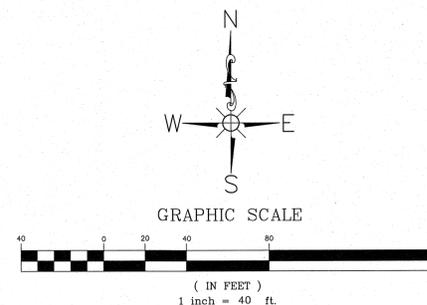


# CONSTRUCTION PLANS

PREPARED FOR

## RICH TORINO II TORINO LAKES PHASE 4

A PORTION OF TRACT "D" AS SHOWN ON THE PLAT OF PORT ST. LUCIE SECTION FORTY SEVEN, AS RECORDED IN PLAT BOOK 16, AT PAGE 40, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA  
PORT ST. LUCIE, FLORIDA



### OWNER

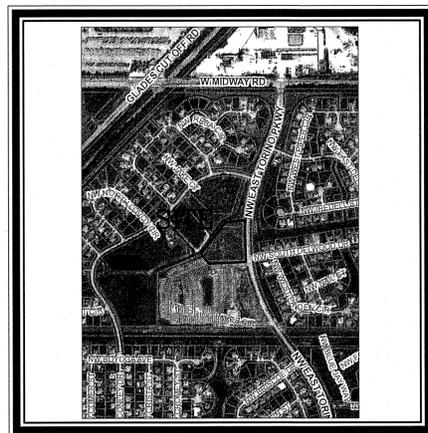
RICH TORINO II, LLC  
2552 PETERS ROAD SUITE B  
FORT PIERCE, FLORIDA 34945  
(772) 446-7344

### CIVIL ENGINEER

ATLANTIC CIVIL ENGINEERING, INC.  
2552 PETERS ROAD SUITE D  
FORT PIERCE, FLORIDA 34945  
(772) 398-1520

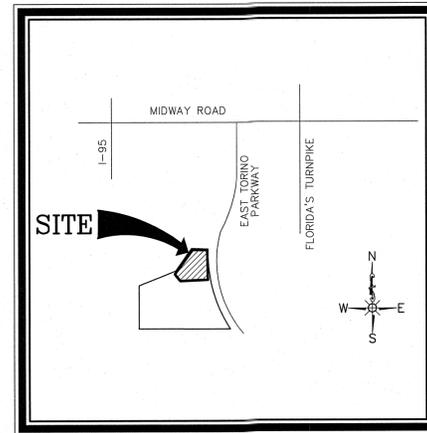
### SURVEYOR

LAVENTURE & ASSOCIATES, INC.  
2552 PETERS ROAD SUITE D  
FORT PIERCE, FLORIDA 34945  
(772) 398-6430



LOCATION MAP

N.T.S.



VICINITY MAP

N.T.S.

### INDEX TO SHEETS

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	OVERALL SITE PLAN
3	DETAILED SITE PLAN
4	PAVING, GRADING & DRAINAGE PLAN
5	UTILITY PLAN
6-7	SANITARY SEWER PLAN & PROFILE
8-9	WATER & SEWER DETAILS
10	PAVING, GRADING & DRAINAGE DETAILS
11	EROSION CONTROL PLAN
12	HORIZONTAL CONTROL PLAN
13	GENERAL NOTES

### GENERAL NOTES

- 1.) ALL UTILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2019 (OR LATEST) CITY OF PORT ST. LUCIE UTILITY SYSTEMS DEPARTMENT'S TECHNICAL SPECIFICATIONS AND CONSTRUCTION STANDARDS.
- 2.) ALL ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988.
- 3.) THE PROPERTY OWNER, CONTRACTOR AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY IN ACCORDANCE WITH CITY CODE SECTION 41.08 (g).



PREPARED BY  
ATLANTIC CIVIL ENGINEERING, INC.  
CONSULTING ENGINEERS

2552 PETERS ROAD • SUITE D • FORT PIERCE, FLORIDA 34945 • (772) 398-1520 PHONE • (772) 398-1521 FAX

State of Florida Board of Professional Engineers Authorization No. 32020

TORINO LAKES PHASE 4  
PSLUSD PROJECT # 11-835-02  
CITY OF PSL PROJECT #P21-174

REVISION	DESCRIPTION	DATE
1	SPRC COMMENTS (MULTIPLE PAGES)	9/30/21

RICHARD M. LADYKO FL. P.E. No. 34288 DATE

JOB No. 2021.0114-2

SHEET 1 OF 13

**TORINO LAKES P.U.D.**

**EXISTING SITE DATA (PHASE 1-3)**

COMPONENT	SQ. FT.	ACRES	% OF SITE
PUD AREA	738,837 SF	16.96 AC	100.0%
MULTI-FAMILY AREA	620,461 SF	14.24 AC	84.0%
GEN. COMMERCIAL AREA (PHASE 2-3)	118,376 SF	2.72 AC	16.0%

**EXISTING MULTI-FAMILY DATA (PHASE 1)**

COMPONENT	SQ. FT.	ACRES	% OF SITE
MULTI-FAMILY AREA	620,461 SF	14.24 AC	100.0%
(20) 6-UNIT BUILDINGS	123,220 SF	2.83 AC	19.9%
(7) 4-UNIT BUILDINGS	28,819 SF	0.66 AC	4.6%
CLUBHOUSE	3,570 SF	0.08 AC	0.6%
(2) MAIL CENTERS	600 SF	0.01 AC	0.1%
BUILDING COVERAGE	155,733 SF	3.58 AC	25.1%
PAVEMENT COVERAGE	101,599 SF	2.33 AC	16.4%
CONCRETE COVERAGE	38,599 SF	0.89 AC	6.2%
TOTAL IMPERVIOUS	295,931 SF	6.79 AC	47.7%
TOTAL OPEN SPACE	324,530 SF	7.45 AC	52.3%

**MULTI-FAMILY DENSITY (PHASE 1)**

148 UNITS/14.24 AC = 10.4 DU/AC

**MULTI-FAMILY PARKING (PHASE 1)**

REQUIRED: 148 UNITS X 2 SPACES/UNIT = 296 SPACES  
 + 5% GUEST PARKING = 15 SPACES  
 REQUIRED PARKING = 311 SPACES

PROVIDED: 148 UNITS X 2 SPACES/UNIT = 296 SPACES  
 + GUEST PARKING = 32 SPACES \*  
 PROVIDED PARKING = 328 SPACES \*  
 \* INCLUDES 2 HC

**PROPOSED SITE DATA (PHASE 4)**

COMPONENT	SQ. FT.	ACRES	% OF SITE
MULTI-FAMILY AREA	130,680 SF	3.00 AC	100.0%

**PROPOSED MULTI-FAMILY DATA (PHASE 4)**

COMPONENT	SQ. FT.	ACRES	% OF SITE
MULTI-FAMILY AREA	130,680 SF	3.00 AC	100.0%
(5) 6-UNIT BUILDINGS	32,975 SF	0.76 AC	25.2%
(1) 4-UNIT BUILDINGS	4,416 SF	0.10 AC	3.4%
BUILDING COVERAGE	37,391 SF	0.86 AC	28.6%
PAVEMENT COVERAGE	17,559 SF	0.40 AC	13.4%
CONCRETE COVERAGE	10,709 SF	0.25 AC	8.2%
TOTAL IMPERVIOUS	65,659 SF	1.51 AC	50.2%
TOTAL OPEN SPACE	65,021 SF	1.49 AC	49.8%

**MULTI-FAMILY DENSITY (PHASE 4)**

34 UNITS/3.0 AC = 11.3 DU/AC

**MULTI-FAMILY PARKING (PHASE 4)**

REQUIRED: 34 UNITS X 2 SPACES/UNIT = 68 SPACES  
 + 5% GUEST PARKING = 4 SPACES  
 REQUIRED PARKING = 72 SPACES

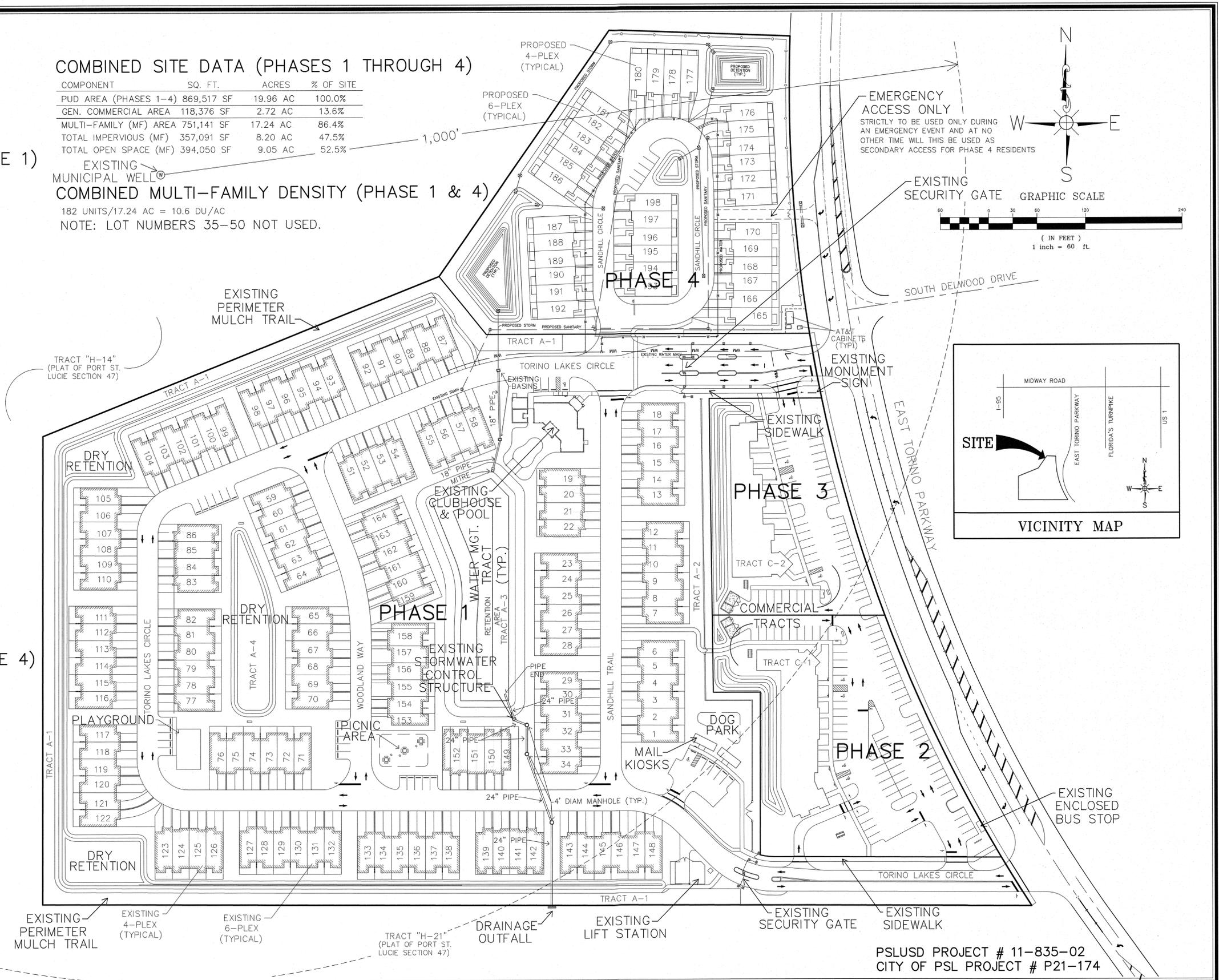
PROVIDED: 34 UNITS X 2 SPACES/UNIT = 68 SPACES  
 + GUEST PARKING = 5 SPACES  
 PROVIDED PARKING = 73 SPACES

**COMBINED SITE DATA (PHASES 1 THROUGH 4)**

COMPONENT	SQ. FT.	ACRES	% OF SITE
PUD AREA (PHASES 1-4)	869,517 SF	19.96 AC	100.0%
GEN. COMMERCIAL AREA	118,376 SF	2.72 AC	13.6%
MULTI-FAMILY (MF) AREA	751,141 SF	17.24 AC	86.4%
TOTAL IMPERVIOUS (MF)	357,091 SF	8.20 AC	47.5%
TOTAL OPEN SPACE (MF)	394,050 SF	9.05 AC	52.5%

**EXISTING MUNICIPAL WELL**  
**COMBINED MULTI-FAMILY DENSITY (PHASE 1 & 4)**

182 UNITS/17.24 AC = 10.6 DU/AC  
 NOTE: LOT NUMBERS 35-50 NOT USED.



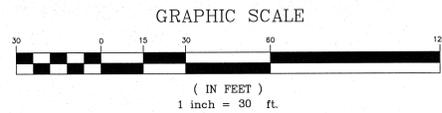
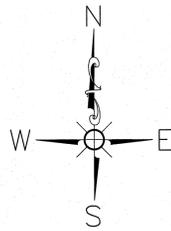
**OVERALL SITE PLAN**  
 PREPARED FOR  
**TORINO LAKES P.U.D.**

- REVISIONS -		BY	DATE
REVISE PER SPRC COMMENTS		JOE M	4/27/21
REVISE PER CITY OF PSL ENGINEERING		MRL	5/18/21
ADD 1,000 FOOT RADIUS FOR PUBLIC WELL		JOE M	9/30/21

FILED	BY	DATE
FIELD	JPH	3/06/20
CALCS	RCL	6/27/18
DRAWN	JOE M	3/06/20
CHECKED	RCL	3/09/20
FILE REF.	FIELD BK/PG	
20.2680-8	GPS/CALC SHEET	

**ATLANTIC CIVIL ENGINEERING, INC.**  
 CONSULTING ENGINEERS  
 2552 PETERS ROAD SUITE D  
 FORT PIERCE, FLORIDA 34945  
 (772) 398-1520 PHONE (772) 398-1521 FAX  
 CERTIFICATE OF AUTHORIZATION #32020

DATE: 1-22-21  
 SCALE: 1"=60'  
 JOB No. 2021-0114-2  
 SHEET 2 OF 13



**PROPOSED SITE DATA (PHASE 4)**

COMPONENT	ACRES	SQ. FT.	% OF SITE
PROPOSED BUILDINGS	0.86	37,391	28.6
PROPOSED PAVING +	0.65	28,268	21.6
IMPERVIOUS	1.51	65,659	50.2 (ABOVE TOTAL)
OPEN SPACE	1.49	65,021	49.8
TOTAL SITE AREA	3.00	130,680	100.0

