



CITY OF FONTANA DESIGN STANDARDS

Link to Location on City Website:

<https://www.fontanaca.gov/3483/Design-and-Construction-Standards>

| STD # | SHEETS | SECTION 5000 - LANDSCAPE | DATE APPROVED |
|-------|--------|---|---------------|
| 5001 | 1 | Typical Hose Connection | 10/18/2006 |
| 5002 | 1 | Controller Placement Detail | 10/18/2006 |
| 5003 | 1 | Rain Sensor | 10/18/2006 |
| 5004 | 1 | Rain Guard | 10/18/2006 |
| 5005 | 3 | Irrigation Controller | 3/15/2022 |
| 5006 | 1 | Tipping Bucket | 10/18/2006 |
| 5007 | 2 | Typical Backflow "Fertilization" | 12/2/2019 |
| 5008 | 1 | Typical Backflow "Private" | 10/18/2006 |
| 5009 | 1 | Typical Backflow | 10/18/2006 |
| 5010 | 1 | Flow Meter/Master Valve | 3/15/2022 |
| 5011 | 1 | Typical Brass Remote Control Valve Detail | 3/15/2022 |
| 5012 | 1 | Automatic Antisiphon Valve | 10/18/2006 |
| 5013 | 1 | Wire Connector | 10/18/2006 |
| 5014 | 1 | Wire Connector | 10/18/2006 |
| 5015 | 1 | Trenching Detail | 10/18/2006 |
| 5016 | 1 | Piping and Wiring | 10/18/2006 |
| 5017 | 1 | Splice Box Assembly | 3/15/2022 |
| 5018 | 1 | Sleeving Detail | 10/18/2006 |
| 5019 | 1 | Gate Valve | 3/15/2022 |
| 5020 | 1 | Thrust Block Assembly | 10/18/2006 |
| 5021 | 1 | Quick Coupler | 3/15/2022 |
| 5022 | 1 | Swing Joint | 10/18/2006 |
| 5023 | 1 | Lawn 4", 6" 8" Shrub Pop-up Head | 10/18/2006 |
| 5024 | 1 | Hi Popup Shrub Head | 10/18/2006 |
| 5025 | 1 | Shrub Spray Head | 10/18/2006 |
| 5026 | 1 | Bubbler Head | 10/18/2006 |
| 5027 | 1 | Shrub Rotor | 10/18/2006 |
| 5028 | 1 | Irrigation at Top of Slope | 10/18/2006 |

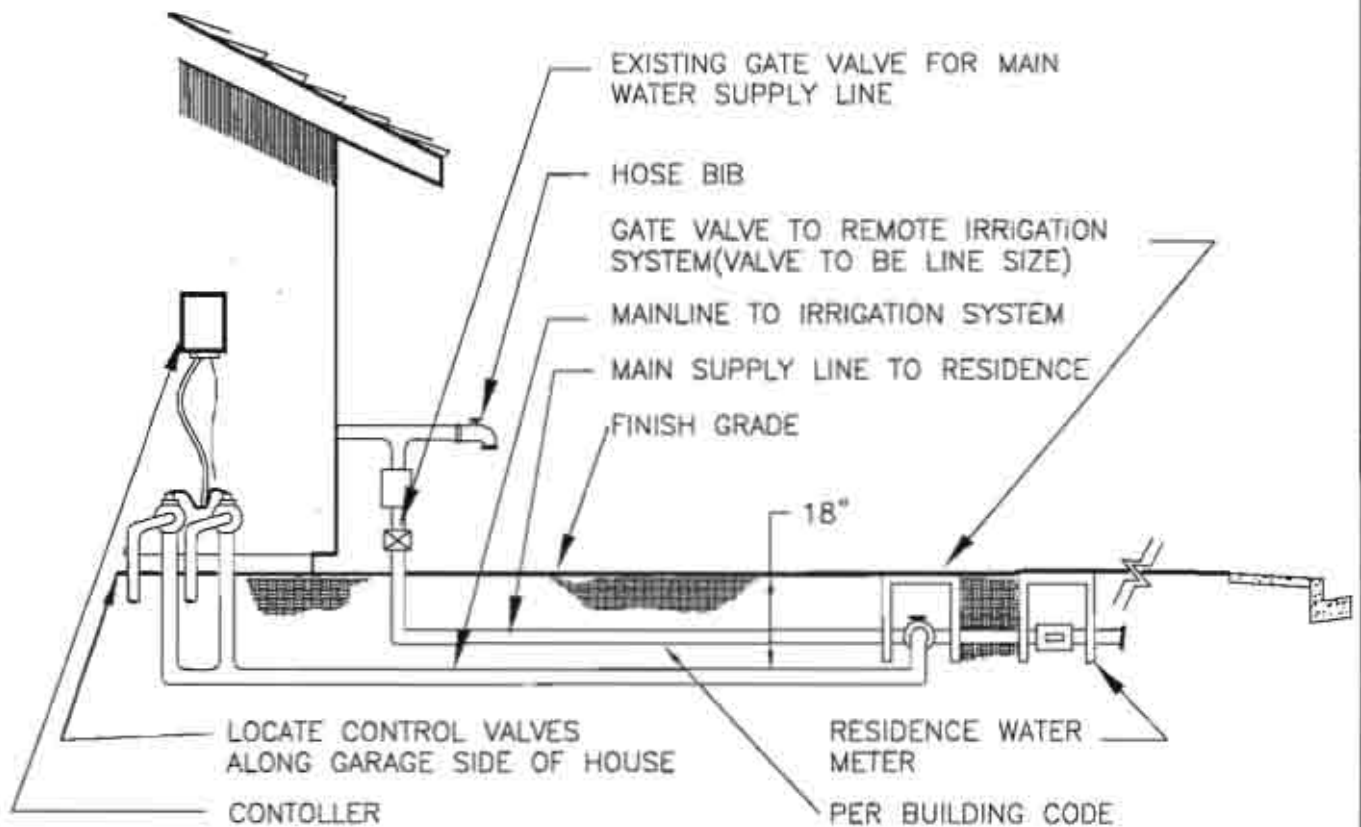


CITY OF FONTANA DESIGN STANDARDS

Link to Location on City Website:

<https://www.fontanaca.gov/3483/Design-and-Construction-Standards>

| STD # | SHEETS | SECTION 5000 - LANDSCAPE (p. 2) | DATE APPROVED |
|-------|--------|---------------------------------|------------------|
| 5029 | 1 | Shrub Rotor on Slope | 10/18/2006 |
| 5030 | 1 | Oscillation Head Assembly | 10/18/2006 |
| 5031 | 1 | Tree Staking | 10/18/2006 |
| 5032 | 1 | Tree Guying | 10/18/2006 |
| 5033 | 1 | Tree Placement | 10/18/2006 |
| 5034 | 1 | Palm Tree Installation | 10/18/2006 |
| 5035 | 1 | Shrub Planting | 10/18/2006 |
| 5036 | 1 | Shrub on Slope | 10/18/2006 |
| 5037 | 1 | Vine Planting | 10/18/2006 |
| 5038 | 1 | Automatic Drip Valve | 3/15/2022 |
| 5039 | 1 | Emitter | 3/15/2022 |
| 5040 | 1 | Emitter Layout | 10/18/2006 |
| 5041 | 1 | Pot Irrigation | 10/18/2006 |
| 5042 | 1 | Drip Emitter | 10/18/2006 |
| 5043 | 1 | Redwood Header Board | 10/18/2006 |
| 5044 | 1 | Concrete Mow Curb | 3/15/2022 |
| 5045 | 1 | Typical Rock Treatment | 12/2/2019 |
| 5046 | 3 | Tree Grates | 1/16/2015 |
| 5047 | 1 | Valve Box Installation | 3/15/2022 |



APPROVED BY:

Ricardo Sandoval 10.18.06
CITY ENGINEER DATE

RICARDO SANDOVAL

REVIEWED BY: Timothy Rostedt

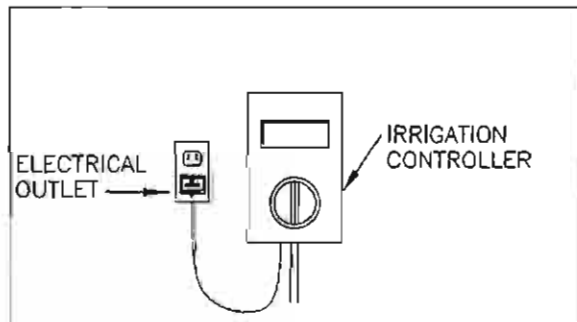
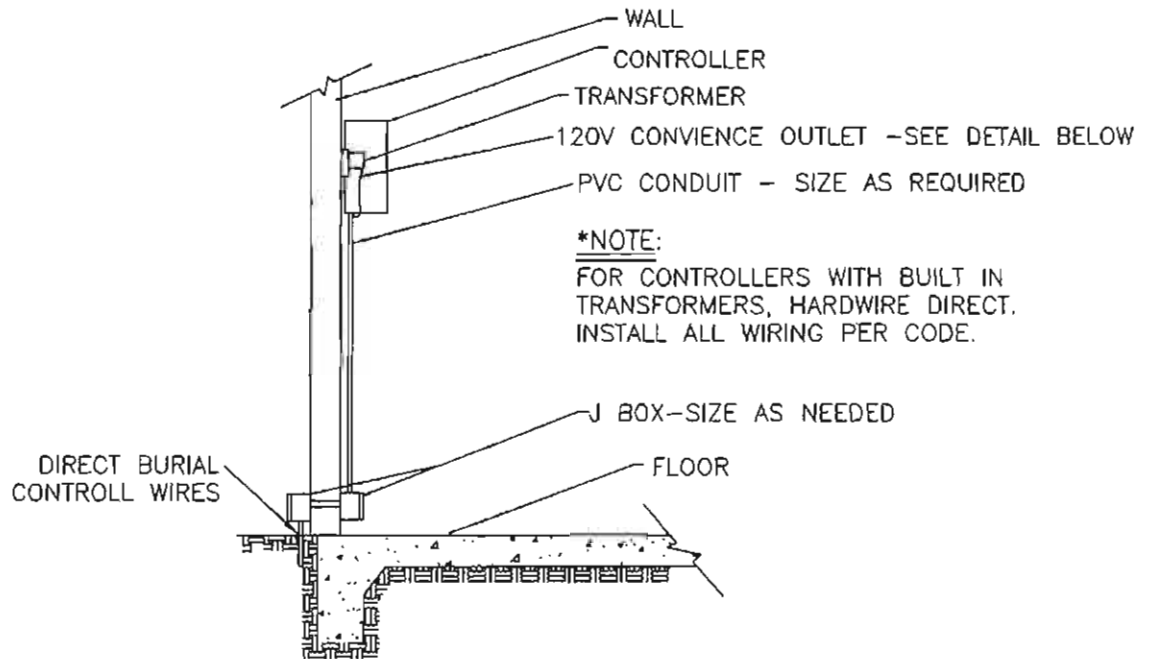
DATE OF LAST REVISION: 1-28-00

CITY OF FONTANA

**TYP. HOUSE
CONNECTION**

STD. PLAN NO. 5001

SHT 1 OF 1



NOTE:
CONVENIENCE OUTLET TO BE
PLACED NEAR CONTROLLER.

CONTROL DETAIL



APPROVED BY:

[Signature] 10.18.00
CITY ENGINEER DATE
RICARDO SANDOVAL

REVIEWED BY: Timothy Rastedt

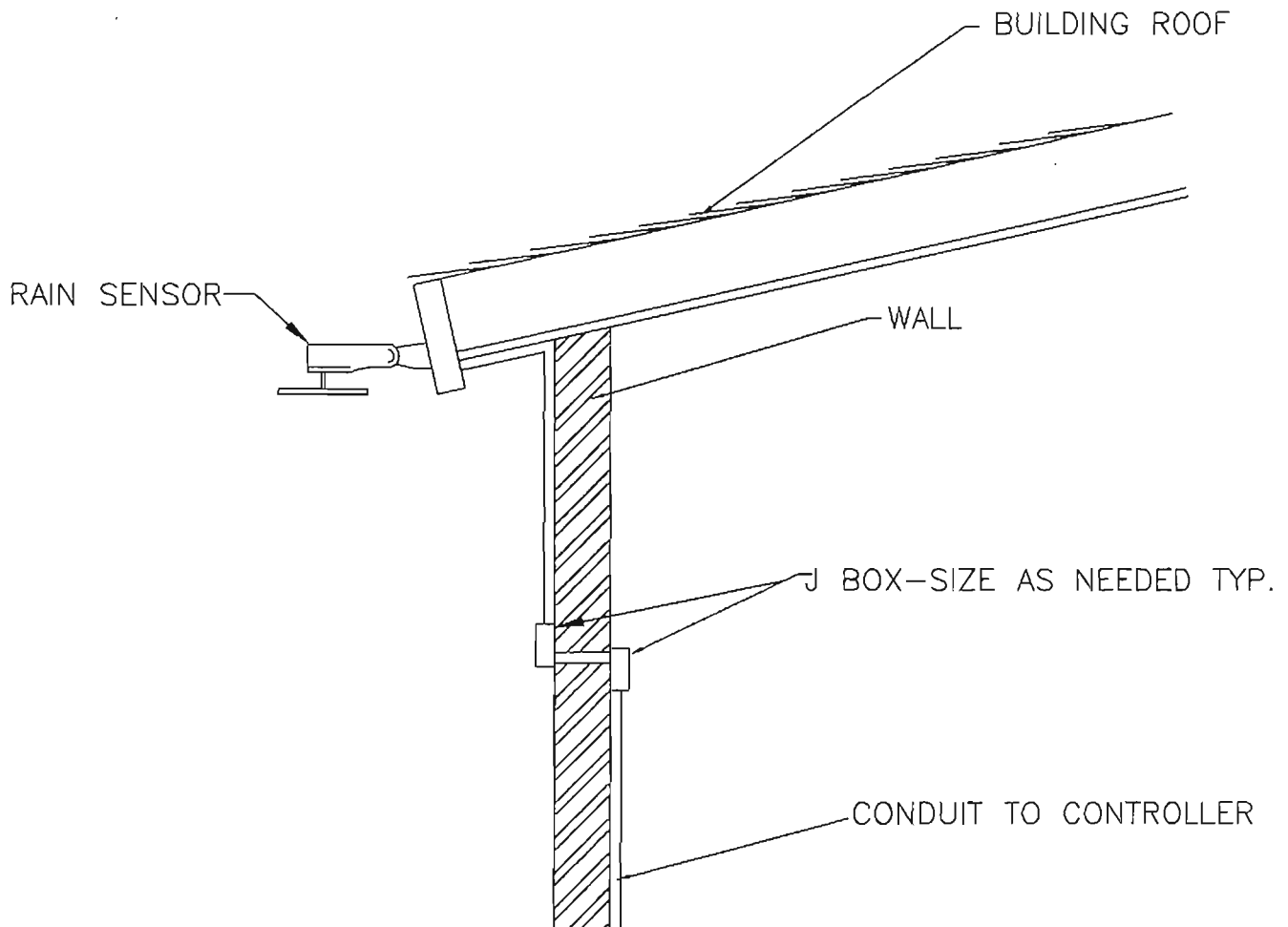
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CITY OF FONTANA

**CONTROL PLACEMENT
DETAIL**

STD. PLAN NO. 5002

SHT 1 OF 1



APPROVED BY:

Ricardo Sandoval 10.18.06

CITY ENGINEER
RICARDO SANDOVAL

DATE

REVIEWED BY: Timothy Rastedt

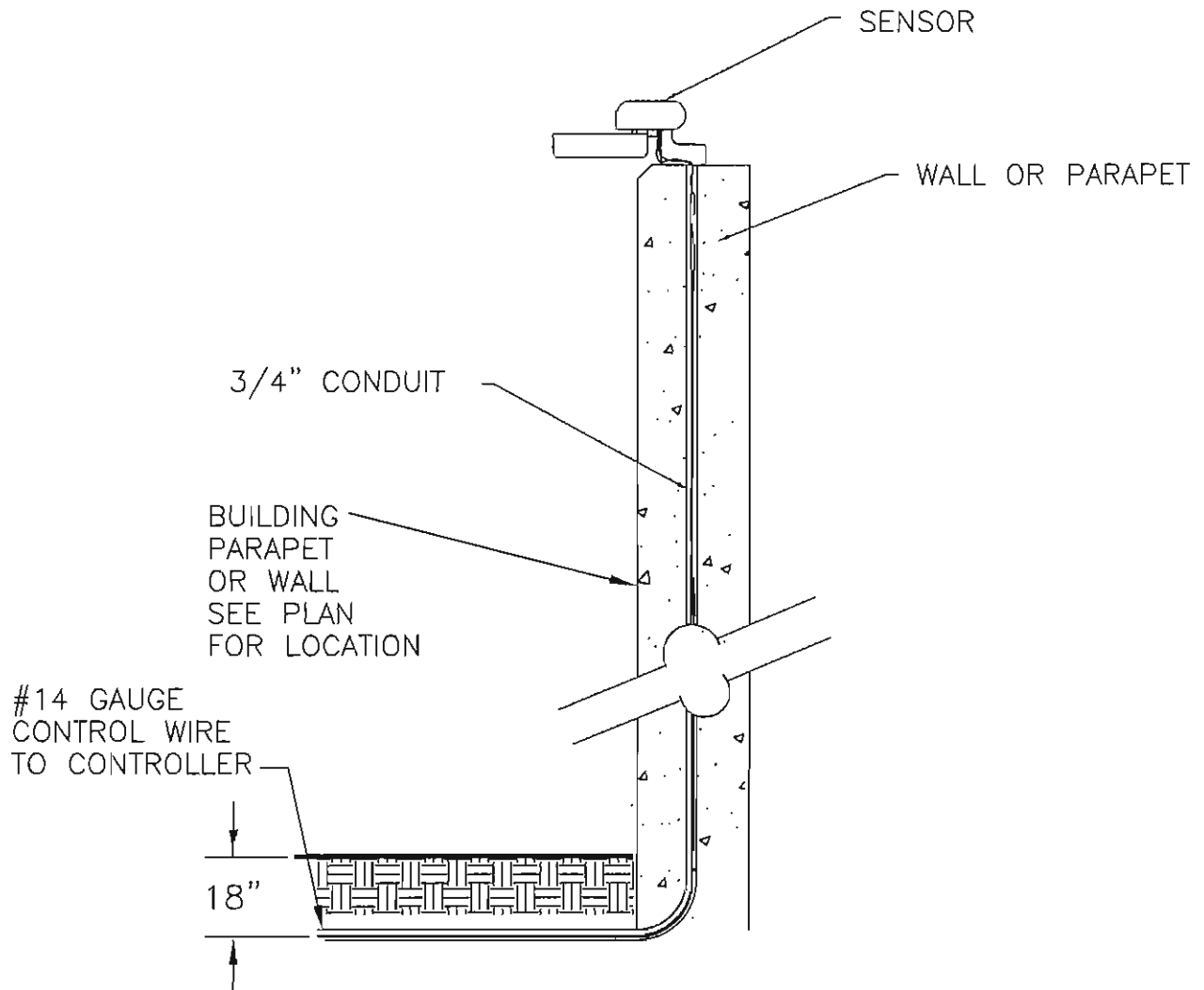
DATE OF LAST REVISION: 1-28-00

CITY OF FONTANA

RAIN SENSOR

STD. PLAN NO. 5003

SHT 1 OF 1



APPROVED BY:

Ricardo Sandoval 10.18.06

CITY ENGINEER
RICARDO SANDOVAL

DATE

REVIEWED BY: Timothy Rostedt

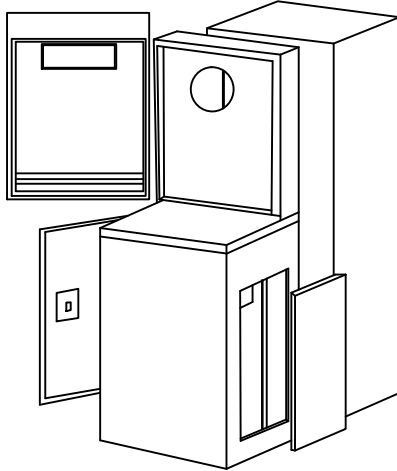
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CITY OF FONTANA

RAIN GUARD

STD. PLAN NO. 5004

SHT 1 OF 1



EXACT LOCATION OF CONTROLLER SHALL BE AGREED UPON BY EDISON, CITY LANDSCAPE INSPECTOR AND CONTRACTOR PRIOR TO ANY TRENCHING OR WIRE PLACEMENT

GENERAL NOTES:

PROVIDE 100A METER AND 50A/2P MAIN C/B WHERE INDICATED ON DRAWINGS

PROVIDE PANELBOARD WHERE INDICATED ON DRAWINGS.

PROVIDE IRRIGATION CONTROLLER CABINET WHERE INDICATED ON DRAWINGS.

TERMINATE AT EXISTION HANDHOLE. PER S.C.E. COMPANY REQ. VERIFY EXACT LOCATION AND TERMINATION REQ. WITH S.C.E. CO. PRIOR TO TRENCHING

CONDUIT AND CONDUCTOR SIZES ARE BASED ON NONMETALLEC CONDUIT AND COPPER CONDUCTORS WITH TYPE "THHN/THWN" INSULATION.

ASSEMBLY MODEL # ISA5-T01-XX/DXI-GPRS/RMRX/RMPM/DXI-TRAN/DXI-OPB

NOTE: "XX" IS FOR STATION COUNT IN INCREMENTS OF 8
(08, 16, 24,32, 40, 48,.....96)

LOCATION AND POSITIONING OF CABINETS NEED TO VERIFIED AND APPROVED BY THE ENGINEERING PUBLIC WORKS INSPECTOR PRIOR TO ANY INSTALLATIONS



APPROVED BY:

Ricardo Sandoval

3-15-22

CITY ENGINEER
RICARDO SANDOVAL

DATE

REVIEWED BY: KS

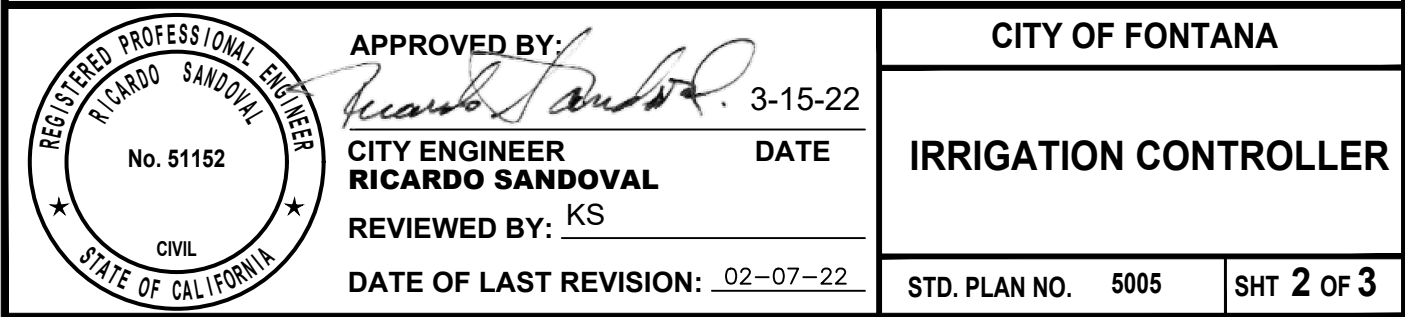
DATE OF LAST REVISION: 02-07-22

CITY OF FONTANA

IRRIGATION CONTROLLER

STD. PLAN NO. 5005

SHT 1 OF 3



City of Fontana
Irrigation Controller Standard
For Communities Facilities Districts

(CFD)

Toro DXi for Sentinel WMS controller installed in an approved stainless steel Edison meter box enclosure.

Contact Imperial Technical Services with the following numbers for the City of Fontana meter/controller. Phone: (714) 696-7535

Fontana Assembly Model # for controller:

ISA5-TO1-XX/DXI-GPRS/RMRX/RMRX/RMPM/DXI-TRAN/DXI-OPB

Note: "XX" is for station count in increments of 8 (08, 16, 24,32, 40, 48,.....96)

Required items to be included with each controller installed:

1. DXi-OPB08 Toro 8 station output board.
2. PROMAX: Rain Master Maintenance Remote Kit, coded "123" for City of Fontana
3. DXI-TRAN-120-60-50-50VA 24VAC Transformer
4. After controller installation contact Imperial Technical Services to schedule inspection for certification which is required prior starting 90 day maintenance

(Note: Items 1.,2., & 3.: No need to order these extra items-They are included in the Assembly Model #)

Contact:

Imperial Technical Services

Phone: (714) 696-7535



APPROVED BY:

Ricardo Sandoval 3-15-22

CITY ENGINEER
RICARDO SANDOVAL

DATE

REVIEWED BY: KS

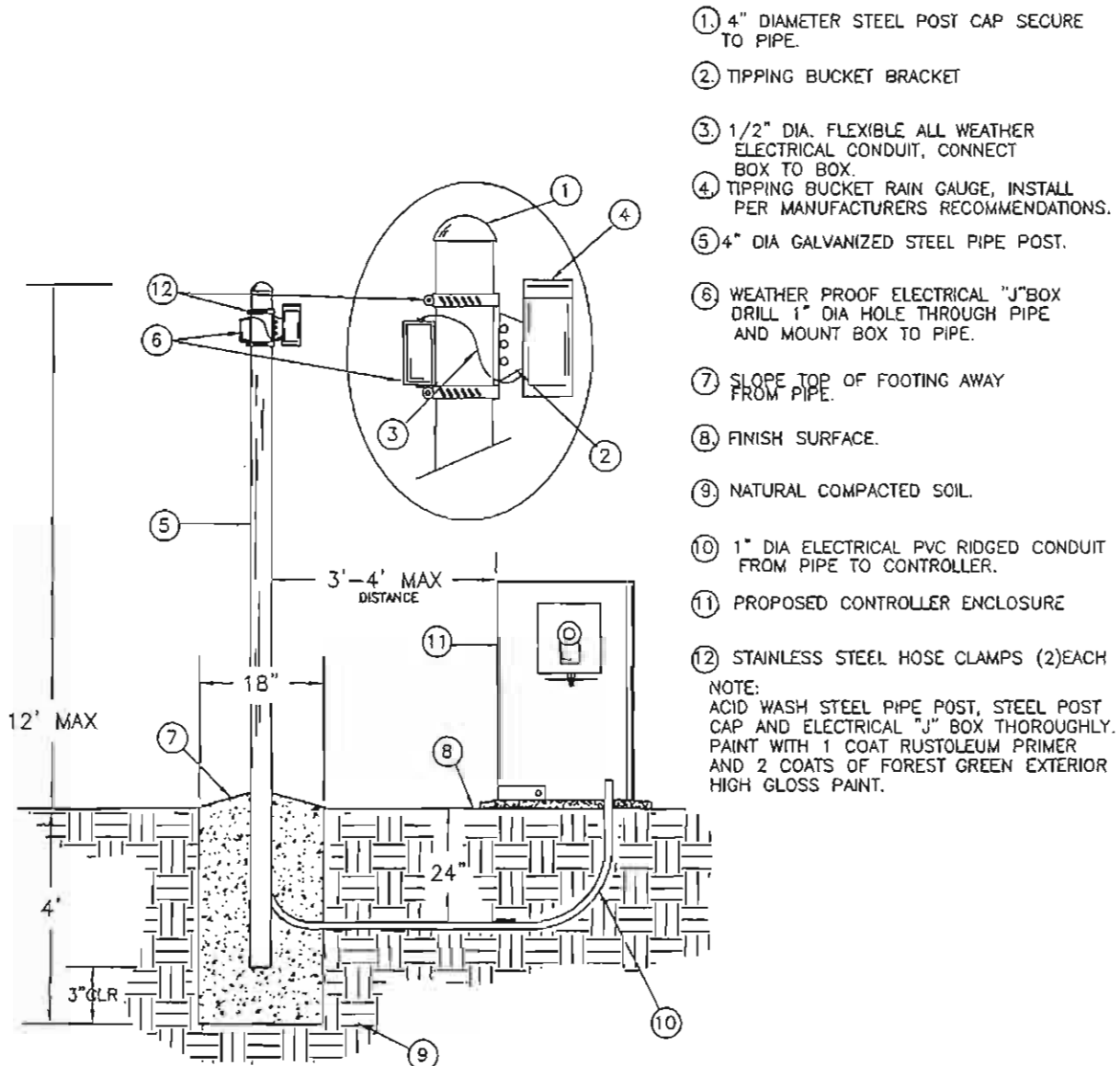
DATE OF LAST REVISION: 02-07-22

CITY OF FONTANA

IRRIGATION CONTROLLER

STD. PLAN NO. 5005

SHT 3 OF 3



APPROVED BY:

Ricardo Sandoval 10-18-06
CITY ENGINEER DATE

RICARDO SANDOVAL

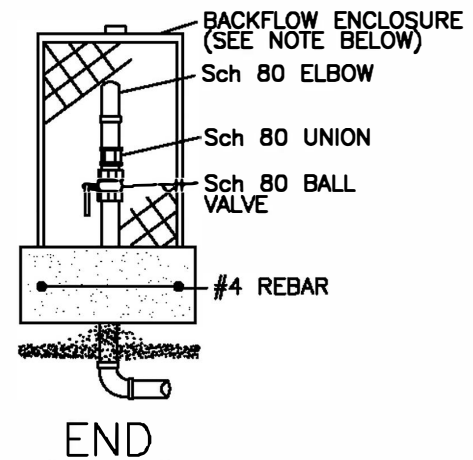
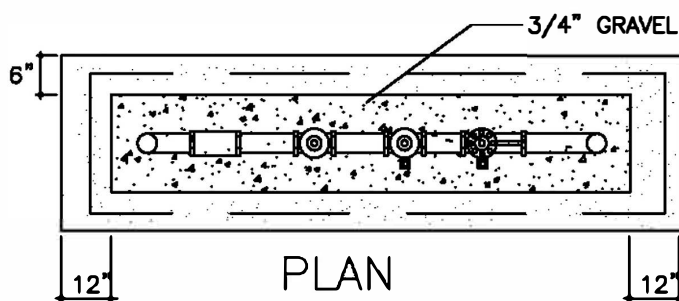
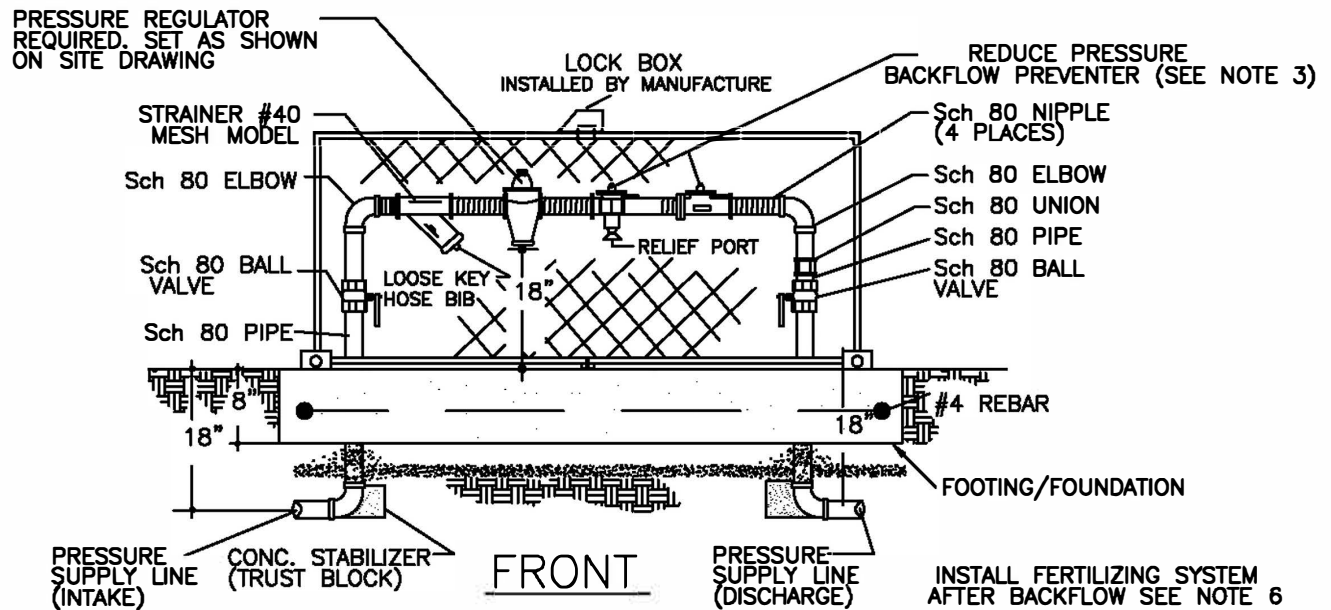
REVIEWED BY: Timothy RastedtDATE OF LAST REVISION: 1-28-00

CITY OF FONTANA

TIPPING BUCKET

STD. PLAN NO. 5006

SHT 1 OF 1



NOTE: BACKFLOW ENCLOSURE, LE MEUR OR EQUAL 24"X60"X36" HIGH HINGED AT BOTH ENDS SECURE TO 6"X8" FOOTING W/4" J BOLTS (EQUIPMENT TO BE CENTERED INSIDE HOUSING) COLOR OF ENCLOSURE: HUNTER GREEN

GENERAL NOTES

1. CONTRACTOR SHALL FORM ENCLOSURE AND REQUEST INSPECTION PRIOR TO POURING FOOTING/FOUNDATION
2. CONTRACTOR SHALL USE 520-C-2500 CONCRETE
3. WILKINS 375XL LEAD FREE PLASTIC BACKFLOW PREVENTER
4. WILKINS 500XL REGULATOR LOW RANGE FOR PRESSURE'S FROM 0 PSI TO 75 PSI LEAD FREE
WILKINS 600XL REGULATOR HIGH RANGE FOR PRESSURE'S FROM 75 PSI TO 120 PSI LEAD FREE
5. BACKFLOW CERTIFICATION REQUIRED BY A CERTIFIED PROFESSIONAL PRIOR TO CITY ACCEPTANCE
6. INSTALL EZ-FLO FERTILIZING SYSTEM EZ025-HC INSTALL DIRECTLY IN THE IRRIGATION MAINLINE AFTER THE BACKFLOW PREVENTER SEE DETAILS ON SHEET 2



APPROVED BY:

Ricardo Sandoval

12-2-19

CITY ENGINEER
RICARDO SANDOVAL

DATE

REVIEWED BY: KS

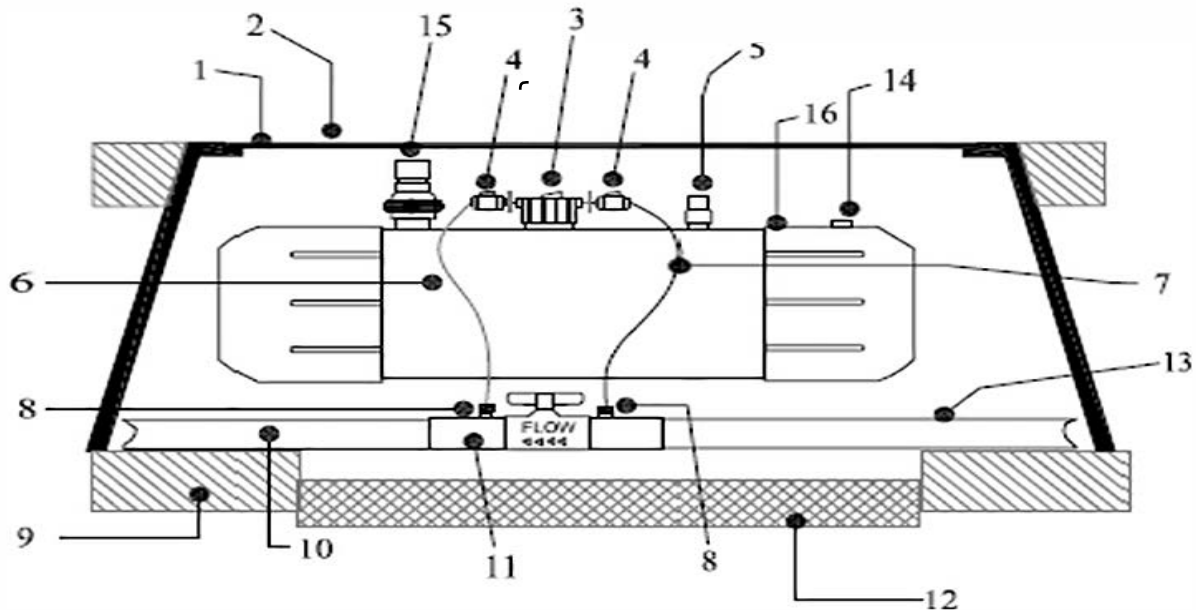
DATE OF LAST REVISION: 12-2-19

CITY OF FONTANA

TYP. BACKFLOW

STD. PLAN NO. 5007

SHT 1 OF 2



1. FINISHED GRADE
2. VALVE BOX CARSON BRAND MODEL 2436 (SIZE DETERMINED BY TANK SIZE CHART BELOW)
3. PROPORTIONING CAP WITH FEED ADJUSTMENT KNOB
4. EZ-FLO SHUT OFF VALVES
5. AIR VENT VALVE
6. FERTILIZER OUT - CONNECT CLEAR TUBE TO GREEN CONNECTIONS ON PROPORTIONING CAP AND COUPLING
7. WATER IN- CONNECT BLACK TUBE TO BLUE CONNECTIONS ON PROPORTIONING CAP AND COUPLING
8. TUBING CLAMP - BOTH THE GREEN AND BLUE COUPLING TUBING CONNECTIONS
9. APPROVED BACKFILL
10. PVC MAINLINE TO VALVE MANIFOLD
11. EZ-BALL VALVE COUPLING CONNECTOR INSTALL ACCORDING TO WORKFLOW DIRECTION ARROW AND PER THE SIZE OF THE MAINLINE
12. PEA GRAVEL (3 CU FT)
13. PVC MAINLINE FROM BACKFLOW PREVENTER
14. PRESSURE RELIEF VALVE
15. FILL VALVE (DRAIN VALVE INCLUDED BUT NOT SHOWN)
16. EZ-FLO MODEL (SIZING BASED ON ATTACHED CHART)
17. FERTILIZER TO BE INSTALLED AFTER MASTER VALVE AND FLOW SENSOR

NOTES:

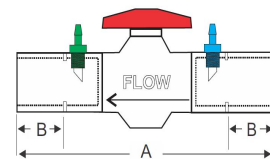
ITEMS 3,4,5,6,7 & 8 ARE INCLUDED WITH THE EZ-FLO SYSTEM. ITEM 11 IS PURCHASED SEPARATELY (BASED ON THE ATTACHED BALL VALVE SIZE CHART)

Sizing the Tank

In the table below refer to the 4-6 week coverage columns to determine the tank size required for the irrigated area

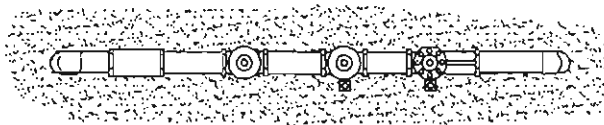
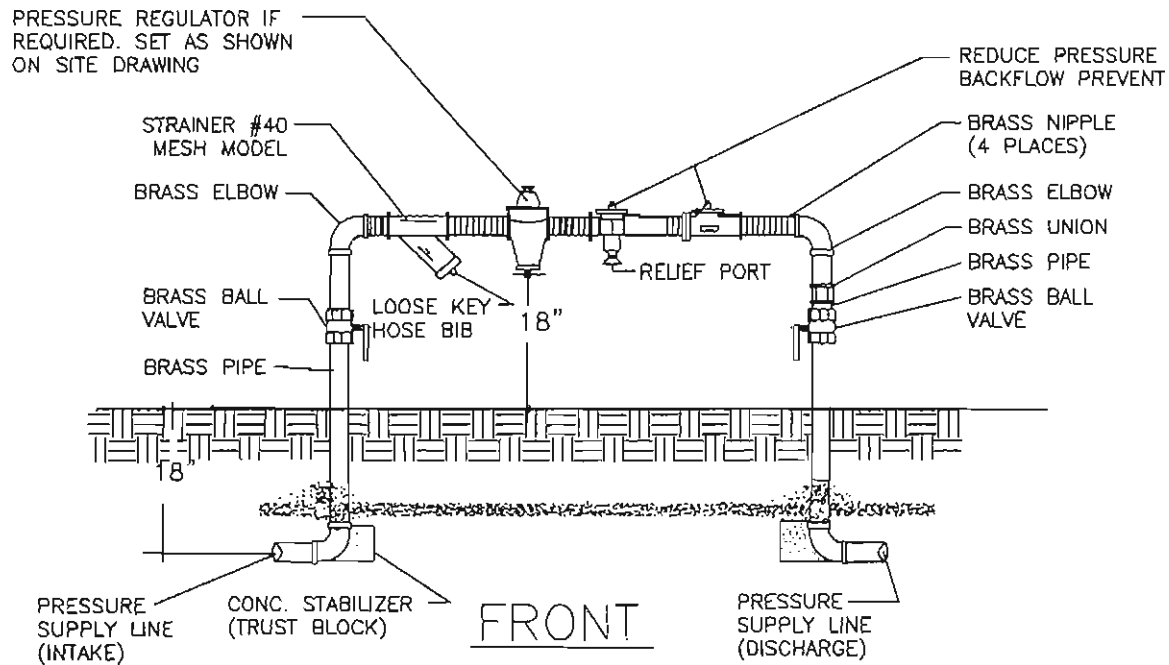
| Model | Capacity | Capacity | Coverage 4-6 Weeks | | Unit Size | | Valve Box Size |
|----------|----------|----------|--------------------|-------------|-----------------|-----------------|----------------|
| | Gallons | Pounds | Zones | Square Feet | L X W X H | L X W X H | L X W X H |
| EZ001-CX | 1.5 | 10 | 5 / 8 | 10,000 | 13" X 8" X 11" | 15" X 10" X 12" | |
| EZ003-CX | 2.5 | 15 | 8 / 14 | 15,000 | 21" X 8" X 11" | 20" X 16" X 12" | |
| EZ005-FX | 5.0 | 30 | | 30,000 | 28" X 10" X 13" | 30" X 18" X 17" | |
| EZ010-FX | 9.4 | 50 | | 50,000 | 27" X 12" X 14" | 30" X 18" X 17" | |
| EZ010-HC | 10.0 | 75 | | 75,000 | 32" X 12" X 18" | 36" X 24" X 24" | |
| EZ017-HC | 17.5 | 150 | | 150,000 | 36" X 15" X 20" | 36" X 24" X 24" | |
| EZ025-HC | 25.0 | 225 | | 225,000 | 36" X 19" X 23" | 36" X 24" X 24" | |

Tank sizing is based on 1 lb of product capacity required to service 1000 sqft of landscape for a 4 to 6 week period. This method is intended to simplify the sizing process and allow for a broad range of products to be used with the system while maintaining adequate capacity.

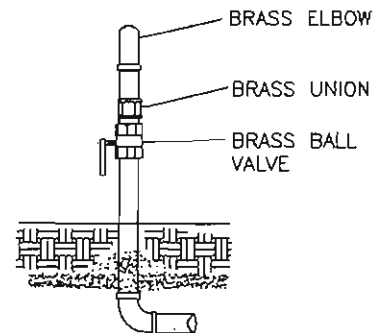


| Part Number | Size | A | B |
|-------------|------------|---------|--------|
| CBV-075 | 3/4" SOC | 7" | 1" |
| CBV-100 | 1" SOC | 8" | 1 1/4" |
| CBV-125 | 1 1/4" SOC | 9 1/4" | 1 1/4" |
| CBV-150 | 1 1/2" SOC | 10 3/4" | 1 1/4" |
| CBV-200 | 2" SOC | 12 1/2" | 1 3/4" |
| CBV-250 | 2 1/2" SOC | 13" | 1 3/4" |
| CBV-300 | 3" SOC | 16 1/2" | 1 3/4" |
| CBV-400 | 4" SOC | 18 1/2" | 2" |
| CBVT-075 | 3/4" THD | 7" | 1" |
| CBVT-100 | 1" THD | 8" | 1 1/4" |
| CBVT-125 | 1 1/4" THD | 9 1/2" | 1 1/4" |

**APPROVED BY:**
12-2-19
CITY ENGINEER
RICARDO SANDOVAL
DATE**REVIEWED BY: _____ K8****DATE OF LAST REVISION: 12-2-19****CITY OF FONTANA**
TYP. BACKFLOW
FERTILIZATION SYSTEM
STD. PLAN NO. 5007 **SHT 2 OF 2**



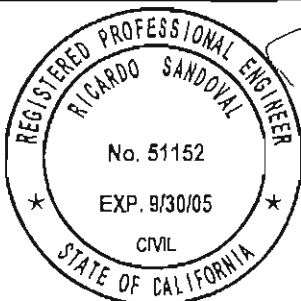
PLAN



END

GENERAL NOTES:

1. BACKFLOW TO BE USED ON PRIVATE PROJECTS ONLY.



APPROVED BY:

Ricardo Sandoval 10.18.06
CITY ENGINEER DATE

RICARDO SANDOVAL

REVIEWED BY: Timothy Rastedt

DATE OF LAST REVISION: 1-28-00

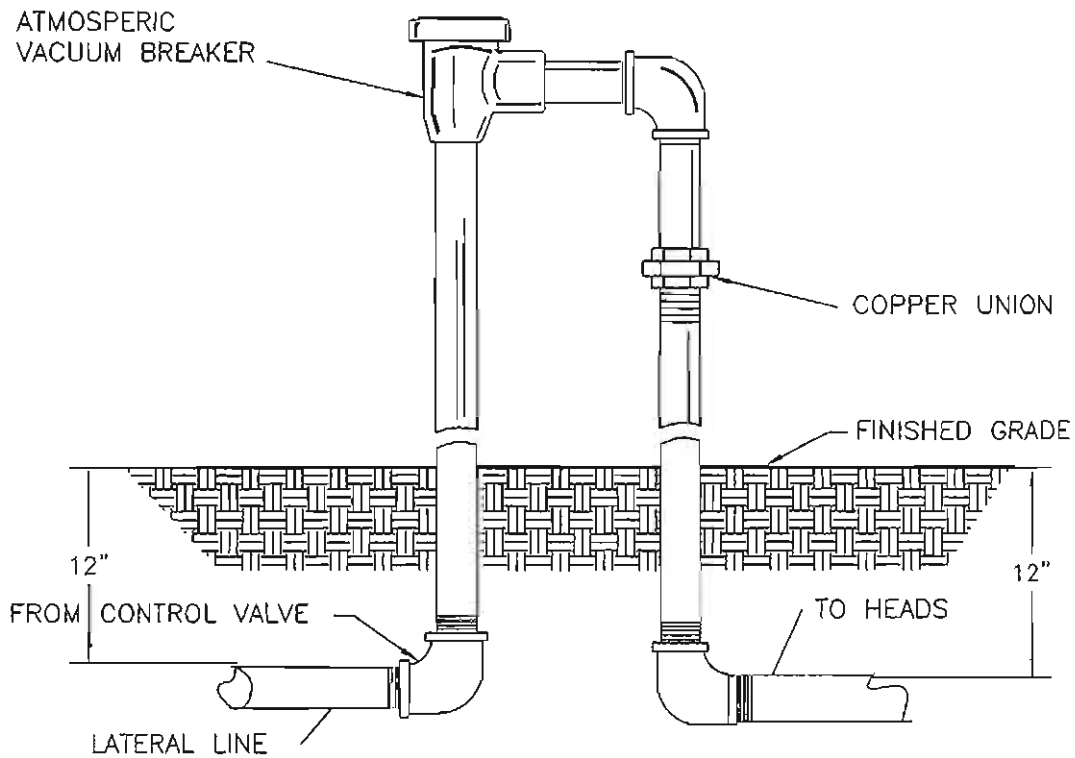
CITY OF FONTANA

**TYP. BACKFLOW
"PRIVATE"**

STD. PLAN NO. 5008

SHT 1 OF 1

NOTE:
INSTALL BACKFLOW A MIN. 6" ABOVE
HIGHEST HEAD



APPROVED BY:

Timothy Rastedt 10.18.00
CITY ENGINEER DATE

RICARDO SANDOVAL

REVIEWED BY: Timothy Rastedt

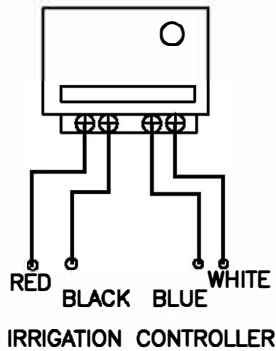
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CITY OF FONTANA

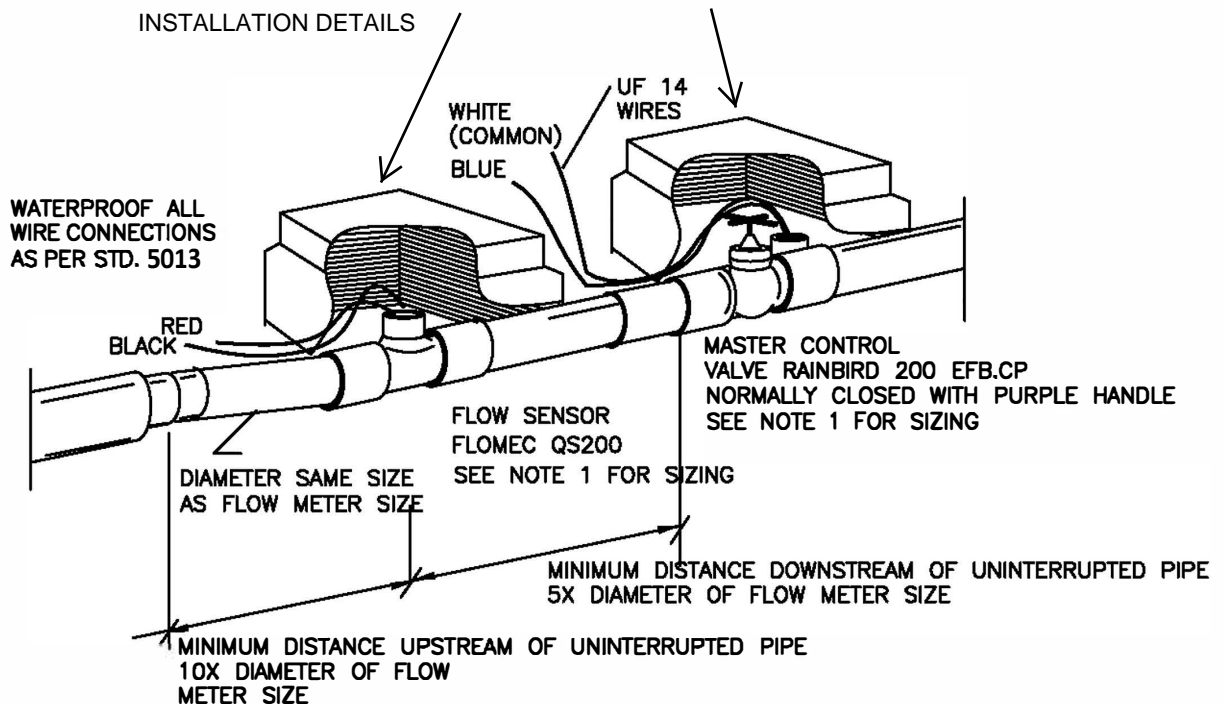
TYPICAL BACKFLOW

STD. PLAN NO. 5009

SHT 1 OF 1



INSTALL CARSON VALVE BOX MODEL 1419 VIOLET/LAVENDER
WITH LID MODEL 1220-4 WITH STAINLESS STEEL BOLT (OR APPROVED EQUAL)
AND ETCHED WITH FLOW SENSOR AND MASTER VALVE SEE STD 5047 FOR BOX
INSTALLATION DETAILS



NOTES:

1. MASTER VALVE AND FLOW SENSOR TO MATCH MAINLINE SIZE
2. MAXIMIZE THE DISTANCE BETWEEN THE MASTER VALVE AND THE FLOW SENSOR



APPROVED BY:

3/15/22

CITY ENGINEER
RICARDO SANDOVAL
KS

DATE

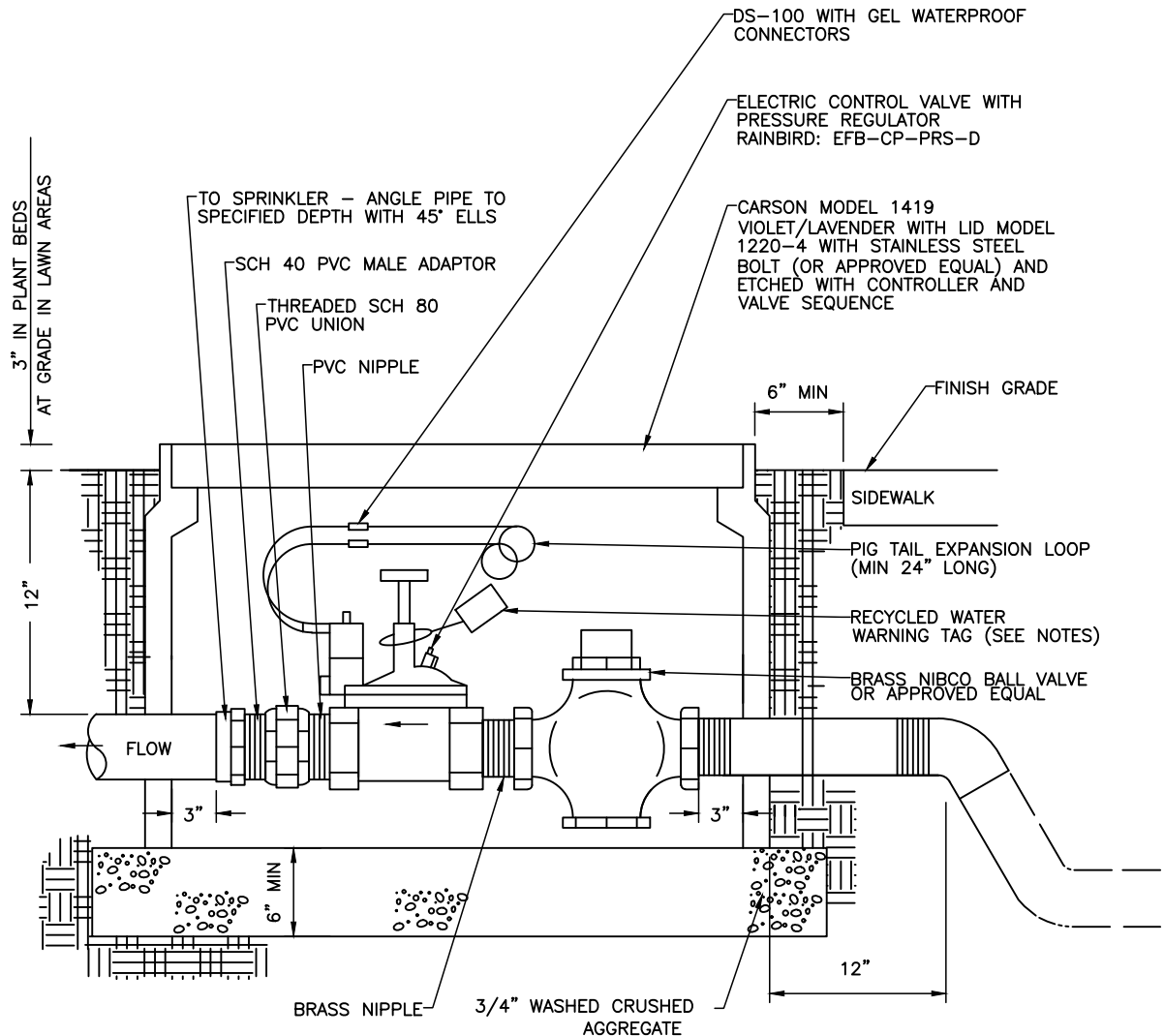
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CITY OF FONTANA

**FLOW METER/
MASTER VALVE**

STD. PLAN NO. 5010

SHT 1 OF 1

**NOTES:**

1. INSTALL CONTROL VALVES A MINIMUM OF 12" FROM ANY STRUCTURES OR HARDSCAPING WHENEVER POSSIBLE.
2. INSTALL VALVES IN PLANT BEDS WHEREVER POSSIBLE NEXT TO SIDEWALKS.
3. PLACE VALVE BOX AT RIGHT ANGLES TO STRUCTURES OR HARDSCAPING.
4. PLACE AGGREGATE PRIOR TO INSTALLATION OF VALVE BOX.
5. ATTACH PLASTIC IDENTIFICATION TAG WITH APPROPRIATE CONTROLLER AND VALVE NUMBER TO WIRE INSIDE VALVE BOX.
6. ALL VALVES MUST HAVE RECYCLED WATER VALVE TAGS (CHRISTY'S PURPLE MODEL NO. ID-MAX-P2-RC009) ATTACHED TO VALVES. ONLY WHEN RECYCLED WATER IS AVAILABLE AND CONNECTED.



APPROVED BY:

3-15-22

CITY ENGINEER
RICARDO SANDOVAL

DATE

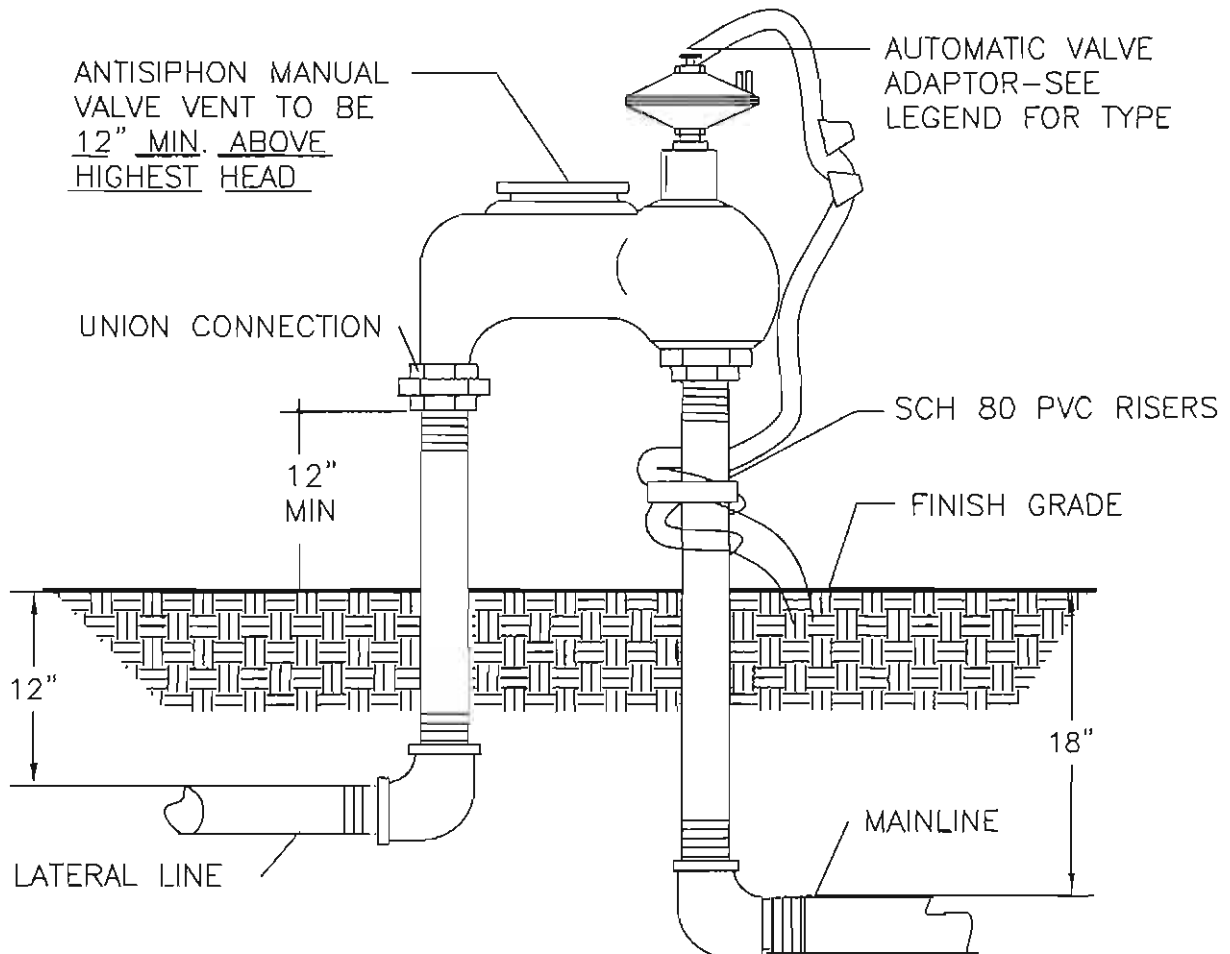
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CITY OF FONTANA

TYP. BRASS REMOTE CONTROL VALVE DETAIL

STD. PLAN NO. 5011

SHT 1 OF 1



APPROVED BY:

[Signature] 10.18.06
CITY ENGINEER DATE
RICARDO SANDOVAL

REVIEWED BY: Timothy Rastedt

DATE OF LAST REVISION: 1-28-00

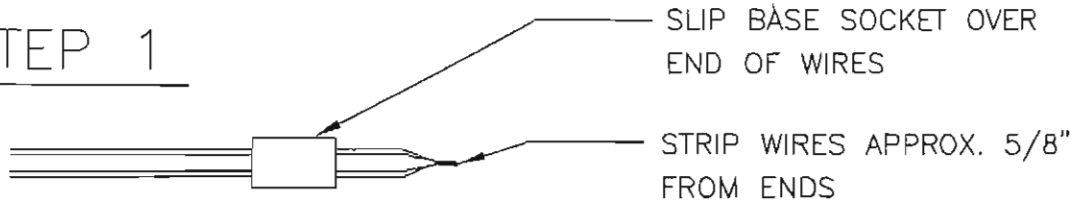
CITY OF FONTANA

AUTOMATIC ANTISIPHON VALVE

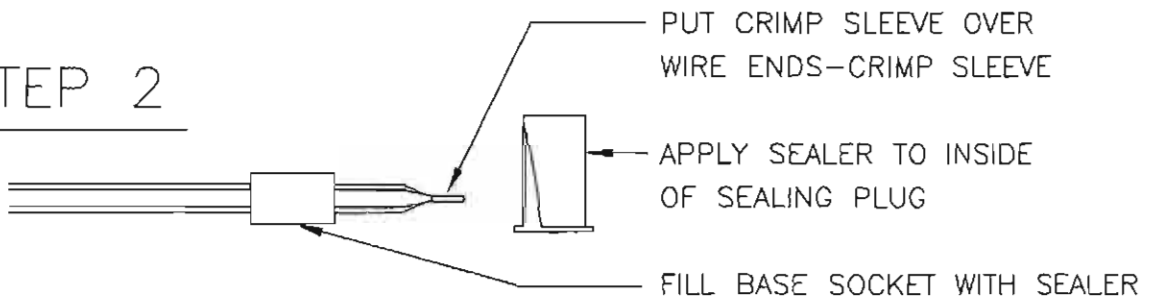
STD. PLAN NO. 5012

SHT 1 OF 1

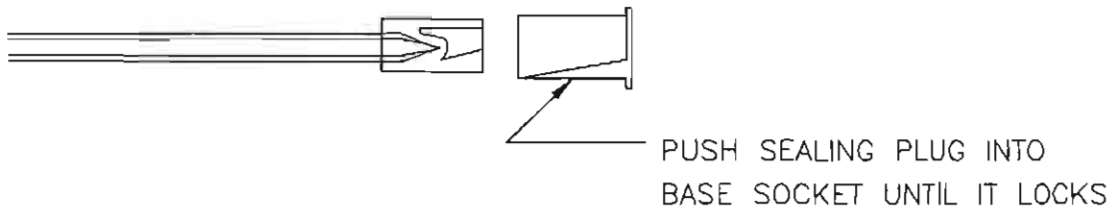
STEP 1



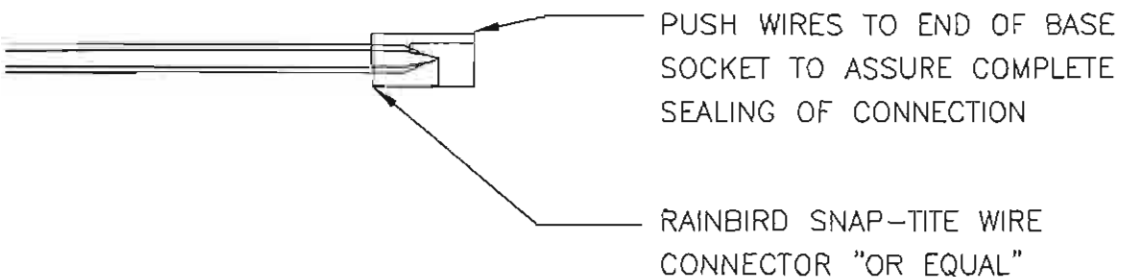
STEP 2



STEP 3



STEP 4



APPROVED BY:

Ricardo Sandoval 10-18-06

CITY ENGINEER
RICARDO SANDOVAL

DATE

REVIEWED BY: Timothy Rastedt

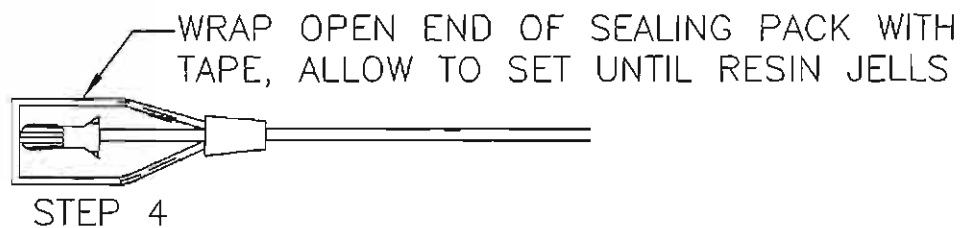
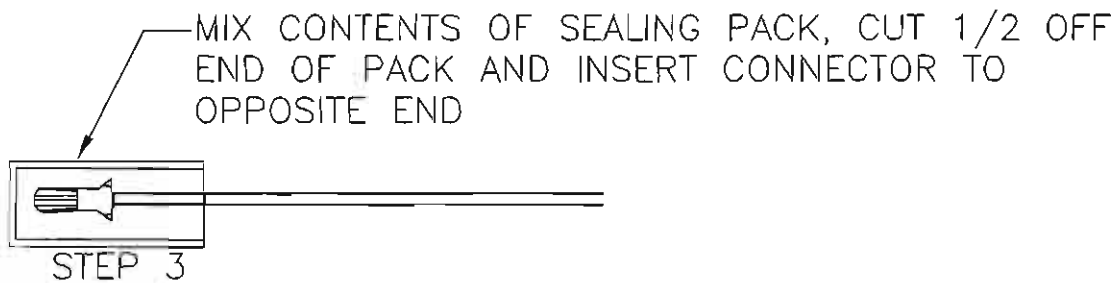
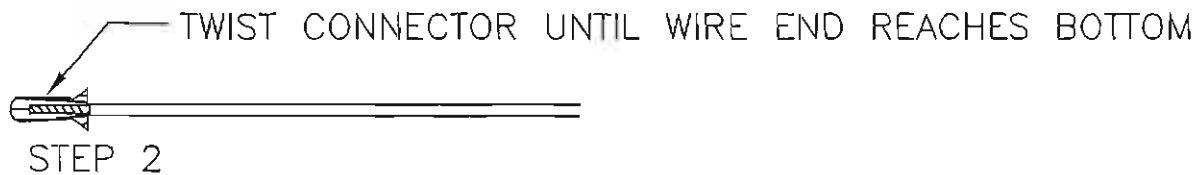
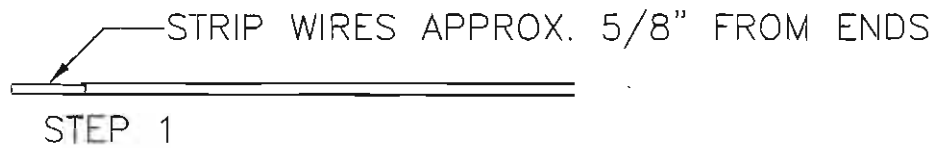
DATE OF LAST REVISION: 1-28-00

CITY OF FONTANA

WIRE CONNECTOR

STD. PLAN NO. 5013

SHT 1 OF 1



"SCOTCH" SEALING PACK



APPROVED BY:

CITY ENGINEER
RICARDO SANDOVAL

REVIEWED BY: Timothy Rastedt

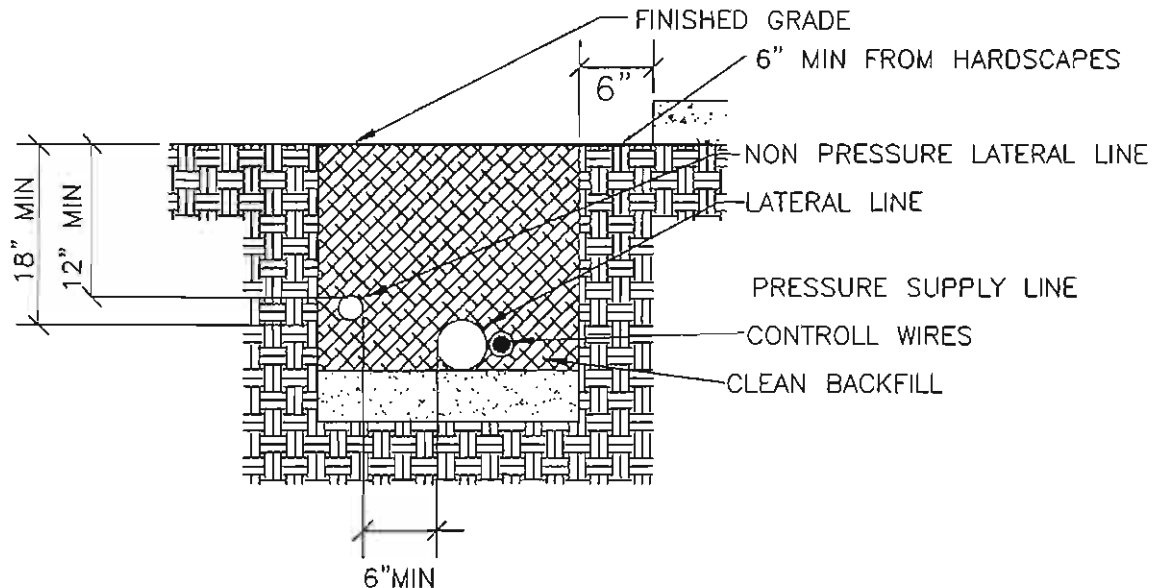
DATE OF LAST REVISION: 1-28-00

CITY OF FONTANA

WIRE CONNECTOR

STD. PLAN NO. 5014

SHT 1 OF 1



FINE GRANULAR MATERIAL WILL BE PLACED ON ALL LINES, NO LARGER THAN 1/2" INCH IN SIZE. THIS WILL BE PERMITTED IN THE INITIAL BACKFILL MEASURED 6" FROM THE TOP OF PIPE. THE REMAINDER OF TRENCH CAN BE FILL WITH ROCK SCREENED 2" MINUS.

ALL BACK FILL IS TO BE SATURATED AND COMPACTED TO 90%
INSTALL ALL PVC PIPE WITH LABEL UP.

SNAKE ALL PIPE IN TRENCH.

BUNDLE AND TAPE ALL CONTROL WIRES AT 10' O.C. TO PRESSURE SUPPLY LINE AND PROVIDE A SERVICE LOOP AT ALL 90 DEGREE CHANGES IN DIRECTION.

PRESSURE MAIN 2" AND LARGER SHALL BE P.V.C. CLASS 315
SMALLER THAN 2" SHALL BE P.V.C. SCHEDULE 40.

CONTRACTOR SHALL PROVIDE SLEEVES OR CONDUIT LINES WHEN MAINLINE INSTALLATION IS UNDER ASPHALT OR CONCRETE.

CONTRACTOR SHALL PROVIDE 24" INCHES OF COVER OVER PIPE SERVING A DRINKING FOUNTAIN OR PRESSURE MAINLINE 3" AND LARGER.



APPROVED BY:

Ricardo Sandoval 10.18.06

CITY ENGINEER
RICARDO SANDOVAL

DATE

REVIEWED BY: Timothy Rastedt

DATE OF LAST REVISION: 1-28-00

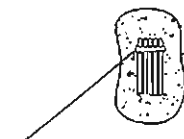
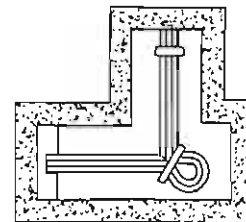
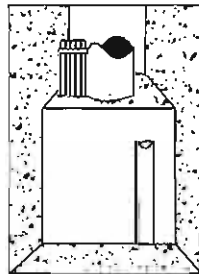
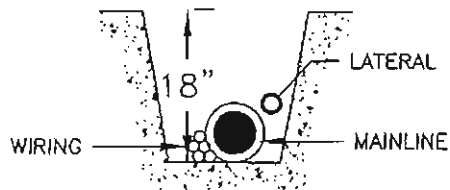
CITY OF FONTANA

TRENCHING DETAIL

STD. PLAN NO. 5015

SHT 1 OF 1

MAIN SUPPLY, LATERAL AND WIRING

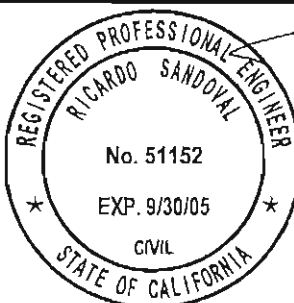


TAPE AND BUNDLE WIRING AT
10' O.C. MAXIMUM TO MAINLINE.

PROVIDE A 20" LOOP OF WIRE
IN ALL CHANGES OF DIRECTION
GREATER THAN 30 DEGREES REMOVE
TIES AFTER ALL CONNETIONS
HAVE BEEN MADE

PLAN VIEW

NOTE:
DO NOT INSTALL 120 VOLTAGE OR HIGHER WIRE
IN THE SAME TRENCH AS THE IRRIGATION
CONTROL WIRING



APPROVED BY:

Ricardo Sandoval 10/18/06

CITY ENGINEER
RICARDO SANDOVAL

DATE

REVIEWED BY: Timothy Rastedt

DATE OF LAST REVISION: 1-28-00

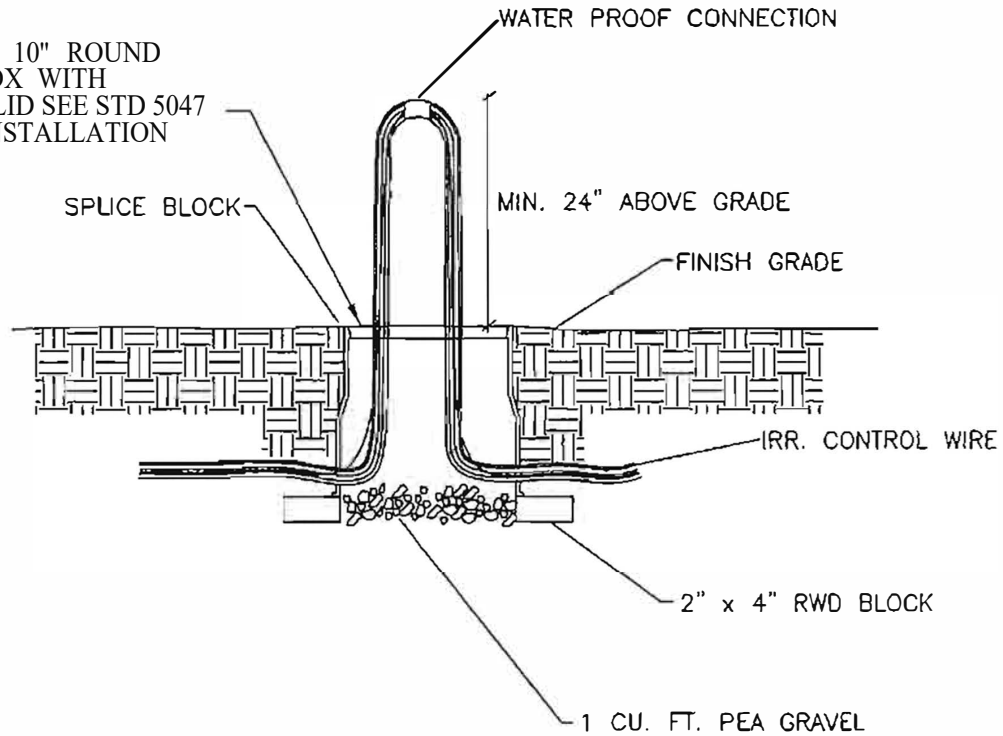
CITY OF FONTANA

PIPING AND WIRING

STD. PLAN NO. 5016

SHT 1 OF 1

INSTALL A 10" ROUND
PLASTIC BOX WITH
LOCKING LID SEE STD 5047
FOR BOX INSTALLATION
DETAILS



NOTE:

REMOTE CONTROL BOX MAY BE USED IN LIEU OF SPLICE BOX.
SEE STD 5047 FOR BOX INSTALLATION DETAILS



APPROVED BY:

CITY ENGINEER
RICARDO SANDOVAL

REVIEWED BY: KS

3-15-2022

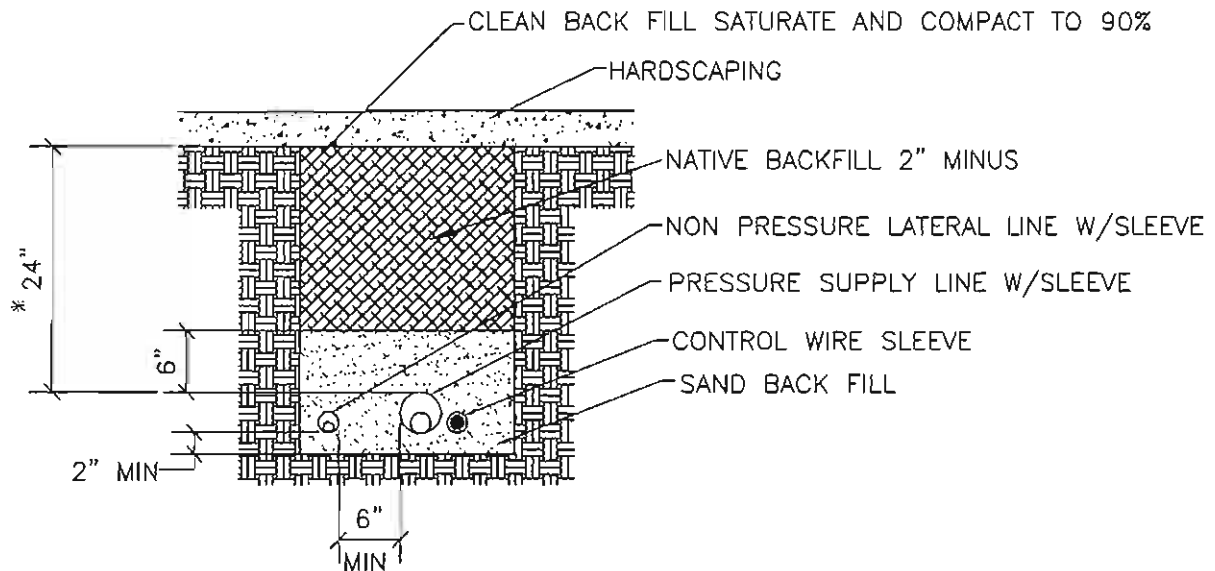
DATE

CITY OF FONTANA

**SPLICE BOX
ASSEMBLY**

STD. PLAN NO. 5017

SHT 1 OF 1

**NOTES:**

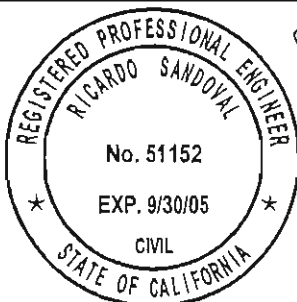
INSTALL CONTROL WIRE SLEEVE ADJACENT TO THE PRESSURE SUPPLY LINE, SIZE PER SPEC.

ALL SLEEVES TO BE SCH. 40 PVC AND TO BE 2X THE DIAMETER OF THE LINE TO BE SLEEVED.

* INCREASE THIS DISTANCE TO 36" WHEN SLEEVING UNDER ROADWAYS AND COMMERCIAL TRAFFIC WAYS WHEN INSTRUCTED BY INSPECTOR.

SLEEVES SHALL BE EXTENDED BEYOND HARDSCAPE TO POINTS AS REQUESTED BY INSPECTOR

IF SLEEVES ARE TO BE USED AT A LATER DATE, CONTRACTOR SHALL TAPE ENDS AND PROVIDE A VERTICAL MARK AT ENDS OF SLEEVING VISIBLE AT GROUND LEVEL.



APPROVED BY:

Ricardo Sandoval 10-18-00
CITY ENGINEER DATE
RICARDO SANDOVAL

REVIEWED BY: Timothy RastadtDATE OF LAST REVISION: 1-28-00

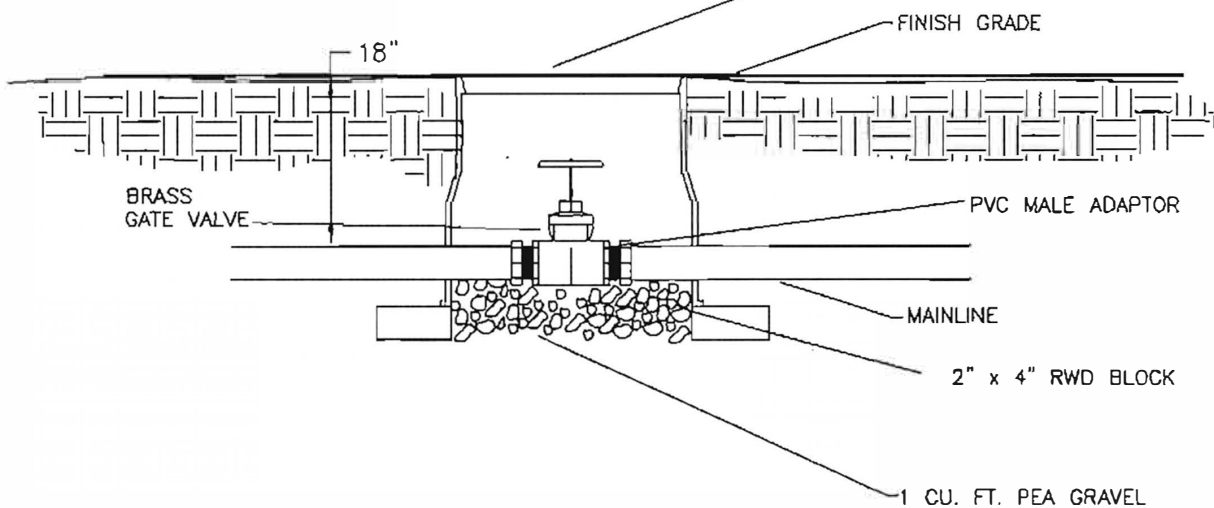
CITY OF FONTANA

SLEEVING DETAIL

STD. PLAN NO. 5018

SHT 1 OF 1

INSTALL CARSON VALVE BOX MODEL 1419
VIOLET/LAVENDER WITH LID MODEL 1220-4
WITH STAINLESS STEEL BOLT (OR APPROVED
EQUAL) AND ETCHED WITH FLOW SENSOR AND
MASTER VALVE SEE STD 5047 FOR BOX
INSTALLATION DETAIL



APPROVED BY:

Ricardo Sandoval

3-15-2022

CITY ENGINEER
RICARDO SANDOVAL

DATE

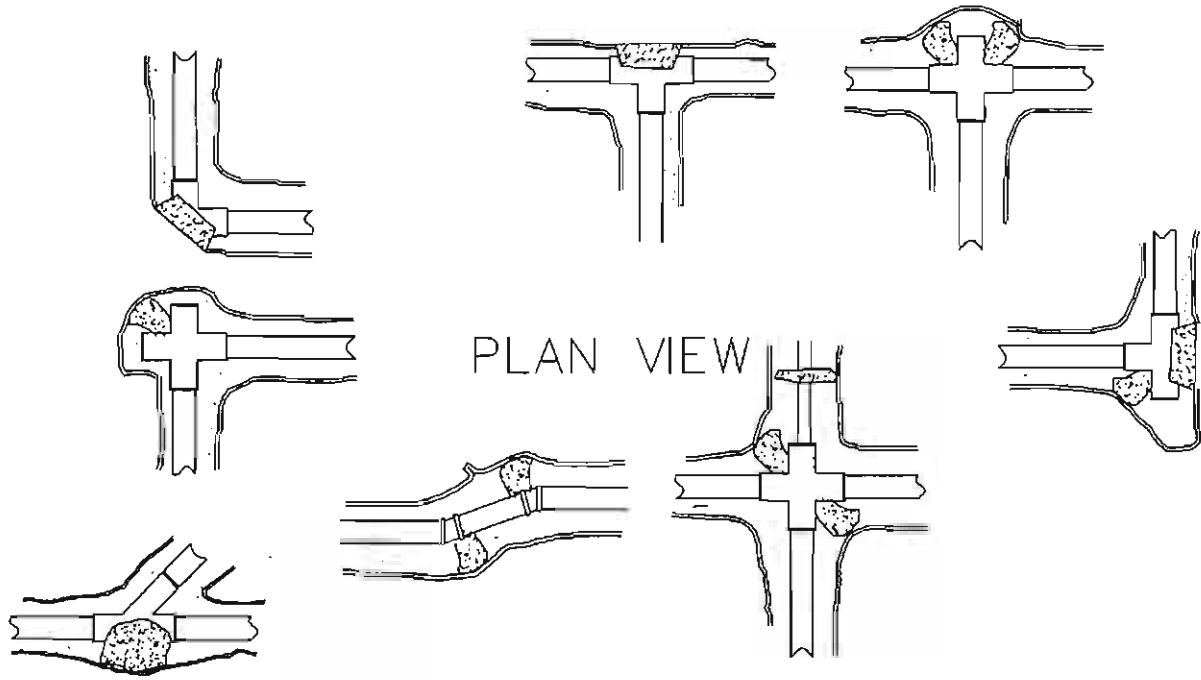
REVIEWED BY: KS

CITY OF FONTANA

GATE VALVE

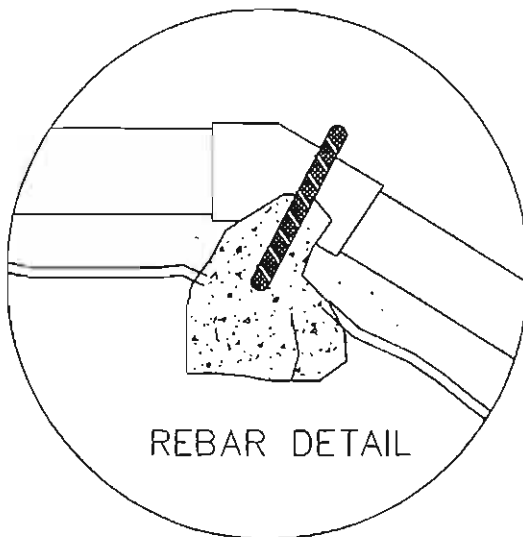
STD. PLAN NO. 5019

SHT 1 OF 1



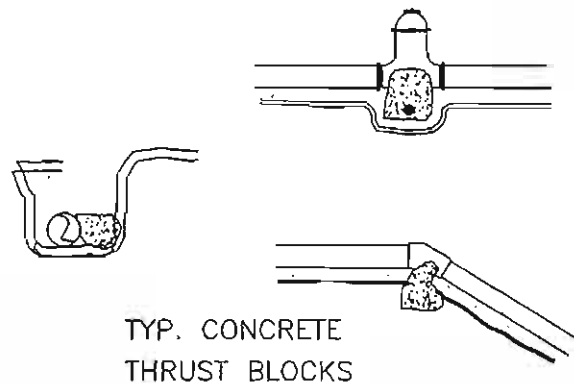
PLAN VIEW

TYP. CONCRETE TO REST
AGAINST UNDISTURBED
SOIL



REBAR DETAIL

ELEVATION



TYP. CONCRETE
THRUST BLOCKS

NOTE: THRUST BLOCKS SHALL BE INSTALLED IN ACCORDANCE WITH PIPE
MANUFACTURER'S RECOMMENDATION FOR SIZE OF PIPING REQUIRED.

UTILIZED IN ALL (2 1/2" AND LARGER MAINLINE PIPE)

#3 REBAR TO BE PLACED AROUND PIPE INTO THRUST BLOCK TYP.



APPROVED BY:

Ricardo Sandoval 10.18.06
CITY ENGINEER DATE
RICARDO SANDOVAL

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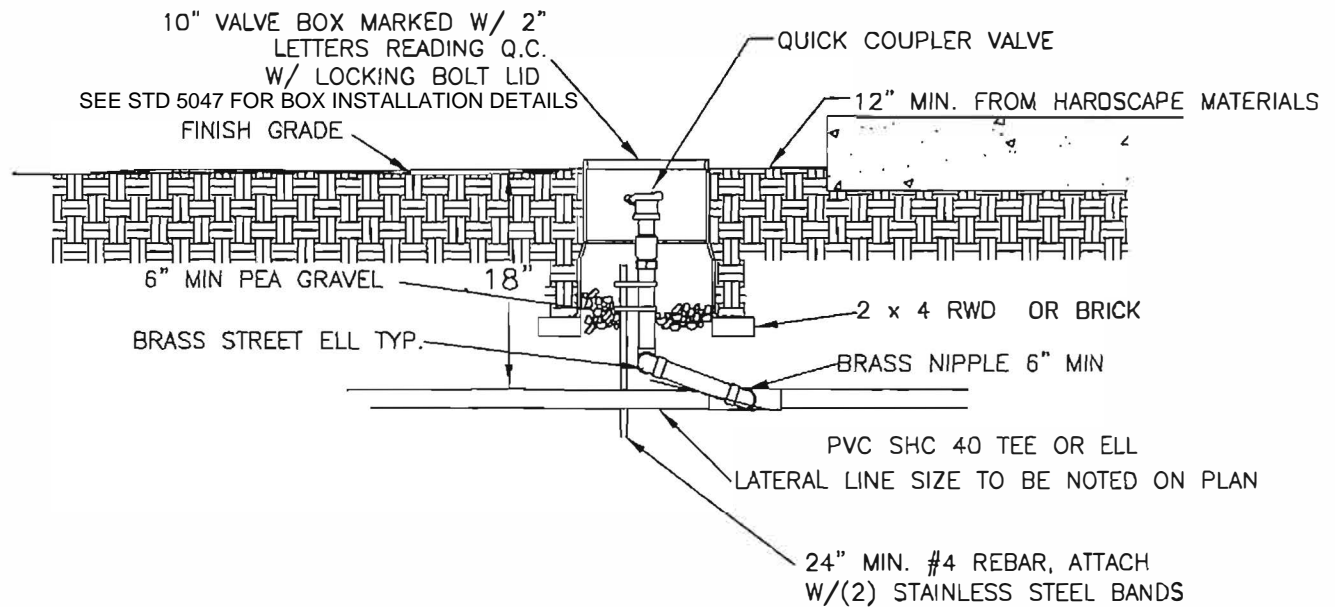
DATE OF LAST REVISION: 1-28-00

CITY OF FONTANA

**THRUST BLOCK
ASSEMBLY**

STD. PLAN NO. 5020

SHT 1 OF 1

NOTE:

USE TEFLON TAPE ON ALL THREADED FITTINGS



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3-15-2022

CITY ENGINEER
RICARDO SANDOVAL

DATE

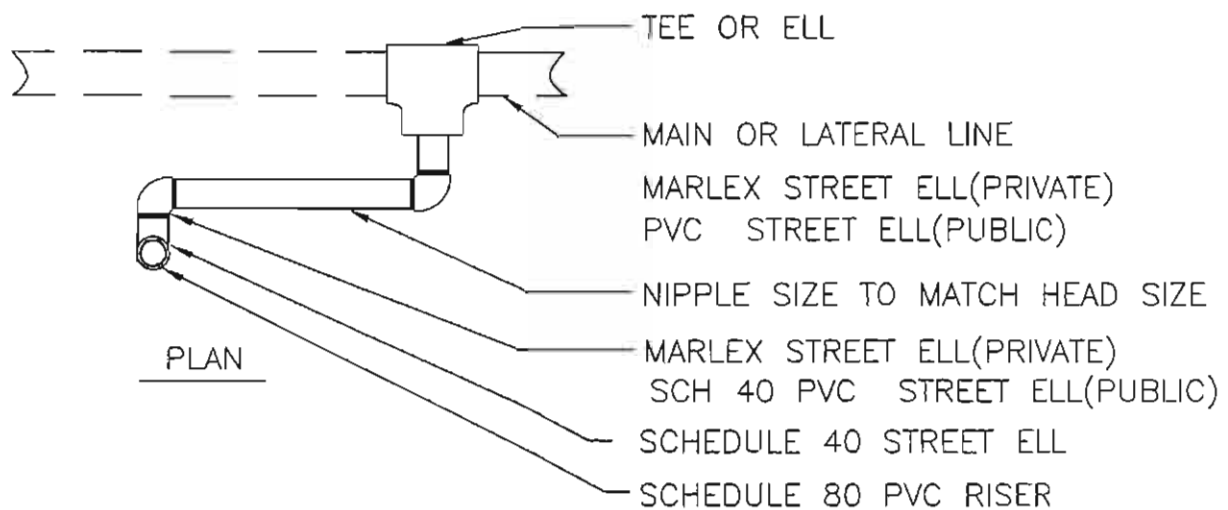
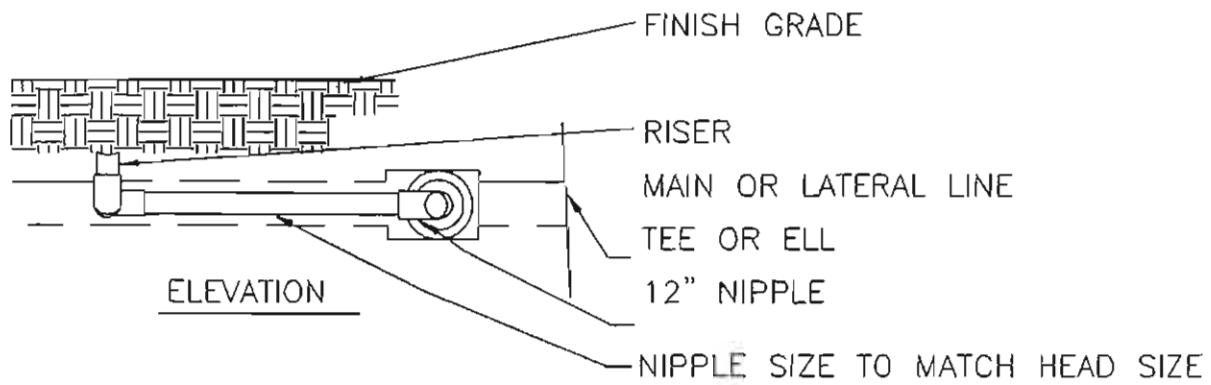
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CITY OF FONTANA

QUICK COUPLER

STD. PLAN NO. 5021

SHT 1 OF 1



NOTE: ALL PIPE AND FITTINGS SHALL BE SCHEDULE 40 PVC UNLESS OTHERWISE SPECIFIED

USE PVC STREET ELLS W/TEFLON TAPE FOR ALL PUBLIC JOBS



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CITY ENGINEER
RICARDO SANDOVAL

DATE

REVIEWED BY: Timothy Rastedt

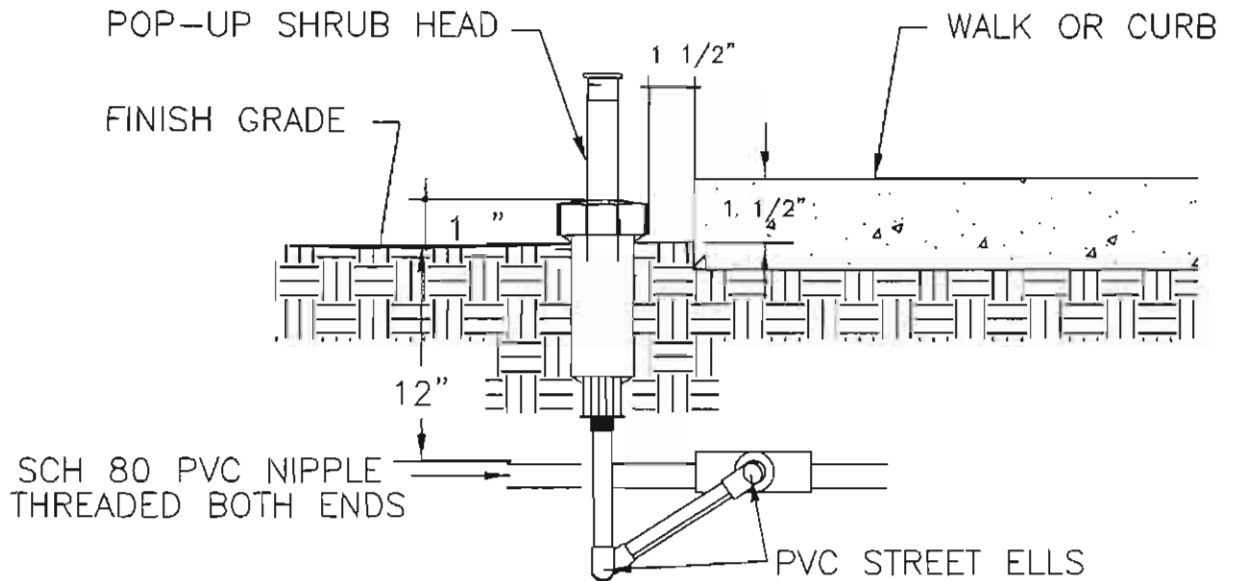
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CITY OF FONTANA

SWING JOINT

STD. PLAN NO. 5022

SHT 1 OF 1



NOTE:

- INSTALL 12" SHRUB POP-UP HEAD 1 1/2" ABOVE F.G.
- F.G. - 1 1/2" BELOW WALK OR CURB
- CHECK VALVE FOR LOW HEAD DRAINAGE



APPROVED BY:

Ricardo Sandoval 10.18.06
CITY ENGINEER
RICARDO SANDOVAL

DATE

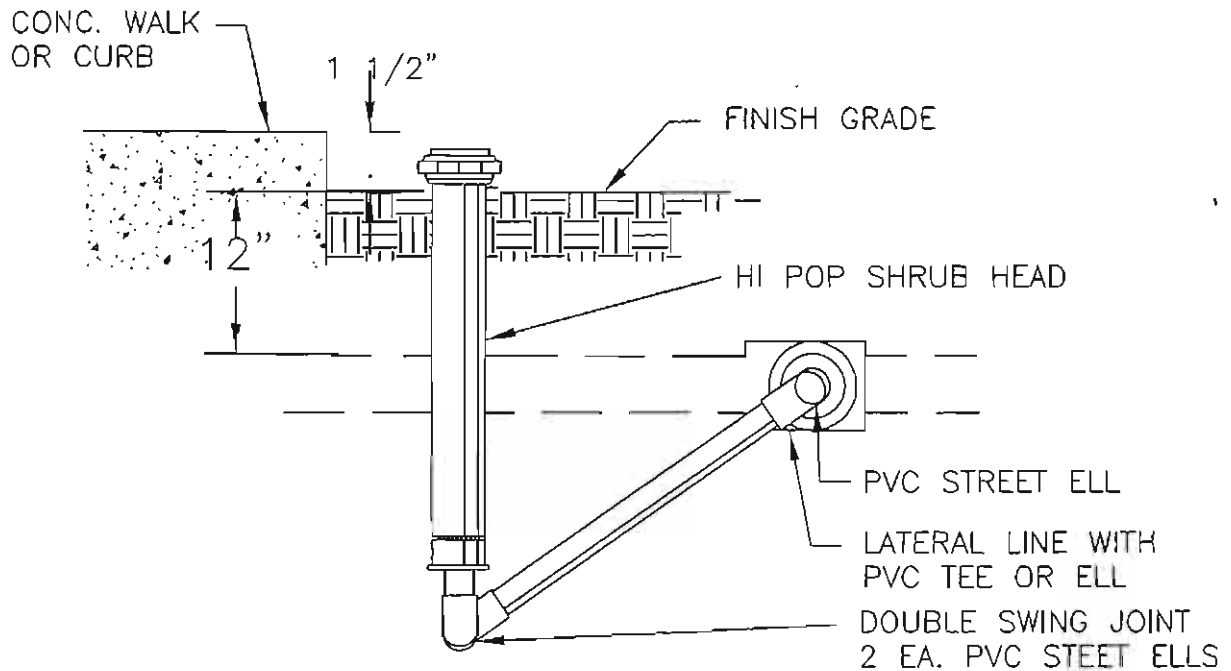
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CITY OF FONTANA

LAWN / 4" 6" 8"
SHRUB POP-UP HEAD

STD. PLAN NO. 5023

SHT. 1 OF 1



NOTE:

INSTALL HI-POP IRR. HEAD 1 1/2" ABOVE F.G.
F.G. 1 1/2" BELOW HARDSCAPE

INSTALL CHECK VALVES FOR LOW HEAD DRAINAGE



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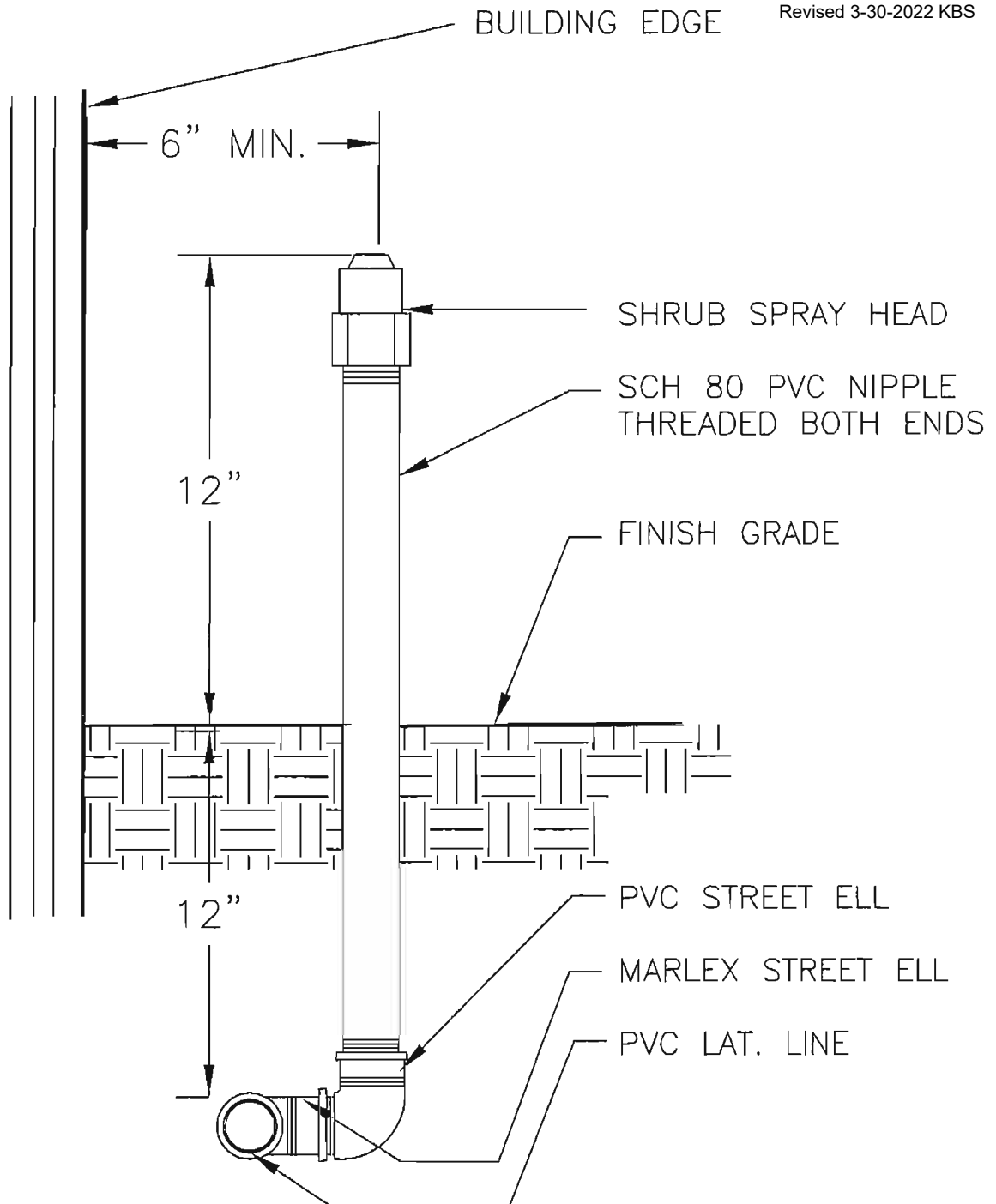
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CITY OF FONTANA

HI POP SHRUB HEAD

STD. PLAN NO. 5024

SHT 1 OF 1



NOTE: FIXED RAISERS ALLOWED ONLY AGAINST BUILDINGS
WALLS, FENCES, ETC.



APPROVED BY:

CITY ENGINEER
RICARDO SANDOVAL

DATE

REVIEWED BY: Timothy Rostedt

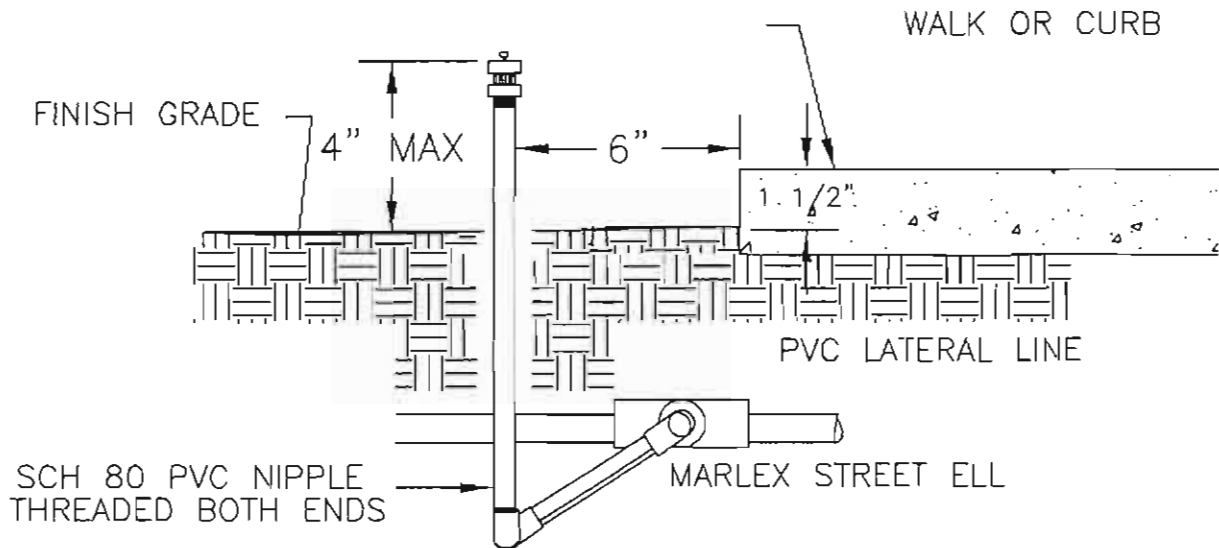
DATE OF LAST REVISION: 1-28-00

CITY OF FONTANA

SHRUB SPRAY HEAD

STD. PLAN NO. 5025

SHT 1 OF 1



NOTE:

- ALL BUBBLERS TO BE INSTALLED WITH TRIPLE SWING JOINTS
- F.G. — 1 1/2" BELOW WALK OR CURB



APPROVED BY:

Ricardo Sandoval 10-18-06
 CITY ENGINEER DATE

RICARDO SANDOVAL

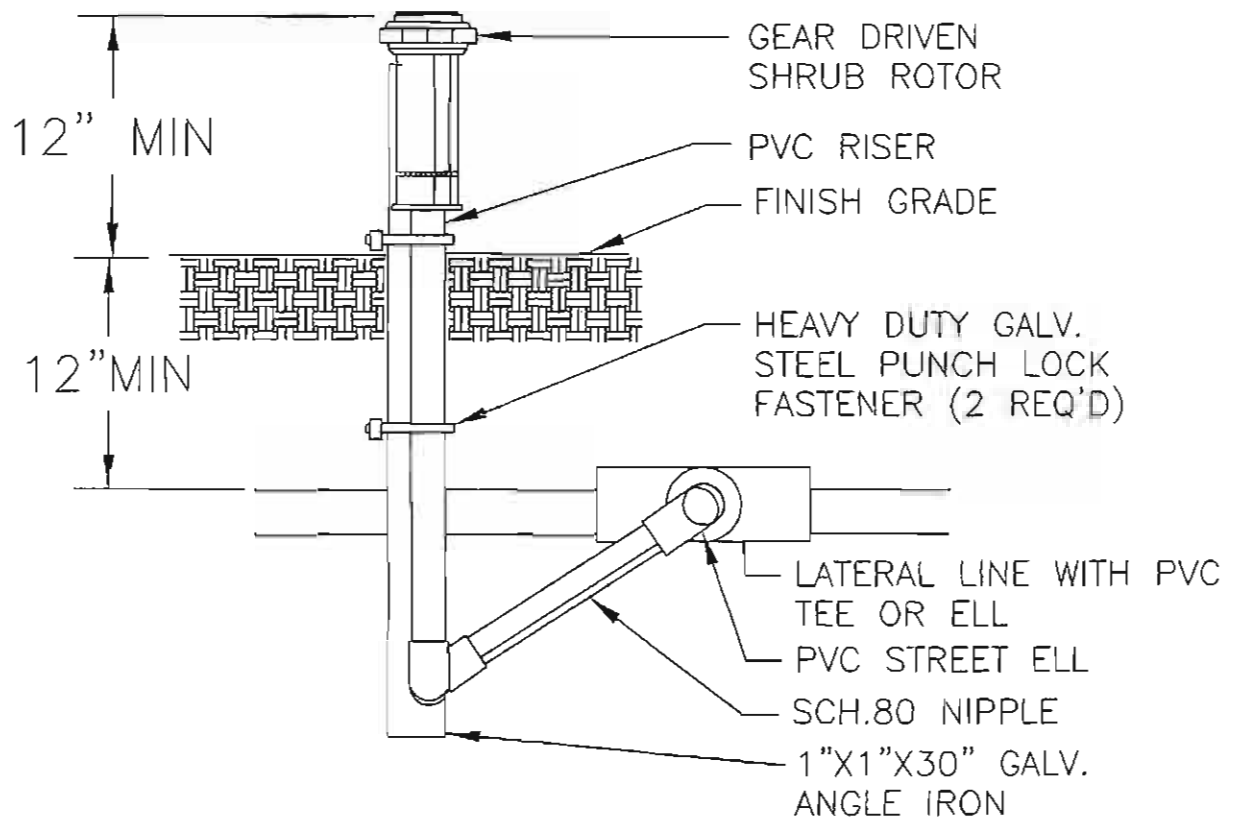
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CITY OF FONTANA

BUBBLER HEAD

STD. PLAN NO. 5026

SHT 1 OF 1



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[Signature] 10.18.20
CITY ENGINEER DATE
RICARDO SANDOVAL

REVIEWED BY: Timothy Rastedt

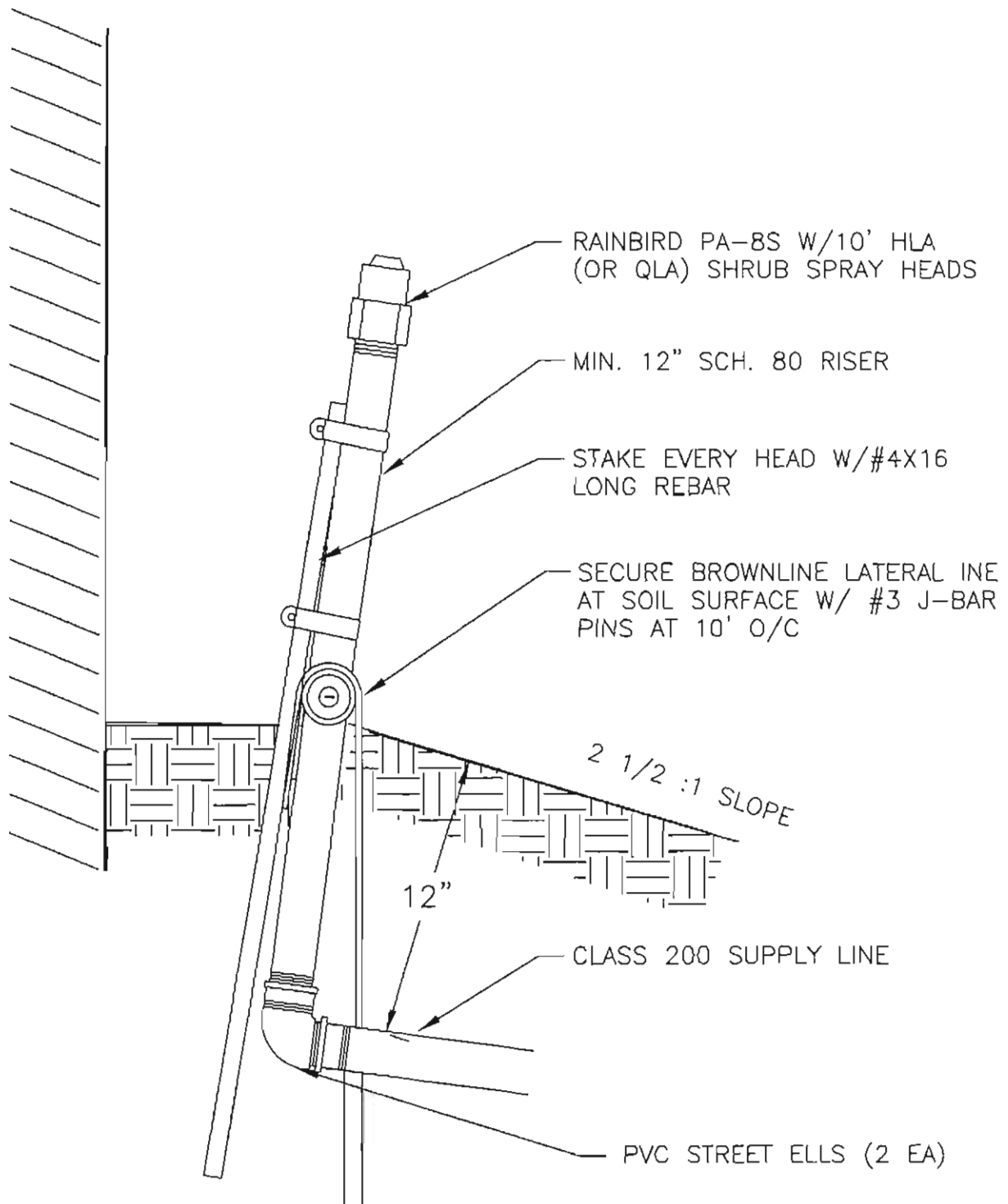
DATE OF LAST REVISION: 1-28-00

CITY OF FONTANA

SHRUB ROTOR

STD. PLAN NO. 5027

SHT 1 OF 1



APPROVED BY:

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CITY ENGINEER DATE

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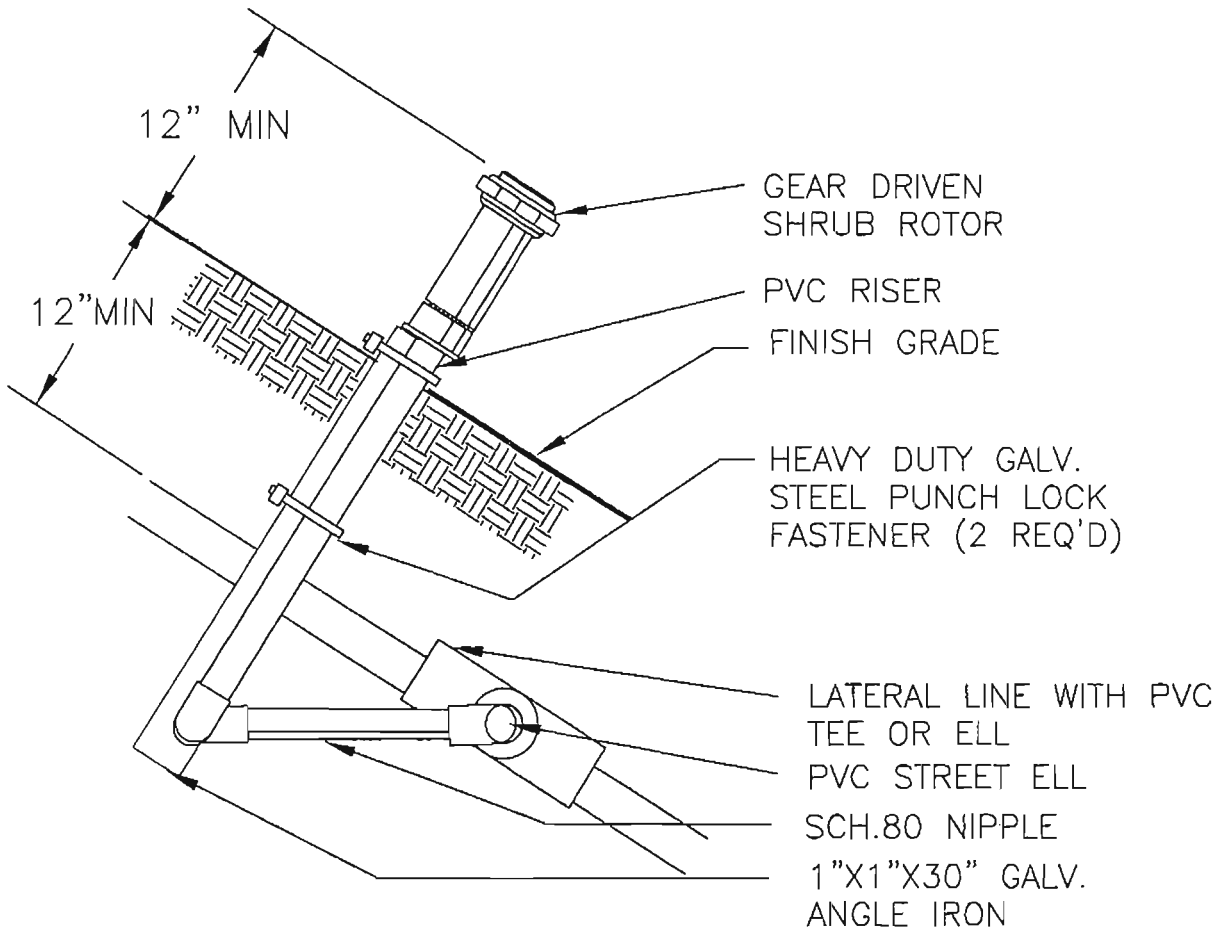
DATE OF LAST REVISION: 1-28-00

CITY OF FONTANA

**IRRIGATION AT
TOP OF SLOPE**

STD. PLAN NO. 5028

SHT 1 OF 1



APPROVED BY:

Ricardo Sandoval 10.18.06

CITY ENGINEER
RICARDO SANDOVAL

DATE

REVIEWED BY: Timothy Rastedt

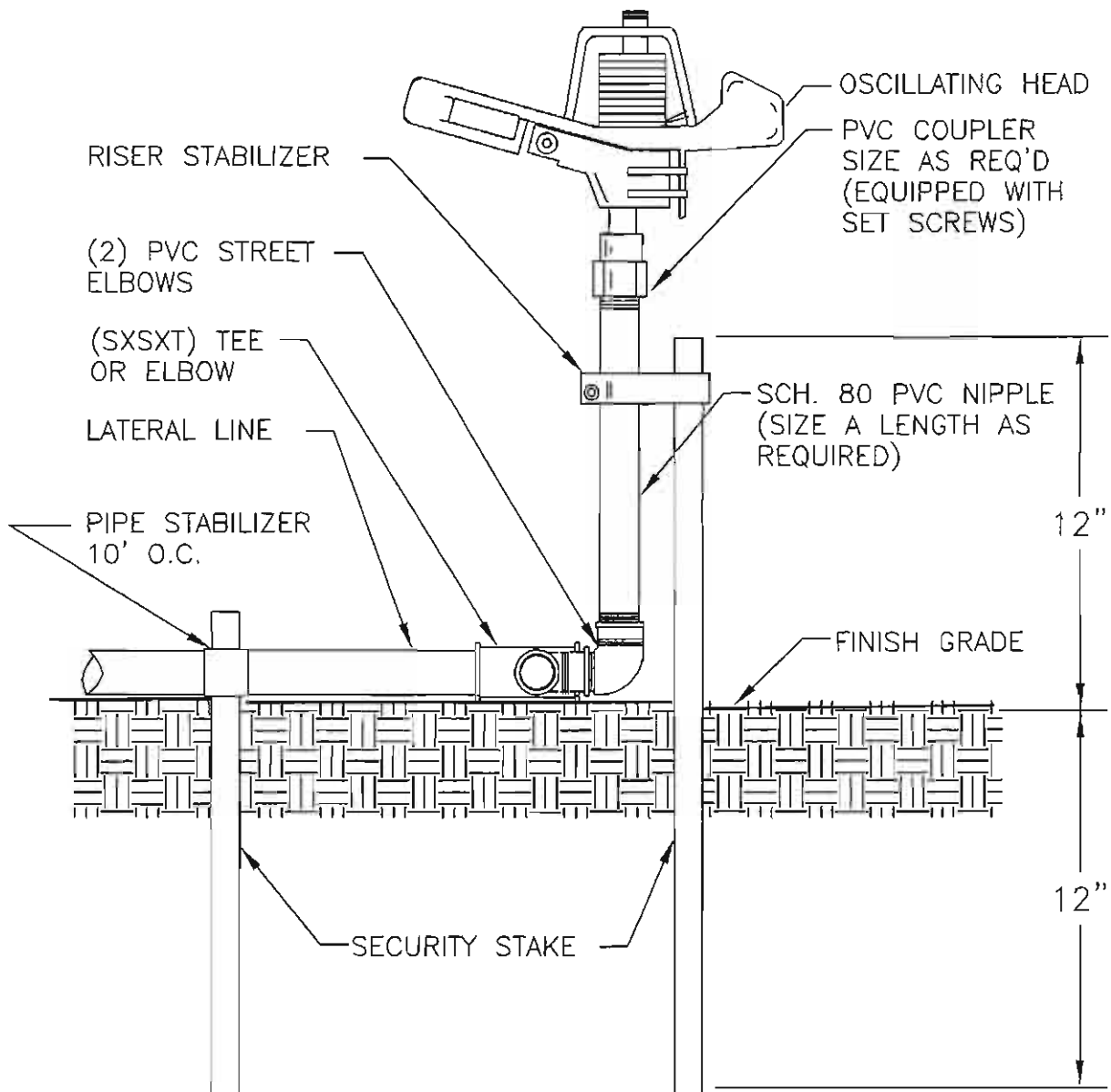
DATE OF LAST REVISION: 1-28-00

CITY OF FONTANA

**SHRUB ROTOR
ON SLOPE**

STD. PLAN NO. 5029

SHT 1 OF 1



NOTE: CONTRACTOR SHALL TILT HEAD AS REQUIRED
TO BEST SUIT SITE COVERAGE



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Ricardo Sandoval 10.18.06
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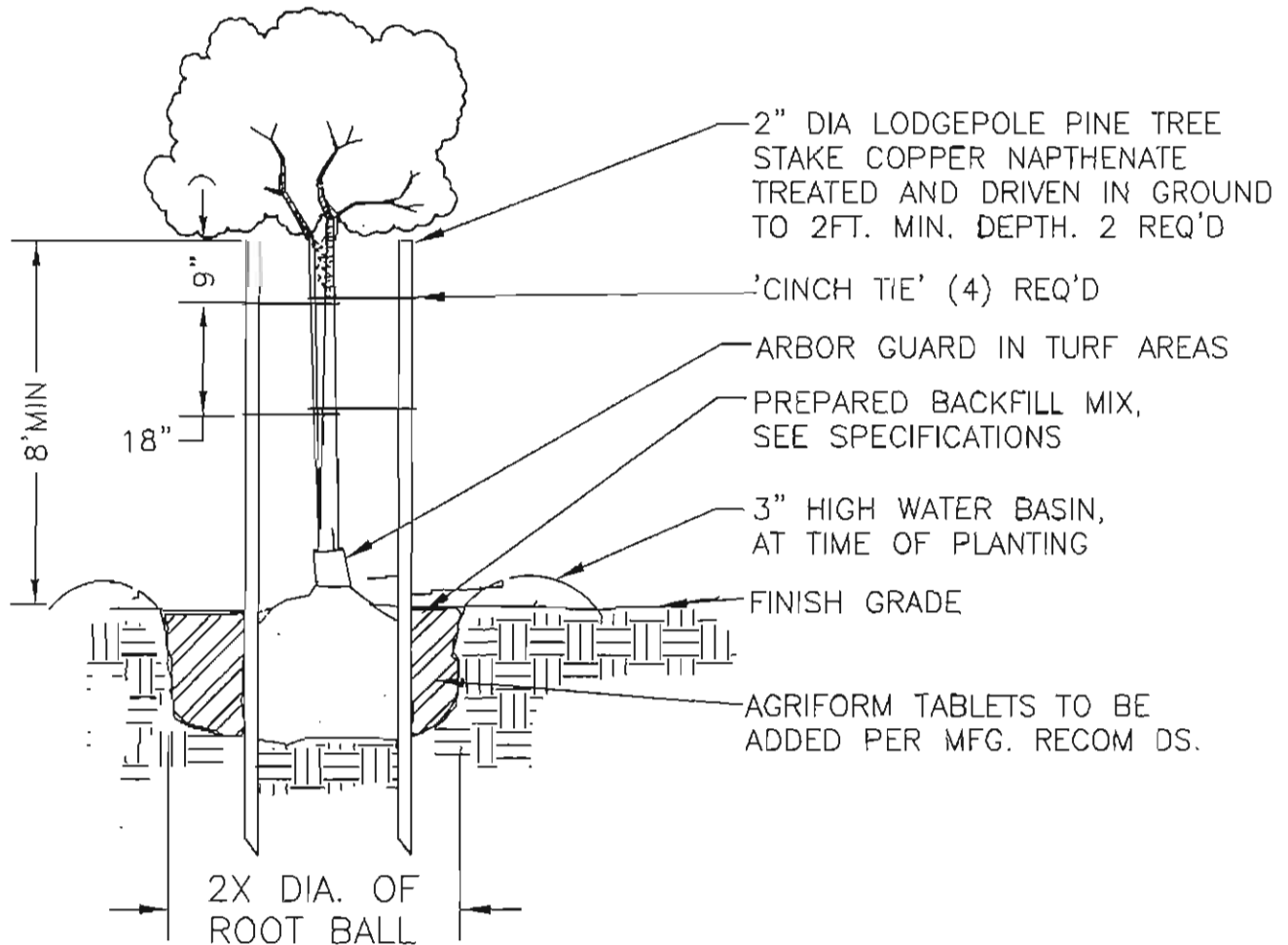
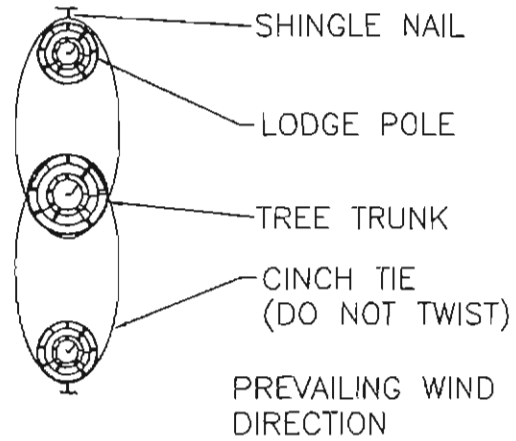
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CITY OF FONTANA

**OSCILLATING HEAD
ASSEMBLY**

STD. PLAN NO. 5030

SHT 1 OF 1



APPROVED BY:

Ricardo Sandoval 10.18.00
CITY ENGINEER DATE
RICARDO SANDOVAL

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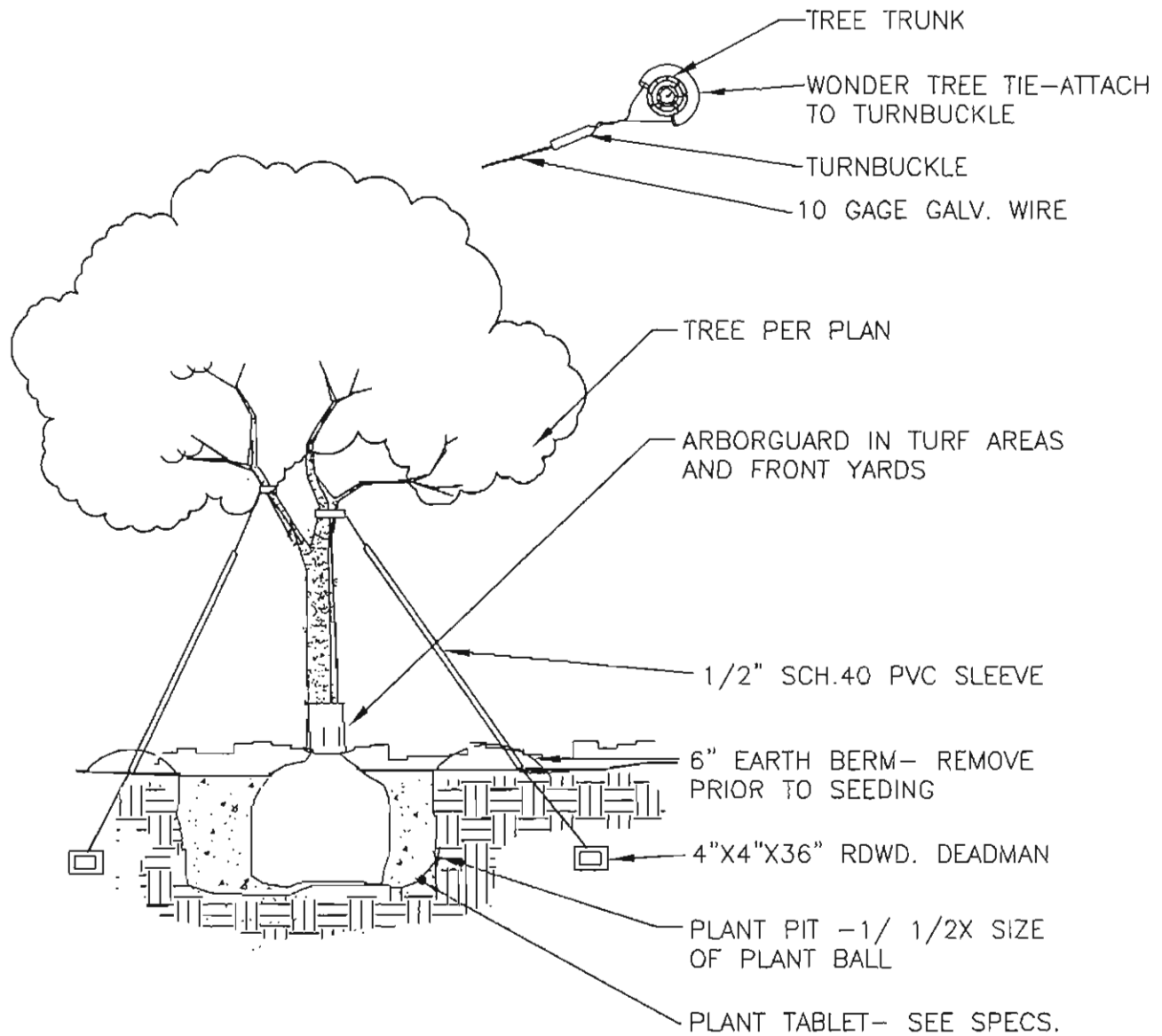
DATE OF LAST REVISION: 1-28-00

CITY OF FONTANA

TREE STAKING

STD. PLAN NO. 5031

SHT 1 OF 1



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Ricardo Sandoval 10.12.06
CITY ENGINEER DATE
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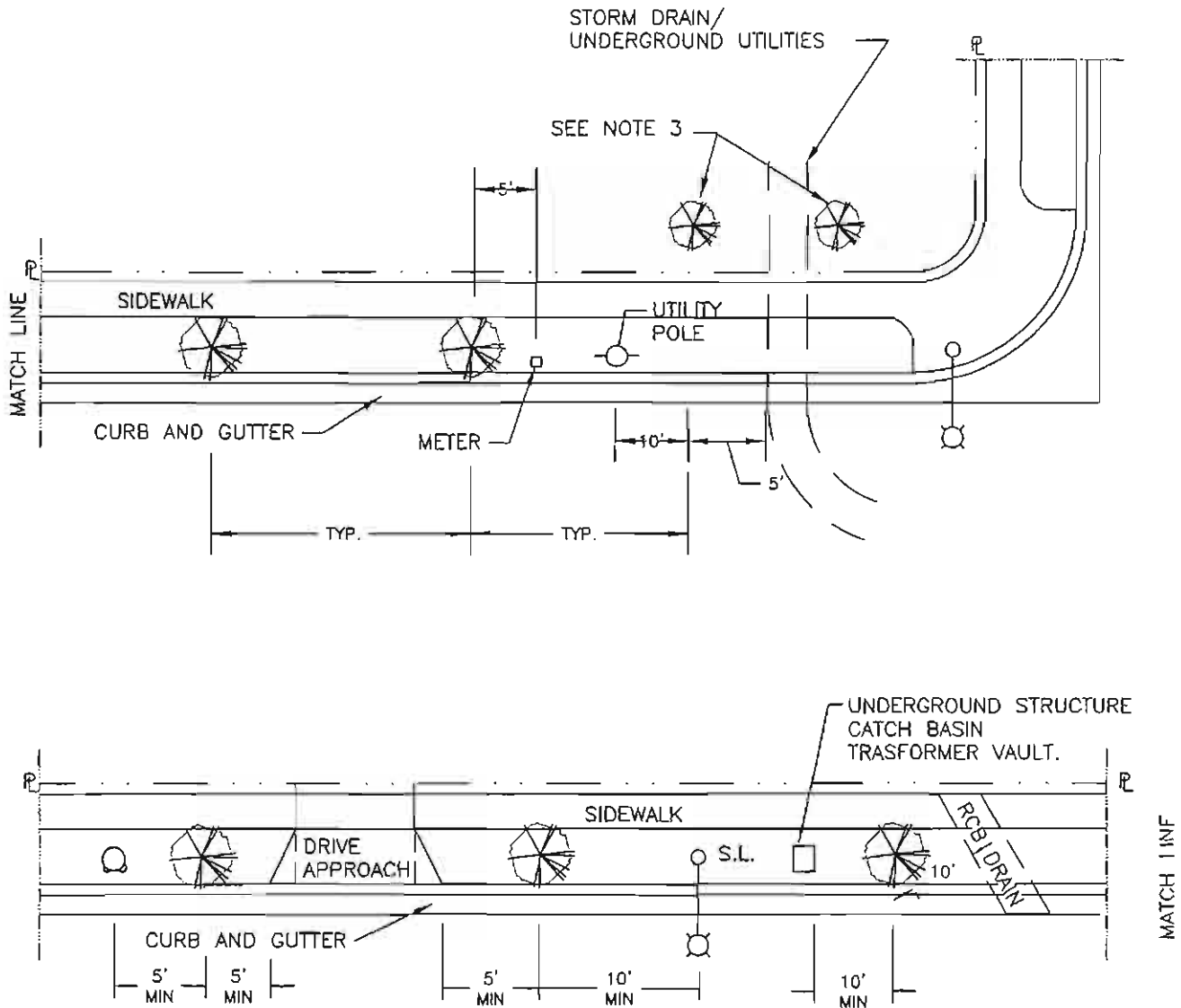
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DATE OF LAST REVISION: 1-28-00

CITY OF FONTANA

TREE GUYING

STD. PLAN NO. 5032 SHT 1 OF 1



NOTES:

1. TREE SPACING SHALL CONFORM TO PLANS APPROVED BY THE CITY ENGINEER
2. ALL TREES IN THE R.O.W. ARE SUBJECT TO LINE OF SIGHT CRITERIA AS APPROVED BY TRAFFIC ENGINEER.
3. AT ALL LOCAL RESIDENTIAL INTERSECTIONS THE FIRST TWO PARKWAY TREES AT ALL APPROACHES TO BE PLACED BEHIND SIDEWALK.
4. MAINTAIN 10 FEET FROM CENTER OF STREET TO EDGE OF ALL UNDERGROUND FACILITIES.
4. MAINTAIN 10 FEET FROM ALL STREET LIGHTS, UTILITIES STRUCTURES AND VALVE BOXES.



APPROVED BY:

Ricardo Sandoval
 CITY ENGINEER
RICARDO SANDOVAL

DATE

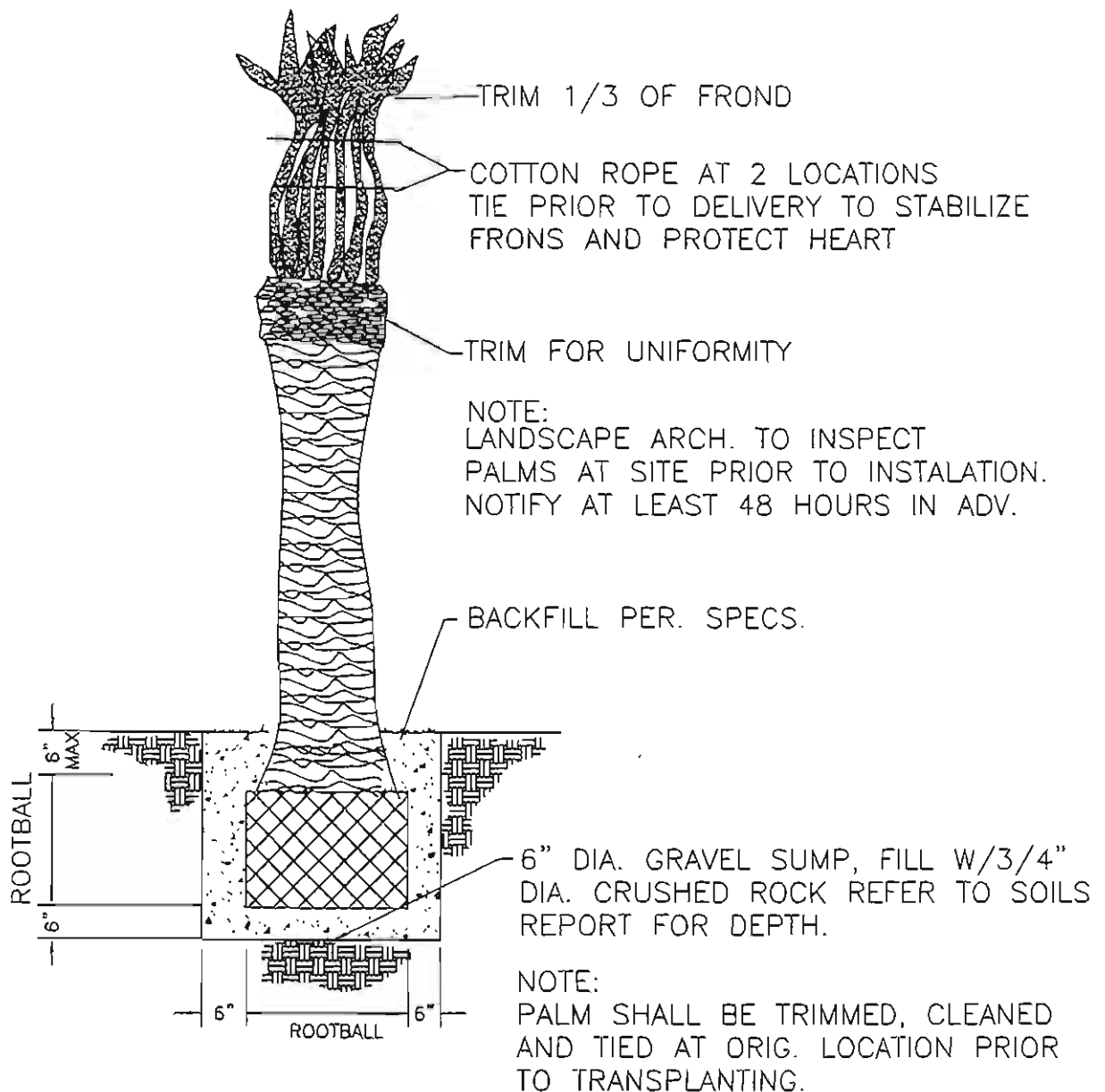
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CITY OF FONTANA

TREE PLACEMENT

STD. PLAN NO. 5033

SHT 1 OF 1



APPROVED BY:

Ricardo Sandoval 10/18/00

CITY ENGINEER
RICARDO SANDOVAL

DATE

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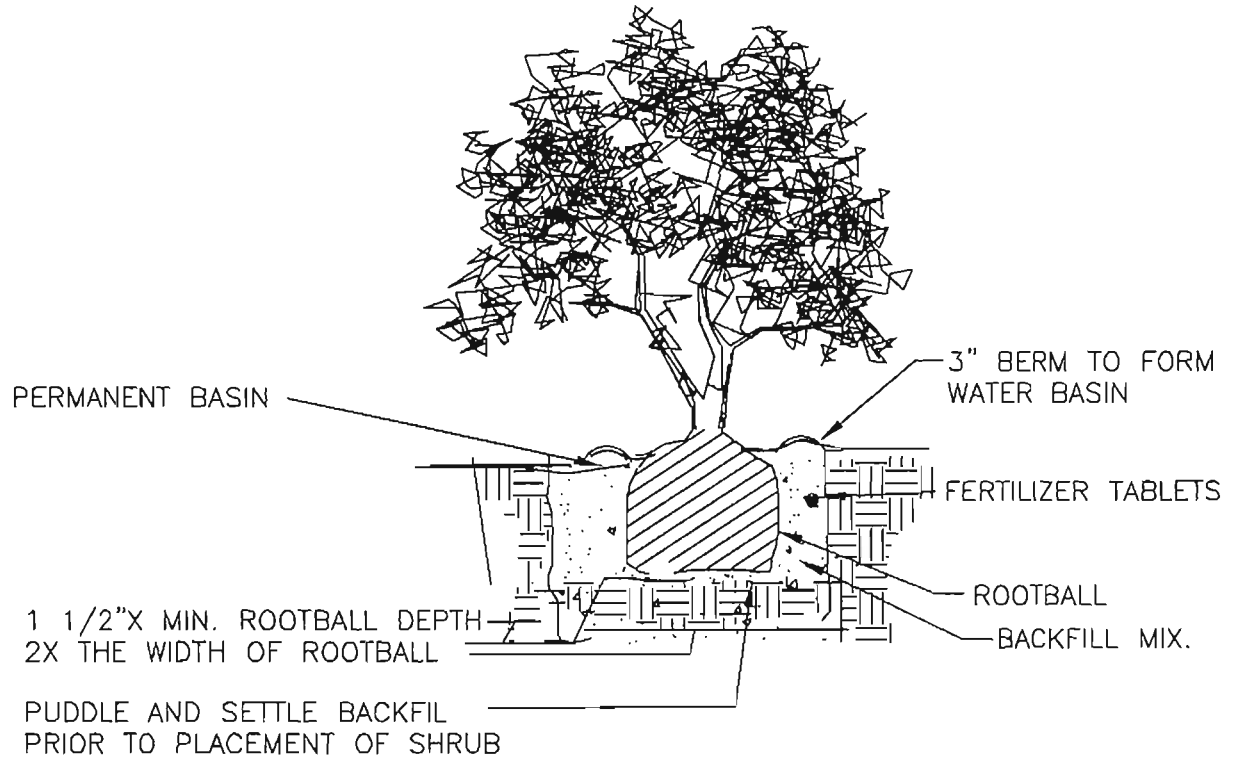
DATE OF LAST REVISION: 1-28-00

CITY OF FONTANA

PALM TREE INSTALLATION

STD. PLAN NO. 5034

SHT 1 OF 1



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CITY ENGINEER
RICARDO SANDOVAL

DATE

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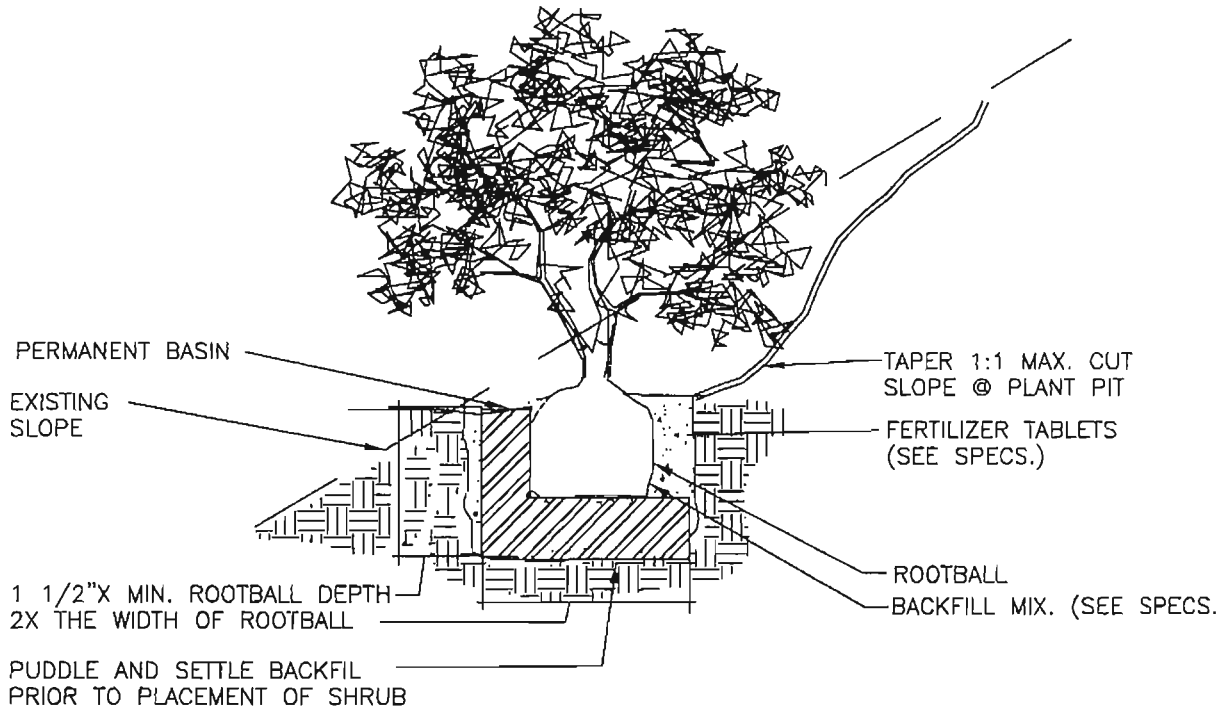
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CITY OF FONTANA

SHRUB PLANTING

STD. PLAN NO. 5035

SHT 1 OF 1



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RICARDO SANDOVAL

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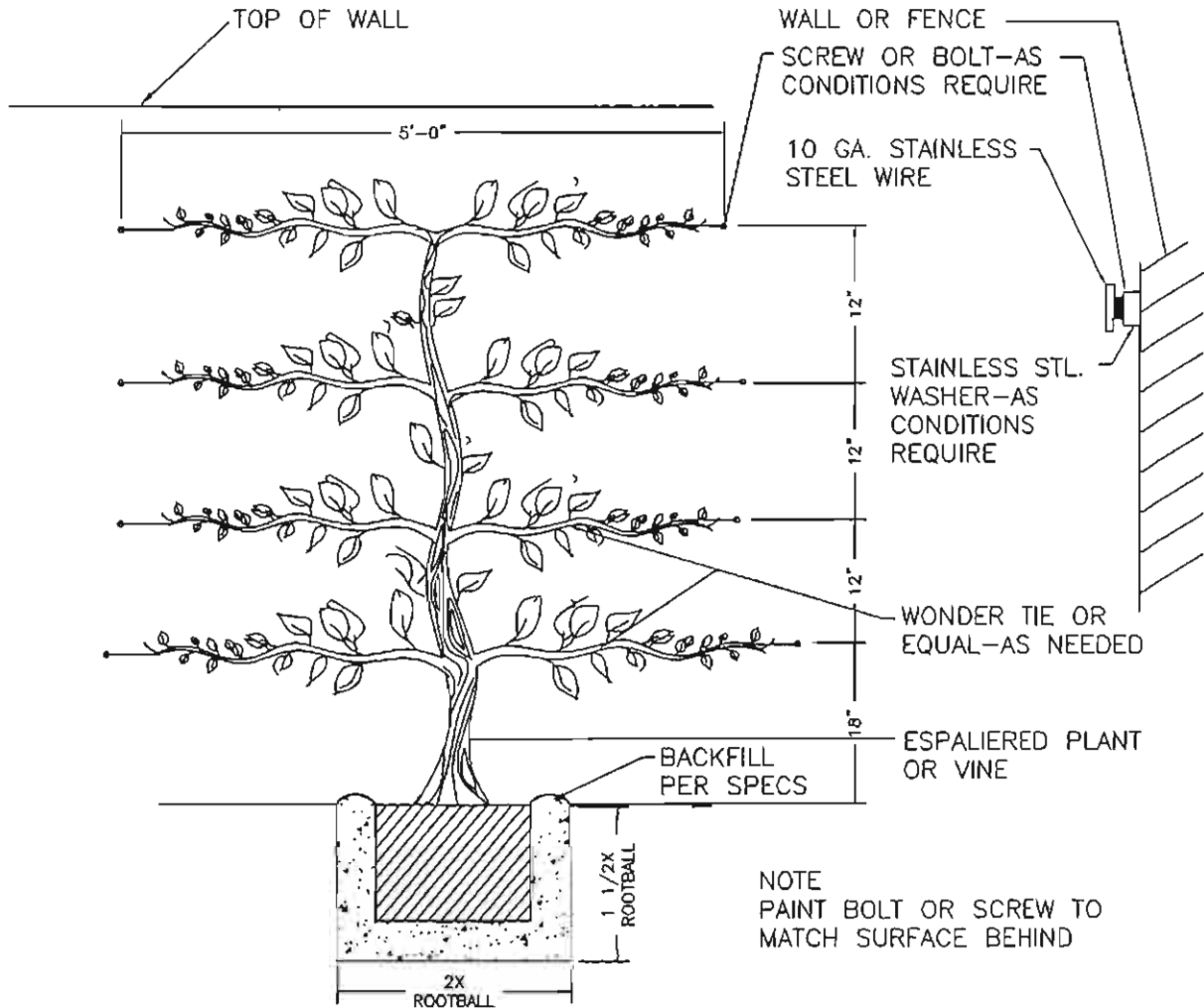
DATE OF LAST REVISION: 1-28-00

CITY OF FONTANA

SHRUB ON SLOPE

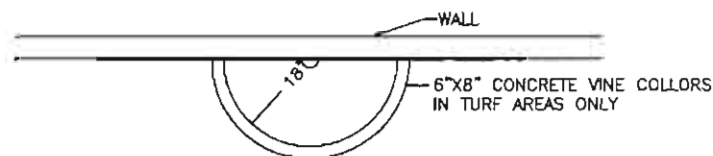
STD. PLAN NO. 5036

SHT 1 OF 1



NOTE
PAINT BOLT OR SCREW TO
MATCH SURFACE BEHIND

ELEVATION VIEW



PLAN VIEW



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Ricardo Sandoval 10-18-00

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RICARDO SANDOVAL

DATE

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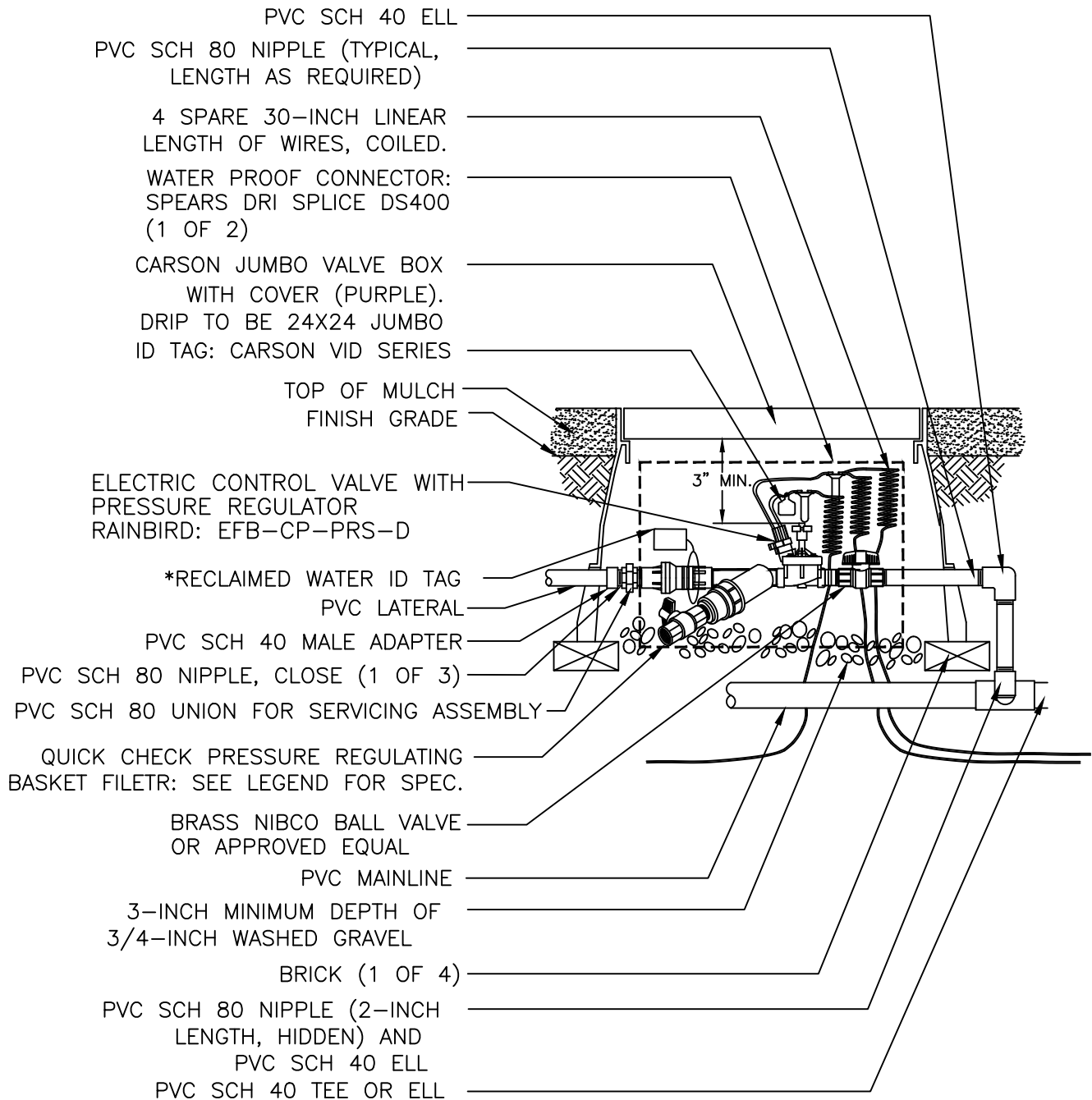
DATE OF LAST REVISION: 1-28-00

CITY OF FONTANA

VINE PLANTING

STD. PLAN NO. 5037

SHT 1 OF 1



* RECLAIMED WATER ID TAG TO BE 3"x4" CHRISTY'S ID TAG (PURPLE) ATTACHED W/ NYLON TIE. LABEL TO READ "RECLAIMED WATER - DO NOT DRINK" IN ENGLISH & SPANISH.

NOTE: INSTALL CONTROL VALVES MINIMUM OF 3 FT. APART IN SHRUB AREAS UNLESS OTHERWISE NOTED.



APPROVED BY:

Ricardo Sandoval

3-15-22

CITY ENGINEER
RICARDO SANDOVAL

DATE

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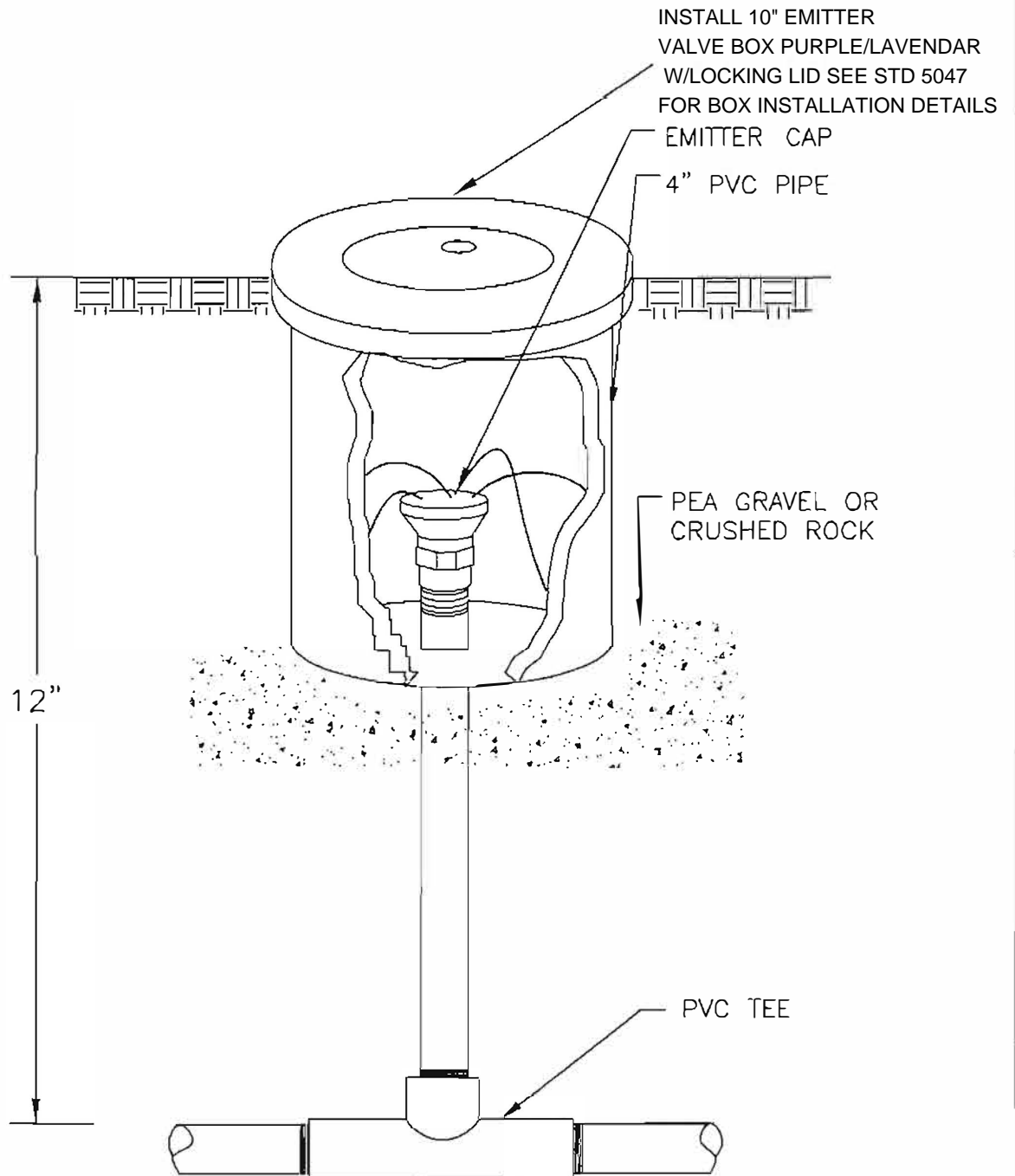
DATE OF LAST REVISION: 2-8-22

CITY OF FONTANA

AUTOMATIC DRIP VALVE

STD. PLAN NO. 5038

SHT 1 OF 1



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Ricardo Sandoval

3-15-2022

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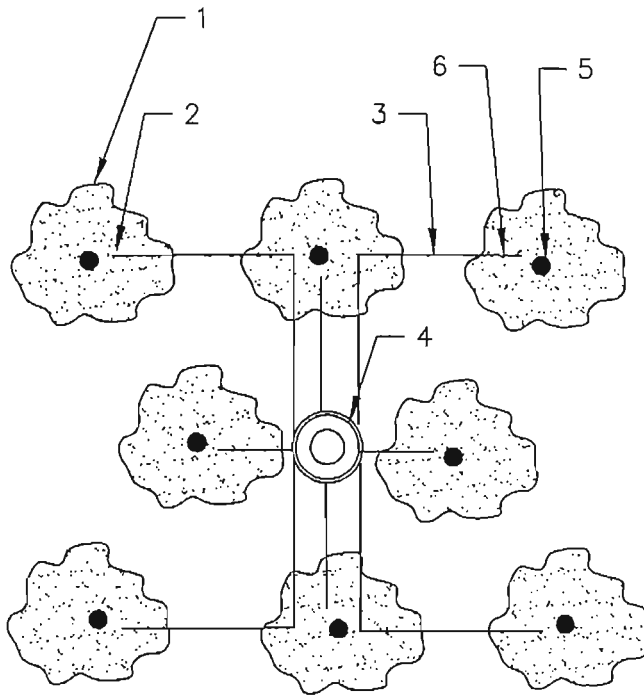
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CITY OF FONTANA

EMITTER

STD. PLAN NO. 5039

SHT 1 OF 1



LEGEND:

1. PLANT MATERIAL TYP.
2. EMISSION POINT, SEE XERI-DETAILS
3. RAIN BIRD MODEL #DT-025 1/4 DISTRIBUTION TUBING. MAX LENGTH PER SPECS.
4. RAIN BIRD XERI-BIRD 8 UNIT FLOW PORT PER IRRI. EQUIP. LEGEND
5. RAIN BIRD MODEL # DAC-025 DIFFUSURE BUG CAP(TYP.)
6. RAIN BIRD MODEL #TS-025 TURNING STAKE (TYP.)

NOTE

THE RAINBIRD PRODUCTS LISTED ABOVE ARE SUGESTED ONLY. PRODUCTS OF EQUAL QUALITY CAN BE USED.



APPROVED BY:

Ricardo Sandoval - 10.18.00

CITY ENGINEER
RICARDO SANDOVAL

DATE

REVIEWED BY: Timothy RastedtDATE OF LAST REVISION: 1-28-00

CITY OF FONTANA

EMITTER LAYOUT

STD. PLAN NO. 5040

SHT 1 OF 1

PROVIDE 1 BUBBLER
OR EMITTER, SEE PLAN
IN EACH POT AS
SHOWN ON IRR. PLAN.
LOCATE AWAY FROM
CENTER OF POT AS
SHOWN

1/2" P.V.C. SUPPLY LINE
ANGLE AS SHOWN TO
LOCATE BUBBLER AS SHOWN

SOIL LEVEL

1/2" MALE RISER
FROM THREAD TO POT

DECORATER
POT (TYP.)

BORE 1" DIA. HOLE
IN CENTER OF EA. POT

PROVIDE 2"
OF PEA
GRAVEL

1/2" PVC. FEMALE
THREADED RIGGED
@ FINISH SURFACE

PROVIDE HOLE IN
PAVING TO ALLOW
FOR SLEEVE SEAL
W/SILICON

PVC SLEEVING
2X DIA. OF PIPE

APPROVED BY:

Ricardo Sandoval 10.18.26
CITY ENGINEER DATE
RICARDO SANDOVAL

REVIEWED BY: Timothy Rastedt

DATE OF LAST REVISION: 1-28-00

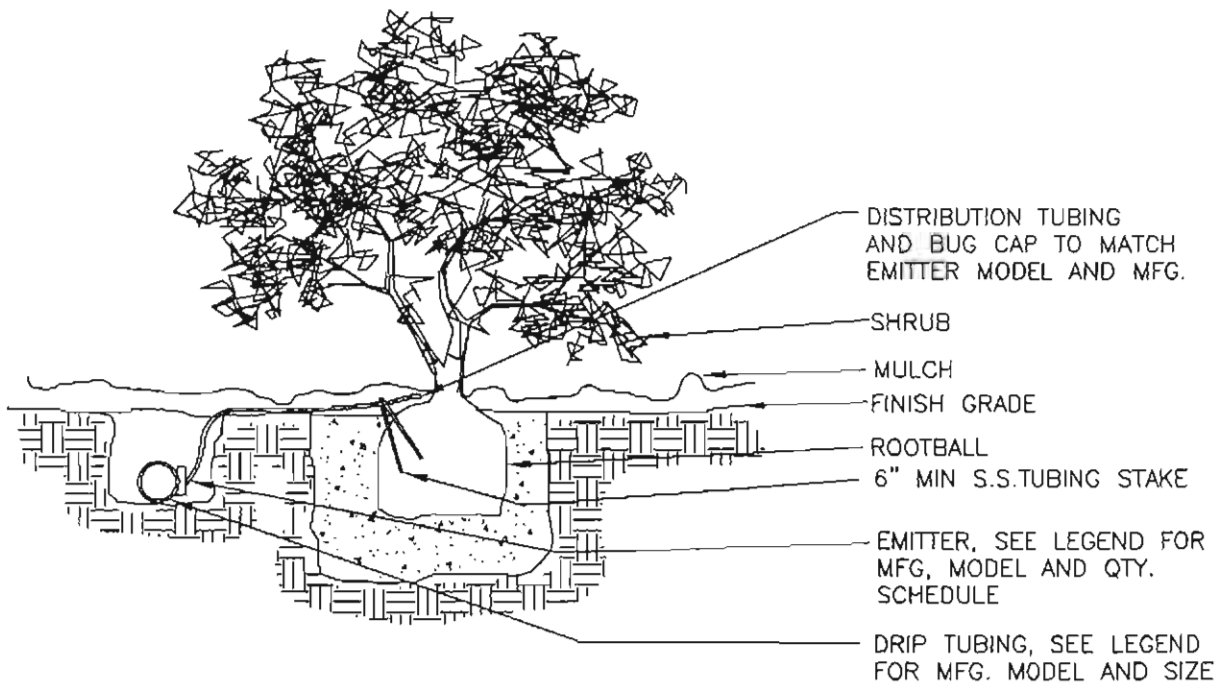
CITY OF FONTANA

POT IRRIGATION

STD. PLAN NO. 5041

SHT 1 OF 1





APPROVED BY:

Ricardo Sandoval 10.13.06
CITY ENGINEER DATE

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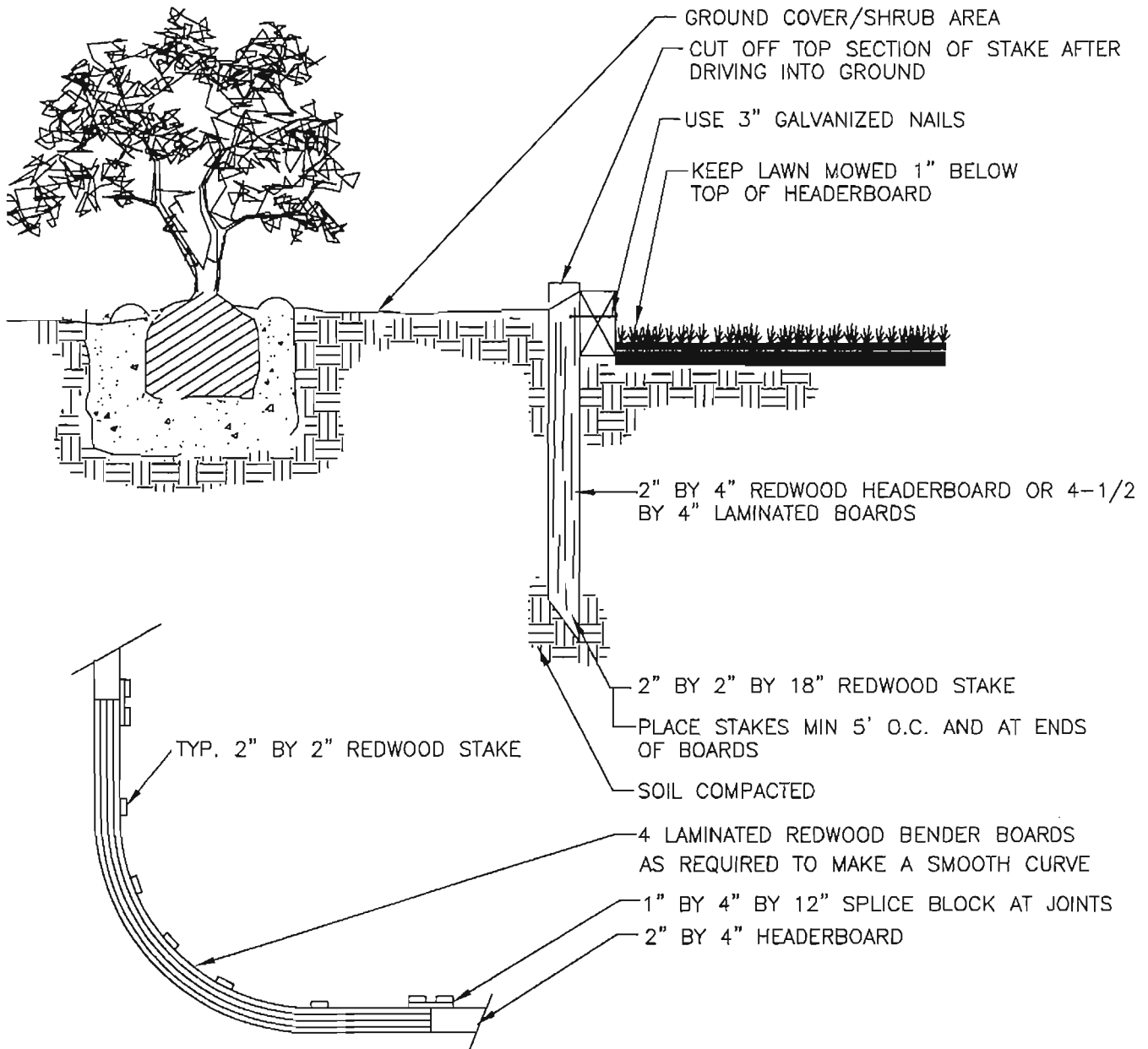
DATE OF LAST REVISION: 1-28-00

CITY OF FONTANA

DRIP EMITTER

STD. PLAN NO. 5042

SHT 1 OF 1



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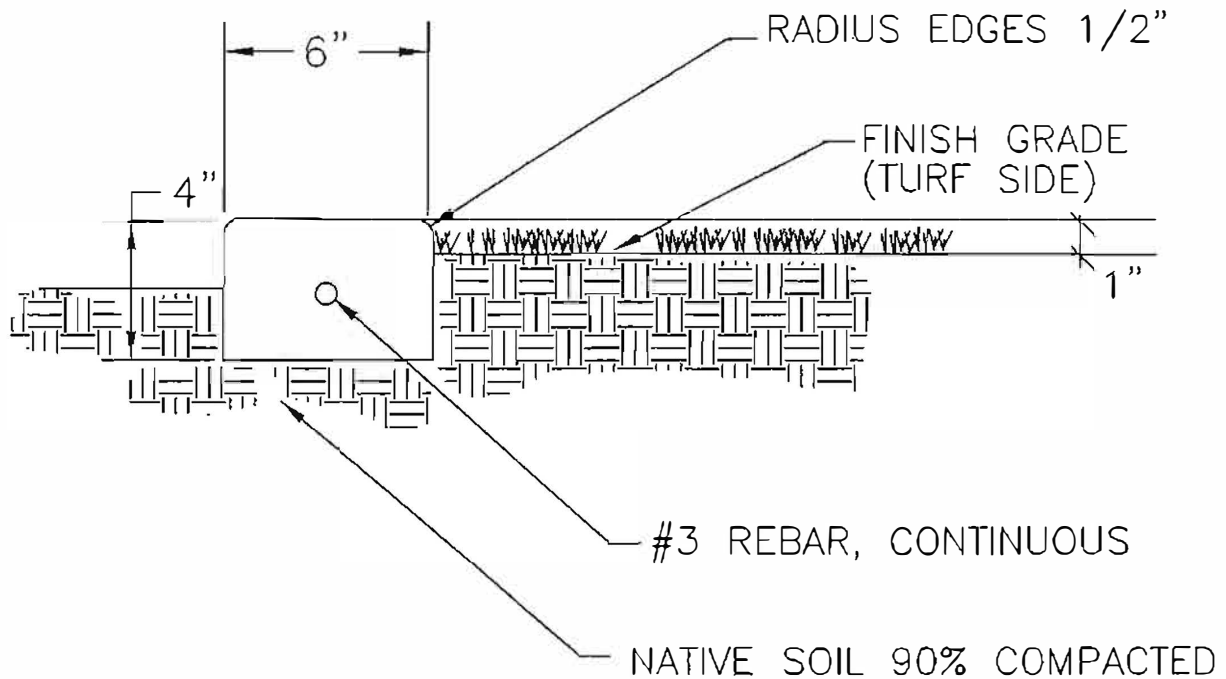
DATE OF LAST REVISION: 1-28-00

CITY OF FONTANA

REDWOOD HEADERBOARD

STD. PLAN NO. 5043

SHT 1 OF 1



NOTE: MOW CURBS SHALL BE PLACED BETWEEN ALL GRASS, PLANTER AREAS, MULCH, DECOMPOSED GRANITE, AND ANYWHERE A LANDSCAPE MATERIAL TRANSITIONS OR ABUTS A DIFFERING MATERIAL UNLESS OTHERWISE NOTED



APPROVED BY:

3-15-2022

CITY ENGINEER
RICARDO SANDOVAL

DATE

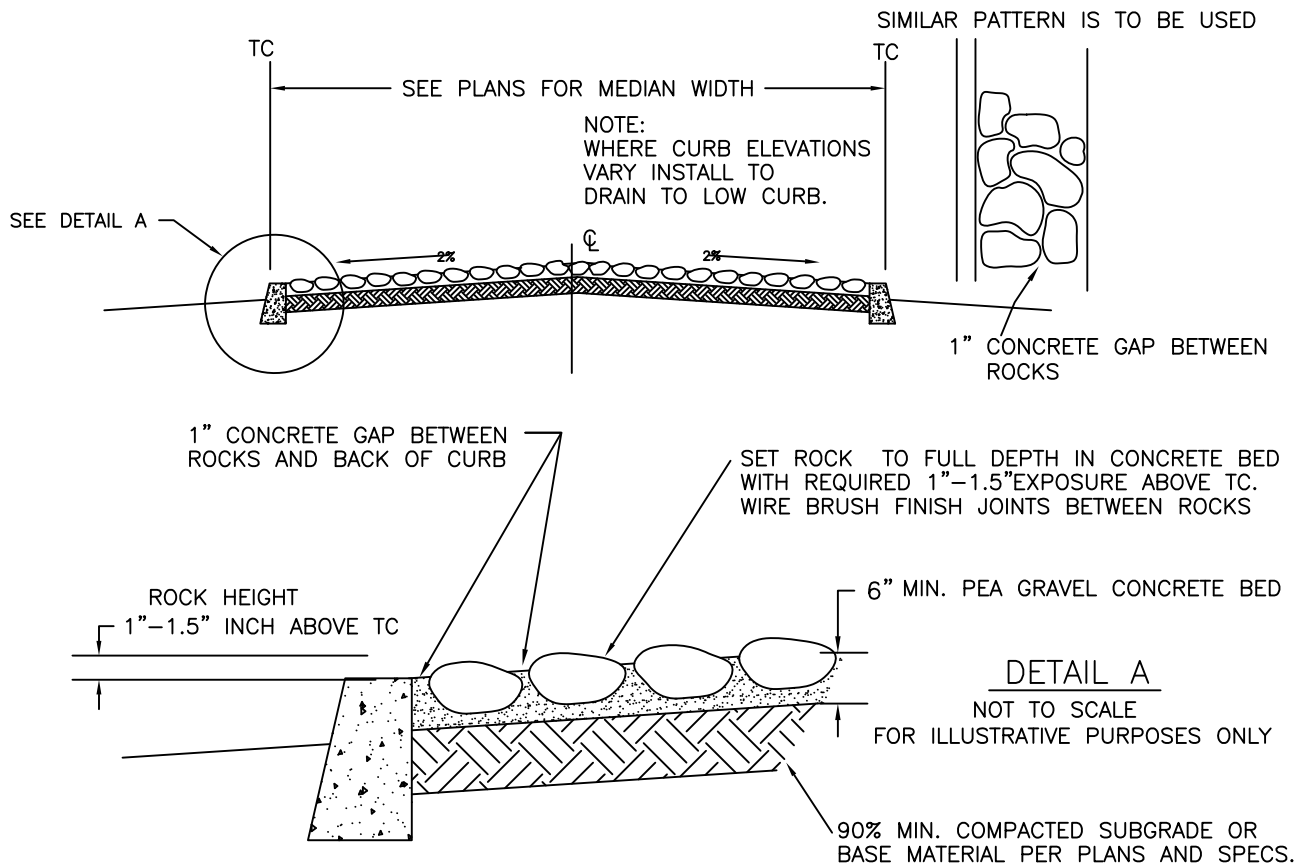
REVIEWED BY:KS

CITY OF FONTANA

CONCRETE MOW CURB

STD. PLAN NO. 5044

SHT 1 OF 1



1. ROCK SIZES UNLESS OTHERWISE SPECIFIED SHALL BE:
COBBLESTONES: MAX. 12" TO MIN. 6" , NO MORE THAN 50% OF ANY ONE SIZE.
2. A SAMPLE AREA, MIN. 10 SQ. FT. SHALL BE APPROVED BY THE CITY INSPECTOR PRIOR TO PROCEEDING WITH THE REMAINING ROCK WORK.
3. FINAL RESTING POSITION OF ALL ROCKS SHALL BE APPROVED BY THE CITY INSPECTOR.
4. ROCKS SHALL BE SMOOTH, ROUNDED, FREE OF OBJECTIONABLE DISFIGURATIONS AND IRON CONTENT AS APPROVED BY THE CITY INSPECTOR
5. CONCRETE SHALL BE 2500 PSI PEA GRAVEL PUMP MIX CONCRETE.
6. WIRE BRUSH ALL JOINTS AFTER THE INSTALLATION OF THE ROCKS. AFTER CONCRETE HAS SET, CLEAN THE RESIDUE FROM SURFACES OF ROCKS.
7. NO JOINTS GREATER THAN 1" BETWEEN ROCKS WILL BE ACCEPTABLE. 4" FILLER ROCKS WILL BE ACCEPTED TO MAINTAIN THE 1" JOINT.
8. WHERE ROCK BORDERS TURF AREA, PLACE 1" CONCRETE EDGE BETWEEN BACK OF ROCK AND TURF.



APPROVED BY:

12-2-19

CITY ENGINEER
RICARDO SANDOVAL

DATE

REVIEWED BY: _____

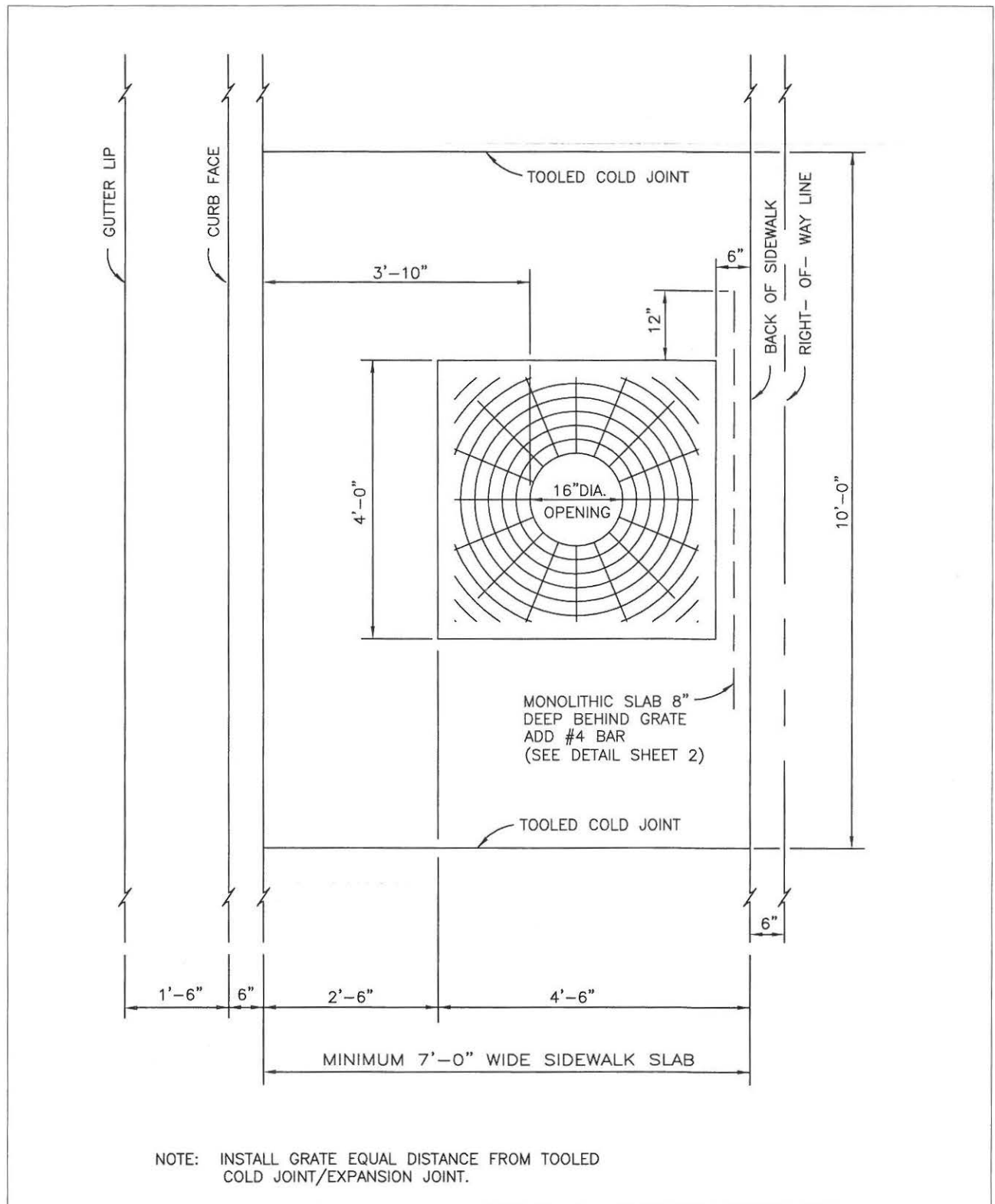
DATE OF LAST REVISION: 10-15-19

CITY OF FONTANA

TYP. ROCK TREATMENT

STD. PLAN NO. 5045

SHT 1 OF 1



APPROVED BY:

CITY ENGINEER
RICARDO SANDOVAL

REVIEWED BY: Kyle Scribner

DATE OF LAST REVISION: 1-14-15

DATE

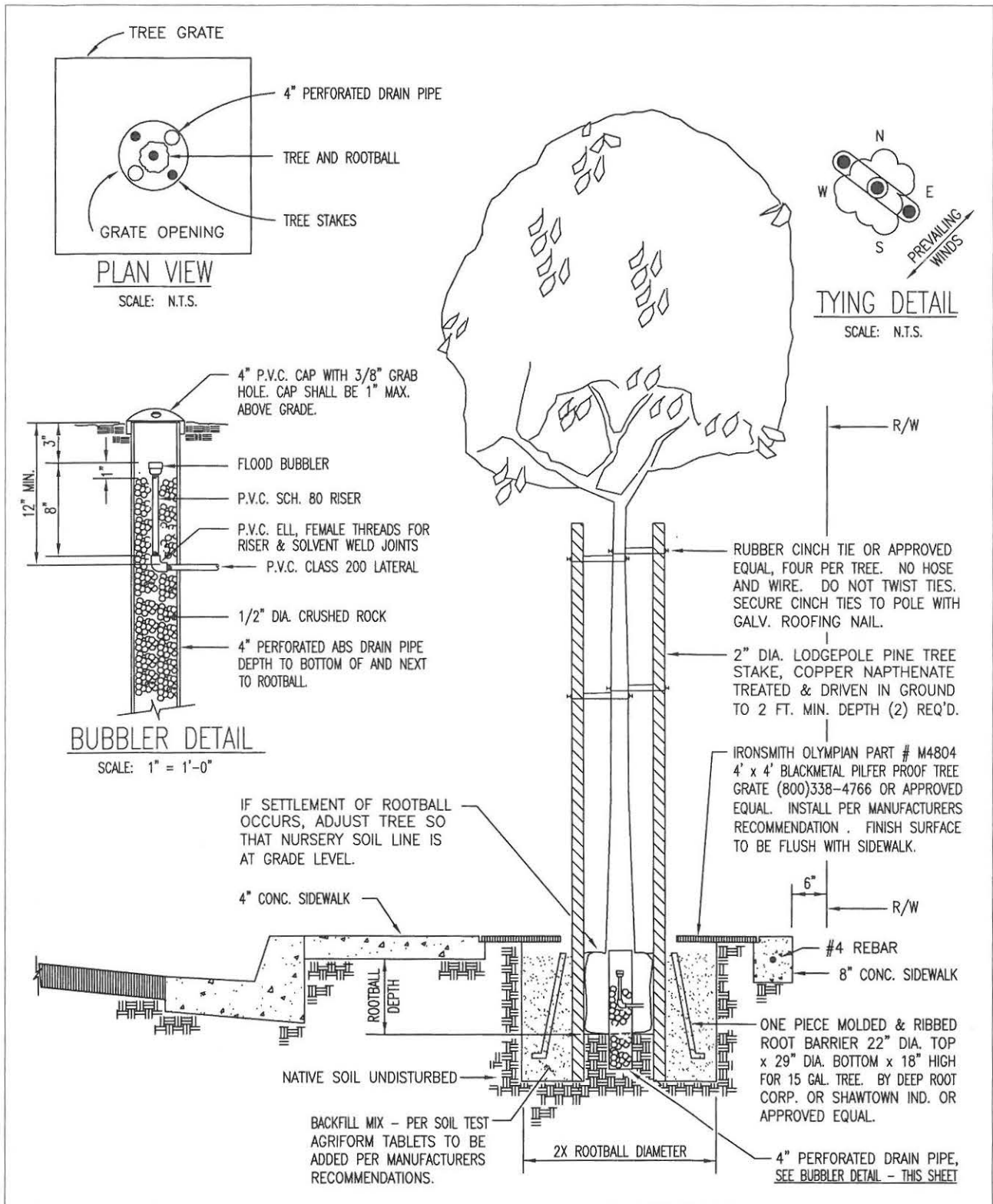
1.16.15

CITY OF FONTANA

TREE GRATES

STD. PLAN NO. 5046

SHT 1 OF 3



APPROVED BY:

CITY ENGINEER
RICARDO SANDOVAL

DATE

REVIEWED BY: Kyle ScribnerDATE OF LAST REVISION: 1-14-15

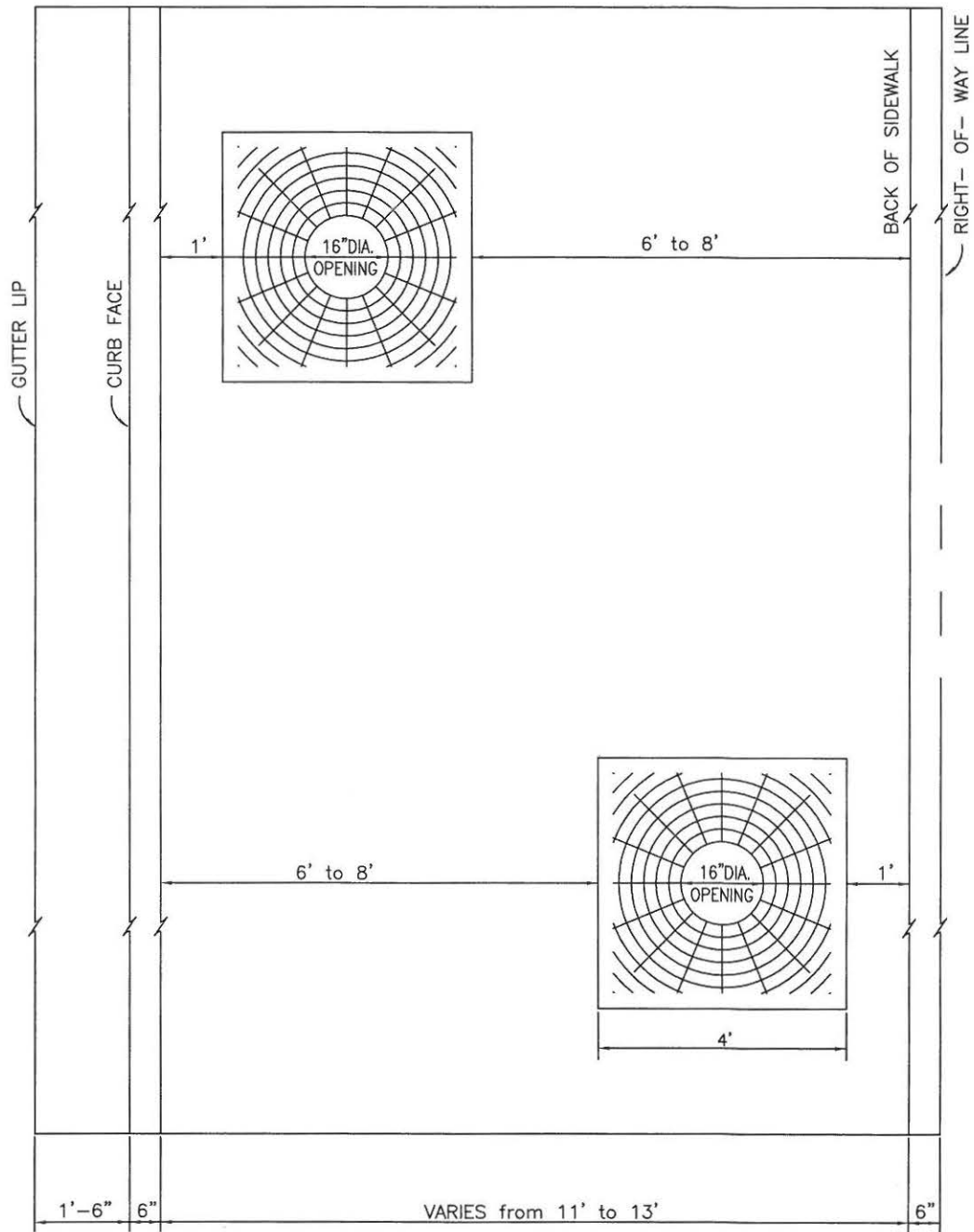
CITY OF FONTANA

TREE GRATES

STD. PLAN NO.

5046

SHT 2 OF 3



2 ALTERNATIVE TREE/GRATE LOCATIONS
FOR COMMERCIAL AREA PARKWAY SIDEWALKS



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CITY OF FONTANA

TREE GRATES

STD. PLAN NO. 5046

SHT 3 OF 3

VALVE BOX LABELING NOTE:

HEAT BRAND ALL VALVE BOX COVERS IN 2" HIGH LETTER
PER EQUIPMENT LOCATED WITHIN VALVE BOXES.

LABEL "GV" FOR ALL GATE VALVES

LABEL "QCV" FOR ALL QUICK COUPLING VALVES

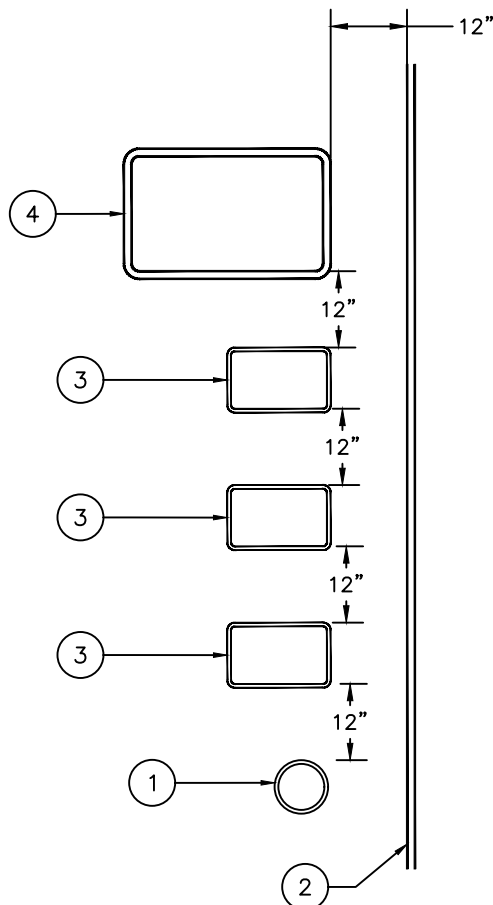
LABEL "MV" FOR ALL MASTER VALVES

LABEL "VALVE STATION" FOR ALL CONTROL VALVES

LABEL "FM" FOR ALL FLOW MASTER VALVES

LABEL "FV" FOR ALL FLUSH VALVES

LABEL "AR" FOR ALL AIR RELIEF VALVES

PLAN VIEW

LEGEND – USE CARSON VALVE BOXES.

1. 10" DIAMETER CIRCULAR VALVE BOX.
2. EDGE OF LAWN, WALK, FENCE, CURB, ETC
3. 14" x 19" RECTANGULAR VALVE BOX.
4. 20" x 30" RECTANGULAR VALVE BOX.

NOTES

- A. CENTER VALVE BOX OVER VALVE TO FACILITATE SERVICING OF VALVE.
- B. SET VALVE BOXES 2" MAXIMUM ABOVE GRADE IN MULCH COVER OR GROUND COVER/SHRUB AREAS – SET FLUSH WITH FINISH GRADE IN TURF AREAS.
- C. SET VALVE BOX AND VALVE ASSEMBLY IN GROUND-COVER/SHRUB AREA WHERE POSSIBLE – INSTALL IN TURF ONLY IF THERE IS NO ADJACENT GROUND-COVER.
- D. SET VALVE BOXES PARALLEL TO ONE ANOTHER AND PERPENDICULAR TO EDGE.
- E. AVOID HEAVY COMPACTION OF SOIL AROUND VALVE BOXES TO PREVENT THEIR DEFORMATION/COLLAPSE
- F. ALL BOXES TO BE PURPLE IN COLOR.

NOTE: CONTRACTOR TO USE PURPLE LIDS WHEN
NON-POTABLE WATER SOURCE IS USED (SEE PLAN)



APPROVED BY:

Ricardo Sandoval

3-15-22

CITY ENGINEER
RICARDO SANDOVAL

DATE

REVIEWED BY: KS

DATE OF LAST REVISION: 2-10-22

CITY OF FONTANA

**VALVE BOX
INSTALLATION**

STD. PLAN NO. 5047

SHT 1 OF 1