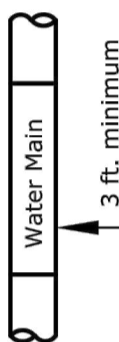
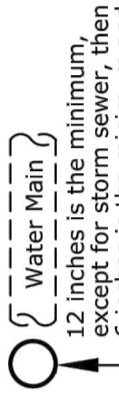
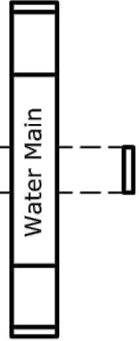
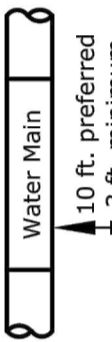

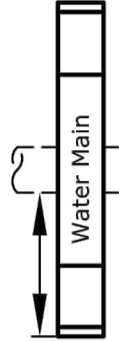
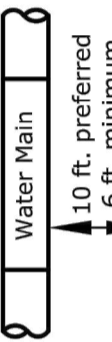
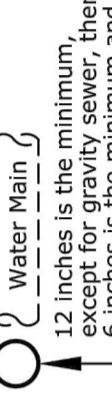
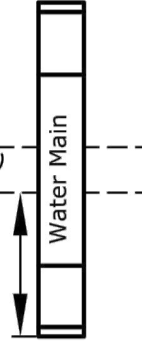


WATER MAIN SEPARATION IN ACCORDANCE WITH F.A.C. RULE 62-555.314				
OTHER PIPE	HORIZONTAL SEPARATION	CROSSINGS (1) (4)	JOINT SPACING @ CROSSINGS (FULL JOINT CENTERED)	
STORM WATER, FORCE MAIN, RECLAIMED WATER (2)	 <p>Water Main</p> <p>3 ft. minimum</p>	 <p>Water Main</p> <p>12 inches is the minimum, then 6 inches is the minimum and 12 inches is preferred</p>	 <p>Water Main</p> <p>Alternate 3 ft. minimum</p>	
VACUUM SANITARY SEWER	 <p>Water Main</p> <p>10 ft. preferred 3 ft. minimum</p>	 <p>Water Main</p> <p>12 inches preferred 6 inches min</p>	 <p>Water Main</p> <p>Alternate 3 ft. minimum</p>	
GRAVITY SANITARY SEWER (3) SANITARY SEWER FORCE MAIN, RECLAIMED WATER	 <p>Water Main</p> <p>10 ft. preferred 6 ft. minimum</p>	 <p>Water Main</p> <p>12 inches is the minimum, except for gravity sewer, then 12 inches is preferred and 12 inches is preferred</p>	 <p>Water Main</p> <p>Alternate 6 ft. minimum</p>	
ON-SITE SEWAGE TREATMENT & DISPOSAL SYSTEM	10 ft. minimum	—	—	

(1) WATER MAIN SHOULD CROSS ABOVE OTHER PIPE. WHEN WATER MAIN MUST BE BELOW OTHER PIPE, THE MINIMUM SEPARATION IS 12 INCHES.

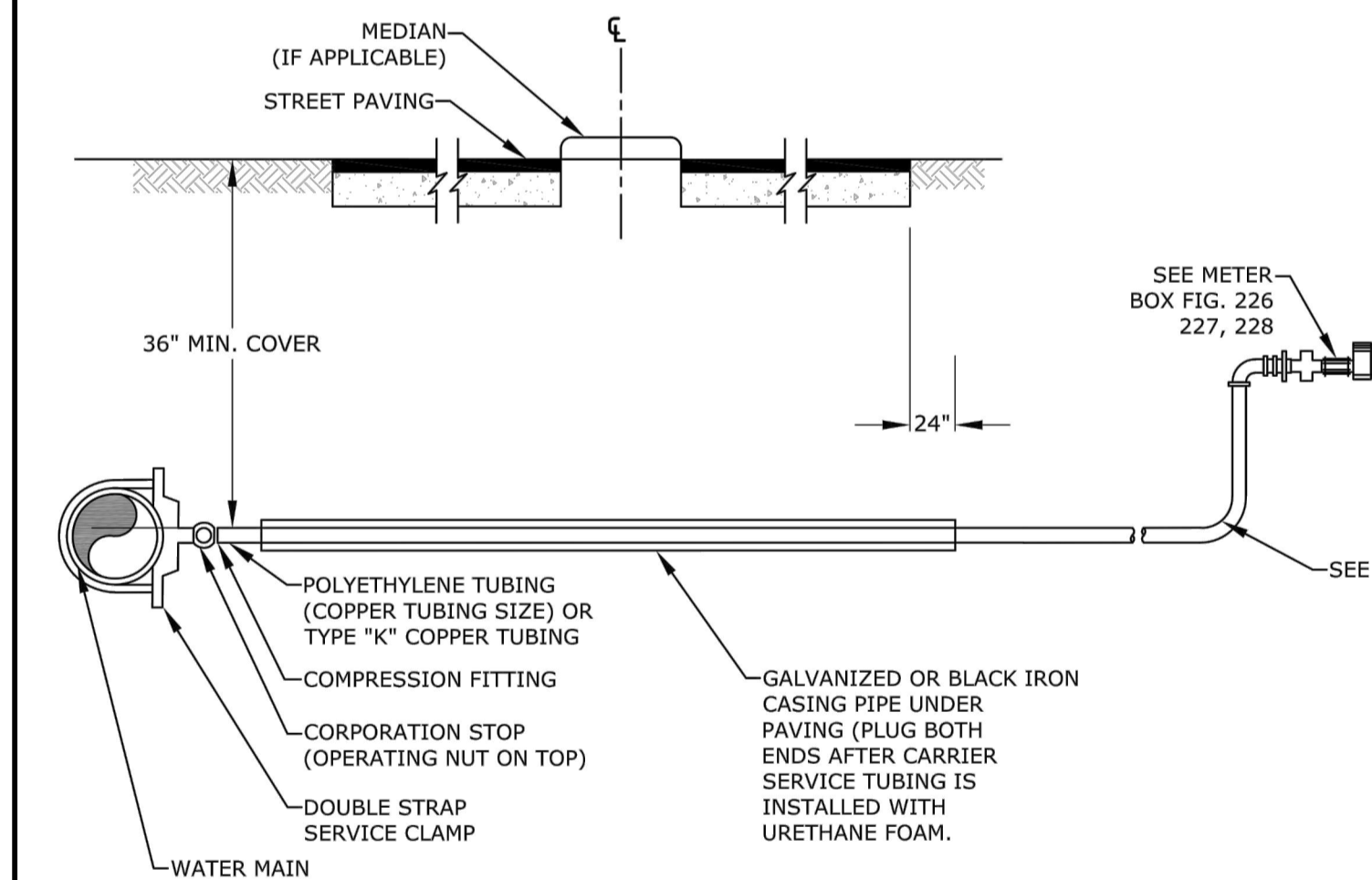
(2) RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

(3) 3 FT. FOR GRAVITY SANITARY SEWER WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6 INCHES ABOVE THE TOP OF THE GRAVITY SANITARY SEWER.

(4) 18" VERTICAL MINIMUM SEPARATION REQUIRED BY WWS, UNLESS OTHERWISE APPROVED.

REVISED	WATER MAIN SEPARATION	FIGURE
7/7/2021		105

BROWARD COUNTY PUBLIC WORKS DEPARTMENT	WATER & WASTEWATER SERVICES ENGINEERING DIVISION 2555 WEST COPANS ROAD POMPAHO BEACH, FL 33069 PHONE NO. 954-831-0745 FAX: 954-831-0925	<h1 style="margin: 0;">STANDARD DETAIL</h1>
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NOTES:

1. SUCCESSIVE TAPS INTO THE WATER MAIN SHALL BE SPACED NOT LESS THAN 18" ON CENTER. NO TAPS SHALL BE CLOSER THAN 18" TO A JOINT.
2. 1" SERVICES REQUIRE A 2" MINIMUM INSIDE DIAMETER CASING PIPE.
3. 2" SERVICES REQUIRE A 3" MINIMUM INSIDE DIAMETER CASING PIPE.
4. ALL CASING PIPE SHALL EXTEND A MINIMUM OF 2' BEYOND THE EDGE OF PAVED STREETS.
5. FOR 1" SERVICE LINES THE MINIMUM RADIUS SHALL BE 14". FOR 2" SERVICE LINES THE MINIMUM RADIUS SHALL BE 21".
6. ALL CASING PIPE ENDS SHALL BE FILED SMOOTH WITH NO BURRS AND SEALED WITH URETHANE FOAM.
7. THE POLYETHYLENE OR COPPER TUBING SHALL BE ONE CONTINUOUS PIECE FROM THE CORPORATION STOP TO THE CHECK VALVE. NO JOINTS WILL BE PERMITTED BETWEEN THESE POINTS.

THIS DETAIL APPLIES ONLY TO COUNTY ARTERIAL AND COLLECTOR ROADS (70' TO 120' R/W) AND ALL STATE ROAD R/W

REVISED	TYPE 2 WATER SERVICE CONNECTION	FIGURE 222
7/7/2021		

BROWARD COUNTY
PUBLIC WORKS DEPARTMENT

WATER & WASTEWATER SERVICES
ENGINEERING DIVISION
2555 WEST COPANS ROAD
FORTLAUDERDALE, FL 33609
PHONE NO. 954-831-0745
FAX: 954-831-0925

STANDARD DETAIL

12"
VARIES
6"
MIN.

**PIPE O.D. PLUS 24 INCHES
TRENCH WIDTH MINIMUM**

**REFER TO PAVEMENT
RESTORATION DETAILS**

**SUITABLE BACKFILL PLACED AND
COMPACTED TO AT LEAST 100%
OF MAXIMUM DENSITY, 6"
MAXIMUM SIZE, 6" LIFTS, PER
AASHTO SPEC. NO. T-99C.**

**SELECT BACKFILL PLACED AND
COMPACTED TO AT LEAST 100%
OF MAXIMUM DENSITY PER AASHTO T-99C IN
LAYERS NOT TO EXCEED 6" THICKNESS WITH 2"
MAXIMUM PARTICLE SIZE.**

**BEDDING MATERIAL. SEE NOTE
NO. 1**

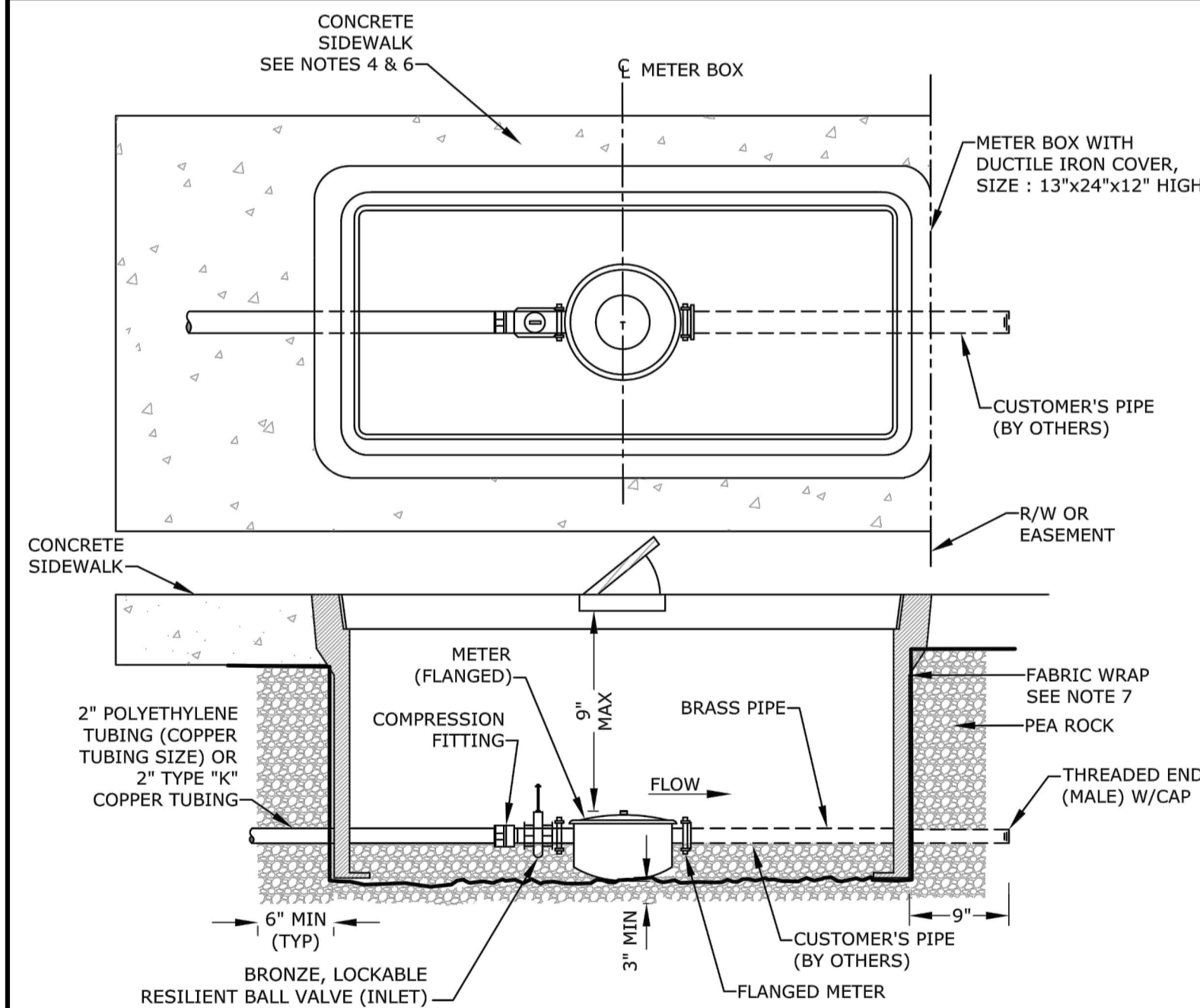
**FOUNDATION REQUIRED IN UNSTABLE
SOILS. SEE NOTE NO. 3**

