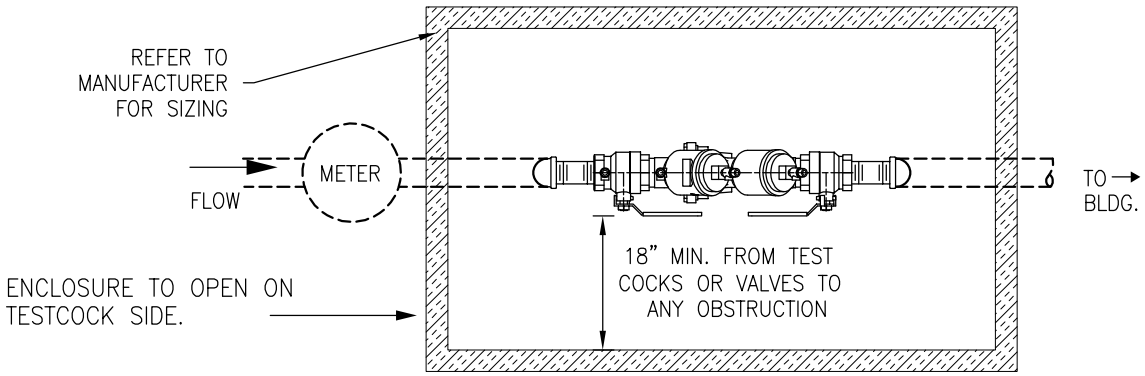
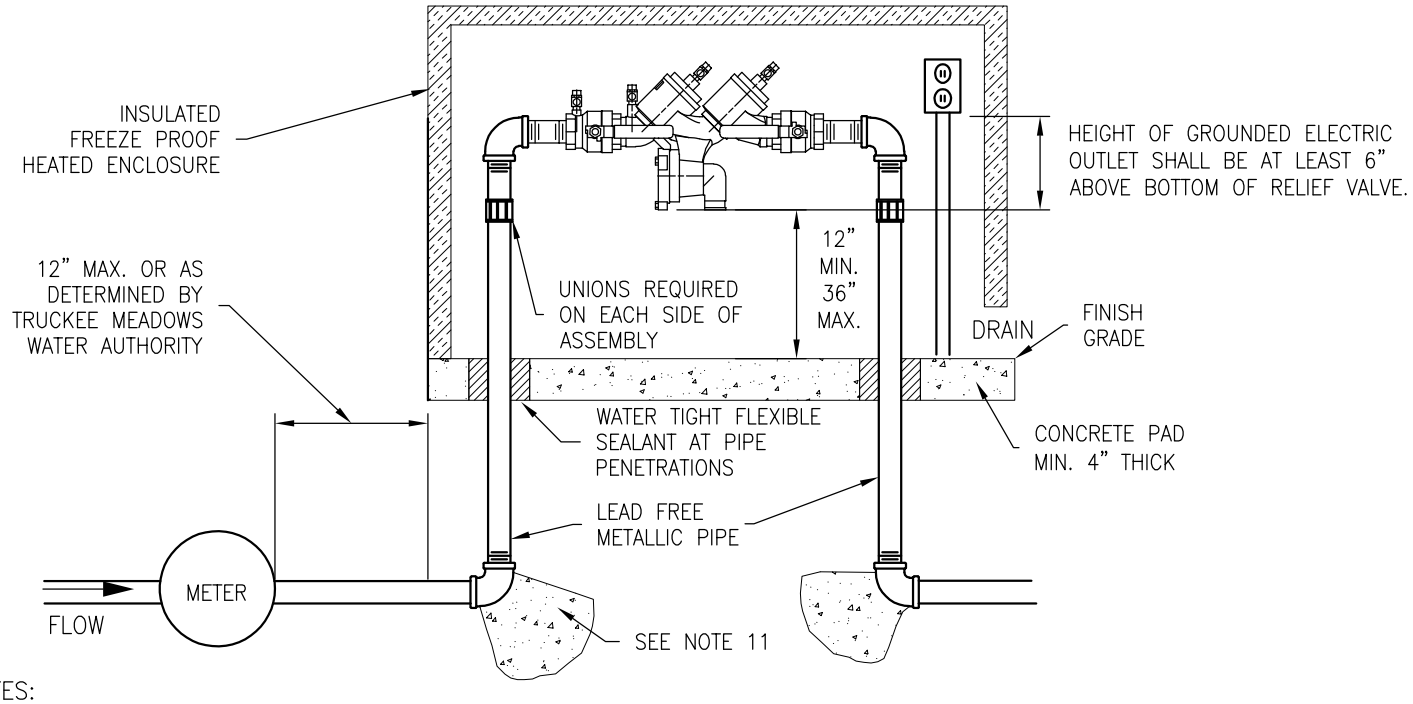
APPENDIX 10A
BACKFLOW PREVENTION ASSEMBLIES

PLAN VIEW

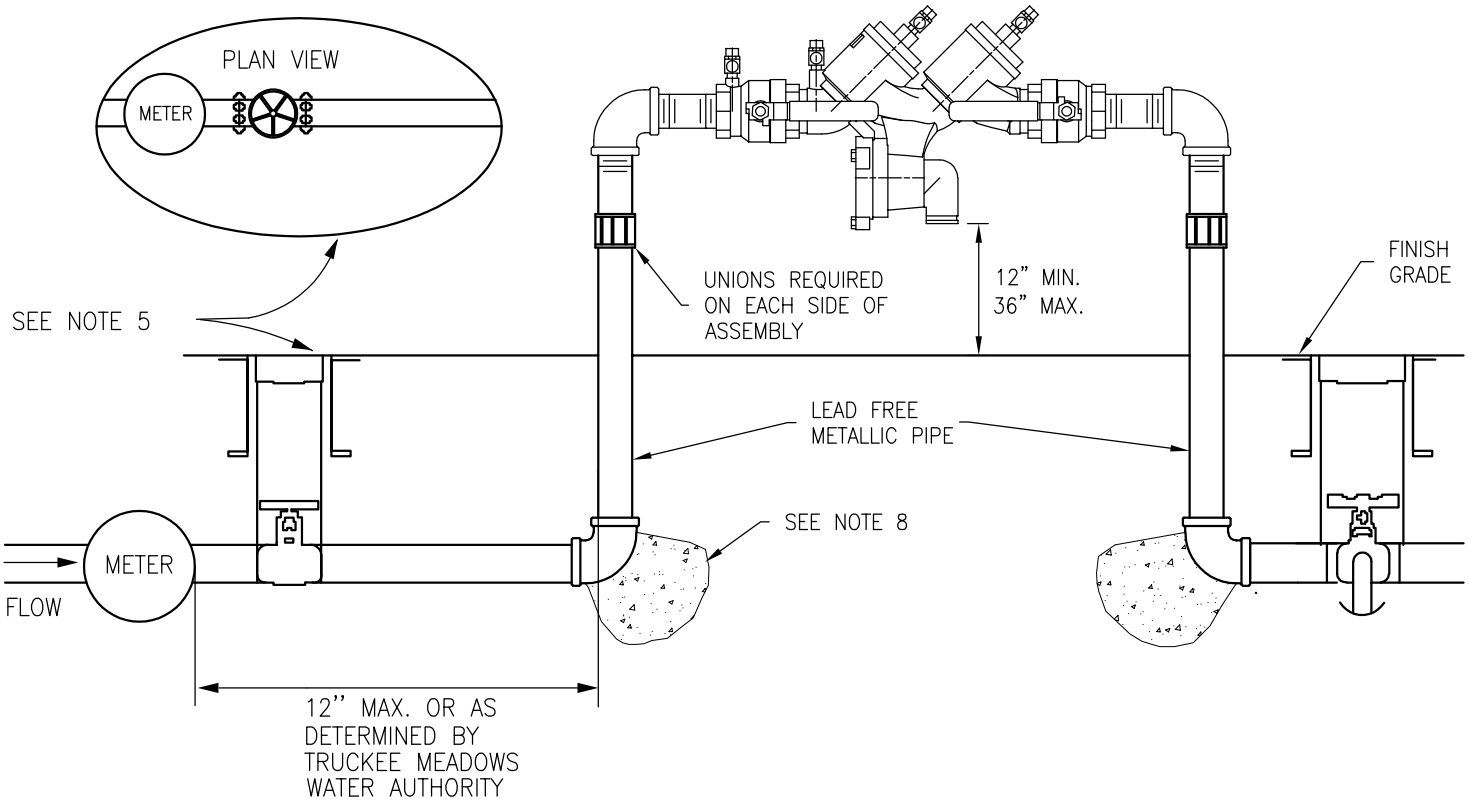




NOTES:

1. ASSEMBLY SHALL BE A USC APPROVED AND NSF–61 CERTIFIED LEAD FREE DEVICE.
2. THE RP SHALL BE INSTALLED ABOVE GRADE.
3. GROUNDED ELECTRIC SUPPLY SHALL BE A MINIMUM OF 6" ABOVE BOTTOM OF RELIEF VALVE AND STUBBED TO THE OUTSIDE.
4. NO TYPE OF OUTLET, TEE, TAP, TAKE–OFF OR CONNECTION BETWEEN THE SERVICE CONNECTION AND THE BACKFLOW PREVENTION DEVICE.
5. FREEZE PROOF INSULATED BOX AND 1 SOURCE OF HEAT ARE REQUIRED. 2 SOURCES OF HEAT ARE STRONGLY RECOMMENDED.
6. INSULATED BOX SHALL SWING CLEAR OF ASSEMBLY TO PROVIDE CLEARANCES SHOWN OR INSULATED BOX SHALL BE SIZED TO PROVIDE CLEARANCES SHOWN.
7. SPRING LOADED LID REQUIRED ON LARGE BOXES.
8. THERMAL EXPANSION PROTECTION IS REQUIRED IN ANY DOMESTIC WATER SUPPLY SYSTEM THAT IS DOWNSTREAM FROM A BACKFLOW PREVENTION DEVICE. REFERENCE: UNIFORM PLUMBING CODE & NAC 445A.67235.
9. INSPECTION BY TMWA BACKFLOW PREVENTION GROUP PERSONNEL REQUIRED BEFORE METER IS SET OR SERVICE IS ACTIVATED.
10. IF INITIAL TEST DONE BY TMWA FIELD PERSONNEL FAILS, RETESTING OF BACKFLOW ASSEMBLY IS REQUIRED WITHIN 7 DAYS AFTER METER IS SET OR SERVICE ACTIVATION. COPY OF TEST RESULTS TO BE FORWARDED TO TMWA BACKFLOW PREVENTION GROUP BY A CERTIFIED ASSEMBLY TESTER WITHIN THAT SAME TIMEFRAME.
11. MINIMUM DIMENSIONS FOR THE THRUST BLOCK BEARING AREA FOR PIPE 2" AND SMALLER SHALL BE 8" X 8" AND 12" IN DEPTH. ALL OTHER SIZES TO BE DETERMINED BY ENGINEER. OPTIONAL: PLACE CONCRETE COMPLETELY BETWEEN THE TWO ELBOWS WITH A MINIMUM OF 8" HIGH X 8" WIDE. SEE 10L–2 FOR CONCRETE REQUIREMENTS.

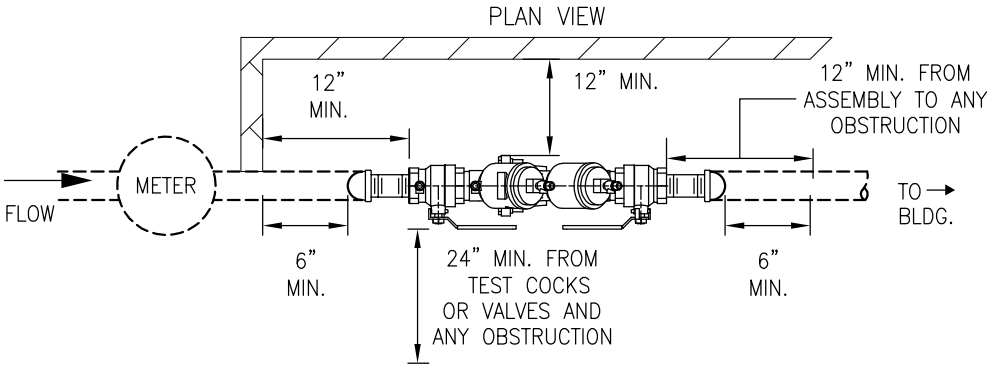
TRUCKEE MEADOWS WATER AUTHORITY	DATE 7/2001 REV 1/2024	APPENDIX 10A BACKFLOW PREVENTION ASSEMBLIES REDUCED PRESSURE PRINCIPLE ASSEMBLY FOR DOMESTIC USE EXTERNAL - HORIZONTAL	DRAWING NUMBER 10A-2

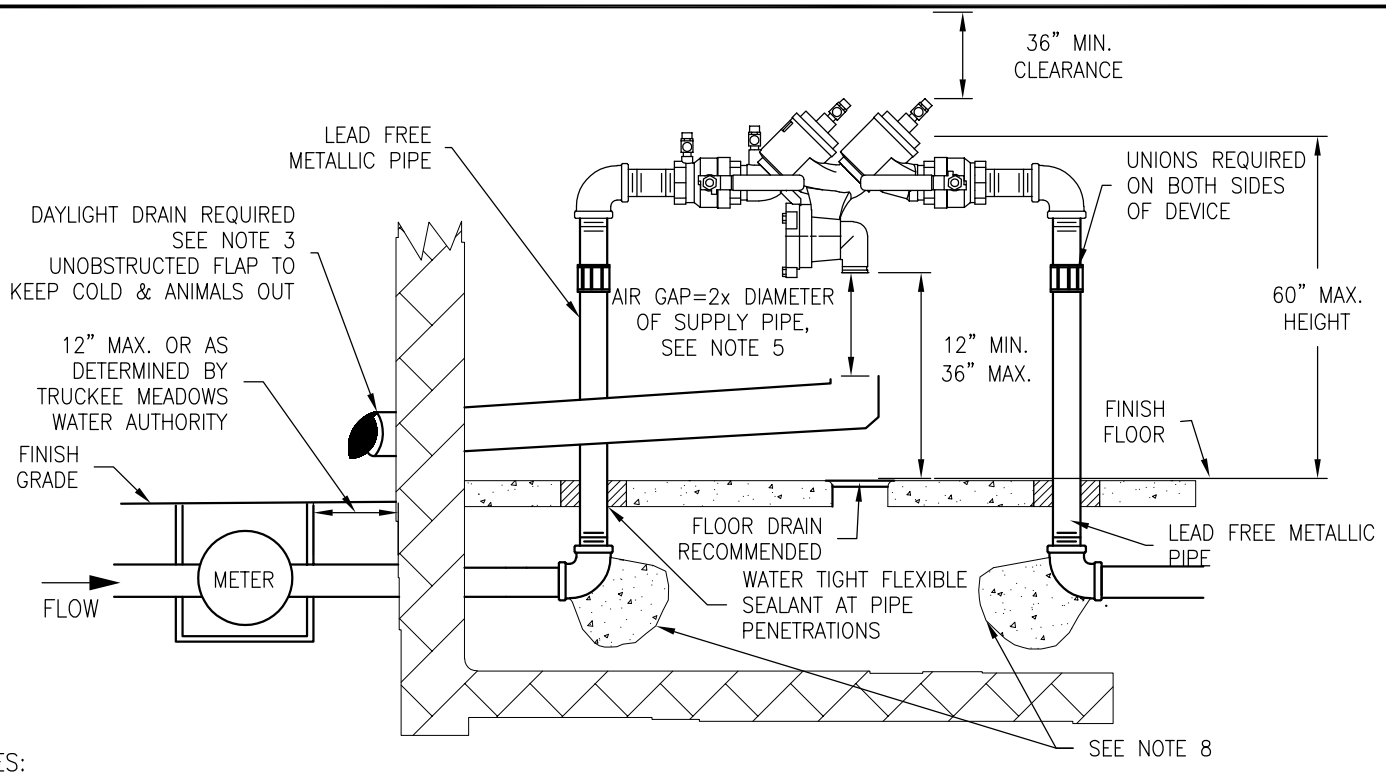


NOTES:

1. ASSEMBLY SHALL BE A USC APPROVED AND NSF-61 CERTIFIED LEAD FREE DEVICE.
2. THE RP SHALL BE INSTALLED ABOVE GRADE.
3. EITHER VALVE BOXES OR PIPE RISERS MAY BE USED FOR THE 2 BELOW GRADE SHUT OFF VALVES.
4. MANUAL SHUT OFF VALVE: INLINE BRASS GLOBE OR CURB VALVE SIZED SAME AS MAINLINE.
5. NO TYPE OF OUTLET, TEE, TAP, TAKE-OFF OR CONNECTION BETWEEN THE SERVICE CONNECTION AND THE BACKFLOW PREVENTION DEVICE.
6. INSPECTION BY TMWA BACKFLOW PREVENTION GROUP PERSONNEL REQUIRED BEFORE METER IS SET OR SERVICE IS ACTIVATED.
7. IF INITIAL TEST DONE BY TMWA FIELD PERSONNEL FAILS, RETESTING OF BACKFLOW ASSEMBLY IS REQUIRED WITHIN 7 DAYS AFTER METER IS SET OR SERVICE ACTIVATION. COPY OF TEST RESULTS TO BE FORWARDED TO TMWA BACKFLOW PREVENTION GROUP BY A CERTIFIED ASSEMBLY TESTER WITHIN THAT SAME TIMEFRAME.
8. MINIMUM DIMENSIONS FOR THE THRUST BLOCK BEARING AREA FOR PIPE 2" AND SMALLER SHALL BE 8" X 8" AND 12" IN DEPTH. ALL OTHER SIZES TO BE DETERMINED BY ENGINEER. OPTIONAL: PLACE CONCRETE COMPLETELY BETWEEN THE TWO ELBOWS WITH A MINIMUM OF 8" HIGH X 8" WIDE. REFER TO 10L-2 FOR CONCRETE REQUIREMENTS.
9. FOR YEAR-ROUND USE REFER TO 10A-2.

TRUCKEE MEADOWS WATER AUTHORITY	DATE 7/2001 REV 5/2024	APPENDIX 10A BACKFLOW PREVENTION ASSEMBLIES REDUCED PRESSURE PRINCIPLE ASSEMBLY FOR IRRIGATION AND CONSTRUCTION WATER USE - HORIZONTAL	DRAWING NUMBER 10A-3



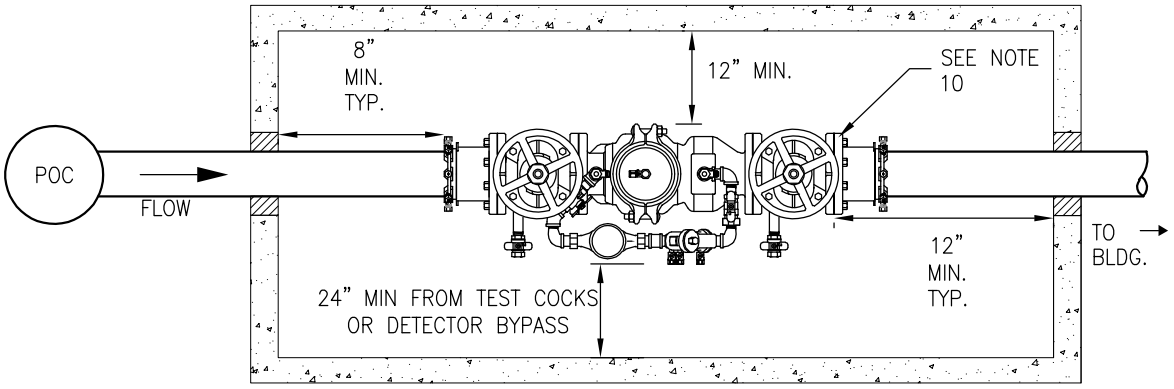


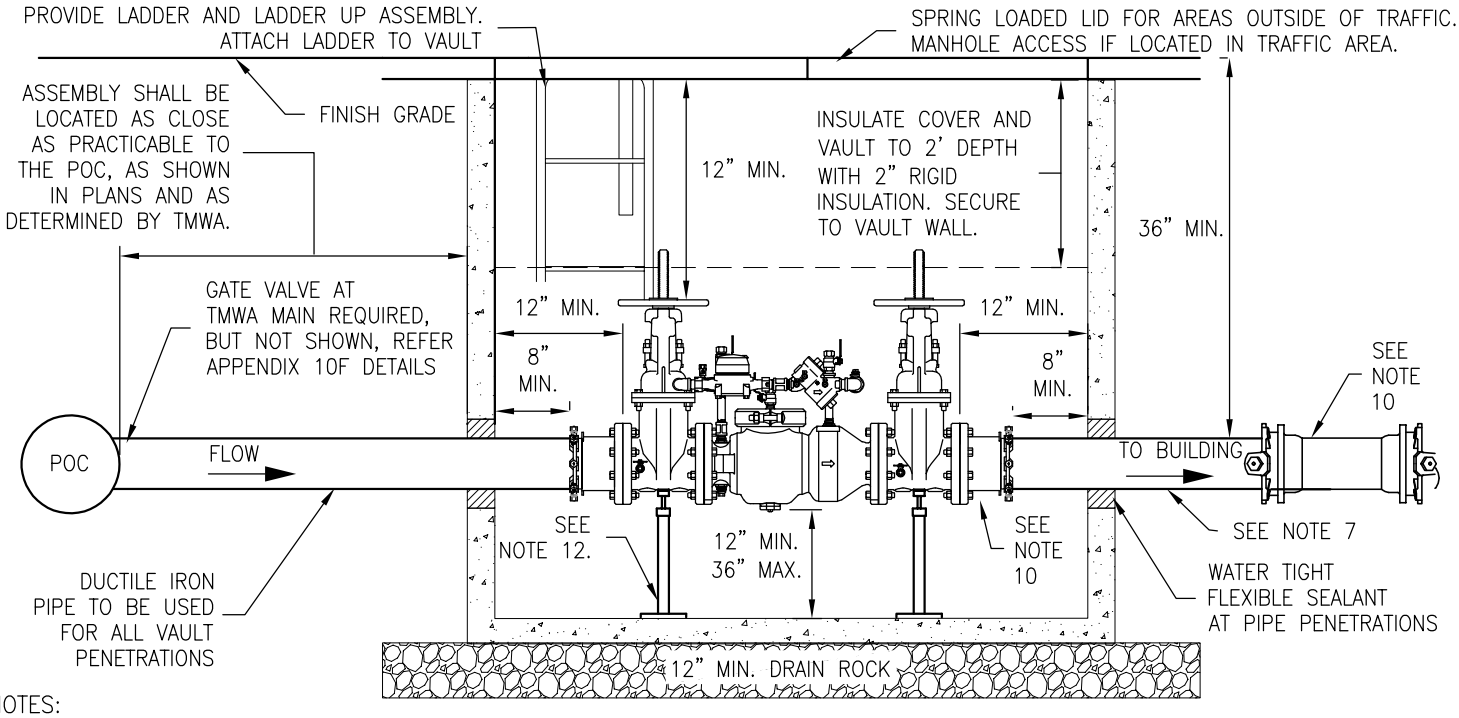
NOTES:

