


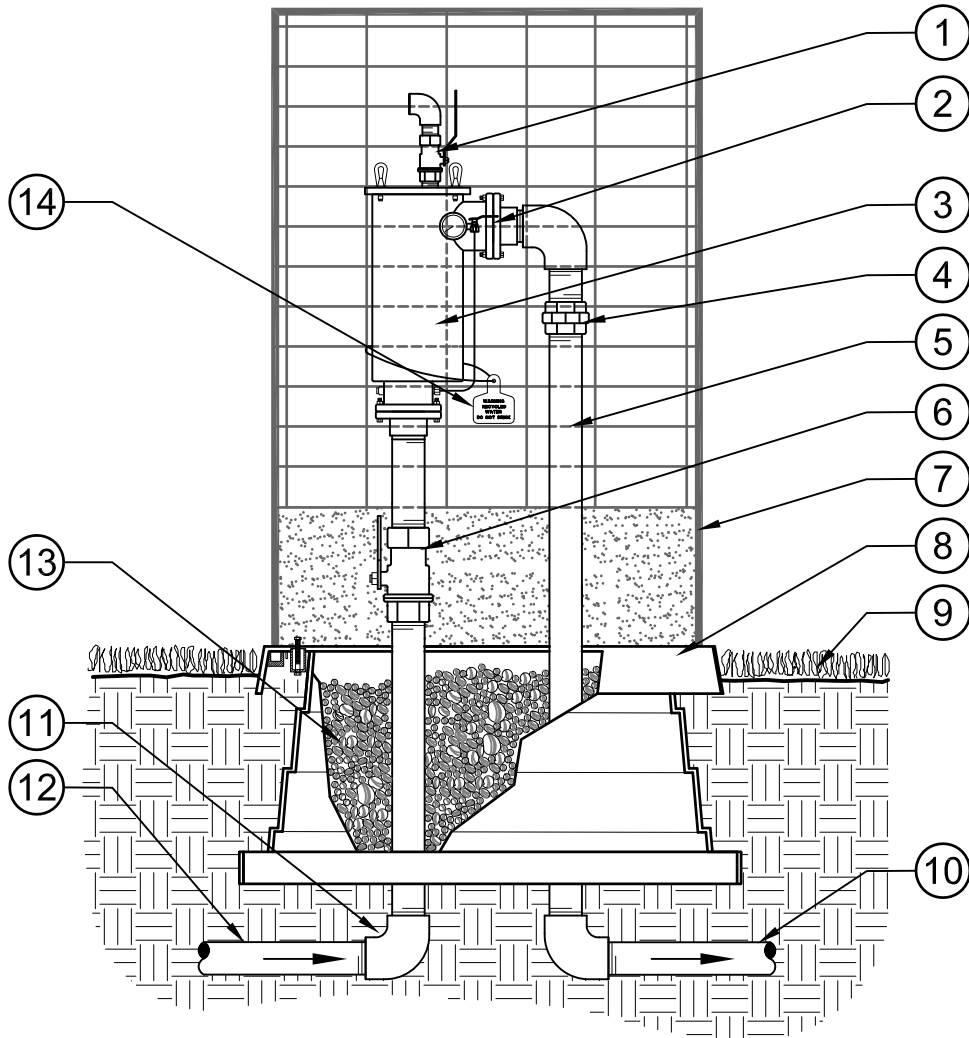


- ① FINISH GRADE
- ② CONCRETE METER BOX PER WATER DISTRICT STANDARDS
- ③ WATER METER PER WATER DISTRICT STANDARDS
- ④ TYPE K COPPER SERVICE LATERAL PER WATER DISTRICT STANDARDS
- ⑤ TYPE K COPPER TO BACKFLOW PREVENTION DEVICE
- ⑥ 6" MINIMUM CRUSHED GRAVEL PER WATER DISTRICT STANDARDS
- ⑦ COMPACT SUBGRADE
- ⑧ RECYCLED WATER WARNING TAG (PER LOCAL STANDARDS)

 STD. R-001	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13
	RECLAIMED TYPICAL WATER METER		
	CONNECTION ONLY	APPROVED BY: MPH	
3"=1'-0"	REV:		



- | | |
|--|---|
| ① FLUSH ASSEMBLY | ⑧ PRE-FABRICATED QUICKPAD AND MOUNTING HARDWARE |
| ② FLANGE (2 REQUIRED) (SIZE VARIES) | ⑨ FINISH GRADE |
| ③ BASKET STRAINER | ⑩ BRASS/COPPER MAINLINE TO MASTER VALVE AND FLOW SENSOR |
| ④ BRASS UNION (1 REQUIRED) (LINE SIZE) | ⑪ BRASS ELBOWS (T x T) (THREE REQUIRED) (LINE SIZE) |
| ⑤ BRASS NIPPLES (LENGTH VARIES) (5 REQUIRED) (LINE SIZE) | ⑫ BRASS/COPPER MAINLINE FROM WATER SOURCE |
| ⑥ BRASS/BRONZE BALL VALVE (1 REQUIRED) (LINE SIZE) | ⑬ PEA GRAVEL |
| ⑦ STAINLESS STEEL STRAINER ENCLOSURE WITH GREEN POWDER COAT FINISH | ⑭ RECYCLED WATER WARNING TAG (PER LOCAL STANDARDS) |



RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS

DATE: 02-05-13

RECLAIMED BASKET STRAINER

FOR IRRIGATION SYSTEM

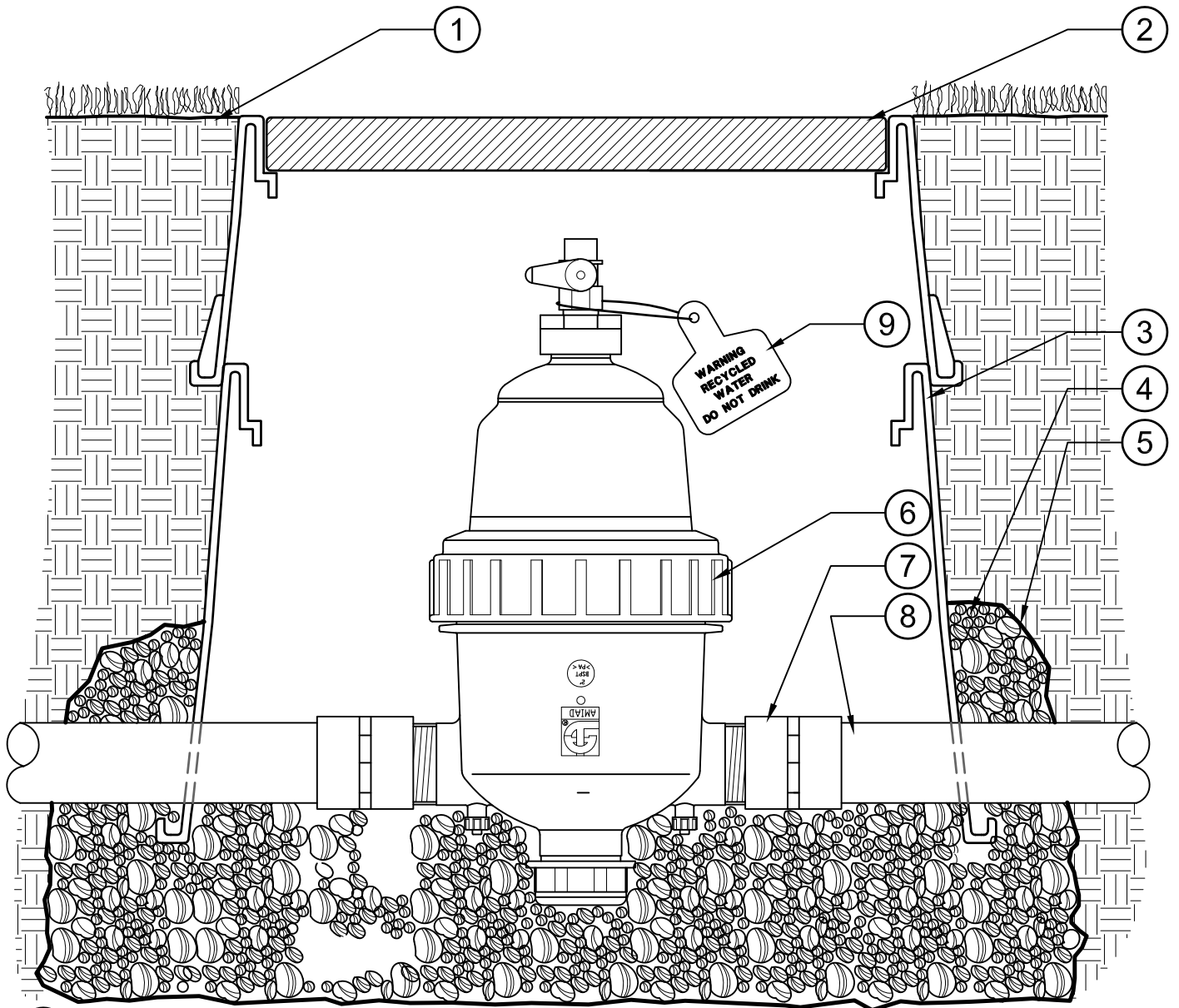
APPROVED BY: MPH

STD. R-002

1"=1'-0"

REV:





- | | |
|---|---|
| <p>① FINISH GRADE</p> <p>② STANDARD RECTANGULAR PURPLE VALVE BOX EXTENSION</p> <p>③ STANDARD RECTANGULAR PURPLE VALVE BOX (SEE SPECIFICATIONS). DO NOT CUT ADDITIONAL HOLES INTO BOX</p> <p>④ 3/4" GRAVEL SUMP IN, UNDER AND AROUND VALVE BOX. FILL TO TOP OF VALVE BOX HOLES</p> | <p>⑤ INSTALL FILTER FABRIC AROUND GRAVEL SUMP</p> <p>⑥ 2" AMIAD "T" SERIES FILTER</p> <p>⑦ PVC SCH. 80 FEMALE ADAPTER (2 REQUIRED)</p> <p>⑧ PURPLE PRESSURE SUPPLY LINE (SEE PLAN FOR SIZE)</p> <p>⑨ RECYCLED WATER WARNING TAG (PER LOCAL STANDARDS)</p> |
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RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS

DATE: 02-05-13

RECLAIMED 150 MESH FILTER

FOR RECYCLED WATER

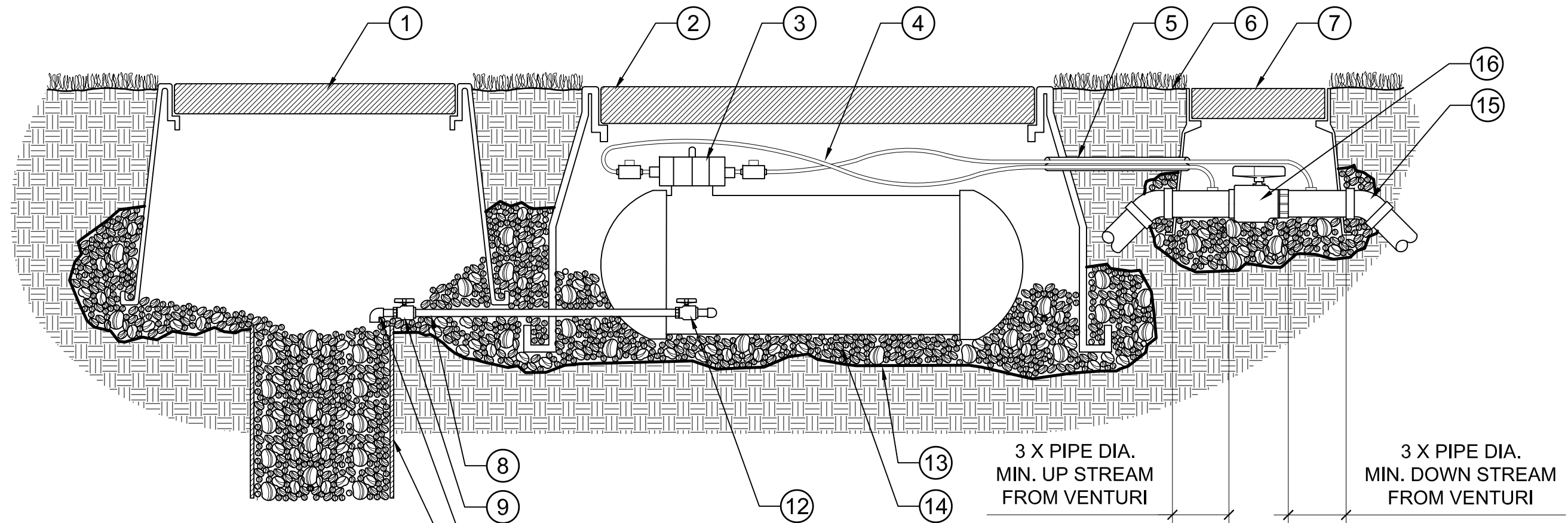
APPROVED BY: MPH

STD. R-003

3"=1'-0"

REV:





- ① PURPLE RECTANGULAR VALVE BOX (SEE SPECIFICATIONS (DO NOT CUT ADDITIONAL HOLES INTO BOX))
- ② PURPLE JUMBO VALVE BOX / PLASTIC VAULT WITH LID (BOX SIZE VARIES WITH INJECTOR MODEL. DRAWING ILLUSTRATES MODEL EZ010-FX)
- ③ FERTILIZER INJECTOR TANK AND AND ADJUSTMENT CAP
- ④ 1/4" SUPPLY TUBING (PROVIDED WITH INJECTOR KIT)
- ⑤ SECTION OF 1" PURPLE SCH. 40 PVC. DRILL HOLES IN VALVE BOXES FOR PASS THROUGH

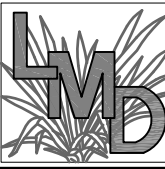
- ⑥ FINISH GRADE
- ⑦ PURPLE 10" ROUND VALVE BOX (DO NOT CUT ADDITIONAL HOLES INTO BOX)
- ⑧ SEGMENT OF PURPLE 1/2" SCH. 40 PVC, CONNECT TO BALL VALVE AT INJECTOR UNIT
- ⑨ 1/2" SCH. 40 BALL VALVE (1 REQUIRED)
- ⑩ 1/2" SCH. 40 S X S 90 DEGREE ELBOW (1 REQUIRED)
- ⑪ 12" SECTION OF 12" DIA. SDR 35 OR SCH. 40 PVC PIPE, FILL WITH GRAVEL

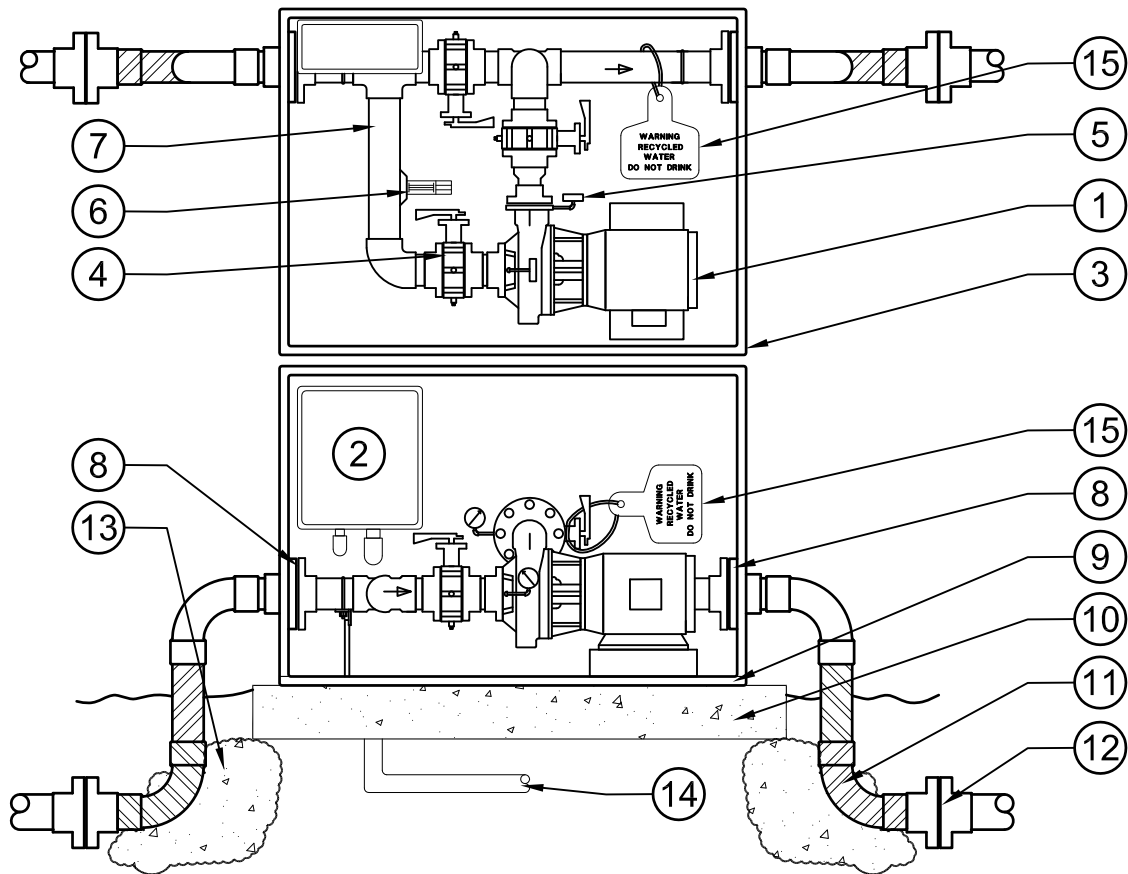
- ⑫ 1/2" SCH. 40 BALL VALVE (PROVIDED WITH INJECTOR KIT)
- ⑬ INSTALL FILTER FABRIC AROUND GRAVEL SUMP
- ⑭ 3/4" GRAVEL SUMP IN, UNDER AND AROUND VALVE BOX. FILL TO TOP OF VALVE BOX HOLES
- ⑮ SCH. 80 PVC 45 DEGREE ELBOW IN PRESSURE SUPPLY LINE AS NEEDED
- ⑯ BALL VALVE / INJECTOR TEE (MAINLINE SIZE) INSTALL WITH FLOW ARROWS AS SHOWN ON THE INJECTOR TEE. INJECTOR TEE MUST BE INSTALLED EQUAL TO OR BELOW THE LEVEL OF THE CAP ON THE TANK.

NOTE:




INSTALLATION OF BACKFLOW PREVENTION DEVICE DIRECTLY DOWNSTREAM OF WATER METER IS REQUIRED ON POTABLE AND RECYCLED IRRIGATION SYSTEMS USING A FERTILIZER INJECTOR.

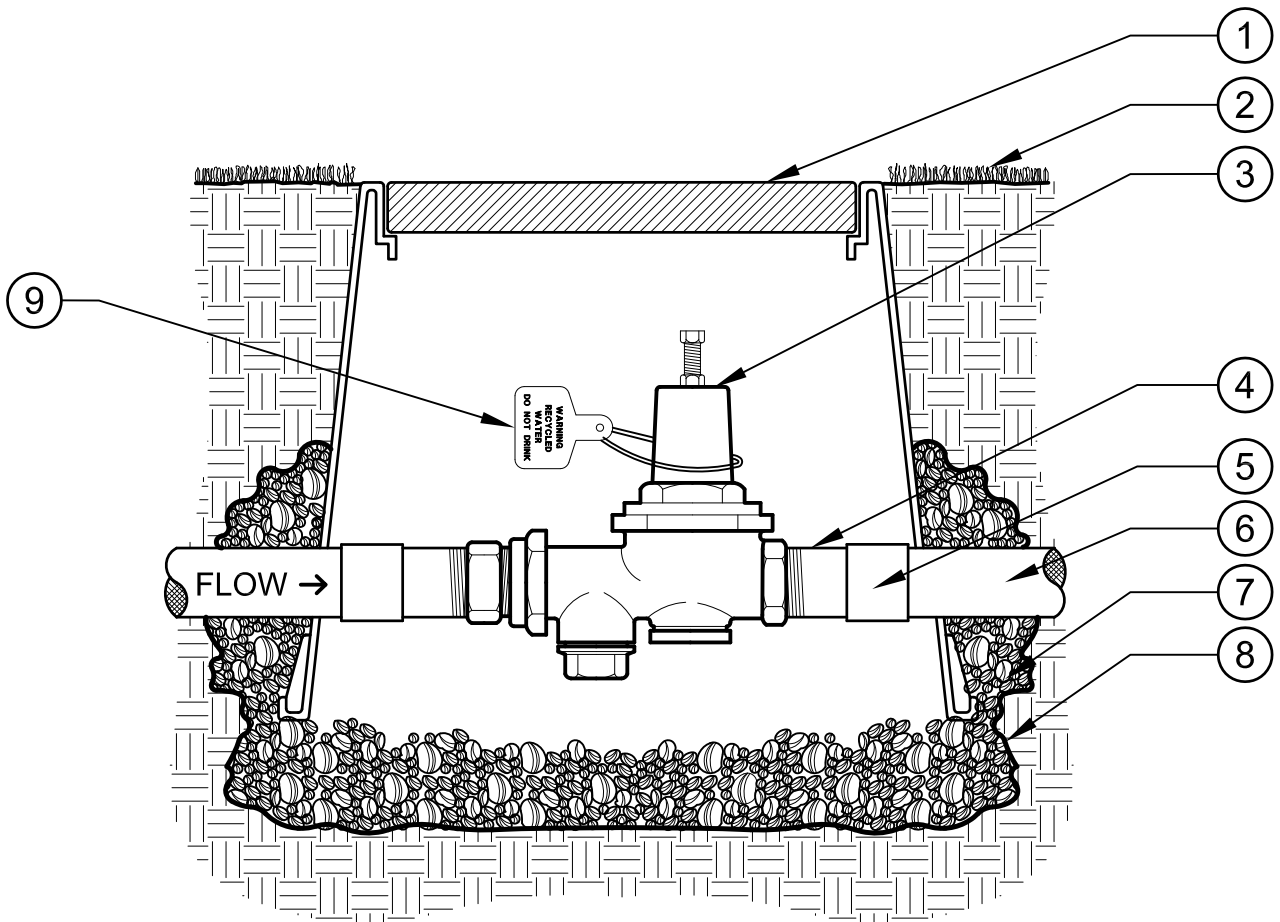
FOR SYSTEMS WITH A PRESSURE SUPPLY LINE SIZE GREATER THAN 2" CONSULT WITH RCTLMA REPRESENTATIVE PRIOR TO INSTALLATION OF FERTILIZER INJECTOR.

	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13
	FERTILIZER INJECTOR FOR UP TO 2" PRESSURE SUPPLY LINE		
STD. R-004	1 1/2"=1'-0"	APPROVED BY: MPH	REV:



- ① CLOSE-COUPLED END SUCTION CENTRIFUGAL PUMP, CAST IRON BRONZE FITTED, BACK PULLOUT DESIGN, MECHANICAL SEAL, ODP MOTOR WITH A VARIABLE FREQUENCY DRIVE SYSTEM.
- ② NEMA 4 ENCLOSED CONTROL PANEL, WITH CIRCUIT BREAKER, MAGNETIC STARTER, HOA SWITCH, AND COMPONENTS FOR AUTOMATIC BOOSTER PUMP CONTROL
- ③ MARINE GRADE ALUMINUM ENCLOSURE HINGED DESIGN WITH VENTING
- ④ CAST IRON ELASTOMER LINED FULL LUG WAFER STYLE BUTTERFLY VALVE
- ⑤ PRESSURE GAUGE, 2 1/2" DIAL, LIQUID FILLED, STAINLESS CASE, 0-200 P.S.I.
- ⑥ FLOW SWITCH, BRONZE, PADDLE STYLE NON-ADJUSTABLE, 100 P.S.I. RATED (OPTIONAL)
- ⑦ TYPE 304 STAINLESS STEEL (SIZE VARIES)
- ⑧ 150 POUND ANSI RATED BRASS OUTPUT FLANGE
- ⑨ FABRICATED STRUCTURAL ALUMINIUM BASEPLATE
- ⑩ 6" CONCRETE PAD, ASTM C-94, ACI STD. 318-83 DESIGN MIX, 2500 PSI RATED
- ⑪ DOUBLE PVC TAPE WRAPPED BRASS PIPE
- ⑫ PVC SCH. 80 / BRASS COMPANION FLANGE CONNECTION
- ⑬ CONCRETE THRUST BLOCK 4 CUBIC FEET MINIMUM
- ⑭ MAIN POWER CONDUIT
- ⑮ RECYCLED WATER WARNING TAG (PER LOCAL STANDARDS)

	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13
<h2>RECLAIMED BOOSTER PUMP</h2>			
FOR IRRIGATION SYSTEM		APPROVED BY: MPH	
STD. R-010	3/4"=1'-0"	REV:	



① RECTANGULAR PURPLE VALVE BOX (SEE SPECIFICATIONS), DO NOT CUT ADDITIONAL HOLES INTO BOX

② FINISH GRADE

③ PRESSURE REGULATING VALVE (SEE SPECIFICATIONS)

④ 4" LONG SCH. 80 TOE NIPPLE (LINE SIZE) (TWO REQUIRED)

⑤ SCH. 80 COUPLING (LINE SIZE) (TWO REQUIRED)

⑥ PRESSURE SUPPLY LINE, ALIGN WITH FLOW SENSOR

⑦ 3/4" GRAVEL SUMP IN, UNDER AND AROUND VALVE BOX FILL TO TOP OF THE HOLES WRAP WITH FILTER FABRIC

⑧ INSTALL FILTER FABRIC AROUND GRAVEL SUMP

⑨ RECYCLED WATER WARNING TAG (PER LOCAL STANDARDS)



RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS

DATE: 02-05-13

RECLAIMED PRESSURE REGULATING VALVE

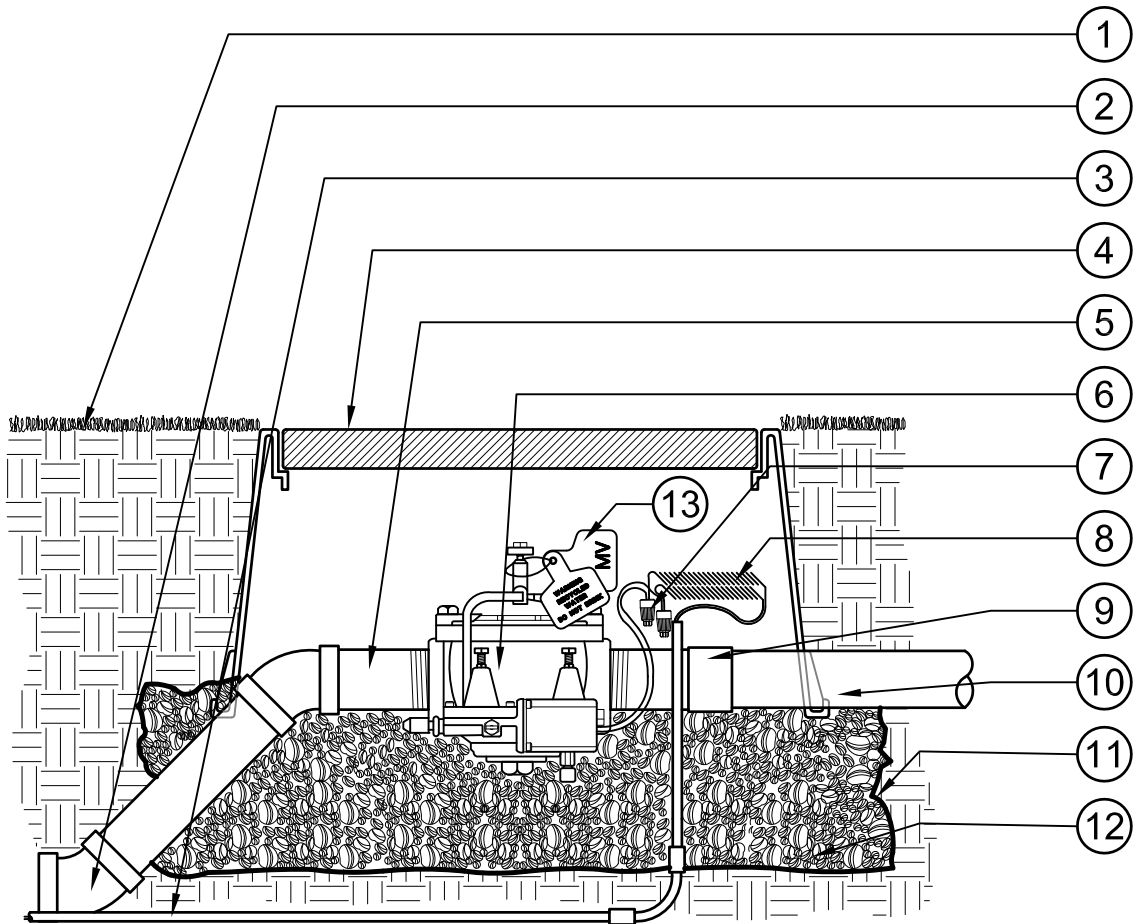
APPROVED BY: MPH



STD. R-011



3"=1'-0"

