMMENT.
4. REVIEW OF SHOP DRAWINGS IS TO BE LIMITED TO TWO (2) REVIEWS PER SUBMITTAL WITHIN THE SCOPE OF BASIC SERVICES (I.E., INITIAL SUBMITTAL REVIEW AND ONE RESUBMITTAL, IF NECESSARY). REVIEW OF ADDITIONAL RESUBMITTALS WILL BE CONSIDERED ADDITIONAL SERVICES, FOR WHICH THE GENERAL CONTRACTOR MAY BE HELD RESPONSIBLE. ADDITIONAL SERVICES COMPENSATION TO THE ENGINEER WILL BE IN ACCORDANCE WITH THE TERMS OF THE ARCHITECT-ENGINEER AGREEMENT FOR THIS PROJECT.
5. ALL SHOP DRAWINGS MUST BEAR EVIDENCE OF THE CONTRACTOR'S APPROVAL PRIOR TO SUBMITTING TO THE A/E. SHOP DRAWINGS WITHOUT BEARING THIS EVIDENCE WILL BE RETURNED WITHOUT COMMENT.
6. ALL CHANGES AND ADDITIONS MADE ON RESUBMITTALS MUST BE CLEARLY FLAGGED AND NOTED. THE PURPOSE OF THE RESUBMITTALS MUST BE CLEARLY NOTED ON THE LETTER OF TRANSMITTAL. ARCHITECT/ENGINEER REVIEW WILL BE LIMITED TO THOSE ITEMS CAUSING THE RESUBMITTAL.
7. FABRICATION PRIOR TO THE RECEIPT OF AN APPROVED SHOP DRAWINGS SHALL BE AT THE CONTRACTOR'S OWN RISK AND THAT INSTALLATION OF ANY WORK PRIOR TO RECEIPT OF AN APPROVED SHOP DRAWING SHALL BE STRICTLY PROHIBITED.
8. SHOP DRAWINGS NOT MEETING THE ABOVE CRITERIA OR SUBMITTED AFTER FABRICATION WILL NOT BE REVIEWED.
9. SHOP DRAWINGS SHALL BE SUBMITTED IN COMPLETE PACKAGES FOR THE FOLLOWING:
   - A. CONCRETE MIX DESIGN
   - B. CONCRETE REINFORCING STEEL AND WELDED WIRE FABRIC
   - C. STRUCTURAL STEEL
10. PRE-ENGINEERED ITEMS SHALL BE SUBMITTED SIGNED AND SEALED BY A SPECIALTY ENGINEER REGISTERED IN THE STATE OF FLORIDA AND IN ACCORDANCE WITH THE FOLLOWING SECTION.

