

**NOTES:**

1. DEVICES SHALL BE FABCO, WATTS, OR APPROVED EQUAL & APPROVED BY THE U.S.C. TESTING LABORATORY.
2. MANUFACTURING AND MODEL NUMBER OF BACKFLOW PREVENTION ASSEMBLY SHALL BE LEAD FREE AND APPROVED BY THE CITY ENGINEER PRIOR TO INSTALLATION.
3. ABOVE GROUND SERVICE PIPING FOR BACKFLOW PREVENTION DEVICES 2 INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER OR BRASS. SERVICE LINES 4-INCH DIAMETER AND SMALLER BUT LARGER THAN 2-INCHES IN DIAMETER SHALL BE GALVANIZED STEEL. WRAP ALL METALLIC PIPING BELOW GROUND AND WITHIN 6-INCHES OF GROUND SURFACE WITH 2 LAYERS OF 10-MIL CALPICO TAPE.
4. SUPPORTS WHERE PROVIDED SHALL NOT INTERFERE WITH TESTING AND MAINTENANCE.
5. BALL VALVES SHALL BE INSTALLED ON 2-INCH AND SMALLER BACKFLOW PREVENTION ASSEMBLIES. GATE VALVES SHALL BE UTILIZED ON BACKFLOW PREVENTION ASSEMBLIES LARGER THAN 2-INCH.
6. INSTALL AN LOCKABLE INSULATED COVER AS APPROVED BY PW DIRECTOR AROUND ASSEMBLY. CAGE PROTECTION IS REQUIRED WHEN INSTALLED IN PARKS OR AS REQUIRED BY THE CITY.
7. DEVICE SHALL BE LOCATED IMMEDIATELY BEHIND WATER METER.
8. DEVICE SHALL BE TESTED BY A CERTIFIED TESTER APPROVED BY THE CITY AND TEST RESULTS SHALL BE SUBMITTED TO THE CITY. AFTER THE INSPECTION TEST COCKS SHALL BE PLUGGED WITH BRASS TEST PLUGS.
9. BACKFLOW PREVENTION ASSEMBLY SHOWN IS FOR NON-FIRE FLOW APPLICATION. BACKFLOW PREVENTION INSTALLATIONS FOR FIRE PREVENTION SHALL BE AS APPROVED BY THE FIRE CHIEF.
10. ALL BACKFLOW DEVICES WILL NEED TO BE SCREENED FROM PUBLIC VIEW BY UTILIZING A COMBINATION OF BLACKWALL, STEEL SCREEN, AND/OR LANDSCAPING ETC.
11. A DOUBLE CHECK VALVE ASSEMBLY WILL ONLY BE PERMITTED FOR REPLACEMENT AND RETROFIT SERVICES AND MUST BE APPROVED BY THE CITY. DOUBLE CHECK VALVE CAN BE USED ON FIRE LINES WITH THE APPROVAL OF FIRE DEPARTMENT.

Apr 28, 2021 - 10:43am L:\Standard details\Cad Files 2020\Section 6 (Water)\W-6, W-7.dwg

## CITY OF PATTERSON IMPROVEMENT STANDARDS



DRAWN BY: J. MANGAT  
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 APPROVED BY: *Fernando Ulloa*  
 FERNANDO ULLOA, CITY ENGR.