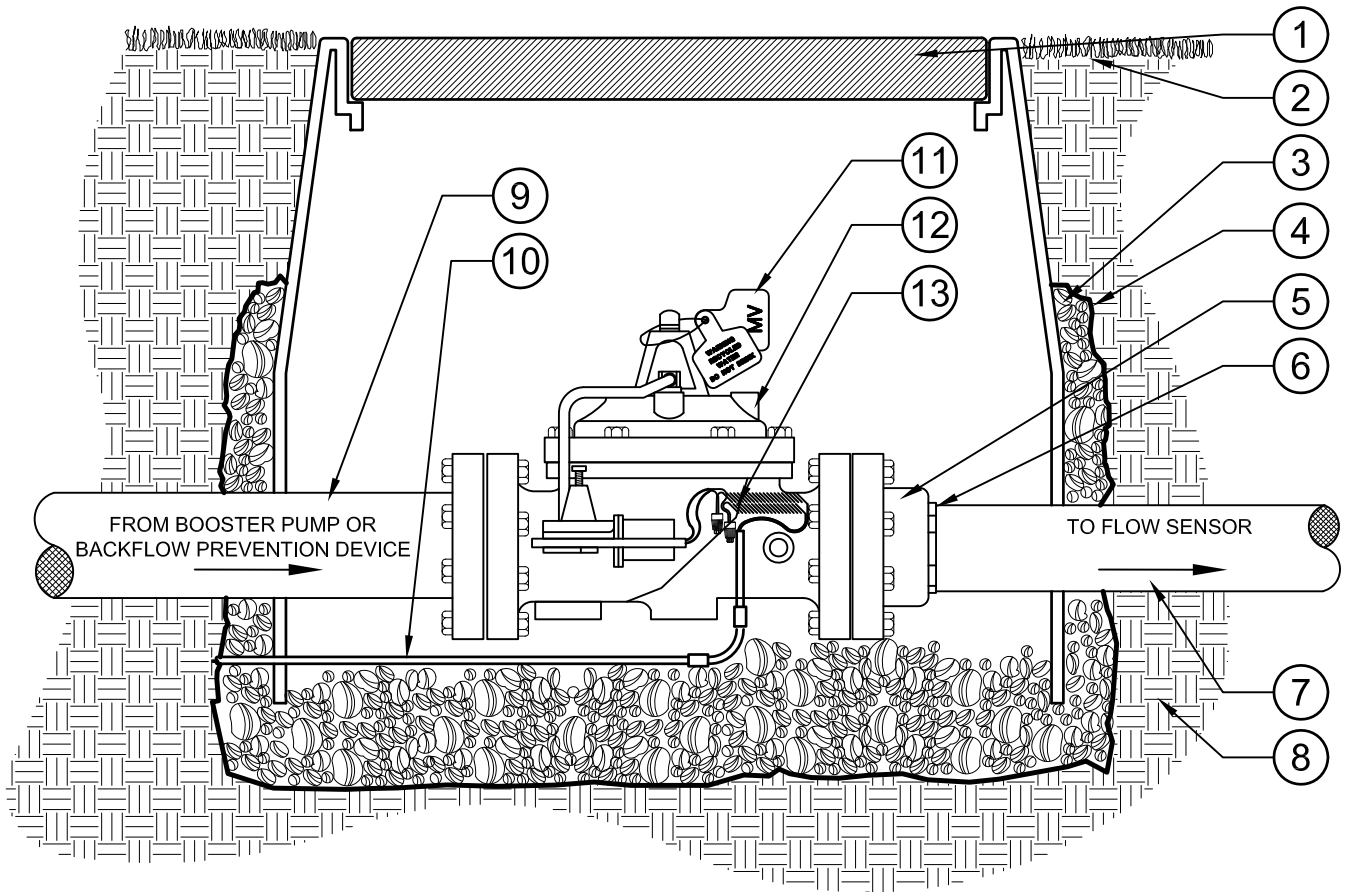
REV:






- ① FINISH GRADE
- ② 45 DEGREE ELL (2 REQUIRED)
- ③ 3/4" SCH 40 WIRE CONDUIT WITH SWEEP FOR MASTER VALVE WIRES (TO CONTROLLER)
- ④ JUMBO RECTANGULAR PURPLE VALVE BOX (SEE SPECIFICATIONS). DO NOT CUT ADDITIONAL HOLES INTO BOX
- ⑤ 4" LONG SCH. 80 TOE NIPPLE (LINE SIZE) (2 REQUIRED)
- ⑥ MASTER VALVE (SEE SPECS)
- ⑦ CONNECT WIRES TO VALVE USING WATER TIGHT CONNECTORS (SEE SPECS.)
- ⑧ USE 1/2" PVC SCRAP TO WRAP 12" OF ADDITIONAL WIRE BEFORE CONNECTING
- ⑨ SCH. 80 COUPLER (ONE REQUIRED) (LINE SIZE)
- ⑩ PRESSURE SUPPLY LINE, ALIGN WITH FLOW SENSOR (SEE PLAN FOR SIZE)
- ⑪ INSTALL FILTER FABRIC AROUND GRAVEL SUMP
- ⑫ 3/4" GRAVEL SUMP, IN, UNDER AND AROUND VALVE BOX. FILL TO TOP OF VALVE BOX HOLES
- ⑬ VALVE IDENTIFICATION TAG AND RECYCLED WATER WARNING TAG (PER LOCAL STANDARDS)

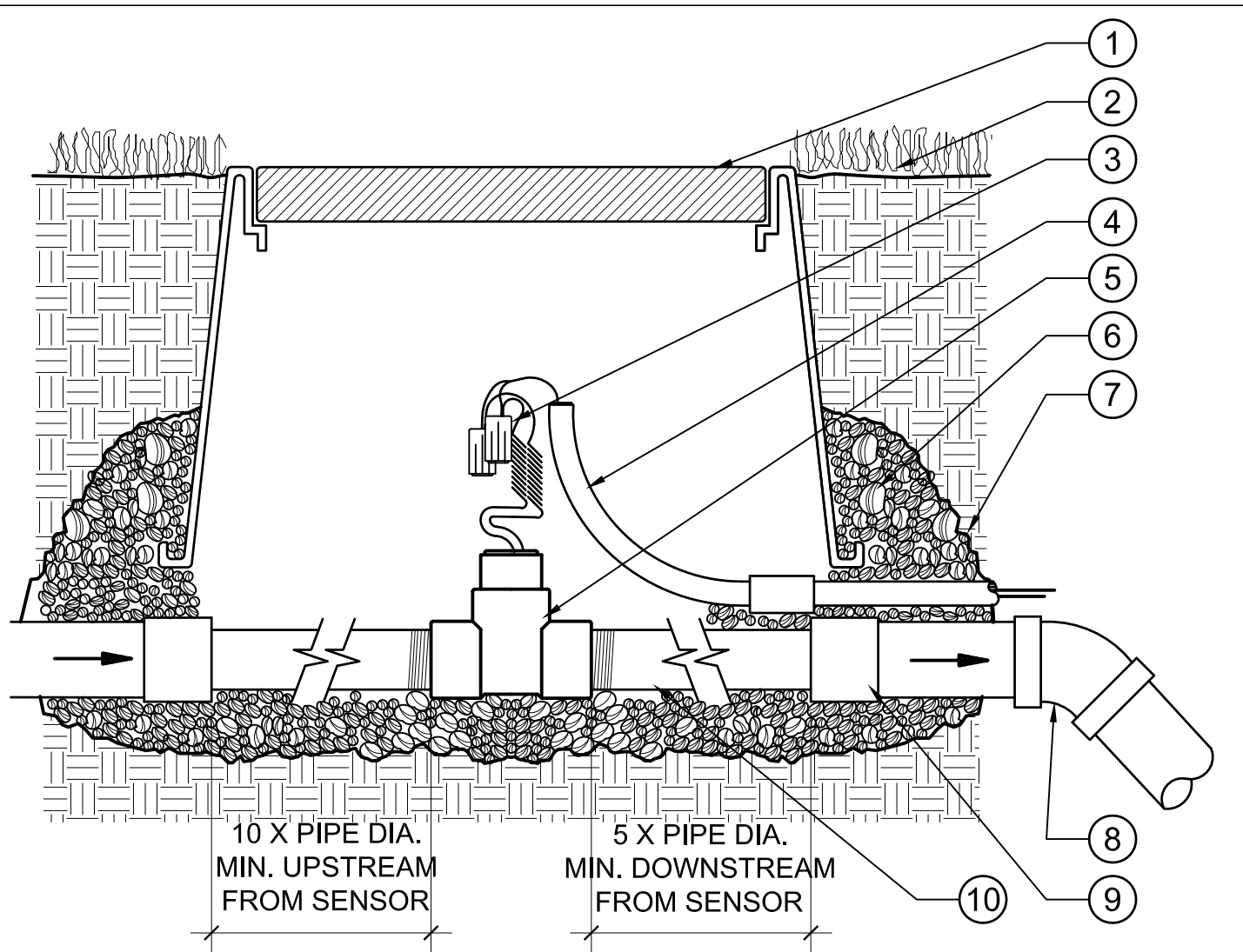
NOTE: ALL CONDUIT SHALL BE SEALED WATER TIGHT WITH EXPANDING FOAM.

	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13
	<h2 style="margin: 0;">RECLAIMED MASTER VALVE</h2>		
NORMALLY CLOSED AT 12" DEPTH	APPROVED BY: MPH		
3/4"=1'-0"	REV:		





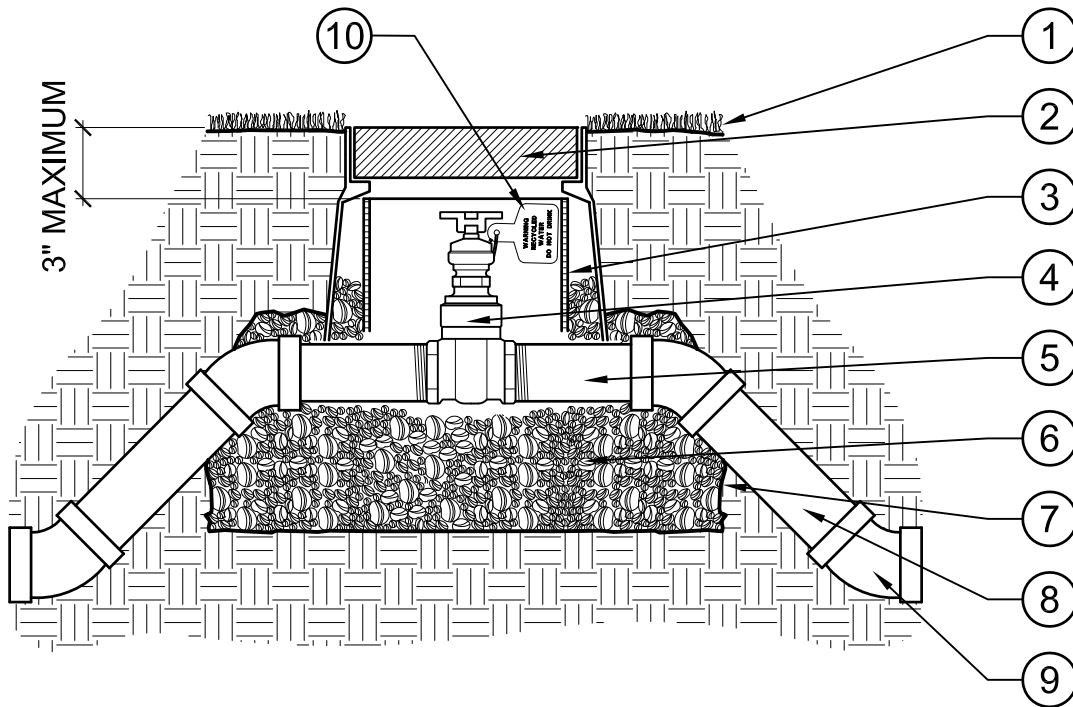
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|--|---|
| <p>① JUMBO VALVE BOX / PLASTIC VAULT WITH PURPLE LID (BOX SIZE VARIES WITH VALVE SIZE)</p> <p>② FINISH GRADE</p> <p>③ 3/4" GRAVEL SUMP IN, UNDER AND AROUND VALVE BOX (FILL TO TOP OF VALVE BOX HOLES)</p> <p>④ INSTALL FILTER FABRIC AROUND GRAVEL SUMP</p> <p>⑤ SCH. 80 PVC FLANGE FLANGE X SLIP (SIZE VARIES)</p> <p>⑥ SxS SCH. 80 REDUCER BUSHING (IF NEEDED)</p> <p>⑦ PRESSURE SUPPLY LINE TO FLOW SENSOR</p> <p>⑧ COMPACTED SUBGRADE</p> | <p>⑨ SPOOL FROM BACKFLOW PREVENTION DEVICE, STRAINER OR BOOSTER PUMP (SIZE AND LENGTH VARIES)</p> <p>⑩ 3/4" SCH 40 WIRE CONDUIT WITH SWEEP FOR MASTER VALVE WIRES (TO CONTROLLER)</p> <p>⑪ VALVE IDENTIFICATION TAG AND RECYCLED WATER WARNING TAG (PER LOCAL STANDARDS)</p> <p>⑫ MASTER VALVE</p> <p>⑬ USE 3/4" PVC SCRAP TO WRAP 24' OF ADDITIONAL WIRE, CONNECT WIRES TO MASTER VALVE USING WATERPROOF WIRE CONNECTORS</p> |
|--|---|
- NOTE:
- ALL BURIED BOLTS SHALL BE COATED WITH TWO (2) COATS AN APPROVED WATERPROOF COATING.
 - ALL BURIED IRON PIPE SHALL BE WRAPPED WITH ONE (1) LAYER 10 MIL. POLYETHYLENE SHEETING TAPED IN PLACE.

	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13
	<h2 style="margin: 0;">RECLAIMED MASTER VALVE (2 1/2" AND LARGER)</h2>		
	NORMALLY CLOSED AT 12" DEPTH	APPROVED BY: MPH	 
STD. R-021	3/4"=1'-0"	REV:	






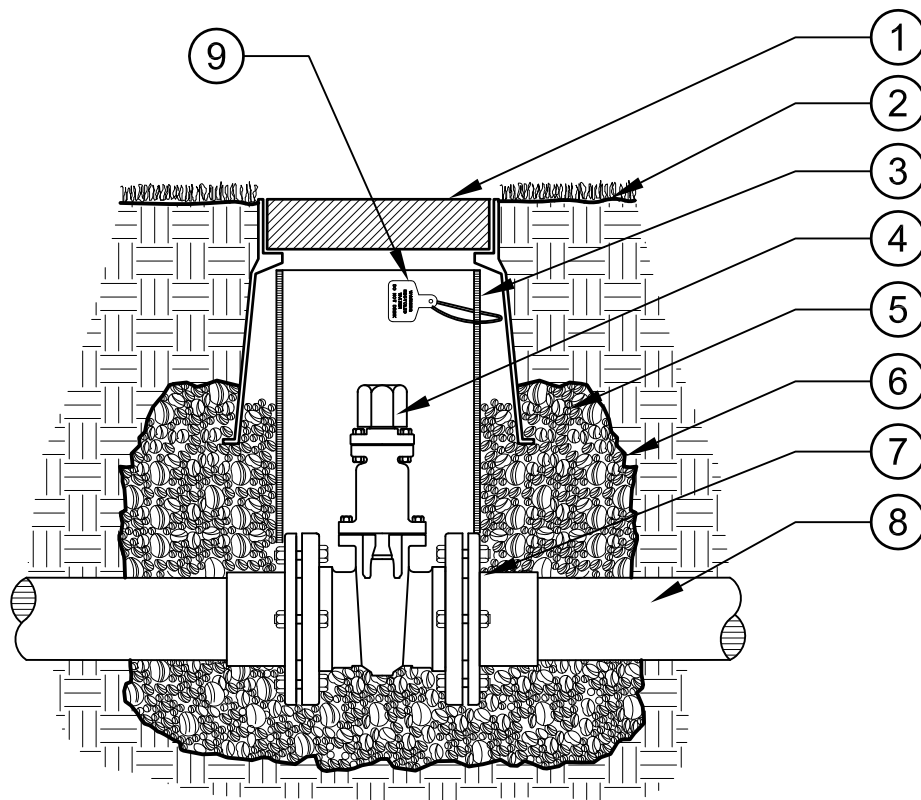
- ① RECTANGULAR PURPLE VALVE BOX (SEE SPECIFICATIONS)
(DO NOT CUT ADDITIONAL HOLES INTO BOX)
- ② FINISH GRADE
- ③ CONNECT WIRE TO FLOW SENSOR USING WATER TIGHT CONNECTORS (SEE SPECIFICATIONS)
- ④ 3/4" SCH. 40 PVC CONDUIT WITH SWEEP FOR FLOW SENSOR WIRE (TO CONTROLLER)
- ⑤ FLOW SENSOR (PVC OR BRASS)
(SEE SPECIFICATIONS)
- ⑥ 3/4" GRAVEL SUMP IN, UNDER AND AROUND VALVE BOX. FILL TO TOP OF VALVE BOX HOLES
- ⑦ INSTALL FILTER FABRIC AROUND GRAVEL SUMP
- ⑧ 45 DEGREE PVC SCH. 40 S x S ELBOW (2 REQUIRED)
EXTEND PRESSURE SUPPLY LINE TO 18" DEPTH
- ⑨ PVC REDUCING BUSHING FOR REDUCTION IN PIPE SIZE AT FLOW SENSOR (TWO REQUIRED, IF NEEDED)
- ⑩ SCH. 80 TOE NIPPLE (SENSOR SIZE - IF BRASS)
SCH. 80 PVC SEGMENT (SENSOR SIZE - IF PVC)

	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13
	<h2 style="margin: 0;">RECLAIMED FLOW SENSOR</h2>		
AT 12" DEPTH	APPROVED BY: MPH		
3"=1'-0"	REV:		

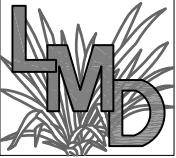




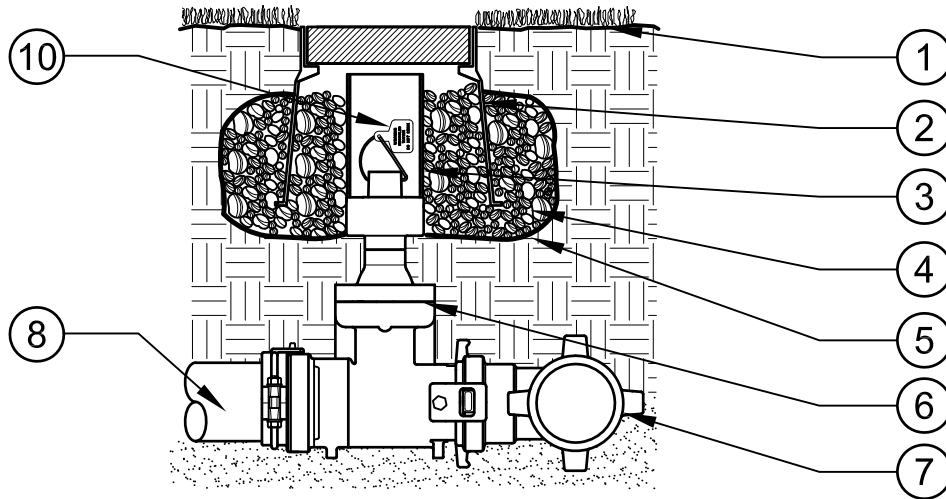
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| <p>① FINISH GRADE</p> <p>② 10" ROUND PURPLE VALVE BOX
(SEE SPECIFICATIONS)
(DO NOT CUT ADDITIONAL HOLES INTO BOX)</p> <p>③ 8" DIAMETER CL 160 PVC SLEEVE (TO REST ON TOP EDGE OF ISOLATION GATE VALVE)</p> <p>④ ISOLATION GATE VALVE
(WITH CROSS HANDLE, SEE SPECIFICATIONS)</p> | <p>⑤ 6" LONG SCH. 80 TOE NIPPLE
(LINE SIZE) (TWO REQUIRED)</p> <p>⑥ 3/4" GRAVEL SUMP IN, UNDER AND AROUND VALVE BOX, FILL TO TOP OF VALVE BOX HOLES</p> <p>⑦ INSTALL FILTER FABRIC AROUND GRAVEL SUMP</p> <p>⑧ PRESSURE SUPPLY LINE
(REFER TO PLAN FOR SIZE)</p> <p>⑨ SLIP X SLIP 45 DEGREE ELL
(4 REQUIRED)</p> <p>⑩ RECYCLED WATER WARNING TAG (PER LOCAL STANDARDS)</p> |
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	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13
	RECLAIMED ISOLATION GATE VALVE		
	FOR UP TO 2 1/2" PRESSURE SUPPLY LINE	APPROVED BY: MPH	
1 1/2"=1'-0"	REV:		

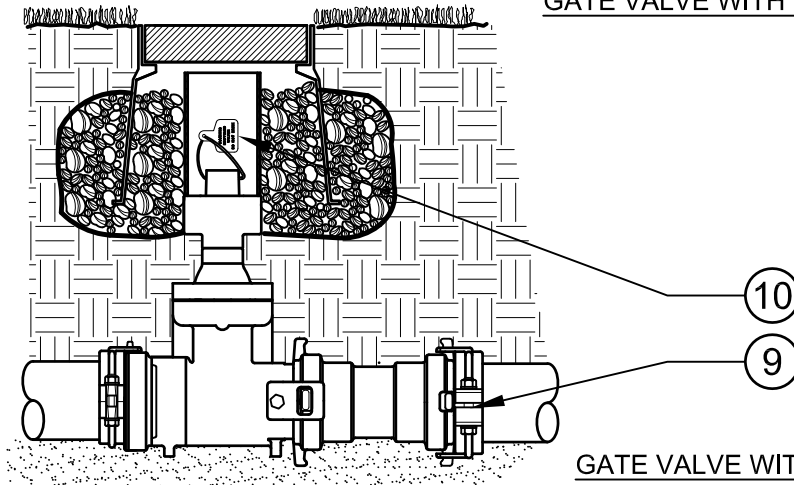


- ① 10" ROUND PURPLE VALVE BOX (SEE SPECIFICATIONS)
(DO NOT CUT ADDITIONAL HOLES INTO BOX)
- ② FINISH GRADE
- ③ 8" CL 160 PVC SLEEVE (TO REST ON TOP
EDGE OF VALVE ASSEMBLY)
- ④ ISOLATION GATE VALVE WITH 2" SQUARE
OPERATING NUT (SEE SPECIFICATIONS)
- ⑤ 3/4" GRAVEL SUMP IN,
UNDER, AND AROUND VALVE BOX
FILL TO TOP OF VALVE BOX HOLES
- ⑥ INSTALL FILTER FABRIC
AROUND GRAVEL SUMP
- ⑦ FLG X SLIP SCH. 80 PVC FLANGE
(2 REQUIRED)
- ⑧ PRESSURE SUPPLY LINE
(REFER TO PLAN FOR SIZE)
- ⑨ RECYCLED WATER WARNING TAG
(PER LOCAL STANDARDS)

	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13
	RECLAIMED ISOLATION GATE VALVE		
	FOR 3" PRESSURE SUPPLY LINE	APPROVED BY: MPH	 
3"=1'-0"	REV:		






