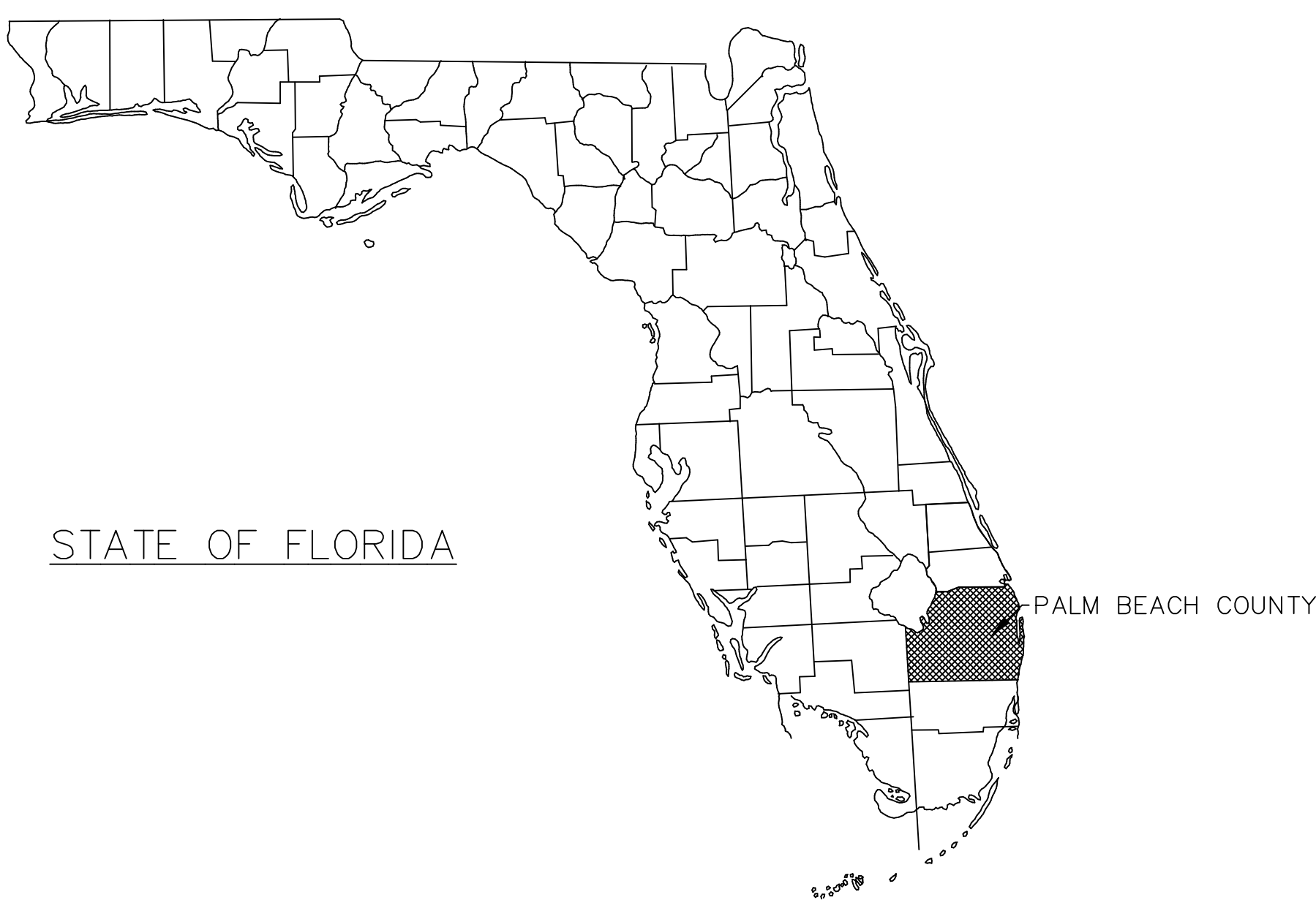
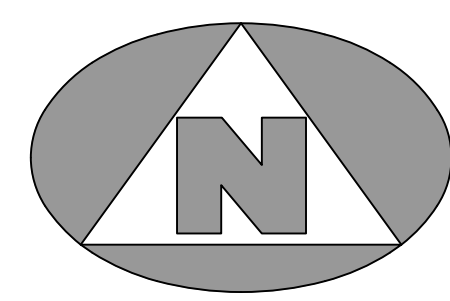


