Park Street Commerce Center

Master Storm System

Storm Report by





Stormwater Summary

Park Street Commerce Center

5/24/2023

SJRWMD #:

Basin Size: 16.65 AC (Total Site)

Special Basin Criteria: Lake Okeechobee (+50% treatment over standard SFWMD criteria)

Wetlands: #56-00002-M Bluefield Ranch Mitigation Bank

Hydraulic Soils: Manatee #6 Type B/D (77%), Immokalee #11 Type B/D (23%)

Impervious Area: 0.05 AC existing, 6.80 AC Total Impervious Area

<u>Treatment Volume Required</u>: 1.5 " over basin or 2.5" x % impervious plus 50%

Peak Design Storm: 100 Yr - 72 hr

Pre vs Post Discharge: S-133 Basin 15.6 cfs/SM for 25YR-72HR storm or 0.36 cfs, proposed 0 cfs

Pond Volume: Dry Pond 4.938 AF (22 Top, 17.60 Bottom), Wet Pond 4.07 AF (20 Top, 15 NWL)

Pond Recovery: 72 hours

Seasonal High Groundwater Elevation: 14.50 elv. (See Geotech Report)

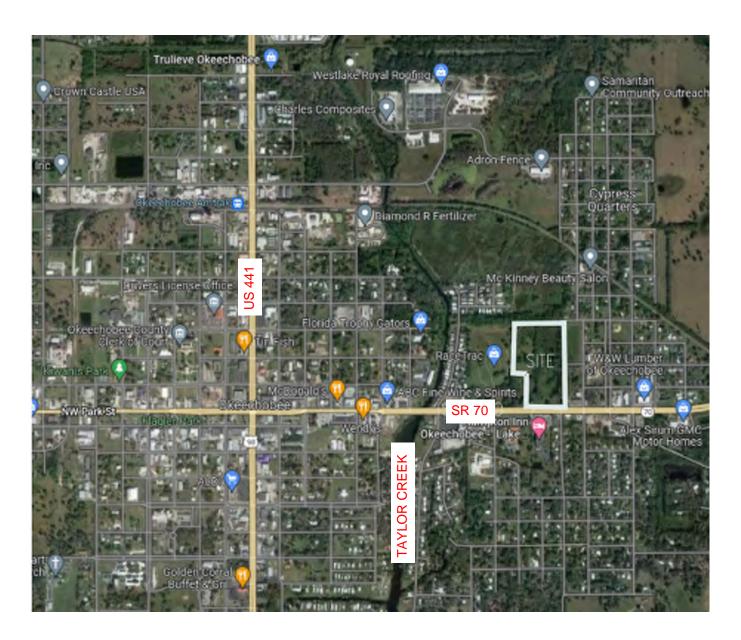
FEMA: Zone X (12093C0480C - 7/16/2016)

Slopes: 4:1 Dry pond

Maintenance Berm: 10 ft

Fencing: No fence proposed







Site Location / Existing Conditions:

The project is 16.65 acres in size and located on 1000 East S.R.70 in the City of Okeechobee, Florida. The site is currently undeveloped apart from an unoccupied house in the back northeast corner. A man-made drainage swale has been cut through the center of the site emptying into Taylor Creek in the north. Several isolated wetlands are present on the property. Topography of the site flows from higher elevations in the east to lower elevations in the west, ultimately discharging north into the creek. During geotechnical investigations organic muck layers were discovered in portions of the site (approx. 27%) that correlated with higher water tables relative to the borings without muck.

Proposed Conditions:

Project proposes four individual commercial lots and city-controlled roadway created with master stormwater. Lot 1 (1 AC impervious) is proposed carwash, Lot 2 (1.5 AC impervious) is Culver's restaurant, Lot 3 & 4 have no current planned development but are still allotted 1.75 AC of impervious area each in the master system. The proposed roadway is allotted 0.80 AC of impervious in the same shared system.

Water Quality:

The site requires nutrient loading be met for Lake Okeechobee basin and includes 50% additional treatment volume over the standard requirements. SFWMD criteria of 1" over basin or 2.5" over percent impervious area (less roofs & wet ponds). The system is designed to exceed the required 2.13 AC-FT of dry retention over the basin providing 3.58 AC-Ft before discharging into the wet pond. All required treatment is met within the dry pond, additional treatment is provided in the wet pond further surpassing the requirements.

Water Quantity:

Rainfall tables used from SFWMD regarding the 10 year -1 day (5"), 25 year -3 day (9") and 100 year -3 day (10") storm events were used to set the final elevations of roads and buildings via ICPR routing simulation. The proposed storm system maintains the 100 Year storm event with additional freeboard. No outfall is proposed.

	Dry Pond (elv)	Wet Pond (elv)
No Outfall – 100 YR – 72 Hour storm :	21.57	18.95
No Outfall – 25 YR – 72 Hour storm :	21.30	18.09
No Outfall – 10 YR – 24 Hour storm :	19.76	15.53

Min Road Elevation = 19.76 provided min. road elv = 20.56



Water Discharge:

No discharge is proposed, all storm events held within proposed storm system.

System Recovery:

Drawdown of the storm pond was performed using a 3-day recovery via groundwater with percolation rates at half rate given in geotech report. The dry pond holds 3.58 AC-FT at elevation 20.95 before discharging into the wet pond at the rear of the site for attenuation. The required treatment volume of 2.13 AC-FT recovers within the required 72 hour simulation with total recovery in 72 hour window equaling recovers 2.32 AC-FT

Operation & Maintenance:

Lots 1-4 will be owned and operated by separate entities. The proposed roadway, storm easement and rear pond will be owned and operated by City of Okeechobee.

Dry Pond Stage / Storage				
Stage (ft)	Area (sf)	Area (ac)	Volume (ac-ft)	Notes
17.6	37,464	0.860	0.000	
18.0	41,429	0.951	0.362	
19.0	45,499	1.045	1.360	
20.0	49,670	1.140	2.452	
21.0	54,134	1.243	3.644	
22.0	58,598	1.345	4.938	
Rear Dry Pond				TOP
Wier Elevation				
Design Wier Elevation =		<u> </u>	20.95	ft
Treatment Volume Provided =			3.584	ac-ft

Stage (ft)	Area (sf)	Area (ac)	Volume (ac-ft)	Notes
6.0	7,866	0.181	0.000	
7.0	8,677	0.199	0.190	
8.0	9,534	0.219	0.399	
9.0	10,440	0.240	0.628	
10.0	11,401	0.262	0.879	
11.0	12,423	0.285	1.152	
12.0	13,519	0.310	1.450	
13.0	28,332	0.650	1.931	
14.0	33,541	0.770	2.641	
15.0	38,878	0.893	0.000	Waterline (2.641 AF vol
16.0	44,343	1.018	0.955	
17.0	49,929	1.146	0.000	
18.0	55,619	1.277	1.212	
19.0	61,409	1.410	2.555	
20.0	70,882	1.627	4.073	TOP
er Elevation				

<u>Development D</u>	<u>rainage Basin</u>	<u>A</u>			
Basin	Area (AC)	% impervious	Cover	CN	Imperv (AC)
Commerical	13.940	49%	Impervious	98	6.800
			Drained Pervious (Type B Soil)	40	
			Roof		
			Sub-Total CN	68	
Totals	13.940	49%		68	6.800
Development D	rainage Basin	<u>B</u>			
Basin	Area (AC)	%Water	Cover	CN	Imperv (AC)
Wet Pond / FPL	2.71	33%	Water	100	0.000
			Pervious (Type B Soil)	60	
Totals	2.71	33%		73	0.000
Total Site	16.65	41%			6.800

Time of Concentration

Assume Minimum 15 minimum for all basins

Treatment Volumes

Basin Area 16.65 AC

Impervious Area 41% 6.80 AC

1 1" over the development

1" x16.65 AC

1.420 AC-FT

Add 50%

2.09 AC-FT

2 2.5" over % impervious area

2.5" x 41% x 16.65 AC 6.8 AC total Impervious

1.42" AC-FT

Add 50%

2.130 AC-FT

Impervious Area Accounted

Lot 1 1.00 AC

Lot 2 1.50 AC

Lot 3 1.75 AC

Lot 4 1.75 AC

Roadway 0.80 AC

Total 6.80 AC



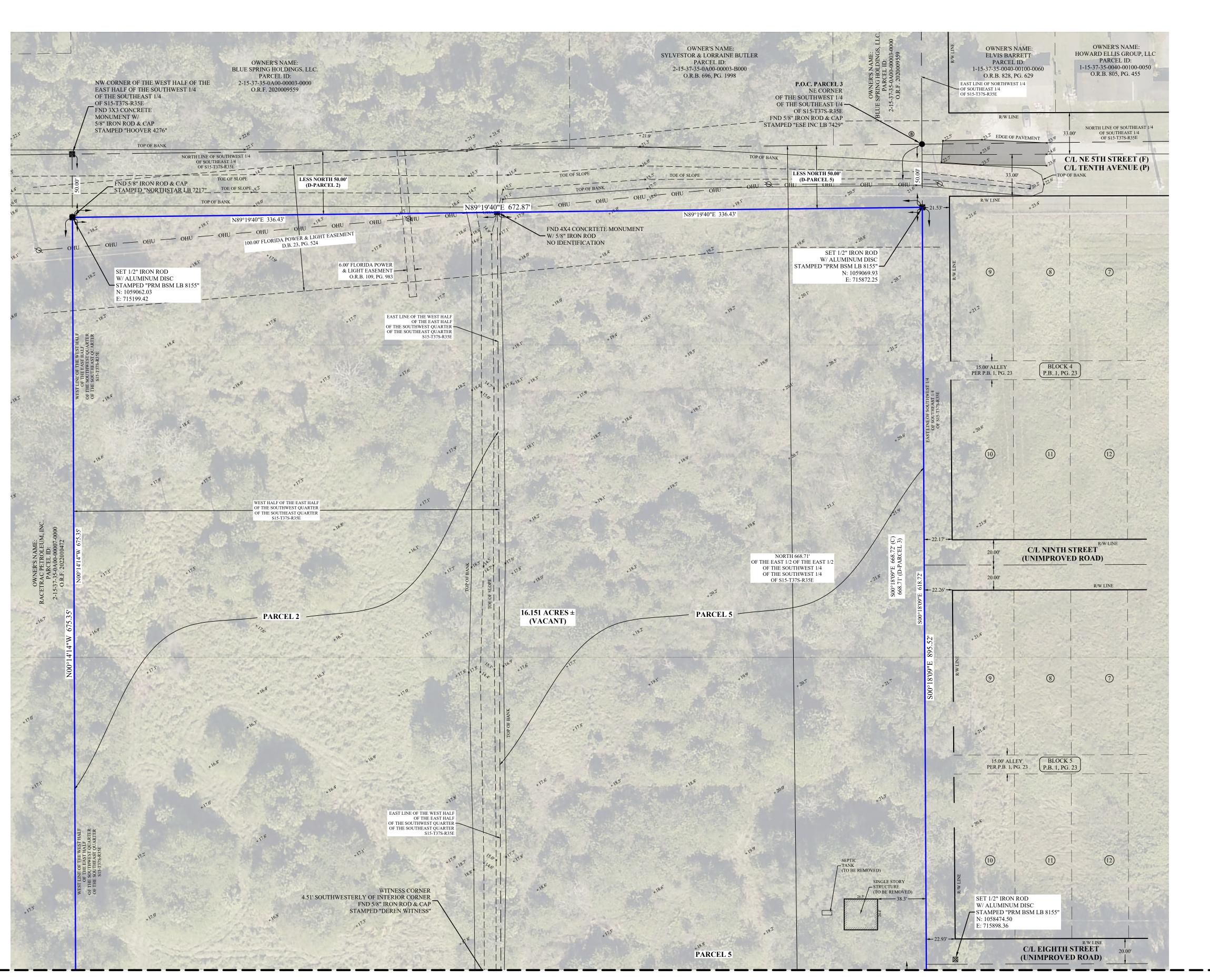
PRE-BASIN MAP

BOUNDARY & TOPOGRAPHIC SURVEY TO ALTA/NSPS GRAPHIC SCALE LAND TITLE STANDARDS 1 INCH = 40 FT.LOCATED IN SECTION 15; TOWNSHIP 37 SOUTH; RANGE 35 EAST (INTENDED DISPLAY SCALE) MATCH LINE "A" FROM SHEET 3 C/L EIGHTH STREET PARCEL 5 (UNIMPROVED ROAD) N89°19'40"E 336.79' (C) W/ ALUMINUM DISC 'AMPED "PRM BSM LB 8155" -N: 1058388.88 5.00 NORTHEASTERLY OF INTERIOR CORNER W/ ALUMINUM DISC E: 715388.51 FND 5/8" IRON ROD & CAP STAMPED "PRM BSM LB 8155 P.O.B. PARCEL 3 FND 3/4" IRON ROD — NO IDENTIFICATION S89°19'40"W 186.30' (C) EAST (D-PARCEL 1) FND 5/8" IRON ROD & CAP STAMPING ILLEGIBLE EAST LINE OF THE WEST HALF OF THE EAST HALF OF THE SOUTHWEST QUARTER -15.00' ALLEY BLOCK 12 PER P.B. 1, PG. 23 P.B. 1, PG. 23 NE CORNER OF PRICE ADDITION FND 5/8" IRON ROD & CAP STAMPED "HOOVER 4276" 16.151 ACRES ± (VACANT) N89°58'38"W 26.31'-FND 5/8" IRON ROD & CAP SET 1/2" IRON ROD FND 5/8" IRON ROD & CAP STAMPED "NORTHSTAR LB 7217" W/ ALUMINUM DISC STAMPED "PRM BSM LB 8155" 0.13' NORTH; 0.83' EAST OF PROPERTY CORNER FND 5/8" IRON ROD & CAP STAMPED "DEREN LB 7996" SET 1/2" IRON ROD THE CENTERLINE OF LINCOLN STREET IS 1.31' WESTERLY OF THE EAST LINE W/ ALUMINUM DISC STAMPED "PRM BSM LB 8155 S89°58'38"E 336.94' (C) E: 715850.67 S89°50'34"W 336.76' (D-PARCEL 3) C/L NE 2ND STREET (F) 20 FND 5/8" IRON ROD VACATED R/W C/L CENTER STREET (P) C/L CENTER STREET (P) (UNIMPROVED ROAD) (UNIMPROVED ROAD) VACATED R/W OWNER'S NAME: RACETRAC PETROLEUM, INC. 47.70' (C)(P) 47.70' (C)(P) 47.70' (C)(P) 47.70' (C)(P) 2-15-37-35-0A00-00007-0000 O.R.F. 2022010472 MOBLEY STREET: 25 00' R/W TO BE INCLUDED IN PLATTING (HATCHED AREA) UNIMPROVED AND ABANDONED RIGHT-OF-WAY -HAVING BEEN RECLAIMED UNDER THE CURRENT PROPERTY OWNER PER THE REVERSIONARY CLAUSE - LESS & EXCEPT 2 47.70' (C)(P) 47.70' (C)(P) 47.70' (C)(P) 47.70' (C)(P) 47.70' (C)(P) 46.63' (P) 15.00' ALLEY PER P.B. 1, PG. 23 BLOCK 13 P.B. 1, PG. 23 P.B. 2, PG. 17 15.00' VACATED ALLEY UNIMPROVED AND ABANDONED RIGHT-OF-WAY -HAVING BEEN RECLAIMED UNDER THE CURRENT PROPERTY OWNER PER THE REVERSIONARY CLAUSE P.O.B. (PLAT LEGAL) FND 5/8" IRON ROD & CAP SET 1/2" IRON ROD STAMPED "NORTHSTAR LB 7217" W/ ALUMINUM DISC FND CONCRETE MONUMENT W/ DISC STAMPED "PRM BSM LB 8155" SOUTHERLY 7.00' N: 1057864.17 STAMPED "FDOT BM2 2012" (NOT INCLUDED IN PLATTING TOPOGRAPHIC E: 715390.68 N: 1057869.69 OR BOUNDARY ACREAGE) E: 715764.13 ELEV.= 23.49' R/W MAP SECTION 91070-2514 WILLIAM R. GRIGSBY, JR SUBJECT TO R/W LINE PER F.D.O.T. R/W MAP SECTION F.D.O.T. R/W MAP SECTION 47.70' (C)(P) 47.70' (C)(P) 47.70' (C)(P) 47.70' (C)(P) 47.70' (C)(P) SE CORNER S15-T37S-R35E STORIC RIM ELEV. = 21.92' FND IRON ROD & CAP FND NAIL & DISC - STAMPED "DEREN LB 7996" B/L STATE ROAD 70 (F) STAMPED "LB 1221" 0.78' NORTH; 0.40' WEST P.O.C. (PLAT LEGAL) NORTH PARK STREET (P) S QUARTER CORNER S15-T37S-R35E THE CENTERLINE OF LINCOLN STREET IS 0.46' WESTERLY OF THE EAST LINE FND NAIL & DISC SET 1/2" IRON ROD SOUTH LINE OF S15-T37S-R35E OF THE SOUTHWEST 1/4 STAMPING ILLEGIBLE W/ ALUMINUM DISC N89°19'21"E IPED "PRM BSM LB 8155" SOUTH LINE OF S15-T37S-R35E WEST (D-PARCEL 1) N: 1057865.58 E: 715853.04 SOUTH LINE OF S15-T37S-R35E M — STM STM — STM — STM — CURB INLET N89°19'21"E 860.10' STORM WATER MANHOLE RIM ELEV. = 21.49' SITE BM# 30001 RIM ELEV. = 22.93' RIM ELEV. = 20.38'(N) 24" RCP INV. ELEV. = 17.19' — FND CONCRETE MONUMENT W/ DISC UNABLE TO OBTAIN SW CORNER OF THE EAST HALF STORM WATER MANHOLE STAMPED "FDOT BM 204" (W) 24" RCP INV. ELEV. = 17.19' INVERT ELEVATION OF THE SOUTHWEST QUARTER RIM ELEV. = 22.51' (W) 24" RCP INV. ELEV. = 15.3' (E) 24" RCP INV. ELEV. = 17.19' OF THE SOUTHEAST QUARTER E: 715741.73 SANITARY SEWER MANHOLE RIM ELEV. = 23.75' - RIM ELEV. = 20.03' (E) 24" RCP INV. ELEV. = 15.3' OF S15-T37S-R35E ELEV.= 23.05' (N) 18" RCP INV. ELEV. = 15.58' (W) 4" PVC INV. ELEV. = 19.2'

BOUNDARY & TOPOGRAPHIC SURVEY TO ALTA/NSPS

LAND TITLE STANDARDS

LOCATED IN SECTION 15; TOWNSHIP 37 SOUTH; RANGE 35 EAST





MATCH LINE "A" FROM SHEET 2



	CAD G: My Drive BSM & ASSOCIATES, IN	AC\2022\22-45 ALTA TOPO & PLAT - KINGS CON	G:Wy Drive'BSM & ASSOCIATES, INC 2022/22-445 ALTA TOPO & PLAT - KINGS CONDOR PARTNERS'PLAT & BOUNDARY VERSION 2\			
HIC SURVEY	REF G.My Drive BSM & ASSOCIATES, IN	NC2022/22-445 ALTA TOPO & PLAT - KINGS CON	G:My Drive/BSM & ASSOCIATES, INC 2022/22-445 ALTA TOPO & PLAT - KINGS CONDOR PARTNERS PLAT & BOUNDARY VERSION 2/MGOI			
	FLD DF	FB./PG. BSM #8/20				
77072	OFF BHM		DATE 11/11/22	3-23-23	REVISED BOUNDARY TO REFLECT CITY COMMENTS	BHM
71715	CKD REB	SHEET 3 OF 3	DWG 22-45 BND SURVEY PER DEED	DATE:	REVISIONS:	BY:



POST-BASIN MAP

SPECIFICATIONS FOR THE PARKING AREA AND DRIVES ARE AS FOLLOWS:

SURFACE COURSE:

A). 1.50" FDOT ASPHALT CONCRETE TYPE 9.5, COMPACTED TO A MIN. OF 95% OF THE MARSHALL DESIGN DENSITY. AFTER PLACEMENT AND FIELD COMPACTION, THE WEARING SURFACE SHOULD BE CORED TO EVALUATE MATERIAL THICKNESS AND TO PERFORM LABORATORY DENSITIES. CORES SHOULD BE TAKEN AT A FREQUENCY OF ONE (1) CORE PER 10,000 SF OF PLACED PAVEMENT.