EXISTING MUNICIPAL WELL  
(SEE SHEET 2 OF 13  
FOR 1,000' RADIUS)

**GENERAL NOTES**

- PROJECT NAME: TORINO LAKES PHASE 4
- LOCATION: A PORTION OF TRACT "D" AS SHOWN ON THE PLAT OF PORT ST. LUCIE SECTION FORTY SEVEN, AS RECORDED IN PLAT BOOK 16, AT PAGE 40, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.
- OWNER: RICH TORINO II LLC  
2552 PETERS RD SUITE B  
FORT PIERCE, FL, 34945  
  
SAME AS OWNER
- APPLICANT: ATLANTIC CIVIL ENGINEERING, INC.  
2552 PETERS ROAD SUITE D  
FORT PIERCE, FLORIDA 34945  
PHONE: (772) 398-1520
- ENGINEER: LAVENTURE & ASSOCIATES, INC.  
2552 PETERS ROAD SUITE D  
FORT PIERCE, FLORIDA 34945  
PHONE: (772) 398-6430
- SURVEYOR: A PORTION OF TRACT "D" AS SHOWN ON THE PLAT OF PORT ST. LUCIE SECTION FORTY SEVEN, AS RECORDED IN PLAT BOOK 16, AT PAGE 40, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
- DESCRIPTION: BEGINNING AT THE NORTHEAST CORNER OF SAID TRACT "D", SAID POINT ALSO BEING ON THE WESTERLY RIGHT-OF-WAY LINE OF EAST TORINO PARKWAY, AS SHOWN ON THE SAID PLAT OF PORT ST. LUCIE SECTION FORTY-SEVEN; THENCE NORTH 87°54'54" WEST, ALONG THE NORTH LINE OF SAID TRACT "D", FOR 225.00 FEET; THENCE SOUTH 34°52'49" WEST, ALONG THE NORTHWESTERLY LINE OF SAID TRACT "D" FOR 370.06 FEET; THENCE SOUTH 39°12'30" EAST FOR 92.55 FEET; THENCE DUE EAST FOR 401.20 FEET TO A POINT ON THE WESTERLY RIGHT-OF-WAY LINE OF SAID EAST TORINO PARKWAY, SAID POINT ALSO BEING A POINT ON THE ARC OF A CIRCULAR CURVE TO THE RIGHT HAVING A RADIAL BEARING OF NORTH 80°40'26" EAST, A RADIUS OF 1850.00 FEET AND A CENTRAL ANGLE OF 11°24'40"; THENCE NORTHERLY, ALONG THE ARC OF SAID CURVE, AND ALONG THE WESTERLY RIGHT-OF-WAY LINE OF SAID EAST TORINO PARKWAY, FOR 368.44 FEET TO THE POINT OF BEGINNING.  
  
SAID LANDS CONTAINS 3.00 ACRES, MORE OR LESS.  
3420-735-0004-010-7  
PROPOSED MULTI-FAMILY DEVELOPMENT
- PARCEL ID NO: 130,680 SQ FT. (3.00 ACRES) GROSS AREA
- TYPE OF PROJECT: 37,391 SQ FT. (0.86 ACRES)(6 BUILDINGS/34 UNITS)
- PROJECT SIZE: ROI (RESIDENTIAL, OFFICE, INSTITUTIONAL)
- BUILDING SIZE: I (INSTITUTIONAL)
- FUTURE LAND USE: ZONE X
- EXISTING ZONING: REQUIRED 34 UNITS X 2.0 SPACES/UNIT + 5% (GUEST) = 72 SPACES  
PROVIDED 73 SPACES
- FLOOD ZONE:
- PARKING: BEGIN CONSTRUCTION: DECEMBER 2021  
CONSTRUCTION TO BE COMPLETED: 365 DAYS
- DEVELOPMENT SCHEDULE: PSLUD  
PSLUD
- UTILITY SERVICE: STORMWATER MANAGEMENT WILL CONSIST OF AN ON-SITE STORMWATER MANAGEMENT SYSTEM WITH A PROPOSED CONNECTION TO THE EXISTING WATER SERVICE:  
SEWER SERVICE: PERMITTED STORMWATER MANAGEMENT SYSTEM (PHASE 1) AND OUTFALL AT THE CITY OF PORT ST. LUCIE CANAL SOUTH OF THE SUBJECT SITE. DESIGN SHALL MEET CITY OF PORT ST. LUCIE AND SOUTH FLORIDA WATER MANAGEMENT DISTRICT CRITERIA.

**TRAFFIC STATEMENT**

(ITE LAND USE (10TH EDITION))

- DAILY TRIP GENERATION  
34 DWELLING UNITS = 7.32 DAILY TRIPS / DU = 249 DAILY TRIPS
- AM PEAK TRIP GENERATION  
34 DWELLING UNITS = 0.46 AM PEAK / DU = 16 AM PEAK HOUR TRIPS (4 IN, 12 OUT)
- PM PEAK TRIP GENERATION  
34 DWELLING UNITS = 0.56 PM PEAK / DU = 19 PM PEAK HOUR TRIPS (12 IN, 7 OUT)

**BUILDING SETBACKS**

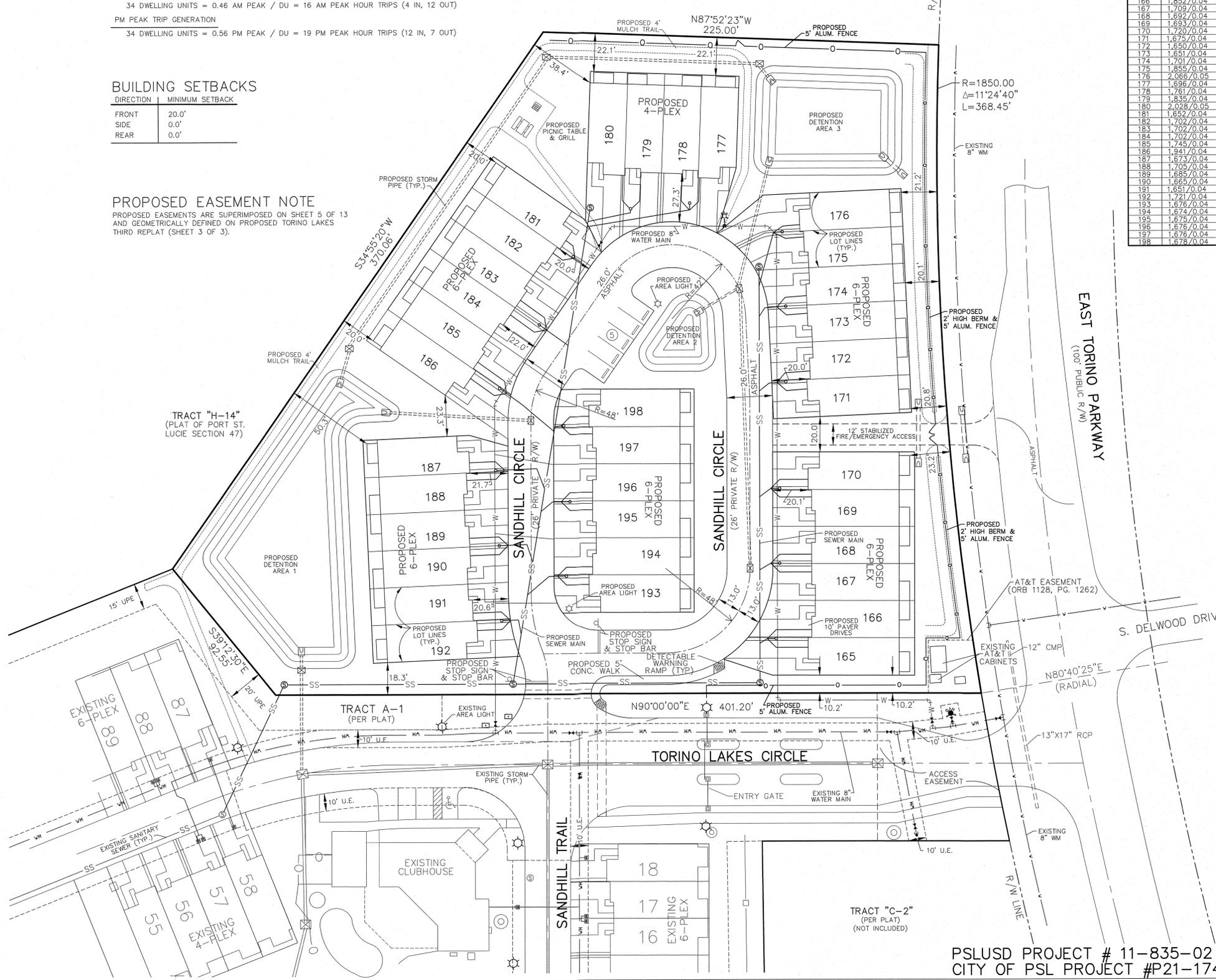
DIRECTION	MINIMUM SETBACK
FRONT	20.0'
SIDE	0.0'
REAR	0.0'

**PROPOSED EASEMENT NOTE**

PROPOSED EASEMENTS ARE SUPERIMPOSED ON SHEET 5 OF 13 AND GEOMETRICALLY DEFINED ON PROPOSED TORINO LAKES THIRD REPLAT (SHEET 3 OF 3).

**AREA TABLE**

LOT NUMBER	AREA SQUARE FEET/ACRES
165	2,100/0.05
166	1,852/0.04
167	1,709/0.04
168	1,692/0.04
169	1,693/0.04
170	1,720/0.04
171	1,835/0.04
172	1,650/0.04
173	1,651/0.04
174	1,701/0.04
175	1,855/0.04
176	2,066/0.05
177	1,696/0.04
178	1,761/0.04
179	1,835/0.04
180	2,028/0.05
181	1,652/0.04
182	1,702/0.04
183	1,702/0.04
184	1,702/0.04
185	1,745/0.04
186	1,941/0.04
187	1,873/0.04
188	1,705/0.04
189	1,685/0.04
190	1,665/0.04
191	1,651/0.04
192	1,721/0.04
193	1,676/0.04
194	1,674/0.04
195	1,629/0.04
196	1,676/0.04
197	1,676/0.04
198	1,678/0.04



**SITE PLAN**

**TORINO LAKES PHASE 4**

- REVISIONS -

NO.	DESCRIPTION	BY	DATE
1	ADD LOT AREA TABLE; ADD UTILITIES	JOE M	9/16/21

BY	DATE
MRL	6/08/21
RCL	5/20/21
RCL	6/09/21
QA/OC	6/16/21

SURVEY REF. DRAWING NAME: 20.2680-8, 2019-0114.dwg

ATLANTIC CIVIL ENGINEERING, INC.  
CONSULTING ENGINEERS

2552 PETERS ROAD SUITE D  
FORT PIERCE, FLORIDA 34945  
(772) 398-1520 PHONE (772) 398-1521 FAX  
CERTIFICATE OF AUTHORIZATION #32020

DATE: 8-4-21  
JOB No. 2021.0114-2  
HORIZ SCALE: 1"=30'  
VERT SCALE: N/A  
SHEET 3 OF 13

PSLUD PROJECT # 11-835-02  
CITY OF PSL PROJECT #P21-174

**PROPOSED SITE DATA (PHASE II)**

COMPONENT	ACRES	SQ. FT.	% OF SITE
PROPOSED BUILDINGS	0.86	37,391	28.6
PROPOSED PAVING +	0.65	28,268	21.6
IMPERVIOUS	1.51	65,659	50.2 (ABOVE TOTAL)
OPEN SPACE	1.49	65,021	49.8
TOTAL SITE AREA	3.00	130,680	100.0

**STORAGE DATA (PHASE II)**

PROPOSED DETENTION AREA 1 (3.0' DEPTH)

COMPONENT	ACRES	SQ. FT.	% OF SITE
TOB	0.219	9,524	7.3
BOT	0.139	6,071	4.6

PROPOSED DETENTION AREA 2 (3.0' DEPTH)

COMPONENT	ACRES	SQ. FT.	% OF SITE
TOB	0.034	1,479	1.1
BOT	0.012	528	0.4

PROPOSED DETENTION AREA 3 (3.0' DEPTH)

COMPONENT	ACRES	SQ. FT.	% OF SITE
TOB	0.115	5,008	3.8
BOT	0.070	3,033	2.3

**IMPERVIOUS AREA TABULATIONS**

DRIVEWAYS & SIDEWALKS	10709 SF	0.246 AC
ROADWAY	17559 SF	0.403 AC
TOTAL IMPERVIOUS	28268 SF	0.649 AC

**CITY CODE SECTION 41.08 (g) NOTE**

THE PROPERTY OWNER, CONTRACTOR AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY IN ACCORDANCE WITH CITY CODE SECTION 41.08 (g).

