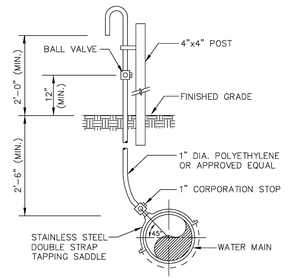
DRC
PZ24-12000020
03/18/2026

Stephen Botek
Digitally signed by Stephen Botek
Date: 2026.02.13 17:07:34 -05'00'

BTE REF DATE: 2-13-2026

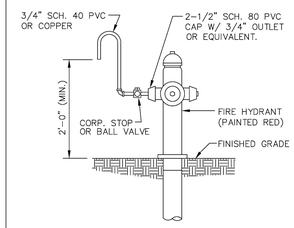


SAMPLE POINT (MAIN)

ALL D.I.P. TO BE PAINTED BLUE ON TOP HALF OF PIPE.

ENGINEERING STANDARDS 2025

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	SAMPLE POINT (MAIN)
S.S.	04-2005		DATE: MAY 2022
		SCALE: N.T.S.	DWG. NO. 100-1



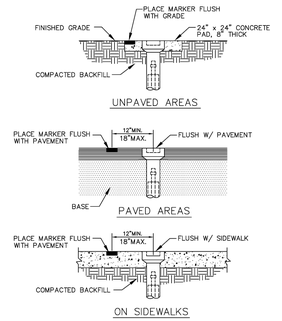
SAMPLE POINT (HYDRANT)

ALL POMPANO BEACH HYDRANTS SHALL BE PAINTED RED.

ALL D.I.P. TO BE PAINTED BLUE ON TOP HALF OF PIPE.

ENGINEERING STANDARDS 2025

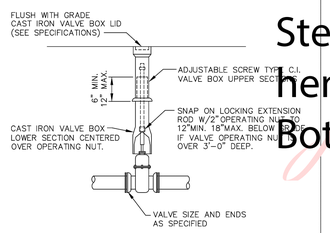
REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	SAMPLE POINT (HYDRANT)
S.S.	04-2005		DATE: MAY 2022
		SCALE: N.T.S.	DWG. NO. 101-1



VALVE BOX SETTINGS

ENGINEERING STANDARDS 2025

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	VALVE BOX SETTINGS
S.S.	04-2005		DATE: MAY 2022
		SCALE: N.T.S.	DWG. NO. 102-1



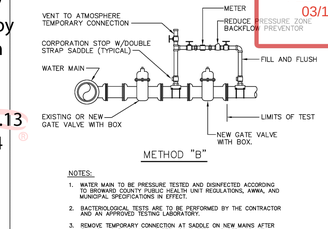
GATE OR PLUG VALVE SETTING

USE MEGALUGS AT ALL PIPE JOINTS

ALL D.I.P. TO BE PAINTED BLUE ON TOP HALF OF PIPE.

ENGINEERING STANDARDS 2025

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	GATE OR PLUG VALVE SETTINGS
S.S.	04-2005		DATE: MAY 2022
T.W.	11-2007	SCALE: N.T.S.	DWG. NO. 103-1



METHOD "B"

NOTES:

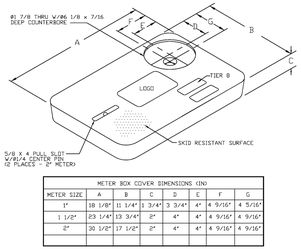
1. WATER MAIN TO BE PRESSURE TESTED AND DISINFECTED ACCORDING TO BROWARD COUNTY PUBLIC HEALTH UNIT REGULATIONS, AWWA, AND MUNICIPAL SPECIFICATIONS IN EFFECT.
2. BACTERIOLOGICAL TESTS ARE TO BE PERFORMED BY THE CONTRACTOR AND AN APPROVED TESTING LABORATORY.
3. REMOVE TEMPORARY CONNECTION AT SADDLE ON NEW MAINS AFTER FILLING AND FLUSHING HAS BEEN COMPLETED AND REPLACE WITH BRASS PLUG
4. PROVIDE ALL NECESSARY THRUST BLOCKS OR OTHER RESTRAINTS.
5. FILLING AND FLUSHING LOCATIONS SHALL BE COORDINATED BY THE CONTRACTOR, ENGINEER, AND CITY.
6. VENT TO ATMOSPHERE SHALL REMAIN OPEN DURING ALL PHASES OF PRESSURE TESTING.
7. AFTER COMPLETION FILL AND FLUSH CONNECTION
8. USE MEGALUGS AT ALL PIPE JOINTS

FILLING AND FLUSHING CONNECTION

ALL D.I.P. TO BE PAINTED BLUE ON TOP HALF OF PIPE.

