

NOTES:

1. TAG WILL BE MANUFACTURED FROM POLYURETHANE BEHR DESOPAN, INCORPORATING AN INTEGRAL ATTACHMENT NECK AND REINFORCED ATTACHMENT HOLE AND WILL BE CAPABLE OF WITHSTANDING 180 LBS. PULL FORCE.
2. THE TAG COLOR WILL BE OSHA SAFETY PURPLE WITH BLACK LETTERS.
3. ATTACH TAG WITH NYLON TIE.

APPROVED:  DATE: <u>4-2-2014</u>		<b>CITY OF ESCONDIDO</b> UTILITY DEPARTMENT	SCALE: NOT TO SCALE
UTILITY ENGINEER			STANDARD DRAWING NO. <b>RW-1-E</b>
REVISED	APPROVED	<b>RECYCLED WATER STANDARD TAG</b>	

1. Pipe Identification (mutually exclusive choices)

- a. All new buried PVC pressure pipes for recycled water shall be OSHA safety purple in color and marked on opposite sides to read "CAUTION - RECYCLED WATER – DO NOT DRINK" in intervals not to exceed 5' with 3/8" high letters. The recycled water PVC piping shall be installed with detectable tape.
- b. All new buried recycled water pipe that is not PVC shall be installed with warning tape. The plastic warning tape shall be an inert plastic film specifically formulated for prolonged underground use and shall be prepared with black printing on a OSHA safety purple field having the words "CAUTION – RECYCLED WATER" in 1" high letters. The minimum thickness shall be 4 mils and the overall width of the tape shall be 12".

Warning tape shall be installed directly on the top of the pipe longitudinally and shall be centered. The warning tape shall be installed continuously for the entire length of the pipe and shall be fastened to each pipe length by plastic adhesive tape banded around the pipe and warning tape at no more than 5' intervals. Taping attached to the sections of pipe before laying in the trench shall have 5' minimum overlap for continuous coverage.


- c. All exposed recycled water piping which is above ground or in vaults shall be primed and painted with two coats of OSHA safety purple rust proof paint and shall be marked with tagging, warning tape or painted letters stating "CAUTION: RECYCLED WATER – DO NOT DRINK." Ultra-violet protection of PVC pipe must be provided.

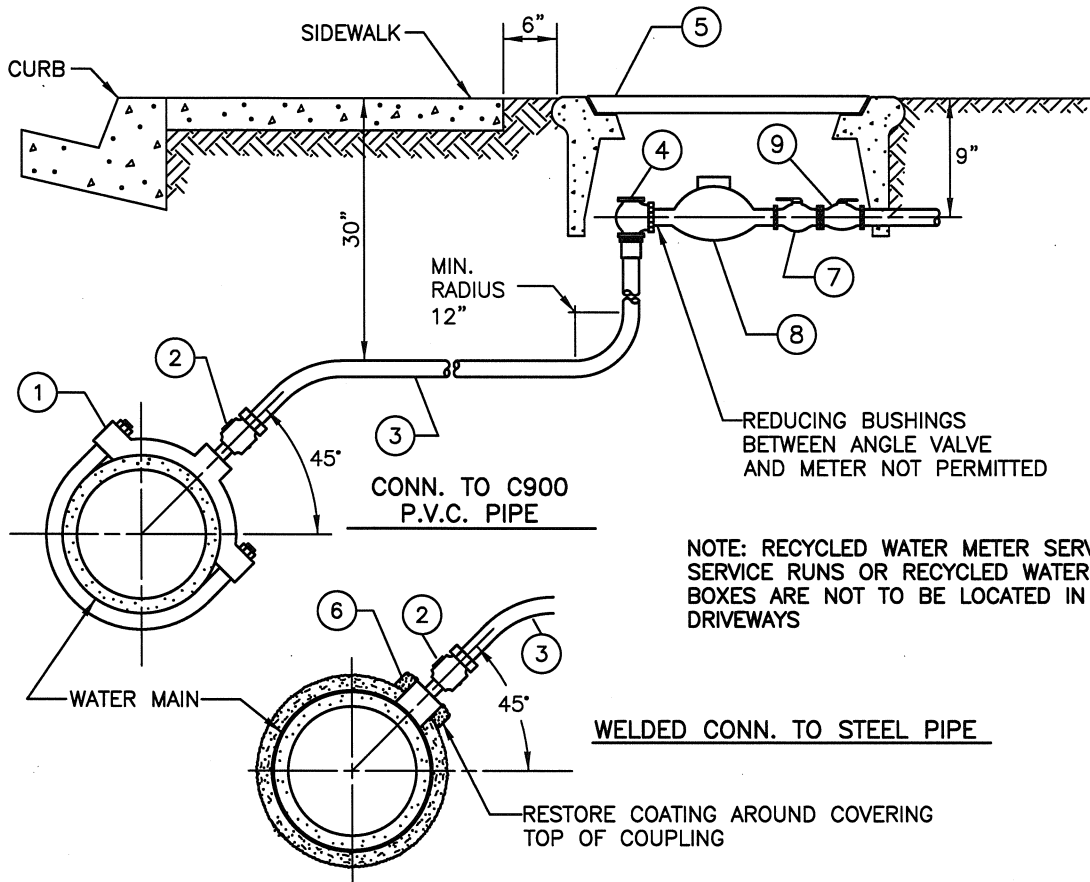
If materials and warning tape are not available, other methods of identification may be approved the City of Escondido upon approval from the San Diego County Department of Health Services.