FISHERMAN'S WHARF WATER AND SEWER PLANS

TOWN OF JUPITER, FLORIDA
PALM BEACH COUNTY, FLORIDA



LOCATION MAP
NOT TO SCALE

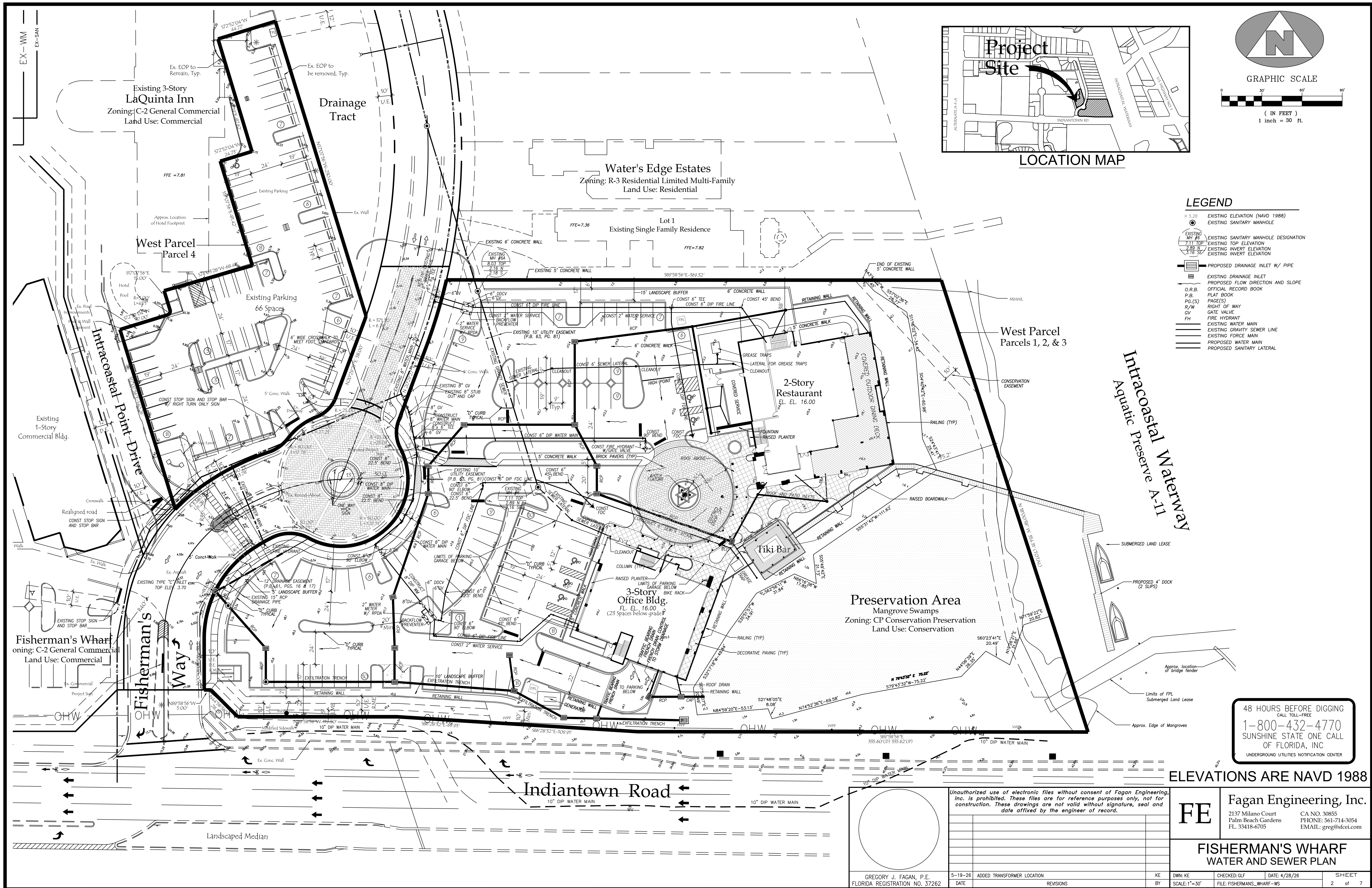
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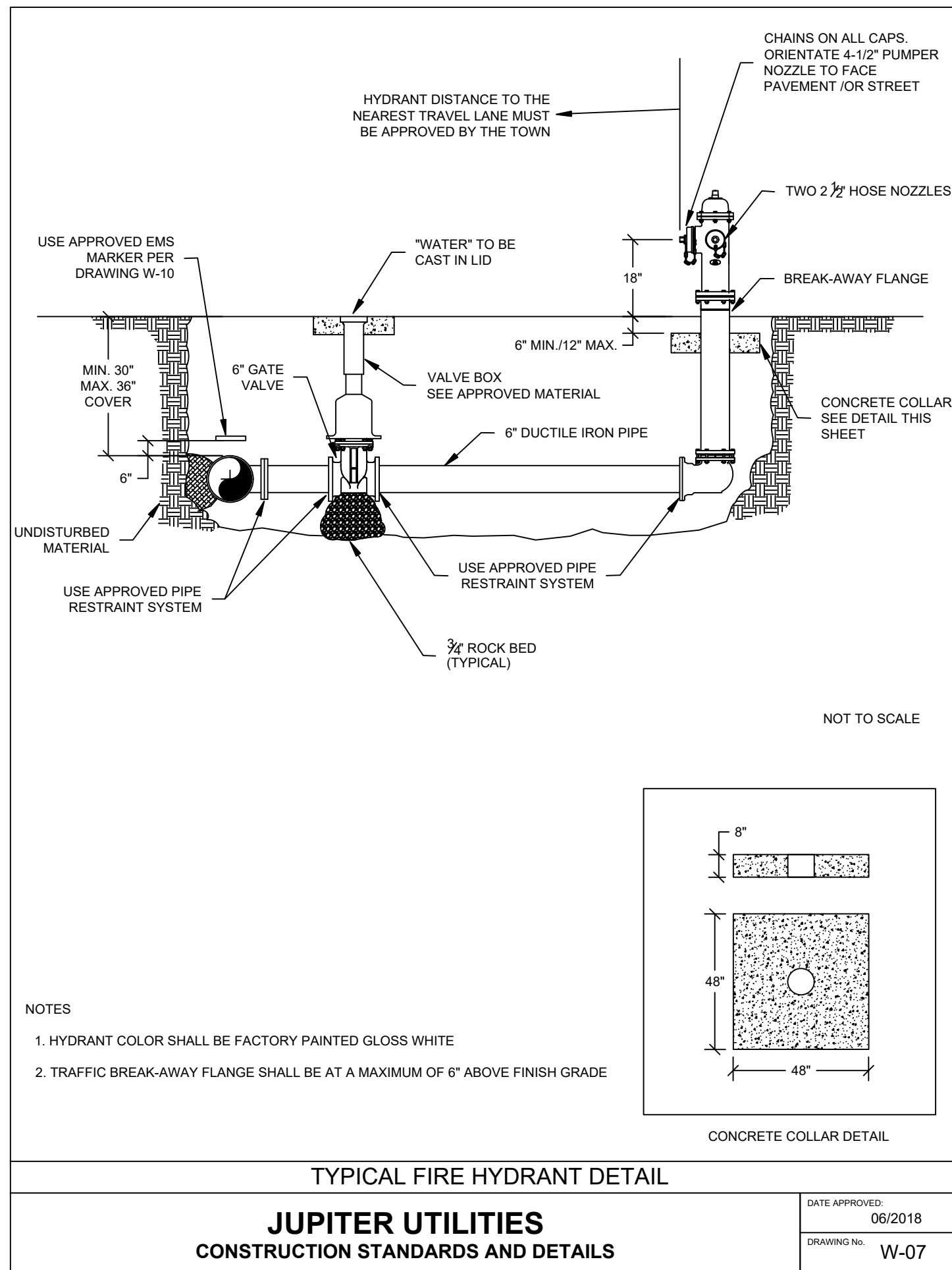
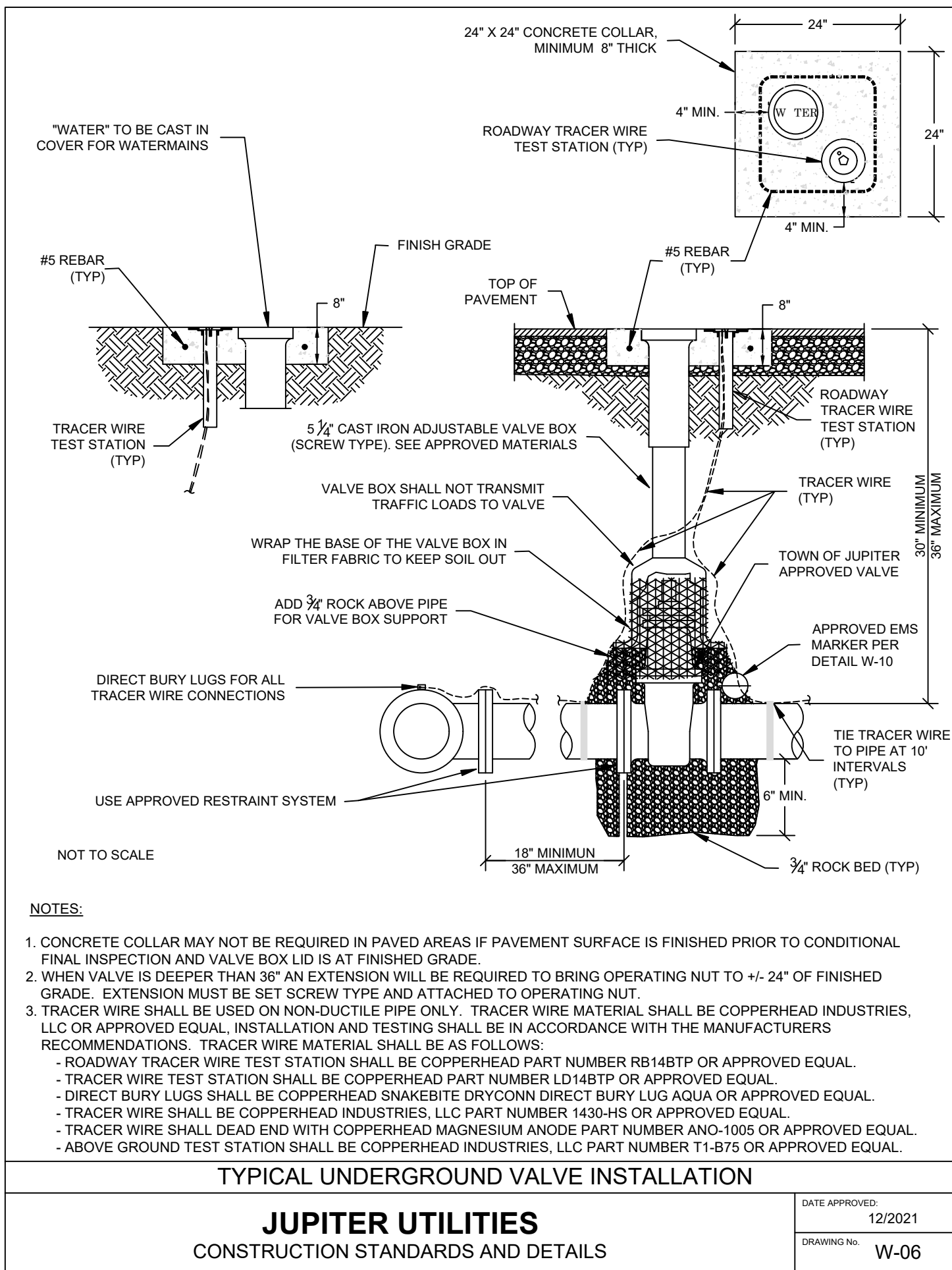
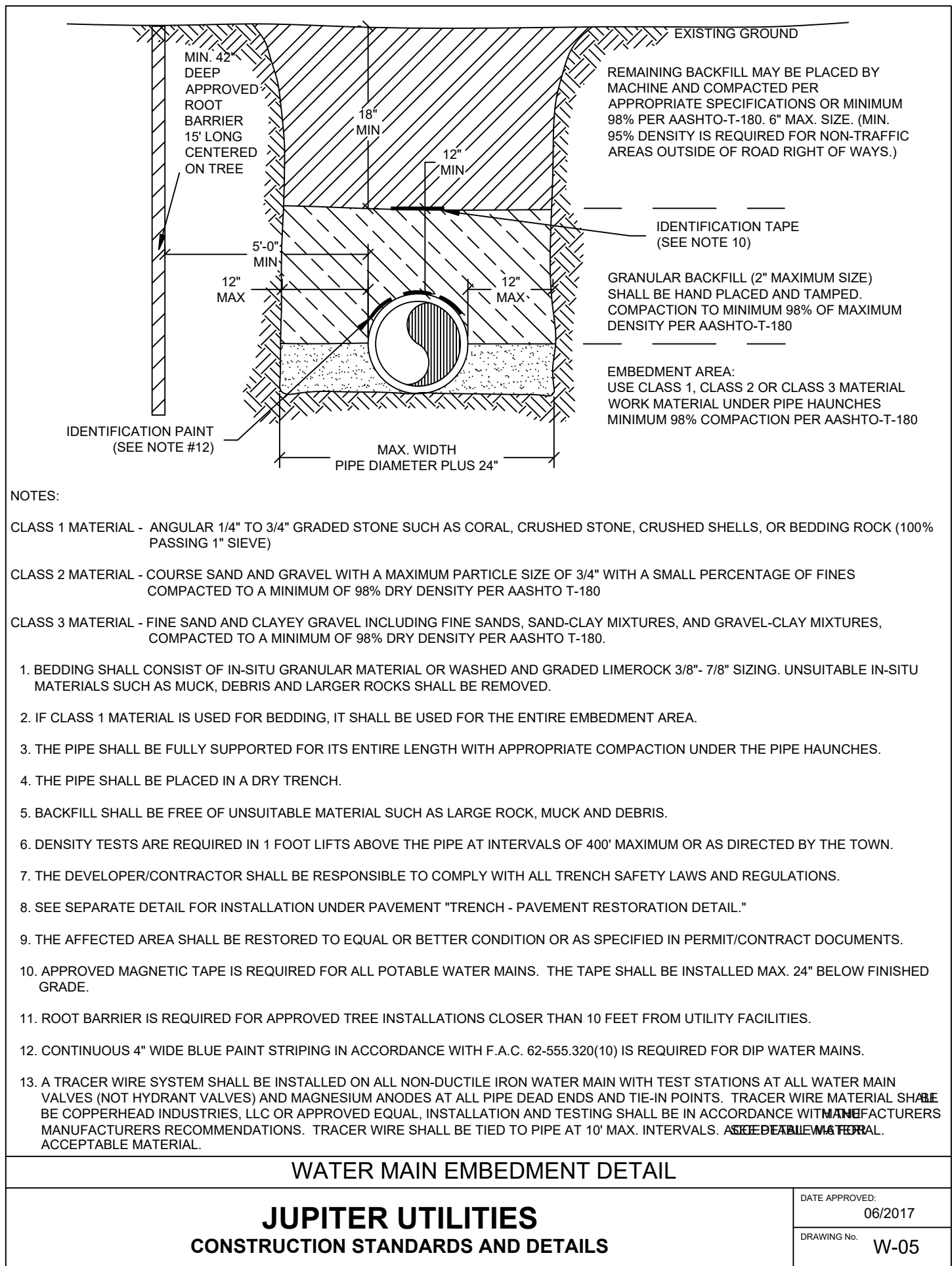
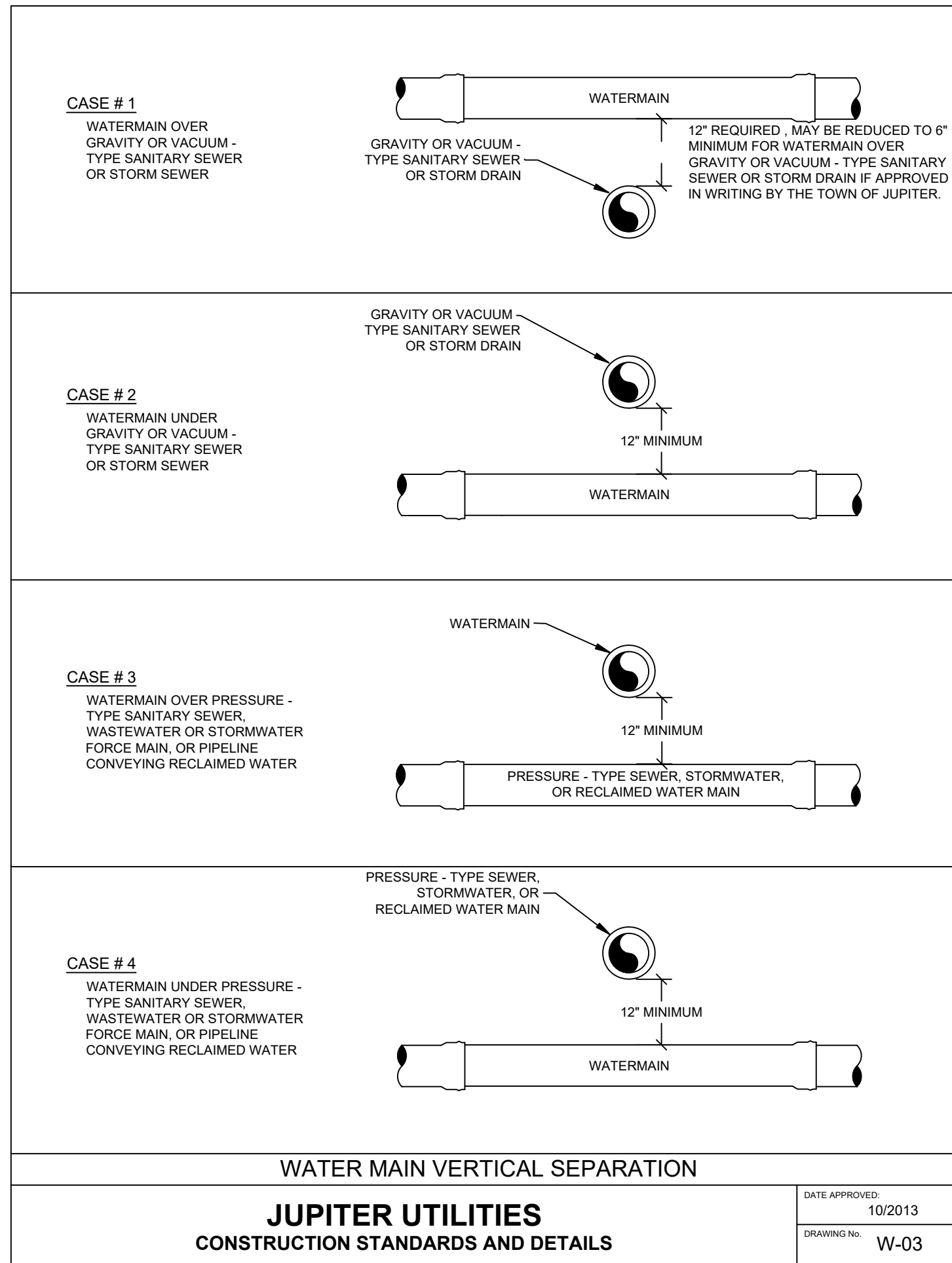
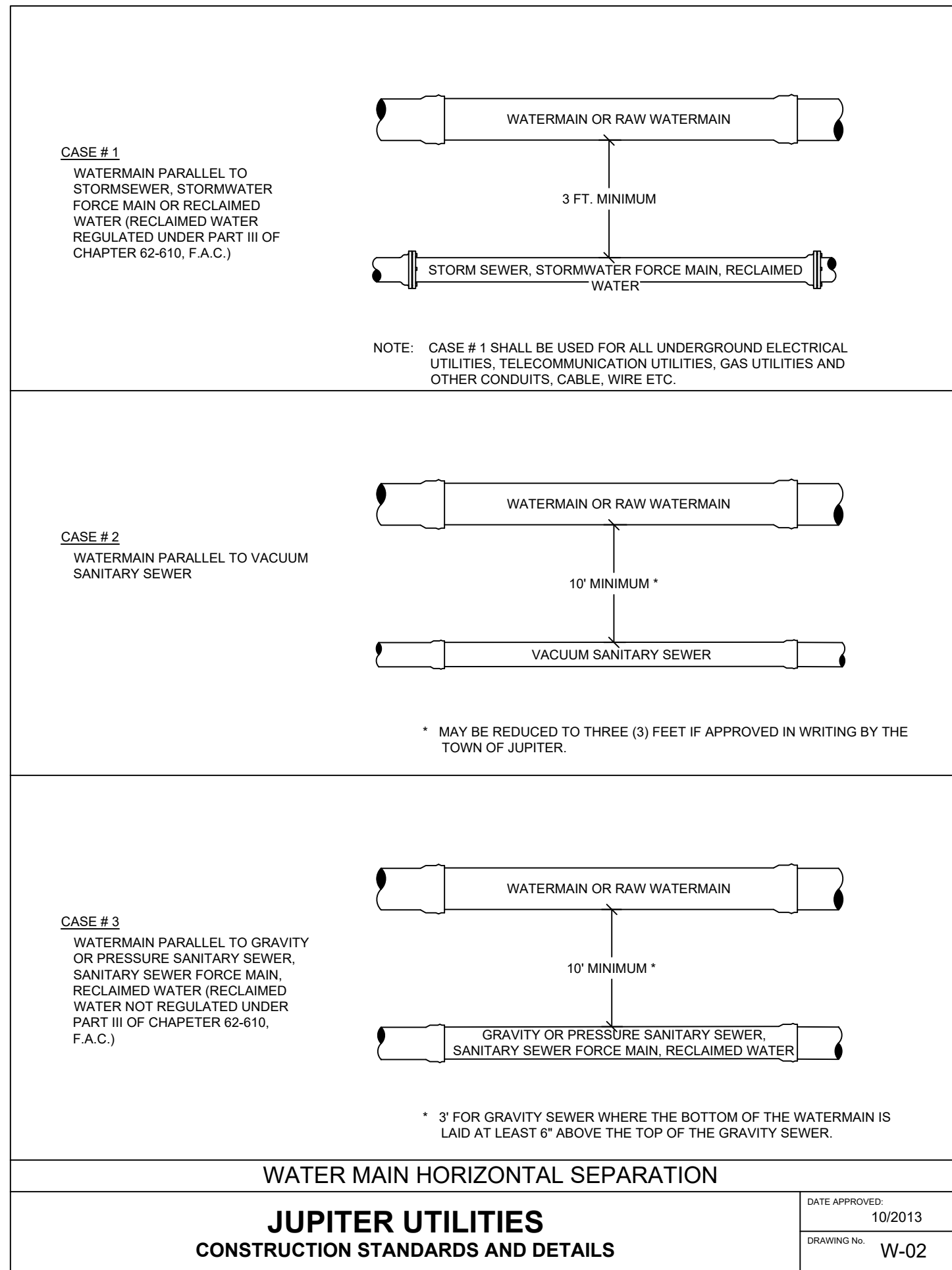
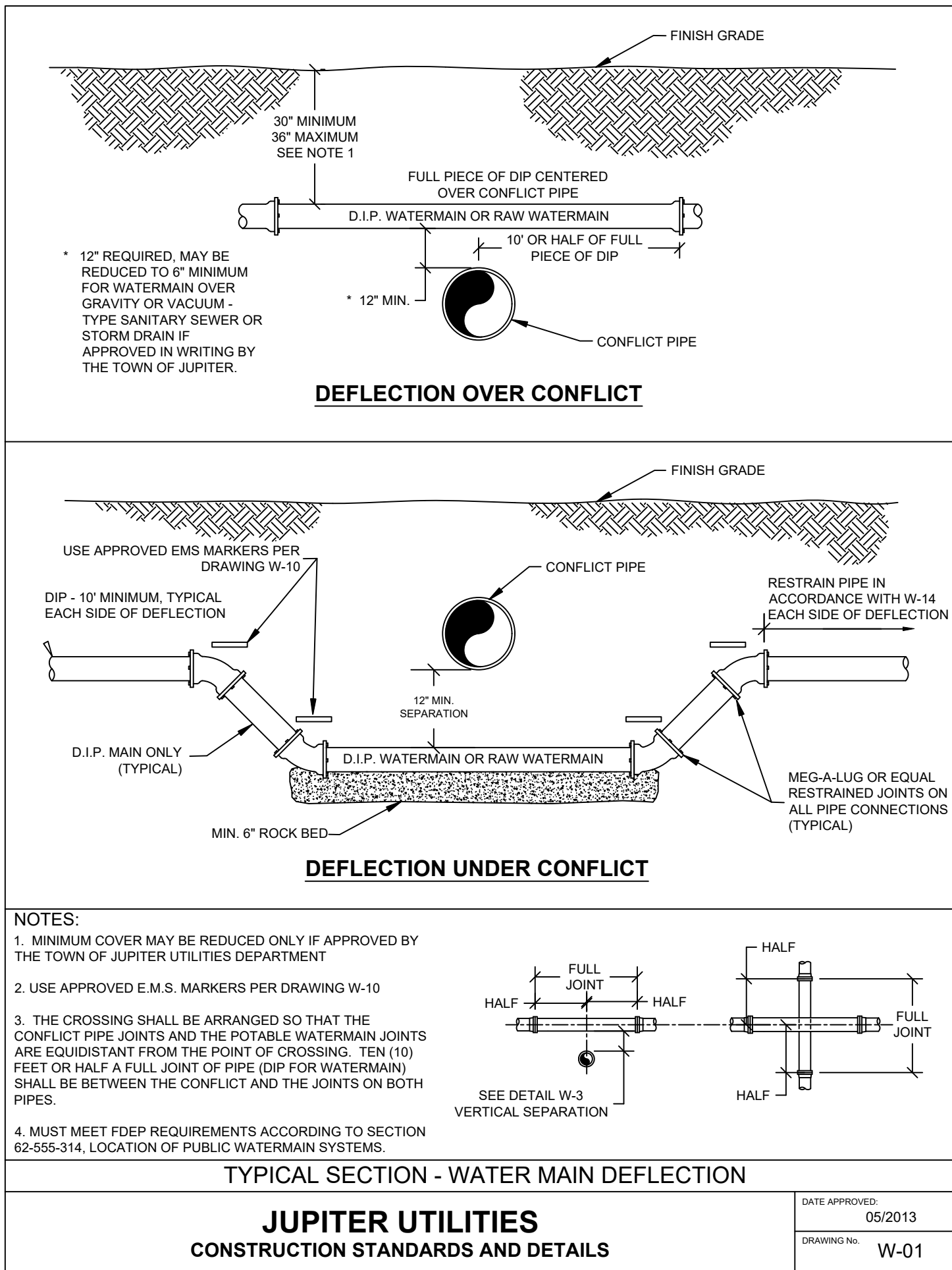
SHEET NO.	DESCRIPTION
1	COVER SHEET
2	WATER AND SEWER PLAN
3-6	WATER DETAILS
7	SEWER DETAILS