ENGINEERING STANDARDS 2025

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	FILLING / FLUSHING CONNECTION
S.S.	04-2005		DATE: MAY 2022
T.W.	11-2007		DWG. NO.
S.S.	01-2012	SCALE: N.T.S.	104-1



METER BOX COVER DIMENSIONS (IN)							
METER SIZE	A	B	C	D	E	F	G
1"	18 1/8"	11 1/4"	13 3/4"	3 3/4"	3 3/4"	4"	4 5/16"
1 1/2"	23 1/4"	13 3/4"	13 3/4"	2"	4"	4"	4 9/16"
2"	30 1/2"	17 1/2"	17 1/2"	2"	4"	4"	4 9/16"

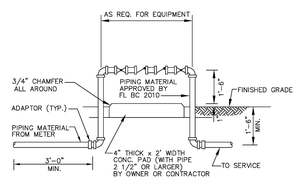
NOTES

1. CUSTOMER IS CITY OF POMPANO BEACH FLORIDA LOGO TO BE SPECIFIED CITY OF POMPANO BEACH POTABLE WATER
2. FITS NEPTUNE R450 ANTENNA
3. THIS COVER IS RATED FOR A STATIC DESIGN LOAD OF 8,000 LBS (35,548 N) OVER A 10 (254) X 10 (254) AREA AND MUST PASS A MINIMUM STATIC TEST LOAD OF 12,000 LBS (53,376 N).
4. METER BOX COVER SHOULD BE RATED FOR TRAFFIC CONDITION AS DETERMINED BY ENGINEER OF RECORD

POTABLE WATER METER BOX COVER

ENGINEERING STANDARDS 2025

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	TYPICAL METER BOX COVER
S.S.	11-2012		DATE: JAN. 2022
		SCALE: N.T.S.	DWG. NO. 105-3

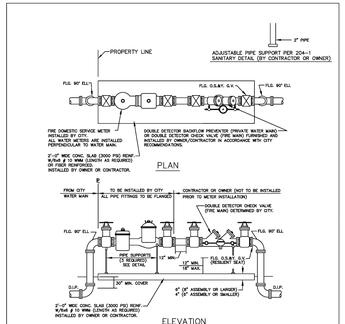


BACKFLOW PREVENTER

USE MEGALUGS AT ALL PIPE JOINTS 3" AND LARGER
PLEASE SEE METER INSTALL DIMENSION LIST ON STANDARD NO. 106-4
SMALL UNITS UNI-STRUT SUPPORT

ENGINEERING STANDARDS 2025

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	BACKFLOW PREVENTER
T.W.	04-2008		DATE: MAY 2022
S.S.	03-2009		DWG. NO.
S.S.	11-2012	SCALE: N.T.S.	106-1
S.S.	01-2013		



FIRE ONLY METER AND BACKFLOW DEVICE DETAILS

NOTES:

1. THE BACKFLOW PREVENTOR FOR THE BY-PASS SHALL BE DCDV OR RPZ.
2. PLEASE NOTE THAT WATER METERS 3" AND LARGER ARE SUBJECT TO AN APPROXIMATE ORDER LEAD TIME OF 60 TO 75 DAYS AFTER FULL PAYMENT. PLEASE CONTACT CUSTOMER SERVICE AT 954-786-4637 TO ARRANGE FOR METER PROCUREMENT AND INSTALLATION.
3. USE MEGALUGS AT ALL PIPE JOINTS
4. PLEASE SEE METER INSTALL DIMENSION LIST ON STANDARD NO. 106-4

ENGINEERING STANDARDS 2025

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	FIRE ONLY METER AND BACKFLOW DEVICE
S.S.	05-2011		DATE: MAY 2022
S.S.	11-2012		DWG. NO.
S.S.	12-2013	SCALE: N.T.S.	106-3
S.S.	11-2016		

FIRE METERS - OS & Y VALVES, GASKETS & METER					2" MIN. TRAVEL
(NEPTUNE MACH 10 Ultrasonic Meter)					
SIZE	VALVES (2)	GASKETS (4)	METER w/ Strainer	TOTAL LENGTH	
3" w/ 4" X 3" Reducer **	16"	1/2"	30" **	46 1/2"	
4"	18"	1/2"	27 1/2"	46"	
6"	21"	1/2"	33"	54 1/2"	
8"	23"	1/2"	30"	53 1/2"	
10"	26"	1/2"	41"	67 1/2"	