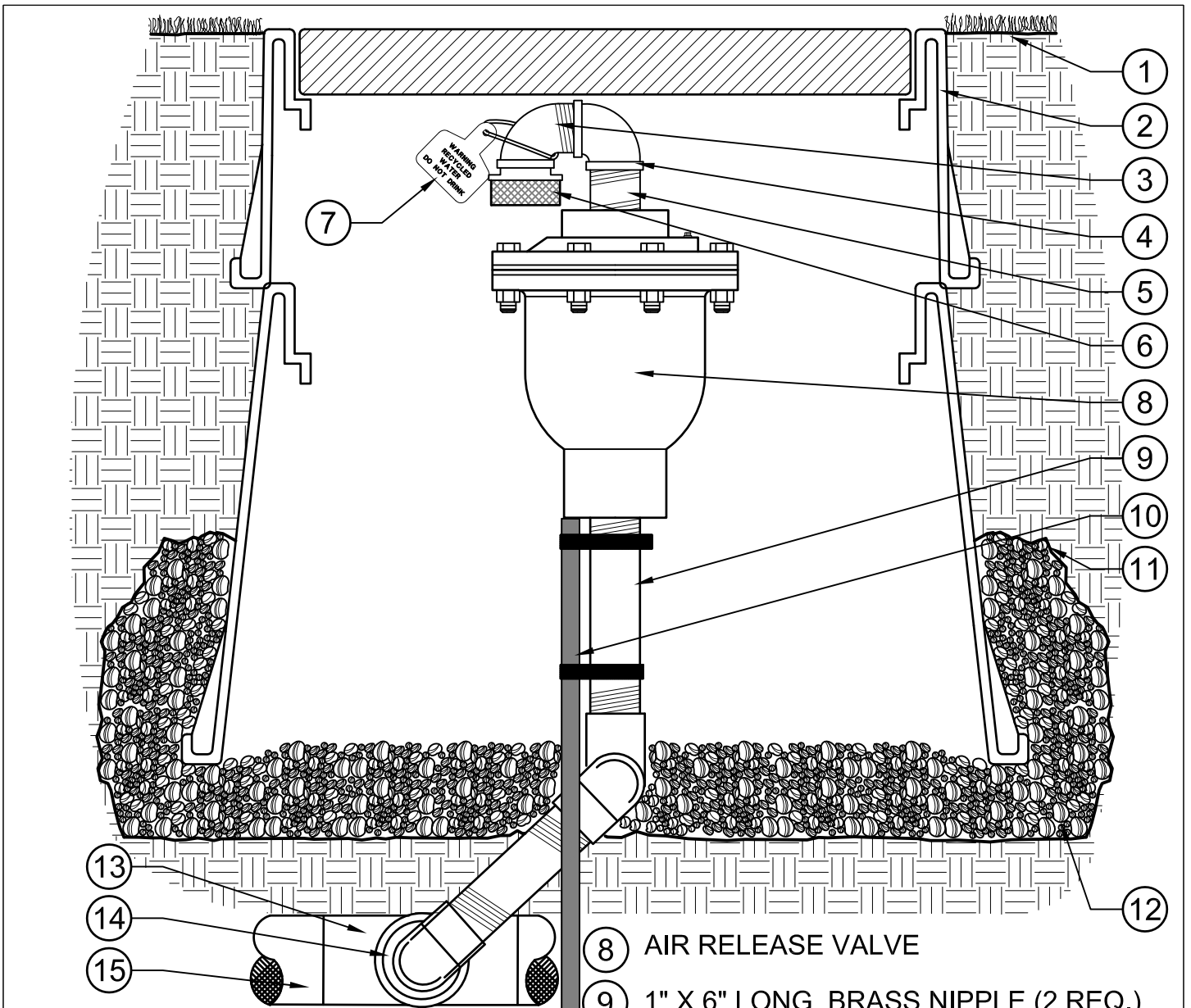
GATE VALVE WITH TEE FITTING





GATE VALVE WITH PIPE FITTING

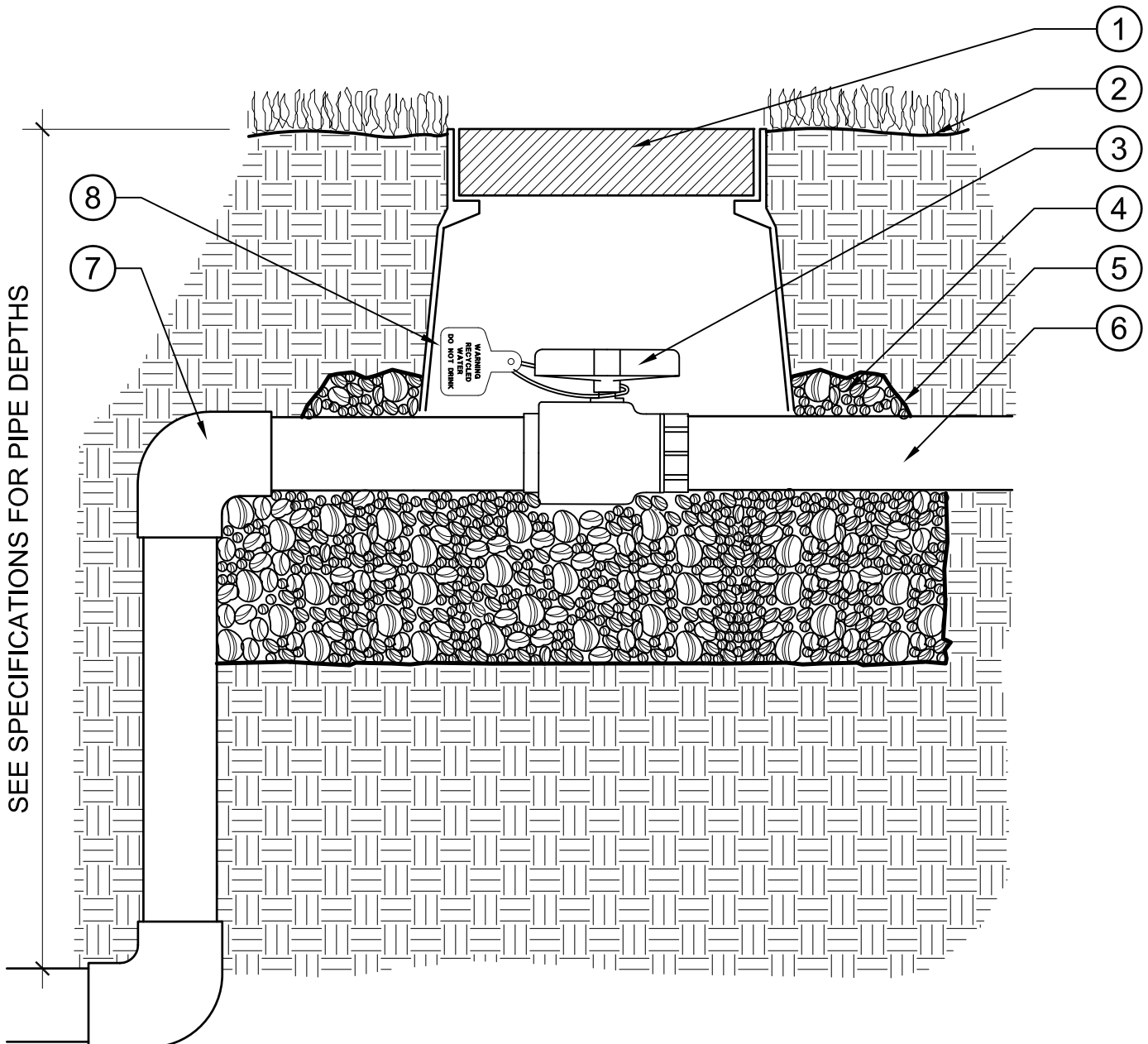
- ① FINISH GRADE
- ② 10" ROUND PURPLE VALVE BOX (SEE SPECIFICATIONS, DO NOT CUT ADDITIONAL HOLES INTO BOX)
- ③ 8" DIAMETER CL 160 PVC SLEEVE (TO REST ON TOP EDGE OF ISOLATION VALVE)
- ④ 3/4" GRAVEL SUMP IN, UNDER AND AROUND VALVE BOX, FILL TO TOP OF VALVE BOX HOLES
- ⑤ INSTALL FILTER FABRIC AROUND GRAVEL SUMP
- ⑥ SELF RESTRAINED SPIGOT X BELL MAINLINE GATE VALVE
- ⑦ BELL X BELL X BELL DUCTILE IRON TEE
- ⑧ PURPLE IRRIGATION PRESSURE SUPPLY LINE
- ⑨ SELF RESTRAINED BELL X BELL MAINLINE GATE VALVE
- ⑩ RECYCLED WATER WARNING TAG (PER LOCAL STANDARDS)

	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13
	RECLAIMED GATE VALVE W/ JOINT RESTRAINT FOR PIPE SIZES 4" AND GREATER		APPROVED BY: MPH
STD. R-032	1"=1'-0"	REV:	 






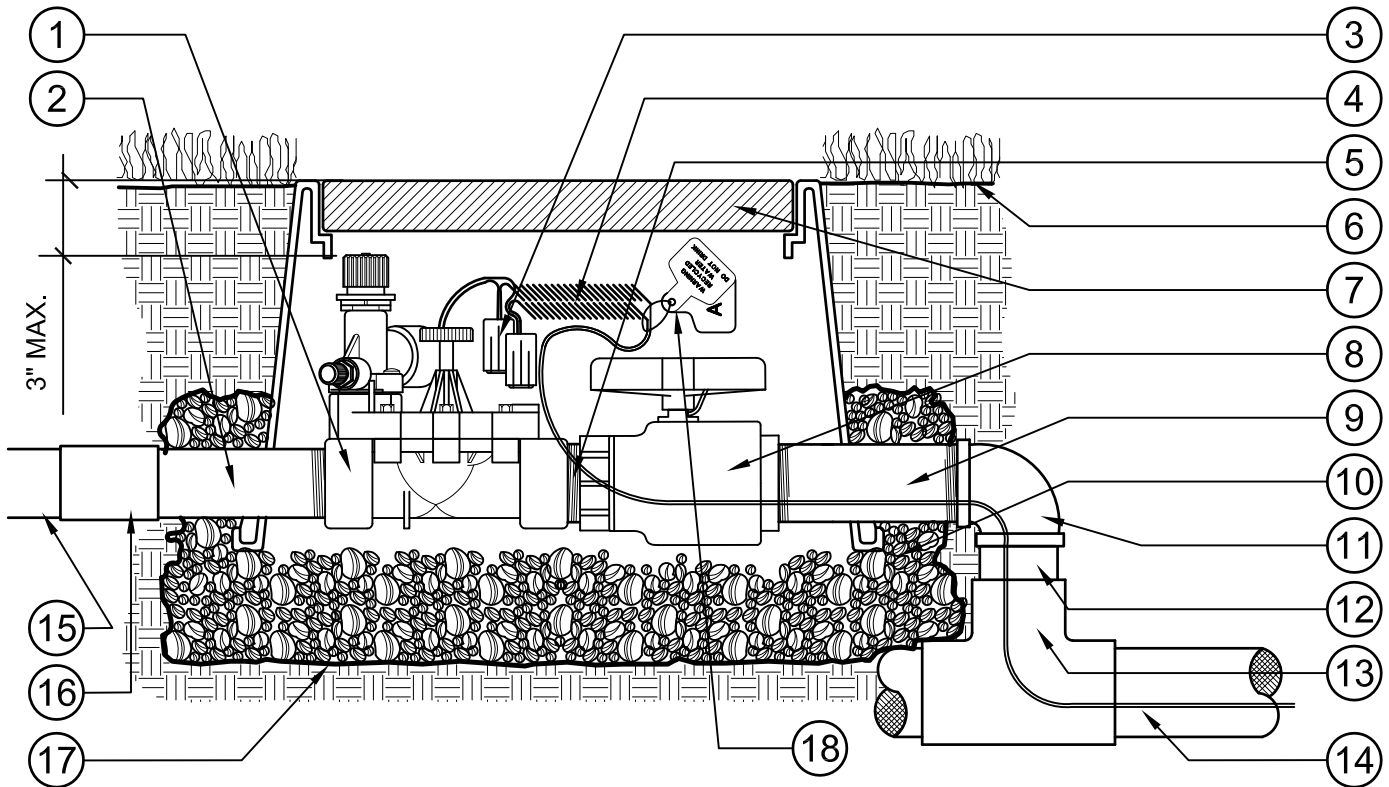
- ① FINISH GRADE
- ② PURPLE RECTANGULAR VALVE BOX, 6" EXTENSION AND LID
- ③ 1" FIPT X MIPT BRASS STREET ELBOW (3 REQUIRED)
- ④ 1" FIPT X FIPT BRASS ELBOW (2 REQUIRED)
- ⑤ 1" X 2" LONG BRASS NIPPLE (1 REQUIRED)
- ⑥ 1" SCREENED CAP (1 REQUIRED)
- ⑦ RECYCLED WATER WARNING TAG (PER LOCAL STANDARDS)
- ⑧ AIR RELEASE VALVE
- ⑨ 1" X 6" LONG BRASS NIPPLE (2 REQ.)
- ⑩ 36" LONG, #4 REBAR STAKE WITH TWO STAINLESS STEEL CLAMPS
- ⑪ INSTALL FILTER FABRIC AROUND GRAVEL SUMP
- ⑫ 3/4" GRAVEL SUMP IN, UNDER AND AROUND VALVE BOX. FILL TO TOP OF VALVE BOX HOLES
- ⑬ S X S X S SCH. 80 TEE IN PRESSURE SUPPLY LINE (MATCH LINE SIZE, 1 REQ.)
- ⑭ SCH. 80 S X FIPT REDUCER BUSHING (LINE SIZE X 1" FIPT) (1 REQUIRED)
- ⑮ PURPLE PRESSURE SUPPLY LINE

	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13
	1" AIR RELIEF VALVE		
	FOR PRESSURE SUPPLY LINE	APPROVED BY: MPH	
3"=1'-0"	REV:		






- ① 10" ROUND PURPLE VALVE BOX (SEE SPECIFICATIONS, DO NOT CUT ADDITIONAL HOLES INTO BOX)
- ② FINISH GRADE
- ③ ISOLATION BALL VALVE (SEE SPECIFICATIONS)
- ④ 3/4" GRAVEL SUMP IN, UNDER, AND AROUND VALVE BOX (FILL TO TOP OF VALVE BOX HOLES)
- ⑤ INSTALL FILTER FABRIC AROUND GRAVEL SUMP
- ⑥ PURPLE PRESSURE SUPPLY LINE EXTENDED TO MANIFOLDS OR QUICK COUPLER
- ⑦ SLIP X SLIP 45 DEGREE ELL (2 REQUIRED)
- ⑧ RECYCLED WATER WARNING TAG (PER LOCAL STANDARDS)

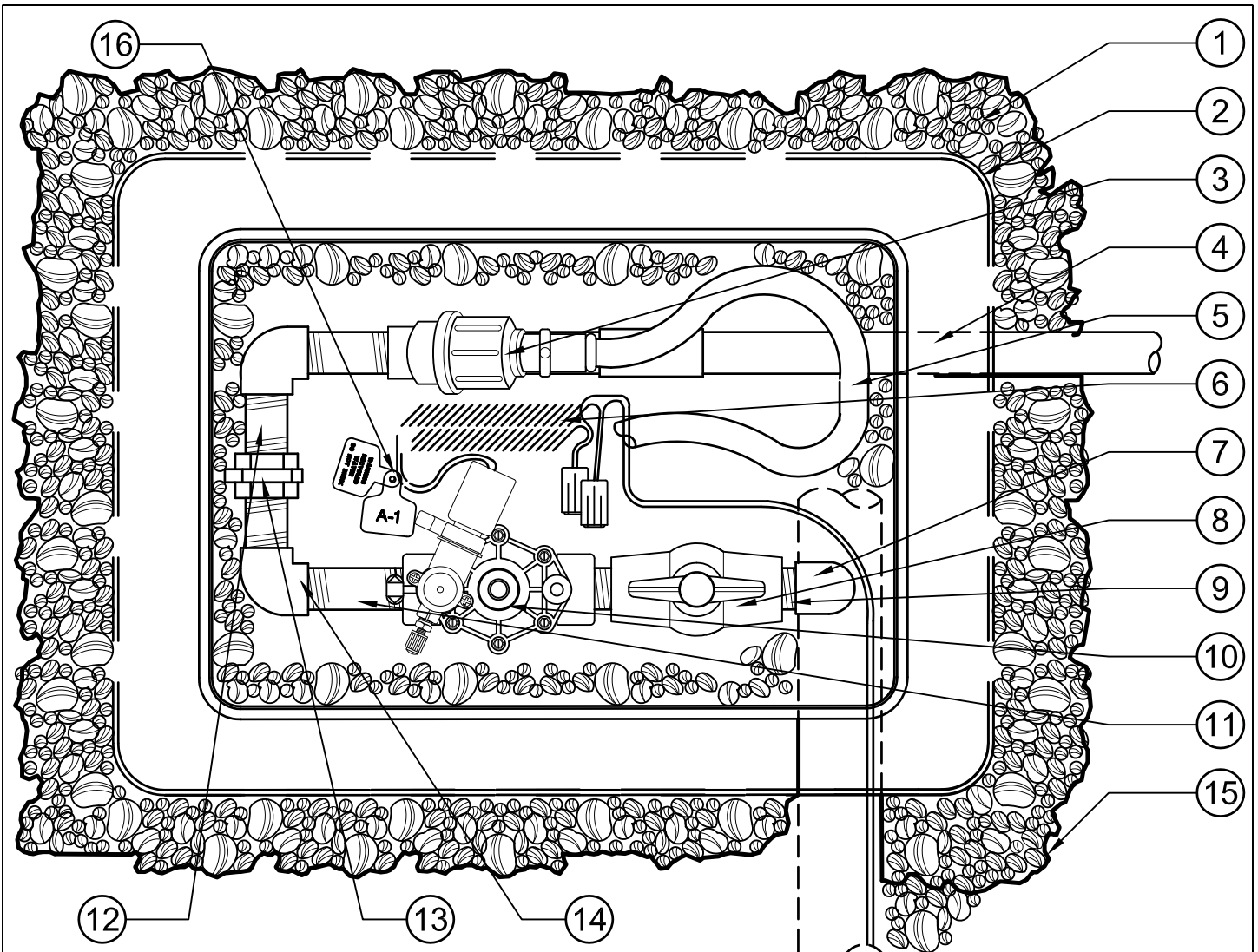
	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13
	RECLAIMED ISOLATION BALL VALVE		
	MANIFOLD / QUICK COUPLER	APPROVED BY: MPH	
STD. R-040	3"=1'-0"	REV:	





- ① ELECTRIC CONTROL VALVE
- ② 6" LONG SCH. 80 TOE NIPPLE (LATERAL LINE SIZE)
- ③ CONNECT WIRES TO VALVE USING WATER TIGHT CONNECTORS (SEE SPECIFICATIONS)
- ④ USE 1/2" PVC SCRAP T WRAP 12" OF ADDITIONAL WIRE BEFORE CONNECTING
- ⑤ CLOSED NIPPLE (LINE SIZE)
- ⑥ FINISH GRADE
- ⑦ RECTANGULAR PURPLE VALVE BOX (SEE SPECIFICATIONS, DO NOT CUT ADDITIONAL HOLES INTO BOX)
- ⑧ PVC SCH 80 BALL VALVE (LINE SIZE)
- ⑨ 4" SCH 80 NIPPLE (LINE SIZE)
- ⑩ 3/4" GRAVEL SUMP IN, UNDER AND AROUND VALVE BOX. FILL TO TOP OF VALVE BOX HOLES
- ⑪ SLIP X FIP ELL (LINE SIZE)
- ⑫ PVC PRESSURE SUPPLY LINE (CUT TO FIT MAXIMUM DIMENSION FROM TOP OF VALVE TO TOP OF LID)
- ⑬ TEE IN PRESSURE SUPPLY LINE (LINE SIZE)
- ⑭ PRESSURE SUPPLY LINE (SEE PLAN FOR SIZE)
- ⑮ LATERAL LINE (SEE PLAN FOR SIZE)
- ⑯ SCH. 80 COUPLING (LATERAL LINE SIZE)
- ⑰ INSTALL FILTER FABRIC AROUND GRAVEL SUMP
- ⑱ VALVE IDENTIFICATION TAG AND RECYCLED WATER WARNING TAG

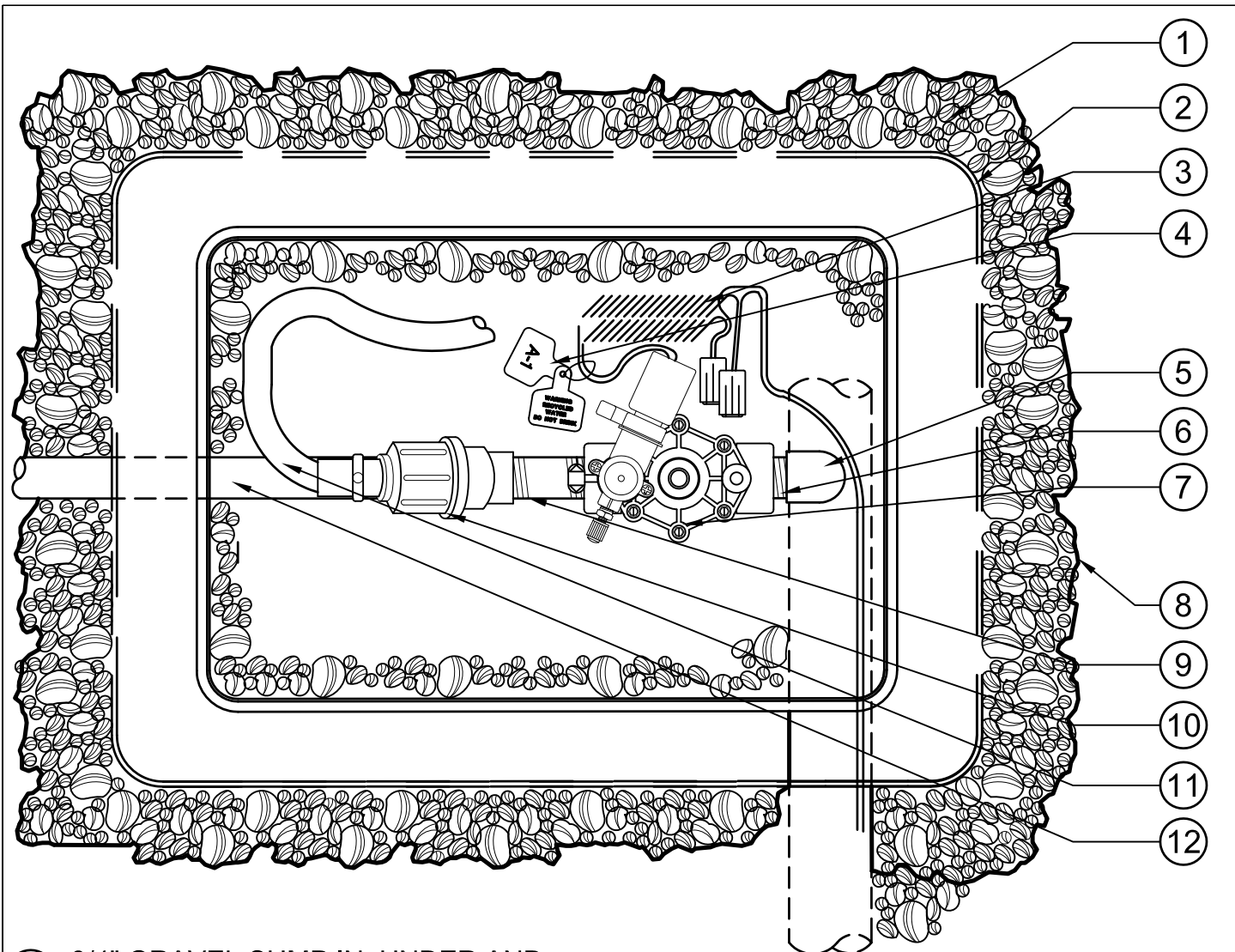
NOTE:
BALL VALVE TO BE USED ONLY IF IRRIGATION CONTROL VALVE IS INSTALLED AS A SINGLE VALVE AND NOT PART OF A MANIFOLD.

	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13
	RECLAIMED ELECTRICAL CONTROL VALVE		
	WITH BALL VALVE	APPROVED BY: MPH	 
STD. R-041	1 1/2"=1'-0"	REV:	



- ① 3/4" GRAVEL SUMP IN, UNDER AND AROUND VALVE BOX. FILL TO TOP OF VALVE BOX HOLES
- ② RECTANGULAR PURPLE VALVE BOX (SEE SPECIFICATIONS, DO NOT CUT ADDITIONAL HOLES INTO BOX)
- ③ WYE STRAINER (SEE SPECIFICATIONS)
- ④ PURPLE PVC NON-PRESSURE LATERAL LINE OR POLYETHYLENE TUBING (SEE SPECIFICATIONS)
- ⑤ 18" LENGTH OF SCH. 40 FLEXIBLE PVC TUBING, CONNECT TO FILTER
- ⑥ USE 1/2" PVC SCRAP TO WRAP 12" OF ADDITIONAL WIRE BEFORE CONNECTING
- ⑦ PVC SCH. 40 SLIP X FIPT ELL CONNECTING RISER FROM PVC PRESSURE SUPPLY LINE
- ⑧ SCH. 80 PVC BALL VALVE (LINE SIZE)
- ⑨ CLOSED NIPPLE (2 REQUIRED)
- ⑩ 1" ELECTRIC CONTROL VALVE (WITH PRESSURE REGULATING FEATURE, SEE SPECIFICATIONS)
- ⑪ 2" SCH. 80 NIPPLE (2 REQUIRED)
- ⑫ 1" SCH. 80 NIPPLE (2 REQUIRED)
- ⑬ SCH. 80 PVC UNION (LINE SIZE)
- ⑭ PVC SCH. 40 FIP X FIP ELL (2 REQUIRED)
- ⑮ INSTALL FILTER FABRIC AROUND GRAVEL SUMP
- ⑯ RECYCLED WATER WARNING AND VALVE IDENTIFICATION TAG

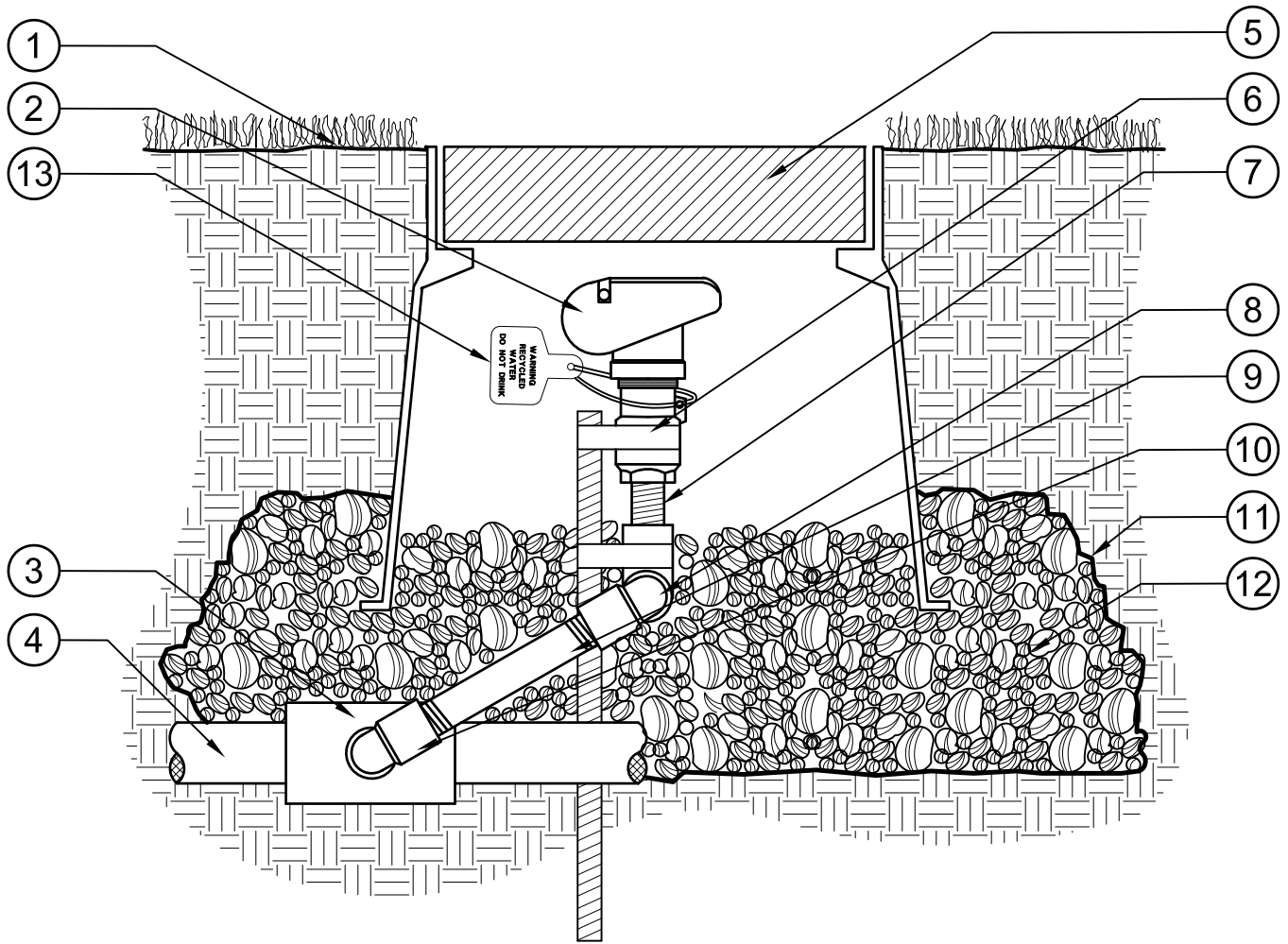
	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS RECLAIMED DRIP VALVE ASSEMBLY - 1" WITH BALL VALVE	DATE: 02-05-13 
STD. R-042	3"=1'-0"	APPROVED BY: MPH REV:



- ① 3/4" GRAVEL SUMP IN, UNDER AND AROUND VALVE BOX. FILL TO TOP OF VALVE BOX HOLES
- ② RECTANGULAR PURPLE VALVE BOX (SEE SPECIFICATIONS, DO NOT CUT ADDITIONAL HOLES INTO BOX)
- ③ USE 1/2" PVC SCRAP TO WRAP 12" OF ADDITIONAL WIRE BEFORE CONNECTING
- ④ VALVE IDENTIFICATION TAG & RECYCLED WATER WARNING / ID TAG
- ⑤ PVC SCH. 40 SLIP X FIPT ELL CONNECTING RISER FROM PVC PRESSURE SUPPLY LINE
- ⑥ SCH. 80 CLOSED NIPPLE
- ⑦ ELECTRIC CONTROL VALVE (WITH PRESSURE REGULATING FEATURE, SEE SPECIFICATIONS)
- ⑧ INSTALL FILTER FABRIC AROUND GRAVEL SUMP
- ⑨ 2" SCH. 80 NIPPLE (1 REQUIRED)
- ⑩ WYE STRAINER (SEE SPECIFICATIONS)
- ⑪ 18" LENGTH OF SCH. 40 FLEXIBLE PVC TUBING CONNECT TO FILTER
- ⑫ PVC NON PRESSURE LATERAL LINE OR POLYETHYLENE TUBING (SEE SPECIFICATIONS)

	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS	DATE: 02-05-13
	RECLAIMED DRIP VALVE ASSEMBLY	
	COMPACT	APPROVED BY: MPH
STD. R-043	3"=1'-0"	REV:





- ① FINISH GRADE
- ② QUICK COUPLING VALVE (SEE LEGEND AND SPECIFICATIONS)
- ③ TEE IN PRESSURE SUPPLY LINE
- ④ PURPLE PRESSURE SUPPLY LINE (SEE PLAN FOR SIZE)
- ⑤ 10" ROUND PURPLE VALVE BOX (DO NOT CUT ADDITIONAL HOLES INTO BOX)
- ⑥ SCH. 40 GALVANIZED 36" STAKE WITH (2) SPRINKLER TIES
- ⑦ PVC SCH. 80 THREADED NIPPLE (SIZE TO FIT)
- ⑧ 1" MIPT X FIPT SCH 40 90 ELL (2 REQUIRED)
- ⑨ 1" X 8" SCH. 80 NIPPLE
- ⑩ 1" PVC SCH. 40 STREET ELL
- ⑪ INSTALL FILTER FABRIC AROUND GRAVEL SUMP
- ⑫ 3/4" GRAVEL SUMP IN, UNDER AND AROUND VALVE BOX. FILL TO TOP OF VALVE BOX HOLES
- ⑬ RECYCLED WATER WARNING TAG (PER LOCAL STANDARDS)



STD. R-044

RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS

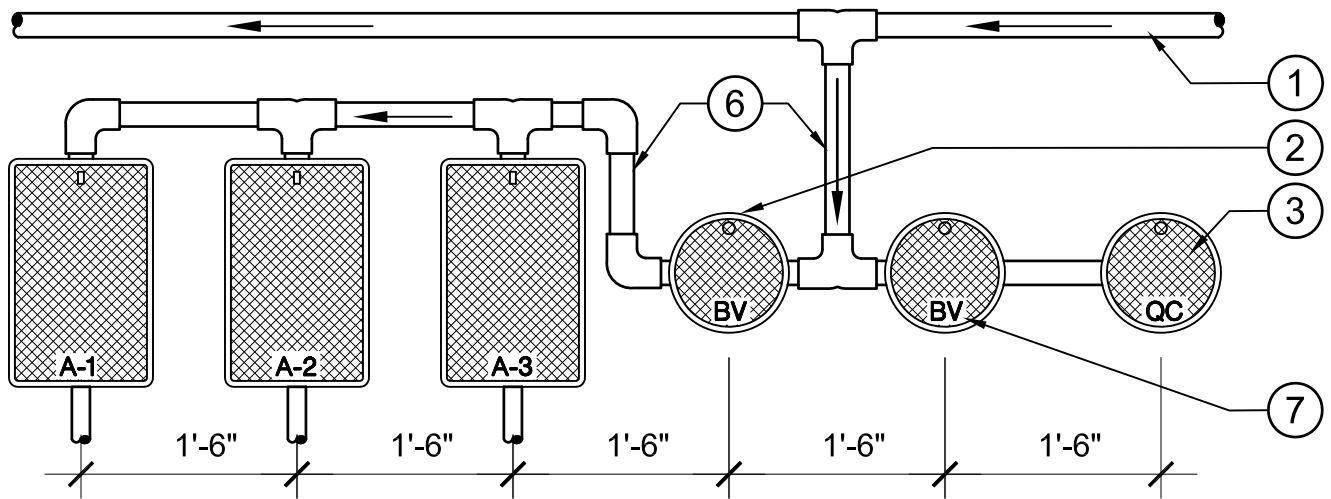
DATE: 02-05-13

RECLAIMED QUICK COUPLING VALVE

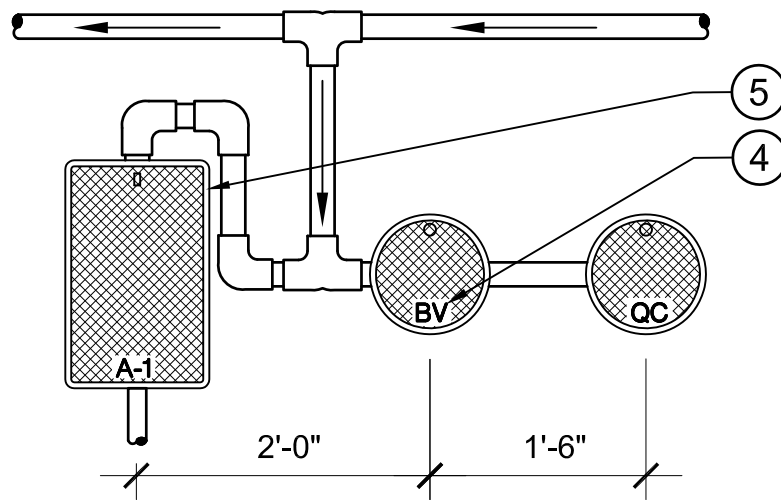
APPROVED BY: MPH

REV:





MULTIPLE VALVE MANIFOLD



SINGLE VALVE MANIFOLD

NOTE:
 NO MORE THAN 5 ELECTRIC CONTROL VALVES ARE TO BE INSTALLED PER MANIFOLD. EACH MANIFOLD SHALL HAVE A MAXIMUM OF 15' SEPARATION. ALL MANIFOLDS ARE TO BE INSTALLED IN PLANTER AREAS WHENEVER POSSIBLE.

- ① PURPLE PRESSURE SUPPLY LINE (SEE PLAN FOR SIZE)
- ② BALL VALVES TO MANIFOLD (SEE IRRIGATION LEGEND AND DETAIL)
- ③ QUICK COUPLER (SEE IRRIGATION LEGEND AND DETAIL)
- ④ HEAT BRAND ALL PURPLE VALVE BOXES PER SPECIFICATION
- ⑤ ELECTRIC CONTROL VALVE (SEE IRRIGATION LEGEND AND DETAIL)
- ⑥ PURPLE MANIFOLD PIPE SEE PLAN FOR SIZE (SHOWN AT SIDE FOR GRAPHIC CLARITY, LOCATE UNDERNEATH PURPLE VALVE BOXES)
- ⑦ BALL VALVE AND PURPLE SUPPLY LINE TO QUICK COUPLER (SIZE PER PLAN)



RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS

DATE: 02-05-13

RECLAIMED MANIFOLD CONFIGURATION

SINGLE AND MULTIPLE VALVES

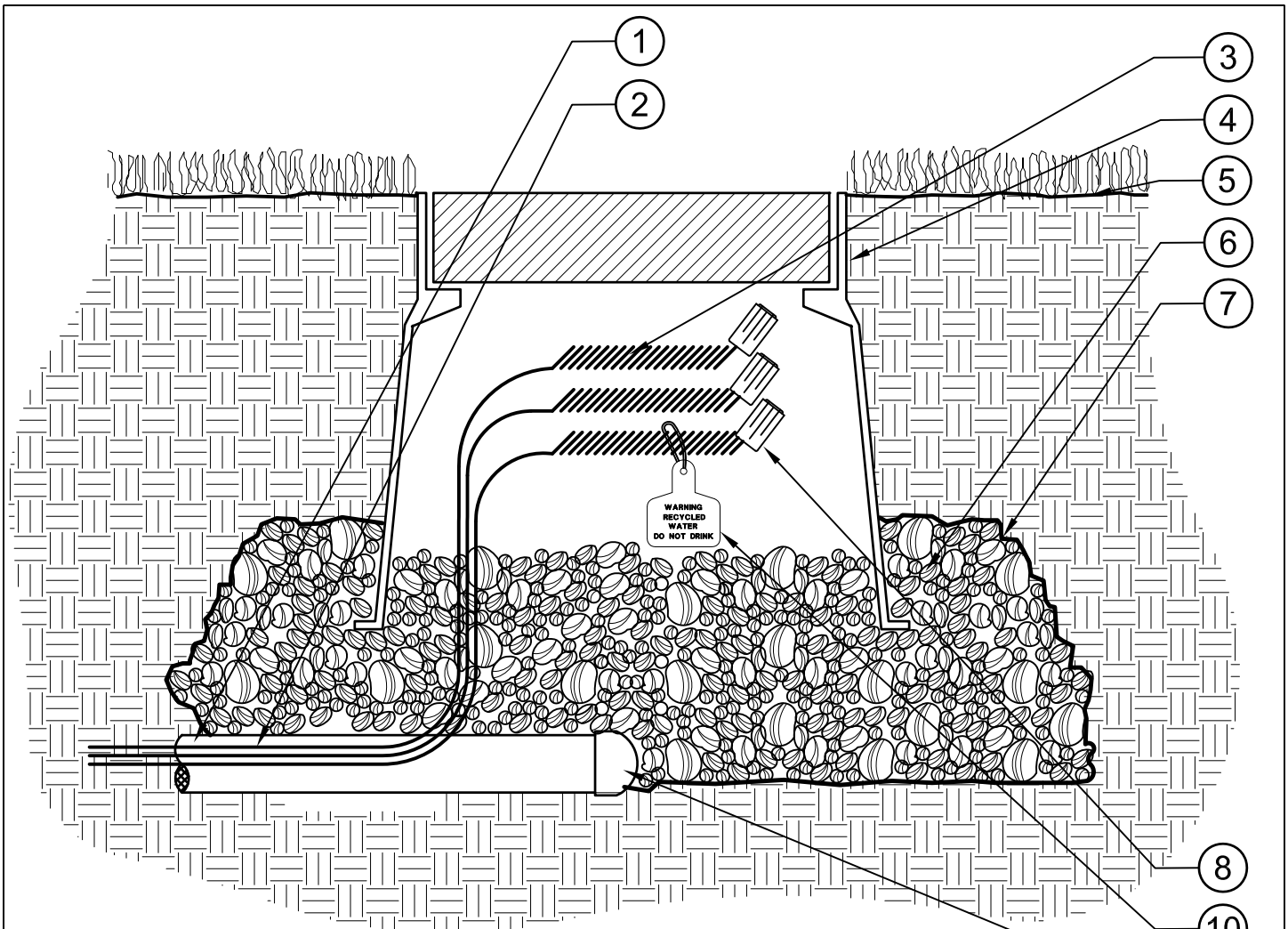
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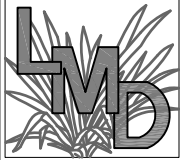

STD. R-045

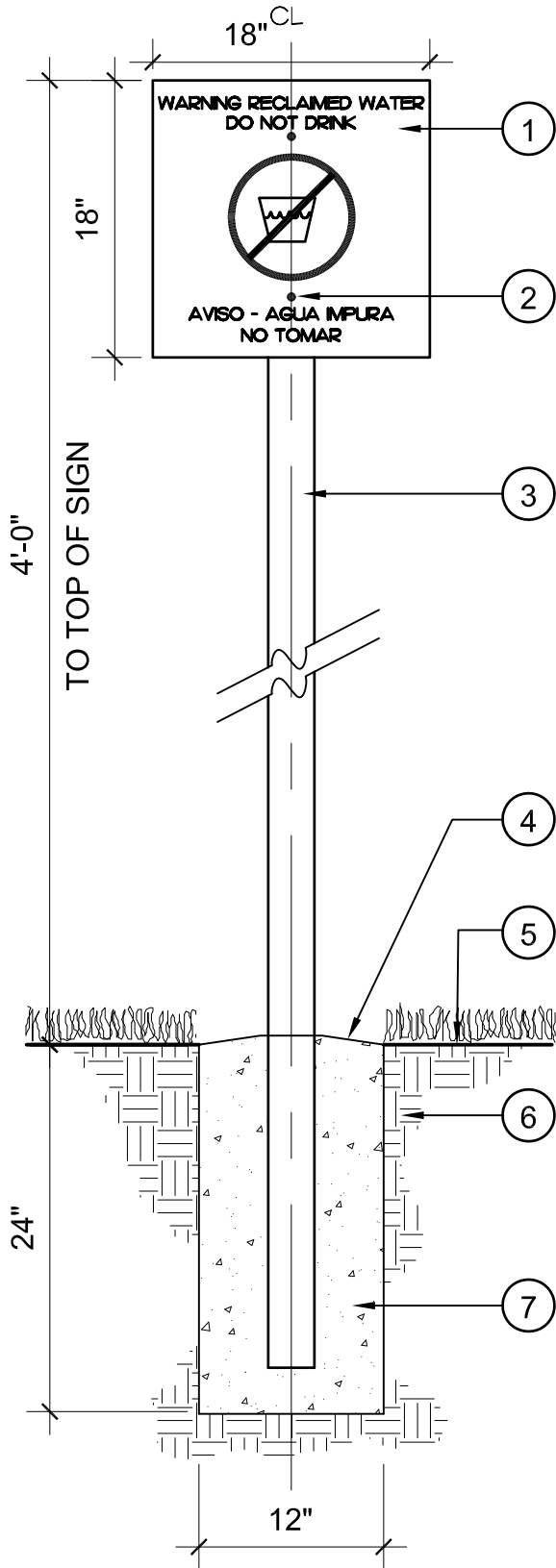
3/4"=1'-0"

REV:



- ① PURPLE PRESSURE SUPPLY LINE (SEE PLAN FOR SIZE)
- ② 2 SPARE WIRES AND 1 COMMON WIRE (CONTINUOUS FROM CONTROLLER) (SEE SPECIFICATIONS FOR SIZE AND COLOR)
- ③ USE 1/2" PVC SCRAP TO WRAP 12" OF ADDITIONAL WIRE. LABEL ALL WIRES AS "SPARE"
- ④ 10" ROUND PURPLE VALVE BOX (INDEPENDENT FROM ALL OTHER BOXES)
- ⑤ FINISH GRADE
- ⑥ 3/4" GRAVEL SUMP IN, UNDER AND AROUND VALVE BOX. FILL TO TOP OF VALVE BOX HOLES
- ⑦ INSTALL FILTER FABRIC AROUND GRAVEL SUMP
- ⑧ CAP WIRES WITH APPROVED WATERTIGHT WIRE CONNECTOR (SEE SPECIFICATIONS)
- ⑨ CAP PRESSURE SUPPLY LINE DIRECTLY BELOW CENTER OF SPARE WIRE VALVE BOX
- ⑩ RECYCLED WATER WARNING TAG (PER LOCAL STANDARDS)

	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13
	RECLAIMED SPARE WIRE BOX		
STD. R-046	3"=1'-0"	APPROVED BY: MPH	 
		REV:	



- ① RECLAIMED WATER SIGN PER PER LOCAL WATER DISTRICT STANDARDS
- ② ATTACH SIGN TO POST W/ (2) 1/4" CARRIAGE BOLTS 3" FROM TOP AND BOTTOM OF SIGN. BOLT SIZES AS REQUIRED
- ③ 3" GALVANIZED STEEL POST
- ④ SLOPE TO DRAIN AWAY FROM POST
- ⑤ FINISH GRADE
- ⑥ COMPACTION PER GEOTECHNICAL REPORT
- ⑦ CONCRETE FOOTING



RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS

DATE: 02-05-13

RECLAIMED WATER SIGNAGE

PER LOCAL WATER DIST. STANDARDS

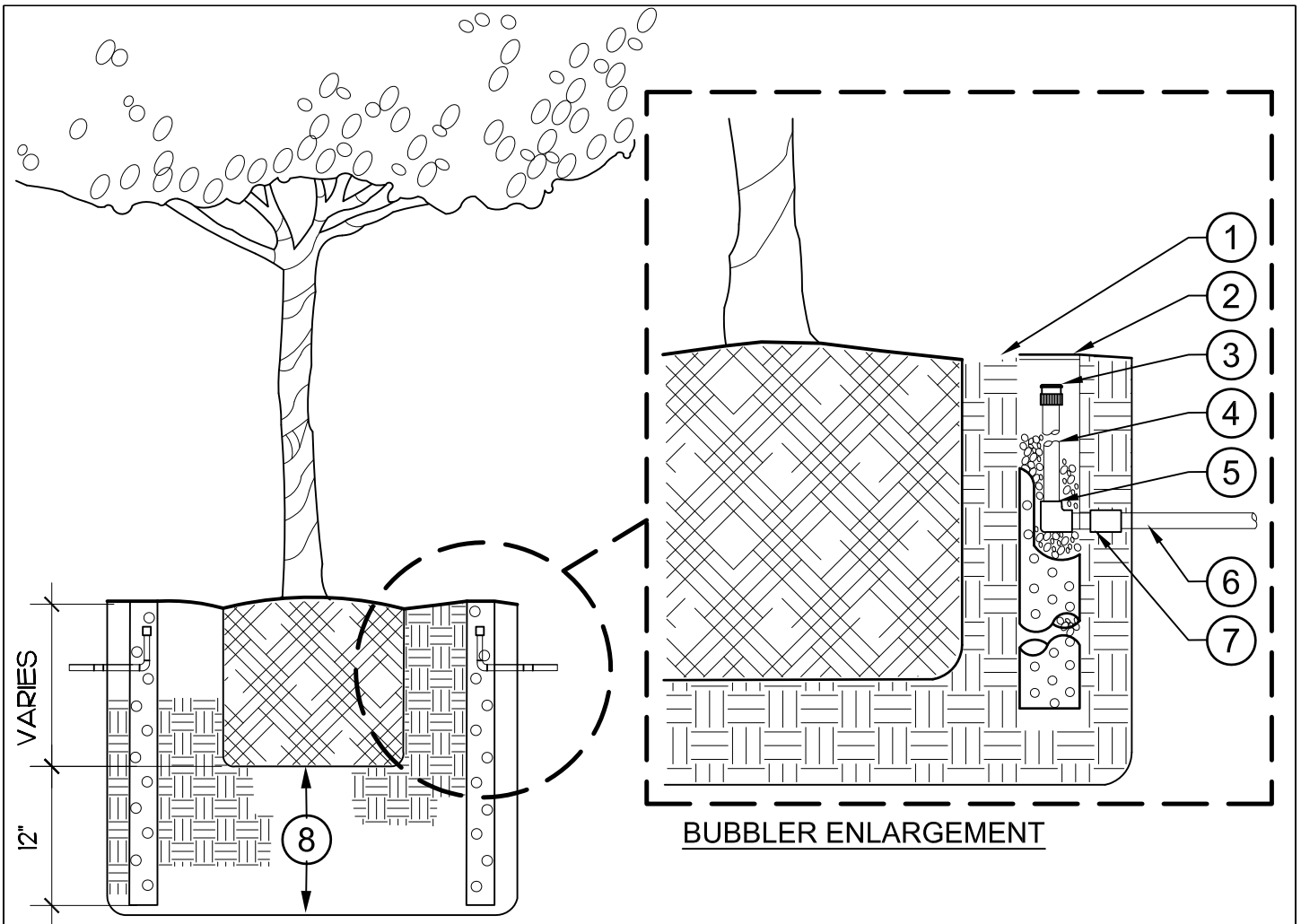
APPROVED BY: MPH



STD. R-047

1"=1'-0"

REV:

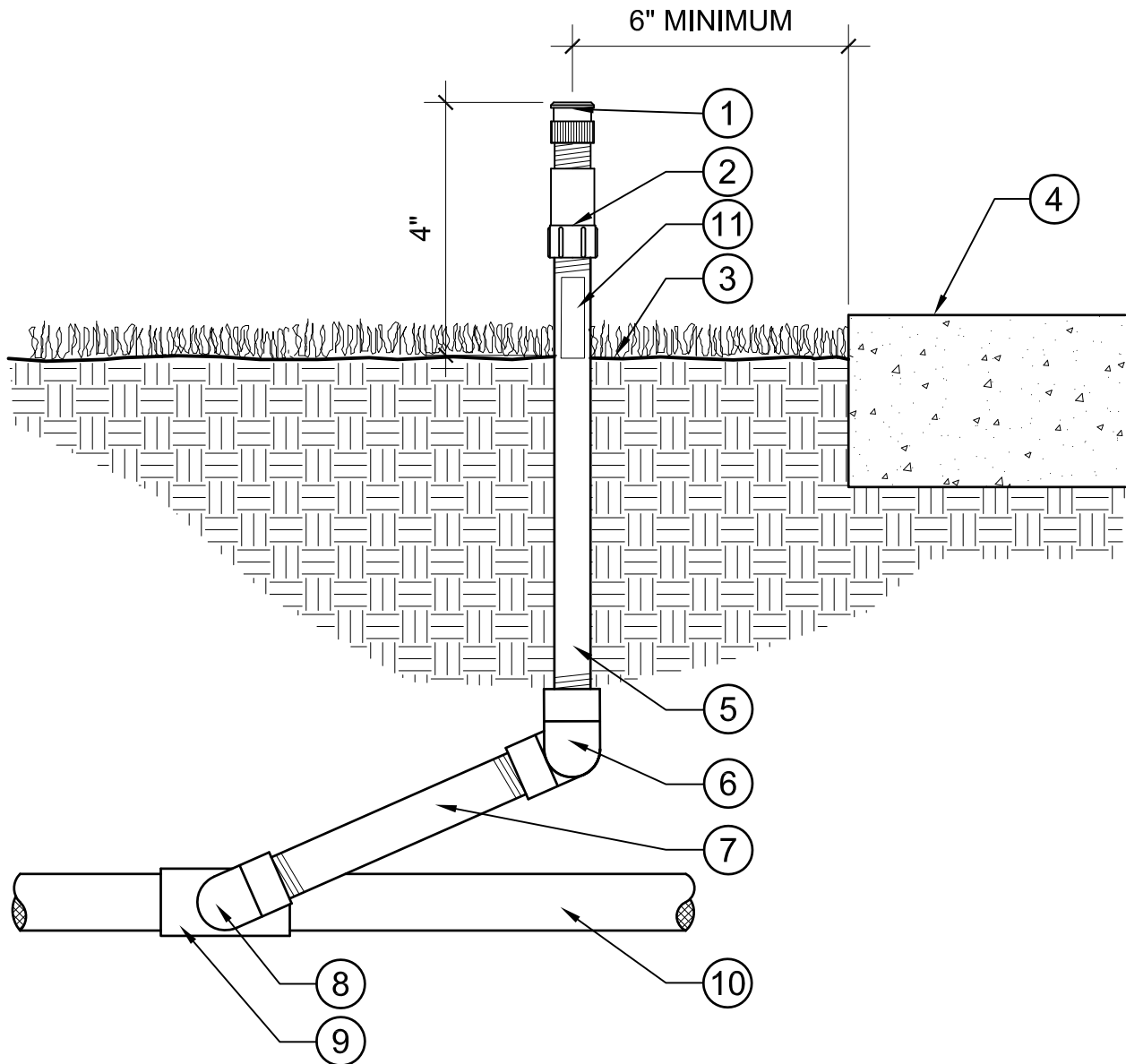


- ① FINISH GRADE
- ② SCH 40 PVC 4" PERFORATED RIGID PIPE WITH FILTER SOCK AND 4" NDS GREEN DRAINAGE GRATE CAP FASTEN CAP WITH A MINIMUM OF (3) STAINLESS STEEL SCREWS
- ③ BUBBLER (SEE IRRIGATION LEGEND) INSTALL 1" MINIMUM BELOW DRAIN GRATE
- ④ 1/2" MIPT X 1/2" MIPT SCH. 80 NIPPLE (LENGTH AS REQUIRED) (2 REQUIRED)
- ⑤ 1/2" FIPT X 1/2" FIPT SCH. 40 90 DEGREE ELBOW
- ⑥ IRRIGATION LATERAL LINE (PER LEGEND AND SPECIFICATIONS)
- ⑦ 1/2" FIPT X 1/2" SLIP SCH. 40 FEMALE ADAPTER
- ⑧ TUBE DEPTH BELOW ROOT BALL 1'-0" (SEE PLANTING DETAIL FOR BALL HOLE DEPTH)




TREE BUBBLER SCHEDULE:

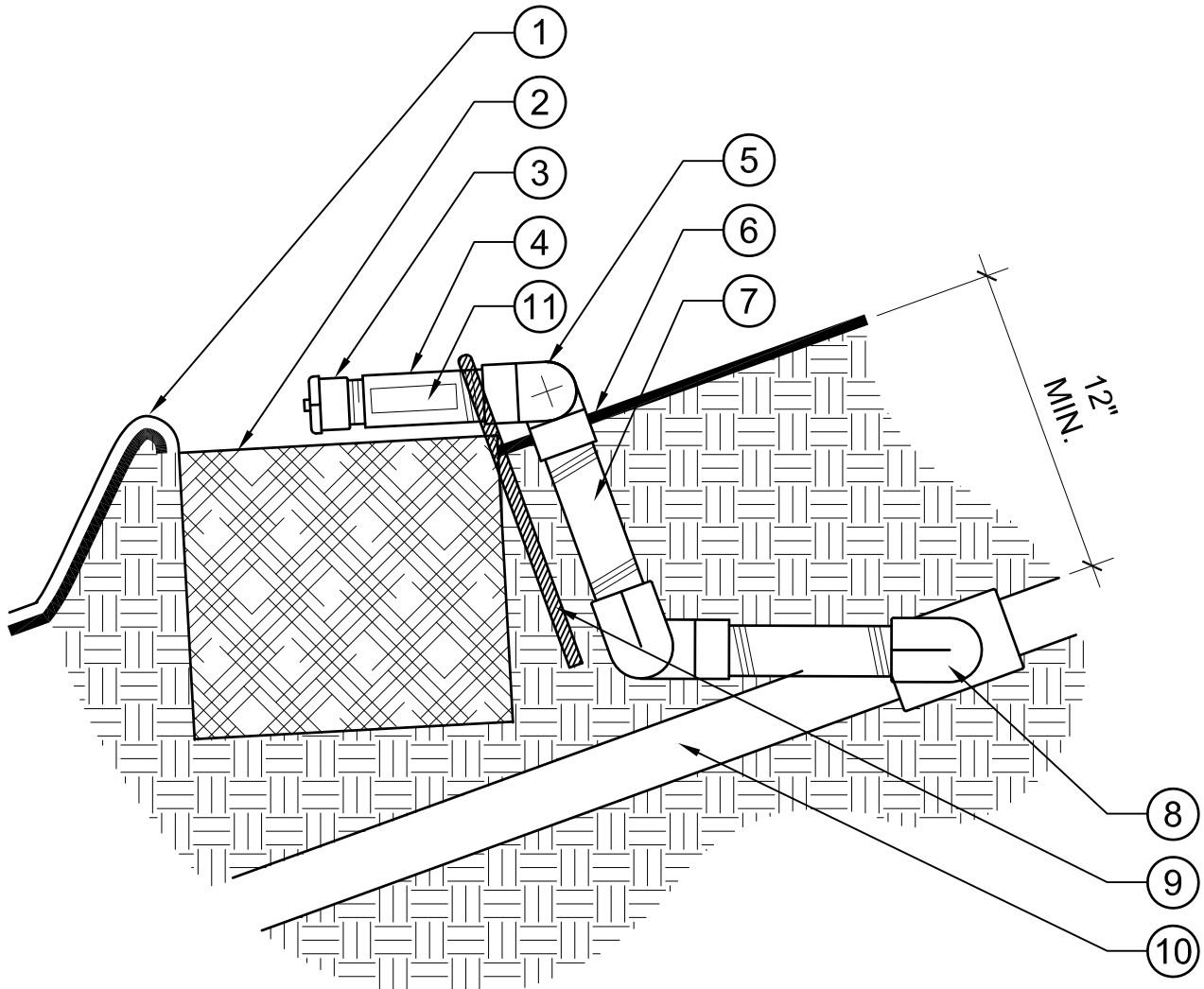
- 15 GALLON - 1 BUBBLER
- 24" BOX - 1 BUBBLER
- 36" BOX - 2 BUBBLERS
- 42" BOX - 2 BUBBLERS
- 48" BOX AND UP - 4 BUBBLERS

	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13
	RECLAIMED TREE WELL BUBBLER		
	AND SCHEDULE		
STD. R-050	N.T.S.	APPROVED BY: MPH	
		REV:	



- ① PURPLE BUBBLER NOZZLE AND SCREEN (SEE LEGEND AND SPECIFICATIONS)
- ② EXTERNAL CHECK VALVE (SEE SPECIFICATIONS)
- ③ FINISH GRADE
- ④ ADJACENT HARDSCAPE (IF APPLICABLE)
- ⑤ 1/2" PVC SCH. 80 RISER (LENGTH VARIES)
- ⑥ 1/2" FIPT x FIPT SCH. 40 90 DEGREE ELBOW (1 REQUIRED)
- ⑦ 1/2" x 8" PVC SCH. 80 NIPPLE
- ⑧ 1/2" FIPT X MIPT SCH. 40 90 DEGREE ELBOW (2 REQUIRED)
- ⑨ S x S x T TEE IN LATERAL LINE (LATERAL SIZE x 1/2" FIPT)
- ⑩ PURPLE NON-PRESSURE LATERAL LINE (SIZE AS NOTED ON PLAN)
- ⑪ RECYCLED WATER WARNING STICKER


	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13
	RECLAIMED BUBBLER ON RISER		
	WITH CHECK VALVE	APPROVED BY: MPH	 
STD. R-051	3"=1'-0"	REV:	

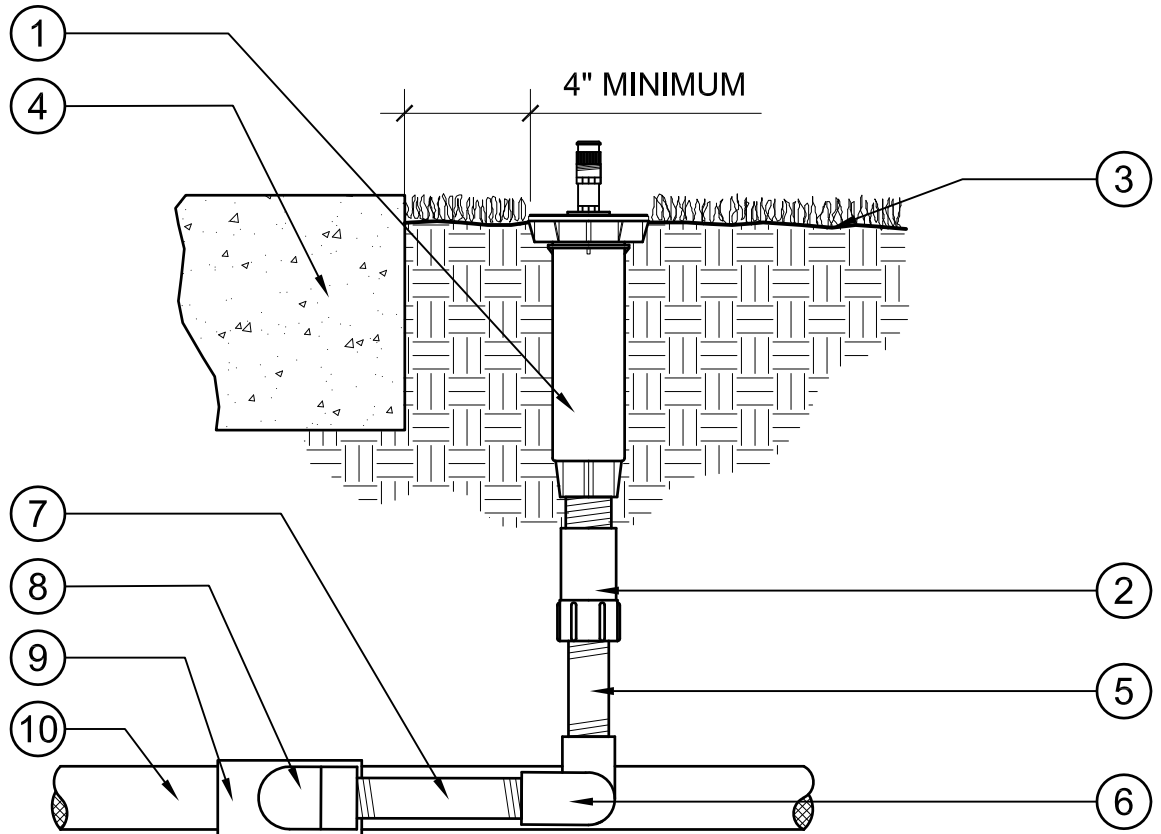


NOTE:

- 1. BUBBLER SHALL BE PLACED TO IRRIGATE DIRECTLY ADJACENT TO PLANT ROOTBALL.
- 2. PVC LATERAL SUPPLY LINES SHALL RUN PARALLEL TO SLOPE WITH BUBBLER LINES RUNNING PERPENDICULAR TO SLOPE AS SHOWN ABOVE.
- 3. ALL IRRIGATION SHALL BE COMPLETELY INSTALLED PRIOR TO PLANT LAYOUTS.




- | | |
|---|---|
| <ul style="list-style-type: none"> ① WATER BASIN INSTALLED AROUND PLANTING PIT ② ROOTBALL OF SHRUB GROUNDCOVER OR TREE ③ BUBBLER NOZZLE ④ 1/2" X 6" SCH. 80 PVC NIPPLE ⑤ 1/2" FIPT T X T SCH. 40 ELBOW AND (2 REQUIRED) ⑥ FINISH GRADE ON SLOPE | <ul style="list-style-type: none"> ⑦ 1/2" x 8" PVC SCH. 80 NIPPLE (2 REQUIRED) ⑧ SCH. 40 1/2" STREET ELBOW T X T (3 REQUIRED) ⑨ #4 X 18" VINYL COATED REBAR "J" HOOK ⑩ PURPLE NON-PRESSURE LATERAL LINE ⑪ RECYCLED WATER WARNING STICKER |
|---|---|

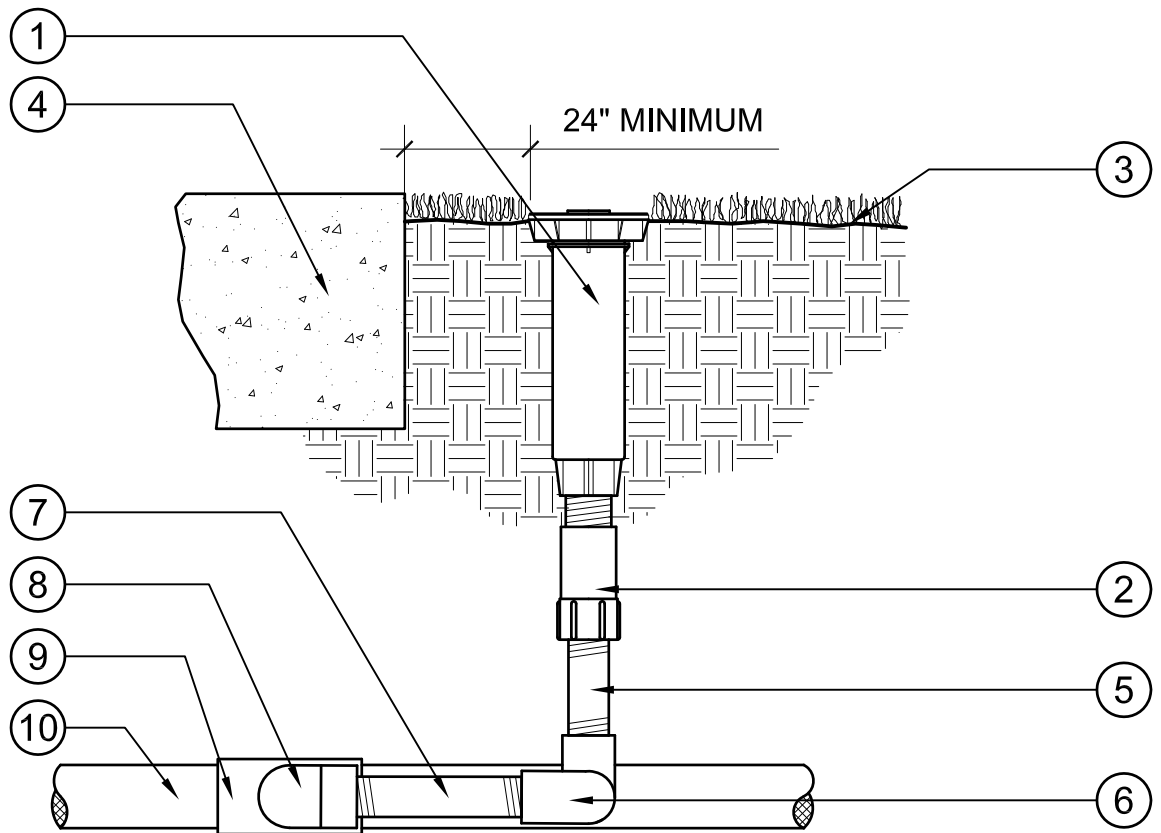
	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS	DATE: 02-05-13
	RECLAIMED BUBBLER FOR TREES ON SLOPES	 
	WITH STEEL "J" HOOK	
STD. R-052	3"=1'-0"	REV:



NOTE:
 INSTALL EXTERNAL CHECK VALVES ON ALL SPRAYHEADS THAT ARE GREATER THAN 8 VERTICAL FEET IN ELEVATION LOWER THAN THE HIGHEST POINT ON THE COMBINED NON-PRESSURE LATERAL LINE FOR THE ENTIRE ZONE.



- | | |
|---|--|
| <ul style="list-style-type: none"> ① POP-UP BUBBLER WITH PURPLE CAP (SEE SPECIFICATIONS) ② EXTERNAL CHECK VALVE (SEE SPECIFICATIONS) ③ FINISH GRADE ④ ADJACENT HARDSCAPE (IF APPLICABLE) ⑤ 1/2" x 2" SCH. 80 NIPPLE (1 REQUIRED) | <ul style="list-style-type: none"> ⑥ 1/2" FIPT x FIPT SCH. 40 90 DEGREE ELBOW (1 REQUIRED) ⑦ 1/2" x 8" PVC SCH. 80 NIPPLE ⑧ 1/2" FIPT X MIPT SCH. 40 90 DEGREE ELBOW (2 REQUIRED) ⑨ S x S x T TEE IN LATERAL LINE (LATERAL SIZE x 1/2" FIPT) ⑩ PURPLE NON-PRESSURE LATERAL LINE (SIZE AS NOTED ON PLAN) |
|---|--|

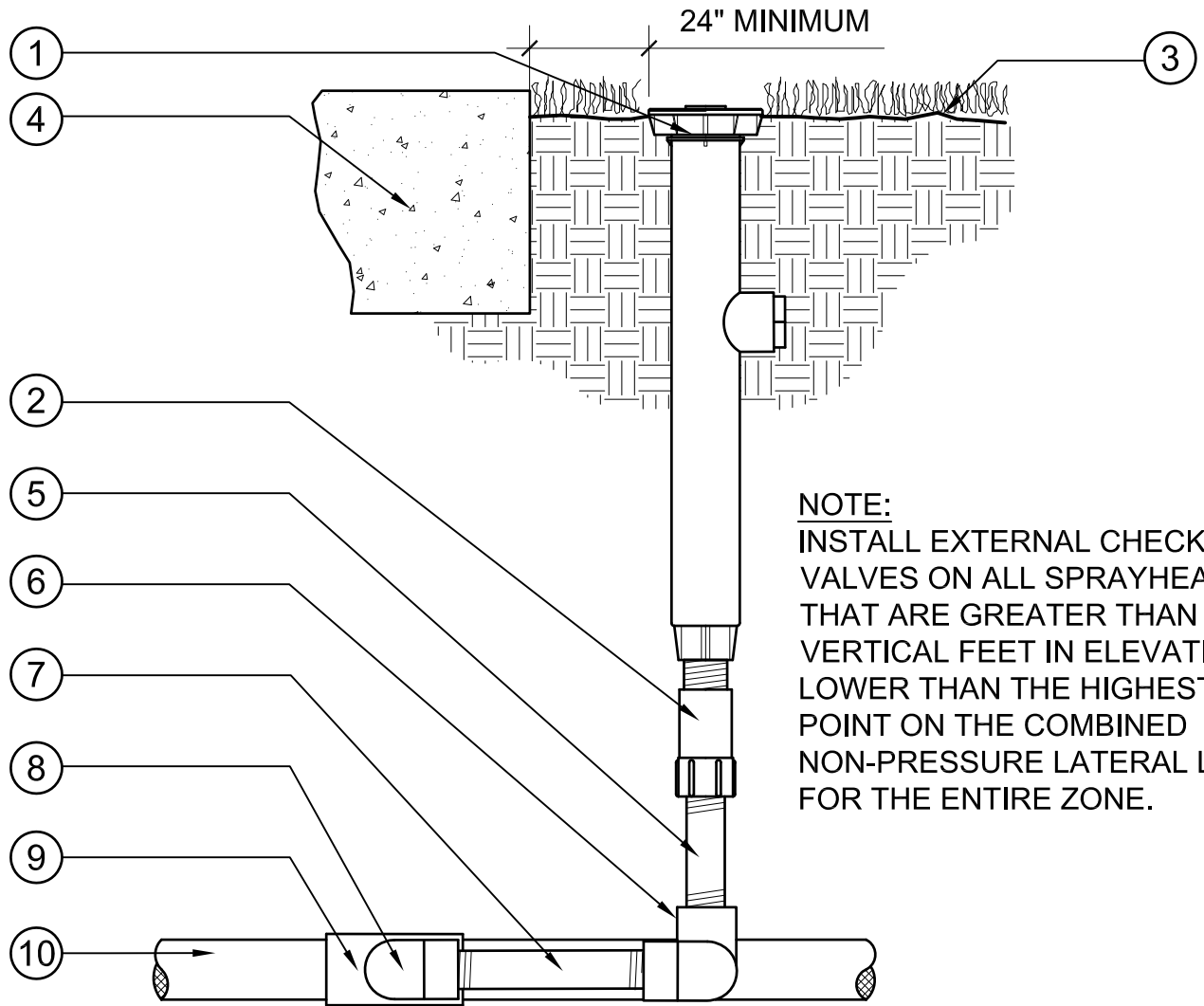
	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13
	RECLAIMED 6" POP-UP BUBBLER		
	WITH EXTERNAL CHECK VALVE	APPROVED BY: MPH	 
STD. R-053	3"=1'-0"	REV:	



NOTE:
 INSTALL EXTERNAL CHECK VALVES ON ALL SPRAYHEADS THAT ARE GREATER THAN 8 VERTICAL FEET IN ELEVATION LOWER THAN THE HIGHEST POINT ON THE COMBINED NON-PRESSURE LATERAL LINE FOR THE ENTIRE ZONE.




- ① POP-UP SPRAY HEAD WITH PURPLE CAP (SEE SPECIFICATIONS)
- ② EXTERNAL CHECK VALVE (SEE SPECIFICATIONS)
- ③ FINISH GRADE
- ④ ADJACENT HARDSCAPE (IF APPLICABLE)
- ⑤ 1/2" x 2" SCH. 80 NIPPLE (1 REQUIRED)
- ⑥ 1/2" FIPT x FIPT SCH. 40 90 DEGREE ELBOW (1 REQUIRED)
- ⑦ 1/2" x 8" PVC SCH. 80 NIPPLE
- ⑧ 1/2" FIPT X MIPT SCH. 40 90 DEGREE ELBOW (2 REQUIRED)
- ⑨ S x S x T TEE IN LATERAL LINE (LATERAL SIZE x 1/2" FIPT)
- ⑩ PURPLE NON-PRESSURE LATERAL LINE (SIZE AS NOTED ON PLAN)

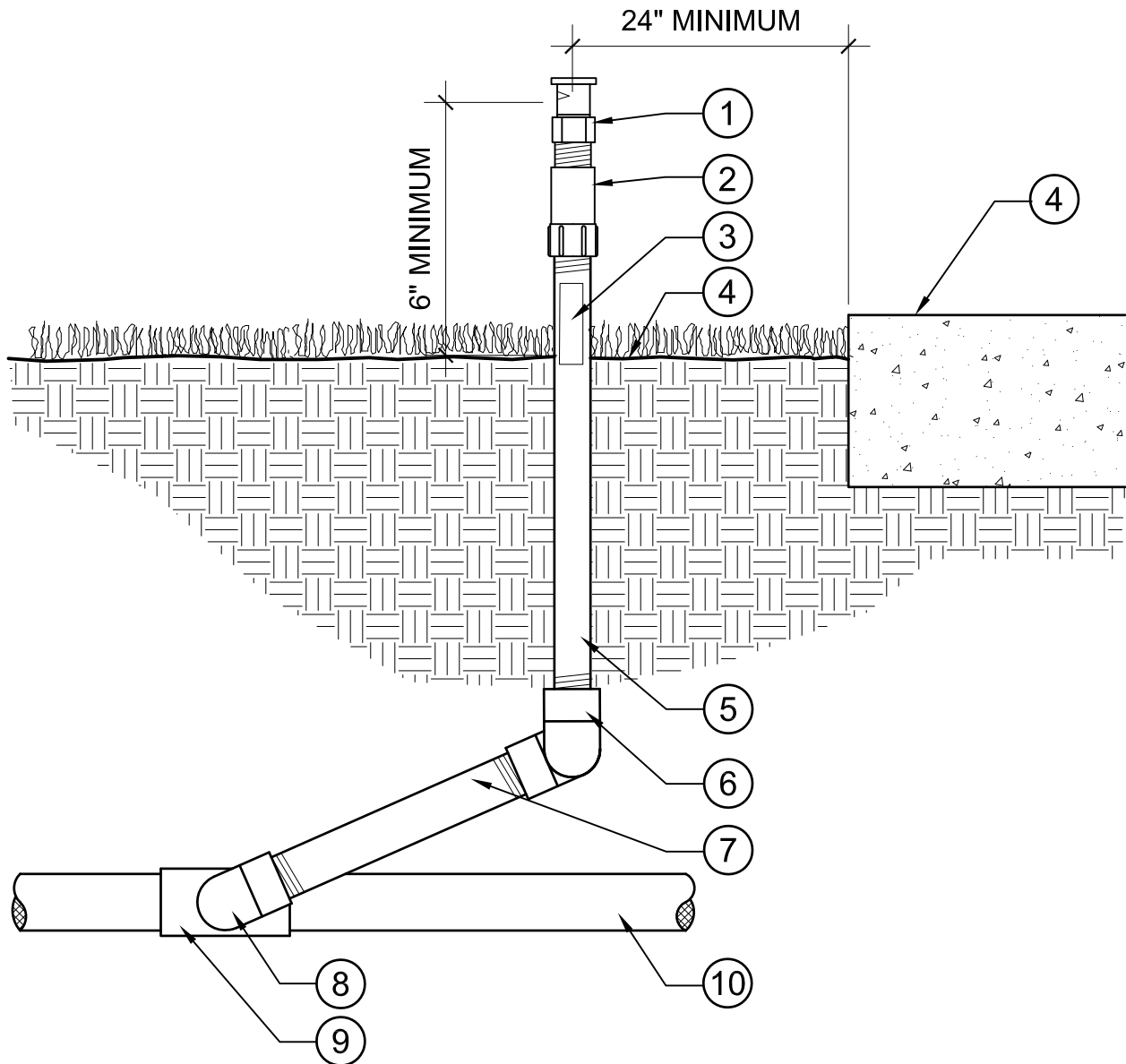
	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13
	<h2 style="margin: 0;">RECLAIMED 6" POP-UP SPRAY HEAD</h2>		
WITH EXTERNAL CHECK VALVE	APPROVED BY: MPH		
STD. R-060	3"=1'-0"	REV:	






NOTE:
 INSTALL EXTERNAL CHECK VALVES ON ALL SPRAYHEADS THAT ARE GREATER THAN 8 VERTICAL FEET IN ELEVATION LOWER THAN THE HIGHEST POINT ON THE COMBINED NON-PRESSURE LATERAL LINE FOR THE ENTIRE ZONE.

- | | |
|--|--|
| ① POP-UP SPRAY HEAD WITH PURPLE CAP (SEE SPECIFICATIONS) | ⑥ 1/2" FIPT x FIPT SCH. 40 90 DEGREE ELBOW (1 REQUIRED) |
| ② EXTERNAL CHECK VALVE (SEE SPECIFICATIONS) | ⑦ 1/2" x 8" PVC SCH. 80 NIPPLE |
| ③ FINISH GRADE | ⑧ 1/2" FIPT X MIPT SCH. 40 90 DEGREE ELBOW (2 REQUIRED) |
| ④ ADJACENT HARDSCAPE (IF APPLICABLE) | ⑨ S x S x T TEE IN LATERAL LINE (LATERAL SIZE x 1/2" FIPT) |
| ⑤ 1/2" x 2" SCH. 80 NIPPLE (1 REQUIRED) | ⑩ PURPLE NON-PRESSURE LATERAL LINE (SIZE AS NOTED ON PLAN) |

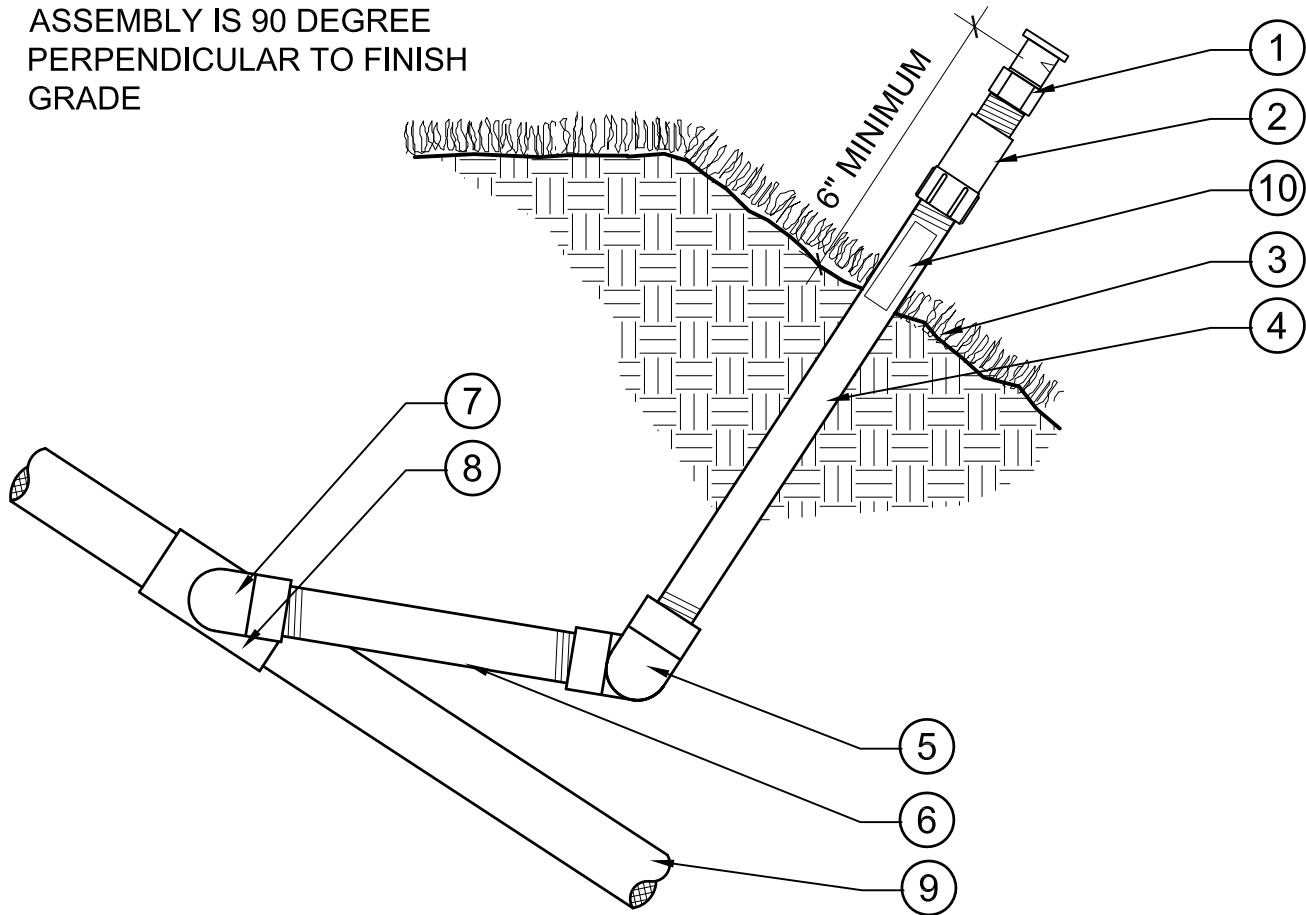
	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13	
	RECLAIMED 12" POP-UP SPRAY HEAD			
	WITH EXTERNAL CHECK VALVE		APPROVED BY: MPH	
STD. R-061	3"=1'-0"	REV:		






- ① SHRUB SPRAY NOZZLE AND SCREEN WITH PURPLE ADAPTER (SEE SPECIFICATIONS)
- ② EXTERNAL CHECK VALVE (SEE SPECIFICATIONS)
- ③ FINISH GRADE
- ④ ADJACENT HARDSCAPE (IF APPLICABLE)
- ⑤ 1/2" PVC SCH. 80 RISER (LENGTH VARIES)
- ⑥ 1/2" FIPT x FIPT SCH. 40 90 DEGREE ELBOW (1 REQUIRED)
- ⑦ 1/2" x 8" PVC SCH. 80 NIPPLE
- ⑧ 1/2" FIPT X MIPT SCH. 40 90 DEGREE ELBOW (2 REQUIRED)
- ⑨ S x S x T TEE IN LATERAL LINE (LATERAL SIZE x 1/2" FIPT)
- ⑩ PURPLE NON-PRESSURE LATERAL LINE (SIZE AS NOTED ON PLAN)
- ⑪ RECYCLED WATER WARNING STICKER

	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13
	RECLAIMED SHRUB SPRAY ON RISER		 
	WITH CHECK VALVE	APPROVED BY: MPH	
STD. R-062	3"=1'-0"	REV:	

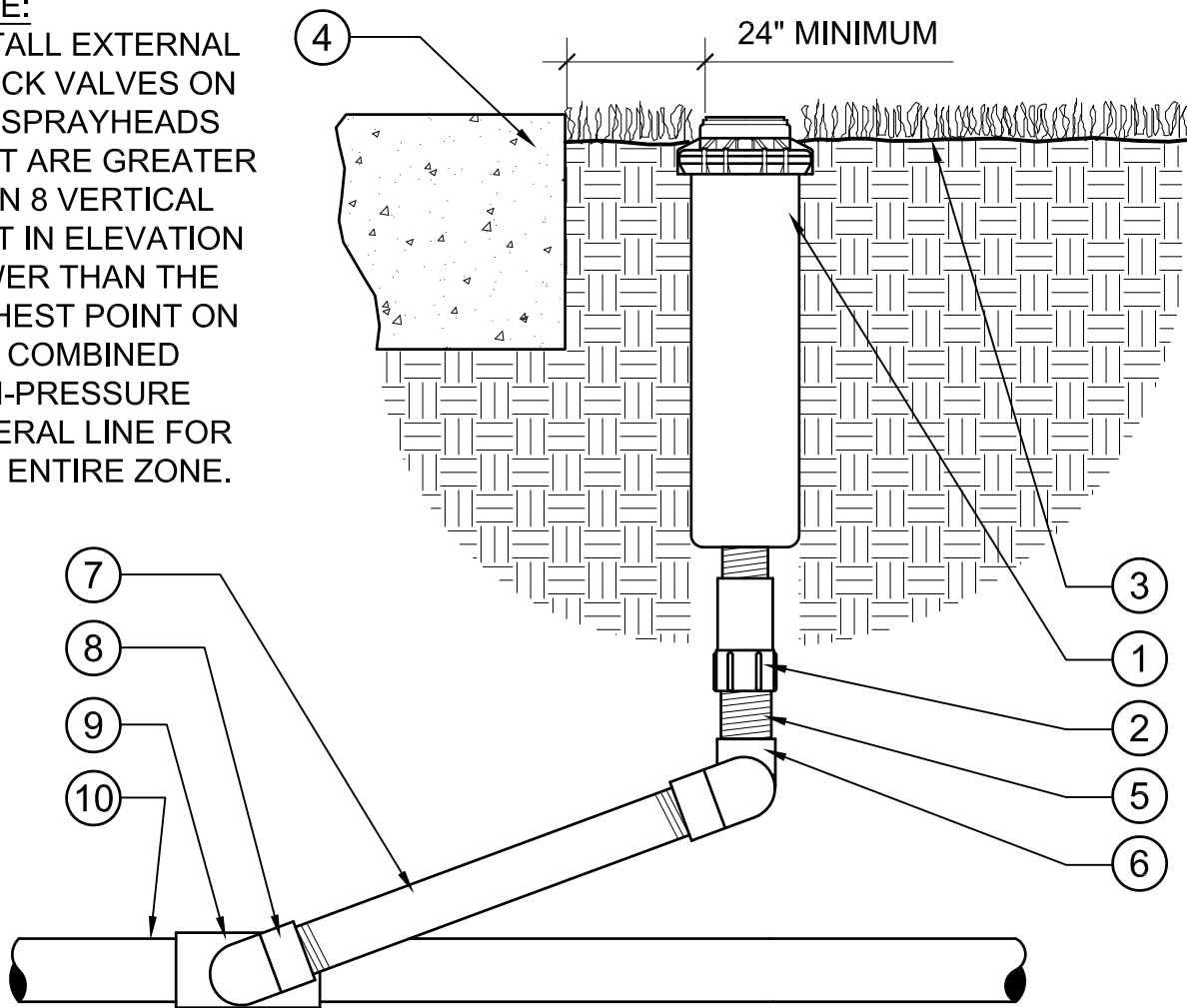
NOTE:
 INSTALL SO THAT RISER
 ASSEMBLY IS 90 DEGREE
 PERPENDICULAR TO FINISH
 GRADE






- | | |
|--|--|
| ① SHRUB SPRAY NOZZLE AND SCREEN WITH PURPLE ADAPTER (SEE SPECIFICATIONS) | ⑥ 1/2" x 8" PVC SCH. 80 NIPPLE |
| ② EXTERNAL CHECK VALVE (SEE SPECIFICATIONS) | ⑦ 1/2" FIPT X MIPT SCH. 40 90 DEGREE ELBOW (2 REQUIRED) |
| ③ FINISH GRADE | ⑧ S x S x T TEE IN LATERAL LINE (LATERAL SIZE x 1/2" FIPT) |
| ④ 1/2" PVC SCH. 80 RISER (LENGTH VARIES) | ⑨ PURPLE NON-PRESSURE LATERAL LINE (SIZE AS NOTED ON PLAN) |
| ⑤ 1/2" FIPT x FIPT SCH. 40 90 DEGREE ELBOW (1 REQUIRED) | ⑩ RECYCLED WATER WARNING STICKER |

	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13
	RECLAIMED SHRUB SPRAY ON RISER (ON SLOPE) WITH CHECK VALVE		APPROVED BY: MPH REV:
STD. R-063	3"=1'-0"		

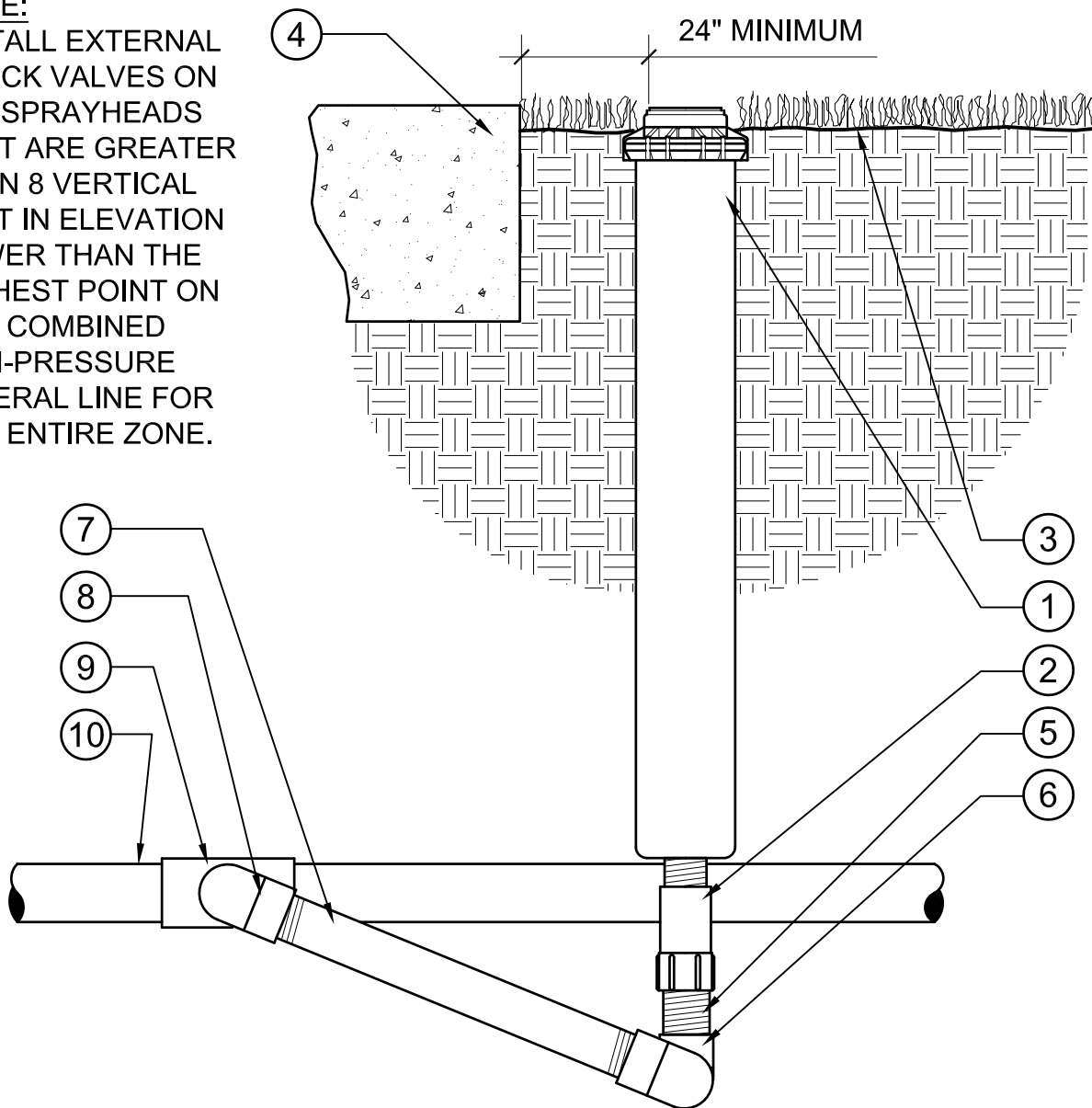
NOTE:
 INSTALL EXTERNAL
 CHECK VALVES ON
 ALL SPRAYHEADS
 THAT ARE GREATER
 THAN 8 VERTICAL
 FEET IN ELEVATION
 LOWER THAN THE
 HIGHEST POINT ON
 THE COMBINED
 NON-PRESSURE
 LATERAL LINE FOR
 THE ENTIRE ZONE.






- ① POP-UP ROTOR HEAD WITH PURPLE CAP (SEE SPECIFICATIONS)
- ② EXTERNAL CHECK VALVE (SEE SPECIFICATIONS)
- ③ FINISH GRADE
- ④ ADJACENT HARDSCAPE (IF APPLICABLE)
- ⑤ 1/2" x 2" SCH. 80 NIPPLE (1 REQUIRED)
- ⑥ 3/4" FIPT x FIPT SCH. 40 90 DEGREE ELBOW (1 REQUIRED)
- ⑦ 3/4" x 8" PVC SCH. 80 NIPPLE
- ⑧ 3/4" FIPT X MIPT SCH. 40 90 DEGREE ELBOW (2 REQUIRED)
- ⑨ S x S x T TEE IN LATERAL LINE (LATERAL SIZE x 3/4" FIPT)
- ⑩ PURPLE NON-PRESSURE LATERAL LINE (SIZE AS NOTED ON PLAN)

	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13
	<h2 style="margin: 0;">RECLAIMED 6" POP-UP ROTOR</h2> <p style="margin: 0;">WITH EXTERNAL CHECK VALVE</p>		APPROVED BY: MPH REV:
STD. R-070	3"=1'-0"		

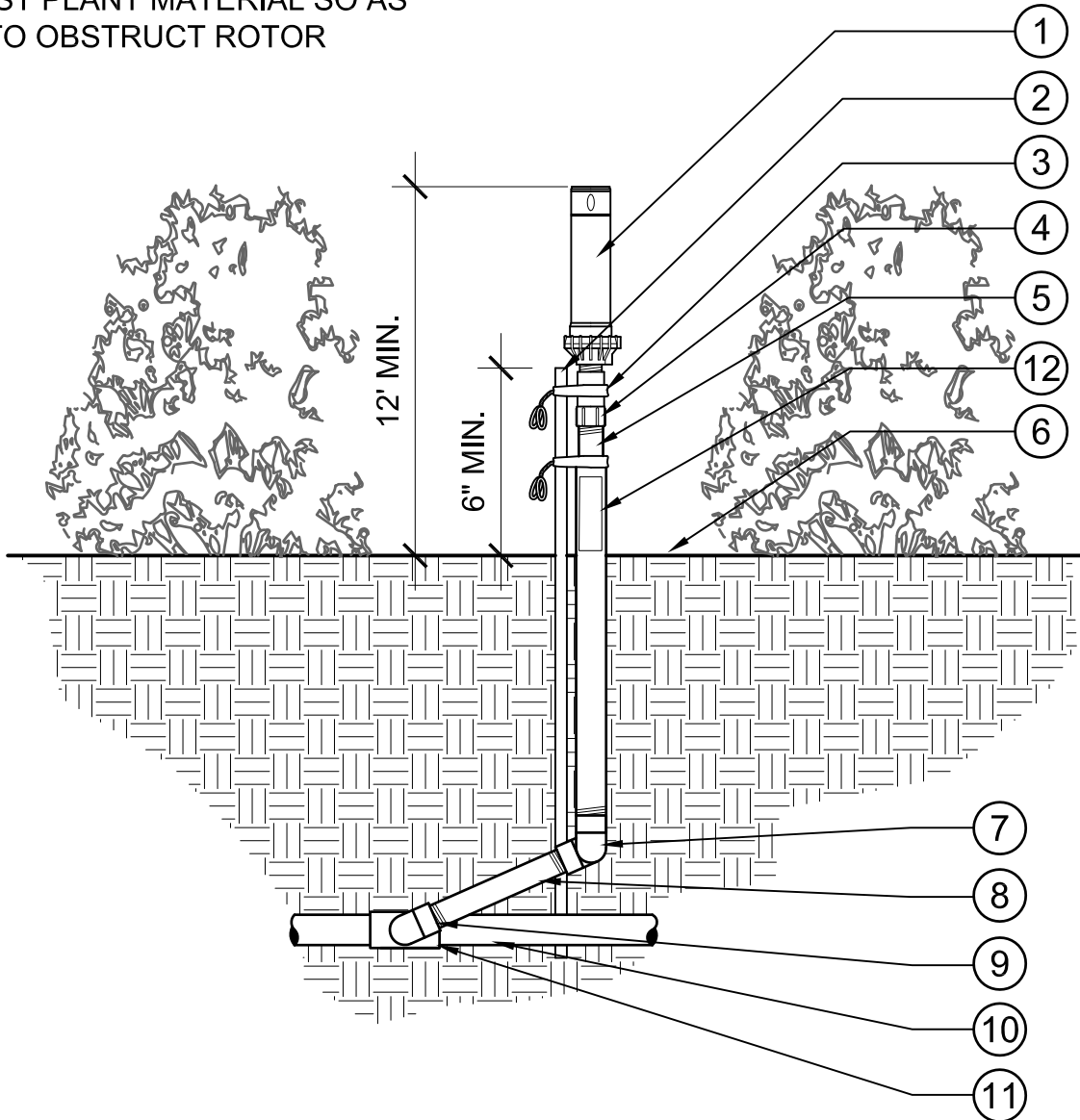
NOTE:
 INSTALL EXTERNAL
 CHECK VALVES ON
 ALL SPRAYHEADS
 THAT ARE GREATER
 THAN 8 VERTICAL
 FEET IN ELEVATION
 LOWER THAN THE
 HIGHEST POINT ON
 THE COMBINED
 NON-PRESSURE
 LATERAL LINE FOR
 THE ENTIRE ZONE.



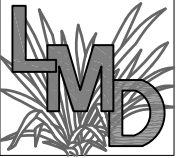


- ① POP-UP ROTOR HEAD WITH PURPLE CAP (SEE SPECIFICATIONS)
- ② EXTERNAL CHECK VALVE (SEE SPECIFICATIONS)
- ③ FINISH GRADE
- ④ ADJACENT HARDSCAPE (IF APPLICABLE)
- ⑤ 1/2" x 2" SCH. 80 NIPPLE (1 REQUIRED)
- ⑥ 3/4" FIPT x FIPT SCH. 40 90 DEGREE ELBOW (1 REQUIRED)
- ⑦ 3/4" x 8" PVC SCH. 80 NIPPLE
- ⑧ 3/4" FIPT X MIPT SCH. 40 90 DEGREE ELBOW (2 REQUIRED)
- ⑨ S x S x T TEE IN LATERAL LINE (LATERAL SIZE x 3/4" FIPT)
- ⑩ PURPLE NON-PRESSURE LATERAL LINE (SIZE AS NOTED ON PLAN)

	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13
	<h2 style="margin: 0;">RECLAIMED 12" POP-UP ROTOR</h2> <p style="margin: 0;">WITH EXTERNAL CHECK VALVE</p>		
STD. R-071	3"=1'-0"	APPROVED BY: MPH	REV:
			

NOTE:
 ADJUST PLANT MATERIAL SO AS
 NOT TO OBSTRUCT ROTOR
 HEAD

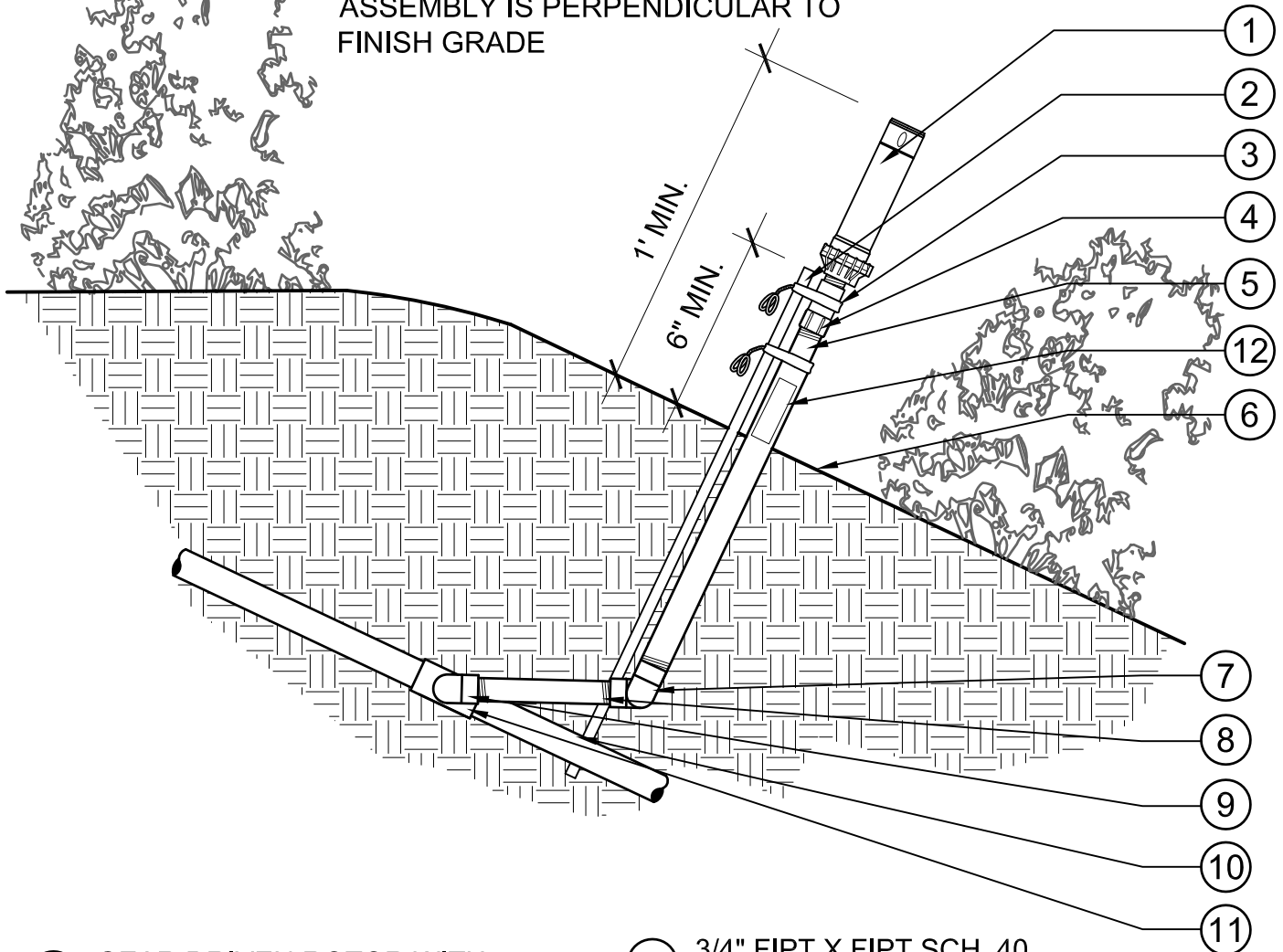


- | | |
|--|---|
| ① GEAR DRIVEN ROTOR WITH PURPLE CAP (SEE SPECIFICATIONS) | ⑦ 3/4" FIPT X FIPT SCH. 40 90 DEGREE ELBOW (1 REQUIRED) |
| ② SPRINKLER STABILIZER BAR (SEE SPECIFICATIONS) | ⑧ 3/4" x 8" PVC SCH. 80 NIPPLE |
| ③ SPRINKLER STABILIZER TIE (SEE SPECIFICATIONS) | ⑨ 3/4" FIPT X MIPT SCH. 40 90 DEGREE ELBOW (2 REQUIRED) |
| ④ EXTERNAL CHECK VALVE (SEE SPECIFICATIONS) | ⑩ PURPLE NON-PRESSURE LATERAL LINE (SIZE NOTED ON PLAN) |
| ⑤ 3/4" x 24" PVC SCH. 80 RISER | ⑪ S x S x T TEE IN LATERAL LINE (LATERAL LINE SIZE x 3/4" FIPT) |
| ⑥ FINISH GRADE | ⑫ RECYCLED WATER WARNING STICKER |




	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13	
	<h2>RECLAIMED SHRUB ROTOR ON RISER</h2>			
	WITH CHECK VALVE		APPROVED BY: MPH	
STD. R-072	1 1/2"=1'-0"	REV:		

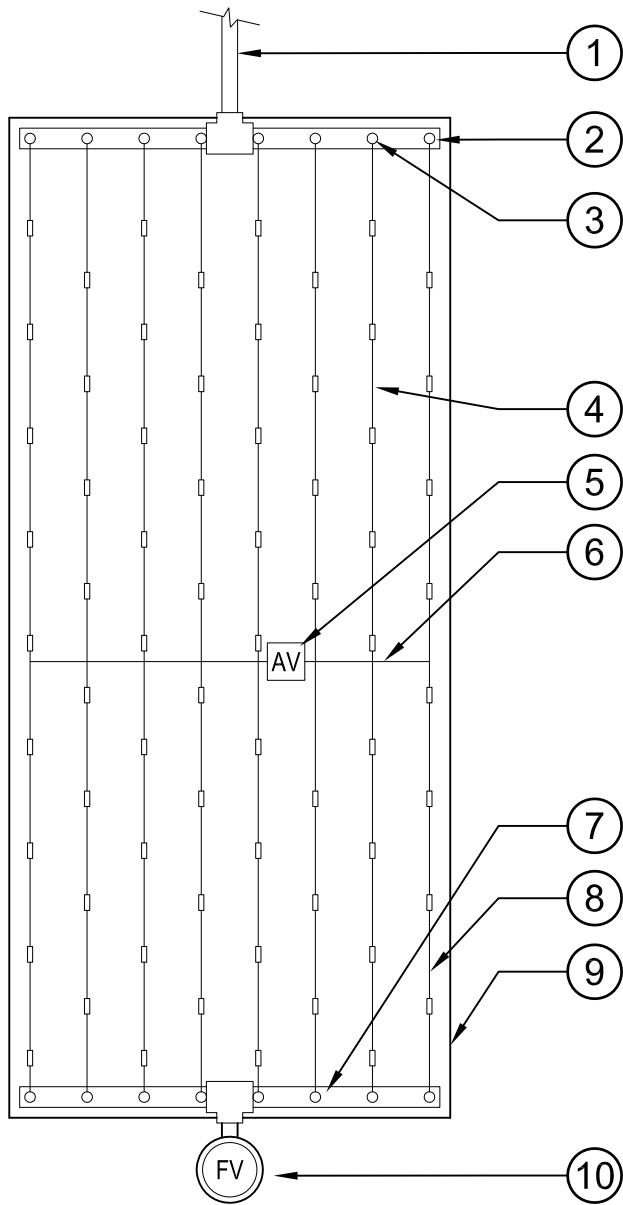
NOTE:
ADJUST PLANT MATERIAL SO AS
NOT TO OBSTRUCT ROTOR HEAD

INSTALL SO THAT RISER
ASSEMBLY IS PERPENDICULAR TO
FINISH GRADE



- ① GEAR DRIVEN ROTOR WITH PURPLE CAP (SEE SPECIFICATIONS)
- ② SPRINKLER STABILIZER BAR (SEE SPECIFICATIONS)
- ③ SPRINKLER STABILIZER TIE (SEE SPECIFICATIONS)
- ④ EXTERNAL CHECK VALVE (SEE SPECIFICATIONS)
- ⑤ 3/4" x 24" PVC SCH. 80 RISER
- ⑥ FINISH GRADE
- ⑦ 3/4" FIPT X FIPT SCH. 40 90 DEGREE ELBOW (1 REQUIRED)
- ⑧ 3/4" x 8" PVC SCH. 80 NIPPLE
- ⑨ 3/4" FIPT X MIPT SCH. 40 90 DEGREE ELBOW (2 REQUIRED)
- ⑩ PURPLE NON-PRESSURE LATERAL LINE (SIZE NOTED ON PLAN)
- ⑪ S x S x T TEE IN LATERAL LINE (LATERAL LINE SIZE x 3/4" FIPT)
- ⑫ RECYCLED WATER WARNING STICKER

	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13
	RECLAIMED SHRUB ROTOR ON RISER (ON SLOPE)		
WITH CHECK VALVE	APPROVED BY: MPH		 
1 1/2"=1'-0"	REV:		






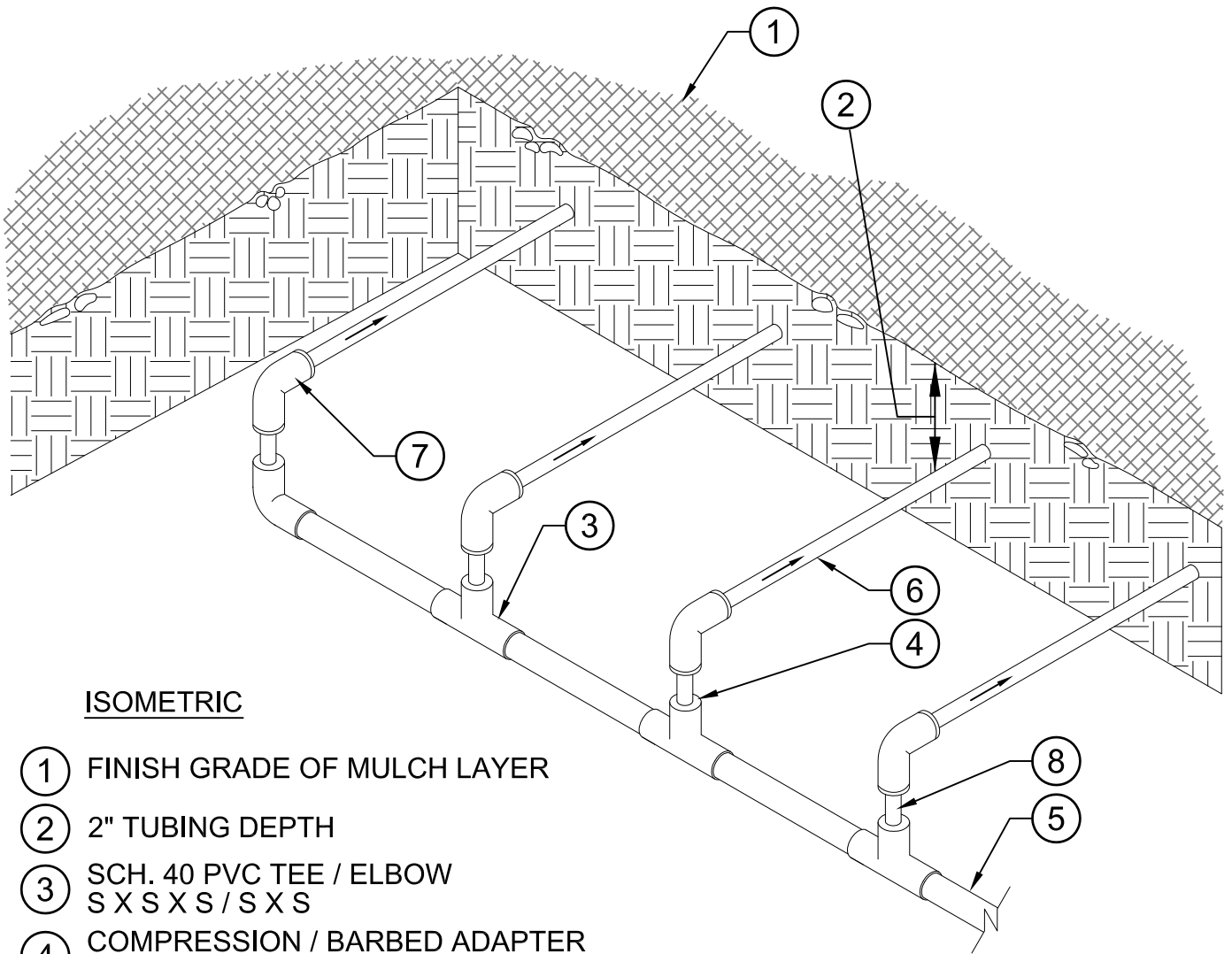
PLAN

- ① PURPLE PVC LATERAL LINE FROM ELECTRIC CONTROL VALVE
- ② PURPLE PVC SUPPLY MANIFOLD
- ③ MANIFOLD TO ELBOW CONNECTION
- ④ PURPLE DRIP LINE LATERAL
- ⑤ AIR/VACUUM RELIEF VALVE AT EACH HIGH POINT
- ⑥ AIR/VACUUM RELIEF LATERAL
- ⑦ PURPLE PVC FLUSH MANIFOLD
- ⑧ PURPLE PERIMETER LATERALS 12" FROM EDGE
- ⑨ HARDSCAPE EDGE
- ⑩ FLUSH VALVE PLUMBED TO FLUSH AT LOW POINT IN PURPLE VALVE BOX

NOTES:

1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. THE TOTAL LENGTH OF ALL INTERCONNECTED DRIP LINE SHALL NOT EXCEED THE MAXIMUM RUN LENGTH.

	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13	
	RECLAIMED SUBSURFACE PIPE AND TUBING LAYOUT			
	END FED CONFIGURATION	APPROVED BY: MPH		
STD. R-080	N.T.S.	REV:		



ISOMETRIC

- ① FINISH GRADE OF MULCH LAYER
- ② 2" TUBING DEPTH
- ③ SCH. 40 PVC TEE / ELBOW
S X S X S / S X S
- ④ COMPRESSION / BARBED ADAPTER
(GLUE INTO PVC TEE / ELBOW)
- ⑤ PURPLE PVC MANIFOLD/SUPPLY LINE
FROM DRIP VALVE AND FILTER
- ⑥ PURPLE DRIP LINE WITH INTEGRAL EMITTERS
2" BELOW FINISH GRADE OF TOP SOIL
- ⑦ COMPRESSION / BARBED ELBOW
- ⑧ PURPLE DRIP LINE

NOTES:

INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.



RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS

DATE: 02-05-13

RECLAIMED SUBSURFACE PIPE AND TUBING MANIFOLD

END FED CONFIGURATION

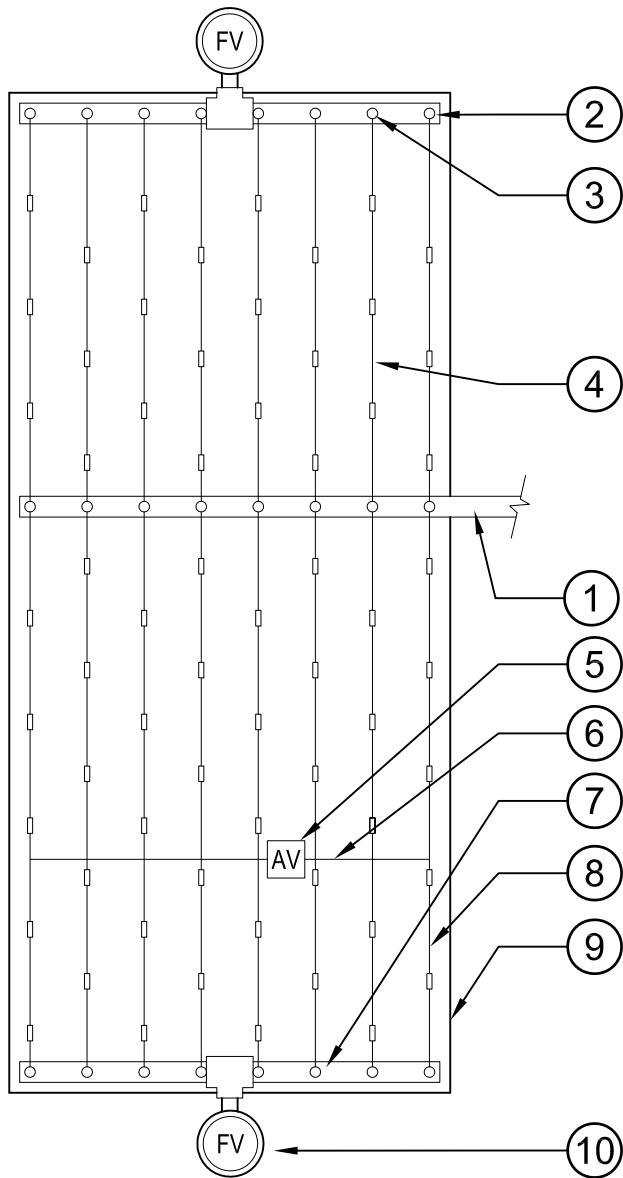
APPROVED BY: MPH



STD. R-081

N.T.S.

REV:





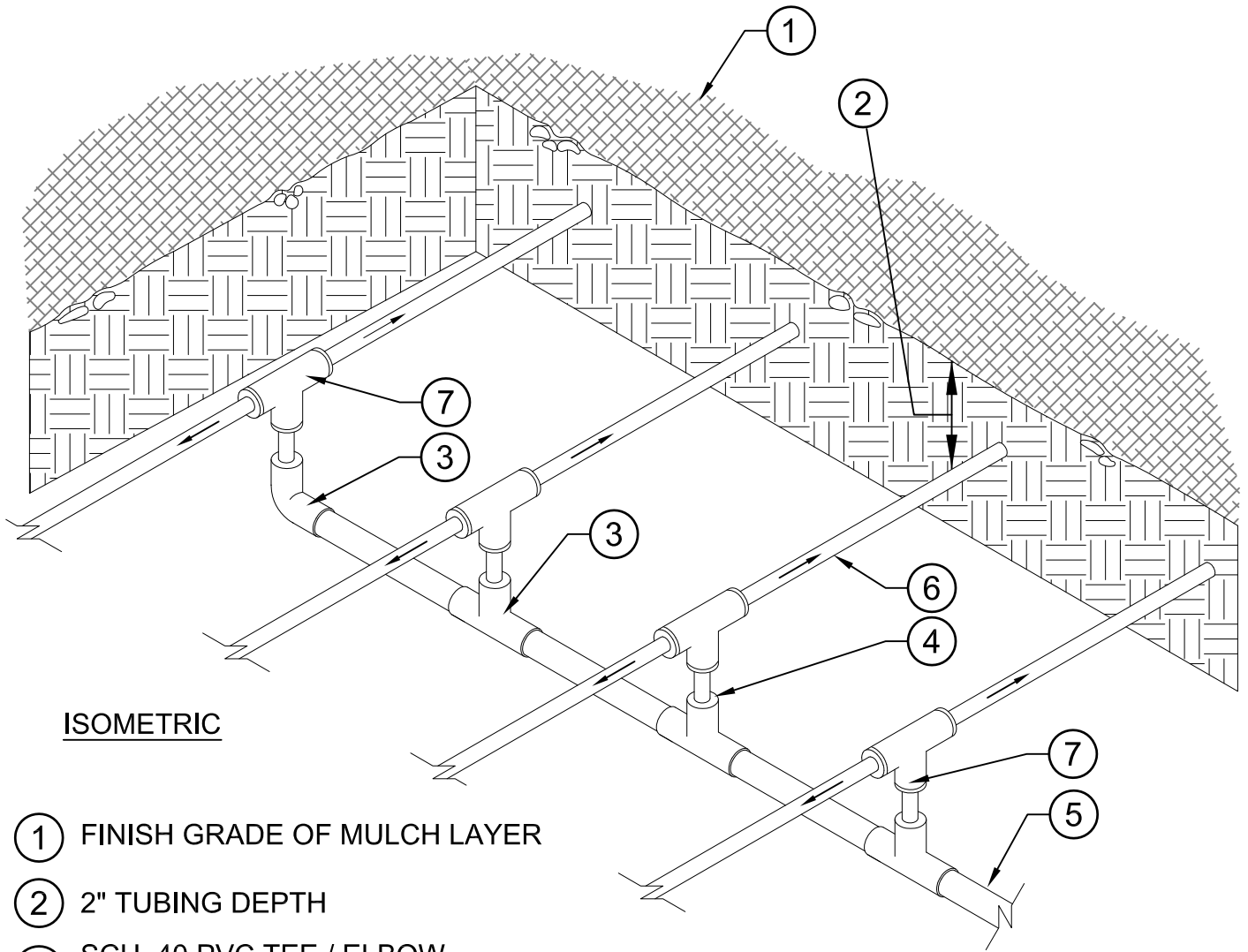
- ① PURPLE PVC LATERAL LINE FROM ELECTRIC CONTROL VALVE
- ② PURPLE PVC EXHAUST
- ③ MANIFOLD TO ELBOW CONNECTION
- ④ PURPLE DRIP LINE LATERAL
- ⑤ AIR/VACUUM RELIEF VALVE AT EACH HIGH POINT
- ⑥ AIR/VACUUM RELIEF LATERAL
- ⑦ PURPLE PVC FLUSH MANIFOLD
- ⑧ PURPLE PERIMETER LATERALS 12" FROM EDGE
- ⑨ HARDSCAPE EDGE
- ⑩ FLUSH VALVE PLUMBED TO FLUSH AT LOW POINT IN PURPLE VALVE BOX

PLAN

NOTES:

1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. THE TOTAL LENGTH OF ALL INTERCONNECTED DRIP LINE SHALL NOT EXCEED THE MAXIMUM RUN LENGTH.

	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13	
	RECLAIMED SUBSURFACE PIPE AND TUBING LAYOUT			
	CENTER FED CONFIGURATION	APPROVED BY: MPH		
STD. R-082	N.T.S.	REV:		

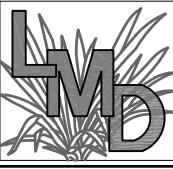




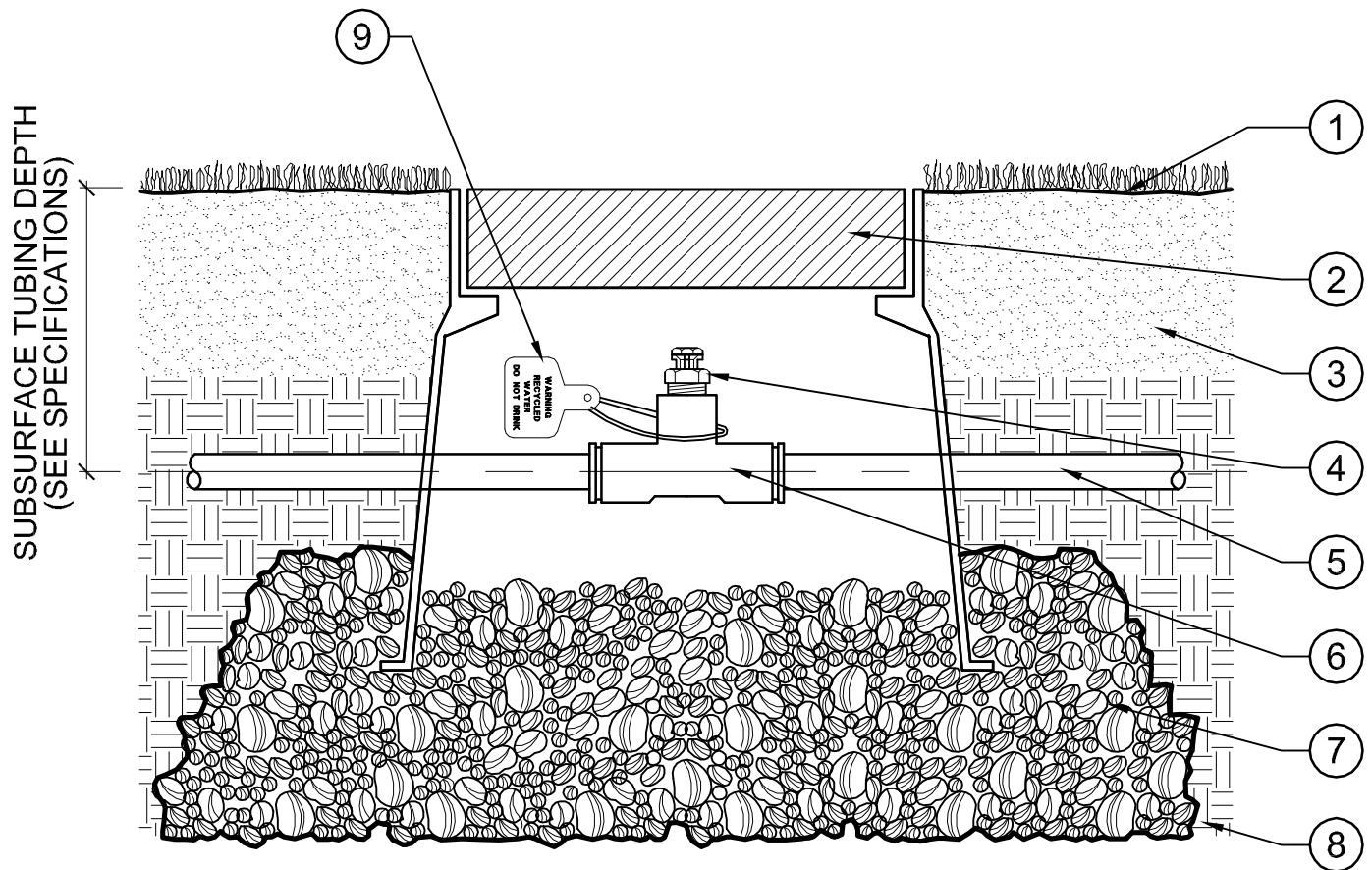
ISOMETRIC

- ① FINISH GRADE OF MULCH LAYER
- ② 2" TUBING DEPTH
- ③ SCH. 40 PVC TEE / ELBOW
S X S X S / S X S
- ④ COMPRESSION / BARBED ADAPTER
(GLUE INTO PVC TEE / ELBOW)
- ⑤ PURPLE PVC MANIFOLD/SUPPLY LINE
FROM DRIP VALVE AND FILTER
- ⑥ PURPLE DRIP LINE WITH INTEGRAL EMITTERS
2" BELOW FINISH GRADE OF TOP SOIL
- ⑦ COMPRESSION / BARBED TEE



NOTES:

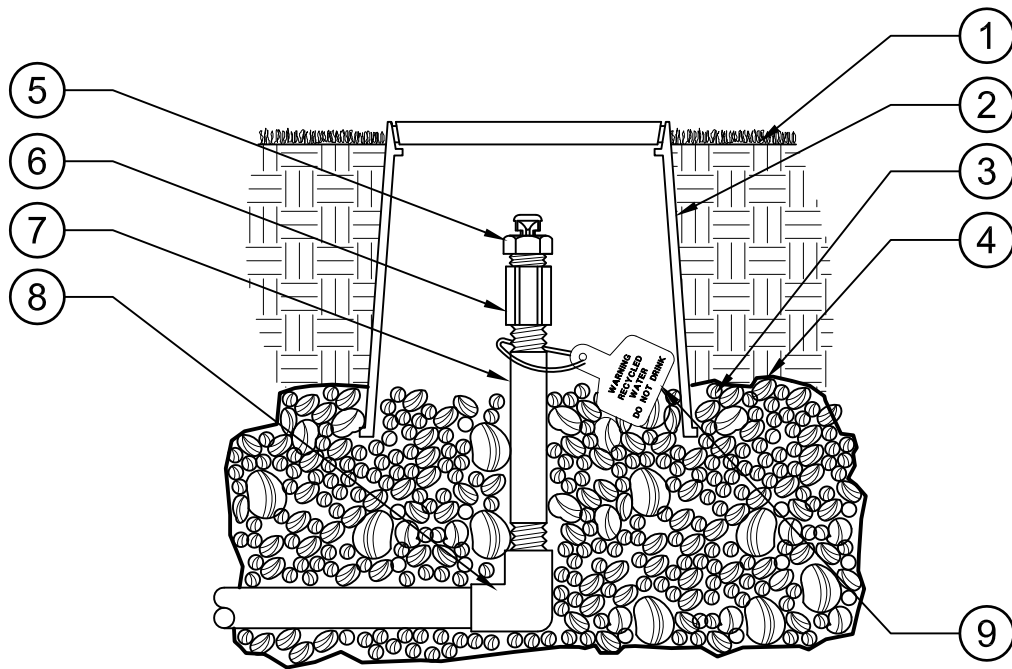
INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13
	RECLAIMED SUBSURFACE PIPE AND TUBING MANIFOLD		
	CENTER FED CONFIGURATION	APPROVED BY: MPH	
STD. R-083	N.T.S.		



- ① FINISH GRADE
 - ② 10" ROUND PURPLE VALVE BOX DRILL HOLES INTO BOX AT SAME DEPTH AS TUBING. HEAT BRAND "AR" ON THE LID IN 1" TALL LETTERS
 - ③ AMENDED SOIL MIX (REFER TO PLANTING PLANS)
 - ④ AIR VACUUM RELIEF VALVE (SEE SPECIFICATIONS)
 - ⑤ PURPLE SUBSURFACE TUBING (SEE SPECIFICATIONS)
 - ⑥ PVC SCH. 40 COMP X FIPT X COMP TEE
 - ⑦ 3/4" GRAVEL SUMP IN, UNDER AND AROUND VALVE BOX. FILL TO TOP OF VALVE BOX HOLES
 - ⑧ INSTALL FILTER FABRIC AROUND GRAVEL SUMP
 - ⑨ RECYCLED WATER WARNING TAG (PER LOCAL STANDARDS)
- NOTE:
LOCATE AIR/VACUUM RELIEF VALVES AT ALL HIGH POINTS IN SUB SURFACE TUBING SYSTEMS

	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13
	RECLAIMED AIR / VACUUM RELIEF VALVE		
	ON SUBSURFACE TUBING	APPROVED BY: MPH	
STD. R-084	3"=1'-0"	REV:	



① FINISH GRADE
(REFER TO PLANTING PLANS
AND SPECIFICATIONS)

⑨ RECYCLED WATER WARNING
TAG (PER LOCAL STANDARDS)

② 6" ROUND PURPLE PLASTIC VALVE BOX
HEAT BRAND "AR" ON THE LID IN 1" TALL LETTERS

③ 3/4" GRAVEL SUMP IN, UNDER AND AROUND
VALVE BOX (FILL TO TOP OF HOLES)

④ INSTALL FILTER FABRIC AROUND
GRAVEL SUMP

⑤ AIR/VACUUM RELIEF VALVE
WITH 1/2" MIPT

NOTE:

USE ONE AIR/VACUUM RELIEF
VALVE PER EVERY 7 GPM ON EACH
ZONE. REFER TO MANUFACTURER'S
SPECIFICATIONS.

⑥ 1/2" T X T SCH. 40 PVC
COUPLER

⑦ 1/2" SCH. 80 PVC NIPPLE
SIZE AS NEEDED

⑧ PURPLE LATERAL LINE SIZE X 1/2" FIPT
90 DEGREE ELBOW



RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS

DATE: 02-05-13

RECLAIMED AIR / VACUUM RELIEF VALVE

ON PVC

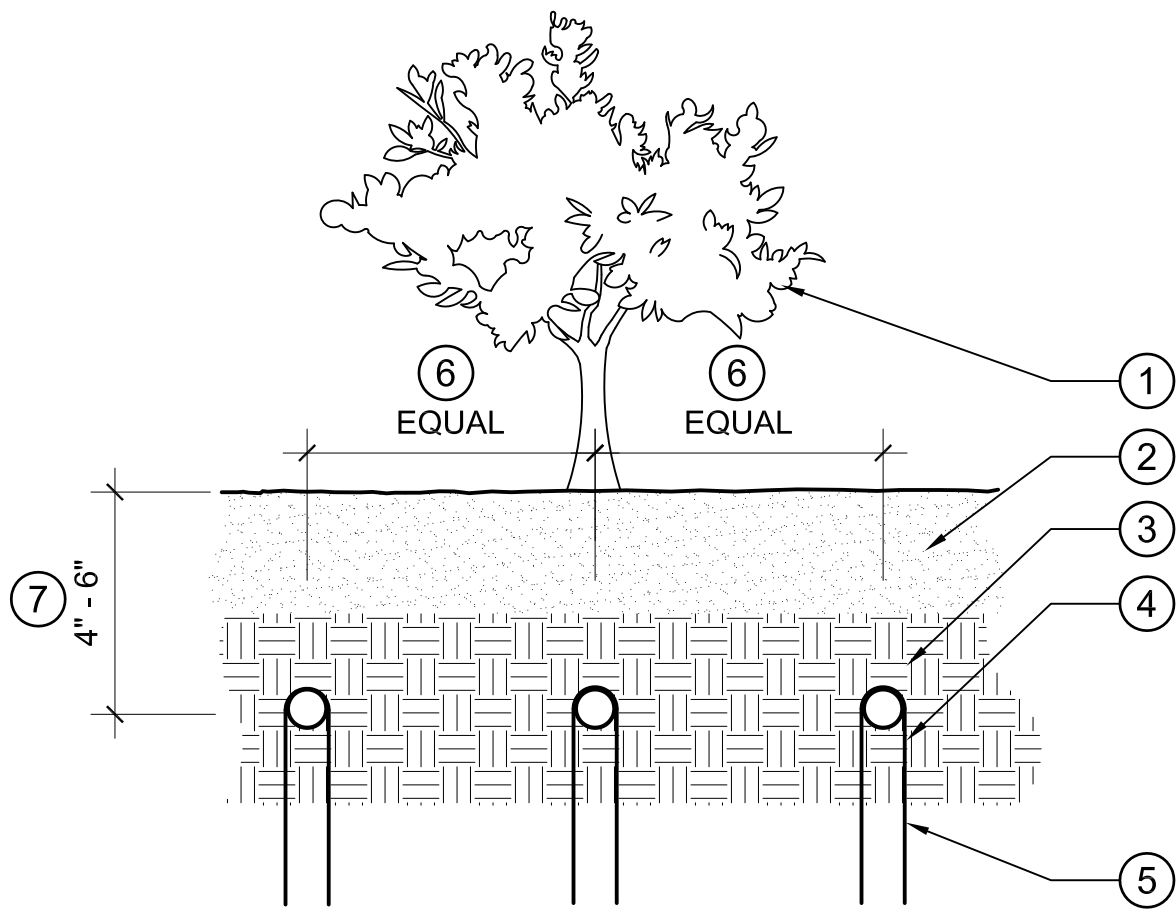
APPROVED BY: MPH



STD. R-085

1 1/2"=1'-0"

REV:



- ① SHRUB OR GROUNDCOVER
(TYPICAL, SEE PLANTING DETAILS)
- ② 2" - 4" BARK MULCH LAYER
- ③ AMENDED SOIL MIX
(REFER TO PLANTING SPECIFICATIONS)
- ④ PURPLE SUB-SURFACE TUBING, BURIED INTO SOIL MIN. 2"
(REFER TO IRRIGATION LEGEND)
- ⑤ TUBING STAKE (SEE
SPECIFICATIONS FOR SPACING
AND MODEL NUMBER)
- ⑥ PURPLE TUBING SPACING VARIES 12" - 18"
ON CENTER BASED ON EMITTER
SPACING
- ⑦ PURPLE TUBING DEPTH VARIES 4"-6"
PER MANUFACTURER'S GUIDELINES



RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS

DATE: 02-05-13

RECLAIMED SUBSURFACE TUBING SPACING AND DEPTH

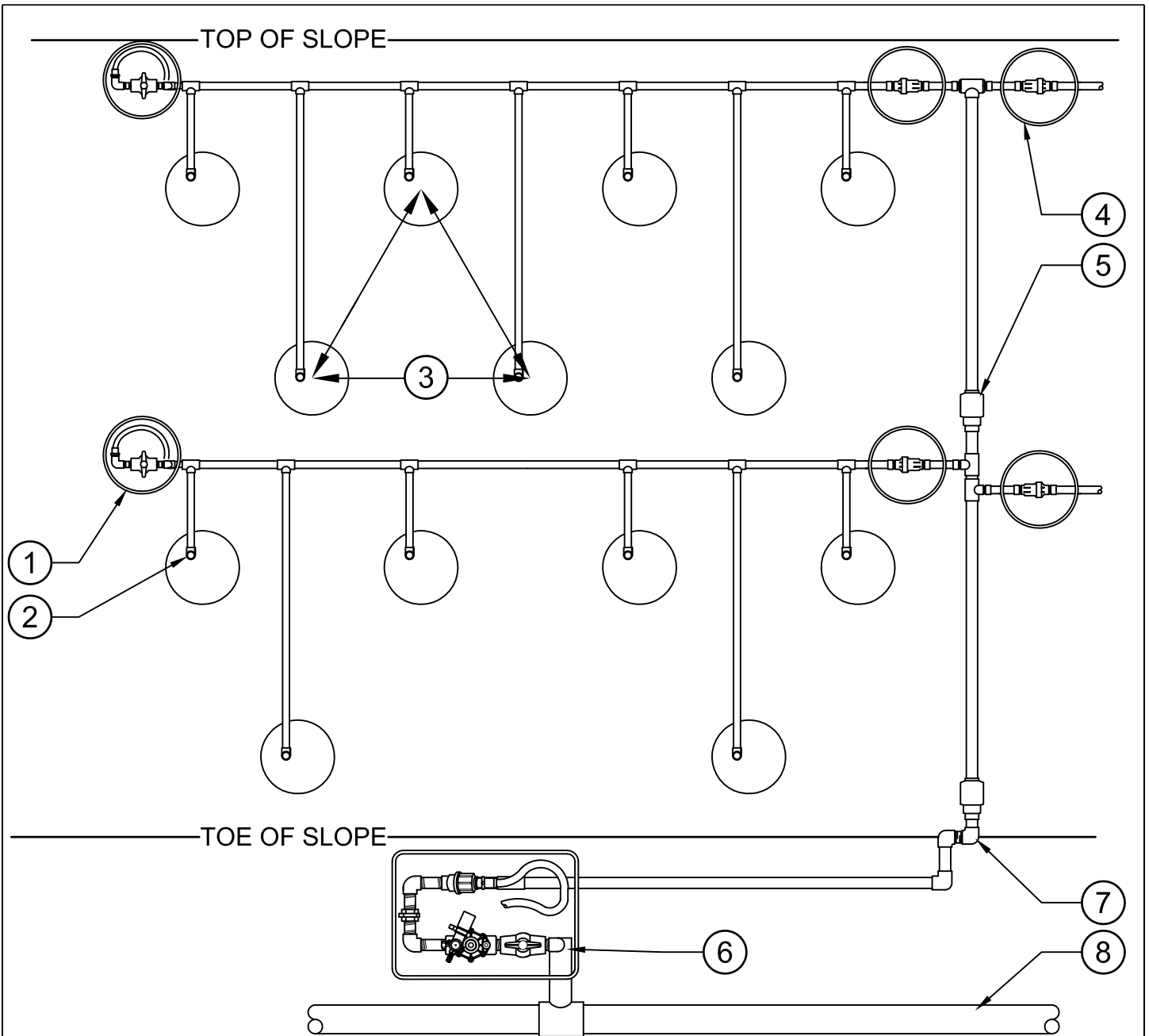
APPROVED BY: MPH






STD. R-086

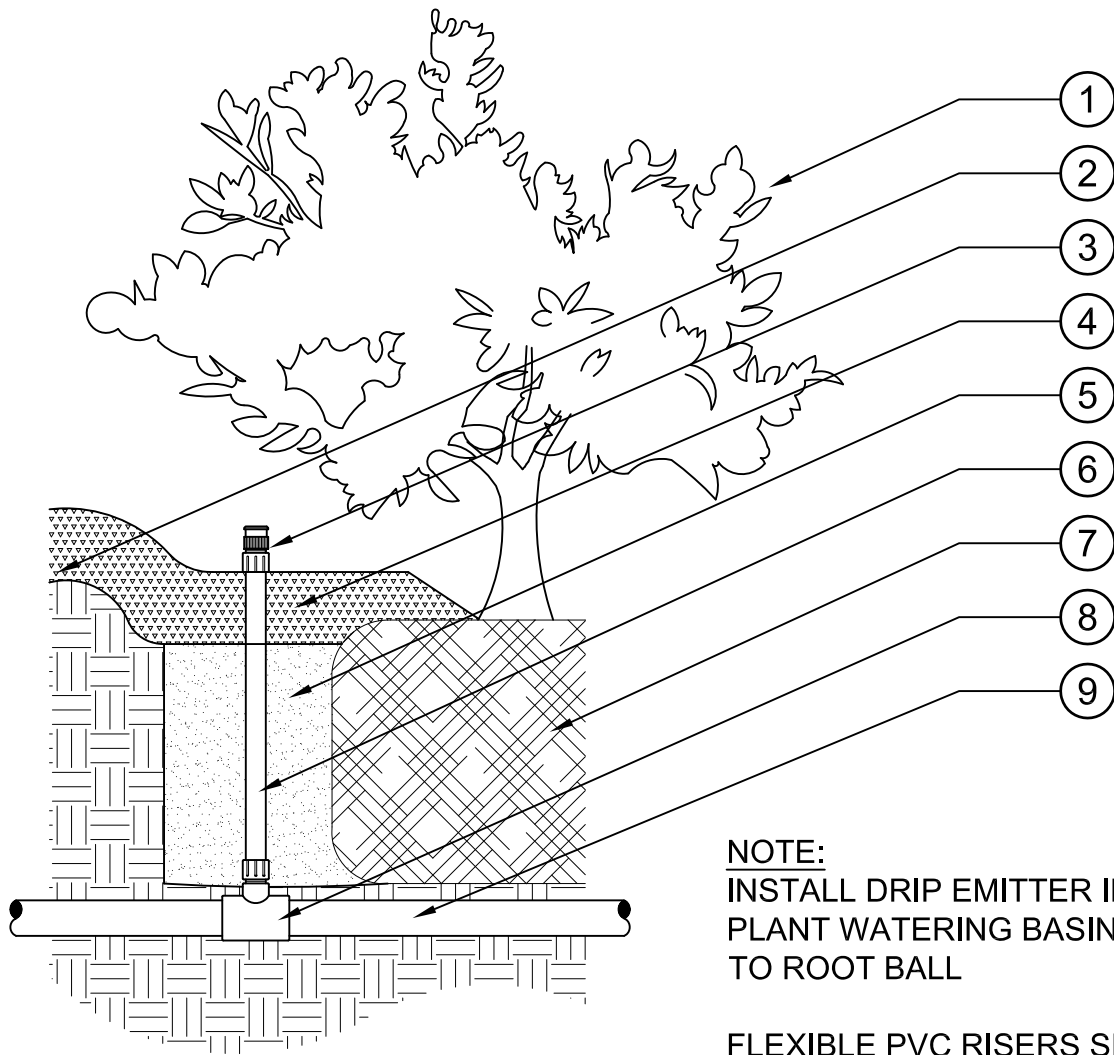
1 1/2"=1'-0"

REV:



- ① MANUAL FLUSH VALVE ASSEMBLY IN PURPLE BOX (SEE DETAIL)
- ② EMITTER ON FLEXIBLE RISER (SEE DETAIL)
- ③ SHRUB SPACING (VARIES - SEE PLANTING PLANS)
- ④ PRESSURE REGULATOR IN PURPLE BOX
- ⑤ CHECK VALVE
- ⑥ DRIP VALVE ASSEMBLY (SEE DETAIL)
- ⑦ SWING ASSEMBLY FOR SLOPE TRANSITION (IF APPLICABLE)
- ⑧ PURPLE IRRIGATION PRESSURE SUPPLY LINE

	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13
	RECLAIMED POINT TO POINT IRRIGATION		
WITH BELOW GRADE LATERALS	APPROVED BY: MPH		 
N.T.S.	REV:		



NOTE:
 INSTALL DRIP EMITTER INSIDE OF
 PLANT WATERING BASING ADJACENT
 TO ROOT BALL

FLEXIBLE PVC RISERS SHALL BE
 PREFABRICATED BY THE
 MANUFACTURER UNLESS OTHERWISE
 APPROVED BY LMD REPRESENTATIVE.

- | | |
|---|---|
| ① SHRUB OR GROUNDCOVER | ⑤ AMENDED BACKFILL |
| ② PLANT WATERING BASIN | ⑥ 1/2" x 12" FLEXIBLE PVC RISER |
| ③ PURPLE EMITTER NOZZLE AND
SCREEN, SEE SPECIFICATIONS | ⑦ PLANT ROOT BALL |
| ④ MULCH PER PLANTING DETAILS | ⑧ SCH 40 S x S x T TEE (OR ELBOW)
(LATERAL SIZE x 1/2" FIPT) |
| | ⑨ PURPLE LATERAL LINE |



RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS

DATE: 02-05-13

RECLAIMED EMITTER ON FLEXIBLE RISER

WITH BELOW GRADE LATERAL LINE

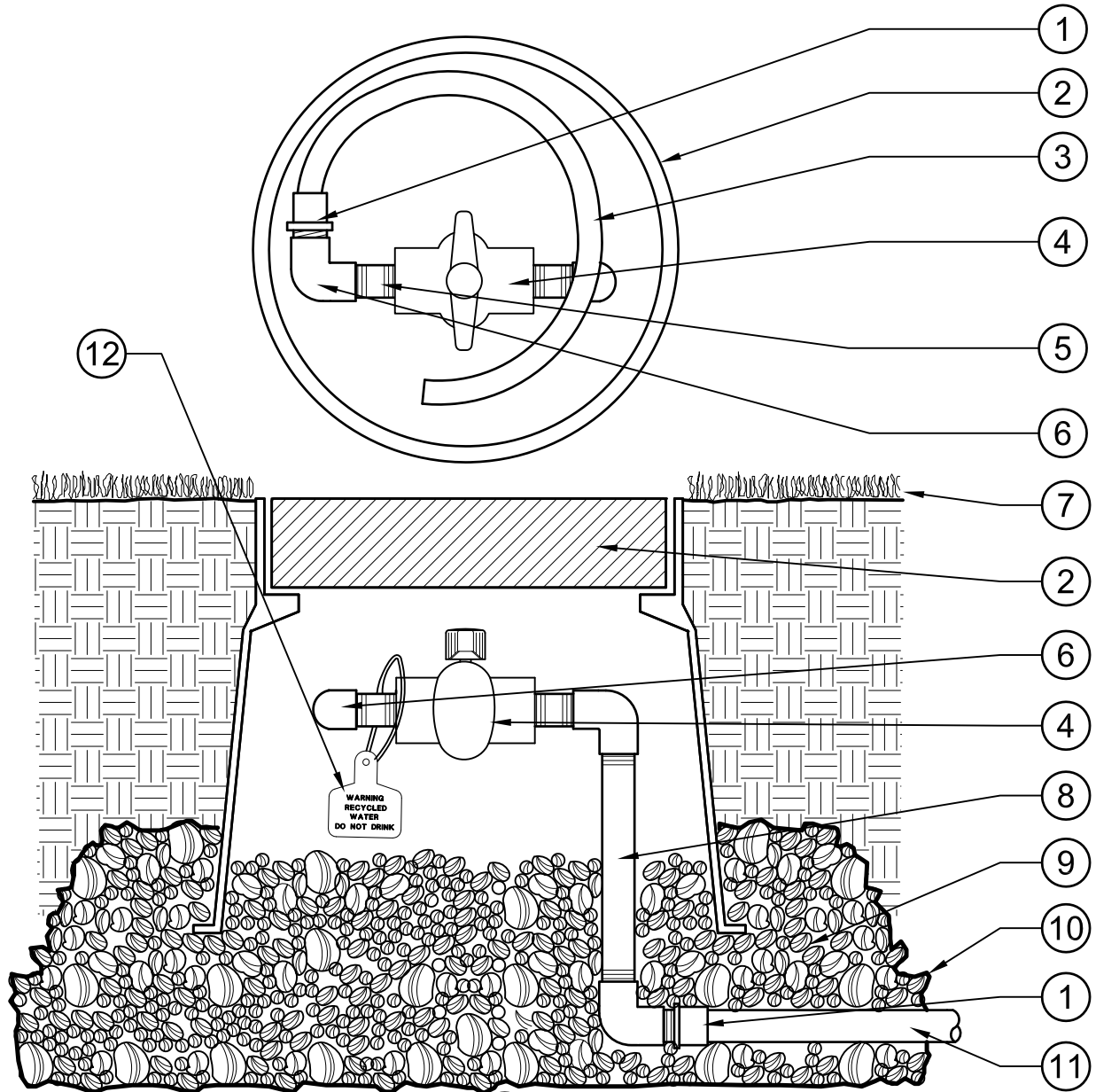
APPROVED BY: MPH






STD. R-091

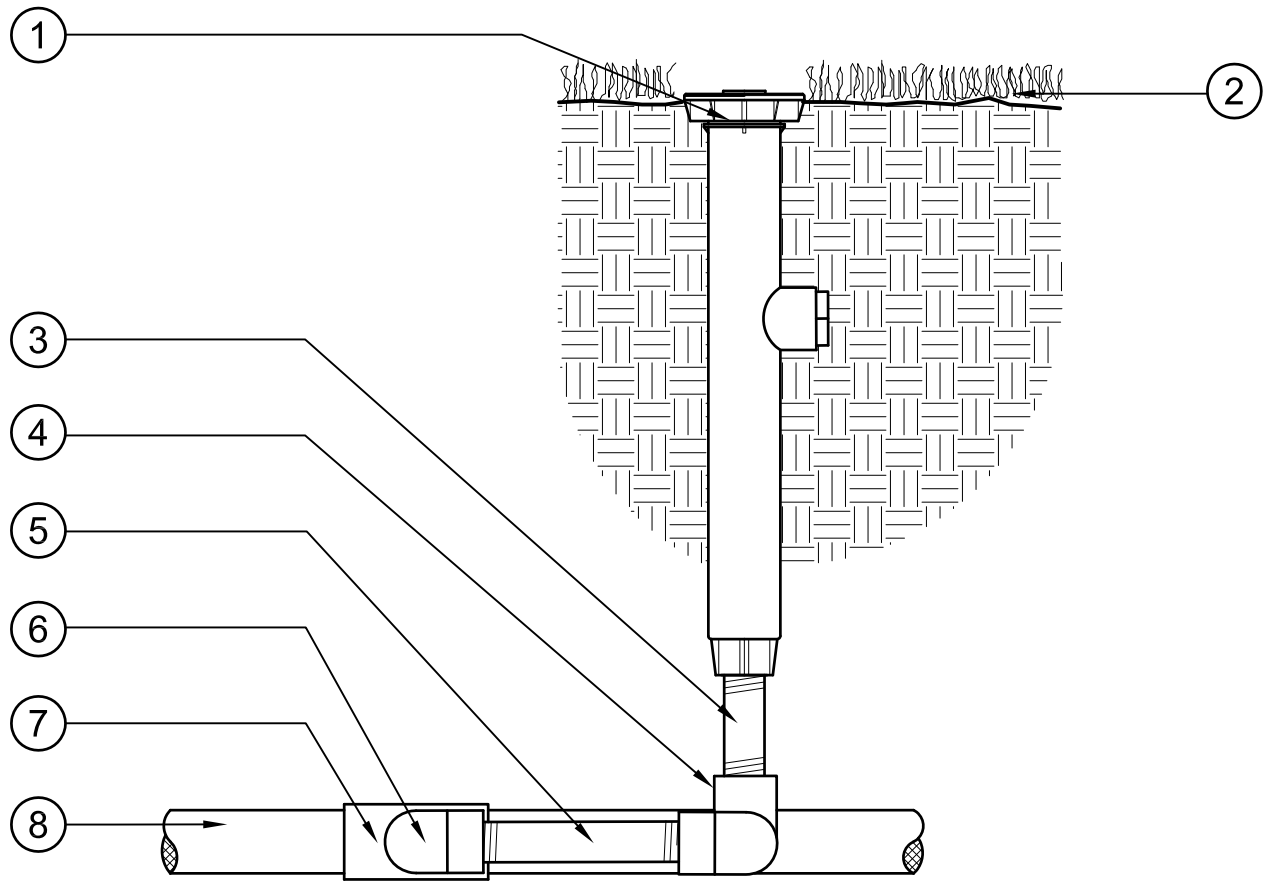
1 1/2"=1'-0"

REV:





- ① SLIP X MIPT SCH. 40 PVC ADAPTER (2 REQUIRED)
- ② 10" ROUND PURPLE VALVE BOX (SEE SPECIFICATIONS, DO NOT CUT ADDITIONAL HOLES INTO BOX)
- ③ 18" LENGTH SCH. 40 FLEXIBLE PVC TUBING FOR FLUSHING OUTSIDE OF BOX
- ④ PVC BALL VALVE (LINE SIZE)
- ⑤ CLOSED NIPPLE (2 REQUIRED)
- ⑥ PVC SCH 40 FIPT X FIPT ELL (3 REQUIRED)
- ⑦ FINISH GRADE
- ⑧ 8 " PVC SCH 80 RISER
- ⑨ 3/4" GRAVEL SUMP IN, UNDER AND AROUND VALVE BOX (FILL TO TOP OF HOLES)
- ⑩ INSTALL FILTER FABRIC AROUND GRAVEL SUMP
- ⑪ PURPLE DRIP TUBING LATERAL LINE (SEE SPECIFICATIONS)
- ⑫ RECYCLED WATER WARNING TAG (PER LOCAL STANDARDS)

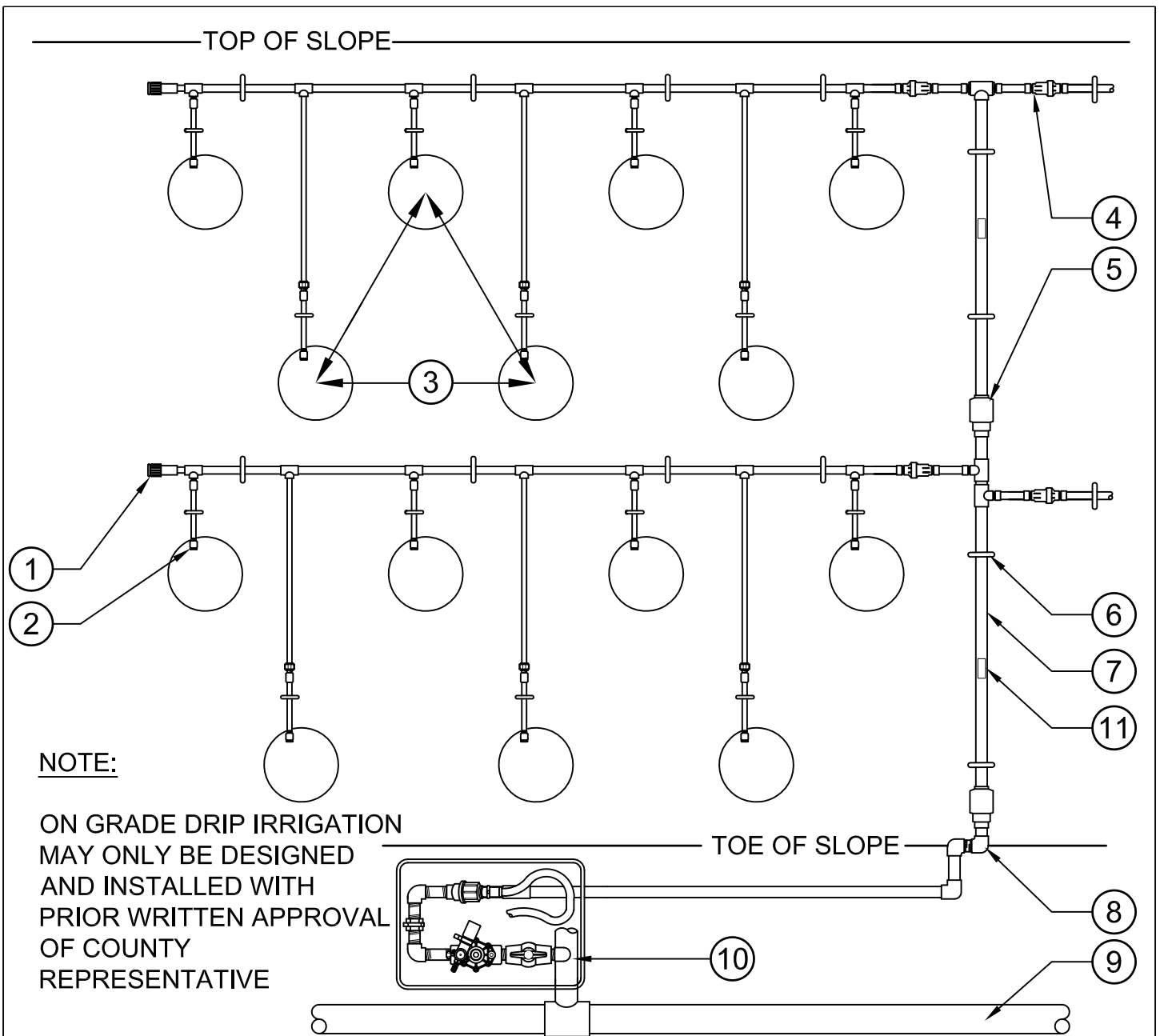
	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13
	RECLAIMED MANUAL FLUSH VALVE ASSEMBLY		
FOR POINT TO POINT DRIP	APPROVED BY: MPH		 
3"=1'-0"	REV:		



- ① 12" POP-UP SPRAY HEAD WITH PURPLE CAP (SEE SPECIFICATIONS)
INSTALL (1) ONE VAN NOZZLE PER STANDARD PRODUCTS LIST, AND ADJUST TO CLOSED POSITION.
- ② FINISH GRADE
- ③ 1/2" x 2" SCH. 80 NIPPLE (1 REQUIRED)
- ④ 1/2" FIPT x FIPT SCH. 40 90 DEGREE ELBOW (1 REQUIRED)
- ⑤ 1/2" x 8" PVC SCH. 80 NIPPLE
- ⑥ 1/2" FIPT x MIPT SCH. 40 90 DEGREE ELBOW (2 REQUIRED)
- ⑦ S x S x T TEE IN LATERAL LINE (LATERAL SIZE x 1/2" FIPT)
- ⑧ NON-PRESSURE LATERAL LINE (SIZE AS NOTED ON PLAN)

NOTE:
 INSTALL (1) ONE DRIP OPERATION INDICATOR NEAR VALVE BOX FOR EACH DRIP ZONE. MARK LOCATION FOR APPROVAL BY LMD REPRESENTATIVE PRIOR TO INSTALLATION.




	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 02-05-13
	DRIP OPERATION INDICATOR		
	POP-UP TYPE	APPROVED BY: MPH	
STD. R-093	3"=1'-0"	REV:	

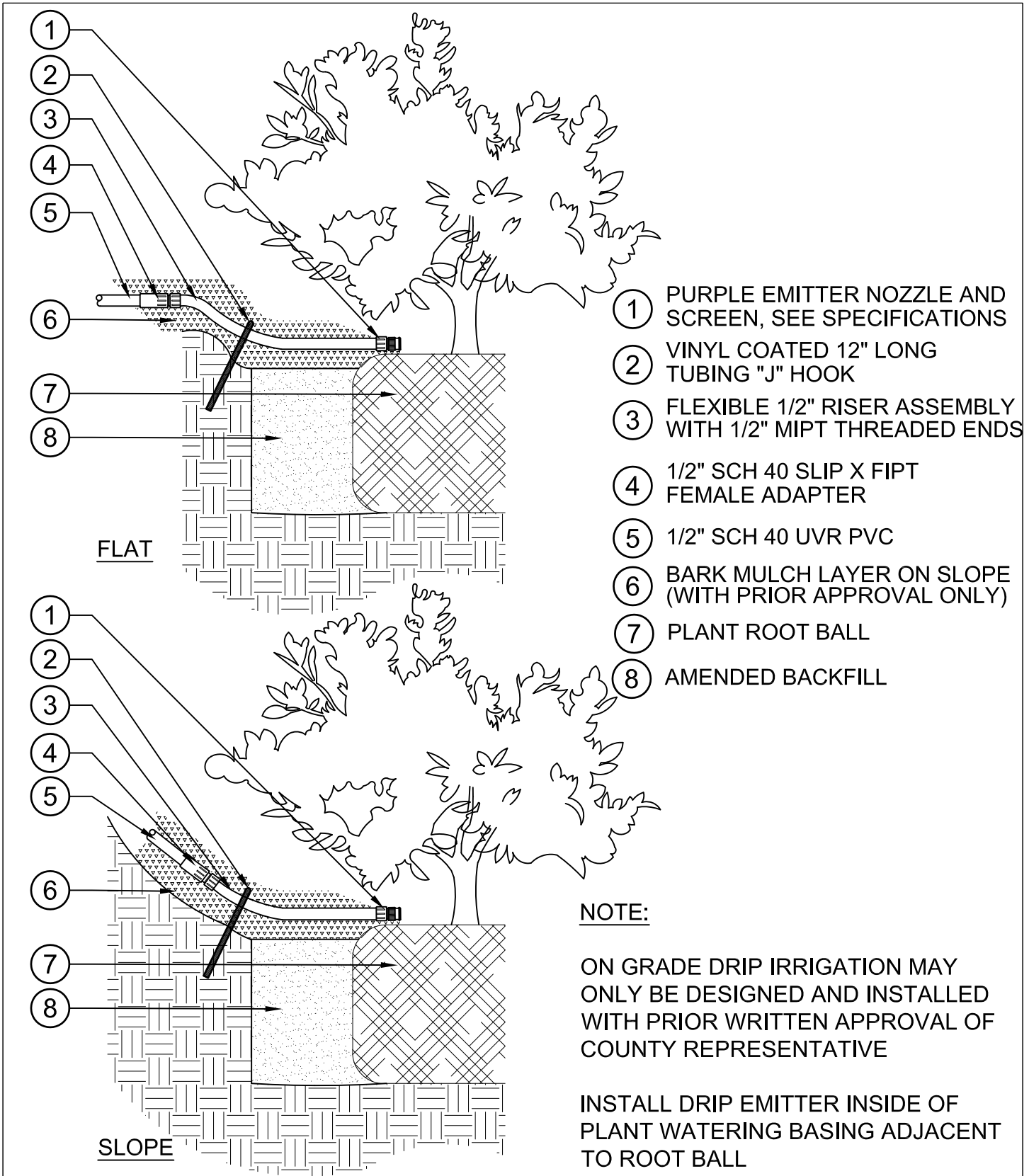


NOTE:

ON GRADE DRIP IRRIGATION
MAY ONLY BE DESIGNED
AND INSTALLED WITH
PRIOR WRITTEN APPROVAL
OF COUNTY
REPRESENTATIVE

- | | |
|--|---|
| <ul style="list-style-type: none"> ① MANUAL FLUSH VALVE ASSEMBLY
3/4" S X 3/4" MHT WITH 3/4" FHT CAP ② EMITTER ON FLEXIBLE RISER
(SEE ON GRADE EMITTER DETAIL) ③ SHRUB SPACING
(VARIES - SEE PLANTING PLANS) ④ PRESSURE REGULATOR IN BOX ⑤ CHECK VALVE ⑥ VINYL COATED 18" LONG "J" HOOK
(MINIMUM 10' O.C.) | <ul style="list-style-type: none"> ⑦ PVC SCH. 40 UVR
LATERAL LINE ⑧ SWING ASSEMBLY FOR SLOPE
TRANSITION (IF APPLICABLE) ⑨ IRRIGATION PRESSURE
SUPPLY LINE ⑩ DRIP VALVE ASSEMBLY
(SEE DETAIL) ⑪ RECYCLED WATER WARNING
TAG / STICKER (MINIMUM 20' O.C.) |
|--|---|

	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 08-06-13
	POINT TO POINT IRRIGATION		
	WITH ON GRADE LATERALS	APPROVED BY:	 
N.T.S.	REV:		




- ① PURPLE EMITTER NOZZLE AND SCREEN, SEE SPECIFICATIONS
- ② VINYL COATED 12" LONG TUBING "J" HOOK
- ③ FLEXIBLE 1/2" RISER ASSEMBLY WITH 1/2" MIPT THREADED ENDS
- ④ 1/2" SCH 40 SLIP X FIPT FEMALE ADAPTER
- ⑤ 1/2" SCH 40 UVR PVC
- ⑥ BARK MULCH LAYER ON SLOPE (WITH PRIOR APPROVAL ONLY)
- ⑦ PLANT ROOT BALL
- ⑧ AMENDED BACKFILL

NOTE:

ON GRADE DRIP IRRIGATION MAY ONLY BE DESIGNED AND INSTALLED WITH PRIOR WRITTEN APPROVAL OF COUNTY REPRESENTATIVE

INSTALL DRIP EMITTER INSIDE OF PLANT WATERING BASING ADJACENT TO ROOT BALL

 LMD	RIVERSIDE COUNTY TLMA: PLANNING AND TRANSPORTATION DEPARTMENTS		DATE: 08-06-13
	EMITTER ON FLEXIBLE RISER		 
	WITH ON GRADE LATERAL LINE		
STD. R-095	N.T.S.	APPROVED BY:	REV: