

# PAVING, GRADING AND DRAINAGE IMPROVEMENTS FOR RIVERLAND PARCEL D PLAT FOUR

## CIVIL CONSTRUCTION PLANS & SPECIFICATIONS SECTIONS 20, TOWNSHIP 37 S, RANGE 39 E CITY OF PORT ST. LUCIE, FLORIDA



REVISIONS:		
BY:	DATE:	COMMENT:
SG	12/15/22	PER SPRC COMMENTS
SG	05/26/23	PER SPRC COMMENTS
SG	07/25/23	PER SPRC COMMENTS

### INDEX OF DRAWINGS

SHEET NO.	DESCRIPTION
01	COVER SHEET
02 - 06	PAVING, GRADING & DRAINAGE PLANS
07 - 08	PAVING, GRADING & DRAINAGE DETAILS
09	CROSS SECTIONS
10	CLEARING AND SEDIMENT & EROSION CONTROL PLAN
11	STORMWATER POLLUTION PREVENTION PLAN
12	MASTER DRAINAGE PLAN

NOTE:  
PSLUSD STANDARDS AND DETAILS EFFECTIVE 2019

GOVERNING DESIGN STANDARDS:  
FLORIDA DEPARTMENT OF TRANSPORTATION, FY2023-24 STANDARDS PLANS FOR ROAD AND BRIDGE CONSTRUCTION AND APPLICABLE INTERIM REVISIONS (IRS).

STANDARD PLANS FOR ROAD CONSTRUCTION AND ASSOCIATED IRS ARE AVAILABLE AT THE FOLLOWING WEBSITE:  
<http://www.fdot.gov/design/standardplans>

APPLICABLE IRS:  
GOVERNING STANDARD SPECIFICATIONS:  
FLORIDA DEPARTMENT OF TRANSPORTATION, 2023-24 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AT THE FOLLOWING WEBSITE:  
<http://www.dot.state.fl.us/programmanagement/Implemented/SpecBooks>

GOVERNING SPECIFICATIONS:  
CITY OF PORT ST. LUCIE PUBLIC WORKS DEPARTMENT ENGINEERING STANDARDS FOR LAND DEVELOPMENT (MOST CURRENT EDITION), AS AMENDED BY CONTRACT DOCUMENTS.



LOCATION MAP  
N.T.S.



VICINITY AERIAL MAP  
N.T.S.

PLAN FOR  
RIVERLAND ASSOCIATES IV LLLP

ENGINEER & SURVEYOR



ENGINEERING & SURVEYING, LLC.

1449 NW COMMERCE CENTRE DR  
PORT ST. LUCIE, FL 34986  
PHONE: (772) 879-0477

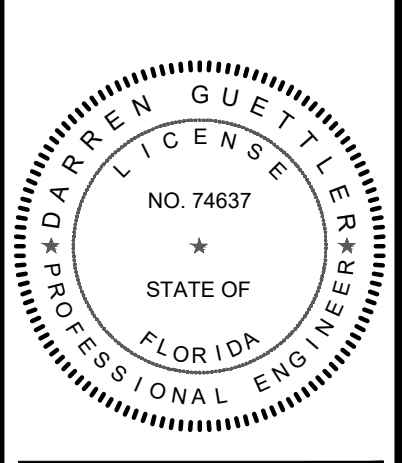
ENGINEER'S PROJECT NO. 22-1022

**LEGAL DESCRIPTION:**  
BEING A PARCEL OF LAND LYING WITHIN SECTION 20, TOWNSHIP 37 SOUTH, RANGE 39 EAST, CITY OF PORT ST. LUCIE, ST. LUCIE COUNTY, FLORIDA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:  
BEGIN AT THE SOUTHWEST CORNER OF TRACT "0511", RIVERLAND PARCEL D - PLAT ONE, AS RECORDED IN PLAT BOOK 118, PAGE 1, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA; THENCE NORTH 89°52'25" WEST, ALONG THE NORTH LINE OF EW #3 RIGHT-OF-WAY AS RECORDED IN OFFICIAL RECORDS BOOK 2972, PAGE 802, SAID PUBLIC RECORDS, A DISTANCE OF 829.88 FEET; THENCE ALONG THE BOUNDARY OF SAID RIVERLAND PARCEL D - PLAT ONE FOR THE FOLLOWING TWENTY (20) DESCRIBED COURSES, NORTH 00°07'35" EAST, A DISTANCE OF 463.25 FEET TO THE POINT OF CURVATURE OF A CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 1832.00 FEET, A CENTRAL ANGLE OF 11°43'13"; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE TO THE LEFT, A DISTANCE OF 374.75 FEET TO A POINT OF TANGENCY; THENCE NORTH 11°35'38" WEST, A DISTANCE OF 183.39 FEET TO THE POINT OF CURVATURE OF A CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 155.82 FEET, A CENTRAL ANGLE OF 60°25'31"; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE TO THE RIGHT, A DISTANCE OF 184.33 FEET TO A POINT OF TANGENCY; THENCE NORTH 48°49'53" EAST, A DISTANCE OF 38.84 FEET TO THE POINT OF CURVATURE OF A CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 150.00 FEET, A CENTRAL ANGLE OF 33°27'52"; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE TO THE RIGHT, A DISTANCE OF 87.61 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE, CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 200.00 FEET, A CENTRAL ANGLE OF 36°53'44"; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE TO THE LEFT, A DISTANCE OF 128.79 FEET TO THE POINT OF COMPOUND CURVATURE OF A CURVE, CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 680.00 FEET, A CENTRAL ANGLE OF 32°32'23"; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE TO THE LEFT, A DISTANCE OF 386.19 FEET TO A POINT OF TANGENCY; THENCE NORTH 12°51'38" EAST, A DISTANCE OF 133.80 FEET; THENCE SOUTH 77°08'22" EAST, A DISTANCE OF 95.00 FEET; THENCE SOUTH 78°20'22" EAST, A DISTANCE OF 90.01 FEET; THENCE SOUTH 77°08'22" EAST, A DISTANCE OF 105.45 FEET TO THE POINT OF CURVATURE OF A CURVE, CONCAVE NORTHERLY, HAVING A RADIUS OF 1070.00 FEET, A CENTRAL ANGLE OF 11°59'50"; THENCE EASTERLY ALONG THE ARC OF SAID CURVE TO THE LEFT, A DISTANCE OF 224.05 FEET TO THE POINT OF INTERSECTION WITH A NON-RADIAL LINE; THENCE SOUTH 02°48'34" WEST, A DISTANCE OF 4.31 FEET; THENCE SOUTH 87°11'26" EAST, A DISTANCE OF 95.00 FEET; THENCE SOUTH 02°48'34" WEST, A DISTANCE OF 359.85 FEET TO THE POINT OF CURVATURE OF A CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 1120.00 FEET, A CENTRAL ANGLE OF 06°18'02"; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE TO THE RIGHT, A DISTANCE OF 123.16 FEET TO A POINT OF TANGENCY; THENCE SOUTH 09°06'36" WEST, A DISTANCE OF 806.55 FEET TO THE POINT OF CURVATURE OF A CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 1380.00 FEET, A CENTRAL ANGLE OF 08°59'01"; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE TO THE LEFT, A DISTANCE OF 216.37 FEET TO A POINT OF TANGENCY; THENCE SOUTH 00°07'35" WEST, A DISTANCE OF 358.98 FEET TO THE POINT OF BEGINNING.

CONTAINING 31.970 ACRES, MORE OR LESS.

PROJECT:  
RIVERLAND PARCEL D  
PLAT FOUR  
CITY OF PORT ST. LUCIE,  
FLORIDA

CLIENT:  
RIVERLAND  
ASSOCIATES IV  
LLLLP



DARREN GUETTLER, PE  
FLORIDA LICENSE No. 74637  
7/27/23

PROJECT No.: 22-1022  
DRAWN BY: SOG  
CHECKED BY: DG  
DATE: 07/21/2022  
CAD ID.: 22-1022-COVER

SHEET TITLE:  
COVER SHEET

SHEET NUMBER:  
01



CITY OF PSL PROJECT NO. P22-288  
PSLUSD FILE NO. 5268D

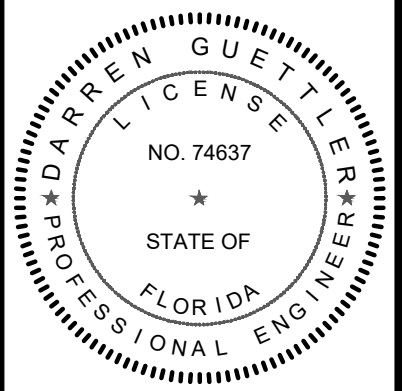
Printed on Thursday, July 27, 2023, 4:37 PM by Shirley Gomez

REVISIONS:

BY:	DATE:	COMMENT:
SG	12/15/22	PER SPRC COMMENTS
SG	05/26/23	PER SPRC COMMENTS
SG	07/25/23	PER SPRC COMMENTS

PROJECT:  
**RIVERLAND PARCEL D  
PLAT FOUR**  
CITY OF PORT ST. LUCIE,  
FLORIDA

CLIENT:  
**RIVERLAND  
ASSOCIATES IV  
LLLP**

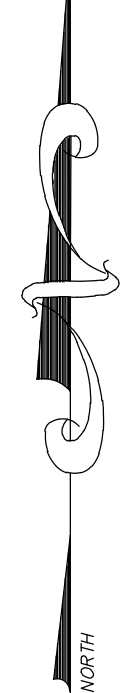
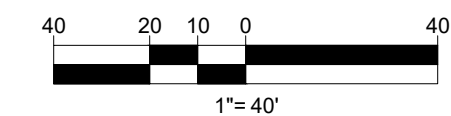
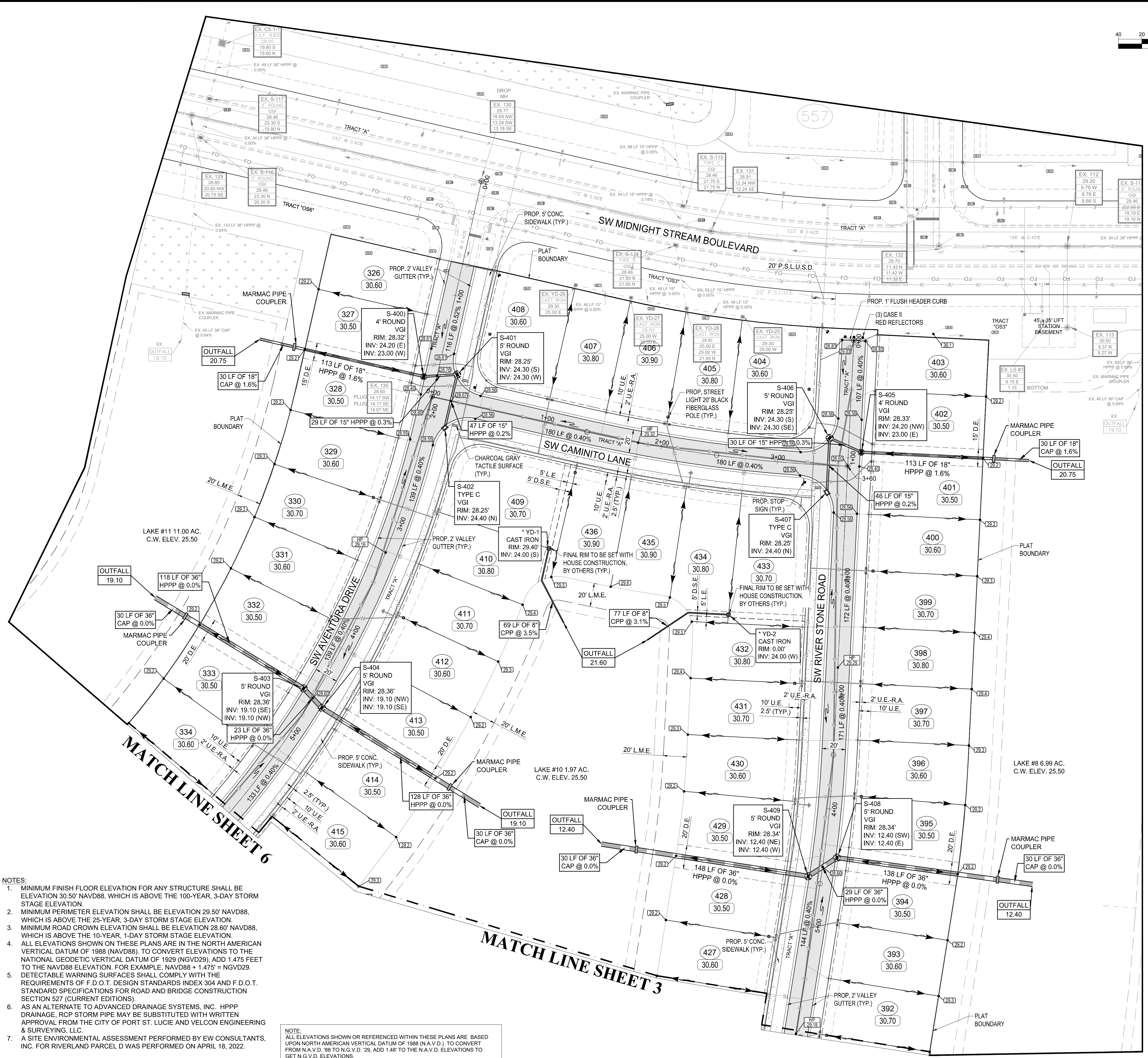


DARREN GUETTLER, PE  
FLORIDA LICENSE NO. 74637  
7/27/23

PROJECT No.: 22-1022  
DRAWN BY: SOG  
CHECKED BY: DG  
DATE: 07/21/2022  
CAD ID: 22-1022 - PGD.FIN

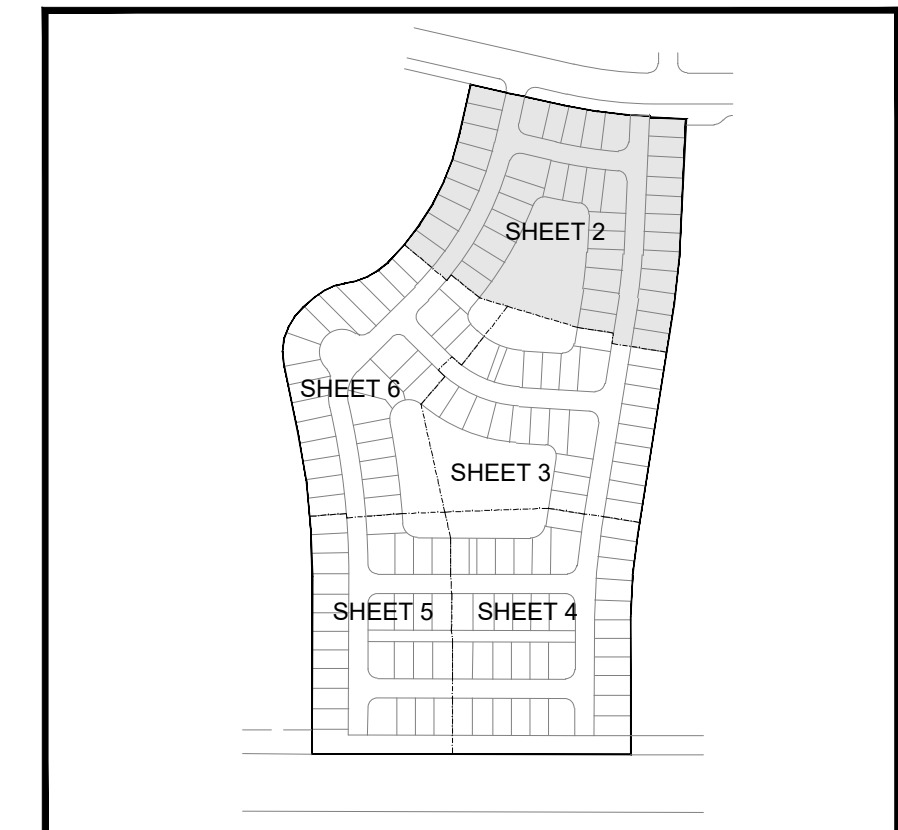
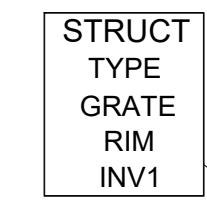
SHEET TITLE:  
**PAVING,  
GRADING &  
DRAINAGE PLAN**

SHEET NUMBER:  
**02**



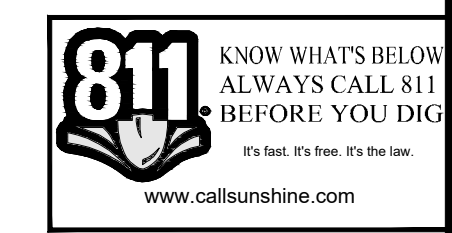
**LEGEND**

- STORM MAIN WITH CATCH BASIN AND CALL OUT
- EXISTING STORM MAIN WITH CATCH BASIN
- SANITARY SEWER MAIN WITH MANHOLE
- WATER MAIN WITH VALVE
- PROPOSED ELEVATION
- ELEVATION BY OTHERS
- EXISTING ELEVATION
- DIRECTION OF FLOW
- STREET LIGHTS
- SIGN
- LOT NUMBER
- FINISHED FLOOR ELEVATION
- CONTROL WATER ELEVATION
- CORRUGATED ALUMINUM PIPE
- DITCH BOTTOM INLET
- DRAINAGE EASEMENT
- DRAINAGE SWALE EASEMENT
- HIGH POINT
- LANDSCAPE EASEMENT
- LAKE MAINTENANCE ACCESS EASEMENT
- LAKE MAINTENANCE EASEMENT
- CITY OF PORT ST. LUCIE UTILITY EASEMENT
- OPEN SPACE
- REINFORCED CONCRETE PIPE
- UTILITY EASEMENT
- UTILITY EASEMENT - RESTRICTED AREA (SEE "U.E." PLAT DEDICATION)
- VALLEY GUTTER INLET
- CURB GUTTER INLET
- YARD DRAIN
- PROPOSED YARD DRAIN WITH COLLAR (18" GRATE)
- PROPOSED YARD DRAIN WITHOUT COLLAR (12" STANDPIPE, GRATE SIZE TO VARY)
- PAVEMENT
- SIDEWALK
- CHARCOAL GRAY DETECTABLE WARNING SURFACE (SEE NOTE)
- LITTORAL PLANTING AREA
- SECTION CALLOUT



- NOTES:
- MINIMUM FINISH FLOOR ELEVATION FOR ANY STRUCTURE SHALL BE ELEVATION 30.50' NAVD88, WHICH IS ABOVE THE 100-YEAR, 3-DAY STORM STAGE ELEVATION.
  - MINIMUM PERIMETER ELEVATION SHALL BE ELEVATION 29.50' NAVD88, WHICH IS ABOVE THE 25-YEAR, 3-DAY STORM STAGE ELEVATION.
  - MINIMUM ROAD CROWN ELEVATION SHALL BE ELEVATION 28.60' NAVD88, WHICH IS ABOVE THE 10-YEAR, 1-DAY STORM STAGE ELEVATION.
  - ALL ELEVATIONS SHOWN ON THESE PLANS ARE IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). TO CONVERT ELEVATIONS TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29), ADD 1.475 FEET TO THE NAVD88 ELEVATION. FOR EXAMPLE, NAVD88 + 1.475' = NGVD29.
  - DETECTABLE WARNING SURFACES SHALL COMPLY WITH THE REQUIREMENTS OF F.D.O.T. DESIGN STANDARDS INDEX 304 AND F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 527 (CURRENT EDITIONS).
  - AS AN ALTERNATE TO ADVANCED DRAINAGE SYSTEMS, INC. HPPP DRAINAGE, RCP STORM PIPE MAY BE SUBSTITUTED WITH WRITTEN APPROVAL FROM THE CITY OF PORT ST. LUCIE AND VELCON ENGINEERING & SURVEYING, LLC.
  - A SITE ENVIRONMENTAL ASSESSMENT PERFORMED BY EW CONSULTANTS, INC. FOR RIVERLAND PARCEL D WAS PERFORMED ON APRIL 18, 2022.

NOTE:  
ALL ELEVATIONS SHOWN OR REFERENCED WITHIN THESE PLANS ARE BASED UPON NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.). TO CONVERT FROM N.A.V.D. '88 TO N.G.V.D. '29, ADD 1.48' TO THE N.A.V.D. ELEVATIONS TO GET N.G.V.D. ELEVATIONS.

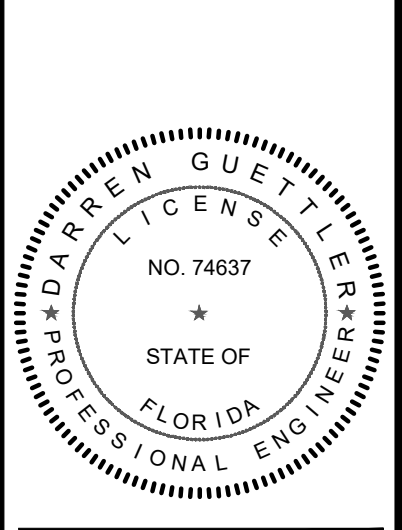


CITY OF PSL PROJECT NO. P22-288  
PSLUSD FILE NO. 5268D

REVISIONS:		
BY:	DATE:	COMMENT:
SG	12/15/22	PER SPRC COMMENTS
SG	05/26/23	PER SPRC COMMENTS
SG	07/25/23	PER SPRC COMMENTS

PROJECT:  
**RIVERLAND PARCEL D  
PLAT FOUR**  
CITY OF PORT ST. LUCIE,  
FLORIDA

CLIENT:  
**RIVERLAND  
ASSOCIATES IV  
LLLP**



DARREN GUETTLER, PE  
FLORIDA LICENSE No. 74637  
7/27/23

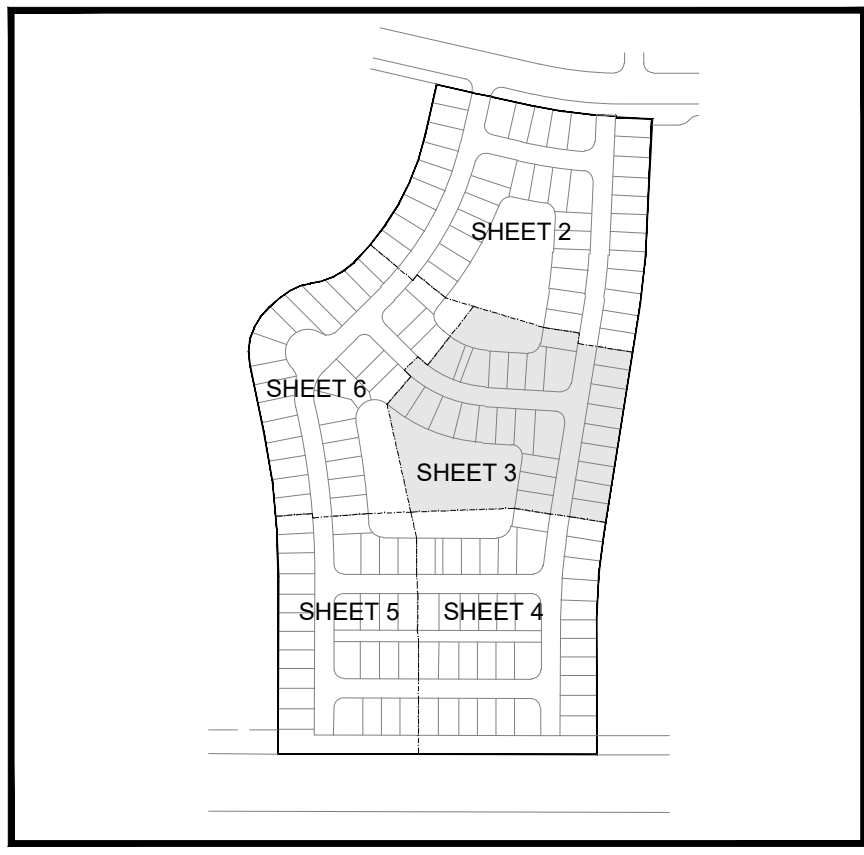
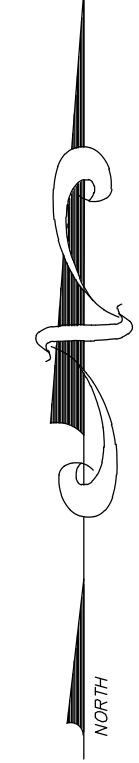
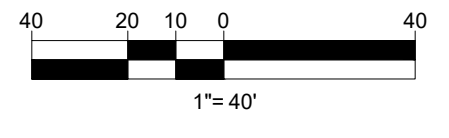
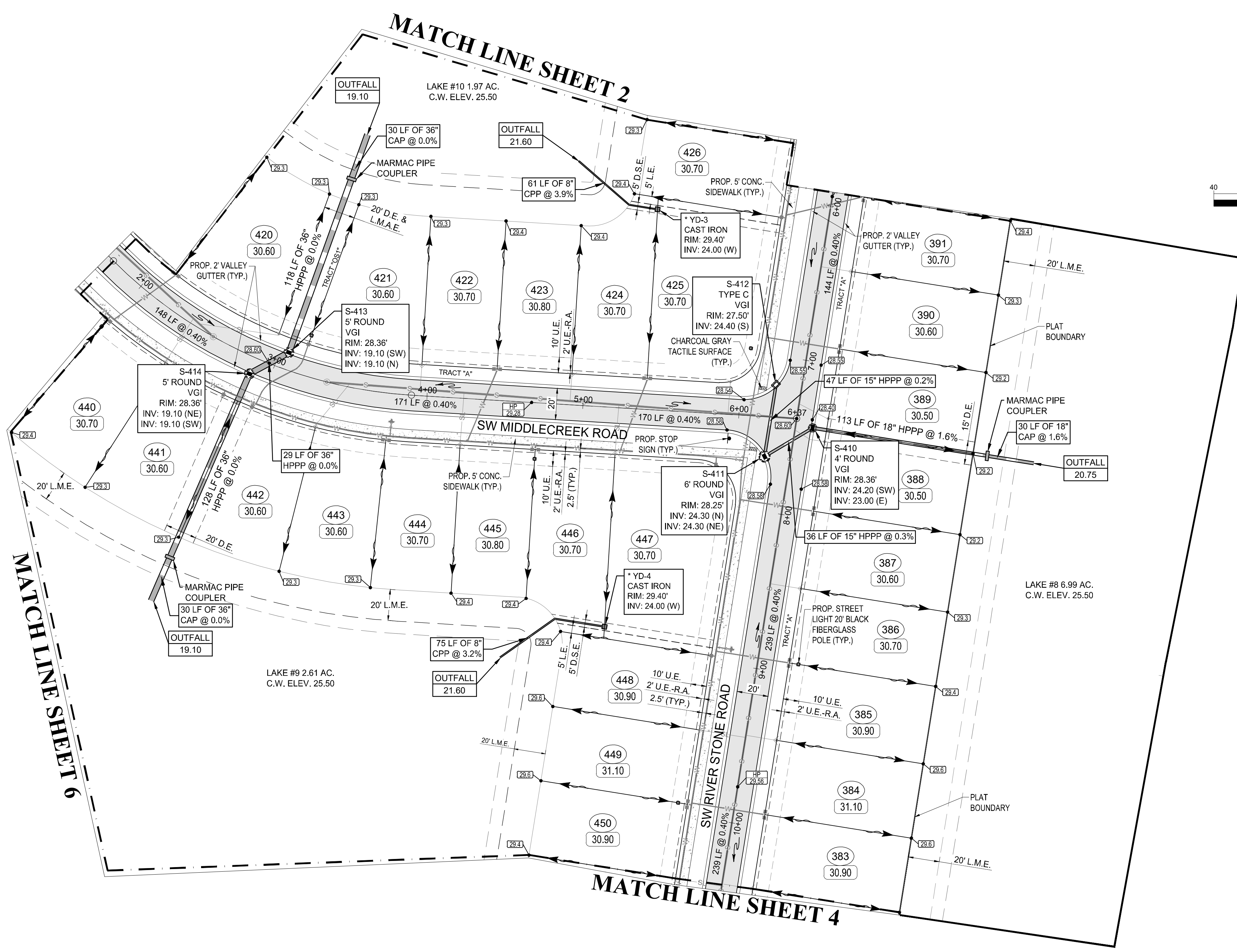
PROJECT No.: 22-1022  
DRAWN BY: SOG  
CHECKED BY: DG  
DATE: 07/21/2022  
CAD ID.: 22-1022 - PGD PLAN

SHEET TITLE:  
**PAVING,  
GRADING &  
DRAINAGE PLAN**

SHEET NUMBER:  
**03**

**LEGEND**

STRUCTURE TYPE	---
GRATE	---
INV1	---
STORM MAIN WITH CATCH BASIN AND CALL OUT	---
EXISTING STORM MAIN WITH CATCH BASIN	---
SANITARY SEWER MAIN WITH MANHOLE	---
WATER MAIN WITH VALVE	---
PROPOSED ELEVATION	20.00
ELEVATION BY OTHERS	28.60
EXISTING ELEVATION	28.63
DIRECTION OF FLOW	---
STREET LIGHTS	---
SIGN	---
LOT NUMBER	1
FINISHED FLOOR ELEVATION	30.00
CONTROL WATER ELEVATION	C.W. ELEV.
CORRUGATED ALUMINUM PIPE	CAP
DITCH BOTTOM INLET	DBI
DRAINAGE EASEMENT	D.E.
DRAINAGE SWALE EASEMENT	D.S.E.
HIGH POINT	HP
LANDSCAPE EASEMENT	L.E.
LAKE MAINTENANCE ACCESS EASEMENT	L.M.A.E.
LAKE MAINTENANCE EASEMENT	L.M.E.
CITY OF PORT ST. LUCIE UTILITY EASEMENT	P.S.L.U.E.
OPEN SPACE	O.S.
REINFORCED CONCRETE PIPE	RCP
UTILITY EASEMENT	U.E.
UTILITY EASEMENT - RESTRICTED AREA (SEE "U.E." PLAT DEDICATION)	U.E.-R.A.
VALLEY GUTTER INLET	VGI
CURB GUTTER INLET	CGI
YARD DRAIN	YD
PROPOSED YARD DRAIN WITH COLLAR (18" GRATE)	---
PROPOSED YARD DRAIN WITHOUT COLLAR (12" STANDPIPE, GRATE SIZE TO VARY)	---
PAVEMENT	---
SIDEWALK	---
CHARCOAL GRAY DETECTABLE WARNING SURFACE (SEE NOTE)	---
LITTORAL PLANTING AREA	---
SECTION CALLOUT	SEC #



KEY MAP

- NOTES:**
- MINIMUM FINISH FLOOR ELEVATION FOR ANY STRUCTURE SHALL BE ELEVATION 30.50' NAVD88, WHICH IS ABOVE THE 100-YEAR, 3-DAY STORM STAGE ELEVATION.
  - MINIMUM PERIMETER ELEVATION SHALL BE ELEVATION 29.50' NAVD88, WHICH IS ABOVE THE 25-YEAR, 3-DAY STORM STAGE ELEVATION.
  - MINIMUM ROAD CROWN ELEVATION SHALL BE ELEVATION 28.60' NAVD88, WHICH IS ABOVE THE 10-YEAR, 1-DAY STORM STAGE ELEVATION.
  - ALL ELEVATIONS SHOWN ON THESE PLANS ARE IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). TO CONVERT ELEVATIONS TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29), ADD 1.475 FEET TO THE NAVD88 ELEVATION. FOR EXAMPLE, NAVD88 + 1.475' = NGVD29.
  - DETECTABLE WARNING SURFACES SHALL COMPLY WITH THE REQUIREMENTS OF F.D.O.T. DESIGN STANDARDS INDEX 304 AND F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 527 (CURRENT EDITIONS).
  - AS AN ALTERNATE TO ADVANCED DRAINAGE SYSTEMS, INC. HPPPP DRAINAGE, RCP STORM PIPE MAY BE SUBSTITUTED WITH WRITTEN APPROVAL FROM THE CITY OF PORT ST. LUCIE AND VELCON ENGINEERING & SURVEYING, LLC.
  - A SITE ENVIRONMENTAL ASSESSMENT PERFORMED BY EW CONSULTANTS, INC. FOR RIVERLAND PARCEL D WAS PERFORMED ON APRIL 18, 2022.

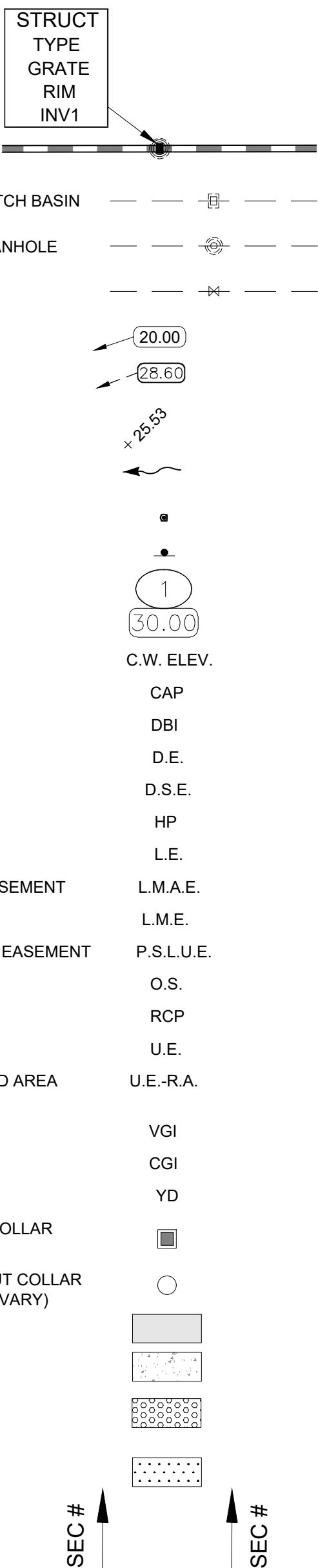
NOTE:  
ALL ELEVATIONS SHOWN OR REFERENCED WITHIN THESE PLANS ARE BASED UPON NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.), TO CONVERT FROM N.A.V.D. '88 TO N.G.V.D. '29, ADD 1.48' TO THE N.A.V.D. ELEVATIONS TO GET N.G.V.D. ELEVATIONS.



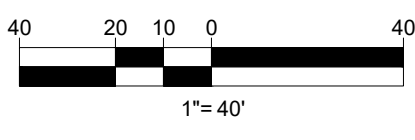
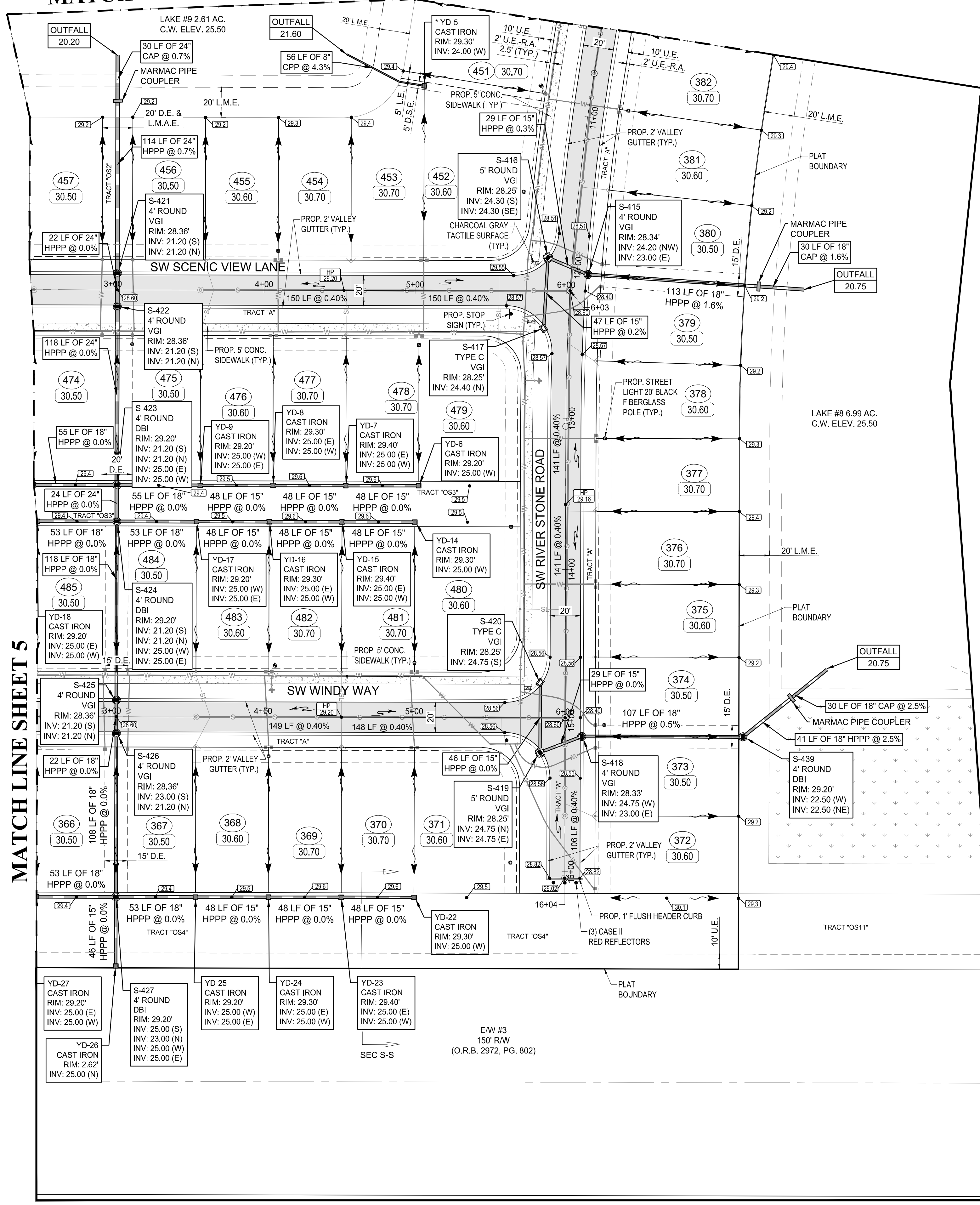
CITY OF PSL PROJECT No. P22-288  
PSLUSD FILE No. 5268D

**LEGEND**

- STORM MAIN WITH CATCH BASIN AND CALL OUT
- EXISTING STORM MAIN WITH CATCH BASIN
- SANITARY SEWER MAIN WITH MANHOLE
- WATER MAIN WITH VALVE
- PROPOSED ELEVATION
- ELEVATION BY OTHERS
- EXISTING ELEVATION
- DIRECTION OF FLOW
- STREET LIGHTS
- SIGN
- LOT NUMBER
- FINISHED FLOOR ELEVATION
- CONTROL WATER ELEVATION
- CORRUGATED ALUMINUM PIPE
- DITCH BOTTOM INLET
- DRAINAGE EASEMENT
- DRAINAGE SWALE EASEMENT
- HIGH POINT
- LANDSCAPE EASEMENT
- LAKE MAINTENANCE ACCESS EASEMENT
- LAKE MAINTENANCE EASEMENT
- CITY OF PORT ST. LUCIE UTILITY EASEMENT
- OPEN SPACE
- REINFORCED CONCRETE PIPE
- UTILITY EASEMENT
- UTILITY EASEMENT - RESTRICTED AREA (SEE "U.E." PLAT DEDICATION)
- VALLEY GUTTER INLET
- CURB GUTTER INLET
- YARD DRAIN
- PROPOSED YARD DRAIN WITH COLLAR (18" GRATE)
- PROPOSED YARD DRAIN WITHOUT COLLAR (12" STANDPIPE, GRATE SIZE TO VARY)
- PAVEMENT
- SIDEWALK
- CHARCOAL GRAY DETECTABLE WARNING SURFACE (SEE NOTE)
- LITTORAL PLANTING AREA
- SECTION CALLOUT

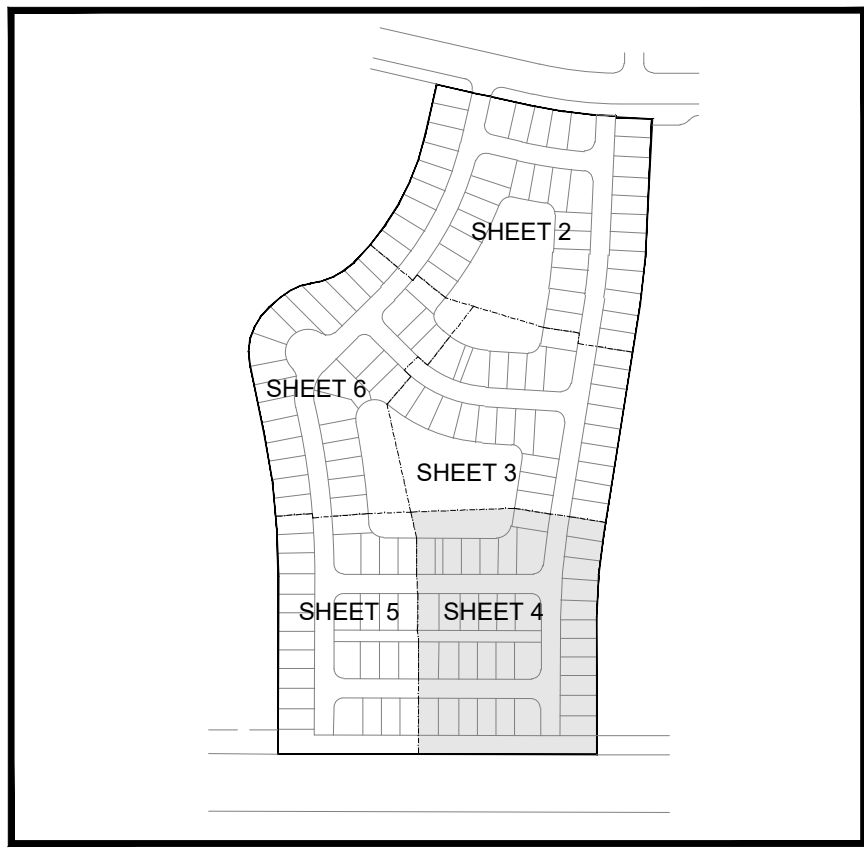


**MATCH LINE SHEET 3**



**MATCH LINE SHEET 5**

- NOTES:**
1. MINIMUM FINISH FLOOR ELEVATION FOR ANY STRUCTURE SHALL BE ELEVATION 30.50' NAVD88, WHICH IS ABOVE THE 100-YEAR, 3-DAY STORM STAGE ELEVATION.
  2. MINIMUM PERIMETER ELEVATION SHALL BE ELEVATION 29.50' NAVD88, WHICH IS ABOVE THE 25-YEAR, 3-DAY STORM STAGE ELEVATION.
  3. MINIMUM ROAD CROWN ELEVATION SHALL BE ELEVATION 28.60' NAVD88, WHICH IS ABOVE THE 10-YEAR, 1-DAY STORM STAGE ELEVATION.
  4. ALL ELEVATIONS SHOWN ON THESE PLANS ARE IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). TO CONVERT ELEVATIONS TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29), ADD 1.475 FEET TO THE NAVD88 ELEVATION. FOR EXAMPLE, NAVD88 + 1.475' = NGVD29.
  5. DETECTABLE WARNING SURFACES SHALL COMPLY WITH THE REQUIREMENTS OF F.D.O.T. DESIGN STANDARDS INDEX 304 AND F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 527 (CURRENT EDITIONS).
  6. AS AN ALTERNATE TO ADVANCED DRAINAGE SYSTEMS, INC. HPPP DRAINAGE, RCP STORM PIPE MAY BE SUBSTITUTED WITH WRITTEN APPROVAL FROM THE CITY OF PORT ST. LUCIE AND VELCON ENGINEERING & SURVEYING, LLC.
  7. A SITE ENVIRONMENTAL ASSESSMENT PERFORMED BY EW CONSULTANTS, INC. FOR RIVERLAND PARCEL D WAS PERFORMED ON APRIL 18, 2022.



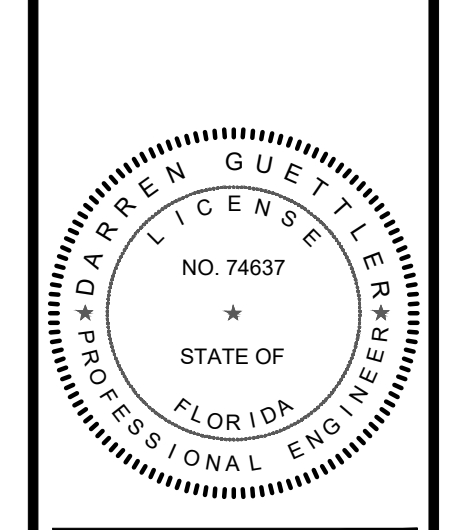
KEY MAP

**VELCON**  
ENGINEERING & SURVEYING, LLC  
1449 NW COMMERCIAL CENTRE DR  
PORT ST. LUCIE, FL 34986  
PHONE: (772) 879-5477  
FIRE C.O.A. # 3222

REVISIONS:		
BY:	DATE:	COMMENT:
SG	12/15/22	PER SPRC COMMENTS
SG	05/26/23	PER SPRC COMMENTS
SG	07/25/23	PER SPRC COMMENTS

PROJECT:  
**RIVERLAND PARCEL D  
PLAT FOUR**  
CITY OF PORT ST. LUCIE,  
FLORIDA

CLIENT:  
**RIVERLAND  
ASSOCIATES IV  
LLLP**



**DARREN GUETTLER, PE**  
FLORIDA LICENSE NO. 74637  
7/27/23

PROJECT NO.: 22-1022  
DRAWN BY: SOG  
CHECKED BY: DG  
DATE: 07/21/2022  
CAD ID: 22-1022-PSD PLAN

SHEET TITLE:  
**PAVING,  
GRADING &  
DRAINAGE PLAN**

SHEET NUMBER:  
**04**

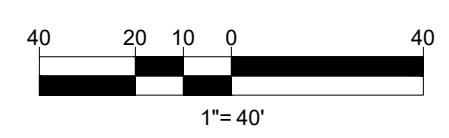
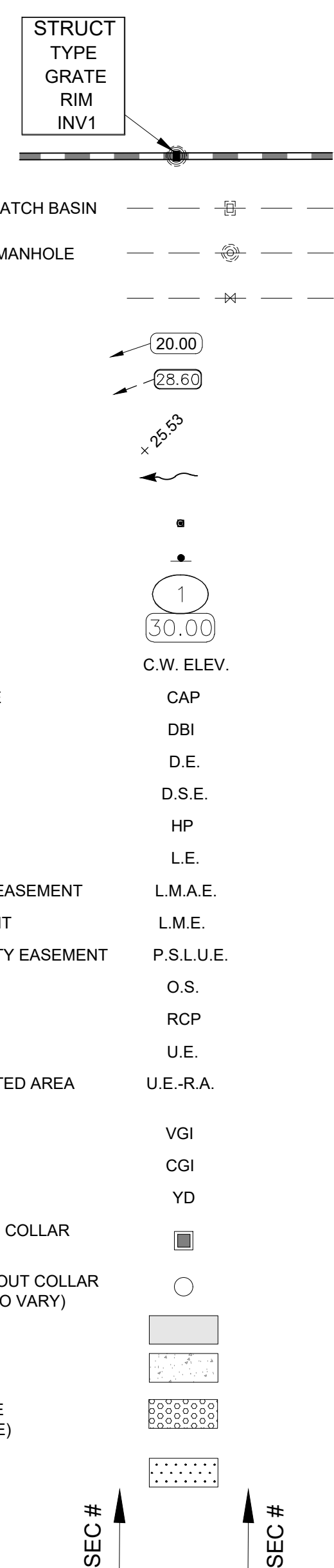
KNOW WHAT'S BELOW  
ALWAYS CALL 811  
BEFORE YOU DIG  
www.call811.com

CITY OF PSL PROJECT NO. P22-288  
PSLUSD FILE NO. 5268D

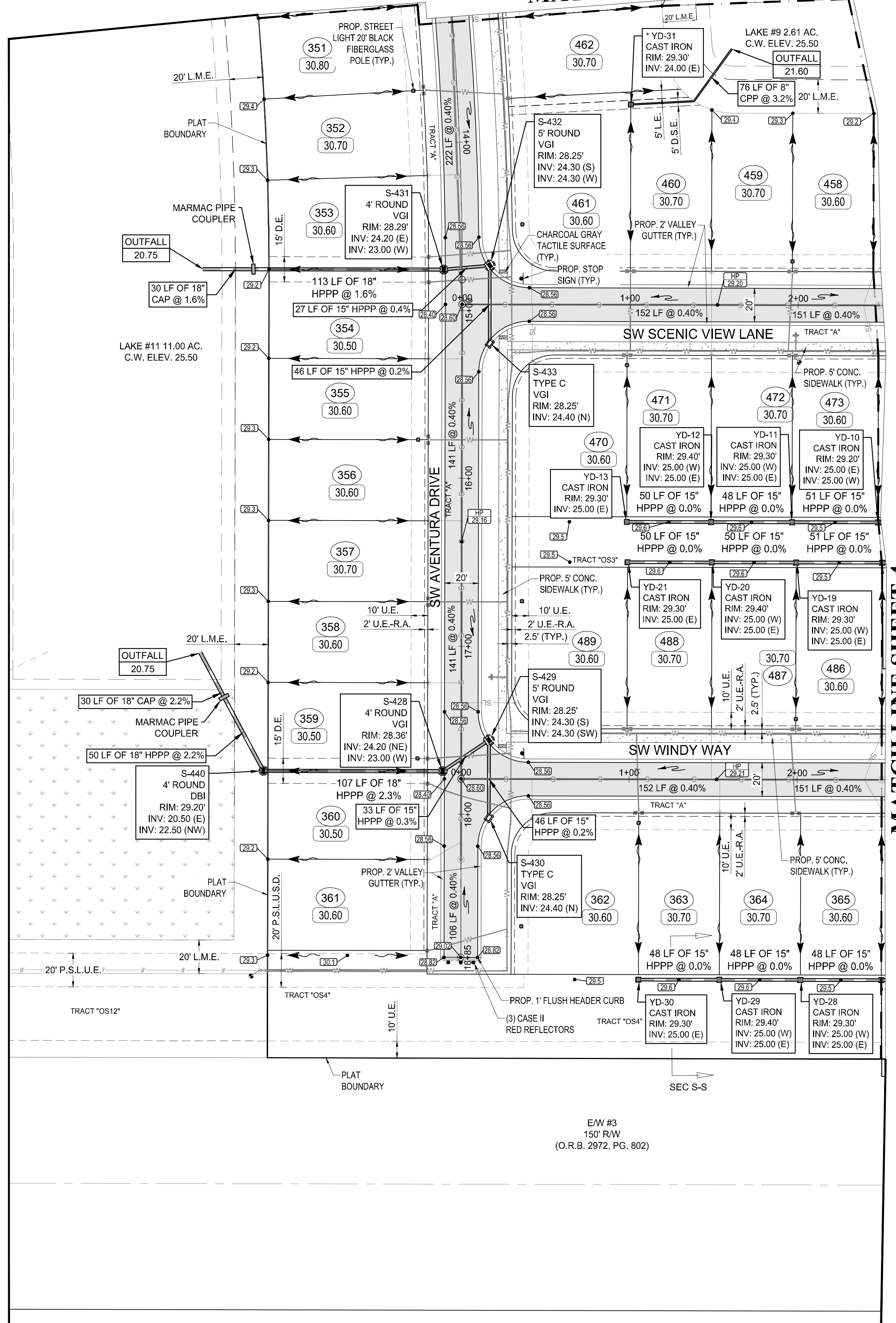
NOTE:  
ALL ELEVATIONS SHOWN OR REFERENCED WITHIN THESE PLANS ARE BASED UPON NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.), TO CONVERT FROM N.A.V.D. '88 TO N.G.V.D. '29, ADD 1.48' TO THE N.A.V.D. ELEVATIONS TO GET N.G.V.D. ELEVATIONS.

**LEGEND**

- STORM MAIN WITH CATCH BASIN AND CALL OUT
- EXISTING STORM MAIN WITH CATCH BASIN
- SANITARY SEWER MAIN WITH MANHOLE
- WATER MAIN WITH VALVE
- PROPOSED ELEVATION
- ELEVATION BY OTHERS
- EXISTING ELEVATION
- DIRECTION OF FLOW
- STREET LIGHTS
- SIGN
- LOT NUMBER
- FINISHED FLOOR ELEVATION
- CONTROL WATER ELEVATION
- CORRUGATED ALUMINUM PIPE
- DITCH BOTTOM INLET
- DRAINAGE EASEMENT
- DRAINAGE SWALE EASEMENT
- HIGH POINT
- LANDSCAPE EASEMENT
- LAKE MAINTENANCE ACCESS EASEMENT
- LAKE MAINTENANCE EASEMENT
- CITY OF PORT ST. LUCIE UTILITY EASEMENT
- OPEN SPACE
- REINFORCED CONCRETE PIPE
- UTILITY EASEMENT
- UTILITY EASEMENT - RESTRICTED AREA (SEE "U.E." PLAT DEDICATION)
- VALLEY GUTTER INLET
- CURB GUTTER INLET
- YARD DRAIN
- PROPOSED YARD DRAIN WITH COLLAR (18" GRATE)
- PROPOSED YARD DRAIN WITHOUT COLLAR (12" STANDPIPE, GRATE SIZE TO VARY)
- PAVEMENT
- SIDEWALK
- CHARCOAL GRAY DETECTABLE WARNING SURFACE (SEE NOTE)
- LITTORAL PLANTING AREA
- SECTION CALLOUT

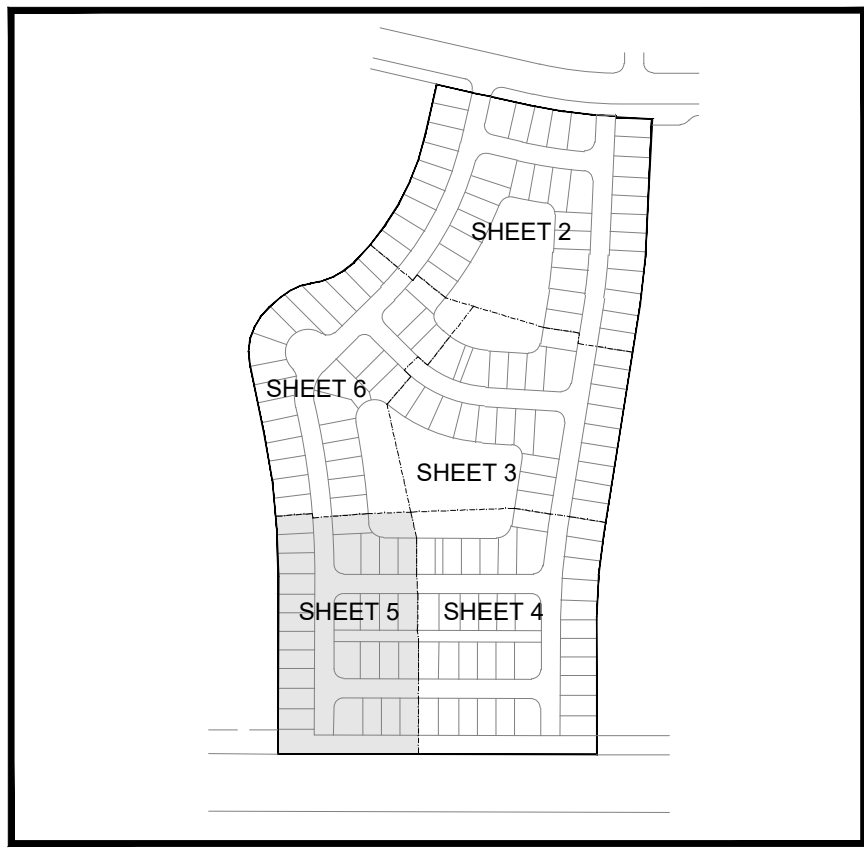


**MATCH LINE SHEET 6**



**MATCH LINE SHEET 4**

- NOTES:**
1. MINIMUM FINISH FLOOR ELEVATION FOR ANY STRUCTURE SHALL BE ELEVATION 30.50' NAVD88, WHICH IS ABOVE THE 100-YEAR, 3-DAY STORM STAGE ELEVATION.
  2. MINIMUM PERIMETER ELEVATION SHALL BE ELEVATION 29.50' NAVD88, WHICH IS ABOVE THE 25-YEAR, 3-DAY STORM STAGE ELEVATION.
  3. MINIMUM ROAD CROWN ELEVATION SHALL BE ELEVATION 28.60' NAVD88, WHICH IS ABOVE THE 10-YEAR, 1-DAY STORM STAGE ELEVATION.
  4. ALL ELEVATIONS SHOWN ON THESE PLANS ARE IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). TO CONVERT ELEVATIONS TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29), ADD 1.475 FEET TO THE NAVD88 ELEVATION. FOR EXAMPLE, NAVD88 + 1.475 = NGVD29.
  5. DETECTABLE WARNING SURFACES SHALL COMPLY WITH THE REQUIREMENTS OF F.D.O.T. DESIGN STANDARDS INDEX 304 AND F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 527 (CURRENT EDITIONS).
  6. AS AN ALTERNATE TO ADVANCED DRAINAGE SYSTEMS, INC. HPPP DRAINAGE, RCP STORM PIPE MAY BE SUBSTITUTED WITH WRITTEN APPROVAL FROM THE CITY OF PORT ST. LUCIE AND VELCON ENGINEERING & SURVEYING, LLC.
  7. A SITE ENVIRONMENTAL ASSESSMENT PERFORMED BY EW CONSULTANTS, INC. FOR RIVERLAND PARCEL D WAS PERFORMED ON APRIL 18, 2022.



KEY MAP



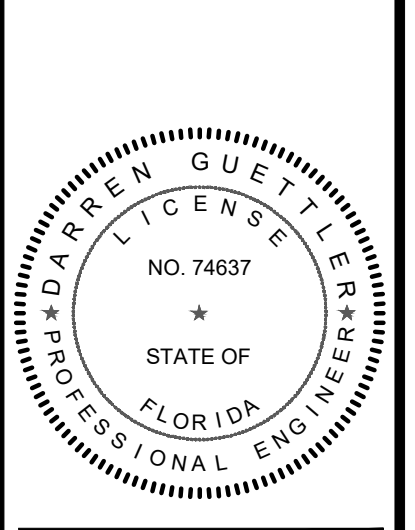
NOTE: ALL ELEVATIONS SHOWN OR REFERENCED WITHIN THESE PLANS ARE BASED UPON NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.). TO CONVERT FROM N.A.V.D. '88 TO N.G.V.D. '29, ADD 1.48' TO THE N.A.V.D. ELEVATIONS TO GET N.G.V.D. ELEVATIONS.

**VELCON**  
ENGINEERING & SURVEYING, LLC  
1449 NW COMMERCIAL CENTRE DR  
PORT ST. LUCIE, FL 34986  
PHONE: (772) 878-5477  
FIRE C.O.A. # 3222

BY:	DATE:	COMMENT:
SG	12/15/22	PER SPRC COMMENTS
SG	05/26/23	PER SPRC COMMENTS
SG	07/25/23	PER SPRC COMMENTS

PROJECT:  
**RIVERLAND PARCEL D  
PLAT FOUR**  
CITY OF PORT ST. LUCIE,  
FLORIDA

CLIENT:  
**RIVERLAND  
ASSOCIATES IV  
LLLP**



DARREN GUETTLER, PE  
FLORIDA LICENSE NO. 74637  
7/27/23

PROJECT NO.: 22-1022  
DRAWN BY: SOG  
CHECKED BY: DG  
DATE: 07/21/2022  
CAD ID: 22-1022 - PGD PLAN

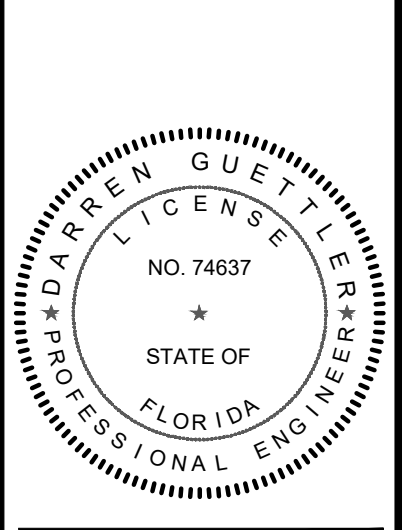
SHEET TITLE:  
**PAVING,  
GRADING &  
DRAINAGE PLAN**

SHEET NUMBER:  
**05**

REVISIONS:		
BY:	DATE:	COMMENT:
SG	12/15/22	PER SPRC COMMENTS
SG	05/26/23	PER SPRC COMMENTS
SG	07/25/23	PER SPRC COMMENTS

PROJECT:  
**RIVERLAND PARCEL D  
PLAT FOUR**  
CITY OF PORT ST. LUCIE,  
FLORIDA

CLIENT:  
**RIVERLAND  
ASSOCIATES IV  
LLLP**



DARREN GUETTLER, PE  
FLORIDA LICENSE No. 74637  
7/27/23

PROJECT No.: 22-1022  
DRAWN BY: SOG  
CHECKED BY: DG  
DATE: 07/21/2022  
CAD ID: 22-1022 - PGD PLAN

SHEET TITLE:  
**PAVING,  
GRADING &  
DRAINAGE PLAN**

SHEET NUMBER:  
**06**

**LEGEND**

STRUCTURE TYPE: GRATE, RIM, INV1

STORM MAIN WITH CATCH BASIN AND CALL OUT

EXISTING STORM MAIN WITH CATCH BASIN

SANITARY SEWER MAIN WITH MANHOLE

WATER MAIN WITH VALVE

PROPOSED ELEVATION: 20.00

ELEVATION BY OTHERS: 28.60

EXISTING ELEVATION: 28.63

DIRECTION OF FLOW

STREET LIGHTS

SIGN

LOT NUMBER: 1

FINISHED FLOOR ELEVATION: 30.00

CONTROL WATER ELEVATION: C.W. ELEV.

CORRUGATED ALUMINUM PIPE: CAP

DITCH BOTTOM INLET: DBI

DRAINAGE EASEMENT: D.E.

DRAINAGE SWALE EASEMENT: D.S.E.

HIGH POINT: HP

LANDSCAPE EASEMENT: L.E.

LAKE MAINTENANCE ACCESS EASEMENT: L.M.A.E.

LAKE MAINTENANCE EASEMENT: L.M.E.

CITY OF PORT ST. LUCIE UTILITY EASEMENT: P.S.L.U.E.

OPEN SPACE: O.S.

REINFORCED CONCRETE PIPE: RCP

UTILITY EASEMENT: U.E.

UTILITY EASEMENT - RESTRICTED AREA (SEE "U.E." PLAT DEDICATION): U.E.-R.A.

VALLEY GUTTER INLET: VGI

CURB GUTTER INLET: CGI

YARD DRAIN: YD

PROPOSED YARD DRAIN WITH COLLAR (18" GRATE)

PROPOSED YARD DRAIN WITHOUT COLLAR (12" STANDPIPE, GRATE SIZE TO VARY)

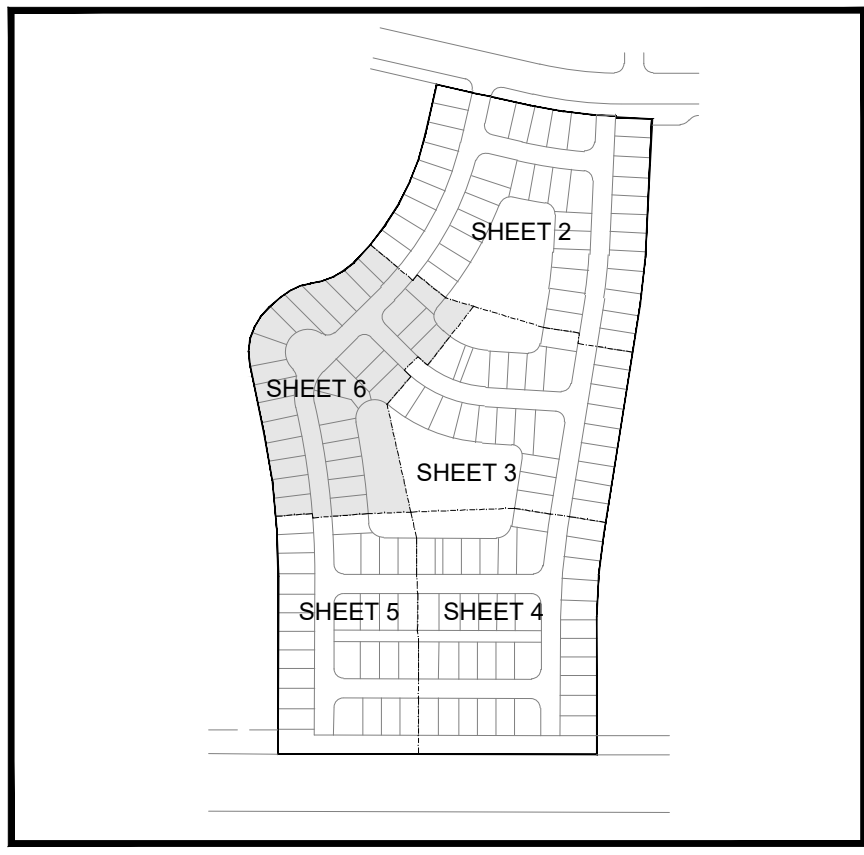
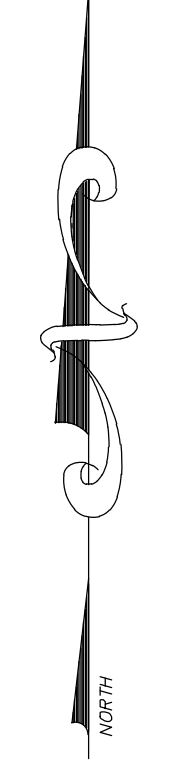
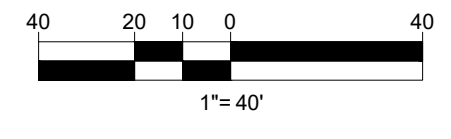
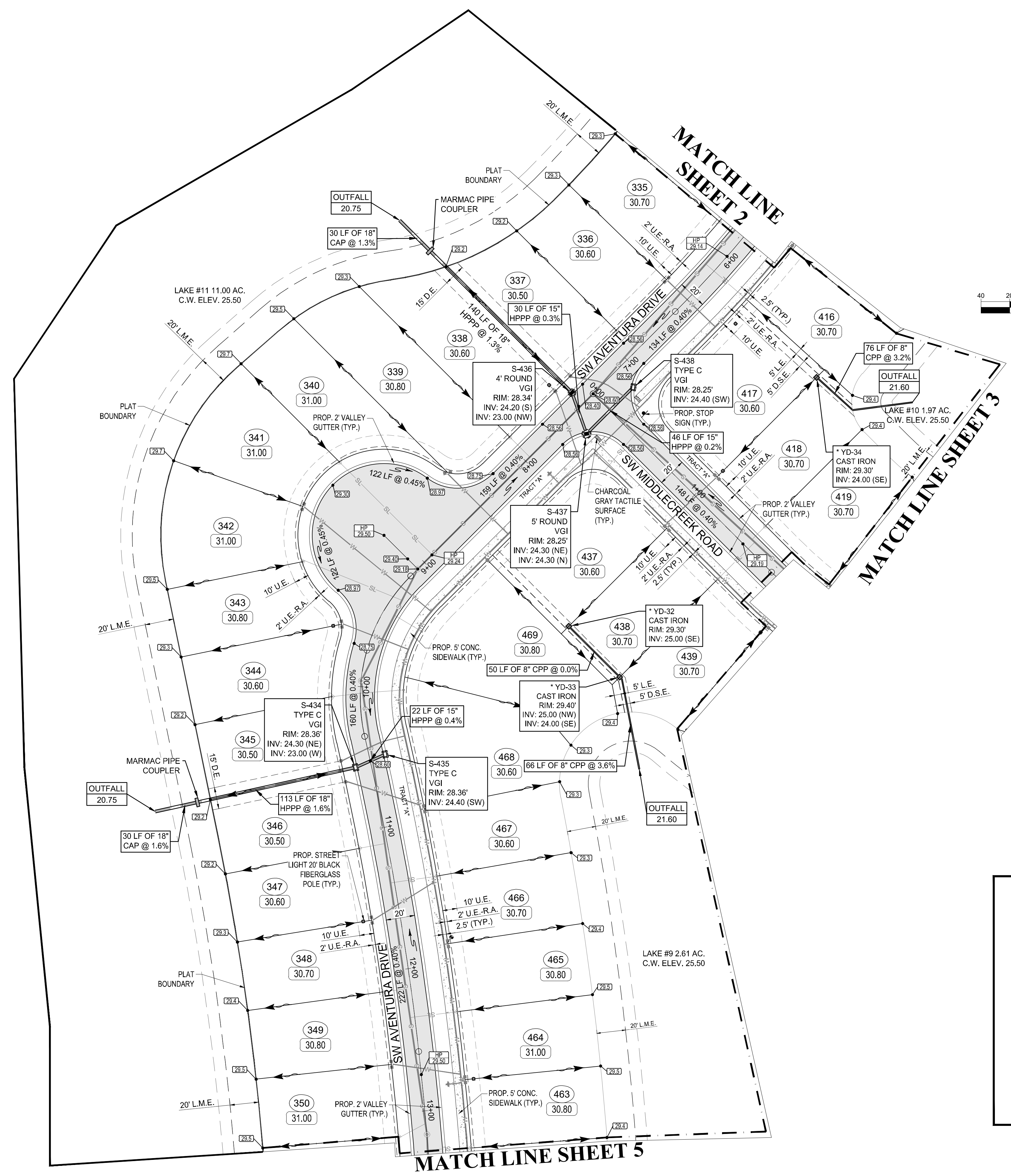
PAVEMENT

SIDEWALK

CHARCOAL GRAY DETECTABLE WARNING SURFACE (SEE NOTE)

LITTORAL PLANTING AREA

SECTION CALLOUT: SEC #



- NOTES:**
- MINIMUM FINISH FLOOR ELEVATION FOR ANY STRUCTURE SHALL BE ELEVATION 30.50' NAVD88, WHICH IS ABOVE THE 100-YEAR, 3-DAY STORM STAGE ELEVATION.
  - MINIMUM PERIMETER ELEVATION SHALL BE ELEVATION 29.50' NAVD88, WHICH IS ABOVE THE 25-YEAR, 3-DAY STORM STAGE ELEVATION.
  - MINIMUM ROAD CROWN ELEVATION SHALL BE ELEVATION 28.60' NAVD88, WHICH IS ABOVE THE 10-YEAR, 1-DAY STORM STAGE ELEVATION.
  - ALL ELEVATIONS SHOWN ON THESE PLANS ARE IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). TO CONVERT ELEVATIONS TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29), ADD 1.475 FEET TO THE NAVD88 ELEVATION. FOR EXAMPLE, NAVD88 + 1.475' = NGVD29.
  - DETECTABLE WARNING SURFACES SHALL COMPLY WITH THE REQUIREMENTS OF F.D.O.T. DESIGN STANDARDS INDEX 304 AND F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 527 (CURRENT EDITIONS).
  - AS AN ALTERNATE TO ADVANCED DRAINAGE SYSTEMS, INC. HPPP DRAINAGE, RCP STORM PIPE MAY BE SUBSTITUTED WITH WRITTEN APPROVAL FROM THE CITY OF PORT ST. LUCIE AND VELCON ENGINEERING & SURVEYING, LLC.
  - A SITE ENVIRONMENTAL ASSESSMENT PERFORMED BY EW CONSULTANTS, INC. FOR RIVERLAND PARCEL D WAS PERFORMED ON APRIL 18, 2022.

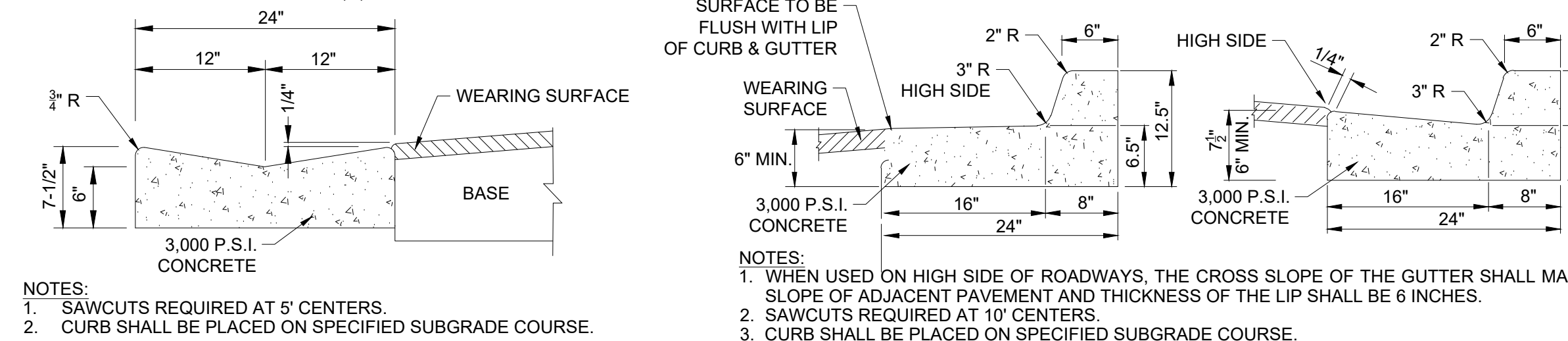
NOTE:  
ALL ELEVATIONS SHOWN OR REFERENCED WITHIN THESE PLANS ARE BASED UPON NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.). TO CONVERT FROM N.A.V.D. '88 TO N.G.V.D. '29, ADD 1.48' TO THE N.A.V.D. ELEVATIONS TO GET N.G.V.D. ELEVATIONS.



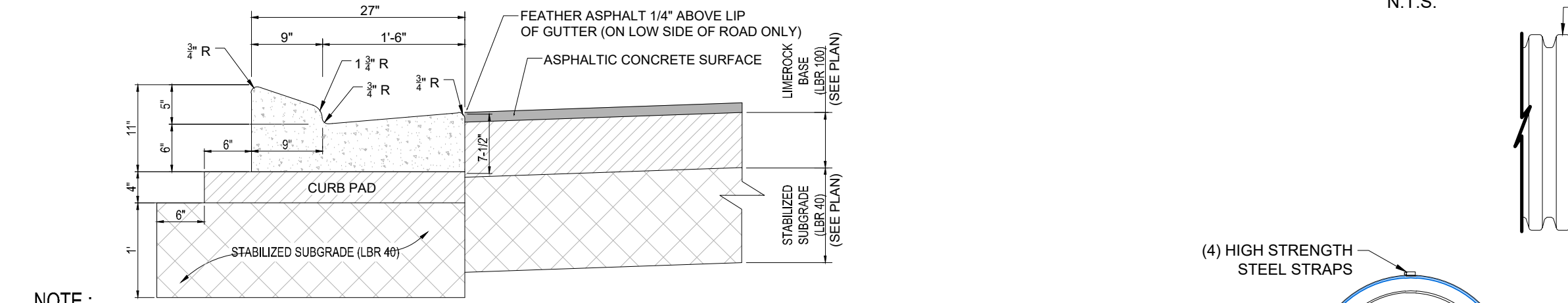
CITY OF PSL PROJECT NO. P22-288  
PSLUSD FILE NO. 5268D

