

GENERAL NOTES

- 1.) ALL RPPDs SHALL BE LOCATED ABOVE GROUND. RPPDs MAY BE SCREENED FROM VIEW BY EITHER LANDSCAPING OR ARCHITECTURAL FEATURES, AND INSTALLED AS CLOSE AS PRACTICAL TO THE WATER METER AND SHALL BE INSTALLED IN A LOCATION THAT IS READILY ACCESSIBLE FOR TESTING AND MAINTENANCE.
- 2.) ALL NUTS AND BOLTS FOR GATE VALVES AND TAPPING TEE'S TO BE GRADE 316 STAINLESS STEEL.
- 3.) SEE STD. SPEC'S. SECTION 02087.1 BACKFLOW PREVENTION DEVICES.
- 4.) ITEMS LISTED MAY BE SUBSTITUTED WITH AN APPROVED EQUAL.
- 5.) WHEN USED AS FIRE SERVICE APPROVED F.M. LISTING REQUIRED.
- 6.) CONTRACTOR/CONSUMER TO SUPPLY HEAVY CHAINS AND LOCKS TO LOCK HANDWHEELS ON VALVES.
- 7.) BACKFILL BURIED PIPING ON CITY SIDE OF BACKFLOW PREVENTER IN UNPAVED AREAS WITH TWO SACK SLURRY TO 12" MIN. OVER PIPE.
- 8.) IMMEDIATELY AFTER INSTALLATION, RELOCATION OR REPAIR, ALL BACKFLOW PREVENTION DEVICES SHALL BE TESTED BY A CERTIFIED TESTER APPROVED BY THE CITY OF HUNTINGTON BEACH. NO SERVICE SHALL BE DEEMED ACCEPTABLE UNTIL THE DEVICE IS TESTED AND CERTIFIED AFTER INSTALLATION.
- 9.) TEE OR OTHER APPURTENANCES ARE PROHIBITED BETWEEN THE METER AND THE RPPD.
- 10.) ALL ABOVE GROUND PIPING INCLUDING BACKFLOW DEVICE SHALL BE PAINTED IN ACCORDANCE WITH SPEC. 02087.1.

ITEM	DESCRIPTION	SPECIFICATION	QTY
①	TEE OR TAPPING TEE, FLANGE, PER STD PLAN No. 614A	02085.9	1
②	VALVE BOX PER STD PLAN No. 612.	02085.9	1
③	P.V.C. PIPE AWWA C900, DR18.	02510.9	AR
④	90° ELBOW, FLANGED ABOVE GROUND, G.T. X FLANGED BELOW GROUND.	02510.1	4
⑤	D.I. PIPE, TC 53, W/SCREWED ENDS, W/THREADED FLANGES, W/POLYETHYLENE ENCASMENT.	02510.1	1
⑥	ADJUSTABLE PIPE SUPPORT PER STD. PLAN No. 616.	02510.8	1
⑦	REDUCED PRESSURE PRINCIPLE ASSY. PER CALIFORNIA DEPT. OF PUBLIC HEALTH APPROVED LIST.	02087.1	1
⑧	GATE VALVE PER STD. PLAN No. 619 (4" MIN.) IF 3"RPPD USED, SERVICE MUST BE A 4" PIPE SIZE. LARGER RPPD MUST BE THE SAME SIZE AS SERVICE DIAMETER.	02085.9	1
⑨	RESILIENT WEDGE VALVE, FLANGED, W/HAND WHEEL	02085.9	1

APPROVED:

CITY ENGINEER

DATE: 9/1/13

CITY OF HUNTINGTON BEACH

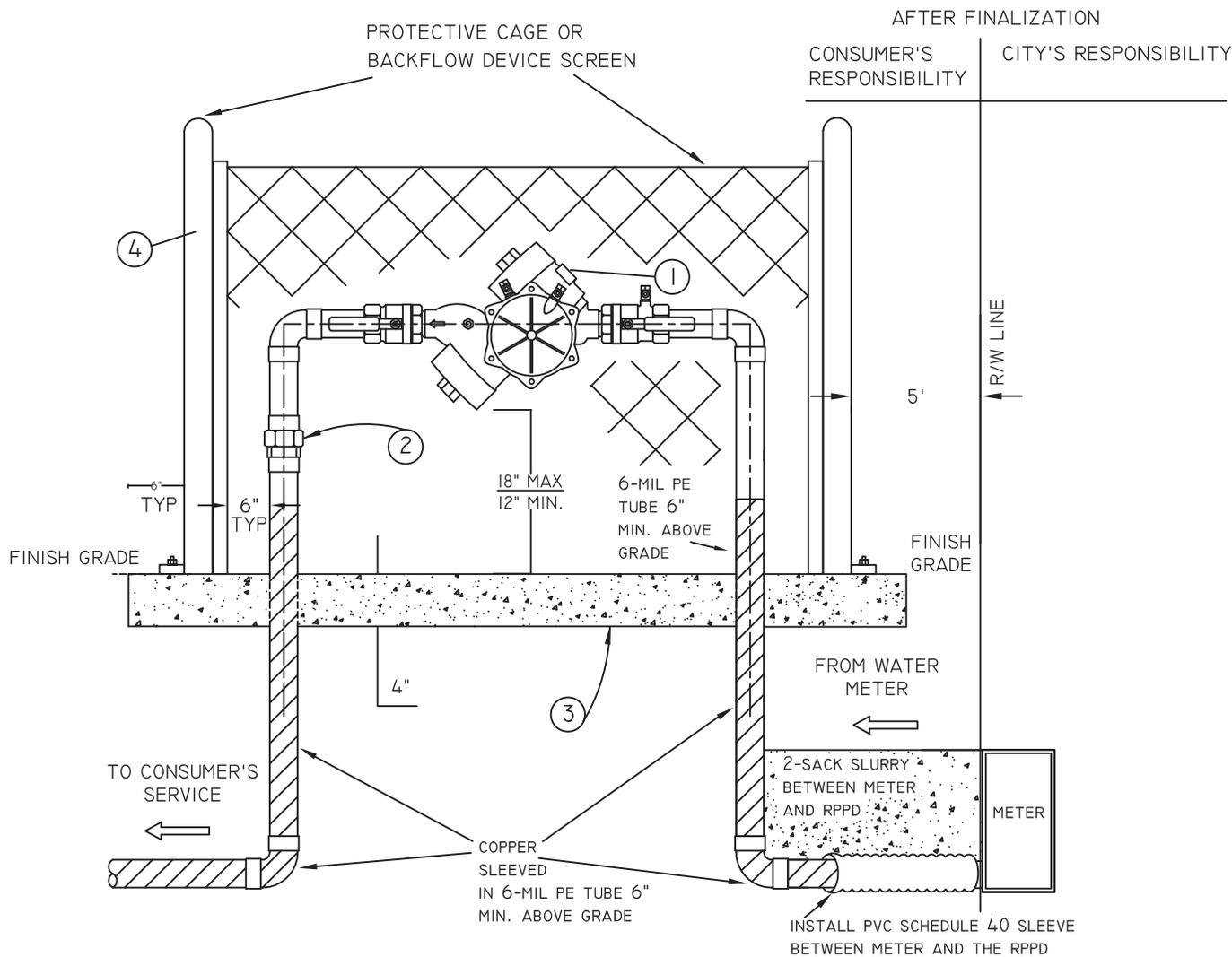
DEPARTMENT OF PUBLIC WORKS



3" THROUGH 10"
REDUCED PRESSURE PRINCIPAL DEVICE
(RPPD)

STANDARD PLAN

609



GENERAL NOTES

1. ALL RPPDs SHALL BE LOCATED ABOVE GROUND. RPPDs MAY BE SCREENED FROM VIEW BY EITHER LANDSCAPE OR ARCHITECTURAL FEATURES, AND INSTALLED AS CLOSE AS PRACTICAL TO THE WATER METER AND SHALL BE INSTALLED IN A LOCATION THAT IS READILY ACCESSIBLE FOR TESTING AND MAINTENANCE.
2. IMMEDIATELY AFTER INSTALLATION, RELOCATION OR REPAIR, ALL RPPDs SHALL BE TESTED BY A CERTIFIED TESTER APPROVED BY THE CITY. NO SERVICE SHALL BE DEEMED ACCEPTABLE UNTIL THE DEVICE IS TESTED AND CERTIFIED AFTER INSTALLATION.
3. RISERS AND TUBING SHALL BE TYPE "K" RIGID COPPER SLEEVED IN 6-MIL POLYETHYLENE AND ALL FITTINGS SHALL BE SOLDER-JOINT TYPE PER UNIFORM PLUMBING CODE AS ADOPTED BY THE CITY OF HUNTINGTON BEACH. ALL UNDERGROUND TUBING FROM THE METER TO THE RPPD SHALL BE SLEEVED IN SCHEDULE 40 PVC AND BACKFILLED WITH TWO SACK SLURRY TO 12" (MIN.) OVER PIPE. COPPER SERVICE AND RPPD SHALL BE AT LEAST THE SAME SIZE AS THE METER.
4. TEES OR OTHER APPURTENANCES ARE PROHIBITED BETWEEN THE METER AND THE RPPD.
5. PAINT RPPD PER SPECIFICATION 02087.1.

ITEM	DESCRIPTION	SPECIFICATION	QTY
①	REDUCE PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY DEVICE PER THE CALIFORNIA DEPARTMENT OF HEALTH SERVICES APPROVED LIST OF DEVICES.	02087.1	1
②	SOLDER JOINT UNION PER CALIFORNIA PLUMBING CODE AS ADOPTED BY THE CITY.		A.R.
③	A CONCRETE PAD SHALL BE CONSTRUCTED IF ONE DOES NOT ALREADY EXIST.	03300	A.R.
④	RPPD ENCLOSURE (RECOMMENDED).	02087.1	1

APPROVED:

CITY ENGINEER

CITY OF HUNTINGTON BEACH

DEPARTMENT OF PUBLIC WORKS



**1" THROUGH 2" REDUCED PRESSURE
PRINCIPAL DEVICE (RPPD)**

STANDARD PLAN

609A

DATE: **9/1/13**

BACKFLOW PROTECTION

- A. ALL INDUSTRIAL, COMMERCIAL AND MULTI-FAMILY DWELLING SERVICE CONNECTIONS SHALL HAVE APPROPRIATE BACKFLOW PROTECTION INSTALLED AND MAINTAINED BY OWNER.
- B. ANY DOMESTIC SERVICE WITH A FIXTURE EXCEEDING 20 FEET ABOVE WATER MAIN SHALL HAVE APPROPRIATE BACKFLOW PROTECTION INSTALLED AND MAINTAINED BY OWNER.
- C. ALL BACKFLOW PREVENTION DEVICES MUST BE TESTED BY A CERTIFIED TESTER AT LEAST ANNUALLY AND IMMEDIATELY AFTER INSTALLATION, RELOCATION OR REPAIR. NO NEW SERVICE SHALL BE DEEMED ACCEPTABLE UNTIL TESTED AND CERTIFIED AFTER INSTALLATION.
- D. ALL BACKFLOW PREVENTION DEVICES MUST BE APPROVED BY THE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH.
- E. ANY WATER SYSTEM PROVIDED WITH A CHECK VALVE, BACKFLOW PREVENTER, OR ANY OTHER NORMALLY CLOSED DEVICE THAT PREVENTS DISSIPATION OF BUILDING PRESSURE BACK INTO THE WATER MAIN SHALL BE PROVIDED WITH AN APPROVED, LISTED, AND ADEQUATELY SIZED EXPANSION TANK OR OTHER APPROVED DEVICE HAVING A SIMILAR FUNCTION TO CONTROL THERMAL EXPANSION.
- F. EXISTING FIRE SERVICES REQUIRING REPAIRS SHALL HAVE THE BACKFLOW PROTECTION UPGRADED TO COMPLY WITH STD. PLAN 618, AS A MINIMUM AND SHALL REQUIRE A SUB-APPROVAL/PERMIT CLEARANCE BY A UTILITY CROSS-CONNECTION CONTROL SPECIALIST, AND FIRE DEPARTMENT INSPECTOR.
- G. AFTER ABANDONMENT AND REMOVAL OF CHECK-VALVE AND VAULT, REPAIR PAVEMENT PER STD 606 OR REPLACE SIDEWALK PER CITY STANDARD.
- H. ALL SEPARATE IRRIGATION WATER SERVICE CONNECTIONS AND IRRIGATION SERVICES COMBINED WITH DOMESTIC SERVICE METERS SHALL HAVE SEPARATE RPPD'S AS APPROVED BY THE UTILITY CROSS-CONNECTION CONTROL SPECIALISTS.
- I. ALL WORK PERTAINING TO BACKFLOW DEVICES SHALL BE INSPECTED BY THE UTILITY CROSS-CONNECTION CONTROL SPECIALISTS.

APPROVED:



CITY ENGINEER

DATE: 9/1/13

CITY OF HUNTINGTON BEACH

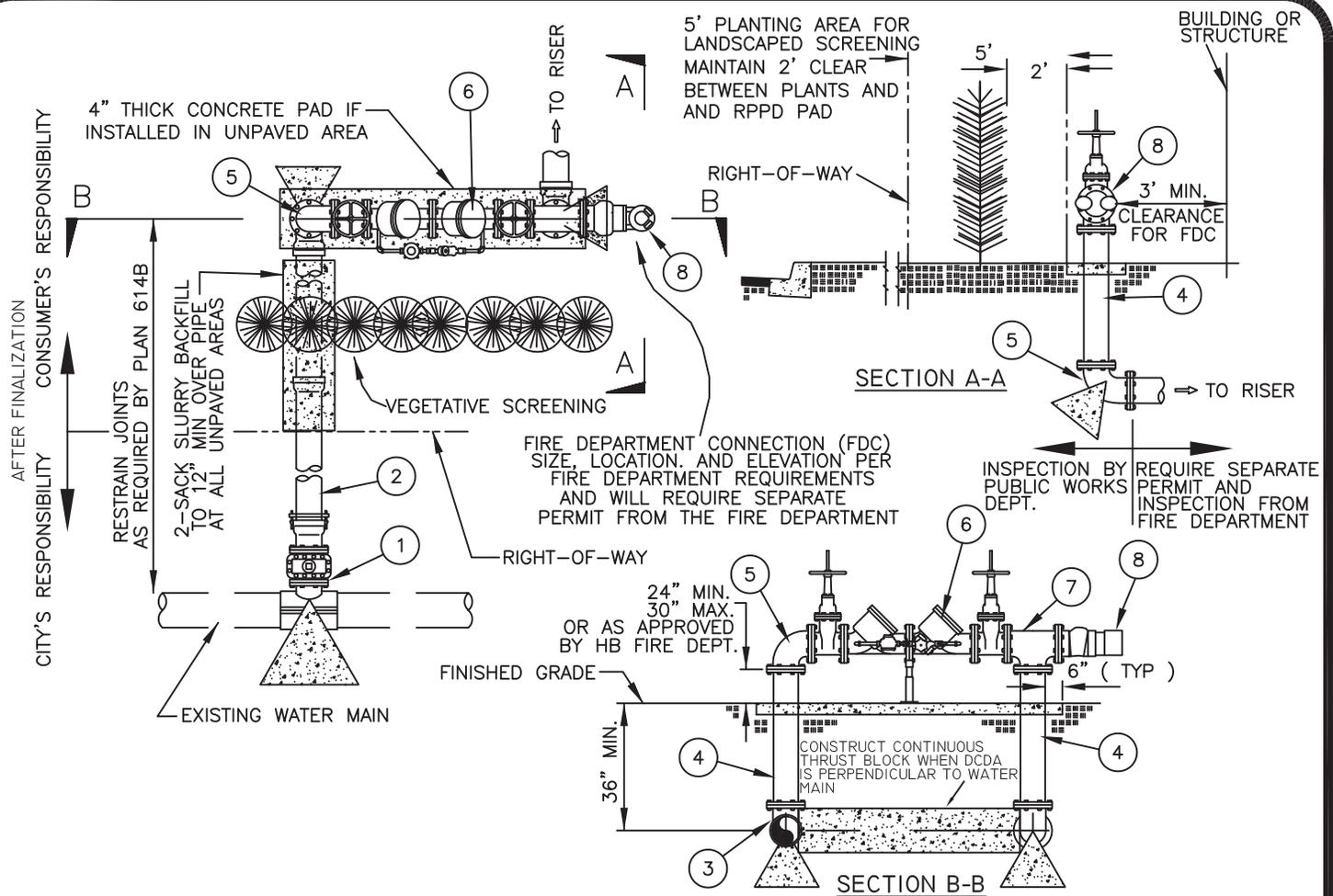
DEPARTMENT OF PUBLIC WORKS



BACKFLOW PROTECTION NOTES

STANDARD PLAN

609B



NOTES:

1. ALL DUCTILE IRON SPOOLS SHALL BE ONE PIECE, CLASS 53, FLANGED, AND SHALL BE INSTALLED PER THE CITY OF HUNTINGTON BEACH STANDARD PLANS AND SPECIFICATIONS.
2. ALL FASTENERS SHALL BE TYPE 316 STAINLESS STEEL.
3. PIPE SUPPORT(S) ARE REQUIRED PER STANDARD PLAN 616.
4. ALL ABOVE GROUND PIPING, INCLUDING BACKFLOW DEVICE, SHALL BE PAINTED ACCORDING TO SPEC. 02087.2. THE MARKINGS, INDICATION FLOW, SIZE, MODEL NUMBER, AND SERIAL NUMBER SHALL BE PERMANENTLY FIXED TO THE BODY OF THE BACKFLOW DEVICE, AND MUST REMAIN VISIBLE AFTER PAINTING.

5. CONTRACTOR MUST POSSESS AN A, C16, OR C-34 CONTRACTORS LICENSE TO PERFORM THE FIRE SERVICE CONSTRUCTION WITH EXCEPTION THAT C36 CONTRACTOR IS NOT ALLOWED TO WORK UPSTREAM FROM THE BACKFLOW DEVICE.
6. ALL FITTINGS SHALL BE DUCTILE IRON.
7. ALL FITTINGS SHALL BE INSTALLED PER STANDARD PLAN 614.
8. BACKFLOW DEVICE MUST BE AN APPROVED DEVICE BY U.S.C. AND MUST BE APPROVED BY PUBLIC WORKS DEPARTMENT.
9. NO MECHANICAL JOINT FITTINGS.
10. IMMEDIATELY AFTER INSTALLATION, RELOCATION, OR REPAIR, ALL BACKFLOW PREVENTION DEVICES SHALL BE TESTED BY A CERTIFIED TESTER APPROVED BY THE CITY OF HUNTINGTON BEACH. NO SERVICE SHALL BE DEEMED ACCEPTABLE UNTIL THE DEVICE IS TESTED AND CERTIFIED AFTER INSTALLATION.

ITEM	DESCRIPTION	SPECIFICATION	QTY
①	TEE AND VALVE OR TAPPING TEE AND VALVE, PER STD. 619	02085.9	1
②	PVC PIPE OR D.I. PIPE LATERAL. SEE APPROVED PROJECT DRAWINGS.	02510.9	AR
③	D.I. 90° ELL, CL.350, FLANGED X PUSH-ON, P.E. WRAPPED, W/THRUST BLOCK PER STANDARD 614.	02510.1	1
④	D.I. FLANGED SPOOL, TC 53, P.E. WRAPPED - LENGTH AS REQUIRED.	02510.1	2
⑤	D.I. 90° ELL, CL. 350, FLG. X FLG.	02510.1	1
⑥	DOUBLE CHECK DETECTOR CHECK (4" MIN.), WITH 3/4" METER, NON-TOUCH READ PER CALIFORNIA DEPARTMENT OF PUBLIC HEALTH APPROVED LIST.	02087.2	1
⑦	D.I. FLANGED TEE, CL. 350, W/ 4" MINIMUM FLANGED BRANCH, FOR FDC	02085.9	1
⑧	4" MINIMUM DIAMETER D.I. FIRE DEPT. CONNECTION, WITH APPROVED CHECK VALVE	02510.1	1

APPROVED:

CITY ENGINEER

DATE: 9/1/13

CITY OF HUNTINGTON BEACH

DEPARTMENT OF PUBLIC WORKS



4" - 10" DOUBLE CHECK
DETECTOR ASSEMBLY (DCDA)
(FIRE SERVICE ONLY)

STANDARD PLAN

618