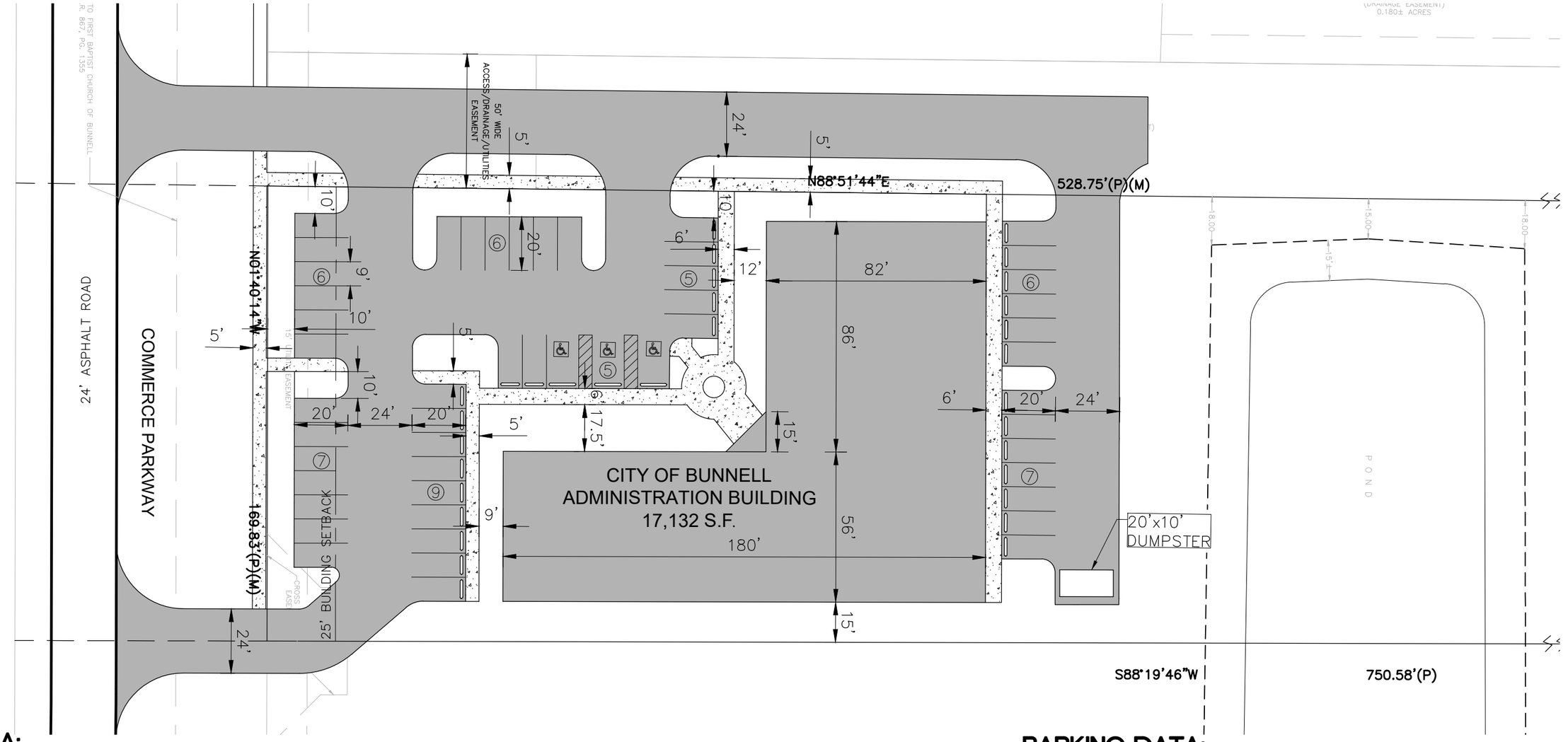
APPENDIX B

SUPPORTING DRAWINGS AND SITE INFORMATION

Includes the following:

1. Conceptual Site Plan
2. Existing Site Survey
3. Conceptual Architectural Schematic Layout
4. Conceptual Architectural Elevations.
5. Flagle Central Commerce Parkway Previously Permitted Plan Set with the SJRWMD
6. Geotechnical Report
7. Recorded Plat
8. Access Easement and Utility Easement Agreement for Tracts A and B

CONCEPTUAL SITE PLAN



SITE DATA:

1. PROJECT SITE AREA 2.883± ACRES.
2. TOTAL PROPOSED ONE-STORY BUILDING 17,132 S.F.

OFFICE SPACE	17,132	S.F.
TOTAL	17,132	S.F.

3. PROPERTY APPRAISER'S PARCEL NO's: 11-12-30-2260-00000-0040
4. ZONING: B-1 BUILDING DISTRICT
5. CURRENT LAND USE: COMMERCIAL- MEDIUM
6. LANDSCAPE BUFFERS:

	REQUIRED	PROVIDED
ADJACENT TO PUBLIC ROW:	10'(WITH BERM)	10'
ADJACENT TO COMPLEMENTARY USE:	10'(WITH BERM) OR 15'	10'(NORTH) AND 15'(SOUTH)
ADJACENT TO UNCOMPLIMENTARY USE:	20'	20'

7. BUILDING SETBACKS

	REQUIRED	PROVIDED
FRONT YARD:	25'	25'
SIDE YARD:	0'	0'
REAR YARD:	10'	10'

8. FLOOD ZONE: PORTIONS OF THE PROPERTY ARE LOCATED WITHIN FLOOD ZONE "X" AND "A" PER THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), ON FLOOD INSURANCE RATE MAP NO. 12035C0226E, WITH DATE OF JUNE 6, 2018.
9. FEMA FLOOD PLAIN ELEVATION = TO BE VERIFIED
10. BUILDING HEIGHT
    MAXIMUM ALLOWED= 35'
    PROVIDED= 25' (ESTIMATED)
11. FLOOR AREA RATIO
    MAXIMUM ALLOWED= 0.44
    PROVIDED= 0.137
12. MAX LOT COVERAGE
    NO MORE THAN 60% IMPERVIOUS
    IMPERVIOUS AREA= 35.9% (ON-SITE)
13. EXISTING PROPOSED DITCH IN NORTHERN ACCESS EASEMENT WILL NEED TO BE RELOCATED
14. SITE PROPOSED PAVED ACCESS THROUGH THE NORTHERN ACCESS EASEMENT WILL NEED TO BE FINALIZED AND COORDINATED WITH THE FLAGLER CENTRAL COMMERCE PARK OWNERS ASSOCIATION.

PARKING DATA:

VEHICLE PARKING REQUIRED:

BASED ON:
- OFFICE SPACE: 1 SPACE/300 SF

CALCULATIONS

BUILDING AREA: 17,132 SF		
OFFICE SPACE 1 SPACE/ 300 SF=	58	SPACES
REQUIRED PARKING:	58	SPACES
PROVIDED ONSITE PARKING:	51	SPACES (INCLUDING 3 A.D.A)
PROVIDED OFFSITE PARKING ACROSS STREET AT FIRST BAPTIST CHURCH	20	SPACES
	71	SPACES TOTAL

CITY OF BUNNELL ADMINISTRATION BUILDING

2400 COMMERCE PKWY, BUNNELL, FL 32110

N

1"
0' 20' 40'

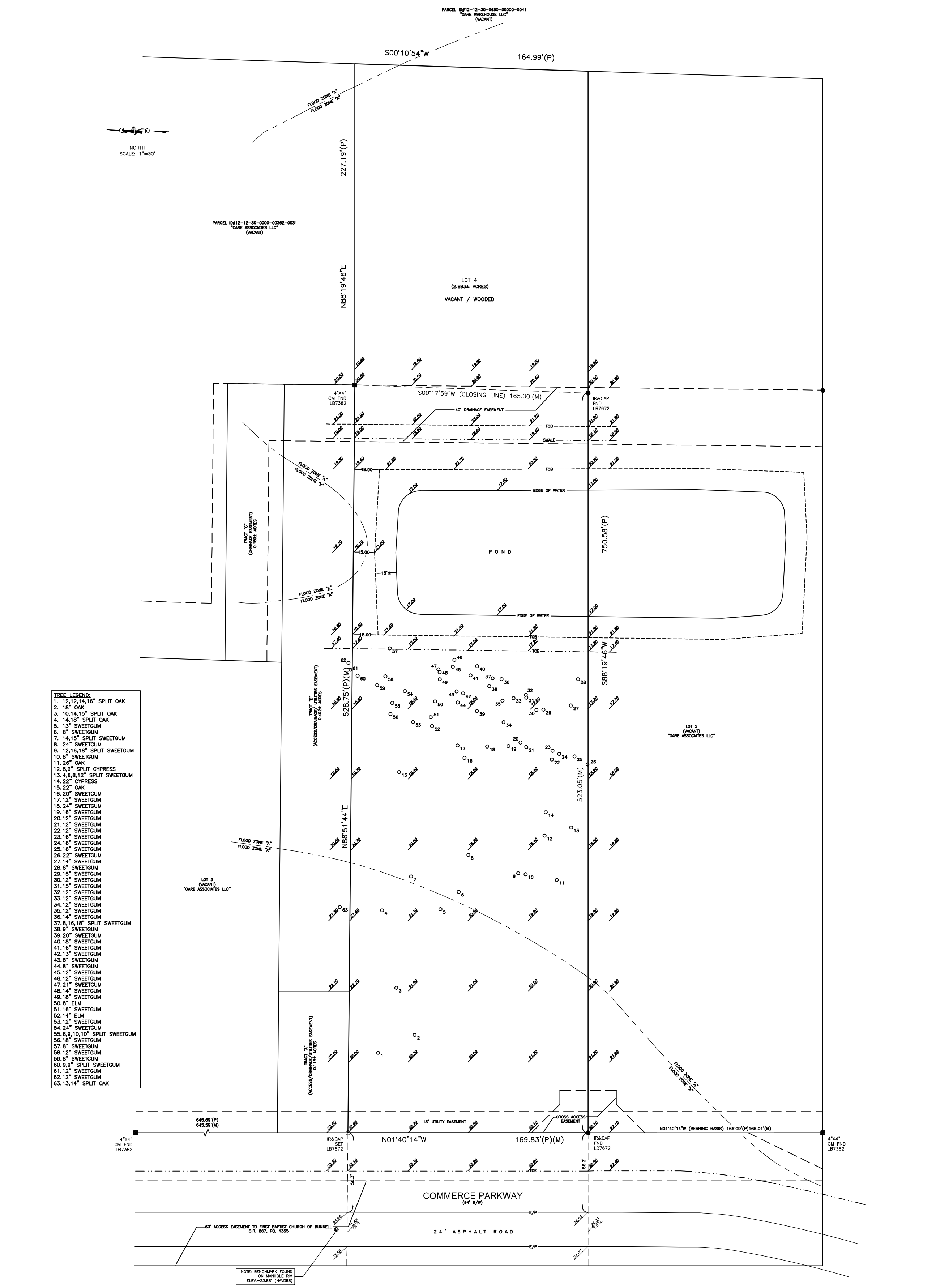
DATE: 2021-09-20

SCALE: 1" = 40'

EXISTING SITE SURVEY

ADDRESS: 2400 COMMERCE PARKWAY

JOB #21-2121



TREE LEGEND:

1. 12,12,14,16" SPLIT OAK
2. 18" OAK
3. 10,14,15" SPLIT OAK
4. 14,18" SPLIT OAK
5. 13" SWEETGUM
6. 8" SWEETGUM
7. 14,15" SPLIT SWEETGUM
8. 24" SWEETGUM
9. 12,16,18" SPLIT SWEETGUM
10. 8" SWEETGUM
11. 26" OAK
12. 8,9" SPLIT CYPRESS
13. 4,8,8,12" SPLIT SWEETGUM
14. 22" CYPRESS
15. 22" OAK
16. 20" SWEETGUM
17. 12" SWEETGUM
18. 24" SWEETGUM
19. 16" SWEETGUM
20. 12" SWEETGUM
21. 12" SWEETGUM
22. 12" SWEETGUM
23. 16" SWEETGUM
24. 16" SWEETGUM
25. 16" SWEETGUM
26. 22" SWEETGUM
27. 14" SWEETGUM
28. 8" SWEETGUM
29. 15" SWEETGUM
30. 12" SWEETGUM
31. 15" SWEETGUM
32. 12" SWEETGUM
33. 12" SWEETGUM
34. 12" SWEETGUM
35. 12" SWEETGUM
36. 14" SWEETGUM
37. 8,16,18" SPLIT SWEETGUM
38. 9" SWEETGUM
39. 20" SWEETGUM
40. 18" SWEETGUM
41. 16" SWEETGUM
42. 13" SWEETGUM
43. 8" SWEETGUM
44. 8" SWEETGUM
45. 12" SWEETGUM
46. 12" SWEETGUM
47. 21" SWEETGUM
48. 14" SWEETGUM
49. 18" SWEETGUM
50. 8" ELM
51. 16" SWEETGUM
52. 14" ELM
53. 12" SWEETGUM
54. 24" SWEETGUM
55. 8,9,10,10" SPLIT SWEETGUM
56. 18" SWEETGUM
57. 8" SWEETGUM
58. 12" SWEETGUM
59. 8" SWEETGUM
60. 9,9" SPLIT SWEETGUM
61. 12" SWEETGUM
62. 12" SWEETGUM
63. 13,14" SPLIT OAK

DESCRIPTION:

LOT 4, FLAGLER CENTRAL COMMERCE PARK PHASE 1A REPLAT, AS RECORDED IN MAP BOOK 37, PAGE 37, BEING A REPLAT OF FLAGLER CENTRAL COMMERCE PARK PHASE 1A, AS RECORDED IN MAP BOOK 36, PAGE 86, OF THE PUBLIC RECORDS OF FLAGLER COUNTY, FLORIDA.

REVISIONS:

--

TYPE OF SURVEY: BOUNDARY / TOPOGRAPHIC / TREE LOCATION

NOTE: PURSUANT TO FLORIDA STATE LAW, THIS SURVEY IS VALID NO MORE THAN 90 DAYS FROM DATE OF LAST FIELD WORK

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY DAN A WILCOX JR. ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PREPARED FOR:
CITY OF BUNNELL
P.O. BOX 756
BUNNELL, FL 32110

SURVEY TYPE:	FIELD DATE	OFFICE DATE	JOB NO.	BY:
Boundary	04/29/21	05/14/21	21-2121	NJG
Site Plan				
Formboard				
Foundation				
Final				

LEGEND:

IR	1/2" Iron Rod set "LB7672"	O.R.	Official Records Book	PC	Point of Curvature	C.B.S.	Concrete Block & Stucco
IR	5/8" Iron Rod found	PG.	Page	PRC	Point of Reverse Curvature	Conc.	Concrete
IP	1/2" Iron Pipe	(D)	Deed Bearing & Distance	N.R.	Non-Radial Curve	C/S	Concrete Slab
N/D	Nail and Disk set "LB7672"	(P)	Plat Bearing & Distance	PT	Point of Tangency	EQP	Pool Equipment Pad
N/D	Nail and Disk found	(M)	Measured Bearing & Distance	PI	Point of Intersection	PEP	Pretreatment Effluent Pumping Tank
PCP	Permanent Control Point	(C)	Calculated Bearing & Distance	U.E.	Utility Easement	O/E	Overhead Electric
CM	Concrete Monument set	C/L	Center Line	D.E.	Drainage Easement		P/P – Power Pole
CM	Concrete Monument found	E/P	Edge of Pavement	L.E.	Landscape Easement		Manhole
PRM	Permanent Reference Monument	E/R	Edge of Road	N.G.V.D.	National Geodetic Vertical Datum		Telephone Riser
FND	Found	R/W	Right of Way	N.A.V.D.	North American Vertical Datum		Cable Television Riser
LB	Licensed Business	Δ	Delta	B.M.	Bench Mark		Fiber Optic Riser
LS	Licensed Surveyor	R	Radius	T.B.M.	Temporary Bench Mark		Water Meter
PSM	Professional Surveyor & Mapper	L	Length	TOB	Top Of Bank		Electric Meter
		CB	Chord Bearing	TOE	TOE of slope		Fire Hydrant
		CH	Chord Distance	F.F.	Finish Floor Elevation		
				INV.	Invert		

NOTES:

1. The entire map encompassing this survey is recorded in Map Book 37, Pages 36–37.
2. Elevations refer to N.A.V.D. 1988 datum and reference local datum.
3. Underground improvements and utilities not located.
4. Bearings refer to plat datum and to the Easterly Right-of-Way of Commerce Parkway as being N01°40'14"W.
5. Property lies in Flood Zone "X" & "A" with reference to Map No. 12035C0226E, Effective Date: June 6, 2018. This location is based on maps prepared by the Federal Emergency Management Agency. Final location and flood zone determination rest with said agency and based on N.A.V.D. 1988 datum.
6. Description provided by client.
7. No search for encumbering instruments was made by surveyor.
8. Error of closure meets or exceeds 1:7500 feet.

STEPHENSON, WILCOX & ASSOCIATES, INC. CA#27726 • LB#7672
2729 E. Moody Blvd., Ste. 400
PO Box 186 Bunnell FL 32110
Phone: 386.437.2363 • Email: info.swa@gmail.com
CIVIL ENGINEERS • LAND SURVEYORS • CONSULTANTS • PLANNERS

I hereby certify that the survey represented hereon meets or exceeds the minimum standards established pursuant to Section 472.027 Florida Statutes, and adopted in Chapter 5J-17 Florida Administrative Code.

Dan Wilcox 08-04-21

DAN A. WILCOX Jr., PSM No.5749, PE No. 57633

Not valid without the signature and the original raised seal of a Florida Licensed surveyor and mapper.

SHEET 1 of 1

\\swa-01\CAD SERVER 2014NOV12\SWA\Cad Server\sdsk projects\0000-Flagler\000-PLATS\Flagler Central Commerce Park Phase 1A Replat\LOT 4.dwg

CONCEPTUAL ARCHITECTURAL SCHEMATIC LAYOUT

SPACE UTILIZATION

CITY HALL:	12,397 SF
POLICE STATION:	5,309 SF
TOTAL BUILDING AREA:	17,706 SF

88'-0"

CHIEF OF POLICE 14'-0" X 17'-0" 238 SQ FT
FURTURE COMDR 12'-0" X 10'-0" 122 SQ FT
SERGEANT 11'-0" X 10'-0" 112 SQ FT
SERGEANT 11'-0" X 10'-0" 112 SQ FT
DETECTIVE 11'-0" X 10'-0" 112 SQ FT
DETECTIVE 11'-0" X 10'-0" 112 SQ FT
JANITOR CLOSET 58 SQ FT
MECH. & ELECT. 82 SQ FT
SUPPLY ROOM 14'-0" X 5'-0" 74 SQ FT
SUPERVISORS
TRAINING / BUNK ROOM 22'-0" X 13'-0" 288 SQ FT
OBSERVATION 7'-10" X 10'-0" 80 SQ FT
INTERROG. ROOM 7'-10" X 10'-0" 80 SQ FT
FITNESS ROOM 11'-6" X 14'-7" 186 SQ FT
COPY 14'-0" X 7'-0" 100 SQ FT
OPEN OFFICES 13'-4" X 30'-0" 400 SQ FT
LOCKERS/ SHOWERS 92 SQ FT (EACH)
ADMINISTRATION 14'-0" X 10'-0" 128 SQ FT
OFFICERS
SERVER ROOM 52 SQ FT
EVIDENCE OFFICER 12'-0" X 10'-0" 122 SQ FT
LOBBY 14'-0" X 9'-0" 141 SQ FT
CLST
ARMORY 9'-0" X 4'-11" 47 SQ FT
EVIDENCE 555 SQ. FT.
OFFICE 10'-5" X 10'-0" 103 SQ FT
ADA UNISEX RR.
BREAK RM 16'-6" X 10'-4" 116 SQ FT
READY ROOM 10'-0" X 10'-4" 106 SQ FT
CLOSET
SECURE 9'-0" X 4'-11" 46 SQ FT
76'-8"
CODE ENFORCEMENT 11'-0" X 11'-4" 135 SQ FT
COMMUNITY DEV. DIRECTOR 11'-0" X 11'-4" 135 SQ FT
PROJECT MANAGER 11'-0" X 11'-4" 135 SQ FT
INFRASTRUCTURE DIRECTOR 11'-0" X 11'-4" 135 SQ FT
BUILDING OFFICIALS 16'-10" X 18'-3" 300 SQ FT
80'-0"
12'-0"
COUNTY FLAG
U.S.A. FLAG
FL STATE FLAG
9'-4"
PERMITTING 12'-0" X 16'-0" 207 SQ FT
PERMIT ROOM 15'-6" X 10'-0" 155 SQ FT
ADMIN. ASSISTANT 15'-6" X 10'-0" 148 SQ FT
COPY ROOM 11'-10" X 11'-0" 151 SQ FT
SPRINKLER RISER ROOM 68 SQ FT
36" MIN.
VESTIBULE 159 SQ FT
COMMUNITY DEV. COORD. 14'-0" X 10'-0" 147 SQ FT
SUPPLY ROOM 12'-4" X 10'-0" 124 SQ FT
OFFICE/FLEX 12'-4" X 10'-0" 124 SQ FT
LARGE CONFERENCE ROOM 17'-10" X 24'-7" 476 SQ FT
MEN 115 SQ FT
WOMEN 116 SQ FT
LOBBY 21'-0" X 16'-0" 600 SQ FT
CONFERENCE ROOM 13'-4" X 15'-0" 229 SQ FT
FINANCE SVCS. COORD. 13'-0" X 11'-0" 130 SQ FT
ACCOUNTING 13'-6" X 11'-0" 149 SQ FT
ACCOUNTING 13'-6" X 11'-0" 149 SQ FT
ASSEMBLY ROOM 2,085 SQ FT
BREAKROOM 12'-10" X 14'-6" 181 SQ FT
FAMILY RR 60 SQ FT
BABY STATION
ADMIN 11'-2" X 8'-5" 128 SQ FT
UTILITY BILLING 14'-8" X 11'-0" 178 SQ FT
IT EQUIPMENT 12'-6" X 14'-10" 160 SQ FT
IT-OFFICE 12'-0" X 12'-6" 150 SQ FT
IT OFFICE 12'-0" X 12'-6" 150 SQ FT
COPY ROOM 7'-0" X 12'-6" 85 SQ FT
FINANCE DIRECTOR 20'-0" X 12'-0" 240 SQ FT
BEVERAGE STATION 80 SQ FT
JANITOR CLOSET 60 SQ FT
56'-0"
SERVER ROOM 65 SQ FT
MEN RR 220 SQ FT
WOMEN RR 220 SQ FT
RECORDS 25'-0" X 20'-0" 492 SQ FT
MECH. ROOM 76 SQ FT
DEPUTY 12'-8" X 11'-0" 140 SQ FT
HUMAN RESOURCES 12'-8" X 11'-0" 140 SQ FT
CLERK OFFICE 18'-6" X 11'-0" 204 SQ FT
CITY MANAGER 25'-0" X 16'-0" 374 SQ FT
142'-0"
EMERGENCY GENERATOR
180'-0"

CONCEPTUAL FLOOR PLAN

SCALE: 1/8" = 1'-0"

CONCEPTUAL ARCHITECTURAL ELEVATIONS

1 COURT ENTRY VIEW-1

1 West
1/8" = 1'-0"

2 North
1/8" = 1'-0"

1 COURT ENRTY VIEW -2

1 COURT ENTRY VIEW - 3

4 3D View 23

8 3D View 19

1 6/24
12" = 1'-0"

2 6/24/1
12" = 1'-0"

FLAGLER CENTRAL COMMERCE PARKWAY PREVIOUSLY PERMITTED PLAN SET WITH THE SJRWMD

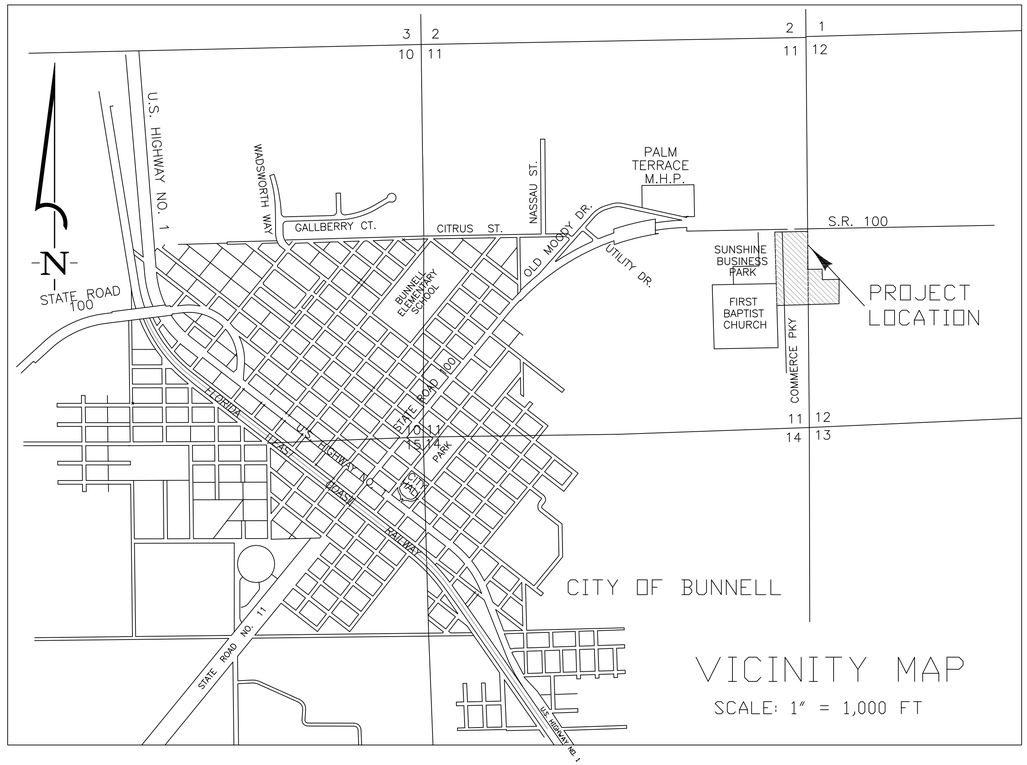
FLAGLER CENTRAL COMMERCE PARK
PHASE 1A
REVISED CONSTRUCTION PLANS
BUNNELL, FLORIDA

Tables — Hydrologic Soil Group — Summary By Map Unit

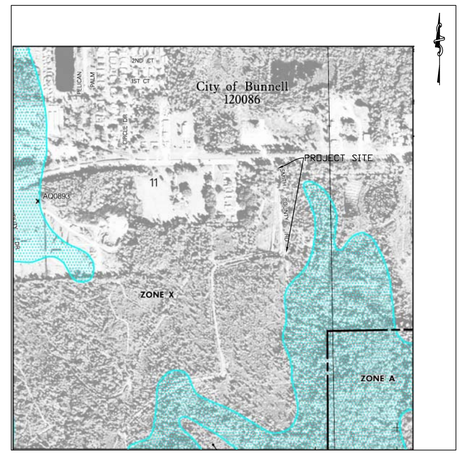
Summary by Map Unit — Flagler County, Florida

Map unit symbol	Map unit name	Rating
8	Hicoria, Riviera, and Gator soils, depressional	C/D
11	Myakka fine sand	A/D
12	Placid, Basinger, and St. Johns soils, depressional	A/D
27	Cassia fine sand	A
29	Udarents, moderately wet	A
40	Pomona fine sand	A/D

SOILS MAP
SCALE: N.T.S.



VICINITY MAP
SCALE: 1" = 1,000 FT



FLOOD ZONE MAP
SCALE: N.T.S.

THE PROJECT IS LOCATED IN FLOOD ZONE X– AREAS _OUTSIDE THE 100 YEAR FLOOD HAZARD PER FIRM MAP PANEL _12035C0226D, EFFECTIVE DATE 7/17/2006.

Utility Contacts

Sunshine State One Call of Florida (Utility Locates)
Call Before You Dig
Ph. No. (800) 432-4770

Florida Power & Light (Electrical Utility Provider):
4277 East Highway 100
Bunnell, FL 32110
Ph. No. (386) 586-6429

ATT (Telecommunications Provider):
900 North Nova Road
Daytona Beach, FL 32117
Ph. No. (386)254-2936

Bright House Networks (Cable / internet service):
211 St. Joe Plaza Drive
Palm Coast, FL 32164
Ph. No. (386) 445-5464

City of Bunnell:
PO BOX 756
Bunnell, Fl 32110
Ph. No. (386)437-7516

OWNER: OARE ASSOCIATES, LLC
AUSTIN BROCKENBROUGH
C/O JANET MARTINEZ
SHUFFIELD-LOWMAN
203 E. RICH STREET
DELAND, FL. 32720

TELEPHONE: 386-736-9225
E-MAIL: JMARTINEZ@SHUFFIELDLOWMAN.COM

ENGINEER: JERRY K. FINLEY, P.E.
FINLEY ENGINEERING GROUP
5531 SOUTH RIDGEWOOD AVE., UNIT 1
PORT ORANGE, FL 32127
TELEPHONE: 386-756-8676
E-MAIL: JFINLEY@FINLEYENGINEERS.COM

NO.	DATE	DESRIPTION
1	10-22-14	SUBMIT TO SJRWMD
3	2-16-15	SJRWMD APPLICATION

5531 SOUTH RIDGEWOOD AVENUE
UNIT 1
PORT ORANGE, FLORIDA 32127
(386)756-8676
CERTIFICATE OF AUTHORIZATION NUMBER 8081
JFINLEY@FINLEYENGINEERS.COM

FINLEY ENGINEERING GROUP

FLAGLER CENTRAL COMMERCE PARK
PHASE 1A
REVISED CONSTRUCTION PLANS
BUNNELL, FLORIDA

PROJECT NUMBER
FEG# 1410

JERRY K. FINLEY, P.E.
P.E. # 29909

SHEET TITLE
COVER SHEET

SHEET
1

STATE ROAD 100

(RIGHT OF WAY VARIES)

R/W

N 88°55'20" E

LOT 1

EXISTING WENDY'S RESTAURANT

CONC. PAD

STORMWATER RETENTION EASEMENT

WETLAND LIMIT UPLAND

EXISTING DRAINAGE CONTROL STRUCTURE MODIFY PER DETAIL

TURBIDITY SCREEN

WETLAND IMPACTS

COMMERCE PARKWAY

LOT 2

MINIMUM FINISHED FLOOR ELEV = 26.0

POND 1

SILT FENCE

CONSTRUCT ADDITIONAL DRAINAGE CONTROL STRUCTURE FOR POND 1 - SEE DETAIL

DETAILED GRADING/SITE PLAN TO BE APPROVED BY SJRWMD TO VERIFY PERMIT COMPLIANCE PRIOR TO BUILDING ON LOT 2 OR LOT 3

LOT 3

MINIMUM FINISHED FLOOR ELEV = 26.0

TRACT C

DRAINAGE EASEMENT

0.1801 ACRES

TRACT B

LOT 4

MINIMUM FINISHED FLOOR ELEV = 26.0

DETAILED GRADING/SITE PLAN TO BE APPROVED BY SJRWMD TO VERIFY PERMIT COMPLIANCE PRIOR TO BUILDING ON LOT 4 OR LOT 5

POND 2

EXISTING BORROW PIT TO BE DESIGNED AND PERMITTED AS RETENTION POND AT THE TIME OF SITE DEVELOPMENT ON LOTS 4 & 5.

LOT 5

MINIMUM FINISHED FLOOR ELEV = 26.0

DRAINAGE CONTROL STRUCTURE FOR POND 2 - SEE DETAIL

TURBIDITY SCREEN

CONSERVATION EASEMENT SIGN

CONSERVATION EASEMENT

N01°40'14"W 1459.10'

S00°10'54"W 824.90'

S89°49'06"E 57.97'

L118 N88°54'50"E 424.73' L152

L119 L120 L132

164.99'

166.08'

FOR DITCH & RETENTION AREA SEE SHEET 5

FOR DITCH & RETENTION AREA SEE SHEET 6

0 50 100 150

SCALE: 1" = 50'

12"

CONSERVATION EASEMENT AREA. NO DUMPING, LAND CLEARING, OR OTHER DISTURBANCE TO NATIVE SOILS OR VEGITATION PERMITTED BEYOND THIS POINT. CALL THE ST. JOHNS RIVERWATER MANAGMENT DISTRICT FOR FURTHER INFORMATION REGARDING THIS HABITAT.

6"

CONSERVATION EASEMENT SIGN DETAIL

Not To Scale

Wetland Summary Table

Flagler Central Commerce Park Phase 1A (Lots 2 thru 5)

	Wendy's Lot 1, FCCP, Ph1A (Acres)	Lots 2-5 Phase 1A (Acres)	Total to Date (Acres)
Total Surface Water	**2.550**	**2.74**	**5.29**
Total Wetlands	2.550	2.74	5.29
Total OSW	0	0	0
Impacts that Require Mitigation	**2.550**	**2.74**	**5.29**
Dredge or Filled	2.550	2.74	5.29
Impacts that Require No Mitigation	**0.00**	**0.00**	**0.00**
Mitigation			**112.710**
On-Site			**112.710**
Wetland Preservation			107.430
Upland Preservation			5.28
Off-Site			**0.00**

NO.	DATE	DESRIPTION
1	10-22-14	SUBMIT TO SJRWMD
2	11-19-14	ADD CE SIGNS(5)
3	2-16-15	SJRWMD APPLICATION

5531 South Ridgewood Avenue
Unit 1
Port Orange, Florida 32127
(386)756-8676
CERTIFICATE OF AUTHORIZATION NUMBER 8081
ENGINEERING@FINLEYENGINEERS.COM

FINLEY ENGINEERING GROUP

FLAGLER CENTRAL COMMERCE PARK

PHASE 1A CONSTRUCTION

PROJECT NUMBER
FEG #1410

JERRY K. FINLEY, P.E.
P.E. # 29909

SHEET TITLE

OVERALL PLAN

SHEET

2

SCALE: 1" = 20'

LOT 1

WENDY'S RESTAURANT-2011 CONSTRUCTION

LOT 2

LOT 3

COMMERCE PARKWAY

MATCH LINE

PLATTED ACCESS EASEMENT

15' UTILITY EASEMENT

15' UTILITY ESMT.

R/W

26'

58.76'

250' - 6' WIDE CONCRETE SIDEWALK CONSTRUCTED WITH LOT 1

DRIVEWAY CONSTRUCTED WITH LOT

6' WIDE CONCRETE SIDEWALK

24' WIDE ASPHALT DRIVEWAY

NEW 12' WIDE TURN LANE

N 88°55'20" E
9.00'

650.46'

2"WATER SERVICE (CONSTRUCTED WITH LOT 1)

6"PVC SANITARY SERVICE TERMINATE WITH CLEANOUT C.O. INV. = 18.35

2"WATER SERVICE

6"PVC WATER

REMOVE BLOWOFF CONNECT TO EXISTING 6" WATER (STA.495+80.67± 0+45.56R))

BLOWOFF (CONSTRUCTED WITH LOT 1)

MES 201
INVERT = 22.20

MES 202
INVERT = 22.00

60"-14"x23" RCP

60'-6"SANITARY SERVICE @ 1.00%

CONNECT TO EXISTING SANITARY SEWER STUB

CONSTRUCT 6" GATE VALVE & BOX (STA.494+27.85)0+44.6(R))

6" GATE VALVE & BOX (CONSTRUCTED WITH LOT 1)

FIRE HYDRANT (CONSTRUCTED WITH LOT 1)

RETENTION POND

JUNCTION BOX STORM MANHOLE (2-CONSTRUCTED WITH LOT 1)

36" RCP (CONSTRUCTED WITH LOT 1)

29"x45" RCP (CONSTRUCTED WITH LOT 1)

30"RCP (CONSTRUCTED WITH LOT 1)

15" RCP (CONSTRUCTED WITH LOT 1)

6"PVC WATER (CONSTRUCTED WITH LOT 1)

SANITARY MH TOP 25.78

SANITARY MH TOP 25.01

SANITARY MH

TOP 25.78
E inv 15.62
S inv 15.63
W inv 15.74

TOP 25.01
N inv 16.70
S inv 16.73
W inv 16.92

TOP 25.03
N inv 17.33
S inv 17.36
W inv 17.45
E inv 17.46

CATCH BASIN GRATE=28.02 INVERT=24.37

2.5' CURB & GUTTER

MITERED END SECTION 18" RCP INVERT = 24.10

MITERED END SECTION 18" RCP INVERT = 23.46

MITERED END SECTION 18" RCP INVERT = 23.38

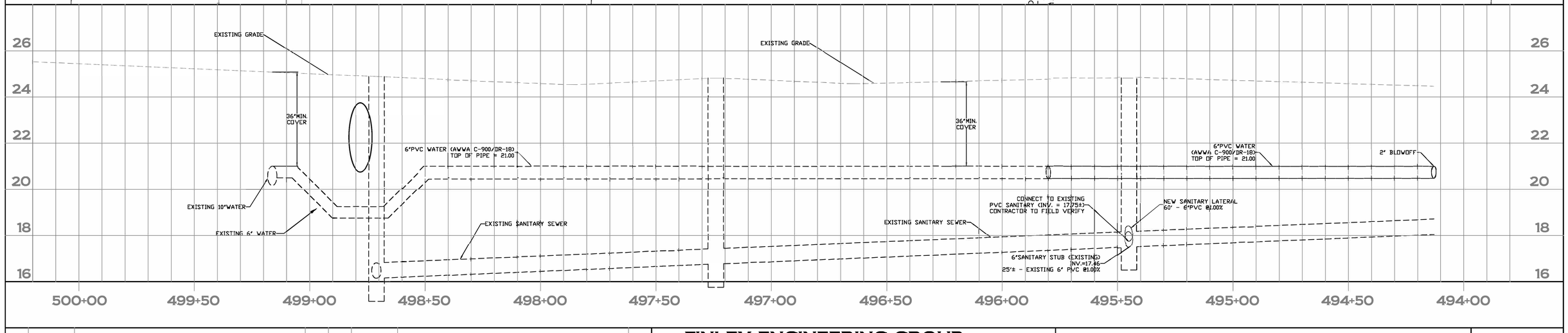
GAS LINE

EXISTING EDGE OF PAVEMENT

CONCRETE ISLAND

R/W

C-2.1 / C-2.2 DETAILS



NO.	DATE	DESCRIPTION	BY
3	5-16-15	SJRWMD APPLICATION	
1	10-22-14	SUBMIT TO SJRWMD	

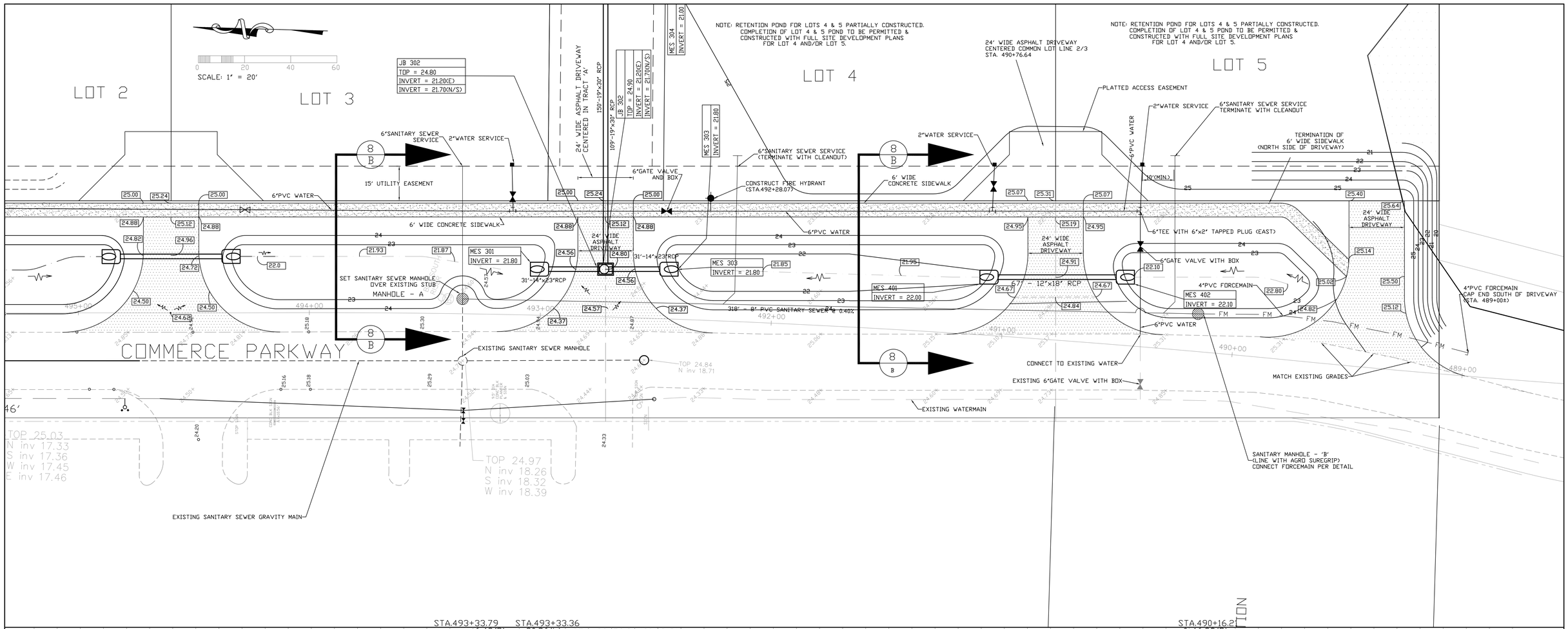
FINLEY ENGINEERING GROUP
CERTIFICATE OF AUTORIZATION # 8081

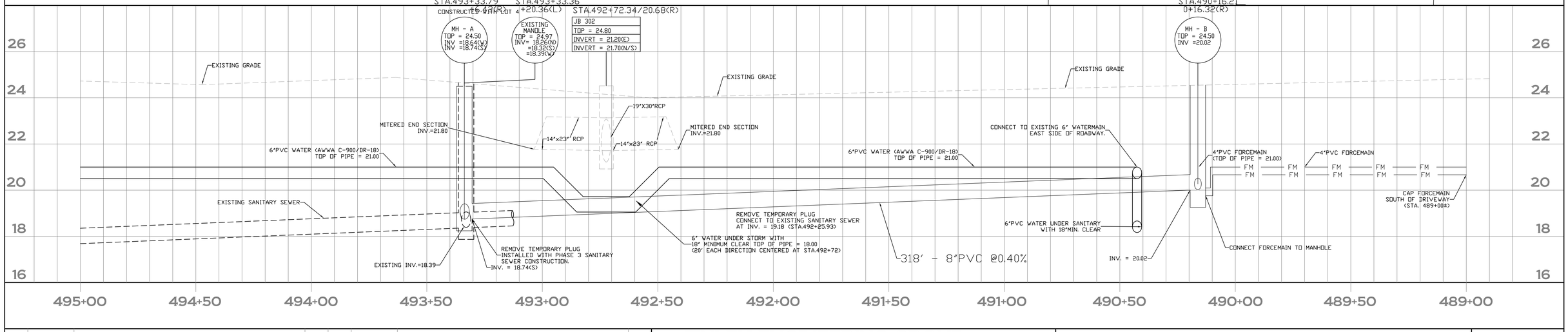
JERRY K. FINLEY, P.E.
P.E. # 29909

5531 SOUTH RIDGEWOOD AVE., UNIT 1
PORT ORANGE, FLORIDA 32127
(386) 756-8676

FLAGLER
CENTRAL COMMERCE PARK
COMMERCE PARKWAY
PHASE 1A CONSTRUCTION

SHEET
3





NO.	DATE	DESCRIPTION	BY
3	2-16-15	SJRWMD APPLICATION	
1	10-22-2014	SUBMIT TO SJRWMD	

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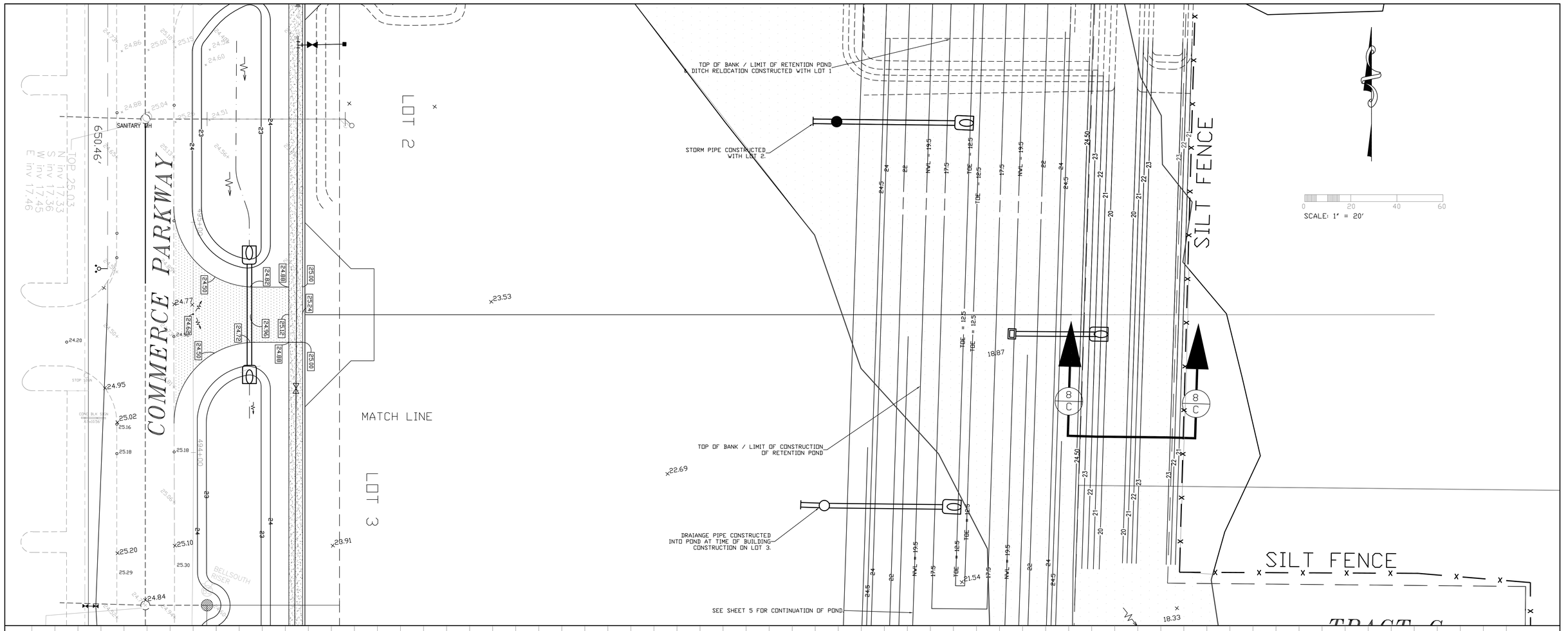
SHEET
4



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FLAGLER
CENTRAL COMMERCE PARK
RETENTION AREA & DITCH CONSTRUCTION
PHASE 1A

SHEET
5

LOT 3

LOT 4

STORM MANHOLE

24"RCP

MITERED END SECTION

SILT FENCE

TRACT C
DRAINAGE EASEMENT
0.180± ACRES

SILT FENCE

24' WIDE ASPHALT DRIVEWAY CENTERED IN TRACT 'A'

150'-19"x30" RCP

JB 302
TOP = 24.90
INVERT = 21.20(E)
INVERT = 21.70(N/S)

MES 304
INVERT = 21.00

MES 303
INVERT = 21.80

6"SANITARY SEWER SERVICE (TERMINATE WITH CLEANOUT)

CONSTRUCT TYPE 'M' HYDRANT (STA.492+28.07)

6"PVC WATER

312' - 8" PVC SANITARY SEWER @ 0.40%

MES 401
INVERT = 22.00

6' WIDE CONCRETE SI

BELLSOUTH RISER

55' DIA CONC BLK PLANTER & SIGN

NOTE: RETENTION POND FOR LOTS 4 & 5 PARTIALLY CONSTRUCTED. COMPLETION OF LOT 4 & 5 POND TO BE PERMITTED & CONSTRUCTED WITH DEVELOPMENT PLANS FOR LOT 4 AND/OR LOT 5.

SCALE: 1" = 20'

CONTINUE DITCH RELOCATION TO SOUTH END OF LOT 5

5)

ASPHALT DRIVEWAY
COMMERCE PARKWAY (EXISTING)
JB 302 TOP = 24.90
6' SIDEWALK
25.24
MATCH EXITING GRADE 24.82±
1.0%
1.375%
1.375%
2.0%
10' @ SLOPE<5.0%
SLOPE TO EXISTING GRADE NOT TO EXCEED 4:1
24.57
24.90
25.12
MAINTAIN 12" COVER IN UNPAVED AREA.
TOP OF PIPE = 23.14
19"x30"RCP
INV.=21.00
14"x23"RCP 0+20.68(R)
INV.=21.70
INV.=21.20
6"WATER LINE TOP = 21.00
6"WATER UNDER STORM WITH 18" MINIMUM CLEAR
4
1
SLOPE TO EXISTING GRADE NOT TO EXCEED 4:1

28 26 24 22 20 18

0+50(L) 0+00 0+50(R) 1+00(R)

STATIONING BASELINE
STA. 492+71.74

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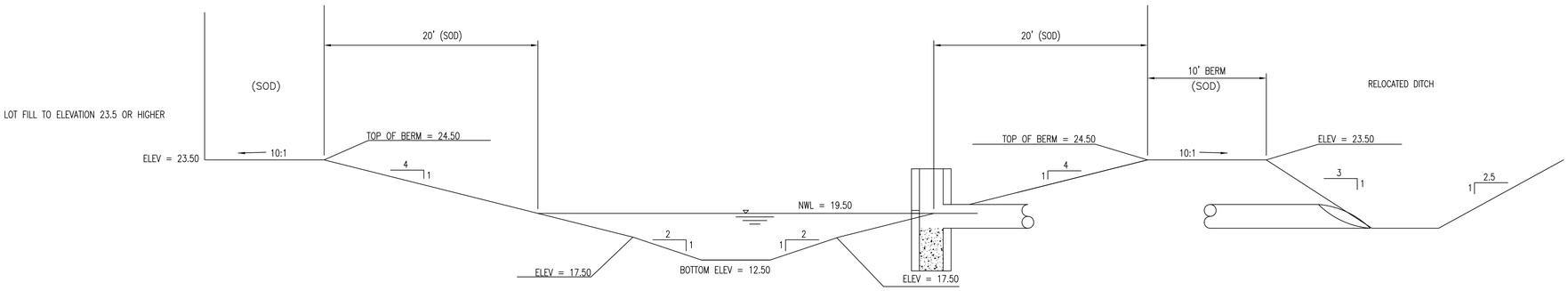
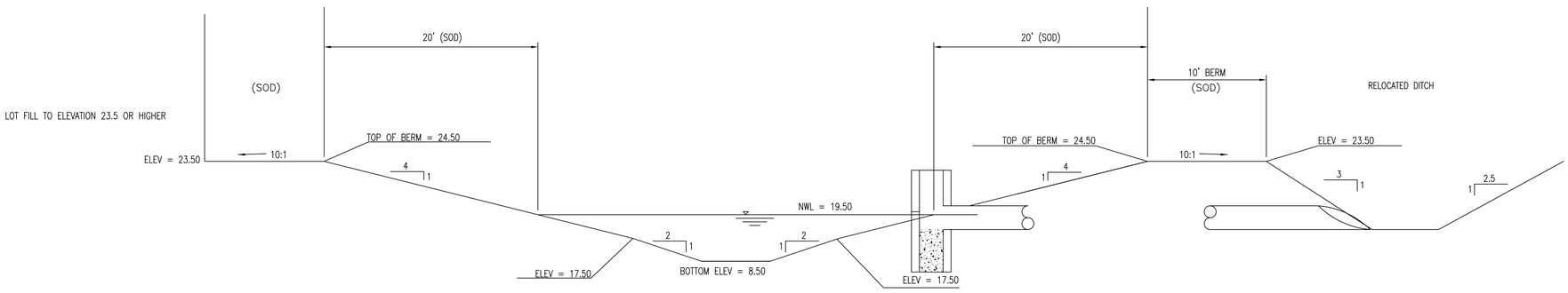
FLAGLER
CENTRAL COMMERCE PARK
RETENTION AREA & DITCH CONSTRUCTION
PHASE 1A

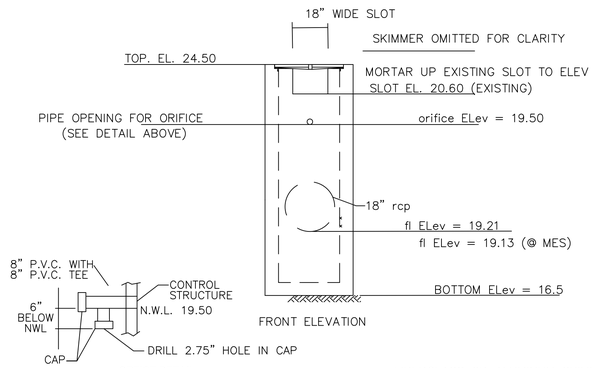
SHEET 6



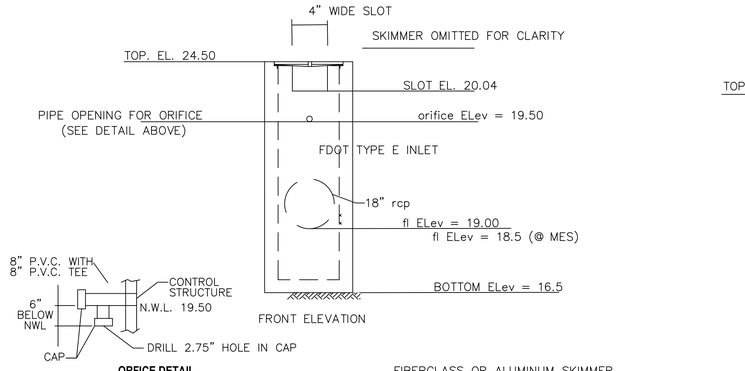
TYPICAL SECTION - POND 1 (LOTS 1 THRU 3)



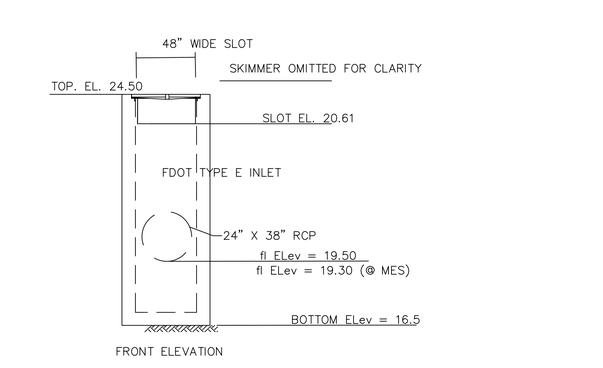
TYPICAL SECTION - POND 2 (LOTS 4 & 5)



EXISTING DRAINAGE CONTROL STRUCTURE AT POND 1
MODIFICATION PLAN



DRAINAGE CONTROL STRUCTURE - POND 2



DRAINAGE CONTROL STRUCTURE #2 FOR POND 1 (LOT 3)

DRAINAGE NOTES

1) PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCES BETWEEN MANHOLE CENTER LINES, CURB INLETS, ETC. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS FOR HIS CONTRACT PRIOR TO ORDERING MATERIALS.
2) PIPES SHALL EXTEND THROUGH INLET AND MANHOLE STRUCTURES 1 / 2 – INCH FROM FLUSH WITH THE INSIDE SURFACE OF THE WALL. CONCRETE SHALL BE CONSTRUCTED AROUND THEM NEATLY AND ALL SURFACES SHALL BE GROUTED SO AS TO PREVENT LEAKAGE.
3) FOR ALL CONCRETE STRUCTURES, ALL FINES AND IRREGULAR PROJECTIONS SHALL BE CHIPPED OFF FLUSH WITH THE SURFACE. ALL PROJECTING WIRES, ETC. SHALL BE CUT OFF 1 / 2 – INCH BELOW THE SURFACE. ALL HOLES IN CONCRETE STRUCTURES USED FOR THEIR HANDLING OR OTHER AND THE ANNULAR SPACE BETWEEN THE WALL AND ENTERING PIPES SHALL BE PLUGGED WATER TIGHT WITH EMBECO NO. 167 NON – SHRINK MORTAR OR APPROVED EQUAL, APPLIED AND CURED IN STRICT CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS SO THERE WILL BE ZERO LEAKAGE THROUGH OPENINGS AND AROUND PIPES. THE MORTAR SHALL BE FINISHED SMOOTH AND FLUSH WITH THE ADJOINING INTERIOR AND EXTERIOR SURFACES.
4) GRAVITY STORM SEWER PIPE SHALL BE LAID TRUE TO LINE AND GRADE GIVEN IN THE CONSTRUCTION PLANS WITH THE BELL END UPSTREAM WITH INSTALLATION, BEDDING, AND BACK FILLING IN COMPLIANCE WITH MANUFACTURER'S RECOMMENDATIONS, ANY REGULATORY AGENCY'S SPECIFIC REQUIREMENTS, AND IN CONFORMANCE WITH SECTION 430 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
5) THE CONTRACTOR SHALL SUPPLY ALL EQUIPMENT AND LABOR NECESSARY TO LAMP TEST THE STORM DRAIN LINES. THE CONTRACTOR WILL GIVE THE ENGINEER AND PERMIT AGENCIES 48 HOURS NOTICE OF PROPOSED TESTING DATE. ANY LINES FOUND NOT TRUE TO LINE OR GRADE OR HOLDING WATER WILL BE RE–INSTALLED. THE CONTRACTOR SHOULD SCHEDULE THIS TESTING AFTER SUBGRADE COMPACTION BUT PRIOR TO FINISH PAVING OVER PIPES TO AVOID COSTLY REPAIRS.
6) AT THE REQUEST OF THE ENGINEER, LOCAL JURISDICTION OR OTHER PERMIT AGENCIES, THE CONTRACTOR SHALL PROVIDE EQUIPMENT AND LABOR AND TEST THE STORM DRAINAGE SYSTEM FOR INFILTRATION OR EXFILTRATION.
7) THE CONTRACTOR SHALL MAINTAIN A CURRENT SET OF MYLAR "AS – BUILT" DRAWINGS SHOWING THE EXACT LOCATION OF ALL UNDERGROUND STORM DRAIN LINES ALONG WITH VERIFICATION OF INVERT, TOP, OR GRATE, AND SUBMIT THEM TO THE ENGINEER PRIOR TO FINAL INSPECTION.
8) ALL DRAINAGE STRUCTURES SHALL COMPLY WITH THE "FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS, 2006, UNLESS SPECIFICALLY DETAILED OTHERWISE.

CONSTRUCTION NOTES

1) THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE, AT ALL TIMES, ONE COPY OF THE CITY OF BUNNELL UTILITY DEPT. STANDARD SPECIFICATIONS AND STANDARD DETAILS, ONE COPY OF THE CONTRACT DOCUMENTS INCLUDING PLANS, SPECIFICATIONS AND SPECIAL PROVISIONS, AND COPIES OF ANY REQUIRED CONSTRUCTION PERMITS.
2) CONTRACTOR IS RESPONSIBLE FOR CHECKING ACTUAL SITE CONDITIONS BEFORE STARTING CONSTRUCTION.
3) ANY DISCREPANCIES ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE COMMENCING WORK.
4) CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS BEFORE COMMENCING WORK.
5) THE CONTRACTOR SHALL CONTACT ALL CONCERNED UTILITIES AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION OPERATIONS.
6) NO FIELD CHANGES OR DEVIATIONS FROM DESIGN TO BE MADE WITHOUT PRIOR APPROVAL OF THE ENGINEER.
7) ALL CONSTRUCTION MATERIALS AND WORKMANSHIP ARE TO BE IN ACCORDANCE WITH LATEST LOCAL AND JURISDICTION'S STANDARDS, SOUTHERN BUILDING CODE, FLORIDA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE CONSTRUCTION SPECIFICATIONS, AND ANY PERMIT CONDITIONS IMPOSED BY LOCAL OR STATE PERMITS.
8) RIGHTS – OF – WAY RESTORATION TO BE DONE AS PER LOCAL JURISDICTION.
9) CONTRACTOR SHALL MAINTAIN LOCAL TRAFFIC AT ALL TIMES. THE CONTRACTOR SHALL COMPLY WITH ALL RULES AND REGULATIONS OF THE STATE, COUNTY AND CITY AUTHORITIES REGARDING CLOSING OR RESTRICTING THE USE OF PUBLIC STREETS OR HIGHWAYS.
10) MAINTENANCE OF TRAFFIC PLAN TO BE PROVIDED BY THE CONTRACTOR. TRAFFIC CONTROL OF ALL COUNTY AND STATE HIGHWAY RIGHTS – OF – WAY SHALL MEET THE REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (U.S. DOT / FHA) AND THE REQUIREMENTS OF THE STATE AND ANY LOCAL AGENCY HAVING JURISDICTION.
11) REFER TO PAVING AND DRAINAGE DETAILS FOR TYPICAL SECTIONS OF THE ROADWAY.
12) ROADWAY SHALL HAVE A MINIMUM 30' RADIUS AT ALL INTERSECTIONS, UNLESS OTHERWISE NOTED.
13) ALL STAKE–OUT SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
14) BOUNDARY INFORMATION PROVIDED BY McKIM & CREED SURVEYORS, (386) 274–2828. TOPO INFORMATION PROVIDED BY EAST COAST LAND SURVEYORS, (386) 437–0123.
15) BURIED UTILITIES ARE SHOWN AS REPRESENTED BY ORIGINAL DESIGN DRAWINGS OR AS – BUILT. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES IN THE WORK AREAS (AS INDICATED ON THE PLANS OR NOT) PRIOR TO COMMENCING WORK AND NOTIFY THE ENGINEER OF ANY CONFLICTS. VERIFICATION SHALL BE MADE SUFFICIENTLY AHEAD OF THE CONSTRUCTION SCHEDULE FOR THAT PARTICULAR AREA OF WORK TO ALLOW FOR ADJUSTMENTS IF CONFLICTS ARE FOUND. CONTRACTOR SHALL ALSO NOTIFY LOCAL UTILITY COMPANIES PRIOR TO BEGINNING THE WORK.
16) ALL SPOT ELEVATIONS ARE EDGE OF PAVEMENT ADJACENT TO CURB AND GUTTERS, UNLESS OTHERWISE INDICATED AS "TC" (TOP OF CURB), ETC.
17) ALL DIMENSIONS ARE TO EDGE OF PAVEMENT OR FACE OF BUILDING UNLESS OTHERWISE NOTED OR SHOWN. CONTRACTOR TO FIELD STAKE AND VERIFY ALL DIMENSIONS PRIOR TO COMMENCING WORK AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES SUFFICIENTLY AHEAD OF THE PROPOSED CONSTRUCTION SCHEDULE TO ALLOW FOR ADJUSTMENTS. THE GEOMETRIC LAYOUT IS BASED ON THE ENGINEER'S INTERPRETATION OF THE BOUNDARY SURVEY OR OTHER INFORMATION PROVIDED BY THE OWNER AND, AS REQUIRED BY LAW, ANY INTERPRETATION AS TO FIELD LOCATIONS OF THE PROPERTY OR OTHER FEATURES MUST BE MADE BY A SURVEYOR LICENSED TO PERFORM FIELD INTERPRETATIONS AND LAYOUTS.
18) CONTRACTOR SHALL REMOVE ANY EXCESS CUTS OR SUPPLY FILL AS NECESSARY TO BRING THE SITE TO THE PROPOSED GRADES, INCLUDING EXCAVATION AND DISPOSAL OF ANY UNSUITABLE MATERIALS.
19) CONTRACTOR SHALL MAINTAIN A CURRENT SET OF MYLAR "AS – BUILT" DRAWINGS SHOWING THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES AND DRAINAGE ALONG WITH VERIFICATION OF INVERT, GRATE, FINISH SLABS, AND OTHER CRITICAL ELEVATIONS AND SUBMIT THEM TO THE ENGINEER PRIOR TO FINAL INSPECTION. ONE (1) SET SHALL BE SUBMITTED TO LOCAL JURISDICTIONAL AGENCY AT THE COMPLETION OF WORK.
20) CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD LOCATION OF ALL UTILITIES, COORDINATION OF WORK WITH AND NOTIFICATION OF ALL UTILITY COMPANIES PRIOR TO COMMENCING WORK.
21) CONTRACTOR SHALL COMPLY WITH ALL LOCAL JURISDICTION'S STANDARDS AND ANY CONDITIONS OF PERMITS FOR THE PROJECT.
22) AFTER COMPLETION OF ALL CONSTRUCTION AND INSTALLATION WORK, THE CONTRACTOR SHALL PERFORM A SITE CLEAN UP OPERATION FOR REMOVAL OF ALL DEBRIS, TRASH, EXCESS OF MATERIAL AND EQUIPMENT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PRESENT THE PROJECT SITE CLEAN AND IN GOOD ORDER AT THE TIME OF FINAL ACCEPTANCE.
23) CONTRACTOR SHALL VERIFY CONFORMITY BETWEEN ENGINEER'S DRAWINGS AND OTHER DRAWINGS PERTAINING TO LOCATION, SIZE AND ELEVATIONS OF BUILDING STUB OUTS AND LATERALS.
24) CONTRACTOR WILL NOT REMOVE OR DAMAGE ANY EXISTING TREES LOCATED IMMEDIATELY OUTSIDE THE LIMITS OF BUILDINGS OR PAVED AREAS, UNLESS OTHERWISE AUTHORIZED BY PROJECT MANAGER, ENGINEER, OR ARCHITECT.
25) CONTRACTOR SHALL VERIFY ALL DIMENSIONS WITH A REGISTERED SURVEYOR PRIOR TO COMMENCING WORK AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
26) CONTRACTOR TO PROVIDE PEDESTRIAN CONTROL FOR CLOSURE OF SIDEWALKS (TYPICAL).
27) ACCESS TO BUSINESSES WILL REMAIN OPEN ALL THE TIME DURING THE COURSE OF THE PROJECT. ACCESS TO SUCH BUSINESSES SHALL NOT BE BLOCKED WITHOUT PRIOR APPROVAL FROM THE CITY."

NO.	DATE	DESRIPTION
1	10-22-14	SUBMIT TO SJ
3	5-16-15	SJRWMD APPLICATION

5531 SOUTH RIDGEWOOD AVENUE
UNIT 1
PORT ORANGE, FLORIDA 32127
(386)756-8676
CERTIFICATE OF AUTHORIZATION NUMBER 8081
ENGINEERING@FINLEYENGINEERS.COM

FINLEY ENGINEERING GROUP

FLAGLER CENTRAL COMMERCE PARK
PHASE 1A

BUNNELL, FLORIDA

PROJECT NUMBER
FEG# 1410

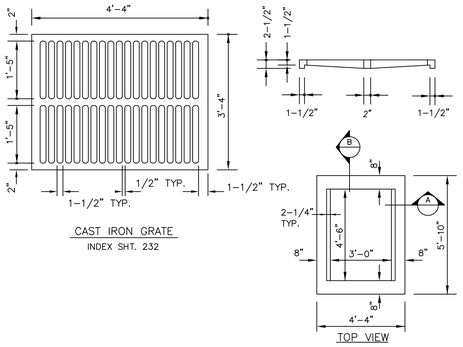
JERRY K. FINLEY, P.E.
P.E. # 29909

SHEET TITLE

DETAILS

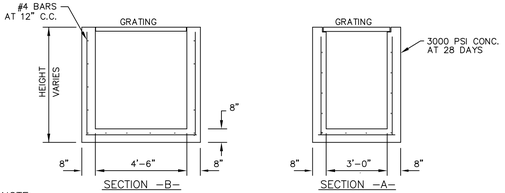
SHEET

7



CAST IRON GRATE
INDEX SHT. 232

TOP VIEW



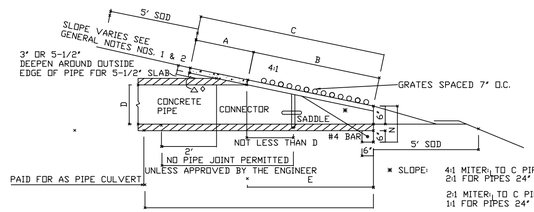
SECTION –B–

SECTION –A–

NOTE:

* 6" THICK WALLS MAY BE PERMITTED, PROVIDING THAT THE INCREASED REINFORCEMENT IN ACCORDANCE WITH FDOT STANDARD INDEX NO. 201 IS INSTALLED. THIS MUST BE REFLECTED ON THE DESIGN PLANS, SHOP DRAWINGS, AND AS–BUILTS.

F.D.O.T. TYPE E INLET
INDEX SHT. 232



4:1 MITER, TO C PIPE 18" AND SMALLER
2:1 FOR PIPES 24" AND LONGER.

2:1 MITER, TO C PIPE FOR PIPES 18" AND SMALLER
1:1 FOR PIPES 24" AND LARGER.

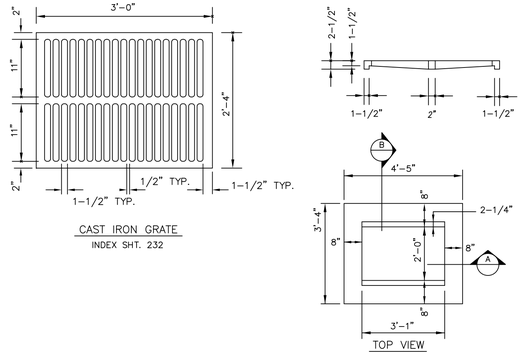
F (PIPE TO BE INCLUDED UNDER UNIT PRICE FOR MITERED END SECTION)

SECTION

DIMENSIONS AND QUANTITIES

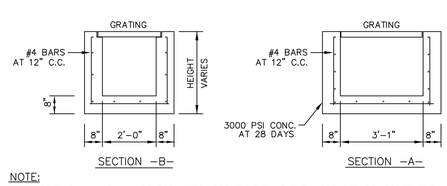
	SIZE	X	A	B	C	E	F	G	W SINGLE PIPE	W DOUBLE PIPE	W TRIPLE PIPE	W QUAD. PIPE	N
4:1 SLOPE	15"	2'-7"	2.27'	4.09'	6.36'	4.03'	8'	1.22'	4.63'	7.21'	9.79'	12.37'	1.19'
	18"	2'-10"	2.36'	5.12'	7.48'	5.03'	9'	1.41'	4.92'	7.75'	10.58'	13.42'	1.21'
	24"	3'-5"	2.53'	7.18'Δ	9.71'	7.03'Δ	11'	1.73'	5.50'	8.92'	12.33'	15.75'	1.25'
	19x30"	4'-0"	2.11'	2.92'	5.03'	2.73'	6'	2.37'	6.04'	10.04'	14.04'	18.04'	1.27"
	24x38"	5'-0"	2.26'	3.85'	6.05'	3.56'ϕ	7'	2.85'	6.79'	11.79'	16.79'	21.79'	1.31'

MITERED END SECTION



CAST IRON GRATE
INDEX SHT. 232

TOP VIEW



SECTION –B–

SECTION –A–

NOTE;

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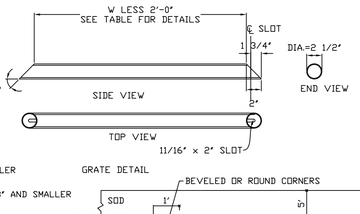
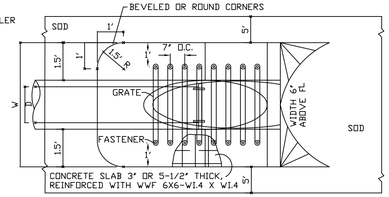
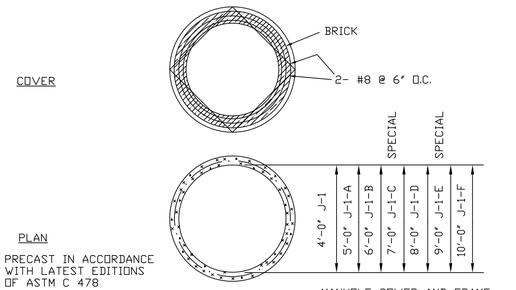
F.D.O.T. TYPE C INLET
INDEX SHT. 232



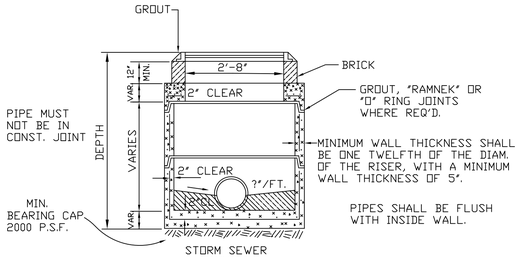
GRATE DETAIL



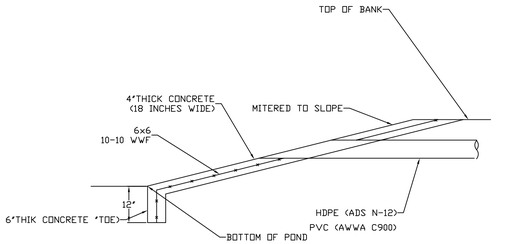
TOP VIEW–SINGLE PIPE



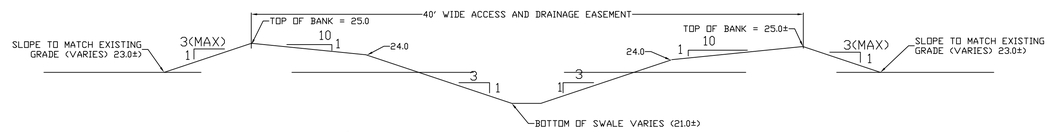
MANHOLE COVER AND FRAME PER CITY OF BUNNELL



STORM SEWER MANHOLE

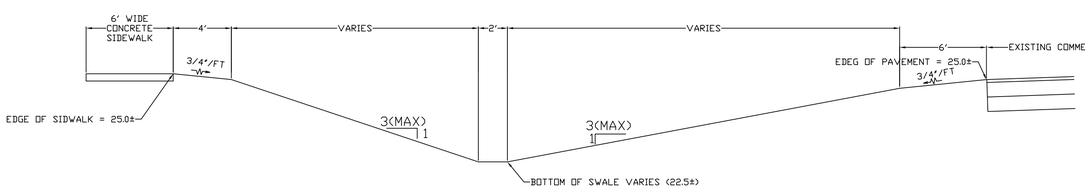


MITERED END SECTION DETAIL



8A LOT 3 / 4 DRAINAGE SWALE SECTION

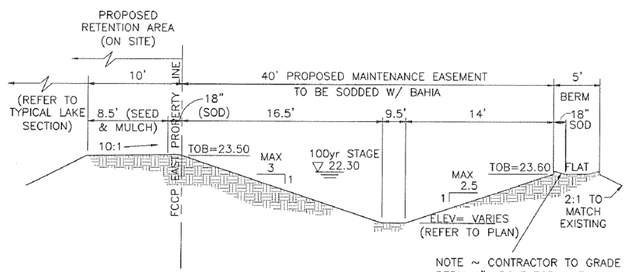
SCALE: 1" = 5' (HORIZ. & VERT.)



8B COMMERCE PARKWAY RIGHT OF WAY SWALE SECTION

SCALE: 1" = 5' (HORIZ. & VERT.)

ELEVATION OF TOP OF BANK VARY PER LOCATION – SEE PLAN VIEW FOR GRADE



NOTE ~ CONTRACTOR TO GRADE BERM 4" ABOVE TOB @ TOB AND BACKSLOPE TO FLAT AREA OF BERM (WITHIN 18" SOD STRIP) TO PREVENT DITCH WASHOUTS

8C RELOACTED DITCH SECTION AT REAR OF LOTS

SCALE: N.T.S.

AS-BUILT DRAWING REQUIREMENTS

IN ORDER TO ENSURE THAT NEW SUBDIVISIONS AND SITE PLANS ARE CONSTRUCTED SUBSTANTIALLY IN ACCORDANCE WITH CITY REGULATIONS AND THE APPROVED DRAWINGS, THE FOLLOWING INFORMATION IS REQUIRED ON ALL AS-BUILT DRAWINGS.

1. PAVEMENT AND CURB WIDTHS SHALL BE VERIFIED AND DIMENSIONED FOR EACH STREET AT EACH BLOCK (FOR SUBDIVISIONS) AND AS APPROPRIATE TO CONFIRM PAVING LIMITS (ON SITE PLANS).
2. ALL RADII AT INTERSECTIONS SHALL BE VERIFIED AND DIMENSIONED. THIS INFORMATION IS TO BE CLEARLY INDICATED ON THE AS-BUILT.
3. ROADWAY ELEVATIONS SHALL BE RECORDED AT ALL GRADE CHANGES, 100' INTERVALS ALONG ROADWAY, AND OTHER INTERVALS AS NEEDED ALONG ALL STREETS. STREET CENTERLINE AND CURB INVERT ELEVATIONS SHALL BE RECORDED AS NOTED. THE AS-BUILT CENTERLINE PROFILE OF ALL STREETS SHALL ALSO BE SHOWN ON THE PLAN AND PROFILE SO IT MAY BE COMPARED TO THE DESIGN PROFILE GRADE LINES. IN THE EVENT THAT THE AS-BUILT CENTERLINE LONGITUDINAL GRADE DOES NOT MEET THE CITY MINIMUM STANDARDS, ADDITIONAL LONGITUDINAL GRADES OF THE ADJACENT CURBING AND SIMILAR ROADWAY CROSS-SECTION SURVEYS TO VERIFY THE CORRECT CROSS SLOPE, SHALL BE REQUIRED TO VERIFY THAT THE SYSTEM WILL FUNCTION AS ORIGINALLY DESIGNED.
4. WATER, SANITARY, REUSE AND STORM DRAINAGE STRUCTURES SHALL BE LOCATED AND DIMENSIONED FROM CENTERLINES AND/OR LOT LINES AS APPROPRIATE. EACH STRUCTURE SHALL BE LOCATED BY SUB-METER GPS WITH LATITUDE, LONGITUDE AND ELEVATION DATA PROVIDED.
5. WATER, SANITARY, REUSE AND STORM DRAINAGE PIPE INVERT AND INLET ELEVATIONS SHALL BE RECORDED AND CLEARLY DENOTED AS AS-BUILT INFORMATION. DESIGN ELEVATIONS SHALL BE CROSSED OUT AND AS-BUILT INFORMATION WRITTEN NEXT TO IT.
6. WATER, SANITARY, REUSE AND STORM DRAINAGE PIPE MATERIAL, LENGTH, AND SIZE SHALL BE MEASURED AND/OR VERIFIED. THIS INFORMATION IS TO BE CLEARLY INDICATED AS BEING AS-BUILT INFORMATION.
7. ALL APPLICABLE TOPOGRAPHIC INFORMATION PERTINENT TO THE ON-SITE DRAINAGE SYSTEM, SUCH AS DITCHES, SWALES, LAKES, CANALS, ETC. THAT ARE DEEMED NECESSARY BY THE CITY TO VERIFY THE FUNCTIONAL PERFORMANCE OF THE STORM WATER SYSTEM SHALL BE NOTED. NORMALLY, RECORDING ELEVATIONS EVERY 100 FEET AT THE TOP OF BANK AND TOE OF SLOPE WILL BE REQUIRED. MEASUREMENTS SHALL BE TAKEN AND RECORDED IN ORDER TO ACCURATELY TIE DOWN THESE FEATURES TO THE ROADWAY CENTERLINES AND TO PLAT LINES. WHENEVER POSSIBLE, CONTOUR LINES SHALL BE UTILIZED TO GRAPHICALLY DESCRIBE THESE TOPOGRAPHIC FEATURES.
8. RETENTION AREAS SHALL HAVE THEIR TOP-OF-BANK AND BOTTOM ELEVATIONS RECORDED. ACTUAL MEASUREMENTS SHALL BE TAKEN AND DIMENSIONS RECORDED OF THE SIZE OF ALL RETENTION AREAS. MEASUREMENTS SHALL BE DONE FROM TOP-OF-BANK TO TOP-OF-BANK WITH SIDE SLOPES INDICATED. SEPARATE CALCULATIONS SHALL BE SUBMITTED TO INDICATE REQUIRED AND PROVIDED RETENTION VOLUMES.
9. ACTUAL MATERIALS USED AND ELEVATIONS AND DIMENSIONS OF OVERFLOW WEIR STRUCTURES AND SKIMMERS SHALL BE NOTED ON THE AS-BUILT.
10. STORM DRAINAGE SWALE CENTERLINES SHALL BE LOCATED AND ELEVATIONS OF FLOW LINE AND TOP OF BANK SHALL BE RECORDED EVERY 100 FEET. SIDE SLOPES SHALL ALSO BE INDICATED.
11. SANITARY SEWER MANHOLES SHALL BE VERIFIED AND DIMENSIONED FROM STREET CENTERLINES OR LOT LINES AS APPROPRIATE. ALL RIM AND INVERT ELEVATIONS SHALL BE VERIFIED AND RECORDED. THIS INFORMATION SHALL BE CLEARLY INDICATED AS BEING AS-BUILT INFORMATION. DESIGN ELEVATIONS SHALL BE CROSSED OUT AND AS-BUILT INFORMATION WRITTEN NEXT TO IT.
12. FOR SUBDIVISIONS, PROPOSED DESIGN FINISHED FLOOR ELEVATIONS SHALL APPEAR ON ALL SUBDIVISION LOTS ON THE APPROPRIATE PLAN AND PROFILE SHEET AS WELL AS ON THE MASTER DRAINAGE PLAN.
13. SANITARY SEWER LINE LENGTHS, SIZES, MATERIAL, SLOPE, ETC., SHALL BE VERIFIED AND RECORDED. THIS INFORMATION IS TO BE CLEARLY INDICATED AS BEING AS-BUILT INFORMATION.
14. SEWER LATERALS SHALL BE VERIFIED AND RECORDED AT THEIR CLEAN OUT LOCATIONS. STATIONING AND OFFSET DISTANCES SHALL BE MEASURED FROM DOWNSTREAM MANHOLES TOWARDS UPSTREAM MANHOLES. INVERT INFORMATION AT CLEAN OUT SHALL BE PROVIDED, AND BE LOCATED BY SUB-METER GPS WITH LATITUDE, LONGITUDE, AND ELEVATION DATA PROVIDED.
15. LIFT STATIONS AND FORCE MAINS SHALL BE VERIFIED AND DIMENSIONED FROM STREET CENTERLINES OR LOT LINES AND BASELINE OF CONSTRUCTION AS APPROPRIATE. FORCE MAIN DEPTH AND LOCATION, INCLUDING VALVES, WILL BE PROVIDED AND TIED TO PERMANENT ABOVE GRADE FEATURES. DIMENSIONAL AND ELEVATION INFORMATION INDICATED ON THE APPROVED PLAN SHALL BE VERIFIED AND RECORDED. THIS INFORMATION SHALL BE CLEARLY INDICATED AS BEING AS-BUILT INFORMATION. BURIED POTABLE WATER LINES AND ELECTRICAL SERVICE LINES SHALL BE CLEARLY DIMENSIONED, LOCATED, AND LABELED. EACH LIFT STATION, MANHOLE, FITTING AND VALVE SHALL BE LOCATED BY SUB-METER GPS WITH LATITUDE, LONGITUDE AND ELEVATION DATA PROVIDED.
16. CURB CUTS OR METAL TABS USED TO MARK SEWER LATERALS, WATER SERVICES AND WATER VALVES, SHALL BE VERIFIED FOR PRESENCE AND ACCURACY OF LOCATION.
17. POTABLE AND RECLAIMED WATER MAIN LINES SHALL BE DIMENSIONED OFF THE BASELINE CONSTRUCTION. WATER MAIN LINE MATERIAL, SIZE, LENGTH AND DEPTH PLACED SHALL BE NOTED. LOCATIONS OF VALVES SHALL ALSO BE TIED TO BASELINE CONSTRUCTION. THIS INFORMATION SHALL BE CLEARLY INDICATED AS BEING AS-BUILT INFORMATION.
18. POTABLE AND RECLAIMED WATER VALVES, TEES, BENDS, ALL SERVICES, AND FIRE HYDRANTS SHALL BE LOCATED BY TYING THEM TO BASELINE CONSTRUCTION (STA. & OFFSET). SIMILARLY, FORCE MAIN VALVES, TEES AND BENDS SHALL BE LOCATED IN THE SAME MANNER. STATIONING AND OFFSET DISTANCES SHALL BE MEASURED FROM DOWNSTREAM MANHOLES TO UPSTREAM MANHOLES. ALL VALVES, FITTINGS AND HYDRANTS SHALL BE LOCATED BY SUB-METER GPS WITH LATITUDE, LONGITUDE AND ELEVATION DATA PROVIDED.
19. FOR PERPENDICULAR CROSSINGS OF STORM WATER, SANITARY SEWER, POTABLE WATER, OR RECLAIMED WATER, THE AS-BUILT PLANS SHALL CLEARLY INDICATE WHICH UTILITIES ARE LOCATED OVER OR UNDER OTHER UTILITIES, AS NECESSARY.
20. ANY SPECIAL FEATURES SUCH AS, CONCRETE FLUMES, LAKE BANKS, WALLS, FENCING, ETC., WHICH WERE A PART OF THE APPROVED CONSTRUCTION DRAWINGS SHOULD ALSO BE LOCATED AND DIMENSIONED.
21. IF AN APPROVED SUBDIVISION PLAT OR SITE PLAN SHOWS A CONSERVATION EASEMENT, THE PROJECT SURVEYOR SHOULD PROVIDE THE EXACT LOCATION OF THE SPECIMEN TREE(S) FROM THE RIGHT-OF-WAY OR PROPERTY LINES AND PROPOSED EASEMENT BOUNDARIES ON THE AS-BUILT DRAWING. THE AS-BUILT LOCATION OF THESE TREES WILL HELP VERIFY THE SUFFICIENCY OF THE CONSERVATION EASEMENT PRIOR TO PLAT RECORDING OR CERTIFICATE OF OCCUPANCY.
22. WHEN STORM WATER, POTABLE WATER, RECLAIMED WATER, OR SANITARY SEWER IMPROVEMENTS ARE LOCATED WITHIN AN EASEMENT, THE AS-BUILT DRAWING SHALL ACCURATELY DEPICT THE LOCATION OF THE EASEMENT ITSELF AS WELL AS THE EXACT LOCATION OF THE IMPROVEMENTS WITHIN THE EASEMENT. THIS IS REQUIRED IN ORDER TO VERIFY THAT THE IMPROVEMENTS HAVE BEEN PROPERLY LOCATED AND TO ENSURE THAT FUTURE SUBSURFACE EXCAVATION TO PERFORM REMEDIAL REPAIR CAN BE ACCOMPLISHED WITHOUT DISTURBANCE BEYOND THE EASEMENT.
23. AS-BUILT DRAWINGS ARE TO BE PREPARED BY A FLORIDA LICENSED SURVEYOR AND SHALL INCLUDE A SIGNED CERTIFICATION STATEMENT BY THE FLORIDA LICENSED ENGINEER OF RECORD. A MYLAR SET OF AS-BUILT RECORD DRAWINGS SHALL BE PROVIDED WITH A DIGITAL COPY IN A COMPATIBLE AUTOCAD FORMAT.

STORM DRAINAGE CONSTRUCTION NOTES

ALL MATERIALS AND INSTALLATION METHODS USED FOR FOR THIS PROJECT'S IMPROVEMENTS SHALL BE IN CONFORMANCE WITH THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), AND THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS (LATEST EDITION).

1. ALL STORM SEWERS AND CULVERTS LOCATED ON THIS PROJECT SHALL BE A MINIMUM OF CLASS III REINFORCED CONCRETE PIPE UNLESS OTHERWISE SHOWN ON THE PLANS. WHERE SHOWN, ALTERNATE MATERIALS MAY BE ALTERNATE MATERIALS INCLUDING:
   A. SMOOTH INNER WALL HIGH DENSITY POLYETHYLENE (HDPE) IN ACCORDANCE WITH AASHTO M-294, AASHTO MP7, ASTM D3350 AND ASTM D2412 FOR SIZES UP TO 42" IN DIAMETER OR
   B. PVC MAY BE SUBSTITUTED IN AREAS NOT EXPOSED TO VEHICULAR TRAFFIC IN ACCORDANCE WITH THE PROVISION NOTED IN THE "SEWER DETAILS" OF THESE PLANS.
2. ALL STORM SEWER PIPE JOINTS SHALL BE ENTIRELY WRAPPED WITH FILTER FABRIC PER FDOT SPECIFICATIONS WITH A MINIMUM WIDTH OF 24" AND A MINIMUM OF 24" OVERLAP SECURED WITH PLASTIC OR STAINLESS BANDS. ADDITIONALLY, ALL JOINTS SHALL BE RUBBER GASKETED FOR BOTH ROUND AND ELLIPTICAL PIPE.
3. DEPTH OF COVER MEASURED TO THE TOP OF PIPE (NOT INCLUDING THE BELL JOINT) SHALL BE A MINIMUM OF 1 FOOT. DEVIATION FROM THIS REQUIREMENT MAY BE ALLOWED BY INCREASING THE PIPE'S STRUCTURAL CAPACITY. THIS DEVIATION MUST BE SPECIFIED ON THE PLANS APPROVED FOR CONSTRUCTION AND SUBSEQUENTLY REFLECTED ON THE SHOP DRAWINGS AND AS–BUILT PLANS.
4. STORM INLETS, MANHOLES, AND CATCH BASINS SHALL BE EITHER POURED IN PLACE OR PRECAST REINFORCED CONCRETE. STRUCTURES SHALL BE REQUIRED AT EACH CHANGE OF PIPE SIZE OR CHANGE IN PIPE DIRECTION. ALL STRUCTURES SHALL BE IN COMPLIANCE WITH ASTM C-478 AND SHALL HAVE 8" THICK WALLS. 6" THICK WALLS MAY BE PERMITTED PROVIDING THAT THE PLANS SPECIFY INCREASED REINFORCEMENT IN ACCORDANCE WITH FDOT STANDARD INDEX NO. 201 IN ADDITION, THIS REQUIREMENT MUST BE REFLECTED ON BOTH THE SHOP DRAWING AND AS–BUILT PLANS. DRAINAGE STRUCTURES EXPOSED TO, HAVING THE POTENTIAL OF BEING EXPOSED TO VEHICULAR TRAFFIC SHALL BE PRECAST REINFORCED CONCRETE PER ASTM C 478.
5. CONCRETE EROSION CONTROL MUST BE PROVIDED WHERE SWALES OR CULVERTS INTERCEPT DRAINAGE DITCHES.
6. LAKE INFLOW AND OUTLET STRUCTURES SHALL GENERALLY BE CONSTRUCTED WITH REINFORCED CONCRETE AND SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER OF RECORD AND CITY OF BUNNELL. SKIMMERS FOR WET PONDS SHALL BE CONSTRUCTED SUCH THAT THE BOTTOM EXTENDS 6" BELOW THE NORMAL WATER LEVEL AND 12" ABOVE THE OVERFLOW. FOR DRY PONDS, THE SKIMMER BOTTOM SHALL BE SET 6" BELOW THE LOWEST OVERFLOW ELEVATION AND 12" ABOVE THE HIGHEST POINT OF OVERFLOW. ALL SKIMMERS SHALL BE CONSTRUCTED OF 1/4 INCH ALUMINUM OR FIBERGLASS SUPPORTED TO PREVENT DEFLECTION. SHOP DRAWING REQUIRED.
7. *SOIL EROSION CONTROL MEASURES, SATISFACTORY TO THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT AND THE CITY OF BUNNELL, SHALL BE EMPLOYED DURING CONSTRUCTION.*
8. IN GENERAL, ALL RETENTION / DETENTION SITES MUST BE CONSTRUCTED ON ALL PROJECTS PRIOR TO ANY ROAD, PARKING LOT, OR BUILDING CONSTRUCTION COMMENCING OR AS CURRENT PERMIT CONDITIONS DICTATE. SEWER AND WATER MAINS MAY BE INSTALLED PRIOR TO RETENTION/DETENTION SITE CONSTRUCTION IF DEWATERING IS NOT REQUIRED.
9. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ANY AND ALL DEWATERING PERMITS THAT MAY BE REQUIRED.
10. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW AND MAINTAIN A COPY OF THE SJRWMD PERMIT AND THE NPDES PERMIT AT THE CONSTRUCTION SITE, AND ABIDE BY ALL CONDITIONS OF THE PERMIT.

NO.	DATE	DESCRIPTION
1	10-22-14	SUBMIT TO SJRWMD
3	2-16-15	SJRWMD APPLICATION

FINLEY ENGINEERING GROUP
5531 SOUTH RIDGEWOOD AVENUE
UNIT 1
PORT ORANGE, FLORIDA 32127
(386)756-8676
CERTIFICATE OF AUTHORIZATION NUMBER 8081
JFINLEY@FINLEYENGINEERS.COM

FLAGLER CENTRAL COMMERCE PARK
PHASE 1A

PROJECT NUMBER
FEG# 1410

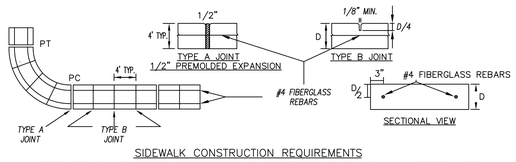
JERRY K. FINLEY, P.E.
P.E. # 29909

SHEET TITLE

STORMWATER MANAGMENT DETAILS

SHEET

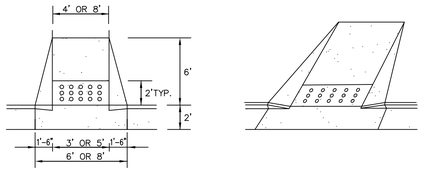
8

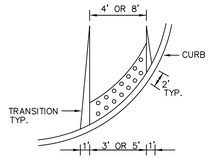


SIDEWALK CONSTRUCTION REQUIREMENTS

1. ALL CONCRETE SIDEWALKS & BIKE PATHS IN PUBLIC RIGHT-OF-WAY, PRIVATE RIGHT-OF-WAY AND ON NON-RESIDENTIAL SITES SHALL CONTAIN FIBERGLASS REINFORCMENT EXCEPT REPAIRS TO NON-REINFORCED EXISTING SIDEWALKS. FIBERGLASS REINFORCEMENT SHALL NOT BE REQUIRED ON PRIVATE RESIDENTIAL SIDEWALKS.
2. SIDEWALKS, BIKEPATHS, RAMPS, AND DRIVEWAY APRONS SHALL BE CONSTRUCTED OF PLAIN PORTLAND CEMENT CONCRETE WITH FIBERGLASS REINFORCEMENT, HAVING A MAXIMUM SLUMP OF 3 INCHES, A MINIMUM DEVELOPED COMPRESSIVE STRENGTH OF 3000 P.S.I. IN 28 DAYS, AND A MINIMUM UNIFORM THICKNESS OF 4 INCHES WHERE INTENDED SOLELY FOR PEDESTRIAN TRAFFIC, AND 6 INCHES THICK WHERE MOTOR VEHICLES ARE LIKELY TO CROSS.
3. 2-#4 CONTINOUS FIBERGLASS BARS (6" OVERLAP REQUIRED) SHALL BE INSTALLED LONGITUDINALLY. 3" FROM THE EDGE OF ALL BIKEPATHS AND SIDEWALKS, TO CONTROL DIFFERENTIAL MOVEMENT AT JOINTS.
4. SIDEWALKS AND BIKEPATHS SHALL BE PLACED PARALLEL TO, AND ONE FOOT WITHIN THE RIGHT-OF-WAY LINE EXCEPT THAT THE CITY MAY APPROVE DEVIATIONS TO SAVE SPECIMEN TREES PROVIDED THAT THE SIDEWALK REMAINS WITHIN THE RIGHT-OF-WAY OR AN APPROVED SIDEWALK EASEMENT ABUTTING THE RIGHT OF WAY. SIDEWALKS AND BIKE PATHS SHOULD BE LOCATED AT LEAST 4 FEET FROM THE EDGE OF THE STREET PAVEMENT UNLESS OTHERWISE APPROVED BY THE CITY.
5. THE TOP OF THE CONCRETE SHALL BE AT AN ELEVATION NO LOWER THAN THE CROWN OF THE ADJACENT ROADWAY, AND NO HIGHER THAN 6 INCHES ABOVE THE CROWN UNLESS APPROVED BY THE CITY TO MAKE A MORE NATURAL TRANSITION WITH THE ADJACENT LAND.
6. ISOLATION JOINTS (TYPE A JOINTS) SHALL BE PROVIDED BETWEEN EXISTING SLABS OR STRUCTURES AND FRESH CONCRETE, TO SEPARATE PEDESTRIAN SECTIONS FROM SECTIONS WHICH WILL ENCOUNTER VEHICLE TRAFFIC, TO SEPARATE FRESH PLACEMENT FROM CONCRETE WHICH HAS SET FOR MORE THAN 60 MINUTES, AND NO FARTHER APART THAN 100 FEET IN SIDEWALKS AND BIKEPATHS. JOINT MATERIAL SHALL BE PREFORMED JOINT FILLER MEETING F.D.O.T. SPECIFICATIONS.
7. CONTROL JOINTS (TYPE B JOINTS) SHALL BE TOOLED INTO THE FRESH CONCRETE TO A DEPTH EQUAL TO 1/4 THE SLAB THICKNESS AND SPACED APART A DISTANCE EQUAL TO THE WIDTH OF THE SLAB OR 4 FEET WHICHEVER IS GREATEST.
8. THE SLAB SURFACE SHALL BE BROOM FINISHED TO BE SLIP RESISTANT, AND SHALL MATCH AS CLOSELY AS POSSIBLE THE FINISH OF EXISTING ADJACENT SLABS AND ALL EDGES SHALL BE TOOLED TO ELIMINATE SHARP CORNERS.
9. THE BEARING SUBSURFACE SHALL HAVE ALL ORGANIC, LOOSE, AND DELETERIOUS MATTER REMOVED, AND THE REMAINING CLEAN SOIL SHALL BE SMOOTH, SOUND, AND SOLID. ANY FILL MATERIAL SHALL BE COMPACTED TO A MINIMUM PROCTOR FIELD DENSITY OF 95 PERCENT.
10. ALL CONCRETE WORK IN THE RIGHT-OF-WAY SHALL BE INSPECTED BY THE CITY AFTER THE SUBSOIL IS PREPARED AND THE FORMS ARE SET, BUT BEFORE THE CONCRETE PLACEMENT BEGINS.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE FINISHED SLAB FROM ALL DAMAGE AND VANDALISM UNTIL THE CITY ACCEPTS OR APPROVES THE SLAB, AFTER WHICH TIME THE OWNER OF THE ABUTTING LAND SHALL BE RESPONSIBLE FOR THE SLAB IN ACCORDANCE WITH THE CITY CODE. ANY SLAB SECTION DAMAGED OR VANDALIZED PRIOR TO ACCEPTANCE OR APPROVAL SHALL BE CUT OUT BETWEEN JOINTS AND REPLACED. REPAIRS ARE NOT ACCEPTABLE.
12. SIDEWALKS LOCATED WITHIN THE RIGHT-OF-WAY SHALL NOT BE TINTED, STAINED, COLORED, OR COATED.
13. ALL FORMS SHALL BE REMOVED PRIOR TO ACCEPTANCE OR APPROVAL AND THE DISTURBED GROUND SHALL BE BACKFILLED, REGRADED, AND SODDED SO THAT THE WEAR SURFACE OF THE CONCRETE IS REASONABLY FLUSH WITH THE ADJACENT GRADE.

SIDEWALK CONSTRUCTION REQUIREMENTS

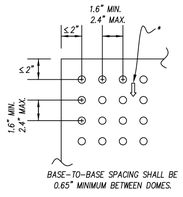


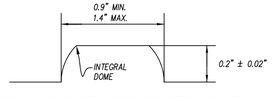


NOTES:

1. RAMP LOCATIONS ARE TO BE COORDINATED WITH AND IN COMFORMANCE WITH CROSSWALK MARKING DETAILS SHOWN IN THE PLANS.
2. CURBED RAMPS SHALL HAVE FLARED SIDES WITH A MAXIMUM SLOPE OF 12:1.
3. RAMPS SHALL HAVE A DETECTABLE WARNING SURFACE AS SHOWN.
4. RAMPS ARE TO BE CONSTRUCTED AT ALL LOCATIONS SHOWN IN THE PLANS EVEN WHEN A SIDEWALK IS NOT CONSTRUCTED CONCURRENTLY.
5. NO CURB TRANSITION IS NEEDED FOR MIAMI CURBS.
6. ALL RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FDOT INDEX NO. 304 AND HANDICAPPED ACCESSIBILITY REQUIREMENTS IN ACCORDANCE WITH THE AMERICAN DISABILITIES ACT.

SIDEWALK AND BIKEPATH RAMP

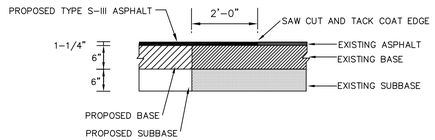




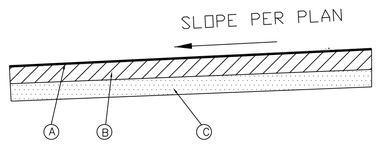
NOTES:

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

SIDEWALK AND BIKEPATH RAMP



STANDARD CONSTRUCTION DETAIL
PAVEMENT BUTT JOINT



(A) ASPHALT PAVEMENT:
1-1/4" ASPHALT BITUMINOUS CONCRETE TYPE S-III; MINIMUM MARSHALL FIELD STABILITY 1500, COMPACTED TO 98% DENSITY PER FM 1-T238 (METHOD B), NUCLEAR DENSITY TEST, "BACK SCATTER METHOD".

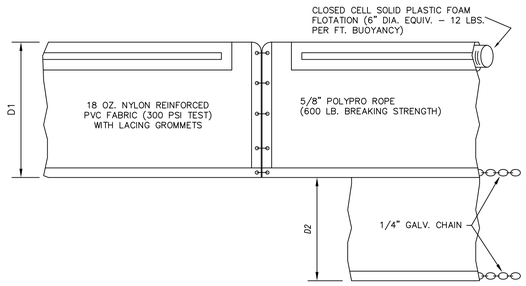
(B) BASE:
6" LIMEROCK BASE (LBR 100) OR RECYCLED CONCRETE BASE (LBR 130) COMPACTED TO 98% DENSITY BASED ON AASHTO T-180 MODIFIED PROCTOR TEST.

(C) SUB-BASE:
6" SUB-BASE COMPACTED TO 98% DENSITY BASED ON AASHTO T-180 MODIFIED PROCTOR TEST WITH MINIMUM LBR 40.

NOTES:

1. ALL MATERIALS ARE TO BE APPROVED BY THE CITY'S DESIGNATED SITE INSPECTOR AND THE DEVELOPER'S LICENSED SOILS ENGINEER PRIOR TO PLACEMENT.
2. A REPRESENTATIVE OF A CERTIFIED SOIL LABORATORY SHALL BE PRESENT DURING ALL CONSTRUCTION PHASES UTILIZING A SOIL CEMENT BASE. THE REPRESENTATIVE SHALL BE CERTIFIED BY F.D.O.T. IN THE INSTALLATION OF SOIL CEMENT.

ASPHALT DRIVEWAY PAVEMENT SECTION



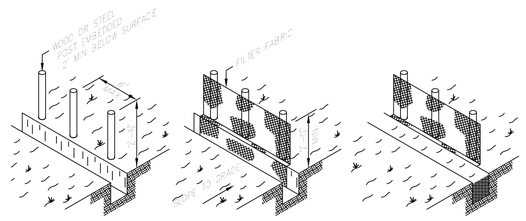
FLOATING TURBIDITY BARRIER
F.D.O.T. INDEX NO. 103

D1 – 5 FT. STD. SINGLE PANEL FOR DEPTHS 5 FT. OR LESS

D2 – 5 FT. STD. ADDITIONAL PANEL FOR DEPTHS GREATER THAN 5 FT.

CURTAIN TO REACH BOTTOM UP TO DEPTHS OF 10 FT.
TWO PANELS TO BE USED FOR DEPTHS GREATER THAN 10 FT.

FLOATING TURBIDITY BARRIER



SET POST AND EXCAVATE A TRENCH

ATTACH FILTER FABRIC TO POST ALLOWING 1 FT EXTENSION INTO THE TRENCH AS SHOWN

BACKFILL AND COMPACT EXCAVATED SOIL

SILT FENCE DETAIL
F.D.O.T. INDEX NO. 102

NOTES:

1. MATERIALS, CONSTRUCTION METHODS AND MAINTENANCE SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND DESIGN STANDARDS CURRENT EDITION.
2. CONTRACTOR SHALL PROVIDE SILT FENCES AND HAY BALES AT ALL STORMWATER DISCHARGE POINTS FOR EROSION CONTROL AND SEDIMENT CONTROL DURING CONST.
3. CONTRACTOR SHALL ROUGH GRADE STORM-WATER SWALES AND RETENTION AREAS PRIOR TO CONSTRUCTION OF SITE IMPROVEMENTS.
4. CONTRACTOR SHALL MEET ALL PERMIT CONDITIONS AS ESTABLISHED BY THE CITY OF PORT ORANGE AND ALL OTHER APPLICABLE AGENCIES, INCLUDING BUT NOT LIMITED TO COUNTY, FDOT, AND THE SJRWMD.

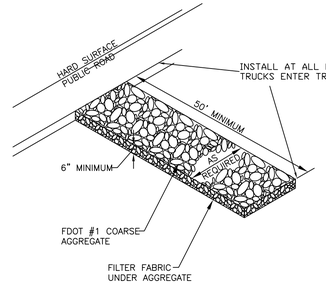
SILT FENCE TURBIDITY BARRIER

CONTRACTOR REQUIREMENTS FOR EROSION CONTROL

THE FOLLOWING MEASURES, AND THOSE REPRESENTED ON THIS POLLUTION PREVENTION PLAN REPRESENT MINIMUM STANDARDS TO BE ADHERED TO BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION OF A PROJECT. ADDITIONAL MEASURES MAY BE EMPLOYED WHEN WARRANTED BY EXTREME CONDITIONS AND/OR THE FAILURE OF THE CONTRACTOR TO EMPLOY THE APPROPRIATE EROSION CONTROL BEST MANAGEMENT PRACTICES. FAILURE TO COMPLY WITH THESE PROVISIONS SHALL RESULT IN THE ISSUANCE OF A "STOP WORK ORDER".

1. NO DISTURBANCE OF PROPOSED CONSERVATION EASEMENTS, NATURAL BUFFERS, OR WATER BODIES IS PERMITTED. THE CONTRACTOR SHALL LOCATE THESE AREAS ON SITE AND BARRICADE THEM TO AVOID ANY UNAUTHORIZED CLEARING. BARRICADES AND OTHER PROTECTIVE FENCING ARE TO BE LOCATED AT THE DRIP LINE OF EXISTING NATIVE TREES OR AT THE EDGE OF THE NATIVE UNDER-STORY HABITAT, WHICHEVER IS NEAREST TO THE CONSTRUCTION ACTIVITY.
2. SPECIMEN AND HISTORIC TREES, CONSERVATION EASEMENTS, NATURAL VEGETATION BUFFERS, AND SIMILAR AREAS MUST BE PROTECTED BY BARRICADES OR FENCING PRIOR TO CLEARING. BARRICADES ARE TO BE SET AT THE DRIP LINE OF THE TREES AND MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. BARBED WIRE IS NOT PERMITTED AS A PROTECTIVE BARRIER.
3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL PROTECTIVE VEGETATION BARRICADES AND EROSION CONTROL STRUCTURES AND MEASURES IN PLACE PRIOR TO THE COMMENCEMENT OF ANY EARTHWORK, INCLUDING PRELIMINARY GRUBBING. THESE MEASURES INCLUDE, BUT ARE NOT LIMITED TO, TEMPORARY CONSTRUCTION FENCES, HAY BALES, SILT FENCES, AND FLOATING TURBIDITY BARRIERS. FURTHER, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL EROSION CONTROL DEVICES THROUGHOUT THE DURATION OF THE ENTIRE PROJECT. MAINTENANCE SHALL INCLUDE PERIODIC INSPECTION AND REMOVAL OF DEBRIS ABUTTING EROSION CONTROL DEVICES.
4. PRIOR TO THE INSTALLATION OF ANY FILL MATERIALS ON SUBJECT SITE, SILT FENCES SHALL BE INSTALLED (1) ALONG SUBJECT SITE BOUNDARY AND PROPERTY LINES, (2) AT THE EDGE OF CONSERVATION EASEMENTS AND WETLANDS, (3) ADJACENT TO NATURAL LANDSCAPE BUFFERS, (4) AROUND THE PERIMETER OF EXISTING STORM WATER TREATMENT FACILITIES, AND (5) AT ANY ADDITIONAL AREAS THAT THE CITY DEEMS NECESSARY TO BE PROTECTED FROM POTENTIAL EROSION IMPACTS DURING CONSTRUCTION. THESE CONDITIONS SHALL APPLY IN ALL INSTANCES LOCATIONS.
5. WHERE FILL MATERIAL IS BEING INSTALLED WITHIN 25 FEET OF ANY OF THE AFOREMENTIONED WHERE FILL MATERIAL IS INTENDED TO BE INSTALLED ADJACENT TO EXISTING VEGETATION WHICH IS INTENDED TO REMAIN NATURAL, THE CONTRACTOR MAY INSTALL SILT FENCING AS A TREE PROTECTION MEASURE, IN LIEU OF INSTALLING EITHER WOOD BRACING OR ORANGE MESH FENCING. IF THE SILT FENCE FAILS TO PROVIDE ADEQUATE PROTECTION FROM IMPACT DUE TO CONSTRUCTION, THEN ADDITIONAL CONSTRUCTION FENCING OR WOOD BRACING SHALL BE REQUIRED.
6. AT A MINIMUM, THE CONTRACTOR SHALL SEED AND MULCH ALL DISTURBED AREAS. SUFFICIENT GRASS COVERAGE IS TO BE ESTABLISHED WITHIN THIRTY DAYS.
7. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR THROUGH SCHEDULING, TO MINIMIZE THE DISTURBANCE OF SITE AREAS THAT HAVE BEEN BROUGHT TO THEIR PROPOSED FINAL GRADE.
8. WITHIN TWENTY DAYS OF BRINGING A SUBJECT AREA TO ITS FINAL GRADE, THE CONTRACTOR SHALL INSTALL SEED AND MULCH OR SOD, AS REQUIRED.

STABILIZATION OF DISTURBED AREAS OF THE SITE SHALL OCCUR ON PORTIONS OF THE SITE IN AREAS WHERE CONSTRUCTION ACTIVITIES HAVE BEEN TEMPORARY OR PERMANENTLY CEASED. TEMPORARY SOIL STABILIZATION CONSISTING OF, AT A MINIMUM, THE SEEDING AND MULCHING OF ANY DISTURBED AREAS WITHIN SEVEN DAYS OF TEMPORARY OR PERMANENT COMPLETION OR CESSATION OF ACTIVITY LASTING IN DURATION OF A PERIOD EXCEEDING 30 DAYS IS REQUIRED. THE CONTRACTOR SHALL ENSURE THAT GROUND COVERAGE AND SOIL STABILIZATION IS ESTABLISHED WITHIN 30 DAYS OF WORK STOPPAGE.



GRAVEL CONSTRUCTION ENTRANCE
N.T.S.

TEMPORARY GRAVEL
CONSTRUCTION ENTRANCE

DEFINITION

A STONE STABILIZED PAD LOCATED AT POINTS OF VEHICULAR INGRESS AND EGRESS ON A CONSTRUCTION SITE.

PURPOSE

TO REDUCE THE AMOUNT OF SEDIMENT TRANSPORTED ONTO PUBLIC ROADS BY MOTOR VEHICLES OR RUNOFF.

CONDITIONS WHERE PRACTICE APPLIES

WHEREVER TRAFFIC WILL BE LEAVING A CONSTRUCTION SITE AND MOVES DIRECTLY ONTO A PUBLIC ROAD OR OTHER PAVED AREA.

PLANNING CONSIDERATIONS

CONSTRUCTION ENTRANCES PROVIDE AN AREA WHERE MUD CAN BE REMOVED FROM CONSTRUCTION VEHICLE TIRES BEFORE THE ENTER A PUBLIC ROAD. IF THE ACTION OF THE VEHICLE TRAVELING OVER THE GRAVEL PAD IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF THE MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLE ENTERS A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF-SITE. CONSTRUCTION ENTRANCES SHOULD BE USED IN CONJUNCTION WITH THE STABILIZATION OF CONSTRUCTION ROADS TO REDUCE THE AMOUNT OF MUD PICKED UP BY CONSTRUCTION VEHICLES.

DESIGN CRITERIA

AGGREGATE SIZE

FDOT AGGREGATE NO. 1 (1.5 – 3.5 INCH STONE) SHOULD BE USED.

ENTRANCE DIMENSIONS

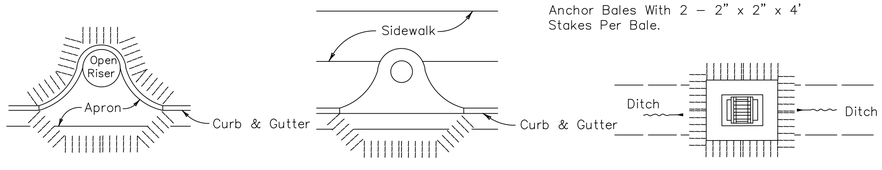
AGGREGATE LAYER MUST BE AT LEAST 6 INCHES THICK. IT MUST EXTEND THE FULL WIDTH OF THE VEHICULAR INGRESS AND EGRESS AREA. THE LENGTH OF THE ENTRANCE MUST BE AT LEAST 50 FEET. (SEE DETAIL).

NOTE: CONTRACTOR SHALL BE RESPONSIBLE FOR ANY OFF-SITE MATERIALS TRACKING ONTO COMMERCE PARKWAY. ALL MATERIAL SPILLED, DROPPED, OR TRACKED ONTO COMMERCE PARKWAY OR SR 100 EAST (INCLUDING STPD AGGREGATE CONSTRUCTION MUD, AND CONCRETE SPILLS) SHALL BE REMOVED DAILY OR MORE FREQUENTLY IF SO DIRECTED BY THE ENGINEER OR CITY OF BUNNELL OFFICIALS/STAFF.

NOTE: ALL STRIPING SHALL BE THERMOPLASTIC AND CONFORM TO SPECIFICAITON SET FORTH IN THE MOST CURRENT FDOT STANDARD SPECIFICAITON FOR ROAD AND BRIDGE CONSTRUCTION.

DEWATERING NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING AND SUBMITTING A DEWATERING PLAN TO THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT A MINIMUM OF FOURTEEN (14) DAYS PRIOR TO ANY DEWATERING ACTIVITY.
2. ALL DEWATERING ACTIVITY SHALL BE COVERED BY AN APPROPRIATE SJRWMD CONSUMPTIVE USE PERMIT.
3. ANY DEWATERING DISCHARGE MUST MEET STATE OF FLORIDA WATER QUALITY STANDARDS.



PARTIAL INLET

COMPLETED INLET

DITCH BOTTOM INLET

PROTECTION AROUND INLETS OR SIMILAR STRUCTURES

SYNTHETIC JUTE BALES SHALL BE TRENCHED TO 3" TO 4" AND ANCHORED WITH 2-1"x2" (OR 1" DIAMETER) x 4' WOOD STAKES.
STAKES OF OTHER MATERIAL OR SHAPE PROVIDING EQUIVALENT SHAPE MAY BE USED IF APPROVED BY THE ENGINEER.
STAKES OTHER THAN WOOD SHALL BE REMOVED UPON COMPLETION OF THE PROJECT.
ADJACENT BALES SHALL BE BUTTED FIRMLY TOGETHER. UNAVOIDABLE GAPS SHALL BE PLUGGED WITH HAY OR STRAW TO PREVENT SILT FROM PASSING.

NO.	DATE	DESRIPTION
1	10-22-14	SUBMIT TO SJRWMD
3	2-16-15	SJRWMD APPLICATION

5531 SOUTH RIDGEWOOD AVENUE
UNIT 1
PORT ORANGE, FLORIDA 32127
(386)756-8676
CERTIFICATE OF AUTHORIZATION NUMBER 8081
JFINLEY@FINLEYENGINEERS.COM
FINLEY ENGINEERING GROUP

FLAGLER CENTRAL COMMERCE PARK
PHASE 1A

PROJECT NUMBER
FEG# 1410

JERRY K. FINLEY, P.E.
P.E. # 29909

SHEET TITLE
ROADWAY/ PAVING DETAILS

SHEET
9

GEOTECHNICAL REPORT

UNIVERSAL
ENGINEERING SCIENCES

GEOTECHNICAL EVALUATION

City of Bunnell Administration Building
Bunnell, Flagler County, Florida

UES Project No. 0430.2100304.0000
UES Report No. 139070

October 11, 2021

Prepared for:

Ms. Debra Winson
City of Bunnell, Florida
PO Box 756
Bunnell, Florida 32110

Prepared by:

UNIVERSAL ENGINEERING SCIENCES
911 Beville Road, Suite 3
South Daytona, Florida 32119

CONSULTANTS:

Geotechnical Engineering • Environmental Engineering • Construction Materials Testing Threshold Inspection • Private Provider Inspection • Geophysical Studies

OFFICES: Daytona Beach, FL • Fort Myers, FL • Fort Pierce, FL • Gainesville, FL • Jacksonville, FL • Leesburg, FL • Miami, FL • Norcross, GA • Ocala, FL • Orange City, Orlando, FL Palm Coast, FL • Panama City, FL • Pensacola, FL • Rockledge, FL • Sarasota, FL • St. Augustine, FL • Tampa, FL • West Palm Beach, FL

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- Panama City
- Pensacola
- Rockledge
- Sarasota
- Tampa
- West Palm Beach

October 11, 2021

Ms. Debra Winson
City of Bunnell, Florida
PO Box 756
Bunnell, Florida 32110

Reference: **GEOTECHNICAL EVALUATION**
City of Bunnell Administration Building
Bunnell, Flagler County, Florida
UES Project No. 0430.2100304.0000 and UES Report No. 139070

Dear Ms. Winson:

Universal Engineering Sciences, Inc. has completed the geotechnical evaluation for the subject project. This report contains the results of our investigations, an engineering interpretation of these with respect to the project characteristics described to us, and recommendations for foundation and pavement support, and site preparation.

We appreciate the opportunity to have worked with you on this project and look forward to a continued association. Please do not hesitate to contact us if you should have any questions, or if we may further assist you as your plans proceed.

Respectfully submitted,

UNIVERSAL ENGINEERING SCIENCES

Cody Wilson, E.I.
Project Engineer

10/11/21

Brian C. Pohl, P.E.
Branch Manager
P.E. Number 60216

BRIAN C. POHL LICENSE NO. 60216 STATE OF FLORIDA PROFESSIONAL ENGINEER

Attachments

CW/BCP/cme

1.0 INTRODUCTION

1.1 GENERAL

In this report we present the results of the subsurface evaluation for the proposed Administration Building in Bunnell, Florida. We have divided this report into the following sections:

- SECTION 2.0 - SCOPE OF SERVICES
- SECTION 3.0 - FINDINGS
- SECTION 4.0 - FOUNDATION AREA RECOMMENDATIONS
- SECTION 5.0 - PAVEMENT AREA RECOMMENDATIONS
- SECTION 6.0 - CONSTRUCTION RELATED SERVICES
- SECTION 7.0 - LIMITATIONS

2.0 SCOPE OF SERVICES

2.1 PROJECT DESCRIPTION

Project information has been provided to us in discussion with you. We were provided with a conceptual site plan indicating the layout of the proposed construction. We understand that the proposed project will consist of constructing a one-story, 16,950 square-foot administration building with an associated flexible asphalt parking area. We understand that the stormwater management facility has previously been constructed. We anticipate that the proposed structure will consist of concrete masonry units with steel and / or wood frame construction. We assume the column and wall loads will not exceed 75 kips and 5 kips/foot, respectively. We assume that two to three feet of fill will be placed within the structure and pavement areas.

Our recommendations are based upon the above considerations. If any of this information is incorrect, or if you anticipate any changes, inform Universal Engineering Sciences so that we may review our recommendations.

2.2 PURPOSE

The purposes of this investigation were:

- to investigate the general subsurface conditions at the site;
- to interpret and review the subsurface conditions with respect to the proposed construction; and
- to provide geotechnical engineering recommendations for foundation and pavement support and site preparation.

This report presents an evaluation of site conditions on the basis of traditional geotechnical procedures for site characterization. The recovered samples were not examined, either visually or analytically, for chemical composition or environmental hazards. Universal Engineering Sciences would be pleased to perform these services, at your request.

Our investigation was confined to the zone of soil likely to be influenced by the proposed construction. Our work did not address the potential for surface expression of deep geological conditions, such as sinkhole development related to karst activity. A deep geological evaluation requires a more extensive range of field services than performed in this study.

2.3 FIELD INVESTIGATION

2.3.1 Borings

The subsurface conditions within the proposed structure area were investigated with two (2) Standard Penetration Test (SPT) borings, B-1 and B-2, advanced to 20 and 25 feet each below existing grade, respectively and one (1) auger boring, AB-1, advanced to approximately 6 feet each below existing grade. The subsurface conditions within the proposed pavement areas were investigated with five (5) auger borings, R-1 through R-5, advanced to a depth of approximately 6 feet each below existing grade. We performed the SPT and auger borings according to the procedures of ASTM D-1586 and ASTM D-1452, respectively.

Samples obtained from the borings were transported to our laboratory for further evaluation. Samples of the soils encountered will be held in our laboratory for your inspection for 60 days unless we are notified otherwise.

2.4 LABORATORY INVESTIGATION

2.4.1 Index Testing

The soil samples recovered from the soil borings were returned to our laboratory and then a UES Engineer visually examined and reviewed the field descriptions. The soils were classified in accordance with the Unified Soil Classification System (USCS). We performed tests on selected soil samples consisting of 200 wash gradations to help in classification of the soils. The results of the tests are on the Boring Profiles in Appendix A.

3.0 FINDINGS

3.1 SUBSURFACE CONDITIONS

The boring locations and detailed subsurface conditions are illustrated in Appendix A: Boring Location Plan and Subsurface Profiles. The classifications and descriptions shown on the profiles are based upon visual characterizations of the recovered soil samples. Also, see Appendix A: Key to Boring Log, for further explanation of the symbols and placement of data on the Subsurface Profiles. The following discussion summarizes the soil conditions encountered.

The results of the SPT borings, B-1 and B-2, generally indicated approximately 12-icnhes of topsoil underlain by intermittent layers of loose to medium dense fine sand (SP) and fine sand with silt (SP-SM) to the boring termination depth of approximately 25 feet below existing grade. As an exception, clayey fine sand (SC) was encountered between approximately 4.0 and 5.5 feet below existing grade at Boring Location B-2.

The results of auger borings R-1 through R-5 and AB-1, generally indicated approximately 12-inches of topsoil underlain by intermittent layers of fine sand (SP) and fine sand with silt 9SP-SM) to the boring termination depth of approximately 6 feet each below existing grade. As an exception, clayey fine sand (SC) was encountered between approximately 4.0 and 6.0 feet below existing grade at Boring Location AB-1.

3.2 GROUNDWATER

We recorded groundwater subsequent to drilling, at a depths varying between depths of approximately 0.5 and 1.5 feet below the ground surface. Based on available published literature, existing site features, and the results of the borings, we estimate the normal seasonal high groundwater level to be approximately one foot above the measured levels. It should be noted the estimated seasonal high water level does not provide any assurance that groundwater level will not exceed these estimated levels during any given year in the future. Should impediments to surface water drainage be present, or should rainfall intensity and duration, or total rainfall quantities, exceed the normally anticipated rainfall quantities, groundwater levels might once again exceed our seasonal high estimates. The depths of the groundwater levels encountered at the boring locations are presented on the Subsurface Profiles.

We recommend positive drainage be established and maintained on the site during construction. We further recommend permanent measures be constructed to maintain positive drainage from the site throughout the life of the project.

4.0 FOUNDATION AREA RECOMMENDATIONS

4.1 GENERAL

The following recommendations are made based upon a review of the attached soil test data, our understanding of the proposed construction, and experience with similar projects and subsurface conditions. If the structural loadings, construction locations, or grading information change from those discussed previously, we request the opportunity to review and possibly amend our recommendations with respect to those changes.

Additionally, if subsurface conditions are encountered during construction which was not encountered in the borings, report those conditions immediately to us for observation and recommendations.

4.2 STRUCTURE FOUNDATIONS

4.2.1 Bearing Pressure

The maximum allowable net soil bearing pressure for shallow foundations should not exceed 2,500 pounds per square foot (psf). Net bearing pressure is defined as the soil bearing pressure at the base of the foundation in excess of the natural overburden pressure. The

foundations should be designed based upon the maximum load that could be imposed by all loading conditions.

4.2.2 Foundation Size

The minimum widths recommended for any isolated column footing and continuous wall footings are 24 inches and 18 inches, respectively. Even though the maximum allowable soil bearing pressure may not be achieved, these width recommendations should control the size of the foundations.

4.2.3 Bearing Depth

The exterior foundation should bear at a depth of at least 12 inches below the exterior final grades and the interior footings should bear at a depth of at least 12 inches below the finish floor elevation to provide confinement to the bearing level soils. We recommend stormwater and surface water be diverted away from the building exterior, both during and after construction, to reduce the possibility of erosion beneath the exterior footings.

4.2.4 Bearing Material

The foundation may bear on either the compacted suitable natural soils or compacted structural fill. The bearing level soils, after compaction, should exhibit densities of at least 95 percent of the maximum dry density of the bearing soils as determined by ASTM D-1557 (Modified Proctor), to the depth described subsequently in the Site Preparation section of the report. In addition to compaction, the bearing soils must exhibit stability and be free of “pumping” conditions.

4.2.5 Settlement Estimates

Post-construction settlement of the structure will be influenced by several interrelated factors, such as (1) subsurface stratification and strength/compressibility characteristics of the bearing soils; (2) footing size, bearing level, applied loads, and resulting bearing pressures beneath the foundation; (3) site preparation and earthwork construction techniques used by the contractor, and (4) external factors, including but not limited to vibration from offsite sources and groundwater fluctuations beyond those normally anticipated for the naturally-occurring site and soil conditions which are present.

Our settlement estimates for the structure are based upon the use of successful adherence to the site preparation recommendations presented later in this report. Any deviation from these recommendations could result in an increase in the estimated post-construction settlement of the structure.

Due to the nature of the surficial soils, following the compaction operations, we expect a significant portion of settlement to be elastic in nature. This settlement is expected to occur relatively quickly, upon application of the loads, during and immediately following construction. Using the recommended maximum bearing pressure, the assumed maximum structural loads, and the field test data which we have correlated to the strength and compressibility characteristics of the subsurface soils, we estimate the total settlements of the structures to be less than one inch.

Differential settlement results from differences in applied bearing pressures and the variations in the compressibility characteristics of the subsurface soils. Based on the subsurface conditions as determined by our borings, it is anticipated that differential settlements will be within tolerable limits.

4.3 SITE PREPARATION FOR SHALLOW FOUNDATIONS

We recommend the following site preparation procedures for the structure areas:

1. Prior to construction, the location of existing underground utility lines within the construction area should be established. Provisions should then be made to relocate interfering utilities to appropriate locations. It should be noted that if underground pipes are not properly removed or plugged, they may serve as conduits for subsurface erosion which may subsequently lead to excessive settlement of the overlying structures.

2. Strip the proposed construction limits of all grass, roots, topsoil, and other deleterious materials within and 5 feet beyond the perimeter of the proposed structure. Expect initial clearing and grubbing to depths of approximately 6 to 12 inches.

3. Based on the ground water levels and anticipated fill, dewatering for foundation excavation and compaction is not anticipated. However, we recommend implementing temporary groundwater control measures if the groundwater is within two feet of the required depth of excavation at the time of construction. Dewatering measures should be the responsibility of the contractor. We recommend the groundwater control measures remain in-place until compaction of the existing soils is completed and backfilling has reached a height of 2 feet above the groundwater level at the time of construction. The site should be graded to direct surface water runoff from the construction area.

4. Compact the exposed surface using tractor/ dozer or vibratory equipment. **We recommend that vibratory equipment be operated in static mode within 75 feet of any existing structures.** The upper one foot of soils below the exposed surface within the building area should be improved to achieve a minimum compaction requirement of 95% of the Modified Proctor Test (ASTM D-1557). We recommend the compacted soils exhibit moisture content within 2 percent of the soils optimum moisture content as determined by the Modified Proctor Test (ASTM D-1557). Should the soils experience pumping and soil strength loss during the compaction operations, compaction work should be immediately terminated and (1) the disturbed soils removed and backfilled with dry structural fill soils which are then compacted, or (2) the excess moisture content within the disturbed soils allowed to dissipate before recompacting.

5. Test the compacted surface for compliance at a minimum of one location per 2,500 square feet within the building area, or at a minimum of four locations.

6. Place fill material, as required. The fill should consist of "clean," fine sand with less than 5 percent soil fines. You may use fill materials with soil fines between 5 percent and 10 percent, but strict moisture control may be required. Place fill in uniform 8 to 12-inch loose lifts and compact each lift to a minimum density of 95 percent of the Modified Proctor maximum dry density. We recommend the compacted soils exhibit moisture content within 2 percent of the soils optimum moisture content as determined

by the Modified Proctor Test (ASTM D-1557). If light compaction equipment is used, we recommend the lift thickness be reduced to 8 inch thick lifts.

7. Perform compliance tests within the backfill and fill soils at a minimum of one location per 2,500 square feet per lift (minimum four locations).

8. Compact and test footing cuts for compaction to a depth of one foot below bearing level. We recommend that you test one out of every four (25 percent) column footings and perform one test per every 50 linear feet of wall footing. Compaction operations in confined areas, such as footing excavations, can best be performed with a lightweight vibratory sled or other hand-held compaction equipment.

5.0 PAVEMENT RECOMMENDATIONS

5.1 GENERAL

As discussed, it is anticipated that flexible asphaltic pavement section will be utilized for the subject project.

5.2 FLEXIBLE ASPHALTIC PAVEMENT

Because traffic loadings are commonly unavailable, we have generalized our pavement design into two groups. The group descriptions and the recommended component thicknesses are presented in Table 1 below.

Table 1: Pavement Component Recommendations

Traffic Group	Component Thickness (Inches)		
	Stabilized Subgrade	Base Course	Surface Course
Parking lots - light duty	12	6	1.5
Parking lots - heavy duty	12	8	2.0

5.3 STABILIZED SUBGRADE

We recommend that subgrade materials be compacted in place according to the requirements in the "Site Preparation" section of this report. Further, stabilize the subgrade materials to a minimum Limerock Bearing Ratio (LBR) of 40 percent as specified by Florida Department of Transportation (FDOT) requirements for Type B Stabilized Subgrade.

Further, the stabilized subgrade can be imported material or a blend of on-site soils and imported materials. If a blend is proposed, we recommend that the contractor perform a mix design to find the optimum mix proportions.
The primary function of stabilized subgrade beneath the base course is to provide a stable and firm subgrade so that the base course can be properly placed and compacted. Depending upon the soil type, the subgrade material may have sufficient stability to provide the needed support without additional stabilizing material. Generally speaking, sands with silt or clay typically have sufficient stability and may not require additional stabilizing material. Conversely, relatively "clean" sands may not provide sufficient stability in order to adequately construct the base course.

5.4 BASE COURSE

We recommend that the base course consist of either limerock or graded crushed aggregate (crushed concrete).

5.4.1 Limerock

Limerock should have a minimum LBR of 100 percent and should be mined from an FDOT approved source. Place limerock in maximum 6-inch lifts and compact each lift to a minimum density of 98 percent of the Modified Proctor maximum dry density.

5.4.2 Crushed Concrete Base

Crushed concrete should be supplied by an approved plant with quality control procedures. The crushed concrete stockpiled should be free of sandy pockets, foreign materials, and uncrushed particles. We recommend the following specifications be enforced.

a) Crushed concrete shall not contain lumps, balls or pockets of sand or clay sized material in sufficient quantity as to be detrimental to the proper binding, finishing or strength of the crushed concrete base.

b) Samples of base course materials shall be supplied to the engineer prior to use in the work. Additional samples shall be furnished during construction, as necessary.

c) At least 97 percent (by weight) of the material shall pass a 3-1/2 inch sieve and the material shall be graded uniformly down to dust. The fine material shall consist entirely of dust or fracture. All crushing or breaking-up which might be necessary in order to meet such size requirements shall be done before the material is placed on the road.

d) The base shall be bladed and shaped to conform to the typical sections shown on the plans. Then the base shall be compacted by rolling with a combination of steel wheel and rubber tired rollers until an average density of 98 percent of the maximum density obtainable under AASHTO Method T-180 is reached. The base shall have an average LBR of not less than 130. The LBR value of material produced at a particular source shall be determined in accordance with an approved quality control procedure.

Testing shall be performed at the following frequency:

1) Perform in-place density tests on crushed concrete base at a frequency of 2 tests per pavement area or 1 test per 5,000 square feet whichever is greater

2) Perform Limerock Bearing Ratio tests at a frequency of 1 test per visual change in material and a minimum of 1 test per pavement area or every 15,000 square feet whichever is greater.

3) Engineer should perform a final visual base inspection prior to placement of prime or tack coat and paving.

5.5 SURFACE COURSE

In light duty areas where there is occasional truck traffic, but primarily passenger cars, we recommend using an asphaltic concrete, FDOT Type SP 9.5 mix. In heavy duty areas where truck traffic is predominant, we recommend using an asphaltic concrete, FDOT Type SP 12.5 mix.

It should be noted that if a more aesthetically pleasing asphalt surface is required a layer of Friction Course (FC) (finer aggregate) can be placed. A ½ inch layer of FC asphalt can be placed above the SP asphaltic concrete. However this may result in increased costs.

Asphaltic concrete mixes should be a current FDOT approved design of the materials actually used. Samples of the materials delivered to the project should be tested to verify that the aggregate gradation and asphalt content satisfies the mix design requirements. Compact the asphalt to a minimum of 90 percent of the Gmm (maximum voidless specific gravity).

After placement and field compaction, core the wearing surface to evaluate material thickness and to perform laboratory densities. Obtain cores at frequencies of at least one core per 3,000 square feet of placed pavement or a minimum of two cores per day's production.

In parking lots, for extended life expectancy of the surface course, we recommend applying a coal tar emulsion sealer at least six months after placement of the surface course. The seal coat will help to patch cracks and voids, and protect the surface from damaging ultraviolet light and automobile liquid spillage. Please note that applying the seal coat prior to six months after placement may hinder the "curing" of the surface course, leading to its early deterioration.

5.6 CURBING

We recommend that curbing around landscaped sections adjacent to the parking lots and driveways be constructed with full-depth curb sections. Using extruded curb sections which lie directly on top of the final asphalt level, or eliminating the curbing entirely, may not significantly impede the migration of irrigation water from the landscape areas to the interface between the asphalt and the base. This migration often causes separation of the wearing surface from the base and subsequent rippling and pavement deterioration. It is recommended that the subgrade below the curbing be stabilized to a minimum LBR of 40.

5.7 CONSTRUCTION TRAFFIC

Light duty roadways and incomplete pavement sections will not perform satisfactorily under construction traffic loadings. We recommend that construction traffic (construction equipment, concrete trucks, sod trucks, garbage trucks, dump trucks, etc.) be re-routed away from these roadways or that the pavement section be designed for these loadings.

5.8 EFFECTS OF GROUNDWATER

We recommend that all pavement sections analyses incorporate the seasonal high groundwater conditions. Based on the groundwater level at the site, the below separations will be maintained.

Table 2 Recommended Minimum Clearance Between Pavement Base and Wet Season Water Table	
Type of Base	**Separation (inches)**
Limerock	18
Crushed Concrete	12

One of the most critical influences on the pavement performance in Central Florida is the relationship between the pavement subgrade and the seasonal high groundwater level. Many roadways and parking areas have been destroyed as a result of deterioration of the base and the base/surface course bond resulting from a high water table. **Regardless of the type of base selected, we recommend that the seasonal high groundwater and the bottom of the base course be separated by at least the amount presented in Table 2 above.**

5.9 SITE PREPARATION FOR PAVEMENTS

We recommend the following site preparation procedures:

1. Strip the proposed construction limits of all grass, roots, topsoil and other deleterious materials within, and 3 feet beyond, the proposed pavement limits. Expect initial clearing and grubbing to depths of approximately 6 to12-inches.

2. Proof-compact the exposed surface using tractor/ dozer or vibratory equipment until you maintain density of at least 95 percent of the Modified Proctor maximum dry density (ASTM D-1557) to a depth of 1 foot below the exposed surface, with the exception that densities of at least 98 percent should be obtained in the upper 12 inches below base course. We recommend the compacted soils exhibit moisture content within 2 percent of the soils optimum moisture content as determined by the Modified Proctor Test (ASTM D-1557). Should the soils experience pumping and soil strength loss during the compaction operations, compaction work should be immediately terminated and (1) the disturbed soils removed and backfilled with dry structural fill soils which are then compacted, or (2) the excess moisture content within the disturbed soils allowed to dissipate before recompacting.

3. Test the compacted surface for density at a frequency of not less than one test per 10,000 square feet of pavement area (minimum three locations).

4. Place and compact backfill material, as required. The fill should consist of "clean," fine sand with less than 5 percent soil fines. You may use fill materials with soil fines between 5 percent and 10 percent, but strict moisture control may be required. Place fill in uniform 10 to 12-inch loose lifts and compact each lift to a minimum density of 95 percent of the Modified Proctor maximum dry density with the exception that densities of at least 98 percent should be obtained within the upper one foot below base course. We recommend the compacted soils exhibit moisture content within 2 percent of the soils optimum moisture content as determined by the Modified Proctor Test (ASTM D-1557).

5. Perform compliance tests within each lift of fill at a frequency of not less than one test per 10,000 square feet of pavement area (minimum of three locations).

6.0 CONSTRUCTION RELATED SERVICES

We recommend the owner retain Universal Engineering Sciences to perform construction materials tests and observations on this project. Field tests and observations include verification of foundation subgrades by monitoring filling operations and performing quality assurance tests on the placement of compacted natural soils and structural fill. We can also perform concrete testing, pavement section testing, structural steel testing and other construction materials testing services.

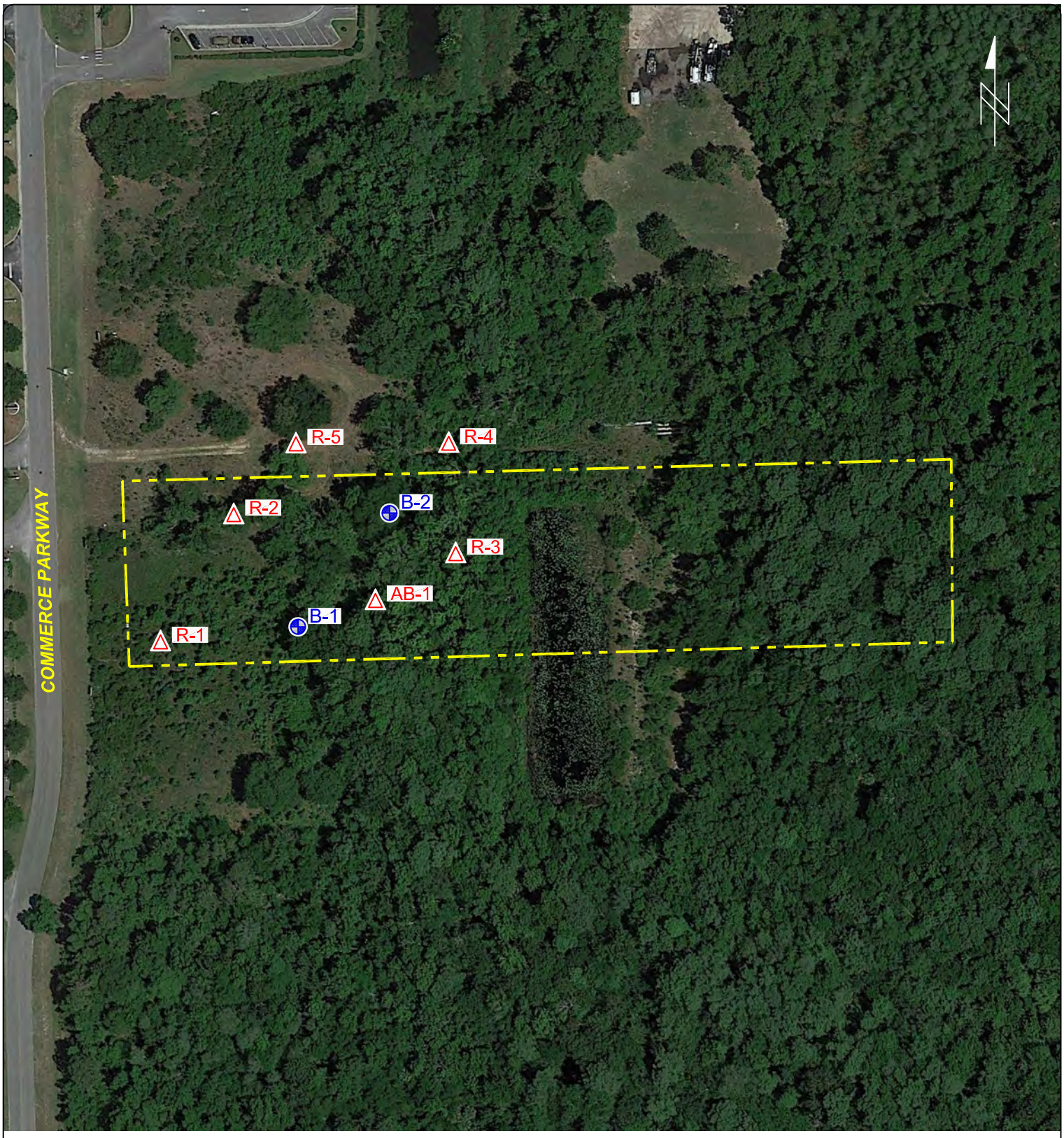
The geotechnical engineering design does not end with the advertisement of the construction documents. The design is an on-going process throughout construction. Because of our familiarity with the site conditions and the intent of the engineering design, we are most qualified to address problems that might arise during construction in a timely and cost-effective manner.

7.0 LIMITATIONS

During the early stages of most construction projects, geotechnical issues not addressed in this report may arise. Because of the natural limitations inherent in working with the subsurface, it is not possible for a geotechnical engineer to predict and address all possible problems. An Association of Engineering Firms Practicing in the Geosciences (ASFE) publication, "Important Information about Your Geotechnical Engineering Report" appears in Appendix C, and will help explain the nature of geotechnical issues. Further, we present documents in Appendix C: Constraints and Restrictions, to bring to your attention the potential concerns and the basic limitations of a typical geotechnical report.

APPENDIX A

BORING LOCATION PLAN
SUBSURFACE PROFILES
SOILS CLASSIFICATION CHART



LEGEND

△ APPROXIMATE LOCATION OF AUGER BORING

⊕ APPROXIMATE LOCATION OF STANDARD PENETRATION TEST (SPT) BORING

GRAPHIC SCALE

0 50 100

(IN FEET)

1 INCH ≈ 100 ft.

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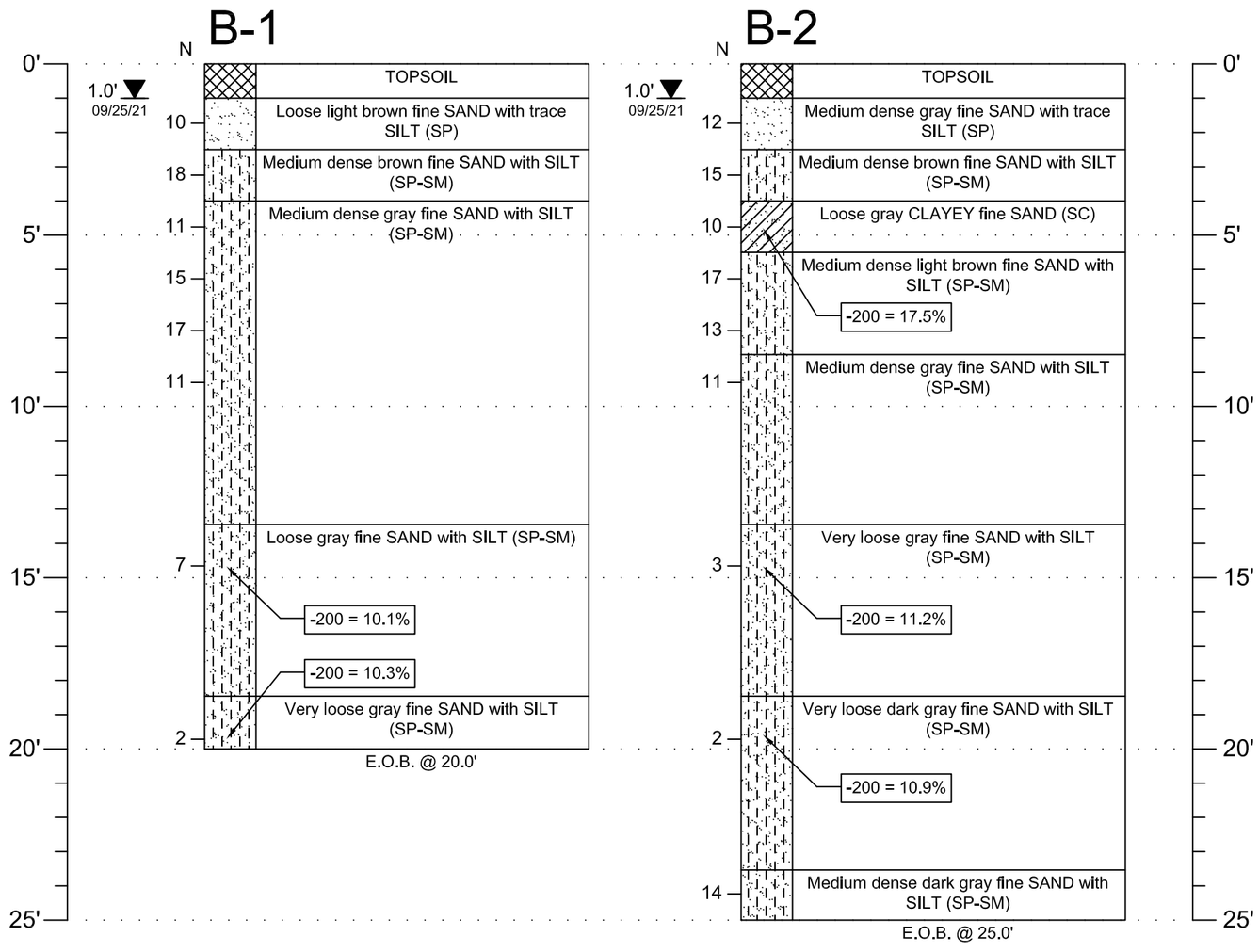
TITLE: BORING LOCATION PLAN			SCALE: 1" ≈ 100'
PROJECT: GEOTECHNICAL EVALUATION CITY OF BUNNELL ADMINISTRATION BUILDING BUNNELL, FLORIDA			PAGE/FIG. NO.: A-1
DRAWN BY: MKL	DATE: 10/11/21	PROJECT NO.: 0430.2100304.0000	
CHECKED BY: BP	DATE: 10/11/21	REPORT NO.: 139070	



Fine SAND (SP)

Fine SAND with SILT (SP-SM)

CLAYEY fine SAND (SC)

TOPSOIL

NOTES:

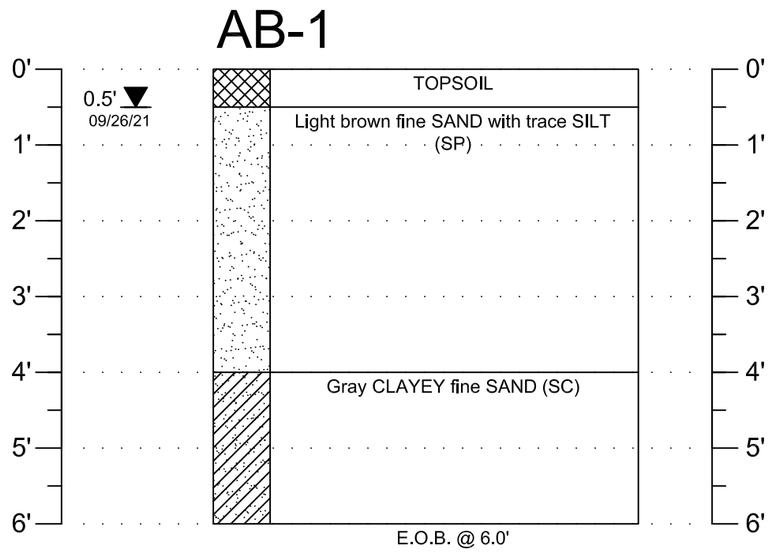
▼	Measured Groundwater Level 24 (+) Hours Subsequent to Time of Drilling
(SP)	Unified Soil Classification System
EOB	End of Boring
N	Penetr. Resistance, Blows/ft.
Kv	Coefficient of Permeability, (ft/day)
-200	% Passing No. 200 Sieve
NE	Groundwater not Encountered

UNIVERSAL ENGINEERING SCIENCES

PROJECT:
GEOTECHNICAL EVALUATION
CITY OF BUNNELL ADMINISTRATION BUILDING
BUNNELL, FLORIDA

TITLE:
SUBSURFACE PROFILES

DRAWN BY:	MKL	DATE:	10/08/21	PROJECT NO.:	0430.2100304.0000	SCALE: NA (in feet)	PAGE/FIG. NO.: A-2
CHECKED BY:	BP	DATE:	10/08/21	REPORT NO.:	139070		



Fine SAND (SP)

Fine SAND with SILT (SP-SM)

CLAYEY fine SAND (SC)

TOPSOIL

NOTES:

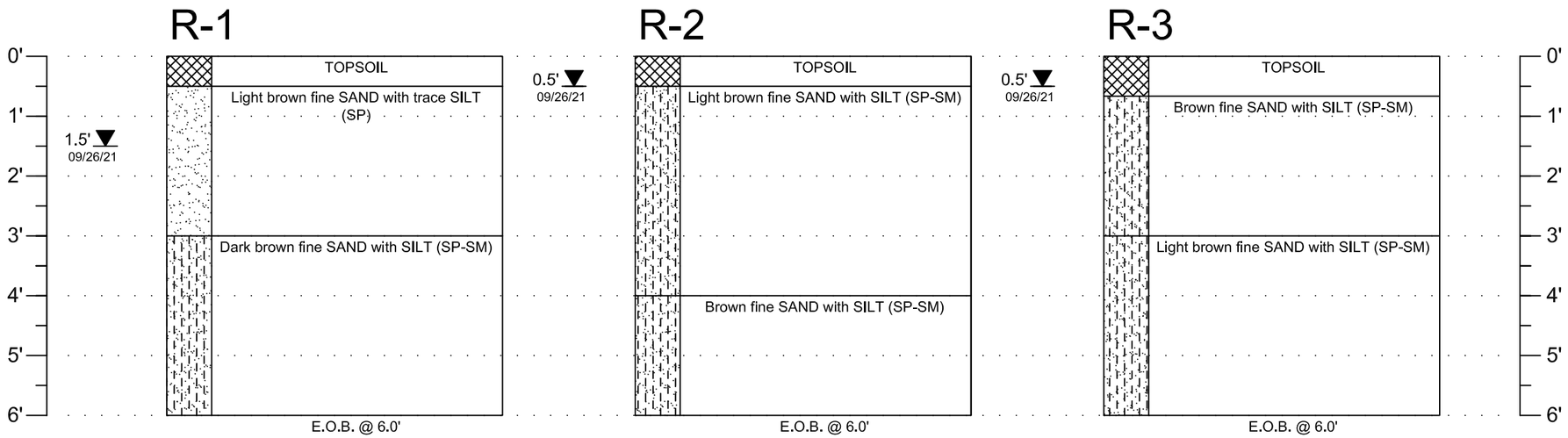
▼	Measured Groundwater Level 24 (+) Hours Subsequent to Time of Drilling
(SP)	Unified Soil Classification System
EOB	End of Boring
N	Penetr. Resistance, Blows/ft.
Kv	Coefficient of Permeability, (ft/day)
-200	% Passing No. 200 Sieve
NE	Groundwater not Encountered

UNIVERSAL
ENGINEERING SCIENCES

PROJECT:
GEOTECHNICAL EVALUATION
CITY OF BUNNELL ADMINISTRATION BUILDING
BUNNELL, FLORIDA

TITLE:
SUBSURFACE PROFILE

DRAWN BY:	MKL	DATE:	10/04/21	PROJECT NO.:	0430.2100304.0000	SCALE: NA (in feet)	PAGE/FIG. NO.: A-3
CHECKED BY:	BP	DATE:	10/04/21	REPORT NO.:	139070		



Fine SAND (SP)

Fine SAND with SILT (SP-SM)

CLAYEY fine SAND (SC)

TOPSOIL

NOTES:

▼	Measured Groundwater Level 24 (+) Hours Subsequent to Time of Drilling
(SP)	Unified Soil Classification System
EOB	End of Boring
N	Penetr. Resistance, Blows/ft.
Kv	Coefficient of Permeability, (ft/day)
-200	% Passing No. 200 Sieve
NE	Groundwater not Encountered

UNIVERSAL ENGINEERING SCIENCES

PROJECT:
GEOTECHNICAL EVALUATION
CITY OF BUNNELL ADMINISTRATION BUILDING
BUNNELL, FLORIDA

TITLE:
SUBSURFACE PROFILE

DRAWN BY:	MKL	DATE:	10/04/21	PROJECT NO.:	0430.2100304.0000	SCALE: NA (in feet)	PAGE/FIG. NO.: A-4
CHECKED BY:	BP	DATE:	10/04/21	REPORT NO.:	139070		

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KEY TO BORING LOGS

SYMBOLS

SYMBOL	DESCRIPTION
N	No. of blows of a 140-lb weight falling 30 inches required to drive standard spoon 1 foot.
WOR	Weight of Drill Rods
WOH	Weight of Drill Rods and Hammer
% REC	Percent Core Recovery from Rock Core Drilling
RQD	Rock Quality Designation
EOB	End Of Boring
BT	Boring Terminated
-200	Fines Content or % Passing No. 200 Sieve
MC	Moisture Content
LL	Liquid Limit
PI	Plasticity Index
K	Coefficient of Permeability
O.C.	Organic Content
▽	Estimated seasonal high groundwater level
▼	Measured groundwater level at time of drilling

UNIFIED CLASSIFICATION SYSTEM

MAJOR DIVISIONS			GROUP SYMBOLS	TYPICAL NAMES
COARSE-GRAINED SOILS More than 50% retained on No. 200 sieve*	GRAVELS 50% or more of coarse fraction retained on No. 4 sieve	CLEAN GRAVELS	GW	Well-graded gravels and gravel-sand mixtures, little or no fines
			GP	Well-graded gravels and gravel-sand mixtures, little or no fines
		GRAVELS WITH FINES	GM	Silty gravels, gravel-sand-silt mixtures
			GC	Clayey gravels, gravel-sand-clay mixtures
	SANDS More than 50% of coarse fraction passes No. 4 sieve	CLEAN SANDS	SW**	Well-graded sands and gravelly sands, little or no fines
			SP**	Well-graded sands and gravelly sands, little or no fines
		SANDS WITH FINES	SM**	Silty sands, sand-silt mixtures
			SC**	Clayey sands, sand-clay mixtures
FINE-GRAINED SOILS 50% or more passes No. 200 sieve*	SILTS AND CLAYS Liquid limit 50% or less		ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
			OL	Organic silts and organic silty clays of low plasticity
	SILTS AND CLAYS Liquid limit greater than 50%		MH	Inorganic silts, micaceous or diatomaceous fine sands or silts, elastic silts
			CH	Organic clays or high plasticity, fat clays
			OH	Organic clays of medium to high plasticity
			PT	Peat, muck and other highly organic soils

* Based on the material passing the 3-in. (75 mm) sieve.

** Use dual symbol (such as, SP-SM and SP-SC) for soil with more than 5% but less than 12% passing through No. 200 sieve.

RELATIVE DENSITY
(sand-silt)

Very Loose - Less Than 4 Blows/Ft.
Loose - 4 to 10 Blows/Ft.
Medium - 11 to 30 Blows/Ft.
Dense - 31 to 50 Blows/Ft.
Very Dense - More Than 50 Blows/Ft.

CONSISTENCY
(clay)

Very Soft - Less than 2 Blows/Ft.
Soft - 2 to 4 Blows/Ft.
Medium - 5 to 8 Blows/Ft.
Stiff - 9 to 15 Blows/Ft.
Very Stiff - 16 to 30 Blows/Ft.
Hard - More Than 30 Blows/Ft.

RELATIVE HARDNESS
(Limestone)

Soft - 100 Blows for more than 2"
Hard - 100 Blows for less than 2"

MODIFIERS

These modifiers provide our estimate of the amount of minor constituents (SILT or CLAY sized particles) in the soil sample.
Trace - 5% or less
With SILT or with CLAY - 6% to 11%
SILTY or CLAYEY - 12% to 30%
Very SILTY or Very CLAYEY - 31% to 50%

These modifiers provide our estimate of the amount of organic components in the soil sample.
Trace - 1% to 2%
Few - 3% to 4%
Some - 5% to 8%
Many - Greater than 8%

These modifiers provide our estimate of the amount of other components (Shell, Gravel, Etc.) in the soil sample
Trace - 5% or less
Few - 6% to 12%
Some - 13% to 30%
Many - 31% to 50%

APPENDIX B

LABORATORY TESTING PROCEDURES

DESCRIPTION OF LABORATORY TESTING PROCEDURES

LABORATORY PERMEABILITY TEST

The laboratory permeability test is a Falling Head Test that is performed on soil samples recovered from this site. The data recovered from this test are used to calculate Darcy's Coefficient of Permeability (k) of the soil.

WASH 200 TEST

The Wash 200 test is performed by passing a representative soil sample over a No. 200 sieve and rinsing with water. The percentage of the soil grains passing this sieve is then calculated.

ORGANIC CONTENT TESTS

The organic content test is performed by weighing a sample before and after placing in a high temperature oven which burns the organic material in the sample. The percent of organic material by weight is then calculated.

MOISTURE CONTENT DETERMINATION ASTM D-2216

Moisture content is the ratio of the weight of water to the dry weight of soil. Moisture content is measured by drying a sample at 105 degrees Celsius. The moisture content is expressed as a percent of the oven dried soil mass.

ATTERBERG LIMITS

The Atterberg Limits consist of the Liquid Limit (LL) and the Plastic Limit (PL). The LL and PL were determined in general accordance with the latest revision of ASTM D-4318. The LL is the water content of the material denoting the boundary between the liquid and plastic states. The PL is the water content denoting the boundary between the plastic and semi-solid states. The Plasticity Index (Pl) is the range of water content over which a soil behaves plastically and is denoted numerically by as the difference between the LL and the PL. The water content of the sample tested was determined in general accordance with the latest revision of ASTM D-2216. The water content is defined as the ratio of "pore" or "free" water in a given mass of material to the mass of solid material particles.

CONSOLIDATION TESTING

A single selected portion of the undisturbed sample was extruded from the 3-inch diameter sample tube for consolidation testing. The selected sample was trimmed and confined into a stainless steel disc having a diameter of 2.5 inches and a height of 1 inch. The disc was then "sandwiched" between 2 porous stones, saturated and subjected to incrementally increasing loads. The resulting deformation of the sample within the steel disc was measured using a micrometer gauge.

APPENDIX C

GENERAL CONDITIONS
CONSTRAINTS AND RESTRICTIONS AND
IMPORTANT INFORMATION ABOUT YOUR
GEOTECHNICAL ENGINEERING REPORT

CONSTRAINTS AND RESTRICTIONS

WARRANTY
Universal Engineering Sciences has prepared this report for our client for his exclusive use, in accordance with generally accepted soil and foundation engineering practices, and makes no other warranty either expressed or implied as to the professional advice provided in the report.

UNANTICIPATED SOIL CONDITIONS
The analysis and recommendations submitted in this report are based upon the data obtained from soil borings performed at the locations indicated on the Boring Location Plan. This report does not reflect any variations which may occur between these borings.

The nature and extent of variations between borings may not become known until excavation begins. If variations appear, we may have to re-evaluate our recommendations after performing on-site observations and noting the characteristics of any variations.

CHANGED CONDITIONS
We recommend that the specifications for the project require that the contractor immediately notify Universal Engineering Sciences, as well as the owner, when subsurface conditions are encountered that are different from those present in this report.

No claim by the contractor for any conditions differing from those anticipated in the plans, specifications, and those found in this report, should be allowed unless the contractor notifies the owner and Universal Engineering Sciences of such changed conditions. Further, we recommend that all foundation work and site improvements be observed by a representative of Universal Engineering Sciences to monitor field conditions and changes, to verify design assumptions and to evaluate and recommend any appropriate modifications to this report.

MISINTERPRETATION OF SOIL ENGINEERING REPORT
Universal Engineering Sciences is responsible for the conclusions and opinions contained within this report based upon the data relating only to the specific project and location discussed herein. If the conclusions or recommendations based upon the data presented are made by others, those conclusions or recommendations are not the responsibility of Universal Engineering Sciences.

CHANGED STRUCTURE OR LOCATION
This report was prepared in order to aid in the evaluation of this project and to assist the architect or engineer in the design of this project. If any changes in the design or location of the structure as outlined in this report are planned, or if any structures are included or added that are not discussed in the report, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and the conclusions modified or approved by Universal Engineering Sciences.

USE OF REPORT BY BIDDERS
Bidders who are examining the report prior to submission of a bid are cautioned that this report was prepared as an aid to the designers of the project and it may affect actual construction operations.

Bidders are urged to make their own soil borings, test pits, test caissons or other investigations to determine those conditions that may affect construction operations. Universal Engineering Sciences cannot be responsible for any interpretations made from this report or the attached boring logs with regard to their adequacy in reflecting subsurface conditions which will affect construction operations.

STRATA CHANGES
Strata changes are indicated by a definite line on the boring logs which accompany this report. However, the actual change in the ground may be more gradual. Where changes occur between soil samples, the location of the change must necessarily be estimated using all available information and may not be shown at the exact depth.

OBSERVATIONS DURING DRILLING
Attempts are made to detect and/or identify occurrences during drilling and sampling, such as: water level, boulders, zones of lost circulation, relative ease or resistance to drilling progress, unusual sample recovery, variation of driving resistance, obstructions, etc.; however, lack of mention does not preclude their presence.

WATER LEVELS
Water level readings have been made in the drill holes during drilling and they indicate normally occurring conditions. Water levels may not have been stabilized at the last reading. This data has been reviewed and interpretations made in this report. However, it must be noted that fluctuations in the level of the groundwater may occur due to variations in rainfall, temperature, tides, and other factors not evident at the time measurements were made and reported. Since the probability of such variations is anticipated, design drawings and specifications should accommodate such possibilities and construction planning should be based upon such assumptions of variations.

LOCATION OF BURIED OBJECTS
All users of this report are cautioned that there was no requirement for Universal Engineering Sciences to attempt to locate any man-made buried objects during the course of this exploration and that no attempt was made by Universal Engineering Sciences to locate any such buried objects. Universal Engineering Sciences cannot be responsible for any buried man-made objects which are subsequently encountered during construction that are not discussed within the text of this report.

TIME
This report reflects the soil conditions at the time of investigation. If the report is not used in a reasonable amount of time, significant changes to the site may occur and additional reviews may be required.

Universal Engineering Sciences, LLC
GENERAL CONDITIONS

SECTION 1: RESPONSIBILITIES 1.1 *Universal Engineering Sciences, LLC*, and its subsidiaries and affiliated companies ("UES"), is responsible for providing the services described under the Scope of Services. The term "UES" as used herein includes all of UES's agents, employees, professional staff, and subcontractors. **1.2** The Client or a duly authorized representative is responsible for providing UES with a clear understanding of the project nature and scope. The Client shall supply UES with sufficient and adequate information, including, but not limited to, maps, site plans, reports, surveys, plans and specifications, and designs, to allow UES to properly complete the specified services. The Client shall also communicate changes in the nature and scope of the project as soon as possible during performance of the work so that the changes can be incorporated into the work product. **1.3** The Client acknowledges that UES's responsibilities in providing the services described under the Scope of Services section is limited to those services described therein, and the Client hereby assumes any collateral or affiliated duties necessitated by or for those services. Such duties may include, but are not limited to, reporting requirements imposed by any third party such as federal, state, or local entities, the provision of any required notices to any third party, or the securing of necessary permits or permissions from any third parties required for UES's provision of the services so described, unless otherwise agreed upon by both parties in writing.

SECTION 2: STANDARD OF CARE 2.1 Services performed by UES under this Agreement will be conducted in a manner consistent with the level of care and skill ordinarily exercised by members of UES's profession practicing contemporaneously under similar conditions in the locality of the project. No other warranty, express or implied, is made. **2.2** Execution of this document by UES is not a representation that UES has visited the site, become generally familiar with local conditions under which the work is to be performed, or correlated personal observations with the requirements of the Scope of Services. It is the Client's responsibility to provide UES with all information necessary for UES to provide the services described under the Scope of Services, and the Client assumes all liability for information not provided to UES that may affect the quality or sufficiency of the services so described.

SECTION 3: SITE ACCESS AND SITE CONDITIONS 3.1 Client will grant or obtain free access to the site for all equipment and personnel necessary for UES to perform the work set forth in this Agreement. The Client will notify any possessors of the project site that Client has granted UES free access to the site. UES will take reasonable precautions to minimize damage to the site, but it is understood by Client that, in the normal course of work, some damage may occur, and the correction of such damage is not part of this Agreement unless so specified in the Scope of Services. **3.2** The Client is responsible for the accuracy of locations for all subterranean structures and utilities. UES will take reasonable precautions to avoid known subterranean structures, and the Client waives any claim against UES, and agrees to defend, indemnify, and hold UES harmless from any claim or liability for injury or loss, including costs of defense, arising from damage done to subterranean structures and utilities not identified or accurately located. In addition, Client agrees to compensate UES for any time spent or expenses incurred by UES in defense of any such claim with compensation to be based upon UES's prevailing fee schedule and expense reimbursement policy.

SECTION 4: BILLING AND PAYMENT 4.1 UES will submit invoices to Client monthly or upon completion of services. Invoices will show charges for different personnel and expense classifications. **4.2** Payment is due 30 days after presentation of invoice and is past due 31 days from invoice date. Client agrees to pay a finance charge of one and one-half percent (1 ½ %) per month, or the maximum rate allowed by law, on past due accounts. **4.3** If UES incurs any expenses to collect overdue billings on invoices, the sums paid by UES for reasonable attorneys' fees, court costs, UES's time, UES's expenses, and interest will be due and owing by the Client.

SECTION 5: OWNERSHIP AND USE OF DOCUMENTS 5.1 All reports, boring logs, field data, field notes, laboratory test data, calculations, estimates, and other documents prepared by UES, as instruments of service, shall remain the property of UES. Neither Client nor any other entity shall change or modify UES's instruments of service. **5.2** Client agrees that all reports and other work furnished to the Client or his agents, which are not paid for, will be returned upon demand and will not be used by the Client for any purpose. **5.3** UES will retain all pertinent records relating to the services performed for a period of five years following submission of the report or completion of the Scope of Services, during which period the records will be made available to the Client in a reasonable time and manner. **5.4** All reports, boring logs, field data, field notes, laboratory test data, calculations, estimates, and other documents prepared by UES, are prepared for the sole and exclusive use of Client, and may not be given to any other entity, or used or relied upon by any other entity, without the express written consent of UES. Client is the only entity to which UES owes any duty or duties, in contract or tort, pursuant to or under this Agreement.

SECTION 6: DISCOVERY OF UNANTICIPATED HAZARDOUS MATERIALS 6.1 Client represents that a reasonable effort has been made to inform UES of known or suspected hazardous materials on or near the project site. **6.2** Under this agreement, the term hazardous materials include hazardous materials, hazardous wastes, hazardous substances (40 CFR 261.31, 261.32, 261.33), petroleum products, polychlorinated biphenyls, asbestos, and any other material defined by the U.S. EPA as a hazardous material. **6.3** Hazardous materials may exist at a site where there is no reason to believe they are present. The discovery of unanticipated hazardous materials constitutes a changed condition mandating a renegotiation of the scope of work. The discovery of unanticipated hazardous materials may make it necessary for UES to take immediate measures to protect health and safety. Client agrees to compensate UES for any equipment decontamination or other costs incident to the discovery of unanticipated hazardous materials. **6.4** UES will notify Client when unanticipated hazardous materials or suspected hazardous materials are encountered. Client will make any disclosures required by law to the appropriate governing agencies. Client will hold UES harmless for all consequences of disclosures made by UES which are required by governing law. In the event the project site is not owned by Client, Client it is the Client's responsibility to inform the property owner of the discovery of unanticipated hazardous materials or suspected hazardous materials. **6.5** Notwithstanding any other provision of the Agreement, Client waives any claim against UES, and to the maximum extent permitted by law, agrees to defend, indemnify, and save UES harmless from any claim, liability, and/or defense costs for injury or loss arising from UES's discovery of unanticipated hazardous materials or suspected hazardous materials including any costs created by delay of the project and any cost associated with possible reduction of the property's value. Client will be responsible for ultimate disposal of any samples secured by UES which are found to be contaminated.

SECTION 7: RISK ALLOCATION 7.1 Client agrees that UES's liability for any damage on account of any breach of contract, error, omission, or professional negligence will be limited to a sum not to exceed $50,000 or UES's fee, whichever is greater. If Client prefers to have higher limits on contractual or professional liability, UES agrees to increase the limits up to a maximum of $1,000,000.00 upon Client's written request at the time of accepting UES's proposal provided that Client agrees to pay an additional consideration of four percent of the total fee, or $400.00, whichever is greater. If Client prefers a $2,000,000.00 limit on contractual or professional liability, UES agrees to increase the limits up to a maximum of $2,000,000.00 upon Client's written request at the time of accepting UES's proposal provided that Client agrees to pay an additional consideration of four percent of the total fee, or $800.00, whichever is greater. The additional charge for the higher liability limits is because of the greater risk assumed and is not strictly a charge for additional professional liability insurance. **7.2** Client shall not be liable to UES and UES shall not be liable to Client for any incidental, special, or consequential damages (including lost profits, loss of use, and lost savings) incurred by either party due to the fault of the other, regardless of the nature of the fault, or whether it was committed by Client or UES, their employees, agents, or subcontractors; or whether such liability arises in breach of contract or warranty, tort (including negligence), statutory, or any other cause of action. **7.3** As used in this Agreement, the terms "claim" or "claims" mean any claim in contract, tort, or statute alleging negligence, errors, omissions, strict liability, statutory liability, breach of contract, breach of warranty, negligent misrepresentation, or any other act giving rise to liability.

SECTION 8: INSURANCE 8.1 UES represents it and its agents, staff and consultants employed by UES, is and are protected by worker's compensation insurance and that UES has such coverage under public liability and property damage insurance policies which UES deems to be adequate. Certificates for all such policies of insurance shall be provided to Client upon request in writing. Within the limits and conditions of such insurance, UES agrees to indemnify and save Client harmless from and against loss, damage, or liability arising from negligent acts by UES, its agents, staff, and consultants employed by it. UES shall not be responsible for any loss, damage or liability beyond the amounts, limits, and conditions of such insurance or the limits described in Section 7, whichever is less.

The Client agrees to defend, indemnify, and save UES harmless for loss, damage or liability arising from acts by Client, Client's agents, staff, and others employed by Client. **8.2** Under no circumstances will UES indemnify Client from or for Client's own actions, negligence, or breaches of contract. **8.3** To the extent damages are covered by property insurance, Client and UES waive all rights against each other and against the contractors, consultants, agents, and employees of the other for damages, except such rights as they may have to the proceeds of such insurance.

SECTION 9: DISPUTE RESOLUTION **9.1** All claims, disputes, and other matters in controversy between UES and Client arising out of or in any way related to this Agreement will be submitted to mediation or non-binding arbitration, before and as a condition precedent to other remedies provided by law. **9.2** If a dispute arises and that dispute is not resolved by mediation or non-binding arbitration, then: (a) the claim will be brought in the state or federal courts having jurisdiction where the UES office which provided the service is located; and (b) the prevailing party will be entitled to recovery of all reasonable costs incurred, including staff time, court costs, attorneys' fees, expert witness fees, and other claim related expenses.

SECTION 10: TERMINATION **10.1** This agreement may be terminated by either party upon seven (7) days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof, or in the case of a force majeure event such as terrorism, act of war, public health or other emergency. Such termination shall not be effective if such substantial failure or force majeure has been remedied before expiration of the period specified in the written notice. In the event of termination, UES shall be paid for services performed to the termination notice date plus reasonable termination expenses. **10.2** In the event of termination, or suspension for more than three (3) months, prior to completion of all reports contemplated by the Agreement, UES may complete such analyses and records as are necessary to complete its files and may also complete a report on the services performed to the date of notice of termination or suspension. The expense of termination or suspension shall include all direct costs of UES in completing such analyses, records, and reports.

SECTION 11: REVIEWS, INSPECTIONS, TESTING, AND OBSERVATIONS **11.1** Plan review, private provider inspections, and building inspections are performed for the purpose of observing compliance with applicable building codes. Threshold inspections are performed for the purpose of observing compliance with an approved threshold inspection plan. Construction materials testing ("CMT") is performed to document compliance of certain materials or components with applicable testing standards. UES's performance of plan reviews, private provider inspections, building inspections, threshold inspections, or CMT, or UES's presence on the site of Client's project while performing any of the foregoing activities, is not a representation or warranty by UES that Client's project is free of errors in either design or construction. **11.2** If UES is retained to provide construction monitoring or observation, UES will report to Client any observed work which, in UES's opinion, does not conform to the plans and specifications provided to UES. UES shall have no authority to reject or terminate the work of any agent or contractor of Client. No action, statements, or communications of UES, or UES's site representative, can be construed as modifying any agreement between Client and others. UES's performance of construction monitoring or observation is not a representation or warranty by UES that Client's project is free of errors in either design or construction. **11.3** Neither the activities of UES pursuant to this Agreement, nor the presence of UES or its employees, representatives, or subcontractors on the project site, shall be construed to impose upon UES any responsibility for means or methods of work performance, superintendence, sequencing of construction, or safety conditions at the project site. Client acknowledges that Client or its contractor is solely responsible for project jobsite safety. **11.4** Client is responsible for scheduling all inspections and CMT activities of UES. All testing and inspection services will be performed on a will-call basis. UES will not be responsible for tests and inspections that are not performed due to Client's failure to schedule UES's services on the project, or for any claims or damages arising from tests and inspections that are not scheduled or performed.

SECTION 12: ENVIRONMENTAL ASSESSMENTS Client acknowledges that an Environmental Site Assessment ("ESA") is conducted solely to permit UES to render a professional opinion about the likelihood or extent of regulated contaminants being present on, in, or beneath the site in question at the time services were conducted. No matter how thorough an ESA study may be, findings derived from the study are limited and UES cannot know or state for a fact that a site is unaffected by reportable quantities of regulated contaminants as a result of conducting the ESA study. Even if UES states that reportable quantities of regulated contaminants are not present, Client still bears the risk that such contaminants may be present or may migrate to the site after the ESA study is complete.

SECTION 13: SUBSURFACE EXPLORATIONS **13.1** Client acknowledges that subsurface conditions may vary from those observed at locations where borings, surveys, samples, or other explorations are made, and that site conditions may change with time. Data, interpretations, and recommendations by UES will be based solely on information available to UES at the time of service. UES is responsible for those data, interpretations, and recommendations, but will not be responsible for other parties' interpretations or use of the information developed or provided by UES. **13.2** Subsurface explorations may result in unavoidable cross-contamination of certain subsurface areas, as when a probe or boring device moves through a contaminated zone and links it to an aquifer, underground stream, or other hydrous body not previously contaminated. UES is unable to eliminate totally cross-contamination risk despite use of due care. Since subsurface explorations may be an essential element of UES's services indicated herein, Client shall, to the fullest extent permitted by law, waive any claim against UES, and indemnify, defend, and hold UES harmless from any claim or liability for injury or loss arising from cross-contamination allegedly caused by UES's subsurface explorations. In addition, Client agrees to compensate UES for any time spent or expenses incurred by UES in defense of any such claim with compensation to be based upon UES's prevailing fee schedule and expense reimbursement policy.

SECTION 14: SOLICITATION OF EMPLOYEES Client agrees not to hire UES's employees except through UES. In the event Client hires a UES employee within one year following any project through which Client had contact with said employee, Client shall pay UES an amount equal to one-half of the employee's annualized salary, as liquidated damages, without UES waiving other remedies it may have.

SECTION 15: ASSIGNS Neither Client nor UES may delegate, assign, sublet, or transfer its duties or interest in this Agreement without the written consent of the other party.

SECTION 16: GOVERNING LAW AND SURVIVAL **16.1** This Agreement shall be governed by and construed in accordance with the laws of the jurisdiction in which the UES office performing the services hereunder is located. **16.2** In any of the provisions of this Agreement are held illegal, invalid, or unenforceable, the enforceability of the remaining provisions will not be impaired and will survive. Limitations of liability and indemnities will survive termination of this agreement for any cause.

SECTION 17: INTEGRATION CLAUSE **17.1** This Agreement represents and contains the entire and only agreement and understanding among the parties with respect to the subject matter of this Agreement, and supersedes any and all prior and contemporaneous oral and written agreements, understandings, representations, inducements, promises, warranties, and conditions among the parties. No agreement, understanding, representation, inducement, promise, warranty, or condition of any kind with respect to the subject matter of this Agreement shall be relied upon by the parties unless expressly incorporated herein. **17.2** This Agreement may not be amended or modified except by an agreement in writing signed by the party against whom the enforcement of any modification or amendment is sought.

SECTION 18: WAIVER OF JURY TRIAL Both Client and UES waive trial by jury in any action arising out of or related to this Agreement.

SECTION 19: INDIVIDUAL LIABILTY PURSUANT TO FLORIDA STAT. 558.0035, AN INDIVIDUAL EMPLOYEE OR AGENT OF UES MAY NOT BE HELD INDIVIDUALLY LIABLE FOR NEGLIGENCE.

Important Information about This

Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical-engineering study conducted for a civil engineer may not fulfill the needs of a constructor — a construction contractor — or even another civil engineer. Because each geotechnical- engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client. No one except you should rely on this geotechnical-engineering report without first conferring with the geotechnical engineer who prepared it. *And no one — not even you* — should apply this report for any purpose or project except the one originally contemplated.

Read the Full Report

Serious problems have occurred because those relying on a geotechnical-engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

Geotechnical Engineers Base Each Report on a Unique Set of Project-Specific Factors

Geotechnical engineers consider many unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk-management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical-engineering report that was:

- not prepared for you;
- not prepared for your project;
- not prepared for the specific site explored; or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical-engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light-industrial plant to a refrigerated warehouse;
- the elevation, configuration, location, orientation, or weight of the proposed structure;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

Subsurface Conditions Can Change

A geotechnical-engineering report is based on conditions that existed at the time the geotechnical engineer performed the study. *Do not rely on a geotechnical-engineering report whose adequacy may have been affected by*: the passage of time; man-made events, such as construction on or adjacent to the site; or natural events, such as floods, droughts, earthquakes, or groundwater fluctuations. *Contact the geotechnical engineer before applying this report to determine if it is still reliable.* A minor amount of additional testing or analysis could prevent major problems.

Most Geotechnical Findings Are Professional Opinions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ — sometimes significantly — from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide geotechnical-construction observation is the most effective method of managing the risks associated with unanticipated conditions.

A Report's Recommendations Are Not Final

Do not overrely on the confirmation-dependent recommendations included in your report. *Confirmation-dependent recommendations are not final,* because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations *only* by observing actual subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's confirmation-dependent recommendations if that engineer does not perform the geotechnical-construction observation required to confirm the recommendations' applicability.*

A Geotechnical-Engineering Report Is Subject to Misinterpretation

Other design-team members' misinterpretation of geotechnical-engineering reports has resulted in costly

problems. Confront that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Constructors can also misinterpret a geotechnical-engineering report. Confront that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing geotechnical construction observation.

Do Not Redraw the Engineer's Logs

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical-engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make constructors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give constructors the complete geotechnical-engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise constructors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure constructors have sufficient time* to perform additional study. Only then might you be in a position to give constructors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

Read Responsibility Provisions Closely

Some clients, design professionals, and constructors fail to recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Environmental Concerns Are Not Covered

The equipment, techniques, and personnel used to perform an *environmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical-engineering report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk-management guidance. *Do not rely on an environmental report prepared for someone else.*

Obtain Professional Assistance To Deal with Mold

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the *express purpose* of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold-prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, many mold- prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical- engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; *none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.*

Rely, on Your GBC-Member Geotechnical Engineer for Additional Assistance

Membership in the Geotechnical Business Council of the Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project. Confer with you GBC-Member geotechnical engineer for more information.

GEOTECHNICAL BUSINESS COUNCIL
of the Geoprofessional Business Association

8811 Colesville Road/Suite G106, Silver Spring, MD 20910
Telephone: 301/565-2733 Facsimile: 301/589-2017
e-mail: info@geoprofessional.org www.geoprofessional.org

RECORDED PLAT

SUBDIVISION PLAT OF

FLAGLER CENTRAL COMMERCE PARK PHASE 1A REPLAT

MAP BOOK 37, PAGE 36

IN SECTIONS 11 & 12, TOWNSHIP 12 SOUTH, RANGE 30 EAST, CITY OF BUNNELL, FLAGLER COUNTY, FLORIDA
A REPLAT OF FLAGLER CENTRAL COMMERCE PARK PHASE 1A, AS RECORDED IN MAP BOOK 36, PAGE 86

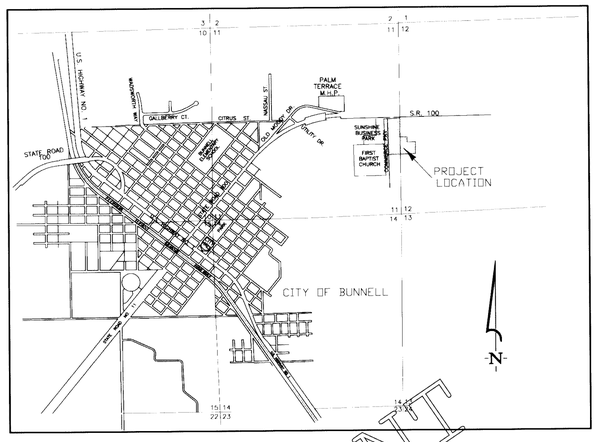
FLAGLER CENTRAL COMMERCE PARK PHASE 1A

BEING A PART OF SECTIONS 11 AND 12, TOWNSHIP 12 SOUTH, RANGE 30 EAST, FLAGLER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF SAID SECTION 11; THENCE NORTH 00°10'54" EAST, ALONG THE EAST LINE OF SAID SECTION 11, A DISTANCE OF 1694.08 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION;

THENCE LEAVING SAID EAST LINE OF SAID SECTION BEAR SOUTH 88°19'46" WEST, A DISTANCE OF 414.37 FEET; THENCE NORTH 01°40'14" WEST, A DISTANCE OF 991.49 FEET TO A POINT ON THE SOUTHERLY RIGHT-OF-WAY LINE OF STATE ROAD NO. 100 (A RIGHT-OF-WAY OF VARYING WIDTH); THENCE NORTH 88°55'20" EAST, ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE, A DISTANCE OF 35.33 FEET TO AN ANGLE POINT IN SAID RIGHT OF WAY LINE; THENCE SOUTH 01°04'40" EAST, CONTINUING ALONG SAID RIGHT OF WAY LINE, A DISTANCE OF 9.00 FEET TO AN ANGLE POINT IN SAID RIGHT OF WAY LINE; THENCE NORTH 88°55'20" EAST, CONTINUING ALONG SAID RIGHT OF WAY LINE, A DISTANCE OF 403.80 FEET TO AN ANGLE POINT IN SAID RIGHT OF WAY LINE; THENCE NORTH 01°04'40" WEST, CONTINUING ALONG SAID RIGHT OF WAY LINE, A DISTANCE OF 9.00 FEET TO AN ANGLE POINT IN SAID RIGHT OF WAY LINE; THENCE NORTH 88°55'20" EAST, CONTINUING ALONG SAID RIGHT OF WAY LINE, A DISTANCE OF 6.89 FEET TO A POINT ON SAID EAST LINE OF SECTION 11; THENCE CONTINUE NORTH 88°55'20" EAST ALONG SAID RIGHT-OF-WAY A DISTANCE OF 23.67 FEET; THENCE LEAVING SAID SOUTHERLY RIGHT OF WAY LINE SOUTH 01°04'40" EAST, A DISTANCE OF 32.00 FEET; THENCE SOUTH 88°55'20" WEST A DISTANCE OF 24.08 FEET TO A POINT ON THE EAST LINE OF SAID SECTION 11; THENCE SOUTH 00°10'54" WEST ALONG SAID EAST LINE OF SECTION 11, A DISTANCE OF 532.44 FEET; THENCE LEAVING SAID EAST LINE NORTH 88°51'44" EAST, A DISTANCE OF 195.68 FEET; THENCE SOUTH 01°02'40" EAST, A DISTANCE OF 90.00 FEET; THENCE NORTH 88°19'46" EAST, A DISTANCE OF 227.19 FEET; THENCE SOUTH 00°10'54" WEST, A DISTANCE OF 331.08; THENCE SOUTH 88°19'46" WEST A DISTANCE OF 424.85 FEET TO THE POINT OF BEGINNING.

CONTAINING 13.345 ACRES MORE OR LESS.



VICINITY MAP
NOT TO SCALE

JOINDER IN DEDICATION

THE UNDERSIGNED, BEING THE OWNER AND HOLDER OF THAT CERTAIN MORTGAGE RECORDED AT OFFICIAL RECORDS BOOK 913, PAGE 102, PUBLIC RECORDS OF FLAGLER COUNTY, FLORIDA, ENCUMBERING THE LANDS BEING PLATTED HEREIN, DOES JOIN THE DEDICATION FOR THE PURPOSE OF SUBORDINATING THE LIEN OF THE MORTGAGE TO THE USES AND PURPOSES DESCRIBED IN THE DEDICATION.

DELIVERED IN THE PRESENCE OF:

Carol Forbes Oare
CAROL FORBES OARE

STATE OF FLORIDA
COUNTY OF FLAGLER

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS 25th DAY OF June, 2009, PERSONALLY APPEARED CAROL FORBES OARE, MANAGING MEMBER OF OARE ASSOCIATES, LLC, A FLORIDA LIMITED LIABILITY COMPANY, WHO IS PERSONALLY KNOWN TO ME, AND WHO ACKNOWLEDGED BEFORE ME THAT SHE EXECUTED THE ABOVE AND FOREGOING JOINDER TO DEDICATION.

PRINT NAME: Linda S. MYACHINKO
NOTARY PUBLIC
STATE OF FLORIDA AT LARGE

COMMISSION # DD670927
MY COMMISSION EXPIRES:
LINDA S. MYACHINKO MY COMMISSION # DD 670927 EXPIRES: July 14, 2011 Bonded Thru Budget Notary Services

CERTIFICATE OF SURVEYOR

KNOW ALL MEN BY THESE PRESENTS, THAT THE UNDERSIGNED, BEING A LICENSED PROFESSIONAL SURVEYOR AND MAPPER, DOES HEREBY CERTIFY THAT ON THE 5 DAY OF June, 2009 HE COMPLETED THE SURVEY OF THE LANDS AS SHOWN IN THE FOREGOING PLAT; THAT SAID PLAT IS A CORRECT REPRESENTATION OF THE LANDS, FLOOD ZONES AND WETLAND BOUNDARIES THEREIN DESCRIBED AND PLATTED: THAT SAID PLAT WAS MADE UNDER THE UNDERSIGNED'S RESPONSIBLE DIRECTION AND SUPERVISION, THAT PERMANENT REFERENCE MONUMENTS HAVE BEEN PLACED AS SHOWN THEREON AS REQUIRED BY CHAPTER 177.091(7), AND PERMANENT CONTROL POINTS WILL BE SET IN ACCORDANCE WITH SECTION 177.091(8) FLORIDA STATUTES, THAT ALL REQUIREMENTS OF CHAPTER 177, PART 1 – PLATTING HAVE BEEN MET, AND THAT SAID LAND IS LOCATED IN THE CITY OF BUNNELL, FLORIDA.

DATE 6/5/09

A Sanzone
ANTHONY C. M. SANZONE
FLORIDA PROFESSIONAL SURVEYOR AND MAPPER
CERTIFICATE NO. 6309
EAST COAST LAND SURVEYING
11 COOLIDGE AVE
SUITE "J"
ORMOND BEACH FL 32174
LICENSED BUSINESS No. 7382
(386) 672-3633

CERTIFICATE OF REVIEW (ENGINEER)

I HEREBY CERTIFY THAT THE UNDERSIGNED IS A LICENSED PROFESSIONAL ENGINEER AND IS EITHER EMPLOYED OR UNDER CONTRACT WITH THE CITY OF BUNNELL; I ALSO CERTIFY THAT I AM NOT REPRESENTING THE OWNER OR OWNERS OF RECORD AND I HAVE APPROVED THIS PLAT ON THIS 16th DAY OF JUNE, 2009

BY: _____ LICENSE NO. 41128
FLORIDA PROFESSIONAL ENGINEER

NOTES:

1. BEARINGS SHOWN HEREON BASED ON N 88°55'20" E ON THE SOUTHERLY RIGHT OF WAY LINE OF STATE ROAD 100 PER SURVEY BY OTHERS.
2. ALL PLATTED UTILITY EASEMENTS SHALL ALSO BE EASEMENTS FOR THE CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES; PROVIDED, HOWEVER, NO SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES SHALL INTERFERE WITH THE FACILITIES AND SERVICES OF AN ELECTRIC, TELEPHONE, GAS OR OTHER PUBLIC UTILITY. IN THE EVENT A CABLE TELEVISION COMPANY DAMAGES THE FACILITIES OF A PUBLIC UTILITY, IT SHALL BE SOLELY RESPONSIBLE FOR THE DAMAGES.
3. MONUMENTS SHALL BE SET AT ALL LOT CORNERS.
4. NOTICE: THIS PLAT AS RECORDED IN ITS GRAPHIC FORM, IS THE OFFICIAL DEPICTION OF THE SUBDIVIDED LANDS DESCRIBED HEREIN AND WILL IN NO CIRCUMSTANCES BE SUPPLANTED IN AUTHORITY BY ANY OTHER GRAPHIC OR DIGITAL FORM OF THE PLAT. THERE MAY BE ADDITIONAL RESTRICTIONS THAT ARE NOT RECORDED ON THIS PLAT THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY.
5. DEDICATOR HAS RECEIVED PERMITS FROM ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD) BEING PERMIT #40-035-93481-1 AND PERMIT #40-035-93481-2, AND PERMIT #40-035-93481-6 AND PERMIT #40-035-93481-8, AS WELL AS A PERMIT FROM UNITED STATES ARMY CORPS OF ENGINEERS (USACOE), BEING PERMIT #SAJ-2004-4984, TO CONSTRUCT THIS SUBDIVISION. THE PERMITS AUTHORIZE WETLAND IMPACTS, INCLUDING SECONDARY IMPACTS ARISING FROM THE ABSENCE OF UPLAND BUFFERS ON ANY LOT IN THE SUBDIVISION. ACCEPTABLE MITIGATION HAS BEEN GRANTED TO SJRWMD & USACOE FOR THE ABSENCE OF UPLAND BUFFERS. THEREFORE NO UPLAND BUFFERS SHALL BE REQUIRED BY SJRWMD OR USACOE WITHIN THE SUBDIVISION, SUBJECT TO REGULATIONS OF OTHER JURISDICTIONAL AGENCIES.

CERTIFICATE OF APPROVAL

I HEREBY CERTIFY, THAT THE UNDERSIGNED, IS A LICENSED PROFESSIONAL SURVEYOR AND MAPPER AND IS EITHER EMPLOYED OR UNDER CONTRACT WITH THE CITY OF BUNNELL I ALSO CERTIFY THAT I AM NOT REPRESENTING THE OWNER OR OWNERS OF RECORD AND HAVE REVIEWED THIS PLAT AND FOUND IT TO COMPLY WITH THE REQUIREMENTS OF CHAPTER 177, FLORIDA STATUTES AND CITY OF BUNNELL PLATTING REGULATIONS.

DATE: 6/10/09 BY: Ronald E. Stanton #5072
FLORIDA PROFESSIONAL SURVEYOR AND MAPPER
CERTIFICATE NO.

DEDICATION

OARE ASSOCIATES, LLC, A FLORIDA LIMITED LIABILITY COMPANY, BEING THE OWNER OF THE LANDS DESCRIBED ON THIS PLAT HAS CAUSED THIS LAND TO BE SURVEYED AND PLATTED AS SHOWN, AND HEREBY DEDICATES THE LANDS KNOWN AS FLAGLER CENTRAL COMMERCE PARK PHASE 1A REPLAT TO THE USES AND PURPOSES SHOWN HEREON AND HEREIN.

COMMERCE PARKWAY IS DEDICATED TO THE CITY OF BUNNELL FOR ROAD RIGHT-OF-WAY PURPOSES AND ASSOCIATED UTILITIES.

TRACTS A & B ARE RESERVED TO THE DEDICATOR, ITS SUCCESSORS AND ASSIGNS.

TRACT C IS DEDICATED TO THE FLAGLER CENTRAL COMMERCE PARK PROPERTY OWNERS ASSOCIATION, INC.

TRACT D IS DEDICATED FOR THE FOLLOWING USES AND PURPOSES:

1. AN EASEMENT FOR CONSTRUCTION AND MAINTENANCE OF THE ADJOINING COMMERCE PARKWAY IN FAVOR OF THE DEDICATOR, THE CITY OF BUNNELL, AUTHORIZED CONTRACTORS, AGENTS AND EMPLOYEES. THE USE OF THIS EASEMENT IS INTENDED TO BE TEMPORARY AND SERIAL, AS CONSTRUCTION AND MAINTENANCE IS REQUIRED ON COMMERCE PARKWAY FROM TIME TO TIME, AND TRACT D IS NOT PART OF THE PUBLIC RIGHT OF WAY OF COMMERCE PARKWAY. ANY DAMAGE TO THE SURFACE OF TRACT D DURING THE USE OF THIS EASEMENT SHALL BE RESTORED BY THE PARTY UTILIZING THE EASEMENT.
2. AN EASEMENT FOR UTILITIES.
3. DEDICATOR RESERVES FOR ITSELF, ITS SUCCESSORS AND ASSIGNS ALL RIGHTS TO THE SURFACE OF TRACT D FOR ANY PURPOSES NOT INCONSISTENT WITH THE EASEMENT RIGHTS ENCUMBERING TRACT D, INCLUDING BUT NOT LIMITED TO THE ERECTION, PLACEMENT AND MAINTENANCE OF MONUMENT SIGNS.

ALL STORM WATER RETENTION EASEMENTS ARE DEDICATED TO THE FLAGLER CENTRAL COMMERCE PARK PROPERTY OWNERS ASSOCIATION, INC.

ALL DRAINAGE EASEMENTS ARE DEDICATED TO THE FLAGLER CENTRAL COMMERCE PARK PROPERTY OWNERS ASSOCIATION, INC.

THE UTILITY EASEMENTS SHOWN AS THE WESTERLY 15 FEET OF TRACT A AND THE WESTERLY 15 FEET OF LOTS 1-5 INCLUSIVE, ARE DEDICATED TO THE UTILITY PROVIDERS LISTED BELOW.

THE UTILITY EASEMENT SHOWN AS THE NORTHERLY 26 FEET OF LOT 1 IS DEDICATED TO THE UTILITY PROVIDERS LISTED BELOW.

ALL UTILITY EASEMENTS FOR THE BENEFIT OF UTILITY PROVIDERS SHALL BE FOR THE BENEFIT OF THE FOLLOWING UTILITIES: POTABLE WATER, WASTE WATER, IRRIGATION WATER, CABLE TELEVISION, ELECTRICAL SERVICE, TELEPHONE SERVICE.

DEDICATOR RESERVES THE RIGHT TO MAKE FUTURE DEDICATIONS OR GRANTS OF EASEMENTS OVER THE UTILITY EASEMENTS TO SUCH OTHER UTILITY PROVIDERS AS MAY PROPOSE TO SERVICE FLAGLER CENTRAL COMMERCE PARK PHASE 1A.

IN WITNESS WHEREOF THE DEDICATOR HAS SET ITS HAND AND SEAL ON THIS 26th DAY OF June, 2009.

SIGNED, SEALED AND DELIVERED IN THE PRESENCE OF:
OARE ASSOCIATES, LLC, A FLORIDA LIMITED LIABILITY COMPANY

BY: Carol Forbes Oare
MANAGING MEMBER

STATE OF FLORIDA
COUNTY OF FLAGLER

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS 26th DAY OF June, 2009, PERSONALLY APPEARED CAROL FORBES OARE, MANAGING MEMBER OF OARE ASSOCIATES, LLC, A FLORIDA LIMITED LIABILITY COMPANY, WHO IS PERSONALLY KNOWN TO ME, AND WHO ACKNOWLEDGED BEFORE ME THAT SHE EXECUTED THE ABOVE AND FOREGOING DEDICATION ON BEHALF OF THE COMPANY.

PRINT NAME: Linda S. MYACHINKO
NOTARY PUBLIC
STATE OF FLORIDA AT LARGE

COMMISSION # DD670927
MY COMMISSION EXPIRES:
LINDA S. MYACHINKO MY COMMISSION # DD 670927 EXPIRES: July 14, 2011 Bonded Thru Budget Notary Services

CERTIFICATE OF APPROVAL

THIS IS TO CERTIFY THAT ON THE 2nd DAY OF June, 2009, THIS PLAT WAS APPROVED BY THE CITY OF BUNNELL, FLAGLER COUNTY, FLORIDA.

BY: Catherine D. Robinson
MAYOR, CITY OF BUNNELL

BY: Barbara C. Hutchinson, Acting City Clerk
CITY CLERK

BY: _____
CITY ATTORNEY

BY: _____
CHAIRMAN, P.Z.A.

CERTIFICATE OF CLERK

I HEREBY CERTIFY THAT THE FOREGOING PLAT WAS FILED FOR RECORD ON THE 1st DAY OF July, 2009 AT _____ FILE NO. 2009019593.

CLERK OF COURT, IN AND FOR FLAGLER COUNTY, FLORIDA

(PLR) Plat Related OR 1723 Page 919 Joinder & Consent to Dedication

SUBDIVISION PLAT OF
FLAGLER CENTRAL COMMERCE PARK PHASE 1A REPLAT
SECTIONS 11 AND 12, TOWNSHIP 12 SOUTH, RANGE 30 EAST, CITY OF BUNNELL, FLAGLER COUNTY, FLORIDA
OWNED BY
OARE ASSOCIATES, LLC
1 FLORIDA PARK DRIVE SOUTH, ATRIUM SUITE, PALM COAST FL, 32137

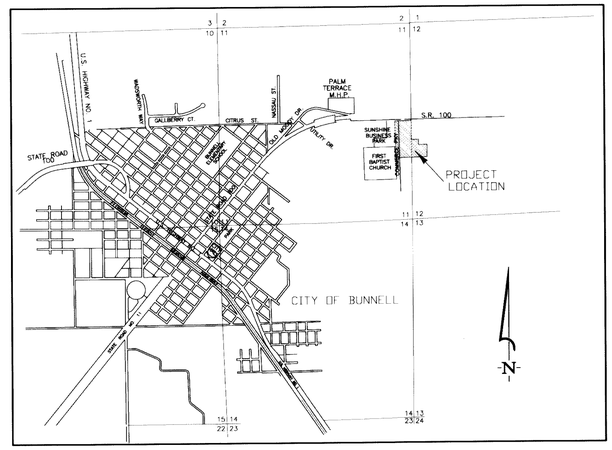
04/09/09

SUBDIVISION PLAT OF

FLAGLER CENTRAL COMMERCE PARK PHASE 1A REPLAT

MAP BOOK 37, PAGE 37

IN SECTIONS 11 & 12, TOWNSHIP 12 SOUTH, RANGE 30 EAST
CITY OF BUNNELL, FLAGLER COUNTY, FLORIDA
A REPLAT OF FLAGLER CENTRAL COMMERCE PARK PHASE 1A
AS RECORDED IN MAP BOOK 36, PAGE 86



VICINITY MAP
NOT TO SCALE

S 00°10'54" W 331.08'
164.99' 166.08'
227.19'
N 88°19'46" E
220.10'
424.85'
90.00'
S 01°02'40" E
40.00' 50.00'
S01°02'40"E 430.92'
DRAINAGE EASEMENT
N01°02'40"W 391.30'
40.00'
S88°19'46"W
195.68'
155.45'
N88°51'44"E
S 88°51'44" E
TRACT C
DRAINAGE EASEMENT
0.1801± ACRES
196.53'
156.32'
N 88°51'44" E
40.00'
528.75'
TRACT B
(ACCESS/DRAINAGE/UTILITIES EASEMENT)
0.492± ACRES
N 88°19'46" E 750.58'
LOT 5
2.850± ACRES
SECTION 12
SECTION 11
EAST LINE SECTION 11
1694.08'
N 00°10'54" E
POINT OF BEGINNING
POINT OF REFERENCE
SOUTHEAST CORNER SECTION 11
TOWNSHIP 12 SOUTH, RANGE 30 EAST
FOUND 1" IRON PIPE NO ID
11 12 14 13
S.01°04'40" E 32.00'
S.88°55'20"W 24.08'
529.40'
S00°10'54"W
DRAINAGE EASEMENT
FD 4x4"CM LB 6422
FD 4x4"CM FDOT
EAST 1/4 CORNER SECTION 11
TOWNSHIP 12 SOUTH, RANGE 30 EAST
S 00°10'54" W
EAST LINE SECTION 11
532.44'
6.89'
N.88°55'20"E
9.00'
N.01°04'40"W
246.70'
529.44'
539.44'
168.09'
DRAINAGE EASEMENT
166.26'
40.00'
STORMWATER RETENTION EASEMENT
STORMWATER RETENTION EASEMENT
STORMWATER RETENTION EASEMENT
100.02'
N88°55'20"E 196.72'
DRAINAGE EASEMENT
S88°55'20"W 196.83'
100.02'
S88°51'44"W
429.30'
539.55'
N00°10'54"E
LOT 4
2.883± ACRES
403.80'
STATE ROAD 100
(RIGHT OF WAY VARIES)
345.04' FDOT LINE EASEMENT OR. 1676 Pg. 94
UTILITY & DRAINAGE EASEMENT
S01°04'40"E 16.00'
N01°04'40"W 56.00'
195.83'
N 88°55'20" E
N 88°19'46" E 343.56'
N 88°19'46" E 338.12'
LOT 1
2.117± ACRES
LOT 2
1.315± ACRES
LOT 3
1.268± ACRES
S 88°51'44" W
50.00'
TRACT A
(ACCESS/DRAINAGE/UTILITIES EASEMENT)
0.115± ACRES
100.00'
100.00'
CROSS ACCESS EASEMENT
CROSS ACCESS EASEMENT
CROSS ACCESS EASEMENT (TYPICAL)
S 88°19'46" W
745.22'
414.37'
UTILITY EASEMENT
20' 20' 10' 40' 40' 40' 53.00' 56.89' S.22°10'31"W
25.67'
68.33'
264.61'
15' UTILITY EASEMENT
168.00'
163.08'
50.00'
169.83'
166.09'
26'
R/W
S 01°40'14" E
58.76'
COMMERCE PARKWAY
86.00'
94.00'
60' ACCESS EASEMENT TO FIRST BAPTIST CHURCH OF BUNNELL
O.R. 867 , Pg. 1355
S 01°04'40" E 9.00'
N 88°55'20" E 35.33'
650.18'
N 01°40'14" W
TRACT D
(8.00' x 650.18')
991.49'
R/W

SECTION 11, TOWNSHIP 12 SOUTH, RANGE 30 EAST,
MAP OF THE BUNNELL DEVELOPMENT COMPANY'S LAND
MAP BOOK 1, PAGE 1
BLOCK D

COUNTY PARCEL No.
11-12-30-0650-000D0-C010

COUNTY PARCEL No.
11-12-30-0650-000D0-C011

LEGEND:

FND	FOUND
CM ■	FOUND 4"X4" CONCRETE MONUMENT AS SHOWN
CM □	FOUND 4"X4" CONCRETE MONUMENT LB 7382
○	SET PK NAIL AND DISK "PCP - LB 7382"
LB	LICENSED BUSINESS
R/W	RIGHT OF WAY
F.D.O.T.	FLORIDA DEPT OF TRANSPORTATION

SCALE: 1"=50'
0 50 100 200

EAST COAST LAND SURVEYING LB#7382
P.O. BOX 2388, 300 N STATE ST BUNNELL FL 32110
PHONE (386) 437-0123 FAX (386) 437-0114

SUBDIVISION PLAT OF
FLAGLER CENTRAL COMMERCE PARK PHASE 1A REPLAT
SITUATED IN
SECTIONS 11 AND 12, TOWNSHIP 12 SOUTH, RANGE 30 EAST, CITY OF BUNNELL, FLAGLER COUNTY, FLORIDA
OWNED BY
OARE ASSOCIATES, LLC
1 FLORIDA PARK DRIVE S, ATRIUM SUITE, PALM COAST FL, 32137

04/10/09

ACCESS EASEMENT AND UTILITY EASEMENT AGREEMENT FOR TRACTS A AND B

Instrument No: 2022024784 5/12/2022 10:38 AM BK: 2686 PG: 1475 PAGES: 9 -
RECORDED IN THE OFFICIAL RECORDS OF Tom Bexley, Clerk of the Circuit Court & Comptroller Flagler, FL

THIS INSTRUMENT PREPARED BY:
SHUFFIELD, LOWMAN & WILSON, P.A.
Attn: Logan J. Opsahl, Esquire
1000 Legion Place, Suite 1700
Orlando, Florida 32801

---- ABOVE SPACE FOR RECORDING INFORMATION ----

ACCESS, UTILITY, AND CONSTRUCTION EASEMENT AGREEMENT

This Access, Utility, and Construction Easement Agreement (the "**Agreement**") is entered into this 15 day of December, 2021, by and between **OARE ASSOCIATES, LLC**, a Florida limited liability company (**OARE**), and **CITY OF BUNNELL**, a Florida municipality ("**CITY**"). Parties to this Agreement may also be referred to individually as "party" or collectively as the "parties".

RECITALS

WHEREAS, OARE and CITY entered into that certain Option Contract for Sale and Purchase dated July 26, 2021, for the sale and purchase of the Property (as defined below), (the "**Contract**"); and

WHEREAS, of even date herewith OARE conveyed to CITY fee simple title in and to that certain real property located in the City of Bunnell, County of Flagler, State of Florida identified as Lot 4 of the Flagler Central Commerce Park Phase 1A Replat, Map Book 37, Page 37, of the Public Records of Flagler County, Florida (the "**Plat**"), bearing a Parcel ID number of 11-12-30-2260-00000-0040 and having a physical address of 2400 Commerce Parkway, Bunnell, Florida 32110 (the "**Property**"); and

WHEREAS, OARE is the fee simple owner of Tract A and Tract B of the Plat (collectively, the "**Easement Area**"); and

WHEREAS, pursuant to Section 4 of the Master Declaration of Covenants, Conditions and Restrictions for Flagler Central Commerce Park recorded in Official Records Book 1794, Page 44, of the Public Records of Flagler County, Florida (the "**Declaration**"), CITY has provided to OARE and OARE, as Developer under the terms of the Declaration has approved, a site plan for CITY's intended use of the Property as illustrated in **Exhibit "A"** attached hereto (the "**Site Plan**"); and

WHEREAS, in order to allow for CITY to develop the Property in accordance with the Site Plan, OARE desires to grant CITY the right to construct, grade and pave at CITY's own cost and expense and under certain conditions more particularly described herein within and upon the Easement Area certain access improvements as more particularly described on **Exhibit "B"** attached hereto (collectively, the "**Access Improvements**"); and

WHEREAS, the parties desire to provide for certain obligations and create certain non-exclusive, perpetual rights, and benefits for the mutual benefit of the Property and certain other lots within the Plat, the present and future owners of each lot or lots (each an "**Owner**" and,

collectively, the "**Owners**"), and the lessees and occupants thereof (collectively, the "**Occupants**") and the agents, contractors, employees, customers, visitors, invitees, licensees, and subtenants of such Owners and Occupants (collectively, the "**Permittees**");

NOW THEREFORE, for and in consideration of the covenants set forth below and other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, the parties hereby agree, each for itself, its successors and assigns, as follows:

AGREEMENT

1. **Recitals**. The foregoing recitals are true and correct and are hereby incorporated into the text of this Agreement.

2. **Grant of Easement**. OARE does hereby establish, give, grant, reserve, declare and convey for the benefit of the CITY, and CITY's contractors and agents, and the Property, a perpetual non-exclusive access, utility and construction easement across and over the Easement Area for the purpose of construction, maintenance, ingress and egress to the Property (collectively, the "**Easement**").

3. **Construction Obligations**.

a. Work. The Access Improvements shall be constructed, installed and completed by CITY, at its sole cost and expense as part of the development of the Property. Construction of the Access Improvements and performance of the foregoing work shall be referred to collectively as the "**Work**."

b. Warranty; Defective Work. CITY hereby warrants and guarantees that: (i) the Work shall be performed in a good and workmanlike manner, with adequate commercial general liability and workers compensation insurance policies purchased and in place by CITY at all times during such work which general liability policies, among other things, shall name OARE as an additional insured; (ii) the Work shall be performed in material compliance with all applicable laws, permits and approvals including the City Code requirements for roadways and approved Site Plan; (iii) the performance of the Work shall materially conform to this Agreement and other documents of record; and (iv) the improvements installed as part of the Work shall be free from construction and materials defects for one (1) year from the date of substantial completion ("**Warranty Period**"). Any portion of the Work performed by CITY hereunder not in conformance with this warranty and guarantee shall be considered defective ("**Defective Work**"), and CITY shall correct any such Defective Work discovered during the Warranty Period.

c. Construction Liens. CITY shall not permit any lien to be filed on the Easement Area. CITY shall discharge or bond over any such lien filed against the Easement Area for work done or materials furnished in connection with the Work within thirty (30) days after CITY receives written notice such lien is filed. If CITY fails to keep this covenant, the OARE may at its option discharge such lien, in which event CITY agrees to pay to OARE a sum equal to the amount of the lien thus discharged plus reasonable internal administrative costs not to exceed five percent (5%) of the lien amount, reasonable attorneys' fees and other reasonable expenses.

4. **Maintenance**. The cost of maintenance of the Easement Area and Access Improvements, including paving, gutters, curbing, sidewalks, medians and any other structures relating to the Access Improvements shall rest solely with the CITY. The CITY shall maintain the Easement Area and Access Improvements in good operating condition at all times and insure the provision of safe access by emergency vehicles. The City shall be responsible for monitoring the condition of the Easement Area and Access Improvements and initiate maintenance activities as needed to maintain minimum road surface standards. All maintenance required to be performed pursuant to this paragraph shall be completed in a good and workmanlike manner and in compliance with all applicable laws, codes and ordinances.

5. **Non-Exclusive Use**. CITY expressly acknowledges and agrees that the Easement granted herein is non-exclusive and CITY's right to use the Easement Area and Access Improvements is non-exclusive on other Owners and Occupants to use the Easement Area and Access Improvements for ingress and egress to each Owner and Occupant's respective property. CITY shall not block, fence, obstruct or otherwise restrict the use of the Easement Area and Access Improvements by other Owners and Occupants. CITY acknowledges and agrees the non-exclusive use of the Easement Area and Access Improvements, as defined in this section, is a material condition of this Agreement.

6. **Use of Property**. The Property shall be used only for lawful purposes in conformance with all restrictions imposed by all applicable governmental laws, ordinances, codes, and regulations.

7. **Approved Site Plan**. No alteration to the Site Plan, as previously approved by OARE, as Developer under the terms of the Declaration, shall be made without the prior written consent of OARE, such consent not to be unreasonably withheld, conditioned or delayed.

8. **Indemnity**. CITY shall defend, indemnify and save harmless OARE from any and all liability, damage, expense, causes of action, suits, claims or judgments, arising from accidents, loss, personal injury, death, property damage, or violation of applicable law occurring on or from the Work, use of the Easement Area and Access Improvements and CITY's Property (including, without limitation, reasonable attorneys' fees and technical consultants' fees and expenses), except if caused by the act or negligence of the Indemnified Party, its agents, employees or contractors. The obligations of this paragraph shall not be construed as a waiver of CITY's sovereign immunity and shall be limited to such indemnification and liability limits consistent with the requirements of Sec. 768.28, Fla. Stat., and subject to the procedural requirements set forth therein.

9. **Notices**. If a party desires to give notice or a request for approval regarding any matter herein, then such notice or request shall be in writing and addressed to the party at the address shown below. Such notice or request may be deposited in the United States mail, certified, or registered, return receipt requested and postage prepaid or sent by Federal Express or comparable overnight mail services. Notice shall be deemed to have been given upon receipt or refusal of delivery of such notice. Either party may change their notice information upon not less than 30 days' advance written notice to the other party.

If to OARE: Elizabeth Oare Neale
31880 Tortuga Shore Loop

Wesley Chapel, FL 33545
Phone: _____
Email: _____

With a copy to: Shuffield, Lowman & Wilson, P.A.
1000 Legion Place, Suite 1700
Orlando, FL 32801
Attn: John Junod and James Galzerano
Email: jjunod@shuffieldlowman.com

If to CITY: City of Bunnell, a Florida municipality
c/o City Manager
P.O. Box 756
Bunnell, FL 32110

10. **Covenants Running with the Land**. This Agreement shall run with the land and shall inure to the benefit of and be binding upon the Owners and their respective successors and assigns. Once an Owner ceases to own any interest in its property, such Owner shall have no further obligations hereunder with respect to such property except as to obligations and liabilities that accrued with respect to such property during the time that such Owner owned its interest in the property.

11. **Amendments**. This Agreement may be amended only by a written instrument duly executed by the Parties and the Owners, or their respective successors and/or assigns.

12. **Use of Easement Area**. It is acknowledged and agreed that the Easement granted herein is not an exclusive easement and that OARE shall have the right to use and enjoy the Easement Area and any of its other property. OARE shall also have the right to grant others the right to use the Easement Area, at OARE's sole discretion.

13. **Termination**. This Agreement, and the Easement granted herein, shall terminate upon the earlier of: (i) written termination of the Agreement by the parties; (ii) conveyance of the Easement Area by OARE to Flagler Central Commerce Park Owners Association, Inc., a Florida not for profit corporation; or (iii) conveyance of the Easement Area by OARE to the public for the purpose of dedicating the Easement Area as public right-of-way.

14. **Severability**. If any term or provision of this Agreement, or the application thereof to any person or circumstance shall, to any extent, be held to be invalid or unenforceable by a court of competent jurisdiction, the remainder of this Agreement, or the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby, and each term and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

15. **Governing Law**. This Agreement shall be governed, construed and enforced in accordance with the laws of the State of Florida.

16. **Enforcement**. The terms of this Agreement may be enforced by an action for injunctive relief, damages, or both, and the prevailing party in any enforcement action shall be

entitled to reasonable attorneys' fees and costs of enforcement. All of the remedies permitted or available under this Agreement or at law or in equity shall be cumulative and not alternative, and the invocation of any such right or remedy shall not constitute a waiver or election of remedies with respect to any other permitted or available right or remedy.

17. **Recording**. This Agreement shall be recorded in the appropriate office for the recordation of real estate conveyances in Flagler County, Florida.

18. **Counterparts**. This Agreement may be executed in any number of counterparts and by the separate parties hereto in separate counterparts, each of which when taken together shall be deemed to be one and the same instrument.

19. **Construction**. The section headings contained in this Agreement are for reference purposes only and shall not affect the meaning or interpretation hereof. All of the parties to this Agreement have participated fully in the negotiation of this Agreement, and accordingly, this Agreement shall not be more strictly construed against any one of the parties hereto. In construing this Agreement, the singular shall be held to include the plural, the plural shall be held to include the singular, and reference to any particular gender shall be held to include every other and all genders.

20. **Successors and Assigns**. This Agreement and the rights and obligations created hereunder shall run with the land, and shall be binding upon, and inure to the benefit of, the parties, including their respective successors and assigns. Any reference to the parties herein, unless specified otherwise, also refers to their respective heirs, legal representatives, successors and assigns.

21. **Entire Agreement**. This Agreement constitutes the entire agreement and understanding between the parties relating to the subject matter hereof.

[REMAINDER OF PAGE INTENTIONALLY BLANK]
[SIGNATURES ON FOLLOWING PAGE]

IN WITNESS WHEREOF, this Agreement has been executed by the duly authorized managers of OARE and CITY on the day and year first above written.

Signed, sealed and delivered
in the presence of:

Paige Kerr
Print: PAIGE KERR

Print: WALTER ROBERTSON

OARE ASSOCIATES, LLC, a Florida limited liability company

By: Austin Brockenbrough IV
Print Name: AUSTIN BROCKENBROUGH IV
Title: MANAGER

COMMONWEALTH OF VIRIGINA)
COUNTY OF HENRICO)

The foregoing instrument was acknowledged before me by ☑ physical presence or by ☐ online notarization this 14th day of DEC., 2021 by AUSTIN BROCKENBROUGH IV Authorized Signatory of **OARE ASSOCIATES, LLC**, a Florida limited liability company on behalf of the company, who is personally known to me or has produced N/A _____ as identification.

My Commission Expires: DEC. 31/2021

Paige Anne Kerr
Print: PAIGE ANNE KERR
Notary Public

PAIGE ANNE KERR
NOTARY PUBLIC
REGISTRATION # 7555074
COMMONWEALTH OF VIRGINIA
MY COMMISSION EXPIRES
DECEMBER 31, 2021

Signed, sealed and delivered
in the presence of:

Print: Alvin B. Jackson, Jr, City Manager

ATTEST

Print: Kristen Bates, City Clerk

CITY OF BUNNELL, a Florida municipality

By:
Print: Catherine D. Robinson
Title: Mayor, City of Bunnell

STATE OF FLORIDA)
COUNTY OF FLAGLER)

The foregoing instrument was acknowledged before me by ☒ physical presence or by ☐ online notarization this 15 day of December, 2021 by Catherine D. Robinson as _____ of CITY OF BUNNELL, a Florida municipality, on behalf of the municipality, who is personally known to me or has produced _____ as identification.

My Commission Expires:

Notary Public State of Florida
Kristen A Bates
My Commission GG 959711
Expires 03/10/2024

Print: Kristen A Bates
Notary Public

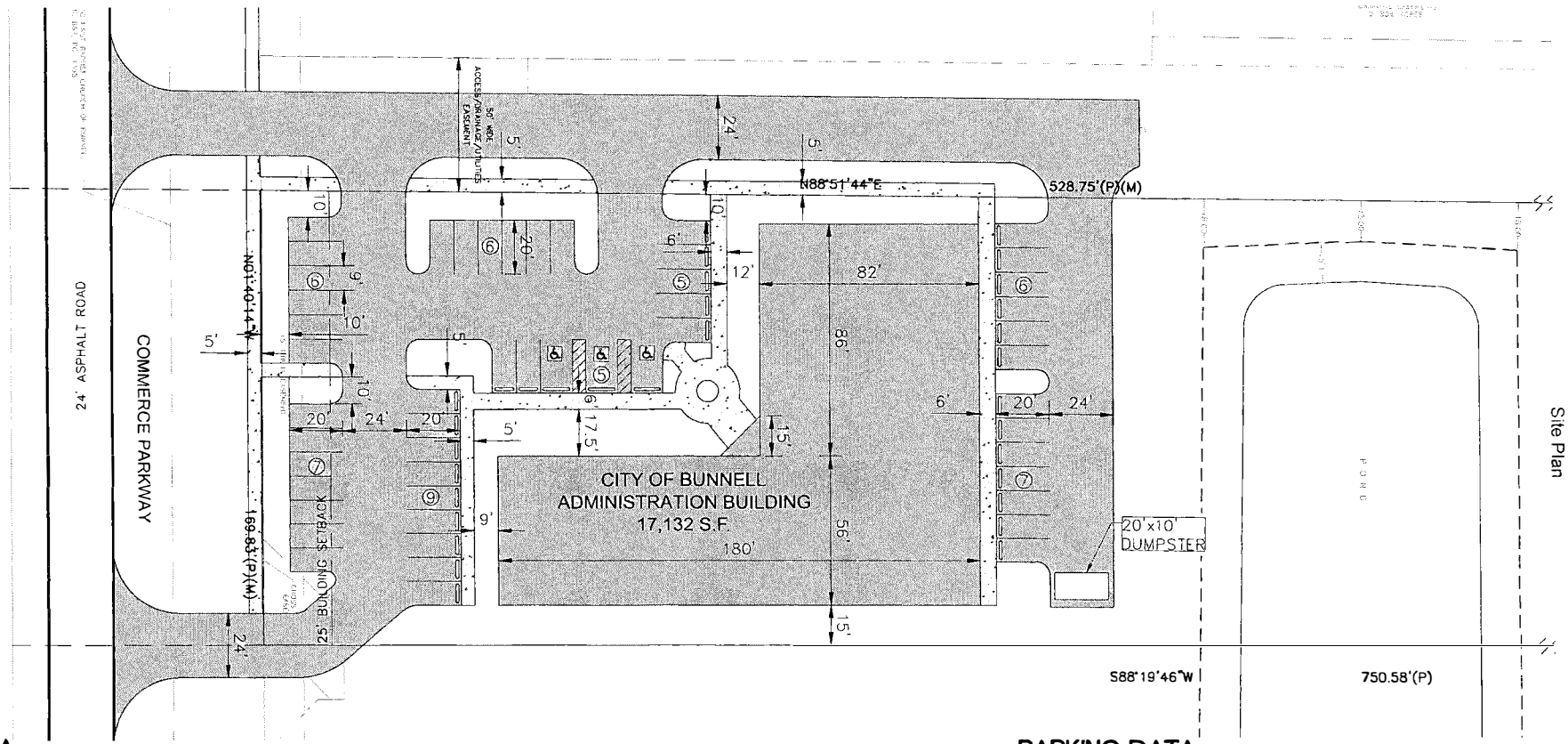


Exhibit "A"
Site Plan

SITE DATA:

1. PROJECT SITE AREA 2.883± ACRES.
2. TOTAL PROPOSED ONE-STORY BUILDING 17,132 S.F.
   OFFICE SPACE 17,132 S.F.
   TOTAL 17,132 S.F.
3. PROPERTY APPRAISER'S PARCEL NO's: 11-12-30-2260-0000-0040
4. ZONING: B-1 BUILDING DISTRICT
5. CURRENT LAND USE: COMMERCIAL- MEDIUM
6. LANDSCAPE BUFFERS:

	REQUIRED	PROVIDED
ADJACENT TO PUBLIC ROW:	10'(WITH BERM)	10'
ADJACENT TO COMPLEMENTARY USE:	10'(WITH BERM) OR 15'	10'(NORTH) AND 15'(SOUTH)
ADJACENT TO UNCOMPLIMENTARY USE:	20'	20'

7. BUILDING SETBACKS

	REQUIRED	PROVIDED
FRONT YARD:	25'	25'
SIDE YARD:	0'	0'
REAR YARD:	10'	10'

8. FLOOD ZONE: PORTIONS OF THE PROPERTY ARE LOCATED WITHIN FLOOD ZONE "X" AND "A" PER THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), ON FLOOD INSURANCE RATE MAP NO. 12035C0226E, WITH DATE OF JUNE 6, 2018.
9. FEMA FLOOD PLAIN ELEVATION = TO BE VERIFIED
10. BUILDING HEIGHT
    MAXIMUM ALLOWED= 35'
    PROVIDED= 25' (ESTIMATED)
11. FLOOR AREA RATIO
    MAXIMUM ALLOWED= 0.44
    PROVIDED= 0.137
12. MAX LOT COVERAGE
    NO MORE THAN 60% IMPERVIOUS
    IMPERVIOUS AREA= 35.9% (ON-SITE)
13. EXISTING PROPOSED DITCH IN NORTHERN ACCESS EASEMENT WILL NEED TO BE RELOCATED
14. SITE PROPOSED PAVED ACCESS THROUGH THE NORTHERN ACCESS EASEMENT WILL NEED TO BE FINALIZED AND COORDINATED WITH THE FLAGLER CENTRAL COMMERCE PARK OWNERS ASSOCIATION.

PARKING DATA:

VEHICLE PARKING REQUIRED:

BASED ON:
- OFFICE SPACE: 1 SPACE/300 SF

CALCULATIONS

BUILDING AREA:	17,132 SF	
OFFICE SPACE	1 SPACE/ 300 SF=	58 SPACES
REQUIRED PARKING:		58 SPACES
PROVIDED ONSITE PARKING:		51 SPACES (INCLUDING 3 A.D.A)
PROVIDED OFFSITE PARKING ACROSS STREET AT FIRST BAPTIST CHURCH		20 SPACES
		71 SPACES TOTAL

CITY OF BUNNELL ADMINISTRATION BUILDING

2400 COMMERCE PKWY, BUNNELL, FL 32110

N

1"
0' 20' 40'

DATE: 2021-09-20
DRAWN BY: JP
SCALE: 1" = 40'

EXHIBIT "B"

Access Improvements

Asphalt Roadway and access points to Lot 4, including curbing and gutters, approximately three hundred seventy-five feet (375') in length and twenty-four feet (24') wide

Concrete Sidewalk, up to three hundred seventy-five feet (375') in length and up to six feet (6') wide

Stormwater piping, stormwater management structures and/or ditches to meet any of the St John's River Water Management District permitting requirements