2. Magnetic Warning/Locating Tape

This tape is to be placed longitudinally and centered above all buried pressurized PVC recycled water pipe, approximately 24" directly above the top of the pipe. The fastening tape shall be wrapped/tied tightly around the pipe and loosely around the magnetic tape. Other means of attaching the tape to the pipe during backfill of trench may be used if suitable for the job as determined by the agency of the inspector. The minimum tape width shall be 6".

The tape must be printed with the following words: "CAUTION: RECYCLED WATER – DO NOT DRINK"

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UTILITY ENGINEER				
REVISED	APPROVED		<b>RECYCLED WATER</b> <b>PIPE IDENTIFICATION &amp; WARNINGS</b>	STANDARD DRAWING NO. <b>RW-2-E</b>



NOTE: RECYCLED WATER METER SERVICE SERVICE RUNS OR RECYCLED WATER METER BOXES ARE NOT TO BE LOCATED IN DRIVEWAYS

WELDED CONN. TO STEEL PIPE

FOR COMPONENT DETAILS REFER TO THE CITY OF ESCONDIDO UTILITIES APPROVED MATERIALS LIST LOCATED ON THE CITY WEBSITE. SEE THE CITY OF ESCONDIDO'S "RULES AND REGULATION FOR RECYCLED WATER" FOR COMPLETE DETAILS ALL COMPONENTS SHALL BE COLORED OSHA SAFETY PURPLE OR LABELED "RECYCLED"

**LEGEND ON PLANS**



ITEM NO.	DESCRIPTION	MATERIAL SPECIFICATIONS	REMARKS
1	DOUBLE STRAP SADDLE AWWA TAPER THREAD CC OR CS CORPORATION STOP MALE AWWA TAPER THREAD CC OR CS X PACK JOINT (1" ONLY)		FLAT STRAPS
2	REQ'D TUBING, COPPER SERVICE SIZE (1" ONLY) INSTALL WARNING TAPE PER RW-2-E, 1.b.	TYPE 'K' SOFT	
3	ANGLE BALL VALVE WITH LOCK WING COMPRESSION NUT. WITH A 5/8" X 3/4" METER, THE REDUCTION SHALL BE IN THE ANGLE VALVE. TAG ANGLE VALVE PER RW-1-E.		
4	METER BOX - #4 1/2 - OSHA SAFETY PURPLE POLYMER/COMPOSITE - IMPRINTED "RECYCLED WATER" TO BE SUPPLIED BY CITY.	PLASTIC/CONCRETE	1 PIECE LID
5	HIGH PRESSURE FORGED STEEL COUPLING (1" ONLY)	3,000 PSI	WELD TO PIPE
6	BALL VALVE - SUPPLIED BY CITY		NO SUBSTITUTIONS
7	METER TO BE PAINTED OSHA SAFETY PURPLE - TO BE PURCHASED FROM CITY.		
8	TEST COCK - BRASS BALL VALVE, 1/4" - 1"		

APPROVED:  DATE: 4-2-2014  
 UTILITY ENGINEER

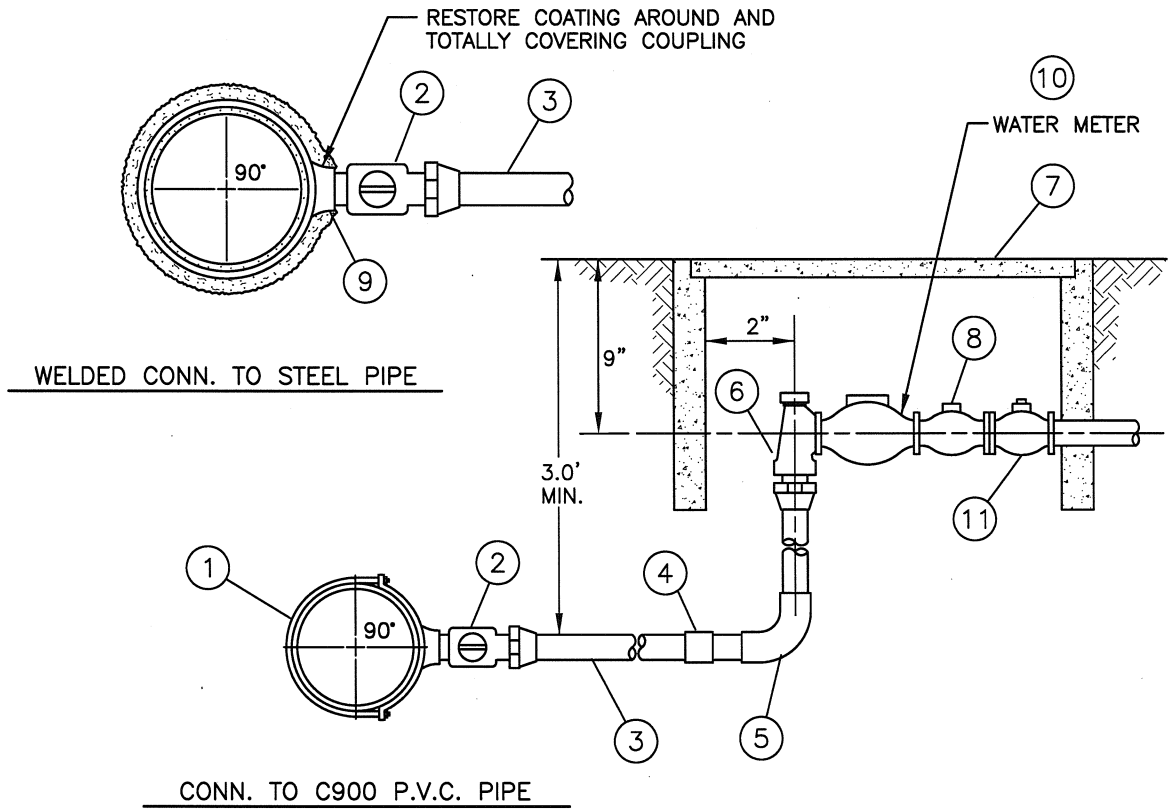
**CITY OF ESCONDIDO**  
 UTILITY DEPARTMENT

