THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT
Florida

DESIGN REVIEW

Property Information

Property address or Location: 1211 & 1213 S 25th Street, Fort Pierce FL 34947

Parcel ID #(s): 2417-507-0005-000-7 & 2417-503-0040-000-2

Project description: Youth & Family Behavioral Health Center aims to provide life-changing mental health services to each individual tailoring their care to reach them within their own personal cultural background.

Jean Monval	Jerry Compton, Sr. PM, Creech Consulting, Inc.
Property Owner(s)	**Applicant/Representative, Title, Company**
2011 S 25th St, Fort Pierce, FL 34947	PO Box 327
Street Address	Street Address
Fort Pierce Fl 34947	Stuart FL 34994
City State Zip	City State Zip
772-242-1079	772-215-1434
Phone Number	Phone Number
youthandfamily@yfbhc.org	jcompton@creech.consulting
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For more information, please refer to the website:

https://www.cityoffortpierce.com/971/Application-Submittal-for-Technical-Revi

Design Review Application Checklist
(City Code of Ordinances 125-314)

Submittal for Administrative Approval

a. A survey (1" = 30' minimum scale) of property lines, existing topography and the location of trees meeting the tree protection regulations of section 123-66, location of bordering streets and, if applicable, wetlands and beaches.
b. A site analysis study to include a discussion of specimen trees and other natural vegetation, access, significant topography, wetlands, buffers, setbacks, views, orientation, the surrounding built environment, and other site features that may influence design elements.
c. A draft written narrative describing the design intent of the project, its goals, and objectives and how it reflects the site analysis study results.
d. Context photographs of neighboring uses and architectural styles.
e. Photographs and/or drawings of architectural buildings or objects that serve as a precedent for the proposed building design. Models should be taken from local exemplary buildings, either existing or demolished. Documentation of such buildings is available in the city's planning department.
f. Photographs of all existing structures located on the property. If existing structures on the property are more than fifty (50) years of age, documentation of these structures with data from the Florida Master Site File form is also required.
g. Conceptual site plan (to scale) showing proposed location of all buildings, structures, parking areas, signs and landscaping.
h. Landscape plan, at the same scale as the site plan. The planning director or designee may request enlarged plans of detailed planting areas. Planting schedule with sizes of proposed plantings must be included.
i. Accurate color rendering of proposed signs showing dimensions, type of lettering, materials and actual color samples that demonstrates cohesiveness with the project design.
j. Exterior elevations showing architectural character, external architectural features, and streetscape of the proposed development, including materials, colors, shadow lines and landscaping. The street elevation shall encompass the entire proposed project and generally identify the major elements of the adjacent two (2) properties on either side of the site. If the adjacent properties are vacant or underutilized, a diagram shall be provided that identifies the mass and form that is allowable under current zoning. If the street elevation must be drawn at such a scale as to render architectural details of the building unreadable, drawings of individual buildings at a larger scale should be provided as well.
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e. Final floor plans and elevation drawings (1/8" = 1'-0" minimum scale), as detailed under administrative approval, showing exterior building materials and colors with architectural sections and details to adequately describe the project.
f. A color board (11"x17" maximum) containing actual color samples of all exterior finishes, keyed to the elevations, and indicating the manufacturer's name and color designation.

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Application Type

☐Site Plan ☐Conditional Use w/New Construction ☐Conceptual Development Plan

☐Minor Amendment ☐Major Amendment

Site Information

Non-Residential: Proposed Sq. Ft.: 4368 Site Acreage: 0.52

Residential: Proposed Units: _____ Proposed Sq. Ft.:_____ Site Acreage:_____

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Site Plan submittal requirements:

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- [x] Complete application
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Jean-Mary Monval
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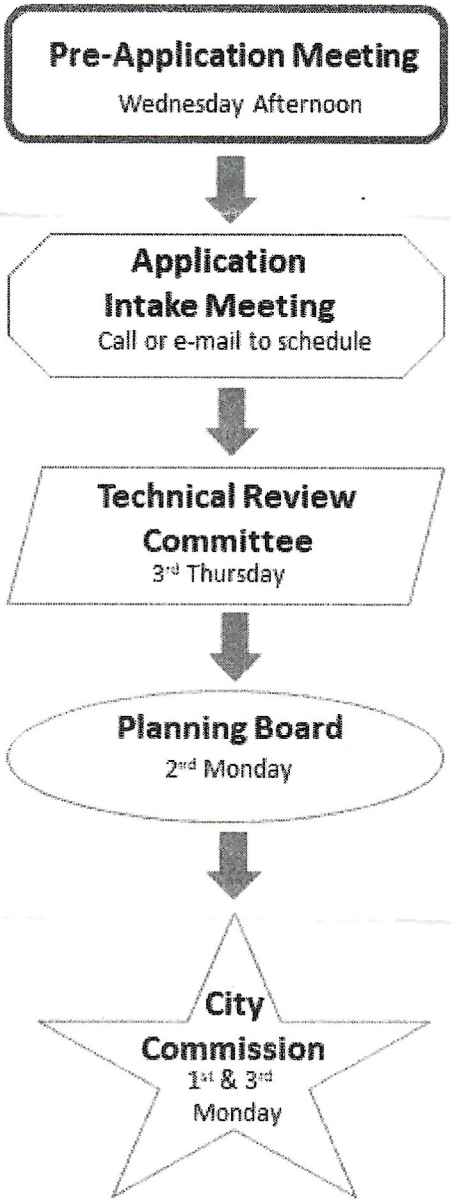
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CONCURRENCY
CAPACITY ANALYSIS

I. Site Data:

	Existing Use	Future Land Use	Zoning
North	Family dwelling	GC - General Commercial	C3- General Commercial
South	Dentist Office	OP - Office Professional	C1- Office Commercial
East	Family Dollar	NC - Neighborhood Commercial	C2 - Neighborhood Commercial
West	Family dwelling	GC - General Commercial	C3- General Commercial

	Future Land Use	Zoning Classification	Maximum Intensity Residential: Dwelling Units per Acre Other: Square Footage	Total Acreage	Flood Zone
Current	GC - General Commercial	C3- General Commercial	Vacant	0.52	x
****Proposed**	GC - General Commercial	C3- General Commercial	60% - 13,500 sf	0.52	N/A

II. Public Facilities Information:

A. Potable Water:	
Average Use	Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand) Other: 0.125 gallons per day per square foot (4306 x 0.125 = 538.25)
Demand Analysis	Maximum N/A
Current Zoning/FLU	Total gallons per day N/A
**Proposed Zoning/FLU	Total gallons per day N/A
**Change in Demand	Total gallons per day N/A

B. Wastewater:	
Average Use	Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand) Other: 0.1 gallons per day per square foot (4306 x 0.125 = 538.25)
Demand Analysis	Maximum N/A
Current Zoning/FLU	Total gallons per day N/A
**Proposed Zoning/FLU	Total gallons per day N/A
**Change in Demand	Total gallons per day n/A

C. Parks and Recreation (Residential Classifications Only):
(Du x 2.6 = persons + 44,227 = population /LOS)

Park Type	LOS	Existing Population Park Demand	Proposed Population Park Demand	Change in Demand
Regional	20 acres per 1,000 people			
Urban District	5 acres per 1,000 people			
Community	2.5 acres per 1,000 people			
Neighborhood	1.36 acres per 1,000 people			

D. Public Schools (Residential Classifications Only):
Single Family: (du x 0.405 = students/70% K-8/30% High)
Multi-family: (du x 0.207 = students/70% K-8/30% High)

	K-8	High
School Name		
City		
Distance		
Current Zoning/FLU Enrollment Demand		
****Proposed Zoning/FLU Enrollment Demand**		
****Change in Demand**		

E. Solid Waste: Residential (2 yard serves 15 units, 4 yard serves 30 units, 6 yard serves 45 units, 8 yard serves 60 units)	
Demand Analysis	Maximum
Current Zoning/FLU	
****Proposed Zoning/FLU**	
***Change in Demand**	

F. Stormwater:
Potential increase in volume discharged due to increased impervious coverage, reduced groundwater seepage or loss of surface water storage impacting Adopted LOS of 25-year 3-day storm Pre vs. Post Runoff (Storm sewers to convey 5 year- 1 day storm event; Canals to convey 3 year – 1 day storm event)

Impact	22,500 sf of existing previous 13,261 sf of proposed pervious

III. Transportation Analysis: *Complete ITE Trip Generation Form (Attached)*

G. Transportation Analysis: Complete ITE Trip Generation Data Form Most recent ITE Code for use; HCM Roadway Capacity		
	AADT	**AM/PM Peak Hour Trips**
Demand Analysis	Maximum	Maximum
Current Zoning/FLU		
****Proposed Zoning/FLU**		
***Change in Demand**	Trips	Trips
Impact to Capacity		

IV. Project Description

PHASING
Is this project (phase) part of a larger project? ☐ Yes ☑ No
If yes, enumerate each phase, the number of units or square footage in each phase and beginning/completion date.
Total Project: Residential Units: Single Family: Multifamily:
Non-residential (square footage):
Mixed-use (describe use):
(If this is a single phase project, name it Phase I – Total) 22,500 sf / 0.52 ac

RESIDENTIAL DATA					
Type	**Phase**	**Number of Units**	**Acres**	**Expected beginning date**	**Expected completion date**
Single-family, detached					
Single-family, attached					
Multi-family					
Other (specify)					

NON-RESIDENTIAL DATA					
Type(s) specify	**Phase**	**Square footage**	**Acres**	**Expecting beginning date**	**Expected completion date**

A. Indicate whether the proposed project will be eliminating any existing recreational facilities. If yes, detail the number and type being eliminated. ☐ Yes ☑ No

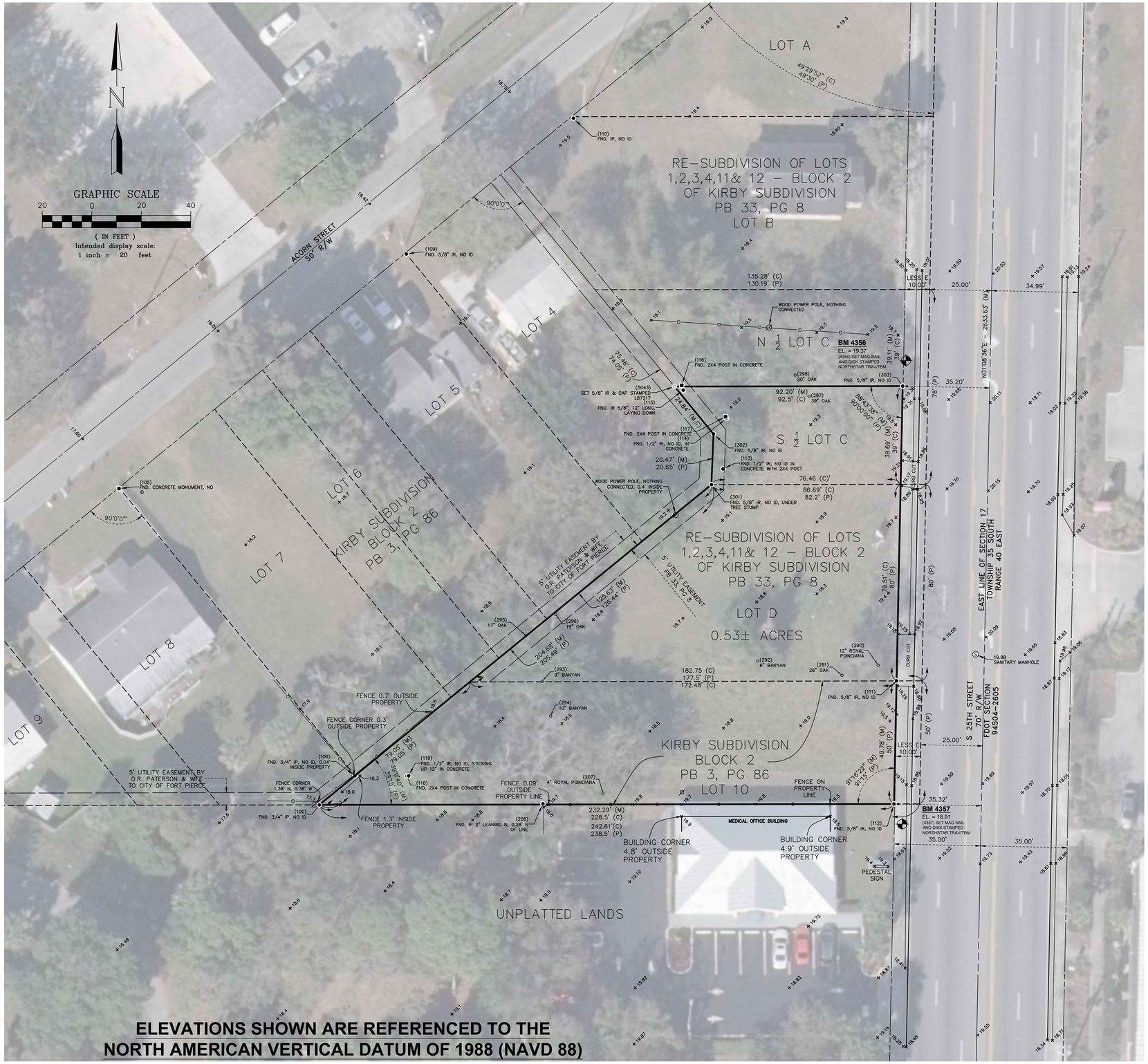
B. 1. Does this application involve demolition or re-use of any structure(s)? ☐ Yes ☑ No
If yes, what is the size of the structure(s) to be demolished or re-used? _____

2. What is the current use of the structure to be demolished or re-used? _____

3. Are you claiming trip credits for the demolition or re-use of a structure(s) at the site? ☐ Yes ☑ No
If yes, provide estimates of credits for each previous use at the site. (Attach sheet with calculations)

C. Exemptions Requested:

** Complete section if requesting a change in zoning, future land use, or expanding



SURVEYOR'S NOTES

1. THE EXPECTED USE OF THIS SURVEY IS FOR ENGINEERING DESIGN PURPOSES.
2. ALL MEASUREMENTS SHOWN HEREON ARE IN ACCORDANCE WITH THE UNITED STATES STANDARD AND ARE IN FEET.
3. ADDITIONS OR DELETIONS TO THE SURVEY MAP AND/OR REPORT BY OTHER THAN THE SIGNING PARTY IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES AND RENDERS THE SURVEY INVALID.
4. THIS SURVEY CANNOT BE TRANSFERRED OR ASSIGNED WITHOUT THE SPECIFIC WRITTEN PERMISSION OF THE SURVEYOR HEREON.
5. THE SURVEY MAP AND REPORT OR THE COPIES THEREOF ARE NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
6. THIS SURVEY MEETS OR EXCEEDS APPLICABLE ACCURACY REQUIREMENTS AND IS PREPARED ACCORDING TO THE STANDARDS OF PRACTICE SET FORTH BY THE FLORIDA ADMINISTRATIVE CHAPTER 5J-17 AS CODE, ADOPTED BY THE BOARD OF PROFESSIONAL SURVEYOR AND MAPPERS.
7. THERE WAS NO ATTEMPT TO LOCATE ANY UNDERGROUND UTILITIES, EXCEPT AS SHOWN.
8. LANDS SHOWN HEREON WERE NOT ABSTRACTED FOR RIGHT-OF-WAY EASEMENTS, OWNERSHIP, OR OTHER INSTRUMENTS OF RECORD.
9. SYMBOLS SHOWN HEREON ARE NOT TO SCALE.
10. FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), BY GRAPHIC PLOTTING ONLY, INDICATES SAID PROPERTY IS LOCATED WITHIN AN AREA HAVING A FLOOD ZONE DESIGNATION OF X ON FLOOD RATE PANEL NO. 12111C0186J, WITH A REVISION DATE OF 2/16/2012.
11. LAST DATE OF DATA ACQUISITION: 11/16/2022
12. THIS SURVEY IS INTENDED TO BE DISPLAYED AT THE SCALE SHOWN ON THE SCALE BAR.
13. BEARINGS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD83), ADJUSTMENT OF 2011, FLORIDA STATE PLANE EAST ZONE GRID NORTH AS ESTABLISHED BY THE NOS AND THE EAST LINE OF SECTION 17 AS SHOWN HEREON AS BEING N 01°08'36" E. ALL OTHER BEARINGS ARE RELATIVE THERETO. FLORIDA DEPARTMENT OF TRANSPORTATION PERMANENT REFERENCE NETWORK WAS USED AS HORIZONTAL CONTROL AND GPS RTK WITH REDUNDANT MEASUREMENTS. HORIZONTAL ACCURACY IS 0.10 FOOT, PLUS OR MINUS.
14. ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). ELEVATIONS DEPICTED ON THIS SURVEY WERE OBTAINED USING FLORIDA DEPARTMENT OF TRANSPORTATION PERMANENT REFERENCE NETWORK AND REAL TIME KINEMATIC (RTK) GPS METHODS WITH AN EXPECTED ACCURACY OF +/- 0.2'.
15. BACKGROUND IMAGERY OBTAINED FROM FLORIDA DEPARTMENT OF TRANSPORTATION, DATED 2021

LEGAL DESCRIPTION

PARCEL 1: THE SOUTH ½ OF LOT C AND ALL OF LOT D, LESS THE EAST 10 FEET THEREOF OF THE RESUBDIVISION OF LOTS 1, 2, 3, 4, 11, AND 12, BLOCK 2, KIRBY'S SUBDIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 8, PAGE 33, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA;

AND

PARCEL 2: LOT 10, BLOCK 2, KIRBY SUBDIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 3, PAGE 86, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, LESS THE EAST 10 FEET, DEEDED TO THE STATE OF FLORIDA IN OFFICIAL RECORDS BOOK 169, PAGE 1169, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

LEGEND

Abbreviations

(C)	= CALCULATED MEASUREMENT
(D)	= DEED MEASUREMENT
(M)	= FIELD MEASUREMENT
(P)	= PLAT MEASUREMENT
(xxxxx)	= SURVEYOR'S POINT NUMBER
BM	= BENCHMARK
CL	= CENTERLINE
DB	= DEED BOOK
FDOT	= FLORIDA DEPARTMENT OF TRANSPORTATION
FND	= FOUND
ID	= IDENTIFICATION
IP	= IRON PIPE
IR	= IRON ROD
LB	= LAND SURVEYING BUSINESS
NAVD88	= NORTH AMERICAN VERTICAL DATUM OF 1988
ORB	= OFFICIAL RECORDS BOOK
PB	= PLAT BOOK
PCN	= PARCEL CONTROL NUMBER
PG	= PAGE
PID	= PARCEL IDENTIFICATION NUMBER
PSM	= PROFESSIONAL SURVEYOR & MAPPER
X 14.2	= EXISTING ELEVATION

Linetypes

= BOUNDARY
= CHAIN LINK FENCE
= CENTERLINE
= RIGHT OF WAY
= SECTION LINE
= PLAT LOT LINE
= EASEMENT

Symbols

= BENCHMARK (AS LABELED)
= FOUND 1/4 SECTION CORNER
= FOUND SECTION CORNER
= POLE ANCHOR
= SANITARY MAN HOLE
= SET 5/8" IRON ROD & CAP STAMPED "NORTHSTAR LB 7217"
= SIGN
= TREE (AS LABELED)
= UTILITY PEDESTAL
= WOOD UTILITY POLE

SURVEYOR'S CERTIFICATION

(THIS SURVEY IS NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND RAISED EMBOSSED SEAL OF FRANK C. VELDHUIS, FLORIDA PROFESSIONAL SURVEYOR AND MAPPER.)

I HEREBY CERTIFY THAT THE BOUNDARY AND TOPOGRAPHIC SURVEY OF THE PROPERTY SHOWN AND DESCRIBED HEREON WAS COMPLETED UNDER MY DIRECTION AND SAID SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

I FURTHER CERTIFY THAT THIS BOUNDARY AND TOPOGRAPHIC SURVEY MEETS THE STANDARDS OF PRACTICE FOR SURVEYS SET FORTH BY THE FLORIDA BOARD OF LAND SURVEYORS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027 FLORIDA STATE STATUTES. NO SEARCH OF THE PUBLIC RECORDS HAS BEEN MADE BY THIS OFFICE. THIS SURVEY IS BASED ON INFORMATION FURNISHED BY CLIENT OR CLIENT'S REPRESENTATIVE

NORTHSTAR GEOMATICS, INC.

DATE

FRANK C. VELDHUIS
PROFESSIONAL SURVEYOR & MAPPER
FLORIDA CERTIFICATION NO. 6582

NORTHSTAR GEOMATICS
5820 NW ZENITH DR
PORT ST LUCIE, FLORIDA 34986
(772) 781-6400 WWW.NSGEO.COM
LICENSED BUSINESS NO. 7217

DATE	REVISIONS

DATE 11/16/2022
SCALE 1" = 20'
FIELD BK. -
DWNG. BY FCV
CHECKED BY FCV

BOUNDARY AND TOPOGRAPHIC SURVEY FOR: YOUTH & FAMILY BEHAVIORAL HEALTH CENTER, INC.

SECTION 17, TOWNSHIP 35 SOUTH, RANGE 40 EAST
FT. PIERCE, FLORIDA

SHEET NO. 1
OF 1 SHEETS
PROJECT NO. 22-038

Advanced Restoration Ecology

1211-1213 S 25th St

Ft Pierce, FL

Environmental Assessment

Prepared For:
Youth and Behavioral Health Center

Prepared By:

Drew Gatewood, MS, PWS
2593 NE Roberta St
Jensen Beach, FL 34957
772-242-7200
813-784-8891

©ARE, Inc. January 2023

The environmental assessment report below has been compiled in accordance with the St Lucie County Development Review Division and previsions set forth by the state of Florida. The parcel is listed by the St Lucie County Property Appraiser as Parcel ID number 2417-507-0005-000-7 and 2417-503-0040-000-2 and is a total of .51 acres. The property is located at 1211-1213 S 25th St, in Ft Pierce, Florida. The following report describes the findings of our recent on-site review and database research as it pertains to St Lucie County, City of Ft Pierce, and the State of Florida.

LAND USE RECORDS

The St Lucie County Property Appraiser's Report lists this property as 0000 Vacant Residential.

SOIL COMPOSITION:

Based on a review of the United State Department of Agriculture's Web Soil Survey database the site's soils are comprised of the following:

Waveland Urban Land Complex - This soil is a nearly level, moderately drained soil in broad open areas of urban development. The water table is typically at a depth of less than 10 inches for 2 to 4 months during wet seasons, and at a depth of 10 to 40 inches for 6 months or more receding to a greater depth during extended dry periods.

Tantile and Pomona Sands - This poorly drained soil is found typically in broad areas in the flatwoods. Typically the surface layer is black fine sand about 5 inches thick. The water table is at a depth of less than 10 inches for 2 to 4 months during the wet season and within a depth of 40 inches for more than 6 months. Natural vegetation consists of slash pine, saw palmetto, inkberry, rusty lyonia, black root, penny royal, pineland threeawn, chalky bluestem, panicum and various grasses. The soil is well suited for pasture and hay crops.

WILDLIFE EVALUATION:

On January 5th, 2023, ARE conducted pedestrian transects across 100% of property looking for local, state and federally listed or endangered species present on the site. This survey primarily focused on the presence of gopher tortoise burrows or recent activity. During the pedestrian transects of the property, gopher tortoise activity was not observed on site, nor were any other listed plant or animal species were observed on site during the site visit.

NATIVE HABITAT

The site investigation conducted by ARE, Inc. did not native upland habitat on the site. Species observed during the site reconnaissance included the following:

Brazilian pepper (*Schinus terbinthifolius)* Bahia Grass (*Paspalum notatum*)
Laurel Oak (*Quercus laurifolia*)

WETLAND DELINEATION:

Based on the State definition of a wetland in 62-340 FAC, there are three components: hydric soils, wetland plants, and hydrologic indicators. These factors listed were not present during the site investigation. ARE concludes this property does not likely include state or federally jurisdictional wetlands on site in its current configuration.

CITY REQUIREMENTS

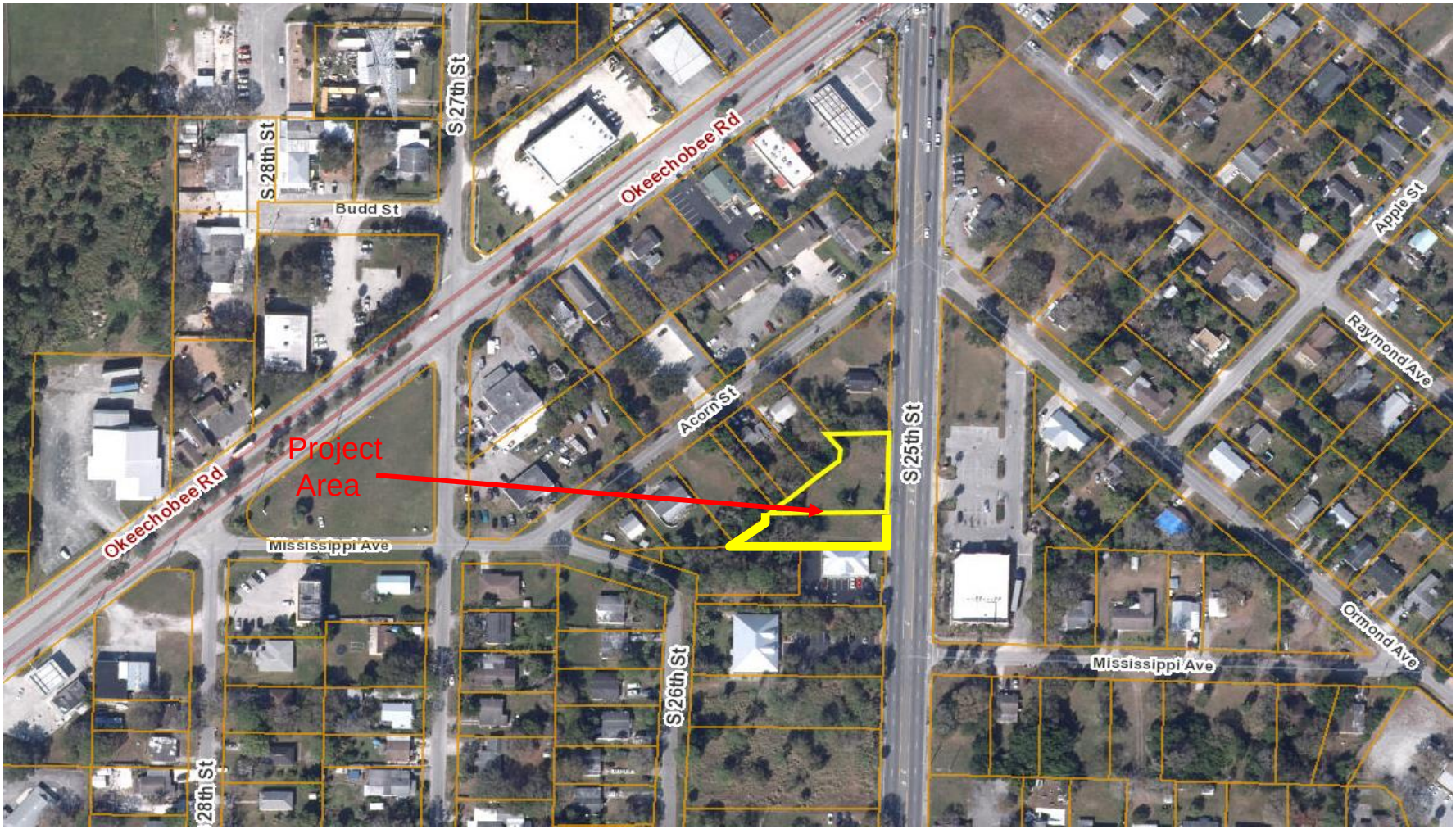
The City will require proof of a completed gopher tortoise survey by a licensed agent. Please submit this document with any applications to use as the needed verification of a 100% gopher tortoise survey has been completed on the site. Per FWC regulations a gopher tortoise survey is good for 90 days, and any clearing must have a valid survey prior to commencement. The City will not authorize/issue any permitting without a current gopher tortoise survey. There are 5 trees on site meeting the tree protection standards for the City. Below are the trees meeting the Tree Protection Standards on site and their evaluations.

Tree 291 26" Laurel Oak (Health Score 2/5 Included Bark, Basal Rot)
Tree 295 17" Laurel Oak (Health Score 3/5 Lean and Basal Rot)
Tree 296 19" Laurel Oak (Health Score 4/5)
Tree 297 39" Laurel Oak (Health Score 2/5 Severe Lean and Basal Rot)
Tree 298 20" Laurel Oak (Health Score 4/5)

We recommend Trees 291, 295, 297, 298 be removed due to their structural weaknesses and likelihood of failure during a storm.

CONCLUSION:

Based on City requirements, ARE, Inc. conducted a site investigation throughout the property to survey for the presence of any listed plant or animal species. Gopher Tortoise burrows were not observed on site, and no other State or Federally listed species were observed on the property during the site visit. A 100% gopher tortoise survey of the property was conducted and completed by an FWC licensed gopher tortoise agent during the site investigation. Native habitat was determined not to be on site. It is the professional opinion of ARE, Inc. that there are likely no State or Federally jurisdictional wetlands on the site as the site's characteristics do not meet the minimum thresholds required for wetland classification.



1/5/2023

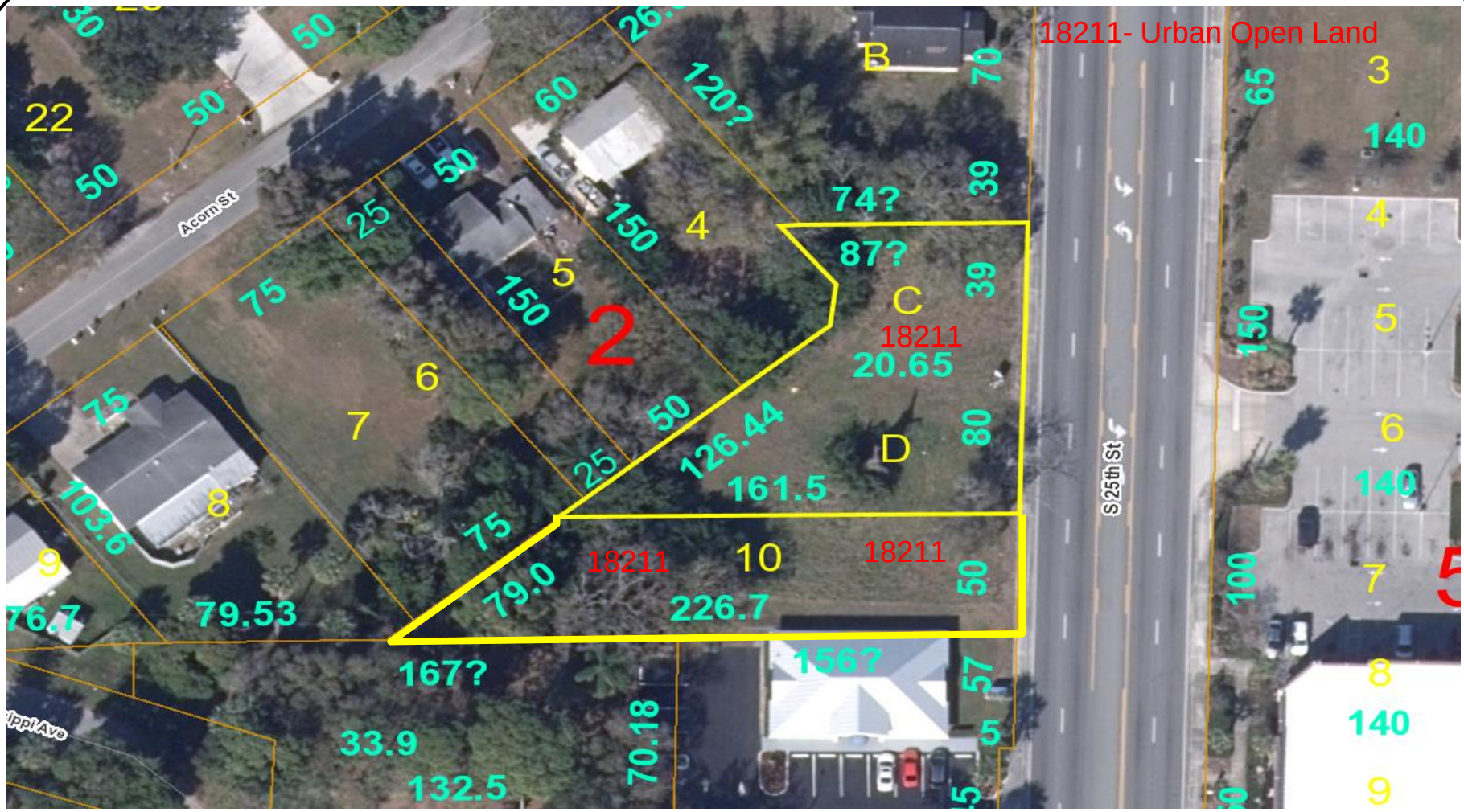
Location Map

Map Source: St Lucie County

N

1211-1213 S 25th St
Ft Pierce, FL

Advanced Restoration Ecology



1/5/2023

FLUCCS Map

Map Source: St Lucie County

N

1211-1213 S 25th St
Ft Pierce, FL

Advanced Restoration Ecology



St. Lucie County, Florida (FL111)

St. Lucie County, Florida (FL111)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
44	Tantile and Pomona sands	0.8	99.2%
52	Waveland-Urban land complex	0.0	0.8%
Totals for Area of Interest		**0.8**	**100.0%**

1/5/2023

Soil Map

Map Source: St Lucie County

N

1211-1213 S 25th St
Ft Pierce, FL

Advanced Restoration Ecology

CREECH
CONSULTING, INC.

Project Narrative
Youth and Family
Board Approval Development Plan Application

The applicant is requesting approval of a major development plan application to accommodate a 4,306 sq. ft. building on 0.52 acres of vacant property located at 1211 & 1213 S 25th Street (SR 615) Fort Pierce, Florida. The vacant property is identified as parcel number 12417-507-0005-000-7 and 2417-503-0040-000-2 and known as a parcel of land situated in Section 17, Township 35 South, Range 40 East, St. Lucie, County, Florida. The property is approximately triangle shaped 170 ft. long (north to south) and approximately 232 ft. wide (east to west) with the property fronting Southeast 25th Street. The land use designation for the property on the Future Land Use Map (FLUM) of the City of fort Pierce is General Commercial and a zoning is C3. The property was purchased by Youth & Family Behavioral Health Center Inc November 18, 2021, as is reflected in the warranty deeds provided as part of this application.

The project has been designed in accordance with the C2 development standard provisions and complies with current zoning and land use regulations and will meet and exceed current land development regulations.

The proposed development will include a rain garden to filtrate nutrients prior to discharging into an existing storm water system which exceeds the water quality criteria of the SFWMD permitted storm water conveyance system. In addition, they will be utilizing a pervious pavement in the parking lot to further remove harmful nutrients and chemicals prior to reaching the FDOT permitted storm water system. The development will continue on their environmentally friendly green initiative by saving a 39”, 19” and 17” caliber Oak trees that exist on the property. The proposed development will utilize the Fort Pierce Utility Authorities

The owners are investing in the business by providing mental health services to the community at large from the age of 3 and up. Youth and family is an outpatient mental health clinic founded in 2016 to provide counseling services, psychiatric evaluation, medication management and targeted case management. We would like to expand the services and add more components such as outpatient substance abuse treatment and Applied Behavior Analysis. The construction will allow us to service a larger population and create more jobs in the community.

FDOT has granted full access on S 25th Street (SR 615) Full access driveway on the west side of SR 615 30 feet north of the south property boundary. Please see the attached FDOT pre-application letter dated February 16, 2023.



IMAGE 1



IMAGE 4

GENERAL NOTES

SUBMITTAL FOR ADMINISTRATIVE APPROVAL - ITEMS d. AND e.:

- CONTEXT PHOTOGRAPHS OF NEIGHBORING USES AND ARCHITECTURAL STYLES.
- PHOTOGRAPHS OR ARCHITECTURAL BUILDINGS THAT SERVE AS PRECEDENT FOR PROPOSED BUILDING DESIGN.

IMAGE 1: USE OF ROOF TYPE AND MATERIAL, CLEAN LINES AND COLORS. (SOUTH OF PROPOSED SITE)

IMAGE 2: USE OF PARAPET WALL, MODERN CLEAN LINE ELEMENTS, BLACK AWNINGS AND FEATURE WALL. (SOUTH OF PROPOSED SITE)

IMAGE 3: USE OF RESIDENTIAL TYPE ELEMENTS ALONG WITH ROOF TYPE AND MATERIALS. (SOUTH OF PROPOSED SITE - ADJACENT TO PROPOSED SITE)

IMAGE 4: USE OF PARAPET WALL AND HEIGHT ALONG WITH DARK COLORED AWNINGS AND SEMI-MODERN AESTHETIC. (EAST OF PROPOSED SITE - ACROSS THE STREET)

IMAGE 5: METAL ROOFING MATERIAL AND RAISED AREA AT MAIN ENTRY. (NORTH OF PROPOSED SITE)

IMAGE 6: CLEAN MODERN LINES. (SOUTH OF PROPOSED SITE)

IMAGE 7: RESIDENTIAL ELEMENTS AND RAISED FEATURE AND MAIN ENTRY. (NORTH OF PROPOSED SITE)

IMAGE 8: EXISTING STRUCTURE ON THE ADJACENT PROPERTY TO THE NORTH.

***NOTE:** MONUMENT SIGNS CAN BE SEEN IN SOME OF THE ATTACHED PHOTOS. THE PROPOSED MONUMENT SIGN DESIGN IS CONSISTENT WITH WHAT IS CURRENTLY EXISTING ALONG THE ROAD AND NEIGHBORING PROPERTIES.



IMAGE 2



IMAGE 5



IMAGE 7



IMAGE 3



IMAGE 6



IMAGE 8

	DATE
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	

ISSUE DESCRIPTION

Dan Kot, R.A.
AR94202

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All drawings and written material appearing herein constitute the original and unpublished work of the Architect and the same may not be duplicated, used or disclosed without the written consent of the Architect. Penalties shall apply when used without Architect's written consent.

Commercial and Residential Architecture
7904 SW Jack James Drive
Stuart, Florida 34997
(772) 233-1096
www.2TKAD.com

2TK ARCHITECTURE & DESIGN

PROJECT
YOUTH & FAMILY BEHAVIORAL HEALTH
FORT PIERCE, FLORIDA

DRAWING NAME
PRECEDENT AND CONTEXT PHOTOGRAPHS

SCHEMATIC DESIGN

PROJECT # 23-0049
SHEET # A3.3
PRINT DATE: MAY 30, 2023

K:\2TK Architecture & Design\02_Projects\02_Commercial\2023\23-0049 - Youth & Family BH\02_Drawings\01_Project Drawings\01_Schematic Design\23-0049 - SD - 05-30-23.dwg, 5/30/2023 12:22:51 PM, AutoCAD PDF (General Documentation).pc3

SITE CIVIL CONSTRUCTION DRAWINGS

FOR

Youth and Family Behavioral Health Center

CITY OF FORT PIERCE
St. LUCIE COUNTY, FLORIDA

CONTACTS

OWNER
YOUTH & FAMILY BEHAVIORAL
HEALTH CENTER INC
1211 S 25TH ST
FORT PIERCE, FL 34947

LANDSCAPE ARCHITECT
CONCEPTUAL DESIGN GROUP, INC.
900 EAST OCEAN BOULEVARD, SUITE 130D
STUART, FLORIDA 34994
PHONE: 561-371-1644

CIVIL ENGINEER
CREECH CONSULTING, INC.
PO BOX 327
STUART, FL 34995
PHONE: (772) 485-2140

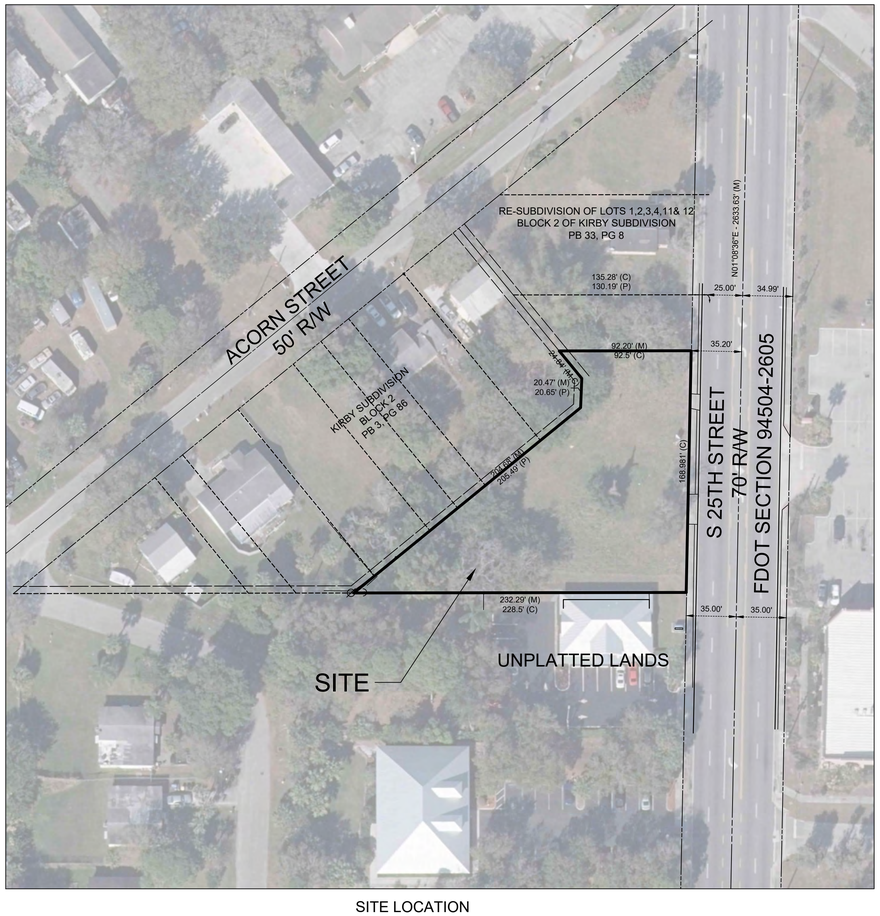
ARCHITECT
2KT ARCHITECTURE AND DESIGN
2081 SE OCEAN BLVD SUITE 1A
STUART, FL, 34996
PHONE: (772) 220-4411

SURVEYOR
NORTHSTAR GEOMATICS, INC.
617 NW BAKER RD
STUART, FL 34994
PHONE: (772)781-6400

TRAFFIC
O'ROURKE ENGINEERING & PLANNING
969 SE FEDERAL HIGHWAY, SUITE 402
STUART, FL 34994
PHONE: (772) 781-7918

GEOTECH
WHITESTONE
4 HARVARD CIRCLE, SUITE 850
WEST PALM BEACH, FLORIDA 33409
PHONE: (561) 717-7006

ENVIRONMENTAL
ADVANCE RESTORATION ECOLOGY
2593 NE ROBERTA ST
JENSEN BEACH, FL 34957
PHONE: (772) 242-7200



SITE LOCATION
MAP
1" = 50'

SHEET INDEX

SHEET NO.	SHEET TITLE
C0	COVER SHEET
C1	MASTER SITE PLAN
1	BOUNDARY AND TOPOGRAPHIC SURVEY
C2	DEMOLITION & EROSION CONTROL PLAN
C3	PAVING, GRADING & DRAINAGE PLAN
C4	WATER AND SEWER PLAN
D1	EROSION CONTROL DETAILS
D2-D3	PAVING, GRADING & DRAINAGE DETAILS
D4	PAVING, GRADING & DRAINAGE DETAILS SPECIFICATIONS
D5	POTABLE WATER & WASTEWATER DETAILS & NOTES

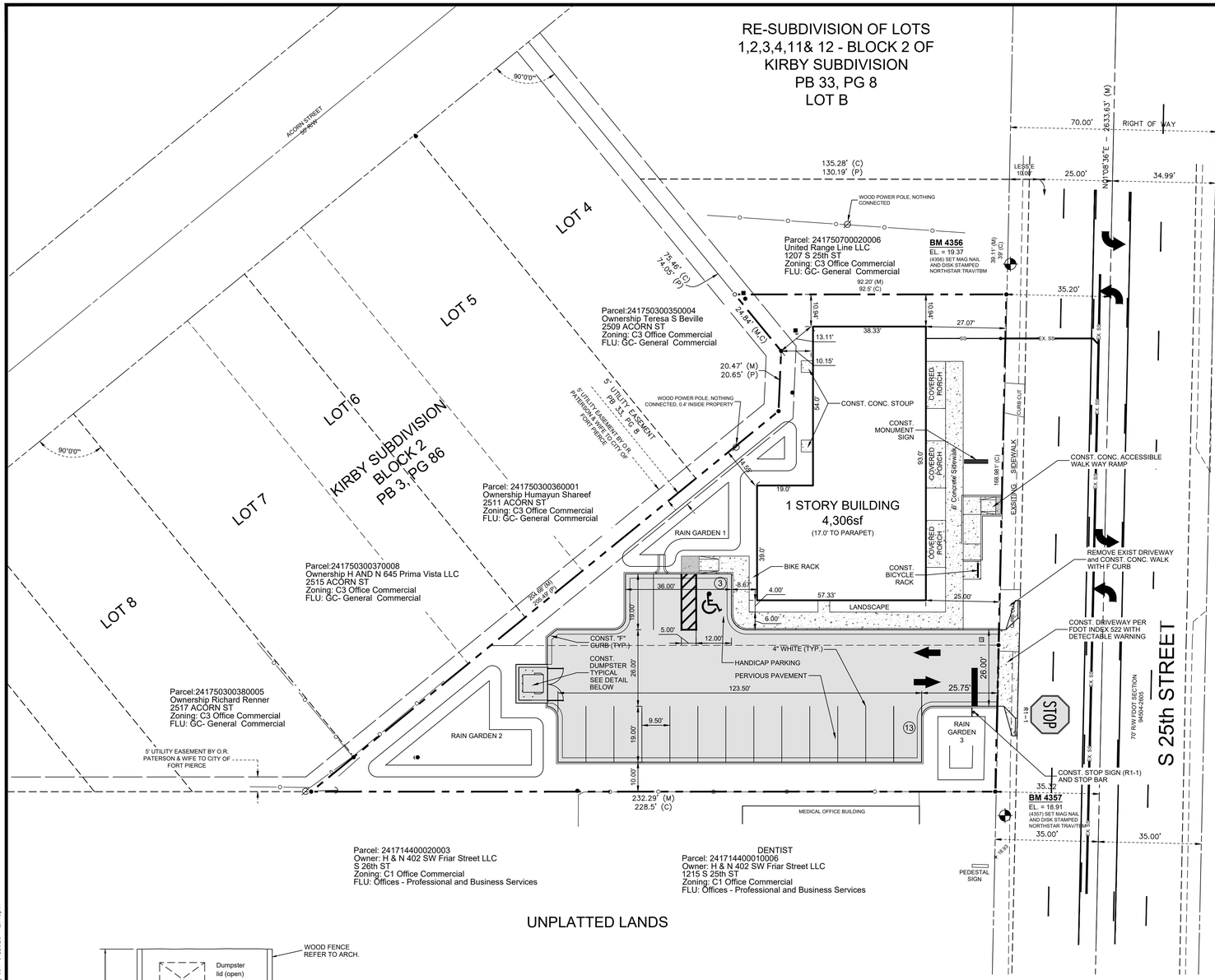
NORTH

CREECH CONSULTING, INC.
CIVILIZATION ENGINEERED
PO BOX 327, STUART, FLORIDA 34994 (772) 485-2140

BOARD OF PROFESSIONAL ENGINEERS, CERTIFICATE OF AUTHORIZATION NUMBER 5139
PROFESSIONAL SURVEYORS AND MAPPERS, AMENDED CERTIFICATE NO. LB-0006705

06/02/2023
RICHARD CREECH
FL P.E. NO. 38592

SHEET C0



SITE DATA

1211 & 1213 S 25th Street

Parcel 1	2417-507-0005-000-7	**12,446**	**0.29**	ac
Existing Zoning	C3 General Commercial			
Proposed Zoning	C3 General Commercial			
Existing Land Use	Vacant			
Future Land Use	General Commercial			
Parcel 2	2417-503-0040-000-2	**10,055**	**0.23**	ac
Existing Zoning	C3 General Commercial			
Proposed Zoning	C3 General Commercial			
Existing Land Use	Vacant			
Future Land Use	General Commercial			

Total Site Area		**22,500 sf**	**0.52 ac**	**100%**
Impervious		Square Feet	Acreage	Percent of Total
Required (Max)		n/a sf	ac	
Proposed		9,239 sf	0.21 ac	41%
Impervious Total				
Building		4,306 sf	0.10 ac	19%
Pervious Pavement	50% impervious	3,580 sf	0.08 ac	16%
Sidewalk		1,353 sf	0.03 ac	6%
	sub-total	**9,239 sf**	**0.21 ac**	**41%**
Pervious Total			0.00	0%
Pervious Pavement	50% pervious	3,580 sf	0.08 ac	16%
Rain Garden 1		862 sf	0.02 ac	4%
Rain Garden 2		1,297 sf	0.03 ac	6%
Landscape / Green Area		7,522 sf	0.17 ac	33%
	sub-total	**13,261 sf**	**0.30 ac**	**59%**

Building Setbacks	
Front	25'
Side	10
Rear	0

Max Building coverage		60%	
Prop. Office Building	Square footage	4,306	sf
Prop. Office Building	Height to top of parapet	17	ft

Parking

Professional service establishments, Other	4,306 sf	14 spaces required
1 parking space for 300 square feet of non-storage floor area		
Total Required		14 spaces required
Total Accessible Required		1 spaces required
Total Provided		15 spaces required
Total Accessible Provided		1 spaces required

LEGAL DESCRIPTION

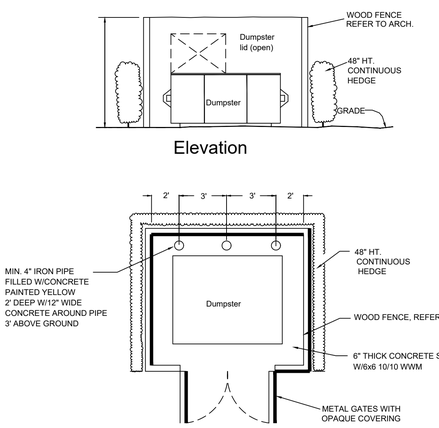
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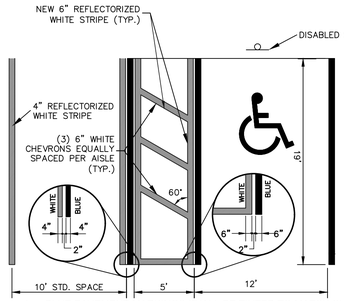
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LEGEND

- RIGHT OF WAY LINES
- CHAIN LINK FENCE
- CENTER LINE
- RIGHT OF WAY LINE
- SECTION LINE
- PLAT LOT LINE
- EASEMENT LINE
- PERIMETER BERM
- PROPOSED CONCRETE
- PROPOSED PERVIOUS PAVEMENT
- Ø EXISTING UTILITY POLE



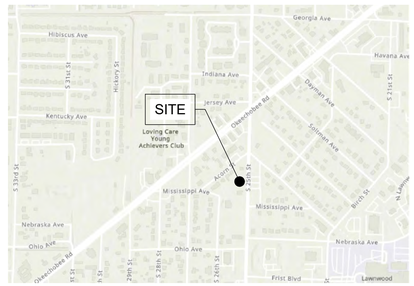


NOTES:
1. BLUE PAVEMENT MARKINGS SHALL BE TINTED TO MATCH SHADE 15180 OF FEDERAL STANDARDS 595A.
2. ALL DIMENSIONS ARE TO THE CENTERLINE OF MARKINGS.

TYPICAL HANDICAP AND STRIPING DETAIL
NTS

GENERAL NOTES:

1. SURVEY PROVIDED BY NORTHSTAR GEOMATICS DATED 11/16/22.
2. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY OF FT. PIERCE REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
3. ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 1V:3H OR STEEPER. CONTRACTOR SHALL GRASS DISTURBED AREAS IN ACCORDANCE WITH CITY SPECIFICATIONS UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
4. ALL ISLANDS WITH CURB & GUTTER SHALL BE LANDSCAPED.
5. ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, (UNLESS OTHERWISE NOTED ON PLANS) INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS & POLES, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN BASE BID.
7. REFER TO ARCHITECTURAL PLANS FOR SITE LIGHTING AND ELECTRICAL PLANS.
8. ALL SIDEWALKS AND ADA ACCESSIBLE AREAS SHALL HAVE A MAXIMUM RUNNING SLOPE OF 1V:20H & A MAXIMUM CROSS SLOPE OF 1V:50H.
9. ALL CURB RAMPS TO HAVE DETECTABLE WARNINGS & BE CONSTRUCTED PER LATEST EDITIONS OF FDOT STANDARDS PLANS FOR ROAD CONSTRUCTION, INDEX 522-002, FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, SECTION 527 & PER ADA REQUIREMENTS.
10. ALL STRIPING TO BE HIGH SLIP-RESISTANT FINISH TO PREVENT SLIPPING IN WET & DRY CONDITIONS.
11. ALL STRIPING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF FDOT STANDARD PLANS FOR ROAD CONSTRUCTION, INDEX# 711-001, FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 711 "THERMO PLASTIC PAVEMENT MARKINGS",CITY OF FT. PIERCE
12. REQUIREMENTS. INSTALL RETRO-REFLECTIVE PAVEMENT MARKINGS (RPM'S).
13. ALL STRIPING SHALL BE INSTALLED AFTER NEW PAVEMENT.
14. ALL PROHIBITED EXOTIC SPECIES SHALL BE REMOVED AND ALL REQUIRED LANDSCAPING SHALL BE INSTALLED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
15. REFER TO CONSTRUCTION DRAWINGS FOR LOCATION OF TRAFFIC CONTROL DEVICES.
16. DURING CONSTRUCTION ACTIVITIES, EXIST. NATIVE VEGETATION TO BE PRESERVED (IF ANY) SHALL BE RETAINED TO ACT AS BUFFERS BETWEEN ADJACENT LAND USES, AND TO MINIMIZE NUISANCE DUST, NOISE AND AIR POLLUTION. BARRICADES SHALL BE USED ON SITE TO PRESERVE THE VEGETATION TO BE USED FOR THIS PURPOSE.
17. ALL SIGNS WILL BE REVIEWED FOR COMPLIANCE WITH THE APPLICABLE REGULATIONS AT THE TIME THE SIGN PERMIT IS ISSUED.
18. ALL BUILDING, PARKING AND ACCESS AREAS SHALL DOCUMENT COMPLIANCE WITH THE REQUIREMENTS OF THE AMERICAN DISABILITIES ACT PRIOR TO THE ISSUANCE OF A BUILDING PERMIT.
19. NO LAND CLEARING IS AUTHORIZED PRIOR TO THE MANDATORY PRE-CONSTRUCTION MEETING FOR THE PROJECT. PROPERTY CORNERS AND PRESERVATION AREAS SHALL BE LOCATED BY A LICENSED LAND SURVEYOR AND CLEARLY MARKED IN THE FIELD PRIOR TO THE PRE-CONSTRUCTION MEETING. AUTHORIZATION FOR CLEARING TO INSTALL EROSION CONTROL DEVICES AND PRESERVE BARRICADES WILL BE GRANTED AT THE PRE-CONSTRUCTION MEETING. NO ADDITIONAL LAND CLEARING SHALL COMMENCE UNTIL A SATISFACTORY INSPECTION OF THE REQUIRED CONTROL STRUCTURES AND BARRICADES HAS BEEN OBTAINED. AUTHORIZATION FOR THE RELOCATION OF GOPHER TORTOISES WITHIN THE DEVELOPMENT,



VICINITY MAP
SECTION 17, TOWNSHIP 38S, RANGE 40E
NOT TO SCALE

0 20 40 60
SCALE IN FEET

CREECH CONSULTING, INC.
CIVIL ENGINEERING
PO BOX 327, STUART, FLORIDA 34994 (772) 485-2140
BOARD OF PROFESSIONAL ENGINEERS, CERTIFICATE OF AUTHORIZATION NUMBER 5139
PROFESSIONAL SURVEYORS AND MAPPERS, AMENDED CERTIFICATE NO. LB-0006705

DATE	BY	REVISIONS

YOUTH & FAMILY
BEHAVIORAL HEALTH CENTER INC
MASTER SITE PLAN AND STRIPING PLAN
FORT PIERCE FLORIDA

DRAWN BY:	JAC
CHECKED BY:	RTC / ANDREWS
LATITUDE:	27°26'5.40"N
LONGITUDE:	80°21'2.96"W
HORZ. SCALE:	1" =20'
VERT. SCALE:	

SEAL

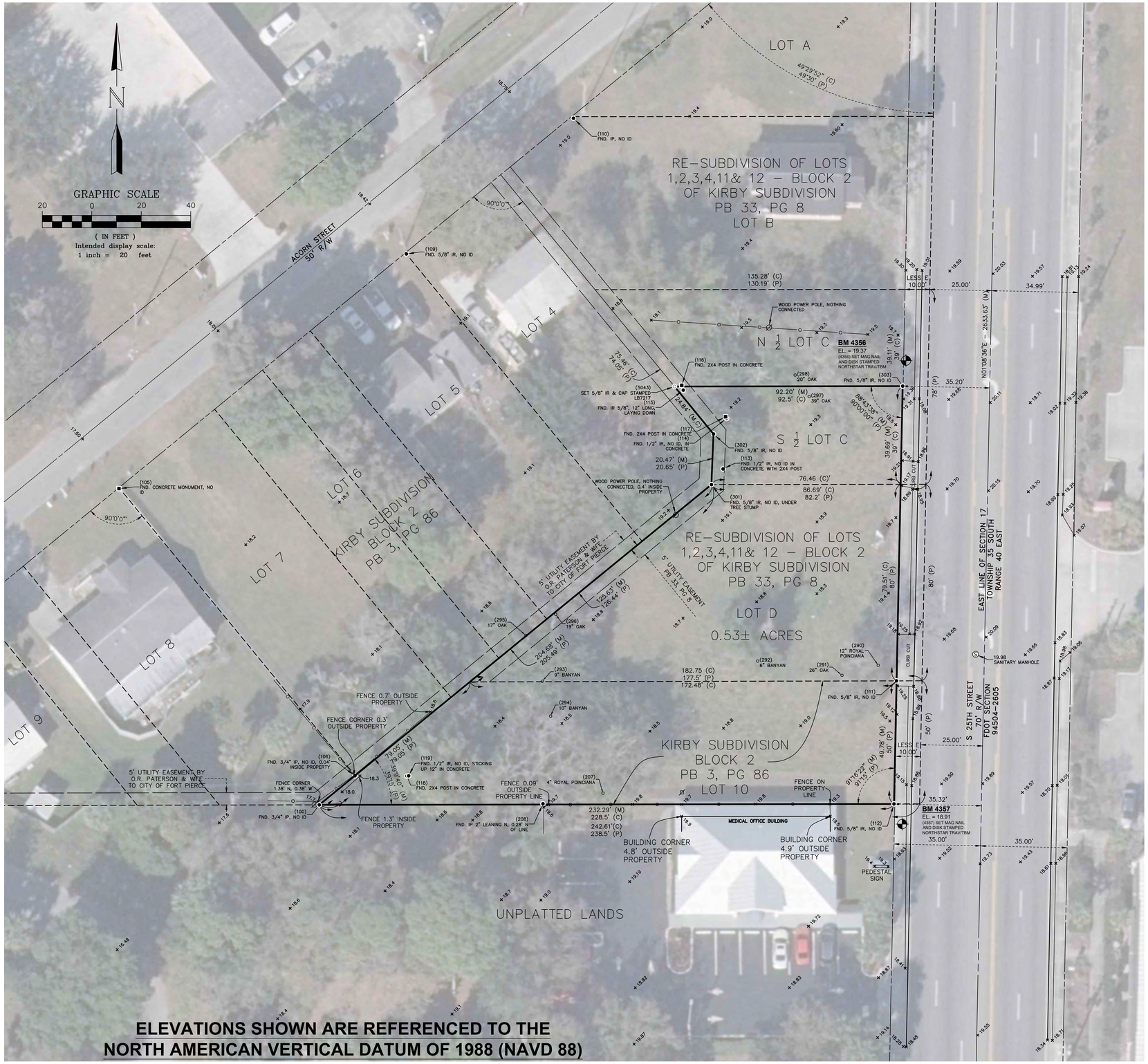
06/02/2023
RICHARD CREECH
FL P.E. NO. 38592

SHEET C1

PROJECT NO. 22-016-001

P:\Projects\2022\2022-016-001 Youth and Family Center\CAD\1~ Plans\C1 Site Plan.dwg C1 SITE PLAN osnc_ Jun 01,2023 - 12:49pm

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



SURVEYOR'S NOTES

1. THE EXPECTED USE OF THIS SURVEY IS FOR ENGINEERING DESIGN PURPOSES.
2. ALL MEASUREMENTS SHOWN HEREON ARE IN ACCORDANCE WITH THE UNITED STATES STANDARD AND ARE IN FEET.
3. ADDITIONS OR DELETIONS TO THE SURVEY MAP AND/OR REPORT BY OTHER THAN THE SIGNING PARTY IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES AND RENDERS THE SURVEY INVALID.
4. THIS SURVEY CANNOT BE TRANSFERRED OR ASSIGNED WITHOUT THE SPECIFIC WRITTEN PERMISSION OF THE SURVEYOR HEREON.
5. THE SURVEY MAP AND REPORT OR THE COPIES THEREOF ARE NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
6. THIS SURVEY MEETS OR EXCEEDS APPLICABLE ACCURACY REQUIREMENTS AND IS PREPARED ACCORDING TO THE STANDARDS OF PRACTICE SET FORTH BY THE FLORIDA ADMINISTRATIVE CHAPTER 5J-17 AS CODE, ADOPTED BY THE BOARD OF PROFESSIONAL SURVEYOR AND MAPPERS.
7. THERE WAS NO ATTEMPT TO LOCATE ANY UNDERGROUND UTILITIES, EXCEPT AS SHOWN.
8. LANDS SHOWN HEREON WERE NOT ABSTRACTED FOR RIGHT-OF-WAY EASEMENTS, OWNERSHIP, OR OTHER INSTRUMENTS OF RECORD.
9. SYMBOLS SHOWN HEREON ARE NOT TO SCALE.
10. FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), BY GRAPHIC PLOTTING ONLY, INDICATES SAID PROPERTY IS LOCATED WITHIN AN AREA HAVING A FLOOD ZONE DESIGNATION OF X ON FLOOD RATE PANEL NO. 12111C0186J, WITH A REVISION DATE OF 2/16/2012.
11. LAST DATE OF DATA ACQUISITION: 11/16/2022
12. THIS SURVEY IS INTENDED TO BE DISPLAYED AT THE SCALE SHOWN ON THE SCALE BAR.
13. BEARINGS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD83), ADJUSTMENT OF 2011, FLORIDA STATE PLANE EAST ZONE GRID NORTH AS ESTABLISHED BY THE NOS AND THE EAST LINE OF SECTION 17 AS SHOWN HEREON AS BEING N 01°08'36" E. ALL OTHER BEARINGS ARE RELATIVE THERETO. FLORIDA DEPARTMENT OF TRANSPORTATION PERMANENT REFERENCE NETWORK WAS USED AS HORIZONTAL CONTROL AND GPS RTK WITH REDUNDANT MEASUREMENTS. HORIZONTAL ACCURACY IS 0.10 FOOT, PLUS OR MINUS.
14. ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). ELEVATIONS DEPICTED ON THIS SURVEY WERE OBTAINED USING FLORIDA DEPARTMENT OF TRANSPORTATION PERMANENT REFERENCE NETWORK AND REAL TIME KINEMATIC (RTK) GPS METHODS WITH AN EXPECTED ACCURACY OF +/- 0.2'.
15. BACKGROUND IMAGERY OBTAINED FROM FLORIDA DEPARTMENT OF TRANSPORTATION, DATED 2021

LEGAL DESCRIPTION

PARCEL 1: THE SOUTH ½ OF LOT C AND ALL OF LOT D, LESS THE EAST 10 FEET THEREOF OF THE RESUBDIVISION OF LOTS 1, 2, 3, 4, 11, AND 12, BLOCK 2, KIRBY'S SUBDIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 8, PAGE 33, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA;

AND

PARCEL 2: LOT 10, BLOCK 2, KIRBY SUBDIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 3, PAGE 86, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, LESS THE EAST 10 FEET, DEEDED TO THE STATE OF FLORIDA IN OFFICIAL RECORDS BOOK 169, PAGE 1169, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

LEGEND

Abbreviations

(C)	= CALCULATED MEASUREMENT
(D)	= DEED MEASUREMENT
(M)	= FIELD MEASUREMENT
(P)	= PLAT MEASUREMENT
(xxxxx)	= SURVEYOR'S POINT NUMBER
BM	= BENCHMARK
CL	= CENTERLINE
DB	= DEED BOOK
FDOT	= FLORIDA DEPARTMENT OF TRANSPORTATION
FND	= FOUND
ID	= IDENTIFICATION
IP	= IRON PIPE
IR	= IRON ROD
LB	= LAND SURVEYING BUSINESS
NAVD88	= NORTH AMERICAN VERTICAL DATUM OF 1988
ORB	= OFFICIAL RECORDS BOOK
PB	= PLAT BOOK
PCN	= PARCEL CONTROL NUMBER
PG	= PAGE
PID	= PARCEL IDENTIFICATION NUMBER
PSM	= PROFESSIONAL SURVEYOR & MAPPER
X 14.2	= EXISTING ELEVATION

Linetypes

= BOUNDARY
= CHAIN LINK FENCE
= CENTERLINE
= RIGHT OF WAY
= SECTION LINE
= PLAT LOT LINE
= EASEMENT

Symbols

= BENCHMARK (AS LABELED)
= FOUND 1/4 SECTION CORNER
= FOUND SECTION CORNER
= POLE ANCHOR
= SANITARY MAN HOLE
= SET 5/8" IRON ROD & CAP STAMPED "NORTHSTAR LB 7217"
= SIGN
= TREE (AS LABELED)
= UTILITY PEDESTAL
= WOOD UTILITY POLE

SURVEYOR'S CERTIFICATION

(THIS SURVEY IS NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND RAISED EMBOSSED SEAL OF FRANK C. VELDHUIS, FLORIDA PROFESSIONAL SURVEYOR AND MAPPER.)

I HEREBY CERTIFY THAT THE BOUNDARY AND TOPOGRAPHIC SURVEY OF THE PROPERTY SHOWN AND DESCRIBED HEREON WAS COMPLETED UNDER MY DIRECTION AND SAID SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

I FURTHER CERTIFY THAT THIS BOUNDARY AND TOPOGRAPHIC SURVEY MEETS THE STANDARDS OF PRACTICE FOR SURVEYS SET FORTH BY THE FLORIDA BOARD OF LAND SURVEYORS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027 FLORIDA STATE STATUTES. NO SEARCH OF THE PUBLIC RECORDS HAS BEEN MADE BY THIS OFFICE. THIS SURVEY IS BASED ON INFORMATION FURNISHED BY CLIENT OR CLIENT'S REPRESENTATIVE

NORTHSTAR GEOMATICS, INC.

DATE

FRANK C. VELDHUIS
PROFESSIONAL SURVEYOR & MAPPER
FLORIDA CERTIFICATION NO. 6582

NORTHSTAR GEOMATICS
5820 NW ZENITH DR
PORT ST LUCIE, FLORIDA 34986
(772) 781-6400 WWW.NSGEO.COM
LICENSED BUSINESS NO. 7217

DATE	REVISIONS

DATE 11/16/2022
SCALE 1" = 20'
FIELD BK. -
DWNG. BY FCV
CHECKED BY FCV

BOUNDARY AND TOPOGRAPHIC SURVEY FOR: YOUTH & FAMILY BEHAVIORAL HEALTH CENTER, INC.

SECTION 17, TOWNSHIP 35 SOUTH, RANGE 40 EAST
FT. PIERCE, FLORIDA

SHEET NO. 1
OF 1 SHEETS
PROJECT NO. 22-038

DEMOLITION NOTES

1. CONTRACTOR MUST USE SITE STABILIZATION METHODS, SUCH AS, BUT NOT LIMITED TO, SEEDING, WETTING, AND MULCHING WHICH MINIMIZE AIRBORNE DUST AND PARTICULATE EMISSIONS GENERATED BY CONSTRUCTION ACTIVITY. SUCH METHODS SHALL BE COMPLETED PROGRESSIVELY AND ACTIVELY MAINTAINED AS VEGETATION REMOVAL OCCURS WITHIN A GIVEN AREA OF A SITE. AT THE PRE-CONSTRUCTION MEETING, THE CONTRACTOR SHALL INFORM THE COUNTY WHICH VEGETATION REMOVAL METHODS WILL BE CONDUCTED AND THE PLAN TO MINIMIZE AIRBORNE DUST AND PARTICULATE EMISSIONS.
2. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSAL OF (IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES) ALL STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, PARKING,DRIVES, DRAINAGE, STRUCTURES, UTILITIES, ETC., SUCH THAT THE IMPROVEMENTS SHOWN IN THESE CONSTRUCTION DRAWINGS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE SPECIFICATIONS.
3. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE SITE AND DISPOSING OF THE DEBRIS IN A LAWFUL MANNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.
4. THE CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY'S FORCES AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES.
5. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR ONSITE LOCATIONS OF EXISTING UTILITIES.CONTRACTOR TO VERIFY EXISTING UTILITIES & LOCATIONS PRIOR TO CONSTRUCTION. CONTRACTOR TO NOTIFY THE ENGINEER & OWNER IMMEDIATELY IF ANY DISCREPANCIES ARE IDENTIFIED.
6. ALL EXISTING SEWERS, PIPING AND UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. CONTRACTOR SHALL GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PROCEEDING WITH THE WORK. UTILITIES DETERMINED TO BE ABANDONED AND LEFT IN PLACE SHALL BE GROUTED IF UNDER BUILDING.
7. CONTRACTOR SHALL COORDINATE ALL ELECTRICAL, TELEPHONE, CABLE, WATER, FIBER OPTIC CABLE AND/OR GAS LINES NEEDING TO BE REMOVED OR RELOCATED WITH THE AFFECTED UTILITY COMPANY.CONTRACTOR TO PROVIDE ADEQUATE TIME FOR RELOCATION AND CLOSE COORDINATION WITH THE UTILITY COMPANY IN ORDER TO PROVIDE A SMOOTH TRANSITION IN UTILITY SERVICE. CONTRACTOR SHALL PAY CLOSE ATTENTION TO EXISTING UTILITIES WITHIN ANY ROAD RIGHT OF WAY DURING CONSTRUCTION.
8. CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, (AND OTHER APPROPRIATE BEST MANAGEMENT PRACTICES). THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY.
9. PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED.
10. SHOULD REMOVAL AND/OR RELOCATION ACTIVITIES DAMAGE FENCING, LIGHTING AND/OR EXISTING STRUCTURES, THE CONTRACTOR SHALL PROVIDE NEW MATERIALS/ STRUCTURES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. EXCEPT FOR MATERIALS DESIGNED TO BE RELOCATED ON THIS DRAWING, ALL OTHER CONSTRUCTION MATERIALS SHALL BE NEW.
11. CONTRACTOR MAY LIMIT SAW-CUT & PAVEMENT REMOVAL TO ONLY THOSE AREAS WHERE IT IS REQUIRED AS SHOWN ON THESE CONSTRUCTION DRAWINGS BUT IF ANY DAMAGE IS INCURRED ON ANY OF THE SURROUNDING PAVEMENT, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IT'S REMOVAL AND REPAIR.
12. THE CONTRACTOR SHALL COORDINATE WATER MAIN WORK WITH THE FIRE DEPT. AND CITY OF STUART UTILITIES TO PLAN PROPOSED IMPROVEMENTS AND TO ENSURE ADEQUATE FIRE PROTECTION IS CONSTANTLY AVAILABLE TO EXISTING USERS AND SITE THROUGHOUT ALL PHASES OF CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR ARRANGING/PROVIDING ANY REQUIRED WATER MAIN SHUT OFFS WITH THE CITY OF STUART UTILITIES DURING CONSTRUCTION. ANY COSTS ASSOCIATED WITH WATER MAIN SHUT OFFS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NO EXTRA COMPENSATION WILL BE PROVIDED.
13. DAMAGE TO ANY EXISTING IMPROVEMENTS THAT ARE TO REMAIN WILL BE REPLACED AT CONTRACTOR'S EXPENSE.
14. CONTRACTOR SHALL PROTECT ALL AREAS OUTSIDE OF LIMIT OF CLEARING AND DEMOLITION.
15. PROPERTY CORNERS SHALL BE LOCATED BY A LICENSED LAND SURVEYOR AND CLEARLY MARKED IN THE FIELD PRIOR TO THE ENGINEERING DEPARTMENT'S PRE-CONSTRUCTION MEETING FOR SITE DEVELOPMENT.
16. NO ADDITIONAL LAND CLEARING SHALL COMMENCE UNTIL A SATISFACTORY INSPECTION OF THE REQUIRED EROSION CONTROL BARRICADES HAS BEEN OBTAINED.
17. ALL CONSTRUCTION BARRICADES AND SILT FENCES WILL REMAIN IN PLACE AND BE MONITORED FOR COMPLIANCE BY PERMIT HOLDER DURING THE PERMITTED DEVELOPMENT ACTIVITIES.
18. PRIOR TO SCHEDULING A FINAL INSPECTION FOR THE INFRASTRUCTURE, ALL BARRICADES AND EROSION CONTROL DEVICES SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
19. DISTURBED AREAS ON THE SITE WHERE CONSTRUCTION ACTIVITIES ARE STOPPED SHALL BE SEEDED, SODDED OR VEGETATED NO LATER THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY. VEGETATION SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT.
20. AUTHORIZATION TO INSTALL EROSION CONTROL DEVICES AND BARRICADES WILL BE GRANTED AT THE PRE-CONSTRUCTION MEETING. THIS AUTHORIZATION SHALL BE POSTED ON THE SITE, IN THE PERMIT BOX, ITS LOCATION SHOWN ELSEWHERE ON THIS PAGE.

LAND CLEARING NOTES

1. THE APPLICANT WILL REQUEST IN WRITING, PRIOR TO ANY LAND CLEARING, THAT THE CITY OF STUART GROWTH MANAGEMENT DEPT. PERFORM A FIELD INSPECTION TO DETERMINE IF BARRICADES HAVE BEEN PROPERLY INSTALLED ON THE SITE.
2. DURING CONSTRUCTION ACTIVITIES, EXISTING NATIVE VEGETATION TO BE PRESERVED (IF ANY) SHALL BE RETAINED TO ACT AS BUFFERS BETWEEN ADJACENT LAND USES, AND TO MINIMIZE NUISANCE DUST, NOISE AND AIR POLLUTION. BARRICADES SHALL BE USED ON SITE TO PRESERVE THE VEGETATION TO BE USED FOR THIS PURPOSE.
3. PROPERTY CORNERS SHALL BE LOCATED BY A LICENSED LAND SURVEYOR AND CLEARLY MARKED IN THE FIELD PRIOR TO THE ENGINEERING DEPARTMENT'S MEETING FOR SITE DEVELOPMENT
4. AUTHORIZATION TO INSTALL SAME EROSION CONTROL DEVICES AND PRESERVE BARRICADES WILL BE GRANTED AT THE PRE-CONSTRUCTION MEETING. THIS AUTHORIZATION SHALL BE POSTED ON THE SITE, IN THE PERMIT BOX, IT'S LOCATION SHOWN ELSEWHERE ON THIS PAGE.
5. TREES IDENTIFIED TO BE PROTECTED SHALL HAVE PROTECTIVE BARRICADES INSTALLED AND APPROVED BY LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF ANY CLEARING ACTIVITIES.
6. NO ADDITIONAL LAND CLEARING SHALL COMMENCE UNTIL A SATISFACTORY INSPECTION OF THE REQUIRED EROSION CONTROL STRUCTURES AND BARRICADES HAS BEEN OBTAINED.
7. SOIL STABILIZATION SHALL BE COMPLETED WITHIN 7 DAYS OF VEGETATION REMOVAL.
8. PROPERTY CORNERS SHALL BE LOCATED BY A LICENSED LAND SURVEYOR AND CLEARLY MARKED IN THE FIELD PRIOR TO THE ENGINEERING DEPARTMENT'S PRE-CONSTRUCTION MEETING FOR SITE DEVELOPMENT.
9. ALL CONSTRUCTION BARRICADES AND SILT FENCES WILL REMAIN IN PLACE AND BE MONITORED FOR COMPLIANCE BY THE PERMIT HOLDER DURING THE PERMITTED DEVELOPMENT ACTIVITIES.
10. PRIOR TO SCHEDULING A FINAL ENVIRONMENTAL INSPECTION FOR THE INFRASTRUCTURE, ALL BARRICADES AND EROSION CONTROL DEVICES SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
11. CONTRACTOR MUST USE SITE STABILIZATION METHODS, SUCH AS, BUT NOT LIMITED TO, SEEDING, WETTING, AND MULCHING WHICH MINIMIZE AIRBORNE DUST AND PARTICULATE EMISSIONS GENERATED BY CONSTRUCTION ACTIVITY. SUCH METHODS SHALL BE COMPLETED PROGRESSIVELY AND ACTIVELY MAINTAINED AS VEGETATION REMOVAL OCCURS WITHIN A GIVEN AREA OF A SITE. AT THE PRE-CONSTRUCTION MEETING, THE CONTRACTOR SHALL INFORM THE COUNTY WHICH VEGETATION REMOVAL METHODS WILL BE CONDUCTED AND THE PLAN TO MINIMIZE AIRBORNE DUST AND PARTICULATE EMISSIONS
12. STABILIZATION (SEED OR SOD) OF THE DISTURBED AREAS MUST BE COMPLETED WITHIN 30 DAYS OF VEGETATION REMOVAL. PROVIDE METHOD OF STABILIZATION.

SUGGESTED EROSION CONTROL CONSTRUCTION SEQUENCE

1. FLAG AND FENCE ALL WORK LIMITS.
2. NOTIFY SEDIMENT CONTROL INSPECTOR (24) HOURS PRIOR TO START OF CONSTRUCTION.
3. PERFORM CLEARING AND GRADING REQUIRED FOR INSTALLATION OF PERIMETER CONTROLS.
4. INSTALL PERIMETER RUNOFF CONTROLS AND TREE BARRIERS; NOTIFY SEDIMENT INSPECTOR AND OBTAIN APPROVAL BEFORE PROCEEDING FURTHER.
5. COMPLETE ALL REQUIRED STOCKPILING, SITE CLEARING, AND GRADING. STOCKPILE ANY EXCESS TOPSOIL OR OTHER EXCAVATED SOIL IN APPROVED STOCKPILES OR REMOVE FROM SITE.
6. REMOVE AND DISPOSE HARDPAN LAYER BENEATH DRY DETENTION BOTTOM.
7. SOD AND STABILIZE EMBANKMENT SLOPES. CONSTRUCT PARKING SUBGRADE AND BUILDING PAD SUBGRADE, AND INSTALL SITE UTILITIES AND DRAINAGE PIPES AND INLETS.
8. INSTALL STORM DRAINAGE PROTECTION. COMPLETE PARKING LOT CONSTRUCTION.
9. COMPLETE FINAL GRADING, STABILIZATION, AND LANDSCAPING. REMOVE ANY EXCESS MATERIAL FROM THE SITE AND DISPOSE OF AT A PERMITTED SITE.
10. NOTIFY SEDIMENT CONTROL INSPECTOR AND OBTAIN APPROVAL TO REMOVE SEDIMENT AND EROSION CONTROL.

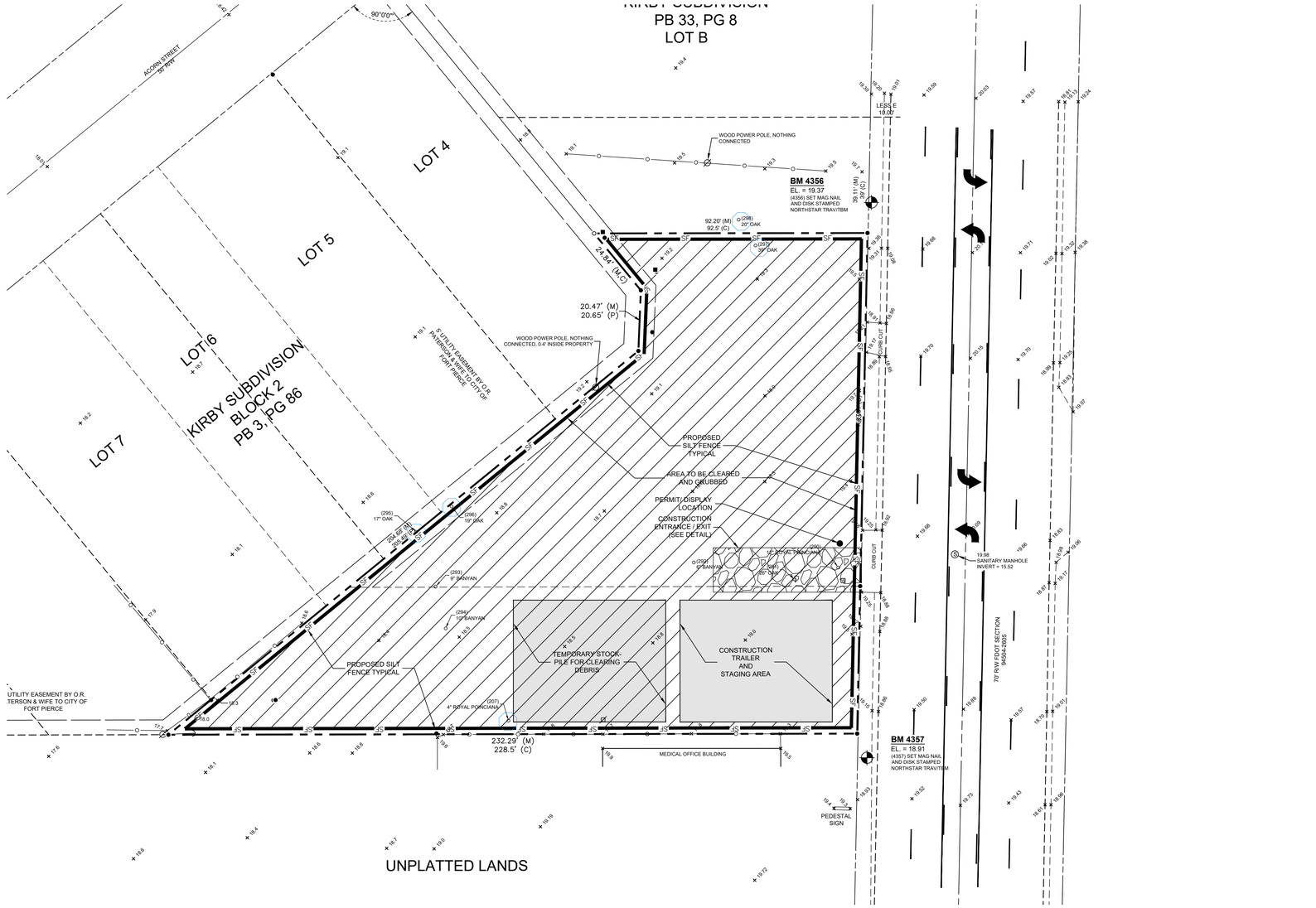
TREE PRESERVATION NOTES

1. REFER TO "TREE PROTECTION BARRIER" DETAIL SEC. 4.666 - TREE PROTECTION

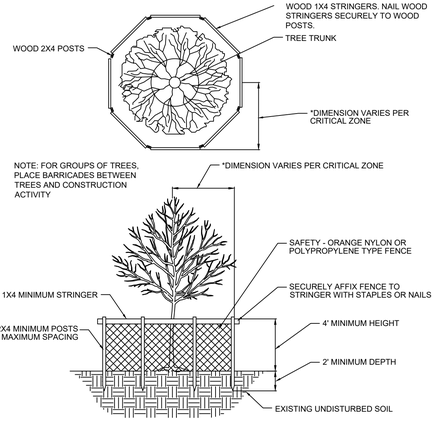
   4.666.B LOCATION OF PROTECTED TREES. ALL PROTECTED TREES WHICH MAY BE IMPACTED WITHIN 75 PERCENT OF THEIR CANOPY DRIP-LINES BY PROPOSED DEVELOPMENT ACTIVITIES SHALL BE PHYSICALLY LOCATED ON SITE AND INDICATED ON THE TREE SURVEY AS REQUIRED IN SECTION 4.662.A.7., BARRICADES MUST BE CONSTRUCTED AROUND THE CRITICAL PROTECTION ZONE OF EACH TREE OR CLUSTER OF TREES. THESE BARRICADES MUST BE CONSTRUCTED OF A MINIMUM OF ONE-FOURTH-INCH DIAMETER ROPE WHICH IS YELLOW OR ORANGE IN COLOR AND MADE OF NYLON OR POLY. THE ROPE IS TO BE ATTACHED TO A MINIMUM OF TWO × TWO WOODEN POLES. IRON REBAR, TWO INCHES OR GREATER PVC PIPE OR OTHER MATERIAL WITH PRIOR APPROVAL OF THE GROWTH MANAGEMENT DEPARTMENT. THE ROPE MUST BE A MINIMUM OF FOUR FEET OFF THE GROUND AND MAY NOT BE ATTACHED TO ANY VEGETATION. ALL BARRICADES MUST BE MAINTAINED INTACT FOR THE DURATION OF CONSTRUCTION. THE LOCATION OF PROPOSED DEVELOPMENT ACTIVITIES THAT ARE WITHIN 15 FEET OF THE CRITICAL PROTECTION ZONE OF A PROTECTED TREE MUST BE LOCATED USING BRIGHTLY COLORED FLAGGING TO INDICATE CORNERS.

2. TREE BARRICADES SYMBOL IS A SYMBOL ONLY. CONTRACTOR TO VERIFY EXACT DIMENSIONS OF BARRICADE.

3. CONTRACTOR SHALL BE RESPONSIBLE FOR FULL REPLACEMENT VALUE FOR ANY DAMAGED TREES DESIGNATED TO BE PRESERVED.



SEE SHEET D1 FOR EROSION CONTROL DETAILS



NOTES:
CRITICAL PROTECTION ZONE: THE AREA SURROUNDING A TREE WITHIN A CIRCLE DESCRIBED BY A RADIUS OF ONE FOOT FOR EACH INCH OF THE TREE TRUNK DIAMETER AT 54" ABOVE FINISHED GRADE. FOR GROUPS OF TREES, PLACE BARRICADES BETWEEN TREES AND CONSTRUCTION ACTIVITY.

* TREE PROTECTION BARRICADE SHALL BE LOCATED TO PROTECT A MINIMUM OF 75% OF THE CRITICAL PROTECTION ZONE.

TREE BARRIER
NOT TO SCALE

LEGEND

- EXISTING TREE TO REMAIN (INSTALL TREE PROTECTION BARRICADE)
- LIMITS OF CLEARING
- TEMPORARY STOCK PILES
- EXIST. WATER BODY
- PROPERTY LINE
- TOB — TOB — TOP OF BANK
- TOE — TOE — EXISTING FENCE
- SF — SF — PROPOSED SAFTY FENCE
- PROPOSED SILT FENCE
- × 14.3 — EXISTING GRADES
- BM — EXISTING NAVD BENCH MARK

0 20' 40' 60'
SCALE IN FEET

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

CREECH
CONSULTING, INC.
CIVIL EXECUTION ENGINEERED
PO BOX 327, STUART, FLORIDA 34994 (772) 485-2140
BOARD OF PROFESSIONAL ENGINEERS, CERTIFICATE OF AUTHORIZATION NUMBER 5139
PROFESSIONAL SURVEYORS AND MAPPERS, AMENDED CERTIFICATE NO. LB-0006705

DATE	BY	REVISIONS

YOUTH & FAMILY
BEHAVIORAL HEALTH CENTER INC
EROSION CONTROL PLAN
FORT PIERCE FLORIDA

DRAWN BY:	JAC
CHECKED BY:	RTC / ANDREWS
LATITUDE:	27°26'5.40"N
LONGITUDE:	80°21'2.96"W
HORZ. SCALE:	1" = 20'
VERT. SCALE:	

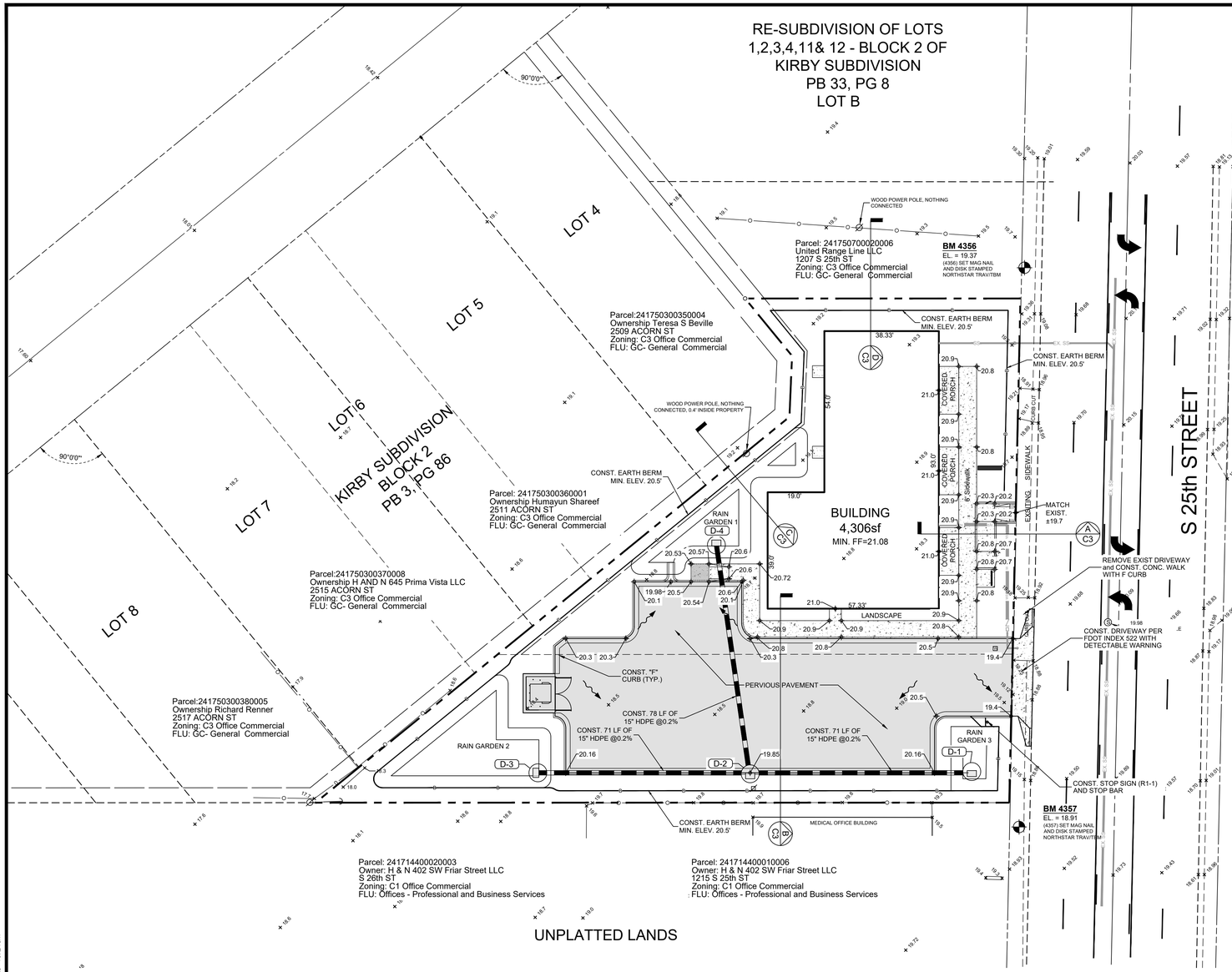
SEAL

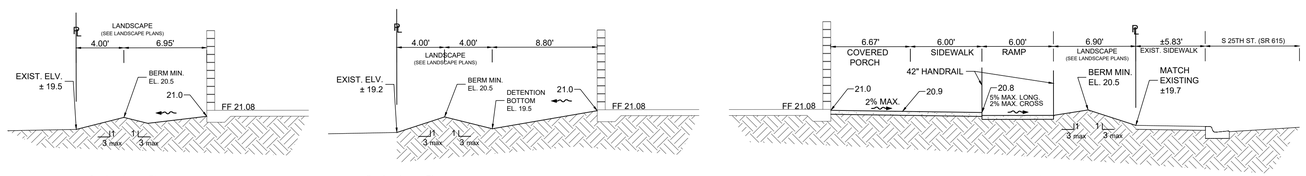
06/02/2023
RICHARD CREECH
FL P.E. NO. 38592

SHEET C2

PROJECT NO. 22-016-001

P:\Projects\2022\2022-016-001 Youth and Family Center\CAD\V... Plans\C2 EROSION CONTROL.dwg C1 ostc_j Jun 01,2023 - 12:48pm





See Landscape Plans Plantings Including Sod

SECTION D-D
VERT. & HORZ. SCALE 1"=5'

See Landscape Plans Plantings Including Sod

SECTION C-C
VERT. & HORZ. SCALE 1"=5'

See Landscape Plans Plantings Including Sod

SECTION A-A
VERT. & HORZ. SCALE 1"=5'

See Landscape Plans Plantings Including Sod

SECTION B-B
VERT. & HORZ. SCALE 1"=5'

LEGEND

- RIGHT OF WAY LINES
- CHAIN LINK FENCE
- CENTER LINE
- RIGHT OF WAY LINE
- SECTION LINE
- PLAT LOT LINE
- EASEMENT LINE
- PROPOSED CONCRETE
- PROPOSED PERVIOUS PAVEMENT
- EXISTING UTILITY POLE
- PROPOSED PERIMETER BERM
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER SERVCE
- PROPOSED 2" WATER SERVICE
- PROPOSED STORM PIPE
- PROPOSED INLETS
- PROPOSED DRAINAGE STRUCTURE
- DRAINAGE FLOW ARROW
- PROPOSED GRADES
- EXISTING ELEVATION
- PROPOSED LIFT STATION
- EXISTING FIBER OPTIC HANDHOLE
- EXISTING UTILITY POLE
- EXISTING NAVD BENCH MARK

STORM DRAINAGE STRUCTURE TABLE	
STRUCTURE NAME	STRUCTURE DETAILS
D-01	GRATE ELEV. = 19.5 (W) INV. ELEV. = 14.00
D-02	GRATE ELEV. = 19.85 (E) INV. ELEV. = 14.15 (W) INV. ELEV. = 14.25 (N) INV. ELEV. = 14.25
D-03	GRATE ELEV. = 19.50 (E) INV. ELEV. = 14.40
D-04	GRATE ELEV. = 19.50 (S) INV. ELEV. = 14.40

NOTES:

1. REQUIRED MINIMUM ELEVATIONS:
   a. MINIMUM FINISHED FLOOR ELEVATION = 21.08 NAVD.
   b. MINIMUM ROAD ELEVATION = 19.5 NAVD.
   c. MINIMUM PERIMETER ELEVATION = 20.5 NAVD.
2. RAIN GARDENS
   a. TOP OF RAIN GARDENS = 20.50'
   b. BOTTOM OF RAIN GARDENS = 19.50'

GRADING NOTES

1. THE SURVEY WAS PROVIDED BY NORTHSTAR GEOMATICS, FIELD DATED NOVEMBER 16, 2022.
2. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 121 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
3. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE DRAWINGS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR TO VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
4. ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED.
5. PRECAST STRUCTURES ARE TO BE USED.
6. STORM PIPE SHALL BE IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS.
7. ALL STORM PIPES & STRUCTURES TO BE CLEANED, VACUUMED & DESILTED PRIOR TO PROJECT TURN OVER. DRY DETENTION AREA TO BE DESILTED PRIOR TO PROJECT TURN OVER.
8. IF ANY EXISTING STRUCTURE TO REMAIN IS DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
9. ALL STORM PIPE ENTERING STORM STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STORM STRUCTURE IS WATERTIGHT.
10. ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE 6" ABOVE FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER".
11. THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE EPA, FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP), NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) "GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES" AND THE PROJECT SPECIFICATIONS.
12. CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
13. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
14. TOPOGRAPHIC INFORMATION IS TAKEN FROM A TOPOGRAPHIC SURVEY PREPARED BY NORTHSTAR GEOMATICS. IF THE CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THEN THE CONTRACTOR SHALL SUPPLY, AT THEIR EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR TO THE OWNER FOR REVIEW.
15. CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH GOVERNING SPECIFICATIONS UNTIL A HEALTHY STAND OF VEGETATION IS OBTAINED. ALSO REFER TO THE LANDSCAPE PLANS FOR ADDITIONAL REQUIREMENTS FOR LANDSCAPE/OPEN SPACE AREAS.
16. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
17. PROPOSED GRADE ELEVATIONS SHOWN ARE AT THE EDGE OF PAVEMENT LINE OF UNLESS OTHERWISE NOTED.
18. CONTRACTOR TO PAY SPECIAL ATTENTION WHEN COMPACTING SOIL AROUND SANITARY AND DRAINAGE STRUCTURES AND SHALL ENSURE THAT THE SOIL IS PROPERLY COMPACTED TO ELIMINATE DIFFERENTIAL SETTLEMENT. THE PAVEMENT SUBGRADE FILL PLACED WITHIN 24 INCHES OF FINISHED SUBGRADE ELEVATION AND AT LEAST THE UPPER 24 INCHES OF SUBGRADE IN ALL CUT AREAS SHALL BE COMPACTED TO AT LEAST 98% OF THE MATERIAL'S MAXIMUM MODIFIED PROCTOR DRY DENSITY (ASTM D1557).
19. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SUFFICIENT COVER OVER ALL PIPES DURING ALL CONSTRUCTION PHASES IN ORDER TO PREVENT DAMAGE TO THE DRAINAGE SYSTEM.
20. ANY DAMAGE TO THE DRAINAGE SYSTEM DURING CONSTRUCTION WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR / REPLACE AND INCUR ALL COSTS.
21. CONTRACTOR SHALL TAKE SPECIAL CARE TO AVOID UNNECESSARY DISTURBANCE OF EXISTING SOILS, ESPECIALLY THOSE W/ SENSITIVE OPTIMAL MOISTURE CONTENT.
22. DRAINAGE STRUCTURE SYMBOLS SHOWN ON THE DRAWING ARE NOT TO SCALE.
23. SAW CUT PAVEMENT AT CONFORMS AND PROTECT EDGE.
24. ALL CURB CUT RAMPS SHALL HAVE DETECTABLE WARNING STRIPS AND CONSTRUCTED PER LATEST EDITION OF FDOT STANDARD SPECIFICATIONS SECTION 522-002 AND PER ADA REQUIREMENTS.
25. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF AND EXISTING UTILITIES SERVING PREVIOUS STRUCTURES. UTILITIES ARE TO BE REMOVED TO THE RIGHT-OF-WAY.

0 20 40 60
SCALE IN FEET

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

CREECH
CONSULTING, INC.
CIVIL ENGINEERING
PO BOX 327, STUART, FLORIDA 34994 (772) 485-2140
BOARD OF PROFESSIONAL ENGINEERS, CERTIFICATE OF AUTHORIZATION NUMBER 5139
PROFESSIONAL SURVEYORS AND MAPPERS, AMENDED CERTIFICATE NO. LB-0006705

DATE	BY	REVISIONS

YOUTH & FAMILY
BEHAVIORAL HEALTH CENTER INC
FORT PIERCE FLORIDA

PAVING, GRADING & DRAINAGE PLAN

DRAWN BY:	JAC
CHECKED BY:	RTC / ANDREWS
LATITUDE:	27°26'5.40"N
LONGITUDE:	80°21'2.96"W
HORZ. SCALE:	1" =20'
VERT. SCALE:	

SEAL

06/02/2023
RICHARD CREECH
FL P.E. NO. 38592

SHEET C3

PROJECT NO. 22-016-001

P:\Projects\2022\2022-016-001 Youth and Family Center\C4D\1 - Plans\C3 STORM.dwg C3 STORM dwg, C3, STORM, dsc_j, Jun 02,2023 - 10:24am

RE-SUBDIVISION OF LOTS
1,2,3,4,11& 12 - BLOCK 2 OF
KIRBY SUBDIVISION
PB 33, PG 8
LOT B

LOT 4

LOT 5

LOT 6

KIRBY SUBDIVISION
BLOCK 2
PB 3, PG 86

LOT 7

LOT 8

Parcel: 241750300020006
United Range Line LLC
1207 S 25th ST
Zoning: C3 Office Commercial
FLU: GC- General Commercial

BM 4356
EL. = 19.37
(4356) SET MAG NAIL
AND DISK STAMPED
NORTHSTAR TRAV/TBM

WOOD POWER POLE, NOTHING CONNECTED

Parcel:241750300350004
Ownership Teresa S Beville
2509 ACORN ST
Zoning: C3 Office Commercial
FLU: GC- General Commercial

WOOD POWER POLE, NOTHING CONNECTED, 0.4' INSIDE PROPERTY

Parcel: 241750300360001
Ownership Humayun Shareef
2511 ACORN ST
Zoning: C3 Office Commercial
FLU: GC- General Commercial

Parcel:241750300370008
Ownership H AND N 645 Prima Vista LLC
2515 ACORN ST
Zoning: C3 Office Commercial
FLU: GC- General Commercial

Parcel:241750300380005
Ownership Richard Renner
2517 ACORN ST
Zoning: C3 Office Commercial
FLU: GC- General Commercial

38.33'
CONST. 26 LF OF
6" PVC @1.0%
SANITARY SEWER SERVICE

CONNECT TO EXISTING
SANITARY SEWER
CONST. CLEAN OUT
EXIST. INVERT ± 15.46

EXIST. INVERT ± 15.14

54.0'

COVERED PORCH

63.0'

S Sidewalk

COVERED PORCH

38.0'

19.0'

BUILDING
4,306sf
MIN. FF=21.08

CONNECT TO EXISTING 2"
WATER SERVICE
w/ 5/8" RPZ AND METER

REMOVE EXIST. METER

67.33'

LANDSCAPE

RAIN GARDEN 1
D-4

EXISTING SIDEWALK

CX. SS

FOUR CUT

S 25th STREET

Parcel: 241660201580003
Ownership FD South LLC
Family Dollar Lease
1210 S 25th ST
Zoning: C2 Neighborhood Commercial
FLU: NC- Neighborhood Commercial

19.98
SANITARY MANHOLE
INVERT = 15.52

RAIN GARDEN 2
D-3
D-2
D-1

CONST. STOP SIGN (R1-1)
AND STOP BAR

BM 4357
EL = 18.91
(4357) SET MAG NAIL
AND DISK STAMPED
NORTHSTAR TRAV/TBM

MEDICAL OFFICE BUILDING

Parcel: 241714400020003
Owner: H & N 402 SW Friar Street LLC
S 26th ST
Zoning: C1 Office Commercial
FLU: Offices - Professional and Business Services

Parcel: 241714400010006
Owner: H & N 402 SW Friar Street LLC
1215 S 25th ST
Zoning: C1 Office Commercial
FLU: Offices - Professional and Business Services

UNPLATTED LANDS

LEGEND

- RIGHT OF WAY LINES
- CHAIN LINK FENCE
- CENTER LINE
- RIGHT OF WAY LINE
- SECTION LINE
- PLAT LOT LINE
- EASEMENT LINE
- PROPOSED CONCRETE
- PROPOSED PERVIOUS PAVEMENT
- EXISTING UTILITY POLE
- PROPOSED PERIMETER BERM
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER SERVCE
- PROPOSED 2" WATER SERVICE
- PROPOSED STORM PIPE
- PROPOSED INLETS
- D-09 PROPOSED DRAINAGE STRUCTURE
- DRAINAGE FLOW ARROW
- 16.30 PROPOSED GRADES
- 14.3 EXISTING ELEVATION
- S PROPOSED LIFT STATION
- FH EXISTING FIBER OPTIC HANDHOLE
- EXISTING UTILITY POLE
- BM EXISTING NAVD BENCH MARK

UTILITY NOTES

1. EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE FORT PIERCE UTILITY AUTHORITY, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
3. ALL FILL MATERIAL IS TO BE IN PLACE, AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
4. CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
5. SANITARY SEWER PIPE SHALL BE AS FOLLOWS:
   - 6" PVC SDR26 PER ASTM D 3034
   - 8" PVC SDR26 PER ASTM D 3034
6. WATER LINES SHALL BE AS FOLLOWS:
   - 2" AND SMALLER, POLYETHYLENE AS DEFINED BY ASTM D2737 SDR9 COPPER TUBE SIZE
   - 4"-12" PVC DR-18 C-900
7. DUCTILE IRON PIPE (DIP) SHALL BE REQUIRED WHEN WITHIN SIX (6) FEET HORIZONTALLY OF SEWAGE FACILITIES OR PIPES.
8. DUCTILE IRON PIPE (DIP) SHALL BE A MINIMUM OF PRESSURE CLASS 350 AND CONFORM TO THE LATEST STANDARDS OF ANSI/AWWA C150/A21.50 FOR THE THICKNESS DESIGN OF DIP.
9. ALL UTILITIES SHOULD HAVE A MINIMUM HORIZONTAL SEPARATION OF 3' TO POWER POLES, LIGHT POLES, OR OTHER UTILITIES, 15' TO BUILDINGS, TOP OF BANKS OF LAKES & CANALS AND OTHER STRUCTURES, OR ABSOLUTE MINIMUM OF 10' WITH DIP.
10. ALL WATER FITTINGS ARE TO BE DUCTILE IRON MECHANICAL JOINTS AS CALLED OUT IN FORT PIERCE UTILITY AUTHORITY MINIMUM DESIGN & CONSTRUCTION STANDARDS.
11. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 30" COVER ON ALL WATERLINES, 8" OR SMALLER. IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES (EXISTING AND PROPOSED), THE WATER LINE SHALL HAVE APPROPRIATE RESTRAINTS AS REQUIRED BY FORT PIERCE UTILITY AUTHORITY , A MINIMUM OF 6" CLEARANCE (12" PREFERRED).
12. LINES UNDERGROUND SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
13. TOPS OF EXISTING MANHOLES SHALL BE RAISED AS NECESSARY TO BE FLUSH WITH PROPOSED PAVEMENT ELEVATIONS, AND TO BE ONE FOOT ABOVE FINISHED GROUND ELEVATIONS WITH WATERTIGHT LIDS WHEN LOCATED IN UNPAVED AREAS.
14. CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE LOCAL AUTHORITIES REGARDING TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES.
15. ALL EXISTING VALVES TO BE ADJUSTED TO FINAL FINISHED GRADE.
16. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES. THIS AND THE FINAL CONNECTIONS OF THE SERVICE SHALL BE COMPLETED AT LEAST 30 DAYS PRIOR TO C.O.
17. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
18. CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING UTILITY DURING CONSTRUCTION AT NO COST TO THE OWNER.
19. SEE FORT PIERCE UTILITY AUTHORITY MINIMUM DESIGN & CONSTRUCTION STANDARDS FOR BACKFILLING AND COMPACTION REQUIREMENTS ON UTILITY TRENCHES.
20. CONTRACTOR SHALL COMPLY WITH FORT PIERCE UTILITY AUTHORITY MINIMUM DESIGN & CONSTRUCTION STANDARDS, LATEST EDITION.
21. CONTRACTOR SHALL GROUT ALL PIPE ENTRANCES AND PIPE REMOVALS TO/FROM MANHOLES TO ASSURE WATER TIGHT CONNECTIONS AND PLUGS.
22. DRAWINGS DO NOT PURPORT TO SHOW ALL EXISTING UTILITIES.
23. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATION OF ALL UTILITY ENTRANCES TO INCLUDE SANITARY SEWER LATERALS, DOMESTIC AND FIRE PROTECTION WATER SERVICE, ELECTRICAL, TELEPHONE, FIBER OPTIC, AND GAS SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND ASSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH FORT PIERCE UTILITY AUTHORITY REQUIREMENTS AS TO LOCATION AND SCHEDULING FOR TIE-INS, CONNECTIONS AND INSPECTIONS PRIOR TO CONNECTING TO EXISTING UTILITIES.
24. CONTRACTOR SHALL CONDUCT ALL REQUIRED TESTS TO THE SATISFACTION OF THE RESPECTIVE UTILITY COMPANIES AND THE OWNER'S INSPECTING AUTHORITIES.
25. CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST STANDARDS OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING AND ANY OTHER MEANS OF PROTECTION. THIS INCLUDES, BUT IS NOT LIMITED TO, ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE TO COMPLY WITH PERFORMANCE CRITERIA FOR OSHA.
26. THE INSTALLATION OR REPAIR OF ANY UNDERGROUND FACILITIES OF PIPING WHICH CONNECTS TO OR FURNISHES WATER FOR THE FIRE PROTECTION SPRINKLER SYSTEM SHALL BE PERFORMED ONLY BY A LICENSED UTILITY CONTRACTOR, FIRE PROTECTION SPRINKLER CONTRACTOR OR LICENSED PLUMBER. SEE O.C.G.A. TITLE 25-11-7-(a). A COPY OF THE LICENSE OR CERTIFICATE OF COMPETENCY SHALL BE PROVIDED TO THE INSPECTOR AT THE FINAL INSPECTION.

0 20 40 60
SCALE IN FEET

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P:\Projects\2022\2022-016-001 Youth and Family Center\CAD\1 - Plans\C4 UTL.dwg C4 UTL Jun 02,2023 - 10:24am

CREECH
CONSULTING, INC.
CIVIL ENGINEERING
PO BOX 327, STUART, FLORIDA 34994 (772) 485-2140
BOARD OF PROFESSIONAL ENGINEERS, CERTIFICATE OF AUTHORIZATION NUMBER 5139
PROFESSIONAL SURVEYORS AND MAPPERS, AMENDED CERTIFICATE NO. LB-0006705

DATE	BY	REVISIONS

YOUTH & FAMILY
BEHAVIORAL HEALTH CENTER INC
FORT PIERCE FLORIDA

WATER AND SEWER PLAN

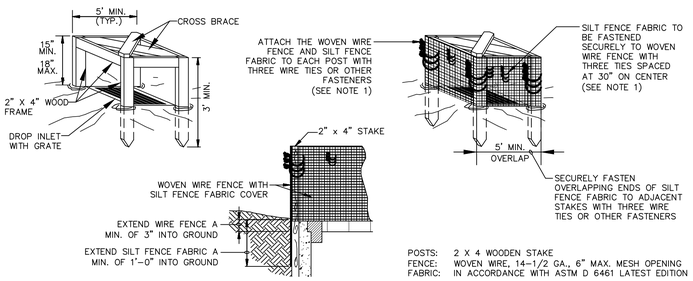
DRAWN BY:	JAC
CHECKED BY:	RTC / ANDREWS
LATITUDE:	27°26'5.40"N
LONGITUDE:	80°21'2.96"W
HORZ. SCALE:	1" =20'
VERT. SCALE:	

SEAL

06/02/2023
RICHARD CREECH
FL P.E. NO. 38592

SHEET C4

PROJECT NO. 22-016-001



POSTS: 2 X 4 WOODEN STAKE
FENCE: WOVEN WIRE, 14-1/2 GA., 6" MAX. MESH OPENING
FABRIC: IN ACCORDANCE WITH ASTM D 6461 LATEST EDITION

NOTES:

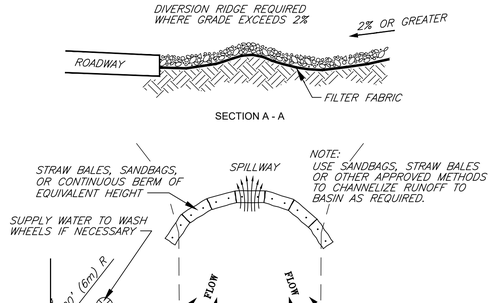
1. ATTACH THE WOVEN WIRE FENCE AND THE GEOTEXTILE TO EACH POST (SPACED EVERY 30") WITH THREE WIRE TIES OR OTHER FASTENERS, ALL SPACED WITHIN THE TOP 8" OF THE FABRIC. ATTACH EACH TIE DIAGONALLY 45 DEGREES THROUGH THE FABRIC, WITH EACH PUNCTURE AT LEAST 1" VERTICALLY APART.
2. WHEN TWO SECTIONS OF SILT FENCE FABRIC ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED ACROSS TWO POSTS.
3. MAINTENANCE SHALL BE PERFORMED AS NOTED IN THE SWPPP. DEPTH OF ACCUMULATED SEDIMENTS MAY NOT EXCEED ONE-THIRD THE HEIGHT OF THE FABRIC.
4. ALL SILT FENCE INLET PROTECTIONS SHALL INCLUDE WIRE SUPPORT.

MAINTENANCE NOTES:

1. INLET PROTECTION DEVICES MUST BE INSPECTED FOR SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN (IF USING INSERT-TYPE DEVICE) OR UPGRADIENT OF THE INLET.
2. REMOVAL OF SEDIMENT ACCUMULATED IN OR ADJACENT TO A STORM DRAIN INLET MUST BEGIN IMMEDIATELY UPON DISCOVERY, WITH COMPLETION OF THE ACTIVITY OCCURRING NO LATER THAN THE END OF THE FOLLOWING BUSINESS DAY.
3. INLET PROTECTION DEVICES SHALL BE INSPECTED FOR UNINTENDED BYPASS OR IMPROPER FLOW-RATES THAT MAY CAUSE DOWNSTREAM FLOODING.
4. CONTACT THE CEC FOR ALTERNATE INLET PROTECTION IF THE DESIGNED PROTECTION MAY IMPACT DOWNSTREAM BMPS, ADJACENT SLOPES, ETC., DUE TO PONDING ISSUES. ENSURE THAT NO UNDERMINING OF INLET PROTECTION DEVICES HAS OCCURRED.
5. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.

SILT FENCE INLET PROTECTION DETAIL AT UNPAVED AREAS

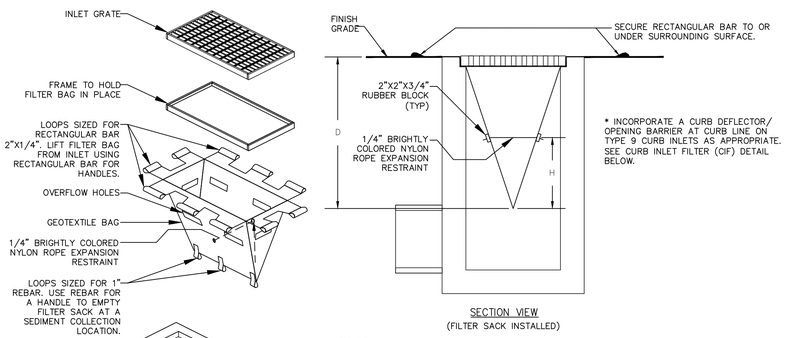
N.T.S.



NOTES:

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

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT DETAIL



SECTION VIEW
(FILTER SACK INSTALLED)

ISOMETRIC VIEW

NOTES:

1. GEOTEXTILE SHALL BE A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS REQUIREMENTS IN THE SPECIFICATIONS TABLE.
2. PLACE AN OIL ABSORBENT PAD OR PILLOW OVER INLET GRATE WHEN OIL SPILLS ARE A CONCERN.
3. THE WIDTH, "W", OF THE FILTER SACK SHALL MATCH THE INSIDE WIDTH OF THE GRATED INLET BOX.
4. THE DEPTH, "D", OF THE FILTER SACK SHALL BE BETWEEN 18 INCHES AND 36 INCHES.
5. THE LENGTH, "L", OF THE FILTER SACK SHALL MATCH THE INSIDE LENGTH OF THE GRATED INLET BOX.

MAINTENANCE NOTES:

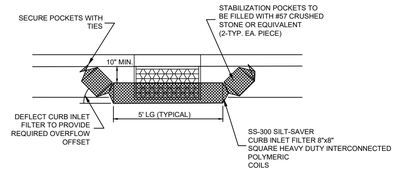
1. INLET PROTECTION DEVICES MUST BE INSPECTED FOR SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN. REMOVE TRAPPED SEDIMENT WHEN BRIGHTLY COLORED EXPANSION RESTRAINT CAN NO LONGER BE SEEN.
2. REMOVAL OF SEDIMENT ACCUMULATED IN OR ADJACENT TO A STORM DRAIN INLET MUST BEGIN IMMEDIATELY UPON DISCOVERY, WITH COMPLETION OF THE ACTIVITY OCCURRING NO LATER THAN THE END OF THE FOLLOWING BUSINESS DAY.
3. INLET PROTECTION DEVICES SHALL BE INSPECTED FOR UNINTENDED BYPASS OR IMPROPER FLOW-RATES THAT MAY CAUSE DOWNSTREAM FLOODING.
4. CONTACT THE CEC FOR ALTERNATE INLET PROTECTION IF THE DESIGNED PROTECTION MAY IMPACT DOWNSTREAM BMPS, ADJACENT SLOPES, ETC., DUE TO PONDING ISSUES. ENSURE THAT NO UNDERMINING OF INLET PROTECTION DEVICES HAS OCCURRED.
5. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.

LOW TO MODERATE FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	300 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	120 LBS
MULLEN BURST	ASTM D-3786	800 PSI
TRAPEZOID TEAR	ASTM D-4533	120 LBS
UV RESISTANCE	ASTM D-4355	80 %
APPARENT OPENING SIZE	ASTM D-4751	40 US SIEVE
FLOW RATE	ASTM D-4491	40 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	0.55 SEC -1

MODERATE TO HIGH FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	135 LBS
MULLEN BURST	ASTM D-3786	420 PSI
TRAPEZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4355	90 %
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	1.5 SEC -1

INLET PROTECTION FILTER SACK

N.T.S.

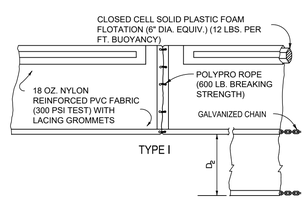


INSTALLATION PROCEDURE:

1. IDENTIFY OPENING DIMENSIONS TO DETERMINE THE NUMBER OF SS-300 CURB INLET FILTERS THAT WILL BE REQUIRED.
2. COMPLETELY FILL THE STABILIZATION CHAMBER ON EACH END OF EACH SS-300 CURB INLET FILTER WITH #57 CRUSHED STONE.
3. SECURE ENDS OF THE STABILIZATION POCKETS WITH TIES.
4. PLACE THE SS-300 CURB INLET FILTER(S) IN FRONT OF THE CURB INLET OR OPENING TO PREVENT THE MIGRATION OF SILT INTO THE STORM DRAIN SYSTEM.

CURB INLET FILTER DETAIL

N.T.S.

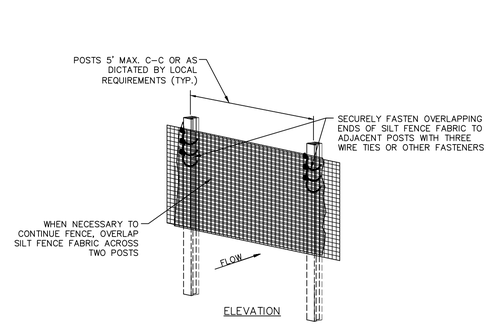


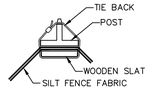
D =5' STD. (SINGLE PANEL FOR DEPTHS 5' OR LESS),
D =5' STD. (ADDITIONAL PANEL FOR DEPTHS GREATER THAN 5'),

CURTAIN TO REACH BOTTOM UP TO DEPTHS OF 10'. TWO (2) PANELS TO BE USED FOR DEPTHS GREATER THAN 10' UNLESS SPECIAL DEPTHS SPECIFICALLY CALLED FOR IN THE PLANS OR AS DETERMINED BY THE ENGINEER.

FLOATING TURBIDITY BARRIER DETAIL

N.T.S.



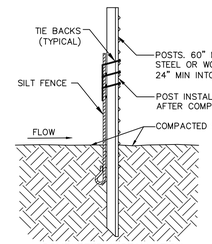


INSIDE CORNER - PLAN VIEW

TABLE 1 Temporary Silt Fence Material Property Requirements

		Test Method	Units	Supported[A] Silt Fence	Unsupported[A] Silt Fence	Type of Value
Grab Strength		ASTM D 4632	N (lbs)			
	Machine Direction			400 (90)	550 (90)	MARV
	X-Machine Direction			400 (90)	450 (90)	MARV
Permittivity[#]		ASTM D 4491	sec-1	0.05	0.05	MARV
Apparent Opening Size[#]		ASTM D 4751	mm (US Sieve #)	0.60 (30)	0.60 (30)	Max. ARV[C]
Ultraviolet Stability		ASTM D 4355	% Retained Strength	70% after 500 h of exposure	70% after 500 h of exposure	Typical

[A]Silt fence support shall consist of 14 gage steel wire with a mesh spacing of 150 mm (6 in.) or prefabricated polymer mesh of equivalent strength.
[#]These default values are based on empirical evidence with a variety of sediments. For environmentally sensitive areas, a review of previous experience and/or site or regionally specific geotextile tests in accordance with Test Method D 5141 should be performed by the agency to confirm suitability of these requirements.
[C]As measured in accordance with Test Method D 4632.
TABLE 1 TAKEN FROM ASTM D 6461-99 (2007)



COMPLETED INSTALLATION

POSTS: STEEL OR WOOD
FABRIC: IN ACCORDANCE WITH ASTM D 6461 LATEST EDITION.

SPECIFICATIONS FOR SILT FENCE INSTALLATION

1. SILT FENCE SHALL BE PROVIDED AND INSTALLED PER ASTM D-6462-03 LATEST EDITION.
2. INSTALL SILT FENCE AT A FAIRLY LEVEL GRADE ALONG THE CONTOUR WITH THE ENDS CURVED UPHILL TO PROVIDE SUFFICIENT UPSTREAM STORAGE VOLUME FOR ANTICIPATED RUNOFF.
3. INSTALL POSTS AT A MAXIMUM OF 5'-0" APART.
4. INSTALL POSTS AT A MINIMUM DEPTH OF 24" ON THE DOWNSTREAM SIDE OF THE SILT FENCE, AND AS CLOSE AS POSSIBLE TO THE FABRIC, ENABLING POSTS TO SUPPORT UPSTREAM WATER PRESSURE ON THE FABRIC.
5. INSTALL WITH THE POSTS AWAY FROM THE SILT FENCE FABRIC.
6. ATTACH THE FABRIC TO EACH POST WITH THREE TIES, ALL SPACED WITHIN THE TOP 8" OF THE FABRIC. ATTACH EACH TIE DIAGONALLY 45 DEGREES THROUGH THE FABRIC, WITH EACH PUNCTURE AT LEAST 1" VERTICALLY APART.
7. WRAP APPROXIMATELY 6" OF FABRIC AROUND THE END POSTS AND SECURE WITH 3 TIES.
8. WHEN NECESSARY TO CONTINUE FENCE, OVERLAP SILT FENCE FABRIC ACROSS TWO POSTS.
9. NO MORE THAN 24" OF A 36" FABRIC IS ALLOWED ABOVE GROUND LEVEL.
10. THE INSTALLATION SHOULD BE CHECKED AND CORRECTED FOR ANY DEVIATIONS BEFORE COMPACTION. USE A FLAT-BLADED SHOVEL TO TUCK FABRIC DEEPER INTO THE TRENCH IF NECESSARY.
11. COMPACT THE SOIL IMMEDIATELY NEXT TO THE SILT FENCE FABRIC.
12. WHEN TWO SECTIONS OF SILT FENCE FABRIC ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED A MINIMUM OF 60" ACROSS TWO POSTS, AS SHOWN.

MAINTENANCE NOTES

1. SILT FENCES SHALL BE INSPECTED ALONG ITS ENTIRETY AND MUST BE CLEANED WHEN SEDIMENT HAS ACCUMULATED TO ONE-THIRD THE HEIGHT OF THE SILT FENCE. MAINTENANCE CLEANOUT MUST BE CONDUCTED REGULARLY TO PREVENT ACCUMULATED SEDIMENTS FROM REACHING ON-THIRD THE HEIGHT OF THE SILT FENCE.
2. ALL MATERIAL EXCAVATED FROM BEHIND SILT FENCE SHALL BE STOCKPILED ON AN UPLAND PORTION OF THE SITE IF SUITABLE FOR REUSE.
3. SPECIAL ATTENTION SHALL BE PAID TO ENSURE THAT NO UNDERMINING OF SILT FENCE HAS OCCURRED AND THAT NO BYPASS IS OCCURRING AT JOINING SECTIONS.
4. IF EXCESS SEDIMENT IS ACCUMULATING IN ANY SECTION OF SILT FENCE, THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL UPSTREAM STABILIZATION MEASURES OR ADDITIONAL BMPS TO PREVENT EXCESSIVE BUILDUP ON SILT FENCE.
5. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED.

SFI

SILT FENCE INSTALLATION

N.T.S.

B.M.P.'s (BEST MANAGEMENT PRACTICES)

These plans addresses the following areas:

1. General erosion control.
2. Protection of surface water quality during and after construction
3. Control of wind erosion.

The various techniques or actions identified under each section indicate the appropriate situation when the techniques should be employed. It should be noted that the measures identified on this plan are only suggested BMP(s). The contractor shall provide pollution prevention and erosion control measures and as necessary for each specific application.

SECTION 1 GENERAL EROSION CONTROL

1.1 General erosion control BMPs shall be employed to minimize soil erosion and potential lake slope cave-ins. While the various techniques required will be site and plan specific, they should be employed as soon as possible during construction activities.

1.2 Cleared site development areas not continually scheduled for construction activities shall be covered with hay or overseeded and periodically watered sufficient to stabilize the temporary groundcover.

1.3 Slopes of banks of wet detention ponds shall be constructed not steeper than 4H:1V from top of bank to (3) feet below normal water level.

1.4 All grass slopes constructed 4H:1V and steeper shall be sodded as soon as practical after their construction.

1.5 Sod shall be placed for a 3-foot wide strip adjoining all curbing and around all inlets as required by plan. Sod shall be placed before silt barriers are removed.

1.6 Where required to prevent erosion from sheet flow across bare ground from entering a lake or swale, a temporary sediment sump shall be constructed. The temporary sediment sump shall remain in place until vegetation is established on the ground draining to the sump.

SECTION 2 PROTECTION OF SURFACE WATER QUALITY DURING & AFTER CONSTRUCTION

2.1 Surface water quality shall be maintained by employing the following BMPs, at a minimum, in the construction planning and construction of all improvements.

2.2 Where practical, stormwater shall be conveyed by swales.

2.3 Erosion control measures shall be employed to minimize turbidity of surface waters located downstream of any construction activity. While the various measures required will be site specific, they shall be employed as needed in accordance with the following:

a. In general, erosion shall be controlled at the furthest practical upstream location.

b. Stormwater inlets shall be protected during construction as shown. Protection measures shall be employed as soon as practical during the various stages of inlet construction. Silt barriers shall remain in place until sodding around inlets is complete.

2.4 Heavy construction equipment parking and maintenance areas shall be designed to prevent oil, grease, and lubricants from entering site drainage features including stormwater collection and treatment systems. Contractors shall provide broad dikes, hay bales or silt screens around, and sediment sumps within, such areas as required to contain spills of oil, grease or lubricants. Contractors shall have available, and shall use, absorbent filter pads to clean up spills as soon as possible after occurrence.

2.5 Silt barriers, any silt which accumulates behind the barriers, and any fill used to anchor the barriers shall be removed promptly after the end of the maintenance period specified for the barriers.

SECTION 3 CONTROL OF WIND EROSION

3.1 Wind erosion shall be controlled by employing the following methods as necessary and appropriate:

a. Bare earth areas shall be watered during construction as necessary to minimize the transport of fugitive dust. It may be necessary to limit construction vehicle speed if bare earth has not been effectively watered. In no case shall fugitive dust be allowed to leave the site under construction.

b. As soon as practical after completion of construction, bare earth areas shall be vegetated.

c. At any time both during and after site construction that watering and/or vegetation are not effective in controlling wind erosion and/or transport of fugitive dust, other methods as are necessary for such control shall be employed. These methods may include erection of dust control fences. If required, dust control fences shall be constructed in accordance with the detail for a silt fence, as shown, except the minimum height shall be 4 feet.

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

CREECH CONSULTING, INC.
CIVIL NETWORK ENGINEERED
PO BOX 327, STUART, FLORIDA 34994 (772) 485-2140
BOARD OF PROFESSIONAL ENGINEERS, CERTIFICATE OF AUTHORIZATION NUMBER 5139
PROFESSIONAL SURVEYORS AND MAPPERS, AMENDED CERTIFICATE NO. LB-0006705

DATE	BY	REVISIONS

YOUTH & FAMILY
BEHAVIORAL HEALTH CENTER INC
EROSION CONTROL DETAILS
FORT PIERCE FLORIDA

DRAWN BY:	JAC
CHECKED BY:	RTC / ANDREWS
LATITUDE:	27°26'5.40"N
LONGITUDE:	80°21'2.96"W
HORZ. SCALE:	
VERT. SCALE:	

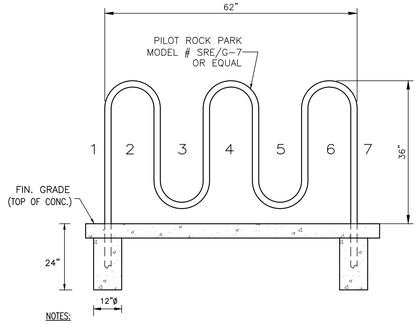
SEAL

06/02/2023
RICHARD CREECH
FL P.E. NO. 38592

SHEET D1

PROJECT NO. 22-016-001

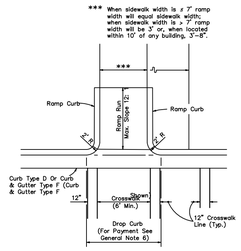
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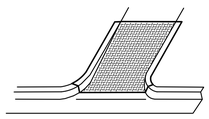
NOTES:

1. BIKE RACK SHALL BE EMBEDDED A INTO A 24" DEEP, 12" DIAMETER CONCRETE FOOTER

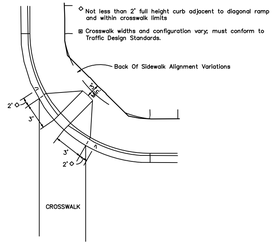
TYPICAL BIKE RACK DETAIL



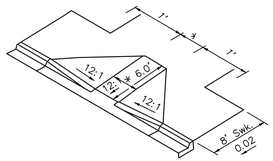
PLAN VIEW



PICTORIAL VIEW

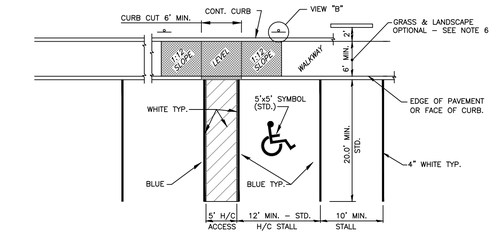


DIAGONAL RAMPS

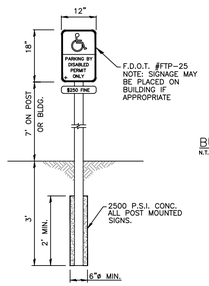


8' SIDEWALK RAMPS

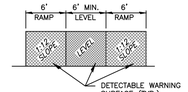
ACCESSIBLE RAMPS



HANDICAP PARKING STALL
N.T.S.



VIEW "B"
N.T.S.



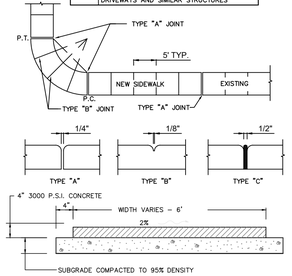
BUILT-UP CURB RAMP (NOTE 5)
N.T.S.

NOTES:

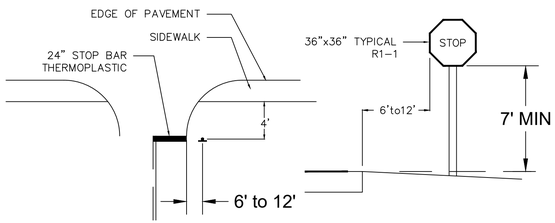
1. ACCESSIBILITY TO AND WITHIN BUILDINGS, INCLUDING THE PLACEMENT OF RAMPS, SHALL CONFORM TO THE LATEST EDITIONS OF THE D.C.A. ACCESSIBILITY MANUAL, CHAPTER 553, PART V, OF THE FLORIDA STATUTES AND THE F.D.O.T. ROADWAY & TRAFFIC DESIGN STANDARDS.
2. ALL PARKING STALLS SHALL BE DOUBLE STRIPED AND ALL STRIPING SHALL BE FOUR (4) INCHES WIDE.
3. HANDICAP ACCESWAY STRIPING SHALL BE LAID OUT ON 45° ANGLE SPACE AT 4' ON CENTER AS MEASURED ALONG THE ACCESSWAY.
4. BUILT-UP CURB RAMPS SHALL NOT PROJECT INTO TRAFFIC LANES.
5. AS AN OPTION, THE TWO FOOT PAVED AREA (FROM THE EDGE OF PAVEMENT OR CURB TO THE BACK OF THE WHEEL STOP) MAY BE LANDSCAPED IN LIEU OF ASPHALT. (SEE SECTION A–A).
6. THERMOPLASTIC STRIPING IS RECOMMENDED AT ALL WALKWAYS IN THE PARKING AREAS.
7. PAINT SHALL BE APPLIED AT A RATE THICK ENOUGH TO PROVIDE SOLID WHITE/BLUE/BLACK LINES WITH NO LIGHT SPOTS OR PAINT SKIPS (15 MILS MIN.).
8. PARKING STALL AREAS SHALL HAVE A MIN. OF 6" OF BASE COMPACTED TO 98% DRY DENSITY PER AASHTO T–180 SPEC. AND A MINIMUM OF 1" OF TYPE S–III PAVEMENT.

ACCESSIBLE PARKING, STALLS AND DETAILS

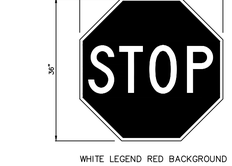
TABLE OF SIDEWALK JOINTS	
TYPE	LOCATION
"A"	P.C. AND P.T. OF CURVES
"B"	5'0" CENTER TO CENTER ON SIDEWALK
"C"	WHERE SIDEWALK ABUTS CONCRETE CURBS, DRIVEWAYS AND SIMILAR STRUCTURES



TYPICAL SIDEWALK DETAIL

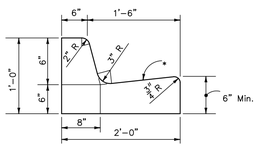


TYPICAL STOP SIGN LOCATION DETAIL

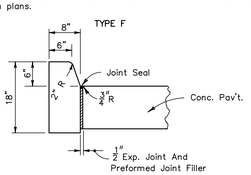


WHITE LEGEND RED BACKGROUND

R1-1 STOP SIGN DETAIL

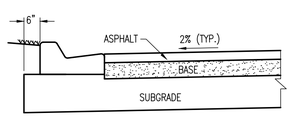


*Note: When used on high side of roadways, the cross slope of the gutter shall match the cross slope of the adjacent pavement the thickness of the lip shall be 6", unless otherwise shown on plans.



TYPE D

TYPICAL CURB DETAILS

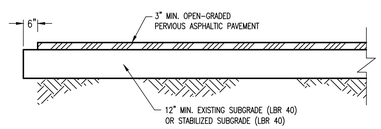


- SURFACE COURSE: 2" TYPE SP-12.5 ASPHALTIC CONCRETE
- BASE COURSE: 6" CRUSHED LIMEROCK WITH MIN. LBR 100 COMPACTED TO 98% MODIFIED PROCTOR MAX. DRY DENSITY
- SUBGRADE: 12" STABLIZED SUBGRADE (LBR-40) COMPACTED TO 98% MODIFIED PROCTOR MAX. DRY DENSITY

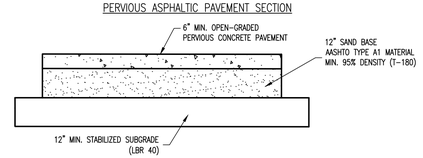
NOTES:

1. ASPHALT MIX SHALL NOT CONTAIN MORE THAN 30% RECLAIMED ASPHALT PAVEMENT (R.A.P.)
2. ALL MATERIAL USED WITHIN THE ROADWAY MUST MEET FDOT SPECIFICATIONS AND BE SUPPLIED FROM A FDOT CERTIFIED MINING OPERATION AND ASPHALT PLANT.
3. A MINIMUM OF TWO DENSITY TESTS SHALL BE TAKEN FOR EACH SIX (6) INCH LIFT OF SUB GRADE AND BASE. WHEN THE SPECIFIED COMPACTED BASE IS GREATER THAN SIX AND ONE-HALF (6 ½") INCHES THE BASE SHALL BE CONSTRUCTED IN TWO OR MORE COURSES. PROCTORS FOR MATERIALS USED IN BACK-FILLING SHALL BE OBTAINED BY A CERTIFIED LABORATORY. DENSITY TESTS SHALL BE CONDUCTED BY A CERTIFIED LABORATORY. THE PERCENTAGE OF MAXIMUM DENSITY REQUIRED SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS. A COPY OF ALL COMPLETED AND ACCEPTED DENSITY TESTS SHALL BE FURNISHED TO THE COUNTY ENGINEER'S OFFICE PRIOR TO FINAL INSPECTION.
4. ANY IN-LINE PARKING DEFICIENCIES SHALL BE ADDRESSED IN ACCORDANCE TO FDOT SPECIFICATION SECTION 330.

FLEXIBLE PAVEMENT DETAIL



PERVIOUS ASPHALTIC PAVEMENT SECTION



PERVIOUS CONCRETE PAVEMENT SECTION

NOTES:

1. THE PERVIOUS PAVEMENT CONTRACTOR SHALL BE APPROVED BY THE COUNTY ENGINEER AND MUST BE CERTIFIED BY THE NATIONAL READY MIX CONCRETE ASSOCIATION (NRMCA).
2. THE CONTRACTOR SHALL SUBMIT A PERVIOUS PAVEMENT MIX DESIGN TO THE COUNTY ENGINEER FOR APPROVAL.
3. PERVIOUS CONCRETE MIX SHALL HAVE 20% to 25% VOIDS, AN AGGREGATE TO CEMENT (A/C) RATIO BETWEEN 4.0 AND 4.5, AND A WATER TO CEMENT (W/C) RATIO BETWEEN 0.27 AND 0.36.
4. ALL MATERIAL USED WITHIN THE ROADWAY MUST MEET FDOT SPECIFICATIONS AND BE SUPPLIED FROM A FDOT CERTIFIED MINING OPERATION AND ASPHALT PLANT.
5. A MINIMUM OF TWO DENSITY TESTS SHALL BE TAKEN FOR EACH SIX (6) INCH LIFT OF SUB GRADE AND BASE. WHEN THE SPECIFIED COMPACTED BASE IS GREATER THAN SIX AND ONE–HALF (6 ½") INCHES THE BASE SHALL BE CONSTRUCTED IN TWO OR MORE COURSES. PROCTORS FOR MATERIALS USED IN BACK–FILLING SHALL BE OBTAINED BY A CERTIFIED LABORATORY. DENSITY TESTS SHALL BE CONDUCTED BY A CERTIFIED LABORATORY. THE PERCENTAGE OF MAXIMUM DENSITY REQUIRED SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS. A COPY OF ALL COMPLETED AND ACCEPTED DENSITY TESTS SHALL BE FURNISHED TO THE COUNTY ENGINEER'S OFFICE PRIOR TO FINAL INSPECTION.
6. CRUSHED CONCRETE MAY NOT BE USED WITHIN COUNTY–MAINTAINED ROADWAY.

PERVIOUS PAVEMENT DETAIL

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CREECH
CONSULTING, INC.
CIVIL/ELECTRICAL ENGINEERED
PO BOX 327, STUART, FLORIDA 34994 (772) 485-2140
BOARD OF PROFESSIONAL ENGINEERS, CERTIFICATE OF AUTHORIZATION NUMBER 5139
PROFESSIONAL SURVEYORS AND MAPPERS, AMENDED CERTIFICATE NO. LB-0006705

DATE	BY	REVISIONS

YOUTH & FAMILY
BEHAVIORAL HEALTH CENTER INC
PAVING, GRADING AND DRAINAGE DETAILS
FORT PIERCE FLORIDA

DRAWN BY:	JAC
CHECKED BY:	RTC / ANDREWS
LATITUDE:	27°26'5.40"N
LONGITUDE:	80°21'2.96"W
HORZ. SCALE:	
VERT. SCALE:	

SEAL

06/02/2023
RICHARD CREECH
FL P.E. NO. 38592

SHEET D2

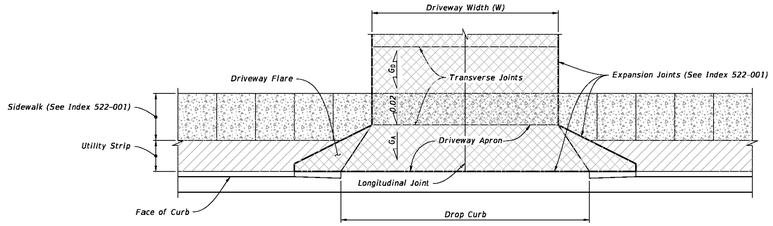
PROJECT NO. 22-016-001

GENERAL NOTES:

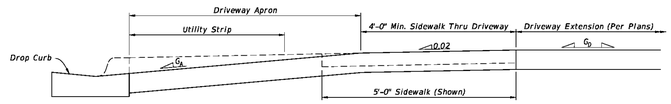
1. Work this Index with Specification 522.
2. Refer to Index 520-001 for drop curb details and Index 522-001 for joints between driveway, sidewalks, and curb.
3. Existing Curb and Gutter:
   Remove existing curb and gutter to either the nearest joint beyond the flared point or to where no remaining section is less than 5 feet long.
4. Grades and cross slopes shown are maximums.
5. Longitudinal Joints:
   Construct ½" open joints placed at equal (20' max.) intervals for driveways over 20' wide. Match joints in curb and gutter to match joints in driveways.
6. Transverse Joints:
   Construct ½" open joints @ 10' Centers and ½" expansion joints with preformed joint filler every 5th joint.
7. Construct driveways (6" thick concrete) to a uniform width (W) to the R/W line or the extent shown in the Plans.
8. Width of Sidewalk Thru Driveway is 4'-0" minimum. Match sidewalk width when shown in Plans or when utility strip width is equal to or greater than the depth of the Driveway Apron.
9. Alpha-Numeric Identification:
   Concrete Flared Driveway Alpha-Numeric Identifications (e.g. G4) are provided for reference purposes in the Plans.

LEGEND:

- Sidewalk
- Flared Driveway (6" Thick Concrete)
- Sidewalk Thru Driveway (6" Thick Concrete)
- Utility Strip
- G_A Grade of Apron
- G_D Grade of Driveway (Per Plans)



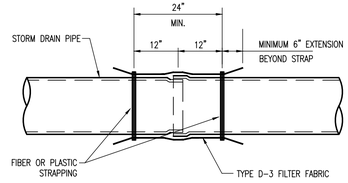
PLAN



ELEVATION

CONCRETE FLARED DRIVEWAY NOMENCLATURE

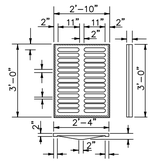
LAST REVISION	REVISION	DESCRIPTION:	FDOT	FY 2021-22 STANDARD PLANS	CONCRETE FLARED DRIVEWAYS	INDEX	SHEET
11/01/18						522-003	1 of 4



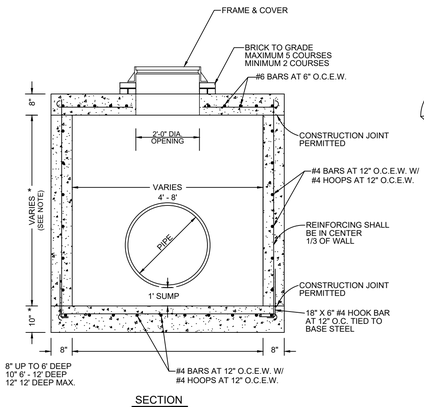
NOTES:

1. ALL PIPE LOCATED UNDER ROADWAYS AND/OR RESIDENTIAL PARKING AREAS SHALL BE REINFORCED CONCRETE PIPE (RCP).
2. MINIMUM PIPE DIAMETER SHALL BE 15" OR ELLIPTICAL EQUIVALENT.
3. FILTER FABRIC SHALL BE OVERLAPPED 2'-0" MINIMUM AT ALL JOINTS, INCLUDING ALL END TREATMENTS, REGARDLESS OF PIPE CULVERT MATERIAL.
4. A CONTINUOUS PIECE OF FILTER FABRIC, CONFORMING TO TYPE "D-3" OF FDOT STANDARD SPECIFICATIONS 985, SHALL BE USED AT ALL JOINTS, INCLUDING STRUCTURES AND END TREATMENTS.