SPECIALTY ENGINEERED PRODUCTS

1. THE GENERAL CONTRACTOR IS RESPONSIBLE TO COORDINATE THE PROPER SUBMISSION OF SPECIALTY ENGINEERED SHOP DRAWINGS WHICH SHALL BE SIGNED AND SEALED BY AN ENGINEER REGISTERED IN THE STATE OF FLORIDA.
2. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO ASSURE THAT THE SPECIALTY ENGINEERED SHOP DRAWINGS ARE SUBMITTED IN A TIMELY MANNER TO ALLOW REVIEWS AND RESUBMISSIONS AS REQUIRED.
3. ALL SPECIALTY ENGINEERED PRODUCTS SHALL BE DESIGNED FOR THE APPROPRIATE GRAVITY LOADS AND ENVIRONMENTAL LOADS.
4. IN ADDITION TO THE LOADS SHOWN IN THE DESIGN LOAD SCHEDULE, THE SPECIALTY ENGINEER SHALL DESIGN FOR THE WEIGHT OF ALL MECHANICAL, PLUMBING AND ELECTRICAL EQUIPMENT AND FIXTURES, AS WELL AS CABINETS, AND OVERHEAD DOORS.
5. INTERIOR SPECIALTY PRODUCTS SHALL BE DESIGNED FOR A LATERAL LOADS TO ASSURE STABILITY.
6. SPECIALTY ENGINEERED PRODUCTS SHALL BE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
   - A. OPEN WEB STEEL JOISTS.
   - B. LIGHT GAUGE METAL, INCLUDING BUT NOT LIMITED TO, SOFFITS, CLADDING, CEILINGS, ETC.
   - C. STRUCTURAL STEEL CONNECTIONS REQUIRING ENGINEERING INPUT.
   - D. MISCELLANEOUS METALS INCLUDING STEEL STAIRS, HAND RAILS AND SAFETY RAILS, MECHANICAL EQUIPMENT SUPPORT, FRAMES THAT SUPPORT OF MECHANICAL SYSTEMS.
   - E. MISCELLANEOUS HANGARS, CHANDELIERS, CABINETS, METAL FRAMES, LADDERS, RIGGING, HANGING WALLS, RAILINGS, GLAZING FRAMES, CLADDING SUCH AS STONE, PRECAST, ALUMINUM, METAL PANELS, CABLE BARRIER SYSTEMS, ETC. OR ANY OTHER MISCELLANEOUS PRODUCT REQUIRED BY ANY OF THE CONSTRUCTION DOCUMENTS.
7. GENERAL CONTRACTORS TO INCLUDE IN THEIR BID THE COST OF THE ABOVE NOTED SPECIALTY ENGINEERING.
8. SPECIALTY ENGINEER:
   - A. DEFINITION - A FLORIDA REGISTERED PROFESSIONAL ENGINEER; NOT THE STRUCTURAL ENGINEER OF RECORD, WHO SPECIALIZES IN AND WHO UNDERTAKES THE DESIGN OF STRUCTURAL COMPONENTS OR STRUCTURAL SYSTEMS INCLUDED IN A SPECIFIC SUBMITTAL PREPARED FOR THIS PROJECT.
   - B. SHALL BE:
     - a. AN EMPLOYEE OR OFFICER OF A FABRICATOR.
     - b. AN EMPLOYEE OR OFFICER OF AN ENTITY SUPPLYING COMPONENTS TO A FABRICATOR.
     - c. AN INDEPENDENT CONSULTANT RETAINED BY THE FABRICATOR OR HIS SUPPLIER.
9. SUBMITTALS SHALL CLEARLY IDENTIFY THE SPECIFIC PROJECT AND APPLICABLE CODES. LIST THE DESIGN CRITERIA, AND SHOW ALL DETAILS AND PLANS NECESSARY FOR PROPER FABRICATION AND INSTALLATION. CALCULATIONS AND SHOP DRAWINGS SHALL IDENTIFY SPECIFIC PRODUCTS UTILIZED. GENERIC PRODUCTS WILL NOT BE ACCEPTED.
10. SHOP DRAWINGS AND CALCULATIONS MUST BE PREPARED UNDER THE DIRECT SUPERVISION AND CONTROL OF THE SPECIALTY ENGINEER.
11. SHOP DRAWINGS AND CALCULATIONS REQUIRE THE SEAL, DATE AND SIGNATURE OF THE SPECIALTY ENGINEER. COMPUTER PRINTOUTS ARE AN ACCEPTABLE SUBSTITUTE FOR MANUAL COMPUTATIONS, PROVIDED THEY ARE ACCOMPANIED BY SUFFICIENT DESCRIPTIVE INFORMATION TO PERMIT THEIR PROPER EVALUATION. SUCH DESCRIPTIVE INFORMATION SHALL BEAR THE IMPRESSED OR DIGITAL SEAL AND SIGNATURE OF THE SPECIALTY ENGINEER AS AN INDICATION THAT HE HAS ACCEPTED RESPONSIBILITY FOR THE RESULTS. THE STRUCTURAL ENGINEER WILL RETAIN ONE SIGNED AND SEALED BLACKLINE PRINT FOR RECORD.
12. REVIEW OF SUBMITTALS BY THE ENGINEER OF RECORD IS LIMITED TO VERIFYING THE FOLLOWING:
   - A. THAT THE SPECIFIED STRUCTURAL SUBMITTALS HAVE BEEN FURNISHED.
   - B. THAT THE STRUCTURAL SUBMITTALS HAVE BEEN SIGNED AND SEALED BY THE SPECIALTY ENGINEER.
   - **C.** THAT THE SPECIALTY ENGINEER HAS UNDERSTOOD THE DESIGN INTENT AND HAS USED THE SPECIFIED STRUCTURAL CRITERIA. (NO DETAILED CHECK OF CALCULATIONS WILL BE MADE.)
   - **D.** THAT THE CONFIGURATION SET FORTH IN THE STRUCTURAL SUBMITTALS IS CONSISTENT WITH THE CONTRACT DOCUMENTS. (NO DETAILED CHECK OF DIMENSIONS OR QUANTITIES WILL BE MADE.)
13. A LIST OF DRAWINGS SHALL BE PREPARED AND MAINTAINED BY THE GENERAL CONTRACTOR FOR ALL SHOP DRAWINGS REQUIRING PARTICIPATION OF A SPECIALTY ENGINEER. THE LIST SHALL CONTAIN PROJECT NAME, NAME OF GENERAL CONTRACTOR, NAME OF SUBCONTRACTOR, NAME OF SPECIALTY ENGINEER, DRAWING NUMBER, DRAWING TITLE AND LATEST REVISION NUMBER AND DATE. FOR PARTIAL SUBMITTALS, THE LIST SHALL CONTAIN ALL ANTICIPATED DRAWING NUMBERS AND TITLES REQUIRED TO COMPLETE THE CONTRACT. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR SUBMITTING THE LATEST UPDATED LIST OF DRAWINGS WITH EACH SUBMITTAL.