BASE REQUIREMENTS:

2.638 AC

1.992 AC

LOT 1 1.581 AC

DRY POND 2.023 AC

LOT 3

20 FT SEWER EASEMENT FORCEMAIN TO SR 70

TURE PARCEL

2.363 AC

*50FT ROAD EASEMENT

LOT 3,4, 5 SIGNAGE THA-15 trash ~2

20FT STORM EASEMENT

DWAY 7 0.386

O

2.142 AC

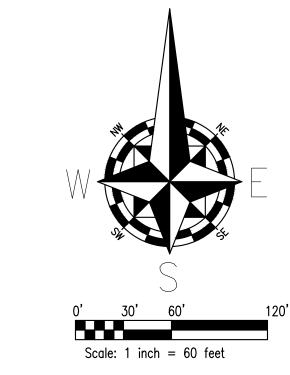
A). 8" PLACED RECYCLED CRUSHED CONCRETE FINES COMPACTED TO A MINIMUN DENSITY OF 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY

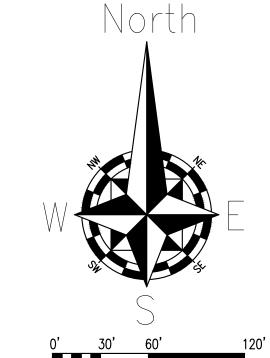
FOR CRUSHED CONCRETE FINES BASE BASE REQUIREMENTS:

12" STABILIZED SUBGRADE TO HAVE A MIN. FBV=75 AND BE COMPACTED TO AT LEAST 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D 1557) VALUE. LEAST 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D 1557) VALUE.

GRADING NOTES

- 1. ALL MATERIALS AND CONSTRUCTION METHODS TO MEET CURRENT FDOT STANDARDS AND SPECIFICATIONS.
- 2. STABILIZE ALL DISTURBED AREAS





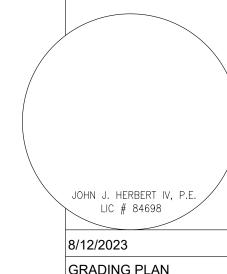
	Structure Table			Pipe Ta	ble	
ıre Name	Structure Details		Pipe Name	Size	Length	Slope
T-1 OT P-2	RIM = 21.17 SUMP = 17.17		Pipe - (1)	18"	30.41	0.20%
b inlet	Pipe - (1) INV OUT = 18.17		Pipe - (2)	24"	314.63	0.15%
т о	RIM = 22.43 SUMP = 17.62		Pipe - (3)	24"	252.75	0.20%
T-3 manhole	Pipe - (2) INV IN = 17.63 Pipe - (3) INV OUT = 17.62		Pipe - (4)	24"	33.54	0.21%
	RIM = 21.17		Pipe - (5)	24'	213.06	0.20%
T-2 OT P-2 b inlet	SUMP = 18.10 Pipe - (1) INV IN = 18.11		Pipe - (6)	24"	79.00	0.20%
o irilet	Pipe - (2) INV OUT = 18.10		Pipe - (7)	24"	72.34	0.21%
Г-10 Туре-D	RIM = 20.95 SUMP = 18.25		Pipe - (8)	24"	212.89	0.20%
all inlet	Pipe - (9) INV OUT = 18.25		Pipe - (9)	24"	20.59	5.10%
T 4	RIM = 20.56 SUMP = 17.10		Pipe - (10)	18"	41.94	0.60%
T-4 OT P-2 b inlet	Pipe - (3) INV IN = 17.11 Pipe - (9) INV IN = 17.20		Pipe - (11)	18"	71	0.20%
	Pipe - (4) INV OUT = 17.10		ing material EC	OT conor	oto or ADS	LD Storn

Pipe material FDOT concrete or ADS HP Stor	m

1-15-37-35-0030-00040-001	ſ	SUE A).	3-BASE REQ 12" STABII LEAST 98% LEAST 98%
9 2 =			Structure
20040-0010			ST- FDOT curb i
1-15-37-35-0030-00040-0010			ST- 4' dia ma
			ST- FDOT curb i
1-15-37-35-0030-00040-0010			ST- FDOT T outfall
1-15-37.			ST- FDOT curb i
0200			ST- FDOT curb i
COMMERCIAL 1-15-37-35-0030-00120-0070			ST- FDOT T inle
			ST; FDOT T inle
COM®IERCIAL			ST- FDOT T inle
TERLINE OF LINCOLN STI VESTERLY OF THE EAST LI SOUTHWEST 1/4 137S-R35E			ST- FDOT T inle
04			ST- M.E
COMMERCIAL 1-15-37-35-0030-00130-0040			ST- M.E
C. 1-15-3:			ST-

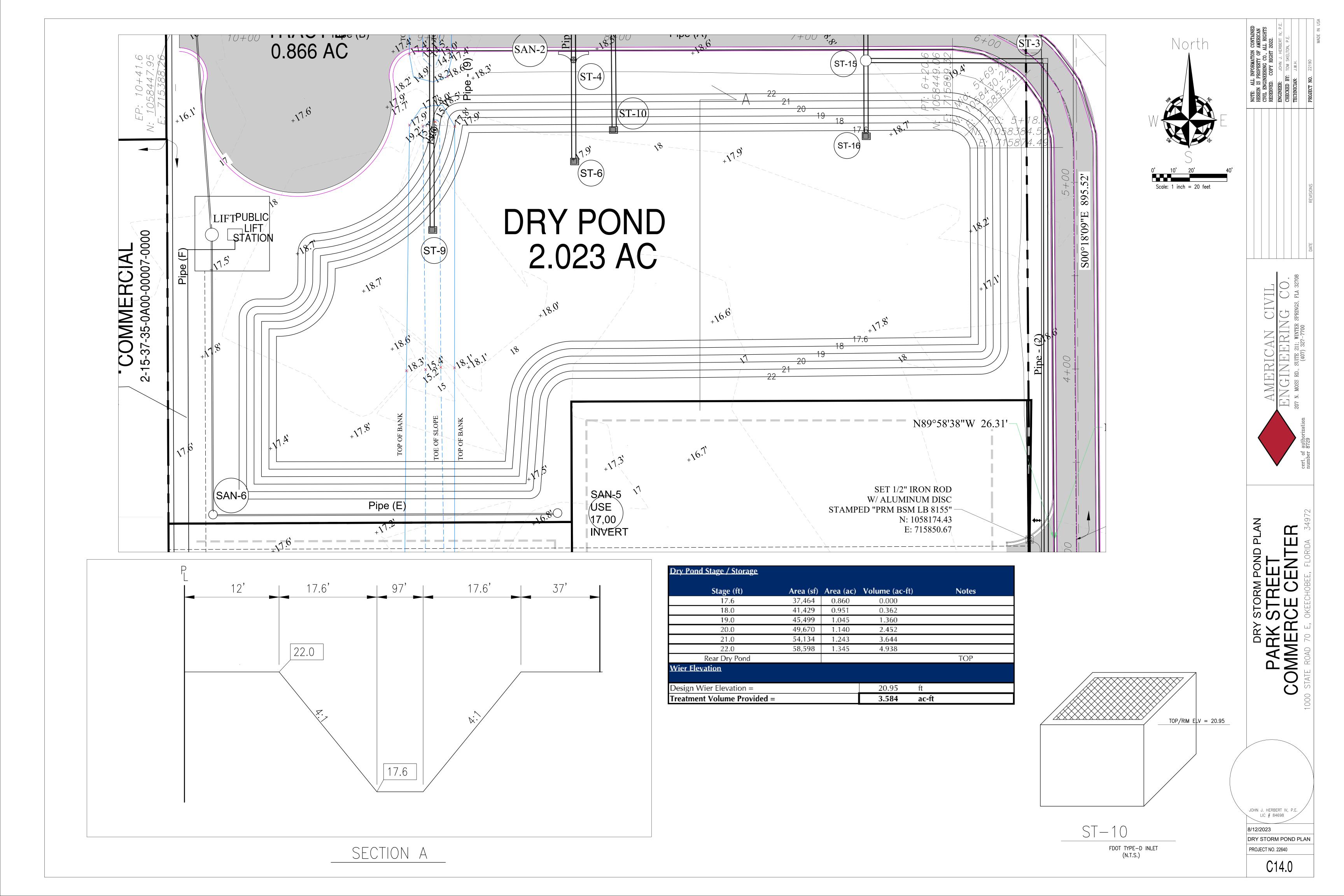
			•	0.20	3	
ST-1 FDOT P-2	RIM = 21.17 SUMP = 17.17		Pipe - (1)	18"	30.41	0.2
curb inlet	Pipe - (1) INV OUT = 18.17		Pipe - (2)	24"	314.63	0.
ST 2	RIM = 22.43 SUMP = 17.62		Pipe - (3)	24"	252.75	0.2
ST-3 4' dia manhole	Pipe - (2) INV IN = 17.63 Pipe - (3) INV OUT = 17.62		Pipe - (4)	24"	33.54	0.2
	RIM = 21.17		Pipe - (5)	24'	213.06	0.2
ST-2 FDOT P-2 curb inlet	SUMP = 18.10 Pipe - (1) INV IN = 18.11		Pipe - (6)	24"	79.00	0.2
	Pipe - (2) INV OUT = 18.10		Pipe - (7)	24"	72.34	0.2
ST-10 FDOT Type-D	RIM = 20.95 SUMP = 18.25		Pipe - (8)	24"	212.89	0.2
outfall inlet	Pipe - (9) INV OUT = 18.25		Pipe - (9)	24"	20.59	5.
ST-4	RIM = 20.56 SUMP = 17.10	1	Pipe - (10)	18"	41.94	0.0
FDOT P-2 curb inlet	Pipe - (3) INV IN = 17.11 Pipe - (9) INV IN = 17.20	ı	Pipe - (11)	18"	71	0.2
	Pipe - (4) INV OUT = 17.10	Pipe	e material FD	OT concr	ete or ADS	HP
ST-5	RIM = 20.56 SUMP = 17.02					
FDOT P-2 curb inlet	Pipe - (4) INV IN = 17.03 Pipe - (5) INV OUT = 17.02					
OT 11	RIM = 19.34					
ST-11 FDOT Type-D inlet	SUMP = 16.59 Pipe - (5) INV IN = 16.59 Pipe - (8) INV OUT = 16.59					
STx FDOT Type-D	RIM = 19.25 SUMP = 15.25					
inlet	Pipe - (10) INV OUT = 15.25					
ST-12 FDOT Type-D inlet	RIM = 18.91 SUMP = 16.16 Pipe - (8) INV IN = 16.16 Pipe - (6) INV OUT = 16.16					
ST-8 FDOT Type-D inlet	RIM = 18.75 SUMP = 16.00 Pipe - (6) INV IN = 16.00 Pipe - (7) INV OUT = 16.00					
ST-9 M.E.S.	RIM = 18.18 Pipe - (7) INV IN = 15.85					
ST-x M.E.S.	RIM = 16.79 Pipe - (10) INV IN = 15.00					
ST-13 M.E.S.	RIM = 15.64 Pipe - (11) INV IN = 14.14					
ST-14 M F S	RIM = 15.50 Pine - (11) INV IN = 14.00					

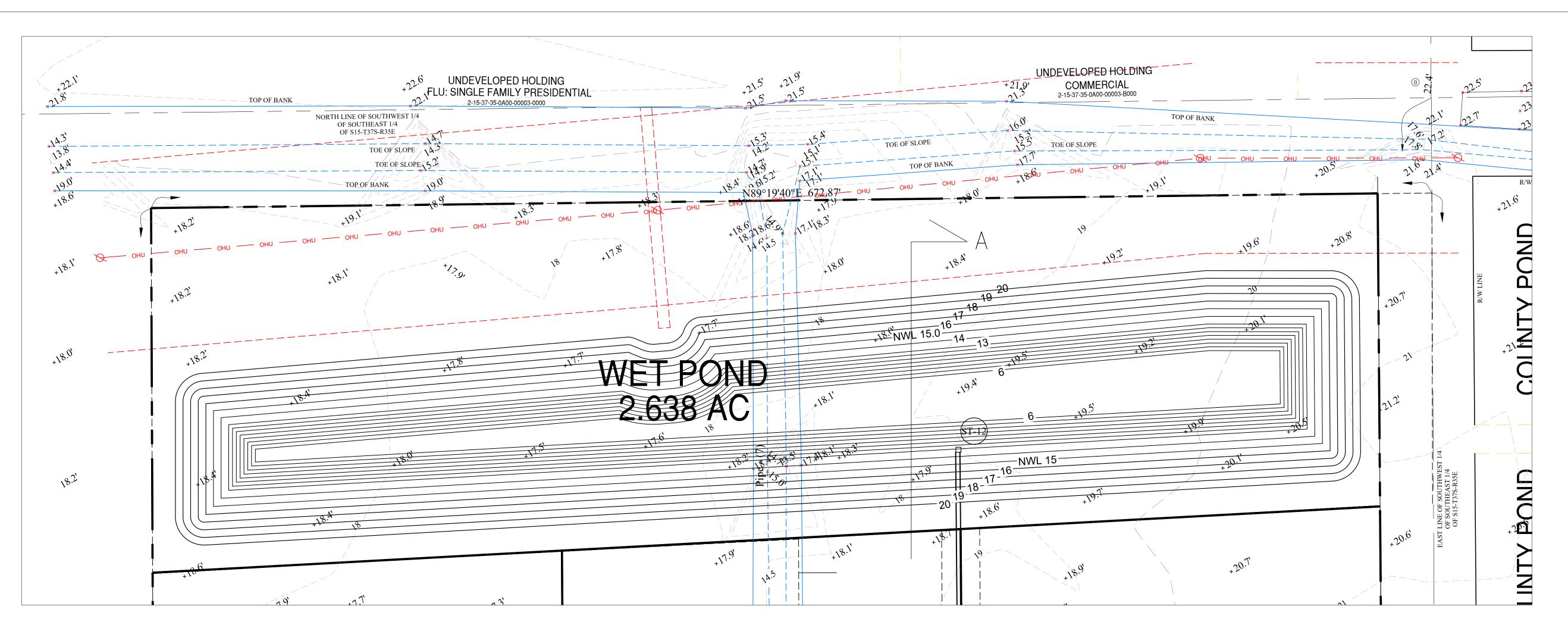
Pipe - (11) INV IN = 14.00



GRADING PLAN PROJECT NO. 22640

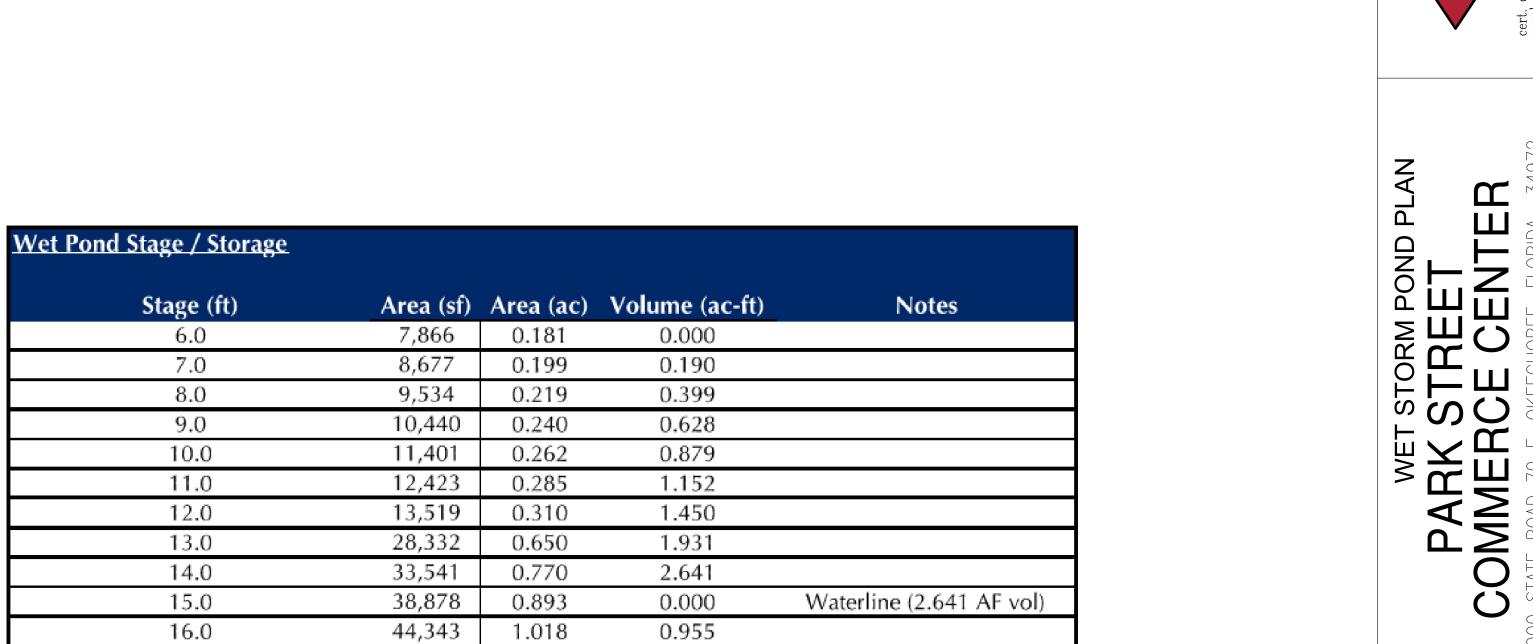
C5.0

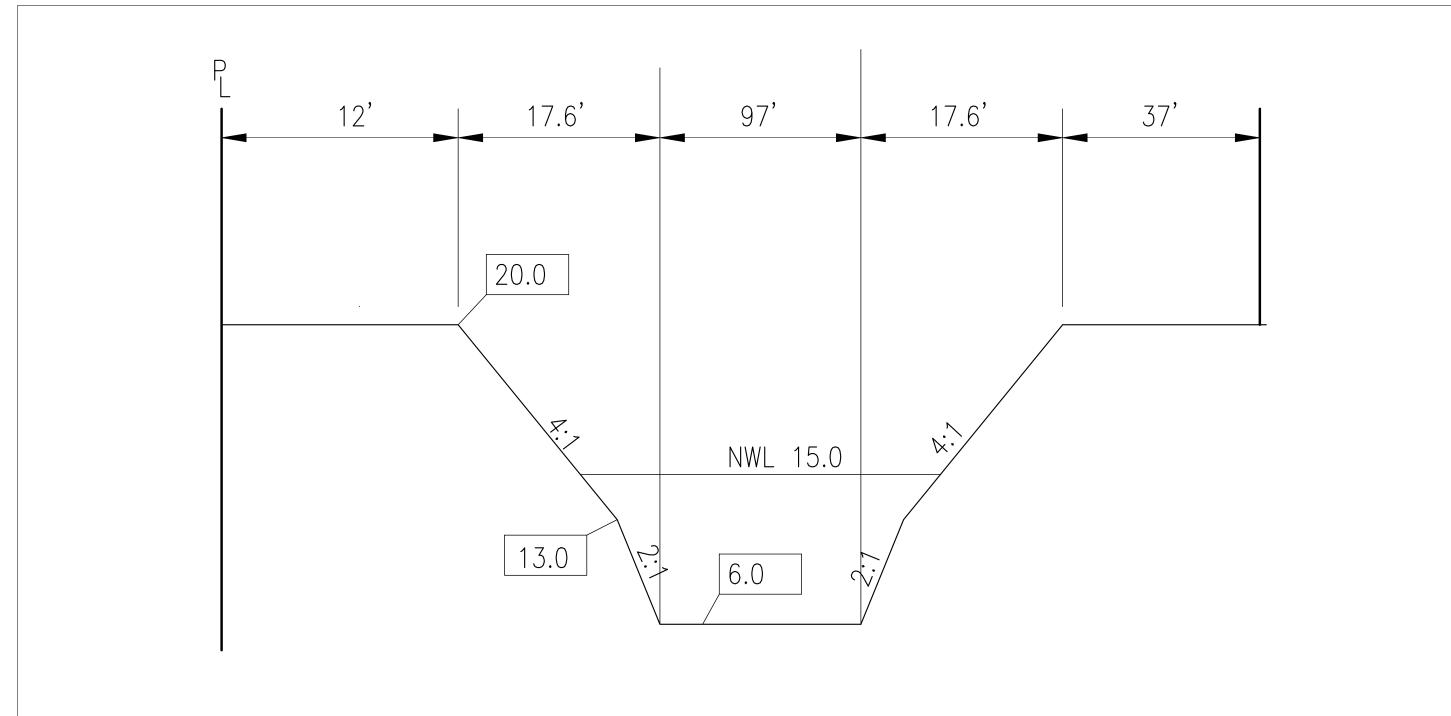












SECTION A	

Stage (ft)	Area (sf)	Area (ac)	Volume (ac-ft)	Notes
6.0	7,866	0.181	0.000	
7.0	8,677	0.199	0.190	
8.0	9,534	0.219	0.399	
9.0	10,440	0.240	0.628	
10.0	11,401	0.262	0.879	
11.0	12,423	0.285	1.152	
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15.0	38,878	0.893	0.000	Waterline (2.641 AF vol)
16.0	44,343	1.018	0.955	
17.0	49,929	1.146	0.000	
18.0	55,619	1.277	1.212	
19.0	61,409	1.410	2.555	
20.0	70,882	1.627	4.073	TOP
r Elevation				
Outfall on Pond				

JOHN J. HERBERT IV, P.E. LIC # 84698 8/12/2023 WET STORM POND PLAN PROJECT NO. 22640

C15.0



FEMA MAP

1DWLRODO (DRRG-EDUGIDHU)51WWH







7K_V BS:FF8DLH/ ZWK (\$V WDQEDJG/ IFU WKHXHR
G_LWDD IORTGB9/LI LW LV QRW YRLGD/ GH/FULB-GB+ORZ
7K-IEX/HEX-WRXDFR8DLH/ ZWK (\$V EX/HES
DFXUER WDQEDJG/

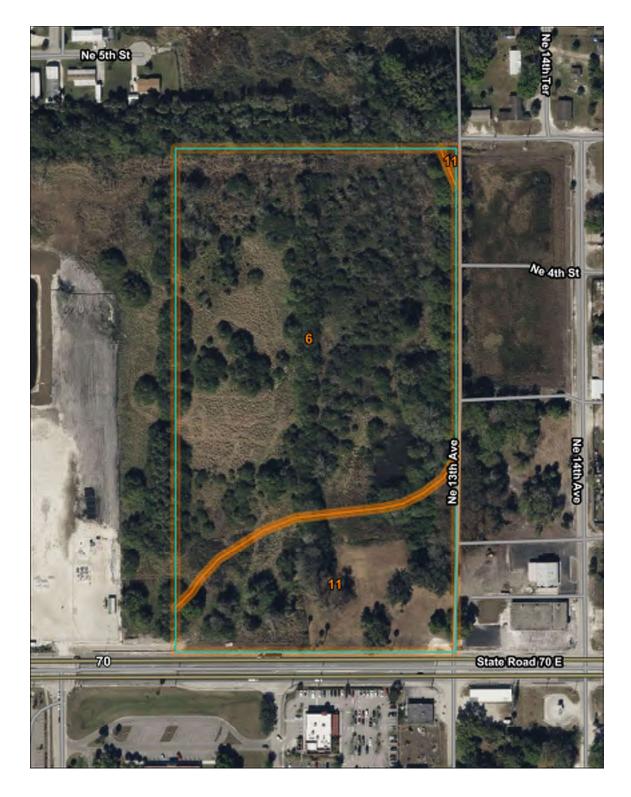
7KHSLQGLVSOEHGRQWKHESLV DQDSSUFLEWH SRLQW VHOHFWHGEWKHXHU DDGGRHV CRW UHSUH DQDWKRULWDWLYHSURSHUW ORTDWLRQ

7KHIOFFGKDUGLQRUBWLRQLVGHULYHGGLUHFWO\IUFRWKHDWKRULWDWLYHJYZEVHUYLFH/SURYLGHGE)(6) 7KLVBS
2D/HSRUWHGRQ DW S DOGGRH/QRW
UHOHFW HOOHVRU DPOGPDWVVXEMIXHDW WRWKLVGDWHDQG
WLFI 7KHJYFDQGHIHFWLYHLQRUBWLRQBHQQHRU
BHFRIVSHUWHGGEQ

7KLV BSL BJHLV YRLGLI WKHROHRU RUHRI WKHIROORZOJBS HOHPOW GROW DSHOU, EDKHBSL BJHJV IORGJROHODHOV OHJAGG VFDOHEDU BSRJIHDWLROGDWH FRROLWILGHOWLILHUV)\$500-D QMPU DGG)\$HIFWLYHGDWH DSL BJHJ IRU XDBSHGDGXCRG-JUQJ-JGDUHDV FDXDRW BHXKHGIRU UHJYODWRJ/SUSKIHJ



SOIL MAP



USDA SOILS SURVEY

6—Manatee loamy fine sand, frequently ponded, 0 to 1 percent slopes 11—Immokalee fine sand, 0 to 2 percent slopes

PROJECT: 1000 State Road 70, Okeechobee, Florida

SHEET 2 OF 2 PERMIT #:

PROJECT #: 2210339-soils



DRAWN BY: C.V.
DESIGNED BY: C.C.C.
DATE: 20221228
SCALE: NOT TO SCALE



ICPR

Node Max Conditions [Recover]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Groundwater	Recover	14.50	14.50	0.0000	4.06	0.00	0
Recover	Recover	23.00	20.95	-0.0010	0.00	4.06	53921

Node Max Conditions [Scenario1]

Node Name	Sim Name	Warning	Max Stage	Min/Max	Max Total	Max Total	Max Surface
		Stage [ft]	[ft]	Delta Stage	Inflow [cfs]	Outflow [cfs]	Area [ft2]
				[ft]			
POST WET	100YR-72HR	20.00	18.95	0.0010	15.34	0.00	64129
POND							
Post Dry Pond	100YR-72HR	22.00	21.57	0.0010	47.00	10.97	56689
Pre- Node	100YR-72HR	20.00	14.00	0.0000	27.00	0.00	0
POST WET	10YR-24HR	20.00	15.53	0.0003	5.46	0.00	42298
POND							
Post Dry Pond	10YR-24HR	22.00	19.76	0.0010	23.63	0.00	48646
Pre- Node	10YR-24HR	20.00	14.00	0.0000	7.23	0.00	0
POST WET	25YR-72HR	20.00	18.09	0.0010	8.46	0.00	58643
POND							
Post Dry Pond	25YR-72HR	22.00	21.30	0.0010	40.69	6.65	55482
Pre- Node	25YR-72HR	20.00	14.00	0.0000	22.73	0.00	0

Simple Basin: POST-BASIN DRY

Scenario: Scenario1

Node: Post Dry Pond

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number
Time of Concentration: 15.0000 min
Max Allowable Q: 0.00 cfs

Time Shift: 0.0000 hr
Unit Hydrograph: UH323
Peaking Factor: 323.0

Area: 13.9400 ac

Curve Number: 68.0
% Impervious: 0.00
% DCIA: 0.00
% Direct: 0.00
Rainfall Name:

Comment:

Simple Basin: POST-BASIN WET

Scenario: Scenario1

Node: POST WET POND

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number
Time of Concentration: 15.0000 min
Max Allowable Q: 0.00 cfs

Time Shift: 0.0000 hr
Unit Hydrograph: UH323
Peaking Factor: 323.0

Area: 2.7120 ac

Curve Number: 72.0 % Impervious: 0.00 % DCIA: 0.00 % Direct: 0.00

Rainfall Name:

Comment:

Simple Basin: PRE-BASIN

Scenario: Scenario1

Node: Pre- Node

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number
Time of Concentration: 45.0000 min
Max Allowable Q: 0.00 cfs

Time Shift: 0.0000 hr Unit Hydrograph: UH323

Peaking Factor: 323.0

Area: 16.6500 ac

Curve Number: 58.0
% Impervious: 0.00
% DCIA: 0.00
% Direct: 0.00

Rainfall Name:

Comment:

Node: Groundwater

Scenario: Recover
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 14.50 ft
Warning Stage: 14.50 ft

Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	14.50
0	0	0	72.0000	14.50

Comment:

Node: Recover

Scenario: Recover
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 20.95 ft
Warning Stage: 23.00 ft

Stage [ft]	Area [ac]	Area [ft2]
17.60	0.8600	37462
18.00	0.9510	41426
19.00	1.0450	45520
20.00	1.1400	49658
21.00	1.2430	54145
22.00	1.3450	58588

Comment:

Node: POST WET POND

Scenario: Scenario1 Type: Stage/Area Base Flow: 0.00 cfs Initial Stage: 15.00 ft Warning Stage: 20.00 ft

Stage [ft]	Area [ac]	Area [ft2]
15.00	0.8930	38899
20.00	1.6270	70872

Comment:

Node: Post Dry Pond

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 17.60 ft
Warning Stage: 22.00 ft

Stage [ft]	Area [ac]	Area [ft2]
17.60	0.8600	37462
18.00	0.9510	41426
19.00	1.0450	45520
20.00	1.1400	49658
21.00	1.2430	54145
22.00	1.3450	58588

Comment:

Node: Pre- Node

Scenario: Scenario1 Type: Time/Stage Base Flow: 0.00 cfs Initial Stage: 14.00 ft Warning Stage: 20.00 ft

Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	14.00
0	0	0	72.0000	14.00

Comment:

Percolation Link: L-0110PERC

Vary Based on Stage/Area Surface Area Option: Scenario: Recover

From Node: Recover Table

To Node: Groundwater Vertical Flow Termination: Horizontal Flow Algorithm

Link Count: 1 Perimeter 1: 1152.00 ft Perimeter 2: 1602.00 ft Flow Direction: Both Aquifer Base Elevation: 5.00 ft Perimeter 3: 2216.00 ft Water Table Elevation: 14.50 ft Distance P1 to P2: 50.00 ft Annual Recharge Rate: 0 ipy Distance P2 to P3: 100.00 ft Horizontal Conductivity: 7.500 fpd # of Cells P1 to P2: 50 Vertical Conductivity: 6.500 fpd # of Cells P2 to P3: 50

Fillable Porosity: 0.250 Layer Thickness: 3.10 ft

Comment: 1/2 the perc rate for FS

Drop Structure Link: Dry to Wet Upstream Pipe Downstream Pipe Scenario: Scenario1 Invert: 16.50 ft Invert: 13.00 ft From Node: Post Dry Pond Manning's N: 0.0120 Manning's N: 0.0120 To Node: POST WET POND Link Count: Max Depth: 1.50 ft Max Depth: 1.50 ft Bottom Clip Flow Direction: Both Solution: Combine Default: 0.00 ft Default: 0.00 ft Increments: 0 Op Table: Op Table: Pipe Count: 1 Ref Node: Ref Node: Damping: 0.0000 ft Manning's N: 0.0000 Manning's N: 0.0000 Length: 538.00 ft Top Clip FHWA Code: 0 Default: 0.00 ft Default: 0.00 ft Entr Loss Coef: 0.00 Op Table: Op Table: Exit Loss Coef: 0.00 Ref Node: Ref Node: Bend Loss Coef: 0.00 Manning's N: 0.0000 Manning's N: 0.0000 Bend Location: 0.00 dec Energy Switch: Energy Pipe Comment:

Weir: Weir Count: 1 Weir Flow Direction: Both

> Damping: 0.0000 ft

Weir Type: Horizontal Geometry Type: Rectangular

Invert: 20.95 ft Control Elevation: 20.95 ft

Max Width: 3.00 ft

Max Depth: 2.00 ft Fillet: 0.00 ft

Default: 0.00 ft Op Table:

Ref Node: Top Clip

Default: 0.00 ft Op Table:

Discharge Coefficients

Weir Default: 3.200 Weir Table:

Ref Node:

Orifice Default: 0.600

Orifice Table:

Weir Comment:

Drop Structure Comment:

Simulation: Recover

Scenario: Recover

Run Date/Time: 5/24/2023 11:28:42 AM

Program Version: ICPR4 4.07.08

Genera

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	72.0000

 Hydrology [sec]
 Surface Hydraulics [sec]

 60.0000
 0.1000

Min Calculation Time: 60.0000 0.1000

Max Calculation Time: 30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set: Extern Hydrograph Set: Curve Number Set:

> Green-Ampt Set: Vertical Layers Set:

Impervious Set:

Time Marching: SAOR IA Recovery Time: 24.0000 hr

Max Iterations: 6 Over-Relax Weight 0.5 dec

Fact:

Max dZ: 1.0000 ft

Smp/Man Basin Rain Global dZ Tolerance: 0.0010 ft

Opt:

Link Optimizer Tol: 0.0001 ft Rainfall Name: ~SFWMD-72

Rainfall Amount: 0.00 in

Edge Length Option: Automatic Storm Duration: 72.0000 hr

> Dflt Damping (1D): 0.0050 ft Min Node Srf Area 100 ft2

> > (1D):

Energy Switch (1D): Energy

Comment:

Scenario: Scenario1

Run Date/Time: 5/24/2023 11:28:49 AM

Program Version: ICPR4 4.07.08

C	0	n	0	r	ы

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	72.0000

Hydrology [sec] Surface Hydraulics [sec]

Min Calculation Time: 60.0000 0.1000 Max Calculation Time: 30.0000

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Save Restart: False

Rainfall Folder:

Unit Hydrograph Folder:

Boundary Stage Set: Extern Hydrograph Set: Curve Number Set:

> Green-Ampt Set: Vertical Layers Set: Impervious Set:

Tolerances & Options

Time Marching: SAOR

Max Iterations: 6 Over-Relax Weight 0.5 dec

Fact:

dZ Tolerance: 0.0010 ft

Max dZ: 1.0000 ft

Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr

Smp/Man Basin Rain Global

Opt:

~SFWMD-72 Rainfall Name:

Rainfall Amount: 10.00 in Storm Duration: 72.0000 hr

Dflt Damping (1D): 0.0050 ft Min Node Srf Area 100 ft2

(1D):

Energy Switch (1D): Energy

Comment:

Scenario1 Scenario:

Run Date/Time: 5/24/2023 11:28:59 AM

Program Version: ICPR4 4.07.08

Run Mode: Normal

> Month Day Hour [hr] Year

Start Time: 0 0 0.0000 0 End Time: 0 0 0 24.0000

> Hydrology [sec] Surface Hydraulics [sec]

60.0000 0.1000 Min Calculation Time: Max Calculation Time: 30.0000

Hydrology

l	Year	Month	Day	Hour [hr]	Time Increment [min]
1	0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Save Restart: False

Unit Hydrograph Folder:

Rainfall Folder:

Lookup Tables

Boundary Stage Set: Extern Hydrograph Set: Curve Number Set:

> Green-Ampt Set: Vertical Layers Set: Impervious Set:

Time Marching: SAOR IA Recovery Time: 24.0000 hr

Max Iterations: Over-Relax Weight 0.5 dec

Fact:

Smp/Man Basin Rain Global dZ Tolerance: 0.0010 ft

Opt:

Max dZ: 1.0000 ft

Link Optimizer Tol: 0.0001 ft ~SCSII-24 Rainfall Name: Rainfall Amount: 5.00 in

Edge Length Option: Automatic Storm Duration: 24.0000 hr

> Dflt Damping (1D): 0.0050 ft Min Node Srf Area 100 ft2

> > (1D):

Energy Switch (1D): Energy

Comment:

Simulation: 25YR-72HR

Scenario: Scenario1

Run Date/Time: 5/24/2023 11:29:01 AM Program Version: ICPR4 4.07.08

Genera

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	72.0000

Hydrology [sec]	Surface Hydraulics	[sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:	30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Table

Resources

Rainfall Folder:

Unit Hydrograph Folder: Lookup Tables

Boundary Stage Set: Extern Hydrograph Set: Curve Number Set:

> Green-Ampt Set: Vertical Layers Set: Impervious Set:

Tolerances & Options

Time Marching: SAOR IA Recovery Time: 24.0000 hr

Max Iterations: 6
Over-Relax Weight 0.5 dec

Fact:

dZ Tolerance: 0.0010 ft Smp/Man Basin Rain Global

Opt:

Max dZ: 1.0000 ft

Link Optimizer Tol: 0.0001 ft Rainfall Name: ~SFWMD-72

Rainfall Amount: 9.00 in

Edge Length Option: Automatic Storm Duration: 72.0000 hr

Dflt Damping (1D): 0.0050 ft Min Node Srf Area 100 ft2

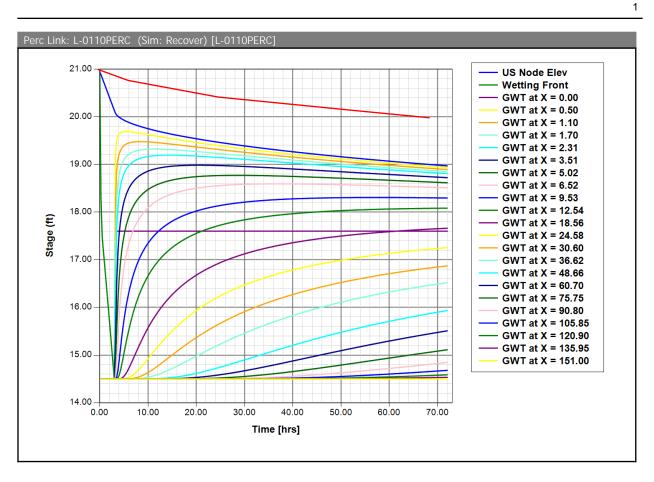
(1D):

Energy Switch (1D): Energy

Comment:



RECOVERY





GEOTECH REPORT

Headquarters 11345 U.S. Highway 1 Sebastian, FL. 32958 Orlando 723 Progress Way Sanford, FL. 32771



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December 30, 2022

Workspace Collective Adam Ramsay 603 E. Fort King Street Ocala. FL 34471

Re: 1000 State Road 70 Okeechobee, Florida

KSM Project #: 2210339-b&p

Dear Mr. Ramsay:

As requested, KSM Engineering & Testing has performed a preliminary subsurface investigation at the referenced site. The purpose of this investigation was to determine the general nature of the subsurface conditions at the subject property and to offer preliminary guidance on the development of the property for its intended use. Presentation of the data gathered during the investigation, together with our geotechnical related opinions, are included in this report.

Scope of Work and Professional Service Agreement:

The scope of work and the agreement to perform a geotechnical exploration was provided by KSM's October 27, 2022, proposal to Workspace Collective, in care of Mr. Adam Ramsay. The agreement was signed by Mr. Ramsay on November 4, 2022 and was returned to KSM thereafter.

Summary of Findings and Conclusions:

The following is a summary of the principal findings and conclusions that are contained in this report, based on the results of KSM's subsurface exploration and analytical laboratory testing:

- Within the depth of exploration, the property was underlain by generally weak (very loose to loose) near surface layer of granular material with an organic content varying from less than 5%, which is the typically accepted limit before a soil is considered problematic for construction, to 10.9%. When inherently problematic soils were encountered they were typically at the surface with an estimated thickness of 1 foot however several borings encountered problematic soil deposits to depths ranging from 1 to 6 feet below grade. Below the organic layer deposits of loose to medium dense cohesionless fine sand underlain by loose to medium dense clayey/silty fine sand were discovered.
- The recorded depth to the surface of the groundwater body was very shallow and KSM expects that the surface of the wet season groundwater body will be at or near to the altitude of the existing land surface.

1000 State Road 70 Okeechobee, Florida KSM Project #: 2210339-b&p



- The discovered subsurface conditions are expected to negatively impact the development of this property in that creation of a stable subgrade for support of the proposed dwellings and roadways will be difficult due to the combined effect of the expected shallow position of the groundwater surface, the excessive organic content and weak nature of the upper zones of soil. Specifically, we anticipate that the excavation and backfill of near surface organic deposits and the compaction of very loose subgrade soils may be difficult due to the shallow water table position. Consideration should also be given to scheduling the earthwork operations to be performed during the seasonally dry winter and spring months to decrease the amount of anticipated dewatering that will be required.
- The installation of buried utility lines (i.e., stormwater piping, water supply lines, power lines, and telecommunication lines) are likely to involve excavation of trenches below the groundwater surface. Accordingly, dewatering of the trench excavations is likely to be necessary to enable the installation to be performed in dry conditions.
- Given the existing weak nature of the subgrade soils, the foundations that support the
 new structures on this property should bear at elevations that are as shallow as
 practical, in order to contain the stress transmitted by the foundations within the
 compacted engineered fill soils that will be placed during the mass grading operations.
 Monolithic slab foundation systems are generally better suited to this situation than are
 conventional shallow spread footings and a separate slab-on-grade systems.

The nature and extent of earthwork methods that would best suit this property will depend to a great extent on the details of the proposed grading and drainage plan. The development of the land into a retail development would benefit from the raising the land surface above the existing landform, by installation of structural fill, in order to enable the streets and structures to be supported above the seasonal groundwater levels, upon engineered fill materials. This report offers preliminary recommendations that assume that the landform will be raised a height of not less than 5 feet above the existing land surface.

Site Description:

<u>Location & Physiography</u> – The project site was located in Okeechobee, Florida, on State Route (SR) 70. At the time of the investigation, the site was found to have a generally flat topography. Vegetation on the site consisted mostly of light ground surface cover vegetation and many trees.

Project Description:

The following information is based, in part, on our review of the Conceptual Sizing Plans for "Park Prime Retail (22.10.10)" and "Plan Park Street Commerce Center (12.14.22)" by American Civil Engineering Co. Due to the preliminary nature of this project, it is our understanding that the development site plan has not been finalized. Please contact KSM to provide the most recent plans, so we can make any adjustments and review this report accordingly.

<u>Overall Development</u> – It is our understanding that the proposed site may be developed with a typical low rise three-story commercial hotel structure, a one-story car wash building, a one-story commercial restaurant building and various one-story storage structures/canopies constructed on the property. As part of the overall development, two (2) ponds are proposed



for the purpose of stormwater management on the site. Typical pavement areas will consist of driveways and parking areas.

The Scope of KSM's Study Included:

- 1. Performed soil borings within the approximate limits of the proposed structures and pavement areas, as well as in the proposed pond locations.
- 2. Measured the encountered groundwater level at each boring.
- 3. Reviewed the soil samples and field soil boring logs (by a geotechnical engineer) in our laboratory and assigned analytical laboratory testing to selected samples.
- 4. Performed the assigned analytical laboratory tests on the selected soil samples.
- 5. Evaluated the discovered subsurface conditions with respect to the construction of the proposed structures and roadways.
- 6. Prepared this preliminary report to document the data that was gathered, to present our findings and to present our preliminary recommendations.

Site Investigation:

<u>Limitations</u> – The preliminary opinions and recommendations are based on the discovered subsurface conditions in the locations of the performed tests.

<u>Subsurface Testing</u> – KSM's site investigation program consisted of performing the following tests:

- Twenty-nine (29) Standard Penetration Test (SPT) Borings, terminated at approximate depths ranging from 10 to 15 feet below the existing ground surface, were performed within the limits of the site.
- Fifteen (15) Hand Auger (HA) Borings with corresponding Static Cone Penetrometer (SCP) Soundings, terminated at an approximate depth of 6 feet below the existing ground surface, were performed within the limits of the proposed pavement areas.
- Two (2) SPT borings, denoted as PB, terminated at an approximate depth of 20 feet below the existing ground surface, were performed within the limits of the proposed stormwater management areas.

<u>SPT Borings</u> – The SPT borings were performed in general accordance with procedures described in ASTM D1586.

<u>HA Borings</u> – The HA borings were performed using a bucket auger tool to advance the borehole and to return disturbed samples of the soils. The drilling was performed in general accordance with the procedures delineated in ASTM D1452.

<u>SCP Soundings</u> – Execution of a SCP sounding consists of pushing a thin steel shaft, with an attached 60°-conical point, by hand through the soil. The capacity of this tool to measure the relative density of the soil is directly related to the weight that is applied on the shaft by the technician that operates the tool. The thrust required to push the cone tip is measured by an



attached proving ring with a calibrated gauge. The value of the bearing pressure exerted by the cone point has been correlated with the relative soil density. The relationship of the SCP reading to the relative density is listed in the table below:

Static Cone Penetrometer							
Relative Density	Static Penetrometer Reading						
Very Loose or Soft	<15						
Loose	15-40						
Medium Dense	40-70						
Dense	>70						

<u>Soil Classification</u> – The field soil boring logs and recovered soil samples were transported to KSM's office from the project site. Following the completion of the field exploration activities, visual and tactile examination of the soil samples was performed by a geotechnical engineer to identify the engineering classification of the soil samples that were obtained in the field exploration. The visual classification of the samples was performed in general accordance with the current United Soil Classification System (ASTM D2487).

<u>General Subsurface Soil Classification Summary</u> – The following table outlines the general subsurface conditions encountered during our investigation. Refer to the boring logs and location map for specific information regarding our interpretation of the field boring logs.

	Generalized Soil Profile
Approximate Depth Below Grade (Feet)	Discovered Subsurface Conditions
0 to 5	Very loose sand with organic material (problematic soil deposits) generally within 1 foot of the surface however some borings revealed problematic soil deposits to depths of 5 feet below grade;
	Very loose to medium dense fine sand
6 to 15	Loose to medium-dense fine sand, slightly clayey/slightly silty sand, and clayey sand

Observed Groundwater Table – Following the completion of each soil boring, the groundwater was allowed to attain an equilibrium level and the approximate depth to the surface of the groundwater was measured from existing ground elevation and recorded in the field log. The typical observed water table was encountered at approximate depths ranging from at or above the existing grade to depths of 5.3 feet below existing grade. These values were recorded at the time of investigation, which took place between the dates of November 21, 2022, and December 15, 2022.



Analytical Laboratory Testing:

<u>Natural Moisture Content</u> – Testing was performed in general accordance with procedures described in ASTM D2216-19.

<u>Fines Content</u> – Testing was performed in general accordance with procedures described in ASTM D1140-17.

<u>Organic Content Tests</u> – Testing was performed in general accordance with procedures described in ASTM D2974-20e1.

	Analytical Laboratory Testing Results										
Boring	Sample Depth (ft)	Soil Description	Moisture %	Fines %	Organic Content %						
B-1	2	Gray Clayey Sand	19%	24%							
B-3	13	Brown Clayey Sand	22%	29%							
B-9	6	Dark Gray Slightly Clayey Sand	26%	5.2%							
B-10	2	Dark Brown Sand with Organics	34%								
B-11	6	Light Gray Sand	24%	1.2%							
B-19	6	Gray Slightly Silty Sand	35%	5.5%							
B-19	13	Gray Clayey Sand	25%	23%							
B-22	2	Gray Sand	17%	3.1%							
B-24	2	Dark Gray Sand	34%	3.7%							
B-24	13	Brown Clayey Sand	2%	33%							
B-25	4	Brown Sand	31%	4.9%							
B-26	1	Dark Gray Sand with Traces of Roots	27%								
B-29	2	Brown Sand	22%	2.5%							
B-29	13	Brown Slightly Clayey Sand	29%	11%							
HA-2	1	Dark Gray Silty Sand with Organics	47%		7.9%						
HA-9	1	Dark Gray Silty Sand with Organics	45%	12%	8.0%						
HA-12	1	Dark Gray Sand, Slightly Silty with Organics	49%		10.9%						



		Analytical Laboratory Testing R	esults (Conti	nued)	
Boring	Sample Depth (ft)	Soil Description	Moisture %	Fines %	Organic Content %
PB-1	3	Light Gray Slightly Silty Sand	27%	5.8%	
PB-1	5	Grayish Brown Sand	24%	3.7%	
PB-1	10 Grayish Brown Sand		25%	2.2%	
PB-1	12	Gray Slightly Clayey Sand	23%	9.8%	
PB-2	3	Light Gray Sand	25%	2.0%	
PB-2	5	Dark Gray Sand, Slightly Silty	24%	11%	
PB-2	7	Light Gray Sand	25%	0.6%	
PB-2	12	Gray Clayey Sand	22%	33%	
PB-2	16	Light Brown Clayey Sand	27%	19%	
PB-2	18	Light Gray Clayey Sand with Shell	13%	12%	

Engineering Evaluation:

Based on the information obtained from this site investigation, we are pleased to offer the following evaluation:

<u>Limitations</u> – Due to the preliminary nature of this project, KSM recommends that additional testing is performed within the development features once the final locations are known. The following information is preliminary and based on the initial conceptual site layout and may not correspond to the final design site layout.

<u>Seasonal Groundwater Fluctuation</u> – The following table indicates the recorded measurement taken from the existing grade to the encountered groundwater table for each test location along with our estimated depth normal wet season water table and normal dry season water table depths (below existing grade) for the test locations. The measurements were taken after the borings were performed and the groundwater table was allowed to stabilize.

Estimated Normal Season Groundwater Table Fluctuation								
Test Location	Depth	(feet,') Below Existing	Grade					
(See Location Plan)	Measured Encountered Groundwater Table	Estimated Normal Wet Season Water Table	Estimated Normal Dry Season Water Table					
PB-1	1.0'	0.3'	3.3'					
PB-2	PB-2 2.4' 1.0'							

Absent land surface elevation measurements at the boring locations, and assuming that the surface of the groundwater table is not steeply inclined, KSM has concluded that borings that



featured deeper groundwater surface depths were likely to have been drilled at locations where the land surface altitude was above boring locations that featured shallower groundwater surface depth measurements, or that the range and depth of the water table elevation may be affected by the proximity of man-made or natural drainage features. Accordingly, as part of the design phase geotechnical studies, KSM recommends that the land surface elevation of the borings be surveyed to determine the approximate altitude of the groundwater surface, at the time that the measurements were made. Using that data, KSM can provide a more precise estimate of seasonal groundwater levels.

<u>Dewatering</u> – Given the normal wet season groundwater surface level estimates, and assuming that KSM's estimates of the height of the fill stated in the "Project Description" section is accurate, it is KSM's preliminary opinion that the position of the groundwater table is unlikely to affect either the design or the installation of the shallow foundations that will support the dwellings constructed on this property. Conversely, KSM anticipates that the earthwork stage of site development will require the compaction and/or excavation of soils located below the groundwater surface. Additionally, excavations that are made to install buried utility lines could also require excavations below the groundwater surface. Accordingly, the earthwork contractor should recognize that temporary dewatering of excavations that penetrate below the prevailing groundwater surface will be necessary to allow the earthwork operations to be performed in dry conditions and plan his operations accordingly.

<u>Analysis and Opinions: Fill Suitability</u> – Based on the discovered soils in the locations of PB-1 and PB-2, KSM offers the following recommendations on the suitability of fill deposits that will be used to rough grade the property in preparation for the installation of the roadway and utility networks and for the construction of the individual dwellings.

- Fine sands deposits, which feature less than 5 percent "fines", are considered to be best suited as a structural fill source because they drain freely when excavated below the water table and are not as moisture sensitive as material that contains higher fines.
- The slightly clayey/silty fine sands containing between 5 and 12 percent fines, are suitable as structural fill, but may require extra effort to be properly moisture conditioned and compacted. These soil deposits drain fairly well but will require more effort than the fine sand deposits above to create optimum moisture conditions in order to avoid compaction issues. Thinner lifts not exceeding 6 inches in loose thickness may be required for placement and compaction of these soils.
- Clayey and/or silty fine sand deposits, (i.e., sand deposits that contain more than 12 percent fines, by weight) are typically not considered desirable for structural fill, due to their poor workability characteristics in comparison with sand deposits that feature fewer fines. Due to the moisture sensitive nature of these materials a substantial amount of time and effort would be required in order to improve their workability. The discovered clayey sand deposits may be more suitable for use as fill material in non-structural areas outside the building pad and within the pavement area footprint, and potentially as a stabilized subgrade component in the roadway pavement cross section. KSM recommends that the earthwork contractor use there materials selectively. Properly compacted, such materials can be used as structural fill, provided that the earthwork contractor is prepared to contend with the effort that will be



necessary to moisture condition and densify such soil deposits. Such efforts could include draining/drying of saturated soils before attempting compaction, reduction in the thickness of lifts that are compacted, and the use of non-vibratory compaction machinery.

 Soil deposits that featured organic contents greater than 5 percent should not be considered suitable soils for structural fill.

<u>Borrow Source Suitability Opinions</u> – KSM assumes that the soil that is excavated to create the stormwater management basin will be used as a source of fill in creating the landform of the developed property. Based on the results of the field investigation, together with the analytical laboratory testing of the selected soil samples, KSM offers the following opinions:

- From the surface to an approximate depth of 10 feet below existing grade Deposits of fine sand and slightly clayey/silty sand were discovered. These granular, low fines content deposits can be considered suitable for structural fill.
- From a depth of approximately 10 to 15 feet below existing grade Deposits of clayey/silty sand were discovered. We anticipate that most of the excavated soils within this depth interval will feature fines contents that exceed 12 percent. These soil deposits are expected to be moisture sensitive soils, given their elevated fines content and the estimated shallow position of the surface of the wet season groundwater table. To avoid compaction-related issues during construction, it is KSM's opinion that excavated soils with elevated fines content should not be considered suitable as structural fill for building pads or in pavement areas. In no case should these materials be used in areas that are expected to contain septic drain fields, due to their expected low internal permeability.
- From a depth of approximately 15 to 20 feet below existing grade Deposits of fine sand with shell and slightly silty/clayey sand were encountered. These granular, low fines content deposits can be considered suitable for structural fill.

The contractor and civil engineer should coordinate to determine the appropriate methods for borrow source excavation. It is important to segregate the low-fines soil deposits from the near-surface clayey and silty sand deposits.

Preliminary Utility and Storm Sewer Opinions – Due to the expected very shallow seasonal depth to the surface of the groundwater, we believe that difficulties may arise when installing any utility that will require trenching and/or that will rely on gravity flow. Trench excavations that encounter very loose subsurface materials may require over-excavation, typically to a depth of 1 foot below the utility subgrade elevation, backfilled with ¾-inch stone compacted to produce a firm, unyielding surface. Any excavated materials with elevated fines content will likely prove to be problematic if intended to be used as backfill. Blending of the excavated material with dry, clean fine sand may be necessary, but due to the time and effort required to properly blend these materials, for ease of construction and scheduling considerations, it may be advantageous to import clean, free-draining fine sand for use as utility trench backfill. Additionally, dewatering operations may be required in order to achieve proper backfill compaction requirements.



Analysis and Opinions: Preliminary Subgrade Opinions — Based on our experience in the area, the results of the borings, and KSM's understanding of the project, we believe that the current conditions of the near surface soils are problematic for development due to the high degree of variation between borings, elevated organic content, to the elevated fines content, to the very loose to loose condition of the near-surface soil deposits, and to the anticipated shallow depth to the groundwater table. Excavation of problematic soils and backfill of the exposed areas to create a stable platform for the expected fill deposits will require that temporary dewatering systems be installed to depress the groundwater level. Please note that estimating the vertical and horizontal limits of any problematic material was as part of our scope for this investigation. KSM recommends that a design level geotechnical investigation is performed on this site to aid in the development of design plans.

<u>Preliminary Minimum Roadway Opinions</u> – It is our preliminary opinion that the discovered subsurface conditions are generally problematic to support a roadway subgrade. It appears that prior to the installation of the proposed roadway section, improvement of the existing subgrade can be achieved using a proper excavation and backfilling techniques. Additionally, the cost of dewatering should be considered. Provided that the subgrade is properly prepared and that the building pads are properly installed, it is KSM's opinion that the improved subgrade can support the proposed roadway section.

The pavement should be designed for the anticipated axle weights, vehicle velocities, traffic mix and frequencies. Please refer to the following table for the minimum recommended pavement section.

A minimum of 16 inches of separation should be maintained between the bottom of the base and the high-season water table.

	Minimum Pavement Section								
Pavement	Material	Layer Thickness (in)							
Type	iviatei iai	Standard Duty	Heavy Duty						
	Florida DOT Asphalt Type 3	1.5	2.5						
Flexible	Base Course* (Min. LBR of 100) Cemented Coquina Rock	6	10						
	Stabilized Subgrade* (Min. LBR of 40)	12	12						

^{*} Compacted to minimum 98 percent of its modified dry Proctor value (AASHTO T180)

<u>Preliminary Foundation Opinions</u> – In order for a shallow foundation to perform satisfactorily, it must be able to support the structural loads while limiting both total and differential settlement to tolerable values. It is our preliminary opinion that the discovered subsurface conditions are generally problematic to support a building pad subgrade. It appears that prior to the installation of the proposed buildings pads, improvement of the existing subgrade can be achieved using a proper excavation and backfilling techniques. Additionally, the cost of dewatering should be considered. Provided that the subgrade is properly prepared and that the building pads are properly installed, it is KSM's opinion that conventional shallow foundation systems are feasible to support the expected low-rise (3-story maximum) structures.



For more precise building area site and roadway preparation recommendations, as well as recommendations pertaining to foundation design and settlement calculations, we recommend performing a design level investigation. KSM should be provided with the civil construction drawing set as well as the structural plans for review. Please see the section titled "Future Studies" for additional information.

Estimated Aquifer Parameters:

<u>Limitations</u> – Due to the preliminary nature of this project, KSM recommends that additional testing is performed within the proposed stormwater management features once the locations and elevations are better defined. The following information is preliminary and based on the initial stormwater management layout and may not correspond to the proposed stormwater management layout.

<u>Factor of Safety</u> – KSM has not applied a factor of safety to the estimated aquifer parameters within this report. The Engineer of Record is responsible for applying the appropriate factor(s) of safety to the estimated aquifer parameters contained within this report for use in their design. For any stratum where the estimated flow rate exceeds 10 inches per hour (20 feet per day), we recommend that a design flow rate equal to 10 in/hr (20 ft/day) is used.

<u>In-Field Testing</u> – At the test location, Usual Condition Test was performed in general conformance with the South Florida Water Management District described procedures for the 'Usual Open-Hole Test' method.

Estimated Aquifer Parameters – In-Field Testing							
Test Location	Estimated Hydraulic Conductivity (CFS/SF- Ft Head)						
P-1	2.5 x 10 ⁻⁵						
P-2	7.6 x 10 ⁻⁵						

<u>Laboratory Testing and Professional Judgement</u> – Selected samples obtained from our site investigation were tested in our laboratory in general accordance with ASTM D2434, ASTM D1140-17 and ASTM C136.

Estimated Aquifer Parameters – Laboratory Testing									
Test Location	Stratum Depth Range (ft)	Horizontal Saturated Flow Rate (in/hr)	Vertical Saturated Flow Rate (in/hr)						
P-1	0.8 – 1.8	1.9	0.9						
P-1	1.8 – 4.2	3.2	2.2 †						
P-2	0.0 - 4.5	7.0	5.8						

[†] Estimation; reduction of estimated horizontal saturated flow rate applied.



<u>Restrictive Stratum</u> – Based on the results of our soil borings and the laboratory testing, in boring PB-1 we encountered a stratum which we estimate exhibit restrictive flow rates relative to the overlying stratum, and are described below:

• Deposits of Dark Gray Silty Sand with Organics encountered at an approximate depth range from the surface to 0.8 feet below grade.

Future Studies:

<u>Design Phase Geotechnical Explorations</u> – KSM recommends that a design-phase geotechnical exploration be performed to determine whether individual structures are underlain by any organic soil deposits or inherently problematic soils and to generate the subsurface data that is necessary to provide site specific foundation design and earthwork recommendations. Upon request, KSM will provide a detailed scope of work and cost proposal to address these features, based on the preliminary plan documents.

Closure:

Based upon KSM's subsurface investigation at the above-mentioned project location, the reliance of the preliminary opinions and recommendations presented within this signed and sealed report is predicated on KSM being engaged to perform design-basis geotechnical explorations and testing. The opinions and recommendations given in this report are preliminary and should not be used to create final plan documents and specifications.

This report has been prepared in accordance with generally accepted soil and foundation engineering practices based on the results of the borings and the assumed loading conditions. No warranties, either expressed or implied, are intended or made. This report does not reflect any variations which may occur between the borings. If variations appear evident during construction, it will be necessary for you or your representative to engage KSM to perform any supplementary studies and to re-evaluate the recommendations made in this report.

Environmental conditions, wetland delineation, karst activity, water quality, and municipal requirements were not a part of this study.

KSM is pleased to have been 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.

Respectfully,

Christopher S. LeBrun, E.I. Geotechnical Engineer

Christopher LeBrun

Florida Lic. No. 1100022858

CCC/cv

Email to: adam@workspace-collective.com

No. 91598

*
STATE OF

FLORIDA

Cody C. Clawson, P.E. Geotechnical Engineer Florida Lic. No. 91598



BORING NUMBER B-01 PAGE 1 OF 1

			PROJECT NAME 1000 State Road 70 PROJECT LOCATION Okeechobee, Florida									
D/ DI	ATE STAF RILLING (RILLING N	RTED 12/15/22 CONTRACTOR METHOD _Split Spoon S	COMPLETED 12/15/22 Sample	GROUND ELEVA GROUND WATER AT TIME O	ESIZE inches							
- 1		ee Attached Location Pla										
	GRAPHIC LOG		MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	PENETROMETER	DRY UNIT WT. (pcf)	A SPT N VALUE A 20 40 60 80 PL MC LL 20 40 60 80 □ FINES CONTENT (%) □ 20 40 60 80			
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-	5	Gray Clayey Sand Brown Sand		X ss		3-4-4 (8)						
1339-B&P.GP		BIOWII Saliu		ss		4-4-4 (8) 3-2-2						
OCS (KSM-SERVER)/2210339\SOIL INVESTIGATION/2210339-B&P.GPJ	0	Dark Brown Slightly	/ Silty Sand	X ss		3-2-2 (4)	-					
VER)\2210339\SOIL	- - - -	Brown Sand	ottom of borehole at 15.0 feet.	ss		8-8-8 (16)	_					
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BORING NUMBER B-02 PAGE 1 OF 1

CLIENT	CLIENT Workspace Collective				PROJECT NAME 1000 State Road 70							
PROJE	CT NUM	IBER _2210339-b&p		_ PROJEC	T LOCAT	ON _	Okeechobe	e, Flo	orida			
DATE S	STARTE	D 12/14/22	COMPLETED 12/14/22	GROUND ELEVATION HOLE SIZE inches								
DRILLI	NG CON	TRACTOR		GROUND WATER LEVELS:								
DRILLI	NG METI	HOD Split Spoon San	nple	∑ at	TIME OF	DRILI	LING 0.9 f	t				
LOGGE	D BY _	DC/CW	CHECKED BY CCC	AT	END OF	DRILL	ING					
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10		Botto	om of borehole at 10.0 feet.		X ss		(9)			<u> </u>		

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BORING NUMBER B-03 PAGE 1 OF 1

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9-B&P.GP				s	S	6-7-6 (13)								
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BORING NUMBER B-04 PAGE 1 OF 1

	CLIENT Workspace Collective PROJECT NUMBER _2210339-b&p			PROJECT NAME 1000 State Road 70									
	PROJ	IECT N	NUMBER 2210339-b&	PROJECT LOCAT	ION _	Okeechobe	e, Flo	orida					
	DATE	STAF	RTED 12/12/22	COMPLETED 12/12/22	GROUND ELEVAT	TION _			HOLE	SIZE _i	nches		
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PROJECT	NUMBER 2210339-b&p	PROJECT	LOCAT	ION _	Okeechobe	e, Flo	orida		
DATE STA	RTED 12/15/22 COMPLETED 12/15/22	GROUND	ELEVAT	TION _			HOLE	SIZE inches	
DRILLING	CONTRACTOR	GROUND	WATER	LEVE	LS:				
DRILLING	METHOD Split Spoon Sample	∑ at :	TIME OF	DRILL	ING 2.1 f	t			
LOGGED E	Y DC/CW CHECKED BY CCC	AT	END OF	DRILL	ING				
NOTES _S	ee Attached Location Plan	AF1	TER DRIL	LING					
O DEPTH (ft) GRAPHIC			SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	PENETROMETER	DRY UNIT WT. (pcf)	A SPT N VALUE A 20 40 60 80 PL MC LL 20 40 60 80 □ FINES CONTENT (%) □ 20 40 60 80	
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	CLIE	NT _W	orkspace Collective		PROJECT NAMI	E 1000	State Road	d 70						
	PRO.	IECT N	NUMBER 2210339-b8	& p	PROJECT LOCA	ATION _	Okeechobe	e, Flo	orida					
	DATE	STAF	RTED 12/12/22	COMPLETED 12/12/22	GROUND ELEV	ATION		HOLE SIZE inches						
	DRIL	LING C	CONTRACTOR		GROUND WATE	R LEVE	LS:							
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BORING NUMBER B-07 PAGE 1 OF 1

	Fax: (7	72)-589-6469	
CLIE	NT Workspace Collecti	ve	PROJECT NAME 1000 State Road 70
PRO	JECT NUMBER 221033		PROJECT LOCATION Okeechobee, Florida
DAT	E STARTED 12/13/22	COMPLETED 12/13/22	
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BORING NUMBER B-08 PAGE 1 OF 1

CLIEN	NT <u>W</u>	orkspace Collective	PROJECT NAME 1000 State Road 70								
PROJ	JECT N	UMBER 2210339-b&p	PROJEC	T LOCAT	ON _	Okeechobe	e, Flo	orida			
DATE	STAR	TED 12/13/22 COMPLETED 12/13/22	GROUNE	ELEVA1	TION _			HOLE	SIZE inches		
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		Bottom of borehole at 10.0 feet.									
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BORING NUMBER B-09 PAGE 1 OF 1

CLIE	NT W	orkspace Collective		PROJECT NAME _1000 State Road 70								
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DAT	E STAF	RTED 12/15/22	COMPLETED12/15/22	GROUND	ELEVA	TION _		<u>.</u>	HOLE	SIZE inch	nes	
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O DEPTH	GRAPHIC LOG		ATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	PENETROMETER	DRY UNIT WT. (pcf)	20 4 PL 1 20 4	N VALU 0 60 MC 0 60 CONTEN	80 LL -1 80 T (%) \square
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BORING NUMBER B-10 PAGE 1 OF 1

CLIE	W_ T	orkspace Collective	PROJECT NAME 1000 State Road 70									
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GEOTECH BH PLOTS - GINT STD US LAB.GDT - 12/29/22 16:59 - K:\KSM FILES\22 DOCS (KSM-SER



BORING NUMBER B-11 PAGE 1 OF 1

CLIE	NT _W	orkspace Collective	PROJECT NAME _1000 State Road 70								
PRO.	JECT N	IUMBER 2210339-b&p	_ PROJEC	T LOCAT	TION _	Okeechobe	ee, Flo	orida			
DATE	STAF	RTED 12/15/22 COMPLETED 12/15/22	_ GROUNI	ELEVA	TION _			HOLE	SIZE inches		
DRIL	LING C	CONTRACTOR	_ GROUNI	WATER	LEVE	LS:					
DRIL	LING N	METHOD Split Spoon Sample	$oxedsymbol{oxed}$ At	TIME OF	DRIL	LING <u>0.8</u> 1	ft				
LOG	GED B	Y _DC/CW CHECKED BY _CCC	_ AT	END OF	DRILL	.ING					
NOTE	S Se	ee Attached Location Plan	_ AF	TER DRI	LLING						
O DEPTH	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	PENETROMETER	DRY UNIT WT. (pcf)	A SPT N VALUE A 20 40 60 80 PL MC LL 20 40 60 80 □ FINES CONTENT (%) □ 20 40 60 80		
	-0 0	□ Dark Gray Slightly Silty Sand □ Dark Gray Sand with Traces of Roots		ss ss	-	1-1-2 (3) 1-1-2 (3)	-		^		
5	Ø	Gray Sand Light Gray Sand		ss	-	4-5-5 (10) 5-9-9 (18)	-				
10		Dark Gray Sand Light Gray Slightly Clayey Sand		SS SS	_	2-2-2 (4)	_				
15	· : <u>/·/</u>	Bottom of borehole at 15.0 feet.		V V		(ד)		_			

GEOTECH BH PLOTS - GINT STD US LAB.GDT - 12/29/22 16:59 - K:\KSM FILES\22 DOCS (KSM-SEF



BORING NUMBER B-12 PAGE 1 OF 1

CLIENT Wo	orkspace Collective	PROJECT NAME 1000 State Road 70									
PROJECT N	UMBER 2210339-b&p	_ PROJECT I	LOCAT	ION _	Okeechobe	e, Flo	orida				
DATE START	TED 12/15/22 COMPLETED 12/15/22	_ GROUND E	ELEVAT	ION _			HOLE	SIZE _i	nches		
DRILLING CO	ONTRACTOR	_ GROUND V	WATER	LEVE	LS:						
DRILLING M	ETHOD Split Spoon Sample	$_$ AT TI	IME OF	DRILL	ING 1.8 f	t					
LOGGED BY	DC/CW CHECKED BY CCC	AT E	ND OF	DRILL	ING						
NOTES See	e Attached Location Plan	AFTE	ER DRIL	LING							
O DEPTH (ft) GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	PENETROMETER	DRY UNIT WT. (pcf)	20 PL F 20 FINE	40	60 C L 60 NTENT	80 LL -1 80
	Dark Gray Sand <u>▽</u>	X	ss	_	1-2-3 (5)			^		<u> </u>	
5	Dark Gray Slightly Silty Sand		ss		4-5-5 (10)						
	Dark Gray Sand	X	ss	-	4-4-4 (8) 4-5-7 (12)						
10	Gray Sand		ss	-	6-7-7 (14)				<u>:</u>	<u> </u>	
	Bottom of borehole at 10.0 feet.			•			_				

GEOTECH BH PLOTS - GINT STD US LAB GDT - 12/29/22 16:59 - K:\KSM FILES\\(\text{RSM-SERVER}\)\\(\text{22}210339\)\\(\text{SSM-SERVER}\)\\(\text{IUNESTIGATION}\)\\(\text{SSTIGATION}\)\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\



BORING NUMBER B-13 PAGE 1 OF 1

PROJ PATE PRILL PRILL	ECT N	orkspace Collective IUMBER <u>2210339-b&p</u> ITED <u>12/15/22</u>		PROJECT NAME PROJECT LOCA				rida							
OATE ORILL ORILL	STAR			PROJECT LOCA		OKERCHODE	IC	n IClia							
RILL		12/10/22	COMDIETED 19/15/99	GROUND ELEVA					SIZE inch	26					
RILL	100	ONTRACTOR	COMPLETED 12/15/22					HOLE	JIZE INCH	50					
			Sample				ft								
.OGG			CHECKED BY CCC												
			an												
							Ľ		▲ SPT	N VALUE	: 🛦				
O DEPTH (ff)	GRAPHIC LOG		MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	PENETROMETER	DRY UNIT WT. (pcf)	20 4 PL 20 4	0 60 MC I 0 60 CONTENT	80 L H 80 (%) □				
- -		Light Gray Sand ∑		ss		1-1-3 (4)			A						
- 5				X SS		(10)				<u>:</u>	 :				
_				ss		4-5-5 (10)			+	:					
-		Gray Sand		ss		6-7-7 (14)			A	<u>:</u>					
- 10				√ ss		6-6-7				<u>:</u> :					
_				/\		(13)				<u>:</u> :					
-										· · · · · · · · · · · · · · · · · · ·					
- 15		Gray Slightly Claye	y Sand	ss		3-3-4 (7)			A	<u>:</u> :					
		В	ottom of borehole at 15.0 feet.	, , , , , , , , , , , , , , , , , , ,				_							
	0	5	U Light Gray Sand ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	Usight Gray Sand Sand Gray Sand Gray Sand Gray Slightly Clayey Sand	Light Gray Sand SS SS Gray Sand Gray Slightly Clayey Sand SS SS SS SS SS SS SS SS SS	Light Gray Sand SS SS Gray Sand SS Gray Slightly Clayey Sand SS SS SS SS SS SS SS SS SS	Usht Gray Sand SS 1-1-3 (4) SS 4-5-5 (10) Gray Sand SS 6-7-7 (14) SS Gray Slightly Clayey Sand SS Gray Slightly Clayey Sand SS 3-3-4 (7)	Light Gray Sand SS 1-1-3 (4) 4-5-5 (10) SS Gray Sand SS Gray Slightly Clayey Sand SS Gray Slightly Clayey Sand SS SS SS SS SS SS SS SS SS	Light Gray Sand SS	Usht Gray Sand SS	5 Light Gray Sand 5 SS 6-5-5 (10) 4-5-5 (10) Gray Sand SS 6-7-7 (14) SS 6-6-7 (13) SS 6-6-7 (13) SS				



BORING NUMBER B-14 PAGE 1 OF 1

CLIENT _V	Vorkspace Collective	PROJECT NAME 1000 State Road 70								
PROJECT	NUMBER 2210339-b&p	PROJECT LOCATION Okeechobee, Florida								
DATE STA	RTED 12/13/22 COMPLETED 12/13/22	GROUND ELEVATION HOLE SIZE inches								
DRILLING	CONTRACTOR	GROUND WATER LEVELS:								
DRILLING	METHOD Split Spoon Sample	\overline{Y} AT TIME OF DRILLING 2.0 ft								
LOGGED E	BY DC/CW CHECKED BY CCC	AT END OF DRILLING								
NOTES S	ee Attached Location Plan	AFTER DRILLING								
O DEPTH (ft) (RT) GRAPHIC		SAMPLE TYPE NUMBER (RQD) RECOVERY (RQD) BLOW COUNTS (N VALUE) COUNTS (N V								
5 5 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Light Gray Sand	SS 2-2-4 (6) SS 6-7-7 (14) 7-10-10 (20) SS 3-4-4 (8) SS 6-6-7 (13)								
	Bottom of borehole at 10.0 feet.									

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BORING NUMBER B-15 PAGE 1 OF 1

			Fax: (772)-5	89-6469									
	CLIE	NT <u>W</u>	orkspace Collective		PROJEC	TNAME	1000	State Road	d 70				
	PRO.	JECT N	IUMBER _2210339-b&					Okeechobe		rida			
	DATE	STAR	TED 12/14/22	COMPLETED 12/14/22	GROUN	D ELEVA	TION _			HOLE	SIZE inc	nes	
	1								_=		-		
	1			Sample		TIME OF	DRILL	_ING 2.31	ft				
	1			CHECKED BY CCC									
	1			lan									
						1					A CD:	T NI \ / A I I I	
		0				SAMPLE TYPE NUMBER	% /		PENETROMETER	DRY UNIT WT. (pcf)	▲ SP	Γ N VALU! 40 60	
	DEPTH (ft)	GRAPHIC LOG		MATERIAL RECORDINATION			H E	BLOW COUNTS (N VALUE)) ME	<u> </u>	PL		L <u>L</u>
	iii	LCRA	'	MATERIAL DESCRIPTION		IDM IOM	98	BLC SOU	T.Y	59	20	40 60	80
		٥				SAN	RECOVERY (RQD)	02		J.S.	☐ FINES	CONTEN	Γ (%) 🗆
	0	10.00000	Light Gray Sand						<u>a</u>		20	40 60	80
	ļ -		Light Gray Sand								· · · · · · · · · · · · · · · · · · ·		
	ļ .		Σ			Ss		1-1-5 (6)			. ←	<u> </u>	
	<u> </u>		-			V V					\	<u> </u>	
	ļ .		Dark Brown Sand			ss		5-8-10 (18)			}		
2	5		2.5 Garid			V 1					<u> </u>		
&P.G	-					X ss		7-7-9 (16)					
39-B	L .						1	(,			<i> </i>	.ii	
2103	L .					X ss		8-6-5 (11)				<u>.ii</u>	
ION/2	L .							(11)				<u>.ii</u>	
GATI	10		Light Gray Sand			ss		5-4-6 (10)				<u>.ii</u>	
/ESTI	L.		Light Gray Gand				1	(10)					:
Z	L.											<u>.ii.</u>	
08\6	L.												
1033			Gray Slightly Silty	Sand			-	6-5-4					:
R)/22	15					X ss		(9)			A	: :	:
RVE			E	Bottom of borehole at 15.0 feet.									
M-SE													
s (KS													
000													
3/22													
FILE													
KSM													
16:55													
9/22													
12/2													
EDT.													
LAB.(
SO													
GEOTECH BH PLOTS - GINT STD US LAB. GDT - 12/29/22 16:59 - K.\KSM FILES\22 DOCS (KSM-SERVER)\2210339\SOIL INVESTIGATION\2210339-8&P.GPJ													
GINT													
TS-													
I PLO													
H BH													
TEC													
GEC													



BORING NUMBER B-16 PAGE 1 OF 1

		orkspace Collective									
1		UMBER 2210339-b&p		_							
		TED 12/13/22 COMPLETED 12/13/22					HOLE SIZ	E inches			
1		ONTRACTOR									
DRILI	LING N	IETHOD Split Spoon Sample	AT TIME C	F DRIL	LING						
LOGO	GED B	CHECKED BY CCC									
NOTE	S _Se	e Attached Location Plan	AFTER DE	ILLING							
O DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	PENETROMETER	DRY UNIT WT. (pcf)	▲ SPT N 20 40 PL M 20 40 FINES CO 20 40	60 1C 60 NTENT	80 LL ⊢ 80 Γ (%) □	
		Gray Sand						: :			
5 10		Light Gray Sand Gray Sand, Slightly Silty	ss ss ss ss ss ss ss		1-1-2 (3) 5-6-6 (12) 7-8-10 (18) 4-8-7 (15) 6-5-3 (8)						
15		Gray Clayey Sand	ss		5-5-5 (10)				<u></u>		
		Bottom of borehole at 15.0 feet.									

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BORING NUMBER B-17 PAGE 1 OF 1

PRO.	JECT N	orkspace Collective IUMBER _2210339- ITED _12/15/22	b&p	PROJECT NAME _1000 State Road 70 PROJECT LOCATION _Okeechobee, Florida GROUND ELEVATION HOLE SIZE _inches GROUND WATER LEVELS:							
DRIL	LING N	IETHOD Split Spoor	on Sample CHECKED BY CCC Plan	$oxed{oxed}$ AT TIME OI	DRIL DRILL	LING _2.0					
O DEPTH	GRAPHIC LOG		MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	PENETROMETER	A SPT N VALUE ▲ 20 40 60 80 PL MC LL 20 40 60 80 □ FINES CONTENT (%) 20 40 60 80			
		Dark Gray Sand		ss ss ss		1-2-2 (4) 4-5-5 (10) 4-3-3 (6)					
4)/2210339ISOIL INVESTIGATION/221033		Light Gray Sand	1	ss ss	-	6-8-8 (16) 7-8-8 (16) 8-9-8 (17)					
GEOTECH BH PLOTS - GINT STD US LAB.GDT - 12/29/22 16:59 - K:\KSM FILES\(\)\ZZ DOCS (KSM-SERVER)\(\)\ZZ 10339\(\)SQU 1 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			Bottom of borehole at 15.0 feet.								



BORING NUMBER B-18 PAGE 1 OF 1

	CLIENT Workspace Collective					PROJECT NAME 1000 State Road 70						
	PROJ	ECT N	IUMBER 2210339-b&p		PROJECT LOCATION Okeechobee, Florida							
	DATE	STAR	RTED 12/15/22	COMPLETED 12/15/22	GROUN	D ELEVA	TION _			HOLE	SIZE inches	
	DRILI	ING C	ONTRACTOR									
				sample	$\overline{igspace}$ at time of drilling $\underline{1.8~\mathrm{ft}}$							
				CHECKED BY CCC								
			ee Attached Location Pla			TER DRI						
						1			<u>~</u>		▲ SPT N VALUE ▲	
	O DEPTH (ft)	GRAPHIC LOG		MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	PENETROMETER	DRY UNIT WT. (pcf)	20 40 60 80 PL MC LL 20 40 60 80 □ FINES CONTENT (%) □ 20 40 60 80	
	 		Dark Gray Slightly \$	Silty Sand		ss	_	1-2-2 (4)	-		↑	
ſ	 _ 5		Dark Gray Sand			ss		3-4-4 (8)				
339-B&P.GF	 		Light Gray Sand			ss		4-5-7 (12)	_			
TION/2210	 		Dark Gray Sand			X ss		5-6-7 (13)				
NVESTIGA.	10 					X ss		3-4-6 (10)			A	
1339\SOIL II	 	7.8.47.87										
)/2210	 15		Light Gray Slightly	Clayey Sand with Shell Fragments		ss		4-5-6 (11)				
3VER	13	<i>Y/////</i>	1 B	ottom of borehole at 15.0 feet.		<i>V</i> V		(11)		_		
GEOTECH BH PLOTS - GINT STD US LAB. GDT - 12/29/22 16:59 - K/KSM FILES/22 DOCS (KSM-SERVER)/2210339/SOIL INVESTIGATION/2210339-8&P. GPJ												



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CLIENT Workspace					PROJECT NAME 1000 State Road 70											
	2210339-b&p		PROJECT LOCATION Okeechobee, Florida													
		COMPLETED 12/15/22		ELEVA ^T	TION _			HOLE SIZE _ inches								
				$\overline{2}$ at time of drilling $\underline{1.8 \text{ ft}}$												
		nple														
		CHECKED BY CCC														
NOTES See Attacl	ned Location Plan		AF	TER DRI	LLING				ı							
O DEPTH (ft) (ft) (CDG LOG		ERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	PENETROMETER	DRY UNIT WT. (pcf)	20 PL 	40	60 L 60 ΓΕΝΤ	80 L H 80 (%) □				
1 (4) (4)	nt Gray Sand										. <u>.</u>					
│ │ │	y Slightly Silty San	d		ss		1-2-2 (4)			↑	<u>.</u>						
				ss		4-5-5 (10)										
5						, ,					. <u>.</u>					
P B B P O				ss		4-4-5 (9)					. <u>i</u>					
OCS (KSM-SERVER))2210339\SOIL INVESTIGATION\2210339-B&P.GPJ	y Sand			ss		6-7-7 (14)										
OL -	y Sanu				1	6-5-5			<u>:</u>		. <u></u>					
<u>5</u> 10				X ss		(10)			:	<u>:</u> :	:	:				
¥											:	:				
TIOS/W											:					
© Gra	y Clayey Sand			\ \		6-4-5					:	:				
15				SS		(9)			A	:	:	<u> </u>				
SERVE	Botto	om of borehole at 15.0 feet.														
XSM X-																
) soo																
\22 D																
FILES																
IKSM																
2 16.6																
2/29/2																
1- TO																
LAB.G																
SN Q																
TSTN																
B-GII																
PLOT																
GEOTECH BH PLOTS - GINT STD US LAB.GDT - 12/29/22 16:59 - K.;KSM FILES/22 D																
SOTEC																
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BORING NUMBER B-20 PAGE 1 OF 1

	CLIENT Workspace Collective			PROJECT NAME 1000 State Road 70										
			NUMBER <u>2210339-b&p</u>	COMPLETED _12/15/22				<u>Okeechobe</u>			SIZE inches			
				COMPLETED _12/15/22		D ELEVA D WATER			HOLE SIZE inches					
				ample					ft					
				_ CHECKED BY CCC										
				in		TER DRI								
									<u>~</u>		A SDT N.V.	\\\\\\\		
	O DEPTH (ft)	GRAPHIC LOG		IATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	PENETROMETER	DRY UNIT WT. (pcf)	△ SPT N V/ 20 40 PL MC 20 40 □ FINES CONT 20 40	60 80 LL 60 80 ENT (%) \Box		
			Dark Gray Sand			ss		1-1-2			^			
Į.	 5					ss		3-4-5 (9)				i i		
39-B&P.GP			Light Gray Sand			ss		5-6-7 (13)						
ION\22103:	 					ss		7-8-8 (16)						
VESTIGAT	10					ss		6-6-7 (13)						
339\SOIL IN\														
3)/2210	 15		Gray Sand, Slightly	Silty with Traces of Shell		ss		4-4-4 (8)						
RVEF	10	גווע	Во	ottom of borehole at 15.0 feet.		<i>V</i> V				_				
GEOTECH BH PLOTS - GINT STD US LAB.GDT - 12/29/22 16:59 - K.1/KSM FILES/22 DOCS (KSM-SERVER)/2210339/SOIL INVESTIGATION/2210339-B&P.GPJ														



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	CLIENT Workspace Collective			PROJECT NAME 1000 State Road 70									
	PROJ	IECT N	NUMBER 2210339-b	&p	PROJECT LOC	CATION	Okeechobe	ee, Flo	Florida				
	DATE	STAF	RTED 12/14/22	COMPLETED 12/14/22	GROUND ELE	VATION			HOLE	E SIZE inches			
	DRILI	LING (CONTRACTOR		GROUND WAT	ER LEVE	ELS:						
			METHOD Split Spoon			OF DRIL	LING 2.3	ft					
	LOGO	SED B	Y DC/CW	CHECKED BY CCC									
	NOTE	S _Se	ee Attached Location I	Plan	AFTER DRILLING								
F					111			Ľ.		▲ SPT N VALUE ▲			
	_	೨			SAMPLETYPE	ا الا	, s (PENETROMETER	ONIT WT.	20 40 60 80			
	DEPTH (ft)	GRAPHIC LOG		MATERIAL DESCRIPTION	"	RECOVERY (RQD)	BLOW COUNTS (N VALUE)	Š	N C	PL MC LL			
	DE	GR/J			MP				 ≿				
	0				S A	 		PEN	DRY	☐ FINES CONTENT (%) ☐ 20 40 60 80			
T			Dark Gray Sand							20 40 00 00			
ļ	-				<u> </u>	ss	1-1-2	1		A			
ļ	-		Ž		<u> </u>	_	(3)	1					
ſ	-				Ms	SS	4-5-5						
_	5				Į V		(10)	_					
P.GP.			Danis Drawn Can	1		SS	5-6-6						
39-B&	_		Dark Brown Sand	ı			(12)	-					
21035	_		Light Gray Sand			ss	8-8-9						
ON/2							(17)	-					
GATI	10				X s	ss	8-7-9 (16)						
ÆSTI	_		· ·		<u> </u>		(10)	1					
Ź ⊒													
08/6													
21033	_		Gray Sand, Sligh	tly Silty	<u> </u>		5-3-4	1					
DOCS (KSM-SERVER)/2210339/SOIL INVESTIGATION/2210339-B&P.GPJ	15				X	SS	(7)						
ERVE				Bottom of borehole at 15.0 feet.									
SM-S													
SS (K													
ES\2													
GEOTECH BH PLOTS - GINT STD US LAB.GDT - 12/29/22 16:59 - K:\KSM FILES\22													
K:∖KS													
- 65:													
22 16													
2/29/													
T-1													
AB.GE													
US L													
STD													
NIE													
TS - C													
PLO.													
H H													
TEC													
GEO													



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BORING NUMBER B-22 PAGE 1 OF 1

PROJECT I DATE STAI DRILLING I DRILLING I LOGGED B	/orkspace Collective NUMBER 2210339-b&p RTED 12/14/22 COMPLE CONTRACTOR METHOD Split Spoon Sample Y DC/CW CHECKE ee Attached Location Plan	ETED 12/14/22	PROJECT LOCA GROUND ELEVA GROUND WATE AT TIME O AFTER DE	ee, Flo	lorida HOLE SIZE inches						
O DEPTH (ft) GRAPHIC LOG	MATERIAL DE	ESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	PENETROMETER	DRY UNIT WT. (pcf)	20 PL 10 20 □ FINE 20	PT N VA 40 6 MC 40 6 S CONT 40 6	60 8 LL 1 60 8 ENT (9	80 80
	Gray Sand ☑ Dark Brown Sand Brown Sand Gray Slightly Silty Sand Bottom of bore	shole at 15.0 feet.	SS	S	1-1-2 (3) 4-5-5 (10) 4-5-6 (11) 4-3-4 (7) 3-3-3 (6)	DENE	DR	20	40 6	60 8	80



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BORING NUMBER B-23 PAGE 1 OF 1

