

①	REDUCED PRESSURE PRINCIPAL ASSEMBLY UNIT	⑦	PIPE SLEEVE & 1" ANNULAR SPACE
②	BALL VALVE	⑧	RELIEF VALVE
③	COPPER TYPE L	⑨	4" MIN P.C.C OVER 4" MIN CLASS 2AB
④	90° BEND, PROGRESS FITTING	⑩	TEST COCKS WITH THREADED ENDS
⑤	TO WATER METER	⑪	PROTECTIVE ENCLOSURE/ INSULATED WEATHER COVER
⑥	WYE STRAINER, IF REQUIRED	⑫	ASSET TAG

CITY OF MILPITAS, ENGINEERING DIVISION

STANDARD DRAWING

NO. 734

REVISION	DATE
4	2022
5	2025
6	

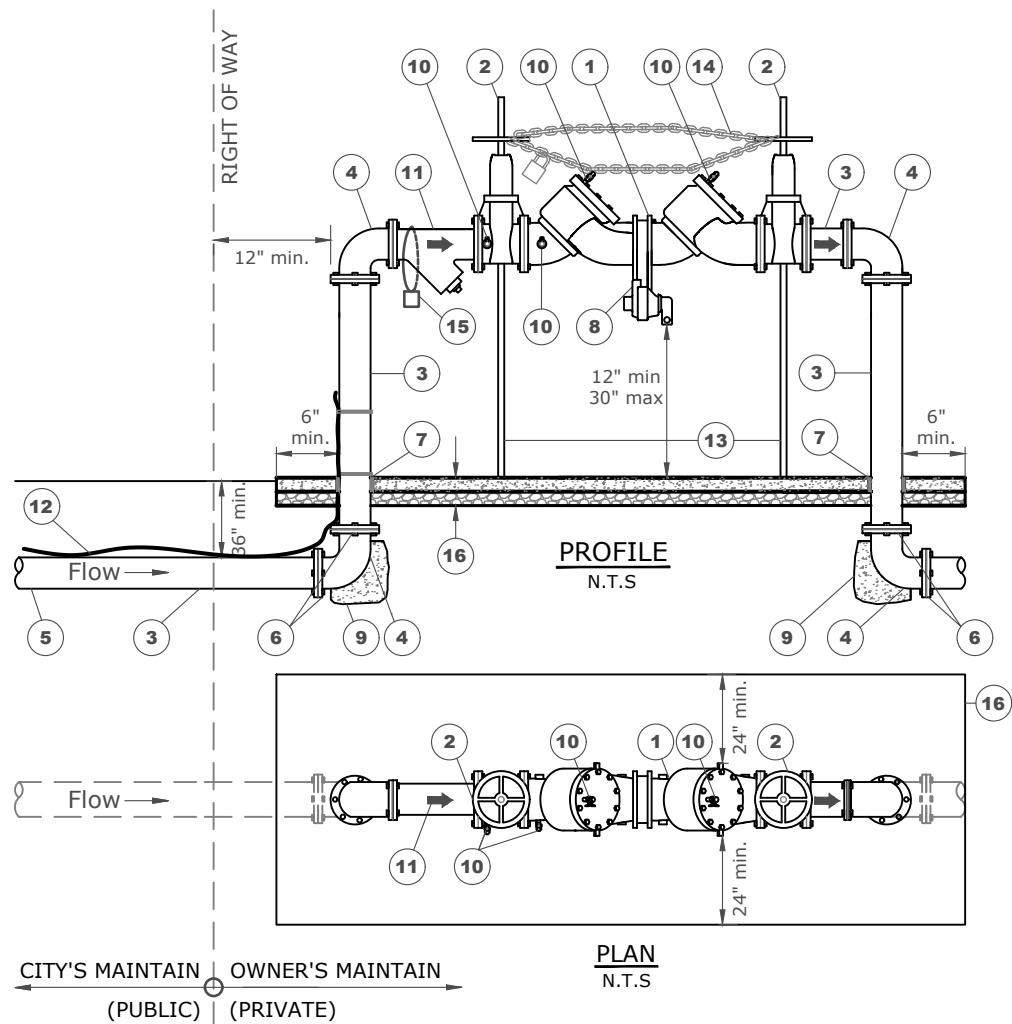
REDUCED PRESSURE PRINCIPAL ASSEMBLY
FOR 3/4"-2" DOMESTIC, FIRE, OR IRRIGATION SERVICES