1. ASSEMBLY SHALL BE USC APPROVED. IF USED FOR DOMESTIC PURPOSES, ASSEMBLY SHALL BE NSF–61 CERTIFIED AND LEAD FREE.
2. THE RP SHALL BE INSTALLED ABOVE GRADE AND NOT IN A BASEMENT.
3. A DAYLIGHT DRAIN IS REQUIRED AND A FLOOR DRAIN IS RECOMMENDED. DAYLIGHT DRAIN SHOULD BE NO SMALLER THAN THE RP DEVICE THAT IS INSTALLED.
4. NO TYPE OF OUTLET, TEE, TAP, TAKE–OFF OR CONNECTION BETWEEN THE SERVICE CONNECTION AND THE BACKFLOW PREVENTION DEVICE.
5. AN AIR GAP (VERTICAL PHYSICAL SEPARATION) OF AT LEAST 2 TIMES THE DIAMETER OF THE RELIEF VALVE OPENING, IF THE PIPE IS AFFECTED BY SIDE WALLS, CLEARANCE SHALL BE AT LEAST THREE TIMES THE EFFECTIVE DIAMETER OF THE PIPE, A MINIMUM OF 1" SHALL BE MAINTAINED BETWEEN THE WATER DISCHARGE POINT ON THE RELIEF VALVE AND THE DRAIN OR MAXIMUM FLOOD LEVEL, WHICHEVER IS HIGHEST.
6. INSPECTION BY TMWA BACKFLOW PREVENTION GROUP PERSONNEL REQUIRED BEFORE METER IS SET OR SERVICE IS ACTIVATED.
7. TESTING OF BACKFLOW ASSEMBLY REQUIRED WITHIN 7 DAYS AFTER METER IS SET OR SERVICE ACTIVATION. COPY OF TEST RESULTS TO BE FORWARDED TO TMWA BACKFLOW PREVENTION GROUP PERSONNEL BY A CERTIFIED ASSEMBLY TESTER WITHIN THAT SAME TIMEFRAME.
8. MINIMUM DIMENSIONS FOR THE THRUST BLOCK BEARING AREA FOR PIPE 2" AND SMALLER SHALL BE 8" X 8" AND 12" IN DEPTH. ALL OTHER SIZES TO BE DETERMINED BY ENGINEER. OPTIONAL: PLACE CONCRETE COMPLETELY BETWEEN THE TWO ELBOWS WITH A MINIMUM OF 8" HIGH X 8" WIDE. REFER TO 10L–2 FOR CONCRETE REQUIREMENTS.
9. THERMAL EXPANSION PROTECTION IS REQUIRED IN ANY DOMESTIC WATER SUPPLY SYSTEM THAT IS DOWNSTREAM FROM A BACKFLOW PREVENTION DEVICE. REFERENCE: UNIFORM PLUMBING CODE AND NAC 445A.67235.

TRUCKEE MEADOWS WATER AUTHORITY	DATE 7/2001 REV 5/2024	APPENDIX 10A BACKFLOW PREVENTION ASSEMBLIES REDUCED PRESSURE PRINCIPLE ASSEMBLY INTERNAL - RETROFIT ONLY	DRAWING NUMBER 10A-4

PLAN VIEW

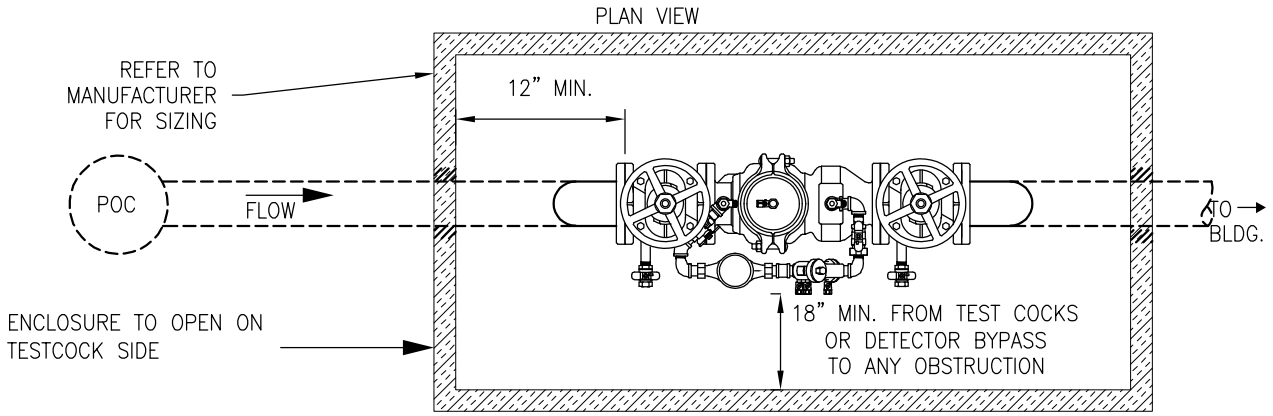


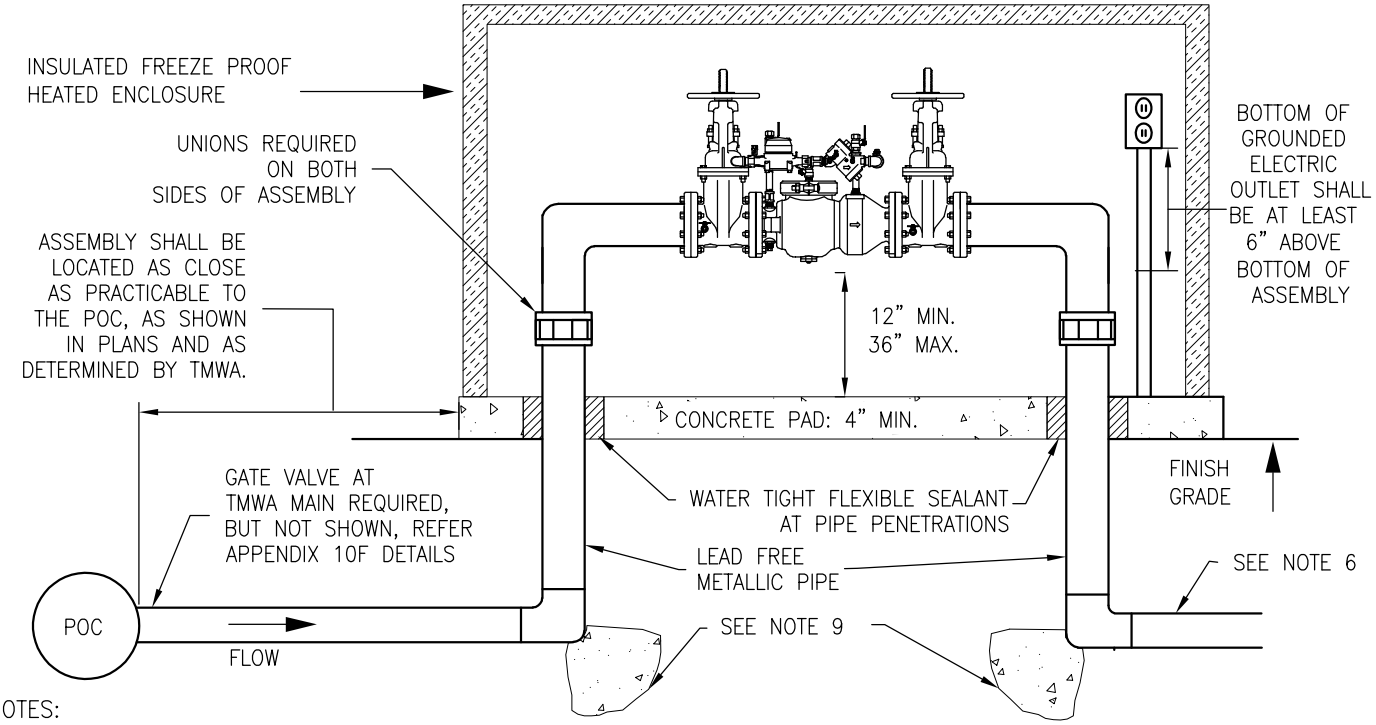


NOTES:

1. ASSEMBLY SHALL BE USC APPROVED. IF USED FOR DOMESTIC PURPOSES, ASSEMBLY SHALL BE NSF–61 CERTIFIED AND LEAD FREE.
2. FREEZE PROOF INSULATED VAULT REQUIRED.
3. BELOW GROUND VAULT SHALL BE SIZED TO PROVIDE CLEARANCES AS SHOWN ABOVE.
4. BELOW GROUND VAULT SHALL REMAIN DRY THROUGHOUT THE YEAR, CONTRACTOR SHALL ENSURE THERE IS PROPER DRAINAGE AROUND THE VAULT
5. SPRING LOADED LID REQUIRED ON LARGE VAULTS WITH ASSEMBLIES LARGER THAN 2 INCHES. MANHOLE ACCESS IS REQUIRED IN AREAS SUBJECT TO VEHICULAR TRAFFIC.
6. NO TYPE OF OUTLET, TEE, TAP, TAKE–OFF OR CONNECTION BETWEEN THE SERVICE CONNECTION AND THE BACKFLOW PREVENTION DEVICE.
7. CALL LOCAL BUILDING AND/OR FIRE DEPARTMENTS FOR TYPE OF PIPE TO BE USED.
8. INSPECTION BY TMWA BACKFLOW PREVENTION GROUP PERSONNEL REQUIRED BEFORE METER IS SET OR SERVICE IS ACTIVATED.
9. TESTING OF THE ASSEMBLY REQUIRED WITHIN 7 DAYS AFTER METER IS SET OR SERVICE ACTIVATION. COPY OF TEST RESULTS TO BE FORWARDED TO TMWA BACKFLOW PREVENTION GROUP PERSONNEL BY A CERTIFIED ASSEMBLY TESTER WITHIN THAT SAME TIMEFRAME.
10. RESTRAINED FLANGE COUPLING ADAPTERS (RFCA) TO BE INSTALLED WITH ALL ASSEMBLIES ON BOTH SIDES OF ASSEMBLY. UPON APPROVAL ONE RFCA CAN BE REPLACE WITH A FLANGE X PLAIN END SPOOL WITH AN MRJ X MRJ DUCTILE IRON SOLID SLEEVE CONNECTING THE PLAIN END TO THE ADJACENT PIPE MINIMUM OF 20" FROM VAULT WALL ON THE BUILDING SIDE OF THE ASSEMBLY.
11. VALVES ON DETECTOR BYPASS SHALL REMAIN OPEN AT ALL TIMES.
12. ADJUSTABLE PIPE SUPPORTS, MINIMUM OF 2.

TRUCKEE MEADOWS WATER AUTHORITY	DATE 7/2001 REV 5/2024	APPENDIX 10A BACKFLOW PREVENTION ASSEMBLIES FIRE - CLASS 1, 2 & 3 DOUBLE CHECK VALVE DETECTOR ASSEMBLY EXTERNAL - HORIZONTAL BELOW GRADE	DRAWING NUMBER 10A-5

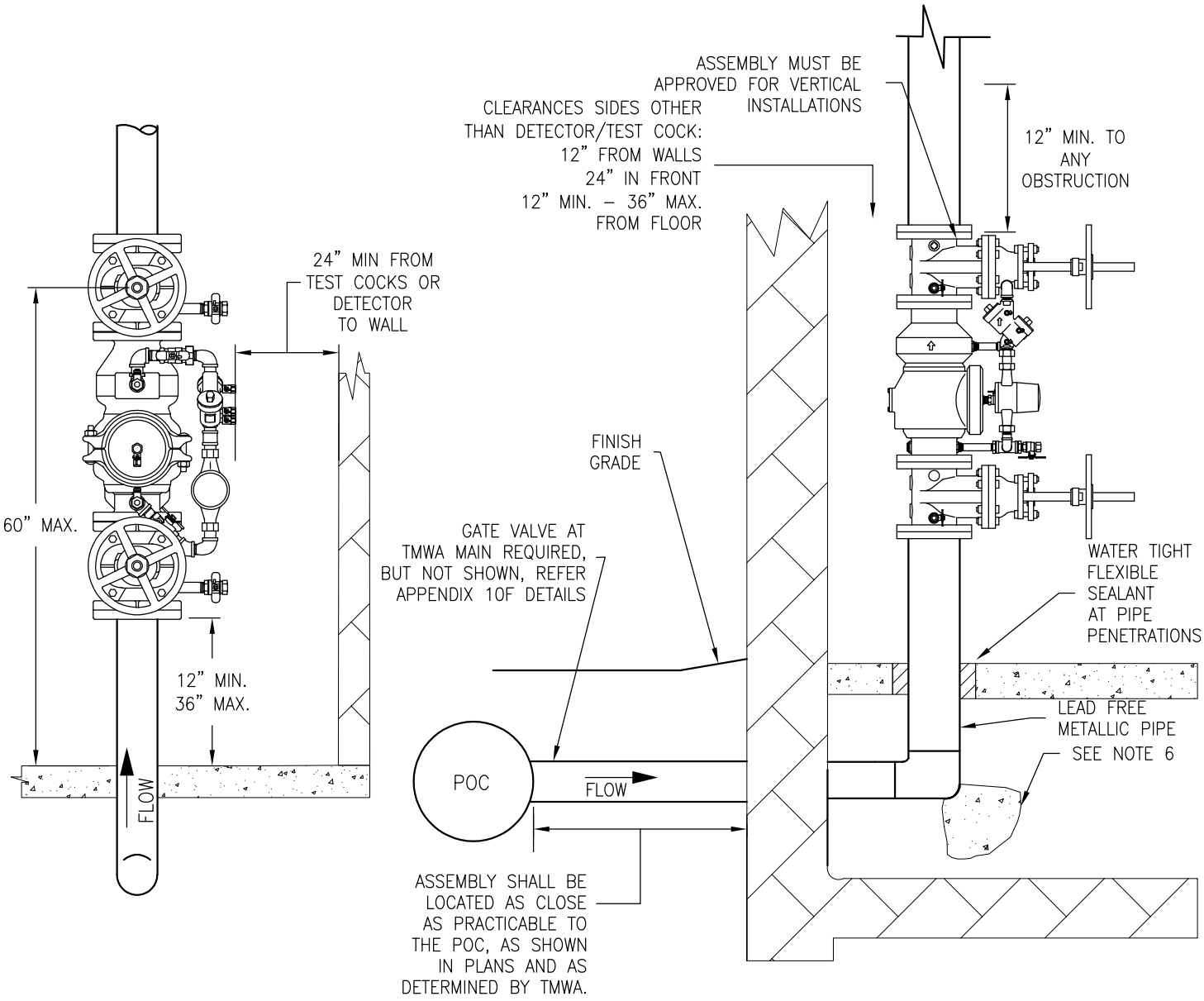




NOTES:

1. ASSEMBLY SHALL BE USC APPROVED. IF USED FOR DOMESTIC PURPOSES, ASSEMBLY SHALL BE NSF-61 CERTIFIED AND LEAD FREE.
2. GROUNDED ELECTRIC SUPPLY SHALL BE A MINIMUM OF 6" ABOVE BOTTOM OF RELIEF VALVE AND STUBBED TO THE OUTSIDE.
3. FREEZE PROOF INSULATED BOX AND 1 SOURCE OF HEAT ARE REQUIRED. 2 SOURCES OF HEAT ARE STRONGLY RECOMMENDED.
4. INSULATED BOX SHALL SWING CLEAR OF ASSEMBLY TO PROVIDE CLEARANCES SHOWN IN PLAN VIEW OR INSULATED BOX SHALL BE SIZED TO PROVIDE CLEARANCES
5. NO TYPE OF OUTLET, TEE, TAP, TAKE-OFF OR CONNECTION BETWEEN THE SERVICE CONNECTION AND THE BACKFLOW PREVENTION DEVICE.
6. CALL LOCAL BUILDING AND/OR FIRE DEPARTMENT FOR TYPE OF PIPE TO BE USED.
7. INSPECTION BY TMWA BACKFLOW PREVENTION GROUP PERSONNEL REQUIRED BEFORE METER IS SET OR SERVICE IS ACTIVATED.
8. TESTING OF BACKFLOW ASSEMBLY REQUIRED WITHIN 7 DAYS AFTER METER IS SET OR SERVICE ACTIVATION. COPY OF TEST RESULTS TO BE FORWARDED TO TMWA BACKFLOW PREVENTION GROUP PERSONNEL BY A CERTIFIED ASSEMBLY TESTER WITHIN THAT SAME TIMEFRAME.
9. MINIMUM DIMENSIONS FOR THE THRUST BLOCK BEARING AREA FOR PIPE 2" AND SMALLER SHALL BE 8" X 8" AND 12" IN DEPTH. ALL OTHER SIZES TO BE DETERMINED BY ENGINEER. OPTIONAL: PLACE CONCRETE COMPLETELY BETWEEN THE TWO ELBOWS WITH A MINIMUM OF 8" HIGH X 8" WIDE. REFER TO 10L-2 FOR CONCRETE REQUIREMENTS.
10. UNIONS TO BE INSTALLED WITH ALL ASSEMBLIES ON BOTH SIDES OF ASSEMBLY.
11. VALVES ON DETECTOR BYPASS SHALL REMAIN OPEN AT ALL TIMES.

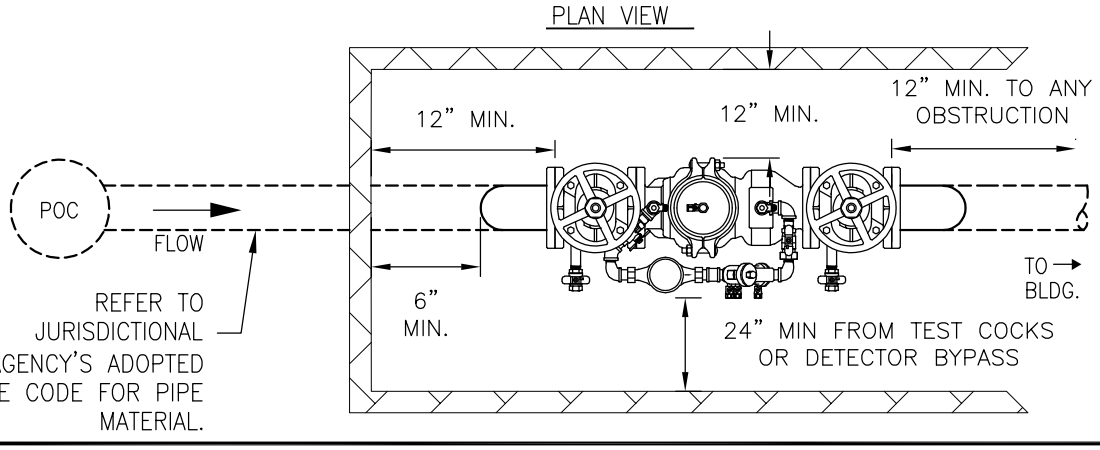
TRUCKEE MEADOWS WATER AUTHORITY	DATE 7/2001 REV 5/2024	APPENDIX 10A BACKFLOW PREVENTION ASSEMBLIES FIRE CLASS 1, 2 & 3 DOUBLE CHECK VALVE DETECTOR ASSEMBLY EXTERNAL - HORIZONTAL ABOVE GRADE	DRAWING NUMBER 10A-6

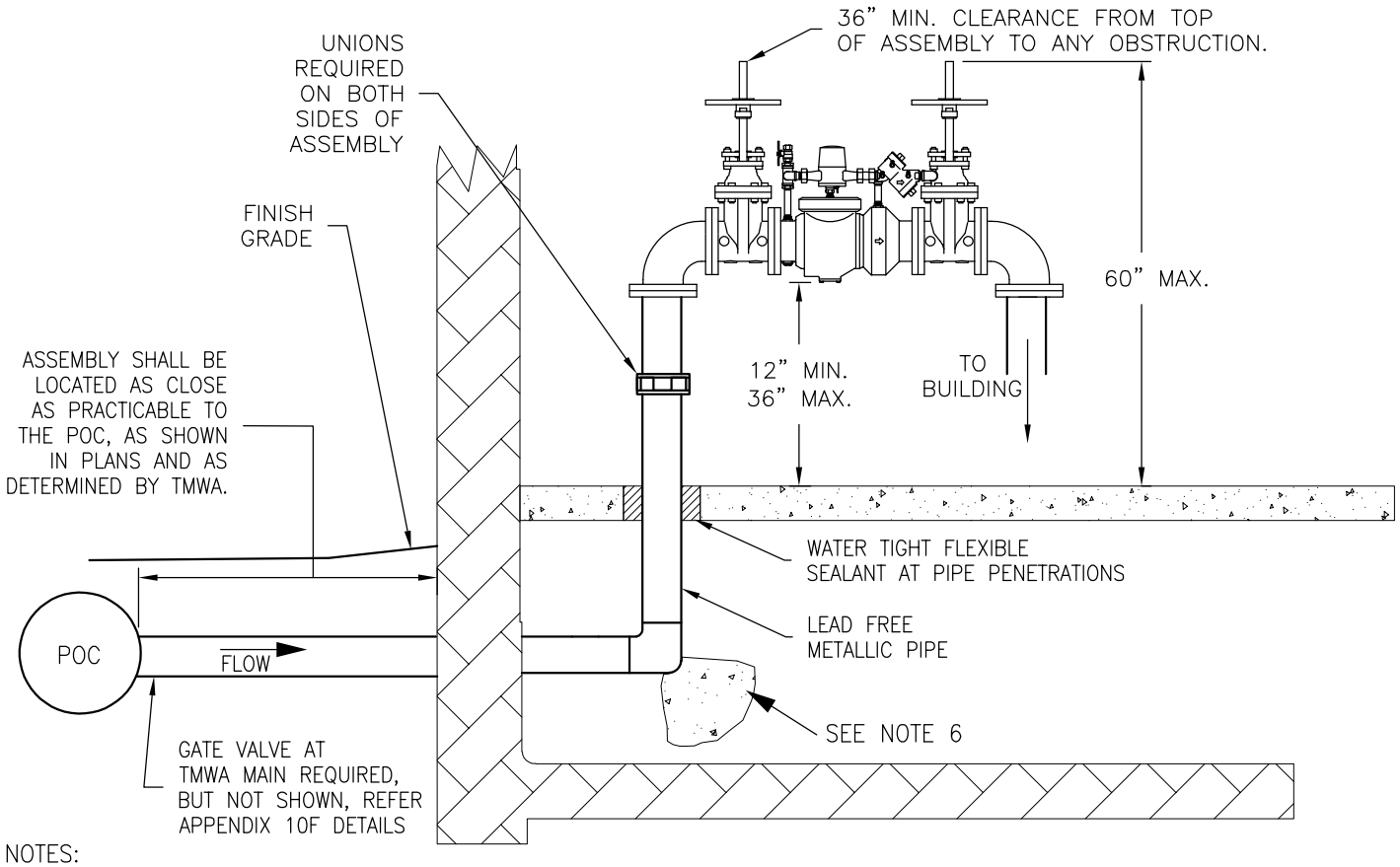


NOTES:

1. ASSEMBLY SHALL BE A USC APPROVED LEAD FREE DEVICE. IF USED FOR DOMESTIC PURPOSES, ASSEMBLY SHALL BE NSF–61 CERTIFIED.
2. NO STOP AND WASTE VALVES.NO TYPE OF OUTLET, TEE, TAP, TAKE–OFF OR CONNECTION BETWEEN THE SERVICE CONNECTION AND THE BACKFLOW PREVENTION DEVICE.
3. CALL LOCAL BUILDING AND/OR FIRE DEPARTMENTS FOR TYPE OF PIPE TO BE USED.
4. INSPECTION BY TMWA BACKFLOW PREVENTION GROUP PERSONNEL REQUIRED BEFORE METER IS SET OR SERVICE IS ACTIVATED.
5. TESTING OF BACKFLOW ASSEMBLY REQUIRED WITHIN 7 DAYS AFTER METER IS SET OR SERVICE ACTIVATION. COPY OF TEST RESULTS TO BE FORWARDED TO TMWA BACKFLOW PREVENTION GROUP PERSONNEL BY A CERTIFIED ASSEMBLY TESTER WITHIN THAT SAME TIMEFRAME.
6. MINIMUM DIMENSIONS FOR THE THRUST BLOCK BEARING AREA FOR PIPE 2" AND SMALLER SHALL BE 8" X 8" AND 12" IN DEPTH. ALL OTHER SIZES TO BE DETERMINED BY ENGINEER. REFER TO 10L–2 FOR CONCRETE REQUIREMENTS.
7. TMWWA'S BACKFLOW DEPARTMENT MUST APPROVE THE USE OF INTERNAL BACKFLOW ASSEMBLIES.
8. VALVES ON DETECTOR BYPASS SHALL REMAIN OPEN AT ALL TIMES.

TRUCKEE MEADOWS WATER AUTHORITY	DATE 7/2001 REV 5/2024	APPENDIX 10A BACKFLOW PREVENTION ASSEMBLIES FIRE - CLASS 1, 2 & 3 DOUBLE CHECK VALVE DETECTOR ASSEMBLY INTERNAL VERTICAL INSTALLATION	DRAWING NUMBER 10A-7



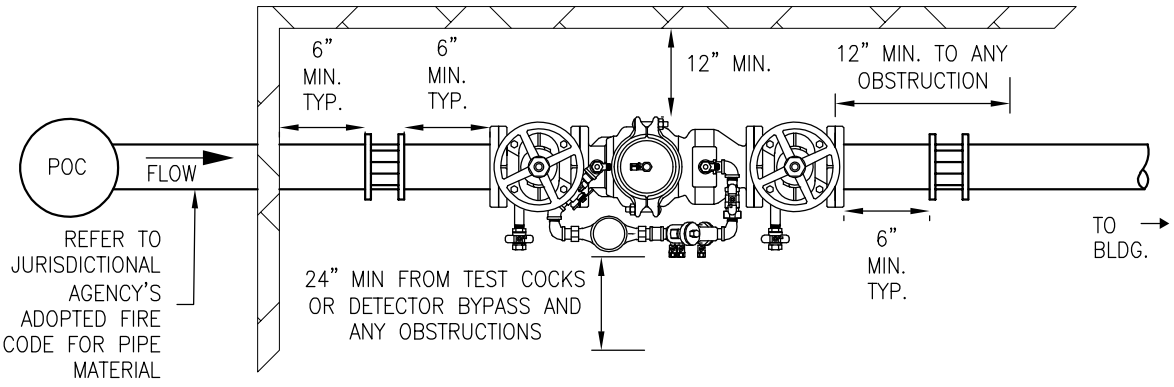


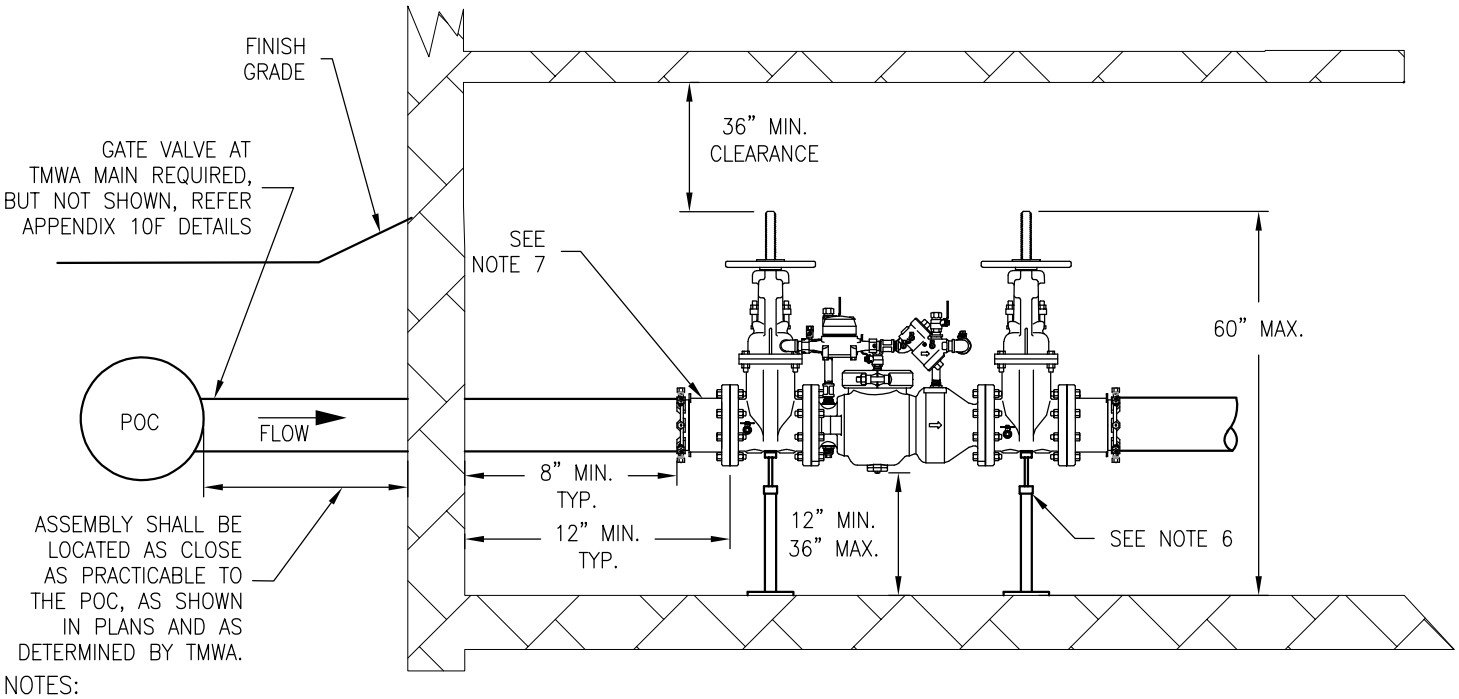
NOTES:

1. ASSEMBLY SHALL BE A USC APPROVED. IF USED FOR DOMESTIC PURPOSES, THE ASSEMBLY SHALL BE NSF–61 CERTIFIED AND LEAD FREE.
2. NO TYPE OF OUTLET, TEE, TAP, TAKE–OFF OR CONNECTION BETWEEN THE SERVICE CONNECTION AND THE BACKFLOW PREVENTION DEVICE.
3. CALL LOCAL BUILDING AND/OR FIRE DEPARTEMENTS FOR TYPE OF PIPE TO BE USED.
4. INSPECTION BY TMWA BACKFLOW PREVENTION GROUP PERSONNEL REQUIRED BEFORE METER IS SET OR SERVICE IS ACTIVATED.
5. TESTING OF BACKFLOW ASSEMBLY REQUIRED WITHIN 7 DAYS AFTER METER IS SET OR SERVICE ACTIVATION. COPY OF TEST RESULTS TO BE FORWARDED TO TMWA BACKFLOW PREVENTION GROUP PERSONNEL BY A CERTIFIED ASSEMBLY TESTER WITHIN THAT SAME TIMEFRAME.
6. MINIMUM DIMENSIONS FOR THE THRUST BLOCK BEARING AREA FOR PIPE 2" AND SMALLER SHALL BE 8" X 8" AND 12" IN DEPTH. ALL OTHER SIZES TO BE DETERMINED BY ENGINEER.
7. VALVES ON DETECTOR BYPASS SHALL REMAIN OPEN AT ALL TIMES.
8. TMWA'S BACKFLOW DEPARTMENT MUST APPROVE THE USE OF INTERNAL BACKFLOW ASSEMBLIES.

TRUCKEE MEADOWS WATER AUTHORITY	DATE 7/2001 REV 5/2024	APPENDIX 10A BACKFLOW PREVENTION ASSEMBLIES FIRE - CLASS 1, 2 & 3 DOUBLE CHECK VALVE DETECTOR ASSEMBLIES INTERNAL - HORIZONTAL INSTALLATION	DRAWING NUMBER 10A-8

PLAN VIEW

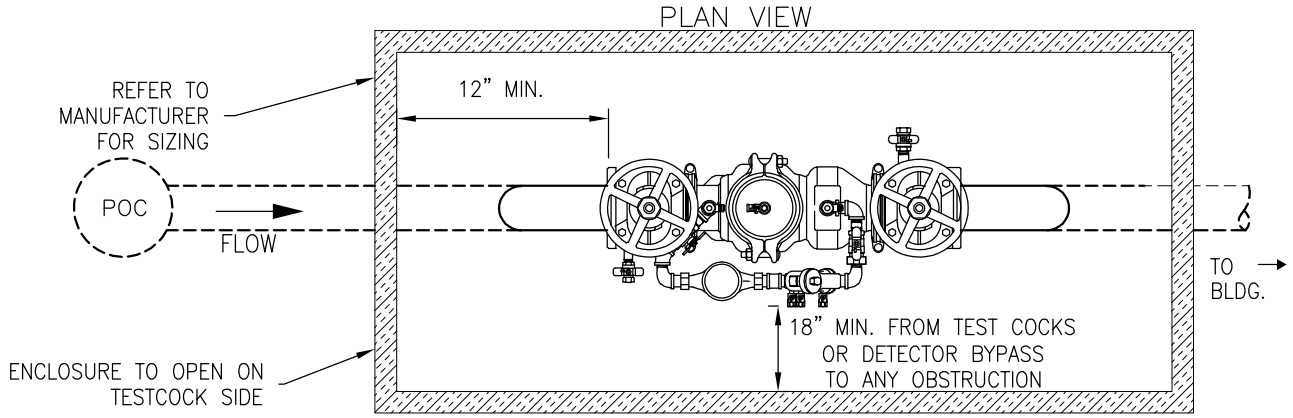


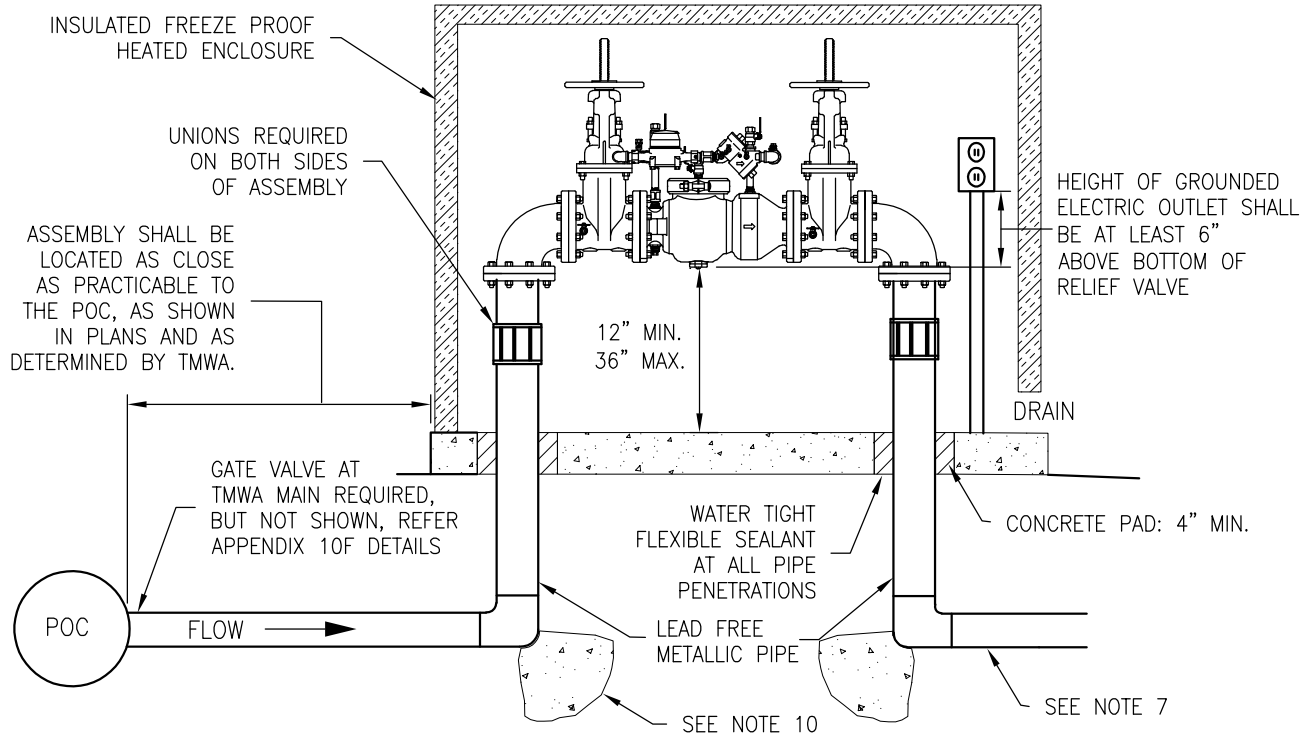


NOTES:

1. ASSEMBLY SHALL BE A USC APPROVED. IF USED FOR DOMESTIC PURPOSES, THE ASSEMBLY SHALL BE NSF-61 CERTIFIED AND LEAD FREE.
2. NO TYPE OF OUTLET, TEE, TAP, TAKE-OFF OR CONNECTION BETWEEN THE SERVICE CONNECTION AND THE BACKFLOW PREVENTION DEVICE.
3. CALL LOCAL BUILDING AND/OR FIRE DEPARTMENTS FOR TYPE OF PIPE TO BE USED.
4. INSPECTION BY TMWA BACKFLOW PREVENTION GROUP PERSONNEL REQUIRED BEFORE METER IS SET OR SERVICE IS ACTIVATED.
5. TESTING OF BACKFLOW ASSEMBLY REQUIRED WITHIN 7 DAYS AFTER METER IS SET OR SERVICE ACTIVATION. COPY OF TEST RESULTS TO BE FORWARDED TO TMWA BACKFLOW PREVENTION GROUP PERSONNEL BY A CERTIFIED ASSEMBLY TESTER WITHIN THAT SAME TIMEFRAME.
6. A MINIMUM OF 2 ADJUSTABLE PIPE STANDS TO BE USED.
7. RESTRAINED FLANGE COUPLING ADAPTERS TO BE INSTALLED WITH ALL ASSEMBLIES ON BOTH SIDES OF ASSEMBLY.
8. VALVES ON DETECTOR BYPASS SHALL REMAIN OPEN AT ALL TIMES.
9. TMWA'S BACKFLOW DEPARTMENT MUST APPROVE THE USE OF INTERNAL BACKFLOW ASSEMBLIES.

TRUCKEE MEADOWS WATER AUTHORITY	DATE 7/2001 REV 5/2024	APPENDIX 10A BACKFLOW PREVENTION ASSEMBLIES FIRE - CLASS 1, 2 & 3 DOUBLE CHECK VALVE DETECTOR ASSEMBLY INTERNAL BASEMENT INSTALLATION	DRAWING NUMBER 10A-9



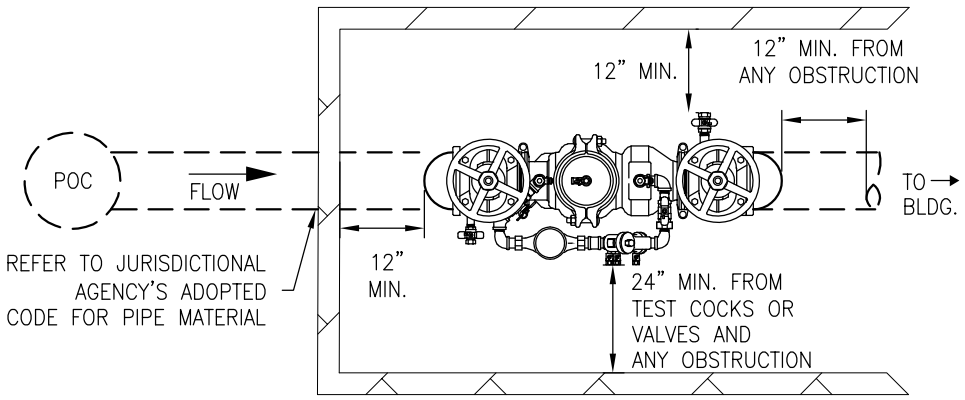


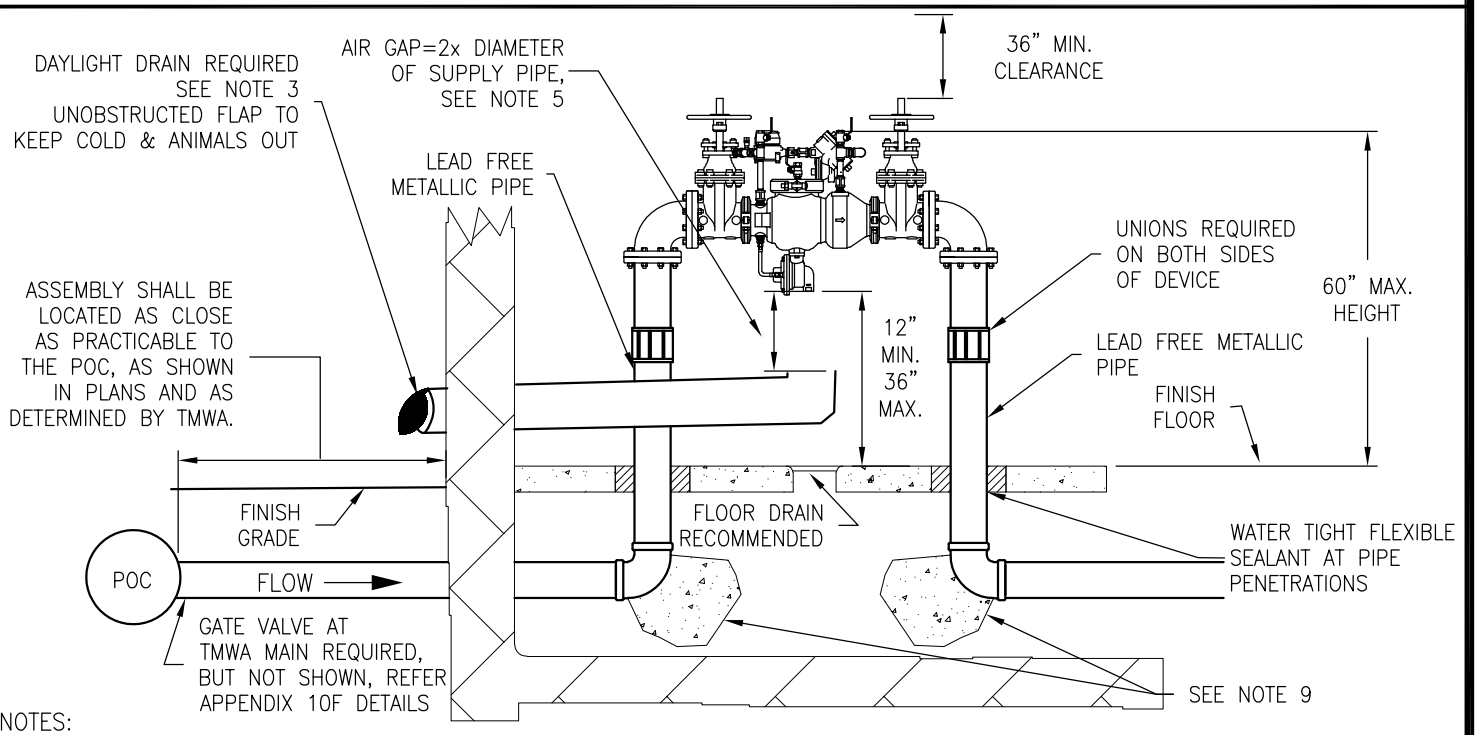
NOTES:

1. ASSEMBLY SHALL BE A USC APPROVED. IF USED FOR DOMESTIC PURPOSES, THE ASSEMBLY SHALL BE NSF–61 CERTIFIED AND LEAD FREE.
2. THE RP SHALL BE INSTALLED ABOVE GRADE.
3. FREEZE PROOF INSULATED BOX AND 1 SOURCE OF HEAT ARE REQUIRED. 2 SOURCES OF HEAT ARE STRONGLY RECOMMENDED.
4. NO TYPE OF OUTLET, TEE, TAP, TAKE–OFF OR CONNECTION BETWEEN THE SERVICE CONNECTION AND THE BACKFLOW PREVENTION DEVICE.
5. INSULATED BOX SHALL SWING CLEAR OF ASSEMBLY TO PROVIDE CLEARANCES SHOWN IN PLAN VIEW OR INSULATED BOX SHALL BE SIZED TO PROVIDE CLEARANCES SHOWN IN PLAN VIEW.
6. SPRING LOADED LID REQUIRED ON LARGE BOXES.
7. CALL LOCAL BUILDING AND/OR FIRE DEPARTMENTS FOR TYPE OF PIPE TO BE USED.
8. INSPECTION BY TMWA BACKFLOW PREVENTION GROUP PERSONNEL REQUIRED BEFORE METER IS SET OR SERVICE IS ACTIVATED.
9. TESTING OF BACKFLOW ASSEMBLY REQUIRED WITHIN 7 DAYS AFTER METER IS SET OR SERVICE ACTIVATION. COPY OF TEST RESULTS TO BE FORWARDED TO TMWA BACKFLOW PREVENTION GROUP PERSONNEL BY A CERTIFIED ASSEMBLY TESTER WITHIN THAT SAME TIMEFRAME.
10. MINIMUM DIMENSIONS FOR THE THRUST BLOCK BEARING AREA FOR PIPE 2" AND SMALLER SHALL BE 8" X 8" AND 12" IN DEPTH. ALL OTHER SIZES TO BE DETERMINED BY ENGINEER. OPTIONAL: PLACE CONCRETE COMPLETELY BETWEEN THE TWO ELBOWS WITH A MINIMUM OF 8" HIGH X 8" WIDE. REFER TO 10L–2 FOR CONCRETE REQUIREMENTS.
11. VALVES ON DETECTOR BYPASS SHALL REMAIN OPEN AT ALL TIMES.

TRUCKEE MEADOWS WATER AUTHORITY	DATE 7/2001 REV 5/2024	APPENDIX 10A BACKFLOW PREVENTION ASSEMBLIES FIRE - CLASS 4, 5 & 6 REDUCED PRESSURE PRINCIPLE DETECTOR ASSEMBLY EXTERNAL - HORIZONTAL	DRAWING NUMBER 10A-10

PLAN VIEW

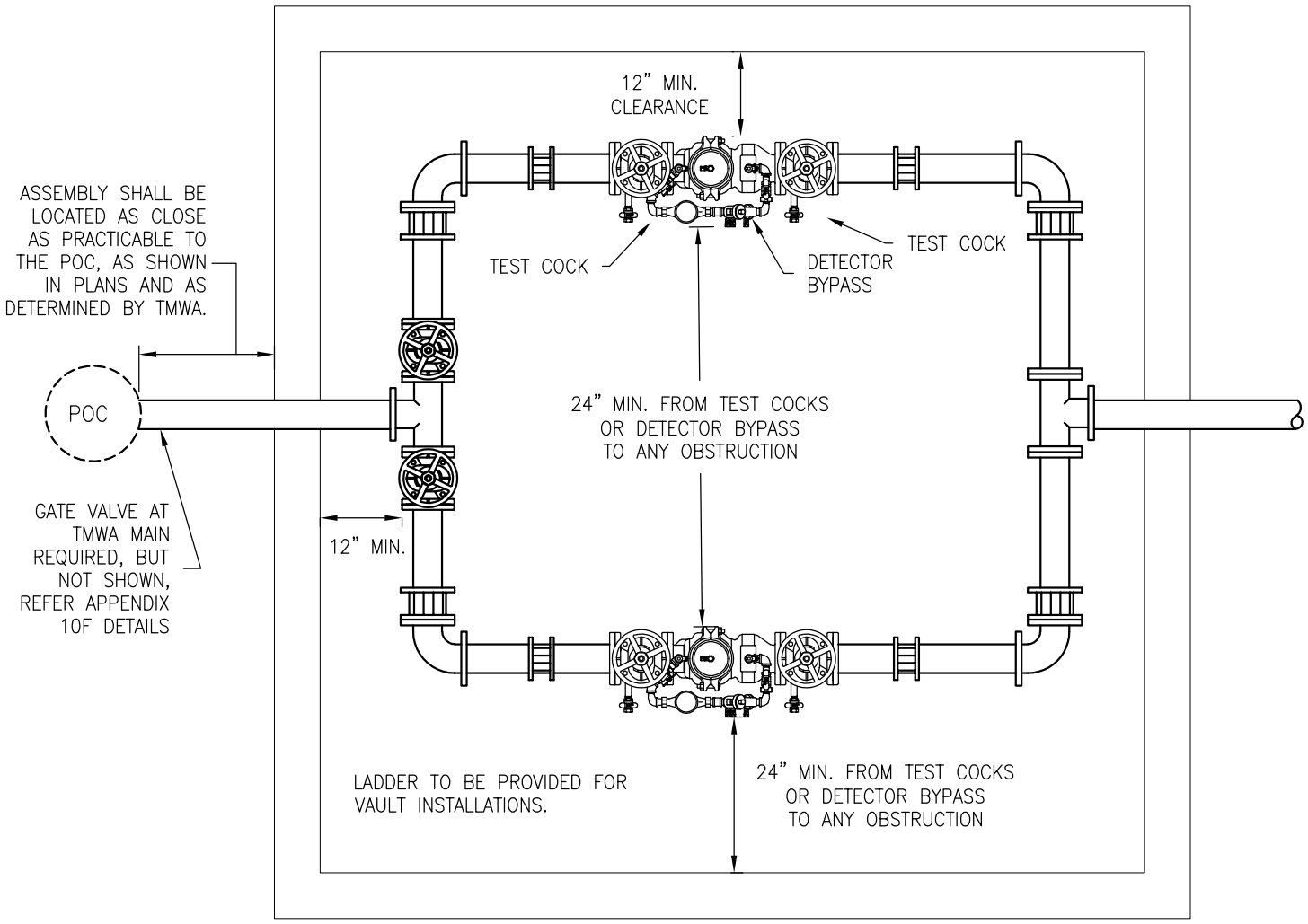




NOTES:

1. ASSEMBLY SHALL BE A USC APPROVED. IF USED FOR DOMESTIC PURPOSES, THE ASSEMBLY SHALL BE NSF–61 CERTIFIED AND LEAD FREE.
2. THE RP SHALL BE INSTALLED ABOVE GRADE AND NOT IN A BASEMENT.
3. A DAYLIGHT DRAIN IS REQUIRED AND A FLOOR DRAIN IS RECOMMENDED. DAYLIGHT DRAIN SHOULD BE NO SMALLER THAN THE RP DEVICE THAT IS INSTALLED.
4. NO TYPE OF OUTLET, TEE, TAP, TAKE–OFF OR CONNECTION BETWEEN THE SERVICE CONNECTION AND THE BACKFLOW PREVENTION DEVICE.
5. AN AIR GAP (VERTICAL PHYSICAL SEPARATION) OF AT LEAST TWICE THE DIAMETER OF THE RELIEF VALVE OPENING, IF THE PIPE IS AFFECTED BY SIDE WALLS, CLEARANCE SHALL BE AT LEAST THREE TIMES THE EFFECTIVE DIAMETER OF THE PIPE, A MINIMUM OF 1" SHALL BE MAINTAINED BETWEEN THE WATER DISCHARGE POINT ON THE RELIEF VALVE AND THE DRAIN OR MAXIMUM FLOOD LEVEL, WHICHEVER IS HIGHEST.
6. CALL LOCAL BUILDING AND/OR FIRE DEPARTMENTS FOR TYPE OF PIPE TO BE USED.
7. INSPECTION BY TMWA BACKFLOW PREVENTION GROUP PERSONNEL REQUIRED BEFORE METER IS SET OR SERVICE IS ACTIVATED.
8. TESTING OF BACKFLOW ASSEMBLY REQUIRED WITHIN 7 DAYS AFTER METER IS SET OR SERVICE ACTIVATION. COPY OF TEST RESULTS TO BE FORWARDED TO TMWA BACKFLOW PREVENTION GROUP PERSONNEL BY A CERTIFIED ASSEMBLY TESTER WITHIN THAT SAME TIMEFRAME.
9. MINIMUM DIMENSIONS FOR THE THRUST BLOCK BEARING AREA FOR PIPE 2" AND SMALLER SHALL BE 8" X 8" AND 12" IN DEPTH. ALL OTHER SIZES TO BE DETERMINED BY ENGINEER. OPTIONAL: PLACE CONCRETE COMPLETELY BETWEEN THE TWO ELBOWS WITH A MINIMUM OF 8" HIGH X 8" WIDE.. REFER TO 10L–2 FOR CONCRETE REQUIREMENTS.
10. VALVES ON DETECTOR BYPASS SHALL REMAIN OPEN AT ALL TIMES.

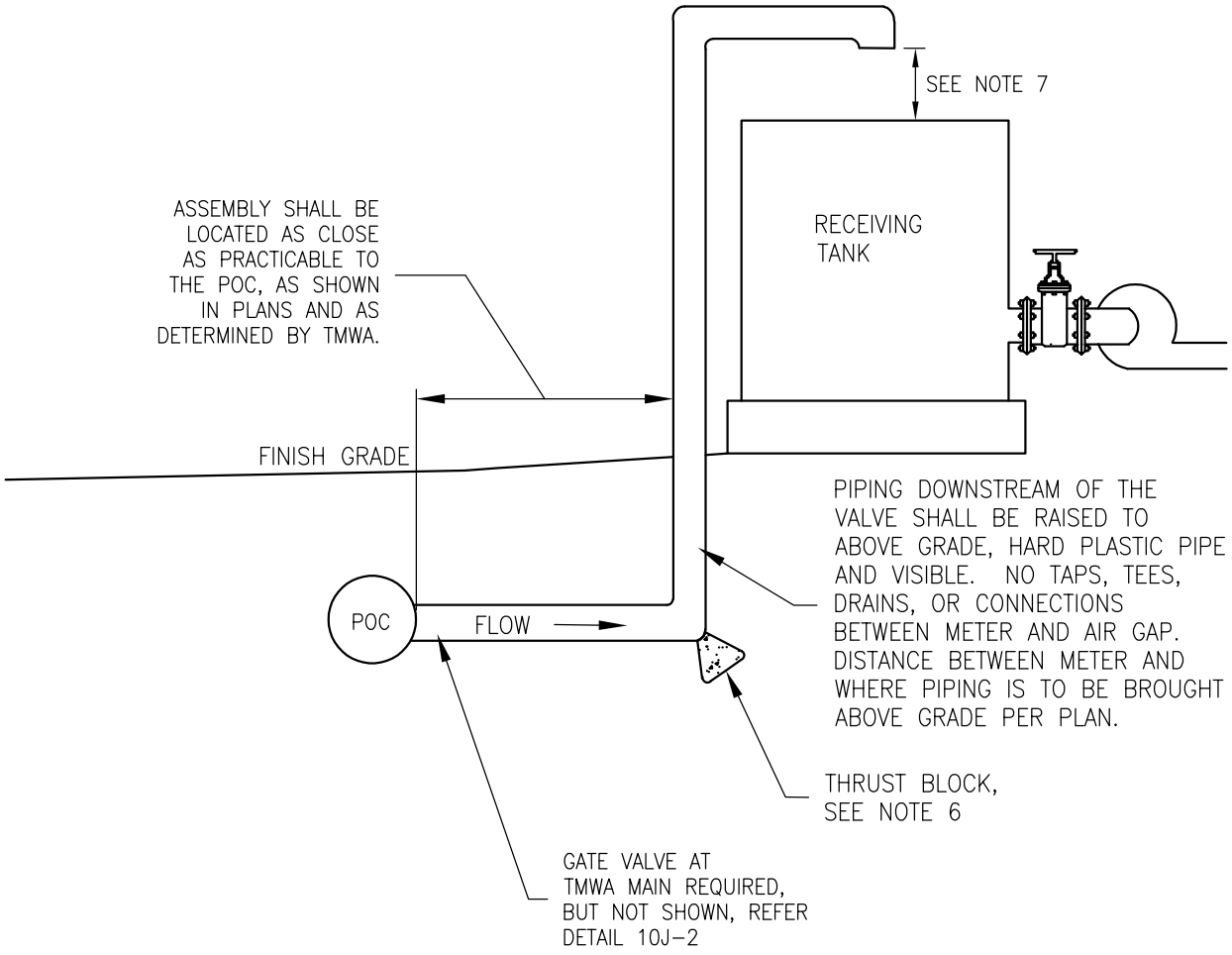
TRUCKEE MEADOWS WATER AUTHORITY	DATE 7/2001 REV 5/2024	APPENDIX 10A BACKFLOW PREVENTION ASSEMBLIES FIRE - CLASS 4, 5 & 6 REDUCED PRESSURE PRINCIPLE DETECTOR ASSEMBLY INTERNAL - HORIZONTAL	DRAWING NUMBER 10A-11



NOTES:

1. ASSEMBLY SHALL BE A USC APPROVED. IF USED FOR DOMESTIC PURPOSES, THE ASSEMBLY SHALL BE NSF–61 CERTIFIED AND LEAD FREE.
2. THE ENTIRE MANIFOLD SHALL BE EXPOSED WITHIN THE ABOVE GROUND BOX OR BELOW GROUND VAULT.
3. REFER TO THE RP OR DC STANDARD FOR INSTALLATION DETAILS.
4. SUPPORTS SHALL BE PROVIDED AS NECESSARY.
5. FOR VAULT INSTALLATION REFER TO 10A–5 FOR DEPTH, PIPING, LADDER, VAULT AND PENETRATION REQUIREMENTS.
6. NO TYPE OF OUTLET, TEE, TAP, TAKE–OFF OR CONNECTION BETWEEN THE SERVICE CONNECTION AND THE BACKFLOW PREVENTION DEVICE.
7. CALL LOCAL BUILDING AND/OR FIRE DEPARTMENTS FOR TYPE OF PIPE TO BE USED.
8. INSPECTION BY TMWA BACKFLOW PREVENTION GROUP PERSONNEL REQUIRED BEFORE METER IS SET OR SERVICE IS ACTIVATED.
9. TESTING OF BACKFLOW ASSEMBLY REQUIRED WITHIN 7 DAYS AFTER METER IS SET OR SERVICE ACTIVATION. COPY OF TEST RESULTS TO BE FORWARDED TO TMWA BACKFLOW PREVENTION GROUP PERSONNEL BY A CERTIFIED ASSEMBLY TESTER WITHIN THAT SAME TIMEFRAME.
10. THRUST BLOCKS ARE REQUIRED AT ALL BELOW GRADE ELBOWS (TO BE SIZED BY ENGINEER). REFER TO 10L–2 FOR CONCRETE REQUIREMENTS.
11. VALVES ON DETECTOR BYPASS SHALL REMAIN OPEN AT ALL TIMES.

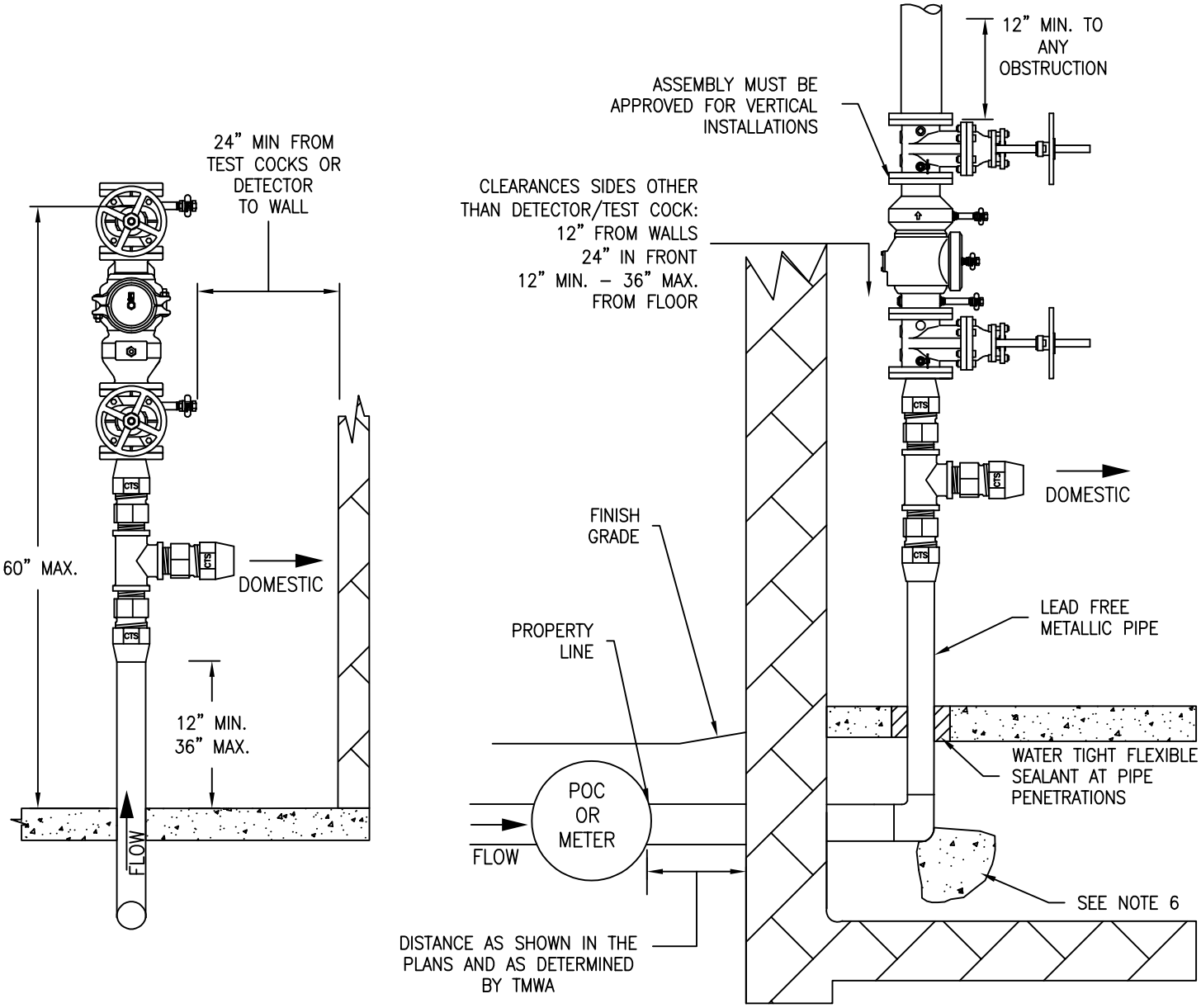
TRUCKEE MEADOWS WATER AUTHORITY	DATE 7/2001 REV 5/2024	APPENDIX 10A BACKFLOW PREVENTION ASSEMBLIES FIRE-CLASS 1 TO 6 CONTINUOUS FLOW SERVICES MANIFOLD FOR PARALLEL BACKFLOW ASSEMBLIES	DRAWING NUMBER 10A-12



NOTES:

1. IF THE AIR GAP IS INSTALLED IN AN AREA WHERE CORROSIVE FUMES OR GASES COULD RENDER THE ASSEMBLY INEFFECTIVE, AN RP MAY BE REQUIRED UPSTREAM ON THE SERVICE LINE.
2. NO STOP AND WASTE VALVES.
3. THE AIR GAP SHALL BE READILY ACCESSIBLE FOR INSPECTION.
4. THE AIR GAP SHALL REMAIN OPERATIVE AND EFFECTIVE THROUGHOUT THE YEAR WITHOUT BEING BYPASSED. TMWA SHALL BE NOTIFIED OF ANY BYPASS INSTALLED.
5. INSPECTION BY TMWA BACKFLOW PREVENTION GROUP PERSONNEL REQUIRED BEFORE METER IS SET OR SERVICE IS ACTIVATED.
6. THRUST BLOCKS REQUIRED ON ALL BELOW GRADE ELBOWS. SIZE TO BE VERIFIED BY ENGINEER. REFER TO 10L–2 FOR CONCRETE REQUIREMENTS.
7. AIR GAP MUST BE AT LEAST TWICE THE EFFECTIVE DIAMETER OF THE PIPE OR IF THE PIPE IS AFFECTED BY SIDE WALLS, AT LEAST THREE TIMES THE EFFECTIVE DIAMETER OF THE PIPE. IN NO CASE SHALL THE AIR GAP BE LESS THAN 1".

TRUCKEE MEADOWS WATER AUTHORITY	DATE 7/2001 REV 5/2024	APPENDIX 10A BACKFLOW PREVENTION ASSEMBLIES AIR GAP SEPARATION	DRAWING NUMBER 10A-13



NOTES:

1. ASSEMBLY SHALL BE A USC APPROVED LEAD FREE DEVICE.
2. NO STOP AND WASTE VALVES.
3. CALL LOCAL BUILDING AND/OR FIRE DEPARTMENTS FOR TYPE OF PIPE TO BE USED.
4. INSPECTION BY TMWA BACKFLOW PREVENTION GROUP PERSONNEL REQUIRED BEFORE METER IS SET OR SERVICE IS ACTIVATED.
5. TESTING OF BACKFLOW ASSEMBLY REQUIRED WITHIN 7 DAYS AFTER METER IS SET OR SERVICE ACTIVATION. COPY OF TEST RESULTS TO BE FORWARDED TO TMWA BACKFLOW PREVENTION GROUP PERSONNEL BY A CERTIFIED ASSEMBLY TESTER WITHIN THAT SAME TIMEFRAME.
6. MINIMUM DIMENSIONS FOR THE THRUST BLOCK BEARING AREA FOR PIPE 2" AND SMALLER SHALL BE 8" X 8" AND 12" IN DEPTH. ALL OTHER SIZES TO BE DETERMINED BY ENGINEER. REFER TO 10L–2 FOR CONCRETE REQUIREMENTS.
7. TMWA'S BACKFLOW DEPARTMENT MUST APPROVE THE USE OF INTERNAL BACKFLOW ASSEMBLIES.

TRUCKEE MEADOWS WATER AUTHORITY	DATE	APPENDIX 10A BACKFLOW PREVENTION ASSEMBLIES SINGLE FAMILY RESIDENTIAL FIRE DOUBLE CHECK VALVE ASSEMBLY INTERNAL - VERTICAL INSTALLATION	DRAWING NUMBER
	5/2024		10A-14
	REV		