

PROSPECT ST. WATER MAIN REPLACEMENT

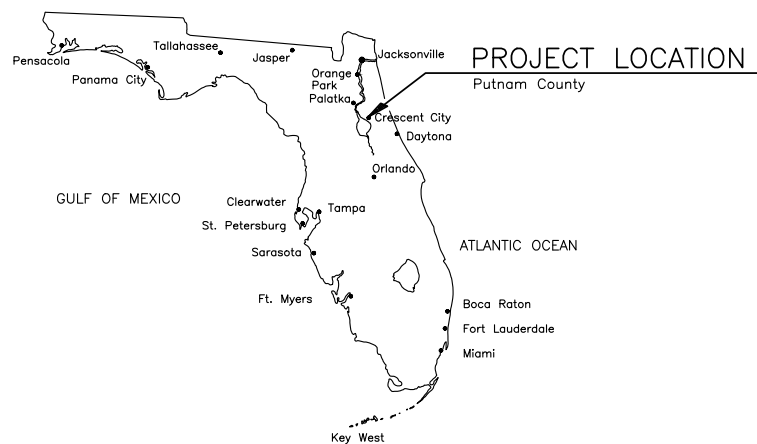
FOR

CITY OF CRESCENT CITY, FLORIDA

M & A Project No. 9318-64-1

FDEP Agreement No. LPA0500

SJRWMD Contract No. 38880



MICHELE MYERS
MAYOR

H. HARRY BANKS
VICE MAYOR

LISA KANE DeVITTO
COMMISSIONER

WILLIAM "B.J." LAURIE
COMMISSIONER

CYNTHIA BURTON
COMMISSIONER

CHARLES RUDD
CITY MANAGER

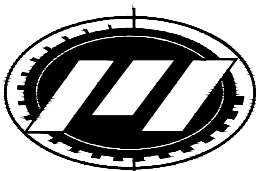
ROBERT PICKENS
CITY ATTORNEY

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8	PROSPECT ST - EDGEWOOD AVE TO MAGNOLIA AVE
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VICINITY MAP



MITTAUER
& ASSOCIATES, INC.
CONSULTING ENGINEERS

580-1 WELLS ROAD, ORANGE PARK, FLORIDA 32073
TEL. (904) 278-0030 FAX. (904) 278-0840 FLORIDA RY NO. 6569

CONSTRUCTION SET

04/08/24

GENERAL NOTES

A. GENERAL CONSTRUCTION NOTES

1. Existing underground utilities have been shown from the best available information. The Contractor shall notify the proper Utility Representative prior to commencing excavation near the utility. The Contractor is responsible for locating all utilities in the path of construction. Contractor shall field determine the location, size, and depth of all existing piping. The Contractor shall call the Sunshine State One center (1-800-432-4770).
2. It shall be the sole responsibility of the Contractor to locate and avoid all utilities, structures, and obstructions both above and below the ground surface. All damages resulting from the Contractor's failure to comply with this requirement shall be repaired at the Contractor's expense.
3. Contractor is responsible for supporting/protecting & maintaining all existing improvements (i.e., utilities, utility poles, structures, pavement, sidewalks, monitoring wells, foundations, etc.) which may be damaged/undermined or interrupted as a result of his operations. The Contractor shall immediately notify the Engineer of any such occurrences. The Contractor may be required to shore, sheet, brace, or support work to protect existing improvements. The Contractor shall maintain a minimum of 5 feet of undisturbed soil around all power poles. Where edge of utility trench would be closer than 5 feet from poles, Contractor shall be required to sheet around pole to maintain 5 feet of undisturbed soil. Where 5 feet of undisturbed soil cannot be maintained, Contractor shall make arrangements with power company to have poles held/braced. All costs associated with supporting/protecting existing improvements shall be borne by the Contractor.
4. All existing facilities (e.g., pipes, roadways, sidewalks, landscaping, structure, etc.) not indicated to be disturbed/restored which are disturbed/damaged as a result of the Contractor's operations shall be restored to a condition equal to or better than that which existed prior to construction, at Contractor's expense.
5. Horizontal and vertical controls are subject to adjustments in the field if necessary to avoid utility conflicts upon approval of the Engineer or his representative. Contractor shall not adjust location of pipe or other facilities (either vertically or horizontally) without approval of the Engineer or his representative.
6. Contractor shall provide constant slope between indicated pipe invert elevations, unless otherwise directed by Engineer.
7. The Contractor shall at all times conduct his operations so as to interfere as little as possible with the existing facilities. The Contractor shall develop a program in cooperation with the Owner's operating staff which shall provide for the construction of an putting into service the proposed work in the most orderly manner possible. All work of connection with, cutting into and reconstruction of existing facilities shall be planned so as not to interfere with the existing facility.
8. Contractor shall apply for and obtain FDEP Generic Permit for Large and Small Construction Activities (CGP). The Contractor shall act as the Operator of all temporary construction phase pollution prevention improvements and be responsible for their design, selection, and implementation. Schematic erosion control measures are provided in these documents and shall be the basis of the Contractor's design.
9. During any construction activity, including stabilization and revegetation of disturbed surfaces, the Contractor is responsible for the design, selection, permitting, implementation, and operation of all temporary construction phase erosion and sediment control measures required to retain on-site sediment and prevent violations of the State of Florida water quality standards. The Contractor shall use appropriate best management practices described in the State of Florida Erosion and Sediment Control Designer and Reviewer Manual, July 2013, with revisions. All turbidity/silt barriers must be in place downgradient from the construction zone prior to the start of any construction activity in general accordance with the plans and details provided in these documents. The barriers shall remain in place until all the disturbed areas have been properly stabilized.
10. Unsuitable materials exposed during construction under utility pipes or structures shall be removed and replaced with selected backfill, properly compacted, in accordance with specifications.
11. Where existing culverts must be removed to construct the project, the Contractor shall reinstall the culverts as soon as practical. If the culverts are not suitable for reuse, the Contractor shall, at his expense, extend/replace the culverts as required with similar materials to accommodate the work while maintaining existing invert elevations for all extended/replaced culverts. Provide all required excavation and fill necessary to extend/replace the culvert. The Contractor shall ensure, at his expense, temporary measures are provided to maintain existing drainage patterns.
12. The Contractor shall temporarily relocate the postal mail boxes and clusters as required for the construction of the project and reinstall them in their original locations upon completion of the construction. All work associated with the mail boxes or clusters shall be in accordance with the requirements of the U.S. Post Masters Office.
13. Only that excavation that can be backfilled by the end of the work day will be excavated. No open trench will be allowed to remain after work ends for the day, unless approved by Engineer or governing authority.
14. All areas disturbed by construction shall be regraded and sodded.
15. Until final acceptance of the work by the Owner, it shall be under the charge and custody of the Contractor and he shall take every precaution against injury or damage to the work by the action of the elements or from any other cause whatsoever, arising either from the execution or from the non-execution of the work. The Contractor shall rebuild, repair, restore and make good without any additional compensation, oil injury or damage to any portion of the work occasioned by any of the above causes before its completion and acceptance.
16. The Contractor shall employ the services of a Florida licensed surveyor who shall be responsible for laying out the work and for establishing the following: project temporary benchmarks; elevation lines and grades; and right-of-way and easement limits for construction. Contractor shall also employ the services of a Florida licensed surveyor to obtain the required record drawing information.
17. The Contractor shall employ a land surveyor, registered in the State of Florida, to reference property and restore property corners and land markers which may be disturbed as a result of Contractor's operations.
18. Project Benchmark: Project Benchmark: All elevations on these plans are relative to the North American Vertical Datum of 1988 (NAVD 88) based on National Geodetic Survey Benchmark PID A16986 having an elevation of 2.99 feet. See Sheet No. 3 for location and description of Benchmark.
19. Topographic information based on a survey by Mittauer & Associates, Inc., performed on 09/12/22, job no. 9318-61-1.
20. Horizontal control for features on the plans are relative to the NAD83 Florida State Planes, East Zone, US Foot coordinate system.

B. GENERAL WATER SYSTEM NOTES

1. All water line work shall be in accordance with FAC 62-555, Permitting and Construction of Public Water Systems. All materials that come in contact with drinking water shall be in conformance with ANSI/NSF International Standard 61 and shall be installed in accordance with applicable AWWA Standards and/or the manufacturer's recommendations.
2. The Contractor shall coordinate the construction of the water facilities with all other construction. The Contractor shall verify the location and elevation of the proposed water main connection(s) prior to commencing work. It shall be the Contractor's responsibility to notify the Owner and the Engineer of any discrepancies.
3. Water lines are designed to finished grade and shall be protected until finished work is complete.
4. All workmanship and materials associated with water mains shall conform to the latest standards and specifications of the local utility company.
5. Refer to specifications and FDEP rules for separation requirements between potable water mains and other utilities.
6. All existing water main valves which are made inactive as the result of this project shall have their valve boxes removed and the disturbed roadway or grassed area restored. Valve boxes which are in paved areas shall have the cover removed and the section shall be filled with asphalt or flowable fill with the surface painted to match the surrounding pavement.
7. The location of water services on the plans are approximate. Actual location of services shall be determined in the field by location of existing water lines and as directed by the Engineer and the Owner.
8. No connection to the existing potable water system shall be allowed until all proposed water lines have been pressure tested, disinfected and cleared for service. Pressure testing shall be in accordance with AWWA C600 for DI mains or AWWA C605 for PVC mains. All water lines shall be disinfected in accordance with AWWA C651 and DEP requirements. As a minimum, successful bacteriological test shall be performed on two consecutive days at the point of tie-in, at junctions, along the water line route at 1,200' spacing, and at the terminal end of the line extension.
9. Existing water services and water meters will be abandoned. The contractor shall coordinate with the customer to schedule the switchover. The existing meter and meter box shall be removed and disposed of by the Contractor. The replacement water service will include all new components (service saddle, valves, coupling, water meter, meter box, etc.) to the point of connection with the customer's existing plumbing. The Contractor is responsible for locating and connecting all existing water services to the new main with replacement services.

C. PAVEMENT STRIPING AND SIGNAGE NOTES

1. Unless otherwise noted on the drawings, all existing signs removed by the construction activity, shall be restored to their original position prior to completion of the project. Any signs damaged during construction shall be replaced at the Contractor's expense.
2. All signs and pavement markings shall conform to the Manual on Uniform Traffic Control Devices (MUTCD) and the Florida Department of Transportation Roadway and Traffic Design Standards, latest editions.
3. Sign assembly locations, shown on the plans, which are in conflict with lighting, utilities etc. may be adjusted slightly as directed by the Engineer.
4. Existing signs to be permanently removed shall become the property of the Contractor and disposed of at his expense unless claimed by Owner or governing authority.
5. All pavement striping within Right-of-Way or easements, as well as all stop bars, crosswalks, messages and directional arrows (regardless of location) shall be lead free, thermoplastic pavement markings (FDOT spec. section 711). All other striping shall be reflective paint (FDOT spec. section 710) unless noted otherwise on the drawings or in the project specifications.
6. The aluminum column (post) & connection design shall adhere to FDOT Index 700-010 and the following criteria:
- mounting height = 8' maximum
 - sign(s) area = 25 sq. ft. maximum
 - sign(s) width: single = 36" maximum
 - dual = 48" maximum
7. All posts shall be installed plumb.
8. All hardware shall be stainless steel (ASTM F593, ASTM F594, Alloy Group 2, Condition A, CW2 or SH4).
9. All signs furnished under this contract shall be permanently affixed with the date they were fabricated.

D. MAINTENANCE OF TRAFFIC NOTES

1. Contractor shall provide all Maintenance of Traffic (MOT) plans and/or schematics as required per the MUTCD, FDOT, and/or local jurisdiction to obtain R/W permit(s). Standard Index Drawings are provided for reference purposes only. Final MOT plans are the Contractor's responsibility per their construction approval and shall be implemented at their expense.
2. Contractor shall maintain vehicular access to all residences at the end of each workday. No roadway/driveway shall be blocked to vehicular traffic for more than a two (2) hour period.
3. Contractor shall maintain single lane access, at a minimum, at all times. Contractor shall provide detours and/or temporary roadway as necessary. Contractor shall provide all necessary flagging.
4. Contractor shall confine his active work area to no more than 100 feet at a time.
5. The roadway shall be restored to at least a limrock surface before it is reopened to traffic, and before the Contractor moves on to the next construction zone.
6. Dust control measures shall be implemented on all unpaved surfaces until paved.

E. TREE PROTECTION

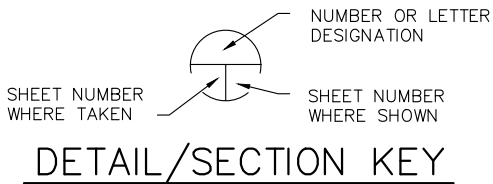
1. The design intent is to preserve all existing trees within the project corridor. See Technical Specifications 02115 for requirements. No tree shall be removed or trimmed without the City Manager's approval.