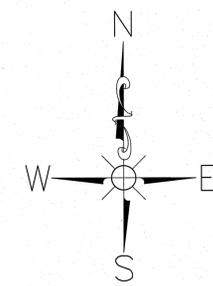
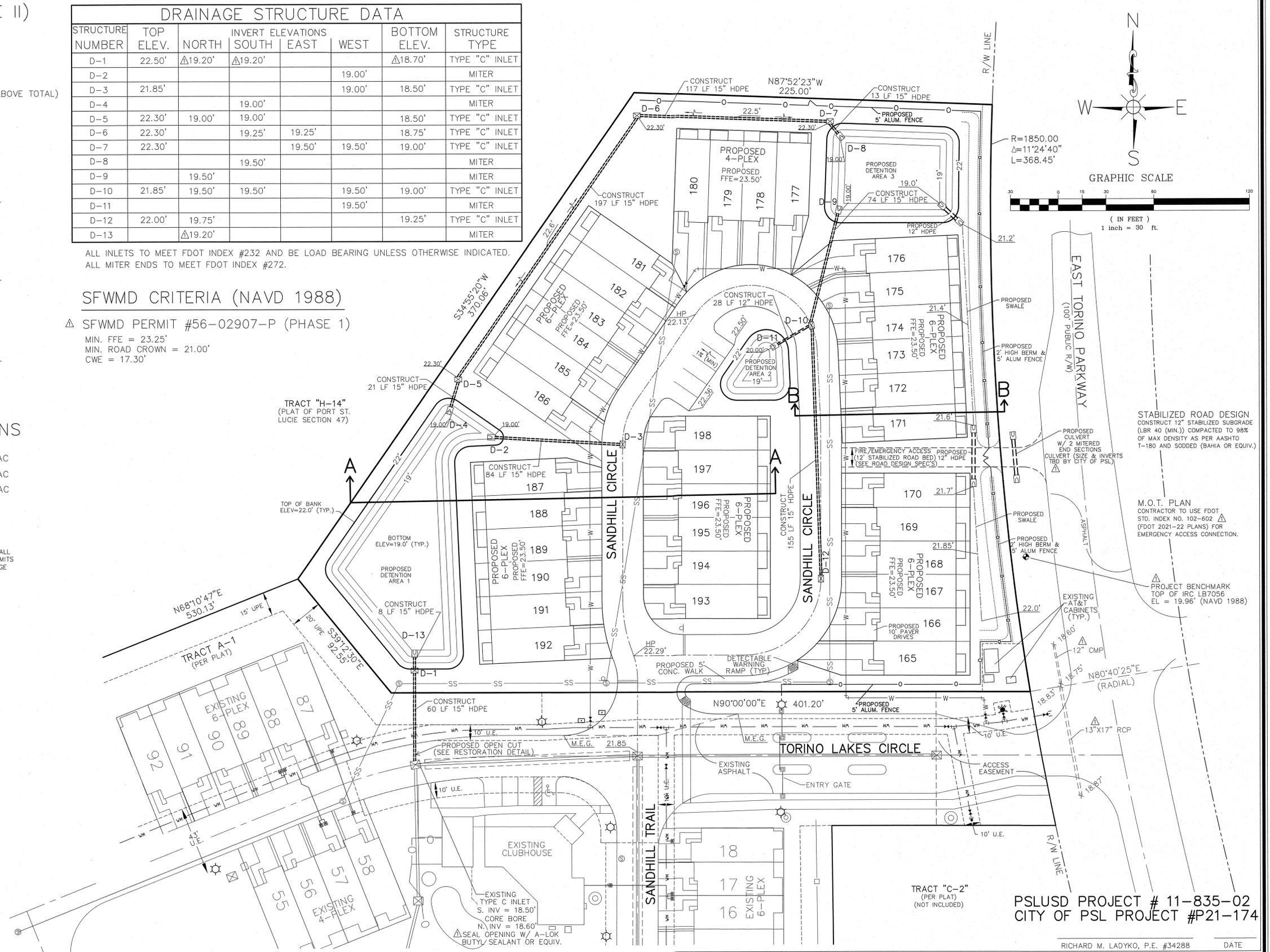
DRAINAGE STRUCTURE DATA							
STRUCTURE NUMBER	TOP ELEV.	NORTH	INVERT ELEVATIONS			BOTTOM ELEV.	STRUCTURE TYPE
			SOUTH	EAST	WEST		
D-1	22.50'	Δ19.20'	Δ19.20'			Δ18.70'	TYPE "C" INLET
D-2					19.00'		MITER
D-3	21.85'				19.00'	18.50'	TYPE "C" INLET
D-4			19.00'				MITER
D-5	22.30'	19.00'	19.00'			18.50'	TYPE "C" INLET
D-6	22.30'		19.25'	19.25'		18.75'	TYPE "C" INLET
D-7	22.30'			19.50'	19.50'	19.00'	TYPE "C" INLET
D-8			19.50'				MITER
D-9		19.50'					MITER
D-10	21.85'	19.50'	19.50'		19.50'	19.00'	TYPE "C" INLET
D-11					19.50'		MITER
D-12	22.00'	19.75'				19.25'	TYPE "C" INLET
D-13		Δ19.20'					MITER

ALL INLETS TO MEET FDOT INDEX #232 AND BE LOAD BEARING UNLESS OTHERWISE INDICATED.  
ALL MITER ENDS TO MEET FDOT INDEX #272.

**SFWMDCRITERIA (NAVD 1988)**

Δ SFWMDCRITERIA PERMIT #56-02907-P (PHASE 1)

MIN. FFE = 23.25'  
MIN. ROAD CROWN = 21.00'  
CWE = 17.30'



STABILIZED ROAD DESIGN  
CONSTRUCT 12" STABILIZED SUBGRADE  
(LBR 40 (MIN.)) COMPACTED TO 98%  
OF MAX DENSITY AS PER AASHTO  
T-180 AND SODDED (BAHIA OR EQUIV.)

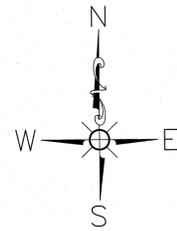
M.O.T. PLAN  
CONTRACTOR TO USE FDOT  
STD. INDEX NO. 102-602 Δ  
(FDOT 2021-22 PLANS) FOR  
EMERGENCY ACCESS CONNECTION.

PROJECT BENCHMARK  
TOP OF IRC LB7056  
EL = 19.96' (NAVD 1988)

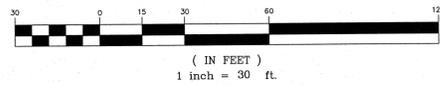
PSLUSD PROJECT # 11-835-02  
CITY OF PSL PROJECT #P21-174

RICHARD M. LADYKO, P.E. #34288 DATE

<p>PAVING, GRADING, &amp; DRAINAGE PLAN</p> <p>PREPARED FOR</p> <p><b>TORINO LAKES PHASE 4</b></p>	<p>- REVISIONS -</p> <table border="1"> <thead> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>BY</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>ADD SFWMDCRITERIA; MISC. LABELS; OMIT WEST SIDEWALK; ADD BM</td> <td>JOE M</td> <td>9/18/21</td> </tr> </tbody> </table>		NO.	DESCRIPTION	BY	DATE	1	ADD SFWMDCRITERIA; MISC. LABELS; OMIT WEST SIDEWALK; ADD BM	JOE M	9/18/21	<table border="1"> <thead> <tr> <th>BY</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>JPH</td> <td>3/06/20</td> </tr> <tr> <td>RCL</td> <td>6/27/18</td> </tr> <tr> <td>MRL</td> <td>3/06/20</td> </tr> <tr> <td>RML</td> <td>3/09/20</td> </tr> <tr> <td>FILE REF.</td> <td>FIELD BK/PG 20.2680-8</td> </tr> <tr> <td></td> <td>GPS/CALC SHEET</td> </tr> </tbody> </table>		BY	DATE	JPH	3/06/20	RCL	6/27/18	MRL	3/06/20	RML	3/09/20	FILE REF.	FIELD BK/PG 20.2680-8		GPS/CALC SHEET	<p>ATLANTIC CIVIL ENGINEERING, INC. CONSULTING ENGINEERS</p> <p>2552 PETERS ROAD SUITE D FORT PIERCE, FLORIDA 34945 (772) 398-1520 PHONE (772) 398-1521 FAX CERTIFICATE OF AUTHORIZATION #32020</p>	<p>DATE: 8-4-21</p> <p>SCALE: 1"=30'</p> <p>JOB No. 21.0114-2</p> <p>SHEET 4 OF 13</p>
	NO.	DESCRIPTION	BY	DATE																								
1	ADD SFWMDCRITERIA; MISC. LABELS; OMIT WEST SIDEWALK; ADD BM	JOE M	9/18/21																									
BY	DATE																											
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FILE REF.	FIELD BK/PG 20.2680-8																											
	GPS/CALC SHEET																											
<p>FIELD CALC. 3/06/20</p> <p>DRAWN MRL 3/06/20</p> <p>CHECKED RML 3/09/20</p>																												



GRAPHIC SCALE



SANITARY STRUCTURES

STRUCTURE NUMBER	TOP ELEV.	INVERT NORTH	INVERT SOUTH	INVERT EAST	INVERT WEST
EXIST (**)	22.13'	16.45'			16.35'
S-1	22.30'		18.59'		
S-2	22.60'	17.50'		17.50'	17.40'
S-3	22.40'		16.78'	16.88'	
S-4	22.34'	18.19' Δ			18.09' Δ
S-5	22.23'		19.14' Δ		

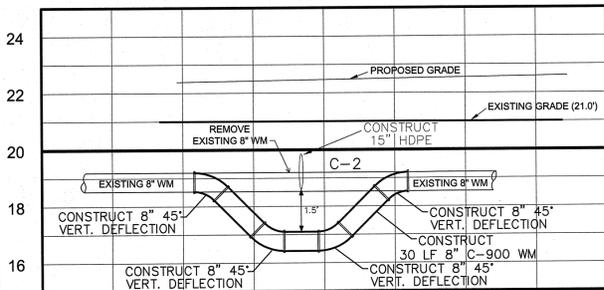
ΔΔ\*\* CORE BORE NORTH INV. ELEV=16.45' AND WATERTIGHT WITH APPROVED PSLUSD SEALANT AND PROCEDURES.

CONFLICT TABLE

CONFLICT NUMBER	GROUND ELEV.	UPPER PIPE	UPPER PIPE BOTTOM ELEV.	LOWER PIPE	LOWER PIPE TOP ELEV.	SEPARATION
1	22.3'	EXIST. 8" WM	18.8'	8" SAN	17.3'	1.5'
2 (*)	22.1'	15" HDPE	18.8'	EXIST. 8" WM	19.2'	* ADJUST WM
3	22.4'	15" HDPE	19.5'	8" SAN	17.6'	1.9'
4	22.5'	8" WM	19.6'	8" SAN	18.1'	1.5'
5	22.5'	15" HDPE	19.0'	8" WM	17.5'	1.5'
6	22.5'	8" SAN	18.4'	8" WM	16.9'	1.5'
7	22.4'	15" HDPE	19.3'	8" WM	17.8'	1.5'

\* LOWER EXISTING 8" WM TO TOP ELEV=17.30' SEPARATION=1.5' (STORM OVER WATER)

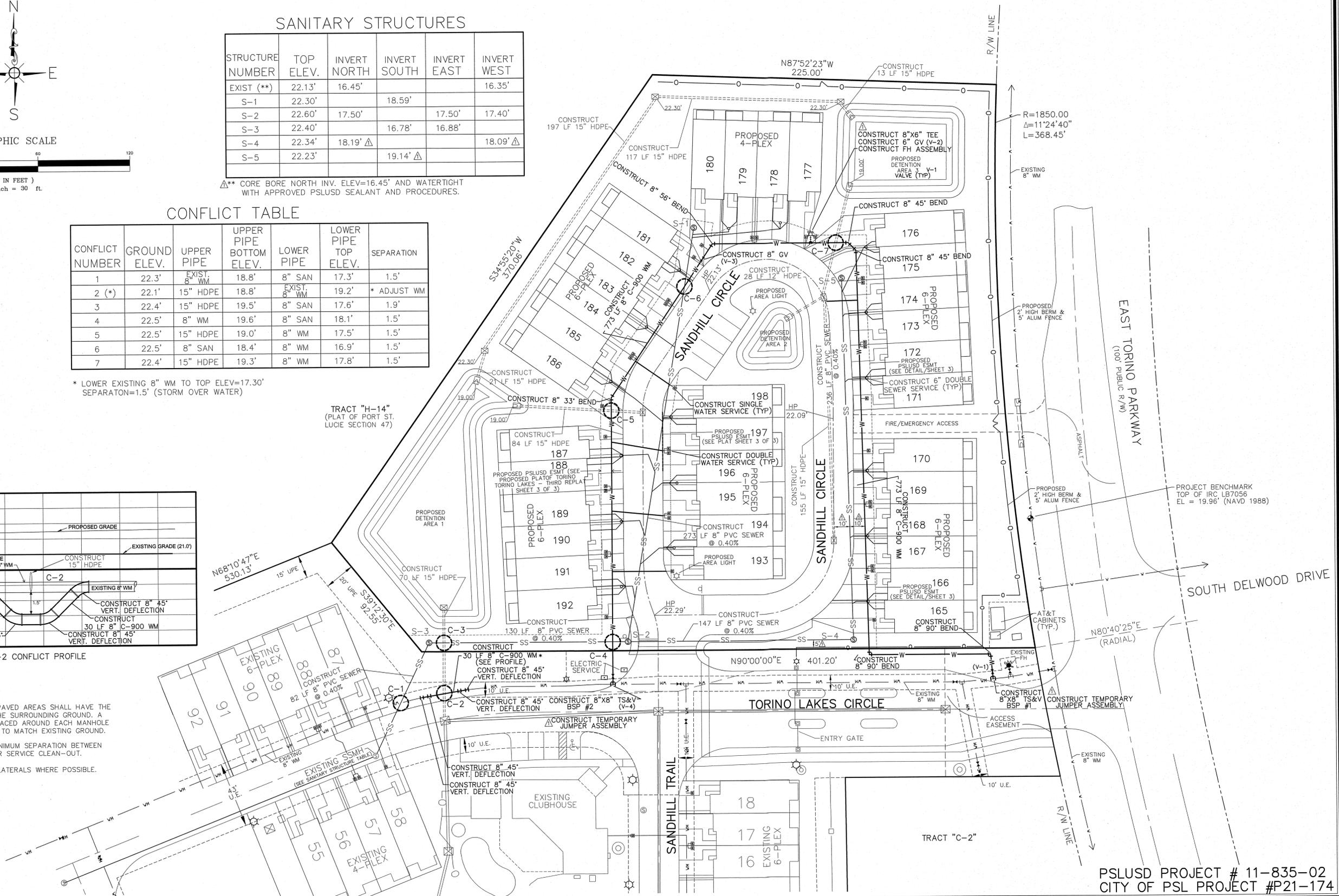
TRACT "H-14"  
(PLAT OF PORT ST. LUCIE SECTION 47)