STRUCTURAL STEEL

1. FABRICATE AND ERECT STRUCTURAL STEEL IN ACCORDANCE WITH AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS", LATEST EDITION. ALL STRUCTURAL STEEL CONSTRUCTION SHALL CONFORM TO THE CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES.
2. MATERIAL REQUIREMENTS:
   - A. SQUARE, RECTANGULAR & ROUND HOLLOW STRUCTURAL SECTIONS (HSS) - ASTM A500 GRADE C
   - B. ANGLES, PLATES AND BARS - ASTM A36
   - C. STRUCTURAL BOLTS SHALL BE ASTM A-325 TYPE N UNLESS OTHERWISE NOTED
3. WHERE THE WORK OF OTHER TRADES REQUIRES CUTS OR OPENINGS TO BE MADE IN STRUCTURAL STEEL MEMBERS, APPROVAL SHALL BE OBTAINED FROM THE ENGINEER. SUCH OPENINGS SHALL BE MADE IN THE SHOP AND CLEARLY INDICATED ON THE SHOP DRAWING.
4. TO OBTAIN SPECIFIED ALIGNMENT AND FIT-UP U.N.O. FIELD WELDING MUST BE PERFORMED WHERE SPECIFICALLY NOTED. EDGE OF SLAB AND ROOF BENT PLATES, ANGLES AND OTHER MISC EXTERIOR, OR INTERIOR WALL ALIGNMENT ITEMS SHALL BE FIELD WELDED TO BEAMS. PROVIDE FABRICATION AND ERECTION TOLERANCES MORE STRINGENT THAN SPECIFIED BY AISC WHERE REQUIRED TO ACHIEVE THE DETAILS INDICATED.
5. E70XX ELECTRODES SHALL BE USED FOR ALL WELDING. PROPERLY QUALIFIED WELDERS SHALL PERFORM ALL WELDING, AS PRESCRIBED UNDER "STANDARD QUALIFICATION PROCEDURE" OF THE AMERICAN WELDING SOCIETY.
6. WELD LENGTHS CALLED FOR ON THE PLANS ARE THE NET EFFECTIVE LENGTH REQUIRED. WHERE FILLET WELD SYMBOL IS GIVEN WITHOUT INDICATION OF SIZE, USE MINIMUM SIZE WELDS AS SPECIFIED BY AISC OR 3/16", WHICH EVER IS GREATER.
7. ALL HSS SECTIONS WITH OPEN ENDS SHALL BE CAPPED WITH A 1/4" THICK PLATE OF THE SAME CROSS SECTION, FULLY WELDED AND GROUND SMOOTH UNLESS NOTED OTHERWISE.
8. FIELD CUTTING OF STRUCTURAL STEEL OR ANY FIELD MODIFICATIONS SHALL NOT BE MADE WITHOUT PRIOR WRITTEN APPROVAL BY THE ENGINEER FOR EACH INDIVIDUAL CASE.
9. PROVIDE TEMPORARY ERECTION BRACING AND SUPPORTS TO HOLD THE STRUCTURAL STEEL FRAME SECURELY IN POSITION. BRACING SHALL NOT BE REMOVED UNTIL THE PERMANENT LATERAL LOAD RESISTING SYSTEM IS IN PLACE. THE STEEL FRAME SHALL BE CONSIDERED A NON SELF-SUPPORTING FRAME UNTIL ALL LATERAL BRACING IS IN PLACE
10. STRUCTURAL STEEL AND FASTENERS EXPOSED TO THE WEATHER OR LOACTED IN A NONCONDITIONED SPACE, SHALL BE HOT DIPPED GALVANIZED.
11. STRUCTURAL STEEL SHOP DRAWINGS, PREPARED BY THE STEEL SUBCONTRACTOR, SHOWING COMPLETE DIMENSIONS AND DETAILS, SHALL BE SUBMITTED FOR APPROVAL PRIOR TO FABRICATION OF THE STEEL COMPONENTS. THE STRUCTURAL STEEL SUBCONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING, VERIFICATION AND COORDINATION OF DIMENSIONS AND DETAILS WITH THE STRUCTURAL AND OTHER PORTIONS OF THE CONTRACT DRAWINGS. THE STEEL SUBCONTRACTOR SHALL NOT REPRODUCE ANY PORTION OF THE DRAWINGS HEREIN FOR UTILIZATION AS SHOP DRAWINGS, UNLESS APPROVAL OF THE STRUCTURAL ENGINEER IS OBTAINED.
12. CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF STRUCTURAL STEEL CONNECTIONS NOT SPECIFICALLY DESIGNED OR SHOWN ON DRAWINGS. THE FABRICATOR IS RESPONSIBLE FOR RETAINING THE SERVICES OF A PROFESSIONAL REGISTERED STRUCTURAL ENGINEER FOR THE DESIGN OF ALL SUCH CONNECTIONS.

