

WILDLIGHT COMMERCE PARK PARCEL B

NASSAU COUNTY, FLORIDA

PREPARED FOR

PATTILLO INDUSTRIAL REAL ESTATE

5170 PEACHTREE ROAD, BLDG. 100, STE. 400
ATLANTA, GEORGIA
678-926-5944



LOCATION MAP
N.T.S.

DRAWING INDEX			
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England-Thims & Miller, Inc.
14775 Old St. Augustine Road
Jacksonville, FL 32258
TEL: (904) 642-8990
FAX: (904) 646-9485
CA - 00002584 LC - 0000316

FIRE FLOW TEST	
A FLOW TEST WAS CONDUCTED ON 03/23/2023.	
THE FLOW HYDRANT LOCATION: A1A/SR 200 & STILL QUARTERS RD (76174)	
THE STATIC RESIDUAL HYDRANT LOCATION: A1A/SR 200 & OLD YULEE RD (76173)	
NUMBER OF PORTS	3
DIAMETER OF PORTS (INCH)	2.5
PITOT PRESSURE (PSI)	16
STATIC PRESSURE (PSI)	59
RESIDUAL PRESSURE (PSI)	41
THE FOLLOWING COMPUTATIONAL RESULTS BASED ON THE ABOVE VARIABLES AND NFPA SECTION 291 (2002 EDITION) ARE AS FOLLOWS:	
FLOW AT TEST (GPM):	2,025
FLOW AT 20 PSI (GPM):	3,074
THESE RESULTS REFLECT SYSTEM CONDITIONS AT THE TIME OF THE TEST. FLOW WILL FLUCTUATE OVER TIME IN A DYNAMIC SYSTEM AND SHOULD BE TAKEN INTO CONSIDERATION WHEN INTERPRETING OR USING THIS DATA. IF YOU HAVE ANY QUESTIONS CONCERNING THIS MATTER, CONTACT CURTIS PERRIN VIA E-MAIL AT: CPERRIN@JEACOM	

NOTE: JEA AVAILABILITY NO. 2023-1007
1. THESE PLANS ARE DESIGNED IN ACCORDANCE WITH 2023 JEA STANDARDS.

NOTE: IF YOU DIG IN FLORIDA, YOU ARE REQUIRED TO CALL SUNSHINE STATE ONE-CALL OF FLORIDA, INC. 1-800-432-4770 FOR LOCATES. IT'S THE LAW.

VERTICAL DATUM USED FOR THIS PROJECT: NAVD 1988

COVER SHEET
WILDLIGHT COMMERCE PARK PARCEL B
FOR
PATTILLO INDUSTRIAL REAL ESTATE

DRAWING NUMBER
1

PLANS PREPARED UNDER THE DIRECTION OF:
REVISIONS:
ETM NO. 19-239-07-002
DRAWN BY: JMB
DESIGNED BY: JMB
CHECKED BY: JZB
DATE: Issue Date

England-Thims & Miller, Inc.
 14775 Old St. Augustine Road
 Jacksonville, FL 32258
 TEL: (904) 642-8990
 FAX: (904) 646-9485
 CA - 00002584 LC - 0000316
ETM
 VISION • EXPERIENCE • RESULTS

THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY JON-MICHAEL BARQUIN, P.E. ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

THE FLORIDA PROFESSIONAL ENGINEER NAMED HEREIN SHALL BE RESPONSIBLE FOR THE DRAWINGS LISTED IN THIS BOX IN ACCORDANCE WITH RULE 61G15-23-003, F.A.C. THESE SHEETS HAVE BEEN SIGNED AND SEALED USING A DIGITAL SIGNATURE BY: JON-MICHAEL BARQUIN P.E. NUMBER: 94926

ENGLAND-THIMS & MILLER, INC.
14775 OLD ST. AUGUSTINE ROAD
JACKSONVILLE, FLORIDA 32258
PHONE (904) 642-8990
CERTIFICATE OF AUTHORIZATION NUMBER: 00002584

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REVISIONS:

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SIGNATURE SHEET

WILDLIGHT COMMERCE PARK PARCEL B

FOR

PATTILLO INDUSTRIAL REAL ESTATE

DRAWING NUMBER

2

THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY JONATHAN FRANCIS KORMAN, ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

THE FLORIDA REGISTERED LANDSCAPE ARCHITECT NAMED HEREIN SHALL BE RESPONSIBLE FOR THE DRAWINGS LISTED IN THIS BOX. THESE SHEETS HAVE BEEN SIGNED AND SEALED USING A DIGITAL SIGNATURE BY: JONATHAN FRANCIS KORMAN L.A. NUMBER: 6667357

ENGLAND-THIMS & MILLER, INC.
14775 OLD ST. AUGUSTINE ROAD
JACKSONVILLE, FLORIDA 32258
PHONE (904) 642-8990
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GENERAL SITE NOTES:

- 1. ALL WORK SHALL BE PERFORMED IN A SAFE MANNER...
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE JOB SITE...
3. THE CONTRACTOR SHALL VERIFY LOCATIONS OF EXISTING STRUCTURES...
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING A PERMANENT STAND OF SOD AND/OR GRASS...
5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO EITHER CONDUCT ANY FIELD EXPLORATION OR ACQUIRE ANY GEOTECHNICAL ASSISTANCE...
6. ALL MATERIALS AND WORKMANSHIP ARE TO BE WARRANTED BY THE CONTRACTOR...
7. THE LOCATION OF ALL EXISTING UTILITIES, STRUCTURES AND IMPROVEMENTS SHOWN ON THE DRAWINGS IS BASED ON LIMITED INFORMATION...
8. UNLESS DIRECTED OTHERWISE BY THE OWNER OR THE ENGINEER, THE CONTRACTOR WILL CONTRACT WITH AN INDEPENDENT TESTING LABORATORY...
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSURANCE REQUIRED FOR THE PROJECT...
10. THE CONTRACTOR SHALL COORDINATE THE WORK WITHIN COUNTY OR STATE RIGHT-OF-WAY WITH THE APPROPRIATE AGENCIES...
11. IF DEWATERING CAPACITY REQUIRES A CONSUMPTIVE USE PERMIT (C.U.P.) IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE PERMIT...
12. PRIOR TO ANY DISCHARGE OF GROUND WATER (DEWATERING) FROM CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT TO WATERS OF THE STATE...

GENERAL SITE NOTES:

- 12. ALL AREAS SHOWN TO BE FILLED SHALL BE CLEARED AND GRUBBED IN ACCORDANCE WITH NASSAU COUNTY STANDARDS...
13. CLEARING AND GRUBBING REQUIRED FOR ALL ROADWAY, UTILITIES, DITCHES, BERMS, RIGHTS-OF-WAYS AND EASEMENTS...
15. ALL ACCESS EASEMENTS ARE TO BE STABILIZED AND DRIVABLE.
16. ALL DEBRIS RESULTING FROM ALL ACTIVITIES SHALL BE DISPOSED OF OFF-SITE BY CONTRACTOR.
17. BURNING OF TREES, BRUSH AND OTHER MATERIAL SHALL BE APPROVED, PERMITTED AND COORDINATED WITH NASSAU COUNTY FIRE MARSHAL...
18. UNSUITABLE MATERIALS UNDER UTILITY OR STORM PIPE, STRUCTURES, PAVEMENT, BUILDING PADS, OR HARDSCAPE ELEMENTS SHALL BE REMOVED AND REPLACED WITH SELECTED BACKFILL...
19. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL SURVEY AND PROPERTY MONUMENTS...
20. ALL UNDERGROUND UTILITIES TO BE INSTALLED UNDER PAVEMENT MUST BE INSTALLED PRIOR TO PREPARATION OF SUBGRADE...
22. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL MATERIALS TO THE ENGINEER FOR REVIEW AND APPROVAL...
23. AUGER BORINGS PROVIDED BY ECS FLORIDA, LLC, DATED: 05/09/2022.
24. FLOOD ZONE BASED UPON FEMA INSURANCE RATE MAPS PANEL NOS. 12089C0215G, DATED: 08/02/2017.
25. FOR SEDIMENT AND EROSION CONTROL PLANS, DETAILS AND NOTES REFER TO DRAWINGS 10-11. CONTRACTOR TO COORDINATE WITH AUTHORITY FOR INSPECTIONS PRIOR TO CLEARING OPERATIONS.
26. ELEVATIONS ARE BASED ON NAVD 1988.
27. TOPOGRAPHIC INFORMATION BASED ON SURVEY PROVIDED BY L.D. BRADLEY LAND SURVEYORS, DATED: 07/08/2022.
28. BOUNDARY INFORMATION BASED ON SURVEY PROVIDED BY L.D. BRADLEY LAND SURVEYORS, DATED: 07/08/2022.
29. S.U.E. (SUBSURFACE UTILITY ENGINEERING) PROVIDED BY ###, DATED: ###.
30. ALL WORK AND MATERIALS SHALL BE IN COMPLETE ACCORDANCE WITH ALL RELATIVE SECTIONS "NASSAU COUNTY LAND DEVELOPMENT CODE", (LATEST REVISION) AND ALL CURRENT COUNTY STANDARD DETAILS...
31. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE CIVIL ENGINEER TO DETERMINE IF THIS PROJECT IS WITHIN THE COUNTY JURISDICTION FOR INSPECTION...
32. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF THE EXISTING SOIL IN ALL LANDSCAPE AREAS FROM CONTAMINATION...
33. CONTRACTOR SHALL REMOVE ALL SURPLUS MATERIAL WITHIN 24' OF THE FINAL SURFACE FROM THE LANDSCAPE AREAS...
34. CONTRACTOR SHALL NOT INSTALL THE TOP LAYER OF SOIL OR FINISH GRADING LANDSCAPE AREAS UNTIL THESE AREAS HAVE BEEN REVIEWED BY THE PROJECT ENGINEER.
35. PROJECT LOCATION: NASSAU COUNTY, FLORIDA.
36. THESE PLANS WERE GENERATED UTILIZING AUTOCAD CIVIL 3D 2019.

PAVING AND DRAINAGE NOTES:

- 1. ALL DRAINAGE STRUCTURES TO HAVE TRAFFIC BEARING GRATES.
2. ALL DRAINAGE PIPE JOINTS ARE TO BE FILTER FABRIC WRAPPED.
3. ALL INVERTS IN DRAINAGE STRUCTURES TO BE PRECAST OR BRICK WITH LAYER OF MORTAR BETWEEN EACH LAYER OF BRICK...
4. ALL PIPE LENGTHS ARE SCALED DIMENSIONS...
5. CONTRACTOR SHALL ENSURE THAT ALL DRAINAGE STRUCTURES, PIPES, ETC. ARE CLEAN AND FUNCTIONING PROPERLY AT TIME OF ACCEPTANCE.
6. THE CONTRACTOR SHALL PROVIDE ACCESSIBLE CURB RAMPS AT ALL SIDEWALK AND CURB CONNECTIONS...
PAVING AND DRAINAGE NOTES:

NASSAU COUNTY STORMWATER DRAINAGE NOTES:

- 1. ALL STORMWATER DRAINAGE FACILITIES WITHIN PUBLIC RIGHT-OF-WAY AND PAVED AREAS...
2. A BUILDER CANNOT MODIFY THE CONCRETE STORM WATER MANAGEMENT SYSTEM INCLUDING THE PIPES, INLETS, AREA DRAINS...
3. DRAINAGE EASEMENTS AND DITCHES SHOULD REMAIN FREE OF STOCKPILED SOIL...
4. THE CONTRACTOR SHALL TEMPORARILY OR PERMANENTLY STABILIZE BARE SOIL AREAS...
5. PER ORDINANCE 99-17 SECTION 11.11.5.4, ALL GRAVITY FLOW PIPE INSTALLATIONS SHALL HAVE A SOIL TIGHT JOINT PERFORMANCE...
6. PER ORDINANCE 99-17 SECTION 10.6.5.1, IMMEDIATELY INSTALL ADDITIONAL EROSION PROTECTION SEDIMENT CONTROL MEASURES...
7. PER 99-17 SECTION 10.1.2.A-E, STORMWATER MANAGEMENT FOR A PROJECT SHALL NOT HAVE ADVERSE EFFECTS...
PAVING AND DRAINAGE NOTES:

NASSAU COUNTY PAVING NOTES:

- 1. PER NASSAU COUNTY ROADWAY AND DRAINAGE STANDARDS...
2. A PRE-PAYE MEETING IS REQUIRED PRIOR TO ANY PAVING OPERATIONS WITHIN NASSAU COUNTY ROW...
3. APPROVED MIX DESIGNS SHALL BE PROVIDED TO NASSAU COUNTY CONSTRUCTION INSPECTOR...
4. CONTRACTOR IS REQUIRED TO HAVE A CERTIFIED QC ASPHALT LEVEL II TECHNICIAN...
5. ALL BASES SHALL BE PRIMED IN ACCORDANCE WITH ORDINANCE 99-17 SECTION 11.5.2.3...
6. SIGNAGE AND PAVEMENT MARKINGS SHALL BE IN COMPLIANCE WITH NASSAU COUNTY STANDARDS...
7. MAINTENANCE OF TRAFFIC (MOT) SHALL BE IN COMPLIANCE WITH FDOT STANDARD INDEXT 600 SERIES.
8. ALL WORK, MATERIALS, AND TESTING PERFORMED WITHIN NASSAU COUNTY RIGHT-OF-WAY...
9. PER ORDINANCE 99-17 SECTION 11.9.2, ALL PAVEMENT MARKINGS WITHIN NASSAU COUNTY ROW...
10. REMOVING PAVEMENT MARKINGS WITHIN NASSAU COUNTY ROW...
11. PER ORDINANCE 99-17 SECTION 8.5.5, ANY DAMAGE TO PAVEMENT RESULTING FROM CONSTRUCTION...
12. ALL UNDERGROUND UTILITIES, OR APPROPRIATE CONDUIT SLEEVES...
13. SINGLE VERTICAL JOINTS IN ROADWAY CONSTRUCTION SHALL BE AVOIDED IN NASSAU COUNTY RIGHT-OF-WAY...
14. ALL DRAINAGE STRUCTURES SHALL HAVE TRAFFIC BEARING GRATES...
15. ALL CONCRETE SHALL BE A MINIMUM OF 3000 PSI WITHIN PUBLIC RIGHT-OF-WAY.

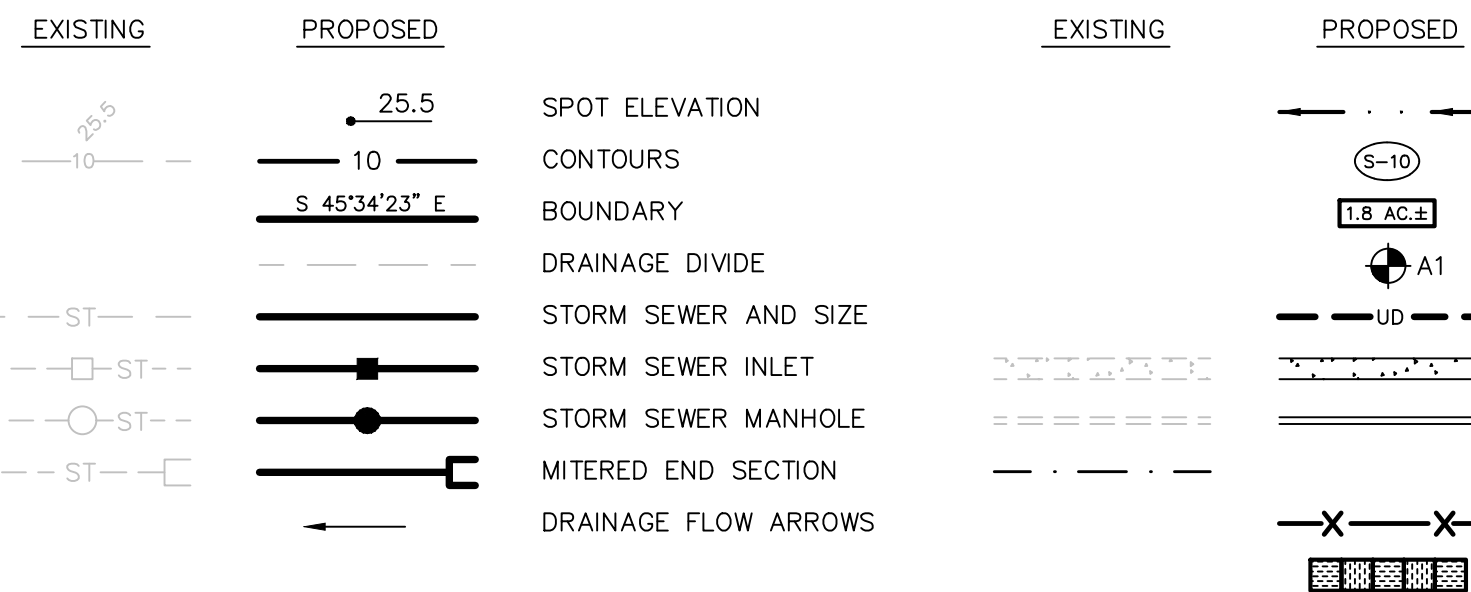
WATER, REUSE, & SEWER REQUIREMENTS

- 1. ALL WATER, REUSE WATER, SANITARY SEWER AND STORM SEWER CONSTRUCTION SHALL BE ACCOMPLISHED BY AN UNDERGROUND UTILITY CONTRACTOR...
2. FIRE PROTECTION MAINS (NON-JEA OWNED WATER SYSTEMS) SHALL BE C-90 PVC DR18 PIPE...
3. FINAL CONNECTION TO THE JEA SYSTEM MAY BE CONTINGENT UPON THE CONSTRUCTION, DEDICATION, AND FINAL ACCEPTANCE OF OFF-SITE SYSTEMS.
4. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER...
5. UNSUITABLE MATERIALS UNDER UTILITY PIPES AND STRUCTURES SHALL BE REMOVED...
6. MECHANICALLY RESTRAINED JOINTS ARE REQUIRED ON PRESSURE MAINS...
7. CONTRACTOR SHALL FURNISH AND INSTALL LOCATE WRING ON ALL PVC WATER MAINS, REUSE MAINS, FORCE MAINS...
8. ALL POINTS OF CONNECTION FOR WATER, REUSE WATER AND SEWER MUST BE IN ACCORDANCE WITH THE AVAILABILITY RESPONSE FROM JEA.
9. F.O.E.P. PERMITS SUBMITTED THROUGH THE DEPARTMENT FOR PROCESSING SHALL BE IN CONFORMANCE WITH BOTH THE DESIGN PLANS...
10. A JEA PRE-CONSTRUCTION CONFERENCE MUST BE HELD PRIOR TO COMMENCEMENT OF WORK...
11. A TAP APPLICATION FEE IS REQUIRED AND SHALL BE PAID @ 515 N. LAURA ST...
12. THE CONTRACTOR SHALL MINIMIZE SERVICE INTERRUPTIONS AND MAINTAIN ANY EXISTING WATER AND SEWER SERVICE TO MEET THE SYSTEM DEMANDS...
13. CONTRACTOR SHALL OBTAIN A COPY OF THE F.D.E.P. OR JEA WATER AND SEWER PERMITS...
14. ALL JEA ELECTRICAL CONDUIT WORK SHALL BE COMPLETED PRIOR TO THE PRESSURE TESTING...
15. UNLESS OTHERWISE INDICATED, ALL WATER MAINS AND REUSE MAINS WILL BE PVC DR18...
16. WATER MAINS AND REUSE MAINS SHALL HAVE A MINIMUM OF 30" COVER UNDER UNPAVED AREAS...
17. ALL WATER MAINS AND REUSE MAINS SHALL BE FLUSHED IN ACCORDANCE WITH AND UNDER THE DIRECTION OF THE JEA.
18. HORIZONTAL AND VERTICAL SEPARATION BETWEEN WATER MAINS AND REUSE MAINS...
19. ALL GATE VALVES SHALL BE JEA STANDARD...
20. ALL NEW AND / OR RELOCATED WATER MAIN AND REUSE MAIN PIPE AND FITTINGS SHALL NOT CONTAIN MORE THAN EIGHT PERCENT LEAD...

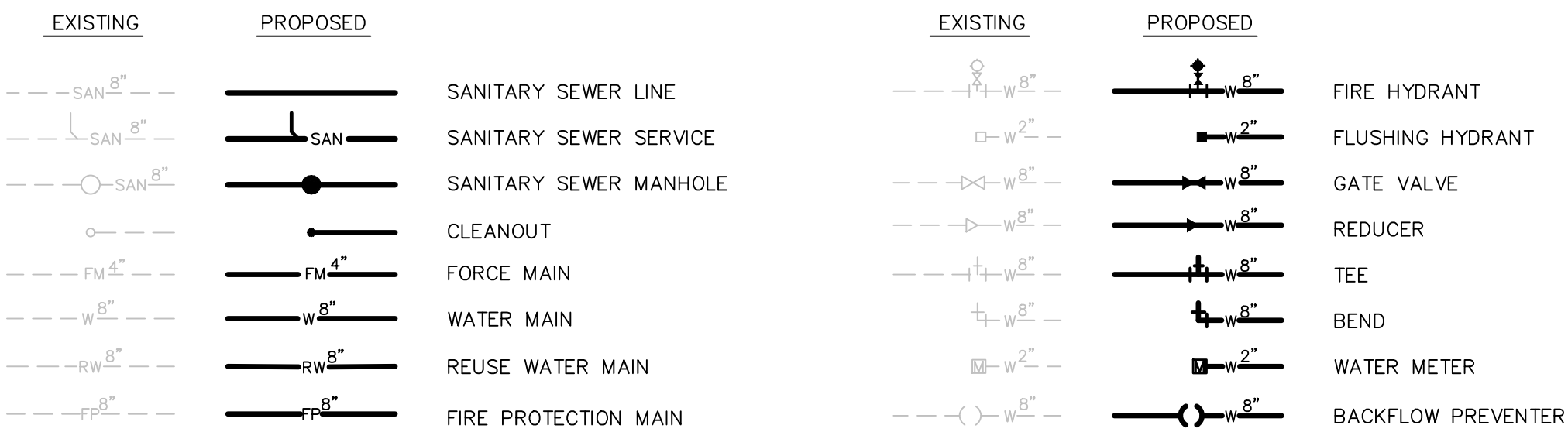
WATER, REUSE, & SEWER REQUIREMENTS

- 21. ALL FIRE HYDRANTS SHALL BE JEA STANDARD...
22. ALL FIRE HYDRANTS THAT ARE SUPPLIED BY A FIRE PUMP AND SUBJECT TO HIGH PRESSURE...
23. ALL NEW FIRE HYDRANT INSTALLATIONS, PUBLIC AND PRIVATE, SHALL HAVE A BLUE F.O.D.T. TYPE REFLECTIVE PAVEMENT MARKER...
24. ALL WATER MAINS SHALL BE BACTERIOLOGICAL AND PRESSURE TESTED AT 150 PSI FOR 2 HOURS...
25. ALL BACKFLOW PREVENTORS SHALL BE IN ACCORDANCE WITH JEA CROSS CONNECTION CONTROL PROGRAM...
26. THE WATER TAPS DEPicted ON THESE DESIGN PLANS SHALL BE CONSTRUCTED AS FOLLOWS...
27. WATER METERS SHALL NOT BE LOCATED WITHIN PAVEMENT, CURB AND GUTTER OR DRIVEWAYS.
28. IF SOLVENT CONTAMINATION IS FOUND IN THE PIPE TRENCH, WORK SHALL BE STOPPED...
29. ALL SEWER MAINS, SERVICES, AND FITTINGS SHALL BE PVC (ASTM-3034) SDR 26...
30. SANITARY SEWER SERVICES SHALL BE 6" PVC WITH A MINIMUM SLOPE OF 1.04%...
31. SEWER LINES AND FORCE MAINS ARE DESIGNED TO FINISHED GRADES AND SHALL BE PROTECTED UNTIL WORK IS COMPLETED...
32. PRIOR TO THE PLACEMENT OF THE LIMEROCK BASE COURSE, THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER A SCHEDULE OF INVERT ELEVATIONS...
33. THE CONTRACTOR SHALL INSTALL ANY ADDITIONAL AIR RELEASE VALVES AT CHANGES IN ELEVATION...
34. TELEVISION INSPECTION SHALL BE REQUIRED ON ALL GRAVITY SEWER MAINS...
WATER AND SEWER REQUIREMENTS

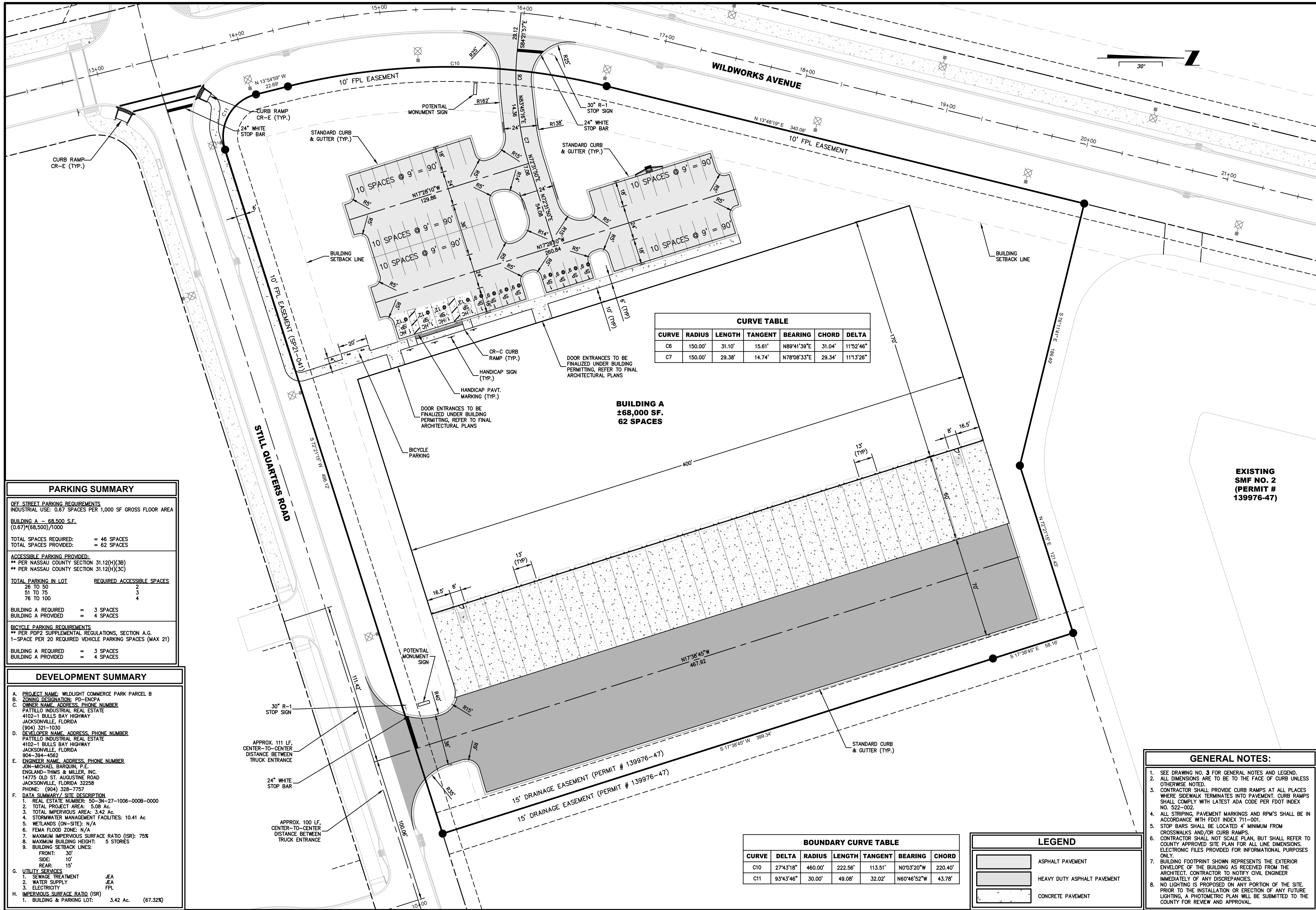
PAVING AND DRAINAGE LEGEND



WATER AND SEWER LEGEND



PLANS PREPARED UNDER THE DIRECTION OF: ENGLAND-THIBBS & MILLER, INC. 14775 Old St. Augustine Road Jacksonville, FL 32258. Includes project title, drawing number, and revision table.



CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	BEARING	CHORD	DELTA
C6	150.00'	31.10'	15.61'	N89°41'39"E	31.04'	11°52'46"
C7	150.00'	29.38'	14.74'	N78°08'33"E	29.34'	11°13'26"

BOUNDARY CURVE TABLE

CURVE	DELTA	RADIUS	LENGTH	TANGENT	BEARING	CHORD
C10	27°43'18"	460.00'	222.56'	113.51'	N0°03'20"W	220.40'
C11	93°43'46"	30.00'	49.08'	32.02'	N60°46'52"W	43.78'

PARKING SUMMARY

OFF-STREET PARKING REQUIREMENTS
INDUSTRIAL USE: 0.67 SPACES PER 1,000 SF GROSS FLOOR AREA

BUILDING A - 68,500 S.F.
(0.67)*(68,500)/1000

TOTAL SPACES REQUIRED: = 46 SPACES
TOTAL SPACES PROVIDED: = 62 SPACES

ACCESSIBLE PARKING PROVIDED:
** PER NASSAU COUNTY SECTION 31.12(H)(3B)
** PER NASSAU COUNTY SECTION 31.12(H)(3C)

TOTAL PARKING IN LOT	REQUIRED ACCESSIBLE SPACES
26 TO 50	2
51 TO 75	3
76 TO 100	4

BUILDING A REQUIRED = 3 SPACES
BUILDING A PROVIDED = 4 SPACES

BICYCLE PARKING REQUIREMENTS
** PER PDP2 SUPPLEMENTAL REGULATIONS, SECTION A.G.
1-SPACE PER 20 REQUIRED VEHICLE PARKING SPACES (MAX 21)

BUILDING A REQUIRED = 3 SPACES
BUILDING A PROVIDED = 4 SPACES

DEVELOPMENT SUMMARY

A. PROJECT NAME: WILDLIGHT COMMERCE PARK PARCEL B
B. ZONING DESIGNATION: PD-ENCPA
C. OWNER NAME, ADDRESS, PHONE NUMBER
PATTILLO INDUSTRIAL REAL ESTATE
4102-1 BULLS BAY HIGHWAY
JACKSONVILLE, FLORIDA
(904) 321-1030
D. DEVELOPER NAME, ADDRESS, PHONE NUMBER
PATTILLO INDUSTRIAL REAL ESTATE
4102-1 BULLS BAY HIGHWAY
JACKSONVILLE, FLORIDA
904-394-4562
E. ENGINEER NAME, ADDRESS, PHONE NUMBER
JON-MICHAEL BARQUIN, P.E.
ENGLAND-THIMS & MILLER, INC.
14775 OLD ST. AUGUSTINE ROAD
JACKSONVILLE, FLORIDA 32258
PHONE: (904) 328-7757
F. DATA SUMMARY / SITE DESCRIPTION
1. REAL ESTATE NUMBER: 50-3N-27-1006-000B-0000
2. TOTAL PROJECT AREA: 5.98 Ac.
3. TOTAL IMPERVIOUS AREA: 3.42 Ac.
4. STORMWATER MANAGEMENT FACILITIES: 10.41 Ac
5. WETLANDS (ON-SITE): N/A
6. FEMA FLOOD ZONE: N/A
7. MAXIMUM IMPERVIOUS SURFACE RATIO (ISR): 75%
8. MAXIMUM BUILDING HEIGHT: 5 STORIES
9. BUILDING SETBACK LINES:
FRONT: 30'
SIDE: 10'
REAR: 15'
G. UTILITY SERVICES
1. SEWAGE TREATMENT JEA
2. WATER SUPPLY JEA
3. ELECTRICITY FPL
H. IMPERVIOUS SURFACE RATIO (ISR)
1. BUILDING & PARKING LOT: 3.42 Ac. (67.32%)

GENERAL NOTES:

- SEE DRAWING NO. 3 FOR GENERAL NOTES AND LEGEND.
- ALL DIMENSIONS ARE TO BE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL PROVIDE CURB RAMP AT ALL PLACES WHERE SIDEWALK TERMINATES INTO PAVEMENT. CURB RAMP SHALL COMPLY WITH LATEST ADA CODE PER FDOT INDEX NO. 522-002.
- ALL STRIPING, PAVEMENT MARKINGS AND RPM'S SHALL BE IN ACCORDANCE WITH FDOT INDEX 711-001.
- STOP BARS SHALL BE LOCATED 4' MINIMUM FROM CROSSWALKS AND/OR CURB RAMP.
- CONTRACTOR SHALL NOT SCALE PLAN, BUT SHALL REFER TO COUNTY APPROVED SITE PLAN FOR ALL LINE DIMENSIONS. ELECTRONIC FILES PROVIDED FOR INFORMATIONAL PURPOSES ONLY.
- BUILDING FOOTPRINT SHOWN REPRESENTS THE EXTERIOR ENVELOPE OF THE BUILDING AS RECEIVED FROM THE ARCHITECT. CONTRACTOR TO NOTIFY CIVIL ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
- NO LIGHTING IS PROPOSED ON ANY PORTION OF THE SITE. PRIOR TO THE INSTALLATION OR ERECTION OF ANY FUTURE LIGHTING, A PHOTOMETRIC PLAN WILL BE SUBMITTED TO THE COUNTY FOR REVIEW AND APPROVAL.

LEGEND

[Pattern]	ASPHALT PAVEMENT
[Pattern]	HEAVY DUTY ASPHALT PAVEMENT
[Pattern]	CONCRETE PAVEMENT

PLANS PREPARED UNDER THE DIRECTION OF:

REVISIONS:

ETM NO. 19-239-07-002

DRAWN BY: JMB

DESIGNED BY: JMB

CHECKED BY: JZB

DATE: Issue Date

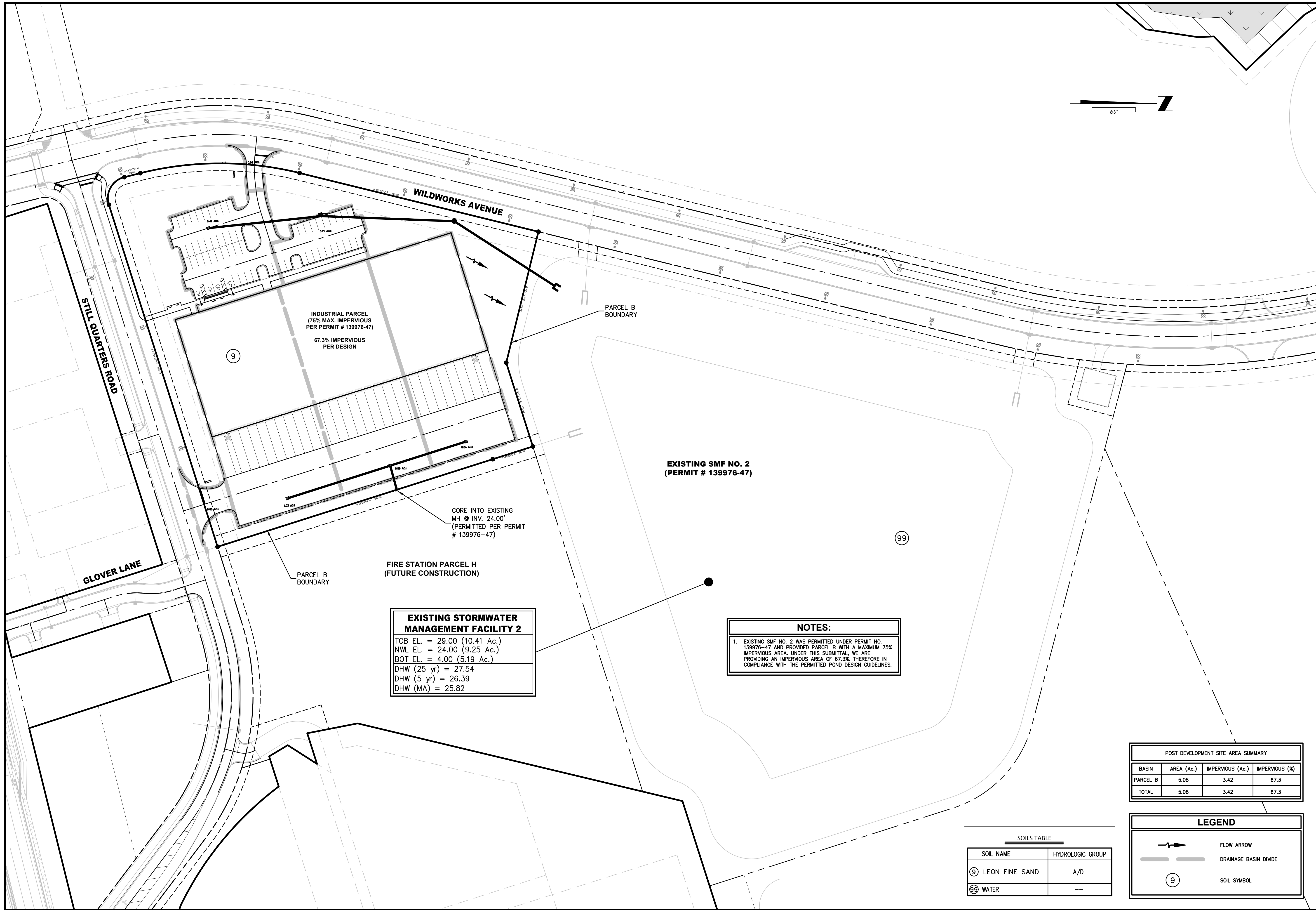
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ETM
VISION • EXPERIENCE • RESULTS

SITE GEOMETRY PLAN
WILDLIGHT COMMERCE PARK PARCEL B
FOR
PATTILLO INDUSTRIAL REAL ESTATE

DRAWING NUMBER
4

FL:2019\19-239-07\19-239-07-002\encldev\Design\Plan\19-239-07-002.dwg
PLOTTED: August 25, 2023 - 9:53 AM, BY: Jon-Michael Barquin
P.E. NUMBER: 94926



EXISTING STORMWATER MANAGEMENT FACILITY 2

TOB EL. = 29.00 (10.41 Ac.)
NWL EL. = 24.00 (9.25 Ac.)
BOT EL. = 4.00 (5.19 Ac.)
DHW (25 yr) = 27.54
DHW (5 yr) = 26.39
DHW (MA) = 25.82

NOTES:

1. EXISTING SMF NO. 2 WAS PERMITTED UNDER PERMIT NO. 139976-47 AND PROVIDED PARCEL B WITH A MAXIMUM 75% IMPERVIOUS AREA. UNDER THIS SUBMITTAL, WE ARE PROVIDING AN IMPERVIOUS AREA OF 67.3%, THEREFORE IN COMPLIANCE WITH THE PERMITTED POND DESIGN GUIDELINES.

POST DEVELOPMENT SITE AREA SUMMARY

BASIN	AREA (Ac.)	IMPERVIOUS (Ac.)	IMPERVIOUS (%)
PARCEL B	5.08	3.42	67.3
TOTAL	5.08	3.42	67.3

SOILS TABLE

SOIL NAME	HYDROLOGIC GROUP
⑨ LEON FINE SAND	A/D
⑨⑨ WATER	---

LEGEND

	FLOW ARROW
	DRAINAGE BASIN DIVIDE
⑨	SOIL SYMBOL

POST DEVELOPMENT PLAN
WILDLIGHT COMMERCE PARK PARCEL B
FOR
PATTILLO INDUSTRIAL REAL ESTATE

DRAWING NUMBER **5**

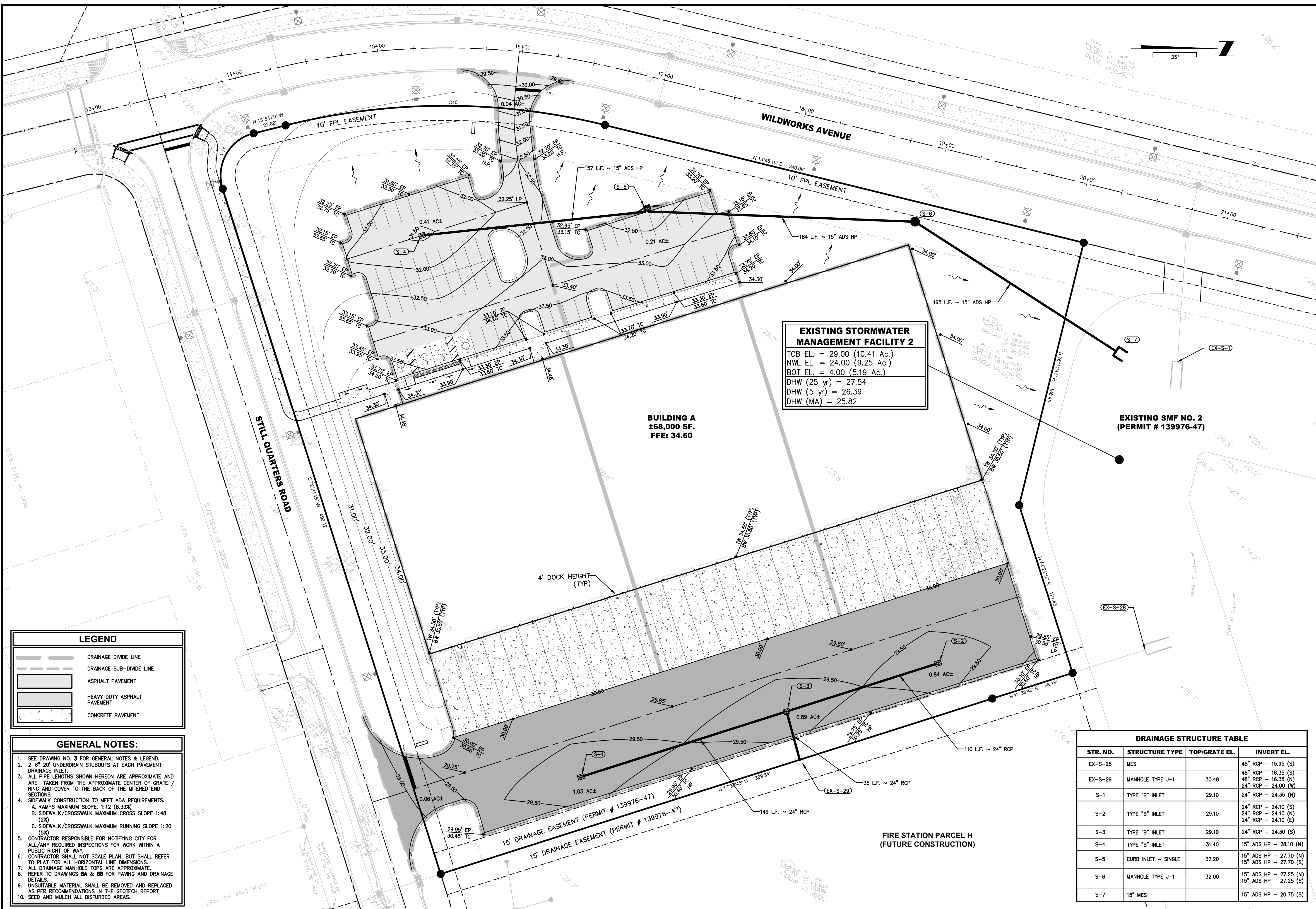
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England • Thins & Miller, Inc.
 14775 Old St. Augustine Road
 Jacksonville, FL 32258
 TEL: (904) 642-8890
 FAX: (904) 646-9485
 CA - 00002694 LC - 0000316

PLANS PREPARED UNDER THE DIRECTION OF:
 JON-MICHAEL BARQUIN
 P.E. NUMBER: 94926

REVISIONS:
 ETM NO. 19-239-07-002
 DRAWN BY: JMB
 DESIGNED BY: JMB
 CHECKED BY: JZB
 DATE: Issue Date

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EXISTING STORMWATER MANAGEMENT FACILITY 2
 TOB EL. = 29.00 (10.41 Ac.)
 NWL EL. = 24.00 (9.25 Ac.)
 BOT EL. = 4.00 (5.19 Ac.)
 DHW (25 yr) = 27.54
 DHW (5 yr) = 26.39
 DHW (MA) = 25.82

BUILDING A
 ±68,000 SF.
 FFE: 34.50

EXISTING SMF NO. 2
 (PERMIT # 139976-47)

LEGEND

	DRAINAGE DIVIDE LINE
	DRAINAGE SUB-DIVIDE LINE
	ASPHALT PAVEMENT
	HEAVY DUTY ASPHALT PAVEMENT
	CONCRETE PAVEMENT

- GENERAL NOTES:**
- SEE DRAWING NO. 3 FOR GENERAL NOTES & LEGEND.
 - 2'-6" TO 20' UNDERDRAIN STUBOUTS AT EACH PAVEMENT DRAINAGE INLET.
 - ALL PIPE LENGTHS SHOWN HEREON ARE APPROXIMATE AND ARE TAKEN FROM THE APPROXIMATE CENTER OF GRATE / RING AND COVER TO THE BACK OF THE MITERED END SECTIONS.
 - SIDEWALK CONSTRUCTION TO MEET ADA REQUIREMENTS.
 - RAMPS MAXIMUM SLOPE: 1:12 (8.33%)
 - SIDEWALK/CROSSWALK MAXIMUM CROSS SLOPE 1:48 (2%)
 - SIDEWALK/CROSSWALK MAXIMUM RUNNING SLOPE 1:20 (5%)
 - CONTRACTOR RESPONSIBLE FOR NOTIFYING CITY FOR ALL/ANY REQUIRED INSPECTIONS FOR WORK WITHIN A PUBLIC RIGHT OF WAY.
 - CONTRACTOR SHALL NOT SCALE PLAN, BUT SHALL REFER TO PLAT FOR ALL HORIZONTAL LINE DIMENSIONS.
 - ALL DRAINAGE MANHOLE TOPS ARE APPROXIMATE.
 - REFER TO DRAWINGS **BA** & **BB** FOR PAVING AND DRAINAGE DETAILS.
 - UNSATURABLE MATERIAL SHALL BE REMOVED AND REPLACED AS PER RECOMMENDATIONS IN THE GEOTECH REPORT
 - SEED AND MULCH ALL DISTURBED AREAS.

DRAINAGE STRUCTURE TABLE

STR. NO.	STRUCTURE TYPE	TOP/GRATE EL.	INVERT EL.
EX-S-28	MES		48" RCP - 15.95 (S)
EX-S-29	MANHOLE TYPE J-1	30.48	48" RCP - 16.35 (S) 24" RCP - 16.35 (N) 24" RCP - 24.00 (W)
S-1	TYPE "B" INLET	29.10	24" RCP - 24.35 (N)
S-2	TYPE "B" INLET	29.10	24" RCP - 24.10 (S) 24" RCP - 24.10 (N) 24" RCP - 24.10 (E)
S-3	TYPE "B" INLET	29.10	24" RCP - 24.30 (S)
S-4	TYPE "B" INLET	31.40	15" ADS HP - 28.10 (N)
S-5	CURB INLET - SINGLE	32.20	15" ADS HP - 27.70 (N) 15" ADS HP - 27.70 (S)
S-6	MANHOLE TYPE J-1	32.00	15" ADS HP - 27.25 (N) 15" ADS HP - 27.25 (S)
S-7	15" MES		15" ADS HP - 20.75 (S)

PLANS PREPARED UNDER THE DIRECTION OF:
 JON-MICHAEL BARQUIN
 P.E. NUMBER: 94926

REVISIONS:
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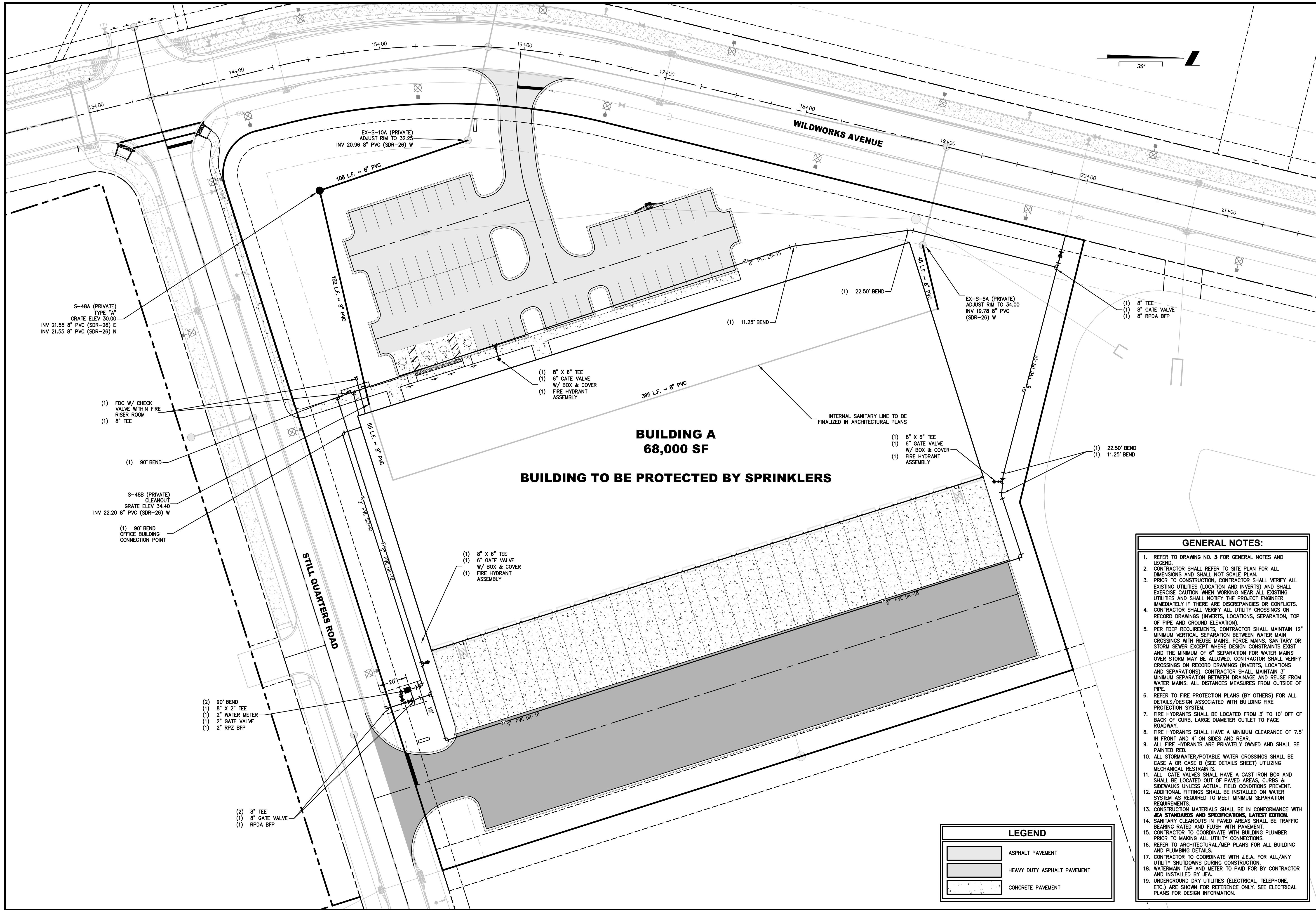
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 Jacksonville, FL 32258
 TEL: (904) 642-8890
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 CA-0002584 LC-0000316

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PAVING & DRAINAGE PLAN
 WILDLIGHT COMMERCE PARK PARCEL B
 FOR
 PATTILLO INDUSTRIAL REAL ESTATE

DRAWING NUMBER
6

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 PLOTTED: August 25, 2023 - 9:54 AM, BY: Jon-Michael Barquin



**BUILDING A
68,000 SF
BUILDING TO BE PROTECTED BY SPRINKLERS**

- GENERAL NOTES:**
- REFER TO DRAWING NO. 3 FOR GENERAL NOTES AND LEGEND.
 - CONTRACTOR SHALL REFER TO SITE PLAN FOR ALL DIMENSIONS AND SHALL NOT SCALE PLAN.
 - PRIOR TO CONSTRUCTION, CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES (LOCATION AND INVERTS) AND SHALL EXERCISE CAUTION WHEN WORKING NEAR ALL EXISTING UTILITIES AND SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY IF THERE ARE DISCREPANCIES OR CONFLICTS.
 - CONTRACTOR SHALL VERIFY ALL UTILITY CROSSINGS ON RECORD DRAWINGS (INVERTS, LOCATIONS, SEPARATION, TOP OF PIPE AND GROUND ELEVATION).
 - PER FDEP REQUIREMENTS, CONTRACTOR SHALL MAINTAIN 12" MINIMUM VERTICAL SEPARATION BETWEEN WATER MAIN CROSSINGS WITH REUSE MAINS, FORCE MAINS, SANITARY OR STORM SEWER EXCEPT WHERE DESIGN CONSTRAINTS EXIST AND THE MINIMUM OF 6" SEPARATION FOR WATER MAINS OVER STORM MAY BE ALLOWED. CONTRACTOR SHALL VERIFY CROSSINGS ON RECORD DRAWINGS (INVERTS, LOCATIONS AND SEPARATIONS). CONTRACTOR SHALL MAINTAIN 3" MINIMUM SEPARATION BETWEEN DRAINAGE AND REUSE FROM WATER MAINS. ALL DISTANCES MEASURES FROM OUTSIDE OF PIPE.
 - REFER TO FIRE PROTECTION PLANS (BY OTHERS) FOR ALL DETAILS/DESIGN ASSOCIATED WITH BUILDING FIRE PROTECTION SYSTEM.
 - FIRE HYDRANTS SHALL BE LOCATED FROM 3' TO 10' OFF OF BACK OF CURB, LARGE DIAMETER OUTLET TO FACE ROADWAY.
 - FIRE HYDRANTS SHALL HAVE A MINIMUM CLEARANCE OF 7.5' IN FRONT AND 4' ON SIDES AND REAR.
 - ALL FIRE HYDRANTS ARE PRIVATELY OWNED AND SHALL BE PAINTED RED.
 - ALL STORMWATER/POTABLE WATER CROSSINGS SHALL BE CASE A OR CASE B (SEE DETAILS SHEET) UTILIZING MECHANICAL RESTRAINTS.
 - ALL GATE VALVES SHALL HAVE A CAST IRON BOX AND SHALL BE LOCATED OUT OF PAVED AREAS, CURBS & SIDEWALKS UNLESS ACTUAL FIELD CONDITIONS PREVENT. ADDITIONAL FITTINGS SHALL BE INSTALLED ON WATER SYSTEM AS REQUIRED TO MEET MINIMUM SEPARATION REQUIREMENTS.
 - CONSTRUCTION MATERIALS SHALL BE IN CONFORMANCE WITH **IEA STANDARDS AND SPECIFICATIONS, LATEST EDITION.**
 - SANITARY CLEANOUTS IN PAVED AREAS SHALL BE TRAFFIC BEARING RATED AND FLUSH WITH PAVEMENT.
 - CONTRACTOR TO COORDINATE WITH BUILDING PLUMBER PRIOR TO MAKING ALL UTILITY CONNECTIONS.
 - REFER TO ARCHITECTURAL/MEP PLANS FOR ALL BUILDING AND PLUMBING DETAILS.
 - CONTRACTOR TO COORDINATE WITH J.E.A. FOR ALL/ANY UTILITY SHUTDOWNS DURING CONSTRUCTION.
 - WATERMAIN TAP AND METER TO PAID FOR BY CONTRACTOR AND INSTALLED BY J.E.A.
 - UNDERGROUND DRY UTILITIES (ELECTRICAL, TELEPHONE, ETC.) ARE SHOWN FOR REFERENCE ONLY. SEE ELECTRICAL PLANS FOR DESIGN INFORMATION.