PROJECT NUMBER 2210339-86p	CLIE	NT W	Fax: (77 orkspace Collectiv	2)-589-6469 e		PROJECT NA	AME	1000	State Road	d 70						
DRILLING CONTRACTOR																
DRILLING METHOD Split Spoon Sample LOGGED BY DC/CW CHECKED BY CCC NOTES See Attached Location Plan MATERIAL DESCRIPTION Dark Gray Sand Light Gray Sand AT TIME OF DRILLING 2.4 ft AT END OF DRILLING AFTER DRILLING AFTER DRILLING ASPT N VALUE A 20 40 60 80 PL MC LL 20 40 60 80 FINES CONTENT (%) 20 40 60 80 FINES CONTENT (%) 20 40 60 80 CONTENT (%) 20 40 60 80 CONTENT (%) CONT											_ HOLE SIZE _ inches					
LOGGED BY DC/CW CHECKED BY CCC AT END OF DRILLING NOTES See Attached Location Plan MATERIAL DESCRIPTION MATERIAL DESCRIPTION Dark Gray Sand Light Gray Sand A SPT N VALUE A 20 40 60 80 PL MC LL 20 40 60 80 FINES CONTENT (%) 20 40 60 80 FINES CONTENT (%) 20 40 60 80 FINES CONTENT (%) 20 40 60 80																
NOTES See Attached Location Plan AFTER DRILLING #################################																
Dark Gray Sand □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □																
OTECH BH PLOTS - GINT STD	DRIL LOG NOTI	LING N GED B' ES Se	METHOD Split Sport Y DC/CW The Attached Location Dark Gray Sar	CHECKED BY _Con Plan MATERIAL DESCRIP	TION	✓ AT TIM AT EN AFTER	ME OF DOF DOF STATE OF SS SS SS SS SS SS SS	DRILL DRILL LING	SUNG 2.4 f ING WOTH STANDON N 1-1-1 (2) 2-2-2 (4) 4-6-6 (12) 4-5-5 (10) 7-9-8 (17)		T	△ SF 20 PL 20 □ FINES 20	PT N VALU 40 60 MC 40 60 6 CONTEN 40 60	JE ▲ 80 LL 80 NT (%) □ 80		
	OTECH BH PLOTS - GINT STD															



BORING NUMBER B-24 PAGE 1 OF 1

CLIENT Workspace Collective PROJECT NAME 1000 State Road 70												
1		UMBER 2210339-b&p										
DATE	STAR	TED _11/22/22	GROUND ELEVATION HOLE SIZE _ inches									
		ONTRACTOR	GROUND WATER LEVELS:									
		ETHOD Split Spoon Sample	_									
LOG	GED B	SH/NV CHECKED BY CCC	AT END OF DRILLING									
NOTI	ES _Se	e Attached Location Plan	AFTER DRILLING									
O DEPTH (#)		MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER NUMBER RECOVERY % (RQD) SAMPLE TYPE NUMBER (RQD) SAMPLE TYPE NUMBER (RQD) SAMPLE TYPE (RQD) (RQD) SAMPLE TYPE (RQD) SA	30 - 30 %) □								
- - - -		Gray Sand with Root	ss 1-0-1 (1) ss 1-0-0 (0)									
5 10			SS 0-0-3 (3) SS 4-5-6 (11) SS 7-8-10 (18)	: : :								
15		Brown Clayey Sand	ss (18) 4-4-3 (7)									
		Bottom of borehole at 15.0 feet.										

GEOTECH BH PLOTS - GINT STD US LAB GDT - 12/29/22 16:59 - K:\KSM FILES\\(\text{RSM-SERVER}\)\\(\text{22}210339\)\\(\text{SSM-SERVER}\)\\(\text{IUNESTIGATION}\)\\(\text{SSTIGATION}\)\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\)\\(\text{SSTIGATION}\



BORING NUMBER B-25 PAGE 1 OF 1

CLI	CLIENT Workspace Collective			PROJECT NAME 1000 State Road 70									
PRO	OJECT N	IUMBER 2210339-b	% p	PROJEC	T LOCAT	TION _	Okeechobe	e, Flo	orida				
DA ⁻	TE STAF	RTED 11/21/22	COMPLETED _11/21/22	GROUN	D ELEVA	TION _		HOLE SIZE inches					
DRI	LLING C	CONTRACTOR		GROUND WATER LEVELS: AT TIME OF DRILLING 3.3 ft AT END OF DRILLING AFTER DRILLING									
DRI	LLING N	METHOD Split Spoo	n Sample										
LO	GGED B	Y NV/MH	CHECKED BY _CCC										
NO.	TES Se	ee Attached Location	Plan										
2210339ISOIL INVESTIGATION/2210339-B&P.GPJ 0 DEPTH OX	LES & CITY CRAPHIC CRAPHIC LOG		MATERIAL DESCRIPTION	A	END OF	DRILL	MOTH STATE OF THE PROPERTY OF						
GEOTECH BH PLOTS - GINT STD US LAB.GDT - 12/29/22 16:59 - K:\KSM FILES\22 DOCS (KSM-SERVER)\Z G			Bottom of borehole at 15.0 feet.		<u> </u>		(7)						



BORING NUMBER B-26 PAGE 1 OF 1

CLIEN	NT W	orkspace Collective	PROJECT NAME _1000 State Road 70							
PROJ	ECT N	UMBER _2210339-b&p								
DATE	STAR	TED 12/14/22 COMPLETED 12/14/22	GROUND ELEVATION HOLE SIZE inches							
DRILL	ING C	ONTRACTOR								
1		ETHOD Split Spoon Sample		DRIL	LING _1.3 f	ft				
1		CHECKED BY CCC	AT END OF DRILLING							
NOTE	S _Se	e Attached Location Plan	AFTER DRI	LLING						
O DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	PENETROMETER	DRY UNIT WT. (pcf)	A SPT N VALUE A 20 40 60 80 PL MC LL 20 40 60 80 □ FINES CONTENT (%) □ 20 40 60 80		
	٥٥	Dark Gray Sand with Roots								
-	· ()	<u> </u>	ss s	-	1-1-1 (2) 1-2-2 (4)					
5		·		1						
? 			X ss		3-4-4 (8)			\		
10			xs xs		5-6-6 (12) 6-6-8					
		Dark Gray Sand		_	1-1-1					
15		Gray Slightly Clayey Sand	X ss	_	(2)					
20	° (Light Gray Sand with Shell	X ss		9-10-10 (20)					
	r v (· ')	Bottom of borehole at 20.0 feet.	<i>V</i> V	1	\ /	<u> </u>	_	· · · · ·		



BORING NUMBER B-27 PAGE 1 OF 1

CLIENT Workspace Collective PROJECT NUMBER 2210339-b&p DATE STARTED 11/21/22 COMPLETED 11/21/22 DRILLING CONTRACTOR DRILLING METHOD Split Spoon Sample LOGGED BY NV/MH CHECKED BY CCC NOTES See Attached Location Plan	PROJECT LOCATION Okeechobee, Floration GROUND ELEVATION GROUND WATER LEVELS: AT TIME OF DRILLING 3.3 ft AT END OF DRILLING	orida HOLE SIZE _ inches
O DEPTH (ft) (ft) (ft) (ft) (ft) (ft) (ft) (ft)	SAMPLE TYPE NUMBER RECOVERY % (RQD) BLOW COUNTS (N VALUE)	A SPT N VALUE ▲ 20 40 60 80 PL MC LL 20 40 60 80 □ FINES CONTENT (%) □ 20 40 60 80
Brown Sand Light Brown Sand Light Brown Sand Brown Clayey Sand Brown of borehole at 15.0 feet.	SS 1-2-3 (5) 2-2-2 (4)	



BORING NUMBER B-28 PAGE 1 OF 1

NT \^/	orkenace Collective	9-0409	DDO IECT NAME	1000	State Pee	4 70		
							rida	
								SIZE inches
						ft		
ES _Se	e Attached Location Pla	n	AFTER DRI	LLING				
GRAPHIC LOG		ATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	PENETROMETER	DRY UNIT WT. (pcf)	20 40 60 80 PL MC LL 20 40 60 80 PINES CONTENT (%) 20 40 60 80 :: :: :: :: :: :: :: :: :: :: :: :: ::
	Brown Sand		ss	-	1-1-1 (2)			\
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		ss		2-4-4 (8)			
			ss		3-4-5 (9)			
			ss		8-8-9 (17)			
			ss	_	8-9-10 (19)			
- - <i>V/,</i>	Brown Clayey Sand			-	2.2.2			
			X ss		(6)			
	80	ttom of porenole at 15.0 feet.						
	JECT NE STAR LING C LING N GED B' ES Se	JECT NUMBER 2210339-b&p E STARTED 11/21/22 LING CONTRACTOR LING METHOD Split Spoon Sa GED BY NV/MH ES See Attached Location Plan Dark Gray Sand Brown Sand Brown Clayey Sand	SESTARTED 11/21/22 COMPLETED 11/21/22 LING CONTRACTOR LING METHOD Split Spoon Sample GED BY NV/MH CHECKED BY CCC ES See Attached Location Plan MATERIAL DESCRIPTION Dark Gray Sand Brown Sand	PROJECT LOCAT E STARTED 11/21/22 COMPLETED 11/21/22 GROUND ELEVA LING CONTRACTOR GROUND WATER LING METHOD Split Spoon Sample GED BY NV/MH CHECKED BY CCC AT END OF SS See Attached Location Plan MATERIAL DESCRIPTION Dark Gray Sand Brown Sand SS SS SS SS SS SS SS SS SS	## PROJECT LOCATION PROJECT LOCATION STARTED 11/21/22 COMPLETED 11/21/22 GROUND ELEVATION GROUND WATER LEVE □ AT TIME OF DRILL AT END OF DRILL AFTER DRILLING See Attached Location Plan AFTER DRILLING Dark Gray Sand □ Dark Gray Sand □ Dark Gray Sand □ See S	PROJECT LOCATION Okeechober E STARTED	PROJECT LOCATION Okeechobee, Fig.	PROJECT LOCATION Okeechobee, Florida STARTED 11/21/22 COMPLETED 11/21/22 GROUND ELEVATION GROUND WATER LEVELS: LING METHOD Split Spoon Sample GED BY NV/MH CHECKED BY CCC ATTEM OF DRILLING ES See Attached Location Plan MATERIAL DESCRIPTION Dark Gray Sand Brown Sand Dark Gray Sand Brown Clayey Sand PROJECT LOCATION Okeechobee, Florida GROUND ELEVATION GROUND WATER LEVELS: VAT TIME OF DRILLING AFTER DRILLING SLING MATERIAL DESCRIPTION SS (A) (A) (B) (B) (B) (B) (B) (B) (B) (B) (B) (B



BORING NUMBER B-29 PAGE 1 OF 1

C. 15	NIT \^*	rdx. (772)-309-0409	DDO IECT NAME 4000 Otata Daniel 70	
1			PROJECT LOCATION Okaseheles F	
		IUMBER _2210339-b&p RTED _11/21/22		
- 1		CONTRACTOR		HOLL SILL HIGHES
		METHOD Split Spoon Sample		
		Y NV/MH CHECKED BY CCC		
		ee Attached Location Plan		
				. · ▲ SPT N VALUE ▲
O DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER RECOVERY % (RQD) BLOW COUNTS (N VALUE)	A SPT N VALUE
		Gray Sand		
			SS 2-3-3	A
<u> </u>		Brown Sand	(6)	
5			SS 2-2-2 (4)	A
B&P.GPJ		$ar{ar{ abla}}$	SS 2-3-4 (7)	A
2210339-			SS 4-4-5 (9)	
OL -				
<u></u> 10 10 10 10 10 10 10 10 10 10 10 10 10			SS 4-5-4 (9)	
NVE L				
SOIL				
0339	1//	Brown Clayey Sand		
15			SS 4-4-4 (8)	
RVE	<u> </u>	Bottom of borehole at 15.0 feet.		
GEOTECH BH PLOTS - GINT STD US LAB.GDT - 12/29/22 16:59 - K.iKSM FILES/22 DOCS (KSM-SERVER))2210339/SOIL INVESTIGATION/2210339-B&P.GPJ				
DOCS				
ES/22				
M FILE				
K:\KSI				
9:59 -				
3/22 1				
12/28				
GDT -				
LAB				
ID US				
STNI				
S- G				
PLOT				
H BH				
OTEC				
Ж				



BORING NUMBER HA-01 PAGE 1 OF 1

CLIEN	IT W	orkspace Collective	_ PROJEC	TNAME	1000	State Roa	d 70					
PROJ	ECT N	UMBER 2210339-b&p	PROJEC	T LOCAT	ION _	Okeechobe	e, Flo	rida				
DATE	STAR	TED 11/23/22 COMPLETED 11/23/22	GROUNE	ELEVA ⁻	TION _			HOLE	SIZE in	ches		
DRILL	ING C	ONTRACTOR	GROUNE	WATER	LEVE	LS:						
DRILL	ING M	IETHOD	_ AT	TIME OF	DRILI	LING 4	of St	anding	g Water			
		RC/MH CHECKED BY CCC		END OF	DRILL	.ING						
NOTE	S <u>Se</u>	e Attached Location Plan	_ AF	TER DRI	LLING							
O DEPTH	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	PENETROMETER	DRY UNIT WT. (pcf)	20 PL 	40	60 60 ITENT	80 LL -I 80
	****	Dark Gray Slightly Silty Sand with Organics (Muck)					7		:	:	:	:
 5		Light Gray Sand Brown Sand					30 30 35 40 40					
		Bottom of borehole at 6.0 feet.										



BORING NUMBER HA-02 PAGE 1 OF 1

CLIEN	NT _W	orkspace Collective	_ PROJEC	T NAME	1000	State Road	d 70					
PROJ	ECT N	UMBER 2210339-b&p	_ PROJEC	T LOCAT	ION _	Okeechobe	e, Flo	rida				
DATE	STAR	TED 11/23/22 COMPLETED 11/23/22	GROUND	ELEVA ⁻	TION _			HOLE	SIZE _ ir	nches		
DRILL	ING C	ONTRACTOR	_ GROUND	WATER	LEVE	LS:						
DRILI	ING N	ETHOD	_ ∑ at	TIME OF	DRILL	LING 1.31	t					
LOGG	ED B	RC/MH CHECKED BY CCC	AT	END OF	DRILL	ING						
NOTE	S _Se	e Attached Location Plan	AF	TER DRI	LLING							
O DEPTH	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	PENETROMETER	DRY UNIT WT. (pcf)	20 PL I- 20	40 40 S COI	60	80 LL -1 80 T (%) \square
		Dark Gray Silty Sand with Organics					8		÷	:	:	:
 - 5		Light Gray Sand Brown Slightly Silty Sand					30 30 35 35 39					
	<u> 1 % (1-1) 1 </u>	Bottom of horehole at 6.0 feet								*		•



BORING NUMBER HA-03 PAGE 1 OF 1

CLIEN	NT _W	orkspace Collective	_ PROJEC	T NAME	1000	State Road	d 70					
PROJ	IECT N	UMBER 2210339-b&p	_ PROJEC	T LOCAT	TION _	Okeechobe	e, Flo	rida				
DATE	STAR	TED 11/23/22 COMPLETED 11/23/22	GROUNE	ELEVA	TION _			HOLE	SIZE _ ir	nches		
DRILL	LING C	ONTRACTOR	_ GROUNE	WATER	LEVE	LS:						
DRILL	LING N	IETHOD	_ ∑ at	TIME OF	DRILL	LING _1.71	ft					
LOGG	SED B	RC/MH CHECKED BY CCC	AT	END OF	DRILL	ING						
NOTE	S _Se	e Attached Location Plan	AF	TER DRI	LLING							
O DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	PENETROMETER	DRY UNIT WT. (pcf)	20 PL I- 20 □ FINE		60 C 60 NTEN	80 LL ⊢ 80 Γ (%) □
	***	Dark Gray Silty Sand with Organics					7		:	:	:	:
 		∑ Light Gray Sand					30 30 25					
_ 5		Brown Slightly Silty Sand					35				<u>:</u>	
1		Bottom of borehole at 6.0 feet.										



BORING NUMBER HA-04 PAGE 1 OF 1

CLIEN	NT _W	orkspace Collective	_ PROJEC	T NAME	1000	State Road	d 70					
PROJ	ECT N	IUMBER 2210339-b&p	_ PROJEC	T LOCAT	ION _	Okeechobe	e, Flo	rida				
DATE	STAF	TED 11/23/22 COMPLETED 11/23/22	GROUND	ELEVA	TION _			HOLE	SIZE _ ir	ches		
DRILL	ING C	CONTRACTOR	GROUND	WATER	LEVE	LS:						
DRILL	ING N	METHOD	_ ∑ at	TIME OF	DRILI	LING 1.61	ft					
LOGG	SED B	Y RC/MH CHECKED BY CCC	_ AT	END OF	DRILL	ING						
NOTE	S _Se	ee Attached Location Plan	_ AF	TER DRI	LLING							
O DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	PENETROMETER	DRY UNIT WT. (pcf)	20 PL I- 20	40 S CON	60 C 60	80 LL -1 80 T (%) □
		Dark Gray Slightly Silty Sand with Some Organics					7 30			:	:	:
 - 5		☑ Light Gray Sand Brown Slightly Silty Sand					35 35 35 35 35					
		Bottom of horehole at 6.0 feet						_				



BORING NUMBER HA-05 PAGE 1 OF 1

CLIEN	NT _W	orkspace Collective	_ PROJEC	T NAME	1000	State Road	d 70				
PROJ	ECT N	IUMBER 2210339-b&p	_ PROJEC	T LOCAT	ION _	Okeechobe	e, Flo	rida			
DATE	STAR	TED 11/23/22 COMPLETED 11/23/22	GROUNE	ELEVA	TION _			HOLE	SIZE inc	hes	
DRILI	ING C	CONTRACTOR	_ GROUNE	WATER	LEVE	LS:					
DRILI	ING N	METHOD	_ ∑ AT	TIME OF	DRILI	LING 1.41	t				
LOGG	SED B	Y RC/MH CHECKED BY CCC	AT	END OF	DRILL	ING					
NOTE	S _Se	ee Attached Location Plan	AF	TER DRI	LLING						
O DEPTH	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	PENETROMETER	DRY UNIT WT. (pcf)	20 PL 20 D FINES	CONT	0 80
	000	Dark Gray Silty Sand with Traces of Roots					8 32		:	:	:
 - 5		□ Light Gray Sand □ Brown Slightly Silty Sand					43 46 44 49				
	<u>15-51-14-</u>	Bottom of borehole at 6.0 feet.						1			



BORING NUMBER HA-06 PAGE 1 OF 1

CLIEN	IT <u>W</u>	orkspace Collective	PROJEC	T NAME	1000	State Roa	d 70			
PROJ	ECT N	UMBER 2210339-b&p	PROJEC	T LOCA	TION _	Okeechobe	e, Flo	orida		
DATE	STAR	TED 11/23/22 COMPLETED 11/23/22	GROUNE	ELEVA	TION _			HOLE	SIZE inches	
DRILL	ING C	ONTRACTOR	GROUNE	WATER	LEVE	LS:				
DRILL	ING N	IETHOD	∑ at	TIME OF	DRILI	LING 1.2	ft			
		Y RC/MH CHECKED BY CCC		END OF	DRILL	ING				
NOTE	S <u>Se</u>	e Attached Location Plan	AF	TER DRI	LLING					
O DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	PENETROMETER	DRY UNIT WT. (pcf)	A SPT N VALUE A 20 40 60 80 PL MC LL 20 40 60 80 □ FINES CONTENT (% 20 40 60 80)) (6) [
Ť	0 9 0	Dark Gray Silty Sand with Traces of Roots					8 34		<u> </u>	
 5		☐ Light Gray Sand Brown Slightly Silty Sand					40 40 43 47			
1		Bottom of borehole at 6.0 feet.								



BORING NUMBER HA-07 PAGE 1 OF 1

CLIEN	<u>W</u> T	orkspace Collective	_ PROJEC	T NAME	1000	State Roa	d 70					
PROJ	IECT N	UMBER 2210339-b&p	_ PROJEC	T LOCA	TION _	Okeechobe	e, Flo	rida				
DATE	STAR	TED 11/23/22 COMPLETED 11/23/22	GROUNE	ELEVA	TION _			HOLE	SIZE _ ir	nches		
DRILL	LING C	ONTRACTOR	GROUNE	WATER	RLEVE	LS:						
DRILL	LING N	IETHOD	∑ at	TIME OF	FDRILI	LING 2.8	ft					
LOGG	SED B	CHECKED BY CCC	AT	END OF	DRILL	.ING						
NOTE	S Se	e Attached Location Plan	AF	TER DRI	LLING							
O DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	PENETROMETER	DRY UNIT WT. (pcf)	20 PL Fl 20		60 C 60 NTEN	80 LL -I 80 Γ (%) □
		Dark Gray Silty Sand with Organics (Muck)					6 34				i	
 5		Light Gray Sand					37 39 42 46					
		Bottom of borehole at 6.0 feet.										



BORING NUMBER HA-08 PAGE 1 OF 1

CLIEN	NT _W	orkspace Collective	_ PROJEC	T NAME	1000	State Road	d 70					
PROJ	ECT N	UMBER 2210339-b&p	_ PROJEC	T LOCAT	ION _	Okeechobe	e, Flo	orida				
DATE	STAR	TED 11/23/22 COMPLETED 11/23/22	GROUND	ELEVA ⁻	TION _			HOLE	SIZE _ ir	ches		
DRILL	ING C	ONTRACTOR	GROUND	WATER	LEVE	LS:						
DRILL	ING N	IETHOD	_ ∑ at	TIME OF	DRILL	_ING _2.8 t	t					
LOGG	SED B	Y RC/MH CHECKED BY CCC	_ AT	END OF	DRILL	ING						
NOTE	S _Se	e Attached Location Plan	_ AF	TER DRI	LLING							
O DEPTH	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	PENETROMETER	DRY UNIT WT. (pcf)	20 PL I- 20	40 M 40 S CON	60	80 LL -1 80 T (%) □
		Dark Gray Slightly Silty Sand with Some Organics					8			:	:	:
 5		Brown Sand					29 30 35 35 35					
		Rottom of borehole at 6.0 feet					33		:	:	<u>:</u>	:



BORING NUMBER HA-09 PAGE 1 OF 1

CLIEN	IT <u>W</u>	orkspace Collective	_ PROJEC	T NAME	1000	State Road	d 70			
PROJ	ECT N	IUMBER 2210339-b&p	_ PROJEC	T LOCAT	ION _	Okeechobe	e, Flo	orida		
DATE	STAR	TED 11/23/22 COMPLETED 11/23/22	_ GROUND	ELEVA	TION _			HOLE	SIZE inches	
DRILL	ING C	ONTRACTOR	_ GROUND	WATER	LEVE	LS:				
DRILL	ING N	TETHOD	_ <u></u>	TIME OF	DRILI	LING 1.21	ft			
		Y RC/MH CHECKED BY CCC		END OF	DRILL	.ING				
NOTE	S <u>Se</u>	e Attached Location Plan	AF	TER DRI	LLING					
O DEPTH	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	PENETROMETER	DRY UNIT WT. (pcf)	20 40 60 80 PL MC LL 20 40 60 80 PINES CONTENT (% 20 40 60 80)
		Dark Gray Silty Sand with Some Organics					8 8 9 29 30			
5		Brown Sand, Slightly Silty					31			
i		Bottom of borehole at 6.0 feet.								



BORING NUMBER HA-10 PAGE 1 OF 1

CLIEN	NT <u>W</u>	orkspace Collective	_ PROJEC	T NAME	1000	State Road	d 70			
PROJ	ECT N	UMBER 2210339-b&p	_ PROJEC	T LOCAT	TION _	Okeechobe	e, Flo	rida		
DATE	STAR	TED 11/23/22 COMPLETED 11/23/22	GROUNE	ELEVA	TION _			HOLE	SIZE inches	
DRILL	ING C	ONTRACTOR	_ GROUNE	WATER	LEVE	LS:				
DRILL	ING N	IETHOD	_ ∑ at	TIME OF	DRILI	LING 2.31	t			
LOGG	SED B	Y RC/MH CHECKED BY CCC	AT	END OF	DRILL	.ING				
NOTE	S _Se	e Attached Location Plan	AF	TER DRI	LLING					
O DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	PENETROMETER	DRY UNIT WT. (pcf)	A SPT N VALU 20 40 60 PL MC 20 40 60 □ FINES CONTEN 20 40 60	80 LL
 5	· ()	Dark Brown Sand with Root					20 30 20 45 45 50			
 5		Light Gray Sand Bottom of borehole at 6.0 feet.					45			



BORING NUMBER HA-11 PAGE 1 OF 1

CLIENT Workspace Collective			PROJECT NAME _1000 State Road 70											
PROJECT NUMBER 2210339-b&p			PROJECT LOCATION Okeechobee, Florida											
DATE	STAR	TED 11/23/22 COMPLETED 11/23/22	GROUND ELEVATION						HOLE SIZE inches					
DRILL	LING C	ONTRACTOR	GROUND WATER LEVELS:											
DRILL	LING N	ETHOD	\overline{Y} AT TIME OF DRILLING 5.2 ft											
LOGG	SED BY	RC/MH CHECKED BY CCC	AT END OF DRILLING											
NOTES See Attached Location Plan			AFTER ROULING											
O DEPTH	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	PENETROMETER	DRY UNIT WT. (pcf)	20 PL I- 20	40 40 S COI	60	80 LL -1 80 T (%) □		
 		Gray Sand Brown Sand					16 21 29 33 40							
5		Light Brown Sand					40		<u>:</u>		<u>:</u>			
Bottom of borehole at 6.0 feet							-							



BORING NUMBER HA-12 PAGE 1 OF 1

CLIENT Workspace Collective			PROJECT NAME 1000 State Road 70									
PROJECT NUMBER 2210339-b&p			PROJECT LOCATION Okeechobee, Florida									
DATE	STAR	TED 11/23/22 COMPLETED 11/23/22	GROUND ELEVATION HOLE SIZE _inches									
DRILL	ING C	ONTRACTOR	GROUND WATER LEVELS:									
DRILL	ING N	METHOD										
LOGG	ED B	Y RC/MH CHECKED BY CCC	AT END OF DRILLING									
NOTES See Attached Location Plan			AFTER DRILLING									
o DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	PENETROMETER	DRY UNIT WT. (pcf)	A SPT N VALUE A 20 40 60 80 PL MC LL 20 40 60 80 □ FINES CONTENT (%) □ 20 40 60 80			
 5		Dark Gray Sand, Slightly Silty with Organics (Muck)					8 10 30 35 50 50					
		Bottom of borehole at 6.0 feet.										



BORING NUMBER HA-13 PAGE 1 OF 1

CLIENT Workspace Collective				PROJECT NAME 1000 State Road 70									
PROJECT NUMBER _2210339-b&p			PROJECT LOCATION Okeechobee, Florida										
DATE	STAR	TED 11/23/22 COMPLETED 11/23/22	GROUNE	ELEVA	TION _	HOLE SIZEinches							
DRILL	ING C	ONTRACTOR											
DRILLING METHOD													
1		Y RC/MH CHECKED BY CCC											
NOTES See Attached Location Plan													
O DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	PENETROMETER	DRY UNIT WT. (pcf)	A SPT N VALUE A 20 40 60 80 PL MC LL 20 40 60 80 □ FINES CONTENT (%) □ 20 40 60 80				
		Dark Gray Silty Sand with Organics (Muck)					8						
 5		☑ Brown Sand ☑ Light Brown Sand					28 30 35 35 35						
l		Bottom of borehole at 6.0 feet.											



BORING NUMBER HA-14 PAGE 1 OF 1

CLIENT Workspace Collective				PROJECT NAME 1000 State Road 70										
PROJECT NUMBER 2210339-b&p			PROJECT LOCATION Okeechobee, Florida											
DATE	STAR	TED 11/23/22 COMPLETED 11/23/22	GROUNE	ELEVA ⁻	TION _	HOLE SIZEinches								
DRILLING CONTRACTOR				WATER	LEVE	LS:								
DRILLING METHOD			∑ at											
1				AT END OF DRILLING										
NOTES See Attached Location Plan														
O DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	PENETROMETER	DRY UNIT WT. (pcf)	A SPT N VALUE A 20 40 60 80 PL MC LL 20 40 60 80 □ FINES CONTENT (%) □ 20 40 60 80					
 5	。) p	Gray Sand with Traces of Root Brown Sand					18 29 30 37 40 40							
		Bottom of borehole at 6.0 feet.												



BORING NUMBER HA-15 PAGE 1 OF 1

CLIENT Workspace Collective				PROJECT NAME 1000 State Road 70									
PROJECT NUMBER _2210339-b&p			PROJECT LOCATION Okeechobee, Florida										
DATE	STAR	TED 11/23/22 COMPLETED 11/23/22	GROUNE	ELEVA ⁻	TION _	HOLE SIZEinches							
DRILLING CONTRACTOR				WATER	LEVE	LS:							
DRILLING METHOD													
1				AT END OF DRILLING									
NOTES See Attached Location Plan													
DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	PENETROMETER	DRY UNIT WT. (pcf)	A SPT N VALUE A 20 40 60 80 PL MC LL 20 40 60 80 □ FINES CONTENT (%) □ 20 40 60 80				
		Gray Sand with Buried Debris Dark Brown Sand					42 40 38						
 _ 5		Brown Sand					43 46 47						
		Bottom of borehole at 6.0 feet.						_					



BORING NUMBER PB-1

PAGE 1 OF 1

CLIENT Workspace Collective			PROJECT NAME 1000 State Road 70								
PROJ	ECT N	UMBER 2210339-b&p									
DATE	STAR	TED 12/13/22 COMPLETED 12/13/22	GROUND ELEVATION HOLE SIZE inches								
DRILL	ING C	ONTRACTOR									
		IETHOD Split Spoon Sample									
LOGG	SED B	CHECKED BY CCC	AT END OF DRILLING								
NOTE	S Se	e Attached Location Plan	AFTER DRILLING								
			ш s								
O DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER NUMBER NUMBER (ROUNTS (ROUNTS (N VALUE) DRY UNIT WT. (pcf) DRY UNIT W								
		Dark Gray Silty Sand with Organics (Muck)									
-		Gray Sand, Slightly Silty	SS 1-1-2								
<u> </u>		Light Gray Sand	(3)								
		Grayish Brown Silty Sand	SS 6-9-5 (14)								
5		Staylor Brown Sity Garla	SS 4-3-3 (6)								
			3-3-4								
-			(1)								
10		Gray Slightly Clayey Sand	SS (6)								
-		Gray Silgritiy Clayey Sanu	ss 4-4-3 (7)								
			SS 3-3-4 (7)								
15		Light Gray Slightly Silty Sand	SS 3-4-3 (7)								
			ss 4-3-2 (5)								
			3-3-8								
20	, U	Gray Sand with Shell	SS (11)								
		Bottom of borehole at 20.0 feet.									
<u> </u>											
3											
: 											
1											

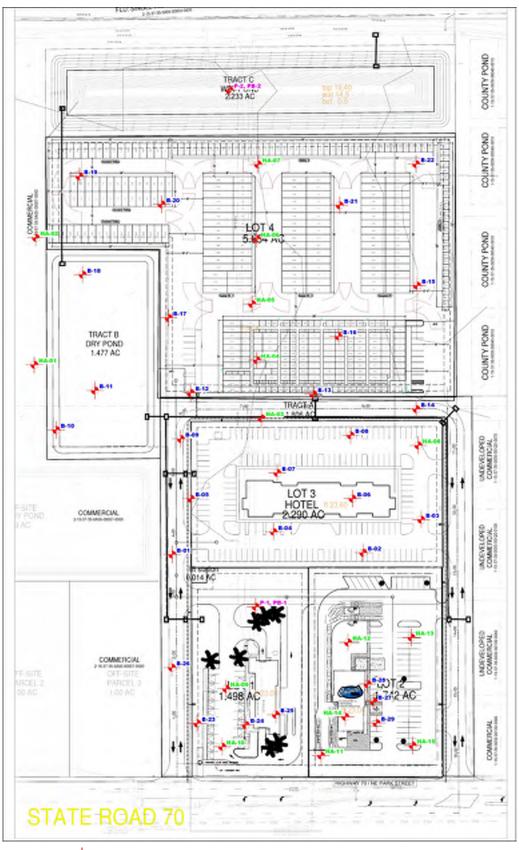
KSM

KSM Engineering & Testing P.O. Box 78-1377 Sebastian, FL 32978 Tel: (772)-589-0712 Fax: (772)-589-6469

BORING NUMBER PB-2

PAGE 1 OF 1

CL	CLIENT Workspace Collective			PROJECT NAME 1000 State Road 70										
PR	OJE	CT N	UMBER _2210339-b&p											
DA	TE S	TAR	TED 12/15/22 COMPLETED 12/15/22	GROUND ELEVATION HOLE SIZE inches										
DR	ILLIN	NG C	ONTRACTOR	GROUND WATER LEVELS:										
DR	ILLIN	NG M	ETHOD Split Spoon Sample											
LO	GGE	D BY	DC/CW CHECKED BY CCC	AT END OF DRILLING										
NC	TES	See	e Attached Location Plan	AFTER DRILLING										
		GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER RECOVERY % (RQD) BLOW COUNTS (N VALUE) DRY UNIT WT. PENETROMETER DRY UNIT WT. (Pcf) DRY UNIT WT. DRY U										
C			Light Gray Sand	<u>a</u> 20 40 60 80										
_	-		$ar{\Delta}$	SS 5-7-8 (15)										
			Dark Gray Sand, Slightly Silty	SS 10-12-10 (22)										
-B&P.GPJ			Light Gray Sand	SS 8-5-5 (10)										
N/2210339	-			SS 5-6-6 (12)										
STIGATIO	0			SS 6-7-8 (15)										
SOIL INVE	- <u> </u>		Gray Clayey Sand	9-8-7 (15)										
(2210339)	_ _ _			SS 5-2-2 (4)										
M-SERVER)	5		Gray Slightly Clayey Sand	SS 2-2-2 (4)										
DOCS (KS	- X		Light Gray Clayey Sand with Shell	SS 1-1-1 (2)										
2/52 2				SS 8-12-29 (41)										
	- 12		Bottom of borehole at 20.0 feet.											
GEOTECH BH PLOTS - GINT STD US LAB.GDT - 12/29/22 17:00 - K:/KSM FILES/22 DOCS (KSM-SERVER)/2210339/SOIL INVESTIGATION/2210339-B&P.GPJ														





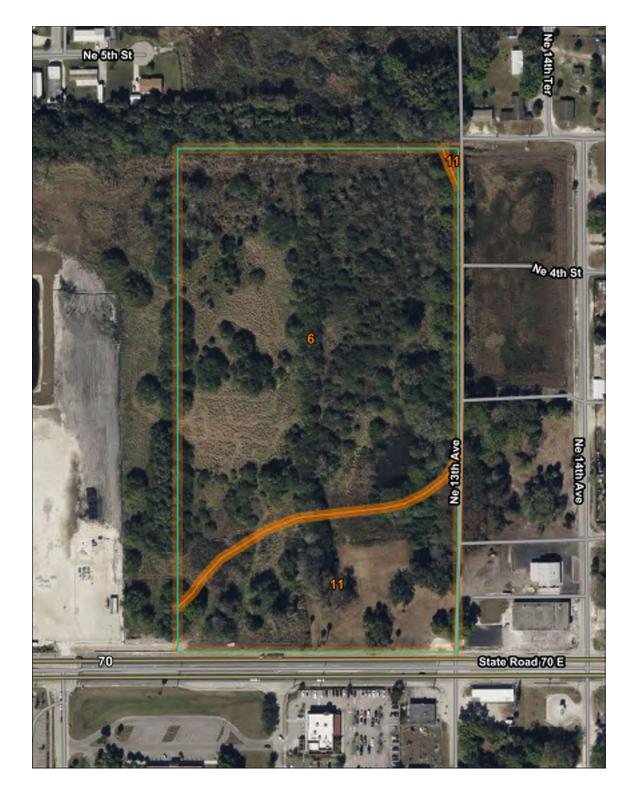
PROJECT: 1000 State Road 70, Okeechobee, Florida

SHEET 1 OF 2 PERMIT #:

PROJECT #: 2210339-b&p



DRAWN BY: C.V.
DESIGNED BY: C.C.C.
DATE: 20221228
SCALE: NOT TO SCALE



USDA SOILS SURVEY

6—Manatee loamy fine sand, frequently ponded, 0 to 1 percent slopes 11—Immokalee fine sand, 0 to 2 percent slopes

PROJECT: 1000 State Road 70, Okeechobee, Florida

SHEET 2 OF 2 PERMIT #:

PROJECT #: 2210339-soils



DRAWN BY: C.V.
DESIGNED BY: C.C.C.
DATE: 20221228
SCALE: NOT TO SCALE