REINFORCED CONCRETE

1. ALL CONCRETE WORK SHALL CONFORM TO ACI 301, "SPECIFICATION FOR STRUCTURAL CONCRETE FOR BUILDINGS", LATEST EDITION. DESIGN IS BASED ON ACI 318, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE"
2. CONCRETE MATERIALS:
   - PORTLAND CEMENT ASTM C150 TYPE 1
   - AGGREGATES ASTM C33 (NORMAL WEIGHT); ASTM C330 (LIGHT WEIGHT)
   - WATER ASTM C1602
3. REINFORCEMENT MATERIALS:
   - DEFORMED REINFORCING BARS ASTM A615 GRADE 60
   - REINFORCING STEEL TO BE WELDED ASTM A706
   - WELDED WIRE REINFORCING ASTM A1064 MINIMUM YIELD STRENGTH OF 20,000 PSI
   - FIBER REINFORCEMENT ASTM C116
4. ADMIXTURES
   - AIR-ENTRAINING ADMIXTURES ASTM C260
   - CHEMICAL ADMIXTURES ASTM C494 OR ASTM C1017
5. ALL CONCRETE SHALL BE NORMAL WEIGHT (139 PCF - 150 PCF) WITH MIXES DESIGNED TO MEET THE FOLLOWING CRITERIA:

LOCATION	f'_c (PSI)	MAX AGG SIZE (IN.)	MIN CEMENT (LBS PER CY)	W/C RATIO	AIR CONTENT (%)	SLUMP (IN.) (MIN./MAX.)
ELEMENT/LOCATION	3000	1	750	0.45	3	---

6. SUBMIT CONCRETE MIX DESIGNS IN ACCORDANCE WITH ACI 301 TO THE ARCHITECT AND TESTING AGENCY. THE PROPOSED MATERIALS AND MIX DESIGN SHALL BE FULLY DOCUMENTED AND REVIEWED BY THE OWNER'S TESTING LABORATORY. RESPONSIBILITY FOR OBTAINING THE REQUIRED STRENGTH IS THE CONTRACTOR'S.
7. USE OF CALCIUM CHLORIDE, CHLORINE IONS, OR OTHER SALTS IN CONCRETE IS NOT PERMITTED.
8. THE AIR CONTENT OF ALL CONCRETE EXPOSED TO WEATHER SHALL BE BETWEEN 4% AND 6%. EXCEPT AIR CONTENT FOR SLAB ON GRADE AND ELEVATED SLABS SHALL NOT EXC

STRUCTURAL GENERAL NOTES

DEVELOPMENT LENGTH TABLE (IN.)

f'_c (PSI)	REINFORCEMENT TYPE			BAR SIZE										
				#3	#4	#5	#6	#7	#8	#9	#10	#11	#14	#18
3000 PSI	TENSION	CLASS A LAP SPLICE	CASE 1 TOP	23	29	37	43	63	72	81	91	102	121	162
			CASE 1 OTHERS	17	22	28	33	48	55	62	70	78	93	124
			CASE 2 TOP	41	43	55	65	76	108	121	137	151	182	242
			CASE 2 OTHERS	31	33	42	50	58	83	93	105	116	140	186
		CLASS B LAP SPLICE	CASE 1 TOP	30	38	49	56	82	94	106	119	133	158	211
			CASE 1 OTHERS	23	29	37	43	63	72	81	91	102	121	162
			CASE 2 TOP	54	56	72	85	99	141	158	179	197	237	315
			CASE 2 OTHERS	41	43	55	65	76	108	121	137	151	182	242
	COMPRESSION			12	15	19	23	27	30	34	39	43	51	68
	HOOKED			6	6	8	11	14	16	20	23	27	36	55

DEVELOPMENT LENGTH NOTES:

1. TABULATED VALUES ARE BASED ON GRADE 60 REINFORCING BARS AND NORMAL WEIGHT CONCRETE.
2. INTERPOLATION OF TABULATED VALUES IS ALLOWED.
3. TENSION DEVELOPMENT AND LAP SPLICE LENGTHS ARE BASED ON ACI 318-19 SECTION 25.4.2 AND 25.5.2, RESPECTIVELY. TABULATED VALUES FOR BEAM AND COLUMN ARE BASED ON TRANSVERSE REINFORCEMENT AND CONCRETE COVER MEETING MINIMUM CODE REQUIREMENTS, LENGTHS ARE IN INCHES.
4. LAP CLASS "A" VALUES ARE THE REQUIREMENTS TENSION DEVELOPMENT LENGTHS, ld ; LAP SPLICE LENGTHS ARE MULTIPLES OF TENSION DEVELOPMENT LENGTHS; CLASS "A" = 1.0 l_d AND CLASS "B" = 1.3 l_d (ACI 318-14, SECTION 25.5.2-1).
5. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12 IN OF CONCRETE CAST BELOW THE BARS.
6. CASE 1 AND 2, WHICH DEPEND ON THE TYPE OF STRUCTURAL ELEMENT, CONCRETE COVER, AND THE CENTER TO CENTER SPACING OF THE BARS, ARE DEFINED AS:

BEAMS & COLUMNS	CASE 1	COVER AT LEAST 1 d_b AND CC SPACING AT LEAST 1 d_b
	CASE 2	COVER LESS THAN 1 d_b AND CC SPACING LESS THAN 1 d_b
ALL OTHERS	CASE 1	COVER AT LEAST 1 d_b AND CC SPACING AT LEAST 2 d_b
	CASE 2	COVER LESS THAN 1 d_b AND CC SPACING LESS THAN 2 d_b

7. TENSION DEVELOPMENT LENGTHS OF STANDARD HOOKS ARE BASED ON ACI 318-19 SECTION 25.4.3 LENGTHS ARE IN INCHES.
8. FOR BARS SIZE #3 THROUGH #11 ONLY:
   A. IF CONCRETE COVER CONFORMS TO ACI 318-19, SECTIONS 25.4.3.2, THEN A MODIFICATION FACTOR OF 0.7 MAY BE APPLIED BUT THE RESULTING LENGTH MUST NOT BE LESS THAN 8db NOR 6 IN.
   B. IF HOOK IS ENCLOSED IN TIES OR STIRRUPS CONFORMING TO ACI 318-14 SECTION 25.4.3.2, THEN A MODIFICATION FACTOR OF 0.8 MAY BE APPLIED BUT THE RESULTING LENGTH MUST NOT BE LESS THAN 8db NOR 6 IN.
9. COMPRESSION DEVELOPMENT LENGTHS AND COMPRESSION LAP SPLICES ARE BASED ON ACI 318-19 SECTION 25.4.9.1 AND 25.5.5, RESPECTIVELY. LENGTHS ARE IN INCHES.
10. FOR COMPRESSION DEVELOPMENT LENGTHS . IF BARS ARE ENCLOSED IN SPIRALS OR TIES CONFORMING TO ACI 318-19, SECTION 25.4.9.3, THEN A MODIFICATION FACTOR OF 0.75 MAY BE APPLIED BUT THE RESULTING LENGTH MUST NOT BE LESS THAN 6 IN.
11. FOR COMPRESSION LAP SPLICE LENGTHS:
   A. IF BARS ARE ENCLOSED IN TIED-REINFORCED COMPRESSION MEMBER CONFORMING TO ACI 318-19 SECTION 10.7.5.2 1(a), THEN A MODIFICATION FACTOR OF 0.83 MAY BE APPLIED BUT THE RESULTING LENGTH MUST NOT BE LESS THAN 12 IN
   B. IF BARS ARE ENCLOSED IN A SPIRALLY-REINFORCED COMPRESSION MEMBER CONFORMING TO ACI 318-19 SECTION 10.7.5.2 1(b), THEN A MODIFICATION FACTOR OF 0.75 MAY BE APPLIED BUT THE RESULTING LENGTHS MUST NOT BE LESS THAN 12 IN.

