Forest View Acres Water District CONSTRUCTION STANDARDS

The following approved manufacturers and standard drawings are to be used in conjunction with the latest edition of the Forest View Acres Water District (FVAWD) Rules and Regulations. FVAWD retains the power to impose additional and/or more stringent requirements on all or part of any project as necessary to insure reliability and quality of the FVAWD water system. Prior to construction involving the FVAWD water system or for variance requests contact Community Resource Services (303) 381-4960 or (719) 488-2110. A minmum of 48 hours notice is required prior to any work involving the existing water system.

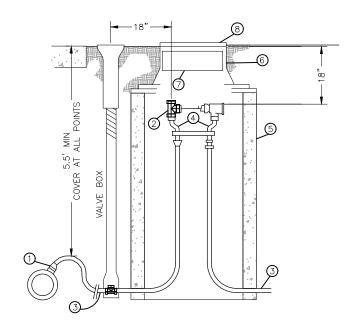
Water System Standard Approved Manufacturers and Specifications

COMPONENT	APPROVED MANUFACTURERS	MODEL	SPECIFICATIONS
PVC Tapping Saddle	A.Y. McDonald	4855A	Two stainless steel straps, ductile iron body, shop coat finish, designed for use on PVC or C-
. To rapping saddle	Mueller	BR2S	900.
Sandar Line Bine	Cresline	CE Blue Flexible Pipe	DR9, NSF-61, 200 PSI with Stainless Steel
Service Line Pipe	ADS	Potable Water Service Tubing	Stiffners
C	Mueller	300 Ball	ANAMANA C 000 NICE C1. Comment Ken 22
Corporation Stop	A.Y. McDonald	NL Ball Style Corporation Stop - 74701B	AWWA C-800, NSF-61, Ground Key??
Meter Setter	A.Y. McDonald	NL Meter Setter - 737-2WDCC 33	Copper Flare x Copper Flare, NSF-61
Curb Stop	A.Y. McDonald	NL Ball Style Curb Stop - 76100Q	AWWA C800, NSF-61
Meters	Badger	Model 25 LL 5/8" x 3/4" - 3/4 Bore (3/4 x 7 1/2)	AMR and ERT compatible, NSF 61
	AVK	Nostalgic	Straight line opening mechanism, self draining,
Fire Hydrants	Kennedy	Guardian	AWWA C502, NSF-61
	Clow Valve Co.	Medallion	AW WA C302, N3F-01
	Mueller	A-2361 or A-2362	
	M&H Valve Company	4067 or 7000	Non-rising, 2 inch operating nut, open left,
Gate Valves 3" and Larger	American	Series 2500	with o-ring stem seal. FBE coated interior and
	Kennedy	KS-RW or KS-FW	exterior. AWWA C-515 or C509, C550, NSF61
	Clow Valve Co.	2638 or 2639	
	JM Eagle	Blue Brute, C-900	
	Diamond Plastics	Diamond C-900	AWWA C-900, ASTM D1784, ASTM D3139, NSF
PVC Main Line Pipe	Vinyl Tech	C900-07 PVC	61, DR18 (235 PSI rating), Bell ends with
	North American Pipe Corporation	C900-07 PVC	elastometric gaskets.
Mechanical Joint Restraints for			AWWA C-900, ASTM D1784, ASTM D3139, NSF
PVC Pipe	EBAA Iron Inc.	Series 2000PV	61, DR18 (235 PSI rating)
Mechanical Joint Fittings	Star Pipe Products	MJ Fittings	AWWA 153, Ductile Iron ASTM A536, Gaskets ANSI A21.11/AWWA 111
Ductile Iron Flanged Fittings	Star Pipe Products	Flanged Fittings	AWWA C110, Ductile Iron ASTM A536, Class 125, Flange Drilling ANSI B16.1

Water System Standard Specification Drawings

W-1	Curb Stop and Meter Pit Installation
W-2	Service Tapping Detail - 3/4" thru 2"
W-3	Fire Hydrant Installation
W-4	Air/Vacuum Relief Valve Vault
W-5	Pressure Reducing Vault
W-6	Pressure Reducing Vault with Meter
W-7	Typical Trench Cross Section
W-8	Thrust Block Data
W-9	Typical Inline Gate Valve Assembly
W-10	Applications for Mechanical Joint Restraints
W-11	Restrained MJ Pipe Length Data

Forest View Acres Water District Final 5/18/2018



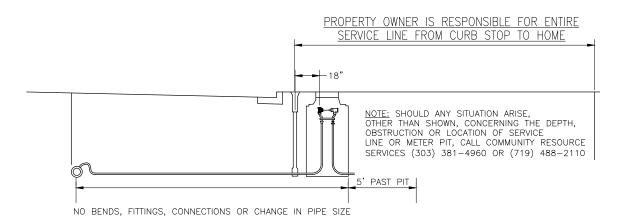
LEGEND

- (1) SADDLE, CORPORATION STOP AND INSULATOR
- (2) LOCKING SHUT OFF VALVE
- SERVICE LINE COPPER (TYPE K) OR PE, DR9, 200 PSI CRESTLINE CE BLUE WITH STAINLESS STEEL STIFFENERS
- 3/4" METER YOKE WITH CHECK VALVE, VARIANCE REQUIRED FOR OTHER SERVICE LINE SIZES
- (5) METER PIT: 24" DIAMETER, 4' MINIMUM DEPTH
- (6) METER PIT BELL AND LID
- PLASTIC RECESSED FROST LID
- (8) 2" HOLE IN METER LID

- WATER METER AND REMOTE READ DEVICE FURNISHED AND INSTALLED BY FOREST VIEW ACRES WATER DISTRICT PERSONNEL. SERVICE LINE MUST HAVE A MINIMUM COVER OF 5.5 FEET. WATER DISTRICT PERSONNEL SHALL INSPECT THE SERVICE LINE FROM THE MAIN TO THE METER PRIOR TO BACKFILLING.

- INSIDE METER SETTINGS WILL NOT BE PERMITTED.
- OUTBUILDINGS SUPPLIED WITH WATER SHOULD BE CONNECTED TO PROPERTY OWNER'S SERVICE LINE NO LESS THAN FIVE (5) FEET AFTER THE METER PIT. METER PITS AND CURB STOPS SHALL BE LOCATED IN GRASSY, LANDSCAPED AREAS, UNLESS OTHERWISE APPROVED BY THE BOARD OF DIRECTORS PRIOR TO INSTALLATION. METER PITS CANNOT BE PLACED IN DRIVEWAYS, SIDEWALKS OR UNDER PARKING AREAS.
- ALL METER SETTINGS MUST BE INSPECTED BY FOREST VIEW ACRÉS WATER DISTRICT PERSONNEL BEFORE BEING BACKFILLED. METERS WILL NOT BE SET/APPROVED UNLESS METER SETTING AND SERVICE LINE ARE IN FULL COMPLIANCE WITH THE RULES AND REGULATIONS, STANDARD DRAWINGS AND APPROVED PROJECT DRAWINGS AS APPLICABLE.
- DOMESTIC WATER SERVICES SHALL RUN AT A NINETY (90) DEGREE ANGLE FROM WATER MAIN WITH NO BENDS, NO CHANGES IN PIPE SIZE OR MATERIAL, AND NO CONNECTIONS UNTIL FIVE (5) FEET PAST THE METER PIT. NO JOINTS ARE PERMITTED WITHIN THE METER PIT EXCEPT THOSE SHOWN ON THE STANDARD DRAWINGS.
- FOREST VIEW ACRES WATER DISTRICT WILL REPAIR SERVICE LINE LEAKS BETWEEN THE CORPORATION STOP AND THE INLET TO THE CURB STOP ONLY. PROPERTY OWNER IS RESPONSIBLE FOR ALL OTHER SERVICE LINE REPAIRS.

 IF THE SERVICE LINE HAS TO BE REPLACED, THE PROPERTY OWNER IS RESPONSIBLE FOR ENTIRE REPLACEMENT FROM THE CORPORATION STOP ON THE
- WATER MAIN IN THE STREET TO THEIR HOME.



- ALL NEW 3/4" SERVICES TO CONSIST OF PIPE TAPPING SADDLE, SOFT COPPER TUBING TYPE K PIPING OF SPECIFIED SIZE ON DRAWINGS, CORPORATION
- ALL NEW 3/4 SERVICES TO CONSIST OF PIPE TAPPING SADDLE, SOFT CONTENT TO STOPS, AND ANGLE—HEAD VALVE IN PIT.

