

COMMERCIAL

NOTE:

1. DOUBLE CHECK ASSE 1015 OR REDUCED PRESSURE BACKFLOW ASSEMBLY ASSE 1013 SHALL MEET CURRENT TOWN OF APEX CROSS CONNECTION ORDINANCE AND USC CODE.
2. INLET PIPE TO WATER METER SHALL BE SAME SIZE AS OUTLET PIPE BEHIND BACKFLOW PREVENTER.
3. THERE SHALL BE NO TAPS, BYPASS PIPING, HYDRANTS, FIRE DEPT. CONNECTION POINTS OR OTHER WATER-USING APPURTENANCES CONNECTED TO THE SUPPLY LINE BETWEEN ANY WATER METER AND ITS REQUIRED BACKFLOW PREVENTER.
4. EACH BACKFLOW PREVENTER CONNECTED TO TOWN OF APEX WATER SUPPLY (CONTAINMENT) SHALL BE TESTED BY AN APPROVED TESTER BEFORE PLACING THE WATER SYSTEM IN SERVICE AND SHALL BE TESTED ANNUALLY OR AS REQUESTED BY THE TOWN OF APEX.
5. IRRIGATION BACKFLOW PREVENTERS SHALL BE INSTALLED OUTSIDE.
6. AUTOMATICALLY CONTROLLED IRRIGATION SYSTEMS ARE REQUIRED TO INSTALL A RAIN SENSOR SET TO $\frac{1}{4}$ INCH OR LESS PER TOWN OF APEX ORDINANCE.
7. ENCLOSURE SHALL HAVE THE FOLLOWING INFORMATION MARKED:
 - A. NAME OF MANUFACTURER OR TRADE MARK
 - B. MODEL NUMBER
 - C. DATE CODE OR SERIAL NUMBER
 - D. CLASS DESIGNATION AND LOWEST TEMPERATURE RANGE
 - E. ASSE STANDARD #1060
 - F. PHYSICAL ADDRESS
 - G. MARKINGS SHALL BE 6 MM ($\frac{1}{4}$ ") SIZE LETTER HEIGHT AND CAST, ETCHED, STAMPED OR ENGRAVED ON THE ENCLOSURE, OR ON A CORROSION RESISTANT PLATE SECURELY ATTACHED TO THE ENCLOSURE.
 - H. 2" SIZE NUMBERS TO BE PLACED ON THE BACK OF THE COVER FOR EACH BACKFLOW LOCATION (COMMERCIAL ONLY).
8. ALL BACKFLOW PREVENTERS SHALL BE "LEAD FREE".
9. ASSE 1060 CLASS 1 OR 2 INSULATED ENCLOSURE IS REQUIRED FOR IRRIGATION SYSTEMS THAT DO NOT HAVE THREADED UNIONS TO ALLOW FOR REMOVAL FOR THE WINTER SEASON. SHUT OFF VALVES (SOV) ARE REQUIRED AND MUST NOT BE SUBJECT TO FREEZING.

SCALE: N.T.S.

TOWN OF APEX
STANDARDS

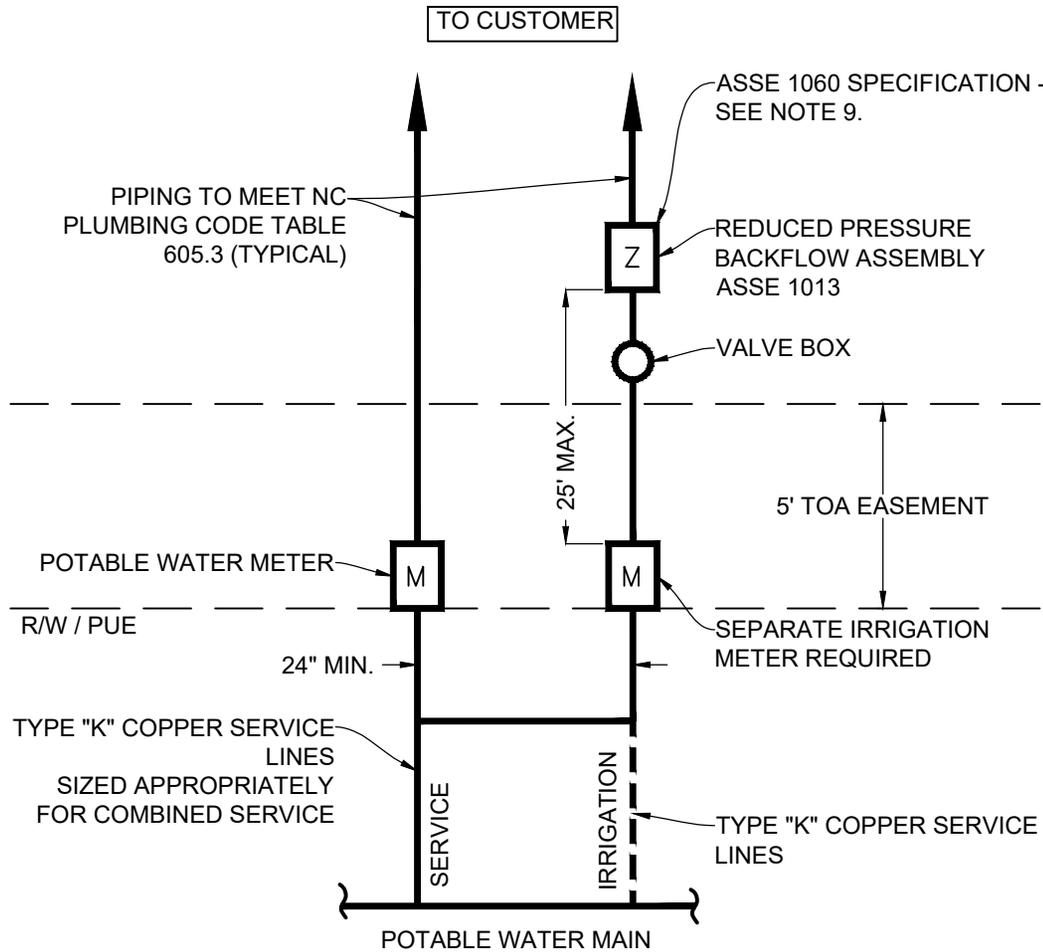
EFFECTIVE: JUNE 11, 2024

TYPICAL SERVICE & IRRIGATION CONNECTIONS

STD. NO.

620.01

SHEET 1 OF 2



RESIDENTIAL

NOTE:

1. REDUCED PRESSURE BACKFLOW ASSEMBLY ASSE 1013 SHALL MEET CURRENT TOWN OF APEX CROSS CONNECTION ORDINANCE AND USC CODE.
2. INLET PIPE TO WATER METER SHALL BE SAME SIZE AS OUTLET PIPE BEHIND BACKFLOW PREVENTER.
3. THERE SHALL BE NO TAPS, BYPASS PIPING, HYDRANTS, FIRE DEPT. CONNECTION POINTS OR OTHER WATER-USING APPURTENANCES CONNECTED TO THE SUPPLY LINE BETWEEN ANY WATER METER AND ITS REQUIRED BACKFLOW PREVENTER.
4. EACH BACKFLOW PREVENTER CONNECTED TO TOWN OF APEX WATER SUPPLY (CONTAINMENT) SHALL BE TESTED BY AN APPROVED TESTER BEFORE PLACING THE WATER SYSTEM IN SERVICE AND SHALL BE TESTED ANNUALLY OR AS REQUESTED BY THE TOWN OF APEX.
5. IRRIGATION BACKFLOW PREVENTERS SHALL BE INSTALLED OUTSIDE.
6. AUTOMATICALLY CONTROLLED IRRIGATION SYSTEMS ARE REQUIRED TO INSTALL A RAIN SENSOR SET TO $\frac{1}{4}$ INCH OR LESS PER TOWN OF APEX ORDINANCE.
7. ENCLOSURE SHALL HAVE THE FOLLOWING INFORMATION MARKED:
 - A. NAME OF MANUFACTURER OR TRADE MARK
 - B. MODEL NUMBER
 - C. DATE CODE OR SERIAL NUMBER
 - D. CLASS DESIGNATION AND LOWEST TEMPERATURE RANGE
 - E. ASSE STANDARD #1060
 - F. MARKINGS SHALL BE 6 MM ($\frac{1}{4}$ ") SIZE LETTER HEIGHT AND CAST, ETCHED, STAMPED OR ENGRAVED ON THE ENCLOSURE, OR ON A CORROSION RESISTANT PLATE SECURELY ATTACHED TO THE ENCLOSURE.
 - G. 2" SIZE NUMBERS TO BE PLACED ON THE BACK OF THE COVER FOR EACH BACKFLOW LOCATION (COMMERCIAL ONLY).
8. ALL BACKFLOW PREVENTERS SHALL BE "LEAD FREE".
9. ASSE 1060 CLASS 1 OR 2 INSULATED ENCLOSURE IS REQUIRED FOR IRRIGATION SYSTEMS THAT DO NOT HAVE THREADED UNIONS TO ALLOW REMOVAL DURING THE WINTER SEASON. SHUT OFF VALVES (SOV) ARE REQUIRED AND CANNOT BE SUBJECT TO FREEZING.
10. BACKFLOW PREVENTERS SHALL NOT BE INSTALLED BEHIND FENCES, UNDER FOUNDATIONS, DECKS OR INSIDE DWELLINGS.
11. BACKFLOW PREVENTERS SHALL NOT BE INSTALLED 10' PAST THE FRONT FACADE OF THE DWELLING.

SCALE: N.T.S.

TOWN OF APEX
STANDARDS

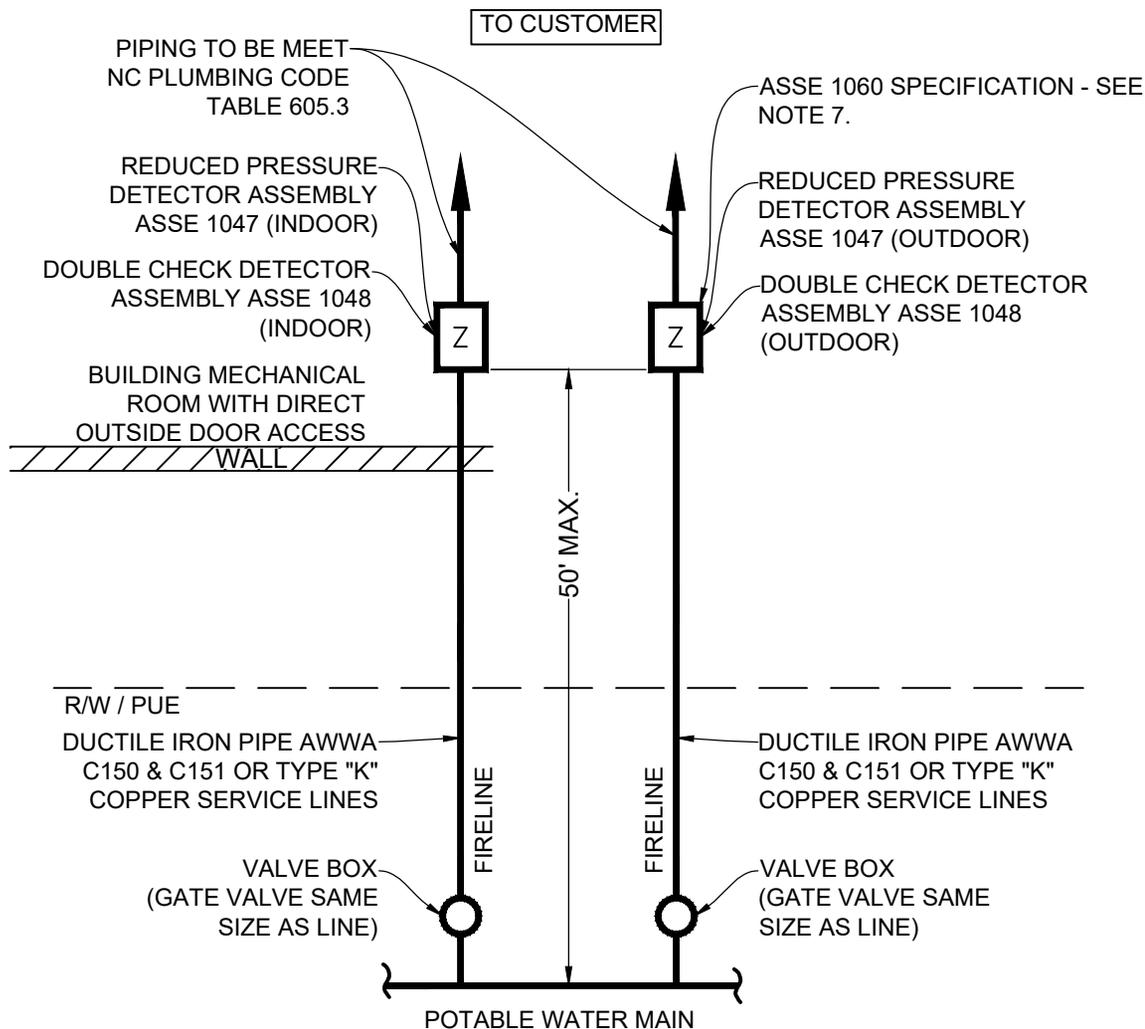
EFFECTIVE: JUNE 11, 2024

TYPICAL SERVICE & IRRIGATION CONNECTIONS

STD. NO.

620.01

SHEET 2 OF 2



NOTE:

1. REDUCED PRESSURE DETECTOR ASSEMBLY ASSE 1047 SHALL MEET CURRENT TOWN OF APEX CROSS CONNECTION ORDINANCE AND USC CODE.
2. INLET PIPE TO WATER METER SHALL BE SAME SIZE AS OUTLET PIPE BEHIND BACKFLOW PREVENTER.
3. THERE SHALL BE NO TAPS, BYPASS PIPING, HYDRANTS, FIRE DEPT. CONNECTION POINTS OR OTHER WATER-USING APPURTENANCES CONNECTED TO THE SUPPLY LINE BETWEEN ANY WATER METER AND ITS REQUIRED BACKFLOW PREVENTER.
4. EACH BACKFLOW PREVENTER CONNECTED TO TOWN OF APEX WATER SUPPLY (CONTAINMENT) SHALL BE TESTED BY AN APPROVED TESTER BEFORE PLACING THE WATER SYSTEM IN SERVICE AND SHALL BE TESTED ANNUALLY OR AS REQUESTED BY THE TOWN OF APEX.
5. ENCLOSURE SHALL HAVE THE FOLLOWING INFORMATION MARKED:
 - A. NAME OF MANUFACTURER OR TRADE MARK
 - B. MODEL NUMBER
 - C. DATE CODE OR SERIAL NUMBER
 - D. CLASS DESIGNATION AND LOWEST TEMPERATURE RANGE
 - E. ASSE STANDARD #1060
 - F. PHYSICAL ADDRESS
 - G. MARKINGS SHALL BE 6 MM (1/4") SIZE LETTER HEIGHT AND CAST, ETCHED, STAMPED OR ENGRAVED ON THE ENCLOSURE, OR ON A CORROSION RESISTANT PLATE SECURELY ATTACHED TO THE ENCLOSURE.
 - H. 2" SIZE NUMBERS TO BE PLACED ON THE BACK OF THE COVER FOR EACH BACKFLOW LOCATION (COMMERCIAL ONLY).
6. ALL BACKFLOW PREVENTERS SHALL BE "LEAD FREE".
7. ASSE 1060 CLASS 1 OR 2 ENCLOSURE WITH PERMANENT, HARD PIPED ELECTRICAL SERVICE, AND A THERMOSTATICALLY CONTROLLED HEATER OR HEAT TRACE.

SCALE: N.T.S.

**TOWN OF APEX
STANDARDS**

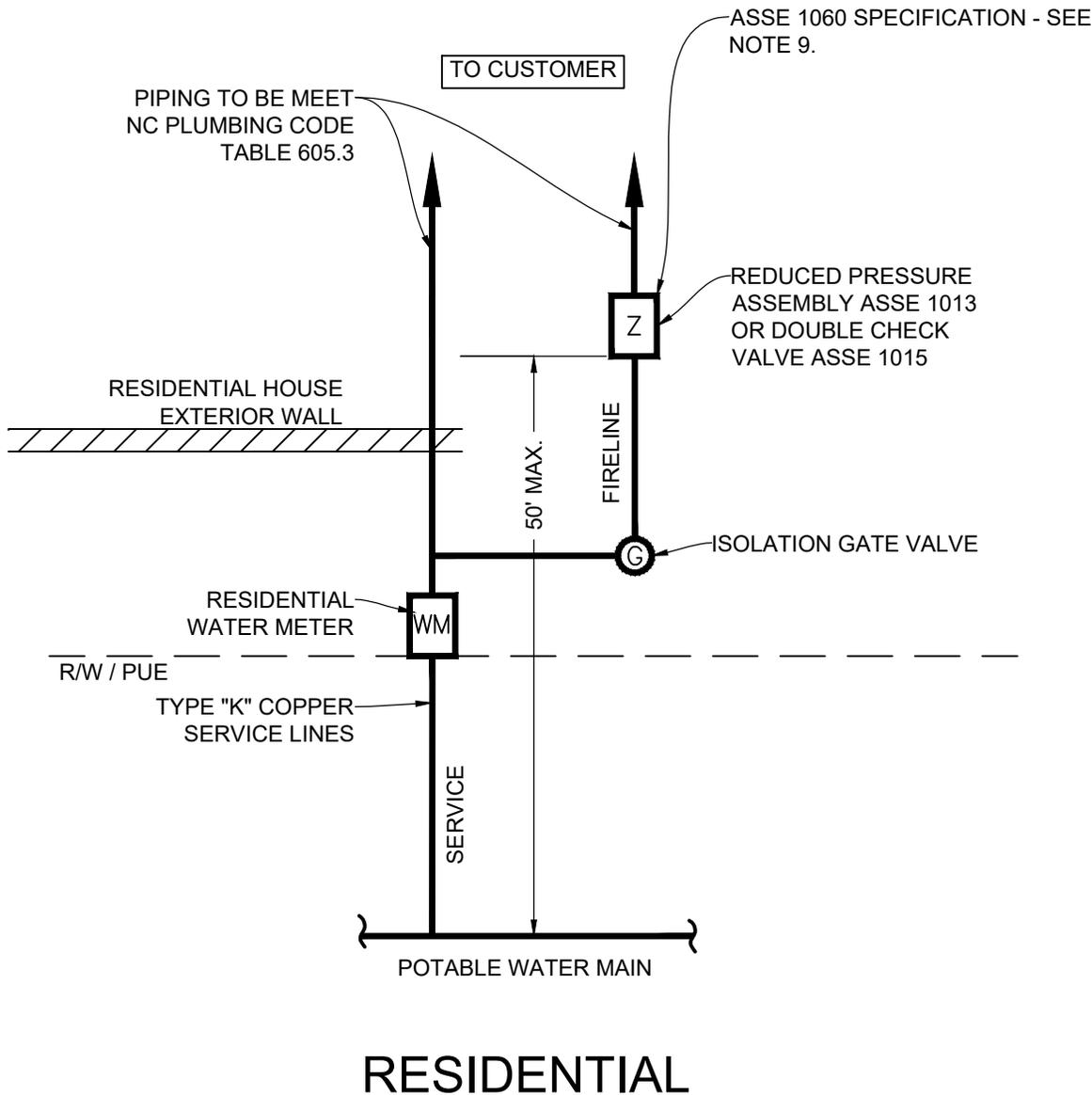
EFFECTIVE: JUNE 11, 2024

TYPICAL FIRE CONNECTIONS

STD. NO.

620.02

SHEET 1 OF 2



NOTE:

1. REDUCED PRESSURE ASSEMBLY ASSE 1013 OR DOUBLE CHECK VALVE ASSE 1015 SHALL MEET CURRENT TOWN OF APEX CROSS CONNECTION ORDINANCE AND USC CODE.
2. INLET PIPE TO WATER METER SHALL BE SAME SIZE AS OUTLET PIPE BEHIND BACKFLOW PREVENTER.
3. THERE SHALL BE NO TAPS, BYPASS PIPING, HYDRANTS, FIRE DEPT. CONNECTION POINTS OR OTHER WATER-USING APPURTENANCES CONNECTED TO THE SUPPLY LINE BETWEEN ANY WATER METER AND ITS REQUIRED BACKFLOW PREVENTER.
4. EACH BACKFLOW PREVENTER CONNECTED TO TOWN OF APEX WATER SUPPLY (CONTAINMENT) SHALL BE TESTED BY AN APPROVED TESTER BEFORE PLACING THE WATER SYSTEM IN SERVICE AND SHALL BE TESTED ANNUALLY OR AS REQUESTED BY THE TOWN OF APEX.
5. ENCLOSURE SHALL HAVE THE FOLLOWING INFORMATION MARKED:
 - A. NAME OF MANUFACTURER OR TRADE MARK
 - B. MODEL NUMBER
 - C. DATE CODE OR SERIAL NUMBER
 - D. CLASS DESIGNATION AND LOWEST TEMPERATURE RANGE
 - E. ASSE STANDARD #1060
 - F. PHYSICAL ADDRESS
 - G. MARKINGS SHALL BE 6 MM (1/4") SIZE LETTER HEIGHT AND CAST, ETCHED, STAMPED OR ENGRAVED ON THE ENCLOSURE, OR ON A CORROSION RESISTANT PLATE SECURELY ATTACHED TO THE ENCLOSURE.
6. ALL BACKFLOW PREVENTERS SHALL BE "LEAD FREE".
7. INTERIOR INSTALLATIONS ARE NOT PERMITTED IN WALLS, FLOORS, OR CEILINGS / ATTICS.
8. EXTERIOR INSTALLATIONS ARE NOT PERMITTED IN CRAWL SPACES / FOUNDATIONS OR BENEATH PERMANENT STRUCTURES.
9. ASSE 1060 CLASS 1 OR 2 ENCLOSURE WITH PERMANENT, HARD PIPED ELECTRICAL SERVICE, AND A THERMOSTATICALLY CONTROLLED HEATER OR HEAT TRACE.

SCALE: N.T.S.

TOWN OF APEX
STANDARDS

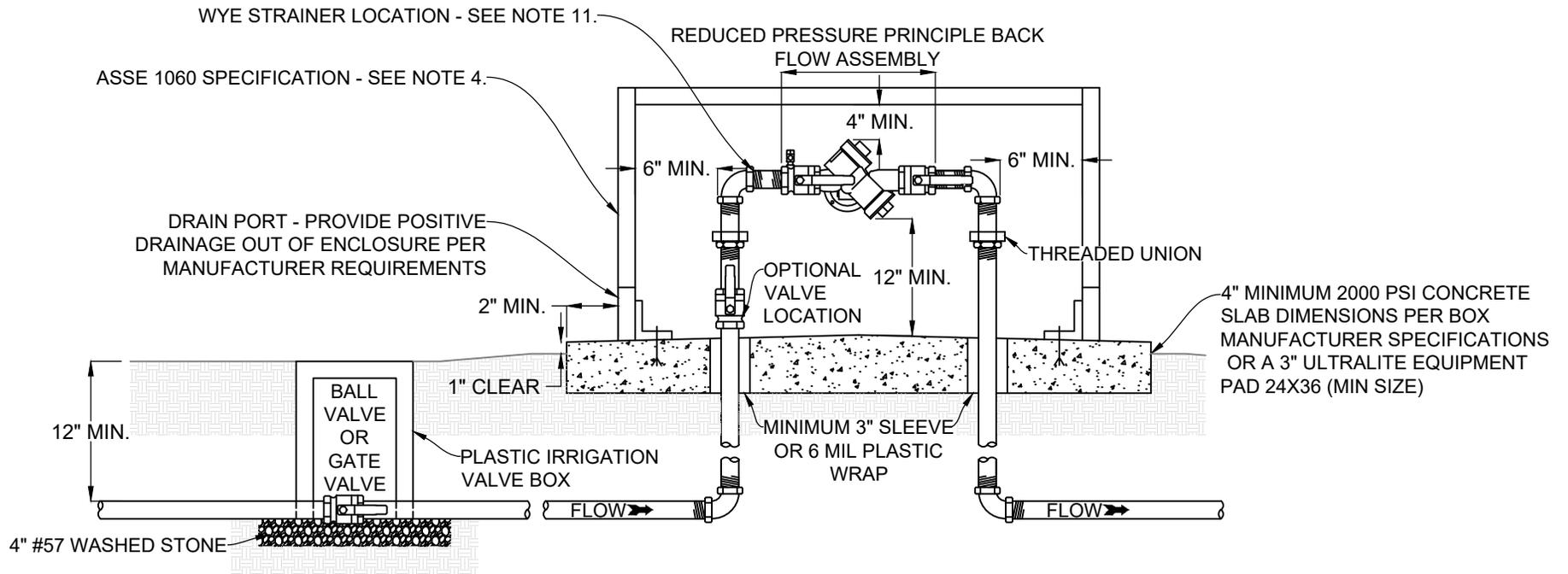
EFFECTIVE: JUNE 11, 2024

TYPICAL FIRE CONNECTIONS

STD. NO.

620.02

SHEET 2 OF 2

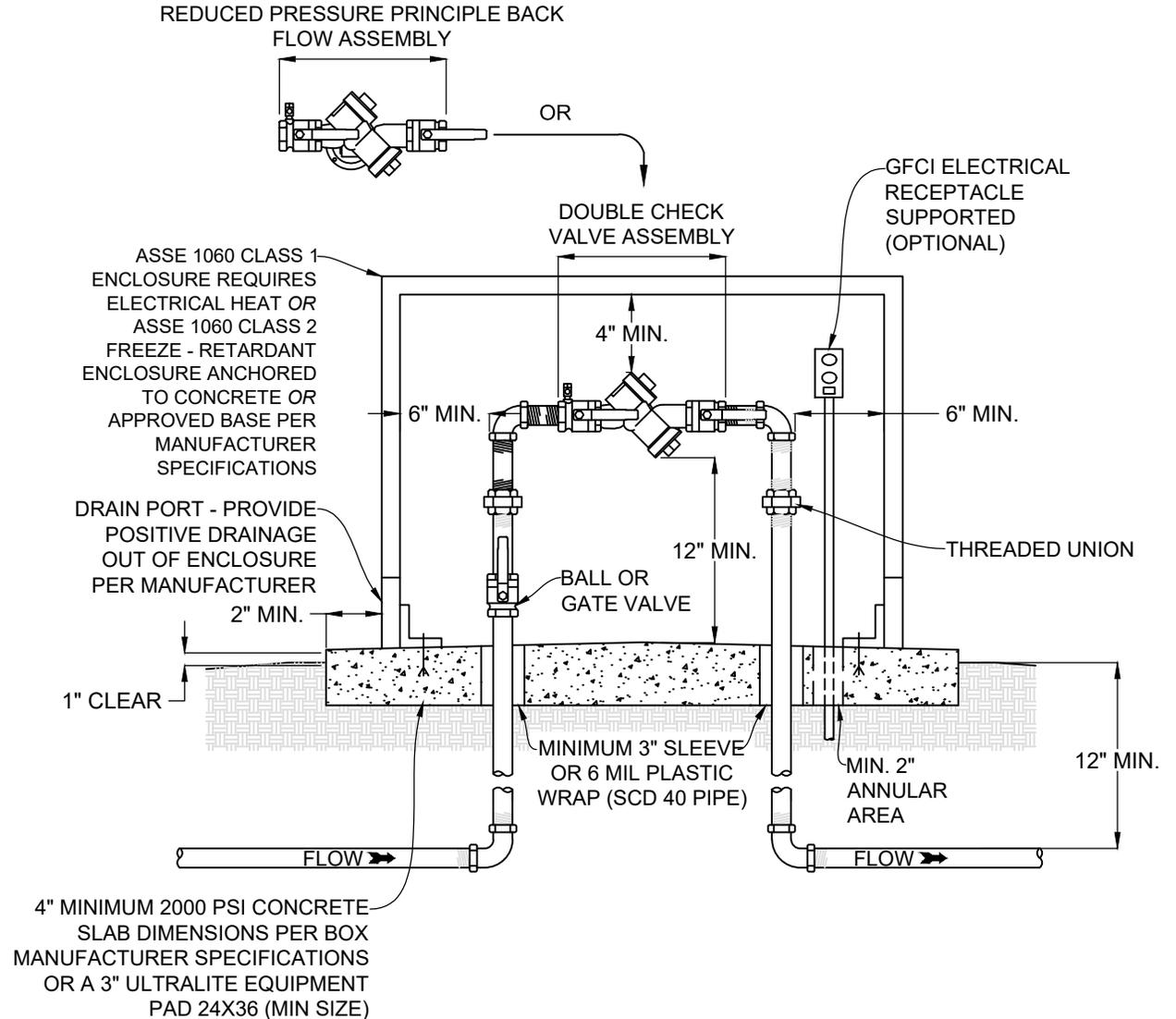


NOTES:

1. REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY SHALL COMPLY WITH ASSE 1013 & AWWA C511.
2. BACKFLOW ASSEMBLY SHALL BE CENTERED ON CONCRETE OR APPROVED BASE PER MANUFACTURER SPECIFICATION.
3. ASSE 1060 CLASS 1 OR 2 INSULATED ENCLOSURE IS REQUIRED FOR IRRIGATIONS SYSTEMS THAT DO NOT HAVE THREADED UNIONS TO ALLOW FOR REMOVAL DURING THE WINTER SEASON. SHUTOFF VALVES ARE REQUIRED AND CANNOT BE SUBJECT TO FREEZING.
4. PIPE MATERIAL SHALL MEET CURRENT NC PLUMBING CODE SPECIFICATION TABLE 605.3.
5. INSTALLATION SHALL BE IN COMPLIANCE WITH ALL APPLICABLE TOWN ORDINANCES AND SPECIFICATIONS, USC FCCCHR CODE AND THE NC PLUMBING CODE.
6. INSTALLATIONS ARE NOT ALLOWED IN TOWN RIGHT-OF-WAYS, TOWN EASEMENTS, UNDER STRUCTURES OR WITHIN FOUNDATIONS. INSTALLATIONS MUST BE WITHIN 25' OF WATER METER BUT NOT TO EXCEED 10' PAST THE FRONT CORNER OF THE PERMANENT STRUCTURE.
7. PROPERTY OWNER SHALL BE RESPONSIBLE FOR MAINTENANCE AND OPERATION OF BACKFLOW PREVENTION ASSEMBLY AND COMPLIANCE WITH REPORTING AND TESTING REQUIREMENTS.
8. ALL BACKFLOW PREVENTERS SHALL MEET CURRENT UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS-CONNECTION AND HYDRAULIC RESEARCH REQUIREMENTS.
9. ALL BACKFLOWS SHALL BE "LEAD FREE".
10. A WYE STRAINER SHALL BE INSTALLED IMMEDIATELY UPSTREAM OF THE BACKFLOW PREVENTER'S #1 SHUTOFF VALVE AND THE UPSTREAM DISCONNECT UNION.
11. BACKFLOW PREVENTER INSTALLATION SHALL MEET DETAIL 620.01 (1 OF 2) OR (2 OF 2).

NOTES:

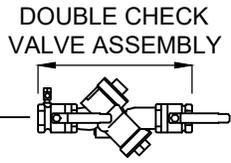
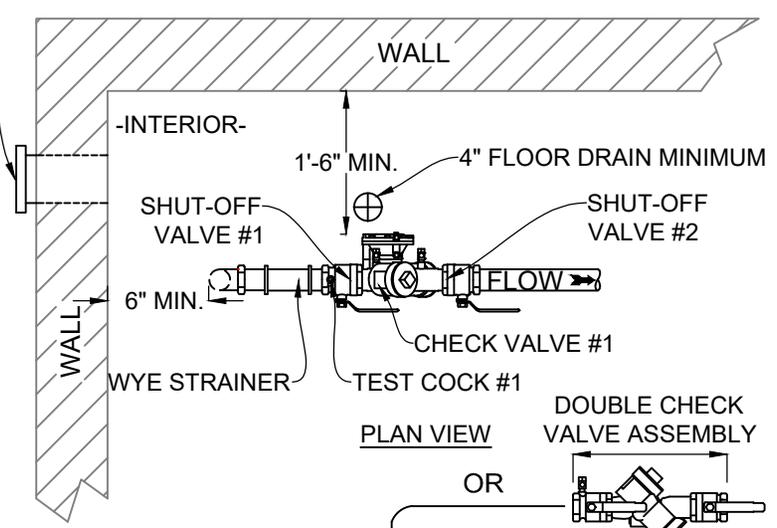
1. REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY SHALL COMPLY WITH ASSE 1013 & AWWA C511.
2. DOUBLE CHECK BACKFLOW PREVENTION ASSEMBLY SHALL COMPLY WITH ASSE 1015 & AWWA C510.
3. BACKFLOW PREVENTION ASSEMBLY SHALL BE CENTERED ON CONCRETE OR APPROVED BASE PER MANUFACTURER SPECIFICATION.
4. ASSE 1060 CLASS 2 FREEZE-RETARDANT ENCLOSURE - ELECTRICAL HEAT NOT REQUIRED.
5. 120V GFCI ELECTRICAL RECEPTACLE REQUIRED TO BE INSTALLED IN ACCORDANCE WITH THE NC ELECTRICAL CODE FOR OUTDOOR OPERATION WITH ASSE 1060 CLASS 1 ENCLOSURE.
6. PIPE MATERIAL SHALL MEET CURRENT NC PLUMBING CODE TABLE 605.3.
7. INSTALLATION SHALL BE IN COMPLIANCE WITH ALL APPLICABLE TOWN ORDINANCES AND SPECIFICATIONS, USC FCCCHR CODE AND THE NC PLUMBING CODE.
8. PROPERTY OWNER SHALL BE RESPONSIBLE FOR MAINTENANCE AND OPERATION OF BACKFLOW ASSEMBLY AND COMPLIANCE WITH REPORTING AND TESTING REQUIREMENTS.
9. ALL BACKFLOW PREVENTERS SHALL MEET CURRENT UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS-CONNECTION AND HYDRAULIC RESEARCH REQUIREMENTS.
10. ALL BACKFLOWS SHALL BE "LEAD FREE".
11. A WYE STRAINER SHALL BE INSTALLED ON THE IMMEDIATE UPSTREAM OF THE BACKFLOW PREVENTER'S #1 SHUTOFF VALVE AND THE UPSTREAM DISCONNECT UNION.
12. BACKFLOW PREVENTER'S SHALL MEET DETAIL 620.01 (1 OF 2).
13. BACKFLOW PREVENTER'S SHALL NOT BE IN INSTALLED IN TOWN R/W OR TOWN EASEMENT.



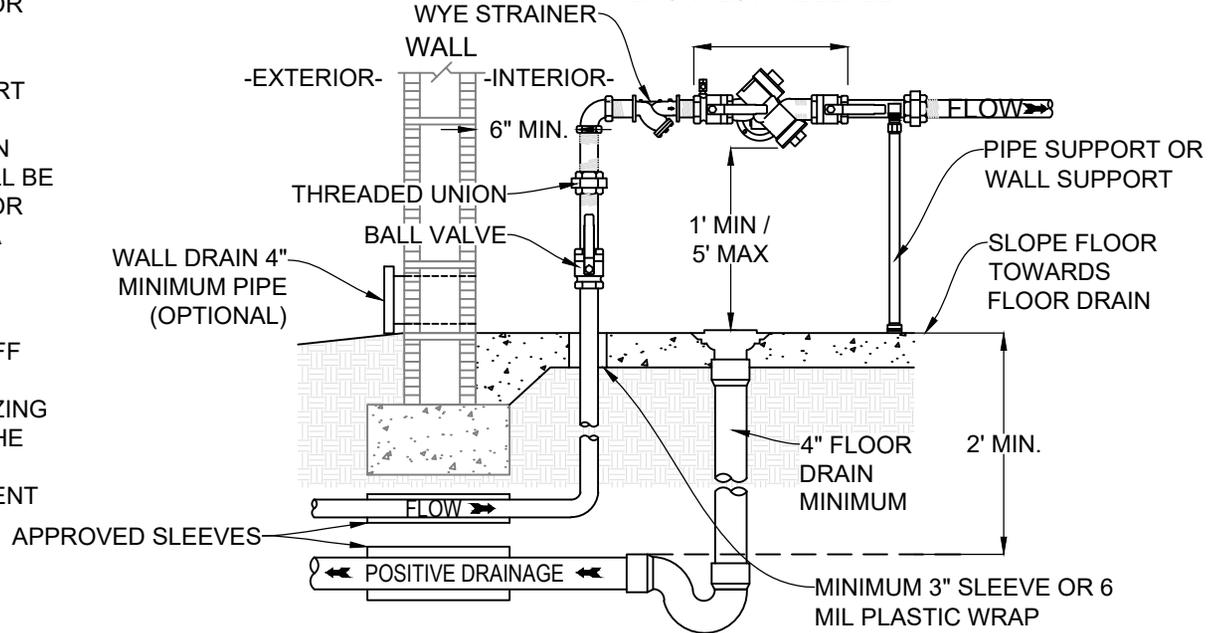
NOTES:

1. REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY SHALL COMPLY WITH ASSE 1013 & AWWA C511.
2. DOUBLE CHECK BACKFLOW PREVENTION ASSEMBLY SHALL COMPLY WITH ASSE 1015 & AWWA C510.
3. BACKFLOW PREVENTION ASSEMBLY SHALL MAINTAIN MINIMUM CLEARANCES FROM WALLS AND FLOOR AS SPECIFIED.
4. ALL BACKFLOW PREVENTERS SHALL BE LOCATED IN A LOWEST FLOOR ROOM (1HR FIRE RATED) WITH AN EXTERIOR DOOR WITH DIRECT ACCESS FROM THE OUTSIDE.
5. PIPE MATERIAL SHALL MEET CURRENT NC PLUMBING CODE TABLE 605.3 (OUTSIDE) AND TABLE 605.4 (INSIDE).
6. INSTALLATION SHALL BE IN COMPLIANCE WITH ALL APPLICABLE TOWN ORDINANCES AND SPECIFICATIONS, USFCCHR CODE AND THE NC PLUMBING CODE.
7. PROPERTY OWNER SHALL BE RESPONSIBLE FOR MAINTENANCE AND OPERATION OF BACKFLOW ASSEMBLY AND COMPLIANCE WITH REPORTING AND TESTING REQUIREMENTS.
9. ALL BACKFLOW PREVENTERS SHALL MEET CURRENT UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS-CONNECTION AND HYDRAULIC RESEARCH REQUIREMENTS.
10. ALL DRAINS SHALL BE DESIGNED TO HANDLE A FULL PORT DISCHARGE FROM THE ASSEMBLY. AN APPROVED, PRE-FABRICATED, APPROPRIATELY SIZED AIR GAP DRAIN MUST BE USED AND ALL RELIEF PORT DRAIN LINES SHALL BE PIPED TO DIRECT FLOW TOWARD INDIRECT WASTE FLOOR DRAIN, FULL SIZE TO THEIR POINT OF TERMINATION AT A SLOPE CONFORMING WITH NC PLUMBING CODE 704.1.
11. ALL BACKFLOW PREVENTERS SHALL BE "LEAD FREE".
12. A WYE STRAINER SHALL BE INSTALLED IMMEDIATELY UPSTREAM OF THE BACKFLOW PREVENTER'S #1 SHUTOFF VALVE AND THE UPSTREAM DISCONNECT UNION.
13. AN ISOLATION SHUT-OFF VALVE NOT SUBJECT TO FREEZING SHALL BE REQUIRED TO BE INSTALLED UPSTREAM OF THE BACKFLOW PREVENTER.
14. ALL BACKFLOW INSTALLATIONS SHALL MEET THE CURRENT DETAIL 620.01, 1 OF 2.

WALL DRAIN
4" MINIMUM PVC SCH. 40
PIPE (OPTIONAL)



REDUCED PRESSURE PRINCIPLE
BACK FLOW ASSEMBLY



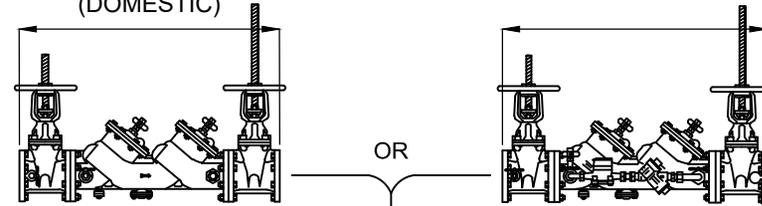
ELEVATION VIEW

NOTES:

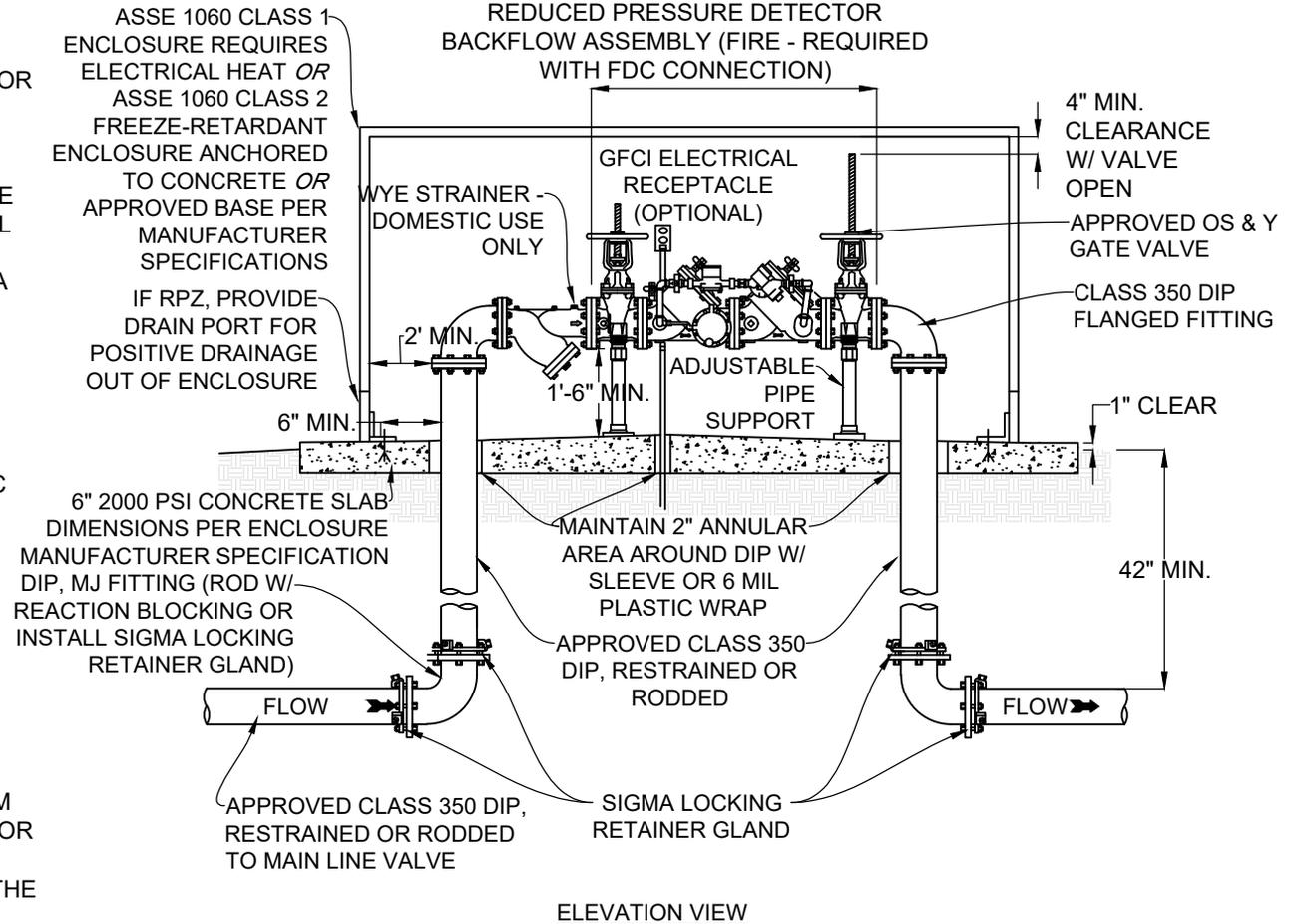
1. REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY SHALL COMPLY WITH ASSE 1013 & AWWA C511.
2. REDUCED PRESSURE DETECTOR BACKFLOW PREVENTION ASSEMBLY SHALL COMPLY WITH ASSE 1047. UNIT SHALL BE USED FOR ALL FIRE PREVENTION SYSTEMS WITH FDC, CHEMICAL, PROCESSED OR BOOSTERED.
3. DOUBLE CHECK VALVE BACKFLOW PREVENTION ASSEMBLY SHALL COMPLY WITH ASSE 1015 & AWWA C510.
4. DOUBLE CHECK DETECTOR BACKFLOW PREVENTION ASSEMBLY SHALL COMPLY WITH ASSE 1048.
5. BACKFLOW ASSEMBLY SHALL BE CENTERED ON CONCRETE PAD AND CENTERED WITHIN ENCLOSURE OR BASED ON MANUFACTURER SPECIFICATION.
6. ASSE 1060 CLASS 1 OR 2 FREEZE-RETARDANT ENCLOSURE REQUIRED.
7. STANDARD 120V GFCI ELECTRICAL RECEPTACLE TO BE INSTALLED IN ACCORDANCE WITH THE NC ELECTRICAL CODE IF AN ASSE 1060 CLASS 1 BOX IS INSTALLED ON DOMESTIC SERVICE. ELECTRICAL RECEPTACLE AND A CONTROL HEATER OR HEAT TRACER REQUIRED.
8. PIPE MATERIAL SHALL BE CLASS 350 DIP AWWA C150 AND C151 APPROVED BY THE TOWN.
9. INSTALLATION SHALL BE IN COMPLIANCE WITH ALL APPLICABLE TOWN ORDINANCES, SPECIFICATIONS, UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS - CONNECTION CONTROL AND HYDRAULIC RESEARCH AND THE NC PLUMBING CODE.
10. PROPERTY OWNER SHALL BE RESPONSIBLE FOR MAINTENANCE AND OPERATION OF BACKFLOW PREVENTION ASSEMBLY AND COMPLIANCE WITH REPORTING AND TESTING REQUIREMENTS.
11. ALL BACKFLOW PREVENTERS SHALL BE "LEAD FREE".
12. ALL BACKFLOW INSTALLATIONS SHALL MEET DETAIL 620.01, 1 OF 2.
13. A WYE STRAINER SHALL BE INSTALLED ON THE IMMEDIATE UPSTREAM OF THE BACKFLOW PREVENTER'S #1 SHUTOFF VALVE AND THE UPSTREAM DISCONNECT UNION. THE WYE STRAINER SHALL BE FOR DOMESTIC SERVICE CONNECTIONS ONLY.
14. AN ISOLATION GATE VALVE SHALL BE INSTALLED ON THE TOWN OF APEX PUBLIC WATERLINE FOR BACKFLOW ISOLATION PURPOSES.

DOUBLE CHECK VALVE ASSEMBLY
AND
REDUCE PRESSURE ASSEMBLY
(DOMESTIC)

DOUBLE CHECK DETECTOR
BACKFLOW ASSEMBLY (FIRE) - (NOT
PERMITTED WITH FDC CONNECTION)



REDUCED PRESSURE DETECTOR
BACKFLOW ASSEMBLY (FIRE - REQUIRED
WITH FDC CONNECTION)



ELEVATION VIEW

TOWN OF APEX
STANDARDS

EFFECTIVE: JUNE 11, 2024

≥3" COMMERCIAL OUTDOOR BACKFLOW ASSEMBLY

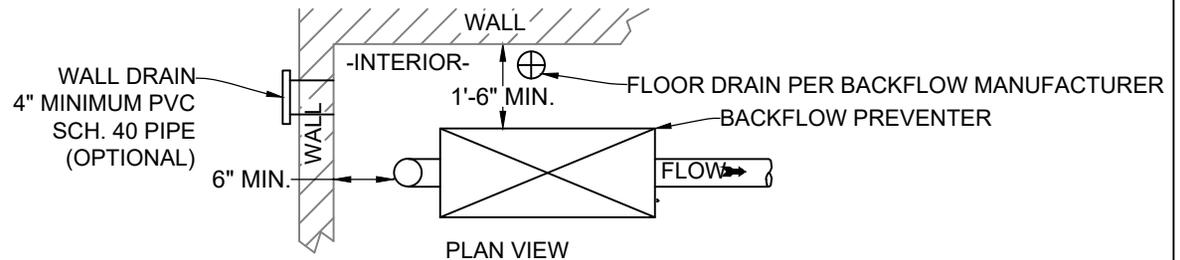
STD. NO.

620.06

SHEET 1 OF 1

NOTES:

1. REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY SHALL COMPLY WITH ASSE 1013 & AWWA C511.
2. REDUCED PRESSURE DETECTOR ASSEMBLY SHALL COMPLY WITH ASSE 1047. UNIT SHALL BE USED FOR ALL FIRE PREVENTION SYSTEMS.
3. DOUBLE CHECK VALVE BACKFLOW PREVENTION ASSEMBLY SHALL COMPLY WITH ASSE 1015 & AWWA C510.
4. DOUBLE CHECK DETECTOR BACKFLOW PREVENTION VALVE ASSEMBLY SHALL COMPLY WITH ASSE 1048.
5. BACKFLOW PREVENTERS CANNOT BE LOCATED INSIDE WALLS, CABINETS OR FOUNDATIONS.
6. ALL BACKFLOW PREVENTERS SHALL BE LOCATED IN A LOWEST FLOOR ROOM (2HR FIRE RATED) WITH AN EXTERIOR DOOR WITH DIRECT ACCESS FROM THE OUTSIDE.
7. PIPE MATERIAL SHALL BE CLASS 350 DIP AWWA C150 AND C151 APPROVED BY THE TOWN. PIPE MATERIAL BEHIND THE BACKFLOW PREVENTER SHALL MEET NC PLUMBING CODE TABLE 605.4
8. PROPERTY OWNER SHALL BE RESPONSIBLE FOR MAINTENANCE AND OPERATION OF BACKFLOW ASSEMBLY AND COMPLIANCE WITH REPORTING AND TESTING REQUIREMENTS.
9. ALL BACKFLOW PREVENTERS SHALL MEET CURRENT UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS-CONNECTION AND HYDRAULIC RESEARCH REQUIREMENTS.
10. ALL DRAINS SHALL BE DESIGNED TO HANDLE A FULL PORT DISCHARGE FROM THE ASSEMBLY. AN APPROVED, PRE-FABRICATED APPROPRIATELY SIZED AIR GAP DRAIN MUST BE USED AND ALL RELIEF PORT DRAIN LINES SHALL BE PIPED TO DIRECT FLOW TOWARD INDIRECT WASTE FLOOR DRAINS.
11. ALL BACKFLOWS SHALL BE "LEAD FREE".
12. A WYE STRAINER SHALL BE INSTALLED IMMEDIATELY UPSTREAM OF THE BACKFLOW PREVENTER'S #1 SHUTOFF VALVE AND THE UPSTREAM DISCONNECT UNION. THE WYE STRAINER SHALL BE FOR DOMESTIC SERVICE CONNECTIONS ONLY.
13. AN ISOLATION GATE VALVE SHALL BE INSTALLED ON THE TOWN OF APEX PUBLIC WATERLINE FOR BACKFLOW ISOLATION PURPOSES.



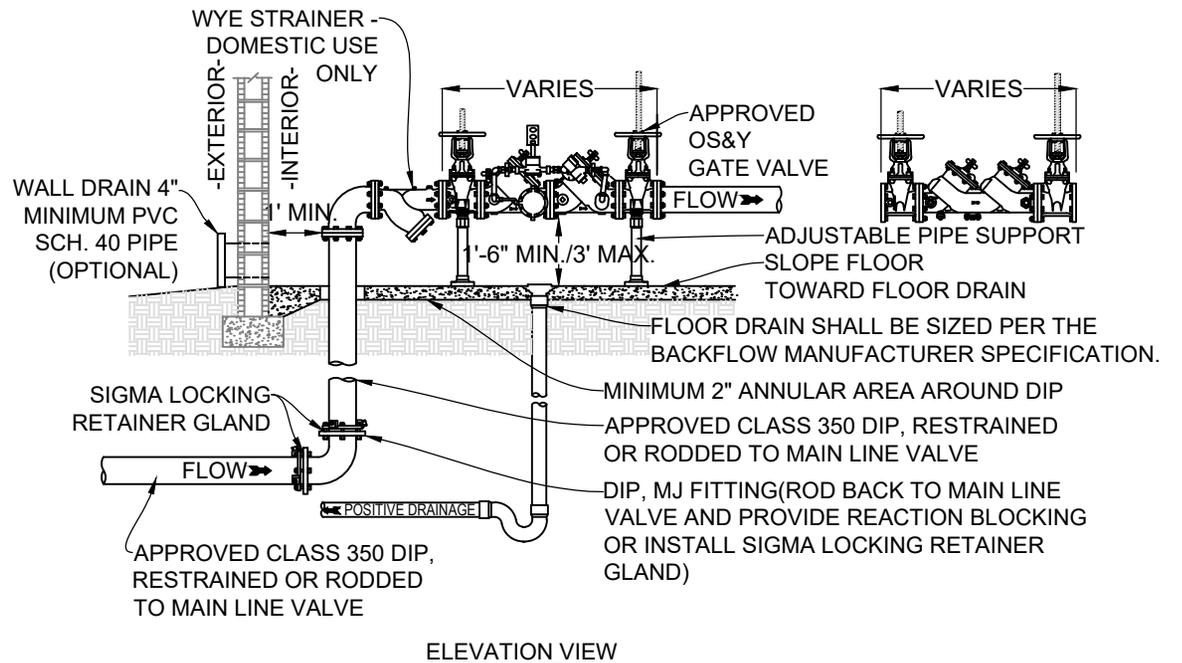
OR

DOUBLE CHECK DETECTOR BACKFLOW ASSEMBLY (NOT PERMITTED WITH FDC CONNECTION)

OR

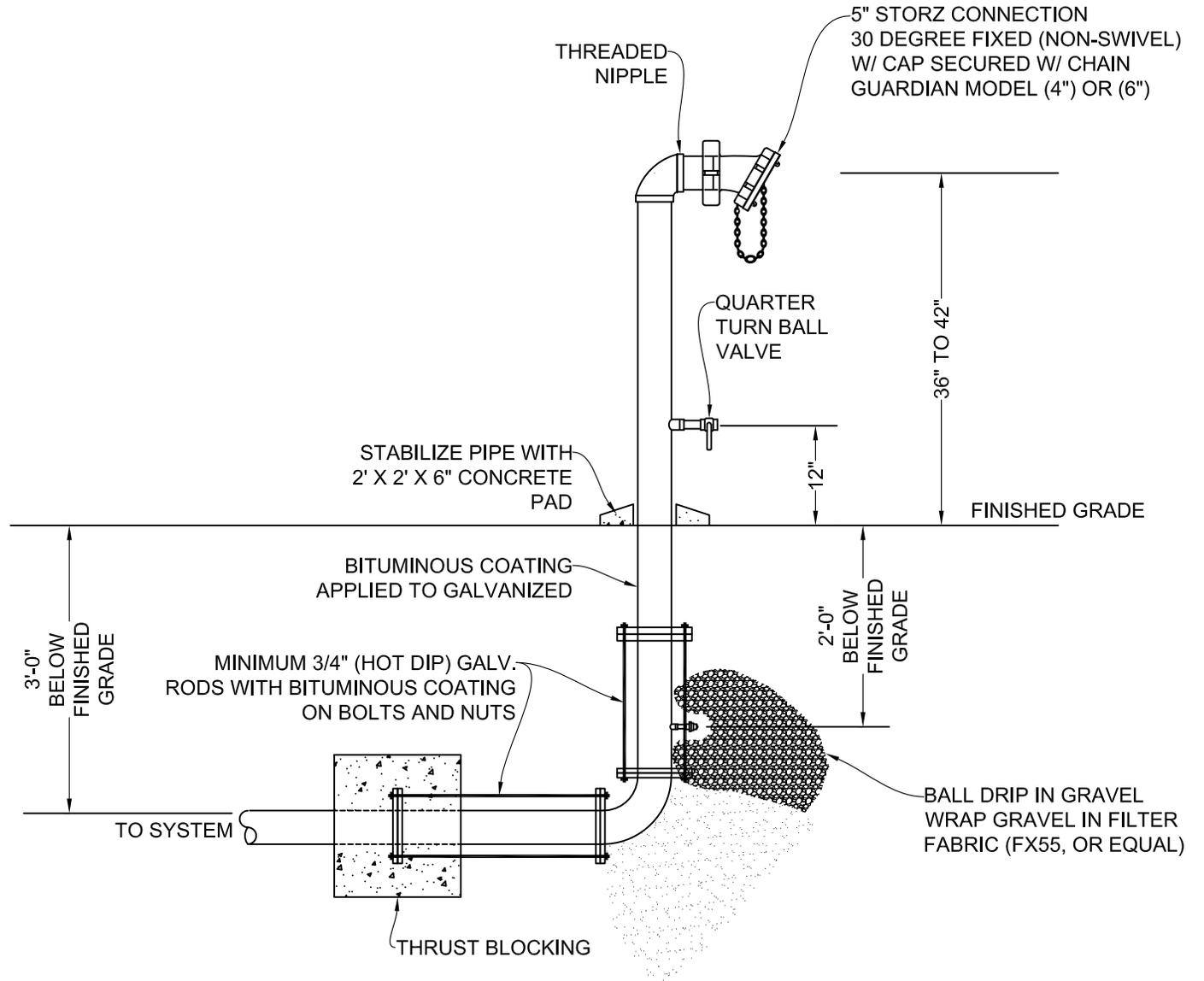
REDUCED PRESSURE DETECTOR BACKFLOW ASSEMBLY (FIRE - REQUIRED WITH FDC CONNECTION)

DOUBLE CHECK VALVE ASSEMBLY OR REDUCED PRESSURE ASSEMBLY (DOMESTIC)



NOTES:

1. ALL EXPOSED PIPING AND FITTINGS SHALL BE GALVANIZED WITH EXCEPTION OF STORZ CONNECTION
2. PIPE MATERIAL SHALL BE CLASS 350 DIP AWWA C150 AND C151 APPROVED BY THE TOWN. PIPE MATERIAL BEHIND THE BACKFLOW PREVENTER SHALL MEET NC PLUMBING CODE TABLE 605.4
3. PROPERTY OWNER SHALL BE RESPONSIBLE FOR MAINTENANCE AND OPERATION OF FDC AND ACCESSORIES
4. 50' MAX DISTANCE FROM FDC TO APPARATUS - FIRE HYDRANT
5. FOR NFPA 13R SYSTEMS (2 1/2" RISER AND SMALLER) SINGLE FDC WITH NATIONAL STANDARD THREADS SHALL BE USED
6. AN APPROVED CONNECTION (TAPPING IS NOT APPROVED)



TOWN OF APEX
STANDARDS

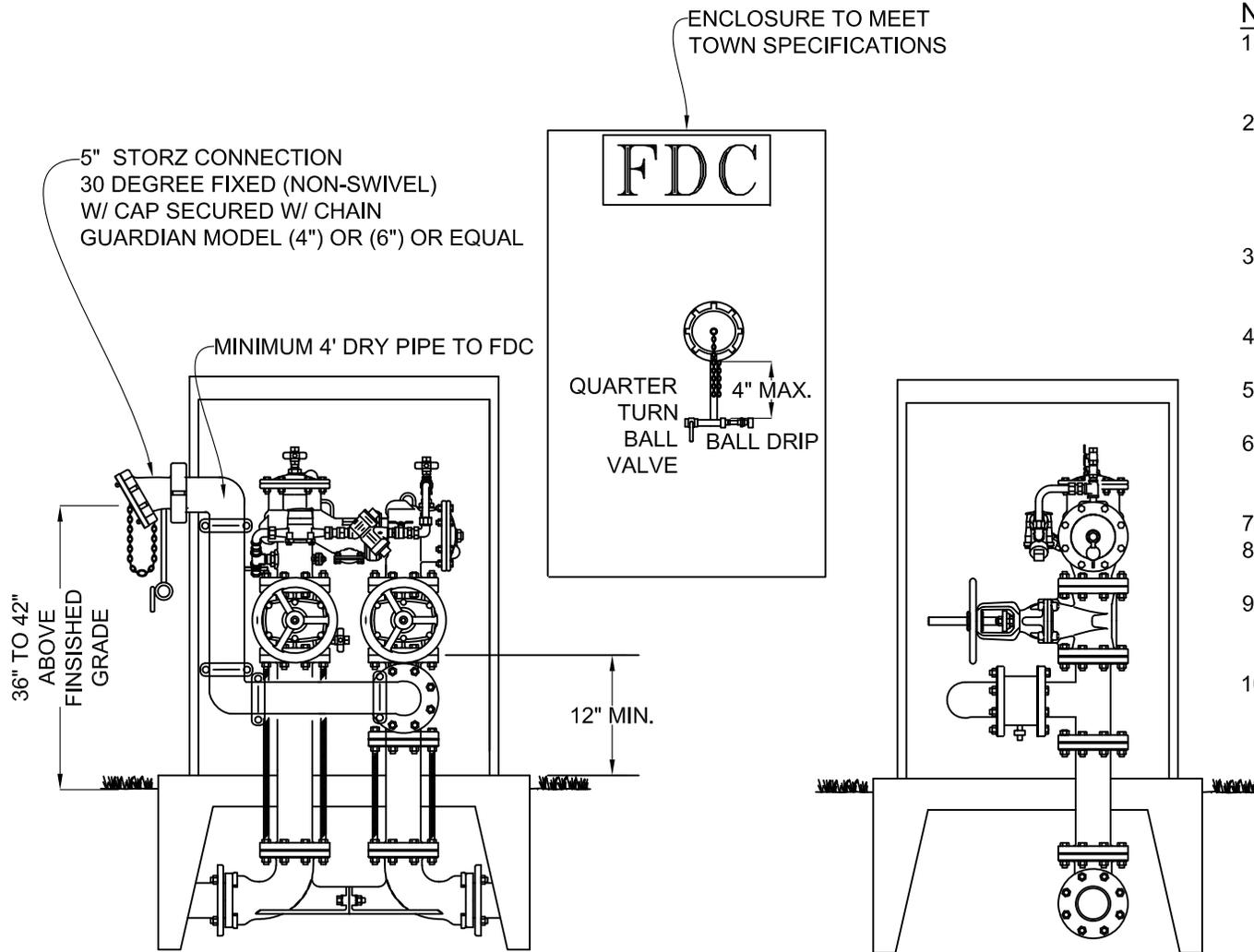
EFFECTIVE: MARCH 6, 2018

YARD FDC

STD. NO.

620.08

SHEET 1 OF 1



NOTES:

1. ALL PIPING AND FITTINGS SHALL BE DUCTILE IRON, GALVANIZED BRASS, OR ALUMINUM.
2. DUCTILE IRON PIPE MATERIAL SHALL BE CLASS 350 DIP AWWA C150 AND C151 APPROVED BY THE TOWN. PIPE MATERIAL BEHIND THE BACKFLOW PREVENTER SHALL MEET NC PLUMBING CODE TABLE 605.4.
3. PROPERTY OWNER SHALL BE RESPONSIBLE FOR MAINTENANCE AND OPERATION OF FDC AND ACCESSORIES.
4. 50' MAX DISTANCE FROM FDC TO APPARATUS - FIRE HYDRANT.
5. FDC TO FACE FIRE HYDRANT - APPARATUS ACCESS LOCATION.
6. DO NOT BLOCK HYDRANT - APPARATUS ACCESS TO BUILDING WITH HOSE LAY FROM HYDRANT TO FDC.
7. MINIMUM DISTANCE BEHIND CURB IS 3'.
8. PROVIDE HEAT AND ALARM SUPERVISION TO HOT BOX (2 CONDUITS).
9. COMPLY WITH TOWN OF APEX SPECIFICATION AND DETAILS FOR BACKFLOW INSTALLATION.
10. ALL BACKFLOWS SHALL BE "LEAD FREE".

TOWN OF APEX
STANDARDS

HOTBOX VUVD FDC

EFFECTIVE: MARCH 6, 2018

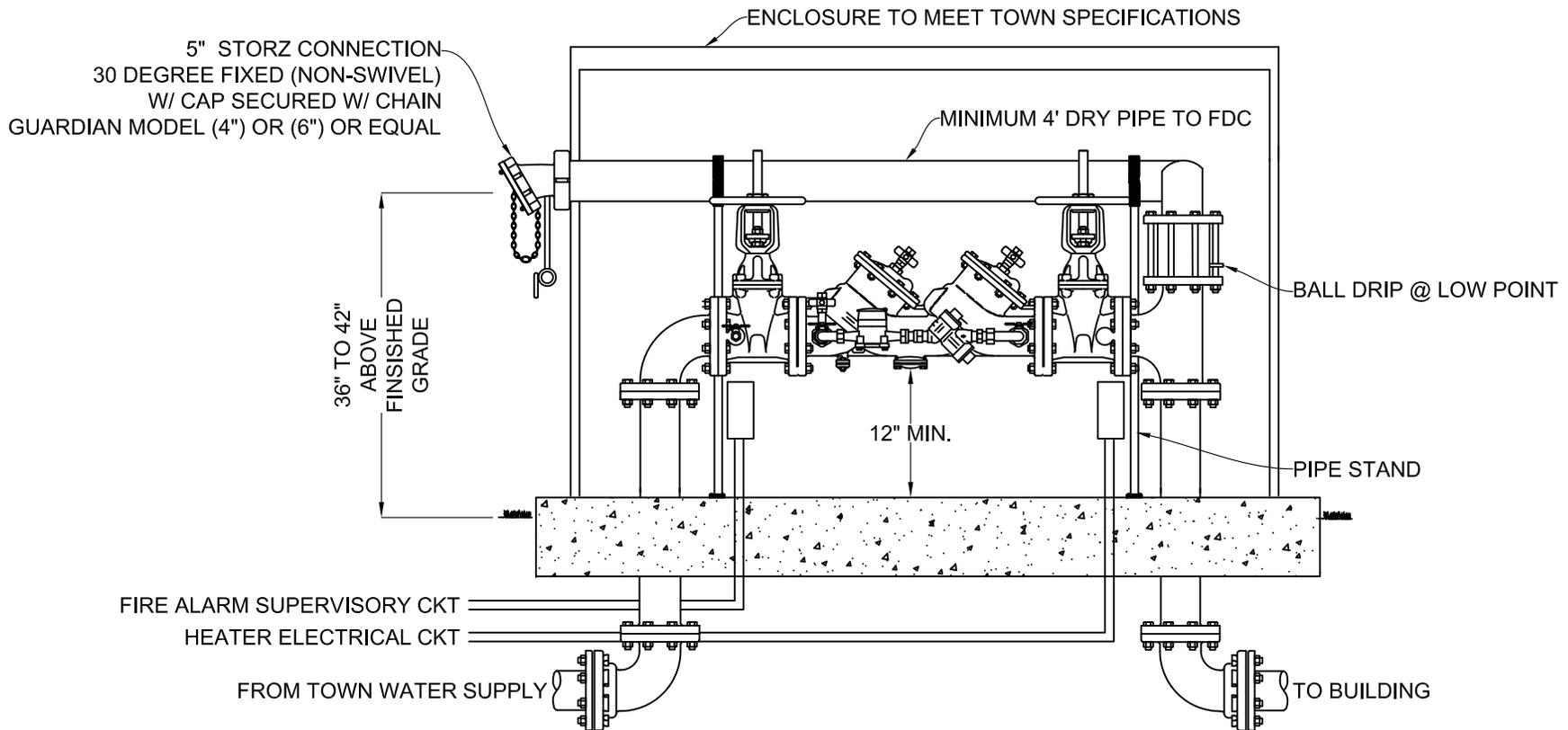
STD. NO.

620.09

SHEET 1 OF 1

NOTES:

1. ALL PIPING AND FITTINGS SHALL BE DUCTILE IRON, GALVANIZED BRASS, OR ALUMINUM.
2. DUCTILE IRON PIPE MATERIAL SHALL BE CLASS 350 DIP AWWA C150 AND C151 APPROVED BY THE TOWN. PIPE MATERIAL BEHIND THE BACKFLOW PREVENTER SHALL MEET NC PLUMBING CODE TABLE 605.4.
3. PROPERTY OWNER SHALL BE RESPONSIBLE FOR MAINTENANCE AND OPERATION OF FDC AND ACCESSORIES.
4. 50' MAX DISTANCE FROM FDC TO APPARATUS - FIRE HYDRANT.
5. FDC TO FACE FIRE HYDRANT - APPARATUS ACCESS LOCATION.
6. DO NOT BLOCK HYDRANT - APPARATUS ACCESS TO BUILDING WITH HOSE LAY FROM HYDRANT TO FDC.
7. MINIMUM DISTANCE BEHIND CURB IS 3'.
8. PROVIDE HEAT AND ALARM SUPERVISION TO HOT BOX (2 CONDUITS).
9. COMPLY WITH TOWN OF APEX SPECIFICATION AND DETAILS FOR BACKFLOW INSTALLATION.
10. ALL BACKFLOWS SHALL BE "LEAD FREE".



TOWN OF APEX
STANDARDS

HOTBOX INLINE FDC

EFFECTIVE: MARCH 6, 2018

STD. NO.

620.10

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