LEGEND

PROPOSED	EXISTING	
-- 8" SAN --		SANITARY SEWER
-- 4" FM --		SANITARY FORCE MAIN
MH	MH	MANHOLE
		VALVE
-- 6" W --		WATER MAIN (CONSTRUCTED)
-----	-- 6" W --	WATER MAIN (DIRECTIONAL DRILL)
		FIRE HYDRANT
		WATER SERVICE (BASE)
		WATER SERVICE (ADDITIVE ALTERNATE)
		TEMPORARY SAMPLE POINT
		TELEPHONE PEDESTAL
		MAIL BOX
18" RCP	18" RCP	STORM DRAIN PIPE
		STORM DRAIN STRUCTURE
84.0	84	GRADE CONTOURS
63.00		SPOT ELEVATIONS
		POWER POLE/ W/ANCHOR
		UTILITY POLE, LIGHT POLE
-- BT --		BURIED TELEPHONE
-- FO --		FIBER OPTIC CABLE
CTV		CABLE TELEVISION
-- OHE --		OVERHEAD ELECTRIC
-- GAS --		GAS LINE
-- SWALE --		SWALE
-- X -- X --		FENCING
		ASPHALT PAVEMENT OR IMPROVEMENT
		CONCRETE PAVEMENT OR SIDEWALK
		LIMITS OF MILLING AND OVERLAY
		STABILIZED ROADWAY OR DRIVEWAY
		LIMITS OF REMOVAL
		OVERLAND FLOW DIRECTION
		TEMPORARY SILT FENCE
		LIMITS OF WOODS
		TREE
		TREE TO BE REMOVED
-- X --		TEMPORARY TREE BARRICADE

ABBREVIATIONS

ABBREVIATION	DESCRIPTION		
ABS	ACRYLONITRILE BUTADIENE STYRENE	MAINT	MAINTAIN OR MAINTENANCE
ABV	ABOVE	MAN	MANUAL(LY)
ACP	ASBESTOS CEMENT PIPE	MAX	MAXIMUM
AFF	ABOVE FINISH FLOOR (REF. ELEV.)	MES	METERED END SECTION
AFG	ABOVE FINISH GRADE (REF. ELEV.)	MECH	MECHANICAL
ALUM	ALUMINUM	MFR	MANUFACTURE
ALT	ALTERNATE	MG	MILLION GALLON(S)
APRX	APPROXIMATE(LY)	MGD	MILLION GALLONS PER DAY
ARCH	ARCHITECTURAL	MH	MANHOLE
ARV	AIR RELEASE VALVE	MIN	MINIMUM; MINUTE(S)
ASPH	ASPHALT	MISC	MISCELLANEOUS
ASSEMB	ASSEMBLY	MJ	MECHANICAL JOINT
BE	BURIED ELECTRIC	MON	MONUMENT
BF	BOTTOM FACE	MPH	MILES PER HOUR
BFD	BURIED FIBER OPTIC	MPT	MALE PIPE THREAD
BRV	BUTTERFLY VALVE	MTD	MOUNTED
BTUM	BITUMINOUS OR BITUMASTIC	N	NORTH
B	BASELINE	NE	NORTHEAST
BLDG	BUILDING	NIC	NOT IN CONTRACT; NOT INCLUDED
BLK	BLOCK	NOM	NOMINAL
BOT	BOTTOM	No	NUMBER
BT	BURIED TELEPHONE--CABLE	NPT	NATIONAL PIPE THREAD
BV	BALL VALVE	NPW	NON-POTABLE WATER
C, CND	CONDUIT	NTS	NOT TO SCALE
CAIV	CABLE TELEVISION	NW	NORTHWEST
C	CAST IRON	N/A	NOT APPLICABLE
CIP	CAST IRON PIPE, CAST-IN-PLACE	OA	OVERALL DIMENSION
CLF	CENTERLINE	ON	ON CENTER
CL	CHAIN LINK FENCE	OD	OUTSIDE DIAMETER
CLR	CLEAR OR CLEARANCE	OF	OUTSIDE FACE
CM	CONCRETE MONUMENT	OH	OVER HEAD
CMP	CORRUGATED METAL PIPE	OHE	OVER HEAD ELECTRIC
CMU	CONCRETE MASONRY UNIT	P	PAVEMENT
CNR	CORNER	PC	POINT OF CURVE
CONC	CONCRETE	PI	POINT OF INTERSECTION
CONT	CONTINUOUS	PL	PLATE
COORD	COORDINATE	P/L	POUNDS PER LINEAR FOOT
CPLG	COUPLING	PB	POINT OF BEGINNING
CPVC	CHLORINATED POLYVNYL CHLORIDE	PP	POWER POLE
CUL	CULVERT	PPM	PARTS PER MILLION
CV	CHECK VALVE	PSF	POUNDS PER SQUARE FOOT
QV	QUICK VALVE	PSI	POUNDS PER SQUARE INCH
C/C	CENTER TO CENTER	PT	POINT OF TANGENCY
DBL	DOUBLE	PVC	POLYVNYL CHLORIDE
DI	DUCTILE IRON	PWT	POTABLE WATER LINE
DIA	DIAMETER	QTY	QUANTITY
DIM	DIMENSION	R, RAD	RADIUS
DI	DUCTILE IRON PIPE	RCP	REINFORCED CONCRETE PIPE
DOT	DEPARTMENT OF TRANSPORTATION	RD	ROAD
DWG	DRAWING	RED	REDUCER
E	EAST	REBAR	REINFORCING STEEL BARS
EA	EACH	REF	REFERENCE
EF	EACH FACE	REINF	REINFORCING(D)(ING)(MENT)
EL, ELEV	ELEVATION	REQD	REQUIRED
EPC	ELECTRIC(IAL)	RR	RAILROAD
EDGE	EDGE OF PAVEMENT	RT	RIGHT
ERCP	ELLIPTICAL REINFORCED CONCRETE PIPE	R/W	RIGHT-OF-WAY
ESMT	EASEMENT	S	SEWER; SOUTH
EW	EACH WAY	SAN	SANITARY SEWER
EXP	EXPANSION	SCHD	SCHEDULE
EX, EXIST	EXISTING	SE	SOUTHEAST
EXT	EXTERIOR	SF	SQUARE FOOT OR FEET
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION	SHT	SHEET(ED)(ING)
FH	FIRE HYDRANT	SQ	SQUARE
FIG	FIGURE	SR	STATE ROAD
FIN	FINISH(ED)	SS	SANITARY SEWER, STAINLESS STEEL
FIN GR	FINISH GRADE	ST	STREET
FJ	FLANGED JOINT	STA	STATION
FM	FORCE MAIN	STD	STANDARD
FRP	FIBERGLASS REINFORCED PLASTIC	STRUCT	STRUCTURAL
FT	FOOT OR FEET	SW	SOUTHWEST
F/F	FACE TO FACE	S/W	SEWER
G	GAS MAIN	TBM	TEMPORARY BENCH MARK
GAL	GALLON(S)	TC, TOC	TOP OF CONCRETE
GALV	GALVANIZED	TEL	TELEPHONE
GIP	GALVANIZED IRON PIPE	TEMP	TEMPORARY
GR	GRADE	T	TEMP
GS	GALVANIZED STEEL	THD	THREAD(ED)
GSP	GALVANIZED STEEL PIPE	THK	THICK(NESS)
GV	GATE VALVE	TOB	TOP OF BANK
HB	HOSE BIBB	TOE	TOE OF SLOPE
HDPE	HIGH-DENSITY POLYETHYLENE	TOS	TOE OF SLOPE; TOP OF STEEL
HOT	HORIZONTAL	TP	TELEPHONE POLE, TOP OF PAVEMENT
HORIZ	HORIZONTAL	TP	TYPICAL
HWL	HIGH WATER LEVEL	T&B	TOP AND BOTTOM
HWY	HIGHWAY	UG	UNDERGROUND
ID	INSIDE DIAMETER	UGE	UNDERGROUND ELECTRIC
IF	INSIDE FACE	VCP	VITRIFIED CLAY PIPE
IN	INCH(ES)	VERT	VERTICAL
INF	INFLUENT	VOL	VOLUME
INT	INTERSECTION	W	WATER
INV	INVERT	WM	WATER MAIN
IP	IRON PIPE	WS	WATER SURFACE
IPS	INTERNATIONAL PIPE STANDARD; IRON PIPE SIZE	WWF	WELDED WIRE FABRIC
LF	LINEAR FEET	WWM	WELDED WIRE MESH
LR	LONG RADIUS	W	WITH
LWL	LOW WATER LEVEL	W/O	WITHOUT
		YD	YARD(S)



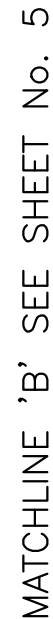
DETAIL/SECTION KEY

PROJECT CONTACTS

TYPE	ORGANIZATION	ADDRESS	TELEPHONE	CONTACT PERSON
LINE LOCATIONS	SUNSHINE STATE ONE--CALL OF FLORIDA, INC.	7797 N. UNIVERSITY DR., SUITE 204 FT. LAUDERDALE, FL. 33321	(800) 432-4770	CALL 48 HRS BEFORE DIGGING
INTERNET/TELEPHONE	UNITI FIBER, LLC.	200 CUMBERLAND PARK DR. ST. AUGUSTINE, FL. 32095	(904) 718-8152	BOB MENSCHING
ELECTRIC	FPL	2900 CATHERINE ST. PALATKA, FL. 32177	(561) 401-6186	JAMIE PURNELL
INTERNET/TELEPHONE	WINDSTREAM FLORIDA, INC.	206 WHITE AVE. S.E. ALACHUA, FL. 32064	(386) 462-6530	GARY CARY
CABLE T.V.	COMCAST	5934 RICHARD ST JACKSONVILLE, FL. 32216	(904) 738-0685	LARRY PAYNE
GAS	CITY OF CRESCENT CITY	3 NORTH SUMMIT STREET CRESCENT CITY, FL. 32112	(386) 698-2525 EXT. 223	JOHN TURNEY OPERATIONS/DISTRIBUTION
WATER & SEWER	CITY OF CRESCENT CITY	3 NORTH SUMMIT STREET CRESCENT CITY, FL. 32112	(386) 698-2525	KEITH HARRIS PUBLIC WORKS DIRECTOR
OWNER	CITY OF CRESCENT CITY	3 NORTH SUMMIT STREET CRESCENT CITY, FL. 32112	(386) 698-2525	CHARLES RUDD CITY MANAGER
DESIGN ENGINEER	MITTAUER & ASSOCIATES, INC.	580-1 WELLS ROAD ORANGE PARK, FL. 32073	(904) 278-0030	JARROD P. PETROHOVICH, P.E.

CITY OF CRESCENT CITY
Prospect St. Water Main Replacement
General Notes, Abbreviations and Legend
Putnam County, Florida

JOB NO.
9318-64-1
SHEET NO.



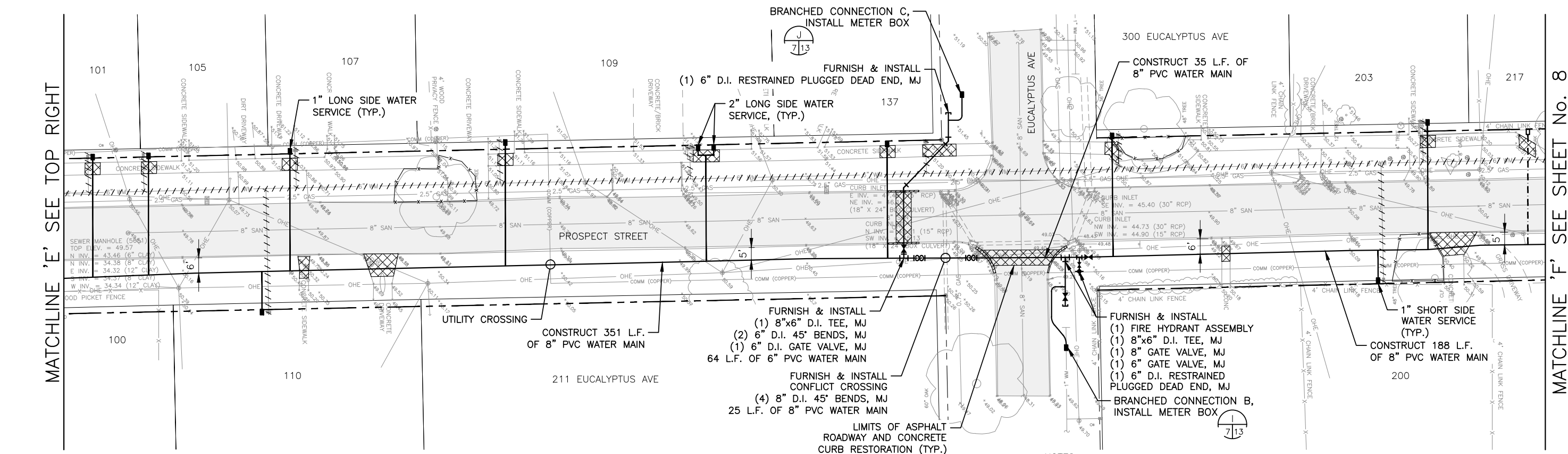
MATCHLINE 'D' SEE SHEET No. 7

COVERED CONCRETE
SIDEWALK

10.22
1.53
1.59
1.63

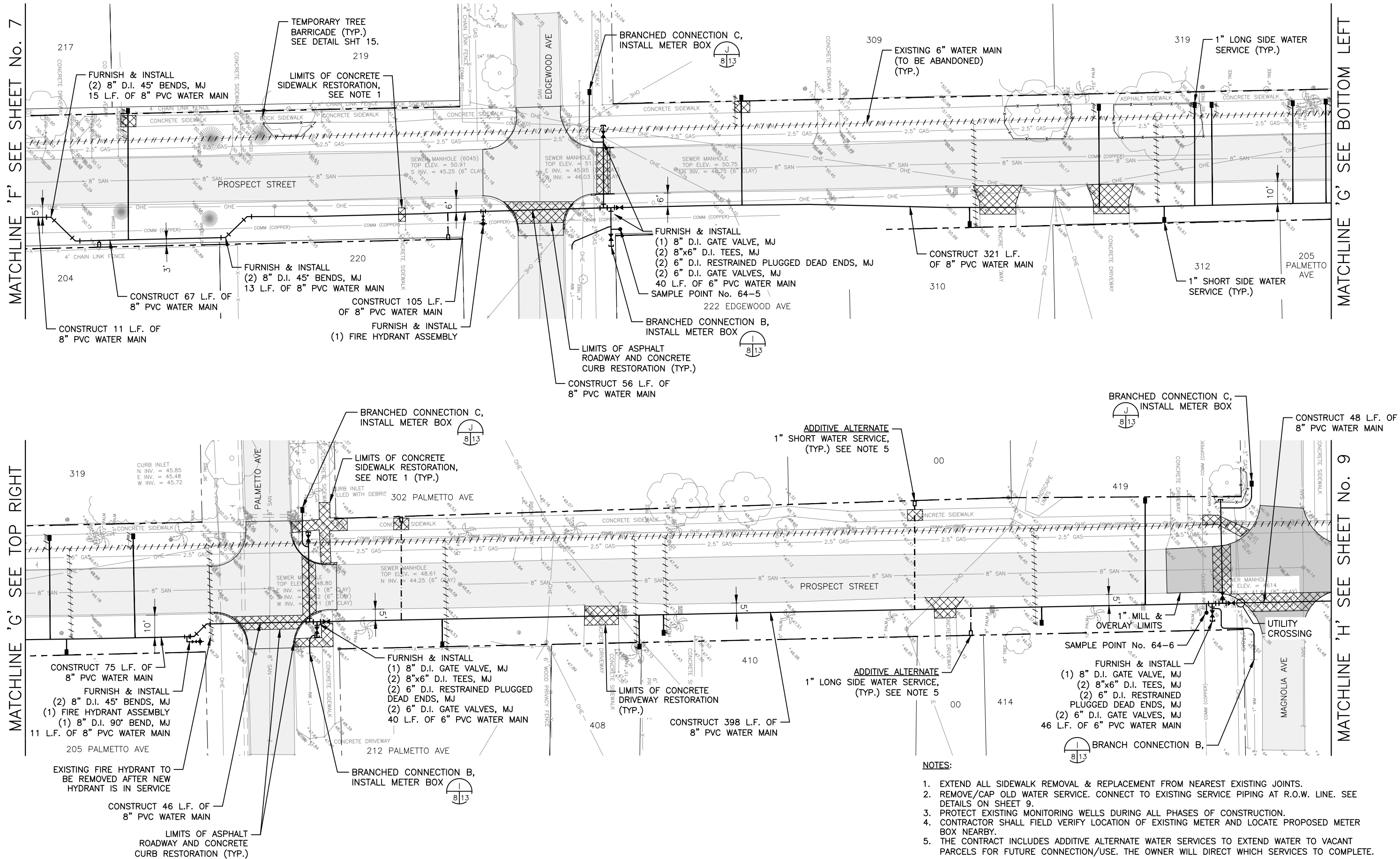
MATCHLINE 'C' SEE BOTTOM LEFT

- NOTES:**
1. EXTEND ALL SIDEWALK REMOVAL & REPLACEMENT FROM NEAREST EXISTING JOINTS.
 2. REMOVE/CAP OLD WATER SERVICE. CONNECT TO EXISTING SERVICE PIPING AT R.O.W. LINE. SEE DETAILS ON SHEET 9.
 3. PROTECT EXISTING MONITORING WELLS DURING ALL PHASES OF CONSTRUCTION.
 4. CONTRACTOR SHALL FIELD VERIFY LOCATION OF EXISTING METER AND LOCATE PROPOSED METER BOX NEARBY.
 5. THE CONTRACT INCLUDES ADDITIVE ALTERNATE WATER SERVICES TO EXTEND WATER TO VACANT PARCELS FOR FUTURE CONNECTION/USE. THE OWNER WILL DIRECT WHICH SERVICES TO COMPLETE.
 6. CONTRACTOR SHALL CONFIRM EXISTING SERVICE SIZES AND SELECT FITTINGS TO MATCH.
 7. CONFIRM EXISTING 6" WATER METER LOCATION & DEPTH PRIOR TO ORDERING MATERIALS. ADDITIONAL FITTINGS MAY BE REQUIRED.

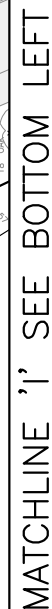



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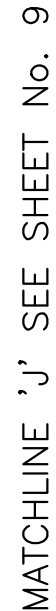
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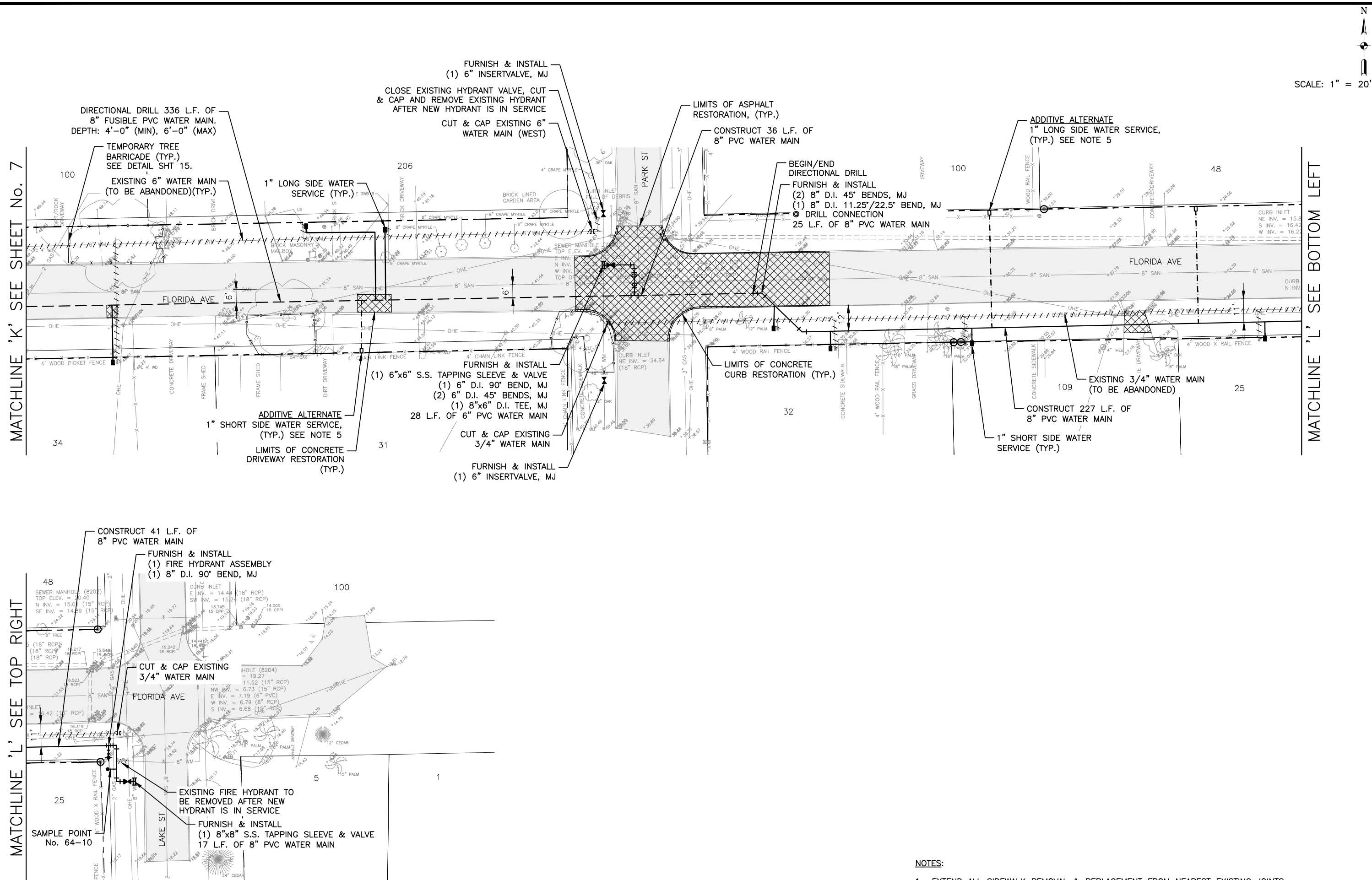
CITY OF CRESCENT CITY Prospect St. Water Main Replacement Prospect St - Edgewood Ave to Magnolia Ave Putnam County, Florida		MITTALTAUER & ASSOCIATES, INC. CONSULTING ENGINEERS 580-1 WELLS ROAD, ORANGE PARK, FLORIDA 32073 TEL. (904) 278-0030 FAX. (904) 278-0840		DESIGN: JPP DRAWN: DHS CHECKED: JRS DATE: 04/09/24 1 INCH = 20 FEET		CONFORMED PER ADDENDA NO. 1 DATE: 05/15/24 BY: MAL		REVISION DESCRIPTION	
JOB NO. 9318-64-1		SHEET NO. 8							



CITY OF CRESCENT CITY Prospect St. Water Main Replacement Prospect St - Oleander Ave to Lakeview Dr Putnam County, Florida				DESG _____ JPP _____ DRWN _____ DHS _____ PROJ _____ WGS _____ DATE 04/08/24 _____ 1 INCH _____		1 05/15/24 WAL NO DATE BY		CONFORMED PER ADDENDA REVISION DESCRIPTION	
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CITY OF CRESCENT CITY
Prospect St. Water Main Replacement
Florida Ave - Park St to Lake St
Putnam County, Florida

JOB NO.
9318-64-1
SHEET NO.



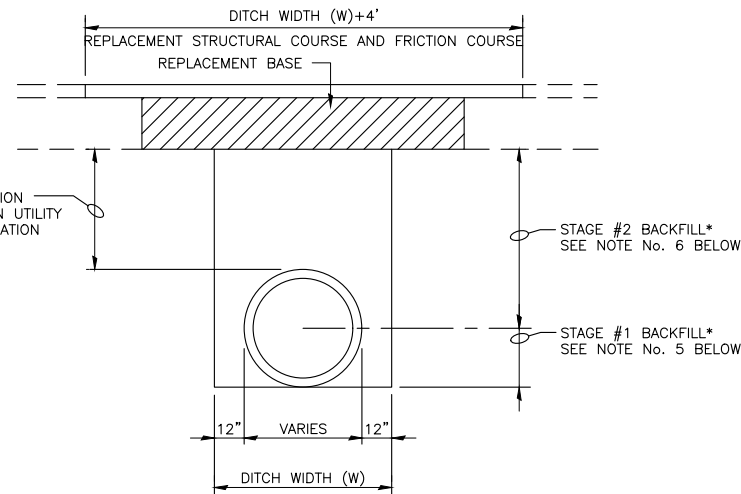
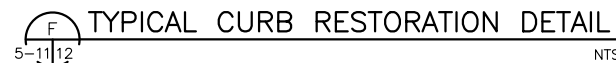
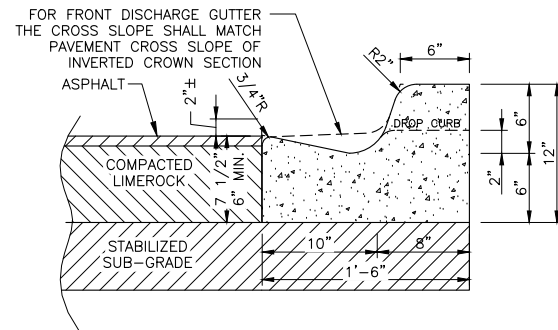
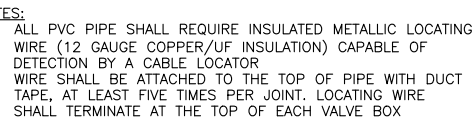
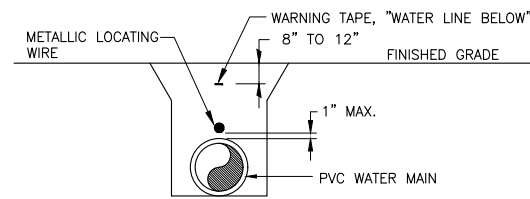
MITTAUER & ASSOCIATES, INC.
CONSULTING ENGINEERS
580-1 WELLS ROAD, ORANGE PARK, FLORIDA 32073
TEL. (904) 278-0030 FAX. (904) 278-0840
FLORIDA RY. NO. 6569

DESIGN: JPP
DRAWN: DHS
PROJ. MGR.: JRS
DATE: 04/09/24

1 05/15/24 MAL
NO DATE BY

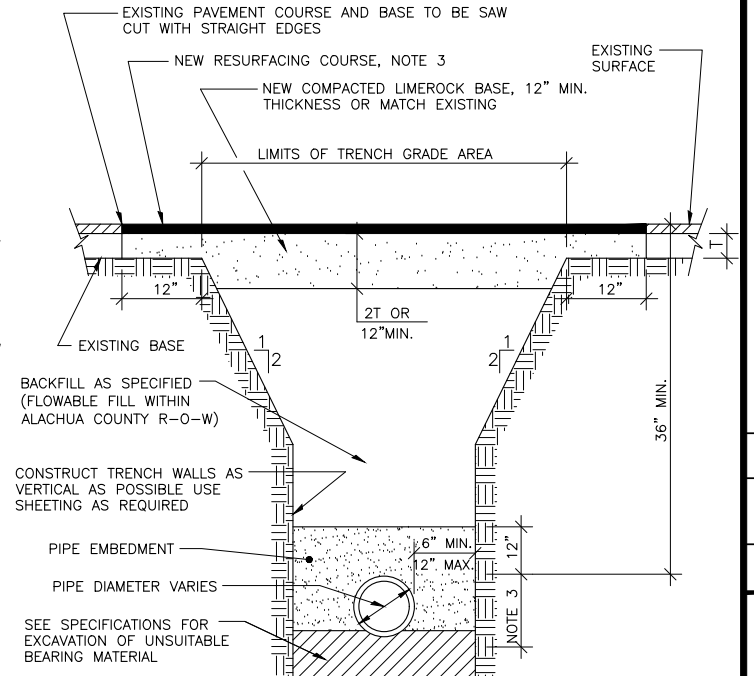
CONFORMED PER ADDENDA

REVISION DESCRIPTION



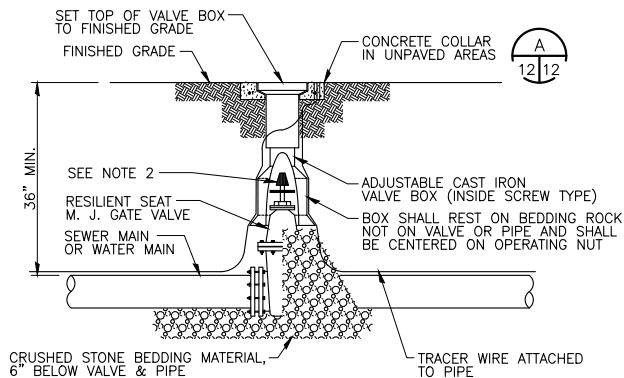
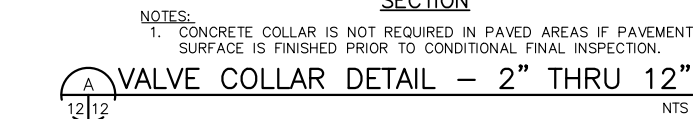
FLEXIBLE PAVEMENT RESTORATION NOTES

1. PAVEMENT SHALL BE MECHANICALLY SAWED.
2. THE REPLACEMENT ASPHALT SHALL MATCH THE EXISTING STRUCTURAL AND FRICTION COURSES FOR TYPE AND THICKNESS.
3. FLOWABLE FILL IS TO BE PLACED IN ACCORDANCE WITH SECTION 121 OF THE SPECIFICATIONS TO THE STANDARD SPECIFICATIONS FOR THE ENGINEER.
4. DO NOT ALLOW THE UTILITY BEING INSTALLED TO FLOAT. IF A METHOD IS PROVIDED TO PREVENT FLOTATION FROM OCCURRING, STAGES #1 AND #2 CAN BE COMBINED IF APPROVED BY THE ENGINEER.
5. IN STAGE #1, PLACE FLOWABLE FILL MIDWAY UP ON BOTH SIDES OF THE UTILITY. ALLOW TO HARDEN BEFORE PLACING STAGE 2.
6. IN STAGE #2, PLACE FLOWABLE FILL TO THE BOTTOM OF THE EXISTING BASE COURSE.

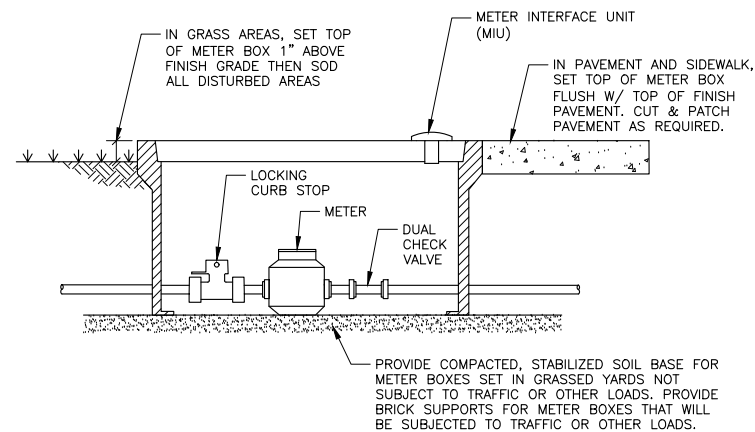
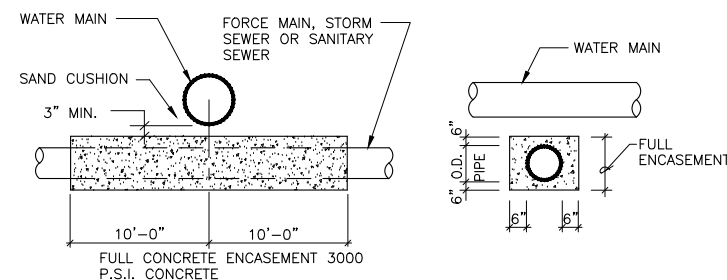


NOTES:

1. DEWATERING SHALL CONTINUE UNTIL BACKFILL IS COMPACTED AT LEAST 2 FEET ABOVE WATER TABLE.
2. SURFACE TREATED PAVEMENT JOINTS SHALL BE LAPPED AND FEATHERED.
3. PROVIDE 2 INCHES OF TYPE FC 12.5 MIX (NO RAP) ASPHALT.



- NOTES:
1. PVC EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.
 2. THE ACTUATING NUT FOR DEEPER VALVES SHALL BE EXTENDED TO A MAXIMUM OF 4 FEET BELOW FINISHED GRADE.



- NOTES:
1. METER BOX SHALL BE COMPATIBLE WITH FUTURE
AMI METER REPLACEMENT PROGRAM.

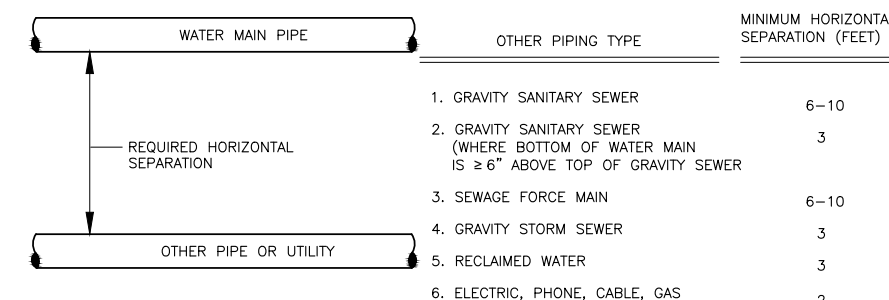


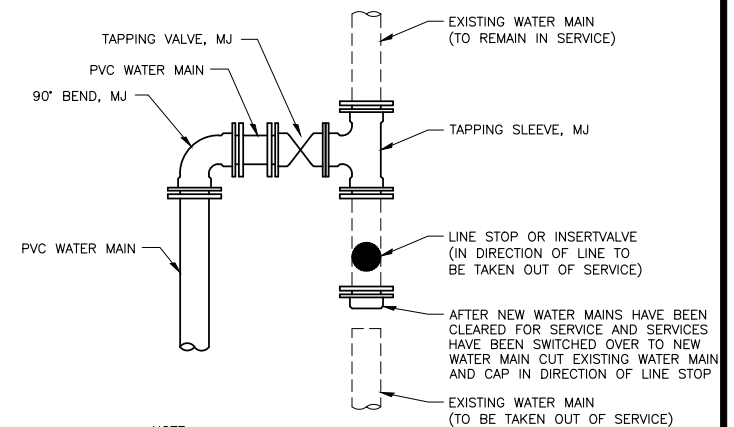
Diagram illustrating a section view of a water main on top with a joint centered over another utility pipe. The diagram shows a horizontal line representing the water main, with a vertical line indicating the joint. A note "SEE NOTE 1" points to the joint. Below the water main, a circle represents the other pipe or utility, with a vertical line passing through its center. The text "SECTION VIEW" is at the bottom.

NOTE:

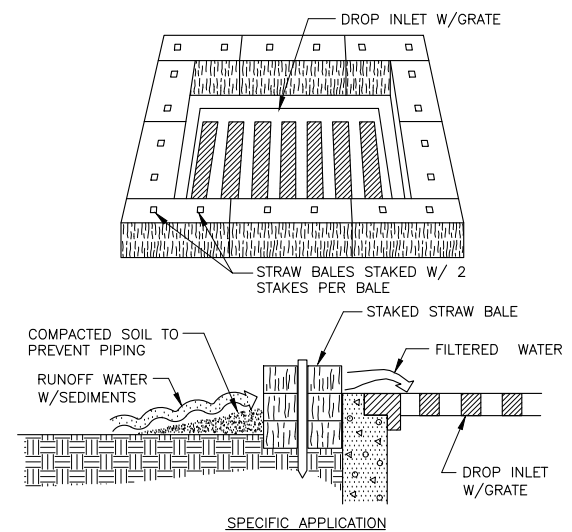
- NOTE:
1. IF THE WATER MAIN IS BELOW THE SANITARY SEWER, RECLAIMED WATER MAIN OR STORM SEWER PIPE, THEN A MINIMUM OF 12" VERTICAL SEPARATION IS REQUIRED.



- | OTHER PIPING TYPE | MINIMUM VERTICAL SEPARATION (INCHES) |
|--------------------------------|--------------------------------------|
| 1. GRAVITY SANITARY SEWER | 6 |
| 2. SEWAGE FORCE MAIN | 12 |
| 3. GRAVITY STORM SEWER | 6-12 |
| 4. RECLAIMED WATER | 12 |
| 5. ELECTRIC, PHONE, CABLE, GAS | 6 |

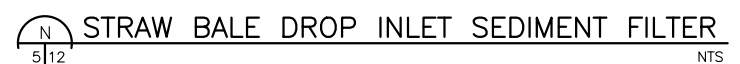


NOTE:
SEE PLAN SHEETS FOR LINE AND FITTING SIZES

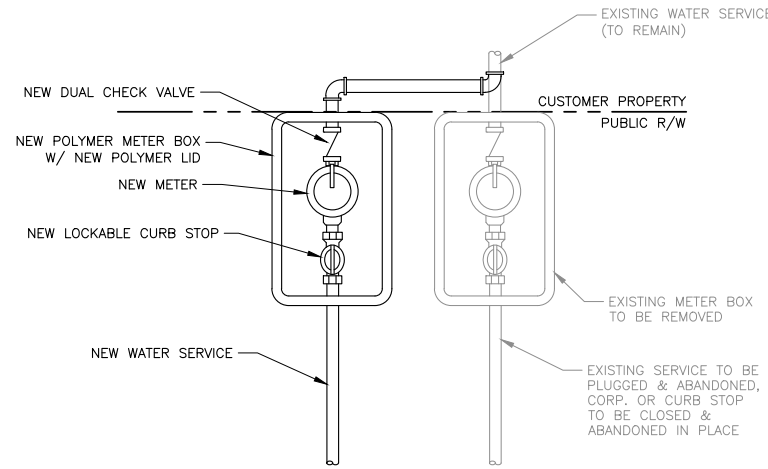


SPECIFIC APPLICATION

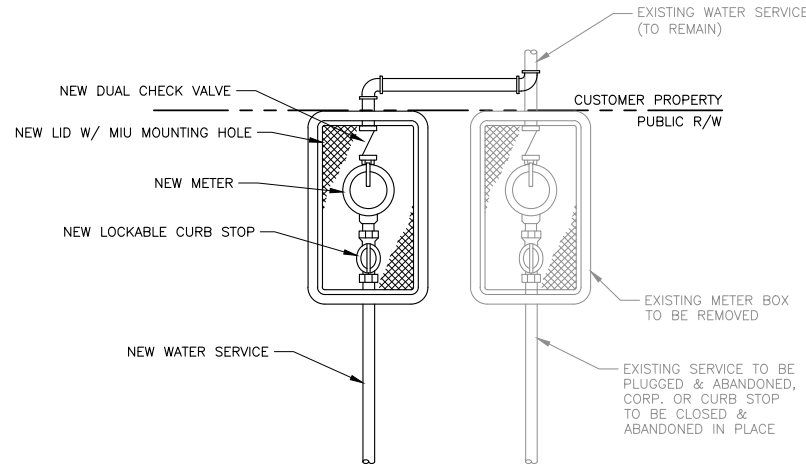
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPES NO GREATER THAN 5%) WHERE SHEET OR OVERLAND FLOWS (NOT EXCEEDING 0.5 CFS) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.



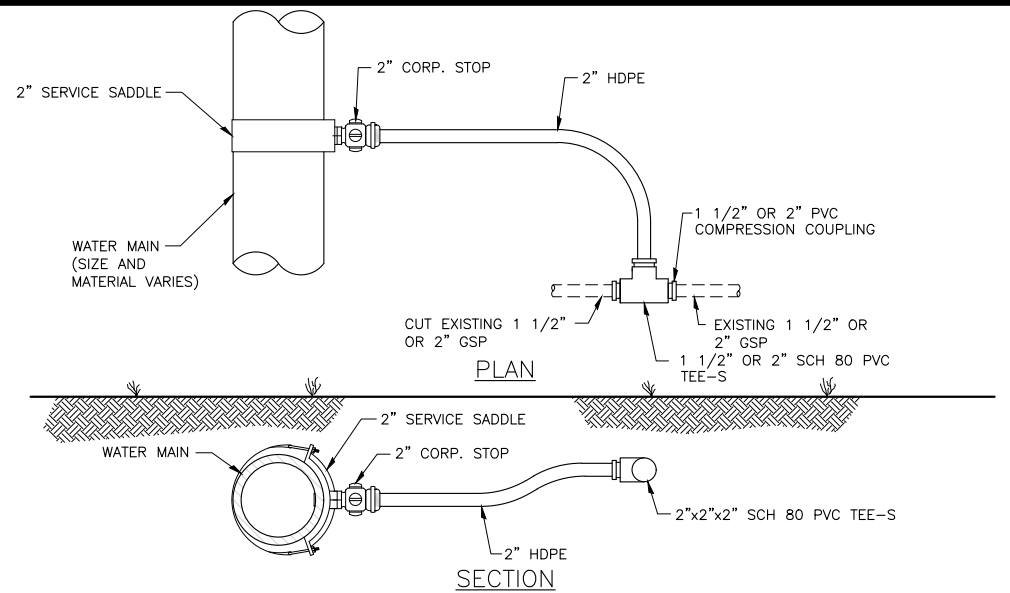
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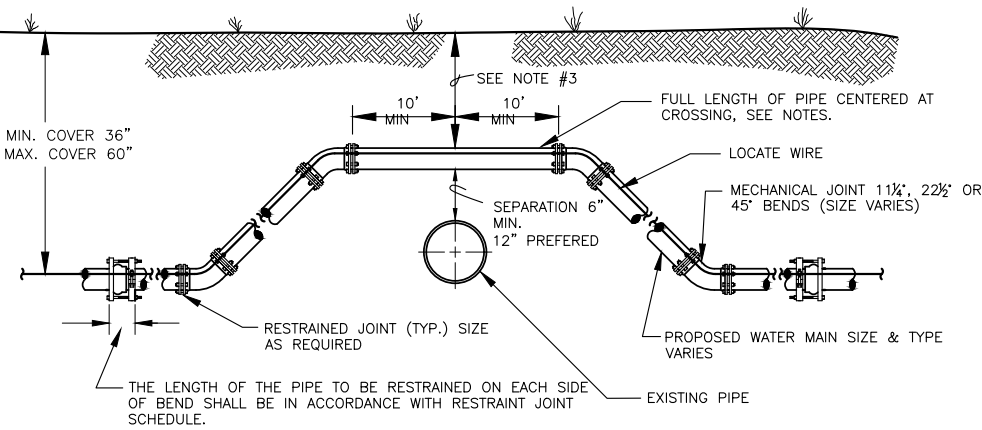
A WATER METER REPLACEMENT DETAIL
5/8" METERS | NON-TRAFFIC



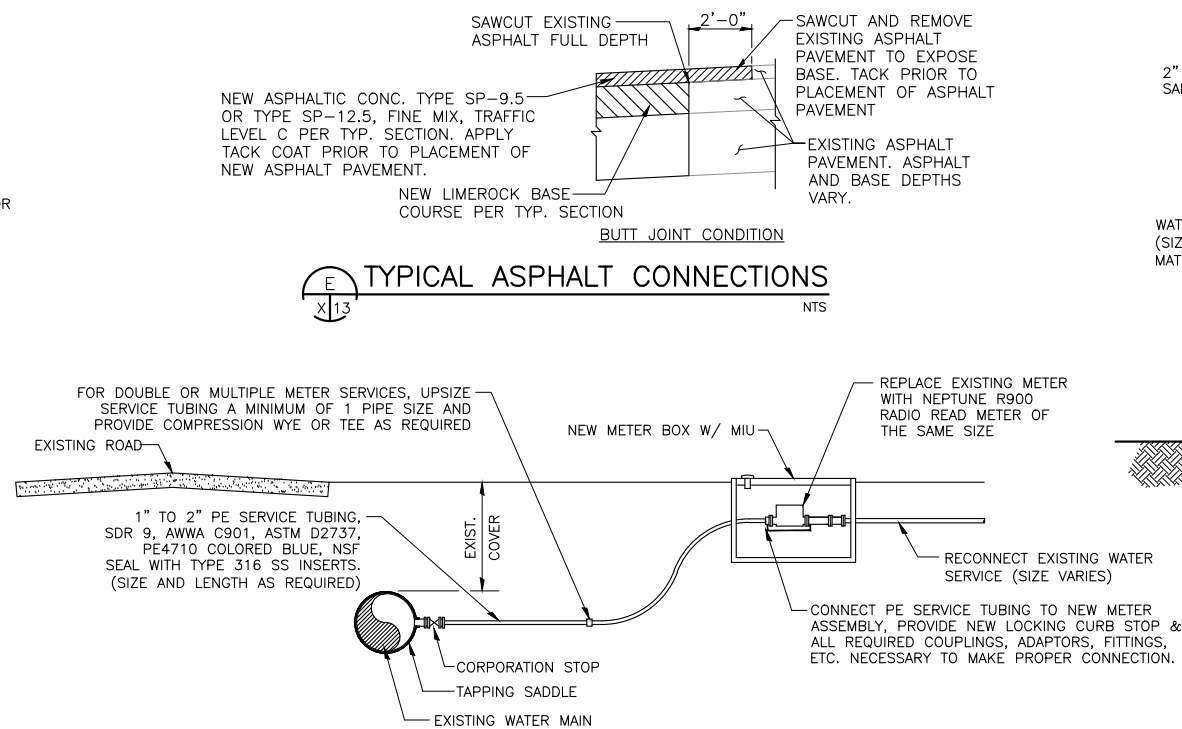
D WATER METER REPLACEMENT DETAIL
5/8" METERS | TRAFFIC AREAS



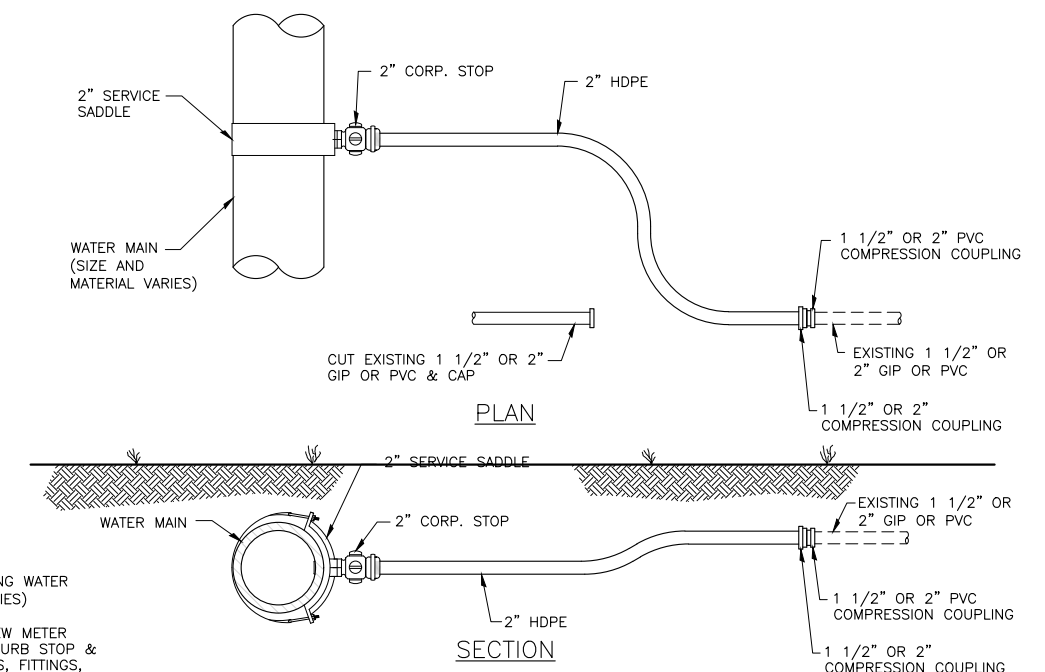
H BRANCH CONNECTION DETAIL A



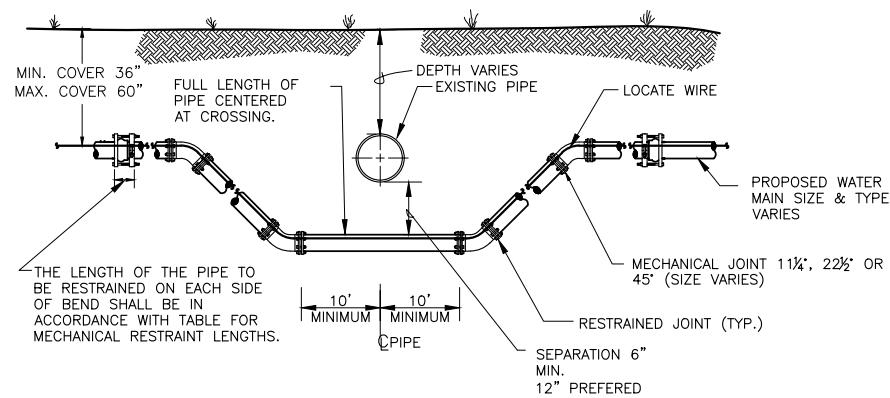
B TYPE "A" CROSSING



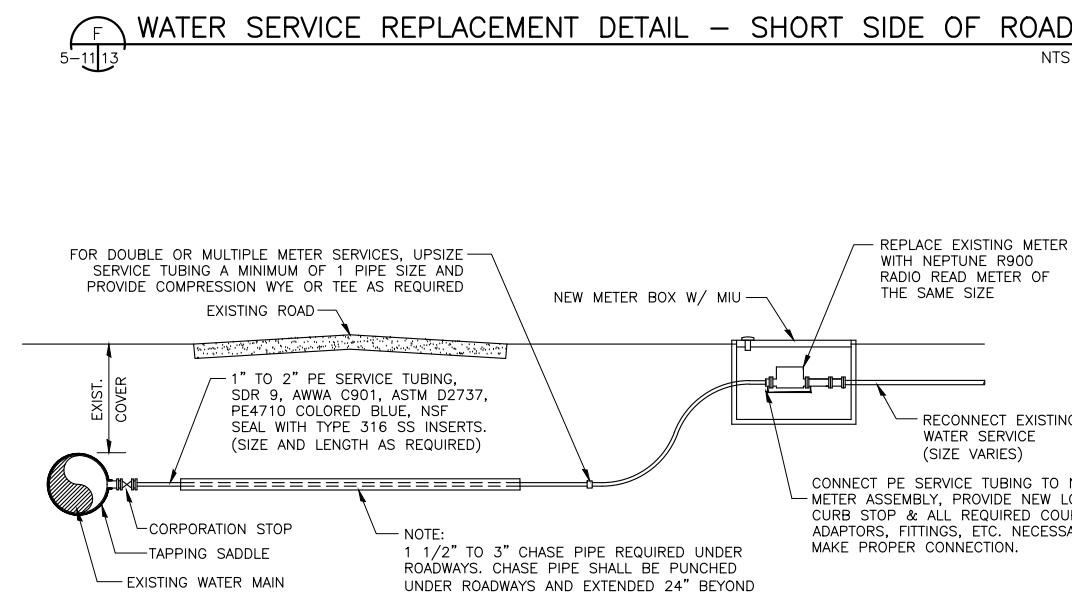
E TYPICAL ASPHALT CONNECTIONS



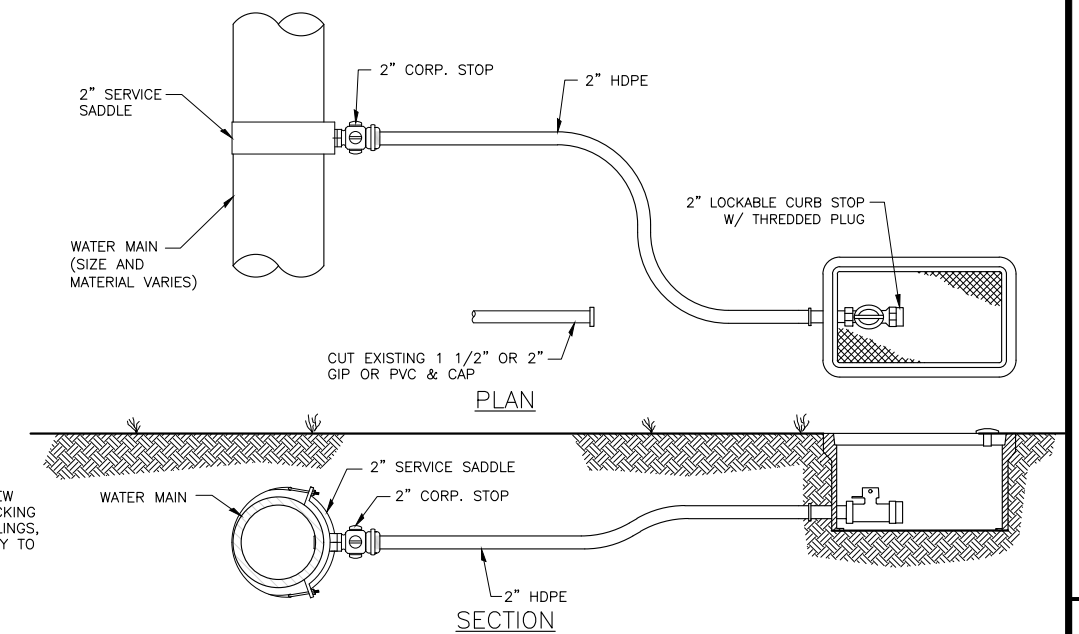
I BRANCH CONNECTION DETAIL B



C TYPE "B" CROSSING



F WATER SERVICE REPLACEMENT DETAIL - SHORT SIDE OF ROAD



J BRANCH CONNECTION DETAIL C

G WATER SERVICE REPLACEMENT DETAIL - LONG SIDE OF ROAD

DESIGN: MAR
DRAWN: DHS
CHECKED: JRS
DATE: 04/09/24

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580-1 WELLS ROAD, ORANGE PARK, FLORIDA 32073
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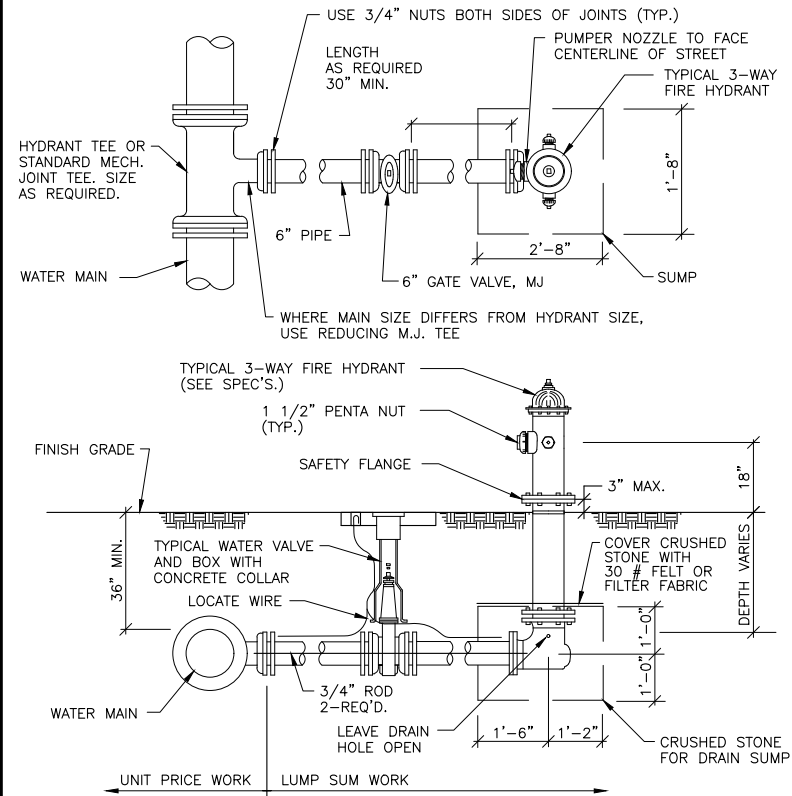
CITY OF CRESCENT CITY
Prospect St. Water Main Replacement
Typical Details
Putnam County, Florida

JOB NO.
9318-64-1
SHEET NO.

13

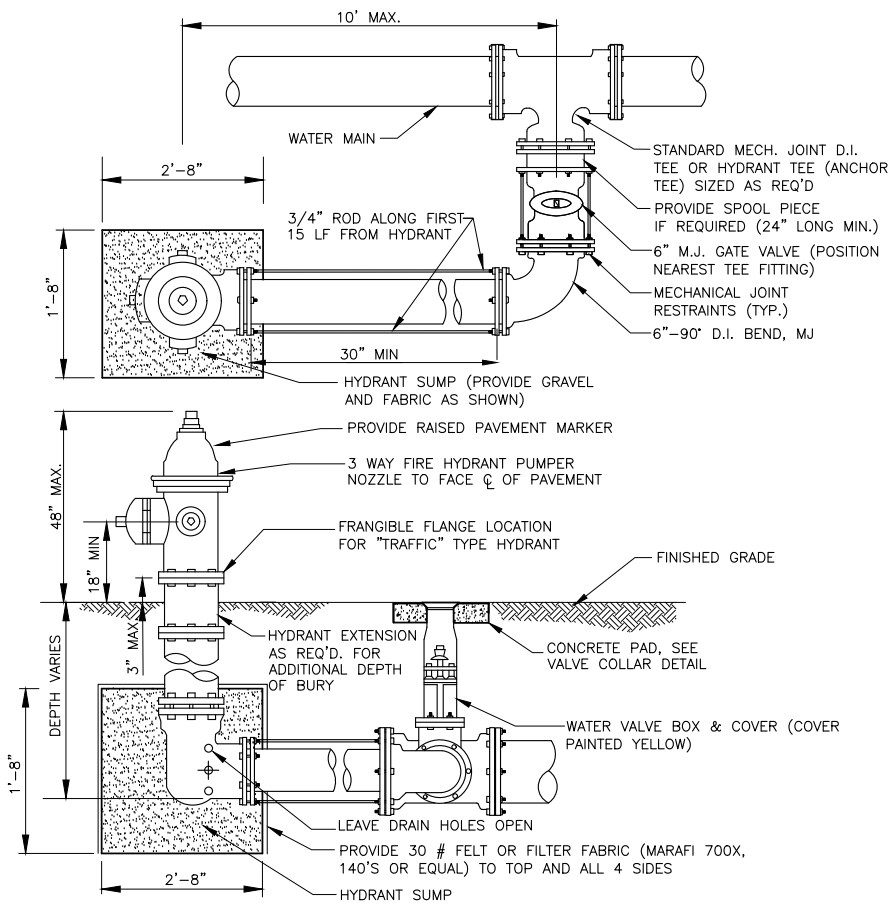
CONFORMED PER ADDENDUM
DATE: 05/15/24
BY: MAL
NO. 1

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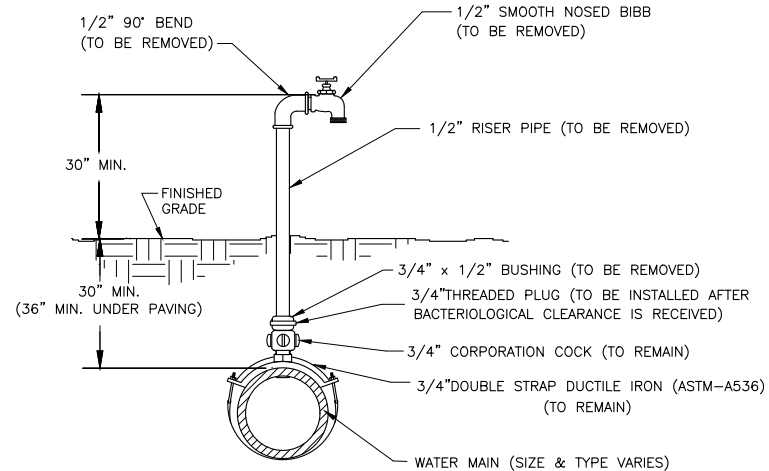


- NOTES:
1. TIE RODS, NUTS, WASHERS AND OTHER FASTENERS SHALL BE ASTM A 246 CORROSION RESISTANT STEEL, OR TYPE 316 STAINLESS STEEL.
 2. ALL PIPE, VALVES AND FITTINGS OF HYDRANT SHALL BE RESTRAINED.
 3. CONTRACTOR SHALL NOT PRE-ORDER THE FIRE HYDRANTS ASSEMBLIES WITH THE SAME LENGTH BARREL. THEY SHALL BE ORDERED AFTER THE CONTRACTOR HAS PREPARED AN INVENTORY OF LENGTHS REQUIRED TO ENSURE PROPER BURY DEPTH TO MEET ACTUAL FIELD CONDITIONS.
 4. COLOR OF HYDRANT SHALL BE MANUFACTURER'S STANDARD INDUSTRIAL FINISH. OWNER SHALL CHANGE COLOR AND PROVIDE BLUE REFLECTIVE MARKER IF DESIRED.

A
6/14
TYPICAL FIRE HYDRANT INSTALLATION
NTS

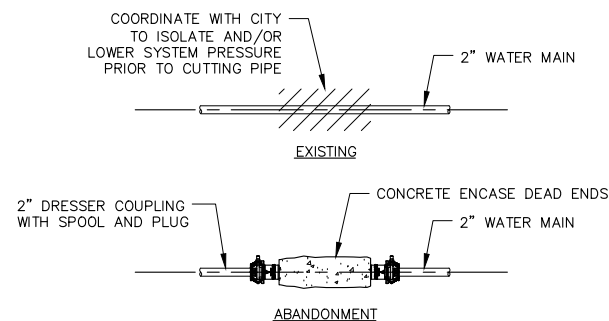


B
7/14
TYPICAL FIRE HYDRANT LIMITED SPACE INSTALLATION
NTS

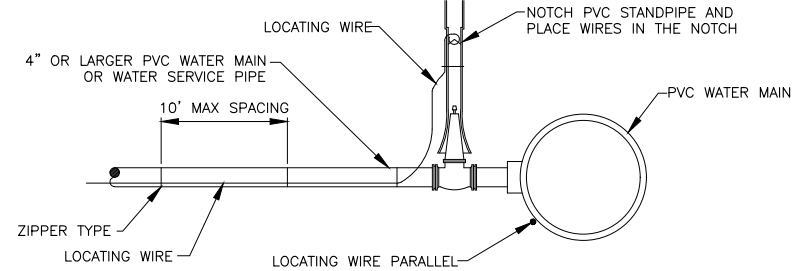


- NOTE:
- 1) LOCATION OF SAMPLE POINT BIBB SHALL NOT BE WITHIN THE ROADWAY BUT ROUTED TO THE ROADWAY SHOULDERS (NON-TRAFFIC AREAS) OF THE ROAD (WHERE APPLICABLE)
 - 2) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL PIPING & FITTINGS NOTED AFTER BACTERIOLOGICAL CLEARANCE FROM THE HEALTH DEPARTMENT.

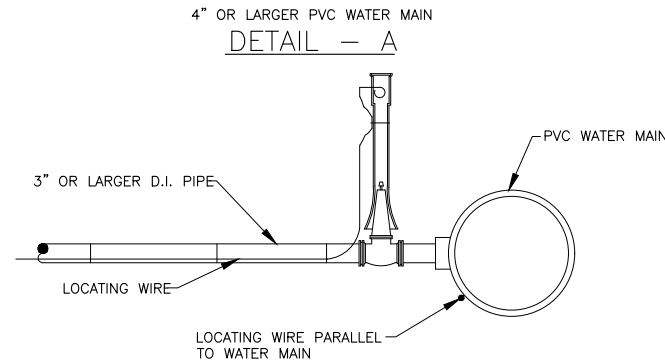
D
X14
1/2" TEMPORARY SAMPLE TAP
NTS



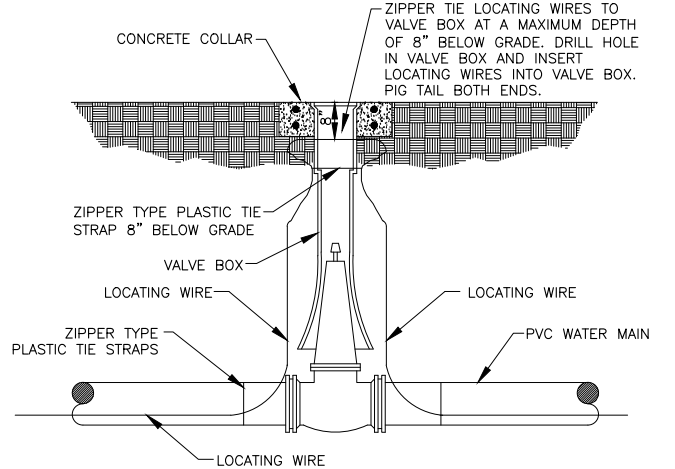
E
X14
WATER SYSTEM ABANDONMENT DETAIL
(2" OR LESS)
NTS



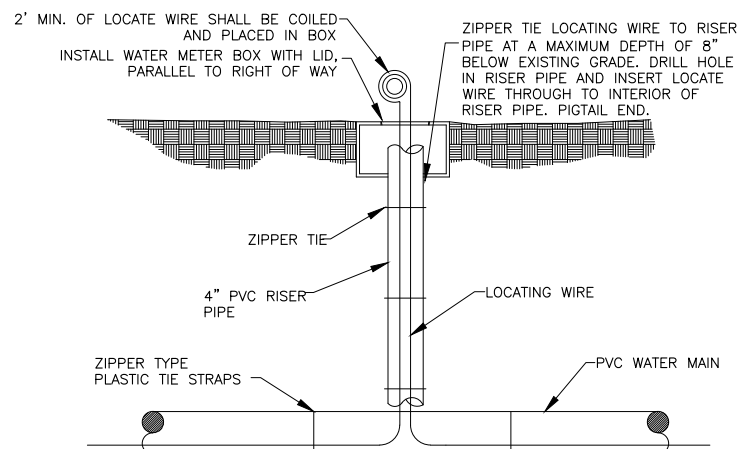
CONNECTION TO PVC MAINS
DETAIL - A



CONNECTION TO PVC MAINS
w/3" OR LARGER D.I. WATER MAIN
DETAIL - B



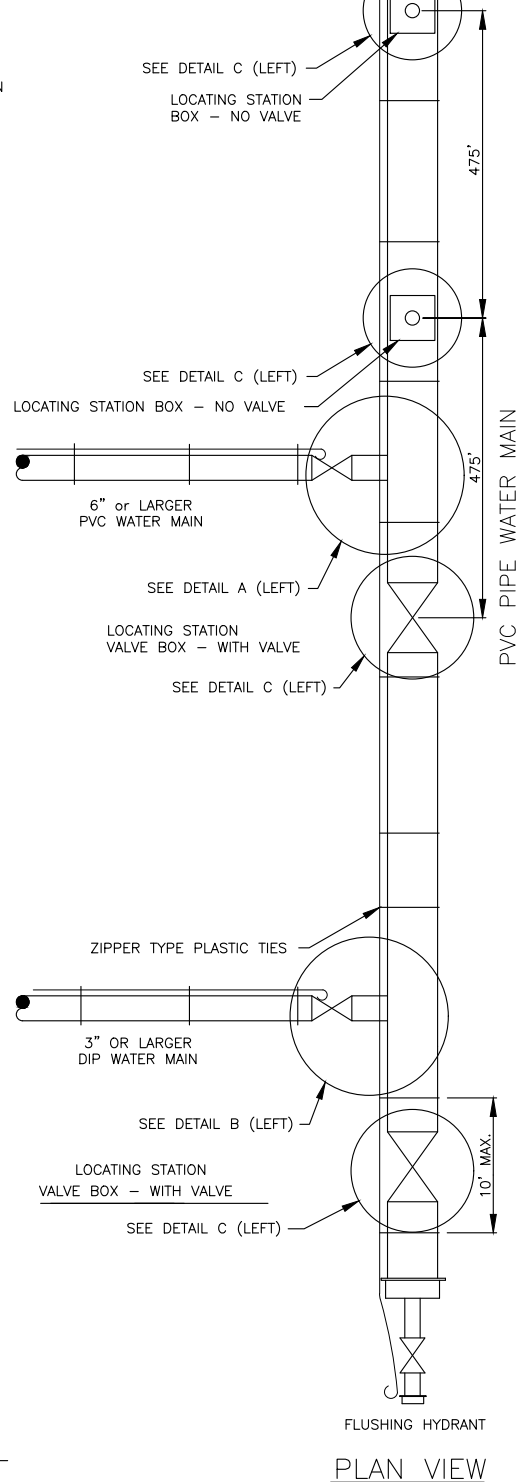
IN LINE LOCATING STATION- PVC PIPE
VALVE BOX WITH VALVE



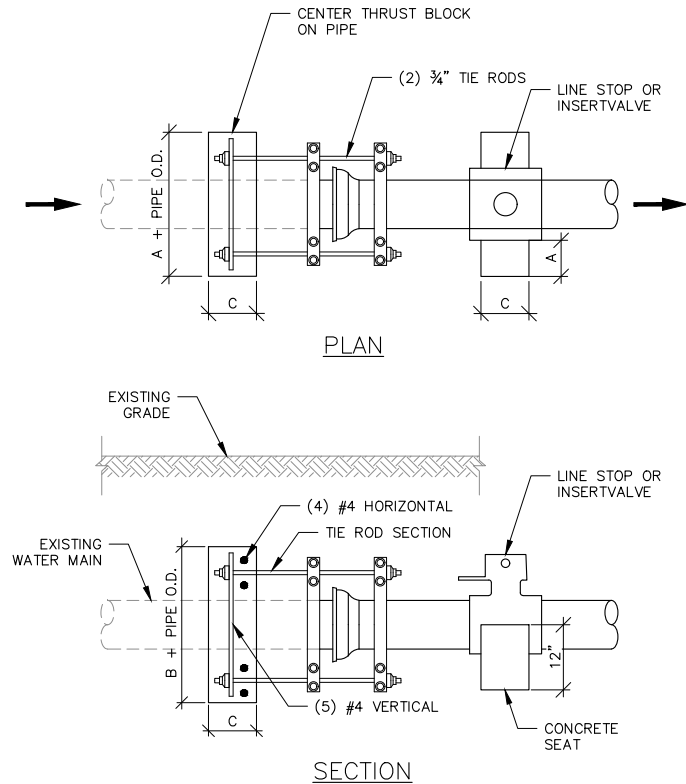
IN LINE LOCATING STATION - PVC PIPE
METER BOX
DETAIL - C

- NOTES:
1. LOCATING WIRE, SEE SPECIFICATION 02513 FOR REQUIREMENTS.
 2. BOXES SHALL NOT BE LOCATED IN SIDEWALKS OR DRIVEWAYS. LOCATE BOXES SPACING SHALL NOT EXCEED 500 FEET.
 3. WHERE IT IS NOT POSSIBLE TO LOCATE THE BOX OUTSIDE OF A PAVED STREET OR PARKING LOT THE LOCATE WIRE SHALL BE PLACED IN A VALVE BOX INSTEAD OF A ROME BOX. VALVE BOX LID SHALL BE MARKED ACCORDING TO THE TYPE OF PIPE SERVED.

F
X14
TYPICAL LOCATOR WIRING INSTALLATION DETAILS



PLAN VIEW



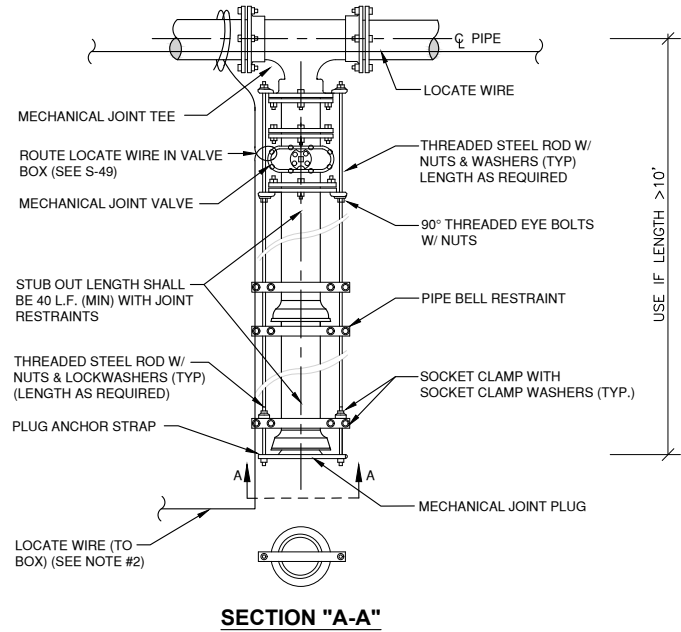
PVC O.D. (SCH 40)

6" - 6.625"

8" - 8.625"

THRUST BLOCK FOR TEES & PLUGS				
SIZE	90° BEND			S.F. BEARING SURFACE
	A	B	C	
6"	20"	24"	18"	3.33
8"	26"	32"	18"	5.78

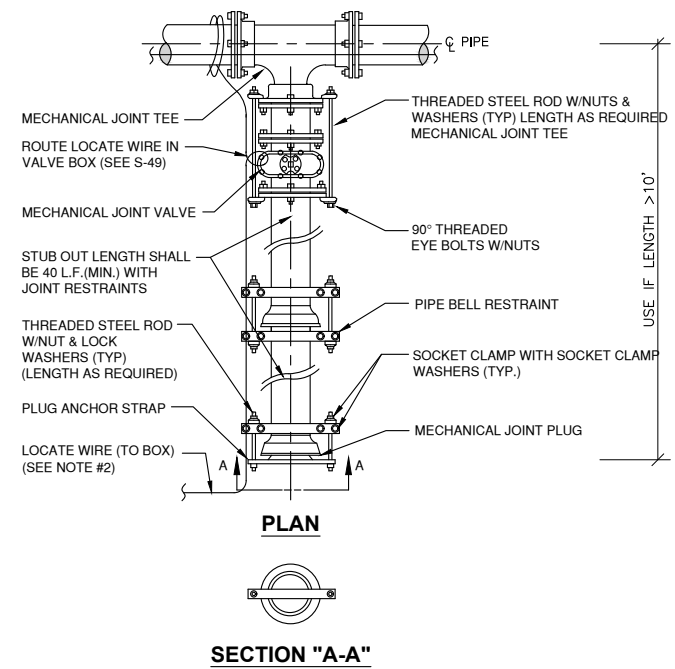
(A) LINE STOP & INSERTVALVE DETAIL
X15 NTS



- 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.

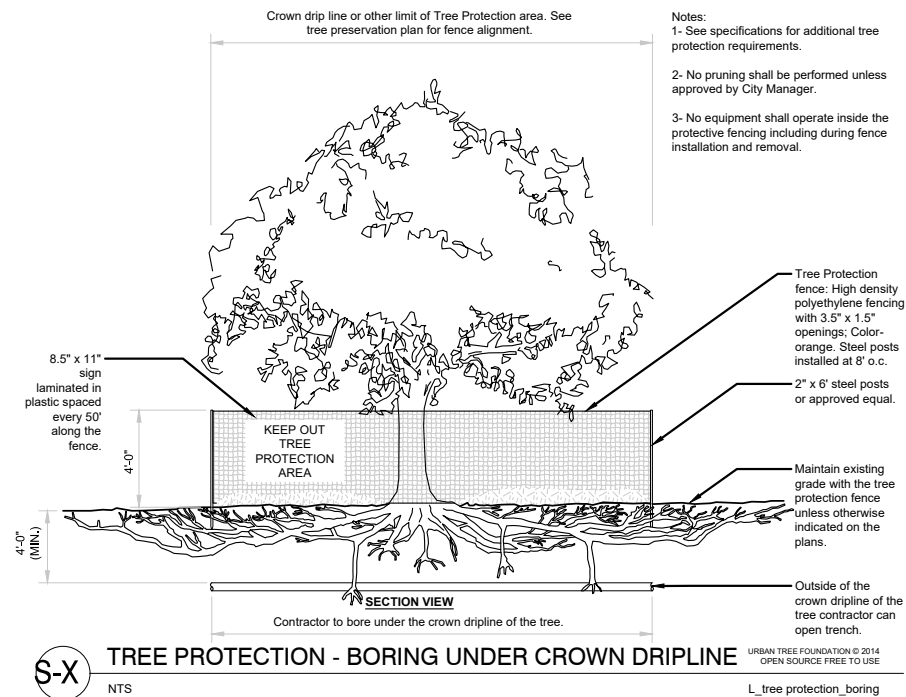
(B) PLUGGED DEAD END USING TIE RODS
X15 NTS



- 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:

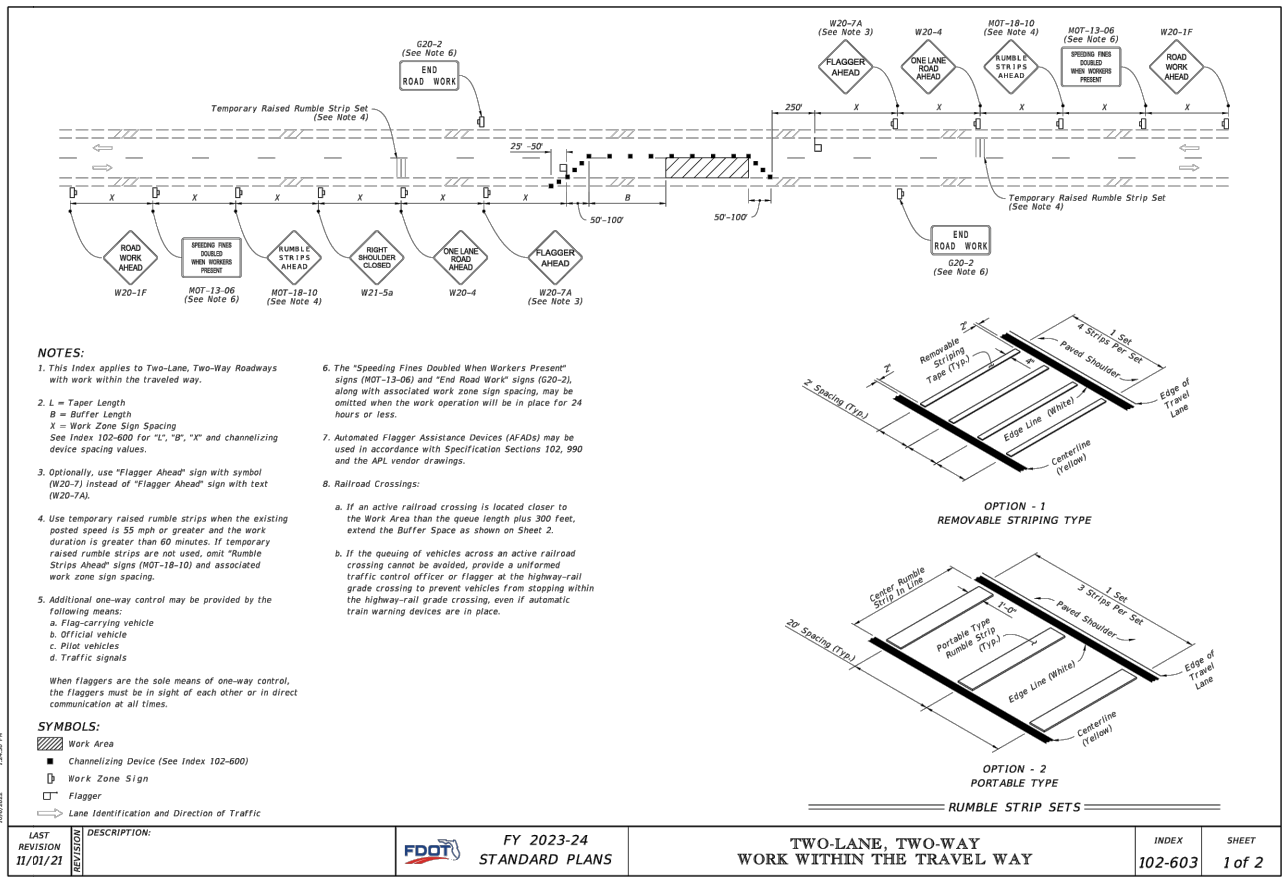
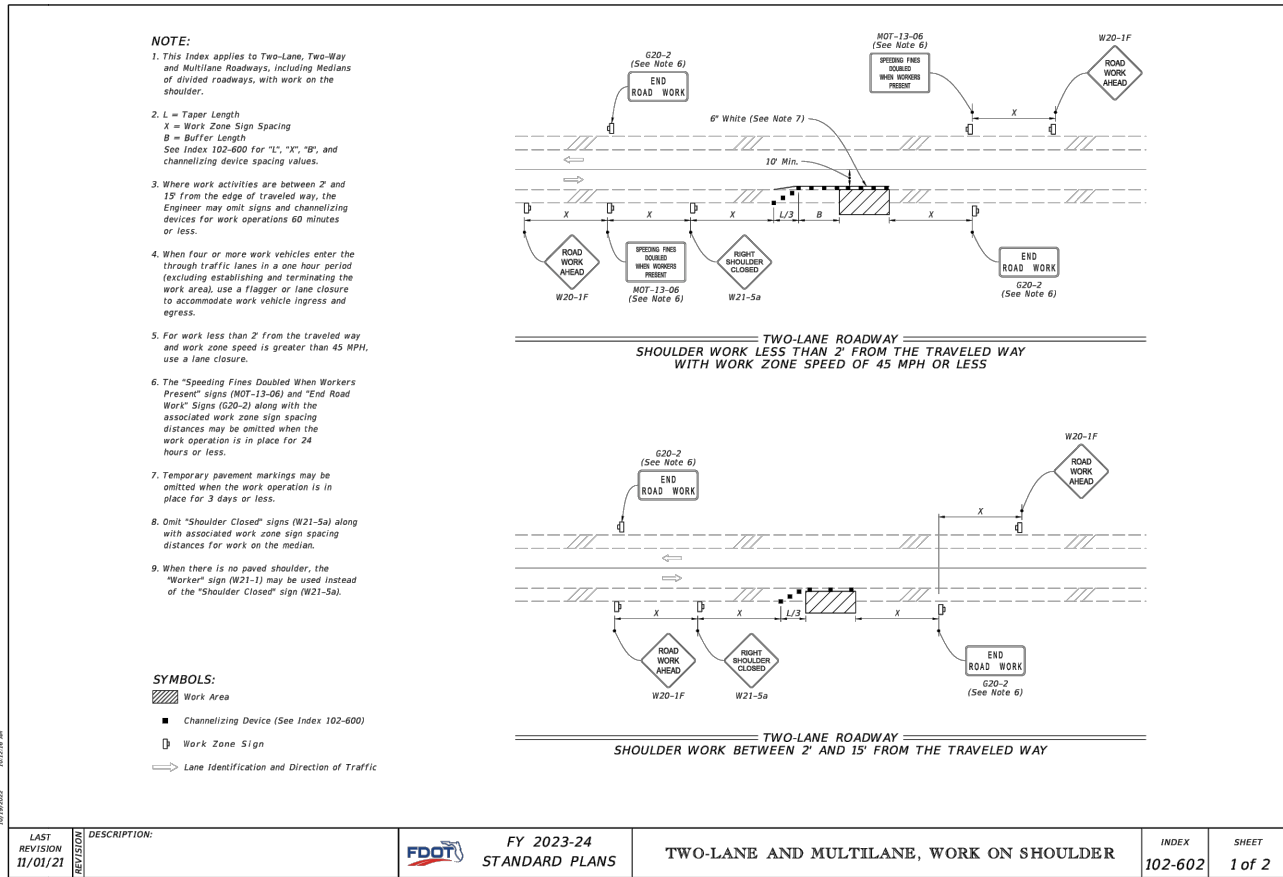
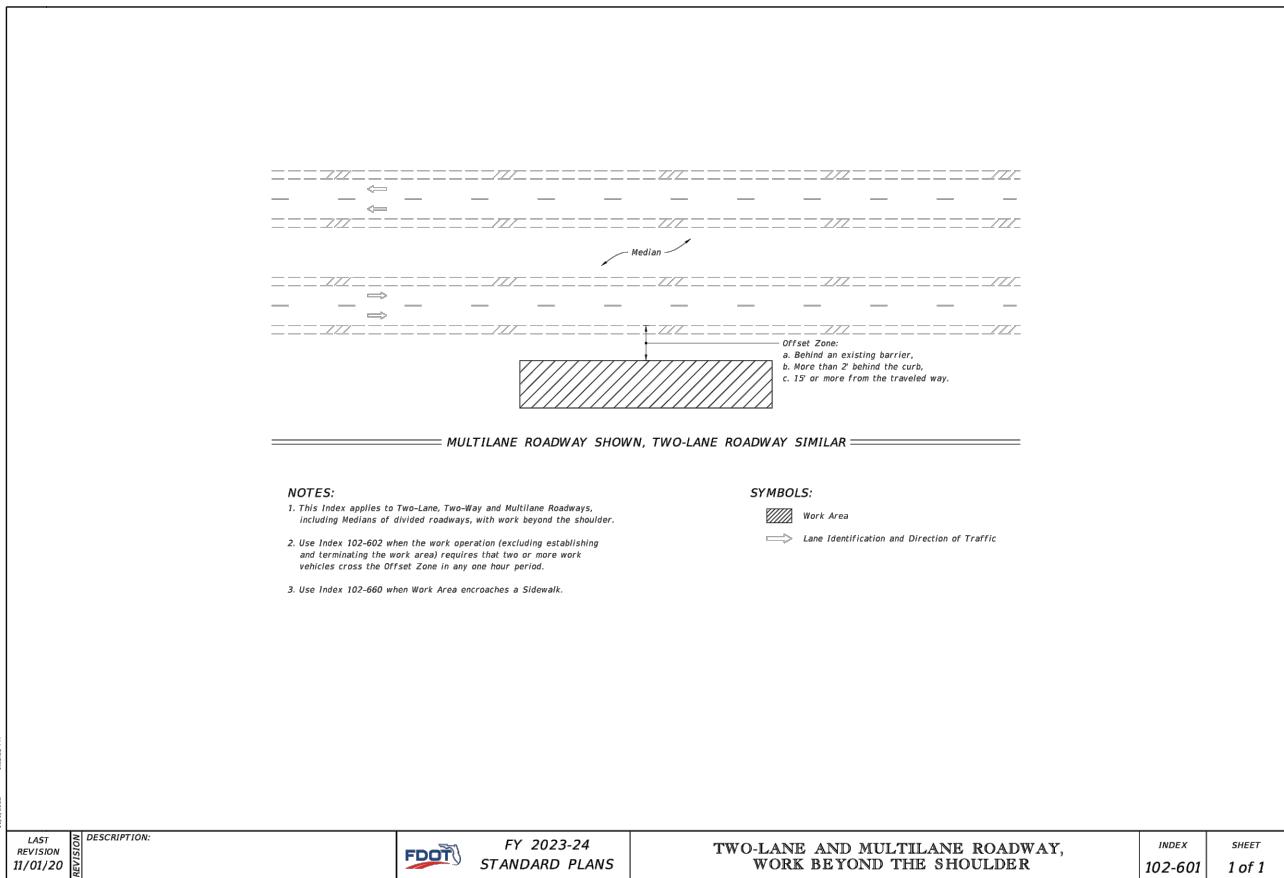
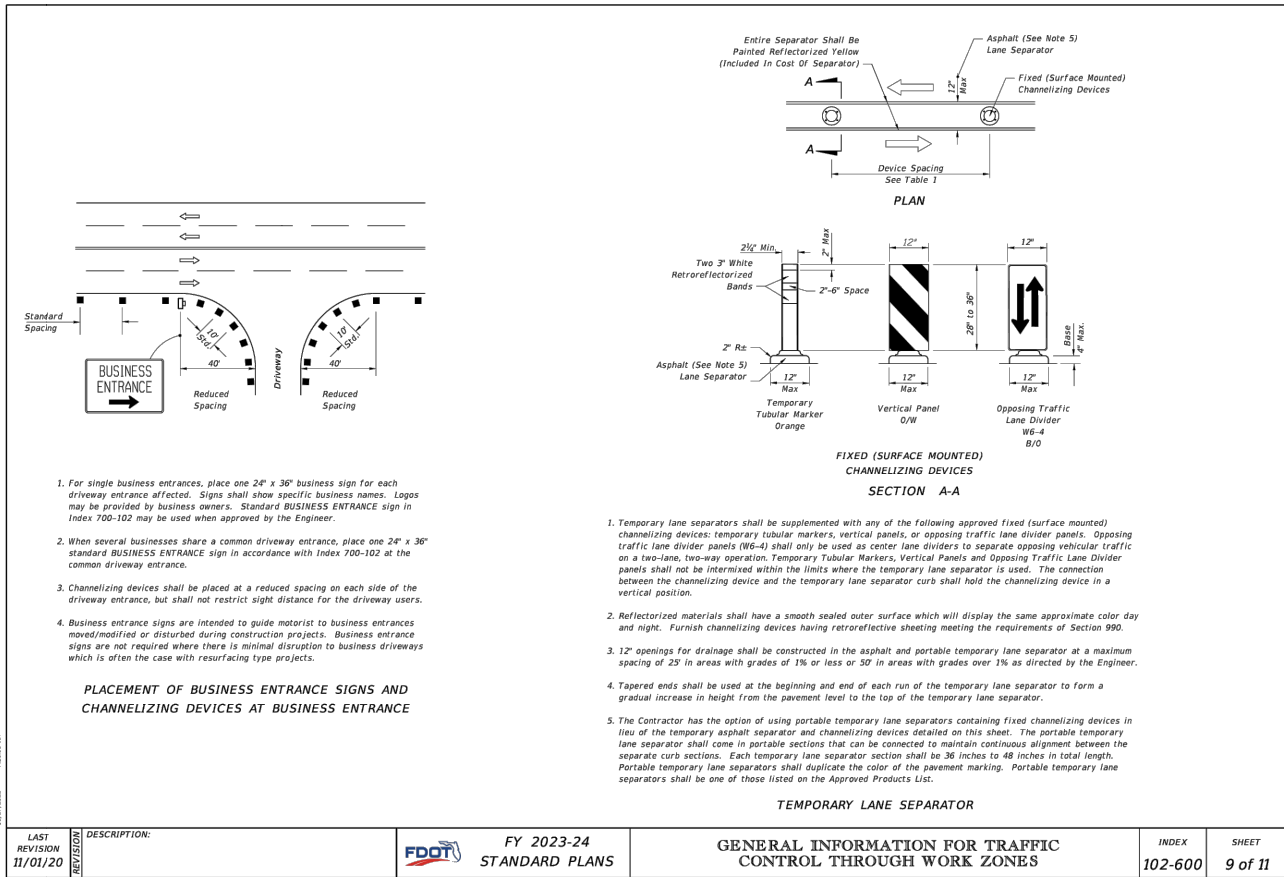
3" - 8"	DIAMETER MAIN - 2 TIE RODS REQUIRED PER JOINT (3/4" ROD)
10" - 12"	DIAMETER MAIN - 4 TIE RODS REQUIRED PER JOINT (3/4" ROD)
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42" - 48"	DIAMETER MAIN - 16 TIE RODS REQUIRED PER JOINT (1 1/4" ROD)
54"	DIAMETER MAIN - 18 TIE RODS REQUIRED PER JOINT (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.

(C) PLUGGED DEAD END USING MECHANICAL RESTRAINTS
X15 NTS



TRAFFIC CONTROL GENERAL NOTES

1. THE EXISTING POSTED SPEED SHALL BE MAINTAINED FOR THE DURATION OF CONSTRUCTION. WORK ZONE SPEED SHALL NOT BE LESS THAN POSTED SPEED.
2. ARROWS DENOTE DIRECTION OF TRAFFIC ONLY AND DO NOT REFLECT PAVEMENT MARKINGS, UNLESS OTHERWISE NOTED.
3. THE CONTRACTOR IS TO MAINTAIN AND KEEP STREET NAME IDENTIFICATION SIGNS VISIBLE DURING CONSTRUCTION OPERATIONS TO FACILITATE EMERGENCY VEHICLE TRAFFIC.
4. PLACE BUSINESS ENTRANCE SIGNS IN ACCORDANCE WITH FDOT INDEX 102-600, SHEET 9.
5. EXISTING GUIDE SIGNS AND APPLICABLE WARNING SIGNS ARE TO BE RELOCATED DURING CONSTRUCTION TO ALIGN WITH ALL PHASE TRAFFIC PATTERNS.
6. THE CONTRACTOR SHALL CONTACT TRANSIT AND SCHOOL AUTHORITIES FOR THEIR BUS STOP LOCATIONS AND SCHEDULES TO MAINTAIN SAFE ACCESS TO THE RIDERS AT ALL TIMES.
7. ALL LANE CLOSURES SHALL BE COORDINATED WITH LOCAL EMERGENCY SERVICES. A MINIMUM OF 24 HOURS NOTICE SHALL BE PROVIDED FOR ANY SCHEDULED WORK REQUIRING LANE CLOSURES OR DETOURS.



DESIGN JPP
DRAW DMS
PROJ JRS
MGR. DATE 04/09/24

MITTALTAUER & ASSOCIATES, INC.
CONSULTING ENGINEERS
580-1 WELLS ROAD, ORANGE PARK, FLORIDA 32073
TEL. (904) 278-0030 FAX. (904) 278-0840
FLORIDA RY NO. 6569



CITY OF CRESCENT CITY
Prospect St. Water Main Replacement
Maintenance of Traffic
Putnam County, Florida

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