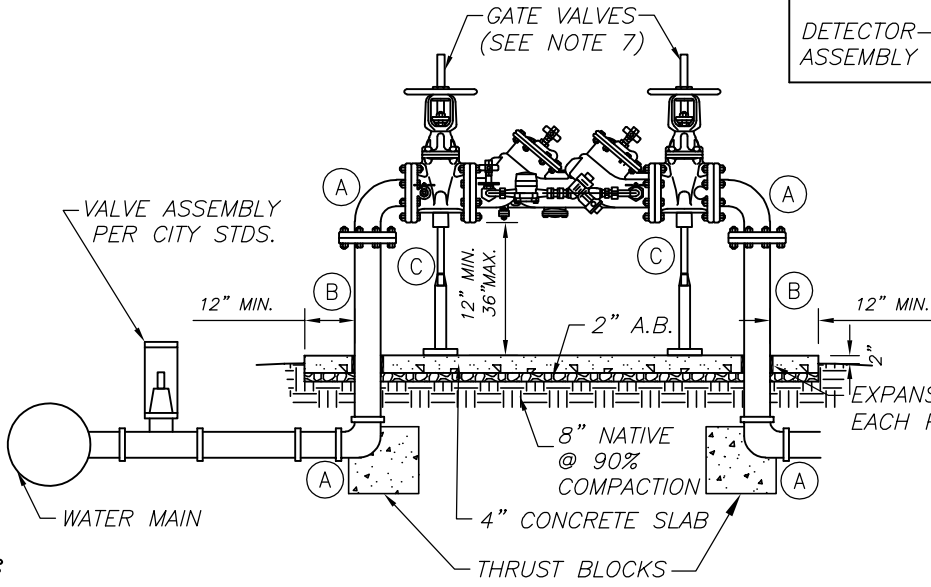
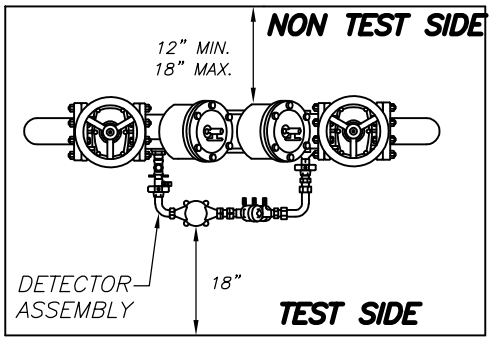
# 2" OR SMALLER DOUBLE CHECK VALVE BACKFLOW PREVENTER

10/26/20      62736  
 DATE      R.C.E. NO.

DRAWING NO. **W - 6**  
 NTS

SERVICE LINE SHALL HAVE A WATER METER IMMEDIATELY BEFORE THE BACKFLOW ASSEMBLY.

DETECTOR ASSEMBLIES ARE ONLY REQUIRED FOR NON-METERED FIRE LINES.



- LEGEND:**
- (A) 90° ELBOW
  - (B) SPOOL
  - (C) PIPE SUPPORT, ANVIL FIG. 264 OR APPROVED EQUAL

**NOTES:**

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3. SPOOLS 4-INCH DIAMETER AND SMALLER BUT LARGER THAN 2-INCHES IN DIAMETER SHALL BE GALVANIZED STEEL. SPOOLS LARGER THAN 4-INCH DIAMETER SHALL BE DUCTILE IRON AND FLANGED BOLTED.
4. THE DEVICE SHALL BE TESTED BY A CERTIFIED TESTER APPROVED BY THE CITY AND TEST RESULTS SHALL BE SUBMITTED TO THE CITY. AFTER THE INSPECTION, TEST COCKS SHALL BE SECURED WITH BRASS TEST PLUGS OR CAPS.
5. GATE VALVES SHALL BE SECURED WITH 1/4" GRADE 30 GALVANIZED CHAIN. LOCK SUPPLIES BY THE CITY.
6. DEVICES 3" SHALL INCLUDE FREEZE PROTECTION (FABRICATED INSULATED COVER APPROVED BY THE CITY).
7. WHEN A TEMPER ALARM IS REQUIRED IT SHALL BE INSTALLED WITH A TOGGLE STPE SWITCH ON THE STEM OF EACH GATE VALVE.
8. VALVES SHALL BE OF RESILIENT WEDGE CONSTRUCTION.
9. PAINT ALL PIPING, FITTINGS, AND DEVICES WITH RUST RESISTANT GLOSS ENAMEL PAINT FOR SIZES 4" AND LARGER.
10. BACKFLOW PREVENTION ASSEMBLY SHOWN IS FOR NON-FIRE FLOW APPLICATION. BACKFLOW PREVENTION INSTALLATIONS FOR FIRE PREVENTION SHALL BE AS APPROVED BY THE FIRE CHIEF.
11. ALL BACKFLOW DEVICES WILL NEED TO BE SCREENED FROM PUBLIC VIEW BY UTILIZING A COMBINATION OF BLACKWALL, STEEL SCREEN, AND/OR LANDSCAPING ETC.
12. A DOUBLE CHECK VALVE ASSEMBLY WILL ONLY BE PERMITTED FOR REPLACEMENT AND RETROFIT SERVICES AND MUST BE APPROVED BY THE CITY. DOUBLE CHECK VALVE CAN BE USED ON FIRE LINES WITH THE APPROVAL OF FIRE DEPARTMENT.

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CITY OF PATTERSON IMPROVEMENT STANDARDS

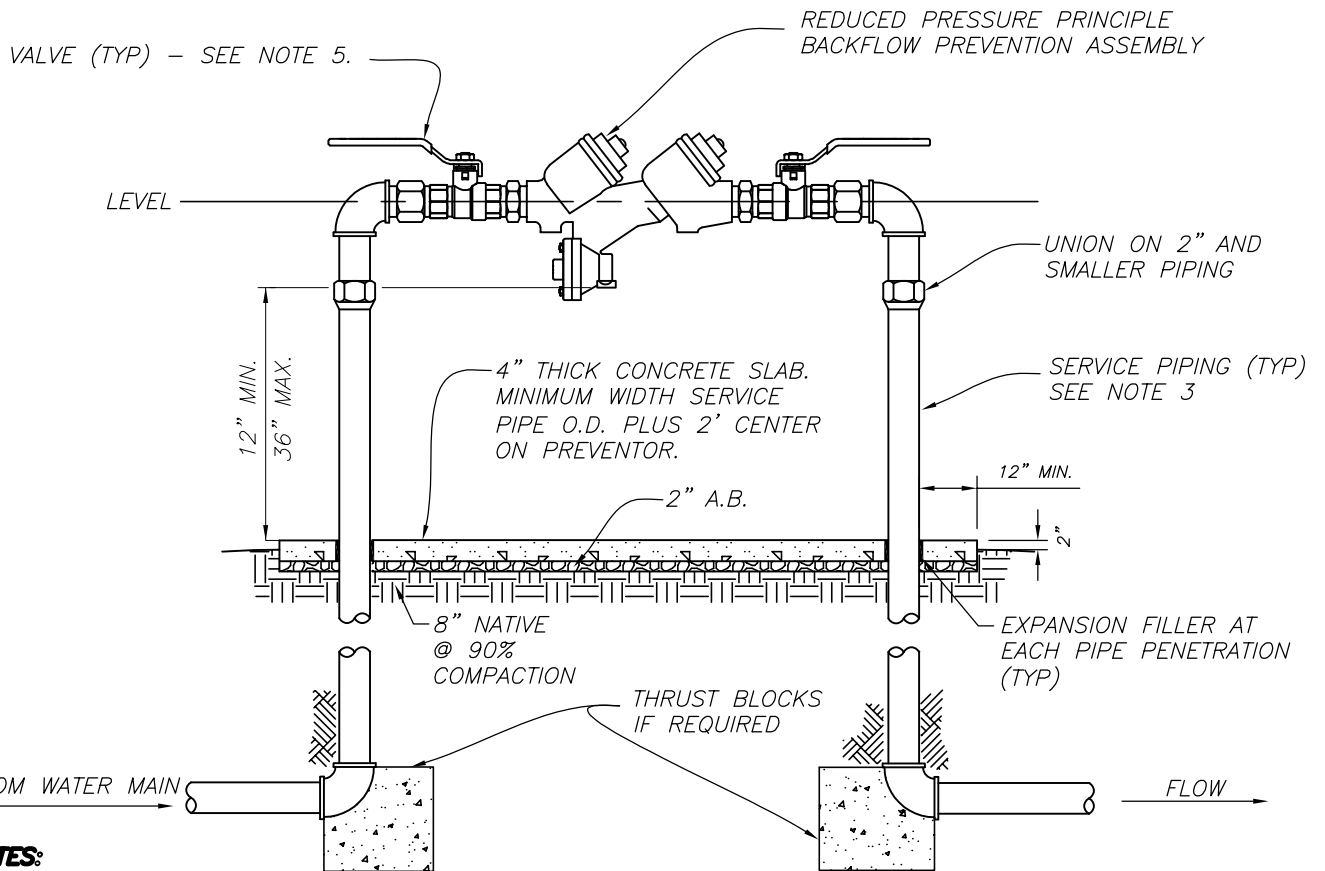


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**3" OR LARGER DOUBLE CHECK BACKFLOW PREVENTION DEVICE**

10/26/20 DATE 62736 R.C.E. NO.

DRAWING NO. **W - 7**  
 NTS



**NOTES:**

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11. BACKFLOW PREVENTION ASSEMBLY MUST BE A REDUCED PRESSURE PRINCIPLE ASSEMBLY TYPE AND MUST BE APPROVED BY THE CITY.

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## CITY OF PATTERSON IMPROVEMENT STANDARDS

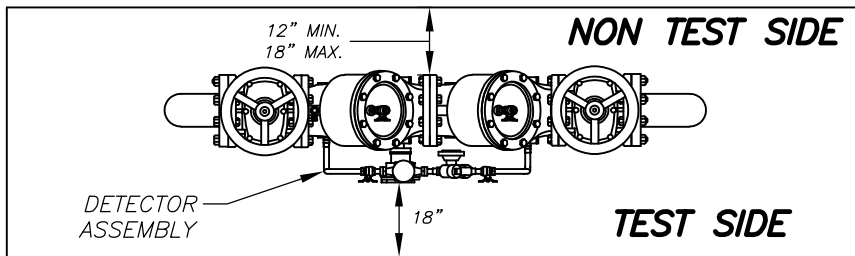


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 FERNANDO ULLOA, CITY ENGR.

# 2" OR SMALLER REDUCED PRESSURE BACKFLOW PREVENTER

10/26/20      62736  
 DATE      R.C.E. NO.

DRAWING NO. **W - 8**  
 NTS

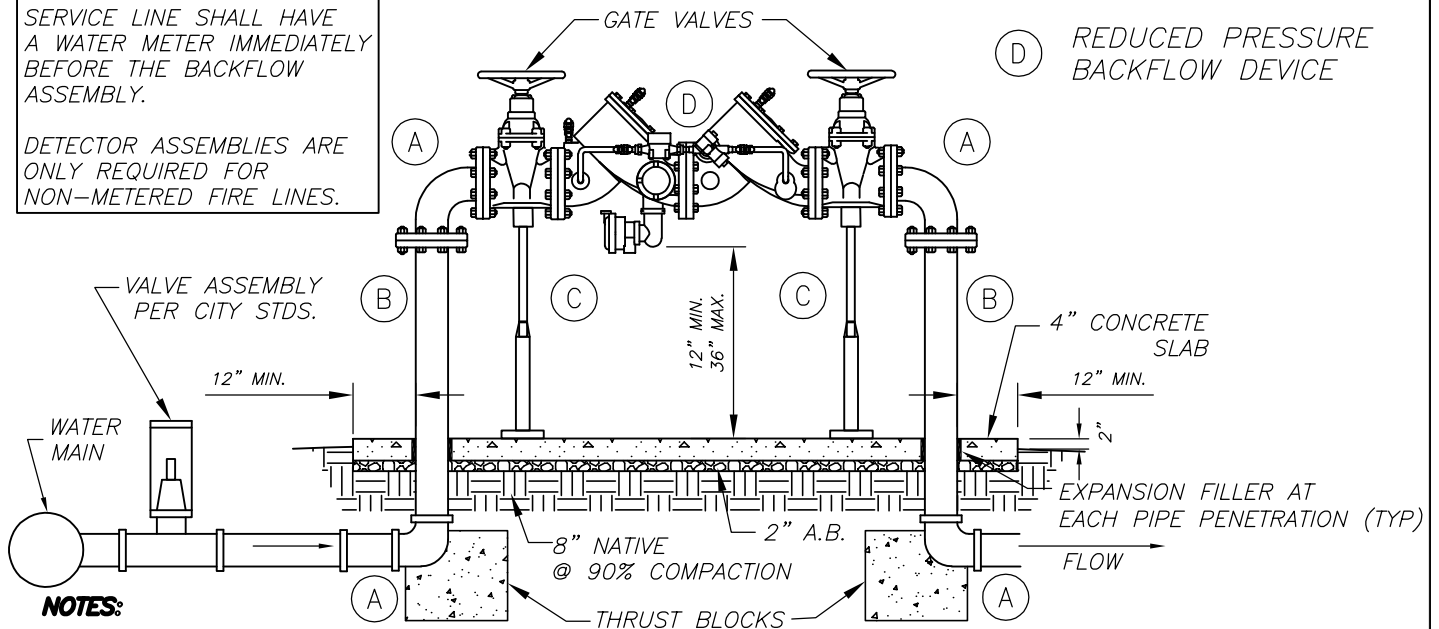


**LEGEND:**

- (A) 90° ELBOW
- (B) SPOOL
- (C) PIPE SUPPORT, ANVIL OR APPROVED EQUAL
- (D) REDUCED PRESSURE BACKFLOW DEVICE

SERVICE LINE SHALL HAVE A WATER METER IMMEDIATELY BEFORE THE BACKFLOW ASSEMBLY.

DETECTOR ASSEMBLIES ARE ONLY REQUIRED FOR NON-METERED FIRE LINES.



**NOTES:**

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5. GATE VALVES SHALL BE SECURED WITH 1/4" GRADE 30 GALVANIZED CHAIN. LOCK SUPPLIES BY THE CITY.
6. DEVICES 3" SHALL INCLUDE FREEZE PROTECTION (FABRICATED INSULATED COVER APPROVED BY THE CITY).
7. WHEN A TEMPER ALARM IS REQUIRED IT SHALL BE INSTALLED WITH A TOGGLE STPE SWITCH ON THE STEM OF EACH GATE VALVE.
8. VALVES SHALL BE OF RESILIENT WEDGE CONSTRUCTION.
9. PAINT ALL PIPING, FITTINGS, AND DEVICES WITH RUST RESISTANT GLOSS ENAMEL PAINT FOR SIZES 4" AND LARGER.
10. BACKFLOW PREVENTION ASSEMBLY SHOWN IS FOR NON-FIRE FLOW APPLICATION. BACKFLOW PREVENTION INSTALLATIONS FOR FIRE PREVENTION SHALL BE AS APPROVED BY THE FIRE CHIEF.
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CITY OF PATTERSON IMPROVEMENT STANDARDS

