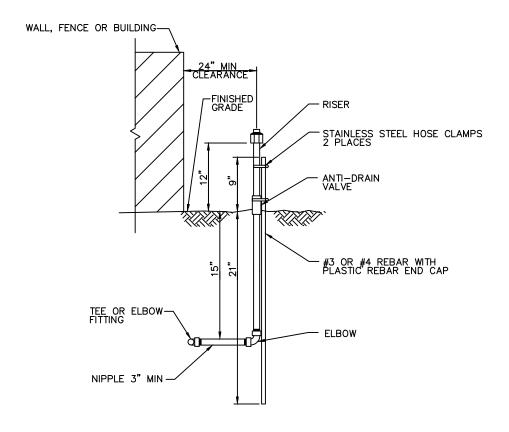
SPRINKLER IRRIGATION SYSTEMS

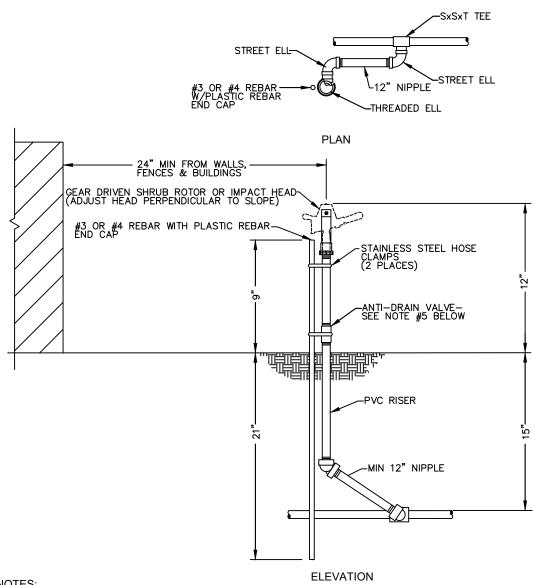


- 1. FITTINGS SHALL BE PVC SCH 40.
- 2. NIPPLES AND RISERS SHALL BE PVC SCH 80.
- 3. TEFLON TAPE SHALL BE USED ON THREADED CONNECTIONS.
- 4. CLOSE NIPPLES SHALL NOT BE USED.
- 5. NO FIXED RISERS IN RIGHT—OF—WAY OR WITHIN 10' OF VEHICULAR OR PEDESTRIAN TRAFFIC.
- 6. ANTI-DRAIN VALVES SHALL BE INSTALLED UNDER ALL HEADS.

LEGEND ON PLANS

SHOW A NUMBER TO INDICATE TYPE HEAD

				ON FIXED RISER	DRAWING NUMBER I-01
Reviewed	RP	S. Engeda	03/22	SHRUB SPRAY HEAD	Chairperson R.C.E. 52241 Date
Reviewed	EW	T. Stanton	10/18		Samor Engela 03/24/2022
ORIGINAL		Kercheval	12/75		
Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE



1. FITTINGS SHALL BE PVC SCH 40.

2. NIPPLES AND RISERS SHALL BE PVC SCH 80.

3. TEFLON TAPE SHALL BE USED ON THREADED CONNECTIONS.

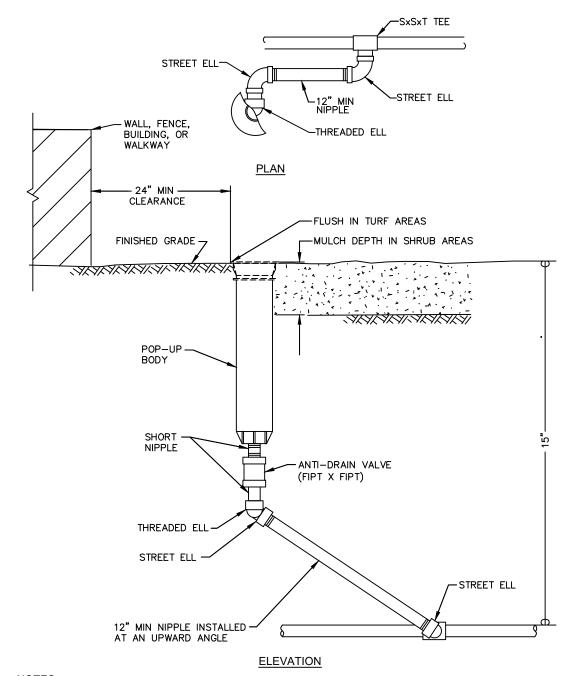
4. CLOSE NIPPLES SHALL NOT BE USED.

ANTI-DRAIN VALVES SHALL BE INSTALLED UNDER OR IN ALL HEADS.

6. NO FIXED RISERS ALLOWED IN RIGHT-OF-WAY OR WITHIN 10' OF VEHICULAR OR PEDESTRIAN TRAFFIC. LEGEND ON PLANS

SHOW A NUMBER TO-INDICATE HEAD TYPE

Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
ORIGINAL		Parkinson	05/92		
Reviewed	EW	T. Stanton	10/18		Samon Engels 03/24/2022
Reviewed	RP	S. Engeda	03/22	ROTOR OR IMPACT HEAD	Chairperson R.C.E. 52241 Date
				ON FIXED RISER	DRAWING LOO
				OH I INED HIGH	NUMBER I-02

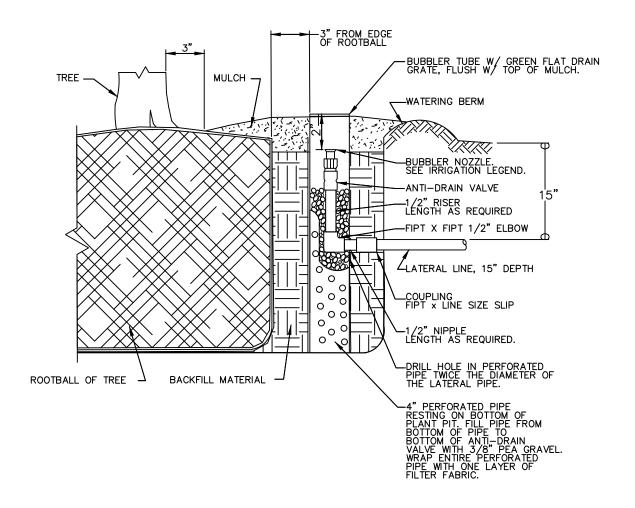


- 1. FITTINGS SHALL BE PVC SCH 40.
- 2. NIPPLES AND RISERS SHALL BE PVC SCH 80.
- 3. TEFLON TAPE SHALL BE USED ON THREADED CONNECTIONS.
- 4. CLOSE NIPPLES SHALL NOT BE USED.
- 5. ANTI-DRAIN VALVES SHALL BE INSTALLED UNDER OR IN ALL HEADS.
- 6. LATERAL DEPTH SHALL BE 18" WHEN 12" POP-UP BODIES ARE USED.

LEGEND ON PLANS

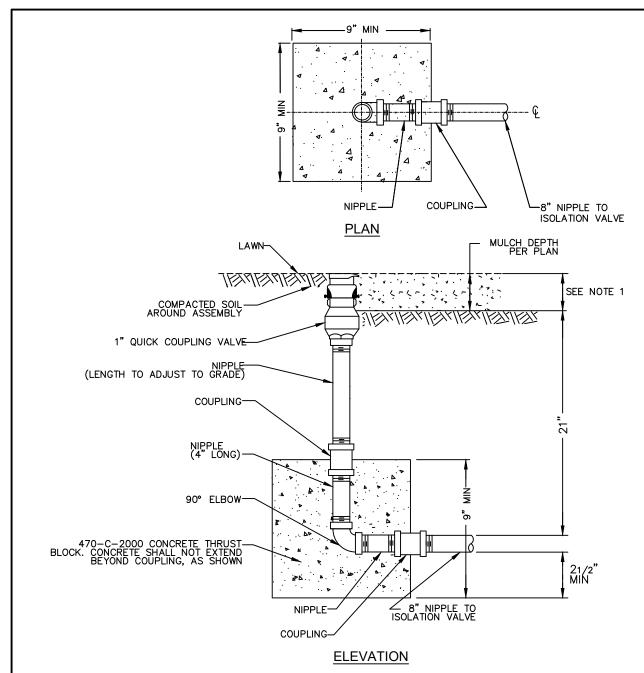
SHOW A NUMBER TO INDICATE TYPE HEAD

Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
ORIGINAL		Kercheval	12/75		
Reviewed	EW	T. Stanton	10/18		Sames Engela 03/24/202
Reviewed	RP	S. Engeda	03/22	ROTOR, SPRAY, OR BUBBLER	Chairperson R.C.E. 52241 Date
				POP-UP HEAD	DRAWING LOG
				1 01 01 112/15	NUMBER I-03



- 1. FOR BUBBLER LOCATION, REFER TO TREE PLANTING AND STAKING DRAWING.
- 2. EACH TREE SHALL HAVE A 2" POP-UP HEAD WITH BUBBLER NOZZLE PER I-3 AND A FIXED BUBBLER NOZZLE IN A PERFORATED PIPE.
- 3. NIPPLES AND RISERS SHALL BE PVC SCH 80.
- 4. FITTINGS SHALL BE PVC SCH 40.
- 5. TEFLON TAPE SHALL BE USED ON THREADED CONNECTIONS.
- 6. CLOSE NIPPLES SHALL NOT BE USED.
- 7. ANTI-DRAIN VALVES SHALL BE INSTALLED UNDER ALL HEADS.

Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
ORIGINAL		M. CARO	02/05	SAN DIEGO NEGIONAL GTANDAND DIVAVIING	MESICIVIE STANDARDS COMMITTEE
Reviewed	EW	T. Stanton	10/18		Samph - 26 03/24/2022
Reviewed	RP	S. Engeda	03/22	DEEP ROOT TREE BUBBLER	Chairperson R.C.E. 52241 Date
				DELI ROOT TREE BODDEER	DRAWING I-04
					NUMBER 1-04



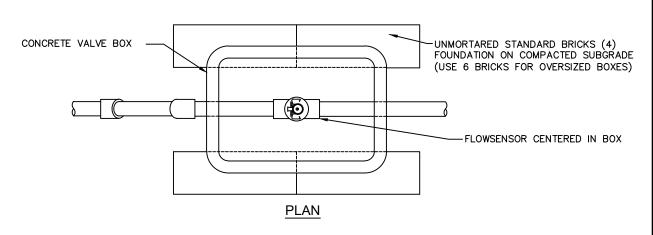
- 1. QUICK COUPLING VALVES SHALL BE SET FLUSH IN LAWN AND PER MULCH DEPTH ABOVE FINISH GRADE IN SHRUB / GROUNDCOVER AREAS.
- 2. CLOSE NIPPLES SHALL NOT BE USED.
- 3. NIPPLES, COUPLINGS, AND ELBOWS SIZE SHALL BE 1" RED BRASS.
- 4. TEFLON TAPE SHALL BE USED ON THREADED CONNECTIONS.
- 5. UPON PROJECT ACCEPTANCE, THE CONTRACTOR SHALL PROVIDE TWO SETS OF APPROPRIATE QUICK CUPLER VALVE KEY WITH 1" BRASS BALL VALVE AND SWIVEL ADAPTER INCLUDED IN THE ASSEMBLY.
- 6. INSTALL VALVE BOX PER AGENCY STANDARDS.

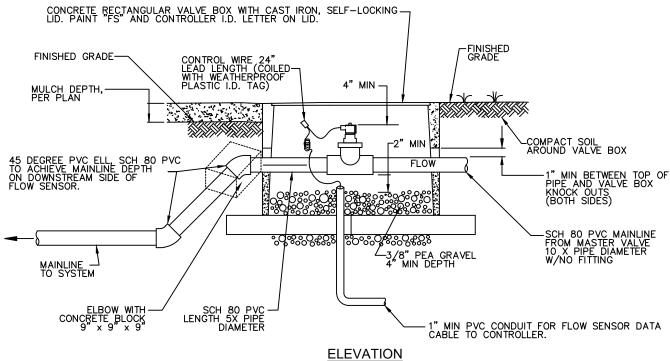
LEGEND ON PLANS

QCV



Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
ORIGINAL		Kercheval	12/75		
Reviewed	KA	N. Batta	10/15		Samson Engela 03/24/2022
Reviewed	EW	T. Stanton	10/18	QUICK COUPLING VALVE	Chairperson R.C.E. 52241 Date
Reviewed	RP	S. Engeda	03/22		DRAWING NUMBER I-05



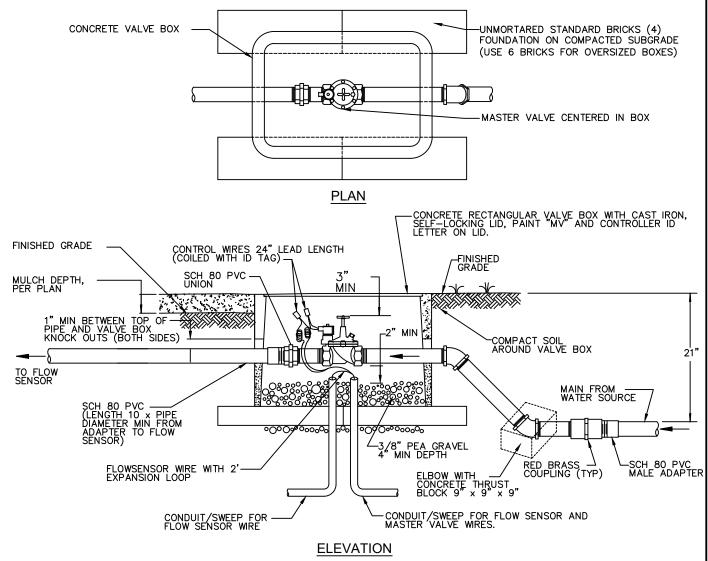


- SPLICES SHALL BE SOLDERED WITH A PROPERLY SET MECHANICAL SPLICE CONNECTOR, ENTIRELY ENCLOSED IN SELF-CURING RESIN AND SHALL BE COMPLETELY WATER-PROOF.
- 2. SEAL CONDUIT OPENINGS WITH ELECTRICAL SEALANT.
- 3. KNOCK OUTS SHALL NOT BE ENLARGED.
- 4. INSTALL ONLY ONE FLOW SENSOR PER BOX.
- 5. VALVE BOXES SHALL BE SET PERPENDICULAR TO HARDSCAPE PER MULCH DEPTH IN SHRUB / GROUNDCOVER AREAS. IF NECESSARY TO BE SET IN TURF, VALVE BOXES SHALL BE SET FLUSH WITH FINISHED GRADE.

LEGEND ON PLANS

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Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
ORIGINAL	ΚA	N. Batta	11/11		
Reviewed	KA	N. Batta	10/15		Samor Engela 03/24/2022
Reviewed	EW	T. Stanton	10/18	FLOW SENSOR	Chairperson R.C.E. 52241 Date
Reviewed	RP	S. Engeda	03/22		DRAWING LOO
					NUMBER I-09

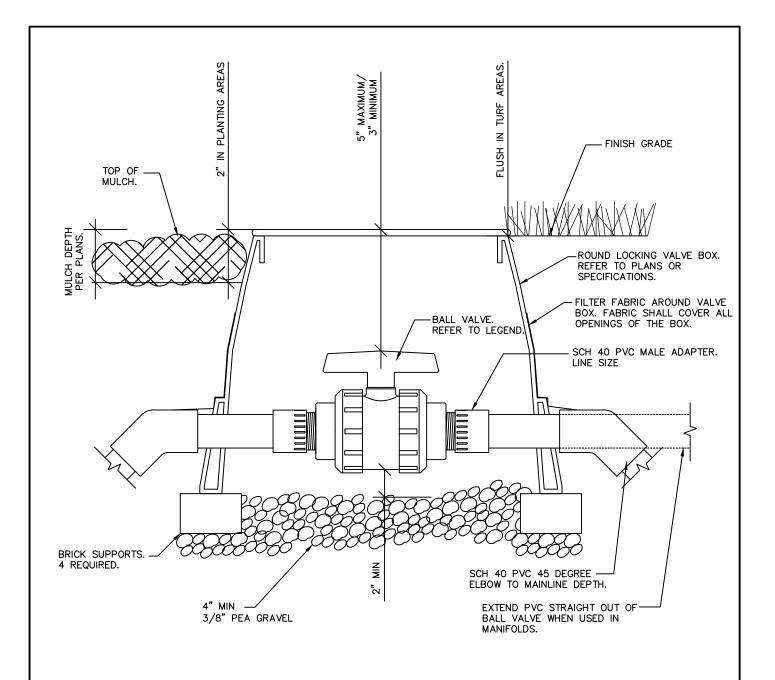


- SPLICING SHALL BE MADE IN VALVE BOXES AND PULL BOXES ONLY. SEE STANDARD DRAWING SDI-115 FOR SPLICE / SOLDERING NOTES.
- 2. SPLICES SHALL BE SOLDERED WITH A PROPERLY SET MECHANICAL SPLICE CONNECTOR, ENTIRELY ENCLOSED IN SELF-CURING RESIN AND SHALL BE COMPLETELY WATER-PROOF.
- 3. SEAL CONDUIT OPENINGS WITH ELECTRICAL CONDUIT SEALANT AS APPROVED BY THE AGENCY.
- 4. PVC CONDUIT SHALL BE 1" MINIMUM.
- 5. VALVE / CONTROLLER IDENTIFICATION SHALL BE LABELED OUTSIDE ON THE VALVE BOX LID AND TAGGED INSIDE THE BOX ON THE VALVE.
- 6. KNOCK OUTS SHALL NOT BE ENLARGED.
- 7. INSTALL ONLY ONE VALVE PER BOX.
- 8. VALVE BOXES SHALL BE SET PERPENDICULAR TO HARDSCAPE, ABOVE FINISHED GRADE IN SHRUB / GROUNDCOVER AREAS, PER MULCH DEPTH. IF NECESSARY TO BE SET IN TURF, VALVE BOXES SHALL BE SET FLUSH WITH FINISHED GRADE.
- 9. CLOSE NIPPLES SHALL NOT BE USED.
- 10. NIPPLES, ELBOWS. AND FITTINGS SHALL BE THREADED RED BRASS, FROM COUPLING THROUGH THE MASTER VALVE. PIPE AND FITTINGS DOWNSTREAM SHALL BE SCH 80 PVC.
- 11. TEFLON TAPE SHALL BE USED ON THREADED CONNECTOR.

LEGEND ON PLANS

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Revision	'		Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
ORIGINAL		Kercheval	12/75		
Reviewed	KA	N. Batta	10/15		Samon Engela 03/24/2022
Reviewed	EW	T. Stanton	10/18	IRRIGATION MASTER VALVE	Chairperson R.C.E. 52241 Date
Reviewed	RP	S., Engeda	03/22	INMIGATION WASTER VALVE	DRAWING I-10
					NUMBER I-IU



- 1. TEFLON TAPE, 3/4" WIDE, SHALL BE USED ON ALL THREADED CONNECTIONS 2. CLOSE NIPPLES SHALL NOT BE USED.

- 2. CLOSE NIFFLES SHALL NOT BE USED.

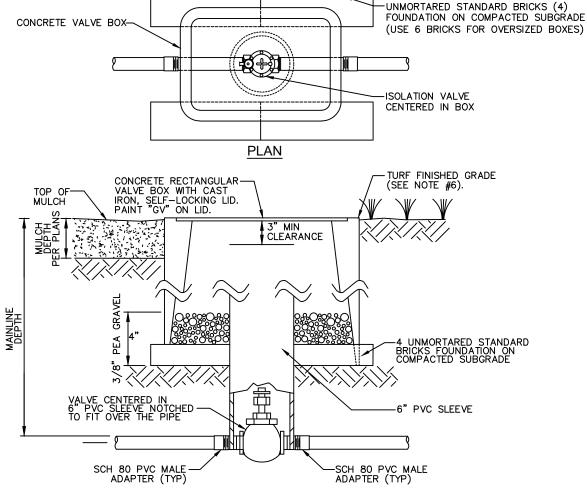
 3. ALL PVC PIPE USED IN MANIFOLD ASSEMBLIES SHALL BE OF THE SAME CLASS AS SPECIFIED FOR THE MAINLINE.

 4. ALL PLASTIC VALVE BOXES SHALL BE HEAT BRANDED WITH THE APPROPRIATE IDENTIFICATION. REFER TO PLANS AND SPECIFICATIONS.

 5. DO NOT CUT ADDITIONAL HOLES IN VALVES BOXES.

 6. ADD SINGLE UNIONS ON EACH SIDE OF VALVE WHEN TRUE UNION BALL VALVES ARE NOT USED.

				2 AND OWALLER	NUMBER	I-11
Reviewed	RP	S. Engeda	03/22	2" AND SMALLER	DRAWING	1.44
Reviewed	EW	T. Stanton	10/18	ISOLATION BALL VALVE	Chairperson R.C.E.	52241 Date
Reviewed	KA	N. Batta	10/15		Samson	ela 03/24/2022
ORIGINAL		Kercheval	12/75		1	
Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY REGIONAL STANDA	



- GLOBE VALVES SHALL BE FURNISHED WITH A STANDARD BRONZE CROSS HANDLE, CENTERED IN PIPE SLEEVE.
- 2. VALVE SHALL BE INSTALLED WITHIN 12" OF HARDSCAPE.
- 3. GLOBE VALVES SHALL BE FURNISHED WITH A REMOVABLE BONNET AND PACKING GLAND NUT.
- 4. TEFLON TAPE SHALL BE USED ON THREADED CONNECTIONS.
- 5. VALVE BOX SHALL BE MOUNTED FLUSH WITH FINISH GRADE IN TURF AREAS AND PER MULCH DEPTH IN SHRUB AREAS.
- 6. LOCATE OUTSIDE OF TURF WHEN POSSIBLE.
- 7. GATE VALVE SHALL BE USED ONLY ON LOOPED MAINLINE.
- 8. VALVE BOX SHALL BE SET PERPENDICULAR TO HARDSCAPE.
- 9. PROVIDE TWO VALVE KEYS TO OPERATE VALVE AT DEPTH.

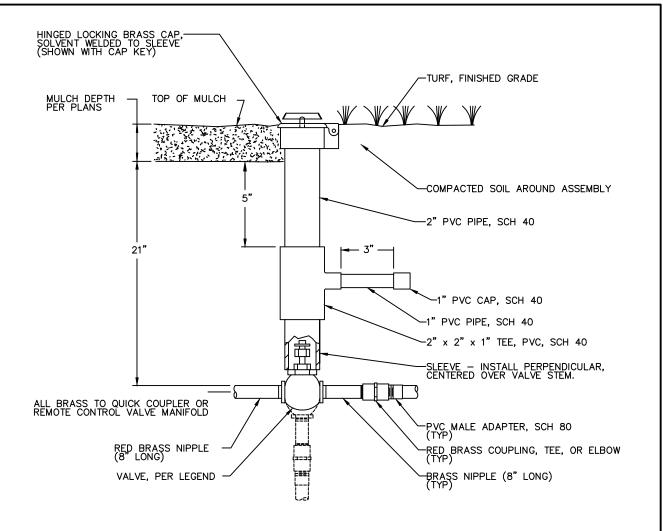
LEGEND ON PLANS





GATE VALVE GLOBE VALVE

Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DI REGIONAL STANDARDS COMMIT	
ORIGINAL	KΑ	N. Batta	11/11		1	
Reviewed	KA	N. Batta	10/15		Samon Engela 03/24	1/2022
Reviewed	EW	T. Stanton	10/18	ISOLATION GLOBE/GATE VALVE	Chairperson R.C.E. 52241 Dat	
Reviewed	RP	S. Engeda	03/22	2½" AND LARGER	DRAWING 140	
				ZZ AND LANGEN	NUMBER I-12	



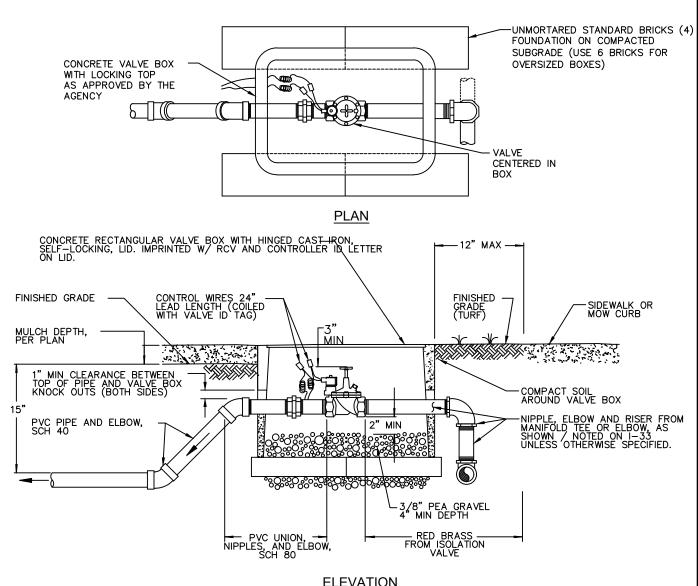
- GLOBE VALVES SHALL BE FURNISHED WITH A STANDARD BRONZE CROSS HANDLE, CENTERED IN PIPE SLEEVE.
- 2. VALVES SHALL BE INSTALLED WITHIN 12" OF HARDSCAPE.
- 3. GLOBE VALVES SHALL BE FURNISHED WITH A REMOVABLE BONNET AND PACKING GLAND NUT.
- 4. CLOSE NIPPLES SHALL NOT BE USED.
- 5. LOCKING CAP SHALL BE MOUNTED FLUSH WITH FINISHED GRADE IN TURF AREAS AND ABOVE FINISHED GRADE IN SHRUB AREAS, PER DEPTH OF MULCH.
- 6. PROVIDE APPROPRIATE LOCKING CAP KEY AND VALVE KEY TO OPERATE VALVE AT DEPTH.
- 7. LOCATE OUTSIDE OF TURF WHEN POSSIBLE.
- 8. TEFLON TAPE SHALL BE USED ON ALL THREADED CONNECTIONS.
- 9. WHEN INSTALLED AS MAINLINE ISOLATION VALVE, NIPPLES AND FITTINGS MAY BE SCH 80 PVC.
- 10. INSTALL VALE BOX PER AGENCY STANDARDS.

<u>LEGEND</u>



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Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
ORIGINAL		Kercheval	12/75		MESISTALE STATES SSIMILATIVE
Reviewed	KA	N. Batta	10/15		Samon - ne to 03/24/20
Reviewed	EW	T. Stanton	10/18	SOLATION BALL VALVE	Chairperson R.C.E. 52241 Date
Reviewed	RP	S. Engeda	03/22	2" AND SMALLER	DRAWING 140
				2 AND OMALLEN	NUMBER I-13



ELEVATION

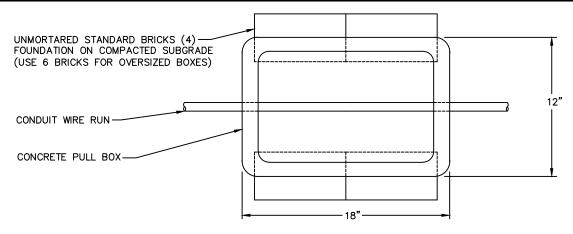
NOTES:

- SPLICING SHALL BE MADE IN VALVE BOXES AND PULL BOXES ONLY. SEE I-15 FOR SPLICE /SOLDERING NOTES.
- SPLICES SHALL BE SOLDERED WITH A PROPERLY SET MECHANICAL SPLICE CONNECTOR, ENTIRELY ENCLOSED IN SELF-CURING RESIN AND SHALL BE COMPLETELY WATER-PROOF.
- 3. KNOCK OUTS SHALL NOT BE ENLARGED.
- 4. INSTALL ONLY ONE VALVE PER BOX.
- VALVE BOXES SHALL BE SET PERPENDICULAR TO HARDSCAPE, ABOVE FINISHED GRADE IN SHRUB / GROUNDCOVER AREAS, PER MULCH DEPTH. IF NECESSARY TO BE SET IN TURF, VALVE BOXES SHALL BE SET FLUSH WITH FINISHED GRADE.
- 6. CLOSE NIPPLES SHALL NOT BE USED.
- 7. NIPPLES, ELBOWS, AND FITTINGS SHALL BE THREADED RED BRASS FROM ISOLATION VALVE THROUGH THE VALVE, UNLESS OTHERWISE SPECIFIED.
- 8. TEFLON TAPE SHALL BE USED ON THREADED CONNECTIONS

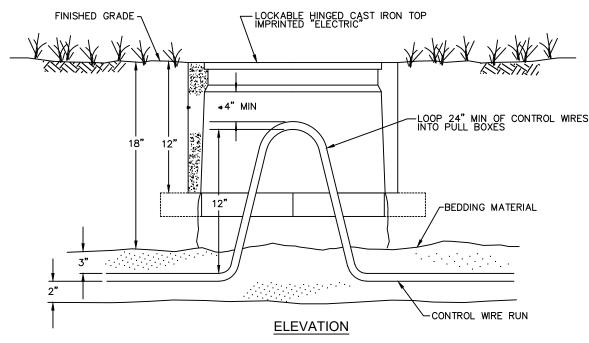
LEGEND ON PLANS

RCV

Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE REGIONAL STANDARDS	
ORIGINAL		R. Munoz	03/97			
Reviewed	KA	N. Batta	10/15		Samon Engela	_03/24/2022
Reviewed	EW	T. Stanton	10/18	REMOTE CONTROL VALVE	Chairperson R.C.E. 5224	
Reviewed	RP	S. Engeda	03/22		DRAWING	1 4 4
					NUMBER	I-14



PLAN VIEW



NOTES:

- INSTALL PULL BOXES AS SHOWN ON PLANS AND AT EACH END OF CONDUITS. SWEEPS RUNNING UNDER VEHICULAR PAVEMENT.
- 2. PULL BOX COVER SHALL BE PERMANENTLY MARKED "ELECTRIC".
- 3. CONDUCTORS FOR EACH CONTROLLER CLOCK SHALL BE HARNESSED SEPARATELY AND AT SUFFICIENT INTERVALS TO MAINTAIN A DEFINITE BUNDLE.
- 4. SPLICES SHALL ONLY BE MADE IN PULL BOXES, WITH A PROPERLY SET MECHANICAL SPLICE CONNECTOR, SOLDERED WITH METALLIC ALLOY, ENTIRELY ENCLOSED IN SELF-CURING RESIN AND SHALL BE COMPLETELY WATER-PROOF.
- 5. SPARE WIRE ENDS SHALL BE INSULATED IN THE SAME MANNER AS WIRE SPLICES.
- MINIMUM SIZE PULL BOX SHALL BE AS SHOWN ABOVE. LARGER BOXES MAY BE NECESSARY TO MEET 4" CLEARANCE REQUIRED.
- 7. NO SPLICES SHALL BE PERMITTED ON WIRE RUNS OF LESS THAN 300'.
- 8. THE LETTER "E" SHALL BE STAMPED OR CHISELED ON THE IMPROVEMENT (CURB-SIDEWALK) DIRECTLY ABOVE THE CONTROL WIRE.

LEGEND ON PLANS

ΡВ

Revision	Ву	Approved	Date	SAN
ORIGINAL		Kercheval	12/75	
Reviewed	KA	N. Batta	10/15	
Reviewed	EW	T. Stanton	10/18	FOR
Reviewed	RP	S. Engeda	03/22	

SAN DIEGO REGIONAL STANDARD DRAWING

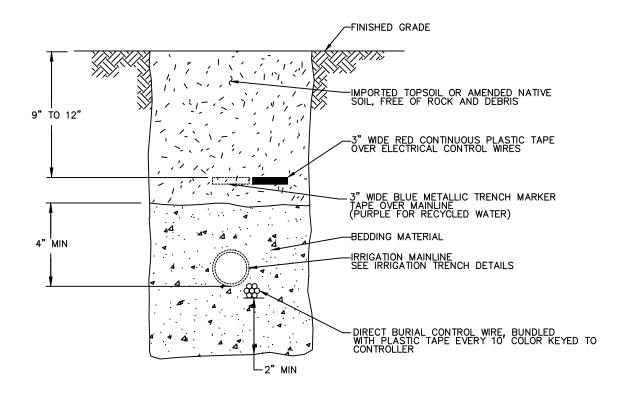
FOR DIRECT BURIAL CONTROL WIRES
AND SPLICING NOTES

RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE

Samsin Engels 03/24/2022 Chairperson R.C.E. 52241 Date

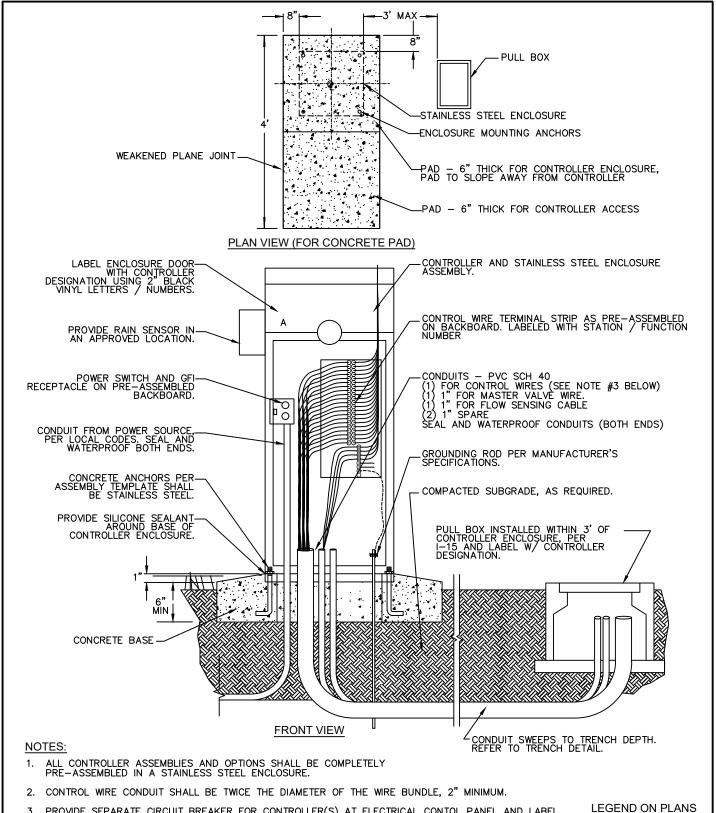
DRAWING NUMBER

I-15



- 1. BEDDING MATERIAL SHALL BE SE 50 PLASTER OR MORTAR SAND.
- 2. WRES WHICH RUN UNDER PAVED AREAS SHALL BE INSTALLED IN PVC CONDUIT TWICE THE DIAMETER OF THE WIRE BUNDLE (2" MINIMUM SIZE), EXTENDING 12" MINIMUM BEYOND EDGE OF PAVEMENT.
- 3. THE LETTER E SHALL BE STAMPED OR CHISELED ON THE IMPROVEMENT(CURB-SIDEWALK) DIRECTLY ABOVE THE CONTROL WIRE / CABLE.
- 4. WHEN CONTROL WIRING CANNOT BE INSTALLED IN A PIPE TRENCH, IT SHALL BE INSTALLED A MINIMUM 18" BELOW FINISH GRADE BUNDLED WITH PLASTIC TAPE.

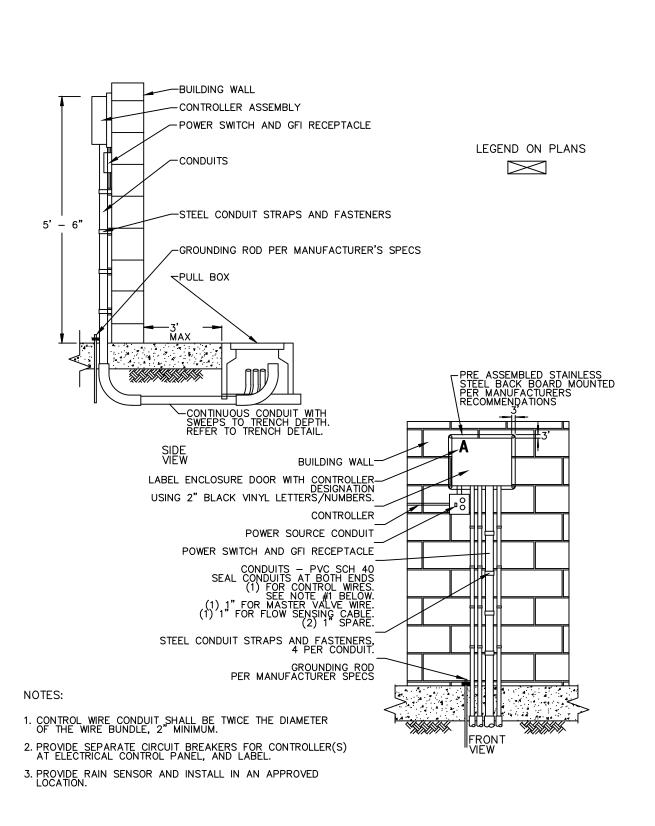
Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN REGIONAL STANDARDS COM	
ORIGINAL		Kercheval	12/75			
Reviewed	KA	N. Batta	10/15		Samson Engeda 03	3/24/2022
Reviewed	EW	T. Stanton	10/18	CONTROL WIRE		Date
Reviewed	RP	S. Engeda	03/22	INSTALLATION	DRAWING	16
					NUMBER I-1	סו



3. PROVIDE SEPARATE CIRCUIT BREAKER FOR CONTROLLER(S) AT ELECTRICAL CONTOL PANEL AND LABEL.

4. SEAL CONDUIT OPENINGS WITH ELECTRICAL SEALANT, AS APPROVED BY THE AGENCY.

Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
ORIGINAL		Kercheval	12/75		MEGICINE SIMBOURGE COMMINITY
Reviewed	KA	N. Batta	10/15		Samph Sach 03/24/2022
Reviewed	EW	T. Stanton	10/18	AUTOMATIC IRRIGATION CONTROLLER	Chairperson R.C.E. 52241 Date
Reviewed	RP	S. Engeda	03/22	PEDESTAL MOUNTED	DRAWING 147
				1 1510 1712 1810 011125	NUMBER I-17



Revision	Ву	Approved	Date
ORIGINAL		Kercheval	12/75
Reviewed	KA	N. Batta	10/15
Reviewed	EW	T. Stanton	10/18
Reviewed	RP	S. Engeda	03/22

SAN DIEGO REGIONAL STANDARD DRAWING

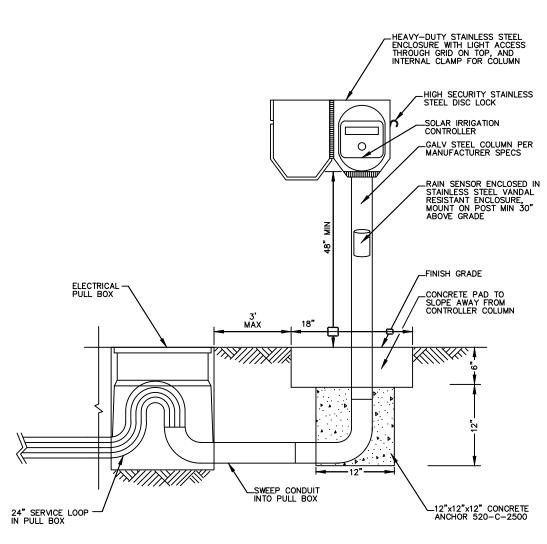
AUTOMATIC IRRIGATION CONTROLLER INDOOR WALL MOUNTED

RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE

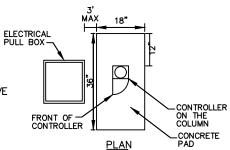
Samsin Engels 03/24/2022 Chairperson R.C.E. 52241 Date

DRAWING NUMBER

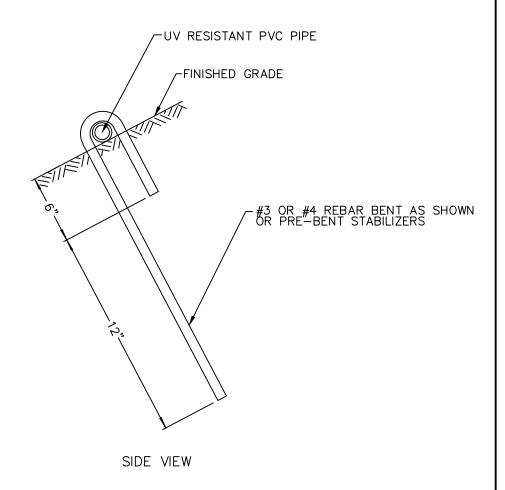
I-18



- 1. PROVIDE SOLENOID ADAPTOR TO SUPPORT SOLAR CLOCK FUNCTION ON VALVE.
- 2. MAXIMUM RUN OF CONTROL WIRE TO REMOTE CONTROL VALVE (RCV) IS 1500' UNLESS OTHERWISE SPECIFIED.
- 3. SEAL CONDUIT OPENINGS WITH ELECTRICAL SEALANT.

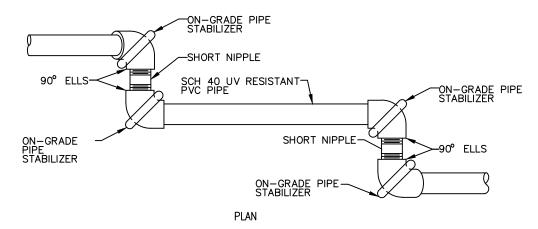


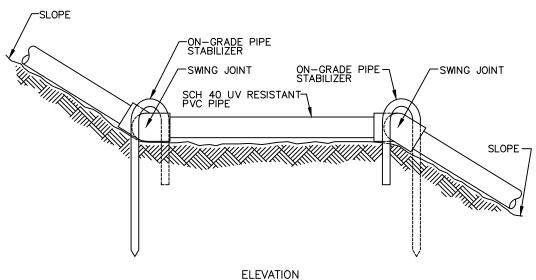
Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
ORIGINAL	KA	T. Stanton	10/11		
Reviewed	KA	N. Batta	10/15		Sames Engels 03/24/2022
Reviewed	EW	T. Stanton	10/18	SOLAR IRRIGATION	Chairperson R.C.E. 52241 Date
Reviewed	RP	S. Engeda	03/22	CONTROLLER	DRAWING 140
				OOMINGELEN	NUMBER I-19



STABILIZERS SHALL BE PLACED NO GREATER THAN 10' APART, AT EACH RISER AND AT ALL FITTINGS.

Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY REGIONAL STANDAR	
ORIGINAL		Kercheval	12/75		1	
Reviewed	KA	N. Batta	10/15		Samon Enger	la 03/24/2022
Reviewed	EW	T. Stanton	10/18	ON-GRADE PIPE STABILIZATION	Chairperson R.C.E. 5	
Reviewed	RP	S. Engeda	03/22	TEMPORARY INSTALLATION	DRAWING	1.00
				TEM SIGNIC MOTALEATION	NUMBER	I-20





NOTE: SWING JOINTS SHALL BE USED AT EACH CHANGE OF GRADE. LEGEND ON PLANS

Revision	Ву	Approved	Date
ORIGINAL		Kercheval	12/75
Reviewed	KA	N. Batta	10/15
Reviewed	EW	T. Stanton	10/18
Reviewed	RP	S. Engeda	03/22

SAN DIEGO REGIONAL STANDARD DRAWING

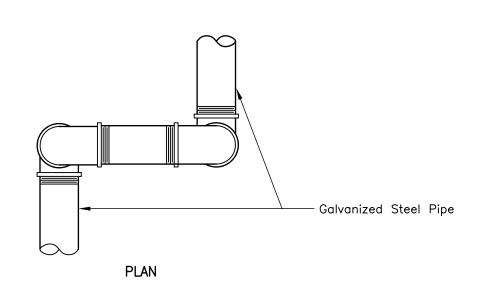
SWING JOINT AND PIPE INSTALLATION ON SLOPES ABOVE GROUND

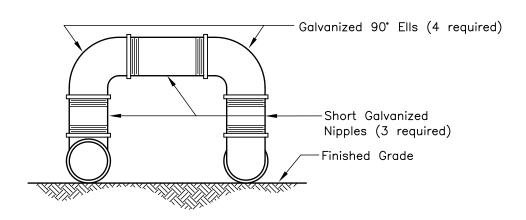
RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE

Samsin Engels 03/24/2022 Chairperson R.C.E. 52241 Date

DRAWING NUMBER

I-23



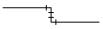


ELEVATION

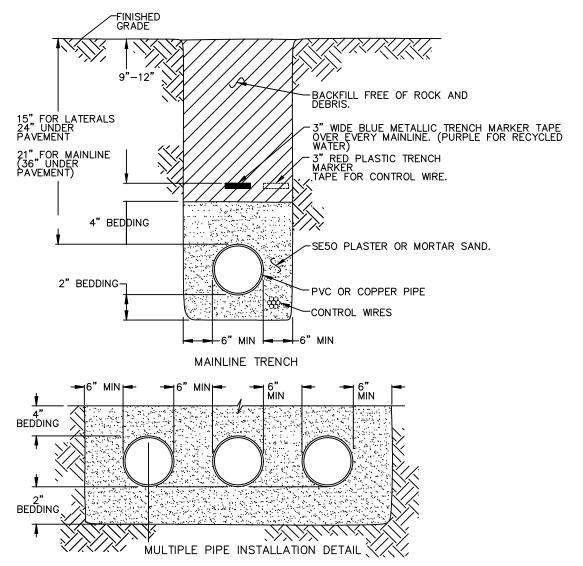
NOTES

- Double swing joint shall be used where changes of grade and alignment occur simultaneously.
 Double swing joint shall be used for expansion joint on long runs of galvanized pipe. (91.44m (300') maximum runs)

LEGEND ON PLANS

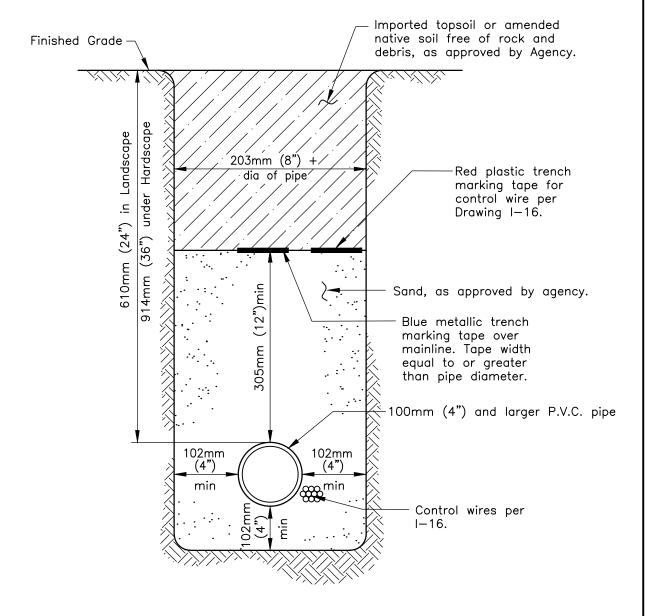


ORIGINAL Reviewed		Kercheval N. Batta	12/75 10/15		REGIONAL STANDARDS COMMITTEE Samain See for 03/24/2022
Reviewed	EW				Chairperson R.C.E. 52241 Date
	RP	S. Engeda	/	ABOVE GROUND PIPE INSTALLATIONS	DRAWING LOA



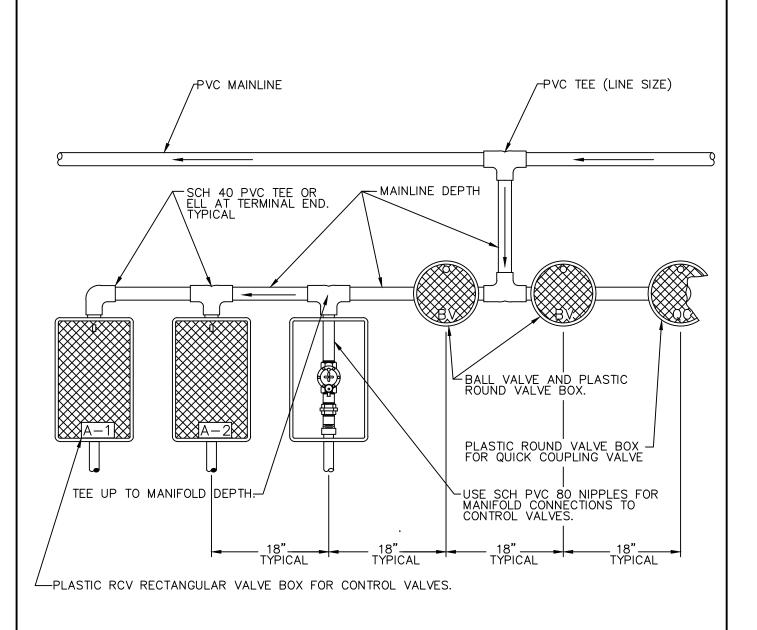
- 1. BACKFILL MATERIAL SHALL BE COMPACTED TO A RELATIVE COMPACTION OF 90% MINIMUM.
- 2. PIPE SHALL LAY FREE IN THE TRENCH WITH NO INDUCED STRAIN AND WITH SUFFICIENT ALLOWANCE FOR EXPANSION AND CONTRACTION.
- 3. PVC PIPE UNDER PAVEMENT SHALL BE INSTALLED IN A SCH 40 PVC SLEEVE TWICE THE DIAMETER OF THE PIPE (2" MINIMUM SIZE) AND EXTEND 12" MINIMUM BEYOND THE EDGE OF PAVEMENT.
- 4. THE LETTER "W" SHALL BE STAMPED OR CHISELED ON THE IMPROVEMENT (CURB/ SIDEWALK) DIRECTLY ABOVE THE PRESSURE PIPELINE SLEEVE.
- 5. NO PVC PRESSURE PIPELINE SHALL BE INSTALLED WITHIN 3' OF ANY UTILITY, UNLESS OTHERWISE SPECIFIED.

Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY REGIONAL STANDA	
ORIGINAL		Kercheval	12/75		1	
Reviewed	KA	N. Batta	10/15		Samson	eda 03/24/2022
Reviewed	EW	T. Stanton	10/18	IRRIGATION TRENCH PVC	Chairperson R.C.E.	
Reviewed	RP	S. Engeda	03/22	OR COPPER PIPE	DRAWING	LOF
					NUMBER	I-25



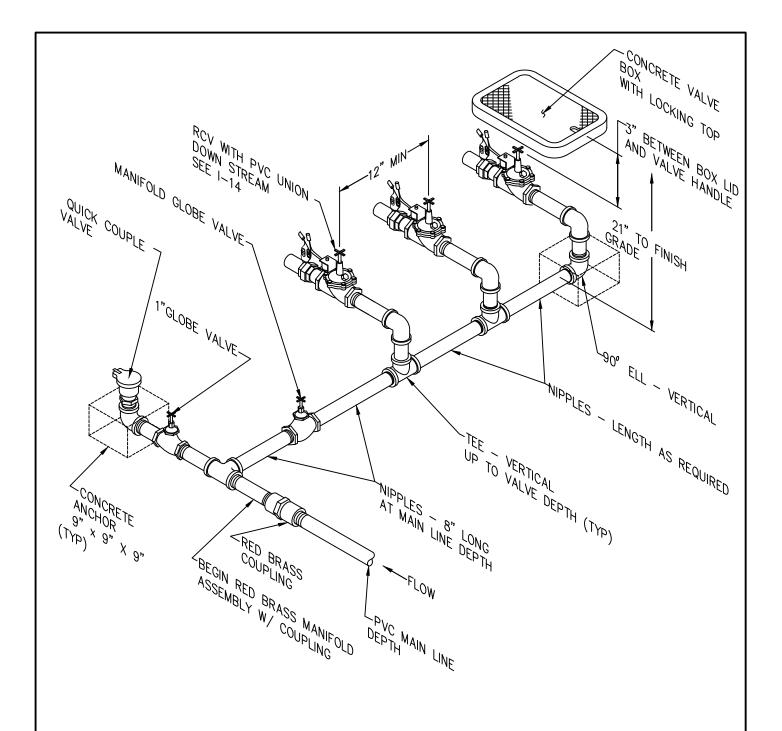
- 1. Backfill material shall be compacted to a relative compaction of 90% or more.
- 2. All pipeline fittings shall be epoxy coated ductile iron. All fittings shall have thrust blocks per W-17 or joint restraints.
- 3. The letter 'W', for pressure pipeline and 'E', for control wires shall be stamped or chiseled on the improvement (curb—sidewalk) directly above the pressure pipeline and wires respectively.
- 4. No P.V.C. pressure pipeline shall be installed within 914mm (3') of any utility, unless otherwise specified.

Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
ORIGINAL		Kercheval	12/75		
Reviewed	EW	T. Stanton	10/18	IRRIGATION TRENCH DETAIL	Samar 8 - 1 03/24/2022
Reviewed	RP	S. Engeda	03/22		Chairperson R.C.E. 52241 Date
				100mm (4") AND LARGER P.V.C. MAINLINE	DRAWING NUMBER I-26



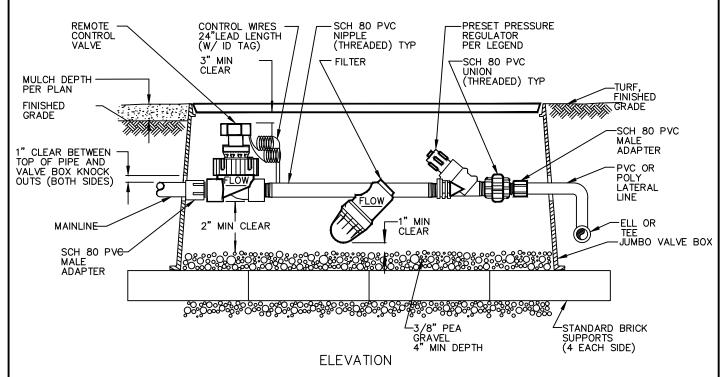
- 1. PVC PIPE USED IN MANIFOLD ASSEMBLIES SHALL BE THE SAME CLASS AS SPECIFIED FOR THE MAINLINE.
- 2. VALVE BOXES SHALL BE HEAT BRANDED WITH CONTROLLER AND VALVE IDENTIFICATION.

Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY REGIONAL STANDAR	
ORIGINAL		Kercheval	12/75		1	
Reviewed	KA	N. Batta	10/15	REMOTE CONTROL VALVE MANIFOLD	Samon Enge	A 03/24/2022
Reviewed	EW	T. Stanton	10/18		Chairperson R.C.E.	
Reviewed	RP	S. Engeda	03/22		DRAWING	1.00
			,	(TEMPORARY SYSTEMS)	NUMBER	I-32



- 1. ALL PIPES, NIPPLES, AND FITTINGS AFTER MALE ADAPTER SHALL BE RED BRASS.
- 2. VALVE AND CONTROLLER IDENTIFICATION SHALL BE LABELED OUTSIDE ON THE VALVE BOX LID AND TAGGED INSIDE THE BOX ON THE VALVE.
- 3. TEFLON TAPE SHALL BE USED ON THREADED CONNECTIONS.

Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
ORIGINAL		Kercheval	12/75		ALEGISTALE STATES COMMITTEE
Reviewed	KA	N. Batta	10/15		Samph - 26 03/24/2022
Reviewed	EW	T. Stanton	10/18	REMOTE CONTROL VALVE	Chairperson R.C.E. 52241 Date
Reviewed	RP	S. Engeda	03/22	MANIFOLD ASSEMBLY WITH BRASS PIPE	DRAWING 1.33
					NUMBER I-33

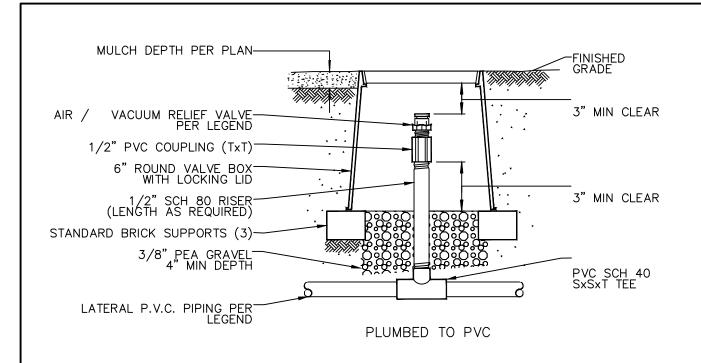


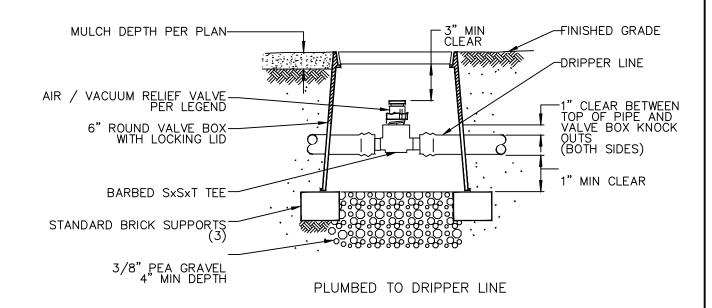
- WIRE SPLICING SHALL BE MADE IN VALVE BOXES AND PULL BOXES ONLY. SEE I-15 FOR SPLICE / SOLDERING NOTES.
- 2. SPARE WIRES TERMINATING IN VALVE BOXES SHALL HAVE THEIR ENDS INSULATED, THE SAME AS FOR A SPLICE.
- 3. WHEN TWO OR MORE VALVES ARE INSTALLED IN THE SAME LOCATION, SEE REMOTE CONTROL VALVE MANIFOLD ASSEMBLY.
- 4. VALVE / CONTROLLER IDENTIFICATION SHALL BE PERMANENTLY LABELED EXTERNALLY ON THE VALVE BOX AND INTERNALLY, WITH A PERMANENT IDENTIFICATION TAG ATTACHED TO THE VALVE.
- 5. KNOCK OUTS SHALL NOT BE ENLARGED UNLESS APPROVED BY THE AGENCY.
- 6. INSTALL ONLY ONE VALVE ASSEMBLY PER BOX.
- 7. VALVE BOXES SHALL BE SET PERPENDICULAR TO HARDSCAPE, A MAXIMUM 12 INCHES FROM EDGE OF HARDSCAPE, 2" ABOVE FINISHED GRADE IN SHRUB / GROUNDCOVER AREAS, PER MULCH DEPTH. IF NECESSARY TO BE SET IN TURF, VALVE BOXES SHALL BE SET FLUSH WITH FINISHED GRADE.
- 8. CLOSE NIPPLES SHALL NOT BE USED.
- 9. FILTER SHALL BE INSTALLED TO ALLOW FOR MAINTENANCE ACCESS.
- 10. TEFLON TAPE SHALL BE USED ON THREADED CONNECTIONS.

LEGEND ON PLANS

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Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
ORIGINAL		M. Caro	12/75		1
Reviewed	KA	N. Batta	10/15		Samon Engeda 03/24/2022
Reviewed	EW	T. Stanton	10/18	REMOTE CONTROL VALVE	Chairperson R.C.E. 52241 Date
Reviewed	RP	S. Engeda	03/22	DRIP IRRIGATION	DRAWING LOF
					NUMBER I-35





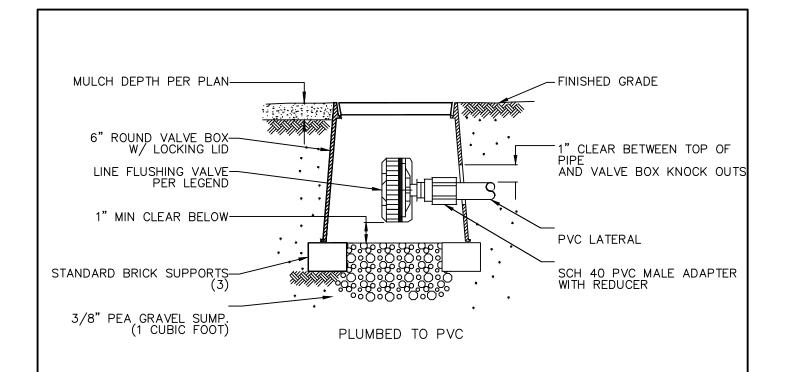
1. INSTALL AIR / VACUUM RELIEF VALVE AT HIGH POINT(S) IN VALVE CIRCUIT.

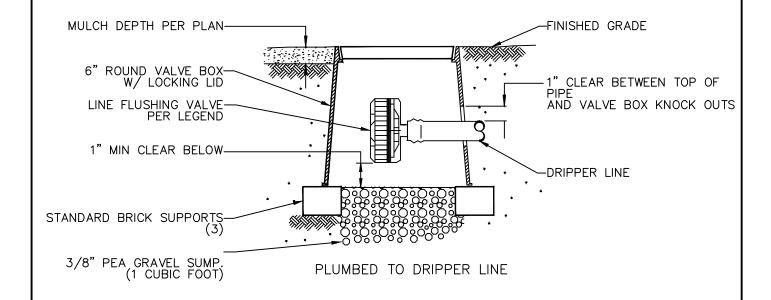
LEGEND ON PLANS

(A)

- _ HEAT—BRAND VALVE BOX LID "AR".
- VALVE SHALL BE CENTERED IN BOX.
- TEFLON TAPE SHALL BE USED ON THREADED CONNECTIONS.

Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
ORIGINAL		M. Caro	1/06		
Reviewed	ΚA	N. Batta	10/15	AIR / VACUUM RELIEF VALVE	Samon Engela 03/24/2022
Reviewed	ΕW	T.Stanton	10/18		Chairperson R.C.E. 52241 Date
Reviewed	RP	T.Stanton	10/18		DRAWING LOG
					NUMBER I-36





1. INSTALL FLUSH VALVE(S) AT THE LOWEST POINTS IN THE VALVE CIRCUIT

LEGEND ON PLANS

HEAT BRAND VALVE BOX LIDS "FV".

3. VALVE SHALL BE CENTERED IN BOX. (FV)

	-	Approved A. Oskoui		SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIE REGIONAL STANDARDS COMMITTI	
Reviewed	ΚA	N. Batta	10/15		Samon 200 10 _03/24/	2022
Reviewed	ΕW	T.Stanton	10/18	DRIP IRRINGATION	Chairperson R.C.E. 52241 Date	
Reviewed	RP	S. Engeda	03/22	FLUSH VALVE (AUTOMATIC)	DRAWING 197	
				TEODIT VALVE (AOTOMATIO)	NUMBER I-37	