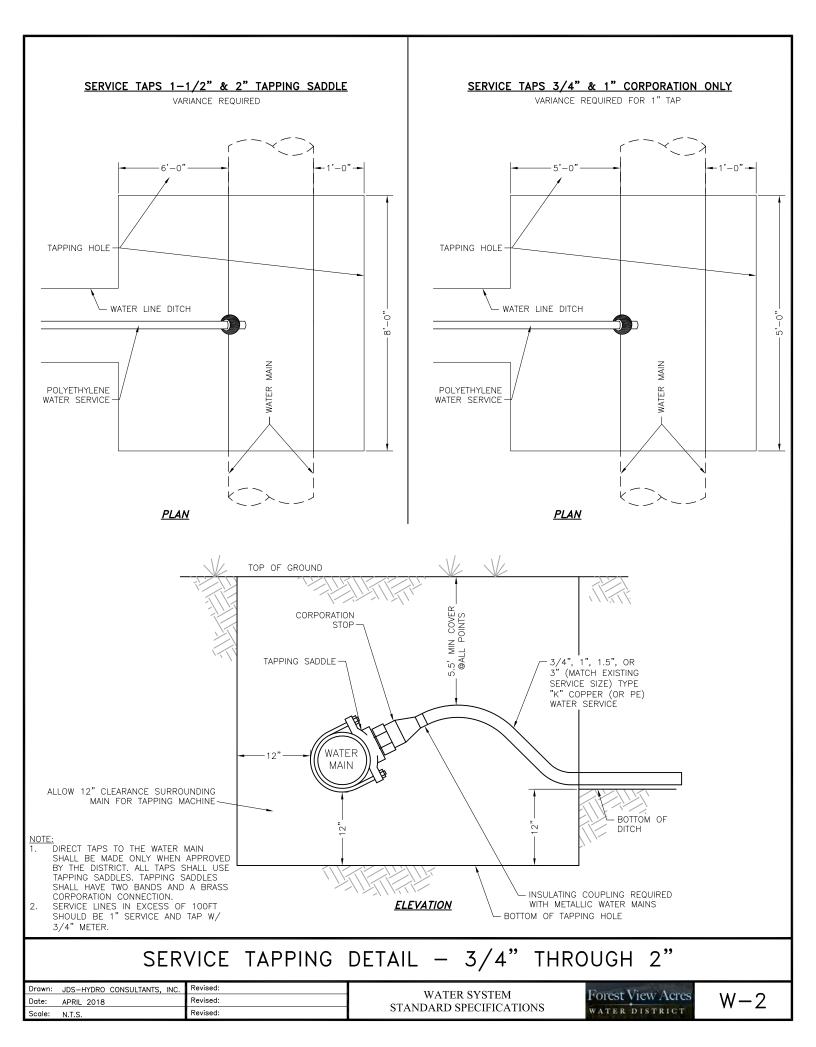
 SERVICE TAPS SERVICE TAPS TO BE WET TAPPED AND COMPLETED AFTER WATER MAIN HAS BEEN PRESSURE—TESTED, DISINFECTED, AND CHARGED.

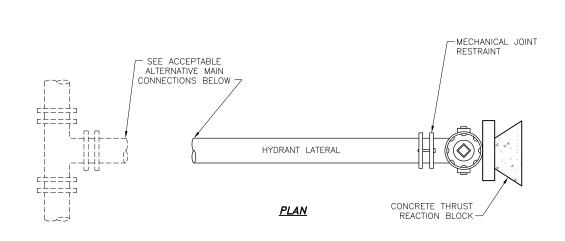
 EXISTING TAPS ARE TO BE LEFT OPERATIONAL UNTIL NEW SERVICE LINES ARE READY TO BE "PULLED" OR OPEN CUT INTO EXISTING METER PITS AND WET TAPPED INTO THE NEW WATER MAIN. AFTER NEW SERVICES ARE COMPLETE, ALL EXISTING TAPS ARE TO BE ABANDONED. COORDINATE ALL NEW TAPS WITH THE FOREST VIEW ACRES WATER DISTRICT TO RESPECTIVE WATER USERS CAN BE NOTIFIED FOR TEMPORARY WATER SERVICE SHUTDOWNS.

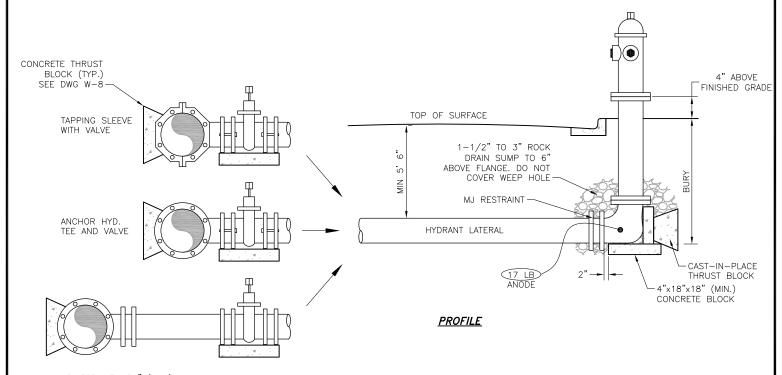
 ALL NEW PIPING SHALL BE PRESSURE TESTED AND DISINFECTED/FLUSHED ACCORDING TO DISTRICT PROVIDED SPECIFICATIONS PRIOR TO CONNECTION TO
- ANY EXISTING WATER MAINS OR COMPLETING ANY DOMESTIC/COMMERCIAL WATER TAPS.