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FISHERMAN'S WHARF COVER SHEET			
DWN: KE SCALE: NONE	CHECKED: GLF FILE: FW-COVER	DATE: 4/28/26 SHEET 1 of 7	





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FLORIDA REGISTRATION NO. 37262

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DATE	REVISIONS	BY

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Palm Beach Gardens
FL 33418-6705

CA NO. 30855
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**FISHERMAN'S WHARF
WATER DETAILS**

DWN: KE	CHECKED: GLF	DATE: 4/28/26	SHEET
SCALE: NONE	FILE: FW-WDETAILS	3	of 7

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PIPE DIAMETER (INCHES)	FULL THRUST CONDITION	ALL BRANCH AND THROUGH SIDES OF TEES, CROSSES AND REDUCERS	45° BEND IN HORIZONTAL OR VERTICAL UP POSITION	22 1/2° BEND IN HORIZONTAL OR VERTICAL UP POSITION	11 1/2° BEND IN HORIZONTAL OR VERTICAL UP POSITION	FULL THRUST CONDITION
	90° BENDS IN HORIZONTAL OR VERTICAL DOWN POSITION					DEAD END AND VALVES (IN-LINE OR BRANCH)
4"		2 L	1 L	1 L	1 L	3 L
6"		3 L	2 L	1 L	1 L	4 L
8"		4 L	2 L	1 L	1 L	5 L
10"		5 L	2 L	1 L	1 L	6 L
12"		5 L	2 L	1 L	1 L	7 L
16"		6 L	3 L	2 L	1 L	8 L

L = ONE PIPE LENGTH (18FT MIN.)

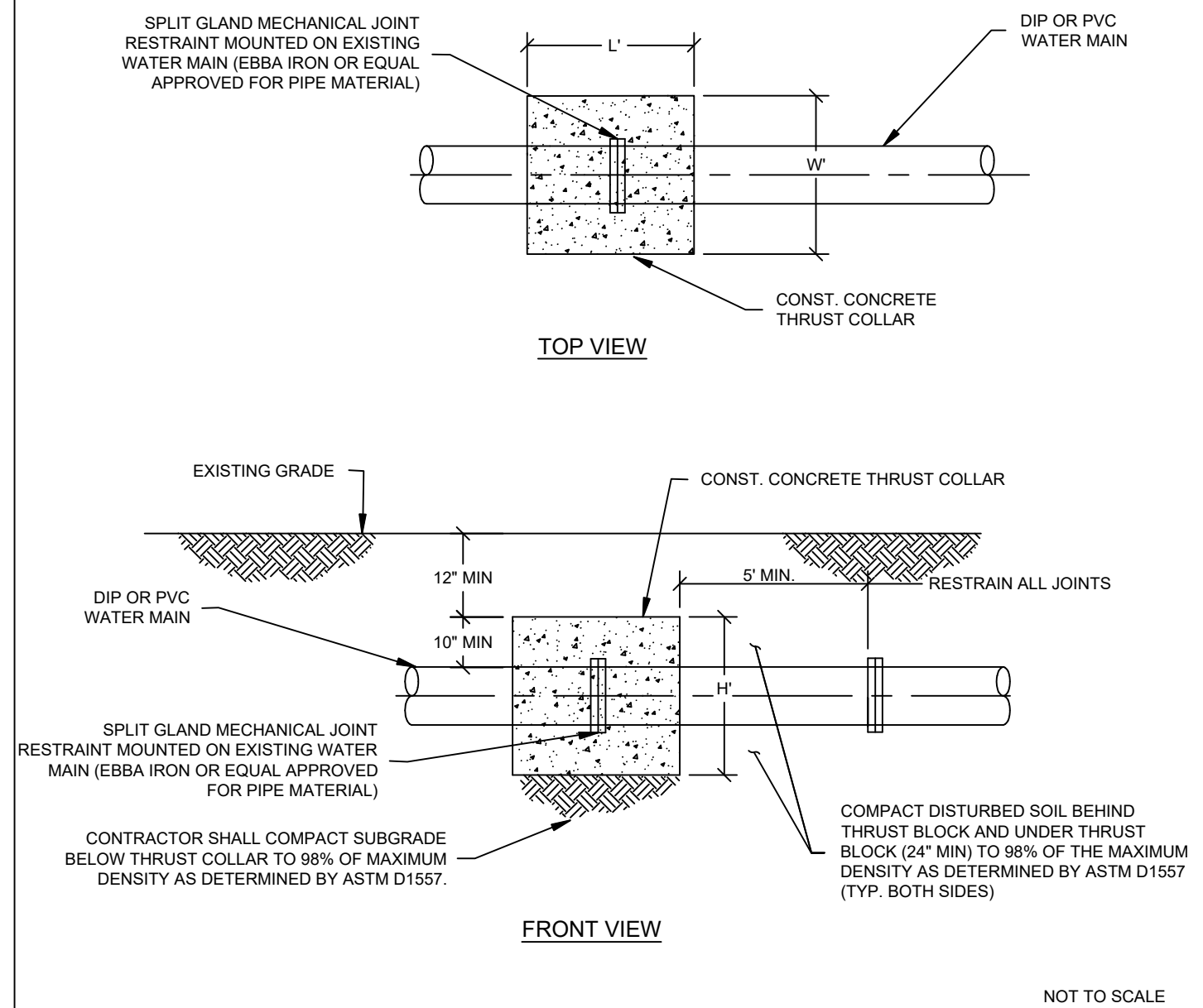
NOTES:

- THE ABOVE TABLE SHALL SERVE AS A GUIDE ONLY. THE ENGINEER OF RECORD SHALL BE RESPONSIBLE FOR THE DESIGN AND SHALL SPECIFY THE MINIMUM LENGTHS OF RESTRAINED PIPE WITH CONSIDERATION TO SOIL TYPE AND LBR, AND PIPE LAYING CONDITIONS.
- PIPES SHALL BE TESTED TO A MINIMUM OF 150 PSIG WITH A 2.5 SAFETY FACTOR.
- SUBAQUEOUS CROSSINGS REQUIRE SPECIFIC RESTRAINT SYSTEMS. SEE DRAWING W-13 "SUBAQUEOUS WATER MAIN CROSSING".

WATER MAIN RESTRAINT SYSTEM TABLE

JUPITER UTILITIES
CONSTRUCTION STANDARDS AND DETAILS

DATE APPROVED:
1/2015
DRAWING No.
W-14



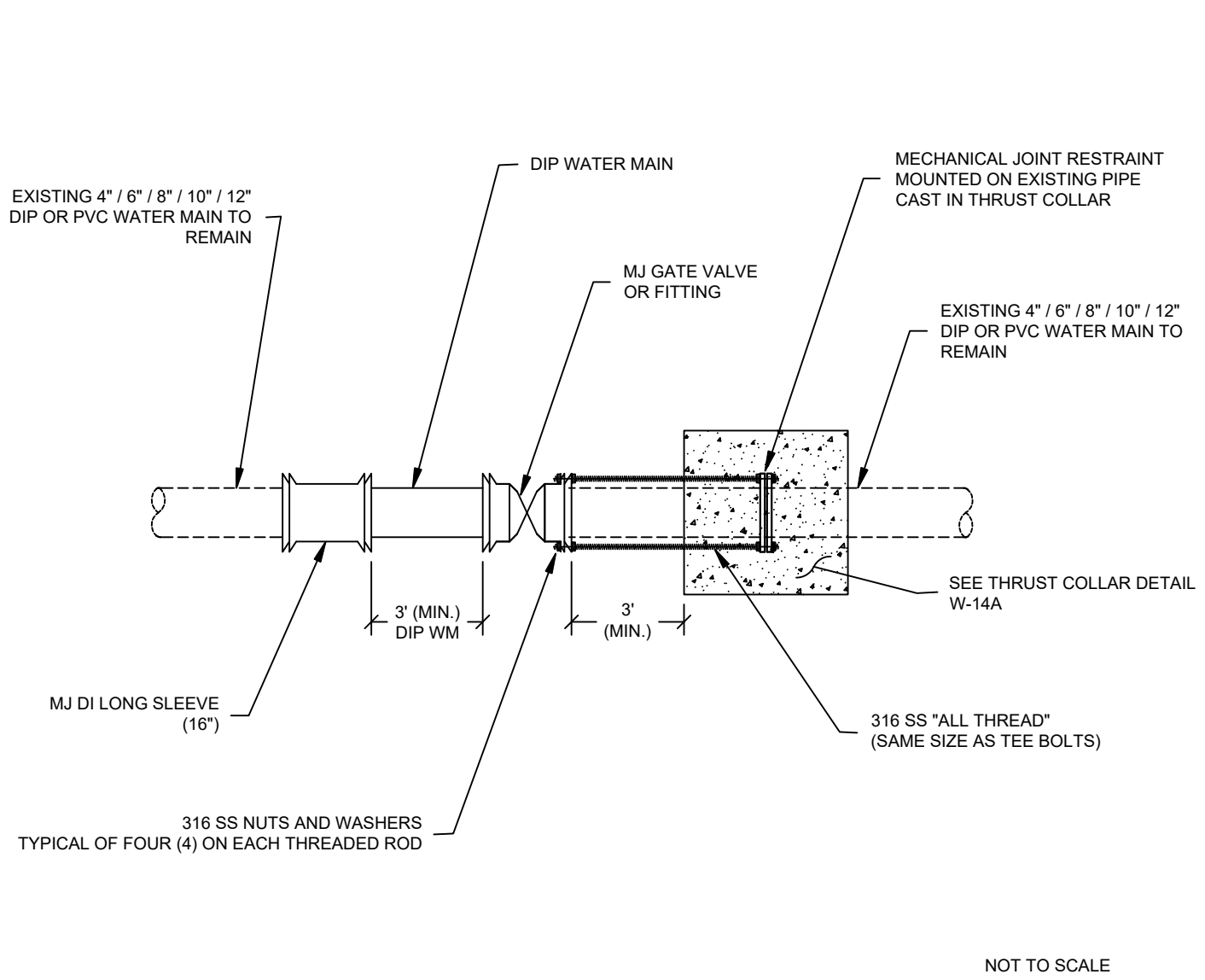
DETAIL NOTES/NOTES:

- CONTRACTOR SHALL COMPACT SUBGRADE BELOW THRUST COLLAR TO 98% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D1557.
- BACKFILL COMPACTION SHALL BE 98% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D1557. LIFTS SHALL BE 12\"/>
- CONTRACTOR SHALL CONSTRUCT A THRUST COLLAR ON EACH SIDE OF A 90 DEGREE BEND.
- H X W X L (MIN) = 2'25\"/>
- H X W X L (MIN) = 2'75\"/>
- H X W X L (MIN) = 3'25\"/>
- H X W X L (MIN) = 4'0\"/>
- USE 4,000 PSI COMPRESSIVE STRENGTH CONCRETE IN ACCORDANCE WITH ASTM C34 MEETING THE FOLLOWING REQUIREMENTS:
 - WATER/CEMENT RATIO 0.48 WITHOUT ADMIXTURES BY WEIGHT
 - FLY ASH MAX. 15% OF CEMENT CONTENT, TYPE F ONLY
 - SLUMP 4\"/>
- THRUST BLOCK SIZING IS BASED ON THE TYPICAL SYSTEM PRESSURE OF 75 PSI AND GENERALLY SANDY SOILS THAT YIELD BEARING PRESSURES OF 2000 PSF. THE CALCULATIONS DO CONSIDER SURGES AND A SAFETY FACTOR. WHERE CONDITIONS EXPERIENCE HIGHER SYSTEM PRESSURES, LOWER QUALITY SOILS OR SHALLOWER BURY DEPTHS THAN 3 FEET THE THRUST BLOCK SHALL BE RESIZES BY AN ENGINEER REGISTERED IN THE STATE OF FLORIDA.

WATER MAIN THRUST COLLAR

JUPITER UTILITIES
CONSTRUCTION STANDARDS AND DETAILS

DATE APPROVED:
01/2022
DRAWING No.
W-14A



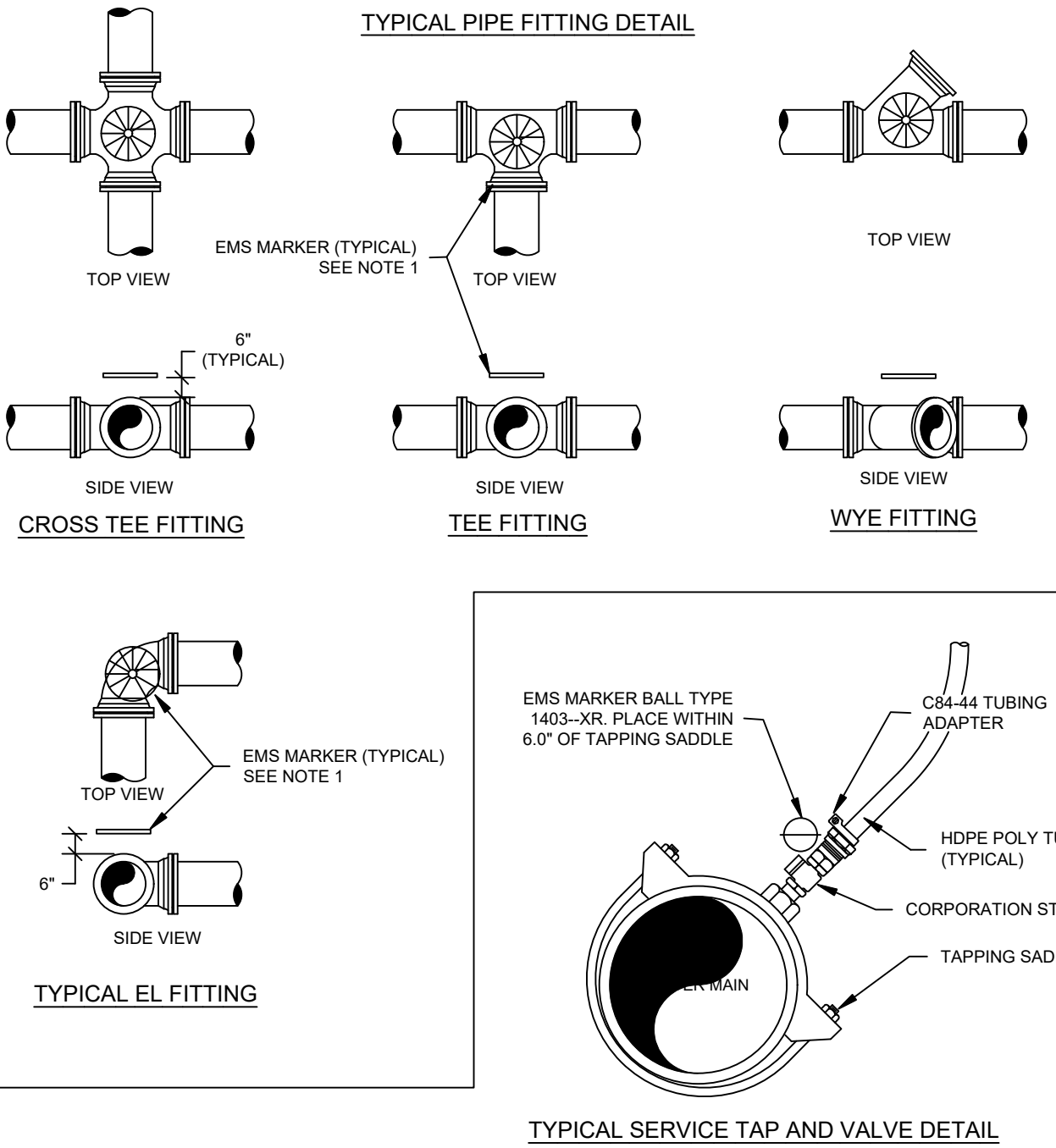
NOTES:

- SEE THRUST COLLAR DETAIL W-14A FOR CONCRETE, SIZING, COMPACTION AND EMBEDMENT REQUIREMENTS.
- MECHANICAL JOINT RESTRAINT MOUNTED ON THE EXISTING PIPE AND EMBEDDED IN THE CONCRETE THRUST COLLAR MAY BE SPLIT SLEEVE OR SOLID RING COMPATIBLE WITH PIPE MATERIAL.
- RESTRAIN ALL FITTINGS WITH A MECHANICAL JOINT TYPE RESTRAINT COMPATIBLE WITH THE PIPE MATERIAL AND ACCEPTED BY THE TOWN OF JUPITER UTILITIES.
- THE THREE FEET MINIMUM DISTANCE SHOWN ABOVE BETWEEN THE SLEEVE, VALVE AND THRUST COLLAR IS TYPICAL AND DEPENDING ON FIELD CONDITIONS MAY BE REDUCED OR INCREASED BY THE TOWN AND SHALL BE CONFIRMED IN THE FIELD.
- TIE-BACKS ON 4\", 6\"/>
- TIE-BACKS ON 10\"/>

VALVE TIE-BACK (DEAD MAN)

JUPITER UTILITIES
CONSTRUCTION STANDARDS AND DETAILS

DATE APPROVED:
12/2021
DRAWING No.
W-14B



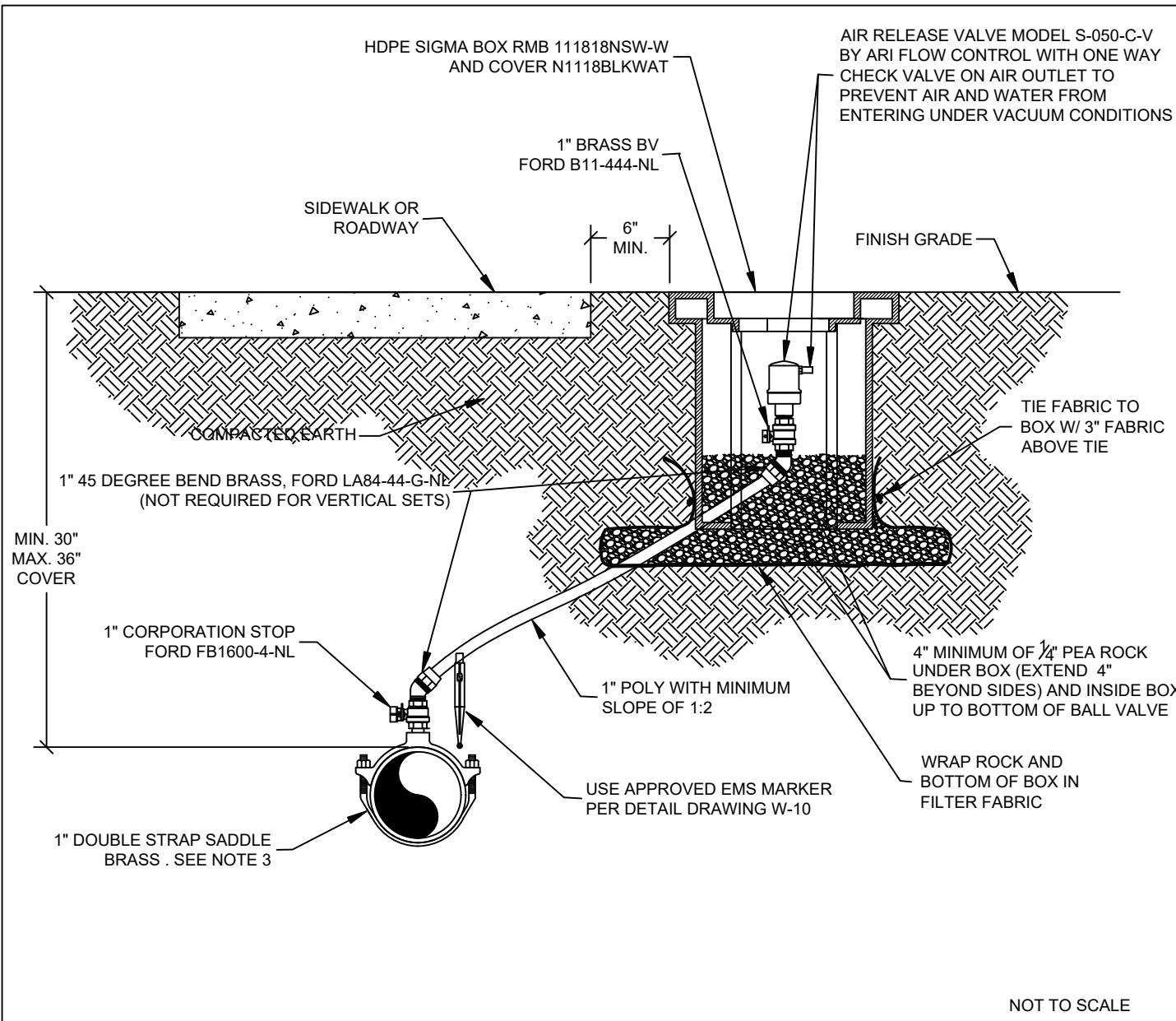
NOTES:

- USE ELECTRONIC MARKERS (E.M.S.) AS FOLLOWS:
 - A) 3M #1257 OR 4\"/>
 - B) 3M #1252 FOR ALL FITTINGS INCLUDING VALVES AND SERVICE TAPS WITH DEPTH FROM 5 FT TO 7 FT MAXIMUM.
- ALL E.M.S. MARKERS SHALL BE VERIFIED TO BE PROPERLY PLACED PRIOR TO METER SETTING.
- ALL E.M.S. MARKERS SHALL BE PLACED SO THAT THE FACE OF THE MARKER IS IN THE DIRECTION OF THE FINISH GRADE.
- E.M.S. MARKERS SHALL BE PLACED NO MORE THAN 50-FEET APART ON ALL WATERMAINS.

WATER MAIN ELECTRONIC MARKER SYSTEM

JUPITER UTILITIES
CONSTRUCTION STANDARDS AND DETAILS

DATE APPROVED:
02/2026
DRAWING No.
W-10



NOT TO SCALE

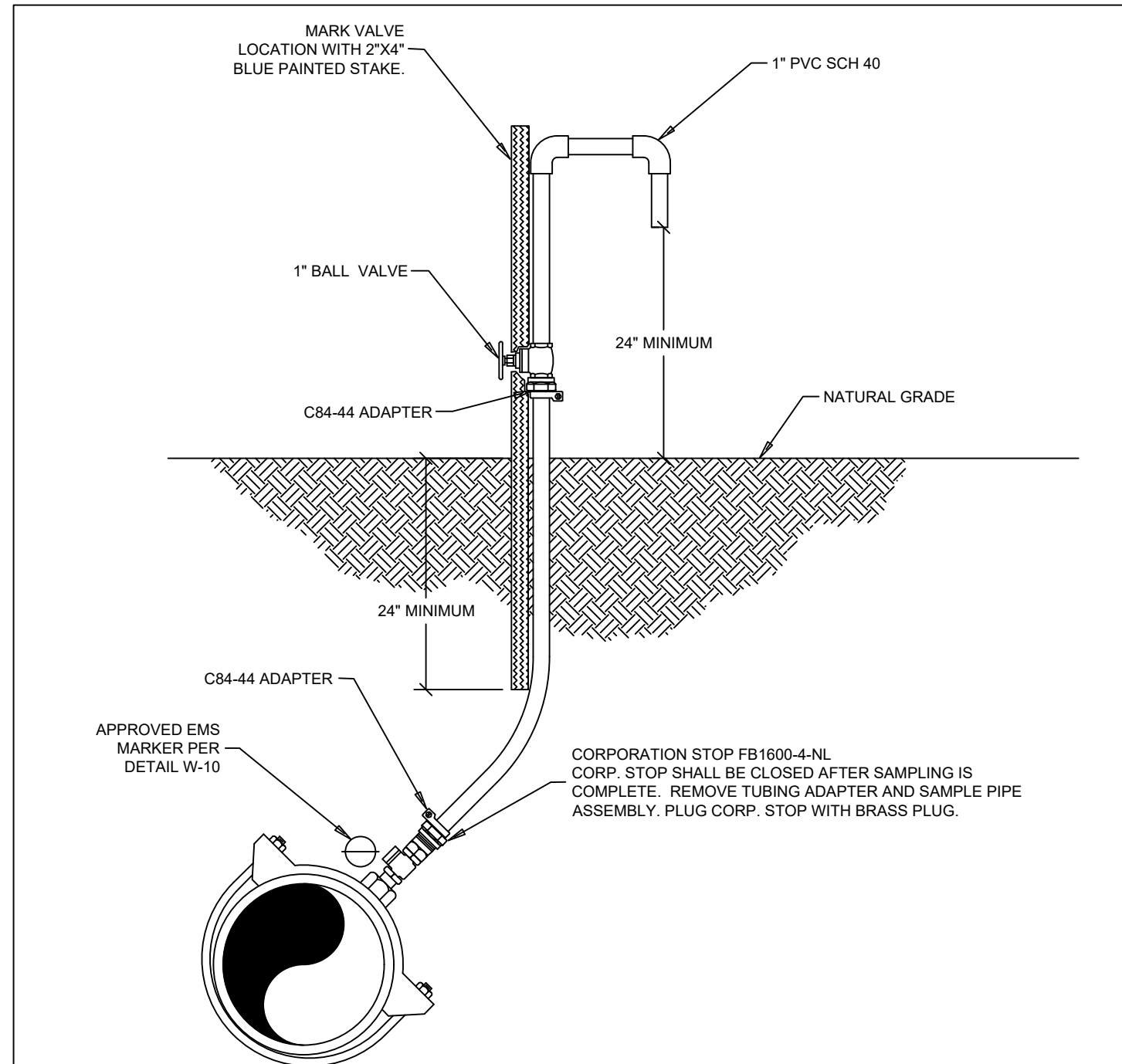
NOTES:

- INSTALL SERVICE/ARV DIRECTLY ABOVE CORPORATION STOP IF NOT LOCATED UNDER SIDEWALK OR ROAD.
- ALL MATERIAL SHALL BE APPROVED BY THE TOWN OF JUPITER WATER UTILITIES PRIOR TO INSTALLATION.
- TAPPING SADDLES:
 - FOR D.I.P., USE 1\"/>

WATER MAIN AIR RELEASE DETAIL

JUPITER UTILITIES
CONSTRUCTION STANDARDS AND DETAILS

DATE APPROVED:
12/2021
DRAWING No.
W-15



NOTES:

- SERVICE TAPS SHALL BE USED AS SAMPLE TAPS WHERE POSSIBLE.
- ALL MATERIAL SHALL BE APPROVED BY THE TOWN OF JUPITER WATER UTILITIES PRIOR TO INSTALLATION.
- TAPPING SADDLES:
 - FOR D.I.P., USE 1\"/>

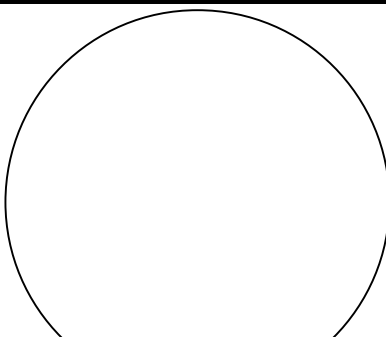
WATER MAIN SAMPLE POINT (IN-LINE)

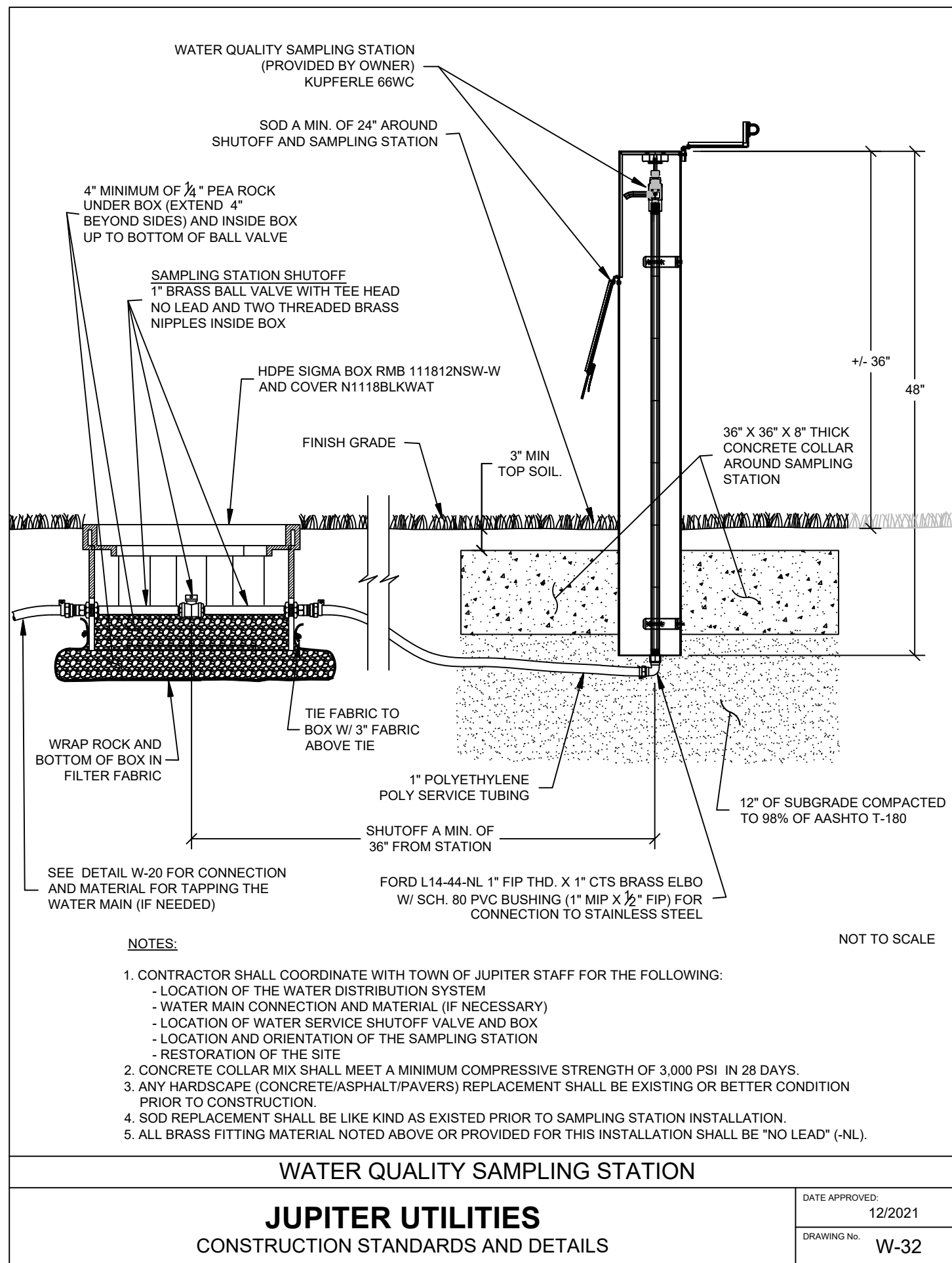
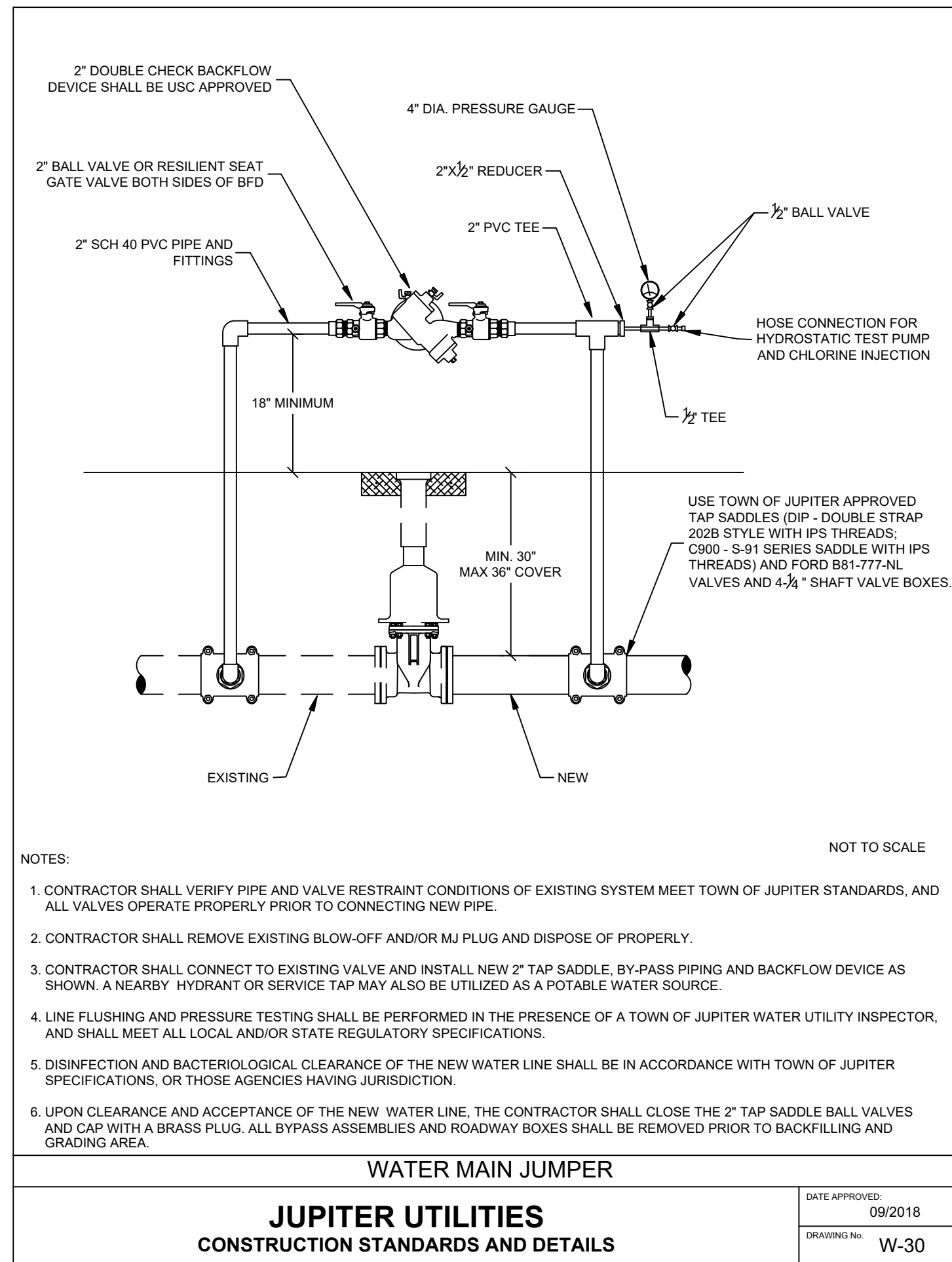
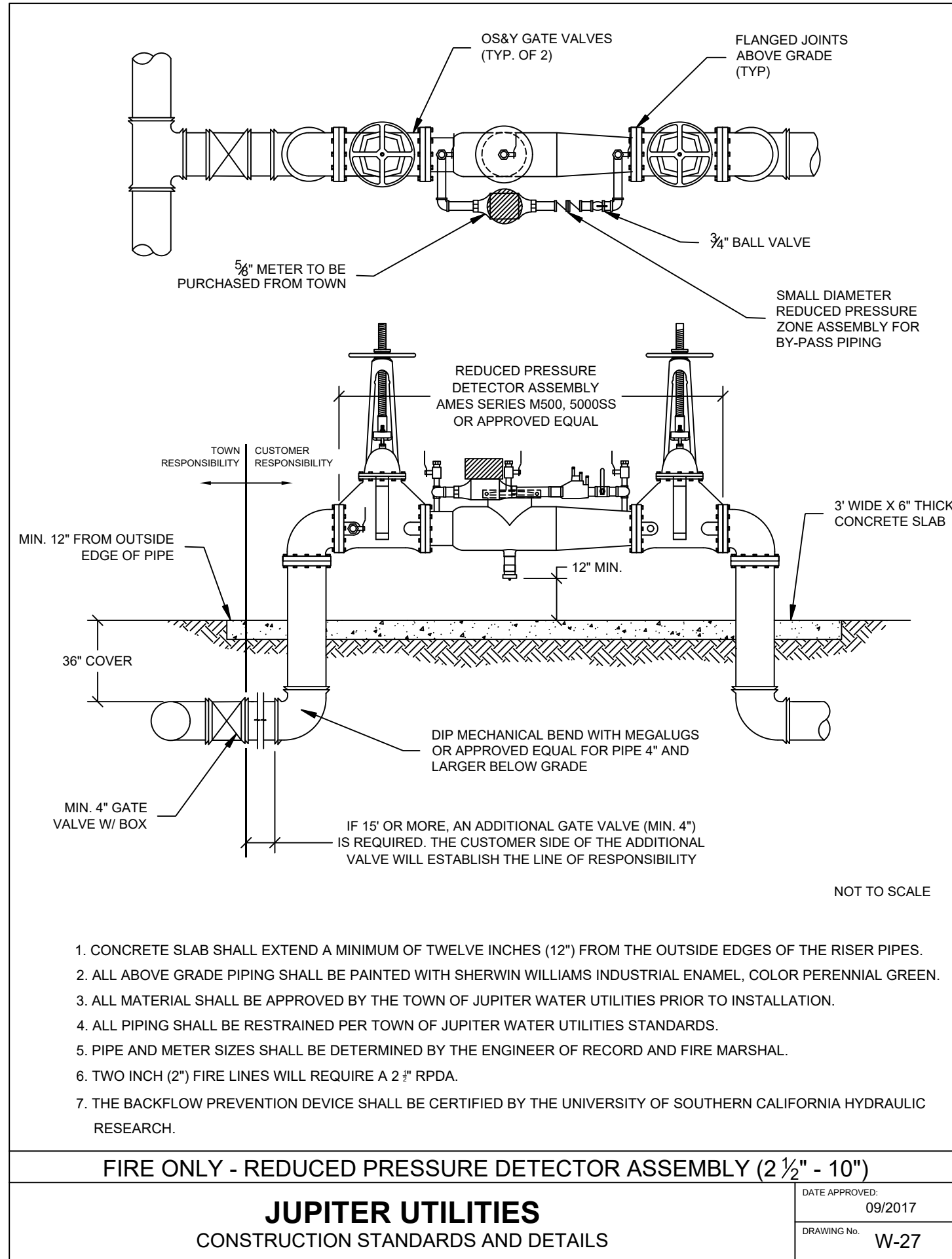
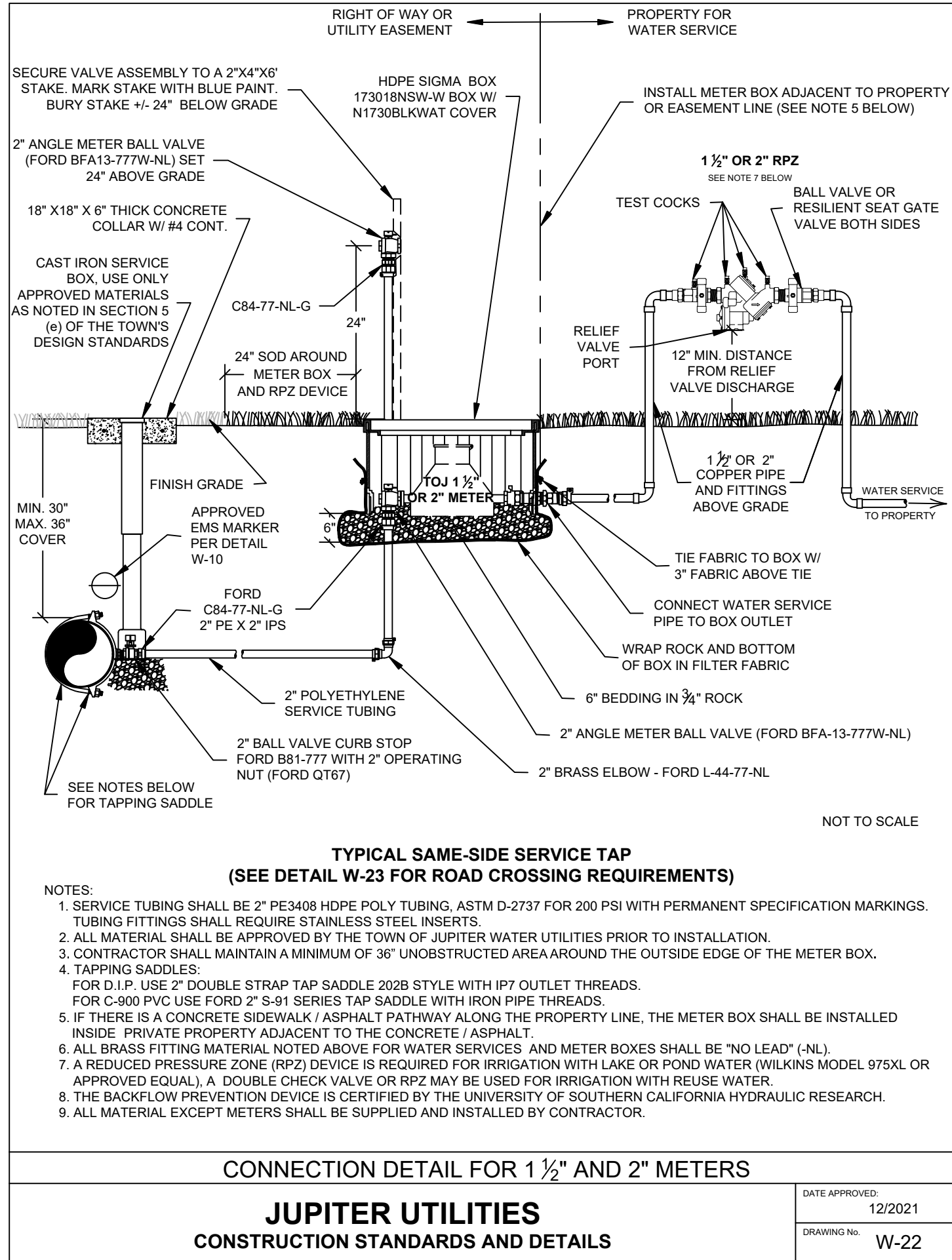
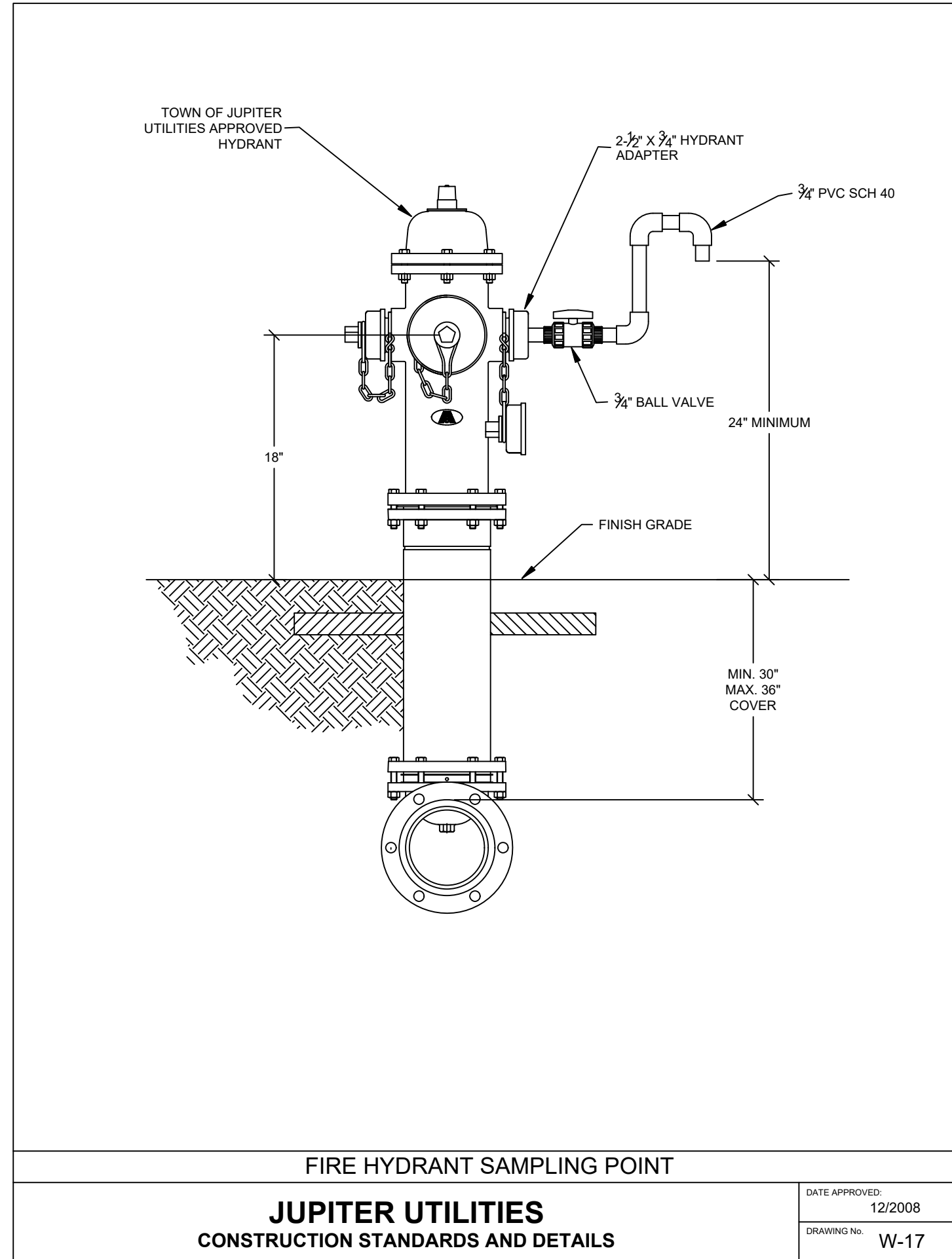
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GREGORY J. FAGAN, P.E. FLORIDA REGISTRATION NO. 37262				FISHERMAN'S WHARF WATER DETAILS									
DATE		REVISIONS		BY		DWN: KE		CHECKED: GLF		DATE: 4/28/26		SHEET	
						SCALE: NONE		FILE: FW-WDETAILS				4 of 7	



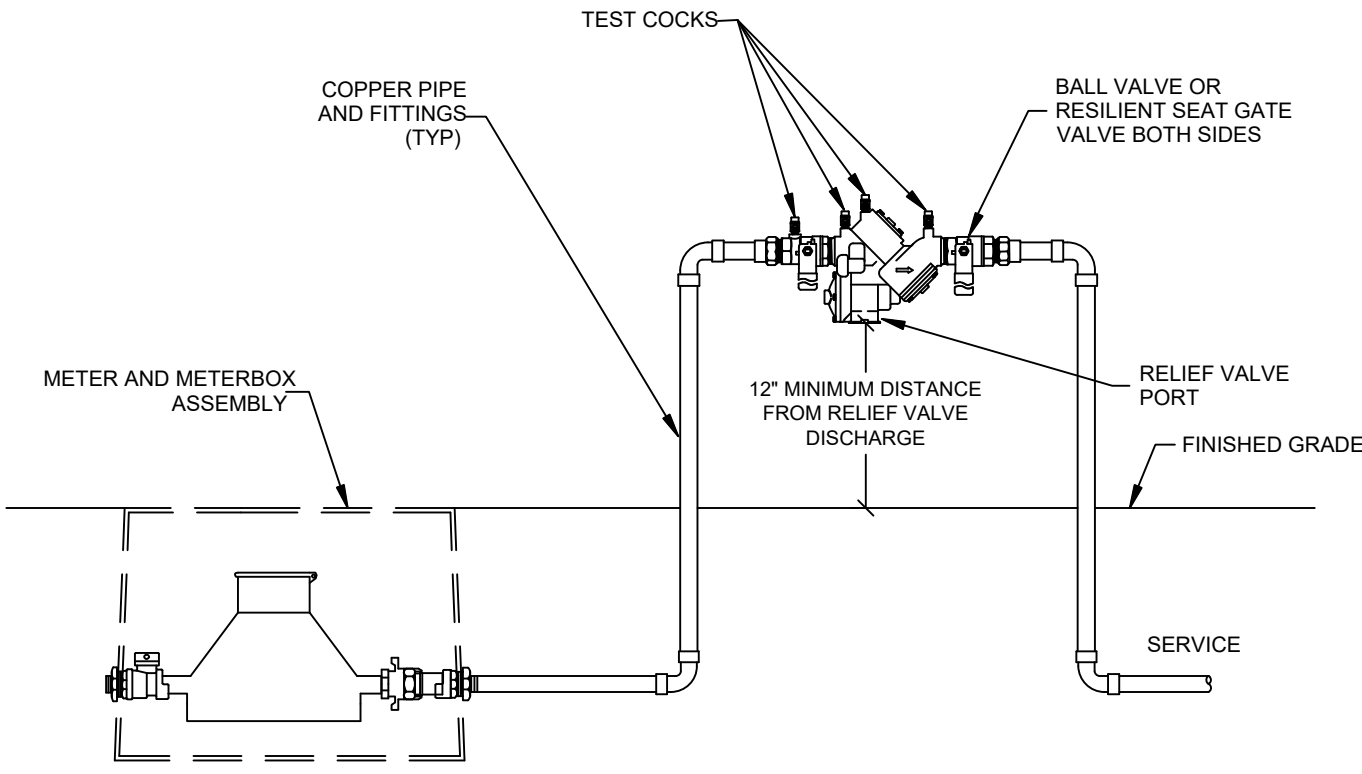
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SCALE: NONE	FILE: FW-WDETAILS		5 of 7

REDUCED PRESSURE ZONE
(RPZ)
BACKFLOW PREVENTION ASSEMBLY
FOR
3/4", 1", 1-1/2", AND 2"
INSTALLATIONS



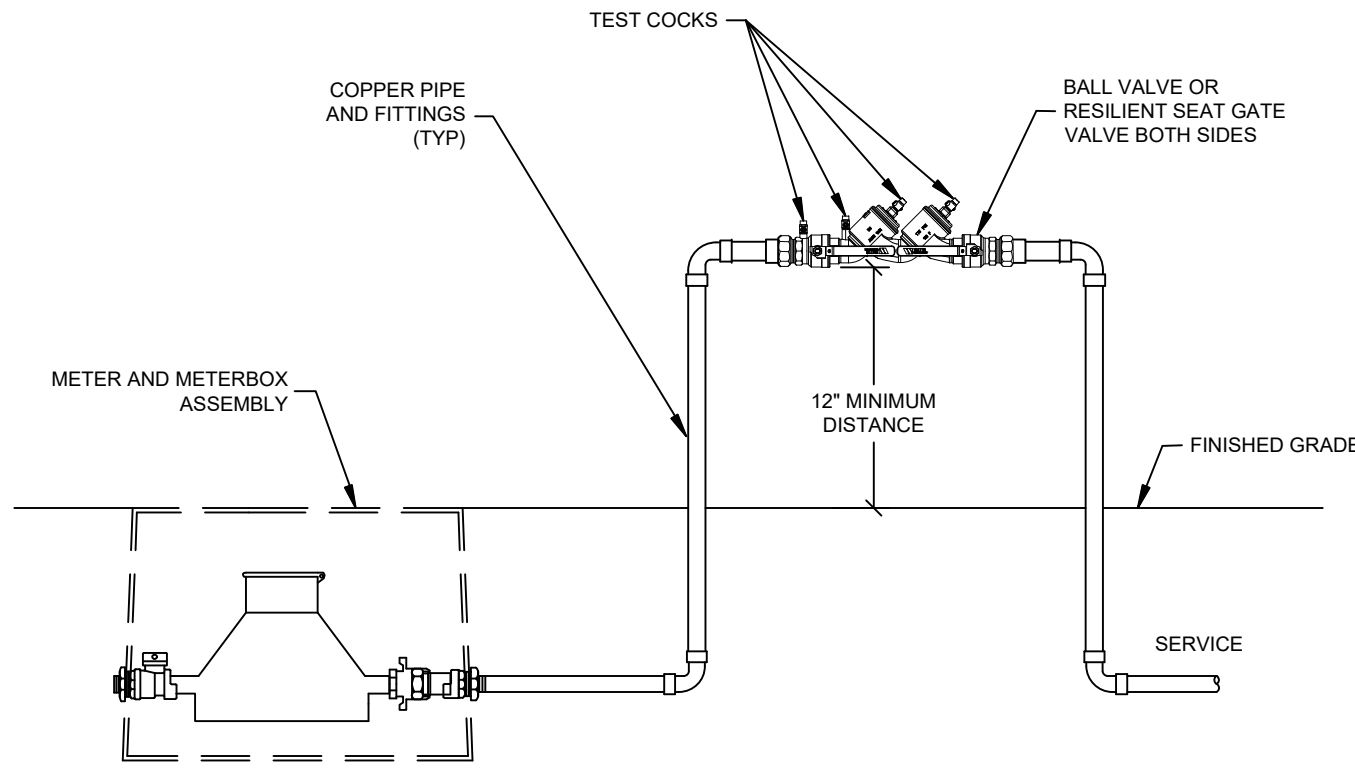
- NOTES:
1. ALL BRASS FITTING MATERIAL INSTALLED SHALL CONTAIN NO LEAD IN ACCORDANCE WITH THE CURRENT DRINKING WATER STANDARDS.
 2. THE BACKFLOW PREVENTION DEVICE MUST BE CERTIFIED BY THE UNIVERSITY OF SOUTHERN CALIFORNIA HYDRAULIC RESEARCH.

REDUCED PRESSURE ZONE BACKFLOW PREVENTION ASSEMBLY

JUPITER UTILITIES
CONSTRUCTION STANDARDS AND DETAILS

DATE APPROVED:
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DRAWING NO.
CC-1

DOUBLE CHECK VALVE
BACKFLOW PREVENTION ASSEMBLY
FOR
3/4", 1", 1-1/2", AND 2"
INSTALLATIONS

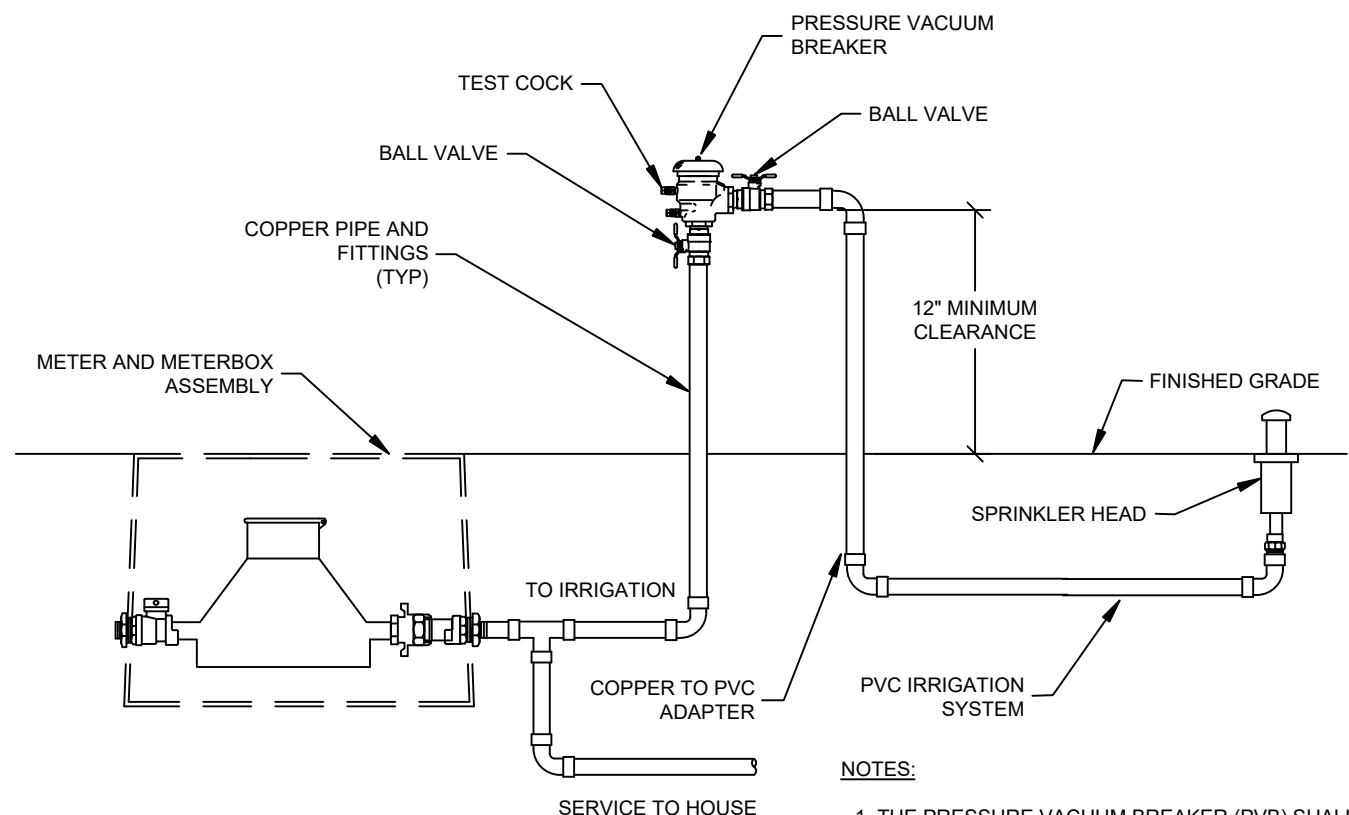


- NOTES:
1. ALL BRASS FITTING MATERIAL INSTALLED SHALL CONTAIN NO LEAD IN ACCORDANCE WITH THE CURRENT DRINKING WATER STANDARDS.
 2. THE BACKFLOW PREVENTION DEVICE MUST BE CERTIFIED BY THE UNIVERSITY OF SOUTHERN CALIFORNIA HYDRAULIC RESEARCH.

DOUBLE CHECK VALVE BACKFLOW PREVENTION ASSEMBLY

JUPITER UTILITIES
CONSTRUCTION STANDARDS AND DETAILS

DATE APPROVED:
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DRAWING NO.
CC-2



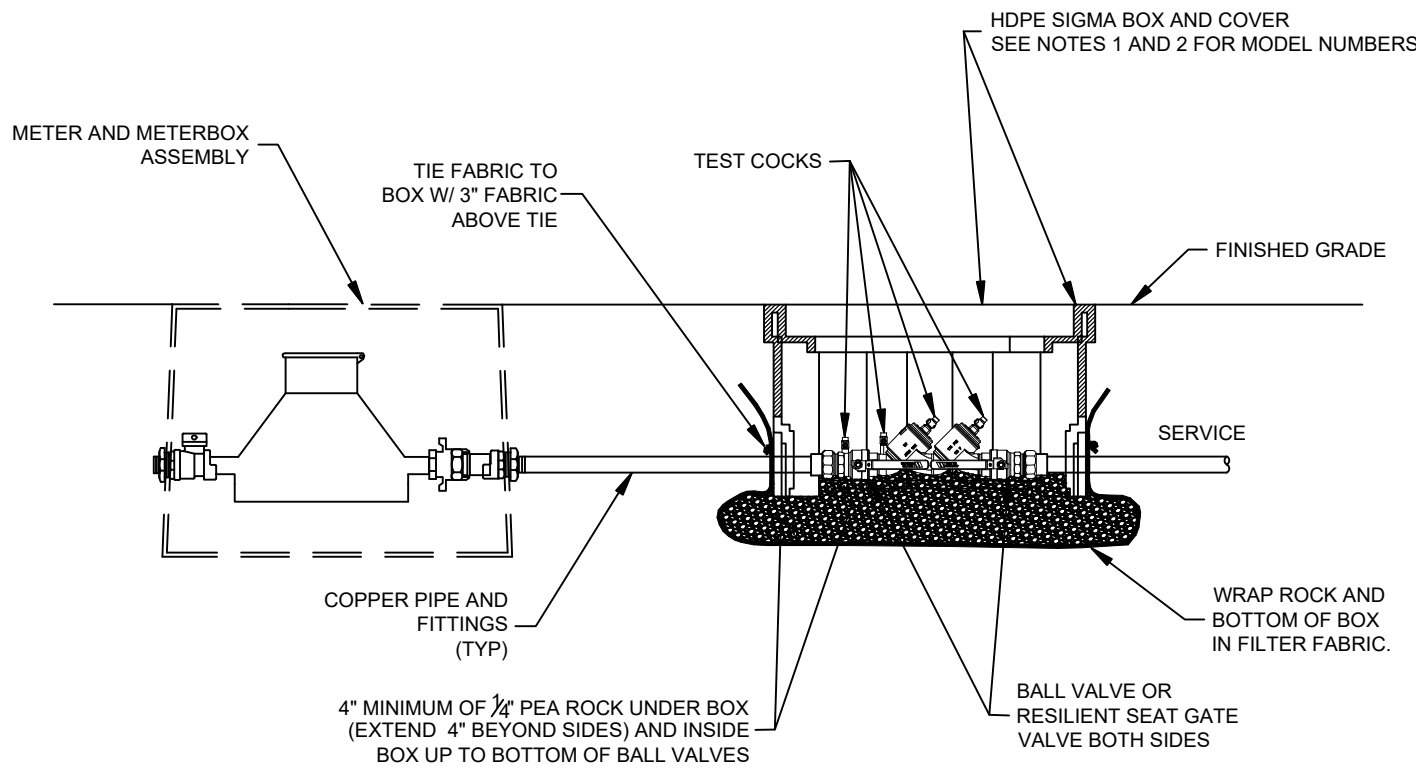
- NOTES:
1. THE PRESSURE VACUUM BREAKER (PVB) SHALL BE INSTALLED ONLY ON SYSTEMS SUBJECT TO NO BACK PRESSURE.
 2. THE PRESSURE VACUUM BREAKER SHALL BE INSTALLED IN AN ACCESSIBLE LOCATION FOR SERVICE AND INSPECTION.
 3. THE PRESSURE VACUUM BREAKER SHALL BE INSTALLED IN THE MAIN LINE TO THE IRRIGATION SYSTEM, NOT LESS THAN 12 INCHES ABOVE THE HIGHEST SPRINKLER HEAD.
 4. ALL MATERIAL SHALL BE APPROVED BY THE TOWN OF JUPITER WATER UTILITIES PRIOR TO INSTALLATION.
 5. ALL BRASS FITTING MATERIAL INSTALLED SHALL CONTAIN NO LEAD IN ACCORDANCE WITH THE CURRENT DRINKING WATER STANDARDS.
 6. THE BACKFLOW PREVENTION DEVICE MUST BE CERTIFIED BY THE UNIVERSITY OF SOUTHERN CALIFORNIA HYDRAULIC RESEARCH.

PRESSURE TYPE VACUUM BREAKER FOR POTABLE IRRIGATION

JUPITER UTILITIES
CONSTRUCTION STANDARDS AND DETAILS

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CC-5

DOUBLE CHECK VALVE
BACKFLOW PREVENTION ASSEMBLY
FOR
3/4", 1", 1-1/2", AND 2"
PIT INSTALLATIONS



- NOTES:
1. FOR 3/4" AND 1" PIT INSTALLATIONS PROVIDE A HDPE SIGMA BOX RMB 111812NSW-W AND COVER N1118BLKWAT
 2. FOR 1-1/2" AND 2" PIT INSTALLATIONS PROVIDE A HDPE SIGMA BOX RMB 173012NSW-W AND COVER N1730BLKWAT
 3. ALL TEST COCKS SHALL BE PROTECTED WITH DUST CAPS OR COVERS.
 4. TO BE USED WHEN RESIDENTIAL RECLAIMED WATER IS AVAILABLE TO LOT.
 5. ALL BRASS FITTING MATERIAL INSTALLED SHALL CONTAIN NO LEAD IN ACCORDANCE WITH THE CURRENT DRINKING WATER STANDARDS.
 6. THE BACKFLOW PREVENTION DEVICE MUST BE CERTIFIED BY THE UNIVERSITY OF SOUTHERN CALIFORNIA HYDRAULIC RESEARCH.

DOUBLE CHECK VALVE BACKFLOW PREVENTION PIT INSTALLATION

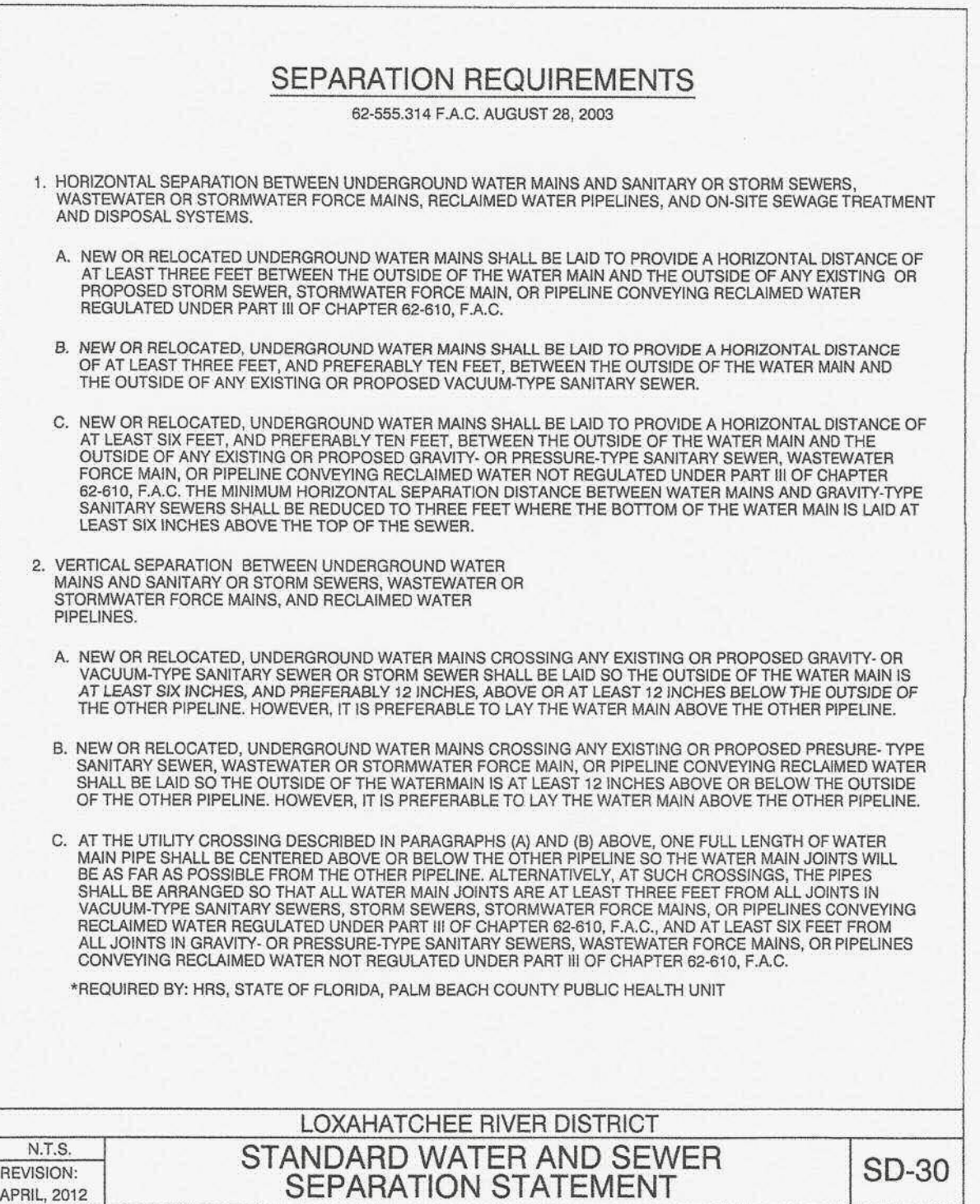
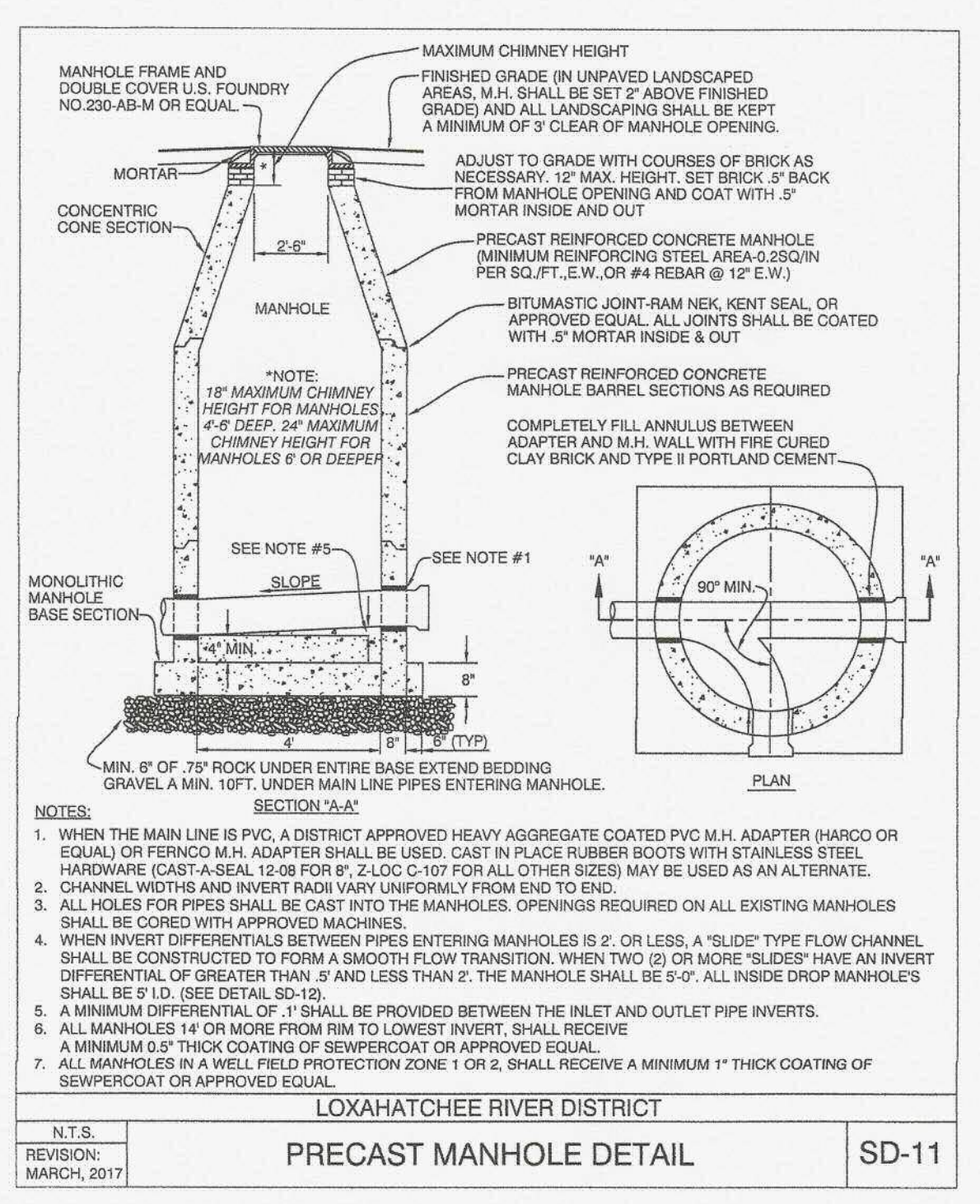
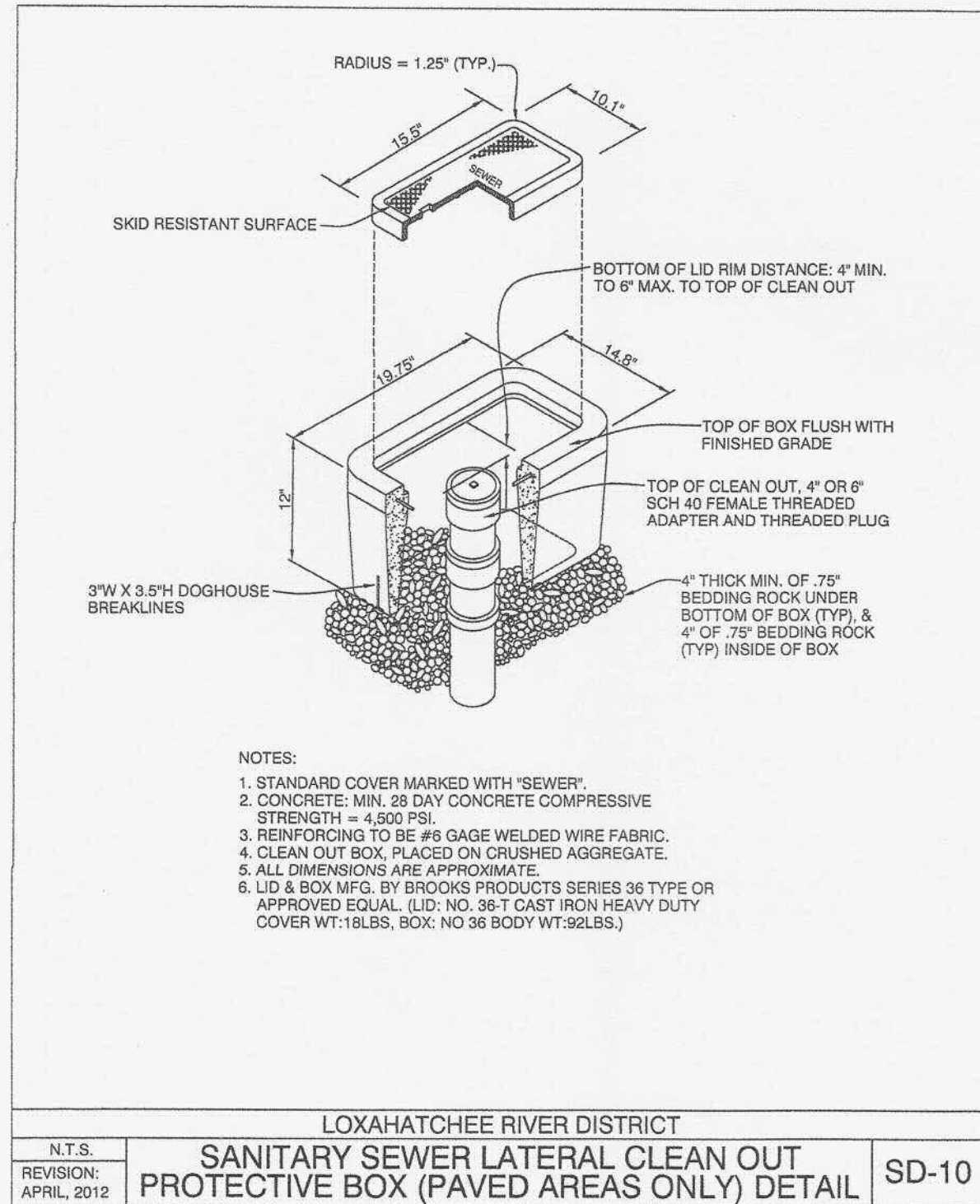
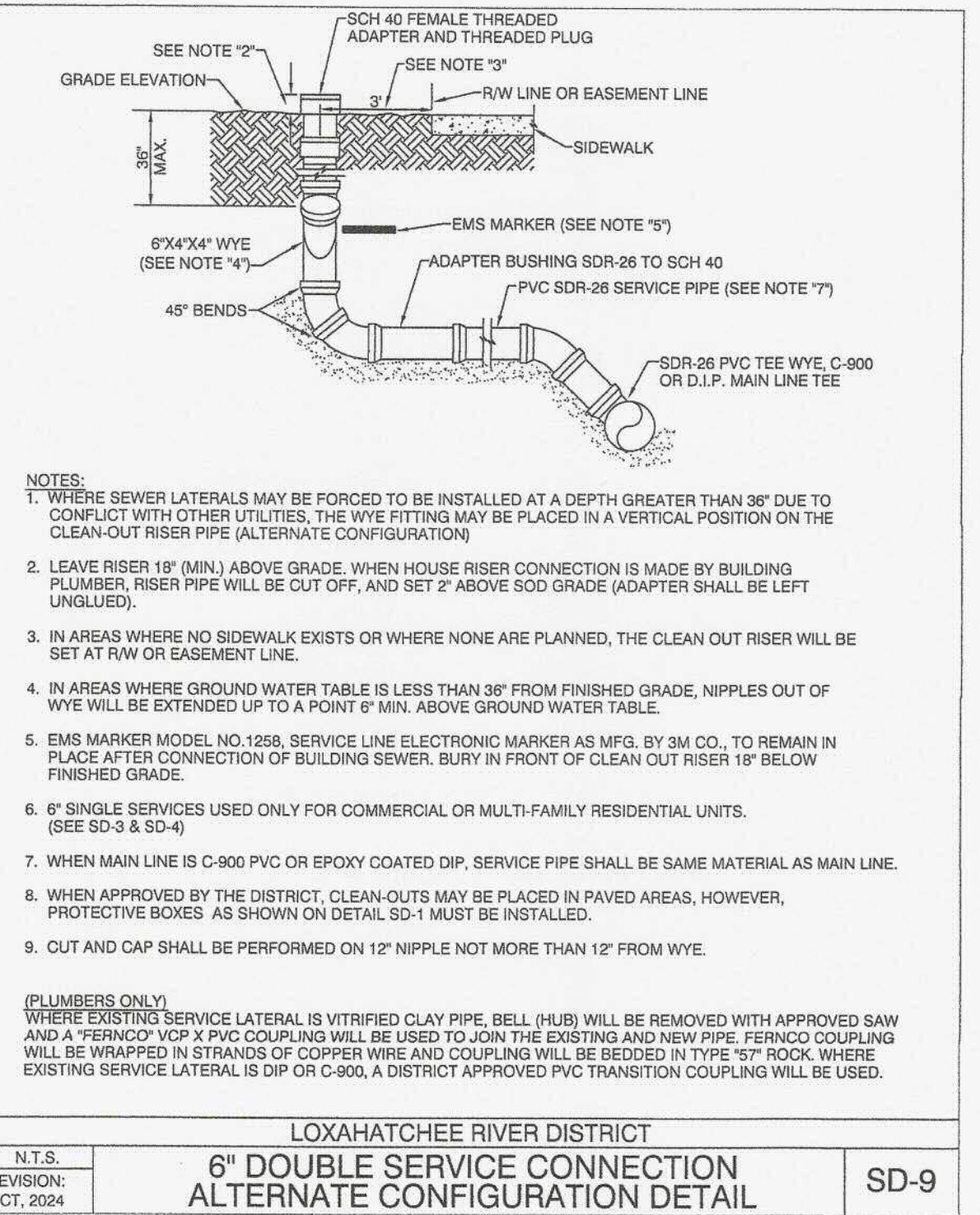
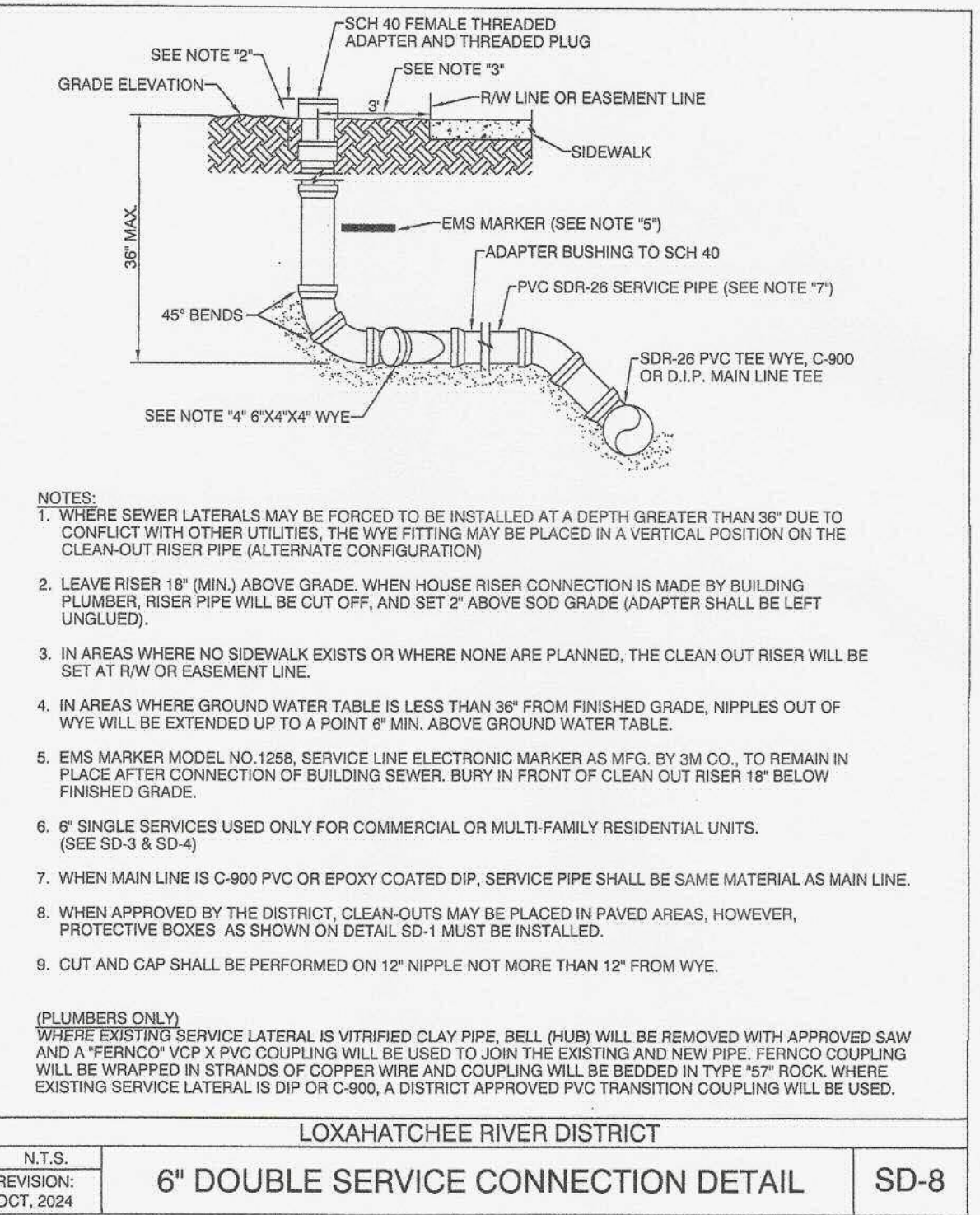
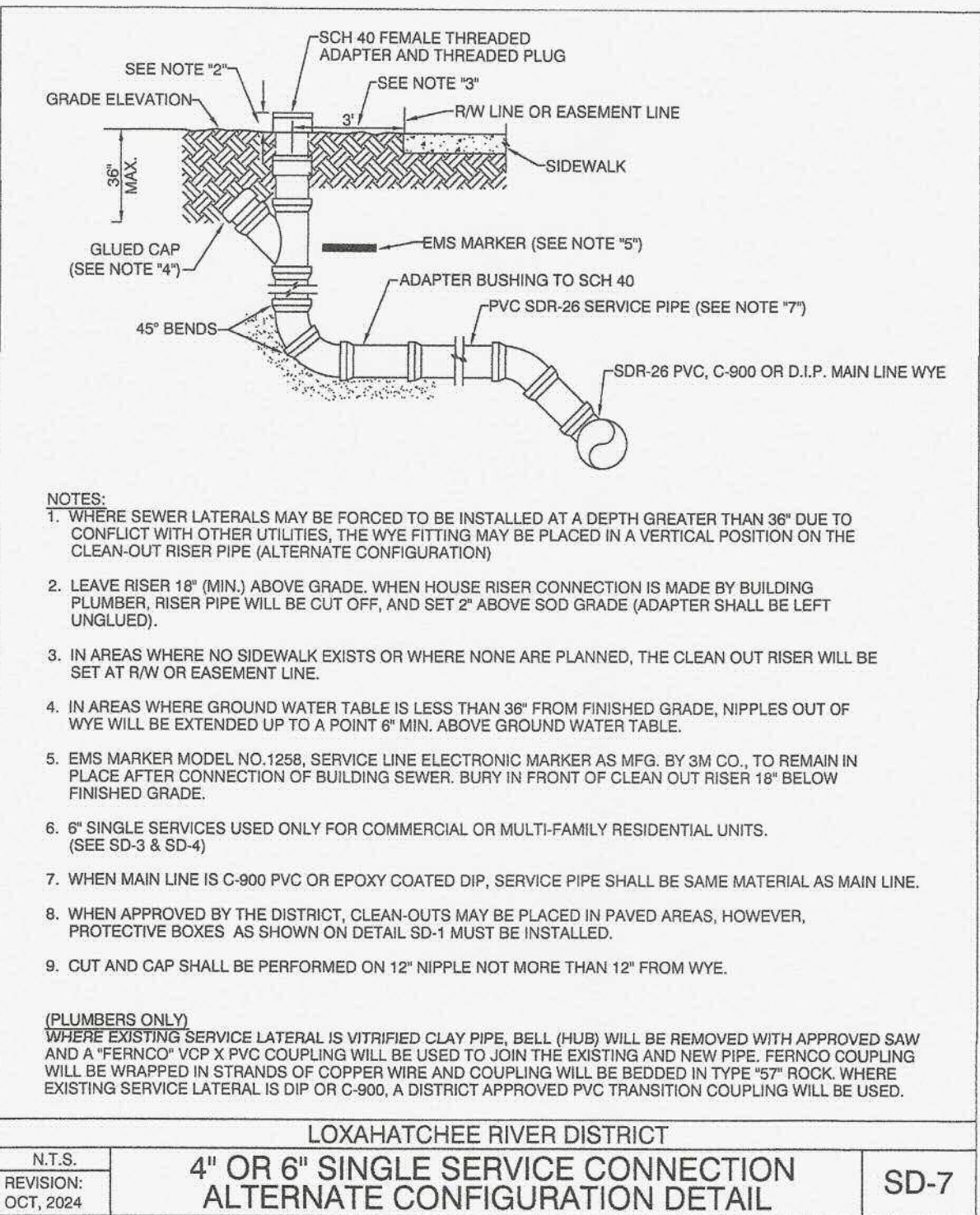
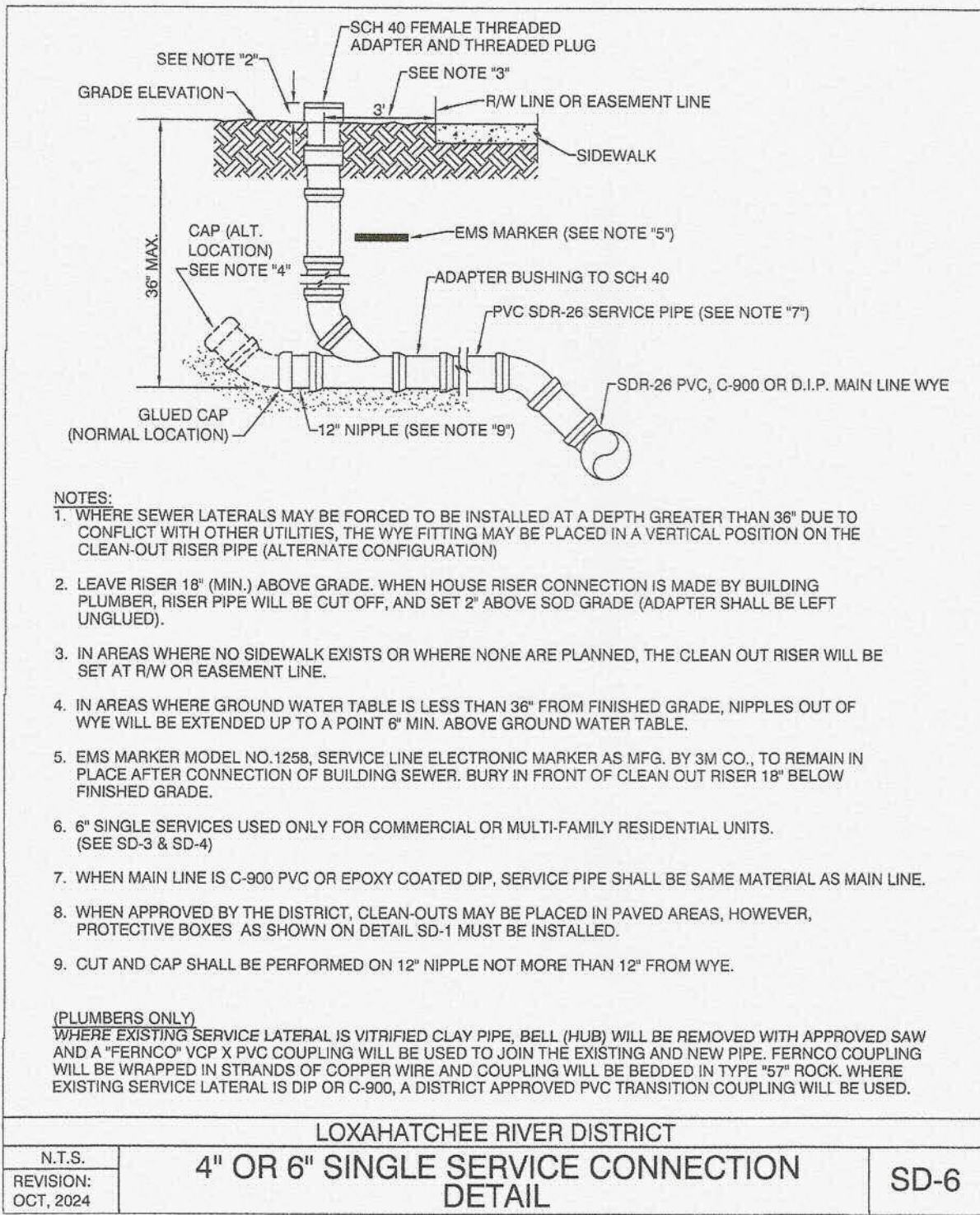
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FISHERMAN'S WHARF WATER DETAILS					
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SCALE: NONE	FILE: FW-WDETAILS		6 of 7		



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FISHERMAN'S WHARF SEWAGE COLLECTION DETAILS		
DWN: KE SCALE: AS SHOWN		
CHECKED: GLF FILE: FW-SDDETAILS		
DATE: 4/28/26		
SHEET 7 of 7		

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