**3" OR LARGER REDUCED PRESSURE BACKFLOW PREVENTION DEVICE**

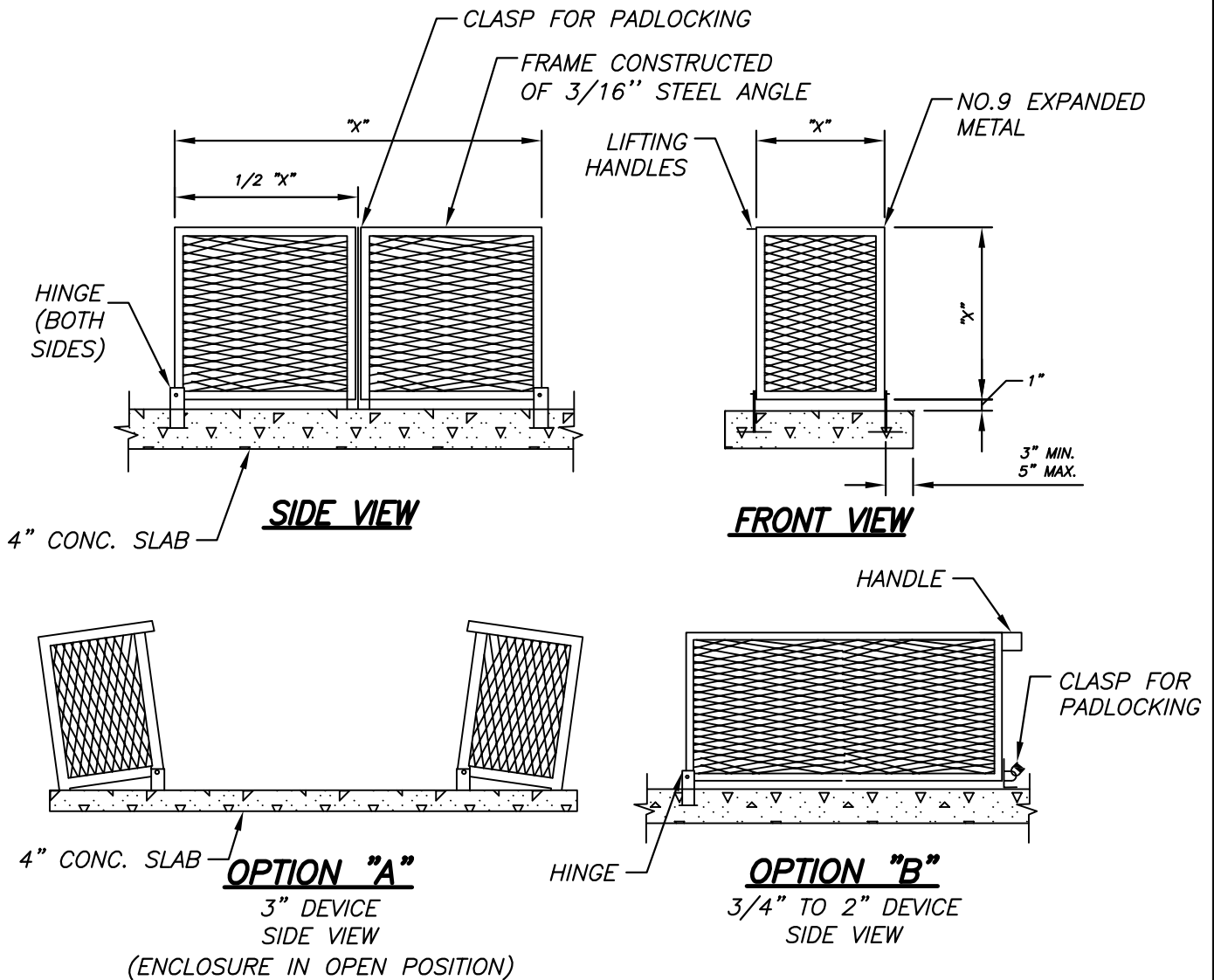


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10/26/20 DATE  
 62736 R.C.E. NO.

DRAWING NO. **W - 9**  
 NTS

Apr 28, 2021 - 10:48am L:\Standard details\Cad Files 2020\Section 6 (Water)\W-8, W-9.dwg



"X" = REFER TO DIMENSIONS ON CONSTRUCTION PLANS

**NOTES:**

1. REFER TO MANUFACTURER'S CATALOG FOR CORRECT DIMENSIONS TO FIT SIZE OF SPECIFIED BACKFLOW DEVICE.
2. CONCRETE FOUNDATION DIMENSIONS TO SUIT EACH INDIVIDUAL INSTALLATION, MINIMUM 4" THICK, OR AS PER MANUFACTURER'S RECOMMENDATION.
3. OPTION SELECTION:  
 OPTION "A": 3" DEVICE  
 OPTION "B": 3/4" TO 2" DEVICES
4. PAINT ALL METAL SURFACES WITH RUST RESISTANT GLOSS ENAMEL PAINT (FOREST GREEN COLOR).

CITY OF PATTERSON IMPROVEMENT STANDARDS



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**BACKFLOW ASSEMBLY CAGE**

10/26/20  
 DATE

62736  
 R.C.E. NO.

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 NTS

**W - 10**