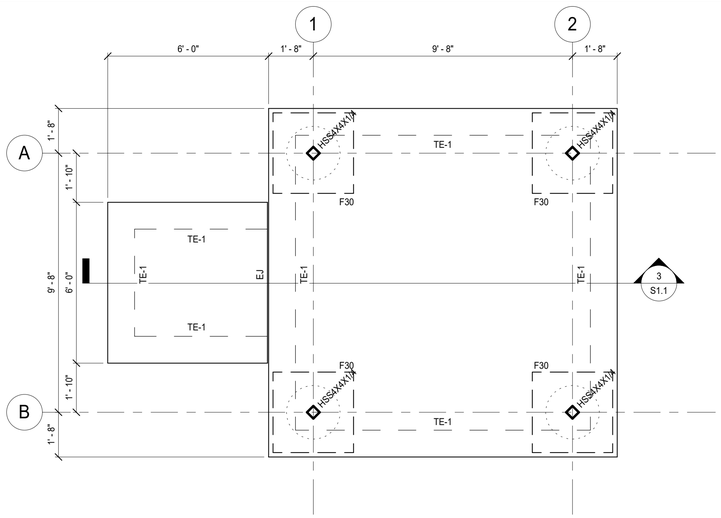
WOOD

1. STRUCTURAL WOOD COMPONENTS (BEAMS, JOISTS, RAFTERS, ETC.) SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE FIBER STRESSES OF NO. 2 SOUTHERN PINE w/ 19% MIN MOISTURE CONTENT AT TIME OF CONSTRUCTION, CONFORMING TO THE LATEST EDITION OF NDS AS FOLLOWS:
   SHEAR FV = 175 PSI
   BENDING 2X6 FB = 1,000 PSI
   BENDING 2X8 FB = 975 PSI
   BENDING 2X10 FB = 800 PSI
   BENDING 2X12 FB = 750 PSI
2. MEMBER SIZES SHOWN ARE NOMINAL UNLESS NOTED OTHERWISE.
3. WOOD IN CONTACT WITH CONCRETE OR MASONRY AND AT OTHER LOCATIONS AS SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE PROTECTED OR PRESERVATIVE-TREATED IN ACCORDANCE WITH AITC-109.
4. WOOD FRAMING CONNECTORS: ALL CONNECTORS SHALL BE GALVANIZED, CONNECTOR MODEL NUMBERS SHOWN ARE STRONG-TIE CONNECTORS AS MANUFACTURED BY SIMPSON STRONG-TIE CO. SUBSTITUTIONS ARE ACCEPTABLE WITH THE APPROVAL OF THE STRUCTURAL ENGINEER. UNLESS SHOWN OTHERWISE, INSTALL SIZE AND NUMBER OF FASTENERS SHOWN IN LATEST SIMPSON CATALOG. FOLLOW ALL MANUFACTURER'S REQUIREMENTS & RECOMMENDATIONS FOR INSTALLATION & HANDLING OF THE PRODUCT.
5. ALL MACHINE BOLTS SHALL CONFORM TO ASTM A307. HOLES FOR BOLTS SHOULD BE DRILLED 1/16" LAGER THAN BOLT DIAMETER.
6. ALL NAILS SHALL BE SINKER NAILS STAGGERED (UON), EXCEPT AS SHOWN IN NAILING SCHEDULE.
7. DO NOT BEND THE SIMPSON PA STRAPS.
8. FASTENERS SPECIFIED ON THE DRAWINGS MAY BE COLORED USING MANUFACTURER'S BRANDS THAT UTILIZE THE COLOR CODED SYSTEM. FOLLOW ALL CODE AND MANUFACTURER'S REQUIREMENTS / RECOMMENDATIONS FOR INSTALLATION AND HANDLING OF THE PRODUCTS.

COLOR CHART FOR STRUCTURAL NAILS

TYPE OF FASTENER	SIZE & DIAMETER	COLORS
8d COOLER	2 3/8 X .113	YELLOW
8d COMMON	2 1/2 X .131	BLUE
16d SHORT	3 1/4 X .131	BLACK
10d COMMON	3 X .148	PURPLE
12d COMMON (16d SINKER)	3 1/4 X .148	GREEN
16d COMMON	3 1/2 X .162	ORANGE

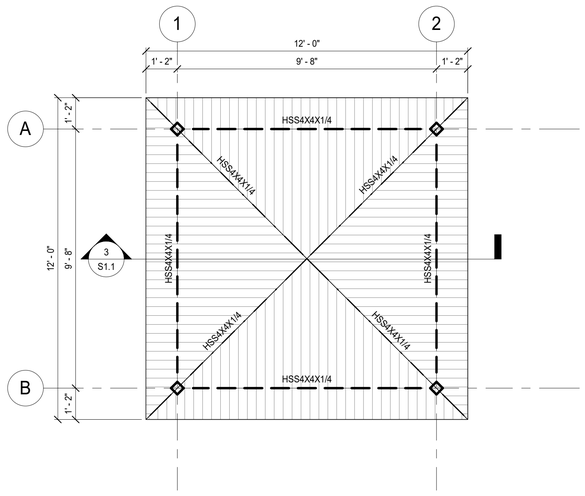
9. ALL FRAMING, BRACING, NAILING, NOTCHING, DRILLING OR BORING SHALL BE IN ACCORDANCE WITH THE BUILDING CODE UNLESS MORE STRINGENT REQUIREMENTS ARE SPECIFIED OR REQUIRED BY THE LOCAL JURISDICTION.
10. FASTENERS IN CONTACT WITH PRESERVATIVE-TREATED LUMBER AND FIRE-RETARDANT TREATED WOOD SHALL BE OF HOT-DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER. EXCEPTION: PLAIN CARBON STEEL FASTENERS IN SBX/DOT AND ZINC BORATE PRESERVATIVE-TREATED WOOD IN AN INTERIOR, DRY ENVIRONMENT SHALL BE PERMITTED.
11. STRUCTURAL INFORMATION SHOWN ON FRAMING PLANS IS FOR THE MAIN STRUCTURAL ELEMENTS. NON-STRUCTURAL ELEMENTS SHALL BE CONSTRUCTED PER APPROVED CODE REQUIREMENTS.
12. CONVENTIONAL LIGHT FRAMED CONSTRUCTION REQUIREMENTS OF CHAPTER 23 SHOULD BE NOT FOLLOWED.
13. ALL LEDGERS SHALL BE SPLICED WITH ST22 STRAPS (UON).
14. ALL SHEAR TRANSFER NAILING SHALL BE PER DRAWINGS, AND CONTRACTOR SHALL PROVIDE PROPER NOTIFICATION FOR INSPECTIONS TO REVIEW THE SAME.



