

VARIANCE

Property address or Location Surfside Drive, Fort Pierce, FL
 Parcel ID #(s) 2412-501-0132-000-3
 Project description Four (4) Multi-Family Units

Surfside Land, LLC
Property Owner(s)
9481 Campi Drive
Street Address
Lake Worth FL 33467-6998
City State Zip
Phone Number
ramy.gali@gmail.com; danlei.keoskes@gmail.com
Email Address

Schulke, Bittle & Stoddard, LLC
Applicant/Representative, Title, Company
1717 Indian River Boulevard, Suite 201
Street Address
Vero Beach FL 32960
City State Zip
772-770-9622
Phone Number
jbittle@sbsengineers.com
Email Address

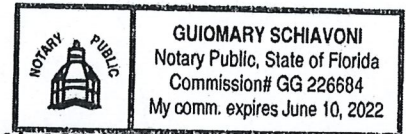
Property Owner(s) Acknowledgements: - This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application. The property owner's signature below shall also authorize the Applicant (if other than the property owner) and/or Representative to act in his/her behalf for the purposes of seeking approval for the application described herein.

Property Owner(s) Signature(s)

STATE OF FL -- COUNTY Palm Beach
 The foregoing instrument was acknowledged before me this 26 day of April, 2021, by
Ramy Gali who is personally known to me or has produced
FL Driver License as identification.

[Signature]
 Signature of Notary

(seal)



INTAKE MEETINGS ARE REQUIRED FOR ALL SUBMITTALS. CALL (772) 467-3737

TO BE COMPLETED BY STAFF

Zoning	Future Land Use	Total Acres	Historic District	Historic Designation	
				Contributing	Individual
				Non-Contributing	None

Pre-Application Meeting Date _____
 Intake Planner _____
 Planner Assigned _____
 Approved By _____ Date _____
 Comments _____

Fees _____ Control # _____ B. Permit # _____

Intake Date Stamp

VARIANCE

Submit eight (8) hard copies and one (1) CD of the following for initial submittal, subsequent submittals will be required:

- Site plan, to scale, including all relevant improvements:
 - Existing & proposed structures
 - Landscaping & parking,
 - Fencing, signs, etc.
- As-built Survey
- Criteria Narrative
- Complete, notarized application

Description of request: 6' Building setback instead of 10' along north property line

Reason for request: The above variance request is needed in order to construct the proposed four (4) multi-family units

Existing Use : Vacant Date Property was Purchased: July 23, 2020

Alterations made to the site since purchase: N/A

Has a request for this variance been denied in the past? Yes No

If yes, what has changed since the denial? _____

Application Outlook

Pre-Application Meeting
Wednesday Afternoons

Application Intake Meeting
Call to schedule

Technical Review Committee
3rd Thursday

Board of Adjustment
4th Thursday

Criteria:

In order to determine whether your request for Variance meets all the criteria in Section 22-108 of the City Code, please answer the following questions. Please provide answers of questions on separate pages:

1. Describe those conditions peculiar to the specific property and not applicable to other lands, structures, or buildings in the same zoning district.
2. Do special conditions or circumstances result from actions other than that of yours? Please explain
3. Identify any undue hardships or deprivation of commonly enjoyed property rights that would result in the literal interpretation of the code for the zoning district.
4. What is the minimum variance that would give the reasonable use of the land, building, or structure?
5. Explain how the variance request would not impair the intent of the zoning ordinance or be detrimental to the general public welfare:

April 30, 2021

Revised: May 3, 2021

Brandon Creagan, MCRP, LEED Green Associate
Planner
City of Fort Pierce
100 North US Highway 1
Fort Pierce, FL 34950

RE: Surfside Quadplex
Variance Criteria Questions

In response to the variance criteria questions listed on Page 2 of the application, we offer the following responses:

1. Describe those conditional peculiarities to the specific property and not applicable to other lands, structures or buildings in the same zoning district.
 - a. Building Setback Variance: Uniquely & atypically narrow for Multi Family parcel. The lot is also decreased by Coastal Construction Control Line, "VE" Flood Zone and Seaward limits of construction restrictions for this lot. Therefore, to make a comfortable width for the residences we must decrease the setback from 10' to 6'. Only requesting on North Side with the minimum variance possible and placed in the least obtrusive location for the adjacent lots.
2. Do special conditions or circumstances result from actions other than that of yours? Please explain.
 - a. Building Setback Variance: Uniquely & atypically narrow for Multi Family parcel. The lot is also decreased by Coastal Construction Control Line, "VE" Flood Zone and Seaward limits of construction restrictions for this lot. Therefore, to make a comfortable width for the residences we must decrease the setback from 10' to 6'. Only requesting on North Side with the minimum variance possible and placed in the least obtrusive location for the adjacent lots.
3. Identify any undue hardships or deprivation of commonly enjoyed property rights that would result in the literal interpretation of the code for the zoning district.
 - a. Building Setback Variance: Uniquely & atypically narrow for Multi Family parcel. The lot is also decreased by Coastal Construction Control Line, "VE" Flood Zone and Seaward limits of construction restrictions for this lot. Therefore, to make a comfortable width for the residences we must decrease the setback from 10' to 6'. Only requesting on North Side with the minimum variance possible and placed in the least obtrusive location for the adjacent lots.

4. What is the minimum variance that would give the reasonable use of the land, building or structure?
 - a. Building Setback Variance: The variance from 10' to 6' is the least amount required for this site. We are placing this Variance on one side due to the adjacent property to the north being setback so far from this property.

5. Explain how the variance request would not impair the intent of the zoning ordinance or be detrimental to the general public welfare
 - a. Building Setback Variance: The 60 feet side setback property to north Building spacing remains much more than 20 foot Code intention. We are proposing a privacy wall and enhances landscaping on BOTH Sides. Eliminate pedestrians cutting through, damaging the Dune Ecosystem; Allows floor plans that are not so narrow as to be marginally functionally obsolete. Helps to Provide closure to a longstanding Developmental challenge unique to this property that has precluded and prevented needed infill for 20 years or longer

Project will provide solution to "dead end sidewalk" danger & liability.

Project will add more than 3 Million dollars to the Tax Roles of the-City & County, potentially totaling an additional \$75,000-\$100,000 annual Ad Valorem Property Tax Revenue increase, compounding to Millions over the next few decades.

If you have any questions, please contact me at our office. Thank you.

Sincerely,



Jodah B. Bittle, P.E.



28 APRIL 2021

SURFSIDE QUADPLEX TOWNHOME PROJECT

The 1700 Surfside Townhomes project is a multi-family development that includes 4 townhome type dwelling units and are 4 stories high. This project is a fee simple ownership located on a vacant oceanfront lot at the North end of Surfside Drive just East of South Ocean Drive, Fort Pierce, Florida.

The ground floor has the car garages facing Surfside Drive with one driveway for the 2 north units and another driveway for the 2 south units. Above that ground level are 3 floors consisting of the townhome dwelling units. There will be stair access to the roofs where there will be patio areas.

The property is zoned R4A and this property is being designed with consideration of transitioning from multifamily condominiums to the North and single-family homes to the South. The proposed development is located seaward of the coastal construction control line and is being designed in accordance with rules and regulations of 62B-33 Florida Administrative Code. Since the project is seaward of the coastal construction control line a conditional use approval will be required from the City of Fort Pierce.

The existing project to the north of this project are 4-story condominium residential apartment buildings with parking on the ground level of the building. The existing property to the south of this project is a single-family single story residential structure.

This development will have a contemporary design style and includes secured garage parking and an elevated swimming pool for each unit. The developer intends to begin construction as soon as all the required permits have been secured.

This Document Prepared By and Return to:
Christopher J. Twohey, PA
844 SE Ocean Blvd. Suite A
Stuart, Florida 34994

Parcel ID Number: 2412-501-0132-000/3

Warranty Deed

This Indenture, Made this 23rd day of July, 2020 A.D., Between
L & K Developers, LLC, an Illinois limited liability company
of the County of Cook, State of Illinois, grantor, and
Surfside Land, LLC, a Florida limited liability
whose address is: 9481 Campi Dr., Lake Worth, FL 33467
of the County of Palm Beach, State of Florida, grantee.

Witnesseth that the GRANTOR, for and in consideration of the sum of
TEN DOLLARS (\$10)

and other good and valuable consideration to GRANTOR in hand paid by GRANTEE, the receipt whereof is hereby
acknowledged, has granted, bargained and sold to the said GRANTEE and GRANTEE'S heirs, successors and assigns
forever, the following described land, situate, lying and being in the County of Saint Lucie
State of Florida to wit:

**Lot 13, Block 11, SURFSIDE UNIT ONE, according to the Plat thereof, as recorded in Plat Book 10, Page
17, Public Records of Saint Lucie County, Florida.**

SUBJECT TO:

1. Taxes for the year 2020, and all subsequent years;
2. Zoning restrictions, prohibitions and other requirements imposed by governmental authority;
3. Restrictions and matters appearing on the Plat or otherwise common to the subdivision; and
4. Public utility easements of record, if any.

and the grantor does hereby fully warrant the title to said land, and will defend the same against lawful claims of all persons
whomsoever.

Warranty Deed - Page 2

Parcel ID Number: 2412-501-0132-000/3

In Witness Whereof, the grantor has hereunto set his hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

Witness
Notary

Eileen M. Keating
Printed Name:
Witness

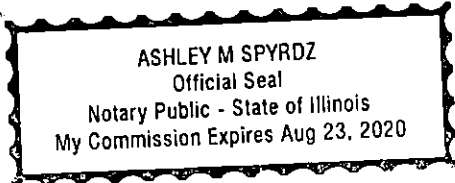
Robert A. Bosco
Printed Name:
Witness

L & K Developers, LLC
By: Robert H. Lohens (Seal)
Robert H. Lohens, Member
P.O. Address: 1237 S. Delphis Ave., Park Ridge, IL 60068

State of Illinois
County of Cook

The foregoing instrument was acknowledged before me by means of physical presence or online notarization, this 23 day of July, 2020, by Robert H. Lohens, Member of L & K Developers, LLC, an Illinois limited liability company on behalf of the limited liability company who is personally known to me or who has produced his driver's license as identification.

Ashley M. Spyrdz
Printed Name:
Notary Public Ashley Spyrzdz
My Commission Expires: 8/23/2020



Property Identification

Site Address: Surfside DR Parcel ID: 2412-501-0132- Account #: 24058 Sec/Town/Range: 07/35S/41E
 Use Type: 0000 Jurisdiction: Fort Pierce Map ID: 25/07N Zoning: HI Medium

Ownership

Surfside Land LLC
 9481 Campi DR
 Lake Worth, FL 33467

Legal Description

SURFSIDE-UNIT ONE- BLK 11 LOT 13(0.54 AC)

Current Values

Just/Market: \$405,300 Assessed: \$405,300
 Exemptions: \$0 Taxable: \$405,300

Historical Values 3-year

Year	Just/Market	Assessed	Exemptions	Taxable
2020	\$405,300	\$405,300	\$0	\$405,300
2019	\$452,000	\$452,000	\$0	\$452,000
2018	\$435,800	\$435,800	\$0	\$435,800

Sale History

Date	Book/Page	Sale Code	Deed	Grantor	Price
07-23-2020	4454 / 2102	0001	WD	L and K Developers	\$567,500
02-04-2016	3834 / 2662	0001	WD	Marchiori Frank A	\$490,000
04-21-2005	2242 / 2471	XX00	WD	Consalo Augustus	\$1,075,000

Primary Building Information

Finished Area of this building: 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	A/C %: 0%	Electric:	Primary Int Wall:
Full Baths: 0	Heated %: N/A%	Heat Type:	Avg Hgt/Floor: 0
Half Baths: 0	Sprinkled %: 0%	Heat Fuel:	Primary Floors:



Image
 or
 Sketch
 unavailable
 for display

Total Areas

Finished/Under Air (SF):	0
Gross Sketched Area (SF):	0
Land Size (acres):	0.54
Land Size (SF):	23,500
Total Building Count:	1

Special Features and Yard Items

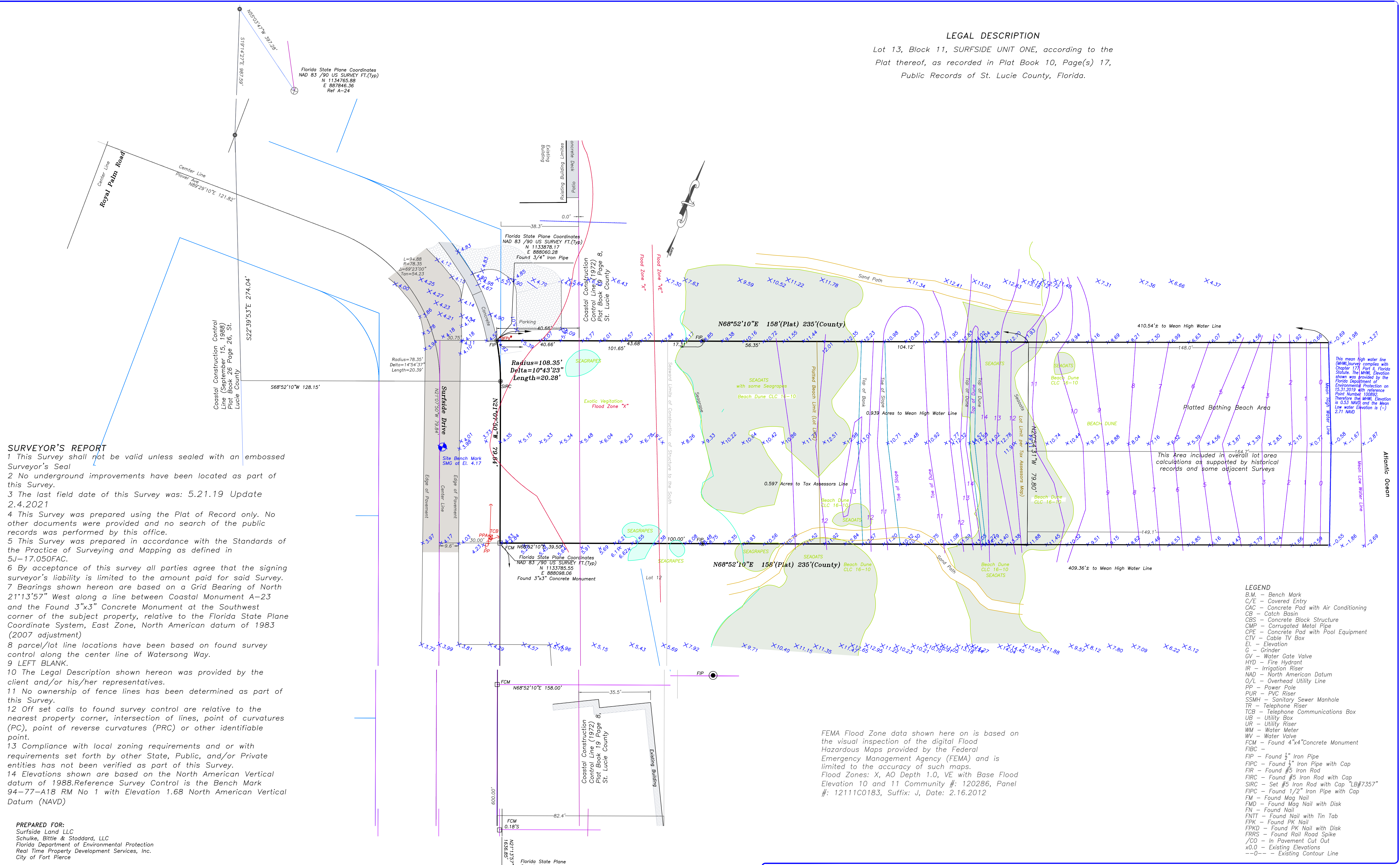
Type	Qty	Units	Year Blt
------	-----	-------	----------

LEGAL DESCRIPTION
 Lot 13, Block 11, SURFSIDE UNIT ONE, according to the
 Plat thereof, as recorded in Plat Book 10, Page(s) 17,
 Public Records of St. Lucie County, Florida.

SURVEYOR'S REPORT
 1 This Survey shall not be valid unless sealed with an embossed Surveyor's Seal
 2 No underground improvements have been located as part of this Survey.
 3 The last field date of this Survey was: 5.21.19 Update 2.4.2021
 4 This Survey was prepared using the Plat of Record only. No other documents were provided and no search of the public records was performed by this office.
 5 This Survey was prepared in accordance with the Standards of the Practice of Surveying and Mapping as defined in 5J-17.050FAC.
 6 By acceptance of this survey all parties agree that the signing surveyor's liability is limited to the amount paid for said Survey.
 7 Bearings shown hereon are based on a Grid Bearing of North 21°13'57" West along a line between Coastal Monument A-23 and the Found 3"x3" Concrete Monument at the Southwest corner of the subject property, relative to the Florida State Plane Coordinate System, East Zone, North American datum of 1983 (2007 adjustment)
 8 parcel/lot line locations have been based on found survey control along the center line of Watersong Way.
 9 LEFT BLANK.
 10 The Legal Description shown hereon was provided by the client and/or his/her representatives.
 11 No ownership of fence lines has been determined as part of this Survey.
 12 Off set calls to found survey control are relative to the nearest property corner, intersection of lines, point of curvatures (PC), point of reverse curvatures (PRC) or other identifiable point.
 13 Compliance with local zoning requirements and or with requirements set forth by other State, Public, and/or Private entities has not been verified as part of this Survey.
 14 Elevations shown are based on the North American Vertical datum of 1988. Reference Survey Control is the Bench Mark 94-77-A18 RM No 1 with Elevation 1.68 North American Vertical Datum (NAVD)

PREPARED FOR:
 Surfside Land LLC
 Schulke, Brittle & Stoddard, LLC
 Florida Department of Environmental Protection
 Real Time Property Development Services, Inc.
 City of Fort Pierce

Prepared By: Regina C. Karner, PSM#4363
 Karner Surveying, Inc. LB#7357



FEMA Flood Zone data shown here on is based on the visual inspection of the digital Flood Hazardous Maps provided by the Federal Emergency Management Agency (FEMA) and is limited to the accuracy of such maps.
 Flood Zones: X, AO Depth 1.0, VE with Base Flood Elevation 10 and 11 Community #: 120286, Panel #: 12111C0183, Suffix: J, Date: 2.16.2012

- LEGEND**
- B.M. - Bench Mark
 - C/E - Covered Entry
 - CAC - Concrete Pad with Air Conditioning
 - CB - Catch Basin
 - CBS - Concrete Block Structure
 - CMP - Corrugated Metal Pipe
 - CPE - Concrete Pad with Pool Equipment
 - CTV - Cable TV Box
 - EL - Elevation
 - G - Grinder
 - GV - Water Gate Valve
 - HYD - Fire Hydrant
 - IR - Irrigation Riser
 - NAD - North American Datum
 - O/L - Overhead Utility Line
 - PP - Power Pole
 - PUR - PVC Riser
 - SSMH - Sanitary Sewer Manhole
 - TR - Telephone Riser
 - TCB - Telephone Communications Box
 - UB - Utility Box
 - UR - Utility Riser
 - WM - Water Meter
 - WV - Water Valve
 - FCM - Found 4"x4" Concrete Monument
 - FIBC - Found 1/2" Iron Pipe
 - FIPC - Found 1/2" Iron Pipe with Cap
 - FIR - Found #5 Iron Rod
 - FIRC - Found #5 Iron Rod with Cap
 - SIRC - Set #5 Iron Rod with Cap "LB#7357"
 - FIPC - Found 1/2" Iron Pipe with Cap
 - FM - Found Mag Nail
 - FMD - Found Mag Nail with Disk
 - FN - Found Nail
 - FNIT - Found Nail with Tin Tab
 - FPK - Found PK Nail
 - FPKD - Found PK Nail with Disk
 - FRRS - Found Rail Road Spike
 - /CO - In Pavement Cut Out
 - X0.0 - Existing Elevations
 - 0-- - Existing Contour Line

Prepared For:
Surfside Land LLC
 St. Lucie County Florida

KARNER SURVEYING, INC.
 Residential & Commercial Surveying Services
 2740 SW Martin Downs Blvd.#333, Palm City, FL 34990
 Phone: (772)288 7206 Fax:(772)223 8181
 WWW.KARNERSURVEYING.COM karner@comcast.net

Date	Revision Description	Sheet Title
8.18.19	Center	Boundary Survey

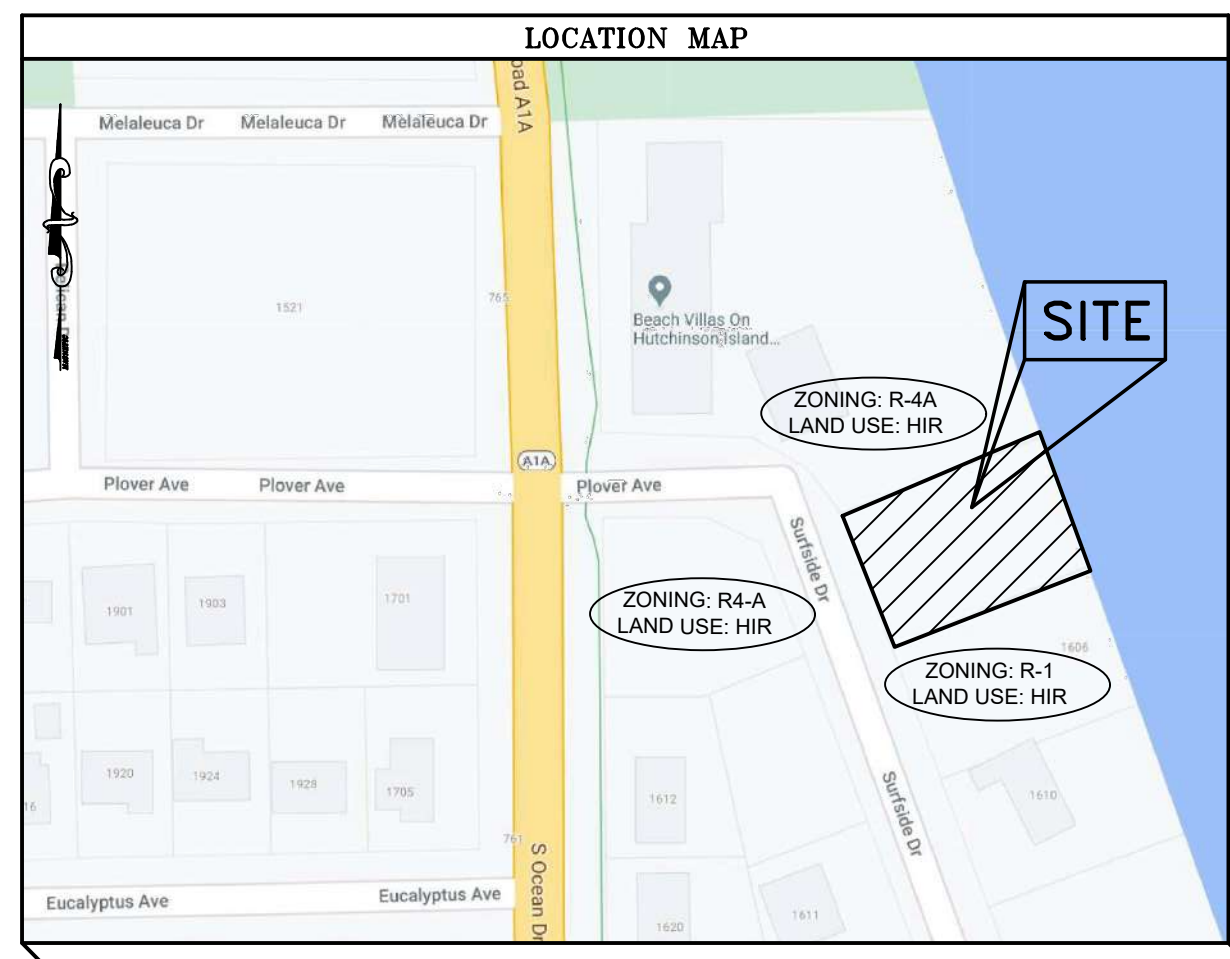
CONDITIONAL USE SITE PLAN/ PRELIMINARY PLAT

FOR

SURFSIDE QUAD PLEX

SECTION 07, TOWNSHIP 35 S, RANGE 41 E
CITY OF FT. PIERCE, FLORIDA

LEGAL DESCRIPTION
SURFSIDE - UNIT ONE - BLK 11 LOT 13



DRAWING INDEX	
SHEET	DESCRIPTION
1	COVER SHEET
2	EXISTING CONDITIONS AND POLLUTION PREVENTION
3	POLLUTION PREVENTION DETAILS
4	SOIL BORINGS
5	PRELIMINARY PLAT
6	SITE PLAN
7	PAVING, GRADING AND DRAINAGE PLAN
8	CROSS SECTIONS
9-12	MISCELLANEOUS DETAILS
13	LIGHTING PLAN
14	AERIAL
ATTACHED	SURVEY LANDSCAPE PLAN ARCHITECTURAL PLAN

SITE DATA		
OWNER/DEVELOPER	SURFSIDE LAND LLC 9481 CANAL DR LAKE WORTH, FL 33467-6998	
ENGINEER	SCHULKE, BITTLE & STODDARD, L.L.C. JODAN B BITTLE, P.E. 57398 1717 INDIAN RIVER BLVD., SUITE 201 VERO BEACH, FL 32960 (772) 770-9622	
SURVEYOR:	KARNER SURVEYING, INC. REGINA KARNER, PSM #4363 2740 SW MARTIN DOWNS BLVD. #333 PALM CITY, FL 34960 PH. (772) 288-7206	
EXISTING USE	UNDEVELOPED	
PROPOSED USE	FOUR (4) MULTI-FAMILY UNITS	
PROJECT LOCATION	SECOND LOT FROM THE CORNER OF SR A-1-A AND SURFSIDE DRIVE	
SITE ADDRESS	SURFSIDE DRIVE, FT. PIERCE, FL	
PARCEL I.D. NUMBER	2412-501-0132-000-3	
CURRENT LAND USE	HIR (HUTCHINSON ISLAND RESIDENTIAL)	
CURRENT ZONING	R-4A (HUTCHINSON ISLAND MEDIUM DENSITY RESIDENTIAL)	
PROPOSED ZONING	R-4A (HUTCHINSON ISLAND MEDIUM DENSITY RESIDENTIAL)	
DEVELOPMENT PARAMETERS	EXISTING	PROPOSED
	R-4A ZONING	DEVELOPMENT
	5,000 SF PER UNIT	40,902 SF
MIN. LOT AREA	75'	100'
MIN. OVERALL LOT WIDTH	70'	235'
MIN. INTERIOR LOT DEPTH	25'	25.9'
MIN. YARD SETBACKS:		
FRONT (WEST)	10'	6.0'
SIDE (NORTH)	10'	10.0'
SIDE (SOUTH)	20'	327.1'
REAR (WEST)	40%	10.7%
MAX. LOT COVERAGE BY BLDGS	25%	83.2%
MIN. OPEN SPACE	75%	16.8%
MAX. IMPERVIOUS AREA	8 UNITS/ACRE	4.3 UNITS/ACRE
MAXIMUM DENSITY	45'	45'
MAX. BLDG. HEIGHT		
AREA CALCULATIONS:		
SITE AREAS:	EXISTING	PROPOSED
DEVELOPABLE AREA:	40,902 SF	0.94 AC
IMPERVIOUS AREA:	6,882 SF	0.16 AC
BUILDING AREA:	4,387 SF	0.10 AC
PAVING AREA:	1,708 SF	0.04 AC
CONCRETE PAVEMENT AREA:	787 SF	0.02 AC
PERVIOUS AREA:	34,020 SF	0.78 AC
GREEN SPACE:	34,020 SF	0.78 AC
NATIVE VEGETATION/PRESERVATION:		
SEE SURVEY FOR DUNE VEGETATION		
PARKING CALCULATIONS:		
REQUIRED: 2 SPACE PER UNIT		
PROVIDED: 8 INTERIOR DRIVEWAY PARKING SPACES		
PROVIDED: 8 INTERIOR DRIVEWAY PARKING SPACES		
AVERAGE DAILY TRIPS:		
PROPOSED USE: PER ITE 9TH EDITION TRIP GENERATION MANUAL, LAND USE 230		
4 MULTI-FAMILY UNITS X 7.78 TRIPS/UNIT = 31.1 OR 32 TRIPS		
CONSTRUCTION SCHEDULE:		
DATE OF COMMENCEMENT: 1/22	DATE OF COMPLETION: 1/23	
VARIANCES FOR THIS PROJECT:		
1. REQUIRED: 10 FOOT SETBACK FROM NORTH PROPERTY LINE		
PROPOSED: 6 FOOT BUILDING SETBACK FROM NORTH PROPERTY LINE		
2. REQUIRED: 50 FOOT SETBACK BETWEEN DRIVEWAYS		
PROPOSED: 20.5 FOOT SETBACK BETWEEN DRIVEWAYS		
3. REQUIRED: 25 FOOT SETBACK FOR DRIVEWAYS FROM PROPERTY LINES		
PROPOSED: 15.5 FOOT SETBACK FOR DRIVEWAYS FROM PROPERTY LINES		
GENERAL NOTES	<p>1. PROPOSED PUBLIC WATER SUPPLY - FT. PIERCE UTILITY AUTHORITY</p> <p>2. PROPOSED PUBLIC SEWER - FT. PIERCE UTILITY AUTHORITY</p> <p>3. GARBAGE IS HANDLED WITH CANS STORED IN THE UNITS. NO DUMPSTER PROPOSED.</p> <p>4. THE PARCEL OF LAND SHOWN HEREON APPEARS TO BE IN FLOOD ZONE X, X (2%), & VE-8 PER FLOOD INSURANCE RATE MAP #12111C0183 J, DATED FEBRUARY 15TH, 2012.</p> <p>5. ALL CONSTRUCTION ON SITE TO BE DONE PER ALL CITY OF FT. PIERCE STANDARDS AND SPECIFICATIONS.</p> <p>6. ALL UTILITY CONSTRUCTION ON SITE TO BE DONE PER F.U.A. UTILITY STANDARDS AND SPECIFICATIONS, LATEST EDITION.</p> <p>7. ALL SIGNS AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST VERSIONS OF THE M.U.T.C.O. FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS, AND CITY OF FT. PIERCE TYPICAL PAVEMENT MARKINGS AND SIGNING DETAILS. IN ADDITION, ALL PAVEMENT MARKINGS WITHIN THE RIGHT-OF-WAY SHALL BE INSTALLED IN THERMO-PLASTIC.</p> <p>8. EXISTING DRIVES AND/OR INTERSECTIONS SHOWN ARE WITHIN THE 300' RADIUS REQUIRED FROM THE PROPOSED SITE.</p> <p>9. THE EXISTING SPEED LIMIT FOR SEAWAY DRIVE IS 35 M.P.H.</p> <p>10. ALL PROPOSED TRAFFIC CONTROL DEVICES SHOWN ON SITE TO BE PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.</p> <p>11. THE SITE LIGHTING (SOURCE OF ILLUMINATION) CANNOT BE VISIBLE FROM THE SITE.</p> <p>12. ANY NUISANCE/EXOTIC PLANTS IN THE DEVELOPED AREA WILL BE REMOVED.</p> <p>13. AT INTERSECTIONS, WALLS, FENCES, PLANTS OR SIGHT OBSTRUCTIONS OF ANY KIND OVER 18" IN HEIGHT ARE PROHIBITED WITHIN THE SITE DISTANCE TRIANGLE AS REQUIRED BY FDOT INDEX 546, 2014 EDITION.</p> <p>14. ANY DISTURBED AREAS ON SITE OR IN THE COUNTY RIGHT-OF-WAY TO BE SODED.</p> <p>15. RUN-OFF FROM ROOF TO BE DIRECTED TO STORMWATER SYSTEM.</p> <p>16. ALL LIGHTS MUST MEET THE FOLLOWING CRITERIA: - ALL POLES MUST BE BLACK OR BRONZE - ALL LIGHTS MUST BE DIRECTED DOWNWARD, WITH A 90 DEG. CUT-OFF - LIGHTS MUST NOT CAUSE GLARE ONTO ADJACENT R/W OR PROPERTIES.</p> <p>17. ALL STOP SIGNS (R-1) SHALL BE 30"</p> <p>18. NO DEWATERING BETWEEN 8 PM AND 6 AM WITHOUT CITY OF FT PIERCE APPROVAL.</p> <p>19. AN ENTRANCE GATE IS PROPOSED FOR THIS SITE.</p> <p>20. CITY OF FT. PIERCE OR FDOT MAY HAVE UNDERGROUND CONDUIT FOR TRAFFIC SIGNAL INTERCONNECTIONS IN THIS AREA AS WELL AS OTHER TRAFFIC SIGNAL EQUIPMENT. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO CONTACT SUNSHINE STATE ONE CALL SYSTEM AT 1-800-432-8770 FOR LOCATIONS OF THIS EQUIPMENT AT LEAST 72 HOURS PRIOR TO ANY CONSTRUCTION.</p> <p>21. ALL SOLID, NON-BREAKAWAY OBJECTS (GATE POSTS/COLUMNS, BOLLARDS, STREET LIGHT POLES, ETC.) ALONGSIDE INTERIOR STREETS AND DRIVING AISLES SHALL BE LOCATED OUTSIDE THE CLEAR ZONE FOR STREETS AND DRIVING AISLES WITH A DESIGN SPEED OF 25 MPH OR LESS. THE MINIMUM CLEAR ZONE IS 2.5 FEET FROM THE FACE OF THE CURB (TYPE 'D' OR 'T'), OR 6 FEET FROM THE EDGE OF THE TRAVEL LANE. THIS APPLIES TO PUBLIC AND PRIVATE PROPERTY.</p> <p>22. THE BEARING BASE FOR THIS SURVEY IS A GRID BEARING OF S46°30'43"W, ALONG THE NORTH R/W LINE OF SEAWAY DRIVE AND BASED ON FOUND MONUMENTATION.</p> <p>23. THE ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988. THE BENCHMARK IS CGS MONUMENT 231 1965, ELEVATION 4.47 NAVD. SECONDARY BENCHMARK IS AS SHOWN HEREON. THE CONVERSION TO NAVD29 IS BY ADDING 1.499 FT.</p> <p>24. ALL CONSTRUCTION WILL COMPLY WITH SECTIONS 17 AND 22 OF THE CITY OF FT. PIERCE CODE OF ORDINANCES.</p> <p>25. ANY ABANDONED FLOW WELLS FOUND ON SITE SHALL BE PLUGGED PURSUANT TO D.O.H. AND SWMD REGULATIONS.</p> <p>26. ALL PAVEMENT MARKINGS IN THE RIGHT-OF-WAY SHALL BE 90 MIL., EXTRUDED TYPE, ALKID BASE, THERMOPLASTIC.</p> <p>27. ALL HANDICAPPED PARKING SPACES SHALL BE PROPERLY SIGNED AND STRIPED IN ACCORDANCE WITH THE FDOT STANDARD INDEX 17346, 2014 EDITION.</p> <p>28. ALL STOP SIGNS SHALL BE HIGH INTENSITY RETRO-REFLECTIVITY</p> <p>29. ALL UTILITIES MUST BE PLACED UNDERGROUND.</p> <p>30. THE CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITY LINES AND STRUCTURES PRIOR TO CONSTRUCTION.</p> <p>31. FRI SPRINKLER SYSTEM IS PROPOSED FOR THIS BUILDING.</p>	

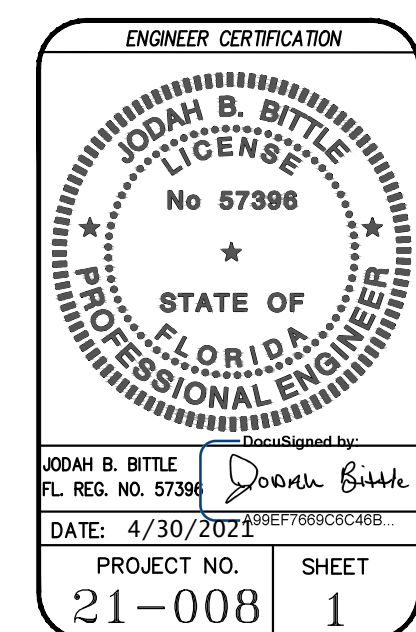
CONSTRUCTION NOTES	
1. SUBMITTALS	
A. PRODUCT DATA AND SHOP DRAWINGS	FOR ALL SITE WORK CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT PRODUCT DATA IN THE FORM OF MANUFACTURERS' CUT SHEETS AND CATALOG DATA FOR ALL PRODUCTS, MATERIAL AND EQUIPMENT CLEARLY INDICATING THE SPECIFIC PART OR PRODUCT CATALOG NUMBER(S) FOR APPROVAL.
B. UTILITIES	THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL PRODUCTS, MATERIALS AND EQUIPMENT REQUIRED TO BE FABRICATED, OR WHEN STANDARD PUBLISHED PRODUCT DATA IS NOT SUITABLE FOR USE.
C. PAVING AND GRADING	ALL PIPE, FITTINGS, VALVES, OTHER MISCELLANEOUS APPURTENANCES, CONTROLS, PUMP STATION EQUIPMENT, COMPONENTS AND STRUCTURES, AND ALL OTHER UTILITY SYSTEM PRODUCTS, MATERIALS AND COMPONENTS AND SIMILAR CONTROLS.
D. DRAINAGE	ALL PIPE, FITTINGS, AND COMPONENTS THEREOF: STRUCTURES, FRAMES, GRATES, LIDS, GASKETS, FASTENERS, COUPLINGS AND SIMILAR, AND ALL OTHER DRAINAGE SYSTEM PRODUCTS, MATERIALS, AND COMPONENTS AND SIMILAR CONTROLS.
E. SIGNING AND PAVEMENT MARKINGS	FDOT CERTIFICATIONS AND LAB ANALYSIS RESULTS FOR PAVEMENT, BASE, SUBGRADE, AND FILL MATERIALS. INCLUDE EVIDENCE (CERTIFICATIONS) THAT THE MATERIALS PROPOSED TO BE USED MEET OR EXCEED FDOT SPECIFICATIONS AND THE CONTRACT DOCUMENTS.
F. IRRIGATION	SIGN AND PAVEMENT MARKING PRODUCTS AND MATERIALS, AND EVIDENCE THAT THE PRODUCTS AND MATERIALS PROPOSED TO BE USED MEET OR EXCEED REQUIREMENTS SPECIFIED IN THE CONTRACT DOCUMENTS, LOCAL ENGINEERING DEPARTMENT, MUTCO AND FDOT SPECIFICATIONS.
G. AS-BUILTS	ALL PIPE, FITTINGS, VALVES, OTHER MISCELLANEOUS APPURTENANCES, CONTROLS, PUMP STATION EQUIPMENT, COMPONENTS AND STRUCTURES, AND ALL OTHER UTILITY SYSTEM PRODUCTS, MATERIALS AND COMPONENTS AND SIMILAR CONTROLS, WELLS, AND/OR OTHER IRRIGATION SOURCES. THE CONTRACTOR SHALL SUBMIT AN IRRIGATION COORDINATION DRAWING, INDICATING CONTRACTOR PROPOSED LOCATION OF MAIN LINES, SECONDARY LINES, HEAD LOCATIONS, WELL, PUMP, CONTROL PANEL, SENSORS, CONTROL VALVE AND VALVE LOCATIONS. THIS DRAWING SHOULD CLEARLY DEPICT ADJUSTMENTS OR CHANGES THE CONTRACTOR PROPOSES. THE DRAWINGS SHALL INDICATE ALL PROPOSED SUBSTITUTIONS OF SIZE, MATERIAL, AND/OR MANUFACTURER.
H. TESTING	ENGINEER WILL NOT BE RESPONSIBLE FOR PROJECT DELAYS RELATED TO DELIVERY AND TRANSMISSION OF THE DOCUMENTS ONCE INFORMATION HAS LEFT ENGINEER'S OFFICE. ITEMS REQUIRING A LONG LEAD TIME SHOULD BE SUBMITTED AS SOON AS POSSIBLE.
I. WATER	THE CONTRACTOR SHALL PROVIDE A STAMP INDICATING ITS REVIEW AND APPROVAL, INITIALED OR SIGNED, CERTIFYING TO REVIEW OF SUBMITTAL, VERIFICATION OF PRODUCTS, FIELD MEASUREMENTS AND FIELD CONSTRUCTION CRITERIA, AND COORDINATION OF THE INFORMATION WITHIN THE SUBMITTAL WITH REQUIREMENTS OF THE WORK AND OF CONTRACT DOCUMENTS, INCLUDING PLANS AND SPECIFICATIONS OF OTHER DESIGN PROFESSIONALS (I.E., ARCHITECT, MECHANICAL, ELECTRICAL, AND STRUCTURAL ENGINEERS).
J. SEWER, EXFIL, LAMPING (FIELD), AND BACKFILL DENSITIES PER PROJECT SPECIFICATIONS AND LOCAL ENGINEERING REQUIREMENTS.	
K. EARTHWORK & PAVING, DENSITIES, LBRS AND FBVS AS PER PROJECT SPECIFICATIONS AND LOCAL ENGINEERING REQUIREMENTS.	
L. SUBMIT ALL TEST RESULTS FOR ENGINEERING REVIEW WITHIN 3 DAYS OF TESTING. FAILURE TO PROVIDE TEST RESULTS, OR PROVIDING FAILING TEST RESULTS WILL BE GROUNDS FOR DELAY AND/OR REJECTION OF PAY REQUEST APPLICATIONS.	
M. SEWER STRUCTURES, DIAMETER OR SIZE, AND LOCATION AND ELEVATION OF STRUCTURES, TOP, BOTTOMS, AND SEWER INVERTS.	
N. MAINS AND LATERALS, LOCATION AND INVERT ELEVATIONS AT CONNECTIONS, FITTINGS, AND TERMINATION.	
O. LIFT STATIONS: HORIZONTAL LAYOUT AND LOCATION OF ALL EQUIPMENT, PANELS, VALVES, WET WELL, VALVES, LOCATION OF CONDUIT RUNS AND WATER SERVICE/ HOSE BIBB, LOCATION AND INVERT ELEVATIONS OF GRAVITY AND FORCE MAINS TO AND FROM LIFT STATION, WET WELL, DIAMETER, TOP AND BOTTOM ELEVATIONS, PUMPS(S) SIZE, TYPE, DISCHARGE DIAMETER, MANUFACTURER AND MODEL #	
P. DRAINAGE: ALL STRUCTURES DIAMETER OR SIZE, LOCATION, AND ELEVATION OF TOP, BOTTOM, AND INVERT ELEVATIONS, ALL PIPES, DIAMETER, TYPE/MATERIAL, LOCATION AND INVERT ELEVATION AT CONNECTIONS, FITTINGS, AND TERMINATION POINTS.	
Q. IRRIGATION: ALL LINES, SYSTEM EQUIPMENT COMPONENTS, MATERIALS INCLUDING PIPES, VALVES, FITTINGS, SPRINKLER HEADS, AND MISCELLANEOUS APPURTENANCES.	
R. OPERATION AND MAINTENANCE MANUALS	
S. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH OPERATION AND MAINTENANCE MANUALS FOR ALL OPERABLE EQUIPMENT (PUMP STATIONS AND CONTROLS, AUTOMATIC CONTROL VALVES, AND OTHER AUTOMATED EQUIPMENT, CONTROL PANELS, ETC.).	
T. OPERATION AND MAINTENANCE MANUALS SHALL BE SUBMITTED AS A PRE-REQUISITE TO THE PROJECT BEING DEEMED SUBSTANTIALLY COMPLETE.	
U. WARRANTY	THE CONTRACTOR SHALL PROVIDE ALL WARRANTIES, CERTIFICATIONS, GUARANTIES, AND WARRANTY BONDS AS SPECIFIED IN THE CONTRACT DOCUMENTS AND PERMIT CONDITIONS INCLUDING: - UTILITY MAINTENANCE BOND - FOR ALL PUBLIC WATER AND SEWER UTILITIES INFRASTRUCTURE - (25% OF CONTRACT VALUE) - ENGINEERING MAINTENANCE BOND - FOR ALL PAVING, GRADING, AND DRAINAGE IMPROVEMENTS AND INFRASTRUCTURE (25% OF CONTRACT VALUE)
V. OWNER TRAINING	THE CONTRACTOR SHALL INCLUDE 2 HOURS OF OWNER TRAINING (FOR EACH WATER, SEWER, DRAINAGE, AND IRRIGATION SYSTEM) FOR ALL OPERABLE EQUIPMENT AND SHALL INCLUDE THE TIME FOR INITIAL ADJUSTMENTS OF EQUIPMENT AND TIME FOR ONE FOLLOW-UP VISIT AND ADJUSTMENTS OF EQUIPMENT 60 DAYS AFTER END USER HAD OPERATIONAL TIME WITH THE EQUIPMENT.

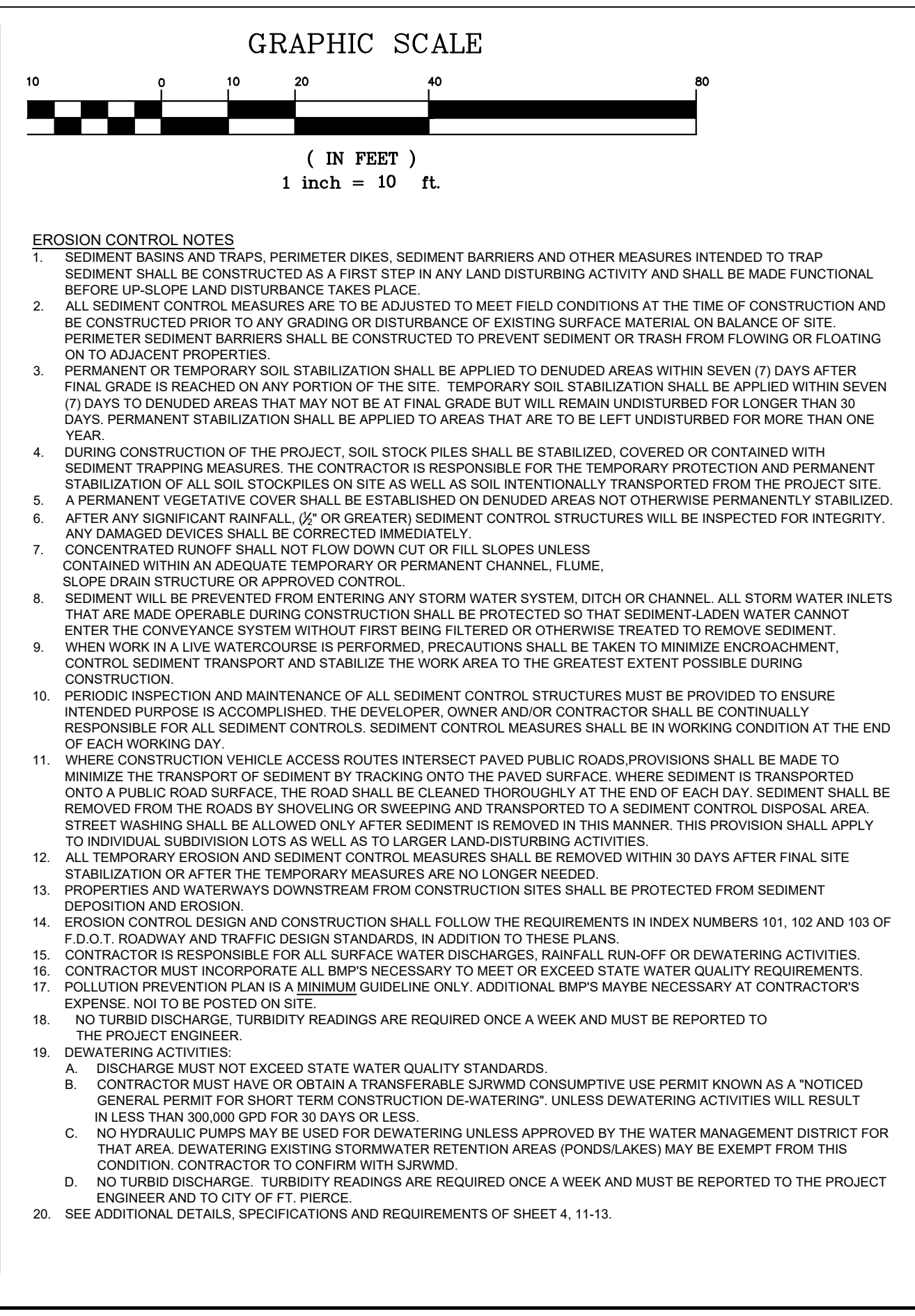
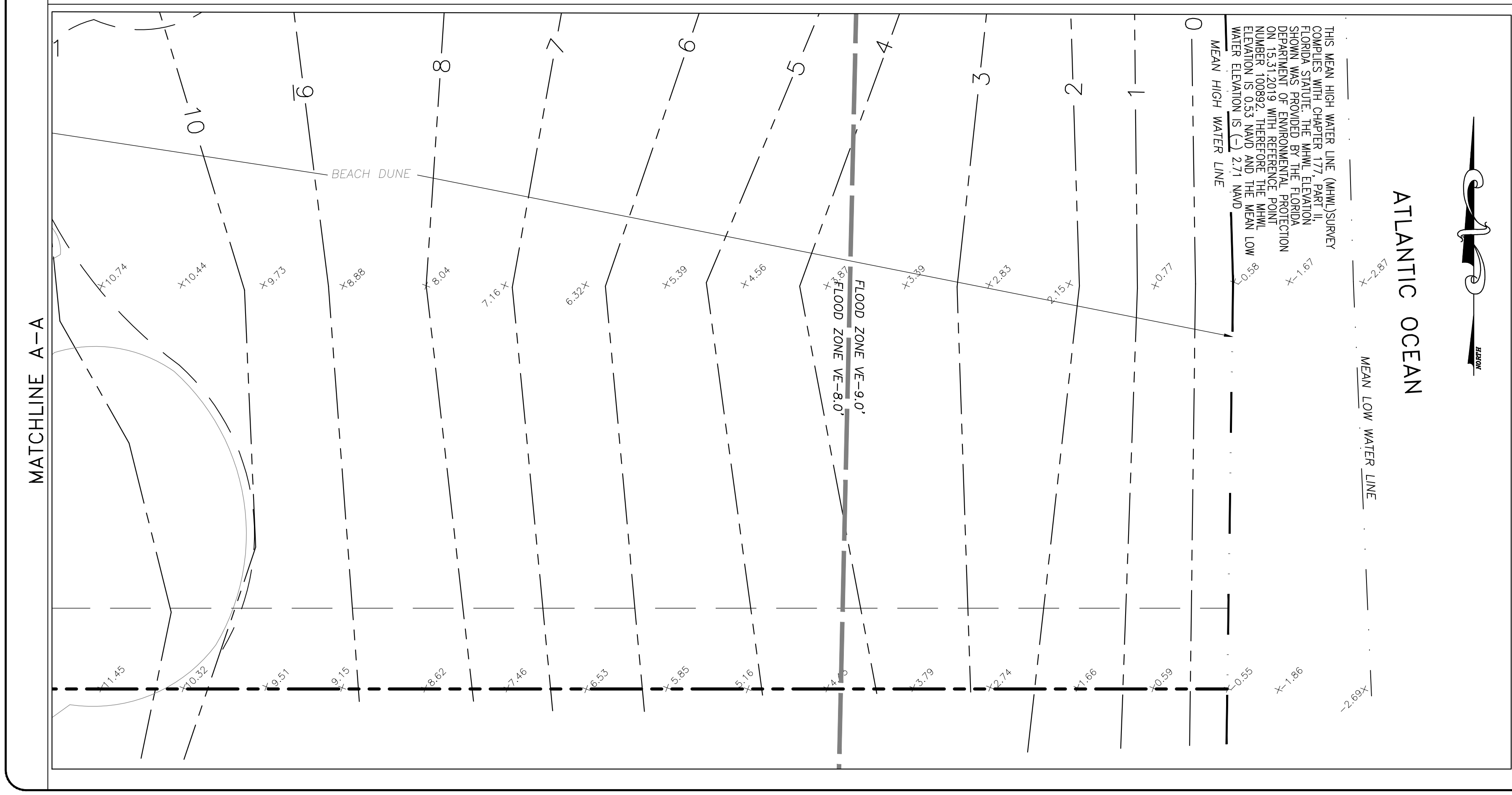
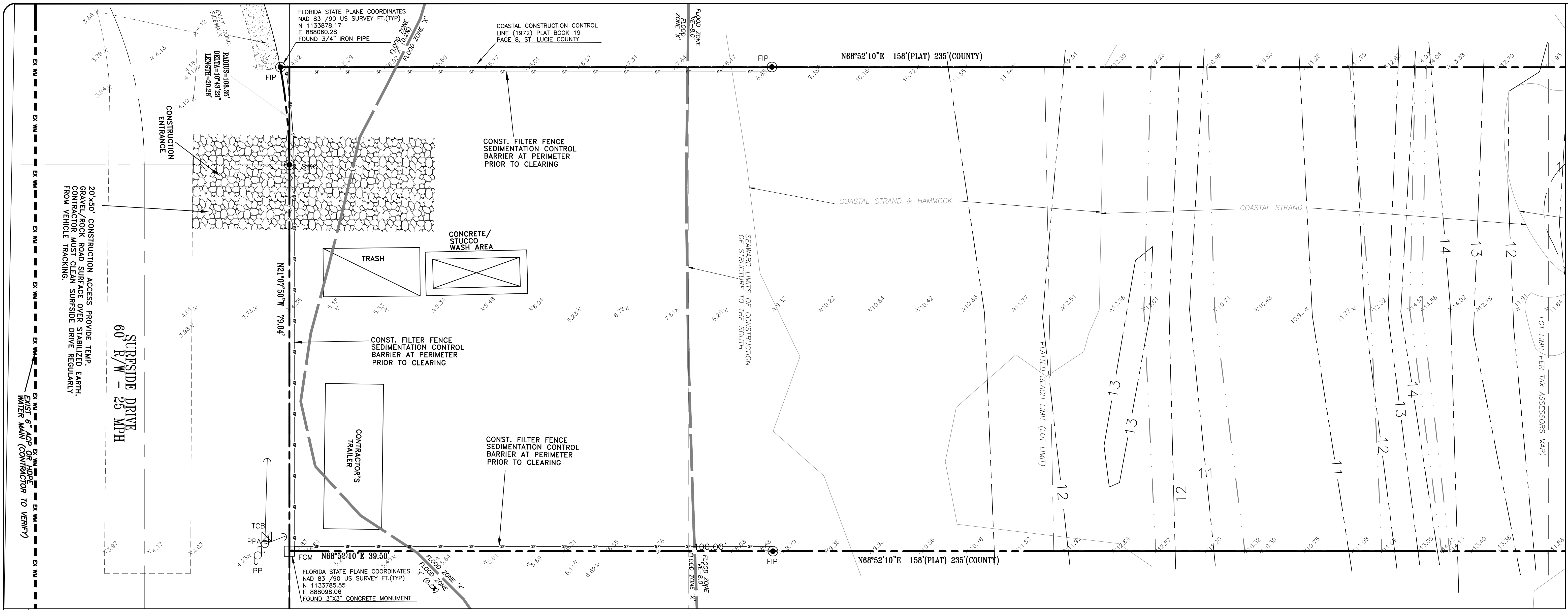
SCHULKE, BITTLE & STODDARD, L.L.C.

CIVIL & STRUCTURAL ENGINEERING • LAND PLANNING • ENVIRONMENTAL PERMITTING

CERTIFICATION OF AUTHORIZATION NO.: 00008668

1717 INDIAN RIVER BLVD., SUITE 201 VERO BEACH, FLORIDA 32960
TEL 772 / 770-9622 FAX 772 / 770-9496 EMAIL info@sbsengineers.com





STORMWATER POLLUTION PREVENTION PLAN

A SITE PLAN MUST BE DEVELOPED AND MUST CONTAIN, AT A MINIMUM, THE FOLLOWING INFORMATION:

1. DRAINAGE PATTERNS - SEE SURVEY AND DRAINAGE PLAN SHEET 3 & 7.
2. APPROXIMATE SLOPES AFTER MAJOR GRADING ACTIVITIES - SEE SHEET 7.
3. AREAS OF SOIL DISTURBANCE - SEE SHEETS 2, AND THIS SHEET.
4. OUTLINE ALL AREAS THAT ARE NOT TO BE DISTURBED - N/A.
5. LOCATION OF ALL MAJOR STRUCTURAL AND NON-STRUCTURAL CONTROLS - THIS SHEET.
6. THE LOCATION OF EXPECTED STABILIZATION PRACTICES - THIS SHEET.
7. NO WETLANDS AND SURFACE WATERS.
8. LOCATIONS WHERE STORMWATER MAY DISCHARGE TO A SURFACE WATER OR MS4 - SEE SHEET 7.

DESCRIBE THE NATURE OF THE CONSTRUCTION ACTIVITY:
DEMOLITION, LAND CLEARING, EARTHWORK, PAVING AND UTILITY WORK FOR BUILDING, PARKING AND SITE IMPROVEMENTS.

DESCRIBE THE INTENDED SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES:
1. SITE PREPARATION AND STABILIZE CONSTRUCTION ENTRANCE.
2. INSTALL SILT FENCE AROUND PERIMETER OF SITE. INSTALL TURBIDITY BARRIERS AT ALL OUTFALL LOCATIONS. CLEAR LAND. CONSTRUCT BERM ON PERIMETER AND TEMPORARY SWALES AS SHOWN ON PLANS. BERM SHALL BE CONSTRUCTED USING INITIAL IMPORTED FILL MATERIAL. THE BERM AND SWALE SHALL BE SEEDED.

TOTAL AREA OF THE SITE: 0.94 ACRES
TOTAL AREA OF THE SITE TO BE DISTURBED: 0.25 ACRES

EXISTING DATA DESCRIBING THE SOIL OR QUALITY OF ANY STORMWATER DISCHARGE:
SEE SOIL BORINGS BY SHEETS 2. NO DISCHARGE FROM DISTURBED AREAS IS ANTICIPATED.

DRAINAGE AREA SIZE FOR EACH DISCHARGE POINT:
ENTIRE SITE = 0.25 ACRES

LATITUDE AND LONGITUDE OF THE SITE:
LATITUDE = N 27° 27' 04" N
LONGITUDE = W 80° 17' 05" W

NOTES:

1. THIS PLAN (SHEETS 4 AND 5), COPY OF FDP NO.1 (STATE OF FLORIDA GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES) AND ALL REQUIRED INSPECTION REPORTS, TESTS, AND ALL OTHER DOCUMENTATION SHALL BE KEPT AT THE PROJECT SITE.
2. THE FOLLOWING CERTIFICATION SHALL BE COMPLETED BY ALL CONTRACTORS/SUB-CONTRACTORS RESPONSIBLE FOR ANY PORTION OF THE IMPLEMENTATION OF THE S.W.P.P.P.

CERTIFICATION:
I CERTIFY UNDER THE PENALTY OF LAW THAT I UNDERSTAND AND SHALL COMPLY WITH, THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES AND THIS STORMWATER POLLUTION PREVENTION PLAN PREPARED THEREUNDER.

SWPPP DESCRIPTION OF WORK/ RESPONSIBILITY	NAME TITLE	CONTRACTOR OR SUB CONTRACTOR (NAME, ADDRESS, PHONE)	NAME/SIGNATURE TO CERTIFICATION	DATE
			_____ DATE	
			_____ DATE	
			_____ DATE	
			_____ DATE	

MATCHLINE A-A

DESIGNED	CHECKED	SCALE	DATE
JBB	JBB	1"=10'	04/16/21

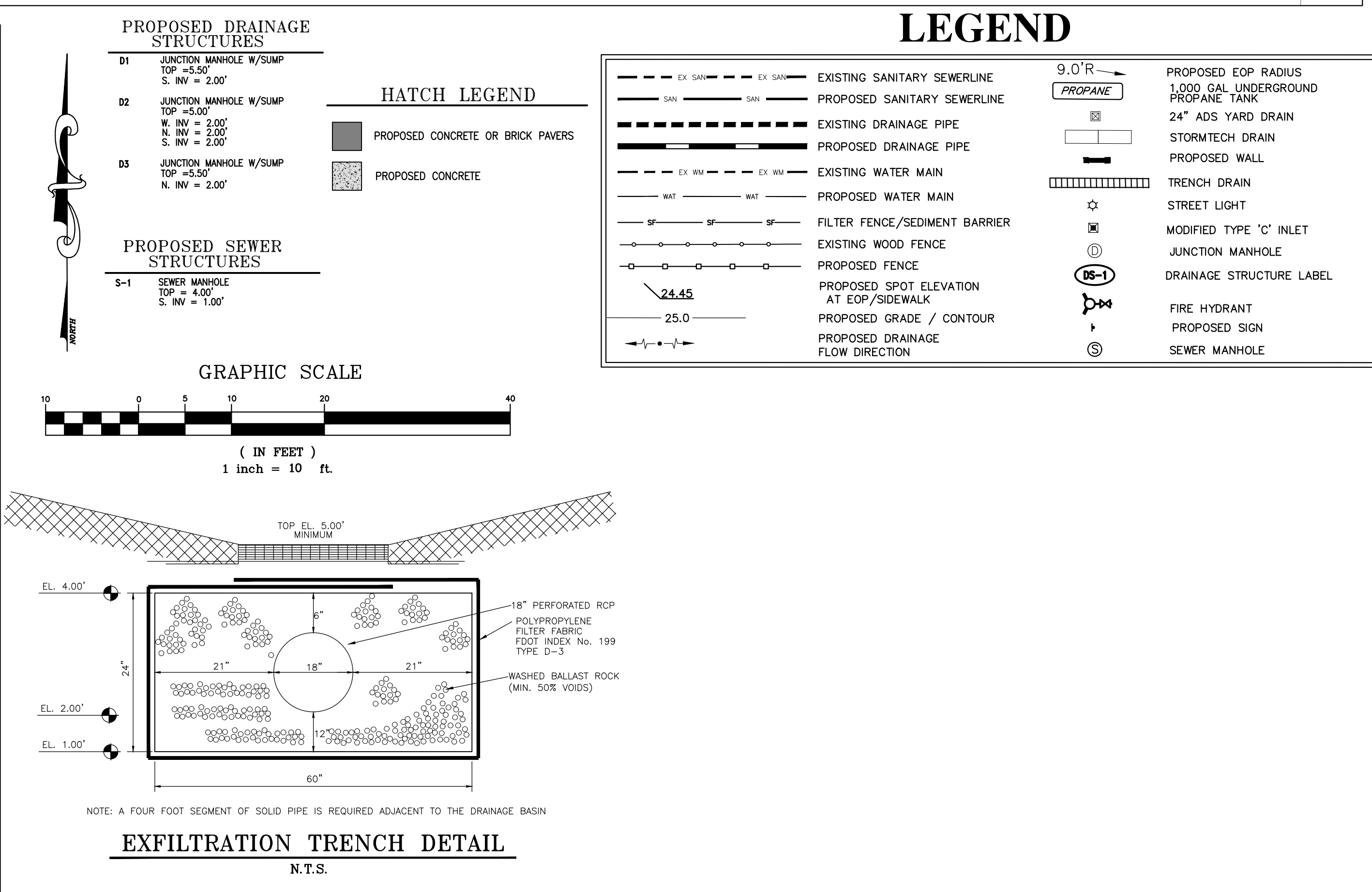
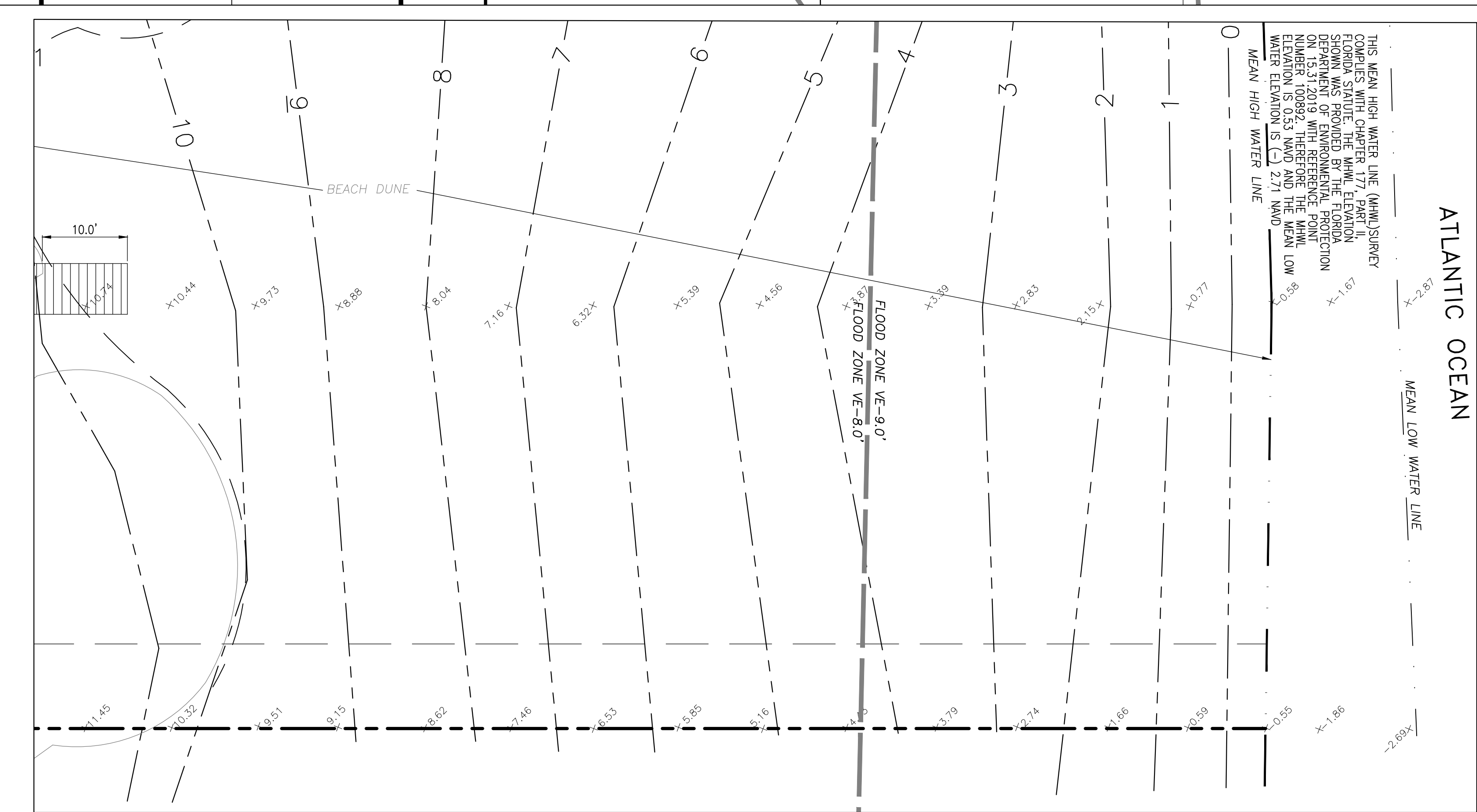
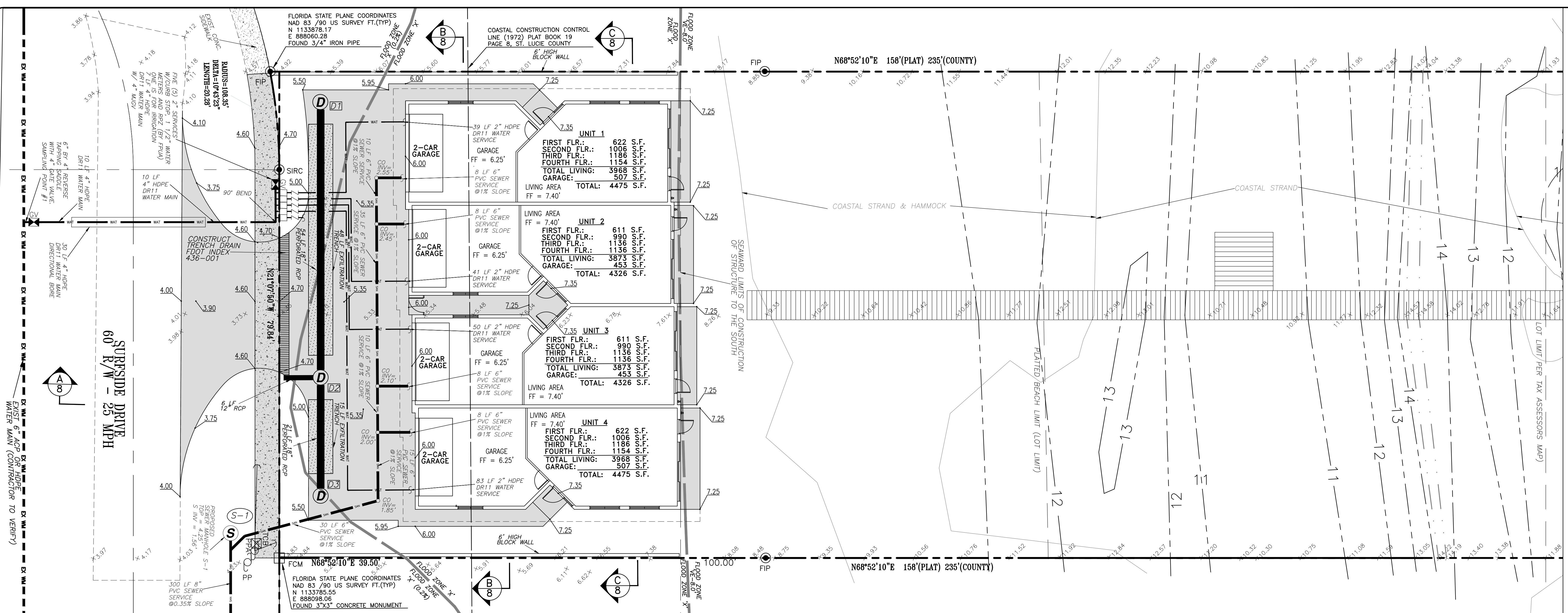
THE DRAWINGS ARE THE PROPERTY OF SCHULKE, BITTLE & STODDARD, L.L.C. FOR WHICH THEY ARE MADE. NO OTHER OR NOT A COPY OR USE FOR OTHER UNAUTHORIZED USE WILL BE PROSECUTED PURSUANT TO THE COPYRIGHT LAWS.

SCHULKE, BITTLE & STODDARD, L.L.C.
CIVIL & STRUCTURAL ENGINEERING, LAND PLANNING, ENVIRONMENTAL PERMITTING
CERTIFICATION OF AUTHORIZATION NO.: 000086668
1717 INDIAN RIVER BLVD., SUITE 201 VERO BEACH, FLORIDA 32960
TEL 772-770-9622 FAX 772-770-9496 EMAIL jbittle@sbsengineers.com
WEBSITE https://www.sbsengineers.com

EXISTING CONDITIONS/ DEMOLITION AND POLLUTION PREVENTION PLAN

SURFSIDE QUAD PLEX

ENGINEER CERTIFICATION
JUDAH B. BITTLE
P.L. REG. NO. 57398
DATE: 4/30/2021
PROJECT NO. 21-008 SHEET 2



MATCHLINE A-A

DESIGNED	DATE	REVISION

SCHULKE, BITTLE & STODDARD, L.L.C.
 CIVIL & STRUCTURAL ENGINEERING, LAND PLANNING, ENVIRONMENTAL PERMITTING
 CERTIFICATION OF AUTHORIZATION NO.: 00008668
 1717 INDIAN RIVER BLVD., SUITE 201 VERO BEACH, FLORIDA 32960
 TEL 772-770-9622 FAX 772-770-9496 EMAIL jbittle@sbsengineers.com
 WEBSITE https://www.sbsengineers.com

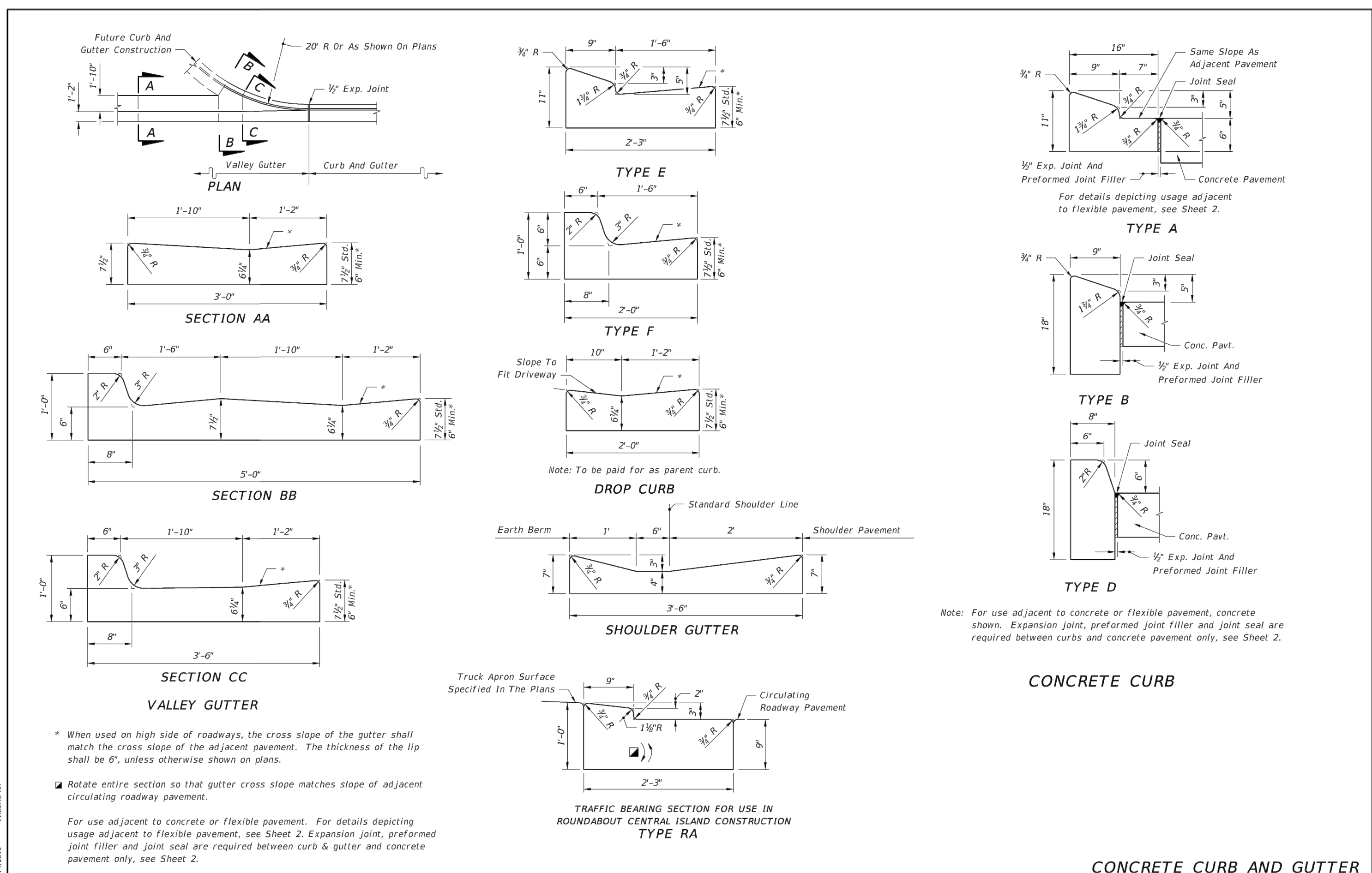
PAVING, GRADING & DRAINAGE PLAN

SURFSIDE QUAD PLEX

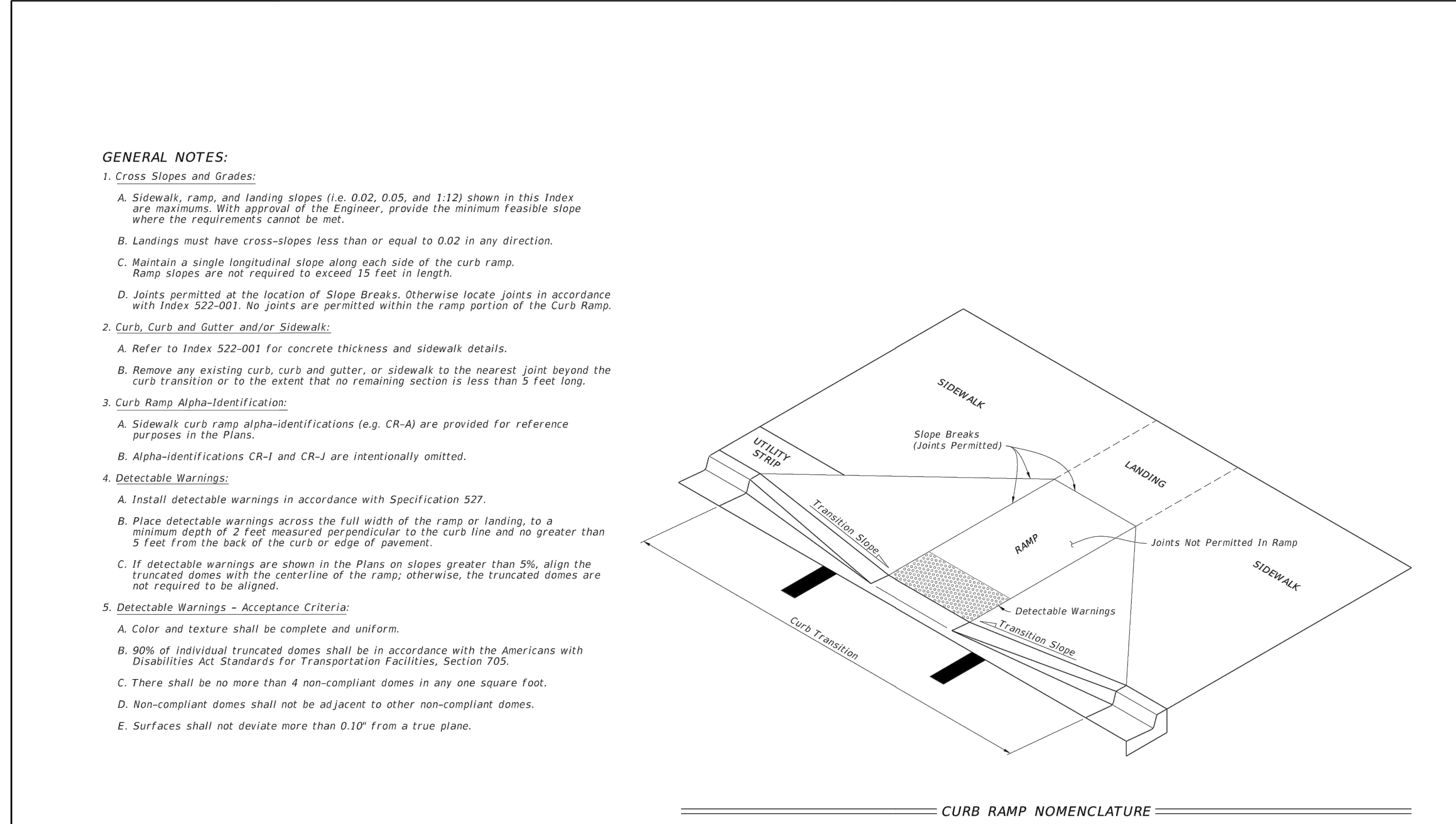
ENGINEER CERTIFICATION

JODAH B. BITTLE
 FL. REG. NO. 57396
 No 57396
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER

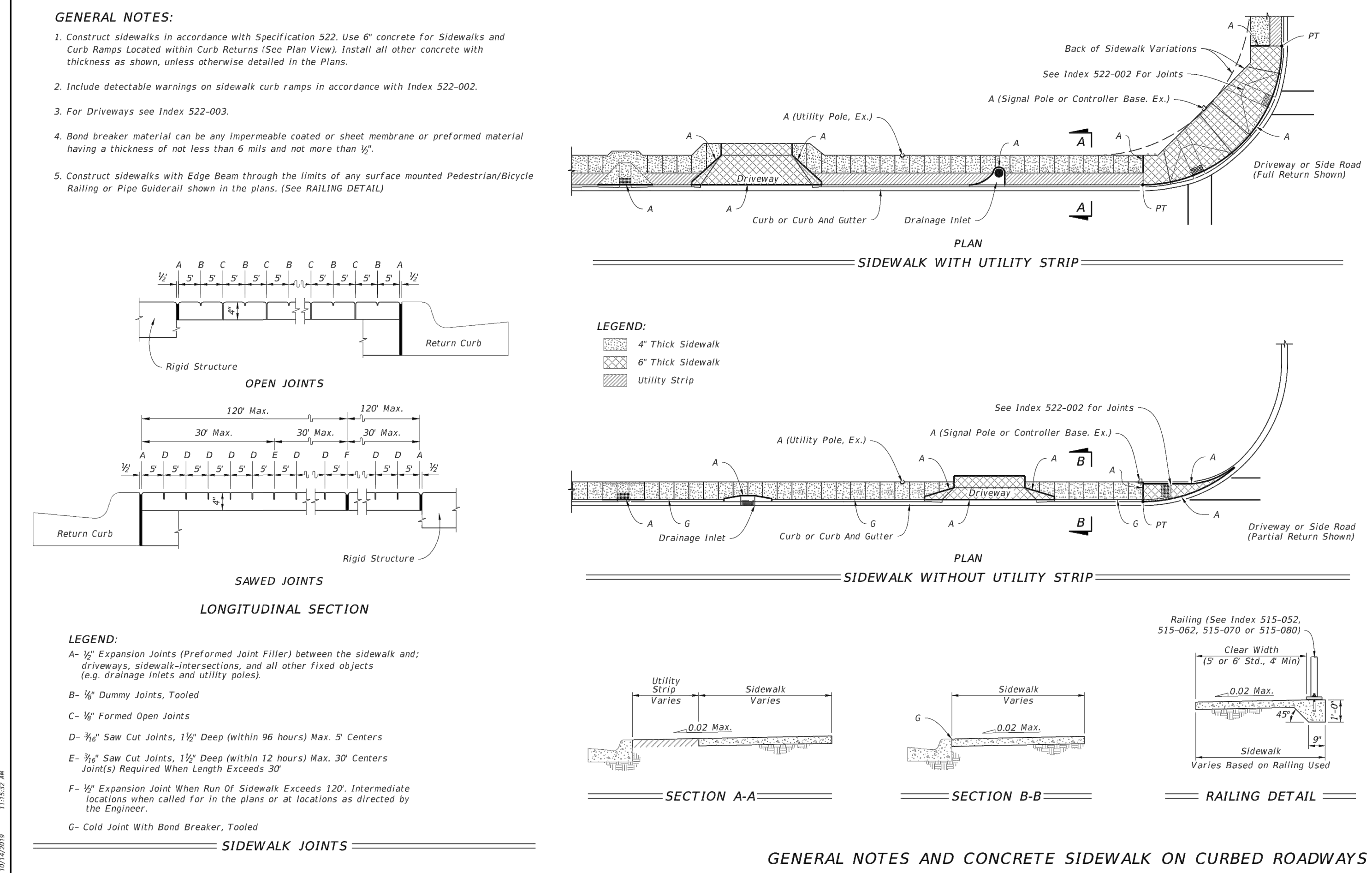
DATE: _____
 PROJECT NO: 21-008 SHEET 7



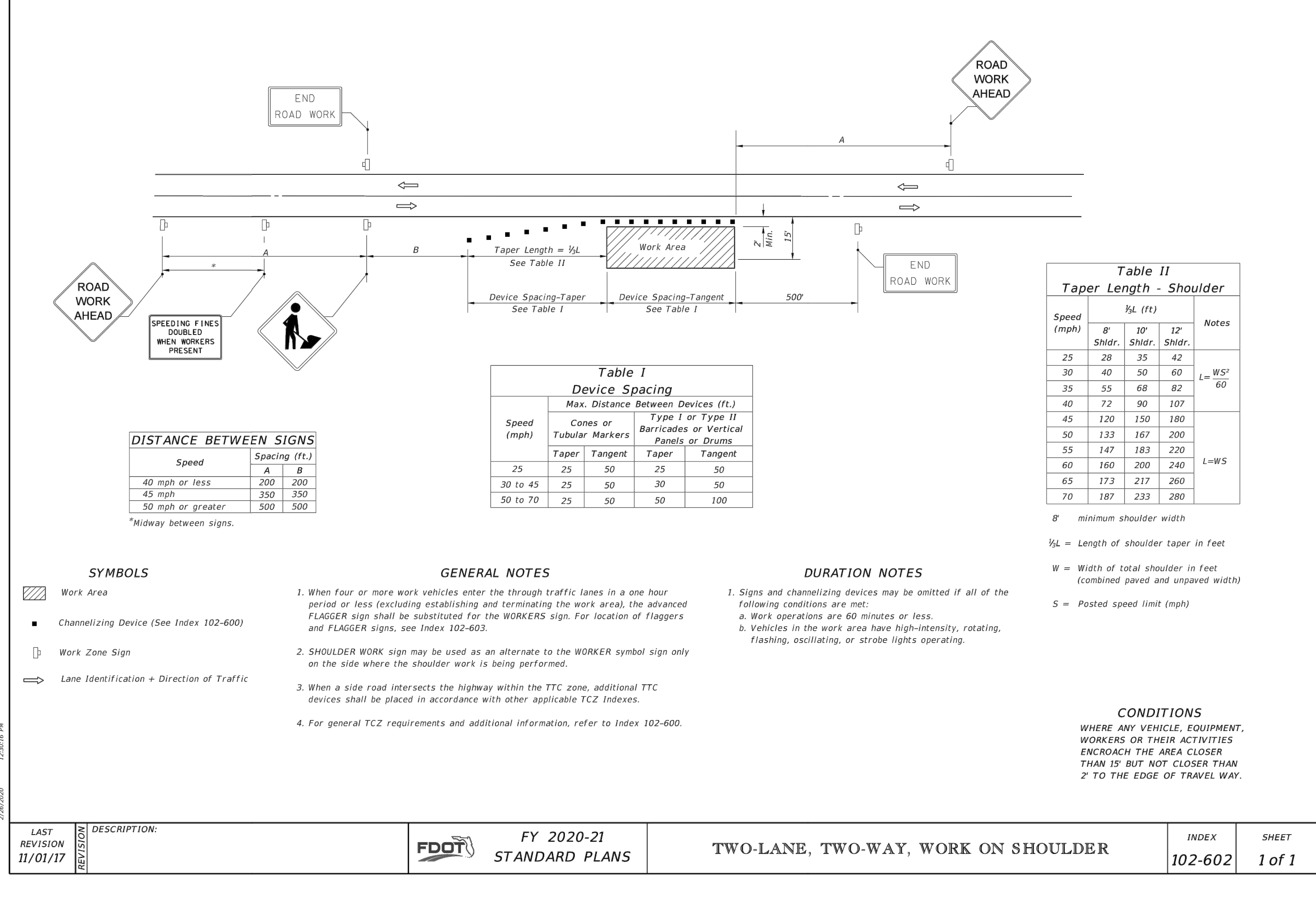
LAST REVISION 11/01/17	DESCRIPTION:	FDOT	FY 2020-21 STANDARD PLANS	INDEX	SHEET
				520-001	1 of 2



LAST REVISION 11/01/19	DESCRIPTION:	FDOT	FY 2020-21 STANDARD PLANS	INDEX	SHEET
				522-002	1 of 7



LAST REVISION 11/01/18	DESCRIPTION:	FDOT	FY 2020-21 STANDARD PLANS	INDEX	SHEET
				522-001	1 of 2



LAST REVISION 11/01/17	DESCRIPTION:	FDOT	FY 2020-21 STANDARD PLANS	INDEX	SHEET
				102-602	1 of 1

DATE	
REVISION	
MARK	
DESIGNED	JBB
CHECKED	JBB
SCALE	NTS
DATE	04/16/21

THE DRAWINGS ARE THE PROPERTY OF SCHULKE, BITTLE & STODDARD, L.L.C. FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. COPY OR REUSE FOR OTHER PROJECTS WITHOUT THE WRITTEN AUTHORIZATION OF THE ENGINEER. UNAUTHORIZED USE WILL BE PROSECUTED PURSUANT TO THE COPYRIGHT LAWS.

SCHULKE, BITTLE & STODDARD, L.L.C.
 CIVIL & STRUCTURAL ENGINEERING LAND PLANNING ENVIRONMENTAL PERMITTING
 CERTIFICATION OF AUTHORIZATION NO.: 00008668
 1717 INDIAN RIVER BLVD., SUITE 201 VERO BEACH, FLORIDA 32960
 TEL 772-770-9622 FAX 772-770-9496 EMAIL jbittle@sbsengineers.com
 WEBSITE https://www.sbsengineers.com

MISCELLANEOUS DETAILS
 SURFSIDE QUAD PLEX

ENGINEER CERTIFICATION

JOAH B. BITTLE
 FL. REG. NO. 57396
 No 57396
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER

PROJECT NO. 21-008 SHEET 10

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...
3. WATER MAIN, WHERE SPECIFIED AS DUCTILE IRON PIPE, SHALL CONFORM TO ANSI/AWWA C151/A21.51...
4. POLYVINYL CHLORIDE WATER MAIN SHALL BE BLUE IN COLOR OR WHITE IN COLOR WITH BLUE STRIPES...
5. FITTINGS SHALL BE DUCTILE IRON CONFORMING TO ANSI/AWWA C-110/A21.10...
6. GATE VALVES SHALL BE MUELLER RESILIENT SEAT, KENNEDY KEN-SEAL, AMERICAN OR APPROVED...
7. WATER LINES SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH FPUA DESIGN AND CONSTRUCTION STANDARDS...
8. NO FIELD CHANGES OR DEVIATIONS FROM THE DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL...
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...
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 NOTES CONTINUED

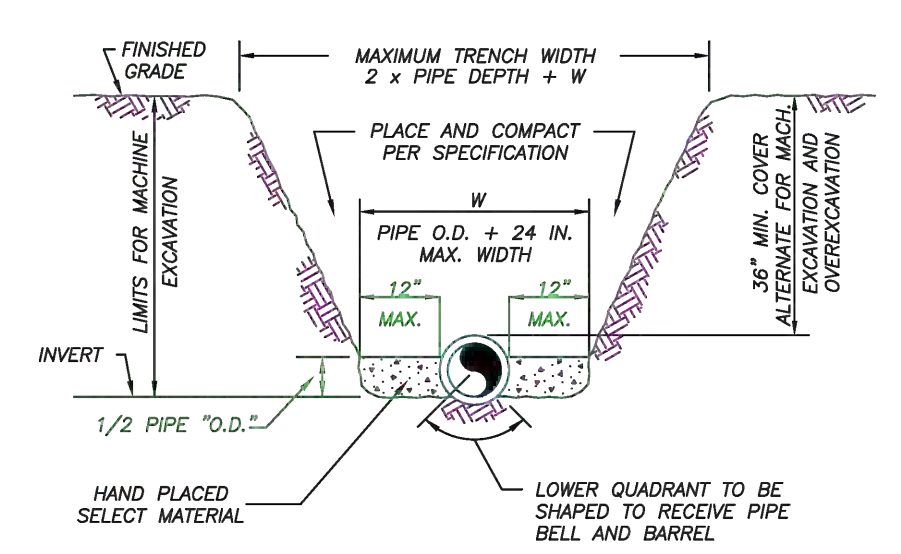
- 16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EXISTING UTILITIES AND DRAINAGE.
17. THE CONTRACTOR SHALL FURNISH RECORD DRAWING INFORMATION TO THE ENGINEER INCLUDING LOCATIONS OF VALVES, FITTINGS, SERVICE CONNECTIONS, BLOWOFFS, AIR RELEASE VALVES, AND ANY OTHER PERTINENT INFORMATION NECESSARY 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 THIN 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 UTILITIES 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 = SLOPE 1/2
F48.000
L = LEAKAGE IN GPH
L = LENGTH OF PIPE IN FEET
D = PIPE DIAMETER IN INCHES
P = TESTING PRESSURE IN PSI

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 THAN 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 CONSISTING OF PIPE SIZES, LOCATION OF SERVICE TEE WYES, DIAMETER OF SERVICE TEE WYES, 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 EQUIDISTANT 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 FROM 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 THIN 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 UTILITIES ENGINEER AND SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE.
18. EACH SERVICE LATERAL WILL BE MARKED WITH A LOCATOR TAPE 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.

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, FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-110, 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 62-110, 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 WITH A 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 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.
3. A MINIMUM 6-FOOT, AND PREFERABLY 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 FEET 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 SHELVE 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 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.



- 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.

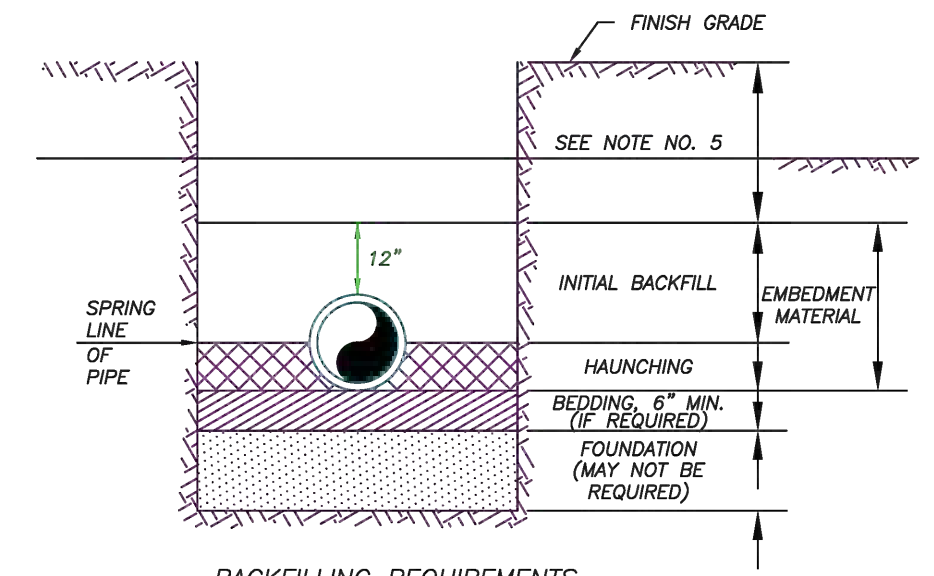
Table with 4 columns: DATE, REVISION, DRAWN, CHECKED. Includes title block for WATER DISTRIBUTION G-1 NOTES.

Table with 4 columns: DATE, REVISION, DRAWN, CHECKED. Includes title block for WATER DISTRIBUTION G-1 NOTES.

Table with 4 columns: DATE, REVISION, DRAWN, CHECKED. Includes title block for WASTEWATER CONSTRUCTION NOTES G-2 CONSTRUCTION NOTES.

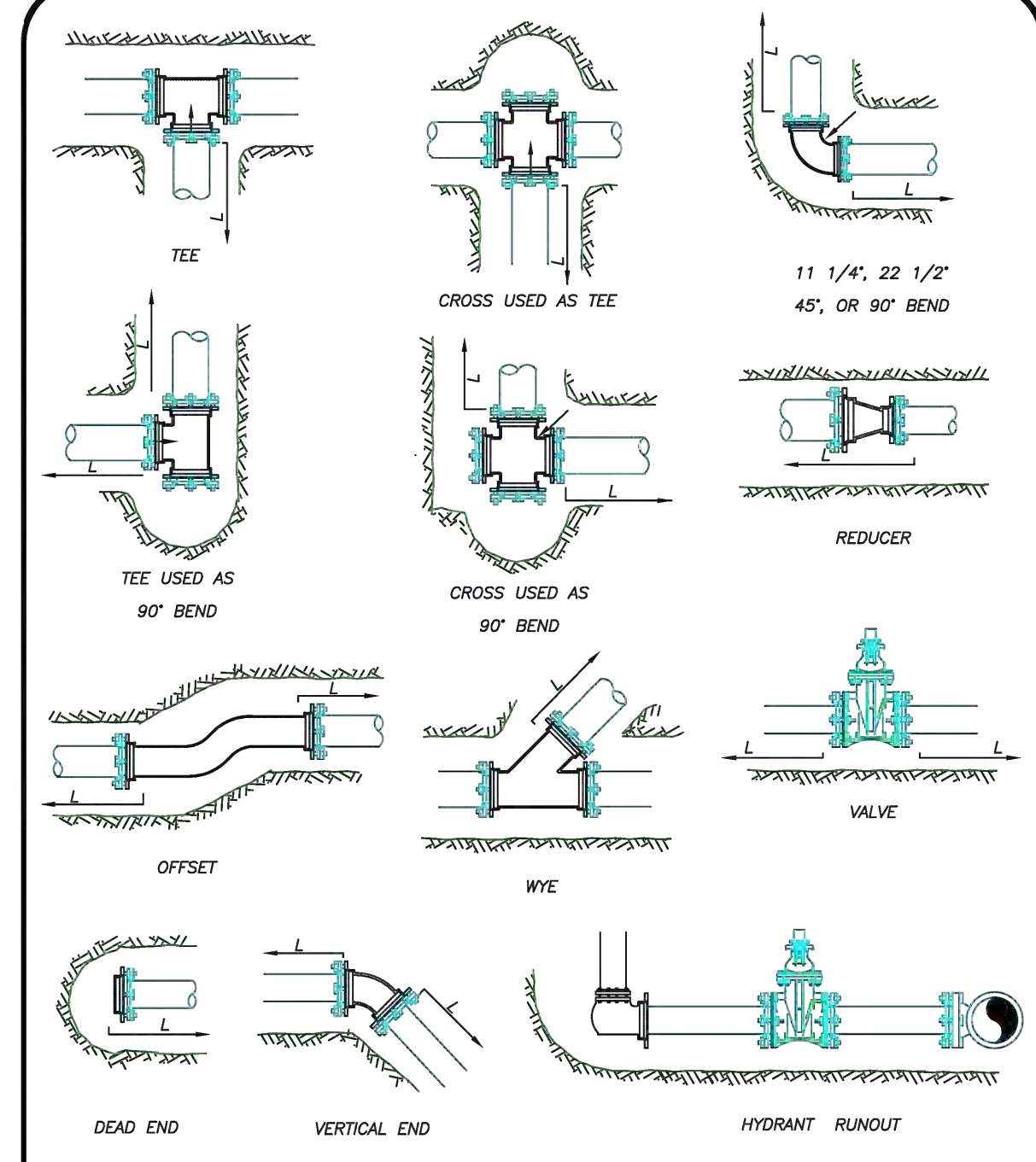
Table with 4 columns: DATE, REVISION, DRAWN, CHECKED. Includes title block for STANDARD SEPARATION STATEMENT G-3 WATER/SEWER CONFLICT.

Table with 4 columns: DATE, REVISION, DRAWN, CHECKED. Includes title block for TYPICAL TRENCH DETAIL M-1.



- 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-100.
6) DENSITY TEST SHALL BE PERFORMED AT AREAS DETERMINED BY THE UTILITIES ENGINEER OR PERMIT AGENCY HAVING JURISDICTION, AT THE CONTRACTOR'S EXPENSE.
7) CONTRACTOR TO COMPLY WITH ALL FEDERAL, STATE AND LOCAL TRENCH SAFETY REGULATIONS.

Table with 4 columns: DATE, REVISION, DRAWN, CHECKED. Includes title block for BACKFILLING REQUIREMENTS M-2.



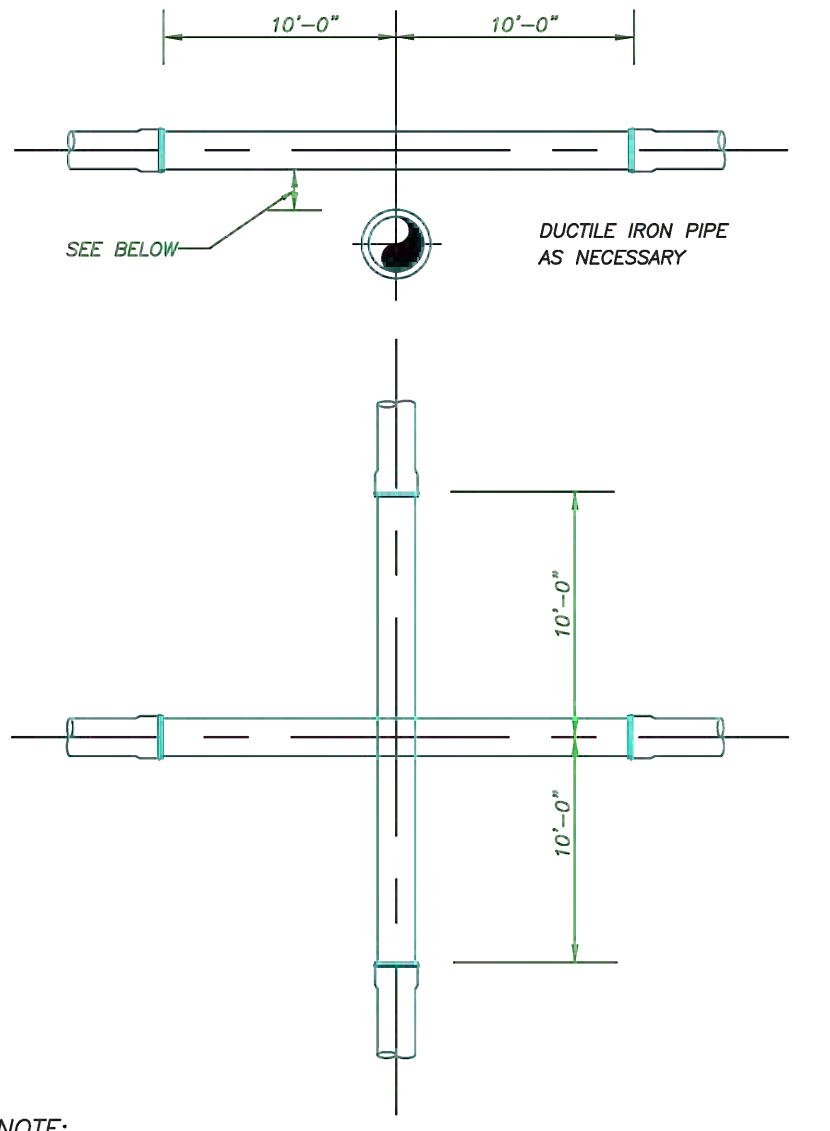
MECHANICAL JOINT ANCHORING REQUIREMENTS N.T.S.

Table with 4 columns: DATE, REVISION, DRAWN, CHECKED. Includes title block for MECHANICAL JOINT ANCHORING REQUIREMENTS M-3.

MECHANICAL JOINT RESTRAINT NOTES

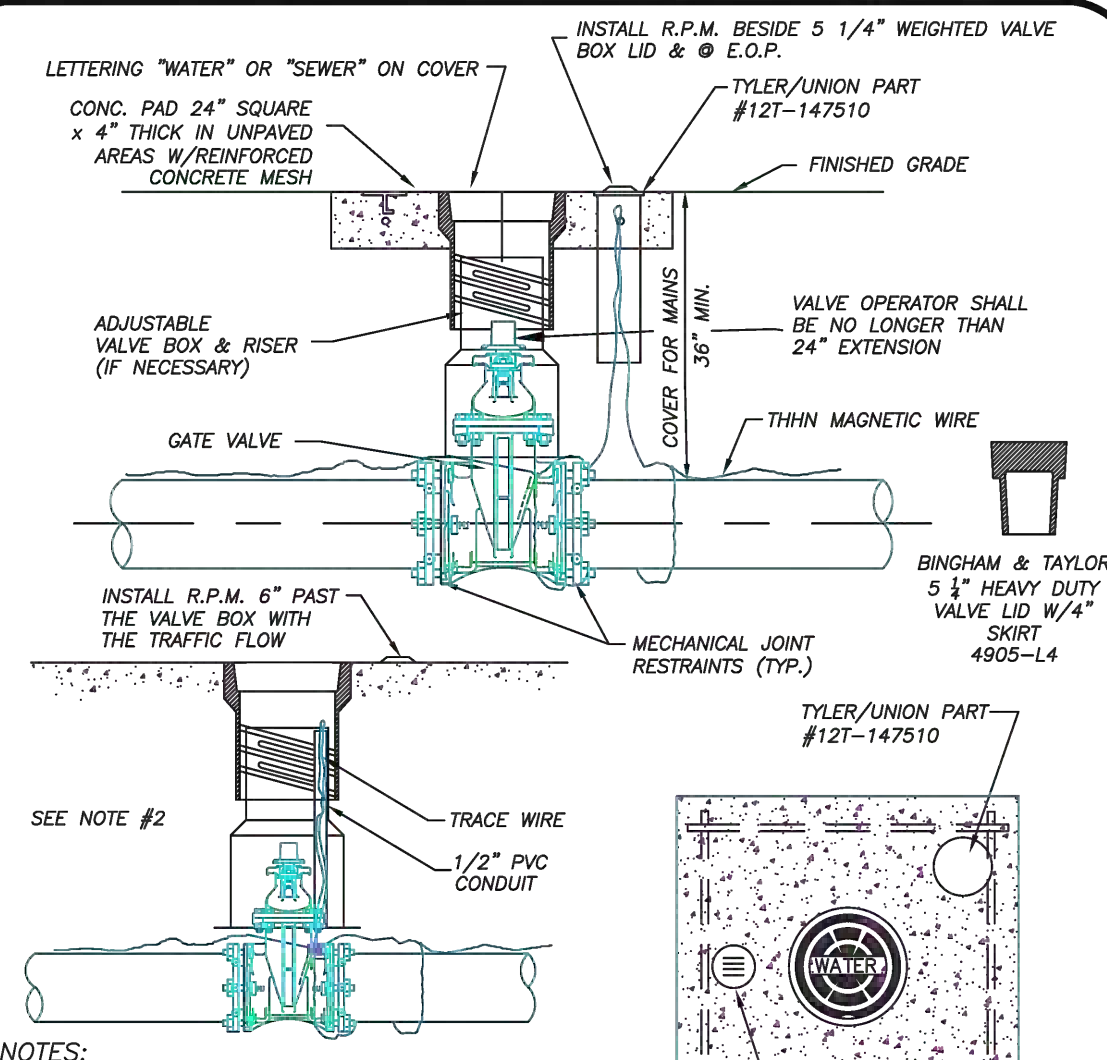
- NOTES:
1) THE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING THE REQUIRED LENGTH TO BE RESTRAINED BASED UPON THE PROJECT AREA SOIL TYPE, PROPOSED TRENCH CONDITIONS AND DEPTH, PRESSURE OF 150 PSI, AND A SAFETY FACTOR OF TWO (2). A DRAWING OF EVERY TYPICAL FITTING ASSEMBLY WITHIN THE PROJECT SHALL BE SUBMITTED WHICH REFLECTS THE RESTRAINT DETAIL PROPOSED FOR USE, INCLUDING LENGTH OF PIPE RESTRAINT.
2) REQUIRED RESTRAINED LENGTH CALCULATIONS SHALL ALSO CONSIDER THE CONDITIONS OF OTHER BENDS OR FITTINGS THAT WILL BE LOCATED WITHIN THE CALCULATED RESTRAINED LENGTH (L) OF THE BEND OR FITTING IN QUESTION.
3) EVERY JOINT OR FITTING MUST BE RESTRAINED ON BOTH SIDES OF THE BEND AND FOR TEES ALONG THE BEND ALSO.

Table with 4 columns: DATE, REVISION, DRAWN, CHECKED. Includes title block for MECHANICAL JOINT RESTRAINT NOTES M-4.



UTILITY CROSSING DETAIL N.T.S.

Table with 4 columns: DATE, REVISION, DRAWN, CHECKED. Includes title block for UTILITY CROSSING DETAIL M-5.



- NOTES:
1. BLUE REFLECTIVE PAVEMENT MARKER (RPM) FOR WATER VALVES AND GREEN RPM FOR WASTEWATER VALVES PAVEMENT EDGE.
2. FOR WATER AND WASTEWATER VALVES INSTALLED IN PAVED AREAS, ELIMINATE CONCRETE PAD AND ENCASE THE MAGNETIC WIRE IN 1/2" PVC INSIDE THE VALVE BOX SEVEN INCHES BELOW GRADE.
3. DIP MAY BE USED AS RISERS ONLY IF A VALVE BOX IS NOT MANUFACTURED FOR THAT DEPTH. NO PVC RISERS SHALL BE USED IN ANY CIRCUMSTANCES.

Table with 4 columns: DATE, REVISION, DRAWN, CHECKED. Includes title block for TYPICAL GATE VALVE & VALVE BOX DETAIL M-6.

SCHULKE, BITTLE & STODDARD, L.L.C. CIVIL & STRUCTURAL ENGINEERING LAND PLANNING ENVIRONMENTAL PERMITTING. CERTIFICATION OF AUTHORIZATION NO.: 000086668. 1717 INDIAN RIVER BLVD., SUITE 201 VERO BEACH, FLORIDA 32980. TEL 772-770-9622 FAX 772-770-9496 EMAIL jbittle@sbsengineers.com WEBSITE https://www.sbsengineers.com

MISCELLANEOUS DETAILS SURFSIDE QUAD PLEX

Professional Engineer seal for JODAH B. BITTLE, No. 57398, State of Florida. Includes project number 21-008 and sheet number 11.

NOTES:

- WHERE DIRECTIONAL DRILLING LENGTHS EXCEED 750 LINEAR FEET AND/OR HDPE PIPE DIAMETER EXCEED 12 INCHES, A SECOND LENGTH OF TRACE WIRE SHALL BE INSTALLED.
- TRACE WIRE SHALL CONFORM TO THE FOLLOWING SPECIFICATION:
 MANUFACTURER - COPPERHEAD INDUSTRIES, LLC
 PART NUMBER - 12458-EHS-500 / 12458-EHS-1000 / 12458-EHS-2500
 PART NUMBER DESCRIPTION - 12 (AWG), 45 (JACKET MIL), B (JACKET COLOR: B=BLUE, G=GREEN, ETC.) - EHS (EXTRA HIGH STRENGTH-HARD DRAWN / 1150# BREAKING LOAD STRENGTH) - 500 (WIRE LENGTH IN FEET)

DIRECTIONAL BORE WIRE ATTACHMENT		M-16	
DATE: 03-09	DESIGN: CONCRETE SLAB	SCALE: 1/8\"/>	

TERMINAL CLEANOUT DETAIL (COMMERCIAL)
(N.T.S.)

TERMINAL CLEANOUT DETAIL WASTEWATER		S-4B	
DATE: 03-09	DESIGN: WASTEWATER	SCALE: 1/8\"/>	

GRINDER STATION CONNECTION
(N.T.S.)

NOTES:

- FORFE MAN CONNECTION SHALL CONSIST OF A 2" TAPPING SADDLE, 2" STAINLESS STEEL NIPPLE AND 2" THREADED RESILIENT SEAT GATE VALVE.
- GREEN 10 GAUGE THIN WIRE SHALL BE ATTACHED TO THE SERVICE LINE.
- WHERE SERVICES UNDER PAVEMENT ARE REQUIRED, THE POLYETHYLENE TUBING SHALL BE INSTALLED WITHIN SCHEDULE 40 PVC CASING PIPE.
- MINIMUM COVER IN UNPAVED AREAS SHALL BE 30", IN PAVED AREAS OR PLANNED ROADWAYS OR SWALES MIN. COVER SHALL BE 36".

GRINDER STATION CONNECTION		S-16	
DATE: 03-09	DESIGN: WASTEWATER	SCALE: 1/8\"/>	

GENERAL POLICY

WHERE COST JUSTIFIED AND OPERATIONALLY FEASIBLE, IT IS THE GENERAL POLICY OF THE F.P.U.A. TO PROVIDE WATER, ELECTRIC, SEWER AND GAS SERVICE FROM THE STREET SIDE OF A PIECE OF PROPERTY. DEPENDING ON FACTORS SUCH AS LOCATION OF EXISTING SUPPLY SOURCE FACILITIES, REAR OR SIDE LOT LINE SUPPLY MAY BE AUTHORIZED, BUT ONLY WITH PRIOR APPROVAL FROM THE F.P.U.A.

NOTES:

- THE PREFERRED POINT OF CONNECTION TO THE F.P.U.A. WATER METER, AREA (C) SHALL BE LOCATED IN THE CORNER OF THE PROPERTY SELECTED BY THE F.P.U.A. AS THE BEST LOCATION FOR THE WATER METER. EVERY EFFORT WILL BE MADE TO SELECT THE CORNER WHERE TWO WATER SERVICES AND METERS CAN BE CONNECTED.
- IF PHYSICAL BARRIERS OR OTHER OBSTACLES PREVENT THE CONNECTION OF THE BUILDING SERVICE LINE TO THE F.P.U.A. WATER SERVICE, WITHIN AREA (C), THE F.P.U.A. ENGINEERING DEPARTMENT MAY AUTHORIZE THE CONNECTION ALONG THE PORTION OF THE R/W LINE MARKED AREA (D), OR ALONG THE PROPERTY LINES MARKED AREA (E).
- HORIZONTAL SEPARATION OF WATER AND WASTEWATER SERVICES SHOULD BE A MINIMUM OF 6 FEET AND PREFERABLY 10 FEET.
- ALL METERS SHALL BE INSTALLED IN AN UNRESTRICTED AREA FOLLOWING EASE OF ACCESS AND PROVIDING ADEQUATE PROTECTION.
- THE F.P.U.A. SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND REPAIR OF THE WATER LATERAL WITHIN THE EASEMENT OR RIGHT-OF-WAY, UP TO THE POINT OF CONNECTION.

WATER METER PLACEMENT
(N.T.S.)

WATER METER PLACEMENT POLICY		W-1	
DATE: 03-09	DESIGN: WASTEWATER	SCALE: 1/8\"/>	

NOTES:

- BLUE 10 GAUGE THIN WIRE SHALL BE ATTACHED TO THE SERVICE LINE AND RAN TO OUTER METERS ONLY.
- WHERE SERVICES UNDER PAVEMENT ARE REQUIRED, THE POLYETHYLENE TUBING SHALL BE INSTALLED WITHIN SCHEDULE 40 PVC CASING PIPE.
- ALL METER SIZES SHALL REQUIRE LOCKABLE METER VALVE. (CURB STOP)
- MINIMUM COVER IN UNPAVED AREAS SHALL BE 30", IN PAVED AREAS OR PLANNED ROADWAYS OR SWALES MIN. COVER SHALL BE 36".
- POLY SERVICE LINE SHALL VARY IN SIZE PER COMMERCIAL USE.
- F.P.U.A. SHALL REMOVE METER BOXES AND INSTALL STAND PIPES AT THE TIME OF CONNECTION.

TYPICAL MULTIPLE WATER SERVICE CONNECTION (COMMERCIAL)
(N.T.S.)

TYPICAL MULTIPLE WATER SERVICE CONNECTION (COMMERCIAL)		W-4A	
DATE: 03-09	DESIGN: WASTEWATER	SCALE: 1/8\"/>	

NOTES:

- 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.
- 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.)

WATER METER/BACKFLOW PREVENTER ASSEMBLY - DOMESTIC SERVICES (METER SIZE 1/2" OR LESS)		W-8	
DATE: 03-09	DESIGN: WASTEWATER	SCALE: 1/8\"/>	

DATE	
REVISION	
MARK	
DESIGNED: JBB	DRAWN: JBB
CHECKED: JBB	
SCALE: N.T.S.	DATE: 04/16/21
THE ENGINEER HAS REVIEWED THIS PROJECT FOR WHICH THEY ARE MADE IS EXECUTED FOR PRODUCTS IS PERMITTED ONLY BY WRITTEN CONTRACT WITH THE ENGINEER PURSUANT TO THE COPYRIGHT LAWS.	

SCHULKE, BITTLE & STODDARD, L.L.C.
 CIVIL & STRUCTURAL ENGINEERING LAND PLANNING ENVIRONMENTAL PERMITTING
 CERTIFICATION OF AUTHORIZATION NO.: 0008668
 1717 INDIAN RIVER BLVD., SUITE 201 VERO BEACH, FLORIDA 32960
 TEL 772-770-9496 FAX 772-770-9496 EMAIL: jbittle@sbsengineers.com
 WEBSITE: https://www.sbsengineers.com

MISCELLANEOUS DETAILS

SURFSIDE QUAD PLEX

ENGINEER CERTIFICATION

JODAH B. BITTLE
 FL. REG. NO. 57396
 DATE: 4/30/2021
 PROJECT NO. 21-008 SHEET 12

Landscape Data

Landscape Strip Adjacent to Public R.O.W

Ten (10) feet wide minimum landscape Strip.
One (1) tree for each three hundred (300) square feet of required landscaped area.

Surfside Drive (West) : 54 LF x 10 = 540 sf

Trees Required: (540 sf / 300) = 2 Trees
Trees Provided: = 3 Trees

Landscape Strip Adjacent to Other Property

Ten (10) feet wide minimum landscape Strip.
One (1) tree for each three hundred (200) square feet of required landscaped area.

North Property Line : 84 LF x 10 = 840 sf

Trees Required: (840 sf / 200) = 4 Trees
Trees Provided: = 6 Trees

South Property Line : 84 LF x 10 = 840 sf

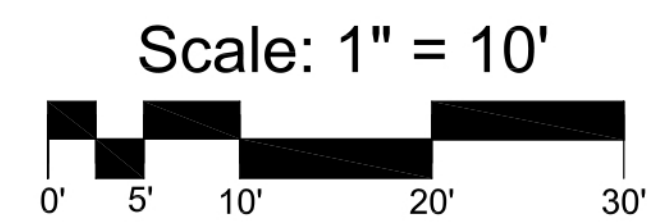
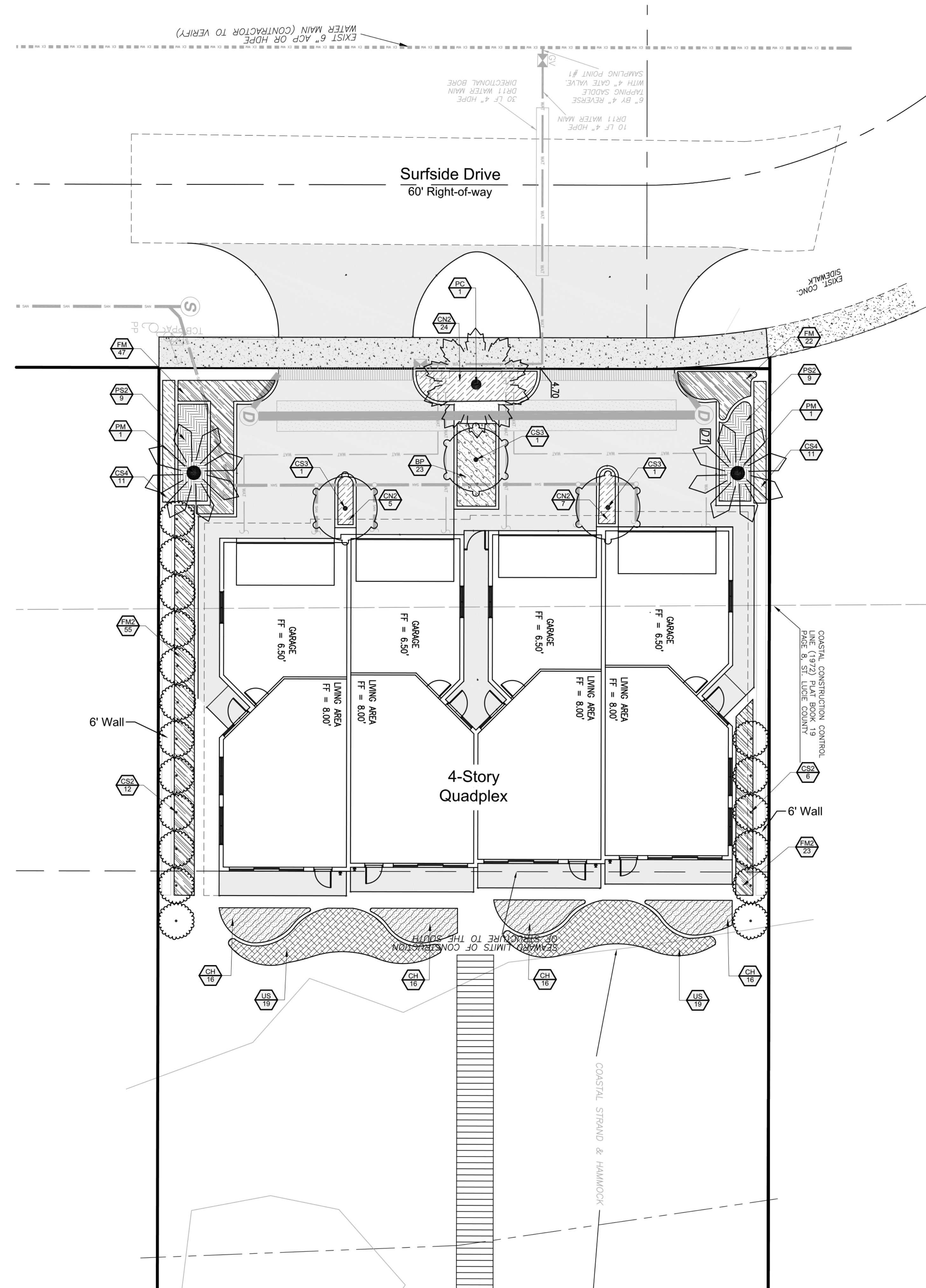
Trees Required: (840 sf / 200) = 4 Trees
Trees Provided: = 12 Trees

Interior Vehicular Use Areas

Trees Required: = 3 Trees
Trees Provided: = 3 Trees

Fort Pierce Landscape Notes

- Plant materials shall meet or exceed the standards for Florida No. 1 as set out in the most current edition of "Grades and Standards for Nursery Plants Part 1 and Part 2.", State of Florida, Department of Agriculture, Tallahassee.
- All trees required by this article (excluding palms that are exempt from the grades and standards) shall have a Florida No. 1 or better "Grades and Standards" certification tag attached at time of delivery through final inspection.
- Grass sod shall be clean and free of weeds, pests and diseases.
- Planting soil for all landscaped areas shall consist of existing soil mixed with fifty (50) per cent recycled top soil. Such planting soil shall be generally indigenous to the locale, free of debris, roots, clay, stones, plants or other foreign materials. The planting soil shall extend to an appropriate depth so as to eliminate any hindrance to planting operations or detriment to good plant growth. Compliance with these soil requirements shall be verified as part of the final inspection.
- Landscaped areas shall be covered in their entirety with shrubs, ground cover, turf, or three (3) inches of bulk organic mulch or other suitable material which permits percolation and is approved by the department.
- Do not place any soil or mulch over the root ball. If stakes or guide wires are used to support a tree, the wire must be covered with protective material where it is in contact with the tree and the stakes or guide wires must be removed after one year.
- All landscaping must be protected from vehicular and pedestrian traffic by the installation of curbing, wheel stops or other protective devices along the perimeter of any landscaping which adjoins vehicular use areas or sidewalks. These protected devices shall have a minimum height of six (6) inches above grade.
- No parking, display of vehicles or outside storage or display of merchandise is permitted in or over any required landscape area, nor are vehicles permitted to overhang any required landscaped area.
- To minimize traffic hazards at street or driveway intersections, all landscaping installations must provide unobstructed views.
- Any irrigation system placed on city right-of-way will be the responsibility of the property owner who shall relocate, replace or repair the system as appropriate in the event it is damaged due to permitted construction in the right-of-way.
- Prior to issuance of certificate of occupancy, final landscape installation shall be certified as complete and in conformance to the approved landscape plan by submission of a certification letter by a landscape architect.
- Property owners shall maintain all required landscaping so that it continues to present a healthy, neat and orderly appearance free of refuse and debris.
- Vegetation required shall be replaced with equivalent vegetation if it is not living. All trees for which credit is awarded and which subsequently die shall be replaced by the same number of living trees.
- Maintenance shall include sufficient weeding, watering, fertilizing, pruning, mowing, edging, mulching and other horticultural practices so as to assure that the landscaping continues to maintain a healthy, neat and orderly appearance.
- No person shall, directly or indirectly, cut down, substantially alter, destroy, remove, relocate, damage or authorize any such act involving a protected tree situated on land within the city, without first obtaining a tree removal permit.
- Removal, trimming, pruning or alteration of any tree or vegetation in an existing utility easement or public right-of-way, provided such work is done by or under the control of the operating utility company and said company has received all necessary licenses or permits to provide utility service within the easement.
- This plan has been designed to meet the tree planting requirements contained within the FPL document entitled "Plant the Right Tree in the Right Place". For existing or proposed utilities, no tree shall be planted where it could, at a mature height conflict with overhead power lines.
 - Large trees (height at maturity of more than 30') shall be planted no closer than a horizontal distance of 30' from the nearest overhead power line.
 - Medium height trees (height at maturity between 20' and 30') shall be offset at least 20' and small trees (height at maturity of less than 20') require no offset.
 - No tree shrubs, hedges or vines shall be planted within 5' of an existing or proposed utility pole, guy wire or pad-mounted transformer.
 - Palms should be planted at a distance equal to or greater than the average frond length plus two (2) feet from power lines.



50 E. Ocean Blvd., Suite 101
Stuart, Florida 34994

T 772.678.7200
F 772.678.7201

www.hjadesignstudio.com
LA 0000905

Florida
Surfside Quadplex
 City of Fort Pierce
Landscape Plan

Copyright
The following drawings are instruments of service to the Landscape Architect. They are not products of design. All ideas, designs, arrangements, and plans indicated or represented by this drawing are owned by and the property of the designer, and were created, evolved, and developed for use on and in connection with the specified project. None of such ideas, designs, arrangements, or plans shall be used for any other project without the express written consent of the designer.

REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT
 CRAIG MICHAEL HOUSTON
 LA0000905
 MH
 STATE OF FLORIDA

Job No. 2021-12
 Drawn By EB
 Checked By MH
 Approved By MH
 Submittal Dates 4-30-21

Revision Dates

LP-1

Landscape Notes / Specifications

1. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ADHERING TO ALL THE REQUIREMENTS STATED UNDER DIVISION 1 - GENERAL REQUIREMENTS AND CONDITIONS AS WELL AS THE SPECIFIC CRITERIA OUTLINED HEREIN AND ON THE LANDSCAPE DRAWINGS INCLUDING ADDENDA AS MAY BE ISSUED BY THE OWNER.

2. THE SCOPE OF WORK FOR THE LANDSCAPE CONTRACTOR FOR THIS PROJECT SHALL INCLUDE THE PROVISION OF ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO COMPLETE ALL TASKS ASSOCIATED WITH THE LANDSCAPE AND IRRIGATION INSTALLATION AS SHOWN ON THE DRAWINGS OR NOTED HEREIN. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE GENERAL CONTRACTOR REASONABLE ACCESS TO POWER AND POTABLE WATER SOURCES AS REQUIRED.

3. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR INSURING ALL WORK (INCLUDING DELIVERY, STORAGE AND DISPOSAL OF THEIR MATERIALS) IS PERFORMED IN COMPLIANCE WITH APPLICABLE JURISDICTIONAL CODES. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS ASSOCIATED WITH THE WORK.

4. THE LANDSCAPE CONTRACTOR SHALL ASSIGN A QUALIFIED PROJECT MANAGER AND FIELD SUPERVISOR TO WORK DIRECTLY WITH THE LANDSCAPE ARCHITECT AND SUPERVISE THE WORK AT ALL TIMES THROUGH FINAL OWNER ACCEPTANCE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT PROJECT MANAGER HAS A COMPLETE, CURRENT SET OF DOCUMENTS ON-SITE AT ALL TIMES.

5. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH EXISTING SITE CONDITIONS AND NOTIFYING THE OWNER IN WRITING OF ANY CONCERNS PRIOR TO COMMENCEMENT OF WORK. THIS EVALUATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, VERIFICATION OF SURFACE AND SUBSURFACE UTILITIES, GRADES, DIMENSIONS AND SOIL CONDITIONS.

6. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH PROJECT PLANS AND SCOPES OF WORK RELATED TO ASSOCIATED TRADES TO BE PERFORMED BY OTHERS IN ORDER TO IDENTIFY KEY COORDINATION ITEMS INCLUDING, BUT NOT LIMITED TO, SITE ACCESS, MATERIAL STORAGE, SCHEDULING AND SEQUENCING OF WORK. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL SITE ISSUES WITH THE GENERAL CONTRACTOR.

7. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ADJACENT WORK, MATERIALS AND EQUIPMENT FROM DAMAGE DUE TO THEIR ACTIVITIES. THE LANDSCAPE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR ANY DAMAGE OR INJURY TO PERSON OR PROPERTY THAT MAY OCCUR AS A RESULT OF THE EXECUTION OF THEIR WORK.

8. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE AREA, MATERIALS AND EQUIPMENT WITHIN THE LIMITS OF WORK IN A SAFE, NEAT AND ORDERLY MANNER. EXCESS MATERIALS AND DEBRIS ARE TO BE REMOVED FROM THE WORK AREA NO LESS THAN WEEKLY OR AS DIRECTED BY THE GENERAL CONTRACTOR.

9. THE LANDSCAPE CONTRACTOR MUST TAKE PRECAUTIONS TO PROTECT ALL EXISTING SITE ROADS PARKING LOTS, CURBS AND UTILITIES FROM DAMAGE. THIS APPLIES NOT ONLY TO THE AREA WITHIN THE LIMITS OF WORK BUT ALSO ALONG ANY LOCAL ACCESS ROADS.

10. THE LANDSCAPE CONTRACTOR SHALL PROVIDE ALL NECESSARY SAFETY MEASURES DURING CONSTRUCTION OPERATIONS TO PROTECT THE PUBLIC APPLICABLE TO ALL APPLICABLE CODES AND RECOGNIZE LOCAL PRACTICES.

11. THE LANDSCAPE CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR TO ENSURE THAT TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES (SILT FENCE, ORANGE GEO FENCE AND/OR OTHER MEASURES) ARE INSTALLED PRIOR TO BEGINNING EXCAVATION.

12. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL PLANT MATERIALS AND THE PLANTING AREAS UNTIL FINAL ACCEPTANCE BY THE OWNER.

13. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR THE AGRONOMIC EVALUATION OF SOIL CHARACTERISTICS. EVALUATION MUST INCLUDE CHEMICAL ANALYSIS BY A QUALIFIED AGRICULTURAL SOILS TESTING LABORATORY (CERTIFIED IN THE STATE OF FLORIDA). SOILS SAMPLE SHOULD BE TAKEN IMMEDIATELY FOLLOWING COMPLETION OF ROUGH GRADING ACTIVITIES AND SHOULD BE COLLECTED AT A RATE OF ONE SAMPLE FOR EACH 6000 SQUARE FEET OF IMPACTED AREA, OR A TOTAL OF SIX, WHICHEVER IS GREATER. AT A MINIMUM THE CHEMICAL ANALYSIS OF THE SOIL SHOULD CONSIDER THE FOLLOWING:

- A. PERCENTAGE OF ORGANIC MATTER
- B. SALINITY
- C. PH
- D. LIME CONTENT
- E. MINERAL NUTRIENTS INCLUDING CONCENTRATIONS OF NITROGEN, PHOSPHOROUS, POTASSIUM, CALCIUM, MAGNESIUM, IRON, ZINC, MANGANESE, COPPER, SULFUR, AND MOLYBDENUM.
- F. POTENTIAL HAZARDS OR IMPEDIMENTS FOR PLANT GROWTH INCLUDING SALINITY, SODIUM CHLORIDE, BORON, IMPAIRED SOIL STRUCTURE OR DRAINAGE.
- F. SAND FRACTION ANALYSIS AS A PERCENTAGE PASSING THROUGH 1', 1/2', AND NO. 200 SIEVES

H. PERCOLATION RATE IN INCHES PER HOUR. THE ANALYSIS SHOULD ALSO INCLUDE SPECIFIC RECOMMENDATIONS TO THE OWNER FOR ANY AMENDMENTS AND BACKFILL MIXES FOR OPTIMAL PLANT GROWTH TO BE MADE TO THE SOILS PRIOR TO PLANTING. THE CONTRACTOR SHOULD INCLUDE THE COST FOR SOIL AMENDMENTS. THE CONTRACTOR IS TO PROVIDE THE OWNER WITH COPIES OF ALL SOIL TESTING RESULTS. SUBMITTAL DOCUMENTATION MUST ALSO CONTAIN A GRAPHIC SITE PLAN DEPICTING LOCATIONS FROM WHICH EACH SAMPLE WAS DRAWN.

14. THE LANDSCAPE CONTRACTORS BASE BID FOR SOIL PREPARATION IS TO INCLUDE THE FOLLOWING WITH THE UNDERSTANDING THAT MIX DESIGN MAY NEED TO BE ADJUSTED BASED ON OUTCOME OF AGRONOMIC TESTING.

- A. TREES: 100% SITE SOIL WITH 5LB TRIPLE SUPER PHOSPHATE PER CU. YD.
- B. SHRUBS: 100% SITE SOIL WITH OSMOCOTE CONTROLLER RELEASE FERTILIZER (14-14-14) PER MANUFACTURER'S RECOMMENDATION.
- C. THE SOILS TEST RESULTS TAKE PRECEDENCE OVER THE ITEMS NOTED IN A AND B ABOVE.

15. SHOULD OWNER AND LANDSCAPE CONTRACTOR AGREE WITH THE RECOMMENDATION OF THE TESTING AGENCY TO FURTHER AMEND THE SOILS THE CONTRACTOR'S CONTRACT WILL BE ADJUSTED ACCORDINGLY. THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT SAMPLES OF AMENDED SOILS TO BE RE-TESTED TO CONFIRM COMPLIANCE WITH RECOMMENDATIONS FOLLOWING THE SAME PROCEDURES AS THE ORIGINAL TESTS.

16. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE QUANTITIES OF EACH PLANT MATERIAL REQUIRED TO ADEQUATELY COVER THE AREA SHOWN ON THE LANDSCAPE PLANS AT THE PRESCRIBED SPACING AND NOTIFYING THE OWNER IMMEDIATELY OF ANY PERCEIVED DISCREPANCIES FOR RESOLUTION. THE PLANT SPACING CONTROLS BED LAYOUT, NOT THE PLAN QUANTITY FOR THAT PARTICULAR BED.

FINE GRADING NOTES

1. FINISHED GRADE IN PLANTING AREAS SHALL BE HELD 3" BELOW THE FINISHED ELEVATIONS SHOWN FOR ALL ADJACENT Hardscape SURFACES.
2. ALL FILL REQUIRED SHALL BE CLEAN, WELL DRAINING SOIL. FILL SHALL BE CLEAN AND FREE OF ALL MATERIALS HARMFUL TO PLANT GROWTH AND DELETERIOUS MATERIAL SUCH AS ROCKS (LARGER THAN 2" DIA.), COMPACTED CLAY, ROADBED OR SURFACING MATERIAL, MUCK, ROOTS AND BRANCHES, ETC.
3. THE LANDSCAPE CONTRACTOR IS TO ENSURE THAT THEIR WORK DOES NOT ADVERSELY IMPACT ESTABLISHED OR PROJECTED DRAINAGE PATTERNS.

INSTALLATION NOTES

1. PLANT AND LANDSCAPE MATERIALS SHALL CONFORM TO THE STANDARDS FOR FLORIDA NO. 1, AS GIVEN IN THE GRADES AND STANDARDS FOR NURSERY PLANTS, PARTS I & II, AS PREPARED BY THE FLORIDA DEPT. OF AGRICULTURE AND CONSUMER SERVICES.
2. A 3" THICK LAYER OF ORGANIC NON-CYPRESS MULCH SHALL BE APPLIED TO ALL LANDSCAPE AND PLANTING AREAS.
3. ALL EXOTIC VEGETATION TO BE REMOVED FROM THE SITE PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
4. THIS PLAN HAS BEEN DESIGNED TO MEET WITH THE TREE PLANTING REQUIREMENTS CONTAINED WITHIN THE FPL DOCUMENT ENTITLED "PLANT THE RIGHT TREE IN THE RIGHT PLACE."
5. FOR EXISTING OR PROPOSED UTILITIES, NO TREE SHALL BE PLANTED WHERE IT COULD, AT MATURE HEIGHT, CONFLICT WITH OVERHEAD POWER LINES. LARGE TREES | HEIGHT AT MATURITY OF MORE THAN THIRTY (30) FEET | SHALL BE PLANTED NO CLOSER THAN A HORIZONTAL DISTANCE OF THIRTY (30) FEET FROM THE NEAREST OVERHEAD POWER LINE. MEDIUM HEIGHT TREE | HEIGHT AT MATURITY BETWEEN TWENTY (20) AND THIRTY (30) FEET | SHALL BE OFFSET AT LEAST TWENTY (20) FEET AND SMALL TREES | HEIGHT AT MATURITY OF LESS THAN (20) FEET | REQUIRE NO OFFSET.
6. NO TREE, SHRUBS, HEDGES OR VINES SHALL BE PLANTED WITHIN FIVE (5) FEET OF ANY EXISTING OR PROPOSED UTILITY POLE, GUY WIRE OR PAD MOUNTED TRANSFORMER. PALMS SHOULD BE PLANTED AT A DISTANCE EQUAL TO OR GREATER THAN THE AVERAGE FRONT LENGTH PLUS TWO (2) FEET FROM POWER LINES.
7. WETLAND BUFFERS, BUFFER PROTECTION AREAS, AND UPLAND PRESERVE AREAS SHALL BE PROTECTED FROM EXCAVATION, CONSTRUCTION, AND OTHER BUILDING MAINTENANCE ACTIVITIES.
8. TREES TO REMAIN DURING CONSTRUCTION SHALL BE PROTECTED AND BARRICADED. SEE TREE PROTECTION NOTE.
9. FERTILIZER SHALL BE COMPLETE WITH APPROXIMATELY THE FOLLOWING RATIO: 3N-1P-3K (+1MG FOR PALMS ONLY)
10. TREES AND PALMS ARE TO BE PLANTED IN ACCORDANCE TO LANDSCAPE PLAN. GOOD HORTICULTURAL PRACTICES MUST BE OBSERVED.
11. TREES AND PALMS ARE TO BE PLANTED IN THE RIGHT-OF-WAY (ROW) AT A MINIMUM OF FOUR (4) FEET FROM BACK OF CURB AT LOCATIONS IDENTIFIED ON THE LANDSCAPE PLAN. AWARDED BIDDER SHALL STAKE AND/OR PAINT PLANTING LOCATIONS IN THE FIELD. UPON APPROVAL BY THE CUSTOMER, THESE AREAS SHALL BE SPRAYED WITH AN APPROVED HERBICIDE AND MAINTAINED WEED-FREE FOR THE DURATION OF THE PROJECT.
12. EXCAVATE PLANTING HOLES WITH VERTICAL SIDES. DO NOT DISTURB SOIL AT BOTTOM OF PLANTING HOLES. MAKE EXCAVATIONS TWICE AS WIDE AS THE ROOT BALL DIAMETER AND SLIGHTLY LESS (TWO INCHES) THAN THE DISTANCE BETWEEN THE TOP-MOST ROOT BALL IN THE ROOT BALL AND THE BOTTOM OF THE ROOT BALL. ALTERNATIVELY, EXCAVATE THE HOLE SLIGHTLY WIDER THAN THE ROOT BALL AND PLACE THE ROOT BALL IN THE HOLE SO THE TOP-MOST ROOT IS EVEN WITH OR SLIGHTLY (2 INCHES) HIGHER THAN THE SURROUNDING LANDSCAPE GRADE. THEN, LOOSEN THE SURROUNDING SOIL OUT TO A DIAMETER EQUAL TO TWICE THE DIAMETER OF THE ROOT BALL. FINALLY, PUSH THE LOOSENED SOIL TOWARD THE ROOT BALL TO FILL THE HOLE.

13. IF WATER FILLS THE BOTTOM OF THE PLANTING HOLE, ADD SOIL TO THE BOTTOM OF THE HOLE UNTIL THE WATER IS COVERED. PACK THIS ADDED SOIL FIRMLY. PLACE THE ROOT BALL ON THIS PACKED, SOLID SOIL, NOT IN WATER. NO PART OF THE ROOT BALL SHALL BE PLACED IN WATER. IF NECESSARY, BRING IN SOIL SIMILAR TO SITE SOIL TO COVER THE SIDES OF THE ROOT BALL, CREATING A RAISED MOUND. THE BASE OF THE MOUND (I.E. THE OUTER DIAMETER) CREATED SHALL BE AT LEAST SIX TIMES THE DIAMETER OF THE ROOT BALL.
14. WHEN PLANTING ON A SLOPE, THE TOP-MOST MAIN ROOT IN THE ROOT BALL SHALL BE EVEN WITH THE GRADE ON THE UPHILL SIDE OF THE TREE. SITE SOIL WILL NEED TO BE ADDED ON THE DOWNHILL SIDE TO COVER THE SIDES OF THE ROOT BALL AND TO CONSTRUCT THE SOIL BERM TO HOLD WATER. THE AMOUNT OF SOIL ADDED ON THE DOWNHILL SIDE WILL DEPEND ON THE SLOPE AND SIZE OF THE ROOT BALL.
15. REMOVE ALL WOOD, PLASTIC, OR GRO-BAGS FROM THE ROOT BALL. SET PLANTS IN CENTER OF HOLES WITH THE TOP-MOST ROOT IN THE ROOT BALL AT THE SAME HEIGHT OR SLIGHTLY (2 INCHES) HIGHER THAN FINISHED LANDSCAPE GRADES AND PLUMB THE TREE SO THE TRUNK IS VERTICAL. BACKFILL FIELD SOIL AROUND SIDES OF ROOT MASS AND WORK EACH LAYER TO SETTLE AND ELIMINATE VOIDS AND AIR POCKETS. MATERIAL MUST BE WATERED IN AS PLANTED. PROVIDE APPROXIMATELY 5 GALLONS OF WATER PER INCH OF TRUNK CALIPER TO THE ROOT BALL ONCE ALL BACKFILL IS FILLED IN AROUND THE ROOT BALL.
16. PROVIDE A 2-3" HIGH SOIL BERM AROUND THE EDGE OF ROOT BALL TO FORM A SHALLOW SAUCER TO COLLECT WATER. THE WATERING SAUCER, REGARDLESS OF HOLE SIZE, IS TO BE AT EDGE OF ROOT BALL. ALTERNATIVELY, COBRA EDGING IS TO BE INSTALLED AT THE EDGE OF THE ROOT BALL.
17. BROADCAST OVER THE ROOT BALL AND BACKFILL SOIL, AT THE RECOMMENDED RATE, A BROAD-SPECTRUM PRE-EMERGENT HERBICIDE PRIOR TO MULCHING.
18. APPLY A CONTROLLED-RELEASE FERTILIZER TO THE SOIL SURFACE UNDER THE MULCH AT 1LB NITROGEN PER 1000 FT² PRIOR TO MULCHING. NO OTHER AMENDMENTS ARE NECESSARY.
19. ON TREES UP TO 4" CALIPER, APPLY A THREE (3)-INCH LAYER OF MULCH TO AN EIGHT (8)-FOOT DIAMETER CIRCULAR AREA AROUND THE TRUNK. ON LARGER CALIPER TREES, APPLY A TWO (2)-FOOT DIAMETER MULCH AREA FOR EACH INCH OF TRUNK CALIPER. NO MULCH SHALL BE APPLIED TO THE INNER HALF OF THE ROOT BALL SURFACE.
20. TREES AND PALMS ARE TO BE SECURED BY AWARDED BIDDER AS SHOWN IN EXHIBITS A-C. (NOTE: STAKING IS OPTIONAL FOR MORE PROTECTED LOCATIONS).
21. A REPRESENTATIVE WILL INSPECT TREES AND PALMS DURING INSTALLATION. MATERIAL THAT IS IN SHOCK OR HAS BEEN DAMAGED DURING INSTALLATION SHALL BE REPLACED BY AWARDED BIDDER WITHIN FIVE (5) WORKING DAYS FROM NOTIFICATION.
22. REMOVE FROM WORK SITE ALL EXCESS MATERIALS (E.G., SOIL, DEBRIS AND EQUIPMENT) DAILY THROUGH DURATION OF PROJECT. DAMAGES RESULTING FROM INSTALLATION SHALL BE REPAIRED BY AWARDED BIDDER.
23. PRUNING: IF THERE IS A DOUBLE LEADER IN THE TOP HALF OF THE TREE, SHORTEN ONE, BY ABOUT ONE-HALF, BACK TO A LIVE BRANCH THAT POINTS AWAY FROM THE TREE AND IS AT LEAST ONE-THIRD THE DIAMETER OF THE CUT LEADER. REMOVE BROKEN PORTIONS OF DAMAGED BRANCHES BACK TO A LIVE LATERAL BRANCH.

21. PRUNING: IF THERE IS A DOUBLE LEADER IN THE TOP HALF OF THE TREE, SHORTEN ONE, BY ABOUT ONE-HALF, BACK TO A LIVE BRANCH THAT POINTS AWAY FROM THE TREE AND IS AT LEAST ONE-THIRD THE DIAMETER OF THE CUT LEADER. REMOVE BROKEN PORTIONS OF DAMAGED BRANCHES BACK TO A LIVE LATERAL BRANCH.

22. REMOVE ALL STRING OR WIRE STRUNG AROUND THE TRUNK. REMOVE ALL STRAPS, ROPE AND STRIP USED TO LIFT THE ROOT BALL. REMOVE ALL BURLAP AND WIRE FROM THE TOP OF THE ROOT BALL.

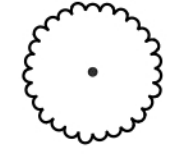
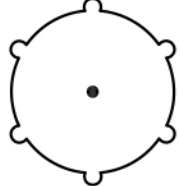
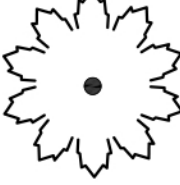
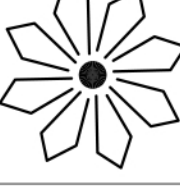
ACCEPTANCE NOTES

1. INSPECTION TO DETERMINE ACCEPTANCE OF PLANTED AREAS WILL BE MADE BY THE CUSTOMER REPRESENTATIVE UPON AWARDED BIDDERS REQUEST. PROVIDE NOTIFICATION A MINIMUM OF FIVE (5) WORKING DAYS BEFORE REQUESTED INSPECTION DATE.

PLANTED AREAS WILL BE ACCEPTED PROVIDED ALL REQUIREMENTS, INCLUDING MAINTENANCE, HAVE BEEN SATISFIED AND PLANT MATERIALS ARE IN A HEALTHY, VIGOROUS CONDITION.

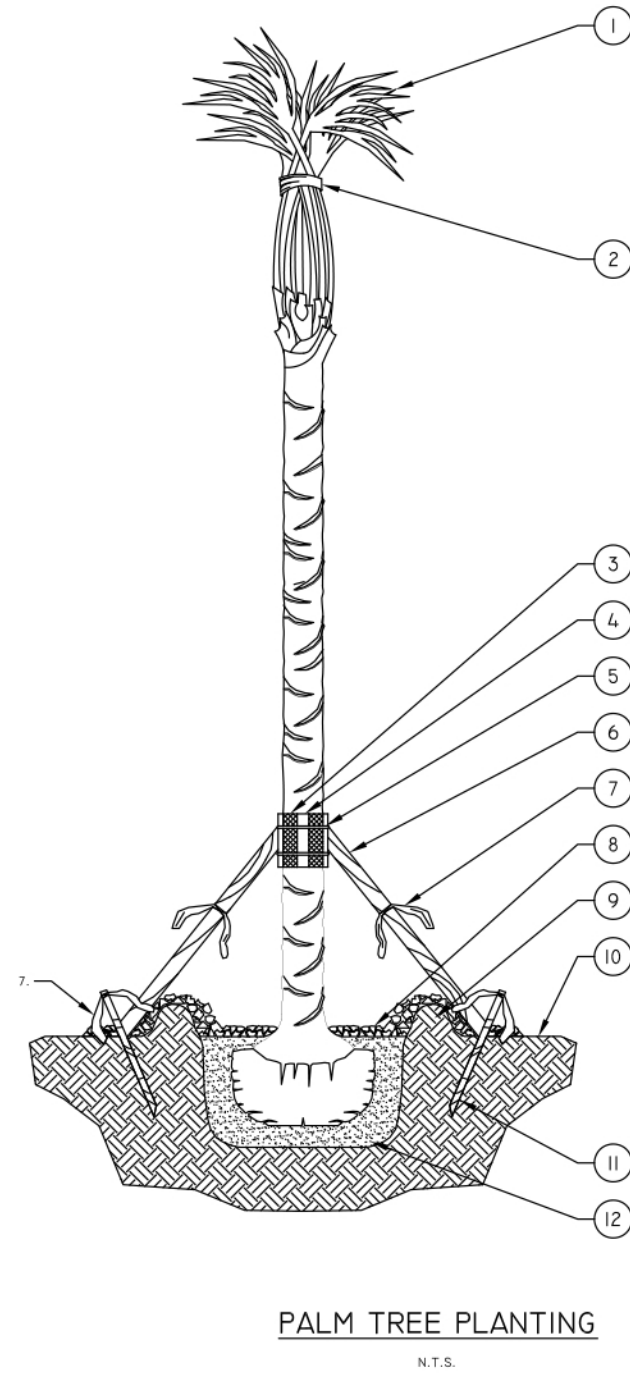
2. THE CUSTOMER REPRESENTATIVE WILL PREPARE A "PUNCH LIST" OF THOSE ITEMS, WHICH MUST BE CORRECTED BEFORE RE-INSPECTION FOR FINAL ACCEPTANCE. THE REPRESENTATIVE WILL DETERMINE AN APPROPRIATE TIME PERIOD FOR CORRECTIONS. AWARDED BIDDER MUST REQUEST RE-INSPECTION TWO (2) WORKING DAYS IN ADVANCE.

PLANT SCHEDULE

TREES	CODE	QTY	COMMON / BOTANICAL NAME	SIZE	NATIVE
	CS2	18	Small Leaf Clusia / Clusia guttifera	8' - 10' Ht. x 4' - 5' Spr, Std., 4 - 5' ct.	Yes
	CS3	3	Silver Buttonwood / Conocarpus erectus sericeus	2.5" DBH, 12' Ht. x 5' Spr. Min., Std., 5' ct.	Yes
PALMS	CODE	QTY	COMMON / BOTANICAL NAME	SIZE	NATIVE
	PC	1	Canary Island Date Palm / Phoenix canariensis	7' - 8' CT. Single Specimen	No
	PM	2	Date Palm / Phoenix dactylifera 'Medjool'	12' - 13' CT, Single Specimen, Diamond Cut	No

PLANT SCHEDULE

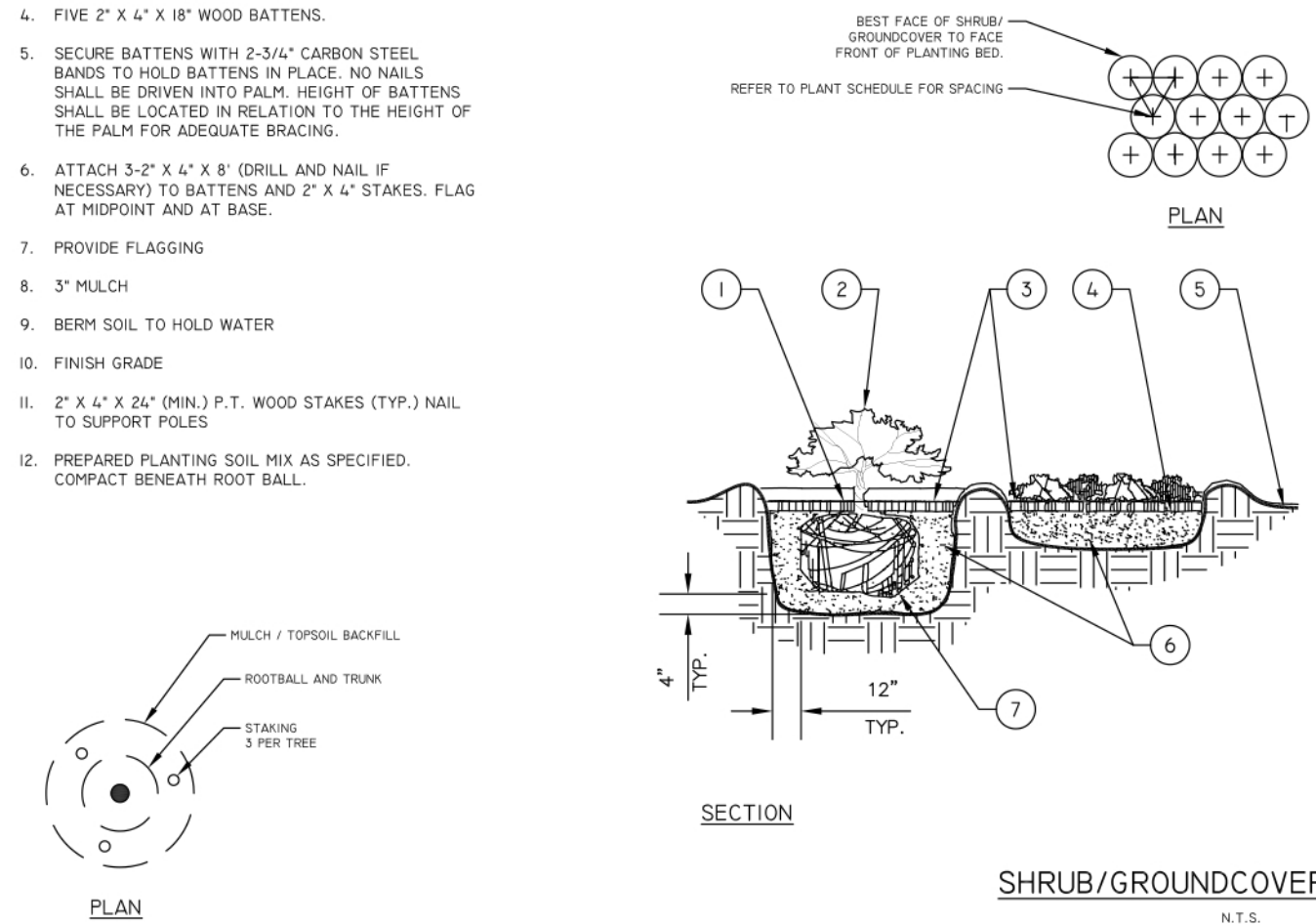
SHRUB AREAS	QTY	COMMON / BOTANICAL NAME	SIZE	NATIVE	SPACING
BP	23	Purple Bougainvillea / Bougainvillea spectabilis 'Purple'	3 gal., 16" - 18" Ht, Full, Compact Shrub form	No	24" o.c.
CH	64	Horizontal Cocoplum / Chrysobalanus icaco 'Horizontalis'	3 gal., 12"-14" HT x 12"-14" Spr., Full	Yes	24" o.c.
CN2	36	Dwarf Pitch Apple / Clusia rosea 'Nana'	3 gal., 12 - 14" HT. x 12 - 14" Spr., Full	No	24" o.c.
CS4	22	Silver Buttonwood / Conocarpus erectus sericeus	3 gal., 24" Ht. Min.	Yes	24" o.c.
FM2	78	Green Island Ficus / Ficus microcarpa 'Green Island'	3 gal., 12 - 14" HT. x 12 - 14" Spr., Full	No	24" o.c.
FM	69	Green Island Ficus / Ficus microcarpa 'Green Island'	3 gal., 12 - 14" HT. x 12 - 14" Spr., Full	No	20" o.c.
PS2	18	White Fountain Grass / Pennisetum setaceum 'White'	3 gal, 36" o.c.	Yes	36" o.c.
US	38	Sea Oats / Uniola paniculata	3 gal., 24" Ht. Min.	Yes	36" o.c.



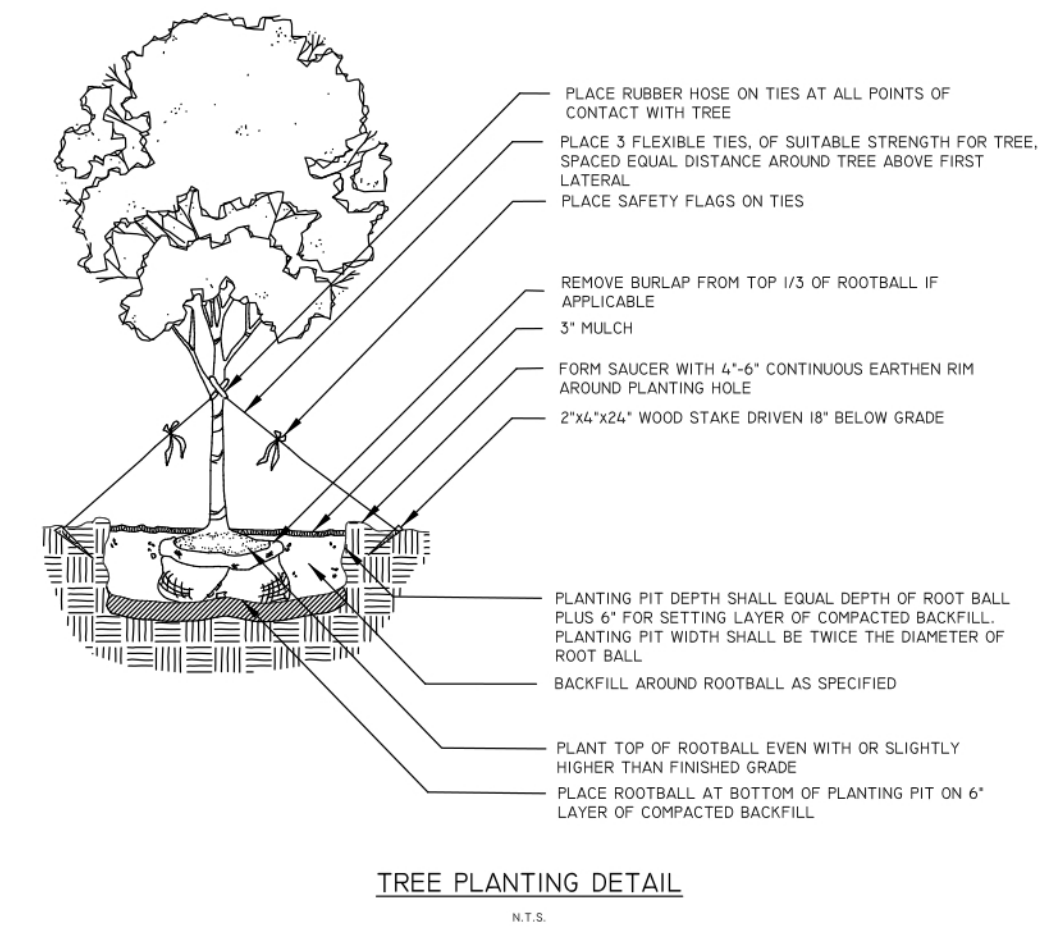
NOTES:

- A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.
- B. REMOVE BURLAP, WIRE AND STRAPS (ANYTHING THAT COULD GIRDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL.
- C. SEE LANDSCAPE NOTES FOR THE TYPE OF MULCH MATERIAL TO USE.

1. MINIMUM OF NINE (9) GOOD PALM FRONDS
2. PRUNE AND THE FRONDS WITH HEMP TWINE. CABBAGE PALMS TO BE "HURRICANE CUT"
3. 5 LAYERS OF BURLAP TO PROTECT TRUNK.
4. FIVE 2" X 4" X 18" WOOD BATTENS.
5. SECURE BATTENS WITH 2-5/16" CARBON STEEL BANDS TO HOLD BATTENS IN PLACE. NO NAILS SHALL BE DRIVEN INTO PALM. HEIGHT OF BATTENS SHALL BE LOCATED IN RELATION TO THE HEIGHT OF THE PALM FOR ADEQUATE BRACING.
6. ATTACH 3-2" X 4" X 8" DRILL AND NAIL IF NECESSARY TO BATTENS AND 2" X 4" STAKES. FLAG AT MIDPOINT AND AT BASE.
7. PROVIDE FLAGGING
8. 3" MULCH
9. BERM SOIL TO HOLD WATER
10. FINISH GRADE
11. 2" X 4" X 24" (MIN) P.T. WOOD STAKES (TYP.) NAIL TO SUPPORT POLES.
12. PREPARED PLANTING SOIL MIX AS SPECIFIED. COMPACT BENEATH ROOT BALL.



1. TOP OF SHRUB ROOTBALLS TO BE PLANTED 1" - 2" HIGH WITH SOIL MOUNDING UP TO THE TOP OF ROOTBALL.
2. WHEN USED IN MASSES- PRUNE ALL SHRUBS TO ACHIEVE A UNIFORM MASS/HEIGHT.
3. 3" MULCH AS SPECIFIED.
4. EXCAVATE ENTIRE BED SPECIFIED FOR GROUNDCOVER BED.
5. 4" MINIMUM OF TOPSOIL TO BRING TO FINISHED GRADE (SEE GRADING PLAN).
6. PREPARED PLANTING SOIL AS SPECIFIED. NOTE: WHEN GROUND-COVERS AND SHRUBS USED IN MASSES ENTIRE BED TO BE AMENDED WITH PLANTING SOIL MIX AS SPECIFIED IN THE PLANTING SPECIFICATION.
7. SCARIFY ROOTBALL SIDES AND BOTTOM.



50 E. Ocean Blvd., Suite 101
Stuart, Florida 34994

T 772.678.7200
F 772.678.7201

www.hjadesignstudio.com
LA 0000905

Surfside Quadplex

City of Fort Pierce

Landscape Specifications



Job No. 2021-12

Drawn By _____ EB

Checked By _____ MH

Approved By _____ MH

Submittal Dates 4-30-21

Revision Dates _____

LP-2