DATE : JUNE 2025

APPROVED BY: Michael Silveira

△ MICHAEL SILVEIRA, P.E., CITY ENGINEER RCE # C-83869

SHEET 1 OF 3



① REDUCED PRESSURE PRINCIPAL ASSEMBLY UNIT	⑨ CONCRETE THRUST BLOCKS, SEE NOTE 11 ON SHEET 3
② RESILIENT SEATED SHUT-OFF VALVE	⑩ TEST COCKS WITH THREADED ENDS
③ DUCTILE IRON PIPE	⑪ WYE STRAINER, IF REQUIRED
④ 90° BEND, DUCTILE IRON FLANGED	⑫ TRACER WIRE, SEE NOTE 8 ON SHEET 3
⑤ TO WATER METER	⑬ PIPE SUPPORT, SEE NOTE 9 ON SHEET 3
⑥ BURIED FITTING TO BE FUSION EPOXY COATED	⑭ CHAIN & LOCK VALVE WHEELS
⑦ PIPE SLEEVE & 1" ANNULAR SPACE	⑮ ASSET TAG
⑧ RELIEF VALVE	⑯ 4" MIN P.C.C OVER 4" MIN CLASS 2AB

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REDUCED PRESSURE PRINCIPAL ASSEMBLY
FOR 2 1/2" OR LARGER DOMESTIC OR IRRIGATION SERVICE

DATE : JUNE 2025

APPROVED BY: Michael Silveira

MICHAEL SILVEIRA, P.E., CITY ENGINEER RCE # C-83869

SHEET 2 OF 3

1. Reduced Pressure Principal Assembly (RPPA) shall be Wilkins 975XL3 or FEBCO LF860 or approved equal, as approved by the USC Foundation for Cross-Connection Control and Hydraulic Research.
2. RPPA shall be installed per the current State of California of Public Health regulations contained in Title 17 of the Administrative Code and City of Milpitas Ordinance No. 232.
3. RPPA shall be purchased and installed as a whole unit including resilient shutoff valves, test cocks, and wye strainer (if required).
4. The components of the RPDA shall be lead-free certified.
5. For a water service serving water heaters or boilers without a secondary thermal expansion relief device, the secondary pressure relief valve (SPRV) shall be installed after RPPA. The SPRV shall be set at or below the maximum working pressure of the water heater or boiler. The SPRV shall be listed by a nationally recognized testing laboratory or approved and inspected by the Building Department.
6. All pipe and spools shall be either copper or ductile iron pipe as shown per Standard Drawing. Galvanized pipe or dissimilar metal pipe are not allowed.
7. Underground ductile iron pipe shall be wrapped with 15 mil polywrap and fittings shall be fusion epoxy coated.
8. The 10-gauge solid trace shall be extended from fire service 2-feet above ground, folded in half and secured to the inlet side of the RPPA with zip ties and the ends shall be stripped.
9. All ductile iron fittings shall be flanged and the bolts, nuts, and washers shall be stainless steel 316.
10. The RPPA for 2-1/2" of large shall be equipped with resilient seated gate valves with flanged ends and supported by stainless steel pipe saddle braces.
11. The RPPA for 4" or larger shall be equipped with thrust blocks per Standard Drawing No. 704.
12. Domestic or irrigation water service shall be installed per Standard Drawings.
13. The size of the RPPA and piping shall be the same size of the water service. The applicant's designer is responsible for sizing the RPPA and water service according to the Building and/or Fire Codes.
14. The RPPA shall be inspected by the Building, Fire, and Public Works Department and tested and certified by a licensed certified tester registered with the City. The testing of the RPPA shall be coordinated with all Departments and immediately tested after the install. The Certification Report (including test results) shall be submitted to the Building Department prior to occupancy and Engineering Division prior to acceptance of public improvements.
15. The RPPA shall be installed when any of the following conditions exist:
 - A. When serving more than two dwelling units.
 - B. To separate potable water supply from irrigation system.
 - C. When recycle water connection serves the site.
 - D. When recycle water irrigation system has a permanent plumbing connection to chemical feed.
 - E. When any potable water service has a permanent plumbing connection to pumps, injectors, or tanks.
16. OS&Y gate valves shall be electrically monitored by the fire sprinkler monitoring system.
17. The protective enclosure shall be model BPE-200r by Pipeline Product or approved equal.

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		SHEET 3 OF 3