Δ C-2 CONFLICT PROFILE

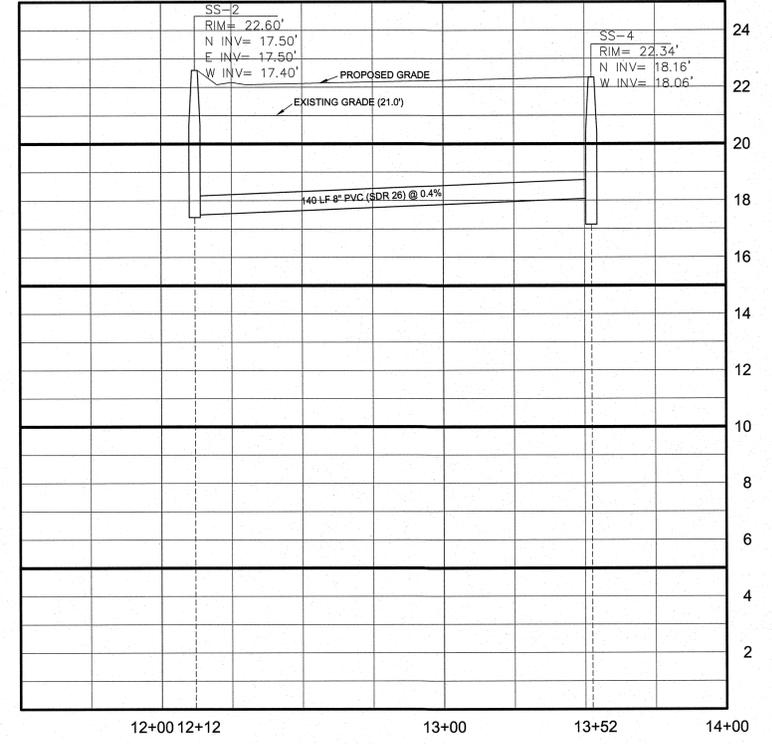
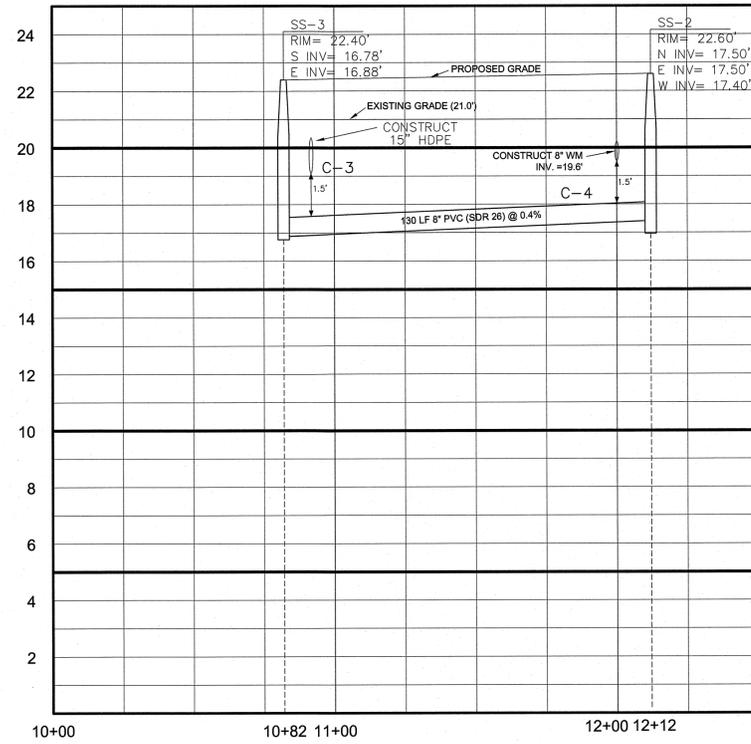
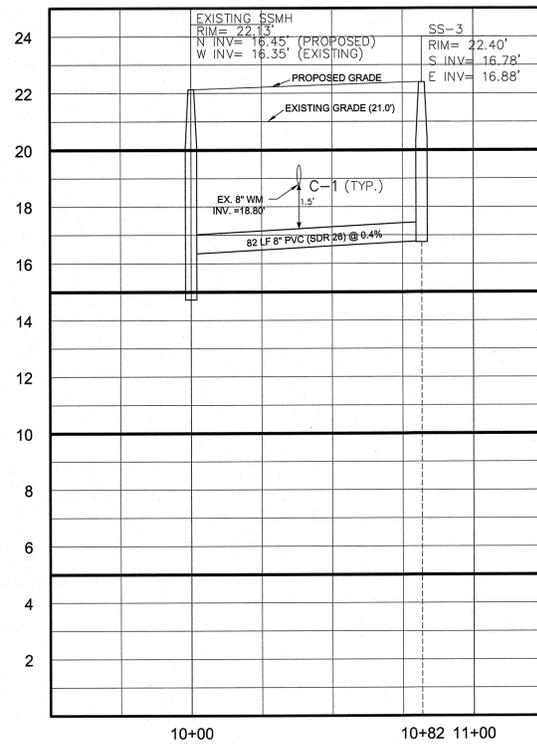
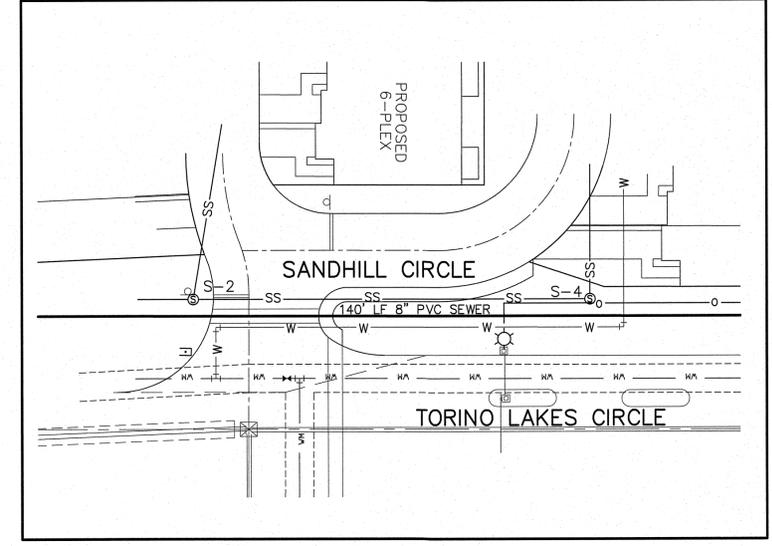
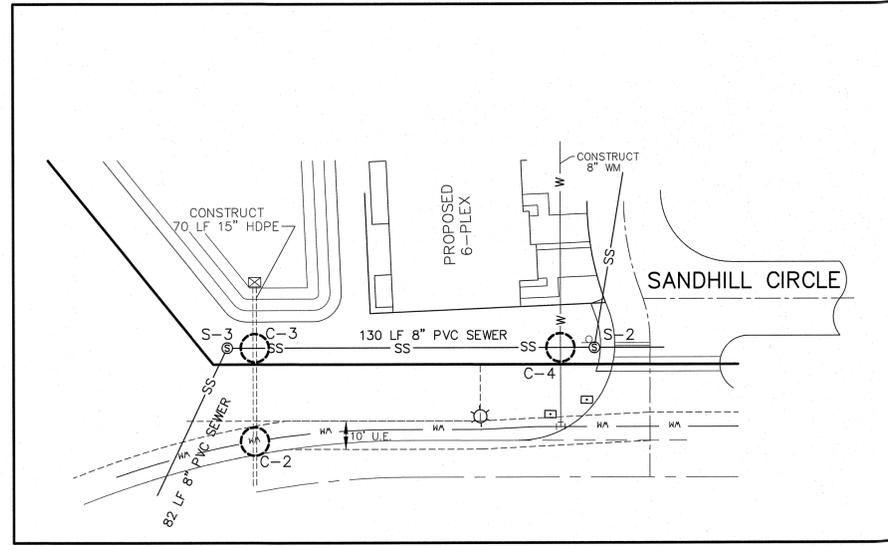
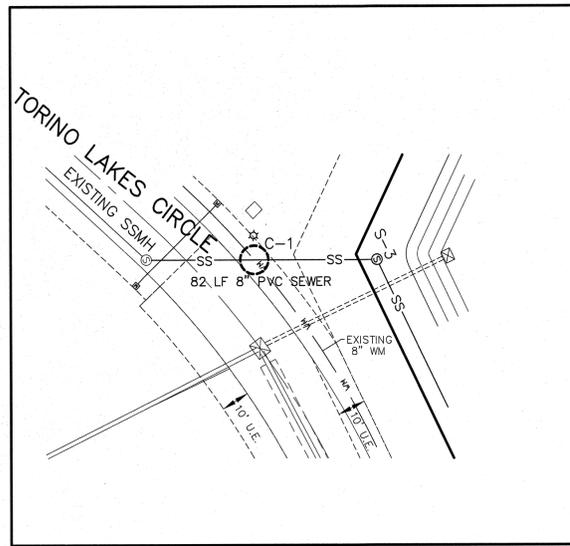
GENERAL UTILITY NOTES

- 1) ALL MANHOLES LOCATED IN UNPAVED AREAS SHALL HAVE THE RIM ELEVATION 2" HIGHER THAN THE SURROUNDING GROUND. A CONCRETE COLLAR SHALL BE PLACED AROUND EACH MANHOLE AND SLOPED AWAY FROM THE RIM TO MATCH EXISTING GROUND.
- 2) CONTRACTOR TO PROVIDE 5' MINIMUM SEPARATION BETWEEN INSTALLED WATER MAIN AND SEWER SERVICE CLEAN-OUT.
- 3) WATER MAINS OVER SANITARY LATERALS WHERE POSSIBLE.



PSLUSD PROJECT # 11-835-02  
CITY OF PSL PROJECT #P21-174

<h2 style="margin: 0;">UTILITY PLAN</h2> <h3 style="margin: 0;">TORINO LAKES PHASE 4</h3>	<p>— REVISIONS —</p> <table border="1" style="font-size: small;"> <thead> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>BY</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>ADD HYDRANT, ADD SAN SEWER SLOPES, MISC REVISIONS &amp; LABELLING</td> <td>JOE M</td> <td>9/30/21</td> </tr> </tbody> </table>	NO.	DESCRIPTION	BY	DATE	1	ADD HYDRANT, ADD SAN SEWER SLOPES, MISC REVISIONS & LABELLING	JOE M	9/30/21	<table border="1" style="font-size: x-small;"> <thead> <tr> <th>BY</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>MRL</td> <td>6/26/21</td> </tr> <tr> <td>QA/QC</td> <td></td> </tr> <tr> <td>SURVEY REF.</td> <td>DRAWING NAME</td> </tr> </tbody> </table>	BY	DATE	MRL	6/26/21	QA/QC		SURVEY REF.	DRAWING NAME	<p style="font-size: x-small; margin: 0;"> <b>ATLANTIC CIVIL ENGINEERING, INC.</b>          CONSULTING ENGINEERS          2552 PETERS ROAD SUITE D          FORT PIERCE, FLORIDA 34945          (772) 398-1520 PHONE (772) 398-1521 FAX          CERTIFICATE OF AUTHORIZATION #32020       </p>	<table border="1" style="font-size: x-small;"> <tr> <td>DATE: 5/14/21</td> <td>JOB No. 2021.0114-2</td> </tr> <tr> <td>HORIZ SCALE: 1"=30'</td> <td>SHEET 5 OF 13</td> </tr> <tr> <td>VERT SCALE: N/A</td> <td></td> </tr> </table> <p style="font-size: x-small; margin-top: 5px;">RICHARD M. LADYKO FL P.E. No. 34288 DATE</p>	DATE: 5/14/21	JOB No. 2021.0114-2	HORIZ SCALE: 1"=30'	SHEET 5 OF 13	VERT SCALE: N/A	
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HORIZ SCALE: 1"=30'	SHEET 5 OF 13																									
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HORIZONTAL SCALE: 1" = 30'  
VERTICAL SCALE: 1" = 3'

PSLUSD PROJECT # 11-835-02  
CITY OF PSL PROJECT #P21-174

RICHARD M. LADYKO, P.E. #34288 DATE

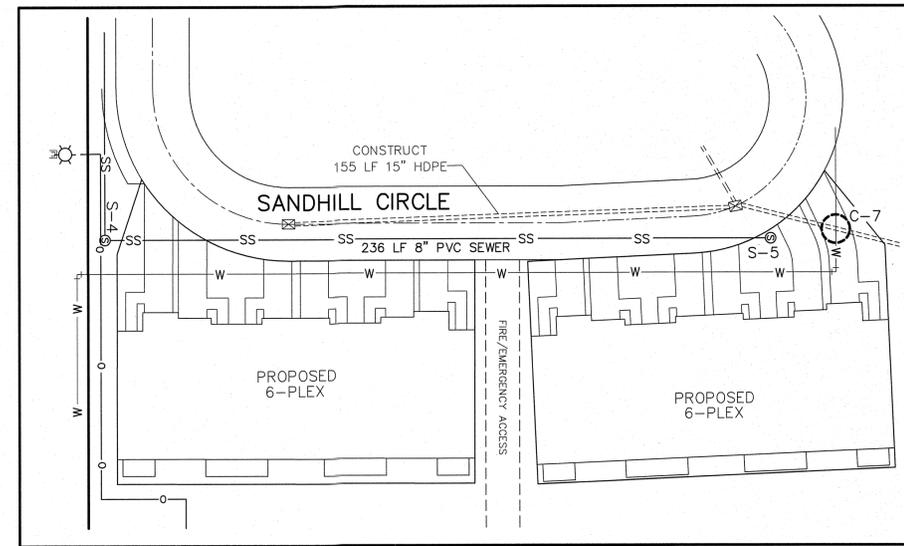
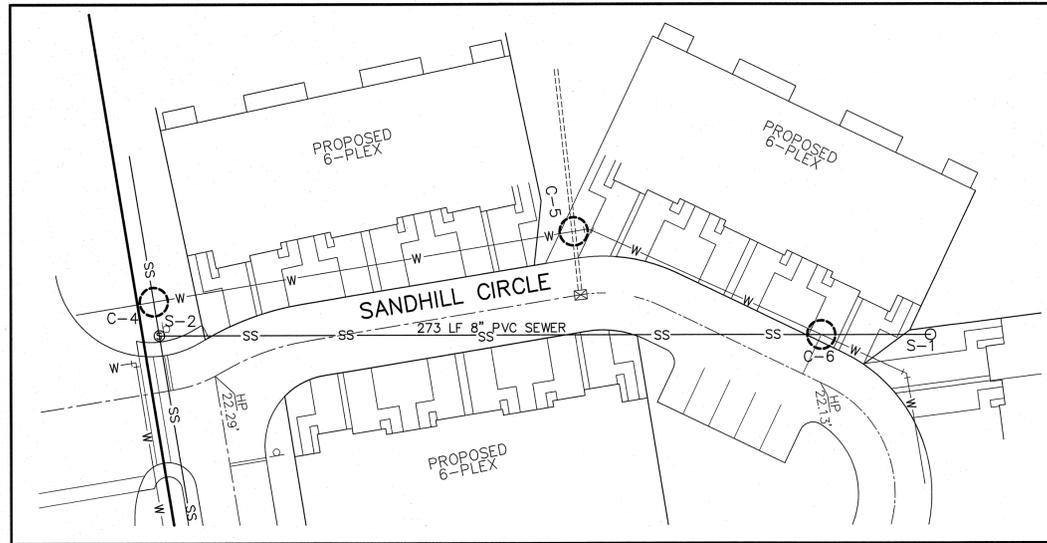
PLAN AND PROFILE  
PREPARED FOR  
**TORINO LAKES PHASE 4**

- REVISIONS -		BY	DATE

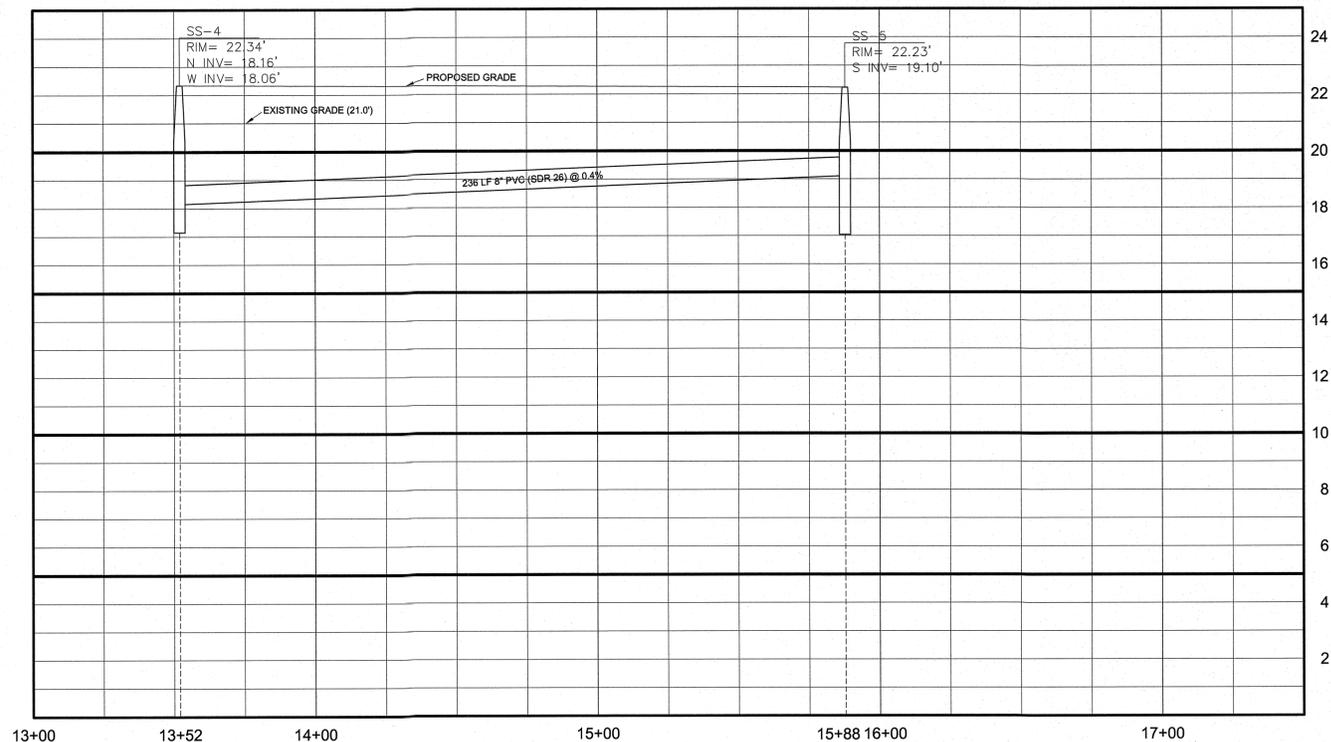
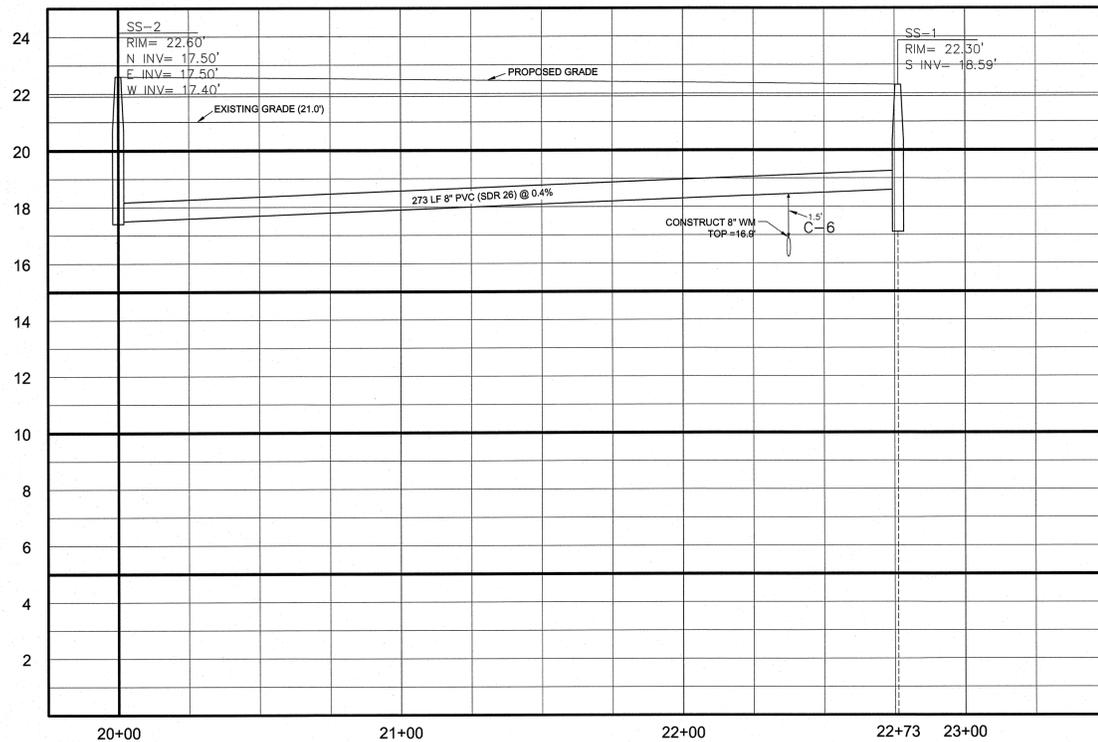
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DRAWN		
CHECKED		
FILE REF.	FIELD BK/PG	
20.2680-8	8PS/CALC SHEET	

ATLANTIC CIVIL ENGINEERING, INC.  
CONSULTING ENGINEERS  
2552 PETERS ROAD SUITE D  
FORT PIERCE, FLORIDA 34945  
(772) 398-1520 PHONE (772) 398-1521 FAX  
CERTIFICATE OF AUTHORIZATION #32020

DATE: 8-4-21  
SCALE: 1"=30'  
JOB No. 21.0114-2  
SHEET 6 OF 13



LERDY

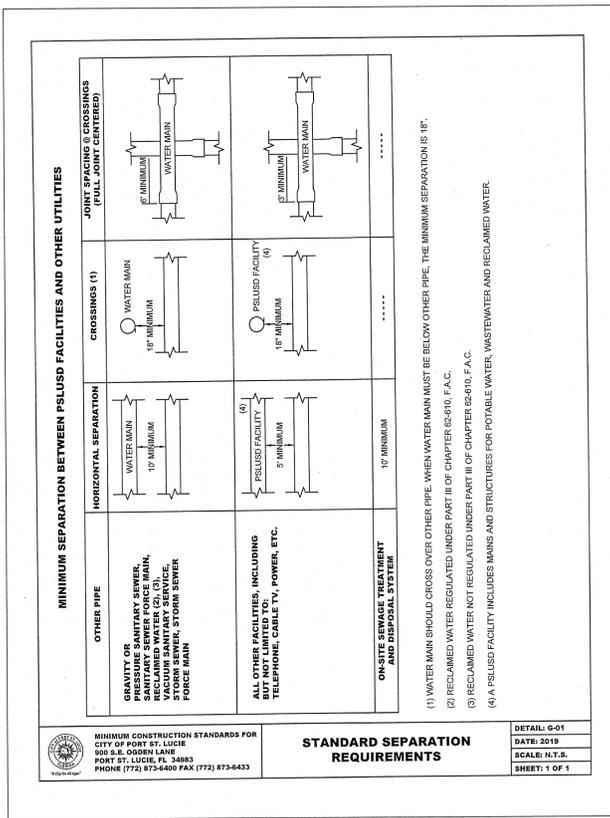


HORIZONTAL SCALE: 1" = 30'  
VERTICAL SCALE: 1" = 3'

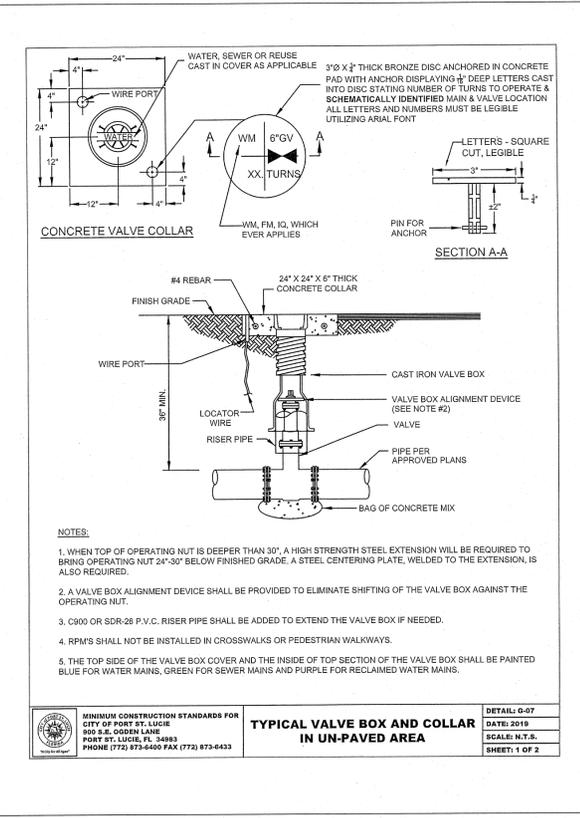
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CITY OF PSL PROJECT #P21-174

RICHARD M. LADYKO, P.E. #34288 DATE

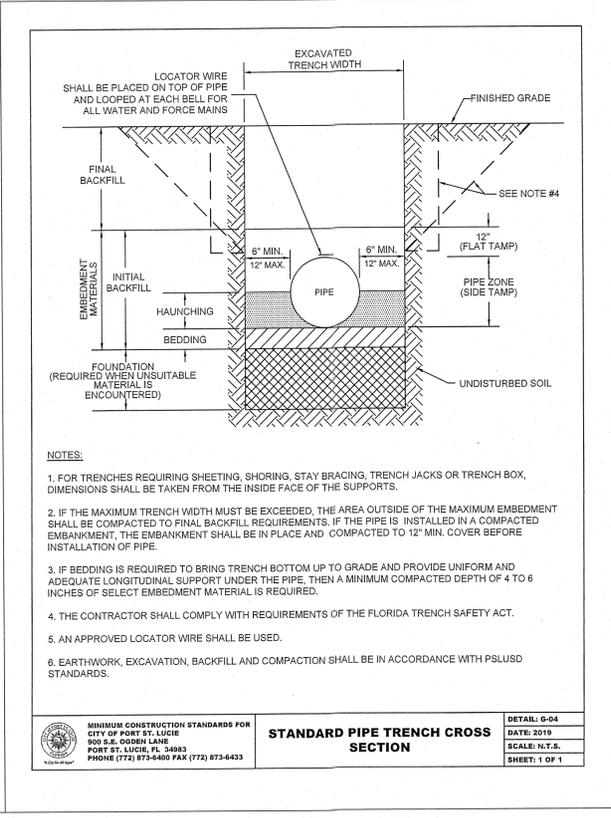
<p><b>PLAN AND PROFILE</b></p> <p>PREPARED FOR</p> <p><b>TORINO LAKES PHASE 4</b></p>	<p>- REVISIONS -</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>BY</th> <th>DATE</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	NO.	DESCRIPTION	BY	DATE													<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>BY</th> <th>DATE</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>	BY	DATE							<p><b>ATLANTIC CIVIL ENGINEERING, INC.</b> CONSULTING ENGINEERS 2552 PETERS ROAD SUITE D FORT PIERCE, FLORIDA 34945 (772) 398-1520 PHONE (772) 398-1521 FAX CERTIFICATE OF AUTHORIZATION #32020</p>	<p>DATE: 8-4-21</p> <p>SCALE: 1" = 30'</p> <p>JOB No. 21.0114-2</p> <p>SHEET 7 OF 13</p>
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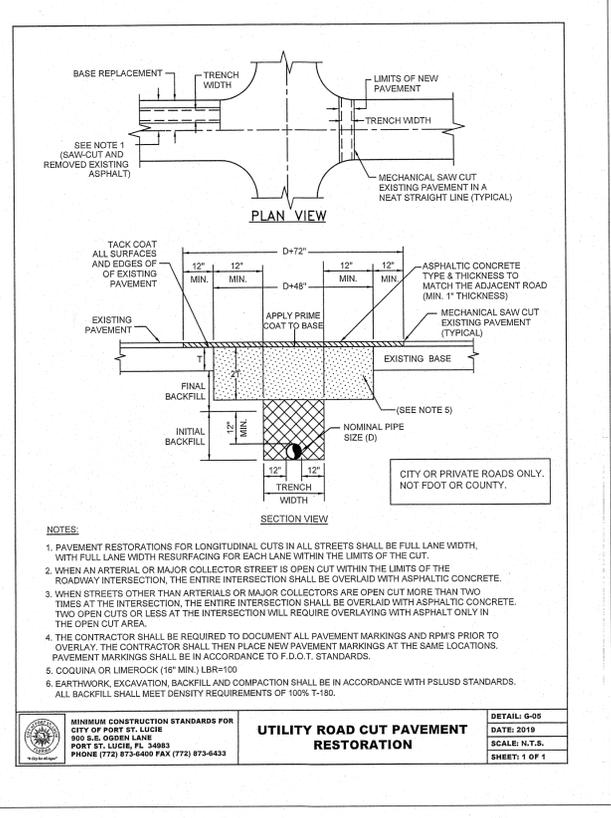
STANDARD SEPARATION REQUIREMENTS



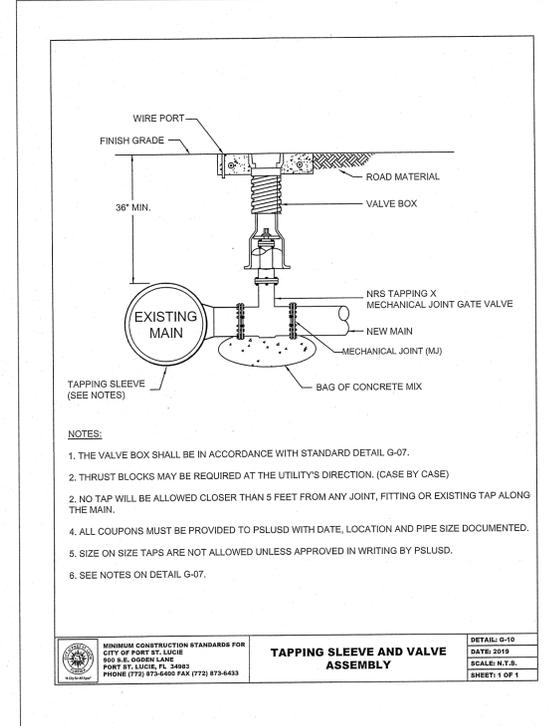
TYPICAL VALVE BOX AND COLLAR IN UN-PAVED AREA



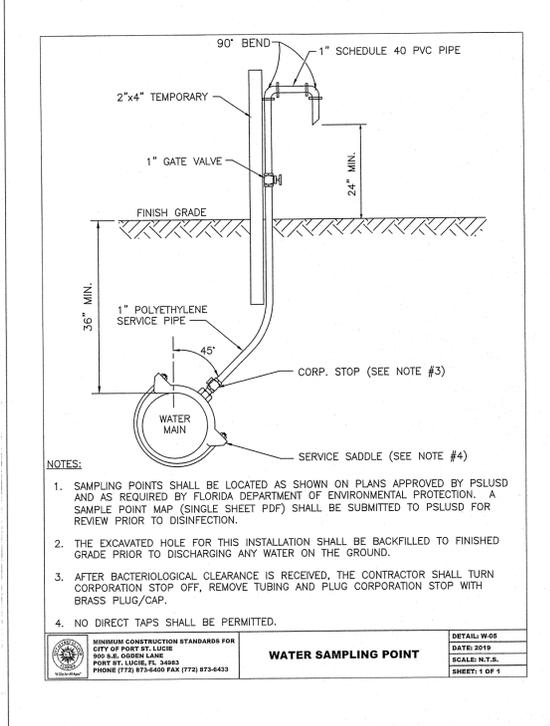
STANDARD PIPE TRENCH CROSS SECTION



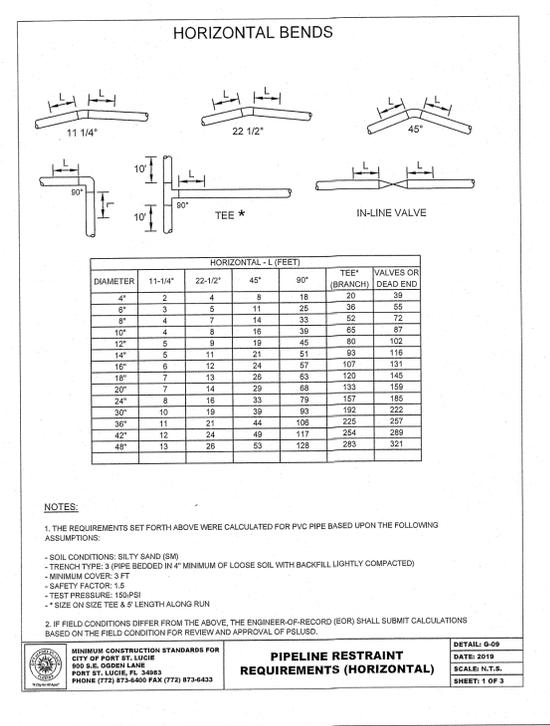
UTILITY ROAD CUT PAVEMENT RESTORATION



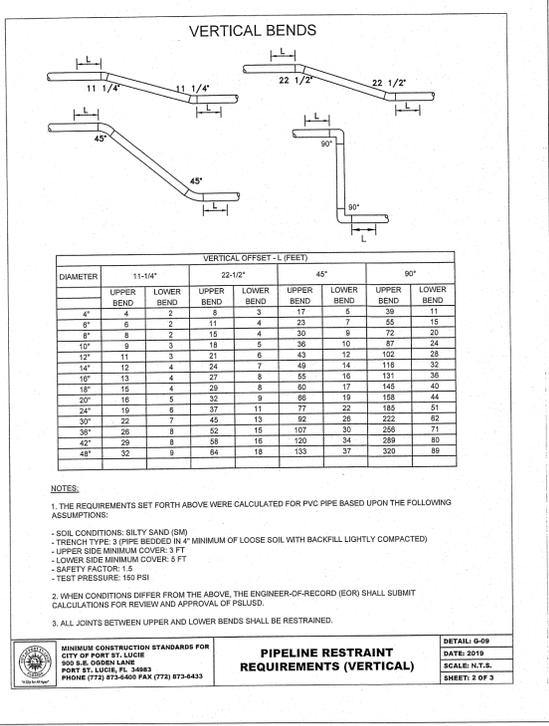
TAPPING SLEEVE AND VALVE ASSEMBLY



WATER SAMPLING POINT



PIPELINE RESTRAINT REQUIREMENTS (HORIZONTAL)



PIPELINE RESTRAINT REQUIREMENTS (VERTICAL)

**WATER AND SEWER DETAILS**

**TORINO LAKES PHASE 4**

- REVISIONS -		BY	DATE

BY	DATE

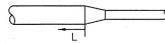
**ATLANTIC CIVIL ENGINEERING, INC.**  
 CONSULTING ENGINEERS  
 2552 PETERS ROAD SUITE D  
 FORT PIERCE, FLORIDA 34945  
 (772) 398-1520 PHONE (772) 398-1521 FAX  
 CERTIFICATE OF AUTHORIZATION #32020

DATE: 8-4-21  
 HORIZ SCALE: 1"=40'  
 VERT SCALE: N/A

JOB No. 2021.0114-2  
 SHEET 8 OF 13

RICHARD M. LADYKO, P.E. #34288

**REDUCER**



L = RETAINED LENGTH AT LARGER SIZE OF REDUCER (FEET)

DIAMETER	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	36"	42"	48"
4"	29	62	71	89	105	121	138	151	179	217	253	285	318	
6"		31	53	74	93	111	127	143	172	211	249	282	315	
8"			29	54	76	96	114	131	163	204	243	277	310	
10"				30	55	78	98	117	151	195	235	271	305	
12"					30	56	79	100	137	184	226	263	299	
14"						30	56	79	120	171	216	255	292	
16"							30	56	101	158	204	245	283	
18"								30	80	140	190	233	273	
20"									56	121	175	221	263	
24"										78	141	192	238	
30"											78	140	194	
36"												76	139	
42"													75	

**NOTES:**

1. THE REQUIREMENTS SET FORTH ABOVE WERE CALCULATED FOR PVC PIPE BASED UPON THE FOLLOWING ASSUMPTIONS:

- SOIL CONDITIONS: SILTY SAND (SM)
- TRENCH TYPE: 3 (PIPE BEDDED IN 4" MINIMUM OF LOOSE SOIL WITH BACKFILL LIGHTLY COMPACTED)
- MINIMUM COVER: 3 FT
- SAFETY FACTOR: 1.5
- TEST PRESSURE: 150 PSI

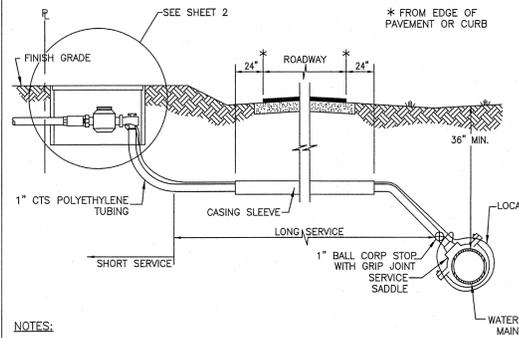
2. IF FIELD CONDITIONS DIFFER FROM THE ABOVE, THE ENGINEER-OF-RECORD (EOR) SHALL SUBMIT CALCULATIONS BASED ON THE FIELD CONDITION FOR REVIEW AND APPROVAL OF PSLUSD.

MINIMUM CONSTRUCTION STANDARDS FOR CITY OF PORT ST. LUCIE 900 S.E. OGDEN LANE PORT ST. LUCIE, FL 34983 PHONE (772) 873-6400 FAX (772) 873-6433

**PIPELINE RESTRAINT REQUIREMENTS (REDUCER)**

DETAIL: 9-09  
DATE: 2019  
SCALE: N.T.S.  
SHEET: 3 OF 3

PIPELINE RESTRAINT REQUIREMENTS (REDUCER)



**NOTES:**

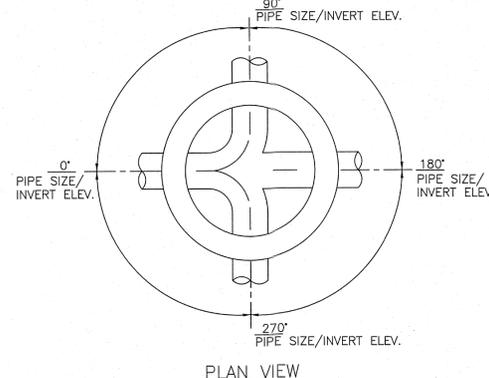
- SUCCESSIVE TAPS INTO THE WATER MAIN SHALL BE A MINIMUM OF 18" ON CENTER.
- ALL SERVICES REQUIRE 36" MINIMUM COVER AT ALL POINTS ALONG SERVICE.
- 1" SERVICES REQUIRE A 2" MINIMUM I.D. CASING PIPE. CASING PIPE SHALL BE SCHEDULE 40 PVC OR POLYETHYLENE.
- TRACE WIRE TO BE INSTALLED AS PER THIS DETAIL.
- METERS SHALL BE LOCATED IMMEDIATELY OUTSIDE THE PROPERTY LINE IN THE RIGHT-OF-WAY UNLESS OTHERWISE DIRECTED BY PSLUSD (SEE SHEET 2).

MINIMUM CONSTRUCTION STANDARDS FOR CITY OF PORT ST. LUCIE 900 S.E. OGDEN LANE PORT ST. LUCIE, FL 34983 PHONE (772) 873-6400 FAX (772) 873-6433

**RESIDENTIAL WATER SERVICE CONNECTION**

DETAIL: W01  
DATE: 2019  
SCALE: N.T.S.  
SHEET: 1 OF 2

RESIDENTIAL WATER SERVICE CONNECTION



**NOTES:**

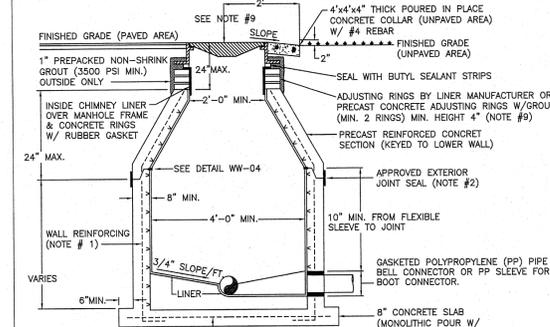
- THE ENGINEER-OF-RECORD SHALL SUBMIT TO PSLUSD THE SHOP DRAWINGS FOR EACH STRUCTURE, PROVIDING THE DIAMETER OF EACH PIPE, INVERT ELEVATION OF EACH PIPE, RIM ELEVATION AND THE NUMBER OF DEGREES BETWEEN PIPES. (15 DEGREE INCREMENTS IF POSSIBLE)
- MANHOLE INTERIOR SHALL BE LINED UTILIZING A CORROSION BARRIER SYSTEM. LISTED ON THE PSLUSD QUALIFIED PRODUCT LIST.
- MANHOLE EXTERIOR SHALL BE COATED WITH A PRIMER AND TWO COATS OF A WATER BASED EPOXY 3-5 MILS EACH PER THE PSLUSD SPECIFICATIONS. APPLICATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION.

MINIMUM CONSTRUCTION STANDARDS FOR CITY OF PORT ST. LUCIE 900 S.E. OGDEN LANE PORT ST. LUCIE, FL 34983 PHONE (772) 873-6400 FAX (772) 873-6433

**INVERT FLOW CHANNELS FOR MANHOLES**

DETAIL: WW-01  
DATE: 2019  
SCALE: N.T.S.  
SHEET: 1 OF 1

INVERT FLOW CHANNELS FOR MANHOLES



**NOTES:**

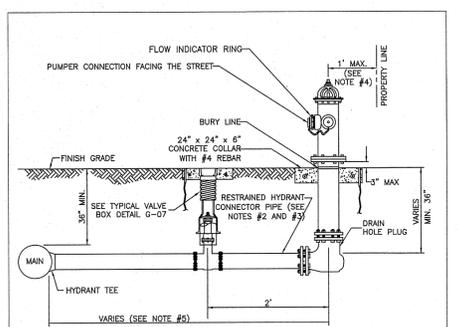
- MANHOLE FABRICATION SHALL BE IN ACCORDANCE W/ ASTM C-478, LATEST REVISION.
- SEALANT SHALL BE APPLIED PER MANUFACTURER'S SPECIFICATION BETWEEN MANHOLE SECTIONS & AT ALL JOINTS (SEE DETAIL WW-04). ALSO AN APPROVED EXTERNAL JOINT SEAL MAY BE APPLIED AT THE JOINTS. (EXTERNAL JOINT SEAL IS OPTIONAL)
- ALL PIPE OPENINGS SHALL BE GAS AND WATER TIGHT WITH NO EXPOSED CONCRETE SURFACES.
- CAST OPENINGS SHALL BE MANUFACTURED WITH PRECAST HOLE W/ CAST-IN LINER SLEEVE SIZED FOR APPROPRIATE PIPE AND FLEXIBLE CONNECTOR. APPROVED FLEXIBLE MANHOLE CONNECTORS SHALL BE USED AT PIPE CONNECTIONS. HOLE SIZE PER BOOT MANUFACTURER'S SPECIFICATIONS. DOUBLE STAINLESS STEEL PIPE CLAMPS MUST BE INSTALLED ON THE FLEXIBLE SLEEVES WHERE REQUIRED BY BOOT MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- FLOW CHANNELS SHALL BE CONSTRUCTED TO DIRECT FLOW INTO FLOW STREAM (SEE DETAIL WW-01).
- LIFT HOLES ARE PERMITTED BUT MUST BE GROUTED ONCE MANHOLE IS IN PLACE.
- MANHOLE AND BASE WILL BE LINED INSIDE WITH AN APPROVED LINER SYSTEM.
- AN APPROVED COVER & FRAME SHALL BE PROVIDED. APPROVED INSIDE MANHOLE CHIMNEY SEALANT SHALL BE APPLIED OVER THE MANHOLE FRAME, CONCRETE RINGS, AND LINER SECTION IN ACCORDANCE WITH THE SPECIFICATIONS.
- MAXIMUM HEIGHT OF CHIMNEY SHALL NOT EXCEED 24 INCHES INCLUDING FRAME CASTING.

MINIMUM CONSTRUCTION STANDARDS FOR CITY OF PORT ST. LUCIE 900 S.E. OGDEN LANE PORT ST. LUCIE, FL 34983 PHONE (772) 873-6400 FAX (772) 873-6433

**STANDARD PRECAST MANHOLE**

DETAIL: WW-02  
DATE: 2019  
SCALE: N.T.S.  
SHEET: 1 OF 2

STANDARD PRECAST MANHOLE



**NOTES:**

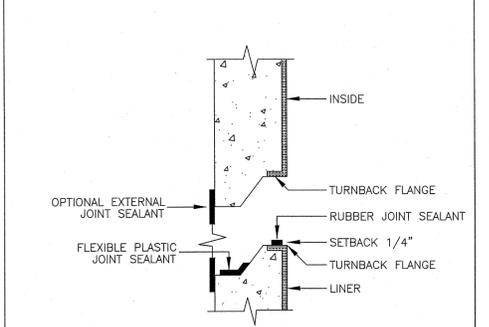
- HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH ANSI/AWWA C600. THE HYDRANTS SHALL BE PAINTED BY THE MANUFACTURER WITH 2 COATS (MIN).
- VERTICAL BENDS MAY BE NECESSARY TO OBTAIN COVER UNDER SVALES OR AT HYDRANT LOCATION. VERTICAL BENDS OR OFFSETS ARE INCLUDED IN HYDRANT ASSEMBLY. ALL BENDS MUST BE RESTRAINED.
- CONNECTOR PIPE AND ANY REQUIRED VERTICAL BENDS SHALL HAVE AN ANCHORING FEATURE ON BOTH ENDS SO THAT WHEN USED WITH M.J. SPLIT GLANDS, A RESTRAINED JOINT IS PROVIDED.
- WHEN INSTALLED WITH SIDEWALK OR CURB, PROVIDE MIN. 2 FOOT CLEARANCE TO ANY PORTION OF THE HYDRANT, UTILIZING THE SIDE LOT EASEMENT IF NECESSARY.
- A GATE VALVE SHALL BE INSTALLED WITHIN 2 FEET OF THE FIRE HYDRANT. IF DISTANCE FROM THE WATER MAIN TO THE FIRE HYDRANT IS GREATER THAN 20 FEET, A SECOND GATE VALVE SHALL BE INSTALLED WITHIN 2 FEET OF THE MAIN.
- ANY DEVIATIONS FROM THE CRITERIA ABOVE REQUIRE A WRITTEN RECOMMENDATION FROM THE ENGINEER-OF-RECORD AND WRITTEN APPROVAL BY PSLUSD.

MINIMUM CONSTRUCTION STANDARDS FOR CITY OF PORT ST. LUCIE 900 S.E. OGDEN LANE PORT ST. LUCIE, FL 34983 PHONE (772) 873-6400 FAX (772) 873-6433

**FIRE HYDRANT ASSEMBLY**

DETAIL: WW-06  
DATE: 2019  
SCALE: N.T.S.  
SHEET: 1 OF 1

FIRE HYDRANT ASSEMBLY



**NOTES:**

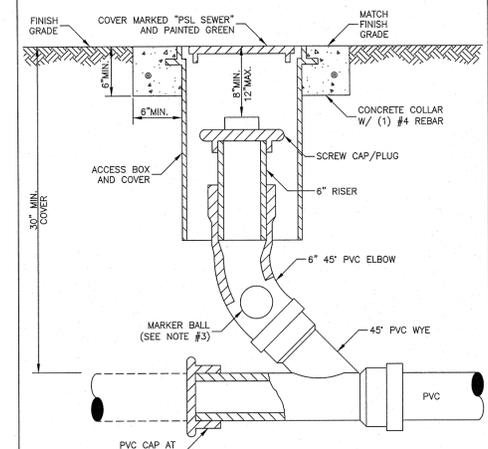
- APPROVED JOINT SEALANTS SHALL BE USED.
- WELDED CAP STRIPS AT JOINTS OR WELDED JOINTS MAY BE ACCEPTABLE IF APPROVED IN WRITING BY PSLUSD.

MINIMUM CONSTRUCTION STANDARDS FOR CITY OF PORT ST. LUCIE 900 S.E. OGDEN LANE PORT ST. LUCIE, FL 34983 PHONE (772) 873-6400 FAX (772) 873-6433

**MANHOLE / WETWELL JOINT DETAIL**

DETAIL: WW-04  
DATE: 2019  
SCALE: N.T.S.  
SHEET: 1 OF 1

MANHOLE / WETWELL JOINT DETAIL



**NOTES:**

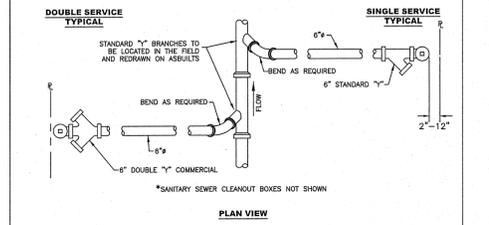
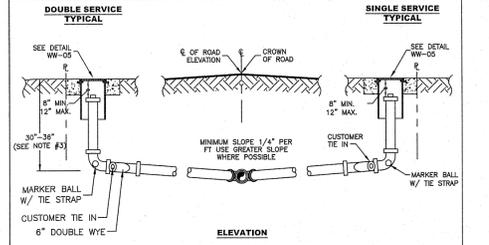
- AN ACCESS BOX AND COVER SHALL BE USED.
- CLEANOUT ASSEMBLY SHALL BE INSTALLED AT A MAXIMUM 75' INTERVALS AND AT TERMINAL POINT OF THE PSLUSD RESPONSIBILITY. THE LOCATION SHALL BE IN ACCORDANCE WITH THE PSLUSD UTILITY STANDARDS.
- MARKER BALL SHALL BE STRAPPED TO THE ELBOW.

MINIMUM CONSTRUCTION STANDARDS FOR CITY OF PORT ST. LUCIE 900 S.E. OGDEN LANE PORT ST. LUCIE, FL 34983 PHONE (772) 873-6400 FAX (772) 873-6433

**SANITARY SEWER CLEANOUT**

DETAIL: WW-08  
DATE: 2019  
SCALE: N.T.S.  
SHEET: 1 OF 1

SANITARY SEWER CLEANOUT



**NOTES:**

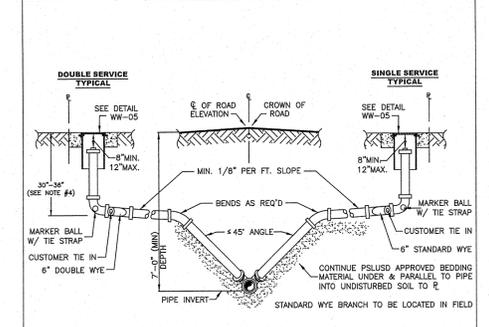
- SANITARY SEWER LATERALS SHALL BE 6" IN DIAMETER.
- THE ENGINEER OF RECORD SHALL ENSURE THAT THE PROPOSED PLUMBING STUB-OUT ELEVATION FOR EACH BUILDING WILL ALLOW FOR A GRAVITY CONNECTION TO THE SANITARY SEWER LATERAL WITH THE REQUIRED SLOPE. HORIZONTAL AND VERTICAL SEPARATION SHALL BE MAINTAINED AS REQUIRED IN THE UTILITY STANDARDS MANUAL.

MINIMUM CONSTRUCTION STANDARDS FOR CITY OF PORT ST. LUCIE 900 S.E. OGDEN LANE PORT ST. LUCIE, FL 34983 PHONE (772) 873-6400 FAX (772) 873-6433

**SANITARY SEWER LATERAL (SHALLOW)**

DETAIL: WW-05  
DATE: 2019  
SCALE: N.T.S.  
SHEET: 1 OF 1

SANITARY SEWER LATERAL (SHALLOW)



**NOTES:**

- PSLUSD APPROVED BEDDING MATERIAL SHALL BE USED FOR EXCAVATION BACK FILL.
- LOCATE MARKER BALL WITH TIE STRAPS TO BE ATTACHED TO 6" ELBOW.
- THE ENGINEER OF RECORD SHALL ENSURE THAT THE PROPOSED PLUMBING STUB-OUT ELEVATION FOR EACH BUILDING WILL ALLOW FOR A GRAVITY CONNECTION TO THE SANITARY SEWER LATERAL WITH THE REQUIRED SLOPE. HORIZONTAL AND VERTICAL SEPARATION SHALL BE MAINTAINED AS REQUIRED IN THE UTILITY STANDARDS MANUAL.

MINIMUM CONSTRUCTION STANDARDS FOR CITY OF PORT ST. LUCIE 900 S.E. OGDEN LANE PORT ST. LUCIE, FL 34983 PHONE (772) 873-6400 FAX (772) 873-6433

**SANITARY SEWER LATERAL (DEEP)**

DETAIL: WW-07  
DATE: 2019  
SCALE: N.T.S.  
SHEET: 1 OF 1

SANITARY SEWER LATERAL (DEEP)

**WATER AND SEWER DETAILS**

**TORINO LAKES PHASE 4**

- REVISIONS -

NO.	DESCRIPTION	BY	DATE

BY	DATE

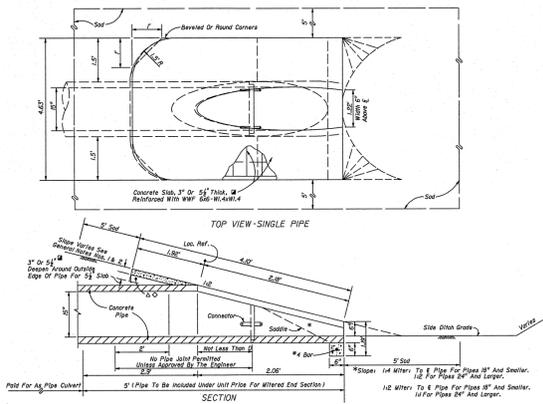
BY	DATE

ATLANTIC CIVIL ENGINEERING, INC.  
CONSULTING ENGINEERS  
2552 PETERS ROAD SUITE D  
FORT PIERCE, FLORIDA 34945  
(772) 398-1520 PHONE (772) 398-1521 FAX  
CERTIFICATE OF AUTHORIZATION #32020

DATE: 8-4-21  
HORIZ SCALE: 1"=40'  
VERT SCALE: N/A

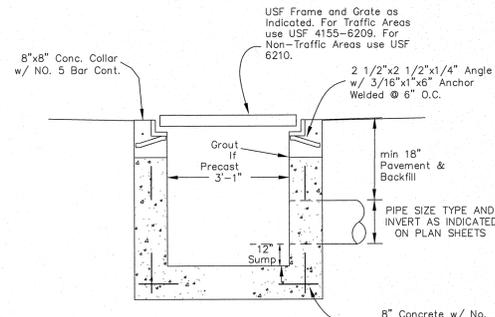
JOB No. 2021.0114-2  
SHEET 9 OF 13

RICHARD M. LADYKO, P.E. #34288 DATE



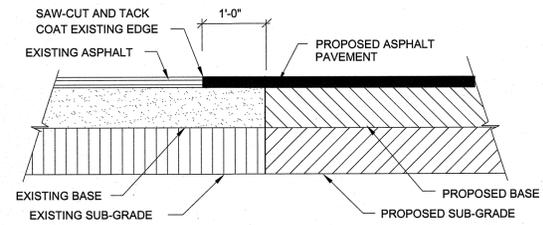
**15" R.C.P. MITERED END SECTION**

CONSTRUCT MITERS PER FDOT INDEX 273  
 PER 2020-21 FDOT DESIGN STANDARDS



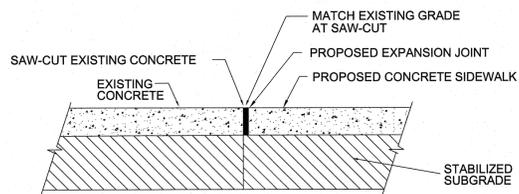
**TYPICAL TYPE "C" INLET**

NOTES:  
 1. Construct Type "C" Inlet per FDOT Index #232.



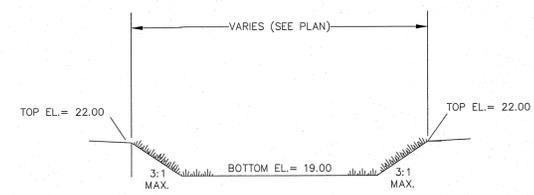
**PAVEMENT SAW-CUT AND BUTT JOINT**

N.T.S.

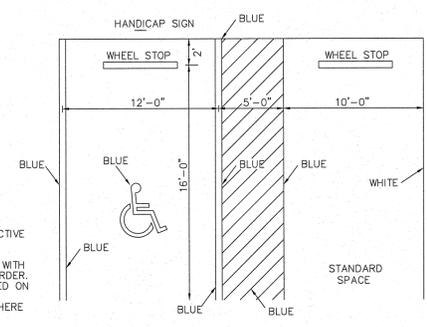


**CONCRETE SAW-CUT AND BUTT JOINT**

N.T.S.

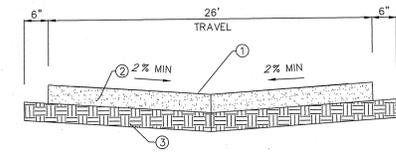


**DRY DETENTION SECTION**



**PARKING SPACE DETAILS**

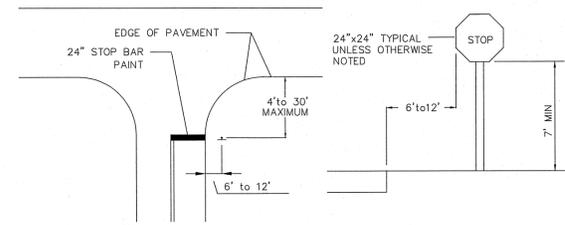
STRIPING & SIGNAGE PER FDOT INDEX 17346 AND 17355  
 PER 2020-21 FDOT DESIGN STANDARDS



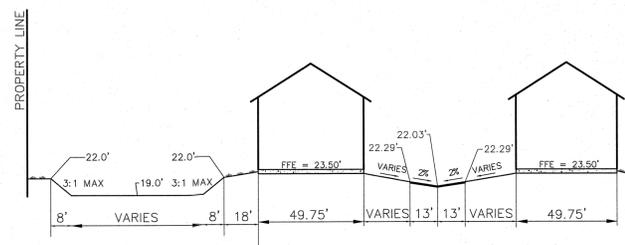
**TYPICAL PAVEMENT DETAIL**

- ① 1 1/2" TYPE "S" ASPHALT
- ② 6" ROCK BASE (MIN. 98% OF AASHTO T-180)
- ③ 12" STABILIZED SUBGRADE (COMPACTED MIN. 98% OF AASHTO T-180)

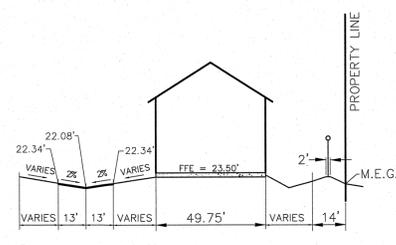
**FLEXIBLE PAVEMENT SECTION**



**TYPICAL STOP SIGN LOCATION DETAIL**



**SECTION A-A**



**SECTION B-B**

PSLUSD PROJECT # 11-835-02  
 CITY OF PSL PROJECT #P21-174

**PAVING, GRADING & DRAINAGE  
 DETAILS**  
**TORINO LAKES PHASE 4**

- REVISIONS -		BY	DATE
ADD	2020-21 FDOT REFERENCE & PARKING DETAIL; OMIT INLET DETAIL	JOE M	9-30-21

BY	DATE
DRAWN MRL	7-2-21
DESIGNED MRL	7-2-21
CHECKED RCL	7-31-21
QA/QC RML	8-4-21
SURVEY REF. 20,2680-8	DRAWING NAME 2021-0114-2-P20-Details

**ATLANTIC CIVIL ENGINEERING, INC.**  
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 2552 PETERS ROAD SUITE D  
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 (772) 398-1520 PHONE (772) 398-1521 FAX  
 CERTIFICATE OF AUTHORIZATION #32020

DATE: 8-4-21	JOB No. 2021.0114-2
HORIZ SCALE: 1"=40'	SHEET 10 OF 13
VERT SCALE: N/A	
RICHARD M. LADYKO, P.E. #34288	DATE

Section 1	Project Name and location information:	TORINO LAKES - PHASE 4, CONSISTING OF 34 PROPOSED TOWNHOUSES AND ASSOCIATED INFRASTRUCTURE EAST TORINO PARKWAY
Section 2	Describe the nature of the construction activity:	MULTI-FAMILY RESIDENTIAL
Section 3	Describe the intended sequence of major soil disturbing activities:	0-3 DAYS INSTALL SILT FENCE 3-4 DAYS INSTALL SOIL TRACKING ENTRANCE 5-7 DAYS CLEAR SITE 7-180 DAYS INSTALL PERMITTED IMPROVEMENTS 180-190 DAYS STABILIZE AND TOP OFF SITE
Section 4	Total area of the site:	3.0 ACRES
Section 5	Total area of the site to be disturbed:	3.0 ACRES
Section 6	Existing data describing the soil or quality of any stormwater discharge from the site:	SUBJECT PROPERTY CURRENTLY DRAINS IN ALL DIRECTIONS TOWARD EXISTING SWALES AND CANALS. SEE DRAINAGE PLAN ON SHEET 4 OF 13 FOR PROPOSED STORMWATER MANAGEMENT.
Section 7	Estimate the drainage area size for each discharge point:	3.0 ACRES
Section 8	Latitude and longitude of each discharge point and identify the receiving water or MS4 for each discharge point:	LAT = 27°22'10.731" LONG = -80°23'23.225" DISCHARGES TO CITY OF PSL CANAL (SOUTH)
Section 9	Give a detailed description of all controls, Best Management Practices (BMPs) and measures that will be implemented at the construction site for each activity identified in the intended sequence of major soil disturbing activities section. Provide time frames in which the controls will be implemented. NOTE: All controls shall be consistent with performance standards for erosion and sediment control and stormwater treatment set forth in s. 62-40.432, F.A.C., the applicable Stormwater or Environmental Resource Permitting requirements of the Department or a Water Management District, and the guidelines contained in the State of Florida Erosion and Sediment Control Designer and Reviewer Manual, FDOT, FDEP, and any subsequent amendments.	SILT FENCE TO BE INSTALLED AND MAINTAINED FOR THE LIFE OF THE CONSTRUCTION PHASE PURSUANT TO THE GUIDELINES INDICATED HEREON. ALL NPDES PROTOCOL TO BE FOLLOWED FOR THE DURATION OF THE PROJECT.
Section 10	Describe all temporary and permanent stabilization practices. Stabilization practices include temporary seeding, mulching, permanent seeding, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, vegetative preservations, etc.	ALL PROPOSED PERVIOUS AREAS TO BE SODDED UPON COMPLETION OF CONSTRUCTION ACTIVITY.
Section 11	Describe all structural controls to be implemented to divert stormwater flow from exposed soils and structural practices to store flows, retain sediment on-site or in any other way limit stormwater runoff. These controls include silt fences, earth dikes, diversions, swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, coagulating agents and temporary or permanent sediment basins.	SILT FENCE TO BE INSTALLED AND MAINTAINED FOR THE LIFE OF THE CONSTRUCTION PHASE PURSUANT TO THE GUIDELINES INDICATED HEREON. ALL NPDES PROTOCOL TO BE FOLLOWED FOR THE DURATION OF THE PROJECT. FILTER FABRIC TO BE INSTALLED IN ALL STROM BASINS AND MAINTAINED DURING THE CONSTRUCTION EFFORT.
Section 12	Describe all sediment basins to be implemented for areas that will disturb 10 or more acres at one time. The sediment basins (or an equivalent alternative) should be able to provide 3,600 cubic feet of storage for each acre drained. Temporary sediment basins (or an equivalent alternative) are recommended for drainage areas under 10 acres.	N/A
Section 13	Describe all permanent stormwater management controls such as, but not limited to, detention or retention systems or vegetated swales that will be installed during the construction process.	STORMWATER BASINS AND PIPES ARE PROPOSED (PLEASE SEE P, G & D PLAN).

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

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

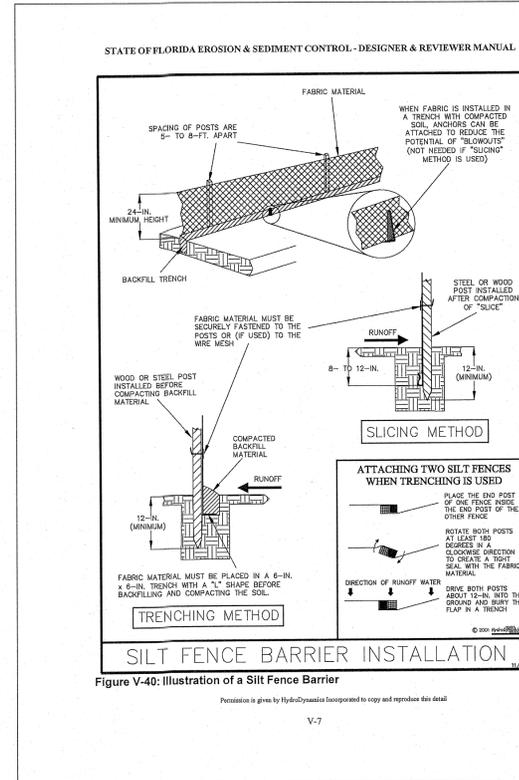


Figure V-40: Illustration of a Silt Fence Barrier

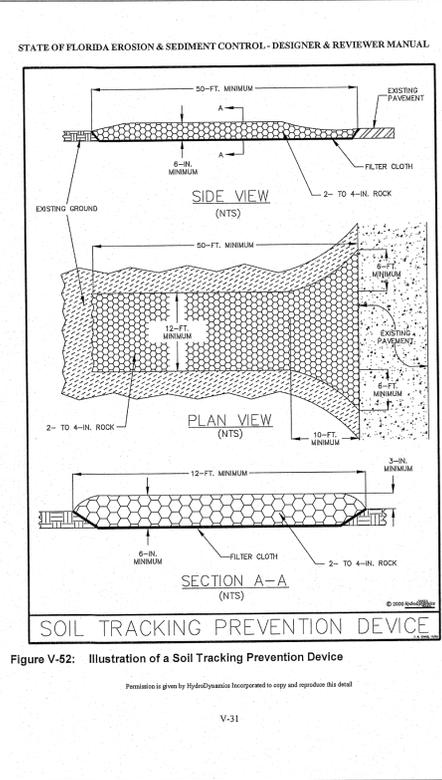


Figure V-52: Illustration of a Soil Tracking Prevention Device

PSLUSD PROJECT # 11-835-02  
CITY OF PSL PROJECT #P21-174 RICHARD M. LADYKO, P.E. #34288 DATE

**EROSION CONTROL PLAN**

PREPARED FOR  
**TORINO LAKES PHASE 4**

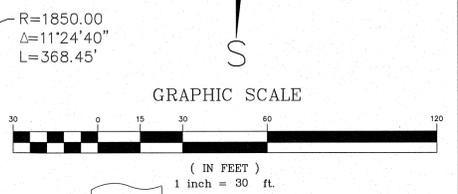
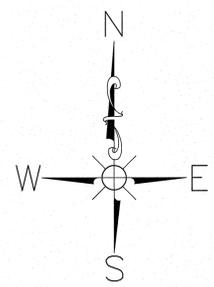
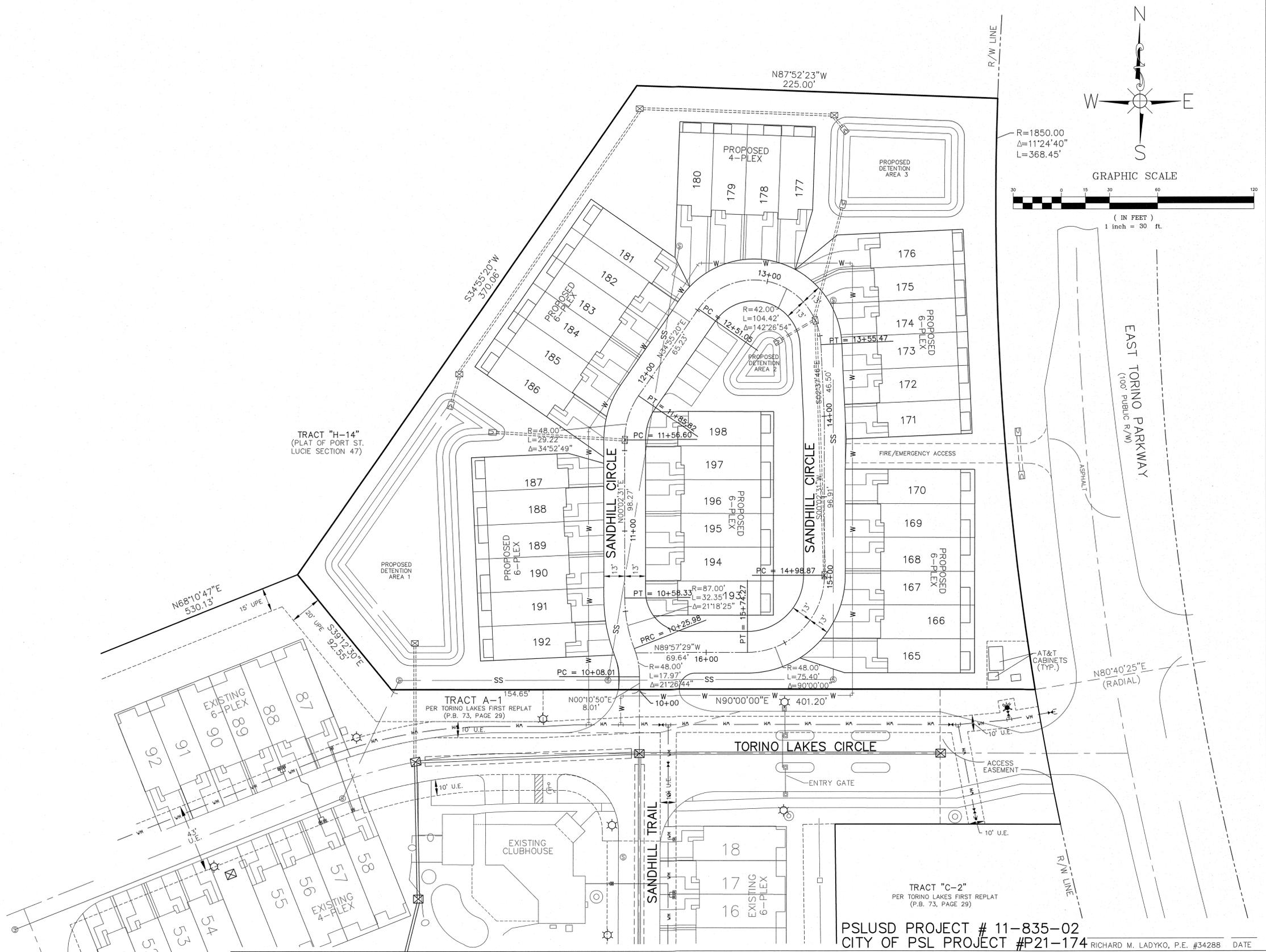
- REVISIONS -		BY	DATE
REVISE PAGE TO CITY OF PSL FORMAT		JOE M	9/30/21

	BY	DATE
FIELD	JPH	3/06/20
CALCS.	RCL	6/27/18
DRAWN	JOE M	3/06/20
CHECKED	RCL	3/09/20
FILE REF.	FIELD BK/PG	
	20.2680-8	SPS/CALC SHEET

**ATLANTIC CIVIL ENGINEERING, INC.**  
CONSULTING ENGINEERS

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CERTIFICATE OF AUTHORIZATION #32020

DATE: 8-4-21
SCALE: 1"=30'
JOB No. 21.0114-2
SHEET 11 OF 13



**HORIZONTAL CONTROL PLAN**  
PREPARED FOR  
**TORINO LAKES PHASE 4**

- REVISIONS -		BY	DATE

BY	DATE
FIELD JPH	3/06/20
CALCS RCL	6/27/18
DRAWN JOE M	3/06/20
CHECKED RCL	3/09/20
FILE REF. FIELD BK/PG	20.2680-8
GPS/CALC SHEET	



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DATE: 8-4-21
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JOB No. 2021-0114-2
SHEET 12 OF 13

PSLUSD PROJECT # 11-835-02  
CITY OF PSL PROJECT #P21-174 RICHARD M. LADYKO, P.E. #34288 DATE

