

UTILITY PERMIT

PERMIT NO: 2019-H-294-00051

STATE ROAD INFORMATION

County: Duval	Section: 72292000	State Road No: SR 202	Beginning Mile Post: 4.006	Ending Mile Post: 4.006
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APPLICANT INFORMATION

The Utility Agency Owner (UAO) shall be identified in this Applicant Information Box. When the UAO is a City or County and desires to have the Utility Builder make a joint permit applicant, as prescribed in Section 2.1(4) of the 2017 Utility Accommodation Manual (UAM), the Utility Builder shall also be identified in this Applicant Information Box. A Utility Builder alone cannot apply for a utility permit without the City or County adding them as a joint applicant.

<u>Utility Agency/Owner (UAO)</u>		<u>Utility Builder (only applicable when the UAO is a City or County)</u>	
Name:	JEA (Elizabeth DiMeo)	Name:	
Contact Person:	JEA (Elizabeth DiMeo)	Contact Person:	
Address:	21 W. Church Street T-4	Address:	
City:	Jacksonville	City:	
State:	Florida	State:	
Zip:	32202	Zip:	
Telephone:	9046658139	Telephone:	
Email:	dimeea@jea.com	Email:	

WORK DESCRIPTION

The Applicant(s) requests permission from the Florida Department of Transportation (FDOT) to construct, operate, and maintain the utilities as described below and as depicted in the incorporated documentation.

The project includes the installation of a 24-inch wastewater transmission force main connecting to an existing JEA 36-inch force main stub-out in the JEA electric transmission corridor (T-Line) south of J. Turner Butler Boulevard (SR 202) and connecting to an existing 36-inch force main stub-out in the JEA T-Line corridor north of JEA Pump Station #S1151 (near Town Center Parkway). An auger boring installation method is proposed for the J. Turner Butler Boulevard (SR 202) ... (see work description cont. page)

Utility Work No:

Additional sheets are attached and are incorporated into this permit Yes ☐ No ☒

For FDEP certification, the FDOT agency report is attached in accordance with UAM Section 2.4.1 (13) Yes ☒ No ☐

TRAFFIC CONTROL (TCP)

- ☒ The TCP will comply with the following 600 series index(es) 600
- ☐ A TCP has been attached and incorporated into this permit application in compliance with UAM Section 2.4.2.

MOT Technician's contact information (may be supplied at the two (2) business day notification to FDOT):

Name: _____ Telephone: _____ Email: _____

COMMENCEMENT OF WORK

The UAO and/or Utility Builder shall commence actual construction in good faith within sixty (60) calendar days after approval of the permit application. If the beginning date is more than sixty (60) calendar days from the date of approval, the UAO and/or Utility Builder must review the permit with the FDOT Approving Engineer listed to make sure no changes have occurred to the transportation facility that would affect the permit's continued approval. The UAO and/or Utility Builder shall make good faith efforts to expedite the work and complete the work within the calendar days indicated.

Anticipated Start Date: 5/1/2019

Calendar days needed to completed: 240

Approved
2019-H-294-00051
Julian Mckinley
3/4/2019

UTILITY PERMIT**PERMIT NO:** 2019-H-294-00051**APPLICANT SIGNATURE**

By the below signature(s) the UAO and/or Utility Builder agree(s) to construct, operate, and maintain the work as noted in the above Work Description, shown in plans and incorporated documents, in compliance with the UAM, all instructions noted in the FDOT Special Instructions Box, and special instructions incorporated into this permit. The UAO and/or Utility Builder declares, the location of all existing utilities that it owns or has an interest in, both aerial and underground, are accurately shown on the plans of the work areas. In accordance with UAM Section 2.8, the UAO and/or Utility Builder further declares that a letter of notification was delivered to the owners of other facilities within the work areas and that those listed below are the only facility owners known to be involved or potentially impacted by the proposed work.

Date Notified:

1/25/2019

Name of other facility owners (attach additional sheets if necessary).

Comcast1/25/2019AT&T

Utility Agency/Owner

Utility Builder (when applicable)

Signature: ELIZABETH DIMEO (digital signature) Date: 1/25/2019Name (printed): ELIZABETH DIMEO

Title: _____

Signature: _____ Date: _____

Name (printed): _____

Title: _____

FDOT PROJECT INFORMATION

Pursuant to UAM Section 2.1(10), the utility work is within FDOT projects listed below and must have a Utility Work Schedule for each project approved prior to commencement of work within the FDOT project limits:

There are NO FDOT constructions (proposed or underway).

This work is NOT related to an approved utility work Schedule.

FDOT SPECIAL INSTRUCTIONS

In accordance with UAM Section 2.7, FDOT incorporates the below and attached special instructions into this permit.

Contact Richard Harvey, Maintenance Manager Permits at (904) 360-5376, a minimum of two (2) business days prior to starting work within FDOT Right of Way to schedule a pre-construction meeting. Be advised that a pre-construction meeting must be held with an FDOT inspector prior to any work commencing within FDOT Right of Way.

Additional FDOT Special Instructions are attached and incorporated into this permit. Yes ☐ No ☒

PERMIT APPROVAL

By signature below, FDOT gives permission to the UAO and /or Utility Builder to construct, operate, and maintain the utilities indicated in this Utility Permit in compliance with the UAM, all incorporated documents, and special instructions. Any changes to the approved work must be approved by the FDOT's Approving Engineer and attached and incorporated into this permit in accordance with UAM Section 2.11.

Approving Engineer: Julian Mckinley (digital signature) Date: 3/4/2019Name: Julian MckinleyTitle: MAINTENANCE PROGRAM ENGINEERNotification of Utility Work to be provided to: Telephone (904) 360-5376 ext. _____ or Email: richard.harvey@dot.state.fl.us

An FDOT Representative is required to be present on the worksite prior to commencement of work. Yes ☒ No ☐

Rep. Name: Richard Harvey Telephone 9043605376 Email: richard.harvey@dot.state.fl.us

2019-H-294-00051
Julian Mckinley
3/4/2019

Florida Department of Transportation
UTILITY PERMIT

December 14, 2016

PERMIT NO: 2019-H-294-00051

CERTIFICATION

I, the undersigned UAO and/or Utility Builder, hereby CERTIFY that the utilities were constructed and inspected in compliance with the UAM all incorporated documents, and special instructions. Pursuant to UAM Section 2.11, all changes have been approved by the FDOT's Approving Engineer and incorporated into this permit along with all other material certifications, test results, bore logs, approved plans changes, as-built plans or other required documentation.

I also CERTIFY that work began on _____ and was completed on _____ and that the area was left in as good or better condition than when the work began.

Utility Agency/Owner

Utility Builder (when applicable)

Signature: _____ Date _____

Signature: _____ Date _____

Name (printed): _____

Name (printed): _____

Title: _____

Title: _____

FINAL INSPECTION OF WORK

☐ The work was inspected and found to be in non-compliance as noted below:

☐ All issues of non-compliance listed above have been brought into compliance and/or FDOT has no outstanding issues that need to be addressed by the UAO and/or Utility Builder. However, this final inspection does not release the UAO and/or Utility Builder of their continuing responsibilities pursuant to Rule 14-46.001, the UAM, all incorporated documents, and special instructions.

FDOT Inspector: _____ Date: _____

Name: _____

Title: _____

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2019-H-294-00051
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3/4/2019

PERMIT NO.: 2019-H-294-00051

The complete Work Description could not fit in the space allotted on Page 1 of the Utility Permit so it is displayed below.

Work Description

The project includes the installation of a 24-inch wastewater transmission force main connecting to an existing JEA 36-inch force main stub-out in the JEA electric transmission corridor (T-Line) south of J. Turner Butler Boulevard (SR 202) and connecting to an existing 36-inch force main stub-out in the JEA T-Line corridor north of JEA Pump Station #S1151 (near Town Center Parkway). An auger boring installation method is proposed for the J. Turner Butler Boulevard (SR 202) crossing. The purpose of the force main is to provide additional capacity in the St. Johns Town Center area.

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3/4/2019

All construction shall be performed in accordance with the approved plans and comply with all standard city policies and practices. City approval is contingent upon any required state or federal permit approvals such as those from the Department of Environmental Protection or the St. Johns River Water Management District (SJRWMD).

Plan approval through Development Services does not include utilities. Proposed water, sewer or electric construction must be approved separately through the respective utility company. In most cases, this will be:

WORK WITHIN THE RIGHT-OF-WAY

Adjacent State Roads: _____

STORMWATER

Plan review and approval does not relieve the contractor of complying with all applicable State Fire Codes.

Underground mains and hydrants shall be installed, completed, and in service prior to construction work.

Underground contractor shall submit to the Fire Marshall for approval complete specs for all underground pipe and fittings relating to fire protection PRIOR to installation and inspection. Contractor shall include manufacturer's name and pipe ID along with contractor's state license number.

A Site Work Permit is required for this project.

☐ Tree Fund payment is due: _____ inches at \$ _____ = \$ _____

☐ Article 25 funds are due: _____ inches at \$ _____ = \$ _____

TRAFFIC SIGNS

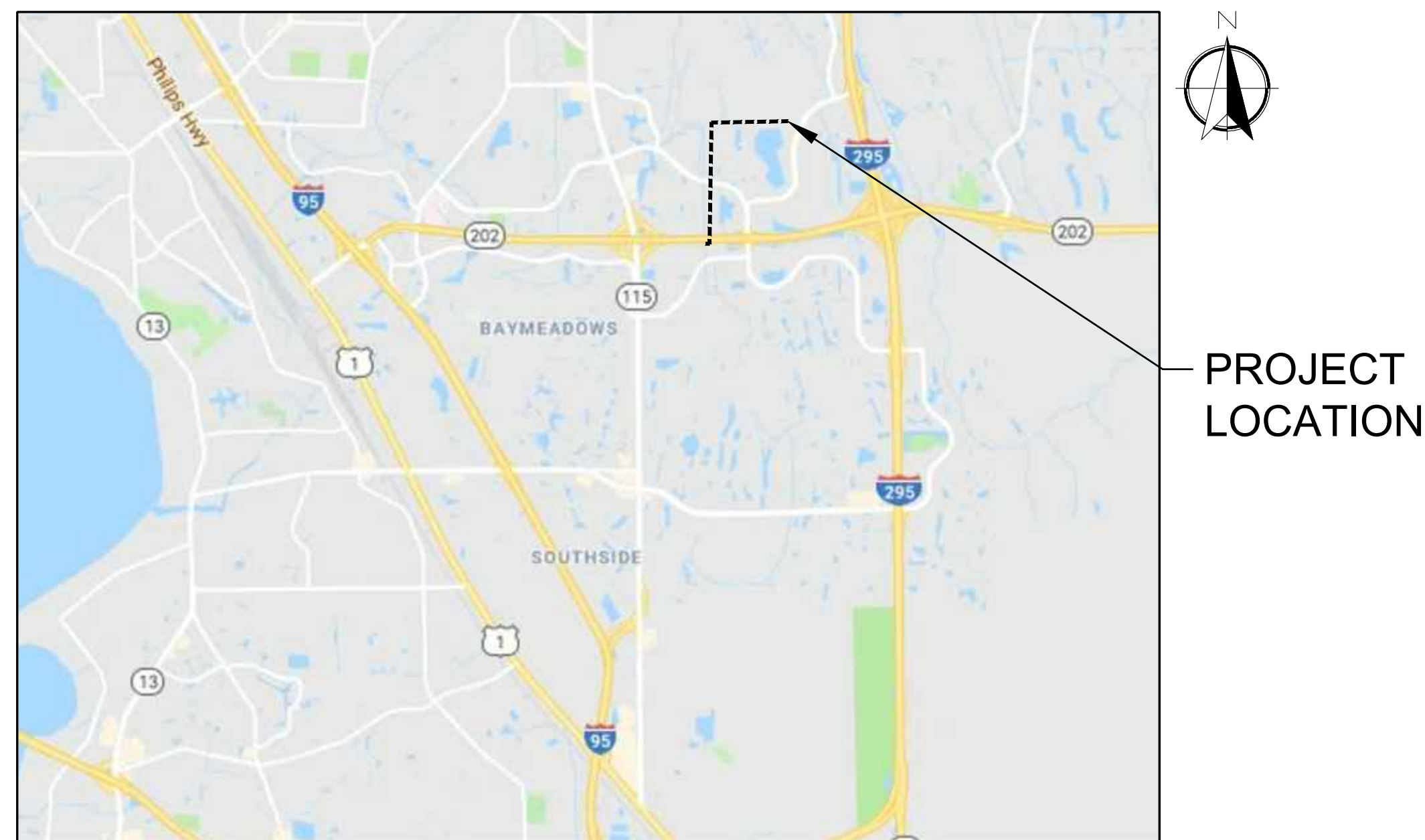
Metro Name	_____	\$55.00	ea.	_____
Standard	_____	\$55.00	ea.	_____
Stop/Yield	_____	\$55.00	ea.	_____
Design	_____	\$55.00		_____
Installation	_____	\$55.00	/hr.	_____
		TOTAL		_____

☐ Streetlights Required

NOTE: Traffic sign costs change from time to time. If the costs change after plan approval but prior to payment for installation, the developer must pay for the signs at the current costs. The above total assumes the subdivision will be platted as one phase. If the development is platted as separate phases, design and installation will be calculated separately for each phase.

No lane closures allowed from 7 a.m. till 9 a.m. and from 4 p.m. till 6 p.m.

JEA PROJECT NO.: 8004196



VICINITY MAP

PREPARED BY:

JACOBS®

JACOBS PROJECT No. EEXJ0300
200 W FORSYTH STREET, SUITE 1520
JACKSONVILLE, FL 32202
TEL.: (904) 636-5432
FAX: (904) 636-5433
COA # 2822

PREPARED FOR:

The logo for JEA (Jefferson Electric Association) features the letters 'JEA' in a large, bold, stylized font. Below the letters, the tagline 'Building Community' is written in a smaller, sans-serif font. A small 'sm' trademark symbol is located at the end of the tagline.

IFB BID NO.:

BID DUE DATE:

TIME OF RECEIPT:

TIME OF OPENING:

BID PLACE:

— — —

M D, 2019 (Tuesday)

12:00 PM

2:00 PM

21 W. CHURCH ST.

TOWER LOBBY, SUITE 103
JACKSONVILLE, FL 32202

JANUARY 2019

Date	Development Services Division (Chief)
Date	Review Group (Reviewer)

Plan approval is valid for five years after the initial approval date. Revisions made after the initial approval date do not extend this five-year time frame.

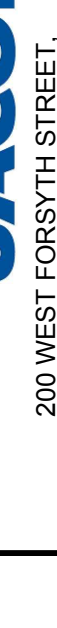
PLAN APPROVAL IS SUBJECT TO THE
FOLLOWING NOTES AND CONDITIONS:

GENERAL PROJECT INFORMATION

GENERAL	
City Development Number	4161.271
Concurrency Application Number	N/A
Property Appraiser Number (RE #)	N/A
Zoning Designation	PUD, RMD-D, RLD-60
PUD Ordinance Number	1994-1121-1352; 1998-0769-E
FIRM – Community – Panel	12031 C0393 H
Flood Zones (Show in Plans)	X, AE
Base Flood Elev. (Show in Plans)	33 FT
Vertical Datum Used for Project	NAVD 88
JEA Availability Number	N/A

<u>SUBDIVISION</u>	
PSD Number	N/A
City or Private Inspection	N/A
Public or Private Roads	N/A
Subdivision ("911") Disk Provided?	N/A

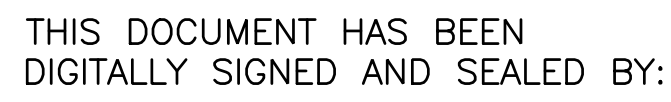
NON-SUBDIVISION
North American Industry
Classification System (NAICS)
Impervious Area (Sq. Ft.)

<div> <div>  </div> <div> <p>T-LINE - JTB TO TOWN CENTER PARKWAY - TRANSMISSION FORCE MAIN COVER SHEET</p> </div> </div>	PROJ. NO. EEXJ0300 DATE: JANUARY 2019 SCALE: AS SHOWN	NO. SHEETS 36 SHEET NO. 1 DRAWING NO. GC-1	<div> <div>  </div> <div> <p>200 WEST FORNSYTH STREET, SUITE 1630 JACKSONVILLE, FL 32202</p> <p>T: (904) 636-5422 F: (904) 636-5433 COA # 2822</p> </div> </div>	DESIGNER: CSE DRAWN BY: DDH DATE: JANUARY 2019 CHECKED BY: RF DATE: JANUARY 2019	DESIGN ENGINEER CHRISTINE S. ELLENBERGER FLORIDA REGISTRATION NO. 58418	NO. BY DATE REVISIONS 6. 5. 4. 3. 2. 1.
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JACOBS ENGINEERING GROUP INC.
200 WEST FORSYTH STREET, SUITE 1520
JACKSONVILLE, FL 32202
CERTIFICATE OF AUTHORIZATION 2822
CHRISTINE S. ELLENBERGER, PE NO 58418

SHEET NO.	SHEET DESCRIPTION
1	COVER SHEET
3	GENERAL NOTES AND LEGEND
4	LOCATION MAP AND SHEET INDEX
5-20	FORCE MAIN PLAN AND PROFILE SHEETS
21	MISCELLANEOUS DETAILS
22-25	STANDARD DETAILS



C&ES CONSULTANTS, INC.
9432 BAYMEADOWS ROAD, SUITE 100
JACKSONVILLE, FL 32256
CERTIFICATE OF AUTHORIZATION 27598
CLARO N. MAGPANTAY, PE NO 60164

SHEET NO.	SHEET DESCRIPTION
26-34	SEDIMENT AND EROSION CONTROL
35	TEMPORARY TRAFFIC CONTROL PLAN
36	EROSION CONTROL & PAVEMENT REPAIR DETAILS

NO. SHEETS 36		PROJ. NO. EEKJ0300		T-LINE - JTB TO TOWN CENTER PARKWAY - TRANSMISSION FORCE MAIN SIGNATURE SHEET					
SHEET NO. 2		DATE: JANUARY 2019		DESIGNER: DRAWWAY:		CSE DDA		DESIGN ENGINEER CHRISTINE S. ELLENBERGER	
DRAWING NO. G-2		SCALE: AS SHOWN		CHECKED BY: DATE:		RF JANUARY 2019		FLORIDA REGISTRATION NO. 59418	
								NO. BY DATE REVISIONS	

SURVEY AND LOCATE DATA:

- | | | | |
|-------------------------------------|-------------------------------------|----|--|
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 1. | ALL ELEVATIONS ARE BASED ON U.S.C.&G.S. DATUM AND SHOWN IN FEET. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 2. | ELEVATIONS ARE BASED ON N.A.V.D. 1988. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 3. | LOCATION OF EXISTING UTILITIES OBTAINED BY SOFT DIG LOCATES WHERE SHOWN ON PLANS, OR INCLUDED WITH BID SPECS. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 4. | EXISTING WATER AND SEWER LINES ARE SHOWN AS PER FIELD LOCATES AND SUBDIVISION AS-BUILT PLANS. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 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. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 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. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 7. | INVERT ELEVATIONS SHOWN ON DRAWINGS REFER TO THE CENTERLINE OF MANHOLES, UNLESS OTHERWISE INDICATED. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 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. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 9. | BENCHMARK DATA: |

PERMIT REQUIREMENTS (NOT ALL INCLUSIVE):

- | | | | |
|--------------------------|-------------------------------------|-----|---|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1. | CONTRACTOR TO OBTAIN ALL REQUIRED RIGHT-OF-WAY PERMITS. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 2. | CONTRACTOR SHALL NOT OPEN CUT STREETS IN THE PROJECT AREA UNLESS SPECIFICALLY SHOWN ON PLANS |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 3. | THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A CONSUMPTIVE USE PERMIT (C.U.P.) THROUGH THE ST. JOHNS WATER MANAGEMENT DISTRICT SHOULD DETERMINED ACTIVITIES BE REQUIRED. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 4. | THE DEPARTMENT OF TRANSPORTATION, RAILROAD COMPANIES AND C.O.J. ARE TO BE NOTIFIED IN ADVANCE OF CONSTRUCTION PER THEIR RESPECTIVE PERMIT CONDITIONS. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 5. | ALL WORK SHALL BE IN ACCORDANCE WITH BID DOCUMENTS, JEA WATER AND SEWER STANDARDS, DETAILS AND MATERIALS MANUAL, REV. 01/17, AND CITY OF JACKSONVILLE STANDARD SPECIFICATIONS AND DETAILS AND ALL APPLICABLE STATE AND LOCAL REGULATIONS. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 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. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 7. | THE CONTRACTOR SHALL NOTIFY APPLICABLE UTILITY CONTACT PERSONNEL NOT LESS THAN ONE WEEK PRIOR TO CONSTRUCTION OF FACILITIES IN THEIR RESPECTIVE AREAS. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 8. | TREE PROTECTION SHALL BE IN ACCORDANCE WITH JACKSONVILLE ORDINANCE CODE 656 AND/OR AS DETAILED ON SPECIFIC PLAN SHEETS. NO TRIMMING OF OVERHANGING TREE LIMBS WILL BE ALLOWED. USE SMALLER EQUIPMENT IF NECESSARY. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 9. | THE CONTRACTOR SHALL LOCATE THE DRAINAGE INLET STRUCTURES IN THE PROJECT AREA AND ERECT SEDIMENTATION CONTROL DEVICES AS NECESSARY PER THE CITY OF JACKSONVILLE STORMWATER POLLUTION PREVENTION PLAN. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 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.

CITY OF JACKSONVILLE PUBLIC WORKS DEPARTMENT
TRAFFIC ENGINEERING DIVISION PAVEMENT
MARKINGS STANDARDS:

3. PAVEMENT MARKINGS SHOULD BE PLACED AS SHOWN ON THE PLANS AND DETAIL SHEETS.
2. ANY REQUIRED TEMPORARY MARKINGS MUST BE IN PLACE BEFORE OPENING LANES OF TRAFFIC, PAY ITEMS FOR TEMPORARY PAVEMENT MARKINGS ARE TO BE INCLUDED IN THE TABULATION OF QUANTITIES.
3. THE REMOVAL OF EXISTING PAVEMENT MARKINGS WILL BE CONSIDERED AN INCIDENTAL ITEM WITH NO ADDITIONAL COMPENSATION PROVIDED.
4. ALL PERMANENT PAVEMENT MARKINGS SHALL BE EXTRUDED THERMOPLASTIC AND MEET CURRENT CITY OF JACKSONVILLE SPECIFICATIONS AND/OR FDOT STANDARD SPECIFICATIONS, LATEST EDITION.
5. THERMOPLASTIC PAVEMENT MARKINGS ARE TO BE PLACE NO SOONER THAN 30 CALENDAR DAYS AFTER THE COMPLETION OF THE FINAL PAVEMENT LAYER.
6. A BITUMINOUS REFLECTIVE PAVEMENT MARKER (RPM) ADHESIVE MEETING CURRENT CITY OF JACKSONVILLE AND/OR FDOT SPECIFICATIONS SHALL BE USED ON ASPHALT ROADWAYS.
7. THE CONTRACTOR SHALL USE CLASS-B REFLECTIVE PAVEMENT MARKERS (RPMs) INSTALLED TO MEET CURRENT CITY OF JACKSONVILLE SPECIFICATIONS AND/OR FDOT STANDARD SPECIFICATIONS.
8. REFLECTIVE PAVEMENT MARKERS THAT DO NOT CONFLICT WITH PERMANENT (THERMOPLASTIC) MARKINGS SHALL BE PLACED ON ALL FINAL ASPHALTIC CONCRETE SURFACES IMMEDIATELY AFTER THE TEMPORARY PERMANENT STRIPING IS IN PLACE.
9. PAVEMENT MARKINGS REMOVAL.
 - A. PAINT BLOCKOUT METHOD OF PAVEMENT MARKINGS REMOVAL IS NOT ACCEPTABLE.
 - B. GRINDING OR HYDRO BLAST METHODS SHALL BE USED ON WEATHERED ASPHALT SURFACES.
 - C. REMOVAL ON NEW ASPHALT SURFACES SHALL BE BY HYDRO BLAST METHOD ONLY.
10. THE CONTRACTOR SHALL CONTACT THE PAVEMENT MARKING INSPECTOR (904) 255.7550 48 HOURS PRIOR TO INSTALLING ANY PAVEMENT MARKINGS ON ANY CITY OF JACKSONVILLE ROADWAY OR STREET.
11. IN THE EVENT OF A CONFLICT BETWEEN THE SPECIFICATIONS OF THE CITY OF JACKSONVILLE AND THE SPECIFICATIONS OF THE FDOT, THE CITY OF JACKSONVILLE WILL PREVAIL.

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 THE 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.
9. ALL WORK PERFORMED WITHIN AN EASEMENT OR A PUBLIC RIGHT OF WAY REQUIRES A SEPARATE PERMIT ISSUED BY THE CITY ENGINEER, ORDINANCE 69-941-688.
10. REPLACE CURB & GUTTER TO THE NEAREST CONSTRUCTION JOINT PAST PROJECT EXTENTS.
11. REPLACE SIDEWALK TO NEAREST CONSTRUCTION JOINT PAST PROJECT EXTENTS.
12. CONTRACTOR SHALL MILL MINIMUM 1" OF EXISTING PAVEMENT IN CONSTRUCTION AREAS AS INDICATED ON PLANS AND RESURFACE WITH 1" MINIMUM OF EITHER TYPE II OR TYPE S-1 ASPHALTIC CONCRETE.

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 -	904-380-5200
G. JEA - WATER COLLECTION & DISTRIBUTION - SCOTT BOYLE	904-665-1907
H. JEA - SEWER COLLECTION & DISTRIBUTION - BILL GREEN -	904-665-8183
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 -	904-209-1341
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

GENERAL LEGEND

	<u>EXISTING</u>	<u>PROPOSED</u>
RIGHT OF WAY LINE	_____	
CENTER LINE	_ _ _ _ _	
LIMITS OF CONSTRUCTION		L.O.C. -----
FENCE (HEIGHT & MAT'L. INDICATED)	X 6' CHAIN LINK X	X 6' CHAIN LINK X
DITCH OR SWALE	~~~~~	~~~~~
DRAIN PIPE	— D — D —	———— D ———
CATCH BASIN		
STORM DRAIN GRATE		———— 24" RCP ———— =====
STORM SEWER (SIZE & MAT'L. INDICATED)	=====	
STORM SEWER REPLACEMENT (IN CASE 10 TRENCH) SIZE, MAT'L. INDICATED)		
STORM SEWER (SIZE & MAT'L. INDICATED)	=====	———— 18" CMP ————
CULVERT WENDWALLS (SIZE & MAT'L. INDICATED)	J — 18" CMP — J	18" CMP
WATER MAIN (SIZE, TYPE INDICATED)	— W — 6" W PVC —	— W — W 6" PVC —
GRAVITY SEWER (SIZE, TYPE INDICATED)	— S — 8" S PVC —	— S — 8" PVC —
SEWER FORCE MAIN (SIZE, TYPE INDICATED)	— FM 10" PVC —	— FM —
LINE VALVE		
CHECK VALVE		
FIRE HYDRANT		
VALVE (TYPE INDICATED)		
END CAP		
PLUG (AT END OF LINE)		
VALVE (TYPE INDICATED)		
REDUCER		
FIRE HYDRANT		OR
HOUSE CONNECTION (SEWER)		1275 [NHC]
SPOT ELEVATION	+ (100.00) OR + 100.00	
MANHOLE - TYPE (IF INDICATED) E - ELECTRIC S - SANITARY D - STORM T - TELEPHONE	● C.O. ● SPR	MH1
CLEAN OUT		
SPRINKLER HEAD		
SILT HAY BARRIER		
SIDEWALK		
TREE REMOVAL	X T1	

UTILITY SYMBOLS

ELECTRIC POLE OR S.B.T. POLE (WOOD)	PP OR PP □ (WITH LIGHT)
WOOD POWER POLE	○ WPP
ELECTRIC POLE OR S.B.T. POLE (CONC.)	PP □ OR PP □ (WITH LIGHT)
CONCRETE POWER POLE	□ CPP
GUY WIRE	TS
TRAFFIC SIGNAL POLE	○ I.P.
IRON PIPE	--- OHF ---
OVERHEAD ELECTRIC	--- UGE ---
UNDERGROUND ELECTRIC	--- OT ---
OVERHEAD TELEPHONE	--- UGT ---
UNDERGROUND TELEPHONE	--- GAS ---
GAS MAIN (SIZE & MAT'L. INDICATED)	--- CATV ---
CABLE TELEVISION	--- FO ---
FIBER OPTIC LINE	--- OHE ---
UNDERGROUND CABLE (TYPE UNDETERMINED)	○ --- ○
TREE PROTECTION	--- SF ---
SILT FENCE	□ WM
WATER METER	□ WM(TR)
WATER METER WITH TOUCHREAD	□
TELEPHONE BOX	□ CATV
CATV BOX	□ CM
CONCRETE MONUMENT	⊕
GAS VALVE	⊗
SOIL BORING (NUMBER INDICATED)	B1
SOFT DIG (NUMBER INDICATED)	TH1
TREE, SIZE & TYPE INDICATED	● 12" ○
MAIL BOX	MB
SIGN - TYPE INDICATED	→ OR → SIGN
BUSH, SHRUB OR HEDGE	SHRUB
ASPHALT PAVEMENT OVERLAY	
INDICATES DRIVEWAY/SIDEWALK TO BE AND REPLACED	
STABILIZED ACCESS ROAD	
EXISTING BOX CULVERT	
MONITORING POINT	MP f1
AIR VALVE ASSEMBLY	
GOPHER TORTOISE BURROW	


INSTALLATION NOTES:

- | | | | |
|-------------------------------------|-------------------------------------|-----|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1. | CONTRACTOR TO REHABILITATE ALL MANHOLES ON PIPE BURST SEWERS VIA COATING/LINING PER JEA SPECIFICATION 446-2, UNLESS OTHERWISE NOTED ON THE PLANS. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 2. | CONTRACTOR TO RENEW, REHABILITATE, REPLACE OR REINSTALL AS APPLICABLE ALL SERVICE LATERALS TO R.O.W. LINE. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 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. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 4. | <p>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:</p> <p>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 @ 665-6847 (mobile 860-1687)
 SOUTHSIDE-NORTH OF BEACH BLVD. DERYL BASFORD @ 665-6855 (mobile 662-0616)
 SOUTHSIDE-BACKUP EDDIE GALES @ 665-6855 (mobile 662-0616)</p> <p>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.</p> |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 5. | ALL NEW STORM DRAIN PIPE JOINTS SHALL BE WRAPPED WITH FILTER FABRIC. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 6. | THE DESIGN FOR THE PROJECT IS BASED UPON THE "OPEN-CUT" AND AUGER BORE METHODS OF CONSTRUCTION. IF USING ALTERNATIVE MEANS OR METHODS, THE CONTRACTOR SHALL FOLLOW ALL APPLICABLE STANDARDS FOR THAT MEANS OR METHOD. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 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. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 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). |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 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. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 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. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 11. | CONTRACTOR SHALL REPLACE EXISTING WATER METER BOXES WHEN DEEMED NECESSARY BY THE JEA INSPECTOR. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 12. | CONTRACTOR TO PROVIDE ADDITIONAL DEPTH OF BURY VIA PIPE JOINT DEFLECTION TO ACCOMMODATE VALVE SELECTION PER JEA STANDARDS. ALL GATE VALVES 20-INCH AND LARGER SHALL BE INSTALLED VERTICALLY. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 13. | WATER METERS MAY REQUIRE RELOCATION FOR CONSTRUCTION, CONTRACTOR SHALL CONTACT JEA METER DEPARTMENT AND RELOCATE WATER METERS AS NECESSARY. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 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. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 15. | SHEET PILING WILL BE REQUIRED ON ALL EXCAVATIONS DEEPER THAN 16 FEET. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 16. | ALL FORCE MAIN FITTINGS AND VALVES SHALL BE RESTRAINED PER THE PVC PIPE RESTRAINT DETAILS ON SHEET STD-02. NO JOINT DEFLECTION WILL BE ALLOWED AT FITTINGS OR VALVES ON 24-INCH AND LARGER PIPE. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 17. | FOR OPEN CUT PORTION: THE MAXIMUM JOINT DEFLECTION SHALL BE LIMITED TO 80% OF THE PIPE MANUFACTURER'S RECOMMENDATION. BENDING OF THE PIPE BARREL IS NOT ALLOWED. NO JOINT DEFLECTION SHALL BE ALLOWED AT FITTINGS OR VALVES. UNLESS OTHERWISE APPROVED BY JEA, THE MAXIMUM ALLOWED JOINT DEFLECTION SHALL BE AS LISTED IN THE TABLE IN JEA STANDARD DETAIL PLATES S-47 AND S-48. ONLY MANUAL FORCE CAN BE UTILIZED TO OBTAIN JOINT DEFLECTION. ALL OFFSETS ARE BASED ON MINIMUM 20 LF PIPE LENGTH. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 18. | DEPTHS OF EXISTING UTILITIES SHOWN ON PROFILE ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 19. | CONTRACTOR SHALL RESTORE COJ AND FDOT RIGHT-OF-WAY TO EXISTING GRADE AND CONDITION, SUBJECT TO COJ OR FDOT REVIEW AND APPROVAL AS APPLICABLE. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 20. | DISTURBANCE WITHIN THE JEA T-LINE SHALL BE LIMITED TO THE AREAS OUTLINED BY SILT FENCE ON THE CONSTRUCTION DRAWINGS. THE CONTRACTOR SHALL SUBMIT A STAGING, STORAGE, PIPE STRINGING, AND LIMITS OF DISTURBANCE PLAN WITHIN SHEETS C-1.01 TO C-1.10 AND SHEETS C-1.13 TO C-1.16 TO THE JEA ELECTRICAL UTILITY GROUP AND ENVIRONMENTAL GROUP VIA THE JEA PROJECT MANAGER FOR APPROVAL. NO STAGING OR STORAGE SHALL TAKE PLACE WITHIN 75' OF AN ELECTRICAL STRUCTURE AND GUY ANCHORS. ALL EQUIPMENT AND CONSTRUCTION ACTIVITIES SHALL BE KEPT OUTSIDE A MINIMUM TWENTY FOOT (20') RADIUS OF ALL TRANSMISSION LINES (VERTICALLY AND HORIZONTALLY). THE CONTRACTOR SHALL COORDINATE WITH THE JEA ELECTRICAL UTILITY GROUP FOR ENTRY/EXIT PROTOCOL FOR THE JEA T-LINE. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 21. | CONTRACTOR SHALL MAINTAIN ELECTRICAL SUBSTATION AND T-LINE ACCESS TO JEA AT ALL TIMES. IF ACCESS ROAD IS IMPACTED OR BLOCKED, THE CONTRACTOR SHALL COORDINATE WITH JEA ELECTRICAL UTILITY GROUP A MINIMUM OF 2 WEEKS IN ADVANCE. THE CONTRACTOR SHALL RESTORE ANY DISTURBED PORTIONS OF THE JEA T-LINE ACCESS DRIVE TO MATCH PRECONSTRUCTION CONDITIONS. THE MANNER IN WHICH THIS IS ACCOMPLISHED SHALL BE LEFT TO THE DISCRETION OF THE CONTRACTOR, SUBJECT TO THE REQUIREMENTS OF THE CONTRACT AND PRIOR APPROVAL OF THE JEA PROJECT MANAGER. THE JEA PROJECT MANAGER APPROVAL IN NO WAY RELIEVES THE CONTRACTOR OF ANY LIABILITIES RESULTING FROM THE RESTORATION METHOD CHOSEN. STONE AGGREGATE SHALL BE USED TO PROVIDE A FINAL DRIVING SURFACE FOR THE RESTORED PORTIONS. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 22. | THE AIR/VACUUM VALVE PIPE CONNECTION MUST BE LOCATED AT A HIGH POINT. CONTRACTOR SHALL PROVIDE ADDITIONAL DEPTH OF BURY TO ACCOMMODATE THE AIR/VACUUM VALVE ASSEMBLY PER THE JEA STANDARD DETAILS. SEE TECHNICAL SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 23. | THE PROPOSED FORCE MAIN SHALL BE OFFSET FROM THE EXISTING JEA ELECTRICAL TRANSMISSION TOWERS AS INDICATED ON THE DRAWINGS. |

ABBREVIATIONS:

AC	ASBESTOS CEMENT	ℓ	FLOW LINE	r	RADIUS
A.G.	ALLEY GRATE	FM	FORCE MAIN	R	RATE
APPROX	APPROXIMATELY	GALV./GLV	GALVANIZED	R.C.P.	REINFORCED CONCRETE PIPE
	BASE LINE	G.V.	GAS LINE	R	RIGHT
B.M.	BENCH MARK	G.V.	GAS VALVE	R/W	RIGHT OF WAY
BC	BOTTOM OF CURVE	H.D.P.E.	HIGH DENSITY POLYETHYLENE PIPE	R.D.	ROOF DRAIN
C.B.	CATCH BASIN	HW	HEAD WALL	RJ	RESTRAINED JOINT
C.I.	CAST IRON	H.C.	HIGH CURB	RWM	RECLAIMED WATER MAIN
	CENTER LINE	HDD	HORIZONTAL DIRECTIONAL DRILL	S.W.	SIDE WALK
C.E.P.	CITY ELECTRIC POLE	H.C.	HORIZONTAL	S.B.T.	SOUTHERN BELL TELEPHONE
CONC.	CONCRETE	HP	HORIZONTAL POINT OF CURVATURE	SS	STAINLESS STEEL
CONST.	CONSTRUCTION	HPT	HORIZONTAL POINT OF TANGENCY	STA	STATION
COJ	CITY OF JACKSONVILLE	INT.	INTERSECTION	TC	TOP OF CURVE
C.M.P.	CORRUGATED METAL PIPE	INVERT	INVERT	TEMP	TEMPORARY
C.M.P.A.	CORRUGATED METAL PIPE ARCH	I.P.	IRON PIPE	T	TREE REMOVAL
CULV.	CULVERT	J.W.W.	JACKSONVILLE WATER WORKS	TYP	TYPICAL
C&G	CURB & GUTTER	JTB	J. TURNER BUTLER BOULEVARD	U.G.E.	UNDERGROUND ELECTRIC
	CUT	L.L.	LONG LEAF	U.G.T.	UNDERGROUND TELEPHONE
D.B.I.	DITCH BOTTOM INVERT	L.T.	LEFT	U.S.C. & G.S.	UNITED STATES COASTAL & GEODETIC SURVEY
D.W. OR DR	DRIVEWAY	M	MAIL BOX		
D.I.	DUCTILE IRON	M.H.	MANHOLE	V.C.	VITRIFIED CLAY
DIPS	DUCTILE IRON PIPE SIZE	MJ	MECHANICAL JOINT	VERT	VERTICAL
DIA.	DIMENSION RATIO	MOT	MOVEMENT OF TRAFFIC	VERTICAL	VERTICAL POINT OF TANGENCY
R.O.P.	EDGE OF PAVEMENT	MP	MONITORING POINT	VPC	VERTICAL POINT OF CURVATURE
ELEV.	ELEVATION	N.T.S.	NOT TO SCALE	WM	WATER METER
ERCP	ELLIPTICAL REINFORCED CONC. PIPE	O.E.	OVERHEAD ELECTRIC	W.V.	WATER VALVE
EXP. JT.	EXPANSION JOINT	O.T.	OVERHEAD TELEPHONE	WLP	WOOD LIGHT POLE
		P.R.M.	PERMANENT REFERENCE MONUMENT	WPP	WOOD POWER POLE
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION	PROF	PROFILE	WTP	WOOD TELEPHONE POLE
F.H.	FIRE HYDRANT	PVC	POLYVINYL CHLORIDE		

NOTE:
STANDARD DRAWINGS ARE APPLICABLE
FOR ALL PROJECTS, INCORPORATED BY
REFERENCE AND ARE AVAILABLE AT
JEA.COM

		T: (904) 636-5432 F: (904) 636-5433 COA # 2802	
200 WEST FORTYFTH STREET, SUITE 1520 JACKSONVILLE, FL 32202		NO.	REVISIONS
BY	DATE		
		6	
		4	
		3	
		2	
		1	

DESIGN ENGINEER
CHRISTINE S. ELLENBERGER
FLORIDA REGISTRATION NO.
58418

DESIGNER:	CSE
DRAWN BY:	DDH
DATE:	JANUARY 2019
CHECKED BY:	RF
DATE:	JANUARY 2019

JEAsm
Building Communitysm

WAY -

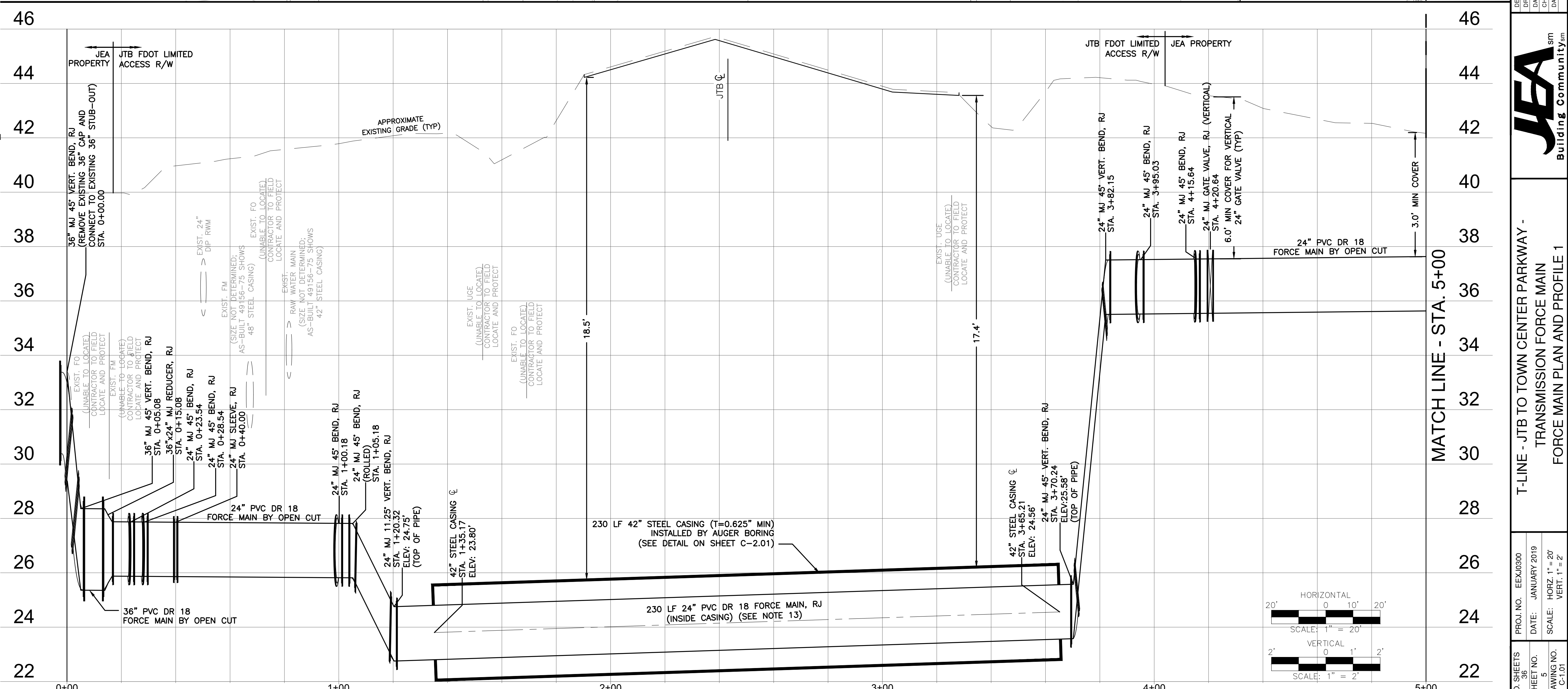
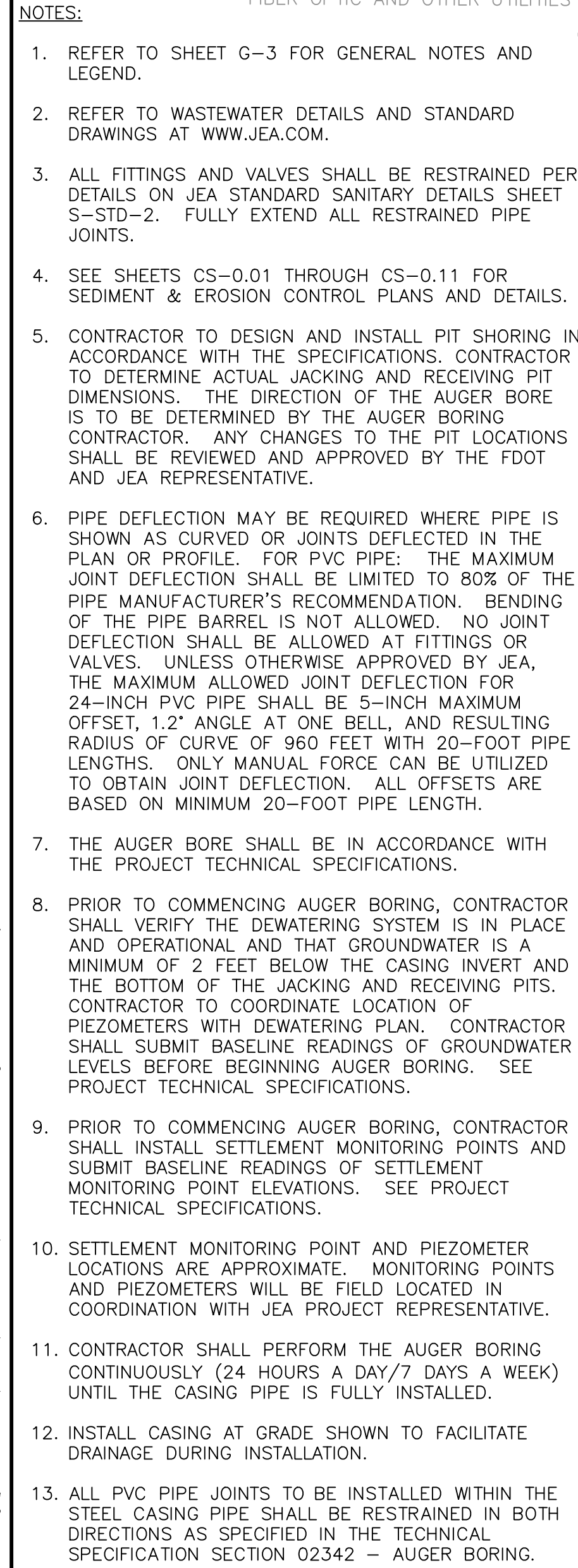
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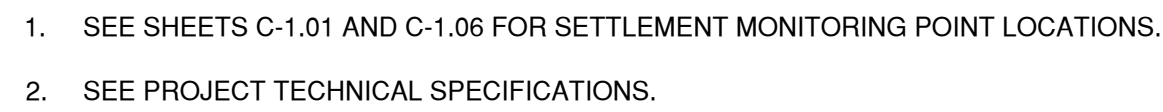
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GENERAL NOTE

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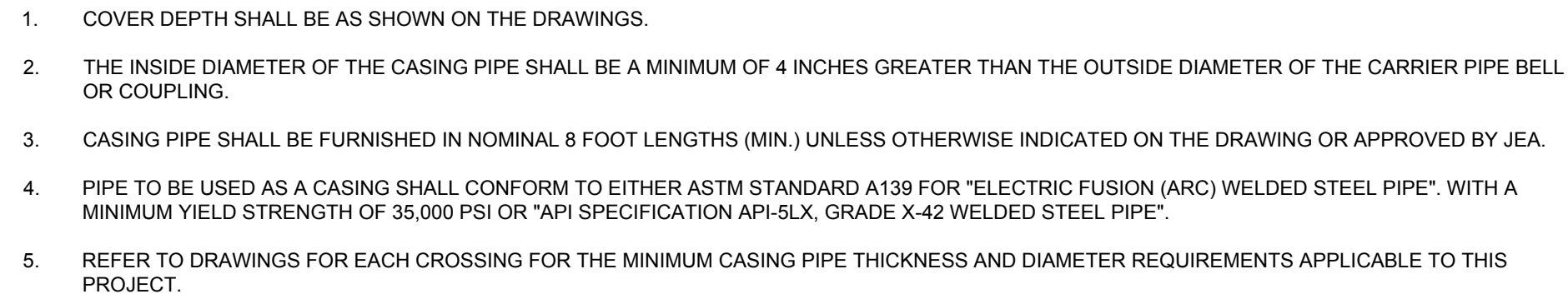
PROJ. NO.	EEXJ0300
DATE:	JANUARY 2019
SCALE:	AS SHOWN

NO. SHEETS 36	SHEET NO. 3	DRAWING NO. G-3
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1. SEE SHEETS C-1.01 AND C-1.06 FOR PIEZOMETER LOCATIONS.
2. SEE PROJECT TECHNICAL SPECIFICATIONS.



CASING DETAIL - SEWER

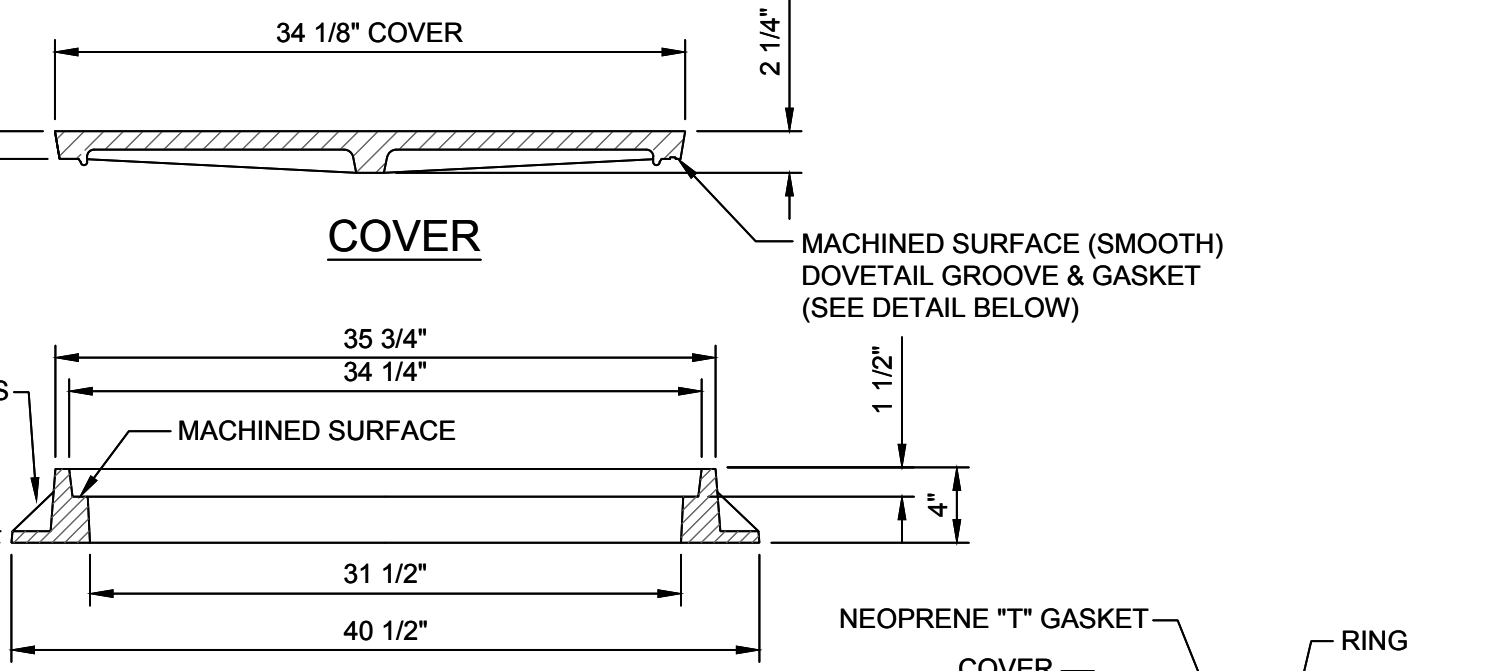
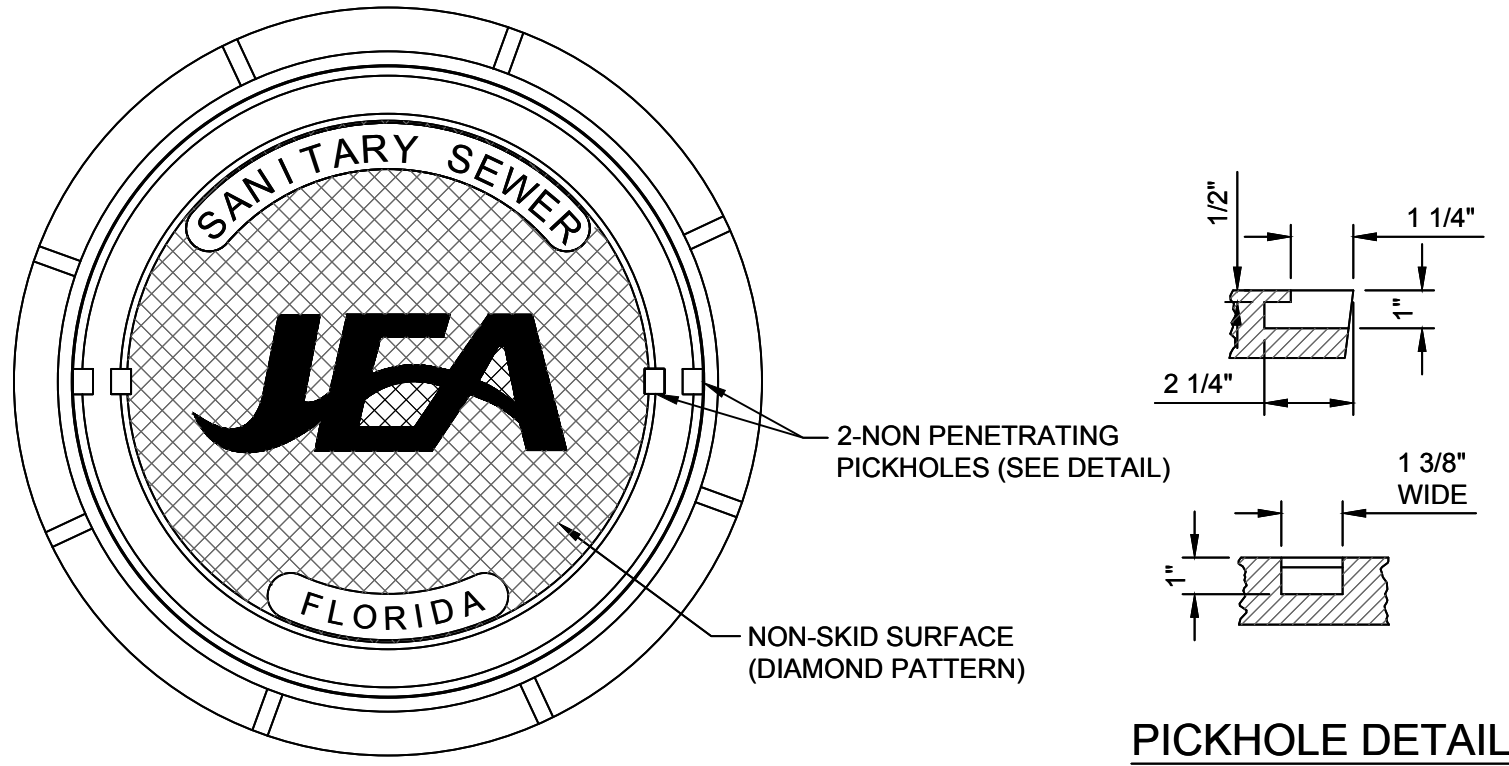
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NO. SHEETS 36		PROJ. NO. EEXJ0300 DATE: JANUARY 2019		<div>  </div>		T-LINE - JTB TO TOWN CENTER PARKWAY - TRANSMISSION FORCE MAIN MISCELLANEOUS DETAILS		<div>  </div>		DESIGN ENGINEER CHRISTINE S. ELLENBERGER FLORIDA REGISTRATION NO. 58418		NO. BY DATE REVISIONS	
SHEET NO. 21		CSE DRAWN BY: DDH DATE: JANUARY 2019 CHECKED BY: BF DATE: JANUARY 2019								6. 5. 4. 3. 2. 1.			
DRAWING NO. C-2.01		SCALE: HORIZ. 1" = 20" VERT. 1" = 2"											

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Current Layout Tab = JEA STANDARD SANITARY DETAILS 1

Thu Jan 24, 2019 - 13:50

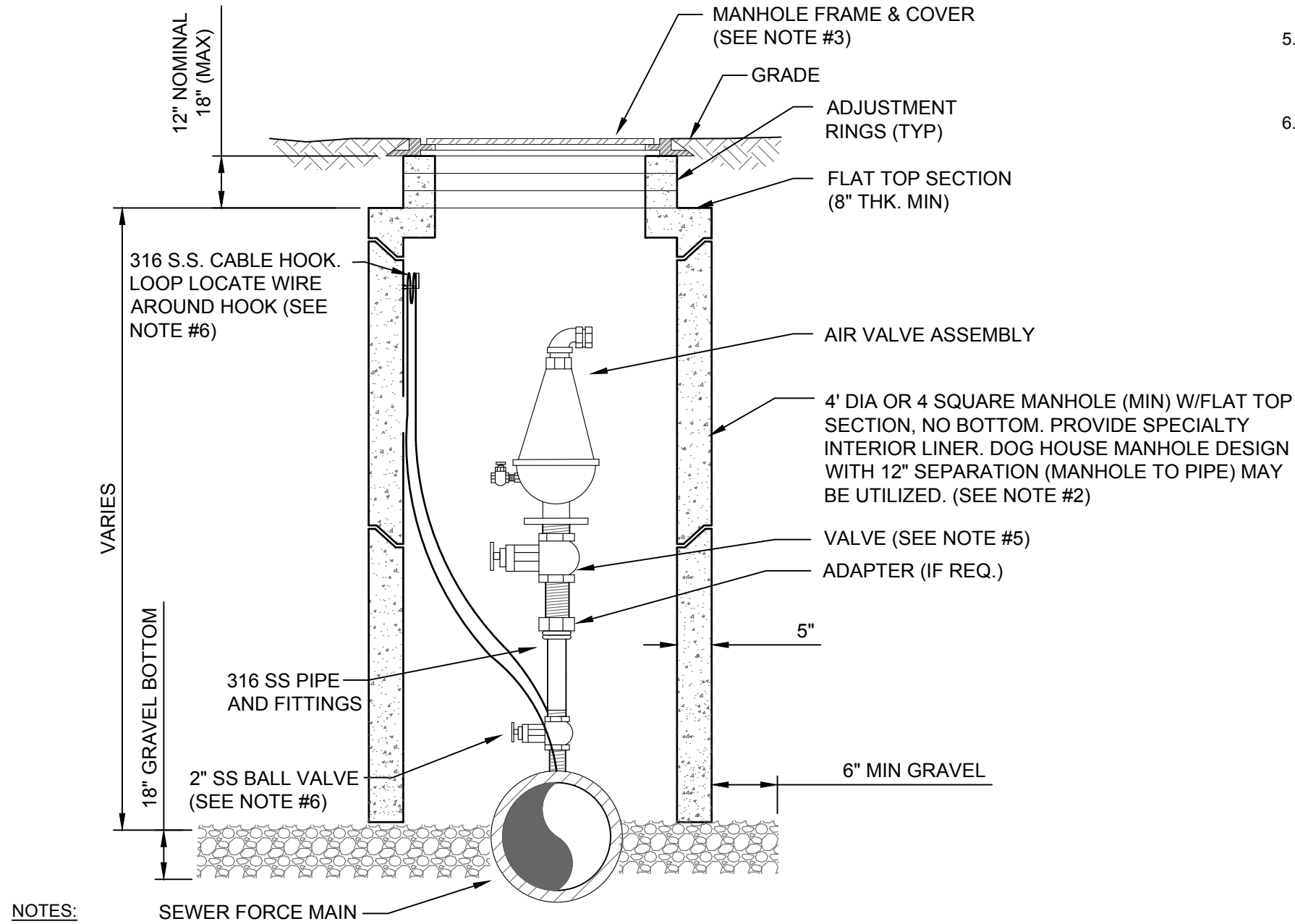


- NOTES:**
1. MATERIAL: ASTM A-48 CLASS 35B GRAY IRON.
 2. RING WEIGHT 230 LBS. APPROX.
 3. COVER WEIGHT 230 LBS. APPROX.
 4. ALL DIMENSIONS ARE SHOWN IN INCHES.
 5. FOR MANHOLES WHICH WILL BE MAINTAINED BY JEA (INCLUDING UTILITY DEDICATION PROJECTS), THE COVER SHALL INCLUDE THE "JEA" LOGO AND A NEOPRENE GASKET.
 6. 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 2019

PLATE S-1

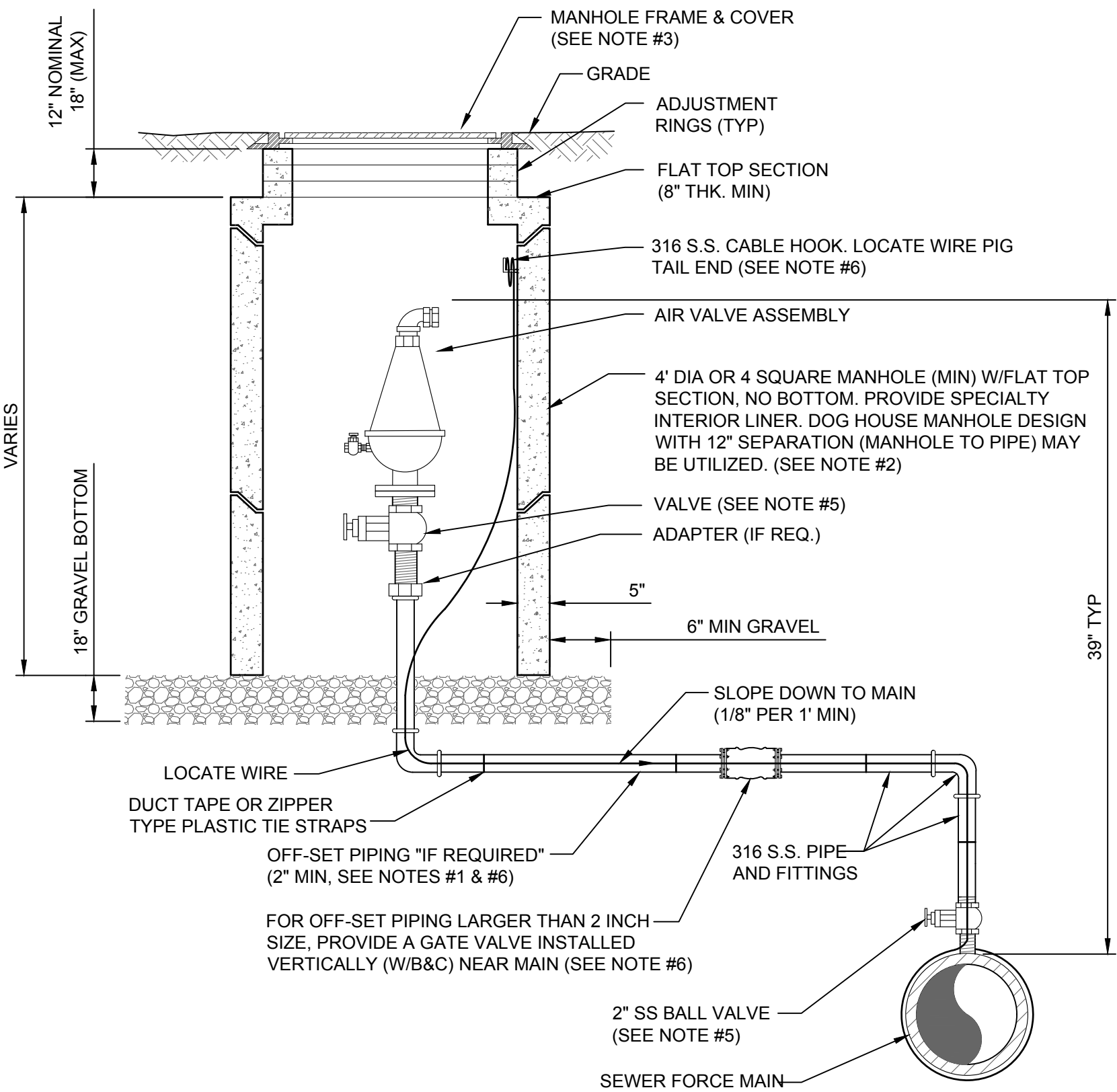


- NOTES:**
1. THE AIR ASSEMBLY MANHOLE SHALL BE LOCATED OUTSIDE OF THE ROADWAY PAVEMENT AREA (I.E. LOCATED IN NON-TRAFFIC AREAS).
 2. THE CONCRETE MANHOLE SHALL INCLUDE A POLYURETHANE SPECIALTY LINER (PER SPEC SECTION 446) TO BE INSTALLED ON THE INTERIOR SURFACES INCLUDING THE RISER SECTION TOP AND THE ADJUSTMENT RINGS. A BITUMINOUS WATERPROOFING MATERIAL SHALL BE PROVIDED ON THE OUTSIDE SURFACES OF THE MANHOLE.
 3. 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).
 4. 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.
 5. 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.
 6. LOCATE WIRE SHALL HAVE ENOUGH SLACK TO REACH 4' ABOVE FINAL GRADE.

AIR VALVE ASSEMBLY INSIDE MANHOLE IN ROW

JANUARY 2019

PLATE S-29B



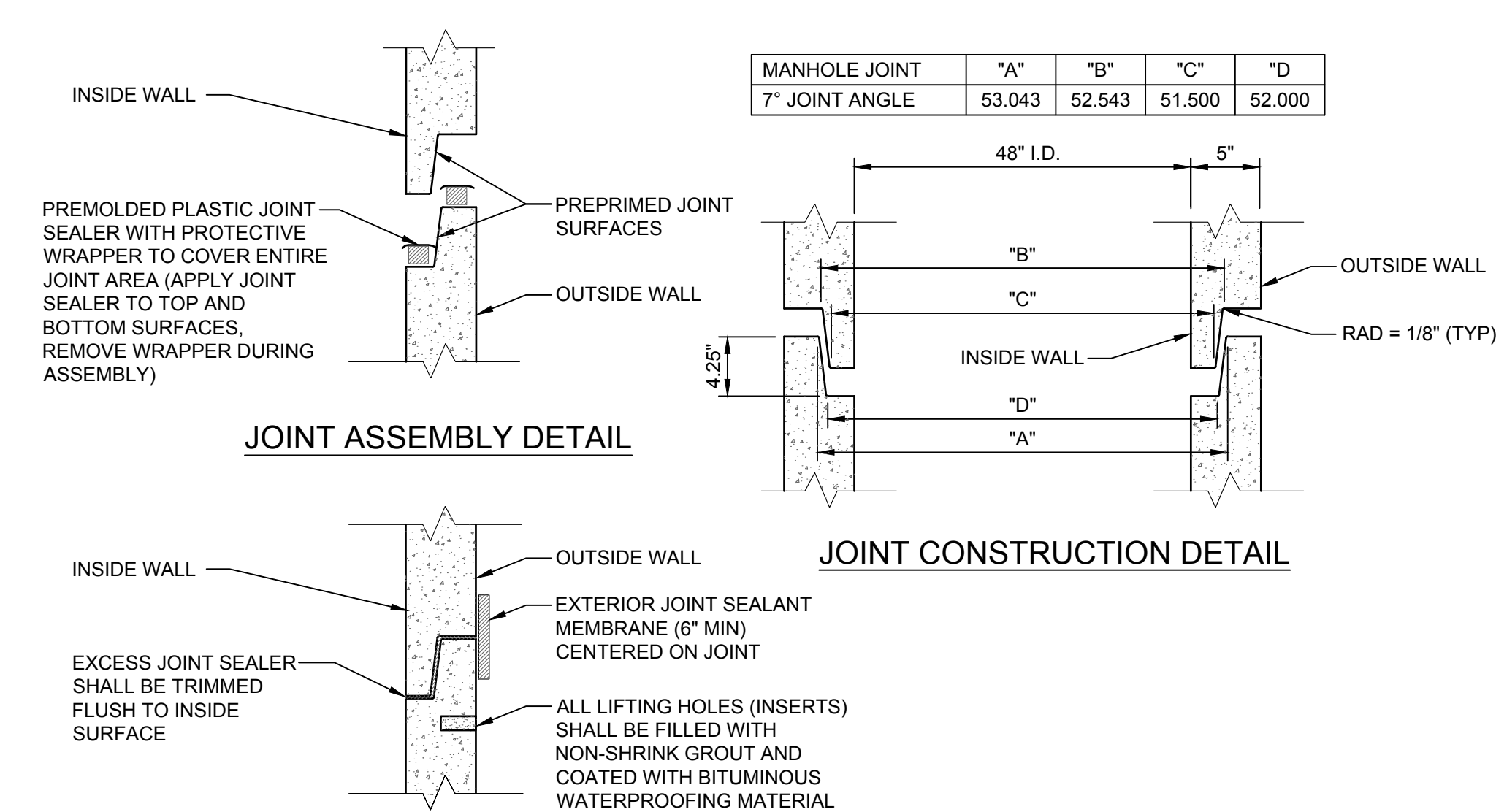
NOTES:

1. 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.
2. 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.
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5. 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.
6. LOCATE WIRE SHALL HAVE ENOUGH SLACK TO REACH 4' ABOVE FINAL GRADE.

AIR VALVE ASSEMBLY INSIDE MANHOLE

JANUARY 2019

PLATE S-29

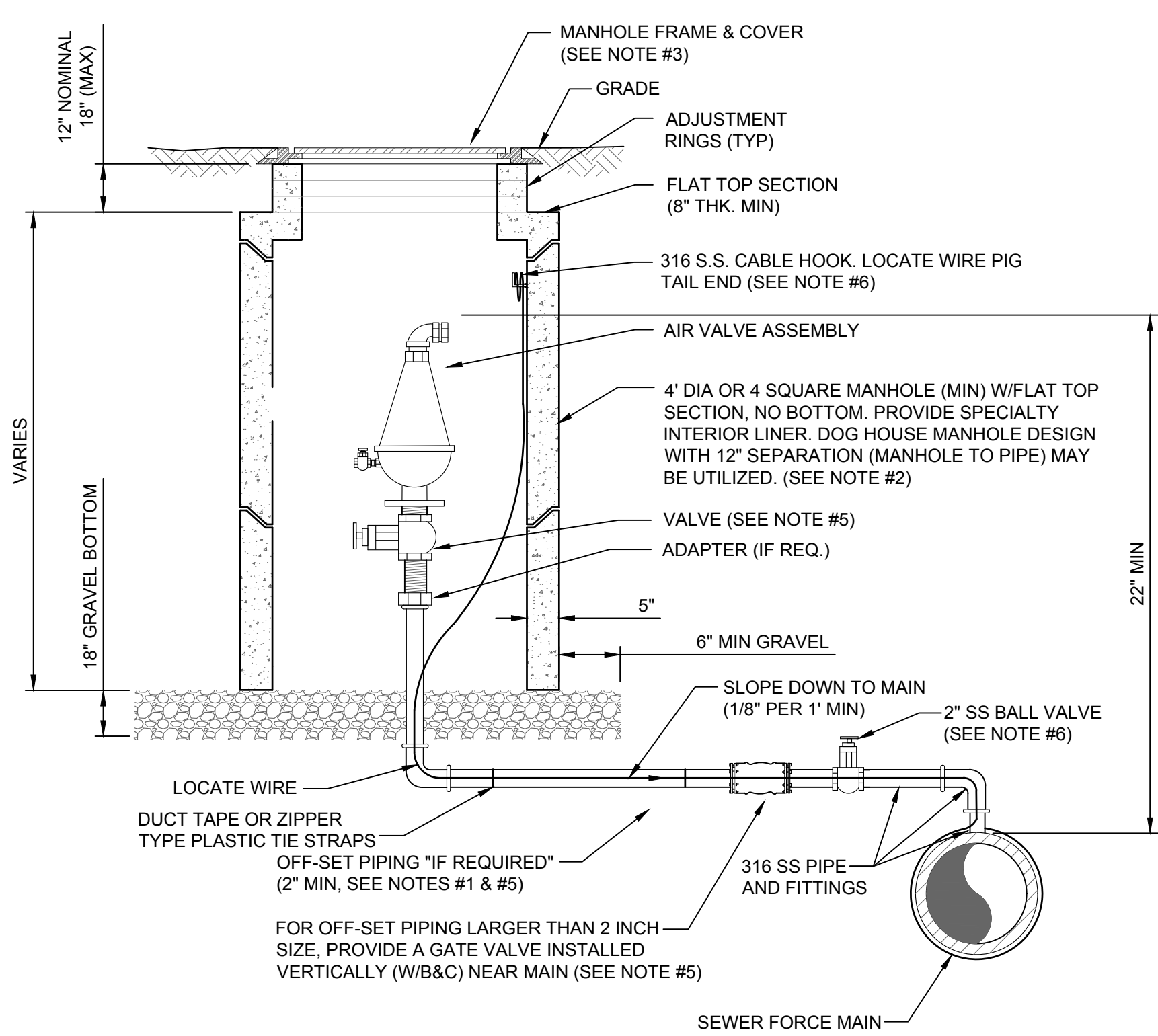


COMPLETED JOINT DETAIL

PRECAST CONCRETE SEWER MANHOLE JOINT DETAIL

JANUARY 2019

PLATE S-17



NOTES:

1. 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.
2. 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.
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4. 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.
5. 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.
6. LOCATE WIRE SHALL HAVE ENOUGH SLACK TO REACH 4' ABOVE FINAL GRADE.

OPTIONAL LOW PROFILE AIR VALVE ASSEMBLY INSIDE MANHOLE

JANUARY 2019

PLATE S-29A

JACOBS

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COA # 2822

NO.

BY

DATE

REVISIONS

DESIGNER

CSE

DESIGNED BY

DDH

DATE

JANUARY 2019

CHECKED BY

RF

DATE

JANUARY 2019

DESIGN ENGINEER

CHRISTINE S. ELLENBERGER

FLORIDA REGISTRATION NO.

56418

DESIGNER

CSE

DESIGNED BY

DDH

DATE

JANUARY 2019

CHECKED BY

RF

DATE

JANUARY 2019

DESIGN ENGINEER

CHRISTINE S. ELLENBERGER

FLORIDA REGISTRATION NO.

56418

NO. SHEETS

36

SHEET NO.

22

DRAWING NO.

S-29B-1

PROJ. NO.

EEXJ0300

DATE

JANUARY 2019

SCALE

AS SHOWN

T-LINE - JTB TO TOWN CENTER PARKWAY -
TRANSMISSION FORCE MAIN
JEA STANDARD SANITARY DETAILS 1

JEA Building Communitysm

T-LINE - JTB TO TOWN CENTER PARKWAY - TRANSMISSION FORCE MAIN

PROJ. TITLE: T-LINE - JTB TO TOWN CENTER PARKWAY - TRANSMISSION FORCE MAIN

JEA PROJ NO.: 8004196

IFB BID NO.: -

2019-H-294-00051
Julian McKinley
3/4/2019

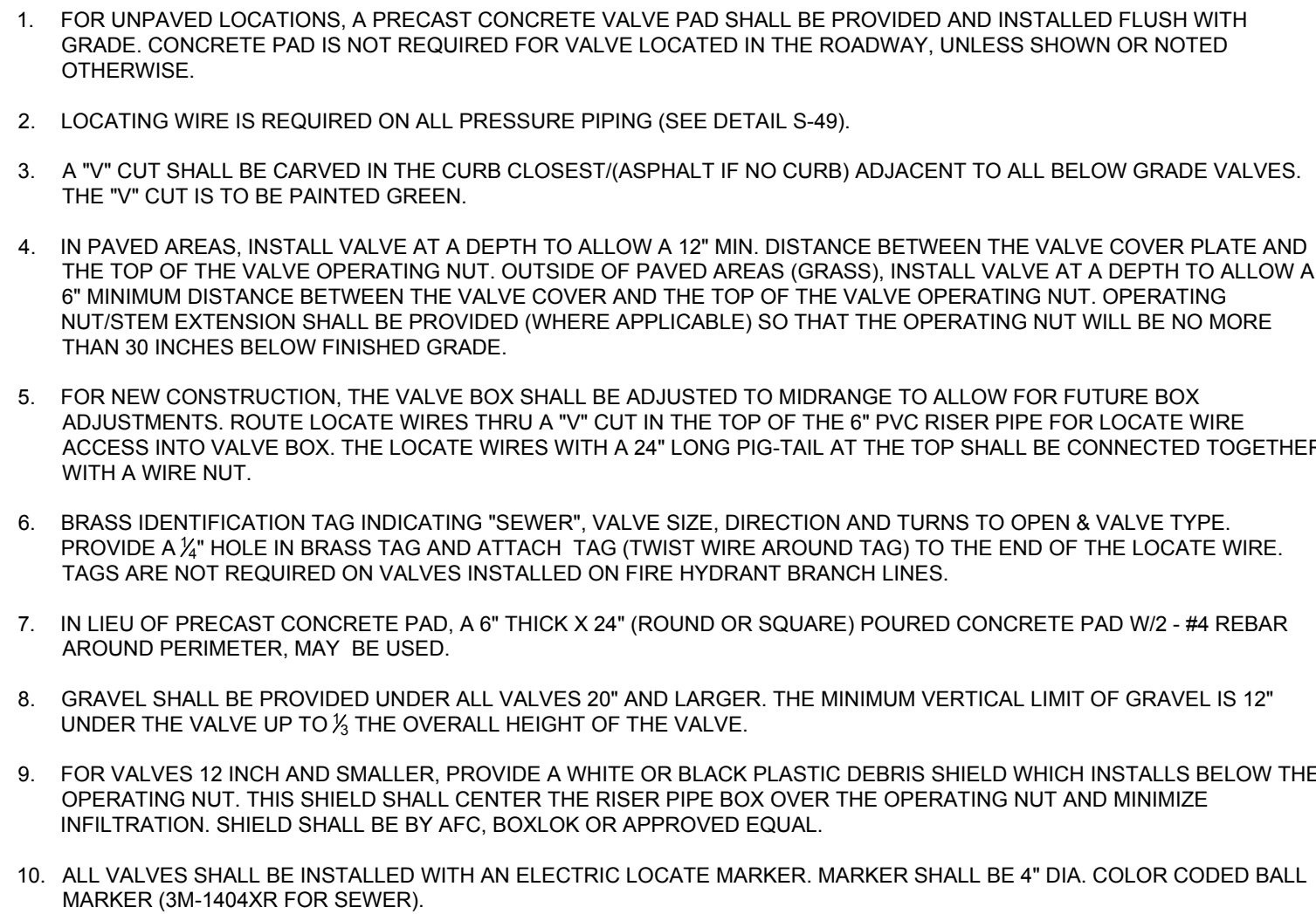


PLATE S-30

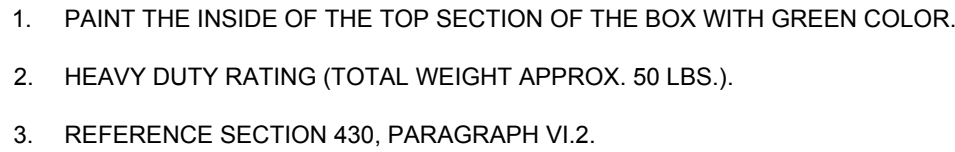


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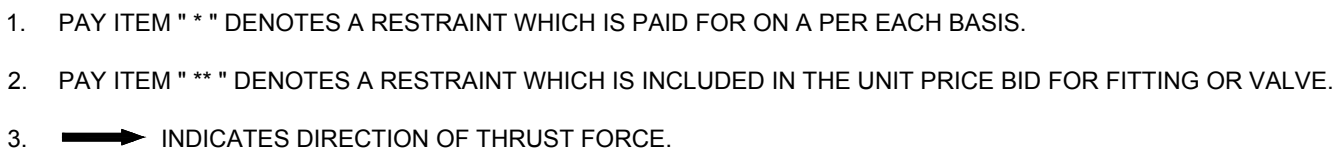


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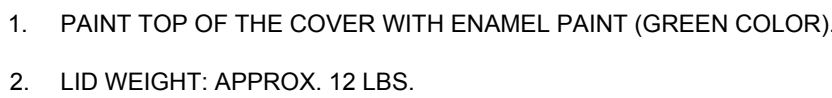


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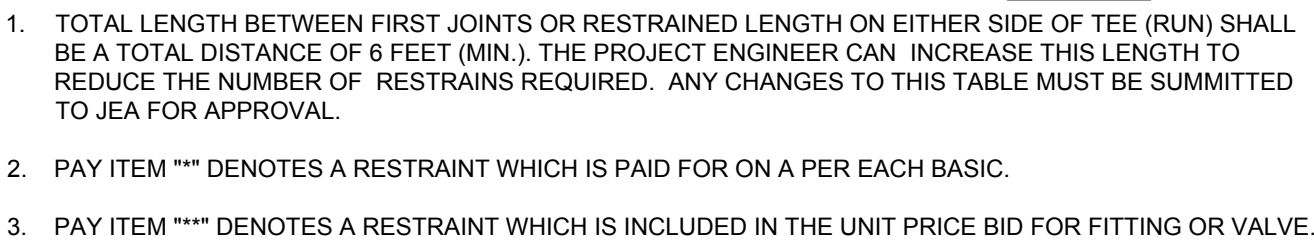


PLATE S-38D

F.O. = FITTING ONLY

PLATE S-38A

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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" NOTE 5	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 (BUILDINGS, SIGNS, POLES, ETC.)	SEE NOTE 7	N/A	N/A	SEE NOTE 7	N/A	N/A	SEE NOTE 7	N/A	N/A	SEE NOTE 7	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 SECTION 429, III.4.3.
- REFER TO SECTION 429, III.4.2 FOR MINIMUM SEPARATION REQUIREMENTS FROM PIPE TO STRUCTURES.

SEPARATION REQUIREMENTS FOR WATER, WASTEWATER AND RECLAIMED WATER MAINS

JANUARY 2019

PLATE S-26

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 PREFERABLE 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 A 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 - SEWER

JANUARY 2019

PLATE S-27

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NO. BY DATE

REVISIONS

DESIGN ENGINEER
CHRISTINE S. ELLENBERGER
FLORIDA REGISTRATION NO. 55418

DESIGNER: CSE
DRAWN BY: DDH
DATE: JANUARY 2019
CHECKED BY: RF
DATE: JANUARY 2019

T-LINE - JTB TO TOWN CENTER PARKWAY -
TRANSMISSION FORCE MAIN
JEA STANDARD SANITARY DETAILS 4

PROJ. NO.: 8004196

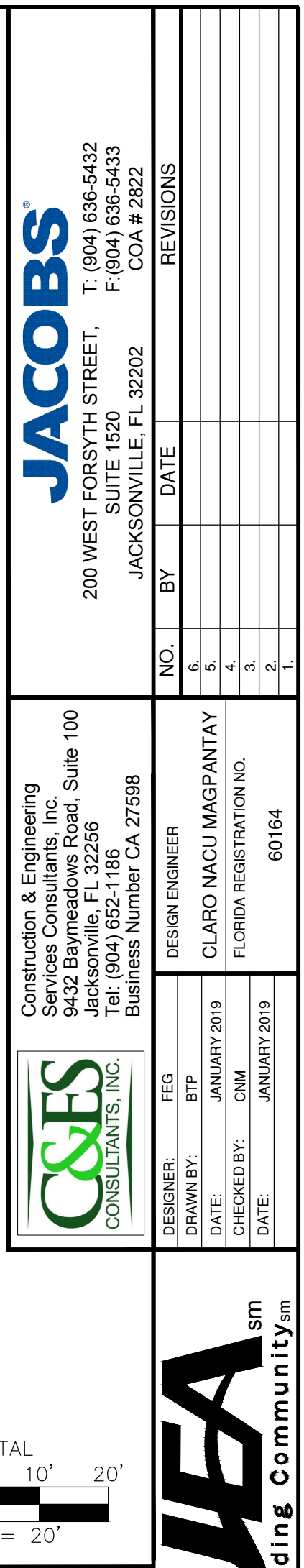
NO. SHEETS 36
SHEET NO. 25
DRAWING NO. STD-4

PROJ. NO. EEXJ0300
DATE: JANUARY 2019
SCALE: AS SHOWN

JEA
Building Communitysm

PROJ. TITLE: T-LINE - JTB TO TOWN CENTER PARKWAY - TRANSMISSION FORCE MAIN

2019-H-294-00051
Julian Mckinley
3/4/2019



1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL UTILIZE THE FDEP BEST MANAGEMENT PRACTICES.
2. ALL EXISTING TREES TO BE REMOVED ARE SHOWN IN THE DRAWINGS AND THE TABLE BELOW. ALL OTHER EXISTING TREES ARE TO REMAIN AND SHALL BE PRESERVED AND PROTECTED.
3. BURNING OF TREES, BRUSH AND OTHER MATERIAL IS NOT ALLOWED.
4. EROSION CONTROL MEASURES SHALL REMAIN IN PLACE AND MAINTAINED PROPERLY UNTIL PERMANENT VEGETATIVE COVER HAS BEEN ESTABLISHED.
5. ANY DAMAGE INCURRED BY EROSION SHALL BE RECTIFIED IMMEDIATELY.
6. AFTER RESTORATION IS COMPLETE, TEMPORARY CONTROL MEASURES SHALL BE REMOVED AND DISPOSED OF PROPERLY.

SUMMARY OF PROTECTED TREE REMOVAL AND MITIGATION					
TREE TYPE	INCHES TO BE REMOVED	MITIGATION RATIO	MITIGATION REQUIRED (INCHES)	COST FOR MITIGATION PER INCH	MITIGATION FEE
OAK (6"-23")	42	3	14.00	\$ 155.00	\$ 2,170.00
PINE (6"-23")	51	3	17.00	\$ 155.00	\$ 2,635.00
BAY (6"-23")	7	3	2.33	\$ 155.00	\$ 361.67
TOTAL			33.33	\$ 5,166.67	



JANUARY 2019 IN CITY RIGHT -OF-WAY PLATE W-42



THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPES NOT 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.



OF INLET PROTECTION IS
WHERE THE INLET DRAINS A
FLAT AREA (SLOPES NO GREATER
1%) WHERE SHEET OR OVERLAND
FLOW (EXCEEDING 0.5 cfs) ARE TYPICAL.
INLET PROTECTION SHALL NOT APPLY TO INLETS
SERVING CONCENTRATED FLOWS, SUCH AS IN
HIGHWAY MEDIANS.

N.T.S.

N.T.S.

JEAsm
Building Communitysm