CURB STOP AND METER PIT INSTALLATION

Drawn:	JDS-HYDRO CONSULTANTS, INC.	Revised: 02/24/22
Date:	MARCH 2018	Revised:
Scale:	NTS	Revised:





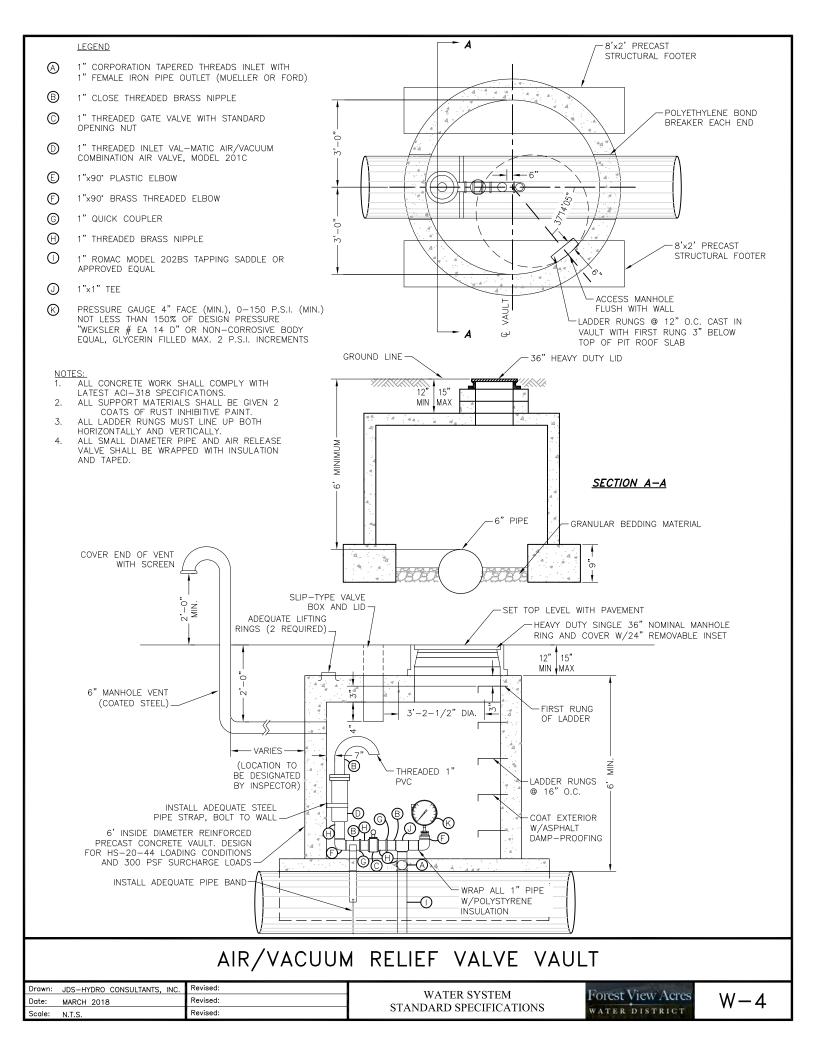


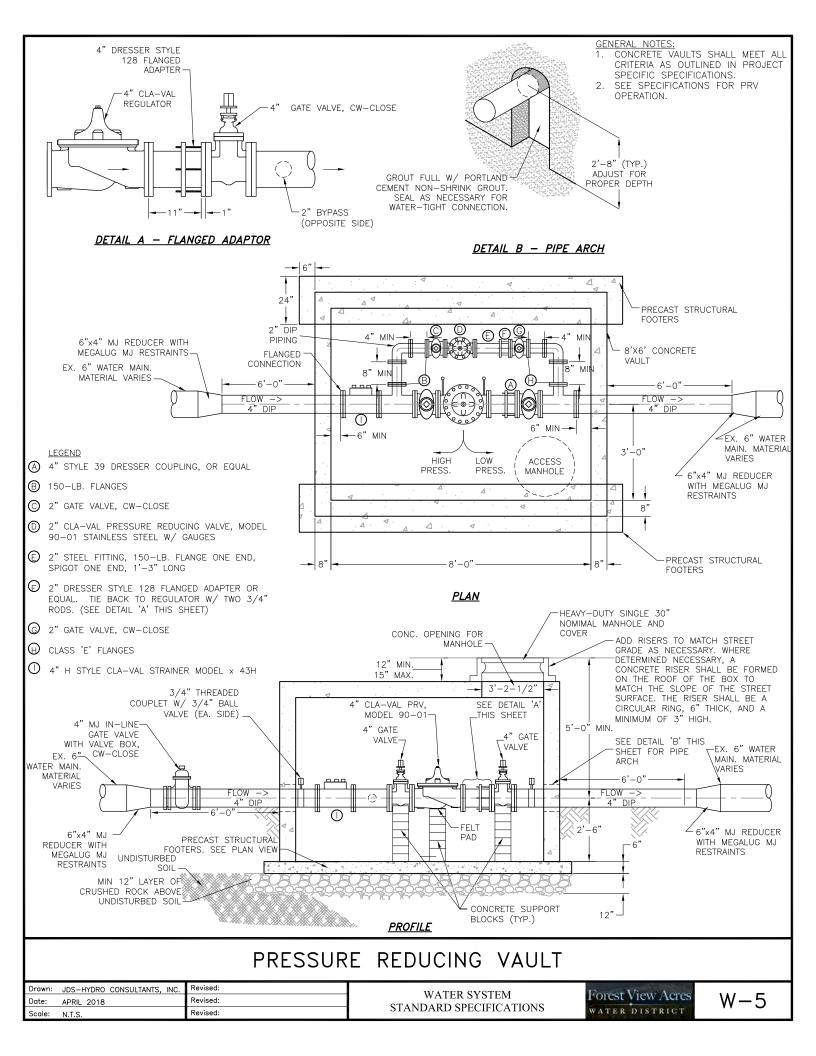
MJ HYD. TEE WITH 30" (MIN.) SPACER PIPE AND VALVE. USE MECHANICAL JOINT RESTRAINT AT EACH MECHANICAL JOINT

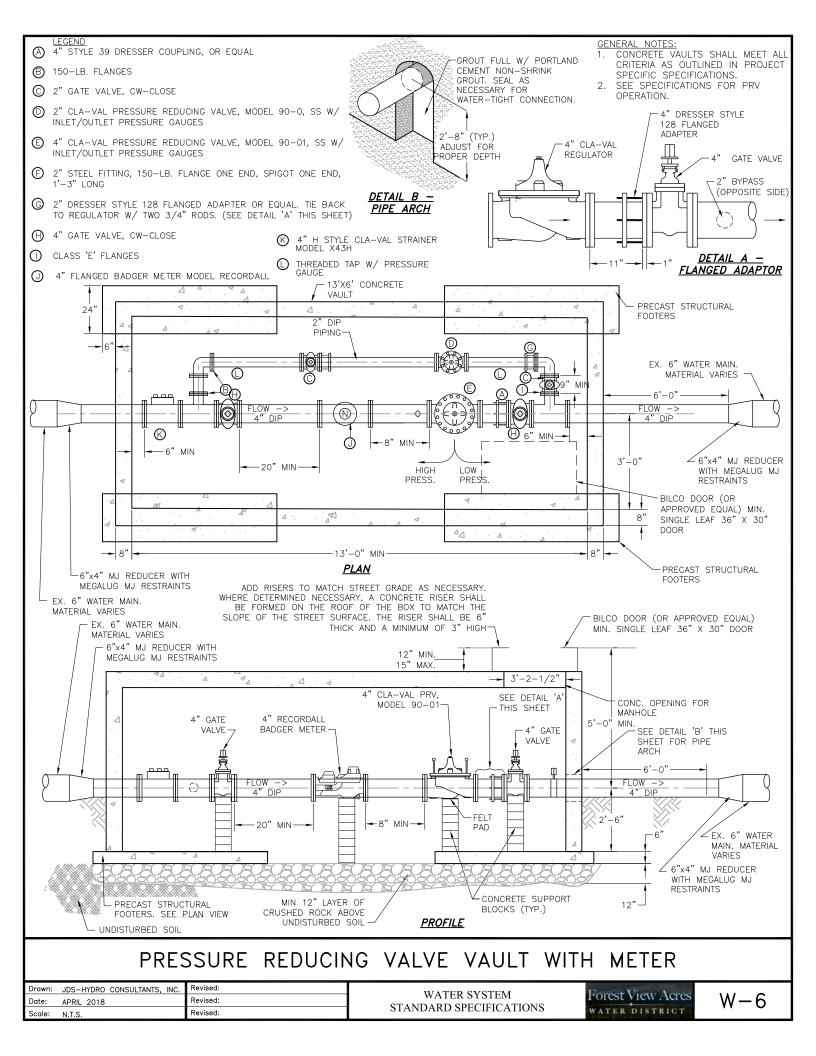
- ALL JOINTS BETWEEN HYDRANT AND TEE MUST BE RESTRAINED. WHEN LATERAL IS GREATER THAN ONE PIPE LENGTH, RESTRAINT IS REQUIRED AT EACH COUPLING.

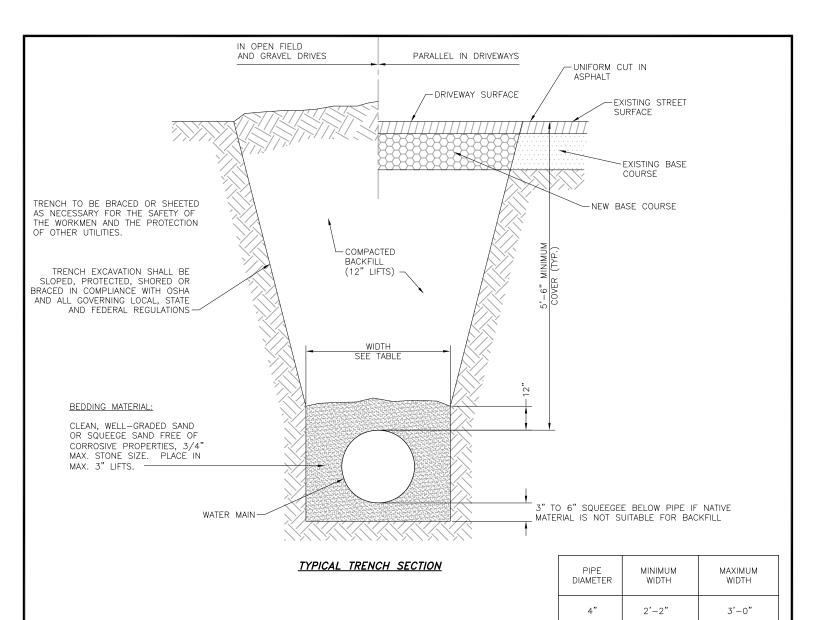
FIRE HYDRANT INSTALLATION

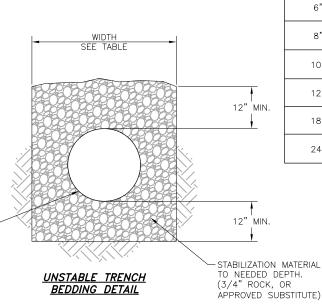
Drawn:	JDS-HYDRO CONSULTANTS, INC.	Revised:	WATED CVCTEM	Danset Viere Amer	
Date:	MARCH 2018	Revised:	WATER SYSTEM	Forest View Acres	W-3
Scale:	N.T.S.	Revised:	STANDARD SPECIFICATIONS	WATER DISTRICT	,, ,











TYPICAL	TRENCH	CROSS-	·SECTION

Drawn:	JDS-HYDRO CONSULTANTS, INC.	Revised:	337 A
Date:	MARCH 2018	Revised:	WA
Scale:	N.T.S.	Revised:	STANDAR

WATER MAIN

AN OVER—EXCAVATED TRENCH SHALL BE REFILLED WITH BEDDING MATERIAL AND THOROUGHLY COMPACTED AS PER THE SPECIFICATIONS.

ATER SYSTEM RD SPECIFICATIONS

Forest View Acres WATER DISTRICT

2'-2"

2'-2"

2'-4"

2'-6"

2'-10"

3'-2"

6"

8"

10"

12"

18"

24"

W-7

3'-0"

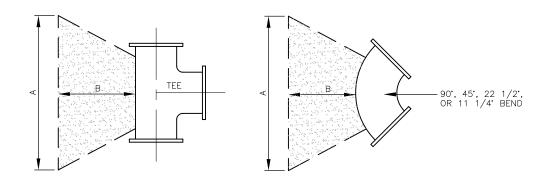
3'-0"

3'-0"

3'-6"

3'-9"

4'-3"



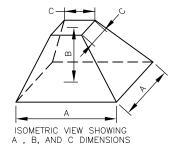
DIMENSIONS AND VOLUMES (SEE ISOMETRIC VIEW)

		TEE			90 °			45°			22 1/2°			11 1/4°	
SIZE	in.	in.	c.y.	in.	in.	c.y.	in.	in.	c.y.	in.	in.	c.y.	in.	in.	c.y.
	Α	В	VOL	Α	В	VOL	Α	В	VOL	Α	В	VOL	Α	В	VOL
4"	2'-6"	0'-10"	1/8	2'-6"	0'-10"	1/8	2'-6"	0'-10"	1/8	2'-6"	0'-10"	1/8	2'-6"	0'-10"	1/8
6"	3'-2"	2'-5"	1/2	3'-6"	3'-0"	3/4	3'-2"	2'-5"	1/2	2'-6"	0'-10"	1/8	2'-6"	0'-10"	1/8
8"	4'-0"	2'-6"	3/4	4'-10"	3'-1"	1-1/4	4'-0"	2'-6"	3/4	2'-6"	0'-10"	1/4	2'-6"	0'-10"	1/8
10"	4-'4"	3-'0"	1	5'-3"	3'-3"	1-1/2	4-'4"	3-'0"	1	2'-8"	1'-7"	1/4	2'-6"	0'-10"	1/8
12"	4'-10"	3'-1"	1-1/4	5'-7"	3'-5"	1-3/4	4'-10"	3'-1"	1-1/4	2'-8"	1'-7"	1/4	2'-6"	0'-10"	1/8
20"	5'-3"	3'-3"	1-1/2	5'-10"	3'-7"	2-0	5'-3"	3'-3"	1/2	3'-2"	2'-5"	1/2	2'-8"	1'-7"	1/4

- NOTES:

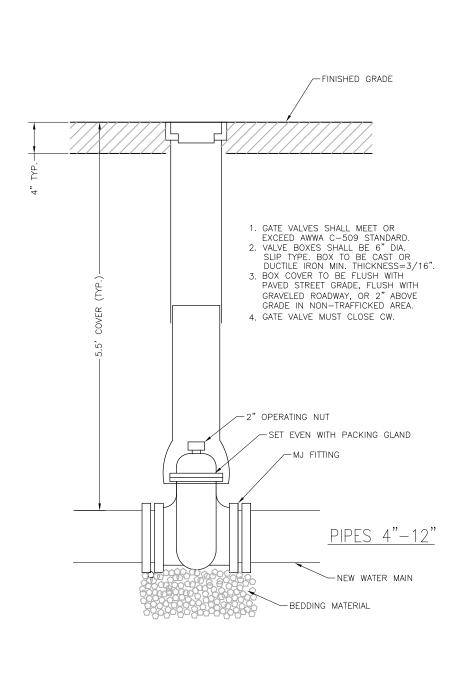
 1. THE MINIMUM A AND B DIMENSIONS FOR ANY BLOCK IS 1'-6". DIMENSION C FOR ALL PIPE 12" OR LESS SHALL BE 1'-6".

 2. THRUST BLOCK DIMENSIONS AND VOLUMES FOR DEAD ENDS SHALL BE THE SAME AS
 - FOR TEES.
 THE ABOVE VOLUMES ARE ROUNDED TO THE NEAREST PORTION OF A CUBIC YARD.
 NUTS AND BOLTS SHALL REMAIN ACCESSIBLE AND FREE OF SPLASHED CONCRETE. A
 BOND BREAKER IS REQUIRED BETWEEN FITTINGS AND CONCRETE.



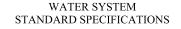
THRUST BLOCK DATA

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Date:	MARCH 2018	Revised:	CT.
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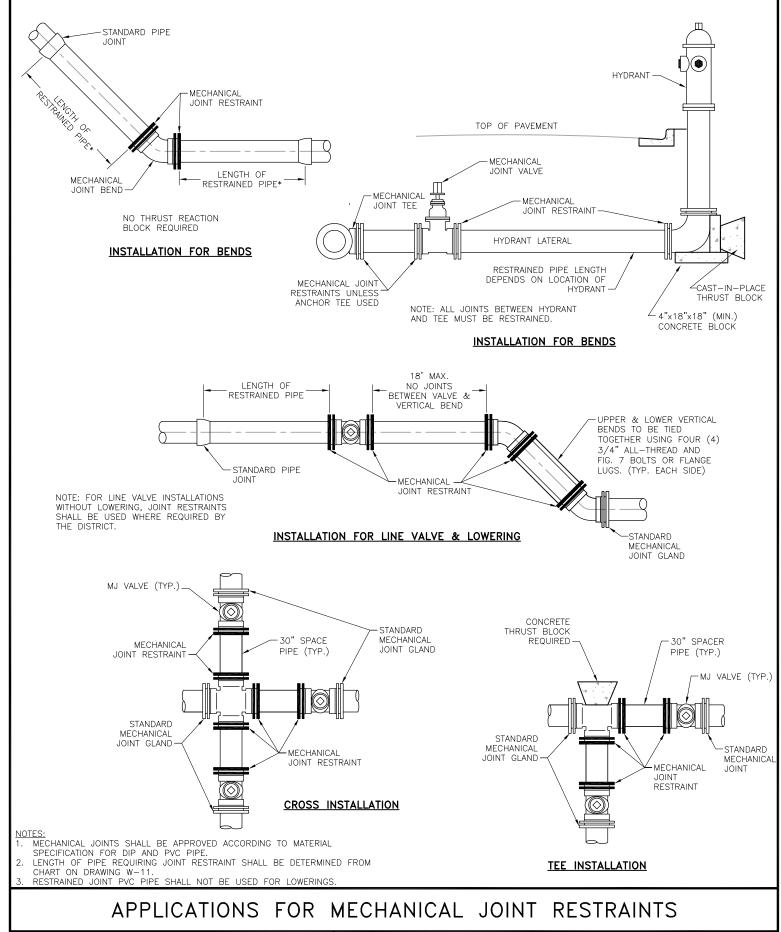


TYPICAL IN-LINE GATE VALVE ASSEMBLY

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Date:	MARCH 2018	Revised:
Scale:	N.T.S.	Revised:







Drawn: JDS-HYDRO CONSULTANTS, INC. Revised:

Date: MARCH 2018 Revised:
Scale: N.T.S. Revised:

WATER SYSTEM
STANDARD SPECIFICATIONS

WATER DISTRICT

WATER DISTRICT

RESTRAINED M.J. PIPE LENGTH (FT)

6-INCH DUCTILE IRON AND PVC

O INOTE BOOTILE INOTE TO							
TYPE OF FITTING	STATIC PRESSURE (PSI)						
THE OF THINKS	<100	100-150	150-200				
90° BEND, TEE, VALVE OR PLUG	12	18	24				
45° BEND	5	8	10				
22-1/2° BEND	2	4	5				
11-1/4° BEND	1	2	2				

16-INCH DUCTILE IRON AND PVC

TYPE OF FITTING	STATIC PRESSURE (PSI)				
TITL OF THINKS	<100	100-150	150-200		
90° BEND, TEE, VALVE OR PLUG	29	43	58		
45° BEND	12	18	24		
22-1/2° BEND	6	9	12		
11-1/4° BEND	3	4	6		

8-INCH DUCTILE IRON AND PVC

Γ	PE OF FITTING	STATIC	PRESSURE	(PSI)
Ľ	11 L 01 11111110	<100	100-150	150-200
	O' BEND, TEE, ALVE OR PLUG	16	24	32
	45° BEND	7	10	13
2	2-1/2° BEND	3	5	6
1	1-1/4° BEND	2	2	3

18-INCH DUCTILE IRON AND PVC

10 111011 2001122 111011 7110 1 10			
TYPE OF FITTING	STATIC PRESSURE (PSI)		
	<100	100-150	150-200
90° BEND, TEE, VALVE OR PLUG	32	48	64
45° BEND	14	20	27
22-1/2° BEND	7	10	13
11-1/4° BEND	3	5	7

12-INCH DUCTILE IRON AND PVC

TYPE OF FITTING	STATIC PRESSURE (PSI)		
	<100	100-150	150-200
90° BEND, TEE, VALVE OR PLUG	23	34	45
45° BEND	9	14	19
22-1/2° BEND	5	7	9
11-1/4° BEND	2	3	4

20-INCH DUCTILE IRON AND PVC

TYPE OF FITTING	STATIC PRESSURE (PSI)		
	<100	100-150	150-200
90° BEND, TEE, VALVE OR PLUG	35	52	70
45° BEND	15	22	29
22-1/2° BEND	7	10	14
11-1/4° BEND	3	5	7

24-INCH DUCTILE IRON AND PVC

TYPE OF FITTING	STATIC PRESSURE (PSI)		
	<100	100-150	150-200
90° BEND, TEE, VALVE OR PLUG	41	61	81
45° BEND	17	25	34
22-1/2° BEND	8	12	16
11-1/4° BEND	4	6	8

NOTES

- 1. PRESSURES GREATER THAN 200 PSI REQUIRE SPECIAL DESIGN APPROVED BY THE DISTRICT.
- 2. LENGTH IS BASED ON MINIMUM 5'-0" OF GROUND COVER AND SOIL COMPACTED TO 95% OF STANDARD PROCTOR DENSITY AT OPTIMUM MOISTURE.

 3. APPROVED METHODS OF RESTRAINED PIPE BEYOND INITIAL FITTING SHALL BE:

 A. FOR DUCTILE IRON PIPE, 1100 SERIES MEGALUG BY EBAA IRON OR EQUAL ON MECHANICAL JOINT PIPE OR DOUBLE 1100 SERIES MEGALUG BY EBAA IRON OR EQUAL ON DISCHOLUCION DIDE
 - PUSH ON JOINT PIPE.

 B. FOR PVC PIPE, SERIES 1500 OR SERIES 2800 RESTRAINTS BY EBAA IRON OR EQUAL.

RESTRAINED M.J. PIPE LENGTH DATA

Drawn:	APPLICATION FOR MECHANICAL JO	INREVIREST: RAINTS
Date:	MARCH 2018	Revised:
Scale:	N.T.S.	Revised: