



- ① TAPPING SLEEVE, MJ
- ② TEE MJ WITH FLANGED BRANCH
- ③ TRACER WIRE
- ④ THRUST BLOCK (SEE STANDARD NO. 21)
- ⑤ GATE VALVE, MJ X FLANGED
- ⑥ POLYWRAP (TAPE THE END TO MAIN)
- ⑦ DUCTILE IRON PIPE
- ⑧ STD. TRAFFIC VALVE BOX & EXTENSION (SEE STANDARD NO. 19 & 20)
- ⑨ PIPE MARKING TAPE
- ⑩ RETAINING GLAND
- ⑪ 90° BEND, MJ X MJ
- ⑫ SPOOL, DIP
- ⑬ MJ X FLANGE ADAPTER, RESTRAINED
- ⑭ TEE, FLANGED
- ⑮ GATE VALVE, FLANGED
- ⑯ REDUCING 90° BEND, FLANGED
- ⑰ DISMANTLING JOINT
- ⑱ TURBINE METER
- ⑲ TEST ASSEMBLY
- ⑳ RP BACKFLOW PREVENTION DEVICE, SAME SIZE AS METER

**NOTE:**  
 4" SERVICE USE TWO 3" METERS  
 6" SERVICE USE TWO 4" METERS  
 8" SERVICE USE TWO 6" METERS

**NOTES TO DEVELOPER:**

1. ADD DIELECTRIC UNION WHEN TRANSITIONING BETWEEN DISSIMILAR METALS.
2. KEEP METER & BACKFLOW INSTALLATION PLUMB AND LEVEL.
3. MECHANICALLY RESTRAIN ALL JOINTS.
4. DO NOT INSTALL DISMANTLING JOINT COMPRESSED.
5. DISMANTLING JOINT LENGTH SHALL BE 3 TIMES THE DIAMETER OF THE PIPE LEADING INTO THE METER.



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 Revised Date: **NOVEMBER 2017**

Signature:   
 Director of  
 Water and Sewer Utilities

**CITY OF SANTA CLARA**  
**WATER AND SEWER UTILITIES - STANDARD NO. 12**  
**4", 6" AND 8" WATER SERVICE WITH RP**  
**(DUAL METER SERVICE)**

**Standard No. 12 – 4”, 6” and 8” Water Service with RP (Dual Meter Service) – Material List****Domestic Products Only. Use 316 stainless steel bolts, flange gasket with EPDM rubber, nuts, and washers for all bolted connections.****Use no lead products for domestic water services.****Coat above ground water service with Dunn Edwards Paint #10-L, 11-789-04 Santa Clara Mission Sand, Syn Lustr.****Provide 5-foot clearance around service above ground.**

Material	Description	Manufacturer	Model
1. Tapping Sleeve	Mechanical joint with all accessories. -Ductile iron, cast iron, or PVC	Mueller H-615 Clow F-5205	
	-AC pipe	Mueller H-619 Clow F-5207	
2. Tee	Mechanical joint with flanged branch. AWWA C-153 compact ductile iron, cement lined with stainless steel bolts and gaskets	US Pipe Tyler Union	
3. Tracer Wire	RHW#12 AWG Solid. Tape to the top of the water main with 12" minimum slack inside all valve boxes		
4. Thrust Block	See City Standard No. 21		
5. Gate Valve	MJ x Flanged. AWWA C-509 resilient seat, epoxy coated inside and out to meet AWWA C-550. Open left with 2" square operating nut. All rubber components shall be EPDM.	M&H	Style 4067
		Mueller	A-2361
		Clow	F-6106
6. Polywrap	Blue. 8 mil low density or 4 mil high density polyethylene film installed per AWWA C105. Tape end to pipe with 10 mil tape.		
7. Pipe mechanically restrain all joints	Size and type as specified.	US Pipe	
	-Ductile iron, cement lined Class 50. Protect with polywrap for underground pipe.	Pacific States	
8. Traffic Valve Box & Extension (see Standard Detail Nos. 19 & 20)	Lid marked "Water" or "Water Meter"	Christy	G5 with lid marked "Water"
	Extension - 8" PVC SDR 35, single piece cut to proper length.		
9. Pipe Marking Tape	Blue. 3" wide, 4 mil, non-detectable.		
10. Retaining Gland	Joint restraint for use with mechanical joint fittings. Size as specified.	US Pipe (not allowed above ground)	MJ Field Lok, High Max, Romac
		EBAA	Megalug Series 1100
		Uniflange	Series 1400 (DIP)
11. 90 Degree Bend with Mechanical Joint	AWWA C-153 ductile iron with mechanical joint, cement lined with stainless steel bolts and gaskets	US Pipe	
		Tyler Union	
12. Spool	Ductile iron, cement lined Class 50 with restrained adapter flange.		
13. MJ x Flange Adapter	AWWA C-153 ductile iron, restrained.	Tyler Union	#5-158
		Trinity / USP	With megalug restraining gland
14. Tee	Flanged. Size as specified. AWWA C-110 ductile iron, cement-lined.	US Pipe	
		Tyler Union	
15. Gate Valve	Flanged. AWWA C-509 resilient seat, epoxy coated inside and out to meet AWWA C-550. Open left with 2" square operating nut. All rubber components shall be EPDM.	M&H	Style 4067
		Mueller	A-2360
		Clow	F-6102
16. Reducing 90 Degree Bend	Flanged, AWWA C-110 ductile iron, cement lined.	US Pipe	
		Tyler Union	
17. Dismantling Joint	Dismantling Joint. Length = 3x diameter.	Romac KRAUSZ	DJ400 or DJ405
18. Meter and Register (manufacturer's test results are to be submitted with all meters).	Turbine meter with strainer and test plug. Provide Elster transmitter compatible encoded register with Nicor connector. All registers to be facing inlet and provide cubic feet reading.	Sensus	Omni T2 (industrial - more constant flow)
		Sensus	Omni C2 (varying flow)
19. Test Assembly	Consisting of a brass nipple, ball valve and brass plug. See meter manufacturer's specifications for size.	Ball valve - Ford	B11-NL
20. Reduced Pressure Backflow Prevention Device	Same size as meter. Reduced pressure zone assembly. 3 - 1/2" x 1/4" Standard pipe thread and SAE flare brass fittings.	Watts	LF 909
		Wilkins	375XL