FOUNDATION AND SLAB NOTES:

1. NOMINAL TOP OF GROUND FLOOR SLAB ELEVATION = 0' - 0" (TYP-UNO). VERIFY WITH CIVIL DRAWINGS FOR REFERENCE DATUM ELEVATIONS AND FINISH GRADES PRIOR TO CONSTRUCTION.
2. CONCRETE SLAB-ON-GRADE SHALL BE 4" THICK REINFORCED WITH W4xW4 - W4.0xW4.0 WWF.
3. SEE ARCH DWGS FOR SLOPES, SPOT ELEVATIONS AND DIMENSIONAL INFORMATION NOT SHOWN. VERIFY ALL OPENING DIMENSIONS WITH ARCH. DRAWINGS PRIOR TO CONSTRUCTION.
4. TOP OF FOOTING ELEV. (UNO) = -1' - 4"
5. ANY CONDUITS (I.E. FIBER, POWER, WATER) BELOW GRADE SHALL BE COORDINATED WITH THE APPROPRIATE DISCIPLINE AND FIELD DETERMINED PRIOR TO CONSTRUCTION OF THE FOUNDATION AND SLAB.
6. ALL REINFORCING SHOWN SHALL BE TOP REINFORCING
7. F30 INDICATES A 3 FT x 3 FT x 16 IN CIP CONC FOOTING w/ (4) #5 EW T&B.
8. T.E. INDICATES THICKENED EDGE, SEE DETAIL 6 / S1.1.
9. E.J. INDICATES A SLAB EXPANSION JOINT.

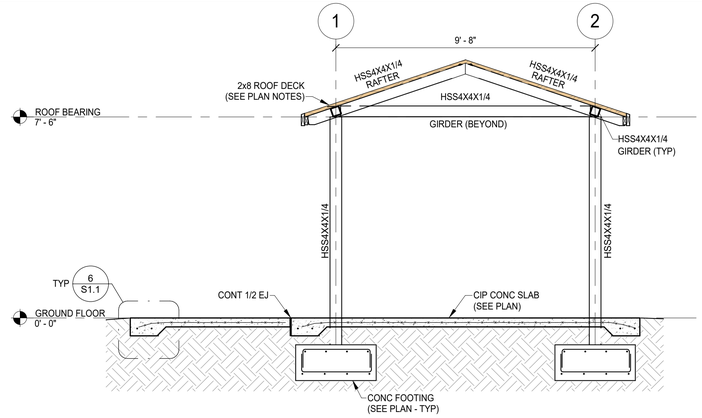
1 FOUNDATION PLAN
S1.1 — 3/8" = 1'-0"



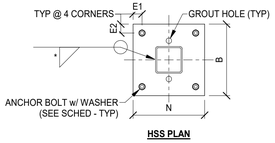
ROOF FRAMING NOTES

1. REFER TO STRUCTURAL GENERAL NOTES ON SHEET S0.1 AND S1.1 FOR MORE INFORMATION.
2. GC TO REFER TO ARCHITECTURAL, AND MEP DRAWINGS FOR COORDINATION.
3. PROVIDE 2x8 PT ROOF DECK DECK (LAID FLAT) w/ (2) SIMPSON TBP1475 WTS SCREWS (MIN), OR APPROVED OTHER, AT EA END SUPPORT (RAFTER AND GIRDER).
4. — — — INDICATES STEEL GIRDER MEMBER, SEE PLAN FOR STEEL SIZE.
5. —— · —— INDICATES STEEL RAFTER MEMBER, SEE PLAN FOR STEEL SIZE.