SCALE:  
 NOT TO SCALE

REVISED	APPROVED

**1" RECYCLED WATER SERVICE FOR 3/4" AND 1" METERS**


STANDARD DRAWING NO.  
**RW-3-E**

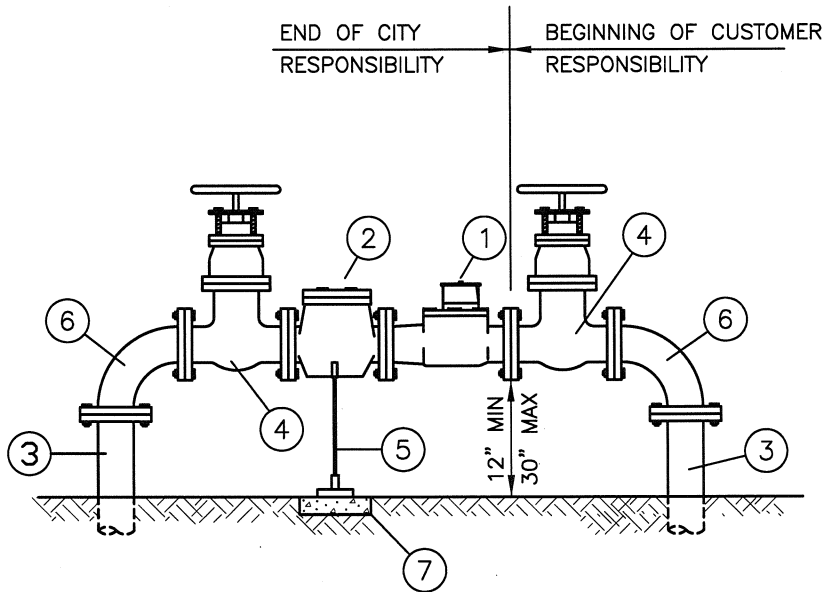


FOR COMPONENT DETAILS REFER TO THE CITY OF ESCONDIDO UTILITIES APPROVED MATERIALS LIST LOCATED ON THE CITY WEBSITE.  
 SEE THE CITY OF ESCONDIDO'S "RULES AND REGULATION FOR RECYCLED WATER" FOR COMPLETE DETAILS ALL COMPONENTS SHALL BE COLORED OSHA SAFETY PURPLE OR LABELED "RECYCLED"

LEGEND ON PLANS  
 — (RW)

ITEM NO.	DESCRIPTION	REMARKS
①	SERVICE CLAMP (2" ONLY)	FLAT STRAPS  1 PIECE LID  NO SUBSTITUTIONS 3,000 PSI STEEL
②	CORPORATION STOP - INSTALL WITH KEY ON SIDE AND OPEN TAP (2" ONLY)	
③	COPPER TUBING - TYPE 'K' SOFT (2" ONLY). INSTALL WARNING TAPE PER RW-2-E, 1.b.	
④	COPPER COUPLING WHEN SERVICE IS OVER 20' - SILVER SOLDER (2" ONLY)	
⑤	COPPER 90° SLIP FITTING (SILVER SOLDER ONLY)	
⑥	ANGLE BALL VALVE WITH LOCK WING. INLET COMP/OUTLET METER FLANGE - TAG ANGLE VALVE PER RW-1-E.	
⑦	METER BOX - BROOKS #6 - OSHA SAFETY PURPLE POLYMER/COMPOSITE - REFER TO S.D.R.S.D WS-03 FOR LOCATION - LID TO BE IMPRINTED "RECYCLED WATER" - SUPPLIED BY CITY	
⑧	BALL VALVE - SUPPLIED BY CITY	
⑨	HIGH PRESSURE FORGED STEEL COUPLING 2" F.I.P., WELDED TO PIPE	
⑩	METER TO BE PAINTED OSHA SAFETY PURPLE - TO BE PURCHASED FROM CITY	
⑪	TEST COCK - BRASS BALL VALVE	

APPROVED: 	DATE: 4-2-2014	<b>CITY OF ESCONDIDO</b> UTILITY DEPARTMENT	SCALE: NOT TO SCALE
UTILITY ENGINEER			
REVISED	APPROVED	<b>2" RECYCLED WATER SERVICE FOR 1 1/2" AND 2" METERS</b>	STANDARD DRAWING NO. <b>RW-4-E</b>