**GENERAL NOTES**

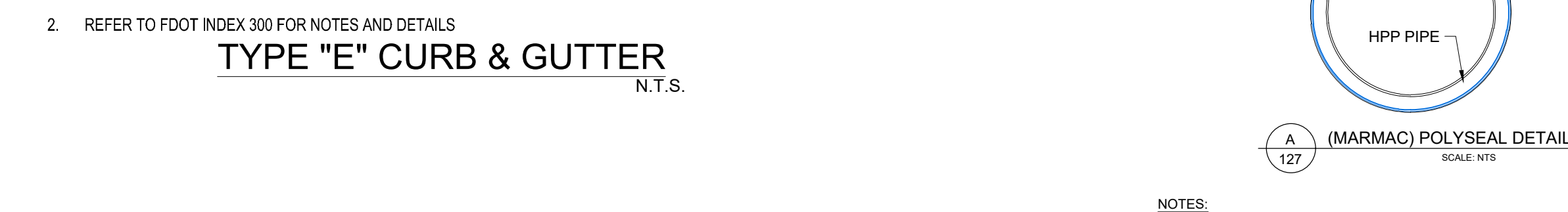
- MINIMUM FINISH FLOOR ELEVATION FOR ANY STRUCTURE SHALL BE ELEVATION 30.50' NAVD88, WHICH IS ABOVE THE 100-YEAR, 3-DAY STORM STAGE ELEVATION.
- MINIMUM PERIMETER ELEVATION SHALL BE ELEVATION 29.50' NAVD88, WHICH IS ABOVE THE 25-YEAR, 3-DAY STORM STAGE ELEVATION.
- MINIMUM ROAD CROWN ELEVATION SHALL BE ELEVATION 28.60' NAVD88, WHICH IS ABOVE THE 10-YEAR, 1-DAY STORM STAGE ELEVATION.
- ALL ELEVATIONS SHOWN ON THESE PLANS ARE IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). TO CONVERT ELEVATIONS TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29), ADD 1.475 FEET TO THE NAVD88 ELEVATION. FOR EXAMPLE, NAVD88 + 1.475' = NGVD29.
- ALL WORK SHALL BE DONE IN A WORKMANLIKE MANNER AND SHALL CONFORM TO ALL APPLICABLE CITY, COUNTY, STATE OR FEDERAL REGULATIONS AND/OR CODES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND LICENSES REQUIRED PRIOR TO INITIATING THE WORK.
- THE CONTRACTOR SHALL CALL SUNSHINE (1-800-432-4770), 48 HOURS BEFORE DIGGING FOR FIELD LOCATIONS OF UNDERGROUND UTILITIES.
- UTILITIES - IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THE EXACT LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES, WHETHER SHOWN OR NOT, PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION. NOTIFY ENGINEER PRIOR TO CONSTRUCTION OF ANY DEVIATION FROM WHAT IS SHOWN ON THE PLAN.
- AS-BUILTS - THE CONTRACTOR SHALL SUBMIT "AS-BUILT" INFORMATION OBTAINED BY A FLORIDA REGISTERED LAND SURVEYOR. INFORMATION SHALL BE IN A FORMAT SPECIFIED BY THE GOVERNING AGENCIES.
- GUARANTY - ALL MATERIAL AND EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR UNDER THIS CONTRACT SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE THEREOF, AGAINST DEFECTIVE MATERIALS, INSTALLATION AND WORKMANSHIP. UPON RECEIPT OF NOTICE FROM THE OWNER OF FAILURE OF ANY PART FOR THE GUARANTEED EQUIPMENT OR MATERIALS, DURING THE GUARANTY PERIOD, THE AFFECTED PART, PARTS OR MATERIALS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
- SEQUENCE OF CONSTRUCTION - THE SEQUENCE OF CONSTRUCTION SHALL BE SUCH THAT ALL UNDERGROUND INSTALLATIONS OF EVERY KIND THAT ARE BENEATH THE PAVEMENT, SHALL BE IN PLACE AND HAVE PROPER DENSITY PRIOR TO THE CONSTRUCTION AND COMPACTION OF THE SUBGRADE.
- CLEARING AND GRUBBING - WITHIN THE LIMITS OF CONSTRUCTION, ALL VEGETATION AND ROOT MATERIAL SHALL BE REMOVED.
- GUMBO - WHERE GUMBO OR OTHER PLASTIC CLAYS ARE ENCOUNTERED, THEY SHALL BE REMOVED WITHIN THE ROADWAY AND PARKING AREAS ONE FOOT BELOW THE SUBGRADE EXTENDING HORIZONTALLY TO THE OUTSIDE EDGE OF THE SHOULDER AREA.
- MUCK AND PEAT - IF MUCK AND/OR PEAT ARE ENCOUNTERED IN THE ROAD, PARKING OR BUILDING AREA, THEY SHALL BE REMOVED COMPLETELY TO A WIDTH OF TEN FEET BEYOND THE EDGE OF PAVEMENT OR FOUNDATION AND SHALL BE BACKFILLED WITH GRANULAR MATERIAL.
- SOD - WHERE SOD IS SHOWN, LOWER THE GROUND 2 INCHES BELOW THE FINISHED GRADE TO ALLOW FOR THE THICKNESS OF THE SOD.
- SUBGRADE - SHALL BE COMPACTED AS NOTED ON THE PLANS AND MEET THE DENSITY REQUIREMENTS AS DETERMINED BY THE A.S.H.T.O. T-180 SPECIFICATIONS. SUBGRADE SHALL BE 12" THICK AND EXTEND 12" BEYOND THE PROPOSED EDGE OF PAVEMENT AND/OR 6" BEYOND VALLEY GUTTER, TYPE "F" CURB & GUTTER OR TYPE "D" CURB. IF SUBGRADE IS REQUIRED TO BE STABILIZED, THE REQUIRED BEARING VALUE DETERMINATIONS SHALL BE MADE PER FLORIDA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, LATEST EDITION. WHEN FILLING IS REQUIRED, SUBGRADE SHALL BE COMPACTED IN 6" LIFTS.
- BASE MATERIAL - APPROVED BASE MATERIAL, MINIMUM L.B.R. 100, SHALL BE COMPACTED TO NOT LESS THAN 98% MAXIMUM DENSITY AS DETERMINED BY A.S.H.T.O. T-180 SPECIFICATIONS AND MEET THE CRITERIA SET FORTH IN THE PLANS AND SPECIFICATIONS AND AS CALLED FOR IN BOTH FLORIDA D.O.T. INDEX 514 AND FLORIDA D.O.T. SPECIFICATIONS, LATEST EDITION. CONTRACTOR SHALL NOTIFY BOTH THE OWNER AND OWNER'S GEOTECHNICAL ENGINEER A MINIMUM OF 48 HOURS PRIOR TO BASE MATERIAL DELIVERY TO THE PROJECT TO SCHEDULE MATERIAL TESTING. TEST RESULTS THAT DO NOT MEET THE SPECIFIED CRITERIA, SHALL CAUSE THE CONTRACTOR, AT HIS SOLE EXPENSE, TO REMOVE ANY AND ALL OF SAME MATERIAL THAT IS EITHER ALREADY PLACED IN ROADWAYS OR IN STOCKPILES AND NOT USE IT IN AREAS REQUIRING BASE MATERIAL. CONTRACTOR SHALL NOTIFY OWNER AND OWNER'S GEOTECHNICAL ENGINEER 48 HOURS PRIOR TO DELIVERY OF BASE MATERIAL THAT IS FROM A NEW SOURCE TO SCHEDULE MATERIAL TESTING. CONTRACTOR SHALL PROVIDE THE OWNER AND OWNER'S GEOTECHNICAL ENGINEER A SCHEMATIC INDICATING WHERE ON THE PROJECT THE CHANGE IN MATERIAL SOURCE HAS OCCURRED. AT MINIMUM, ALL BASE MATERIAL SHALL BE TESTED PRIOR TO THE START OF EACH NEW PHASE OF THE WORK AND AS THE OWNER OR OWNER'S GEOTECHNICAL ENGINEER DEEMS AS NECESSARY DURING FIELD INSPECTIONS TO ENSURE ALL BASE MATERIAL THROUGHOUT THE PROJECT MEETS ALL MINIMUM CRITERIA.
- PRIME COAT - BITUMINOUS PRIME COAT SHALL CONFORM WITH THE REQUIREMENTS OF THE FLORIDA D.O.T. SPECIFICATIONS, LATEST EDITION AND SHALL BE APPLIED AT A RATE OF 0.25 GALLONS PER SQUARE YARD, UNLESS A DIFFERENT RATE IS DIRECTED BY THE ENGINEER. PRIME COAT IS TO BE APPLIED AT LEAST 24 HOURS PRIOR TO PLACEMENT OF PAVEMENT WITH AN ABSOLUTE MINIMUM APPLICATION LEAD TIME OF 12 HOURS PERMITTED ONLY WITH THE WRITTEN APPROVAL FROM THE ENGINEER.
- TACK COAT - BITUMINOUS TACK COAT SHALL CONFORM WITH THE REQUIREMENTS OF THE FLORIDA D.O.T. SPECIFICATIONS, LATEST EDITION AND SHALL BE APPLIED AT THE RATE OF 0.08 GALLONS PER SQUARE YARD, UNLESS A VARIATION IS APPROVED BY THE ENGINEER.
- SURFACE COURSE - ASPHALTIC CONCRETE SURFACE COURSE SHALL CONFORM WITH THE REQUIREMENTS OF THE FLORIDA D.O.T. SPECIFICATIONS, LATEST EDITION. THE MINIMUM COMPACTED THICKNESS TO BE AS NOTED ON PLANS.
- PAVEMENT MARKINGS AND GEOMETRICS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, LATEST EDITION.
- CONCRETE - ALL CONCRETE SHALL DEVELOP 2500 P.S.I. (MINIMUM) 28 DAY COMPRESSIVE STRENGTH OR GREATER WHERE NOTED ON PLANS. CLASS I CONCRETE SHALL CONFORM WITH THE FLORIDA D.O.T. SPECIFICATIONS, LATEST EDITION. CLASS I CONCRETE USED AS PAVING SHALL DEVELOP 3000 P.S.I. (MINIMUM) 28 DAYS COMPRESSIVE STRENGTH.
- ANY EXISTING ROADWAY AND/OR UTILITY THAT IS DAMAGED BY THE CONTRACTOR SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER'S ENGINEER.
- PIPE BACKFILL - REQUIREMENTS FOR PIPE BACKFILL CROSSING ROADS OR PARKING AREAS SHALL BE DEFINED IN THE FLORIDA D.O.T. SPECIFICATIONS, LATEST EDITION. PIPELINE BACKFILL SHALL BE PLACED IN SIX INCH LIFTS AND COMPACTED TO 100% OF THE STANDARD PROCTOR (A.A.S.H.T.O.) T-99 SPECIFICATIONS.
- ALL PIPE LENGTHS AND CENTERLINE SLOPE LENGTHS SHOWN ON THESE DRAWINGS ARE SCALED DISTANCES. THE CONTRACTOR SHALL CONFIRM ALL MEASUREMENTS IN THE FIELD AND NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCY WITH THE DRAWINGS PRIOR TO PERFORMING THE WORK. ALL CONCRETE PIPES SHALL HAVE GASKET JOINTS.
- 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).



**2' VALLEY GUTTER**  
**TYPE "F" CURB & GUTTER**



**TYPE "E" CURB & GUTTER**  
**MARMAC PIPE COUPLER DETAIL**



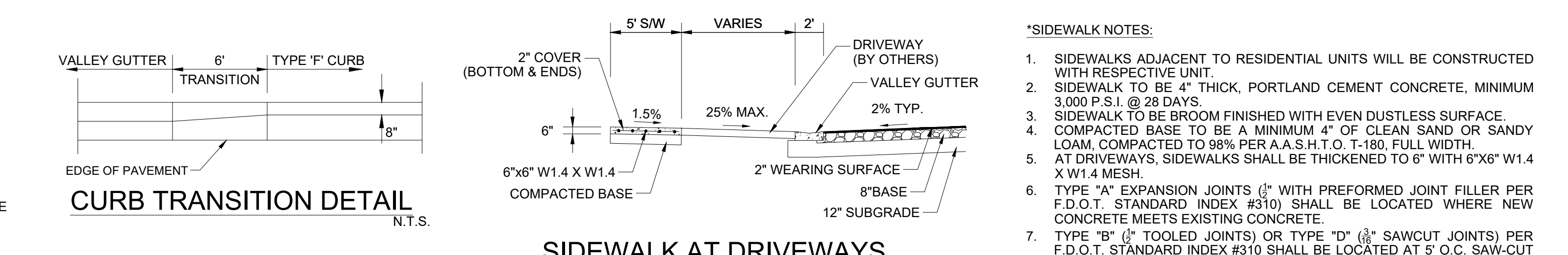
**TYPE "D" CURB**

**DETAILS LEGEND:**

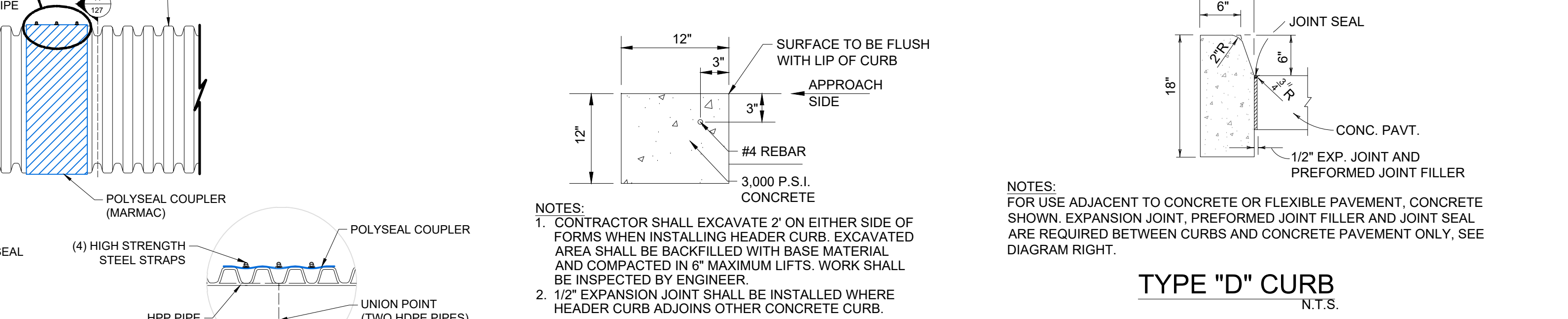
C/L	-CENTERLINE	R	-RADIUS
CONC.	-CONCRETE	R/W	-RIGHT-OF-WAY
EL	-ELEVATION	SW	-SIDEWALK
LL	-LOT LINE	TYP.	-TYPICAL
LME	-LAKE MAINTENANCE EASEMENT	U.E.	-UTILITY EASEMENT
MAX.	-MAXIMUM	U.E.-R.A.	-UTILITY EASEMENT - RESTRICTED AREA
MIN.	-MINIMUM		
P.S.L.U.E.	-CITY OF PORT ST. LUCIE UTILITY EASEMENT		

**PAVING / SIDEWALK SPECIFICATIONS**

TYPE	WEARING SURFACE	BASE	SUBGRADE	STRUCTURAL NUMBER (SN) (LOCAL ROADS SN = 1.89 MIN.)
80' RIGHT-OF-WAY ROAD SECTION AND ENTRY ROAD SECTION	2" THICK, TYPE S-III A.C.A.C. INSTALLED IN TWO LIFTS (FIRST LIFT TO BE 1" & SECOND LIFT TO BE 1"). TACK COAT REQUIRED WITH MULTIPLE LIFTS.	8" THICK, LIMEROCK (LBR 100) COMPACTED IN ONE LIFT TO 98% MAXIMUM DRY DENSITY, A.A.S.H.T.O. T-180	12" THICK, STABILIZED SUBGRADE, COMPACTED TO 98% MAXIMUM DRY DENSITY A.S.H.T.O. T-180 AND STABILIZED TO EITHER L.B.R. = 40 OR F.B.V. = 75	2 X 0.44 = 0.88 8 X 0.18 = 1.44 12 X 0.08 = 0.96 SN = 3.28
		OPTIONAL BLACK BASE 5" THICK, TYPE B-12.5 (BLACK BASE) MAY BE SUBSTITUTED IN LIEU OF 6-1/2" LIMEROCK	12" THICK, STABILIZED SUBGRADE, COMPACTED TO 98% MAXIMUM DRY DENSITY A.S.H.T.O. T-180 AND STABILIZED TO EITHER L.B.R. = 40 OR F.B.V. = 75	2 X 0.44 = 0.88 5 X 0.30 = 1.50 12 X 0.08 = 0.96 SN = 3.34
		OPTIONAL DOUBLE ROCK 5.5" ADDITIONAL LIMEROCK BASE AND 12" COMPACTED SUBGRADE MAY BE SUBSTITUTED IN LIEU OF 12" STABILIZED SUBGRADE	12" THICK COMPACTED	2 X 0.44 = 0.77 13.5 X 0.18 = 2.43 12 X 0 = 0 SN = 3.31
50' RIGHT-OF-WAY ROAD SECTION	2" THICK, TYPE S-III A.C.A.C. INSTALLED IN TWO LIFTS (FIRST LIFT TO BE 1" & SECOND LIFT TO BE 1"). TACK COAT REQUIRED WITH MULTIPLE LIFTS.	6-1/2" THICK, LIMEROCK (LBR 100) COMPACTED IN ONE LIFT TO 98% MAXIMUM DRY DENSITY, A.A.S.H.T.O. T-180	12" THICK, STABILIZED SUBGRADE, COMPACTED TO 98% MAXIMUM DRY DENSITY A.S.H.T.O. T-180 AND STABILIZED TO EITHER L.B.R. = 40 OR F.B.V. = 75	2 X 0.44 = 0.88 6.5 X 0.18 = 1.17 12 X 0.08 = 0.96 SN = 3.01
		OPTIONAL BLACK BASE 5" THICK, TYPE B-12.5 (BLACK BASE) MAY BE SUBSTITUTED IN LIEU OF 6-1/2" LIMEROCK	12" THICK, STABILIZED SUBGRADE, COMPACTED TO 98% MAXIMUM DRY DENSITY A.S.H.T.O. T-180 AND STABILIZED TO EITHER L.B.R. = 40 OR F.B.V. = 75	2 X 0.44 = 0.88 5 X 0.30 = 1.50 12 X 0.08 = 0.96 SN = 3.34
		OPTIONAL DOUBLE ROCK 5.5" ADDITIONAL LIMEROCK BASE AND 12" COMPACTED SUBGRADE MAY BE SUBSTITUTED IN LIEU OF 12" STABILIZED SUBGRADE	12" THICK COMPACTED	2 X 0.44 = 0.88 12.0 X 0.18 = 2.16 12 X 0 = 0 SN = 3.04
16' CART PATH SECTION	1-1/2" THICK, TYPE S-III A.C.A.C. INSTALLED IN TWO LIFTS (FIRST LIFT TO BE 3/4" & SECOND LIFT TO BE 3/4"). TACK COAT REQUIRED WITH MULTIPLE LIFTS.	8" THICK, LIMEROCK (LBR 100) COMPACTED IN ONE LIFT TO 98% MAXIMUM DRY DENSITY, A.A.S.H.T.O. T-180	12" THICK, STABILIZED SUBGRADE, COMPACTED TO 98% MAXIMUM DRY DENSITY A.S.H.T.O. T-180 AND STABILIZED TO EITHER L.B.R. = 40 OR F.B.V. = 75	1.50 X 0.44 = 0.66 8 X 0.18 = 1.44 12 X 0.08 = 0.96 SN = 3.06
		OPTIONAL BLACK BASE 5" THICK, TYPE B-12.5 (BLACK BASE) MAY BE SUBSTITUTED IN LIEU OF 6-1/2" LIMEROCK	12" THICK, STABILIZED SUBGRADE, COMPACTED TO 98% MAXIMUM DRY DENSITY A.S.H.T.O. T-180 AND STABILIZED TO EITHER L.B.R. = 40 OR F.B.V. = 75	1.50 X 0.44 = 0.66 5 X 0.30 = 1.50 12 X 0.08 = 0.96 SN = 3.12
SIDEWALKS *	4" THICK 3,000 PSI CONCRETE OR 6" THICK 3,000 PSI CONCRETE WITH W1.4 X W1.4, 6" X 6" REINFORCING MESH AT ALL DRIVEWAYS & L.M.A.E.'S	4" THICK, CLEAN SAND COMPACTED TO 98% PER A.A.S.H.T.O. T-180	N/A	N/A
PAVER STONE ON 80' RIGHT-OF-WAY ROAD SECTION AND ENTRY ROAD SECTION	INTERLOCKING CONC. PAVER STONES 2 3/8" THICK (MIN.) 1" SCREENED OR CONC. SAND	11.5" THICK LIMEROCK LBR 100 COMPACTED IN ONE LIFT TO 98% MAXIMUM DRY DENSITY, A.A.S.H.T.O. T-180	12" THICK, STABILIZED SUBGRADE, COMPACTED TO 98% MAXIMUM DRY DENSITY A.S.H.T.O. T-180 AND STABILIZED TO EITHER L.B.R. = 40 OR F.B.V. = 75	2.375 X 0 = 0 11.5 X 0.18 = 2.07 12 X 0.08 = 0.96 SN = 3.03
		OPTIONAL BLACK BASE 7" TYPE B-12.5 (BLACK BASE) MAY BE SUBSTITUTED IN LIEU OF 8" LIMEROCK	12" THICK, STABILIZED SUBGRADE, COMPACTED TO 98% MAXIMUM DRY DENSITY A.S.H.T.O. T-180 AND STABILIZED TO EITHER L.B.R. = 40 OR F.B.V. = 75	2.375 X 0 = 0 7 X 0.30 = 2.10 12 X 0.08 = 0.96 SN = 3.06
8' PATH SECTION	1-1/2" THICK, TYPE S-III A.C.A.C. INSTALLED IN TWO LIFTS (FIRST LIFT TO BE 3/4" & SECOND LIFT TO BE 3/4"). TACK COAT REQUIRED WITH MULTIPLE LIFTS.	6-1/2" THICK, LIMEROCK (LBR 100) COMPACTED IN ONE LIFT TO 98% MAXIMUM DRY DENSITY, A.A.S.H.T.O. T-180	12" THICK, STABILIZED SUBGRADE, COMPACTED TO 98% MAXIMUM DRY DENSITY A.S.H.T.O. T-180 AND STABILIZED TO EITHER L.B.R. = 40 OR F.B.V. = 75	1.50 X 0.44 = 0.66 6.5 X 0.18 = 1.17 12 X 0.08 = 0.96 SN = 2.79
		OPTIONAL BLACK BASE 5" THICK, TYPE B-12.5 (BLACK BASE) MAY BE SUBSTITUTED IN LIEU OF 6-1/2" LIMEROCK	12" THICK, STABILIZED SUBGRADE, COMPACTED TO 98% MAXIMUM DRY DENSITY A.S.H.T.O. T-180 AND STABILIZED TO EITHER L.B.R. = 40 OR F.B.V. = 75	1.50 X 0.44 = 0.66 5 X 0.30 = 1.50 12 X 0.08 = 0.96 SN = 3.12
16' MULTI-MODAL PATH SECTION	1-1/2" THICK, TYPE S-III A.C.A.C. INSTALLED IN TWO LIFTS (FIRST LIFT TO BE 3/4" & SECOND LIFT TO BE 3/4"). TACK COAT REQUIRED WITH MULTIPLE LIFTS.	6-1/2" THICK, LIMEROCK (LBR 100) COMPACTED IN ONE LIFT TO 98% MAXIMUM DRY DENSITY, A.A.S.H.T.O. T-180	12" THICK, STABILIZED SUBGRADE, COMPACTED TO 98% MAXIMUM DRY DENSITY A.S.H.T.O. T-180 AND STABILIZED TO EITHER L.B.R. = 40 OR F.B.V. = 75	1.50 X 0.44 = 0.66 6.5 X 0.18 = 1.17 12 X 0.08 = 0.96 SN = 2.79
		OPTIONAL BLACK BASE 5" THICK, TYPE B-12.5 (BLACK BASE) MAY BE SUBSTITUTED IN LIEU OF 6-1/2" LIMEROCK	12" THICK, STABILIZED SUBGRADE, COMPACTED TO 98% MAXIMUM DRY DENSITY A.S.H.T.O. T-180 AND STABILIZED TO EITHER L.B.R. = 40 OR F.B.V. = 75	1.50 X 0.44 = 0.66 5 X 0.30 = 1.50 12 X 0.08 = 0.96 SN = 3.12



**CURB TRANSITION DETAIL**  
**SIDEWALK AT DRIVEWAYS**



**12" FLUSH HEADER CURB**  
**MARMAC PIPE COUPLER DETAIL**



**MARMAC PIPE COUPLER DETAIL**

**NOTE: ALL GRADES SHOWN ARE IN NAVD88**



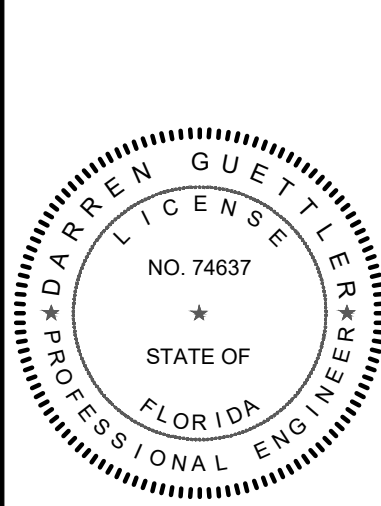
ENGINEERING & SURVEYING, LLC  
1449 NW COMMERCIAL CENTRE DR  
PORT ST. LUCIE, FL 34956  
PHONE: (772) 879-0477  
FIRE C.O.A. #3222

**REVISIONS:**

BY:	DATE:	COMMENT:
SG	12/15/22	PER SPRK COMMENTS
SG	05/26/23	PER SPRK COMMENTS
SG	07/25/23	PER SPRK COMMENTS

PROJECT: RIVERLAND PARCEL PLAT FOUR  
CITY OF PORT ST. LUCIE, FLORIDA

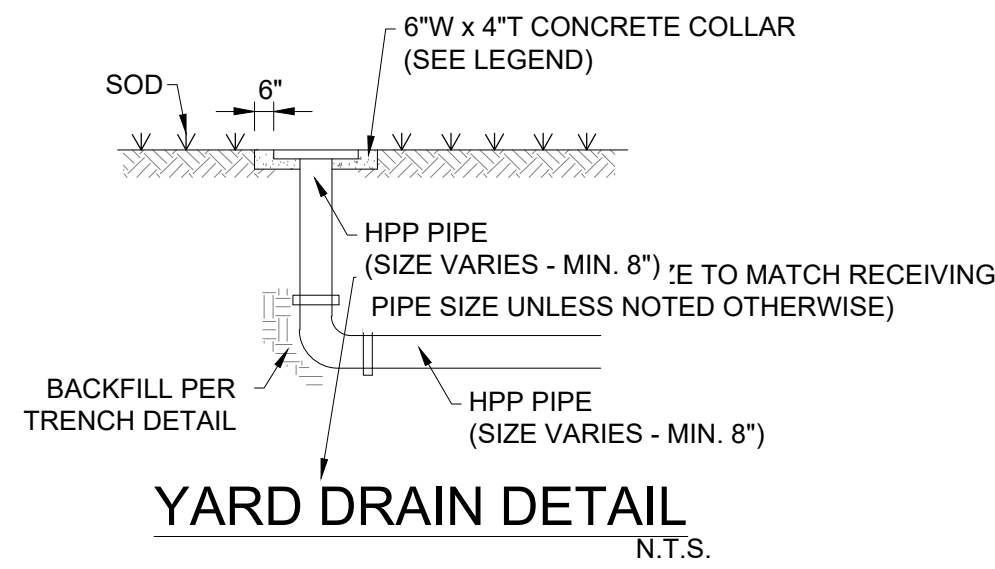
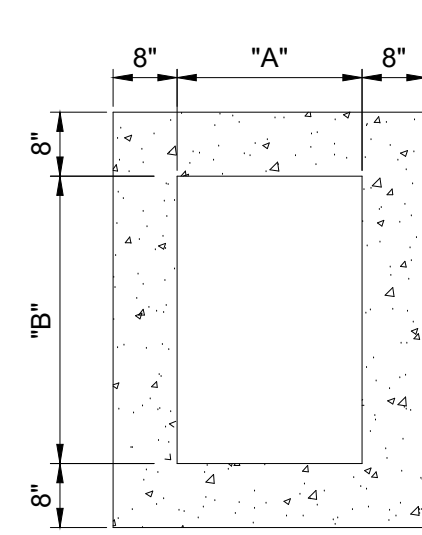
CCLIENT: RIVERLAND ASSOCIATES IV LLLP



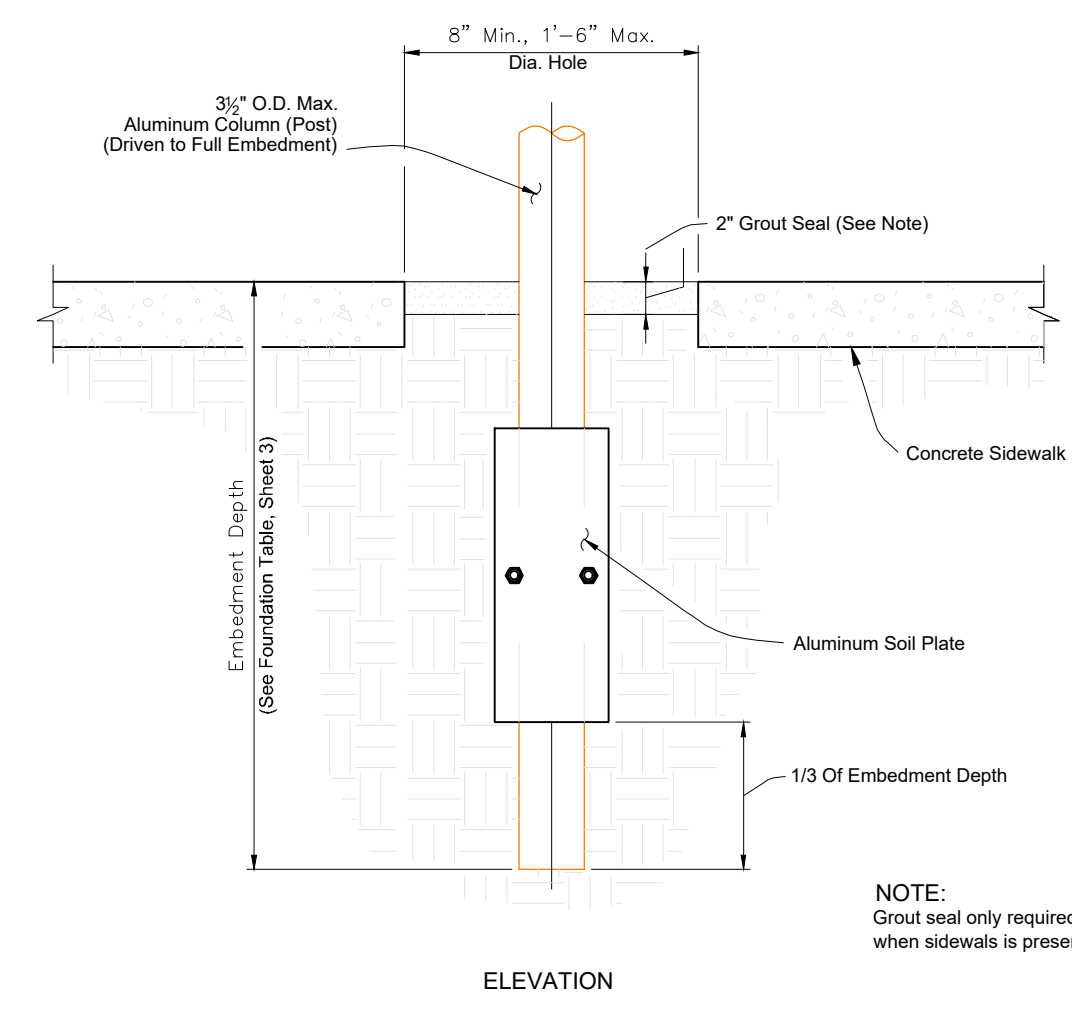
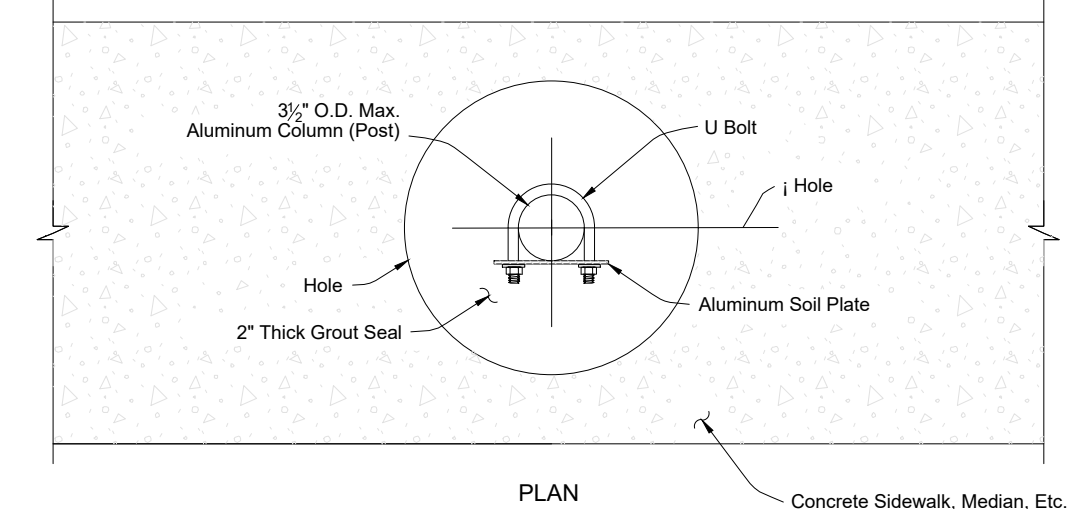
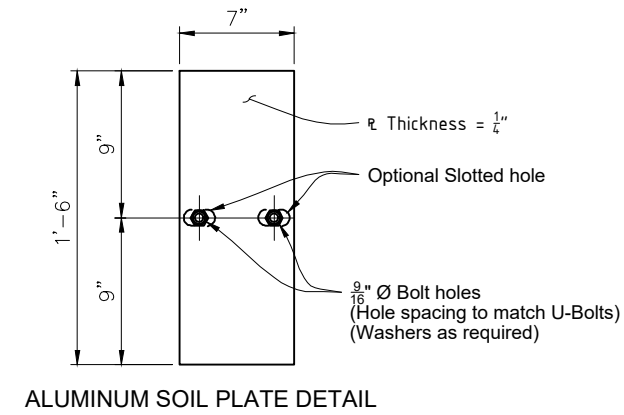
DARREN GUETTLER, PE  
FLORIDA LICENSE NO. 74637  
7/27/23

PROJECT NO.: 22-1022  
DRAWN BY: SOG  
CHECKED BY: DG  
DATE: 07/21/2022  
CAD I.D.: 22-1022 - PSD DETAILS

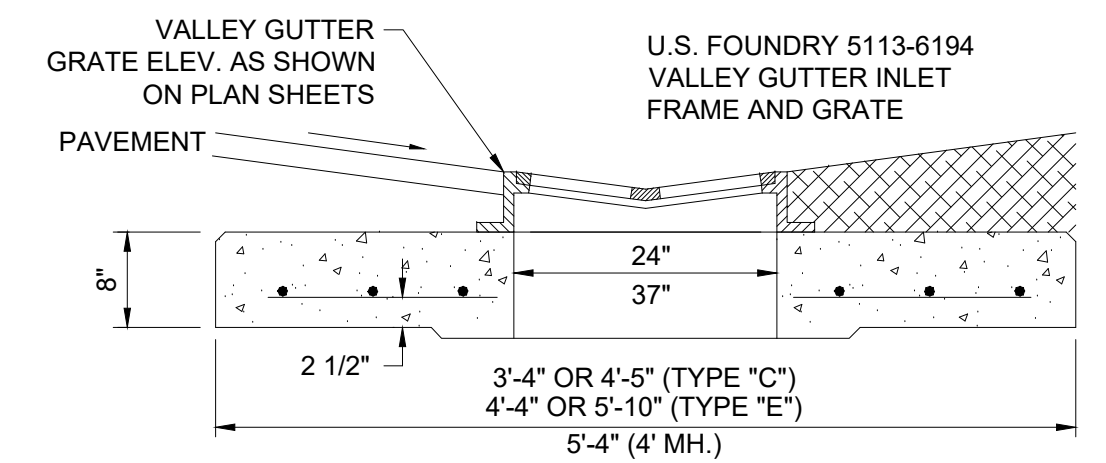
PAVING, GRADING & DRAINAGE DETAILS



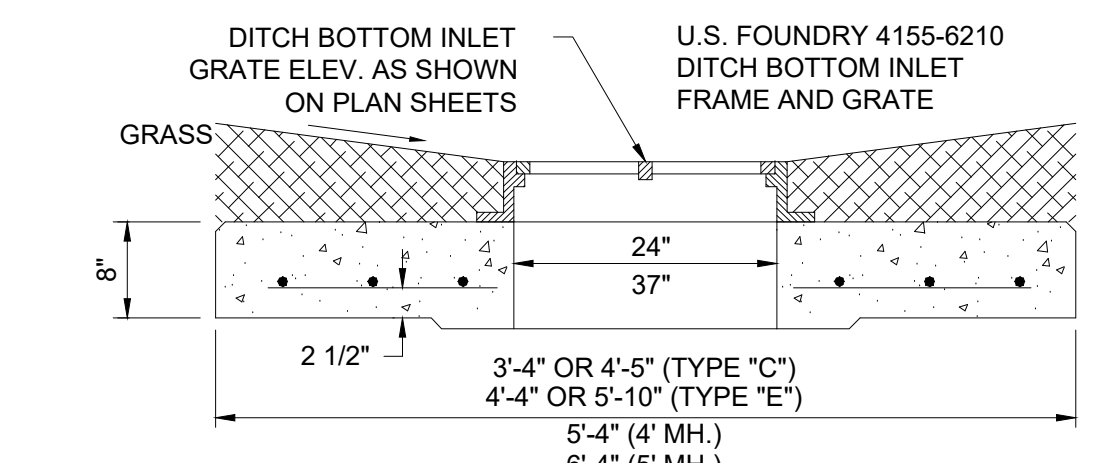
- INLET AND MANHOLE NOTES:**
- ALL INLET CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT F.D.O.T. STANDARDS INDEX # 201 & 232.
  - SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER.
  - STRUCTURES WITH SKEWED PIPE CONNECTIONS SHALL BE INSTALLED IN ACCORDANCE WITH F.D.O.T. STANDARDS INDEX # 200, SHEET 3 OF 5 AND INDEX # 201, SHEET 5 OF 5. ROUND STRUCTURES ARE TO BE USED WHERE SKEW ANGLES EXCEED MAXIMUM ALLOWED OR WHEN PIPE CONNECTION WOULD BE AT THE CORNER OF A RECTANGULAR STRUCTURE. RECTANGULAR STRUCTURES WITH A CORNER OPENING IS ONLY TO BE USED WHEN A ROUND STRUCTURE IS NOT POSSIBLE.
  - ALL EXPOSED CORNERS AND EDGES SHALL BE CHAMFERED  $\frac{3}{4}$ ".
  - INLETS AND MANHOLES SHALL BE PRECAST CLASS "A" 3,000 P.S.I. CONCRETE.
  - FRAMES AND GRATES SHALL BE CAST IRON AND IN ACCORDANCE WITH F.D.O.T. SPECIFICATIONS.
  - INLET GRATES SHALL BE U.S. FOUNDRY OR EQUAL.
  - ALL INLET GRATES SHALL HAVE LOCKING CHAINS IN ACCORDANCE WITH F.D.O.T. STANDARD INDEX #201, OR AN APPROVED ALTERNATE SECURING MECHANISM.
  - REINFORCING STEEL SHALL CONFORM TO A.S.T.M. 615 GRADE 40.
  - AS AN ALTERNATE, PRECAST CIRCULAR (MANHOLES) MAY BE FURNISHED IN ACCORDANCE WITH F.D.O.T. STANDARD INDEX #200 WITH WALLS AND REINFORCEMENT IN ACCORDANCE WITH A.S.T.M. C-478 SPECIFICATIONS, EXCEPT THAT MINIMUM WALL THICKNESS SHALL BE 6".



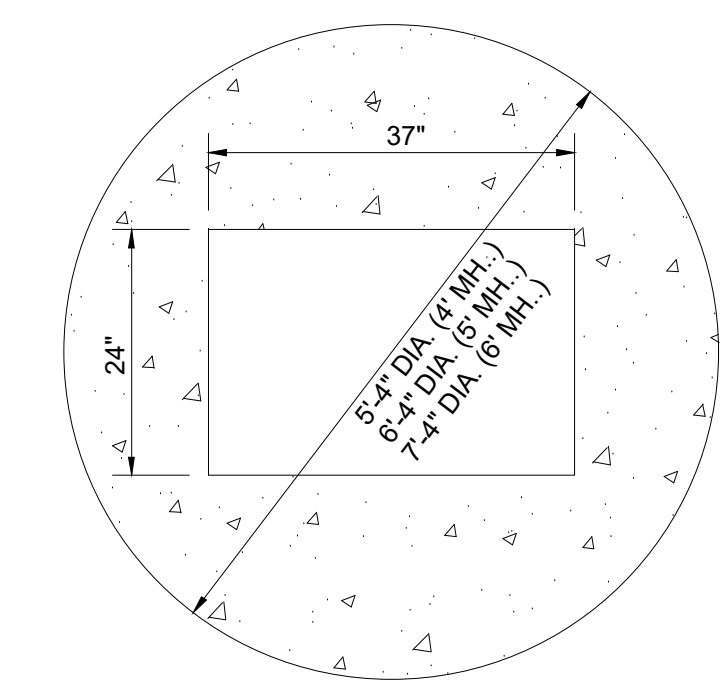
DRIVEN POST, CONCRETE/STUB, AND SOIL PLATE DETAILS FDOT INDEX 700-010



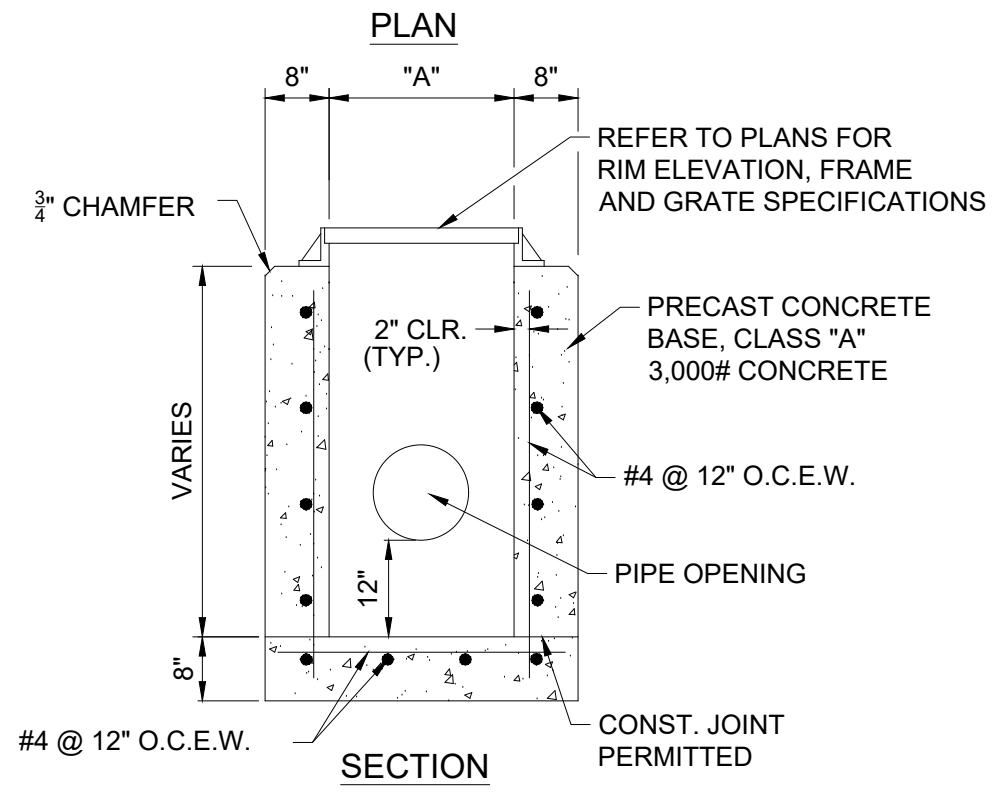
VALLEY GUTTER INLET (VGI) DETAIL



DITCH BOTTOM INLET (DBI) DETAIL

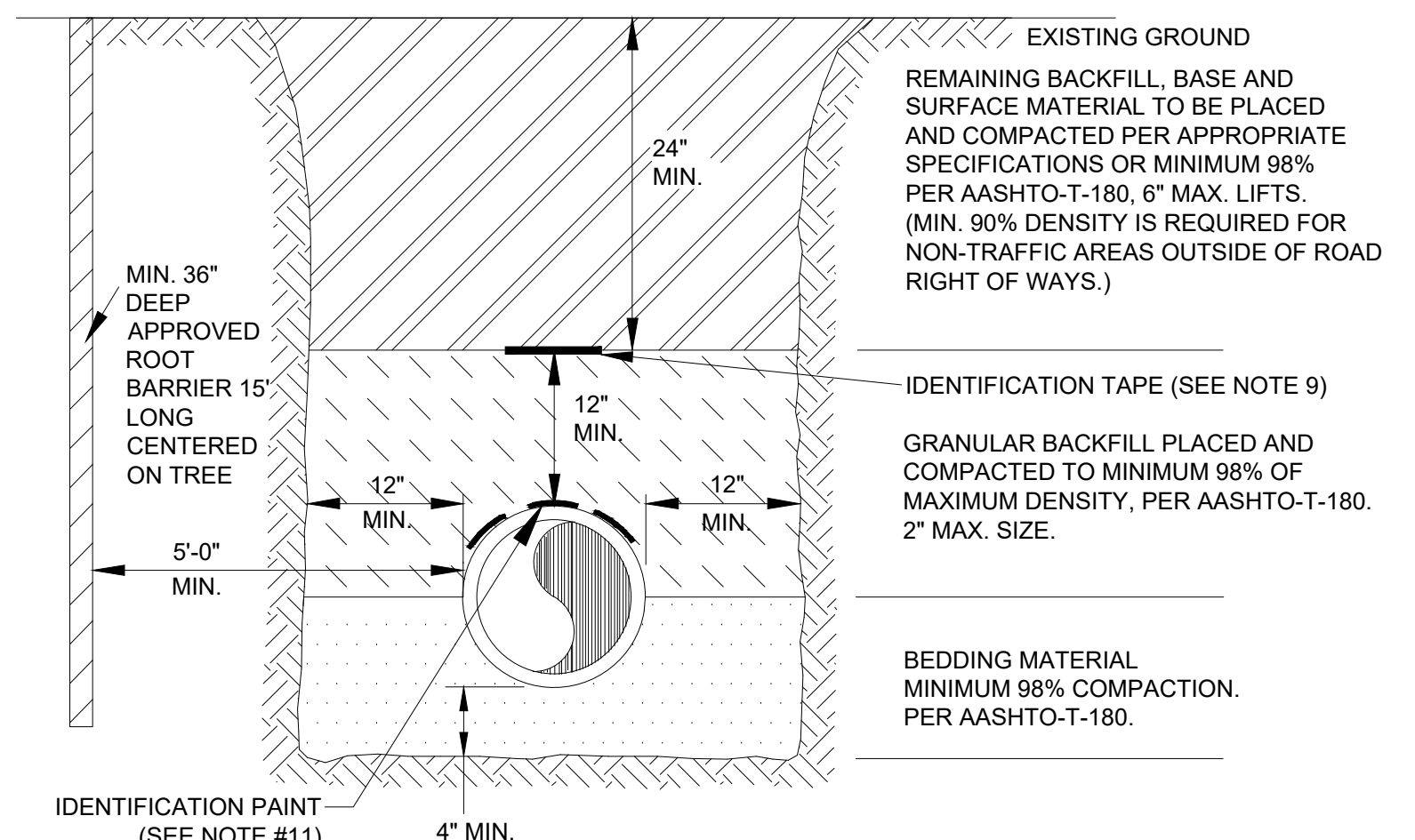


PLAN (4', 5' OR 6' MH)



TYPE	DIMENSIONS	
INLET	"A"	"B"
C	2'-0"	3'-1"
E	3'-0"	4'-6"

STANDARD TYPE "C" & "E" INLET DETAIL



- TRENCH NOTES:**
- BEDDING SHALL CONSIST OF IN-SITU GRANULAR MATERIAL OR WASHED AND GRADED LIMESTONE 3/8" - 7/8" SIZING WITH EQUAL OR GREATER STRUCTURAL ADEQUACY AS EXISTING. UNSUITABLE IN-SITU MATERIALS SUCH AS MUCK, DEBRIS AND LARGER ROCKS SHALL BE REMOVED.
  - THE PIPE SHALL BE FULLY SUPPORTED FOR ITS ENTIRE LENGTH WITH APPROPRIATE COMPACTION UNDER THE PIPE HAUNCHES.
  - THE PIPE SHALL BE PLACED IN A DRY TRENCH.
  - BACKFILL SHALL BE FREE OF UNSUITABLE MATERIAL SUCH AS LARGE ROCK, MUCK AND DEBRIS.
  - DENSITY TESTS SHALL BE TAKEN IN 1 FOOT LIFTS ABOVE THE PIPE AT INTERVALS OF 400' MAXIMUM. (MINIMUM 1 SET) OR AS DIRECTED BY THE CONSTRUCTION COORDINATION DIVISION. RESULTS SHALL BE SUBMITTED TO CONSTRUCTION COORDINATION AS PART OF THEIR FIELD REVIEW.
  - THE PERMITTEE/DEVELOPER/CONTRACTOR SHALL BE RESPONSIBLE TO COMPLY WITH ALL TRENCH SAFETY LAWS AND REGULATIONS.
  - SEE SEPARATE DETAIL FOR PAVED AREAS (OPEN CUT FOR THOROUGHFARE AND NON-THOROUGHFARE ROADS)
  - THE AFFECTED AREA SHALL BE RESTORED TO EQUAL OR BETTER CONDITION OR AS SPECIFIED IN PERMIT/CONTRACT DOCUMENTS.
  - APPROVED MAGNETIC TAPE IS REQUIRED FOR ALL MAIN PRESSURE PIPES AND CONDUIT IN THE CITY'S RIGHT-OF-WAY. INSTALL TAPE 24" BELOW FINISHED GRADE.
  - ROOT BARRIER IS REQUIRED FOR APPROVED PIPE INSTALLATION CLOSER THAN 10 FEET FROM AN EXISTING TREE.
  - CONTINUOUS 4" WIDE PAINT STRIPING IS REQUIRED FOR DIP/PCP WATER MAINS (BLUE), DIP SANITARY FORCE MAINS (GREEN), DIP RECLAIMED WATER MAINS (PURPLE), GAS MAINS (YELLOW), OR AS REQUIRED BY THE APWA.
  - PERMANENT ABOVE GROUND UTILITY MARKER SHALL BE INSTALLED IF REQUIRED BY PROPERTY OWNER GRANTING THE PIPE INSTALLATION PERMIT.

TYPICAL TRENCH DETAIL

**GENERAL SIGN SPECIFICATIONS:**  
SIGNS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MUTCD. COORDINATE WITH DEVELOPER FOR SPECIFIC SIGN TYPE AND MAINTAIN CONSISTENCY THROUGHOUT PROJECT.

**FLAT BLADE:** ALCOA #86054.6063-T6 ALLOY, ETCHED, DECREASED WITH #1200 ALODINE FINISH WITH #3877 GREEN HIGH INTENSITY BACKGROUND AND EQUAL DIMENSIONS - 9" & 12" MIN. H, 24", 30", 36" AND 42" L.

**LETTERS:** NAME - 6" UPPERCASE WITH 4.5" LOWERCASE & 9" UPPERCASE WITH 6.75" LOWERCASE. SERIES 'B' # 3870 HIGH INTENSITY (SILVER) OR EQUAL - PREFIX & SUFFIX - 4.5".

**POST:** STEEL FLANGED CHANNEL POST 3 LBS. WEIGHT PER FOOT WITH BAKED GREEN ALKYL OR GALVANIZED FINISH PER A.S.T.M. - A-123 WITHOUT ANCHOR PLATES. SQUARE POST PER FDOT INDEX 11860.

**BRACKETS:** SHALL BE ATTACHED FIRMLY ON STANDARD SQUARE TUBE OR U-CHANNEL POSTS BY MEANS OF (2) 1/8" DIAMETER HEX HEAD BOLTS.

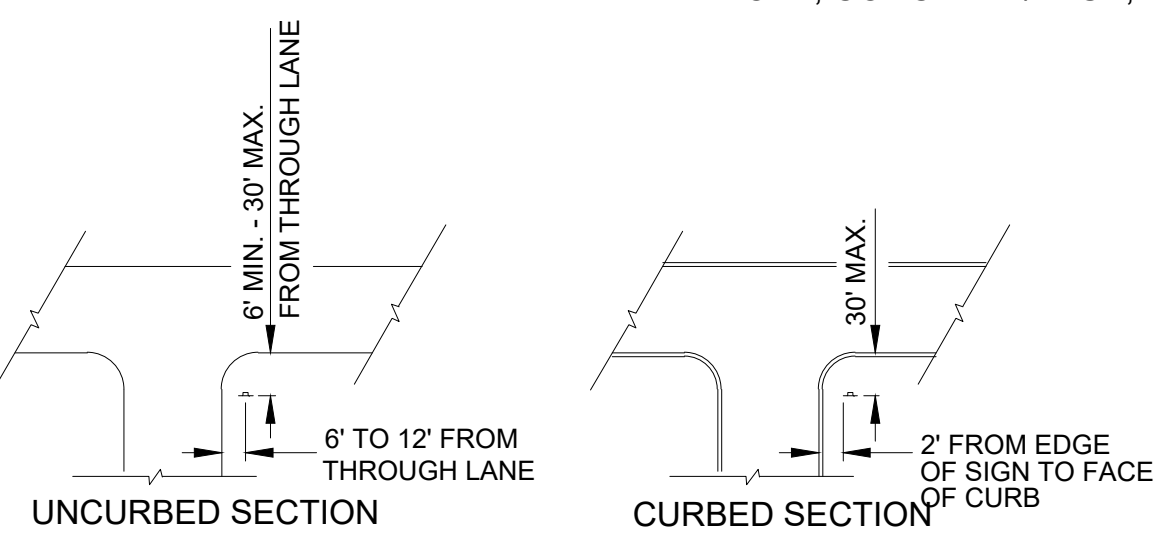
**STOP SIGN:** R-1 MUTCD (HIGH INTENSITY)

**LOCATION:** ONE PER INTERSECTION AS INDICATED ON THE PLANS.

**POLICY:** 9" BLADES WITH 6" UPPERCASE WITH 4.5" LOWERCASE LETTERS FOR TWO ROADS WITH A SPEED LIMIT UNDER 45 MPH.

**12" BLADES:** WITH 9" UPPERCASE WITH 6.75" LOWERCASE LETTERS FOR THOROUGHFARE ROADS FOUR LANES OR WIDER, TWO LANE ROADS WITH A POSTED SPEED LIMIT OF 45 MPH OR MORE.

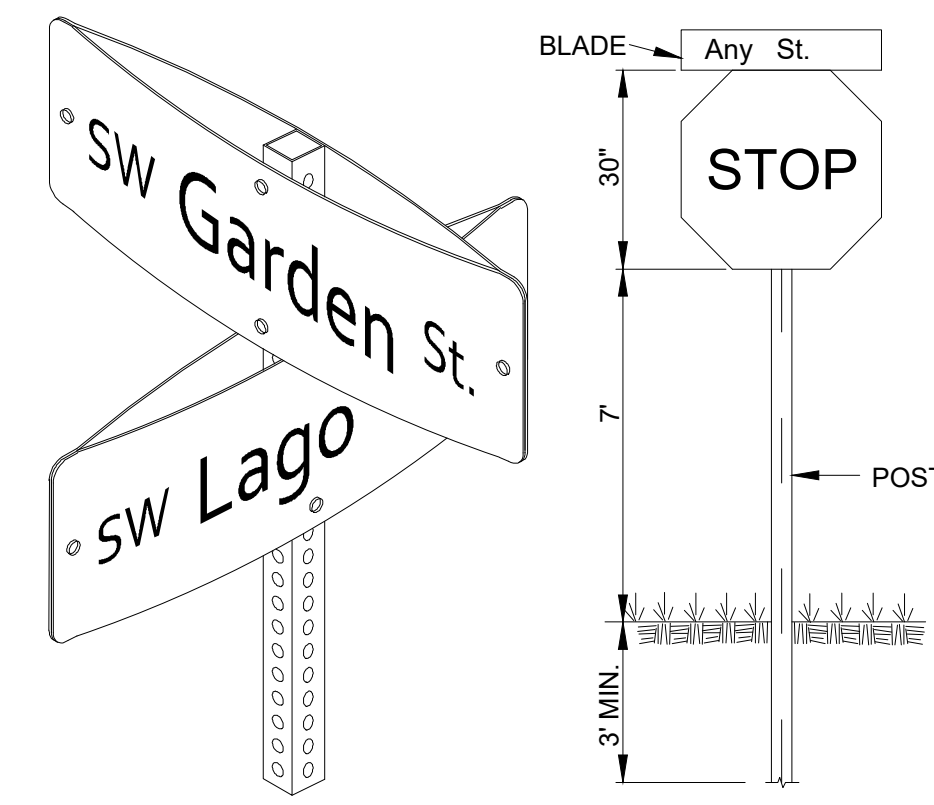
**ONLY ONE BLADE** WILL BE INSTALLED AT INTERSECTION WITH THOROUGHFARE ROAD INDICATING THE SIDE STREET NAME.



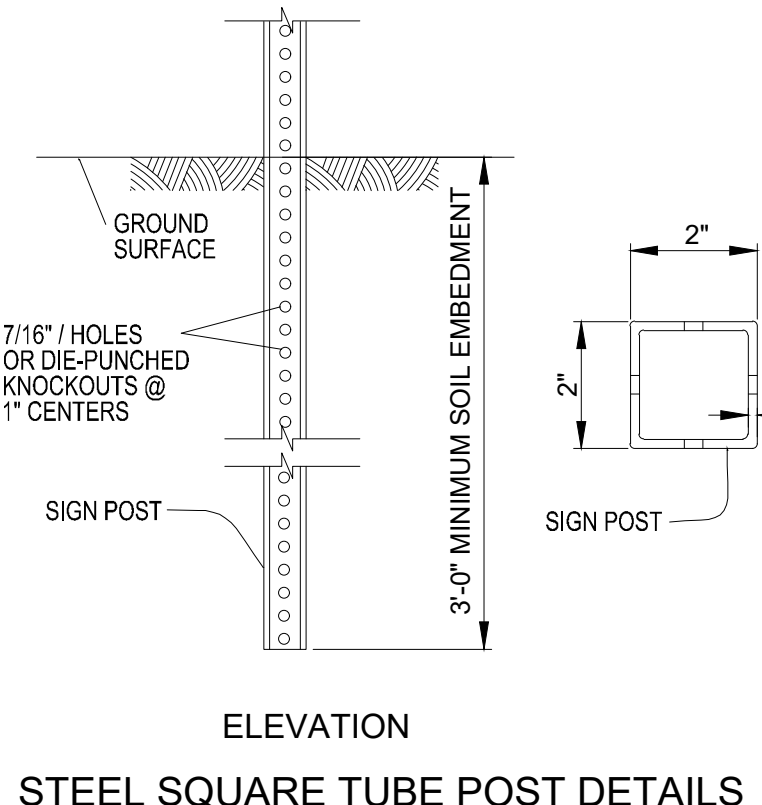
TYPICAL STOP SIGN PLACEMENT



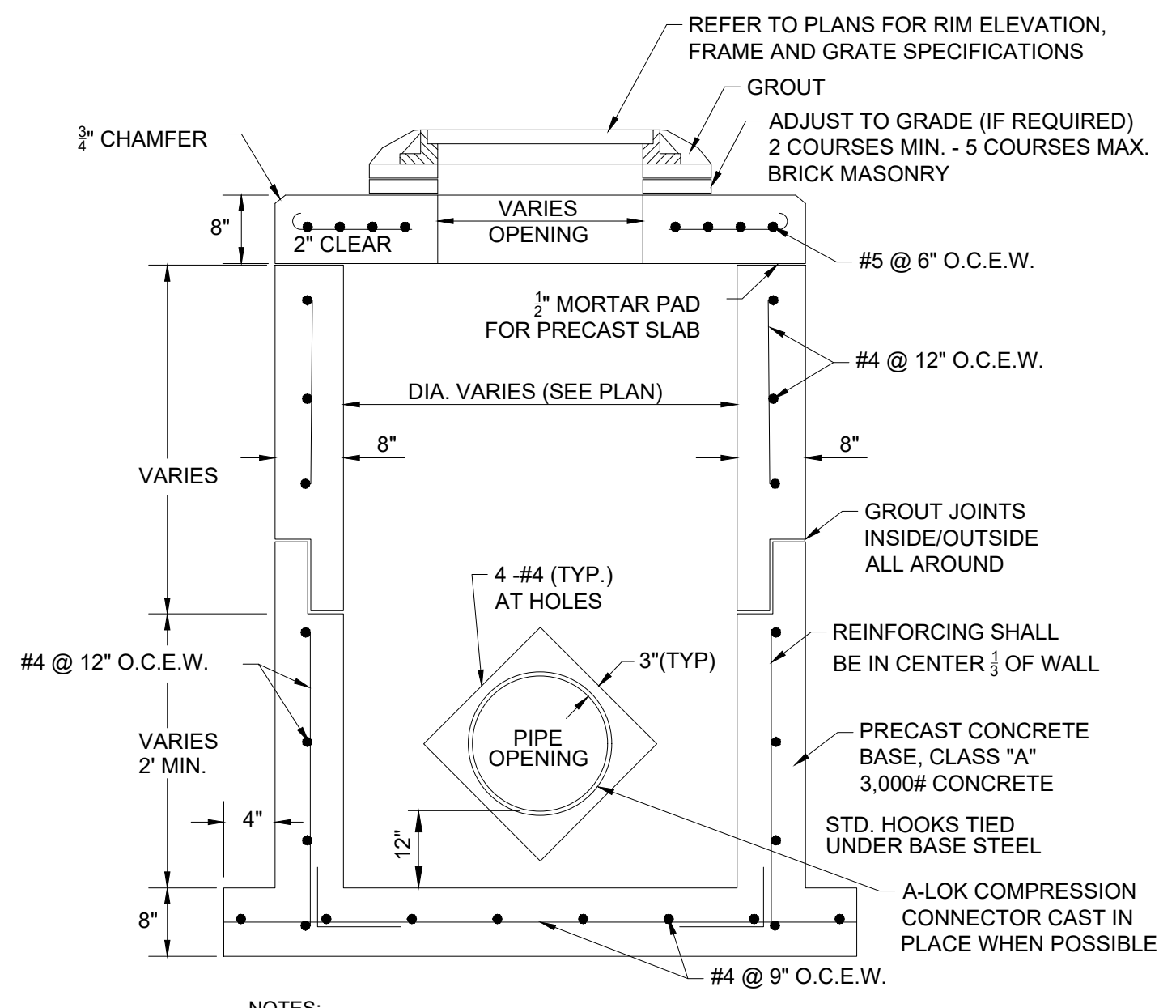
STREET NAME SIGN (SNS) OR (D-3)



STREET NAME SIGN WITH STOP SIGN



STEEL SQUARE TUBE POST DETAILS



- NOTES:**
- ALL REINFORCEMENT TO MEET CURRENT F.D.O.T. SPECIFICATIONS.
  - THIS STRUCTURE MAY BE SUBSTITUTED WITH OTHER STRUCTURES ONLY IF THE STANDARDS HAVE BEEN MET.

STORM MANHOLE DETAIL

NOTE: ALL GRADES SHOWN ARE IN NAVD88

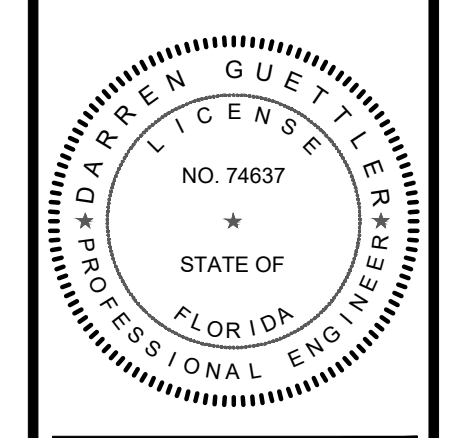


**REVISIONS:**

BY:	DATE:	COMMENT:
SG	12/15/22	PER SPRC COMMENTS
SG	05/26/23	PER SPRC COMMENTS
SG	07/25/23	PER SPRC COMMENTS

PROJECT: RIVERLAND PARCEL D  
PLAT FOUR  
CITY OF PORT ST. LUCIE,  
FLORIDA

CLIENT: RIVERLAND ASSOCIATES IV LLLP

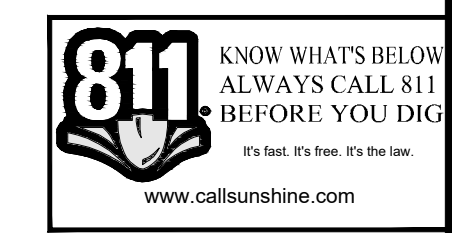


DARREN GUETTLER, PE  
FLORIDA LICENSE No. 74637  
7/27/23

PROJECT No.: 22-1022  
DRAWN BY: SOG  
CHECKED BY: DG  
DATE: 07/21/2022  
CAD I.D.: 22-1022 - PGD DETAILS

SHEET TITLE: PAVING, GRADING & DRAINAGE DETAILS

SHEET NUMBER: 08



CITY OF PSL PROJECT No. P22-288  
PSLUSD FILE No. 5268D

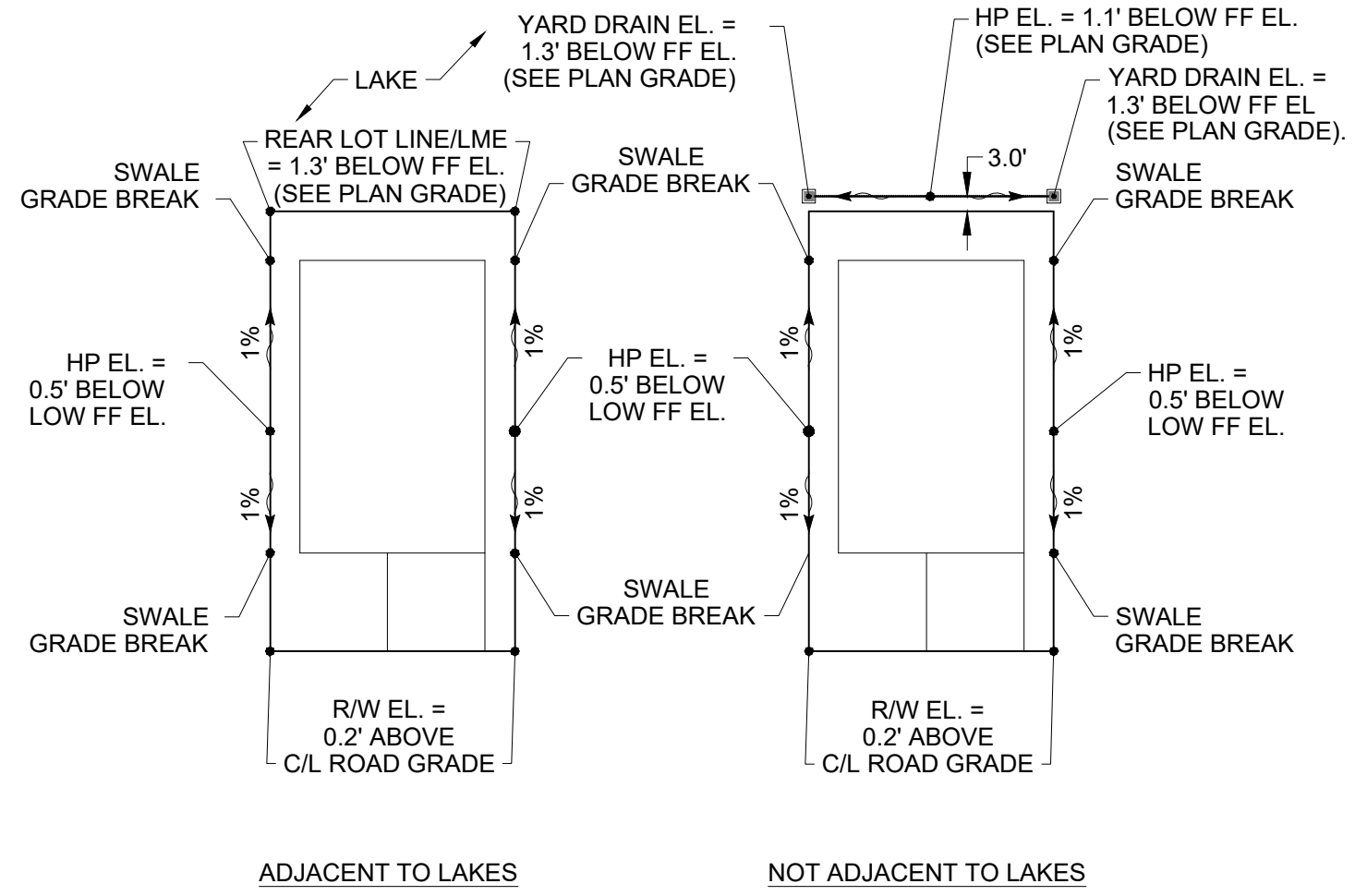
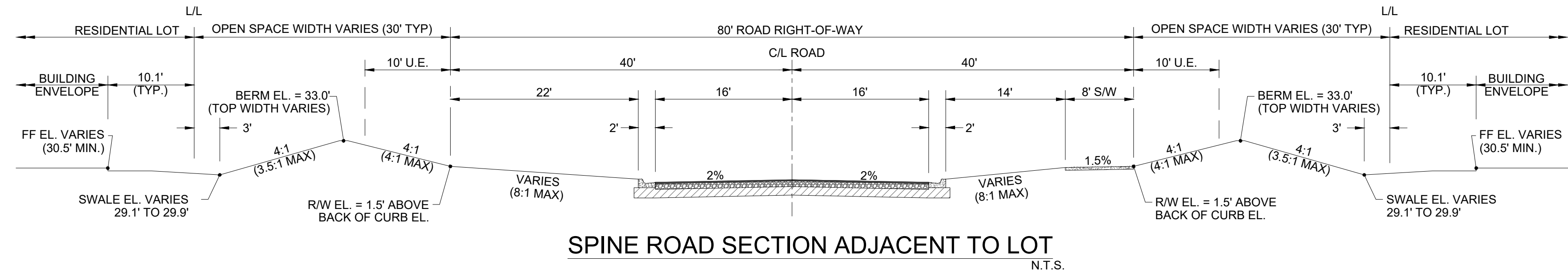
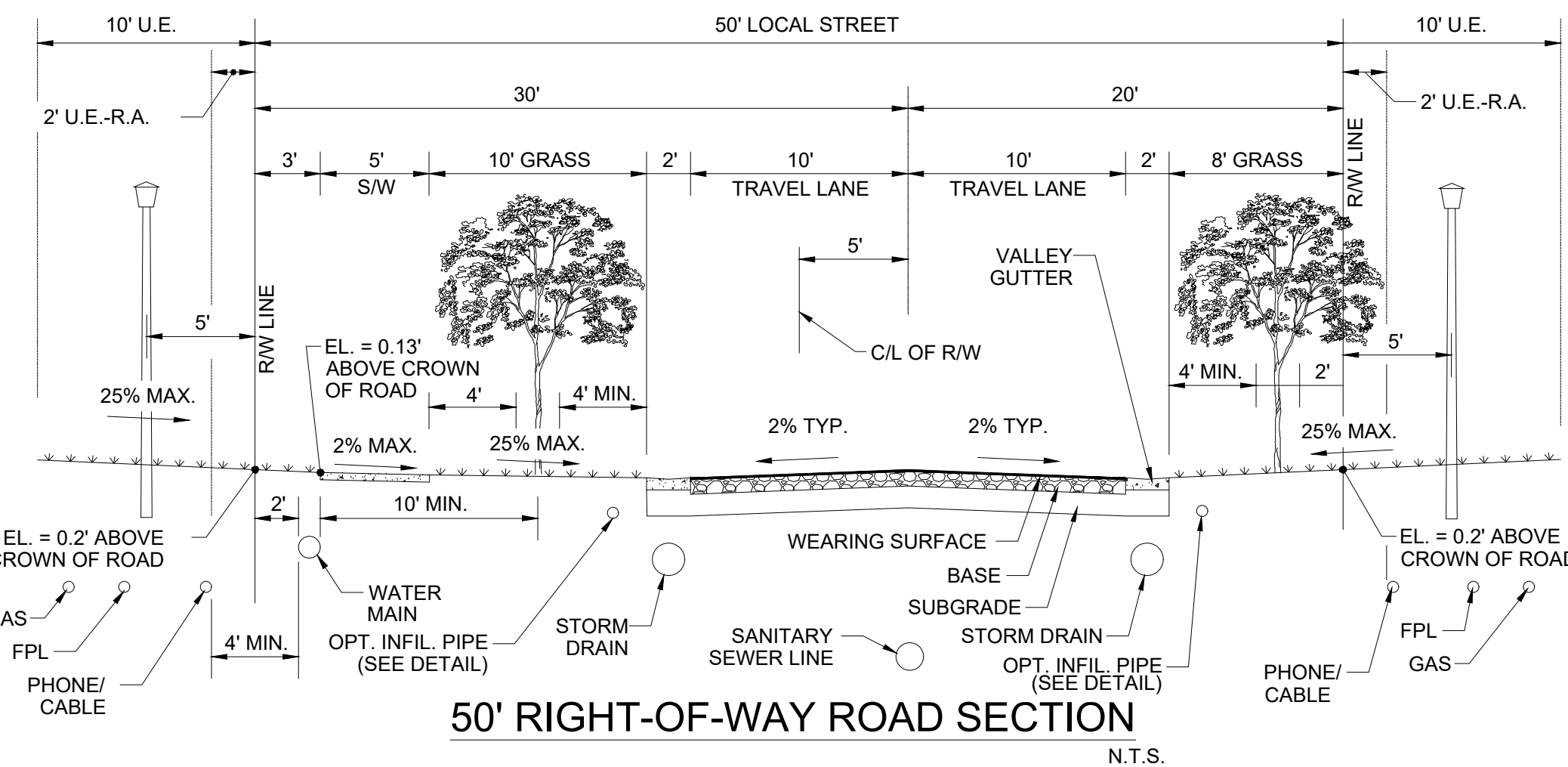


**GENERAL NOTES**

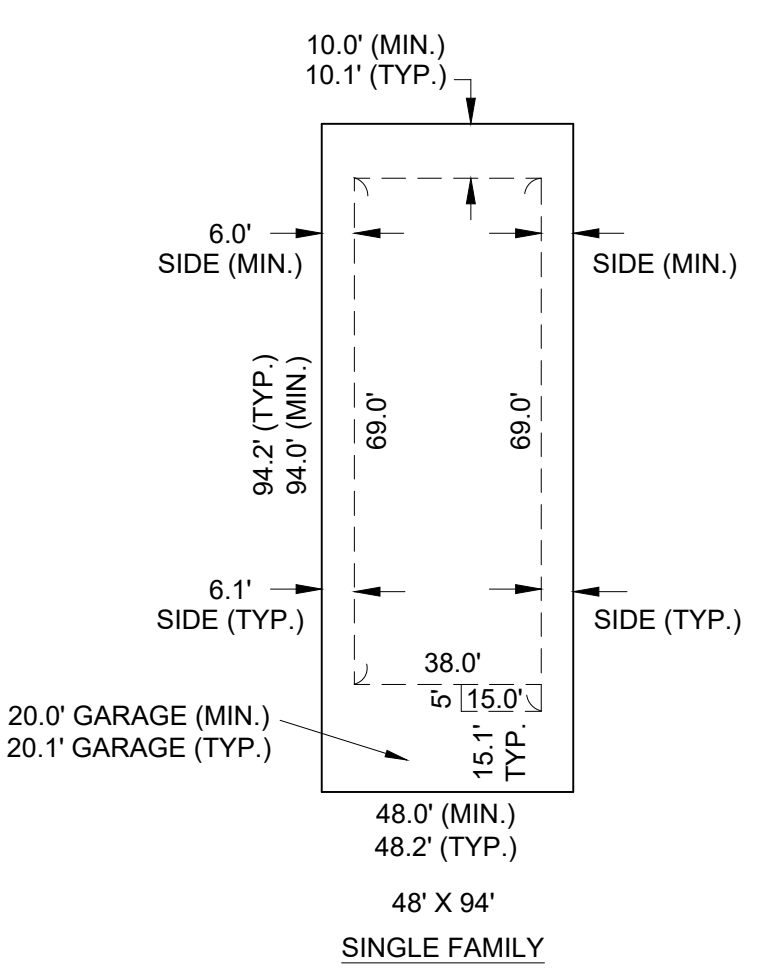
- ALL ELEVATIONS SHOWN ON THESE PLANS ARE IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
- MINIMUM PERIMETER ELEVATION SHALL BE ELEVATION 28.50' NAVD88, WHICH IS ABOVE THE 25-YEAR, 3-DAY STORM STAGE ELEVATION.
- ALL WORK SHALL BE DONE IN A WORKMANLIKE MANNER AND SHALL CONFORM TO ALL APPLICABLE CITY, COUNTY, STATE OR FEDERAL REGULATIONS AND/OR CODES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND LICENSES REQUIRED PRIOR TO INITIATING THE WORK.
- THE CONTRACTOR SHALL CALL SUNSHINE (1-800-432-4770), 48 HOURS BEFORE DIGGING FOR FIELD LOCATIONS OF UNDERGROUND UTILITIES.
- UTILITIES - IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THE EXACT LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES, WHETHER SHOWN OR NOT, PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION. NOTIFY ENGINEER PRIOR TO CONSTRUCTION OF ANY DEVIATION FROM WHAT IS SHOWN ON THE PLAN.
- AS-BUILTS - THE CONTRACTOR SHALL SUBMIT "AS-BUILT" INFORMATION OBTAINED BY A FLORIDA REGISTERED LAND SURVEYOR. INFORMATION SHALL BE IN A FORMAT SPECIFIED BY THE GOVERNING AGENCIES.
- GUARANTY - ALL MATERIAL AND EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR UNDER THIS CONTRACT SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE THEREOF, AGAINST DEFECTIVE MATERIALS, INSTALLATION AND WORKMANSHIP. UPON RECEIPT OF NOTICE FROM THE OWNER OF FAILURE OF ANY PART FOR THE GUARANTEED EQUIPMENT OR MATERIALS, DURING THE GUARANTY PERIOD, THE AFFECTED PART, PARTS OR MATERIALS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
- CLEARING AND GRUBBING - WITHIN THE LIMITS OF CONSTRUCTION, ALL VEGETATION AND ROOT MATERIAL SHALL BE REMOVED.
- GUMBO - WHERE GUMBO OR OTHER PLASTIC CLAYS ARE ENCOUNTERED, THEY SHALL BE REMOVED WITHIN THE ROADWAY AND PARKING AREAS ONE FOOT BELOW THE SUBGRADE EXTENDING HORIZONTALLY TO THE OUTSIDE EDGE OF THE SHOULDER AREA.
- MUCK AND PEAT - IF MUCK AND/OR PEAT ARE ENCOUNTERED IN THE ROAD, PARKING OR BUILDING AREA, THEY SHALL BE REMOVED COMPLETELY TO A WIDTH OF TEN FEET BEYOND THE EDGE OF PAVEMENT OR FOUNDATION AND SHALL BE BACKFILLED WITH GRANULAR MATERIAL.
- ANY EXISTING ROADWAY AND/OR UTILITY THAT IS DAMAGED BY THE CONTRACTOR SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER'S ENGINEER.
- THIS WILL BE A RETENTION SYSTEM, THERE WILL BE NO OUTFALL CONNECTIONS TO ADJACENT PARCELS FOR THIS PHASE OF CONSTRUCTION.
- EXCAVATED MATERIAL SHALL BE PLACED THROUGHOUT THE SITE WITHIN ROAD RIGHT-OF-WAYS, BUILDING PADS AND OPEN SPACE AREAS. ANY FILL REQUIRED TO BE STOCKPILED SHALL BE APPROVED BY THE CITY OF PORT ST. LUCIE PRIOR TO STOCKPILING.
- DEWATERING SHALL NOT BE REQUIRED FOR THIS PHASE OF CONSTRUCTION.
- IRRIGATION SHALL NOT BE REQUIRED FOR THIS PHASE OF CONSTRUCTION.
- PRIOR TO THE FILLING OR EXCAVATION WITHIN THE 10' FP&L EASEMENT (ORB 444, PG 600) THE EASEMENT SHALL BE ABANDONED.
- ON-SITE BURNING SHALL NOT BE AUTHORIZED UNLESS ALL APPLICABLE PERMITS HAVE BEEN OBTAINED BY THE CONTRACTOR/OWNER.
- 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).

**SECTIONS/DETAILS LEGEND:**

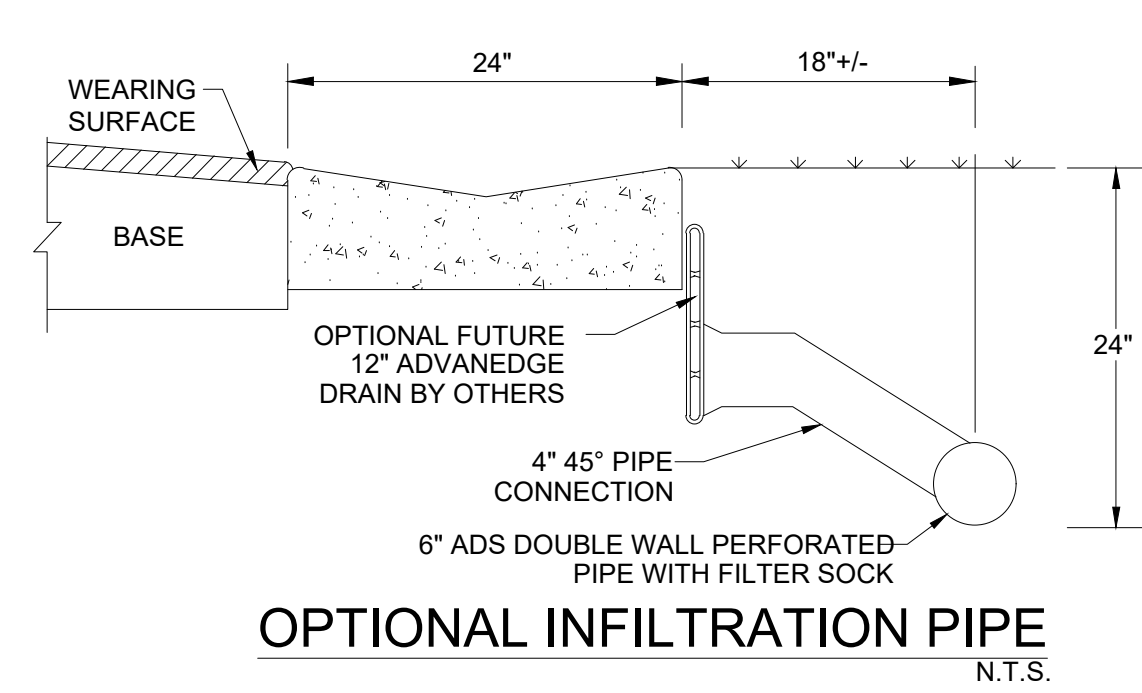
- C/L - CENTERLINE
- CONC. - CONCRETE
- EL. - ELEVATION
- FF - FINISHED FLOOR
- HPPP - HIGH PERFORMANCE POLYETHYLENE PIPE
- L/L - LOT LINE
- LME - LAKE MAINTENANCE EASEMENT
- MAX. - MAXIMUM
- MIN. - MINIMUM
- P.L. - PROPERTY LINE
- P.S.L.U.E. - CITY OF PORT ST. LUCIE UTILITY EASEMENT
- R/W - RIGHT-OF-WAY
- S/W - SIDEWALK
- T/L - TRACT LINE
- TYP. - TYPICAL
- U.F. - UTILITY EASEMENT
- U.F.-R.A. - UTILITY EASEMENT - RESTRICTED AREA



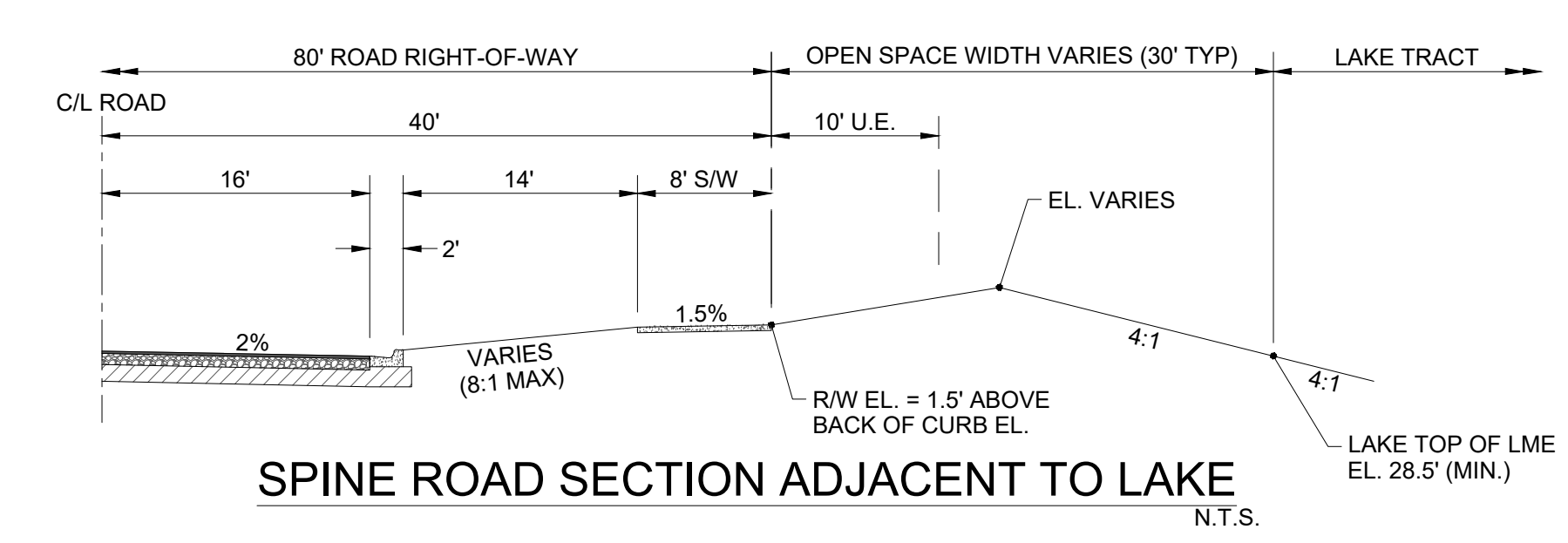
**TYPICAL LOT GRADING PLAN**  
N.T.S.



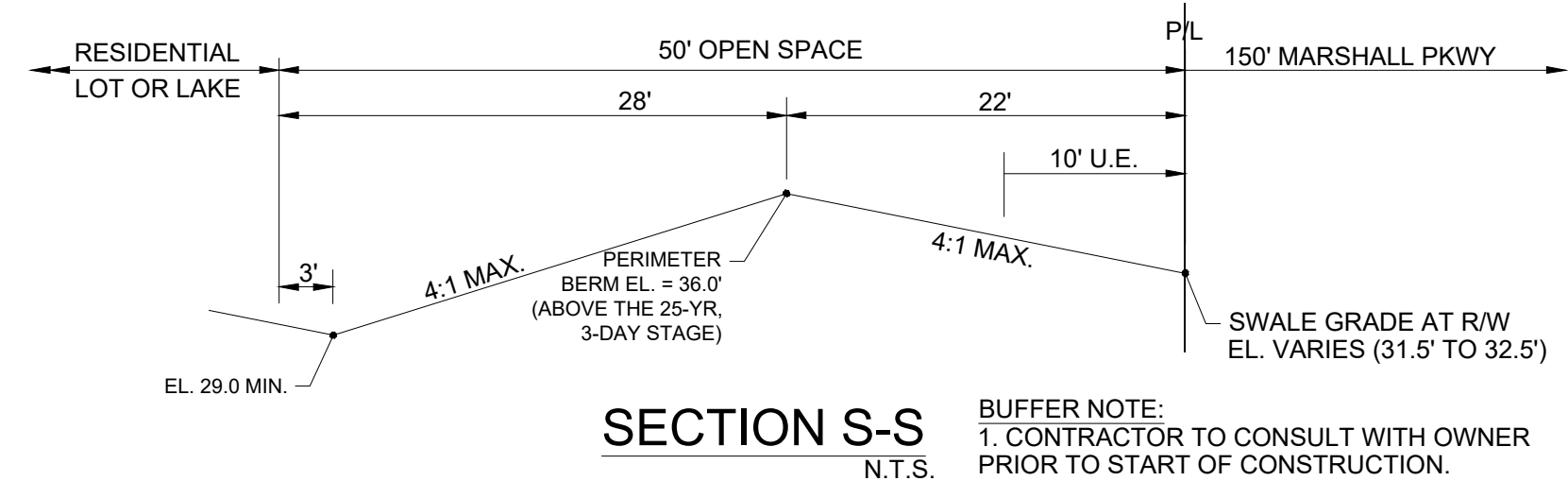
**TYPICAL LOT/BUILDING DIMENSIONS**  
N.T.S.



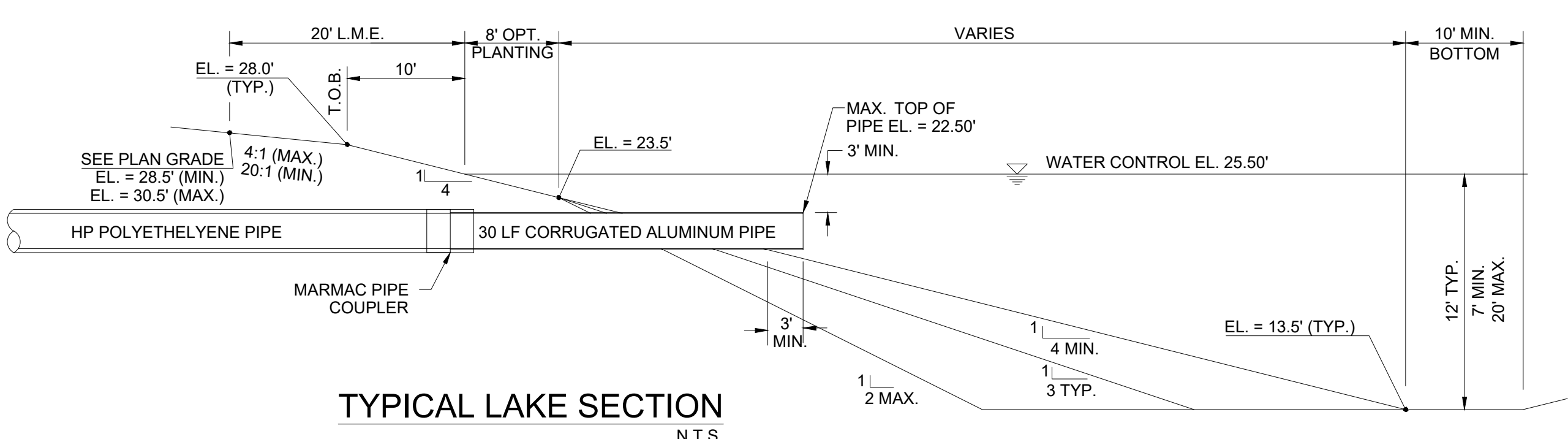
**OPTIONAL INFILTRATION PIPE**  
N.T.S.



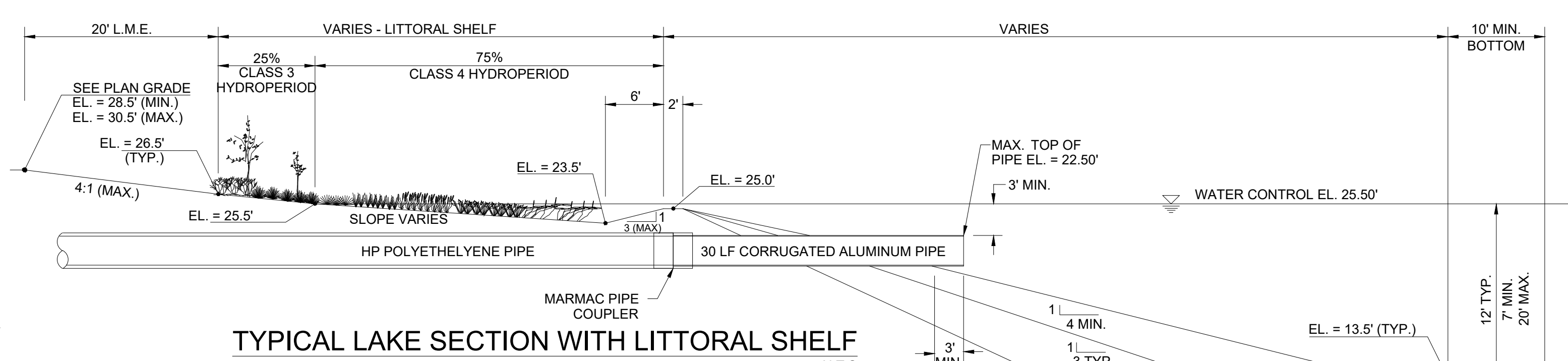
**SPINE ROAD SECTION ADJACENT TO LAKE**  
N.T.S.



**SECTION S-S**  
N.T.S.



**TYPICAL LAKE SECTION**  
N.T.S.



**TYPICAL LAKE SECTION WITH LITTORAL SHELF**  
N.T.S.

**LAKE SECTION NOTES:**

- LAKE BANKS TO BE GRADED TO THE ABOVE TYPICAL SECTION AND REGRADED WHERE FINISHED LAKE AREAS ARE DISTURBED BY OUTFALL CONSTRUCTION.
- ALL ELEVATIONS SHOWN ON THESE PLANS ARE IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). TO CONVERT ELEVATIONS TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29), ADD 1.475 FEET TO THE NAVD88 ELEVATION. FOR EXAMPLE NAVD88 + 1.475' = NGVD29.
- LAKE CONTROL ELEVATION SHALL BE 25.50 NAVD88.

**NOTE: ALL GRADES SHOWN ARE IN NAVD88**

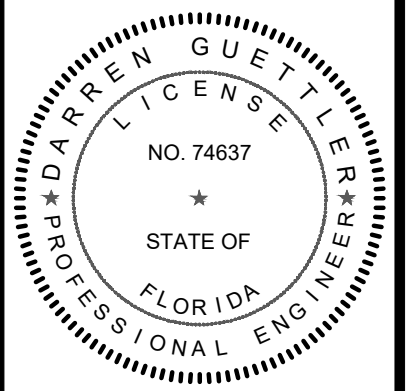


1449 NW COMMERCIAL CENTRE DR  
PORT ST. LUCIE, FL 34986  
PHONE: (772) 879-5477  
FIRE C.O.A. # 3222

REVISIONS:	BY:	DATE:	COMMENT:
SG	12/15/22		PER SPRC COMMENTS
SG	05/26/23		PER SPRC COMMENTS
SG	07/25/23		PER SPRC COMMENTS

PROJECT:  
**RIVERLAND PARCEL D  
PLAT FOUR**  
CITY OF PORT ST. LUCIE,  
FLORIDA

CLIENT:  
**RIVERLAND  
ASSOCIATES IV  
LLLP**



**DARREN GUETTLER, PE**  
FLORIDA LICENSE NO. 74637  
7/27/23

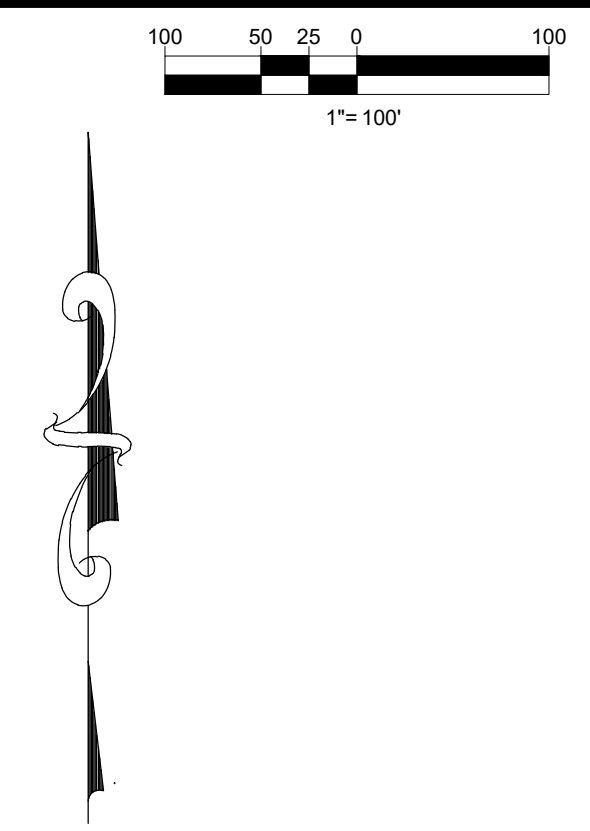
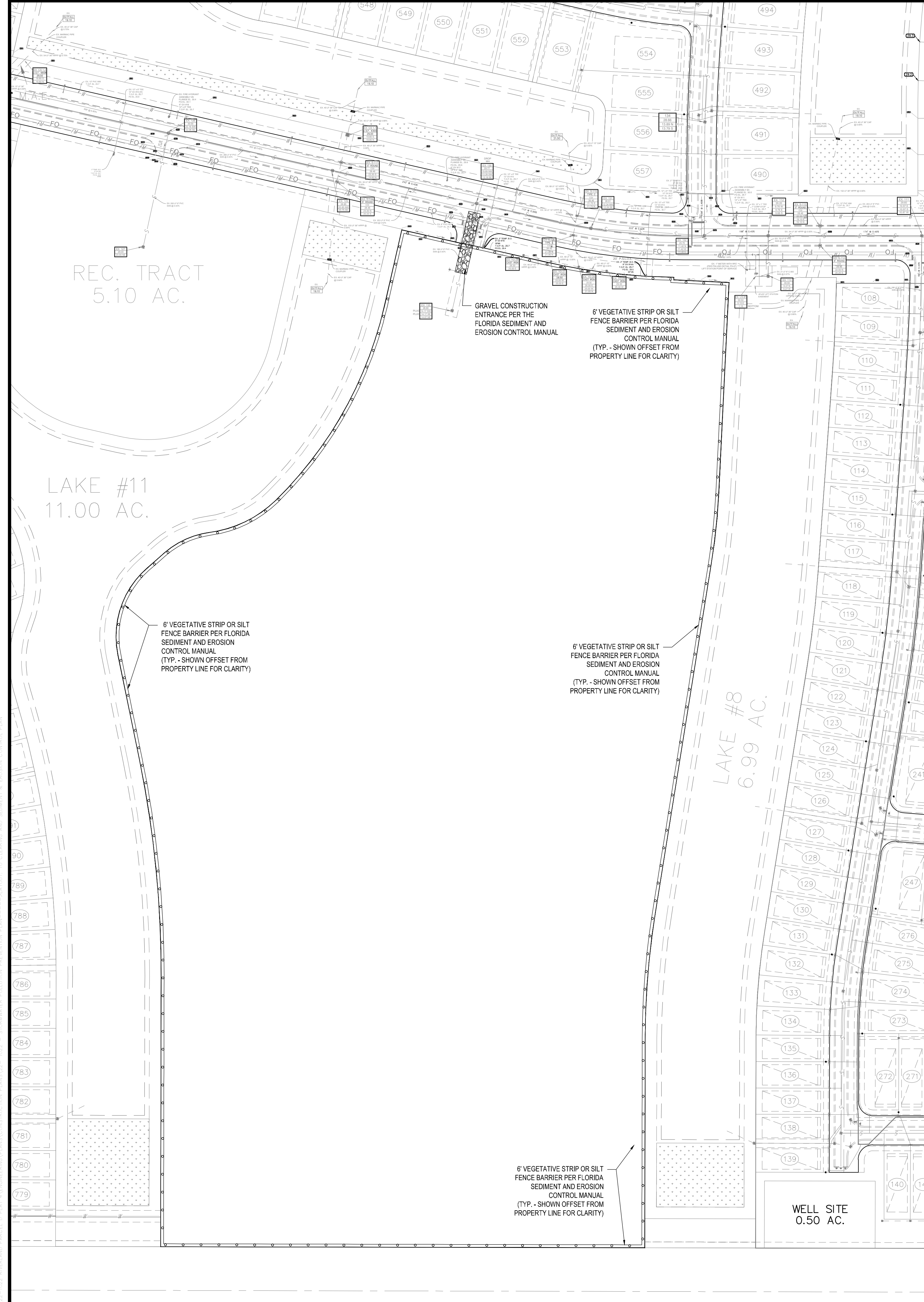
PROJECT No.: 22-1022  
DRAWN BY: SOG  
CHECKED BY: DG  
DATE: 07/21/2022  
CAD I.D.: 22-1022 - SECTIONS

SHEET TITLE:  
**CROSS SECTIONS**

SHEET NUMBER:  
**09**



CITY OF PSL PROJECT NO. P22-288  
PSLUSD FILE NO. 5268D



LEGEND	
	EXISTING WATER MAIN
	EXISTING FORCE MAIN
	EXISTING GRAVITY SEWER MAIN
	EXISTING EDGE OF PAVEMENT TO REMAIN
	EXISTING EDGE OF PAVEMENT TO BE REMOVED
	CONCRETE TO BE REMOVED
	EXISTING LIGHT POLE TO BE REMOVED
	6' VEGETATIVE STRIP OR SILT FENCE

**NOTE:**  
 EROSION AND SEDIMENT CONTROL - CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING EROSION AND SEDIMENT CONTROL USING THE LATEST F.D.D.T. STANDARDS, BALED HAY, STRAW, AND SILTATION BARRIERS WILL BE INSTALLED WHERE NEEDED TO PREVENT SILTATION OF ADJACENT PROPERTY, PUBLIC RIGHT-OF-WAY, WETLANDS AND WATERWAYS. THESE WILL REMAIN IN PLACE UNTIL GRASSING OR SODDING HAS BEEN COMPLETED OR UNTIL SILTATION AND EROSION ARE NO LONGER A THREAT TO ADJACENT PROPERTIES AND WATERWAYS. STREET SWEEPING SHALL BE PERFORMED ANYTIME SEDIMENT HAS BEEN TRACKED ONTO THE ADJACENT ROADWAYS FROM THE SITE OR THE SITE DRIVEWAYS. SHOULD DUST BECOME AN ISSUE, ALL UNSTABILIZED AREAS SHALL BE WETTED DOWN SUFFICIENTLY IN ORDER TO PREVENT DUST.

**SILT FENCE SHALL BE IN PLACE PRIOR TO CLEARING**  
 PROJECT AREA: 1,392,607 S.F. (31,970 AC)  
 AREA TO BE CLEARED: 1,392,607 S.F. (31,970 AC)

**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).

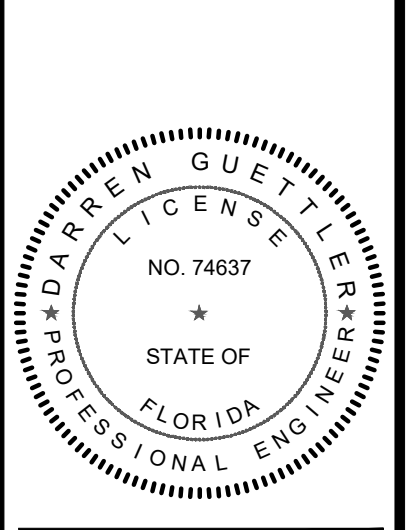
**ENVIRONMENTAL STATEMENT:**  
 THIS SITE WAS INCLUDED IN THE OVERALL RIVERLAND ENVIRONMENTAL SITE ASSESSMENT AND THIS AREA OF THE DEVELOPMENT IS PART OF THE MASTER GRADING PLAN THAT WAS APPROVED BY THE CITY AND IS CURRENTLY IN OPERATION.



REVISIONS:		
BY:	DATE:	COMMENT:
SG	12/15/22	PER SPRC COMMENTS
SG	05/26/23	PER SPRC COMMENTS
SG	07/25/23	PER SPRC COMMENTS

PROJECT:  
**RIVERLAND PARCEL D  
 PLAT FOUR**  
 CITY OF PORT ST. LUCIE,  
 FLORIDA

CLIENT:  
**RIVERLAND  
 ASSOCIATES IV  
 LLLP**



**DARREN GUETTLER, PE**  
 FLORIDA LICENSE No. 74637  
 7/27/23

PROJECT No.: 22-1022  
 DRAWN BY: SOIC  
 CHECKED BY: DG  
 DATE: 07/21/2022  
 CAD LD: 22-1022 - STORMWATER POLLUTION PREVENTION PLAN

SHEET TITLE:  
**CLEARING AND  
 SEDIMENT &  
 EROSION  
 CONTROL PLAN**  
 SHEET NUMBER:

**10**



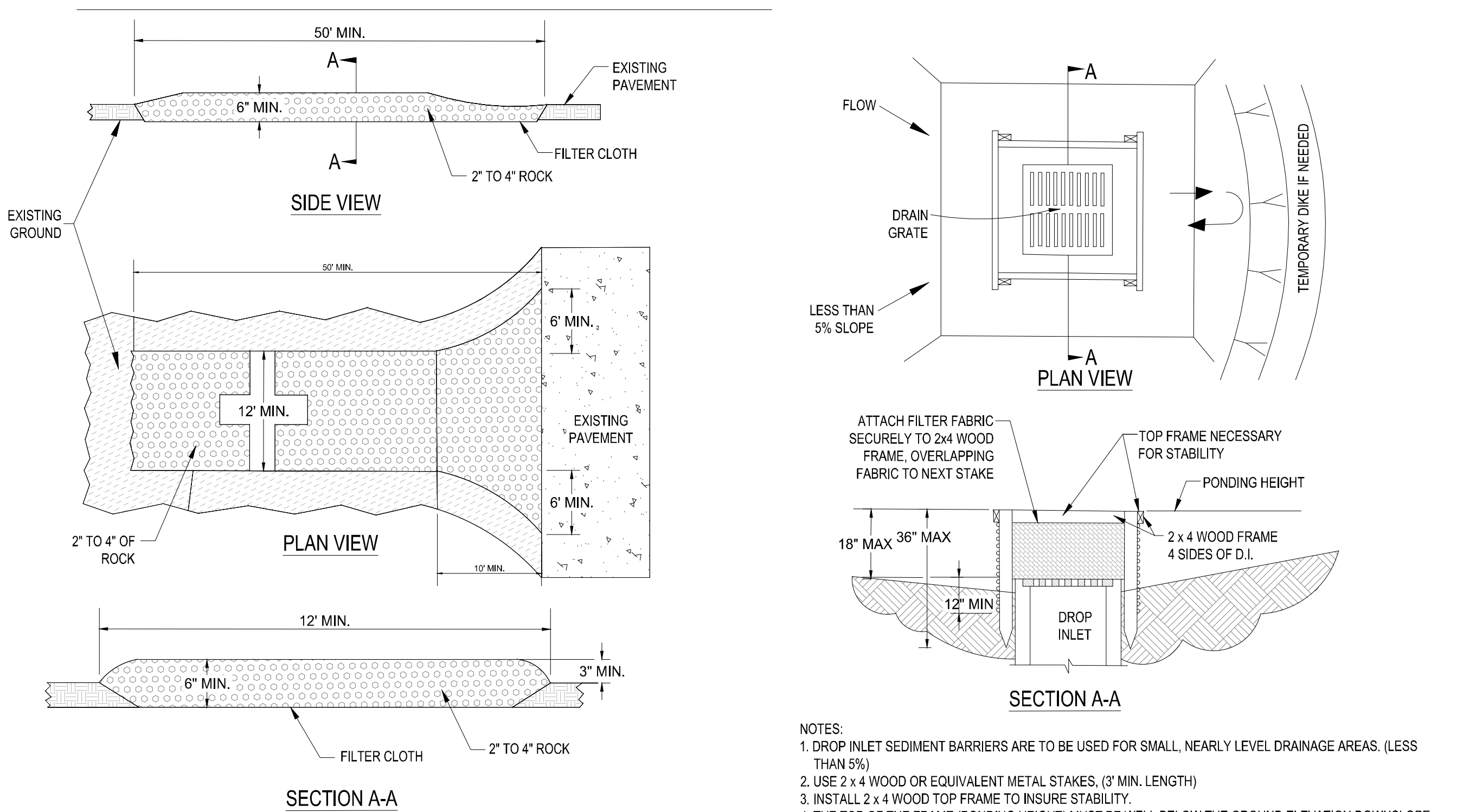
CITY OF PSL PROJECT NO. P22-288  
 PSLUSD FILE NO. 5268D

Printed on Thursday, July 27, 2023, 4:39 PM by Shirley Gomez  
 C:\PROJECTS\22-1022 - STORMWATER POLLUTION PREVENTION PLAN\22-1022 - STORMWATER POLLUTION PREVENTION PLAN\22-1022 - STORMWATER POLLUTION PREVENTION PLAN - EROSION CONTROL PLAN

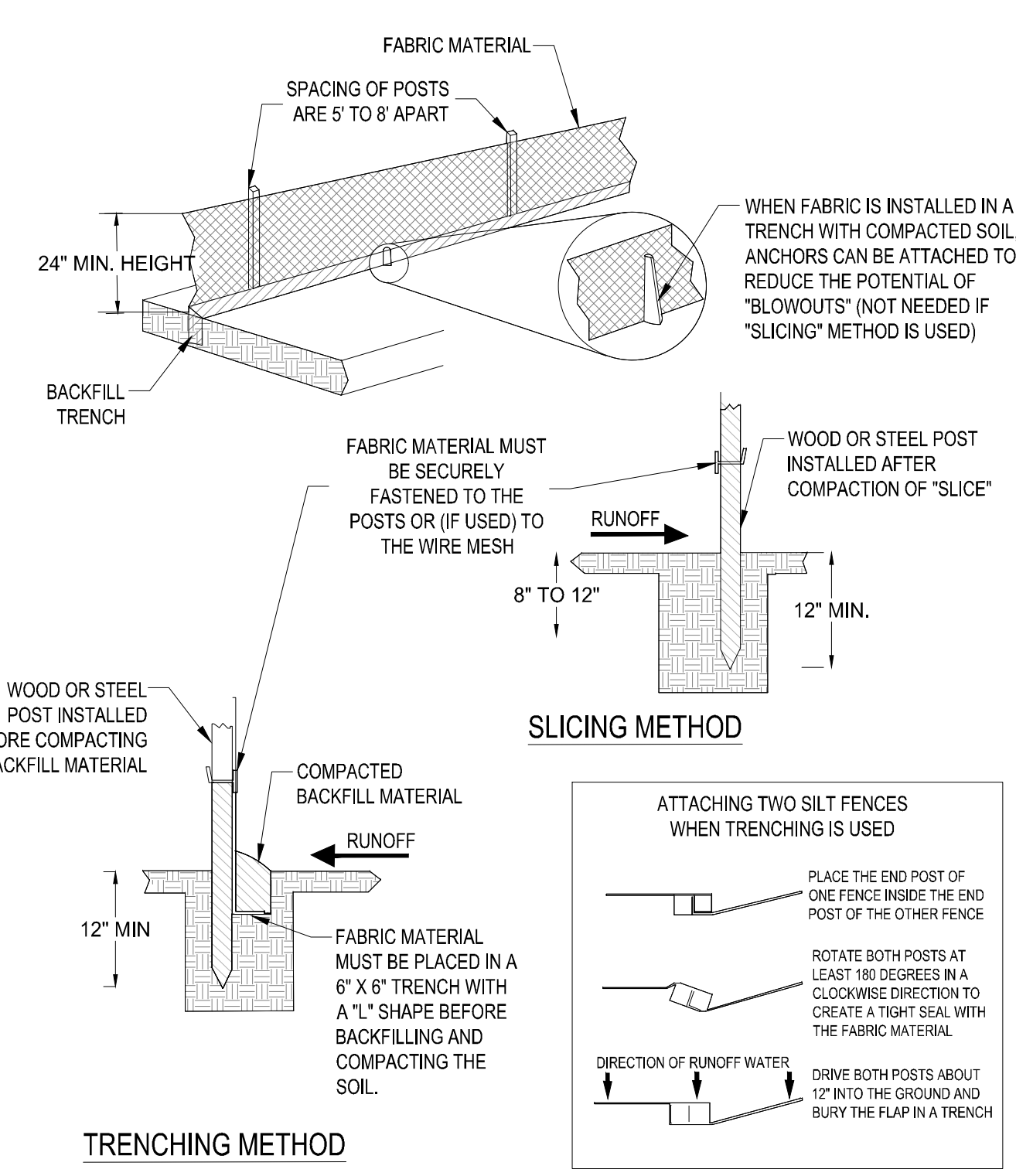
Section 1	Project Name and location information:	Riverland - Parcel D Plat 4 City of Port St. Lucie, Florida
Section 2	Describe the nature of the construction activity:	Construction activities consist of 164 Single-Family Residential units in the City of Port St. Lucie, St. Lucie County, Florida
Section 3	Describe the intended sequence of major soil disturbing activities: The following sequence of major activities shall be followed unless the contractor can propose an alternative that is equal or exceeds the erosion and sediment control practices described in this document, and is approved by the Engineer. The detailed sequence for the entire project can vary significantly from contractor to contractor. The contractor is responsible for providing a detailed sequence of construction for all construction activities.	1. Placement of all erosion control devices. 2. Clearing and grubbing, earthwork, filling of the existing lake, and excavation of the dry detention area. 3. Storm sewer construction; all storm sewer shall be constructed in the upstream direction. 4. Water & wastewater utility construction. 5. Earthwork associated with roadway, curb, subgrade, base and pavement. 6. Final seed and mulch and landscaping and sodding of the unpaved project area as called for in plans.
Section 4	Total area of the site:	31.97 acres
Section 5	Total area of the site to be disturbed:	31.97 acres
Section 6	Existing data describing the soil or quality of any stormwater discharge from the site: The soils are silty fine sand to clean sands. The small sand particle size will make the potential for erosion high.	Runoff Data Runoff Coefficients: Before: 0.81 During: 0.30-0.81 After: 0.81
Section 7	Estimate the drainage area size for each discharge point:	31.97 acres
Section 8	Latitude and longitude of each discharge point and identify the receiving water or MS4 for each discharge point:	There is one (1) discharge point for the project. Lat. 27°12'21.84" N, Long. 80°26'55.86" W Receiving Water is the C-23 Canal
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.  The following defines general quantities for the sequence of construction and the use of stabilization and structural practices. The contractor is also responsible for documenting this portion of the SWPPP. The construction of this project is expected to last twelve months.  Install stabilized construction entrances at all common areas where construction vehicles will be entering and exiting the construction site. The driveways shall be constructed per the Florida Sediment and Erosion Control Manual.  Install silt fences, Type III, around all ditch bottom inlets on the project, and the project perimeter. Filter cloth under the grates on catch basins may be used in lieu of a silt fence.  Install staked turbidity barriers at the locations as indicated in the Paving and Drainage Plan (discharge points).	
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.  Temporary: Seed and mulch, and sod in accordance with Specification Section 104.  Permanent: All stabilization practices shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 7 days after the construction activity in that portion of the site has temporarily ceased. The contractor is also responsible for documenting this portion of the SWPPP.	
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.	
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.	
Section 13	N/A - less than 10 acres	
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.	
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 manufactures' 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 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.  The contractor is required to submit a dewatering plan to SFWMD for approval prior to commencement of any construction activities that require dewatering. This plan shall include any stockpile areas and excavation areas. The contractor is responsible for documenting this portion of the SWPPP. If contaminated soil or groundwater is encountered, contact the District Hazardous Materials Coordinator
Section 22	Site Map  The construction plans will substitute as site maps. Locations of the required information are described below.  Drainage Patterns: The drainage flow directions are shown on the Paving and Drainage Plan.  Approximate Slopes: The slopes of the site can be seen on the Grading and Drainage plan and cross sections.  Areas of Soil Disturbance: The areas to be disturbed are indicated on the plan. Any areas where permanent features are shown to be constructed above or below ground will be disturbed.  Areas not to be disturbed: Those areas shown outside of the limits of the silt fence will not be disturbed.  Locations of Controls: The erosion control devices and locations are shown on the Sediment & Erosion Control Plan.  Areas to be stabilized: Temporary stabilization practices are also shown on the plans, if applicable. Areas of permanent stabilization are shown on the Paving and Drainage Plan.  Surface Water: Surface water for the project is collected by inlets and culverts and directed to the Water Management Tracts within the Riverland Development, which are part of the Riverland Master Stormwater Management System. All water quality and attenuation is provided by the master system.  Receiving Waters: The Riverland Master Stormwater Management System discharges to the C-23 Canal and the ultimate outfall is the North Fork of the St. Lucie River.
Section 23	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. This document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."  Name (Operator and/or Responsible Authority) _____ Date _____

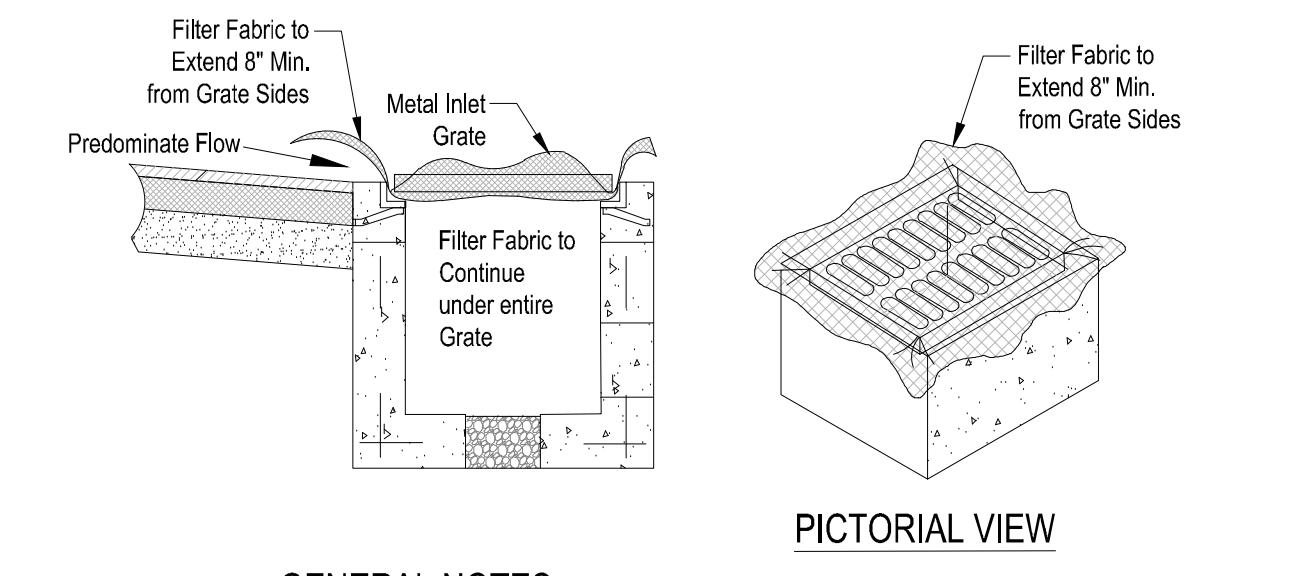
Name	Title	Company Name, Address and Phone Number	Responsible Items	Date



**SOIL TRACKING PREVENTION DEVICE**



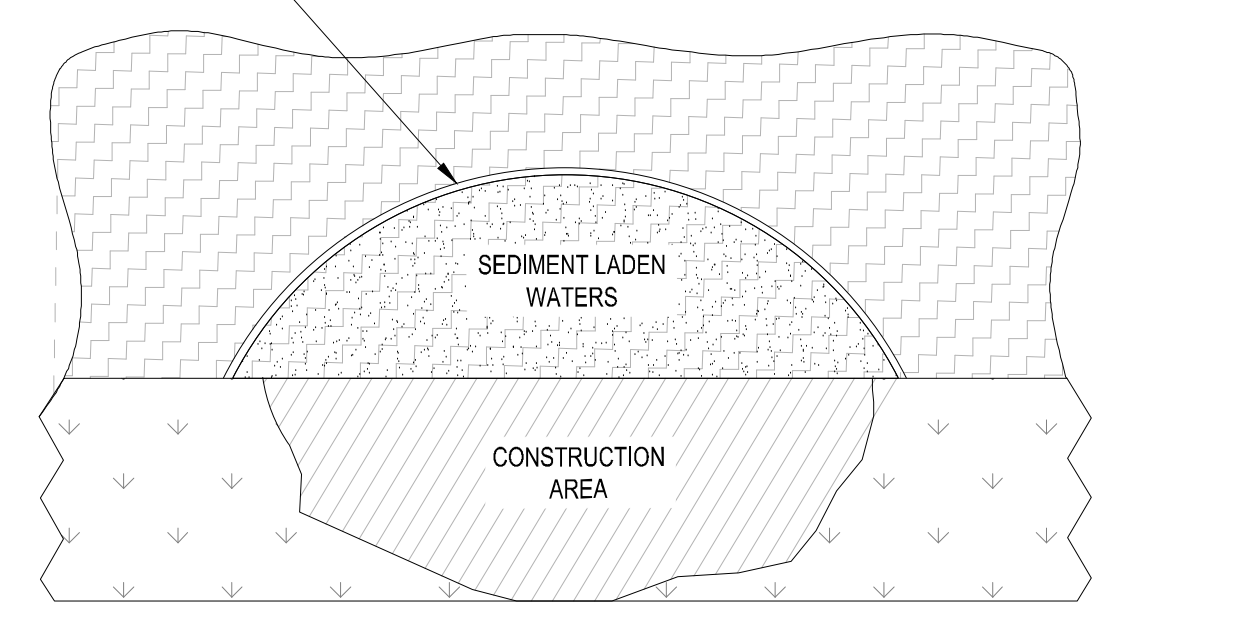
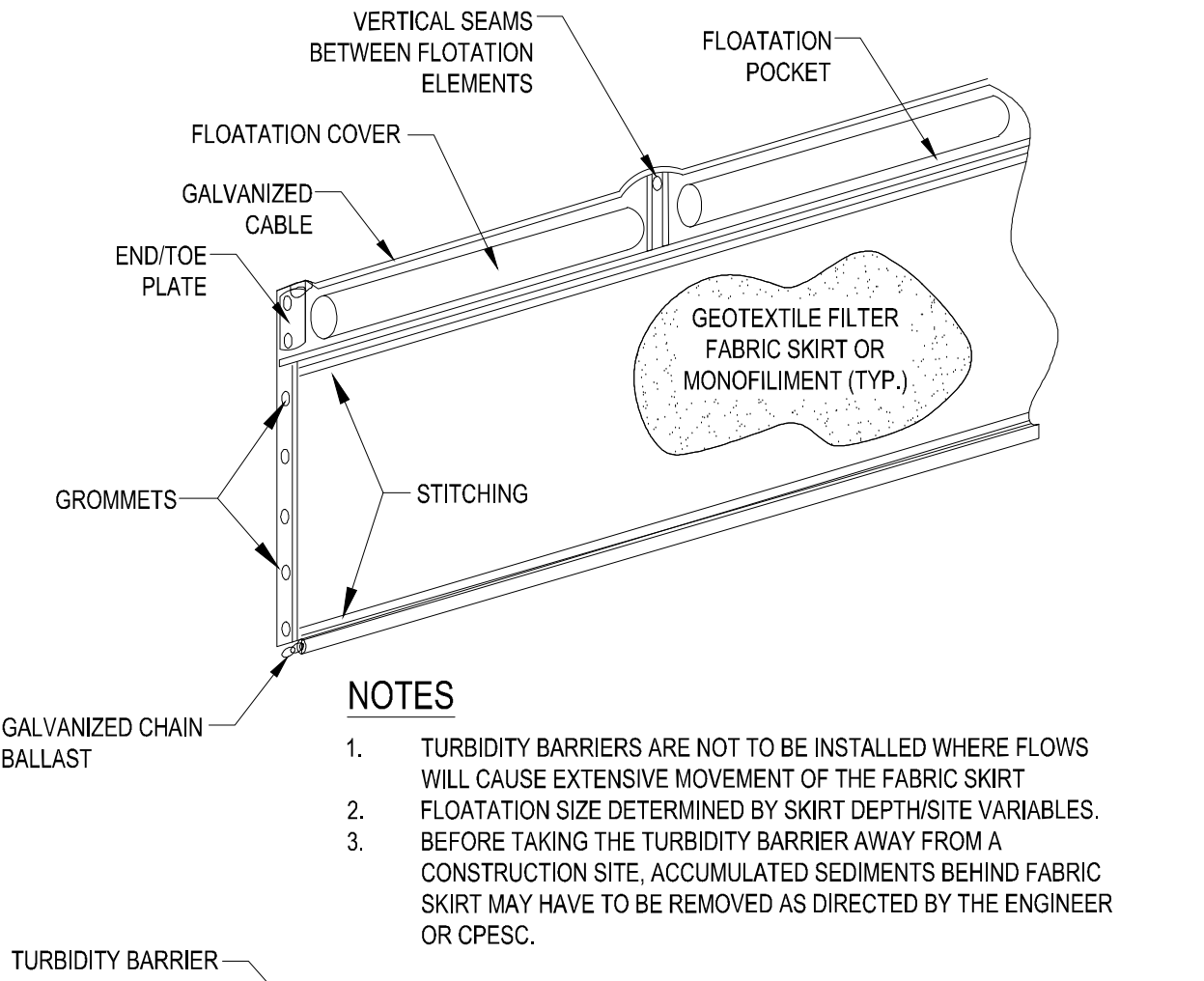
**SILT FENCE BARRIER INSTALLATION**



**GENERAL NOTES:**  
1. THIS INLET IS DESIGNED WITH FILTER FABRIC PROTRUDING 8" FROM SIDES FOR GRIPPING WHEN SEDIMENT NEEDS TO BE CLEARED AFTER FINAL CONSTRUCTION.  
2. FILTER FABRIC TO BE INSTALLED AND TRIMMED BEFORE GRATE IS INSET.

**FILTER FABRIC DETAIL**

**SILT FENCE DROP INLET SEDIMENT BARRIER**



**TURBIDITY BARRIER**

**VELCON**  
ENGINEERING & SURVEYING, LLC  
1449 NW COMMERCIAL CENTRE DR  
PORT ST. LUCIE, FL 34986  
PHONE: (772) 878-5477  
FIRE C.O.A. # 3222

BY:	DATE:	COMMENT:
SG	12/15/22	PER SPRC COMMENTS
SG	05/26/23	PER SPRC COMMENTS
SG	07/25/23	PER SPRC COMMENTS

PROJECT: RIVERLAND PARCEL D PLAT FOUR CITY OF PORT ST. LUCIE, FLORIDA  
 CLIENT: RIVERLAND ASSOCIATES IV LLLP

**DARREN GUETTLER, PE**  
FLORIDA LICENSE No. 74637  
7/27/23

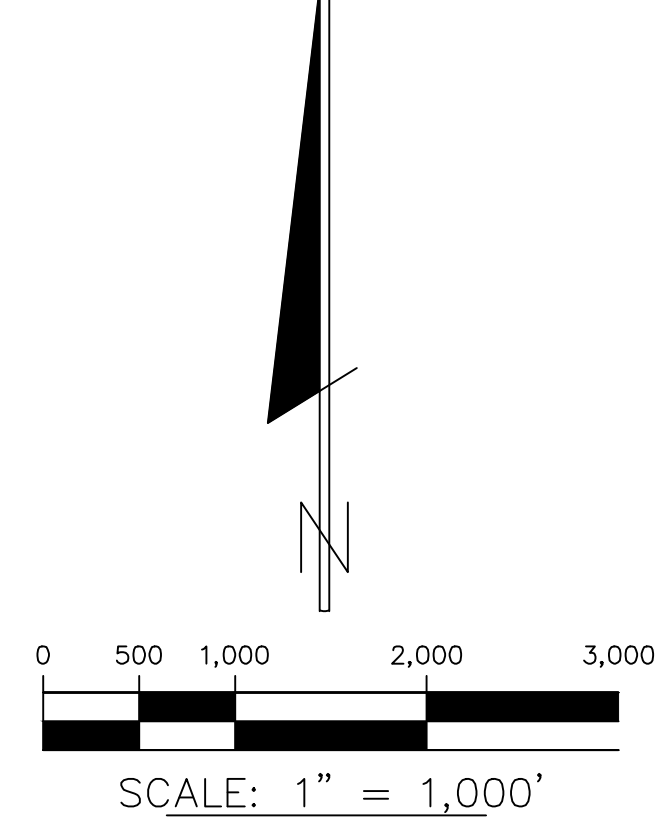
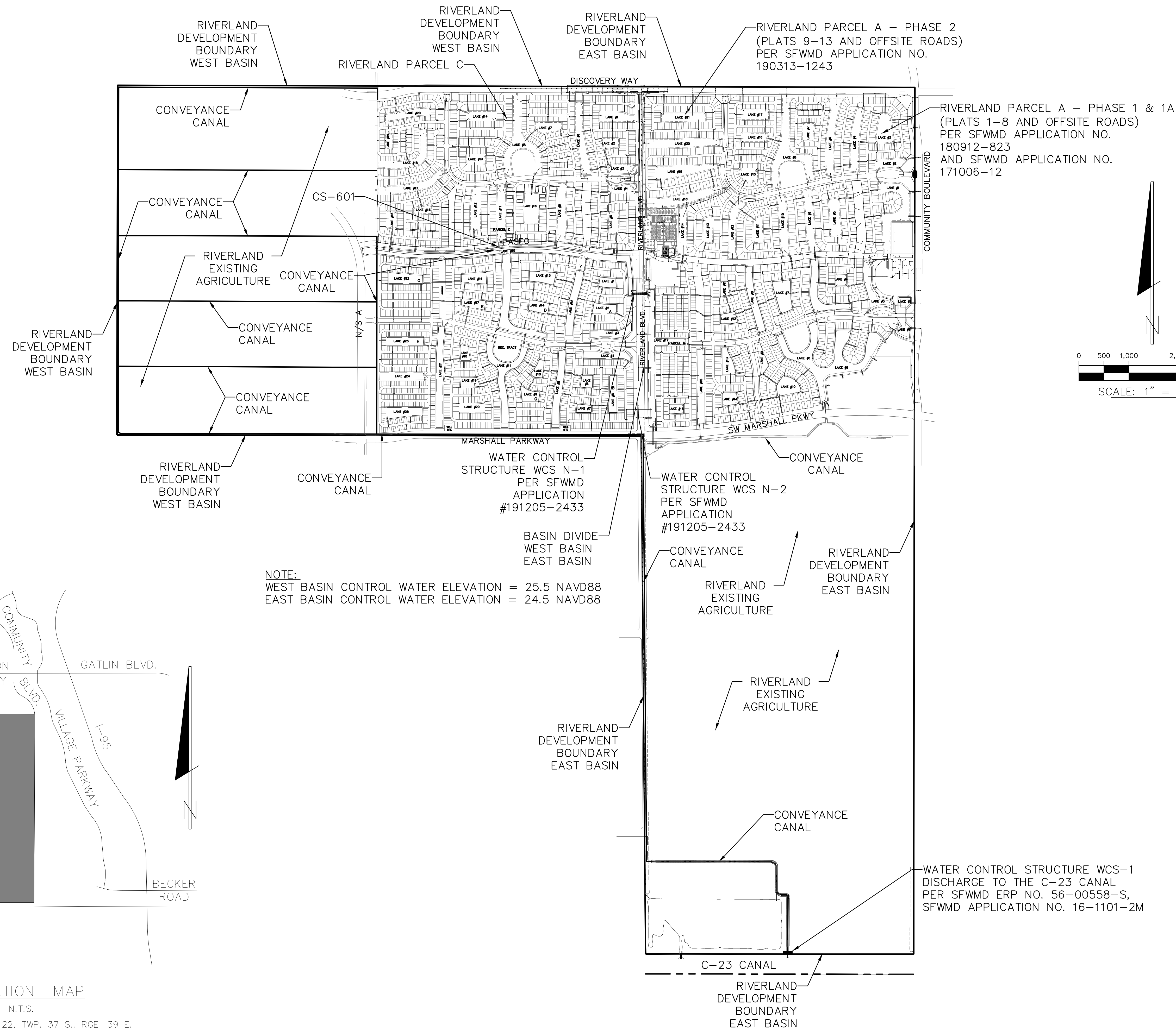
PROJECT No.:	22-1022
DRAWN BY:	SGC
CHECKED BY:	DG
DATE:	07/21/2022
CAD ID:	22-1022-STORMWATER POLLUTION PREVENTION PLAN

**STORMWATER POLLUTION PREVENTION PLAN**

SHEET NUMBER: **11**

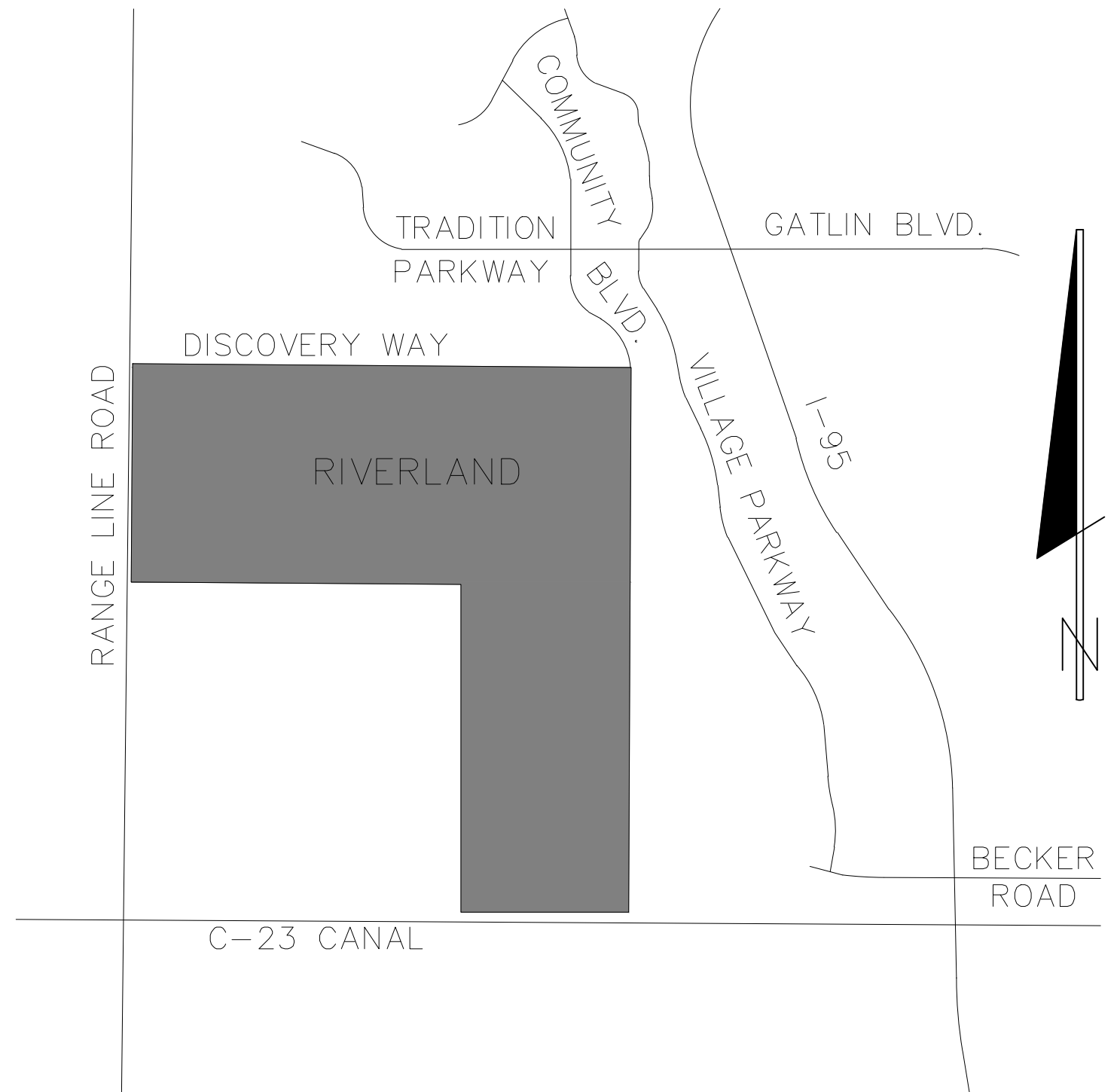
CITY OF PSL PROJECT No. P22-288  
PSLUSD FILE NO. 5268D

REVISIONS:	BY:	DATE:	COMMENT:
	SG	12/15/22	PER SPRC COMMENTS
	SG	05/26/23	PER SPRC COMMENTS
	SG	07/25/23	PER SPRC COMMENTS



**NOTE:**  
WEST BASIN CONTROL WATER ELEVATION = 25.5 NAVD88  
EAST BASIN CONTROL WATER ELEVATION = 24.5 NAVD88

WATER CONTROL STRUCTURE WCS-1 DISCHARGE TO THE C-23 CANAL PER SFWMD ERP NO. 56-00558-S, SFWMD APPLICATION NO. 16-1101-2M

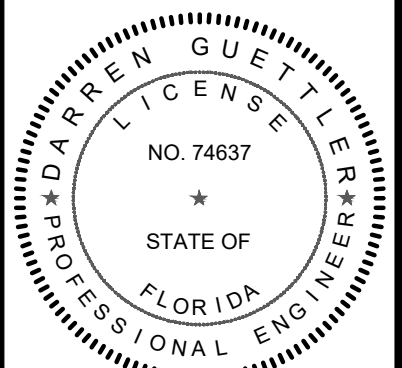


**LOCATION MAP**  
N.T.S.

SEC. 15, 16, 21 & 22, TWP. 37 S., RGE. 39 E.

**RIVERLAND PARCEL D  
PLAT FOUR**  
CITY OF PORT ST. LUCIE,  
FLORIDA

**RIVERLAND ASSOCIATES IV  
LLLP**

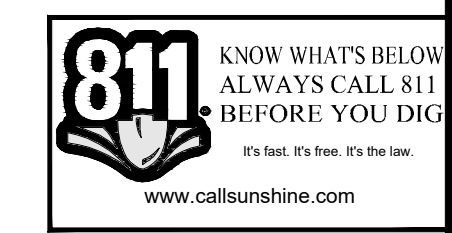


**DARREN GUETTLER, PE**  
FLORIDA LICENSE No. 74637  
7/27/23

PROJECT No.: 22-1022  
DRAWN BY: SOG  
CHECKED BY: DG  
DATE: 07/21/2022  
SHEET: MASTER DRAINAGE PLAN

**MASTER  
DRAINAGE PLAN**

SHEET NUMBER:  
**12**



CITY OF PSL PROJECT NO. P22-288  
PSLUSD FILE NO. 5268D