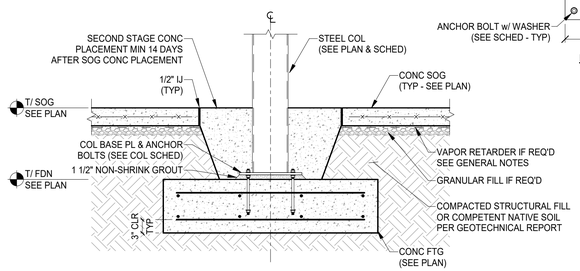
2 ROOF FRAMING PLAN
S1.1 — 3/8" = 1'-0"



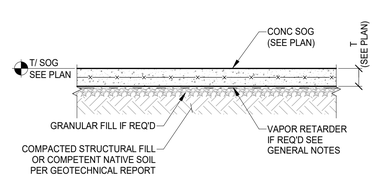
3 SECTION THRU PAVILION
S1.1 — 3/8" = 1'-0"



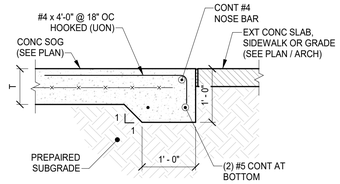
HSS PLAN



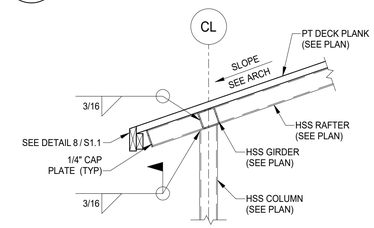
4 INTERIOR FOOTING WITH STEEL COLUMN
S1.1 — 3/4" = 1'-0"



5 TYPICAL SLAB-ON-GRADE (SOG)
S1.1 — 3/4" = 1'-0"



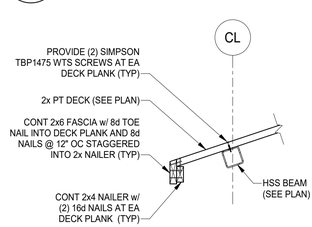
6 THICKEND EDGE
S1.1 — 3/4" = 1'-0"



NOTE:

1. ROOFING NOT SHOWN FOR CLARITY (SEE ARCH).

7 COLUMN TO BEAM AND RAFTER CONNECTION
S1.1 — 3/4" = 1'-0"



8 ROOF OVERHANG DETAIL
S1.1 — 3/4" = 1'-0"

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

AIDA L. BAEZ LICENSE No. 90765 STATE OF FLORIDA PROFESSIONAL ENGINEER

accord ENGINEERING

AIDA L. BAEZ, PE
LICENSED ENGINEER NO. 90765
STATE OF FLORIDA
ACCORD ENGINEERING, INC. PROJECT # 250305

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AR91827

CPSL P&Z: #P24-221
CPSLUSD FILE: #5001-32

O.L. Peacock Park Pavilions

SW Dreyfuss Boulevard
Port St. Lucie, FL 34953
Craig Seger, CAPTEC
Engineering, Inc.

Rev. #	Date

Project Number	24-0977
Status	100% Bid Set
Issue date	04/25/2025
Sheet	S1.1

STRUCTURAL PLANS

FLORIDA DEPARTMENT of STATE

RON DESANTIS
Governor

CORD BYRD
Secretary of State

Hobe Sound Environmental Consultants
9512 SE Duncan Street
Hobe Sound, Florida 33455

April 15, 2024

RE: DHR Project File No.: 2024-1588, Received by DHR: March 15, 2024
Application No.: N/A
Project: LWCF O L Peacock Sr. Park
County: St. Lucie

To Whom it May Concern,

The Florida State Historic Preservation Officer reviewed the referenced project for possible effects on historic properties listed, or eligible for listing, on the *National Register of Historic Places.* The review was conducted in accordance with Section 106 of the *National Historic Preservation Act of 1966*, as amended, and its implementing regulations in *36 CFR Part 800: Protection of Historic Properties.*

It is the opinion of this office that the proposed project is unlikely to affect historic properties. However, the permit, if issued, should include the following special condition regarding unexpected discoveries:

- If prehistoric or historic artifacts, such as pottery or ceramics, projectile points, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are encountered at any time within the project site area, the permitted project shall cease all activities involving subsurface disturbance in the vicinity of the discovery. The applicant shall contact the Florida Department of State, Division of Historical Resources, Compliance and Review Section at (850)-245-6333. Project activities shall not resume without verbal and/or written authorization. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, *Florida Statutes*.

If you have any questions, please contact Alexandra Gulde, Historic Sites Specialist, by email at *Alexandra.Gulde@dos.myflorida.com*, or by telephone at (850) 245-6363.

Sincerely,

Alissa S. Lotane, SHPO

Alissa S. Lotane Director, Division of Historical Resources & State Historic Preservation Officer