LEGEND	
	ASPHALT PAVEMENT
	HEAVY DUTY ASPHALT PAVEMENT
	CONCRETE PAVEMENT

PLANS PREPARED UNDER THE DIRECTION OF:
 JON-MICHAEL BARQUIN
 P.E. NUMBER: 94926

REVISIONS:
 ETM NO. 19-239-07-002
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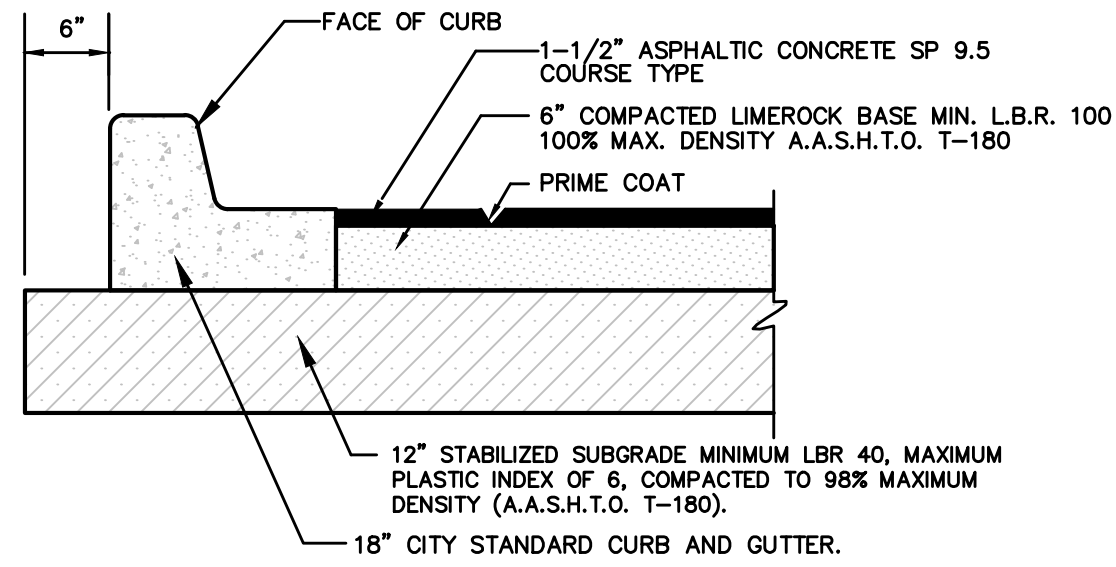
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 14775 Old St. Augustine Road
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 TEL: (904) 642-8890
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WATER & SEWER PLAN
WILDLIGHT COMMERCE PARK PARCEL B
FOR
PATILLO INDUSTRIAL REAL ESTATE

DRAWING NUMBER
7

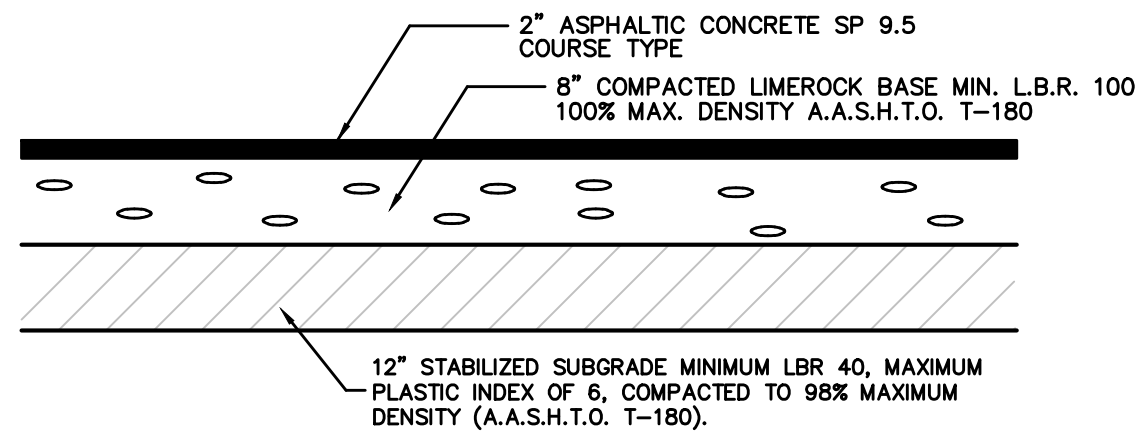
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- NOTES:**
1. ALL DISTURBED AREAS TO BE SEEDED AND MULCHED
 2. SOIL ANALYSIS MAY INDICATE THE NEED FOR THICKER BASE COURSES THAN THOSE HEREIN. THE PAVEMENT THICKNESS SHOWN HEREIN ARE NOT INTENDED TO BE ABSOLUTE, BUT ARE PRELIMINARY CRITERIA AND MAY BE MODIFIED TO ACCOMMODATE THE BEARING CAPACITY OF VARIOUS SUBGRADES.
 3. ALL ASPHALTIC CONCRETE SHALL MEET THE REQUIREMENTS OF SECTION 331 AND/OR 333, FDOT STANDARD SPECIFICATIONS, LATEST EDITION.

TYPICAL PAVEMENT SECTION

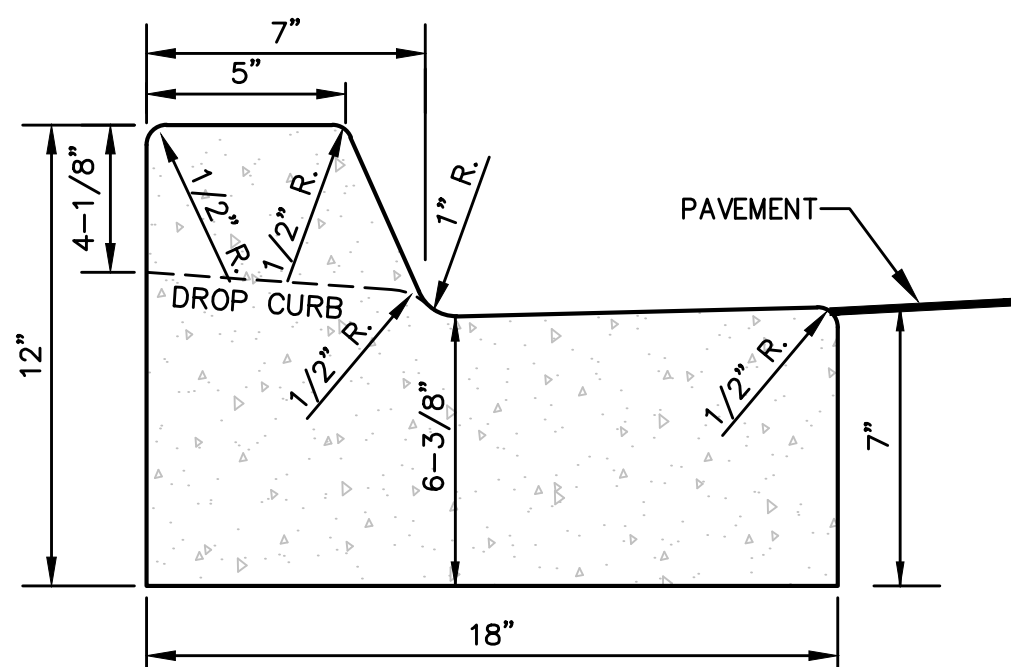
N.T.S.



- NOTES:**
1. ALL DISTURBED AREAS TO BE SEEDED AND MULCHED
 2. SOIL ANALYSIS MAY INDICATE THE NEED FOR THICKER BASE COURSES THAN THOSE HEREIN. THE PAVEMENT THICKNESS SHOWN HEREIN ARE NOT INTENDED TO BE ABSOLUTE, BUT ARE PRELIMINARY CRITERIA AND MAY BE MODIFIED TO ACCOMMODATE THE BEARING CAPACITY OF VARIOUS SUBGRADES.
 3. ALL ASPHALTIC CONCRETE SHALL MEET THE REQUIREMENTS OF SECTION 331 AND/OR 333, FDOT STANDARD SPECIFICATIONS, LATEST EDITION.

HEAVY DUTY ASPHALT PAVEMENT SECTION

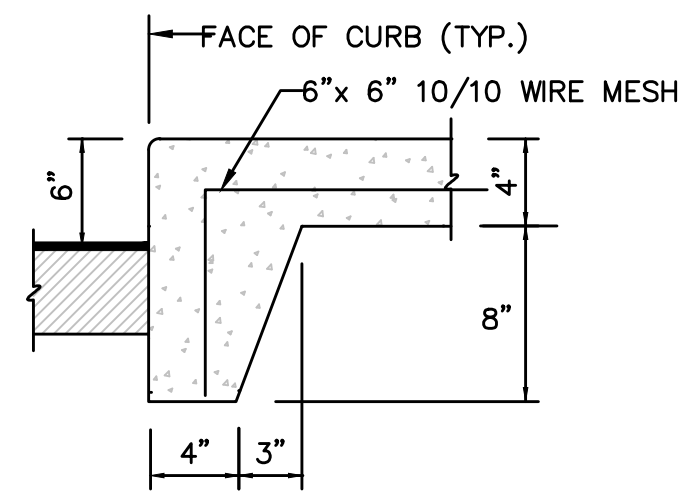
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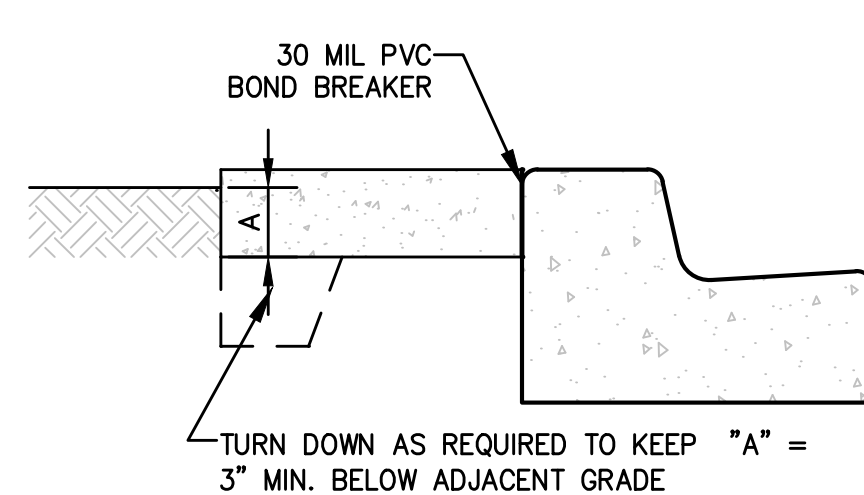
STANDARD CURB AND GUTTER

N.T.S.

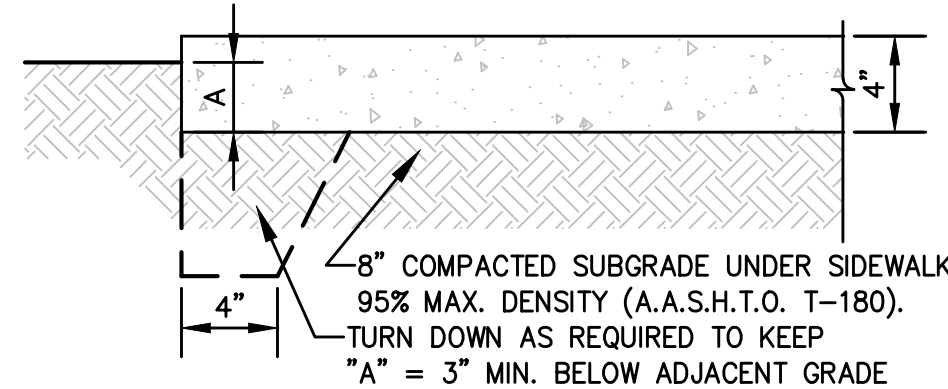
- CURB AND GUTTER NOTES:**
1. MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE LATEST FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
 2. CONCRETE SHALL BE CLASS 1 CONCRETE WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,000 PSI UNLESS OTHERWISE APPROVED BY THE ENGINEER OF RECORD.
 3. WHEN USED ON THE HIGH SIDE OF ROADWAY SECTIONS, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT. WHERE THIS CONDITION IS ENCOUNTERED, THE FRONT FACE VERTICAL DIMENSION SHALL REMAIN AS SHOWN FOR NORMAL SECTIONS SHOWN HEREON.



AT ASPHALT PAVEMENT



AT CURB AND GUTTER

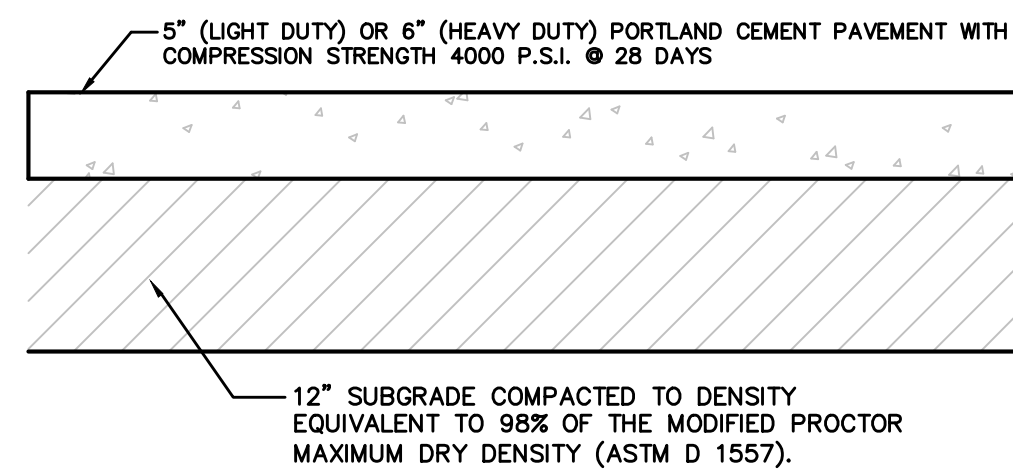


AT GRADE

- NOTES:**
1. CONSTRUCT STRAIGHT JOINTS WITH FACE PERPENDICULAR TO SURFACE OF CONCRETE. TRAVERSE JOINTS SHALL BE AT RIGHT ANGLES TO CENTERLINE UNLESS OTHERWISE INDICATED ON PLANS.
 2. PROVIDE EXPANSION JOINTS AT 100' INTERVAL MAXIMUM SPACING ON CENTER.
 3. PROVIDE EXPANSION JOINTS FILLER FOR JOINTS ABUTTING CURBS, CATCH BASINS, MANHOLES, INLETS STRUCTURES, WALKS AND OTHER FIXED OBJECTS UNLESS OTHERWISE INDICATED ON PLANS.
 4. EXTEND JOINTS FILLER FULL WIDTH AND DEPTH OF JOINT, AND 1/2" BELOW FINISHED SURFACE. PLACE SEALANT OVER JOINT FILLER PER MANUFACTURERS RECOMMENDATIONS.
 5. USE PREMOLDED ASPHALT-IMPREGNATED FIBERBOARD, 1/2" THICK CONFORMING TO ASTM D1751. CONTRACTION JOINT SHALL BE SAW CUT (1/4" WIDE BY 1" DEEP).
 6. FINISHED SURFACE FOR CONCRETE SIDEWALK SHALL BE GRAY CONCRETE WITH LIGHT BROOM FINISH PERPENDICULAR TO LINE OF TRAFFIC (UNLESS OTHERWISE INDICATED ON PLANS).
 7. PROVIDE CRACK CONTROL JOINTS @ (SAME AS WIDTH) O.C.
 8. PROVIDE 16" STRIP SOD ADJACENT TO ALL EDGES OF SIDEWALK, CURB AND PAVEMENT AREAS.
 9. CONCRETE COMPRESSION STRENGTH 3000 P.S.I. @ 28 DAYS UNLESS OTHERWISE APPROVED BY ENGINEER OF RECORD.
 10. SIDEWALK TO BE CONSTRUCTED WITH SLOPES COMPLYING TO WITH LATEST ADA CODE AND FDOT INDEX 522-001. SIDEWALK MAX. VERTICAL SLOPE OF 5.0% AND MAX CROSS SLOPE OF 2.0%.

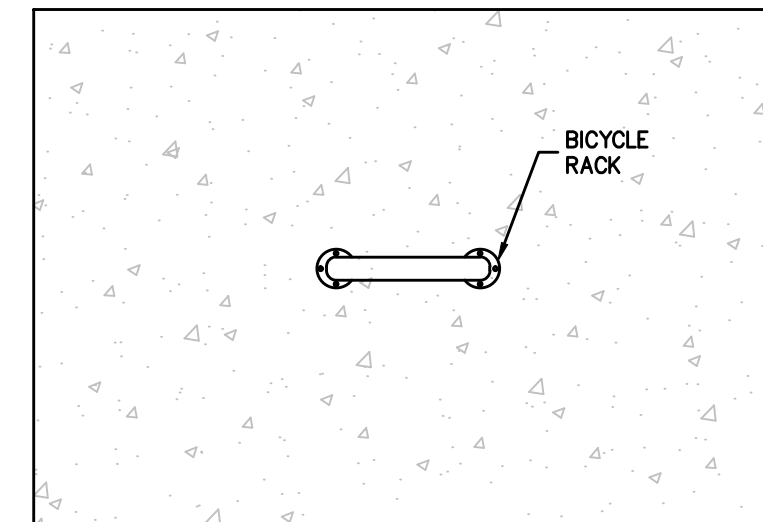
CONCRETE WALK

N.T.S.



TYPICAL CONCRETE PAVEMENT SECTION

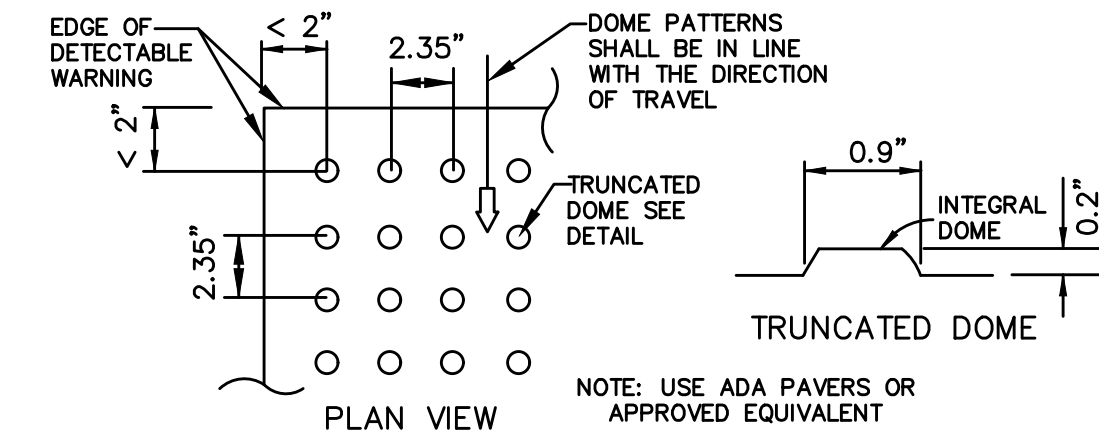
N.T.S.



- NOTES:**
1. INVERTED "U" SHAPED BICYCLE RACK (OR APPROVED EQUIVALENT) HOT DIPPED GALVANIZED WITH SURFACE MOUNT
 2. RACK MUST SUPPORT BICYCLE IN TWO PLACES
 3. BICYCLE RACKS SHALL BE A MINIMUM OF 3' FROM ANY BUILDING

BICYCLE RACK DETAIL

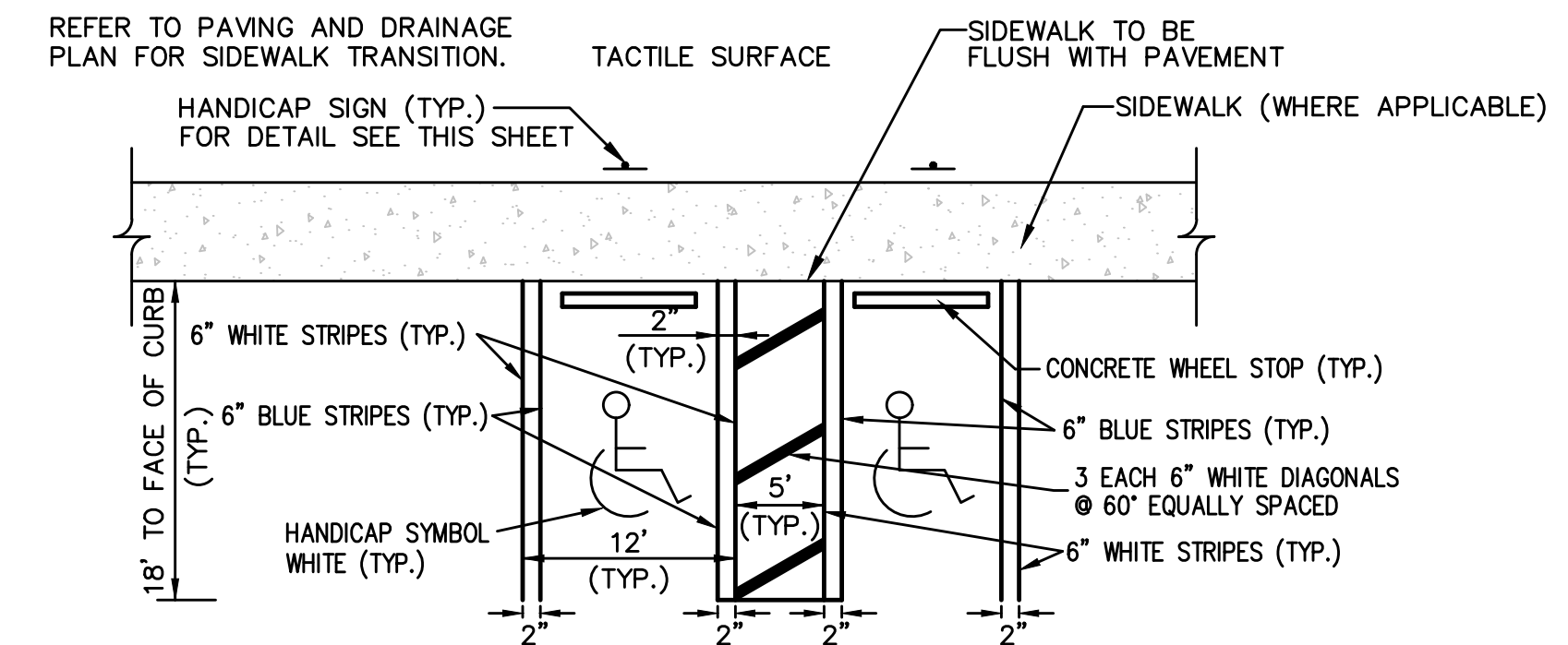
N.T.S.



CURB RAMP DETECTABLE WARNING

N.T.S.

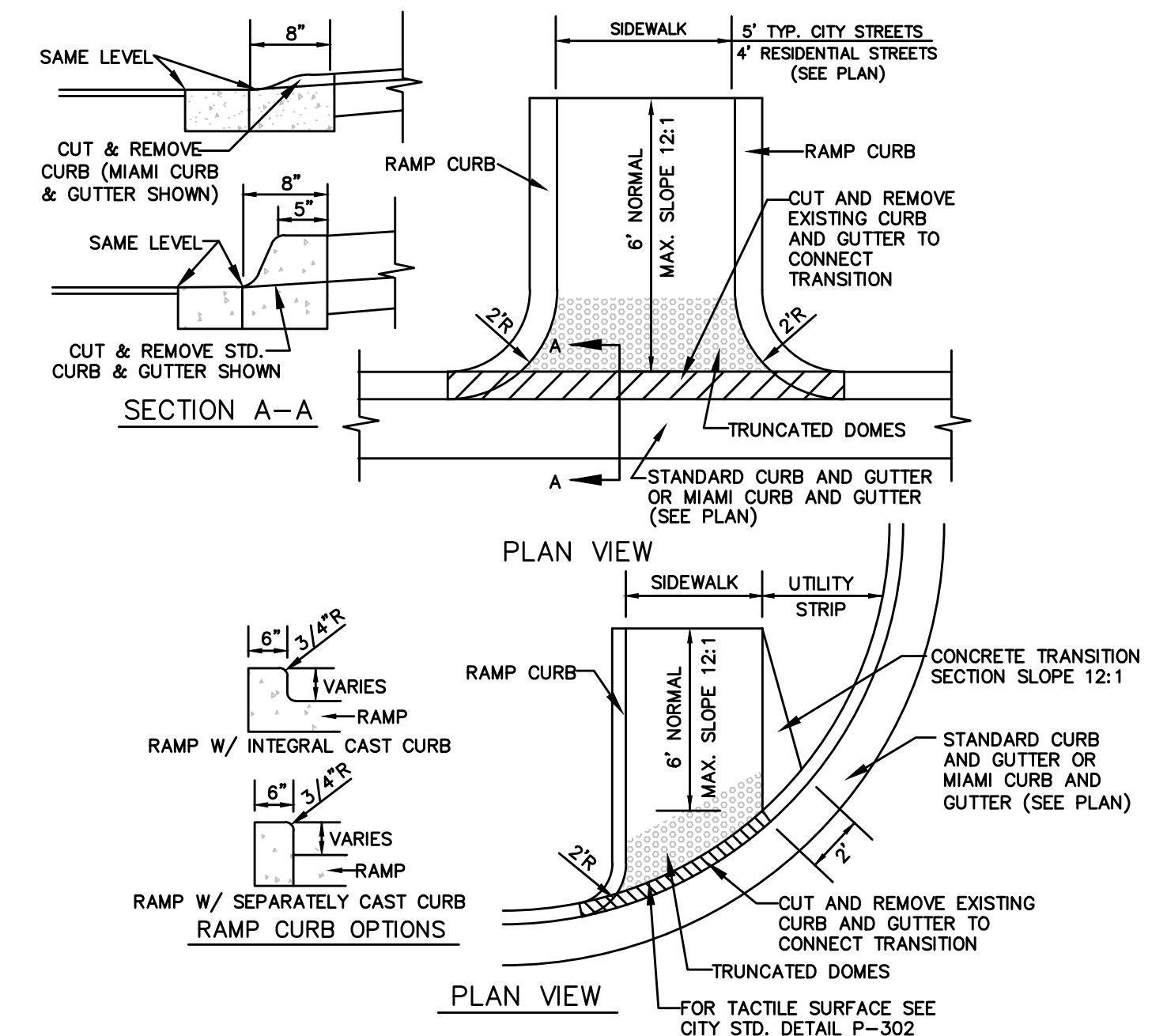
ALL SIDEWALK CURB RAMPS SHALL HAVE DETECTABLE WARNING SURFACES THAT EXTEND THE FULL WIDTH OF THE RAMP AND IN THE DIRECTION OF TRAVEL 24" FROM THE BACK OF CURB



- NOTE:**
1. HANDICAP RAMPS, SPACES AND SIGNAGE SHALL MEET AMERICAN NATIONAL STANDARD A117.1 AND ALL APPLICABLE CITY AND STATE REQUIREMENTS.
 2. THE CONTRACTOR SHALL INSTALL DETECTABLE WARNING SURFACES IN ACCORDANCE WITH A.D.A. REQUIREMENTS. REFER TO FDOT STANDARD INDEX 522-002 FOR DETECTABLE WARNING PLACEMENT.

UNIVERSAL HANDICAP PARKING DETAIL

N.T.S.



- NOTES:**
1. HANDICAP RAMPS, SPACES AND SIGNAGE SHALL MEET AMERICAN NATIONAL STANDARD A117.1 AND ALL APPLICABLE CITY AND STATE REQUIREMENTS.
 2. THE CONTRACTOR SHALL INSTALL DETECTABLE WARNING SURFACES IN ACCORDANCE WITH A.D.A. REQUIREMENTS. REFER TO FDOT STANDARD INDEX 502-002 FOR FURTHER INFORMATION.

STANDARD HANDICAP RAMP DETAILS

N.T.S.

REVISIONS:

ETM NO. 19-239-07-002	DESIGNED BY: JMB
	CHECKED BY: JZB
	DATE: Issue Date

England-Thins & Miller, Inc.
14775 Old St. Augustine Road
Jacksonville, FL 32258
TEL: (904) 642-8890
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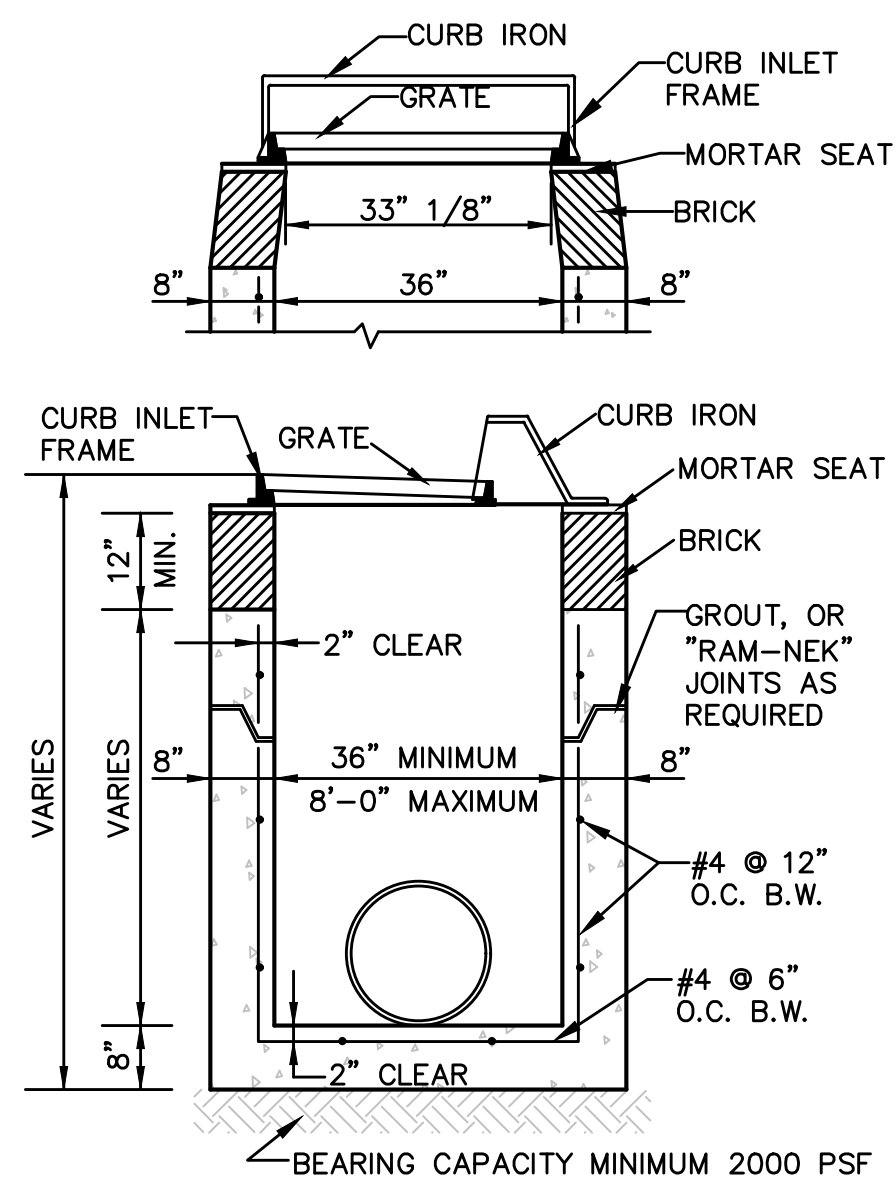


PAVING & DRAINAGE DETAILS A
WILDLIGHT COMMERCE PARK PARCEL B
PATTILLO INDUSTRIAL REAL ESTATE

DRAWING NUMBER
8A

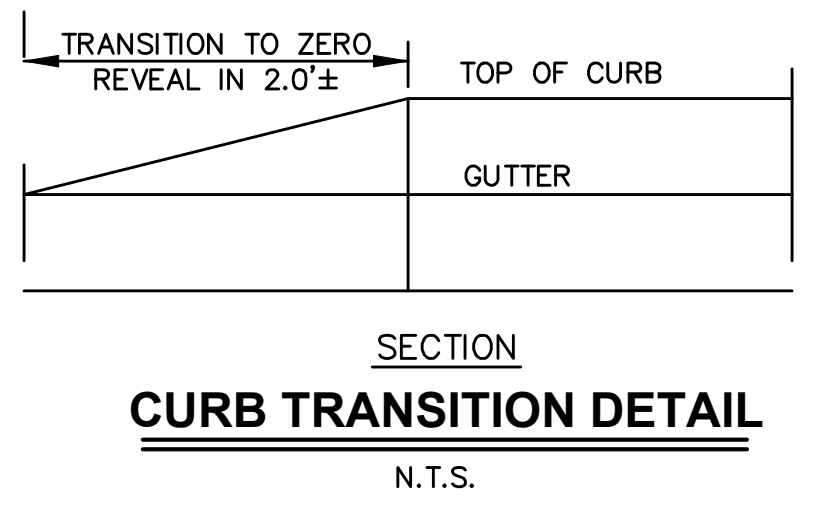
PLANS PREPARED UNDER THE DIRECTION OF:
JON-MICHAEL BARQUIN
P.E. NUMBER: 94926

PLOTTED: August 25, 2023 - 9:54 AM, BY: Jon-Michael Barquin

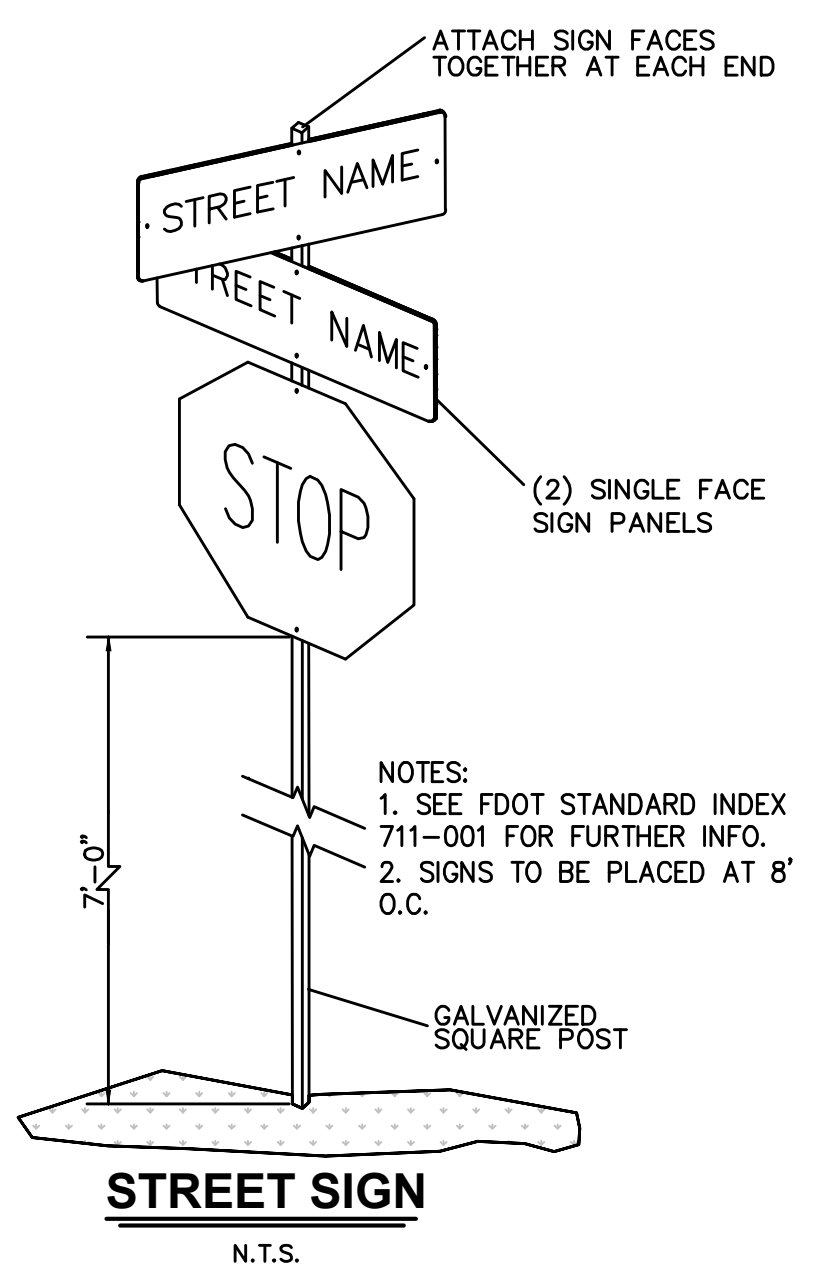


NOTES:
 1. PROVISION SHALL BE MADE AT THE TIME OF DRAINAGE STRUCTURE PRE-CASTING TO PROVIDE OPENINGS FOR UNDERDRAIN STUBOUTS ON EACH SIDE OF INLET.
 2. CONCRETE DESIGN STRENGTH 4,000 PSI.
 3. PIPE SHALL NOT BE IN CONSTRUCTION JOINT.

TYPE "A" SINGLE CURB INLET
N.T.S.

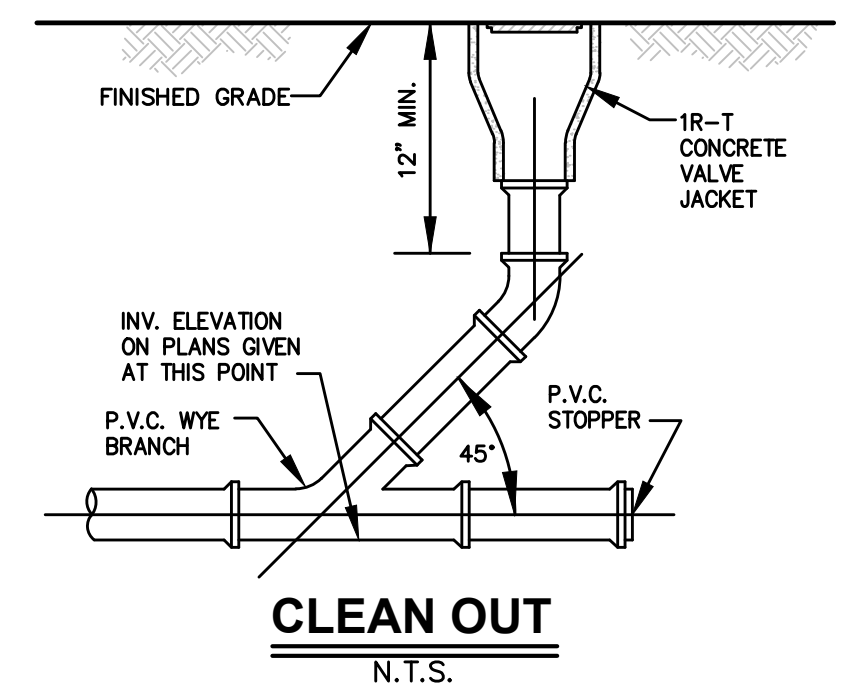


CURB TRANSITION DETAIL
N.T.S.

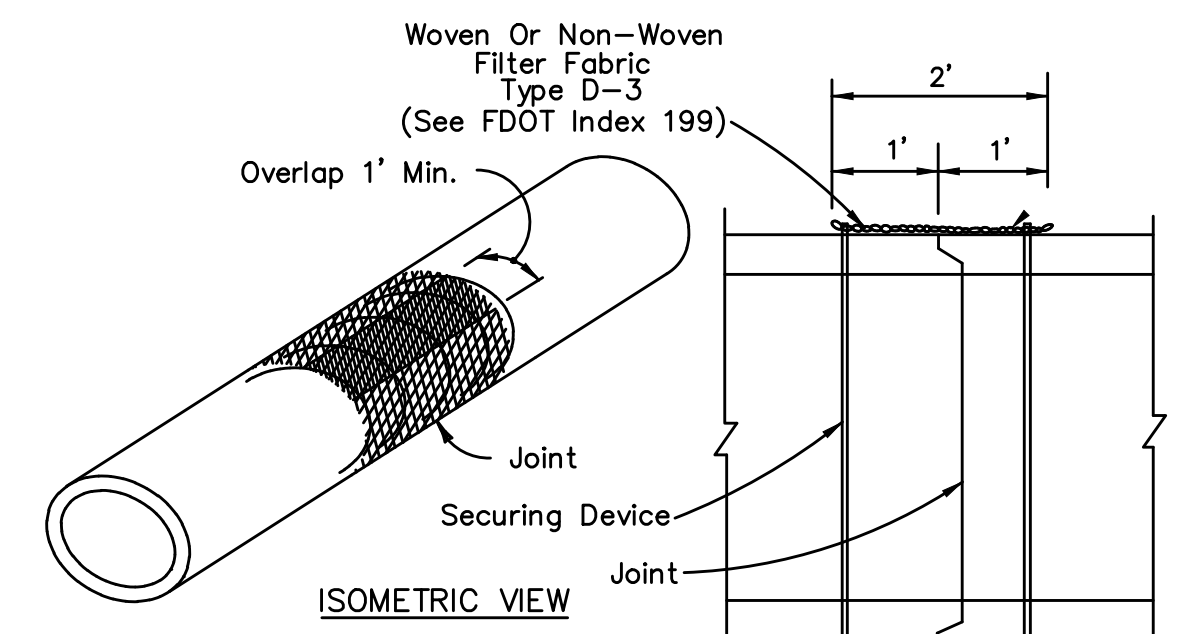


NOTES:
 1. SEE FDOT STANDARD INDEX 711-001 FOR FURTHER INFO.
 2. SIGNS TO BE PLACED AT 8' O.C.

STREET SIGN
N.T.S.

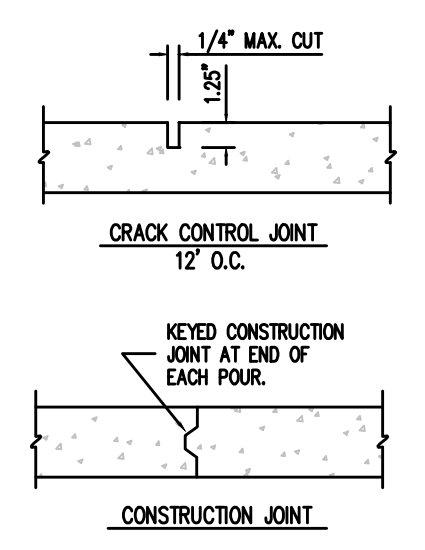


CLEAN OUT
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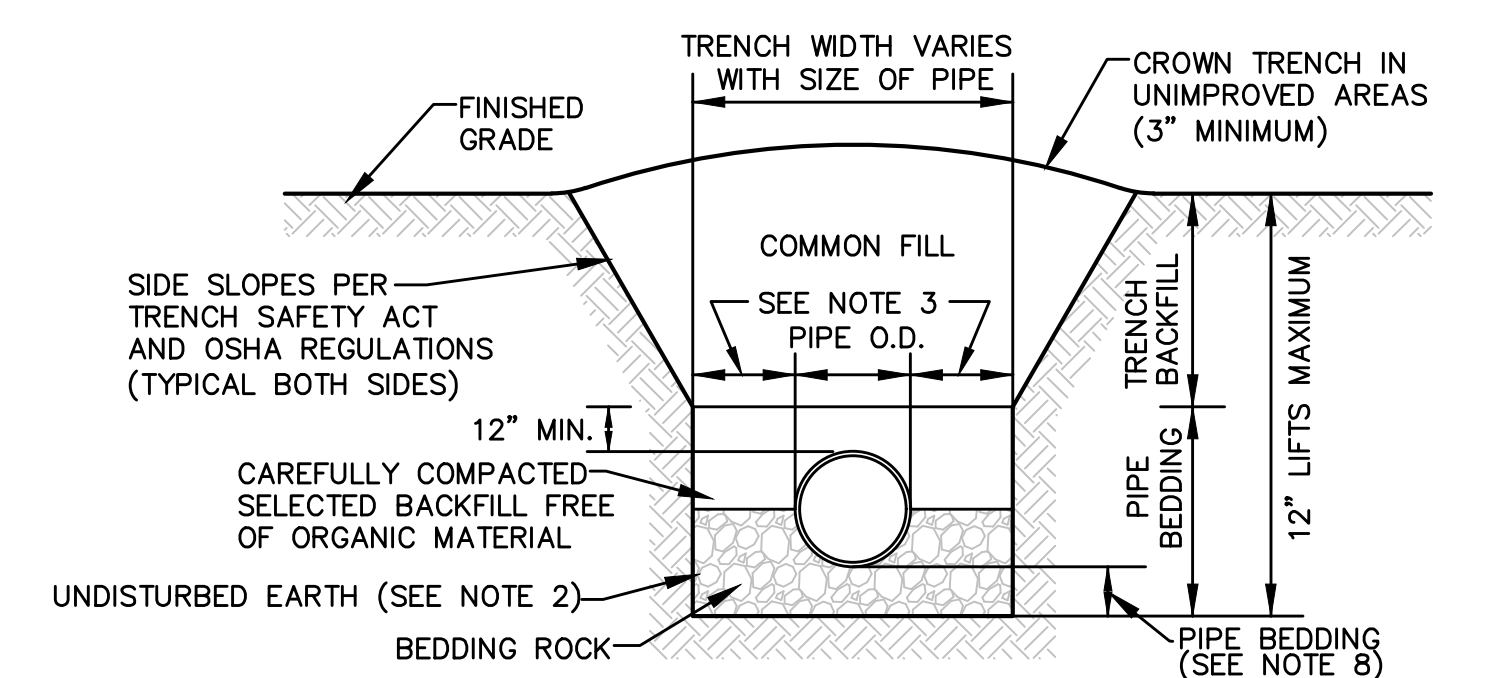


NOTES:
 1. ALL DRAINAGE PIPE TO BE WRAPPED AT JOINTS.
 2. COST OF FILTER FABRIC JACKET TO BE INCLUDED IN COST OF PIPE CULVERTS.

FILTER FABRIC JACKET
N.T.S.

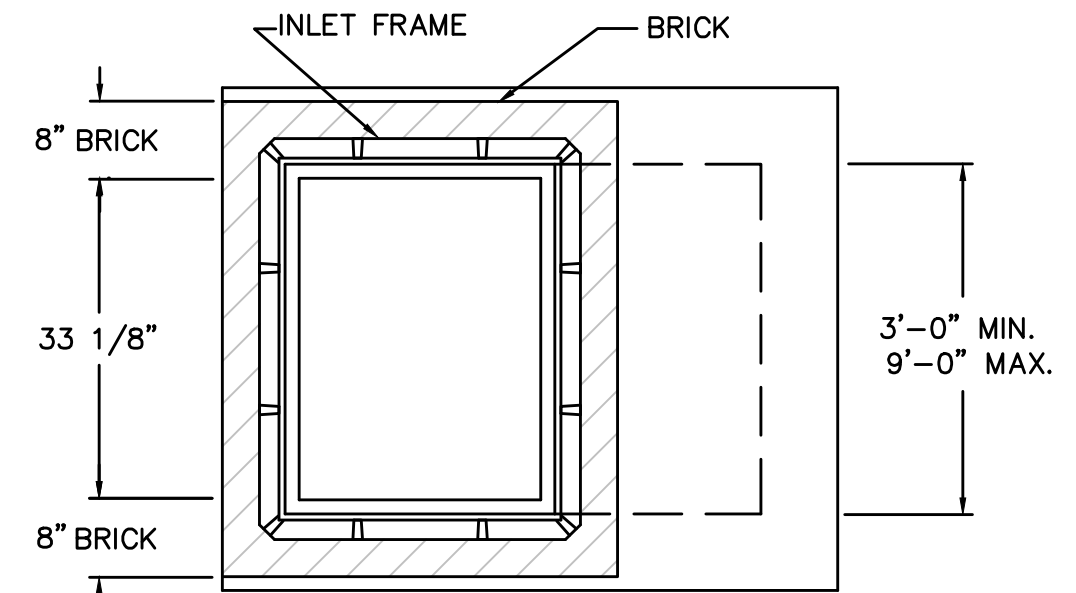


CONCRETE JOINT DETAIL
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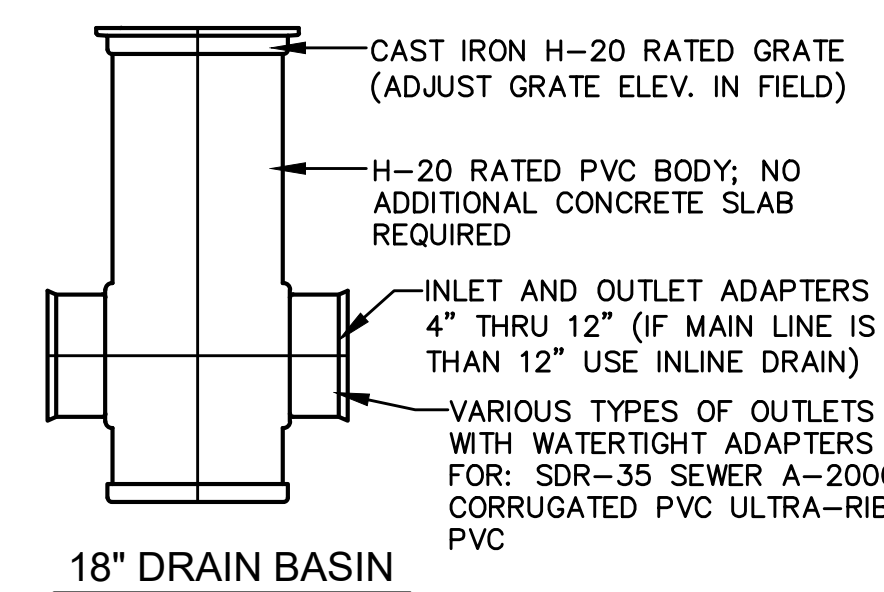


NOTES:
 1. TRENCH AND PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 95% MAX. DENSITY (AASHTO T-180).
 2. USE TYPE A BEDDING TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE COUNTY.
 3. 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
 4. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
 5. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
 6. REFER TO MANUAL FOR SHEETING AND BRACING IN EXCAVATIONS.
 7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES SURFACE RESTORATION WITHIN COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.
 8. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. THE COUNTY SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.

TYPE A BEDDING AND TRENCH DETAIL
N.T.S.

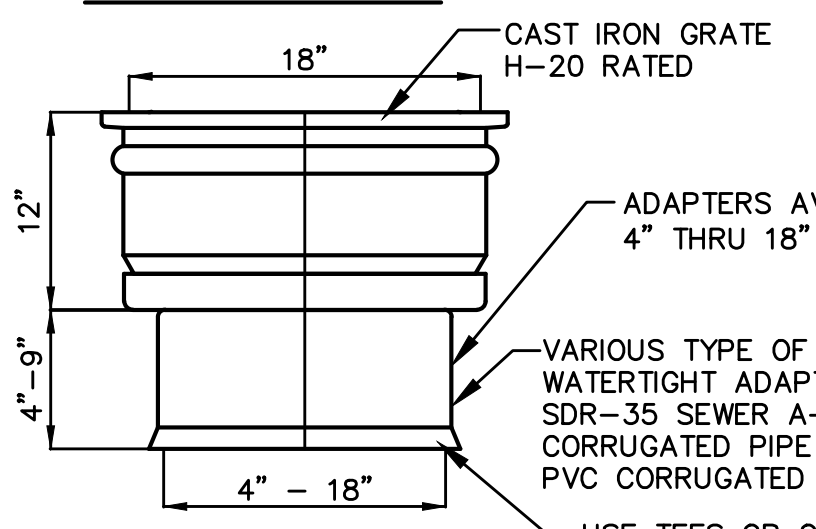


STORM SEWER TYPE "B" INLET
N.T.S.

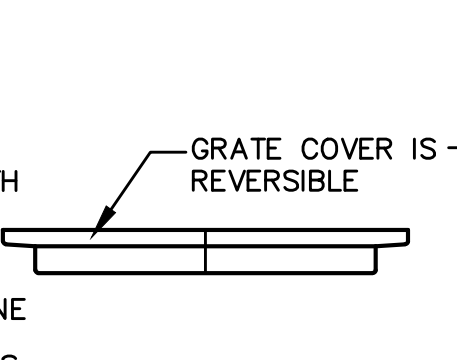


18" DRAIN BASIN

DRAIN AREA = 98.7 SQ. INCH
 GRATE HAS H-20 (HEAVY TRAFFIC) DOT RATING
 QUALITY: MATERIAL SHALL CONFORM TO ASTM A48 - CLASS 30B
 PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT



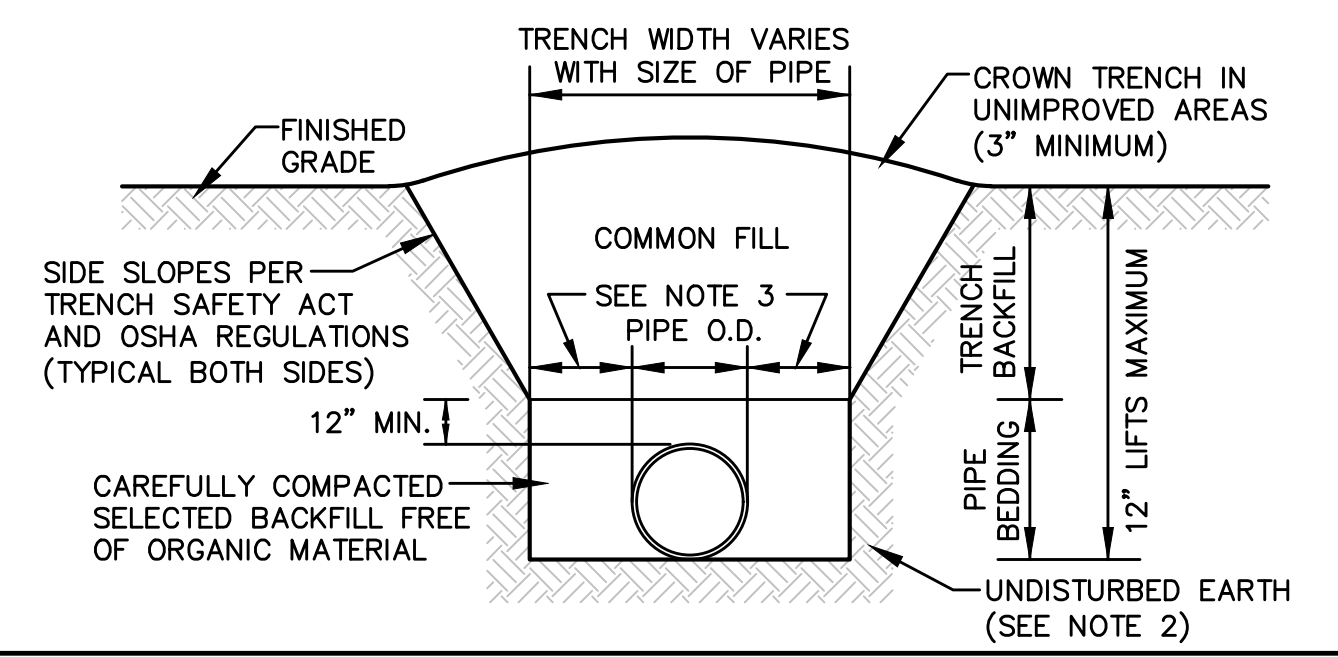
18" INLINE DRAIN



18" CAST IRON GRATE

NOTE:
 CONTRACTOR SHALL USE FILTER WRAP AROUND ALL HDPE JOINTS PER MANUFACTURER'S RECOMMENDATIONS

YARD DRAIN - HDPE STORM SEWER INLETS
NYLOPLAST OR APPROVED EQUIVALENT
N.T.S.



NOTES:
 1. TRENCH AND PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 95% MAX. DENSITY (AASHTO T-180).
 2. USE TYPE B BEDDING TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE COUNTY.
 3. 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
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 6. REFER TO MANUAL FOR SHEETING AND BRACING IN EXCAVATIONS.
 7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES SURFACE RESTORATION WITHIN COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS

TYPE B BEDDING AND TRENCH DETAIL
N.T.S.

PLANS PREPARED UNDER THE DIRECTION OF:
 JON-MICHAEL BARQUIN
 P.E. NUMBER: 94926

REVISIONS:

ETM NO. 19-239-07-002	DRAWN BY: JMB	DESIGNED BY: JMB	CHECKED BY: JZB	DATE: Issue Date
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ETM
 VISION • EXPERIENCE • RESULTS

PAVING & DRAINAGE DETAILS B
WILDLIGHT COMMERCE PARK PARCEL B
PATTILLO INDUSTRIAL REAL ESTATE

DRAWING NUMBER
8B

F:\2019\19-239\19-239-07\19-239-07\19-239-07-002\Layouts\19-239-07-002.dwg
 PLOTTED: August 25, 2023 - 9:55 AM, BY: Jon-Michael Barquin

NOT APPLICABLE

APPLICABLE

SURVEY AND LOCATE DATA:

- 1. ALL ELEVATIONS ARE BASED ON U.S.C.&G.S. DATUM AND SHOWN IN FEET.
- 2. ELEVATIONS ARE BASED ON NAVD 1988.
- 3. LOCATION OF EXISTING UTILITIES OBTAINED BY SOFT DIG LOCATES WHERE SHOWN ON PLANS, OR INCLUDED WITH BID SPECS.
- 4. EXISTING WATER AND SEWER LINES ARE SHOWN AS PER FIELD LOCATES AND SUBDIVISION AS-BUILT PLANS.
- 5. UNDERGROUND UTILITIES WERE LOCATED UTILIZING GROUND PENETRATING RADAR (GPR) AND A DIGITAL LOCATOR. CONTRACTOR SHALL BE AWARE THAT IN SOME CASES UTILITIES HAVE BEEN LOCATED, AND SURVEY HAS BEEN COMPLETED ONLY ON ONE SIDE OF THE ROAD.
- 6. ALL PIPE LENGTHS SHOWN ON PLAN AND PROFILES ARE FROM CENTER TO CENTER OF MANHOLES, CATCH BASINS, INLETS ETC. OR ALONG THE CENTER LINE OF FORCE MAINS AND WATER MAINS.
- 7. INVERT ELEVATIONS SHOWN ON DRAWINGS REFER TO THE CENTERLINE OF MANHOLES, UNLESS OTHERWISE INDICATED.
- 8. THE LOCATION OF ALL EXISTING SEWER AND WATER SERVICE LINES MAY NOT BE INDICATED ON THESE PLANS. THE LOCATION OF NEW SERVICES SHALL BE VERIFIED IN THE FIELD.
- 9. BENCHMARK DATA: NAVD 88.

PERMIT REQUIREMENTS (NOT ALL INCLUSIVE):

- 1. CONTRACTOR TO OBTAIN ALL REQUIRED RIGHT-OF-WAY PERMITS.
- 2. CONTRACTOR SHALL NOT OPEN CUT STREETS IN THE PROJECT AREA UNLESS SPECIFICALLY SHOWN ON PLANS
- 3. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A CONSUMPTIVE USE PERMIT (C.U.P.) THROUGH THE ST. JOHNS WATER MANAGEMENT DISTRICT SHOULD DEWATERING ACTIVITIES BE REQUIRED.
- 4. THE DEPARTMENT OF TRANSPORTATION, RAILROAD COMPANIES AND S.J.C. ARE TO BE NOTIFIED IN ADVANCE OF CONSTRUCTION PER THEIR RESPECTIVE PERMIT CONDITIONS.
- 5. ALL WORK SHALL BE IN ACCORDANCE WITH BID DOCUMENTS, JEA WATER AND SEWER STANDARDS, DETAILS AND MATERIALS MANUAL, REV. 2018, AND ST. JOHNS COUNTY STANDARD SPECIFICATIONS AND DETAILS AND ALL APPLICABLE STATE AND LOCAL REGULATIONS.
- 6. IF SOLVENT CONTAMINATION IS FOUND IN THE PIPE TRENCH, WORK SHALL BE STOPPED AND THE PROPER AUTHORITIES NOTIFIED. WITH APPROVAL OF THE PERMITTING AGENCY, DUCTILE IRON PIPE, FITTINGS AND SOLVENT RESISTANT GASKET MATERIAL SHALL BE USED IN THE CONTAMINATED AREA. THE DUCTILE IRON PIPE SHALL EXTEND AT LEAST 100 FEET BEYOND ANY SOLVENT NOTED.
- 7. THE CONTRACTOR SHALL NOTIFY APPLICABLE UTILITY CONTACT PERSONNEL NOT LESS THAN ONE WEEK PRIOR TO CONSTRUCTION OF FACILITIES IN THEIR RESPECTIVE AREAS.
- 8. TREE PROTECTION SHALL BE IN ACCORDANCE WITH ST. JOHNS COUNTY LDC AND/OR AS DETAILED ON SPECIFIC PLAN SHEETS. NO TRIMMING OF OVERHANGING TREE LIMBS WILL BE ALLOWED. USE SMALLER EQUIPMENT IF NECESSARY.
- 9. THE CONTRACTOR SHALL LOCATE THE DRAINAGE INLET STRUCTURES IN THE PROJECT AREA AND ERECT SEDIMENTATION CONTROL DEVICES AS NECESSARY PER THE ST. JOHNS COUNTY STORMWATER POLLUTION PREVENTION PLAN.
- 10. CONTRACTOR TO COORDINATE WORK WITH OTHER UTILITIES DURING CONSTRUCTION.

EXISTING UTILITY PROTECTION:

- 1. IN ORDER TO REDUCE THE DISRUPTION AND COST OF UTILITY DAMAGES OCCURRING IN THE DUVAL COUNTY RIGHT-OF-WAY AND EASEMENTS, THE CONTRACTOR SHALL PREVENT DAMAGES TO EXISTING UTILITIES CAUSED BY HIS WORK THROUGH FIELD VERIFICATION OF THE LOCATION OF THE EXISTING UTILITIES. IN THE CASE OF OPEN EXCAVATION, VERIFICATION MAY BE PERFORMED DURING THE CONTRACTORS WORK. IN THE CASE OF DIRECTIONAL DRILLING, VERIFICATION SHALL TAKE PLACE PRIOR TO MOBILIZATION OF THE DRILLING EQUIPMENT.
- 2. THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES AS NEEDED TO AVOID CONTACT. EXISTING UTILITIES SHALL BE EXPOSED USING DETECTION EQUIPMENT OR OTHER ACCEPTABLE MEANS. SUCH METHODS MAY INCLUDE BUT SHALL NOT BE LIMITED TO "SOFT DIG" EQUIPMENT AND GROUND PENETRATING RADAR (GPR). THE EXCAVATOR SHALL BE HELD LIABLE FOR DAMAGES CAUSED TO THE CITY'S/JEA'S INFRASTRUCTURE AND THE EXISTING FACILITIES OF OTHER UTILITY COMPANIES.
- 3. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND AVOID ALL UTILITIES, OTHER STRUCTURES AND OBSTRUCTIONS BOTH ABOVE AND BELOW GROUND SURFACE. ALL DAMAGE RESULTING FROM THE CONTRACTOR'S FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

RESTORATION NOTES:

- 1. THE CONTRACTOR SHALL EMPLOY A LAND SURVEYOR, REGISTERED IN THE STATE OF FLORIDA, TO REFERENCE AND RESTORE PROPERTY CORNERS AND LANDMARKS WHICH MAY BE DISTURBED BY CONSTRUCTION. KNOWN CORNER LOCATIONS ARE AVAILABLE FROM THE CITY OF JACKSONVILLE ENGINEERING DIVISION.
- 2. THE CONTRACTOR SHALL RESTORE/REPLACE ALL CULVERTS, HEADWALLS AND STORM DRAIN INLETS REMOVED OR DISTURBED BY THE CONSTRUCTION OPERATION.
- 3. TRAFFIC SIGNS AND PAVEMENT MARKINGS SHALL BE RESTORED TO THEIR PRE-CONSTRUCTION CONDITION IN ACCORDANCE WITH CITY OF JACKSONVILLE/FDOT STANDARD SPECIFICATIONS.
- 4. SIDEWALKS, DRIVEWAYS AND CURBING DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE REPLACED IN ACCORDANCE WITH JACKSONVILLE STANDARD SPECIFICATIONS. SIDEWALKS REMOVED AND REPLACED IN CURB AND GUTTER AREAS AT INTERSECTIONS SHALL HAVE HANDICAP RAMPS INSTALLED. DRIVEWAYS AND SIDEWALKS SHALL BE SAWCUT ALONG THE RIGHT-OF-WAY LINE OR NEAREST JOINT AND REMOVED AND REPLACED TO THE EDGE OF STREET.
- 5. GRASS SOD SHALL BE FURNISHED AND PLACED IN THE AREAS DISTURBED OR DAMAGED BY THE CONSTRUCTION OPERATION.
- 6. ALL PAVEMENT REPAIR SHALL BE IN ACCORDANCE WITH THE CITY OF JACKSONVILLE/FDOT STANDARD DETAILS AND SPECIFICATIONS LATEST EDITION.
- 7. UNLESS OTHERWISE NOTED, REMOVE AND REPLACE EXISTING PAVEMENT AS PER C.O.J. CASE X (10) PAVEMENT REPLACEMENT DETAIL.
- 8. CONTRACTOR MUST MAINTAIN AND PRESERVE NEWLY GRADED AREAS AND REPAIR AREAS WHERE SETTLING AND EROSION HAVE OCCURRED.

UTILITY CONTACTS:

- A. AT&T - GENERAL NUMBER-----904-519-2529
- B. AT&T - ADAM DUGAN - NORTH DISTRICT-----904-781-0741
- C. AT&T - BILL LAKE - SOUTH DISTRICT-----904-303-8754
- D. CITY OF JACKSONVILLE - PUBLIC WORKS DEPT.-----904-255-8762
- E. CITY OF JACKSONVILLE - TRAFFIC OPERATIONS-----904-387-8861
- F. FLORIDA DEPT. OF TRANSPORTATION-----904-360-5200
- G. JEA - WATER COLLECTION & DISTRIBUTION - BOB ALLSBROOK-----904-665-7299
- H. JEA - SEWER COLLECTION & DISTRIBUTION - BOB ALLSBROOK-----904-665-7299
- I. JEA - GENERAL INFORMATION-----904-665-6000
- J. JEA - PROJECT OUTREACH-----904-665-7500
- K. JEA - POWER OUTAGES-----904-665-6000
- L. JEA - SEWER PROBLEMS-----904-665-4802
- M. JEA - WATER PROBLEMS-----904-665-4801
- N. JEA - WATER & SEWER LOCATES-----904-665-8410
- O. NASSAU COUNTY - PUBLIC WORKS - CHARLES HOUSTON-----904-491-7334
- P. ST. JOHNS COUNTY - RIGHT-OF-WAY PERMITTING - RICK MAULDIN-----904-209-0134
- Q. ST. JOHNS COUNTY - TRAFFIC SIGNALS - HANK MEIN-----904-209-0173
- R. COMCAST - EMERGENCY HOTLINE-----904-380-6274
- S. TECO/PEOPLES GAS - BEN MOBLEY-----904-545-8958
- T. SUNSHINE ONE CALL-----811

NOT APPLICABLE

APPLICABLE

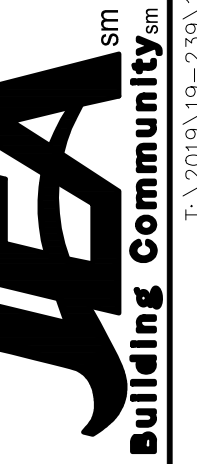
INSTALLATION NOTES:

- 1. CONTRACTOR TO REHABILITATE ALL MANHOLES ON PIPE BURST SEWERS VIA COATING/LINING PER JEA SPECIFICATION 446-2, UNLESS OTHERWISE NOTED ON THE PLANS.
- 2. CONTRACTOR TO RENEW, REHABILITATE, REPLACE OR REINSTALL AS APPLICABLE ALL SERVICE LATERALS TO R.O.W. LINE.
- 3. CONTRACTOR TO INSTALL SEWER SERVICE PIPING A MINIMUM OF 60 INCHES BELOW GRADE. WHERE NEW SANITARY SEWER MAIN IS LESS THAN 5 FEET DEEP, THE SEWER SERVICE PIPE SHALL BE INSTALLED AS DEEP AS POSSIBLE.
- 4. WHEN THE DISTANCE BETWEEN A POWER POLE AND THE TRENCH IS LESS THAN THE TRENCH DEPTH, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH JEA ELECTRICAL PERSONNEL TO SECURE POWER POLES. THE CONTACTS FOR JEA ARE AS FOLLOWS:
 NORTHSIDE-EAST of US-1 MIKE CORBITT @ 665-7991 (mobile 662-0635)
 NORTHSIDE-WEST of US-1 ANDY YEAGER @ 665-7998 (mobile 662-0622)
 NORTHSIDE-BACKUP ALAN AINSLEY @ 665-7303 (mobile 662-6557)
 SOUTHSIDE-SOUTH of BEACH BLVD. TOM KERNS @ 665-6947 (mobile 860-1687)
 SOUTHSIDE-NORTH of BEACH BLVD. DERYL BASFORD @ 665-6855 (mobile 662-0616)
 SOUTHSIDE-BACKUP EDDIE GALES @ 665-6855 (mobile 662-0616)
 A MINIMUM OF TWO (2) WORKING DAYS NOTICE IS REQUIRED FOR AN OUTSIDE MEETING WITH JEA ELECTRICAL TO DISCUSS THE REQUIRED WORK. ADDITIONAL TIME WILL BE REQUIRED BY JEA ELECTRICAL FOR ANY REQUIRED WORK TO BE ACCOMPLISHED.
- 5. ALL NEW STORM DRAIN PIPE JOINTS SHALL BE WRAPPED WITH FILTER FABRIC.
- 6. THE DESIGN FOR THE PROJECT IS BASED UPON THE "OPEN-CUT" METHOD OF CONSTRUCTION. IF USING ALTERNATIVE MEANS OR METHODS, THE CONTRACTOR SHALL FOLLOW ALL APPLICABLE STANDARDS FOR THAT MEANS OR METHOD.
- 7. THE CONTRACTOR SHALL MINIMIZE SERVICE INTERRUPTIONS AT SERVICE CONNECTIONS. THE MEANS AND METHODS SHALL BE LEFT TO THE DISCRETION OF THE CONTRACTOR, SUBJECT TO THE REQUIREMENTS OF THE CONTRACT SPECIFICATIONS. NO EXISTING ACTIVE SERVICE SHALL BE LEFT INTERRUPTED AT THE END OF THE WORK DAY.
- 8. CONTRACTOR SHALL PROVIDE ADDITIONAL CORPORATION STOPS FOR FILLING AND DRAINING PURPOSES DURING CONSTRUCTION AS NEEDED. CORPORATION STOPS ARE TO BE PLUGGED AND LEFT IN PLACE. INDICATE CORPORATION STOP LOCATIONS ON RECORD DRAWINGS (AS-BUILTS).
- 9. WATER AND SEWER SERVICES SHALL BE TRANSFERRED TO THE NEW MAIN UPON COMPLETION AND F.D.E.P./J.E.A. CERTIFICATION, AND PRIOR TO THE EXISTING MAINS BEING ABANDONED.
- 10. IF EXISTING VALVES ARE IN UNPAVED AREAS AND ARE TO BE TAKEN OUT OF SERVICE, THEY SHALL BE CLOSED AND THE VALVE BOX AND COVER SHALL BE REMOVED. IF THE VALVES ARE UNDER PAVED AREAS, THEY SHALL BE CLOSED, THE VALVE BOX GROUT FILLED AND THE COVER REMOVED.
- 11. CONTRACTOR SHALL REPLACE EXISTING WATER METER BOXES WHEN DEEMED NECESSARY BY THE JEA INSPECTOR.
- 12. CONTRACTOR TO PROVIDE ADDITIONAL DEPTH OF BURY VIA PIPE JOINT DEFLECTION TO ACCOMMODATE VALVE SELECTION PER JEA STANDARDS.
- 13. WATER METERS MAY REQUIRE RELOCATION FOR CONSTRUCTION, CONTRACTOR SHALL CONTACT JEA METER DEPARTMENT AND RELOCATE WATER METERS AS NECESSARY.
- 14. PRIOR TO COMMENCING ANY EXCAVATION OR GRADING, THE CONTRACTOR SHALL OBTAIN ALL GEOTECHNICAL AND TOPOGRAPHIC SURVEY DATA AND LOCATIONS OF ABOVE GROUND AND UNDERGROUND UTILITIES. SHOULD THE CONTRACTOR DISCOVER ANY INACCURACIES, ERRORS OR OMISSIONS IN THE SURVEY DATA, HE SHALL IMMEDIATELY NOTIFY THE DESIGN ENGINEER IN ORDER THAT PROPER ADJUSTMENTS CAN BE ANTICIPATED AND ORDERED.
- 15. SHEET PILING WILL BE REQUIRED ON ALL EXCAVATIONS DEEPER THAN 16 FEET.

ETM
 England-Thins & Miller, Inc.
 14776 Old St. Augustine Road
 Jacksonville, FL 32228
 TEL: (904) 462-8928
 FAX: (904) 546-9485
 CA - 0000284 LC - 0000316
VISION • EXPERIENCE • RESULTS

THESE DETAILS AS SHOWN ON THIS DRAWING ARE BY THE JEA. WE TAKE NO EXCEPTION TO THE DESIGN

DESIGNER:	DESIGN ENGINEER	NO.	BY	DATE	REVISIONS
DRAWN BY:	JON-MICHAEL BARQUIN	1			
CHECKED BY:	FLORIDA REGISTRATION NO.	2			
DATE:	94926	3			
		4			
		5			
		6			



JEA STANDARD
 GENERAL NOTES LEGEND, AND SHEET INDEX
 WILDLIGHT COMMERCE PARK PARCEL B

NO. SHEETS	PROJ. NO.	19-239-07-002
5	DATE:	JANUARY 2017
SHEET NO.	SCALE:	AS NOTED
5		
DRAWING NO.		
....		

HORIZONTAL & VERTICAL SEPARATION REQUIREMENTS

PROPOSED UTILITY

CONFLICTING UTILITY	POTABLE WATER			WASTEWATER GRAVITY AND FORCE MAIN			RECLAIMED WATER			VACUUM SEWERS		
	HORIZ.	VERT.	JOINT SPACING*	HORIZ.	VERT.	JOINT SPACING*	HORIZ.	VERT.	JOINT SPACING*	HORIZ.	VERT.	JOINT SPACING*
POTABLE WATER	3' NOTE 1	12"	3' NOTE 2	6' to 10'	12"	6' NOTE 2	3'	12"	6' NOTE 2	3' to 10'	12"	3' NOTE 2
RECLAIMED WATER	3'	12"	6' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3'	12"	6' NOTE 2	3' NOTE 1	12"	3' NOTE 2
WASTEWATER (GRAVITY AND FORCE MAIN)	6' to 10'	12"	6' NOTE 2	3' NOTE 1	12"	6"	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2
VACUUM SEWERS	3' to 10'	12"	3' NOTE 2	3' NOTE 1	12"	6"	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2
RIGHT OF WAYS	3' NOTE 1	N/A	N/A	3' NOTE 1	N/A	N/A	3' NOTE 1	N/A	N/A	3' NOTE 1	N/A	N/A
PERMANENT STRUCTURES (SIGNS, POLES, ETC.)	3' NOTE 1	N/A	N/A	3' NOTE 1	N/A	N/A	3' NOTE 1	N/A	N/A	3' NOTE 1	N/A	N/A
STORM SEWERS	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2
GAS	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2
TREES	3'-6' NOTE 6	N/A	N/A	3'-6' NOTE 6	N/A	N/A	3'-6' NOTE 6	N/A	N/A	3'-6' NOTE 6	N/A	N/A
ALL OTHER UTILITIES	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2

- NOTES:**
- THIS SEPARATION REQUIREMENT IS TO PROVIDE ACCESSIBILITY FOR CONSTRUCTION AND MAINTENANCE. THREE FEET OF HORIZONTAL SEPARATION IS THE MINIMUM FOR PIPES WITH THREE FEET OF COVER. FOR PIPES INSTALLED AT GREATER DEPTH, PROVIDE AN ADDITIONAL FOOT OF SEPARATION FOR EACH ADDITIONAL FOOT OF DEPTH.
 - THE MINIMUM JOINT SPACING REQUIRED FROM CROSSING FROM OTHER UTILITIES WHILE STILL MAINTAINING MINIMUM VERTICAL SEPARATION.
 - DISTANCES GIVEN ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE.
 - NO WATER PIPE SHALL PASS THROUGH OR COME INTO CONTACT WITH ANY PART OF SANITARY OR STORM WATER MANHOLE OR STRUCTURES.
 - WATER MAIN SHOULD CROSS ABOVE OTHER PIPES WHENEVER POSSIBLE. WHEN WATER MAIN MUST BE BELOW OTHER UTILITY PIPING, THE MINIMUM SEPARATION SHALL BE 12 INCHES.
 - REFER TO POTABLE WATER PIPING- SECTION 350, III.4.11.

SEPARATION REQUIREMENTS FOR WATER, WASTEWATER AND RECLAIMED WATER MAINS

JANUARY 2022

PLATE W-10

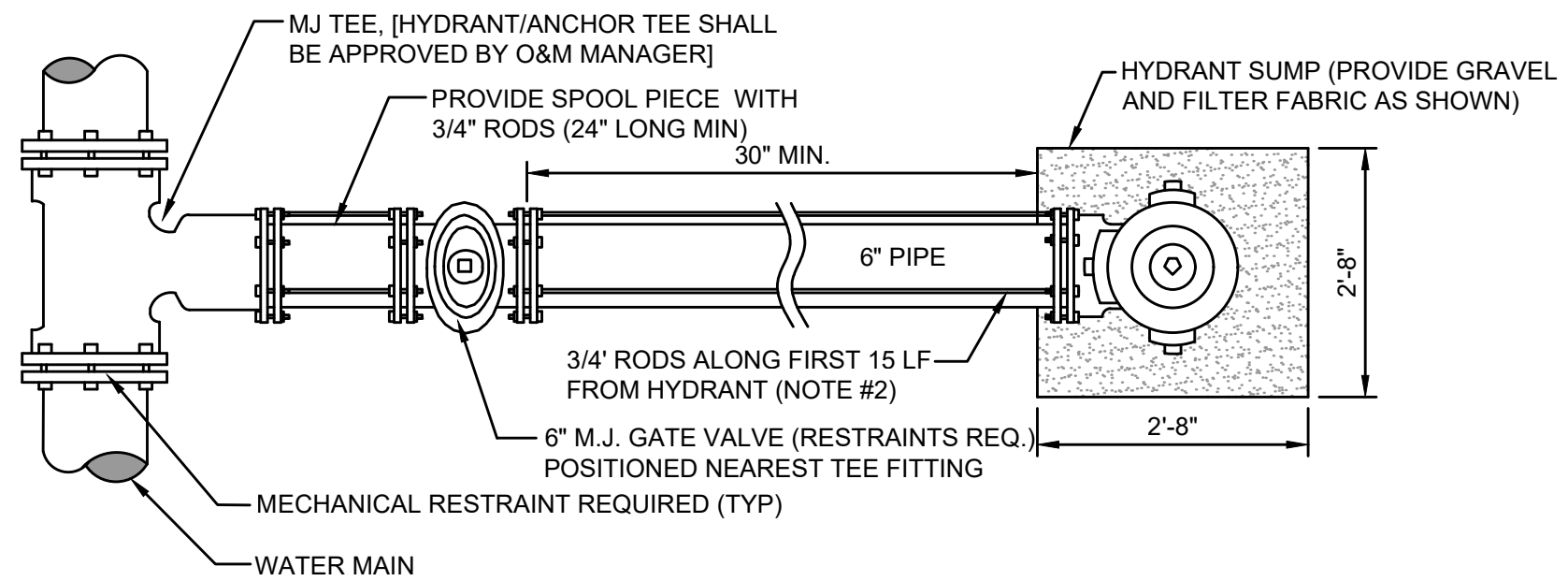
WATER MAIN AND NON-WATER MAIN SEPARATION REQUIREMENTS - NOTES

- IT IS REQUIRED THAT "WATER MAINS" BE INSTALLED, CLEANED, DISINFECTED AND HAVE A SATISFACTORY BACTERIOLOGICAL SURVEY PERFORMED IN ACCORDANCE WITH THE LATEST APPLICABLE AWWA STANDARDS, CHAPTER 62-555, F.A.C. AND LATEST JEA WATER AND SEWER STANDARDS. FOR THE PURPOSE OF THIS SECTION, THE PHRASE "WATER MAINS" SHALL MEAN MAINS, INCLUDING TREATMENT PLANT PROCESS PIPING, CONVEYING EITHER RAW, PARTIALLY TREATED, OR FINISHED DRINKING WATER, FIRE HYDRANT LEADS, AND SERVICE LINES THAT HAVE AN INSIDE DIAMETER OF THREE (3) INCHES OR GREATER. IN ADDITION, THE PHRASE "RECLAIMED WATER" REFERS TO THE WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
- NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE (3) FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER.
- NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX (6) FEET, AND PREFERABLY TEN (10) FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS MAY BE REDUCED TO THREE (3) FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX (6) INCHES ABOVE THE TOP OF THE SEWER (SPECIAL CASE).
- NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX (6) INCHES, AND PREFERABLY TWELVE (12) INCHES, ABOVE OR AT LEAST TWELVE (12) INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
- NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST TWELVE (12) INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
- AT THE UTILITY CROSSINGS DESCRIBED IN NOTES 4 AND 5 ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE (3) FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER, AND AT LEAST SIX (6) FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINE CONVEYING RECLAIMED WATER.
- NEW OR RELOCATED FIRE HYDRANTS SHALL BE LOCATED SO THAT THE HYDRANTS ARE AT LEAST THREE (3) FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER; AT LEAST THREE (3) FEET, AND PREFERABLY TEN (10) FEET, FROM ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER; AT LEAST SIX (6) FEET, AND PREFERABLY TEN (10) FEET, FROM ANY EXISTING OR PROPOSED GRAVITY OR PRESSURE-TYPE SANITARY SEWER OR WASTEWATER FORCE MAIN.
- WHERE AN UNDERGROUND WATER MAIN IS BEING LAID LESS THAN THE REQUIRED MINIMUM HORIZONTAL DISTANCE FROM ANOTHER PIPELINE AND WHERE AN UNDERGROUND WATER MAIN IS CROSSING ANOTHER PIPELINE AND JOINTS IN THE WATER MAIN ARE BEING LOCATED LESS THAN THE REQUIRED MINIMUM DISTANCE FROM JOINTS IN THE OTHER PIPELINE, THE CONTRACTOR SHALL CONSULT THE DESIGN ENGINEER TO OBTAIN APPROVAL OF ANY ALTERNATIVE CONSTRUCTION METHODS, PRIOR TO CONSTRUCTION.

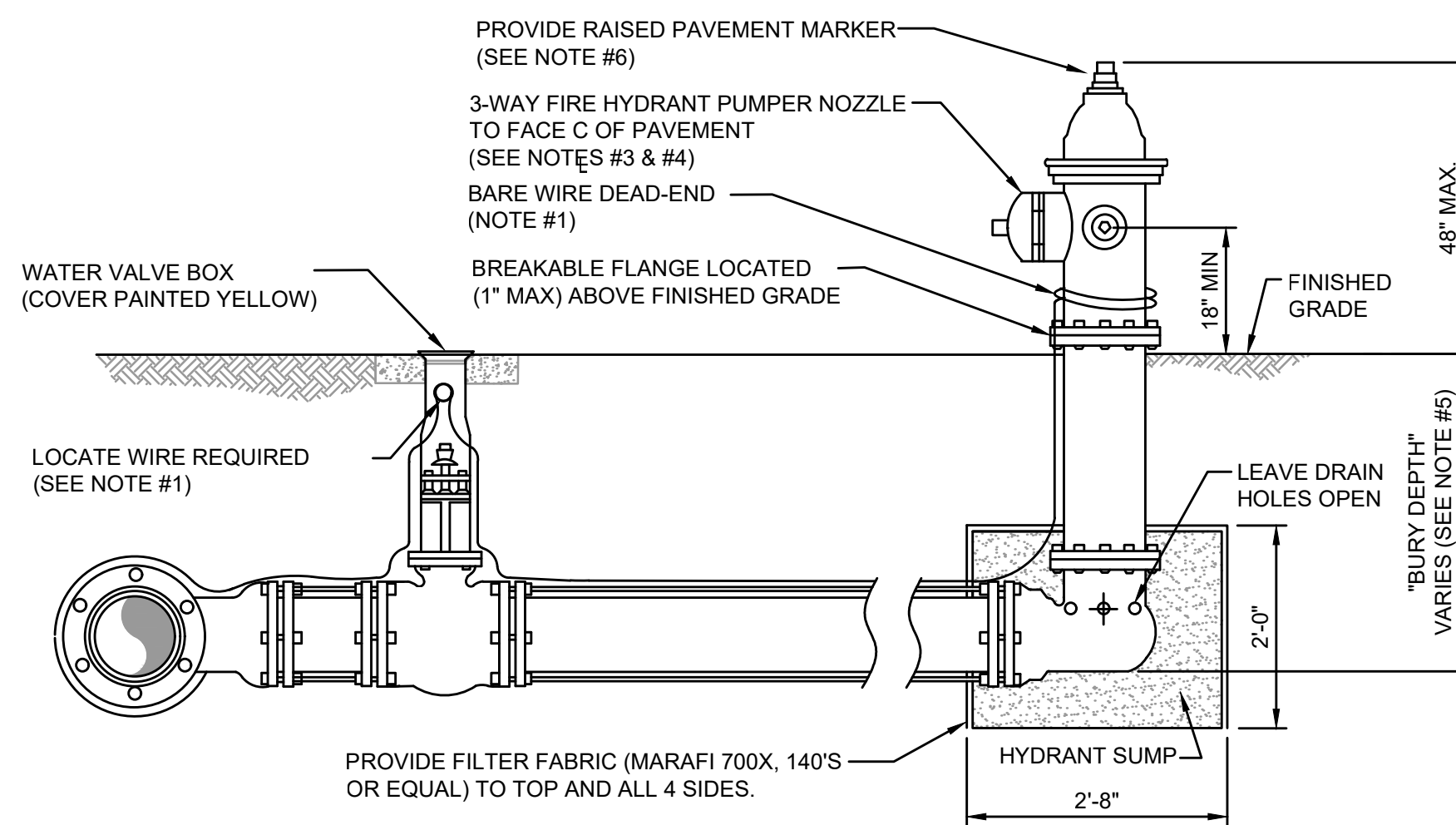
NOTES ON UTILITY SEPARATION REQUIREMENTS

JANUARY 2022

PLATE W-11



PLAN



SECTION

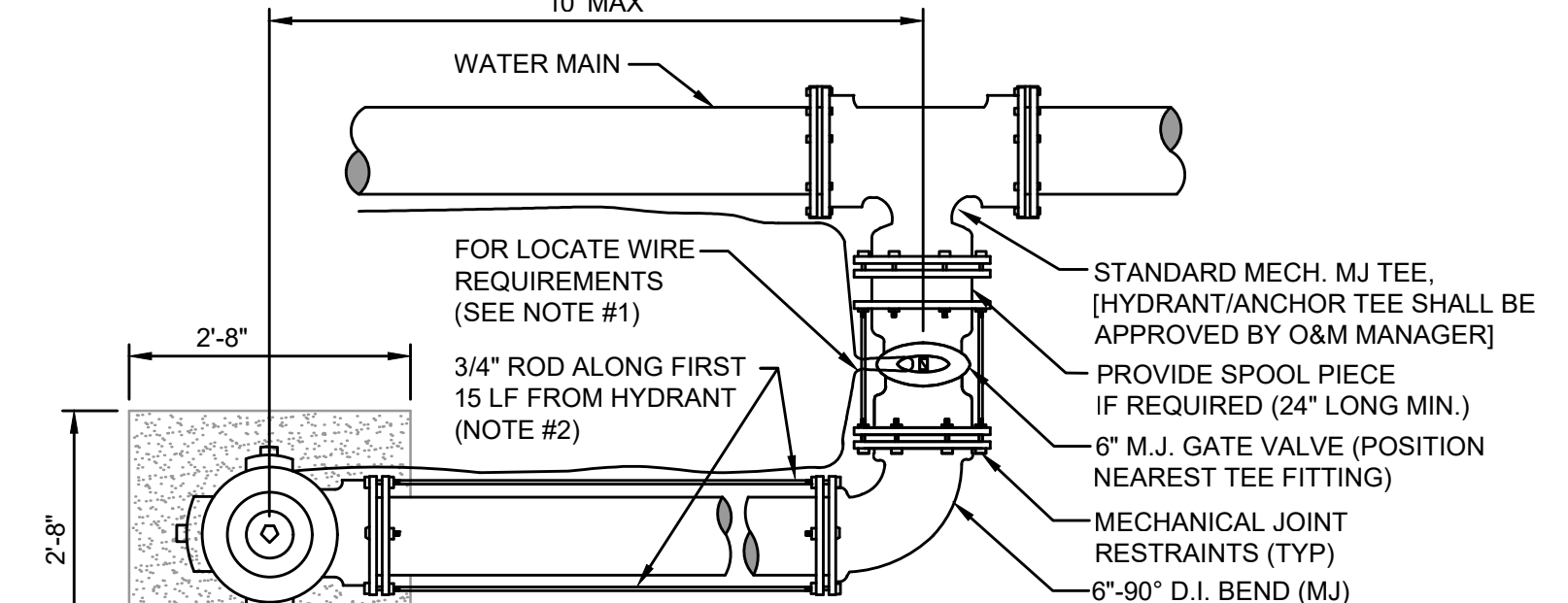
NOTES:

- LOCATE WIRE SHALL BE ROUTED FROM THE VALVE TO THE HYDRANT AS SHOWN ABOVE LEAVING ENOUGH SLACK TO REACH 4\"/>
- FIRE HYDRANTS SHALL BE INSTALLED BETWEEN BACK OF CURB AND FACE OF SIDEWALK AND NOT WITHIN SWALE/DITCH AREAS. THE DISTANCE RANGE FROM EDGE OF ADJACENT PAVEMENT, BACK OF CURB AND FACE OF SIDEWALK SHALL BE IN COMPLIANCE WITH LOCAL COUNTY FIRE DEPARTMENT RULES AND AS APPROVED BY JEA AND APPLICABLE PERMITTING AGENCIES. DISTANCE SHALL BE MEASURED TO THE CLOSEST PART OF THE FIRE HYDRANT (I.E. THE PUMPER NOZZLE). THE MAXIMUM DISTANCE (BACK OF CURB) SHALL BE IN COMPLIANCE WITH LOCAL COUNTY FIRE DEPARTMENT RULES AND AS APPROVED BY JEA. FOR OTHER LOCATION LIMITATIONS SEE PLATES W-10 AND W-11. IF PIPING BETWEEN TEE AND HYDRANT IS LONGER THAN 80 LF, AN ADDITIONAL 6\"/>
- OPERATION OF THE FIRE HYDRANT SHALL BE EITHER FULL OPEN POSITION OR TOTALLY CLOSED POSITION. THE HYDRANT SHALL NOT BE UTILIZED TO THROTTLE OUTLET FLOW.
- PRIOR TO PROJECT FINAL INSPECTION, THE HYDRANT AND ALL ABOVE GROUND PIPING SHALL BE RE-OILED, GREASED AND REPAINTED (RUS- KIL ENAMEL-INTERNATIONAL YELLOW OR EQUAL), PRIVATELY OWNED AND MAINTAINED FIRE HYDRANTS SHALL BE PAINTED RED.
- FIRE HYDRANTS SHALL BE ORDERED WITH PROPER "BURY DEPTH" TO MEET ACTUAL FIELD CONDITIONS. THIS IS ESPECIALLY IMPORTANT FOR BRANCH LINES WHICH TEE-OFF A 12\"/>
- BLUE REFLECTIVE MARKERS SHALL BE INSTALLED IN SUCH A MANNER THAT THE REFLECTIVE FACE OF THE MARKER IS PERPENDICULAR TO A LINE PARALLEL TO THE ROADWAY CENTERLINE. THE BLUE REFLECTIVE MARKERS SHALL BE PLACED IN THE CENTER OF THE TRAVEL LANE, DIRECTLY ACROSS FROM AND ADJACENT TO EACH FIRE HYDRANT.

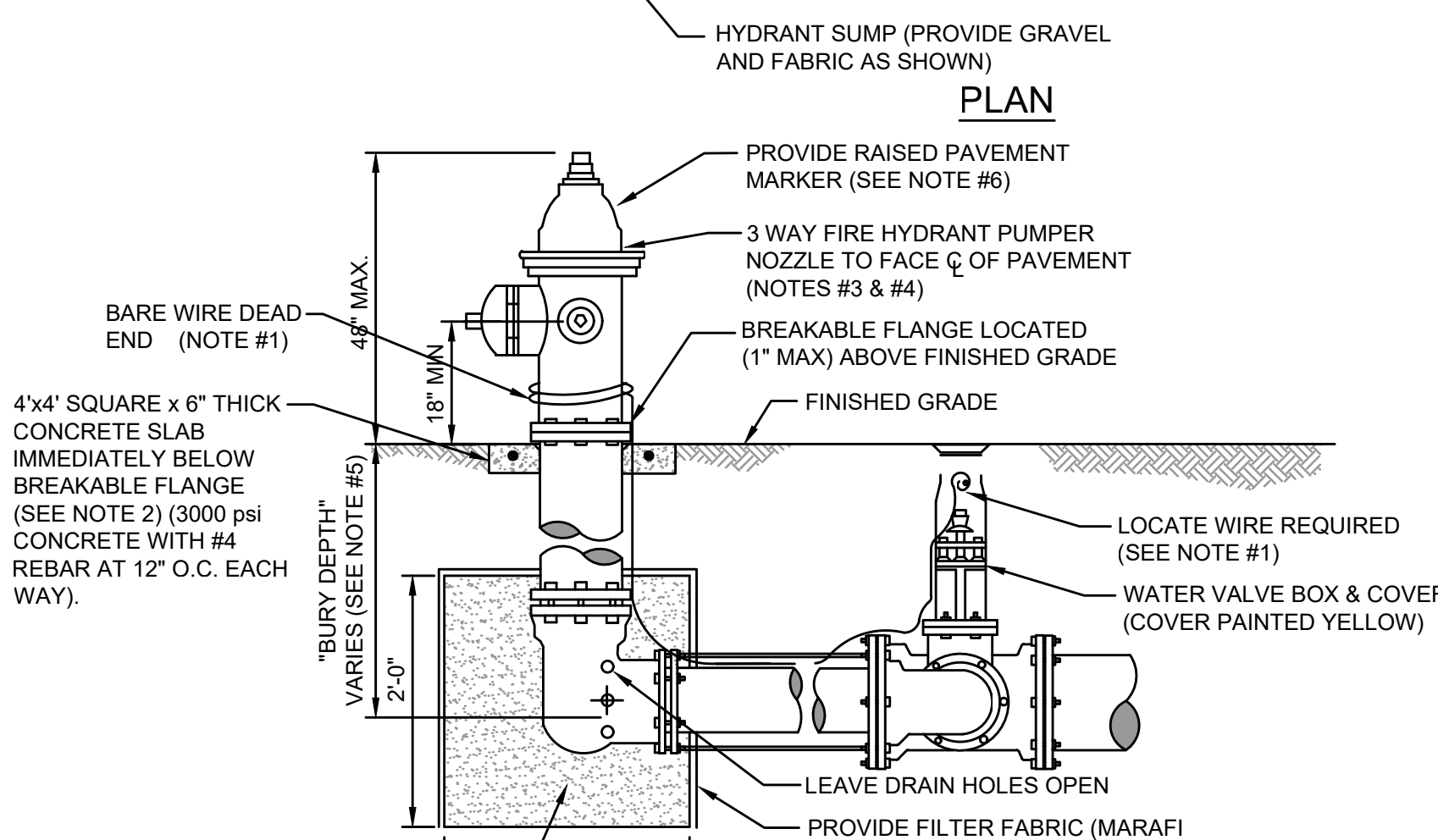
FIRE HYDRANT INSTALLATION USING MECHANICAL JOINT TEE

JANUARY 2022

PLATE W-13



PLAN



SECTION

NOTES:

- LOCATE WIRE SHALL BE ROUTED FROM THE VALVE TO THE HYDRANT AS SHOWN ABOVE LEAVING ENOUGH SLACK TO REACH 4\"/>
- FIRE HYDRANTS SHALL BE INSTALLED BETWEEN BACK OF CURB AND FACE OF SIDEWALK. ALL HYDRANTS SHALL BE LOCATED NO LESS THAN THREE (3) FEET FROM THE EDGE OF PAVEMENT OR BACK OF CURB OF THE ADJACENT ROADWAY AND NO LESS THAN THREE (3) FEET FROM ANY PHYSICAL FEATURE WHICH MAY OBSTRUCT ACCESS OR VIEW OF ANY HYDRANT UNLESS OTHERWISE APPROVED BY THE JEA. THE MAXIMUM DISTANCE (BACK OF CURB) SHALL BE IN COMPLIANCE WITH LOCAL COUNTY FIRE DEPARTMENT RULES AND AS APPROVED BY JEA. FOR OTHER LOCATION LIMITATIONS SEE PLATES W-10 AND W-11. IF PIPING BETWEEN TEE AND HYDRANT IS LONGER THAN 80 LF, AN ADDITIONAL 6\"/>
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- PRIOR TO PROJECT FINAL INSPECTION, THE HYDRANT AND ALL ABOVE GROUND PIPING SHALL BE RE-OILED, GREASED AND REPAINTED (RUS- KIL ENAMEL-INTERNATIONAL YELLOW OR EQUAL), PRIVATELY OWNED AND MAINTAINED FIRE HYDRANTS SHALL BE PAINTED RED.
- FIRE HYDRANTS SHALL BE ORDERED WITH PROPER "BURY DEPTH" TO MEET ACTUAL FIELD CONDITIONS. THIS IS ESPECIALLY IMPORTANT FOR BRANCH LINES WHICH TEE-OFF A 12\"/>
- BLUE REFLECTIVE MARKERS SHALL BE INSTALLED IN SUCH A MANNER THAT THE REFLECTIVE FACE OF THE MARKER IS PERPENDICULAR TO A LINE PARALLEL TO THE ROADWAY CENTERLINE. THE BLUE REFLECTIVE MARKERS SHALL BE PLACED IN THE CENTER OF THE TRAVEL LANE, DIRECTLY ACROSS FROM AND ADJACENT TO EACH FIRE HYDRANT.

FIRE HYDRANT INSTALLATION LIMITED SPACE

JANUARY 2022

PLATE W-14

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 14776 Old St. Augustine Road
 The Woodlands, TX 77380
 TEL: (800) 462-8828
 TEL: (936) 462-8828
 FAX: (936) 462-8828
 FAX: (936) 462-8828
 CA - 00002884 LC - 0000316

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 FLORIDA REGISTRATION NO. 94926

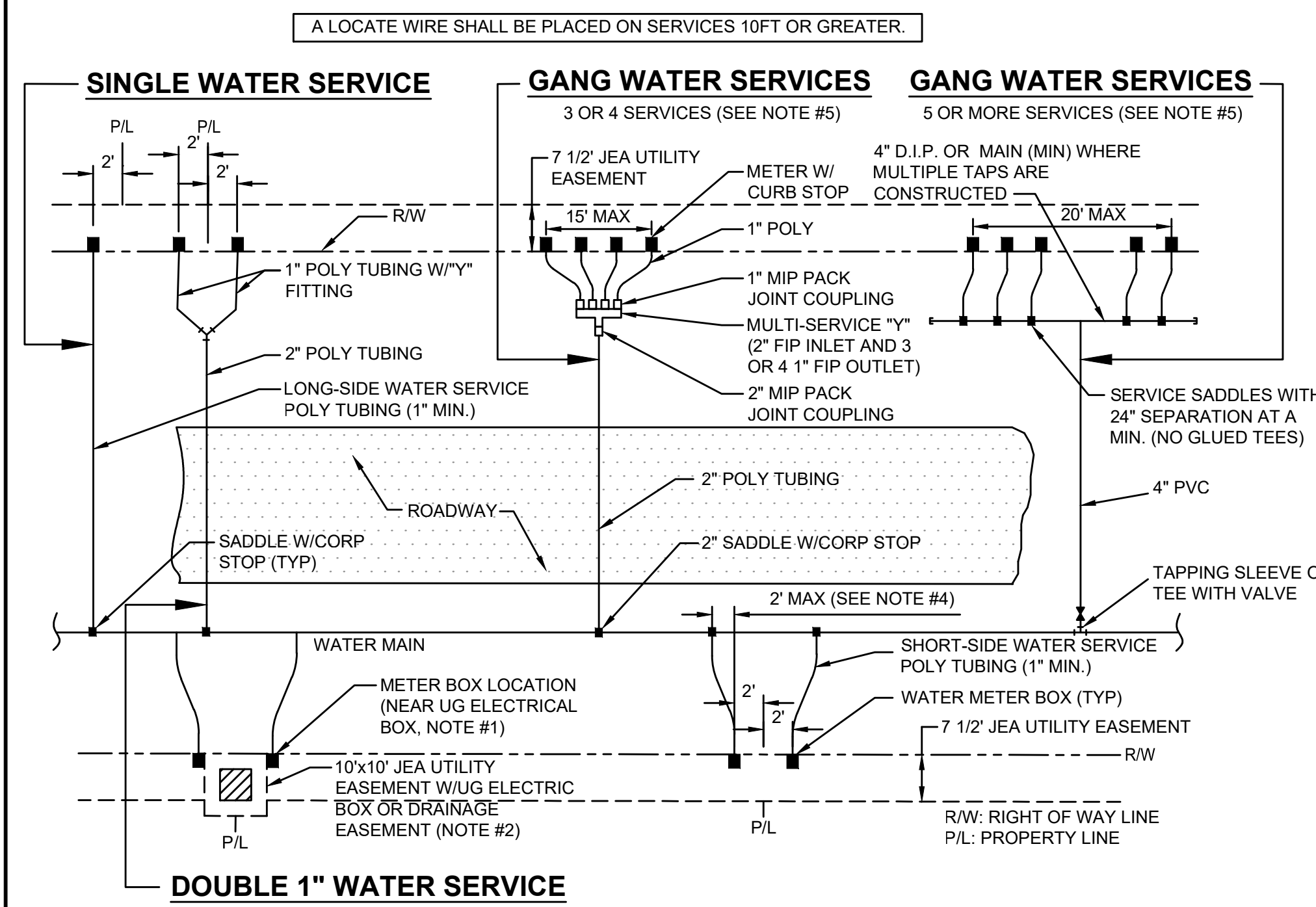
DESIGNED BY: JON-MICHAEL BARQUIN
 DRAWN BY: JON-MICHAEL BARQUIN
 CHECKED BY: JON-MICHAEL BARQUIN
 DATE: JON-MICHAEL BARQUIN
 DATE: JON-MICHAEL BARQUIN

JEA STANDARD WATER AND RECLAIMED DETAILS
 WILDLIGHT COMMERCE PARK PARCEL B

PROJ. NO.: 19-239-07-002
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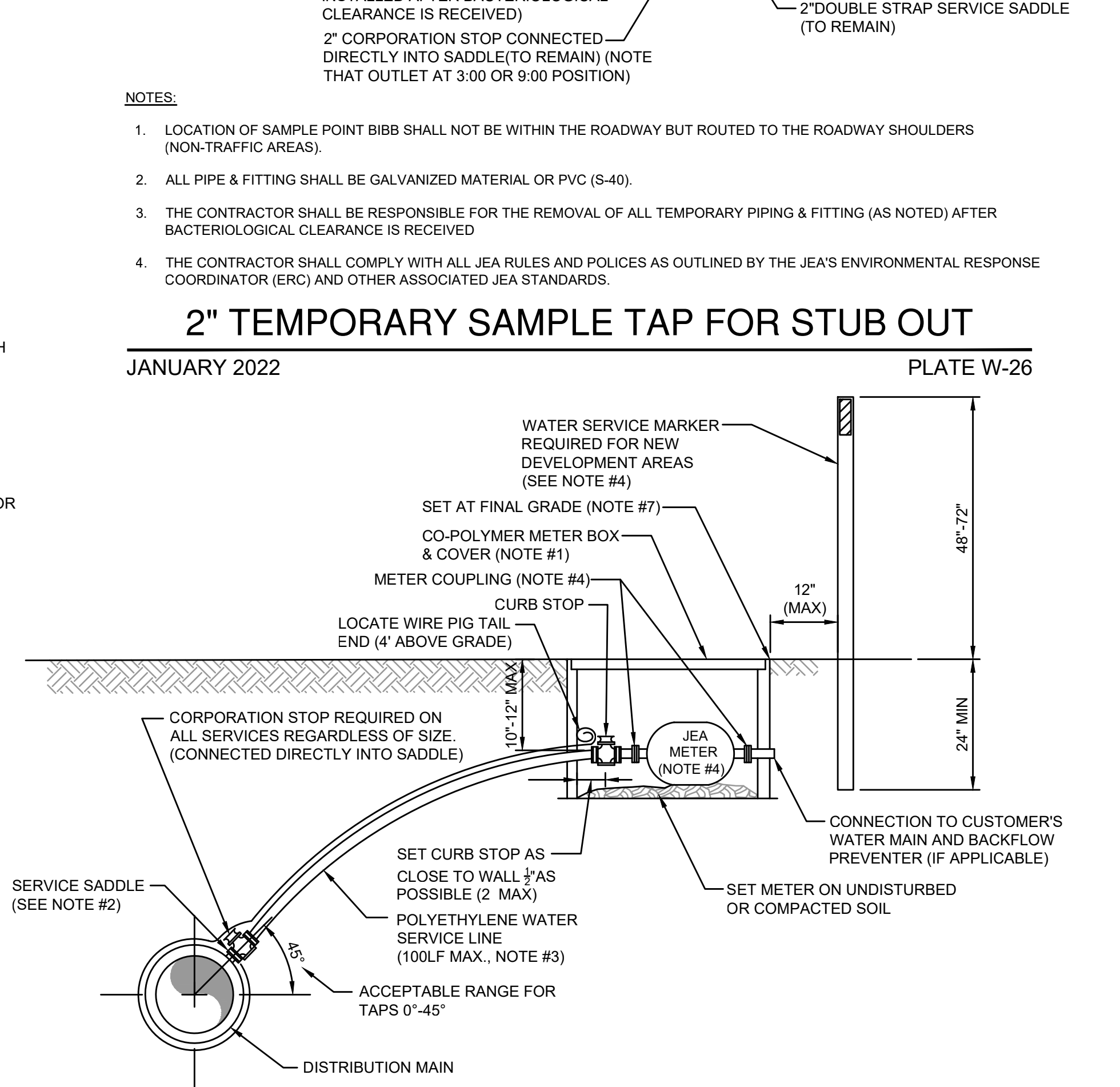
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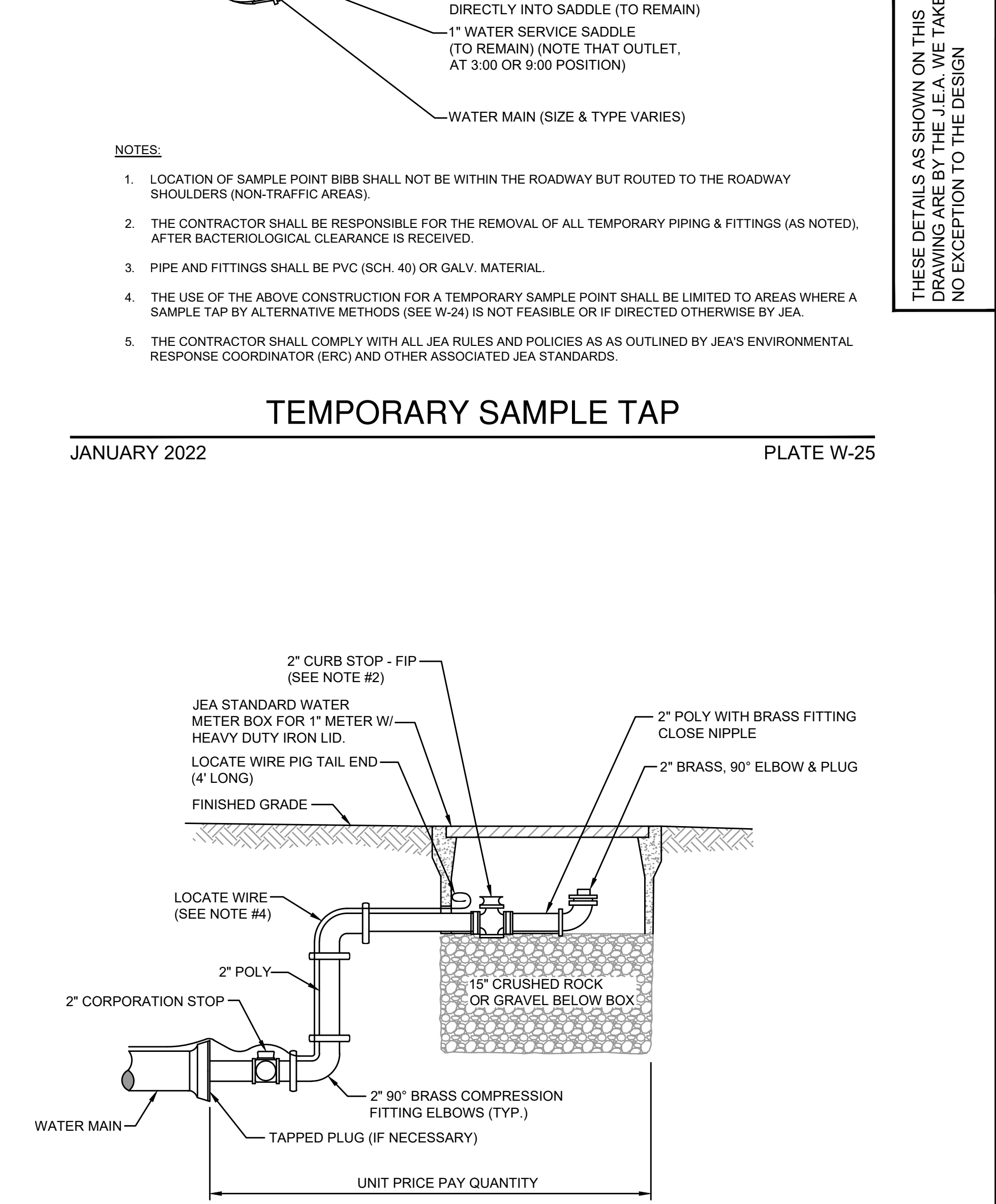
- DOUBLE 1" WATER SERVICE**
 (SEE NOTE #6)
- NOTES:**
- THE SKETCHES ABOVE INDICATE TYPICAL WATER SERVICE AND METER BOX LOCATIONS. ACTUAL LOCATIONS OF BOXES MAY VARY SLIGHTLY ACCORDING TO FIELD CONDITIONS ENCOUNTERED. TYPICALLY, THE METER BOX SHALL BE LOCATED AT THE R/W LINE BUT INSIDE THE 7 1/2" ELECTRIC EASEMENT.
 - UNLESS SPECIFIED OTHERWISE BY THE APPLICABLE COUNTY (NASSAU, CLAY OR ST. JOHNS COUNTY), THE METER BOX SHALL BE LOCATED IN THE JEA 7 1/2" UTILITY EASEMENT, AND TWO FEET INSIDE OF THE PROLONGATION OF ONE OF THE SIDE PROPERTY LINES. IF A CONFLICT EXISTS WITH OTHER UTILITIES, THE METER BOX MAY BE ADJUSTED TO FOUR FEET (MAX) INSIDE PROPERTY LINES (IN LIEU OF TWO FEET). UNLESS APPROVED OTHERWISE BY JEA, THE WATER METER BOX SHALL BE LOCATED IN NON-TRAFFIC AREAS (NOT IN SIDEWALKS OR DRIVEWAYS). IF THE METER BOX IS APPROVED BY JEA TO BE LOCATED IN A DRIVEWAY OR SIDEWALK, THEN THE CONSTRUCTION SHALL MEET STANDARD DETAIL NUMBERS W-384, AT A MINIMUM (SEE W-3 AND W-4 FOR THE REQUIREMENTS OF SPECIAL ORDER POLYMER BOX AND TOP). SET TOP OF BOX AT FINISHED GRADE. IF AN UNAPPROVED METER BOX IS IDENTIFIED BY JEA, THEN THE CONTRACTOR OR CUSTOMER SHALL BE RESPONSIBLE FOR THE COST OF RELOCATING ANY METER BOX WHICH IS LOCATED IN THE SIDEWALK OR DRIVEWAY OR THE COST TO PROVIDE THE CORRECT METER BOX. JEA SHALL APPROVE ALL DEVIATIONS TO THE ABOVE PRIOR TO CONSTRUCTION.
 - IF DRAINAGE OR OTHER EASEMENT LOCATED BETWEEN LOTS, METER BOXES SHALL BE LOCATED AT THE EASEMENT LINE BUT OUTSIDE THE EASEMENT AREA.
 - FOR SINGLE SERVICES, THE HORIZONTAL DISTANCE (PERPENDICULAR TO THE MAIN) BETWEEN THE SERVICES SADDLE AND THE METER BOX SHALL BE 2 FEET MAXIMUM. FOR DOUBLE 1" SERVICES, THE 2" POLY MAIN SHALL BE LOCATED CENTERED BETWEEN THE TWO METER BOXES. LOCATE WIRE IS REQUIRED ON ALL SERVICES 10' OR GREATER IN LENGTH. IF LOCATE WIRE IS REQUIRED, THE WIRE SHALL RUN FROM THE METER BOX (W/ PIG TAIL) TO THE MAIN (DEAD END SHALL BE TAPED WITH NO CONNECTION TO MAIN WIRE WITH THE LAST 24 INCHES STRIPED OF INSULATION/BARE WIRE AS GROUND). ALL EXCEPTIONS TO THIS REQUIREMENT MUST BE APPROVED BY JEA. THIS WILL ASSIST IN LOCATING EXISTING SERVICE LINES IN THE FUTURE.
 - GANG WATER SERVICES: FOR 3 OR 4 SERVICES IN ONE AREA, A DUCTILE IRON PIPE (D.I.P.) WATER MAIN EXTENSION W/LOCATE WIRE MAY BE UTILIZED ON EITHER SHORT-SIDE OR LONG SIDE SERVICES WHERE SHOWN ON THE DRAWINGS. LOCATE WIRE SHALL EXTEND FROM ONE METER BOX TO CORP STOP AT WATER MAIN. FOR 5 OR MORE SERVICES IN ONE AREA, A WATER MAIN EXTENSION W/LOCATE WIRE MAY BE UTILIZED ON EITHER SHORT-SIDE OR LONG SIDE SERVICES WHERE SHOWN ON THE DRAWINGS (TAPS STAGGERED AND AT 2 FEET ON CENTER MIN). FOR WATER SUPPLY HEADERS WHERE 5 OR MORE TAPS ARE CONSTRUCTED, THE HEADER PIPE SHALL BE 4" AT A MINIMUM. EXAMPLE: CONSTRUCT A 4" MAIN PVC CROSSING THE STREET FOR 5 RESIDENTIAL CUSTOMERS, UTILIZING 4" DIP, 4" PIPE, 4"x1" SADDLES AND 1" CORP STOPS (NO GLUED TEE FITTINGS). THE 4" OR LARGER D.I.P. WATER MAIN MUST BE SIZED AND DESIGNED BY THE P.E. ENGINEER.
 - DOUBLE 1" WATER SERVICES IS ALLOWED FOR SHORT SIDE OR LONG SIDE SERVICES AND WHERE SHOWN ON THE DRAWINGS.
 - A 1" IRRIGATION SERVICE MAYBE TAPPED INTO THE (1" MIN) DOMESTIC WATER SERVICE LINE (WHICH SERVES THE SAME CUSTOMER) UTILIZING A 1" BRONZE "Y" FITTING. (IN AREAS WHERE NO RECLAIMED WATER IS AVAILABLE).
 - No 2" AND SMALLER WATER SERVICE TAPS PERMITTED ON WATER MAINS WHICH ARE 20" AND LARGER SIZE.
 - RECLAIMED WATER METER BOXES OR SERVICES SHALL BE CONSTRUCTED SIMILAR TO THE ABOVE AND SHALL BE LOCATED, AT A MIN. OF 10' FROM THE POTABLE WATER SERVICE, AND/OR BOX AND NOT ALLOWED IN CONCRETE OR ASPHALT UNLESS APPROVED OTHERWISE BY JEA.
 - SERVICE SIZE SHALL BE SAME AS THE METER SIZE.

WATER OR RECLAIM SERVICE INSTALLATIONS
2" AND SMALLER METER
 JANUARY 2022 PLATE W-1



- NOTES:**
- LOCATION OF SAMPLE POINT BIBB SHALL NOT BE WITHIN THE ROADWAY BUT ROUTED TO THE ROADWAY SHOULDERS (NON-TRAFFIC AREAS).
 - ALL PIPE & FITTING SHALL BE GALVANIZED MATERIAL OR PVC (S-40).
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL TEMPORARY PIPING & FITTING (AS NOTED) AFTER BACTERIOLOGICAL CLEARANCE IS RECEIVED.
 - THE CONTRACTOR SHALL COMPLY WITH ALL JEA RULES AND POLICES AS OUTLINED BY THE JEA'S ENVIRONMENTAL RESPONSE COORDINATOR (ERC) AND OTHER ASSOCIATED JEA STANDARDS.

WATER SERVICE DETAIL- 2" AND SMALLER METER
 JANUARY 2022 PLATE W-2



- NOTES:**
- LOCATION OF SAMPLE POINT BIBB SHALL NOT BE WITHIN THE ROADWAY BUT ROUTED TO THE ROADWAY SHOULDERS (NON-TRAFFIC AREAS).
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL TEMPORARY PIPING & FITTINGS (AS NOTED), AFTER BACTERIOLOGICAL CLEARANCE IS RECEIVED.
 - PIPE AND FITTINGS SHALL BE PVC (SCH. 40) OR GALV. MATERIAL.
 - THE USE OF THE ABOVE CONSTRUCTION FOR A TEMPORARY SAMPLE POINT SHALL BE LIMITED TO AREAS WHERE A SAMPLE TAP BY ALTERNATIVE METHODS (SEE W-24) IS NOT FEASIBLE OR IF DIRECTED OTHERWISE BY JEA.
 - THE CONTRACTOR SHALL COMPLY WITH ALL JEA RULES AND POLICES AS AS OUTLINED BY JEA'S ENVIRONMENTAL RESPONSE COORDINATOR (ERC) AND OTHER ASSOCIATED JEA STANDARDS.

FLUSHING VALVE BELOW GRADE
 JANUARY 2022 PLATE W-28

England, Thims & Miller, Inc.
 14776 Old St. Augustine Road
 Jacksonville, FL 32228
 TEL: (904) 462-8828
 FAX: (904) 546-9485
 CA - 0002884 LC - 000316

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 FLORIDA REGISTRATION NO. 94926

DESIGNED BY: JON-MICHAEL BARQUIN
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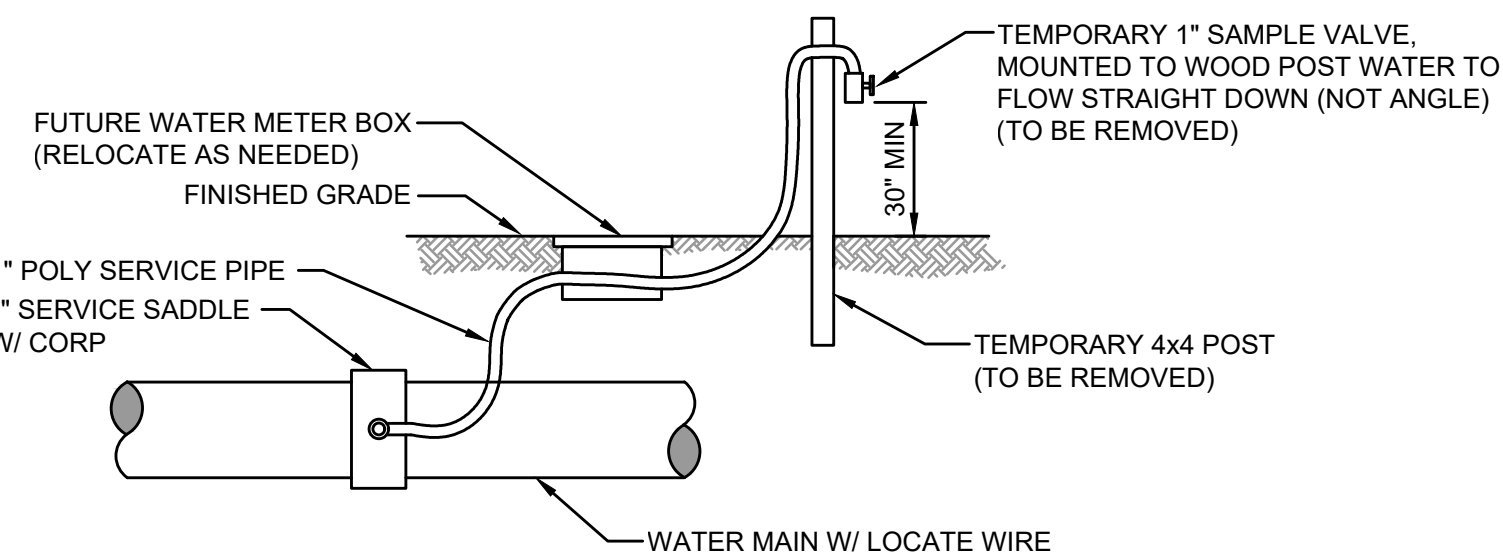
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JEA STANDARD
 WATER AND RECLAIMED DETAILS
 WILDLIGHT COMMERCE PARK PARCEL B

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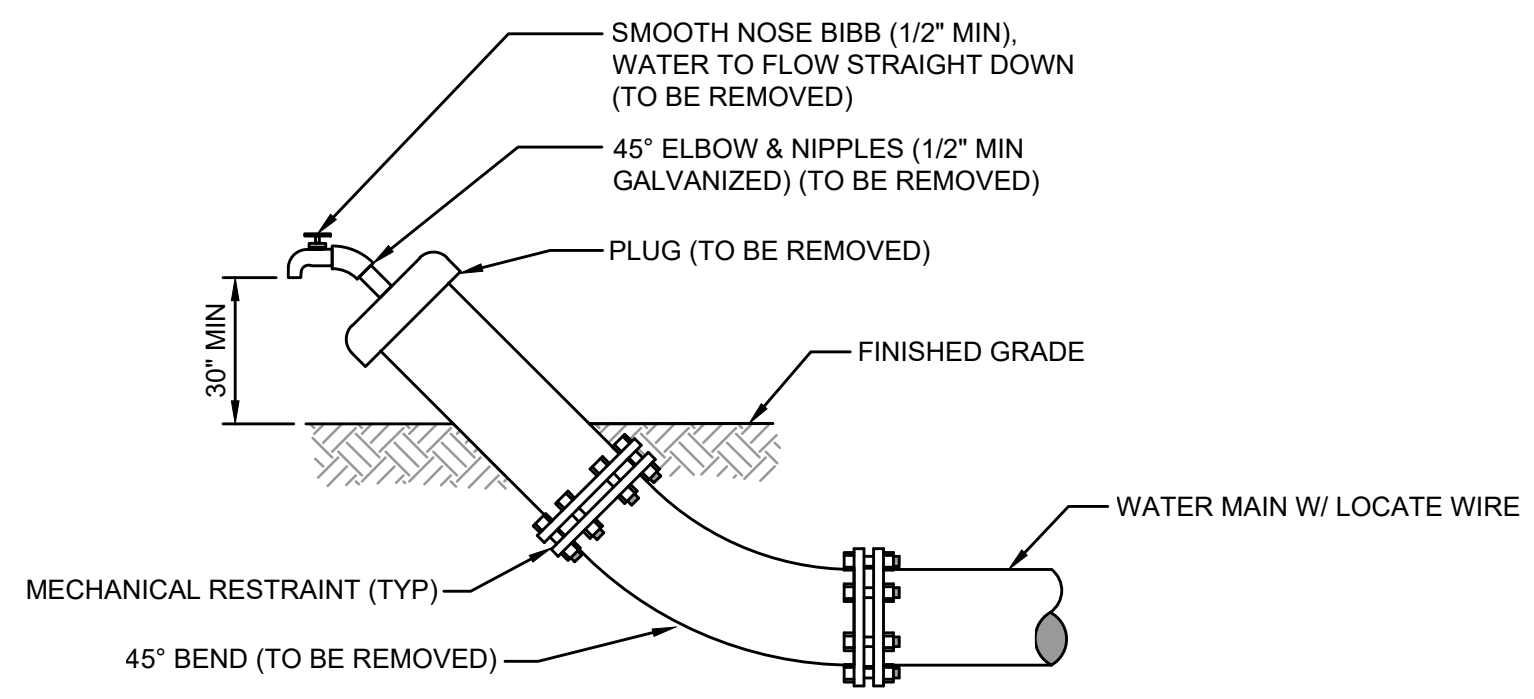
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TEMPORARY SAMPLE TAP UTILIZING A NEW 1" WATER SERVICE

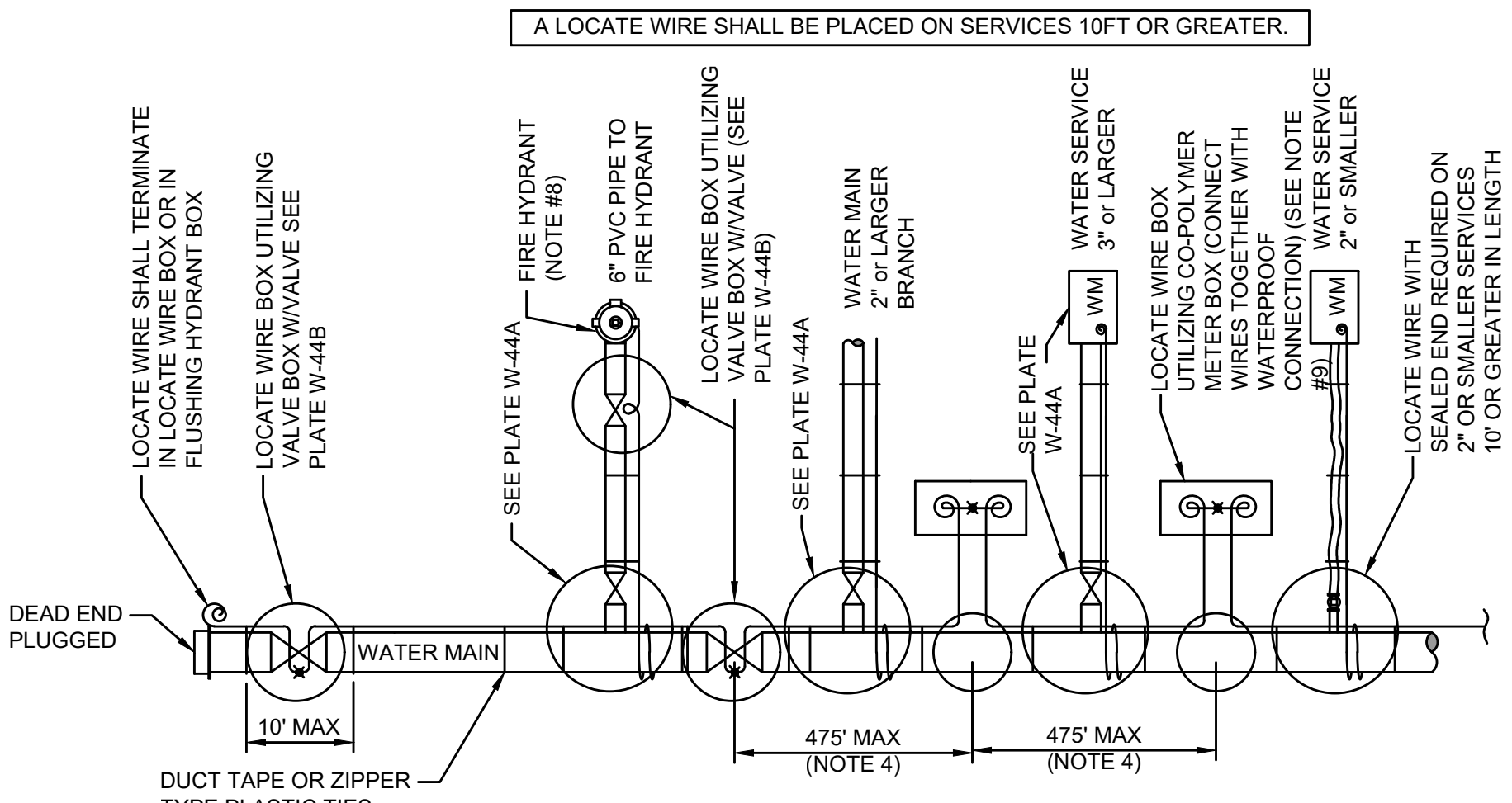
- NOTES:**
1. LOCATION OF SAMPLE POINT BIBB SHALL NOT BE WITHIN THE ROADWAY BUT ROUTED TO THE ROAD SHOULDERS.
 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL TEMPORARY PIPING & FITTINGS (AS NOTED) AFTER BACTERIOLOGICAL CLEARANCE IS RECEIVED.
 3. THE CONTRACTOR SHALL UTILIZE THE ABOVE ALTERNATIVE METHODS FOR CONSTRUCTION OF TEMPORARY SAMPLE POINTS IN ALL AREAS, WHERE POSSIBLE.
 4. THE CONTRACTOR SHALL COMPLY WITH ALL JEA RULES AND POLICIES AS OUTLINED BY THE JEA'S ENVIRONMENTAL RESPONSE COORDINATOR (ERC) AND OTHER ASSOCIATED JEA STANDARDS.



TEMPORARY SAMPLE TAP UTILIZING PLUG AT FLUSHING LOCATION

- NOTES:**
1. LOCATION OF SAMPLE POINT BIBB SHALL NOT BE WITHIN THE ROADWAY BUT ROUTED TO THE ROAD SHOULDERS.
 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL TEMPORARY PIPING & FITTINGS (AS NOTED) AFTER BACTERIOLOGICAL CLEARANCE IS RECEIVED.
 3. THE CONTRACTOR SHALL UTILIZE THE ABOVE ALTERNATIVE METHODS FOR CONSTRUCTION OF TEMPORARY SAMPLE POINTS IN ALL AREAS, WHERE POSSIBLE.
 4. THE CONTRACTOR SHALL COMPLY WITH ALL JEA RULES AND POLICIES AS OUTLINED BY THE JEA'S ENVIRONMENTAL RESPONSE COORDINATOR (ERC) AND OTHER ASSOCIATED JEA STANDARDS.

TEMPORARY SAMPLE TAP ALTERNATIVE METHOD A
JANUARY 2022 PLATE W-24

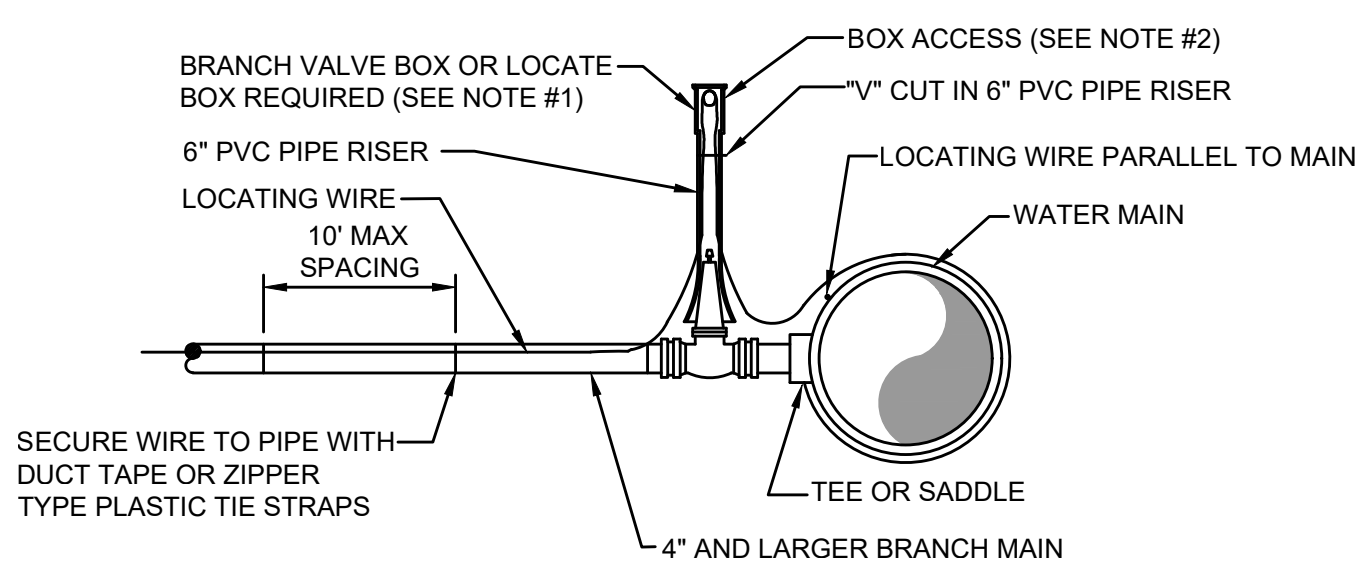


LOCATE WIRE SYSTEM

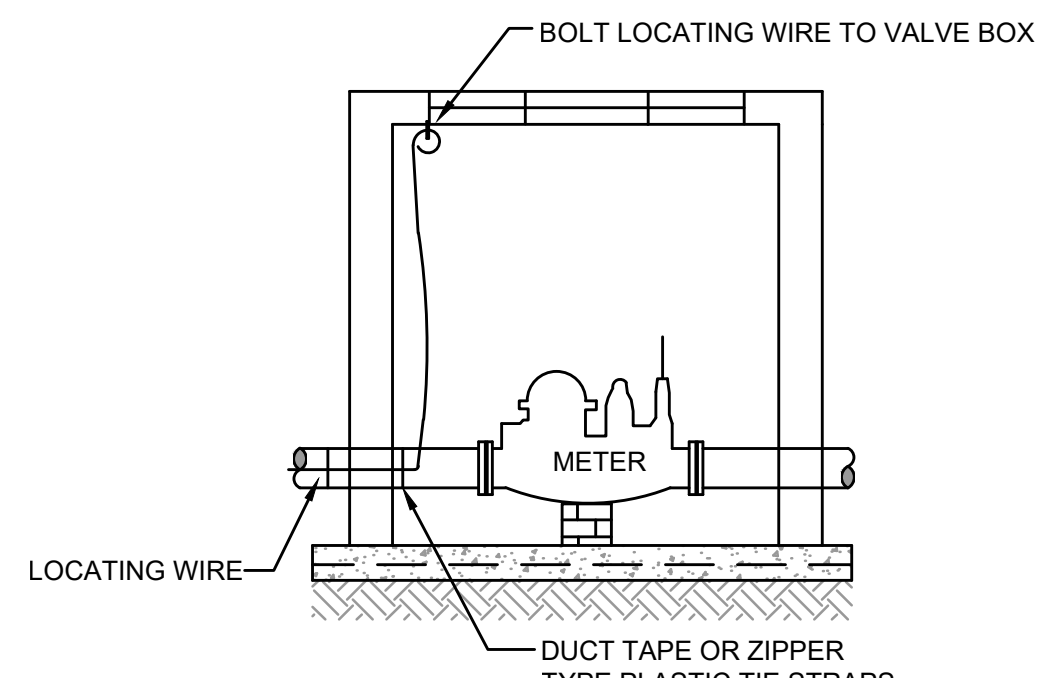
- NOTES:**
1. LOCATING WIRE TO BE INSTALLED IN EITHER THE ONE OR ELEVEN O'CLOCK POSITION ON ALL DUCTILE IRON OR PVC (PRESSURE MAINS). LOCATE WIRE SHALL ALSO BE INSTALLED ON ALL (HDPE) POLY MAIN PIPING (1:00 OR 11:00 POSITION, IF POSSIBLE).
 2. SECURE LOCATING WIRE TO PVC & D.I.P. WATER MAIN BY USE OF DUCT TAPE OR ZIPPER TYPE PLASTIC TIE STRAPS SPACED AT A MAXIMUM DISTANCE OF TEN (10') AND AT EACH SIDE OF BELL JOINT OR FITTING.
 3. THE ENTIRE LOCATING SYSTEM SHALL BE SUBJECTED TO TESTING TO DETERMINE ITS RELIABILITY. WHERE INSTALLED UNDER PAVEMENT AREAS, TESTING SHALL BE DONE PRIOR TO THE PLACEMENT OF PAVEMENT, UNLESS APPROVED OTHERWISE BY JEA.
 4. LOCATING WIRE SHALL TERMINATE WITHIN AN ACTIVE VALVE BOX (WITH A VALVE) OR A METER BOX (IF NO VALVE) AT 475' INTERVALS. SEE DETAIL PLATE W-44B. WIRE CONNECTIONS BELOW GROUND (OUTSIDE OF A BOX) SHALL BE AVOIDED.
 5. REFER TO SECTION 350 FOR LOCATE WIRE SPECIFICATIONS.
 6. * indicates that the wires are connected together with a waterproof connection. (SEE DETAIL W-44B)
 7. @ indicates a wire pig-tail (4' LONG)
 8. FOR FIRE HYDRANT LOCATE WIRE REQUIREMENTS AND EXCLUSIONS, SEE PLATES W-12,13 AND 14.
 9. AN "LW" CUT SHALL BE CARVED IN THE CONCRETE CURB AND PAINTED AT ALL LOCATE WIRE BOXES.
 10. FOUR LANES OF TRAFFIC (HAVING TWO LANES OF TRAFFIC IN EACH DIRECTION) OR GREATER THE LOCATE WIRE AND VALVE BOX SHALL BE OFF-SET TO THE RIGHT-OF-WAY.

LOCATE WIRE CONSTRUCTION FOR WATER MAINS
JANUARY 2022 PLATE W-44

TEMPORARY SAMPLE TAP ALTERNATIVE METHOD B
JANUARY 2022 PLATE W-24A



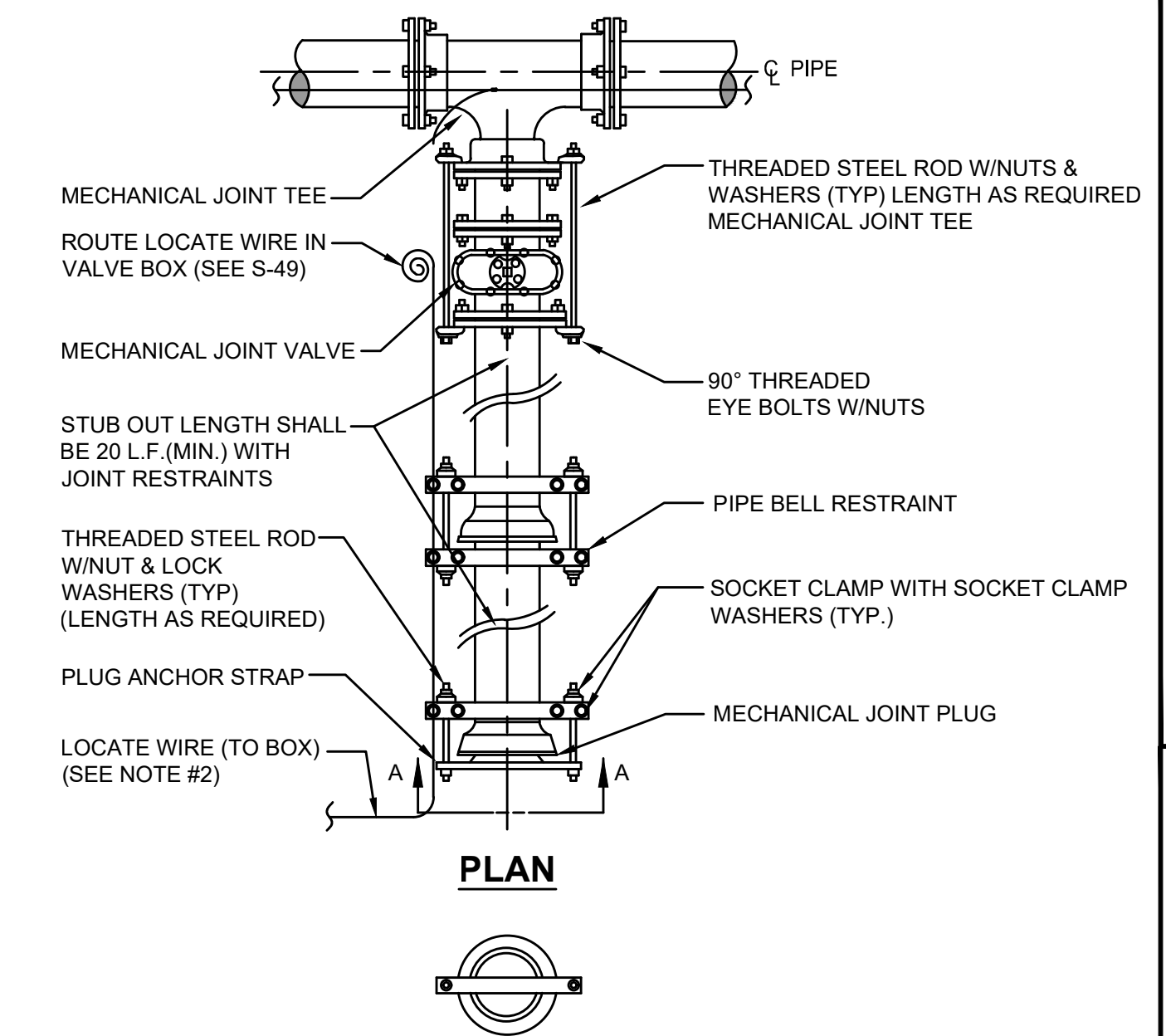
BRANCH FORCE MAIN
(2" AND LARGER WATER MAIN OR 3" AND LARGER WATER SERVICE PIPE)



CONNECTION AT LARGE METER BOX
(3" OR LARGER SERVICE)

- NOTES:**
1. NOTE THAT THE BRANCH WIRE IS NOT CONNECTED TO THE MAIN WIRE.
 2. LOCATE WIRE SHALL ENTER THE VALVE BOX THROUGH A "V" CUT IN THE 6" PVC RISER PIPE SECTION (SEE W-18).
 3. LOCATE WIRE SHALL HAVE ENOUGH SLACK TO REACH 4' ABOVE FINAL GRADE AND LOCATE POINTS.

LOCATE WIRE FOR BRANCH MAIN
JANUARY 2022 PLATE W-44A

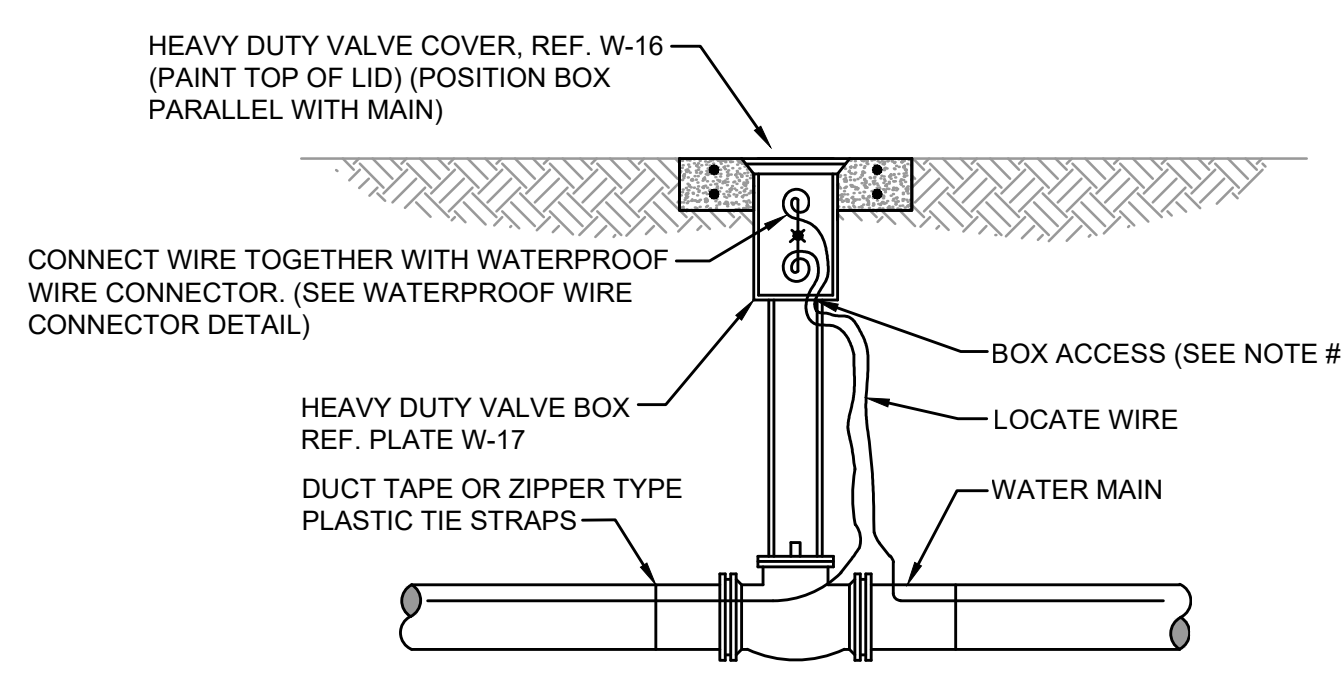


SECTION "A-A"

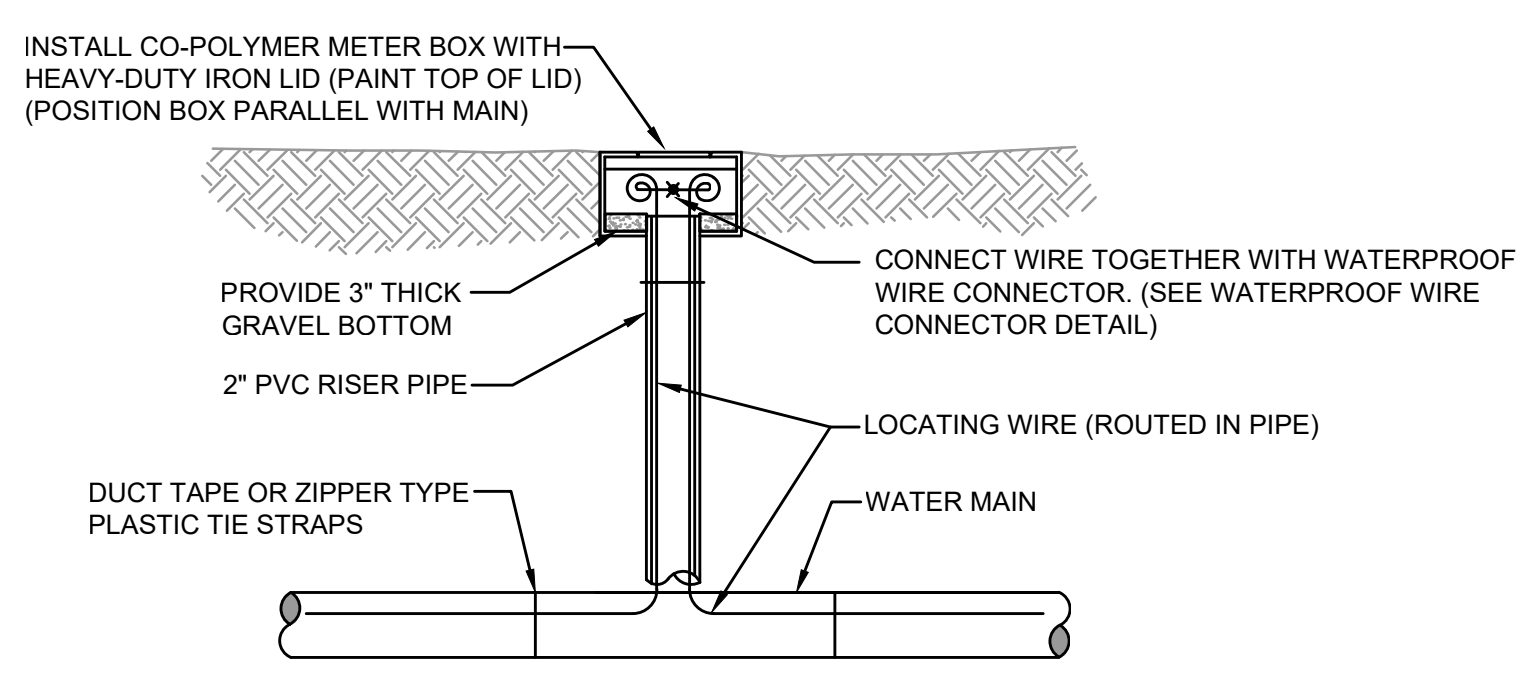
- NOTES:**
1. IN LIEU OF BELL/ROD RESTRAINTS, MECHANICAL JOINT RESTRAINTS MAY BE USED.
 2. LOCATING WIRE REQUIRED, UTILIZING A LOCATE WIRE BOX INSTALLED AT PLUG LOCATION.
 3. NUMBER OF TIE RODS REQUIRED IS AS FOLLOWS:
 3" - 8" DIAMETER MAIN - 2 TIE RODS REQUIRED PER JOINT (3/4" ROD)
 10" - 12" DIAMETER MAIN - 4 TIE RODS REQUIRED PER JOINT (3/4" ROD)
 14" - 16" DIAMETER MAIN - 6 TIE RODS REQUIRED PER JOINT (3/4" ROD)
 18" - 20" DIAMETER MAIN - 8 TIE RODS REQUIRED PER JOINT (3/4" ROD)
 24" DIAMETER MAIN - 12 TIE RODS REQUIRED PER JOINT (3/4" ROD)
 30" - 36" DIAMETER MAIN - 14 TIE RODS REQUIRED PER JOINT (1" ROD)
 42" - 48" DIAMETER MAIN - 16 TIE RODS REQUIRED PER JOINT (1 1/4" ROD)
 54" DIAMETER MAIN - 18 TIE RODS REQUIRED PER JOINT (1 1/4" ROD)
 4. THE LOCATION OF THE DEAD END PLUG SHALL NOT BE UNDER PAVEMENT, IF POSSIBLE. THE STUB OUT SHALL EXTEND BEYOND THE INTERSECTION AREAS OR ROAD CROSSING BY 10 FEET (MIN.) WHERE POSSIBLE.

PLUGGED DEAD END USING MECHANICAL RESTRAINTS

JANUARY 2022 PLATE W-37



LOCATE WIRE BOX UTILIZING VALVE BOX



LOCATE WIRE BOX UTILIZING METER BOX

LOCATE WIRE BOX
JANUARY 2022 PLATE W-44B

England, Thins & Miller, Inc.
14775 Old St. Augustine Road
Titusville, FL 32781
TEL: (888) 462-8928
FAX: (888) 462-8928
CA - 000284 LC - 000316

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JEA STANDARD WATER AND RECLAIMED DETAILS

WILDLIGHT COMMERCE PARK PARCEL B

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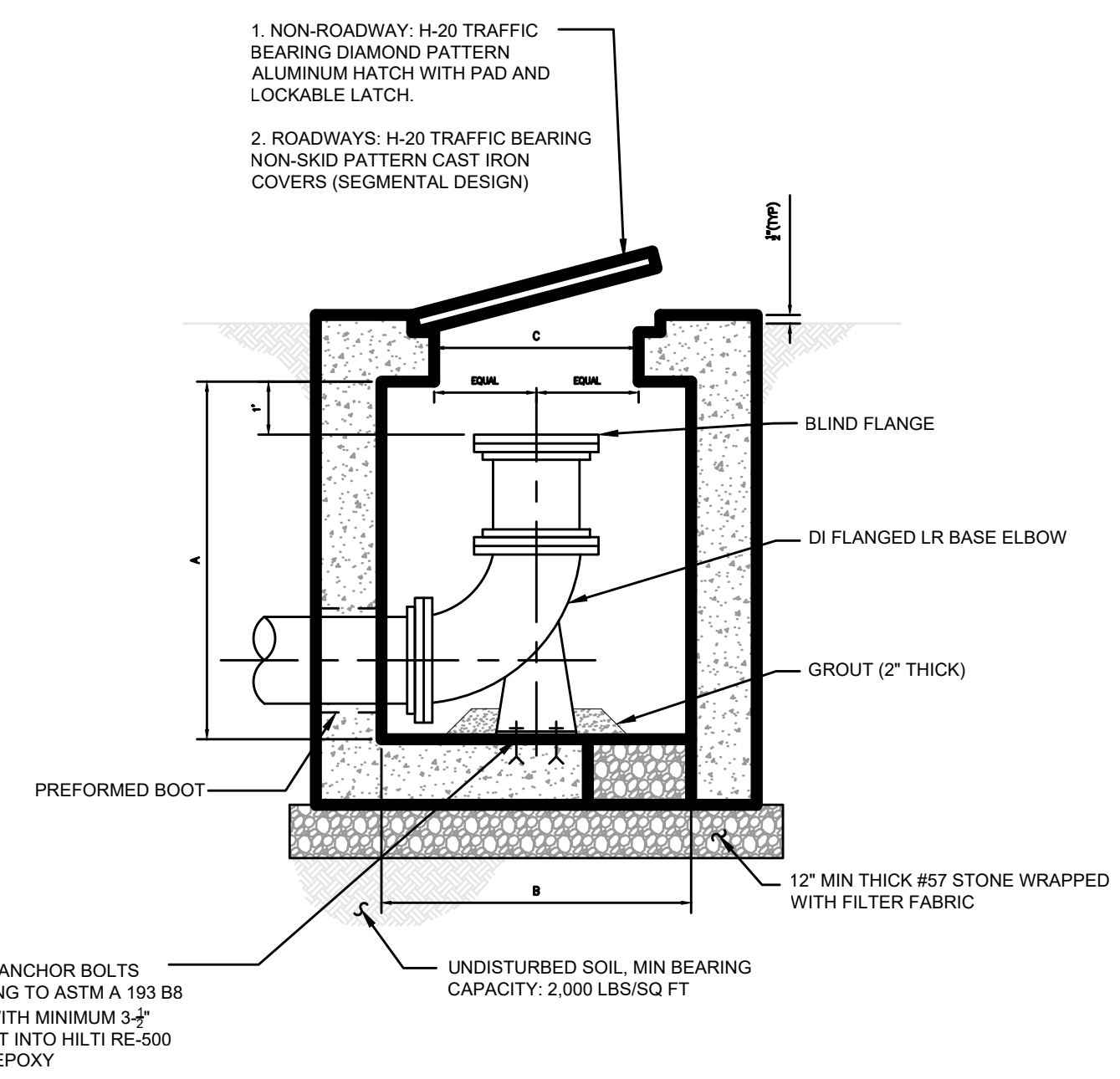
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JEA STANDARD WATER AND RECLAIMED DETAILS

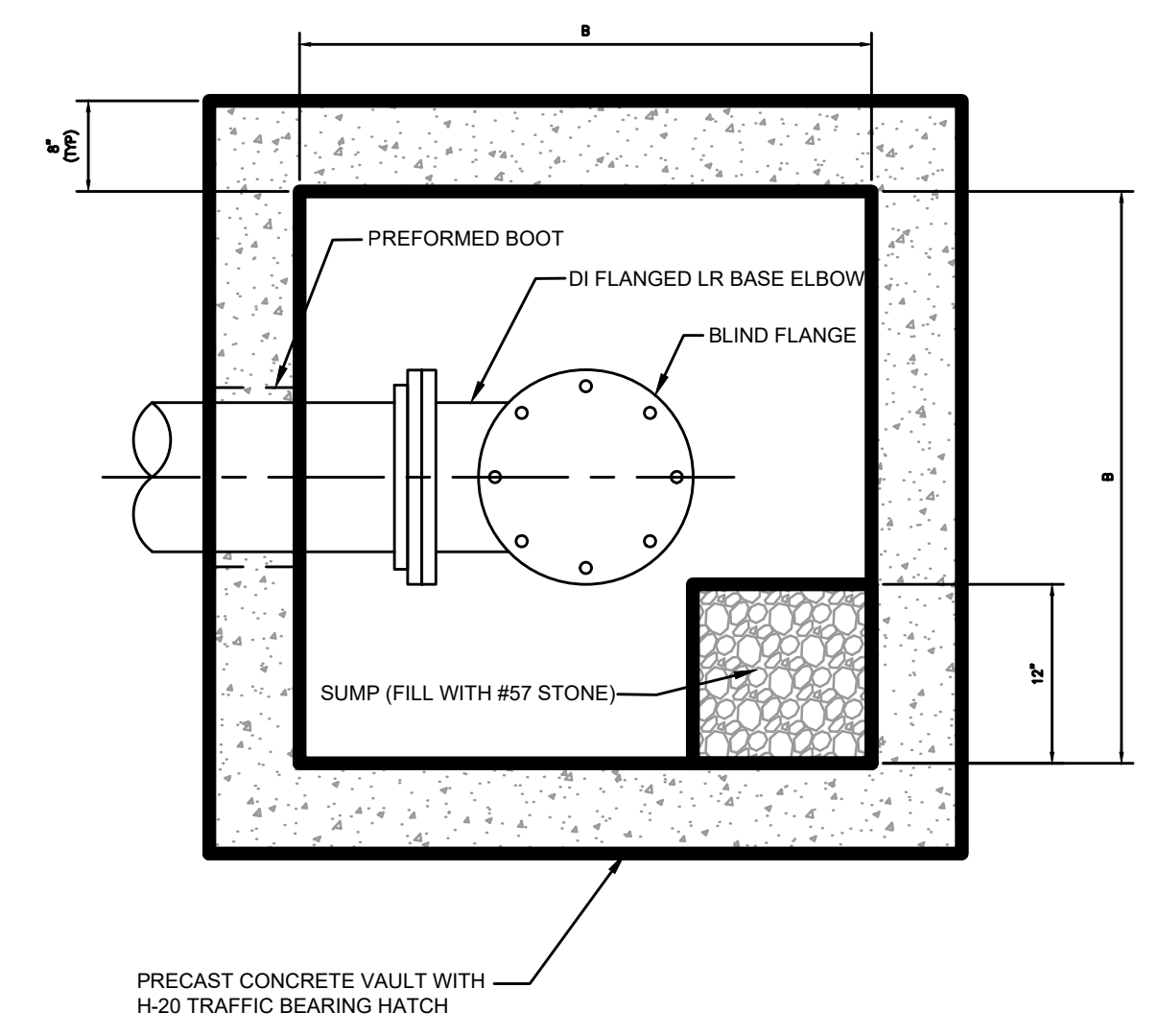
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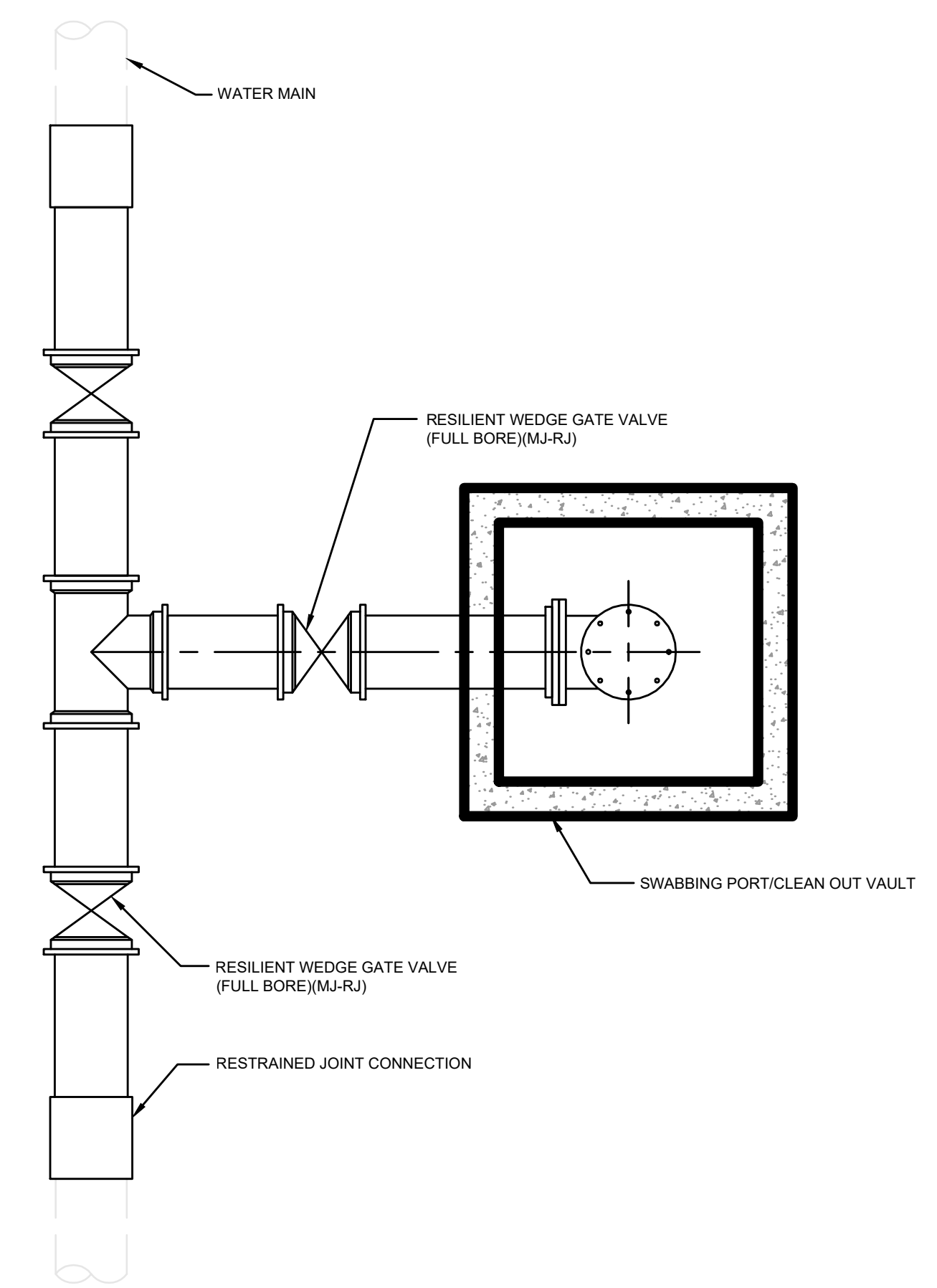
SWABBING PORT AND CLEAN OUT VAULT DETAIL - SECTION

JANUARY 2022 PLATE W-45



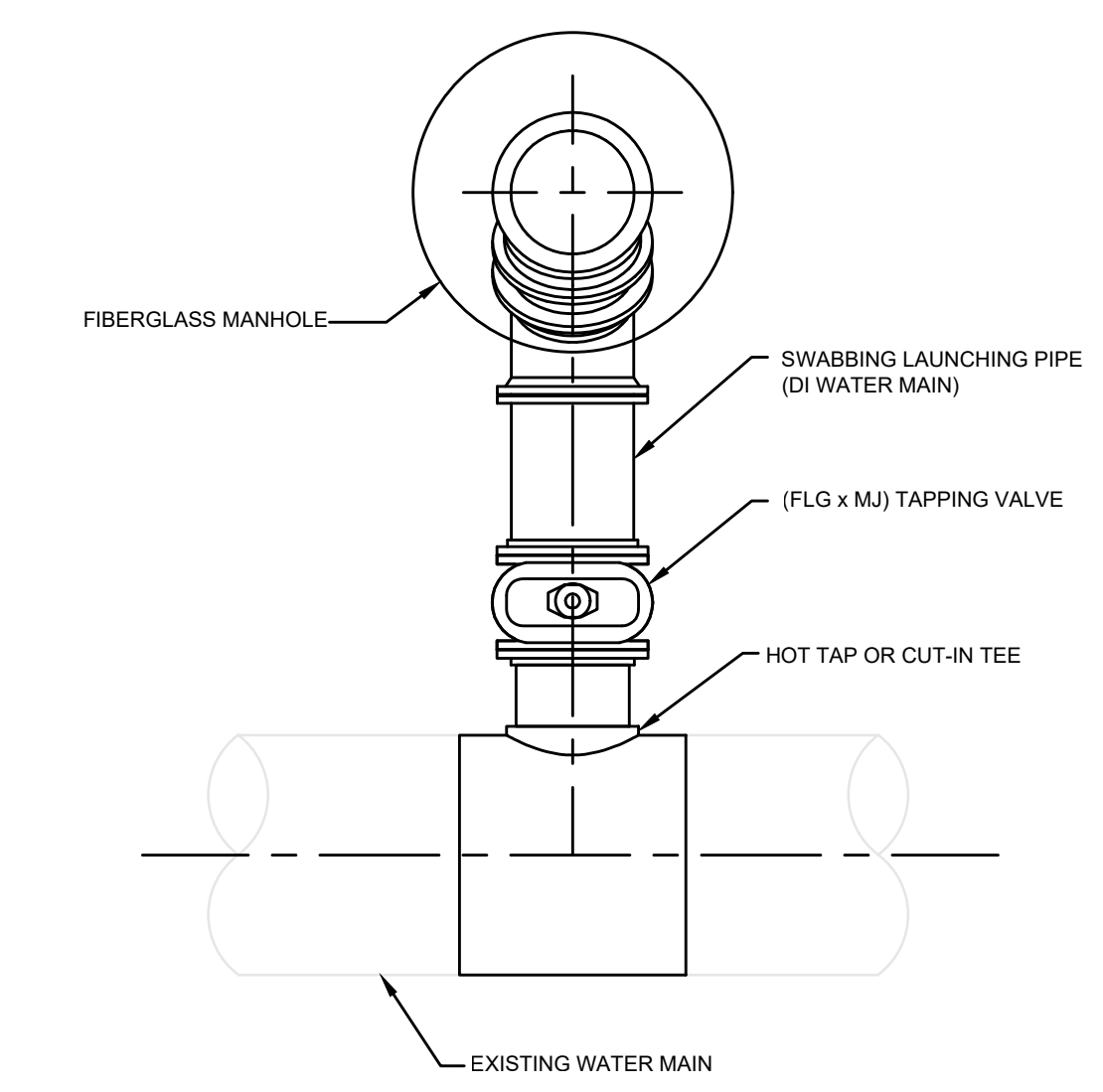
SWABBING PORT AND CLEAN OUT VAULT DETAIL - PLAN

JANUARY 2022 PLATE W-45A



SWABBING LAUNCHING STATION DETAIL FOR NEW WATER MAIN UP TO 24"

JANUARY 2022 PLATE W-45B

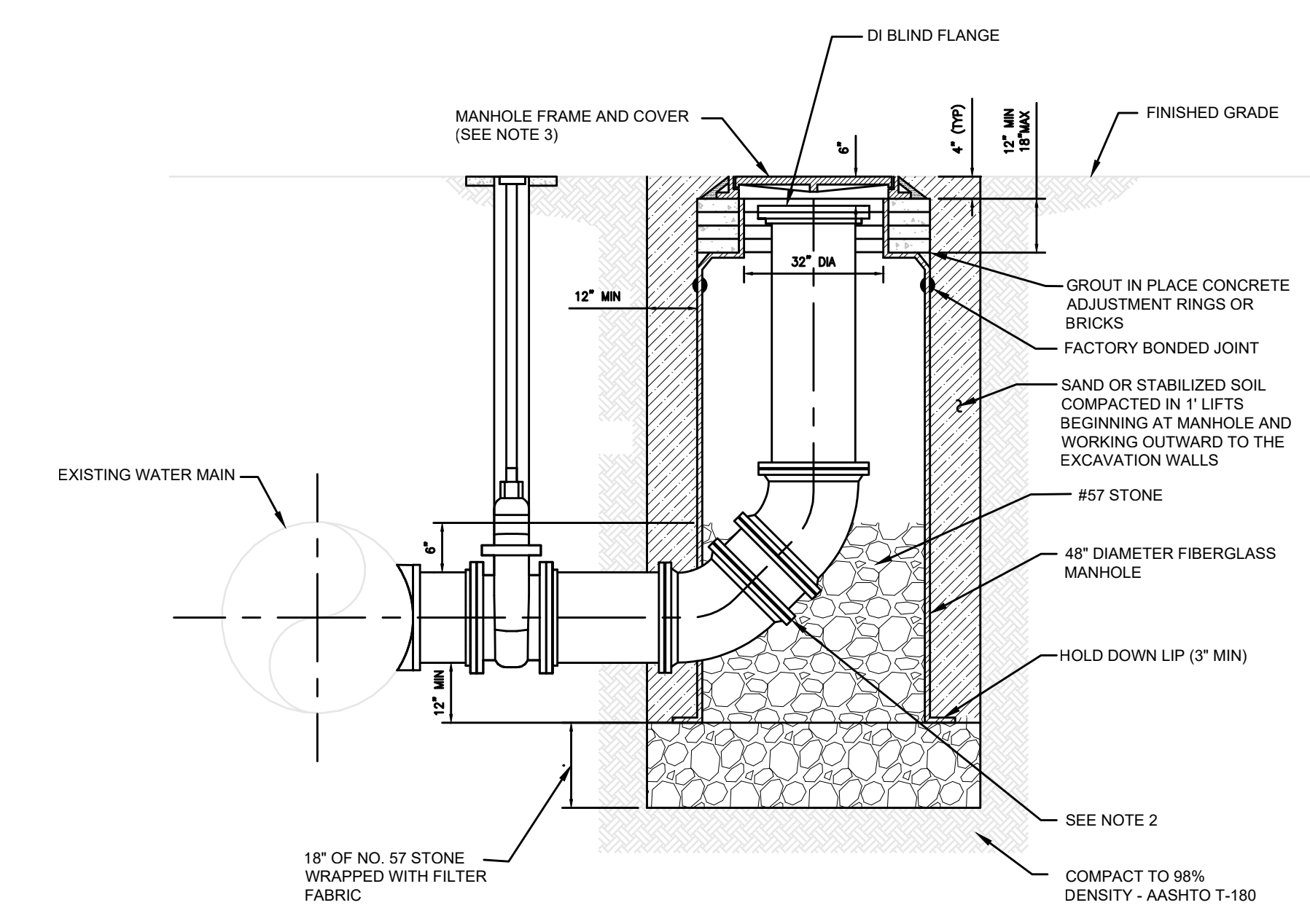


NOTES:

- FOR HOT TAP CONNECTIONS ON EXISTING WATER MAINS 10" DIAMETER AND GREATER, DIAMETER OF TAPPING VALVE AND PIG LAUNCHING PIPE SHALL BE ONE NOMINAL SIZE LESS THAN EXISTING WATER MAIN.

SWABBING PIG LAUNCHING STATION DETAIL FOR WATER MAINS UP TO 24" - PLAN

JANUARY 2022 PLATE W-45C



NOTES:

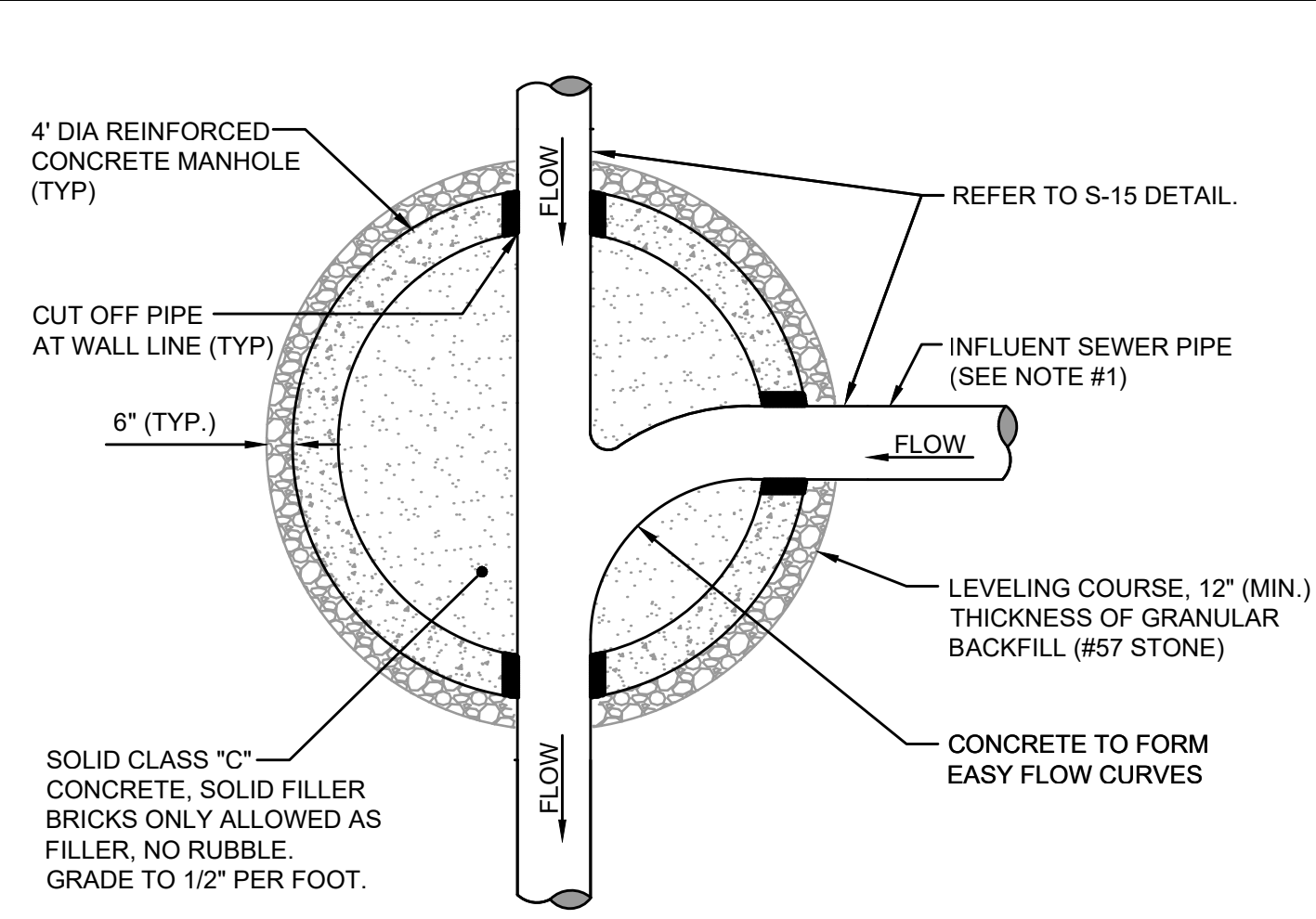
- PROVIDE ALL MATERIALS IN ACCORDANCE TO JEA WATER AND WASTEWATER STANDARD SPECIFICATIONS.
- USE TWO VERTICAL 45 DEGREE MJ BENDS OR LONG RADIUS 90 DEGREE MJ BEND.
- PROVIDE STANDARD JEA FRAME AND COVER.
- RESTRAIN ALL JOINTS.

RETROFIT SWABBING LAUNCHING STATION DETAIL FOR WATER MAINS UP TO 24" - SECTION

JANUARY 2022 PLATE W-45D

 England, Thims & Miller, Inc. 14775 Old St. Augustine Road Ft. Lauderdale, FL 33325 TEL: (954) 462-8928 FAX: (954) 546-9485 CA - 0002884 LC - 000316		
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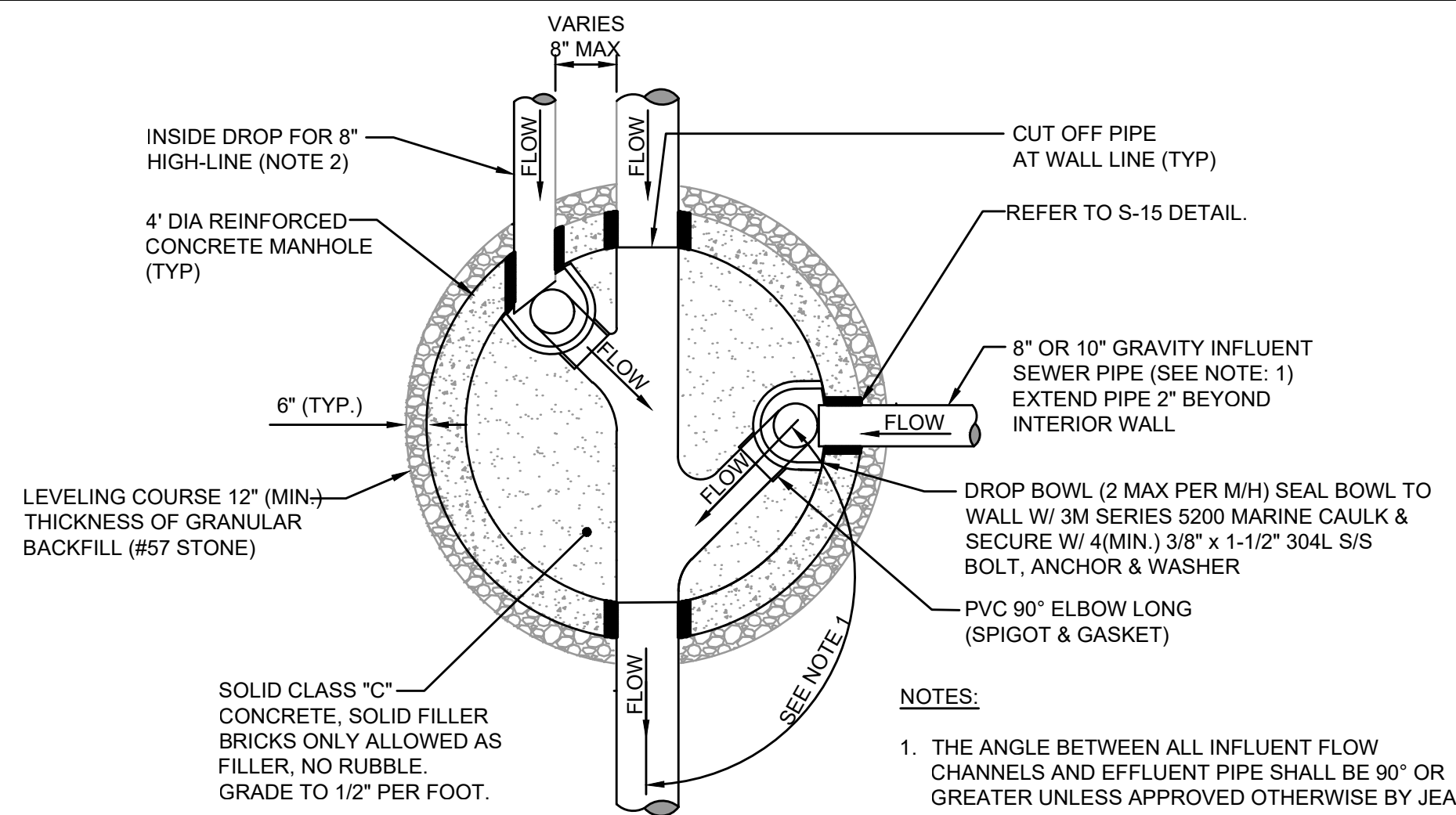
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NOTES:

1. THE ANGLE BETWEEN ALL INFLUENT FLOW CHANNELS AND EFFLUENT PIPE SHALL BE BETWEEN 90° - 180° UNLESS OTHERWISE APPROVED BY JEA.

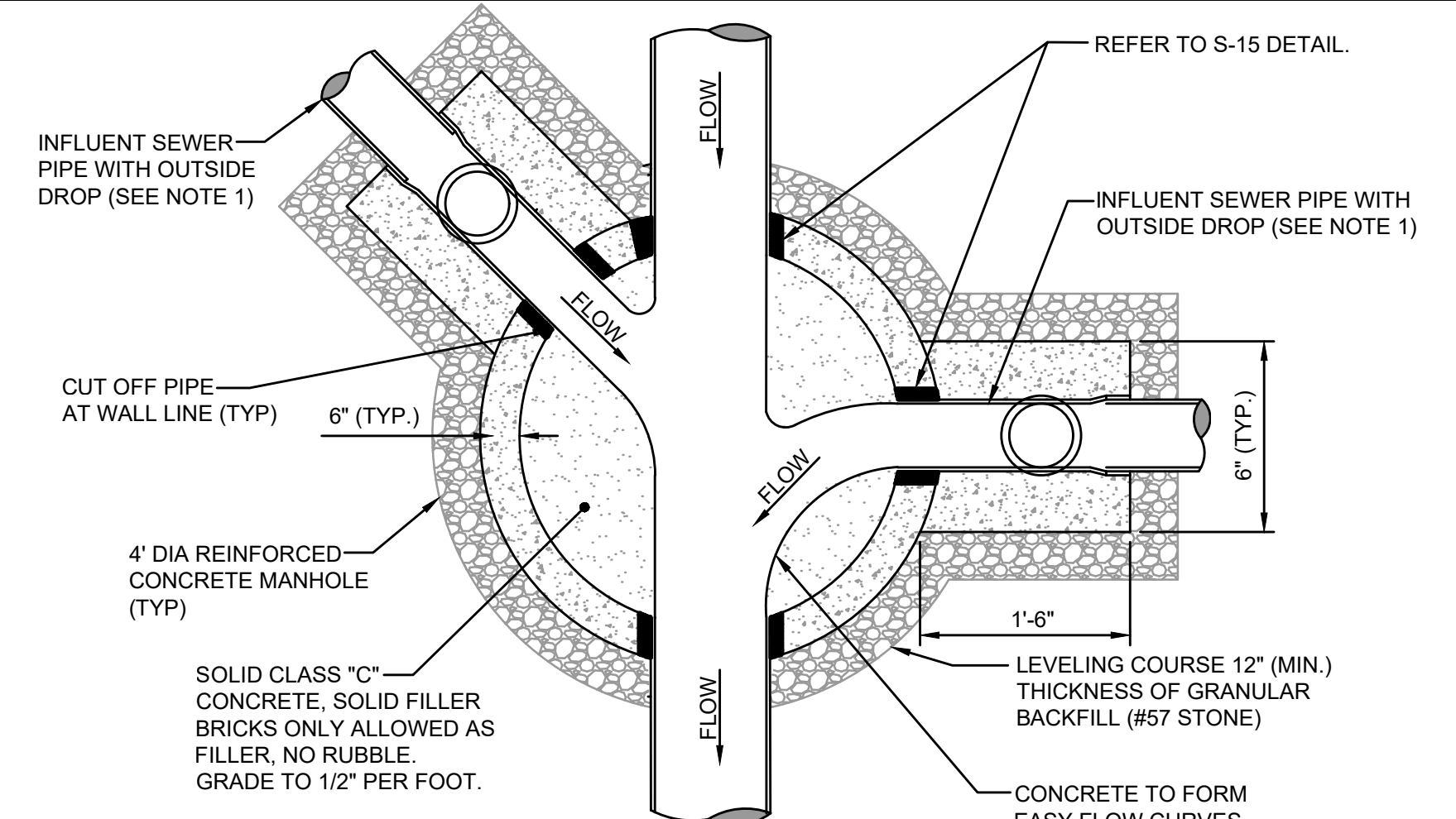
PLAN VIEW (S-3)
(FOR SECTION VIEW SEE S-2)



NOTES:

1. THE ANGLE BETWEEN ALL INFLUENT FLOW CHANNELS AND EFFLUENT PIPE SHALL BE 90° OR GREATER UNLESS APPROVED OTHERWISE BY JEA.
2. THE 8" HIGH-LINE, WHERE UTILIZED, SHALL ENTER THE MANHOLE ON-CENTER OR OFF-CENTER AS SHOWN ABOVE.

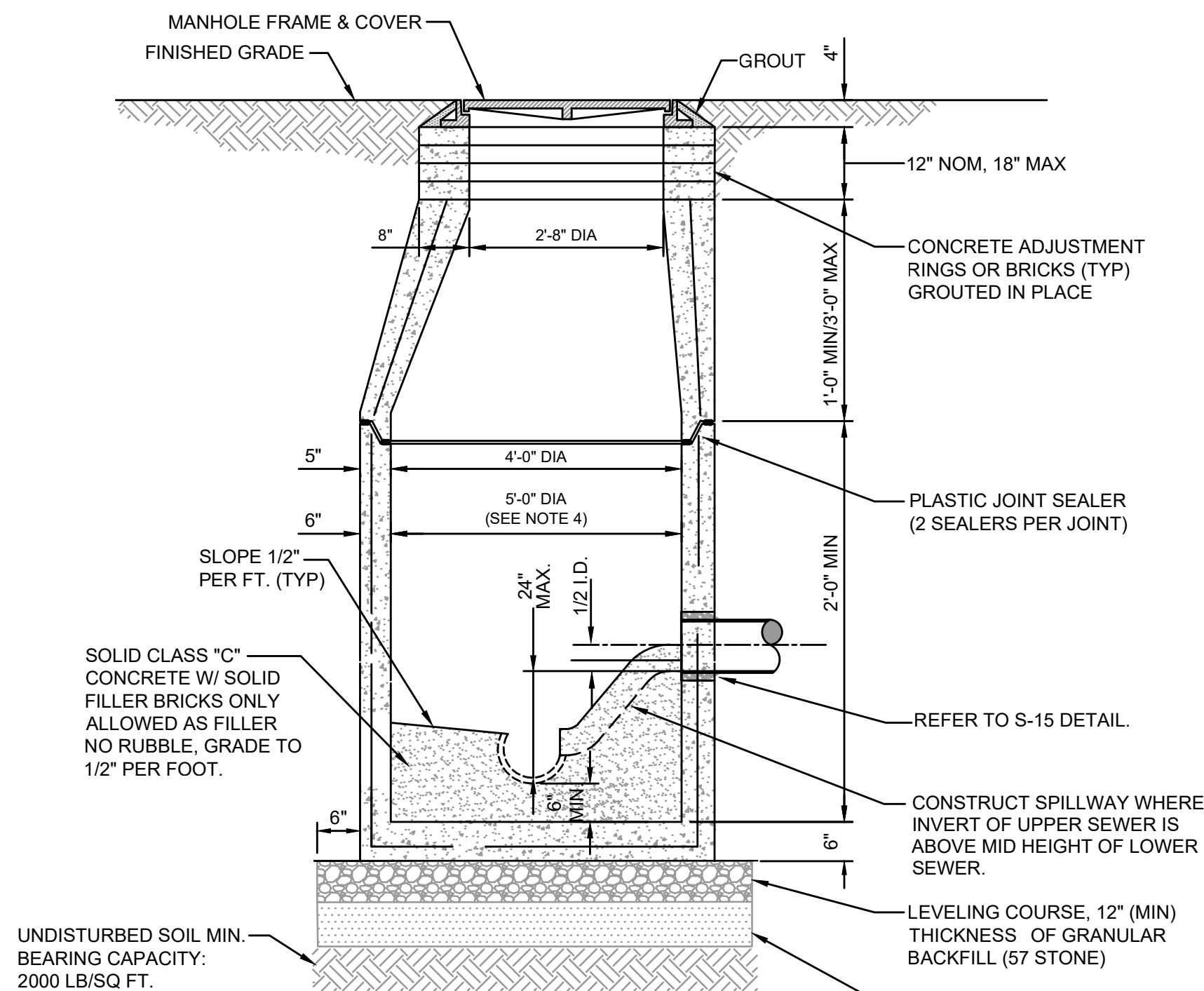
PLAN VIEW (S-5)
(FOR SECTION VIEW SEE S-4)



NOTES:

1. THE ANGLE BETWEEN ALL INFLUENT FLOW CHANNELS AND EFFLUENT PIPE SHALL BE 90° OR GREATER UNLESS APPROVED OTHERWISE BY JEA.
2. THE INTERIOR AND EXTERIOR OF THE MANHOLE AND THE INTERIOR OF THE ADJUSTMENT RINGS SHALL BE GIVEN 2 COATS OF BITUMINOUS WATERPROOFING MATERIAL.
3. IF SPECIALTY LINER IS TO BE INSTALLED ON INSIDE OF MANHOLE, THE BITUMINOUS WATERPROOFING MATERIAL SHALL BE OMITTED ON THE INSIDE.
4. TYPE "D" MANHOLES SHALL BE USED FOR 12" OR LARGER INFLUENT PIPES W/ 2' OR GREATER INFLUENT DROP.

PLAN VIEW (S-8)
(FOR SECTION VIEW SEE S-7)



SECTION VIEW (S-2)
(FOR PLAN VIEW SEE S-3)

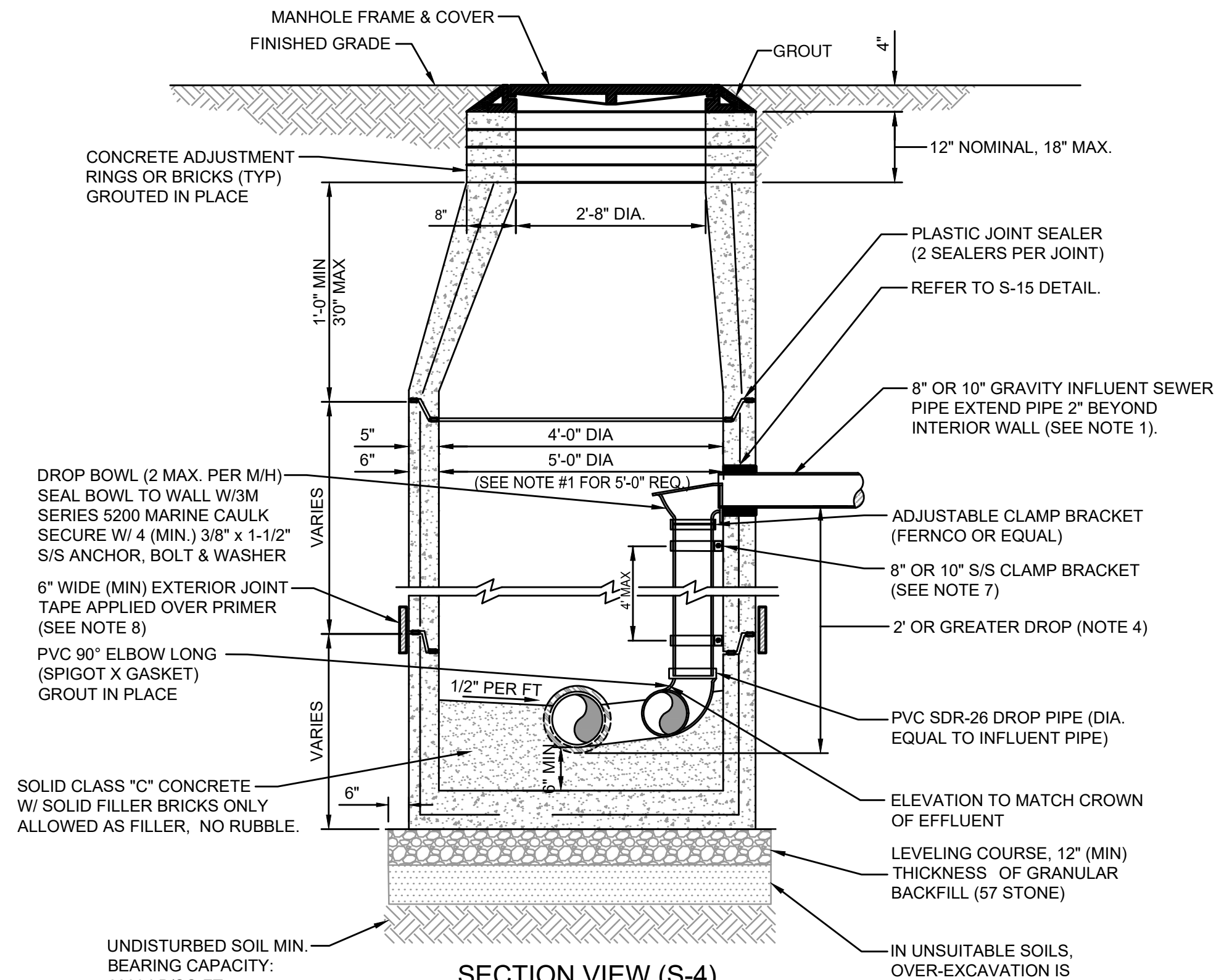
NOTES:

1. PRECAST MANHOLE SECTIONS TO BE MANUFACTURED IN ACCORDANCE WITH THE LATEST EDITIONS OF A.S.T.M. C-478 WITH 4000 LB. CONC., TYPE II CEMENT. ALL LIFTING HOLES AND OUTSIDE INSERTS SHALL BE FILLED WITH NON-SHRINK GROUT AND COATED WITH BITUMINOUS WATERPROOFING MATERIAL.
2. THE INTERIOR AND EXTERIOR OF MANHOLE AND ADJUSTING RINGS SHALL BE GIVEN TWO COATS OF BITUMINOUS WATERPROOFING MATERIAL.
3. IF SPECIALTY LINER IS TO BE INSTALLED ON INSIDE SURFACE OF MANHOLE, THE BITUMINOUS WATERPROOFING MATERIAL SHALL BE OMITTED ON THE INSIDE.
4. JUNCTION MANHOLE (CLOSEST TO WETWELL) SHALL BE 5' DIA WITH SPECIALTY LINER.
5. ALL MANHOLE JOINTS BELOW THE TOP COVER SECTION SHALL INCLUDE A 6" WIDE (MIN) EXTERIOR JOINT TAPE (WITH PRIMER). TAPE ON THE CONE SECTION IS OPTIONAL. SEE PLATE S-17.
6. IN SILTS, CLAY OR HIGHLY ORGANIC SOILS (FINE-GRAINED SOILS INCLUDING SOIL GROUPS ML, CL, OL, MH, CH, OH AND PT) THE SOILS SHALL BE OVER-EXCAVATED AN ADDITIONAL 24" (AT A MIN.) AND BACKFILLED WITH AASHTO CLASS A-3 SOIL (COMPACTED TO 98%, ASTM D1557) OR OVER-EXCAVATE AN ADDITIONAL 12" (AT A MIN.) AND BACKFILL WITH GRANULAR BACKFILL (57 STONE).

SANITARY SEWER TYPE "A" MANHOLE
8"-21" SEWERS

JANUARY 2022

PLATES S-2, S-3



SECTION VIEW (S-4)
(FOR PLAN VIEW SEE S-5)

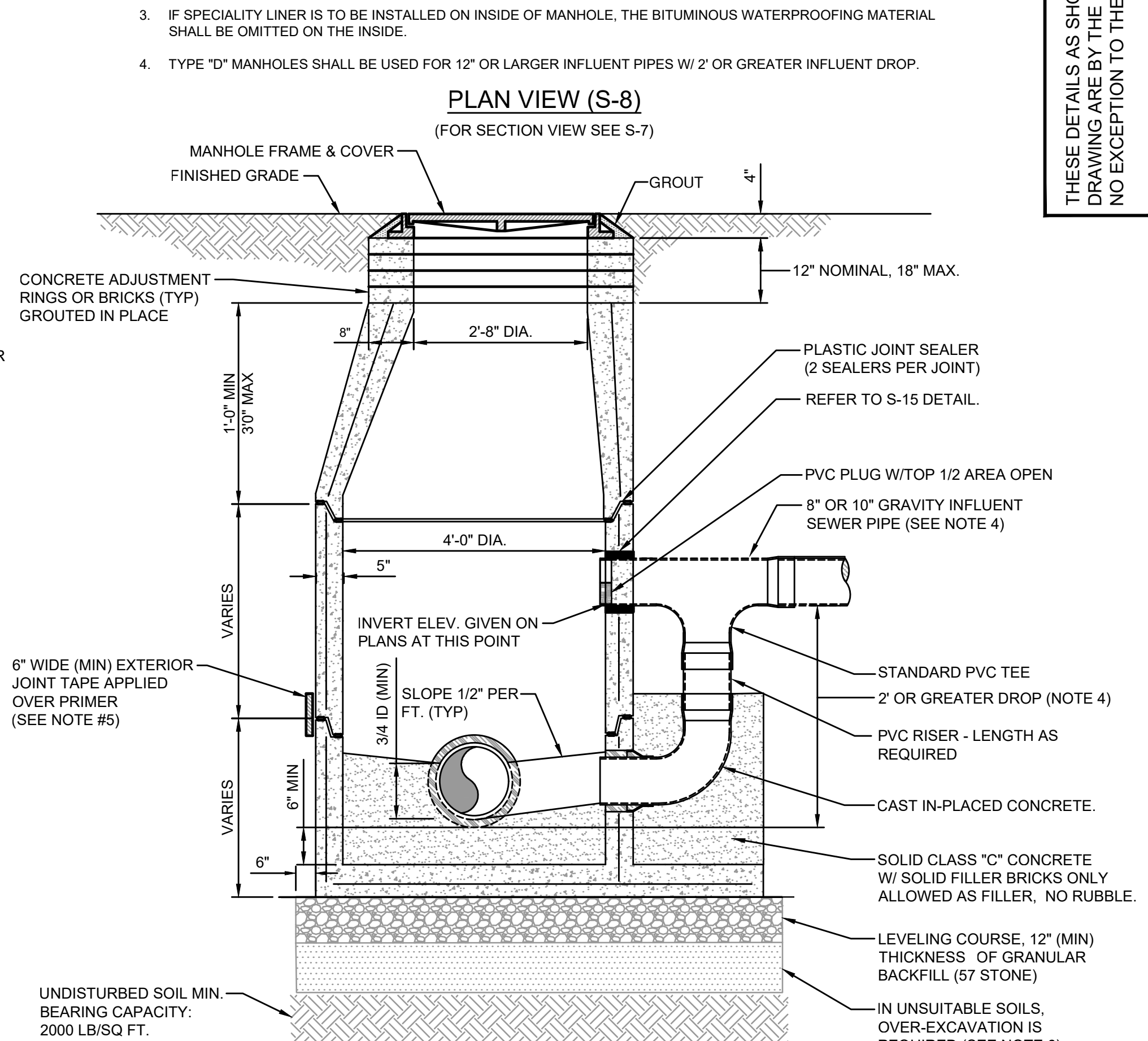
NOTES:

1. THIS ASSEMBLY IS FOR 8" OR 10" GRAVITY INFLUENT LINES ONLY. NO DROPS ALLOWED FOR FORCE MAINS. MAXIMUM OF 2 INSIDE DROP BOWLS PER MANHOLE. A 5'-0" DIA. MANHOLE (6" THICK WALLS) IS REQUIRED IF TWO INSIDE DROPS ARE CONSTRUCTED WITH ONE OR BOTH BEING 10" SIZE. DROP BOWL BY RELINER OR APPROVED EQUAL REQUIRED. THE INSIDE DROP FOR AN 8" HIGH-LINE SHALL BE CONSTRUCTED SIMILAR TO ABOVE (SEE PLATE S-5).
2. PRECAST MANHOLE SECTIONS TO BE MANUFACTURED IN ACCORDANCE WITH THE LATEST EDITIONS OF A.S.T.M. C-478 WITH 4000 LB. CONC., TYPE II CEMENT. ALL LIFTING HOLES AND OUTSIDE INSERTS SHALL BE FILLED WITH NON-SHRINK GROUT AND COATED WITH BITUMINOUS WATERPROOFING MATERIAL.
3. THE INTERIOR AND EXTERIOR OF MANHOLE AND THE INTERIOR OF ADJUSTMENT RINGS SHALL BE GIVEN TWO COATS OF BITUMINOUS WATERPROOFING MATERIAL.
4. TYPE "B" MANHOLE MUST BE USED FOR 2' OR GREATER INFLUENT PIPE DROPS.
5. THE DROP BOWL ASSEMBLY SHALL BE INSTALLED PRIOR TO APPLICATION OF SPECIALTY LINING MATERIAL.
6. A TYPE "D" MANHOLE SHALL BE UTILIZED WHEN THREE OR MORE (2' OR GREATER) DROPS ARE INVOLVED OR WHEN INFLUENT PIPES AREA LARGER THAN 10' IN SIZE.
7. ADJUSTABLE CLAMPING BRACKET (MIN. 2 PER DROP BOWL ASSY). 1-1/2" WIDE, 11 GA. W/ 3/8" DIA. 18-8 PINCH BOLTS AND NUTS. SECURE TO M/H WALL WITH (2) 3/8" X 1" BOLT, ANCHOR & WASHER PER BRACKET ASSY. ALL 304 OR 316 STAINLESS STEEL MATERIALS.
8. ALL M/H JOINTS BELOW THE TOP CONE SECTION SHALL INCLUDE A 6" WIDE (MIN) EXTERIOR JOINT TAPE (W/PRIMER). TAPE ON THE CONE SECTION IS OPTIONAL.
9. IN SILTS, CLAY OR HIGHLY ORGANIC SOILS (FINE-GRAINED SOILS INCLUDING SOIL GROUPS ML, CL, OL, MH, CH, OH AND PT) THE SOILS SHALL BE OVER-EXCAVATED AN ADDITIONAL 24" (AT A MIN.) AND BACKFILLED WITH AASHTO CLASS A-3 SOIL (COMPACTED TO 98%, ASTM D1557) OR OVER-EXCAVATE AN ADDITIONAL 12" (AT A MIN.) AND BACKFILL WITH GRANULAR BACKFILL (57 STONE).

SANITARY SEWER TYPE "B" MANHOLE
8"-10" SEWERS

JANUARY 2022

PLATES S-4, S-5



SECTION VIEW (S-7)
(FOR PLAN VIEW SEE S-8)

NOTES:

1. PRECAST MANHOLE SECTIONS TO BE MANUFACTURED IN ACCORDANCE WITH THE LATEST EDITIONS OF A.S.T.M. C-478 WITH 4000 LB. CONC., TYPE II CEMENT. ALL LIFTING HOLES AND OUTSIDE INSERTS SHALL BE FILLED WITH NON-SHRINK GROUT AND COATED WITH BITUMINOUS WATERPROOFING MATERIAL.
2. THE INTERIOR AND EXTERIOR OF MANHOLE AND THE INTERIOR OF THE ADJUSTMENT RINGS SHALL BE GIVEN TWO COATS OF BITUMINOUS WATERPROOFING MATERIAL.
3. IF SPECIALTY LINER IS TO BE INSTALLED ON INSIDE SURFACE OF MANHOLE, THE BITUMINOUS WATERPROOFING SHALL BE, OMITTED ON INSIDE.
4. TYPE "D" MANHOLE SHALL BE USED FOR 12" OR LARGER INFLUENT PIPES W/ 2' OR GREATER INFLUENT DROP.
5. ALL M/H JOINTS BELOW THE TOP CONE SECTION SHALL INCLUDE A 6" WIDE (MIN) EXTERIOR JOINT TAPE (W/PRIMER). TAPE ON THE CONE SECTION IS OPTIONAL.
6. IN SILTS, CLAY OR HIGHLY ORGANIC SOILS (FINE-GRAINED SOILS INCLUDING SOIL GROUPS ML, CL, OL, MH, CH, OH AND PT) THE SOILS SHALL BE OVER-EXCAVATED AN ADDITIONAL 24" (AT A MIN.) AND BACKFILLED WITH AASHTO CLASS A-3 SOIL (COMPACTED TO 98%, ASTM D1557) OR OVER-EXCAVATE AN ADDITIONAL 12" (AT A MIN.) AND BACKFILL WITH GRANULAR BACKFILL (57 STONE).

SANITARY SEWER TYPE "D" MANHOLE
12"-21" SEWERS

JANUARY 2022

PLATES S-7, S-8

England-Thims & Miller, Inc.
14775 Old St. Augustine Road
The Woodlands, TX 77380
TEL: (281) 462-8928
FAX: (281) 462-8945
CA - 0002884, LC - 000316

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DESIGN ENGINEER: JON-MICHAEL BARQUIN
FLORIDA REGISTRATION NO.: 94926

NO. 1
SHEET NO. 1
DRAWING NO. 9H

REVISIONS

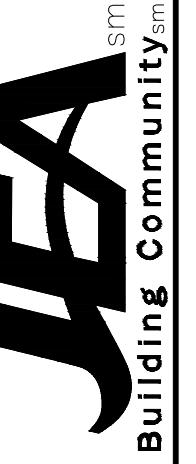
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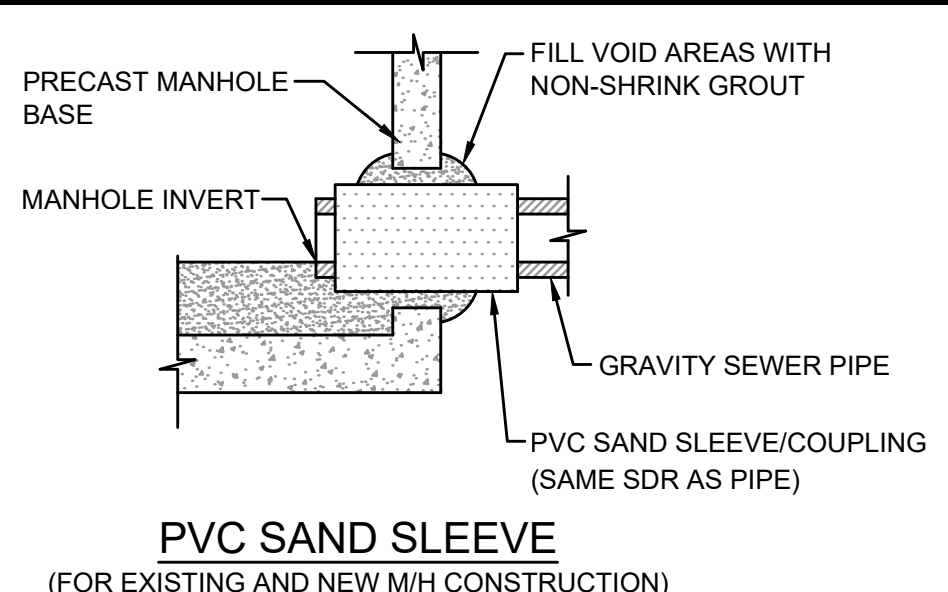
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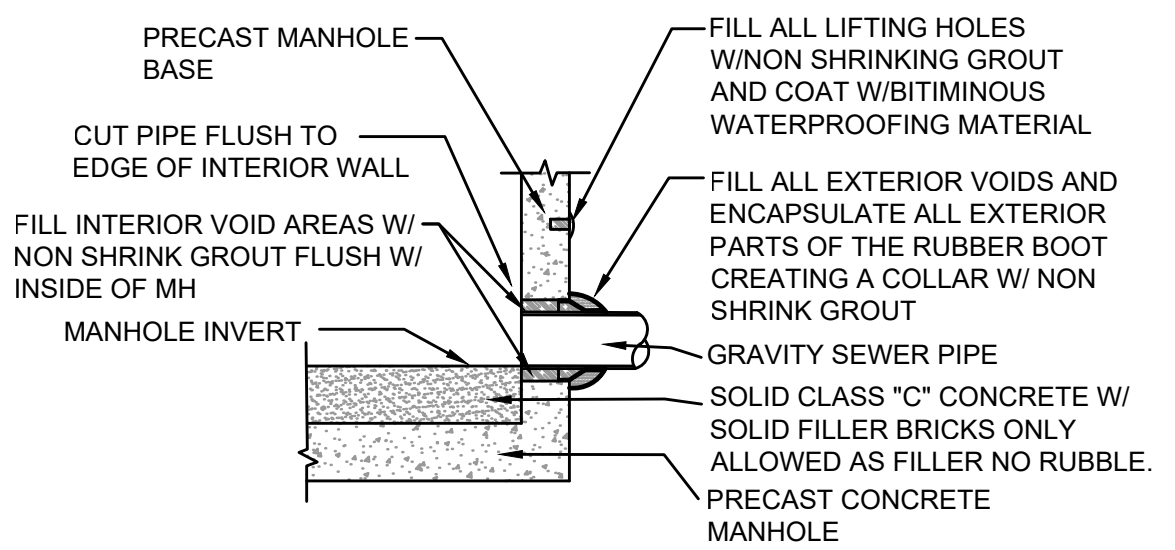
JEA STANDARD
SANITARY SEWER DETAILS

WILDLIGHT COMMERCE PARK PARCEL B

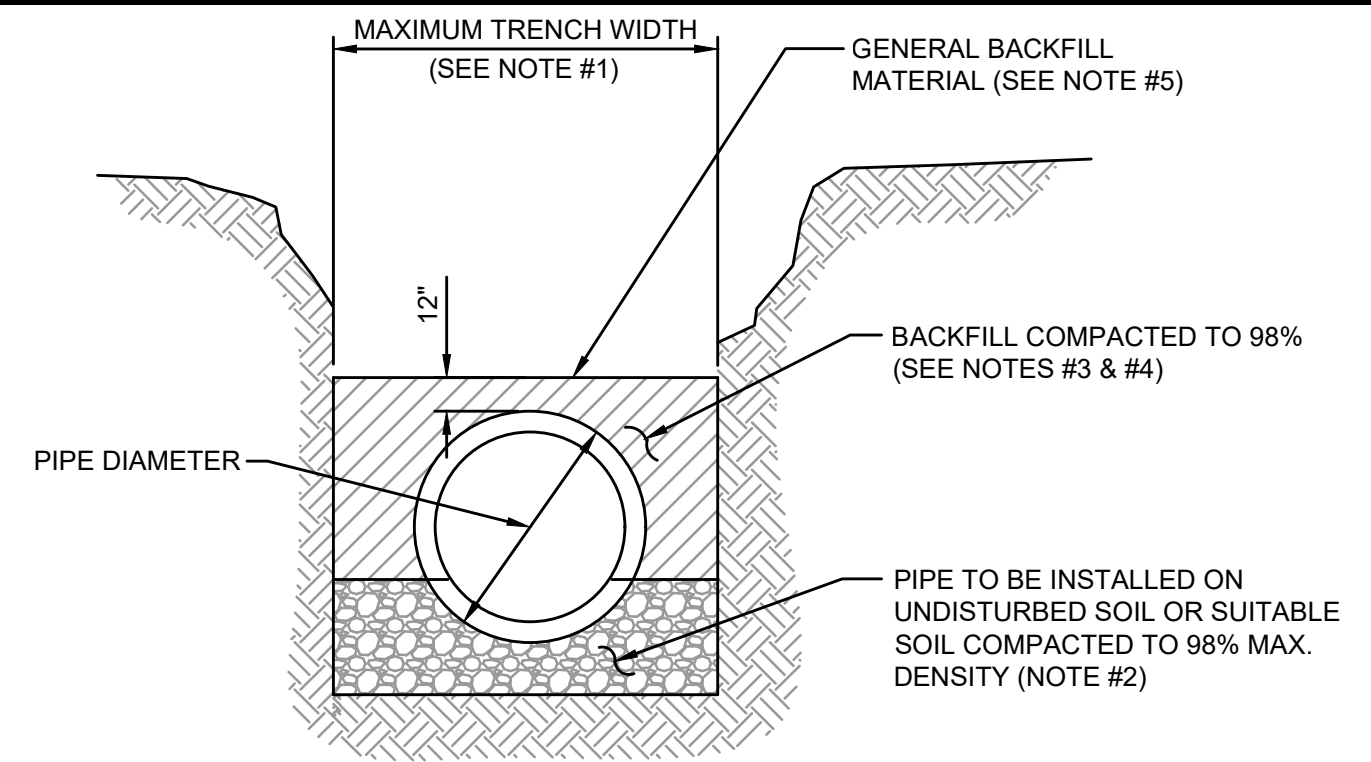
PROJ. NO.:	19-239-07-002
DATE:	JANUARY 2022
SCALE:	AS NOTED



PVC SAND SLEEVE
(FOR EXISTING AND NEW M/H CONSTRUCTION)

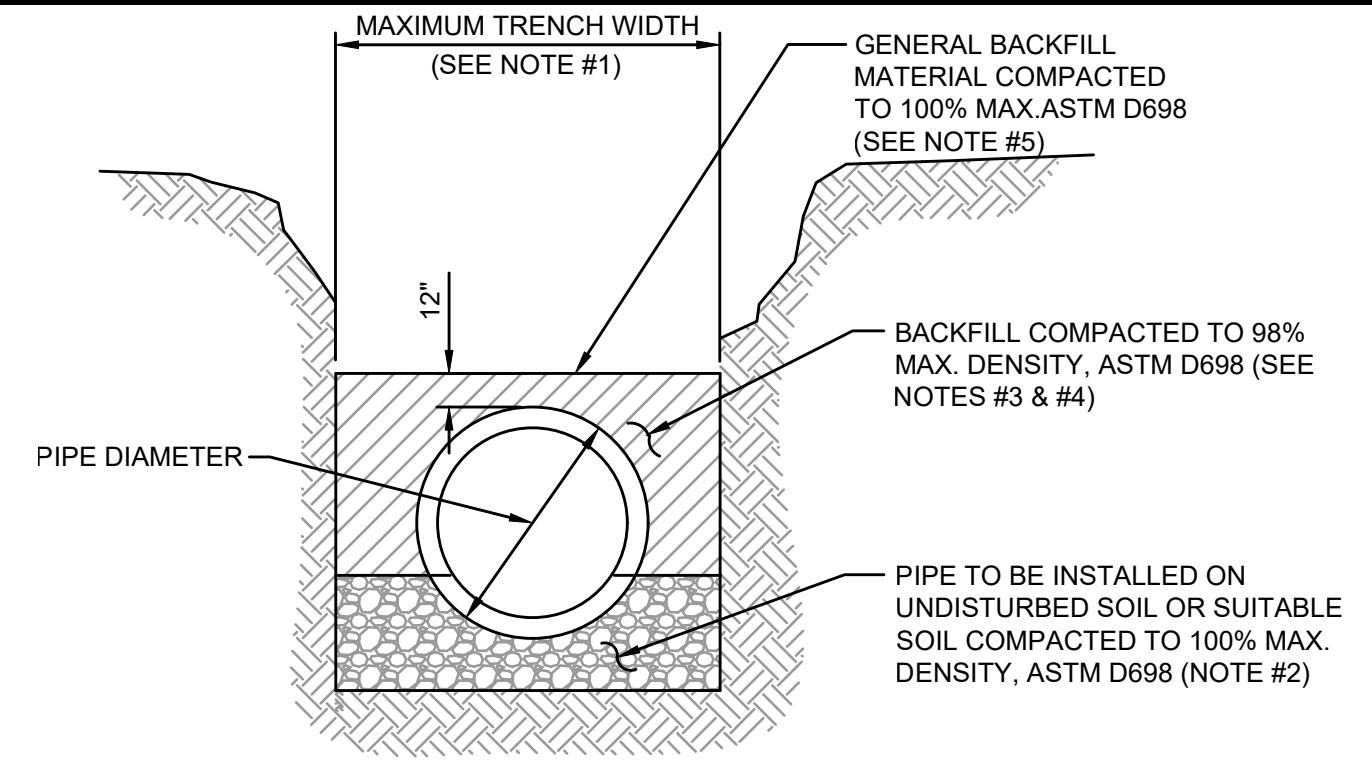


RUBBER BOOT
(FOR NEW M/H CONSTRUCTION ONLY, MAXIMUM DEPTH 15FT)



TYPICAL TRENCH

- NOTES:**
- TRENCH SIDES SHALL BE APPROXIMATELY VERTICAL BETWEEN AN ELEVATION OF 1 FOOT ABOVE THE TOP OF THE PIPE AND THE CENTER LINE OF THE PIPE; OTHERWISE, TRENCH SIDES SHALL BE AS VERTICAL AS POSSIBLE OR AS REQUIRED BY OSHA STANDARDS. REFER TO THE MEASUREMENT AND PAYMENT SECTION (SECTION #801, PARAGRAPH #4)) TO DETERMINE MAXIMUM PAYLINE WIDTHS.
 - BELL HOLE SHALL BE DUG TO PERMIT THE ENTIRE STRAIGHT BARREL OF THE PIPE TO REST ON THE UNDISTURBED TRENCH BOTTOM. BOULDERS OR LOOSE ROCKS LARGER THAN 3/4 INCH IN SIZE WILL NOT BE PERMITTED IN BACKFILL UP TO 1 FOOT ABOVE THE TOP OF THE PIPE.
 - BACK FILL MATERIAL UP TO A LEVEL OF 1 FOOT OVER THE PIPE SHALL CONSIST OF AASHTO CLASS A-3 SOIL (SUITABLE SOIL) AND SHALL EXCLUDE CLAY MATERIALS AND LOOSE ROCKS LARGER THAN 3/4 INCH SIZE.
 - BACKFILL MATERIAL UP TO A LEVEL 1 FOOT OVER THE TOP OF PIPE OR BOTTOM OF STRUCTURES SHALL BE PLACED IN 6 INCH COMPACTED THICKNESS LAYERS AND SHALL BE COMPACTED TO 98% OF ITS MAXIMUM DENSITY AS DETERMINED BY THE LABORATORY MODIFIED PROCTOR TEST, ASTM D1557.
 - SEE "EXCAVATION AND EARTHWORK", SECTION 408 FOR ADDITIONAL REQUIREMENTS INCLUDING REMOVAL AND REPLACEMENT OF UNSUITABLE SOILS, DEWATERING, COMPACTION REQUIREMENTS AND DENSITY TESTING OF COMPACTED SOILS.

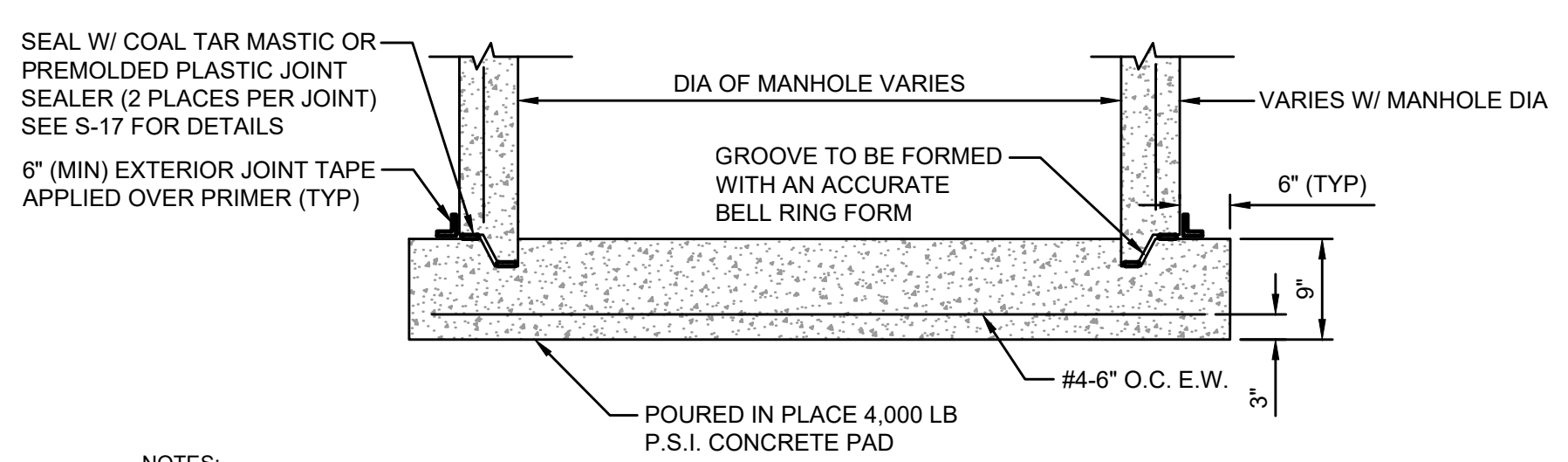


TYPICAL TRENCH

- NOTES:**
- TRENCH SIDES SHALL BE APPROXIMATELY VERTICAL BETWEEN AN ELEVATION OF 1 FOOT ABOVE THE TOP OF THE PIPE AND THE CENTER LINE OF THE PIPE; OTHERWISE, TRENCH SIDES SHALL BE AS VERTICAL AS POSSIBLE OR AS REQUIRED BY OSHA STANDARDS. REFER TO THE MEASUREMENT AND PAYMENT SECTION (SECTION #801, PARAGRAPH #4)) TO DETERMINE MAXIMUM PAYLINE WIDTHS.
 - BELL HOLE SHALL BE DUG TO PERMIT THE ENTIRE STRAIGHT BARREL OF THE PIPE TO REST ON THE UNDISTURBED TRENCH BOTTOM. BOULDERS OR LOOSE ROCKS LARGER THAN 3/4 INCH IN SIZE WILL NOT BE PERMITTED IN BACKFILL UP TO 1 FOOT ABOVE THE TOP OF THE PIPE.
 - BACK FILL MATERIAL UP TO A LEVEL OF 1 FOOT OVER THE PIPE SHALL CONSIST OF AASHTO CLASS A-3 SOIL (SUITABLE SOIL) AND SHALL EXCLUDE CLAY MATERIALS AND LOOSE ROCKS LARGER THAN 3/4 INCH SIZE.
 - BACKFILL MATERIAL UP TO A LEVEL 1 FOOT OVER THE TOP OF PIPE OR BOTTOM OF STRUCTURES SHALL BE PLACED IN 6 INCH COMPACTED THICKNESS LAYERS AND SHALL BE COMPACTED TO 100% OF ITS MAXIMUM DENSITY AS DETERMINED BY THE LABORATORY MODIFIED PROCTOR TEST, ASTM D698.
 - SEE "EXCAVATION AND EARTHWORK", SECTION 408 FOR ADDITIONAL REQUIREMENTS AND EXCEPTIONS INCLUDING REMOVAL AND REPLACEMENT OF UNSUITABLE SOILS, DEWATERING, COMPACTION REQUIREMENTS AND DENSITY TESTING OF COMPACTED SOILS.

OPEN CUT TRENCH FOR PRESSURE PIPE

JANUARY 2022 IN STATE ROAD RIGHT -OF-WAY PLATE W-42A

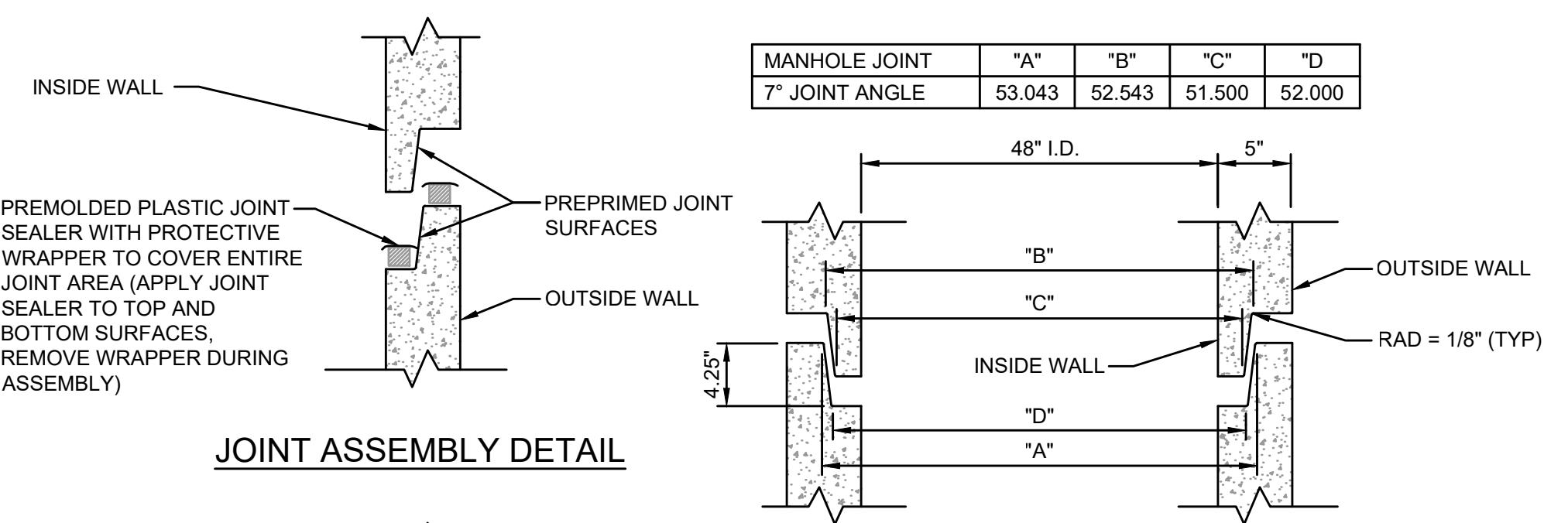


- NOTES:**
- THE USE OF THE POURED IN PLACE MANHOLE BOTTOM SHALL BE MINIMIZED AND SHALL BE SPECIFICALLY APPROVED BY JEA PRIOR TO CONSTRUCTION.

MANHOLE BOTTOM

MANHOLE PIPE CONNECTION DETAIL

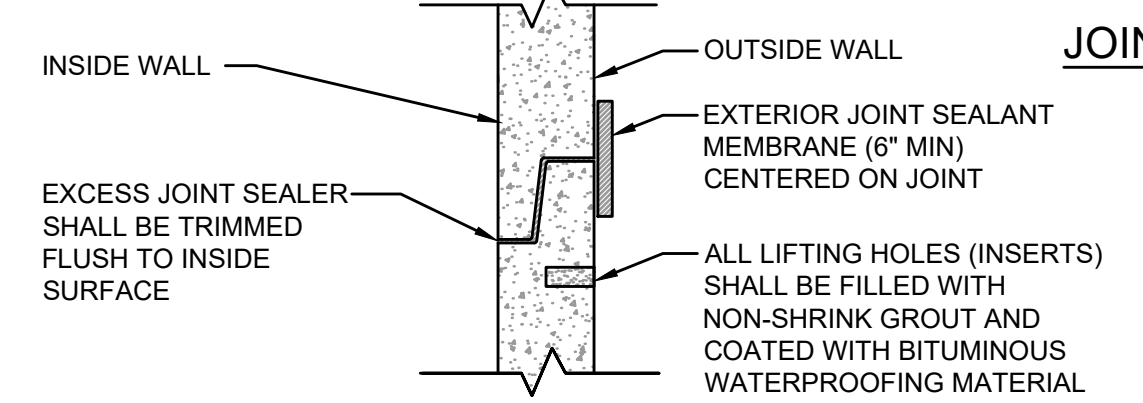
JANUARY 2022 PLATE S-15



MANHOLE JOINT	"A"	"B"	"C"	"D"
7" JOINT ANGLE	53.043	52.543	51.500	52.000

JOINT ASSEMBLY DETAIL

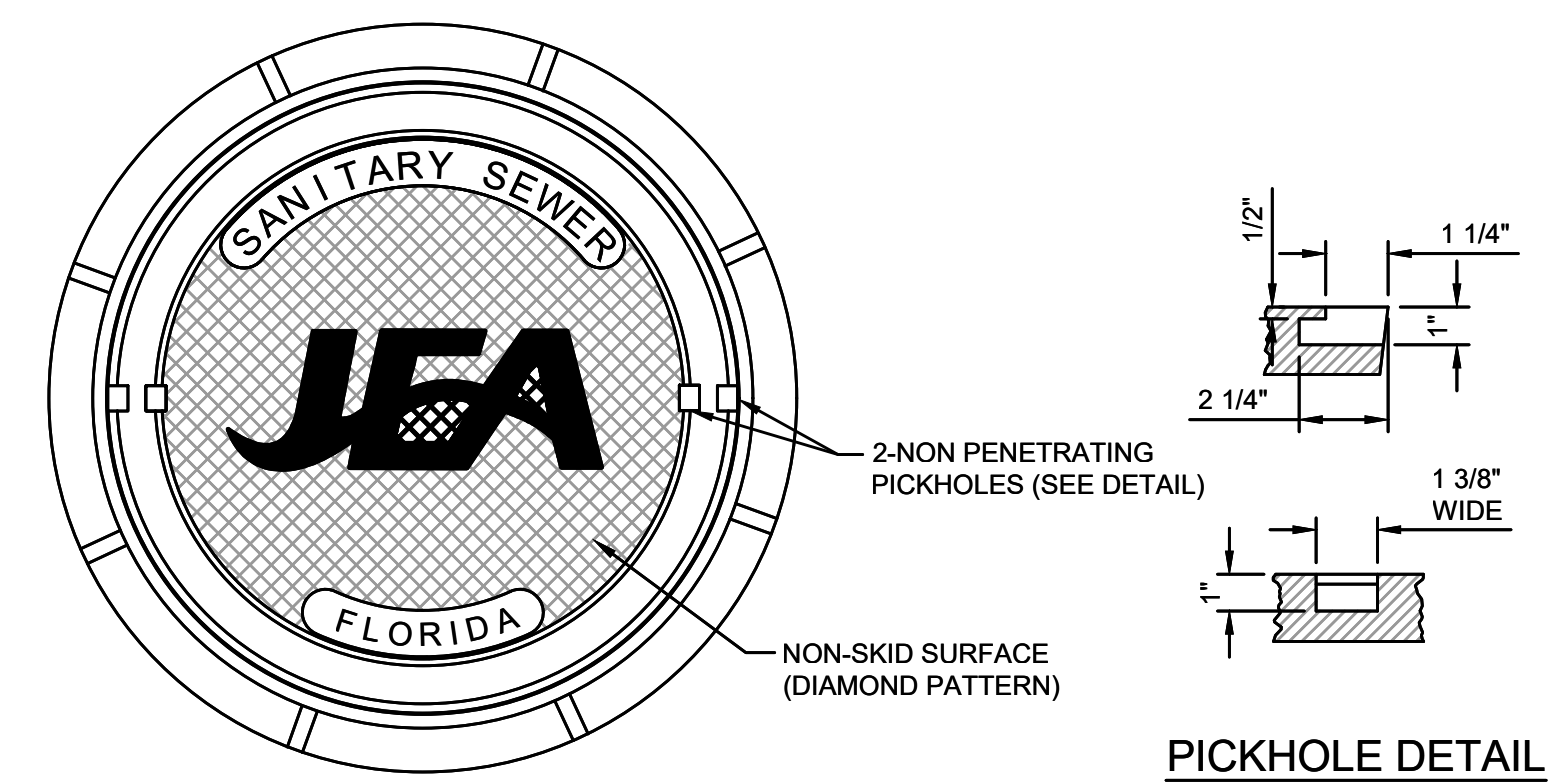
JOINT CONSTRUCTION DETAIL



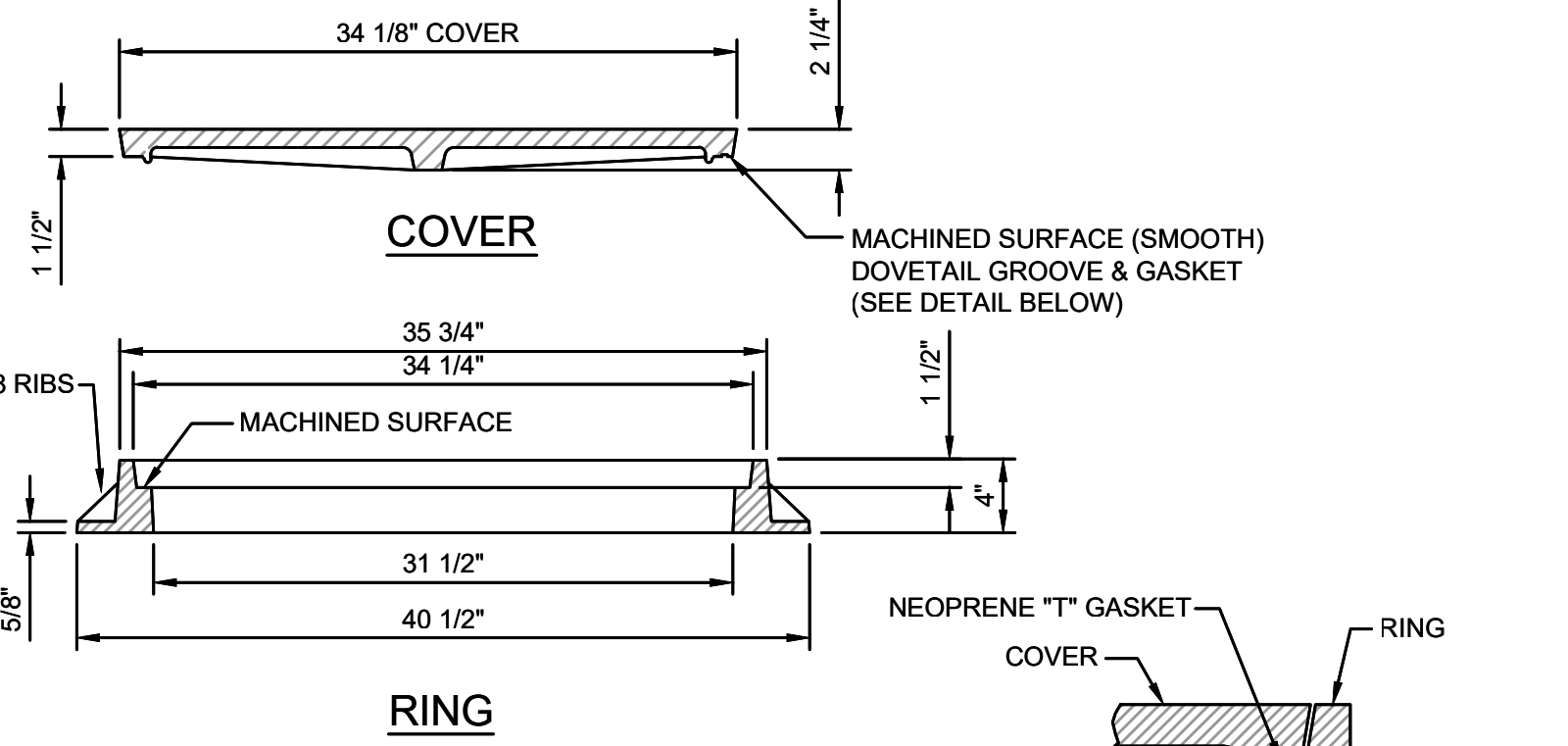
COMPLETED JOINT DETAIL

PRECAST SEWER MANHOLE JOINT DETAIL

JANUARY 2022 PLATE S-17



PICKHOLE DETAIL



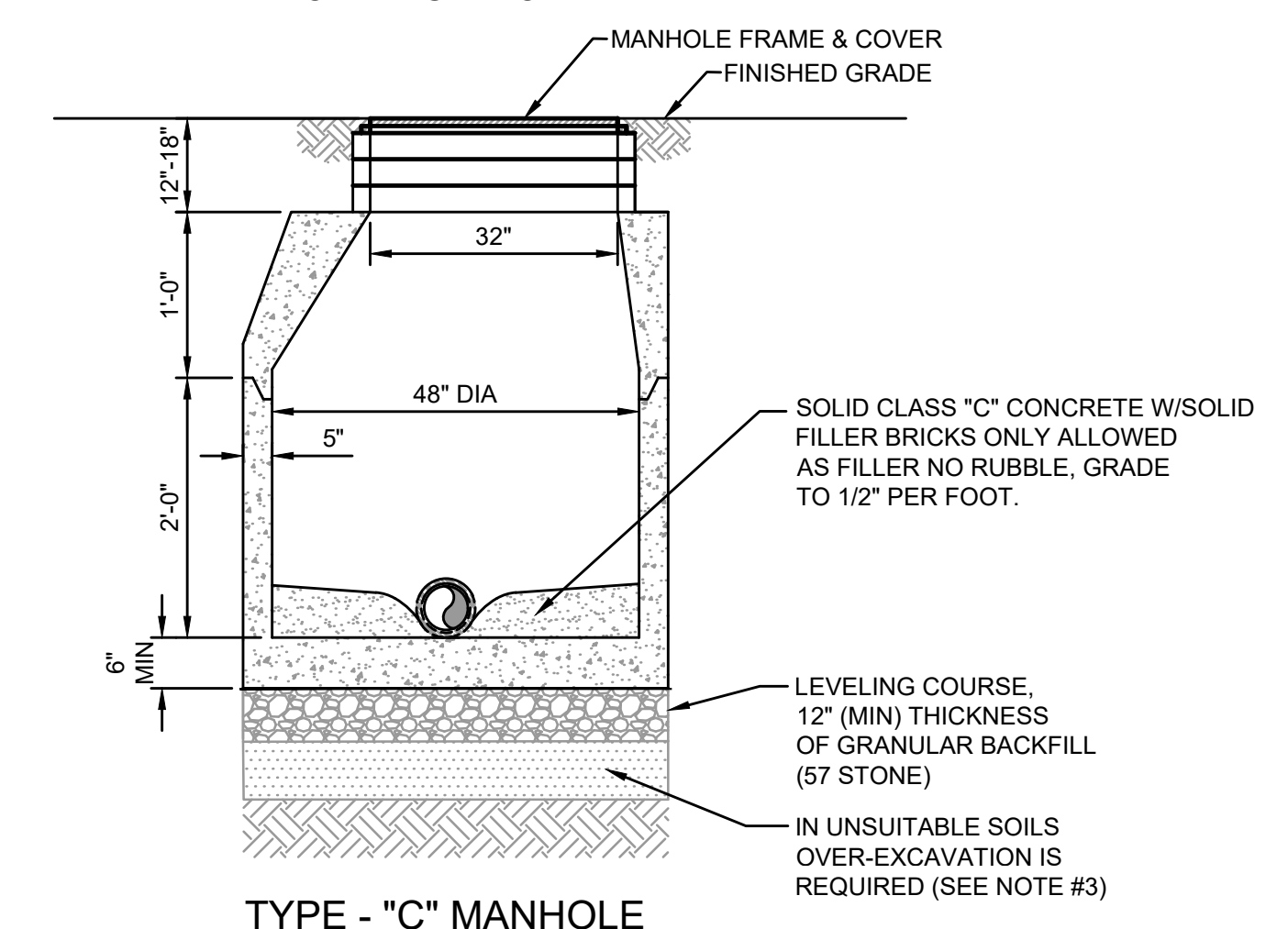
RING

GROOVE & GASKET DETAIL

- NOTES:**
- MATERIAL: ASTM A-48 CLASS 35B GRAY IRON.
 - RING WEIGHT 230 LBS. APPROX.
 - COVER WEIGHT 230 LBS. APPROX.
 - ALL DIMENSIONS ARE SHOWN IN INCHES.
 - FOR MANHOLES WHICH WILL BE MAINTAINED BY JEA (INCLUDING UTILITY DEDICATION PROJECTS), THE COVER SHALL INCLUDE THE "JEA" LOGO AND A NEOPRENE GASKET.
 - FOR MANHOLES WHICH WILL BE MAINTAINED BY PARTIES OTHER THAN JEA (SUCH AS PRIVATE SEWER COLLECTION SYSTEMS, PRIVATE (FORCE MAIN) PUMP OUT BOX AND SYSTEMS NOT MAINTAINED BY JEA), THE COVER SHALL INCLUDE "SANITARY SEWER" GENERIC LETTERING (NO "JEA" LOGO OR NEOPRENE GASKET).

SANITARY SEWER MANHOLE FRAME AND COVER

JANUARY 2022 PLATE S-1



TYPE - "C" MANHOLE

TYPE - "C" MANHOLE WITH FLAT TOP

SECTION VIEWS

- NOTES:**
- PRECAST MANHOLE SECTIONS TO BE MANUFACTURED IN ACCORDANCE WITH THE LATEST EDITIONS OF A.S.T.M. C-478 WITH 4000 LB. CONC., TYPE II CEMENT. ALL LIFTING HOLES AND OUTSIDE INSERTS SHALL BE FILLED WITH NON-SHRINK GROUT AND COATED WITH BITUMINOUS WATERPROOFING MATERIAL.
 - THE INTERIOR AND EXTERIOR OF MANHOLE AND INTERIOR OF ADJUSTMENT RINGS SHALL BE GIVEN TWO COAT OF BITUMINOUS WATERPROOFING MATERIAL.
 - IN SILTS, CLAY OR HIGHLY ORGANIC SOILS (FINE-GRAINED SOILS INCLUDING SOIL GROUPS ML, CL, OL, MH, CH, OH AND PT) THE SOILS SHALL BE OVER-EXCAVATED AN ADDITIONAL 24" (AT A MIN.) AND BACKFILLED WITH AASHTO CLASS A-3 SOIL (COMPACTED TO 98%, ASTM D1557) OR OVER-EXCAVATE AN ADDITIONAL 12" (AT A MIN.) AND BACKFILL WITH GRANULAR BACKFILL (57 STONE).

SANITARY SEWER TYPE "C" MANHOLE
8"-21" SEWERS

JANUARY 2022 PLATE S-6

England-Thims & Miller, Inc.
14775 Old St. Augustine Road
P.O. Box 100
Titusville, FL 32781
TEL: (888) 462-8828
TEL: (888) 462-8828
FAX: (888) 462-8828
CA - 000284 LC - 000316

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1.			
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3.			
4.			

DESIGN ENGINEER: JON-MICHAEL BARQUIN
FLORIDA REGISTRATION NO.: 94926

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JEA
Building Community

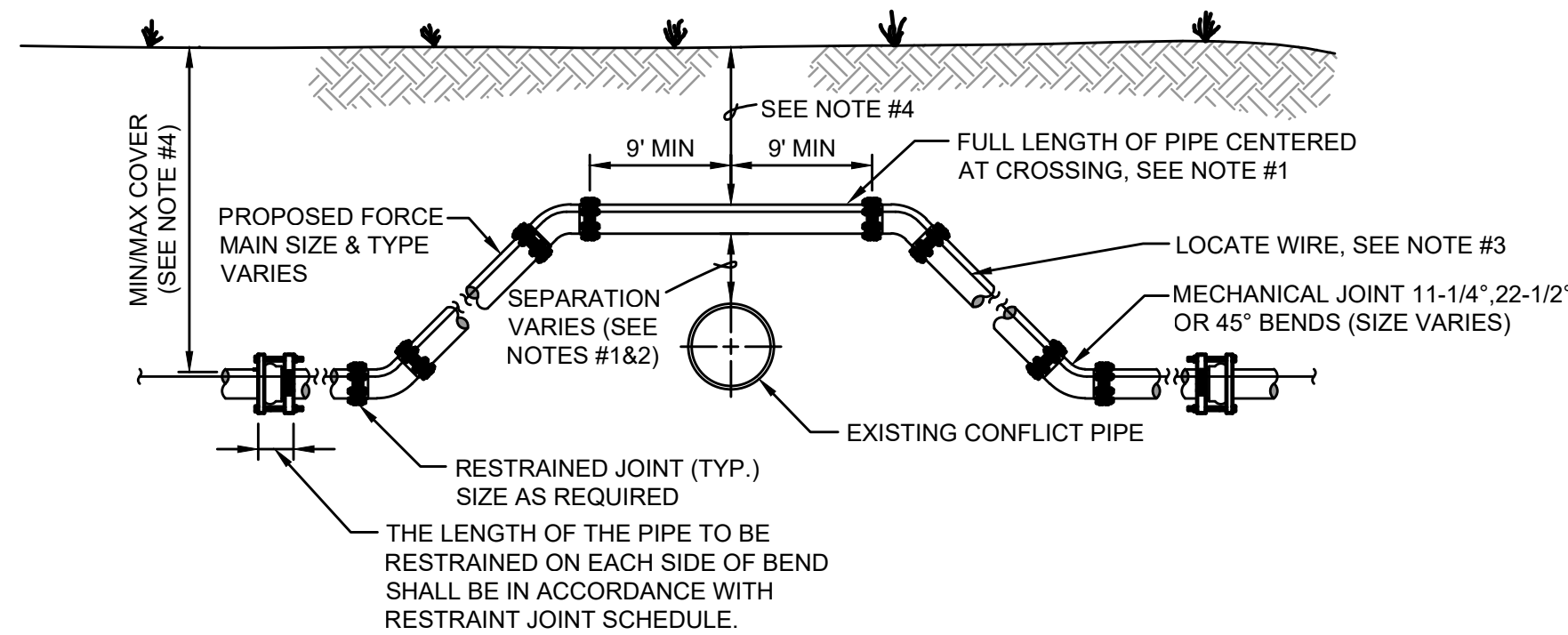
JEA STANDARD
SANITARY SEWER DETAILS

WILDLIGHT COMMERCE PARK PARCEL B

PROJ. NO.:	19-239-07-002
DATE:	JANUARY 2022
SCALE:	AS NOTED
NO. SHEETS:	5
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CASE "A" CROSSING

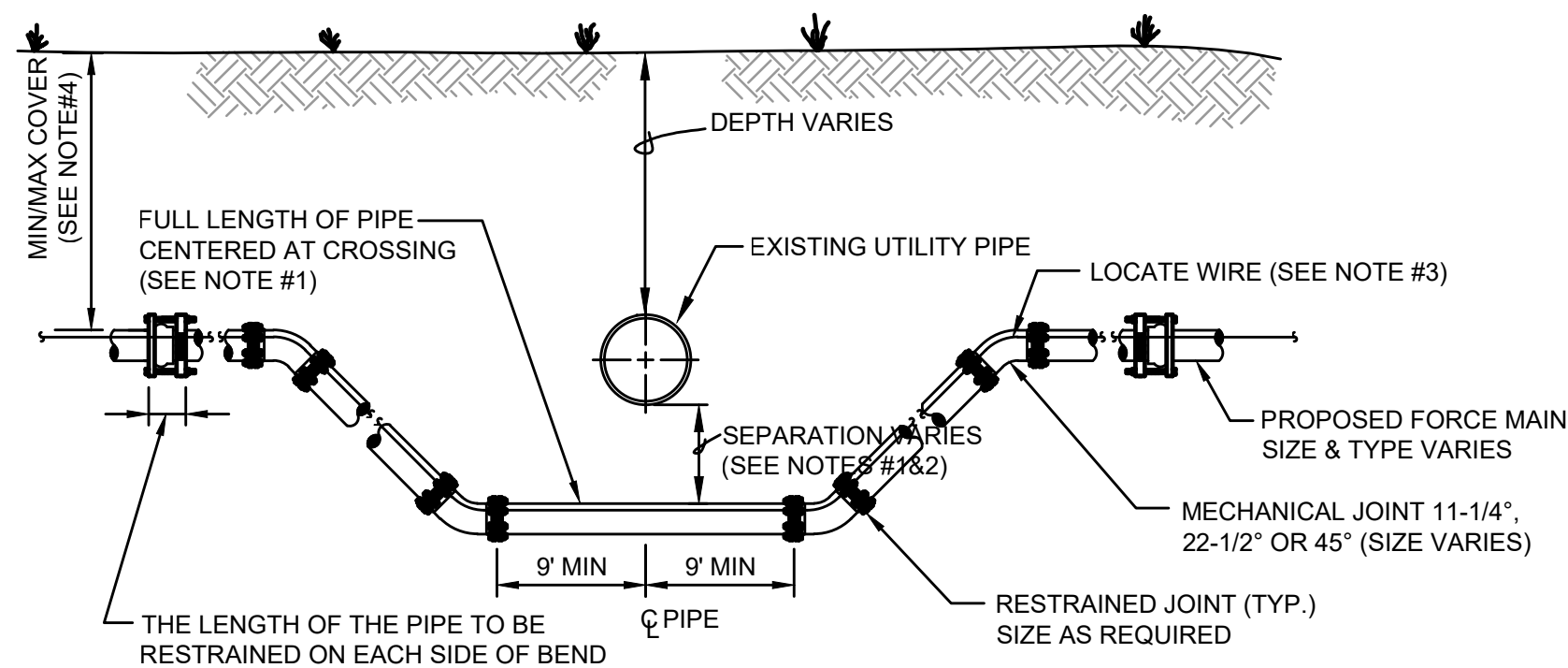
NOTES:

- IF EXISTING CONFLICT PIPE IS A WATER OR RECLAIMED WATER MAIN, 12-INCHES OF SEPARATION IS REQUIRED. A FULL LENGTH OF PIPE SHALL BE CENTERED OVER EXISTING UTILITY MAIN TO PROVIDE MAXIMUM JOINT SPACING FOR ALL CROSSINGS.
- FOR OTHER LOCATION LIMITATIONS SEE DETAIL (S-26 & S-27).
- LOCATING WIRE REQUIRED: SEE DETAIL S-49.
- THE COVER FOR PIPING LESS THAN 24" SIZE SHALL BE 30" (MIN) IN UNPAVED AREAS, 36" (MIN) IN PAVED AREAS AND A MAXIMUM COVER OF 60", UNLESS PRE-APPROVED BY JEA. THE COVER FOR PIPING 24" SIZE AND LARGER SHALL BE 36" (MIN) IN PAVED AND UNPAVED AREAS AND A MAXIMUM COVER OF 84", UNLESS APPROVED BY JEA.
- THE SOILS BETWEEN THE MAIN AND THE CONFLICT PIPE SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY THE LABORATORY MODIFIED PROCTOR TEST ASTM D 1557.

**ADJUSTMENT OVER EXISTING UTILITIES
MECHANICAL RESTRAINTS**

JANUARY 2022

PLATE S-39



CASE "B" CROSSING

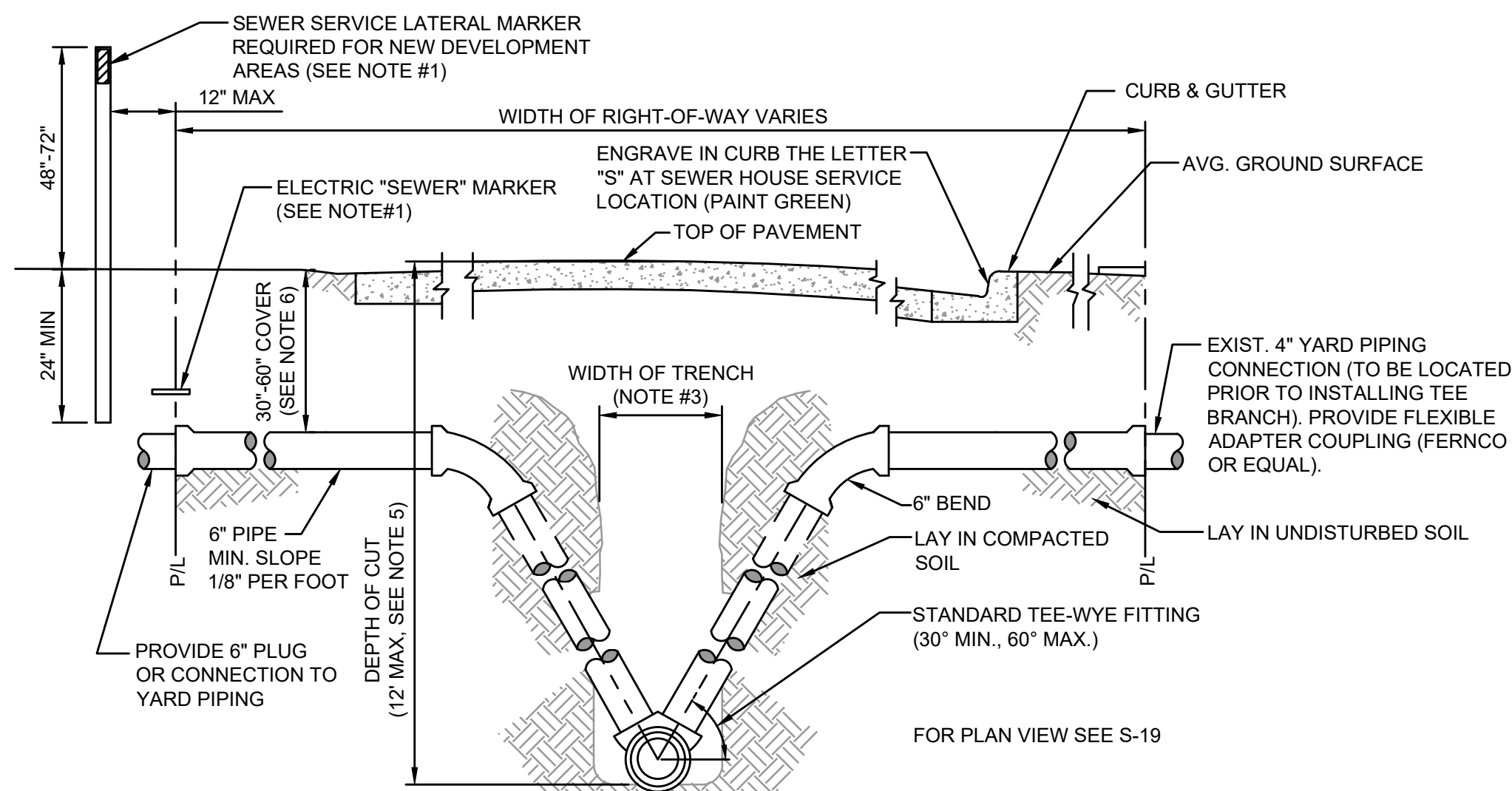
NOTES:

- IF EXISTING CONFLICT PIPE IS A WATER OR RECLAIMED WATER MAIN, 12-INCHES OF SEPARATION IS REQUIRED. A FULL LENGTH OF PIPE SHALL BE CENTERED OVER EXISTING UTILITY MAIN TO PROVIDE MAXIMUM JOINT SPACING FOR ALL CROSSINGS.
- FOR OTHER LOCATION LIMITATIONS SEE DETAIL (S-26 & S-27).
- LOCATING WIRE REQUIRED: SEE DETAIL S-49.
- THE COVER FOR PIPING LESS THAN 24" SIZE SHALL BE 30" (MIN) IN UNPAVED AREAS, 36" (MIN) IN PAVED AREAS AND A MAXIMUM COVER OF 60", UNLESS PRE-APPROVED BY JEA. THE COVER FOR PIPING 24" SIZE AND LARGER SHALL BE 36" (MIN) IN PAVED AND UNPAVED AREAS AND A MAXIMUM COVER OF 84", UNLESS APPROVED BY JEA.
- THE SOILS BETWEEN THE MAIN AND THE CONFLICT PIPE SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY THE LABORATORY MODIFIED PROCTOR TEST ASTM D 1557.

**ADJUSTMENT UNDER EXISTING UTILITIES
MECHANICAL RESTRAINTS**

JANUARY 2022

PLATE S-41



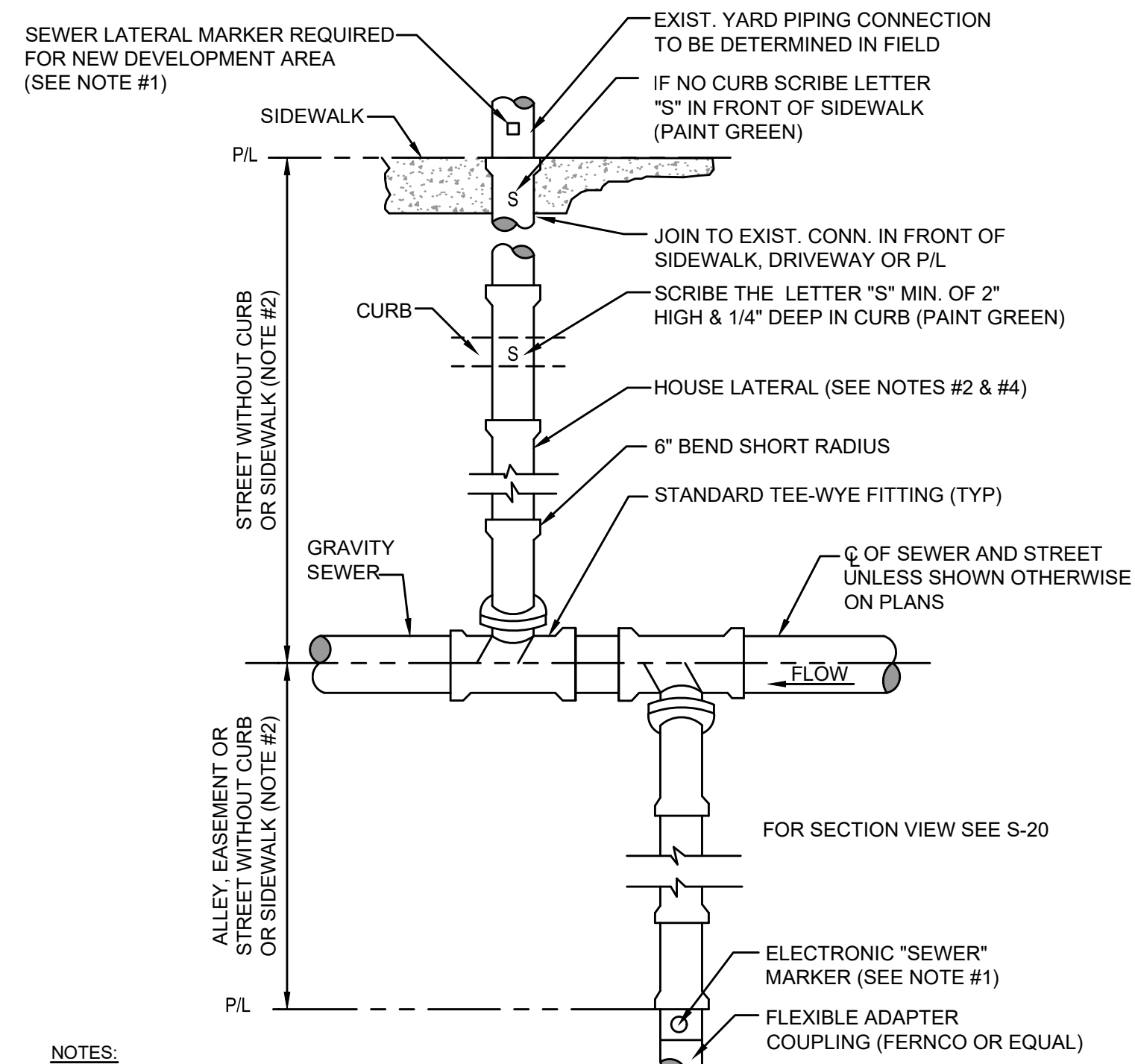
NOTES:

- TO MARK THE LOCATION OF THE 6" PLUG FOR NEW SERVICE: FOR PROJECTS WHERE NO CONCRETE CURB EXIST, AN ELECTRONIC "SEWER" MARKER IS REQUIRED FOR ALL LATERALS WHICH ARE "NOT" IN USE. FOR NEW DEVELOPMENT AREAS WHERE THE SEWER LATERAL IS "NOT" IN USE, A LANDSCAPE TIMBER OR 3x3 MIN. P.T. POST (TOP PAINTED GREEN) SHALL BE INSTALLED. WHERE REQUIRED BY JEA OR NO CONCRETE CURB EXIST, AN ELECTRONIC "SEWER" MARKER SHALL BE INSTALLED TO MARKER SHALL ALSO BE INSTALLED.
- THE MINIMUM SIZE OF ALL HOUSE LATERALS SHALL BE 6 INCHES. THE MAXIMUM LENGTH OF A HOUSE LATERAL SHALL BE 60 FEET (LENGTH BETWEEN SEWER MAIN OR MANHOLE TO CUSTOMERS PROPERTY LINE).
- SEE MEASUREMENT AND PAYMENT SECTION FOR MAXIMUM PAYMENT WIDTHS.
- ALL GRAVITY SEWER MAINS AND ASSOCIATED SEWER LATERAL PIPE AND FITTINGS (INCLUDING THE TEE-WYE FITTING) SHALL BE PVC SDR-26.
- UNLESS APPROVED OTHERWISE BY A JEA O&M MANAGER, NO GRAVITY SEWER MAIN WITH SEWER SERVICE LATERALS SHALL BE CONSTRUCTED WITH A "DEPTH OF CUT" GREATER THAN 12 FEET.
- SEWER SERVICE LATERALS ASSOCIATED WITH GRAVITY SEWER MAINS WHICH ARE DEEPER THAN 12 FEET, MUST BE ROUTED TO A GRAVITY SEWER HIGH-LINE, A MANHOLE OR OTHER JEA APPROVED METHOD.
- THE SEWER SERVICE LATERAL SHALL BE CONSTRUCTED AT A DEPTH TO ALLOW A GRAVITY CONNECTION BY THE CUSTOMER, WHERE POSSIBLE (CONTINGENT UPON MEETING THE CUSTOMER'S ON-SITE CONDITIONS AND LOCAL CONSTRUCTION STANDARDS). A LATERAL REQUIRING MORE THAN 60" OF COVER MUST BE APPROVED, PRIOR TO CONSTRUCTION, BY JEA.

HOUSE LATERAL - SECTION VIEW

JANUARY 2022

PLATE S-20



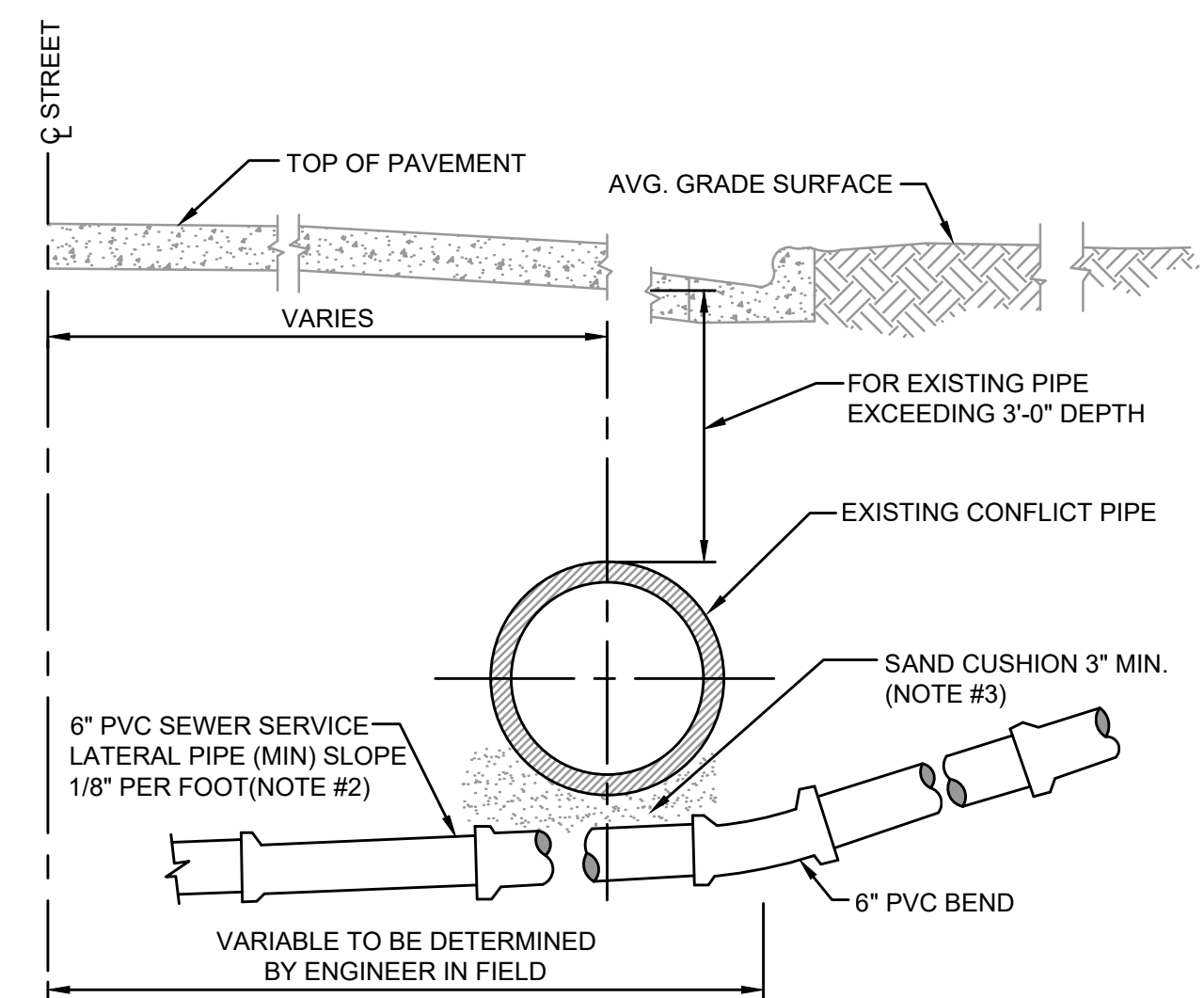
NOTES:

- TO MARK THE LOCATION OF THE 6" PLUG FOR NEW SERVICE: FOR PROJECTS WHERE NO CONCRETE CURB EXIST, AN ELECTRONIC "SEWER" MARKER IS REQUIRED FOR ALL LATERALS WHICH ARE "NOT" IN USE. FOR NEW DEVELOPMENT AREAS WHERE THE SEWER LATERAL IS "NOT" IN USE, A LANDSCAPE TIMBER OR 3x3 MIN. P.T. POST (TOP PAINTED GREEN) SHALL BE INSTALLED. WHERE REQUIRED BY JEA OR NO CONCRETE CURB EXIST, AN ELECTRONIC "SEWER" MARKER SHALL BE INSTALLED TO MARKER SHALL ALSO BE INSTALLED.
- THE MINIMUM SIZE OF ALL HOUSE LATERALS SHALL BE 6 INCHES. THE MAXIMUM LENGTH OF A HOUSE LATERAL SHALL BE 60 FEET (LENGTH BETWEEN SEWER MAIN OR MANHOLE TO CUSTOMERS PROPERTY LINE).
- NO SEWER SERVICE CONNECTIONS PERMITTED ON GRAVITY SEWER PIPE WHICH ARE 16" AND LARGER.
- ALL GRAVITY SEWER MAINS AND ASSOCIATED SEWER LATERAL PIPE AND FITTINGS (INCLUDING THE TEE-WYE FITTING) SHALL BE PVC SDR-26.

HOUSE LATERAL - PLAN VIEW

JANUARY 2022

PLATE S-19



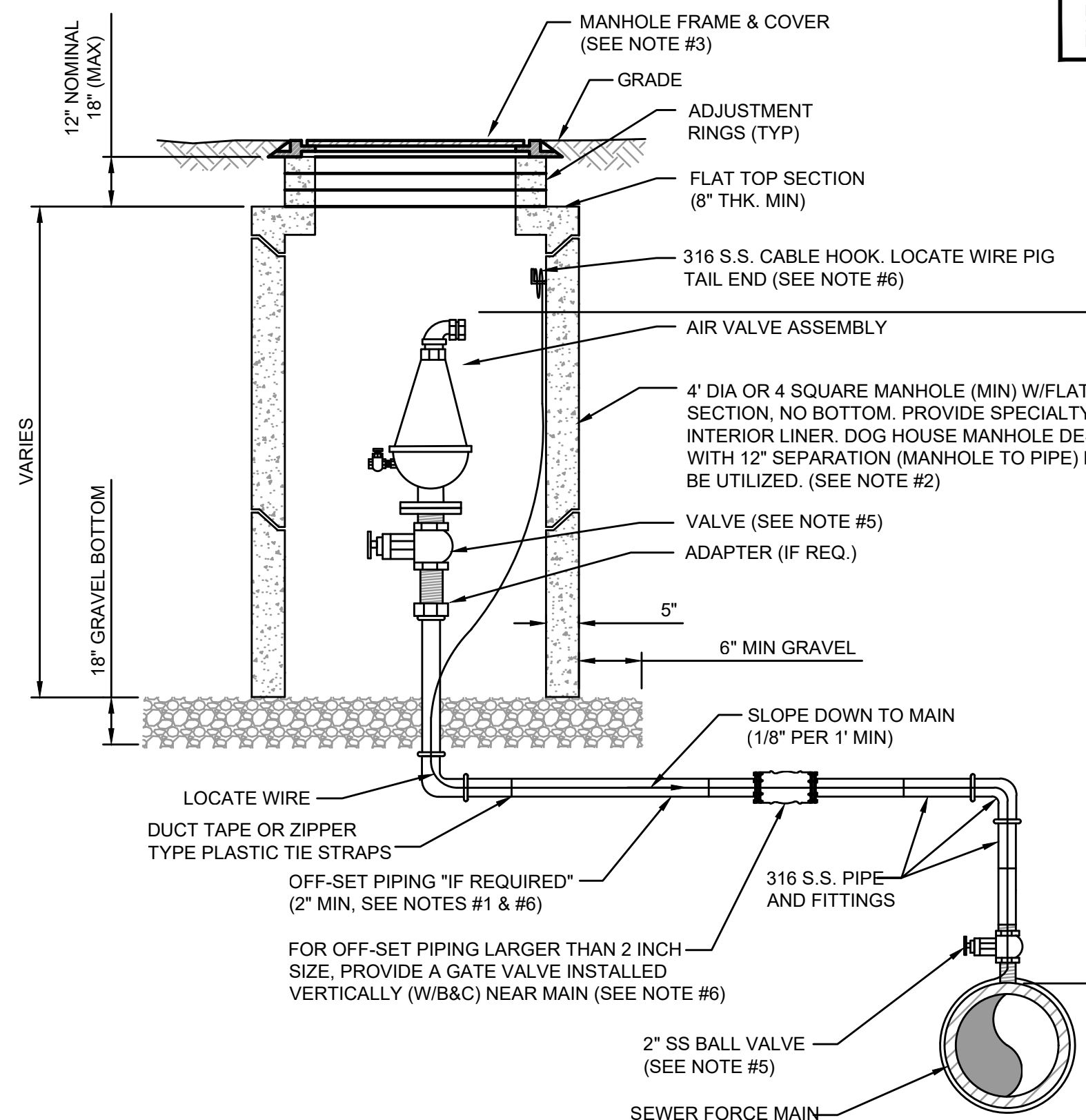
NOTES:

- ALTERNATE GRADIENT FOR 6 INCH LATERAL SEWERS AT CONFLICTS WITH EXISTING UTILITIES.
- FLATTER SLOPE MUST BE PRE-APPROVED BY JEA O&M MANAGER (ONLY) PRIOR TO CONSTRUCTION
- THE SOILS BETWEEN THE NEW MAIN AND THE CONFLICT PIPE SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY THE LABORATORY MODIFIED PROCTOR TEST, ASTM D 1557.

HOUSE LATERAL UNDER CONFLICT PIPE

JANUARY 2022

PLATE S-24



NOTES:

- THE AIR ASSEMBLY MANHOLE SHALL BE LOCATED OUTSIDE OF THE ROADWAY PAVEMENT AREA (I.E. LOCATED IN NON-TRAFFIC AREAS). IF OFF-SET PIPING IS REQUIRED, THE PIPING SHALL BE 2 INCH MINIMUM, (SAME SIZE AS AIR VALVE INLET). FOR PIPE SIZES 3 INCH AND SMALLER: PIPING SHALL BE 316 STAINLESS STEEL SCH.40, STD GRADE, THREADED. FOR PIPE SIZES 4 INCH AND LARGER: PIPING SHALL BE 316 STAINLESS STEEL SCH. 10 (MIN), WELDED OR PVC DR-18 PIPE AND FITTINGS-RESTRAINED.
- THE CONCRETE MANHOLE SHALL INCLUDE A POLYURETHANE SPECIALTY LINER (PER SPEC SECTION 446) TO BE INSTALLED ON THE INTERIOR SURFACES INCLUDING THE RISER SECTION TOP AND THE ADJUSTMENT RINGS. A BITUMINOUS WATERPROOFING MATERIAL SHALL BE PROVIDED ON THE OUTSIDE SURFACES OF THE MANHOLE.
- FRAME AND COVER SHALL BE JEA STANDARD. THE COVER SHALL HAVE NO GASKET TO ALLOW AIR TO EXIT VAULT (REMOVE GASKET IF NECESSARY FROM THE UNDER SIDE OF STANDARD JEA COVER). THE COVER (WHEN FLIPPED OPEN) MUST CLEAR THE AIR VALVE ASSEMBLY AT ALL TIMES OR A SQUARE TOP WITH ALUMINUM DOOR SHALL BE PROVIDED (NON-TRAFFIC LOCATIONS ONLY).
- FOR PIPE SIZES 3 INCH AND SMALLER, PROVIDE A STAINLESS STEEL BALL VALVE (2" MIN). FOR PIPE SIZES 4 INCH AND LARGER, PROVIDE A FLANGE GATE VALVE (WHEEL OPERATOR) OR PLUG VALVE. (LEVER ARM OPERATOR) SEE SPECIFICATION FOR ADDITIONAL REQUIREMENTS.
- FOR A 2" AIR VALVE, PROVIDE 2" STAINLESS STEEL BALL VALVE AT THE MAIN. FOR AIR VALVES LARGER THAN 2" SIZE, PROVIDE A TAPPING SLEEVE OR DUCTILE IRON TEE FITTING. ALSO, FOR OFF-SET PIPING LARGER THAN 2 INCH SIZE, PROVIDE A GATE VALVE (INSTALLED VERTICALLY NEAR MAIN). SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- LOCATE WIRE SHALL HAVE ENOUGH SLACK TO REACH 4' ABOVE FINAL GRADE.

AIR VALVE ASSEMBLY INSIDE MANHOLE

JANUARY 2022

PLATE S-29

England, Thims & Miller, Inc.
14776 Old St. Augustine Road
Titusville, FL 32781
TEL: (321) 462-8928
FAX: (321) 462-8985
CA - 0002884 LC - 0000316

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DESIGNER: JON-MICHAEL BARQUIN
DATE: FLORIDA REGISTRATION NO. 94926

NO. SHEETS: 5
SHEET NO.: 3
DRAWING NO.: 94

REVISIONS:

NO.	DATE	BY
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THESE DETAILS AS SHOWN ON THIS DRAWING ARE BY THE JEA. WE TAKE NO EXCEPTION TO THE DESIGN

JEA
Building Community

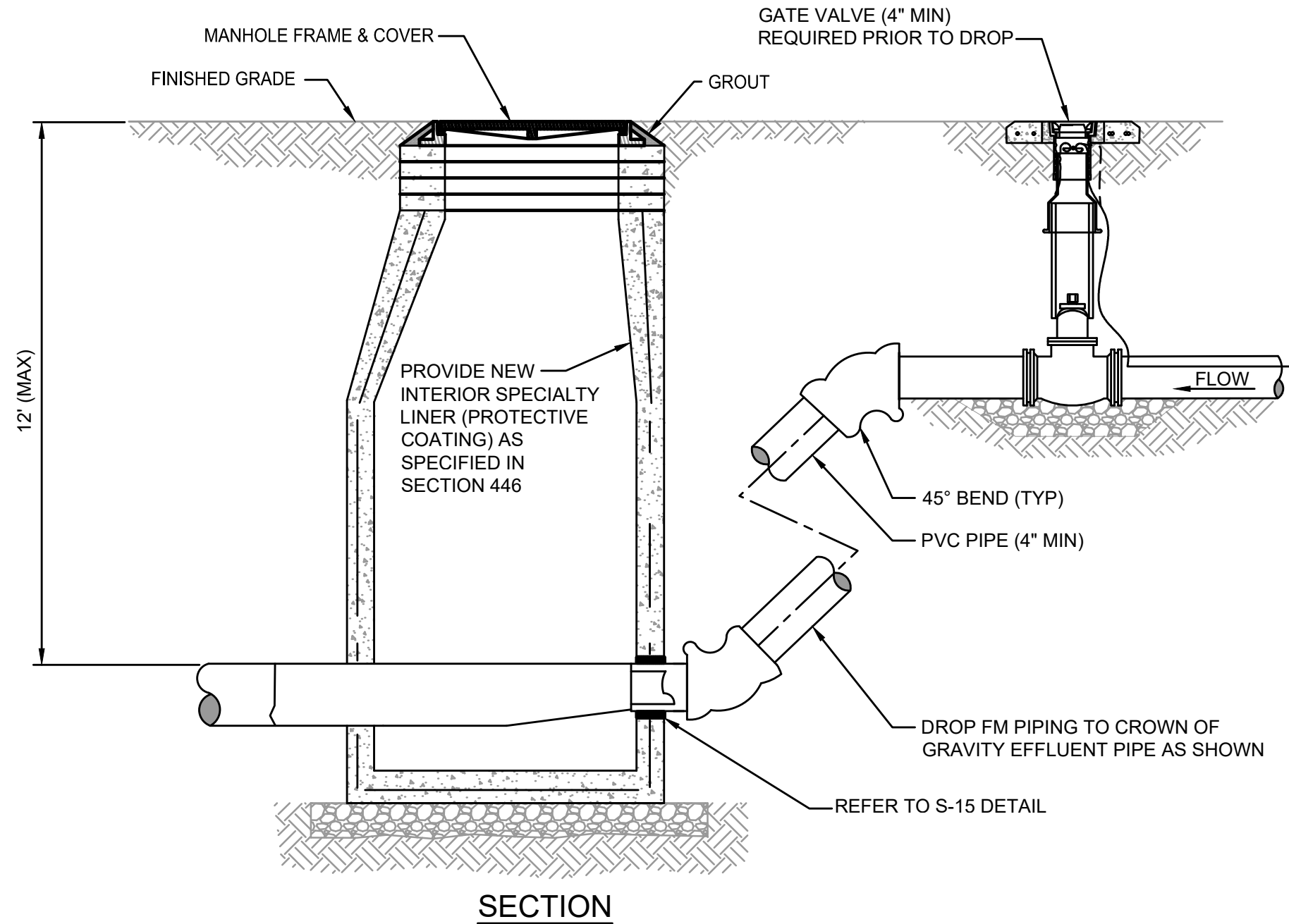
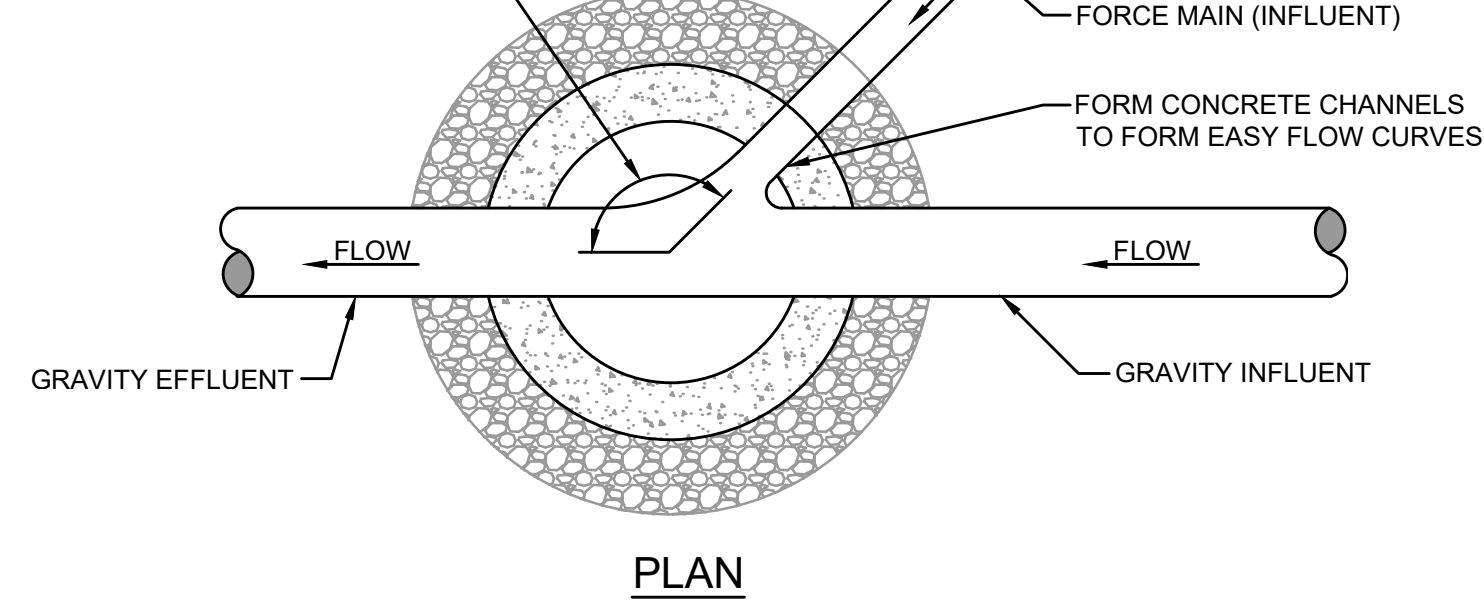
JEA STANDARD
SANITARY SEWER DETAILS

WILDLIGHT COMMERCE PARK PARCEL B

PROJ. NO.: 19-239-07-002
DATE: JANUARY 2022
SCALE: AS NOTED

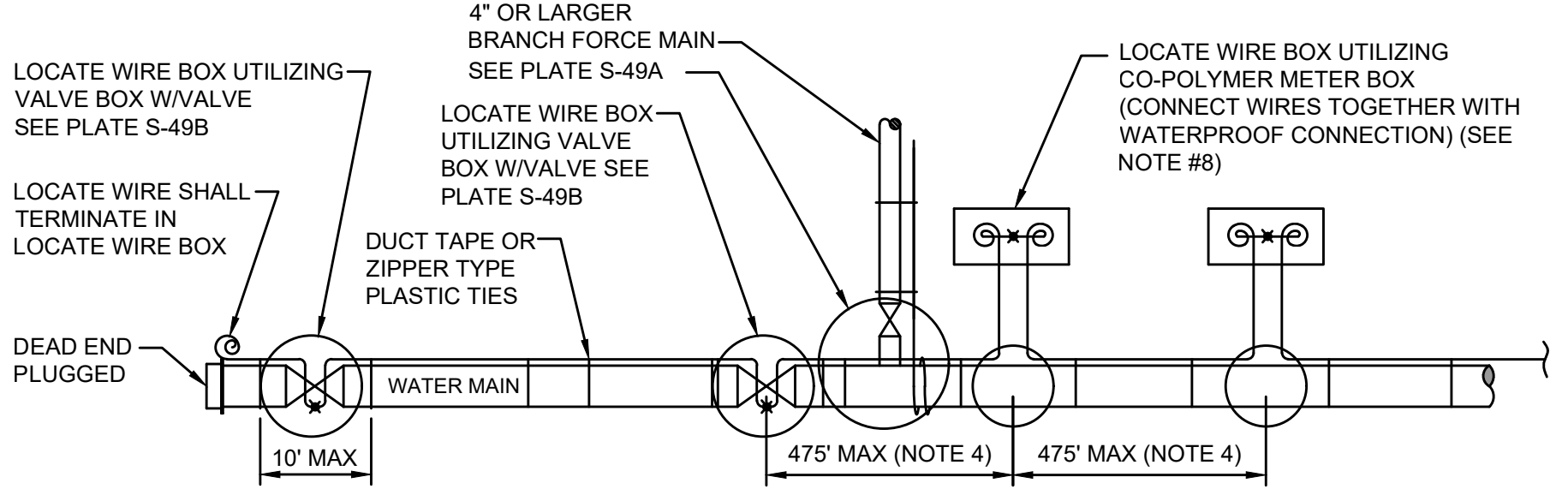
NO. SHEETS: 5
SHEET NO.: 3
DRAWING NO.: 94

NOTE: ANGLE BETWEEN INFLUENT FORCE MAIN AND GRAVITY EFFLUENT PIPE SHALL BE BETWEEN 135° - 180° UNLESS APPROVED OTHERWISE BY JEA.



TYPICAL FORCE MAIN CONNECTION TO MANHOLE

JANUARY 2022 PLATE S-18

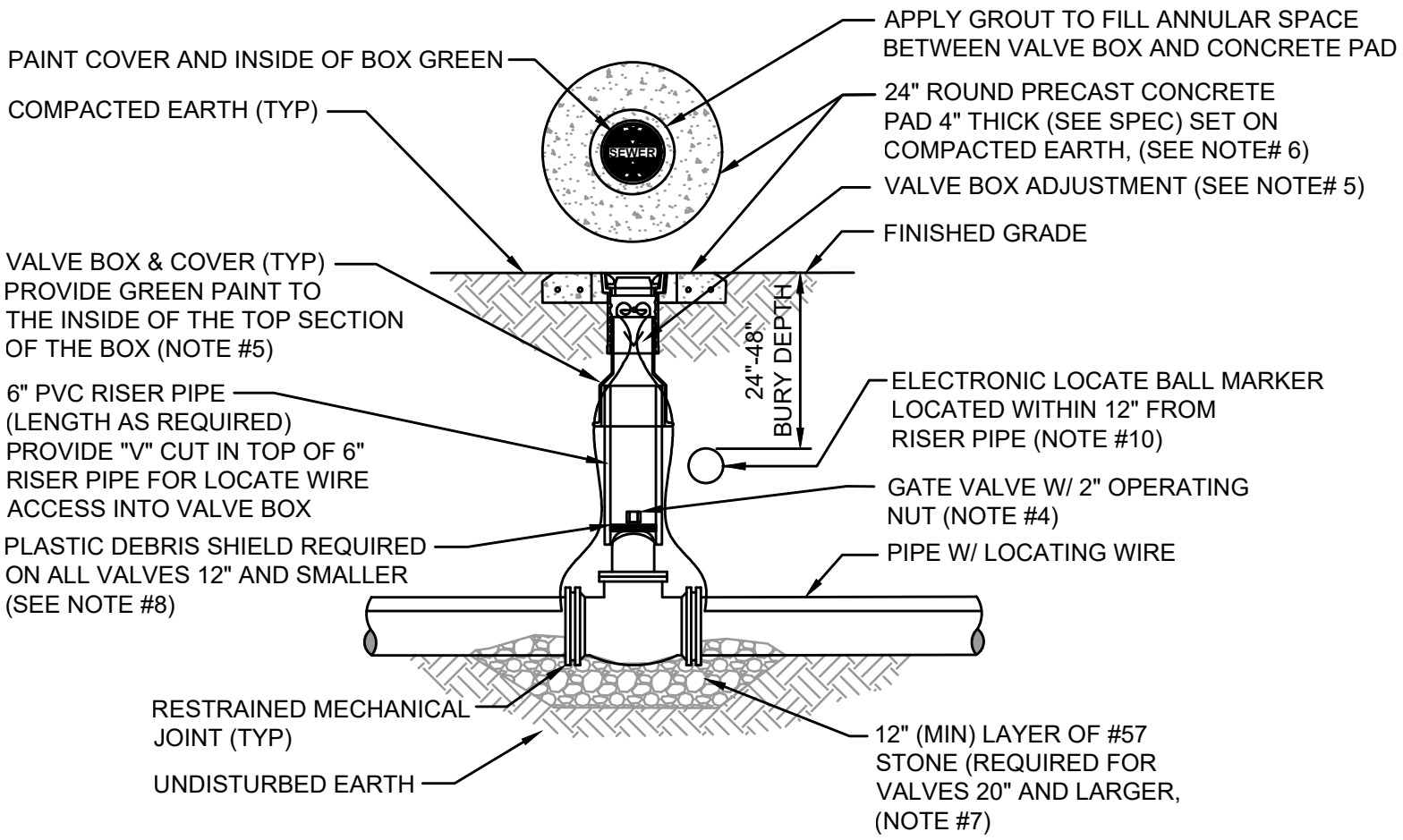


LOCATE WIRE SYSTEM

- NOTES:**
- LOCATING WIRE TO BE INSTALLED IN EITHER THE ONE OR ELEVEN O'CLOCK POSITION ON ALL DUCTILE IRON OR PVC (PRESSURE MAINS). LOCATE WIRE SHALL ALSO BE INSTALLED ON ALL (HDPE) POLY MAIN PIPING (1:00 OR 11:00 POSITION, IF POSSIBLE).
 - SECURE LOCATING WIRE TO PVC FORCE MAIN BY USE OF DUCT TAPE OR ZIPPER TYPE PLASTIC TIE STRAPS SPACED AT A MAXIMUM DISTANCE OF TEN (10') AND AT EACH SIDE OF BELL JOINT OR FITTING.
 - THE ENTIRE LOCATING SYSTEM SHALL BE SUBJECT TO TESTING TO DETERMINE ITS RELIABILITY. WHERE INSTALLED UNDER PAVEMENT AREAS, TESTING SHALL BE DONE PRIOR TO THE PLACEMENT OF PAVEMENT, UNLESS APPROVED OTHERWISE BY JEA.
 - LOCATING WIRE SHALL TERMINATE WITHIN AN ACTIVE VALVE BOX (WITH A VALVE) OR A METER BOX (IF NO VALVE) AT 475' INTERVALS. SEE DETAIL PLATE S-49B. WIRE CONNECTIONS BELOW GROUND (OUTSIDE OF A BOX) SHALL BE AVOIDED.
 - LOCATING WIRE SHALL BE 12 GAUGE COPPER WIRE WITH .03 INCHES (MINIMUM) HDPE INSULATION THICKNESS, 0.141 INCHES (MINIMUM) O.D. RATED BREAK LOAD 250LBS., UF RATED (DIRECT BURIAL), GREEN COLOR. FOR HDD INSTALLATIONS, THE LOCATE WIRE SHALL BE COPPER CODED STEEL AS SPECIFIED IN SPEC. SECTION 750.
 - INDICATES THAT THE WIRES ARE CONNECTED TOGETHER WITH WATERPROOF CONNECTION. (SEE DETAIL W-49B)
 - INDICATES A WIRE PIG-TAIL (24" LONG)
 - AN "LW" CUT SHALL BE CARVED IN THE CONCRETE CURB AND PAINTED AT ALL LOCATE WIRE BOXES.
 - FOUR LANES OF TRAFFIC (HAVING TWO LANES OF TRAFFIC IN EACH DIRECTION) OR GREATER THE LOCATE WIRE AND VALVE BOX SHALL BE OFF-SET TO THE RIGHT-OF-WAY.

LOCATE WIRE CONSTRUCTION FOR FORCE MAINS

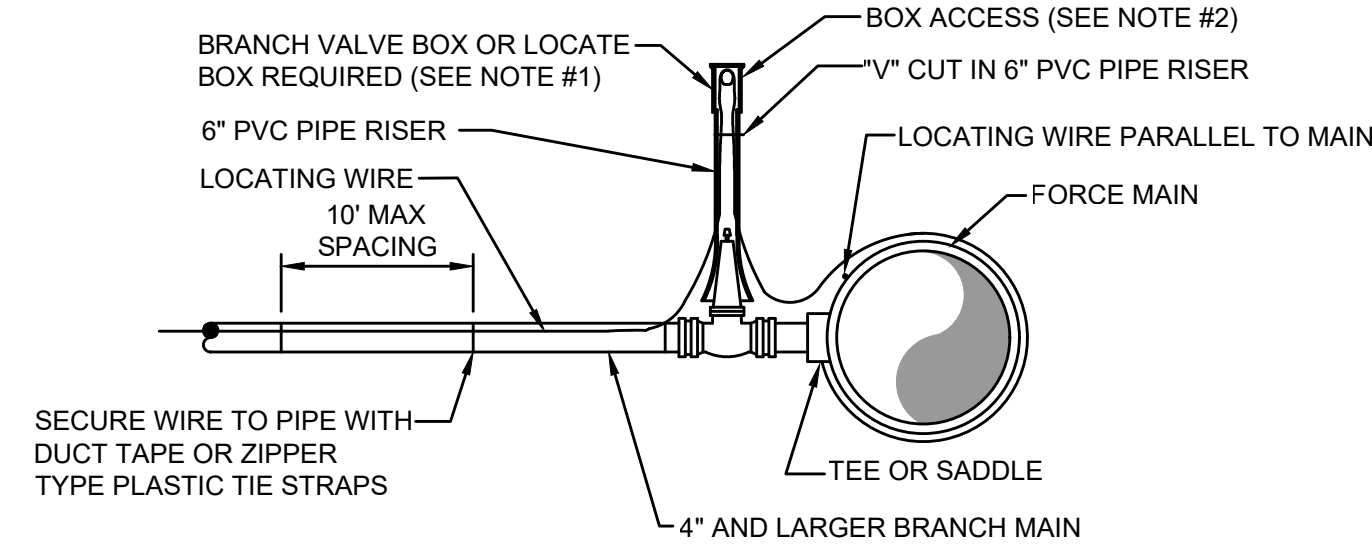
JANUARY 2022 PLATE S-49



- NOTES:**
- FOR UNPAVED LOCATIONS, A PRECAST CONCRETE VALVE PAD SHALL BE PROVIDED AND INSTALLED FLUSH WITH GRADE. CONCRETE PAD IS NOT REQUIRED FOR VALVE LOCATED IN THE ROADWAY, UNLESS SHOWN OR NOTED OTHERWISE.
 - LOCATING WIRE IS REQUIRED ON ALL PRESSURE PIPING (SEE DETAIL S-49).
 - A "V" CUT SHALL BE CARVED IN THE CURB CLOSEST (ASPHALT IF NO CURB) ADJACENT TO ALL BELOW GRADE VALVES. THE "V" CUT IS TO BE PAINTED GREEN.
 - IN PAVED AREAS, INSTALL VALVE AT A DEPTH TO ALLOW A 12" MIN. DISTANCE BETWEEN THE VALVE COVER PLATE AND THE TOP OF THE VALVE OPERATING NUT. OUTSIDE OF PAVED AREAS (GRASS), INSTALL VALVE AT A DEPTH TO ALLOW A 6" MINIMUM DISTANCE BETWEEN THE VALVE COVER AND THE TOP OF THE VALVE OPERATING NUT. OPERATING NUT/STEM EXTENSION SHALL BE PROVIDED (WHERE APPLICABLE) SO THAT THE OPERATING NUT WILL BE NO MORE THAN 30 INCHES BELOW FINISHED GRADE.
 - FOR NEW CONSTRUCTION, THE VALVE BOX SHALL BE ADJUSTED TO MIDRANGE TO ALLOW FOR FUTURE BOX ADJUSTMENTS. ROUTE LOCATE WIRES THRU A "V" CUT IN THE TOP OF THE 6" PVC RISER PIPE FOR LOCATE WIRE ACCESS INTO VALVE BOX. THE LOCATE WIRES WITH A 24" LONG PIG-TAIL AT THE TOP SHALL BE CONNECTED TOGETHER WITH A WIRE NUT.
 - BRASS IDENTIFICATION TAG INDICATING "SEWER", VALVE SIZE, DIRECTION AND TURNS TO OPEN & VALVE TYPE. PROVIDE A 1/2" HOLE IN BRASS TAG AND ATTACH TAG (TWIST WIRE AROUND TAG) TO THE END OF THE LOCATE WIRE. TAGS ARE NOT REQUIRED ON VALVES INSTALLED ON FIRE HYDRANT BRANCH LINES.
 - IN LIEU OF PRECAST CONCRETE PAD, A 6" THICK X 24" (ROUND OR SQUARE) POURED CONCRETE PAD W/2- #4 REBAR AROUND PERIMETER, MAY BE USED.
 - GRAVEL SHALL BE PROVIDED UNDER ALL VALVES 20" AND LARGER. THE MINIMUM VERTICAL LIMIT OF GRAVEL IS 12" UNDER THE VALVE UP TO 1/2 THE OVERALL HEIGHT OF THE VALVE.
 - FOR VALVES 12 INCH AND SMALLER, PROVIDE A WHITE OR BLACK PLASTIC DEBRIS SHIELD WHICH INSTALLS BELOW THE OPERATING NUT. THIS SHIELD SHALL CENTER THE RISER PIPE BOX OVER THE OPERATING NUT AND MINIMIZE INFILTRATION. SHIELD SHALL BE BY AFC, BOXLOK OR APPROVED EQUAL.
 - ALL VALVES SHALL BE INSTALLED WITH AN ELECTRIC LOCATE MARKER. MARKER SHALL BE 4" DIA. COLOR CODED BALL MARKER (3M-1404XR FOR SEWER).

SEWER VALVE DETAIL

JANUARY 2022 PLATE S-30



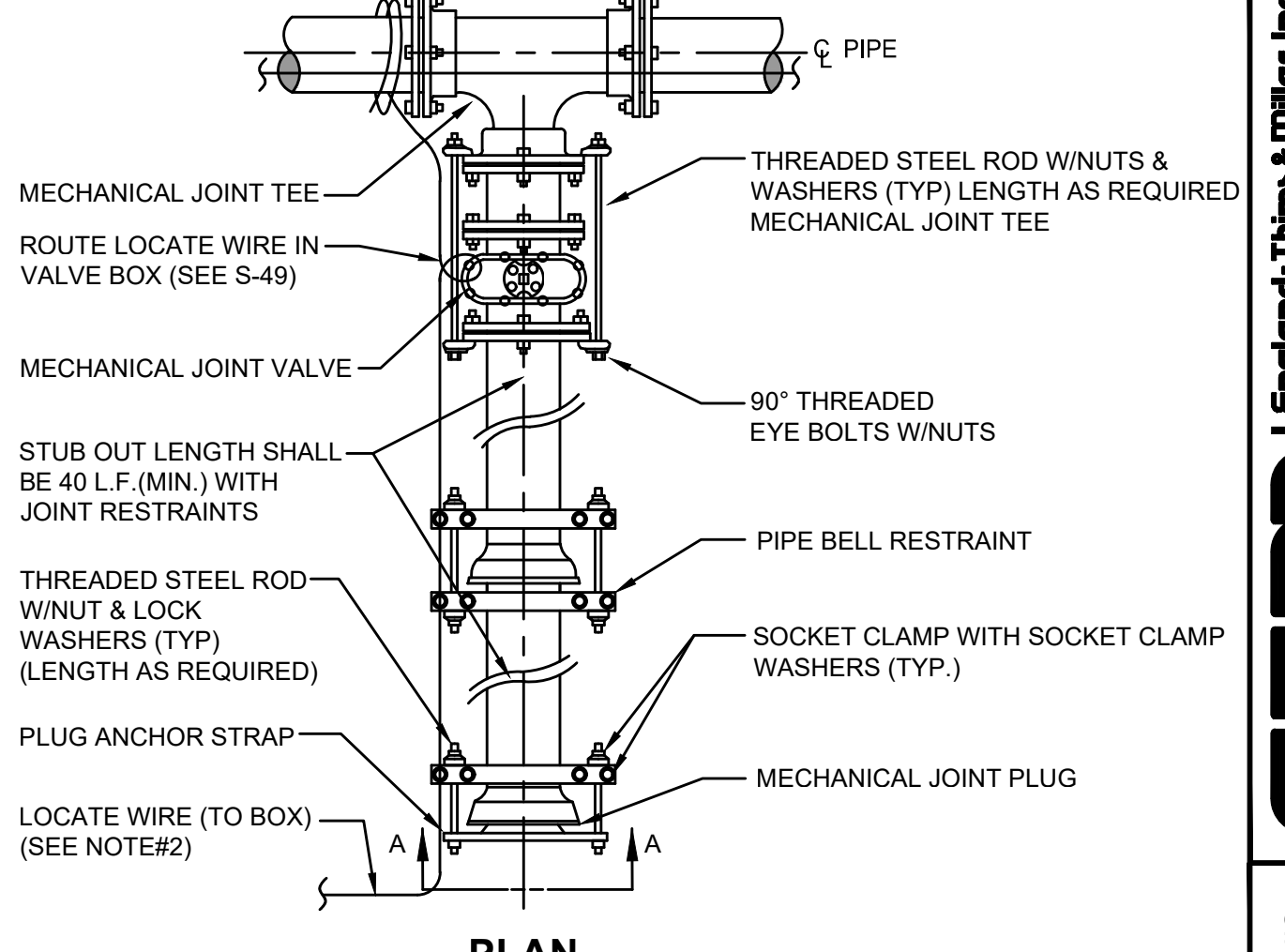
BRANCH FORCE MAIN

(4" AND LARGER SEWER MAIN)

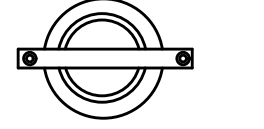
- NOTE:**
- NOTE THAT THE BRANCH WIRE IS NOT CONNECTED TO THE MAIN WIRE.
 - LOCATE WIRE SHALL ENTER THE VALVE BOX THROUGH A "V" CUT IN THE 6" PVC RISER PIPE SECTION (SEE S-30).
 - LOCATE WIRE BOX SHALL BE INSTALLED OUTSIDE OF SIDEWALKS, DRIVEWAYS AND PAVEMENT.
 - INDICATES A WIRE PIG-TAIL (4' LONG)

LOCATE WIRE FOR BRANCH MAIN

JANUARY 2022 PLATE S-49A



PLAN

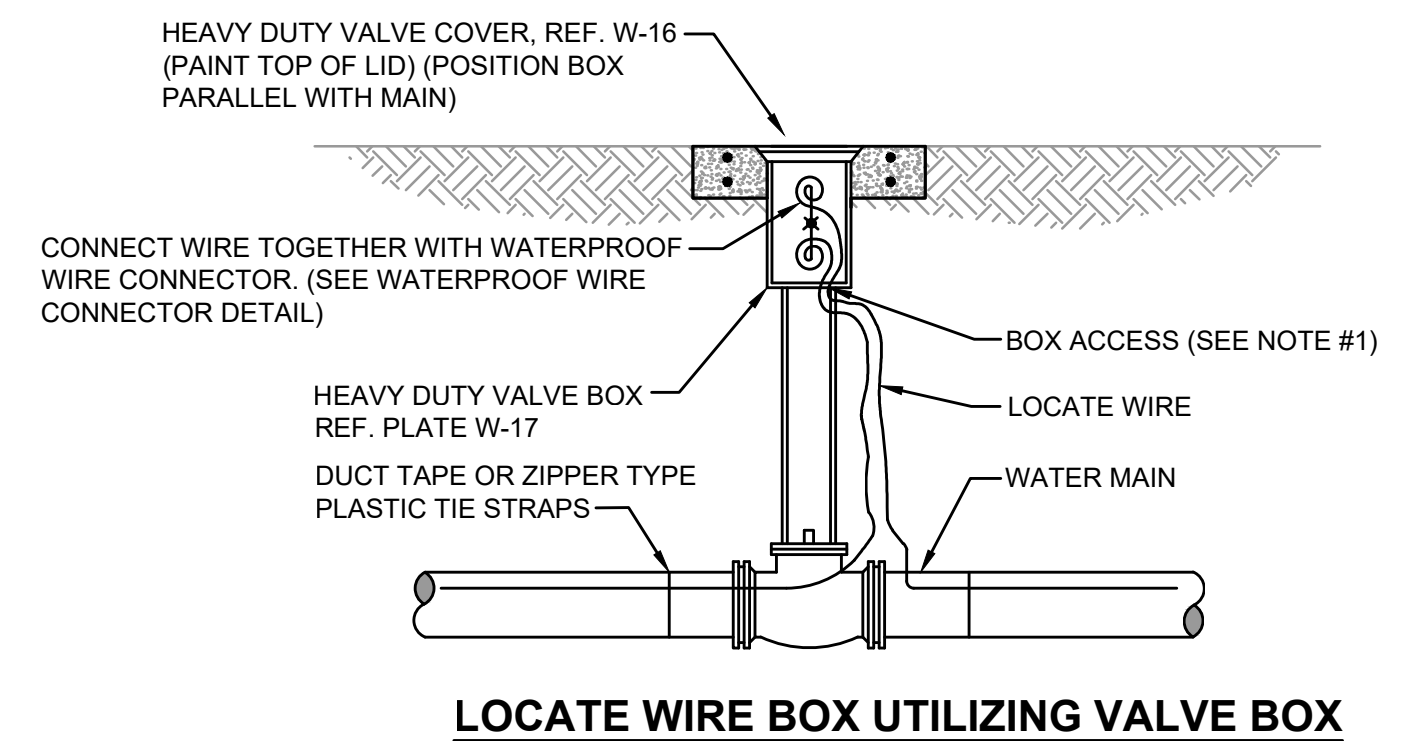


SECTION "A-A"

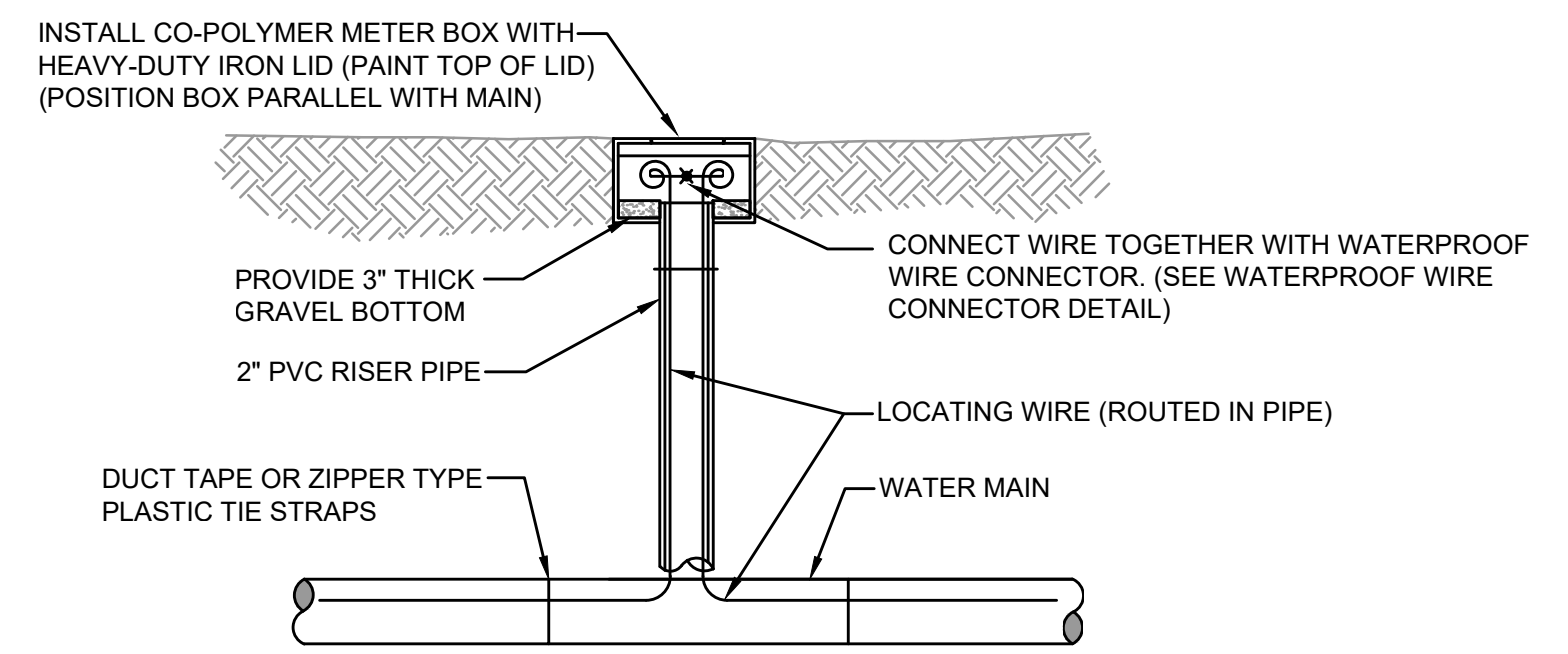
- NOTES:**
- IN LIEU OF BELL/ROD RESTRAINTS, MECHANICAL JOINT RESTRAINTS MAY BE USED.
 - LOCATING WIRE REQUIRED, UTILIZING A LOCATE WIRE BOX INSTALLED AT PLUG LOCATION.
 - NUMBER OF TIE RODS REQUIRED IS AS FOLLOWS:
3" - 8" DIAMETER MAIN - 2 TIE RODS REQUIRED PER JOINT (3/4" ROD)
10" - 12" DIAMETER MAIN - 4 TIE RODS REQUIRED PER JOINT (3/4" ROD)
14" - 16" DIAMETER MAIN - 6 TIE RODS REQUIRED PER JOINT (3/4" ROD)
18" - 20" DIAMETER MAIN - 8 TIE RODS REQUIRED PER JOINT (3/4" ROD)
24" DIAMETER MAIN - 12 TIE RODS REQUIRED PER JOINT (3/4" ROD)
30" - 36" DIAMETER MAIN - 14 TIE RODS REQUIRED PER JOINT (1" ROD)
42" - 48" DIAMETER MAIN - 16 TIE RODS REQUIRED PER JOINT (1 1/4" ROD)
54" DIAMETER MAIN - 18 TIE RODS REQUIRED PER JOINT (1 1/4" ROD)
 - THE LOCATION OF THE DEAD END PLUG SHALL NOT BE UNDER PAVEMENT, IF POSSIBLE. THE STUB OUT SHALL EXTEND BEYOND THE INTERSECTION AREAS OR ROAD CROSSING BY 10 FEET (MIN.) WHERE POSSIBLE.

PLUGGED DEAD END USING MECHANICAL RESTRAINTS

JANUARY 2022 PLATE S-44



LOCATE WIRE BOX UTILIZING VALVE BOX



LOCATE WIRE BOX UTILIZING METER BOX

LOCATE WIRE BOX

JANUARY 2022 PLATE S-49B

England-Thims & Miller, Inc.
14776 Old St. Augustine Road
The Woodlands, TX 77380
Tel: (281) 462-8828
Fax: (281) 462-8828
CA - 0002884 LC - 000316

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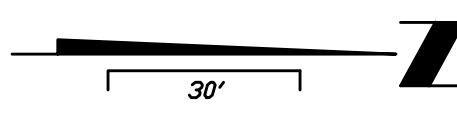
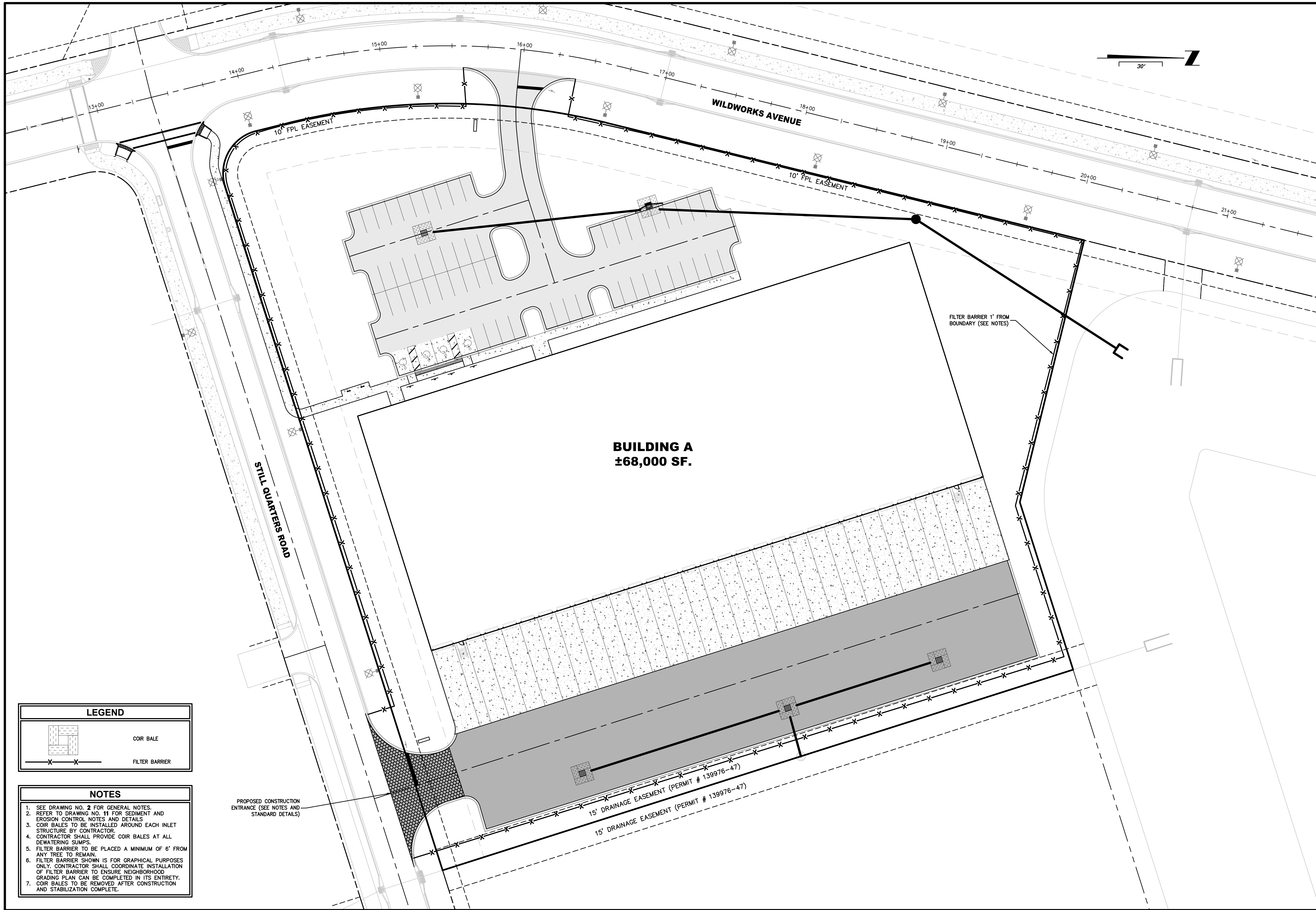
DESIGNER: JON-MICHAEL BARQUIN
DRAWN BY: JON-MICHAEL BARQUIN
CHECKED BY:
DATE:
FLORIDA REGISTRATION NO.: 94926

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JEA STANDARD
SANITARY SEWER DETAILS
WILDLIGHT COMMERCE PARK PARCEL B

PROJ. NO. 19-239-07-002	DATE: JANUARY 2022	SCALE: AS NOTED
NO. SHEETS 5	SHEET NO. 5	DRAWING NO.



PLANS PREPARED UNDER THE
DIRECTION OF:
JON-MICHAEL BARQUIN
P.E. NUMBER: 94926

REVISIONS:

ETM NO. 19-239-07-002	JMB
DRAWN BY:	JMB
DESIGNED BY:	JMB
CHECKED BY:	JZB
DATE:	Issue Date

England, Thins & Miller, Inc.
14775 Old St. Augustine Road
Jacksonville, FL 32258
TEL: (904) 642-8890
FAX: (904) 646-9485
CA - 0002584 LC - 0000316

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SEDIMENT & EROSION CONTROL PLAN
WILDLIGHT COMMERCE PARK PARCEL B
PATTILLO INDUSTRIAL REAL ESTATE

DRAWING NUMBER
10

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LEGEND

	COIR BALE
	FILTER BARRIER

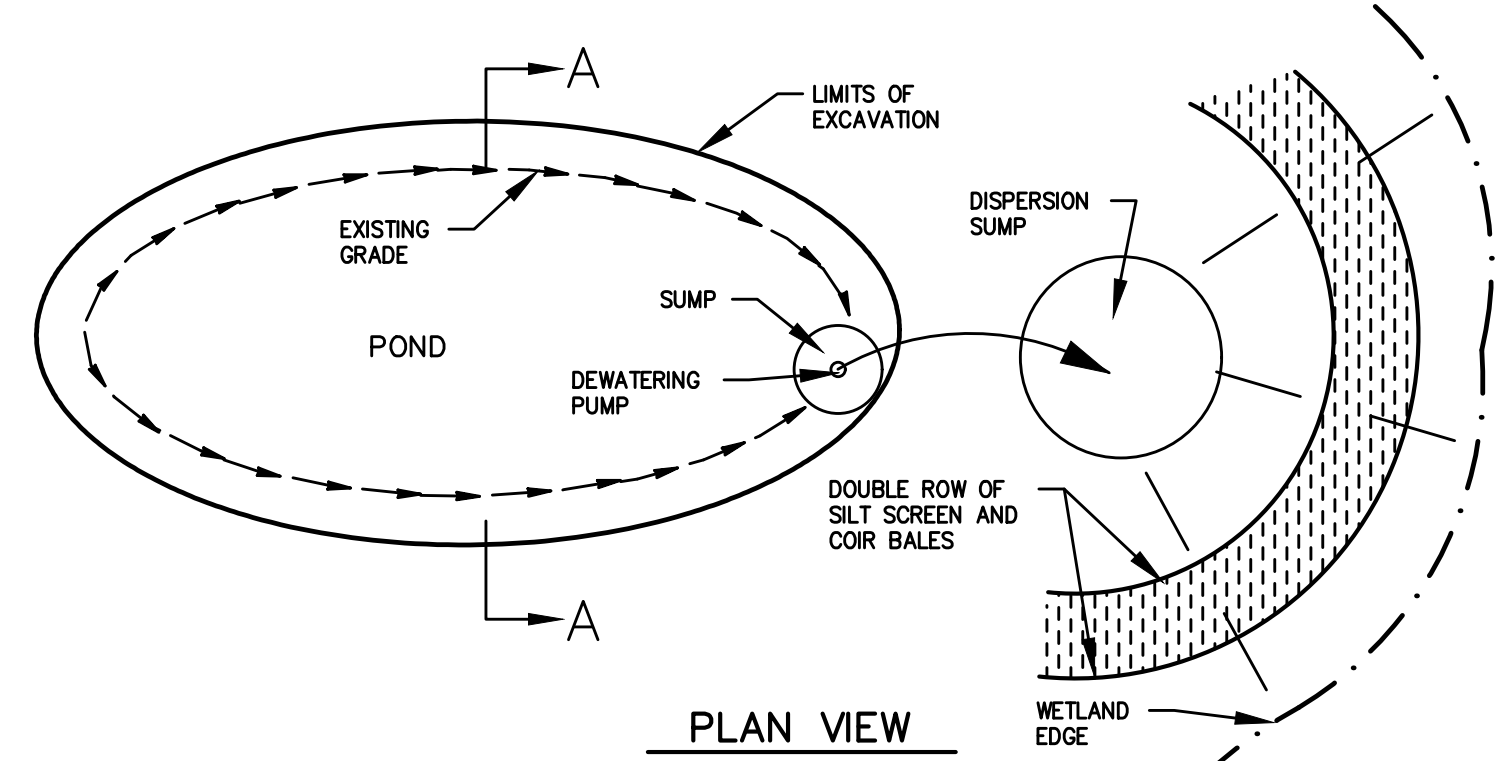
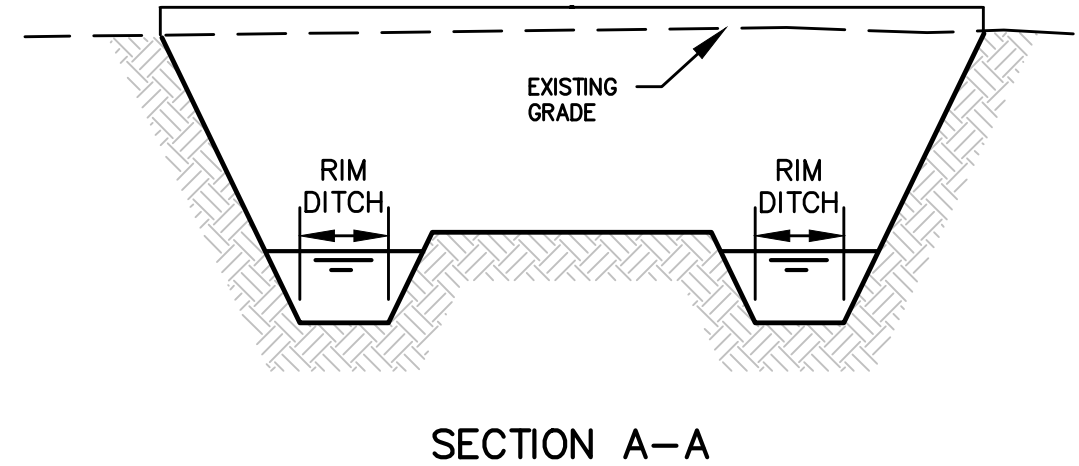
- NOTES**
- SEE DRAWING NO. 2 FOR GENERAL NOTES.
 - REFER TO DRAWING NO. 11 FOR SEDIMENT AND EROSION CONTROL NOTES AND DETAILS.
 - COIR BALES TO BE INSTALLED AROUND EACH INLET STRUCTURE BY CONTRACTOR.
 - CONTRACTOR SHALL PROVIDE COIR BALES AT ALL DEWATERING SUMPS.
 - FILTER BARRIER TO BE PLACED A MINIMUM OF 6' FROM ANY TREE TO REMAIN.
 - FILTER BARRIER SHOWN IS FOR GRAPHICAL PURPOSES ONLY. CONTRACTOR SHALL COORDINATE INSTALLATION OF FILTER BARRIER TO ENSURE NEIGHBORHOOD GRADING PLAN CAN BE COMPLETED IN ITS ENTIRETY.
 - COIR BALES TO BE REMOVED AFTER CONSTRUCTION AND STABILIZATION COMPLETE.

SEDIMENT AND EROSION CONTROL NOTES

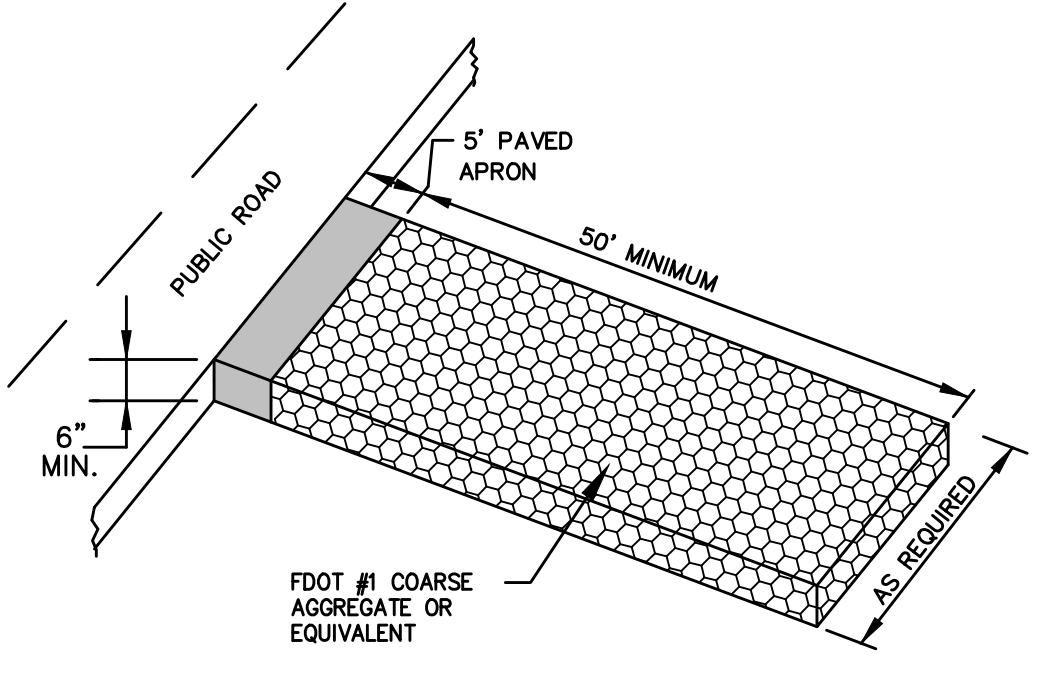
- THE CONTRACTOR IS RESPONSIBLE FOR REMOVING SILT FROM SITE IF NOT REUSABLE ON-SITE AND ASSURING PLAN ALIGNMENT AND GRADE IN ALL DITCHES AND SWALES AT COMPLETION OF CONSTRUCTION.
- THE SITE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREAS HAVE BEEN STABILIZED.
- ADDITIONAL PROTECTION - ON-SITE PROTECTION IN ADDITION TO THE ABOVE MUST BE PROVIDED THAT WILL NOT PERMIT SILT TO LEAVE THE PROJECT CONFINES DUE TO UNSEEN CONDITIONS OR ACCIDENTS.
- CONTRACTOR SHALL INSURE THAT ALL DRAINAGE STRUCTURES, PIPES, ETC. ARE CLEANED OUT AND WORKING PROPERLY AT TIME OF ACCEPTANCE.
- WIRE MESH SHALL BE LAID OVER THE DROP INLET SO THAT THE WIRE EXTENDS A MINIMUM OF 1 FOOT BEYOND EACH SIDE OF THE INLET STRUCTURE. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS SHALL BE USED. IF MORE THAN ONE STRIP OF MESH IS REQUIRED, THE STRIPS SHALL BE OVERLAPPED.
- FOOT NO. 1 COARSE AGGREGATE SHALL BE PLACED OVER THE WIRE MESH AS INDICATED ON SEDIMENT FILTER DETAIL (SEE DETAIL THIS SHEET). THE DEPTH OF STONE SHALL BE AT LEAST 12 INCHES OVER THE ENTIRE INLET OPENING. THE STONE SHALL EXTEND BEYOND THE INLET OPENING AT LEAST 18 INCHES ON ALL SIDES.
- IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONES MUST BE PULLED AWAY FROM THE INLET, CLEANED AND REPLACED.
- BALES SHALL BE EITHER WIRE-BOUND OR STRING-TIED WITH THE BINDINGS ORIENTED AROUND THE SIDES RATHER THAN OVER AND UNDER THE BALES.
- BALES SHALL BE PLACED LENGTHWISE IN A SINGLE ROW SURROUNDING THE INLET, WITH THE ENDS OF ADJACENT BALES PRESSED TOGETHER.
- THE FILTER BARRIER SHALL BE ENTRENCHED AND BACKFILLED. A TRENCH SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 4 INCHES. AFTER THE BALES ARE STAKED, THE EXCAVATED SOIL SHALL BE BACKFILLED AND COMPACTED AGAINST THE FILTER BARRIER.
- EACH BALE SHALL BE SECURELY ANCHORED AND HELD IN PLACE BY AT LEAST TWO STAKES OR REBARS DRIVEN THROUGH THE BALE.
- LOOSE COIR SHOULD BE WEDGED BETWEEN BALES TO PREVENT WATER FROM ENTERING BETWEEN BALES.
- COIR BALE BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
- CLOSE ATTENTION SHALL BE GIVEN TO THE REPAIR OF DAMAGED BALES, END RUNS AND UNDERCUTTING BENEATH BALES.
- NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF BALES SHALL BE ACCOMPLISHED PROMPTLY.
- SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. IT MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
- ANY SEDIMENT DEPOSITS REMAINING IN PLACE, AFTER THE COIR BALE OR FILTER BARRIERS, AND OR SILT FENCES ARE NO LONGER REQUIRED, SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.
- SILT FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
- SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED IMMEDIATELY.
- STRUCTURES SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS REQUIRED.
- SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
- THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING THE BEST EROSION AND SEDIMENT CONTROL PRACTICES AS OUTLINED IN THE PLANS, SPECIFICATIONS AND ST. JOHNS RIVER WATER MANAGEMENT DISTRICT RULES AND REGULATIONS.
- FOR ADDITIONAL INFORMATION ON SEDIMENT AND EROSION CONTROL REFER TO "THE FLORIDA DEVELOPMENT MANUAL - A GUIDE TO SOUND LAND AND WATER MANAGEMENT" FROM THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION (F.D.E.P.) CHAPTER 6.
- EROSION AND SEDIMENT CONTROL BARRIERS SHALL BE PLACED ADJACENT TO ALL WETLAND AREAS WHERE THERE IS POTENTIAL FOR DOWNSTREAM WATER QUALITY DEGRADATION. SEE DETAILS (THIS SHEET) FOR TYPICAL CONSTRUCTION.
- SOD SHALL BE PLACED IN AREAS WHICH MAY REQUIRE IMMEDIATE EROSION PROTECTION TO ENSURE WATER QUALITY STANDARDS ARE MAINTAINED.
- ANY DISCHARGE FROM DEWATERING ACTIVITY SHALL BE FILTERED AND CONVEYED TO THE OUTFALL IN A MANNER WHICH PREVENTS EROSION AND TRANSPORTATION OF SUSPENDED SOLIDS TO THE RECEIVING OUTFALL.
- DEWATERING PUMPS SHALL NOT EXCEED THE CAPACITY OF THAT WHICH REQUIRES A CONSUMPTIVE USE PERMIT FROM THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT.
- ALL DISTURBED AREAS SHALL BE GRASSED, FERTILIZED AND MULCHED UNTIL A PERMANENT VEGETATIVE COVER IS ESTABLISHED. CONTRACTOR SHALL USE ADDITIONAL MEASURES TO STABILIZE DISTURBED AREAS THROUGH COMPACTION, SILT SCREENS, COIR BALES, AND GRASSING. ALL FILL SLOPES 3:1 OR STEEPER TO RECEIVE STAKED SOLID SOD.
- ALL DEWATERING, EROSION, AND SEDIMENT CONTROL SHALL REMAIN IN PLACE UNTIL AFTER COMPLETION OF CONSTRUCTION, AND REMOVED ONLY WHEN AREAS HAVE BEEN STABILIZED.
- THIS PLAN INDICATES THE MINIMUM EROSION AND SEDIMENT MEASURES REQUIRED FOR THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL APPLICABLE RULES, REGULATIONS AND WATER QUALITY GUIDELINES AND MAY NEED TO INSTALL ADDITIONAL CONTROLS.
- THE CONTRACTOR SHALL BE REQUIRED TO RESPOND TO ALL WATER MANAGEMENT DISTRICT INQUIRIES, RELATIVE TO COMPLIANCE OF SURVMD FOR EROSION AND SEDIMENTATION CONTROL. THE COST OF THIS COMPLIANCE SHALL BE PART OF THE CONTRACT.
- EROSION AND SEDIMENT CONTROL BARRIERS SHALL BE PLACED ADJACENT TO ALL WETLAND AREAS AND PRESERVATION EASEMENTS WHERE THERE IS POTENTIAL FOR DOWNSTREAM WATER QUALITY DEGRADATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING A PERMANENT STAND OF SOD AND/OR GRASS PER THE CONTRACT DOCUMENTS AND MEETING THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT, XXXXXXXXX AND NPDES FINAL STABILIZATION REQUIREMENTS.
- THESE PLANS INCLUDING THE POLLUTION PREVENTION PLAN INDICATE THE MINIMUM EROSION & SEDIMENT CONTROL MEASURES REQUIRED FOR THIS PROJECT. FOR ADDITIONAL INFORMATION ON SEDIMENT AND EROSION CONTROL REFER TO "THE FLORIDA DEVELOPMENT MANUAL - A GUIDE TO

SOUND LAND AND WATER MANAGEMENT" FROM THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (F.D.E.P.) CHAPTER 6. CONTRACTOR SHALL PROVIDE EROSION PROTECTION AND TURBIDITY CONTROL AS REQUIRED TO INSURE CONFORMANCE TO STATE AND FEDERAL WATER QUALITY STANDARDS AND MAY NEED TO INSTALL ADDITIONAL CONTROLS TO CONFORM TO AGENCIES REQUIREMENTS. IF A WATER QUALITY VIOLATION OCCURS, THE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR ALL DAMAGE AND ALL COSTS WHICH MAY RESULT INCLUDING LEGAL FEES, CONSULTANT FEES, CONSTRUCTION COSTS, AND FINES.

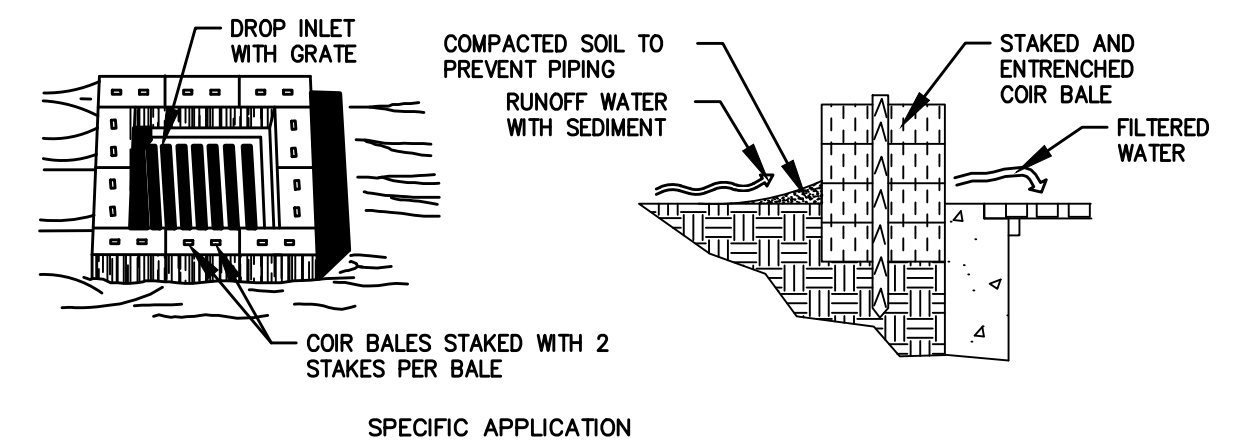
35. 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR WILL SUBMIT A "NOTICE OF INTENT" TO THE EPA IN ACCORDANCE WITH NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM RULES AND REGULATIONS. (FOR ANY CONSTRUCTION NOT COVERED BY THE OWNER'S "NOTICE OF INTENT" PERMIT)



TEMPORARY DEWATERING DETAIL
N.T.S.

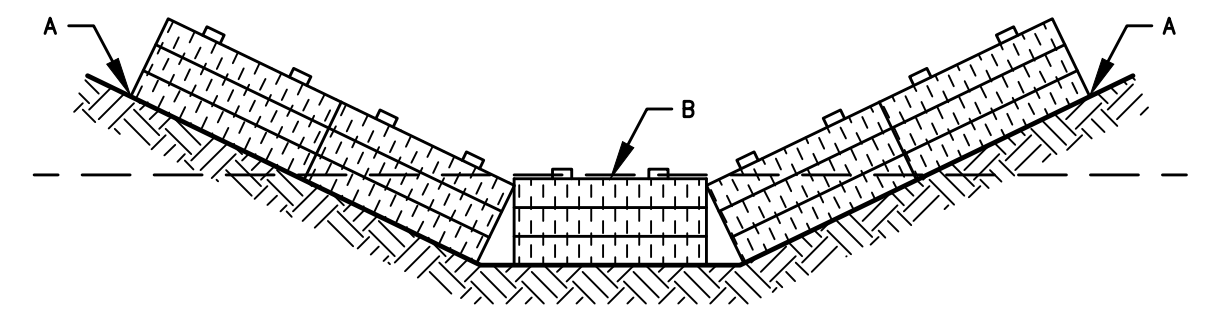


STABILIZED CONSTRUCTION ENTRANCE
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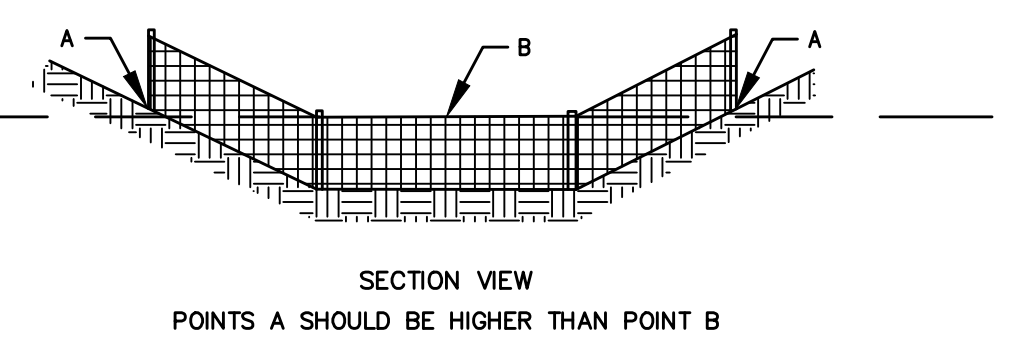
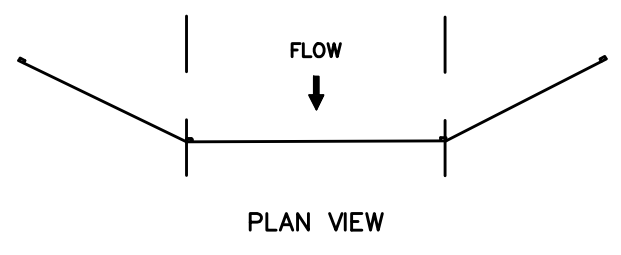


THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPES NO GREATER THAN 5 PERCENT) WHERE SHEET OR OVERLAND FLOWS (NOT EXCEEDING 0.5 cfs) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

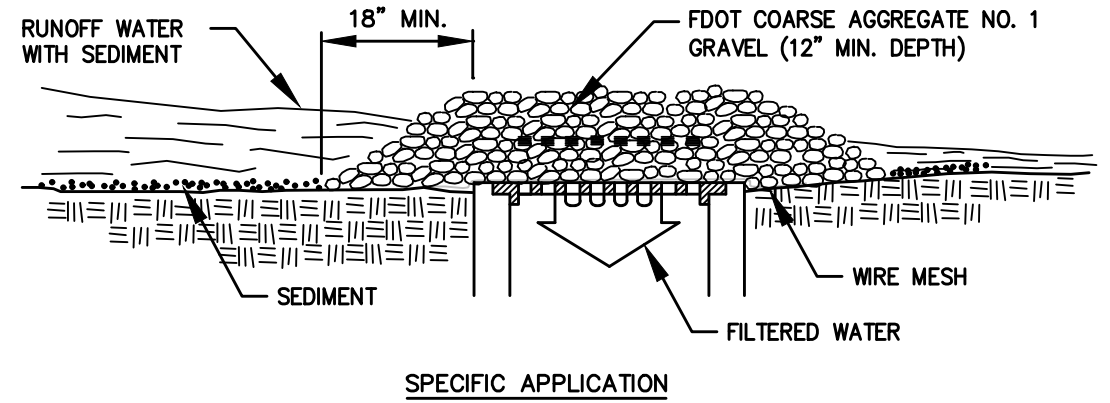
COIR BALE DROP INLET SEDIMENT FILTER
N.T.S.



PROPER PLACEMENT OF COIR BALE IN A DRAINAGE WAY
N.T.S.

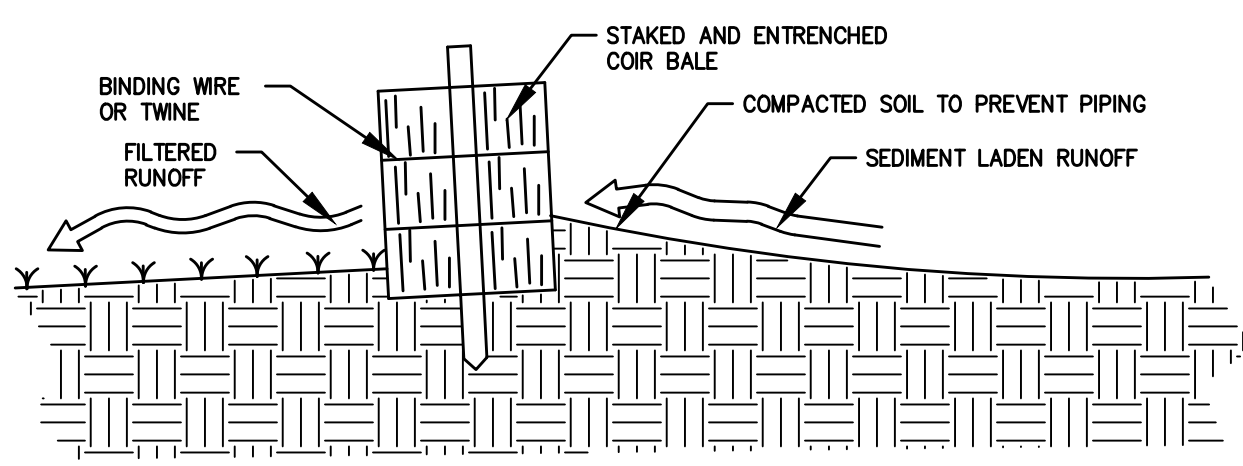


PROPER PLACEMENT OF A FILTER BARRIER IN DRAINAGE WAY
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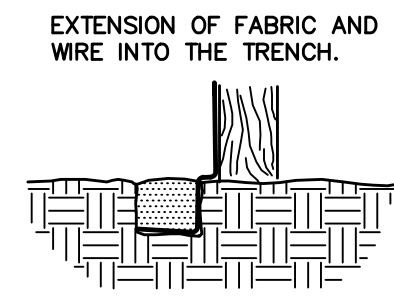
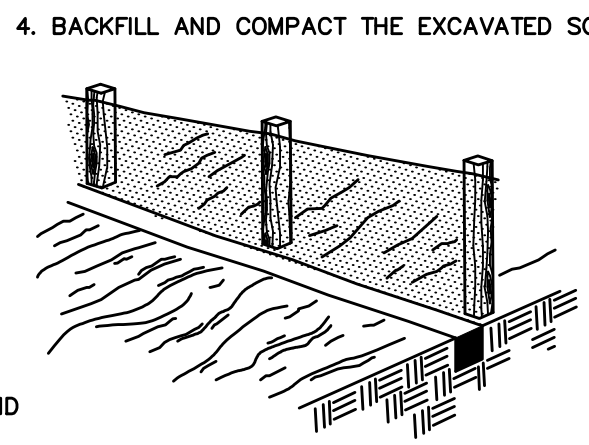
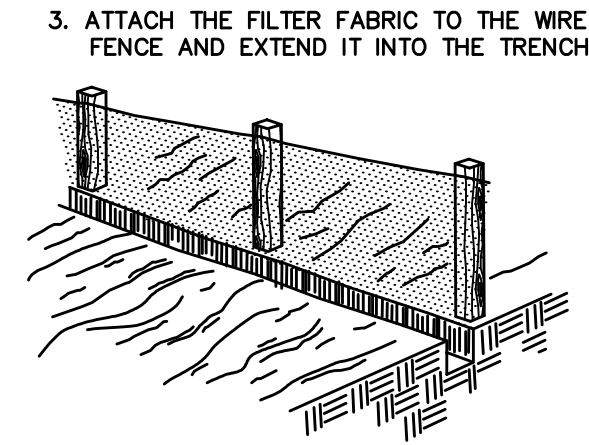
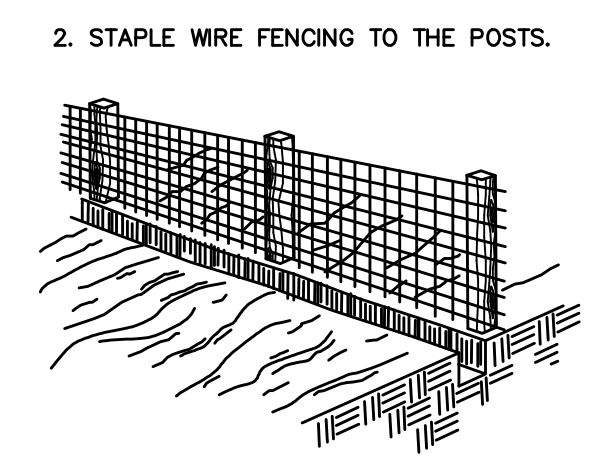
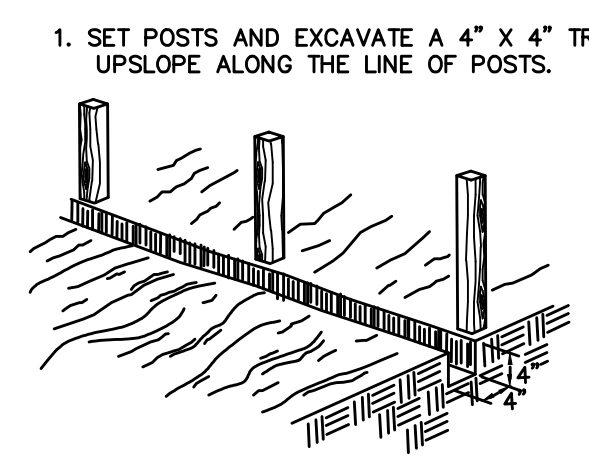


THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, BUT NOT WHERE PONDING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.

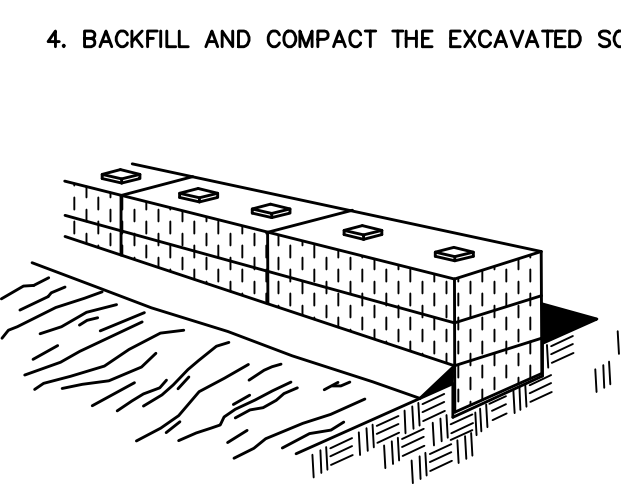
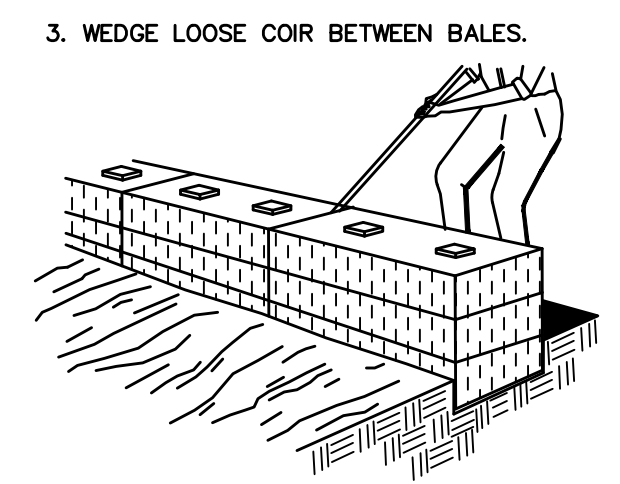
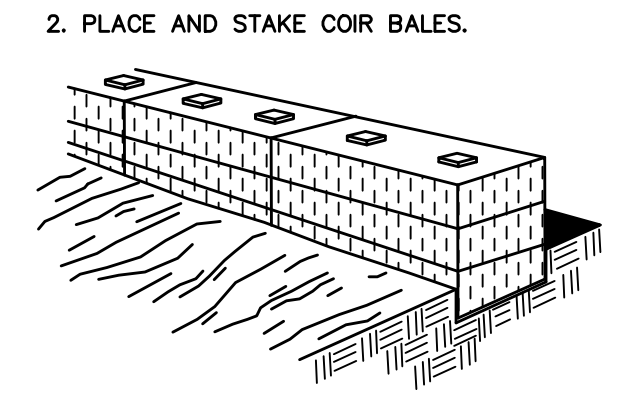
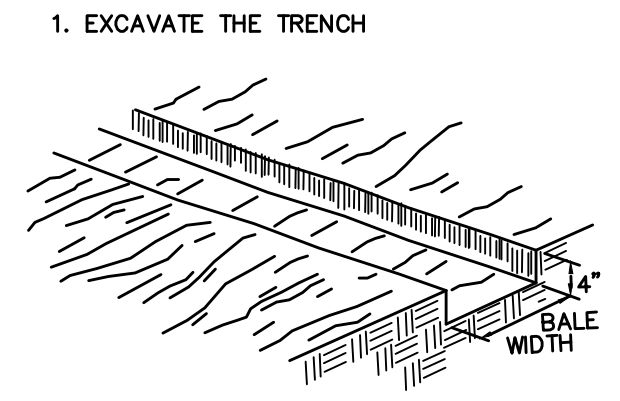
GRAVEL AND WIRE MESH DROP INLET SEDIMENT FILTER
N.T.S.



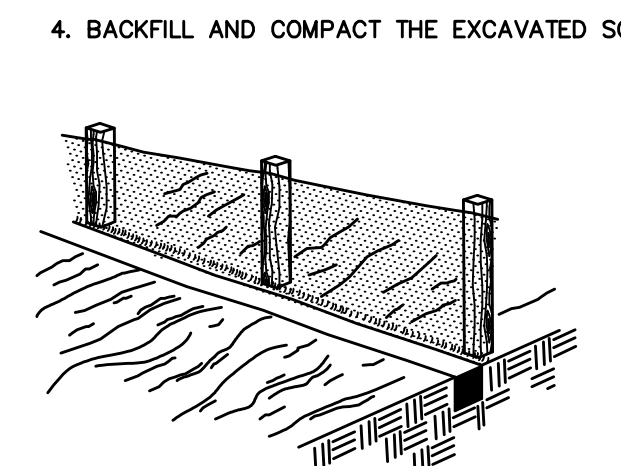
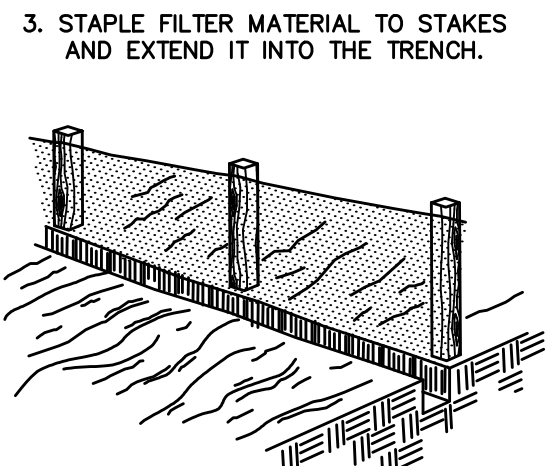
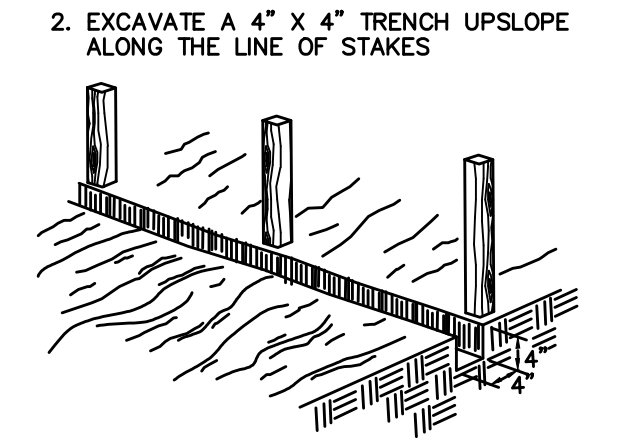
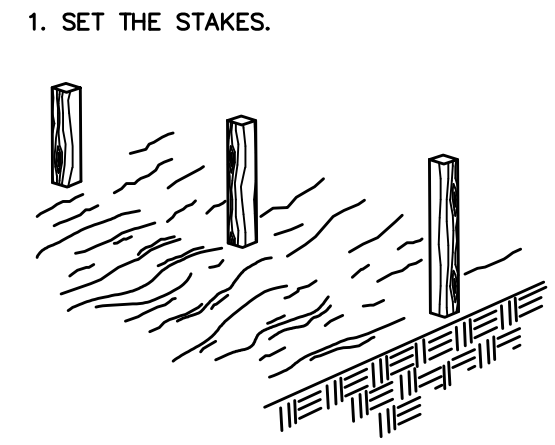
CROSS-SECTION OF A PROPERLY INSTALLED COIR BALE
N.T.S.



CONSTRUCTION OF SILT FENCE
N.T.S.



CONSTRUCTION OF A COIR BALE BARRIER
N.T.S.



CONSTRUCTION OF A FILTER BARRIER
N.T.S.

PLANS PREPARED UNDER THE DIRECTION OF:
JON-MICHAEL BARQUIN
P.E. NUMBER: 94926

FLOTTED: August 25, 2023 - 9:56 AM, BY: Jon-Michael Barquin

REVISIONS:

ETM NO. 19-239-07-002	DRAWN BY: JMB	DESIGNED BY: JMB	CHECKED BY: JJB	DATE: Issue Date
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England-Thins & Miller, Inc.
14775 Old St. Augustine Road
Jacksonville, FL 32258
TEL: (904) 642-8890
FAX: (904) 646-9485
CA - 0002584 LC - 0000316

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SEDIMENT & EROSION CONTROL DETAILS

WILDLIGHT COMMERCE PARK PARCEL B

PATTILLO INDUSTRIAL REAL ESTATE

DRAWING NUMBER
11

OWNER'S REQUIREMENTS

CONTRACTOR'S REQUIREMENTS

Main table with columns: SITE DESCRIPTION, GENERAL, CONTROLS, POLLUTION PREVENTION PLAN CERTIFICATION, INVENTORY FOR POLLUTION PREVENTION PLAN, SPILL PREVENTION, SPILL CONTROL PRACTICES, MAINTENANCE/INSPECTION PROCEDURES, DEWATERING, and CONTRACTOR'S CERTIFICATION. Includes detailed project information, regulatory requirements, and certification text.

Vertical sidebar containing: PLAN'S PREPARED UNDER THE DIRECTION OF: (JON-MICHAEL BARQUIN); REVISIONS table; ETM logo; and drawing number 12.

Vertical text on the far right edge: PLOTTED: August 25, 2023 - 9:57 AM, BY: Jon-Michael Barquin

**WILDLIGHT COMMERCE PARK PARCEL B
STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM**

THIS IS THE CONTRACTORS CERTIFICATION REQUIRED BY THE EPA'S NATIONAL POLLUTION PREVENTION ACT (NPDES) PERMIT. THIS PLAN IS A POLLUTION PREVENTION PLAN FOR CONSTRUCTION SITES OVER 1 ACRE. THIS CERTIFICATION MUST BE COMPLETED WEEKLY AND AFTER EVERY RAINFALL EVENT OVER 0.25 INCHES

INSPECTOR: _____
 INSPECTOR'S QUALIFICATIONS: _____

 DAYS SINCE LAST RAINFALL: _____ AMOUNT OF LAST RAINFALL: _____ INCHES

STABILIZATION MEASURES

INSPECTION AREA (DESCRIPTION OF LOCATION)	DATE SINCE LAST DISTURBED	DATE OF NEXT DISTURBANCE	STABILIZED ? (YES/NO)	STABILIZED WITH	CONDITION

STABILIZATION REQUIRED: _____

 TO BE PERFORMED BY: _____ ON OR BEFORE _____

**WILDLIGHT COMMERCE PARK PARCEL B
STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM**

DATE: _____

STRUCTURAL CONTROLS

DIKE OR SWALE	FROM	TO	IS DIKE/SWALE STABILIZED ?	IS THERE EVIDENCE OF WASHOUT OR OVERTOPPING

MAINTENANCE REQUIRED FOR EARTH DIKE/SWALE: _____

 TO BE PERFORMED BY: _____ ON OR BEFORE _____

CATCH BASIN/CURB INLET/OUTFALL TURBIDITY CONTROLS

STRUCTURE/ OUTFALL	ARE TURBIDITY CONTROLS IN PLACE	ANY EVIDENCE OF CLOGGING/WASHOUT OR BYPASSING ?	ARE TURBIDITY CONTROLS IN NEED OF REPLACING	DOES SILT NEED TO BE REMOVED FROM CONTROL

MAINTENANCE REQUIRED FOR CATCH BASIN/CURB INLETS/OUTFALLS TURBIDITY CONTROLS: _____

 TO BE PERFORMED BY: _____ ON OR BEFORE _____

**WILDLIGHT COMMERCE PARK PARCEL B
STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM**

SEDIMENT BASIN

DEPTH OF SEDIMENT IN BASIN	DEPTH OF SEDIMENT SIDE BASIN	ANY EVIDENCE OF OVERTOPPING OF THE EMBANKMENT ?	CONDITION OF OUTFALL FROM SEDIMENT BASIN

MAINTENANCE REQUIRED FOR SEDIMENT BASIN: _____

 TO BE PERFORMED BY: _____ ON OR BEFORE _____

OTHER CONTROLS

STABILIZED CONSTRUCTION ENTRANCE

DOES MUCH SEDIMENT GET TRACKED ON TO ROAD ?	IS THE GRAVEL CLEAN OR IS IT FILLED WITH SEDIMENT?	DOES ALL TRAFFIC USE THE STABILIZED ENTRANCE TO LEAVE THE SITE ?	IS THE CULVERT BENEATH THE ENTRANCE WORKING? (IF APPLICABLE)

MAINTENANCE REQUIRED FOR STABILIZED CONSTRUCTION ENTRANCE: _____

 TO BE PERFORMED BY: _____ ON OR BEFORE _____

**WILDLIGHT COMMERCE PARK PARCEL B
STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM**

CHANGES REQUIRED TO THE POLLUTION PREVENTION PLAN: _____

REASONS FOR CHANGES: _____

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION AND THAT I AM A LICENSED PROFESSIONAL ENGINEER. I HAVE GATHERED AND EVALUATED THE INFORMATION SUBMITTED, BASED ON MY KNOWLEDGE AND BELIEF, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE MAY BE OTHER INFORMATION PERTINENT TO THIS PROJECT THAT I AM NOT AWARE OF. I AM NOT PROVIDING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

SIGNATURE: _____
 DATE: _____

**STORMWATER POLLUTION PREVENTION
PLAN CONTRACTORS CERTIFICATION**
**WILDLIGHT COMMERCE PARK PARCEL B
FOR
PATTILLO INDUSTRIAL REAL ESTATE**

DRAWING NUMBER
13

England-Thins & Miller, Inc.

14775 Old St. Augustine Road
 Jacksonville, FL 32259

TEL: (904) 645-8890
 FAX: (904) 645-9485

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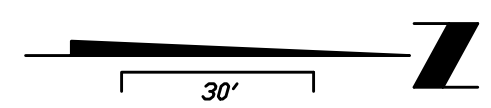
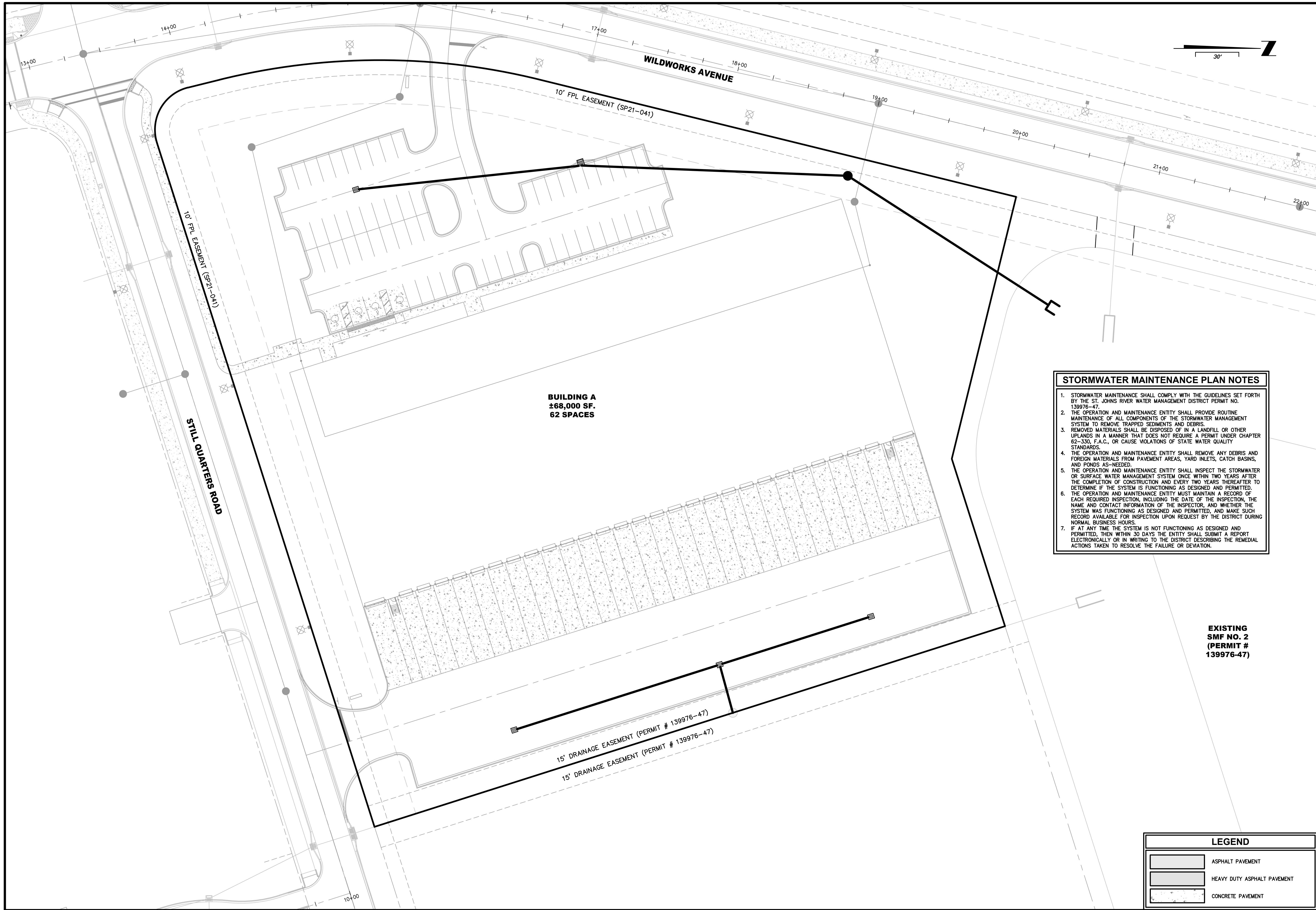


REVISIONS:

ETM NO.	DATE	BY	REVISION
19-239-07-002		JMB	
		JMB	
		JZB	

PLANS PREPARED UNDER THE
DIRECTION OF:

JON-MICHAEL BARQUIN
 P.E. NUMBER: 94926



**BUILDING A
±68,000 SF.
62 SPACES**

STORMWATER MAINTENANCE PLAN NOTES

1. STORMWATER MAINTENANCE SHALL COMPLY WITH THE GUIDELINES SET FORTH BY THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT PERMIT NO. 139976-47.
2. THE OPERATION AND MAINTENANCE ENTITY SHALL PROVIDE ROUTINE MAINTENANCE OF ALL COMPONENTS OF THE STORMWATER MANAGEMENT SYSTEM TO REMOVE TRAPPED SEDIMENTS AND DEBRIS.
3. REMOVED MATERIALS SHALL BE DISPOSED OF IN A LANDFILL OR OTHER UPLANDS IN A MANNER THAT DOES NOT REQUIRE A PERMIT UNDER CHAPTER 62-330, F.A.C. OR CAUSE VIOLATIONS OF STATE WATER QUALITY STANDARDS.
4. THE OPERATION AND MAINTENANCE ENTITY SHALL REMOVE ANY DEBRIS AND FOREIGN MATERIALS FROM PAVEMENT AREAS, YARD INLETS, CATCH BASINS, AND PONDS AS-NEEDED.
5. THE OPERATION AND MAINTENANCE ENTITY SHALL INSPECT THE STORMWATER OR SURFACE WATER MANAGEMENT SYSTEM ONCE WITHIN TWO YEARS AFTER THE COMPLETION OF CONSTRUCTION AND EVERY TWO YEARS THEREAFTER TO DETERMINE IF THE SYSTEM IS FUNCTIONING AS DESIGNED AND PERMITTED.
6. THE OPERATION AND MAINTENANCE ENTITY MUST MAINTAIN A RECORD OF EACH REQUIRED INSPECTION, INCLUDING THE DATE OF THE INSPECTION, THE NAME AND CONTACT INFORMATION OF THE INSPECTOR, AND WHETHER THE SYSTEM WAS FUNCTIONING AS DESIGNED AND PERMITTED, AND MAKE SUCH RECORD AVAILABLE FOR INSPECTION UPON REQUEST BY THE DISTRICT DURING NORMAL BUSINESS HOURS.
7. IF AT ANY TIME THE SYSTEM IS NOT FUNCTIONING AS DESIGNED AND PERMITTED, THEN WITHIN 30 DAYS THE ENTITY SHALL SUBMIT A REPORT ELECTRONICALLY OR IN WRITING TO THE DISTRICT DESCRIBING THE REMEDIAL ACTIONS TAKEN TO RESOLVE THE FAILURE OR DEVIATION.

**EXISTING
SMF NO. 2
(PERMIT #
139976-47)**

LEGEND	
	ASPHALT PAVEMENT
	HEAVY DUTY ASPHALT PAVEMENT
	CONCRETE PAVEMENT

PLANS PREPARED UNDER THE DIRECTION OF:
 JON-MICHAEL BARQUIN
 P.E. NUMBER: 94926
 FLOTTED: August 25, 2023 - 9:57 AM, BY: Jon-Michael Barquin

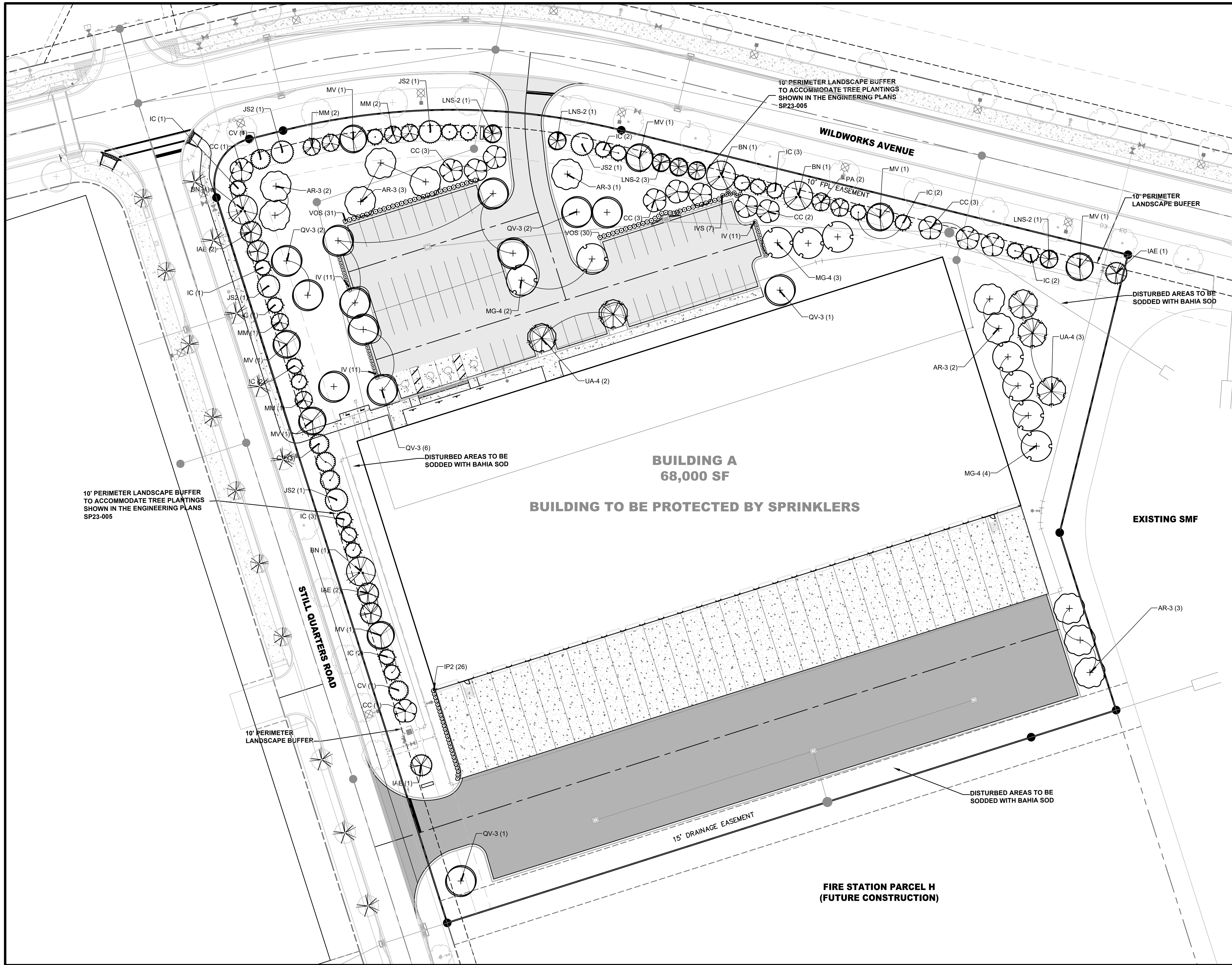
REVISIONS:
 ETM NO. 19-239-07-002
 DRAWN BY: JMB
 DESIGNED BY: JMB
 CHECKED BY: JZB
 DATE: Issue Date

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 14775 Old St. Augustine Road
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 FAX: (904) 646-9485
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STORMWATER MAINTENANCE PLAN
 WILDLIGHT COMMERCE PARK PARCEL B
 FOR
 PATTILLO INDUSTRIAL REAL ESTATE

DRAWING NUMBER
14



PLANT SCHEDULE

LARGE TREES	
CODE	COMMON NAME
AR-3	RED MAPLE
BN	RIVER BIRCH MULTI-TRUNK
JS2	SOUTHERN RED CEDAR
MG-4	SOUTHERN MAGNOLIA
MV	SWEET BAY
QV-3	SOUTHERN LIVE OAK
UA-4	WINGED ELM
MEDIUM TREES	
CODE	COMMON NAME
IAE	EAST PALATKA HOLLY
CC	EASTERN REDBUD
CV	WHITE FRINGETREE
IC	DAHOO HOLLY
LNS-2	WHITE STANDARD TRUNK GRAPE MYRTLE
MM	SAUCER MAGNOLIA MULTI-TRUNK
PA	CHICKASAW PLUM
SMALL TREES	
CODE	COMMON NAME
IP2	ANISE
IV	YAUPOH HOLLY
IVS	SCHILLINGS DWARF
VOS	MS. SCHILLERS DELIGHT WALTER'S VIBURNUM

SHRUBS

CODE	COMMON NAME
IP2	ANISE
IV	YAUPOH HOLLY
IVS	SCHILLINGS DWARF
VOS	MS. SCHILLERS DELIGHT WALTER'S VIBURNUM

PLANS PREPARED UNDER THE DIRECTION OF:
 JONATHAN FRANCIS KORMAN
 L.A. NUMBER: 6667357
 PLOTTED: August 25, 2023 - 9:37 AM, BY: Art Aguirre

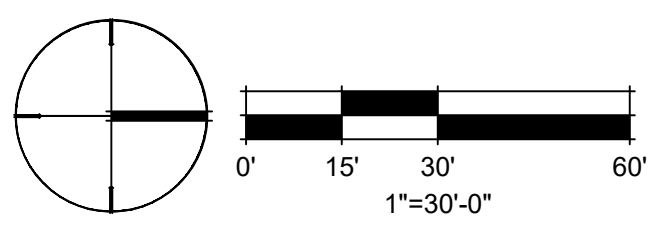
REVISIONS:
 ETM NO. 19-239-07-002
 DRAWN BY: AA
 DESIGNED BY: JK
 CHECKED BY:
 DATE: Issue Date

England, Thins & Miller, Inc.
 14775 Old St. Augustine Road
 Jacksonville, FL 32258
 TEL: (904) 642-8890
 FAX: (904) 646-9485
 REG. 2584 LC-0000316

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LANDSCAPE PLAN
WILDLIGHT COMMERCE PARK PARCEL B
FOR
PATTILLO INDUSTRIAL REAL ESTATE

DRAWING NUMBER
LC-01



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LANDSCAPE CODE SUMMARY

REFERENCE	DESCRIPTION	NOTES/ COMPLIANCE?	REFERENCE	DESCRIPTION	NOTES/ COMPLIANCE?	REFERENCE	DESCRIPTION	NOTES/ COMPLIANCE?	REFERENCE	DESCRIPTION	NOTES/ COMPLIANCE?
Section 37.05. – LANDSCAPING											
37.05.B	All installed trees, shrubs and groundcovers shall conform to the standards for Florida Grade #1 or better according to the current edition of "Grades and Standards for Nursery plants" published by the Florida Department of Agriculture and Consumer Services, Division of Plant Industry.	YES	37.05.D.1	A1A/S.R. 200, U.S. Highway 1 and U.S. 301. A strip parallel to the right-of-way line having an average width of twenty-five (25) feet and a minimum width of ten feet along the entire street frontage except for permitted driveways. This perimeter landscaping strip shall contain a minimum of three (3) canopy trees per one hundred (100) linear feet of property frontage and three (3) understory trees per one hundred (100) linear feet of property frontage. The canopy trees shall consist of more than one (1) species listed in Tables 37-1 or 37-2. Planted trees are not meant to be spaced evenly but rather randomly distributed by species.	N/A	37.05.E.1	At the intersection of two (2) streets, all landscaping within that area defined by the Florida Department of Transportation sight triangle, as outlined in the FDOT Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System shall be installed and maintained below three (3) feet in height or above eight (8) feet in height.	YES	37.05.H.3	Turf grass areas should be consolidated and limited to those areas on the site that receive pedestrian traffic, provide for recreational uses, provide soil erosion control such as berms, slopes and swales, where turf grass is used as a design unifier or other similar practical use.	YES
37.05.B.1	The minimum number of trees required by this section shall be either qualifying existing trees preserved on-site or more than one species listed in Tables 37-1 or 37-2. New landscaping should not include more than fifty (50) percent of any one genus or twenty-five (25) percent of any one species. All trees shall be planted in a minimum dimension of ten (10) feet. This minimum planting area must be free of all pavement and vehicle overhang in order to prevent possible tree damage.	YES	37.05.D.2	Other arterial and collector roadways. All other arterial and collector roadways, as identified by the comprehensive plan, shall provide a strip parallel to the right-of-way line having an average width of fifteen (15) feet and a minimum width of seven and one-half (7½) feet along the entire street frontage except for permitted driveways. This perimeter landscaping strip shall contain a minimum of three (3) canopy trees per one hundred (100) linear feet of property frontage and three (3) understory trees per one hundred (100) linear feet of property frontage. The canopy trees shall consist of more than one species listed in Tables 37-1 or 37-2. Planted trees are not meant to be spaced evenly but rather randomly distributed by species within the largest open spaces.	N/A	37.05.E.2	When a driveway intersects a right-of-way, clear unobstructed cross visibility shall be provided within the site triangle formed by such intersection. The sight triangle shall be measured from the point of intersection, fifteen (15) feet along the access way and then fifteen (15) feet along the right-of-way, with the third side being a line connecting the two (2) points. Cross visibility within the sight triangle shall be unobstructed between the height of three (3) feet and eight (8) feet measured from the ground line. Trees and palms shall have their foliage trimmed in a manner that no limbs or foliage will extend into the cross visibility area. To ensure proper visibility at the intersection of access ways with public rights-of-way, excluding properly trimmed trees as previously stated; only ground cover type plants shall be allowed within a sight triangle.	YES	37.05.H.4	All planting areas shall be mulched with approximately three (3) inches of organic mulch, such as pine bark or shredded hardwood chips.	YES
37.05.B.2	Shrubs shall have a minimum height of eighteen (18) inches when planted. When planted as a hedge, the maximum spacing is 30 inches on center. All shrubs used for visual screening shall be of a plant species that is capable of reaching a height of four (4) feet within twenty-four (24) months under normal growing conditions. Shrubs used as accent ground cover and vines may vary in size depending on the type of plant material and the desired effect.	YES	37.05.D.3	Local streets. A strip parallel to the street line having a minimum width of ten (10) feet along the entire street frontage except for permitted driveways. This perimeter landscaping strip shall contain a minimum of two (2) canopy trees per one hundred (100) linear feet of property frontage and three (3) understory trees per one hundred (100) linear feet of property frontage. The canopy trees shall consist of more than one species listed in Tables 37-1 or 37-2.	YES	37.05.F.1	Except for one- and two-family dwellings, all off-street parking areas shall contain interior landscaping islands at a ratio of one (1) island for each ten (10) parking spaces. Rows of parking spaces abutting a sidewalk adjacent to a building are exempt from required landscape islands except for terminal islands at the end of each row.	YES	Section 37.06. – BUFFERS BETWEEN CERTAIN USES		
37.05.B.3	Groundcovers shall be planted in such manner as to present a finished appearance and complete coverage within one (1) year after planting.	YES	37.05.D.5	Except for one- and two-family dwellings, all off-street parking areas, drive aisles, and paved storage areas lying within fifty (50) feet of, and visible from any street right-of-way, the perimeter landscaping requirement of this section shall also include shrubs	N/A	37.05.F.2	Each separate interior landscaped island shall contain a minimum of one hundred sixty-six (166) square feet and shall be at least ten (10) feet wide as measured from back of curb. A minimum of one (1) canopy tree shall be planted in each interior landscaped island.	YES	37.06.4.a	Medium and fast growing canopy trees shall be chosen from Table 37-1 having a dense, evergreen crown to provide maximum visual separation between abutting properties.	N/A
37.05.B	All tree planted shall be staked or guyed for a period of at least six (6) months in accordance with the adopted planting detail.	YES	37.05.D.6	Dumpsters and mechanical equipment shall be screened through the use of a wall, which is one hundred (100) percent opaque in conjunction with landscaping. Minimum landscaping shall include one (1) shrub every two (2) feet. The shrub shall be maintained at a minimum of four (4) feet in height. One (1) canopy tree or understory tree per ten (10) linear feet of wall or fence unless said fence or wall is less than eight (8) feet in length. Where a transformer pad is located along a public right-of-way, it shall be screened using a hedge meeting the standards of section 37.05.B.2 of this Code along the sides visible from the right-of-way.	N/A	37.05.H.2	Fifty (50) percent of the plants used in all vehicular use area landscape designs should be drought tolerant and located in groupings according to zones designated by the water requirements.	YES	37.06.4.b	Shrubs shall be spaced to provide a natural appearance and inhibit free movement of pedestrian traffic except at a mutually agreed upon pedestrian connection. Where screening is proposed consisting of a fence or wall, shrubs are not required.	N/A
37.05.C.1	One and two-family dwellings. Each single-family and two-family lot must provide at least one (1) tree per three thousand (3,000) square feet of lot area for the first quarter acre of lot area. For lots exceeding one-quarter (¼) acre, one (1) tree for every additional one-quarter (¼) acre, or major fraction thereof, must be preserved or planted. Existing canopy trees, sabal palms and pine trees may be used to satisfy this requirement, in whole or in part, provided that they have a minimum caliper of four (4) inches DBH. When trees are planted to meet the minimum requirement they must be more than one species of tree listed in Tables 37-1 or 37-2 and meeting the material standards of this section. The foregoing represent the entire requirement applicable to individual one and two-family dwellings.	N/A	37.05.D.7	Use of understory trees (ref. Table 37-4 LDC) are permitted in lieu of native canopy trees listed in Table 37-1 and 37-2 as determined to be practical by the director of planning and economic opportunity or designee because of overhead utility lines or other overhead restrictions that cannot otherwise be mitigated through design modifications. Understory trees may be permitted at a rate of one (1) tree for every fifteen (15) feet of site/lot frontage along the right-of-way or street. At the time of planting, Crape Myrtles shall be a minimum of eight (8) feet in height and measure three (3) caliper inches if a single trunk or an aggregate of six (6) inches if a multi-trunk.	YES	37.05.K	The property owner is responsible for the maintenance of all landscape areas required by this section. Maintenance includes irrigating, mowing, trimming, fertilizing and carrying out those activities necessary to keep the plant material in a healthy and growing condition, maintain visual clearance and allow passage of vehicles and pedestrians on public roads and non-exclusive easements.	YES	37.06.4.c	Where screening is required, it shall consist of one or more of the following materials: A five (5) foot masonry wall stuccoed on the side facing the abutting property; A solid six (6) foot fence constructed of resistant materials such as vinyl, cypress or pressure treated wood; Existing dense vegetation; A berm three (3) feet in height located entirely within the buffer and having the requisite number of shrubs planted along the crown.	N/A
37.05.C.2	Multi-family, mobile home park and travel trailer parks. In addition to the use buffer and perimeter landscaping adjacent to a right-of-way requirements found in this section, each commercial and/or industrial development must provide a minimum of ten (10) percent of the lot or parcel as pervious green space planted with one or more species of tree listed in Tables 37-1 or 37-2 for every five hundred (500) square feet of such green space.	N/A	37.05.D.10	Back flow preventer(s) and lift stations shall generally be to the side or rear of a building. Where they cannot be placed at the side or rear of a building, it shall be screened from public rights-of-way through the use of shrubs planted as a hedge meeting the standards of section 37.05.B.2 of the Code.	YES	37.05.K.1	Upon determination by the county that a required tree or plant is dead or severely damaged or diseased, the tree or plant shall be replaced by the owner with plant material meeting the requirements of this section.	YES	REVISIONS:		
37.05.C.3	Non-residential developments. In addition to the buffer and perimeter landscaping adjacent to a right-of-way requirements found in this section, each commercial and/or industrial development must provide a minimum of ten (10) percent of the lot or parcel as pervious green space planted with one or more species of tree listed in Tables 37-1 or 37-2 for every five hundred (500) square feet of such green space.	YES	ETM VISION • EXPERIENCE • RESULTS								
37.05.D	The use of a wall or fence is permitted provided the wall or fence is located on the inner most boundary (behind the vegetation as viewed from outside the development) of the perimeter landscaping adjacent to rights-of-ways/streets, required uncomplimentary land use buffer or other landscaped area.	N/A	England • Thims & Miller, Inc. 14775 Old St. Augustine Road Jacksonville, FL 32258 TEL: (904) 642-8890 FAX: (904) 642-9485 REG. # 2584 LC - 0000316								
DRAWING NUMBER											
LC-02											

PLANS PREPARED UNDER THE DIRECTION OF:
JONATHAN FRANCIS KORMAN
L.A. NUMBER: 6667357

FL0TED: August 25, 2023 – 9:37 AM, BY: Ari Aguilera

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LANDSCAPE CODE SUMMARY
WILDLIGHT COMMERCE PARK PARCEL B
FOR
PATTILLO INDUSTRIAL REAL ESTATE

DRAWING NUMBER
LC-02