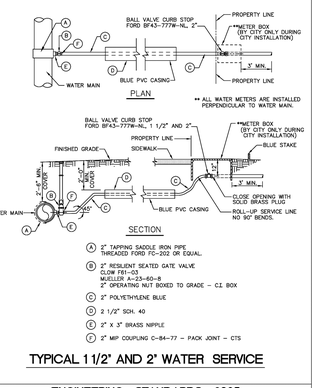
FIRE &/or Domestic Water SERVICE METERS - TEES, OS & Y VALVES, GASKETS & METERS				
(NEPTUNE MACH 10 Ultrasonic Meter)				
SIZE	TEES (2)	VALVES (2)	GASKETS (6)	Meter w/ Strainer	TOTAL LENGTH
3" w/ 4" X 3" Reducer **	3" X 3" - 22"	16"	3/4"	30" **	68 3/4"
4"	4" X 3" - 26"	18"	3/4"	27 1/2"	72 1/4"
6"	6" X 4" - 32"	21"	3/4"	33"	86 3/4"
8"	8" X 4" - 36"	23"	3/4"	30"	89 3/4"
10"	10" X 6" - 44"	26"	3/4"	41"	111 3/4"

*All fittings, valves and meters are flanged & all dimensions are from face of flange to face of flange.

NOTE:
PLEASE NOTE THAT WATER METERS 3" AND LARGER ARE SUBJECT TO AN APPROXIMATE ORDER LEAD TIME OF 60 TO 75 BUSINESS DAYS AFTER FULL PAYMENT. PLEASE CONTACT CUSTOMER SERVICE AT 954-786-4637 TO ARRANGE FOR METER PROCUREMENT AND INSTALLATION. LARGE METERS MUST BE AT MINIMUM ORDERED PRIOR TO INITIAL INSPECTIONS.

ENGINEERING STANDARDS 2025

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	METER INSTALL DIMENSION LIST
T.W.	02-2008		DATE: JAN. 2022
S.S.	11-2016		DWG. NO.
A.S.	01-2022	SCALE: N.T.S.	106-4

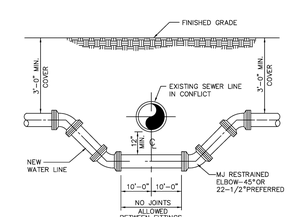


(A) 2" TAPPING SADDLE IRON PIPE THREADED FORD FC-202 OR EQUAL.
(B) 2" RESILIENT SEATED GATE VALVE FORD FR1-961-42-NL MUELLER A-2360-6 OR EQUAL
2" OPERATING NUT BOXED TO GRADE – C.I. BOX
(C) 2" POLYETHYLENE BLUE
(D) 2 1/2" SCH. 40
(E) 2" X 3" BRASS NIPPLE
(F) 2" MIP COUPLING C-84-77 – PACK JOINT – CTS

TYPICAL 1 1/2" AND 2" WATER SERVICE

ENGINEERING STANDARDS 2025

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	TYPICAL 2" WATER SERVICE
S.S.	05-2011		DATE: APRIL 2022
S.S.	05-2012		DWG. NO.
S.S.	11-2016	SCALE: N.T.S.	107-2
A.S.	08-2021		



NOTES

WHERE CONDITIONS PERMIT, PIPE DEFLECTION MAY BE USED INSTEAD OF BENDS TO OBTAIN THE MINIMUM CLEARANCE. FACTORY OFFSETS MAY BE USED.

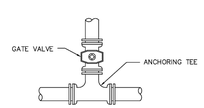
TYPICAL CONFLICT DETAIL

USE MEGALUGS AT ALL PIPE JOINTS

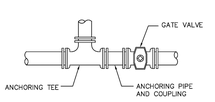
ALL D.I.P. TO BE PAINTED BLUE ON TOP HALF OF PIPE.

ENGINEERING STANDARDS 2025

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	TYPICAL CONFLICT (WATER)
T.W.	11-2007		DATE: MAY 2022
S.S.	JUNE 2005		DWG. NO.
		SCALE: N.T.S.	108-1



RESTRAINED VALVE AT TEE (BRANCH)



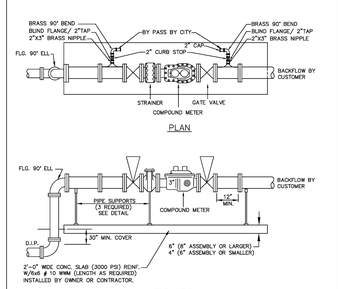
RESTRAINED VALVE AT TEE (IN LINE)

USE MEGALUGS AT ALL PIPE JOINTS

ALL D.I.P. TO BE PAINTED BLUE ON THE TOP HALF OF PIPE.

ENGINEERING STANDARDS 2025

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	RESTRAINED VALVE AT TEE
S.S.	JUNE 2005		DATE: MAY 2022
		SCALE: N.T.S.	DWG. NO. 111-1



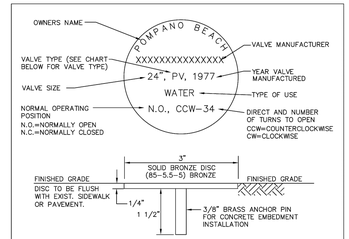
DOMESTIC SERVICE ONLY

PLEASE SEE METER INSTALL DIMENSION LIST ON STANDARD NO. 106-4

USE MEGALUGS AT ALL PIPE JOINTS

ENGINEERING STANDARDS 2025

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	DOMESTIC SERVICE ONLY
TCW	04-08		DATE: APRIL 2022
S.S.	01-2012		DWG. NO.
S.S.	11-2012	SCALE: N.T.S.	112-1



VALVE TYPES

BALL VALVE---BALLV
RESILIENT WEDGE GATE VALVE---RWGV
BUTTERFLY VALVE---BV
PLUG VALVE---PV

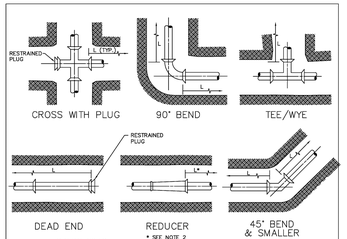
NOTES:

1. VALVE INFORMATION TO BE TRIPLE ENGRAVED INTO TOP SURFACE WITH 1/4" CAPITAL LETTERS.
2. ENTIRE MARKER TO BE COATED WITH CLEAR EPOXY TO PREVENT TARNISHING.
3. VALVE INFORMATION TO BE APPROVED BY CITY OF POMPANO BEACH UTILITIES DEPARTMENT.
4. MARKERS SHALL BE MANUFACTURED BY RO WRENCH, OR APPROVED EQUAL

UNDERGROUND VALVE IDENTIFICATION MARKER

ENGINEERING STANDARDS 2025

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	UNDERGROUND VALVE IDENTIFICATION MARKER
S.S.	JUNE 2005		DATE: FEB. 2022
T.W.	11-2007		DWG. NO.
T.W.	02-2008	SCALE: N.T.S.	115-1
S.S.	1-24-12		



GENERAL NOTES:

1. VALUES IN TABLE ARE BASED ON 3' OF COVER, 100 PSI INTERNAL PRESSURE, FOR FORCE MAINS, 150 PSI REUSE WATER LINES, ANSI/AWWA C03 & C150/A21.50 LAYING CONDITION 3, ASTM D2487 SAND-SILT SP SOIL TYPE, AND SAFETY FACTOR OF 2.0. RESTRAINED LENGTHS WERE COMPUTED PER DIPRA "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" AND "PVC PIPE THRUST RESTRAINT DESIGN HANDBOOK," EBAA IRON, INC.
2. CONFIRM THE EXACT LENGTH OF RESTRAINING REQUIRED FOR REDUCERS, PIPE ENCASED IN POLYETHYLENE AND ENCROACHING RESTRAINED LENGTHS WITH THE DESIGN ENGINEER.
3. THE CONTRACTOR IS RESPONSIBLE FOR PROPER INSTALLATION OF THE RESTRAINED JOINTS TO PREVENT MOVEMENT OF THE PIPE & FITTINGS.
4. IN THE EVENT OF A CONFLICT BETWEEN RESTRAINED LENGTHS SHOWN ON THE TABLE AND RESTRAINED LENGTHS SHOWN ON THE DRAWINGS, THE LONGEST RESTRAINED LENGTH SHALL BE USED.

RESTRAINED JOINT INFORMATION

ENGINEERING STANDARDS 2025

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	RESTRAINED JOINT INFORMATION
			DATE: MAY 2022
		SCALE: N.T.S.	DWG. NO. 118-1

#	DATE	REVISIONS

STEPHEN F. BOTEK LICENSE No. 55335 STATE OF FLORIDA PROFESSIONAL ENGINEER

February 13, 2026

THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY STEPHEN F. BOTEK, P.E. ON THE DATE ADJACENT TO THE SEAL.

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WATER AND SANITARY SEWER DETAILS

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www.botekthurlow-eng.com p: 954-568-0888 f: 954-568-0757

BTE PROJECT #: 23-1102

PROJECT DATE: 7-9-25

SHEET #: C-4.1

DRC
PZ24-12000020
07/15/2026