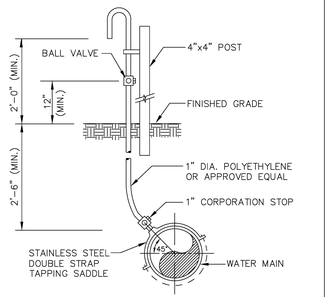
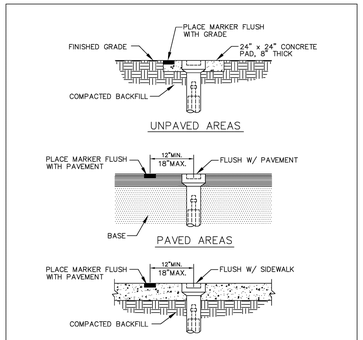


SAMPLE POINT (MAIN)

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

ENGINEERING STANDARDS 2025

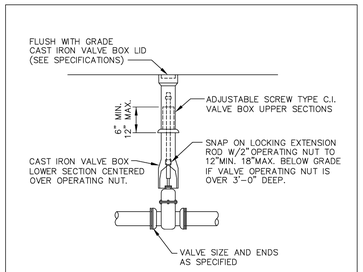
REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	SAMPLE POINT (MAIN)
S.S.	04-2005		DATE: MAY 2022
		SCALE: N.T.S.	DWG. NO. 100-1



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



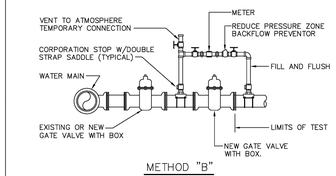
GATE OR PLUG VALVE SETTING

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:

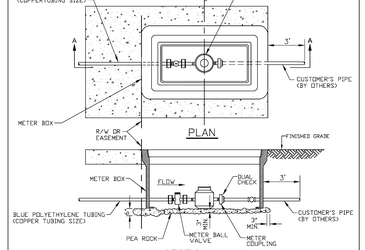
1. WATER MAIN TO BE PRESSURE TESTED AND DISINFECTED ACCORDING TO BROWARD COUNTY PUBLIC HEALTH UNIT REGULATIONS, AWWA, AND MUNICIPAL SPECIFICATIONS IN EFFECT.
2. BACTERIOLOGICAL TESTS ARE TO BE PERFORMED BY THE CONTRACTOR AND AN APPROVED TESTING LABORATORY.
3. REMOVE TEMPORARY CONNECTION AT SADDLE ON 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. 104-1
S.S.	01-2012	SCALE: N.T.S.	



NOTES:

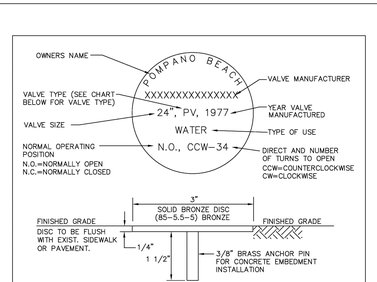
1. ALL METERS WILL BE SUPPLIED AND INSTALLED BY COPB UTILITIES METER HAS IRON PIPE THREAD MALE CONNECTION ON EACH END.
2. METER SHALL BE CENTERED IN BOX.
3. DUAL CHECK IS SAME SIZE AS CUSTOMER'S SERVICE LINE.

METER SIZE	LAYING LENGTH ±IN	HEIGHT ±IN
⅝"	7.5	4.56
1"	10.75	5.75

METER BOX INSTALLATION

ENGINEERING STANDARDS 2025

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	METER BOX INSTALLATION FOR 5/8" AND 1" METERS
S.S.	11-2012		DATE: JAN. 2022
		SCALE: N.T.S.	DWG. NO. 105-2



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

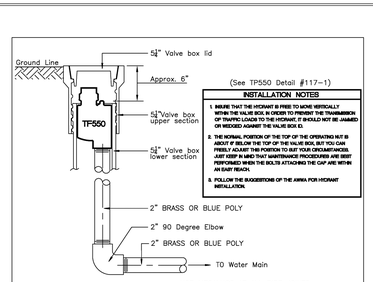
NOTES

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 BE 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	SCALE: N.T.S.	DWG. NO. 106-1
S.S.	11-2012		
S.S.	01-2013		