NOTES:

- UNLESS OTHERWISE SPECIFIED, BEDDING MATERIAL SHALL CONSIST OF SELECT BACKFILL MATERIAL 2" MAXIMUM PARTICLE SIZE, COMPACTED TO AT LEAST 100% OF MAX. DENSITY, 6" LIFTS, PER AASHTO SPEC. NO. T-99C.
- WHERE REQUIRED, SHEETING AND SHORING SHALL BE IN ACCORDANCE WITH OSHA REQUIREMENTS.
- WHERE UNSTABLE SOILS ARE ENCOUNTERED, INCLUDING PEAT, MUCK OR OTHER ORGANIC SOILS, ELASTIC SILT AND CLAYS, A FOUNDATION IS REQUIRED AS DETERMINED BY THE ENGINEER OF RECORD.

REVISED	TYPICAL TRENCH BACKFILL	FIGURE
7/7/2021		180

BROWARD COUNTY PUBLIC WORKS DEPARTMENT	WATER & WASTEWATER SERVICES ENGINEERING DIVISION 2555 WEST COPANS ROAD POMPAHO BEACH, FL 33069 PHONE NO. 954-831-0745 FAX: 954-831-0925	<h1 style="margin: 0;">STANDARD DETAIL</h1>
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METER SIZE	LAYING LENGTH (IN)	HEIGHT (IN)
1 ½"	13	6 ⅞"
2"	17	7 17/32"

1. ALL STRUCTURES TO BE TRAFFIC BEARING TYPE.
2. CURVE IN SERVICE LINE SHALL BE AS CLOSE TO METEOR BOX AS PRACTICAL, WITH A MINIMUM RADIUS SHALL BE 21' FOR 2" TURNING.
3. ALL METERS WILL BE SUPPLIED AND INSTALLED BY WWS, METERS ARE FLANGED.
4. SIDEWALKS ARE PROVIDED IN THE R/W, THE BACK EDGE OF THE METER BOX SHALL LINE UP WITH THE BACK EDGE OF THE SIDEWALK.
5. METER SHALL BE CENTERED IN BOX DIRECTLY UNDER THE ACCESS LID.
6. WHEN THERE ARE NO SIDEWALKS, CONSTRUCT 6" WIDE X 6" THICK CONCRETE COLLAR AT GRADE.
7. AT ALL PIPE PENETRATIONS THROUGH THE FABRIC WRAP, THE FABRIC SHALL BE PULLED TIGHT AROUND THE PIPE AND SECURED WITH TWO GRADE 316 STAINLESS STEEL HOSE CLAMPS TO PROVIDE A TIGHT SEAL AROUND PIPE.

REVISED	WATER METER INSTALLATION FOR 1 ½" OR 2" METERS	FIGURE 228
7/7/2021		

BROWARD COUNTY
PUBLIC WORKS DEPARTMENT

WATER & WASTEWATER SERVICES
ENGINEERING DIVISION
2555 WEST COPANS ROAD
POMPANCO BEACH, FL 33069
PHONE NO: 954-831-0745
FAX: 954-831-0925

STANDARD DETAIL

Technical drawing illustrating a standard detail for a water tapping operation. The drawing shows a cross-section of a pipe with a new tapping valve and sleeve installed. The drawing includes labels for various components and dimensions:

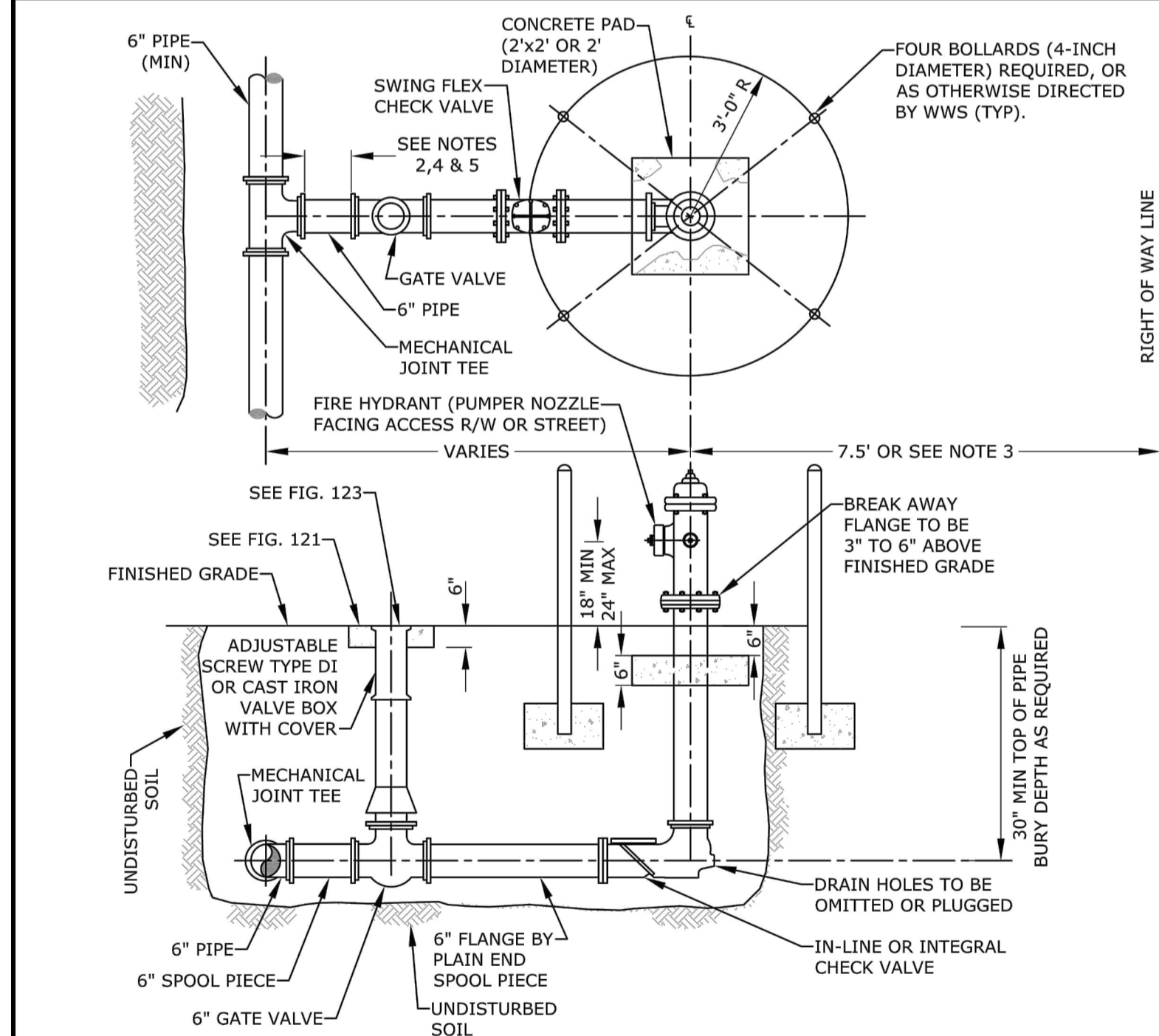
- VALVE BOX W/ CONCRETE COLLAR
- FINISH GRADE
- RESILIENT SEAT TAPPING VALVE WITH VALVE BOX (TYP.)
- TEST PLUG
- NEW TAPPING SLEEVE AND VALVE
- EXIST WATER MAIN
- 12" (MIN)
- 6" (MIN)
- PERMANENT CONCRETE BLOCK SUPPORT (12" MIN)
- UNDISTURBED SOIL
- RESTRAINED MECHANICAL JOINT
- BEDDING ROCK

NOTES:

1. REFER TO WWS MINIMUM DESIGN AND CONSTRUCTION STANDARDS FOR MINIMUM REQUIREMENTS AND PRE-APPROVED MANUFACTURERS.
2. MAIN SHALL BE CLEANED BEFORE ATTACHING SLEEVE
3. SLEEVE AND VALVE SHALL BE PRESSURE TESTED BEFORE MAKING TAP. PRESSURE TEST AND TAP SHALL BE MADE IN PRESENCE OF AN AUTHORIZED COUNTY REPRESENTATIVE.
4. TAP SHALL BE MADE NO CLOSER THAN 18" FROM THE NEAREST JOINT.
5. CONCRETE BLOCK SHALL COMPLETELY SUPPORT TAPPING VALVE.
6. RESTRAINT JOINT REQUIREMENTS SHALL BE IN ACCORDANCE WITH WWS MINIMUM DESIGN AND CONSTRUCTION STANDARDS.

REVISED	TAPPING SLEEVE AND VALVE INSTALLATION	FIGURE
7/7/2021		196

BROWARD COUNTY PUBLIC WORKS DEPARTMENT	WATER & WASTEWATER SERVICES ENGINEERING DIVISION 2555 WEST COPANS ROAD POMPAHO BEACH, FL 33069 PHONE NO. 954-831-0745 FAX: 954-831-0925	<h1 style="margin: 0;">STANDARD DETAIL</h1>
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1. HYDRANT COATED WITH OSHA SAFETY YELLOW REFLECTIVE PAINT.
2. USE RESTRAINED JOINTS FOR THE ENTIRE ASSEMBLY SHOWN.
3. HYDRANT SET BACK SHALL CORRESPOND TO FDOT AND BCHCD REQUIREMENTS, WHERE APPLICABLE.
4. GATE VALVE IS NORMALLY LOCATED NEXT TO TEE.
5. IF DISTANCE FROM MAIN LINE TO FIRE HYDRANT IS GREATER THAN 20 FEET ANOTHER GATE VALVE WILL BE PROVIDED CLOSE TO THE HYDRANT. THIS SECOND VALVE SHALL BE INSTALLED WITHIN 5' OF THE FIRE HYDRANT CHECK VALVE SHALL BE WITHIN 3' OF FIRE HYDRANT UNLESS CHECK VALVE INTEGRAL TO HYDRANT ASSEMBLY.
6. HYDRANT FEED PIPE MAY BE TAPPED FOR A SERVICE LINE UPSTREAM OF THE ISOLATION GATE VALVE.
7. FIRE HYDRANT SIZES SHALL BE IDENTIFIED BY A PLATE PLACED AT THE CENTER LINE OF THE OUTSIDE ROADWAY LANE TO IDENTIFY THE FIRE HYDRANT LOCATION.

REVISED	FIRE HYDRANT INSTALLATION	FIGURE 231
7/7/2021		

[illegible]