- ① WATER METER – METER SHALL BE PURCHASED FROM THE CITY. METER AND STRAINER SHALL BE TYPE AND SIZE APPROVED BY THE CITY. THE CITY SHALL PROVIDE, INSTALL AND MAINTAIN METER AND STRAINER.
- ② STRAINER – SHALL BE TYPE AND SIZE APPROVED BY THE CITY AND BE SUPPLIED BY THE CITY.
- ③ RISER SPOOLS – SHALL BE CEMENT LINED & COATED STEEL WITH WELD ON RAISED FACE FLANGES OR DUCTILE IRON SPOOLS
- ④ FLANGED GATE VALVE (HUB OR HANDWHEEL) PER STANDARD DRAWING RW-8-E
- ⑤ VALVE SUPPORT STAND
- ⑥ 90-DEGREE CAST IRON ELBOW
- ⑦ CONCRETE PAD – 12" X 12" X 3 ½"

**NOTES:**

- A. SEE THE CITY OF ESCONDIDO'S "RULES AND REGULATIONS FOR RECYCLED WATER" FOR COMPLETE DETAILS
- B. THE VALVES AND METER TO BE TAGGED PER RW-1-E
- C. THE ASSEMBLY WILL BE PRIMED AND PAINTED PER RW-2-E, 1.c.
- D. ALL INSTALLATIONS SHALL BE ABOVE GROUND
- E. FOR COMPONENT DETAILS REFER TO THE CITY OF ESCONDIDO UTILITIES APPROVED MATERIALS LIST LOCATED ON THE CITY WEBSITE.

LEGEND ON PLANS



APPROVED:  DATE: 4-2-2014  
 UTILITY ENGINEER

**CITY OF ESCONDIDO**  
 UTILITY DEPARTMENT

SCALE:  
 NOT TO SCALE

REVISED	APPROVED

**RECYCLED WATER**  
**METER, 3" AND LARGER**

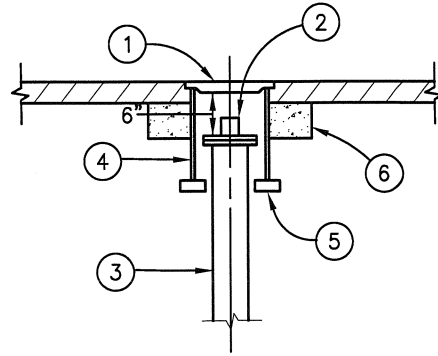
STANDARD DRAWING NO.  
**RW-5-E**

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APPROVED: _____		DATE: <u>4-2-2014</u>	CITY OF ESCONDIDO UTILITY DEPARTMENT	SCALE: NOT TO SCALE
UTILITY ENGINEER				STANDARD DRAWING NO.
REVISED	APPROVED			RW-6-E

FOR COMPONENT DETAILS REFER TO THE CITY OF ESCONDIDO UTILITIES APPROVED MATERIALS LIST LOCATED ON THE CITY WEBSITE.

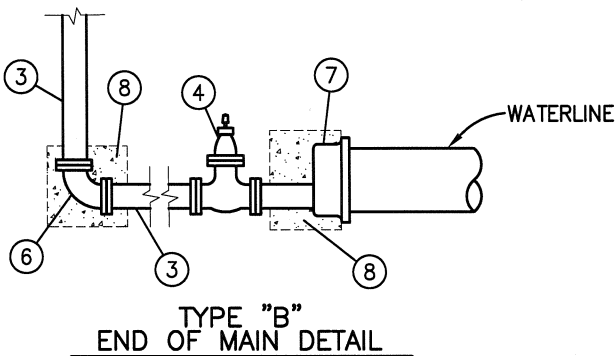
- ① SET 12" O.D. C.I. GATE WELL CAP MARKED "RECYCLED WATER"
- ② SET 4"X4" FEMALE FACED COMPANION FLANGE WITH 4" ABS PLASTIC PLUG
- ③ 4" DUCTILE IRON PIPE
- ④ C900 PVC PIPE CL235
- ⑤ CONC. BLOCKS.
- ⑥ 6" x 6" X-SECT. CONC. COLLAR.



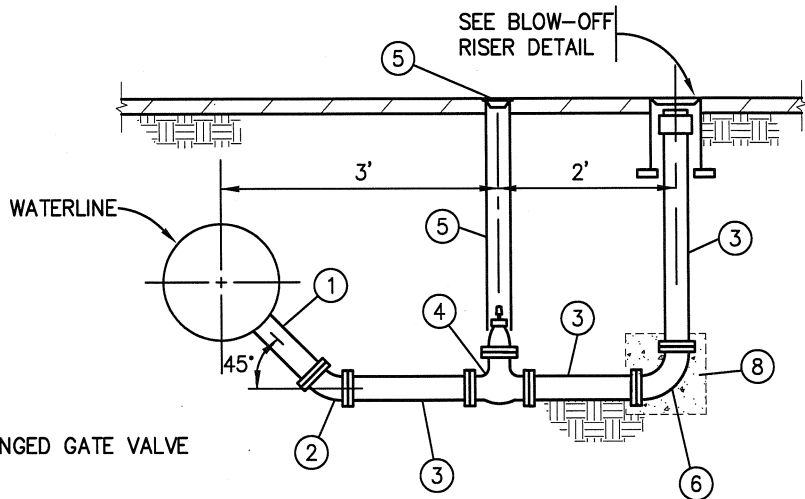
**BLOW-OFF RISER DETAIL**

**NOTES**

ALL COMPONENTS SHALL BE COLORED OSHA SAFETY PURPLE OR LABELED "RECYCLED"



- ① FLANGED TEE (LINE SIZE X 4")
- ② SHORT RADIUS 45° FLANGED BEND (SAME MATERIAL AS ITEM 3)
- ③ 4" FLANGED DUCTILE IRON PIPE
- ④ 4" RESILIENT SEATED 200 PSI FLANGED GATE VALVE PER W-4-E
- ⑤ VALVE WELL PER W-4-E
- ⑥ 90° FLANGED BEND (SAME MATERIAL AS ITEM 3)
- ⑦ DUCTILE IRON LINE SIZE P.O. X 4" FLANGE REDUCER
- ⑧ CONCRETE THRUST BLOCK PER SDRSD WT-01



LEGEND ON PLANS



APPROVED: *[Signature]* DATE: 4-2-2014

UTILITY ENGINEER

REVISED

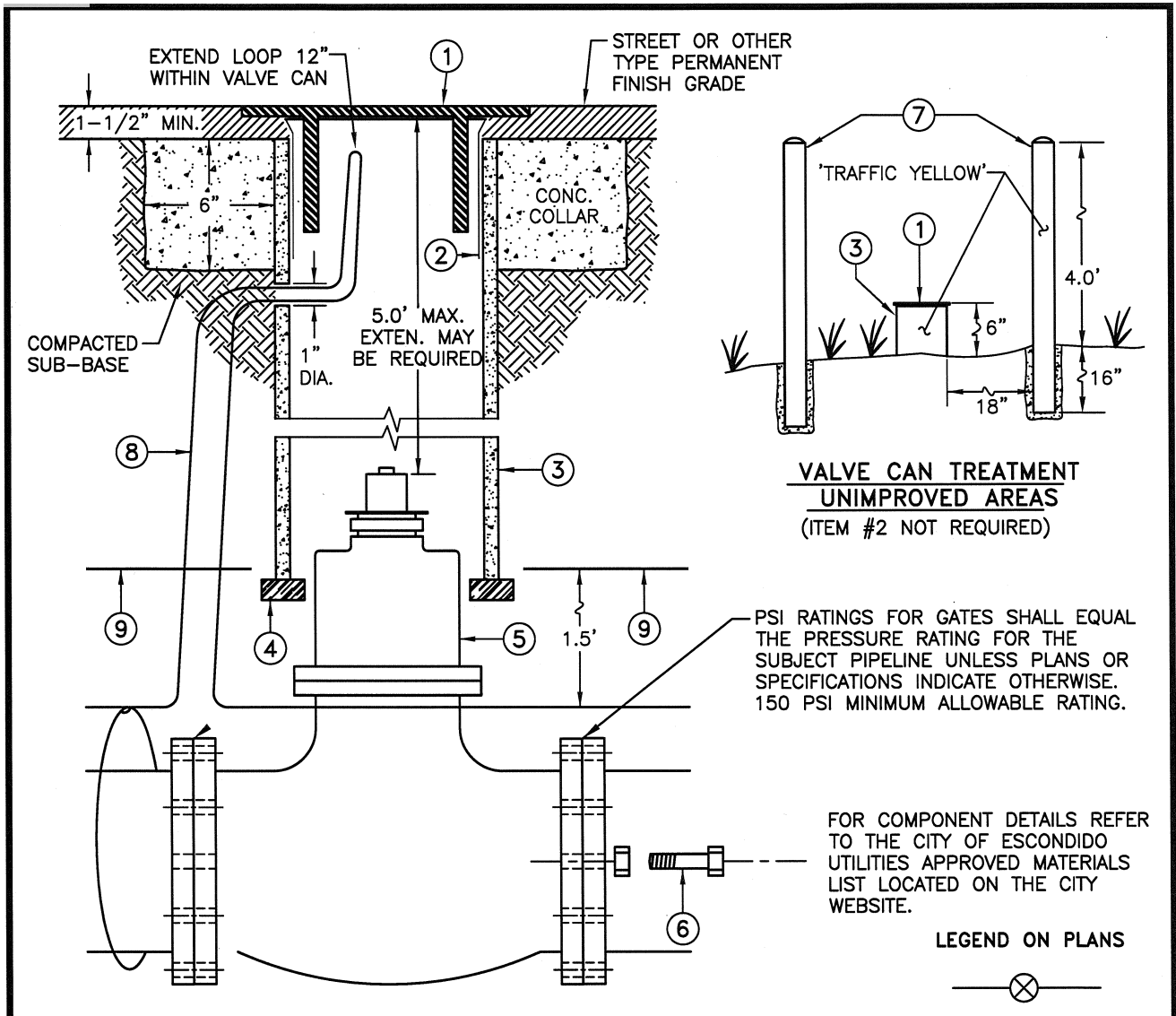
APPROVED

**CITY OF ESCONDIDO**  
 UTILITY DEPARTMENT

SCALE:  
 NOT TO SCALE

**4" RECYCLED WATER  
 BLOW-OFF ASSEMBLY**

STANDARD DRAWING NO.  
**RW-7-E**



**VALVE CAN TREATMENT  
 UNIMPROVED AREAS**  
 (ITEM #2 NOT REQUIRED)


PSI RATINGS FOR GATES SHALL EQUAL THE PRESSURE RATING FOR THE SUBJECT PIPELINE UNLESS PLANS OR SPECIFICATIONS INDICATE OTHERWISE. 150 PSI MINIMUM ALLOWABLE RATING.

FOR COMPONENT DETAILS REFER TO THE CITY OF ESCONDIDO UTILITIES APPROVED MATERIALS LIST LOCATED ON THE CITY WEBSITE.

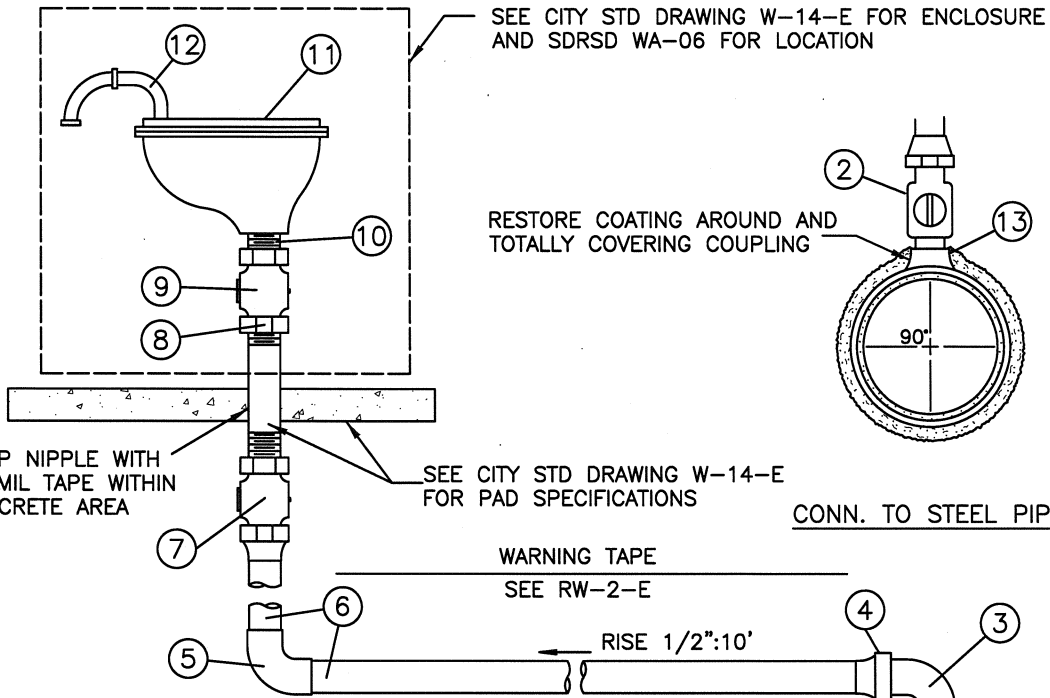
LEGEND ON PLANS



ITEM NO.	SIZE & DESCRIPTION	REMARKS
①	8" CAST IRON VALVE CAN COVER MARKED 'RECYCLED WATER'	LONG SKIRT
②	8"x12" GALVANIZED METAL SLIP CAN (W/ VERTICAL SPLIT)	20 GAUGE
③	8"x REQUIRED LENGTH UN-REINFORCED CONCRETE PIPE OR C-900 PVC PIPE	
④	2"x4" REDWOOD BLOCKS	
⑤	GATE VALVE. ALL GATES TO CONFORM TO LATEST AWWA C-509 SPECIFICATIONS. ALL GATES TO BE FLANGE x FLANGE, NON-RISING STEM. VALVES SHALL OPEN COUNTER-CLOCKWISE.	
⑥	HEXAGONAL BOLT & NUT, TYPE 316 STAINLESS STEEL	
⑦	VALVE MARKER POST, 4" STEEL PIPE CONCRETE FILLED & ANCHORED	
⑧	#10 SOFT BARE CONTINUOUS COPPER WIRE	
⑨	6" WIDE STRIP OF OSHA SAFETY PURPLE MAGNETIC WARNING TAPE LAID 2' OVER PVC PIPE OR INSTALL WARNING TAPE PER RW-2-E, 1.b., ON PIPE THAT IS NOT PVC.	

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REVISOR: _____	APPROVED: _____		STANDARD DRAWING NO. <b>RW-8-E</b>
<b>RECYCLED WATER GATE VALVE &amp; VALVE CAN</b>			





SEE CITY STD DRAWING W-14-E FOR ENCLOSURE AND SDRSD WA-06 FOR LOCATION

RESTORE COATING AROUND AND TOTALLY COVERING COUPLING

WRAP NIPPLE WITH 10-MIL TAPE WITHIN CONCRETE AREA

SEE CITY STD DRAWING W-14-E FOR PAD SPECIFICATIONS

CONN. TO STEEL PIPE

WARNING TAPE  
SEE RW-2-E

RISE 1/2":10'

- ① CONNECTION TO MAIN AS IN STANDARD DRAWINGS RW-3-E FOR 1" AND RW-4-E FOR 2". CONNECTION TO BE MADE VERTICALLY
- ② CORPORATION STOP: MIP X MIP
- ③ 90 ELL: FIP X FIP.
- ④ ADAPTER: MIP X COMPRESSION
- ⑤ 2" AIR VALVE SERVICE USE 90° COPPER ELL (SILVER SOLDER ONLY) 1" SWEEP OK.
- ⑥ TYPE "K" SOFT COPPER.
- ⑦ BALL VALVE: FIP X FLARE WITH HANDLE.
- ⑧ BRASS NIPPLE MALE IRON PIPE THREADS, MINIMUM LENGTH 6", MAX 12".
- ⑨ BALL VALVE: FIP X FIP WITH HANDLE.
- ⑩ BRASS NIPPLE MALE IRON PIPE THREADS.
- ⑪ COMBINATION AIR VALVE ASSEMBLY
- ⑫ 2-90° ELLS (STAINLESS STEEL SCREEN ON OUTLET END).
- ⑬ HIGH PRESSURE FORGED STEEL COUPLING (WELDED TO PIPE). 3000 PSI STEEL


RECYCLED WATER MAIN

FOR COMPONENT DETAILS REFER TO THE CITY OF ESCONDIDO UTILITIES APPROVED MATERIALS LIST LOCATED ON THE CITY WEBSITE.

NOTES:

- A. ITEM ⑪ & ENCLOSURE (SEE CITY STD. DRAWING W-14-E) TO BE PRIMED & PAINTED WITH 2 COATS OF OSHA SAFETY PURPLE RUST PROOF PAINT. LABEL WITH WORDS "RECYCLED WATER" PAINTED IN WHITE LETTERS 1 1/2" HIGH
- B. ITEM ⑪ TO BE TAGGED PER RW-1-E
- C. ITEM ⑥, INSTALL WARNING TAPE PER RW-2-E, 1.b.
- D. COPPER COUPLING (SILVER SOLDER ONLY) SERVICES OVER 100 FEET AND 2" SERVICE OVER 20 FEET

LEGEND ON PLANS

APPROVED:  DATE: 4-2-2014  
 UTILITY ENGINEER

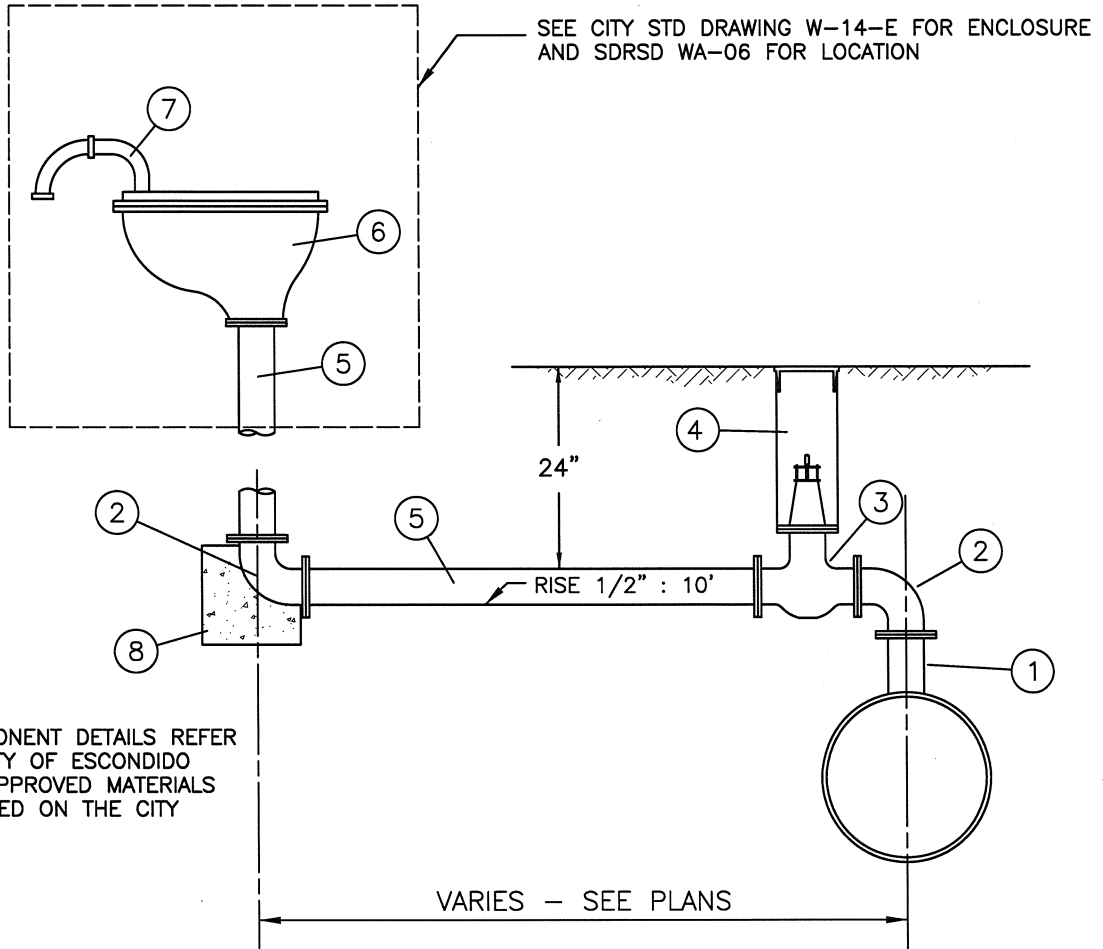
CITY OF ESCONDIDO  
 UTILITY DEPARTMENT

SCALE:  
 NOT TO SCALE

REVISED	APPROVED

RECYCLED WATER  
 COMBINATION AIR VALVE  
 1" & 2"

STANDARD DRAWING NO.  
**RW-9-E**



FOR COMPONENT DETAILS REFER TO THE CITY OF ESCONDIDO UTILITIES APPROVED MATERIALS LIST LOCATED ON THE CITY WEBSITE.

- 1 FLANGED OUTLET, CEMENT LINED AND COATED STEEL
- 2 FLANGED, 90° ELL, CEMENT LINED AND COATED STEEL OR CEMENT LINED DUCTILE IRON
- 3 VALVE (SEE STD. DWG. RW-8-E)
- 4 VALVE WELL AND CAP (SEE STD. DWG. RW-8-E)
- 5 STEEL PIPE, CEMENT LINED AND COATED
- 6 COMBINATION AIR VALVE
- 7 2 - 90° ELLS (SCREENED ON THE OUTLET END)
- 8 CONCRETE THRUST BLOCK PER SDRSD WT-01

NOTES:

- A. PRIME & PAINT ENCLOSURE AND VALVE WITH 2 COATS OF OSHA SAFETY PURPLE RUST PROOF PAINT. LABEL WITH WORDS "RECYCLED WATER" PAINTED IN WHITE LETTERS 1 1/2" HIGH.
- B. THE AV VALVE TO BE TAGGED PER RW-1-E

LEGEND ON PLANS

APPROVED:  DATE: 4-2-2014  
 UTILITY ENGINEER

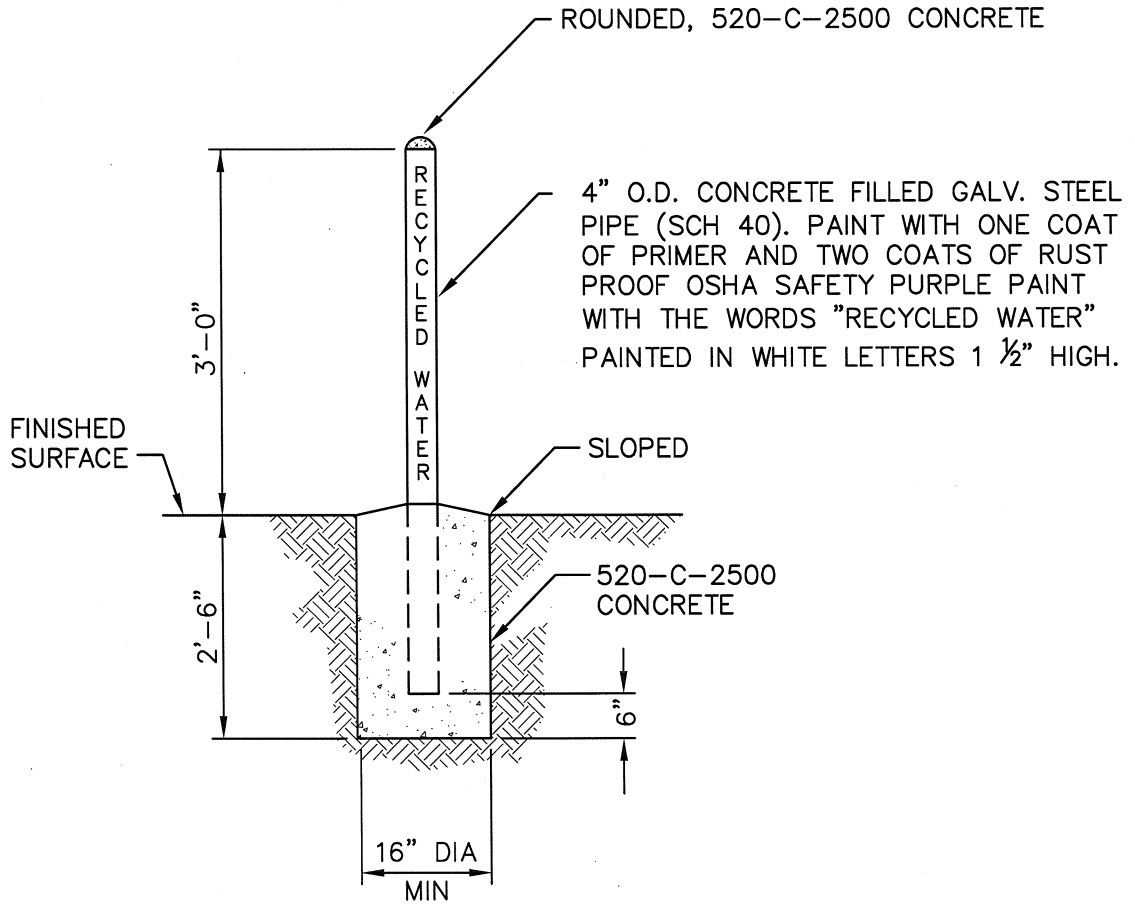
**CITY OF ESCONDIDO**  
 UTILITY DEPARTMENT

SCALE:  
 NOT TO SCALE

REVISED	APPROVED

**RECYCLED WATER**  
**4" COMBINATION AIR VALVE**

STANDARD DRAWING NO.  
**RW-10-E**



APPROVED:  DATE: 4-2-2014

UTILITY ENGINEER

REVISED

APPROVED

CITY OF ESCONDIDO  
 UTILITY DEPARTMENT

SCALE:  
 NOT TO SCALE

RECYCLED WATER  
 GUARD POST

STANDARD DRAWING NO.  
 RW-11-E