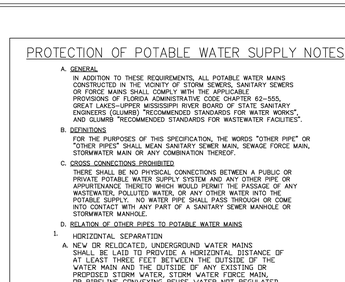
FIRE METERS - OS & Y VALVES, GASKETS & METER (NEPTUNE MACH 10 Ultrasonic Meter)					2" MIN. TRAVEL
SIZE	VALVES (2)	GASKETS (4)	METER w/ Strainer	TOTAL LENGTH	
3" w/ 4" X 3" Reducer **	16"	1/2"	30" **	46 1/2"	
4"	18"	1/2"	27 1/2"	46"	
6"	21"	1/2"	33"	54 1/2"	
8"	23"	1/2"	30"	53 1/2"	
10"	26"	1/2"	41"	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	SCALE: N.T.S.	DWG. NO. 106-4
A.S.	01-2022		

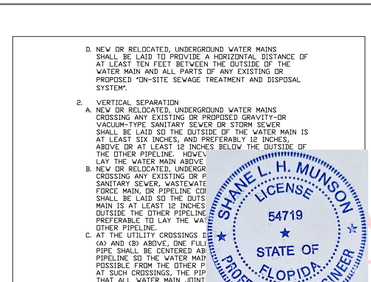


SINGLE SERVICE	DOUBLE SERVICE
A 1" TAPPING SADDLE CC THREAD FORD	A 1" TAPPING SADDLE (2) FORD FC-202 OR EQUAL.
B 1" CORPORATION STOP FORD TYPE FT1000-4 NL THREADS	B 1" CORPORATION STOP (2) FORD TYPE FT000
C 1" POLYETHYLENE SOLID BLUE CTS SDR 18 (200 PSI)	C 1" POLYETHYLENE SOLID BLUE C.T.S. (2)
D 1 1/2" SCH. 40 FOR 1" SERVICE 2 1/2" SCH. 40 FOR 2" SERVICE PAINTED BLUE	D 2 1/2" SCH. 40 FOR 1" SERVICE 8" SCH. 40 FOR 2" SERVICE PAINTED BLUE

TYPICAL 3/4" AND 1" WATER SERVICE

ENGINEERING STANDARDS 2025

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	TYPICAL 1" WATER SERVICE
T.W.	11-2007		DATE: MAY 2022
S.S.	05-2012	SCALE: N.T.S.	DWG. NO. 107-1
S.S.	11-2015		
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.

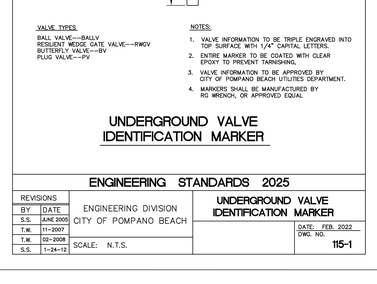
TYPICAL CONFLICT DETAIL

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)
S.S.	04-2005		DATE: MAY 2022
S.S.	01-2012	SCALE: N.T.S.	DWG. NO. 108-1



VALVE TYPES

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

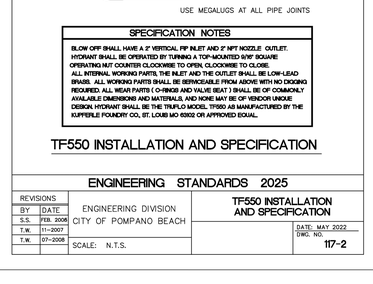
NOTES:

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 RG 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.	AJNE 2005		DATE: FEB. 2022
T.W.	11-2007		DWG. NO. 115-1
T.W.	02-2008	SCALE: N.T.S.	
S.S.	1-24-12		



INSTALLATION NOTES

1. INSURE THAT THE HYDRANT IS FREE TO MOVE VERTICALLY WITHIN THE VALVE BOX, IN ORDER TO PREVENT THE TRANSMISSION OF TRAFFIC LOADS TO THE HYDRANT, IT SHOULD NOT BE JAMMED OR WEDGED AGAINST THE VALVE BOX ID.
2. THE NORMAL PORTION OF THE TOP OF THE OPERATING NUT IS ABOUT 9" BELOW THE TOP OF THE VALVE BOX, BUT YOU CAN FREELY ADJUST THIS PORTION TO SUIT YOUR CIRCUMSTANCES. JUST KEEP IN MIND THAT MAINTENANCE PROCEDURES ARE BEST PERFORMED WHEN THE BOLTS ATTACHING THE CAP ARE WITHIN AN EASY REACH.
3. FOLLOW THE SUGGESTIONS OF THE AWWA FOR HYDRANT INSTALLATION.

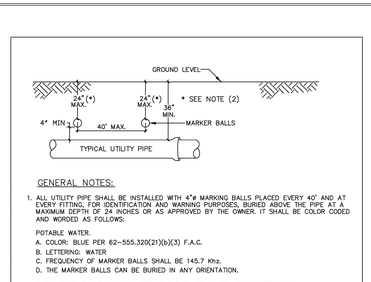
SPECIFICATION NOTES

BLOW OFF SHALL HAVE A 2" VERTICAL PIP INLET AND 3" NPT NOZZLE OUTLET. HYDRANT SHALL BE OPERATED BY TURNING A TOP-MOUNTED 6(W)" SQUARE OPERATING NUT COUNTER CLOCKWISE TO OPEN, CLOCKWISE TO CLOSE. ALL INTERNAL WORKING PARTS, THE INLET AND THE OUTLET SHALL BE LOW-LEAD BRASS. ALL WORKING PARTS SHALL BE REPRICEABLE FROM ABOVE WITH NO DIGGING REQUIRED. ALL WEAR PARTS (O-RINGS AND VALVE SEAT) SHALL BE OF COMMONLY AVAILABLE DIMENSIONS AND MATERIALS, AND NONE MAY BE OF VENDOR UNIQUE DESIGN. HYDRANT SHALL BE THE TRUFLO MODEL TF550 AS MANUFACTURED BY THE KUPPERLE FOUNDRY CO., ST. LOUIS MO 63302 OR APPROVED EQUAL.

TF550 INSTALLATION AND SPECIFICATION

ENGINEERING STANDARDS 2025

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	TF550 INSTALLATION AND SPECIFICATION
S.S.	FEB. 2006		DATE: MAY 2022
T.W.	11-2007	SCALE: N.T.S.	DWG. NO. 117-2
T.W.	07-2008		



GENERAL NOTES:

1. ALL UTILITY PIPE SHALL BE INSTALLED WITH 4"ø MARKING BALLS PLACED EVERY 40' AND AT EVERY FITTING, FOR IDENTIFICATION AND WARNING PURPOSES, BURIED ABOVE THE PIPE AT A MAXIMUM DEPTH OF 24 INCHES OR AS APPROVED BY THE OWNER. IT SHALL BE COLOR CODED AND WORDED AS FOLLOWS:

   POTABLE WATER.
   A. COLOR: BLUE PER 62-555.320(21)(b)(3) F.A.C.
   B. LETTERING: WATER
   C. FREQUENCY OF MARKER BALLS SHALL BE 145.7 Khz.
   D. THE MARKER BALLS CAN BE BURIED IN ANY ORIENTATION.

   THE MARKER BALLS SHALL BE DETECTABLE BY STANDARD METAL DETECTION EQUIPMENT AND SHALL BE MANUFACTURED BY TEMPO OR 3M LOCATOR SYSTEM OR EQUIVALENT (FREQUENCY 145.7 Khz)

2. FOR LARGE DIAMETER PIPE INSTALLED AT DEPTHS BELOW 4'-0" MARKER BALLS SHALL BE PLACED AT A MAXIMUM DEPTH OF 4'-0" BELOW GRADE *.

WATER PIPE IDENTIFICATION

ENGINEERING STANDARDS 2025

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	WATER PIPE IDENTIFICATION
S.S.	01/12		DATE: JAN. 2022
S.S.	06/16	SCALE: N.T.S.	DWG. NO. 119-1

PROTECTION OF POTABLE WATER SUPPLY NOTES

A. GENERAL
IN ADDITION TO THESE REQUIREMENTS, ALL POTABLE WATER MAINS CONSTRUCTED IN THE VICINITY OF STORM SEWERS, SANITARY SEWERS OR FORCE MAINS SHALL COMPLY WITH THE APPLICABLE PROVISIONS OF FLORIDA ADMINISTRATIVE CODE CHAPTER 62-555, GREAT LAKES-UPPER MISSISSIPPI RIVER BOARD OF STATE SANITARY ENGINEERS (GLUMRB) "RECOMMENDED STANDARDS FOR WATER WORKS", AND GLUMRB "RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES".

B. DEFINITIONS
FOR THE PURPOSES OF THIS SPECIFICATION, THE WORDS "OTHER PIPE" OR "OTHER PIPES" SHALL MEAN SANITARY SEWER MAIN, SEWAGE FORCE MAIN, STORMWATER MAIN OR ANY COMBINATION THEREOF.

C. CROSS CONNECTIONS PROHIBITED
THERE SHALL BE NO PHYSICAL CONNECTIONS BETWEEN A PUBLIC OR PRIVATE POTABLE WATER SUPPLY SYSTEM AND ANY OTHER PIPE OR APPURTENANCE THERETO WHICH WOULD PERMIT THE PASSAGE OF ANY WASTEWATER, POLLUTED WATER, OR ANY OTHER WATER INTO THE POTABLE SUPPLY. NO WATER PIPE SHALL PASS THROUGH OR COME INTO CONTACT WITH ANY PART OF A SANITARY SEWER MANHOLE OR STORMWATER MANHOLE.

D. RELATION OF OTHER PIPES TO POTABLE WATER MAINS

1. HORIZONTAL SEPARATION
   A. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM WATER, STORM WATER FORCE MAIN, OR PIPELINE CONVEYING REUSE WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610,F.A.C.
   B. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.
   C. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN 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 REUSE WATER NOT REGULATED UNDER CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY TYPE SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.

ENGINEERING STANDARDS 2025

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	POTABLE WATER SUPPLY NOTES
S.S.	01/12		DATE: JAN. 2022
		SCALE: N.T.S.	DWG. NO. 122-2

D. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM".

2. VERTICAL SEPARATION
   A. 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 INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE, HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE
   B. NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY-OR SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING REUSE WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES, AND PREFERABLY 12 INCHES, OUTSIDE THE OTHER PIPELINE, HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
   C. AT THE UTILITY CROSSINGS DESCRIBED IN (A) AND (B) ABOVE, ONE FULL LENGTH OF WATER PIPE SHALL BE CENTERED AS NEARLY AS POSSIBLE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. AT SUCH CROSSINGS, THE PIPE SHALL BE SPECIAL PIPE THAT ALL WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWER, STORM SEWER, STORM WATER FORCE MAIN, OR PIPELINES CONVEYING REUSE WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610,F.A.C. THE CENTER OF THE WATER MAIN PIPE SHALL BE AT LEAST SIX FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM WATER FORCE MAINS, OR PIPELINES CONVEYING REUSE WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610,F.A.C. THE CENTER OF THE WATER MAIN PIPE SHALL BE AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING REUSE WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610,F.A.C. AND ADJACENT TO THE SEAL.

   WHERE THE HORIZONTAL CAN BEING LOCATED LESS THAN THE REQUIRED MINIMUM DISTANCE BECAUSE OF THE DIAMETER OF THE OTHER PIPELINE OR THE HORIZONTAL DISTANCE BETWEEN THE PIPELINE AND ANOTHER PIPELINE OR THE REQUIRED MINIMUM VERTICAL DISTANCE FROM THE OTHER PIPELINE, THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY FOR RECOMMENDED SOLUTIONS TO MEET THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REQUIREMENTS PER CHAPTER 62-555, F.A.C.

PROTECTION OF POTABLE WATER SUPPLY NOTES

ENGINEERING STANDARDS 2025

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	POTABLE WATER SUPPLY NOTES
S.S.	01/12		DATE: JAN. 2022
		SCALE: N.T.S.	DWG. NO. 122-3

MDC
MUNSON DESIGN AND CONSULTING, INC.
PO BOX 771058
CORAL SPRINGS, FL. 33077
PHONE: 954-340-5291
AUTHORIZATION No. 9327
BUSINESS LICENSE No.7958

CITY STANDARD WATER SYSTEM DETAILS

REVISIONS:

PROJECT ADDRESS:
BIG TREE B.B.Q.
SW/C OF NW 5th STREET AND POWERLINE ROAD
POMPANO BEACH, FLORIDA 33069

SHANE L. H. MUNSON LICENSE 54719 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Shane Munson
Date: 2025.10.28 12:32:55 -04'00'

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY SHANE MUNSON ON THE DATE ADJACENT TO THE SEAL.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

SIGNATURE AND SEAL

Phase: DOCUMENTS

Scale:	1"=20'
Job No.	Sheet No.
2025-100	C5
Date 02/01/2025	
Drawn by SM	Plot Date 10/28/2025
Appr. by SB	5 of 7

DRC
PZ25-12000012
12/03/2025