

NOTES:

1. THE BACKFLOW PREVENTER ASSEMBLY SHALL CONSIST OF AN APPROVED REDUCED PRESSURE OR DOUBLE DETECTOR CHECK VALVE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. THE ASSEMBLIES SHALL BE SUITABLE FOR SUPPLY PRESSURES.
2. THE BACKFLOW ASSEMBLY SHALL BE OF BRONZE CONSTRUCTION WITH ALL CONNECTIONS ON THE UNIT TO BE THREADED BRASS OR SWEATED COPPER MATERIAL FOR 3/4" THROUGH 2"; 2 1/2" AND ABOVE SHALL HAVE FLANGED FITTINGS TOGETHER WITH STAINLESS STEEL NUTS AND BOLTS.
3. AN ANGLE STYLE PRESSURE REDUCING VALVE SHALL BE INSTALLED ON THE UPSTREAM LINE OF THE BACKFLOW PREVENTER WHEN EXCESS OF 80 POUNDS PER SQUARE INCH OR MORE IS AVAILABLE PER SECTION 608.2 OF THE UNIFORM PLUMBING CODE.
4. LOCATION AND INSTALLATION SHALL BE PER PLAN AS SUBMITTED TO AND ACCEPTED BY THE DISTRICT.
5. ALL ASSEMBLIES 2 1/2" AND LARGER TO BE INSTALLED SHALL BE EQUIPPED WITH RESILIENT WEDGE GATE VALVES.
6. LOCATE THE ASSEMBLY IMMEDIATELY AFTER THE CUSTOMER SERVICE VALVE. OTHER LOCATIONS MUST BE APPROVED BY THE DISTRICT INSPECTOR PRIOR TO INSTALLATION.
7. CLEARANCES ARE SHOWN, EXCEPT THAT LATERAL CLEARANCES SHALL BE 12-INCHES MINIMUM EACH DIRECTION.
8. ASSEMBLIES SHALL NOT BE LOCATED IN AREAS SUBJECT TO FLOODING.
9. ONLY SECURITY ENCLOSURES PROVIDING ADEQUATE CLEARANCES AND FULL VIEW OF ASSEMBLY SHALL BE PERMITTED.
10. LANDSCAPING OR CONSTRUCTION AROUND ASSEMBLY SHALL PERMIT AN UNOBSTRUCTED VIEW FROM AT LEAST ONE PUBLIC VANTAGE POINT.
11. FINAL INSPECTION AND ACCEPTANCE TEST SHALL BE PROVIDED BY DISTRICT BACKFLOW INSPECTOR.
12. NO CONNECTIONS OR TEES ARE PERMITTED BETWEEN METER AND BACKFLOW PREVENTER.
13. SIZES 3" AND LARGER SHALL HAVE ADDITIONAL PIPE SUPPORT.
14. SIZES 3/4" THROUGH 2" SHALL HAVE (1) UNION PLACED ON DOWNSTREAM CUSTOMER PIPING.
15. BACKFLOW ASSEMBLY TO BE THE SAME SIZE OR ONE SIZE LARGER THAN METER.
16. MATERIALS SHALL BE SELECTED FROM THE ACCEPTED MATERIALS GUIDELINE.
17. BRASS PLUGS ARE TO BE USED.

ITEM	DESCRIPTION
①	ACCEPTED BACKFLOW PREVENTION ASSEMBLY
②	BALL VALVE (CUSTOMER SERVICE VALVE)
③	SERVICE METER
④	WATER MAIN

REVISION	BY	APPR	DATE

Elsinore Valley Municipal Water District

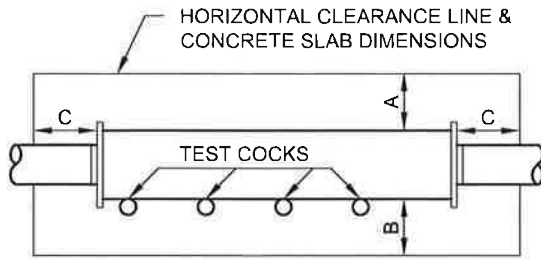
J-R-DH

7-20-17

Jason R. Daffarn R.C.E. B2123 DATE

**BACKFLOW PREVENTION
ASSEMBLY ABOVE GROUND
INSTALLATION**

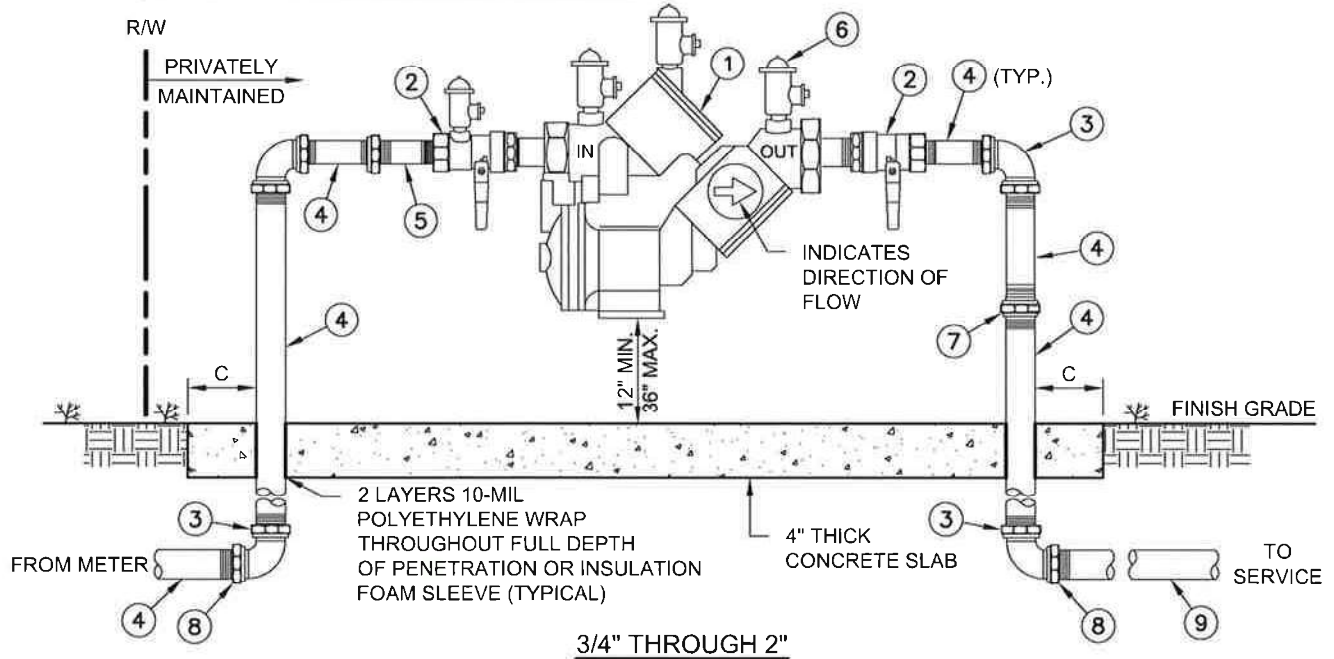
STD. DWG. NO.
W-21A



ADEQUATE CLEARANCE MUST BE PROVIDED TO PERMIT TESTING AND REPAIR WORK

MINIMUM CLEARANCE			
SIZE	A	B	C
1"-3"	12"	18"	12"
4"& UP	24"	24"	12"

REQUIRED MIN. 2 FEET CLEARANCE WITH BLOCK WALL



NOTES:

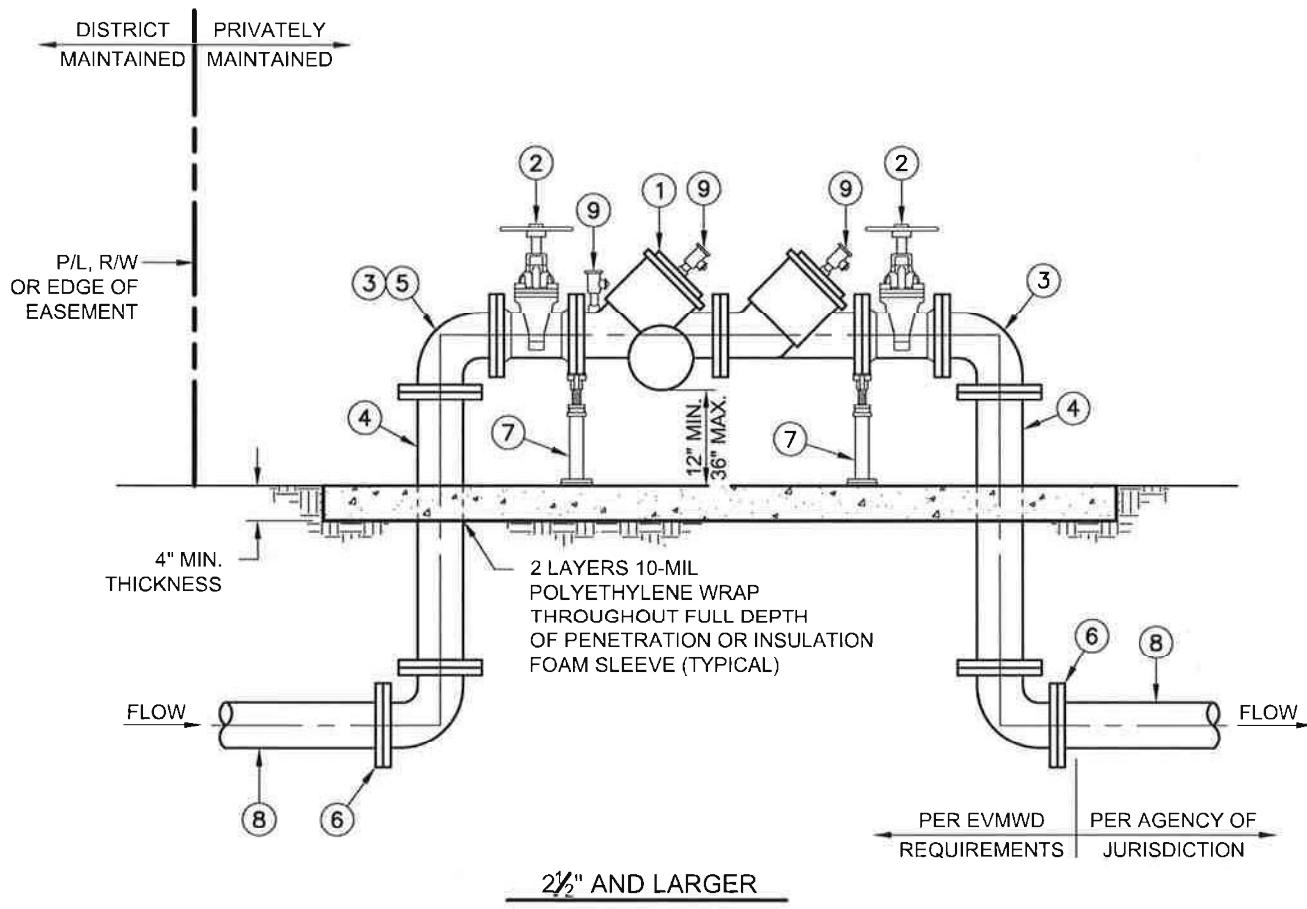
1. BOTTOM OF UNIT SHALL BE NO LESS THAN 12-INCHES AND NO MORE THAN 36-INCHES ABOVE FINISH GRADE OF THE SURROUNDING GROUND.
2. THE DEVICE MUST BE INSPECTED AND TESTED IMMEDIATELY AFTER INSTALLATION. CONTACT DISTRICT FOR INSPECTION & TESTING.
3. CONCRETE THRUST BLOCK AND/OR ABOVE GROUND SLAB REQUIRE INSPECTION BEFORE CONCRETE IS POURED.
4. MATERIALS SHALL BE SELECTED FROM THE ACCEPTED MATERIALS GUIDELINE.
5. USE ONLY TEFLON TAPE FOR PIPE THREADS.
6. PIPING SHALL BE PAINTED BLUE FOR POTABLE WATER AND PURPLE FOR RECYCLED WATER.
7. BRASS PLUGS ARE TO BE USED.

ITEM	EACH	DESCRIPTION	SPEC.	REMARKS
①	1	REDUCED PRESSURE PRINCIPLE BACKFLOW DEVICE	PER STANDARD TECHNICAL SPECIFICATIONS	MUST BE STATE & USC APPROVED TYPE
②	2	BALL VALVE	BRONZE INTERNAL	USC APPROVED (BALL VALVE)
③	4	90° ELBOW, BRASS OR COPPER	THREADED BRASS	COPPER TYPE L, HARD
④	2	RISER AND NIPPLES, BRASS OR COPPER	THREADED BRASS	WITH THREADED BRASS UNIONS
⑤	1	PRESSURE REDUCING AND/OR RELIEF VALVE	UPC APPROVED (BRONZE)	FOR PRESSURE IN EXCESS OF 80 PSI
⑥	1	BRASS PLUG / TEST PORT		
⑦	1	THREADED BRASS UNION OR COPPER UNION		
⑧	2	BRASS OR COPPER MALE ADAPTOR		FEMALE THREADED x MALE SLIP
⑨	1	P.V.C. PIPING		SCHEDULE AS REQUIRED

REVISION	BY	APPR	DATE

BACKFLOW PREVENTION ASSEMBLY (3/4" THROUGH 2") ABOVE GROUND INSTALLATION

STD. DWG. N°
W-21B



NOTES:

1. PLACE BOTTOM OF UNIT A MINIMUM OF 12-INCHES AND NOT MORE THAN 36-INCHES ABOVE FINISH GRADE OF THE SURROUNDING GROUND.
2. THE DEVICE MUST BE INSPECTED AND TESTED IMMEDIATELY AFTER INSTALLATION. CONTACT DISTRICT FOR INSPECTION & TESTING.
3. CONCRETE THRUST BLOCK AND/OR ABOVE GROUND SLAB REQUIRE INSPECTION BEFORE CONCRETE IS POURED. CONCRETE SLAB DIMENSION SHALL BE IN ACCORDANCE WITH CLEARANCE REQUIREMENTS ON W-21 SHEET 2 OF 3.
4. MATERIALS SHALL BE SELECTED FROM THE ACCEPTED MATERIALS GUIDELINE.
5. PIPING SHALL BE PAINTED BLUE FOR POTABLE WATER AND PURPLE FOR RECYCLED WATER.

ITEM	EACH	DESCRIPTION	SPEC.	REMARKS
(1)	1	REDUCED PRESSURE PRINCIPLE BACKFLOW DEVICE	PER STANDARD TECHNICAL SPECIFICATIONS	MUST BE STATE & USC APPROVED TYPE
(2)	2	FLANGED RESILIENT WEDGE GATE VALVE	PER STANDARD TECHNICAL SPECIFICATIONS	SEE ACCEPTED MATERIALS GUIDELINE
(3)	2	90° ELBOW	PER STANDARD TECHNICAL SPECIFICATIONS	DUCTILE IRON
(4)	2	FLANGED RISER PIPE	PER STANDARD TECHNICAL SPECIFICATIONS	DUCTILE IRON SPOOLS
(5)	1	ANGLE PRESSURE REDUCING VALVE	SEE ACCEPTED MATERIALS GUIDELINE	FOR PRESSURE IN EXCESS OF 100 PSI
(6)	2	FLG x FLG 90° ELBOW	PER STANDARD TECHNICAL SPECIFICATIONS	DUCTILE IRON
(7)	2	ADJUSTABLE PIPE SUPPORT	SEE ACCEPTED MATERIALS GUIDELINE	
(8)	L.F.	P.V.C. OR DUCTILE IRON PIPING	PER STANDARD TECHNICAL SPECIFICATIONS	SIZE AS REQUIRED
(9)	3	BRASS PLUGS		AS REQUIRED BY DISTRICT

REVISION	BY	APPR	DATE

A-DH
 7-20-17
 Jason R. Dafforn R.C.E. 82123 DATE


**BACKFLOW PREVENTION
 ASSEMBLY (2 1/2" AND LARGER)
 ABOVE GROUND INSTALLATION**

STD. DWG. NO.
W-21C

RECYCLED WATER GENERAL NOTES

1. Five (5) days prior to commencement of any excavation of on-site improvements, the contractor shall notify the Elsinore Valley Municipal Water District Engineering and Inspection Department at (951) 674-3146 x 8402.
2. All work shall be done in accordance with the Elsinore Valley Municipal Water District (EVMWD) "Rules and Regulations for Recycled Water Use and Distribution within the Elsinore Valley Municipal Water District", and the State Water Resources Control Board - Division of Drinking Water (DDW) requirements.
3. Cross connection between recycled water lines and potable water lines is strictly prohibited.
4. No substitution of pipe materials will be allowed without prior approval by the EVMWD and DDW.
5. All below grade recycled water pipe shall be color code purple pantone #522 or distinctively sleeved in purple recycled water protective wrapping or in purple tape fixed to top of pipe and stenciled with "Caution recycled water - DO NOT DRINK". Orient the stenciling to the top of the trench for laterals. Install purple metallic tape over the recycled water mains per the recycled water system standard design requirements in the EVMWD standard specifications and drawings.
6. All above ground recycled water facilities shall be purple colored pantone #512 and marked to differentiate recycled water facilities from potable water or wastewater facilities per American Water Works Association (AWWA) guidelines and section 116815 of the California Health and Safety Code.
7. Provide a minimum cover of all pipes in accordance with EVMWD standard specifications and drawings per the standard design requirements for recycled water pipelines.
8. Maintain separation between potable water, recycled water, and/or sewer pipelines according to the EVMWD standard drawings and CDPH guidance memo no. 2003-02 latest revision.
9. All public and private potable water mains including fire mains, services and any water wells and water courses within the recycled water project shall be shown on the plans.
10. Tag all valves and other below grade facilities within boxes with permanent recycled water labels that identify the facility as "Recycled Water - DO NOT DRINK NO BEBER". Attach the label with either stainless steel wire or self-locking plastic ties.
11. Blowoff assemblies for recycled water shall be in accordance with EVMWD standard drawing RW-1.
12. All public facilities such as comfort stations, drinking fountains, outdoor eating areas, etc. shall be protected from spray and or misting by recycled water.
13. No ponding, run-off, misting, or over spray is permitted. Relocate or adjust all irrigation heads to prevent over spraying onto sidewalks, streets, private lots, and areas not approved for recycled water use.

REVISION	BY	APPR	DATE



Elsinore Valley Municipal Water District

J. D.H.

7-20-17

Jason R. Dafforn R.C.E. 82123 DATE


**RECYCLED WATER
GENERAL NOTES**

STD. DWG. NO

GN-5

RECYCLED WATER GENERAL NOTES (CONT.)

14. Areas not approved for recycled water use shall be protected from contact with recycled water, whether by windblown spray or by direct application through irrigation or other use. Lack of protection, whether by design, construction practice, or system operation is strictly prohibited.
15. Hose bibs on recycled water systems are prohibited.
16. Recycled water quick coupling valves shall be designed for use on recycled water in accordance with the rules, and regulations.
17. Quick coupling valves use in recycled water systems shall conform the following:
 - 17.1. Quick coupling valves can be 1 inch or 3/4 inch nominal size, with brass construction and a normal working pressure of 150 psi or equal.
 - 17.2. A purple rubber or vinyl locking cover shall be permanently attached to the quick coupling valves, Nelson 7645 with Acme threads.
18. When potable water and recycled water lines cross, the recycled water line shall be installed within a protective pipe similar to standard drawing W-6 except AWWA C-905 PVC pipe can be used in place of steel pipe. The protective pipe shall extend 10 feet from each side of the outside edge of the potable water line.
19. Provide a minimum of 12 inches of vertical separation between potable water, recycled water, and sewer line according to these rules and DDW. Maintain at least 12 inches crossing separation between other utilities unless otherwise directed by EVMWD personnel.
20. Install purple colored pantone #512 material for all above grade irrigation facilities per AWWA guidelines and section 116815 of the California Health and Safety Code.
 - 20.1. Valve and other on - grade boxes - purple color.
 - 20.2. Sprinkler heads - purple color.
21. All recycled water sprinkler control valves and others below grade facilities within boxes shall be tagged with identification tags. Tags shall be weather proof plastic 3 inches x 4 inches, purple in color, with words "Recycled Water - DO NOT DRINK" and "Aviso Aqua Impura - NO TOMAR" imprinted on one side, and the recognized symbol for not drinking on the other side. Imprinting shall be permanent and black in color. One tag shall be attached either to the valve stem directly with plastic tie wrap, or to the solenoid wire directly with plastic tie wrap per EVMWD standard drawing RW-3.
22. The contractor shall conduct a cross-connection control shutdown test and coverage test (as defined in section 4.8 of the District's rules) when requested by the District or DDW prior to any use of recycled water. The method of this test must be accepted by the district.
23. The required cross-connection shutdown test may be performed by a certified cross-connection control specialist as defined in the district's rules and witnessed by the district's cross-connection specialist. Copies of inspection reports shall be forwarded to the district.

REVISION	BY	APPR	DATE	 <p align="center">Elsinore Valley Municipal Water District</p> <p align="center"><i>J-R D-H</i></p> <p align="center">7-20-17</p> <p align="center">Jason R. Dafforn R.C.E. B2123 DATE</p>	<p align="center">RECYCLED WATER GENERAL NOTES</p>	STD. DWG. NO.
						GN-6