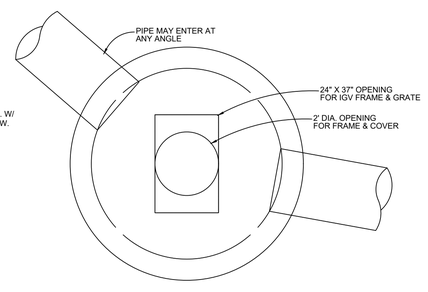
STORM DRAIN PIPE JOINT DETAIL



TYPICAL TYPE 'C' GRATE DETAIL
(TRAFFIC BEARING)

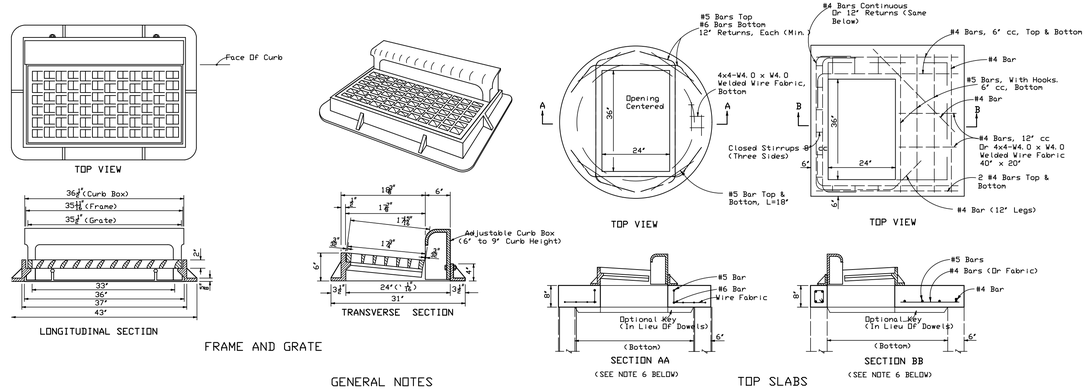


SECTION



TOP VIEW

4' Ø PRECAST MANHOLE
N.T.S.



GENERAL NOTES

TOP SLABS

1. THIS INLET IS PRIMARILY INTENDED FOR LOCATIONS WITH LIGHT TO MODERATE FLOWS WHERE RIGHT OF WAY DOES NOT PERMIT THE USE OF THROATED CURB INLETS TYPES 1 THROUGH 6. THE TYPICAL APPLICATION IS ON CURB RETURNS TO CITY STREETS. THE INLET GRATE IS SUITABLE FOR PEDESTRIAN AND BICYCLE TRAFFIC.
2. THIS INLET TO BE LOCATED IN VERTICAL FACED CURBS SUCH AS CURB AND GUTTER TYPE F. GRATE SHALL BE ORIENTED WITH VANES DIRECTED TOWARD PREDOMINATE FLOW. INLET TO BE LOCATED OUTSIDE PEDESTRIAN CROSSWALK WHERE PRACTICAL.
3. FOR STRUCTURE BOTTOMS SEE INDEX NO. 200. FOR SUPPLEMENTAL DETAILS SEE INDEX NO. 201.
4. ALL STEEL IN SLAB TOPS SHALL HAVE 1.25" MINIMUM COVER UNLESS OTHERWISE SHOWN. TOPS SHALL BE EITHER CAST-IN-PLACE OR PRECAST CONCRETE.
5. FOR ALTERNATE B APPLICATIONS, TOP SLAB OPENINGS SHALL BE PLACED SUCH THAT 2 EDGES OF INLET FRAME WILL BE LOCATED DIRECTLY ABOVE BOTTOM WALL OR RISER WALL.
6. WHEN USED ON A STRUCTURE WITH DIMENSIONS LARGER THAN THOSE DETAILED ABOVE AND RISERS ARE NOT APPLIED, THE TOP SLAB SHALL BE CONSTRUCTED USING INDEX 200 WITH THE SLAB OPENING ADJUST TO 24"/36". THE "SPECIAL TOP SLAB" ON INDEX 200 IS NOT PERMITTED.
7. FRAME MAY BE ADJUSTED WITH ONE TO SIX COURSES OF BRICK.
8. INLET AND GRATE DETAIL SHOWN IS NEENAH R-3067-L. VANED GRATES WITH APPROXIMATELY EQUAL OPENINGS WILL BE PERMITTED THAT SATISFY AASHTO H-20 LOADING. INLET AND GRATE SHALL BE CLASS 30 CASTINGS IN ACCORDANCE WITH ASTM A 48. GRATES SHALL BE REVERSIBLE, RIGHT OR LEFT.
9. CONTRACTOR TO USE EQUIVALENT GRATE, TO WHAT IS SHOWN THAT SATISFY AASHTO H-20 LOADING

TYPE 9 TOP

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GENERAL:

IT IS INTENDED THAT THE FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION "DESIGN STANDARDS", LATEST EDITION, BE USED WHERE APPLICABLE FOR VARIOUS WORK, AND THAT WHERE SUCH WORDING THEREIN REFERS TO THE STATE OF FLORIDA AND ITS DEPARTMENT OF TRANSPORTATION AND PERSONNEL, SUCH WORDING IS INTENDED TO BE REPLACED WITH THAT WORDING WHICH WOULD PROVIDE PROPER TERMINOLOGY, THEREBY MAKING SUCH "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AND "DESIGN STANDARDS" AS THE "STANDARD SPECIFICATIONS" FOR THIS PROJECT.

IF WITHIN THAT PARTICULAR SECTION ANOTHER SECTION, ARTICLE OR PARAGRAPH IS REFERRED TO, IT SHALL BE A PART OF THE "STANDARD SPECIFICATIONS" ALSO.

ALL WORK SHALL BE DONE IN A WORKMANLIKE MANNER AND SHALL CONFORM WITH ALL APPLICABLE CITY, COUNTY, STATE AND FEDERAL REGULATIONS AND/OR CODES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND LICENSES REQUIRED TO BEGIN WORK.

GENERAL NOTES:

1. THE CONTRACTOR SHALL GIVE THE ENGINEER AT LEAST 48 HOURS NOTICE PRIOR TO REQUESTING REQUIRED CONSTRUCTION OBSERVATIONS AND SHALL SUPPLY ALL EQUIPMENT NECESSARY TO PROPERLY TEST AND INSPECT THE COMPLETED WORK.

2. THE CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS FOR A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION, DURING WHICH TIME ALL FAULTY CONSTRUCTION AND/OR MATERIALS SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING ABOVE-GROUND, UNDERGROUND, AND ON THE SURFACE STRUCTURES AND UTILITIES AGAINST THE CONSTRUCTION OPERATION THAT MAY CAUSE DAMAGE TO SAID FACILITY.

4. STREET OR HIGHWAY RESTORATION WORK IS TO BE DONE AS PER THE LOCAL OR STATE AGENCY HAVING JURISDICTION.

5. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE RULES AND REGULATIONS OF THE STATE, COUNTY AND CITY AUTHORITIES REGARDING CLOSING OR RESTRICTING THE USE OF PUBLIC STREETS OR HIGHWAYS.

6. TRAFFIC CONTROL ON ALL CITY, 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.

6.a. THE MAINTENANCE OF TRAFFIC FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE FLORIDA D.O.T. DESIGN STANDARDS INDEX 600 SERIES, THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, AS A MINIMUM CRITERIA.

TRAFFIC DISRUPTIONS WHICH ARE NECESSARY TO CONSTRUCT THE PROJECT SHALL BE SUBMITTED IN WRITING TO THE ENGINEER AND APPROVAL SHALL BE OBTAINED AT LEAST 72 HOURS PRIOR TO THE COMMENCEMENT OF WORK. SUBMITTAL MATERIAL SHALL INCLUDE SKETCHES, CALCULATIONS AND OTHER DATA REQUIRED BY THE ENGINEER.

THE CONTRACTOR SHALL REMOVE OR COVER ANY EXISTING OR PROPOSED SIGNS OR PAVEMENT MARKINGS WHICH CONFLICT WITH THE TRAFFIC CONTROL PLANS. WHEN THE CONFLICT NO LONGER EXISTS, THE CONTRACTOR SHALL RESTORE THE SIGNS OR PAVEMENT MARKINGS TO THEIR ORIGINAL POSITION. REMOVAL OF EXISTING PAVEMENT MARKINGS NOT OTHERWISE REMOVED BY MILLING, SHALL BE ACCOMPLISHED BY HYDRO BLASTING OR BY METHODS APPROVED BY ENGINEER, THAT WILL ELIMINATE THE PREVIOUS MARKING PATTERN AND WILL NOT MATERIALLY DAMAGE THE SURFACE TEXTURE OF THE PAVEMENT. USE OF BLACK PAINT TO COVER EXISTING PAVEMENT MARKINGS IS PROHIBITED.

CONTRACTOR SHALL EMPLOY TEMPORARY BARRICADES BETWEEN DRIVE LANES AND EXCAVATED AREAS IN ACCORDANCE WITH FDOT INDEX 102-600.

NOTIFICATION OF LANE CLOSURES OR TEMPORARY DETOURS SHALL BE ACCOMPLISHED AT LEAST 30 DAYS PRIOR TO CLOSURE OR DETOUR BY SUBMITTING THE REQUIRED LANE CLOSURE FORM, SKETCHES, CALCULATIONS, AND OTHER DATA TO THE ENGINEER.

CONTACT LOCAL POLICE, FIRE RESCUE AND AMBULANCE SERVICES 24 HOURS PRIOR TO ANY AND ALL LANE SHIFTS AND OR CLOSURES.

THE CONTRACTOR SHALL PROVIDE THE SERVICES OF UNIFORMED OFF-DUTY POLICE OFFICERS TO SUPERVISE TRAFFIC CONTROL WHERE CONSTRUCTION OPERATIONS CAUSE TRAFFIC CONGESTION TO THE EXTENT THAT POLICE SUPERVISION IS NEEDED TO ASSURE PUBLIC SAFETY AND PROTECT THE WORK.

ALL LANES OF US1/SR5 (NORTHWEST FEDERAL HIGHWAY) MUST REMAIN OPEN FOR TRAFFIC DURING AN EVACUATION NOTICE OF HURRICANE OR OTHER CATASTROPHIC EVENT AND SHALL REMAIN OPEN FOR THE DURATION OF THE EMERGENCY AS DIRECTED BY THE ENGINEER.

6.b. THE CONTRACTOR SHALL PREPARE THE MAINTENANCE OF TRAFFIC PLAN FOR ALL PHASES OF THE WORK PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES. THE PLAN SHALL INDICATE THE TYPE AND LOCATION OF ALL SIGNS, LIGHTS, STRIPING AND BARRIERS TO BE USED FOR THE SAFE PASSAGE OF TRAFFIC AND PEDESTRIANS THROUGH THE PROJECT AREA AND FOR THE PROTECTION OF THE WORKERS. THE PLAN SHALL ALSO INDICATE CONDITIONS AND SETUPS FOR EACH PHASE OF WORK. THE PLAN SHALL PROVIDE FOR MAINTENANCE OF TWO-WAY TRAFFIC AT ALL TIMES WHERE PRACTICAL. PLAN SHALL BE SIGNED, SEALED AND SUBMITTED TO FDOT FOR APPROVAL AT LEAST ONE WEEK PRIOR TO THE PRE-CONSTRUCTION MEETING.

ALL WORK WITHIN THE FDOT RIGHT OF WAY SHALL BE GOVERNED BY THE CURRENT EDITION OF FDOT DESIGN STANDARDS, AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

6.c. ALL PAVEMENT MARKING SHALL BE THERMOPLASTIC PER FDOT STANDARDS.

ALL STRIPING SHALL BE IN ACCORDANCE WITH THE MOST CURRENT FDOT DESIGN STANDARD INDEX 711-001 AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 711 "THERMO PLASTIC TRAFFIC STRIPES AND MARKINGS", LATEST EDITION AND CITY OF STUART PUBLIC WORKS AND MUTCD LATEST EDITION.

INSTALL RETRO - REFLECTIVE PAVEMENT MARKERS (RPM'S) PER THE MOST CURRENT FDOT DESIGN STANDARD STANDARD INDEX 706-001 AND THE MOST CURRENT FDOT DESIGN STANDARD SPECIFICATIONS # 706.

7. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY WHEN A CONFLICT BETWEEN THE DRAWINGS AND ACTUAL CONDITIONS IS DISCOVERED DURING THE COURSE OF CONSTRUCTION.

8. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE PRIOR TO BIDDING THE WORK AND TO PERFORM SUCH TESTS, STUDIES AND SURVEYS AS HE DEEMS NECESSARY TO SATISFY HIMSELF AS TO ACTUAL SURFACE AND SUBSURFACE CONDITIONS EXISTING AT THE SITE. ACTUAL CONDITIONS THAT DIFFER FROM THOSE SHOWN ON DRAWINGS SHALL NOT CONSTITUTE A BASIS FOR ADDITIONAL PAYMENT.

9. ALL ELEVATIONS REFER TO N.A.V.D. 1988 DATUM, UNLESS OTHERWISE NOTED.

10. ALL CONSTRUCTION DEWATERING (WELL POINTS, SUMPS ETC.) WILL REQUIRE A DEWATERING PERMIT FROM THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT.

11. ANY CHANGES DUE TO FIELD CONDITIONS OR ANY OTHER DEVIATIONS FROM THE APPROVED DRAWINGS MUST BE APPROVED BY THE ENGINEER AND THE GOVERNING AUTHORITY HAVING JURISDICTION PRIOR TO BEING CONSTRUCTED.

12. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES: ONE (1) SET OF "APPROVED" CONSTRUCTION DRAWINGS, ONE (1) COPY OF THE APPLICABLE UTILITY COMPANY'S "MINIMUM DESIGN AND CONSTRUCTION STANDARDS", ONE (1) COPY OF ALL CONTRACT DOCUMENTS AND, ONE (1) COPY OF ALL APPLICABLE LOCAL, STATE AND FEDERAL PERMITS REQUIRED FOR CONSTRUCTION.

13. THE CONTRACTOR SHALL PROVIDE A QUALIFIED SUPERINTENDENT TO REMAIN AT THE JOB SITE AT ALL TIMES WHEN WORK IS BEING PERFORMED. THE SUPERINTENDENT SHALL BE PRESENT AT ALL SCHEDULED CONSTRUCTION OBSERVATION MEETINGS.

14. THE CONTRACTOR SHALL BE SOLEY RESPONSIBLE FOR THE PROPER MAINTENANCE AND SAFE CONTROL OF TRAFFIC AND PEDESTRIANS AT ALL TIMES FOR THE DURATION OF CONSTRUCTION. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION OR TIME EXTENSION SHALL BE ALLOWED.

SEDIMENTATION AND EROSION CONTROL:

PRIOR TO AND DURING CONSTRUCTION, THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN ALL SEDIMENTATION AND EROSION CONTROL MEASURES REQUIRED TO RETAIN SEDIMENT ON SITE AND TO PREVENT VIOLATIONS OF STATE WATER QUALITY STANDARDS. SEDIMENTATION AND EROSION CONTROL FEATURES MAY INCLUDE, BUT ARE NOT LIMITED TO, SILT FENCES, SILTATION BARRIERS, GEOTEXTILE FILTER BARRIERS, TURBIDITY SCREENS AND SEDIMENTATION BASINS. CONSTRUCTION AND MAINTENANCE OF SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH SECTION 104 OF THE STANDARD SPECIFICATIONS.

THE CONTRACTOR SHALL CONSTRUCT AND MAINTAIN ALL REQUIRED SEDIMENTATION AND EROSION CONTROL MEASURES FOR THE DURATION OF CONSTRUCTION.

STABILIZATION MEASURES, INCLUDING BUT NOT LIMITED TO, SODDING OR SEEDING AND MULCHING, SHALL BE INITIATED FOR SEDIMENTATION AND EROSION CONTROL ON ALL DISTURBED AREAS AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN SEVEN (7) DAYS AFTER CONSTRUCTION ACTIVITY HAS CEASED. THE CONTRACTOR SHALL INSPECT ALL SEDIMENTATION AND EROSION CONTROL MEASURES DAILY DURING CONSTRUCTION. ANY DEFICIENCIES SHALL BE IMMEDIATELY CORRECTED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY OFF SITE WATER QUALITY IMPACTS OR OTHER ADVERSE IMPACTS DUE TO SEDIMENTATION AND EROSION FROM THE PROJECT SITE DURING CONSTRUCTION.

SUGGESTED SEQUENCE FOR EROSION & SEDIMENTATION CONTROL

1. FLAG AND FENCE ALL WORK LIMITS.

2. NOTIFY THE COUNTY SEDIMENT CONTROL INSPECTOR AT LEAST (72) HOURS PRIOR TO START OF CONSTRUCTION.

3. PERFORM CLEARING AND GRADING REQUIRED FOR INSTALLATION OF PERIMETER CONTROLS.

4. INSTALL PERIMETER RUNOFF CONTROLS; NOTIFY SEDIMENT INSPECTOR AND OBTAIN APPROVAL BEFORE PROCEEDING FURTHER.

5. NO ADDITIONAL LAND CLEARING SHALL COMMENCE UNTIL A SATISFACTORY INSPECTION OF THE REQUIRED EROSION CONTROL BARRICADES HAS BEEN OBTAINED.

6. COMPLETE ALL REQUIRED STOCKPILING, SITE CLEARING, AND GRADING. STOCKPILE ANY EXCESS TOPSOIL OR OTHER EXCAVATED SOIL IN APPROVED STOCKPILES OR REMOVE FROM SITE. AND DISPOSE OF AT A PERMITTED SITE.

CLEARING AND GRUBBING:

ALL TREES, BRUSH, STUMPS, ROOTS, GRASS, WEEDS, RUBBISH AND ALL OTHER OBSTRUCTIONS RESTING ON OR LYING WITHIN 12" BELOW FINISHED GRADE OR SUBGRADE SHALL BE COMPLETELY REMOVED WITHIN ALL AREAS OF CONSTRUCTION AS SHOWN ON THE DRAWINGS. ALL WORK SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS. CLEANING AND GRUBBING AREAS TO BE INSPECTED AND APPROVED PRIOR TO ANY FILL OR CONSTRUCTION WORK. ALL MATERIAL FROM CLEARING AND GRUBBING SHALL BE REMOVED AND LEGALLY DISPOSED OF.

DEMOLITION:

1. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSAL (IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES) ALL STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, PARKING, DRIVES, DRAINAGE, STRUCTURES, UTILITIES, ETC., SUCH THAT THE IMPROVEMENTS SHOWN ON THE REMAINING PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE SPECIFICATIONS.

2. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE SITE AND DISPOSING THE DEBRIS IN A LAWFUL MANNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.

3. THE CONTRACTOR SHALL MAINTAIN ALL UTILITY SERVICES TO EXISTING USERS AND AT ALL TIMES.UTILITY SERVICES SHALL NOT BE INTERRUPTED WITHOUT APPROVAL FROM OWNER.

4. THE CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY'S FORCES AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES.

5. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR ONSITE LOCATIONS OF EXISTING UTILITIES.

6. ALL EXISTING SEWERS, PIPING AND UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PROCEEDING WITH THE WORK. UTILITIES DETERMINED TO BE ABANDONED AND LEFT IN PLACE SHALL BE GROUTED IF UNDER BUILDING.

7. ELECTRICAL, TELEPHONE, CABLE, WATER, FIBER OPTIC CABLE AND/OR GAS LINES NEEDING TO BE REMOVED OR RELOCATED SHALL BE COORDINATED WITH THE AFFECTED UTILITY COMPANY. ADEQUATE TIME SHALL BE PROVIDED FOR RELOCATION AND CLOSE COORDINATION WITH THE UTILITY COMPANY IS NECESSARY TO PROVIDE A SMOOTH TRANSITION IN UTILITY SERVICE. CONTRACTOR SHALL PAY CLOSE ATTENTION TO EXISTING UTILITIES WITHIN THE ANY ROAD RIGHT OF WAY DURING CONSTRUCTION.

8. CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, (AND OTHER APPROPRIATE BEST MANAGEMENT PRACTICES).

9. PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED.

10. SHOULD REMOVAL AND/OR RELOCATION ACTIVITIES DAMAGE EXISTING STRUCTURES, THE CONTRACTOR SHALL PROVIDE NEW MATERIALS/ STRUCTURES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. EXCEPT FOR MATERIALS DESIGNED TO BE RELOCATED ON THIS PLAN, ALL OTHER CONSTRUCTION MATERIALS SHALL BE NEW.

11. CONTRACTOR MAY LIMIT SAW-CUT & PAVEMENT REMOVAL TO ONLY THOSE AREAS WHERE IT IS REQUIRED AS SHOWN ON THESE CONSTRUCTION PLANS BUT IF ANY DAMAGE IS INCURRED ON ANY OF THE SURROUNDING PAVEMENT, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IT'S REMOVAL AND REPAIR.

12. THE CONTRACTOR SHALL COORDINATE WATER MAIN WORK WITH THE COUNTY UTILITY DEPARTMENT TO PLAN PROPOSED IMPROVEMENTS.

13. DAMAGE TO ANY EXISTING CONDITIONS TO REMAIN WILL BE REPLACED AT CONTRACTOR'S EXPENSE.

14. CONTRACTOR SHALL PROTECT ALL AREAS OUTSIDE OF LIMIT OF CLEARING.

BURNING:

BURNING IS NOT ALLOWED.

EXCAVATION:

THE CONTRACTOR SHALL PERFORM ALL EXCAVATION NECESSARY TO ACCOMPLISH THE CONSTRUCTION INDICATED ON THE DRAWINGS. EXCAVATION SHALL BE UNCLASSIFIED REGARDLESS OF MATERIAL ENCOUNTERED. ALL EXCAVATED MATERIAL NOT REQUIRED FOR FILL OR EMBANKMENT, SHALL BE REMOVED FROM THE SITE. AS DIRECTED BY THE OWNER, OR HIS REPRESENTATIVE. THE CONTRACTOR SHALL DO ALL SHORING NECESSARY TO PERFORM AND PROTECT THE EXCAVATION, AND AS NECESSARY FOR THE SAFETY OF THE WORKERS AND ANY EXISTING FACILITIES IN ACCORDANCE WITH THE STATE OF FLORIDA "TRENCH SAFETY ACT", WHEREVER EXCAVATIONS ARE MADE BELOW THE GRADES INDICATED ON THE DRAWINGS, CLEAN FIRM MATERIAL APPROVED BY THE ENGINEER SHALL BE USED TO RESTORE THE AREA TO THE PROPER GRADE, AND SHALL BE COMPACTED IN ACCORDANCE WITH THE REQUIREMENTS FOR COMPACTION INCLUDED IN THESE SPECIFICATIONS.

UNSUITABLE MATERIAL:

WHERE MUCK, ROCK, CLAY, ORGANIC MATERIAL OR OTHER DELETERIOUS MATERIAL WITHIN THE LIMITS OF CONSTRUCTION IS, IN THE OPINION OF THE ENGINEER, UNSUITABLE IN ITS ORIGINAL POSITION, THE CONTRACTOR SHALL EXCAVATE SUCH MATERIAL, AND BACKFILL THE EXCAVATED AREA WITH SUITABLE MATERIAL, WHICH SHALL BE COMPACTED AND SHAPED TO CONFORM TO THE REQUIRED SECTION. BACKFILL MATERIAL AND COMPACTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS INCLUDED IN THESE SPECIFICATIONS.

SELECT FILL:

A. THIS WORK SHALL CONSIST OF FURNISHING AND PLACING THE MATERIALS REQUIRED FOR FILL OR EMBANKMENT FOR THE CONSTRUCTION AS SHOWN ON THE DRAWINGS. THE MATERIAL USED FOR EMBANKMENT SHALL BE CLEAN UNIFORM FREE DRAINING GRANULAR SOIL CONSISTING OF SAND, GRAVEL, OR A MIXTURE THEREOF, AND/OR OTHER SUITABLE MATERIAL APPROVED BY THE ENGINEER. IF THE MATERIALS ARE OF A VARIABLE QUALITY, THE CONTRACTOR SHALL PLAN HIS OPERATIONS SO THAT THE UPPER TWO FEET OF THE FILL IS CONSTRUCTED OF SELECTED MATERIALS AS APPROVED AND DIRECTED BY THE ENGINEER.

B. PRIOR TO PLACING ANY FILL, THE SURFACE TO RECEIVE THE FILL, SHALL BE PLOWED OR SCARIFIED. FILL SHALL BE PLACED IN SUCCESSIVE UNIFORM LAYERS TWELVE INCHES (12"), MEASURED LOOSE, OR AS APPROVED BY THE ENGINEER. EACH LAYER WILL THEN BE COMPACTED BY AN APPROVED METHOD IN ACCORDANCE WITH THE REQUIREMENTS FOR COMPACTION INCLUDED IN THESE SPECIFICATIONS. THE COMPACTION SHALL BE VERIFIED THROUGH TESTING AS INDICATED IN THE TESTING SPECIFICATIONS.

BACKFILL:

ALL BACKFILL MATERIAL SHALL BE CLEAN, UNIFORM, FREE DRAINING SOIL AND FREE OF LUMBER, TRASH OR OTHER DEBRIS, AND SHALL BE THOROUGHLY COMPACTED IN LAYERS NOT TO EXCEED TWELVE INCHES (12"), MEASURED LOOSE AND BROUGHT TO AN ELEVATION ABOVE THE FINISHED GRADE, SUFFICIENT TO ALLOW FOR SETTLEMENT. PRIOR TO PLACING BACKFILL, THE AREAS AROUND STRUCTURES UPON WHICH THE BACKFILL IS TO BE PLACED, SHALL BE CLEANED OF ALL TRASH AND DEBRIS OF ANY NATURE. SHEETING AND BRACING ALLOWED TO BE LEFT IN PLACE SHALL BE CUT OFF A MINIMUM OF 2.5 FEET BELOW FINISHED GRADE. COMPACTION FOR EACH LIFT SHALL BE EQUAL TO 100% OF MAXIMUM DENISTY AS DETERMINED BY AASHTO T-99.

GRADING:

THE CONTRACTOR SHALL PERFORM ALL NECESSARY GRADING TO ACHIEVE THE FINISHED GRADING AS PER THE DRAWINGS. ALL WORKMANSHIP SHALL BE IN ACCORDANCE WITH THESE SPECIFICATIONS.

THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE EPA, FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP), NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) "GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES" AND THE PROJECT SPECIFICATIONS.

PROPOSED GRADE ELEVATIONS SHOWN ARE AT THE EDGE OF PAVEMENT LINE OF UNLESS OTHERWISE NOTED.

COMPACTION:

ALL AREAS TO BE COMPACTED SHALL BE MOISTENED AND COMPACTED BY TAMPING OR USE OF VIBRATORY ROLLERS, VIBRATORY PLATE COMPACTORS OR ANY OTHER METHOD APPROVED BY THE ENGINEER IN ORDER TO OBTAIN THE REQUIRED DENSITY. WHERE USE OF VIBRATORY EQUIPMENT MAY AFFECT ADJACENT STRUCTURES, COMPACTION SHALL BE PERFORMED USING OTHER EQUIPMENT THAT WILL SATISFY THE DENSITY REQUIREMENTS WITHOUT DAMAGING EXISTING STRUCTURES. THE CONTRACTOR SHALL INSPECT ALL COMPACTED AREAS PRIOR TO FURTHER CONSTRUCTION OPERATIONS, TO ENSURE THAT SATISFACTORY COMPACTION HAS BEEN OBTAINED. ALL EMBANKMENT, INCLUDING BACKFILL AND EMBANKMENT ADJACENT TO STRUCTURES, SHALL BE COMPACTED TO A DENSITY OF NOT LESS THAN 100 PERCENT (100%) OF THE MAXIMUM DENSITY, AS DETERMINED BY AASHTO T-99.

THE CONTRACTOR SHALL PAY PARTICULAR ATTENTION TO COMPACTION IN AREAS AROUND STRUCTURES AND OTHER FEATURES WHERE ACCESS BY SELF PROPELLED VIBRATORY COMPACTORS MAY BE DIFFICULT.

BACKFILL AND COMPACTION WITHIN PIPE TRENCHES SHALL BE IN ACCORDANCE WITH THE TYPICAL TRENCH DETAIL SHOWN ON THE DRAWINGS. FOR NON-FLEXIBLE PIPE MATERIALS, ALL BACKFILL SHALL BE COMPACTED TO NOT LESS THAN 100 PERCENT (100%) OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99. FOR FLEXIBLE PIPE MATERIALS, ALL BACKFILL SHALL BE COMPACTED TO NOT LESS THAN 95 PERCENT (95%) OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99.

DENSITY TESTING

THE TESTING LABORATORY SHALL FORWARD COPIES OF ALL TEST REPORTS TO THE ENGINEER, CONTRACTOR, AND OWNER.

STABILIZED SUBGRADE:

STABILIZED SUBGRADE SHALL BE CONSTRUCTED TO DEPTH AND LIMITS SHOWN ON THE PLAN, AND IN ACCORDANCE WITH SECTION 160 OF THE STANDARD SPECIFICATIONS FOR TYPE C STABILIZATION. THE STABILIZED SUBGRADE SHALL BE CONSTRUCTED TO A LIMEROCK BEARING RATIO (LBR) OF NOT LESS THAN 40 AND SHALL BE COMPACTED TO NOT LESS THAN 98% OF THE MAXIMUM DENSITY AS DETERMINED BY MODIFIED PROCTOR AASHTO T-180.

COMPACTED SUBGRADE:

COMPACTED SUBGRADE SHALL BE CONSTRUCTED TO THE DEPTH AND LIMITS SHOWN ON THE DRAWINGS. ALL COMPACTED SUBGRADE SHALL BE COMPACTED TO NOT LESS THAN 98% OF THE MAXIMUM DENSITY AS DETERMINED BY MODIFIED PROCTOR AASHTO T-180.

ROCK BASE:

ROCK BASE SHALL BE CONSTRUCTED OF EITHER LIMEROCK MATERIAL OR CEMENTED COQUINA SHELL MATERIAL IN ACCORDANCE WITH SECTION 911 OF THE STANDARD SPECIFICATIONS.

THE CONTRACTOR SHALL PROVIDE ROCK PIT CERTIFICATION FOR CEMENTED COQUINA SHELL MATERIAL.

ROCK BASE SHALL BE CONSTRUCTED TO THE DEPTH AND LIMITS AS SHOWN ON THE DRAWINGS. THE ROCK BASE MATERIAL SHALL HAVE A LIMEROCK BEARING RATIO (LBR) OF NOT LESS THAN 100. THE ROCK BASE SHALL BE COMPACTED TO NOT LESS THAN 98% OF THE MAXIMUM DENSITY AS DETERMINED BY MODIFIED PROCTOR ASTM D-1557. A PRIME COAT AND SAND SEAL SHALL BE APPLIED TO THE ROCK BASE AFTER CONSTRUCTION INSPECTION AND APPROVAL BY THE ENGINEER.

PRIME AND TACK COAT:

A BITUMINOUS PRIME COAT SHALL BE APPLIED TO THE ROCK BASE. PRIME COAT SHALL BE CUT BACK ASPHALT GRADE RC-70 OR RC-250 APPLIED AT A RATE OF NOT LESS THAN 0.10 GALLONS PER SQUARE YARD. THE PRIME COAT SHALL BE COVERED WITH SAND FREE FROM ANY APPRECIABLE AMOUNT OF SILT, CLAY, TRASH OR ORGANIC MATTER. A TACK COAT, WHERE SPECIFIED ON THE DRAWINGS, SHALL BE EMULSIFIED ASPHALT GRADES RS-1 AND RS-2 APPLIED AT A RATE OF BETWEEN 0.02 AND 0.08 GALLONS PER SQUARE YARD.

CONSTRUCTION OF THE PRIME AND TACK COATS SHALL BE IN ACCORDANCE WITH SECTION 300 OF THE STANDARD SPECIFICATIONS. BITUMINOUS MATERIALS FOR THE PRIME AND TACK COATS SHALL BE IN ACCORDANCE WITH SECTION 300 OF THE STANDARD SPECIFICATIONS.

ASPHALTIC CONCRETE SURFACE COURSE (A.C.S.C.):

THE A.C.S.C. SHALL BE CONSTRUCTED FOR THE DEPTH AND LIMITS SHOWN ON THE DRAWINGS, IN ACCORDANCE WITH SECTIONS 330 AND 334 OF THE STANDARD SPECIFICATIONS. A.C.S.C. SHALL HAVE A MARSHALL STABILITY OF NOT LESS THAN 1,500 LBS. BITUMINOUS MATERIAL SHALL BE ASPHALT CEMENT VISCOSITY GRADE AC-20 IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

TESTING:

THE OWNER SHALL PROVIDE THE SPECS AND SCOPE OF SERVICES FOR THE INDEPENDENT TESTING LABORATORY TO CONDUCT ALL REQUIRED TESTS. THE ENGINEER SHALL BE PRESENT FOR ALL TESTING. THE CONTRACTOR SHALL GIVE THE ENGINEER AT LEAST FOUR-EIGHT (48) HOURS NOTICE PRIOR TO ANY SCHEDULED TESTING. TEST RESULTS MUST BE SUBMITTED TO THE ENGINEER PRIOR TO FINAL CERTIFICATION OR ANY REQUEST FOR PAYMENT ON THE ABOVE ITEMS. SEE ARCHTECTURAL SPECIFICATIONS FOR REQUIREMENTS WITHIN LIMITS OF BUILDING PADS.

THE SCHEDULE FOR TESTING OF ROADWAY AND PARKING CONSTRUCTION SHALL BE AS FOLLOWS:

A. SUBGRADE:
1. SAMPLES OF SUBGRADE MATERIAL SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 5,000 SF, OR CLOSER AS MIGHT BE NECESSARY IN THE EVENT OF VARIATIONS IN SUBSOIL CONDITIONS. LIMEROCK BEARING RATIO (LBR) TESTS SHALL BE PERFORMED ON A COMPOSITE OF SAMPLES OF SUBGRADE MATERIALS, CONSISTING OF MATERIAL FROM CONSECUTIVES SAMPLES, SUCH THAT ONE (1) LBR TEST IS PERFORMED AT INTERVALS OF NOT MORE THAN 20,000 SQUARE FEET.

2. DENSITY TESTS SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 5000 SQUARE FEET OR CLOSER AS MIGHT BE NECESSARY.

B. BASE:
1. SAMPLES OF BASE MATERIAL SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 10,000 SF, OR CLOSER AS MIGHT BE NECESSARY IN THE EVENT OF VARIATIONS IN THE ROCK BASE MATERIAL. LIMEROCK BEARING RATIO (LBR) TESTS SHALL BE PERFORMED ON A COMPOSITE OF SAMPLES OF BASE MATERIALS, CONSISTING OF MATERIAL FROM CONSECUTIVE SAMPLES, SUCH THAT ONE (1) LBR TEST IS PERFORMED AT INTERVALS OF NOT MORE THAN 40,000 SQUARE FEET.

2. DENSITY TESTS SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 10,000 SF OR CLOSER AS MIGHT BE NECESSARY.

NOTE: A "NON-SOAKED" LBR TEST MAY BE USED IN LIEU OF A "STANDARD" (SOAKED) LBR TEST, PROVIDED THAT THE REQUIREMENT FOR ACCEPTANCE IS INCREASED BY 5 UNITS. I.e. "STANDARD" LBR=40, "NON-SOAKED" LBR=45

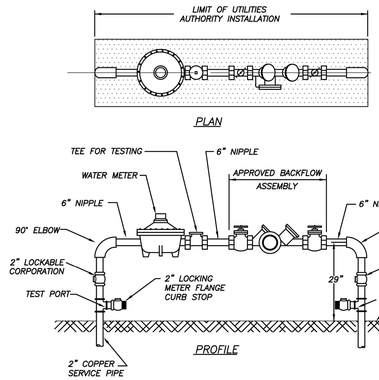
C. SELECT FILL
1. REPRESENTATIVE SAMPLES OF SELECT FILL MATERIAL SHALL BE TAKEN FOR EACH SOIL TYPE TO BE USED FOR FILL. AT MINIMUM, EACH SAMPLE SHALL BE TESTED TO DETERMINE GRADATION, CLASSIFICATION AND MAXIMUM DRY DENSITY. ADDITIONAL TESTING MAY BE REQUIRED AS INDICATED HEREIN OR AS DETERMINED BY THE ENGINEER DURING CONSTRUCTION.

D. REPORTS
1. ALL SAMPLES TAKEN SHALL BE UNIQUELY NUMBERED
2. ALL FIELD DENISTY TESTS SHAL REFER TO UNIQUELY NUMBERED SAMPLES FOR DETERMINATION OF ADEQUATE COMPACTION.
3. THE GEOTECHNICAL ENGINEER SHALL RECORD THE LOCATION OF EACH TEST ON A COPY OF THE SITE PLAN, ALONG WITH THE EXTENT OF THE FILL PLACED.

IF ANY TEST INDICATES THAT THE WORK DOES NOT MEET THE SPECIFICATIONS, THE SUBSTANDARD AREA SHALL BE REWORKED OR CORRECTED AND RETESTED, AT THE CONTRACTOR'S EXPENSE, UNTIL THE PROVISIONS OF THESE SPECIFICATIONS ARE MET. ALL FAILING TESTS SHALL BE PAID FOR BY THE CONTRACTOR.

CONCRETE:

UNLESS OTHERWIS

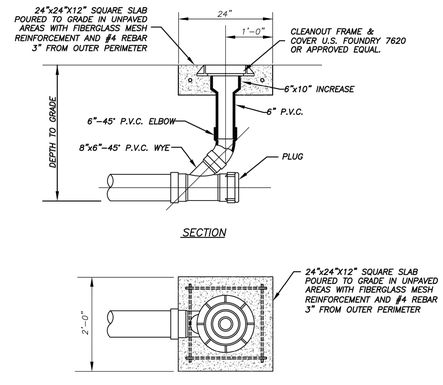


NOTES:

1. LANDSCAPING REQUIRED PER CITY OF FORT PIERCE OR ST. LUCIE COUNTY ORDINANCE. NO PLANTS OR TREES WITHIN 18" AROUND METER OR BACKFLOW. NO SOLDER JOINTS.
2. ASSEMBLY TO BE 29" FROM FINISH GRADE TO CENTERLINE OF THE FLANGED 90° BEND.

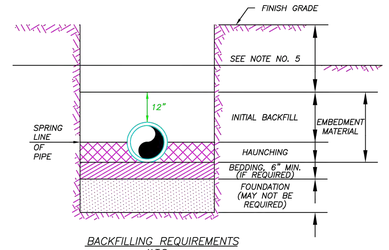
WATER METER/BACKFLOW PREVENTER ASSEMBLY
DOMESTIC SERVICE (COMMERCIAL)
(N.T.S.)

FPUA COMMUNITY PROUD — FT. PIERCE UTILITIES AUTHORITY WATER/WASTEWATER ENGINEERING 1701 SOUTH 5TH STREET FT. PIERCE, FLORIDA 34947 772-466-1600	WATER METER/BACKFLOW PREVENTER ASSEMBLY--DOMESTIC SERVICES (METER SIZE 2" OR LESS)		W-8
03-09 DESIGN	REVISION:	SLL BY:	JLC APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # WATER DETAILS 200602.DWG			FT. PIERCE UTILITIES AUTHORITY
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TERMINAL CLEANOUT DETAIL (COMMERCIAL)
(N.T.S.)

FPUA COMMUNITY PROUD — FT. PIERCE UTILITIES AUTHORITY WATER/WASTEWATER ENGINEERING 1701 SOUTH 5TH STREET FT. PIERCE, FLORIDA 34947 772-466-1600	TERMINAL CLEANOUT DETAIL WASTEWATER		S-4B
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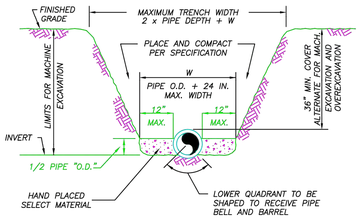


BACKFILLING REQUIREMENTS
N.T.S.

NOTES:

1) IN CERTAIN SOIL CONDITIONS A FOUNDATION MAY BE REQUIRED.
2) BEDDING IS REQUIRED PRIMARILY TO BRING THE TRENCH BOTTOM UP TO GRADE. BEDDING MATERIALS SHALL PROVIDE A UNIFORM AND ADEQUATE LONGITUDINAL SUPPORT UNDER THE PIPE.
3) HAUNCHING MATERIAL SHALL BE HAND PLACED TO THE SPRINGLINE OF THE PIPE. MATERIAL SHALL BE CONSOLIDATED UNDER THE PIPE AND HAND TAMPED TO PROVIDE ADEQUATE SIDE SUPPORT.
4) INITIAL BACKFILL MATERIAL SHALL BE HAND PLACED TO 12" ABOVE THE TOP OF PIPE. THE SOIL SHALL BE COMPACTED TO 100% MAX. DENSITY.(AASHTO T-99)
5) BACKFILL SHALL BE COMPACTED TO 100% OF MAX. DENSITY AS PER AASHTO T-99, TO A POINT 30" BELOW PROPOSED PROFILE GRADE OR EXISTING GRADE. THE FINAL 30" OF BACKFILL SHALL BE COMPACTED TO 98% OF MAX. DENSITY AS PER AASHTO T-180.
6) DENSITY TEST SHALL BE PERFORMED AT AREAS DETERMINED BY THE UTILITIES ENGINEER OR PERMIT AGENCY HAVING JURISDICTION, AT THE CONTRACTORS EXPENSE.
7) CONTRACTOR TO COMPLY WITH ALL FEDERAL, STATE AND LOCAL TRENCH SAFETY REGULATIONS.

FPUA COMMUNITY PROUD — FT. PIERCE UTILITIES AUTHORITY WATER/WASTEWATER ENGINEERING 1701 SOUTH 5TH STREET FT. PIERCE, FLORIDA 34947 772-466-1600	BACKFILLING REQUIREMENTS		M-2
03-09 CONCRETE SLAB	REVISION:	SLL BY:	JLC APPD:	WATER/WASTEWATER ENGINEERING
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APPROVED: JLC	DATE: 2015	SHEET 1 OF 1		



NOTES:

1) THE CONTRACTOR SHALL COMPLY WITH REQUIREMENTS OF THE FLORIDA TRENCH SAFETY ACT.
2) INITIAL BACKFILL SHALL BE HAND PLACED TO 12" ABOVE THE PIPE. BACKFILL SHALL BE MECHANICALLY TAMPED TO A MINIMUM OF 100% OF MAX. DENSITY AS DETERMINED BY AASHTO METHOD T-99.

TYPICAL TRENCH DETAIL
N.T.S.

FPUA COMMUNITY PROUD — FT. PIERCE UTILITIES AUTHORITY WATER/WASTEWATER ENGINEERING 1701 SOUTH 5TH STREET FT. PIERCE, FLORIDA 34947 772-466-1600	TYPICAL TRENCH DETAIL		M-1
03-09 CONCRETE SLAB	REVISION:	SLL BY:	JLC APPD:	WATER/WASTEWATER ENGINEERING
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APPROVED: JLC	DATE: 2015	SHEET 1 OF 1		

FORT PIERCE UTILITIES AUTHORITY
WATER DISTRIBUTION NOTES

1. ALL CONSTRUCTION MATERIAL, INSTALLATION AND TESTING SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE FORT PIERCE UTILITIES AUTHORITY.
2. WATER MAINS WHERE SPECIFIED AS POLYVINYL CHLORIDE (PVC) SHALL CONFORM TO AWWA C-900 OR C-905, PRESSURE CLASS 150, DR (18). WATER MAINS WHERE SPECIFIED AS POLYETHYLENE (PE) SHALL CONFORM TO AWWA C-901 OR C-906, STANDARD CODE DESIGNATION PE3408, PIPE CLASS 200, DIMENSION RATIO (DR) 17 FOR DIRECT BURY, (DR) 11 FOR DIRECTIONAL BORING, AND (DR) 9 FOR 2 INCH AND SMALLER PIPELINES.
3. WATER MAIN, WHERE SPECIFIED AS DUCTILE IRON PIPE , SHALL CONFORM TO ANSI/AWWA C151/A21.51 AND SHALL BE PRESSURE CLASS 250 (MINIMUM).
4. POLYVINYL CHLORIDE WATER MAIN SHALL BE BLUE IN COLOR OR WHITE IN COLOR WITH BLUE STRIPES. THE USE OF IDENTIFICATION TAPE ATTACHED TO THE TOP OF THE PIPE MAY BE USED IN LIEU OF MARKING ON THE PIPE, ALSO DIP PIPE SHALL REQUIRE THE USE OF IDENTIFICATION TAPE AND THHN WIRE.
5. FITTINGS SHALL BE DUCTILE IRON CONFORMING TO ANSI/AWWA C-110/A21.10, CLASS 250 MIN., CEMENT LINED AND FACTORY COATED
6. GATE VALVES SHALL BE MUELLER RESILIENT SEAT, KENNDY KEN-SEAL, AMERICAN OR APPROVED EQUAL. VALVES SHALL CONFORM TO AWWA C-509.
7. WATER LINES SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH FPUA DESIGN AND CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL SUBMIT CERTIFIED DENSITY TESTS AS REQUIRED BY FPUA ENGINEERING AND THE CITY, COUNTY, FDOT. IN CASES WHERE PAVED AREAS FALL WITHIN THE JURISDICTION OF LOCAL OR STATE AGENCIES, THE COMPACTION REQUIREMENTS SHALL NOT BE LESS THAN THE MINIMUM REQUIRED BY THE APPROPRIATE RESPONSIBLE AGENCY.
8. NO FIELD CHANGES OR DEVIATIONS FROM THE DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE FPUA ENGINEER AND CITY/COUNTY/FDOT ENGINEER.
9. THE CONTRACTOR SHALL NOTIFY FPUA ENGINEERING AND CITY/COUNTY/FDOT ENGINEERING 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
10. A PRE-CONSTRUCTION CONFERENCE BETWEEN THE ENGINEER, THE CONTRACTOR, FPUA, AND CITY/ COUNTY/FDOT ENGINEER SHALL BE MANDATORY PRIOR TO COMMENCEMENT OF CONSTRUCTION.
11. TRAFFIC CONTROL, BARRICADES, ETC., SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS AND APPROVED BY THE CITY ENGINEER.
12. MINIMUM COVER SHALL BE 36 INCHES EXCEPT AS APPROVED BY THE UTILITIES ENGINEER AND CITY/ COUNTY/FDOT ENGINEER. PIPES WITH COVER LESS THAN 30 INCHES SHALL BE CONSTRUCTED OF DUCTILE IRON OR IN PVC CASING.
13. DISTURBED AREAS SHALL BE RESTORED IN CONFORMANCE WITH THE APPLICABLE GOVERNING AGENCY REQUIREMENTS.
14. EXISTING UTILITIES AND DRAINAGE SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION AND PROTECTED BY THE CONTRACTOR.
15. WATER MAINS SHALL BE TESTED AND DISINFECTED IN ACCORDANCE WITH THE APPLICABLE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND AWWA C-651 FOR DISINFECTION.

FORT PIERCE UTILITIES AUTHORITY	WATER DISTRIBUTION		G-1 NOTES
02-06	REVISION:	BY:	APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # DETAIL NOTES 200602.DWG			FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: JJM	SCALE: N.T.S.			
APPROVED: JLC	DATE: 2010	SHEET 1 OF 2		

FORT PIERCE UTILITIES AUTHORITY
WATER DISTRIBUTION NOTES
CONTINUED

16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EXISTING UTILITIES AND DRAINAGE.
17. THE CONTRACTOR SHALL FURNISH RECORD DRAWING INFORMATION TO THE ENGINEER INCLUDING LOCATIONS OF VALVES, FITTINGS, SERVICE CONNECTIONS, BLOWOFFS, AIR RELEASE VALVES, AND ANY OTHER PERTINENT INFORMATION NECESSARY TO LOCATE ITEMS CONSTRUCTED UNDER THIS PROJECT, AS REQUIRED BY THE UTILITIES ENGINEER.
18. THE CONTRACTOR SHALL TAP EXISTING LINES UNDER THE SUPERVISION OF THE FORT PIERCE UTILITIES AUTHORITY ONLY AFTER TESTING AND DISINFECTION HAS BEEN COMPLETED AND APPROVED ON THE TAPPING VALVE AND SLEEVE.
19. WATER MAIN SHALL BE MARKED BY THE USE OF CONTINUOUS 10 GAUGE THHN MULTI STRANDED WIRE (BLUE IN COLOR) AND IDENTIFICATION TAPE WITH "WATER" MARKED ON TAPE, PERMANENTLY ATTACHED TO THE TOP OF THE WATER MAIN IN ACCORDANCE WITH THE FORT PIERCE UTILITES AUTHORITY SPECIFICATIONS.
20. SERVICE TAPS SHALL BE PLACED APPROXIMATELY TEN FEET AWAY FROM GATE VALVES, AS SHOWN, FOR TESTING. FOLLOWING TESTING AND STERILIZATION OF WATER LINE. CONTRACTOR SHALL PLACE A BRASS PLUG IN CORPORATION STOPS AND CURB STOPS SHALL BE REMOVED FROM TESTING LOCATIONS.
21. MECHANICAL RESTRAINTS TO BE USED ON ALL FITTINGS AND PLACED IN ACCORDANCE WITH MANUFACTURER'S OR ENGINEER'S RECOMMENDATIONS (WHICHEVER IS MORE STRINGENT) AND FPUA REQUIREMENTS.
22. ALL MAINS SHALL BE TESTED AT A MINIMUM OF 150 PSI. TESTING METHODS SHALL CONFORM TO AWWA C-600. – 2 HR MINIMUM TEST

$$L = \frac{SD(P)\ 1/2}{148{,}000}$$

L= LEAKAGE IN GPH
S= LENGTH OF PIPE IN FEET
D= PIPE DIAMETER IN INCHES
P= TESTING PRESSURE IN PSI

23. PRIOR TO ANY TESTING, ALL MAINS 6" IN DIA. AND LARGER SHALL HAVE A SWAB PASSED THRU THE ENTIRE LENGTH OF THE LINE. NOTE: SWAB SHOULD BE PLACED IN 1st. JOINT OF NEW LINE. END OF MAIN SHOULD BE "TURNED UP" AT 45$ AND EXTENDED SO THAT SWABBING AND A FULL BORE FLUSH CAN BE ACCOMPLISHED. BLOW-OFF ASSY CAN THEN BE PLACED. WHERE LINES BRANCH, SWABS WILL BE PLACED IN BRANCH LINES AND SEQUENTIALLY SWABBED AND FLUSHED.
24. A MINIMUM SIX FEET AND PREFERABLY TEN FEET HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN THE WATER MAIN AND ANY WASTEWATER LINES. 6 INCHES MINIMUM VERTICAL SEPARATION IF WATER MAIN IS OVER WASTEWATER AND 12 INCHES IF WATER MAIN IS UNDER SHALL BE MAINTAINED BETWEEN THE WATER MAIN AND ANY WASTWATER LINES. THE DISTANCE SHALL BE MEASURED FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE OR STRUCTURE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE WASTEWATER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING, AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. SUFFICIENT LENGHTS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT ALL CROSSINGS.
25. WHERE A WATER MAIN IS TO BE INSTALLED BELOW A STORM DRAIN PIPE, A MINIMUM OF 6 INCHES OF VERTICAL CLEARANCE BETWEEN PIPES SHALL BE CONSTRUCTED OF DIP AT THE CROSSING, AND SHALL BE MECHANICALLY RESTRAINED WITHIN 20 FEET OF THE CROSSING.
26. CONTRACTOR SHALL COMPLY WITH FLORIDA TRENCH SAFETY ACT REQUIREMENTS.

FORT PIERCE UTILITIES AUTHORITY	WATER DISTRIBUTION		G-1 NOTES
02-06	REVISION:	BY:	APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # DETAIL NOTES 200602.DWG			FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: JJM	SCALE: N.T.S.			
APPROVED: JLC	DATE: 2010	SHEET 2 OF 2		

FORT PIERCE UTILITIES AUTHORITY WASTEWATER CONSTRUCTION NOTES

1. ALL CONSTRUCTION MATERIAL, INSTALLATION AND TESTING SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE FORT PIERCE UTILITIES AUTHORITY.
2. GRAVITY SEWER MAIN SHALL BE POLYVINYL CHLORIDE SDR-26, GREEN OR WHITE IN COLOR, GRAVITY SEWER MAIN SHALL HAVE LOCATOR TAPE WITH "SEWER" MARKED ON TAPE AND SHALL CONFORM TO ASTM D-3034.
3. THE MANHOLE BASE SHALL BE SET ON A FIRM, DRY AND STABLE OR COMPACTED BASE FOUNDATION. IF NECESSARY, THE CONTRACTOR SHALL UTILIZE ROCK TO PROVIDE A FIRM AND SUITABLE MANHOLE BASE FOUNDATION.
4. WASTEWATER LINES SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH FPUA DESIGN AND CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL SUBMIT CERTIFIED DENSITY TESTS AS REQUIRED BY FPUA ENGINEERING AND THE CITY ENGINEERING DEPARTMENT. IN CASES WHERE PAVED AREAS FALL WITHIN THE JURISDICTION OF LOCAL OR STATE AGENCIES, THE COMPACTION REQUIREMENTS SHALL NOT BE LESS THEN THE MINIMUM REQUIRED BY THE APPROPRIATE RESPONSIBLE AGENCY.
5. A 1% MINIMUM SLOPE SHALL BE MAINTAINED ON ALL SANITARY SERVICE LATERALS.
6. THE CONTRACTOR SHALL FURNISH RECORD DRAWING INFORMATION TO THE ENGINEER CONSISITING OF PIPE SIZES, LOCATION OF SERVICE TEE WYES, DIAMETER OF SERVICES, LOCATION OF ANY FITTINGS, FINAL RIM AND INVERT ELEVATION OF ALL MANHOLES AND ANY OTHER PERTINENT INFORMATION NECESSARY TO LOCATE ITEMS CONSTRUCTED UNDER THIS PROJECT.
7. MAINTAIN SIX FEET AND PREFERABLY 10 FEET HORIZONTAL DISTANCE BETWEEN WATER MAINS AND SEWER MAINS AS A MINIMUM.
8. WASTEWATER FORCE MAINS, WASTEWATER COLLECTION LINES, AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. A MINIMUM VERTICAL DISTANCE OF 12 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE SHALL BE PROVIDED WHENEVER POSSIBLE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE WASTEWATER PIPE JOINTS AND THE WATER PIPE JOINTS ARE EQUIDISTANCE FROM THE POINT OF CROSSING, AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT ALL CROSSINGS.
9. A PRE-CONSTRUCTION CONFERENCE BETWEEN THE ENGINEER, THE CONTRACTOR, AND FPUA/CITY COUNTY/FDOT SHALL BE MANDATORY PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
10. NO FIELD CHANGES OR DEVIATIONS FORM THE DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL FPUA/CITY/COUNTY/FDOT ENGINEER,
11. TRAFFIC CONTROL, BARRICADES, ETC. SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS.
12. CONTRACTOR SHALL NOTIFY FORT PIERCE UTILITIES AUTHORITY 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
13. WASTEWATER FORCE MAIN SHALL BE POLYVINYL CHLORIDE CONFORMING TO AWWA C-900, AND SHALL BE CLASS 150, DR-18.
14. WASTEWATER FORCE MAIN SHALL BE GREEN IN COLOR.
15. FITTINGS SHALL BE DUCTILE IRON, CONFORMING TO ANSI/AWWA C-110/A21.10 CLASS 250 MIN. AND INTERIOR EPOXY COATED.
16. WASTEWATER FORCE MAIN SHALL BE MARKED BY THE USE OF CONTINUOUS 10 GAUGE THHN WIRE (GREEN IN COLOR) PERMANENTLY ATTACHED TO THE TOP OF THE FORCE MAIN WITH LOCATOR TAPE MARKED "SEWER" ON TAPE IN ACCORDANCE WITH FPUA SPECIFICATIONS.
17. MINIMUM COVER SHALL BE 36 INCHES, PIPES WITH COVER LESS THAN 30 INCHES SHALL REQUIRE PRIOR APPROVAL OF THE UTILITES ENGINEER AND SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE.
18. EACH SERVICE LATERAL WILL BE MARKED WITH A LOCATOR BALL AS MANUFACTURED BY 3M CORPORATION, OR APPROVED EQUAL AS REQUIRED BY FPUA ENGINEER.
19. ALL MANHOLES SHALL HAVE SEWER RAIN GUARDS INSTALLED AS REQUIRED BY FPUA ENGINEER.
20. THE CONTRACTOR SHALL COMPLY WITH THE FLORIDA TRENCH SAFETY ACT REQUIREMENTS.

FORT PIERCE UTILITIES AUTHORITY	WASTEWATER CONSTRUCTION NOTES FPUA REQUIREMENTS		G-2 CONSTRUCTION NOTES
02-06	REVISION:	BY:	APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # DETAIL NOTES 200602.DWG			FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: JJM	SCALE: N.T.S.			
APPROVED: JLC	DATE: 2010	SHEET 1 OF 1		

STANDARD SEPARATION STATEMENT FOR
WATER / SEWER CONFLICTS

1. SANITARY SEWER, FORCE MAINS, AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. SANITARY SEWERS, FORCE MAINS AND STORM SEWERS CROSSING UNDER WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 6 INCHES, PREFERABLY 12 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHEN ABOVE, AND AT LEAST 12 INCHES OF SEPARATION WHEN THE WATER MAIN IS BELOW.

WHERE SANITARY SEWER, FORCE MAINS, STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 6 INCHES VERTICAL SEPARATION, BOTH THE SEWER AND WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) CENTERED ON THE CROSSING. (DIP IS NOT REQUIRED FOR STORM SEWERS.) SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED.

ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING). AT SUCH CROSSINGS PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE WITH LESS THAN 6 INCHES VERTICAL CLEARANCE, THE NEW PIPE SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWERS) AND NEW PIPES SHALL BE ARRANGED TO MEET THE CROSSING REQUIREMENTS ABOVE.

2. A MINIMUM 3-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF STORM SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

A MINIMUM 3-FOOT, AND PREFERABLE 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN VACUUM TYPE SANITARY SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

A MINIMUM 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN "ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

A MINIMUM 6-FOOT, AND PREFERABLE 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN GRAVITY OR PRESSURE TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO 3 FOOT WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER

IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10-FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON A UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 6 INCHES ABOVE THE TOP OF THE SEWER.

WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 6 INCHES IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR THE FORCE MAIN SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWER) WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED JOINTS).

3. ALL DIP SHALL BE PRESSURE CLASS 250 MIN.. ADEQUATE PROTECTIVE MEASURES AGAINST CORROSION SHALL BE USED AS DETERMINED BY THE DESIGN ENGINEER.

FORT PIERCE UTILITIES AUTHORITY	STANDARD SEPARATION STATEMENT FOR WATER/SEWER CONFLICT		G-3 WATER/SEWER CONFLICT
02-06	REVISION:	BY:	APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # DETAIL NOTES 200603.DWG			FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: JJM	SCALE: N.T.S.			
APPROVED: JLC	DATE: 2010	SHEET 1 OF 1		

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

P:\Projects\2022\2022-016-001 Youth and Family Center\CAD\1- Plans\Youth and Family details.dwg D5 WATER SEWER dsc_ Jun 01,2023-12:53pm

CREECH
CONSULTING, INC.
CIVIL NETWORK ENGINEERED
PO BOX 327, STUART, FLORIDA 34994 (772) 485-2140
BOARD OF PROFESSIONAL ENGINEERS, CERTIFICATE OF AUTHORIZATION NUMBER 5139
PROFESSIONAL SURVEYORS AND MAPPERS, AMENDED CERTIFICATE NO. LB-0006705

DATE	BY	REVISIONS

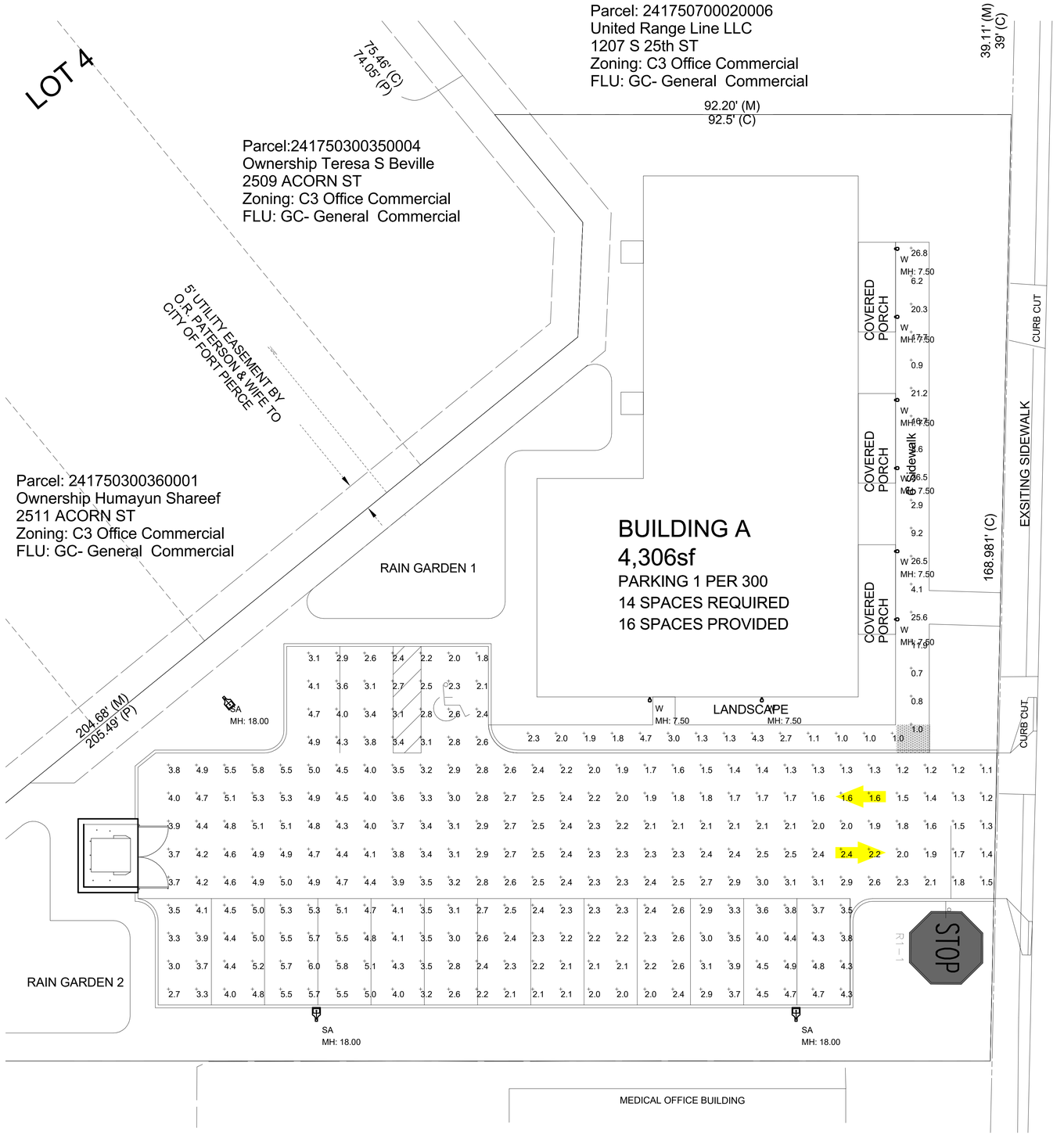
YOUTH & FAMILY
BEHAVIORAL HEALTH CENTER INC
UTILITY DETAILS & SPECIFICATIONS
FORT PIERCE FLORIDA

DRAWN BY:	JAC
CHECKED BY:	RTC / ANDREWS
LATITUDE:	27°26'5.40"N
LONGITUDE:	80°21'2.96"W
HORZ. SCALE:	
VERT. SCALE:	

SEAL
06/02/2023
RICHARD CREECH
FL P.E. NO. 38592

SHEET D5

PROJECT NO. 22-016-001



ELECTRICAL PHOTOMETRIC PLAN
1" = 10'-0"

Luminaire Schedule: YOUTH & FAMILY BEHAVIORAL HEALTH - SITE FORT PIERCE, FL 05/25/2023

Symbol	Label	Arrangement	Manufacturer	Catalog Number	Mounting	LLF	Luminaire Lumens	Luminaire Watts	Arrangement Watts
	SA	Single	Lithonia Lighting	DSX0 LED P6 40K 80CRI TFTM	POLE MOUNT A.F.G.	0.903	16066	137	137
	W	Single	Gotham Architectural Lighting	EVO6WTRC 40/20 AR MWD LS	WALL MOUNT A.F.F. (bottom of fixture)	0.903	2038	19.7	19.7

Calculation SummaryYOUTH & FAMILY BEHAVIORAL HEALTH - SITE FORT PIERCE, FL 05/25/2023

Label	Calc Type	Units	Avg	Max	Min	Avg/Min	Max/Min
PARKING & DRIVE LANE	Illuminance	Fc	3.16	6.0	1.1	2.87	5.45
WALKWAY	Illuminance	Fc	8.03	26.8	0.7	11.47	38.29





2023-06-02 SITE PLAN APPROVAL

ISSUE DESCRIPTION / DATE
1. 2. 3. 4. 5. 6. 7. 8.

Dan Kot, R.A.
AR94202

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Commercial and Residential Architecture
7904 SW Jack James Drive
Stuart, Florida 34997
(772) 233-1096
www.2TKAD.com

2TK ARCHITECTURE & DESIGN

PROJECT
YOUTH & FAMILY BEHAVIORAL HEALTH
FORT PIERCE, FLORIDA

DRAWING NAME
ELECTRICAL PHOTOMETRIC PLAN
- SCHEMATIC DESIGN

ELLIS CONSULTING
ENGINEERING FOR TODAY'S BUILT ENVIRONMENT
1106B NORTH G STREET
LAKE WORTH, FL 33460
(561) 370-3300 phone
www.ellis.consulting

BEN ELLIS, PE
LICENSED ENGINEER #67568
STATE OF FLORIDA
CERT. OF AUTH. #32939
O.P. 23035
DATE

PROJECT # 23-0037
SHEET # E-1
PRINT DATE: MAY 24, 2023

Plant List

QTY	SYM	SPECIES	COMMON NAME/DESCRIPTION	SIZE	SPACING	REMARKS	DROUGHT TOLERANCE
CANOPY / ORNAMENTAL TREES							
6	IE*	ILEX x ATTENUATA 'EAGLESTON'	EAGLESTON HOLLY	12' x 5', 2.5" D.B.H.	A.S.	FULL CANOPY, 5' C.T. MIN.	HIGH
3	LS	LAGERSTROEMIA SPECIOSA	QUEEN'S CREPE MYRTLE	12' x 5', 2.5" D.B.H.	A.S.	FULL CANOPY, 5' C.T. MIN.	HIGH
13	PE*	PINUS ELLIOTTI	SLASH PINE	12' x 5', 2.5" D.B.H.	A.S.	FULL CANOPY, 5' C.T. MIN.	HIGH
14	QV*	QUERCUS VIRGINIANA	LIVE OAK	12' x 5', 2.5" D.B.H.	A.S.	FULL CANOPY, 5' C.T. MIN.	HIGH
2	TD*	TAXODIUM DISTICHUM	BALD CYPRESS	12' x 5', 2.5" D.B.H.	A.S.	FULL CANOPY, 5' C.T. MIN.	HIGH
SHRUBS							
90	CES*	CONOCARPUS ERECTUS VAR. SERICEUS	SILVER BUTTONWOOD	#3, 2' x 2'	2' O.C.	FULL & THICK	HIGH
65	FOS*	FORESTIERA SEGREGATA	FLORIDA PRIVET	#3, 2' x 2'	2' O.C.	FULL & THICK	HIGH
288	MYR*	MYRICANTHES FRAGRANS	SIMPSON STOPPER	#3, 2' x 2'	2' O.C.	FULL & THICK	HIGH
19	MYR-1*	MYRICANTHES FRAGRANS	SIMPSON STOPPER	#7, 4' x 2'	2' O.C.	FULL & THICK	HIGH
3,100	SPB*	SPARTINA BAKERI	SAND CORDGRASS	LINER	12" O.C.	FULL & THICK	HIGH
LOW SHRUBS / GROUNDCOVERS / VINES							
100	HED*	HELIANTHUS DEBILIS	BEACH SUNFLOWER	#1, 12" x 12"	24" O.C.	FULL & THICK	HIGH
30	ILV*	ILEX VOMITORIA	DWARF YAUPON HOLLY	#3, 12" x 12"	24" O.C.	FULL & THICK	HIGH
50	NEB*	NEPHROLEPIS EXALTATA	BOSTON FERN	#1, 12" x 12"	24" O.C.	FULL & THICK	HIGH
	SOD	PASPALUM NOTATUM	BAHIA SOD	SEE SPECS			HIGH
	SOD-1	STENOTAPHRUM SECUNDATUS	ST. AUGUSTINE SOD	SEE SPECS			MEDIUM
		* = FLORIDA NATIVE					

Landscape Data

Landscaping Adjacent to R.O.W. (East Buffer) 169'

Trees Required = 10' Wide Landscape Strip with 1 Tree/300 s.f.
169 l.f. x 10' = 1,690 s.f. / 300 = 6 Trees
Provided = 6 Trees

Shrubs Required = Continuous Hedge @ 2' o.c.
169 l.f. / 2' o.c. = 85 Shrubs
Provided = 85 Shrubs

Landscaping to Adjacent Property (North, South & West Buffer) 575'

Trees Required = 10' Wide Landscape Strip with 1 Tree/200 s.f.
575 l.f. x 10' = 5,750 s.f. / 200 = 29 Trees
Provided = 29 Trees

Shrubs Required = Continuous Hedge @ 2' o.c.
575 l.f. / 2' o.c. = 288 Shrubs
Provided = 288 Shrubs

Interior Vehicular Use Area

Required = 1 s.f. of interior landscaping per
15 s.f. of vehicular use area (3,580 s.f./15 = 239 s.f.)
Landscape Area Provided = 246 s.f.
Trees Required = 1 Tree/100 s.f. of interior landscape area
3,580 s.f./15 = 257 s.f. / 100 = 3 Trees
Trees Provided = 3

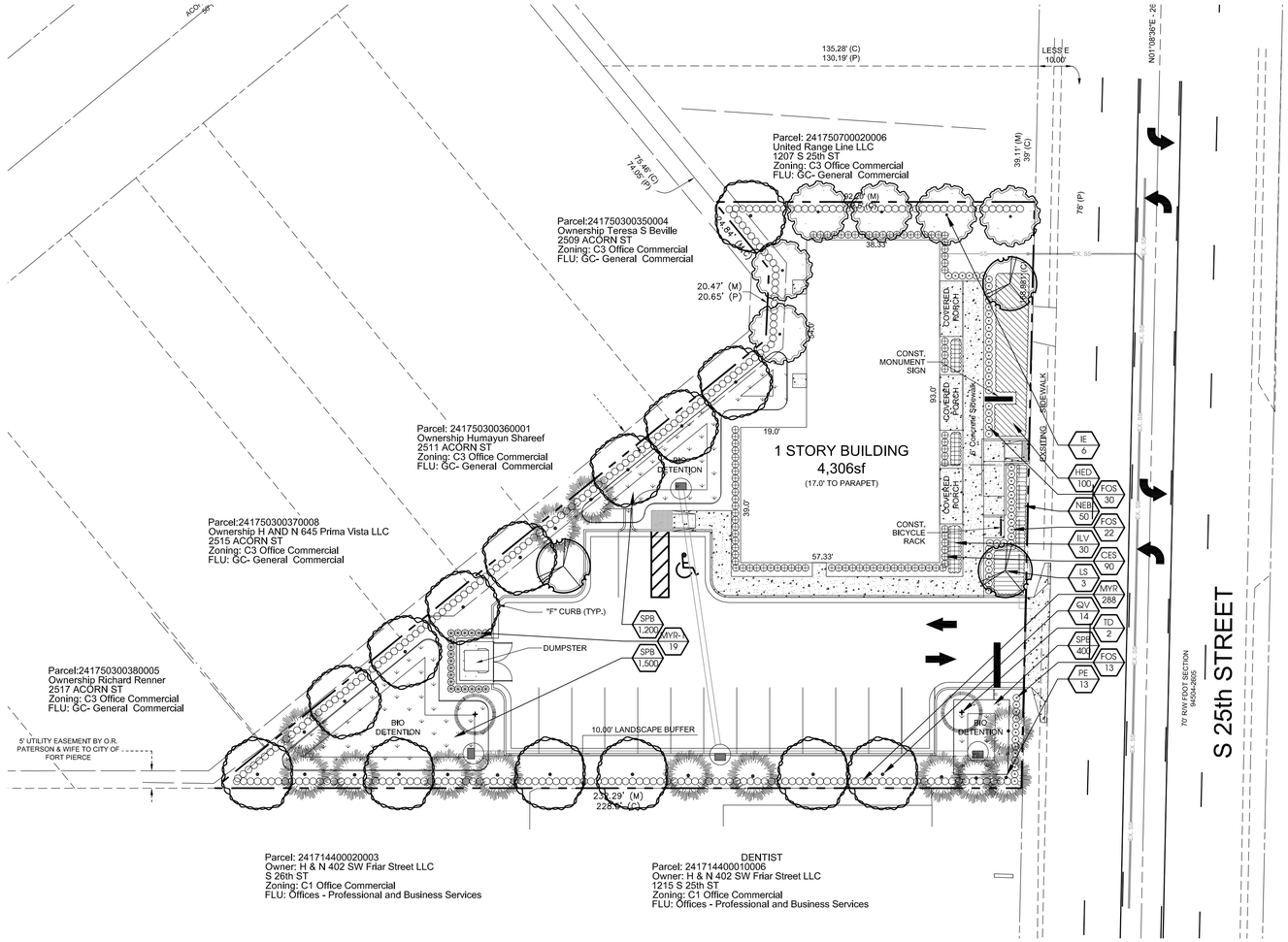
Maximum Use of Palm Trees
Sec. 22-187(1)(c)
Required = Fifty (50) percent of the required trees shall be species other than palm trees
Total Trees Required = 38 Trees
Maximum Palms Allowed = 19 (38 / 2 = 19)
Total Palms Provided = 0 (0%)

Total Trees Required = 38 Trees
Total Trees Provided = 38 Trees

Total Trees Required = 38 Trees
Total Native Trees Provided = 35 (92%)

Total Palms Required = 0
Total Native Palms Provided = 0 (0%)

Total Shrubs Required = 392
Total Native Shrubs Provided = 392 (100%)



Landscape Plan

North
Scale: 1" = 20'
0 10' 20' 40'

Conceptual Design Group, Inc.
Landscape Architecture - Site Planning
900 East Ocean Boulevard, Suite 130d
Stuart, Florida 34994
(772) 344-2340
LC: 26000198

Youth & Family Behavioral Health Center Inc

South 25th Street
City of Fort Pierce, Florida

City Project Number:

Jeffrey W. Smith, RLA
Florida Registration Number:
LA 0001635

Job No. 23-0101
Drawn By JWS
Submittal Dates 6-2-2023

Revision Dates

These drawings are the property of the landscape architect and are not to be used for other projects except by written permission from the landscape architect. Report any discrepancies immediately to the landscape architect.

Sheet L-1 of 2

Landscape Specifications

1. All tree and plant material to be Florida No. 1 or better, as classified in "Grades and Standards for Nursery Plants", Part 1 and Part II, State of Florida, Dept. of Agriculture, Tallahassee. All plants not listed in "Grades and Standards for Nursery Plants" shall conform to a Florida No. 1 as to: (1) health and vitality, (2) condition of foliage, (3) root system, (4) freedom from pest or mechanical damage, (5) heavily branched and densely foliated according to the accepted normal shape of the species.
2. Undersizing or substitution of one species or cultivar for another species is a breach of contract and will be "Rejected" at the time of final landscape inspection unless approved by Landscape Architect.
3. Project Warranty: All plant material shall be warranted for a period of one (1) year after date of substantial completion against defects, including death and unsatisfactory growth, except for defects resulting from abuse or damage by others or unusual phenomena or incidents which are beyond the contractor's control.
4. Any and all conditions which the contractor feels will be detrimental to the success of the planting shall be brought to the owner or representative's attention.
5. The contractor shall verify the location of underground utilities prior to commencing work on any project area.
6. Mulch planting areas with 3" layer of Melaleuca, Eucalyptus, or Enviromulch. Cypress Mulch is NOT ACCEPTABLE. Planting beds to receive mulch throughout entire bed area.
7. All plants to be set to ultimate grade. No filling will be permitted around trunks or stems. Mulch to be kept a minimum of 2" away from trunks and stems.
8. Planting trees and shrubs: Excavate hole per planting detail. When plant is set, place additional backfill consisting of a 50% mixture of Peat humus and natural soil around the base and sides of ball, and work each layer to settle backfill and eliminate voids and air pockets. When excavation is approximately 2/3 full, water thoroughly before placing remainder of backfill. Water again after placing final layer of backfill and before installing mulch.
9. Guy and stake trees in 3 directions with galvanized wire, through flexible hose chafing guards, with wooden stake anchors immediately after planting. (See Detail)
10. Trees and shrubs shall be fertilized with a complete natural organic fertilizer with a ratio of approximately 3:0:2 or 3:0:3 (e.g. one labeled 12-0-8), Similar analysis such as 16-0-8 (4:0:2) can also be used. Fertilizers that are slow release, controlled release, sulphur coated or with nitrogen as IBDU or ureaformaldehyde have extended release period. Thirty to fifty percent of the nitrogen should be water insoluble or slow release.

Palms should receive a complete granular fertilizer formulated for palms ("Palm Special") at a rate of 5 to 8 lbs. per palm.

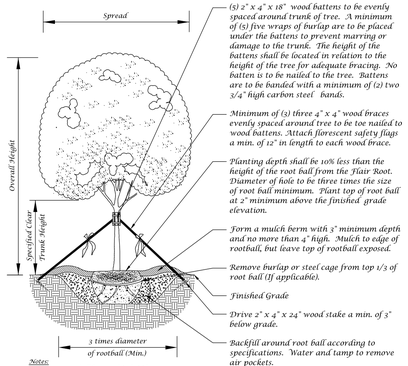
Agriform 20-0-5 twenty-one gram planting tablets may be substituted for granular fertilizer. If utilized, the following rates shall be utilized: Position plant in hole, Backfill halfway up the rootball, Place tablet(s) beside rootball about 1" from root tips. Do not place tablet(s) in bottom of hole.

1 Gallon 1 Tablet
3 Gallon 2 Tablets
25 Gallon & B&B Trees 2 per 1" caliper

11. All planting areas and sod to be irrigated to provide 100% coverage. Shop drawings to be submitted by the irrigation contractor for approval prior to installation.
12. Maintain trees, shrubs, and other plants by watering, cultivating, and weeding as required for healthy growth, Restore planting saucers and mulch, Tighten and repair stake and guying and reset trees and shrubs to proper grade or vertical position as required. Spray as necessary to keep trees and shrubs free of insects and disease. The contractor shall begin maintenance immediately after planting and shall continue maintenance through final acceptance when Certificate of Occupancy is issued to the General Contractor by City and project is released by the General Contractor to Client.
13. Prune trees and shrubs only to remove damaged branches as directed by the Landscape Architect.
14. Planting Lawns: Provide clean, strongly rooted, uniformly sized strips of Stenotaphrom secundatus Floritam (unless otherwise noted), machine stripped not more than 24 hours prior to laying. Grade and roll prepared lawn surface. Water thoroughly but not to create muddy soil conditions. Lay sod strips with tight joints, roll or tamp lightly, and water thoroughly.
15. Maintain positive drainage, no planting is to block drainage.
16. Drainage Testing
    Prior to planting of trees, palms, and specimen material, each planting pit shall be tested in the following manner to verify adequate drainage.
    A) Dig each planting pit to the minimum specified size.
    B) Fill the planting pit with (12") twelve inches of water. If the water level in the planting pit drops (4") four or more inches within (4) four hours, the drainage is sufficient and a drainage channel is not required. If the water level drops less than (4") four inches within the (4) four hour period, then a drainage channel is required.
    C) When a drainage channel is required, the drainage channel must extend down through the non porous soil and into porous soil. (See Drainage Testing Detail)
    D) Discard all material removed from the drainage channel.
    E) When backfilling the planting pit, add course gravel to the drainage channel. Also, care must be taken to keep the consistency of the soil mix the same throughout the planting pit.

NOTES:
1. Contractor to include drainage testing for all trees and palms in bid. If drainage is inadequate, the soil specification in item #8 above shall be revised for site conditions. Contractor shall notify the Owner and Landscape Architect of poor drainage conditions in writing and written direction will be provided to the contractor of appropriate soil mixture specification to be used.
2. All fertilizers shall meet the City of Port St. Lucie's fertilizer ordinance.

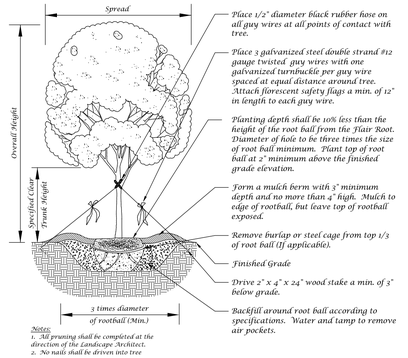
Landscape Details



Notes:
1. All pruning shall be completed at the direction of the Landscape Architect.
2. No nails shall be driven into tree

Large Tree Planting Detail (5" Caliper or Greater)

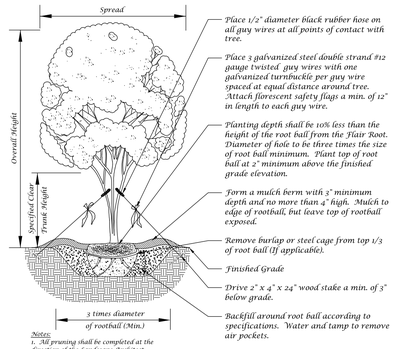
Not to Scale



Notes:
1. All pruning shall be completed at the direction of the Landscape Architect.
2. No nails shall be driven into tree

Tree Planting Detail

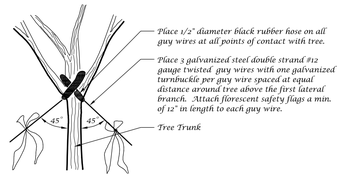
Not to Scale



Notes:
1. All pruning shall be completed at the direction of the Landscape Architect.
2. No nails shall be driven into tree

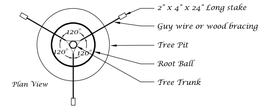
Multi-Trunk Tree Planting Detail

Not to Scale



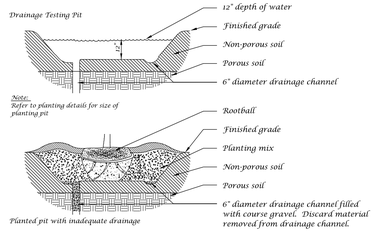
Guy Wire Attachment Detail

Not to Scale



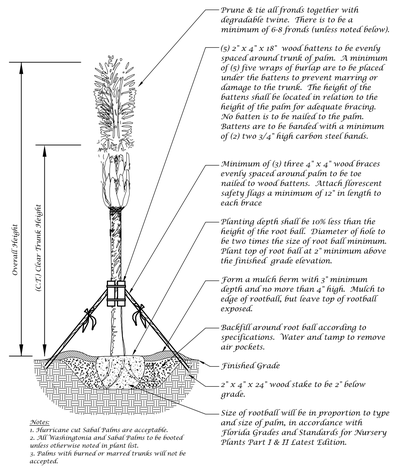
Staking Detail

Not to Scale



Drainage Testing Detail

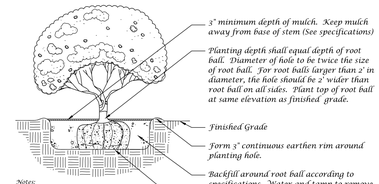
Not to Scale



Notes:
1. Hurricane cut Sabal Palms are acceptable.
2. All Washingtonia and Sabal Palms to be booted unless otherwise noted in plant list.
3. Palms with burned or marred trunks will not be accepted.

Palm Planting Detail

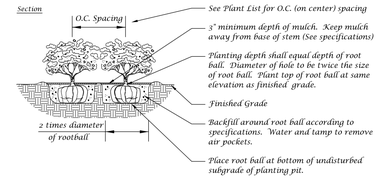
Not to Scale



Notes:
1. All pruning shall be completed at the direction of the Landscape Architect.
2. Remove any container from around rootball.
3. Plant as hedge row with O.C. (on center) spacing as specified in plant list, or with triangular spacing as a mass.

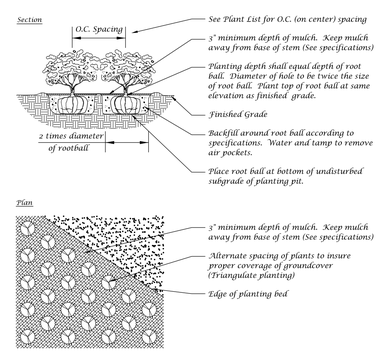
Shrub Detail

Not to Scale



Ground Cover Detail

Not to Scale



Ground Cover Detail

Not to Scale

Landscape Plan

Conceptual Design Group, Inc.
Landscape Architecture - Site Planning
900 East Ocean Boulevard, Suite 130d
Stuart, Florida 34994
(772) 344-2340
LC: 26000198

Youth & Family Behavioral Health Center Inc

South 25th Street

City of Fort Pierce, Florida

City Project Number:

Jeffrey W. Smith, RLA
Florida Registration Number:
LA 0001635

Job No. 23-0101
Drawn By JWS
Submittal Dates 6-2-2023

Revision Dates

These drawings are the property of the landscape architect and are not to be used for other projects except by written permission from the landscape architect. Report any discrepancies immediately to the landscape architect.

WALL LEGEND

NEW 8" EXTERIOR CMU WALLS WITH SMOOTH STUCCO FINISH.

NEW INTERIOR NON-BEARING WALL PARTITIONS - PROVIDE 25 GA METALS STUDS AT 16" O.C. MAX WITH 5/8" DRYWALL FINISH EACH SIDE WITH BATT INSULATION WHERE APPLICABLE. ATTACH DRYWALL WITH #12 X 1-1/4" DRYWALL SCREWS @ 8" O.C. MAX AT SIDES AND 12" O.C. MAX IN FIELD. REFER TO WALL TYPES FOR ADDITIONAL INFORMATION



1 - FLOOR PLAN

SCALE: 1/4" = 1'-0"

ISSUE DESCRIPTION	DATE
1.	
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Dan Kivi, R.A.
AR94202

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21TK ARCHITECTURE & DESIGN

PROJECT
YOUTH & FAMILY BEHAVIORAL HEALTH
FORT PIERCE, FLORIDA

DRAWING NAME
FLOOR PLAN

SCHEMATIC DESIGN

PROJECT # 23.0049

SHEET #
A2.1

PRINT DATE:
MAY 30, 2023

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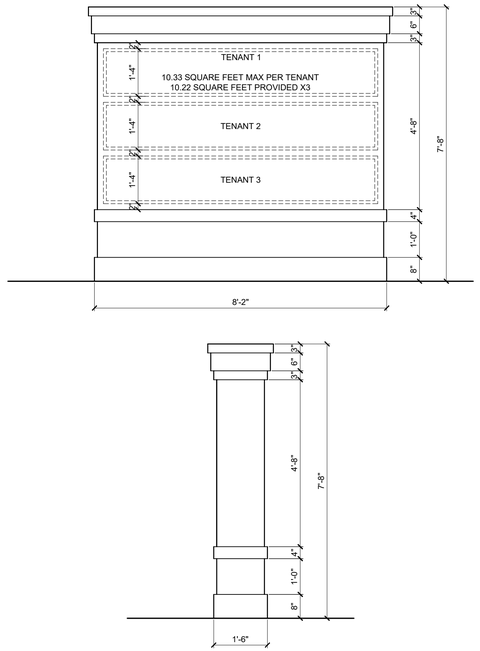
GENERAL NOTES

1. ALL WINDOWS AND DOOR SHALL BE HURRICANE IMPACT RESISTANT STOREFRONT WITH A BLACK FINISH.
2. STANDING SEAM METAL ROOF SHALL BE CHARCOAL GRAY BY ENGLERT - 0.032" ALUMINUM.
3. STUCCO FINISH SHALL BE SMOOTH UNLESS OTHERWISE NOTED.
4. DECORATIVE ALUMINUM AWNINGS (PAINTED) - COLOR TO MATCH ROOF. PROVIDE SHOP DRAWINGS FOR REVIEW AND APPROVAL.
5. BUILDING SIGNAGE AND PERMIT SHALL BE BY 'OTHERS'.
6. MONUMENT SIGN AND PERMIT SHALL BE BY 'OTHERS'.



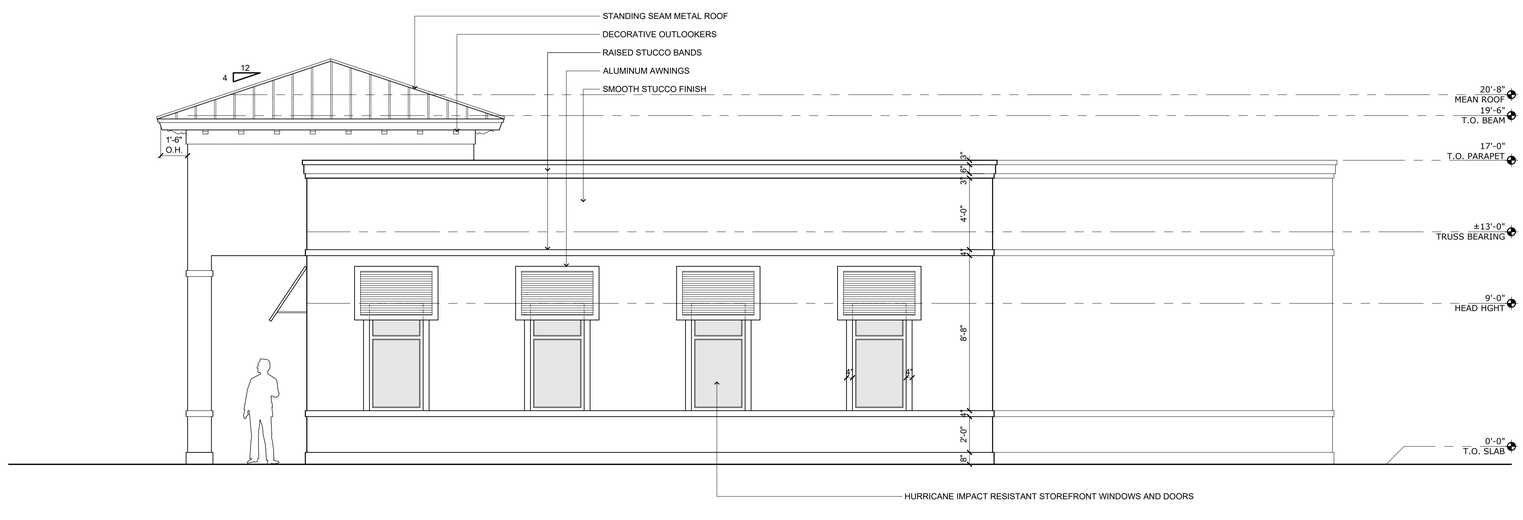
1 - EAST ELEVATION

SCALE: 1/4" = 1'-0"



3 - MONUMENT SIGN

SCALE: 1/2" = 1'-0"



2 - NORTH ELEVATION

SCALE: 1/4" = 1'-0"

ISSUE	DESCRIPTION	DATE
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PROJECT
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FORT PIERCE, FLORIDA

DRAWING NAME
BUILDING ELEVATIONS

SCHEMATIC DESIGN

PROJECT # 23-0049

SHEET #
A3.1

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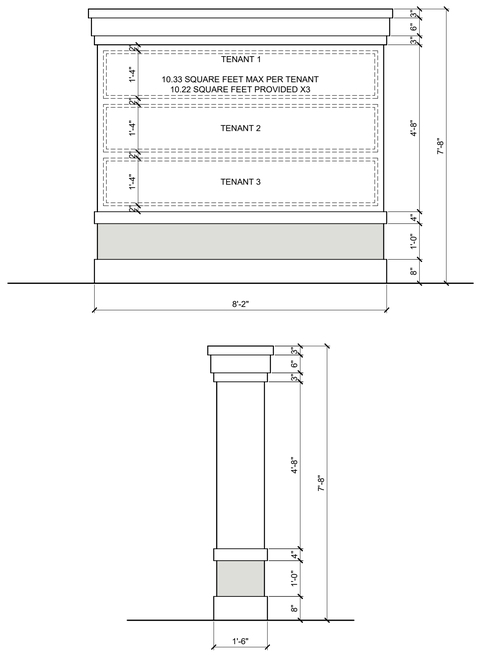
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1 - EAST ELEVATION

SCALE: 1/4" = 1'-0"



3 - MONUMENT SIGN

SCALE: 1/2" = 1'-0"



2 - NORTH ELEVATION

SCALE: 1/4" = 1'-0"

ISSUE	DESCRIPTION	DATE
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DRAWING NAME
BUILDING ELEVATIONS COLORED

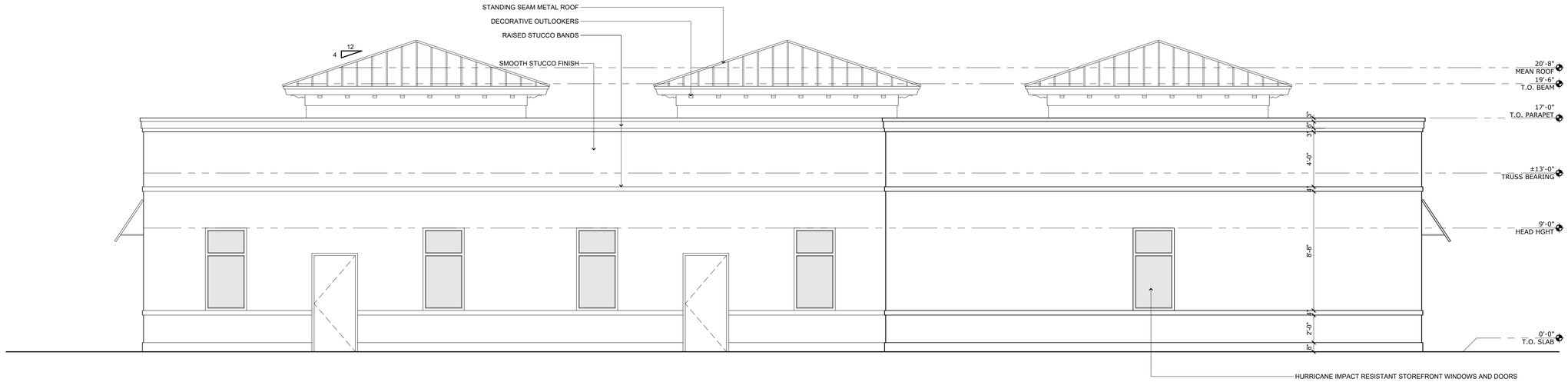
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SHEET # A3.1a
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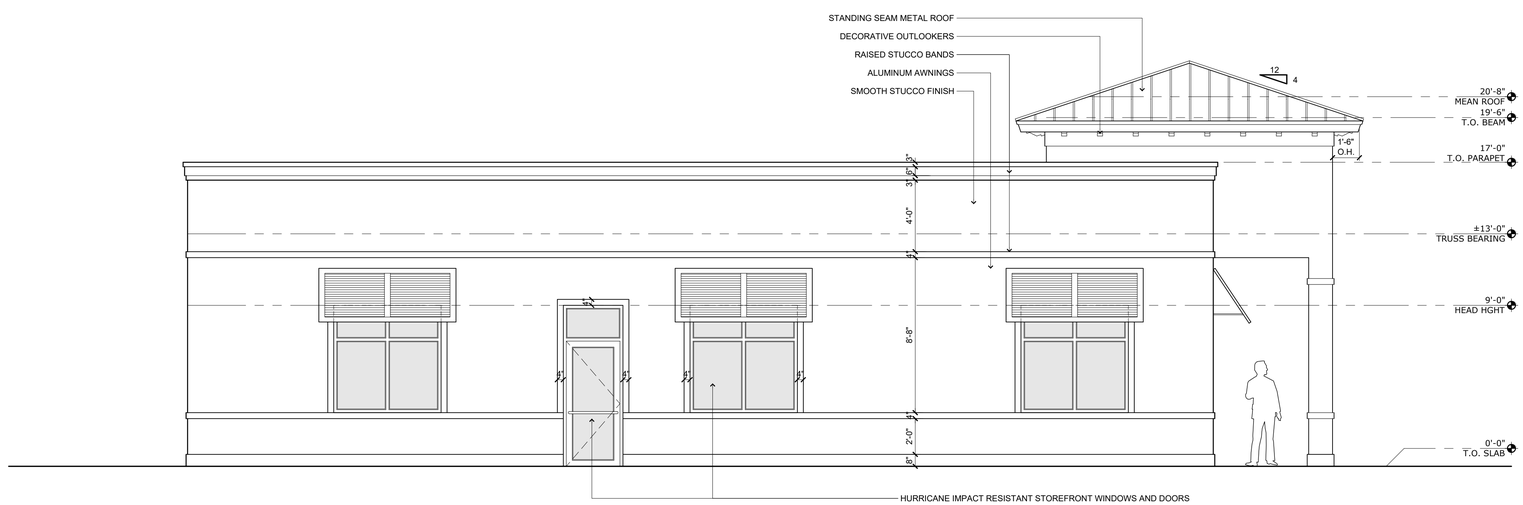
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1 - WEST ELEVATION

SCALE: 1/4" = 1'-0"



2 - SOUTH ELEVATION

SCALE: 1/4" = 1'-0"

ISSUE	DESCRIPTION	DATE
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FORT PIERCE, FLORIDA

DRAWING NAME
BUILDING ELEVATIONS

SCHEMATIC DESIGN

PROJECT # 23-0049
SHEET # A3.2

PRINT DATE:
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1 - WEST ELEVATION

SCALE: 1/4" = 1'-0"



2 - SOUTH ELEVATION

SCALE: 1/4" = 1'-0"

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1 - STREET ELEVATION

SCALE: 3/32" = 1'-0"



2 - PARTIAL STREET ELEVATION WITH BUILDING TO THE SOUTH

SCALE: 3/16" = 1'-0"



3 - PARTIAL STREET ELEVATION WITH BUILDING TO THE NORTH

SCALE: 3/16" = 1'-0"

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YOUTH & FAMILY BEHAVIORAL HEALTH
FORT PIERCE, FLORIDA

DRAWING NAME
STREET ELEVATION

SCHEMATIC DESIGN

PROJECT # 23-049

SHEET #
A3.4

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Stormwater Management Report

for

YOUTH & FAMILY BEHAVIORAL HEALTH CENTER

St. Lucie County, Florida

City of Fort Pierce

Prepared for

Youth & Family Behavioral Health Center, Inc

June 2, 2023

This item has been electronically signed and sealed by Richard Creech on _____ using a SHA-1 authentication Code.

Printed copies of this document are not considered signed and sealed and the SHA-1 authentication code must be verified on any electronic copies.

Richard Creech, State of Florida, License No. 38592

P.O. Box 327
Stuart, FL 34995
Tel 772 485 2140
FL Certificate of Authorization 5139
Certificate LB-0006705

TABLE OF CONTENTS

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II. Existing Land Use
III. Proposed Project
IV. Land Use
V. Water Quantity
VI. Discharge & Outlet Structure
VII. Water Quality
VIII. Wetland Impacts
IX. Utilities
X. Floodplain Encroachment
XI. Recovery

Exhibits

Location Map

Aerial Map

FEMA Map

Boundary Topographic Survey

Environmental Report

Appendices

SFWMD Rainfall Figures

Water Management Calculations

Cascade 2001 Modeling Report

Excerpts from SFWMD Permit

I. PROJECT SITE DESCRIPTION

The project site is a 22,500 square foot property, consisting of two parcels, located at 1211 and 1213 South 25th, which is on the West side of S 25th Street approximately 250 feet south of the intersection with Acorn Street in the City of Fort Pierce, Florida. Please see Exhibit 1 for the Location Map.

II. EXISTING LAND USE

The parcel is considered Vacant land with no structures or other improvements on the property, although previously there were several structures with associated paving on the property which have subsequently been removed. The site is currently covered by grass with some trees along the west property line and in the southwest corner of the site. The site is currently Zoned C3 General Commercial.

III. PROPOSED PROJECT

The proposed project consists of constructing a 4,306 square foot commercial structure with a driveway access to S 25th Street. A pervious pavement is being utilized to provide driveway access to S 25th Street, 15 standard 9.5' by 19' parking spaces along with one 12' by 19' Handicap parking space with a 5' wide ADA access aisle. The total vehicular use area is 7,160 square feet of pervious pavement. 1,353 square feet of concrete sidewalk provides an ADA access path from the parking area to the building entrances.

Stormwater management facilities will consist of 7,160 square feet of pervious pavement, along with two "Rain Garden" detention areas with a combined area of 2,159 square feet. The remaining 7,522 square feet will be landscaping and green space. The pervious pavement will be in the form of PaveDrain® or approved equivalent. Stormwater Management Calculations herein are based on PaveDrain®, approval of equivalent pervious pavement will require revision to this Stormwater Management Calculation. The PaveDrain® storage volume, along with the volume of voids (40%) of the underlying #57 Stone shall be converted to inches of storage and added to the soil storage.

Per Fort Pierce Land Development Code Section 119-3, "Design Standards; Stormwater Management; Approvals", the proposed Stormwater Management System must be designed to meet the following:

- Roadway and Parking Lots shall be above the 10-year, 1-day no-discharge water surface elevation (wsel); Rainfall = 6.00"
- Site perimeter elevation shall be set at the 25-year, 3-day no-discharge wsel; Rainfall = 9.50"

  - Perimeter overflow shall not flow onto private property without a drainage easement in-place.
- Building elevation shall be above FEMA Floodplain elevation if applicable.
- Building shall be above routed 100-year, 3-day wsel; Rainfall = 12.23".
- Building roof drains shall be collected by on-site Stormwater Management Facilities.

The following information shall be submitted:

- Stage/Storage data.
- Stage/Discharge data.
- Flood Routing for:
  - 10-yr, 1-day event, Rainfall = 6.00"
  - 25-yr, 3-day event, Rainfall = 9.50"
  - 100-year, 3-day event, Rainfall = 12.23"

IV. LAND USE

The proposed use will be a General Commercial structure with associated parking. The proposed Zoning is C3 General Commercial.

Land Use	Area (SF)
Buildings	4,306
Pervious Pavement	7,160
Sidewalk	1,353
Detention Area	2,159
Landscape/Green Area	7,522
Total Area	22,500

V. WATER QUANTITY

Pre-Developed Conditions

The existing site is vacant with 85% grassland cover in fair hydrologic condition and 15% Wooded in fair hydrologic condition. The site was previously developed with structures and paving which have since been removed.

Youth & Family
Water Management Calculations

Revised:
Project: Youty & Family Behavioal Health Center — **Engineer:** GA
Project #: 22-016-001 — **Date:** 6/2/23

1.) PRE DEVELOPMENT SITE DATA

Existing Impervious	0 sf	acres
Pervious Area	22500 sf	acres
TOTAL AREA:	**22500 sf**	acres

		ACREAGE	%	STAGE ELEVATIONS (NAVD) From:	To:
Impervious					
	Dirt Road	0 sf	0%	19.0	
Pervious					
	Wooded	3375 sf	15%	18.0	18.5
	Grasslands	19125 sf	85%	18.5	19.5
Total Impervious:		0 sf	**0%**		
Total Pervious:		22500 sf	**100%**		
TOTAL AREA:		22500 sf	**100%**		

Water Table Elev. = **8.5** NAVD — Typical depth to ground water for this Soil Type is 8'

Find Curve Number:

Avg. Pervious Ground El. = 19.00 NAVD
Groundwater Elevation = 8.5 NAVD
Distance to Water Table = 10.50

Soil Storage Table

Depth to W.T. (ft)	Coastal Storage (in)	Flatwoods Storage (in)	Depression Storage (in)
1.0	0.6	0.6	0.6
1.5	1.6	1.6	1.4
2.0	2.5	2.5	2.1
2.5	4.6	4.0	3.3
3.0	6.6	5.4	4.4
3.5	8.8	7.2	5.6
4.0	10.9	9	6.8

Pervious Area = 22500 sf
Storage from Table = 10.90 in (4.0 feet - not compacted)
Avail Soil Storage = 20438 sf
Soil Moisture Storage (S) = 10.90 in
Curve Number = 48

Youth & Family
Water Management Calculations

Project: Youty & Family Behavioal Health Center
Project #: 22-016-001

Revised:
Engineer: GA
Date: 6/2/23

PRE DEVELOPMENT RUNOFF:

Q = Total Runoff for a given storm depth (inches)
P = Storm Depth (inches)
S = Soil Storage (inches)
V = Total Runoff Volume (ac-ft)

$$Q = \frac{(P - 0.2S)^2}{P + 0.8S}$$

A.) 10-year 1-day Storm Event:

P = 6 inches
S = 10.90 in inches

Q = 0.99 inches

V = 0.99 inches x 22500.00 acres = **1859** **(cubic-ft)**

B.) 25-year 3-day Storm Event:

P = 9.5 inches
S = 10.90 in inches

Q = 2.94 inches

V = 2.94 inches x 22500.00 acres = **5514** **(cubic-ft)**

A.) 100-year 3-day Storm Event:

P = 12.23 inches
S = 10.90 in inches

Q = 4.82 inches

V = 4.82 inches x 22500.00 acres = **9040** **(cubic-ft)**

Post-Developed Conditions

Youth & Family
Water Management Calculations

Revised:
Project: Youty & Family Behavioal Health Center — **Engineer:** GA
Project #: 22-016-001 — **Date:** 6/2/23

2.) POST DEVELOPMENT SITE DATA

Impervious Area	9239	sf	(Includes 50% of Pervious Paver Area)
Pervious Area	13261	sf	(Includes 50% of Pervious Paver Area)
TOTAL AREA:	**22500**	sf	

		ACREAGE	%	STAGE ELEVATIONS (NAVD) From:	To:
Impervious Area					
	Sidewalk	1353 sf	6%	19.0	19.5
	Parking Lot	7160 sf	32%	19.8	20.5
	Buildings	4306 sf	19%	20.0	20.0
Pervious Area					
	Rain Garden 1	862 sf	4%	18.0	19.0
	Rain Garden 2	1296 sf	6%	18/	19.0
	Landscape/Grass	7523 sf	33%	18.0	19.5
Total Impervious:		12819 sf	**57%**		
Total Pervious:		9681 sf	**43%**		
TOTAL AREA:		22500 sf	**100%**		

Water Table Elev. = **8.5** NAVD — Typical depth to ground water for this Soil Type is 8'

Find Curve Number:

Avg. Pervious Ground El. = 19.00 NAVD
Groundwater Elevation = 8.5 NAVD
Distance to Water Table = 10.50

Soil Storage Table

Depth to W.T. (ft)	Coastal Storage (in)	Flatwoods Storage (in)	Depression Storage (in)	Compacted Pervious Storage	PaveDrain® on #57, com sub
PaveDrain®	0	0	0	0	3.43
1.0	0.6	0.6	0.6	0.45	3.88
1.5	1.6	1.6	1.4	1.16	4.59
2.0	2.5	2.5	2.1	1.88	5.31
2.5	4.6	4.0	3.3	3.41	6.84
3.0	6.6	5.4	4.4	4.95	8.38
3.5	8.8	7.2	5.6	6.56	9.99
3.75	9.8	8.1	6.2	7.37	10.80
4.0	10.9	9	6.8	8.18	11.61

	Uncompacted Pervious	Compacted Pervious	Non-Building Impervious	Building Impervious	Pervious Pavers
Impervious Area =			1353 sf	4306 sf	7160 sf
Compacted Pervious Area =		7523 sf			
Pervious Area =	2158 sf				
Storage from Table =	10.90 in	8.18 in	5.45 in	0.00 in	11.61
Avail Soil Storage =	10.90 in	8.18 in	5.45 in	0.00 in	11.61
Soil Moisture Storage (S) =	10.90 in	8.18 in	5.45 in	0.00 in	11.61
Curve Number =	48	55	65	98	46
Cumulative Moisture Storage (S) =	6.57				
Weighted Curve Number =	60				

Youth & Family
Water Management Calculations

Project: Youty & Family Behavioal Health Center
Project #: 22-016-001

Revised:
Engineer: GA
Date: 6/2/23

POST DEVELOPMENT RUNOFF:

Q = Total Runoff for a given storm depth (inches)
P = Storm Depth (inches)
S = Soil Storage (inches)
V = Total Runoff Volume (ac-ft)

$$Q = \frac{(P - 0.2S)^2}{P + 0.8S}$$

A.) 10-year 1-day Storm Event:

P =	6.00	inches			
S =	6.57 in	inches			
Q =	1.95	inches			
V =	1.95	inches x	22500	sf =	**3660** (cubic-ft)

B.) 25-year 3-day Storm Event:

P =	9.50	inches			
S =	6.57 in	inches			
Q =	4.54	inches			
V =	4.54	inches x	22500	sf =	**8518** (cubic-ft)

C.) 100-year 3-day Storm Event:

P =	12.23	inches			
S =	6.57 in	inches			
Q =	6.82	inches			
V =	6.82	inches x	22500	acres =	**12781** (cubic-ft)

Set Parking Elevation

Unrouted Runoff Volume =	3660			
Subtract 3.43" of pervious pavers storage		2,046 =	1614	(cubic-ft)
From Stage-Storage Graph, Required Stage =	20.1	feet		

Perimeter Elevation

Unrouted 25-year, 3-day storm =	8518	(cubic-ft)		
Subtract 3.43" of pervious pavers storage	2,046	(cubic-ft) =	6472	(cubic-ft)
From Stage Storage Graph, required perimeter elevation =	21.1	feet		

Building Floor Elevation

Unrouted Post-Dev 100-year, 3-day storm =	12781	(cubic-ft)	
Pre-Dev 100-year, 3-day storm =	9040	(cubic-ft)	
Estimated Rouned 100-year, 3-day storm =	3741	(cubic-ft)	
From Stage Storage Graph, min Floor Elevation =	20.5	(feet)	

Youth & Family Behavioral Health Center
Basin Volume

Rain Garden 1

Elev. (ft)	Δ Elev (ft)	Area (SF)	Ave Area (sf)	Volume (cf)	Cum Vol (cf)
18.75		0			0
	0.25		0	0	
19.00		72			0
	0.25		97	24	
19.25		122			24
	0.25		223.5	56	
19.50		325			80
	0.25		336.5	84	
19.75		348			164
	0.25		439	110	
20.00		530			274
	0.25		619	155	
20.25		708			429

Rain Garden 2

Elevation (ft)	Δ Elev (ft)	Area (SF)	Ave Area (sf)	Vol. (cf)	Cum Vol (cf)
18.75		0			0
	0.25		265	0	
19.00		530			0
	0.25		546	137	
19.25		562			137
	0.25		675	169	
19.50		788			305
	0.25		861	215	
19.75		934			521
	0.25		1014	254	
20.00		1094			774
	0.25		1179	295	
20.25		1264			1069

Rain Garden 3

Elev. (ft)	Δ Elev (ft)	Area (SF)	Ave Area (sf)	Volume (cf)	Cum Vol (cf)
18.75		74			0
	0.25		94	24	
19.00		114			24
	0.25		139	35	
19.25		164			58
	0.25		194	49	
19.50		224			107
	0.25		259	65	
19.75		294			172
	0.25		330	83	
20.00		366			254

Stage/Storage Table

Elev	Vol.
18.75	0
19.00	24
19.25	219
19.50	492
19.75	856
20.00	1358
20.25	2243
20.50	2605
20.75	5235

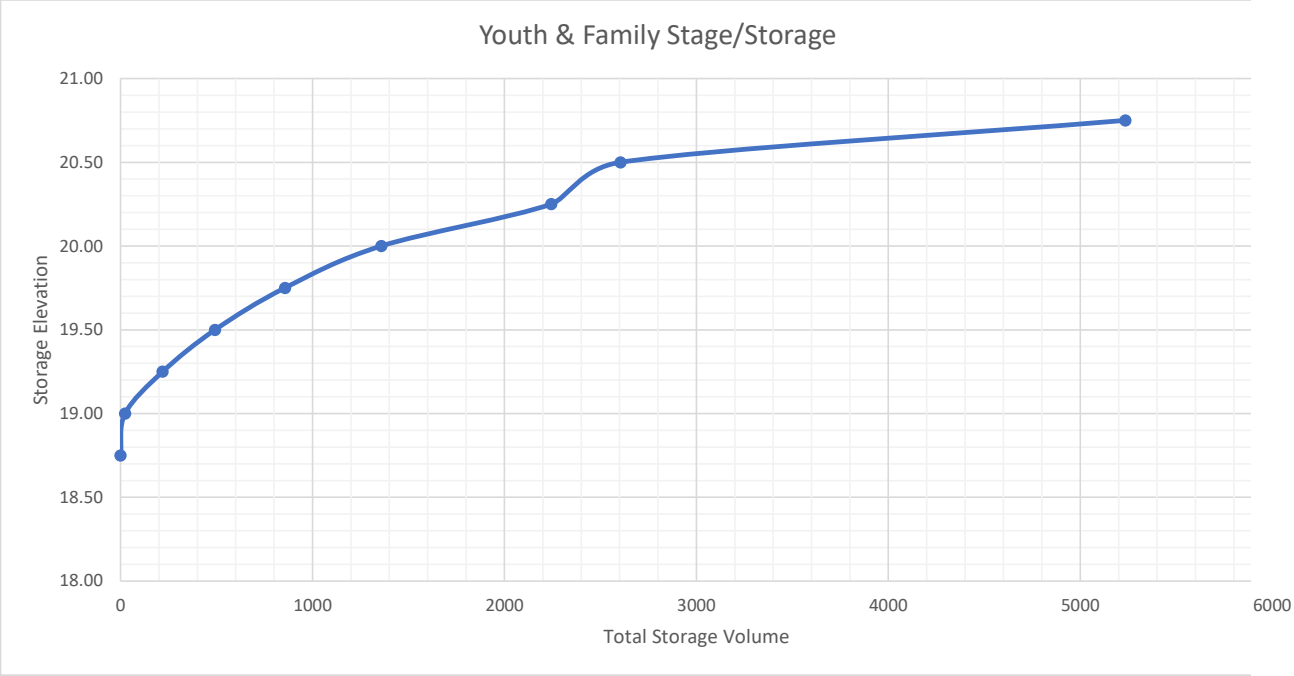
Parking lot

ELEV. (ft)	Δ Elev (ft)	Area (SF)	Ave Area (sf)	Vol. (cf)	Cum Vol (cf)
18.75		0			0
	0.25		0	0	
19.00		0			0
	0.25		0	0	
19.25		0			0
	0.25		0	0	
19.50		0			0
	0.25		0	0	
19.75		0			0
	0.25		225	56	
20.00		450			56
	0.25		2758	690	
20.25		5066			746
	0.25		7435	1859	
20.50		9804			2605
	0.25		10522	2631	
20.75		11240			5235

Youth & Family Behavioral Health Center
Stage-Storage Table and Graph

Stage/Storage Table

Elevation	Volume
18.75	0
19.00	24
19.25	219
19.50	492
19.75	856
20.00	1358
20.25	2243
20.50	2605
20.75	5235



VI. DISCHARGE & OUTFALL STRUCTURES

To Be Determined

VII. WATER QUALITY

Youth & Family
Post Development Water Quality

Project: Youty & Family Behavioal Health Center
Project #: 22-016-001
Revised:
Engineer: GA
Date: 6/2/23

WATER QUALITY VOLUMES TO BE TREATED:

A.) First Inch:

Pervious pavers includes 3.43 inces of storage, therefore is treated within. Area to be treated excludes Pervious Paver Area.

(Treated Volume) 1-inch * 1-ft/12-in * 15,340 (TREATED AREA (SF)) = 1,278 (TREATED VOLUME) cf

B.) 2.5 inches Times the Percent Impervious (SFWMD Standards):

(Site Area) 22,500 (PROJECT AREA (SF)) - (0.00 (LAKES (SF)) + 4,306 (ROOFS (SF))) = 18,194 (SITE AREA) sf

(Impervious Area) 18,194 (SITE AREA (AC)) - 13,261 (PERVIOUS AREA (AC)) = 4,933 (IMPERVIOUS AREA) sf

(% Impervious) IMPERVIOUS AREA * 100% / SITE AREA (AC) = 27.11%

(2.5-in * % Imp.) 2.5-inches * 27.11% (PERCENT IMPERVIOUS) = 0.68 (INCHES TO BE TREATED) in

(Treated Volume) 0.68 (TREATED (IN)) * 1-ft/12-in * 22,500 (PROJECT AREA - LAKES (AC)) = 1,271 (TREATED VOLUME) cf

C.) Total Required Detention:

100% Required Wet Detention = **1,278** cf

75% Required Dry Detention = **959** cf

50% Required Retention = **639** cf

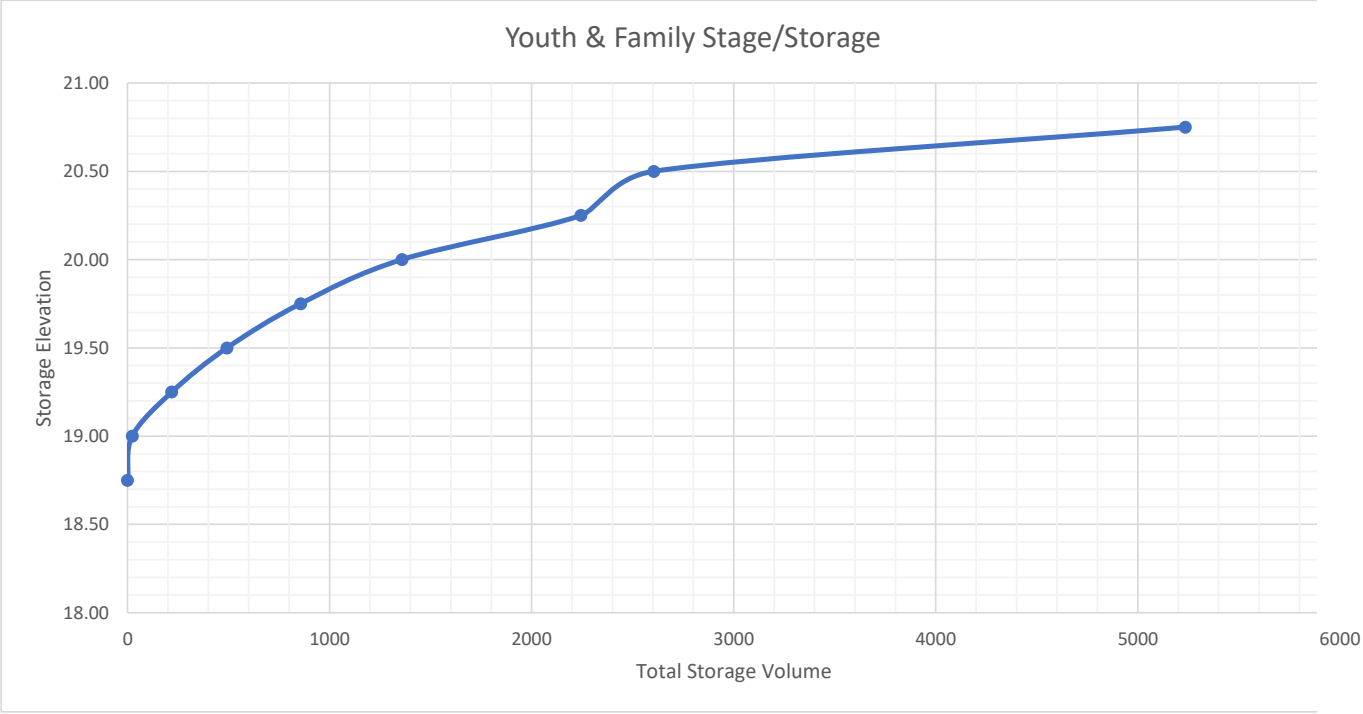
The required water quality storage is being provided as dry detention in 3 Rain Gardens dispersed around the site. The pervious pavers proposed for the entire driveway and parking area include 3.43' of storage per their design, therefore the area does not contribute to the

required treated area. Since the water quality requirements are being provided by dry detention, the required volume is 75% of the greater of the first 1" of rainfall over the entire treated area site or 2.5" of rainfall times the percent impervious of the treated area. The required water quality volume is therefore 959 cubic feet which corresponds to a storage elevation of 19.8'.

Youth & Family Behavioral Health Center
Stage-Storage Table and Graph

Stage/Storage Table

Elevation	Volume
18.75	0
19.00	24
19.25	219
19.50	492
19.75	856
20.00	1358
20.25	2243
20.50	2605
20.75	5235



VIII. WETLAND IMPACTS

There will be no wetland impacts resulting from the proposed project. Please see Exhibit 5 for the Environmental Report

IX. UTILITIES

There are currently no known utilities servicing the site nor evidence found of abandoned utilities remaining from the previous structures. This information must be confirmed by the contractor prior to any earth moving associated with this project. There are utility services available in the South 25th Street Right-of-Way, including aerial electric lines and below grade electric, communications, water, sanitary sewer, and storm water lines.

X. FLOODPLAIN ENCROACHMENT

The project area is shown on FEMA Flood Insurance Rate Map (FIRM) 12111C0186J where it is located in a Zone X areas determined to be outside the 0.2% annual chance floodplain boundary. Therefore, there is no floodplain encroachment associated with this project. Please see Exhibit 3 for the Floodplain Map.

XI. RECOVERY

To be Determined

Michelle Franklin, CFA -- Saint Lucie County Property Appraiser -- All rights reserved.

Property Identification

Site Address: 1211 S 25th ST
Sec/Town/Range: 17/35S/40E
Parcel ID: 2417-507-0005-000-7
Jurisdiction: Fort Pierce

Use Type: 1000
Account #: 26767
Map ID: 24/17N
Zoning: General Co

Ownership

YOUTH & FAMILY BEHAVIORAL
HEALTH CENTER INC
1211 S 25th St
Fort Pierce, FL 34947



Legal Description

RE-S/D OF KIRBY`S S/D S 1/2 OF LOT C AND ALL LOT D-LESS E 10 FT-(OR 1264-54)

Current Values

Just/Market Value:	$60,100
Assessed Value:	$60,100
Exemptions:	$0
Taxable Value:	$60,100

Property taxes are subject to change upon change of ownership.

- **Past taxes are not a reliable projection of future taxes.**
- **The sale of a property will prompt the removal of all exemptions, assessment caps, and special classifications.**

Taxes for this parcel: SLC Tax Collector's Office
Download TRIM for this parcel: Download PDF

Total Areas

Finished/Under Air (SF):	0
Gross Sketched Area (SF):	0
Land Size (acres):	0.28
Land Size (SF):	12,018

Building Design Wind Speed

Occupancy Category	I	II	III
Speed	140	150	160

Sources/links:

Sale History

Date	Book/Page	Sale Code	Deed	Grantor	Price
Nov 18, 2021	4726 / 2872	0205	WD	Rodriguez-Torres Raul	$130,000
Nov 16, 1999	1264 / 0054	XX02	WD	Harrison John G	$70,000
Nov 1, 1987	0565 / 0097	XX02	CV		$125,000
Jan 1, 1981	0350 / 2827	XX01	CV		$8,500

Building Information (1 of 1)

Finished Area: 0 SF

Gross Sketched Area: 0 SF

Exterior Data

View:	Roof Cover:	Roof Structure:
Building Type:	Year Built: N/A	Frame:
Grade:	Effective Year: N/A	Primary Wall:
Story Height:	No. Units: 0	Secondary Wall:

Interior Data

Bedrooms: 0	Electric:	Primary Int Wall:
Full Baths: 0	Heat Type:	Avg Hgt/Floor: 0
Half Baths: 0	Heat Fuel:	Primary Floors:
A/C %: 0%	Heated %: N/A%	Sprinkled %: 0%



Image or Sketch unavailable for display

Sketch Area Legend

Sub Area	Description	Area	Fin. Area	Perimeter

Special Features and Yard Items

Type	Qty	Units	Year Blt

Current Year Values

Current Values Breakdown

Building:	$0
Land:	$60,100
Just/Market:	$60,100
Ag Credit:	$0
Save Our Homes or 10% Cap:	$0
Assessed:	$60,100
Exemption(s):	$0
Taxable:	$60,100

Current Year Exemption Value Breakdown

Current Year Special Assessment Breakdown

Start Year	AssessCode	Units	Description	Amount
2001	0041	0.8	Fort Pierce Stormwater Charge	$55.20

This does not necessarily represent the total Special Assessements that could be charged against this property. The total amount charged for special assessments is reflected on the most current tax statement and information is available with the SLC Tax Collector's Office.

Historical Values

Year	Just/Market	Assessed	Exemptions	Taxable
2022	$60,100	$60,100	$0	$60,100
2021	$60,100	$60,100	$0	$60,100
2020	$60,100	$60,100	$0	$60,100
2019	$60,100	$60,100	$0	$60,100

Permits

Number	Issue Date	Description	Amount	Fee
F89001350D	Dec 1, 1989	Demolition	$2,375	$2,375
F89001370D	Dec 1, 1989	Demolition	$1,675	$1,675

Notice: This does not necessarily represent all the permits for this property.
Click the following link to check for additional permit data in Fort Pierce

All information is believed to be correct at this time, but is subject to change and is provided without any warranty.
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MICHELLE R. MILLER, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 4957411 OR BOOK 4726 PAGE 2872, Recorded 11/27/2021 12:59:22 PM Doc Tax: $910.00

Return to:
Florida Title & Guarantee Agency
14050 NW 14th Street, Suite 110
Sunrise, FL 33323

This Instrument Prepared
under the supervision of:

Karene Anderson
Florida Title & Guarantee Agency
14050 NW 14th Street, Suite 110
Sunrise, FL 33323

Property Appraisers Parcel Identification (Folio) No.:
2417-507-0005-000-7 and 2417-503-0040-000-2

Our File No.: 84-21-0551

WARRANTY DEED

This Warranty Deed made this 18th day of November, 2021 by Raul Rodriguez-Torres and Lisa Rodriguez-Torres, husband and wife, whose mailing address is 164 SE Osprey Ridge, Port St. Lucie, FL 34984, hereinafter called the grantor(s), to Youth & Family Behavioral Health Center, Inc, a Florida corporation, whose post office address is 1211 S 25th St, Fort Pierce, FL 34950, hereinafter called the grantee:

(Wherever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives and assigns of individuals, and the successors and assigns of corporations)

WITNESSETH: That the grantor(s), for and in consideration of the sum of $10.00 (ten) and other valuable considerations, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto the grantee all that certain land situate in St. Lucie County, State of Florida, viz:

Parcel 1: The South 1/2 of Lot C and all of Lot D, less the East 10 feet thereof of the Resubdivision of Lots 1, 2, 3. 4, 11 and 12, Block 2, Kirby's Subdivision, according to the plat thereof, as recorded in Plat Book 8, Page 33, of the Public Records of St. Lucie County, Florida;

AND

Parcel 2: Lot 10, Block 2, KIRBY SUBDIVISION, according to the Plat thereof, as recorded in Plat Book 3, Page 86, Public Records of St. Lucie County, Florida, less the East 10 feet, deeded to the State of Florida in Official Records Book 169, Page 1169, of the Public Records of St. Lucie County, Florida.

Neither the grantor(s) named herein, nor the spouse(s) thereof nor anyone for whose support they are responsible reside on or adjacent to the property herein described and is not therefore their homestead property.

SUBJECT TO: covenants, conditions, restrictions, reservations, limitations, easements and agreements of record, if any; taxes and assessments for the year 2022 and subsequent years; and to all applicable zoning ordinances and/or restrictions and prohibitions imposed by governmental authorities, if any,

TOGETHER, with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

TO HAVE AND TO HOLD, the same in Fee Simple forever.

AND the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land, and hereby warrants the title to said land and will defend the same against the lawful claims of all persons.

IN WITNESS WHEREOF, the said grantor has signed and sealed these presents the day and year first above written.

Signed, sealed and delivered in the presence of:

Audrey Hand
First Witness Signature

Audrey Hand
Printed Signature

Patricia H Thompson
Second Witness Signature

PATRICIA H THOMPSON
Printed Signature

Raul Rodriguez-Torres

Lisa Rodriguez-Torres

State of Florida

County of St Lucie

The foregoing instrument was acknowledged before me by means of ☑ physical presence or ☐ online notarization, this 18 day of NOV 2021 by Raul Rodriguez-Torres and Lisa Rodriguez-Torres, who has produced DL as identification or is personally known to me to be the persons therein.

Audrey Hand
Notary Public, State of Florida

My commission expires:
Seal

AUDREY HAND
Notary Public - State of Florida
Commission # GG 927160
My Comm. Expires Oct 28, 2023
Bonded through National Notary Assn.

Michelle Franklin, CFA -- Saint Lucie County Property Appraiser -- All rights reserved.

Property Identification

Site Address: 1213 S 25th ST
Sec/Town/Range: 17/35S/40E
Parcel ID: 2417-503-0040-000-2
Jurisdiction: Fort Pierce

Use Type: 1000
Account #: 26653
Map ID: 24/17N
Zoning: General Co

Ownership

YOUTH & FAMILY BEHAVIORAL
HEALTH CENTER INC
1211 S 25th St
Fort Pierce, FL 34947



Legal Description

KIRBY`S S/D BLK 2 LOT 10-LESS E 10 FT- (OR 1264-54)

Current Values

Just/Market Value:	$50,500
Assessed Value:	$50,500
Exemptions:	$0
Taxable Value:	$50,500

Property taxes are subject to change upon change of ownership.

- **Past taxes are not a reliable projection of future taxes.**
- **The sale of a property will prompt the removal of all exemptions, assessment caps, and special classifications.**

Taxes for this parcel: SLC Tax Collector's Office
Download TRIM for this parcel: Download PDF

Total Areas

Finished/Under Air (SF):	0
Gross Sketched Area (SF):	0
Land Size (acres):	0.23
Land Size (SF):	10,100

Building Design Wind Speed

Occupancy Category	I	II	III
Speed	140	150	160

Sources/links:

Sale History

Date	Book/Page	Sale Code	Deed	Grantor	Price
Nov 18, 2021	4726 / 2872	0205	WD	Rodriguez-Torres Raul	$130,000
Nov 16, 1999	1264 / 0054	XX02	WD	Harrison John G	$70,000
Nov 1, 1987	0565 / 0097	XX02	CV		$125,000
May 1, 1987	0565 / 0096	XX01	CV		$0

Building Information (1 of 1)

Finished Area: 0 SF

Gross Sketched Area: 0 SF

Exterior Data

View:	Roof Cover:	Roof Structure:
Building Type:	Year Built: N/A	Frame:
Grade:	Effective Year: N/A	Primary Wall:
Story Height:	No. Units: 0	Secondary Wall:

Interior Data

Bedrooms: 0	Electric:	Primary Int Wall:
Full Baths: 0	Heat Type:	Avg Hgt/Floor: 0
Half Baths: 0	Heat Fuel:	Primary Floors:
A/C %: 0%	Heated %: N/A%	Sprinkled %: 0%



Image or Sketch unavailable for display

Sketch Area Legend

Sub Area	Description	Area	Fin. Area	Perimeter

Special Features and Yard Items

Type	Qty	Units	Year Blt

Current Year Values

Current Values Breakdown

Building:	$0
Land:	$50,500
Just/Market:	$50,500
Ag Credit:	$0
Save Our Homes or 10% Cap:	$0
Assessed:	$50,500
Exemption(s):	$0
Taxable:	$50,500

Current Year Exemption Value Breakdown

Current Year Special Assessment Breakdown

Start Year	AssessCode	Units	Description	Amount
1999	0041	1	Fort Pierce Stormwater Charge	$69.00

This does not necessarily represent the total Special Assessements that could be charged against this property. The total amount charged for special assessments is reflected on the most current tax statement and information is available with the SLC Tax Collector's Office.

Historical Values

Year	Just/Market	Assessed	Exemptions	Taxable
2022	$50,500	$50,500	$0	$50,500
2021	$50,500	$50,500	$0	$50,500
2020	$50,500	$50,500	$0	$50,500
2019	$50,500	$50,500	$0	$50,500

Permits

Number	Issue Date	Description	Amount	Fee
F900000886	Jul 10, 1990	Demolition	$1,890	$1,890

Notice: This does not necessarily represent all the permits for this property.
Click the following link to check for additional permit data in Fort Pierce

All information is believed to be correct at this time, but is subject to change and is provided without any warranty.
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MICHELLE R. MILLER, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 4957411 OR BOOK 4726 PAGE 2872, Recorded 11/27/2021 12:59:22 PM Doc Tax: $910.00

Return to:
Florida Title & Guarantee Agency
14050 NW 14th Street, Suite 110
Sunrise, FL 33323

This Instrument Prepared
under the supervision of:

Karene Anderson
Florida Title & Guarantee Agency
14050 NW 14th Street, Suite 110
Sunrise, FL 33323

Property Appraisers Parcel Identification (Folio) No.:
2417-507-0005-000-7 and 2417-503-0040-000-2

Our File No.: 84-21-0551

WARRANTY DEED

This Warranty Deed made this 18th day of November, 2021 by Raul Rodriguez-Torres and Lisa Rodriguez-Torres, husband and wife, whose mailing address is 164 SE Osprey Ridge, Port St. Lucie, FL 34984, hereinafter called the grantor(s), to Youth & Family Behavioral Health Center, Inc, a Florida corporation, whose post office address is 1211 S 25th St, Fort Pierce, FL 34950, hereinafter called the grantee:

(Wherever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives and assigns of individuals, and the successors and assigns of corporations)

WITNESSETH: That the grantor(s), for and in consideration of the sum of $10.00 (ten) and other valuable considerations, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto the grantee all that certain land situate in St. Lucie County, State of Florida, viz:

Parcel 1: The South 1/2 of Lot C and all of Lot D, less the East 10 feet thereof of the Resubdivision of Lots 1, 2, 3. 4, 11 and 12, Block 2, Kirby's Subdivision, according to the plat thereof, as recorded in Plat Book 8, Page 33, of the Public Records of St. Lucie County, Florida;

AND

Parcel 2: Lot 10, Block 2, KIRBY SUBDIVISION, according to the Plat thereof, as recorded in Plat Book 3, Page 86, Public Records of St. Lucie County, Florida, less the East 10 feet, deeded to the State of Florida in Official Records Book 169, Page 1169, of the Public Records of St. Lucie County, Florida.

Neither the grantor(s) named herein, nor the spouse(s) thereof nor anyone for whose support they are responsible reside on or adjacent to the property herein described and is not therefore their homestead property.

SUBJECT TO: covenants, conditions, restrictions, reservations, limitations, easements and agreements of record, if any; taxes and assessments for the year 2022 and subsequent years; and to all applicable zoning ordinances and/or restrictions and prohibitions imposed by governmental authorities, if any,

TOGETHER, with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

TO HAVE AND TO HOLD, the same in Fee Simple forever.

AND the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land, and hereby warrants the title to said land and will defend the same against the lawful claims of all persons.

IN WITNESS WHEREOF, the said grantor has signed and sealed these presents the day and year first above written.

Signed, sealed and delivered in the presence of:

Audrey Hand
First Witness Signature

Audrey Hand
Printed Signature

Patricia H Thompson
Second Witness Signature

PATRICIA H THOMPSON
Printed Signature

Raul Rodriguez-Torres

Lisa Rodriguez-Torres

State of Florida

County of St Lucie

The foregoing instrument was acknowledged before me by means of ☑ physical presence or ☐ online notarization, this 18 day of NOV 2021 by Raul Rodriguez-Torres and Lisa Rodriguez-Torres, who has produced DL as identification or is personally known to me to be the persons therein.

Audrey Hand
Notary Public, State of Florida

My commission expires:
Seal

AUDREY HAND
Notary Public - State of Florida
Commission # GG 927160
My Comm. Expires Oct 28, 2023
Bonded through National Notary Assn.

O'ROURKE
ENGINEERING & PLANNING

TRAFFIC ANALYSIS

FOR

Youth and Family Behavioral Health Center

Prepared for:

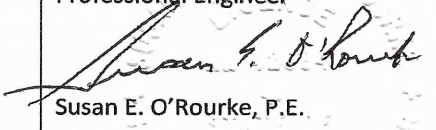
Youth and Family Behavioral Health Center
1211 S. 25th Street
Fort Pierce, FL 34974

Prepared by

O'Rourke Engineering & Planning
22 SE Seminole St
Stuart, Florida 34994
772-781-7918

June 5, 2023

SR23012.0

Prepared by: O'Rourke Engineering & Planning Certificate of Authorization: #26869 22 SE Seminole Street Stuart, Florida 34994 772-781-7918	Professional Engineer  Susan E. O'Rourke, P.E. Date signed and sealed: 6/5/2023 License #: 42684

O'ROURKE
ENGINEERING & PLANNING

June 5, 2023

Mr. Jean Monval
Youth and Family Behavioral Health Center
1211 S. 25th Street
Fort Pierce, FL 34974

Re: Youth and Family Behavioral Health Center

Dear Mr. Monval:

O'Rourke Engineering & Planning has completed the analysis of a 4,306 square foot medical office building located south of Okeechobee Road and west of 25th Street in St. Lucie County, Florida. The steps in the analysis and the ensuing results are presented herein.

It has been a pleasure working with you. If you have any questions or comments, please give me a call.

Respectfully submitted,

O'Rourke Engineering & Planning

Susan E. O'Rourke, P.E.
Registered Civil Engineer

22 SE Seminole Street | Stuart, FL 34994 | 772-781-7918 | SEORourke@comcast.net

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APPENDIX A: Site Location
APPENDIX B: Roadway Details
APPENDIX C: St. Lucie County 2022 Level of Service Report
APPENDIX D: Growth Rate/Background Data
APPENDIX E: Intersection/Driveway Analysis/FDOT Letter

INTRODUCTION

O'Rourke Engineering & Planning was retained to prepare a traffic analysis for the proposed 4,306 square foot medical office building located west of 25th Street in St. Lucie County, Florida. The purpose of this report is to determine the impact of the change in land use on the surrounding roadway system.

In order to make that determination, the following analytical steps were taken:

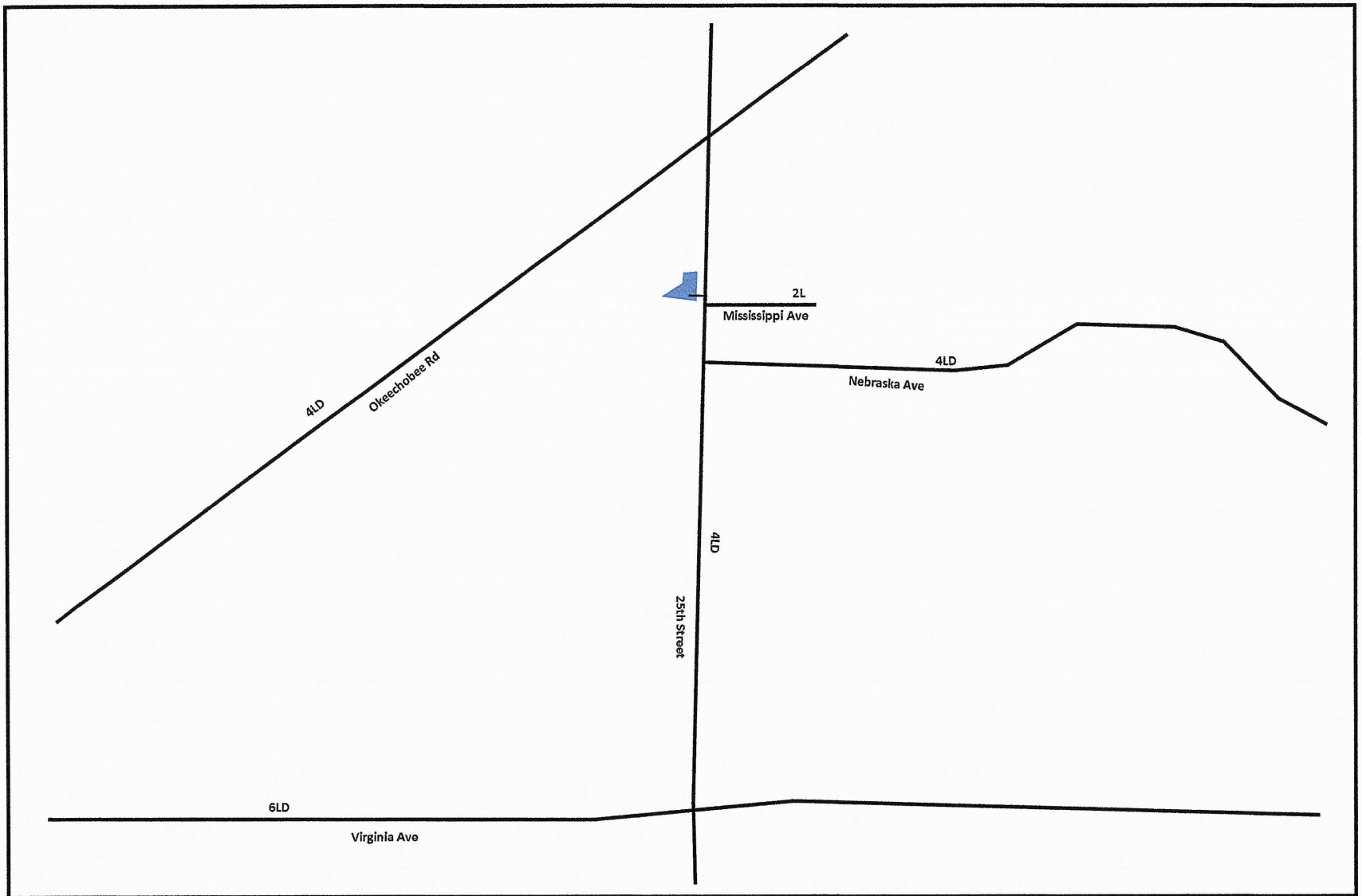
- summary of the project
- summary of existing lane geometries
- summary of the existing traffic volumes
- assessment of project traffic
- determination of impact area
- summary of short-term cumulative traffic volumes
- summary of levels of service with the project traffic added

Each of these steps is outlined herein.

PROJECT DESCRIPTION

The subject property consists of approximately 0.52 acres located off 25th Street in St. Lucie County, Florida. The proposed project consists of 4,306 square feet of medical office. A 2025 buildout is proposed.

The project location is shown in **Figure 1**. **Appendix A** shows the details of the site.



NTS

O'ROURKE ENGINEERING & PLANNING

22 SE Seminole Street
Stuart, Fl, 34994

Job Number: SR23012.0 | Date: 2/2/2023

Legend

= Location

Figure 1

Project Location

Youth and Family

ROADWAY CONDITIONS

The study area is defined as the roadways upon which the project has an impact of 3% of the level of service capacity of the roadway and 1% on the adjacent link. Once the project traffic was assigned, the study area was refined based on the impact percentages.

The study area roadways were defined in terms of existing lane geometrics and existing traffic volumes.

Existing/Proposed Lane Geometrics and Traffic Control

The study area was reviewed to determine the existing number and type of lanes, and the traffic control along the roadway. Each roadway is described below.

- 25th Street is a four-lane divided principle arterial with a north/south alignment.
- Virginia Avenue is a six-lane divided principle arterial with an east/west alignment.
- Okeechobee Road is a multi-lane divided arterial roadway with an east/west alignment. It is four-lane divided west of Kings Highway and east of Virginia Avenue. It is six-lane divided from Rolyat Street to Virginia Avenue and from Kings Highway to I-95. There is an eight-lane divided section from east of I-95 to Rolyat Street. There are numerous extended turn lanes and freeway auxiliary lanes.
- Nebraska Avenue is a four-lane divided minor arterial east of 25th street with an east/west alignment.

Roadway details are included in **Appendix B.**

Existing Traffic Volumes/ Service Volume

Traffic volumes were obtained from the St. Lucie County TPO and FDOT. The count data along with the number of lanes and the associated peak hour/peak direction service volumes will be summarized in the upcoming sections of the report. The service volumes were developed based on the functional classification contained in the County Comprehensive Plan and the St. Lucie County 2022 Traffic Counts and Level of Service Report. These documents are included in **Appendix C.**

Table 1 - Trip Generation

Table 1a: Daily

Land Use	ITE Code	Intensity	Units	Trip Generation Rate	Directional Split		Gross Trips		
					In	Out	In	Out	Total
Medical Office	720	4,306	Sft	T = 42.97(X) - 108.01	50%	50%	39	38	77
TOTALS							**39**	**38**	**77**

Source: ITE 11th Edition Trip Generation Rates

Table 1b: AM Peak Hour

Land Use	ITE Code	Intensity	Units	Trip Generation Rate	Directional Split		Gross Trips		
					In	Out	In	Out	Total
Medical Office	720	4,306	Sft	Ln(T) = 0.90 Ln(X) + 1.34	79%	21%	11	3	14
TOTALS							**11**	**3**	**14**

Source: ITE 11th Edition Trip Generation Rates

Table 1c: PM Peak Hour

Land Use	ITE Code	Intensity	Units	Trip Generation Rate	Directional Split		Gross Trips		
					In	Out	In	Out	Total
Medical Office	720	4,306	Sft	T = 4.07(X) - 3.17	30%	70%	4	10	14
TOTALS							**4**	**10**	**14**

Source: ITE 11th Edition Trip Generation Rates

PROJECT TRAFFIC

To estimate future traffic generated by the project, the ITE Trip Generation, 11th Edition trip rates were applied. Land Use Code 720 for Medical Office was applied to estimate the trips generated. These calculations are shown in **Tables 1a, 1b, and 1c.**

As shown, the project will generate 77 new daily trips. The project will generate 14 new AM peak hour trips with 11 trips entering the project and 3 trips exiting the project. There will be 14 new PM peak hour trips with 4 trips entering the project and 10 trips exiting the project.

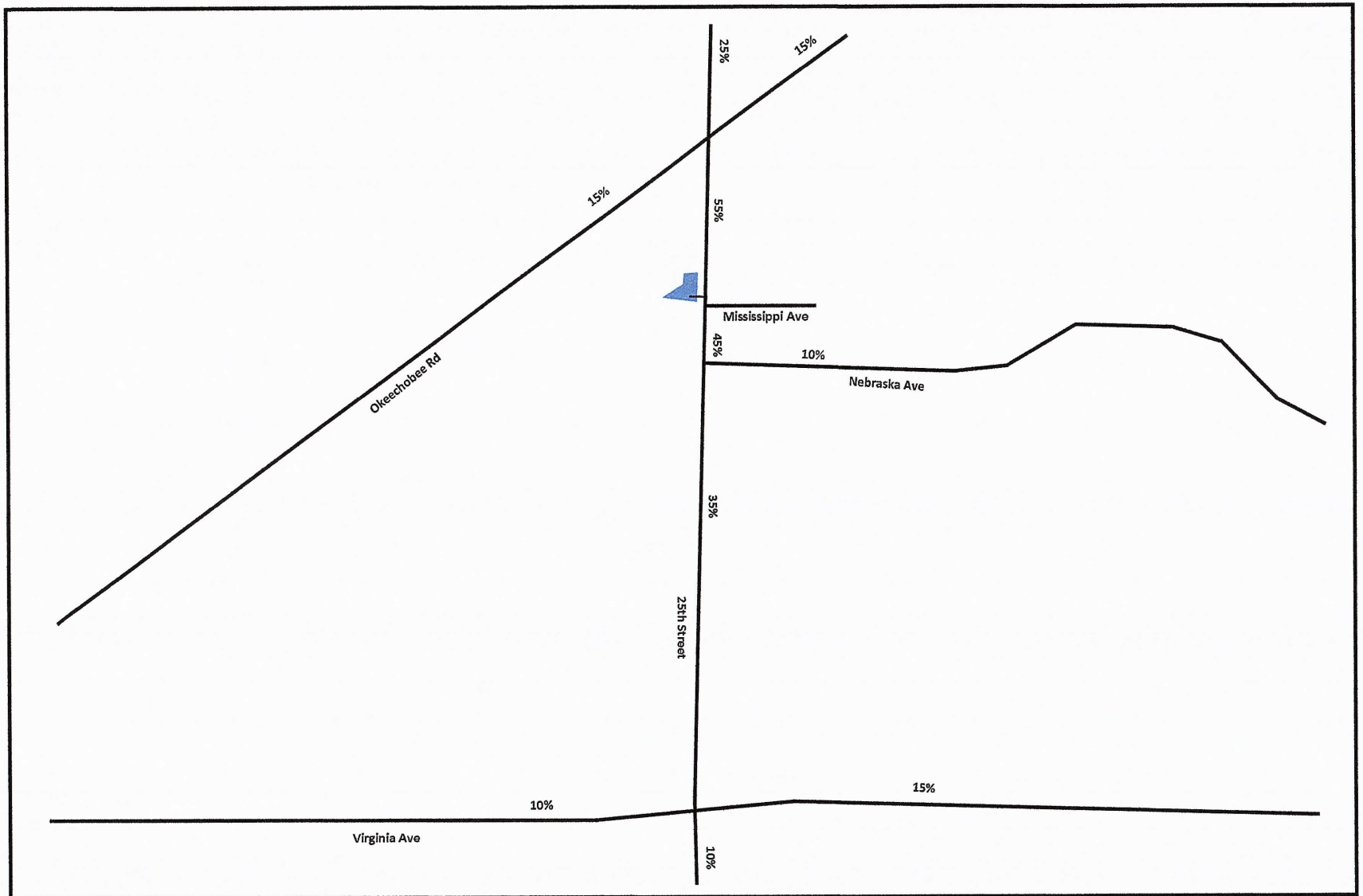
PROJECT DISTRIBUTION/ ASSIGNMENT

The project traffic was distributed by general geographic direction and then assigned to the roadway network.

Distribution/ Assignment – This general distribution led to an assignment of trips based on the anticipated ultimate destinations and the roadway paths used to reach those destinations. The resultant project assignment is shown in **Figure 2.**

2025 Analysis

The project traffic was assigned to the network to determine project impact and significance. **Tables 2a and 2b** summarize the project percent impact with the trips anticipated by 2025. Significance is defined as 1% on the adjacent link and 3% on other links in the network. As shown, the project will not be significant on any links. Only the adjacent link was analyzed further. Existing traffic volumes were grown using an area wide historical growth rate. Approved background projects were then added. Finally, the project trips were then added to generate total traffic. The total traffic volumes were then compared to the allowable service volumes to determine concurrency**. Tables 3a and 3b** summarize the results of the link analysis. As shown, all roadways will operate at acceptable levels of service.



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O'ROURKE ENGINEERING & PLANNING

22 SE Seminole Street
Stuart, Fl, 34994

Job Number: SR23012.0 | Date: 2/2/2023

Legend

AM (PM) = XX (XX)

Figure 2

Percent Assignment

Youth and Family

TABLE 2a - Project Percent Impact - AM

Segment	From	To	Lanes	Direction	IN/OUT	Greater than 3% (1% on Adjacent Links) (2)	Peak Hour Service Capacity (E+C) (1)	Project Volume Peak Direction	% Project of Capacity-Peak Hour	Project Percent Assignment
Okeechobee Rd	33rd St	25th St	4LD	EB	IN	NO	1,630	2	0.12%	15%
	33rd St	25th St	4LD	WB	OUT	NO	1,630	0	0.00%	15%
	25th St	Georgia Ave	4LD	EB	OUT	NO	1,630	0	0.00%	15%
	25th St	Georgia Ave	4LD	WB	IN	NO	1,630	2	0.12%	15%
Nebraska Ave	25th St	13th St	4LD	EB	OUT	NO	1,710	0	0.00%	10%
	25th St	13th St	4LD	WB	IN	NO	1,710	1	0.06%	10%
25th St	Cortez Blvd	Virginia Ave	4LD	NB	IN	NO	2,000	1	0.05%	10%
	Cortez Blvd	Virginia Ave	4LD	SB	OUT	NO	2,000	0	0.00%	10%
	Virginia Ave	Nebraska Ave	4LD	NB	IN	NO	2,000	4	0.20%	35%
	Virginia Ave	Nebraska Ave	4LD	SB	OUT	NO	2,000	1	0.05%	35%
	Nebraska Ave	Okeechobee Rd	4LD	NB	OUT	NO	2,000	2	0.10%	55%
	Nebraska Ave	Okeechobee Rd	4LD	SB	IN	NO	2,000	6	0.30%	55%
	Okeechobee Rd	Georgia Ave	4LD	NB	OUT	NO	1,630	1	0.06%	25%
	Okeechobee Rd	Georgia Ave	4LD	SB	IN	NO	1,630	3	0.18%	25%
Virginia Ave	35th St	25th St	6LD	EB	IN	NO	3,020	1	0.03%	10%
	35th St	25th St	6LD	WB	OUT	NO	3,020	0	0.00%	10%
	25th St	13th St	6LD	EB	OUT	NO	3,020	0	0.00%	15%
	25th St	13th St	6LD	WB	IN	NO	3,020	2	0.07%	15%

(1) FDOT 2022 Service Capacity Tables & St. Lucie TPO

(2) According to the Guidelines prepared by the TPO and modified by the City and County

Two-Way: 14
Net In: 11
Net Out: 3

TABLE 2b - Project Percent Impact - PM

Segment	From	To	Lanes	Direction	IN/OUT	Greater than 3% (1% on Adjacent Links) (2)	Peak Hour Service Capacity (E+C) (1)	Project Volume Peak Direction	% Project of Capacity-Peak Hour	Project Percent Assignment
Okeechobee Rd	33rd St	25th St	4LD	EB	IN	NO	1,630	1	0.06%	15%
	33rd St	25th St	4LD	WB	OUT	NO	1,630	0	0.00%	15%
	25th St	Georgia Ave	4LD	EB	OUT	NO	1,630	2	0.12%	15%
	25th St	Georgia Ave	4LD	WB	IN	NO	1,630	1	0.06%	15%
Nebraska Ave	25th St	13th St	4LD	EB	OUT	NO	1,710	1	0.06%	10%
	25th St	13th St	4LD	WB	IN	NO	1,710	1	0.06%	10%
25th St	Cortez Blvd	Virginia Ave	4LD	NB	IN	NO	2,000	0	0.00%	10%
	Cortez Blvd	Virginia Ave	4LD	SB	OUT	NO	2,000	1	0.05%	10%
	Virginia Ave	Nebraska Ave	4LD	NB	IN	NO	2,000	4	0.20%	35%
	Virginia Ave	Nebraska Ave	4LD	SB	OUT	NO	2,000	1	0.05%	35%
	Nebraska Ave	Okeechobee Rd	4LD	NB	OUT	NO	2,000	6	0.30%	55%
	Nebraska Ave	Okeechobee Rd	4LD	SB	IN	NO	2,000	2	0.10%	55%
	Okeechobee Rd	Georgia Ave	4LD	NB	OUT	NO	1,630	3	0.18%	25%
	Okeechobee Rd	Georgia Ave	4LD	SB	IN	NO	1,630	1	0.06%	25%
Virginia Ave	35th St	25th St	6LD	EB	IN	NO	3,020	0	0.00%	10%
	35th St	25th St	6LD	WB	OUT	NO	3,020	1	0.03%	10%
	25th St	13th St	6LD	EB	OUT	NO	3,020	2	0.07%	15%
	25th St	13th St	6LD	WB	IN	NO	3,020	1	0.03%	15%

(1) FDOT 2022 Service Capacity Tables & St. Lucie TPO

(2) According to the Guidelines prepared by the TPO and modified by the City and County

Two-Way: 14
Net In: 4
Net Out: 10

TABLE 3a - Link Analysis - AM

Segment	From	To	Direction	IN/OUT	Greater than 3% (1% on Adjacent Links)	AADT 2022	D Factor (3)	2022 Peak Hour Directional Volumes	Growth Rate (2)	2025 AM Peak Hour + Growth	AM Peak Hour Committed Projects Directional	2025 Growth + Committed Peak Direction	Peak Hour Service Capacity (1)	Project Volume Peak Direction	Total Traffic (Peak Direction)	% Project of Capacity-Peak Hour	Does Project Satisfy Concurrency ?	Project Percent Assignment
25th St	Nebraska Ave	Okeechobee Rd	NB	OUT	NO	21,256	0.61	1,219	0.08%	1,222	4	1,226	2,000	2	1,228	0.10%	YES	55%
	Nebraska Ave	Okeechobee Rd	SB	IN	NO	21,256	0.39	779	0.08%	781	2	783	2,000	6	789	0.30%	YES	55%

(1) St. Lucie County 2022 Traffic Counts and LOS Report

(2) Area wide growth rate calculated from FDOT Historical AADT

(3) From FDOT Hourly Count Data

Two-Way:	14
Net In:	11
Net Out:	3
Years Grown:	3

TABLE 3b - Link Analysis - PM

Segment	From	To	Direction	IN/OUT	Greater than 3% (1% on Adjacent Links)	AADT 2022	D Factor (3)	2022 Peak Hour Directional Volumes	Growth Rate (2)	2025 PM Peak Hour + Growth	PM Peak Hour Committed Projects Directional	2025 Growth + Committed Peak Direction	Peak Hour Service (1) Capacity	Project Volume Peak Direction	Total Traffic (Peak Direction)	% Project of Capacity-Peak Hour	Does Project Satisfy Concurrency ?	Project Percent Assignment
25th St	Nebraska Ave	Okeechobee Rd	NB	OUT	NO	21,256	0.48	1,008	0.08%	1,010	3	1,013	2,000	6	1,019	0.30%	YES	55%
	Nebraska Ave	Okeechobee Rd	SB	IN	NO	21,256	0.52	1,092	0.08%	1,095	5	1,100	2,000	2	1,102	0.10%	YES	55%

(1) St. Lucie County 2022 Traffic Counts and LOS Report

(2) Area wide growth rate calculated from FDOT Historical AADT

(3) From FDOT Hourly Count Data

Two-Way:	14
Net In:	4
Net Out:	10
Years Grown:	3

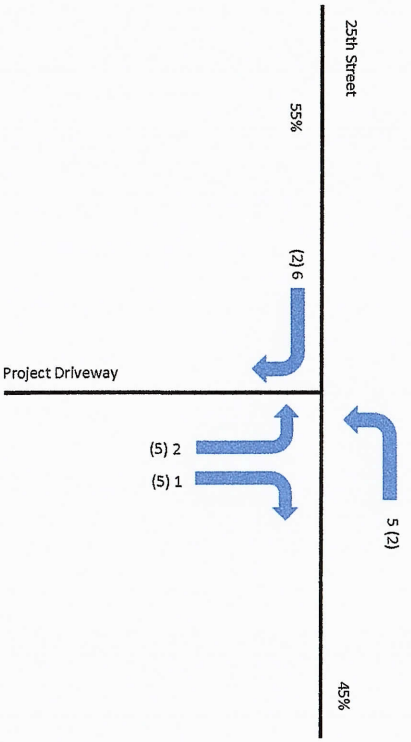
Intersection/Driveway Analysis

The project proposes one driveway for the site. The driveway will be located on the east side of the site and will connect to 25th Street. The driveway location was approved by FDOT. **Figure 3** illustrates the project traffic at the driveways.

The project driveway was analyzed using HCS. The Project Driveway and 25th Street will operate at a LOS C for the eastbound movement during the AM and PM peak hours at buildout.

The Project Driveway & 25th Street was also analyzed for the need for a right-turn lane using the FDOT Access Management Guidebook. 25th Street has a posted speed limit of 40 MPH. Therefore, a right-turn lane is recommended when the right turning volume exceeds 80-125 peak hour vehicles. With a peak hour right-turn movement of 6 vehicles, a right-turn lane is not warranted at the project driveway. There is an existing two-way left-turn lane at the project driveway. Therefore, a left-turn lane analysis is not needed.

The details of the intersection/driveway analysis and the FDOT letter are included in **Appendix E**.



	IN	OUT
AM	11	3
PM	4	10

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O'ROURKE ENGINEERING & PLANNING

22 SE Seminole Street
Stuart, Fl, 34994

Job Number:

Date:

Legend

AM (PM) = XX (XX)

Figure 3

Driveway Assignment

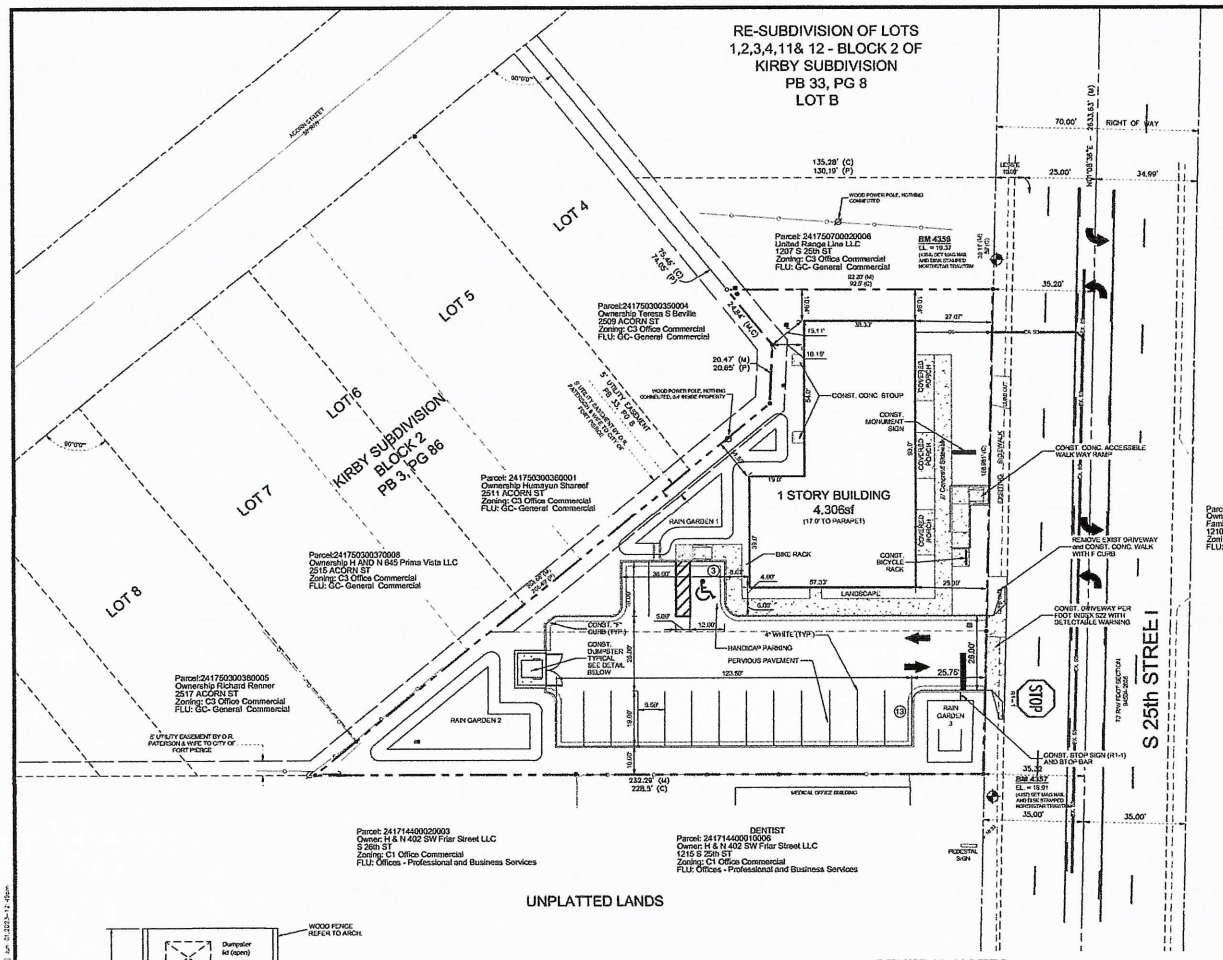
Youth and Family

CONCLUSION

With 14 net new AM peak hour trips and 14 net new PM peak hour trips, all links and intersections comply with concurrency standards. Therefore, the project meets the requirements for concurrency.

APPENDIX A

SITE DATA



SITE DATA

1211 & 1213 S 25th Street

Parcel 1	2417-507-0005-000-7	12,446	0.29	ac
Existing Zoning	C3 General Commercial			
Proposed Zoning	C3 General Commercial			
Existing Land Use	Vacant			
Future Land Use	General Commercial			
Parcel 2	2417-503-0040-000-7	10,055	0.23	ac
Existing Zoning	C3 General Commercial			
Proposed Zoning	C3 General Commercial			
Existing Land Use	Vacant			
Future Land Use	General Commercial			

Total Site Area		**22,500 sf**	**0.52 ac**	**100%**
Impervious		Square Feet	Acreage	Percent of Total
Required (Max.)		n/a sf	ac	
Proposed		9,239 sf	0.21 ac	41%
Impervious Total				
Building		4,306 sf	0.10 ac	19%
Pervious Pavement	50% impervious	3,580 sf	0.08 ac	16%
Sidewalk		1,353 sf	0.03 ac	6%
	sub-total	**9,239 sf**	**0.21 ac**	**41%**
Pervious Total			0.00	0%
Pervious Pavement	50% pervious	3,580 sf	0.08 ac	16%
Rain Garden 1		862 sf	0.02 ac	4%
Rain Garden 2		1,297 sf	0.03 ac	6%
Landscape / Green Area		7,522 sf	0.17 ac	33%
	sub-total	**13,261 sf**	**0.30 ac**	**59%**

Building Setbacks	
Front	25'
Side	10
Rear	0

Max Building coverage		60%	
Prop. Office Building	Square footage	4,306 sf	
Prop. Office Building	Height to top of parapet	17 ft	

Parking

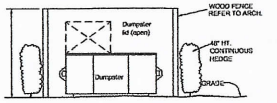
Professional service establishments, Other	4,306 sf	
1 parking space for 300 square feet of non-storage floor area		14 spaces required
Total Required		14 spaces required
Total Accessible Required		1 spaces required
Total Provided		15 spaces required
Total Accessible Provided		1 spaces required

LEGAL DESCRIPTION

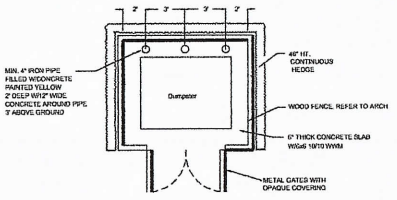
PARCEL 1: THE SOUTH ½ OF LOT C AND ALL OF LOT D, LESS THE EAST 10 FEET THEREOF OF THE RESUBDIVISION OF LOTS 1, 2, 3, 4, 11, AND 12, BLOCK 2, KIRBY'S SUBDIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 8, PAGE 33, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA;

AND

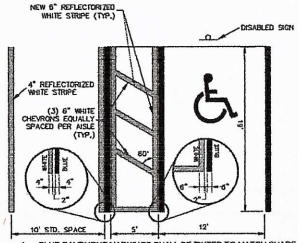
PARCEL 2: LOT 10, BLOCK 2, KIRBY SUBDIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 3, PAGE 86, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, LESS THE EAST 10 FEET, DEEDED TO THE STATE OF FLORIDA IN OFFICIAL RECORDS BOOK 169, PAGE 1189, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.



Elevation



Dumpster Detail

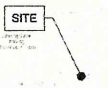


NOTES:
1. BLUE PAVEMENT MARKINGS SHALL BE TINTED TO MATCH SHADE 15180 OF FEDERAL STANDARDS 595A.
2. ALL DIMENSIONS ARE TO THE CENTERLINE OF MARKINGS.

TYPICAL HANDICAP AND STRIPING DETAIL
NTS

GENERAL NOTES:

1. SURVEY PROVIDED BY NORTHSTAR GEOMATICS DATED 11/18/22.
2. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY OF FT. PIERCE REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
3. ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FASRC TO ALL SLOPES 1V:3H OR STEEPER. CONTRACTOR SHALL GRASS DISTURBED AREAS IN ACCORDANCE WITH CITY SPECIFICATIONS UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
4. ALL ISLANDS WITH CURB & GUTTER SHALL BE LANDSCAPED.
5. ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, (UNLESS OTHERWISE NOTED ON PLANS) INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS & POLES, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN BASE BID.
7. REFER TO ARCHITECTURAL PLANS FOR SITE LIGHTING AND ELECTRICAL PLANS.
8. ALL SIDEWALKS AND ADA ACCESSIBLE AREAS SHALL HAVE A MAXIMUM RUNNING SLOPE OF 1V:20H & A MAXIMUM CROSS SLOPE OF 1V:50H.
9. ALL CURB RAMPS TO HAVE DETECTABLE WARNINGS & BE CONSTRUCTED PER LATEST EDITIONS OF FDOT STANDARDS PLANS FOR ROAD CONSTRUCTION, INDEX 522-002, FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, SECTION 527 & PER ADA REQUIREMENTS.
10. ALL STRIPING TO BE HIGH SLIP-RESISTANT FINISH TO PREVENT SLIPPING IN WET & DRY CONDITIONS.
11. ALL STRIPING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF FDOT STANDARD PLANS FOR ROAD CONSTRUCTION, INDEX# 711-001, FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 711 "THERMO PLASTIC PAVEMENT MARKINGS",CITY OF FT. PIERCE REQUIREMENTS. INSTALL RETRO-REFLECTIVE PAVEMENT MARKINGS (RPM'S).
12. ALL STRIPING SHALL BE INSTALLED AFTER NEW PAVEMENT.
13. ALL PROHIBITED EXOTIC SPECIES SHALL BE REMOVED AND ALL REQUIRED LANDSCAPING SHALL BE INSTALLED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
14. REFER TO CONSTRUCTION DRAWINGS FOR LOCATION OF TRAFFIC CONTROL DEVICES.
15. DURING CONSTRUCTION ACTIVITIES, EXIST. NATIVE VEGETATION TO BE PRESERVED (IF ANY) SHALL BE RETAINED TO ACT AS BUFFERS BETWEEN ADJACENT LAND USES, AND TO MINIMIZE NUISANCE DUST, NOISE AND AIR POLLUTION. BARRICADES SHALL BE USED ON SITE TO PRESERVE THE VEGETATION TO BE USED FOR THIS PURPOSE.
16. ALL SIGNS WILL BE REVIEWED FOR COMPLIANCE WITH THE APPLICABLE REGULATIONS AT THE TIME THE SIGN PERMIT IS ISSUED.
17. ALL BUILDING, PARKING AND ACCESS AREAS SHALL DOCUMENT COMPLIANCE WITH THE REQUIREMENTS OF THE AMERICAN DISABILITIES ACT PRIOR TO THE ISSUANCE OF A BUILDING PERMIT.
18. NO LAND CLEARING IS AUTHORIZED PRIOR TO THE MANDATORY PRE-CONSTRUCTION MEETING FOR THE PROJECT. PROPERTY CORNERS AND PRESERVATION AREAS SHALL BE LOCATED BY A LICENSED LAND SURVEYOR AND CLEARLY MARKED IN THE FIELD PRIOR TO THE PRE-CONSTRUCTION MEETING. AUTHORIZATION FOR CLEARING TO INSTALL EROSION CONTROL DEVICES AND PRESERVE BARRICADES WILL BE GRANTED AT THE PRE-CONSTRUCTION MEETING. NO ADDITIONAL LAND CLEARING SHALL COMMENCE UNTIL A SATISFACTORY INSPECTION OF THE REQUIRED CONTROL STRUCTURES AND BARRICADES HAS BEEN OBTAINED. AUTHORIZATION FOR THE RELOCATION OF GOPHER TORTOISES WITHIN THE DEVELOPMENT,



VICINITY MAP
SECTION 17, TOWNSHIP 36S, RANGE 40E
NOT TO SCALE

0 20 40 60
SCALE IN FEET

CREECH CONSULTING, INC.
CIVIL ENGINEERING
PO BOX 327, STUART, FLORIDA 34994 (772) 485-2140
BOARD OF PROFESSIONAL ENGINEERS, CERTIFICATE OF AUTHORIZATION NUMBER 27139
BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS, CERTIFICATE OF AUTHORIZATION NUMBER LB 7939

DATE	BY	REVISIONS

YOUTH & FAMILY
BEHAVIORAL HEALTH CENTER INC
FORT PIERCE FLORIDA

MASTER SITE PLAN
AND STRIPING PLAN

DRAWN BY:	JAC
CHECKED BY:	RTC / ANDREWS
LATITUDE:	27°26'5.49"N
LONGITUDE:	80°21'2.96"W
HORZ. SCALE:	1" =20'
VERT. SCALE:	

SEAL

08/02/2023
RICHARD CREECH
FL P.E. NO. 38592

SHEET C1

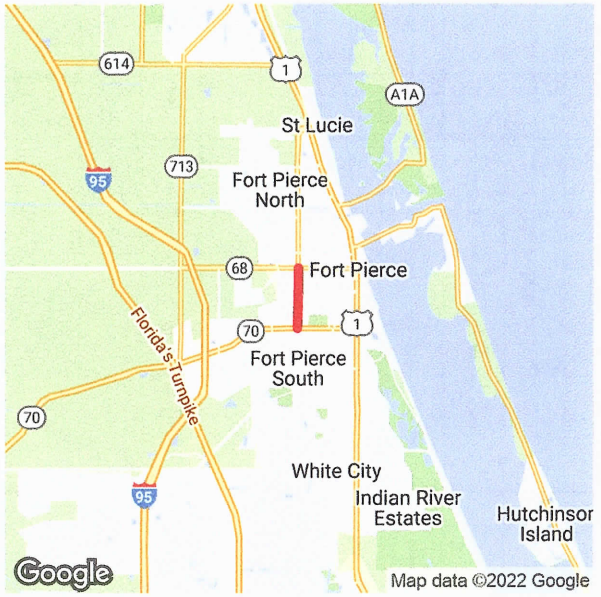
PROJECT NO. 22-016-001

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

APPENDIX B

Roadway Details

S 25TH ST FROM NORTH OF EDWARDS RD TO NORTH OF VIRGINIA AVE
4461701 Non-SIS



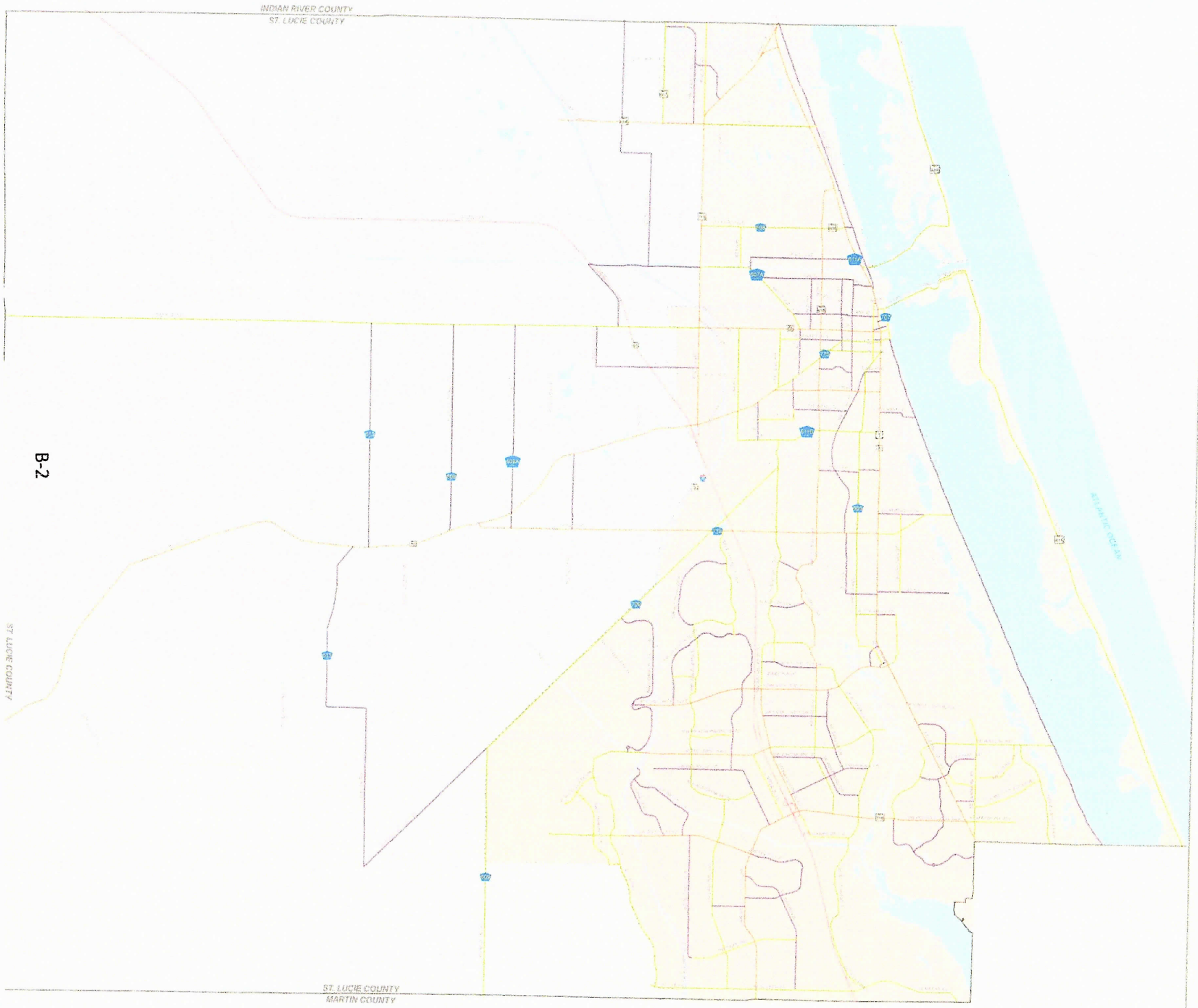
Project Description: RESURFACING
Lead Agency: MANAGED BY FDOT
From: NORTH OF EDWARDS RD
County: ST. LUCIE
To: NORTH OF VIRGINIA AVE
Length: 1.024
Phase Group: PRELIMINARY ENGINEERING, CONSTRUCTION

Phase	Fund Code	2023	2024	2025	2026	2027	Total
CST	DDR	0	1,967,250	0	0	0	1,967,250
CST	DS	0	380,355	0	0	0	380,355
CST	SA	0	344,269	0	0	0	344,269
			2,691,874				**2,691,874**

Prior Year Cost: 434,237
Future Year Cost: 0
Total Project Cost: 3,126,111
LRTP: Page 3-9

B-1

2010 FEDERAL FUNCTIONAL CLASSIFICATION AND URBAN AREA BOUNDARIES MAP



B-2

ST. LUCIE COUNTY

ST. LUCIE COUNTY

2010 Federal Highway Administration (FHWA) Adjusted Urban Areas:
Port St. Lucie Urbanized Area and
Sebastian-Vero Beach South Urbanized Area

N

2 1 0 2 Miles

SCALE 1:52,000

Principal Arterial (Rural/Urban)
- Interstate
- Other Freeways & Expressways (OF&E)
- Other Principal Arterial (OPA)

Minor Arterial (Rural/Urban)
- Minor Arterial

Collector (Rural/Urban)
- Major Collector
- Minor Collector

Local (Rural/Urban)
- Local
- 2010 FHWA Adjusted Urban Boundaries
- County Boundary

Board of County Commissioners Chair — Date

Transportation Planning Organization Chair — 1/7/13 Date

Florida Department of Transportation District Four Secretary — 12/10/12 Date

Federal Highway Administration — 01/24/2013 Date

PREPARED BY:

APPENDIX C

ST. LUCIE COUNTY 2022 LEVEL OF SERVICE REPORT

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2022

Roadway Name	Location	STATION ID	2022 AADT *	Last Physical Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
17TH ST	ORANGE AVE to AVENUE D	608	2,627	2020	750	147	C	0.196	140	C	0.187
17TH ST	AVENUE D to AVENUE Q	608	2,627	2020	750	147	C	0.196	140	C	0.187
25TH ST	MIDWAY RD to BELL AVE	940016	19,410	2020	2,100	1,235	C	0.588	1,152	C	0.549
25TH ST	BELL AVE to EDWARDS RD	159	18,943	2020	2,100	1,111	C	0.529	1,108	C	0.528
25TH ST	EDWARDS RD to CORTEZ BLVD	940021	21,493	2020	2,000	1,263	C	0.632	1,259	C	0.63
25TH ST	CORTEZ BLVD to VIRGINIA AVE	529	24,089	2019	2,000	1,356	C	0.678	1,447	C	0.724
25TH ST	VIRIGINIA AVE to NEBRASKA AVE	940015	21,256	2020	2,000	1,219	C	0.61	1,092	C	0.546
25TH ST	NEBRASKA AVE to OKEECHOBEE RD	940015	21,256	2020	2,000	1,219	C	0.61	1,092	C	0.546
25TH ST	OKEECHOBEE RD to GEORGIA AVE	609	21,897	2020	1,630	1,011	D	0.62	1,049	D	0.644
25TH ST	GEORGIA AVE to DELAWARE AVE	609	21,897	2020	1,630	1,011	D	0.62	1,049	D	0.644
25TH ST	DELAWARE AVE to ORANGE AVE	940014	20,450	2020	1,630	1,043	D	0.64	1,037	D	0.636
25TH ST	ORANGE AVE to AVENUE D	610	17,824	2019	1,630	822	D	0.504	848	D	0.52
25TH ST	AVENUE D to AVENUE Q	940050	16,835	2020	1,630	850	D	0.521	826	D	0.507
25TH ST	AVENUE Q to JUANITA AVE	945152	15,107	2020	2,000	787	C	0.394	721	C	0.361
25TH ST	JUANITA AVE to ST LUCIE BLVD	940791	15,898	2013	2,100	844	C	0.402	792	C	0.377
25TH ST	ST LUCIE BLVD to US 1	945165	7,932	2020	2,100	390	C	0.186	435	C	0.207
33RD ST	OKEECHOBEE RD to DELAWARE AVE	611	6,788	2019	750	406	D	0.541	357	C	0.476
33RD ST	DELAWARE AVE to ORANGE AVE	948507	5,700	2020	790	263	C	0.333	263	C	0.333
35TH ST	KIRBY LOOP RD to CORTEZ BLVD	612	6,724	2019	540	531	D	0.983	433	D	0.802
35TH ST	CORTEZ BLVD to VIRGINIA AVE	612	6,724	2019	790	531	D	0.672	433	D	0.548
35TH ST	VIRGINIA AVE to OKEECHOBEE RD	613	4,593	2020	750	226	C	0.301	243	C	0.324
53RD ST	ANGLE RD to JUANITA AVE	614	2,400	2022	540	128	C	0.237	141	C	0.261
AE BACKUS AVE	7TH ST to US 1	632	900	2022	750	61	C	0.081	71	C	0.095
AIROSO BLVD	PORT ST LUCIE BLVD to THORNHILL DR	303	17,500	2022	2,100	1,142	C	0.544	961	C	0.458
AIROSO BLVD	THORNHILL DR to CROSSTOWN PKWY	303	17,500	2022	2,100	1,142	C	0.544	961	C	0.458

C-1

* **NOTE:** A six digit number in the "STATION ID" column identifies segment counted by FDOT
* Volumes shown were adjusted using FDOT Seasonal Factors
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St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
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772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2022

Roadway Name	Location	STATION ID	2022 AADT *	Last Physical Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
MARIPOSA AVE	LENNARD RD to HALLAHAN ST	166	7,018	2019	880	532	C	0.605	753	C	0.856
MCCARTY RD	WILLIAMS RD to MIDWAY RD	680	350	2022	540	30	C	0.056	32	C	0.059
MCCARTY RD	MIDWAY RD to OKEECHOBEE RD	681	417	2019	540	36	C	0.067	36	C	0.067
MCNEIL RD	OKEECHOBEE RD to KIRBY LOOP RD	682	6,893	2019	790	422	D	0.534	420	D	0.532
MCNEIL RD	KIRBY LOOP RD to EDWARDS RD	682	6,893	2019	540	422	D	0.781	420	D	0.778
MELALEUCA BLVD	LENNARD RD to GREEN RIVER PKWY	683	10,609	2020	920	624	C	0.678	595	C	0.647
MIDWAY RD	EAST TORINO PKWY to MILNER DR	134	24,000	2022	880	1,173	F	1.333	1,233	F	1.401
MIDWAY RD	MILNER DR to W OF SELVITZ RD	134	24,000	2022	790	1,173	F	1.485	1,233	F	1.561
MIDWAY RD	OKEECHOBEE RD to SHINN RD	940732	6,679	2020	760	342	C	0.45	435	C	0.572
MIDWAY RD	SHINN RD to MCCARTY RD	940732	6,679	2020	630	342	C	0.543	435	C	0.69
MIDWAY RD	MCCARTY RD to I-95	940732	6,679	2020	700	342	C	0.489	435	C	0.621
MIDWAY RD	I-95 to GLADES CUT-OFF RD	945140	19,256	2020	2,100	942	C	0.449	1,044	C	0.497
MIDWAY RD	GLADES CUT-OFF RD to EAST TORINO PKWY	228	22,500	2022	2,100	1,189	C	0.566	1,223	C	0.582
MIDWAY RD	W OF SELVITZ RD to SELVITZ RD	134	24,000	2022	2,100	1,173	C	0.559	1,233	C	0.587
MIDWAY RD	SELVITZ RD to CHRISTENSEN RD	132	20,000	2022	2,100	961	C	0.458	916	C	0.436
MIDWAY RD	CHRISTENSEN RD to 25TH ST	132	20,000	2022	2,100	961	C	0.458	916	C	0.436
MIDWAY RD	25TH ST to SUNRISE BLVD	130	20,000	2022	2,100	1,091	C	0.52	1,002	C	0.477
MIDWAY RD	SUNRISE BLVD to OLEANDER AVE	130	20,000	2022	2,100	1,091	C	0.52	1,002	C	0.477
MIDWAY RD	OLEANDER AVE to US 1	242	16,500	2022	2,100	871	C	0.415	862	C	0.41
MIDWAY RD	US 1 to WALLACE ST	940023	3,764	2020	790	216	C	0.273	239	C	0.303
MIDWAY RD	WALLACE ST to WEATHERBEE RD	940023	3,764	2020	920	216	C	0.235	239	C	0.26
MIDWAY RD	WEATHERBEE RD to INDIAN RIVER DR	940023	3,764	2020	630	216	C	0.343	239	C	0.379
MORNINGSIDE BLVD	WESTMORELAND BLVD to PORT ST LUCIE BLVD	333	2,300	2022	920	138	C	0.15	132	C	0.143
MORNINGSIDE BLVD	PORT ST LUCIE BLVD to LYNGATE DR	331	3,789	2019	880	301	C	0.342	320	C	0.364
NEBRASKA AVE	25TH ST to 13TH ST	684	3,800	2022	1,710	236	C	0.138	199	C	0.116

* **NOTE:** A six digit number in the "STATION ID" column identifies segment counted by FDOT

* Volumes shown were adjusted using FDOT Seasonal Factors

* AADT = Annual Average Daily Traffic (volumes for both directions where applicable)

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Traffic Counts and Level of Service Report
2022

Roadway Name	Location	STATION ID	2022 AADT *	Last Physical Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
OAKRIDGE DR	MOUNTWELL ST to OAKLYN ST	621	6,950	2019	700	432	C	0.617	376	C	0.537
OHIO AVE	SUNRISE BLVD to COLONIAL RD	686	3,600	2022	540	213	C	0.394	208	C	0.385
OHIO AVE	COLONIAL RD to US 1	686	3,600	2022	750	213	C	0.284	208	C	0.277
OKEECHOBEE RD	OKEECHOBEE C.L. to BLUEFIELD RD	687	11,342	2020	1,580	592	B	0.375	637	B	0.403
OKEECHOBEE RD	BLUEFIELD RD to CARLTON RD	687	11,342	2020	2,000	592	B	0.296	637	B	0.319
OKEECHOBEE RD	CARLTON RD to SNEED RD	940039	7,535	2020	2,100	370	B	0.176	362	B	0.172
OKEECHOBEE RD	IDEAL HOLDING RD to HEADER CANAL RD	940039	7,535	2020	2,100	370	B	0.176	362	B	0.172
OKEECHOBEE RD	SNEED RD to IDEAL HOLDING RD	940039	7,535	2020	2,100	370	B	0.176	362	B	0.172
OKEECHOBEE RD	HEADER CANAL RD to MIDWAY RD	940039	7,535	2020	2,450	370	B	0.151	362	B	0.148
OKEECHOBEE RD	MIDWAY RD to SHINN RD	940039	7,535	2020	3,110	370	B	0.119	362	B	0.116
OKEECHOBEE RD	SHINN RD to MCCARTY RD	940195	6,920	2020	3,240	376	B	0.116	376	B	0.116
OKEECHOBEE RD	MCCARTY RD to FLORIDA'S TURNPIKE	940025	8,360	2020	3,240	401	B	0.124	416	B	0.128
OKEECHOBEE RD	FLORIDA'S TURNPIKE to KINGS HWY	940025	8,360	2020	2,100	401	C	0.191	416	C	0.198
OKEECHOBEE RD	KINGS HWY to CROSSROADS PKWY	940748	21,934	2020	4,240	1,058	C	0.25	1,116	C	0.263
OKEECHOBEE RD	CROSSROADS PKWY to I-95	940106	26,526	2020	4,240	1,282	C	0.302	1,310	C	0.309
OKEECHOBEE RD	I-95 to JENKINS RD	940029	31,865	2020	4,240	2,082	C	0.491	1,801	C	0.425
OKEECHOBEE RD	JENKINS RD to MCNEIL RD	940029	31,865	2020	4,040	2,082	C	0.515	1,801	C	0.446
OKEECHOBEE RD	MCNEIL RD to VIRGINIA AVE	940742	29,519	2020	3,170	1,550	C	0.489	1,618	C	0.51
OKEECHOBEE RD	VIRGINIA AVE to HARTMAN RD	688	12,094	2019	2,100	665	C	0.317	704	C	0.335
OKEECHOBEE RD	HARTMAN RD to 35TH ST	688	12,094	2019	1,630	665	C	0.408	704	C	0.432
OKEECHOBEE RD	35TH ST to 33RD ST	689	16,610	2019	1,630	901	D	0.553	881	D	0.54
OKEECHOBEE RD	33RD ST to 25TH ST	689	16,610	2019	1,630	901	D	0.553	881	D	0.54
OKEECHOBEE RD	25TH ST to GEORGIA AVE	690	13,247	2019	1,630	762	D	0.467	724	C	0.444
OKEECHOBEE RD	GEORGIA AVE to DELAWARE AVE	690	13,247	2019	1,710	762	C	0.446	724	C	0.423
OLD DIXIE HWY	US 1 to SR A1A NORTH	691	150	2022	790	11	C	0.014	10	C	0.013

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Traffic Counts and Level of Service Report
2022

Roadway Name	Location	STATION ID	2022 AADT *	Last Physical Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
US 1	SR A1A SOUTH to AVENUE H	715	34,167	2020	2,100	1,725	C	0.821	1,718	C	0.818
US 1	AVENUE H to OLD DIXIE HWY	715	34,167	2020	2,000	1,725	C	0.863	1,718	C	0.859
US 1	OLD DIXIE HWY to AVENUE O	940123	25,703	2020	2,000	1,599	C	0.8	1,250	C	0.625
US 1	AVENUE O to SR A1A NORTH	940123	25,703	2020	2,100	1,599	C	0.761	1,250	C	0.595
US 1	SR A1A NORTH to JUANITA AVE	940010	18,788	2020	2,100	1,128	C	0.537	903	C	0.43
US 1	JUANITA AVE to ST LUCIE BLVD	940010	18,788	2020	2,100	1,128	C	0.537	903	C	0.43
US 1	ST LUCIE BLVD to 25TH ST	940009	18,940	2020	2,100	1,050	C	0.5	1,007	C	0.48
US 1	25TH ST to INDRIO RD	940009	18,940	2020	2,100	1,050	C	0.5	1,007	C	0.48
US 1	INDRIO RD to TURNPIKE FEEDER RD	940107	22,049	2020	2,100	1,129	C	0.538	1,122	C	0.534
US 1	TURNPIKE FEEDER RD to INDIAN RIVER C.L.	940107	22,049	2020	2,100	1,129	C	0.538	1,122	C	0.534
VETERANS MEMORIAL PKWY	PORT ST LUCIE BLVD to LYNGATE DR	329	14,500	2022	2,100	779	C	0.371	817	C	0.389
VETERANS MEMORIAL PKWY	LYNGATE DR to US 1	327	12,747	2020	2,100	651	C	0.31	659	C	0.314
VILLAGE GREEN DR	US 1 to WALTON RD	716	15,504	2020	2,100	927	C	0.441	977	C	0.465
VILLAGE GREEN DR	WALTON RD to TIFFANY AVE	717	5,300	2022	920	285	C	0.31	269	C	0.292
VILLAGE PKWY	DISCOVERY WAY to TRADITION PKWY	718	23,000	2022	2,650	1,139	C	0.43	1,158	C	0.437
VILLAGE PKWY	BECKER RD to DISCOVERY WAY	718	23,000	2022	1,710	1,139	D	0.666	1,158	D	0.677
VILLAGE PKWY	TRADITION PKWY to WESTCLIFFE LN	719	24,412	2020	1,710	1,344	D	0.786	1,345	D	0.787
VILLAGE PKWY	WESTCLIFFE LN to CROSSTOWN PKWY	720	14,550	2019	1,710	776	D	0.454	769	C	0.45
VIRGINIA AVE	35TH ST to 25TH ST	940032	21,812	2020	3,020	1,125	C	0.373	1,096	C	0.363
VIRGINIA AVE	OKEECHOBEE RD to HARTMAN RD	940030	21,679	2020	3,020	1,116	C	0.37	1,075	C	0.356
VIRGINIA AVE	HARTMAN RD to 35TH ST	940030	21,679	2020	3,020	1,116	C	0.37	1,075	C	0.356
VIRGINIA AVE	25TH ST to 13TH ST	940033	20,792	2020	3,020	1,033	C	0.342	1,100	C	0.364
VIRGINIA AVE	13TH ST to 11TH ST	940794	22,011	2020	3,020	1,083	C	0.359	1,083	C	0.359
VIRGINIA AVE	11TH ST to SUNRISE BLVD	940794	22,011	2020	3,170	1,083	C	0.342	1,083	C	0.342
VIRGINIA AVE	SUNRISE BLVD to OLEANDER AVE	940792	19,107	2020	3,020	1,009	C	0.334	942	C	0.312

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APPENDIX D

GROWTH RATE/BACKGROUND DATA

Growth Rata Calculation

Roadway	From	To	2019 AADT	2022 AADT
Virginia	West of	25th Street	23000	23500
	East of	25th Street	23500	24500
Okeechobee	North of	25th Street	17600	15300
25th St	South of	Okeechobee	23000	24000
		Total:	87100	87300
		Growth Rate:	0.08%	

COUNTY: 94
STATION: 0015
DESCRIPTION: SR 615/25 ST - N OF SR 70/VIRGINIA AVE (COUNTY 15)
START DATE: 03/30/2022
START TIME: 0000

TIME	DIRECTION: N 1ST	2ND	3RD	4TH	TOTAL	DIRECTION: S 1ST	2ND	3RD	4TH	TOTAL	COMBINED TOTAL
0000	14	15	15	5	49	24	16	19	20	79	128
0100	13	6	10	11	40	7	18	11	12	48	88
0200	19	20	12	6	57	13	11	14	10	48	105
0300	8	10	12	13	43	7	6	6	3	22	65
0400	10	19	40	52	121	4	13	10	7	34	155
0500	63	79	126	119	387	31	36	55	70	192	579
0600	131	173	257	227	788	73	113	122	127	435	1223
0700	253	254	256	305	1068	149	146	164	216	675	1743
0800	275	219	214	206	914	199	181	180	161	721	1635
0900	166	197	184	191	738	176	136	154	145	611	1349
1000	177	195	176	185	733	145	142	151	190	628	1361
1100	168	178	152	188	686	160	165	155	150	630	1316
1200	178	170	179	210	737	168	163	175	161	667	1404
1300	166	190	222	193	771	200	193	213	252	858	1629
1400	226	179	236	169	810	196	212	215	235	858	1668
1500	218	211	207	202	838	262	251	294	245	1052	1890
1600	216	254	244	243	957	257	235	251	296	1039	1996
1700	251	187	195	165	798	283	308	254	215	1060	1858
1800	185	227	204	164	780	222	157	159	150	688	1468
1900	134	127	123	123	507	157	182	142	138	619	1126
2000	112	101	93	79	385	151	121	107	97	476	861
2100	83	83	82	59	307	104	81	60	64	309	616
2200	56	42	54	47	199	59	48	43	49	199	398
2300	28	38	22	20	108	33	43	29	24	129	237
24-HOUR TOTALS:					12821					12077	24898

PEAK VOLUME INFORMATION

	DIRECTION: N HOUR	VOLUME	DIRECTION: S HOUR	VOLUME	COMBINED DIRECTIONS HOUR	VOLUME
A.M.	715	1090	745	776	715	1815
P.M.	1615	992	1645	1141	1630	2063
DAILY	715	1090	1645	1141	1630	2063

AM = NB Peak
↑ 0.61 ↓ 0.39

PM = SB Peak
↑ 0.48 ↓ 0.52

GENERATED BY SPS 5.0.57P



	IN	OUT
AM	12	28
PM	30	20

NTS

O'ROURKE ENGINEERING & PLANNING

22 SE Seminole Street
Stuart, Fl, 34994

Job Number: SR22092.0 | Date: 2/23/2023

Legend

AM (PM) = XX (XX)

Figure 2

Percent Assignment

Estancia

Michelle Franklin, CFA – Saint Lucie County Property Appraiser -- All rights reserved.

Property Identification

Site Address: 1210 S 25th ST
Sec/Town/Range: 16/35S/40E
Parcel ID: 2416-602-0158-000-3
Jurisdiction: Fort Pierce

Use Type: 1100
Account #: 25987
Map ID: 24/16N
Zoning: Neighborho



Ownership

FD South LLC
Family Dollar Atten: Lease Admin
Property Tax
10301 Monroe Rd
Matthews, NC 28105

Legal Description

BILTMORE PARK BLK 51 LOTS 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 AND W 1/2 OF LOT 11 AND LOTS 22 AND 23-LESS NELY 150 FT AND LESS RD R/W (OR 4008-1081) (1.678 AC- 73,125 SF)

Current Values

Just/Market Value:	$1,274,400
Assessed Value:	$1,274,400
Exemptions:	$0
Taxable Value:	$1,274,400

Property taxes are subject to change upon change of ownership.

- **Past taxes are not a reliable projection of future taxes.**
- **The sale of a property will prompt the removal of all exemptions, assessment caps, and special classifications.**

Taxes for this parcel: SLC Tax Collector's Office
Download TRIM for this parcel: Download PDF

Total Areas

Finished/Under Air (SF):	8,551
Gross Sketched Area (SF):	8,623
Land Size (acres):	1.65
Land Size (SF):	71,710.099

Building Design Wind Speed

Occupancy Category	I	II	III
Speed	140	150	160

Sources/links:

All information is believed to be correct at this time, but is subject to change and is provided without any warranty.
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Table 1 - Trip Generation

Table 1a: Daily

Land Use	ITE Code	Intensity	Units	Trip Generation Rate	Directional Split		Gross Trips			Pass-by Trips				Net New Trips		
					In	Out	In	Out	Total	In	Out	Total	%	In	Out	Total
Free-Standing Discount Store	815	8,551	Sft	Ln(T) = 0.77 Ln(X) + 5.05	50%	50%	407	407	814	82	81	163	20.0%	325	326	651
TOTALS							**407**	**407**	**814**	**82**	**81**	**163**	**20.0%**	**325**	**326**	**651**

Source: ITE 11th Edition Trip Generation Rates

Table 1b: AM Peak Hour

Land Use	ITE Code	Intensity	Units	Trip Generation Rate	Directional Split		Gross Trips			Pass-by Trips				Net New Trips		
					In	Out	In	Out	Total	In	Out	Total	%	In	Out	Total
Free-Standing Discount Store	815	8,551	Sft	Ln(T) = 0.84 Ln(X) + 0.74	70%	30%	9	4	13	2	1	3	20.0%	7	3	10
TOTALS							**9**	**4**	**13**	**2**	**1**	**3**	**23.1%**	**7**	**3**	**10**

Source: ITE 11th Edition Trip Generation Rates

Table 1c: PM Peak Hour

Land Use	ITE Code	Intensity	Units	Trip Generation Rate	Directional Split		Gross Trips			Pass-by Trips				Net New Trips		
					In	Out	In	Out	Total	In	Out	Total	%	In	Out	Total
Free-Standing Discount Store	815	8,551	Sft	Ln(T) = 0.84 Ln(X) + 2.30	50%	50%	31	30	61	6	6	12	20.0%	25	24	49
TOTALS							**31**	**30**	**61**	**6**	**6**	**12**	**19.7%**	**25**	**24**	**49**

Source: ITE 11th Edition Trip Generation Rates


Ormond Ave
S 25th St
1120
1202
1207
1206
20%
615
1209
30%
60%
30%
S 25th St
1215
1212
Family Dollar
Dollar store
615
20%
Mississippi Ave
Mississippi Ave
Google

APPENDIX E

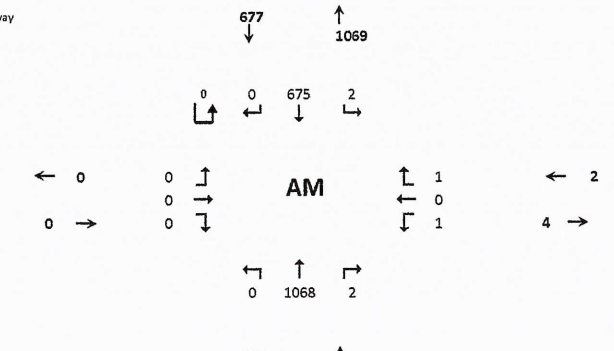
INTERSECTION/DRIVEWAY ANALYSIS
FDOT LETTER

TURNING MOVEMENT VOLUME COUNTS

N/S STREET: 25th Street
E/W STREET: Project Driveway
CONTROL: TWSC
FILENAME
COUNT DATE: 3/30/2022
DAY
CITY: Fort Pierce
INTERSECTION: 25th Street and Driveway
REPORT DATE: 6/5/2023
ANALYSIS YEAR: 2022

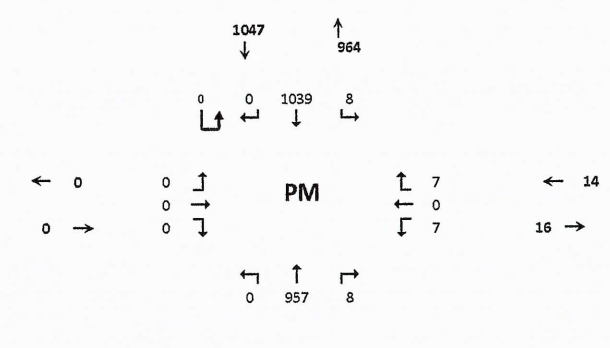
15 Min Period	Northbound NBL	NBT	NBR	Southbound SBU	SBL	SBT	SBR	Eastbound EBL	EBT	EBR	Westbound WBL	WBT	WBR	TOTAL	ONE HOUR SUM
7:00-7:15														0	0
7:15-7:30														0	0
7:30-7:45														0	0
7:45-8:00														0	0
8:00-8:15														0	0
8:15-8:30														0	
8:30-8:45														0	
8:45-9:00														0	
AM PEAK HOUR IS FROM:	7:00AM TO 8:00AM														
Volumes	0	1068	2	0	2	675	0	0	0	0	1	0	1	0	
Season Factor	0	1068	2	0	2	675	0	0	0	0	1	0	1	1749	
Growth	0	1068	2	0	2	675	0	0	0	0	1	0	1	1749	
In/Out	In	In	In	In	In	In	In	In	In	In	In	In	In		
Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
PROJECT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	1068	2	0	2	675	0	0	0	0	1	0	1	1749	

Seasonal Factor: 1
Trips In:
Trips Out:
Growth Rate: 1
Years Grown:



15 Min Period lanes	Northbound NBL	NBT	NBR	Southbound SBU	SBL	SBT	SBR	Eastbound EBL	EBT	EBR	Westbound WBL	WBT	WBR	TOTAL	ONE HOUR SUM
4:00-4:15														0	0
4:15-4:30														0	0
4:30-4:45														0	0
4:45-5:00														0	0
5:00-5:15														0	0
5:15-5:30														0	
5:30-5:45														0	
5:45-6:00														0	
PM PEAK HOUR IS FROM:	4:00PM TO 5:00PM														
Volumes	0	957	8	0	8	1039	0	0	0	0	7	0	7	0	
Season Factor	0	957	8	0	8	1039	0	0	0	0	7	0	7	2026	
Growth	0	957	8	0	8	1039	0	0	0	0	7	0	7	2026	
In/Out	In	In	In	In	In	In	In	In	In	In	In	In	In		
Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Project	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	957	8	0	8	1039	0	0	0	0	7	0	7	2026	

Seasonal Factor: 1
Growth Rate: 1
Trips In:
Trips Out:
Years Grown: 0



E-1

HCS Two-Way Stop-Control Report

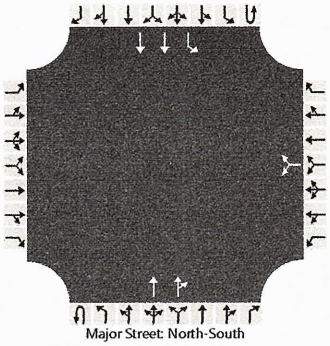
General Information

Analyst	KS
Agency/Co.	OREP
Date Performed	6/5/2023
Analysis Year	2022
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Existing

Site Information

Intersection	25th Street and Project Driveway
Jurisdiction	St Lucie County
East/West Street	Project Driveway
North/South Street	25th Street
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume (veh/h)						1		1			1068	2	0	2	675	
Percent Heavy Vehicles (%)						3		3					3	3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Left + Thru								1						

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.86		6.96						4.16		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							2							2		
Capacity, c (veh/h)							283							591		
v/c Ratio							0.01							0.00		
95% Queue Length, Q_{95} (veh)							0.0							0.0		
Control Delay (s/veh)							17.8							11.1		
Level of Service (LOS)							C							B		
Approach Delay (s/veh)						17.8								0.0		
Approach LOS						C								A		

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HCS Two-Way Stop-Control Report

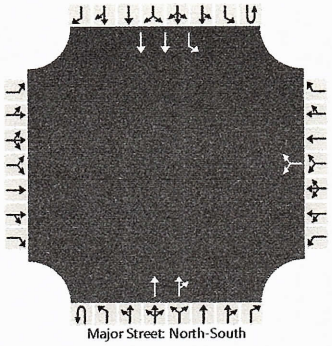
General Information

Analyst	KS
Agency/Co.	OREP
Date Performed	6/5/2023
Analysis Year	2022
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Existing

Site Information

Intersection	25th Street and Project Driveway
Jurisdiction	St Lucie County
East/West Street	Project Driveway
North/South Street	25th Street
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume (veh/h)						7		7			957	8	0	8	1039	
Percent Heavy Vehicles (%)						3		3					3	3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Left + Thru								1						

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.86		6.96						4.16		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

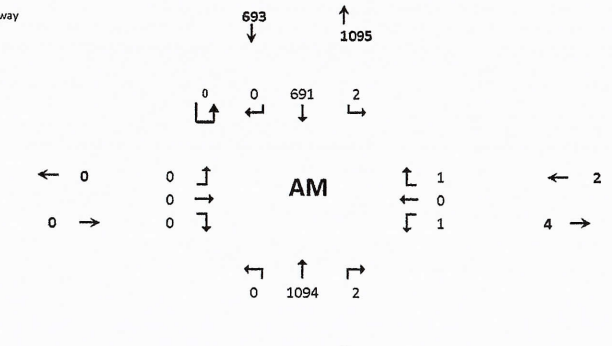
Flow Rate, v (veh/h)							15							9		
Capacity, c (veh/h)							294							653		
v/c Ratio							0.05							0.01		
95% Queue Length, Q_{95} (veh)							0.2							0.0		
Control Delay (s/veh)							17.9							10.6		
Level of Service (LOS)							C							B		
Approach Delay (s/veh)					17.9								0.1			
Approach LOS					C								A			

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TURNING MOVEMENT VOLUME COUNTS

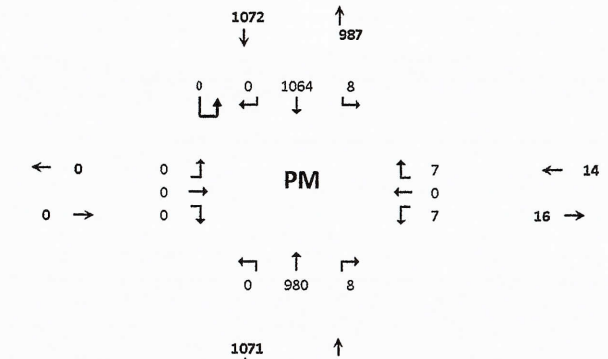
N/S STREET: 25th Street **E/W STREET:** Project Driveway **CONTROL:** TWSC
FILENAME
COUNT DATE 3/30/2022 **DAY** **CITY** Fort Pierce **INTERSECTION:** 25th Street and Driveway
REPORT DATE 6/5/2023 **ANALYSIS YEAR** 2025

15 Min Period	Northbound NBL	NBT	NBR	Southbound SBU	SBL	SBT	SBR	Eastbound EBL	EBT	EBR	Westbound WBL	WBT	WBR	TOTAL	ONE HOUR SUM
7:00-7:15														0	0
7:15-7:30														0	0
7:30-7:45														0	0
7:45-8:00														0	0
8:00-8:15														0	0
8:15-8:30														0	
8:30-8:45														0	
8:45-9:00														0	
AM PEAK HOUR IS FROM:	7:00AM TO 8:00AM														
Volumes	0	1068	2	0	2	675	0	0	0	0	1	0	1	0	
Season Factor	0	1068	2	0	2	675	0	0	0	0	1	0	1	1749	
Growth	0	1094	2	0	2	691	0	0	0	0	1	0	1	1791	
In/Out	In	In	In	In	In	In	In	In	In	In	In	In	In		
Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
PROJECT	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	
Total	0	1094	2	0	2	691	0	0	0	0	1	0	1	1791	



Seasonal Factor 1
Trips In
Trips Out
Growth Rate 1.008
Years Grown 3

15 Min Period lanes	Northbound NBL	NBT	NBR	Southbound SBU	SBL	SBT	SBR	Eastbound EBL	EBT	EBR	Westbound WBL	WBT	WBR	TOTAL	ONE HOUR SUM
4:00-4:15														0	0
4:15-4:30														0	0
4:30-4:45														0	0
4:45-5:00														0	0
5:00-5:15														0	0
5:15-5:30														0	
5:30-5:45														0	
5:45-6:00														0	
PM PEAK HOUR IS FROM:	4:00PM TO 5:00PM														
Volumes	0	957	8	0	8	1039	0	0	0	0	7	0	7	0	
Season Factor	0	957	8	0	8	1039	0	0	0	0	7	0	7	2026	
Growth	0	980	8	0	8	1064	0	0	0	0	7	0	7	2075	
In/Out	In	In	In	In	In	In	In	In	In	In	In	In	In		
Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Project	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	
Total	0	980	8	0	8	1064	0	0	0	0	7	0	7	2074	



Seasonal Factor: 1
Growth Rate: 1.008
Trips In:
Trips Out:
Years Grown 3

E-4

HCS Two-Way Stop-Control Report

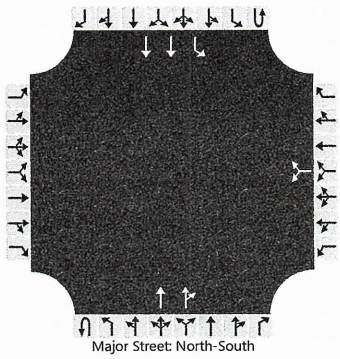
General Information

Analyst	KS
Agency/Co.	OREP
Date Performed	6/5/2023
Analysis Year	2025
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	without Project

Site Information

Intersection	25th Street and Project Driveway
Jurisdiction	St Lucie County
East/West Street	Project Driveway
North/South Street	25th Street
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume (veh/h)						1		1			1094	2	0	2	691	
Percent Heavy Vehicles (%)						3		3					3	3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Left + Thru								1						

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.86		6.96						4.16		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							2							2		
Capacity, c (veh/h)							274							576		
v/c Ratio							0.01							0.00		
95% Queue Length, Q_{95} (veh)							0.0							0.0		
Control Delay (s/veh)							18.2							11.3		
Level of Service (LOS)							C							B		
Approach Delay (s/veh)					18.2								0.0			
Approach LOS					C								A			

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HCS Two-Way Stop-Control Report

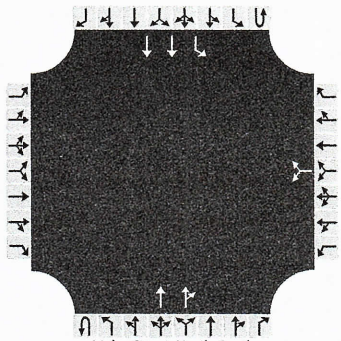
General Information

Analyst	KS
Agency/Co.	OREP
Date Performed	6/5/2023
Analysis Year	2025
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	without Project

Site Information

Intersection	25th Street and Project Driveway
Jurisdiction	St Lucie County
East/West Street	Project Driveway
North/South Street	25th Street
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume (veh/h)						7		7			980	8	0	8	1064	
Percent Heavy Vehicles (%)						3		3					3	3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Left + Thru								1						

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.86		6.96						4.16		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

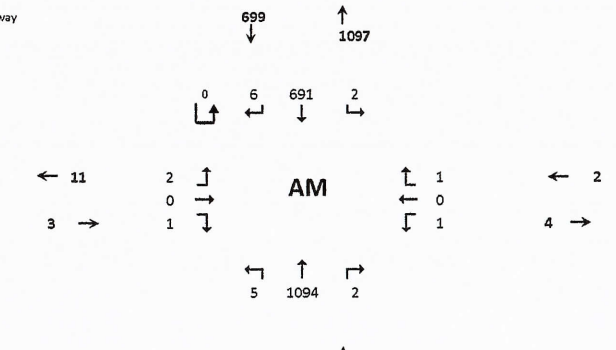
Flow Rate, v (veh/h)							15							9		
Capacity, c (veh/h)							286							639		
v/c Ratio							0.05							0.01		
95% Queue Length, Q_{95} (veh)							0.2							0.0		
Control Delay (s/veh)							18.3							10.7		
Level of Service (LOS)							C							B		
Approach Delay (s/veh)					18.3								0.1			
Approach LOS					C								A			

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TURNING MOVEMENT VOLUME COUNTS

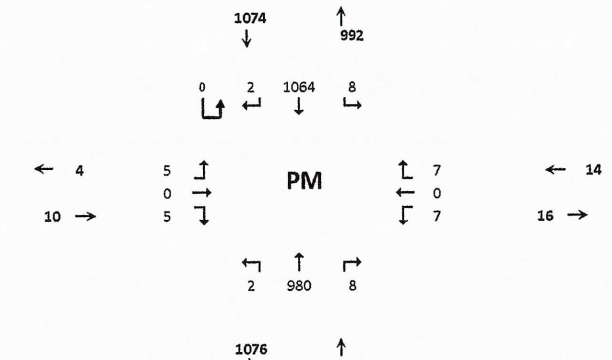
N/S STREET: 25th Street
E/W STREET: Project Driveway
CONTROL: TWSC
FILENAME
COUNT DATE 3/30/2022
DAY
CITY: Fort Pierce
INTERSECTION: 25th Street and Driveway
REPORT DATE 6/5/2023
ANALYSIS YEAR 2025

15 Min Period	Northbound			Southbound				Eastbound			Westbound				ONE HOUR SUM
	NBL	NBT	NBR	SBU	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL	
7:00-7:15														0	0
7:15-7:30														0	0
7:30-7:45														0	0
7:45-8:00														0	0
8:00-8:15														0	0
8:15-8:30														0	
8:30-8:45														0	
8:45-9:00														0	
AM PEAK HOUR IS FROM:	7:00AM TO 8:00AM														
Volumes	0	1068	2	0	2	675	0	0	0	0	1	0	1	0	
Season Factor	0	1068	2	0	2	675	0	0	0	0	1	0	1	1749	
Growth	0	1094	2	0	2	691	0	0	0	0	1	0	1	1791	
In/Out	In	In	In	In	In	In	In	Out	In	Out	In	In	In		
Percentage	45%	0%	0%	0%	0%	0%	55%	55%	0%	45%	0%	0%	0%		
PROJECT	5	0	0	0	0	0	6	2	0	1	0	0	0	**14**	
Total	5	1094	2	0	2	691	6	2	0	1	1	0	1	1805	



Seasonal Factor 1
Trips In 11
Trips Out 3
Growth Rate 1.008
Years Grown 3

15 Min Period lanes	Northbound			Southbound				Eastbound			Westbound				ONE HOUR SUM
	NBL	NBT	NBR	SBU	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL	
4:00-4:15														0	0
4:15-4:30														0	0
4:30-4:45														0	0
4:45-5:00														0	0
5:00-5:15														0	0
5:15-5:30														0	
5:30-5:45														0	
5:45-6:00														0	
PM PEAK HOUR IS FROM:	4:00PM TO 5:00PM														
Volumes	0	957	8	0	8	1039	0	0	0	0	7	0	7	0	
Season Factor	0	957	8	0	8	1039	0	0	0	0	7	0	7	2026	
Growth	0	980	8	0	8	1064	0	0	0	0	7	0	7	2075	
In/Out	In	In	In	In	In	In	In	Out	In	Out	In	In	In		
Percentage	45%	0%	0%	0%	0%	0%	55%	55%	0%	45%	0%	0%	0%		
Project	2	0	0	0	0	0	2	5	0	5	0	0	0	**14**	
Total	2	980	8	0	8	1064	2	5	0	5	7	0	7	2088	



Seasonal Factor: 1
Growth Rate: 1.008
Trips In: 4
Trips Out: 10
Years Grown 3

E-7

HCS Two-Way Stop-Control Report

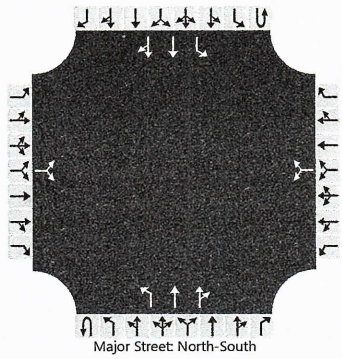
General Information

Analyst	KS
Agency/Co.	OREP
Date Performed	6/5/2023
Analysis Year	2025
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	with Project

Site Information

Intersection	25th Street and Project Driveway
Jurisdiction	St Lucie County
East/West Street	Project Driveway
North/South Street	25th Street
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	2	0	0	1	2	0
Configuration			LR				LR			L	T	TR		L	T	TR
Volume (veh/h)		2		1		1		1	0	5	1094	2	0	2	691	6
Percent Heavy Vehicles (%)		3		3		3		3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Left + Thru								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9		7.5		6.9		4.1				4.1		
Critical Headway (sec)		7.56		6.96		7.56		6.96		4.16				4.16		
Base Follow-Up Headway (sec)		3.5		3.3		3.5		3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53		3.33		3.53		3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			3				2			5				2		
Capacity, c (veh/h)			289				230			843				576		
v/c Ratio			0.01				0.01			0.01				0.00		
95% Queue Length, Q_{95} (veh)			0.0				0.0			0.0				0.0		
Control Delay (s/veh)			17.6				20.8			9.3				11.3		
Level of Service (LOS)			C				C			A				B		
Approach Delay (s/veh)	17.6				20.8				0.0				0.0			
Approach LOS	C				C				A				A			

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HCS Two-Way Stop-Control Report

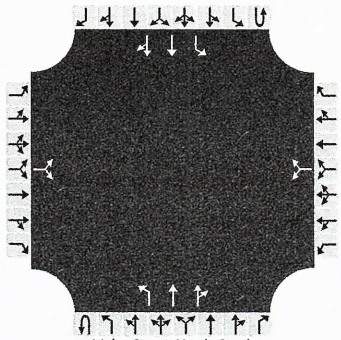
General Information

Analyst	KS
Agency/Co.	OREP
Date Performed	6/5/2023
Analysis Year	2025
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	with Project

Site Information

Intersection	25th Street and Project Driveway
Jurisdiction	St Lucie County
East/West Street	Project Driveway
North/South Street	25th Street
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	2	0	0	1	2	0
Configuration			LR				LR			L	T	TR		L	T	TR
Volume (veh/h)		5		5		7		7	0	2	980	8	0	8	1064	2
Percent Heavy Vehicles (%)		3		3		3		3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Left + Thru								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9		7.5		6.9		4.1				4.1		
Critical Headway (sec)		7.56		6.96		7.56		6.96		4.16				4.16		
Base Follow-Up Headway (sec)		3.5		3.3		3.5		3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53		3.33		3.53		3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			11				15			2				9		
Capacity, c (veh/h)			224				244			593				639		
v/c Ratio			0.05				0.06			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.2				0.2			0.0				0.0		
Control Delay (s/veh)			21.9				20.7			11.1				10.7		
Level of Service (LOS)			C				C			B				B		
Approach Delay (s/veh)	21.9				20.7				0.0				0.1			
Approach LOS	C				C				A				A			

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FDOT

Florida Department of Transportation

RON DESANTIS
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

JARED W. PERDUE, P.E.
SECRETARY

June 2, 2022

THIS PRE-APPLICATION LETTER IS VALID UNTIL – June 2, 2023
THIS LETTER IS NOT A PERMIT APPROVAL

Jerry Compton
Creech Consulting
PO Box 327, Stuart, Florida

Dear Jerry Compton:
RE: Pre-application Review for **Category C Driveway,** Pre-application Meeting Date: **June 2, 2022**
Martin County - Stuart; SR 714; Sec. # 89092000; MP: 0.60; Access Class - 6;
Posted Speed - 40; SIS - No; Ref. Project:

Request: Right-in/right-out driveway on the south side of SR 714 approximately 245 feet west of SE Willoughby Blvd.

SITE SPECIFIC INFORMATION
Project Name & Address: **Clear Gold Properties – 424 SE Monterey Rd Stuart FL**
Property Owner: **Clear Gold Properties, LLC**; Parcel Size: **1.24 Acres**
Development Size: **2,750 SF Kitchen and Bath Cabinet Showroom, 2,750 SF Pizza Restaurant with Drive-through**

WE APPROVE YOUR REQUEST

This decision is based on your presentation of the facts, site plan and survey - please see the conditions and comments below. You may choose to review this concept further with the District Access Management Review Committee (AMRC).

Conditions:
- **A minimum driveway length of 60 feet, as measured from the ultimate right-of-way line to the first conflict point shall be provided.**
- **If a gate is proposed, a minimum driveway length of 100 feet and a turnaround area before the gate are required.**
- **A minimum drive-through stacking of at least 8 vehicles (170 feet) shall be provided.**

Comments:
- **All driveways not approved in this letter must be fully removed and the area restored.**
- **Any other fast-food restaurant or coffee shop with drive-through land use not approved in this letter. Other fast-food restaurant or coffee shop with drive-through may require a longer drive-through stacking.**
- A Drainage Permit is required for any stormwater impacts within FDOT right-of-way (i.e. increased runoff or reduction of existing storage).
- The applicant shall donate property to the Department if right-of-way dedication is required to implement the improvements.
- Dimensions between driveways are measured from the near edge of pavement to near edge of pavement and for median openings are measured from centerline to centerline unless otherwise indicated.

The purpose of this Pre-Application letter is to document the conceptual review of the approximate location of driveway(s) to the State Highway System and to note required improvements, if any. This letter shall be submitted with any further reviews and for permitting. The Department's personnel shall review permit plans for compliance with this letter as well as current Department standards and/or specifications. Final design must consider the existing roadway profile and any impacts to the existing drainage system. **Note, this letter does not guarantee permit approval**. The permit may be denied based on the review of the submitted engineering plans. Be aware that any approved median openings may be modified (or closed) in the future, at the sole discretion of the Department. For right-of-way dedication requirements go to: https://osp.fdot.gov; click on Statewide Permit News; Scroll down to District 4; Scroll down to Additional Information and Examples and choose Right-of-way Donations/Dedications.
Please contact the Access Management Manager - Tel. # 954-777-4363 or e-mail: D4AccessManagement@dot.state.fl.us with any questions regarding the Pre-Approval Letter and Permits Office - Tel. # 954-777-4383 with any questions regarding permits.

Sincerely,

Digitally signed by:
Dalila Fernandez
Date: 2022.06.02
14:59:36 -04'00'

Dalila Fernandez, P.E.
District Access Management Manager

cc: Jonathan Overton, P.E., Nesa Y. Harden
File: S:\Transportation Operations\Traffic Operations\Access Management\1. Pre-Apps and Variance\2022-06-02\Pre-app - 3. 89092000 MP 0.6 SR 714_Jerry Compton\89092 MP 0.6 SR 714_Jerry Compton.docx

Florida Department of Transportation

RON DESANTIS
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

JARED W. PERDUE, P.E.
SECRETARY

February 16, 2023

THIS PRE-APPLICATION LETTER IS VALID UNTIL – February 16, 2024
THIS LETTER IS NOT A PERMIT APPROVAL

Jerry Compton
Creech Consulting, Inc.
PO Box 327, Stuart FL, 34995

Dear Jerry Compton:
RE: Pre-application Review for **Category B Driveway,** Pre-application Meeting Date: **Janury 26, 2023**
St. Lucie County - Fort Pierce; SR 615; Sec. # 94005000; MP: 1.60; Access Class - 6;
Posted Speed - 40; SIS - Influence Area; FDOT Ref. Project:

Request: Full access driveway on the west side of SR 615 30 feet north of the south property boundary.

SITE SPECIFIC INFORMATION
Project Name & Address: **Youth and Family Behavioral Health Center – 1211-1213 S 25th St, Fort Pierce**
Property Owner: **Youth & Family Behavioral Health Center Inc**; Parcel Size: **0.52 Acres**
Development Size: **4,886 SF Office**

REQUEST APPROVED

This decision is based on your presentation of the facts, site plan and survey - please see the conditions and comments below. You may choose to review this concept further with the District Access Management Review Committee (AMRC).

Conditions:
- **A minimum driveway length of 25 feet, as measured from the ultimate right-of-way line to the first conflict point shall be provided.**
- **If a gate is proposed, a minimum driveway length of 100 feet to the call box and/or gate house, and a turnaround area before the gate are required.**

Comments:
- **Proposed driveway shall be aligned to the driveway on the east side of SR 615.**
- All driveways not approved in this letter must be fully removed and the area restored.
- A Drainage Permit is required for any stormwater impacts within FDOT right-of-way (i.e. increased runoff or reduction of existing storage).
- The applicant shall donate property to the Department if right-of-way dedication is required to implement the improvements.
- Dimensions between driveways are measured from the near edge of pavement to near edge of pavement and for median openings are measured from centerline to centerline unless otherwise indicated.

The purpose of this Pre-Application letter is to document the conceptual review of the approximate location of driveway(s) to the State Highway System and to note required improvements, if any. This letter shall be submitted with any further reviews and for permitting. The Department's personnel shall review permit plans for compliance with this letter as well as current Department standards and/or specifications. Final design must consider the existing roadway profile and any impacts to the existing drainage system. **Note, this letter does not guarantee permit approval**. The permit may be denied based on the review of the submitted engineering plans. Be aware that any approved median openings may be modified (or closed) in the future, at the sole discretion of the Department. For right-of-way dedication requirements go to: https://osp.fdot.gov; click on Statewide Permit News; Scroll down to District 4; Scroll down to Additional Information and Examples and choose Right-of-way Donations/Dedications.
Please contact the Access Management Manager - Tel. # 954-777-4363 or e-mail: D4AccessManagement@dot.state.fl.us with any questions regarding the Pre-Approval Letter.

Sincerely,

Kollol Shams, P.E.
District Access Management Manager

cc: Nesa Y. Harden

S:\Transportation Operations\Traffic Operations\Access Management\1. Pre-Apps and Variance\2023-01-26\1. 94005000 MP 1.6 SR 615_Youth and Family Behavioral Health Center\94005 MP 1.6 SR 615_Youth and Family Behavioral Health Center.docx

WHITESTONE
An Employee-Owned Company

8405 BENJAMIN ROAD
SUITE J
TAMPA, FLORIDA 33634
813.851.0690
whitestoneassoc.com

REPORT OF GEOTECHNICAL INVESTIGATION

PROPOSED YOUTH AND FAMILY BEHAVIORAL HEALTH CENTER
1211 SOUTH 25TH STREET
FORT PIERCE, ST. LUCIE COUNTY, FLORIDA







Prepared for:

YOUTH AND FAMILY BEHAVIORAL HEALTH CENTER, INC.
2011 South 25th Street
Suite 108
Fort Pierce, Florida 34947

Prepared by:

WHITESTONE ASSOCIATES, INC.
8405 Benjamin Road
Suite J
Tampa, Florida 33634

Kevin A. Feath, P.E.
Principal

Nicholas Rajcoomar, E.I.T.
Geotechnical Engineer

Whitestone Project No.: GF2319913.000
January 27, 2023

WHITESTONE
An Employee-Owned Company

8405 BENJAMIN ROAD
SUITE J
TAMPA, FLORIDA 33634
813.851.0690
whitestoneassoc.com

January 27, 2023

via email

YOUTH AND FAMILY BEHAVIORAL HEALTH CENTER, INC.
2011 South 25th Street
Suite 108
Fort Pierce, Florida 34947

Attention: Dr. Jean Monval
President

Regarding: GEOTECHNICAL INVESTIGATION
PROPOSED YOUTH AND FAMILY BEHAVIORAL HEALTH CENTER
1211 SOUTH 25TH STREET
FORT PIERCE, ST. LUCIE COUNTY, FLORIDA
WHITESTONE PROJECT NO.: GF2319913.000

Dear Dr. Monval:

Whitestone Associates, Inc. (Whitestone) is pleased to submit the attached *Report of Geotechnical Investigation* for the above-referenced project. The attached report presents the results of Whitestone's soils exploration efforts and presents recommendations for design of the proposed structural foundations, floor slab, pavements, stormwater management (SWM) areas, utilities, and related earthwork associated with the proposed site development.

Whitestone's geotechnical division appreciates the opportunity to be of service to Youth and Family Behavioral Health Center, Inc. (YFBHC). Please note that Whitestone has the capability to conduct the additional geotechnical engineering services recommended herein. Please contact us at (813) 851-0690 with any questions regarding the enclosed report.

Sincerely,

WHITESTONE ASSOCIATES, INC.

Nicholas Rajcoomar, E.I.T.
Geotechnical Engineer

Kevin A. Feath, P.E.
Principal

KAF/js O:\Job Folders\2023\2319913GF\Reports and Submittals\GF2319913.000 Fort-Pierce-FL-ROGI.docx
Enclosures
Copy: Jerry Compton, Creech Consulting, Inc.
Laurence W. Keller, P.E., Whitestone Associates, Inc.

REPORT OF GEOTECHNICAL INVESTIGATION
Proposed Youth and Family Behavioral Health Center
1211 South 25th Street
Fort Pierce, St. Lucie County, Florida

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REPORT OF GEOTECHNICAL INVESTIGATION
Proposed Youth and Family Behavioral Health Center
1211 South 25th Street
Fort Pierce, St. Lucie County, Florida

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SECTION 1.0
Summary of Findings and Recommendations

An exploration and evaluation of the subsurface conditions has been conducted on the site of the proposed Youth and Family Behavioral Health Center located at 1211 South 25th Street in Fort Pierce, St. Lucie County, Florida. The site of the proposed construction is shown on the *Test Location Plan* included as Figure 1.

Topographic information was not provided at the time of this report, however, based on visual observation during field investigation, the proposed development area generally is flatlying with a maximum grade change of less than one foot.

Based on the August 2, 2022 *Conceptual Master Site Plan #1* prepared by Creech Consulting, Inc. (Creech), the proposed site development includes construction of an approximately 4,886-square feet single-story office building with associated trash enclosure, pavements, stormwater management (SWM) rain garden, landscaping, and utilities. The proposed building is anticipated to be a metal- and concrete-framed structure with a ground-supported floor slab. No earth retaining walls are planned. Detailed grading has not been finalized, however, based on existing site grades, Whitestone anticipates that the site will be developed at or near existing site elevations, with the exception of the SWM rain garden, with maximum cuts and fills of less than one foot.

The geotechnical investigation included conducting a reconnaissance of the project site, drilling soil borings, conducting in-situ infiltration testing, and collecting soil samples for laboratory analysis. The data from this exploration and analysis were analyzed by Whitestone in light of the project information provided by YFBHC and Creech.

A summary of Whitestone's findings is presented in the following table and detailed descriptions of the subsurface conditions encountered are presented in Section 4.0.

Subsurface Profile	Description	Bottom of Stratum (fbgs)
Surface Cover	Approximately three inches of surficial topsoil was encountered at the boring locations.	0.3
Coastal Plain Marine Deposits	Generally consisting of sand with lesser amounts of silt and/or clay (USCS: SP, SP-SM, and SC). The coastal plain marine deposits extended to the maximum boring termination depth of approximately 25 fbgs.	+25.0
Groundwater	Static groundwater was encountered at depths ranging between approximately 9.5 fbgs and 11.0 fbgs.	9.5 to 11.0

Notes: fbgs – feet below ground surface.

Recommendations developed upon consideration of these findings are summarized in the table below and presented in greater detail in the indicated sections of the report.

Geotechnical Consideration	Recommendations	Report Section
Foundation System	Shallow spread and continuous footings bearing on improved and approved natural soils and/or imported structural fill.	5.5
Floor Slab & Pavements	The improved and approved natural site soils are anticipated to be suitable for a ground-supported floor slabs and pavements following compaction efforts and proofroll inspections.	5.6
Groundwater Control	Static groundwater is not anticipated to be encountered during foundations construction. However, removal of perched/trapped water should be anticipated within excavations for foundations and utilities.	5.4
On-Site Soil Reuse	The vast majority natural site soils are anticipated to be suitable for reuse as structural fill and/or backfill provided and that moisture levels are maintained within three percent of optimum moisture content and any deleterious debris encountered is removed.	5.3
Sinkhole Potential	The subject site is underlain by limestone bedrock, which is water soluble and may be susceptible to solution cavities and void formation that can result in surficial depressions or sinkholes. However, the results of the subsurface investigation did not identify conditions typically indicative of an elevated risk for sinkhole development, e.g., subsurface voids and/or solution channels.	5.2

SECTION 2.0
Introduction

2.1 AUTHORIZATION

Dr. Jean Monval of YFBHC issued authorization to Whitestone to conduct a geotechnical investigation on this site relevant to the construction of the proposed development. The geotechnical investigation was conducted in accordance with Whitestone's November 3, 2022 proposal to YFBHC.

2.2 PURPOSE

The purpose of this subsurface exploration and analysis was to:

- ascertain the various soil profile components at test locations;
- estimate the engineering characteristics of the proposed foundation bearing and subgrade materials;
- provide geotechnical criteria for use by the design engineers in preparing the foundation, slab, pavement, and SWM;
- provide recommendations for required earthwork and subgrade preparation;
- record groundwater and bedrock levels (if encountered) at the time of the investigation and discuss the potential impact on the proposed construction; and
- recommend additional investigation and/or analysis (if warranted).

2.3 SCOPE

The scope of the exploration and analysis included the subsurface exploration, field testing and sampling, laboratory analysis, an engineering analysis and evaluation of the foundation materials. This *Report of Geotechnical Investigation* is limited to addressing the site conditions related to the physical support of the proposed construction. Any references to suspicious odors, materials, or conditions are provided strictly for the client's information.

2.3.1 Field Exploration

Field exploration of the project site was conducted by means of seven soil borings (identified as B-1 through B-7) and one infiltration test (identified as P-1) at the boring B-7 location. The soil borings were advanced with a track-mounted Diedrick rig using hollow-stem augers and split-spoon sampling techniques. The

subsurface tests were backfilled with excavated soils generated from the investigation. The test locations are shown on the *Test Location Plan* included as Figure 1. *Records of Subsurface Exploration* are provided in Appendix A.

The soil borings and infiltration test were conducted in the presence of a Whitestone engineer who conducted field tests, recorded visual classifications, and collected samples of the various strata encountered. The test areas were located in the field using normal taping procedures and estimated right angles, and a hand-held global positioning system (GPS) unit. These locations are presumed to be accurate within a few feet.

Soil borings and Standard Penetration Tests (SPTs) were conducted in general accordance with ASTM International (ASTM) designation D-1586. The SPT resistance value (N) can be used as an indicator of the consistency of fine-grained soils and the relative density of coarse-grained soils. The N-value for various soil types can be correlated with the engineering behavior of earthworks and foundations.

Groundwater level observations, where encountered, were recorded during and immediately after the completion of field operations prior to backfilling the borings. Groundwater elevations derived from sources other than seasonally observed groundwater monitor wells may not be representative of true groundwater levels.

2.3.2 Laboratory Program

In addition to the field investigation, a laboratory program was conducted to determine additional, pertinent engineering characteristics of representative samples of on-site soils. The laboratory program was conducted in general accordance with applicable ASTM standard test methods and included physical testing of proposed building foundation bearing and pavement subgrade stratum.

Physical/Textural Analyses: Representative samples of selected strata encountered were subjected to a laboratory testing program that included Atterberg limits determinations (ASTM D-4318), moisture content determinations (ASTM D-2216) and particle size analysis through the No. 200 sieve (ASTM D-1140) in order to conduct supplementary engineering soil classifications in general accordance with ASTM D-2487. The soil strata tested were classified by the Unified Soil Classification System (USCS) and results of the laboratory testing are summarized in the following table. Quantitative test results are provided in Appendix B.

PHYSICAL/TEXTURAL ANALYSES SUMMARY							
Boring No.	**Sample**	**Depth (fbgs)**	**% Passing No. 200 Sieve**	**Moisture Content (%)**	**Liquid Limit**	**Plastic Index**	**USCS Classification**
B-1	S-1	0.3 - 2.0	1.9	2.7	Non-Plastic		SP
B-2	S-2	2.0 - 4.0	3.7	9.3	Non-Plastic		SP
B-7	S-4	6.0 - 8.0	14.6	14.8	24	11	SC

Notes: fbgs – feet below ground surface.

The engineering classifications are useful when considered in conjunction with the additional site data to estimate properties of the soil types encountered and to predict the soil's behavior under construction and service loads.

Organic Content Analyses: A representative sample of a suspected organic stratum was tested for organic content by the Loss on Ignition (LOI) method of testing (ASTM D-2974). The results of the laboratory testing program are presented in tabular format in the following table. Quantitative test results are provided in Appendix B.

ORGANIC CONTENT TESTING SUMMARY				
Boring No.	**Sample**	**Depth (fbgs)**	**USCS Classification**	**Organic Content (%)**
B-2	S-2	2.0 - 4.0	SP	3.6

SECTION 3.0
Site Description

3.1 LOCATION AND DESCRIPTION

The subject site located at 1211 South 25th Street in Fort Pierce, St. Lucie County, Florida is further identified as St. Lucie County Parcel ID Nos.: 2417-503-0040-000-2 & 2417-507-0005-000-7. At the time of Whitestone's site investigation, the site consisted of vacant grass-covered parcels with trees. The site is bound to the north by a single-family residential development followed by the intersection of Acorn Street and South 25th Street, to the east by South 25th Street followed by a Family Dollar retail store development, to the south by the Conviva Care Center and the Family Oral Health Associates developments, and to the west by single-family residential developments followed by Acorn Street. The location of the site is shown on the *Test Location Plan* included as Figure 1.

3.2 EXISTING CONDITIONS

Previous Site Development: Based on a review of historic aerial photographs dating back to 1969, the subject site housed an unidentified structure with pavement areas on the northern portion of the site and two unidentified structures with pavement areas on the southern portion of the site. The site remained relatively unchanged until 1984. Between 1984 and 1999, the three former site structures and pavements no longer occupied the site. The site has remained relatively unchanged as a vacant grass-covered lot from 1999 to present day.

Surface Cover/Development: At the time of the investigation, the subject site consisted of two vacant, grass-covered parcels with trees and utilities on the adjacent South 25th Street right-of-way (ROW).

Topography: Topographic information was not available at the time of this report, however, based on visual observations the proposed development area is generally flatlying with a maximum grade change of less than one foot.

Utilities: At the time of Whitestone's subsurface field investigation, the subject site was not serviced by utilities. However, the ROW of the adjacent South 25th Street appeared to be serviced by aboveground electric lines and underground communication, electric, water, sanitary sewer, and stormwater lines. Other utilities were not observed at the subject site by Whitestone but may be present. The utility information contained in this report is presented for general discussion only and is not intended for construction purposes.

Site Drainage: Surface run-off generally follows existing topography draining towards inlets located within the east adjacent South 25th Street ROW. The termini of these inlets are unknown.

3.3 SITE GEOLOGY

The site is located within the Atlantic Coastal Complex Province of the Barrier Island Sequence District. According to the Florida Geological Survey *Geologic Map of the State of Florida 1:100,000 Scale*, the immediate underlying bedrock formation consists of the Pleistocene-age Anastasia Formation. The additional underlying bedrock layers mapped at the site include the Undifferentiated Quaternary sediments, Dunes, Peace River Formation, Hawthorne Group –Arcadia Formation, Suwanee Limestone, Ocala Limestone, and Avon Park Formation. The unconsolidated soils at the site, which includes the natural site soils, generally consist of orangish brown, variably fossiliferous interbedded sands, often cemented with calcite, and coquinoid limestone. The deeper underlying bedrock formations, which include the Ocala Limestone and Avon Park Formation, generally consists of cream to light-brown to tan and white to orangish gray, sandy, variably fossiliferous limestone occasionally interbedded with tan to brown, fossiliferous dolostone. The overburden materials at the site include shelly sand and clay coastal plain marine deposits.

The site is mapped by United States Geological Survey as being within a karst area. Karst conditions, including solution cavities, are known to exist in areas where limestone bedrock is present. The limestone bedrock, which is water soluble and susceptible to solution cavities and void formation, can result in surficial depressions or sinkholes. Based on a review of Florida Department of Environmental Protection (FDEP) *Subsidence and Swallet Incident Reports*, the closest reported subsidence or swallet incident was approximately 4.5 miles from the subject site. The results of Whitestone's subsurface investigation and visual site inspection did not identify conditions typically indicative of an elevated risk for sinkhole development, e.g., subsurface voids and/or solution channels.

3.4 PROPOSED CONSTRUCTION

Based on the August 2, 2022 *Conceptual Master Site Plan #1* prepared by Creech, the proposed site development includes construction of an approximately 4,886-square feet single-story office building with associated trash enclosure, pavements, SWM rain garden, landscaping, and utilities. No earth retaining walls are planned. Detailed grading has not been finalized, however, based on existing site grades, Whitestone anticipates that the site will be developed at or near existing site elevations, with the exception of the SWM rain garden, with maximum cuts and fills on the order of less than one foot. The bottom elevation of the proposed SWM rain garden is anticipated to be approximately three feet to five feet below existing site grades.

Whitestone anticipates the proposed structure will consist of concrete foundations and a combination of metal and masonry framing with a ground-supported concrete floor slab. The anticipated maximum loads for the proposed structures are expected to be as follows:

- building column load - 40 kips;
- wall load - 2.0 kips per linear foot;
- floor slab load - 125 pounds per square foot; and

The scope of Whitestone's investigation and the professional advice contained in this report were generated based on the project details and loading noted herein. Any revisions or additions to the design details enumerated in this report should be brought to the attention of Whitestone for additional evaluation as warranted.

SECTION 4.0
Subsurface Conditions

Details of the subsurface materials encountered are presented on the *Records of Subsurface Exploration* presented in Appendix A of this report. The subsurface soil conditions encountered in the soil borings consisted of the following generalized strata in order of increasing depth.

4.1 SUBSURFACE SOIL CONDITIONS

Surface Cover: The subsurface tests were conducted within grass-covered areas and encountered approximately three inches of topsoil at the ground surface.

Coastal Plain Marine Deposits: Underlying the surface cover, the subsurface tests disclosed coastal plain marine deposits that generally consisted of poorly graded sand (USCS: SP and SP-SM) with a variable amount of silt, or clayey sand (USCS: SC) to the boring termination depths that ranged from approximately 10 fbgs to 25 fbgs. SPT N-values recorded within the stratum ranged between seven blows per foot (bpf) and 78 bpf, indicating loose to very dense relative densities and averaging approximately 23 bpf.

4.2 GROUNDWATER

Static groundwater water was encountered in the majority of the borings conducted at depths ranging between approximately 9.5 fbgs and 11.0 fbgs. Perched/trapped water was not encountered in the borings conducted. However, perched/trapped water conditions may be encountered within finer-grained portions of the natural site soils especially following precipitation events. Static and perched/trapped water conditions are expected to fluctuate seasonally and following periods of precipitation.

SECTION 5.0
Conclusions and Recommendations

5.1 GENERAL

The results of the subsurface investigation and analysis indicated that the proposed structures may be supported by a shallow foundation system designed to bear within the improved and approved natural site soils and/or properly placed structural fill materials, as detailed herein. Furthermore, a majority of the existing site soils are also anticipated to be suitable for supporting floor slabs and pavements contingent upon construction phase evaluation and approval.

5.2 SITE PREPARATION AND EARTHWORK

Surface Cover Stripping and Demolition: Prior to stripping operations, all utilities should be identified and secured. Any surficial vegetation should be stripped at least 10 feet beyond the limits of the proposed construction area. Any remnant structures associated with past development at the site encountered including foundation walls, footings, slabs, and utilities, should be removed entirely from below proposed foundations and slabs including their zones of influence (as determined by the owners Geotechnical Engineer) and excavated to at least two feet below proposed construction subgrade levels elsewhere. Foundations and slabs may remain in place below these depths below proposed ground-supported slabs, pavements and landscaped areas, provided there is no interference with future construction; however, any existing slab to remain should be thoroughly broken such that maximum particle size is 12 inches to allow vertical drainage of water.

Carbonic Rock Area Considerations: Carbonate rock formations are soluble in mildly acidic water and characteristically contain subsurface voids and solution cavities of varying sizes. Sinkholes occur when soil overlying the void washes into underlying voids in sufficient quantities to cause a surficial collapse. Naturally formed sinkholes typically require thousands to tens of thousands of years to form, however, sinkhole development can be greatly accelerated by acts of man. For this reason, care should be exercised when constructing structures within a sinkhole prone area. Many triggering mechanisms have their origin in rapidly fluctuating, or artificially fluctuating groundwater levels. These conditions may be caused by situations beyond the owner's control, including saturating rains, droughts, drawdown from neighborhood wells, or changes to drainage patterns. Sinkholes can form undetected, even if prudent design and construction practices are implemented.

Site Planning Considerations: At a minimum, the recommended measures to reduce sinkhole occurrence include relatively minor site planning considerations and construction measures to minimize risks inherent

to the region. Such measures should include proper grading to avoid concentrations of surface runoff. Additionally, excavations for footing and utilities should not be exposed to rain and surface runoff due to potential increased risk of sinkhole formation and degradation of subgrade materials. Any excavation that must remain open for more than one day is recommended to be sealed at the base with a lean concrete mud mat.

Regional development also should be monitored during the life of the facility to identify conditions that might affect groundwater levels or drainage patterns. If prudent design measures and construction phase considerations are properly implemented, the long-term risk of potential sinkhole activity may be reduced. Sinkholes can form undetected even if prudent design and construction practices are implemented.

Sinkhole Remediation: Although no open sinkholes or surface depressions were identified during the investigation, sinkholes can develop during relatively short time periods and risk of sinkhole occurrence generally increases during construction because of exposed soil conditions and temporary drainage issues. Early formation of sinkholes often can be detected by depressions at the ground surface or within excavations. If suspicious depression areas develop during construction, the locations should be probed or excavated in the presence of the geotechnical engineer to determine if additional investigation is required. In the event that new sinkholes occur during construction, Whitestone preliminarily recommends excavating the sinkhole to expose the throat (cavity) and backfilling the area with wet grout or lean concrete. If a depression is observed during construction, Whitestone should be notified immediately for remediation recommendations.

Surface Preparation/Proofrolling: Prior to placing any fill, backfill or subbase materials to raise or restore grades to the desired subgrade elevations, the exposed soils should be compacted to a firm and unyielding surface with a minimum of four passes in two perpendicular directions of a minimum 20-ton, vibratory smooth drum roller. The surface should be proofrolled with a loaded tandem axle truck in the presence of the geotechnical engineer to help identify soft or loose pockets that may require removal and replacement or further investigation. Any fill or backfill should be placed and compacted in accordance with Section 5.3.

Weather Performance Criteria: The natural site soils are moderately moisture sensitive and may soften when exposed to water. As such, every effort must be made to maintain drainage of surface water runoff away from construction areas by grading and limiting the exposure of excavations and prepared subgrades to rainfall. Accordingly, excavation and fill placement procedures should be conducted during favorable weather conditions. Overexcavation of saturated soils and replacement with controlled structural fill per Section 5.3 of this report may be required prior to resuming work on disturbed subgrade soils.

On-Site Soil Protection and Maintenance: The natural site soils will degrade when exposed to inclement weather or repeated construction traffic. However, if properly protected and maintained as recommended herein, the site soils will provide adequate support for the proposed construction. The site contractors should employ appropriate means and methods to protect the subgrade including, but not limited to the following:

- sealing exposed subgrade soils on a daily basis with a vibratory smooth drum roller;
- regrading the site as needed to maintain positive drainage away from open earthwork construction areas and to prevent standing water;
- removing wet surficial soils and ruts immediately; and
- limiting exposure to construction traffic and precipitation especially following inclement weather.

Pavement Subgrade Stabilization and Inspection: Pavement subgrade soils which are exposed to inclement weather and heavy construction traffic will degrade and require either extensive drying time or overexcavation and replacement in order to provide a suitable subgrade for pavements. Overexcavation of unstable soils within pavement areas typically should be limited to approximately 1.5 feet below planned subgrade unless directed otherwise by the owner's geotechnical engineer, provided that a reinforcing geogrid approved by the owner's geotechnical engineer is used. Alternatively, unstable materials may be completely overexcavated and either aerated and recompacted or replaced with imported structural fill per Section 5.3. However, this option is likely least economical.

Geogrids typically are economical when proposed undercut depths exceed approximately 18 inches. The geogrid (Tensar TriAx TX130S, or similar) should be placed directly on the exposed subgrade and backfill should consist of a well-graded gravel and sand blend. The services of the geotechnical engineer should be retained to inspect soil conditions during construction and to provide specific recommendations for stabilizing subgrades. Additionally, a geotechnical engineer should be retained to verify the suitability of prepared foundation, floor slab and pavement subgrades for support of design loads.

5.3 STRUCTURAL FILL AND BACKFILL

Imported Fill Material: Any imported material placed as structural fill or backfill to raise elevations or restore design grades should consist of clean, relatively well-graded sand or gravel with a maximum particle size of two inches and five percent to 15 percent of material finer than a #200 sieve. Silts, clays, and silty or clayey sands and gravels with higher percentage of fines and with a liquid limit less than 40 and a plasticity index less than 20 may be considered subject to the owner's approval, provided that the required moisture content and compaction controls are met during favorable weather conditions. The material should be free of clay lumps, organics, and deleterious material. Imported structural fill material should be approved by a qualified geotechnical engineer prior to delivery to the site.

On-Site Materials: Whitestone anticipates that the vast majority of the natural site soil will be suitable for reuse as structural fill/backfill provided that soil moisture contents are controlled within three percent of optimum moisture level and objectionable/organic materials, if encountered, are segregated. The reuse of granular site soils with more than 12 percent fines (USCS: SC) typically is possible only during ideal weather conditions. These soils will require stringent moisture conditioning, including aerating and drying

to achieve proper compaction. Immediate reuse of these site soils should not be anticipated if the moisture contents are above three percent of the optimum. Additionally, the site soils must be properly evaluated during the construction phase as described in Section 5.11. Alternatively, imported fill materials may be used to attain the desired grades and expedite earthwork operations during wet weather periods. The contractor should be responsible for covering stockpiled soils, sealing subgrades, and providing proper surface drainage during forecasted wet weather.

Compaction and Placement Requirements: On-site soils used as fill or backfill should be placed in maximum nine-inch loose lifts and compacted using a 20-ton smooth drum vibratory drum roller during mass grading activities or a small walk-behind roller or hand-held vibratory compactor within excavations. All structural fill and backfill, including 10 feet outside exterior walls, and pavement areas should be compacted to at least 95 percent of the maximum dry density within three percent of the optimum moisture content as determined by ASTM D-1557 (Modified Proctor). Structural fill and backfill placed within non-structural areas, such as landscaped areas, may be compacted to at least 92 percent of the maximum dry density within three percent of optimum moisture content as determined by ASTM D-1557 (Modified Proctor).

Structural Fill Testing: A sample of the imported fill material or any on-site material proposed for reuse as structural fill or backfill should be submitted to the geotechnical engineer for analysis and approval at least one week prior to its use. The placement of all fill and backfill should be monitored by a qualified engineering technician to ensure that the specified material and lift thicknesses are properly installed. A sufficient number of in-place density tests should be conducted to ensure that the specified compaction is achieved throughout the height of the fill or backfill.

5.4 GROUNDWATER CONTROL

Static groundwater water was encountered in a majority of the borings conducted at depths ranging between approximately 9.5 fbgs and 11.0 fbgs. Perched/trapped water was not encountered in the borings conducted. However, perched/trapped water conditions may be encountered within finer-grained portions of the natural site soils especially following precipitation events.

As such, temporary dewatering should be anticipated, including the use of mechanical pumps, to remove trapped/perched water within footing and utility excavations, especially following precipitation events. Construction phase dewatering may consist of removing surface water runoff, infiltrating water, or trapped water at this site. Whitestone anticipates that construction phase dewatering would include installing temporary sump pits and filtered pumps within trenches and excavations.

Proper grading and drainage should be incorporated into the site design and construction phase grading to discourage ponding of surface runoff. Every effort should be made to maintain drainage of surface run-off away from construction areas by grading. The contractor should limit exposure of excavations and prepared subgrades to rainfall. Overexcavation of wet soils and replacement with controlled structural fill per Section 5.3 of this report may be required prior to resuming work on disturbed subgrade soils.

5.5 FOUNDATIONS

Shallow Foundation Design Criteria: Following compaction of any upper loose zones encountered at or below proposed foundation elevations, Whitestone recommends supporting the proposed building on conventional shallow spread and continuous footings designed to bear within the improved and approved inorganic natural soils and/or structural fill materials, provided these materials are properly evaluated, placed and compacted in accordance with Sections 5.2, 5.3, and 5.11 of this report. Foundations bearing within these materials may be designed using a maximum allowable net bearing pressure of 3,000 pounds per square foot.

All footing bottoms should be improved by in-trench compaction in the presence of the geotechnical engineer. Regardless of loading conditions, proposed foundations should be sized no less than minimum dimensions of 24 inches for continuous wall footings and 36 inches for isolated column footings.

Footings should be designed such that the maximum toe pressure due to the combined effect of vertical loads and overturning moment does not exceed the recommended maximum allowable net bearing pressure. In addition, positive contact pressure should be maintained throughout the base of the footings such that no uplift or tension exists between the base of the footings and the supporting soil. Uplift loads should be resisted by the weight of the concrete. Side friction should be neglected when proportioning the footings so that lateral resistance should be provided by friction resistance at the base of the footings. An allowable coefficient of friction against sliding of 0.35 is recommended for use in the design of concrete foundations bearing within the on-site soils or imported structural backfill.

Inspection Criteria: Whitestone recommends that the suitability of the bearing soils along the footing bottoms be verified by a geotechnical engineer prior to placing concrete for the footings. Special attention should be given to areas underlain by loose or organic materials. In the event that isolated areas of unsuitable materials are encountered in footing excavations, overexcavation and replacement of the materials or deeper foundation embedment may be necessary to provide a suitable footing subgrade. Any overexcavation to be restored with structural fill will need to extend at least one foot laterally beyond footing edges for each vertical foot of overexcavation. Lateral overexcavation may be eliminated if grade is restored with lean concrete. The bottoms of overexcavated areas should be compacted with vibratory smooth drum rollers, walk-behind compactors, vibrating plates or plate tampers (“jumping jacks”) to compact locally disturbed materials and densify any underlying loose zones. Any standing water within the footing excavation should be removed with a mechanical pump prior to concrete placement.

Settlement: Whitestone estimates post construction settlements of new foundations will be on the order of less than one inch if the recommendations outlined in this report are properly implemented. Differential settlement between individual footings should be less than one-half inch.

Foundation Embedment: Footings should be placed at least 18 inches below adjacent exterior grades, or the depth required by local building codes, to maintain adequate confinement.

5.6 FLOOR SLAB

Whitestone anticipates that majority of the site soils will provide suitable support for the floor slab, contingent upon construction phase evaluation and compaction improvement of any loose zones and overexcavation of organic materials. The exposed subgrade should be compacted and inspected via proofrolling in accordance with Sections 5.2, 5.3 and of this report. Any areas that become softened or disturbed as a result of wetting and/or repeated exposure to construction traffic should be removed and replaced with compacted structural fill. The properly prepared site soils and structural fill/backfill materials are expected to yield a minimum subgrade modulus (k) of 150 psi/in.

A minimum six-inch thick layer of crushed limerock with minimum Limerock Bearing Ratio (LBR) of 100, compacted to 98 percent modified Proctor maximum dry density, should be placed below the floor slab to provide a uniform base. A moisture vapor barrier should be installed beneath the floor slab in accordance with local building code requirements or where required by the floor covering manufacturer.

5.7 PAVEMENT DESIGN CRITERIA

General: The majority of the site soils and/or compacted structural fill/backfill placed to raise or restore design elevations are anticipated to be suitable for support of the proposed pavements provided these materials are properly evaluated, compacted, and proofrolled in accordance with Sections 5.2, 5.3, and 5.11 of this report during favorable weather conditions.

Design Criteria: A minimum required LBR value of 40 has been assigned to the properly prepared subgrade soils for pavement design purposes. This value was correlated with pertinent soil support values and assumed traffic loads to prepare flexible and rigid pavement designs per the AASHTO *Guide for the Design of Pavement Structures*.

Design traffic loads were assumed based on typical volumes for similar facilities and correlated with 18-kip equivalent single axle loads (ESAL) for a 20 year life. An estimated maximum load of 35,000 ESAL was used for all pavement areas assuming the pavement primarily will accommodate both automobile and limited heavier truck traffic, actual pavement loads are anticipated to be less.

Pavement Section: The recommended flexible pavement section is presented below in tabular format:

FLEXIBLE PAVEMENT SECTION DESIGN		
Layer	**Material**	**Standard Duty Thickness (Inches)**
Asphalt Top Course	FDOT Section 334 Type SP-12.5 (Superpave Asphalt Concrete); PG 67-22	2.0
Granular Base Course	Crushed Limerock with minimum LBR of 100, compacted to 98% Modified Proctor maximum dry density	6.0
Stabilized Subgrade	Subgrade with minimum LBR of 40, compacted to 98% Modified Proctor maximum dry density	12.0

A rigid concrete pavement should be used to provide suitable support at areas of high traffic or severe turns such as at the trash enclosure and ingress/egress locations. The recommended rigid pavements are presented below in tabular format:

RIGID PAVEMENT SECTION DESIGN		
Layer	**Material**	**Standard Duty Thickness (Inches)**
Surface	4,000 psi air-entrained concrete	5.0[1]
Granular Base Course	Crushed Limerock with minimum LBR of 100, compacted to 98% Modified Proctor maximum dry density	6.0
Stabilized Subgrade	Subgrade with minimum LBR of 40, compacted to 98% Modified Proctor maximum dry density	12.0

Note [1]: The outer edges of concrete pavements are susceptible to damage as trucks move from rigid pavement to adjacent flexible pavement. Therefore, the thickness at the outer two feet of the rigid concrete pavement should be 12 inches. The concrete should be reinforced with at least one layer of six-inch by six-inch W5.4/W5.4 welded wire fabric (ASTM A185).

Additional Design Considerations: The pavement section thickness designs presented in this report are based on the design parameters detailed herein and are contingent on proper construction, inspection, and maintenance. Additional pavement thickness may be required by local code. The designs are contingent on achieving the minimum soil support value in the field. To accomplish this requirement, all subgrade soil and supporting fill or backfill must be properly evaluated, placed, and prepared as detailed in Sections 5.2, 5.3, and 5.11 of this report. Proper drainage must be provided for the pavement structure including appropriate grading and surface water control, as well as measures to drain water from the subgrade.

The performance of the pavement also will depend on the quality of materials and workmanship. Whitestone recommends that Florida Department of Transportation (FDOT) standards for materials, workmanship, and maintenance be applied to this site. Project specifications should include verifying that

the installed asphaltic concrete material composition is within tolerance for the specified materials and that the percentage of air voids of the installed pavement is within specified ranges for the respective materials. All rigid concrete pavements should be suitably air-entrained, jointed, and reinforced in general accordance with ACI 330R-08 *Guide for the Design and Construction of Concrete Parking Lots*.

5.8 RETAINING WALL/LATERAL EARTH PRESSURES

No earth retaining walls were identified on the site plan. Whitestone should be notified if retaining walls or structures resisting lateral earth pressures are planned.

5.9 SEISMIC AND LIQUEFACTION CONSIDERATIONS

The subsurface conditions are most consistent with a Site Class D as defined by the *2020 Florida Building Code* (FBC 2020). Based on the seismic zone and soil profile, liquefaction considerations are not expected to have a substantial impact on design.

5.10 EXCAVATIONS

The existing fill and natural soils encountered during this investigation are consistent with Type C Soil Conditions as defined by 29 CFR Part 1926 (OSHA) which require a maximum unbraced excavation angle of 1.5:1 (horizontal:vertical). Actual conditions encountered during construction should be evaluated by a competent person (as defined by OSHA) to ensure that safe excavation methods and/or shoring and bracing requirements are implemented.

5.11 SUPPLEMENTAL POST INVESTIGATION SERVICES

Construction Inspection and Monitoring: The owner's geotechnical engineer should conduct inspection, testing, and consultation during construction as described in previous sections of this report. Monitoring and testing should also be conducted to verify that the existing surface cover materials are properly removed, any encountered underground structures (such as building foundations associated with former site development) are properly removed and backfilled, and suitable materials used for controlled fill are properly placed and compacted over suitable subgrade soils. Any overexcavation of loose upper natural or unsuitable soils encountered within the proposed building footprint and/or pavement areas that are unsuitable for structural design support interior current condition should be witnessed and documented by the owner's geotechnical engineer. The proper placement of structural backfill within the building pad and pavement areas should also be documented by the owner's geotechnical engineer.

5.13 PRELIMINARY STORMWATER MANAGEMENT INFILTRATION TESTING

General: Soil boring B-7 was conducted within an accessible area of the proposed SWM rain garden as provided by Creech. Soil boring B-7 was terminated at the approximate depth of 10 fbgs. The results of the subsurface conditions encountered within the soil boring conducted within the proposed SWM area is provided in Appendix A. A summary of the groundwater observations as well as the in-situ infiltration test result are included in the following table.

GROUNDWATER & INFILTRATION TEST SUMMARY				
Boring/Infiltration Test No.	**Groundwater Depth (fbgs)**	**USDA Classification @ Test**	**Exfiltration Test Results**	
			Depth (fbgs)	**Rate (ft/sec)**
B-7/P-1	10.0	Sandy LOAM	10.0	2.31×10^{-7}

Notes: NE – Not Encountered.

Soil Infiltration Rate: An in-situ infiltration test was conducted within the proposed SWM rain garden in general accordance with the South Florida Water Management District (SFWMD) guidelines for "usual open hole" exfiltration testing. Infiltration test P-1 resulted in a field infiltration rate of approximately 2.31×10^{-7} feet per second. Infiltration test results are provided in Appendix C and soil boring logs are included in Appendix A.

SECTION 6.0
General Comments

Supplemental recommendations may be required upon finalization of construction plans or if significant changes are made in the characteristics or location of the proposed structure. Soil bearing conditions should be checked at the appropriate time for consistency with those conditions encountered during Whitestone's geotechnical investigation.

The recommendations presented herein should be utilized by a qualified engineer in preparing the project plans and specifications. The engineer should consider these recommendations as minimum physical standards which may be superseded by local and regional building codes and structural considerations. These recommendations are prepared for the sole use of Youth and Family Behavioral Health Center, Inc. for the specific project detailed and should not be used by any third party. These recommendations are relevant to the design phase and should not be substituted for construction specifications.

The possibility exists that conditions between borings may differ from those at specific testing locations, and conditions may not be as anticipated by the designers or contractors. In addition, the construction process may alter soil and rock conditions. Therefore, experienced geotechnical personnel should observe and document the construction procedures used and the conditions encountered.

Whitestone assumes that a qualified contractor will be employed to conduct the construction work, and that the contractor will be required to exercise care to ensure all excavations are conducted in accordance with applicable regulations and good practice. Particular attention should be paid to avoiding damaging or undermining adjacent properties and maintaining slope stability.

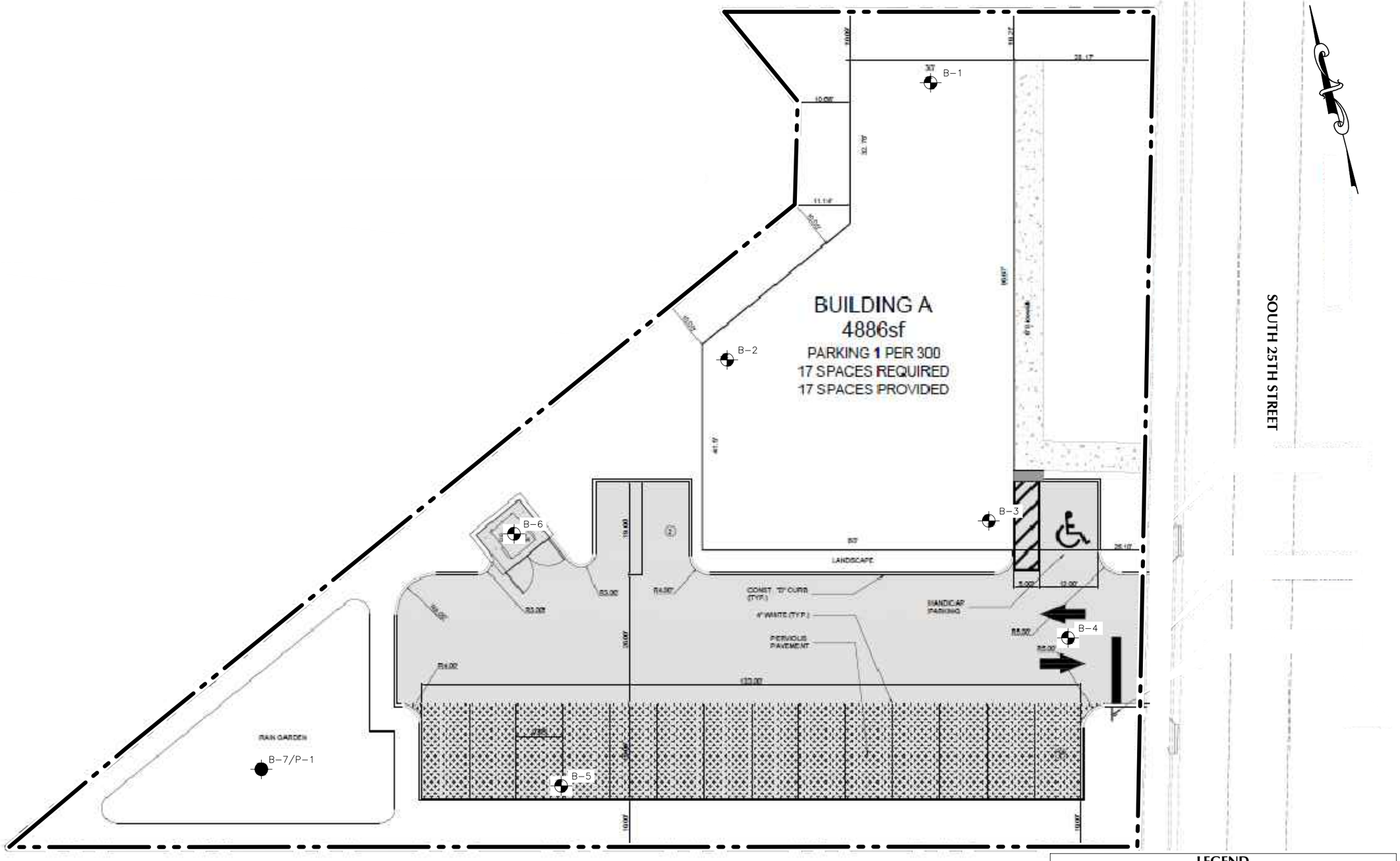
Whitestone recommends that the services of the geotechnical engineer be engaged to test and evaluate the soils in the footing excavations prior to concreting in order to determine that the soils will support the bearing capacities. Monitoring and testing also should be conducted to verify that suitable materials are used for controlled fills and that they are properly placed and compacted over suitable subgrade soils.

The exploration and analysis of the foundation conditions reported herein are considered sufficient in detail and scope to form a reasonable basis for the foundation design. The recommendations submitted for the proposed construction are based on the available soil information and the design details furnished by Youth and Family Behavioral Health Center, Inc. Deviations from the noted subsurface conditions encountered during construction should be brought to the attention of the geotechnical engineer.

The geotechnical engineer warrants that the findings, recommendations, specifications, or professional advice contained herein have been promulgated after being prepared in accordance with generally accepted professional engineering practice in the fields of foundation engineering, soil mechanics, and engineering geology. No other warranties are implied or expressed.

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FIGURE 1
Test Location Plan



0 20

1 inch = 20 ft.

LEGEND

B-1 — BORING

B-7/P-1 — BORING/INFILTRATION TEST

SUBJECT PROPERTY BOUNDARY

REFERENCE

THIS PLAN IS BASED ON AN AUGUST 2, 2022 CONCEPTUAL MASTER SITE PLAN #1 PREPARED BY CREECH CONSULTING, LLC. & ALL SITE LOCATIONS ARE APPROXIMATE.

WHITESTONE
An Employee-Owned Company
8405 BENJAMIN ROAD, SUITE J, TAMPA, FL 33634
813.851.0690 WHITESTONEASSOC.COM

DRAWING TITLE: **TEST LOCATION PLAN**

CLIENT: **YOUTH AND FAMILY BEHAVIORAL HEATH CENTER, INC.**

PROJECT: PROPOSED YOUTH AND FAMILY BEHAVIORAL HEALTH CENTER
1211 SOUTH 25TH STREET
FORTH PIERCE, SAINT LUCIE COUNTY, FL

PROJECT #: GF2319913.000	
DESIGNED BY: GR	PROJ. MGR.: KF
DATE: 1/26/23	FIGURE: 1
SCALE: 1" = 20'	

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APPENDIX A
Records of Subsurface Exploration

WHITESTONE

RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-1

Project:	Proposed Youth and Family Behavioral Health Center	**WAI Project No.:**	GF2219913.000
Location:	1211 South 25th Street	**Client:**	Youth and Family Behavioral Health Center, Inc.
Surface Elevation:	± NS feet	**Date Started:**	1/26/2023
Termination Depth:	25.0 feet bgs	**Date Completed:**	1/26/2023
Proposed Location:	Building	**Logged By:**	AB
Drill / Test Method:	HSA / SPT	**Contractor:**	SCD
		Equipment:	Diedrick Track-Rig

	Water Depth (feet bgs)	Elevation (feet)	Cave-In Depth (feet bgs)	Elevation (feet)
During:	10.0	---		
At Completion:	---	---	**At Completion:**	---	---
24 Hours:	---	---	**24 Hours:**	---	---

Depth (feet)	No	Type	Blows Per 6"	Rec. (in.)	N	DEPTH (feet)	STRATA	DESCRIPTION OF MATERIALS (Classification)	REMARKS
						0.0			
0 - 2	S-1		6 - 5 - 5 - 5	18	10		TOPSOIL	3" Topsoil	
							COASTAL PLAIN MARINE DEPOSITS	Gray Poorly Graded Sand, Moist, Medium Dense (SP)	
						2.0			
2 - 4	S-2		6 - 7 - 8 - 8	18	15			Dark Brown Poorly-Graded Sand with Silt, Trace Roots, Moist, Medium Dense (SP-SM)	
4 - 6	S-3		6 - 20 - 17 - 13	24	37	5.0		As Above, Dense (SP-SM)	
6 - 8	S-4		12 - 12 - 10 - 16	22	22			As Above, Medium Dense (SP-SM)	
8 - 10	S-5		12 - 13 - 17 - 17	20	30			As Above, Brown, Moist to Wet, Dense (SP-SM)	
						10.0 ▽			
13.5 - 15	S-6		4 - 9 - 10	18	19	15.0		As Above, Dark Brown, Wet (SP-SM)	
						18.5			
18.5 - 20	S-7		12 - 12 - 16	18	28			Grayish-Brown Poorly-Graded Sand, Wet, Medium Dense (SP)	
						20.0			
23.5 - 25	S-8		19 - 30 - 48	18	78			As Above, Very Dense (SP)	
						25.0			
								Boring Log B-1 Terminated at a Depth of 25.0 Feet Below Ground Surface	

NOTES: bgs = below ground surface, NA = Not Applicable, NE = Not Encountered, NS = Not Surveyed, P = Perched

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RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-2

Page 1 of 1

Project:	Proposed Youth and Family Behavioral Health Center	**WAI Project No.:**	GF2219913.000
Location:	1211 South 25th Street	**Client:**	Youth and Family Behavioral Center, Inc.

Surface Elevation:	± NS feet	**Date Started:**	1/26/2023		**Water Depth | Elevation (feet bgs) | (feet)**		**Cave-In Depth | Elevation (feet bgs) | (feet)**
Termination Depth:	20.0 feet bgs	**Date Completed:**	1/26/2023				
Proposed Location:	Building	**Logged By:**	AB	**During:**	11.0 | ---		
Drill / Test Method:	HSA / SPT	**Contractor:**	SCD	**At Completion:**	--- | ---	**At Completion:**	--- | ---
		Equipment:	Diedrick Track-Rig	**24 Hours:**	--- | ---	**24 Hours:**	--- | ---

SAMPLE INFORMATION						DEPTH	STRATA		DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	No	Type	Blows Per 6"	Rec. (in.)	N	(feet)				
						0.0				
0 - 2	S-1		2 - 3 - 4 - 4	20	7		TOPSOIL		3" Topsoil	
							COASTAL PLAIN MARINE DEPOSITS		Gray Poorly Graded Sand, Moist, Loose (SP)	
2 - 4	S-2		5 - 5 - 6 - 7	22	11				As Above, Trace Roots, Medium Dense (SP)	Organic Content = 3.6%
						4.0				
4 - 6	S-3		11 - 15 - 22 - 28	20	37	5.0			Brown Poorly-Graded Sand with Silt, Trace Roots, Moist, Dense (SP-SM)	
6 - 8	S-4		10 - 14 - 20 - 15	20	34				As Above (SP-SM)	
						8.0				
8 - 10	S-5		18 - 24 - 22 - 19	22	46				Light Brown Clayey Sand, Moist, Dense (SC)	
						10.0				
						13.5				
13.5 - 15	S-6		8 - 12 - 13	18	25				Grayish-Brown Poorly-Graded Sand, Wet, Medium Dense (SP)	
						15.0				
						18.5				
18.5 - 20	S-7		14 - 11 - 14	16	25				As Above (SP)	
						20.0				
									Boring Log B-2 Terminated at a Depth of 20.0 Feet Below Ground Surface	
						25.0				

NOTES: bgs = below ground surface, NA = Not Applicable, NE = Not Encountered, NS = Not Surveyed, P = Perched

WHITESTONE

RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-3

Page 1 of 1

Project:	Proposed Youth and Family Behavioral Health Center	**WAI Project No.:**	GF2219913.000
Location:	1211 South 25th Street	**Client:**	Youth and Family Behavioral Center, Inc.

Surface Elevation:	± NS feet	**Date Started:**	1/26/2023		**Water Depth | Elevation (feet bgs) | (feet)**		**Cave-In Depth | Elevation (feet bgs) | (feet)**
Termination Depth:	20.0 feet bgs	**Date Completed:**	1/26/2023				
Proposed Location:	Building Pad	**Logged By:**	AB	**During:**	10.0 | ---		
Drill / Test Method:	HSA / SPT	**Contractor:**	SCD	**At Completion:**	--- | ---	**At Completion:**	--- | ---
		Equipment:	Diedrick Track-Rig	**24 Hours:**	--- | ---	**24 Hours:**	--- | ---

SAMPLE INFORMATION						DEPTH	STRATA		DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	No	Type	Blows Per 6"	Rec. (in.)	N	(feet)				
						0.0				
0 - 2	S-1		4 - 4 - 4 - 3	20	8		TOPSOIL		3" Topsoil	
							COASTAL PLAIN MARINE DEPOSITS		Gray Poorly Graded Sand, Moist, Loose (SP)	
2 - 4	S-2		4 - 7 - 14 - 20	24	21				As Above, Medium Dense (SP)	
						3.5				
4 - 6	S-3		7 - 8 - 13 - 18	21	21				Dark Brown Poorly-Graded Sand with Silt, Trace Organics, Moist, Medium Dense (SP-SM)	
						5.0			As Above (SP-SM)	
6 - 8	S-4		7 - 10 - 16 - 20	18	26	6.0			BrownClaey Sand, Trace Roots, Moist, Medium Dense (SC)	
						8.0				
8 - 10	S-5		14 - 7 - 12 - 14	24	33				As Above, Light Brown, Dense (SC)	
						10.0 ▽				
						13.5				
13.5 - 15	S-6		13 - 15 - 15	18	30				Brown Poorly-Graded Sand, Wet, Dense (SP)	
						15.0				
18.5 - 20	S-7		17 - 13 - 16	18	29				As Above, Dark Brown, Medium Dense (SP)	
						20.0				
									Boring Log B-3 Terminated at a Depth of 20.0 Feet Below Ground Surface	
						25.0				

NOTES: bgs = below ground surface, NA = Not Applicable, NE = Not Encountered, NS = Not Surveyed, P = Perched

WHITESTONE

RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-4

Page 1 of 1

Project:	Proposed Youth and Family Behavioral Health Center	**WAI Project No.:**	GF2219913.000
Location:	1211 South 25th Street	**Client:**	Youth and Family Behavioral Center, Inc.

Surface Elevation:	± NS feet	**Date Started:**	1/26/2023		**Water Depth | Elevation (feet bgs) | (feet)**		**Cave-In Depth | Elevation (feet bgs) | (feet)**
Termination Depth:	10.0 feet bgs	**Date Completed:**	1/26/2023				
Proposed Location:	Pavement	**Logged By:**	AB	**During:**	10.0 | ---		
Drill / Test Method:	HSA / SPT	**Contractor:**	SCD	**At Completion:**	--- | ---	**At Completion:**	--- | ---
		Equipment:	Diedrick Track-Rig	**24 Hours:**	--- | ---	**24 Hours:**	--- | ---

SAMPLE INFORMATION						DEPTH	STRATA		DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	No	Type	Blows Per 6"	Rec. (in.)	N	(feet)				
						0.0				
0 - 2	S-1		4 - 4 - 4 - 4	20	8		TOPSOIL		3" Topsoil	
							COASTAL PLAIN MARINE DEPOSITS		Gray Poorly Graded Sand, Moist, Loose (SP)	
						2.0				
2 - 4	S-2		4 - 11 - 10 - 10	22	21				Dark Brown Poorly-Graded Sand with Silt, Trace Organics, Moist, Medium Dense (SP-SM)	
4 - 6	S-3		15 - 11 - 11 - 12	18	22	5.0			As Above, Brown, No Organics (SP-SM)	
6 - 8	S-4		15 - 21 - 23 - 28	22	44				As Above, Dense (SP-SM)	
						8.0				
8 - 10	S-5		13 - 12 - 14 - 16	20	26				Light Brown Clayey Sand, Moist, Medium Dense (SC)	
						10.0				
									Boring Log B-4 Terminated at a Depth of 10.0 Feet Below Ground Surface	
						15.0				
						20.0				
						25.0				

NOTES: bgs = below ground surface, NA = Not Applicable, NE = Not Encountered, NS = Not Surveyed, P = Perched

WHITESTONE

RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-5

Page 1 of 1

Project:	Proposed Youth and Family Behavioral Health Center	**WAI Project No.:**	GF2219913.000
Location:	1211 South 25th Street	**Client:**	Youth and Family Behavioral Center, Inc.

Surface Elevation:	± NS feet	**Date Started:**	1/26/2023		**Water Depth | Elevation (feet bgs) | (feet)**		**Cave-In Depth | Elevation (feet bgs) | (feet)**
Termination Depth:	10.0 feet bgs	**Date Completed:**	1/26/2023				
Proposed Location:	Pavement	**Logged By:**	AB	**During:**	NE | ---		
Drill / Test Method:	HSA / SPT	**Contractor:**	SCD	**At Completion:**	--- | ---	**At Completion:**	--- | ---
		Equipment:	Diedrick Track-Rig	**24 Hours:**	--- | ---	**24 Hours:**	--- | ---

SAMPLE INFORMATION						DEPTH	STRATA		DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	No	Type	Blows Per 6"	Rec. (in.)	N	(feet)				
						0.0				
0 - 2	S-1		4 - 5 - 7 - 4	20	12		TOPSOIL		3" Topsoil	
							COASTAL PLAIN MARINE DEPOSITS		Gray Poorly Graded Sand, Moist, Medium Dense (SP)	
						2.0				
2 - 4	S-2		5 - 7 - 7 - 9	24	14				Dark Brown Poorly Graded Sand with Silt, Trace Organics and Roots, Moist, Medium Dense (SP-SM)	
4 - 6	S-3		8 - 8 - 14 - 12	24	22	5.0			As Above, Brown, No Organics (SP-SM)	
						6.0				
6 - 8	S-4		7 - 10 - 9 - 10	24	19				Light Brown Poorly Graded Sand, Moist, Medium Dense (SP)	
						8.0				
8 - 10	S-5		10 - 11 - 15 - 16	24	16				Light Brown Clayey Sand, Moist, Medium Dense (SC)	
						10.0				
									Boring Log B-5 Terminated at a Depth of 10.0 Feet Below Ground Surface	
						15.0				
						20.0				
						25.0				

NOTES: bgs = below ground surface, NA = Not Applicable, NE = Not Encountered, NS = Not Surveyed, P = Perched

WHITESTONE

RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-6

Page 1 of 1

Project:	Proposed Youth and Family Behavioral Health Center	**WAI Project No.:**	GF2219913.000
Location:	1211 South 25th Street	**Client:**	Youth and Family Behavioral Center, Inc.

Surface Elevation:	± NS feet	**Date Started:**	1/26/2023		**Water Depth (feet bgs) | Elevation (feet)**		**Cave-In Depth (feet bgs) | Elevation (feet)**
Termination Depth:	10.0 feet bgs	**Date Completed:**	1/26/2023				
Proposed Location:	Pavement	**Logged By:**	AB	**During:**	9.5 | ---		
Drill / Test Method:	HSA / SPT	**Contractor:**	SCD	**At Completion:**	--- | ---	**At Completion:**	--- | ---
		Equipment:	Diedrick Track-Rig	**24 Hours:**	--- | ---	**24 Hours:**	--- | ---

SAMPLE INFORMATION						DEPTH	STRATA		DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	No	Type	Blows Per 6"	Rec. (in.)	N	(feet)				
						0.0				
0 - 2	S-1		2 - 3 - 4 - 4	18	7		TOPSOIL		3" Topsoil	
							COASTAL PLAIN MARINE DEPOSITS		Gray Poorly Graded Sand, Dry, Loose (SP)	
2 - 4	S-2		5 - 5 - 5 - 6	24	10				As Above, Brown, Moist, Medium Dense (SP)	
						4.0				
4 - 6	S-3		6 - 9 - 9 - 11	24	18	5.0			Light Brown Clayey Sand, Trace Roots, Moist, Medium Dense (SC)	
6 - 8	S-4		7 - 8 - 9 - 10	20	17				As Above (SC)	
						8.0				
8 - 10	S-5		8 - 12 - 13 - 13	22	25	10.0			Light Brown Porly Graded Sand, Moist to Wet, Medium Dense (SP)	
									Boring Log B-6 Terminated at a Depth of 10.0 Feet Below Ground Surface	
						15.0				
						20.0				
						25.0				

NOTES: bgs = below ground surface, NA = Not Applicable, NE = Not Encountered, NS = Not Surveyed, P = Perched

WHITESTONE

RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-7

Page 1 of 1

Project:	Proposed Youth and Family Behavioral Health Center	**WAI Project No.:**	GF2219913.000
Location:	1211 South 25th Street	**Client:**	Youth and Family Behavioral Center, Inc.

Surface Elevation:	± NS feet	**Date Started:**	1/26/2023		**Water Depth | Elevation (feet bgs) | (feet)**		**Cave-In Depth | Elevation (feet bgs) | (feet)**
Termination Depth:	10.0 feet bgs	**Date Completed:**	1/26/2023				
Proposed Location:	SWM	**Logged By:**	AB	**During:**	10.0 | ---		
Drill / Test Method:	HSA / SPT	**Contractor:**	SCD	**At Completion:**	--- | ---	**At Completion:**	--- | ---
		Equipment:	Diedrick Track-Rig	**24 Hours:**	--- | ---	**24 Hours:**	--- | ---

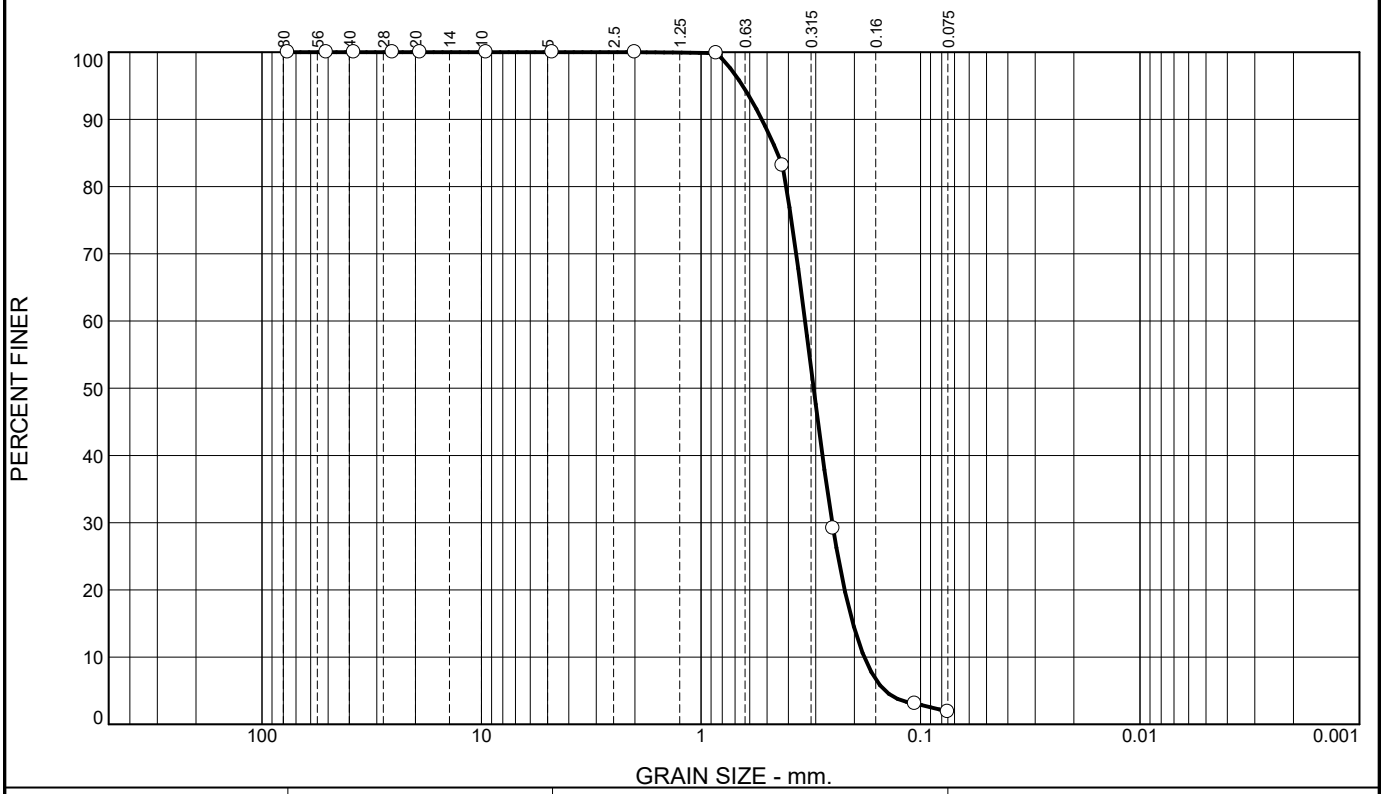
SAMPLE INFORMATION						DEPTH	STRATA		DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	No	Type	Blows Per 6"	Rec. (in.)	N	(feet)				
						0.0				
0 - 2	S-1		3 - 4 - 5 - 4	24	9		TOPSOIL		3" Topsoil	
							COASTAL PLAIN MARINE DEPOSITS		Gray Poorly Graded Sand, Trace Roots, Moist, Loose (SP)	
2 - 4	S-2		8 - 9 - 8 - 9	24	17				As Above, Brown, Medium Dense (SP)	
4 - 6	S-3		6 - 9 - 8 - 11	24	17	5.0			As Above (SP)	
						6.0				
6 - 8	S-4		9 - 9 - 10 - 10	24	19				Gray Clayey Sand, Moist, Medium Dense (SC)	LL = 24 PI = 11
8 - 10	S-5		7 - 8 - 9 - 12	24	17				As Above, Light Brown (SC)	
						10.0				
									Boring Log B-7 Terminated at a Depth of 10.0 Feet Below Ground Surface	
						15.0				
						20.0				
						25.0				

NOTES: bgs = below ground surface, NA = Not Applicable, NE = Not Encountered, NS = Not Surveyed, P = Perched

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APPENDIX B
Laboratory Test Results

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	16.8	81.3	1.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3"	100.0		
2"	100.0		
1 1/2"	100.0		
1"	100.0		
3/4"	100.0		
3/8"	100.0		
#4	100.0		
#10	100.0		
#20	99.9		
#40	83.2		
#60	29.1		
#140	3.1		
#200	1.9		

* (no specification provided)

Material Description

poorly graded sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D_{90}= 0.5283 D_{85}= 0.4487 D_{60}= 0.3356
D_{50}= 0.3068 D_{30}= 0.2524 D_{15}= 0.2030
D_{10}= 0.1804 C_u= 1.86 C_c= 1.05

Classification

USCS= SP AASHTO= A-3

Remarks

W_n = 2.7%

Source of Sample: B-1 **Depth:** 0.3' - 2.0'
Sample Number: S-1 **Date:** 1/18/2023

WHITESTONE ASSOCIATES, INC.
Warren, New Jersey

Client: Youth and Family Behavioral Health Center, Inc.
Project: Proposed Youth and Family Behavioral Health Center
1211 South 25th Street, Fort Pierce, St. Lucie County, Florida
Project No: GF2319913.000 **Figure**

Tested By: AB

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	15.8	80.5	3.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3"	100.0		
2"	100.0		
1 1/2"	100.0		
1"	100.0		
3/4"	100.0		
3/8"	100.0		
#4	100.0		
#10	100.0		
#20	100.0		
#40	84.2		
#60	26.0		
#140	4.5		
#200	3.7		

* (no specification provided)

Material Description

poorly graded sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D_{90}= 0.5151 D_{85}= 0.4355 D_{60}= 0.3381
D_{50}= 0.3112 D_{30}= 0.2607 D_{15}= 0.1834
D_{10}= 0.1514 C_u= 2.23 C_c= 1.33

Classification

USCS= SP AASHTO= A-3

Remarks

W_n = 9.3%

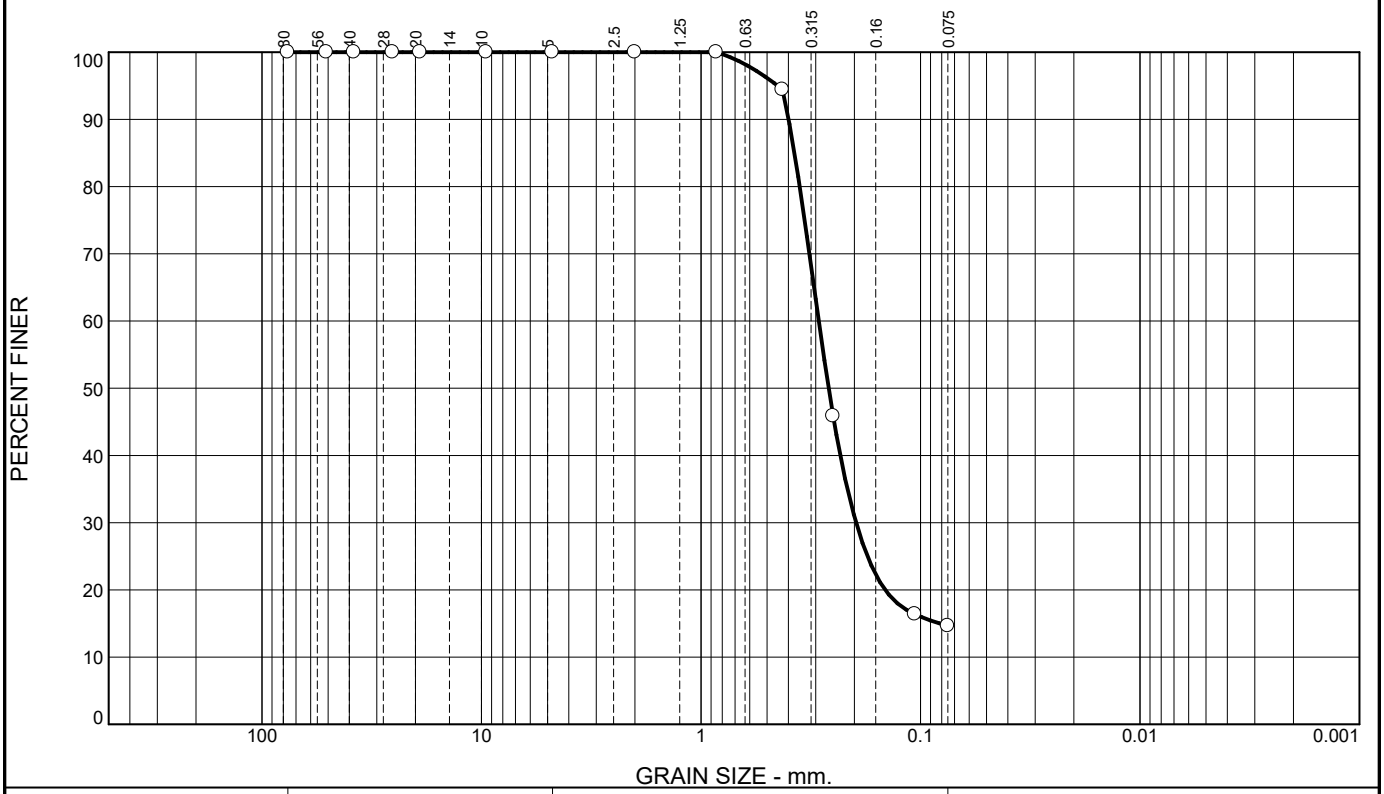
Source of Sample: B-2 **Depth:** 2.0' - 4.0'
Sample Number: S-2 **Date:** 1/18/2023

WHITESTONE ASSOCIATES, INC.
Warren, New Jersey

Client: Youth and Family Behavioral Health Center, Inc.
Project: Proposed Youth and Family Behavioral Health Center
1211 South 25th Street, Fort Pierce, St. Lucie County, Florida
Project No: GF2319913.000 **Figure**

Tested By: AB

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	5.6	79.8	14.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3"	100.0		
2"	100.0		
1 1/2"	100.0		
1"	100.0		
3/4"	100.0		
3/8"	100.0		
#4	100.0		
#10	100.0		
#20	100.0		
#40	94.4		
#60	45.9		
#140	16.4		
#200	14.6		

* (no specification provided)

Material Description

clayey sand

Atterberg Limits

PL= 13 LL= 24 PI= 11

Coefficients

D_{90}= 0.3987 D_{85}= 0.3751 D_{60}= 0.2906
D_{50}= 0.2621 D_{30}= 0.1964 D_{15}= 0.0815
D_{10}= C_u= C_c=

Classification

USCS= SC AASHTO= A-2-6(0)

Remarks

W_n = 14.8%

Source of Sample: B-7 **Depth:** 6.0' - 8.0'
Sample Number: S-4

Date: 1/18/2023

WHITESTONE ASSOCIATES, INC.
Warren, New Jersey

Client: Youth and Family Behavioral Health Center, Inc.
Project: Proposed Youth and Family Behavioral Health Center
1211 South 25th Street, Fort Pierce, St. Lucie County, Florida
Project No: GF2319913.000 **Figure**

Tested By: AB

WHITESTONE

NATURAL MOISTURE CONTENT DETERMINATION + ORGANIC CONTENT DETERMINATION

ASTM D2974

Client: Youth and Family Behavioral Health Center, Inc.

Project: Proposed Youth and Family Behavioral Health Center Project Number: GF2319913.000

Project Location: 1211 South 25th Street, Fort Pierce, St. Lucie County, Florida

MOISTURE CONTENT

Boring/Sample ID	B-2, S-2				
Depth (fbgs)	2.0' - 4.0'				
USCS Classification	SP				
Water content (%)	**8.3**				

ORGANIC CONTENT

Boring/Sample ID	B-2, S-2				
Depth (fbgs)	2.0' - 4.0'				
USCS Classification	SP				
Organic content (%)	**3.6**				

WHITESTONE

APPENDIX C
Infiltration Test Results

WHITESTONE

EXFILTRATION TEST

Client: Youth and Family Behavioral Health Center, Inc.
Project: Proposed Youth and Family Behavioral Health Center
Location: 1211 South 25th Street, Fort Pierce, St. Lucie County, FL
File No. GF2319913.000
Field Engineer: AB
Test Hole Diameter (Inches): 2.0

Test Hole No.: P-1
Date: 1/16/2023
Weather: Sunny, 68°
Surface Elevation: NS
Test Depth (fbgs): 10.0
Test Depth (Elevation): NS
Depth to Water (fbgs): 10.0

Reading No.	Time		Water Added (Gallons)	Time Interval (Hours)	Rate of Flow (Inches/Hour)
	Start	Finish			
1	1:50 PM	2:00 PM	0.4	0.167	0.01
2	2:00 PM	2:10 PM	0.4	0.167	0.01
3	2:10 PM	2:20 PM	0.3	0.167	0.01
4	2:20 PM	2:30 PM	0.3	0.167	0.01
5	2:30 PM	2:40 PM	0.3	0.167	0.01
6	2:40 PM	2:45 PM	0.2	0.083	0.01

Remarks: Field i = 0.01 in/hr

NOTES: FBGS = Feet Below Ground Surface; NS = Not Surveyed

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APPENDIX D
Supplemental Information (USCS, Terms and Symbols)

WHITESTONE
An Employee-Owned Company

8405 BENJAMIN ROAD
SUITE J
TAMPA, FL 33634
813.851.0690
whitestoneassoc.com

UNIFIED SOIL CLASSIFICATION SYSTEM

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			LETTER SYMBOL	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS (LITTLE OR NO FINES)	GW	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
			GP	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)	GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES
			GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
	SAND AND SANDY SOILS	CLEAN SAND (LITTLE OR NO FINES)	SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
			SP	POORLY-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	MORE THAN 50% OF COARSE FRACTION PASSING NO. 4 SIEVE	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)	SM	SILTY SANDS, SAND-SILT MIXTURES
			SC	CLAYEY SANDS, SAND-CLAY MIXTURES
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMITS LESS THAN 50	ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
			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
MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS	LIQUID LIMITS GREATER THAN 50	MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
			CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
			OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS			PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS FOR SAMPLES WITH 5% TO 12% FINES

GRADATION*

% FINER BY WEIGHT

TRACE..... 1% TO 10%
LITTLE..... 10% TO 20%
SOME..... 20% TO 35%
AND..... 35% TO 50%

COMPACTNESS*
Sand and/or Gravel

RELATIVE DENSITY

LOOSE. ..... 0% TO 40%
MEDIUM DENSE.... 40% TO 70%
DENSE..... 70% TO 90%
VERY DENSE..... 90% TO 100%

CONSISTENCY*
Clay and/or Silt

RANGE OF SHEARING STRENGTH IN POUNDS PER SQUARE FOOT

VERY SOFT..... LESS THAN 250
SOFT..... ..... 250 TO 500
MEDIUM..... 500 TO 1000
STIFF..... 1000 TO 2000
VERY STIFF..... 2000 TO 4000
HARD..... GREATER THAN 4000

** VALUES ARE FROM LABORATORY OR FIELD TEST DATA, WHERE APPLICABLE. WHEN NO TESTING WAS PERFORMED, VALUES ARE ESTIMATED.*

L:\Geotechnical Forms and References\Reports\USCSTRMSSYM FL.docx

WHITESTONE
An Employee-Owned Company

8405 BENJAMIN ROAD
SUITE J
TAMPA, FL 33634
813.851.0690
whitestoneassoc.com

GEOTECHNICAL TERMS AND SYMBOLS

SAMPLE IDENTIFICATION

The Unified Soil Classification System is used to identify the soil unless otherwise noted.

SOIL PROPERTY SYMBOLS

N: Standard Penetration Value: Blows per ft. of a 140 lb. hammer falling 30" on a 2" O.D. split-spoon.
Qu: Unconfined compressive strength, TSF.
Qp: Penetrometer value, unconfined compressive strength, TSF.
Mc: Moisture content, %.
LL: Liquid limit, %.
PI: Plasticity index, %.
δd: Natural dry density, PCF.
▼: Apparent groundwater level at time noted after completion of boring.

DRILLING AND SAMPLING SYMBOLS

NE: Not Encountered (Groundwater was not encountered).
SS: Split-Spoon - 1 ⅜" I.D., 2" O.D., except where noted.
ST: Shelby Tube - 3" O.D., except where noted.
AU: Auger Sample.
OB: Diamond Bit.
CB: Carbide Bit
WS: Washed Sample.

RELATIVE DENSITY AND CONSISTENCY CLASSIFICATION

Term (Non-Cohesive Soils)	Standard Penetration Resistance
Very Loose	0-4
Loose	4-10
Medium Dense	10-30
Dense	30-50
Very Dense	Over 50

Term (Cohesive Soils)	Qu (TSF)
Very Soft	0 - 0.25
Soft	0.25 - 0.50
Firm (Medium)	0.50 - 1.00
Stiff	1.00 - 2.00
Very Stiff	2.00 - 4.00
Hard	4.00+

PARTICLE SIZE

Boulders	8 in.+	Coarse Sand	5mm-0.6mm	Silt	0.074mm-0.005mm
Cobbles	8 in.-3 in.	Medium Sand	0.6mm-0.2mm	Clay	-0.005mm
Gravel	3 in.-5mm	Fine Sand	0.2mm-0.074mm		

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT
Florida

TO:	Technical Review Committee
THROUGH:	Kevin Freeman, Planning Director
FROM:	Ryan Altizer, Senior Planner
RE:	**Youth and Family - Site Plan- 23-07000016** **1211 & 1213 S. 25th Street**
BOARD DATE:	July 20, 2023

Resubmittal Site Plan for Youth and Family

The above referenced project is being resubmitted for your review and comments. The applicant is requesting a Site Plan for 1211 & 1213 S. 25th Street for the expansion of their business.

Please send all comments to raltizer@cityoffortpierce.com or planning@cityoffortpierce.com and/or through interoffice mail to the Planning Department

If you have comments or questions, please contact the Planning Department at 772-467-3737 or Ryan Altizer at 772-467-3742.

Thank you.

CREECH
CONSULTING, INC.

January 12, 2024

Alicia Rosenthal
Planning and Development Organizer
Planning Department
100 North U.S. 1
Fort Pierce, FL 34950

RE: Youth and Family – Major Commercial Development Site Plan Approval

Dear Alicia,

In response to the TRC comments please see the revised documents the applicant is requesting approval of a minor development plan application to accommodate a 4,306 sq. ft commercial building on 0.52 acres of vacant property located at 1211 & 1213 S 25th Street, Fort Pierce FL 34947. The vacant property is identified as parcel numbers 2417-507-0005-000-7 & 2417-503-0040-000-2.

Please find attached for your review the following application package:

- 3 – Site Narrative
- 3 – Boundary and Topographic Survey
- 3 – Revised Site Civil Plans and documents
- 3 – Revised Stormwater report
- 3 – Revised Landscaping Plans report
- 3 – FDOT Driveway Connection Permit – Intent to Issue
- 3 – FDOT Temporary Driveway Connection Permit – Approved
- 3 – FDOT Drainage Connection Permit - Approved
- 1 – USB containing the application materials including:

The proposed development we feel, achieves the intent of the City of Fort Pierce's fulfillment of meeting its commercial needs and complies with the City of Fort Pierce Land Development Code. Please feel free to contact me if you should have any additional comments or questions.

Sincerely,

Jerry Compton
Creech Consulting, Inc.

Attachments:

CREECH
CONSULTING, INC.

CC: Jean-Mary Monval – Youth and Family

CREECH
CONSULTING, INC.

January 12, 2024

Alicia Rosenthal — Via Hand Delivery

Planning and Development Organizer
Planning Department
100 North U.S. 1
Fort Pierce, FL 34950

Subject: Site Plan (development & design review) – 1211 & 1213 S. 25th Street – Technical Review Committee responses

Fort Pierce Engineering Department

1. Rain Gardens 1 and 2 shall have a landscape strip of land which is at least 10-feet wide in accordance with the City of Fort Pierce Code of Ordinance Section 123-37(6)(a).
   Response: Detention areas 1 and 2 now have a 10' Landscape strip.

2. Rain Garden 1 encroaches into a 5-foot utility easement.
   Response: Detention areas 1 and 2 have been removed from 5' utility easement area

3. Retention/Detention areas shall be designed in accordance with the City of Fort Pierce Code of Ordinance Section 119-9©. Banks shall have a slope of 4(H):1(V).
   Response: Detention areas 1 and 2 are designed in accordance with the City of Fort Pierce Code of Ordinance Section 119-9©. Banks shall have a slope of 4(H):1(V).

4. Provide a signed and sealed certified survey.
   Response: enclosed are 3 signed and sealed surveys

CREECH
CONSULTING, INC.

Project Narrative
Youth and Family
Board Approval Development Plan Application

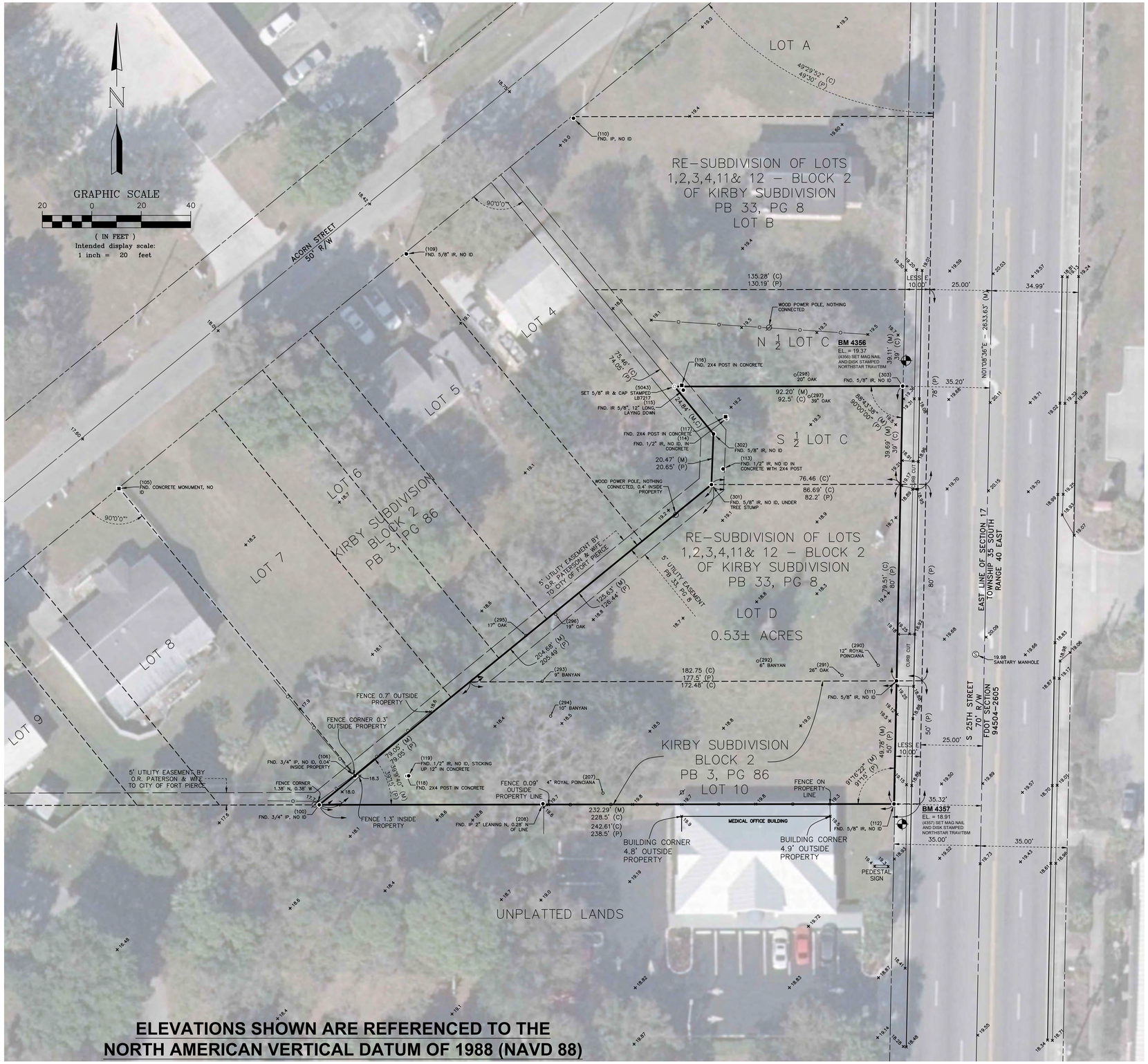
The applicant is requesting approval of a major development plan application to accommodate a 4,306 sq. ft. building on 0.52 acres of vacant property located at 1211 & 1213 S 25th Street (SR 615) Fort Pierce, Florida. The vacant property is identified as parcel number 12417-507-0005-000-7 and 2417-503-0040-000-2 and known as a parcel of land situated in Section 17, Township 35 South, Range 40 East, St. Lucie, County, Florida. The property is approximately triangle shaped 170 ft. long (north to south) and approximately 232 ft. wide (east to west) with the property fronting Southeast 25th Street. The land use designation for the property on the Future Land Use Map (FLUM) of the City of fort Pierce is General Commercial and a zoning is C3. The property was purchased by Youth & Family Behavioral Health Center Inc November 18, 2021, as is reflected in the warranty deeds provided as part of this application.

The project has been designed in accordance with the C2 development standard provisions and complies with current zoning and land use regulations and will meet and exceed current land development regulations.

The proposed development will include detention areas designed to meet City of Fort Pierce and SFWMD. In addition, they will be utilizing a pervious pavement in the parking lot to further remove harmful nutrients and will be kept on site. The development will continue on their environmentally friendly green initiative by saving a 39”, 19” and 17” caliber Oak trees that exist on the property. The proposed development will utilize the Fort Pierce Utility Authorities

The owners are investing in the business by providing mental health services to the community at large from the age of 3 and up. Youth and family is an outpatient mental health clinic founded in 2016 to provide counseling services, psychiatric evaluation, medication management and targeted case management. We would like to expand the services and add more components such as outpatient substance abuse treatment and Applied Behavior Analysis. The construction will allow us to service a larger population and create more jobs in the community.

FDOT has granted full access on S 25th Street (SR 615) Full access driveway on the west side of SR 615 30 feet north of the south property boundary. Please see the attached FDOT pre-application letter dated February 16, 2023.



SURVEYOR'S NOTES

1. THE EXPECTED USE OF THIS SURVEY IS FOR ENGINEERING DESIGN PURPOSES.
2. ALL MEASUREMENTS SHOWN HEREON ARE IN ACCORDANCE WITH THE UNITED STATES STANDARD AND ARE IN FEET.
3. ADDITIONS OR DELETIONS TO THE SURVEY MAP AND/OR REPORT BY OTHER THAN THE SIGNING PARTY IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES AND RENDERS THE SURVEY INVALID.
4. THIS SURVEY CANNOT BE TRANSFERRED OR ASSIGNED WITHOUT THE SPECIFIC WRITTEN PERMISSION OF THE SURVEYOR HEREON.
5. THE SURVEY MAP AND REPORT OR THE COPIES THEREOF ARE NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
6. THIS SURVEY MEETS OR EXCEEDS APPLICABLE ACCURACY REQUIREMENTS AND IS PREPARED ACCORDING TO THE STANDARDS OF PRACTICE SET FORTH BY THE FLORIDA ADMINISTRATIVE CHAPTER 5J-17 AS CODE, ADOPTED BY THE BOARD OF PROFESSIONAL SURVEYOR AND MAPPERS.
7. THERE WAS NO ATTEMPT TO LOCATE ANY UNDERGROUND UTILITIES, EXCEPT AS SHOWN.
8. LANDS SHOWN HEREON WERE NOT ABSTRACTED FOR RIGHT-OF-WAY EASEMENTS, OWNERSHIP, OR OTHER INSTRUMENTS OF RECORD.
9. SYMBOLS SHOWN HEREON ARE NOT TO SCALE.
10. FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), BY GRAPHIC PLOTTING ONLY, INDICATES SAID PROPERTY IS LOCATED WITHIN AN AREA HAVING A FLOOD ZONE DESIGNATION OF X ON FLOOD RATE PANEL NO. 12111C0186J, WITH A REVISION DATE OF 2/16/2012.
11. LAST DATE OF DATA ACQUISITION: 11/16/2022
12. THIS SURVEY IS INTENDED TO BE DISPLAYED AT THE SCALE SHOWN ON THE SCALE BAR.
13. BEARINGS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD83), ADJUSTMENT OF 2011, FLORIDA STATE PLANE EAST ZONE GRID NORTH AS ESTABLISHED BY THE NOS AND THE EAST LINE OF SECTION 17 AS SHOWN HEREON AS BEING N 01°08'36" E. ALL OTHER BEARINGS ARE RELATIVE THERETO. FLORIDA DEPARTMENT OF TRANSPORTATION PERMANENT REFERENCE NETWORK WAS USED AS HORIZONTAL CONTROL AND GPS RTK WITH REDUNDANT MEASUREMENTS. HORIZONTAL ACCURACY IS 0.10 FOOT, PLUS OR MINUS.
14. ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). ELEVATIONS DEPICTED ON THIS SURVEY WERE OBTAINED USING FLORIDA DEPARTMENT OF TRANSPORTATION PERMANENT REFERENCE NETWORK AND REAL TIME KINEMATIC (RTK) GPS METHODS WITH AN EXPECTED ACCURACY OF +/- 0.2'.
15. BACKGROUND IMAGERY OBTAINED FROM FLORIDA DEPARTMENT OF TRANSPORTATION, DATED 2021

LEGAL DESCRIPTION

PARCEL 1: THE SOUTH ½ OF LOT C AND ALL OF LOT D, LESS THE EAST 10 FEET THEREOF OF THE RESUBDIVISION OF LOTS 1, 2, 3, 4, 11, AND 12, BLOCK 2, KIRBY'S SUBDIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 8, PAGE 33, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA;

AND

PARCEL 2: LOT 10, BLOCK 2, KIRBY SUBDIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 3, PAGE 86, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, LESS THE EAST 10 FEET, DEEDED TO THE STATE OF FLORIDA IN OFFICIAL RECORDS BOOK 169, PAGE 1169, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

LEGEND

Abbreviations

(C)	= CALCULATED MEASUREMENT
(D)	= DEED MEASUREMENT
(M)	= FIELD MEASUREMENT
(P)	= PLAT MEASUREMENT
(xxxxx)	= SURVEYOR'S POINT NUMBER
BM	= BENCHMARK
CL	= CENTERLINE
DB	= DEED BOOK
FDOT	= FLORIDA DEPARTMENT OF TRANSPORTATION
FND	= FOUND
ID	= IDENTIFICATION
IP	= IRON PIPE
IR	= IRON ROD
LB	= LAND SURVEYING BUSINESS
NAVD88	= NORTH AMERICAN VERTICAL DATUM OF 1988
ORB	= OFFICIAL RECORDS BOOK
PB	= PLAT BOOK
PCN	= PARCEL CONTROL NUMBER
PG	= PAGE
PID	= PARCEL IDENTIFICATION NUMBER
PSM	= PROFESSIONAL SURVEYOR & MAPPER
X 14.2	= EXISTING ELEVATION

Linetypes

= BOUNDARY
= CHAIN LINK FENCE
= CENTERLINE
= RIGHT OF WAY
= SECTION LINE
= PLAT LOT LINE
= EASEMENT

Symbols

= BENCHMARK (AS LABELED)
= FOUND 1/4 SECTION CORNER
= FOUND SECTION CORNER
= POLE ANCHOR
= SANITARY MAN HOLE
= SET 5/8" IRON ROD & CAP STAMPED "NORTHSTAR LB 7217"
= SIGN
= TREE (AS LABELED)
= UTILITY PEDESTAL
= WOOD UTILITY POLE

SURVEYOR'S CERTIFICATION

(THIS SURVEY IS NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND RAISED EMBOSSED SEAL OF FRANK C. VELDHUIS, FLORIDA PROFESSIONAL SURVEYOR AND MAPPER.)

I HEREBY CERTIFY THAT THE BOUNDARY AND TOPOGRAPHIC SURVEY OF THE PROPERTY SHOWN AND DESCRIBED HEREON WAS COMPLETED UNDER MY DIRECTION AND SAID SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

I FURTHER CERTIFY THAT THIS BOUNDARY AND TOPOGRAPHIC SURVEY MEETS THE STANDARDS OF PRACTICE FOR SURVEYS SET FORTH BY THE FLORIDA BOARD OF LAND SURVEYORS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027 FLORIDA STATE STATUTES. NO SEARCH OF THE PUBLIC RECORDS HAS BEEN MADE BY THIS OFFICE. THIS SURVEY IS BASED ON INFORMATION FURNISHED BY CLIENT OR CLIENT'S REPRESENTATIVE

NORTHSTAR GEOMATICS, INC.

DATE

FRANK C. VELDHUIS
PROFESSIONAL SURVEYOR & MAPPER
FLORIDA CERTIFICATION NO. 6582

NORTHSTAR GEOMATICS
5820 NW ZENITH DR
PORT ST LUCIE, FLORIDA 34986
(772) 781-6400 WWW.NSGEO.COM
LICENSED BUSINESS NO. 7217

DATE	REVISIONS

DATE 11/16/2022
SCALE 1" = 20'
FIELD BK. -
DWNG. BY FCV
CHECKED BY FCV

BOUNDARY AND TOPOGRAPHIC SURVEY FOR:
YOUTH & FAMILY BEHAVIORAL HEALTH CENTER, INC.

SECTION 17, TOWNSHIP 35 SOUTH, RANGE 40 EAST
FT. PIERCE, FLORIDA

SHEET NO. 1
OF 1 SHEETS
PROJECT NO. 22-038

Plant List

QTY	SYM	SPECIES	COMMON NAME/DESCRIPTION	SIZE	SPACING	REMARKS	DROUGHT TOLERANCE
CANOPY / ORNAMENTAL TREES							
6	IE*	ILEX x ATTENUATA 'EAGLESTON'	EAGLESTON HOLLY	12' x 5', 2.5" D.B.H.	A.S.	FULL CANOPY, 5' C.T. MIN.	HIGH
3	LS	LAGERSTROEMIA SPECIOSA	QUEEN'S CREPE MYRTLE	12' x 5', 2.5" D.B.H.	A.S.	FULL CANOPY, 5' C.T. MIN.	HIGH
13	PE*	PINUS ELLIOTTI	SLASH PINE	12' x 5', 2.5" D.B.H.	A.S.	FULL CANOPY, 5' C.T. MIN.	HIGH
14	QV*	QUERCUS VIRGINIANA	LIVE OAK	12' x 5', 2.5" D.B.H.	A.S.	FULL CANOPY, 5' C.T. MIN.	HIGH
2	TD*	TAXODIUM DISTICHUM	BALD CYPRESS	12' x 5', 2.5" D.B.H.	A.S.	FULL CANOPY, 5' C.T. MIN.	HIGH
SHRUBS							
78	CES*	CONOCARPUS ERECTUS VAR. SERICEUS	SILVER BUTTONWOOD	#3, 2' x 2'	2' O.C.	FULL & THICK	HIGH
65	FOS*	FORESTIERA SEGREGATA	FLORIDA PRIVET	#3, 2' x 2'	2' O.C.	FULL & THICK	HIGH
288	MYR*	MYRICANTHES FRAGRANS	SIMPSON STOPPER	#3, 2' x 2'	2' O.C.	FULL & THICK	HIGH
19	MYR-1*	MYRICANTHES FRAGRANS	SIMPSON STOPPER	#7, 4' x 2'	2' O.C.	FULL & THICK	HIGH
LOW SHRUBS / GROUNDCOVERS / VINES							
100	HED*	HELIANTHUS DEBILIS	BEACH SUNFLOWER	#1, 12" x 12"	24" O.C.	FULL & THICK	HIGH
30	ILV*	ILEX VOMITORIA	DWARF YAUPON HOLLY	#3, 12" x 12"	24" O.C.	FULL & THICK	HIGH
50	NEB*	NEPHROLEPIS EXALTATA	BOSTON FERN	#1, 12" x 12"	24" O.C.	FULL & THICK	HIGH
	SOD-1	PASPALUM NOTATUM	BAHIA SOD	SEE SPECS			HIGH
	SOD	STENOTAPHRUM SECUNDATUS	ST. AUGUSTINE SOD	SEE SPECS			MEDIUM
		* = FLORIDA NATIVE					

Landscape Data

Landscaping Adjacent to R.O.W. (East Buffer) 169'

Trees Required = 10' Wide Landscape Strip with 1 Tree/300 s.f.
169 l.f. x 10' = 1,690 s.f. / 300 = 6 Trees
Provided = 6 Trees

Shrubs Required = Continuous Hedge @ 2' o.c.
169 l.f. / 2' o.c. = 85 Shrubs
Provided = 85 Shrubs

Landscaping to Adjacent Property (North, South & West Buffer) 575'

Trees Required = 10' Wide Landscape Strip with 1 Tree/200 s.f.
575 l.f. x 10' = 5,750 s.f. / 200 = 29 Trees
Provided = 29 Trees

Shrubs Required = Continuous Hedge @ 2' o.c.
575 l.f. / 2' o.c. = 288 Shrubs
Provided = 288 Shrubs

Interior Vehicular Use Area

Required = 1 s.f. of interior landscaping per
15 s.f. of vehicular use area (3,580 s.f./15 = 239 s.f.)
Landscape Area Provided = 246 s.f.
Trees Required = 1 Tree/100 s.f. of interior landscape area
3,580 s.f./15 = 257 s.f. / 100 = 3 Trees
Trees Provided = 3

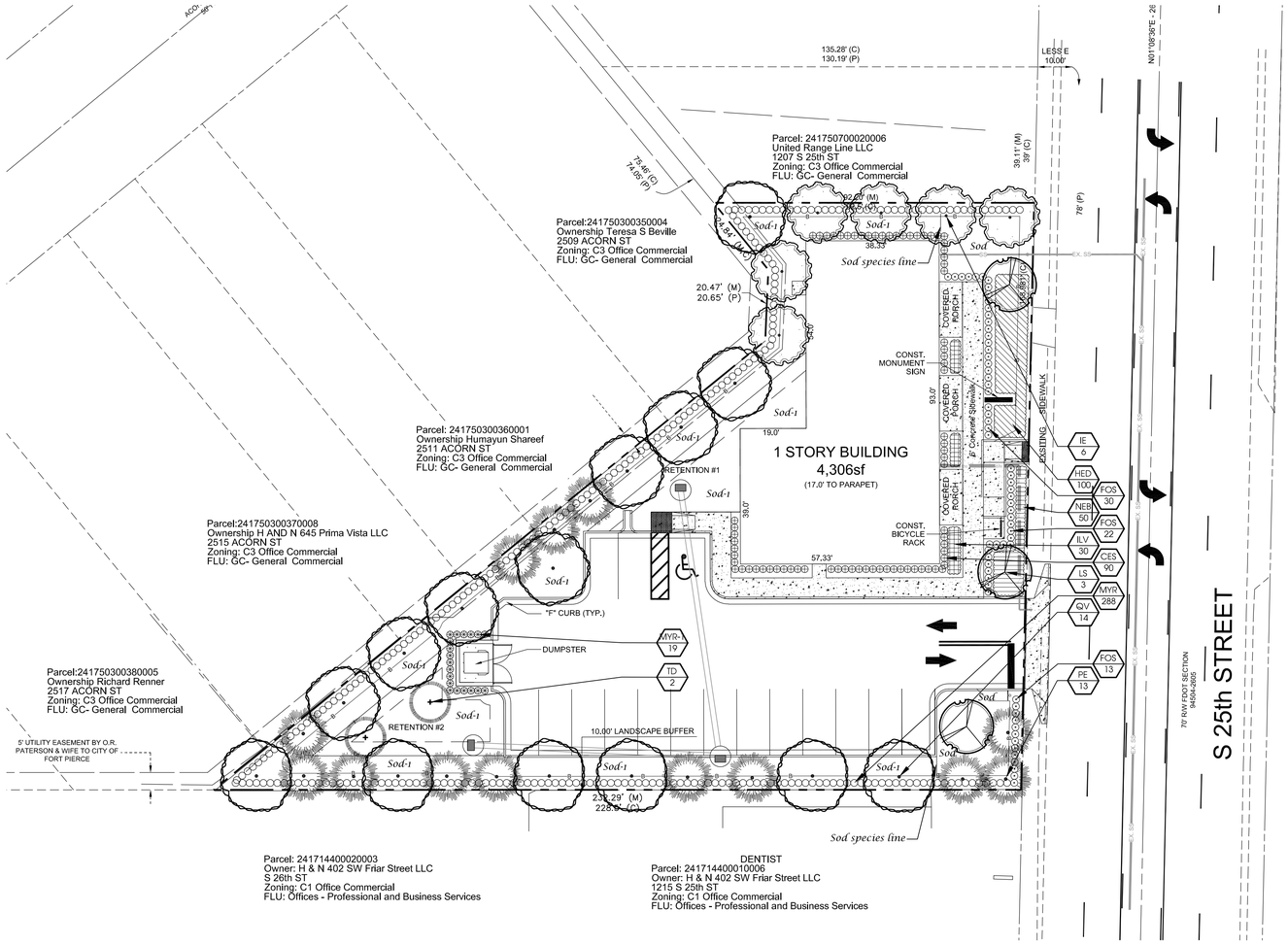
Maximum Use of Palm Trees
Sec. 22-187(1)(c)
Required = Fifty (50) percent of the required trees shall be species other than palm trees
Total Trees Required = 38 Trees
Maximum Palms Allowed = 19 (38 / 2 = 19)
Total Palms Provided = 0 (0%)

Total Trees Required = 38 Trees
Total Trees Provided = 38 Trees

Total Trees Required = 38 Trees
Total Native Trees Provided = 35 (92%)

Total Palms Required = 0
Total Native Palms Provided = 0 (0%)

Total Shrubs Required = 392
Total Native Shrubs Provided = 392 (100%)



Landscape Plan

North
Scale: 1" = 20'
0 10' 20' 40'

Conceptual Design Group, Inc.
Landscape Architecture - Site Planning

900 East Ocean Boulevard, Suite 130d
Stuart, Florida 34994
(772) 344-2340
LC: 26000198

Youth & Family Behavioral Health Center Inc

South 25th Street
City of Fort Pierce, Florida

City Project Number:

Jeffrey W. Smith, RLA
Florida Registration Number:
LA 0001635

Job No. 23-0101
Drawn By JWS
Submittal Dates 6-2-2023
1-12-2024
Revision Dates
New Base 1-12-2024

These drawings are the property of the landscape architect and are not to be used for other projects except by written permission from the landscape architect. Report any discrepancies immediately to the landscape architect.

Landscape Specifications

1. All tree and plant material to be Florida No. 1 or better, as classified in "Grades and Standards for Nursery Plants", Part 1 and Part II, State of Florida, Dept. of Agriculture, Tallahassee. All plants not listed in "Grades and Standards for Nursery Plants" shall conform to a Florida No. 1 as to: (1) health and vitality, (2) condition of foliage, (3) root system, (4) freedom from pest or mechanical damage, (5) heavily branched and densely foliated according to the accepted normal shape of the species.
2. Undersizing or substitution of one species or cultivar for another species is a breach of contract and will be "Rejected" at the time of final landscape inspection unless approved by Landscape Architect.
3. Project Warranty: All plant material shall be warranted for a period of one (1) year after date of substantial completion against defects, including death and unsatisfactory growth, except for defects resulting from abuse or damage by others or unusual phenomena or incidents which are beyond the contractor's control.
4. Any and all conditions which the contractor feels will be detrimental to the success of the planting shall be brought to the owner or representative's attention.
5. The contractor shall verify the location of underground utilities prior to commencing work on any project area.
6. Mulch planting areas with 3" layer of Melaleuca, Eucalyptus, or Envíromulch. Cypress Mulch is NOT ACCEPTABLE. Planting beds to receive mulch throughout entire bed area.
7. All plants to be set to ultimate grade. No filling will be permitted around trunks or stems. Mulch to be kept a minimum of 2" away from trunks and stems.
8. Planting trees and shrubs: Excavate hole per planting detail. When plant is set, place additional backfill consisting of a 50% mixture of Peat humus and natural soil around the base and sides of ball, and work each layer to settle backfill and eliminate voids and air pockets. When excavation is approximately 2/3 full, water thoroughly before placing remainder of backfill. Water again after placing final layer of backfill and before installing mulch.
9. Guy and stake trees in 3 directions with galvanized wire, through flexible hose chafing guards, with wooden stake anchors immediately after planting. (See Detail)
10. Trees and shrubs shall be fertilized with a complete natural organic fertilizer with a ratio of approximately 3:0:2 or 3:0:3 (e.g. one labeled 12-0-8). Similar analysis such as 16-0-8 (4:0:2) can also be used. Fertilizers that are slow release, controlled release, sulphur coated or with nitrogen as IBDU or ureaformaldehyde have extended release period. Thirty to fifty percent of the nitrogen should be water insoluble or slow release.

Palms should receive a complete granular fertilizer formulated for palms ("Palm Special") at a rate of 5 to 8 lbs. per palm.

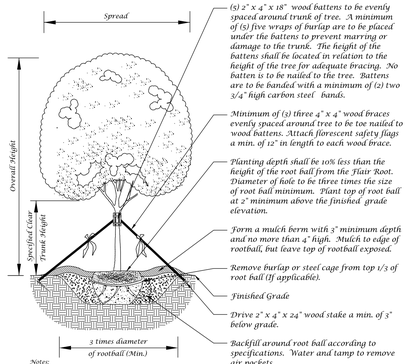
Agriform 20-0-5 twenty-one gram planting tablets may be substituted for granular fertilizer, If utilized, the following rates shall be utilized: Position plant in hole. Backfill halfway up the rootball. Place tablet(s) beside rootball about 1" from root tips. Do not place tablet(s) in bottom of hole.

1 Gallon 1 Tablet
3 Gallon 2 Tablets
25 Gallon & B&B Trees 2 per 1" caliper

11. All planting areas and sod to be irrigated to provide 100% coverage. Shop drawings to be submitted by the irrigation contractor for approval prior to installation.
12. Maintain trees, shrubs, and other plants by watering, cultivating, and weeding as required for healthy growth. Restore planting saucers and mulch. Tighten and repair stake and guying and reset trees and shrubs to proper grade or vertical position as required. Spray as necessary to keep trees and shrubs free of insects and disease. The contractor shall begin maintenance immediately after planting and shall continue maintenance through final acceptance when Certificate of Occupancy is issued to the General Contractor by City and project is released by the General Contractor to Client.
13. Prune trees and shrubs only to remove damaged branches as directed by the Landscape Architect.
14. Planting Lawns: Provide clean, strongly rooted, uniformly sized strips of Stenotaphrom secundatus Floritam (unless otherwise noted), machine stripped not more than 24 hours prior to laying. Grade and roll prepared lawn surface. Water thoroughly but not to create muddy soil conditions. Lay sod strips with tight joints, roll or tamp lightly, and water thoroughly.
15. Maintain positive drainage, no planting is to block drainage.
16. Drainage Testing
    Prior to planting of trees, palms, and specimen material, each planting pit shall be tested in the following manner to verify adequate drainage,
    A) Dig each planting pit to the minimum specified size.
    B) Fill the planting pit with (12") twelve inches of water. If the water level in the planting pit drops (4") four or more inches within (4) four hours, the drainage is sufficient and a drainage channel is not required. If the water level drops less than (4") four inches within the (4) four hour period, then a drainage channel is required.
    C) When a drainage channel is required, the drainage channel must extend down through the non porous soil and into porous soil. (See Drainage Testing Detail)
    D) Discard all material removed from the drainage channel.
    E) When backfilling the planting pit, add course gravel to the drainage channel. Also, care must be taken to keep the consistency of the soil mix the same throughout the planting pit.

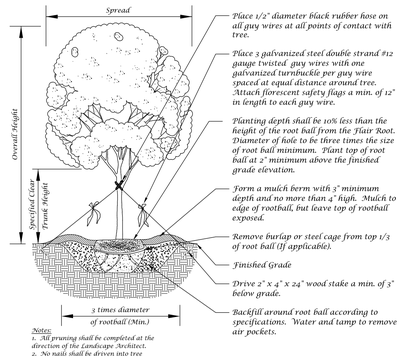
NOTES:
1. Contractor to include drainage testing for all trees and palms in bid. If drainage is inadequate, the soil specification in item #8 above shall be revised for site conditions. Contractor shall notify the Owner and Landscape Architect of poor drainage conditions in writing and written direction will be provided to the contractor of appropriate soil mixture specification to be used.
2. All fertilizers shall meet the City of Port St. Lucie's fertilizer ordinance.

Landscape Details



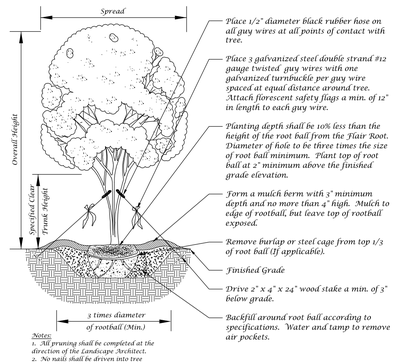
Large Tree Planting Detail (5" Caliper or Greater)

Not to Scale



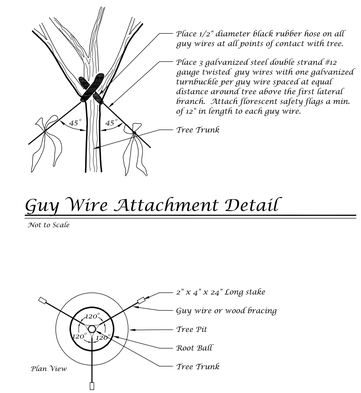
Tree Planting Detail

Not to Scale



Multi-Trunk Tree Planting Detail

Not to Scale

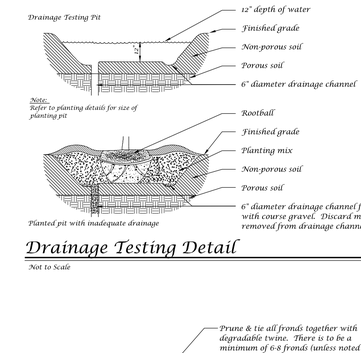


Guy Wire Attachment Detail

Not to Scale

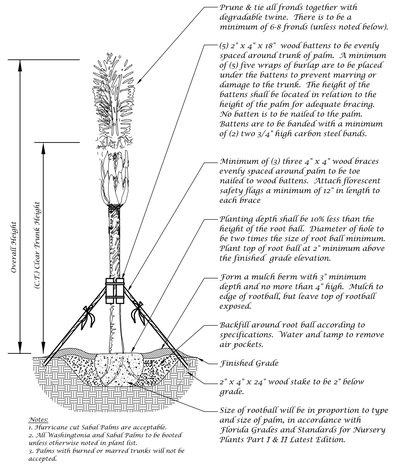
Staking Detail

Not to Scale



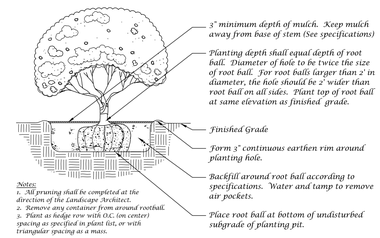
Drainage Testing Detail

Not to Scale



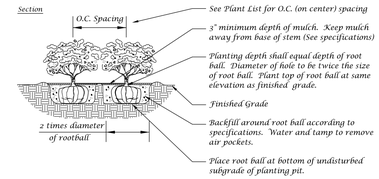
Palm Planting Detail

Not to Scale



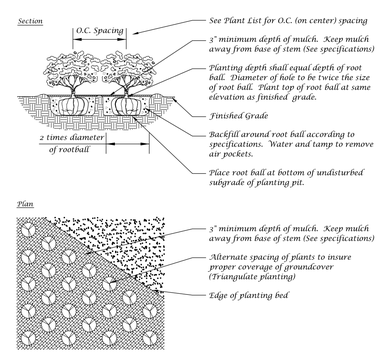
Shrub Detail

Not to Scale



Ground Cover Detail

Not to Scale



Ground Cover Detail

Not to Scale

Landscape Plan

Conceptual Design Group, Inc.
Landscape Architecture - Site Planning
900 East Ocean Boulevard, Suite 130d
Stuart, Florida 34994
(772) 344-2340
LC: 26000198

Youth & Family Behavioral Health Center Inc
South 25th Street
City of Fort Pierce, Florida

City Project Number:

Jeffrey W. Smith, RLA
Florida Registration Number:
LA 0001635

Job No.	23-0101
Drawn By	JWS
Submittal Dates	6-2-2023
	1-12-2024
Revision Dates	
New Base	1-12-2024

These drawings are the property of the landscape architect and are not to be used for other projects except by written permission from the landscape architect. Report any discrepancies immediately to the landscape architect.

Sheet L-2 of 2

DRIVEWAY CONNECTION PERMIT FOR ALL CATEGORIES

PART 1: PERMIT INFORMATION

APPLICATION NUMBER: 2023-A-490-00072

Permit Category: I - Temporary Driveway Access Classification: 6

Project: Youth & Family Behavioral Health Center temporary construction entrance

Permittee: Jerry Compton

Section/Mile Post: 94005 / 1.600 State Road: 615

Section/Mile Post: / State Road:

PART 2: PERMITTEE INFORMATION

Permittee Name: Jerry Compton

Permittee Mailing Address: PO Box 327

City, State, Zip: Stuart, Florida 34995

Telephone: (772) 215-1434 ext. _____

Engineer/Consultant/or Project Manager: Richard Creech

Engineer responsible for construction inspection: Richard Creech (NAME) 38592 (P.E. #)

Mailing Address: PO Box 327

City, State, Zip: Stuart, Florida 34995

Telephone: (772) 485-2140 ext. _____ FAX, Mobile Phone, etc. Fax: / Mobile:

PART 3: PERMIT APPROVAL

The above application has been reviewed and is hereby approved subject to all Provisions as attached.

Permit Number: 2023-A-490-00072
Department of Transportation

Signature: Kimberly Graham Title: OPERATIONS PROGRAM ENGINEER

Department Representative's Printed Name Kimberly Graham

Temporary Permit ☑ YES ☐ NO (If temporary, this permit is only valid for 6 months)

Special provisions attached ☑ YES ☐ NO

Date of Issuance: 1/3/2024

If this is a normal (non-temporary) permit it authorizes construction for one year from the date of issuance. This can only be extended by the Department as specified in 14-96.007(6).

Approved
2023-A-490-00072
Kimberly Graham
1/3/2024

See following pages for General and Special Provisions

PART 4: GENERAL PROVISIONS

1. Notify the Department of Transportation Maintenance Office at least 48 hours in advance of starting proposed work.
   Phone: 7724657396 , Attention: Paul Brege
2. A copy of the approved permit must be displayed in a prominent location in the immediate vicinity of the connection construction.
3. Comply with Rule 14-96.008(1), F.A.C., Disruption of Traffic.
4. Comply with Rule 14-96.008(7), F.A.C., on Utility Notification Requirements.
5. All work performed in the Department's right of way shall be done in accordance with the most current Department standards, specifications and the permit provisions.
6. The permittee shall not commence use of the connection prior to a final inspection and acceptance by the Department.
7. Comply with Rule 14-96.003(3)(a), F.A.C., Cost of Construction.
8. If a Significant Change of the permittee's land use, as defined in Section 335.182, Florida Statutes, occurs, the Permittee must contact the Department.
9. Medians may be added and median openings may be changed by the Department as part of a Construction Project or Safety Project. The provision for a median might change the operation of the connection to be for right turns only.
10. All conditions in NOTICE OF INTENT WILL APPLY unless specifically changed by the Department.
11. All approved connection(s) and turning movements are subject to the Department's continuing authority to modify such connection(s) or turning movements in order to protect safety and traffic operations on the state highway or State Highway System.
12. **Transportation Control Features and Devices in the State Right of Way.** Transportation control features and devices in the Department's right of way, including, but not limited to, traffic signals, medians, median openings, or any other transportation control features or devices in the state right of way, are operational and safety characteristics of the State Highway and are not means of access. The Department may install, remove or modify any present or future transportation control feature or device in the state right of way to make changes to promote safety in the right of way or efficient traffic operations on the highway.
13. The Permittee for him/herself, his/her heirs, his/her assigns and successors in interest, binds and is bound and obligated to save and hold the State of Florida, and the Department, its agents and employees harmless from any and all damages, claims, expense, or injuries arising out of any act, neglect, or omission by the applicant, his/her heirs, assigns and successors in interest that may occur by reason of this facility design, construction, maintenance, or continuing existence of the connection facility,except that the applicant shall not be liable under this provision for damages arising from the sole negligence of the Department.
14. The Permittee shall be responsible for determining and notify all other users of the right of way.
15. Starting work on the State Right of Way means that I am accepting all conditions on the Permit.

Approved
2023-A-490-00072
Kimberly Graham
1/3/2024

PART 5: SPECIAL PROVISIONS

NON-CONFORMING CONNECTIONS: ☐ YES ☑ NO

If this is a non-conforming connection permit, as defined in Rule Chapters 14-96 and 14-97, then the following shall be a part of this permit.

1. The non-conforming connection(s) described in this permit is (are) not permitted for traffic volumes exceeding the Permit Category on page 1 of this permit, or as specified in "Other Special Provisions" below.

2. All non-conforming connections will be subject to closure or relocation when reasonable access becomes available in the future.

OTHER SPECIAL PROVISIONS:

Permittee must contact Paul Brege (FDOT) at 772-429-4923 a minimum of 2 business days prior to start of work. Lane closure request must be sent to Samantha Kayser by Wednesday the week prior to closure.

PART 6: APPEAL PROCEDURES

You may petition for an administrative hearing pursuant to sections 120.569 and 120.57, Florida Statutes. If you dispute the facts stated in the foregoing Notice of Intended Department Action (hereinafter Notice), you may petition for a formal administrative hearing pursuant to section 120.57 (1), Florida Statutes. If you agree with the facts stated in the Notice, you may petition for an informal administrative hearing pursuant to section 120.57(2), Florida Statutes. You must file the petition with:

Clerk of Agency Proceedings
Department of Transportation
Haydon Burns Building
605 Suwannee Street, M.S. 58
Tallahassee, Florida 32399-0458

The petition for an administrative hearing must conform to the requirements of Rule 28-106.201(2) or Rule 28-106.301(2), Florida Administrative Code, and be filed with the Clerk of Agency Proceedings by 5:00 p.m. no later than 21 days after you received the Notice. The petition must include a copy of the Notice, be legible, on 8 1/2 by 11 inch white paper, and contain:

1. Your name, address, telephone number, any Department of Transportation identifying number on the Notice, if known, the name and identification number of each agency affected, if known, and the name, address, and telephone number of your representative, if any, which shall be the address for service purposes during the course of the proceeding.
2. An explanation of how your substantial interests will be affected by the action described in the Notice;
3. A statement of when and how you received the Notice;
4. A statement of all disputed issues of material fact. If there are none, you must so indicate;
5. A concise statement of the ultimate facts alleged, including the specific facts you contend warrant reversal or modification of the agency's proposed action, as well as an explanation of how the alleged facts relate to the specific rules and statutes you contend require reversal or modification of the agency's proposed action;
6. A statement of the relief sought, stating precisely the desired action you wish the agency to take in respect to the agency's proposed action.

If there are disputed issues of material fact a formal hearing will be held, where you may present evidence and argument on all issues involved and conduct cross-examination. If there are no disputed issues of material fact an informal hearing will be held, where you may present evidence or a written statement for consideration by the Department.

Mediation, pursuant to section 120.573, Florida Statutes, may be available if agreed to by all parties, and on such terms as may be agreed upon by all parties. The right to an adminstrative hearing is not affected when mediation does not result in a settlement.

Your petition for an administrative hearing shall be dismissed if it is not in substantial compliance with the above requirements of Rule 28-106.201(2) or Rule 28-106.301(2), Florida Administrative Code. If you fail to timely file your petition in accordance with the above requirements, you will have waived your right to have the intended action reviewed pursuant to chapter 120, Florida Statutes, and the action set forth in the Notice shall be conclusive and final.

Approved
Permit No 900072
Kimberly Graham
1/3/2024

Rule 14-96, F.A.C.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

RECEIPT OF CONNECTION APPLICATION AND FEE (OR WAIVER OF FEE)

850-040-16
SYSTEMS PLANNING
06/17

IMPORTANT NOTE: Even though your application has been accepted, it may not be complete. We will contact you if more information is needed.

(1) APPLICATION NUMBER: 2023-A-490-00072

APPLICANT:

(2) Name/Address: Jerry Compton
PO Box 327
Stuart, Florida 34995

(3) Project Name:

(4) Fee

		VEHICLES PER DAY	FEE
☐	Category A	1-20	$50.00
☐	Category B	21-600	$250.00
☐	Category C	601-1,200	$1,000.00
☐	Category D	1,201-4,000	$2,000.00
☐	Category E	4,001-10,000	$3,000.00
☐	Category F	10,001-30,000	$4,000.00
☐	Category G	30,001 +	$5,000.00
☑	Temporary		$250.00
☐	Safety		NO FEE
☐	Government Entity		NO FEE

(5) Application Fee Collected $ 250.0

Payment Type:

- ☐ Money Order
- ☐ Check (check number _____)
- ☐ Cash
- ☑ Credit Card (online only)

(6) Fee Collected By

Name One-Stop Permitting

Signature One-Stop Permitting

Date 12/22/2023 District _____ Unit _____

(7) Receipt Given Back to Applicant Via

☐ Hand Delivery ☐ Mail ☐ Courier Service ☐ Other ☑ Electronically

Applicant (or Agent) Signature (if available) Jerry Compton

This form bears your application number and serves as your receipt.

(8) If fee is waived, give justification below or on separate sheet.

FOR AGENCY USE ONLY – ATTACH COPY OF CHECK ON THE NEXT PAGE

Make Checks payable to: State of Florida Department of Transportation

Approved
2023-A-490-00072
Kimberly Graham
1/3/2024

SPECIAL CONDITIONS

A copy of this permit & plan will be on the job site at all times

This permit is valid only for work proposed within the FDOT right-of-way.

Contact Paul Brege (772) 429-4923 a minimum of 2 business days before work is to start to schedule a pre-construction conference.

Certification acceptance and final approval is contingent upon conformity of all work done according to this permit.

Validity of this permit is contingent upon permittee obtaining necessary permits from all other agencies involved.

FDOT TEMPORARY ACCESS PERMITS ARE VALID FOR (6) SIX MONTHS FROM DATE OF APPROVAL. The permittee or authorized agent shall request an extension. If possible, request to be received 30 days prior to permit expiration.

Sidewalk closures require the contractor to implement all rules outlined in the most current edition of FDOT Standard Plans Index 102-660.

GIVE SPECIAL ATTENTION TO THE MOT NOTE

Notification of all lane closures will be e-mailed: to Samantha Kayser at skayser@corradino.com by 3:00 P.M. Wednesday the week prior to the anticipated lane closure.

Upon completion of work the Completion Certification will be signed and dated then sent to the Department or their Representative.

NO EXCEPTIONS

Approved
2023-A-490-00072
Kimberly Graham
1/3/2024

Treasure Coast Operations Lane Closure Requests:

NO LANE CLOSURE FORMS WILL BE ACCEPTED FOR MAINTENANCE AND PERMIT RELATED WORK.
Please write out your lane closure following the format options provided below.

REMINDER
Please submit your lane closures to skayser@corradino.com and copy cgomez@corradino.com by **3:30 p.m. Wednesday for a closure the following week. For permit related closures copy Paul Brege at paul.brege@dot.state.fl.us.** Please submit your lane closures based on specs specified by District.

All Permit-related Closures
FDOT lane closure restrictions for State roadways are Sunday through Thursday nights between 9p & 6a and Monday through Friday between 9a & 4p. Proposed closures of 2 or more lanes are restricted to night time hours only.

NEW FORMAT
COUNTY -- Direction (NB, SB, EB, WB) Road with Closure between Street Name and Street Name, in City/Town/Village, Time Start to Time End, Day of Week, Month Day through Day of Week, Month Day, # of lanes closed of # of lanes, for Work Performed. For more information, please contact First Name Last Name at Phone Number.

NOTES:
- Full detours require detour routes.
- For any lane closure that requires a police presence to direct traffic or a flagging operation, please state this before the contact information line. *Example: Traffic to be maintained by flagging operation.*

EXAMPLES:

One Direction
Martin County -- Northbound US 1 between NE Jensen Beach Boulevard to Goldenrod Lane, in Jensen Beach, 9 a.m. to 4 p.m., Monday, Aug. 29 through Thursday, Sept. 1, 1 of 3 lanes closed, for utility work. For more information, please contact Joe Smith at 555-555-5555.

Two Directions
Martin County -- Northbound and southbound US 1 between NE Jensen Beach Boulevard to Goldenrod Lane, in Jensen Beach, 9 a.m. to 4 p.m., Monday, Aug. 29 through Thursday, Sept. 1, 2 of 6 lanes closed, for utility work. For more information, please contact Joe Smith at 555-555-5555.

Full-Closure
Martin County -- Northbound US 1 between NE Jensen Beach Boulevard to Goldenrod Lane, in Jensen Beach, around-the-clock beginning at 9 a.m. Monday, Aug. 29 through 4 p.m., Thursday, Sept. 1, all lanes closed, for utility work. Westbound Jensen Beach Boulevard to northbound US 1 traffic will be detoured to SE Green River Parkway to SE Melaleuca Boulevard to Lennard Road to US 1. Northbound US 1 traffic will be detoured to NW Jensen Beach Boulevard to Green River Parkway to SE Melaleuca Boulevard to Lennard Road to US 1. For more information, please contact Joe Smith at 555-555-5555.

Approved
2023-A-490-00072
Kimberly Graham
1/3/2024

National Pollutant Discharge Elimination System
Treasure Coast



BE A RESPONSIBLE NEIGHBOR ON THE STATE'S HIGHWAY

Please reference the following numbers:

Illicit Discharge or Illegal Dumping	FDOT Treasure Coast Operations Center	772-465-7396
Spill (oil or hazardous materials) onto the highway	State Watch Office	1-800-320-0519

- Return **used oil** to your nearest service station or any auto supply store for recycling.
- **SWEEP AND REMOVE**, do not wash fertilizers, grass clippings, pesticides, soil, or sediment into the storm drain system.
- **DURING CONSTRUCTION**, clean equipment tires before leaving your site and don't allow any erosion or sediment to enter the highway storm drain system. Control waste that may cause adverse impacts to water quality. Please contact FDOT Treasure Coast Operations Center **48 hours** prior to breaking ground on a project that has an **approved DCP**.

To keep up to date on your stormwater responsibility, please visit:
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
http://www.dep.state.fl.us/water

For your information, FDOT-sponsored trainings on illicit discharge detection and elimination (IDDE) or spill prevention/response can be found by visiting:

http://wbt.dot.state.fl.us/ois/IllicitDischarge/index.htm

http://wbt.dot.state.fl.us/ois/SpillPrevention/index.htm

REMEMBER, what goes into a storm drain ends up floating in our waterways or washing up on our beaches!!!

Approved
2023-A-490-00072
Kimberly Graham
1/3/2024

MICHELLE R. MILLER, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 4957411 OR BOOK 4726 PAGE 2872, Recorded 11/27/2021 12:59:22 PM Doc Tax: $910.00

Return to:
Florida Title & Guarantee Agency
14050 NW 14th Street, Suite 110
Sunrise, FL 33323

This Instrument Prepared
under the supervision of:

Karene Anderson
Florida Title & Guarantee Agency
14050 NW 14th Street, Suite 110
Sunrise, FL 33323

Property Appraisers Parcel Identification (Folio) No.:
2417-507-0005-000-7 and 2417-503-0040-000-2

Our File No.: 84-21-0551

WARRANTY DEED

This Warranty Deed made this 18th day of November, 2021 by Raul Rodriguez-Torres and Lisa Rodriguez-Torres, husband and wife, whose mailing address is 164 SE Osprey Ridge, Port St. Lucie, FL 34984, hereinafter called the grantor(s), to Youth & Family Behavioral Health Center, Inc, a Florida corporation, whose post office address is 1211 S 25th St, Fort Pierce, FL 34950, hereinafter called the grantee:

(Wherever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives and assigns of individuals, and the successors and assigns of corporations)

WITNESSETH: That the grantor(s), for and in consideration of the sum of $10.00 (ten) and other valuable considerations, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto the grantee all that certain land situate in St. Lucie County, State of Florida, viz:

Parcel 1: The South 1/2 of Lot C and all of Lot D, less the East 10 feet thereof of the Resubdivision of Lots 1, 2, 3. 4, 11 and 12, Block 2, Kirby's Subdivision, according to the plat thereof, as recorded in Plat Book 8, Page 33, of the Public Records of St. Lucie County, Florida;

AND

Parcel 2: Lot 10, Block 2, KIRBY SUBDIVISION, according to the Plat thereof, as recorded in Plat Book 3, Page 86, Public Records of St. Lucie County, Florida, less the East 10 feet, deeded to the State of Florida in Official Records Book 169, Page 1169, of the Public Records of St. Lucie County, Florida.

Neither the grantor(s) named herein, nor the spouse(s) thereof nor anyone for whose support they are responsible reside on or adjacent to the property herein described and is not therefore their homestead property.

SUBJECT TO: covenants, conditions, restrictions, reservations, limitations, easements and agreements of record, if any; taxes and assessments for the year 2022 and subsequent years; and to all applicable zoning ordinances and/or restrictions and prohibitions imposed by governmental authorities, if any,

TOGETHER, with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

TO HAVE AND TO HOLD, the same in Fee Simple forever.

AND the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land, and hereby warrants the title to said land and will defend the same against the lawful claims of all persons.

IN WITNESS WHEREOF, the said grantor has signed and sealed these presents the day and year first above written.

Approved
2023-A-490-00072
Kimberly Graham
1/3/2024

Signed, sealed and delivered in the presence of:

First Witness Signature

Printed Signature

Second Witness Signature

Printed Signature

Raul Rodriguez-Torres

Lisa Rodriguez-Torres

State of Florida

County of St Lucie

The foregoing instrument was acknowledged before me by means of ☑ physical presence or ☐ online notarization, this 16 day of NOV, 2021 by Raul Rodriguez-Torres and Lisa Rodriguez-Torres, who has produced FL DL as identification or is personally known to me to be the persons therein.

Notary Public, State of Florida

My commission expires:
Seal

AUDREY HAND
Notary Public - State of Florida
Commission # GG 927160
My Comm. Expires Oct 28, 2023
Bonded through National Notary Assn.

Approved
2023-A-490-00072
Kimberly Graham
1/3/2024

MICHELLE R. MILLER, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 4957411 OR BOOK 4726 PAGE 2872, Recorded 11/27/2021 12:59:22 PM Doc Tax: $910.00

Return to:
Florida Title & Guarantee Agency
14050 NW 14th Street, Suite 110
Sunrise, FL 33323

This Instrument Prepared
under the supervision of:

Karene Anderson
Florida Title & Guarantee Agency
14050 NW 14th Street, Suite 110
Sunrise, FL 33323

Property Appraisers Parcel Identification (Folio) No.:
2417-507-0005-000-7 and 2417-503-0040-000-2

Our File No.: 84-21-0551

WARRANTY DEED

This Warranty Deed made this 18th day of November, 2021 by Raul Rodriguez-Torres and Lisa Rodriguez-Torres, husband and wife, whose mailing address is 164 SE Osprey Ridge, Port St. Lucie, FL 34984, hereinafter called the grantor(s), to Youth & Family Behavioral Health Center, Inc, a Florida corporation, whose post office address is 1211 S 25th St, Fort Pierce, FL 34950, hereinafter called the grantee:

(Wherever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives and assigns of individuals, and the successors and assigns of corporations)

WITNESSETH: That the grantor(s), for and in consideration of the sum of $10.00 (ten) and other valuable considerations, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto the grantee all that certain land situate in St. Lucie County, State of Florida, viz:

Parcel 1: The South 1/2 of Lot C and all of Lot D, less the East 10 feet thereof of the Resubdivision of Lots 1, 2, 3. 4, 11 and 12, Block 2, Kirby's Subdivision, according to the plat thereof, as recorded in Plat Book 8, Page 33, of the Public Records of St. Lucie County, Florida;

AND

Parcel 2: Lot 10, Block 2, KIRBY SUBDIVISION, according to the Plat thereof, as recorded in Plat Book 3, Page 86, Public Records of St. Lucie County, Florida, less the East 10 feet, deeded to the State of Florida in Official Records Book 169, Page 1169, of the Public Records of St. Lucie County, Florida.

Neither the grantor(s) named herein, nor the spouse(s) thereof nor anyone for whose support they are responsible reside on or adjacent to the property herein described and is not therefore their homestead property.

SUBJECT TO: covenants, conditions, restrictions, reservations, limitations, easements and agreements of record, if any; taxes and assessments for the year 2022 and subsequent years; and to all applicable zoning ordinances and/or restrictions and prohibitions imposed by governmental authorities, if any,

TOGETHER, with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

TO HAVE AND TO HOLD, the same in Fee Simple forever.

AND the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land, and hereby warrants the title to said land and will defend the same against the lawful claims of all persons.

IN WITNESS WHEREOF, the said grantor has signed and sealed these presents the day and year first above written.

Approved
2023-A-490-00072
Kimberly Graham
1/3/2024

Signed, sealed and delivered in the presence of:

First Witness Signature

Printed Signature

Second Witness Signature

Printed Signature

Raul Rodriguez-Torres

Lisa Rodriguez-Torres

State of Florida

County of St Lucie

The foregoing instrument was acknowledged before me by means of ☑ physical presence or ☐ online notarization, this 16 day of NOV, 2021 by Raul Rodriguez-Torres and Lisa Rodriguez-Torres, who has produced FL DL as identification or is personally known to me to be the persons therein.

Notary Public, State of Florida

My commission expires:
Seal

AUDREY HAND
Notary Public - State of Florida
Commission # GG 927160
My Comm. Expires Oct 28, 2023
Bonded through National Notary Assn.

Approved
2023-A-490-00072
Kimberly Graham
1/3/2024

CREECH
CONSULTING, INC.

November 6, 2023

Florida Department of Transportation
3400 W Commercial Blvd
Fort Lauderdale, Florida 33309

Jean Monval
Youth & Family Behavioral Health Center Inc
1211 S 25th St
Fort Pierce, FL 34947

RE: Youth and Family Behavioral Health Center

Please be Advised that Youth and Family Behavioral Health hereby authorizes Creech Consulting, Inc. to act as its agent relative to the above referenced project and approval process.

Sincerely,
Jean Mary Monval
Youth & Family Behavioral Health Center Inc

Applicant — Signature Date: 11/07/2023

Jean Mary Monval — Printed Name
President — Title

NOTARY ACKNOWLEDGMENT

STATE OF: Florida COUNTY OF: Martin

I hereby certify that the foregoing instrument was acknowledged before me this 7 day of 2023,

by Jean Mary Monval as member, a Florida Profit Corporation, on behalf of the company

He or She ___ is personally known to me or ✓ has produced _____ as identification.

Notary Public Signature — Printed name

STATE OF: Florida at-large

ANGELA S COMPTON
Notary Public-State of Florida
Commission # HH 179381
My Commission Expires
September 26, 2025

P.O. Box 327 Stuart Florida 34995

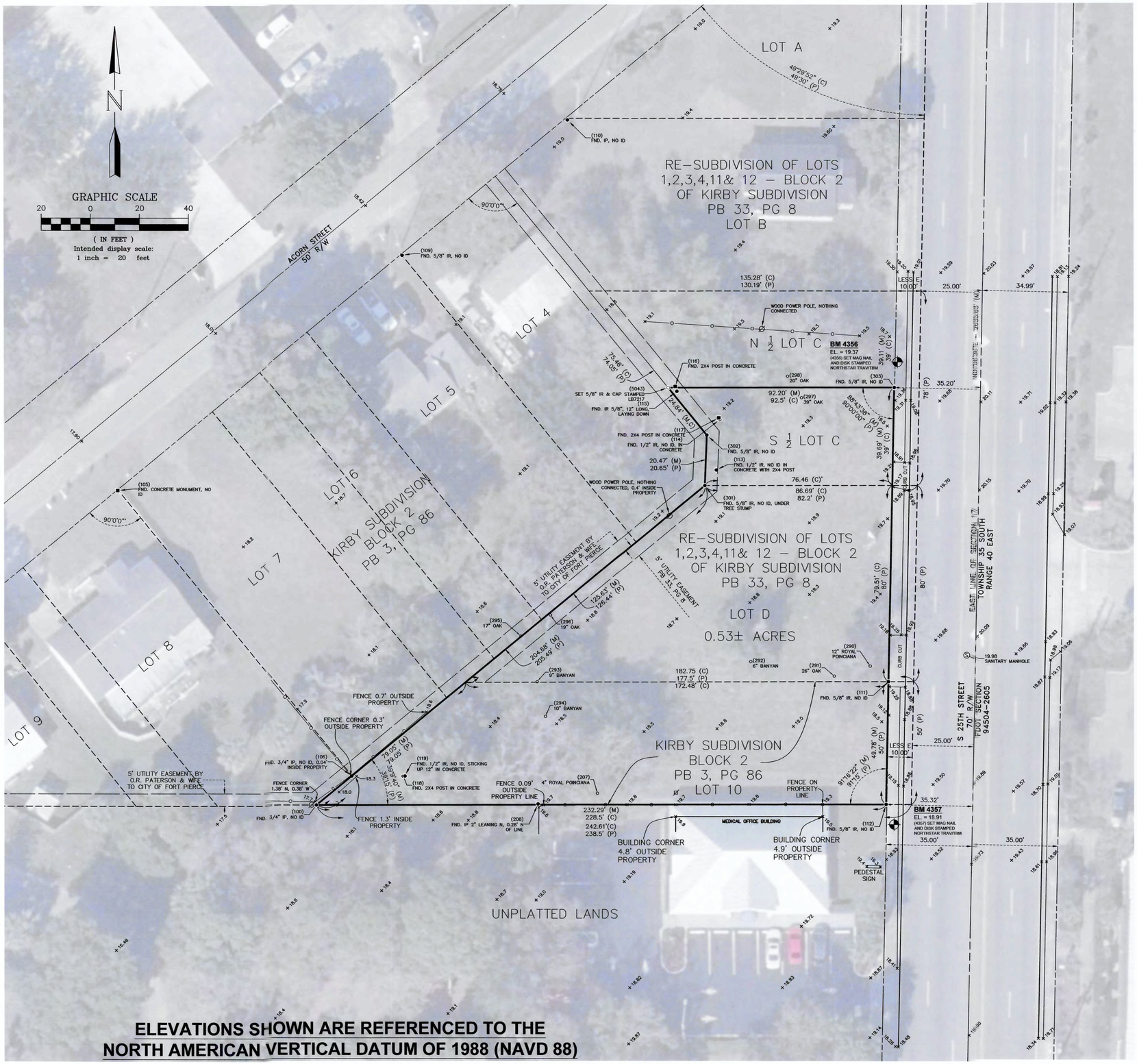
Approved
2023-A-490-00072
Kimberly Graham
1/3/2024



Approved
2023-A-490-00072
Kimberly Graham
1/3/2024



Approved
2023-A-490-00072
Kimberly Graham
1/3/2024



SURVEYOR'S NOTES

1. THE EXPECTED USE OF THIS SURVEY IS FOR ENGINEERING DESIGN PURPOSES.
2. ALL MEASUREMENTS SHOWN HEREON ARE IN ACCORDANCE WITH THE UNITED STATES STANDARD AND ARE IN FEET.
3. ADDITIONS OR DELETIONS TO THE SURVEY MAP AND/OR REPORT BY OTHER THAN THE SIGNING PARTY IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES AND RENDERS THE SURVEY INVALID.
4. THIS SURVEY CANNOT BE TRANSFERRED OR ASSIGNED WITHOUT THE SPECIFIC WRITTEN PERMISSION OF THE SURVEYOR HEREON.
5. THE SURVEY MAP AND REPORT OR THE COPIES THEREOF ARE NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
6. THIS SURVEY MEETS OR EXCEEDS APPLICABLE ACCURACY REQUIREMENTS AND IS PREPARED ACCORDING TO THE STANDARDS OF PRACTICE SET FORTH BY THE FLORIDA ADMINISTRATIVE CHAPTER 5J-17 AS CODE, ADOPTED BY THE BOARD OF PROFESSIONAL SURVEYOR AND MAPPERS.
7. THERE WAS NO ATTEMPT TO LOCATE ANY UNDERGROUND UTILITIES, EXCEPT AS SHOWN.
8. LANDS SHOWN HEREON WERE NOT ABSTRACTED FOR RIGHT-OF-WAY EASEMENTS, OWNERSHIP, OR OTHER INSTRUMENTS OF RECORD.
9. SYMBOLS SHOWN HEREON ARE NOT TO SCALE.
10. FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), BY GRAPHIC PLOTTING ONLY, INDICATES SAID PROPERTY IS LOCATED WITHIN AN AREA HAVING A FLOOD ZONE DESIGNATION OF X ON FLOOD RATE PANEL NO. 12111C0186J, WITH A REVISION DATE OF 2/16/2012.
11. LAST DATE OF DATA ACQUISITION: 11/16/2022
12. THIS SURVEY IS INTENDED TO BE DISPLAYED AT THE SCALE SHOWN ON THE SCALE BAR.
13. BEARINGS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD83), ADJUSTMENT OF 2011, FLORIDA STATE PLANE EAST ZONE GRID NORTH AS ESTABLISHED BY THE NOS AND THE EAST LINE OF SECTION 17 AS SHOWN HEREON AS BEING N 01°08'36" E. ALL OTHER BEARINGS ARE RELATIVE THERETO. FLORIDA DEPARTMENT OF TRANSPORTATION PERMANENT REFERENCE NETWORK WAS USED AS HORIZONTAL CONTROL AND GPS RTK WITH REDUNDANT MEASUREMENTS. HORIZONTAL ACCURACY IS 0.10 FOOT, PLUS OR MINUS.
14. ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). ELEVATIONS DEPICTED ON THIS SURVEY WERE OBTAINED USING FLORIDA DEPARTMENT OF TRANSPORTATION PERMANENT REFERENCE NETWORK AND REAL TIME KINEMATIC (RTK) GPS METHODS WITH AN EXPECTED ACCURACY OF +/- 0.2'.
15. BACKGROUND IMAGERY OBTAINED FROM FLORIDA DEPARTMENT OF TRANSPORTATION, DATED 2021

LEGAL DESCRIPTION

PARCEL 1: THE SOUTH ½ OF LOT C AND ALL OF LOT D, LESS THE EAST 10 FEET THEREOF OF THE RESUBDIVISION OF LOTS 1, 2, 3, 4, 11, AND 12, BLOCK 2, KIRBY'S SUBDIVIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 8, PAGE 33, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA;

AND

PARCEL 2: LOT 10, BLOCK 2, KIRBY SUBDIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 3, PAGE 86, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, LESS THE EAST 10 FEET, DEEDED TO THE STATE OF FLORIDA IN OFFICIAL RECORDS BOOK 169, PAGE 1169, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

LEGEND

Abbreviations

(C)	= CALCULATED MEASUREMENT
(D)	= DEED MEASUREMENT
(M)	= FIELD MEASUREMENT
(P)	= PLAT MEASUREMENT
(xxxxx)	= SURVEYOR'S POINT NUMBER
BM	= BENCHMARK
CL	= CENTERLINE
DB	= DEED BOOK
FDOT	= FLORIDA DEPARTMENT OF TRANSPORTATION
FND	= FOUND
ID	= IDENTIFICATION
IP	= IRON PIPE
IR	= IRON ROD
LB	= LAND SURVEYING BUSINESS
NAVD88	= NORTH AMERICAN VERTICAL DATUM OF 1988
ORB	= OFFICIAL RECORDS BOOK
PB	= PLAT BOOK
PCN	= PARCEL CONTROL NUMBER
PG	= PAGE
PID	= PARCEL IDENTIFICATION NUMBER
PSM	= PROFESSIONAL SURVEYOR & MAPPER
X 14.2	= EXISTING ELEVATION

Linetypes

= BOUNDARY
= CHAIN LINK FENCE
= CENTERLINE
= RIGHT OF WAY
= SECTION LINE
= PLAT LOT LINE
= EASEMENT

Symbols

= BENCHMARK (AS LABELED)
= FOUND 1/4 SECTION CORNER
= FOUND SECTION CORNER
= POLE ANCHOR
= SANITARY MAN HOLE
= SET 5/8" IRON ROD & CAP STAMPED "NORTHSTAR LB 7217"
= SIGN
= TREE (AS LABELED)
= UTILITY PEDESTAL
= WOOD UTILITY POLE

SURVEYOR'S CERTIFICATION

(THIS SURVEY IS NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND RAISED EMBOSSED SEAL OF FRANK C. VELDHUIS, FLORIDA PROFESSIONAL SURVEYOR AND MAPPER.)

I HEREBY CERTIFY THAT THE BOUNDARY AND TOPOGRAPHIC SURVEY OF THE PROPERTY SHOWN AND DESCRIBED HEREON WAS COMPLETED UNDER MY DIRECTION AND SAID SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

I FURTHER CERTIFY THAT THIS BOUNDARY AND TOPOGRAPHIC SURVEY MEETS THE STANDARDS OF PRACTICE FOR SURVEYS SET FORTH BY THE FLORIDA BOARD OF LAND SURVEYORS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027 FLORIDA STATE STATUTES. NO SEARCH OF THE PUBLIC RECORDS HAS BEEN MADE BY THIS OFFICE. THIS SURVEY IS BASED ON INFORMATION FURNISHED BY CLIENT OR CLIENT'S REPRESENTATIVE

NORTHSTAR GEOMATICS, INC.

6-11-2023
DATE

FRANK C. VELDHUIS
PROFESSIONAL SURVEYOR & MAPPER
FLORIDA CERTIFICATION NO. 6582

NORTHSTAR GEOMATICS
5820 NW ZENITH DR
PORT ST LUCIE, FLORIDA 34986
(772) 781-6400 WWW.NSGEO.COM
LICENSED BUSINESS NO. 7217

DATE	REVISIONS

DATE 11/16/2022
SCALE 1" = 20'
FIELD BK. -
DWNG. BY FCV
CHECKED BY FCV

BOUNDARY AND TOPOGRAPHIC SURVEY FOR: YOUTH & FAMILY BEHAVIORAL HEALTH CENTER, INC.

SECTION 17, TOWNSHIP 35 SOUTH, RANGE 40 EAST
FT. PIERCE, FLORIDA

SHEET NO. 1
OF 1 SHEETS
PROJECT NO. 22-038

Approved
23-A-490000072
Kimberly Graham
1/3/2024

SITE CIVIL CONSTRUCTION DRAWINGS

FOR

Youth and Family Behavioral Health Center

CITY OF FORT PIERCE
St. LUCIE COUNTY, FLORIDA

CONTACTS

OWNER
YOUTH & FAMILY BEHAVIORAL
HEALTH CENTER INC
1211 S 25TH ST
FORT PIERCE, FL 34947

LANDSCAPE ARCHITECT
CONCEPTUAL DESIGN GROUP, INC.
900 EAST OCEAN BOULEVARD, SUITE 130D
STUART, FLORIDA 34994
PHONE: 561-371-1644

CIVIL ENGINEER
CREECH CONSULTING, INC.
PO BOX 327
STUART, FL 34995
PHONE: (772) 485-2140

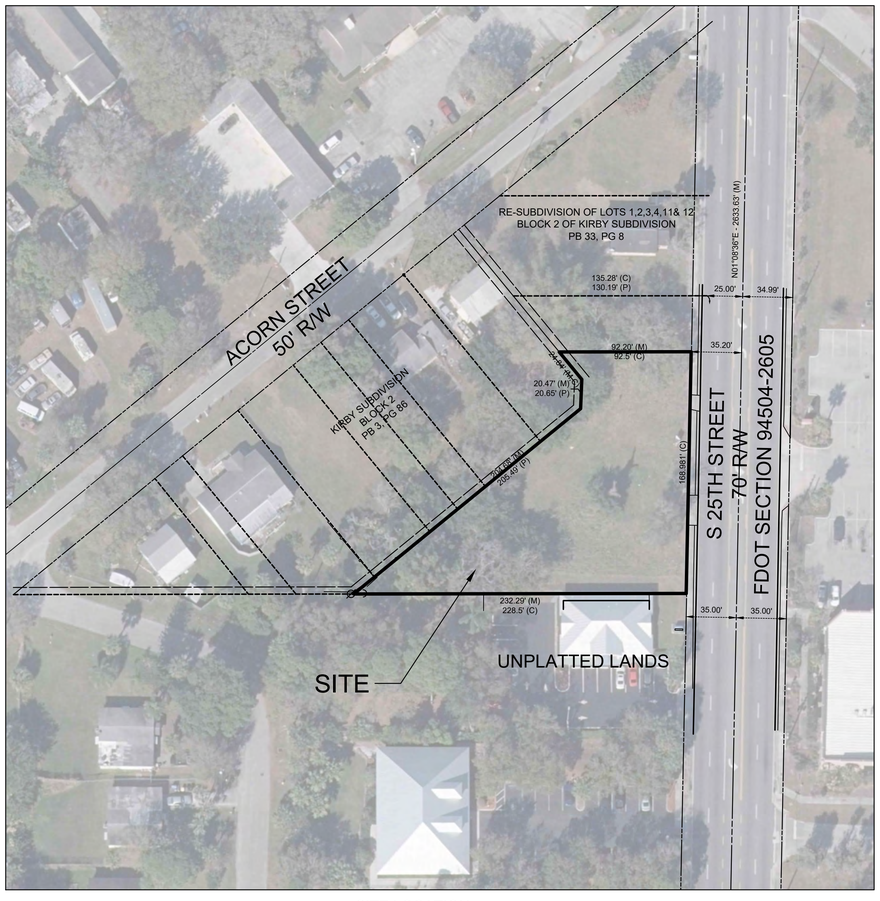
ARCHITECT
2KT ARCHITECTURE AND DESIGN
2081 SE OCEAN BLVD SUITE 1A
STUART, FL, 34996
PHONE: (772) 220-4411

SURVEYOR
NORTHSTAR GEOMATICS, INC.
617 NW BAKER RD
STUART, FL 34994
PHONE: (772)781-6400

TRAFFIC
O'ROURKE ENGINEERING & PLANNING
969 SE FEDERAL HIGHWAY, SUITE 402
STUART, FL 34994
PHONE: (772) 781-7918

GEOTECH
WHITESTONE
4 HARVARD CIRCLE, SUITE 850
WEST PALM BEACH, FLORIDA 33409
PHONE: (561) 717-7006

ENVIRONMENTAL
ADVANCE RESTORATION ECOLOGY
2593 NE ROBERTA ST
JENSEN BEACH, FL 34957
PHONE: (772) 242-7200



SITE LOCATION
MAP
1" = 50'

NORTH

SHEET INDEX

SHEET NO.	SHEET TITLE
C0	COVER SHEET
C1	MASTER SITE PLAN
1	BOUNDARY AND TOPOGRAPHIC SURVEY
C2	DEMOLITION & EROSION CONTROL PLAN
C3	PAVING, GRADING & DRAINAGE PLAN
C4	WATER AND SEWER PLAN
C4a	LOCATION OF EXIST. FIRE HYDRANTS
D1	EROSION CONTROL DETAILS
D2-D3	PAVING, GRADING & DRAINAGE DETAILS
D4	PAVING, GRADING & DRAINAGE SPECIFICATIONS
D5	POTABLE WATER & WASTEWATER DETAILS & NOTES

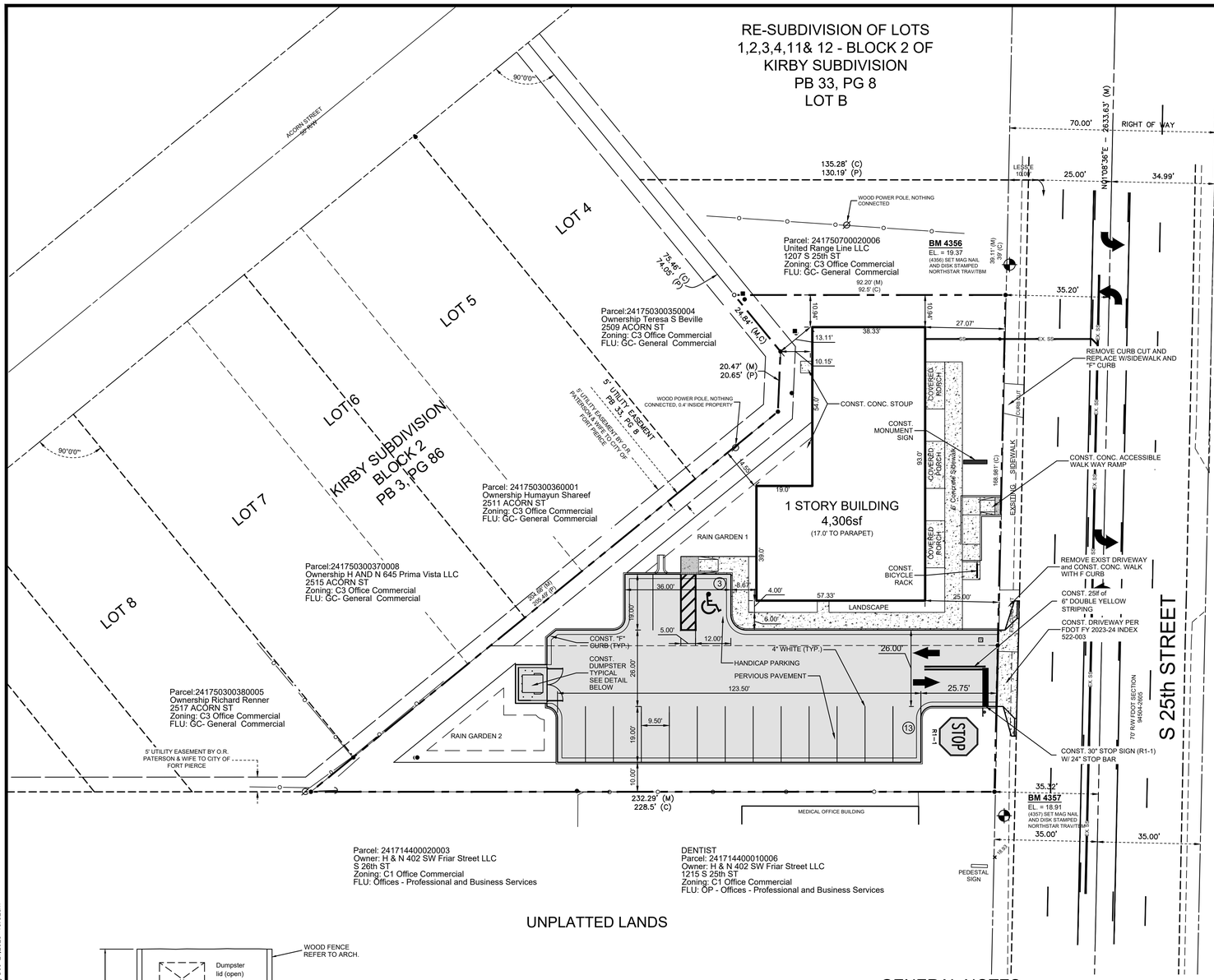
CREECH CONSULTING, INC.
CIVILIZATION ENGINEERED
PO BOX 327, STUART, FLORIDA 34994 (772) 485-2140

BOARD OF PROFESSIONAL ENGINEERS, CERTIFICATE OF AUTHORIZATION NUMBER 5139
PROFESSIONAL SURVEYORS AND MAPPERS, AMENDED CERTIFICATE NO. LB-0006705

09/07/2023
RICHARD CREECH
FL P.E. NO. 38592

SHEET C0

Approved
2023-1000-00072
Andrew Graham
1/3/2024



SITE DATA

1211 & 1213 S 25th Street

Parcel 1	2417-507-0005-000-7	12,446	0.29	ac	
Existing Zoning	C3 General Commercial				
Proposed Zoning	C3 General Commercial				
Existing Land Use	Vacant				
Future Land Use	General Commercial				
Parcel 2	2417-503-0040-000-2	10,055	0.23	ac	
Existing Zoning	C3 General Commercial				
Proposed Zoning	C3 General Commercial				
Existing Land Use	Vacant				
Future Land Use	General Commercial				
Total Site Area		**22,500 sf**	**0.52**	**ac**	**100%**
Impervious		**Square Feet**	**Acreage**		**Percent of Total**
Required (Max)		n/a sf		ac	
Proposed		9,239 sf	0.21	ac	41%
Impervious Total					
Building		4,306 sf	0.10	ac	19%
Pervious Pavement	50% impervious	3,580 sf	0.08	ac	16%
Sidewalk		1,353 sf	0.03	ac	6%
	sub-total	**9,239 sf**	**0.21**	**ac**	**41%**
Pervious Total			0.00		0%
Pervious Pavement	50% pervious	3,580 sf	0.08	ac	16%
Rain Garden 1		920 sf	0.02	ac	4%
Rain Garden 2		966 sf	0.02	ac	4%
Landscape / Green Area		7,795 sf	0.18	ac	35%
	sub-total	**13,261 sf**	**0.30**	**ac**	**59%**
Building Setbacks					
Front	25'				
Side	10				
Rear	0				
Max Building coverage		60%			
Prop. Office Building	Square footage	4,306 sf			
Prop. Office Building	Height to top of parapet	17 ft			
Parking					
Professional service establishments, Other		4,306 sf			14 spaces required
1 parking space for 300 square feet of non-storage floor area					
Total Required					14 spaces required
Total Accessible Required					1 spaces required
Total Provided					15 spaces required
Total Accessible Provided					1 spaces required

LEGAL DESCRIPTION

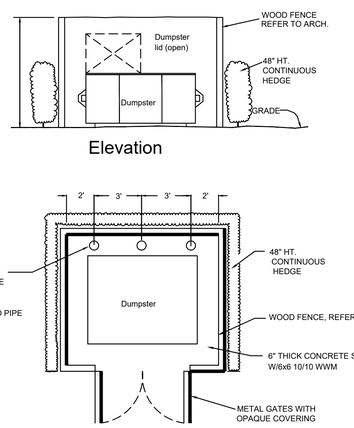
PARCEL 1: THE SOUTH ½ OF LOT C AND ALL OF LOT D, LESS THE EAST 10 FEET THEREOF OF THE RESUBDIVISION OF LOTS 1, 2, 3, 4, 11, AND 12, BLOCK 2, KIRBY'S SUBDIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 8, PAGE 33, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA;

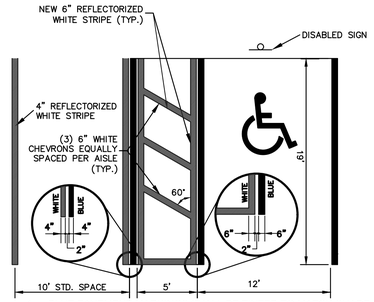
AND

PARCEL 2: LOT 10, BLOCK 2, KIRBY SUBDIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 3, PAGE 86, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, LESS THE EAST 10 FEET, DEEDED TO THE STATE OF FLORIDA IN OFFICIAL RECORDS BOOK 169, PAGE 1169, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

LEGEND

- RIGHT OF WAY LINES
- CHAIN LINK FENCE
- CENTER LINE
- RIGHT OF WAY LINE
- SECTION LINE
- PLAT LOT LINE
- EASEMENT LINE
- PERIMETER BERM
- PROPOSED CONCRETE
- PROPOSED PERVIOUS PAVEMENT
- Ø EXISTING UTILITY POLE



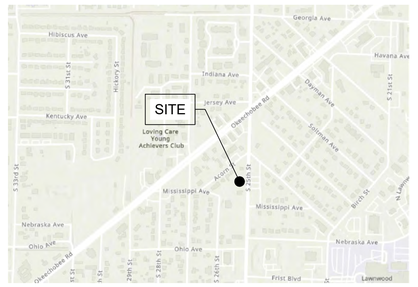


NOTES:
1. BLUE PAVEMENT MARKINGS SHALL BE TINTED TO MATCH SHADE 15180 OF FEDERAL STANDARDS 595A.
2. ALL DIMENSIONS ARE TO THE CENTERLINE OF MARKINGS.

TYPICAL HANDICAP AND STRIPING DETAIL
NTS

GENERAL NOTES:

1. SURVEY PROVIDED BY NORTHSTAR GEOMATICS DATED 11/16/22.
2. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY OF FT. PIERCE REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
3. ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 1V:3H OR STEEPER. CONTRACTOR SHALL GRASS DISTURBED AREAS IN ACCORDANCE WITH CITY SPECIFICATIONS UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
4. ALL ISLANDS WITH CURB & GUTTER SHALL BE LANDSCAPED.
5. ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, (UNLESS OTHERWISE NOTED ON PLANS) INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS & POLES, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN BASE BID.
7. REFER TO ARCHITECTURAL PLANS FOR SITE LIGHTING AND ELECTRICAL PLANS.
8. ALL SIDEWALKS AND ADA ACCESSIBLE AREAS SHALL HAVE A MAXIMUM RUNNING SLOPE OF 1V:20H & A MAXIMUM CROSS SLOPE OF 1V:50H.
9. ALL CURB RAMPS TO HAVE DETECTABLE WARNINGS & BE CONSTRUCTED PER LATEST EDITIONS OF FDOT STANDARDS PLANS FOR ROAD CONSTRUCTION, INDEX 522-002, FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, SECTION 527 & PER ADA REQUIREMENTS.
10. ALL STRIPING TO BE HIGH SLIP-RESISTANT FINISH TO PREVENT SLIPPING IN WET & DRY CONDITIONS.
11. ALL STRIPING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF FDOT STANDARD PLANS FOR ROAD CONSTRUCTION, INDEX# 711-001, FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 711 "THERMO PLASTIC PAVEMENT MARKINGS",CITY OF FT. PIERCE REQUIREMENTS. INSTALL RETRO-REFLECTIVE PAVEMENT MARKINGS (RPM'S).
12. ALL STRIPING SHALL BE INSTALLED AFTER NEW PAVEMENT.
13. ALL PROHIBITED EXOTIC SPECIES SHALL BE REMOVED AND ALL REQUIRED LANDSCAPING SHALL BE INSTALLED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
14. REFER TO CONSTRUCTION DRAWINGS FOR LOCATION OF TRAFFIC CONTROL DEVICES.
15. DURING CONSTRUCTION ACTIVITIES, EXIST. NATIVE VEGETATION TO BE PRESERVED (IF ANY) SHALL BE RETAINED TO ACT AS BUFFERS BETWEEN ADJACENT LAND USES, AND TO MINIMIZE NUISANCE DUST, NOISE AND AIR POLLUTION. BARRICADES SHALL BE USED ON SITE TO PRESERVE THE VEGETATION TO BE USED FOR THIS PURPOSE.
16. ALL SIGNS WILL BE REVIEWED FOR COMPLIANCE WITH THE APPLICABLE REGULATIONS AT THE TIME THE SIGN PERMIT IS ISSUED.
17. ALL BUILDING, PARKING AND ACCESS AREAS SHALL DOCUMENT COMPLIANCE WITH THE REQUIREMENTS OF THE AMERICAN DISABILITIES ACT PRIOR TO THE ISSUANCE OF A BUILDING PERMIT.
18. NO LAND CLEARING IS AUTHORIZED PRIOR TO THE MANDATORY PRE-CONSTRUCTION MEETING FOR THE PROJECT. PROPERTY CORNERS AND PRESERVATION AREAS SHALL BE LOCATED BY A LICENSED LAND SURVEYOR AND CLEARLY MARKED IN THE FIELD PRIOR TO THE PRE-CONSTRUCTION MEETING. AUTHORIZATION FOR CLEARING TO INSTALL EROSION CONTROL DEVICES AND PRESERVE BARRICADES WILL BE GRANTED AT THE PRE-CONSTRUCTION MEETING. NO ADDITIONAL LAND CLEARING SHALL COMMENCE UNTIL A SATISFACTORY INSPECTION OF THE REQUIRED CONTROL STRUCTURES AND BARRICADES HAS BEEN OBTAINED. AUTHORIZATION FOR THE RELOCATION OF GOPHER TORTOISES WITHIN THE DEVELOPMENT.
19. THE SITE PLAN SHALL HAVE A NOTE THAT STATES "ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCE SECTIONS 107, 119 AND 125".



VICINITY MAP
SECTION 17, TOWNSHIP 38S, RANGE 40E
NOT TO SCALE

0 20 40 60
SCALE IN FEET

CREECH CONSULTING, INC. CIVIL ENGINEERING
PO BOX 327, STUART, FLORIDA 34994 (772) 485-2140
BOARD OF PROFESSIONAL ENGINEERS, CERTIFICATE OF AUTHORIZATION NUMBER 5139
PROFESSIONAL SURVEYORS AND MAPPERS, AMENDED CERTIFICATE NO. LB-0006705

DATE	BY	REVISIONS
12/20/2023	JAC	PER FDOT DRIVEWAY CONNECTION COMMENTS
10/06/2023	JAC	PER TRC COMMENTS DATED 10/04/23
09/07/2023	JAC	PER TRC COMMENTS DATED 07/19/23

YOUTH & FAMILY
BEHAVIORAL HEALTH CENTER INC
MASTER SITE PLAN AND STRIPING PLAN
FORT PIERCE FLORIDA

DRAWN BY: JAC
CHECKED BY: RTC / ANDREWS
LATITUDE: 27°26'5.40"N
LONGITUDE: 80°21'2.96"W
HORZ. SCALE: 1" =20'
VERT. SCALE:

SEAL
09/07/2023
RICHARD CREECH
FL P.E. NO. 38592

SHEET C1
PROJECT NO. 22-016-001

Approved
2023-12-490-00072
Christopher Graham
1/5/2024

P:\Projects\2022\2022-016-001 Youth and Family Center\CAD\1~ Plans\C1 Site Plan.dwg C1 SITE PLAN dsc...] Dec 21,2023--10:32am

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

DEMOLITION NOTES

1. CONTRACTOR MUST USE SITE STABILIZATION METHODS, SUCH AS, BUT NOT LIMITED TO, SEEDING, WETTING, AND MULCHING WHICH MINIMIZE AIRBORNE DUST AND PARTICULATE EMISSIONS GENERATED BY CONSTRUCTION ACTIVITY. SUCH METHODS SHALL BE COMPLETED PROGRESSIVELY AND ACTIVELY MAINTAINED AS VEGETATION REMOVAL OCCURS WITHIN A GIVEN AREA OF A SITE. AT THE PRE-CONSTRUCTION MEETING, THE CONTRACTOR SHALL INFORM THE COUNTY WHICH VEGETATION REMOVAL METHODS WILL BE CONDUCTED AND THE PLAN TO MINIMIZE AIRBORNE DUST AND PARTICULATE EMISSIONS.
2. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSAL OF (IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES) ALL STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, PARKING,DRIVES, DRAINAGE, STRUCTURES, UTILITIES, ETC., SUCH THAT THE IMPROVEMENTS SHOWN IN THESE CONSTRUCTION DRAWINGS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE SPECIFICATIONS.
3. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE SITE AND DISPOSING OF THE DEBRIS IN A LAWFUL MANNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.
4. THE CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY'S FORCES AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES.
5. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR ONSITE LOCATIONS OF EXISTING UTILITIES.CONTRACTOR TO VERIFY EXISTING UTILITIES & LOCATIONS PRIOR TO CONSTRUCTION. CONTRACTOR TO NOTIFY THE ENGINEER & OWNER IMMEDIATELY IF ANY DISCREPANCIES ARE IDENTIFIED.
6. ALL EXISTING SEWERS, PIPING AND UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. CONTRACTOR SHALL GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PROCEEDING WITH THE WORK. UTILITIES DETERMINED TO BE ABANDONED AND LEFT IN PLACE SHALL BE GROUTED IF UNDER BUILDING.
7. CONTRACTOR SHALL COORDINATE ALL ELECTRICAL, TELEPHONE, CABLE, WATER, FIBER OPTIC CABLE AND/OR GAS LINES NEEDING TO BE REMOVED OR RELOCATED WITH THE AFFECTED UTILITY COMPANY.CONTRACTOR TO PROVIDE ADEQUATE TIME FOR RELOCATION AND CLOSE COORDINATION WITH THE UTILITY COMPANY IN ORDER TO PROVIDE A SMOOTH TRANSITION IN UTILITY SERVICE. CONTRACTOR SHALL PAY CLOSE ATTENTION TO EXISTING UTILITIES WITHIN ANY ROAD RIGHT OF WAY DURING CONSTRUCTION.
8. CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, (AND OTHER APPROPRIATE BEST MANAGEMENT PRACTICES). THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY.
9. PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED.
10. SHOULD REMOVAL AND/OR RELOCATION ACTIVITIES DAMAGE FENCING, LIGHTING AND/OR EXISTING STRUCTURES, THE CONTRACTOR SHALL PROVIDE NEW MATERIALS/ STRUCTURES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. EXCEPT FOR MATERIALS DESIGNED TO BE RELOCATED ON THIS DRAWING, ALL OTHER CONSTRUCTION MATERIALS SHALL BE NEW.
11. CONTRACTOR MAY LIMIT SAW-CUT & PAVEMENT REMOVAL TO ONLY THOSE AREAS WHERE IT IS REQUIRED AS SHOWN ON THESE CONSTRUCTION DRAWINGS BUT IF ANY DAMAGE IS INCURRED ON ANY OF THE SURROUNDING PAVEMENT, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IT'S REMOVAL AND REPAIR.
12. THE CONTRACTOR SHALL COORDINATE WATER MAIN WORK WITH THE FIRE DEPT. AND CITY OF STUART UTILITIES TO PLAN PROPOSED IMPROVEMENTS AND TO ENSURE ADEQUATE FIRE PROTECTION IS CONSTANTLY AVAILABLE TO EXISTING USERS AND SITE THROUGHOUT ALL PHASES OF CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR ARRANGING/PROVIDING ANY REQUIRED WATER MAIN SHUT OFFS WITH THE CITY OF STUART UTILITIES DURING CONSTRUCTION. ANY COSTS ASSOCIATED WITH WATER MAIN SHUT OFFS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NO EXTRA COMPENSATION WILL BE PROVIDED.
13. DAMAGE TO ANY EXISTING IMPROVEMENTS THAT ARE TO REMAIN WILL BE REPLACED AT CONTRACTOR'S EXPENSE.
14. CONTRACTOR SHALL PROTECT ALL AREAS OUTSIDE OF LIMIT OF CLEARING AND DEMOLITION.
15. PROPERTY CORNERS SHALL BE LOCATED BY A LICENSED LAND SURVEYOR AND CLEARLY MARKED IN THE FIELD PRIOR TO THE ENGINEERING DEPARTMENT'S PRE-CONSTRUCTION MEETING FOR SITE DEVELOPMENT.
16. NO ADDITIONAL LAND CLEARING SHALL COMMENCE UNTIL A SATISFACTORY INSPECTION OF THE REQUIRED EROSION CONTROL BARRICADES HAS BEEN OBTAINED.
17. ALL CONSTRUCTION BARRICADES AND SILT FENCES WILL REMAIN IN PLACE AND BE MONITORED FOR COMPLIANCE BY PERMIT HOLDER DURING THE PERMITTED DEVELOPMENT ACTIVITIES.
18. PRIOR TO SCHEDULING A FINAL INSPECTION FOR THE INFRASTRUCTURE, ALL BARRICADES AND EROSION CONTROL DEVICES SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
19. DISTURBED AREAS ON THE SITE WHERE CONSTRUCTION ACTIVITIES ARE STOPPED SHALL BE SEEDED, SODDED OR VEGETATED NO LATER THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY. VEGETATION SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT.
20. AUTHORIZATION TO INSTALL EROSION CONTROL DEVICES AND BARRICADES WILL BE GRANTED AT THE PRE-CONSTRUCTION MEETING. THIS AUTHORIZATION SHALL BE POSTED ON THE SITE, IN THE PERMIT BOX, ITS LOCATION SHOWN ELSEWHERE ON THIS PAGE.

LAND CLEARING NOTES

1. THE APPLICANT WILL REQUEST IN WRITING, PRIOR TO ANY LAND CLEARING, THAT THE CITY OF STUART GROWTH MANAGEMENT DEPT. PERFORM A FIELD INSPECTION TO DETERMINE IF BARRICADES HAVE BEEN PROPERLY INSTALLED ON THE SITE.
2. DURING CONSTRUCTION ACTIVITIES, EXISTING NATIVE VEGETATION TO BE PRESERVED (IF ANY) SHALL BE RETAINED TO ACT AS BUFFERS BETWEEN ADJACENT LAND USES, AND TO MINIMIZE NUISANCE DUST, NOISE AND AIR POLLUTION. BARRICADES SHALL BE USED ON SITE TO PRESERVE THE VEGETATION TO BE USED FOR THIS PURPOSE.
3. PROPERTY CORNERS SHALL BE LOCATED BY A LICENSED LAND SURVEYOR AND CLEARLY MARKED IN THE FIELD PRIOR TO THE ENGINEERING DEPARTMENT'S MEETING FOR SITE DEVELOPMENT
4. AUTHORIZATION TO INSTALL SAME EROSION CONTROL DEVICES AND PRESERVE BARRICADES WILL BE GRANTED AT THE PRE-CONSTRUCTION MEETING. THIS AUTHORIZATION SHALL BE POSTED ON THE SITE, IN THE PERMIT BOX, IT'S LOCATION SHOWN ELSEWHERE ON THIS PAGE.
5. TREES IDENTIFIED TO BE PROTECTED SHALL HAVE PROTECTIVE BARRICADES INSTALLED AND APPROVED BY LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF ANY CLEARING ACTIVITIES.
6. NO ADDITIONAL LAND CLEARING SHALL COMMENCE UNTIL A SATISFACTORY INSPECTION OF THE REQUIRED EROSION CONTROL STRUCTURES AND BARRICADES HAS BEEN OBTAINED.
7. SOIL STABILIZATION SHALL BE COMPLETED WITHIN 7 DAYS OF VEGETATION REMOVAL.
8. PROPERTY CORNERS SHALL BE LOCATED BY A LICENSED LAND SURVEYOR AND CLEARLY MARKED IN THE FIELD PRIOR TO THE ENGINEERING DEPARTMENT'S PRE-CONSTRUCTION MEETING FOR SITE DEVELOPMENT.
9. ALL CONSTRUCTION BARRICADES AND SILT FENCES WILL REMAIN IN PLACE AND BE MONITORED FOR COMPLIANCE BY THE PERMIT HOLDER DURING THE PERMITTED DEVELOPMENT ACTIVITIES.
10. PRIOR TO SCHEDULING A FINAL ENVIRONMENTAL INSPECTION FOR THE INFRASTRUCTURE, ALL BARRICADES AND EROSION CONTROL DEVICES SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
11. CONTRACTOR MUST USE SITE STABILIZATION METHODS, SUCH AS, BUT NOT LIMITED TO, SEEDING, WETTING, AND MULCHING WHICH MINIMIZE AIRBORNE DUST AND PARTICULATE EMISSIONS GENERATED BY CONSTRUCTION ACTIVITY. SUCH METHODS SHALL BE COMPLETED PROGRESSIVELY AND ACTIVELY MAINTAINED AS VEGETATION REMOVAL OCCURS WITHIN A GIVEN AREA OF A SITE. AT THE PRE-CONSTRUCTION MEETING, THE CONTRACTOR SHALL INFORM THE COUNTY WHICH VEGETATION REMOVAL METHODS WILL BE CONDUCTED AND THE PLAN TO MINIMIZE AIRBORNE DUST AND PARTICULATE EMISSIONS
12. STABILIZATION (SEED OR SOD) OF THE DISTURBED AREAS MUST BE COMPLETED WITHIN 30 DAYS OF VEGETATION REMOVAL. PROVIDE METHOD OF STABILIZATION.

SUGGESTED EROSION CONTROL CONSTRUCTION SEQUENCE

1. FLAG AND FENCE ALL WORK LIMITS.
2. NOTIFY SEDIMENT CONTROL INSPECTOR (24) HOURS PRIOR TO START OF CONSTRUCTION.
3. PERFORM CLEARING AND GRADING REQUIRED FOR INSTALLATION OF PERIMETER CONTROLS.
4. INSTALL PERIMETER RUNOFF CONTROLS AND TREE BARRIERS; NOTIFY SEDIMENT INSPECTOR AND OBTAIN APPROVAL BEFORE PROCEEDING FURTHER.
5. COMPLETE ALL REQUIRED STOCKPILING, SITE CLEARING, AND GRADING. STOCKPILE ANY EXCESS TOPSOIL OR OTHER EXCAVATED SOIL IN APPROVED STOCKPILES OR REMOVE FROM SITE.
6. REMOVE AND DISPOSE HARDPAN LAYER BENEATH DRY DETENTION BOTTOM.
7. SOD AND STABILIZE EMBANKMENT SLOPES. CONSTRUCT PARKING SUBGRADE AND BUILDING PAD SUBGRADE, AND INSTALL SITE UTILITIES AND DRAINAGE PIPES AND INLETS.
8. INSTALL STORM DRAINAGE PROTECTION. COMPLETE PARKING LOT CONSTRUCTION.
9. COMPLETE FINAL GRADING, STABILIZATION, AND LANDSCAPING. REMOVE ANY EXCESS MATERIAL FROM THE SITE AND DISPOSE OF AT A PERMITTED SITE.
10. NOTIFY SEDIMENT CONTROL INSPECTOR AND OBTAIN APPROVAL TO REMOVE SEDIMENT AND EROSION CONTROL.

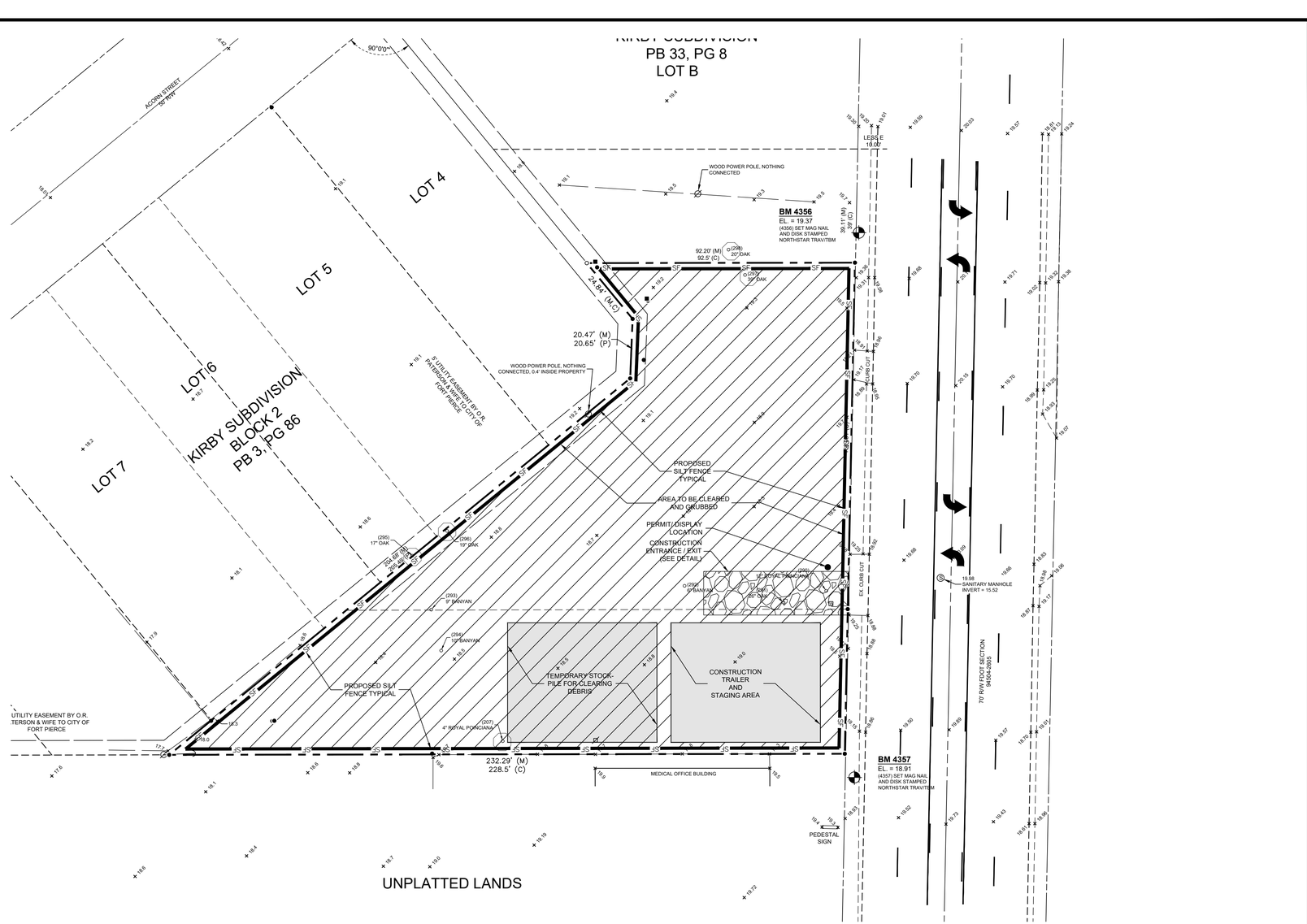
TREE PRESERVATION NOTES

1. REFER TO "TREE PROTECTION BARRIER" DETAIL SEC. 4.666 - TREE PROTECTION

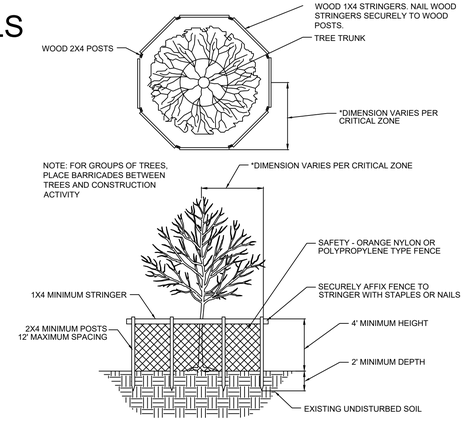
   4.666.B LOCATION OF PROTECTED TREES. ALL PROTECTED TREES WHICH MAY BE IMPACTED WITHIN 75 PERCENT OF THEIR CANOPY DRIP-LINES BY PROPOSED DEVELOPMENT ACTIVITIES SHALL BE PHYSICALLY LOCATED ON SITE AND INDICATED ON THE TREE SURVEY AS REQUIRED IN SECTION 4.662.A.7., BARRICADES MUST BE CONSTRUCTED AROUND THE CRITICAL PROTECTION ZONE OF EACH TREE OR CLUSTER OF TREES. THESE BARRICADES MUST BE CONSTRUCTED OF A MINIMUM OF ONE-FOURTH-INCH DIAMETER ROPE WHICH IS YELLOW OR ORANGE IN COLOR AND MADE OF NYLON OR POLY. THE ROPE IS TO BE ATTACHED TO A MINIMUM OF TWO × TWO WOODEN POLES. IRON REBAR, TWO INCHES OR GREATER PVC PIPE OR OTHER MATERIAL WITH PRIOR APPROVAL OF THE GROWTH MANAGEMENT DEPARTMENT. THE ROPE MUST BE A MINIMUM OF FOUR FEET OFF THE GROUND AND MAY NOT BE ATTACHED TO ANY VEGETATION. ALL BARRICADES MUST BE MAINTAINED INTACT FOR THE DURATION OF CONSTRUCTION. THE LOCATION OF PROPOSED DEVELOPMENT ACTIVITIES THAT ARE WITHIN 15 FEET OF THE CRITICAL PROTECTION ZONE OF A PROTECTED TREE MUST BE LOCATED USING BRIGHTLY COLORED FLAGGING TO INDICATE CORNERS.

2. TREE BARRICADES SYMBOL IS A SYMBOL ONLY. CONTRACTOR TO VERIFY EXACT DIMENSIONS OF BARRICADE.

3. CONTRACTOR SHALL BE RESPONSIBLE FOR FULL REPLACEMENT VALUE FOR ANY DAMAGED TREES DESIGNATED TO BE PRESERVED.



SEE SHEET D1 FOR EROSION CONTROL DETAILS



NOTES:
CRITICAL PROTECTION ZONE: THE AREA SURROUNDING A TREE WITHIN A CIRCLE DESCRIBED BY A RADIUS OF ONE FOOT FOR EACH INCH OF THE TREE TRUNK DIAMETER AT 54" ABOVE FINISHED GRADE. FOR GROUPS OF TREES, PLACE BARRICADES BETWEEN TREES AND CONSTRUCTION ACTIVITY.

* TREE PROTECTION BARRICADE SHALL BE LOCATED TO PROTECT A MINIMUM OF 75% OF THE CRITICAL PROTECTION ZONE.

TREE BARRIER
NOT TO SCALE

LEGEND

- EXISTING TREE TO REMAIN (INSTALL TREE PROTECTION BARRICADE)
- LIMITS OF CLEARING
- TEMPORARY STOCK PILES
- EXIST. WATER BODY
- PROPERTY LINE
- TOB — TOB — TOP OF BANK
- TOE — TOE — EXISTING FENCE
- SF — SF — PROPOSED SAFTY FENCE
- PROPOSED SILT FENCE
- EXISTING GRADES
- × 14.3 BM — EXISTING NAVD BENCH MARK

0 20' 40' 60'
SCALE IN FEET

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CREECH
CONSULTING, INC.
CIVIL EXECUTION ENGINEERED
PO BOX 327, STUART, FLORIDA 34994 (772) 485-2140
BOARD OF PROFESSIONAL ENGINEERS, CERTIFICATE OF AUTHORIZATION NUMBER 5139
PROFESSIONAL SURVEYORS AND MAPPERS, AMENDED CERTIFICATE NO. LB-0006705

DATE	BY	REVISIONS
12/20/2023	JAC	PER FDOT DRIVEWAY CONNECTION COMMENTS
10/90/2023	JAC	PER TRC COMMENTS DATED 10/04/23
09/07/2023	JAC	PER TRC COMMENTS DATED 07/19/23

YOUTH & FAMILY
BEHAVIORAL HEALTH CENTER INC
EROSION CONTROL PLAN
FORT PIERCE FLORIDA

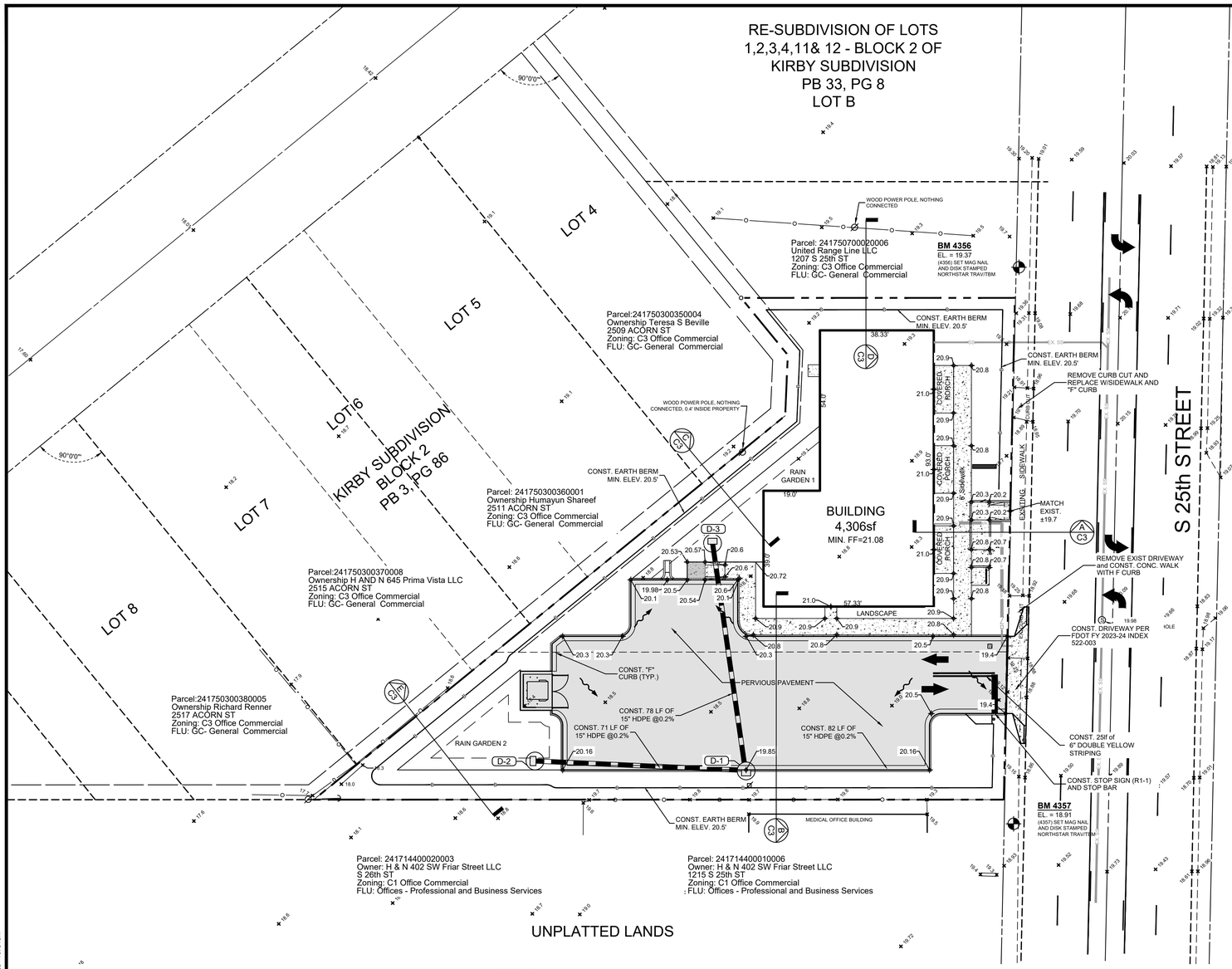
DRAWN BY:	JAC
CHECKED BY:	RTC / ANDREWS
LATITUDE:	27°26'5.40"N
LONGITUDE:	80°21'2.96"W
HORZ. SCALE:	1" = 20'
VERT. SCALE:	

SEAL
09/07/2023
RICHARD CREECH
FL P.E. NO. 38592

SHEET C2
PROJECT NO. 22-016-001

Approved
2023-A-490-00072
Administrative Team
1/3/2024

P:\Projects\2022\2022-016-001 Youth and Family Center\CAD\V... Plans\C2 EROSION CONTROL.dwg C2 EP ssc_j Dec 22,2023 - 4:56pm



LEGEND

- RIGHT OF WAY LINES
- CHAIN LINK FENCE
- CENTER LINE
- RIGHT OF WAY LINE
- SECTION LINE
- PLAT LOT LINE
- EASEMENT LINE
- PROPOSED CONCRETE
- PROPOSED PERVIOUS PAVEMENT
- EXISTING UTILITY POLE
- PROPOSED PERIMETER BERM
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER SERVCE
- PROPOSED 2" WATER SERVICE
- PROPOSED STORM PIPE
- PROPOSED INLETS
- PROPOSED DRAINAGE STRUCTURE
- DRAINAGE FLOW ARROW
- PROPOSED GRADES
- EXISTING ELEVATION
- PROPOSED LIFT STATION
- EXISTING FIBER OPTIC HANDHOLE
- EXISTING UTILITY POLE
- EXISTING NAVD BENCH MARK

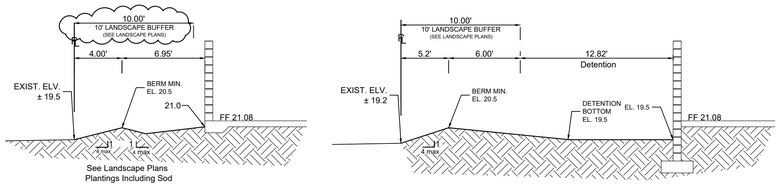
STORM DRAINAGE STRUCTURE TABLE	
STRUCTURE NAME	STRUCTURE DETAILS
D-01	GRATE ELEV. = 19.85 (W) INV. ELEV. = 14.25 (N) INV. ELEV. = 14.25
D-02	GRATE ELEV. = 19.50 (E) INV. ELEV. = 14.40
D-03	GRATE ELEV. = 19.50 (S) INV. ELEV. = 14.40

NOTES:

1. REQUIRED MINIMUM ELEVATIONS:
   a. MINIMUM FINISHED FLOOR ELEVATION = 21.08 NAVD.
   b. MINIMUM ROAD ELEVATION = 19.5 NAVD.
   c. MINIMUM PERIMETER ELEVATION = 20.5 NAVD.
2. RAIN GARDENS
   a. TOP OF RAIN GARDENS = 20.50'
   b. BOTTOM OF RAIN GARDENS = 19.50'

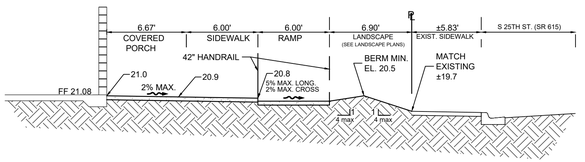
GRADING NOTES

1. THE SURVEY WAS PROVIDED BY NORTHSTAR GEOMATICS, FIELD DATED NOVEMBER 16, 2022.
2. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 121 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
3. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE DRAWINGS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR TO VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
4. ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED.
5. PRECAST STRUCTURES ARE TO BE USED.
6. STORM PIPE SHALL BE IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS.
7. ALL STORM PIPES & STRUCTURES TO BE CLEANED, VACUUMED & DESILTED PRIOR TO PROJECT TURN OVER. DRY DETENTION AREA TO BE DESILTED PRIOR TO PROJECT TURN OVER.
8. IF ANY EXISTING STRUCTURE TO REMAIN IS DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
9. ALL STORM PIPE ENTERING STORM STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STORM STRUCTURE IS WATERTIGHT.
10. ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE 6" ABOVE FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER".
11. THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE EPA, FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP), NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) "GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES" AND THE PROJECT SPECIFICATIONS.
12. CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
13. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
14. CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH GOVERNING SPECIFICATIONS UNTIL A HEALTHY STAND OF VEGETATION IS OBTAINED. ALSO REFER TO THE LANDSCAPE PLANS FOR ADDITIONAL REQUIREMENTS FOR LANDSCAPE/OPEN SPACE AREAS.
15. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
16. PROPOSED GRADE ELEVATIONS SHOWN ARE AT THE EDGE OF PAVEMENT LINE OF UNLESS OTHERWISE NOTED.
17. CONTRACTOR TO PAY SPECIAL ATTENTION WHEN COMPACTING SOIL AROUND SANITARY AND DRAINAGE STRUCTURES AND SHALL ENSURE THAT THE SOIL IS PROPERLY COMPACTED TO ELIMINATE DIFFERENTIAL SETTLEMENT. THE PAVEMENT SUBGRADE FILL PLACED WITHIN 24 INCHES OF FINISHED SUBGRADE ELEVATION AND AT LEAST THE UPPER 24 INCHES OF SUBGRADE IN ALL CUT AREAS SHALL BE COMPACTED TO AT LEAST 98% OF THE MATERIAL'S MAXIMUM MODIFIED PROCTOR DRY DENSITY (ASTM D1557).
18. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SUFFICIENT COVER OVER ALL PIPES DURING ALL CONSTRUCTION PHASES IN ORDER TO PREVENT DAMAGE TO THE DRAINAGE SYSTEM.
19. ANY DAMAGE TO THE DRAINAGE SYSTEM DURING CONSTRUCTION WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR / REPLACE AND INCUR ALL COSTS.
20. CONTRACTOR SHALL TAKE SPECIAL CARE TO AVOID UNNECESSARY DISTURBANCE OF EXISTING SOILS, ESPECIALLY THOSE W/ SENSITIVE OPTIMAL MOISTURE CONTENT.
21. DRAINAGE STRUCTURE SYMBOLS SHOWN ON THE DRAWING ARE NOT TO SCALE.
22. SAW CUT PAVEMENT AT CONFORMS AND PROTECT EDGE.
23. ALL CURB CUT RAMPS SHALL HAVE DETECTABLE WARNING STRIPS AND CONSTRUCTED PER LATEST EDITION OF FDOT STANDARD SPECIFICATIONS SECTION 522-002 AND PER ADA REQUIREMENTS.
24. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF AND EXISTING UTILITIES SERVING PREVIOUS STRUCTURES. UTILITIES ARE TO BE REMOVED TO THE RIGHT-OF-WAY.

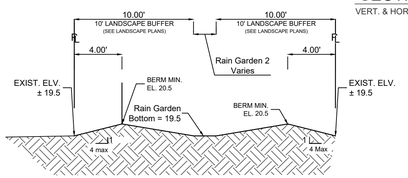


SECTION D-D
VERT. & HORZ. SCALE 1"=6'

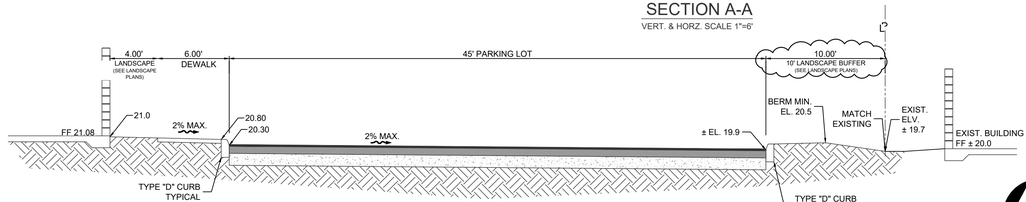
SECTION C-C
VERT. & HORZ. SCALE 1"=6'



SECTION A-A
VERT. & HORZ. SCALE 1"=6'



SECTION E-E
VERT. & HORZ. SCALE 1"=6'



See Landscape Plans Plantings Including Sod

SECTION B-B
VERT. & HORZ. SCALE 1"=6'

0 20 40 60
SCALE IN FEET

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P:\Projects\2022\2022-016-001 Youth and Family Center\CIVIL\~ Plans\C3 STORM.dwg C3 STORM dat=_j Dec 21,2023--10:31am

CREECH
CONSULTING, INC.
CIVIL ENGINEERING
PO BOX 327, STUART, FLORIDA 34994 (772) 485-2140
BOARD OF PROFESSIONAL ENGINEERS, CERTIFICATE OF AUTHORIZATION NUMBER 5139
PROFESSIONAL SURVEYORS AND MAPPERS, AMENDED CERTIFICATE NO. LB-0006705

DATE	BY	REVISIONS
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10/90/2023	JAC	PER TRC COMMENTS DATED 10/04/23
09/07/2023	JAC	PER TRC COMMENTS DATED 07/19/23

YOUTH & FAMILY
BEHAVIORAL HEALTH CENTER INC
PAVING, GRADING & DRAINAGE PLAN
FORT PIERCE FLORIDA

DRAWN BY:	JAC
CHECKED BY:	RTC / ANDREWS
LATITUDE:	27°26'5.40"N
LONGITUDE:	80°21'2.96"W
HORZ. SCALE:	1" =20'
VERT. SCALE:	

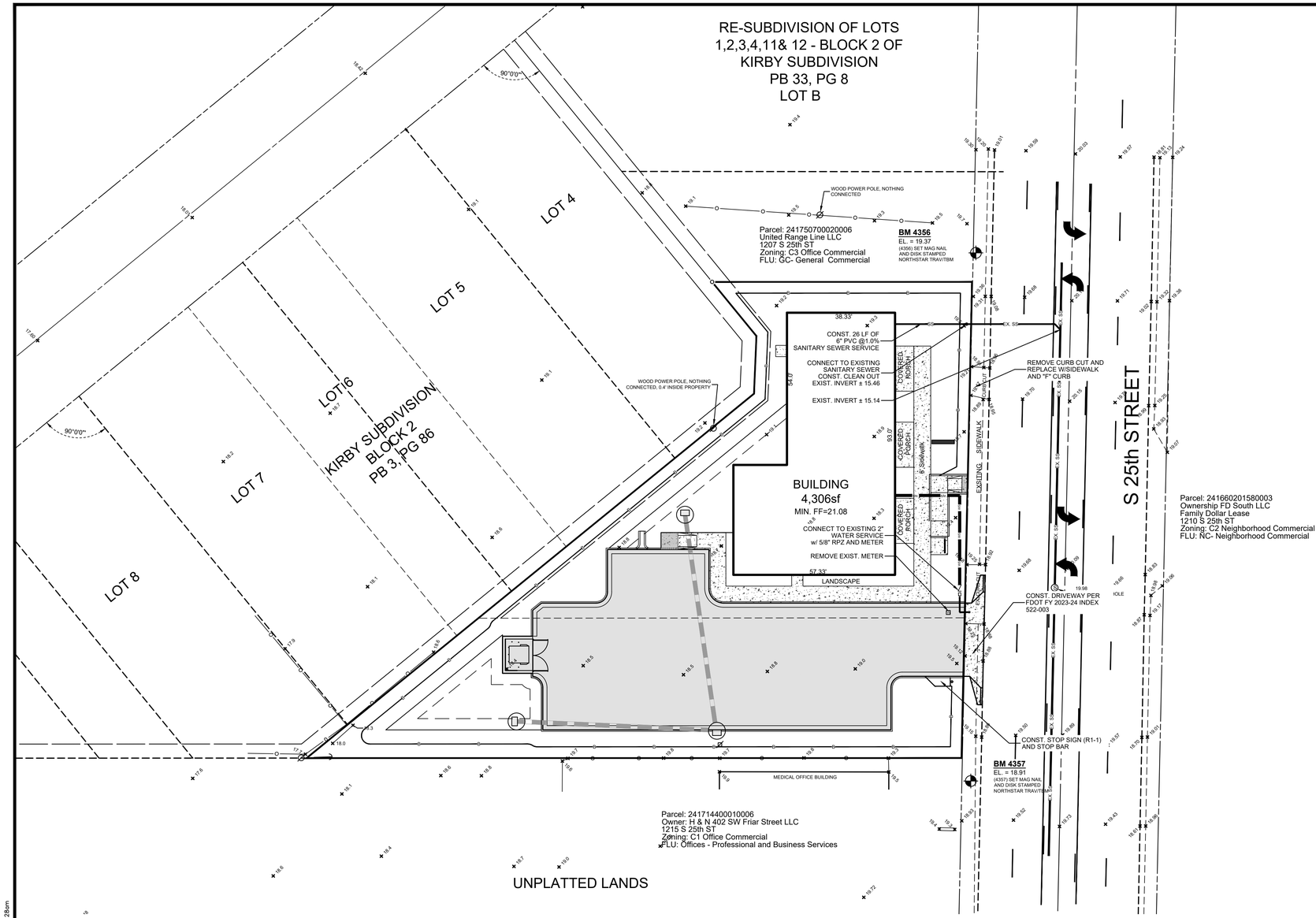
SEAL

09/07/2023
RICHARD CREECH
FL P.E. NO. 38592

SHEET C3

PROJECT NO. 22-016-001

Approved
2023-A-490-00072
Kimberly Graham
1/3/2024



LEGEND

- RIGHT OF WAY LINES
- CHAIN LINK FENCE
- CENTER LINE
- RIGHT OF WAY LINE
- SECTION LINE
- PLAT LOT LINE
- EASEMENT LINE
- PROPOSED CONCRETE
- PROPOSED PERVIOUS PAVEMENT
- EXISTING UTILITY POLE
- PROPOSED PERIMETER BERM
- EX. SS — EXISTING SANITARY SEWER
- SS — PROPOSED SANITARY SEWER SERVCE
- W — PROPOSED 2" WATER SERVICE
- PROPOSED STORM PIPE
- PROPOSED INLETS
- D-09 — PROPOSED DRAINAGE STRUCTURE
- DRAINAGE FLOW ARROW
- 16.30 / 14.3 — PROPOSED GRADES / EXISTING ELEVATION
- S — PROPOSED LIFT STATION
- FH — EXISTING FIBER OPTIC HANDHOLE
- EXISTING UTILITY POLE
- BM — EXISTING NAVD BENCH MARK

UTILITY NOTES

1. EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE FORT PIERCE UTILITY AUTHORITY, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
3. ALL FILL MATERIAL IS TO BE IN PLACE, AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
4. CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
5. SANITARY SEWER PIPE SHALL BE AS FOLLOWS:
   - 6" PVC SDR26 PER ASTM D 3034
   - 8" PVC SDR26 PER ASTM D 3034
6. WATER LINES SHALL BE AS FOLLOWS:
   - 2" AND SMALLER, POLYETHYLENE AS DEFINED BY ASTM D2737 SDR9 COPPER TUBE SIZE
   - 4"-12", PVC DR-18 C-900
7. DUCTILE IRON PIPE (DIP) SHALL BE REQUIRED WHEN WITHIN SIX (6) FEET HORIZONTALLY OF SEWAGE FACILITIES OR PIPES.
8. DUCTILE IRON PIPE (DIP) SHALL BE A MINIMUM OF PRESSURE CLASS 350 AND CONFORM TO THE LATEST STANDARDS OF ANSI/AWWA C150/A21.50 FOR THE THICKNESS DESIGN OF DIP.
9. ALL UTILITIES SHOULD HAVE A MINIMUM HORIZONTAL SEPARATION OF 3' TO POWER POLES, LIGHT POLES, OR OTHER UTILITIES, 15' TO BUILDINGS, TOP OF BANKS OF LAKES & CANALS AND OTHER STRUCTURES, OR ABSOLUTE MINIMUM OF 10' WITH DIP.
10. ALL WATER FITTINGS ARE TO BE DUCTILE IRON MECHANICAL JOINTS AS CALLED OUT IN FORT PIERCE UTILITY AUTHORITY MINIMUM DESIGN & CONSTRUCTION STANDARDS.
11. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 30" COVER ON ALL WATERLINES, 8" OR SMALLER. IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES (EXISTING AND PROPOSED), THE WATER LINE SHALL HAVE APPROPRIATE RESTRAINTS AS REQUIRED BY FORT PIERCE UTILITY AUTHORITY , A MINIMUM OF 6" CLEARANCE (12" PREFERRED).
12. LINES UNDERGROUND SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
13. TOPS OF EXISTING MANHOLES SHALL BE RAISED AS NECESSARY TO BE FLUSH WITH PROPOSED PAVEMENT ELEVATIONS, AND TO BE ONE FOOT ABOVE FINISHED GROUND ELEVATIONS WITH WATERTIGHT LIDS WHEN LOCATED IN UNPAVED AREAS.
14. CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE LOCAL AUTHORITIES REGARDING TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES.
15. ALL EXISTING VALVES TO BE ADJUSTED TO FINAL FINISHED GRADE.
16. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES. THIS AND THE FINAL CONNECTIONS OF THE SERVICE SHALL BE COMPLETED AT LEAST 30 DAYS PRIOR TO C.O.
17. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
18. CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING UTILITY DURING CONSTRUCTION AT NO COST TO THE OWNER.
19. SEE FORT PIERCE UTILITY AUTHORITY MINIMUM DESIGN & CONSTRUCTION STANDARDS FOR BACKFILLING AND COMPACTION REQUIREMENTS ON UTILITY TRENCHES.
20. CONTRACTOR SHALL COMPLY WITH FORT PIERCE UTILITY AUTHORITY MINIMUM DESIGN & CONSTRUCTION STANDARDS, LATEST EDITION.
21. CONTRACTOR SHALL GROUT ALL PIPE ENTRANCES AND PIPE REMOVALS TO/FROM MANHOLES TO ASSURE WATER TIGHT CONNECTIONS AND PLUGS.
22. DRAWINGS DO NOT PURPORT TO SHOW ALL EXISTING UTILITIES.
23. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATION OF ALL UTILITY ENTRANCES TO INCLUDE SANITARY SEWER LATERALS, DOMESTIC AND FIRE PROTECTION WATER SERVICE, ELECTRICAL, TELEPHONE, FIBER OPTIC, AND GAS SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND ASSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH FORT PIERCE UTILITY AUTHORITY REQUIREMENTS AS TO LOCATION AND SCHEDULING FOR TIE-INS, CONNECTIONS AND INSPECTIONS PRIOR TO CONNECTING TO EXISTING UTILITIES.
24. CONTRACTOR SHALL CONDUCT ALL REQUIRED TESTS TO THE SATISFACTION OF THE RESPECTIVE UTILITY COMPANIES AND THE OWNER'S INSPECTING AUTHORITIES.
25. CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST STANDARDS OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING AND ANY OTHER MEANS OF PROTECTION. THIS INCLUDES, BUT IS NOT LIMITED TO, ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE TO COMPLY WITH PERFORMANCE CRITERIA FOR OSHA.
26. THE INSTALLATION OR REPAIR OF ANY UNDERGROUND FACILITIES OF PIPING WHICH CONNECTS TO OR FURNISHES WATER FOR THE FIRE PROTECTION SPRINKLER SYSTEM SHALL BE PERFORMED ONLY BY A LICENSED UTILITY CONTRACTOR, FIRE PROTECTION SPRINKLER CONTRACTOR OR LICENSED PLUMBER. SEE O.C.G.A. TITLE 25-11-7-(a). A COPY OF THE LICENSE OR CERTIFICATE OF COMPETENCY SHALL BE PROVIDED TO THE INSPECTOR AT THE FINAL INSPECTION.

0 20 40 60
SCALE IN FEET

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CREECH
CONSULTING, INC.
CIVIL EXTINCTION ENGINEERED
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YOUTH & FAMILY
BEHAVIORAL HEALTH CENTER INC
WATER AND SEWER PLAN
FORT PIERCE FLORIDA

DRAWN BY:	JAC
CHECKED BY:	RTC / ANDREWS
LATITUDE:	27°26'5.40"N
LONGITUDE:	80°21'2.96"W
HORZ. SCALE:	1" =20'
VERT. SCALE:	

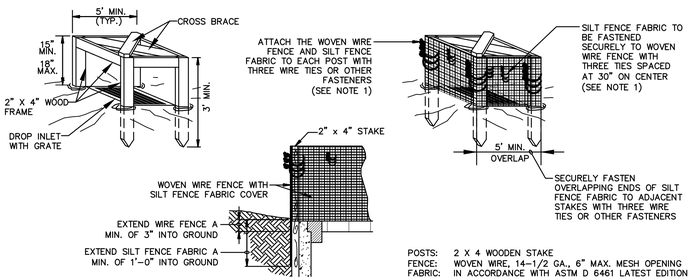
SEAL

09/07/2023
RICHARD CREECH
FL P.E. NO. 38592

SHEET C4

PROJECT NO. 22-016-001

Approved
2023.12.490.00072
Kimberly Graham
1/3/2024



POSTS: 2 X 4 WOODEN STAKE
FENCE: WOVEN WIRE, 14-1/2 GA., 6" MAX. MESH OPENING
FABRIC: IN ACCORDANCE WITH ASTM D 6461 LATEST EDITION

NOTES:

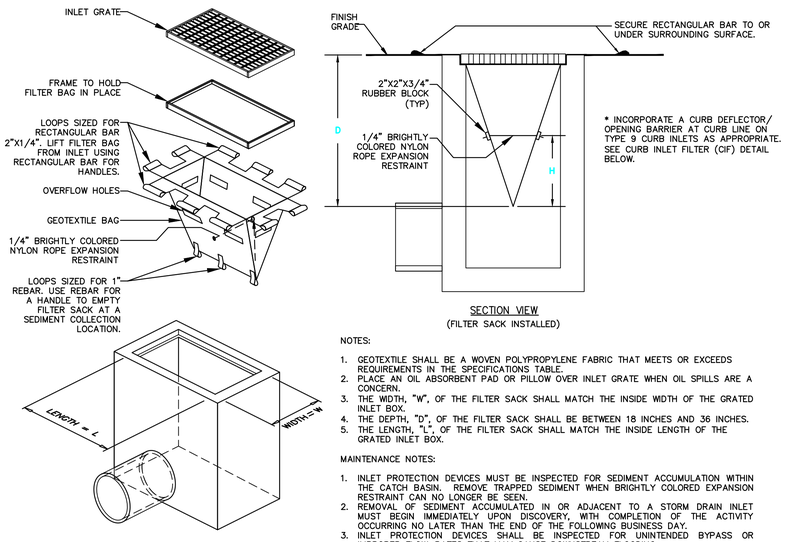
1. ATTACH THE WOVEN WIRE FENCE AND THE GEOTEXTILE TO EACH POST (SPACED EVERY 30") WITH THREE WIRE TIES OR OTHER FASTENERS, ALL SPACED WITHIN THE TOP 8" OF THE FABRIC. ATTACH EACH TIE DIAGONALLY 45 DEGREES THROUGH THE FABRIC, WITH EACH PUNCTURE AT LEAST 1" VERTICALLY APART.
2. WHEN TWO SECTIONS OF SILT FENCE FABRIC ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED ACROSS TWO POSTS.
3. MAINTENANCE SHALL BE PERFORMED AS NOTED IN THE SWPPP. DEPTH OF ACCUMULATED SEDIMENTS MAY NOT EXCEED ONE-THIRD THE HEIGHT OF THE FABRIC.
4. ALL SILT FENCE INLET PROTECTIONS SHALL INCLUDE WIRE SUPPORT.

MAINTENANCE NOTES:

1. INLET PROTECTION DEVICES MUST BE INSPECTED FOR SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN (IF USING INSERT-TYPE DEVICE) OR UPGRADIENT OF THE INLET.
2. REMOVAL OF SEDIMENT ACCUMULATED IN OR ADJACENT TO A STORM DRAIN INLET MUST BEGIN IMMEDIATELY UPON DISCOVERY, WITH COMPLETION OF THE ACTIVITY OCCURRING NO LATER THAN THE END OF THE FOLLOWING BUSINESS DAY.
3. INLET PROTECTION DEVICES SHALL BE INSPECTED FOR UNINTENDED BYPASS OR IMPROPER FLOW-RATES THAT MAY CAUSE DOWNSTREAM FLOODING.
4. CONTACT THE CEC FOR ALTERNATE INLET PROTECTION IF THE DESIGNED PROTECTION MAY IMPACT DOWNSTREAM BMPS, ADJACENT SLOPES, ETC., DUE TO PONDING ISSUES. ENSURE THAT NO UNDERMINING OF INLET PROTECTION DEVICES HAS OCCURRED.
5. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.

SILT FENCE INLET PROTECTION DETAIL AT UNPAVED AREAS

N.T.S.



SECTION VIEW
(FILTER SACK INSTALLED)

ISOMETRIC VIEW

NOTES:

1. GEOTEXTILE SHALL BE A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS REQUIREMENTS IN THE SPECIFICATIONS TABLE.
2. PLACE AN OIL ABSORBENT PAD OR PILLOW OVER INLET GRATE WHEN OIL SPILLS ARE A CONCERN.
3. THE WIDTH, "W", OF THE FILTER SACK SHALL MATCH THE INSIDE WIDTH OF THE GRATED INLET BOX.
4. THE DEPTH, "D", OF THE FILTER SACK SHALL BE BETWEEN 18 INCHES AND 36 INCHES.
5. THE LENGTH, "L", OF THE FILTER SACK SHALL MATCH THE INSIDE LENGTH OF THE GRATED INLET BOX.

MAINTENANCE NOTES:

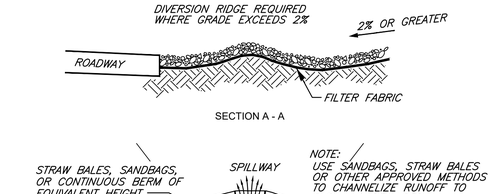
1. INLET PROTECTION DEVICES MUST BE INSPECTED FOR SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN. REMOVE TRAPPED SEDIMENT WHEN BRIGHTLY COLORED EXPANSION RESTRAINT CAN NO LONGER BE SEEN.
2. REMOVAL OF SEDIMENT ACCUMULATED IN OR ADJACENT TO A STORM DRAIN INLET MUST BEGIN IMMEDIATELY UPON DISCOVERY, WITH COMPLETION OF THE ACTIVITY OCCURRING NO LATER THAN THE END OF THE FOLLOWING BUSINESS DAY.
3. INLET PROTECTION DEVICES SHALL BE INSPECTED FOR UNINTENDED BYPASS OR IMPROPER FLOW-RATES THAT MAY CAUSE DOWNSTREAM FLOODING.
4. CONTACT THE CEC FOR ALTERNATE INLET PROTECTION IF THE DESIGNED PROTECTION MAY IMPACT DOWNSTREAM BMPS, ADJACENT SLOPES, ETC., DUE TO PONDING ISSUES. ENSURE THAT NO UNDERMINING OF INLET PROTECTION DEVICES HAS OCCURRED.
5. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.

LOW TO MODERATE FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	300 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	120 LBS
MULLEN BURST	ASTM D-3786	800 PSI
TRAPEZOID TEAR	ASTM D-4533	120 LBS
UV RESISTANCE	ASTM D-4355	80 %
APPARENT OPENING SIZE	ASTM D-4751	40 US SIEVE
FLOW RATE	ASTM D-4491	40 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	0.55 SEC -1

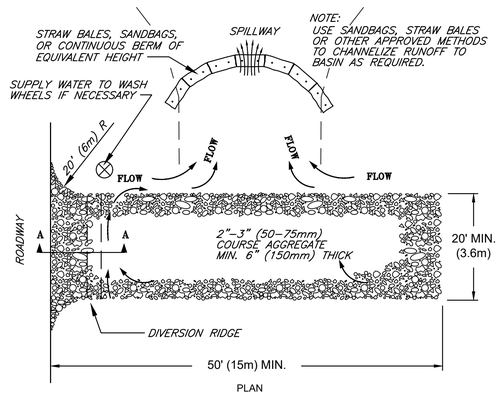
MODERATE TO HIGH FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	135 LBS
MULLEN BURST	ASTM D-3786	420 PSI
TRAPEZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4355	90 %
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	1.5 SEC -1

INLET PROTECTION FILTER SACK

N.T.S.



SECTION A - A

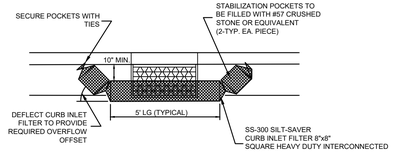


PLAN

NOTES:

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

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT DETAIL

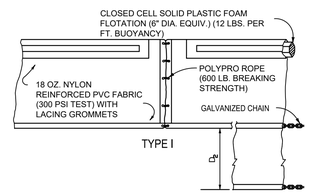


INSTALLATION PROCEDURE:

1. IDENTIFY OPENING DIMENSIONS TO DETERMINE THE NUMBER OF SS-300 CURB INLET FILTERS THAT WILL BE REQUIRED.
2. COMPLETELY FILL THE STABILIZATION CHAMBER ON EACH END OF EACH SS-300 CURB INLET FILTER WITH #57 CRUSHED STONE.
3. SECURE ENDS OF THE STABILIZATION POCKETS WITH TIES.
4. PLACE THE SS-300 CURB INLET FILTER(S) IN FRONT OF THE CURB INLET OR OPENING TO PREVENT THE MIGRATION OF SILT INTO THE STORM DRAIN SYSTEM.

CURB INLET FILTER DETAIL

N.T.S.

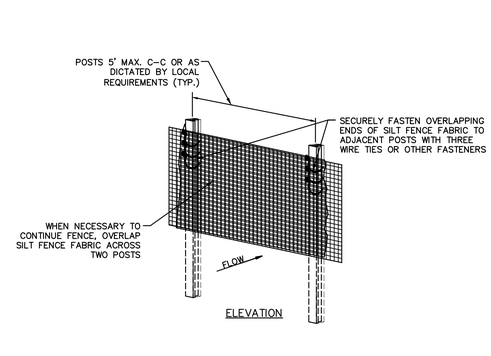


D =5' STD. (SINGLE PANEL FOR DEPTHS 5' OR LESS),
D =5' STD. (ADDITIONAL PANEL FOR DEPTHS GREATER THAN 5'),

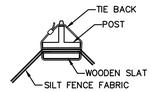
CURTAIN TO REACH BOTTOM UP TO DEPTHS OF 10'. TWO (2) PANELS TO BE USED FOR DEPTHS GREATER THAN 10' UNLESS SPECIAL DEPTHS SPECIFICALLY CALLED FOR IN THE PLANS OR AS DETERMINED BY THE ENGINEER.

FLOATING TURBIDITY BARRIER DETAIL

N.T.S.



ELEVATION

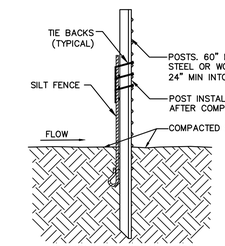


INSIDE CORNER - PLAN VIEW

TABLE 1 Temporary Silt Fence Material Property Requirements

		Test Method	Units	Supported[a] Silt Fence	Unsupported[a] Silt Fence	Type of Value
Grab Strength		ASTM D 4632	N (lbs)			
	Machine Direction			400 (90)	550 (90)	MARV
	X-Machine Direction			400 (90)	450 (90)	MARV
Permittivity[B]		ASTM D 4491	sec-1	0.05	0.05	MARV
Apparent Opening Size[B]		ASTM D 4751	mm (US Sieve #)	0.60 (30)	0.60 (30)	Max. ARV[C]
Ultraviolet Stability		ASTM D 4355	% Retained Strength	70% after 500 h of exposure	70% after 500 h of exposure	Typical

[a]Silt fence support shall consist of 14 gage steel wire with a mesh spacing of 150 mm (6 in.) or prefabricated polymer mesh of equivalent strength.
[B]These default values are based on empirical evidence with a variety of sediments. For environmentally sensitive areas, a review of previous experience and/or site or regionally specific geotextile tests in accordance with Test Method D 5141 should be performed by the agency to confirm suitability of these requirements.
[C]As measured in accordance with Test Method D 4632.
TABLE 1 TAKEN FROM ASTM D 6461-99 (2007)



COMPLETED INSTALLATION

POSTS: STEEL OR WOOD
FABRIC: IN ACCORDANCE WITH ASTM D 6461 LATEST EDITION.

SPECIFICATIONS FOR SILT FENCE INSTALLATION

1. SILT FENCE SHALL BE PROVIDED AND INSTALLED PER ASTM D-6462-03 LATEST EDITION.
2. INSTALL SILT FENCE AT A FAIRLY LEVEL GRADE ALONG THE CONTOUR WITH THE ENDS CURVED UPHILL TO PROVIDE SUFFICIENT UPSTREAM STORAGE VOLUME FOR ANTICIPATED RUNOFF.
3. INSTALL POSTS AT A MAXIMUM OF 5'-0" APART.
4. INSTALL POSTS AT A MINIMUM DEPTH OF 24" ON THE DOWNSTREAM SIDE OF THE SILT FENCE, AND AS CLOSE AS POSSIBLE TO THE FABRIC, ENABLING POSTS TO SUPPORT UPSTREAM WATER PRESSURE ON THE FABRIC.
5. INSTALL WITH THE POSTS AWAY FROM THE SILT FENCE FABRIC.
6. ATTACH THE FABRIC TO EACH POST WITH THREE TIES, ALL SPACED WITHIN THE TOP 8" OF THE FABRIC. ATTACH EACH TIE DIAGONALLY 45 DEGREES THROUGH THE FABRIC, WITH EACH PUNCTURE AT LEAST 1" VERTICALLY APART.
7. WRAP APPROXIMATELY 6" OF FABRIC AROUND THE END POSTS AND SECURE WITH 3 TIES.
8. WHEN NECESSARY TO CONTINUE FENCE, OVERLAP SILT FENCE FABRIC ACROSS TWO POSTS.
9. NO MORE THAN 24" OF A 36" FABRIC IS ALLOWED ABOVE GROUND LEVEL.
10. THE INSTALLATION SHOULD BE CHECKED AND CORRECTED FOR ANY DEVIATIONS BEFORE COMPACTION. USE A FLAT-BLADED SHOVEL TO TUCK FABRIC DEEPER INTO THE TRENCH IF NECESSARY.
11. COMPACT THE SOIL IMMEDIATELY NEXT TO THE SILT FENCE FABRIC.
12. WHEN TWO SECTIONS OF SILT FENCE FABRIC ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED A MINIMUM OF 60" ACROSS TWO POSTS, AS SHOWN.

MAINTENANCE NOTES

1. SILT FENCES SHALL BE INSPECTED ALONG ITS ENTIRETY AND MUST BE CLEANED WHEN SEDIMENT HAS ACCUMULATED TO ONE-THIRD THE HEIGHT OF THE SILT FENCE. MAINTENANCE CLEANOUT MUST BE CONDUCTED REGULARLY TO PREVENT ACCUMULATED SEDIMENTS FROM REACHING ON-THIRD THE HEIGHT OF THE SILT FENCE.
2. ALL MATERIAL EXCAVATED FROM BEHIND SILT FENCE SHALL BE STOCKPILED ON AN UPLAND PORTION OF THE SITE IF SUITABLE FOR REUSE.
3. SPECIAL ATTENTION SHALL BE PAID TO ENSURE THAT NO UNDERMINING OF SILT FENCE HAS OCCURRED AND THAT NO BYPASS IS OCCURRING AT JOINING SECTIONS.
4. IF EXCESS SEDIMENT IS ACCUMULATING IN ANY SECTION OF SILT FENCE, THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL UPSTREAM STABILIZATION MEASURES OR ADDITIONAL BMPS TO PREVENT EXCESSIVE BUILDUP ON SILT FENCE.
5. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED.

SFI

SILT FENCE INSTALLATION

N.T.S.

B.M.P.'s (BEST MANAGEMENT PRACTICES)

These plans addresses the following areas:

1. General erosion control.
2. Protection of surface water quality during and after construction
3. Control of wind erosion.

The various techniques or actions identified under each section indicate the appropriate situation when the techniques should be employed. It should be noted that the measures identified on this plan are only suggested BMP(s). The contractor shall provide pollution prevention and erosion control measures and as necessary for each specific application.

SECTION 1 GENERAL EROSION CONTROL

1.1 General erosion control BMPs shall be employed to minimize soil erosion and potential lake slope cave-ins. While the various techniques required will be site and plan specific, they should be employed as soon as possible during construction activities.

1.2 Cleared site development areas not continually scheduled for construction activities shall be covered with hay or overseeded and periodically watered sufficient to stabilize the temporary groundcover.

1.3 Slopes of banks of wet detention ponds shall be constructed not steeper than 4H:1V from top of bank to (3) feet below normal water level.

1.4 All grass slopes constructed 4H:1V and steeper shall be sodded as soon as practical after their construction.

1.5 Sod shall be placed for a 3-foot wide strip adjoining all curbing and around all inlets as required by plan. Sod shall be placed before silt barriers are removed.

1.6 Where required to prevent erosion from sheet flow across bare ground from entering a lake or swale, a temporary sediment sump shall be constructed. The temporary sediment sump shall remain in place until vegetation is established on the ground draining to the sump.

SECTION 2 PROTECTION OF SURFACE WATER QUALITY DURING & AFTER CONSTRUCTION

2.1 Surface water quality shall be maintained by employing the following BMPs, at a minimum, in the construction planning and construction of all improvements.

2.2 Where practical, stormwater shall be conveyed by swales.

2.3 Erosion control measures shall be employed to minimize turbidity of surface waters located downstream of any construction activity. While the various measures required will be site specific, they shall be employed as needed in accordance with the following:

a. In general, erosion shall be controlled at the furthest practical upstream location.

b. Stormwater inlets shall be protected during construction as shown. Protection measures shall be employed as soon as practical during the various stages of inlet construction. Silt barriers shall remain in place until sodding around inlets is complete.

2.4 Heavy construction equipment parking and maintenance areas shall be designed to prevent oil, grease, and lubricants from entering site drainage features including stormwater collection and treatment systems. Contractors shall provide broad dikes, hay bales or silt screens around, and sediment sumps within, such areas as required to contain spills of oil, grease or lubricants. Contractors shall have available, and shall use, absorbent filter pads to clean up spills as soon as possible after occurrence.

2.5 Silt barriers, any silt which accumulates behind the barriers, and any fill used to anchor the barriers shall be removed promptly after the end of the maintenance period specified for the barriers.

SECTION 3 CONTROL OF WIND EROSION

3.1 Wind erosion shall be controlled by employing the following methods as necessary and appropriate:

a. Bare earth areas shall be watered during construction as necessary to minimize the transport of fugitive dust. It may be necessary to limit construction vehicle speed if bare earth has not been effectively watered. In no case shall fugitive dust be allowed to leave the site under construction.

b. As soon as practical after completion of construction, bare earth areas shall be vegetated.

c. At any time both during and after site construction that watering and/or vegetation are not effective in controlling wind erosion and/or transport of fugitive dust, other methods as are necessary for such control shall be employed. These methods may include erection of dust control fences. If required, dust control fences shall be constructed in accordance with the detail for a silt fence, as shown, except the minimum height shall be 4 feet.

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

CREECH CONSULTING, INC.
CIVIL ENGINEERING
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BOARD OF PROFESSIONAL ENGINEERS, CERTIFICATE OF AUTHORIZATION NUMBER 5139
PROFESSIONAL SURVEYORS AND MAPPERS, AMENDED CERTIFICATE NO. LB-0006705

DATE	BY	REVISIONS
12/20/2023	JAC	PER FDOT DRIVEWAY CONNECTION COMMENTS
10/30/2023	JAC	PER TRC COMMENTS DATED 10/04/23
09/07/2023	JAC	PER TRC COMMENTS DATED 07/19/23

YOUTH & FAMILY
BEHAVIORAL HEALTH CENTER INC
EROSION CONTROL DETAILS
FORT PIERCE FLORIDA

DRAWN BY: JAC
CHECKED BY: RTC / ANDREWS
LATITUDE: 27°26'5.40"N
LONGITUDE: 80°21'2.96"W
HORZ. SCALE:
VERT. SCALE:

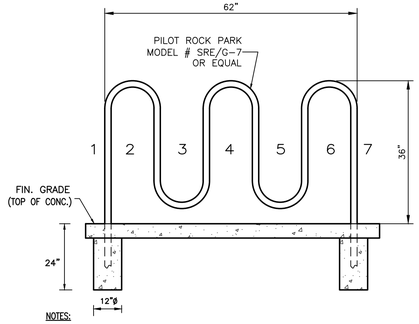
SEAL

09/07/2023
RICHARD CREECH
FL P.E. NO. 38592

SHEET D1
PROJECT NO. 22-016-001

Approved
20240304-490-00072
Kimberly Graham
1/3/2024

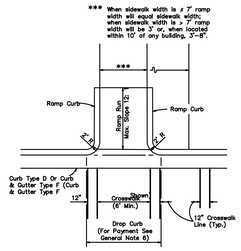
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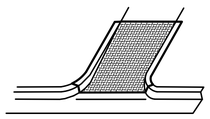
NOTES:

1. BIKE RACK SHALL BE EMBEDDED A INTO A 24" DEEP, 12" DIAMETER CONCRETE FOOTER

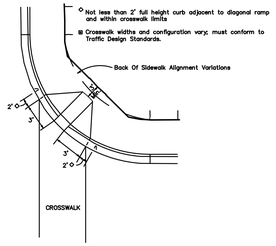
TYPICAL BIKE RACK DETAIL



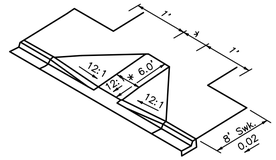
PLAN VIEW



PICTORIAL VIEW

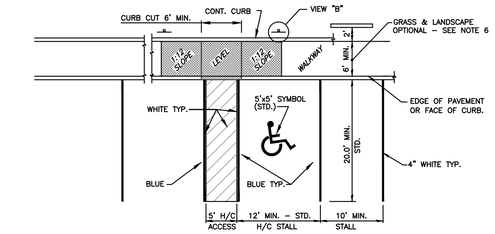


DIAGONAL RAMPS



8' SIDEWALK RAMPS

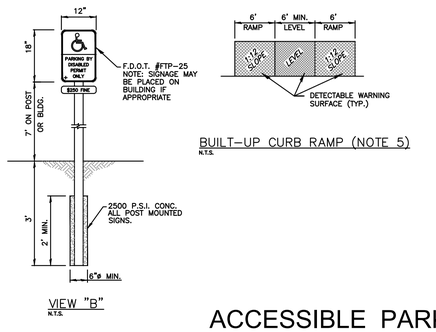
ACCESSIBLE RAMPS



HANDICAP PARKING STALL
N.T.S.

NOTES:

1. ACCESSIBILITY TO AND WITHIN BUILDINGS, INCLUDING THE PLACEMENT OF RAMPS, SHALL CONFORM TO THE LATEST EDITIONS OF THE D.C.A. ACCESSIBILITY MANUAL, CHAPTER 553, PART V, OF THE FLORIDA STATUTES AND THE F.D.O.T. ROADWAY & TRAFFIC DESIGN STANDARDS.
2. ALL PARKING STALLS SHALL BE DOUBLE STRIPED AND ALL STRIPING SHALL BE FOUR (4) INCHES WIDE.
3. HANDICAP ACCESWAY STRIPING SHALL BE LAID OUT ON 45° ANGLE SPACE AT 4' ON CENTER AS MEASURED ALONG THE ACCESSWAY.
4. BUILT–UP CURB RAMPS SHALL NOT PROJECT INTO TRAFFIC LANES.
5. AS AN OPTION, THE TWO FOOT PAVED AREA (FROM THE EDGE OF PAVEMENT OR CURB TO THE BACK OF THE WHEEL STOP) MAY BE LANDSCAPED IN LIEU OF ASPHALT. (SEE SECTION A–A).
6. THERMOPLASTIC STRIPING IS RECOMMENDED AT ALL WALKWAYS IN THE PARKING AREAS.
7. PAINT SHALL BE APPLIED AT A RATE THICK ENOUGH TO PROVIDE SOLID WHITE/BLUE/BLACK LINES WITH NO LIGHT SPOTS OR PAINT SKIPS (15 MILS MIN.).
8. PARKING STALL AREAS SHALL HAVE A MIN. OF 6" OF BASE COMPACTED TO 98% DRY DENSITY PER AASHTO T–180 SPEC. AND A MINIMUM OF 1" OF TYPE S–III PAVEMENT.

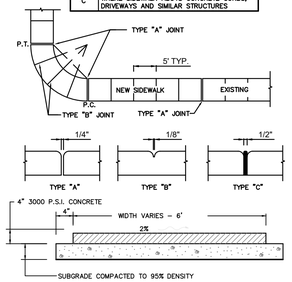


VIEW "B"
N.T.S.

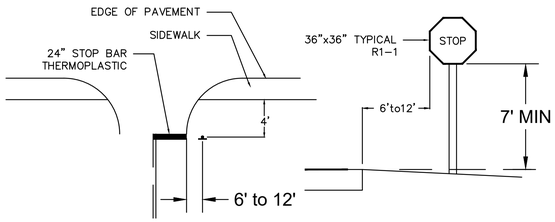
BUILT–UP CURB RAMP (NOTE 5)
N.T.S.

ACCESSIBLE PARKING, STALLS AND DETAILS

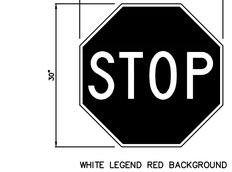
TABLE OF SIDEWALK JOINTS	
TYPE	LOCATION
"A"	P.C. AND P.T. OF CURVES
"B"	5'0" CENTER TO CENTER ON SIDEWALK
"C"	WHERE SIDEWALK ABUTS CONCRETE CURBS, DRIVEWAYS AND SIMILAR STRUCTURES



TYPICAL SIDEWALK DETAIL

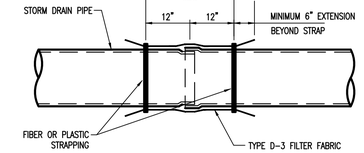


TYPICAL STOP SIGN LOCATION DETAIL



WHITE LEGEND RED BACKGROUND

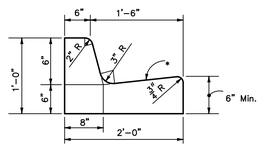
R1-1 STOP SIGN DETAIL



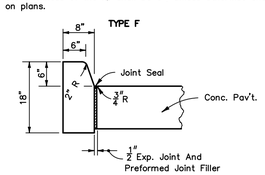
NOTES:

1. ALL PIPE LOCATED UNDER ROADWAYS AND/OR RESIDENTIAL PARKING AREAS SHALL BE REINFORCED CONCRETE PIPE (RCP).
2. MINIMUM PIPE DIAMETER SHALL BE 15" OR ELLIPTICAL EQUIVALENT.
3. FILTER FABRIC SHALL BE OVERLAPPED 2'–0" MINIMUM AT ALL JOINTS, INCLUDING ALL END TREATMENTS, REGARDLESS OF PIPE CULVERT MATERIAL.
4. A CONTINUOUS PIECE OF FILTER FABRIC, CONFORMING TO TYPE "D–3" OF FDOT STANDARD SPECIFICATIONS 985, SHALL BE USED AT ALL JOINTS, INCLUDING STRUCTURES AND END TREATMENTS.

STORM DRAIN PIPE JOINT DETAIL

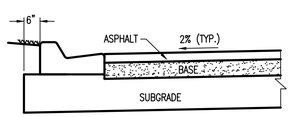


*Note: When used on high side of roadways, the cross slope of the gutter shall match the cross slope of the adjacent pavement the thickness of the lip shall be 6", unless otherwise shown on plans.



TYPE D

TYPICAL CURB DETAILS

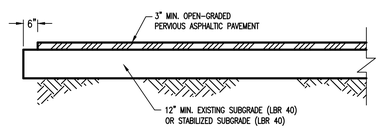


- SURFACE COURSE: 2" TYPE SP-12.5 ASPHALTIC CONCRETE
- BASE COURSE: 6" CRUSHED LIMEROCK WITH MIN. LBR 100 COMPACTED TO 98% MODIFIED PROCTOR MAX. DRY DENSITY
- SUBGRADE: 12" STABLIZED SUBGRADE (LBR-40) COMPACTED TO 98% MODIFIED PROCTOR MAX. DRY DENSITY

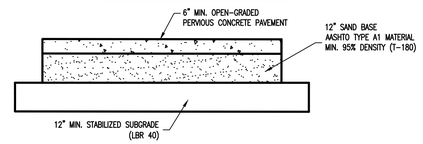
NOTES:

1. ASPHALT MIX SHALL NOT CONTAIN MORE THAN 30% RECLAIMED ASPHALT PAVEMENT (R.A.P.)
2. ALL MATERIAL USED WITHIN THE ROADWAY MUST MEET FDOT SPECIFICATIONS AND BE SUPPLIED FROM A FDOT CERTIFIED MINING OPERATION AND ASPHALT PLANT.
3. A MINIMUM OF TWO DENSITY TESTS SHALL BE TAKEN FOR EACH SIX (6) INCH LIFT OF SUB GRADE AND BASE. WHEN THE SPECIFIED COMPACTED BASE IS GREATER THAN SIX AND ONE-HALF (6 ½") INCHES THE BASE SHALL BE CONSTRUCTED IN TWO OR MORE COURSES. PROCTORS FOR MATERIALS USED IN BACK-FILLING SHALL BE OBTAINED BY A CERTIFIED LABORATORY. DENSITY TESTS SHALL BE CONDUCTED BY A CERTIFIED LABORATORY. THE PERCENTAGE OF MAXIMUM DENSITY REQUIRED SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS. A COPY OF ALL COMPLETED AND ACCEPTED DENSITY TESTS SHALL BE FURNISHED TO THE CITY ENGINEER'S OFFICE PRIOR TO FINAL INSPECTION.
4. ANY IN-LINE PARKING DEFICIENCIES SHALL BE ADDRESSED IN ACCORDANCE TO FDOT SPECIFICATION SECTION 330.

FLEXIBLE PAVEMENT DETAIL



PERVIOUS ASPHALTIC PAVEMENT SECTION



PERVIOUS CONCRETE PAVEMENT SECTION

NOTES:

1. THE PERVIOUS PAVEMENT CONTRACTOR SHALL BE APPROVED BY THE CITY ENGINEER AND MUST BE CERTIFIED BY THE NATIONAL READY MIX CONCRETE ASSOCIATION (NRMCA).
2. THE CONTRACTOR SHALL SUBMIT A PERVIOUS PAVEMENT MIX DESIGN TO THE CITY ENGINEER FOR APPROVAL.
3. PERVIOUS CONCRETE MIX SHALL HAVE 20% to 25% VOIDS, AN AGGREGATE TO CEMENT (A/C) RATIO BETWEEN 4.0 AND 4.5, AND A WATER TO CEMENT (W/C) RATIO BETWEEN 0.27 AND 0.36.
4. ALL MATERIAL USED WITHIN THE ROADWAY MUST MEET FDOT SPECIFICATIONS AND BE SUPPLIED FROM A FDOT CERTIFIED MINING OPERATION AND ASPHALT PLANT.
5. A MINIMUM OF TWO DENSITY TESTS SHALL BE TAKEN FOR EACH SIX (6) INCH LIFT OF SUB GRADE AND BASE. WHEN THE SPECIFIED COMPACTED BASE IS GREATER THAN SIX AND ONE–HALF (6 ½") INCHES THE BASE SHALL BE CONSTRUCTED IN TWO OR MORE COURSES. PROCTORS FOR MATERIALS USED IN BACK–FILLING SHALL BE OBTAINED BY A CERTIFIED LABORATORY. DENSITY TESTS SHALL BE CONDUCTED BY A CERTIFIED LABORATORY. THE PERCENTAGE OF MAXIMUM DENSITY REQUIRED SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS. A COPY OF ALL COMPLETED AND ACCEPTED DENSITY TESTS SHALL BE FURNISHED TO THE CITY ENGINEER'S OFFICE PRIOR TO FINAL INSPECTION.
6. CRUSHED CONCRETE MAY NOT BE USED WITHIN CITY–MAINTAINED ROADWAY.

PERVIOUS PAVEMENT DETAIL

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CREECH
CONSULTING, INC.
CIVIL NATION ENGINEERED
PO BOX 327, STUART, FLORIDA 34994 (772) 485-2140
BOARD OF PROFESSIONAL ENGINEERS, CERTIFICATE OF AUTHORIZATION NUMBER 5139
PROFESSIONAL SURVEYORS AND MAPPERS, AMENDED CERTIFICATE NO. LB-0006705

DATE	BY	REVISIONS
12/20/2023	JAC	PER FDOT DRIVEWAY CONNECTION COMMENTS
10/90/2023	JAC	PER TRC COMMENTS DATED 10/04/23
09/07/2023	JAC	PER TRC COMMENTS DATED 07/19/23

YOUTH & FAMILY
BEHAVIORAL HEALTH CENTER INC
PAVING, GRADING AND DRAINAGE DETAILS
FORT PIERCE FLORIDA

DRAWN BY: JAC
CHECKED BY: RTC / ANDREWS
LATITUDE: 27°26'5.40"N
LONGITUDE: 80°21'2.96"W
HORZ. SCALE:
VERT. SCALE:

SEAL

09/07/2023
RICHARD CREECH
FL P.E. NO. 38592

SHEET D2
PROJECT NO. 22-016-001

Approved
2023.12.490.00072
Kimberly Graham
1/3/2024

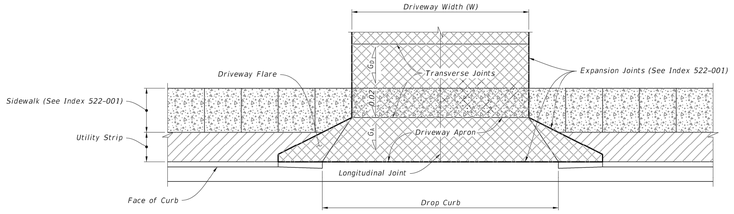
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GENERAL NOTES:

1. Work this Index with Specification 522.
2. Refer to Index 520-001 for drop curb details and Index 522-001 for joints between driveway, sidewalks, and curb.
3. Existing Curb and Gutter:
   Remove existing curb and gutter to either the nearest joint beyond the flared point or to where no remaining section is less than 5 feet long.
4. Grades and cross slopes shown are maximums.
5. Longitudinal Joints:
   Construct ½" open joints placed at equal (20' max.) intervals for driveways over 20' wide. Match joints in curb and gutter to match joints in driveways.
6. Transverse Joints:
   Construct ½" open joints @ 10' Centers and ½" expansion joints with preformed joint filler every 5th joint.
7. Construct driveways (6" thick concrete) to a uniform width (W) to the R/W line or the extent shown in the Plans.
8. Width of Sidewalk Thru Driveway is 4'-0" minimum. Match sidewalk width when shown in Plans or when utility strip width is equal to or greater than the depth of the Driveway Apron.
9. Alpha-Numeric Identification:
   Concrete Flared Driveway Alpha-Numeric Identifications (e.g. G4) are provided for reference purposes in the Plans.

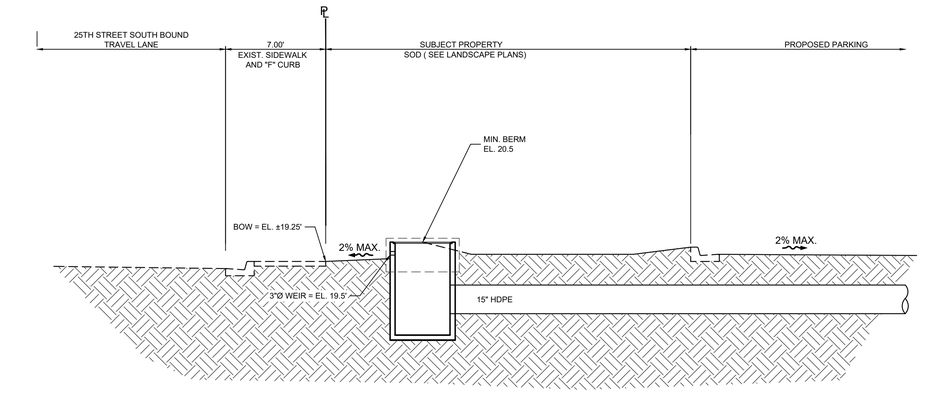
LEGEND:

- Sidewalk
- Flared Driveway (6" Thick Concrete)
- Sidewalk Thru Driveway (6" Thick Concrete)
- Utility Strip
- G_A Grade of Apron
- G_D Grade of Driveway (Per Plans)



CONCRETE FLARED DRIVEWAY NOMENCLATURE

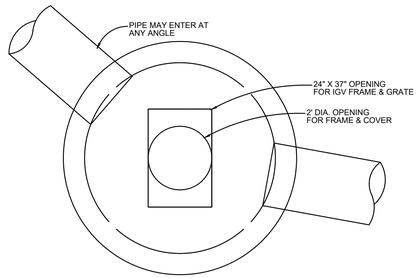
LAST REVISION	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	CONCRETE FLARED DRIVEWAYS	INDEX	SHEET
11/01/18				522-003	1 of 4



See Landscape Plans
Plantings Including Sod

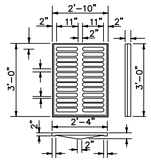
CONTROL STRUCTURE SECTION

VERT. & HORZ. SCALE 1"=5'



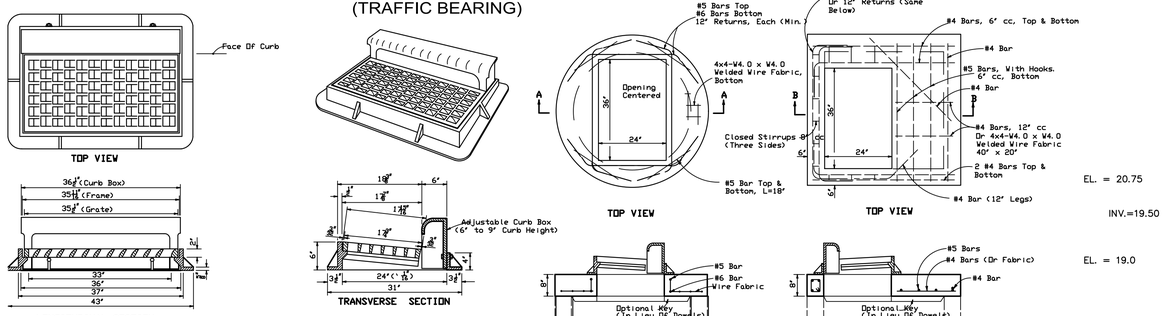
4' Ø PRECAST MANHOLE

N.T.S.



TYPICAL TYPE 'C' GRATE DETAIL

(TRAFFIC BEARING)



GENERAL NOTES

TOP SLABS

1. THIS INLET IS PRIMARILY INTENDED FOR LOCATIONS WITH LIGHT TO MODERATE FLOWS WHERE RIGHT OF WAY DOES NOT PERMIT THE USE OF THROATED CURB INLETS TYPES 1 THROUGH 6. THE TYPICAL APPLICATION IS ON CURB RETURNS TO CITY STREETS. THE INLET GRATE IS SUITABLE FOR PEDESTRIAN AND BICYCLE TRAFFIC.
2. THIS INLET TO BE LOCATED IN VERTICAL FACED CURBS SUCH AS CURB AND GUTTER TYPE F. GRATE SHALL BE ORIENTED WITH VANES DIRECTED TOWARD PREDOMINATE FLOW. INLET TO BE LOCATED OUTSIDE PEDESTRIAN CROSSWALK WHERE PRACTICAL.
3. FOR STRUCTURE BOTTOMS SEE INDEX NO. 200. FOR SUPPLEMENTAL DETAILS SEE INDEX NO. 201.
4. ALL STEEL IN SLAB TOPS SHALL HAVE 1.25" MINIMUM COVER UNLESS OTHERWISE SHOWN. TOPS SHALL BE EITHER CAST-IN-PLACE OR PRECAST CONCRETE.
5. FOR ALTERNATE B APPLICATIONS, TOP SLAB OPENINGS SHALL BE PLACED SUCH THAT 2 EDGES OF INLET FRAME WILL BE LOCATED DIRECTLY ABOVE BOTTOM WALL OR RISER WALL.
6. WHEN USED ON A STRUCTURE WITH DIMENSIONS LARGER THAN THOSE DETAILED ABOVE AND RISERS ARE NOT APPLIED, THE TOP SLAB SHALL BE CONSTRUCTED USING INDEX 200 WITH THE SLAB OPENING ADJUST TO 24"/36". THE "SPECIAL TOP SLAB" ON INDEX 200 IS NOT PERMITTED.
7. FRAME MAY BE ADJUSTED WITH ONE TO SIX COURSES OF BRICK.
8. INLET AND GRATE DETAIL SHOWN IS NEENAH R-3067-L VANED GRATES WITH APPROXIMATELY EQUAL OPENINGS WILL BE PERMITTED THAT SATISFY AASHTO H-20 LOADING. INLET AND GRATE SHALL BE CLASS 30 CASTINGS IN ACCORDANCE WITH ASTM A 48. GRATES SHALL BE REVERSIBLE, RIGHT OR LEFT.
9. CONTRACTOR TO USE EQUIVALENT GRATE, TO WHAT IS SHOWN THAT SATISFY AASHTO H-20 LOADING

TYPE 9 TOP

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YOUTH & FAMILY
BEHAVIORAL HEALTH CENTER INC
FORT PIERCE FLORIDA

PAVING, GRADING AND DRAINAGE DETAILS

DRAWN BY: JAC
CHECKED BY: RTC / ANDREWS
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LONGITUDE: 80°21'2.96"W
HORZ. SCALE:
VERT. SCALE:

SEAL

09/07/2023
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FL P.E. NO. 38592

SHEET D3

PROJECT NO. 22-016-001

Approved
20231220-490-00072
Kimberly Graham
1/5/2024

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GENERAL:

IT IS INTENDED THAT THE FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION "DESIGN STANDARDS", LATEST EDITION, BE USED WHERE APPLICABLE FOR VARIOUS WORK, AND THAT WHERE SUCH WORDING THEREIN REFERS TO THE STATE OF FLORIDA AND ITS DEPARTMENT OF TRANSPORTATION AND PERSONNEL, SUCH WORDING IS INTENDED TO BE REPLACED WITH THAT WORDING WHICH WOULD PROVIDE PROPER TERMINOLOGY, THEREBY MAKING SUCH "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AND "DESIGN STANDARDS" AS THE "STANDARD SPECIFICATIONS" FOR THIS PROJECT.

IF WITHIN THAT PARTICULAR SECTION ANOTHER SECTION, ARTICLE OR PARAGRAPH IS REFERRED TO, IT SHALL BE A PART OF THE "STANDARD SPECIFICATIONS" ALSO.

ALL WORK SHALL BE DONE IN A WORKMANLIKE MANNER AND SHALL CONFORM WITH ALL APPLICABLE CITY, COUNTY, STATE AND FEDERAL REGULATIONS AND/OR CODES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND LICENSES REQUIRED TO BEGIN WORK.

GENERAL NOTES:

1. THE CONTRACTOR SHALL GIVE THE ENGINEER AT LEAST 48 HOURS NOTICE PRIOR TO REQUESTING REQUIRED CONSTRUCTION OBSERVATIONS AND SHALL SUPPLY ALL EQUIPMENT NECESSARY TO PROPERLY TEST AND INSPECT THE COMPLETED WORK.

2. THE CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS FOR A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION, DURING WHICH TIME ALL FAULTY CONSTRUCTION AND/OR MATERIALS SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING ABOVE-GROUND, UNDERGROUND, AND ON THE SURFACE STRUCTURES AND UTILITIES AGAINST THE CONSTRUCTION OPERATION THAT MAY CAUSE DAMAGE TO SAID FACILITY.

4. STREET OR HIGHWAY RESTORATION WORK IS TO BE DONE AS PER THE LOCAL OR STATE AGENCY HAVING JURISDICTION.

5. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE RULES AND REGULATIONS OF THE STATE, COUNTY AND CITY AUTHORITIES REGARDING CLOSING OR RESTRICTING THE USE OF PUBLIC STREETS OR HIGHWAYS.

6. TRAFFIC CONTROL ON ALL CITY, 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.

6.a. THE MAINTENANCE OF TRAFFIC FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE FLORIDA D.O.T. DESIGN STANDARDS INDEX 600 SERIES, THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, AS A MINIMUM CRITERIA.

TRAFFIC DISRUPTIONS WHICH ARE NECESSARY TO CONSTRUCT THE PROJECT SHALL BE SUBMITTED IN WRITING TO THE ENGINEER AND APPROVAL SHALL BE OBTAINED AT LEAST 72 HOURS PRIOR TO THE COMMENCEMENT OF WORK. SUBMITTAL MATERIAL SHALL INCLUDE SKETCHES, CALCULATIONS AND OTHER DATA REQUIRED BY THE ENGINEER.

THE CONTRACTOR SHALL REMOVE OR COVER ANY EXISTING OR PROPOSED SIGNS OR PAVEMENT MARKINGS WHICH CONFLICT WITH THE TRAFFIC CONTROL PLANS. WHEN THE CONFLICT NO LONGER EXISTS, THE CONTRACTOR SHALL RESTORE THE SIGNS OR PAVEMENT MARKINGS TO THEIR ORIGINAL POSITION. REMOVAL OF EXISTING PAVEMENT MARKINGS NOT OTHERWISE REMOVED BY MILLING, SHALL BE ACCOMPLISHED BY HYDRO BLASTING OR BY METHODS APPROVED BY ENGINEER, THAT WILL ELIMINATE THE PREVIOUS MARKING PATTERN AND WILL NOT MATERIALLY DAMAGE THE SURFACE TEXTURE OF THE PAVEMENT. USE OF BLACK PAINT TO COVER EXISTING PAVEMENT MARKINGS IS PROHIBITED.

CONTRACTOR SHALL EMPLOY TEMPORARY BARRICADES BETWEEN DRIVE LANES AND EXCAVATED AREAS IN ACCORDANCE WITH FDOT INDEX 102-600.

NOTIFICATION OF LANE CLOSURES OR TEMPORARY DETOURS SHALL BE ACCOMPLISHED AT LEAST 30 DAYS PRIOR TO CLOSURE OR DETOUR BY SUBMITTING THE REQUIRED LANE CLOSURE FORM, SKETCHES, CALCULATIONS, AND OTHER DATA TO THE ENGINEER.

CONTACT LOCAL POLICE, FIRE RESCUE AND AMBULANCE SERVICES 24 HOURS PRIOR TO ANY AND ALL LANE SHIFTS AND OR CLOSURES.

THE CONTRACTOR SHALL PROVIDE THE SERVICES OF UNIFORMED OFF-DUTY POLICE OFFICERS TO SUPERVISE TRAFFIC CONTROL WHERE CONSTRUCTION OPERATIONS CAUSE TRAFFIC CONGESTION TO THE EXTENT THAT POLICE SUPERVISION IS NEEDED TO ASSURE PUBLIC SAFETY AND PROTECT THE WORK.

ALL LANES OF US1/SR5 (NORTHWEST FEDERAL HIGHWAY) MUST REMAIN OPEN FOR TRAFFIC DURING AN EVACUATION NOTICE OF HURRICANE OR OTHER CATASTROPHIC EVENT AND SHALL REMAIN OPEN FOR THE DURATION OF THE EMERGENCY AS DIRECTED BY THE ENGINEER.

6.b. THE CONTRACTOR SHALL PREPARE THE MAINTENANCE OF TRAFFIC PLAN FOR ALL PHASES OF THE WORK PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES. THE PLAN SHALL INDICATE THE TYPE AND LOCATION OF ALL SIGNS, LIGHTS, STRIPING AND BARRIERS TO BE USED FOR THE SAFE PASSAGE OF TRAFFIC AND PEDESTRIANS THROUGH THE PROJECT AREA AND FOR THE PROTECTION OF THE WORKERS. THE PLAN SHALL ALSO INDICATE CONDITIONS AND SETUPS FOR EACH PHASE OF WORK. THE PLAN SHALL PROVIDE FOR MAINTENANCE OF TWO-WAY TRAFFIC AT ALL TIMES WHERE PRACTICAL. PLAN SHALL BE SIGNED, SEALED AND SUBMITTED TO FDOT FOR APPROVAL AT LEAST ONE WEEK PRIOR TO THE PRE-CONSTRUCTION MEETING.

ALL WORK WITHIN THE FDOT RIGHT OF WAY SHALL BE GOVERNED BY THE CURRENT EDITION OF FDOT DESIGN STANDARDS, AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

6.c. ALL PAVEMENT MARKING SHALL BE THERMOPLASTIC PER FDOT STANDARDS.

ALL STRIPING SHALL BE IN ACCORDANCE WITH THE MOST CURRENT FDOT DESIGN STANDARD INDEX 711-001 AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 711 "THERMO PLASTIC TRAFFIC STRIPES AND MARKINGS", LATEST EDITION AND CITY OF STUART PUBLIC WORKS AND MUTCD LATEST EDITION.

INSTALL RETRO - REFLECTIVE PAVEMENT MARKERS (RPM'S) PER THE MOST CURRENT FDOT DESIGN STANDARD STANDARD INDEX 706-001 AND THE MOST CURRENT FDOT DESIGN STANDARD SPECIFICATIONS # 706.

7. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY WHEN A CONFLICT BETWEEN THE DRAWINGS AND ACTUAL CONDITIONS IS DISCOVERED DURING THE COURSE OF CONSTRUCTION.

8. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE PRIOR TO BIDDING THE WORK AND TO PERFORM SUCH TESTS, STUDIES AND SURVEYS AS HE DEEMS NECESSARY TO SATISFY HIMSELF AS TO ACTUAL SURFACE AND SUBSURFACE CONDITIONS EXISTING AT THE SITE. ACTUAL CONDITIONS THAT DIFFER FROM THOSE SHOWN ON DRAWINGS SHALL NOT CONSTITUTE A BASIS FOR ADDITIONAL PAYMENT.

9. ALL ELEVATIONS REFER TO N.A.V.D. 1988 DATUM, UNLESS OTHERWISE NOTED.

10. ALL CONSTRUCTION DEWATERING (WELL POINTS, SUMPS ETC.) WILL REQUIRE A DEWATERING PERMIT FROM THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT.

11. ANY CHANGES DUE TO FIELD CONDITIONS OR ANY OTHER DEVIATIONS FROM THE APPROVED DRAWINGS MUST BE APPROVED BY THE ENGINEER AND THE GOVERNING AUTHORITY HAVING JURISDICTION PRIOR TO BEING CONSTRUCTED.

12. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES: ONE (1) SET OF "APPROVED" CONSTRUCTION DRAWINGS, ONE (1) COPY OF THE APPLICABLE UTILITY COMPANY'S "MINIMUM DESIGN AND CONSTRUCTION STANDARDS", ONE (1) COPY OF ALL CONTRACT DOCUMENTS AND, ONE (1) COPY OF ALL APPLICABLE LOCAL, STATE AND FEDERAL PERMITS REQUIRED FOR CONSTRUCTION.

13. THE CONTRACTOR SHALL PROVIDE A QUALIFIED SUPERINTENDENT TO REMAIN AT THE JOB SITE AT ALL TIMES WHEN WORK IS BEING PERFORMED. THE SUPERINTENDENT SHALL BE PRESENT AT ALL SCHEDULED CONSTRUCTION OBSERVATION MEETINGS.

14. THE CONTRACTOR SHALL BE SOLEY RESPONSIBLE FOR THE PROPER MAINTENANCE AND SAFE CONTROL OF TRAFFIC AND PEDESTRIANS AT ALL TIMES FOR THE DURATION OF CONSTRUCTION. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION OR TIME EXTENSION SHALL BE ALLOWED.

SEDIMENTATION AND EROSION CONTROL:

PRIOR TO AND DURING CONSTRUCTION, THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN ALL SEDIMENTATION AND EROSION CONTROL MEASURES REQUIRED TO RETAIN SEDIMENT ON SITE AND TO PREVENT VIOLATIONS OF STATE WATER QUALITY STANDARDS. SEDIMENTATION AND EROSION CONTROL FEATURES MAY INCLUDE, BUT ARE NOT LIMITED TO, SILT FENCES, SILTATION BARRIERS, GEOTEXTILE FILTER BARRIERS, TURBIDITY SCREENS AND SEDIMENTATION BASINS. CONSTRUCTION AND MAINTENANCE OF SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH SECTION 104 OF THE STANDARD SPECIFICATIONS.

THE CONTRACTOR SHALL CONSTRUCT AND MAINTAIN ALL REQUIRED SEDIMENTATION AND EROSION CONTROL MEASURES FOR THE DURATION OF CONSTRUCTION.

STABILIZATION MEASURES, INCLUDING BUT NOT LIMITED TO, SODDING OR SEEDING AND MULCHING, SHALL BE INITIATED FOR SEDIMENTATION AND EROSION CONTROL ON ALL DISTURBED AREAS AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN SEVEN (7) DAYS AFTER CONSTRUCTION ACTIVITY HAS CEASED. THE CONTRACTOR SHALL INSPECT ALL SEDIMENTATION AND EROSION CONTROL MEASURES DAILY DURING CONSTRUCTION. ANY DEFICIENCIES SHALL BE IMMEDIATELY CORRECTED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY OFF SITE WATER QUALITY IMPACTS OR OTHER ADVERSE IMPACTS DUE TO SEDIMENTATION AND EROSION FROM THE PROJECT SITE DURING CONSTRUCTION.

SUGGESTED SEQUENCE FOR EROSION & SEDIMENTATION CONTROL

1. FLAG AND FENCE ALL WORK LIMITS.

2. NOTIFY THE COUNTY SEDIMENT CONTROL INSPECTOR AT LEAST (72) HOURS PRIOR TO START OF CONSTRUCTION.

3. PERFORM CLEARING AND GRADING REQUIRED FOR INSTALLATION OF PERIMETER CONTROLS.

4. INSTALL PERIMETER RUNOFF CONTROLS; NOTIFY SEDIMENT INSPECTOR AND OBTAIN APPROVAL BEFORE PROCEEDING FURTHER.

5. NO ADDITIONAL LAND CLEARING SHALL COMMENCE UNTIL A SATISFACTORY INSPECTION OF THE REQUIRED EROSION CONTROL BARRICADES HAS BEEN OBTAINED.

6. COMPLETE ALL REQUIRED STOCKPILING, SITE CLEARING, AND GRADING. STOCKPILE ANY EXCESS TOPSOIL OR OTHER EXCAVATED SOIL IN APPROVED STOCKPILES OR REMOVE FROM SITE. AND DISPOSE OF AT A PERMITTED SITE.

CLEARING AND GRUBBING:

ALL TREES, BRUSH, STUMPS, ROOTS, GRASS, WEEDS, RUBBISH AND ALL OTHER OBSTRUCTIONS RESTING ON OR LYING WITHIN 12" BELOW FINISHED GRADE OR SUBGRADE SHALL BE COMPLETELY REMOVED WITHIN ALL AREAS OF CONSTRUCTION AS SHOWN ON THE DRAWINGS. ALL WORK SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS. CLEANING AND GRUBBING AREAS TO BE INSPECTED AND APPROVED PRIOR TO ANY FILL OR CONSTRUCTION WORK. ALL MATERIAL FROM CLEARING AND GRUBBING SHALL BE REMOVED AND LEGALLY DISPOSED OF.

DEMOLITION:

1. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSAL (IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES) ALL STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, PARKING, DRIVES, DRAINAGE, STRUCTURES, UTILITIES, ETC., SUCH THAT THE IMPROVEMENTS SHOWN ON THE REMAINING PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE SPECIFICATIONS.

2. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE SITE AND DISPOSING THE DEBRIS IN A LAWFUL MANNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.

3. THE CONTRACTOR SHALL MAINTAIN ALL UTILITY SERVICES TO EXISTING USERS AND AT ALL TIMES.UTILITY SERVICES SHALL NOT BE INTERRUPTED WITHOUT APPROVAL FROM OWNER.

4. THE CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY'S FORCES AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES.

5. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR ONSITE LOCATIONS OF EXISTING UTILITIES.

6. ALL EXISTING SEWERS, PIPING AND UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PROCEEDING WITH THE WORK. UTILITIES DETERMINED TO BE ABANDONED AND LEFT IN PLACE SHALL BE GROUTED IF UNDER BUILDING.

7. ELECTRICAL, TELEPHONE, CABLE, WATER, FIBER OPTIC CABLE AND/OR GAS LINES NEEDING TO BE REMOVED OR RELOCATED SHALL BE COORDINATED WITH THE AFFECTED UTILITY COMPANY. ADEQUATE TIME SHALL BE PROVIDED FOR RELOCATION AND CLOSE COORDINATION WITH THE UTILITY COMPANY IS NECESSARY TO PROVIDE A SMOOTH TRANSITION IN UTILITY SERVICE. CONTRACTOR SHALL PAY CLOSE ATTENTION TO EXISTING UTILITIES WITHIN THE ANY ROAD RIGHT OF WAY DURING CONSTRUCTION.

8. CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, (AND OTHER APPROPRIATE BEST MANAGEMENT PRACTICES).

9. PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED.

10. SHOULD REMOVAL AND/OR RELOCATION ACTIVITIES DAMAGE EXISTING STRUCTURES, THE CONTRACTOR SHALL PROVIDE NEW MATERIALS/ STRUCTURES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. EXCEPT FOR MATERIALS DESIGNED TO BE RELOCATED ON THIS PLAN, ALL OTHER CONSTRUCTION MATERIALS SHALL BE NEW.

11. CONTRACTOR MAY LIMIT SAW-CUT & PAVEMENT REMOVAL TO ONLY THOSE AREAS WHERE IT IS REQUIRED AS SHOWN ON THESE CONSTRUCTION PLANS BUT IF ANY DAMAGE IS INCURRED ON ANY OF THE SURROUNDING PAVEMENT, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IT'S REMOVAL AND REPAIR.

12. THE CONTRACTOR SHALL COORDINATE WATER MAIN WORK WITH THE COUNTY UTILITY DEPARTMENT TO PLAN PROPOSED IMPROVEMENTS.

13. DAMAGE TO ANY EXISTING CONDITIONS TO REMAIN WILL BE REPLACED AT CONTRACTOR'S EXPENSE.

14. CONTRACTOR SHALL PROTECT ALL AREAS OUTSIDE OF LIMIT OF CLEARING.

BURNING:

BURNING IS NOT ALLOWED.

EXCAVATION:

THE CONTRACTOR SHALL PERFORM ALL EXCAVATION NECESSARY TO ACCOMPLISH THE CONSTRUCTION INDICATED ON THE DRAWINGS. EXCAVATION SHALL BE UNCLASSIFIED REGARDLESS OF MATERIAL ENCOUNTERED. ALL EXCAVATED MATERIAL NOT REQUIRED FOR FILL OR EMBANKMENT, SHALL BE REMOVED FROM THE SITE, AS DIRECTED BY THE OWNER, OR HIS REPRESENTATIVE. THE CONTRACTOR SHALL DO ALL SHORING NECESSARY TO PERFORM AND PROTECT THE EXCAVATION, AND AS NECESSARY FOR THE SAFETY OF THE WORKERS AND ANY EXISTING FACILITIES IN ACCORDANCE WITH THE STATE OF FLORIDA "TRENCH SAFETY ACT", WHEREVER EXCAVATIONS ARE MADE BELOW THE GRADES INDICATED ON THE DRAWINGS, CLEAN FIRM MATERIAL APPROVED BY THE ENGINEER SHALL BE USED TO RESTORE THE AREA TO THE PROPER GRADE, AND SHALL BE COMPACTED IN ACCORDANCE WITH THE REQUIREMENTS FOR COMPACTION INCLUDED IN THESE SPECIFICATIONS.

UNSUITABLE MATERIAL:

WHERE MUCK, ROCK, CLAY, ORGANIC MATERIAL OR OTHER DELETERIOUS MATERIAL WITHIN THE LIMITS OF CONSTRUCTION IS, IN THE OPINION OF THE ENGINEER, UNSUITABLE IN ITS ORIGINAL POSITION, THE CONTRACTOR SHALL EXCAVATE SUCH MATERIAL, AND BACKFILL THE EXCAVATED AREA WITH SUITABLE MATERIAL, WHICH SHALL BE COMPACTED AND SHAPED TO CONFORM TO THE REQUIRED SECTION. BACKFILL MATERIAL AND COMPACTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS INCLUDED IN THESE SPECIFICATIONS.

SELECT FILL:

A. THIS WORK SHALL CONSIST OF FURNISHING AND PLACING THE MATERIALS REQUIRED FOR FILL OR EMBANKMENT FOR THE CONSTRUCTION AS SHOWN ON THE DRAWINGS. THE MATERIAL USED FOR EMBANKMENT SHALL BE CLEAN UNIFORM FREE DRAINING GRANULAR SOIL CONSISTING OF SAND, GRAVEL, OR A MIXTURE THEREOF, AND/OR OTHER SUITABLE MATERIAL APPROVED BY THE ENGINEER. IF THE MATERIALS ARE OF A VARIABLE QUALITY, THE CONTRACTOR SHALL PLAN HIS OPERATIONS SO THAT THE UPPER TWO FEET OF THE FILL IS CONSTRUCTED OF SELECTED MATERIALS AS APPROVED AND DIRECTED BY THE ENGINEER.

B. PRIOR TO PLACING ANY FILL, THE SURFACE TO RECEIVE THE FILL, SHALL BE PLOWED OR SCARIFIED. FILL SHALL BE PLACED IN SUCCESSIVE UNIFORM LAYERS TWELVE INCHES (12"), MEASURED LOOSE, OR AS APPROVED BY THE ENGINEER. EACH LAYER WILL THEN BE COMPACTED BY AN APPROVED METHOD IN ACCORDANCE WITH THE REQUIREMENTS FOR COMPACTION INCLUDED IN THESE SPECIFICATIONS. THE COMPACTION SHALL BE VERIFIED THROUGH TESTING AS INDICATED IN THE TESTING SPECIFICATIONS.

BACKFILL:

ALL BACKFILL MATERIAL SHALL BE CLEAN, UNIFORM, FREE DRAINING SOIL AND FREE OF LUMBER, TRASH OR OTHER DEBRIS, AND SHALL BE THOROUGHLY COMPACTED IN LAYERS NOT TO EXCEED TWELVE INCHES (12"), MEASURED LOOSE AND BROUGHT TO AN ELEVATION ABOVE THE FINISHED GRADE, SUFFICIENT TO ALLOW FOR SETTLEMENT. PRIOR TO PLACING BACKFILL, THE AREAS AROUND STRUCTURES UPON WHICH THE BACKFILL IS TO BE PLACED, SHALL BE CLEANED OF ALL TRASH AND DEBRIS OF ANY NATURE. SHEETING AND BRACING ALLOWED TO BE LEFT IN PLACE SHALL BE CUT OFF A MINIMUM OF 2.5 FEET BELOW FINISHED GRADE. COMPACTION FOR EACH LIFT SHALL BE EQUAL TO 100% OF MAXIMUM DENISTY AS DETERMINED BY AASHTO T-99.

GRADING:

THE CONTRACTOR SHALL PERFORM ALL NECESSARY GRADING TO ACHIEVE THE FINISHED GRADING AS PER THE DRAWINGS. ALL WORKMANSHIP SHALL BE IN ACCORDANCE WITH THESE SPECIFICATIONS.

THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE EPA, FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP), NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) "GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES" AND THE PROJECT SPECIFICATIONS.

PROPOSED GRADE ELEVATIONS SHOWN ARE AT THE EDGE OF PAVEMENT LINE OF UNLESS OTHERWISE NOTED.

COMPACTION:

ALL AREAS TO BE COMPACTED SHALL BE MOISTENED AND COMPACTED BY TAMPING OR USE OF VIBRATORY ROLLERS, VIBRATORY PLATE COMPACTORS OR ANY OTHER METHOD APPROVED BY THE ENGINEER IN ORDER TO OBTAIN THE REQUIRED DENSITY. WHERE USE OF VIBRATORY EQUIPMENT MAY AFFECT ADJACENT STRUCTURES, COMPACTION SHALL BE PERFORMED USING OTHER EQUIPMENT THAT WILL SATISFY THE DENSITY REQUIREMENTS WITHOUT DAMAGING EXISTING STRUCTURES. THE CONTRACTOR SHALL INSPECT ALL COMPACTED AREAS PRIOR TO FURTHER CONSTRUCTION OPERATIONS, TO ENSURE THAT SATISFACTORY COMPACTION HAS BEEN OBTAINED. ALL EMBANKMENT, INCLUDING BACKFILL AND EMBANKMENT ADJACENT TO STRUCTURES, SHALL BE COMPACTED TO A DENSITY OF NOT LESS THAN 100 PERCENT (100%) OF THE MAXIMUM DENSITY, AS DETERMINED BY AASHTO T-99.

THE CONTRACTOR SHALL PAY PARTICULAR ATTENTION TO COMPACTION IN AREAS AROUND STRUCTURES AND OTHER FEATURES WHERE ACCESS BY SELF PROPELLED VIBRATORY COMPACTORS MAY BE DIFFICULT.

BACKFILL AND COMPACTION WITHIN PIPE TRENCHES SHALL BE IN ACCORDANCE WITH THE TYPICAL TRENCH DETAIL SHOWN ON THE DRAWINGS. FOR NON-FLEXIBLE PIPE MATERIALS, ALL BACKFILL SHALL BE COMPACTED TO NOT LESS THAN 100 PERCENT (100%) OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99. FOR FLEXIBLE PIPE MATERIALS, ALL BACKFILL SHALL BE COMPACTED TO NOT LESS THAN 95 PERCENT (95%) OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99.

DENSITY TESTING

THE TESTING LABORATORY SHALL FORWARD COPIES OF ALL TEST REPORTS TO THE ENGINEER, CONTRACTOR, AND OWNER.

STABILIZED SUBGRADE:

STABILIZED SUBGRADE SHALL BE CONSTRUCTED TO DEPTH AND LIMITS SHOWN ON THE PLAN, AND IN ACCORDANCE WITH SECTION 160 OF THE STANDARD SPECIFICATIONS FOR TYPE C STABILIZATION. THE STABILIZED SUBGRADE SHALL BE CONSTRUCTED TO A LIMEROCK BEARING RATIO (LBR) OF NOT LESS THAN 40 AND SHALL BE COMPACTED TO NOT LESS THAN 98% OF THE MAXIMUM DENSITY AS DETERMINED BY MODIFIED PROCTOR AASHTO T-180.

COMPACTED SUBGRADE:

COMPACTED SUBGRADE SHALL BE CONSTRUCTED TO THE DEPTH AND LIMITS SHOWN ON THE DRAWINGS. ALL COMPACTED SUBGRADE SHALL BE COMPACTED TO NOT LESS THAN 98% OF THE MAXIMUM DENSITY AS DETERMINED BY MODIFIED PROCTOR AASHTO T-180.

ROCK BASE:

ROCK BASE SHALL BE CONSTRUCTED OF EITHER LIMEROCK MATERIAL OR CEMENTED COQUINA SHELL MATERIAL IN ACCORDANCE WITH SECTION 911 OF THE STANDARD SPECIFICATIONS.

THE CONTRACTOR SHALL PROVIDE ROCK PIT CERTIFICATION FOR CEMENTED COQUINA SHELL MATERIAL.

ROCK BASE SHALL BE CONSTRUCTED TO THE DEPTH AND LIMITS AS SHOWN ON THE DRAWINGS. THE ROCK BASE MATERIAL SHALL HAVE A LIMEROCK BEARING RATIO (LBR) OF NOT LESS THAN 100. THE ROCK BASE SHALL BE COMPACTED TO NOT LESS THAN 98% OF THE MAXIMUM DENSITY AS DETERMINED BY MODIFIED PROCTOR ASTM D-1557. A PRIME COAT AND SAND SEAL SHALL BE APPLIED TO THE ROCK BASE AFTER CONSTRUCTION INSPECTION AND APPROVAL BY THE ENGINEER.

PRIME AND TACK COAT:

A BITUMINOUS PRIME COAT SHALL BE APPLIED TO THE ROCK BASE. PRIME COAT SHALL BE CUT BACK ASPHALT GRADE RC-70 OR RC-250 APPLIED AT A RATE OF NOT LESS THAN 0.10 GALLONS PER SQUARE YARD. THE PRIME COAT SHALL BE COVERED WITH SAND FREE FROM ANY APPRECIABLE AMOUNT OF SILT, CLAY, TRASH OR ORGANIC MATTER. A TACK COAT, WHERE SPECIFIED ON THE DRAWINGS, SHALL BE EMULSIFIED ASPHALT GRADES RS-1 AND RS-2 APPLIED AT A RATE OF BETWEEN 0.02 AND 0.08 GALLONS PER SQUARE YARD.

CONSTRUCTION OF THE PRIME AND TACK COATS SHALL BE IN ACCORDANCE WITH SECTION 300 OF THE STANDARD SPECIFICATIONS. BITUMINOUS MATERIALS FOR THE PRIME AND TACK COATS SHALL BE IN ACCORDANCE WITH SECTION 300 OF THE STANDARD SPECIFICATIONS.

ASPHALTIC CONCRETE SURFACE COURSE (A.C.S.C.):

THE A.C.S.C. SHALL BE CONSTRUCTED FOR THE DEPTH AND LIMITS SHOWN ON THE DRAWINGS, IN ACCORDANCE WITH SECTIONS 330 AND 334 OF THE STANDARD SPECIFICATIONS. A.C.S.C. SHALL HAVE A MARSHALL STABILITY OF NOT LESS THAN 1,500 LBS. BITUMINOUS MATERIAL SHALL BE ASPHALT CEMENT VISCOSITY GRADE AC-20 IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

TESTING:

THE OWNER SHALL PROVIDE THE SPECS AND SCOPE OF SERVICES FOR THE INDEPENDENT TESTING LABORATORY TO CONDUCT ALL REQUIRED TESTS. THE ENGINEER SHALL BE PRESENT FOR ALL TESTING. THE CONTRACTOR SHALL GIVE THE ENGINEER AT LEAST FOUR-EIGHT (48) HOURS NOTICE PRIOR TO ANY SCHEDULED TESTING. TEST RESULTS MUST BE SUBMITTED TO THE ENGINEER PRIOR TO FINAL CERTIFICATION OR ANY REQUEST FOR PAYMENT ON THE ABOVE ITEMS. SEE ARCHTECTURAL SPECIFICATIONS FOR REQUIREMENTS WITHIN LIMITS OF BUILDING PADS.

THE SCHEDULE FOR TESTING OF ROADWAY AND PARKING CONSTRUCTION SHALL BE AS FOLLOWS:

A. SUBGRADE:
1. SAMPLES OF SUBGRADE MATERIAL SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 5,000 SF, OR CLOSER AS MIGHT BE NECESSARY IN THE EVENT OF VARIATIONS IN SUBSOIL CONDITIONS. LIMEROCK BEARING RATIO (LBR) TESTS SHALL BE PERFORMED ON A COMPOSITE OF SAMPLES OF SUBGRADE MATERIALS, CONSISTING OF MATERIAL FROM CONSECUTIVES SAMPLES, SUCH THAT ONE (1) LBR TEST IS PERFORMED AT INTERVALS OF NOT MORE THAN 20,000 SQUARE FEET.

2. DENSITY TESTS SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 5000 SQUARE FEET OR CLOSER AS MIGHT BE NECESSARY.

B. BASE:
1. SAMPLES OF BASE MATERIAL SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 10,000 SF, OR CLOSER AS MIGHT BE NECESSARY IN THE EVENT OF VARIATIONS IN THE ROCK BASE MATERIAL. LIMEROCK BEARING RATIO (LBR) TESTS SHALL BE PERFORMED ON A COMPOSITE OF SAMPLES OF BASE MATERIALS, CONSISTING OF MATERIAL FROM CONSECUTIVE SAMPLES, SUCH THAT ONE (1) LBR TEST IS PERFORMED AT INTERVALS OF NOT MORE THAN 40,000 SQUARE FEET.

2. DENSITY TESTS SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 10,000 SF OR CLOSER AS MIGHT BE NECESSARY.

NOTE: A "NON-SOAKED" LBR TEST MAY BE USED IN LIEU OF A "STANDARD" (SOAKED) LBR TEST, PROVIDED THAT THE REQUIREMENT FOR ACCEPTANCE IS INCREASED BY 5 UNITS. I.e. "STANDARD" LBR=40, "NON-SOAKED" LBR=45

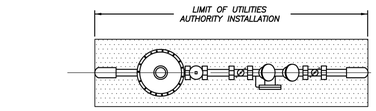
C. SELECT FILL
1. REPRESENTATIVE SAMPLES OF SELECT FILL MATERIAL SHALL BE TAKEN FOR EACH SOIL TYPE TO BE USED FOR FILL. AT MINIMUM, EACH SAMPLE SHALL BE TESTED TO DETERMINE GRADATION, CLASSIFICATION AND MAXIMUM DRY DENSITY. ADDITIONAL TESTING MAY BE REQUIRED AS INDICATED HEREIN OR AS DETERMINED BY THE ENGINEER DURING CONSTRUCTION.

D. REPORTS
1. ALL SAMPLES TAKEN SHALL BE UNIQUELY NUMBERED
2. ALL FIELD DENISTY TESTS SHAL REFER TO UNIQUELY NUMBERED SAMPLES FOR DETERMINATION OF ADEQUATE COMPACTION.
3. THE GEOTECHNICAL ENGINEER SHALL RECORD THE LOCATION OF EACH TEST ON A COPY OF THE SITE PLAN, ALONG WITH THE EXTENT OF THE FILL PLACED.

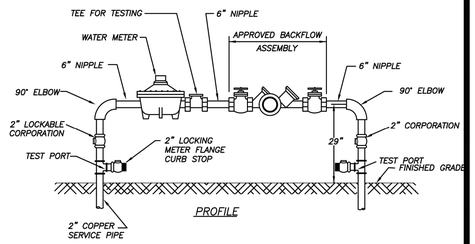
IF ANY TEST INDICATES THAT THE WORK DOES NOT MEET THE SPECIFICATIONS, THE SUBSTANDARD AREA SHALL BE REWORKED OR CORRECTED AND RETESTED, AT THE CONTRACTOR'S EXPENSE, UNTIL THE PROVISIONS OF THESE SPECIFICATIONS ARE MET. ALL FAILING TESTS SHALL BE PAID FOR BY THE CONTRACTOR.

CONCRETE:

UNLESS OTHERWIS



PLAN



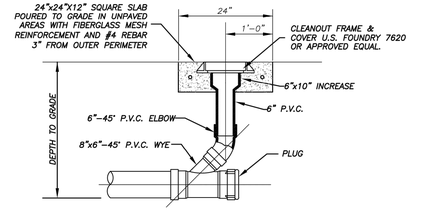
PROFILE

NOTES:

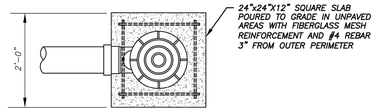
1. LANDSCAPING REQUIRED PER CITY OF FORT PIERCE OR ST. LUCIE COUNTY ORDINANCE. NO PLANTS OR TREES WITHIN 18" AROUND METER OR BACKFLOW. NO SOLDER JOINTS.
2. ASSEMBLY TO BE 29" FROM FINISH GRADE TO CENTERLINE OF THE FLANGED 90° BEND.

WATER METER/BACKFLOW PREVENTER ASSEMBLY
DOMESTIC SERVICE (COMMERCIAL)
(N.T.S.)

FPUA COMMUNITY PROUD — FT. PIERCE UTILITIES AUTHORITY WATER/WASTEWATER ENGINEERING 1701 SOUTH 5TH STREET FT. PIERCE, FLORIDA 34947 772-466-1600	WATER METER/BACKFLOW PREVENTER ASSEMBLY--DOMESTIC SERVICES (METER SIZE 2" OR LESS)	W-8
03-09 DESIGN REVISION: SLL JLC; DATE: BY: APPD:		WATER/WASTEWATER ENGINEERING
DESIGNED: JLC; DRAWN BY: SLL; APPROVED: JLC	COMPUTER FILE # DETAIL NOTES 200602.DWG; SCALE: N.T.S.; DATE: 2010	FT. PIERCE UTILITIES AUTHORITY
		SHEET 1 OF 1



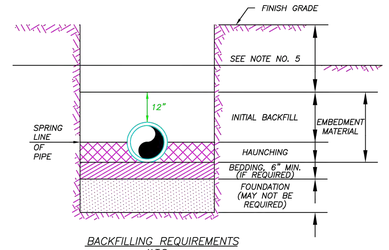
SECTION



PLAN

TERMINAL CLEANOUT DETAIL (COMMERCIAL)
(N.T.S.)

FPUA COMMUNITY PROUD — FT. PIERCE UTILITIES AUTHORITY WATER/WASTEWATER ENGINEERING 1701 SOUTH 5TH STREET FT. PIERCE, FLORIDA 34947 772-466-1600	TERMINAL CLEANOUT DETAIL WASTEWATER	S-4B
10-06 DESIGN REVISION: RBE BY: APPD:		WATER/WASTEWATER ENGINEERING
DESIGNED: JLC; DRAWN BY: SLL; APPROVED: JLC	COMPUTER FILE # SEWER DETAIL 200602.DWG; SCALE: N.T.S.; DATE: 2010	FT. PIERCE UTILITIES AUTHORITY
		SHEET 2 OF 3

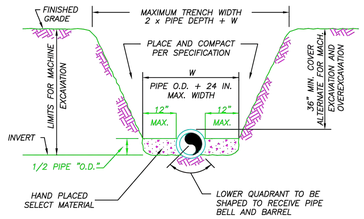


BACKFILLING REQUIREMENTS
N.T.S.

NOTES:

1) IN CERTAIN SOIL CONDITIONS A FOUNDATION MAY BE REQUIRED.
2) BEDDING IS REQUIRED PRIMARILY TO BRING THE TRENCH BOTTOM UP TO GRADE. BEDDING MATERIALS SHALL PROVIDE A UNIFORM AND ADEQUATE LONGITUDINAL SUPPORT UNDER THE PIPE.
3) HAUNCHING MATERIAL SHALL BE HAND PLACED TO THE SPRINGLINE OF THE PIPE. MATERIAL SHALL BE CONSOLIDATED UNDER THE PIPE AND HAND TAMPED TO PROVIDE ADEQUATE SIDE SUPPORT.
4) INITIAL BACKFILL MATERIAL SHALL BE HAND PLACED TO 12" ABOVE THE TOP OF PIPE. THE SOIL SHALL BE COMPACTED TO 100% MAX. DENSITY.(AASHTO T-99)
5) BACKFILL SHALL BE COMPACTED TO 100% OF MAX. DENSITY AS PER AASHTO T-99, TO A POINT 30" BELOW PROPOSED PROFILE GRADE OR EXISTING GRADE. THE FINAL 30" OF BACKFILL SHALL BE COMPACTED TO 98% OF MAX. DENSITY AS PER AASHTO T-180.
6) DENSITY TEST SHALL BE PERFORMED AT AREAS DETERMINED BY THE UTILITIES ENGINEER OR PERMIT AGENCY HAVING JURISDICTION, AT THE CONTRACTORS EXPENSE.
7) CONTRACTOR TO COMPLY WITH ALL FEDERAL, STATE AND LOCAL TRENCH SAFETY REGULATIONS.

FPUA COMMUNITY PROUD — FT. PIERCE UTILITIES AUTHORITY WATER/WASTEWATER ENGINEERING 1701 SOUTH 5TH STREET FT. PIERCE, FLORIDA 34947 772-466-1600	BACKFILLING REQUIREMENTS	M-2
03-09 CONCRETE SLAB REVISION: SLL JLC; DATE: BY: APPD:		WATER/WASTEWATER ENGINEERING
DESIGNED: JLC; DRAWN BY: SLL; APPROVED: JLC	COMPUTER FILE # MISC. DETAILS 200602.DWG; SCALE: ; DATE: 2015	FT. PIERCE UTILITIES AUTHORITY
		SHEET 1 OF 1



NOTES:

1) THE CONTRACTOR SHALL COMPLY WITH REQUIREMENTS OF THE FLORIDA TRENCH SAFETY ACT.
2) INITIAL BACKFILL SHALL BE HAND PLACED TO 12" ABOVE THE PIPE. BACKFILL SHALL BE MECHANICALLY TAMPED TO A MINIMUM OF 100% OF MAX. DENSITY AS DETERMINED BY AASHTO METHOD T-99.

TYPICAL TRENCH DETAIL
N.T.S.

FPUA COMMUNITY PROUD — FT. PIERCE UTILITIES AUTHORITY WATER/WASTEWATER ENGINEERING 1701 SOUTH 5TH STREET FT. PIERCE, FLORIDA 34947 772-466-1600	TYPICAL TRENCH DETAIL	M-1
03-09 CONCRETE SLAB REVISION: SLL JLC; DATE: BY: APPD:		WATER/WASTEWATER ENGINEERING
DESIGNED: JLC; DRAWN BY: SLL; APPROVED: JLC	COMPUTER FILE # MISC. DETAILS 200602.DWG; SCALE: ; DATE: 2015	FT. PIERCE UTILITIES AUTHORITY
		SHEET 1 OF 1

FORT PIERCE UTILITIES AUTHORITY
WATER DISTRIBUTION NOTES

1. ALL CONSTRUCTION MATERIAL, INSTALLATION AND TESTING SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE FORT PIERCE UTILITIES AUTHORITY.
2. WATER MAINS WHERE SPECIFIED AS POLYVINYL CHLORIDE (PVC) SHALL CONFORM TO AWWA C-900 OR C-905, PRESSURE CLASS 150, DR (18). WATER MAINS WHERE SPECIFIED AS POLYETHYLENE (PE) SHALL CONFORM TO AWWA C-901 OR C-906, STANDARD CODE DESIGNATION PE3408, PIPE CLASS 200, DIMENSION RATIO (DR) 17 FOR DIRECT BURY, (DR) 11 FOR DIRECTIONAL BORING, AND (DR) 9 FOR 2 INCH AND SMALLER PIPELINES.
3. WATER MAIN, WHERE SPECIFIED AS DUCTILE IRON PIPE , SHALL CONFORM TO ANSI/AWWA C151/A21.51 AND SHALL BE PRESSURE CLASS 250 (MINIMUM).
4. POLYVINYL CHLORIDE WATER MAIN SHALL BE BLUE IN COLOR OR WHITE IN COLOR WITH BLUE STRIPES. THE USE OF IDENTIFICATION TAPE ATTACHED TO THE TOP OF THE PIPE MAY BE USED IN LIEU OF MARKING ON THE PIPE, ALSO DIP PIPE SHALL REQUIRE THE USE OF IDENTIFICATION TAPE AND THHN WIRE.
5. FITTINGS SHALL BE DUCTILE IRON CONFORMING TO ANSI/AWWA C-110/A21.10, CLASS 250 MIN., CEMENT LINED AND FACTORY COATED
6. GATE VALVES SHALL BE MUELLER RESILIENT SEAT, KENNDY KEN-SEAL, AMERICAN OR APPROVED EQUAL. VALVES SHALL CONFORM TO AWWA C-509.
7. WATER LINES SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH FPUA DESIGN AND CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL SUBMIT CERTIFIED DENSITY TESTS AS REQUIRED BY FPUA ENGINEERING AND THE CITY, COUNTY, FDOT. IN CASES WHERE PAVED AREAS FALL WITHIN THE JURISDICTION OF LOCAL OR STATE AGENCIES, THE COMPACTION REQUIREMENTS SHALL NOT BE LESS THAN THE MINIMUM REQUIRED BY THE APPROPRIATE RESPONSIBLE AGENCY.
8. NO FIELD CHANGES OR DEVIATIONS FROM THE DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE FPUA ENGINEER AND CITY/COUNTY/FDOT ENGINEER.
9. THE CONTRACTOR SHALL NOTIFY FPUA ENGINEERING AND CITY/COUNTY/FDOT ENGINEERING 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
10. A PRE-CONSTRUCTION CONFERENCE BETWEEN THE ENGINEER, THE CONTRACTOR, FPUA, AND CITY/COUNTY/FDOT ENGINEER SHALL BE MANDATORY PRIOR TO COMMENCEMENT OF CONSTRUCTION.
11. TRAFFIC CONTROL, BARRICADES, ETC., SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS AND APPROVED BY THE CITY ENGINEER.
12. MINIMUM COVER SHALL BE 36 INCHES EXCEPT AS APPROVED BY THE UTILITIES ENGINEER AND CITY/COUNTY/FDOT ENGINEER. PIPES WITH COVER LESS THAN 30 INCHES SHALL BE CONSTRUCTED OF DUCTILE IRON OR IN PVC CASING.
13. DISTURBED AREAS SHALL BE RESTORED IN CONFORMANCE WITH THE APPLICABLE GOVERNING AGENCY REQUIREMENTS.
14. EXISTING UTILITIES AND DRAINAGE SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION AND PROTECTED BY THE CONTRACTOR.
15. WATER MAINS SHALL BE TESTED AND DISINFECTED IN ACCORDANCE WITH THE APPLICABLE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND AWWA C-651 FOR DISINFECTION.

FORT PIERCE UTILITIES AUTHORITY	WATER DISTRIBUTION	G-1 NOTES
02-06 DESIGN REVISION: BY: APPD:		WATER/WASTEWATER ENGINEERING
DESIGNED: JLC; DRAWN BY: JJM; APPROVED: JLC	COMPUTER FILE # DETAIL NOTES 200602.DWG; SCALE: N.T.S.; DATE: 2010	FT. PIERCE UTILITIES AUTHORITY
		SHEET 1 OF 2

FORT PIERCE UTILITIES AUTHORITY
WATER DISTRIBUTION NOTES
CONTINUED

16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EXISTING UTILITIES AND DRAINAGE.
17. THE CONTRACTOR SHALL FURNISH RECORD DRAWING INFORMATION TO THE ENGINEER INCLUDING LOCATIONS OF VALVES, FITTINGS, SERVICE CONNECTIONS, BLOWOFFS, AIR RELEASE VALVES, AND ANY OTHER PERTINENT INFORMATION NECESSARY TO LOCATE ITEMS CONSTRUCTED UNDER THIS PROJECT, AS REQUIRED BY THE UTILITIES ENGINEER.
18. THE CONTRACTOR SHALL TAP EXISTING LINES UNDER THE SUPERVISION OF THE FORT PIERCE UTILITIES AUTHORITY ONLY AFTER TESTING AND DISINFECTION HAS BEEN COMPLETED AND APPROVED ON THE TAPPING VALVE AND SLEEVE.
19. WATER MAIN SHALL BE MARKED BY THE USE OF CONTINUOUS 10 GAUGE THHN MULTI STRANDED WIRE (BLUE IN COLOR) AND IDENTIFICATION TAPE WITH "WATER" MARKED ON TAPE, PERMANENTLY ATTACHED TO THE TOP OF THE WATER MAIN IN ACCORDANCE WITH THE FORT PIERCE UTILITES AUTHORITY SPECIFICATIONS.
20. SERVICE TAPS SHALL BE PLACED APPROXIMATELY TEN FEET AWAY FROM GATE VALVES, AS SHOWN, FOR TESTING. FOLLOWING TESTING AND STERILIZATION OF WATER LINE. CONTRACTOR SHALL PLACE A BRASS PLUG IN CORPORATION STOPS AND CURB STOPS SHALL BE REMOVED FROM TESTING LOCATIONS.
21. MECHANICAL RESTRAINTS TO BE USED ON ALL FITTINGS AND PLACED IN ACCORDANCE WITH MANUFACTURER'S OR ENGINEER'S RECOMMENDATIONS (WHICHEVER IS MORE STRINGENT) AND FPUA REQUIREMENTS.
22. ALL MAINS SHALL BE TESTED AT A MINIMUM OF 150 PSI. TESTING METHODS SHALL CONFORM TO AWWA C-600. – 2 HR MINIMUM TEST

$$L = \frac{SD(P)^{1/2}}{148{,}000}$$

L= LEAKAGE IN GPH
S= LENGTH OF PIPE IN FEET
D= PIPE DIAMETER IN INCHES
P= TESTING PRESSURE IN PSI

23. PRIOR TO ANY TESTING, ALL MAINS 6" IN DIA. AND LARGER SHALL HAVE A SWAB PASSED THRU THE ENTIRE LENGTH OF THE LINE. NOTE: SWAB SHOULD BE PLACED IN 1st. JOINT OF NEW LINE. END OF MAIN SHOULD BE "TURNED UP" AT 45$ AND EXTENDED SO THAT SWABBING AND A FULL BORE FLUSH CAN BE ACCOMPLISHED. BLOW-OFF ASSY CAN THEN BE PLACED. WHERE LINES BRANCH, SWABS WILL BE PLACED IN BRANCH LINES AND SEQUENTIALLY SWABBED AND FLUSHED.
24. A MINIMUM SIX FEET AND PREFERABLY TEN FEET HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN THE WATER MAIN AND ANY WASTEWATER LINES. 6 INCHES MINIMUM VERTICAL SEPARATION IF WATER MAIN IS OVER WASTEWATER AND 12 INCHES IF WATER MAIN IS UNDER SHALL BE MAINTAINED BETWEEN THE WATER MAIN AND ANY WASTWATER LINES. THE DISTANCE SHALL BE MEASURED FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE OR STRUCTURE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE WASTEWATER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING, AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. SUFFICIENT LENGHTS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT ALL CROSSINGS.
25. WHERE A WATER MAIN IS TO BE INSTALLED BELOW A STORM DRAIN PIPE, A MINIMUM OF 6 INCHES OF VERTICAL CLEARANCE BETWEEN PIPES SHALL BE CONSTRUCTED OF DIP AT THE CROSSING, AND SHALL BE MECHANICALLY RESTRAINED WITHIN 20 FEET OF THE CROSSING.
26. CONTRACTOR SHALL COMPLY WITH FLORIDA TRENCH SAFETY ACT REQUIREMENTS.

FORT PIERCE UTILITIES AUTHORITY	WATER DISTRIBUTION	G-1 NOTES
02-06 DESIGN REVISION: BY: APPD:		WATER/WASTEWATER ENGINEERING
DESIGNED: JLC; DRAWN BY: JJM; APPROVED: JLC	COMPUTER FILE # DETAIL NOTES 200602.DWG; SCALE: N.T.S.; DATE: 2010	FT. PIERCE UTILITIES AUTHORITY
		SHEET 2 OF 2

FORT PIERCE UTILITIES AUTHORITY WASTEWATER CONSTRUCTION NOTES

1. ALL CONSTRUCTION MATERIAL, INSTALLATION AND TESTING SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE FORT PIERCE UTILITIES AUTHORITY.
2. GRAVITY SEWER MAIN SHALL BE POLYVINYL CHLORIDE SDR-26, GREEN OR WHITE IN COLOR, GRAVITY SEWER MAIN SHALL HAVE LOCATOR TAPE WITH "SEWER" MARKED ON TAPE AND SHALL CONFORM TO ASTM D-3034.
3. THE MANHOLE BASE SHALL BE SET ON A FIRM, DRY AND STABLE OR COMPACTED BASE FOUNDATION. IF NECESSARY, THE CONTRACTOR SHALL UTILIZE ROCK TO PROVIDE A FIRM AND SUITABLE MANHOLE BASE FOUNDATION.
4. WASTEWATER LINES SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH FPUA DESIGN AND CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL SUBMIT CERTIFIED DENSITY TESTS AS REQUIRED BY FPUA ENGINEERING AND THE CITY ENGINEERING DEPARTMENT. IN CASES WHERE PAVED AREAS FALL WITHIN THE JURISDICTION OF LOCAL OR STATE AGENCIES, THE COMPACTION REQUIREMENTS SHALL NOT BE LESS THEN THE MINIMUM REQUIRED BY THE APPROPRIATE RESPONSIBLE AGENCY.
5. A 1% MINIMUM SLOPE SHALL BE MAINTAINED ON ALL SANITARY SERVICE LATERALS.
6. THE CONTRACTOR SHALL FURNISH RECORD DRAWING INFORMATION TO THE ENGINEER CONSISITING OF PIPE SIZES, LOCATION OF SERVICE TEE WYES, DIAMETER OF SERVICES, LOCATION OF ANY FITTINGS, FINAL RIM AND INVERT ELEVATION OF ALL MANHOLES AND ANY OTHER PERTINENT INFORMATION NECESSARY TO LOCATE ITEMS CONSTRUCTED UNDER THIS PROJECT.
7. MAINTAIN SIX FEET AND PREFERABLY 10 FEET HORIZONTAL DISTANCE BETWEEN WATER MAINS AND SEWER MAINS AS A MINIMUM.
8. WASTEWATER FORCE MAINS, WASTEWATER COLLECTION LINES, AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. A MINIMUM VERTICAL DISTANCE OF 12 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE SHALL BE PROVIDED WHENEVER POSSIBLE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE WASTEWATER PIPE JOINTS AND THE WATER PIPE JOINTS ARE EQUIDISTANCE FROM THE POINT OF CROSSING, AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT ALL CROSSINGS.
9. A PRE-CONSTRUCTION CONFERENCE BETWEEN THE ENGINEER, THE CONTRACTOR, AND FPUA/CITY COUNTY/FDOT SHALL BE MANDATORY PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
10. NO FIELD CHANGES OR DEVIATIONS FORM THE DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL FPUA/CITY/COUNTY/FDOT ENGINEER,
11. TRAFFIC CONTROL, BARRICADES, ETC. SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS.
12. CONTRACTOR SHALL NOTIFY FORT PIERCE UTILITIES AUTHORITY 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
13. WASTEWATER FORCE MAIN SHALL BE POLYVINYL CHLORIDE CONFORMING TO AWWA C-900, AND SHALL BE CLASS 150, DR-18.
14. WASTEWATER FORCE MAIN SHALL BE GREEN IN COLOR.
15. FITTINGS SHALL BE DUCTILE IRON, CONFORMING TO ANSI/AWWA C-110/A21.10 CLASS 250 MIN. AND INTERIOR EPOXY COATED.
16. WASTEWATER FORCE MAIN SHALL BE MARKED BY THE USE OF CONTINUOUS 10 GAUGE THHN WIRE (GREEN IN COLOR) PERMANENTLY ATTACHED TO THE TOP OF THE FORCE MAIN WITH LOCATOR TAPE MARKED "SEWER" ON TAPE IN ACCORDANCE WITH FPUA SPECIFICATIONS.
17. MINIMUM COVER SHALL BE 36 INCHES, PIPES WITH COVER LESS THAN 30 INCHES SHALL REQUIRE PRIOR APPROVAL OF THE UTILITES ENGINEER AND SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE.
18. EACH SERVICE LATERAL WILL BE MARKED WITH A LOCATOR BALL AS MANUFACTURED BY 3M CORPORATION, OR APPROVED EQUAL AS REQUIRED BY FPUA ENGINEER.
19. ALL MANHOLES SHALL HAVE SEWER RAIN GUARDS INSTALLED AS REQUIRED BY FPUA ENGINEER.
20. THE CONTRACTOR SHALL COMPLY WITH THE FLORIDA TRENCH SAFETY ACT REQUIREMENTS.

FORT PIERCE UTILITIES AUTHORITY	WASTEWATER CONSTRUCTION NOTES FPUA REQUIREMENTS	G-2 CONSTRUCTION NOTES
02-06 DESIGN REVISION: BY: APPD:		WATER/WASTEWATER ENGINEERING
DESIGNED: JJM; DRAWN BY: JJM; APPROVED: JLC	COMPUTER FILE # DETAIL NOTES 200602.DWG; SCALE: N.T.S.; DATE: 2010	FT. PIERCE UTILITIES AUTHORITY
		SHEET 1 OF 1

STANDARD SEPARATION STATEMENT FOR
WATER / SEWER CONFLICTS

1. SANITARY SEWER, FORCE MAINS, AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. SANITARY SEWERS, FORCE MAINS AND STORM SEWERS CROSSING UNDER WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 6 INCHES, PREFERABLY 12 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHEN ABOVE, AND AT LEAST 12 INCHES OF SEPARATION WHEN THE WATER MAIN IS BELOW.

WHERE SANITARY SEWER, FORCE MAINS, STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 6 INCHES VERTICAL SEPARATION, BOTH THE SEWER AND WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) CENTERED ON THE CROSSING. (DIP IS NOT REQUIRED FOR STORM SEWERS.) SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED.

ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING). AT SUCH CROSSINGS PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE WITH LESS THAN 6 INCHES VERTICAL CLEARANCE, THE NEW PIPE SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWERS) AND NEW PIPES SHALL BE ARRANGED TO MEET THE CROSSING REQUIREMENTS ABOVE.

2. A MINIMUM 3-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF STORM SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

A MINIMUM 3-FOOT, AND PREFERABLE 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN VACUUM TYPE SANITARY SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

A MINIMUM 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN "ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

A MINIMUM 6-FOOT, AND PREFERABLE 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN GRAVITY OR PRESSURE TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO 3 FOOT WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER

IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10-FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON A UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 6 INCHES ABOVE THE TOP OF THE SEWER.

WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 6 INCHES IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR THE FORCE MAIN SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWER) WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED JOINTS).

3. ALL DIP SHALL BE PRESSURE CLASS 250 MIN.. ADEQUATE PROTECTIVE MEASURES AGAINST CORROSION SHALL BE USED AS DETERMINED BY THE DESIGN ENGINEER.

FORT PIERCE UTILITIES AUTHORITY	STANDARD SEPARATION STATEMENT FOR WATER/SEWER CONFLICT	G-3 WATER/SEWER CONFLICT
02-06 DESIGN REVISION: BY: APPD:		WATER/WASTEWATER ENGINEERING
DESIGNED: JJM; DRAWN BY: JJM; APPROVED: JLC	COMPUTER FILE # DETAIL NOTES 200602.DWG; SCALE: N.T.S.; DATE: 2010	FT. PIERCE UTILITIES AUTHORITY
		SHEET 1 OF 1

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

P:\Projects\2022\2022-016-001 Youth and Family Center\CAD\1- Plans\Youth and Family details.dwg D5 WATER SEWER dsc_ Dec 20,2023-3:39pm

CREECH
CONSULTING, INC.
CIVIL/UTILITIES ENGINEERING
PO BOX 327, STUART, FLORIDA 34994 (772) 485-2140
BOARD OF PROFESSIONAL ENGINEERS, CERTIFICATE OF AUTHORIZATION NUMBER 5139
PROFESSIONAL SURVEYORS AND MAPPERS, AMENDED CERTIFICATE NO. LB-0006705

DATE	BY	REVISIONS
12/20/2023	JAC	PER FDOT DRIVEWAY CONNECTION COMMENTS
10/90/2023	JAC	PER TRC COMMENTS DATED 10/04/23
09/07/2023	JAC	PER TRC COMMENTS DATED 07/19/23

YOUTH & FAMILY
BEHAVIORAL HEALTH CENTER INC
UTILITY DETAILS & SPECIFICATIONS
FORT PIERCE FLORIDA

DRAWN BY: JAC
CHECKED BY: RTC / ANDREWS
LATITUDE: 27°26'5.40"N
LONGITUDE: 80°21'2.96"W
HORZ. SCALE:
VERT. SCALE:

SEAL
09/07/2023
RICHARD CREECH
FL P.E. NO. 38592

SHEET D5
PROJECT NO. 22-016-001

Approved
2023.12.490.00072
Kimberly Graham
1/3/2024

PROPOSED STATE HIGHWAY ACCESS CONNECTION
NOTICE OF INTENT TO ISSUE PERMIT

Important: This Notice does not authorize construction to begin and is not a final permit.
ALSO NOTE: THIS NOTICE OF INTENT IS ONLY VALID FOR 1 YEAR FROM SIGNING DATE IN PART 6.

PART 1: APPLICANT INFORMATION

APPLICATION NUMBER: 2023-A-490-00065

Project Name: Youth and Family Behavioral Health Center

State Road Name/Number: 615

Section Number: 94005

Maintenance Office: Treasure Coast Operations (Paul Brege)
Permit Staff Representative

Applicant: Jean Mary Monval

Responsible Officer:

Mailing Address: 2011 S 25th Street, Fort Pierce, Florida 34947
Street City State Zip

Telephone: (772) 242-1079 ext.

PART 2: NOTICE OF INTENT TO ISSUE PERMIT

YOU ARE HEREBY ADVISED:

The Florida Department of Transportation has completed its review of the subject connection permit Application received 11/9/2023 for consistency with Rule Chapters 14-96 and 14-97, F.A.C., and current Department spacing, location, and design criteria and hereby issues this "Notice of Intent" to:

☑ Issue the subject permit consistent with the permit Application.

☐ Issue the subject permit consistent with the permit Application and subject to the attached provisions.

IMPORTANT

This notice of intent to issue a permit does NOT constitute Department permit issuance. The permit will be issued after the permittee shows proof that a valid local government development approval or development order has been given to the sites served by the connection and special provisions of the approval consistent with the permit applications and conditions previously noted.

No connection work on the right of way shall be initiated until the Department permit is actually issued. Any changes to the site(s) plan will require re-evaluation of the connection(s). This notice is valid for one year, from the date of issuance, and can only be extended with approval by the Department for problems outside the control of the applicant pursuant to Rule Chapter 14-96, F.A.C. This Notice of Intent is transferable as specified only in Rule Chapter 14-96, F.A.C.

Continued next page

PART 3: CONDITIONS

Conditions to be met before Permit will be issued:

Standard:

1. Development approval from the appropriate local government consistent with the Notice of Intent to Permit;
2. Assurance of performance pursuant to Section 334.187, Florida Statutes (if required);
3. Notification of all known right of way users affected by the connection(s);
4. Compliance with drainage requirements in Rule Chapter 14-86, F.A.C.

Other Conditions:

Use additional sheet if necessary

Continued next page

PART 4: NOTICE OF DEPARTMENT AUTHORITY

1. All approved connection(s) and turning movements are subject to the Department's continuing authority to modify such connection(s) or turning movements in order to protect safety and traffic operations on the state highway or State Highway System.

2. **Transportation Control Features and Devices in the State Right of Way**. Transportation control features and devices in the Department's right of way, including, but not limited to, traffic signals, medians, median openings, or any other transportation control features or devices in the state right of way, are operational and safety characteristics of the State Highway and are not means of access. The Department may install, remove, or modify any present or future transportation control feature or devices in the state right of way to make changes to promote safety in the right of way or efficient traffic operations on the highway.

PART 5: DEPARTMENT CONTACT

NAME: Paul Brege

ADDRESS: 3601 Oleander Ave

Fort Pierce, Florida 34982

PHONE: (772) 429-4923 ext. _____

PART 6: SIGNATURE OF DEPARTMENT AUTHORITY

SIGNATURE OF DEPARTMENT OFFICIAL: Paul Brege

PRINT OR TYPE NAME: Paul Brege

PRINT OR TYPE POSITION: MAINTENANCE MANAGER/PERMITS

DATE: 12/21/2023 PHONE: 7724657396

Continued next page

PART 7: APPEAL PROCEDURES

You may petition for an administrative hearing pursuant to sections 120.569 and 120.57, Florida Statutes. If you dispute the facts stated in the foregoing Notice of Intended Department Action (hereinafter Notice), you may petition for a formal administrative hearing pursuant to section 120.57 (1), Florida Statutes. If you agree with the facts stated in the Notice, you may petition for an informal administrative hearing pursuant to section 120.57(2), Florida Statutes. You must file the petition with:

Clerk of Agency Proceedings
Department of Transportation
Haydon Burns Building
605 Suwannee Street, M.S. 58
Tallahassee, Florida 32399-0458

The petition for an administrative hearing must conform to the requirements of Rule 28-106.201(2) or Rule 28-106.301(2), Florida Administrative Code, and be filed with the Clerk of Agency Proceedings by 5:00 p.m. no later than 21 days after you received the Notice. The petition must include a copy of the Notice, be legible, on 8 1/2 by 11 inch white paper, and contain:

1. Your name, address, telephone number, any Department of Transportation identifying number on the Notice, if known, the name and identification number of each agency affected, if known, and the name, address, and telephone number of your representative, if any, which shall be the address for service purposes during the course of the proceeding.
2. An explanation of how your substantial interests will be affected by the action described in the Notice;
3. A statement of when and how you received the Notice;
4. A statement of all disputed issues of material fact. If there are none, you must so indicate;
5. A concise statement of the ultimate facts alleged, including the specific facts you contend warrant reversal or modification of the agency's proposed action, as well as an explanation of how the alleged facts relate to the specific rules and statutes you contend require reversal or modification of the agency's proposed action;
6. A statement of the relief sought, stating precisely the desired action you wish the agency to take in respect to the agency's proposed action.

If there are disputed issues of material fact a formal hearing will be held, where you may present evidence and argument on all issues involved and conduct cross-examination. If there are no disputed issues of material fact an informal hearing will be held, where you may present evidence or a written statement for consideration by the Department.

Mediation, pursuant to section 120.573, Florida Statutes, may be available if agreed to by all parties, and on such terms as may be agreed upon by all parties. The right to an adminstrative hearing is not affected when mediation does not result in a settlement.

Your petition for an administrative hearing shall be dismissed if it is not in substantial compliance with the above requirements of Rule 28-106.201(2) or Rule 28-106.301(2), Florida Administrative Code. If you fail to timely file your petition in accordance with the above requirements, you will have waived your right to have the intended action reviewed pursuant to chapter 120, Florida Statutes, and the action set forth in the Notice shall be conclusive and final.

End

DRAINAGE CONNECTION PERMIT

To be completed by DOT

Drainage Connection Permit No. 2023-D-490-00043 Date 12/21/2023

Received By One-Stop Permitting System Maintenance Unit 490

State Road No. 615 Work Program Project No. _____

Section No. 005 Construction Project No. _____

Milepost 1.600 Station _____ _____

Instructions for Drainage Connection Permit

Pursuant to 14-86.004(5), F.A.C. Once approved by the Department, the drainage connection application and supporting documents become the Drainage Connection Permit."

Each completed Drainage Connection Permit package shall include the following items. If an item does not apply to your project, indicate "Not Applicable" or "N/A."

Included	Part	Title	Completed by:	Special Instructions
✔	1	Permit Information Sheet	Applicant	
✔	2	Certification by a Licensed Professional	Licensed Professional	Signed and Sealed
✔	3	Certification	Applicant	Signature
✔	4	Owner's Authorization of a Representative	Owner	Signature
✔	5	Affidavit of Ownership or Control and Statement of Contiguous Interest	Owner	Signature
✔	6	Permit General Conditions	FDOT	
✔	7	Permit Special Conditions	FDOT	
✔	8	As-Built Certification	Licensed Professional	Signed and Sealed – Submit within 15 working days of completion of construction
✔	Attachment	Legal Description		
✔	Attachment	Photographs of Existing Conditions		
✔	Attachment	Location Map		
✔	Attachment	Grading Plan	Licensed Professional	Signed and Sealed
✔	Attachment	Soil Borings		
✔	Attachment	Water Table / Percolation		
✔	Attachment	Calculations		
	Attachment	CD with Electronic Files of all Submittal Items		Scanned Images in pdf format

Note: Different Licensed Professionals may complete parts of the permit package. For example, the Licensed Professional signing and sealing the as-built certification may be different from the Licensed Professional who signed and sealed the calculations for the permit package.

EXCEPTIONS: Activities that qualify for an Exception are listed in Rule 14-86, F.A.C. A permit application to the Department is NOT required. However, if you desire verification whether the work qualifies for an exception, send a completed copy of this permit package with its requested information to the applicable FDOT District Office.

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

PART 1 – Permit Information Sheet

Select one: ☐ **Permit** ☑ **Exception**

Pursuant to 14-86.002(2), F.A.C. "Applicant means the owner of the adjacent property or the owner's authorized representative."

Applicant

Select one: ☐ Property Owner ☑ Owner's Representative (Complete Part 4)

Name: JERRY COMPTON

Title and Company: Sr. Project Manager, CREECH CONSULTING

Address: PO Box 327

City: Stuart State: Florida Zip: 34995

Telephone: (772) 215-1434 ext. _____ FAX: _____ Email: jcompton@creech.consulting

Property Owner (If not applicant)

Name: Jean Mary Monval

Title and Company: Owner, Youth and Family Behavioral Health Center, Inc

Address: 2011 S 25th Street

City: Fort Pierce State: Florida Zip: 34947

Telephone: (772) 242-1079 ext. _____ FAX: _____ Email: youthandfamily@yfhc.org

Applicant's Licensed Professional

Name: Richard Creech Florida License Number: 38592

Title and Company: President, Creech Consulting, Inc

Address: PO Box 327

City: Stuart State: Florida Zip: 34995

Telephone: (772) 485-2140 ext. _____ FAX: _____ Email: rtcreech@creech.consulting

Project Information:

Project Name: Youth and Family Behavioral Center

Location: SR 615
STREET SR. NO. US HWY NO. CITY

St. Lucie 005
COUNTY SECTION(S) TOWNSHIP(S) RANGE(S)

*Geographic Coordinates: Latitude (DMS.SSS): 27.4346578452218 Longitude (DMS.SSS): -80.3501055387534

Benchmark Horizontal Datum: (/ _____.)

* State Plane Coordinates: Northing 0 Easting: 0

Projection Zone: ☐ Florida North ☐ Florida East ☐ Florida West

Coordinate shall be the center of the driveway intersection with FDOT R/W, or, if there is no driveway connection, near the center of the property line nearest the state highway.

**Check with the FDOT Office for requirement.*

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

Brief description of facility and proposed connection:
Brief description of the facility and the proposed connection

The proposed development is requesting an exception and will include a rain garden to filtrate nutrients prior to discharging into an existing storm water system which exceeds the water quality criteria of the SFWMD permitted storm water conveyance system. In addition, they will be utilizing a pervious pavement in the parking lot to further remove harmful nutrients and chemicals.

Briefly describe why this activity requires a Drainage Connection Permit (Include where the stormwater will discharge to FDOT right of way):
Applying for exemption

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

PART 2 – Certification by a Licensed Professional

In accordance with Rule 14-86, Florida Administrative Code (F.A.C.), I hereby certify that the following requirements are and/or will be met.

This project has been designed in compliance with all applicable water quality design standards as required by state or federal governmental entity(ies).

14-86.004(3)(f) (F.A.C.): Certification by a Licensed Professional that the complete set of plans and computations complies with one of the following Rules Sections:

☑ 14-86.003(2)(a) (F.A.C.), or ☐ 14-86.003(2)(b) (F.A.C). (check one)

I further certify that a National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharges associated with industrial activity from construction sites

☐ is required ☑ is not required. (check one)

I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

This certification shall remain valid for any subsequent revision or submittal of plans, computation or other project documents by me.

Name of Licensed Professional: Richard Creech

Florida License Number: 38592

Company Name (if applicable): Creech Consulting, Inc

Certificate of Authorization Number (if applicable): _____

Address: PO Box 327

City: Stuart State: Florida Zip: 34995

Telephone: (772) 485-2140 ext. _____ Fax: _____ Email: rtcreech@creech.consulting

RICHARD THOMAS CREECH LICENSE NO. 38592 STATE OF FLORIDA PROFESSIONAL ENGINEER

Signature of Licensed Professional

Date

(Affix Seal)

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

PART 3 – Certification by Applicant

I hereby certify that the information in this submittal is complete and accurate to the best of my knowledge.

Applicant's Signature: _____ Date: 12.22.23

Name (Printed): JERRY COMPTON

Title and Company: Sr. Project Manager, CREECH CONSULTING

Address: PO Box 327, Stuart, Florida 34995

Phone Number: (772) 215-1434 ext. _____ E-mail address: jcompton@creech.consulting

PART 4 – Owner's Authorization of a Representative

I (we), the owner, JEAN MONVAL, do hereby authorize the following person, or entity, as my representative:

Name (Printed): JERRY COMPTON

Title and Company: Sr. Project Manager, CREECH CONSULTING

Address: PO Box 327, Stuart, Florida 34995

Phone Number: (772) 215-1434 ext. _____ E-mail address: jcompton@creech.consulting

Part 5 – Affidavit of Property Ownership or Control and Statement of Contiguous Interest

I, JEAN MONVAL, certify that I own or lawfully control the following described property:

Does the property owner own or have any interests in any adjacent property?

☑ No ☐ Yes If yes, please describe.

Owner's Signature required for Parts 4 and/or 5

We will not begin on the drainage connection until I receive the Permit and I understand all the conditions of the Permit. When work begins on the connection, I am accepting all conditions listed in the Permit.

Name (Printed): Jean Monval

Address: 2011 S. 25th Street, Fort Pierce, Florida 34947

Phone Number: (772) 242-1079 ext. _____

Signature: _____ Date: 11/9/2023

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

PART 6 – Permit General Conditions

1. This permit is a license for permissive use only and does not convey any property rights either in real estate or material, or any exclusive privilege and it does not authorize any injury to private property or invasion of private rights, or any infringement of Federal, State or local laws, rules or regulations; nor does it obviate the necessity of obtaining any required state or local approvals.

2. The drainage connection as authorized herein shall be constructed and thereafter maintained in accordance with the documents attached hereto and incorporated by reference herein. All work performed in the Department's right of way shall be done in accordance with the most current Department standards, specifications and the permit provisions. Such construction shall be subject to the inspection and approval of the Department, and the Department may at any time make such inspections as it deems necessary to assure that the drainage connection is in compliance with this permit.

3. The entire expense of construction within the Department right of way, including replacement of existing pavement or other existing features, shall be borne by the permittee.

4. The permittee shall maintain that portion of the drainage connection authorized herein located on permittee's property in good condition. The Department shall maintain that portion of the drainage connection authorized herein located within its right of way.

5. If the drainage connection is not constructed, operated or maintained in accordance with this permit, the permit may be suspended or revoked. In this event modification or removal of any portion of the drainage connection from the Department's right of way shall be at the permittee's expense.

6. The Department reserves the right to modify or remove the drainage connection to prevent damage or in conjunction with road improvements.

7. It is understood and agreed that the rights and privileges herein set out are granted only to the extent of the Department's right, title, and interest in the land to be entered upon and used by the permittee, and the permittee will, at all times, assume all risk of and indemnify, defend and save harmless the Department from and against any and all loss, damage, cost or expense arising in any manner on account of the exercise or attempted exercises by said permittee of these rights and privileges, regardless of the respective degrees of fault of the parties.

8. Utilities, including gas lines, may exist within the right of way. Prior to beginning work the permittee shall contact Sunshine State One Call of Florida, Inc at 811 or 800-432-4770, who will notify all utility owners near the scheduled project. The utility owners have two (2) full business days to provide locations of their respective facilities. The permittee shall be solely responsible for any damage to or conflicts with gas lines, utilities and/or third persons.

9. The permittee shall notify the Department of Transportation Maintenance Office located at Treasure Coast Operations (Paul Brege) Phone (772) 429-4923 ext. _____ 48 hours in advance of starting any work on the drainage connection authorized by this permit and also 24 hours prior to any work within the Department's right of way. Construction of any work on the right of way shall be completed within 365 days after such notification. If such construction is not completed within 365 days after such notification, the permittee shall notify the Department of the anticipated completion date.

10. This permit shall expire if construction on the drainage connection is not begun within one year from the date of approval and if construction on the drainage connection is not completed by (Date) 1/3/2025.

11. A permittee may request an extension of the Drainage Connection Permit expiration date by filing a written request for a permit time extension. All requests for time extensions must be received by the Department 15 working days prior to the expiration date.

12. All the provisions of this permit shall be binding on any assignee or successor in interest of the permittee.

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

PART 7 – Permit Special Conditions – To be completed by FDOT

The above request has been reviewed and has been found to meet the regulations as prescribed in Rule 14-86, F.A.C., and is hereby approved, subject to the following special conditions:

Permittee must contact Paul Brege (FDOT) at 772-429-4923 a minimum of 2 business days prior to start of work.

There is no drainage connection.

This Drainage Connection Permit does not authorize any work inside FDOT right of way.

Department of Transportation:

Signature Georgi Celusnek

Title DRAINAGE ENGINEER III Date 1/3/2024

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

PART 8 – As-Built Certification

Within 15 working days of completion of construction, you must send this certification to the Department office in which you filed your DOT Drainage Permit.

1. STORMWATER FACILITY INFORMATION

Permit No.: _____

Source (Project) Name: _____

Source Location: Street _____

City: _____ County: _____

Source Owner: _____

Owner Address: _____

2. AS-BUILT CERTIFICATION

I hereby certify that this stormwater facility has been built substantially in accordance with the certified design plans, and that any substantial deviations (noted below) will not prevent the facility from functioning in compliance with the requirements of Chapter 14-86 F.A.C. when properly maintained and operated. These determinations have been based upon on-site observation of construction, scheduled and conducted by me or by a project representative under my direct supervision.

Name of Licensed Professional: _____

Florida License Number: _____

Company Name (if applicable): _____

Certificate of Authorization Number (if applicable): _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone: _____ Fax: _____ Email: _____

_____
Signature of Licensed Professional

_____
Date

(Affix Seal)

Substantial deviations from the approved plans and specifications (attach additional sheets if required).

_____

2023.12.30 08:43
Georgi Celusnek
1/3/2024

MICHELLE R. MILLER, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 4957411 OR BOOK 4726 PAGE 2872, Recorded 11/27/2021 12:59:22 PM Doc Tax: $910.00

Return to:
Florida Title & Guarantee Agency
14050 NW 14th Street, Suite 110
Sunrise, FL 33323

This Instrument Prepared
under the supervision of:

Karene Anderson
Florida Title & Guarantee Agency
14050 NW 14th Street, Suite 110
Sunrise, FL 33323

Property Appraisers Parcel Identification (Folio) No.:
2417-507-0005-000-7 and 2417-503-0040-000-2

Our File No.: 84-21-0551

WARRANTY DEED

This Warranty Deed made this 18th day of November, 2021 by Raul Rodriguez-Torres and Lisa Rodriguez-Torres, husband and wife, whose mailing address is 164 SE Osprey Ridge, Port St. Lucie, FL 34984, hereinafter called the grantor(s), to Youth & Family Behavioral Health Center, Inc, a Florida corporation, whose post office address is 1211 S 25th St, Fort Pierce, FL 34950, hereinafter called the grantee:

(Wherever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives and assigns of individuals, and the successors and assigns of corporations)

WITNESSETH: That the grantor(s), for and in consideration of the sum of $10.00 (ten) and other valuable considerations, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto the grantee all that certain land situate in St. Lucie County, State of Florida, viz:

Parcel 1: The South 1/2 of Lot C and all of Lot D, less the East 10 feet thereof of the Resubdivision of Lots 1, 2, 3. 4, 11 and 12, Block 2, Kirby's Subdivision, according to the plat thereof, as recorded in Plat Book 8, Page 33, of the Public Records of St. Lucie County, Florida;

AND

Parcel 2: Lot 10, Block 2, KIRBY SUBDIVISION, according to the Plat thereof, as recorded in Plat Book 3, Page 86, Public Records of St. Lucie County, Florida, less the East 10 feet, deeded to the State of Florida in Official Records Book 169, Page 1169, of the Public Records of St. Lucie County, Florida.

Neither the grantor(s) named herein, nor the spouse(s) thereof nor anyone for whose support they are responsible reside on or adjacent to the property herein described and is not therefore their homestead property.

SUBJECT TO: covenants, conditions, restrictions, reservations, limitations, easements and agreements of record, if any; taxes and assessments for the year 2022 and subsequent years; and to all applicable zoning ordinances and/or restrictions and prohibitions imposed by governmental authorities, if any,

TOGETHER, with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

TO HAVE AND TO HOLD, the same in Fee Simple forever.

AND the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land, and hereby warrants the title to said land and will defend the same against the lawful claims of all persons.

IN WITNESS WHEREOF, the said grantor has signed and sealed these presents the day and year first above written.

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

Signed, sealed and delivered in the presence of:

Audrey Hand
First Witness Signature

Audrey Hand
Printed Signature

Patricia H Thompson
Second Witness Signature

PATRICIA H THOMPSON
Printed Signature

Raul Rodriguez-Torres

Lisa Rodriguez-Torres

State of Florida

County of St Lucie

The foregoing instrument was acknowledged before me by means of ☑ physical presence or ☐ online notarization, this 16 day of NOV, 2021 by Raul Rodriguez-Torres and Lisa Rodriguez-Torres, who has produced FL DL as identification or is personally known to me to be the persons therein.

Audrey Hand
Notary Public, State of Florida

My commission expires:
Seal

AUDREY HAND
Notary Public - State of Florida
Commission # GG 927160
My Comm. Expires Oct 28, 2023
Bonded through National Notary Assn.

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

National Pollutant Discharge Elimination System
Treasure Coast



BE A RESPONSIBLE NEIGHBOR ON THE STATE'S HIGHWAY

Please reference the following numbers:

Illicit Discharge or Illegal Dumping	FDOT Treasure Coast Operations Center	772-465-7396
Spill (oil or hazardous materials) onto the highway	State Watch Office	1-800-320-0519

- Return **used oil** to your nearest service station or any auto supply store for recycling.
- **SWEEP AND REMOVE**, do not wash fertilizers, grass clippings, pesticides, soil, or sediment into the storm drain system.
- **DURING CONSTRUCTION**, clean equipment tires before leaving your site and don't allow any erosion or sediment to enter the highway storm drain system. Control waste that may cause adverse impacts to water quality. Please contact FDOT Treasure Coast Operations Center **48 hours** prior to breaking ground on a project that has an **approved DCP**.

To keep up to date on your stormwater responsibility, please visit:
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
http://www.dep.state.fl.us/water

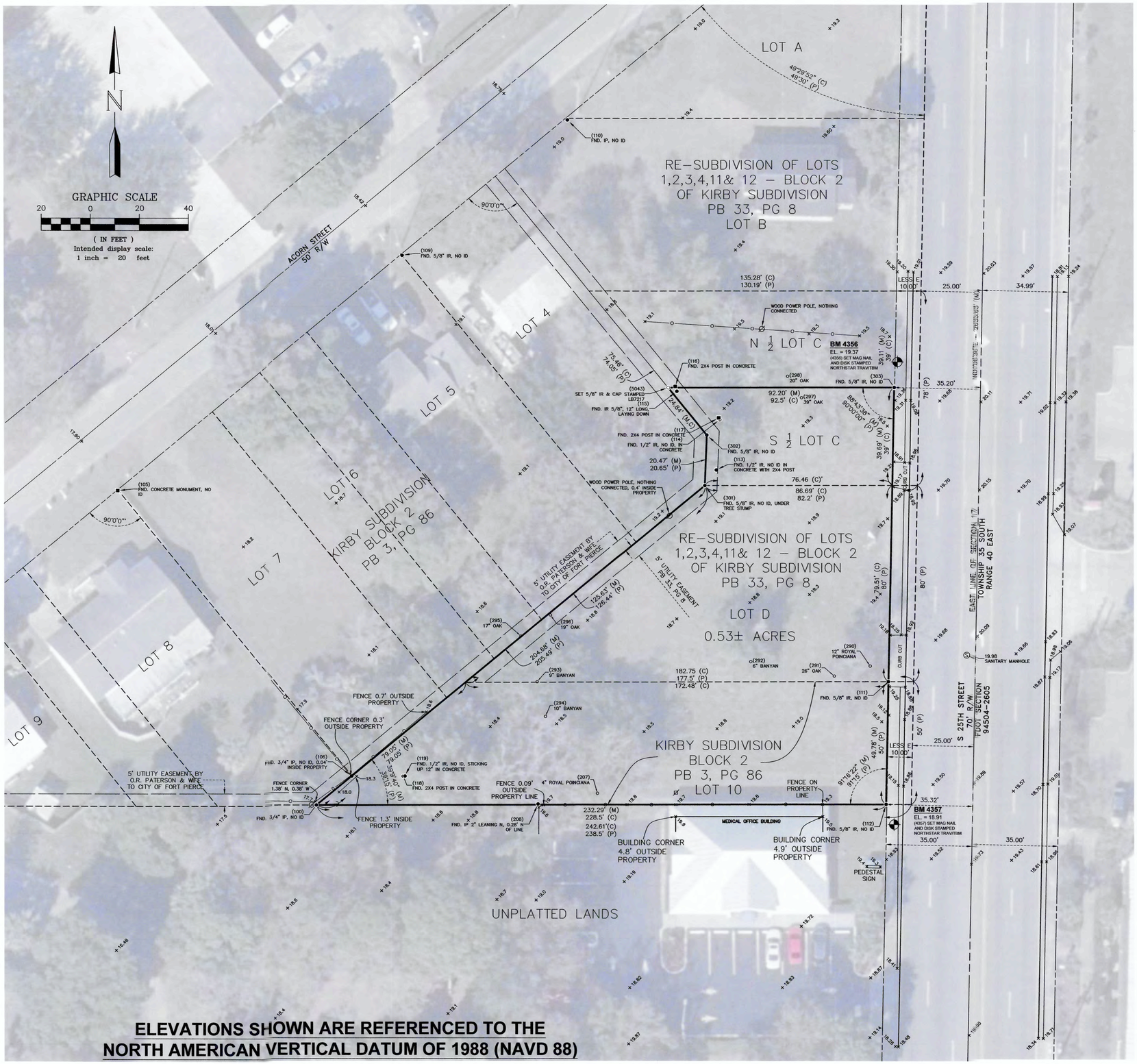
For your information, FDOT-sponsored trainings on illicit discharge detection and elimination (IDDE) or spill prevention/response can be found by visiting:

http://wbt.dot.state.fl.us/ois/IllicitDischarge/index.htm

http://wbt.dot.state.fl.us/ois/SpillPrevention/index.htm

REMEMBER, what goes into a storm drain ends up floating in our waterways or washing up on our beaches!!!

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024



SURVEYOR'S NOTES

1. THE EXPECTED USE OF THIS SURVEY IS FOR ENGINEERING DESIGN PURPOSES.
2. ALL MEASUREMENTS SHOWN HEREON ARE IN ACCORDANCE WITH THE UNITED STATES STANDARD AND ARE IN FEET.
3. ADDITIONS OR DELETIONS TO THE SURVEY MAP AND/OR REPORT BY OTHER THAN THE SIGNING PARTY IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES AND RENDERS THE SURVEY INVALID.
4. THIS SURVEY CANNOT BE TRANSFERRED OR ASSIGNED WITHOUT THE SPECIFIC WRITTEN PERMISSION OF THE SURVEYOR HEREON.
5. THE SURVEY MAP AND REPORT OR THE COPIES THEREOF ARE NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
6. THIS SURVEY MEETS OR EXCEEDS APPLICABLE ACCURACY REQUIREMENTS AND IS PREPARED ACCORDING TO THE STANDARDS OF PRACTICE SET FORTH BY THE FLORIDA ADMINISTRATIVE CHAPTER 5J-17 AS CODE, ADOPTED BY THE BOARD OF PROFESSIONAL SURVEYOR AND MAPPERS.
7. THERE WAS NO ATTEMPT TO LOCATE ANY UNDERGROUND UTILITIES, EXCEPT AS SHOWN.
8. LANDS SHOWN HEREON WERE NOT ABSTRACTED FOR RIGHT-OF-WAY EASEMENTS, OWNERSHIP, OR OTHER INSTRUMENTS OF RECORD.
9. SYMBOLS SHOWN HEREON ARE NOT TO SCALE.
10. FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), BY GRAPHIC PLOTTING ONLY, INDICATES SAID PROPERTY IS LOCATED WITHIN AN AREA HAVING A FLOOD ZONE DESIGNATION OF X ON FLOOD RATE PANEL NO. 12111C0186J, WITH A REVISION DATE OF 2/16/2012.
11. LAST DATE OF DATA ACQUISITION: 11/16/2022
12. THIS SURVEY IS INTENDED TO BE DISPLAYED AT THE SCALE SHOWN ON THE SCALE BAR.
13. BEARINGS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD83), ADJUSTMENT OF 2011, FLORIDA STATE PLANE EAST ZONE GRID NORTH AS ESTABLISHED BY THE NOS AND THE EAST LINE OF SECTION 17 AS SHOWN HEREON AS BEING N 01°08'36" E. ALL OTHER BEARINGS ARE RELATIVE THERETO. FLORIDA DEPARTMENT OF TRANSPORTATION PERMANENT REFERENCE NETWORK WAS USED AS HORIZONTAL CONTROL AND GPS RTK WITH REDUNDANT MEASUREMENTS. HORIZONTAL ACCURACY IS 0.10 FOOT, PLUS OR MINUS.
14. ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). ELEVATIONS DEPICTED ON THIS SURVEY WERE OBTAINED USING FLORIDA DEPARTMENT OF TRANSPORTATION PERMANENT REFERENCE NETWORK AND REAL TIME KINEMATIC (RTK) GPS METHODS WITH AN EXPECTED ACCURACY OF +/- 0.2'.
15. BACKGROUND IMAGERY OBTAINED FROM FLORIDA DEPARTMENT OF TRANSPORTATION, DATED 2021

LEGAL DESCRIPTION

PARCEL 1: THE SOUTH ½ OF LOT C AND ALL OF LOT D, LESS THE EAST 10 FEET THEREOF OF THE RESUBDIVISION OF LOTS 1, 2, 3, 4, 11, AND 12, BLOCK 2, KIRBY'S SUBDIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 8, PAGE 33, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA;

AND

PARCEL 2: LOT 10, BLOCK 2, KIRBY SUBDIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 3, PAGE 86, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, LESS THE EAST 10 FEET, DEEDED TO THE STATE OF FLORIDA IN OFFICIAL RECORDS BOOK 169, PAGE 1169, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

LEGEND

Abbreviations

(C)	= CALCULATED MEASUREMENT
(D)	= DEED MEASUREMENT
(M)	= FIELD MEASUREMENT
(P)	= PLAT MEASUREMENT
(xxxxx)	= SURVEYOR'S POINT NUMBER
BM	= BENCHMARK
CL	= CENTERLINE
DB	= DEED BOOK
FDOT	= FLORIDA DEPARTMENT OF TRANSPORTATION
FND	= FOUND
ID	= IDENTIFICATION
IP	= IRON PIPE
IR	= IRON ROD
LB	= LAND SURVEYING BUSINESS
NAVD88	= NORTH AMERICAN VERTICAL DATUM OF 1988
ORB	= OFFICIAL RECORDS BOOK
PB	= PLAT BOOK
PCN	= PARCEL CONTROL NUMBER
PG	= PAGE
PID	= PARCEL IDENTIFICATION NUMBER
PSM	= PROFESSIONAL SURVEYOR & MAPPER
X 14.2	= EXISTING ELEVATION

Linetypes

= BOUNDARY
= CHAIN LINK FENCE
= CENTERLINE
= RIGHT OF WAY
= SECTION LINE
= PLAT LOT LINE
= EASEMENT

Symbols

= BENCHMARK (AS LABELED)
= FOUND 1/4 SECTION CORNER
= FOUND SECTION CORNER
= POLE ANCHOR
= SANITARY MAN HOLE
= SET 5/8" IRON ROD & CAP STAMPED "NORTHSTAR LB 7217"
= SIGN
= TREE (AS LABELED)
= UTILITY PEDESTAL
= WOOD UTILITY POLE

SURVEYOR'S CERTIFICATION

(THIS SURVEY IS NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND RAISED EMBOSSED SEAL OF FRANK C. VELDHUIS, FLORIDA PROFESSIONAL SURVEYOR AND MAPPER.)

I HEREBY CERTIFY THAT THE BOUNDARY AND TOPOGRAPHIC SURVEY OF THE PROPERTY SHOWN AND DESCRIBED HEREON WAS COMPLETED UNDER MY DIRECTION AND SAID SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

I FURTHER CERTIFY THAT THIS BOUNDARY AND TOPOGRAPHIC SURVEY MEETS THE STANDARDS OF PRACTICE FOR SURVEYS SET FORTH BY THE FLORIDA BOARD OF LAND SURVEYORS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027 FLORIDA STATE STATUTES. NO SEARCH OF THE PUBLIC RECORDS HAS BEEN MADE BY THIS OFFICE. THIS SURVEY IS BASED ON INFORMATION FURNISHED BY CLIENT OR CLIENT'S REPRESENTATIVE

NORTHSTAR GEOMATICS, INC.

6-11-2023
DATE

FRANK C. VELDHUIS
PROFESSIONAL SURVEYOR & MAPPER
FLORIDA CERTIFICATION NO. 6582

NORTHSTAR GEOMATICS
5820 NW ZENITH DR
PORT ST LUCIE, FLORIDA 34986
(772) 781-6400 WWW.NSGEO.COM
LICENSED BUSINESS NO. 7217

DATE	REVISIONS

DATE 11/16/2022
SCALE 1" = 20'
FIELD BK. -
DWNG. BY FCV
CHECKED BY FCV

BOUNDARY AND TOPOGRAPHIC SURVEY FOR: YOUTH & FAMILY BEHAVIORAL HEALTH CENTER, INC.

SECTION 17, TOWNSHIP 35 SOUTH, RANGE 40 EAST
FT. PIERCE, FLORIDA

SHEET NO. 1
OF 1 SHEETS
PROJECT NO. 22-038

Approved
23-D-49000043
Leonid Lisnek
1/3/2024

SITE CIVIL CONSTRUCTION DRAWINGS

FOR

Youth and Family Behavioral Health Center

CITY OF FORT PIERCE
St. LUCIE COUNTY, FLORIDA

CONTACTS

OWNER
YOUTH & FAMILY BEHAVIORAL
HEALTH CENTER INC
1211 S 25TH ST
FORT PIERCE, FL 34947

LANDSCAPE ARCHITECT
CONCEPTUAL DESIGN GROUP, INC.
900 EAST OCEAN BOULEVARD, SUITE 130D
STUART, FLORIDA 34994
PHONE: 561-371-1644

CIVIL ENGINEER
CREECH CONSULTING, INC.
PO BOX 327
STUART, FL 34995
PHONE: (772) 485-2140

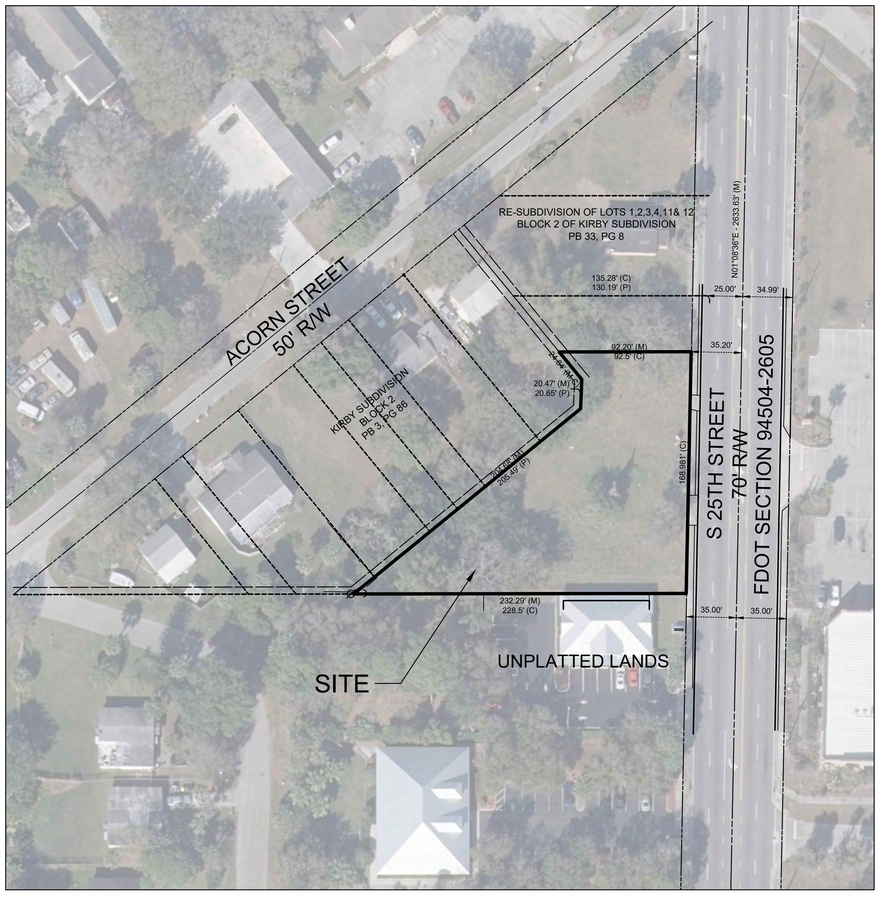
ARCHITECT
2KT ARCHITECTURE AND DESIGN
2081 SE OCEAN BLVD SUITE 1A
STUART, FL, 34996
PHONE: (772) 220-4411

SURVEYOR
NORTHSTAR GEOMATICS, INC.
617 NW BAKER RD
STUART, FL 34994
PHONE: (772)781-6400

TRAFFIC
O'ROURKE ENGINEERING & PLANNING
969 SE FEDERAL HIGHWAY, SUITE 402
STUART, FL 34994
PHONE: (772) 781-7918

GEOTECH
WHITESTONE
4 HARVARD CIRCLE, SUITE 850
WEST PALM BEACH, FLORIDA 33409
PHONE: (561) 717-7006

ENVIRONMENTAL
ADVANCE RESTORATION ECOLOGY
2593 NE ROBERTA ST
JENSEN BEACH, FL 34957
PHONE: (772) 242-7200



SITE LOCATION
MAP
1" = 50'

SHEET INDEX

SHEET NO.	SHEET TITLE
C0	COVER SHEET
C1	MASTER SITE PLAN
1	BOUNDARY AND TOPOGRAPHIC SURVEY
C2	DEMOLITION & EROSION CONTROL PLAN
C3	PAVING, GRADING & DRAINAGE PLAN
C4	WATER AND SEWER PLAN
C4a	LOCATION OF EXIST. FIRE HYDRANTS
D1	EROSION CONTROL DETAILS
D2-D3	PAVING, GRADING & DRAINAGE DETAILS
D4	PAVING, GRADING & DRAINAGE SPECIFICATIONS
D5	POTABLE WATER & WASTEWATER DETAILS & NOTES

NORTH

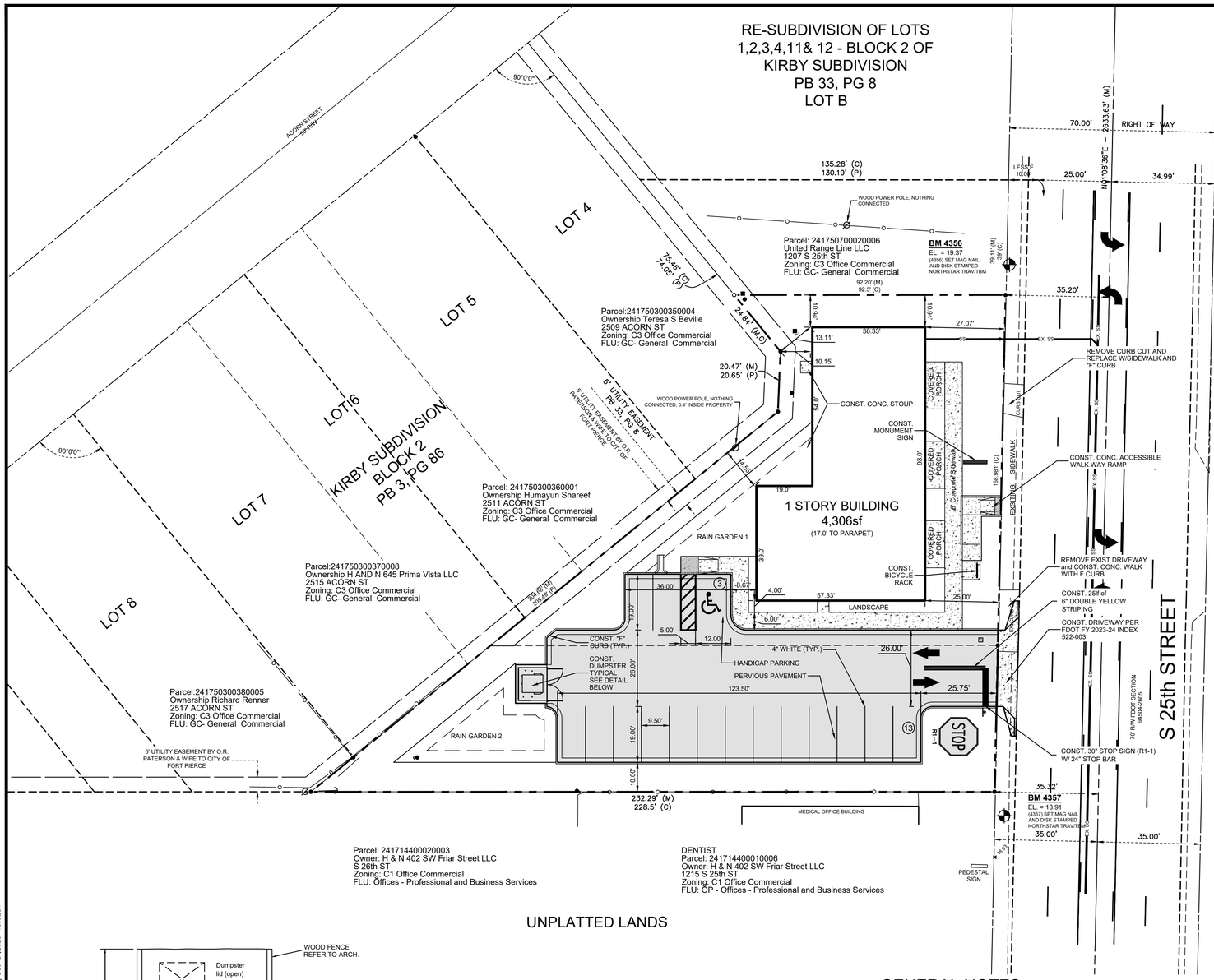
CREECH
CONSULTING, INC.
CIVILIZATION ENGINEERED
PO BOX 327, STUART, FLORIDA 34994 (772) 485-2140

BOARD OF PROFESSIONAL ENGINEERS, CERTIFICATE OF AUTHORIZATION NUMBER 5139
PROFESSIONAL SURVEYORS AND MAPPERS, AMENDED CERTIFICATE NO. LB-0006705

09/07/2023
RICHARD CREECH
FL P.E. NO. 38592

SHEET C0

Approved
2023-[illegible]-00043
Gerbert Barrios
1/3/2024



SITE DATA

1211 & 1213 S 25th Street

Parcel 1	2417-507-0005-000-7	12,446	0.29	ac	
Existing Zoning	C3 General Commercial				
Proposed Zoning	C3 General Commercial				
Existing Land Use	Vacant				
Future Land Use	General Commercial				
Parcel 2	2417-503-0040-000-2	10,055	0.23	ac	
Existing Zoning	C3 General Commercial				
Proposed Zoning	C3 General Commercial				
Existing Land Use	Vacant				
Future Land Use	General Commercial				
Total Site Area		**22,500 sf**	**0.52**	**ac**	**100%**
Impervious		**Square Feet**	**Acreage**		**Percent of Total**
Required (Max)		n/a sf		ac	
Proposed		9,239 sf	0.21	ac	41%
Impervious Total					
Building		4,306 sf	0.10	ac	19%
Pervious Pavement	50% impervious	3,580 sf	0.08	ac	16%
Sidewalk		1,353 sf	0.03	ac	6%
	sub-total	**9,239 sf**	**0.21**	**ac**	**41%**
Pervious Total			0.00		0%
Pervious Pavement	50% pervious	3,580 sf	0.08	ac	16%
Rain Garden 1		920 sf	0.02	ac	4%
Rain Garden 2		966 sf	0.02	ac	4%
Landscape / Green Area		7,795 sf	0.18	ac	35%
	sub-total	**13,261 sf**	**0.30**	**ac**	**59%**
Building Setbacks					
Front	25'				
Side	10				
Rear	0				
Max Building coverage		60%			
Prop. Office Building	Square footage	4,306 sf			
Prop. Office Building	Height to top of parapet	17 ft			
Parking					
Professional service establishments, Other		4,306 sf			14 spaces required
1 parking space for 300 square feet of non-storage floor area					
Total Required					14 spaces required
Total Accessible Required					1 spaces required
Total Provided					15 spaces required
Total Accessible Provided					1 spaces required

LEGAL DESCRIPTION

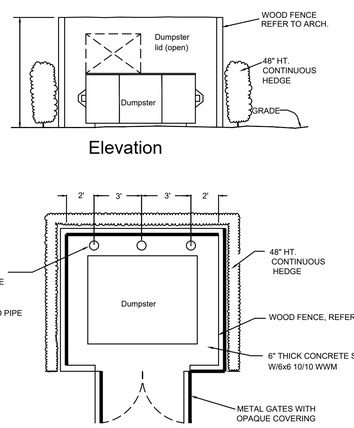
PARCEL 1: THE SOUTH ½ OF LOT C AND ALL OF LOT D, LESS THE EAST 10 FEET THEREOF OF THE RESUBDIVISION OF LOTS 1, 2, 3, 4, 11, AND 12, BLOCK 2, KIRBY'S SUBDIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 8, PAGE 33, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA;

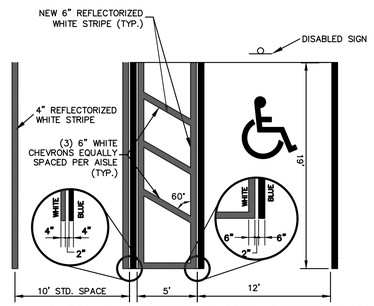
AND

PARCEL 2: LOT 10, BLOCK 2, KIRBY SUBDIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 3, PAGE 86, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, LESS THE EAST 10 FEET, DEEDED TO THE STATE OF FLORIDA IN OFFICIAL RECORDS BOOK 169, PAGE 1169, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

LEGEND

- RIGHT OF WAY LINES
- CHAIN LINK FENCE
- CENTER LINE
- RIGHT OF WAY LINE
- SECTION LINE
- PLAT LOT LINE
- EASEMENT LINE
- PERIMETER BERM
- PROPOSED CONCRETE
- PROPOSED PERVIOUS PAVEMENT
- Ø EXISTING UTILITY POLE



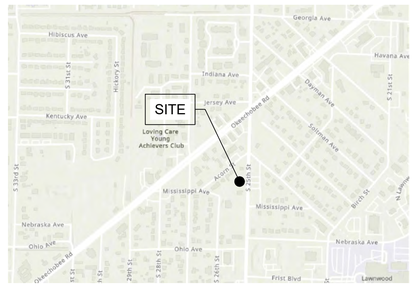


NOTES:
1. BLUE PAVEMENT MARKINGS SHALL BE TINTED TO MATCH SHADE 15180 OF FEDERAL STANDARDS 595A.
2. ALL DIMENSIONS ARE TO THE CENTERLINE OF MARKINGS.

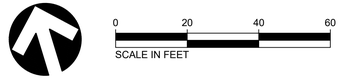
TYPICAL HANDICAP AND STRIPING DETAIL
NTS

GENERAL NOTES:

1. SURVEY PROVIDED BY NORTHSTAR GEOMATICS DATED 11/16/22.
2. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY OF FT. PIERCE REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
3. ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 1V:3H OR STEEPER. CONTRACTOR SHALL GRASS DISTURBED AREAS IN ACCORDANCE WITH CITY SPECIFICATIONS UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
4. ALL ISLANDS WITH CURB & GUTTER SHALL BE LANDSCAPED.
5. ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, (UNLESS OTHERWISE NOTED ON PLANS) INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS & POLES, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN BASE BID.
7. REFER TO ARCHITECTURAL PLANS FOR SITE LIGHTING AND ELECTRICAL PLANS.
8. ALL SIDEWALKS AND ADA ACCESSIBLE AREAS SHALL HAVE A MAXIMUM RUNNING SLOPE OF 1V:20H & A MAXIMUM CROSS SLOPE OF 1V:50H.
9. ALL CURB RAMPS TO HAVE DETECTABLE WARNINGS & BE CONSTRUCTED PER LATEST EDITIONS OF FDOT STANDARDS PLANS FOR ROAD CONSTRUCTION, INDEX 522-002, FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, SECTION 527 & PER ADA REQUIREMENTS.
10. ALL STRIPING TO BE HIGH SLIP-RESISTANT FINISH TO PREVENT SLIPPING IN WET & DRY CONDITIONS.
11. ALL STRIPING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF FDOT STANDARD PLANS FOR ROAD CONSTRUCTION, INDEX# 711-001, FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 711 "THERMO PLASTIC PAVEMENT MARKINGS",CITY OF FT. PIERCE
12. REQUIREMENTS. INSTALL RETRO-REFLECTIVE PAVEMENT MARKINGS (RPM'S).
13. ALL STRIPING SHALL BE INSTALLED AFTER NEW PAVEMENT.
14. ALL PROHIBITED EXOTIC SPECIES SHALL BE REMOVED AND ALL REQUIRED LANDSCAPING SHALL BE INSTALLED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
15. REFER TO CONSTRUCTION DRAWINGS FOR LOCATION OF TRAFFIC CONTROL DEVICES.
16. DURING CONSTRUCTION ACTIVITIES, EXIST. NATIVE VEGETATION TO BE PRESERVED (IF ANY) SHALL BE RETAINED TO ACT AS BUFFERS BETWEEN ADJACENT LAND USES, AND TO MINIMIZE NUISANCE DUST, NOISE AND AIR POLLUTION. BARRICADES SHALL BE USED ON SITE TO PRESERVE THE VEGETATION TO BE USED FOR THIS PURPOSE.
17. ALL SIGNS WILL BE REVIEWED FOR COMPLIANCE WITH THE APPLICABLE REGULATIONS AT THE TIME THE SIGN PERMIT IS ISSUED.
18. ALL BUILDING, PARKING AND ACCESS AREAS SHALL DOCUMENT COMPLIANCE WITH THE REQUIREMENTS OF THE AMERICAN DISABILITIES ACT PRIOR TO THE ISSUANCE OF A BUILDING PERMIT.
19. NO LAND CLEARING IS AUTHORIZED PRIOR TO THE MANDATORY PRE-CONSTRUCTION MEETING FOR THE PROJECT. PROPERTY CORNERS AND PRESERVATION AREAS SHALL BE LOCATED BY A LICENSED LAND SURVEYOR AND CLEARLY MARKED IN THE FIELD PRIOR TO THE PRE-CONSTRUCTION MEETING. AUTHORIZATION FOR CLEARING TO INSTALL EROSION CONTROL DEVICES AND PRESERVE BARRICADES WILL BE GRANTED AT THE PRE-CONSTRUCTION MEETING. NO ADDITIONAL LAND CLEARING SHALL COMMENCE UNTIL A SATISFACTORY INSPECTION OF THE REQUIRED CONTROL STRUCTURES AND BARRICADES HAS BEEN OBTAINED. AUTHORIZATION FOR THE RELOCATION OF GOPHER TORTOISES WITHIN THE DEVELOPMENT.
20. THE SITE PLAN SHALL HAVE A NOTE THAT STATES "ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCE SECTIONS 107, 119 AND 125".



VICINITY MAP
SECTION 17, TOWNSHIP 38S, RANGE 40E
NOT TO SCALE



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

P:\Projects\2022\2022-016-001 Youth and Family Center\CAD\1- Plans\C1 Site Plan.dwg C1 SITE PLAN dsc...| Dec 21,2023-10:32am

CREECH
CONSULTING, INC.
CIVIL ENGINEERING
PO BOX 327, STUART, FLORIDA 34994 (772) 485-2140
BOARD OF PROFESSIONAL ENGINEERS, CERTIFICATE OF AUTHORIZATION NUMBER 5139
PROFESSIONAL SURVEYORS AND MAPPERS, AMENDED CERTIFICATE NO. LB-0006705

DATE	BY	REVISIONS
12/20/2023	JAC	PER FDOT DRIVEWAY CONNECTION COMMENTS
10/90/2023	JAC	PER TRC COMMENTS DATED 10/04/23
09/07/2023	JAC	PER TRC COMMENTS DATED 07/19/23

YOUTH & FAMILY
BEHAVIORAL HEALTH CENTER INC
FORT PIERCE FLORIDA

MASTER SITE PLAN AND STRIPING PLAN

DRAWN BY:	JAC
CHECKED BY:	RTC / ANDREWS
LATITUDE:	27°26'5.40"N
LONGITUDE:	80°21'2.96"W
HORZ. SCALE:	1" =20'
VERT. SCALE:	

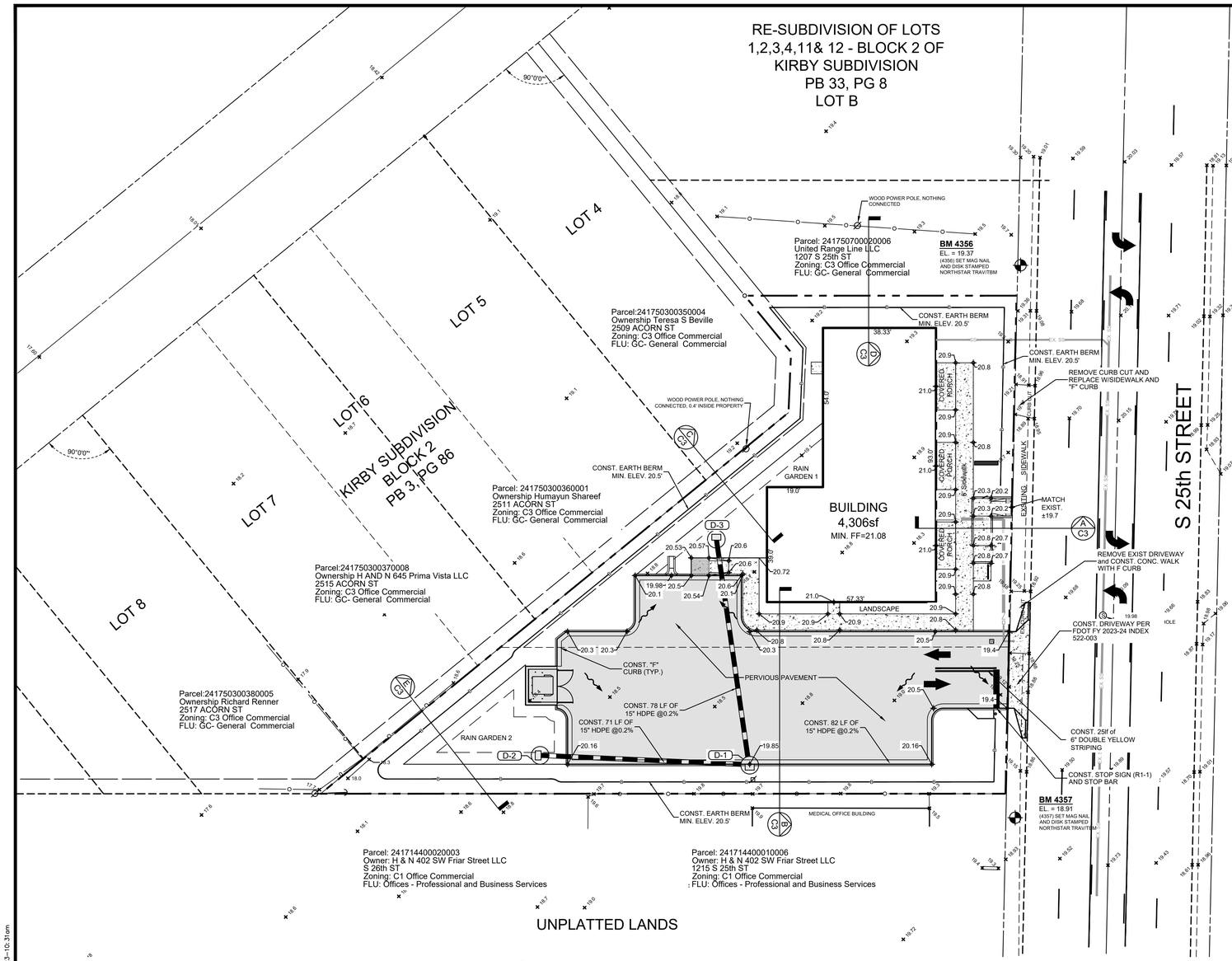
SEAL

09/07/2023
RICHARD CREECH
FL P.E. NO. 38592

SHEET C1

PROJECT NO. 22-016-001

Approved
2023-12-490-00043
Jason Kosinski
1/5/2024



LEGEND

- RIGHT OF WAY LINES
- CHAIN LINK FENCE
- CENTER LINE
- RIGHT OF WAY LINE
- SECTION LINE
- PLAT LOT LINE
- EASEMENT LINE
- PROPOSED CONCRETE
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- EXISTING UTILITY POLE
- PROPOSED PERIMETER BERM
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER SERVCE
- PROPOSED 2" WATER SERVICE
- PROPOSED STORM PIPE
- PROPOSED INLETS
- D-09 PROPOSED DRAINAGE STRUCTURE
- DRAINAGE FLOW ARROW
- 16.30 PROPOSED GRADES
- +14.3 EXISTING ELEVATION
- (S) PROPOSED LIFT STATION
- (FH) EXISTING FIBER OPTIC HANDHOLE
- EXISTING UTILITY POLE
- BM EXISTING NAVD BENCH MARK

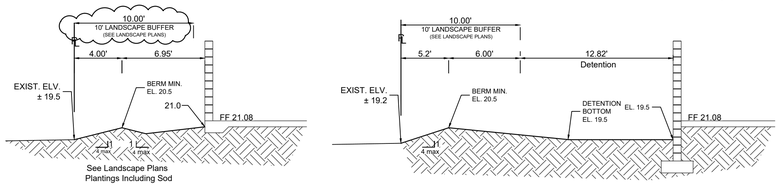
STORM DRAINAGE STRUCTURE TABLE	
STRUCTURE NAME	STRUCTURE DETAILS
D-01	GRATE ELEV. = 19.85 (W) INV. ELEV. = 14.25 (N) INV. ELEV. = 14.25
D-02	GRATE ELEV. = 19.50 (E) INV. ELEV. = 14.40
D-03	GRATE ELEV. = 19.50 (S) INV. ELEV. = 14.40

NOTES:

1. REQUIRED MINIMUM ELEVATIONS:
   a. MINIMUM FINISHED FLOOR ELEVATION = 21.08 NAVD.
   b. MINIMUM ROAD ELEVATION = 19.5 NAVD.
   c. MINIMUM PERIMETER ELEVATION = 20.5 NAVD.
2. RAIN GARDENS
   a. TOP OF RAIN GARDENS = 20.50'
   b. BOTTOM OF RAIN GARDENS = 19.50'

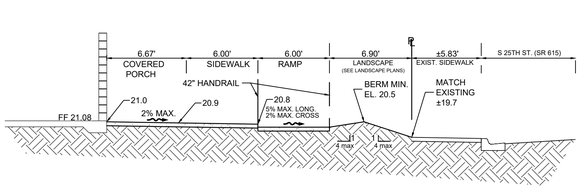
GRADING NOTES

1. THE SURVEY WAS PROVIDED BY NORTHSTAR GEOMATICS, FIELD DATED NOVEMBER 16, 2022.
2. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 121 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
3. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE DRAWINGS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR TO VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
4. ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED.
5. PRECAST STRUCTURES ARE TO BE USED.
6. STORM PIPE SHALL BE IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS.
7. ALL STORM PIPES & STRUCTURES TO BE CLEANED, VACUUMED & DESILTED PRIOR TO PROJECT TURN OVER. DRY DETENTION AREA TO BE DESILTED PRIOR TO PROJECT TURN OVER.
8. IF ANY EXISTING STRUCTURE TO REMAIN IS DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
9. ALL STORM PIPE ENTERING STORM STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STORM STRUCTURE IS WATERTIGHT.
10. ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE 6" ABOVE FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER".
11. THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE EPA, FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP), NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) "GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES" AND THE PROJECT SPECIFICATIONS.
12. CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
13. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
14. CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH GOVERNING SPECIFICATIONS UNTIL A HEALTHY STAND OF VEGETATION IS OBTAINED. ALSO REFER TO THE LANDSCAPE PLANS FOR ADDITIONAL REQUIREMENTS FOR LANDSCAPE/OPEN SPACE AREAS.
15. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
16. PROPOSED GRADE ELEVATIONS SHOWN ARE AT THE EDGE OF PAVEMENT LINE OF UNLESS OTHERWISE NOTED.
17. CONTRACTOR TO PAY SPECIAL ATTENTION WHEN COMPACTING SOIL AROUND SANITARY AND DRAINAGE STRUCTURES AND SHALL ENSURE THAT THE SOIL IS PROPERLY COMPACTED TO ELIMINATE DIFFERENTIAL SETTLEMENT. THE PAVEMENT SUBGRADE FILL PLACED WITHIN 24 INCHES OF FINISHED SUBGRADE ELEVATION AND AT LEAST THE UPPER 24 INCHES OF SUBGRADE IN ALL CUT AREAS SHALL BE COMPACTED TO AT LEAST 98% OF THE MATERIAL'S MAXIMUM MODIFIED PROCTOR DRY DENSITY (ASTM D1557).
18. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SUFFICIENT COVER OVER ALL PIPES DURING ALL CONSTRUCTION PHASES IN ORDER TO PREVENT DAMAGE TO THE DRAINAGE SYSTEM.
19. ANY DAMAGE TO THE DRAINAGE SYSTEM DURING CONSTRUCTION WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR / REPLACE AND INCUR ALL COSTS.
20. CONTRACTOR SHALL TAKE SPECIAL CARE TO AVOID UNNECESSARY DISTURBANCE OF EXISTING SOILS, ESPECIALLY THOSE W/ SENSITIVE OPTIMAL MOISTURE CONTENT.
21. DRAINAGE STRUCTURE SYMBOLS SHOWN ON THE DRAWING ARE NOT TO SCALE.
22. SAW CUT PAVEMENT AT CONFORMS AND PROTECT EDGE.
23. ALL CURB CUT RAMPS SHALL HAVE DETECTABLE WARNING STRIPS AND CONSTRUCTED PER LATEST EDITION OF FDOT STANDARD SPECIFICATIONS SECTION 522-002 AND PER ADA REQUIREMENTS.
24. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF AND EXISTING UTILITIES SERVING PREVIOUS STRUCTURES. UTILITIES ARE TO BE REMOVED TO THE RIGHT-OF-WAY.

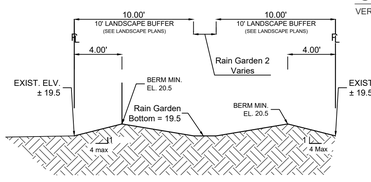


SECTION D-D
VERT. & HORZ. SCALE 1"=6'

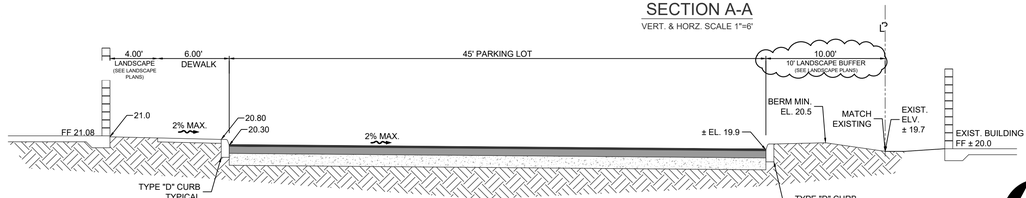
SECTION C-C
VERT. & HORZ. SCALE 1"=6'



SECTION A-A
VERT. & HORZ. SCALE 1"=6'



SECTION E-E
VERT. & HORZ. SCALE 1"=6'



See Landscape Plans Plantings Including Sod

SECTION B-B
VERT. & HORZ. SCALE 1"=6'

0 20 40 60
SCALE IN FEET

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P:\Projects\2022\2022-016-001 Youth and Family Center\CIVIL\~ Plans\C3 STORM.dwg C3 STORM dat=_j Dec 21,2023--10:31am

CREECH
CONSULTING, INC.
CIVIL ENGINEERING
PO BOX 327, STUART, FLORIDA 34994 (772) 485-2140
BOARD OF PROFESSIONAL ENGINEERS, CERTIFICATE OF AUTHORIZATION NUMBER 5139
PROFESSIONAL SURVEYORS AND MAPPERS, AMENDED CERTIFICATE NO. LB-0006705

DATE	BY	REVISIONS
12/20/2023	JAC	PER FDOT DRIVEWAY CONNECTION COMMENTS
10/90/2023	JAC	PER TRC COMMENTS DATED 10/04/23
09/07/2023	JAC	PER TRC COMMENTS DATED 07/19/23

YOUTH & FAMILY
BEHAVIORAL HEALTH CENTER INC
PAVING, GRADING & DRAINAGE PLAN

FORT PIERCE FLORIDA

DRAWN BY:	JAC
CHECKED BY:	RTC / ANDREWS
LATITUDE:	27°26'5.40"N
LONGITUDE:	80°21'2.96"W
HORZ. SCALE:	1" =20'
VERT. SCALE:	

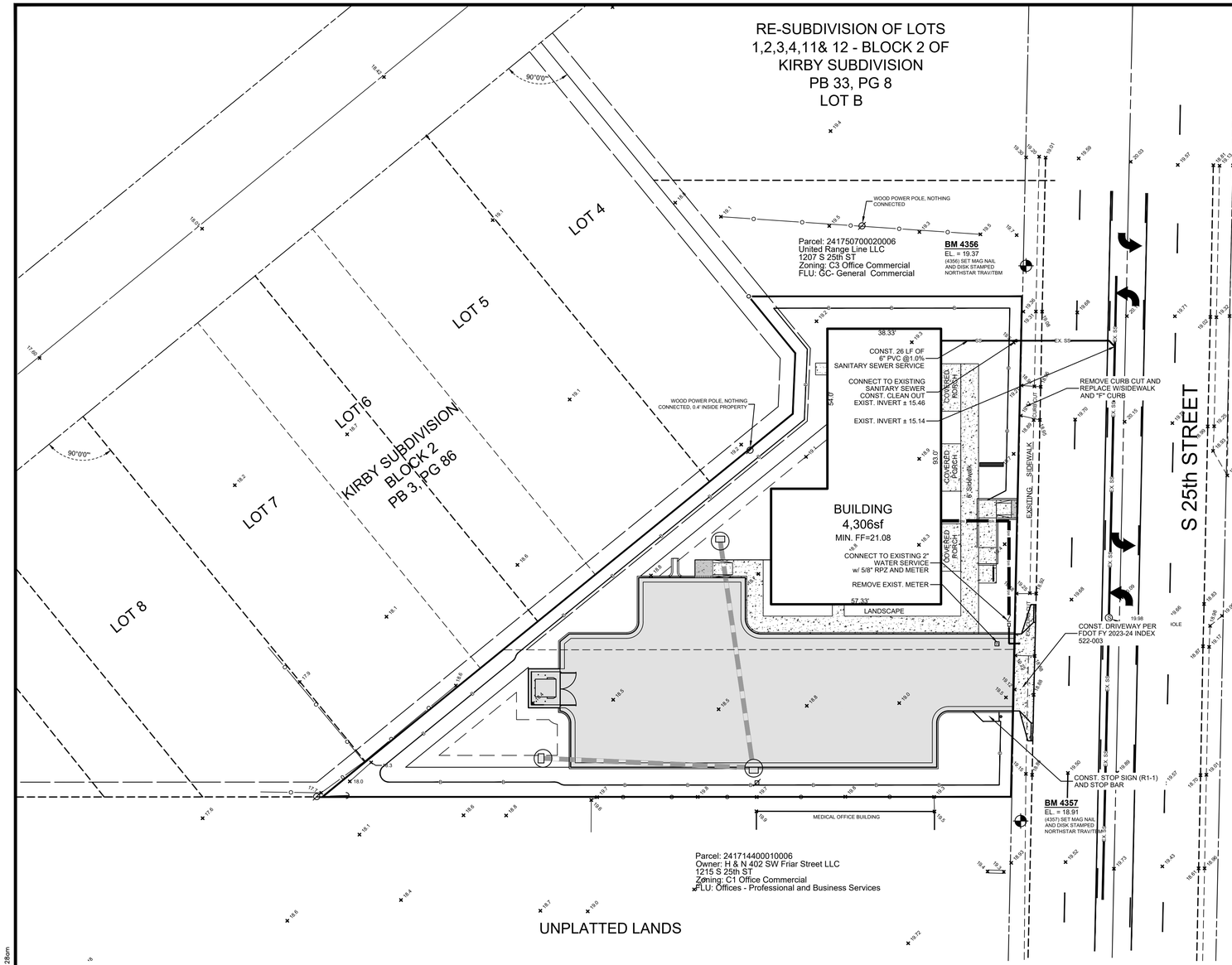
SEAL

09/07/2023
RICHARD CREECH
FL P.E. NO. 38592

SHEET C3

PROJECT NO. 22-016-001

Approved
2023-1490-00043
Stuart Florida
1/3/2024



LEGEND

- RIGHT OF WAY LINES
- CHAIN LINK FENCE
- CENTER LINE
- RIGHT OF WAY LINE
- SECTION LINE
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- PROPOSED CONCRETE
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- EXISTING UTILITY POLE
- PROPOSED PERIMETER BERM
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER SERVCE
- PROPOSED 2" WATER SERVICE
- PROPOSED STORM PIPE
- PROPOSED INLETS
- D-09 PROPOSED DRAINAGE STRUCTURE
- DRAINAGE FLOW ARROW
- 16.30 PROPOSED GRADES
- 14.3 EXISTING ELEVATION
- S PROPOSED LIFT STATION
- FH EXISTING FIBER OPTIC HANDHOLE
- EXISTING UTILITY POLE
- BM EXISTING NAVD BENCH MARK

UTILITY NOTES

1. EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE FORT PIERCE UTILITY AUTHORITY, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
3. ALL FILL MATERIAL IS TO BE IN PLACE, AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
4. CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
5. SANITARY SEWER PIPE SHALL BE AS FOLLOWS:
   - 6" PVC SDR26 PER ASTM D 3034
   - 8" PVC SDR26 PER ASTM D 3034
6. WATER LINES SHALL BE AS FOLLOWS:
   - 2" AND SMALLER, POLYETHYLENE AS DEFINED BY ASTM D2737 SDR9 COPPER TUBE SIZE
   - 4"-12", PVC DR-18 C-900
7. DUCTILE IRON PIPE (DIP) SHALL BE REQUIRED WHEN WITHIN SIX (6) FEET HORIZONTALLY OF SEWAGE FACILITIES OR PIPES.
8. DUCTILE IRON PIPE (DIP) SHALL BE A MINIMUM OF PRESSURE CLASS 350 AND CONFORM TO THE LATEST STANDARDS OF ANSI/AWWA C150/A21.50 FOR THE THICKNESS DESIGN OF DIP.
9. ALL UTILITIES SHOULD HAVE A MINIMUM HORIZONTAL SEPARATION OF 3' TO POWER POLES, LIGHT POLES, OR OTHER UTILITIES, 15' TO BUILDINGS, TOP OF BANKS OF LAKES & CANALS AND OTHER STRUCTURES, OR ABSOLUTE MINIMUM OF 10' WITH DIP.
10. ALL WATER FITTINGS ARE TO BE DUCTILE IRON MECHANICAL JOINTS AS CALLED OUT IN FORT PIERCE UTILITY AUTHORITY MINIMUM DESIGN & CONSTRUCTION STANDARDS.
11. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 30" COVER ON ALL WATERLINES, 8" OR SMALLER. IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES (EXISTING AND PROPOSED), THE WATER LINE SHALL HAVE APPROPRIATE RESTRAINTS AS REQUIRED BY FORT PIERCE UTILITY AUTHORITY , A MINIMUM OF 6" CLEARANCE (12" PREFERRED).
12. LINES UNDERGROUND SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
13. TOPS OF EXISTING MANHOLES SHALL BE RAISED AS NECESSARY TO BE FLUSH WITH PROPOSED PAVEMENT ELEVATIONS, AND TO BE ONE FOOT ABOVE FINISHED GROUND ELEVATIONS WITH WATERTIGHT LIDS WHEN LOCATED IN UNPAVED AREAS.
14. CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE LOCAL AUTHORITIES REGARDING TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES.
15. ALL EXISTING VALVES TO BE ADJUSTED TO FINAL FINISHED GRADE.
16. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES. THIS AND THE FINAL CONNECTIONS OF THE SERVICE SHALL BE COMPLETED AT LEAST 30 DAYS PRIOR TO C.O.
17. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
18. CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING UTILITY DURING CONSTRUCTION AT NO COST TO THE OWNER.
19. SEE FORT PIERCE UTILITY AUTHORITY MINIMUM DESIGN & CONSTRUCTION STANDARDS FOR BACKFILLING AND COMPACTION REQUIREMENTS ON UTILITY TRENCHES.
20. CONTRACTOR SHALL COMPLY WITH FORT PIERCE UTILITY AUTHORITY MINIMUM DESIGN & CONSTRUCTION STANDARDS, LATEST EDITION.
21. CONTRACTOR SHALL GROUT ALL PIPE ENTRANCES AND PIPE REMOVALS TO/FROM MANHOLES TO ASSURE WATER TIGHT CONNECTIONS AND PLUGS.
22. DRAWINGS DO NOT PURPORT TO SHOW ALL EXISTING UTILITIES.
23. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATION OF ALL UTILITY ENTRANCES TO INCLUDE SANITARY SEWER LATERALS, DOMESTIC AND FIRE PROTECTION WATER SERVICE, ELECTRICAL, TELEPHONE, FIBER OPTIC, AND GAS SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND ASSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH FORT PIERCE UTILITY AUTHORITY REQUIREMENTS AS TO LOCATION AND SCHEDULING FOR TIE-INS, CONNECTIONS AND INSPECTIONS PRIOR TO CONNECTING TO EXISTING UTILITIES.
24. CONTRACTOR SHALL CONDUCT ALL REQUIRED TESTS TO THE SATISFACTION OF THE RESPECTIVE UTILITY COMPANIES AND THE OWNER'S INSPECTING AUTHORITIES.
25. CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST STANDARDS OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING AND ANY OTHER MEANS OF PROTECTION. THIS INCLUDES, BUT IS NOT LIMITED TO, ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE TO COMPLY WITH PERFORMANCE CRITERIA FOR OSHA.
26. THE INSTALLATION OR REPAIR OF ANY UNDERGROUND FACILITIES OF PIPING WHICH CONNECTS TO OR FURNISHES WATER FOR THE FIRE PROTECTION SPRINKLER SYSTEM SHALL BE PERFORMED ONLY BY A LICENSED UTILITY CONTRACTOR, FIRE PROTECTION SPRINKLER CONTRACTOR OR LICENSED PLUMBER. SEE O.C.G.A. TITLE 25-11-7-(a). A COPY OF THE LICENSE OR CERTIFICATE OF COMPETENCY SHALL BE PROVIDED TO THE INSPECTOR AT THE FINAL INSPECTION.

0 20 40 60
SCALE IN FEET

CREECH
CONSULTING, INC.
CIVIL ENGINEERING
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YOUTH & FAMILY
BEHAVIORAL HEALTH CENTER INC

WATER AND SEWER PLAN

FORT PIERCE FLORIDA

DRAWN BY:	JAC
CHECKED BY:	RTC / ANDREWS
LATITUDE:	27°26'5.40"N
LONGITUDE:	80°21'2.96"W
HORZ. SCALE:	1" =20'
VERT. SCALE:	

SEAL

09/07/2023
RICHARD CREECH
FL P.E. NO. 38592

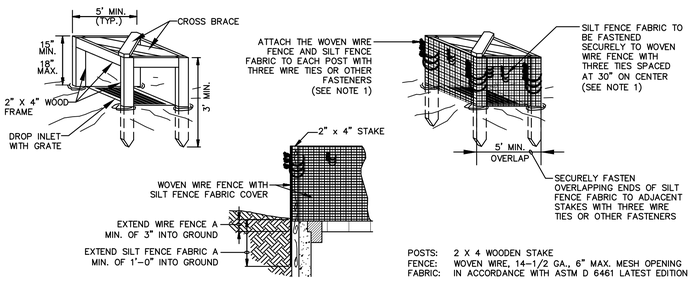
SHEET C4

PROJECT NO. 22-016-001

Approved
2023-1490-00043
George Kisak
1/3/2024

P:\Projects\2022\2022-016-001 Youth and Family Center\CAD\1- Plans\C4 UTL.dwg C4 UTL on--] Dec 21,2023-10:28am

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



POSTS: 2 X 4 WOODEN STAKE
FENCE: WOVEN WIRE, 14-1/2 GA., 6" MAX. MESH OPENING
FABRIC: IN ACCORDANCE WITH ASTM D 6461 LATEST EDITION

NOTES:

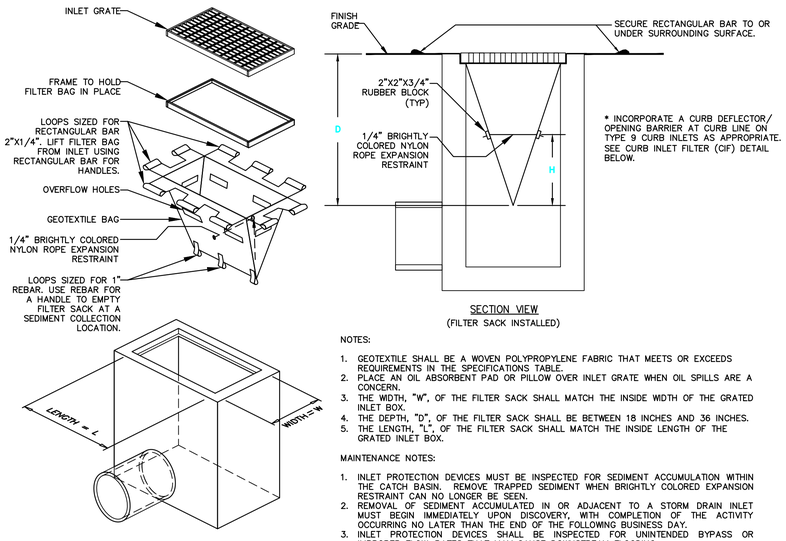
1. ATTACH THE WOVEN WIRE FENCE AND THE GEOTEXTILE TO EACH POST (SPACED EVERY 30") WITH THREE WIRE TIES OR OTHER FASTENERS, ALL SPACED WITHIN THE TOP 8" OF THE FABRIC. ATTACH EACH TIE DIAGONALLY 45 DEGREES THROUGH THE FABRIC, WITH EACH PUNCTURE AT LEAST 1" VERTICALLY APART.
2. WHEN TWO SECTIONS OF SILT FENCE FABRIC ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED ACROSS TWO POSTS.
3. MAINTENANCE SHALL BE PERFORMED AS NOTED IN THE SWPPP. DEPTH OF ACCUMULATED SEDIMENTS MAY NOT EXCEED ONE-THIRD THE HEIGHT OF THE FABRIC.
4. ALL SILT FENCE INLET PROTECTIONS SHALL INCLUDE WIRE SUPPORT.

MAINTENANCE NOTES:

1. INLET PROTECTION DEVICES MUST BE INSPECTED FOR SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN (IF USING INSERT-TYPE DEVICE) OR UPGRADIENT OF THE INLET.
2. REMOVAL OF SEDIMENT ACCUMULATED IN OR ADJACENT TO A STORM DRAIN INLET MUST BEGIN IMMEDIATELY UPON DISCOVERY, WITH COMPLETION OF THE ACTIVITY OCCURRING NO LATER THAN THE END OF THE FOLLOWING BUSINESS DAY.
3. INLET PROTECTION DEVICES SHALL BE INSPECTED FOR UNINTENDED BYPASS OR IMPROPER FLOW-RATES THAT MAY CAUSE DOWNSTREAM FLOODING.
4. CONTACT THE CEC FOR ALTERNATE INLET PROTECTION IF THE DESIGNED PROTECTION MAY IMPACT DOWNSTREAM BMPS, ADJACENT SLOPES, ETC., DUE TO PONDING ISSUES. ENSURE THAT NO UNDERMINING OF INLET PROTECTION DEVICES HAS OCCURRED.
5. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.

SILT FENCE INLET PROTECTION DETAIL AT UNPAVED AREAS

N.T.S.



ISOMETRIC VIEW

SECTION VIEW
(FILTER SACK INSTALLED)

NOTES:

1. GEOTEXTILE SHALL BE A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS REQUIREMENTS IN THE SPECIFICATIONS TABLE.
2. PLACE AN OIL ABSORBENT PAD OR PILLOW OVER INLET GRATE WHEN OIL SPILLS ARE A CONCERN.
3. THE WIDTH, "W", OF THE FILTER SACK SHALL MATCH THE INSIDE WIDTH OF THE GRATED INLET BOX.
4. THE DEPTH, "D", OF THE FILTER SACK SHALL BE BETWEEN 18 INCHES AND 36 INCHES.
5. THE LENGTH, "L", OF THE FILTER SACK SHALL MATCH THE INSIDE LENGTH OF THE GRATED INLET BOX.

MAINTENANCE NOTES:

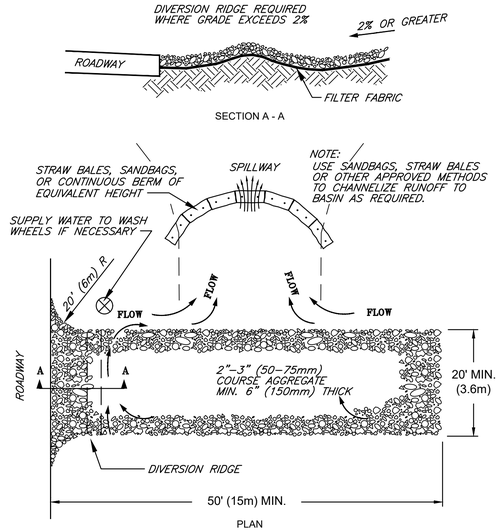
1. INLET PROTECTION DEVICES MUST BE INSPECTED FOR SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN. REMOVE TRAPPED SEDIMENT WHEN BRIGHTLY COLORED EXPANSION RESTRAINT CAN NO LONGER BE SEEN.
2. REMOVAL OF SEDIMENT ACCUMULATED IN OR ADJACENT TO A STORM DRAIN INLET MUST BEGIN IMMEDIATELY UPON DISCOVERY, WITH COMPLETION OF THE ACTIVITY OCCURRING NO LATER THAN THE END OF THE FOLLOWING BUSINESS DAY.
3. INLET PROTECTION DEVICES SHALL BE INSPECTED FOR UNINTENDED BYPASS OR IMPROPER FLOW-RATES THAT MAY CAUSE DOWNSTREAM FLOODING.
4. CONTACT THE CEC FOR ALTERNATE INLET PROTECTION IF THE DESIGNED PROTECTION MAY IMPACT DOWNSTREAM BMPS, ADJACENT SLOPES, ETC., DUE TO PONDING ISSUES. ENSURE THAT NO UNDERMINING OF INLET PROTECTION DEVICES HAS OCCURRED.
5. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.

LOW TO MODERATE FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	300 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	120 LBS
MULLEN BURST	ASTM D-3786	800 PSI
TRAPEZOID TEAR	ASTM D-4533	120 LBS
UV RESISTANCE	ASTM D-4355	80 %
APPARENT OPENING SIZE	ASTM D-4751	40 US SIEVE
FLOW RATE	ASTM D-4491	40 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	0.55 SEC -1

MODERATE TO HIGH FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	135 LBS
MULLEN BURST	ASTM D-3786	420 PSI
TRAPEZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4355	90 %
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	1.5 SEC -1

INLET PROTECTION FILTER SACK

N.T.S.



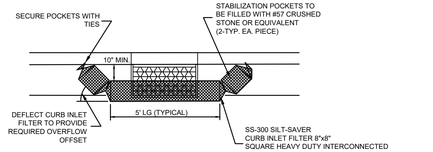
SECTION A - A

PLAN

NOTES:

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

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT DETAIL

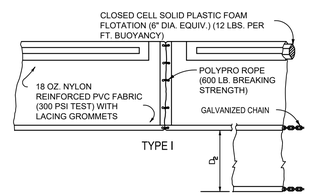


INSTALLATION PROCEDURE:

1. IDENTIFY OPENING DIMENSIONS TO DETERMINE THE NUMBER OF SS-300 CURB INLET FILTERS THAT WILL BE REQUIRED.
2. COMPLETELY FILL THE STABILIZATION CHAMBER ON EACH END OF EACH SS-300 CURB INLET FILTER WITH #57 CRUSHED STONE.
3. SECURE ENDS OF THE STABILIZATION POCKETS WITH TIES.
4. PLACE THE SS-300 CURB INLET FILTER(S) IN FRONT OF THE CURB INLET OR OPENING TO PREVENT THE MIGRATION OF SILT INTO THE STORM DRAIN SYSTEM.

CURB INLET FILTER DETAIL

N.T.S.

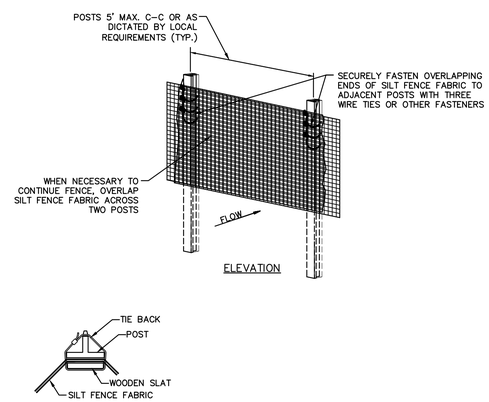


D =5' STD. (SINGLE PANEL FOR DEPTHS 5' OR LESS),
D =5' STD. (ADDITIONAL PANEL FOR DEPTHS GREATER THAN 5'),

CURTAIN TO REACH BOTTOM UP TO DEPTHS OF 10'. TWO (2) PANELS TO BE USED FOR DEPTHS GREATER THAN 10' UNLESS SPECIAL DEPTHS SPECIFICALLY CALLED FOR IN THE PLANS OR AS DETERMINED BY THE ENGINEER.

FLOATING TURBIDITY BARRIER DETAIL

N.T.S.



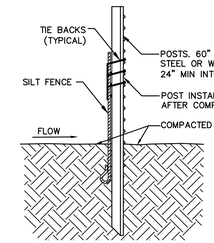
ELEVATION

INSIDE CORNER - PLAN VIEW

TABLE 1 Temporary Silt Fence Material Property Requirements

		Test Method	Units	Supported[A] Silt Fence	Unsupported[A] Silt Fence	Type of Value
Grab Strength		ASTM D 4632	N (lbs)			
	Machine Direction			400 (90)	550 (90)	MARV
	X-Machine Direction			400 (90)	450 (90)	MARV
Permittivity[B]		ASTM D 4491	sec-1	0.05	0.05	MARV
Apparent Opening Size[B]		ASTM D 4751	mm (US Sieve #)	0.60 (30)	0.60 (30)	Max. ARV[C]
Ultraviolet Stability		ASTM D 4355	% Retained Strength	70% after 500 h of exposure	70% after 500 h of exposure	Typical

[A]Silt fence support shall consist of 14 gage steel wire with a mesh spacing of 150 mm (6 in.) or prefabricated polymer mesh of equivalent strength.
[B]These default values are based on empirical evidence with a variety of sediments. For environmentally sensitive areas, a review of previous experience and/or site or regionally specific geotextile tests in accordance with Test Method D 5141 should be performed by the agency to confirm suitability of these requirements.
[C]As measured in accordance with Test Method D 4632.
TABLE 1 TAKEN FROM ASTM D 6461-99 (2007)



COMPLETED INSTALLATION

POSTS: STEEL OR WOOD
FABRIC: IN ACCORDANCE WITH ASTM D 6461 LATEST EDITION.

SPECIFICATIONS FOR SILT FENCE INSTALLATION

1. SILT FENCE SHALL BE PROVIDED AND INSTALLED PER ASTM D-6462-03 LATEST EDITION.
2. INSTALL SILT FENCE AT A FAIRLY LEVEL GRADE ALONG THE CONTOUR WITH THE ENDS CURVED UPHILL TO PROVIDE SUFFICIENT UPSTREAM STORAGE VOLUME FOR ANTICIPATED RUNOFF.
3. INSTALL POSTS AT A MAXIMUM OF 5'-0" APART.
4. INSTALL POSTS AT A MINIMUM DEPTH OF 24" ON THE DOWNSTREAM SIDE OF THE SILT FENCE, AND AS CLOSE AS POSSIBLE TO THE FABRIC, ENABLING POSTS TO SUPPORT UPSTREAM WATER PRESSURE ON THE FABRIC.
5. INSTALL WITH THE POSTS AWAY FROM THE SILT FENCE FABRIC.
6. ATTACH THE FABRIC TO EACH POST WITH THREE TIES, ALL SPACED WITHIN THE TOP 8" OF THE FABRIC. ATTACH EACH TIE DIAGONALLY 45 DEGREES THROUGH THE FABRIC, WITH EACH PUNCTURE AT LEAST 1" VERTICALLY APART.
7. WRAP APPROXIMATELY 6" OF FABRIC AROUND THE END POSTS AND SECURE WITH 3 TIES.
8. WHEN NECESSARY TO CONTINUE FENCE, OVERLAP SILT FENCE FABRIC ACROSS TWO POSTS.
9. NO MORE THAN 24' OF A 36" FABRIC IS ALLOWED ABOVE GROUND LEVEL.
10. THE INSTALLATION SHOULD BE CHECKED AND CORRECTED FOR ANY DEVIATIONS BEFORE COMPACTION. USE A FLAT-BLADED SHOVEL TO TUCK FABRIC DEEPER INTO THE TRENCH IF NECESSARY.
11. COMPACT THE SOIL IMMEDIATELY NEXT TO THE SILT FENCE FABRIC.
12. WHEN TWO SECTIONS OF SILT FENCE FABRIC ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED A MINIMUM OF 60" ACROSS TWO POSTS, AS SHOWN.

MAINTENANCE NOTES

1. SILT FENCES SHALL BE INSPECTED ALONG ITS ENTIRETY AND MUST BE CLEANED WHEN SEDIMENT HAS ACCUMULATED TO ONE-THIRD THE HEIGHT OF THE SILT FENCE. MAINTENANCE CLEANOUT MUST BE CONDUCTED REGULARLY TO PREVENT ACCUMULATED SEDIMENTS FROM REACHING ON-THIRD THE HEIGHT OF THE SILT FENCE.
2. ALL MATERIAL EXCAVATED FROM BEHIND SILT FENCE SHALL BE STOCKPILED ON AN UPLAND PORTION OF THE SITE IF SUITABLE FOR REUSE.
3. SPECIAL ATTENTION SHALL BE PAID TO ENSURE THAT NO UNDERMINING OF SILT FENCE HAS OCCURRED AND THAT NO BYPASS IS OCCURRING AT JOINING SECTIONS.
4. IF EXCESS SEDIMENT IS ACCUMULATING IN ANY SECTION OF SILT FENCE, THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL UPSTREAM STABILIZATION MEASURES OR ADDITIONAL BMPS TO PREVENT EXCESSIVE BUILDUP ON SILT FENCE.
5. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED.

SFI

SILT FENCE INSTALLATION

N.T.S.

B.M.P.'s (BEST MANAGEMENT PRACTICES)

These plans addresses the following areas:

1. General erosion control.
2. Protection of surface water quality during and after construction
3. Control of wind erosion.

The various techniques or actions identified under each section indicate the appropriate situation when the techniques should be employed. It should be noted that the measures identified on this plan are only suggested BMP(s). The contractor shall provide pollution prevention and erosion control measures and as necessary for each specific application.

SECTION 1 GENERAL EROSION CONTROL

1.1 General erosion control BMPs shall be employed to minimize soil erosion and potential lake slope cave-ins. While the various techniques required will be site and plan specific, they should be employed as soon as possible during construction activities.

1.2 Cleared site development areas not continually scheduled for construction activities shall be covered with hay or overseeded and periodically watered sufficient to stabilize the temporary groundcover.

1.3 Slopes of banks of wet detention ponds shall be constructed not steeper than 4H:1V from top of bank to (3) feet below normal water level.

1.4 All grass slopes constructed 4H:1V and steeper shall be sodded as soon as practical after their construction.

1.5 Sod shall be placed for a 3-foot wide strip adjoining all curbing and around all inlets as required by plan. Sod shall be placed before silt barriers are removed.

1.6 Where required to prevent erosion from sheet flow across bare ground from entering a lake or swale, a temporary sediment sump shall be constructed. The temporary sediment sump shall remain in place until vegetation is established on the ground draining to the sump.

SECTION 2 PROTECTION OF SURFACE WATER QUALITY DURING & AFTER CONSTRUCTION

2.1 Surface water quality shall be maintained by employing the following BMPs, at a minimum, in the construction planning and construction of all improvements.

2.2 Where practical, stormwater shall be conveyed by swales.

2.3 Erosion control measures shall be employed to minimize turbidity of surface waters located downstream of any construction activity. While the various measures required will be site specific, they shall be employed as needed in accordance with the following:

a. In general, erosion shall be controlled at the furthest practical upstream location.

b. Stormwater inlets shall be protected during construction as shown. Protection measures shall be employed as soon as practical during the various stages of inlet construction. Silt barriers shall remain in place until sodding around inlets is complete.

2.4 Heavy construction equipment parking and maintenance areas shall be designed to prevent oil, grease, and lubricants from entering site drainage features including stormwater collection and treatment systems. Contractors shall provide broad dikes, hay bales or silt screens around, and sediment sumps within, such areas as required to contain spills of oil, grease or lubricants. Contractors shall have available, and shall use, absorbent filter pads to clean up spills as soon as possible after occurrence.

2.5 Silt barriers, any silt which accumulates behind the barriers, and any fill used to anchor the barriers shall be removed promptly after the end of the maintenance period specified for the barriers.

SECTION 3 CONTROL OF WIND EROSION

3.1 Wind erosion shall be controlled by employing the following methods as necessary and appropriate:

a. Bare earth areas shall be watered during construction as necessary to minimize the transport of fugitive dust. It may be necessary to limit construction vehicle speed if bare earth has not been effectively watered. In no case shall fugitive dust be allowed to leave the site under construction.

b. As soon as practical after completion of construction, bare earth areas shall be vegetated.

c. At any time both during and after site construction that watering and/or vegetation are not effective in controlling wind erosion and/or transport of fugitive dust, other methods as are necessary for such control shall be employed. These methods may include erection of dust control fences. If required, dust control fences shall be constructed in accordance with the detail for a silt fence, as shown, except the minimum height shall be 4 feet.

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CREECH
CONSULTING, INC.
CIVIL ENGINEERING
PO BOX 327, STUART, FLORIDA 34994 (772) 485-2140
BOARD OF PROFESSIONAL ENGINEERS, CERTIFICATE OF AUTHORIZATION NUMBER 5139
PROFESSIONAL SURVEYORS AND MAPPERS, AMENDED CERTIFICATE NO. LB-0006705

DATE	BY	REVISIONS
12/20/2023	JAC	PER FDOT DRIVEWAY CONNECTION COMMENTS
10/30/2023	JAC	PER TRC COMMENTS DATED 10/04/23
09/07/2023	JAC	PER TRC COMMENTS DATED 07/19/23

YOUTH & FAMILY
BEHAVIORAL HEALTH CENTER INC
EROSION CONTROL DETAILS
FORT PIERCE FLORIDA

DRAWN BY: JAC
CHECKED BY: RTC / ANDREWS
LATITUDE: 27°26'5.40"N
LONGITUDE: 80°21'2.96"W
HORZ. SCALE:
VERT. SCALE:

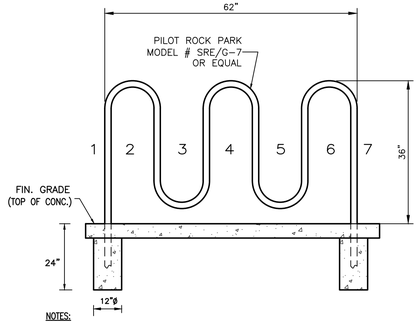
SEAL

09/07/2023
RICHARD CREECH
FL P.E. NO. 38592

SHEET D1
PROJECT NO. 22-015-001

Approved
20230104-490-00043
Georgi Galkinek
1/3/2024

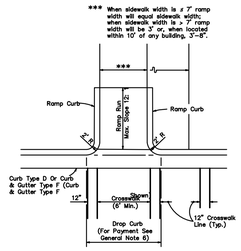
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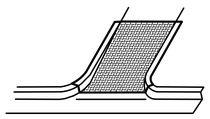
NOTES:

1. BIKE RACK SHALL BE EMBEDDED A INTO A 24" DEEP, 12" DIAMETER CONCRETE FOOTER

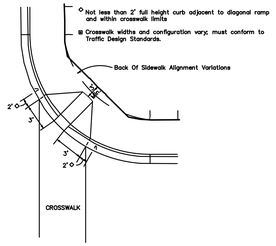
TYPICAL BIKE RACK DETAIL



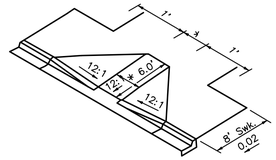
PLAN VIEW



PICTORIAL VIEW

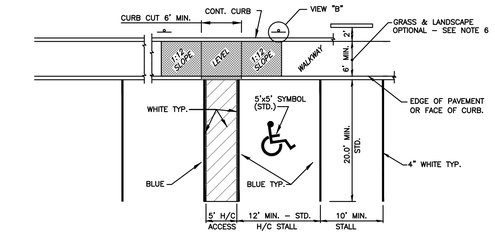


DIAGONAL RAMPS



8' SIDEWALK RAMPS

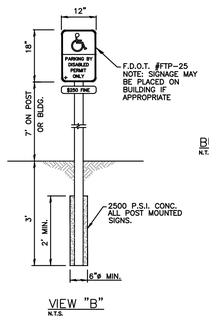
ACCESSIBLE RAMPS



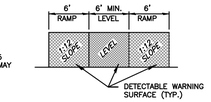
HANDICAP PARKING STALL
N.T.S.

NOTES:

1. ACCESSIBILITY TO AND WITHIN BUILDINGS, INCLUDING THE PLACEMENT OF RAMPS, SHALL CONFORM TO THE LATEST EDITIONS OF THE D.C.A. ACCESSIBILITY MANUAL, CHAPTER 553, PART V, OF THE FLORIDA STATUTES AND THE F.D.O.T. ROADWAY & TRAFFIC DESIGN STANDARDS.
2. ALL PARKING STALLS SHALL BE DOUBLE STRIPED AND ALL STRIPING SHALL BE FOUR (4) INCHES WIDE.
3. HANDICAP ACCESWAY STRIPING SHALL BE LAID OUT ON 45° ANGLE SPACE AT 4' ON CENTER AS MEASURED ALONG THE ACCESSWAY.
4. BUILT–UP CURB RAMPS SHALL NOT PROJECT INTO TRAFFIC LANES.
5. AS AN OPTION, THE TWO FOOT PAVED AREA (FROM THE EDGE OF PAVEMENT OR CURB TO THE BACK OF THE WHEEL STOP) MAY BE LANDSCAPED IN LIEU OF ASPHALT. (SEE SECTION A–A).
6. THERMOPLASTIC STRIPING IS RECOMMENDED AT ALL WALKWAYS IN THE PARKING AREAS.
7. PAINT SHALL BE APPLIED AT A RATE THICK ENOUGH TO PROVIDE SOLID WHITE/BLUE/BLACK LINES WITH NO LIGHT SPOTS OR PAINT SKIPS (15 MILS MIN.).
8. PARKING STALL AREAS SHALL HAVE A MIN. OF 6" OF BASE COMPACTED TO 98% DRY DENSITY PER AASHTO T–180 SPEC. AND A MINIMUM OF 1" OF TYPE S–III PAVEMENT.



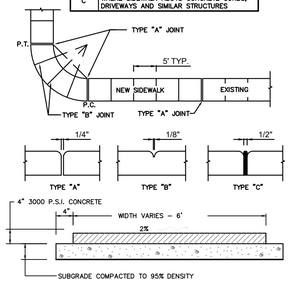
VIEW "B"
N.T.S.



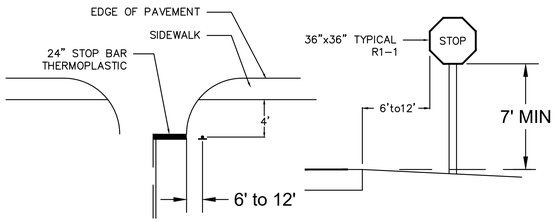
BUILT–UP CURB RAMP (NOTE 5)
N.T.S.

ACCESSIBLE PARKING, STALLS AND DETAILS

TABLE OF SIDEWALK JOINTS	
TYPE	LOCATION
"A"	P.C. AND P.T. OF CURVES
"B"	5'0" CENTER TO CENTER ON SIDEWALK
"C"	WHERE SIDEWALK ABUTS CONCRETE CURBS, DRIVEWAYS AND SIMILAR STRUCTURES



TYPICAL SIDEWALK DETAIL



TYPICAL STOP SIGN LOCATION DETAIL

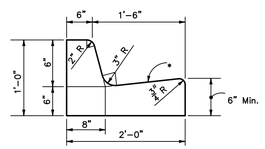
WHITE LEGEND RED BACKGROUND

R1-1 STOP SIGN DETAIL

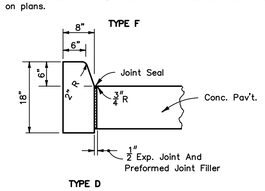
NOTES:

1. ALL PIPE LOCATED UNDER ROADWAYS AND/OR RESIDENTIAL PARKING AREAS SHALL BE REINFORCED CONCRETE PIPE (RCP).
2. MINIMUM PIPE DIAMETER SHALL BE 15" OR ELLIPTICAL EQUIVALENT.
3. FILTER FABRIC SHALL BE OVERLAPPED 2'–0" MINIMUM AT ALL JOINTS, INCLUDING ALL END TREATMENTS, REGARDLESS OF PIPE CULVERT MATERIAL.
4. A CONTINUOUS PIECE OF FILTER FABRIC, CONFORMING TO TYPE "D–3" OF FDOT STANDARD SPECIFICATIONS 985, SHALL BE USED AT ALL JOINTS, INCLUDING STRUCTURES AND END TREATMENTS.

STORM DRAIN PIPE JOINT DETAIL

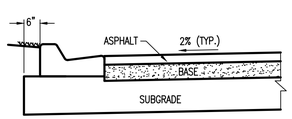


*Note: When used on high side of roadways, the cross slope of the gutter shall match the cross slope of the adjacent pavement the thickness of the lip shall be 6", unless otherwise shown on plans.



TYPE D

TYPICAL CURB DETAILS

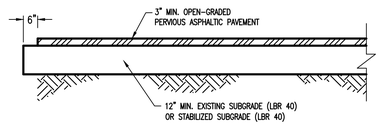


- SURFACE COURSE: 2" TYPE SP-12.5 ASPHALTIC CONCRETE
- BASE COURSE: 6" CRUSHED LIMEROCK WITH MIN. LBR 100 COMPACTED TO 98% MODIFIED PROCTOR MAX. DRY DENSITY
- SUBGRADE: 12" STABLIZED SUBGRADE (LBR-40) COMPACTED TO 98% MODIFIED PROCTOR MAX. DRY DENSITY

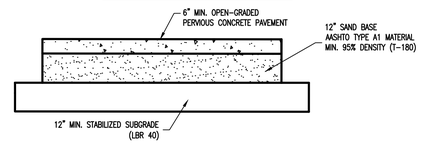
NOTES:

1. ASPHALT MIX SHALL NOT CONTAIN MORE THAN 30% RECLAIMED ASPHALT PAVEMENT (R.A.P.)
2. ALL MATERIAL USED WITHIN THE ROADWAY MUST MEET FDOT SPECIFICATIONS AND BE SUPPLIED FROM A FDOT CERTIFIED MINING OPERATION AND ASPHALT PLANT.
3. A MINIMUM OF TWO DENSITY TESTS SHALL BE TAKEN FOR EACH SIX (6) INCH LIFT OF SUB GRADE AND BASE. WHEN THE SPECIFIED COMPACTED BASE IS GREATER THAN SIX AND ONE-HALF (6 ½") INCHES THE BASE SHALL BE CONSTRUCTED IN TWO OR MORE COURSES. PROCTORS FOR MATERIALS USED IN BACK-FILLING SHALL BE OBTAINED BY A CERTIFIED LABORATORY. DENSITY TESTS SHALL BE CONDUCTED BY A CERTIFIED LABORATORY. THE PERCENTAGE OF MAXIMUM DENSITY REQUIRED SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS. A COPY OF ALL COMPLETED AND ACCEPTED DENSITY TESTS SHALL BE FURNISHED TO THE CITY ENGINEER'S OFFICE PRIOR TO FINAL INSPECTION.
4. ANY IN-LINE PARKING DEFICIENCIES SHALL BE ADDRESSED IN ACCORDANCE TO FDOT SPECIFICATION SECTION 330.

FLEXIBLE PAVEMENT DETAIL



PERVIOUS ASPHALTIC PAVEMENT SECTION



PERVIOUS CONCRETE PAVEMENT SECTION

NOTES:

1. THE PERVIOUS PAVEMENT CONTRACTOR SHALL BE APPROVED BY THE CITY ENGINEER AND MUST BE CERTIFIED BY THE NATIONAL READY MIX CONCRETE ASSOCIATION (NRMCA).
2. THE CONTRACTOR SHALL SUBMIT A PERVIOUS PAVEMENT MIX DESIGN TO THE CITY ENGINEER FOR APPROVAL.
3. PERVIOUS CONCRETE MIX SHALL HAVE 20% to 25% VOIDS, AN AGGREGATE TO CEMENT (A/C) RATIO BETWEEN 4.0 AND 4.5, AND A WATER TO CEMENT (W/C) RATIO BETWEEN 0.27 AND 0.36.
4. ALL MATERIAL USED WITHIN THE ROADWAY MUST MEET FDOT SPECIFICATIONS AND BE SUPPLIED FROM A FDOT CERTIFIED MINING OPERATION AND ASPHALT PLANT.
5. A MINIMUM OF TWO DENSITY TESTS SHALL BE TAKEN FOR EACH SIX (6) INCH LIFT OF SUB GRADE AND BASE. WHEN THE SPECIFIED COMPACTED BASE IS GREATER THAN SIX AND ONE–HALF (6 ½") INCHES THE BASE SHALL BE CONSTRUCTED IN TWO OR MORE COURSES. PROCTORS FOR MATERIALS USED IN BACK–FILLING SHALL BE OBTAINED BY A CERTIFIED LABORATORY. DENSITY TESTS SHALL BE CONDUCTED BY A CERTIFIED LABORATORY. THE PERCENTAGE OF MAXIMUM DENSITY REQUIRED SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS. A COPY OF ALL COMPLETED AND ACCEPTED DENSITY TESTS SHALL BE FURNISHED TO THE CITY ENGINEER'S OFFICE PRIOR TO FINAL INSPECTION.
6. CRUSHED CONCRETE MAY NOT BE USED WITHIN CITY–MAINTAINED ROADWAY.

PERVIOUS PAVEMENT DETAIL

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CREECH
CONSULTING, INC.
CIVIL/EROSION ENGINEERS
PO BOX 327, STUART, FLORIDA 34994 (772) 485-2140
BOARD OF PROFESSIONAL ENGINEERS, CERTIFICATE OF AUTHORIZATION NUMBER 5139
PROFESSIONAL SURVEYORS AND MAPPERS, AMENDED CERTIFICATE NO. LB-0006705

DATE	BY	REVISIONS
12/20/2023	JAC	PER FDOT DRIVEWAY CONNECTION COMMENTS
10/90/2023	JAC	PER TRC COMMENTS DATED 10/04/23
09/07/2023	JAC	PER TRC COMMENTS DATED 07/19/23

YOUTH & FAMILY
BEHAVIORAL HEALTH CENTER INC
PAVING, GRADING AND DRAINAGE DETAILS
FORT PIERCE FLORIDA

DRAWN BY: JAC
CHECKED BY: RTC / ANDREWS
LATITUDE: 27°26'5.40"N
LONGITUDE: 80°21'2.96"W
HORZ. SCALE:
VERT. SCALE:

SEAL

09/07/2023
RICHARD CREECH
FL P.E. NO. 38592

SHEET D2
PROJECT NO. 22-016-001

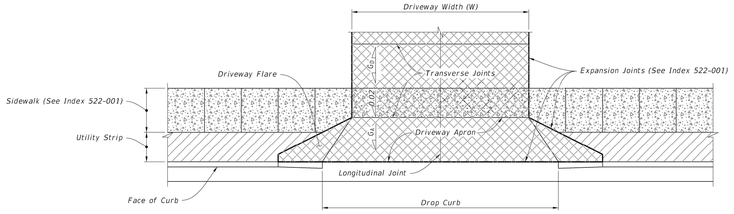
Approved
2023.12.490.00043
George Gilbrick
1/3/2024

GENERAL NOTES:

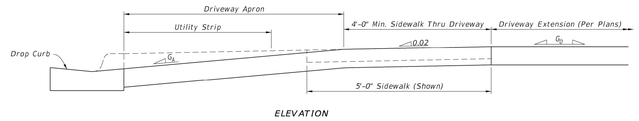
1. Work this Index with Specification 522.
2. Refer to Index 520-001 for drop curb details and Index 522-001 for joints between driveway, sidewalks, and curb.
3. Existing Curb and Gutter:
   Remove existing curb and gutter to either the nearest joint beyond the flared point or to where no remaining section is less than 5 feet long.
4. Grades and cross slopes shown are maximums.
5. Longitudinal Joints:
   Construct ½" open joints placed at equal (20' max.) intervals for driveways over 20' wide. Match joints in curb and gutter to match joints in driveways.
6. Transverse Joints:
   Construct ½" open joints @ 10' Centers and ½" expansion joints with preformed joint filler every 5th joint.
7. Construct driveways (6" thick concrete) to a uniform width (W) to the R/W line or the extent shown in the Plans.
8. Width of Sidewalk Thru Driveway is 4'-0" minimum. Match sidewalk width when shown in Plans or when utility strip width is equal to or greater than the depth of the Driveway Apron.
9. Alpha-Numeric Identification:
   Concrete Flared Driveway Alpha-Numeric Identifications (e.g. G4) are provided for reference purposes in the Plans.

LEGEND:

- Sidewalk
- Flared Driveway (6" Thick Concrete)
- Sidewalk Thru Driveway (6" Thick Concrete)
- Utility Strip
- G_A Grade of Apron
- G_D Grade of Driveway (Per Plans)



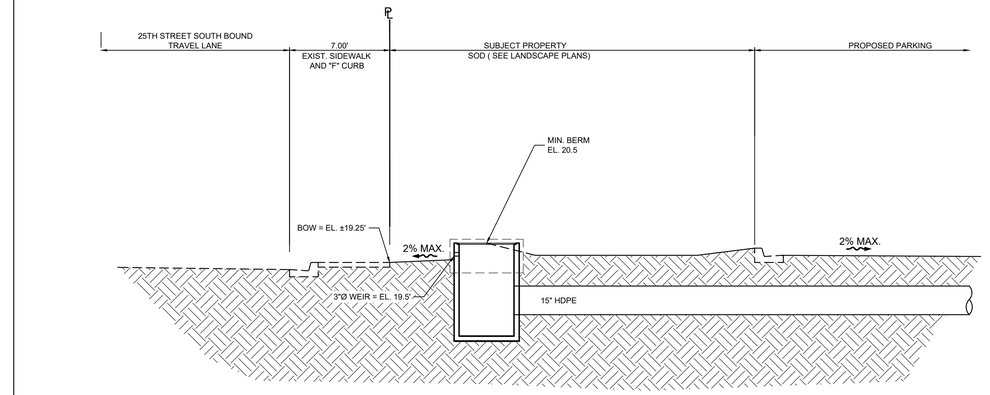
PLAN



ELEVATION

CONCRETE FLARED DRIVEWAY NOMENCLATURE

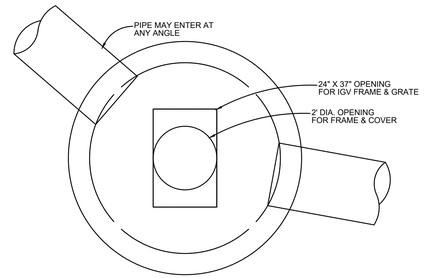
LAST REVISION	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	CONCRETE FLARED DRIVEWAYS	INDEX	SHEET
11/01/18				522-003	1 of 4



See Landscape Plans
Plantings Including Sod

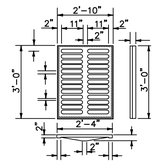
CONTROL STRUCTURE SECTION

VERT. & HORZ. SCALE 1"=5'



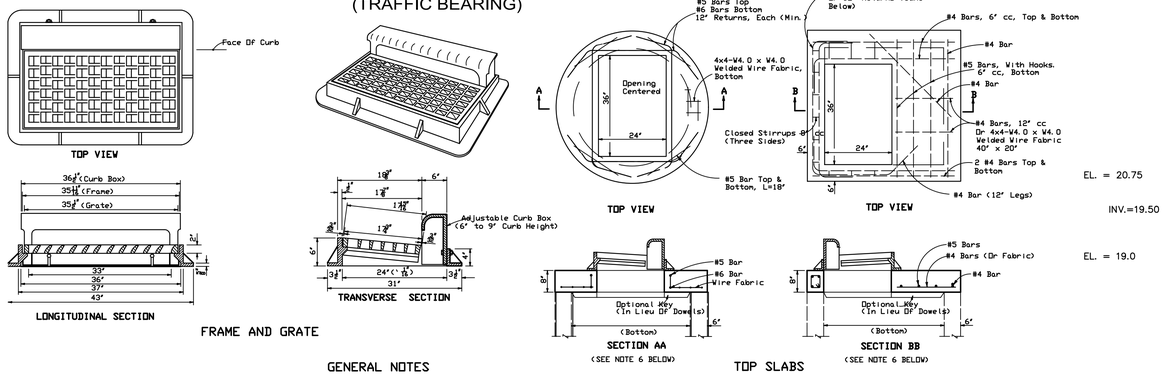
4' Ø PRECAST MANHOLE

N.T.S.



TYPICAL TYPE 'C' GRATE DETAIL

(TRAFFIC BEARING)



FRAME AND GRATE

TOP SLABS

GENERAL NOTES

1. THIS INLET IS PRIMARILY INTENDED FOR LOCATIONS WITH LIGHT TO MODERATE FLOWS WHERE RIGHT OF WAY DOES NOT PERMIT THE USE OF THROATED CURB INLETS TYPES 1 THROUGH 6. THE TYPICAL APPLICATION IS ON CURB RETURNS TO CITY STREETS. THE INLET GRATE IS SUITABLE FOR PEDESTRIAN AND BICYCLE TRAFFIC.
2. THIS INLET TO BE LOCATED IN VERTICAL FACED CURBS SUCH AS CURB AND GUTTER TYPE F. GRATE SHALL BE ORIENTED WITH VANES DIRECTED TOWARD PREDOMINATE FLOW. INLET TO BE LOCATED OUTSIDE PEDESTRIAN CROSSWALK WHERE PRACTICAL.
3. FOR STRUCTURE BOTTOMS SEE INDEX NO. 200. FOR SUPPLEMENTAL DETAILS SEE INDEX NO. 201.
4. ALL STEEL IN SLAB TOPS SHALL HAVE 1.25" MINIMUM COVER UNLESS OTHERWISE SHOWN. TOPS SHALL BE EITHER CAST-IN-PLACE OR PRECAST CONCRETE.
5. FOR ALTERNATE B APPLICATIONS, TOP SLAB OPENINGS SHALL BE PLACED SUCH THAT 2 EDGES OF INLET FRAME WILL BE LOCATED DIRECTLY ABOVE BOTTOM WALL OR RISER WALL.
6. WHEN USED ON A STRUCTURE WITH DIMENSIONS LARGER THAN THOSE DETAILED ABOVE AND RISERS ARE NOT APPLIED, THE TOP SLAB SHALL BE CONSTRUCTED USING INDEX 200 WITH THE SLAB OPENING ADJUST TO 24"/36". THE "SPECIAL TOP SLAB" ON INDEX 200 IS NOT PERMITTED.
7. FRAME MAY BE ADJUSTED WITH ONE TO SIX COURSES OF BRICK.
8. INLET AND GRATE DETAIL SHOWN IS NEENAH R-3067-L VANED GRATES WITH APPROXIMATELY EQUAL OPENINGS WILL BE PERMITTED THAT SATISFY AASHTO H-20 LOADING. INLET AND GRATE SHALL BE CLASS 30 CASTINGS IN ACCORDANCE WITH ASTM A-48. GRATES SHALL BE REVERSIBLE, RIGHT OR LEFT.
9. CONTRACTOR TO USE EQUIVALENT GRATE, TO WHAT IS SHOWN THAT SATISFY AASHTO H-20 LOADING

TYPE 9 TOP

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YOUTH & FAMILY
BEHAVIORAL HEALTH CENTER INC
FORT PIERCE FLORIDA

PAVING, GRADING AND DRAINAGE DETAILS

DRAWN BY: JAC
CHECKED BY: RTC / ANDREWS
LATITUDE: 27°26'5.40"N
LONGITUDE: 80°21'2.96"W
HORZ. SCALE:
VERT. SCALE:

SEAL

09/07/2023
RICHARD CREECH
FL P.E. NO. 38592

SHEET D3
PROJECT NO. 22-016-001

Approved
20250-490-00043
Georgi Golubek
1/3/2024

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GENERAL:

IT IS INTENDED THAT THE FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION "DESIGN STANDARDS", LATEST EDITION, BE USED WHERE APPLICABLE FOR VARIOUS WORK, AND THAT WHERE SUCH WORDING THEREIN REFERS TO THE STATE OF FLORIDA AND ITS DEPARTMENT OF TRANSPORTATION AND PERSONNEL, SUCH WORDING IS INTENDED TO BE REPLACED WITH THAT WORDING WHICH WOULD PROVIDE PROPER TERMINOLOGY, THEREBY MAKING SUCH "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AND "DESIGN STANDARDS" AS THE "STANDARD SPECIFICATIONS" FOR THIS PROJECT.

IF WITHIN THAT PARTICULAR SECTION ANOTHER SECTION, ARTICLE OR PARAGRAPH IS REFERRED TO, IT SHALL BE A PART OF THE "STANDARD SPECIFICATIONS" ALSO.

ALL WORK SHALL BE DONE IN A WORKMANLIKE MANNER AND SHALL CONFORM WITH ALL APPLICABLE CITY, COUNTY, STATE AND FEDERAL REGULATIONS AND/OR CODES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND LICENSES REQUIRED TO BEGIN WORK.

GENERAL NOTES:

1. THE CONTRACTOR SHALL GIVE THE ENGINEER AT LEAST 48 HOURS NOTICE PRIOR TO REQUESTING REQUIRED CONSTRUCTION OBSERVATIONS AND SHALL SUPPLY ALL EQUIPMENT NECESSARY TO PROPERLY TEST AND INSPECT THE COMPLETED WORK.

2. THE CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS FOR A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION, DURING WHICH TIME ALL FAULTY CONSTRUCTION AND/OR MATERIALS SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING ABOVE-GROUND, UNDERGROUND, AND ON THE SURFACE STRUCTURES AND UTILITIES AGAINST THE CONSTRUCTION OPERATION THAT MAY CAUSE DAMAGE TO SAID FACILITY.

4. STREET OR HIGHWAY RESTORATION WORK IS TO BE DONE AS PER THE LOCAL OR STATE AGENCY HAVING JURISDICTION.

5. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE RULES AND REGULATIONS OF THE STATE, COUNTY AND CITY AUTHORITIES REGARDING CLOSING OR RESTRICTING THE USE OF PUBLIC STREETS OR HIGHWAYS.

6. TRAFFIC CONTROL ON ALL CITY, 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.

6.a. THE MAINTENANCE OF TRAFFIC FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE FLORIDA D.O.T. DESIGN STANDARDS INDEX 600 SERIES, THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, AS A MINIMUM CRITERIA.

TRAFFIC DISRUPTIONS WHICH ARE NECESSARY TO CONSTRUCT THE PROJECT SHALL BE SUBMITTED IN WRITING TO THE ENGINEER AND APPROVAL SHALL BE OBTAINED AT LEAST 72 HOURS PRIOR TO THE COMMENCEMENT OF WORK. SUBMITTAL MATERIAL SHALL INCLUDE SKETCHES, CALCULATIONS AND OTHER DATA REQUIRED BY THE ENGINEER.

THE CONTRACTOR SHALL REMOVE OR COVER ANY EXISTING OR PROPOSED SIGNS OR PAVEMENT MARKINGS WHICH CONFLICT WITH THE TRAFFIC CONTROL PLANS. WHEN THE CONFLICT NO LONGER EXISTS, THE CONTRACTOR SHALL RESTORE THE SIGNS OR PAVEMENT MARKINGS TO THEIR ORIGINAL POSITION. REMOVAL OF EXISTING PAVEMENT MARKINGS NOT OTHERWISE REMOVED BY MILLING, SHALL BE ACCOMPLISHED BY HYDRO BLASTING OR BY METHODS APPROVED BY ENGINEER, THAT WILL ELIMINATE THE PREVIOUS MARKING PATTERN AND WILL NOT MATERIALLY DAMAGE THE SURFACE TEXTURE OF THE PAVEMENT. USE OF BLACK PAINT TO COVER EXISTING PAVEMENT MARKINGS IS PROHIBITED.

CONTRACTOR SHALL EMPLOY TEMPORARY BARRICADES BETWEEN DRIVE LANES AND EXCAVATED AREAS IN ACCORDANCE WITH FDOT INDEX 102-600.

NOTIFICATION OF LANE CLOSURES OR TEMPORARY DETOURS SHALL BE ACCOMPLISHED AT LEAST 30 DAYS PRIOR TO CLOSURE OR DETOUR BY SUBMITTING THE REQUIRED LANE CLOSURE FORM, SKETCHES, CALCULATIONS, AND OTHER DATA TO THE ENGINEER.

CONTACT LOCAL POLICE, FIRE RESCUE AND AMBULANCE SERVICES 24 HOURS PRIOR TO ANY AND ALL LANE SHIFTS AND OR CLOSURES.

THE CONTRACTOR SHALL PROVIDE THE SERVICES OF UNIFORMED OFF-DUTY POLICE OFFICERS TO SUPERVISE TRAFFIC CONTROL WHERE CONSTRUCTION OPERATIONS CAUSE TRAFFIC CONGESTION TO THE EXTENT THAT POLICE SUPERVISION IS NEEDED TO ASSURE PUBLIC SAFETY AND PROTECT THE WORK.

ALL LANES OF US1/SR5 (NORTHWEST FEDERAL HIGHWAY) MUST REMAIN OPEN FOR TRAFFIC DURING AN EVACUATION NOTICE OF HURRICANE OR OTHER CATASTROPHIC EVENT AND SHALL REMAIN OPEN FOR THE DURATION OF THE EMERGENCY AS DIRECTED BY THE ENGINEER.

6.b. THE CONTRACTOR SHALL PREPARE THE MAINTENANCE OF TRAFFIC PLAN FOR ALL PHASES OF THE WORK PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES. THE PLAN SHALL INDICATE THE TYPE AND LOCATION OF ALL SIGNS, LIGHTS, STRIPING AND BARRIERS TO BE USED FOR THE SAFE PASSAGE OF TRAFFIC AND PEDESTRIANS THROUGH THE PROJECT AREA AND FOR THE PROTECTION OF THE WORKERS. THE PLAN SHALL ALSO INDICATE CONDITIONS AND SETUPS FOR EACH PHASE OF WORK. THE PLAN SHALL PROVIDE FOR MAINTENANCE OF TWO-WAY TRAFFIC AT ALL TIMES WHERE PRACTICAL. PLAN SHALL BE SIGNED, SEALED AND SUBMITTED TO FDOT FOR APPROVAL AT LEAST ONE WEEK PRIOR TO THE PRE-CONSTRUCTION MEETING.

ALL WORK WITHIN THE FDOT RIGHT OF WAY SHALL BE GOVERNED BY THE CURRENT EDITION OF FDOT DESIGN STANDARDS, AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

6.c. ALL PAVEMENT MARKING SHALL BE THERMOPLASTIC PER FDOT STANDARDS.

ALL STRIPING SHALL BE IN ACCORDANCE WITH THE MOST CURRENT FDOT DESIGN STANDARD INDEX 711-001 AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 711 "THERMO PLASTIC TRAFFIC STRIPES AND MARKINGS", LATEST EDITION AND CITY OF STUART PUBLIC WORKS AND MUTCD LATEST EDITION.

INSTALL RETRO - REFLECTIVE PAVEMENT MARKERS (RPM'S) PER THE MOST CURRENT FDOT DESIGN STANDARD STANDARD INDEX 706-001 AND THE MOST CURRENT FDOT DESIGN STANDARD SPECIFICATIONS # 706.

7. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY WHEN A CONFLICT BETWEEN THE DRAWINGS AND ACTUAL CONDITIONS IS DISCOVERED DURING THE COURSE OF CONSTRUCTION.

8. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE PRIOR TO BIDDING THE WORK AND TO PERFORM SUCH TESTS, STUDIES AND SURVEYS AS HE DEEMS NECESSARY TO SATISFY HIMSELF AS TO ACTUAL SURFACE AND SUBSURFACE CONDITIONS EXISTING AT THE SITE. ACTUAL CONDITIONS THAT DIFFER FROM THOSE SHOWN ON DRAWINGS SHALL NOT CONSTITUTE A BASIS FOR ADDITIONAL PAYMENT.

9. ALL ELEVATIONS REFER TO N.A.V.D. 1988 DATUM, UNLESS OTHERWISE NOTED.

10. ALL CONSTRUCTION DEWATERING (WELL POINTS, SUMPS ETC.) WILL REQUIRE A DEWATERING PERMIT FROM THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT.

11. ANY CHANGES DUE TO FIELD CONDITIONS OR ANY OTHER DEVIATIONS FROM THE APPROVED DRAWINGS MUST BE APPROVED BY THE ENGINEER AND THE GOVERNING AUTHORITY HAVING JURISDICTION PRIOR TO BEING CONSTRUCTED.

12. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES: ONE (1) SET OF "APPROVED" CONSTRUCTION DRAWINGS, ONE (1) COPY OF THE APPLICABLE UTILITY COMPANY'S "MINIMUM DESIGN AND CONSTRUCTION STANDARDS", ONE (1) COPY OF ALL CONTRACT DOCUMENTS AND, ONE (1) COPY OF ALL APPLICABLE LOCAL, STATE AND FEDERAL PERMITS REQUIRED FOR CONSTRUCTION.

13. THE CONTRACTOR SHALL PROVIDE A QUALIFIED SUPERINTENDENT TO REMAIN AT THE JOB SITE AT ALL TIMES WHEN WORK IS BEING PERFORMED. THE SUPERINTENDENT SHALL BE PRESENT AT ALL SCHEDULED CONSTRUCTION OBSERVATION MEETINGS.

14. THE CONTRACTOR SHALL BE SOLEY RESPONSIBLE FOR THE PROPER MAINTENANCE AND SAFE CONTROL OF TRAFFIC AND PEDESTRIANS AT ALL TIMES FOR THE DURATION OF CONSTRUCTION. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION OR TIME EXTENSION SHALL BE ALLOWED.

SEDIMENTATION AND EROSION CONTROL:

PRIOR TO AND DURING CONSTRUCTION, THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN ALL SEDIMENTATION AND EROSION CONTROL MEASURES REQUIRED TO RETAIN SEDIMENT ON SITE AND TO PREVENT VIOLATIONS OF STATE WATER QUALITY STANDARDS. SEDIMENTATION AND EROSION CONTROL FEATURES MAY INCLUDE, BUT ARE NOT LIMITED TO, SILT FENCES, SILTATION BARRIERS, GEOTEXTILE FILTER BARRIERS, TURBIDITY SCREENS AND SEDIMENTATION BASINS. CONSTRUCTION AND MAINTENANCE OF SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH SECTION 104 OF THE STANDARD SPECIFICATIONS.

THE CONTRACTOR SHALL CONSTRUCT AND MAINTAIN ALL REQUIRED SEDIMENTATION AND EROSION CONTROL MEASURES FOR THE DURATION OF CONSTRUCTION.

STABILIZATION MEASURES, INCLUDING BUT NOT LIMITED TO, SODDING OR SEEDING AND MULCHING, SHALL BE INITIATED FOR SEDIMENTATION AND EROSION CONTROL ON ALL DISTURBED AREAS AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN SEVEN (7) DAYS AFTER CONSTRUCTION ACTIVITY HAS CEASED. THE CONTRACTOR SHALL INSPECT ALL SEDIMENTATION AND EROSION CONTROL MEASURES DAILY DURING CONSTRUCTION. ANY DEFICIENCIES SHALL BE IMMEDIATELY CORRECTED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY OFF SITE WATER QUALITY IMPACTS OR OTHER ADVERSE IMPACTS DUE TO SEDIMENTATION AND EROSION FROM THE PROJECT SITE DURING CONSTRUCTION.

SUGGESTED SEQUENCE FOR EROSION & SEDIMENTATION CONTROL

1. FLAG AND FENCE ALL WORK LIMITS.

2. NOTIFY THE COUNTY SEDIMENT CONTROL INSPECTOR AT LEAST (72) HOURS PRIOR TO START OF CONSTRUCTION.

3. PERFORM CLEARING AND GRADING REQUIRED FOR INSTALLATION OF PERIMETER CONTROLS.

4. INSTALL PERIMETER RUNOFF CONTROLS; NOTIFY SEDIMENT INSPECTOR AND OBTAIN APPROVAL BEFORE PROCEEDING FURTHER.

5. NO ADDITIONAL LAND CLEARING SHALL COMMENCE UNTIL A SATISFACTORY INSPECTION OF THE REQUIRED EROSION CONTROL BARRICADES HAS BEEN OBTAINED.

6. COMPLETE ALL REQUIRED STOCKPILING, SITE CLEARING, AND GRADING. STOCKPILE ANY EXCESS TOPSOIL OR OTHER EXCAVATED SOIL IN APPROVED STOCKPILES OR REMOVE FROM SITE. AND DISPOSE OF AT A PERMITTED SITE.

CLEARING AND GRUBBING:

ALL TREES, BRUSH, STUMPS, ROOTS, GRASS, WEEDS, RUBBISH AND ALL OTHER OBSTRUCTIONS RESTING ON OR LYING WITHIN 12" BELOW FINISHED GRADE OR SUBGRADE SHALL BE COMPLETELY REMOVED WITHIN ALL AREAS OF CONSTRUCTION AS SHOWN ON THE DRAWINGS. ALL WORK SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS. CLEANING AND GRUBBING AREAS TO BE INSPECTED AND APPROVED PRIOR TO ANY FILL OR CONSTRUCTION WORK. ALL MATERIAL FROM CLEARING AND GRUBBING SHALL BE REMOVED AND LEGALLY DISPOSED OF.

DEMOLITION:

1. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSAL (IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES) ALL STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, PARKING, DRIVES, DRAINAGE, STRUCTURES, UTILITIES, ETC., SUCH THAT THE IMPROVEMENTS SHOWN ON THE REMAINING PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE SPECIFICATIONS.

2. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE SITE AND DISPOSING THE DEBRIS IN A LAWFUL MANNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.

3. THE CONTRACTOR SHALL MAINTAIN ALL UTILITY SERVICES TO EXISTING USERS AND AT ALL TIMES.UTILITY SERVICES SHALL NOT BE INTERRUPTED WITHOUT APPROVAL FROM OWNER.

4. THE CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY'S FORCES AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES.

5. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR ONSITE LOCATIONS OF EXISTING UTILITIES.

6. ALL EXISTING SEWERS, PIPING AND UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PROCEEDING WITH THE WORK. UTILITIES DETERMINED TO BE ABANDONED AND LEFT IN PLACE SHALL BE GROUTED IF UNDER BUILDING.

7. ELECTRICAL, TELEPHONE, CABLE, WATER, FIBER OPTIC CABLE AND/OR GAS LINES NEEDING TO BE REMOVED OR RELOCATED SHALL BE COORDINATED WITH THE AFFECTED UTILITY COMPANY. ADEQUATE TIME SHALL BE PROVIDED FOR RELOCATION AND CLOSE COORDINATION WITH THE UTILITY COMPANY IS NECESSARY TO PROVIDE A SMOOTH TRANSITION IN UTILITY SERVICE. CONTRACTOR SHALL PAY CLOSE ATTENTION TO EXISTING UTILITIES WITHIN THE ANY ROAD RIGHT OF WAY DURING CONSTRUCTION.

8. CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, (AND OTHER APPROPRIATE BEST MANAGEMENT PRACTICES).

9. PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED.

10. SHOULD REMOVAL AND/OR RELOCATION ACTIVITIES DAMAGE EXISTING STRUCTURES, THE CONTRACTOR SHALL PROVIDE NEW MATERIALS/ STRUCTURES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. EXCEPT FOR MATERIALS DESIGNED TO BE RELOCATED ON THIS PLAN, ALL OTHER CONSTRUCTION MATERIALS SHALL BE NEW.

11. CONTRACTOR MAY LIMIT SAW-CUT & PAVEMENT REMOVAL TO ONLY THOSE AREAS WHERE IT IS REQUIRED AS SHOWN ON THESE CONSTRUCTION PLANS BUT IF ANY DAMAGE IS INCURRED ON ANY OF THE SURROUNDING PAVEMENT, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IT'S REMOVAL AND REPAIR.

12. THE CONTRACTOR SHALL COORDINATE WATER MAIN WORK WITH THE COUNTY UTILITY DEPARTMENT TO PLAN PROPOSED IMPROVEMENTS.

13. DAMAGE TO ANY EXISTING CONDITIONS TO REMAIN WILL BE REPLACED AT CONTRACTOR'S EXPENSE.

14. CONTRACTOR SHALL PROTECT ALL AREAS OUTSIDE OF LIMIT OF CLEARING.

BURNING:

BURNING IS NOT ALLOWED.

EXCAVATION:

THE CONTRACTOR SHALL PERFORM ALL EXCAVATION NECESSARY TO ACCOMPLISH THE CONSTRUCTION INDICATED ON THE DRAWINGS. EXCAVATION SHALL BE UNCLASSIFIED REGARDLESS OF MATERIAL ENCOUNTERED. ALL EXCAVATED MATERIAL NOT REQUIRED FOR FILL OR EMBANKMENT, SHALL BE REMOVED FROM THE SITE, AS DIRECTED BY THE OWNER, OR HIS REPRESENTATIVE. THE CONTRACTOR SHALL DO ALL SHORING NECESSARY TO PERFORM AND PROTECT THE EXCAVATION, AND AS NECESSARY FOR THE SAFETY OF THE WORKERS AND ANY EXISTING FACILITIES IN ACCORDANCE WITH THE STATE OF FLORIDA "TRENCH SAFETY ACT", WHEREVER EXCAVATIONS ARE MADE BELOW THE GRADES INDICATED ON THE DRAWINGS, CLEAN FIRM MATERIAL APPROVED BY THE ENGINEER SHALL BE USED TO RESTORE THE AREA TO THE PROPER GRADE, AND SHALL BE COMPACTED IN ACCORDANCE WITH THE REQUIREMENTS FOR COMPACTION INCLUDED IN THESE SPECIFICATIONS.

UNSUITABLE MATERIAL:

WHERE MUCK, ROCK, CLAY, ORGANIC MATERIAL OR OTHER DELETERIOUS MATERIAL WITHIN THE LIMITS OF CONSTRUCTION IS, IN THE OPINION OF THE ENGINEER, UNSUITABLE IN ITS ORIGINAL POSITION, THE CONTRACTOR SHALL EXCAVATE SUCH MATERIAL, AND BACKFILL THE EXCAVATED AREA WITH SUITABLE MATERIAL, WHICH SHALL BE COMPACTED AND SHAPED TO CONFORM TO THE REQUIRED SECTION. BACKFILL MATERIAL AND COMPACTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS INCLUDED IN THESE SPECIFICATIONS.

SELECT FILL:

A. THIS WORK SHALL CONSIST OF FURNISHING AND PLACING THE MATERIALS REQUIRED FOR FILL OR EMBANKMENT FOR THE CONSTRUCTION AS SHOWN ON THE DRAWINGS. THE MATERIAL USED FOR EMBANKMENT SHALL BE CLEAN UNIFORM FREE DRAINING GRANULAR SOIL CONSISTING OF SAND, GRAVEL, OR A MIXTURE THEREOF, AND/OR OTHER SUITABLE MATERIAL APPROVED BY THE ENGINEER. IF THE MATERIALS ARE OF A VARIABLE QUALITY, THE CONTRACTOR SHALL PLAN HIS OPERATIONS SO THAT THE UPPER TWO FEET OF THE FILL IS CONSTRUCTED OF SELECTED MATERIALS AS APPROVED AND DIRECTED BY THE ENGINEER.

B. PRIOR TO PLACING ANY FILL, THE SURFACE TO RECEIVE THE FILL, SHALL BE PLOWED OR SCARIFIED. FILL SHALL BE PLACED IN SUCCESSIVE UNIFORM LAYERS TWELVE INCHES (12"), MEASURED LOOSE, OR AS APPROVED BY THE ENGINEER. EACH LAYER WILL THEN BE COMPACTED BY AN APPROVED METHOD IN ACCORDANCE WITH THE REQUIREMENTS FOR COMPACTION INCLUDED IN THESE SPECIFICATIONS. THE COMPACTION SHALL BE VERIFIED THROUGH TESTING AS INDICATED IN THE TESTING SPECIFICATIONS.

BACKFILL:

ALL BACKFILL MATERIAL SHALL BE CLEAN, UNIFORM, FREE DRAINING SOIL AND FREE OF LUMBER, TRASH OR OTHER DEBRIS, AND SHALL BE THOROUGHLY COMPACTED IN LAYERS NOT TO EXCEED TWELVE INCHES (12"), MEASURED LOOSE AND BROUGHT TO AN ELEVATION ABOVE THE FINISHED GRADE, SUFFICIENT TO ALLOW FOR SETTLEMENT. PRIOR TO PLACING BACKFILL, THE AREAS AROUND STRUCTURES UPON WHICH THE BACKFILL IS TO BE PLACED, SHALL BE CLEANED OF ALL TRASH AND DEBRIS OF ANY NATURE. SHEETING AND BRACING ALLOWED TO BE LEFT IN PLACE SHALL BE CUT OFF A MINIMUM OF 2.5 FEET BELOW FINISHED GRADE. COMPACTION FOR EACH LIFT SHALL BE EQUAL TO 100% OF MAXIMUM DENISTY AS DETERMINED BY AASHTO T-99.

GRADING:

THE CONTRACTOR SHALL PERFORM ALL NECESSARY GRADING TO ACHIEVE THE FINISHED GRADING AS PER THE DRAWINGS. ALL WORKMANSHIP SHALL BE IN ACCORDANCE WITH THESE SPECIFICATIONS.

THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE EPA, FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP), NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) "GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES" AND THE PROJECT SPECIFICATIONS.

PROPOSED GRADE ELEVATIONS SHOWN ARE AT THE EDGE OF PAVEMENT LINE OF UNLESS OTHERWISE NOTED.

COMPACTION:

ALL AREAS TO BE COMPACTED SHALL BE MOISTENED AND COMPACTED BY TAMPING OR USE OF VIBRATORY ROLLERS, VIBRATORY PLATE COMPACTORS OR ANY OTHER METHOD APPROVED BY THE ENGINEER IN ORDER TO OBTAIN THE REQUIRED DENSITY. WHERE USE OF VIBRATORY EQUIPMENT MAY AFFECT ADJACENT STRUCTURES, COMPACTION SHALL BE PERFORMED USING OTHER EQUIPMENT THAT WILL SATISFY THE DENSITY REQUIREMENTS WITHOUT DAMAGING EXISTING STRUCTURES. THE CONTRACTOR SHALL INSPECT ALL COMPACTED AREAS PRIOR TO FURTHER CONSTRUCTION OPERATIONS, TO ENSURE THAT SATISFACTORY COMPACTION HAS BEEN OBTAINED. ALL EMBANKMENT, INCLUDING BACKFILL AND EMBANKMENT ADJACENT TO STRUCTURES, SHALL BE COMPACTED TO A DENSITY OF NOT LESS THAN 100 PERCENT (100%) OF THE MAXIMUM DENSITY, AS DETERMINED BY AASHTO T-99.

THE CONTRACTOR SHALL PAY PARTICULAR ATTENTION TO COMPACTION IN AREAS AROUND STRUCTURES AND OTHER FEATURES WHERE ACCESS BY SELF PROPELLED VIBRATORY COMPACTORS MAY BE DIFFICULT.

BACKFILL AND COMPACTION WITHIN PIPE TRENCHES SHALL BE IN ACCORDANCE WITH THE TYPICAL TRENCH DETAIL SHOWN ON THE DRAWINGS. FOR NON-FLEXIBLE PIPE MATERIALS, ALL BACKFILL SHALL BE COMPACTED TO NOT LESS THAN 100 PERCENT (100%) OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99. FOR FLEXIBLE PIPE MATERIALS, ALL BACKFILL SHALL BE COMPACTED TO NOT LESS THAN 95 PERCENT (95%) OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99.

DENSITY TESTING

THE TESTING LABORATORY SHALL FORWARD COPIES OF ALL TEST REPORTS TO THE ENGINEER, CONTRACTOR, AND OWNER.

STABILIZED SUBGRADE:

STABILIZED SUBGRADE SHALL BE CONSTRUCTED TO DEPTH AND LIMITS SHOWN ON THE PLAN, AND IN ACCORDANCE WITH SECTION 160 OF THE STANDARD SPECIFICATIONS FOR TYPE C STABILIZATION. THE STABILIZED SUBGRADE SHALL BE CONSTRUCTED TO A LIMEROCK BEARING RATIO (LBR) OF NOT LESS THAN 40 AND SHALL BE COMPACTED TO NOT LESS THAN 98% OF THE MAXIMUM DENSITY AS DETERMINED BY MODIFIED PROCTOR AASHTO T-180.

COMPACTED SUBGRADE:

COMPACTED SUBGRADE SHALL BE CONSTRUCTED TO THE DEPTH AND LIMITS SHOWN ON THE DRAWINGS. ALL COMPACTED SUBGRADE SHALL BE COMPACTED TO NOT LESS THAN 98% OF THE MAXIMUM DENSITY AS DETERMINED BY MODIFIED PROCTOR AASHTO T-180.

ROCK BASE:

ROCK BASE SHALL BE CONSTRUCTED OF EITHER LIMEROCK MATERIAL OR CEMENTED COQUINA SHELL MATERIAL IN ACCORDANCE WITH SECTION 911 OF THE STANDARD SPECIFICATIONS.

THE CONTRACTOR SHALL PROVIDE ROCK PIT CERTIFICATION FOR CEMENTED COQUINA SHELL MATERIAL.

ROCK BASE SHALL BE CONSTRUCTED TO THE DEPTH AND LIMITS AS SHOWN ON THE DRAWINGS. THE ROCK BASE MATERIAL SHALL HAVE A LIMEROCK BEARING RATIO (LBR) OF NOT LESS THAN 100. THE ROCK BASE SHALL BE COMPACTED TO NOT LESS THAN 98% OF THE MAXIMUM DENSITY AS DETERMINED BY MODIFIED PROCTOR ASTM D-1557. A PRIME COAT AND SAND SEAL SHALL BE APPLIED TO THE ROCK BASE AFTER CONSTRUCTION INSPECTION AND APPROVAL BY THE ENGINEER.

PRIME AND TACK COAT:

A BITUMINOUS PRIME COAT SHALL BE APPLIED TO THE ROCK BASE. PRIME COAT SHALL BE CUT BACK ASPHALT GRADE RC-70 OR RC-250 APPLIED AT A RATE OF NOT LESS THAN 0.10 GALLONS PER SQUARE YARD. THE PRIME COAT SHALL BE COVERED WITH SAND FREE FROM ANY APPRECIABLE AMOUNT OF SILT, CLAY, TRASH OR ORGANIC MATTER. A TACK COAT, WHERE SPECIFIED ON THE DRAWINGS, SHALL BE EMULSIFIED ASPHALT GRADES RS-1 AND RS-2 APPLIED AT A RATE OF BETWEEN 0.02 AND 0.08 GALLONS PER SQUARE YARD.

CONSTRUCTION OF THE PRIME AND TACK COATS SHALL BE IN ACCORDANCE WITH SECTION 300 OF THE STANDARD SPECIFICATIONS. BITUMINOUS MATERIALS FOR THE PRIME AND TACK COATS SHALL BE IN ACCORDANCE WITH SECTION 300 OF THE STANDARD SPECIFICATIONS.

ASPHALTIC CONCRETE SURFACE COURSE (A.C.S.C.):

THE A.C.S.C. SHALL BE CONSTRUCTED FOR THE DEPTH AND LIMITS SHOWN ON THE DRAWINGS, IN ACCORDANCE WITH SECTIONS 330 AND 334 OF THE STANDARD SPECIFICATIONS. A.C.S.C. SHALL HAVE A MARSHALL STABILITY OF NOT LESS THAN 1,500 LBS. BITUMINOUS MATERIAL SHALL BE ASPHALT CEMENT VISCOSITY GRADE AC-20 IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

TESTING:

THE OWNER SHALL PROVIDE THE SPECS AND SCOPE OF SERVICES FOR THE INDEPENDENT TESTING LABORATORY TO CONDUCT ALL REQUIRED TESTS. THE ENGINEER SHALL BE PRESENT FOR ALL TESTING. THE CONTRACTOR SHALL GIVE THE ENGINEER AT LEAST FOUR-EIGHT (48) HOURS NOTICE PRIOR TO ANY SCHEDULED TESTING. TEST RESULTS MUST BE SUBMITTED TO THE ENGINEER PRIOR TO FINAL CERTIFICATION OR ANY REQUEST FOR PAYMENT ON THE ABOVE ITEMS. SEE ARCHTECTURAL SPECIFICATIONS FOR REQUIREMENTS WITHIN LIMITS OF BUILDING PADS.

THE SCHEDULE FOR TESTING OF ROADWAY AND PARKING CONSTRUCTION SHALL BE AS FOLLOWS:

A. SUBGRADE:
1. SAMPLES OF SUBGRADE MATERIAL SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 5,000 SF, OR CLOSER AS MIGHT BE NECESSARY IN THE EVENT OF VARIATIONS IN SUBSOIL CONDITIONS. LIMEROCK BEARING RATIO (LBR) TESTS SHALL BE PERFORMED ON A COMPOSITE OF SAMPLES OF SUBGRADE MATERIALS, CONSISTING OF MATERIAL FROM CONSECUTIVES SAMPLES, SUCH THAT ONE (1) LBR TEST IS PERFORMED AT INTERVALS OF NOT MORE THAN 20,000 SQUARE FEET.

2. DENSITY TESTS SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 5000 SQUARE FEET OR CLOSER AS MIGHT BE NECESSARY.

B. BASE:
1. SAMPLES OF BASE MATERIAL SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 10,000 SF, OR CLOSER AS MIGHT BE NECESSARY IN THE EVENT OF VARIATIONS IN THE ROCK BASE MATERIAL. LIMEROCK BEARING RATIO (LBR) TESTS SHALL BE PERFORMED ON A COMPOSITE OF SAMPLES OF BASE MATERIALS, CONSISTING OF MATERIAL FROM CONSECUTIVE SAMPLES, SUCH THAT ONE (1) LBR TEST IS PERFORMED AT INTERVALS OF NOT MORE THAN 40,000 SQUARE FEET.

2. DENSITY TESTS SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 10,000 SF OR CLOSER AS MIGHT BE NECESSARY.

NOTE: A "NON-SOAKED" LBR TEST MAY BE USED IN LIEU OF A "STANDARD" (SOAKED) LBR TEST, PROVIDED THAT THE REQUIREMENT FOR ACCEPTANCE IS INCREASED BY 5 UNITS. I.e. "STANDARD" LBR=40, "NON-SOAKED" LBR=45

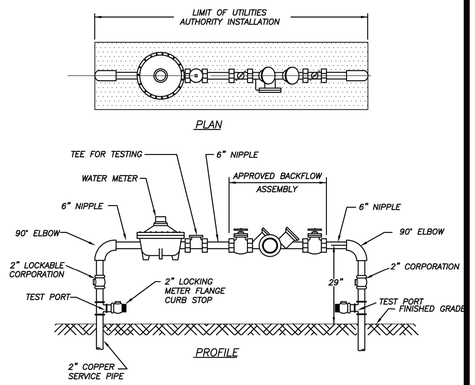
C. SELECT FILL
1. REPRESENTATIVE SAMPLES OF SELECT FILL MATERIAL SHALL BE TAKEN FOR EACH SOIL TYPE TO BE USED FOR FILL. AT MINIMUM, EACH SAMPLE SHALL BE TESTED TO DETERMINE GRADATION, CLASSIFICATION AND MAXIMUM DRY DENSITY. ADDITIONAL TESTING MAY BE REQUIRED AS INDICATED HEREIN OR AS DETERMINED BY THE ENGINEER DURING CONSTRUCTION.

D. REPORTS
1. ALL SAMPLES TAKEN SHALL BE UNIQUELY NUMBERED
2. ALL FIELD DENISTY TESTS SHAL REFER TO UNIQUELY NUMBERED SAMPLES FOR DETERMINATION OF ADEQUATE COMPACTION.
3. THE GEOTECHNICAL ENGINEER SHALL RECORD THE LOCATION OF EACH TEST ON A COPY OF THE SITE PLAN, ALONG WITH THE EXTENT OF THE FILL PLACED.

IF ANY TEST INDICATES THAT THE WORK DOES NOT MEET THE SPECIFICATIONS, THE SUBSTANDARD AREA SHALL BE REWORKED OR CORRECTED AND RETESTED, AT THE CONTRACTOR'S EXPENSE, UNTIL THE PROVISIONS OF THESE SPECIFICATIONS ARE MET. ALL FAILING TESTS SHALL BE PAID FOR BY THE CONTRACTOR.

CONCRETE:

UNLESS OTHERWIS

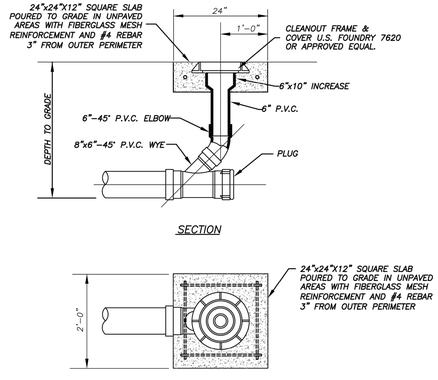


NOTES:

1. LANDSCAPING REQUIRED PER CITY OF FORT PIERCE OR ST. LUCIE COUNTY ORDINANCE. NO PLANTS OR TREES WITHIN 18" AROUND METER OR BACKFLOW. NO SOLDER JOINTS.
2. ASSEMBLY TO BE 29" FROM FINISH GRADE TO CENTERLINE OF THE FLANGED 90° BEND.

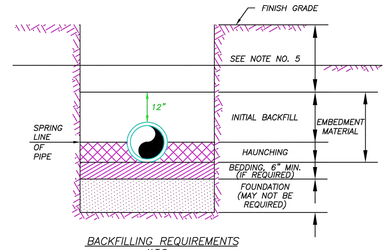
WATER METER/BACKFLOW PREVENTER ASSEMBLY
DOMESTIC SERVICE (COMMERCIAL)
(N.T.S.)

FPUA COMMUNITY PROUD	WATER METER/BACKFLOW PREVENTER ASSEMBLY--DOMESTIC SERVICES (METER SIZE 2" OR LESS)		W-8
03-09 DATE: DESIGN	REVISION:	BY: JLC APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # DETAIL NOTES 200602.DWG		FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL	SCALE: N.T.S.		
APPROVED: JLC	DATE: 2010	SHEET 1 OF 1	



TERMINAL CLEANOUT DETAIL (COMMERCIAL)
(N.T.S.)

FPUA COMMUNITY PROUD	TERMINAL CLEANOUT DETAIL WASTEWATER		S-4B
10-06 DATE:	REVISION:	BY: RBE APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # SEWER DETAIL 200602.DWG		FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL	SCALE: N.T.S.		
APPROVED: JLC	DATE: 2010	SHEET 2 OF 3	

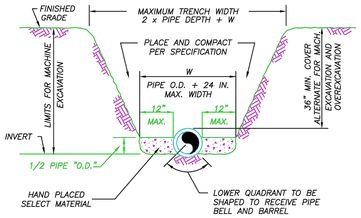


BACKFILLING REQUIREMENTS
N.T.S.

NOTES:

1) IN CERTAIN SOIL CONDITIONS A FOUNDATION MAY BE REQUIRED.
2) BEDDING IS REQUIRED PRIMARILY TO BRING THE TRENCH BOTTOM UP TO GRADE. BEDDING MATERIALS SHALL PROVIDE A UNIFORM AND ADEQUATE LONGITUDINAL SUPPORT UNDER THE PIPE.
3) HAUNCHING MATERIAL SHALL BE HAND PLACED TO THE SPRINGLINE OF THE PIPE. MATERIAL SHALL BE CONSOLIDATED UNDER THE PIPE AND HAND TAMPED TO PROVIDE ADEQUATE SIDE SUPPORT.
4) INITIAL BACKFILL MATERIAL SHALL BE HAND PLACED TO 12" ABOVE THE TOP OF PIPE. THE SOIL SHALL BE COMPACTED TO 100% MAX. DENSITY.(AASHTO T-99)
5) BACKFILL SHALL BE COMPACTED TO 100% OF MAX. DENSITY AS PER AASHTO T-99, TO A POINT 30" BELOW PROPOSED PROFILE GRADE OR EXISTING GRADE. THE FINAL 30" OF BACKFILL SHALL BE COMPACTED TO 98% OF MAX. DENSITY AS PER AASHTO T-180.
6) DENSITY TEST SHALL BE PERFORMED AT AREAS DETERMINED BY THE UTILITIES ENGINEER OR PERMIT AGENCY HAVING JURISDICTION, AT THE CONTRACTORS EXPENSE.
7) CONTRACTOR TO COMPLY WITH ALL FEDERAL, STATE AND LOCAL TRENCH SAFETY REGULATIONS.

FPUA COMMUNITY PROUD	BACKFILLING REQUIREMENTS		M-2
03-09 DATE: CONCRETE SLAB	REVISION:	BY: SLL APPD: JLC	WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # MISC. DETAILS 200602.DWG		FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL	SCALE:		
APPROVED: JLC	DATE: 2015	SHEET 1 OF 1	



NOTES:

1) THE CONTRACTOR SHALL COMPLY WITH REQUIREMENTS OF THE FLORIDA TRENCH SAFETY ACT.
2) INITIAL BACKFILL SHALL BE HAND PLACED TO 12" ABOVE THE PIPE. BACKFILL SHALL BE MECHANICALLY TAMPED TO A MINIMUM OF 100% OF MAX. DENSITY AS DETERMINED BY AASHTO METHOD T-99.

TYPICAL TRENCH DETAIL
N.T.S.

FPUA COMMUNITY PROUD	TYPICAL TRENCH DETAIL		M-1
03-09 DATE: CONCRETE SLAB	REVISION:	BY: SLL APPD: JLC	WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # MISC. DETAILS 200602.DWG		FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL	SCALE:		
APPROVED: JLC	DATE: 2015	SHEET 1 OF 1	

FORT PIERCE UTILITIES AUTHORITY
WATER DISTRIBUTION NOTES

1. ALL CONSTRUCTION MATERIAL, INSTALLATION AND TESTING SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE FORT PIERCE UTILITIES AUTHORITY.
2. WATER MAINS WHERE SPECIFIED AS POLYVINYL CHLORIDE (PVC) SHALL CONFORM TO AWWA C-900 OR C-905, PRESSURE CLASS 150, DR (18). WATER MAINS WHERE SPECIFIED AS POLYETHYLENE (PE) SHALL CONFORM TO AWWA C-901 OR C-906, STANDARD CODE DESIGNATION PE3408, PIPE CLASS 200, DIMENSION RATIO (DR) 17 FOR DIRECT BURY, (DR) 11 FOR DIRECTIONAL BORING, AND (DR) 9 FOR 2 INCH AND SMALLER PIPELINES.
3. WATER MAIN, WHERE SPECIFIED AS DUCTILE IRON PIPE , SHALL CONFORM TO ANSI/AWWA C151/A21.51 AND SHALL BE PRESSURE CLASS 250 (MINIMUM).
4. POLYVINYL CHLORIDE WATER MAIN SHALL BE BLUE IN COLOR OR WHITE IN COLOR WITH BLUE STRIPES. THE USE OF IDENTIFICATION TAPE ATTACHED TO THE TOP OF THE PIPE MAY BE USED IN LIEU OF MARKING ON THE PIPE, ALSO DIP PIPE SHALL REQUIRE THE USE OF IDENTIFICATION TAPE AND THHN WIRE.
5. FITTINGS SHALL BE DUCTILE IRON CONFORMING TO ANSI/AWWA C-110/A21.10, CLASS 250 MIN., CEMENT LINED AND FACTORY COATED
6. GATE VALVES SHALL BE MUELLER RESILIENT SEAT, KENNDY KEN-SEAL, AMERICAN OR APPROVED EQUAL. VALVES SHALL CONFORM TO AWWA C-509.
7. WATER LINES SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH FPUA DESIGN AND CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL SUBMIT CERTIFIED DENSITY TESTS AS REQUIRED BY FPUA ENGINEERING AND THE CITY, COUNTY, FDOT. IN CASES WHERE PAVED AREAS FALL WITHIN THE JURISDICTION OF LOCAL OR STATE AGENCIES, THE COMPACTION REQUIREMENTS SHALL NOT BE LESS THAN THE MINIMUM REQUIRED BY THE APPROPRIATE RESPONSIBLE AGENCY.
8. NO FIELD CHANGES OR DEVIATIONS FROM THE DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE FPUA ENGINEER AND CITY/COUNTY/FDOT ENGINEER.
9. THE CONTRACTOR SHALL NOTIFY FPUA ENGINEERING AND CITY/COUNTY/FDOT ENGINEERING 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
10. A PRE-CONSTRUCTION CONFERENCE BETWEEN THE ENGINEER, THE CONTRACTOR, FPUA, AND CITY/ COUNTY/FDOT ENGINEER SHALL BE MANDATORY PRIOR TO COMMENCEMENT OF CONSTRUCTION.
11. TRAFFIC CONTROL, BARRICADES, ETC., SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS AND APPROVED BY THE CITY ENGINEER.
12. MINIMUM COVER SHALL BE 36 INCHES EXCEPT AS APPROVED BY THE UTILITIES ENGINEER AND CITY/ COUNTY/FDOT ENGINEER. PIPES WITH COVER LESS THAN 30 INCHES SHALL BE CONSTRUCTED OF DUCTILE IRON OR IN PVC CASING.
13. DISTURBED AREAS SHALL BE RESTORED IN CONFORMANCE WITH THE APPLICABLE GOVERNING AGENCY REQUIREMENTS.
14. EXISTING UTILITIES AND DRAINAGE SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION AND PROTECTED BY THE CONTRACTOR.
15. WATER MAINS SHALL BE TESTED AND DISINFECTED IN ACCORDANCE WITH THE APPLICABLE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND AWWA C-651 FOR DISINFECTION.

FORT PIERCE UTILITIES AUTHORITY	WATER DISTRIBUTION		G-1 NOTES
02-06 DATE:	REVISION:	BY: APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # DETAIL NOTES 200602.DWG		FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: JJM	SCALE: N.T.S.		
APPROVED: JLC	DATE: 2010	SHEET 1 OF 2	

FORT PIERCE UTILITIES AUTHORITY
WATER DISTRIBUTION NOTES
CONTINUED

16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EXISTING UTILITIES AND DRAINAGE.
17. THE CONTRACTOR SHALL FURNISH RECORD DRAWING INFORMATION TO THE ENGINEER INCLUDING LOCATIONS OF VALVES, FITTINGS, SERVICE CONNECTIONS, BLOWOFFS, AIR RELEASE VALVES, AND ANY OTHER PERTINENT INFORMATION NECESSARY TO LOCATE ITEMS CONSTRUCTED UNDER THIS PROJECT, AS REQUIRED BY THE UTILITIES ENGINEER.
18. THE CONTRACTOR SHALL TAP EXISTING LINES UNDER THE SUPERVISION OF THE FORT PIERCE UTILITIES AUTHORITY ONLY AFTER TESTING AND DISINFECTION HAS BEEN COMPLETED AND APPROVED ON THE TAPPING VALVE AND SLEEVE.
19. WATER MAIN SHALL BE MARKED BY THE USE OF CONTINUOUS 10 GAUGE THHN MULTI STRANDED WIRE (BLUE IN COLOR) AND IDENTIFICATION TAPE WITH "WATER" MARKED ON TAPE, PERMANENTLY ATTACHED TO THE TOP OF THE WATER MAIN IN ACCORDANCE WITH THE FORT PIERCE UTILITES AUTHORITY SPECIFICATIONS.
20. SERVICE TAPS SHALL BE PLACED APPROXIMATELY TEN FEET AWAY FROM GATE VALVES, AS SHOWN, FOR TESTING. FOLLOWING TESTING AND STERILIZATION OF WATER LINE. CONTRACTOR SHALL PLACE A BRASS PLUG IN CORPORATION STOPS AND CURB STOPS SHALL BE REMOVED FROM TESTING LOCATIONS.
21. MECHANICAL RESTRAINTS TO BE USED ON ALL FITTINGS AND PLACED IN ACCORDANCE WITH MANUFACTURER'S OR ENGINEER'S RECOMMENDATIONS (WHICHEVER IS MORE STRINGENT) AND FPUA REQUIREMENTS.
22. ALL MAINS SHALL BE TESTED AT A MINIMUM OF 150 PSI. TESTING METHODS SHALL CONFORM TO AWWA C-600. – 2 HR MINIMUM TEST

$$L = \frac{SD(P)^{1/2}}{148{,}000}$$

L= LEAKAGE IN GPH
S= LENGTH OF PIPE IN FEET
D= PIPE DIAMETER IN INCHES
P= TESTING PRESSURE IN PSI

23. PRIOR TO ANY TESTING, ALL MAINS 6" IN DIA. AND LARGER SHALL HAVE A SWAB PASSED THRU THE ENTIRE LENGTH OF THE LINE. NOTE: SWAB SHOULD BE PLACED IN 1st. JOINT OF NEW LINE. END OF MAIN SHOULD BE "TURNED UP" AT 45$ AND EXTENDED SO THAT SWABBING AND A FULL BORE FLUSH CAN BE ACCOMPLISHED. BLOW-OFF ASSY CAN THEN BE PLACED. WHERE LINES BRANCH, SWABS WILL BE PLACED IN BRANCH LINES AND SEQUENTIALLY SWABBED AND FLUSHED.
24. A MINIMUM SIX FEET AND PREFERABLY TEN FEET HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN THE WATER MAIN AND ANY WASTEWATER LINES. 6 INCHES MINIMUM VERTICAL SEPARATION IF WATER MAIN IS OVER WASTEWATER AND 12 INCHES IF WATER MAIN IS UNDER SHALL BE MAINTAINED BETWEEN THE WATER MAIN AND ANY WASTWATER LINES. THE DISTANCE SHALL BE MEASURED FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE OR STRUCTURE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE WASTEWATER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING, AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. SUFFICIENT LENGHTS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT ALL CROSSINGS.
25. WHERE A WATER MAIN IS TO BE INSTALLED BELOW A STORM DRAIN PIPE, A MINIMUM OF 6 INCHES OF VERTICAL CLEARANCE BETWEEN PIPES SHALL BE CONSTRUCTED OF DIP AT THE CROSSING, AND SHALL BE MECHANICALLY RESTRAINED WITHIN 20 FEET OF THE CROSSING.
26. CONTRACTOR SHALL COMPLY WITH FLORIDA TRENCH SAFETY ACT REQUIREMENTS.

FORT PIERCE UTILITIES AUTHORITY	WATER DISTRIBUTION		G-1 NOTES
02-06 DATE:	REVISION:	BY: APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # DETAIL NOTES 200602.DWG		FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: JJM	SCALE: N.T.S.		
APPROVED: JLC	DATE: 2010	SHEET 2 OF 2	

FORT PIERCE UTILITIES AUTHORITY WASTEWATER CONSTRUCTION NOTES

1. ALL CONSTRUCTION MATERIAL, INSTALLATION AND TESTING SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE FORT PIERCE UTILITIES AUTHORITY.
2. GRAVITY SEWER MAIN SHALL BE POLYVINYL CHLORIDE SDR-26, GREEN OR WHITE IN COLOR, GRAVITY SEWER MAIN SHALL HAVE LOCATOR TAPE WITH "SEWER" MARKED ON TAPE AND SHALL CONFORM TO ASTM D-3034.
3. THE MANHOLE BASE SHALL BE SET ON A FIRM, DRY AND STABLE OR COMPACTED BASE FOUNDATION. IF NECESSARY, THE CONTRACTOR SHALL UTILIZE ROCK TO PROVIDE A FIRM AND SUITABLE MANHOLE BASE FOUNDATION.
4. WASTEWATER LINES SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH FPUA DESIGN AND CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL SUBMIT CERTIFIED DENSITY TESTS AS REQUIRED BY FPUA ENGINEERING AND THE CITY ENGINEERING DEPARTMENT. IN CASES WHERE PAVED AREAS FALL WITHIN THE JURISDICTION OF LOCAL OR STATE AGENCIES, THE COMPACTION REQUIREMENTS SHALL NOT BE LESS THEN THE MINIMUM REQUIRED BY THE APPROPRIATE RESPONSIBLE AGENCY.
5. A 1% MINIMUM SLOPE SHALL BE MAINTAINED ON ALL SANITARY SERVICE LATERALS.
6. THE CONTRACTOR SHALL FURNISH RECORD DRAWING INFORMATION TO THE ENGINEER CONSISITING OF PIPE SIZES, LOCATION OF SERVICE TEE WYES, DIAMETER OF SERVICES, LOCATION OF ANY FITTINGS, FINAL RIM AND INVERT ELEVATION OF ALL MANHOLES AND ANY OTHER PERTINENT INFORMATION NECESSARY TO LOCATE ITEMS CONSTRUCTED UNDER THIS PROJECT.
7. MAINTAIN SIX FEET AND PREFERABLY 10 FEET HORIZONTAL DISTANCE BETWEEN WATER MAINS AND SEWER MAINS AS A MINIMUM.
8. WASTEWATER FORCE MAINS, WASTEWATER COLLECTION LINES, AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. A MINIMUM VERTICAL DISTANCE OF 12 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE SHALL BE PROVIDED WHENEVER POSSIBLE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE WASTEWATER PIPE JOINTS AND THE WATER PIPE JOINTS ARE EQUIDISTANCE FROM THE POINT OF CROSSING, AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT ALL CROSSINGS.
9. A PRE-CONSTRUCTION CONFERENCE BETWEEN THE ENGINEER, THE CONTRACTOR, AND FPUA/CITY COUNTY/FDOT SHALL BE MANDATORY PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
10. NO FIELD CHANGES OR DEVIATIONS FORM THE DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL FPUA/CITY/COUNTY/FDOT ENGINEER,
11. TRAFFIC CONTROL, BARRICADES, ETC. SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS.
12. CONTRACTOR SHALL NOTIFY FORT PIERCE UTILITIES AUTHORITY 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
13. WASTEWATER FORCE MAIN SHALL BE POLYVINYL CHLORIDE CONFORMING TO AWWA C-900, AND SHALL BE CLASS 150, DR-18.
14. WASTEWATER FORCE MAIN SHALL BE GREEN IN COLOR.
15. FITTINGS SHALL BE DUCTILE IRON, CONFORMING TO ANSI/AWWA C-110/A21.10 CLASS 250 MIN. AND INTERIOR EPOXY COATED.
16. WASTEWATER FORCE MAIN SHALL BE MARKED BY THE USE OF CONTINUOUS 10 GAUGE THHN WIRE (GREEN IN COLOR) PERMANENTLY ATTACHED TO THE TOP OF THE FORCE MAIN WITH LOCATOR TAPE MARKED "SEWER" ON TAPE IN ACCORDANCE WITH FPUA SPECIFICATIONS.
17. MINIMUM COVER SHALL BE 36 INCHES, PIPES WITH COVER LESS THAN 30 INCHES SHALL REQUIRE PRIOR APPROVAL OF THE UTILITES ENGINEER AND SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE.
18. EACH SERVICE LATERAL WILL BE MARKED WITH A LOCATOR BALL AS MANUFACTURED BY 3M CORPORATION, OR APPROVED EQUAL AS REQUIRED BY FPUA ENGINEER.
19. ALL MANHOLES SHALL HAVE SEWER RAIN GUARDS INSTALLED AS REQUIRED BY FPUA ENGINEER.
20. THE CONTRACTOR SHALL COMPLY WITH THE FLORIDA TRENCH SAFETY ACT REQUIREMENTS.

FORT PIERCE UTILITIES AUTHORITY	WASTEWATER CONSTRUCTION NOTES FPUA REQUIREMENTS		G-2 CONSTRUCTION NOTES
02-06 DATE:	REVISION:	BY: APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # DETAIL NOTES 200602.DWG		FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: JJM	SCALE: N.T.S.		
APPROVED: JLC	DATE: 2010	SHEET 1 OF 1	

STANDARD SEPARATION STATEMENT FOR
WATER / SEWER CONFLICTS

1. SANITARY SEWER, FORCE MAINS, AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. SANITARY SEWERS, FORCE MAINS AND STORM SEWERS CROSSING UNDER WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 6 INCHES, PREFERABLY 12 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHEN ABOVE, AND AT LEAST 12 INCHES OF SEPARATION WHEN THE WATER MAIN IS BELOW.

WHERE SANITARY SEWER, FORCE MAINS, STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 6 INCHES VERTICAL SEPARATION, BOTH THE SEWER AND WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) CENTERED ON THE CROSSING. (DIP IS NOT REQUIRED FOR STORM SEWERS.) SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED.

ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING). AT SUCH CROSSINGS PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE WITH LESS THAN 6 INCHES VERTICAL CLEARANCE, THE NEW PIPE SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWERS) AND NEW PIPES SHALL BE ARRANGED TO MEET THE CROSSING REQUIREMENTS ABOVE.

2. A MINIMUM 3-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF STORM SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

A MINIMUM 3-FOOT, AND PREFERABLE 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN VACUUM TYPE SANITARY SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

A MINIMUM 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN "ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

A MINIMUM 6-FOOT, AND PREFERABLE 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN GRAVITY OR PRESSURE TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO 3 FOOT WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER

IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10-FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON A UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 6 INCHES ABOVE THE TOP OF THE SEWER.

WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 6 INCHES IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR THE FORCE MAIN SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWER) WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED JOINTS).

3. ALL DIP SHALL BE PRESSURE CLASS 250 MIN.. ADEQUATE PROTECTIVE MEASURES AGAINST CORROSION SHALL BE USED AS DETERMINED BY THE DESIGN ENGINEER.

FORT PIERCE UTILITIES AUTHORITY	STANDARD SEPARATION STATEMENT FOR WATER/SEWER CONFLICT		G-3 WATER/SEWER CONFLICT
02-06 DATE:	REVISION:	BY: APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # DETAIL NOTES 200602.DWG		FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: JJM	SCALE: N.T.S.		
APPROVED: JLC	DATE: 2010	SHEET 1 OF 1	

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

P:\Projects\2022\2022-016-001 Youth and Family Center\CAD\1- Plans\Youth and Family details.dwg D5 WATER SEWER dsc_] Dec 20,2023-3:39pm

CREECH
CONSULTING, INC.
CIVIL/UTILITY ENGINEERED
PO BOX 327, STUART, FLORIDA 34994 (772) 485-2140
BOARD OF PROFESSIONAL ENGINEERS, CERTIFICATE OF AUTHORIZATION NUMBER 5139
PROFESSIONAL SURVEYORS AND MAPPERS, AMENDED CERTIFICATE NO. LB-0006705

DATE	BY	REVISIONS
12/20/2023	JAC	PER FDOT DRIVEWAY CONNECTION COMMENTS
10/90/2023	JAC	PER TRC COMMENTS DATED 10/04/23
09/07/2023	JAC	PER TRC COMMENTS DATED 07/19/23

YOUTH & FAMILY
BEHAVIORAL HEALTH CENTER INC
FORT PIERCE FLORIDA
UTILITY DETAILS & SPECIFICATIONS

DRAWN BY: JAC
CHECKED BY: RTC / ANDREWS
LATITUDE: 27°26'5.40"N
LONGITUDE: 80°21'2.96"W
HORZ. SCALE:
VERT. SCALE:

SEAL
09/07/2023
RICHARD CREECH
FL P.E. NO. 38592

SHEET D5
PROJECT NO. 22-016-001

Approved
240103-490-00043
Geoffrey Blick
1/3/2024

CREECH
CONSULTING, INC.

YOUTH & FAMILY BEHAVIORAL HEALTH CENTER

St. Lucie County, FL

Stormwater Management Report

FOR

City of Fort Pierce Engineering

Prepared for

Youth & Family Behavioral Health Center, Inc.

December 21, 2023



Richard Creech, State of Florida, License No. 38592

P.O. Box 327
Stuart, FL 34995
Tel 772 485 2140
FL Certificate of Authorization 5139
Certificate LB-0006705

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

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Aerial Map

Boundary/Topographic Survey

Environmental Assessment

Geotechnical Report

FEMA Map

Appendices

Water Management Calculations

Cascade 2001 Modeling Report

Martin County LDR Article 4 Checklist

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

I. PROJECT LOCATION

The project site located at 1211 South 25th Street in Fort Pierce, St. Lucie County, Florida. The property is identified by Parcel IDs 2417-503-0040-000-2 & 2417-507-0005-000-7. Please see Exhibit 1 for an aerial map of the proposed site.

II. TOPOGRAPHY

Existing grade ranges between 18.0 feet NAVD at the southwest property boundary to 20.0 feet NAVD along the south property line. The average site grade is approximately 19.0 feet NAVD. The site generally slopes toward the east of the project; therefore, a majority of the drainage sheet flows toward the South 25th Street right-of-way. All flows are then conveyed directly to curb inlets within South 25th Street. There is currently no water quality treatment or attenuation of the stormwater prior to discharge. Please see Exhibit 2 for a topographic survey of the site.

III. EXISTING LAND USE

The existing site consists of vacant grass-covered parcels with trees. The site is bound to the north by a single-family residential development followed by the intersection of Acorn Street and South 25th Street, to the east by South 25th Street followed by a Family Dollar retail store development, to the south by the Conviva Care Center and the Family Oral Health Associates developments, and to the west by single-family residential developments followed by Acorn Street. There are no permitted surface water management facilities within the project area.

Based on a review of historic aerial photographs dating back to 1969, the subject site housed an unidentified structure with pavement areas on the northern portion of the site. Two unidentified structures with pavement areas also on the existed southern portion of the site. The site remained relatively unchanged until 1984. Between 1984 and 1999, the three former site structures and pavements no longer occupied the site. The site has remained relatively unchanged as a vacant grass-covered lot from 1999 to present day.

Surface water generated within the project site area in the pre-development condition tends to sheet flow toward the adjacent South 25th Street right-of-way. There are no offsite flows entering the project from the surrounding developments. Please see the Pre-Development Drainage Map in Appendix 1 for reference.

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Georgi Celusnek
1/3/2024

IV. FLOOD ZONE

According to FEMA Map Number 12111C0186J (Exhibit 5), updated February 16, 2012, the site lies within FEMA Flood Zone X.

V. SOILS

Based on the USDA Web Soil Survey, the soil type for the site is 100% Tantile and Pomona sands (Map unit Symbol 44). Tantile and Pomona sands are nearly level to sloping soils (0-2%) and are poorly drained with the water table at depths of more than 80 inches. The hydrologic group is A/D. Please refer to the Soils Report in Exhibit 3 for more information. A curve number of 67 was calculated for the proposed site based on soil storage in the post development condition. Please see corresponding calculations presented in Appendix 1.

VI. GROUNDWATER

Whitestone Associates, Inc. performed soil testing at the property and discovered the water table ranged from approximately 9.5 to 11.0 feet below grade. An exfiltration test was conducted to determine the in-situ infiltration capabilities of the site. An average hydraulic conductivity of 2.31 x 10-7 ft/sec was observed. Please see Exhibit 4 for the geotechnical report. Based on the underlying conditions, a wet season water table elevation of 8.5 feet NAVD was established to provide a conservative approach to the stormwater design.

VII. PROPOSED PROJECT

The proposed Youth and Family Behavioral Health Center is a single-story office building with associated parking, utilities, and drainage infrastructure over approximately 0.52 acres in the City of Fort Pierce. Runoff from the site will be directed via site grading and a network of culverts to approximately 0.05 acres of dry retention for water quality treatment and flood attenuation. Please see Appendix 1 for the Post Development Drainage Map.

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1/3/2024

VIII. LAND USE

Land Use	Description	This Phase (acres)
Buildings	Impervious	0.10
Pervious Pavement (50% credit)	Impervious	0.08
Sidewalks	Impervious	0.03
Retention	Pervious	0.05
Pervious Pavement (50% credit)	Pervious	0.08
Open Space	Pervious	0.18
Total	**---**	**0.52**

IX. WATER QUANTITY

The proposed minimum finished floors will be maintained above the 100-year 3-day storm elevation per the City of Fort Pierce Code of Ordinances Section 119-3(e)(4). Perimeter grading and/or berms will be utilized to contain runoff from the 25-year 3-day design storm event in accordance with Section 119-3(e)(2). Proposed minimum parking lot elevations will be held above design standards of a 10-year 1-day storm compliant with Section 119(e)(1). Rainfall quantities for each design storm were taken from Section 119-3(e)(7).

Finished Floors:

Storm Frequency: 100 YEAR 3 DAY Design Rainfall: 12.23 inches

Peak Stage (ft, NAVD)	Proposed Min Finished Floor (ft, NAVD)	FEMA Elevation (ft, NAVD)
20.23	21.08	N/A

Perimeter Berm:

Storm Frequency: 25 YEAR 3 DAY Design Rainfall: 9.5 inches

Peak Stage (ft, NAVD)	Proposed Min Berm (ft, NAVD)
19.92	20.50

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Georgi Celusnek
1/3/2024

Parking Lot Design:

Storm Frequency: 10 YEAR 1 DAY Design Rainfall: 6.0 inches

Peak Stage (ft, NAVD)	Proposed Min Parking Lot (ft, NAVD)
19.50	19.50

Control Elevation:

Area (acres)	Control Elevation (ft, NAVD)	WSWT Elevation (ft, NAVD)	Method of Determination
0.52	20.50	8.50	Soil Borings

X. DISCHARGE & OUTFALL STRUCTURES

Discharge: As stated in the City of Fort Pierce Code of Ordinances Section 119-3(e)(6), off-site discharge shall be limited to predevelopment runoff based on the 25-year-three-day storm event calculated by SFWMD methods. According to the calculations, all stormwater runoff will be contained onsite within the proposed perimeter berms up to the 100-year 3-day event. Please see Appendix 2 for the Cascade 2001 modeling results.

Discharge Storm Frequency: 25 YEAR 3 DAY Design Rainfall: 9.5 inches

Area (acres)	Pre Disch (cfs)	Post Disch (cfs)
0.52	3.77	0.00

XI. WATER QUALITY

Runoff from the site will be directed via site grading and a network of culverts to approximately 0.05 acres of dry retention with a bottom elevation of 18.0 feet NAVD for water quality treatment and storm attenuation prior. A water quality treatment volume equal to 50 percent of the first inch of runoff from the developed project, or the total runoff of 2.5 inches times the percentage of imperviousness, whichever is greater will be provided within the system (SFWMD Applicant's Handbook Volume II Part III Section 4.2.1.a.1).

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Georgi Celusnek
1/3/2024

Turbidity and erosion control devices will be installed prior to commencement of construction around the proposed project limits. Runoff will be diverted to the constructed retention area per the erosion control plan. The devices will remain in place and in good working order until final stabilization is achieved.

Treatment Method	Volume Required (ac-ft)	Volume Provided (ac-ft)
Dry Retention	0.02	0.04

XII. RECOVERY

Dry retention areas shall have mechanisms for returning the groundwater level in the area to the control elevation within 12 days (288 hours) of cessation of rainfall (SFWMD Applicant's Handbook Volume II Part V Section 5.3.3). As seen in Exhibit 4, soil types present on site represent characteristics of Group A/D soils. According to the TR-55 Manual, this soil acts as Group A when drained and Group D when thoroughly wetted. An average infiltration rate of 0.15 in/hr (0.0125 ft/hr) was conservatively estimated based on the site conditions. Please see Appendix 2 for the Cascade 2001 modeling results.

Recovery Criteria	System Recovery Elevation (ft, NAVD)	Time (hrs)	Limit (hrs)
Runoff Volume	18.00	153	288

Max stage 25-year 3-day storm (9.5 inches of rainfall) = 19.92 feet NAVD

Recovery = 19.92 feet NAVD – 18.00 feet NAVD = 1.92 feet

Recovery time = 1.92 feet / 0.0125 ft/hr = 153 hours after cessation of the storm

XIII. UTILITIES

The proposed Youth and Family Behavioral Health Center will receive potable water and wastewater services from the Fort Pierce Utility Authority.

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

XIV. CONCLUSIONS

Please see the attached drainage calculations in Appendix 1 and Cascade 2001 modeling results in Appendix 2. As described above, the proposed design meets the City of Fort Pierce storm water management criteria.

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

Exhibit 1

Aerial Map

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024



AERIAL SITE MAP

SECTION 17, TOWNSHIP 35S., RANGE 40E.

0 100'

SCALE IN FEET

YOUTH & FAMILY BEHAVIORAL HEALTH CENTER, INC.

SCALE: 1" = 100'	APPROVED BY:	DRAWN BY: AJE
DATE: 12/06/2023		FILE: 2228

CREECH CONSULTING, INC.
P.O. BOX 327
Stuart, Florida 34995
FL Certificate of Authorization No. 5139
Certificate : LB-0006705

Approved
2023-D-490-00043
Georgi Calusnek
1/3/2024

FILE: R:\Projects\2228 Creech Youth and Family\CAD\Exhibits\2228-E1.0 ARIAL MAP1.DWG Wednesday, December 6, 2023 1:48:32 PM

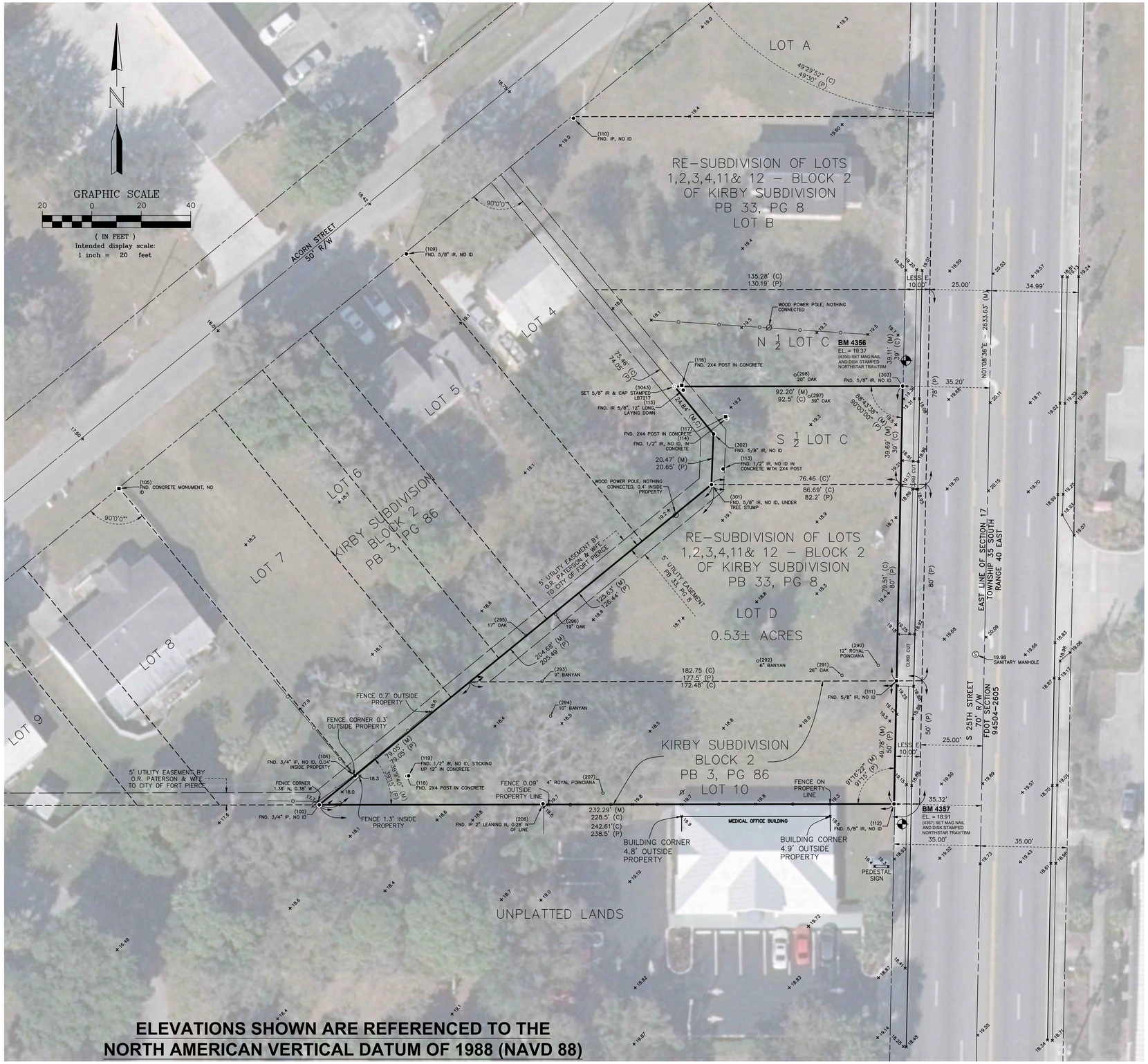
Exhibit 2

Boundary/Topographic Survey

Northstar Geomatics

Issued: November 6th, 2022

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024



ELEVATIONS SHOWN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

SURVEYOR'S NOTES

1. THE EXPECTED USE OF THIS SURVEY IS FOR ENGINEERING DESIGN PURPOSES.
2. ALL MEASUREMENTS SHOWN HEREON ARE IN ACCORDANCE WITH THE UNITED STATES STANDARD AND ARE IN FEET.
3. ADDITIONS OR DELETIONS TO THE SURVEY MAP AND/OR REPORT BY OTHER THAN THE SIGNING PARTY IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES AND RENDERS THE SURVEY INVALID.
4. THIS SURVEY CANNOT BE TRANSFERRED OR ASSIGNED WITHOUT THE SPECIFIC WRITTEN PERMISSION OF THE SURVEYOR HEREON.
5. THE SURVEY MAP AND REPORT OR THE COPIES THEREOF ARE NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
6. THIS SURVEY MEETS OR EXCEEDS APPLICABLE ACCURACY REQUIREMENTS AND IS PREPARED ACCORDING TO THE STANDARDS OF PRACTICE SET FORTH BY THE FLORIDA ADMINISTRATIVE CHAPTER 5J-17 AS CODE, ADOPTED BY THE BOARD OF PROFESSIONAL SURVEYOR AND MAPPERS.
7. THERE WAS NO ATTEMPT TO LOCATE ANY UNDERGROUND UTILITIES, EXCEPT AS SHOWN.
8. LANDS SHOWN HEREON WERE NOT ABSTRACTED FOR RIGHT-OF-WAY EASEMENTS, OWNERSHIP, OR OTHER INSTRUMENTS OF RECORD.
9. SYMBOLS SHOWN HEREON ARE NOT TO SCALE.
10. FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), BY GRAPHIC PLOTTING ONLY, INDICATES SAID PROPERTY IS LOCATED WITHIN AN AREA HAVING A FLOOD ZONE DESIGNATION OF X ON FLOOD RATE PANEL NO. 12111C0186J, WITH A REVISION DATE OF 2/16/2012.
11. LAST DATE OF DATA ACQUISITION: 11/16/2022
12. THIS SURVEY IS INTENDED TO BE DISPLAYED AT THE SCALE SHOWN ON THE SCALE BAR.
13. BEARINGS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD83), ADJUSTMENT OF 2011, FLORIDA STATE PLANE EAST ZONE GRID NORTH AS ESTABLISHED BY THE NOS AND THE EAST LINE OF SECTION 17 AS SHOWN HEREON AS BEING N 01°08'36" E. ALL OTHER BEARINGS ARE RELATIVE THERETO. FLORIDA DEPARTMENT OF TRANSPORTATION PERMANENT REFERENCE NETWORK WAS USED AS HORIZONTAL CONTROL AND GPS RTK WITH REDUNDANT MEASUREMENTS. HORIZONTAL ACCURACY IS 0.10 FOOT, PLUS OR MINUS.
14. ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). ELEVATIONS DEPICTED ON THIS SURVEY WERE OBTAINED USING FLORIDA DEPARTMENT OF TRANSPORTATION PERMANENT REFERENCE NETWORK AND REAL TIME KINEMATIC (RTK) GPS METHODS WITH AN EXPECTED ACCURACY OF +/- 0.2'.
15. BACKGROUND IMAGERY OBTAINED FROM FLORIDA DEPARTMENT OF TRANSPORTATION, DATED 2021

LEGAL DESCRIPTION

PARCEL 1: THE SOUTH ½ OF LOT C AND ALL OF LOT D, LESS THE EAST 10 FEET THEREOF OF THE RESUBDIVISION OF LOTS 1, 2, 3, 4, 11, AND 12, BLOCK 2, KIRBY'S SUBDIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 8, PAGE 33, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA;

AND

PARCEL 2: LOT 10, BLOCK 2, KIRBY SUBDIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 3, PAGE 86, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, LESS THE EAST 10 FEET, DEEDED TO THE STATE OF FLORIDA IN OFFICIAL RECORDS BOOK 169, PAGE 1169, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

LEGEND

Abbreviations

(C)	= CALCULATED MEASUREMENT
(D)	= DEED MEASUREMENT
(M)	= FIELD MEASUREMENT
(P)	= PLAT MEASUREMENT
(xxxxx)	= SURVEYOR'S POINT NUMBER
BM	= BENCHMARK
CL	= CENTERLINE
DB	= DEED BOOK
FDOT	= FLORIDA DEPARTMENT OF TRANSPORTATION
FND	= FOUND
ID	= IDENTIFICATION
IP	= IRON PIPE
IR	= IRON ROD
LB	= LAND SURVEYING BUSINESS
NAVD88	= NORTH AMERICAN VERTICAL DATUM OF 1988
ORB	= OFFICIAL RECORDS BOOK
PB	= PLAT BOOK
PCN	= PARCEL CONTROL NUMBER
PG	= PAGE
PID	= PARCEL IDENTIFICATION NUMBER
PSM	= PROFESSIONAL SURVEYOR & MAPPER
X 14.2	= EXISTING ELEVATION

Linetypes

= BOUNDARY
= CHAIN LINK FENCE
= CENTERLINE
= RIGHT OF WAY
= SECTION LINE
= PLAT LOT LINE
= EASEMENT

Symbols

= BENCHMARK (AS LABELED)
= FOUND 1/4 SECTION CORNER
= FOUND SECTION CORNER
= POLE ANCHOR
= SANITARY MAN HOLE
= SET 5/8" IRON ROD & CAP STAMPED "NORTHSTAR LB 7217"
= SIGN
= TREE (AS LABELED)
= UTILITY PEDESTAL
= WOOD UTILITY POLE

SURVEYOR'S CERTIFICATION

(THIS SURVEY IS NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND RAISED EMBOSSED SEAL OF FRANK C. VELDHUIS, FLORIDA PROFESSIONAL SURVEYOR AND MAPPER.)

I HEREBY CERTIFY THAT THE BOUNDARY AND TOPOGRAPHIC SURVEY OF THE PROPERTY SHOWN AND DESCRIBED HEREON WAS COMPLETED UNDER MY DIRECTION AND SAID SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

I FURTHER CERTIFY THAT THIS BOUNDARY AND TOPOGRAPHIC SURVEY MEETS THE STANDARDS OF PRACTICE FOR SURVEYS SET FORTH BY THE FLORIDA BOARD OF LAND SURVEYORS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027 FLORIDA STATE STATUTES. NO SEARCH OF THE PUBLIC RECORDS HAS BEEN MADE BY THIS OFFICE. THIS SURVEY IS BASED ON INFORMATION FURNISHED BY CLIENT OR CLIENT'S REPRESENTATIVE

NORTHSTAR GEOMATICS, INC.

DATE

FRANK C. VELDHUIS
PROFESSIONAL SURVEYOR & MAPPER
FLORIDA CERTIFICATION NO. 6582

NORTHSTAR GEOMATICS
5820 NW ZENITH DR
PORT ST LUCIE, FLORIDA 34986
(772) 781-6400 WWW.NSGEO.COM
LICENSED BUSINESS NO. 7217

DATE	REVISIONS

DATE 11/16/2022
SCALE 1" = 20'
FIELD BK. -
DWNG. BY FCV
CHECKED BY FCV

BOUNDARY AND TOPOGRAPHIC SURVEY FOR: YOUTH & FAMILY BEHAVIORAL HEALTH CENTER, INC.

SECTION 17, TOWNSHIP 35 SOUTH, RANGE 40 EAST
FT. PIERCE, FLORIDA

SHEET NO. 1

OF 1 SHEETS

PROJECT NO. 22-038

Approved
23-D-4[illegible]00043
Scott Cousnek
1/3/2024

Exhibit 3

Environmental Assessment

Advanced Restoration Ecology

Issued: June 28th, 2023

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

Advanced Restoration Ecology

1211-1213 S 25th St

Ft Pierce, FL

Environmental Assessment

Prepared For:
Youth and Behavioral Health Center

Prepared By:

Drew Gatewood, MS, PWS
2593 NE Roberta St
Jensen Beach, FL 34957
772-242-7200
813-784-8891

©ARE, Inc. January 2023

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

The environmental assessment report below has been compiled in accordance with the St Lucie County Development Review Division and previsions set forth by the state of Florida. The parcel is listed by the St Lucie County Property Appraiser as Parcel ID number 2417-507-0005-000-7 and 2417-503-0040-000-2 and is a total of .51 acres. The property is located at 1211-1213 S 25th St, in Ft Pierce, Florida. The following report describes the findings of our recent on-site review and database research as it pertains to St Lucie County, City of Ft Pierce, and the State of Florida.

LAND USE RECORDS

The St Lucie County Property Appraiser's Report lists this property as 0000 Vacant Residential.

SOIL COMPOSITION:

Based on a review of the United State Department of Agriculture's Web Soil Survey database the site's soils are comprised of the following:

Waveland Urban Land Complex - This soil is a nearly level, moderately drained soil in broad open areas of urban development. The water table is typically at a depth of less than 10 inches for 2 to 4 months during wet seasons, and at a depth of 10 to 40 inches for 6 months or more receding to a greater depth during extended dry periods.

Tantile and Pomona Sands - This poorly drained soil is found typically in broad areas in the flatwoods. Typically the surface layer is black fine sand about 5 inches thick. The water table is at a depth of less than 10 inches for 2 to 4 months during the wet season and within a depth of 40 inches for more than 6 months. Natural vegetation consists of slash pine, saw palmetto, inkberry, rusty lyonia, black root, penny royal, pineland threeawn, chalky bluestem, panicum and various grasses. The soil is well suited for pasture and hay crops.

WILDLIFE EVALUATION:

On January 5th, 2023, ARE conducted pedestrian transects across 100% of property looking for local, state and federally listed or endangered species present on the site. This survey primarily focused on the presence of gopher tortoise burrows or recent activity. During the pedestrian transects of the property, gopher tortoise activity was not observed on site, nor were any other listed plant or animal species were observed on site during the site visit.

NATIVE HABITAT

The site investigation conducted by ARE, Inc. did not native upland habitat on the site. Species observed during the site reconnaissance included the following:

Brazilian pepper (*Schinus terbinthifolius)* Bahia Grass (*Paspalum notatum*)
Laurel Oak (*Quercus laurifolia*)

WETLAND DELINEATION:

Based on the State definition of a wetland in 62-340 FAC, there are three components: hydric soils, wetland plants, and hydrologic indicators. These factors listed were not present during the site investigation. ARE concludes this property does not likely include state or federally jurisdictional wetlands on site in its current configuration.

Approved
2023-D-490-00043
Geuroj Celusnek
1/3/2024

CITY REQUIREMENTS

The City will require proof of a completed gopher tortoise survey by a licensed agent. Please submit this document with any applications to use as the needed verification of a 100% gopher tortoise survey has been completed on the site. Per FWC regulations a gopher tortoise survey is good for 90 days, and any clearing must have a valid survey prior to commencement. The City will not authorize/issue any permitting without a current gopher tortoise survey. There are 5 trees on site meeting the tree protection standards for the City. Below are the trees meeting the Tree Protection Standards on site and their evaluations.

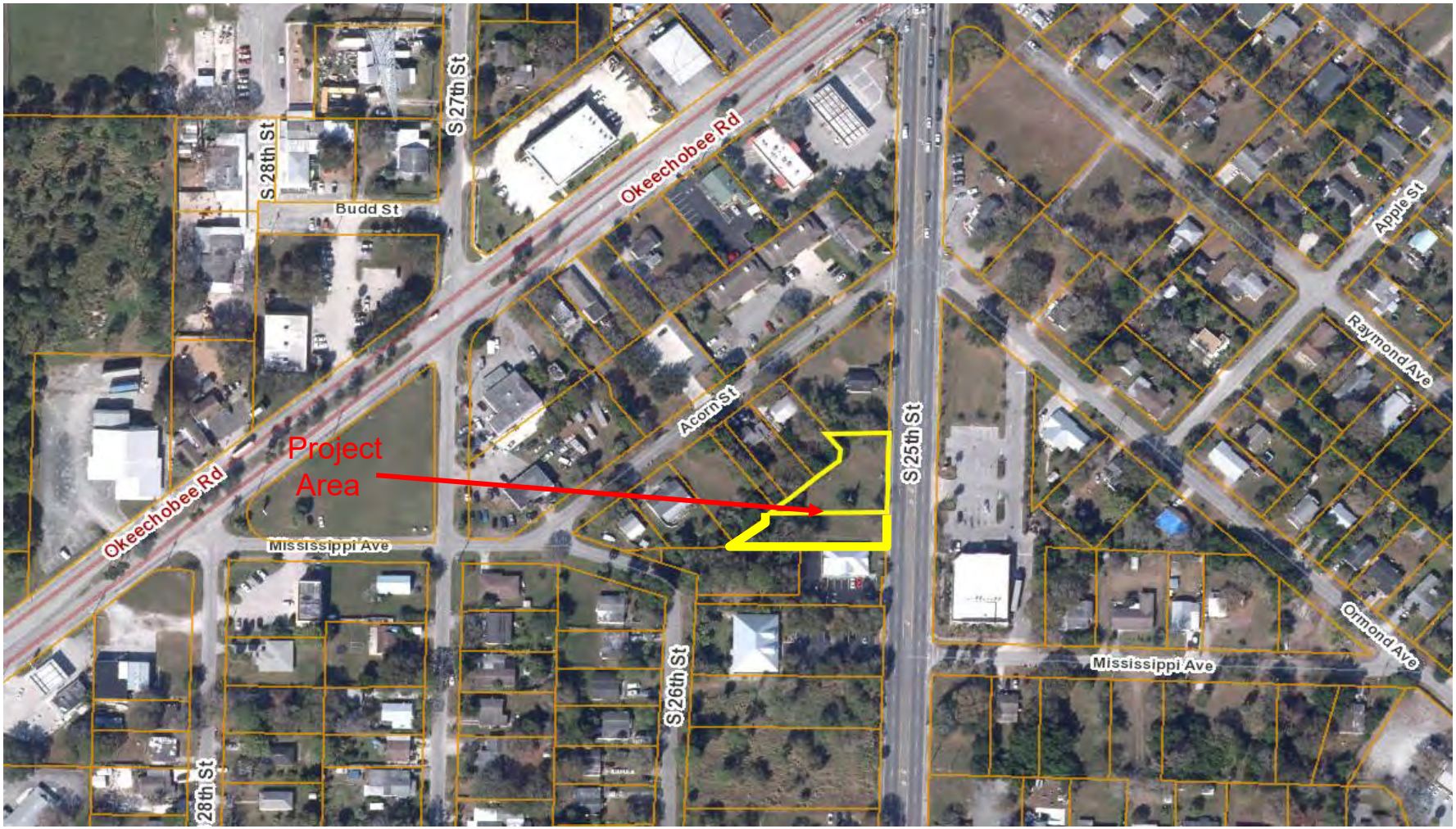
Tree 291 26" Laurel Oak (Health Score 2/5 Included Bark, Basal Rot)
Tree 295 17" Laurel Oak (Health Score 3/5 Lean and Basal Rot)
Tree 296 19" Laurel Oak (Health Score 4/5)
Tree 297 39" Laurel Oak (Health Score 2/5 Severe Lean and Basal Rot)
Tree 298 20" Laurel Oak (Health Score 4/5)

We recommend Trees 291, 295, 297, 298 be removed due to their structural weaknesses and likelihood of failure during a storm.

CONCLUSION:

Based on City requirements, ARE, Inc. conducted a site investigation throughout the property to survey for the presence of any listed plant or animal species. Gopher Tortoise burrows were not observed on site, and no other State or Federally listed species were observed on the property during the site visit. A 100% gopher tortoise survey of the property was conducted and completed by an FWC licensed gopher tortoise agent during the site investigation. Native habitat was determined not to be on site. It is the professional opinion of ARE, Inc. that there are likely no State or Federally jurisdictional wetlands on the site as the site's characteristics do not meet the minimum thresholds required for wetland classification.

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2023-D-490-00043
Georgi Celusnek
1/3/2024



1/5/2023

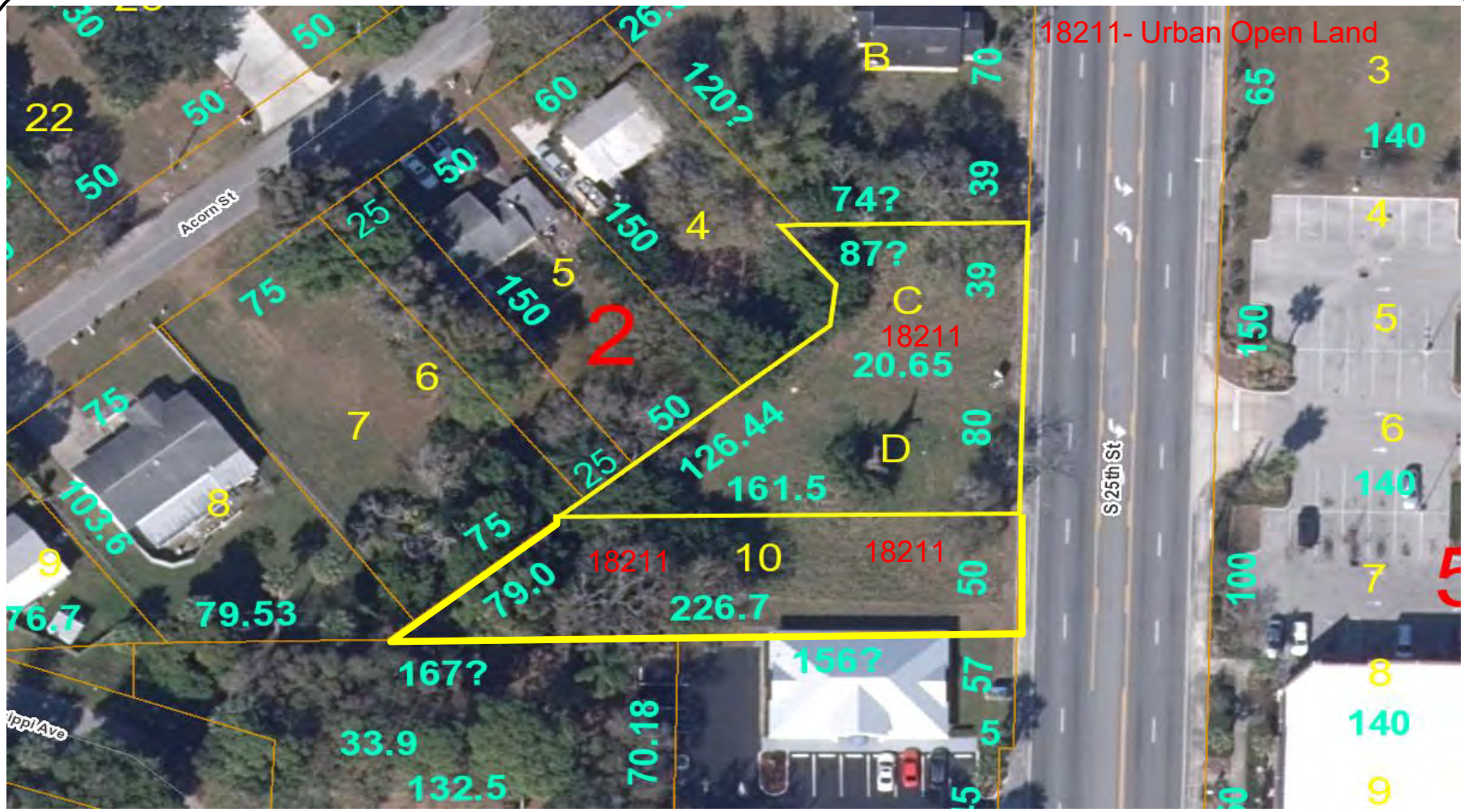
Location Map

Map Source: St Lucie County

N

1211-1213 S 25th St
Ft Pierce, FL

Approved
2023-D-490-00043
Advanced Restoration Ecology
Georgi Cedusek
1/3/2024



1/5/2023

FLUCCS Map

Map Source: St Lucie County

N

1211-1213 S 25th St
Ft Pierce, FL

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024
Advanced Restoration Ecology



St. Lucie County, Florida (FL111)

St. Lucie County, Florida (FL111)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
44	Tantile and Pomona sands	0.8	99.2%
52	Waveland-Urban land complex	0.0	0.8%
Totals for Area of Interest		**0.8**	**100.0%**

1/5/2023

Soil Map

Map Source: St Lucie County

N

1211-1213 S 25th St
Ft Pierce, FL

Approved
2023-D-490-00043
Advanced Restoration Ecology
Georgi Cedusek
1/3/2024

Exhibit 4

Geotechnical Report

Whitestone Associates, Inc.

Issued: January 27th, 2023

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

WHITESTONE
An Employee-Owned Company

8405 BENJAMIN ROAD
SUITE J
TAMPA, FLORIDA 33634
813.851.0690
whitestoneassoc.com

REPORT OF GEOTECHNICAL INVESTIGATION

PROPOSED YOUTH AND FAMILY BEHAVIORAL HEALTH CENTER
1211 SOUTH 25TH STREET
FORT PIERCE, ST. LUCIE COUNTY, FLORIDA







Prepared for:

YOUTH AND FAMILY BEHAVIORAL HEALTH CENTER, INC.
2011 South 25th Street
Suite 108
Fort Pierce, Florida 34947

Prepared by:

WHITESTONE ASSOCIATES, INC.
8405 Benjamin Road
Suite J
Tampa, Florida 33634

Kevin A. Feath, P.E.
Principal

Nicholas Rajcoomar, E.I.T.
Geotechnical Engineer

Whitestone Project No.: GF2319913.000
January 27, 2023

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

WHITESTONE
An Employee-Owned Company

8405 BENJAMIN ROAD
SUITE J
TAMPA, FLORIDA 33634
813.851.0690
whitestoneassoc.com

January 27, 2023

via email

YOUTH AND FAMILY BEHAVIORAL HEALTH CENTER, INC.
2011 South 25th Street
Suite 108
Fort Pierce, Florida 34947

Attention: Dr. Jean Monval
President

Regarding: GEOTECHNICAL INVESTIGATION
PROPOSED YOUTH AND FAMILY BEHAVIORAL HEALTH CENTER
1211 SOUTH 25TH STREET
FORT PIERCE, ST. LUCIE COUNTY, FLORIDA
WHITESTONE PROJECT NO.: GF2319913.000

Dear Dr. Monval:

Whitestone Associates, Inc. (Whitestone) is pleased to submit the attached *Report of Geotechnical Investigation* for the above-referenced project. The attached report presents the results of Whitestone's soils exploration efforts and presents recommendations for design of the proposed structural foundations, floor slab, pavements, stormwater management (SWM) areas, utilities, and related earthwork associated with the proposed site development.

Whitestone's geotechnical division appreciates the opportunity to be of service to Youth and Family Behavioral Health Center, Inc. (YFBHC). Please note that Whitestone has the capability to conduct the additional geotechnical engineering services recommended herein. Please contact us at (813) 851-0690 with any questions regarding the enclosed report.

Sincerely,

WHITESTONE ASSOCIATES, INC.

Nicholas Rajcoomar, E.I.T.
Geotechnical Engineer

Kevin A. Feath, P.E.
Principal

KAF/js O:\Job Folders\2023\2319913GF\Reports and Submittals\GF2319913.000 Fort-Pierce-FL-ROGI.docx
Enclosures
Copy: Jerry Compton, Creech Consulting, Inc.
Laurence W. Keller, P.E., Whitestone Associates, Inc.

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

REPORT OF GEOTECHNICAL INVESTIGATION

Proposed Youth and Family Behavioral Health Center
1211 South 25th Street
Fort Pierce, St. Lucie County, Florida

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Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

REPORT OF GEOTECHNICAL INVESTIGATION
Proposed Youth and Family Behavioral Health Center
1211 South 25th Street
Fort Pierce, St. Lucie County, Florida

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2023-D-490-00043
Georgi Celusnek
1/3/2024

SECTION 1.0
Summary of Findings and Recommendations

An exploration and evaluation of the subsurface conditions has been conducted on the site of the proposed Youth and Family Behavioral Health Center located at 1211 South 25th Street in Fort Pierce, St. Lucie County, Florida. The site of the proposed construction is shown on the *Test Location Plan* included as Figure 1.

Topographic information was not provided at the time of this report, however, based on visual observation during field investigation, the proposed development area generally is flatlying with a maximum grade change of less than one foot.

Based on the August 2, 2022 *Conceptual Master Site Plan #1* prepared by Creech Consulting, Inc. (Creech), the proposed site development includes construction of an approximately 4,886-square feet single-story office building with associated trash enclosure, pavements, stormwater management (SWM) rain garden, landscaping, and utilities. The proposed building is anticipated to be a metal- and concrete-framed structure with a ground-supported floor slab. No earth retaining walls are planned. Detailed grading has not been finalized, however, based on existing site grades, Whitestone anticipates that the site will be developed at or near existing site elevations, with the exception of the SWM rain garden, with maximum cuts and fills of less than one foot.

The geotechnical investigation included conducting a reconnaissance of the project site, drilling soil borings, conducting in-situ infiltration testing, and collecting soil samples for laboratory analysis. The data from this exploration and analysis were analyzed by Whitestone in light of the project information provided by YFBHC and Creech.

A summary of Whitestone's findings is presented in the following table and detailed descriptions of the subsurface conditions encountered are presented in Section 4.0.

Subsurface Profile	Description	Bottom of Stratum (fbgs)
Surface Cover	Approximately three inches of surficial topsoil was encountered at the boring locations.	0.3
Coastal Plain Marine Deposits	Generally consisting of sand with lesser amounts of silt and/or clay (USCS: SP, SP-SM, and SC). The coastal plain marine deposits extended to the maximum boring termination depth of approximately 25 fbgs.	+25.0
Groundwater	Static groundwater was encountered at depths ranging between approximately 9.5 fbgs and 11.0 fbgs.	9.5 to 11.0

Notes: fbgs – feet below ground surface.

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1/3/2024

Recommendations developed upon consideration of these findings are summarized in the table below and presented in greater detail in the indicated sections of the report.

Geotechnical Consideration	Recommendations	Report Section
Foundation System	Shallow spread and continuous footings bearing on improved and approved natural soils and/or imported structural fill.	5.5
Floor Slab & Pavements	The improved and approved natural site soils are anticipated to be suitable for a ground-supported floor slabs and pavements following compaction efforts and proofroll inspections.	5.6
Groundwater Control	Static groundwater is not anticipated to be encountered during foundations construction. However, removal of perched/trapped water should be anticipated within excavations for foundations and utilities.	5.4
On-Site Soil Reuse	The vast majority natural site soils are anticipated to be suitable for reuse as structural fill and/or backfill provided and that moisture levels are maintained within three percent of optimum moisture content and any deleterious debris encountered is removed.	5.3
Sinkhole Potential	The subject site is underlain by limestone bedrock, which is water soluble and may be susceptible to solution cavities and void formation that can result in surficial depressions or sinkholes. However, the results of the subsurface investigation did not identify conditions typically indicative of an elevated risk for sinkhole development, e.g., subsurface voids and/or solution channels.	5.2

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2023-D-490-00043
Georgi Celusnek
1/3/2024

SECTION 2.0
Introduction

2.1 AUTHORIZATION

Dr. Jean Monval of YFBHC issued authorization to Whitestone to conduct a geotechnical investigation on this site relevant to the construction of the proposed development. The geotechnical investigation was conducted in accordance with Whitestone's November 3, 2022 proposal to YFBHC.

2.2 PURPOSE

The purpose of this subsurface exploration and analysis was to:

- ascertain the various soil profile components at test locations;
- estimate the engineering characteristics of the proposed foundation bearing and subgrade materials;
- provide geotechnical criteria for use by the design engineers in preparing the foundation, slab, pavement, and SWM;
- provide recommendations for required earthwork and subgrade preparation;
- record groundwater and bedrock levels (if encountered) at the time of the investigation and discuss the potential impact on the proposed construction; and
- recommend additional investigation and/or analysis (if warranted).

2.3 SCOPE

The scope of the exploration and analysis included the subsurface exploration, field testing and sampling, laboratory analysis, an engineering analysis and evaluation of the foundation materials. This *Report of Geotechnical Investigation* is limited to addressing the site conditions related to the physical support of the proposed construction. Any references to suspicious odors, materials, or conditions are provided strictly for the client's information.

2.3.1 Field Exploration

Field exploration of the project site was conducted by means of seven soil borings (identified as B-1 through B-7) and one infiltration test (identified as P-1) at the boring B-7 location. The soil borings were advanced with a track-mounted Diedrick rig using hollow-stem augers and split-spoon sampling techniques. The

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Georgi Celusnek
1/3/2024

subsurface tests were backfilled with excavated soils generated from the investigation. The test locations are shown on the *Test Location Plan* included as Figure 1. *Records of Subsurface Exploration* are provided in Appendix A.

The soil borings and infiltration test were conducted in the presence of a Whitestone engineer who conducted field tests, recorded visual classifications, and collected samples of the various strata encountered. The test areas were located in the field using normal taping procedures and estimated right angles, and a hand-held global positioning system (GPS) unit. These locations are presumed to be accurate within a few feet.

Soil borings and Standard Penetration Tests (SPTs) were conducted in general accordance with ASTM International (ASTM) designation D-1586. The SPT resistance value (N) can be used as an indicator of the consistency of fine-grained soils and the relative density of coarse-grained soils. The N-value for various soil types can be correlated with the engineering behavior of earthworks and foundations.

Groundwater level observations, where encountered, were recorded during and immediately after the completion of field operations prior to backfilling the borings. Groundwater elevations derived from sources other than seasonally observed groundwater monitor wells may not be representative of true groundwater levels.

2.3.2 Laboratory Program

In addition to the field investigation, a laboratory program was conducted to determine additional, pertinent engineering characteristics of representative samples of on-site soils. The laboratory program was conducted in general accordance with applicable ASTM standard test methods and included physical testing of proposed building foundation bearing and pavement subgrade stratum.

Physical/Textural Analyses: Representative samples of selected strata encountered were subjected to a laboratory testing program that included Atterberg limits determinations (ASTM D-4318), moisture content determinations (ASTM D-2216) and particle size analysis through the No. 200 sieve (ASTM D-1140) in order to conduct supplementary engineering soil classifications in general accordance with ASTM D-2487. The soil strata tested were classified by the Unified Soil Classification System (USCS) and results of the laboratory testing are summarized in the following table. Quantitative test results are provided in Appendix B.

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Georgi Celusnek
1/3/2024

PHYSICAL/TEXTURAL ANALYSES SUMMARY							
Boring No.	**Sample**	**Depth (fbgs)**	**% Passing No. 200 Sieve**	**Moisture Content (%)**	**Liquid Limit**	**Plastic Index**	**USCS Classification**
B-1	S-1	0.3 - 2.0	1.9	2.7	Non-Plastic		SP
B-2	S-2	2.0 - 4.0	3.7	9.3	Non-Plastic		SP
B-7	S-4	6.0 - 8.0	14.6	14.8	24	11	SC

Notes: fbgs – feet below ground surface.

The engineering classifications are useful when considered in conjunction with the additional site data to estimate properties of the soil types encountered and to predict the soil's behavior under construction and service loads.

Organic Content Analyses: A representative sample of a suspected organic stratum was tested for organic content by the Loss on Ignition (LOI) method of testing (ASTM D-2974). The results of the laboratory testing program are presented in tabular format in the following table. Quantitative test results are provided in Appendix B.

ORGANIC CONTENT TESTING SUMMARY				
Boring No.	**Sample**	**Depth (fbgs)**	**USCS Classification**	**Organic Content (%)**
B-2	S-2	2.0 - 4.0	SP	3.6

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2023-D-490-00043
Georgi Celusnek
1/3/2024

SECTION 3.0
Site Description

3.1 LOCATION AND DESCRIPTION

The subject site located at 1211 South 25th Street in Fort Pierce, St. Lucie County, Florida is further identified as St. Lucie County Parcel ID Nos.: 2417-503-0040-000-2 & 2417-507-0005-000-7. At the time of Whitestone's site investigation, the site consisted of vacant grass-covered parcels with trees. The site is bound to the north by a single-family residential development followed by the intersection of Acorn Street and South 25th Street, to the east by South 25th Street followed by a Family Dollar retail store development, to the south by the Conviva Care Center and the Family Oral Health Associates developments, and to the west by single-family residential developments followed by Acorn Street. The location of the site is shown on the *Test Location Plan* included as Figure 1.

3.2 EXISTING CONDITIONS

Previous Site Development: Based on a review of historic aerial photographs dating back to 1969, the subject site housed an unidentified structure with pavement areas on the northern portion of the site and two unidentified structures with pavement areas on the southern portion of the site. The site remained relatively unchanged until 1984. Between 1984 and 1999, the three former site structures and pavements no longer occupied the site. The site has remained relatively unchanged as a vacant grass-covered lot from 1999 to present day.

Surface Cover/Development: At the time of the investigation, the subject site consisted of two vacant, grass-covered parcels with trees and utilities on the adjacent South 25th Street right-of-way (ROW).

Topography: Topographic information was not available at the time of this report, however, based on visual observations the proposed development area is generally flatlying with a maximum grade change of less than one foot.

Utilities: At the time of Whitestone's subsurface field investigation, the subject site was not serviced by utilities. However, the ROW of the adjacent South 25th Street appeared to be serviced by aboveground electric lines and underground communication, electric, water, sanitary sewer, and stormwater lines. Other utilities were not observed at the subject site by Whitestone but may be present. The utility information contained in this report is presented for general discussion only and is not intended for construction purposes.

Approved
2023-D-490-00043
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Site Drainage: Surface run-off generally follows existing topography draining towards inlets located within the east adjacent South 25th Street ROW. The termini of these inlets are unknown.

3.3 SITE GEOLOGY

The site is located within the Atlantic Coastal Complex Province of the Barrier Island Sequence District. According to the Florida Geological Survey *Geologic Map of the State of Florida 1:100,000 Scale*, the immediate underlying bedrock formation consists of the Pleistocene-age Anastasia Formation. The additional underlying bedrock layers mapped at the site include the Undifferentiated Quaternary sediments, Dunes, Peace River Formation, Hawthorne Group –Arcadia Formation, Suwanee Limestone, Ocala Limestone, and Avon Park Formation. The unconsolidated soils at the site, which includes the natural site soils, generally consist of orangish brown, variably fossiliferous interbedded sands, often cemented with calcite, and coquinoid limestone. The deeper underlying bedrock formations, which include the Ocala Limestone and Avon Park Formation, generally consists of cream to light-brown to tan and white to orangish gray, sandy, variably fossiliferous limestone occasionally interbedded with tan to brown, fossiliferous dolostone. The overburden materials at the site include shelly sand and clay coastal plain marine deposits.

The site is mapped by United States Geological Survey as being within a karst area. Karst conditions, including solution cavities, are known to exist in areas where limestone bedrock is present. The limestone bedrock, which is water soluble and susceptible to solution cavities and void formation, can result in surficial depressions or sinkholes. Based on a review of Florida Department of Environmental Protection (FDEP) *Subsidence and Swallet Incident Reports*, the closest reported subsidence or swallet incident was approximately 4.5 miles from the subject site. The results of Whitestone's subsurface investigation and visual site inspection did not identify conditions typically indicative of an elevated risk for sinkhole development, e.g., subsurface voids and/or solution channels.

3.4 PROPOSED CONSTRUCTION

Based on the August 2, 2022 *Conceptual Master Site Plan #1* prepared by Creech, the proposed site development includes construction of an approximately 4,886-square feet single-story office building with associated trash enclosure, pavements, SWM rain garden, landscaping, and utilities. No earth retaining walls are planned. Detailed grading has not been finalized, however, based on existing site grades, Whitestone anticipates that the site will be developed at or near existing site elevations, with the exception of the SWM rain garden, with maximum cuts and fills on the order of less than one foot. The bottom elevation of the proposed SWM rain garden is anticipated to be approximately three feet to five feet below existing site grades.

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Whitestone anticipates the proposed structure will consist of concrete foundations and a combination of metal and masonry framing with a ground-supported concrete floor slab. The anticipated maximum loads for the proposed structures are expected to be as follows:

- building column load - 40 kips;
- wall load - 2.0 kips per linear foot;
- floor slab load - 125 pounds per square foot; and

The scope of Whitestone's investigation and the professional advice contained in this report were generated based on the project details and loading noted herein. Any revisions or additions to the design details enumerated in this report should be brought to the attention of Whitestone for additional evaluation as warranted.

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SECTION 4.0
Subsurface Conditions

Details of the subsurface materials encountered are presented on the *Records of Subsurface Exploration* presented in Appendix A of this report. The subsurface soil conditions encountered in the soil borings consisted of the following generalized strata in order of increasing depth.

4.1 SUBSURFACE SOIL CONDITIONS

Surface Cover: The subsurface tests were conducted within grass-covered areas and encountered approximately three inches of topsoil at the ground surface.

Coastal Plain Marine Deposits: Underlying the surface cover, the subsurface tests disclosed coastal plain marine deposits that generally consisted of poorly graded sand (USCS: SP and SP-SM) with a variable amount of silt, or clayey sand (USCS: SC) to the boring termination depths that ranged from approximately 10 fbgs to 25 fbgs. SPT N-values recorded within the stratum ranged between seven blows per foot (bpf) and 78 bpf, indicating loose to very dense relative densities and averaging approximately 23 bpf.

4.2 GROUNDWATER

Static groundwater water was encountered in the majority of the borings conducted at depths ranging between approximately 9.5 fbgs and 11.0 fbgs. Perched/trapped water was not encountered in the borings conducted. However, perched/trapped water conditions may be encountered within finer-grained portions of the natural site soils especially following precipitation events. Static and perched/trapped water conditions are expected to fluctuate seasonally and following periods of precipitation.

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SECTION 5.0
Conclusions and Recommendations

5.1 GENERAL

The results of the subsurface investigation and analysis indicated that the proposed structures may be supported by a shallow foundation system designed to bear within the improved and approved natural site soils and/or properly placed structural fill materials, as detailed herein. Furthermore, a majority of the existing site soils are also anticipated to be suitable for supporting floor slabs and pavements contingent upon construction phase evaluation and approval.

5.2 SITE PREPARATION AND EARTHWORK

Surface Cover Stripping and Demolition: Prior to stripping operations, all utilities should be identified and secured. Any surficial vegetation should be stripped at least 10 feet beyond the limits of the proposed construction area. Any remnant structures associated with past development at the site encountered including foundation walls, footings, slabs, and utilities, should be removed entirely from below proposed foundations and slabs including their zones of influence (as determined by the owners Geotechnical Engineer) and excavated to at least two feet below proposed construction subgrade levels elsewhere. Foundations and slabs may remain in place below these depths below proposed ground-supported slabs, pavements and landscaped areas, provided there is no interference with future construction; however, any existing slab to remain should be thoroughly broken such that maximum particle size is 12 inches to allow vertical drainage of water.

Carbonic Rock Area Considerations: Carbonate rock formations are soluble in mildly acidic water and characteristically contain subsurface voids and solution cavities of varying sizes. Sinkholes occur when soil overlying the void washes into underlying voids in sufficient quantities to cause a surficial collapse. Naturally formed sinkholes typically require thousands to tens of thousands of years to form, however, sinkhole development can be greatly accelerated by acts of man. For this reason, care should be exercised when constructing structures within a sinkhole prone area. Many triggering mechanisms have their origin in rapidly fluctuating, or artificially fluctuating groundwater levels. These conditions may be caused by situations beyond the owner's control, including saturating rains, droughts, drawdown from neighborhood wells, or changes to drainage patterns. Sinkholes can form undetected, even if prudent design and construction practices are implemented.

Site Planning Considerations: At a minimum, the recommended measures to reduce sinkhole occurrence include relatively minor site planning considerations and construction measures to minimize risks inherent

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to the region. Such measures should include proper grading to avoid concentrations of surface runoff. Additionally, excavations for footing and utilities should not be exposed to rain and surface runoff due to potential increased risk of sinkhole formation and degradation of subgrade materials. Any excavation that must remain open for more than one day is recommended to be sealed at the base with a lean concrete mud mat.

Regional development also should be monitored during the life of the facility to identify conditions that might affect groundwater levels or drainage patterns. If prudent design measures and construction phase considerations are properly implemented, the long-term risk of potential sinkhole activity may be reduced. Sinkholes can form undetected even if prudent design and construction practices are implemented.

Sinkhole Remediation: Although no open sinkholes or surface depressions were identified during the investigation, sinkholes can develop during relatively short time periods and risk of sinkhole occurrence generally increases during construction because of exposed soil conditions and temporary drainage issues. Early formation of sinkholes often can be detected by depressions at the ground surface or within excavations. If suspicious depression areas develop during construction, the locations should be probed or excavated in the presence of the geotechnical engineer to determine if additional investigation is required. In the event that new sinkholes occur during construction, Whitestone preliminarily recommends excavating the sinkhole to expose the throat (cavity) and backfilling the area with wet grout or lean concrete. If a depression is observed during construction, Whitestone should be notified immediately for remediation recommendations.

Surface Preparation/Proofrolling: Prior to placing any fill, backfill or subbase materials to raise or restore grades to the desired subgrade elevations, the exposed soils should be compacted to a firm and unyielding surface with a minimum of four passes in two perpendicular directions of a minimum 20-ton, vibratory smooth drum roller. The surface should be proofrolled with a loaded tandem axle truck in the presence of the geotechnical engineer to help identify soft or loose pockets that may require removal and replacement or further investigation. Any fill or backfill should be placed and compacted in accordance with Section 5.3.

Weather Performance Criteria: The natural site soils are moderately moisture sensitive and may soften when exposed to water. As such, every effort must be made to maintain drainage of surface water runoff away from construction areas by grading and limiting the exposure of excavations and prepared subgrades to rainfall. Accordingly, excavation and fill placement procedures should be conducted during favorable weather conditions. Overexcavation of saturated soils and replacement with controlled structural fill per Section 5.3 of this report may be required prior to resuming work on disturbed subgrade soils.

On-Site Soil Protection and Maintenance: The natural site soils will degrade when exposed to inclement weather or repeated construction traffic. However, if properly protected and maintained as recommended herein, the site soils will provide adequate support for the proposed construction. The site contractors should employ appropriate means and methods to protect the subgrade including, but not limited to the following:

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- sealing exposed subgrade soils on a daily basis with a vibratory smooth drum roller;
- regrading the site as needed to maintain positive drainage away from open earthwork construction areas and to prevent standing water;
- removing wet surficial soils and ruts immediately; and
- limiting exposure to construction traffic and precipitation especially following inclement weather.

Pavement Subgrade Stabilization and Inspection: Pavement subgrade soils which are exposed to inclement weather and heavy construction traffic will degrade and require either extensive drying time or overexcavation and replacement in order to provide a suitable subgrade for pavements. Overexcavation of unstable soils within pavement areas typically should be limited to approximately 1.5 feet below planned subgrade unless directed otherwise by the owner's geotechnical engineer, provided that a reinforcing geogrid approved by the owner's geotechnical engineer is used. Alternatively, unstable materials may be completely overexcavated and either aerated and recompacted or replaced with imported structural fill per Section 5.3. However, this option is likely least economical.

Geogrids typically are economical when proposed undercut depths exceed approximately 18 inches. The geogrid (Tensar TriAx TX130S, or similar) should be placed directly on the exposed subgrade and backfill should consist of a well-graded gravel and sand blend. The services of the geotechnical engineer should be retained to inspect soil conditions during construction and to provide specific recommendations for stabilizing subgrades. Additionally, a geotechnical engineer should be retained to verify the suitability of prepared foundation, floor slab and pavement subgrades for support of design loads.

5.3 STRUCTURAL FILL AND BACKFILL

Imported Fill Material: Any imported material placed as structural fill or backfill to raise elevations or restore design grades should consist of clean, relatively well-graded sand or gravel with a maximum particle size of two inches and five percent to 15 percent of material finer than a #200 sieve. Silts, clays, and silty or clayey sands and gravels with higher percentage of fines and with a liquid limit less than 40 and a plasticity index less than 20 may be considered subject to the owner's approval, provided that the required moisture content and compaction controls are met during favorable weather conditions. The material should be free of clay lumps, organics, and deleterious material. Imported structural fill material should be approved by a qualified geotechnical engineer prior to delivery to the site.

On-Site Materials: Whitestone anticipates that the vast majority of the natural site soil will be suitable for reuse as structural fill/backfill provided that soil moisture contents are controlled within three percent of optimum moisture level and objectionable/organic materials, if encountered, are segregated. The reuse of granular site soils with more than 12 percent fines (USCS: SC) typically is possible only during ideal weather conditions. These soils will require stringent moisture conditioning, including aerating and drying

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to achieve proper compaction. Immediate reuse of these site soils should not be anticipated if the moisture contents are above three percent of the optimum. Additionally, the site soils must be properly evaluated during the construction phase as described in Section 5.11. Alternatively, imported fill materials may be used to attain the desired grades and expedite earthwork operations during wet weather periods. The contractor should be responsible for covering stockpiled soils, sealing subgrades, and providing proper surface drainage during forecasted wet weather.

Compaction and Placement Requirements: On-site soils used as fill or backfill should be placed in maximum nine-inch loose lifts and compacted using a 20-ton smooth drum vibratory drum roller during mass grading activities or a small walk-behind roller or hand-held vibratory compactor within excavations. All structural fill and backfill, including 10 feet outside exterior walls, and pavement areas should be compacted to at least 95 percent of the maximum dry density within three percent of the optimum moisture content as determined by ASTM D-1557 (Modified Proctor). Structural fill and backfill placed within non-structural areas, such as landscaped areas, may be compacted to at least 92 percent of the maximum dry density within three percent of optimum moisture content as determined by ASTM D-1557 (Modified Proctor).

Structural Fill Testing: A sample of the imported fill material or any on-site material proposed for reuse as structural fill or backfill should be submitted to the geotechnical engineer for analysis and approval at least one week prior to its use. The placement of all fill and backfill should be monitored by a qualified engineering technician to ensure that the specified material and lift thicknesses are properly installed. A sufficient number of in-place density tests should be conducted to ensure that the specified compaction is achieved throughout the height of the fill or backfill.

5.4 GROUNDWATER CONTROL

Static groundwater water was encountered in a majority of the borings conducted at depths ranging between approximately 9.5 fbgs and 11.0 fbgs. Perched/trapped water was not encountered in the borings conducted. However, perched/trapped water conditions may be encountered within finer-grained portions of the natural site soils especially following precipitation events.

As such, temporary dewatering should be anticipated, including the use of mechanical pumps, to remove trapped/perched water within footing and utility excavations, especially following precipitation events. Construction phase dewatering may consist of removing surface water runoff, infiltrating water, or trapped water at this site. Whitestone anticipates that construction phase dewatering would include installing temporary sump pits and filtered pumps within trenches and excavations.

Proper grading and drainage should be incorporated into the site design and construction phase grading to discourage ponding of surface runoff. Every effort should be made to maintain drainage of surface run-off away from construction areas by grading. The contractor should limit exposure of excavations and prepared subgrades to rainfall. Overexcavation of wet soils and replacement with controlled structural fill per Section 5.3 of this report may be required prior to resuming work on disturbed subgrade soils.

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5.5 FOUNDATIONS

Shallow Foundation Design Criteria: Following compaction of any upper loose zones encountered at or below proposed foundation elevations, Whitestone recommends supporting the proposed building on conventional shallow spread and continuous footings designed to bear within the improved and approved inorganic natural soils and/or structural fill materials, provided these materials are properly evaluated, placed and compacted in accordance with Sections 5.2, 5.3, and 5.11 of this report. Foundations bearing within these materials may be designed using a maximum allowable net bearing pressure of 3,000 pounds per square foot.

All footing bottoms should be improved by in-trench compaction in the presence of the geotechnical engineer. Regardless of loading conditions, proposed foundations should be sized no less than minimum dimensions of 24 inches for continuous wall footings and 36 inches for isolated column footings.

Footings should be designed such that the maximum toe pressure due to the combined effect of vertical loads and overturning moment does not exceed the recommended maximum allowable net bearing pressure. In addition, positive contact pressure should be maintained throughout the base of the footings such that no uplift or tension exists between the base of the footings and the supporting soil. Uplift loads should be resisted by the weight of the concrete. Side friction should be neglected when proportioning the footings so that lateral resistance should be provided by friction resistance at the base of the footings. An allowable coefficient of friction against sliding of 0.35 is recommended for use in the design of concrete foundations bearing within the on-site soils or imported structural backfill.

Inspection Criteria: Whitestone recommends that the suitability of the bearing soils along the footing bottoms be verified by a geotechnical engineer prior to placing concrete for the footings. Special attention should be given to areas underlain by loose or organic materials. In the event that isolated areas of unsuitable materials are encountered in footing excavations, overexcavation and replacement of the materials or deeper foundation embedment may be necessary to provide a suitable footing subgrade. Any overexcavation to be restored with structural fill will need to extend at least one foot laterally beyond footing edges for each vertical foot of overexcavation. Lateral overexcavation may be eliminated if grade is restored with lean concrete. The bottoms of overexcavated areas should be compacted with vibratory smooth drum rollers, walk-behind compactors, vibrating plates or plate tampers (“jumping jacks”) to compact locally disturbed materials and densify any underlying loose zones. Any standing water within the footing excavation should be removed with a mechanical pump prior to concrete placement.

Settlement: Whitestone estimates post construction settlements of new foundations will be on the order of less than one inch if the recommendations outlined in this report are properly implemented. Differential settlement between individual footings should be less than one-half inch.

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Foundation Embedment: Footings should be placed at least 18 inches below adjacent exterior grades, or the depth required by local building codes, to maintain adequate confinement.

5.6 FLOOR SLAB

Whitestone anticipates that majority of the site soils will provide suitable support for the floor slab, contingent upon construction phase evaluation and compaction improvement of any loose zones and overexcavation of organic materials. The exposed subgrade should be compacted and inspected via proofrolling in accordance with Sections 5.2, 5.3 and of this report. Any areas that become softened or disturbed as a result of wetting and/or repeated exposure to construction traffic should be removed and replaced with compacted structural fill. The properly prepared site soils and structural fill/backfill materials are expected to yield a minimum subgrade modulus (k) of 150 psi/in.

A minimum six-inch thick layer of crushed limerock with minimum Limerock Bearing Ratio (LBR) of 100, compacted to 98 percent modified Proctor maximum dry density, should be placed below the floor slab to provide a uniform base. A moisture vapor barrier should be installed beneath the floor slab in accordance with local building code requirements or where required by the floor covering manufacturer.

5.7 PAVEMENT DESIGN CRITERIA

General: The majority of the site soils and/or compacted structural fill/backfill placed to raise or restore design elevations are anticipated to be suitable for support of the proposed pavements provided these materials are properly evaluated, compacted, and proofrolled in accordance with Sections 5.2, 5.3, and 5.11 of this report during favorable weather conditions.

Design Criteria: A minimum required LBR value of 40 has been assigned to the properly prepared subgrade soils for pavement design purposes. This value was correlated with pertinent soil support values and assumed traffic loads to prepare flexible and rigid pavement designs per the AASHTO *Guide for the Design of Pavement Structures*.

Design traffic loads were assumed based on typical volumes for similar facilities and correlated with 18-kip equivalent single axle loads (ESAL) for a 20 year life. An estimated maximum load of 35,000 ESAL was used for all pavement areas assuming the pavement primarily will accommodate both automobile and limited heavier truck traffic, actual pavement loads are anticipated to be less.

Pavement Section: The recommended flexible pavement section is presented below in tabular format:

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FLEXIBLE PAVEMENT SECTION DESIGN		
Layer	**Material**	**Standard Duty Thickness (Inches)**
Asphalt Top Course	FDOT Section 334 Type SP-12.5 (Superpave Asphalt Concrete); PG 67-22	2.0
Granular Base Course	Crushed Limerock with minimum LBR of 100, compacted to 98% Modified Proctor maximum dry density	6.0
Stabilized Subgrade	Subgrade with minimum LBR of 40, compacted to 98% Modified Proctor maximum dry density	12.0

A rigid concrete pavement should be used to provide suitable support at areas of high traffic or severe turns such as at the trash enclosure and ingress/egress locations. The recommended rigid pavements are presented below in tabular format:

RIGID PAVEMENT SECTION DESIGN		
Layer	**Material**	**Standard Duty Thickness (Inches)**
Surface	4,000 psi air-entrained concrete	5.0[1]
Granular Base Course	Crushed Limerock with minimum LBR of 100, compacted to 98% Modified Proctor maximum dry density	6.0
Stabilized Subgrade	Subgrade with minimum LBR of 40, compacted to 98% Modified Proctor maximum dry density	12.0

Note [1]: The outer edges of concrete pavements are susceptible to damage as trucks move from rigid pavement to adjacent flexible pavement. Therefore, the thickness at the outer two feet of the rigid concrete pavement should be 12 inches. The concrete should be reinforced with at least one layer of six-inch by six-inch W5.4/W5.4 welded wire fabric (ASTM A185).

Additional Design Considerations: The pavement section thickness designs presented in this report are based on the design parameters detailed herein and are contingent on proper construction, inspection, and maintenance. Additional pavement thickness may be required by local code. The designs are contingent on achieving the minimum soil support value in the field. To accomplish this requirement, all subgrade soil and supporting fill or backfill must be properly evaluated, placed, and prepared as detailed in Sections 5.2, 5.3, and 5.11 of this report. Proper drainage must be provided for the pavement structure including appropriate grading and surface water control, as well as measures to drain water from the subgrade.

The performance of the pavement also will depend on the quality of materials and workmanship. Whitestone recommends that Florida Department of Transportation (FDOT) standards for materials, workmanship, and maintenance be applied to this site. Project specifications should include verifying that

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the installed asphaltic concrete material composition is within tolerance for the specified materials and that the percentage of air voids of the installed pavement is within specified ranges for the respective materials. All rigid concrete pavements should be suitably air-entrained, jointed, and reinforced in general accordance with ACI 330R-08 *Guide for the Design and Construction of Concrete Parking Lots*.

5.8 RETAINING WALL/LATERAL EARTH PRESSURES

No earth retaining walls were identified on the site plan. Whitestone should be notified if retaining walls or structures resisting lateral earth pressures are planned.

5.9 SEISMIC AND LIQUEFACTION CONSIDERATIONS

The subsurface conditions are most consistent with a Site Class D as defined by the *2020 Florida Building Code* (FBC 2020). Based on the seismic zone and soil profile, liquefaction considerations are not expected to have a substantial impact on design.

5.10 EXCAVATIONS

The existing fill and natural soils encountered during this investigation are consistent with Type C Soil Conditions as defined by 29 CFR Part 1926 (OSHA) which require a maximum unbraced excavation angle of 1.5:1 (horizontal:vertical). Actual conditions encountered during construction should be evaluated by a competent person (as defined by OSHA) to ensure that safe excavation methods and/or shoring and bracing requirements are implemented.

5.11 SUPPLEMENTAL POST INVESTIGATION SERVICES

Construction Inspection and Monitoring: The owner's geotechnical engineer should conduct inspection, testing, and consultation during construction as described in previous sections of this report. Monitoring and testing should also be conducted to verify that the existing surface cover materials are properly removed, any encountered underground structures (such as building foundations associated with former site development) are properly removed and backfilled, and suitable materials used for controlled fill are properly placed and compacted over suitable subgrade soils. Any overexcavation of loose upper natural or unsuitable soils encountered within the proposed building footprint and/or pavement areas that are unsuitable for structural design support interior current condition should be witnessed and documented by the owner's geotechnical engineer. The proper placement of structural backfill within the building pad and pavement areas should also be documented by the owner's geotechnical engineer.

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5.13 PRELIMINARY STORMWATER MANAGEMENT INFILTRATION TESTING

General: Soil boring B-7 was conducted within an accessible area of the proposed SWM rain garden as provided by Creech. Soil boring B-7 was terminated at the approximate depth of 10 fbgs. The results of the subsurface conditions encountered within the soil boring conducted within the proposed SWM area is provided in Appendix A. A summary of the groundwater observations as well as the in-situ infiltration test result are included in the following table.

GROUNDWATER & INFILTRATION TEST SUMMARY				
Boring/Infiltration Test No.	**Groundwater Depth (fbgs)**	**USDA Classification @ Test**	**Exfiltration Test Results**	
			Depth (fbgs)	**Rate (ft/sec)**
B-7/P-1	10.0	Sandy LOAM	10.0	2.31×10^{-7}

Notes: NE – Not Encountered.

Soil Infiltration Rate: An in-situ infiltration test was conducted within the proposed SWM rain garden in general accordance with the South Florida Water Management District (SFWMD) guidelines for "usual open hole" exfiltration testing. Infiltration test P-1 resulted in a field infiltration rate of approximately 2.31×10^{-7} feet per second. Infiltration test results are provided in Appendix C and soil boring logs are included in Appendix A.

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SECTION 6.0
General Comments

Supplemental recommendations may be required upon finalization of construction plans or if significant changes are made in the characteristics or location of the proposed structure. Soil bearing conditions should be checked at the appropriate time for consistency with those conditions encountered during Whitestone's geotechnical investigation.

The recommendations presented herein should be utilized by a qualified engineer in preparing the project plans and specifications. The engineer should consider these recommendations as minimum physical standards which may be superseded by local and regional building codes and structural considerations. These recommendations are prepared for the sole use of Youth and Family Behavioral Health Center, Inc. for the specific project detailed and should not be used by any third party. These recommendations are relevant to the design phase and should not be substituted for construction specifications.

The possibility exists that conditions between borings may differ from those at specific testing locations, and conditions may not be as anticipated by the designers or contractors. In addition, the construction process may alter soil and rock conditions. Therefore, experienced geotechnical personnel should observe and document the construction procedures used and the conditions encountered.

Whitestone assumes that a qualified contractor will be employed to conduct the construction work, and that the contractor will be required to exercise care to ensure all excavations are conducted in accordance with applicable regulations and good practice. Particular attention should be paid to avoiding damaging or undermining adjacent properties and maintaining slope stability.

Whitestone recommends that the services of the geotechnical engineer be engaged to test and evaluate the soils in the footing excavations prior to concreting in order to determine that the soils will support the bearing capacities. Monitoring and testing also should be conducted to verify that suitable materials are used for controlled fills and that they are properly placed and compacted over suitable subgrade soils.

The exploration and analysis of the foundation conditions reported herein are considered sufficient in detail and scope to form a reasonable basis for the foundation design. The recommendations submitted for the proposed construction are based on the available soil information and the design details furnished by Youth and Family Behavioral Health Center, Inc. Deviations from the noted subsurface conditions encountered during construction should be brought to the attention of the geotechnical engineer.

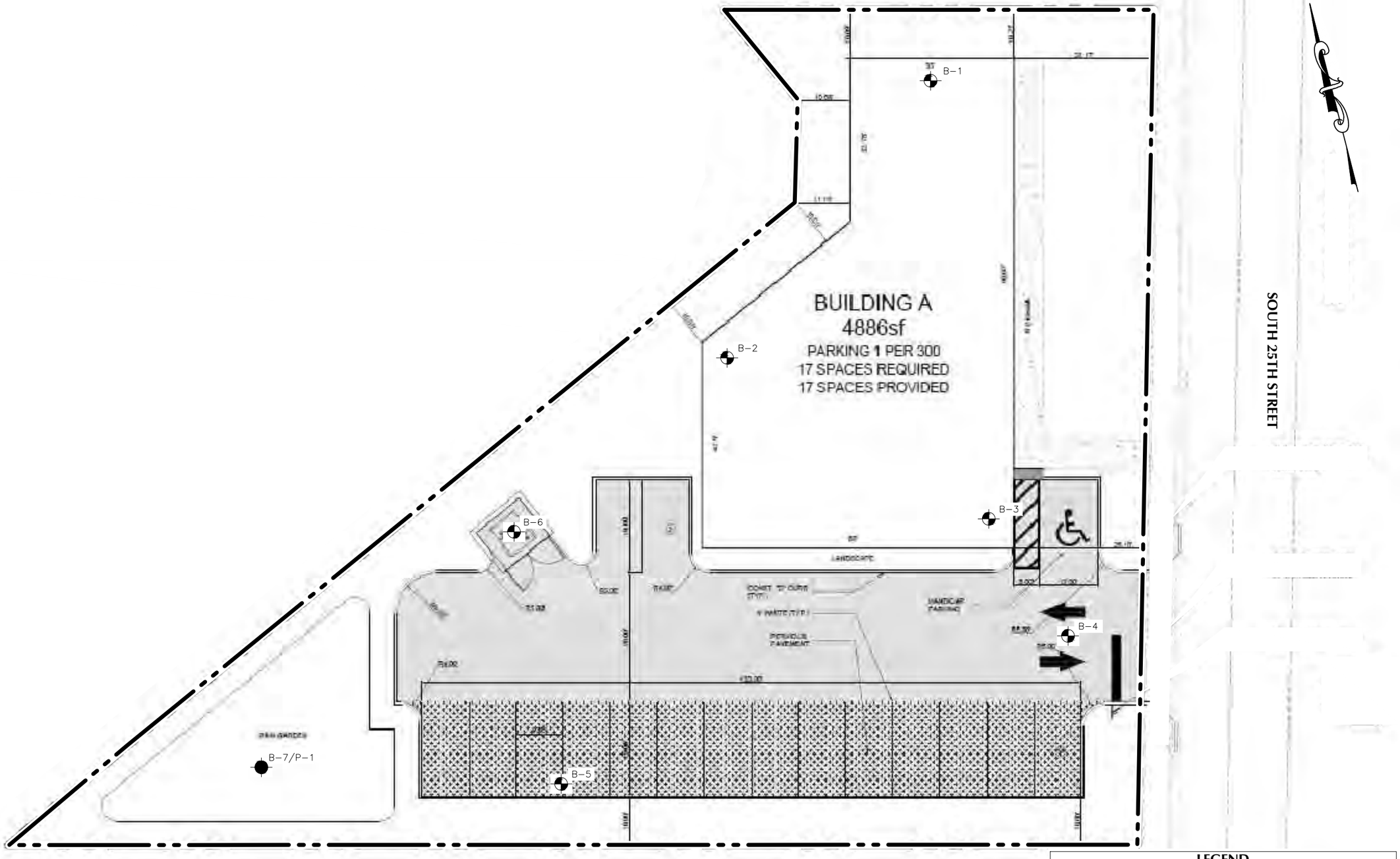
The geotechnical engineer warrants that the findings, recommendations, specifications, or professional advice contained herein have been promulgated after being prepared in accordance with generally accepted professional engineering practice in the fields of foundation engineering, soil mechanics, and engineering geology. No other warranties are implied or expressed.

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FIGURE 1
Test Location Plan

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0 20

1 inch = 20 ft.

LEGEND

B-1 — BORING

B-7/P-1 — BORING/INFILTRATION TEST

SUBJECT PROPERTY BOUNDARY

REFERENCE

THIS PLAN IS BASED ON AN AUGUST 2, 2022 CONCEPTUAL MASTER SITE PLAN #1 PREPARED BY CREECH CONSULTING, LLC. & ALL SITE LOCATIONS ARE APPROXIMATE.

WHITESTONE
An Employee-Owned Company
8405 BENJAMIN ROAD, SUITE J, TAMPA, FL 33634
813.851.0690 WHITESTONEASSOC.COM

DRAWING TITLE: **TEST LOCATION PLAN**

CLIENT: YOUTH AND FAMILY BEHAVIORAL HEATH CENTER, INC.

PROJECT: PROPOSED YOUTH AND FAMILY BEHAVIORAL HEALTH CENTER
1211 SOUTH 25TH STREET
FORTH PIERCE, SAINT LUCIE COUNTY, FL

PROJECT #:	GF2319913.000
DESIGNED BY: GR	PROJ. MGR.: KF
DATE: 1/26/23	FIGURE: 1
SCALE: 1" = 20'	

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APPENDIX A
Records of Subsurface Exploration

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RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-1

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Project:	Proposed Youth and Family Behavioral Health Center	**WAI Project No.:**	GF2219913.000
Location:	1211 South 25th Street	**Client:**	Youth and Family Behavioral Health Center, Inc.

Surface Elevation:	± NS feet	**Date Started:**	1/26/2023		**Water Depth | Elevation (feet bgs) | (feet)**		**Cave-In Depth | Elevation (feet bgs) | (feet)**
Termination Depth:	25.0 feet bgs	**Date Completed:**	1/26/2023				
Proposed Location:	Building	**Logged By:**	AB	**During:**	10.0 | ---		
Drill / Test Method:	HSA / SPT	**Contractor:**	SCD	**At Completion:**	--- | ---	**At Completion:**	--- | ---
		Equipment:	Diedrick Track-Rig	**24 Hours:**	--- | ---	**24 Hours:**	--- | ---

SAMPLE INFORMATION						DEPTH	STRATA		DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	No	Type	Blows Per 6"	Rec. (in.)	N	(feet)				
						0.0				
0 - 2	S-1		6 - 5 - 5 - 5	18	10		TOPSOIL		3" Topsoil	
							COASTAL PLAIN MARINE DEPOSITS		Gray Poorly Graded Sand, Moist, Medium Dense (SP)	
						2.0				
2 - 4	S-2		6 - 7 - 8 - 8	18	15				Dark Brown Poorly-Graded Sand with Silt, Trace Roots, Moist, Medium Dense (SP-SM)	
4 - 6	S-3		6 - 20 - 17 - 13	24	37	5.0			As Above, Dense (SP-SM)	
6 - 8	S-4		12 - 12 - 10 - 16	22	22				As Above, Medium Dense (SP-SM)	
8 - 10	S-5		12 - 13 - 17 - 17	20	30				As Above, Brown, Moist to Wet, Dense (SP-SM)	
						10.0 ▽				
13.5 - 15	S-6		4 - 9 - 10	18	19				As Above, Dark Brown, Wet (SP-SM)	
						15.0				
						18.5				
18.5 - 20	S-7		12 - 12 - 16	18	28				Grayish-Brown Poorly-Graded Sand, Wet, Medium Dense (SP)	
						20.0				
23.5 - 25	S-8		19 - 30 - 48	18	78				As Above, Very Dense (SP)	
						25.0			Boring Log B-1 Terminated at a Depth of 25.0 Feet Below Ground Surface	

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

NOTES: bgs = below ground surface, NA = Not Applicable, NE = Not Encountered, NS = Not Surveyed, P = Perched

WHITESTONE

RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-2

Page 1 of 1

Project:	Proposed Youth and Family Behavioral Health Center	**WAI Project No.:**	GF2219913.000
Location:	1211 South 25th Street	**Client:**	Youth and Family Behavioral Center, Inc.

Surface Elevation:	± NS feet	**Date Started:**	1/26/2023		**Water Depth | Elevation (feet bgs) | (feet)**		**Cave-In Depth | Elevation (feet bgs) | (feet)**
Termination Depth:	20.0 feet bgs	**Date Completed:**	1/26/2023				
Proposed Location:	Building	**Logged By:**	AB	**During:**	11.0 | ---		
Drill / Test Method:	HSA / SPT	**Contractor:**	SCD	**At Completion:**	--- | ---	**At Completion:**	--- | ---
		Equipment:	Diedrick Track-Rig	**24 Hours:**	--- | ---	**24 Hours:**	--- | ---

SAMPLE INFORMATION						DEPTH	STRATA		DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	No	Type	Blows Per 6"	Rec. (in.)	N	(feet)				
						0.0				
0 - 2	S-1		2 - 3 - 4 - 4	20	7		TOPSOIL		3" Topsoil	
							COASTAL PLAIN MARINE DEPOSITS		Gray Poorly Graded Sand, Moist, Loose (SP)	
2 - 4	S-2		5 - 5 - 6 - 7	22	11				As Above, Trace Roots, Medium Dense (SP)	Organic Content = 3.6%
						4.0				
4 - 6	S-3		11 - 15 - 22 - 28	20	37	5.0			Brown Poorly-Graded Sand with Silt, Trace Roots, Moist, Dense (SP-SM)	
6 - 8	S-4		10 - 14 - 20 - 15	20	34				As Above (SP-SM)	
						8.0				
8 - 10	S-5		18 - 24 - 22 - 19	22	46				Light Brown Clayey Sand, Moist, Dense (SC)	
						10.0				
						13.5				
13.5 - 15	S-6		8 - 12 - 13	18	25				Grayish-Brown Poorly-Graded Sand, Wet, Medium Dense (SP)	
						15.0				
						18.5				
18.5 - 20	S-7		14 - 11 - 14	16	25	20.0			As Above (SP)	
									Boring Log B-2 Terminated at a Depth of 20.0 Feet Below Ground Surface	
						25.0				

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2023-D-490-00043
Georgi Celusnek
1/3/2024

NOTES: bgs = below ground surface, NA = Not Applicable, NE = Not Encountered, NS = Not Surveyed, P = Perched

WHITESTONE

RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-3

Page 1 of 1

Project:	Proposed Youth and Family Behavioral Health Center	**WAI Project No.:**	GF2219913.000
Location:	1211 South 25th Street	**Client:**	Youth and Family Behavioral Center, Inc.

Surface Elevation:	± NS feet	**Date Started:**	1/26/2023		**Water Depth | Elevation (feet bgs) | (feet)**		**Cave-In Depth | Elevation (feet bgs) | (feet)**
Termination Depth:	20.0 feet bgs	**Date Completed:**	1/26/2023				
Proposed Location:	Building Pad	**Logged By:**	AB	**During:**	10.0 | ---		
Drill / Test Method:	HSA / SPT	**Contractor:**	SCD	**At Completion:**	--- | ---	**At Completion:**	--- | ---
		Equipment:	Diedrick Track-Rig	**24 Hours:**	--- | ---	**24 Hours:**	--- | ---

SAMPLE INFORMATION						DEPTH	STRATA		DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	No	Type	Blows Per 6"	Rec. (in.)	N	(feet)				
						0.0				
0 - 2	S-1		4 - 4 - 4 - 3	20	8		TOPSOIL		3" Topsoil	
							COASTAL PLAIN MARINE DEPOSITS		Gray Poorly Graded Sand, Moist, Loose (SP)	
2 - 4	S-2		4 - 7 - 14 - 20	24	21				As Above, Medium Dense (SP)	
						3.5				
4 - 6	S-3		7 - 8 - 13 - 18	21	21				Dark Brown Poorly-Graded Sand with Silt, Trace Organics, Moist, Medium Dense (SP-SM)	
						5.0			As Above (SP-SM)	
6 - 8	S-4		7 - 10 - 16 - 20	18	26	6.0			BrownClaey Sand, Trace Roots, Moist, Medium Dense (SC)	
8 - 10	S-5		14 - 7 - 12 - 14	24	33	8.0			As Above, Light Brown, Dense (SC)	
						10.0 ▽				
						13.5				
13.5 - 15	S-6		13 - 15 - 15	18	30				Brown Poorly-Graded Sand, Wet, Dense (SP)	
						15.0				
18.5 - 20	S-7		17 - 13 - 16	18	29	20.0			As Above, Dark Brown, Medium Dense (SP)	
									Boring Log B-3 Terminated at a Depth of 20.0 Feet Below Ground Surface	
						25.0				

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

NOTES: bgs = below ground surface, NA = Not Applicable, NE = Not Encountered, NS = Not Surveyed, P = Perched

WHITESTONE

RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-4

Page 1 of 1

Project:	Proposed Youth and Family Behavioral Health Center	**WAI Project No.:**	GF2219913.000
Location:	1211 South 25th Street	**Client:**	Youth and Family Behavioral Center, Inc.

				Water Depth | Elevation (feet bgs) | (feet)	Cave-In Depth | Elevation (feet bgs) | (feet)
Surface Elevation:	± NS feet	**Date Started:**	1/26/2023		
Termination Depth:	10.0 feet bgs	**Date Completed:**	1/26/2023		
Proposed Location:	Pavement	**Logged By:**	AB	**During:** 10.0 | ---	
Drill / Test Method:	HSA / SPT	**Contractor:**	SCD	**At Completion:** --- | ---	**At Completion:** --- | ---
		Equipment:	Diedrick Track-Rig	**24 Hours:** --- | ---	**24 Hours:** --- | ---

SAMPLE INFORMATION						DEPTH	STRATA		DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	No	Type	Blows Per 6"	Rec. (in.)	N	(feet)				
						0.0				
0 - 2	S-1		4 - 4 - 4 - 4	20	8		TOPSOIL		3" Topsoil	
							COASTAL PLAIN MARINE DEPOSITS		Gray Poorly Graded Sand, Moist, Loose (SP)	
						2.0				
2 - 4	S-2		4 - 11 - 10 - 10	22	21				Dark Brown Poorly-Graded Sand with Silt, Trace Organics, Moist, Medium Dense (SP-SM)	
4 - 6	S-3		15 - 11 - 11 - 12	18	22	5.0			As Above, Brown, No Organics (SP-SM)	
6 - 8	S-4		15 - 21 - 23 - 28	22	44				As Above, Dense (SP-SM)	
						8.0				
8 - 10	S-5		13 - 12 - 14 - 16	20	26				Light Brown Clayey Sand, Moist, Medium Dense (SC)	
						10.0				
									Boring Log B-4 Terminated at a Depth of 10.0 Feet Below Ground Surface	
						15.0				
						20.0				
						25.0				

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

NOTES: bgs = below ground surface, NA = Not Applicable, NE = Not Encountered, NS = Not Surveyed, P = Perched

WHITESTONE

RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-5

Page 1 of 1

Project:	Proposed Youth and Family Behavioral Health Center	**WAI Project No.:**	GF2219913.000
Location:	1211 South 25th Street	**Client:**	Youth and Family Behavioral Center, Inc.

				Water Depth | Elevation (feet bgs) | (feet)	Cave-In Depth | Elevation (feet bgs) | (feet)
Surface Elevation:	± NS feet	**Date Started:**	1/26/2023		
Termination Depth:	10.0 feet bgs	**Date Completed:**	1/26/2023		
Proposed Location:	Pavement	**Logged By:**	AB	**During:** NE | ---	
Drill / Test Method:	HSA / SPT	**Contractor:**	SCD	**At Completion:** --- | ---	**At Completion:** --- | ---
		Equipment:	Diedrick Track-Rig	**24 Hours:** --- | ---	**24 Hours:** --- | ---

SAMPLE INFORMATION						DEPTH	STRATA		DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	No	Type	Blows Per 6"	Rec. (in.)	N	(feet)				
						0.0				
0 - 2	S-1		4 - 5 - 7 - 4	20	12		TOPSOIL		3" Topsoil	
							COASTAL PLAIN MARINE DEPOSITS		Gray Poorly Graded Sand, Moist, Medium Dense (SP)	
						2.0				
2 - 4	S-2		5 - 7 - 7 - 9	24	14				Dark Brown Poorly Graded Sand with Silt, Trace Organics and Roots, Moist, Medium Dense (SP-SM)	
4 - 6	S-3		8 - 8 - 14 - 12	24	22	5.0			As Above, Brown, No Organics (SP-SM)	
						6.0				
6 - 8	S-4		7 - 10 - 9 - 10	24	19				Light Brown Poorly Graded Sand, Moist, Medium Dense (SP)	
						8.0				
8 - 10	S-5		10 - 11 - 15 - 16	24	16				Light Brown Clayey Sand, Moist, Medium Dense (SC)	
						10.0				
									Boring Log B-5 Terminated at a Depth of 10.0 Feet Below Ground Surface	
						15.0				
						20.0				
						25.0				

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

NOTES: bgs = below ground surface, NA = Not Applicable, NE = Not Encountered, NS = Not Surveyed, P = Perched

WHITESTONE

RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-6

Page 1 of 1

Project:	Proposed Youth and Family Behavioral Health Center	**WAI Project No.:**	GF2219913.000
Location:	1211 South 25th Street	**Client:**	Youth and Family Behavioral Center, Inc.

				Water Depth | Elevation (feet bgs) | (feet)	Cave-In Depth | Elevation (feet bgs) | (feet)
Surface Elevation:	± NS feet	**Date Started:**	1/26/2023		
Termination Depth:	10.0 feet bgs	**Date Completed:**	1/26/2023		
Proposed Location:	Pavement	**Logged By:**	AB	**During:** 9.5 | ---	
Drill / Test Method:	HSA / SPT	**Contractor:**	SCD	**At Completion:** --- | ---	**At Completion:** --- | ---
		Equipment:	Diedrick Track-Rig	**24 Hours:** --- | ---	**24 Hours:** --- | ---

SAMPLE INFORMATION						DEPTH	STRATA		DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	No	Type	Blows Per 6"	Rec. (in.)	N	(feet)				
						0.0				
0 - 2	S-1		2 - 3 - 4 - 4	18	7		TOPSOIL		3" Topsoil	
							COASTAL PLAIN MARINE DEPOSITS		Gray Poorly Graded Sand, Dry, Loose (SP)	
2 - 4	S-2		5 - 5 - 5 - 6	24	10				As Above, Brown, Moist, Medium Dense (SP)	
						4.0				
4 - 6	S-3		6 - 9 - 9 - 11	24	18	5.0			Light Brown Clayey Sand, Trace Roots, Moist, Medium Dense (SC)	
6 - 8	S-4		7 - 8 - 9 - 10	20	17				As Above (SC)	
						8.0				
8 - 10	S-5		8 - 12 - 13 - 13	22	25				Light Brown Porly Graded Sand, Moist to Wet, Medium Dense (SP)	
						10.0				
									Boring Log B-6 Terminated at a Depth of 10.0 Feet Below Ground Surface	
						15.0				
						20.0				
						25.0				

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

NOTES: bgs = below ground surface, NA = Not Applicable, NE = Not Encountered, NS = Not Surveyed, P = Perched

WHITESTONE

RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-7

Page 1 of 1

Project:	Proposed Youth and Family Behavioral Health Center	**WAI Project No.:**	GF2219913.000
Location:	1211 South 25th Street	**Client:**	Youth and Family Behavioral Center, Inc.

Surface Elevation:	± NS feet	**Date Started:**	1/26/2023		**Water Depth | Elevation (feet bgs) | (feet)**		**Cave-In Depth | Elevation (feet bgs) | (feet)**
Termination Depth:	10.0 feet bgs	**Date Completed:**	1/26/2023				
Proposed Location:	SWM	**Logged By:**	AB	**During:**	10.0 | ---		
Drill / Test Method:	HSA / SPT	**Contractor:**	SCD	**At Completion:**	--- | ---	**At Completion:**	--- | ---
		Equipment:	Diedrick Track-Rig	**24 Hours:**	--- | ---	**24 Hours:**	--- | ---

SAMPLE INFORMATION						DEPTH	STRATA		DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	No	Type	Blows Per 6"	Rec. (in.)	N	(feet)				
						0.0				
0 - 2	S-1		3 - 4 - 5 - 4	24	9		TOPSOIL		3" Topsoil	
							COASTAL PLAIN MARINE DEPOSITS		Gray Poorly Graded Sand, Trace Roots, Moist, Loose (SP)	
2 - 4	S-2		8 - 9 - 8 - 9	24	17				As Above, Brown, Medium Dense (SP)	
4 - 6	S-3		6 - 9 - 8 - 11	24	17	5.0			As Above (SP)	
6 - 8	S-4		9 - 9 - 10 - 10	24	19	6.0			Gray Clayey Sand, Moist, Medium Dense (SC)	LL = 24 PI = 11
8 - 10	S-5		7 - 8 - 9 - 12	24	17	10.0			As Above, Light Brown (SC)	
						15.0			Boring Log B-7 Terminated at a Depth of 10.0 Feet Below Ground Surface	
						20.0				
						25.0				

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2023-D-490-00043
Georgi Celusnek
1/3/2024

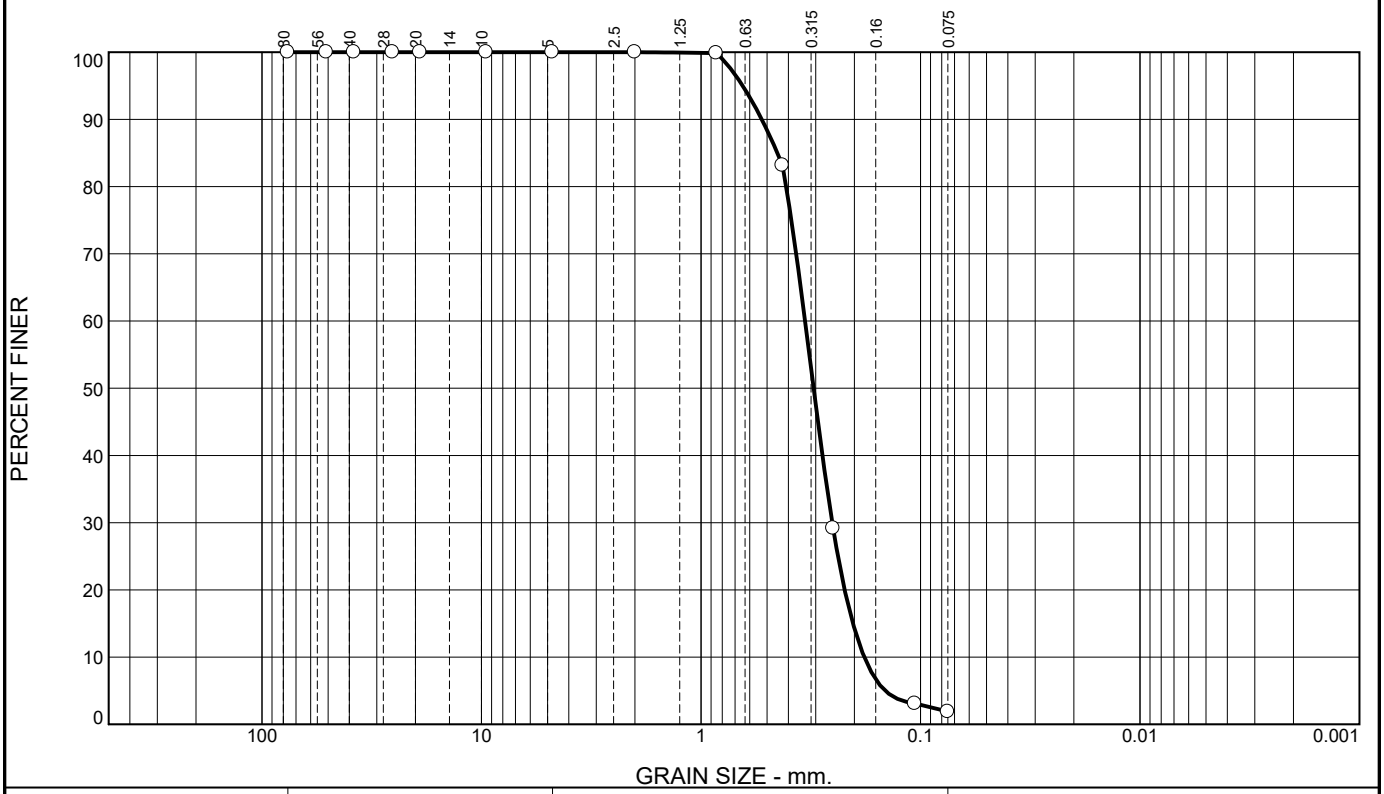
NOTES: bgs = below ground surface, NA = Not Applicable, NE = Not Encountered, NS = Not Surveyed, P = Perched

WHITESTONE

APPENDIX B
Laboratory Test Results

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	16.8	81.3	1.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3"	100.0		
2"	100.0		
1 1/2"	100.0		
1"	100.0		
3/4"	100.0		
3/8"	100.0		
#4	100.0		
#10	100.0		
#20	99.9		
#40	83.2		
#60	29.1		
#140	3.1		
#200	1.9		

* (no specification provided)

Material Description

poorly graded sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D_{90}= 0.5283 D_{85}= 0.4487 D_{60}= 0.3356
D_{50}= 0.3068 D_{30}= 0.2524 D_{15}= 0.2030
D_{10}= 0.1804 C_u= 1.86 C_c= 1.05

Classification

USCS= SP AASHTO= A-3

Remarks

W_n = 2.7%

Source of Sample: B-1 **Depth:** 0.3' - 2.0'
Sample Number: S-1

Date: 1/18/2023

WHITESTONE ASSOCIATES, INC.
Warren, New Jersey

Client: Youth and Family Behavioral Health Center, Inc.
Project: Proposed Youth and Family Behavioral Health Center
1211 South 25th Street, Fort Pierce, St. Lucie County, Florida
Project No: GF2319913.000 **Figure**

Tested By: AB

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	15.8	80.5	3.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3"	100.0		
2"	100.0		
1 1/2"	100.0		
1"	100.0		
3/4"	100.0		
3/8"	100.0		
#4	100.0		
#10	100.0		
#20	100.0		
#40	84.2		
#60	26.0		
#140	4.5		
#200	3.7		

* (no specification provided)

Material Description

poorly graded sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D_{90}= 0.5151 D_{85}= 0.4355 D_{60}= 0.3381
D_{50}= 0.3112 D_{30}= 0.2607 D_{15}= 0.1834
D_{10}= 0.1514 C_u= 2.23 C_c= 1.33

Classification

USCS= SP AASHTO= A-3

Remarks

W_n = 9.3%

Source of Sample: B-2 **Depth:** 2.0' - 4.0'
Sample Number: S-2

Date: 1/18/2023

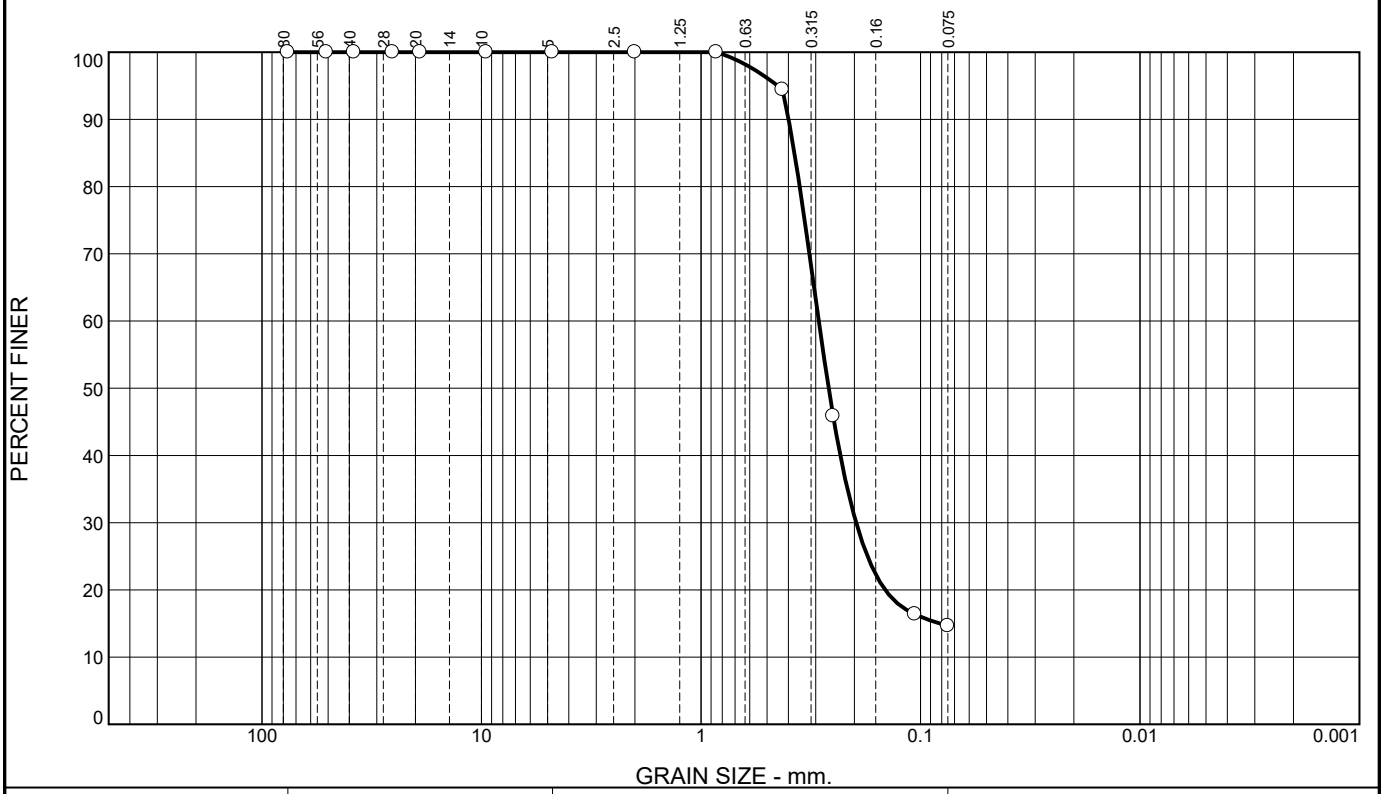
WHITESTONE ASSOCIATES, INC.
Warren, New Jersey

Client: Youth and Family Behavioral Health Center, Inc.
Project: Proposed Youth and Family Behavioral Health Center
1211 South 25th Street, Fort Pierce, St. Lucie County, Florida
Project No: GF2319913.000 **Figure**

Tested By: AB

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	5.6	79.8	14.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3"	100.0		
2"	100.0		
1 1/2"	100.0		
1"	100.0		
3/4"	100.0		
3/8"	100.0		
#4	100.0		
#10	100.0		
#20	100.0		
#40	94.4		
#60	45.9		
#140	16.4		
#200	14.6		

* (no specification provided)

Material Description

clayey sand

Atterberg Limits

PL= 13 LL= 24 PI= 11

Coefficients

D_{90}= 0.3987 D_{85}= 0.3751 D_{60}= 0.2906
D_{50}= 0.2621 D_{30}= 0.1964 D_{15}= 0.0815
D_{10}= C_u= C_c=

Classification

USCS= SC AASHTO= A-2-6(0)

Remarks

W_n = 14.8%

Source of Sample: B-7 **Depth:** 6.0' - 8.0'
Sample Number: S-4 **Date:** 1/18/2023

WHITESTONE ASSOCIATES, INC.
Warren, New Jersey

Client: Youth and Family Behavioral Health Center, Inc.
Project: Proposed Youth and Family Behavioral Health Center
1211 South 25th Street, Fort Pierce, St. Lucie County, Florida
Project No: GF2319913.000 **Figure**

Tested By: AB

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2023-D-490-00043
Georgi Celusnek
1/3/2024

WHITESTONE

NATURAL MOISTURE CONTENT DETERMINATION + ORGANIC CONTENT DETERMINATION

ASTM D2974

Client: Youth and Family Behavioral Health Center, Inc.

Project: Proposed Youth and Family Behavioral Health Center Project Number: GF2319913.000

Project Location: 1211 South 25th Street, Fort Pierce, St. Lucie County, Florida

MOISTURE CONTENT

Boring/Sample ID	B-2, S-2				
Depth (fbgs)	2.0' - 4.0'				
USCS Classification	SP				
Water content (%)	**8.3**				

ORGANIC CONTENT

Boring/Sample ID	B-2, S-2				
Depth (fbgs)	2.0' - 4.0'				
USCS Classification	SP				
Organic content (%)	**3.6**				

Approved
2023-D-490-00043
Georgi Celuspek
1/3/2024

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APPENDIX C
Infiltration Test Results

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

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EXFILTRATION TEST

Client: Youth and Family Behavioral Health Center, Inc.
Project: Proposed Youth and Family Behavioral Health Center
Location: 1211 South 25th Street, Fort Pierce, St. Lucie County, FL
File No. GF2319913.000
Field Engineer: AB
Test Hole Diameter (Inches): 2.0

Test Hole No.: P-1
Date: 1/16/2023
Weather: Sunny, 68°
Surface Elevation: NS
Test Depth (fbgs): 10.0
Test Depth (Elevation): NS
Depth to Water (fbgs): 10.0

Reading No.	Time		Water Added (Gallons)	Time Interval (Hours)	Rate of Flow (Inches/Hour)
	Start	Finish			
1	1:50 PM	2:00 PM	0.4	0.167	0.01
2	2:00 PM	2:10 PM	0.4	0.167	0.01
3	2:10 PM	2:20 PM	0.3	0.167	0.01
4	2:20 PM	2:30 PM	0.3	0.167	0.01
5	2:30 PM	2:40 PM	0.3	0.167	0.01
6	2:40 PM	2:45 PM	0.2	0.083	0.01

Remarks: Field i = 0.01 in/hr

NOTES: FBGS = Feet Below Ground Surface; NS = Not Surveyed

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

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APPENDIX D
Supplemental Information (USCS, Terms and Symbols)

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

WHITESTONE
An Employee-Owned Company

8405 BENJAMIN ROAD
SUITE J
TAMPA, FL 33634
813.851.0690
whitestoneassoc.com

UNIFIED SOIL CLASSIFICATION SYSTEM

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			LETTER SYMBOL	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS (LITTLE OR NO FINES)	GW	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
			GP	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)	GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES
			GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
	SAND AND SANDY SOILS	CLEAN SAND (LITTLE OR NO FINES)	SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
			SP	POORLY-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	MORE THAN 50% OF COARSE FRACTION PASSING NO. 4 SIEVE	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)	SM	SILTY SANDS, SAND-SILT MIXTURES
			SC	CLAYEY SANDS, SAND-CLAY MIXTURES
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMITS LESS THAN 50	ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
			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
MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS	LIQUID LIMITS GREATER THAN 50	MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
			CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
			OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS			PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS FOR SAMPLES WITH 5% TO 12% FINES

GRADATION*

% FINER BY WEIGHT

TRACE..... 1% TO 10%
LITTLE..... 10% TO 20%
SOME..... 20% TO 35%
AND..... 35% TO 50%

COMPACTNESS*
Sand and/or Gravel

RELATIVE DENSITY

LOOSE. ..... 0% TO 40%
MEDIUM DENSE.... 40% TO 70%
DENSE..... 70% TO 90%
VERY DENSE..... 90% TO 100%

CONSISTENCY*
Clay and/or Silt

RANGE OF SHEARING STRENGTH IN POUNDS PER SQUARE FOOT

VERY SOFT..... LESS THAN 250
SOFT..... ..... 250 TO 500
MEDIUM..... 500 TO 1000
STIFF..... 1000 TO 2000
VERY STIFF..... 2000 TO 4000
HARD..... GREATER THAN 4000

** VALUES ARE FROM LABORATORY OR FIELD TEST DATA, WHERE APPLICABLE. WHEN NO TESTING WAS PERFORMED, VALUES ARE ESTIMATED.*

L:\Geotechnical Forms and References\Reports\USCSTRMSSYM FL.docx

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

WHITESTONE
An Employee-Owned Company

8405 BENJAMIN ROAD
SUITE J
TAMPA, FL 33634
813.851.0690
whitestoneassoc.com

GEOTECHNICAL TERMS AND SYMBOLS

SAMPLE IDENTIFICATION

The Unified Soil Classification System is used to identify the soil unless otherwise noted.

SOIL PROPERTY SYMBOLS

N: Standard Penetration Value: Blows per ft. of a 140 lb. hammer falling 30" on a 2" O.D. split-spoon.
Qu: Unconfined compressive strength, TSF.
Qp: Penetrometer value, unconfined compressive strength, TSF.
Mc: Moisture content, %.
LL: Liquid limit, %.
PI: Plasticity index, %.
δd: Natural dry density, PCF.
▼: Apparent groundwater level at time noted after completion of boring.

DRILLING AND SAMPLING SYMBOLS

NE: Not Encountered (Groundwater was not encountered).
SS: Split-Spoon - 1 ⅜" I.D., 2" O.D., except where noted.
ST: Shelby Tube - 3" O.D., except where noted.
AU: Auger Sample.
OB: Diamond Bit.
CB: Carbide Bit
WS: Washed Sample.

RELATIVE DENSITY AND CONSISTENCY CLASSIFICATION

Term (Non-Cohesive Soils)	Standard Penetration Resistance
Very Loose	0-4
Loose	4-10
Medium Dense	10-30
Dense	30-50
Very Dense	Over 50

Term (Cohesive Soils)	Qu (TSF)
Very Soft	0 - 0.25
Soft	0.25 - 0.50
Firm (Medium)	0.50 - 1.00
Stiff	1.00 - 2.00
Very Stiff	2.00 - 4.00
Hard	4.00+

PARTICLE SIZE

Boulders	8 in.+	Coarse Sand	5mm-0.6mm	Silt	0.074mm-0.005mm
Cobbles	8 in.-3 in.	Medium Sand	0.6mm-0.2mm	Clay	-0.005mm
Gravel	3 in.-5mm	Fine Sand	0.2mm-0.074mm		

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2023-D-490-00043
Georgi Celusnek
1/3/2024

Exhibit 5

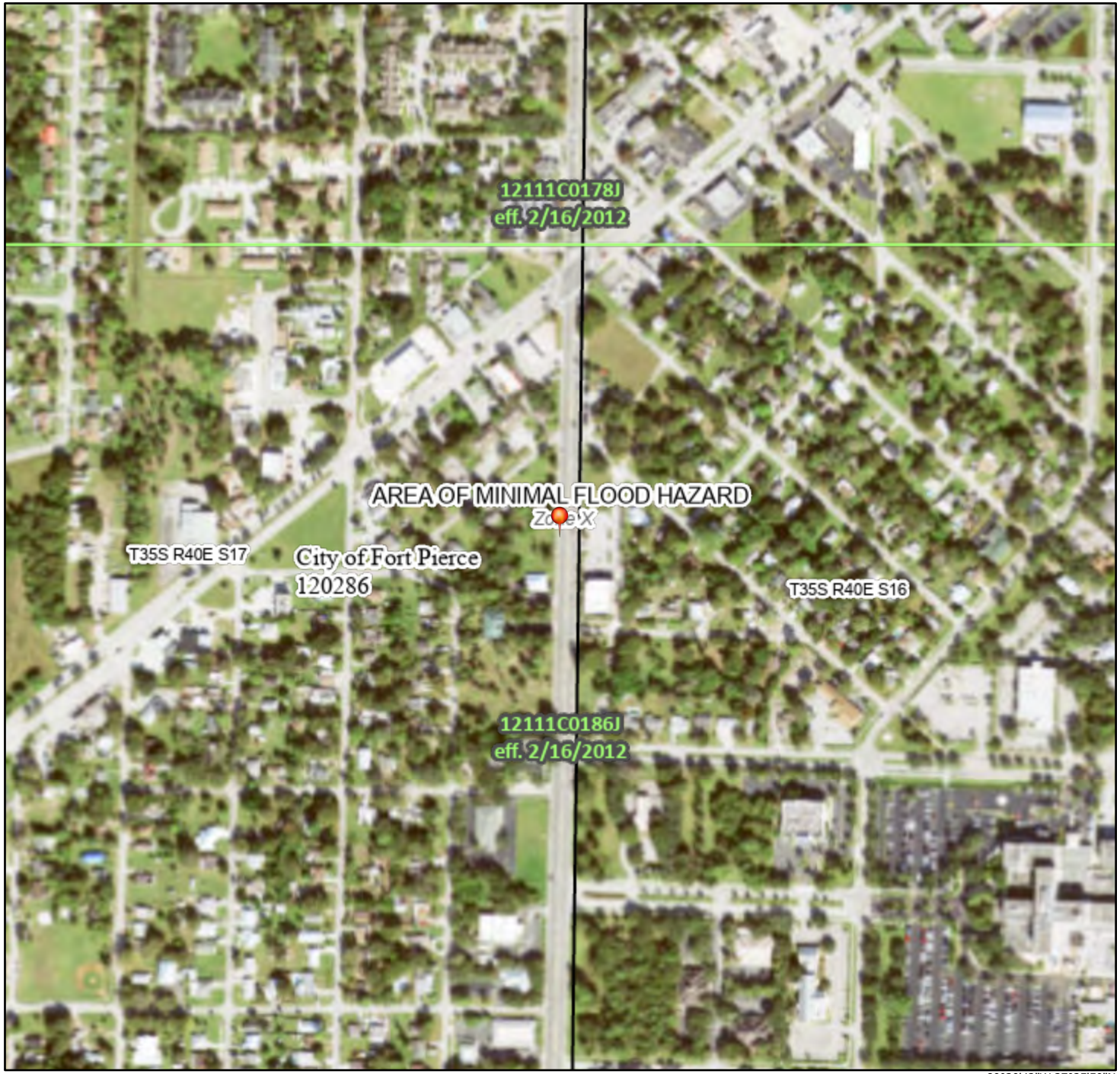
FEMA Map

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

National Flood Hazard Layer FIRMette

FEMA

80°21'19"W 27°26'22"N



80°20'42"W 27°25'50"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 12/6/2023 at 8:18 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Approved
2023-D-490-00043
Gerald Gilbert
12/6/2023

Appendix 1

Water Management Calculations

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

CREECH CONSULTING, INC.

P.O. Box 327
Stuart, FL 34995
FL Certificate of Authorization 5139
Certificate LB-0006705

Youth & Family Behavioral Health Center
Water Management Calculations

Revised:
Project: Youth & Family Behavioral Health Center — **Engineer:** KK
Project #: 2228 — **Date:** 12/6/23

1.) PRE DEVELOPMENT SITE DATA

Impervious Area	0.00	acres
Pervious Area	0.52	acres
TOTAL AREA:	**0.52**	acres

	ACREAGE	%	STAGE ELEVATIONS (NAVD) From:	To:
Pervious Area				
Open Space	0.52 ac	100%	18.0	19.5
Total Impervious:	0.00 ac	**0%**		
Total Pervious:	0.52 ac	**100%**		
TOTAL AREA:	0.52 ac	**100%**		
Water Table Elev. =	**8.5**	NAVD		

Find Curve Number:

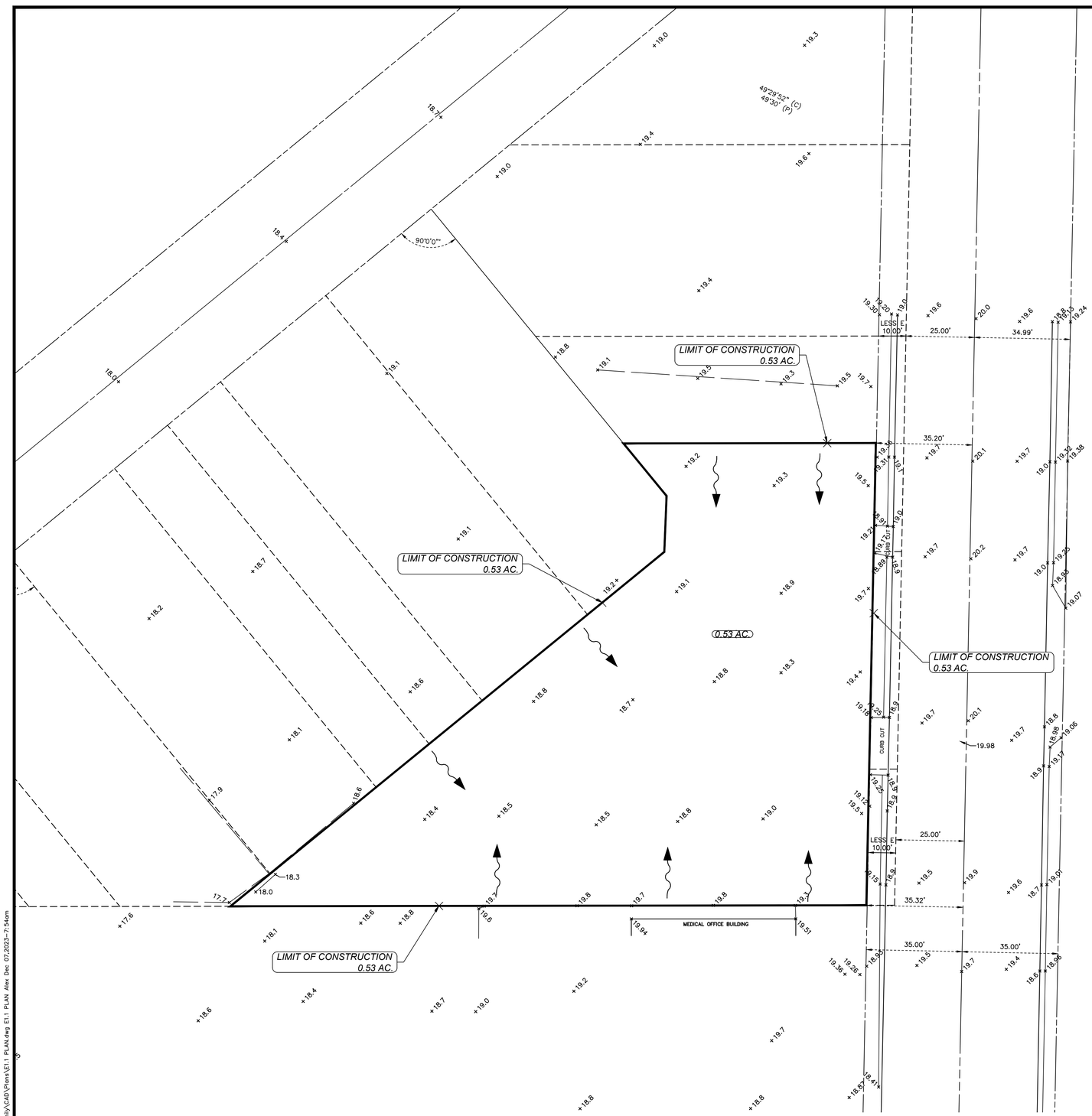
Avg. Pervious Ground El. =	19.0	NAVD
Groundwater Elevation =	8.5	NAVD
Distance to Water Table =	10.50	

Soil Storage Table

Depth to W.T. (ft)	Coastal Storage (in)	Flatwoods Storage (in)	Depression Storage (in)
1.0	0.6	0.6	0.6
1.5	1.6	1.6	1.4
2.0	2.5	2.5	2.1
2.5	4.6	4.0	3.3
3.0	6.6	5.4	4.4
3.5	8.8	7.2	5.6
4.0	10.9	9	6.8

Pervious Area =	0.52 ac	
Storage from Table =	8.18 in	(4.0 feet - compacted)
Avail Soil Storage =	0.35 af	
Soil Moisture Storage (S) =	8.18 in	
Curve Number =	55	

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024



CREECH CONSULTING, INC.
CIVIL ENGINEERING
PO BOX 327, STUART, FLORIDA 34994 (772) 485-2140
BOARD OF PROFESSIONAL ENGINEERS, CERTIFICATE OF AUTHORIZATION NUMBER 5139
PROFESSIONAL ENGINEERS AND ARCHITECTS, MANUEL CREECH LICENSE NO. 0048502

DATE	REV #	REVISIONS / SUBMITTALS

YOUTH & FAMILY
BEHAVIORAL HEALTH CENTER INC
PRE DEVELOPMENT DRAINAGE MAP
FORT PIERCE FLORIDA

DRAWN BY:	----
CHECKED BY:	
LATITUDE:	27°26'06" N
LONGITUDE:	80°21'01" W
HORZ. SCALE:	1" = 20'

SHEET E1.1
PROJECT NO. 2228

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
It's fast, It's free, It's the law.
www.callsunshine.com

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R:\Projects\2228 creech youth and family\CAD\Plans\E1.1 PLAN.dwg E1.1 PLAN Alex Dec 07,2023-7:54am

Approved
2023-1290-00043
George Gliniak
1/3/2024

CREECH CONSULTING, INC.

P.O. Box 327
Stuart, FL 34995
FL Certificate of Authorization 5139
Certificate LB-0006705

Youth & Family Behavioral Health Center
Water Management Calculations

Project: Youth & Family Behavioral Health Center
Project #: 2228

Revised:
Engineer: KK
Date: 12/6/23

2.) POST DEVELOPMENT SITE DATA

Impervious Area	0.21	acres
Pervious Area	0.31	acres
TOTAL AREA:	**0.52**	acres

		ACREAGE	%	STAGE ELEVATIONS (NAVD) From:	To:
Impervious Area					
	Buildings	0.10 ac	19%	21.0	
	Pervious Pavement (50% credit)	0.08 ac	16%	19.5	21.0
	Sidewalks	0.03 ac	6%	20.0	21.0
Pervious Area					
	Open Space	0.18 ac	35%	19.0	19.5
	Pervious Pavement (50% credit)	0.08 ac	16%	19.5	21.0
	Dry Retention 1 Side Slopes	0.01 ac	2%	18.0	19.0
	Dry Retention 1 Bottom	0.02 ac	3%	18.0	
	Dry Retention 2 Side Slopes	0.01 ac	2%	18.0	19.0
	Dry Retention 2 Bottom	0.01 ac	2%	18.0	
Total Impervious:		0.21 ac	**41%**		
Total Pervious:		0.31 ac	**59%**		
TOTAL AREA:		0.52 ac	**100%**		
Water Table Elev. =		**8.5**	NAVD		

Find Curve Number:

Avg. Pervious Ground El. =	18.5	NAVD
Groundwater Elevation =	8.5	NAVD
Distance to Water Table =	10.0	

Soil Storage Table

Depth to W.T. (ft)	Coastal Storage (in)	Flatwoods Storage (in)	Depression Storage (in)
1.0	0.6	0.6	0.6
1.5	1.6	1.6	1.4
2.0	2.5	2.5	2.1
2.5	4.6	4.0	3.3
3.0	6.6	5.4	4.4
3.5	8.8	7.2	5.6
4.0	10.9	9	6.8

Pervious Area =	0.31 ac	
Storage from Table =	8.18 in	(4.0 feet - compacted)
Avail Soil Storage =	0.21 af	
Soil Moisture Storage (S) =	4.84 in	
Curve Number =	67	

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

RE-SUBDIVISION OF LOTS
1,2,3,4,11& 12 - BLOCK 2 OF
KIRBY SUBDIVISION
PB 33, PG 8
LOT B

LOT 4

LOT 5

LOT6

KIRBY SUBDIVISION
BLOCK 2
PB 3, PG 86

LOT 7

LOT 8

Parcel: 241750700020006
United Range Line LLC
1207 S 25th ST
Zoning: C3 Office Commercial
FLU: GC- General Commercial

BM 4356
EL. = 19.37
(4356) SET MAG NAIL
AND DISK STAMPED
NORTHSTAR TRAV/ITBM

Parcel:241750300350004
Ownership Teresa S Beville
2509 ACORN ST
Zoning: C3 Office Commercial
FLU: GC- General Commercial

Parcel: 241750300360001
Ownership Humayun Shareef
2511 ACORN ST
Zoning: C3 Office Commercial
FLU: GC- General Commercial

Parcel:241750300370008
Ownership H AND N 645 Prima Vista LLC
2515 ACORN ST
Zoning: C3 Office Commercial
FLU: GC- General Commercial

Parcel:241750300380005
Ownership Richard Renner
2517 ACORN ST
Zoning: C3 Office Commercial
FLU: GC- General Commercial

Parcel: 241660201580003
Ownership FD South LLC
Family Dollar Lease
1210 S 25th ST
Zoning: C2 Neighborhood Commercial
FLU: NC- Neighborhood Commercial

Parcel: 241714400020003
Owner: H & N 402 SW Friar Street LLC
S 26th ST
Zoning: C1 Office Commercial
FLU: Offices - Professional and Business Services

Parcel: 241714400010006
Owner: H & N 402 SW Friar Street LLC
1215 S 25th ST
Zoning: C1 Office Commercial
: FLU: Offices - Professional and Business Services

UNPLATTED LANDS

S 25th STREET

WOOD POWER POLE, NOTHING CONNECTED

WOOD POWER POLE, NOTHING CONNECTED, 0.4' INSIDE PROPERTY

CONST. EARTH BERM MIN. ELEV. 20.5'

CONST. EARTH BERM MIN. ELEV. 20.5'

CONST. EARTH BERM MIN. ELEV. 20.5'

BUILDING
4,306sf
MIN. FF=21.08

38.33'

54.0'

67.33'

LANDSCAPE

RAIN GARDEN 1

RAIN GARDEN 2

COVERED PORCH

S Sidewalk

SIDEWALK

EXISTING

MATCH EXIST. ±19.7

REMOVE EXIST DRIVEWAY and CONST. CONC. WALK WITH F CURB

CONST. DRIVEWAY PER FDOT INDEX 522

19.98
SANITARY MANHOLE
INVERT = 15.52

CONST. "F" CURB (TYP.)

PERVIOUS PAVEMENT

CONST. 78 LF OF 15" HDPE @0.2%

CONST. 71 LF OF 15" HDPE @0.2%

CONST. 82 LF OF 15" HDPE @0.2%

CONST. 25lf of 6" DOUBLE YELLOW STRIPING

CONST. STOP SIGN (R1-1) AND STOP BAR

BM 4357
EL. = 18.91
(4357) SET MAG NAIL
AND DISK STAMPED
NORTHSTAR TRAV/ITBM

MEDICAL OFFICE BUILDING

D-1 D-2 D-3 D-4

C3 A C3 B C3 C C3 D C3 E

LEGEND

- RIGHT OF WAY LINES
- CHAIN LINK FENCE
- CENTER LINE
- RIGHT OF WAY LINE
- SECTION LINE
- PLAT LOT LINE
- EASEMENT LINE
- PROPOSED CONCRETE
- PROPOSED PERVIOUS PAVEMENT
- EXISTING UTILITY POLE
- PROPOSED PERIMETER BERM
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER SERVCE
- PROPOSED 2" WATER SERVICE
- PROPOSED STORM PIPE
- PROPOSED INLETS
- PROPOSED DRAINAGE STRUCTURE
- DRAINAGE FLOW ARROW
- PROPOSED GRADES
- EXISTING ELEVATION
- PROPOSED LIFT STATION
- EXISTING FIBER OPTIC HANDHOLE
- EXISTING UTILITY POLE
- EXISTING NAVD BENCH MARK

0 20 40 60
SCALE IN FEET

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

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CIVIL ENGINEERING
PO BOX 327, STUART, FLORIDA 34994 (772) 485-2140
BOARD OF PROFESSIONAL ENGINEERS, CERTIFICATE OF AUTHORIZATION NUMBER 5139
PROFESSIONAL SURVEYORS AND MAPPERS, AMENDED CERTIFICATE NO. LB-0006705

DATE	BY	REVISIONS
10/30/2023	JAC	PER TRC COMMENTS DATED 10/04/23
09/07/2023	JAC	PER TRC COMMENTS DATED 07/19/23

YOUTH & FAMILY
BEHAVIORAL HEALTH CENTER INC
POST DEVELOPMENT DRAINAGE MAP
FORT PIERCE FLORIDA

DRAWN BY: JAC
CHECKED BY: RTC / ANDREWS
LATITUDE: 27°26'5.40"N
LONGITUDE: 80°21'2.96"W
HORZ. SCALE: 1" =20'
VERT. SCALE:

SHEET C3
PROJECT NO. 22-016-001

Approved
2023-490-00043
George Gabrielek
11/6/2023

P:\Projects\2022\2022-016-001 Youth and Family Center\CAD\1 - Plans\C3 STORM.dwg C3 STORM dtd:_] Dec 01,2023 - 4:50pm

CREECH CONSULTING, INC.

P.O. Box 327
Stuart, FL 34995
FL Certificate of Authorization 5139
Certificate LB-0006705

Youth & Family Behavioral Health Center
Post Development Water Quality

Project: Youth & Family Behavioral Health Center
Project #: 2228

Revised:
Engineer: KK
Date: 12/6/23

WATER QUALITY VOLUMES TO BE TREATED:

A.) First Inch:

(Treated Volume)	1-inch	*	1-ft/12-in	*	0.52 PROJECT AREA (AC)	=	0.04 TREATED VOLUME	ac-ft

B.) 2.5 inches Times the Percent Impervious (SFWMD Standards):

(Site Area) 0.52 PROJECT AREA (AC) - (0.00 LAKES (AC) + 0.10 ROOFS (AC)) = 0.42 SITE AREA ac

(Impervious Area) 0.42 SITE AREA (AC) - 0.31 PERVIOUS AREA (AC) = 0.11 IMPERVIOUS AREA ac

(% Impervious) IMPERVIOUS AREA * 100% / SITE AREA (AC) = 26.51%

(2.5-in * % Imp.)			2.5-inches	*	26.51% PERCENT IMPERVIOUS	=	0.66 INCHES TO BE TREATED	in
(Treated Volume)	0.66 TREATED (IN)	*	1-ft/12-in	*	0.52 PROJECT AREA - LAKES (AC)	=	0.03 TREATED VOLUME	ac-ft

C.) Total Required Retention:

100% Required Wet Detention	=	**0.04**	ac-ft
75% Required Dry Detention	=	**0.03**	ac-ft
50% Required Retention	=	**0.02**	ac-ft

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

CREECH CONSULTING, INC.

P.O. Box 327
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Certificate LB-0006705

Youth & Family Behavioral Health Center
Water Management Calculations - Pre Development

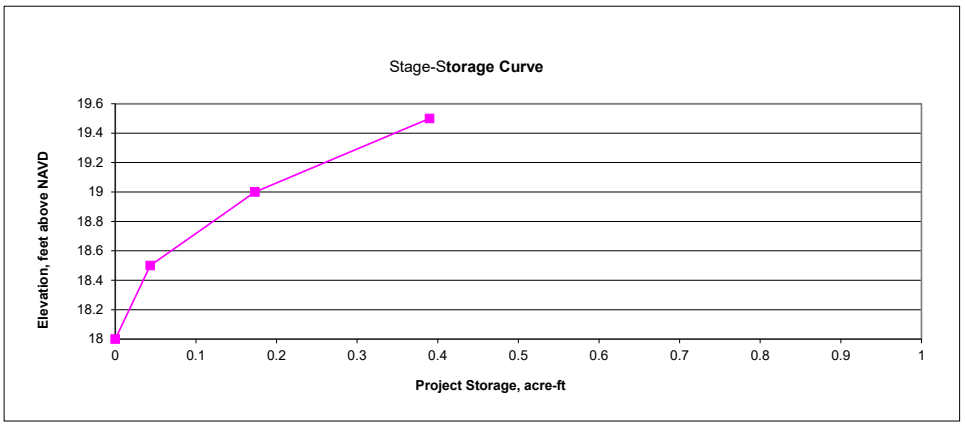
Project: Youth & Family Behavioral Health Center
Project #: 2228

KK
12/6/23

Computation Type Stage-Storage

Site Area	0.52	Ac
Starting Stage	18.00	
Ending Stage	19.50	
Stage Increment	0.50	

Name	**Buildings**	**Pavement**	**Sidewalks**	**Open Space**	
Area	0.00	0.00	0.00	0.52	0.52
Start Elev	0.00	0.00	0.00	18.00	
End Elev		0.00	0.00	19.50	
Stage	Vert	Vert	Vert	Linear	**TOTAL Site**
Feet	Storage	Storage	Storage	Storage	**Storage**
NAVD	Ac-ft	Ac-ft	Ac-ft	Ac-ft	**Ac-ft**
18.00	0.00	0.00	0.00	0.00	0.00
18.50	0.00	0.00	0.00	0.04	0.04
19.00	0.00	0.00	0.00	0.17	0.17
19.50	0.00	0.00	0.00	0.39	0.39



Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

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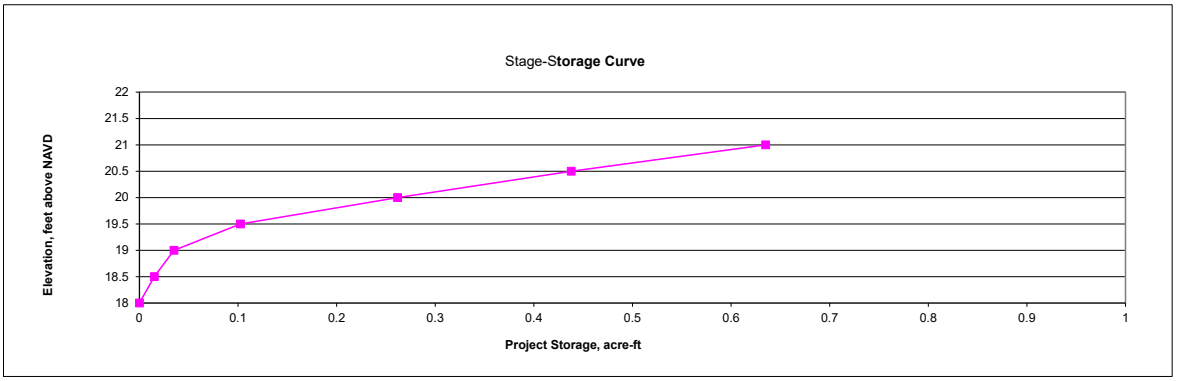
Youth & Family Behavioral Health Center
Water Management Calculations - Post Development

Revised:
Project: Youth & Family Behavioral Health Center — **Engineer:** KK
Project #: 2228 — **Date:** 12/6/23

Computation Type Stage-Storage

Site Area	0.52	Ac
Starting Stage	18.00	
Ending Stage	21.00	
Stage Increment	0.50	

Name	Buildings	Pervious Pavement (50% credit)	Sidewalks	Open Space	Pervious Pavement (50% credit)	Dry Retention 1 Side Slopes	Dry Retention 1 Bottom	Dry Retention 2 Side Slopes	Dry Retention 2 Bottom	
Area	0.10	0.08	0.03	0.18	0.08	0.01	0.02	0.01	0.01	0.52
Start Elev	21.00	19.50	20.00	19.00	19.50	18.00	18.00	18.00	18.00	
End Elev		21.00	21.00	19.50		19.00		19.00		
Stage	Vert	Linear	Linear	Linear	Vert	Linear	Vert	Linear	Vert	**TOTAL Site**
Feet	Storage	Storage	Storage	Storage	Storage	Storage	Storage	Storage	Storage	**Storage**
NAVD	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	**Ac-ft**
18.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18.50	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.02
19.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.01	0.01	0.04
19.50	0.00	0.00	0.00	0.05	0.00	0.01	0.02	0.01	0.02	0.10
20.00	0.00	0.01	0.00	0.14	0.04	0.02	0.03	0.02	0.02	0.26
20.50	0.00	0.03	0.00	0.23	0.08	0.02	0.04	0.02	0.03	0.44
21.00	0.00	0.06	0.02	0.32	0.12	0.03	0.05	0.03	0.03	0.64



Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

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Youth & Family Behavioral Health Center
Water Management Calculations

Project: Youth & Family Behavioral Health Center
Project #: 2228

Revised:
Engineer: KK
Date: 12/6/23

POST DEVELOPMENT RUNOFF:

Q = Total Runoff for a given storm depth (inches)
P = Storm Depth (inches)
S = Soil Storage (inches)
V = Total Runoff Volume (ac-ft)

$$Q = \frac{(P - 0.2S)^2}{P + 0.8S}$$

A.) 10-year 1-day Storm Event:

P = 6 inches
S = 4.84 in inches

Q = 2.56 inches

V = 2.56 inches x 0.52 acres = **0.11** **(acre-ft)**

From the Stage - Storage Curve, the roadway elevation is:

Interpolate Stage Between	19.00	19.50
Interpolate Runoff Between	0.04	0.10

Stage: **19.56** **NAVD** unrouted
Parking lots at 19.5 NAVD*

B.) 25-year 3-day Storm Event:

P = 9.5 inches
S = 4.84 in inches

Q = 5.44 inches

V = 5.44 inches x 0.52 acres = **0.234** **(acre-ft)**

From the Stage - Storage Curve, the perimeter elevation is:

Interpolate Stage Between	19.50	20.00
Interpolate Runoff Between	0.10	0.26

Stage: **19.91** **NAVD** unrouted
Min. perimeter berm at 20.5 NAVD*

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CREECH
CONSULTING, INC.

P.O. Box 327
Stuart, FL 34995
FL Certificate of Authorization 5139
Certificate LB-0006705

C.) 100-year 3-day Storm Event:

P =	12.23	inches		
S =	4.84 in	inches		
Q =	7.88	inches		
V =	7.88	inches x	0.52 acres =	**0.338** (acre-ft)

From the Stage - Storage Curve, the zero discharge elevation is:

Interpolate Stage Between	20.00	20.50
Interpolate Runoff Between	0.26	0.44

Stage: **20.22** **NAVD**
Finished floor at 21.08 NAVD*

D.) Required Weir Crest Elevation:

Required Dry Retention = 0.02 ac-ft

From the Stage - Storage Curve, the weir crest elevation is:

Interpolate Stage Between	18.00	18.50
Interpolate Runoff Between	0.00	0.02

Stage: **18.72** **NAVD**
Retention tops at 19.0 NAVD*

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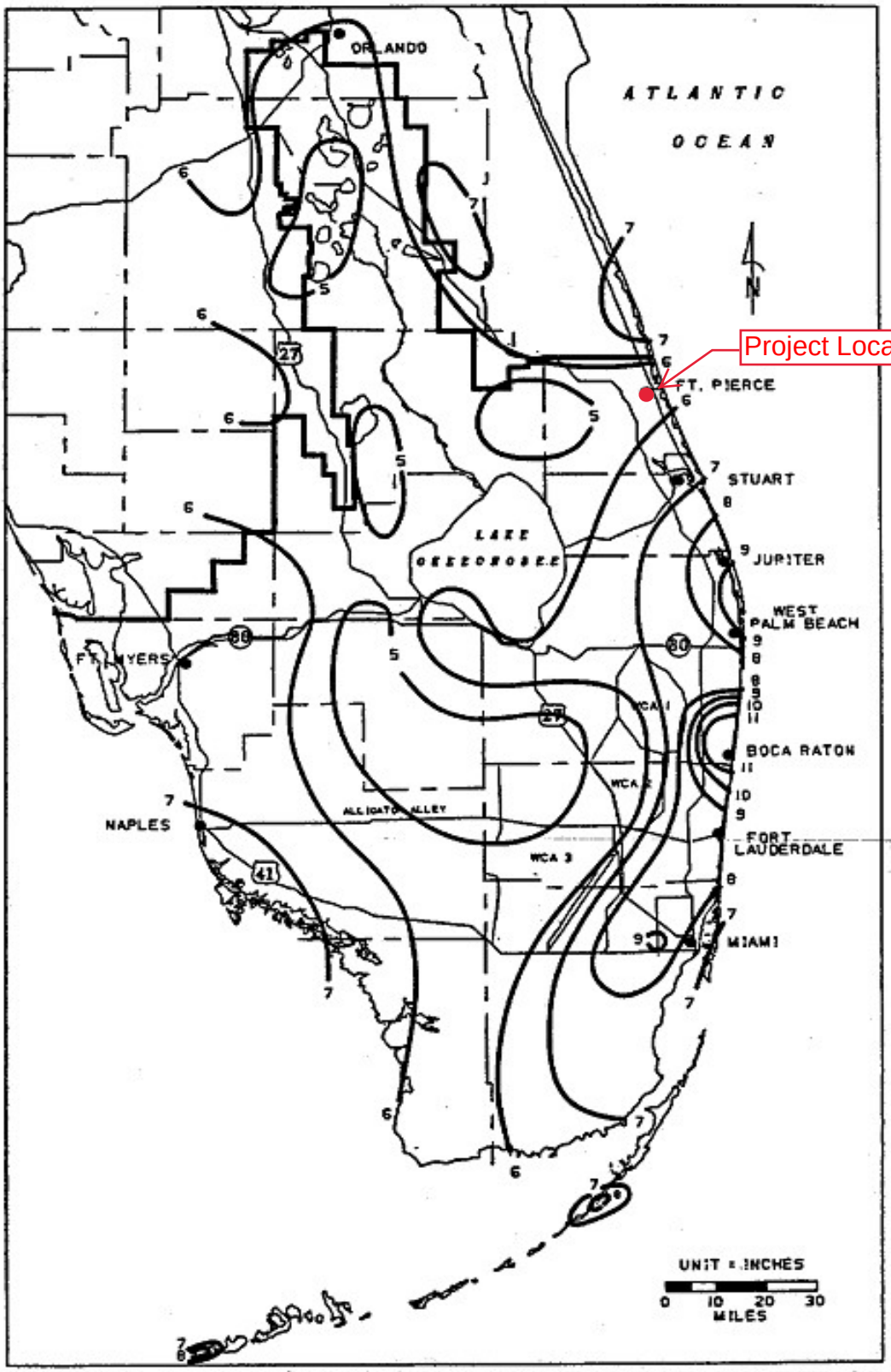


FIGURE C-4. 1-DAY RAINFALL: 10-YEAR RETURN PERIOD

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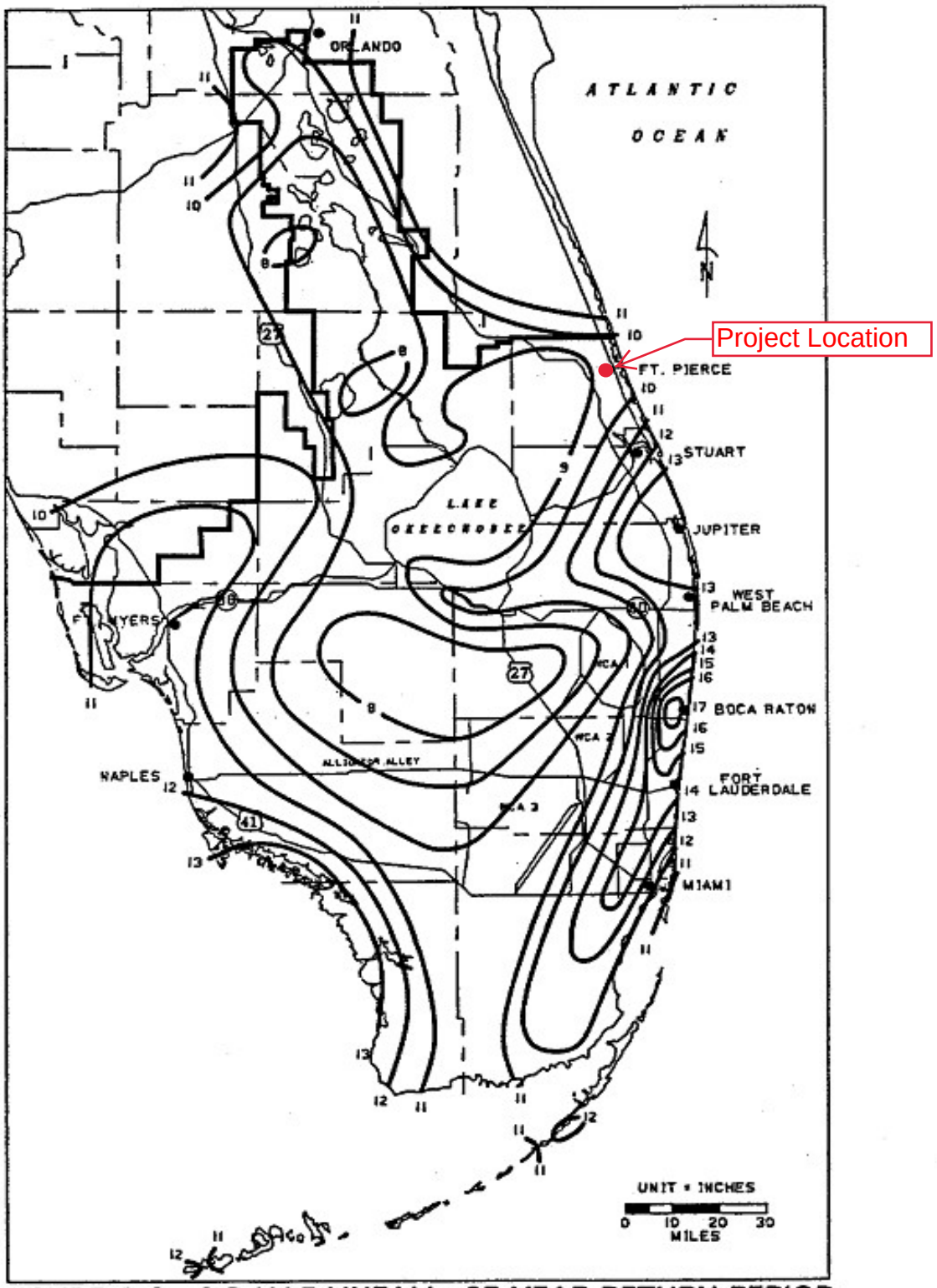


FIGURE C-8. 3-DAY RAINFALL: 25-YEAR RETURN PERIOD

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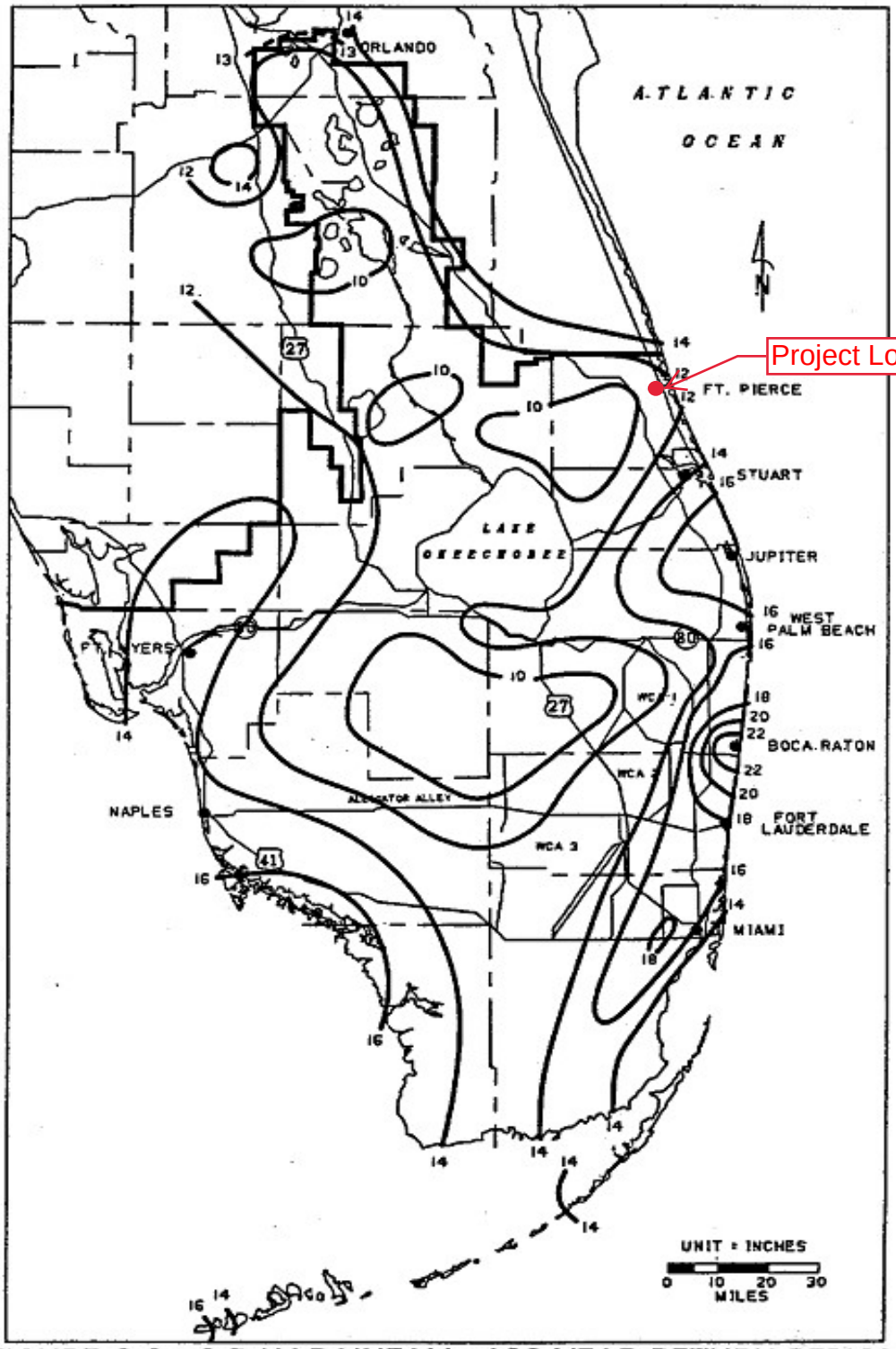


FIGURE C-9. 3-DAY RAINFALL: 100-YEAR RETURN PERIOD

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Appendix 2

Cascade 2001
Modeling Report

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10-Year 1-Day
Storm Event

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Project Name: Youth & Family
Reviewer:
Project Number: 2228
  Period Begin: Jan 01, 2000;0000 hr End: Jan 13, 2000;0000 hr Duration: 288 hr
  Time Step: 0.2 hr, Iterations: 10

Basin 1: Youth & Fam

  Method: Generalized Unit Hydrograph
  Rainfall Distribution: SFWMD - 24 hr
  Design Frequency: 10 year
  1 Day Rainfall: 6 inches
  Area: 0.52 acres
  Ground Storage: 4.84 inches
  Time of Concentration: 0.25 hours
  Peak Rate Factor: 0
  Initial Stage: 18 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
18.00	0.00
18.50	0.02
19.00	0.04
19.50	0.10
20.00	0.26
20.50	0.44
21.00	0.64

Offsite Receiving Body: S 25th Street

Time (hr)	Stage (ft NGVD)
0.00	19.50
288.00	19.50

Structure: 1

  From Basin: Youth & Fam
  To Basin: S 25th Street
  Structure Type: Gravity
    Weir: Broad Crested, Crest Elev = 20.5 ft NGVD, Length = 24 ft, Weir Coef = 2.6
    Bleeder: None
    Pipe: None

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
0.00	0.00	0.00	0.00	0.00	18.00	19.50
1.00	0.06	0.00	0.00	0.00	18.00	19.50
2.00	0.12	0.00	0.00	0.00	18.00	19.50
3.00	0.19	0.00	0.00	0.00	18.00	19.50
4.00	0.27	0.00	0.00	0.00	18.00	19.50
5.00	0.37	0.00	0.00	0.00	18.00	19.50
6.00	0.50	0.00	0.00	0.00	18.00	19.50
7.00	0.65	0.00	0.00	0.00	18.00	19.50
8.00	0.82	0.00	0.00	0.00	18.00	19.50
9.00	1.03	0.00	0.00	0.00	18.00	19.50
10.00	1.28	0.01	0.00	0.00	18.01	19.50
11.00	1.61	0.04	0.00	0.00	18.06	19.50
12.00	3.94	0.96	0.00	0.00	18.70	19.50
13.00	4.60	0.19	0.00	0.00	19.19	19.50
14.00	4.91	0.10	0.00	0.00	19.29	19.50
15.00	5.10	0.07	0.00	0.00	19.34	19.50
16.00	5.28	0.07	0.00	0.00	19.39	19.50
17.00	5.39	0.04	0.00	0.00	19.42	19.50
18.00	5.50	0.04	0.00	0.00	19.45	19.50
19.00	5.60	0.04	0.00	0.00	19.48	19.50

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Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
20.00	5.71	0.04	0.00	0.00	19.50	19.50
21.00	5.78	0.03	0.00	0.00	19.50	19.50
22.00	5.86	0.03	0.00	0.00	19.50	19.50
23.00	5.93	0.03	0.00	0.00	19.50	19.50
24.00	6.00	0.03	0.00	0.00	19.50	19.50
25.00	6.00	0.00	0.00	0.00	19.50	19.50
26.00	6.00	0.00	0.00	0.00	19.50	19.50
27.00	6.00	0.00	0.00	0.00	19.50	19.50
28.00	6.00	0.00	0.00	0.00	19.50	19.50
29.00	6.00	0.00	0.00	0.00	19.50	19.50
30.00	6.00	0.00	0.00	0.00	19.50	19.50
31.00	6.00	0.00	0.00	0.00	19.50	19.50
32.00	6.00	0.00	0.00	0.00	19.50	19.50
33.00	6.00	0.00	0.00	0.00	19.50	19.50
34.00	6.00	0.00	0.00	0.00	19.50	19.50
35.00	6.00	0.00	0.00	0.00	19.50	19.50
36.00	6.00	0.00	0.00	0.00	19.50	19.50
37.00	6.00	0.00	0.00	0.00	19.50	19.50
38.00	6.00	0.00	0.00	0.00	19.50	19.50
39.00	6.00	0.00	0.00	0.00	19.50	19.50
40.00	6.00	0.00	0.00	0.00	19.50	19.50
41.00	6.00	0.00	0.00	0.00	19.50	19.50
42.00	6.00	0.00	0.00	0.00	19.50	19.50
43.00	6.00	0.00	0.00	0.00	19.50	19.50
44.00	6.00	0.00	0.00	0.00	19.50	19.50
45.00	6.00	0.00	0.00	0.00	19.50	19.50
46.00	6.00	0.00	0.00	0.00	19.50	19.50
47.00	6.00	0.00	0.00	0.00	19.50	19.50
48.00	6.00	0.00	0.00	0.00	19.50	19.50
49.00	6.00	0.00	0.00	0.00	19.50	19.50
50.00	6.00	0.00	0.00	0.00	19.50	19.50
51.00	6.00	0.00	0.00	0.00	19.50	19.50
52.00	6.00	0.00	0.00	0.00	19.50	19.50
53.00	6.00	0.00	0.00	0.00	19.50	19.50
54.00	6.00	0.00	0.00	0.00	19.50	19.50
55.00	6.00	0.00	0.00	0.00	19.50	19.50
56.00	6.00	0.00	0.00	0.00	19.50	19.50
57.00	6.00	0.00	0.00	0.00	19.50	19.50
58.00	6.00	0.00	0.00	0.00	19.50	19.50
59.00	6.00	0.00	0.00	0.00	19.50	19.50
60.00	6.00	0.00	0.00	0.00	19.50	19.50
61.00	6.00	0.00	0.00	0.00	19.50	19.50
62.00	6.00	0.00	0.00	0.00	19.50	19.50
63.00	6.00	0.00	0.00	0.00	19.50	19.50
64.00	6.00	0.00	0.00	0.00	19.50	19.50
65.00	6.00	0.00	0.00	0.00	19.50	19.50
66.00	6.00	0.00	0.00	0.00	19.50	19.50
67.00	6.00	0.00	0.00	0.00	19.50	19.50
68.00	6.00	0.00	0.00	0.00	19.50	19.50
69.00	6.00	0.00	0.00	0.00	19.50	19.50
70.00	6.00	0.00	0.00	0.00	19.50	19.50
71.00	6.00	0.00	0.00	0.00	19.50	19.50
72.00	6.00	0.00	0.00	0.00	19.50	19.50
73.00	6.00	0.00	0.00	0.00	19.50	19.50
74.00	6.00	0.00	0.00	0.00	19.50	19.50
75.00	6.00	0.00	0.00	0.00	19.50	19.50
76.00	6.00	0.00	0.00	0.00	19.50	19.50
77.00	6.00	0.00	0.00	0.00	19.50	19.50
78.00	6.00	0.00	0.00	0.00	19.50	19.50
79.00	6.00	0.00	0.00	0.00	19.50	19.50
80.00	6.00	0.00	0.00	0.00	19.50	19.50
81.00	6.00	0.00	0.00	0.00	19.50	19.50
82.00	6.00	0.00	0.00	0.00	19.50	19.50
83.00	6.00	0.00	0.00	0.00	19.50	19.50
84.00	6.00	0.00	0.00	0.00	19.50	19.50
85.00	6.00	0.00	0.00	0.00	19.50	19.50
86.00	6.00	0.00	0.00	0.00	19.50	19.50
87.00	6.00	0.00	0.00	0.00	19.50	19.50
88.00	6.00	0.00	0.00	0.00	19.50	19.50

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Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
89.00	6.00	0.00	0.00	0.00	19.50	19.50
90.00	6.00	0.00	0.00	0.00	19.50	19.50
91.00	6.00	0.00	0.00	0.00	19.50	19.50
92.00	6.00	0.00	0.00	0.00	19.50	19.50
93.00	6.00	0.00	0.00	0.00	19.50	19.50
94.00	6.00	0.00	0.00	0.00	19.50	19.50
95.00	6.00	0.00	0.00	0.00	19.50	19.50
96.00	6.00	0.00	0.00	0.00	19.50	19.50
97.00	6.00	0.00	0.00	0.00	19.50	19.50
98.00	6.00	0.00	0.00	0.00	19.50	19.50
99.00	6.00	0.00	0.00	0.00	19.50	19.50
100.00	6.00	0.00	0.00	0.00	19.50	19.50
101.00	6.00	0.00	0.00	0.00	19.50	19.50
102.00	6.00	0.00	0.00	0.00	19.50	19.50
103.00	6.00	0.00	0.00	0.00	19.50	19.50
104.00	6.00	0.00	0.00	0.00	19.50	19.50
105.00	6.00	0.00	0.00	0.00	19.50	19.50
106.00	6.00	0.00	0.00	0.00	19.50	19.50
107.00	6.00	0.00	0.00	0.00	19.50	19.50
108.00	6.00	0.00	0.00	0.00	19.50	19.50
109.00	6.00	0.00	0.00	0.00	19.50	19.50
110.00	6.00	0.00	0.00	0.00	19.50	19.50
111.00	6.00	0.00	0.00	0.00	19.50	19.50
112.00	6.00	0.00	0.00	0.00	19.50	19.50
113.00	6.00	0.00	0.00	0.00	19.50	19.50
114.00	6.00	0.00	0.00	0.00	19.50	19.50
115.00	6.00	0.00	0.00	0.00	19.50	19.50
116.00	6.00	0.00	0.00	0.00	19.50	19.50
117.00	6.00	0.00	0.00	0.00	19.50	19.50
118.00	6.00	0.00	0.00	0.00	19.50	19.50
119.00	6.00	0.00	0.00	0.00	19.50	19.50
120.00	6.00	0.00	0.00	0.00	19.50	19.50
121.00	6.00	0.00	0.00	0.00	19.50	19.50
122.00	6.00	0.00	0.00	0.00	19.50	19.50
123.00	6.00	0.00	0.00	0.00	19.50	19.50
124.00	6.00	0.00	0.00	0.00	19.50	19.50
125.00	6.00	0.00	0.00	0.00	19.50	19.50
126.00	6.00	0.00	0.00	0.00	19.50	19.50
127.00	6.00	0.00	0.00	0.00	19.50	19.50
128.00	6.00	0.00	0.00	0.00	19.50	19.50
129.00	6.00	0.00	0.00	0.00	19.50	19.50
130.00	6.00	0.00	0.00	0.00	19.50	19.50
131.00	6.00	0.00	0.00	0.00	19.50	19.50
132.00	6.00	0.00	0.00	0.00	19.50	19.50
133.00	6.00	0.00	0.00	0.00	19.50	19.50
134.00	6.00	0.00	0.00	0.00	19.50	19.50
135.00	6.00	0.00	0.00	0.00	19.50	19.50
136.00	6.00	0.00	0.00	0.00	19.50	19.50
137.00	6.00	0.00	0.00	0.00	19.50	19.50
138.00	6.00	0.00	0.00	0.00	19.50	19.50
139.00	6.00	0.00	0.00	0.00	19.50	19.50
140.00	6.00	0.00	0.00	0.00	19.50	19.50
141.00	6.00	0.00	0.00	0.00	19.50	19.50
142.00	6.00	0.00	0.00	0.00	19.50	19.50
143.00	6.00	0.00	0.00	0.00	19.50	19.50
144.00	6.00	0.00	0.00	0.00	19.50	19.50
145.00	6.00	0.00	0.00	0.00	19.50	19.50
146.00	6.00	0.00	0.00	0.00	19.50	19.50
147.00	6.00	0.00	0.00	0.00	19.50	19.50
148.00	6.00	0.00	0.00	0.00	19.50	19.50
149.00	6.00	0.00	0.00	0.00	19.50	19.50
150.00	6.00	0.00	0.00	0.00	19.50	19.50
151.00	6.00	0.00	0.00	0.00	19.50	19.50
152.00	6.00	0.00	0.00	0.00	19.50	19.50
153.00	6.00	0.00	0.00	0.00	19.50	19.50
154.00	6.00	0.00	0.00	0.00	19.50	19.50
155.00	6.00	0.00	0.00	0.00	19.50	19.50
156.00	6.00	0.00	0.00	0.00	19.50	19.50
157.00	6.00	0.00	0.00	0.00	19.50	19.50

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Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
158.00	6.00	0.00	0.00	0.00	19.50	19.50
159.00	6.00	0.00	0.00	0.00	19.50	19.50
160.00	6.00	0.00	0.00	0.00	19.50	19.50
161.00	6.00	0.00	0.00	0.00	19.50	19.50
162.00	6.00	0.00	0.00	0.00	19.50	19.50
163.00	6.00	0.00	0.00	0.00	19.50	19.50
164.00	6.00	0.00	0.00	0.00	19.50	19.50
165.00	6.00	0.00	0.00	0.00	19.50	19.50
166.00	6.00	0.00	0.00	0.00	19.50	19.50
167.00	6.00	0.00	0.00	0.00	19.50	19.50
168.00	6.00	0.00	0.00	0.00	19.50	19.50
169.00	6.00	0.00	0.00	0.00	19.50	19.50
170.00	6.00	0.00	0.00	0.00	19.50	19.50
171.00	6.00	0.00	0.00	0.00	19.50	19.50
172.00	6.00	0.00	0.00	0.00	19.50	19.50
173.00	6.00	0.00	0.00	0.00	19.50	19.50
174.00	6.00	0.00	0.00	0.00	19.50	19.50
175.00	6.00	0.00	0.00	0.00	19.50	19.50
176.00	6.00	0.00	0.00	0.00	19.50	19.50
177.00	6.00	0.00	0.00	0.00	19.50	19.50
178.00	6.00	0.00	0.00	0.00	19.50	19.50
179.00	6.00	0.00	0.00	0.00	19.50	19.50
180.00	6.00	0.00	0.00	0.00	19.50	19.50
181.00	6.00	0.00	0.00	0.00	19.50	19.50
182.00	6.00	0.00	0.00	0.00	19.50	19.50
183.00	6.00	0.00	0.00	0.00	19.50	19.50
184.00	6.00	0.00	0.00	0.00	19.50	19.50
185.00	6.00	0.00	0.00	0.00	19.50	19.50
186.00	6.00	0.00	0.00	0.00	19.50	19.50
187.00	6.00	0.00	0.00	0.00	19.50	19.50
188.00	6.00	0.00	0.00	0.00	19.50	19.50
189.00	6.00	0.00	0.00	0.00	19.50	19.50
190.00	6.00	0.00	0.00	0.00	19.50	19.50
191.00	6.00	0.00	0.00	0.00	19.50	19.50
192.00	6.00	0.00	0.00	0.00	19.50	19.50
193.00	6.00	0.00	0.00	0.00	19.50	19.50
194.00	6.00	0.00	0.00	0.00	19.50	19.50
195.00	6.00	0.00	0.00	0.00	19.50	19.50
196.00	6.00	0.00	0.00	0.00	19.50	19.50
197.00	6.00	0.00	0.00	0.00	19.50	19.50
198.00	6.00	0.00	0.00	0.00	19.50	19.50
199.00	6.00	0.00	0.00	0.00	19.50	19.50
200.00	6.00	0.00	0.00	0.00	19.50	19.50
201.00	6.00	0.00	0.00	0.00	19.50	19.50
202.00	6.00	0.00	0.00	0.00	19.50	19.50
203.00	6.00	0.00	0.00	0.00	19.50	19.50
204.00	6.00	0.00	0.00	0.00	19.50	19.50
205.00	6.00	0.00	0.00	0.00	19.50	19.50
206.00	6.00	0.00	0.00	0.00	19.50	19.50
207.00	6.00	0.00	0.00	0.00	19.50	19.50
208.00	6.00	0.00	0.00	0.00	19.50	19.50
209.00	6.00	0.00	0.00	0.00	19.50	19.50
210.00	6.00	0.00	0.00	0.00	19.50	19.50
211.00	6.00	0.00	0.00	0.00	19.50	19.50
212.00	6.00	0.00	0.00	0.00	19.50	19.50
213.00	6.00	0.00	0.00	0.00	19.50	19.50
214.00	6.00	0.00	0.00	0.00	19.50	19.50
215.00	6.00	0.00	0.00	0.00	19.50	19.50
216.00	6.00	0.00	0.00	0.00	19.50	19.50
217.00	6.00	0.00	0.00	0.00	19.50	19.50
218.00	6.00	0.00	0.00	0.00	19.50	19.50
219.00	6.00	0.00	0.00	0.00	19.50	19.50
220.00	6.00	0.00	0.00	0.00	19.50	19.50
221.00	6.00	0.00	0.00	0.00	19.50	19.50
222.00	6.00	0.00	0.00	0.00	19.50	19.50
223.00	6.00	0.00	0.00	0.00	19.50	19.50
224.00	6.00	0.00	0.00	0.00	19.50	19.50
225.00	6.00	0.00	0.00	0.00	19.50	19.50
226.00	6.00	0.00	0.00	0.00	19.50	19.50

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Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
227.00	6.00	0.00	0.00	0.00	19.50	19.50
228.00	6.00	0.00	0.00	0.00	19.50	19.50
229.00	6.00	0.00	0.00	0.00	19.50	19.50
230.00	6.00	0.00	0.00	0.00	19.50	19.50
231.00	6.00	0.00	0.00	0.00	19.50	19.50
232.00	6.00	0.00	0.00	0.00	19.50	19.50
233.00	6.00	0.00	0.00	0.00	19.50	19.50
234.00	6.00	0.00	0.00	0.00	19.50	19.50
235.00	6.00	0.00	0.00	0.00	19.50	19.50
236.00	6.00	0.00	0.00	0.00	19.50	19.50
237.00	6.00	0.00	0.00	0.00	19.50	19.50
238.00	6.00	0.00	0.00	0.00	19.50	19.50
239.00	6.00	0.00	0.00	0.00	19.50	19.50
240.00	6.00	0.00	0.00	0.00	19.50	19.50
241.00	6.00	0.00	0.00	0.00	19.50	19.50
242.00	6.00	0.00	0.00	0.00	19.50	19.50
243.00	6.00	0.00	0.00	0.00	19.50	19.50
244.00	6.00	0.00	0.00	0.00	19.50	19.50
245.00	6.00	0.00	0.00	0.00	19.50	19.50
246.00	6.00	0.00	0.00	0.00	19.50	19.50
247.00	6.00	0.00	0.00	0.00	19.50	19.50
248.00	6.00	0.00	0.00	0.00	19.50	19.50
249.00	6.00	0.00	0.00	0.00	19.50	19.50
250.00	6.00	0.00	0.00	0.00	19.50	19.50
251.00	6.00	0.00	0.00	0.00	19.50	19.50
252.00	6.00	0.00	0.00	0.00	19.50	19.50
253.00	6.00	0.00	0.00	0.00	19.50	19.50
254.00	6.00	0.00	0.00	0.00	19.50	19.50
255.00	6.00	0.00	0.00	0.00	19.50	19.50
256.00	6.00	0.00	0.00	0.00	19.50	19.50
257.00	6.00	0.00	0.00	0.00	19.50	19.50
258.00	6.00	0.00	0.00	0.00	19.50	19.50
259.00	6.00	0.00	0.00	0.00	19.50	19.50
260.00	6.00	0.00	0.00	0.00	19.50	19.50
261.00	6.00	0.00	0.00	0.00	19.50	19.50
262.00	6.00	0.00	0.00	0.00	19.50	19.50
263.00	6.00	0.00	0.00	0.00	19.50	19.50
264.00	6.00	0.00	0.00	0.00	19.50	19.50
265.00	6.00	0.00	0.00	0.00	19.50	19.50
266.00	6.00	0.00	0.00	0.00	19.50	19.50
267.00	6.00	0.00	0.00	0.00	19.50	19.50
268.00	6.00	0.00	0.00	0.00	19.50	19.50
269.00	6.00	0.00	0.00	0.00	19.50	19.50
270.00	6.00	0.00	0.00	0.00	19.50	19.50
271.00	6.00	0.00	0.00	0.00	19.50	19.50
272.00	6.00	0.00	0.00	0.00	19.50	19.50
273.00	6.00	0.00	0.00	0.00	19.50	19.50
274.00	6.00	0.00	0.00	0.00	19.50	19.50
275.00	6.00	0.00	0.00	0.00	19.50	19.50
276.00	6.00	0.00	0.00	0.00	19.50	19.50
277.00	6.00	0.00	0.00	0.00	19.50	19.50
278.00	6.00	0.00	0.00	0.00	19.50	19.50
279.00	6.00	0.00	0.00	0.00	19.50	19.50
280.00	6.00	0.00	0.00	0.00	19.50	19.50
281.00	6.00	0.00	0.00	0.00	19.50	19.50
282.00	6.00	0.00	0.00	0.00	19.50	19.50
283.00	6.00	0.00	0.00	0.00	19.50	19.50
284.00	6.00	0.00	0.00	0.00	19.50	19.50
285.00	6.00	0.00	0.00	0.00	19.50	19.50
286.00	6.00	0.00	0.00	0.00	19.50	19.50
287.00	6.00	0.00	0.00	0.00	19.50	19.50
288.00	6.00	0.00	0.00	0.00	19.50	19.50

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)
1	0.00	0.00	0.00	0.00

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BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
Youth & Fam	19.50	26.00	18.00	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
Youth & Fam	0.11	0.00	0.00	0.00	0.11	0.00

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Pre-Development
25-Year 3-Day
Storm Event

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1/3/2024

Project Name: Youth & Family
Reviewer:
Project Number: 2228
  Period Begin: Jan 01, 2000;0000 hr End: Jan 13, 2000;0000 hr Duration: 288 hr
  Time Step: 0.2 hr, Iterations: 10

Basin 1: Youth & Fam

  Method: Generalized Unit Hydrograph
  Rainfall Distribution: SFWMD - 3day
  Design Frequency: 25 year
  3 Day Rainfall: 9.5 inches
  Area: 0.52 acres
  Ground Storage: 8.18 inches
  Time of Concentration: 0.25 hours
  Peak Rate Factor: 0
  Initial Stage: 18 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
18.00	0.00
18.50	0.04
19.00	0.17
19.50	0.39

Offsite Receiving Body: S 25th Street

Time (hr)	Stage (ft NGVD)
0.00	19.50
288.00	19.50

Structure: 1

  From Basin: Youth & Fam
  To Basin: S 25th Street
  Structure Type: Gravity
    Weir: Broad Crested, Crest Elev = 19.2 ft NGVD, Length = 6 ft, Weir Coef = 2.6
    Bleeder: None
    Pipe: None

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
0.00	0.00	0.00	-2.56	0.00	18.00	19.50
1.00	0.04	0.00	-2.56	-0.21	19.10	19.50
2.00	0.09	0.00	3.42	-0.32	19.45	19.50
3.00	0.13	0.00	-2.56	-0.36	19.43	19.50
4.00	0.17	0.00	2.56	-0.32	19.43	19.50
5.00	0.21	0.00	-2.56	-0.36	19.43	19.50
6.00	0.26	0.00	2.56	-0.32	19.43	19.50
7.00	0.30	0.00	-2.56	-0.36	19.43	19.50
8.00	0.34	0.00	2.56	-0.32	19.43	19.50
9.00	0.38	0.00	-2.56	-0.36	19.43	19.50
10.00	0.43	0.00	2.56	-0.32	19.43	19.50
11.00	0.47	0.00	-2.56	-0.36	19.43	19.50
12.00	0.51	0.00	2.56	-0.32	19.43	19.50
13.00	0.55	0.00	-2.56	-0.36	19.43	19.50
14.00	0.60	0.00	2.56	-0.32	19.43	19.50
15.00	0.64	0.00	-2.56	-0.36	19.43	19.50
16.00	0.68	0.00	2.56	-0.32	19.43	19.50
17.00	0.72	0.00	-2.56	-0.36	19.43	19.50
18.00	0.77	0.00	2.56	-0.32	19.43	19.50
19.00	0.81	0.00	-2.56	-0.36	19.43	19.50
20.00	0.85	0.00	2.56	-0.32	19.43	19.50
21.00	0.89	0.00	-2.56	-0.36	19.43	19.50
22.00	0.94	0.00	2.56	-0.32	19.43	19.50

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Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
23.00	0.98	0.00	-2.56	-0.36	19.43	19.50
24.00	1.02	0.00	2.56	-0.32	19.43	19.50
25.00	1.08	0.00	-2.56	-0.36	19.43	19.50
26.00	1.14	0.00	2.56	-0.32	19.43	19.50
27.00	1.21	0.00	-2.56	-0.36	19.43	19.50
28.00	1.27	0.00	2.56	-0.32	19.43	19.50
29.00	1.33	0.00	-2.56	-0.36	19.43	19.50
30.00	1.39	0.00	2.56	-0.32	19.43	19.50
31.00	1.45	0.00	-2.56	-0.36	19.43	19.50
32.00	1.52	0.00	2.56	-0.32	19.43	19.50
33.00	1.58	0.00	-2.56	-0.36	19.43	19.50
34.00	1.64	0.00	2.56	-0.32	19.43	19.50
35.00	1.70	0.00	-2.56	-0.36	19.43	19.50
36.00	1.77	0.00	2.56	-0.32	19.43	19.50
37.00	1.83	0.00	-2.56	-0.36	19.43	19.50
38.00	1.89	0.00	2.56	-0.32	19.43	19.50
39.00	1.95	0.00	-2.56	-0.36	19.43	19.50
40.00	2.01	0.00	2.56	-0.32	19.43	19.50
41.00	2.08	0.00	-2.56	-0.36	19.43	19.50
42.00	2.14	0.00	2.56	-0.32	19.43	19.50
43.00	2.20	0.00	-2.56	-0.36	19.43	19.50
44.00	2.26	0.00	2.57	-0.31	19.43	19.50
45.00	2.32	0.00	-2.56	-0.36	19.43	19.50
46.00	2.39	0.01	2.57	-0.31	19.43	19.50
47.00	2.45	0.01	-2.56	-0.36	19.43	19.50
48.00	2.51	0.01	2.57	-0.31	19.43	19.50
49.00	2.58	0.01	-2.56	-0.35	19.43	19.50
50.00	2.65	0.01	2.57	-0.31	19.43	19.50
51.00	2.73	0.01	-2.56	-0.35	19.43	19.50
52.00	2.82	0.01	2.58	-0.31	19.43	19.50
53.00	2.94	0.02	-2.56	-0.35	19.43	19.50
54.00	3.09	0.02	2.60	-0.31	19.43	19.50
55.00	3.26	0.03	-2.56	-0.35	19.43	19.50
56.00	3.47	0.04	2.63	-0.30	19.43	19.50
57.00	3.70	0.05	-2.56	-0.34	19.43	19.50
58.00	4.00	0.06	2.68	-0.29	19.43	19.50
59.00	4.39	0.10	-2.56	-0.33	19.43	19.50
60.00	7.10	1.26	3.75	-0.26	19.47	19.50
61.00	7.87	0.23	-2.53	-0.26	19.45	19.50
62.00	8.23	0.12	2.83	-0.19	19.43	19.50
63.00	8.45	0.08	-2.56	-0.23	19.43	19.50
64.00	8.66	0.08	2.71	-0.18	19.43	19.50
65.00	8.79	0.05	-2.56	-0.22	19.43	19.50
66.00	8.91	0.05	2.65	-0.17	19.43	19.50
67.00	9.04	0.05	-2.56	-0.21	19.43	19.50
68.00	9.16	0.05	2.65	-0.16	19.43	19.50
69.00	9.25	0.03	-2.56	-0.20	19.43	19.50
70.00	9.33	0.03	2.62	-0.16	19.43	19.50
71.00	9.42	0.03	-2.56	-0.20	19.43	19.50
72.00	9.50	0.03	2.62	-0.15	19.43	19.50
73.00	9.50	0.00	-2.56	-0.19	19.43	19.50
74.00	9.50	0.00	2.56	-0.15	19.43	19.50
75.00	9.50	0.00	-2.56	-0.19	19.43	19.50
76.00	9.50	0.00	2.56	-0.15	19.43	19.50
77.00	9.50	0.00	-2.56	-0.19	19.43	19.50
78.00	9.50	0.00	2.56	-0.15	19.43	19.50
79.00	9.50	0.00	-2.56	-0.19	19.43	19.50
80.00	9.50	0.00	2.56	-0.15	19.43	19.50
81.00	9.50	0.00	-2.56	-0.19	19.43	19.50
82.00	9.50	0.00	2.56	-0.15	19.43	19.50
83.00	9.50	0.00	-2.56	-0.19	19.43	19.50
84.00	9.50	0.00	2.56	-0.15	19.43	19.50
85.00	9.50	0.00	-2.56	-0.19	19.43	19.50
86.00	9.50	0.00	2.56	-0.15	19.43	19.50
87.00	9.50	0.00	-2.56	-0.19	19.43	19.50
88.00	9.50	0.00	2.56	-0.15	19.43	19.50
89.00	9.50	0.00	-2.56	-0.19	19.43	19.50
90.00	9.50	0.00	2.56	-0.15	19.43	19.50
91.00	9.50	0.00	-2.56	-0.19	19.43	19.50

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Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
92.00	9.50	0.00	2.56	-0.15	19.43	19.50
93.00	9.50	0.00	-2.56	-0.19	19.43	19.50
94.00	9.50	0.00	2.56	-0.15	19.43	19.50
95.00	9.50	0.00	-2.56	-0.19	19.43	19.50
96.00	9.50	0.00	2.56	-0.15	19.43	19.50
97.00	9.50	0.00	-2.56	-0.19	19.43	19.50
98.00	9.50	0.00	2.56	-0.15	19.43	19.50
99.00	9.50	0.00	-2.56	-0.19	19.43	19.50
100.00	9.50	0.00	2.56	-0.15	19.43	19.50
101.00	9.50	0.00	-2.56	-0.19	19.43	19.50
102.00	9.50	0.00	2.56	-0.15	19.43	19.50
103.00	9.50	0.00	-2.56	-0.19	19.43	19.50
104.00	9.50	0.00	2.56	-0.15	19.43	19.50
105.00	9.50	0.00	-2.56	-0.19	19.43	19.50
106.00	9.50	0.00	2.56	-0.15	19.43	19.50
107.00	9.50	0.00	-2.56	-0.19	19.43	19.50
108.00	9.50	0.00	2.56	-0.15	19.43	19.50
109.00	9.50	0.00	-2.56	-0.19	19.43	19.50
110.00	9.50	0.00	2.56	-0.15	19.43	19.50
111.00	9.50	0.00	-2.56	-0.19	19.43	19.50
112.00	9.50	0.00	2.56	-0.15	19.43	19.50
113.00	9.50	0.00	-2.56	-0.19	19.43	19.50
114.00	9.50	0.00	2.56	-0.15	19.43	19.50
115.00	9.50	0.00	-2.56	-0.19	19.43	19.50
116.00	9.50	0.00	2.56	-0.15	19.43	19.50
117.00	9.50	0.00	-2.56	-0.19	19.43	19.50
118.00	9.50	0.00	2.56	-0.15	19.43	19.50
119.00	9.50	0.00	-2.56	-0.19	19.43	19.50
120.00	9.50	0.00	2.56	-0.15	19.43	19.50
121.00	9.50	0.00	-2.56	-0.19	19.43	19.50
122.00	9.50	0.00	2.56	-0.15	19.43	19.50
123.00	9.50	0.00	-2.56	-0.19	19.43	19.50
124.00	9.50	0.00	2.56	-0.15	19.43	19.50
125.00	9.50	0.00	-2.56	-0.19	19.43	19.50
126.00	9.50	0.00	2.56	-0.15	19.43	19.50
127.00	9.50	0.00	-2.56	-0.19	19.43	19.50
128.00	9.50	0.00	2.56	-0.15	19.43	19.50
129.00	9.50	0.00	-2.56	-0.19	19.43	19.50
130.00	9.50	0.00	2.56	-0.15	19.43	19.50
131.00	9.50	0.00	-2.56	-0.19	19.43	19.50
132.00	9.50	0.00	2.56	-0.15	19.43	19.50
133.00	9.50	0.00	-2.56	-0.19	19.43	19.50
134.00	9.50	0.00	2.56	-0.15	19.43	19.50
135.00	9.50	0.00	-2.56	-0.19	19.43	19.50
136.00	9.50	0.00	2.56	-0.15	19.43	19.50
137.00	9.50	0.00	-2.56	-0.19	19.43	19.50
138.00	9.50	0.00	2.56	-0.15	19.43	19.50
139.00	9.50	0.00	-2.56	-0.19	19.43	19.50
140.00	9.50	0.00	2.56	-0.15	19.43	19.50
141.00	9.50	0.00	-2.56	-0.19	19.43	19.50
142.00	9.50	0.00	2.56	-0.15	19.43	19.50
143.00	9.50	0.00	-2.56	-0.19	19.43	19.50
144.00	9.50	0.00	2.56	-0.15	19.43	19.50
145.00	9.50	0.00	-2.56	-0.19	19.43	19.50
146.00	9.50	0.00	2.56	-0.15	19.43	19.50
147.00	9.50	0.00	-2.56	-0.19	19.43	19.50
148.00	9.50	0.00	2.56	-0.15	19.43	19.50
149.00	9.50	0.00	-2.56	-0.19	19.43	19.50
150.00	9.50	0.00	2.56	-0.15	19.43	19.50
151.00	9.50	0.00	-2.56	-0.19	19.43	19.50
152.00	9.50	0.00	2.56	-0.15	19.43	19.50
153.00	9.50	0.00	-2.56	-0.19	19.43	19.50
154.00	9.50	0.00	2.56	-0.15	19.43	19.50
155.00	9.50	0.00	-2.56	-0.19	19.43	19.50
156.00	9.50	0.00	2.56	-0.15	19.43	19.50
157.00	9.50	0.00	-2.56	-0.19	19.43	19.50
158.00	9.50	0.00	2.56	-0.15	19.43	19.50
159.00	9.50	0.00	-2.56	-0.19	19.43	19.50
160.00	9.50	0.00	2.56	-0.15	19.43	19.50

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Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
161.00	9.50	0.00	-2.56	-0.19	19.43	19.50
162.00	9.50	0.00	2.56	-0.15	19.43	19.50
163.00	9.50	0.00	-2.56	-0.19	19.43	19.50
164.00	9.50	0.00	2.56	-0.15	19.43	19.50
165.00	9.50	0.00	-2.56	-0.19	19.43	19.50
166.00	9.50	0.00	2.56	-0.15	19.43	19.50
167.00	9.50	0.00	-2.56	-0.19	19.43	19.50
168.00	9.50	0.00	2.56	-0.15	19.43	19.50
169.00	9.50	0.00	-2.56	-0.19	19.43	19.50
170.00	9.50	0.00	2.56	-0.15	19.43	19.50
171.00	9.50	0.00	-2.56	-0.19	19.43	19.50
172.00	9.50	0.00	2.56	-0.15	19.43	19.50
173.00	9.50	0.00	-2.56	-0.19	19.43	19.50
174.00	9.50	0.00	2.56	-0.15	19.43	19.50
175.00	9.50	0.00	-2.56	-0.19	19.43	19.50
176.00	9.50	0.00	2.56	-0.15	19.43	19.50
177.00	9.50	0.00	-2.56	-0.19	19.43	19.50
178.00	9.50	0.00	2.56	-0.15	19.43	19.50
179.00	9.50	0.00	-2.56	-0.19	19.43	19.50
180.00	9.50	0.00	2.56	-0.15	19.43	19.50
181.00	9.50	0.00	-2.56	-0.19	19.43	19.50
182.00	9.50	0.00	2.56	-0.15	19.43	19.50
183.00	9.50	0.00	-2.56	-0.19	19.43	19.50
184.00	9.50	0.00	2.56	-0.15	19.43	19.50
185.00	9.50	0.00	-2.56	-0.19	19.43	19.50
186.00	9.50	0.00	2.56	-0.15	19.43	19.50
187.00	9.50	0.00	-2.56	-0.19	19.43	19.50
188.00	9.50	0.00	2.56	-0.15	19.43	19.50
189.00	9.50	0.00	-2.56	-0.19	19.43	19.50
190.00	9.50	0.00	2.56	-0.15	19.43	19.50
191.00	9.50	0.00	-2.56	-0.19	19.43	19.50
192.00	9.50	0.00	2.56	-0.15	19.43	19.50
193.00	9.50	0.00	-2.56	-0.19	19.43	19.50
194.00	9.50	0.00	2.56	-0.15	19.43	19.50
195.00	9.50	0.00	-2.56	-0.19	19.43	19.50
196.00	9.50	0.00	2.56	-0.15	19.43	19.50
197.00	9.50	0.00	-2.56	-0.19	19.43	19.50
198.00	9.50	0.00	2.56	-0.15	19.43	19.50
199.00	9.50	0.00	-2.56	-0.19	19.43	19.50
200.00	9.50	0.00	2.56	-0.15	19.43	19.50
201.00	9.50	0.00	-2.56	-0.19	19.43	19.50
202.00	9.50	0.00	2.56	-0.15	19.43	19.50
203.00	9.50	0.00	-2.56	-0.19	19.43	19.50
204.00	9.50	0.00	2.56	-0.15	19.43	19.50
205.00	9.50	0.00	-2.56	-0.19	19.43	19.50
206.00	9.50	0.00	2.56	-0.15	19.43	19.50
207.00	9.50	0.00	-2.56	-0.19	19.43	19.50
208.00	9.50	0.00	2.56	-0.15	19.43	19.50
209.00	9.50	0.00	-2.56	-0.19	19.43	19.50
210.00	9.50	0.00	2.56	-0.15	19.43	19.50
211.00	9.50	0.00	-2.56	-0.19	19.43	19.50
212.00	9.50	0.00	2.56	-0.15	19.43	19.50
213.00	9.50	0.00	-2.56	-0.19	19.43	19.50
214.00	9.50	0.00	2.56	-0.15	19.43	19.50
215.00	9.50	0.00	-2.56	-0.19	19.43	19.50
216.00	9.50	0.00	2.56	-0.15	19.43	19.50
217.00	9.50	0.00	-2.56	-0.19	19.43	19.50
218.00	9.50	0.00	2.56	-0.15	19.43	19.50
219.00	9.50	0.00	-2.56	-0.19	19.43	19.50
220.00	9.50	0.00	2.56	-0.15	19.43	19.50
221.00	9.50	0.00	-2.56	-0.19	19.43	19.50
222.00	9.50	0.00	2.56	-0.15	19.43	19.50
223.00	9.50	0.00	-2.56	-0.19	19.43	19.50
224.00	9.50	0.00	2.56	-0.15	19.43	19.50
225.00	9.50	0.00	-2.56	-0.19	19.43	19.50
226.00	9.50	0.00	2.56	-0.15	19.43	19.50
227.00	9.50	0.00	-2.56	-0.19	19.43	19.50
228.00	9.50	0.00	2.56	-0.15	19.43	19.50
229.00	9.50	0.00	-2.56	-0.19	19.43	19.50

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Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
230.00	9.50	0.00	2.56	-0.15	19.43	19.50
231.00	9.50	0.00	-2.56	-0.19	19.43	19.50
232.00	9.50	0.00	2.56	-0.15	19.43	19.50
233.00	9.50	0.00	-2.56	-0.19	19.43	19.50
234.00	9.50	0.00	2.56	-0.15	19.43	19.50
235.00	9.50	0.00	-2.56	-0.19	19.43	19.50
236.00	9.50	0.00	2.56	-0.15	19.43	19.50
237.00	9.50	0.00	-2.56	-0.19	19.43	19.50
238.00	9.50	0.00	2.56	-0.15	19.43	19.50
239.00	9.50	0.00	-2.56	-0.19	19.43	19.50
240.00	9.50	0.00	2.56	-0.15	19.43	19.50
241.00	9.50	0.00	-2.56	-0.19	19.43	19.50
242.00	9.50	0.00	2.56	-0.15	19.43	19.50
243.00	9.50	0.00	-2.56	-0.19	19.43	19.50
244.00	9.50	0.00	2.56	-0.15	19.43	19.50
245.00	9.50	0.00	-2.56	-0.19	19.43	19.50
246.00	9.50	0.00	2.56	-0.15	19.43	19.50
247.00	9.50	0.00	-2.56	-0.19	19.43	19.50
248.00	9.50	0.00	2.56	-0.15	19.43	19.50
249.00	9.50	0.00	-2.56	-0.19	19.43	19.50
250.00	9.50	0.00	2.56	-0.15	19.43	19.50
251.00	9.50	0.00	-2.56	-0.19	19.43	19.50
252.00	9.50	0.00	2.56	-0.15	19.43	19.50
253.00	9.50	0.00	-2.56	-0.19	19.43	19.50
254.00	9.50	0.00	2.56	-0.15	19.43	19.50
255.00	9.50	0.00	-2.56	-0.19	19.43	19.50
256.00	9.50	0.00	2.56	-0.15	19.43	19.50
257.00	9.50	0.00	-2.56	-0.19	19.43	19.50
258.00	9.50	0.00	2.56	-0.15	19.43	19.50
259.00	9.50	0.00	-2.56	-0.19	19.43	19.50
260.00	9.50	0.00	2.56	-0.15	19.43	19.50
261.00	9.50	0.00	-2.56	-0.19	19.43	19.50
262.00	9.50	0.00	2.56	-0.15	19.43	19.50
263.00	9.50	0.00	-2.56	-0.19	19.43	19.50
264.00	9.50	0.00	2.56	-0.15	19.43	19.50
265.00	9.50	0.00	-2.56	-0.19	19.43	19.50
266.00	9.50	0.00	2.56	-0.15	19.43	19.50
267.00	9.50	0.00	-2.56	-0.19	19.43	19.50
268.00	9.50	0.00	2.56	-0.15	19.43	19.50
269.00	9.50	0.00	-2.56	-0.19	19.43	19.50
270.00	9.50	0.00	2.56	-0.15	19.43	19.50
271.00	9.50	0.00	-2.56	-0.19	19.43	19.50
272.00	9.50	0.00	2.56	-0.15	19.43	19.50
273.00	9.50	0.00	-2.56	-0.19	19.43	19.50
274.00	9.50	0.00	2.56	-0.15	19.43	19.50
275.00	9.50	0.00	-2.56	-0.19	19.43	19.50
276.00	9.50	0.00	2.56	-0.15	19.43	19.50
277.00	9.50	0.00	-2.56	-0.19	19.43	19.50
278.00	9.50	0.00	2.56	-0.15	19.43	19.50
279.00	9.50	0.00	-2.56	-0.19	19.43	19.50
280.00	9.50	0.00	2.56	-0.15	19.43	19.50
281.00	9.50	0.00	-2.56	-0.19	19.43	19.50
282.00	9.50	0.00	2.56	-0.15	19.43	19.50
283.00	9.50	0.00	-2.56	-0.19	19.43	19.50
284.00	9.50	0.00	2.56	-0.15	19.43	19.50
285.00	9.50	0.00	-2.56	-0.19	19.43	19.50
286.00	9.50	0.00	2.56	-0.15	19.43	19.50
287.00	9.50	0.00	-2.56	-0.19	19.43	19.50
288.00	9.50	0.00	2.56	-0.15	19.43	19.50

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)
1	3.77	60.40	-2.56	0.00

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BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
Youth & Fam	19.48	60.20	18.00	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
Youth & Fam	0.17	0.00	-0.17	0.00	0.36	-0.02

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1/3/2024

Post Development
25-Year 3-Day
Storm Event

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1/3/2024

Project Name: Youth & Family
Reviewer:
Project Number: 2228
  Period Begin: Jan 01, 2000;0000 hr End: Jan 13, 2000;0000 hr Duration: 288 hr
  Time Step: 0.2 hr, Iterations: 10

Basin 1: Youth & Fam

  Method: Generalized Unit Hydrograph
  Rainfall Distribution: SFWMD - 3day
  Design Frequency: 25 year
  3 Day Rainfall: 9.5 inches
  Area: 0.52 acres
  Ground Storage: 4.84 inches
  Time of Concentration: 0.25 hours
  Peak Rate Factor: 0
  Initial Stage: 18 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
18.00	0.00
18.50	0.02
19.00	0.04
19.50	0.10
20.00	0.26
20.50	0.44
21.00	0.64

Offsite Receiving Body: S 25th Street

Time (hr)	Stage (ft NGVD)
0.00	19.50
288.00	19.50

Structure: 1

  From Basin: Youth & Fam
  To Basin: S 25th Street
  Structure Type: Gravity
    Weir: Broad Crested, Crest Elev = 20.5 ft NGVD, Length = 24 ft, Weir Coef = 2.6
    Bleeder: None
    Pipe: None

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
0.00	0.00	0.00	0.00	0.00	18.00	19.50
1.00	0.04	0.00	0.00	0.00	18.00	19.50
2.00	0.09	0.00	0.00	0.00	18.00	19.50
3.00	0.13	0.00	0.00	0.00	18.00	19.50
4.00	0.17	0.00	0.00	0.00	18.00	19.50
5.00	0.21	0.00	0.00	0.00	18.00	19.50
6.00	0.26	0.00	0.00	0.00	18.00	19.50
7.00	0.30	0.00	0.00	0.00	18.00	19.50
8.00	0.34	0.00	0.00	0.00	18.00	19.50
9.00	0.38	0.00	0.00	0.00	18.00	19.50
10.00	0.43	0.00	0.00	0.00	18.00	19.50
11.00	0.47	0.00	0.00	0.00	18.00	19.50
12.00	0.51	0.00	0.00	0.00	18.00	19.50
13.00	0.55	0.00	0.00	0.00	18.00	19.50
14.00	0.60	0.00	0.00	0.00	18.00	19.50
15.00	0.64	0.00	0.00	0.00	18.00	19.50
16.00	0.68	0.00	0.00	0.00	18.00	19.50
17.00	0.72	0.00	0.00	0.00	18.00	19.50
18.00	0.77	0.00	0.00	0.00	18.00	19.50
19.00	0.81	0.00	0.00	0.00	18.00	19.50

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Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
20.00	0.85	0.00	0.00	0.00	18.00	19.50
21.00	0.89	0.00	0.00	0.00	18.00	19.50
22.00	0.94	0.00	0.00	0.00	18.00	19.50
23.00	0.98	0.00	0.00	0.00	18.00	19.50
24.00	1.02	0.00	0.00	0.00	18.00	19.50
25.00	1.08	0.00	0.00	0.00	18.00	19.50
26.00	1.14	0.00	0.00	0.00	18.01	19.50
27.00	1.21	0.00	0.00	0.00	18.01	19.50
28.00	1.27	0.00	0.00	0.00	18.02	19.50
29.00	1.33	0.00	0.00	0.00	18.03	19.50
30.00	1.39	0.00	0.00	0.00	18.03	19.50
31.00	1.45	0.01	0.00	0.00	18.05	19.50
32.00	1.52	0.01	0.00	0.00	18.06	19.50
33.00	1.58	0.01	0.00	0.00	18.07	19.50
34.00	1.64	0.01	0.00	0.00	18.09	19.50
35.00	1.70	0.01	0.00	0.00	18.10	19.50
36.00	1.77	0.01	0.00	0.00	18.12	19.50
37.00	1.83	0.01	0.00	0.00	18.14	19.50
38.00	1.89	0.01	0.00	0.00	18.15	19.50
39.00	1.95	0.01	0.00	0.00	18.17	19.50
40.00	2.01	0.01	0.00	0.00	18.20	19.50
41.00	2.08	0.01	0.00	0.00	18.22	19.50
42.00	2.14	0.01	0.00	0.00	18.24	19.50
43.00	2.20	0.01	0.00	0.00	18.26	19.50
44.00	2.26	0.01	0.00	0.00	18.29	19.50
45.00	2.32	0.01	0.00	0.00	18.31	19.50
46.00	2.39	0.01	0.00	0.00	18.34	19.50
47.00	2.45	0.01	0.00	0.00	18.37	19.50
48.00	2.51	0.01	0.00	0.00	18.40	19.50
49.00	2.58	0.02	0.00	0.00	18.43	19.50
50.00	2.65	0.02	0.00	0.00	18.46	19.50
51.00	2.73	0.02	0.00	0.00	18.50	19.50
52.00	2.82	0.02	0.00	0.00	18.54	19.50
53.00	2.94	0.03	0.00	0.00	18.60	19.50
54.00	3.09	0.04	0.00	0.00	18.68	19.50
55.00	3.26	0.05	0.00	0.00	18.77	19.50
56.00	3.47	0.06	0.00	0.00	18.89	19.50
57.00	3.70	0.08	0.00	0.00	19.01	19.50
58.00	4.00	0.10	0.00	0.00	19.07	19.50
59.00	4.39	0.15	0.00	0.00	19.15	19.50
60.00	7.10	1.65	0.00	0.00	19.54	19.50
61.00	7.87	0.28	0.00	0.00	19.72	19.50
62.00	8.23	0.15	0.00	0.00	19.77	19.50
63.00	8.45	0.10	0.00	0.00	19.80	19.50
64.00	8.66	0.09	0.00	0.00	19.82	19.50
65.00	8.79	0.06	0.00	0.00	19.84	19.50
66.00	8.91	0.06	0.00	0.00	19.85	19.50
67.00	9.04	0.06	0.00	0.00	19.87	19.50
68.00	9.16	0.06	0.00	0.00	19.88	19.50
69.00	9.25	0.04	0.00	0.00	19.89	19.50
70.00	9.33	0.04	0.00	0.00	19.90	19.50
71.00	9.42	0.04	0.00	0.00	19.91	19.50
72.00	9.50	0.04	0.00	0.00	19.92	19.50
73.00	9.50	0.00	0.00	0.00	19.92	19.50
74.00	9.50	0.00	0.00	0.00	19.92	19.50
75.00	9.50	0.00	0.00	0.00	19.92	19.50
76.00	9.50	0.00	0.00	0.00	19.92	19.50
77.00	9.50	0.00	0.00	0.00	19.92	19.50
78.00	9.50	0.00	0.00	0.00	19.92	19.50
79.00	9.50	0.00	0.00	0.00	19.92	19.50
80.00	9.50	0.00	0.00	0.00	19.92	19.50
81.00	9.50	0.00	0.00	0.00	19.92	19.50
82.00	9.50	0.00	0.00	0.00	19.92	19.50
83.00	9.50	0.00	0.00	0.00	19.92	19.50
84.00	9.50	0.00	0.00	0.00	19.92	19.50
85.00	9.50	0.00	0.00	0.00	19.92	19.50
86.00	9.50	0.00	0.00	0.00	19.92	19.50
87.00	9.50	0.00	0.00	0.00	19.92	19.50
88.00	9.50	0.00	0.00	0.00	19.92	19.50

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Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
89.00	9.50	0.00	0.00	0.00	19.92	19.50
90.00	9.50	0.00	0.00	0.00	19.92	19.50
91.00	9.50	0.00	0.00	0.00	19.92	19.50
92.00	9.50	0.00	0.00	0.00	19.92	19.50
93.00	9.50	0.00	0.00	0.00	19.92	19.50
94.00	9.50	0.00	0.00	0.00	19.92	19.50
95.00	9.50	0.00	0.00	0.00	19.92	19.50
96.00	9.50	0.00	0.00	0.00	19.92	19.50
97.00	9.50	0.00	0.00	0.00	19.92	19.50
98.00	9.50	0.00	0.00	0.00	19.92	19.50
99.00	9.50	0.00	0.00	0.00	19.92	19.50
100.00	9.50	0.00	0.00	0.00	19.92	19.50
101.00	9.50	0.00	0.00	0.00	19.92	19.50
102.00	9.50	0.00	0.00	0.00	19.92	19.50
103.00	9.50	0.00	0.00	0.00	19.92	19.50
104.00	9.50	0.00	0.00	0.00	19.92	19.50
105.00	9.50	0.00	0.00	0.00	19.92	19.50
106.00	9.50	0.00	0.00	0.00	19.92	19.50
107.00	9.50	0.00	0.00	0.00	19.92	19.50
108.00	9.50	0.00	0.00	0.00	19.92	19.50
109.00	9.50	0.00	0.00	0.00	19.92	19.50
110.00	9.50	0.00	0.00	0.00	19.92	19.50
111.00	9.50	0.00	0.00	0.00	19.92	19.50
112.00	9.50	0.00	0.00	0.00	19.92	19.50
113.00	9.50	0.00	0.00	0.00	19.92	19.50
114.00	9.50	0.00	0.00	0.00	19.92	19.50
115.00	9.50	0.00	0.00	0.00	19.92	19.50
116.00	9.50	0.00	0.00	0.00	19.92	19.50
117.00	9.50	0.00	0.00	0.00	19.92	19.50
118.00	9.50	0.00	0.00	0.00	19.92	19.50
119.00	9.50	0.00	0.00	0.00	19.92	19.50
120.00	9.50	0.00	0.00	0.00	19.92	19.50
121.00	9.50	0.00	0.00	0.00	19.92	19.50
122.00	9.50	0.00	0.00	0.00	19.92	19.50
123.00	9.50	0.00	0.00	0.00	19.92	19.50
124.00	9.50	0.00	0.00	0.00	19.92	19.50
125.00	9.50	0.00	0.00	0.00	19.92	19.50
126.00	9.50	0.00	0.00	0.00	19.92	19.50
127.00	9.50	0.00	0.00	0.00	19.92	19.50
128.00	9.50	0.00	0.00	0.00	19.92	19.50
129.00	9.50	0.00	0.00	0.00	19.92	19.50
130.00	9.50	0.00	0.00	0.00	19.92	19.50
131.00	9.50	0.00	0.00	0.00	19.92	19.50
132.00	9.50	0.00	0.00	0.00	19.92	19.50
133.00	9.50	0.00	0.00	0.00	19.92	19.50
134.00	9.50	0.00	0.00	0.00	19.92	19.50
135.00	9.50	0.00	0.00	0.00	19.92	19.50
136.00	9.50	0.00	0.00	0.00	19.92	19.50
137.00	9.50	0.00	0.00	0.00	19.92	19.50
138.00	9.50	0.00	0.00	0.00	19.92	19.50
139.00	9.50	0.00	0.00	0.00	19.92	19.50
140.00	9.50	0.00	0.00	0.00	19.92	19.50
141.00	9.50	0.00	0.00	0.00	19.92	19.50
142.00	9.50	0.00	0.00	0.00	19.92	19.50
143.00	9.50	0.00	0.00	0.00	19.92	19.50
144.00	9.50	0.00	0.00	0.00	19.92	19.50
145.00	9.50	0.00	0.00	0.00	19.92	19.50
146.00	9.50	0.00	0.00	0.00	19.92	19.50
147.00	9.50	0.00	0.00	0.00	19.92	19.50
148.00	9.50	0.00	0.00	0.00	19.92	19.50
149.00	9.50	0.00	0.00	0.00	19.92	19.50
150.00	9.50	0.00	0.00	0.00	19.92	19.50
151.00	9.50	0.00	0.00	0.00	19.92	19.50
152.00	9.50	0.00	0.00	0.00	19.92	19.50
153.00	9.50	0.00	0.00	0.00	19.92	19.50
154.00	9.50	0.00	0.00	0.00	19.92	19.50
155.00	9.50	0.00	0.00	0.00	19.92	19.50
156.00	9.50	0.00	0.00	0.00	19.92	19.50
157.00	9.50	0.00	0.00	0.00	19.92	19.50

Approved
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Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
158.00	9.50	0.00	0.00	0.00	19.92	19.50
159.00	9.50	0.00	0.00	0.00	19.92	19.50
160.00	9.50	0.00	0.00	0.00	19.92	19.50
161.00	9.50	0.00	0.00	0.00	19.92	19.50
162.00	9.50	0.00	0.00	0.00	19.92	19.50
163.00	9.50	0.00	0.00	0.00	19.92	19.50
164.00	9.50	0.00	0.00	0.00	19.92	19.50
165.00	9.50	0.00	0.00	0.00	19.92	19.50
166.00	9.50	0.00	0.00	0.00	19.92	19.50
167.00	9.50	0.00	0.00	0.00	19.92	19.50
168.00	9.50	0.00	0.00	0.00	19.92	19.50
169.00	9.50	0.00	0.00	0.00	19.92	19.50
170.00	9.50	0.00	0.00	0.00	19.92	19.50
171.00	9.50	0.00	0.00	0.00	19.92	19.50
172.00	9.50	0.00	0.00	0.00	19.92	19.50
173.00	9.50	0.00	0.00	0.00	19.92	19.50
174.00	9.50	0.00	0.00	0.00	19.92	19.50
175.00	9.50	0.00	0.00	0.00	19.92	19.50
176.00	9.50	0.00	0.00	0.00	19.92	19.50
177.00	9.50	0.00	0.00	0.00	19.92	19.50
178.00	9.50	0.00	0.00	0.00	19.92	19.50
179.00	9.50	0.00	0.00	0.00	19.92	19.50
180.00	9.50	0.00	0.00	0.00	19.92	19.50
181.00	9.50	0.00	0.00	0.00	19.92	19.50
182.00	9.50	0.00	0.00	0.00	19.92	19.50
183.00	9.50	0.00	0.00	0.00	19.92	19.50
184.00	9.50	0.00	0.00	0.00	19.92	19.50
185.00	9.50	0.00	0.00	0.00	19.92	19.50
186.00	9.50	0.00	0.00	0.00	19.92	19.50
187.00	9.50	0.00	0.00	0.00	19.92	19.50
188.00	9.50	0.00	0.00	0.00	19.92	19.50
189.00	9.50	0.00	0.00	0.00	19.92	19.50
190.00	9.50	0.00	0.00	0.00	19.92	19.50
191.00	9.50	0.00	0.00	0.00	19.92	19.50
192.00	9.50	0.00	0.00	0.00	19.92	19.50
193.00	9.50	0.00	0.00	0.00	19.92	19.50
194.00	9.50	0.00	0.00	0.00	19.92	19.50
195.00	9.50	0.00	0.00	0.00	19.92	19.50
196.00	9.50	0.00	0.00	0.00	19.92	19.50
197.00	9.50	0.00	0.00	0.00	19.92	19.50
198.00	9.50	0.00	0.00	0.00	19.92	19.50
199.00	9.50	0.00	0.00	0.00	19.92	19.50
200.00	9.50	0.00	0.00	0.00	19.92	19.50
201.00	9.50	0.00	0.00	0.00	19.92	19.50
202.00	9.50	0.00	0.00	0.00	19.92	19.50
203.00	9.50	0.00	0.00	0.00	19.92	19.50
204.00	9.50	0.00	0.00	0.00	19.92	19.50
205.00	9.50	0.00	0.00	0.00	19.92	19.50
206.00	9.50	0.00	0.00	0.00	19.92	19.50
207.00	9.50	0.00	0.00	0.00	19.92	19.50
208.00	9.50	0.00	0.00	0.00	19.92	19.50
209.00	9.50	0.00	0.00	0.00	19.92	19.50
210.00	9.50	0.00	0.00	0.00	19.92	19.50
211.00	9.50	0.00	0.00	0.00	19.92	19.50
212.00	9.50	0.00	0.00	0.00	19.92	19.50
213.00	9.50	0.00	0.00	0.00	19.92	19.50
214.00	9.50	0.00	0.00	0.00	19.92	19.50
215.00	9.50	0.00	0.00	0.00	19.92	19.50
216.00	9.50	0.00	0.00	0.00	19.92	19.50
217.00	9.50	0.00	0.00	0.00	19.92	19.50
218.00	9.50	0.00	0.00	0.00	19.92	19.50
219.00	9.50	0.00	0.00	0.00	19.92	19.50
220.00	9.50	0.00	0.00	0.00	19.92	19.50
221.00	9.50	0.00	0.00	0.00	19.92	19.50
222.00	9.50	0.00	0.00	0.00	19.92	19.50
223.00	9.50	0.00	0.00	0.00	19.92	19.50
224.00	9.50	0.00	0.00	0.00	19.92	19.50
225.00	9.50	0.00	0.00	0.00	19.92	19.50
226.00	9.50	0.00	0.00	0.00	19.92	19.50

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Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
227.00	9.50	0.00	0.00	0.00	19.92	19.50
228.00	9.50	0.00	0.00	0.00	19.92	19.50
229.00	9.50	0.00	0.00	0.00	19.92	19.50
230.00	9.50	0.00	0.00	0.00	19.92	19.50
231.00	9.50	0.00	0.00	0.00	19.92	19.50
232.00	9.50	0.00	0.00	0.00	19.92	19.50
233.00	9.50	0.00	0.00	0.00	19.92	19.50
234.00	9.50	0.00	0.00	0.00	19.92	19.50
235.00	9.50	0.00	0.00	0.00	19.92	19.50
236.00	9.50	0.00	0.00	0.00	19.92	19.50
237.00	9.50	0.00	0.00	0.00	19.92	19.50
238.00	9.50	0.00	0.00	0.00	19.92	19.50
239.00	9.50	0.00	0.00	0.00	19.92	19.50
240.00	9.50	0.00	0.00	0.00	19.92	19.50
241.00	9.50	0.00	0.00	0.00	19.92	19.50
242.00	9.50	0.00	0.00	0.00	19.92	19.50
243.00	9.50	0.00	0.00	0.00	19.92	19.50
244.00	9.50	0.00	0.00	0.00	19.92	19.50
245.00	9.50	0.00	0.00	0.00	19.92	19.50
246.00	9.50	0.00	0.00	0.00	19.92	19.50
247.00	9.50	0.00	0.00	0.00	19.92	19.50
248.00	9.50	0.00	0.00	0.00	19.92	19.50
249.00	9.50	0.00	0.00	0.00	19.92	19.50
250.00	9.50	0.00	0.00	0.00	19.92	19.50
251.00	9.50	0.00	0.00	0.00	19.92	19.50
252.00	9.50	0.00	0.00	0.00	19.92	19.50
253.00	9.50	0.00	0.00	0.00	19.92	19.50
254.00	9.50	0.00	0.00	0.00	19.92	19.50
255.00	9.50	0.00	0.00	0.00	19.92	19.50
256.00	9.50	0.00	0.00	0.00	19.92	19.50
257.00	9.50	0.00	0.00	0.00	19.92	19.50
258.00	9.50	0.00	0.00	0.00	19.92	19.50
259.00	9.50	0.00	0.00	0.00	19.92	19.50
260.00	9.50	0.00	0.00	0.00	19.92	19.50
261.00	9.50	0.00	0.00	0.00	19.92	19.50
262.00	9.50	0.00	0.00	0.00	19.92	19.50
263.00	9.50	0.00	0.00	0.00	19.92	19.50
264.00	9.50	0.00	0.00	0.00	19.92	19.50
265.00	9.50	0.00	0.00	0.00	19.92	19.50
266.00	9.50	0.00	0.00	0.00	19.92	19.50
267.00	9.50	0.00	0.00	0.00	19.92	19.50
268.00	9.50	0.00	0.00	0.00	19.92	19.50
269.00	9.50	0.00	0.00	0.00	19.92	19.50
270.00	9.50	0.00	0.00	0.00	19.92	19.50
271.00	9.50	0.00	0.00	0.00	19.92	19.50
272.00	9.50	0.00	0.00	0.00	19.92	19.50
273.00	9.50	0.00	0.00	0.00	19.92	19.50
274.00	9.50	0.00	0.00	0.00	19.92	19.50
275.00	9.50	0.00	0.00	0.00	19.92	19.50
276.00	9.50	0.00	0.00	0.00	19.92	19.50
277.00	9.50	0.00	0.00	0.00	19.92	19.50
278.00	9.50	0.00	0.00	0.00	19.92	19.50
279.00	9.50	0.00	0.00	0.00	19.92	19.50
280.00	9.50	0.00	0.00	0.00	19.92	19.50
281.00	9.50	0.00	0.00	0.00	19.92	19.50
282.00	9.50	0.00	0.00	0.00	19.92	19.50
283.00	9.50	0.00	0.00	0.00	19.92	19.50
284.00	9.50	0.00	0.00	0.00	19.92	19.50
285.00	9.50	0.00	0.00	0.00	19.92	19.50
286.00	9.50	0.00	0.00	0.00	19.92	19.50
287.00	9.50	0.00	0.00	0.00	19.92	19.50
288.00	9.50	0.00	0.00	0.00	19.92	19.50

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)
1	0.00	0.00	0.00	0.00

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
Youth & Fam	19.92	74.00	18.00	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
Youth & Fam	0.24	0.00	0.00	0.00	0.24	0.00

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Georgi Celusnek
1/3/2024

100-Year 3-Day Storm Event

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

Project Name: Youth & Family
Reviewer:
Project Number: 2228
  Period Begin: Jan 01, 2000;0000 hr End: Jan 13, 2000;0000 hr Duration: 288 hr
  Time Step: 0.2 hr, Iterations: 10

Basin 1: Youth & Fam

  Method: Generalized Unit Hydrograph
  Rainfall Distribution: SFWMD - 3day
  Design Frequency: 100 year
  3 Day Rainfall: 12.23 inches
  Area: 0.52 acres
  Ground Storage: 4.84 inches
  Time of Concentration: 0.25 hours
  Peak Rate Factor: 0
  Initial Stage: 18 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
18.00	0.00
18.50	0.02
19.00	0.04
19.50	0.10
20.00	0.26
20.50	0.44
21.00	0.64

Offsite Receiving Body: S 25th Street

Time (hr)	Stage (ft NGVD)
0.00	19.50
288.00	19.50

Structure: 1

  From Basin: Youth & Fam
  To Basin: S 25th Street
  Structure Type: Gravity
    Weir: Broad Crested, Crest Elev = 120.5 ft NGVD, Length = 24 ft, Weir Coef = 2.6
    Bleeder: None
    Pipe: None

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
0.00	0.00	0.00	0.00	0.00	18.00	19.50
1.00	0.05	0.00	0.00	0.00	18.00	19.50
2.00	0.11	0.00	0.00	0.00	18.00	19.50
3.00	0.16	0.00	0.00	0.00	18.00	19.50
4.00	0.22	0.00	0.00	0.00	18.00	19.50
5.00	0.27	0.00	0.00	0.00	18.00	19.50
6.00	0.33	0.00	0.00	0.00	18.00	19.50
7.00	0.38	0.00	0.00	0.00	18.00	19.50
8.00	0.44	0.00	0.00	0.00	18.00	19.50
9.00	0.49	0.00	0.00	0.00	18.00	19.50
10.00	0.55	0.00	0.00	0.00	18.00	19.50
11.00	0.60	0.00	0.00	0.00	18.00	19.50
12.00	0.66	0.00	0.00	0.00	18.00	19.50
13.00	0.71	0.00	0.00	0.00	18.00	19.50
14.00	0.77	0.00	0.00	0.00	18.00	19.50
15.00	0.82	0.00	0.00	0.00	18.00	19.50
16.00	0.88	0.00	0.00	0.00	18.00	19.50
17.00	0.93	0.00	0.00	0.00	18.00	19.50
18.00	0.99	0.00	0.00	0.00	18.00	19.50
19.00	1.04	0.00	0.00	0.00	18.00	19.50

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Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
20.00	1.09	0.00	0.00	0.00	18.00	19.50
21.00	1.15	0.00	0.00	0.00	18.01	19.50
22.00	1.20	0.00	0.00	0.00	18.01	19.50
23.00	1.26	0.00	0.00	0.00	18.02	19.50
24.00	1.31	0.00	0.00	0.00	18.02	19.50
25.00	1.39	0.01	0.00	0.00	18.03	19.50
26.00	1.47	0.01	0.00	0.00	18.05	19.50
27.00	1.55	0.01	0.00	0.00	18.06	19.50
28.00	1.63	0.01	0.00	0.00	18.08	19.50
29.00	1.71	0.01	0.00	0.00	18.10	19.50
30.00	1.79	0.01	0.00	0.00	18.12	19.50
31.00	1.87	0.01	0.00	0.00	18.15	19.50
32.00	1.95	0.01	0.00	0.00	18.17	19.50
33.00	2.03	0.01	0.00	0.00	18.20	19.50
34.00	2.11	0.01	0.00	0.00	18.23	19.50
35.00	2.19	0.02	0.00	0.00	18.26	19.50
36.00	2.27	0.02	0.00	0.00	18.29	19.50
37.00	2.35	0.02	0.00	0.00	18.32	19.50
38.00	2.43	0.02	0.00	0.00	18.36	19.50
39.00	2.51	0.02	0.00	0.00	18.39	19.50
40.00	2.59	0.02	0.00	0.00	18.43	19.50
41.00	2.67	0.02	0.00	0.00	18.47	19.50
42.00	2.75	0.02	0.00	0.00	18.51	19.50
43.00	2.83	0.02	0.00	0.00	18.55	19.50
44.00	2.91	0.02	0.00	0.00	18.59	19.50
45.00	2.99	0.02	0.00	0.00	18.63	19.50
46.00	3.07	0.02	0.00	0.00	18.68	19.50
47.00	3.15	0.02	0.00	0.00	18.72	19.50
48.00	3.23	0.02	0.00	0.00	18.77	19.50
49.00	3.32	0.03	0.00	0.00	18.82	19.50
50.00	3.41	0.03	0.00	0.00	18.87	19.50
51.00	3.52	0.03	0.00	0.00	18.94	19.50
52.00	3.64	0.04	0.00	0.00	19.00	19.50
53.00	3.79	0.05	0.00	0.00	19.03	19.50
54.00	3.98	0.06	0.00	0.00	19.07	19.50
55.00	4.20	0.08	0.00	0.00	19.12	19.50
56.00	4.46	0.09	0.00	0.00	19.18	19.50
57.00	4.77	0.11	0.00	0.00	19.25	19.50
58.00	5.15	0.14	0.00	0.00	19.34	19.50
59.00	5.65	0.21	0.00	0.00	19.46	19.50
60.00	9.13	2.31	0.00	0.00	19.72	19.50
61.00	10.13	0.39	0.00	0.00	19.97	19.50
62.00	10.59	0.20	0.00	0.00	20.04	19.50
63.00	10.88	0.13	0.00	0.00	20.07	19.50
64.00	11.15	0.13	0.00	0.00	20.10	19.50
65.00	11.31	0.08	0.00	0.00	20.12	19.50
66.00	11.47	0.08	0.00	0.00	20.14	19.50
67.00	11.64	0.08	0.00	0.00	20.16	19.50
68.00	11.80	0.08	0.00	0.00	20.17	19.50
69.00	11.91	0.05	0.00	0.00	20.19	19.50
70.00	12.01	0.05	0.00	0.00	20.20	19.50
71.00	12.12	0.05	0.00	0.00	20.21	19.50
72.00	12.23	0.05	0.00	0.00	20.22	19.50
73.00	12.23	0.00	0.00	0.00	20.23	19.50
74.00	12.23	0.00	0.00	0.00	20.23	19.50
75.00	12.23	0.00	0.00	0.00	20.23	19.50
76.00	12.23	0.00	0.00	0.00	20.23	19.50
77.00	12.23	0.00	0.00	0.00	20.23	19.50
78.00	12.23	0.00	0.00	0.00	20.23	19.50
79.00	12.23	0.00	0.00	0.00	20.23	19.50
80.00	12.23	0.00	0.00	0.00	20.23	19.50
81.00	12.23	0.00	0.00	0.00	20.23	19.50
82.00	12.23	0.00	0.00	0.00	20.23	19.50
83.00	12.23	0.00	0.00	0.00	20.23	19.50
84.00	12.23	0.00	0.00	0.00	20.23	19.50
85.00	12.23	0.00	0.00	0.00	20.23	19.50
86.00	12.23	0.00	0.00	0.00	20.23	19.50
87.00	12.23	0.00	0.00	0.00	20.23	19.50
88.00	12.23	0.00	0.00	0.00	20.23	19.50

Approved
2023-D-0-00043
George Celusnek
1/3/2024

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
89.00	12.23	0.00	0.00	0.00	20.23	19.50
90.00	12.23	0.00	0.00	0.00	20.23	19.50
91.00	12.23	0.00	0.00	0.00	20.23	19.50
92.00	12.23	0.00	0.00	0.00	20.23	19.50
93.00	12.23	0.00	0.00	0.00	20.23	19.50
94.00	12.23	0.00	0.00	0.00	20.23	19.50
95.00	12.23	0.00	0.00	0.00	20.23	19.50
96.00	12.23	0.00	0.00	0.00	20.23	19.50
97.00	12.23	0.00	0.00	0.00	20.23	19.50
98.00	12.23	0.00	0.00	0.00	20.23	19.50
99.00	12.23	0.00	0.00	0.00	20.23	19.50
100.00	12.23	0.00	0.00	0.00	20.23	19.50
101.00	12.23	0.00	0.00	0.00	20.23	19.50
102.00	12.23	0.00	0.00	0.00	20.23	19.50
103.00	12.23	0.00	0.00	0.00	20.23	19.50
104.00	12.23	0.00	0.00	0.00	20.23	19.50
105.00	12.23	0.00	0.00	0.00	20.23	19.50
106.00	12.23	0.00	0.00	0.00	20.23	19.50
107.00	12.23	0.00	0.00	0.00	20.23	19.50
108.00	12.23	0.00	0.00	0.00	20.23	19.50
109.00	12.23	0.00	0.00	0.00	20.23	19.50
110.00	12.23	0.00	0.00	0.00	20.23	19.50
111.00	12.23	0.00	0.00	0.00	20.23	19.50
112.00	12.23	0.00	0.00	0.00	20.23	19.50
113.00	12.23	0.00	0.00	0.00	20.23	19.50
114.00	12.23	0.00	0.00	0.00	20.23	19.50
115.00	12.23	0.00	0.00	0.00	20.23	19.50
116.00	12.23	0.00	0.00	0.00	20.23	19.50
117.00	12.23	0.00	0.00	0.00	20.23	19.50
118.00	12.23	0.00	0.00	0.00	20.23	19.50
119.00	12.23	0.00	0.00	0.00	20.23	19.50
120.00	12.23	0.00	0.00	0.00	20.23	19.50
121.00	12.23	0.00	0.00	0.00	20.23	19.50
122.00	12.23	0.00	0.00	0.00	20.23	19.50
123.00	12.23	0.00	0.00	0.00	20.23	19.50
124.00	12.23	0.00	0.00	0.00	20.23	19.50
125.00	12.23	0.00	0.00	0.00	20.23	19.50
126.00	12.23	0.00	0.00	0.00	20.23	19.50
127.00	12.23	0.00	0.00	0.00	20.23	19.50
128.00	12.23	0.00	0.00	0.00	20.23	19.50
129.00	12.23	0.00	0.00	0.00	20.23	19.50
130.00	12.23	0.00	0.00	0.00	20.23	19.50
131.00	12.23	0.00	0.00	0.00	20.23	19.50
132.00	12.23	0.00	0.00	0.00	20.23	19.50
133.00	12.23	0.00	0.00	0.00	20.23	19.50
134.00	12.23	0.00	0.00	0.00	20.23	19.50
135.00	12.23	0.00	0.00	0.00	20.23	19.50
136.00	12.23	0.00	0.00	0.00	20.23	19.50
137.00	12.23	0.00	0.00	0.00	20.23	19.50
138.00	12.23	0.00	0.00	0.00	20.23	19.50
139.00	12.23	0.00	0.00	0.00	20.23	19.50
140.00	12.23	0.00	0.00	0.00	20.23	19.50
141.00	12.23	0.00	0.00	0.00	20.23	19.50
142.00	12.23	0.00	0.00	0.00	20.23	19.50
143.00	12.23	0.00	0.00	0.00	20.23	19.50
144.00	12.23	0.00	0.00	0.00	20.23	19.50
145.00	12.23	0.00	0.00	0.00	20.23	19.50
146.00	12.23	0.00	0.00	0.00	20.23	19.50
147.00	12.23	0.00	0.00	0.00	20.23	19.50
148.00	12.23	0.00	0.00	0.00	20.23	19.50
149.00	12.23	0.00	0.00	0.00	20.23	19.50
150.00	12.23	0.00	0.00	0.00	20.23	19.50
151.00	12.23	0.00	0.00	0.00	20.23	19.50
152.00	12.23	0.00	0.00	0.00	20.23	19.50
153.00	12.23	0.00	0.00	0.00	20.23	19.50
154.00	12.23	0.00	0.00	0.00	20.23	19.50
155.00	12.23	0.00	0.00	0.00	20.23	19.50
156.00	12.23	0.00	0.00	0.00	20.23	19.50
157.00	12.23	0.00	0.00	0.00	20.23	19.50

Approved
2023-D-0000-00043
George Celusnek
1/3/2024

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
158.00	12.23	0.00	0.00	0.00	20.23	19.50
159.00	12.23	0.00	0.00	0.00	20.23	19.50
160.00	12.23	0.00	0.00	0.00	20.23	19.50
161.00	12.23	0.00	0.00	0.00	20.23	19.50
162.00	12.23	0.00	0.00	0.00	20.23	19.50
163.00	12.23	0.00	0.00	0.00	20.23	19.50
164.00	12.23	0.00	0.00	0.00	20.23	19.50
165.00	12.23	0.00	0.00	0.00	20.23	19.50
166.00	12.23	0.00	0.00	0.00	20.23	19.50
167.00	12.23	0.00	0.00	0.00	20.23	19.50
168.00	12.23	0.00	0.00	0.00	20.23	19.50
169.00	12.23	0.00	0.00	0.00	20.23	19.50
170.00	12.23	0.00	0.00	0.00	20.23	19.50
171.00	12.23	0.00	0.00	0.00	20.23	19.50
172.00	12.23	0.00	0.00	0.00	20.23	19.50
173.00	12.23	0.00	0.00	0.00	20.23	19.50
174.00	12.23	0.00	0.00	0.00	20.23	19.50
175.00	12.23	0.00	0.00	0.00	20.23	19.50
176.00	12.23	0.00	0.00	0.00	20.23	19.50
177.00	12.23	0.00	0.00	0.00	20.23	19.50
178.00	12.23	0.00	0.00	0.00	20.23	19.50
179.00	12.23	0.00	0.00	0.00	20.23	19.50
180.00	12.23	0.00	0.00	0.00	20.23	19.50
181.00	12.23	0.00	0.00	0.00	20.23	19.50
182.00	12.23	0.00	0.00	0.00	20.23	19.50
183.00	12.23	0.00	0.00	0.00	20.23	19.50
184.00	12.23	0.00	0.00	0.00	20.23	19.50
185.00	12.23	0.00	0.00	0.00	20.23	19.50
186.00	12.23	0.00	0.00	0.00	20.23	19.50
187.00	12.23	0.00	0.00	0.00	20.23	19.50
188.00	12.23	0.00	0.00	0.00	20.23	19.50
189.00	12.23	0.00	0.00	0.00	20.23	19.50
190.00	12.23	0.00	0.00	0.00	20.23	19.50
191.00	12.23	0.00	0.00	0.00	20.23	19.50
192.00	12.23	0.00	0.00	0.00	20.23	19.50
193.00	12.23	0.00	0.00	0.00	20.23	19.50
194.00	12.23	0.00	0.00	0.00	20.23	19.50
195.00	12.23	0.00	0.00	0.00	20.23	19.50
196.00	12.23	0.00	0.00	0.00	20.23	19.50
197.00	12.23	0.00	0.00	0.00	20.23	19.50
198.00	12.23	0.00	0.00	0.00	20.23	19.50
199.00	12.23	0.00	0.00	0.00	20.23	19.50
200.00	12.23	0.00	0.00	0.00	20.23	19.50
201.00	12.23	0.00	0.00	0.00	20.23	19.50
202.00	12.23	0.00	0.00	0.00	20.23	19.50
203.00	12.23	0.00	0.00	0.00	20.23	19.50
204.00	12.23	0.00	0.00	0.00	20.23	19.50
205.00	12.23	0.00	0.00	0.00	20.23	19.50
206.00	12.23	0.00	0.00	0.00	20.23	19.50
207.00	12.23	0.00	0.00	0.00	20.23	19.50
208.00	12.23	0.00	0.00	0.00	20.23	19.50
209.00	12.23	0.00	0.00	0.00	20.23	19.50
210.00	12.23	0.00	0.00	0.00	20.23	19.50
211.00	12.23	0.00	0.00	0.00	20.23	19.50
212.00	12.23	0.00	0.00	0.00	20.23	19.50
213.00	12.23	0.00	0.00	0.00	20.23	19.50
214.00	12.23	0.00	0.00	0.00	20.23	19.50
215.00	12.23	0.00	0.00	0.00	20.23	19.50
216.00	12.23	0.00	0.00	0.00	20.23	19.50
217.00	12.23	0.00	0.00	0.00	20.23	19.50
218.00	12.23	0.00	0.00	0.00	20.23	19.50
219.00	12.23	0.00	0.00	0.00	20.23	19.50
220.00	12.23	0.00	0.00	0.00	20.23	19.50
221.00	12.23	0.00	0.00	0.00	20.23	19.50
222.00	12.23	0.00	0.00	0.00	20.23	19.50
223.00	12.23	0.00	0.00	0.00	20.23	19.50
224.00	12.23	0.00	0.00	0.00	20.23	19.50
225.00	12.23	0.00	0.00	0.00	20.23	19.50
226.00	12.23	0.00	0.00	0.00	20.23	19.50

Approved
2023-D-0-00043
George Celusnek
1/3/2024

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
227.00	12.23	0.00	0.00	0.00	20.23	19.50
228.00	12.23	0.00	0.00	0.00	20.23	19.50
229.00	12.23	0.00	0.00	0.00	20.23	19.50
230.00	12.23	0.00	0.00	0.00	20.23	19.50
231.00	12.23	0.00	0.00	0.00	20.23	19.50
232.00	12.23	0.00	0.00	0.00	20.23	19.50
233.00	12.23	0.00	0.00	0.00	20.23	19.50
234.00	12.23	0.00	0.00	0.00	20.23	19.50
235.00	12.23	0.00	0.00	0.00	20.23	19.50
236.00	12.23	0.00	0.00	0.00	20.23	19.50
237.00	12.23	0.00	0.00	0.00	20.23	19.50
238.00	12.23	0.00	0.00	0.00	20.23	19.50
239.00	12.23	0.00	0.00	0.00	20.23	19.50
240.00	12.23	0.00	0.00	0.00	20.23	19.50
241.00	12.23	0.00	0.00	0.00	20.23	19.50
242.00	12.23	0.00	0.00	0.00	20.23	19.50
243.00	12.23	0.00	0.00	0.00	20.23	19.50
244.00	12.23	0.00	0.00	0.00	20.23	19.50
245.00	12.23	0.00	0.00	0.00	20.23	19.50
246.00	12.23	0.00	0.00	0.00	20.23	19.50
247.00	12.23	0.00	0.00	0.00	20.23	19.50
248.00	12.23	0.00	0.00	0.00	20.23	19.50
249.00	12.23	0.00	0.00	0.00	20.23	19.50
250.00	12.23	0.00	0.00	0.00	20.23	19.50
251.00	12.23	0.00	0.00	0.00	20.23	19.50
252.00	12.23	0.00	0.00	0.00	20.23	19.50
253.00	12.23	0.00	0.00	0.00	20.23	19.50
254.00	12.23	0.00	0.00	0.00	20.23	19.50
255.00	12.23	0.00	0.00	0.00	20.23	19.50
256.00	12.23	0.00	0.00	0.00	20.23	19.50
257.00	12.23	0.00	0.00	0.00	20.23	19.50
258.00	12.23	0.00	0.00	0.00	20.23	19.50
259.00	12.23	0.00	0.00	0.00	20.23	19.50
260.00	12.23	0.00	0.00	0.00	20.23	19.50
261.00	12.23	0.00	0.00	0.00	20.23	19.50
262.00	12.23	0.00	0.00	0.00	20.23	19.50
263.00	12.23	0.00	0.00	0.00	20.23	19.50
264.00	12.23	0.00	0.00	0.00	20.23	19.50
265.00	12.23	0.00	0.00	0.00	20.23	19.50
266.00	12.23	0.00	0.00	0.00	20.23	19.50
267.00	12.23	0.00	0.00	0.00	20.23	19.50
268.00	12.23	0.00	0.00	0.00	20.23	19.50
269.00	12.23	0.00	0.00	0.00	20.23	19.50
270.00	12.23	0.00	0.00	0.00	20.23	19.50
271.00	12.23	0.00	0.00	0.00	20.23	19.50
272.00	12.23	0.00	0.00	0.00	20.23	19.50
273.00	12.23	0.00	0.00	0.00	20.23	19.50
274.00	12.23	0.00	0.00	0.00	20.23	19.50
275.00	12.23	0.00	0.00	0.00	20.23	19.50
276.00	12.23	0.00	0.00	0.00	20.23	19.50
277.00	12.23	0.00	0.00	0.00	20.23	19.50
278.00	12.23	0.00	0.00	0.00	20.23	19.50
279.00	12.23	0.00	0.00	0.00	20.23	19.50
280.00	12.23	0.00	0.00	0.00	20.23	19.50
281.00	12.23	0.00	0.00	0.00	20.23	19.50
282.00	12.23	0.00	0.00	0.00	20.23	19.50
283.00	12.23	0.00	0.00	0.00	20.23	19.50
284.00	12.23	0.00	0.00	0.00	20.23	19.50
285.00	12.23	0.00	0.00	0.00	20.23	19.50
286.00	12.23	0.00	0.00	0.00	20.23	19.50
287.00	12.23	0.00	0.00	0.00	20.23	19.50
288.00	12.23	0.00	0.00	0.00	20.23	19.50

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)
1	0.00	0.00	0.00	0.00

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
Youth & Fam	20.23	74.20	18.00	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
Youth & Fam	0.34	0.00	0.00	0.00	0.34	0.00

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

PART 3 – Certification by Applicant

I hereby certify that the information in this submittal is complete and accurate to the best of my knowledge.

Applicant's Signature: _____ Date: 12.22.23

Name (Printed): JERRY COMPTON

Title and Company: Sr. Project Manager, CREECH CONSULTING

Address: PO Box 327, Stuart, Florida 34995

Phone Number: (772) 215-1434 ext. _____ E-mail address: jcompton@creech.consulting

PART 4 – Owner's Authorization of a Representative

I (we), the owner, JEAN MONVAL, do hereby authorize the following person, or entity, as my representative:

Name (Printed): JERRY COMPTON

Title and Company: Sr. Project Manager, CREECH CONSULTING

Address: PO Box 327, Stuart, Florida 34995

Phone Number: (772) 215-1434 ext. _____ E-mail address: jcompton@creech.consulting

Part 5 – Affidavit of Property Ownership or Control and Statement of Contiguous Interest

I, JEAN MONVAL, certify that I own or lawfully control the following described property:

Does the property owner own or have any interests in any adjacent property?

☑ No ☐ Yes If yes, please describe.

Owner's Signature required for Parts 4 and/or 5

We will not begin on the drainage connection until I receive the Permit and I understand all the conditions of the Permit. When work begins on the connection, I am accepting all conditions listed in the Permit.

Name (Printed): Jean Monval

Address: 2011 S. 25th Street, Fort Pierce, Florida 34947

Phone Number: (772) 242-1079 ext. _____

Signature: _____ Date: 11/9/2023

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

PART 2 – Certification by a Licensed Professional

In accordance with Rule 14-86, Florida Administrative Code (F.A.C.), I hereby certify that the following requirements are and/or will be met.

This project has been designed in compliance with all applicable water quality design standards as required by state or federal governmental entity(ies).

14-86.004(3)(f) (F.A.C.): Certification by a Licensed Professional that the complete set of plans and computations complies with one of the following Rules Sections:

☑ 14-86.003(2)(a) (F.A.C.), or ☐ 14-86.003(2)(b) (F.A.C). (check one)

I further certify that a National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharges associated with industrial activity from construction sites

☐ is required ☑ is not required. (check one)

I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

This certification shall remain valid for any subsequent revision or submittal of plans, computation or other project documents by me.

Name of Licensed Professional: Richard Creech

Florida License Number: 38592

Company Name (if applicable): Creech Consulting, Inc

Certificate of Authorization Number (if applicable): _____

Address: PO Box 327

City: Stuart State: Florida Zip: 34995

Telephone: (772) 485-2140 ext. _____ Fax: _____ Email: rtcreech@creech.consulting

RICHARD THOMAS CREECH LICENSE NO. 38592 STATE OF FLORIDA PROFESSIONAL ENGINEER

Signature of Licensed Professional

Date

(Affix Seal)

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

WHITESTONE
An Employee-Owned Company

8405 BENJAMIN ROAD
SUITE J
TAMPA, FLORIDA 33634
813.851.0690
whitestoneassoc.com

REPORT OF GEOTECHNICAL INVESTIGATION

PROPOSED YOUTH AND FAMILY BEHAVIORAL HEALTH CENTER
1211 SOUTH 25TH STREET
FORT PIERCE, ST. LUCIE COUNTY, FLORIDA







Prepared for:

YOUTH AND FAMILY BEHAVIORAL HEALTH CENTER, INC.
2011 South 25th Street
Suite 108
Fort Pierce, Florida 34947

Prepared by:

WHITESTONE ASSOCIATES, INC.
8405 Benjamin Road
Suite J
Tampa, Florida 33634

Kevin A. Feath, P.E.
Principal

Nicholas Rajcoomar, E.I.T.
Geotechnical Engineer

Whitestone Project No.: GF2319913.000
January 27, 2023

Approved
2023-D-490-00043
Georgi Celusnek
1/3/2024

WHITESTONE
An Employee-Owned Company

8405 BENJAMIN ROAD
SUITE J
TAMPA, FLORIDA 33634
813.851.0690
whitestoneassoc.com

January 27, 2023

via email

YOUTH AND FAMILY BEHAVIORAL HEALTH CENTER, INC.
2011 South 25th Street
Suite 108
Fort Pierce, Florida 34947

Attention: Dr. Jean Monval
President

Regarding: GEOTECHNICAL INVESTIGATION
PROPOSED YOUTH AND FAMILY BEHAVIORAL HEALTH CENTER
1211 SOUTH 25TH STREET
FORT PIERCE, ST. LUCIE COUNTY, FLORIDA
WHITESTONE PROJECT NO.: GF2319913.000

Dear Dr. Monval:

Whitestone Associates, Inc. (Whitestone) is pleased to submit the attached *Report of Geotechnical Investigation* for the above-referenced project. The attached report presents the results of Whitestone's soils exploration efforts and presents recommendations for design of the proposed structural foundations, floor slab, pavements, stormwater management (SWM) areas, utilities, and related earthwork associated with the proposed site development.

Whitestone's geotechnical division appreciates the opportunity to be of service to Youth and Family Behavioral Health Center, Inc. (YFBHC). Please note that Whitestone has the capability to conduct the additional geotechnical engineering services recommended herein. Please contact us at (813) 851-0690 with any questions regarding the enclosed report.

Sincerely,

WHITESTONE ASSOCIATES, INC.

Nicholas Rajcoomar, E.I.T.
Geotechnical Engineer

Kevin A. Feath, P.E.
Principal

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Enclosures
Copy: Jerry Compton, Creech Consulting, Inc.
Laurence W. Keller, P.E., Whitestone Associates, Inc.

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Georgi Celusnek
1/3/2024

REPORT OF GEOTECHNICAL INVESTIGATION

Proposed Youth and Family Behavioral Health Center
1211 South 25th Street
Fort Pierce, St. Lucie County, Florida

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Proposed Youth and Family Behavioral Health Center
1211 South 25th Street
Fort Pierce, St. Lucie County, Florida

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SECTION 1.0
Summary of Findings and Recommendations

An exploration and evaluation of the subsurface conditions has been conducted on the site of the proposed Youth and Family Behavioral Health Center located at 1211 South 25th Street in Fort Pierce, St. Lucie County, Florida. The site of the proposed construction is shown on the *Test Location Plan* included as Figure 1.

Topographic information was not provided at the time of this report, however, based on visual observation during field investigation, the proposed development area generally is flatlying with a maximum grade change of less than one foot.

Based on the August 2, 2022 *Conceptual Master Site Plan #1* prepared by Creech Consulting, Inc. (Creech), the proposed site development includes construction of an approximately 4,886-square feet single-story office building with associated trash enclosure, pavements, stormwater management (SWM) rain garden, landscaping, and utilities. The proposed building is anticipated to be a metal- and concrete-framed structure with a ground-supported floor slab. No earth retaining walls are planned. Detailed grading has not been finalized, however, based on existing site grades, Whitestone anticipates that the site will be developed at or near existing site elevations, with the exception of the SWM rain garden, with maximum cuts and fills of less than one foot.

The geotechnical investigation included conducting a reconnaissance of the project site, drilling soil borings, conducting in-situ infiltration testing, and collecting soil samples for laboratory analysis. The data from this exploration and analysis were analyzed by Whitestone in light of the project information provided by YFBHC and Creech.

A summary of Whitestone's findings is presented in the following table and detailed descriptions of the subsurface conditions encountered are presented in Section 4.0.

Subsurface Profile	Description	Bottom of Stratum (fbgs)
Surface Cover	Approximately three inches of surficial topsoil was encountered at the boring locations.	0.3
Coastal Plain Marine Deposits	Generally consisting of sand with lesser amounts of silt and/or clay (USCS: SP, SP-SM, and SC). The coastal plain marine deposits extended to the maximum boring termination depth of approximately 25 fbgs.	+25.0
Groundwater	Static groundwater was encountered at depths ranging between approximately 9.5 fbgs and 11.0 fbgs.	9.5 to 11.0

Notes: fbgs – feet below ground surface.

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Recommendations developed upon consideration of these findings are summarized in the table below and presented in greater detail in the indicated sections of the report.

Geotechnical Consideration	Recommendations	Report Section
Foundation System	Shallow spread and continuous footings bearing on improved and approved natural soils and/or imported structural fill.	5.5
Floor Slab & Pavements	The improved and approved natural site soils are anticipated to be suitable for a ground-supported floor slabs and pavements following compaction efforts and proofroll inspections.	5.6
Groundwater Control	Static groundwater is not anticipated to be encountered during foundations construction. However, removal of perched/trapped water should be anticipated within excavations for foundations and utilities.	5.4
On-Site Soil Reuse	The vast majority natural site soils are anticipated to be suitable for reuse as structural fill and/or backfill provided and that moisture levels are maintained within three percent of optimum moisture content and any deleterious debris encountered is removed.	5.3
Sinkhole Potential	The subject site is underlain by limestone bedrock, which is water soluble and may be susceptible to solution cavities and void formation that can result in surficial depressions or sinkholes. However, the results of the subsurface investigation did not identify conditions typically indicative of an elevated risk for sinkhole development, e.g., subsurface voids and/or solution channels.	5.2

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SECTION 2.0
Introduction

2.1 AUTHORIZATION

Dr. Jean Monval of YFBHC issued authorization to Whitestone to conduct a geotechnical investigation on this site relevant to the construction of the proposed development. The geotechnical investigation was conducted in accordance with Whitestone's November 3, 2022 proposal to YFBHC.

2.2 PURPOSE

The purpose of this subsurface exploration and analysis was to:

- ascertain the various soil profile components at test locations;
- estimate the engineering characteristics of the proposed foundation bearing and subgrade materials;
- provide geotechnical criteria for use by the design engineers in preparing the foundation, slab, pavement, and SWM;
- provide recommendations for required earthwork and subgrade preparation;
- record groundwater and bedrock levels (if encountered) at the time of the investigation and discuss the potential impact on the proposed construction; and
- recommend additional investigation and/or analysis (if warranted).

2.3 SCOPE

The scope of the exploration and analysis included the subsurface exploration, field testing and sampling, laboratory analysis, an engineering analysis and evaluation of the foundation materials. This *Report of Geotechnical Investigation* is limited to addressing the site conditions related to the physical support of the proposed construction. Any references to suspicious odors, materials, or conditions are provided strictly for the client's information.

2.3.1 Field Exploration

Field exploration of the project site was conducted by means of seven soil borings (identified as B-1 through B-7) and one infiltration test (identified as P-1) at the boring B-7 location. The soil borings were advanced with a track-mounted Diedrick rig using hollow-stem augers and split-spoon sampling techniques. The

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subsurface tests were backfilled with excavated soils generated from the investigation. The test locations are shown on the *Test Location Plan* included as Figure 1. *Records of Subsurface Exploration* are provided in Appendix A.

The soil borings and infiltration test were conducted in the presence of a Whitestone engineer who conducted field tests, recorded visual classifications, and collected samples of the various strata encountered. The test areas were located in the field using normal taping procedures and estimated right angles, and a hand-held global positioning system (GPS) unit. These locations are presumed to be accurate within a few feet.

Soil borings and Standard Penetration Tests (SPTs) were conducted in general accordance with ASTM International (ASTM) designation D-1586. The SPT resistance value (N) can be used as an indicator of the consistency of fine-grained soils and the relative density of coarse-grained soils. The N-value for various soil types can be correlated with the engineering behavior of earthworks and foundations.

Groundwater level observations, where encountered, were recorded during and immediately after the completion of field operations prior to backfilling the borings. Groundwater elevations derived from sources other than seasonally observed groundwater monitor wells may not be representative of true groundwater levels.

2.3.2 Laboratory Program

In addition to the field investigation, a laboratory program was conducted to determine additional, pertinent engineering characteristics of representative samples of on-site soils. The laboratory program was conducted in general accordance with applicable ASTM standard test methods and included physical testing of proposed building foundation bearing and pavement subgrade stratum.

Physical/Textural Analyses: Representative samples of selected strata encountered were subjected to a laboratory testing program that included Atterberg limits determinations (ASTM D-4318), moisture content determinations (ASTM D-2216) and particle size analysis through the No. 200 sieve (ASTM D-1140) in order to conduct supplementary engineering soil classifications in general accordance with ASTM D-2487. The soil strata tested were classified by the Unified Soil Classification System (USCS) and results of the laboratory testing are summarized in the following table. Quantitative test results are provided in Appendix B.

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PHYSICAL/TEXTURAL ANALYSES SUMMARY							
Boring No.	**Sample**	**Depth (fbgs)**	**% Passing No. 200 Sieve**	**Moisture Content (%)**	**Liquid Limit**	**Plastic Index**	**USCS Classification**
B-1	S-1	0.3 - 2.0	1.9	2.7	Non-Plastic		SP
B-2	S-2	2.0 - 4.0	3.7	9.3	Non-Plastic		SP
B-7	S-4	6.0 - 8.0	14.6	14.8	24	11	SC

Notes: fbgs – feet below ground surface.

The engineering classifications are useful when considered in conjunction with the additional site data to estimate properties of the soil types encountered and to predict the soil's behavior under construction and service loads.

Organic Content Analyses: A representative sample of a suspected organic stratum was tested for organic content by the Loss on Ignition (LOI) method of testing (ASTM D-2974). The results of the laboratory testing program are presented in tabular format in the following table. Quantitative test results are provided in Appendix B.

ORGANIC CONTENT TESTING SUMMARY				
Boring No.	**Sample**	**Depth (fbgs)**	**USCS Classification**	**Organic Content (%)**
B-2	S-2	2.0 - 4.0	SP	3.6

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SECTION 3.0
Site Description

3.1 LOCATION AND DESCRIPTION

The subject site located at 1211 South 25th Street in Fort Pierce, St. Lucie County, Florida is further identified as St. Lucie County Parcel ID Nos.: 2417-503-0040-000-2 & 2417-507-0005-000-7. At the time of Whitestone's site investigation, the site consisted of vacant grass-covered parcels with trees. The site is bound to the north by a single-family residential development followed by the intersection of Acorn Street and South 25th Street, to the east by South 25th Street followed by a Family Dollar retail store development, to the south by the Conviva Care Center and the Family Oral Health Associates developments, and to the west by single-family residential developments followed by Acorn Street. The location of the site is shown on the *Test Location Plan* included as Figure 1.

3.2 EXISTING CONDITIONS

Previous Site Development: Based on a review of historic aerial photographs dating back to 1969, the subject site housed an unidentified structure with pavement areas on the northern portion of the site and two unidentified structures with pavement areas on the southern portion of the site. The site remained relatively unchanged until 1984. Between 1984 and 1999, the three former site structures and pavements no longer occupied the site. The site has remained relatively unchanged as a vacant grass-covered lot from 1999 to present day.

Surface Cover/Development: At the time of the investigation, the subject site consisted of two vacant, grass-covered parcels with trees and utilities on the adjacent South 25th Street right-of-way (ROW).

Topography: Topographic information was not available at the time of this report, however, based on visual observations the proposed development area is generally flatlying with a maximum grade change of less than one foot.

Utilities: At the time of Whitestone's subsurface field investigation, the subject site was not serviced by utilities. However, the ROW of the adjacent South 25th Street appeared to be serviced by aboveground electric lines and underground communication, electric, water, sanitary sewer, and stormwater lines. Other utilities were not observed at the subject site by Whitestone but may be present. The utility information contained in this report is presented for general discussion only and is not intended for construction purposes.

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Site Drainage: Surface run-off generally follows existing topography draining towards inlets located within the east adjacent South 25th Street ROW. The termini of these inlets are unknown.

3.3 SITE GEOLOGY

The site is located within the Atlantic Coastal Complex Province of the Barrier Island Sequence District. According to the Florida Geological Survey *Geologic Map of the State of Florida 1:100,000 Scale*, the immediate underlying bedrock formation consists of the Pleistocene-age Anastasia Formation. The additional underlying bedrock layers mapped at the site include the Undifferentiated Quaternary sediments, Dunes, Peace River Formation, Hawthorne Group –Arcadia Formation, Suwanee Limestone, Ocala Limestone, and Avon Park Formation. The unconsolidated soils at the site, which includes the natural site soils, generally consist of orangish brown, variably fossiliferous interbedded sands, often cemented with calcite, and coquinoid limestone. The deeper underlying bedrock formations, which include the Ocala Limestone and Avon Park Formation, generally consists of cream to light-brown to tan and white to orangish gray, sandy, variably fossiliferous limestone occasionally interbedded with tan to brown, fossiliferous dolostone. The overburden materials at the site include shelly sand and clay coastal plain marine deposits.

The site is mapped by United States Geological Survey as being within a karst area. Karst conditions, including solution cavities, are known to exist in areas where limestone bedrock is present. The limestone bedrock, which is water soluble and susceptible to solution cavities and void formation, can result in surficial depressions or sinkholes. Based on a review of Florida Department of Environmental Protection (FDEP) *Subsidence and Swallet Incident Reports*, the closest reported subsidence or swallet incident was approximately 4.5 miles from the subject site. The results of Whitestone's subsurface investigation and visual site inspection did not identify conditions typically indicative of an elevated risk for sinkhole development, e.g., subsurface voids and/or solution channels.

3.4 PROPOSED CONSTRUCTION

Based on the August 2, 2022 *Conceptual Master Site Plan #1* prepared by Creech, the proposed site development includes construction of an approximately 4,886-square feet single-story office building with associated trash enclosure, pavements, SWM rain garden, landscaping, and utilities. No earth retaining walls are planned. Detailed grading has not been finalized, however, based on existing site grades, Whitestone anticipates that the site will be developed at or near existing site elevations, with the exception of the SWM rain garden, with maximum cuts and fills on the order of less than one foot. The bottom elevation of the proposed SWM rain garden is anticipated to be approximately three feet to five feet below existing site grades.

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Whitestone anticipates the proposed structure will consist of concrete foundations and a combination of metal and masonry framing with a ground-supported concrete floor slab. The anticipated maximum loads for the proposed structures are expected to be as follows:

- building column load - 40 kips;
- wall load - 2.0 kips per linear foot;
- floor slab load - 125 pounds per square foot; and

The scope of Whitestone's investigation and the professional advice contained in this report were generated based on the project details and loading noted herein. Any revisions or additions to the design details enumerated in this report should be brought to the attention of Whitestone for additional evaluation as warranted.

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SECTION 4.0
Subsurface Conditions

Details of the subsurface materials encountered are presented on the *Records of Subsurface Exploration* presented in Appendix A of this report. The subsurface soil conditions encountered in the soil borings consisted of the following generalized strata in order of increasing depth.

4.1 SUBSURFACE SOIL CONDITIONS

Surface Cover: The subsurface tests were conducted within grass-covered areas and encountered approximately three inches of topsoil at the ground surface.

Coastal Plain Marine Deposits: Underlying the surface cover, the subsurface tests disclosed coastal plain marine deposits that generally consisted of poorly graded sand (USCS: SP and SP-SM) with a variable amount of silt, or clayey sand (USCS: SC) to the boring termination depths that ranged from approximately 10 fbgs to 25 fbgs. SPT N-values recorded within the stratum ranged between seven blows per foot (bpf) and 78 bpf, indicating loose to very dense relative densities and averaging approximately 23 bpf.

4.2 GROUNDWATER

Static groundwater water was encountered in the majority of the borings conducted at depths ranging between approximately 9.5 fbgs and 11.0 fbgs. Perched/trapped water was not encountered in the borings conducted. However, perched/trapped water conditions may be encountered within finer-grained portions of the natural site soils especially following precipitation events. Static and perched/trapped water conditions are expected to fluctuate seasonally and following periods of precipitation.

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SECTION 5.0
Conclusions and Recommendations

5.1 GENERAL

The results of the subsurface investigation and analysis indicated that the proposed structures may be supported by a shallow foundation system designed to bear within the improved and approved natural site soils and/or properly placed structural fill materials, as detailed herein. Furthermore, a majority of the existing site soils are also anticipated to be suitable for supporting floor slabs and pavements contingent upon construction phase evaluation and approval.

5.2 SITE PREPARATION AND EARTHWORK

Surface Cover Stripping and Demolition: Prior to stripping operations, all utilities should be identified and secured. Any surficial vegetation should be stripped at least 10 feet beyond the limits of the proposed construction area. Any remnant structures associated with past development at the site encountered including foundation walls, footings, slabs, and utilities, should be removed entirely from below proposed foundations and slabs including their zones of influence (as determined by the owners Geotechnical Engineer) and excavated to at least two feet below proposed construction subgrade levels elsewhere. Foundations and slabs may remain in place below these depths below proposed ground-supported slabs, pavements and landscaped areas, provided there is no interference with future construction; however, any existing slab to remain should be thoroughly broken such that maximum particle size is 12 inches to allow vertical drainage of water.

Carbonic Rock Area Considerations: Carbonate rock formations are soluble in mildly acidic water and characteristically contain subsurface voids and solution cavities of varying sizes. Sinkholes occur when soil overlying the void washes into underlying voids in sufficient quantities to cause a surficial collapse. Naturally formed sinkholes typically require thousands to tens of thousands of years to form, however, sinkhole development can be greatly accelerated by acts of man. For this reason, care should be exercised when constructing structures within a sinkhole prone area. Many triggering mechanisms have their origin in rapidly fluctuating, or artificially fluctuating groundwater levels. These conditions may be caused by situations beyond the owner's control, including saturating rains, droughts, drawdown from neighborhood wells, or changes to drainage patterns. Sinkholes can form undetected, even if prudent design and construction practices are implemented.

Site Planning Considerations: At a minimum, the recommended measures to reduce sinkhole occurrence include relatively minor site planning considerations and construction measures to minimize risks inherent

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to the region. Such measures should include proper grading to avoid concentrations of surface runoff. Additionally, excavations for footing and utilities should not be exposed to rain and surface runoff due to potential increased risk of sinkhole formation and degradation of subgrade materials. Any excavation that must remain open for more than one day is recommended to be sealed at the base with a lean concrete mud mat.

Regional development also should be monitored during the life of the facility to identify conditions that might affect groundwater levels or drainage patterns. If prudent design measures and construction phase considerations are properly implemented, the long-term risk of potential sinkhole activity may be reduced. Sinkholes can form undetected even if prudent design and construction practices are implemented.

Sinkhole Remediation: Although no open sinkholes or surface depressions were identified during the investigation, sinkholes can develop during relatively short time periods and risk of sinkhole occurrence generally increases during construction because of exposed soil conditions and temporary drainage issues. Early formation of sinkholes often can be detected by depressions at the ground surface or within excavations. If suspicious depression areas develop during construction, the locations should be probed or excavated in the presence of the geotechnical engineer to determine if additional investigation is required. In the event that new sinkholes occur during construction, Whitestone preliminarily recommends excavating the sinkhole to expose the throat (cavity) and backfilling the area with wet grout or lean concrete. If a depression is observed during construction, Whitestone should be notified immediately for remediation recommendations.

Surface Preparation/Proofrolling: Prior to placing any fill, backfill or subbase materials to raise or restore grades to the desired subgrade elevations, the exposed soils should be compacted to a firm and unyielding surface with a minimum of four passes in two perpendicular directions of a minimum 20-ton, vibratory smooth drum roller. The surface should be proofrolled with a loaded tandem axle truck in the presence of the geotechnical engineer to help identify soft or loose pockets that may require removal and replacement or further investigation. Any fill or backfill should be placed and compacted in accordance with Section 5.3.

Weather Performance Criteria: The natural site soils are moderately moisture sensitive and may soften when exposed to water. As such, every effort must be made to maintain drainage of surface water runoff away from construction areas by grading and limiting the exposure of excavations and prepared subgrades to rainfall. Accordingly, excavation and fill placement procedures should be conducted during favorable weather conditions. Overexcavation of saturated soils and replacement with controlled structural fill per Section 5.3 of this report may be required prior to resuming work on disturbed subgrade soils.

On-Site Soil Protection and Maintenance: The natural site soils will degrade when exposed to inclement weather or repeated construction traffic. However, if properly protected and maintained as recommended herein, the site soils will provide adequate support for the proposed construction. The site contractors should employ appropriate means and methods to protect the subgrade including, but not limited to the following:

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- sealing exposed subgrade soils on a daily basis with a vibratory smooth drum roller;
- regrading the site as needed to maintain positive drainage away from open earthwork construction areas and to prevent standing water;
- removing wet surficial soils and ruts immediately; and
- limiting exposure to construction traffic and precipitation especially following inclement weather.

Pavement Subgrade Stabilization and Inspection: Pavement subgrade soils which are exposed to inclement weather and heavy construction traffic will degrade and require either extensive drying time or overexcavation and replacement in order to provide a suitable subgrade for pavements. Overexcavation of unstable soils within pavement areas typically should be limited to approximately 1.5 feet below planned subgrade unless directed otherwise by the owner's geotechnical engineer, provided that a reinforcing geogrid approved by the owner's geotechnical engineer is used. Alternatively, unstable materials may be completely overexcavated and either aerated and recompacted or replaced with imported structural fill per Section 5.3. However, this option is likely least economical.

Geogrids typically are economical when proposed undercut depths exceed approximately 18 inches. The geogrid (Tensar TriAx TX130S, or similar) should be placed directly on the exposed subgrade and backfill should consist of a well-graded gravel and sand blend. The services of the geotechnical engineer should be retained to inspect soil conditions during construction and to provide specific recommendations for stabilizing subgrades. Additionally, a geotechnical engineer should be retained to verify the suitability of prepared foundation, floor slab and pavement subgrades for support of design loads.

5.3 STRUCTURAL FILL AND BACKFILL

Imported Fill Material: Any imported material placed as structural fill or backfill to raise elevations or restore design grades should consist of clean, relatively well-graded sand or gravel with a maximum particle size of two inches and five percent to 15 percent of material finer than a #200 sieve. Silts, clays, and silty or clayey sands and gravels with higher percentage of fines and with a liquid limit less than 40 and a plasticity index less than 20 may be considered subject to the owner's approval, provided that the required moisture content and compaction controls are met during favorable weather conditions. The material should be free of clay lumps, organics, and deleterious material. Imported structural fill material should be approved by a qualified geotechnical engineer prior to delivery to the site.

On-Site Materials: Whitestone anticipates that the vast majority of the natural site soil will be suitable for reuse as structural fill/backfill provided that soil moisture contents are controlled within three percent of optimum moisture level and objectionable/organic materials, if encountered, are segregated. The reuse of granular site soils with more than 12 percent fines (USCS: SC) typically is possible only during ideal weather conditions. These soils will require stringent moisture conditioning, including aerating and drying

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to achieve proper compaction. Immediate reuse of these site soils should not be anticipated if the moisture contents are above three percent of the optimum. Additionally, the site soils must be properly evaluated during the construction phase as described in Section 5.11. Alternatively, imported fill materials may be used to attain the desired grades and expedite earthwork operations during wet weather periods. The contractor should be responsible for covering stockpiled soils, sealing subgrades, and providing proper surface drainage during forecasted wet weather.

Compaction and Placement Requirements: On-site soils used as fill or backfill should be placed in maximum nine-inch loose lifts and compacted using a 20-ton smooth drum vibratory drum roller during mass grading activities or a small walk-behind roller or hand-held vibratory compactor within excavations. All structural fill and backfill, including 10 feet outside exterior walls, and pavement areas should be compacted to at least 95 percent of the maximum dry density within three percent of the optimum moisture content as determined by ASTM D-1557 (Modified Proctor). Structural fill and backfill placed within non-structural areas, such as landscaped areas, may be compacted to at least 92 percent of the maximum dry density within three percent of optimum moisture content as determined by ASTM D-1557 (Modified Proctor).

Structural Fill Testing: A sample of the imported fill material or any on-site material proposed for reuse as structural fill or backfill should be submitted to the geotechnical engineer for analysis and approval at least one week prior to its use. The placement of all fill and backfill should be monitored by a qualified engineering technician to ensure that the specified material and lift thicknesses are properly installed. A sufficient number of in-place density tests should be conducted to ensure that the specified compaction is achieved throughout the height of the fill or backfill.

5.4 GROUNDWATER CONTROL

Static groundwater water was encountered in a majority of the borings conducted at depths ranging between approximately 9.5 fbgs and 11.0 fbgs. Perched/trapped water was not encountered in the borings conducted. However, perched/trapped water conditions may be encountered within finer-grained portions of the natural site soils especially following precipitation events.

As such, temporary dewatering should be anticipated, including the use of mechanical pumps, to remove trapped/perched water within footing and utility excavations, especially following precipitation events. Construction phase dewatering may consist of removing surface water runoff, infiltrating water, or trapped water at this site. Whitestone anticipates that construction phase dewatering would include installing temporary sump pits and filtered pumps within trenches and excavations.

Proper grading and drainage should be incorporated into the site design and construction phase grading to discourage ponding of surface runoff. Every effort should be made to maintain drainage of surface run-off away from construction areas by grading. The contractor should limit exposure of excavations and prepared subgrades to rainfall. Overexcavation of wet soils and replacement with controlled structural fill per Section 5.3 of this report may be required prior to resuming work on disturbed subgrade soils.

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5.5 FOUNDATIONS

Shallow Foundation Design Criteria: Following compaction of any upper loose zones encountered at or below proposed foundation elevations, Whitestone recommends supporting the proposed building on conventional shallow spread and continuous footings designed to bear within the improved and approved inorganic natural soils and/or structural fill materials, provided these materials are properly evaluated, placed and compacted in accordance with Sections 5.2, 5.3, and 5.11 of this report. Foundations bearing within these materials may be designed using a maximum allowable net bearing pressure of 3,000 pounds per square foot.

All footing bottoms should be improved by in-trench compaction in the presence of the geotechnical engineer. Regardless of loading conditions, proposed foundations should be sized no less than minimum dimensions of 24 inches for continuous wall footings and 36 inches for isolated column footings.

Footings should be designed such that the maximum toe pressure due to the combined effect of vertical loads and overturning moment does not exceed the recommended maximum allowable net bearing pressure. In addition, positive contact pressure should be maintained throughout the base of the footings such that no uplift or tension exists between the base of the footings and the supporting soil. Uplift loads should be resisted by the weight of the concrete. Side friction should be neglected when proportioning the footings so that lateral resistance should be provided by friction resistance at the base of the footings. An allowable coefficient of friction against sliding of 0.35 is recommended for use in the design of concrete foundations bearing within the on-site soils or imported structural backfill.

Inspection Criteria: Whitestone recommends that the suitability of the bearing soils along the footing bottoms be verified by a geotechnical engineer prior to placing concrete for the footings. Special attention should be given to areas underlain by loose or organic materials. In the event that isolated areas of unsuitable materials are encountered in footing excavations, overexcavation and replacement of the materials or deeper foundation embedment may be necessary to provide a suitable footing subgrade. Any overexcavation to be restored with structural fill will need to extend at least one foot laterally beyond footing edges for each vertical foot of overexcavation. Lateral overexcavation may be eliminated if grade is restored with lean concrete. The bottoms of overexcavated areas should be compacted with vibratory smooth drum rollers, walk-behind compactors, vibrating plates or plate tampers (“jumping jacks”) to compact locally disturbed materials and densify any underlying loose zones. Any standing water within the footing excavation should be removed with a mechanical pump prior to concrete placement.

Settlement: Whitestone estimates post construction settlements of new foundations will be on the order of less than one inch if the recommendations outlined in this report are properly implemented. Differential settlement between individual footings should be less than one-half inch.

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Foundation Embedment: Footings should be placed at least 18 inches below adjacent exterior grades, or the depth required by local building codes, to maintain adequate confinement.

5.6 FLOOR SLAB

Whitestone anticipates that majority of the site soils will provide suitable support for the floor slab, contingent upon construction phase evaluation and compaction improvement of any loose zones and overexcavation of organic materials. The exposed subgrade should be compacted and inspected via proofrolling in accordance with Sections 5.2, 5.3 and of this report. Any areas that become softened or disturbed as a result of wetting and/or repeated exposure to construction traffic should be removed and replaced with compacted structural fill. The properly prepared site soils and structural fill/backfill materials are expected to yield a minimum subgrade modulus (k) of 150 psi/in.

A minimum six-inch thick layer of crushed limerock with minimum Limerock Bearing Ratio (LBR) of 100, compacted to 98 percent modified Proctor maximum dry density, should be placed below the floor slab to provide a uniform base. A moisture vapor barrier should be installed beneath the floor slab in accordance with local building code requirements or where required by the floor covering manufacturer.

5.7 PAVEMENT DESIGN CRITERIA

General: The majority of the site soils and/or compacted structural fill/backfill placed to raise or restore design elevations are anticipated to be suitable for support of the proposed pavements provided these materials are properly evaluated, compacted, and proofrolled in accordance with Sections 5.2, 5.3, and 5.11 of this report during favorable weather conditions.

Design Criteria: A minimum required LBR value of 40 has been assigned to the properly prepared subgrade soils for pavement design purposes. This value was correlated with pertinent soil support values and assumed traffic loads to prepare flexible and rigid pavement designs per the AASHTO *Guide for the Design of Pavement Structures*.

Design traffic loads were assumed based on typical volumes for similar facilities and correlated with 18-kip equivalent single axle loads (ESAL) for a 20 year life. An estimated maximum load of 35,000 ESAL was used for all pavement areas assuming the pavement primarily will accommodate both automobile and limited heavier truck traffic, actual pavement loads are anticipated to be less.

Pavement Section: The recommended flexible pavement section is presented below in tabular format:

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FLEXIBLE PAVEMENT SECTION DESIGN		
Layer	**Material**	**Standard Duty Thickness (Inches)**
Asphalt Top Course	FDOT Section 334 Type SP-12.5 (Superpave Asphalt Concrete); PG 67-22	2.0
Granular Base Course	Crushed Limerock with minimum LBR of 100, compacted to 98% Modified Proctor maximum dry density	6.0
Stabilized Subgrade	Subgrade with minimum LBR of 40, compacted to 98% Modified Proctor maximum dry density	12.0

A rigid concrete pavement should be used to provide suitable support at areas of high traffic or severe turns such as at the trash enclosure and ingress/egress locations. The recommended rigid pavements are presented below in tabular format:

RIGID PAVEMENT SECTION DESIGN		
Layer	**Material**	**Standard Duty Thickness (Inches)**
Surface	4,000 psi air-entrained concrete	5.0[1]
Granular Base Course	Crushed Limerock with minimum LBR of 100, compacted to 98% Modified Proctor maximum dry density	6.0
Stabilized Subgrade	Subgrade with minimum LBR of 40, compacted to 98% Modified Proctor maximum dry density	12.0

Note [1]: The outer edges of concrete pavements are susceptible to damage as trucks move from rigid pavement to adjacent flexible pavement. Therefore, the thickness at the outer two feet of the rigid concrete pavement should be 12 inches. The concrete should be reinforced with at least one layer of six-inch by six-inch W5.4/W5.4 welded wire fabric (ASTM A185).

Additional Design Considerations: The pavement section thickness designs presented in this report are based on the design parameters detailed herein and are contingent on proper construction, inspection, and maintenance. Additional pavement thickness may be required by local code. The designs are contingent on achieving the minimum soil support value in the field. To accomplish this requirement, all subgrade soil and supporting fill or backfill must be properly evaluated, placed, and prepared as detailed in Sections 5.2, 5.3, and 5.11 of this report. Proper drainage must be provided for the pavement structure including appropriate grading and surface water control, as well as measures to drain water from the subgrade.

The performance of the pavement also will depend on the quality of materials and workmanship. Whitestone recommends that Florida Department of Transportation (FDOT) standards for materials, workmanship, and maintenance be applied to this site. Project specifications should include verifying that

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the installed asphaltic concrete material composition is within tolerance for the specified materials and that the percentage of air voids of the installed pavement is within specified ranges for the respective materials. All rigid concrete pavements should be suitably air-entrained, jointed, and reinforced in general accordance with ACI 330R-08 *Guide for the Design and Construction of Concrete Parking Lots*.

5.8 RETAINING WALL/LATERAL EARTH PRESSURES

No earth retaining walls were identified on the site plan. Whitestone should be notified if retaining walls or structures resisting lateral earth pressures are planned.

5.9 SEISMIC AND LIQUEFACTION CONSIDERATIONS

The subsurface conditions are most consistent with a Site Class D as defined by the *2020 Florida Building Code* (FBC 2020). Based on the seismic zone and soil profile, liquefaction considerations are not expected to have a substantial impact on design.

5.10 EXCAVATIONS

The existing fill and natural soils encountered during this investigation are consistent with Type C Soil Conditions as defined by 29 CFR Part 1926 (OSHA) which require a maximum unbraced excavation angle of 1.5:1 (horizontal:vertical). Actual conditions encountered during construction should be evaluated by a competent person (as defined by OSHA) to ensure that safe excavation methods and/or shoring and bracing requirements are implemented.

5.11 SUPPLEMENTAL POST INVESTIGATION SERVICES

Construction Inspection and Monitoring: The owner's geotechnical engineer should conduct inspection, testing, and consultation during construction as described in previous sections of this report. Monitoring and testing should also be conducted to verify that the existing surface cover materials are properly removed, any encountered underground structures (such as building foundations associated with former site development) are properly removed and backfilled, and suitable materials used for controlled fill are properly placed and compacted over suitable subgrade soils. Any overexcavation of loose upper natural or unsuitable soils encountered within the proposed building footprint and/or pavement areas that are unsuitable for structural design support interior current condition should be witnessed and documented by the owner's geotechnical engineer. The proper placement of structural backfill within the building pad and pavement areas should also be documented by the owner's geotechnical engineer.

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5.13 PRELIMINARY STORMWATER MANAGEMENT INFILTRATION TESTING

General: Soil boring B-7 was conducted within an accessible area of the proposed SWM rain garden as provided by Creech. Soil boring B-7 was terminated at the approximate depth of 10 fbgs. The results of the subsurface conditions encountered within the soil boring conducted within the proposed SWM area is provided in Appendix A. A summary of the groundwater observations as well as the in-situ infiltration test result are included in the following table.

GROUNDWATER & INFILTRATION TEST SUMMARY				
Boring/Infiltration Test No.	**Groundwater Depth (fbgs)**	**USDA Classification @ Test**	**Exfiltration Test Results**	
			Depth (fbgs)	**Rate (ft/sec)**
B-7/P-1	10.0	Sandy LOAM	10.0	2.31×10^{-7}

Notes: NE – Not Encountered.

Soil Infiltration Rate: An in-situ infiltration test was conducted within the proposed SWM rain garden in general accordance with the South Florida Water Management District (SFWMD) guidelines for "usual open hole" exfiltration testing. Infiltration test P-1 resulted in a field infiltration rate of approximately 2.31×10^{-7} feet per second. Infiltration test results are provided in Appendix C and soil boring logs are included in Appendix A.

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SECTION 6.0
General Comments

Supplemental recommendations may be required upon finalization of construction plans or if significant changes are made in the characteristics or location of the proposed structure. Soil bearing conditions should be checked at the appropriate time for consistency with those conditions encountered during Whitestone's geotechnical investigation.

The recommendations presented herein should be utilized by a qualified engineer in preparing the project plans and specifications. The engineer should consider these recommendations as minimum physical standards which may be superseded by local and regional building codes and structural considerations. These recommendations are prepared for the sole use of Youth and Family Behavioral Health Center, Inc. for the specific project detailed and should not be used by any third party. These recommendations are relevant to the design phase and should not be substituted for construction specifications.

The possibility exists that conditions between borings may differ from those at specific testing locations, and conditions may not be as anticipated by the designers or contractors. In addition, the construction process may alter soil and rock conditions. Therefore, experienced geotechnical personnel should observe and document the construction procedures used and the conditions encountered.

Whitestone assumes that a qualified contractor will be employed to conduct the construction work, and that the contractor will be required to exercise care to ensure all excavations are conducted in accordance with applicable regulations and good practice. Particular attention should be paid to avoiding damaging or undermining adjacent properties and maintaining slope stability.

Whitestone recommends that the services of the geotechnical engineer be engaged to test and evaluate the soils in the footing excavations prior to concreting in order to determine that the soils will support the bearing capacities. Monitoring and testing also should be conducted to verify that suitable materials are used for controlled fills and that they are properly placed and compacted over suitable subgrade soils.

The exploration and analysis of the foundation conditions reported herein are considered sufficient in detail and scope to form a reasonable basis for the foundation design. The recommendations submitted for the proposed construction are based on the available soil information and the design details furnished by Youth and Family Behavioral Health Center, Inc. Deviations from the noted subsurface conditions encountered during construction should be brought to the attention of the geotechnical engineer.

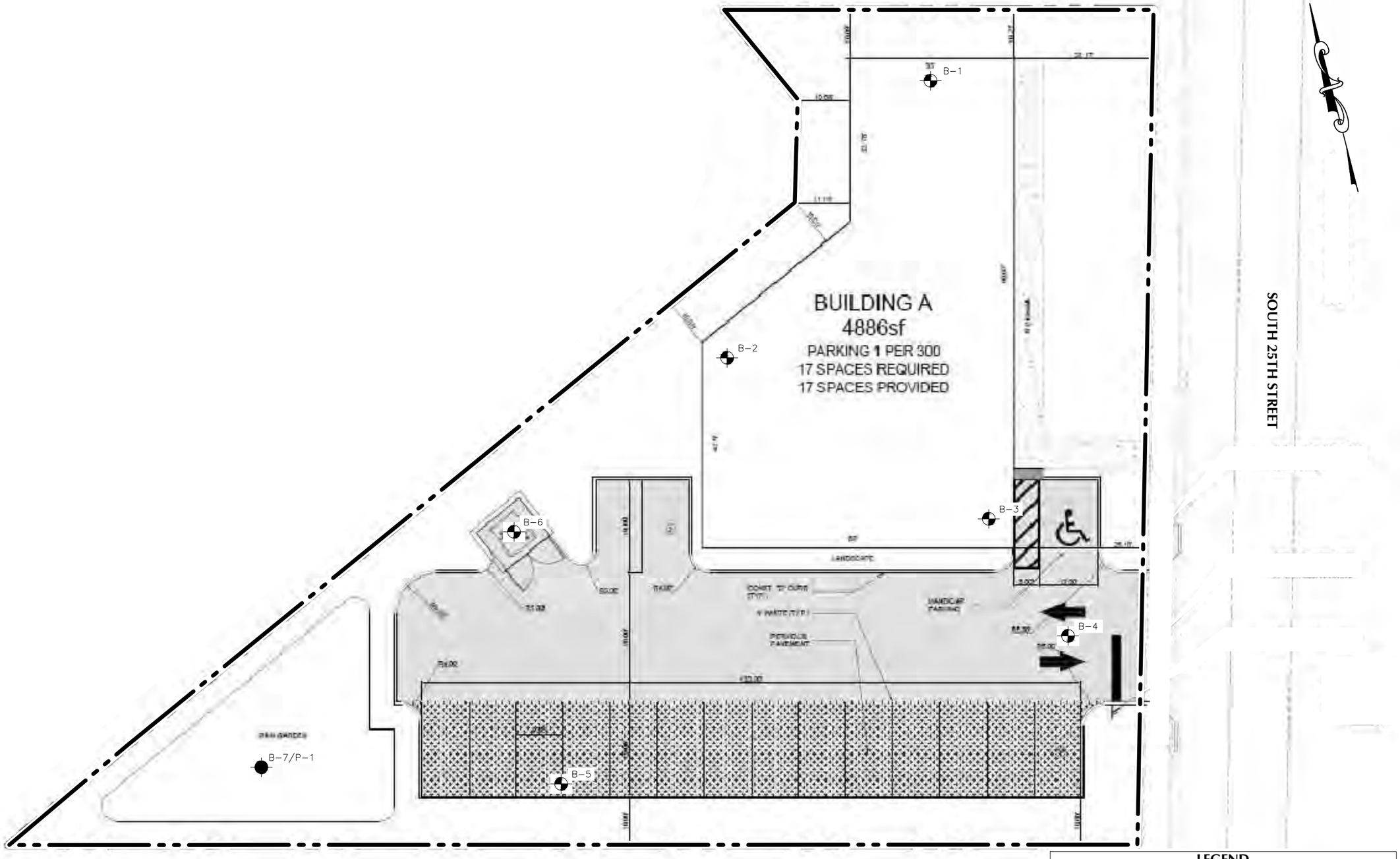
The geotechnical engineer warrants that the findings, recommendations, specifications, or professional advice contained herein have been promulgated after being prepared in accordance with generally accepted professional engineering practice in the fields of foundation engineering, soil mechanics, and engineering geology. No other warranties are implied or expressed.

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FIGURE 1
Test Location Plan

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0 20

1 inch = 20 ft.

LEGEND

B-1 — BORING

B-7/P-1 — BORING/INFILTRATION TEST

SUBJECT PROPERTY BOUNDARY

REFERENCE

THIS PLAN IS BASED ON AN AUGUST 2, 2022 CONCEPTUAL MASTER SITE PLAN #1 PREPARED BY CREECH CONSULTING, LLC. & ALL SITE LOCATIONS ARE APPROXIMATE.

WHITESTONE
An Employee-Owned Company
8405 BENJAMIN ROAD, SUITE J, TAMPA, FL 33634
813.851.0690 WHITESTONEASSOC.COM

DRAWING TITLE: **TEST LOCATION PLAN**

CLIENT: YOUTH AND FAMILY BEHAVIORAL HEATH CENTER, INC.

PROJECT: PROPOSED YOUTH AND FAMILY BEHAVIORAL HEALTH CENTER
1211 SOUTH 25TH STREET
FORTH PIERCE, SAINT LUCIE COUNTY, FL

PROJECT #:	GF2319913.000
DESIGNED BY: GR	PROJ. MGR.: KF
DATE: 1/26/23	FIGURE: 1
SCALE: 1" = 20'	

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APPENDIX A
Records of Subsurface Exploration

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RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-1

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Project:	Proposed Youth and Family Behavioral Health Center	**WAI Project No.:**	GF2219913.000
Location:	1211 South 25th Street	**Client:**	Youth and Family Behavioral Health Center, Inc.

Surface Elevation:	± NS feet	**Date Started:**	1/26/2023		**Water Depth | Elevation (feet bgs) | (feet)**		**Cave-In Depth | Elevation (feet bgs) | (feet)**
Termination Depth:	25.0 feet bgs	**Date Completed:**	1/26/2023				
Proposed Location:	Building	**Logged By:**	AB	**During:**	10.0 | ---		
Drill / Test Method:	HSA / SPT	**Contractor:**	SCD	**At Completion:**	--- | ---	**At Completion:**	--- | ---
		Equipment:	Diedrick Track-Rig	**24 Hours:**	--- | ---	**24 Hours:**	--- | ---

SAMPLE INFORMATION						DEPTH	STRATA		DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	No	Type	Blows Per 6"	Rec. (in.)	N	(feet)				
						0.0				
0 - 2	S-1		6 - 5 - 5 - 5	18	10		TOPSOIL		3" Topsoil	
							COASTAL PLAIN MARINE DEPOSITS		Gray Poorly Graded Sand, Moist, Medium Dense (SP)	
						2.0				
2 - 4	S-2		6 - 7 - 8 - 8	18	15				Dark Brown Poorly-Graded Sand with Silt, Trace Roots, Moist, Medium Dense (SP-SM)	
4 - 6	S-3		6 - 20 - 17 - 13	24	37	5.0			As Above, Dense (SP-SM)	
6 - 8	S-4		12 - 12 - 10 - 16	22	22				As Above, Medium Dense (SP-SM)	
8 - 10	S-5		12 - 13 - 17 - 17	20	30				As Above, Brown, Moist to Wet, Dense (SP-SM)	
						10.0 ▽				
13.5 - 15	S-6		4 - 9 - 10	18	19				As Above, Dark Brown, Wet (SP-SM)	
						15.0				
						18.5				
18.5 - 20	S-7		12 - 12 - 16	18	28				Grayish-Brown Poorly-Graded Sand, Wet, Medium Dense (SP)	
						20.0				
23.5 - 25	S-8		19 - 30 - 48	18	78				As Above, Very Dense (SP)	
						25.0			Boring Log B-1 Terminated at a Depth of 25.0 Feet Below Ground Surface	

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NOTES: bgs = below ground surface, NA = Not Applicable, NE = Not Encountered, NS = Not Surveyed, P = Perched

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RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-2

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Project:	Proposed Youth and Family Behavioral Health Center	**WAI Project No.:**	GF2219913.000
Location:	1211 South 25th Street	**Client:**	Youth and Family Behavioral Center, Inc.

Surface Elevation:	± NS feet	**Date Started:**	1/26/2023		**Water Depth | Elevation (feet bgs) | (feet)**		**Cave-In Depth | Elevation (feet bgs) | (feet)**
Termination Depth:	20.0 feet bgs	**Date Completed:**	1/26/2023				
Proposed Location:	Building	**Logged By:**	AB	**During:**	11.0 | ---		
Drill / Test Method:	HSA / SPT	**Contractor:**	SCD	**At Completion:**	--- | ---	**At Completion:**	--- | ---
		Equipment:	Diedrick Track-Rig	**24 Hours:**	--- | ---	**24 Hours:**	--- | ---

SAMPLE INFORMATION						DEPTH	STRATA		DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	No	Type	Blows Per 6"	Rec. (in.)	N	(feet)				
						0.0				
0 - 2	S-1		2 - 3 - 4 - 4	20	7		TOPSOIL		3" Topsoil	
							COASTAL PLAIN MARINE DEPOSITS		Gray Poorly Graded Sand, Moist, Loose (SP)	
2 - 4	S-2		5 - 5 - 6 - 7	22	11				As Above, Trace Roots, Medium Dense (SP)	Organic Content = 3.6%
						4.0				
4 - 6	S-3		11 - 15 - 22 - 28	20	37	5.0			Brown Poorly-Graded Sand with Silt, Trace Roots, Moist, Dense (SP-SM)	
6 - 8	S-4		10 - 14 - 20 - 15	20	34				As Above (SP-SM)	
						8.0				
8 - 10	S-5		18 - 24 - 22 - 19	22	46				Light Brown Clayey Sand, Moist, Dense (SC)	
						10.0				
						13.5				
13.5 - 15	S-6		8 - 12 - 13	18	25				Grayish-Brown Poorly-Graded Sand, Wet, Medium Dense (SP)	
						15.0				
						18.5				
18.5 - 20	S-7		14 - 11 - 14	16	25	20.0			As Above (SP)	
									Boring Log B-2 Terminated at a Depth of 20.0 Feet Below Ground Surface	
						25.0				

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RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-3

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Project:	Proposed Youth and Family Behavioral Health Center	**WAI Project No.:**	GF2219913.000
Location:	1211 South 25th Street	**Client:**	Youth and Family Behavioral Center, Inc.

Surface Elevation:	± NS feet	**Date Started:**	1/26/2023		**Water Depth | Elevation (feet bgs) | (feet)**		**Cave-In Depth | Elevation (feet bgs) | (feet)**
Termination Depth:	20.0 feet bgs	**Date Completed:**	1/26/2023				
Proposed Location:	Building Pad	**Logged By:**	AB	**During:**	10.0 | ---		
Drill / Test Method:	HSA / SPT	**Contractor:**	SCD	**At Completion:**	--- | ---	**At Completion:**	--- | ---
		Equipment:	Diedrick Track-Rig	**24 Hours:**	--- | ---	**24 Hours:**	--- | ---

SAMPLE INFORMATION						DEPTH	STRATA		DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	No	Type	Blows Per 6"	Rec. (in.)	N	(feet)				
						0.0				
0 - 2	S-1		4 - 4 - 4 - 3	20	8		TOPSOIL		3" Topsoil	
							COASTAL PLAIN MARINE DEPOSITS		Gray Poorly Graded Sand, Moist, Loose (SP)	
2 - 4	S-2		4 - 7 - 14 - 20	24	21				As Above, Medium Dense (SP)	
						3.5				
4 - 6	S-3		7 - 8 - 13 - 18	21	21				Dark Brown Poorly-Graded Sand with Silt, Trace Organics, Moist, Medium Dense (SP-SM)	
						5.0			As Above (SP-SM)	
6 - 8	S-4		7 - 10 - 16 - 20	18	26	6.0			BrownClaey Sand, Trace Roots, Moist, Medium Dense (SC)	
8 - 10	S-5		14 - 7 - 12 - 14	24	33	8.0			As Above, Light Brown, Dense (SC)	
						10.0 ▽				
						13.5				
13.5 - 15	S-6		13 - 15 - 15	18	30				Brown Poorly-Graded Sand, Wet, Dense (SP)	
						15.0				
18.5 - 20	S-7		17 - 13 - 16	18	29	20.0			As Above, Dark Brown, Medium Dense (SP)	
									Boring Log B-3 Terminated at a Depth of 20.0 Feet Below Ground Surface	
						25.0				

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RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-4

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Project:	Proposed Youth and Family Behavioral Health Center	**WAI Project No.:**	GF2219913.000
Location:	1211 South 25th Street	**Client:**	Youth and Family Behavioral Center, Inc.

				Water Depth | Elevation (feet bgs) | (feet)	Cave-In Depth | Elevation (feet bgs) | (feet)
Surface Elevation:	± NS feet	**Date Started:**	1/26/2023		
Termination Depth:	10.0 feet bgs	**Date Completed:**	1/26/2023		
Proposed Location:	Pavement	**Logged By:**	AB	**During:** 10.0 | ---	
Drill / Test Method:	HSA / SPT	**Contractor:**	SCD	**At Completion:** --- | ---	**At Completion:** --- | ---
		Equipment:	Diedrick Track-Rig	**24 Hours:** --- | ---	**24 Hours:** --- | ---

SAMPLE INFORMATION						DEPTH	STRATA		DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	No	Type	Blows Per 6"	Rec. (in.)	N	(feet)				
						0.0				
0 - 2	S-1		4 - 4 - 4 - 4	20	8		TOPSOIL		3" Topsoil	
							COASTAL PLAIN MARINE DEPOSITS		Gray Poorly Graded Sand, Moist, Loose (SP)	
						2.0				
2 - 4	S-2		4 - 11 - 10 - 10	22	21				Dark Brown Poorly-Graded Sand with Silt, Trace Organics, Moist, Medium Dense (SP-SM)	
4 - 6	S-3		15 - 11 - 11 - 12	18	22	5.0			As Above, Brown, No Organics (SP-SM)	
6 - 8	S-4		15 - 21 - 23 - 28	22	44				As Above, Dense (SP-SM)	
						8.0				
8 - 10	S-5		13 - 12 - 14 - 16	20	26				Light Brown Clayey Sand, Moist, Medium Dense (SC)	
						10.0				
									Boring Log B-4 Terminated at a Depth of 10.0 Feet Below Ground Surface	
						15.0				
						20.0				
						25.0				

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RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-5

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Project:	Proposed Youth and Family Behavioral Health Center	**WAI Project No.:**	GF2219913.000
Location:	1211 South 25th Street	**Client:**	Youth and Family Behavioral Center, Inc.

				Water Depth | Elevation (feet bgs) | (feet)	Cave-In Depth | Elevation (feet bgs) | (feet)
Surface Elevation:	± NS feet	**Date Started:**	1/26/2023		
Termination Depth:	10.0 feet bgs	**Date Completed:**	1/26/2023		
Proposed Location:	Pavement	**Logged By:**	AB	**During:** NE | ---	
Drill / Test Method:	HSA / SPT	**Contractor:**	SCD	**At Completion:** --- | ---	**At Completion:** --- | ---
		Equipment:	Diedrick Track-Rig	**24 Hours:** --- | ---	**24 Hours:** --- | ---

SAMPLE INFORMATION						DEPTH	STRATA		DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	No	Type	Blows Per 6"	Rec. (in.)	N	(feet)				
						0.0				
0 - 2	S-1		4 - 5 - 7 - 4	20	12		TOPSOIL		3" Topsoil	
							COASTAL PLAIN MARINE DEPOSITS		Gray Poorly Graded Sand, Moist, Medium Dense (SP)	
						2.0				
2 - 4	S-2		5 - 7 - 7 - 9	24	14				Dark Brown Poorly Graded Sand with Silt, Trace Organics and Roots, Moist, Medium Dense (SP-SM)	
4 - 6	S-3		8 - 8 - 14 - 12	24	22	5.0			As Above, Brown, No Organics (SP-SM)	
						6.0				
6 - 8	S-4		7 - 10 - 9 - 10	24	19				Light Brown Poorly Graded Sand, Moist, Medium Dense (SP)	
						8.0				
8 - 10	S-5		10 - 11 - 15 - 16	24	16				Light Brown Clayey Sand, Moist, Medium Dense (SC)	
						10.0				
									Boring Log B-5 Terminated at a Depth of 10.0 Feet Below Ground Surface	
						15.0				
						20.0				
						25.0				

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RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-6

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Project:	Proposed Youth and Family Behavioral Health Center	**WAI Project No.:**	GF2219913.000
Location:	1211 South 25th Street	**Client:**	Youth and Family Behavioral Center, Inc.

				Water Depth | Elevation (feet bgs) | (feet)	Cave-In Depth | Elevation (feet bgs) | (feet)
Surface Elevation:	± NS feet	**Date Started:**	1/26/2023		
Termination Depth:	10.0 feet bgs	**Date Completed:**	1/26/2023		
Proposed Location:	Pavement	**Logged By:**	AB	**During:** 9.5 | ---	
Drill / Test Method:	HSA / SPT	**Contractor:**	SCD	**At Completion:** --- | ---	**At Completion:** --- | ---
		Equipment:	Diedrick Track-Rig	**24 Hours:** --- | ---	**24 Hours:** --- | ---

SAMPLE INFORMATION						DEPTH	STRATA		DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	No	Type	Blows Per 6"	Rec. (in.)	N	(feet)				
						0.0				
0 - 2	S-1		2 - 3 - 4 - 4	18	7		TOPSOIL		3" Topsoil	
							COASTAL PLAIN MARINE DEPOSITS		Gray Poorly Graded Sand, Dry, Loose (SP)	
2 - 4	S-2		5 - 5 - 5 - 6	24	10				As Above, Brown, Moist, Medium Dense (SP)	
						4.0				
4 - 6	S-3		6 - 9 - 9 - 11	24	18	5.0			Light Brown Clayey Sand, Trace Roots, Moist, Medium Dense (SC)	
6 - 8	S-4		7 - 8 - 9 - 10	20	17				As Above (SC)	
						8.0				
8 - 10	S-5		8 - 12 - 13 - 13	22	25				Light Brown Porly Graded Sand, Moist to Wet, Medium Dense (SP)	
						10.0				
									Boring Log B-6 Terminated at a Depth of 10.0 Feet Below Ground Surface	
						15.0				
						20.0				
						25.0				

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RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-7

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Project:	Proposed Youth and Family Behavioral Health Center	**WAI Project No.:**	GF2219913.000
Location:	1211 South 25th Street	**Client:**	Youth and Family Behavioral Center, Inc.

Surface Elevation:	± NS feet	**Date Started:**	1/26/2023		**Water Depth | Elevation (feet bgs) | (feet)**		**Cave-In Depth | Elevation (feet bgs) | (feet)**
Termination Depth:	10.0 feet bgs	**Date Completed:**	1/26/2023				
Proposed Location:	SWM	**Logged By:**	AB	**During:**	10.0 | ---		
Drill / Test Method:	HSA / SPT	**Contractor:**	SCD	**At Completion:**	--- | ---	**At Completion:**	--- | ---
		Equipment:	Diedrick Track-Rig	**24 Hours:**	--- | ---	**24 Hours:**	--- | ---

SAMPLE INFORMATION						DEPTH	STRATA		DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	No	Type	Blows Per 6"	Rec. (in.)	N	(feet)				
						0.0				
0 - 2	S-1		3 - 4 - 5 - 4	24	9		TOPSOIL		3" Topsoil	
							COASTAL PLAIN MARINE DEPOSITS		Gray Poorly Graded Sand, Trace Roots, Moist, Loose (SP)	
2 - 4	S-2		8 - 9 - 8 - 9	24	17				As Above, Brown, Medium Dense (SP)	
4 - 6	S-3		6 - 9 - 8 - 11	24	17	5.0			As Above (SP)	
6 - 8	S-4		9 - 9 - 10 - 10	24	19	6.0			Gray Clayey Sand, Moist, Medium Dense (SC)	LL = 24 PI = 11
8 - 10	S-5		7 - 8 - 9 - 12	24	17	10.0			As Above, Light Brown (SC)	
						15.0			Boring Log B-7 Terminated at a Depth of 10.0 Feet Below Ground Surface	
						20.0				
						25.0				

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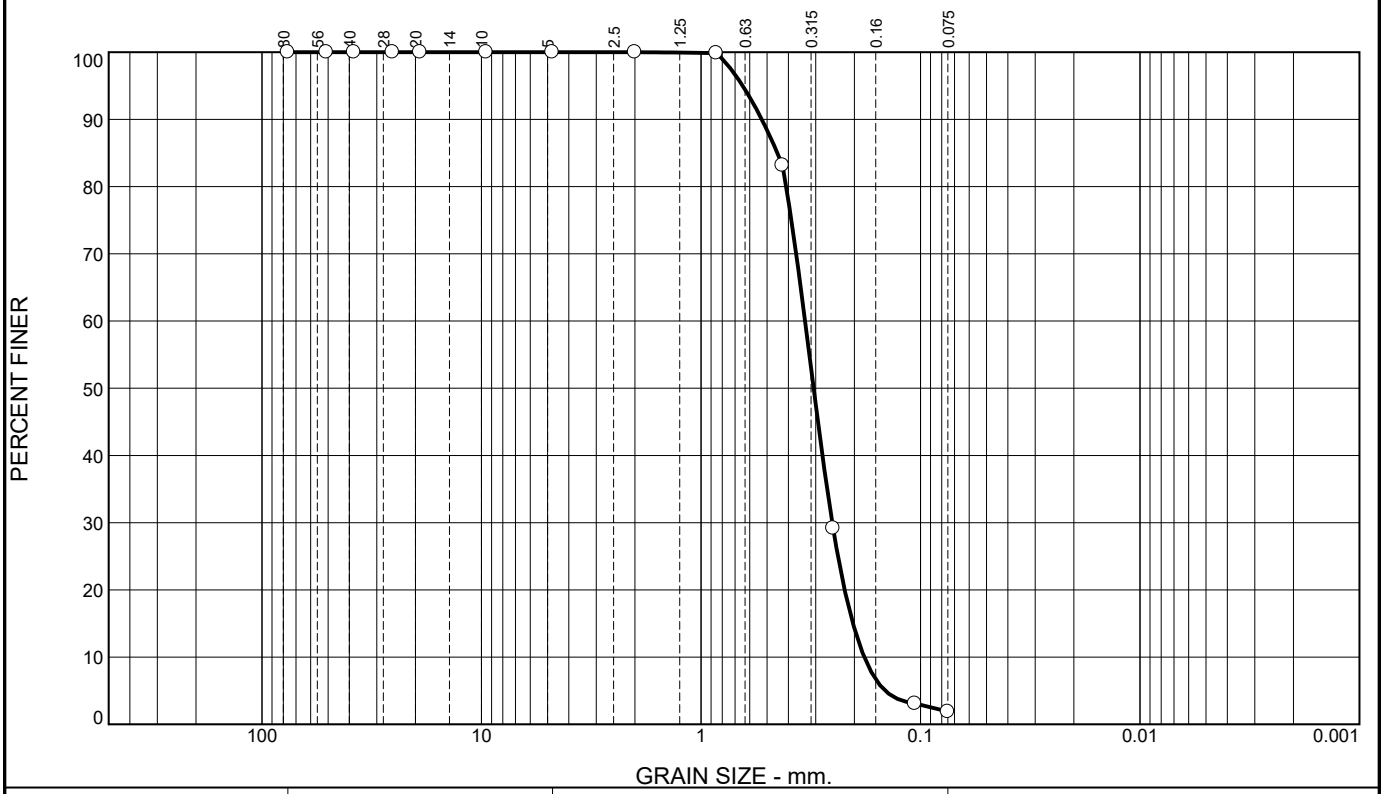
NOTES: bgs = below ground surface, NA = Not Applicable, NE = Not Encountered, NS = Not Surveyed, P = Perched

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APPENDIX B
Laboratory Test Results

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1/3/2024

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	16.8	81.3	1.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3"	100.0		
2"	100.0		
1 1/2"	100.0		
1"	100.0		
3/4"	100.0		
3/8"	100.0		
#4	100.0		
#10	100.0		
#20	99.9		
#40	83.2		
#60	29.1		
#140	3.1		
#200	1.9		

* (no specification provided)

Material Description

poorly graded sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D_{90}= 0.5283 D_{85}= 0.4487 D_{60}= 0.3356
D_{50}= 0.3068 D_{30}= 0.2524 D_{15}= 0.2030
D_{10}= 0.1804 C_u= 1.86 C_c= 1.05

Classification

USCS= SP AASHTO= A-3

Remarks

W_n = 2.7%

Source of Sample: B-1 **Depth:** 0.3' - 2.0'
Sample Number: S-1

Date: 1/18/2023

WHITESTONE ASSOCIATES, INC.
Warren, New Jersey

Client: Youth and Family Behavioral Health Center, Inc.
Project: Proposed Youth and Family Behavioral Health Center
1211 South 25th Street, Fort Pierce, St. Lucie County, Florida
Project No: GF2319913.000 **Figure**

Tested By: AB

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Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	15.8	80.5	3.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3"	100.0		
2"	100.0		
1 1/2"	100.0		
1"	100.0		
3/4"	100.0		
3/8"	100.0		
#4	100.0		
#10	100.0		
#20	100.0		
#40	84.2		
#60	26.0		
#140	4.5		
#200	3.7		

* (no specification provided)

Material Description

poorly graded sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D_{90}= 0.5151 D_{85}= 0.4355 D_{60}= 0.3381
D_{50}= 0.3112 D_{30}= 0.2607 D_{15}= 0.1834
D_{10}= 0.1514 C_u= 2.23 C_c= 1.33

Classification

USCS= SP AASHTO= A-3

Remarks

W_n = 9.3%

Source of Sample: B-2 **Depth:** 2.0' - 4.0'
Sample Number: S-2

Date: 1/18/2023

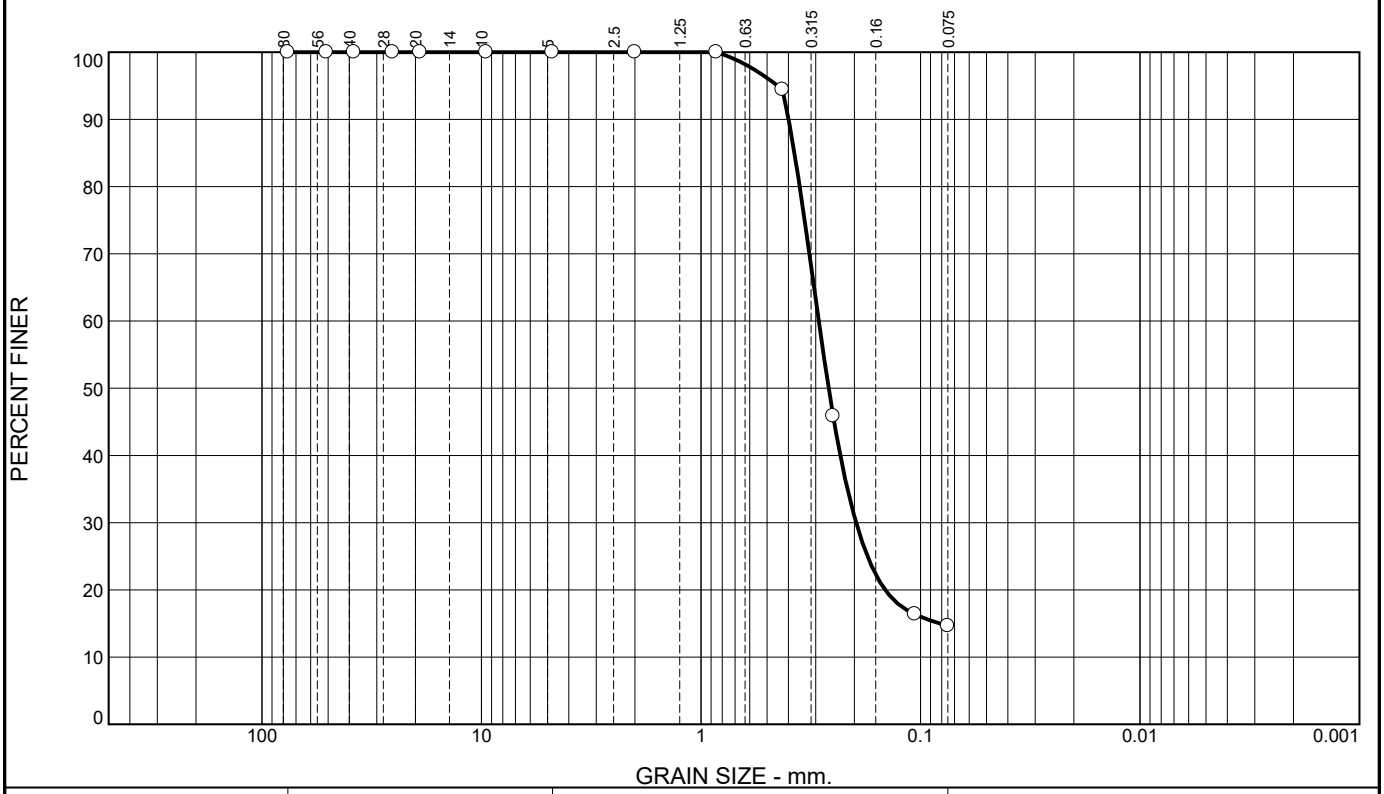
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Warren, New Jersey

Client: Youth and Family Behavioral Health Center, Inc.
Project: Proposed Youth and Family Behavioral Health Center
1211 South 25th Street, Fort Pierce, St. Lucie County, Florida
Project No: GF2319913.000 **Figure**

Tested By: AB

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Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	5.6	79.8	14.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3"	100.0		
2"	100.0		
1 1/2"	100.0		
1"	100.0		
3/4"	100.0		
3/8"	100.0		
#4	100.0		
#10	100.0		
#20	100.0		
#40	94.4		
#60	45.9		
#140	16.4		
#200	14.6		

* (no specification provided)

Material Description

clayey sand

Atterberg Limits

PL= 13 LL= 24 PI= 11

Coefficients

D_{90}= 0.3987 D_{85}= 0.3751 D_{60}= 0.2906
D_{50}= 0.2621 D_{30}= 0.1964 D_{15}= 0.0815
D_{10}= C_u= C_c=

Classification

USCS= SC AASHTO= A-2-6(0)

Remarks

W_n = 14.8%

Source of Sample: B-7 **Depth:** 6.0' - 8.0'
Sample Number: S-4 **Date:** 1/18/2023

WHITESTONE ASSOCIATES, INC.
Warren, New Jersey

Client: Youth and Family Behavioral Health Center, Inc.
Project: Proposed Youth and Family Behavioral Health Center
1211 South 25th Street, Fort Pierce, St. Lucie County, Florida
Project No: GF2319913.000 **Figure**

Tested By: AB

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1/3/2024

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NATURAL MOISTURE CONTENT DETERMINATION + ORGANIC CONTENT DETERMINATION

ASTM D2974

Client: Youth and Family Behavioral Health Center, Inc.

Project: Proposed Youth and Family Behavioral Health Center Project Number: GF2319913.000

Project Location: 1211 South 25th Street, Fort Pierce, St. Lucie County, Florida

MOISTURE CONTENT

Boring/Sample ID	B-2, S-2				
Depth (fbgs)	2.0' - 4.0'				
USCS Classification	SP				
Water content (%)	**8.3**				

ORGANIC CONTENT

Boring/Sample ID	B-2, S-2				
Depth (fbgs)	2.0' - 4.0'				
USCS Classification	SP				
Organic content (%)	**3.6**				

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APPENDIX C
Infiltration Test Results

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1/3/2024

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EXFILTRATION TEST

Client: Youth and Family Behavioral Health Center, Inc.
Project: Proposed Youth and Family Behavioral Health Center
Location: 1211 South 25th Street, Fort Pierce, St. Lucie County, FL
File No. GF2319913.000
Field Engineer: AB
Test Hole Diameter (Inches): 2.0

Test Hole No.: P-1
Date: 1/16/2023
Weather: Sunny, 68°
Surface Elevation: NS
Test Depth (fbgs): 10.0
Test Depth (Elevation): NS
Depth to Water (fbgs): 10.0

Reading No.	Time		Water Added (Gallons)	Time Interval (Hours)	Rate of Flow (Inches/Hour)
	Start	Finish			
1	1:50 PM	2:00 PM	0.4	0.167	0.01
2	2:00 PM	2:10 PM	0.4	0.167	0.01
3	2:10 PM	2:20 PM	0.3	0.167	0.01
4	2:20 PM	2:30 PM	0.3	0.167	0.01
5	2:30 PM	2:40 PM	0.3	0.167	0.01
6	2:40 PM	2:45 PM	0.2	0.083	0.01

Remarks: Field i = 0.01 in/hr

NOTES: FBGS = Feet Below Ground Surface; NS = Not Surveyed

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APPENDIX D
Supplemental Information (USCS, Terms and Symbols)

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1/3/2024

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An Employee-Owned Company

8405 BENJAMIN ROAD
SUITE J
TAMPA, FL 33634
813.851.0690
whitestoneassoc.com

UNIFIED SOIL CLASSIFICATION SYSTEM

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			LETTER SYMBOL	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS (LITTLE OR NO FINES)	GW	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
			GP	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)	GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES
			GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
	SAND AND SANDY SOILS	CLEAN SAND (LITTLE OR NO FINES)	SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
			SP	POORLY-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	MORE THAN 50% OF COARSE FRACTION PASSING NO. 4 SIEVE	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)	SM	SILTY SANDS, SAND-SILT MIXTURES
			SC	CLAYEY SANDS, SAND-CLAY MIXTURES
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMITS LESS THAN 50	ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
			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
MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS	LIQUID LIMITS GREATER THAN 50	MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
			CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
			OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS			PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS FOR SAMPLES WITH 5% TO 12% FINES

GRADATION*

% FINER BY WEIGHT

TRACE..... 1% TO 10%
LITTLE..... 10% TO 20%
SOME..... 20% TO 35%
AND..... 35% TO 50%

COMPACTNESS*
Sand and/or Gravel

RELATIVE DENSITY

LOOSE. ..... 0% TO 40%
MEDIUM DENSE.... 40% TO 70%
DENSE..... 70% TO 90%
VERY DENSE..... 90% TO 100%

CONSISTENCY*
Clay and/or Silt

RANGE OF SHEARING STRENGTH IN POUNDS PER SQUARE FOOT

VERY SOFT..... LESS THAN 250
SOFT..... ..... 250 TO 500
MEDIUM..... 500 TO 1000
STIFF..... 1000 TO 2000
VERY STIFF..... 2000 TO 4000
HARD..... GREATER THAN 4000

** VALUES ARE FROM LABORATORY OR FIELD TEST DATA, WHERE APPLICABLE. WHEN NO TESTING WAS PERFORMED, VALUES ARE ESTIMATED.*

L:\Geotechnical Forms and References\Reports\USCSTRMSSYM FL.docx

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1/3/2024

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8405 BENJAMIN ROAD
SUITE J
TAMPA, FL 33634
813.851.0690
whitestoneassoc.com

GEOTECHNICAL TERMS AND SYMBOLS

SAMPLE IDENTIFICATION

The Unified Soil Classification System is used to identify the soil unless otherwise noted.

SOIL PROPERTY SYMBOLS

N: Standard Penetration Value: Blows per ft. of a 140 lb. hammer falling 30" on a 2" O.D. split-spoon.
Qu: Unconfined compressive strength, TSF.
Qp: Penetrometer value, unconfined compressive strength, TSF.
Mc: Moisture content, %.
LL: Liquid limit, %.
PI: Plasticity index, %.
δd: Natural dry density, PCF.
▼: Apparent groundwater level at time noted after completion of boring.

DRILLING AND SAMPLING SYMBOLS

NE: Not Encountered (Groundwater was not encountered).
SS: Split-Spoon - 1 ⅜" I.D., 2" O.D., except where noted.
ST: Shelby Tube - 3" O.D., except where noted.
AU: Auger Sample.
OB: Diamond Bit.
CB: Carbide Bit
WS: Washed Sample.

RELATIVE DENSITY AND CONSISTENCY CLASSIFICATION

Term (Non-Cohesive Soils)	Standard Penetration Resistance
Very Loose	0-4
Loose	4-10
Medium Dense	10-30
Dense	30-50
Very Dense	Over 50

Term (Cohesive Soils)	Qu (TSF)
Very Soft	0 - 0.25
Soft	0.25 - 0.50
Firm (Medium)	0.50 - 1.00
Stiff	1.00 - 2.00
Very Stiff	2.00 - 4.00
Hard	4.00+

PARTICLE SIZE

Boulders	8 in.+	Coarse Sand	5mm-0.6mm	Silt	0.074mm-0.005mm
Cobbles	8 in.-3 in.	Medium Sand	0.6mm-0.2mm	Clay	-0.005mm
Gravel	3 in.-5mm	Fine Sand	0.2mm-0.074mm		

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Georgi Celusnek
1/3/2024

CREECH
CONSULTING, INC.

Youth and Family

LEGAL DESCRIPTION

PARCEL 1: THE SOUTH ½ OF LOT C AN EAST 10 FEET THEREOF OF THE RESUBDIVISION OF LOTS 1, 2, 3, 4, 11, AND 12, BLOCK 2, KIRBY'S SUBDIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 8, PAGE 33, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA;

AND

PARCEL 2: LOT 10, BLOCK 2, KIRBY SUBDIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 3, PAGE 86, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, LESS THE EAST 10 FEET, DEEDED TO THE STATE OF FLORIDA IN OFFICIAL RECORDS BOOK 169, PAGE 1169, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

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