CITY OF LATHROP

Department of Public Works

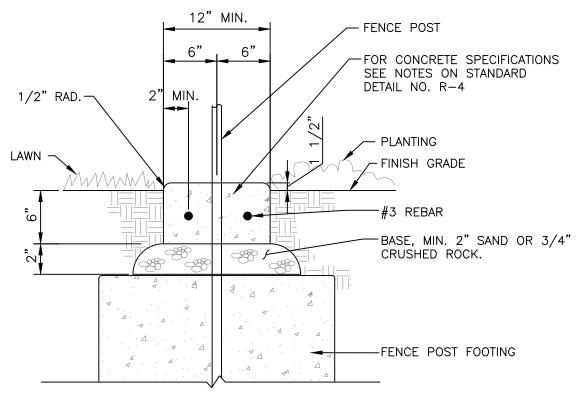
DESIGN & CONSTRUCTION Standard Details



July 2024

Landscape

Concrete Mow Strip At Fence	L-1
Chain Link Fence Up To 8' Height	L-2
Post And Cable Fence	L-3
Drain At Play Area Surfacing	L-4
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Gate Valve (Typical)	L-6
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Backflow Preventer	L-8
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3M-DBY Wire Connection for Non-2 Wire System	L-31
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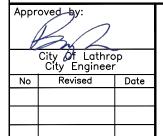


CONCRETE MOW STRIP AT FENCE

NOTES:

- 1. Mow strips are required below all fencing located within turf areas or as directed by plans.
- 2. Provide Score Joints at Each Fence Post (10'-0" Max. Spacing) and Expansion Joints at Every Other Fence Post (20'-0" Max. Spacing).

NOT TO SCALE



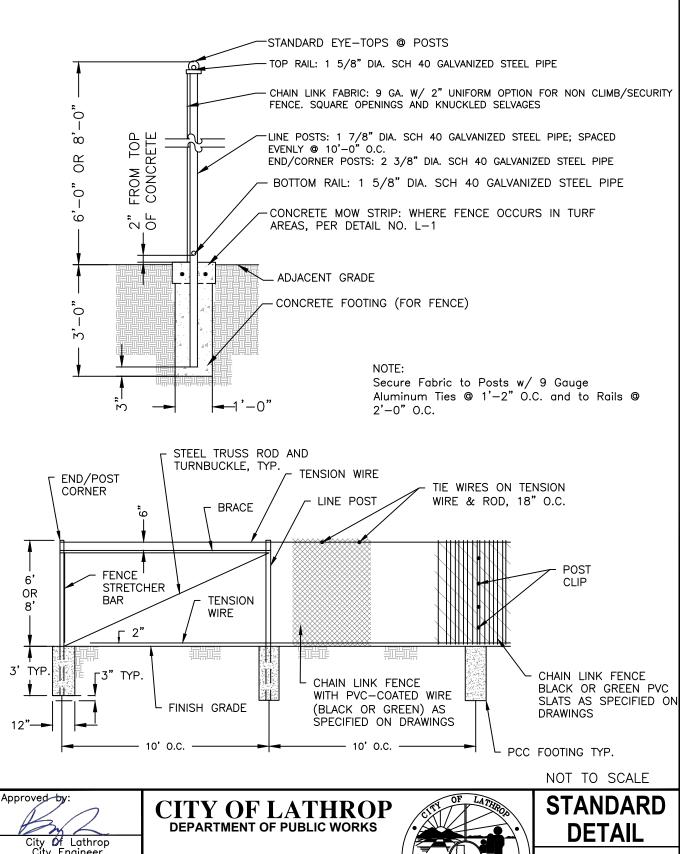
CITY OF LATHROP
DEPARTMENT OF PUBLIC WORKS

CONCRETE MOW STRIP AT FENCE



STANDARD DETAIL

Date: **JULY 2024**Drawing No:



City Of Lathrop
City Engineer

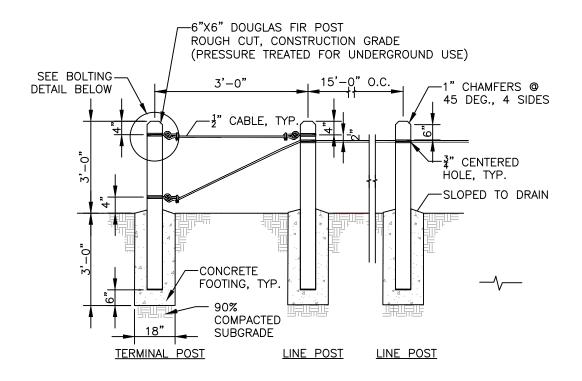
No Revised Date

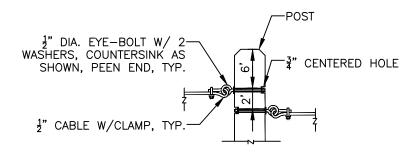
CHAIN LINK FENCE UP TO 8' HEIGHT



Date: **JULY 2024**Drawing No:

awing No:





- 1. Provide concrete footing at all posts.
- 2. Use \(\frac{3}{8}\) "x2" galvanized wire rope clips for connection and splices. All clips shall be placed with nuts facing downward.

NOT TO SCALE



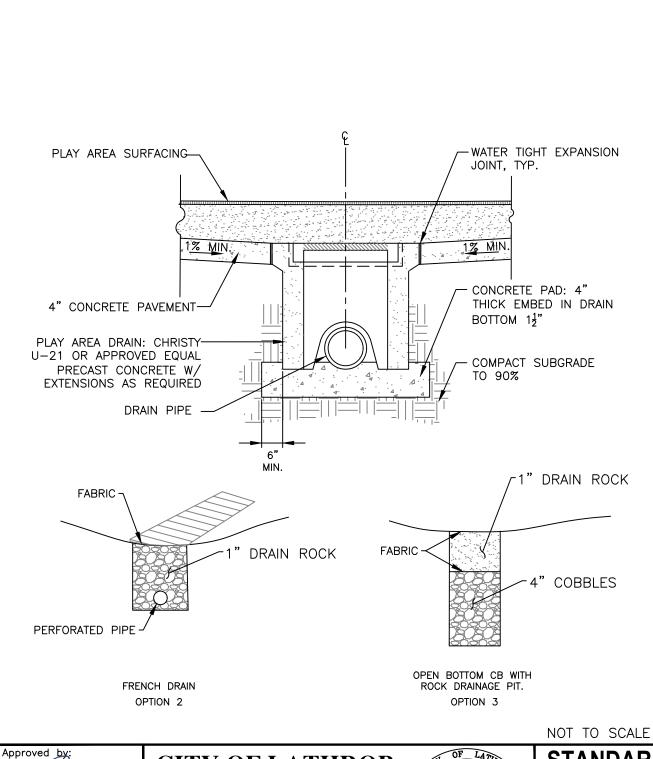
CITY OF LATHROP
DEPARTMENT OF PUBLIC WORKS

POST AND CABLE FENCE



STANDARD DETAIL

Date: JULY 2024
Drawing No:



ity Of Lathrop City Engineer No Revised Date

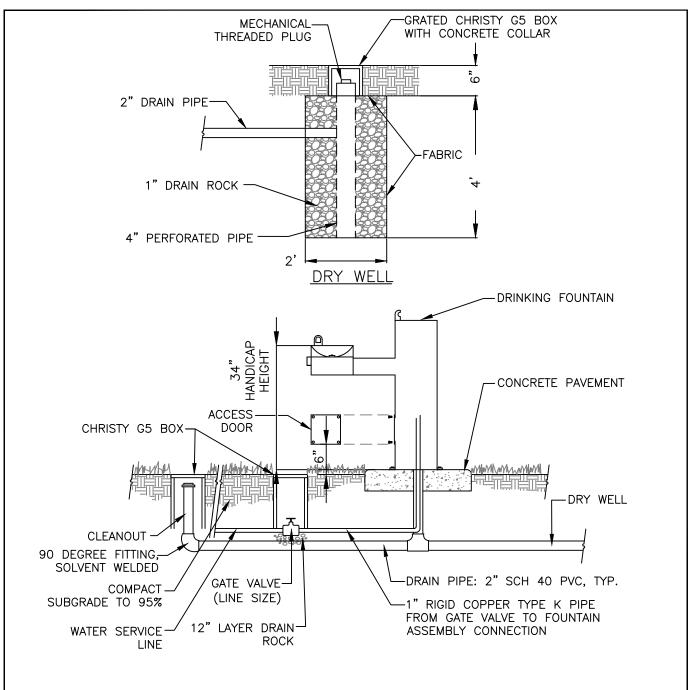
CITY OF LATHROP DEPARTMENT OF PUBLIC WORKS

DRAIN AT PLAY AREA SURFACING



STANDARD DETAIL

Date: **JULY 2024** Drawing No:



- 1. Provide 6" Clear from Back Edge of Fountain to Back Edge of Concrete Pad.
- 2. Drinking Fountain shall be as manufactured by Most Dependable Fountains #440 SMFA and SMSSF with optional pet fountain or approved equal.

NOT TO SCALE



CITY OF LATHROP DEPARTMENT OF PUBLIC WORKS

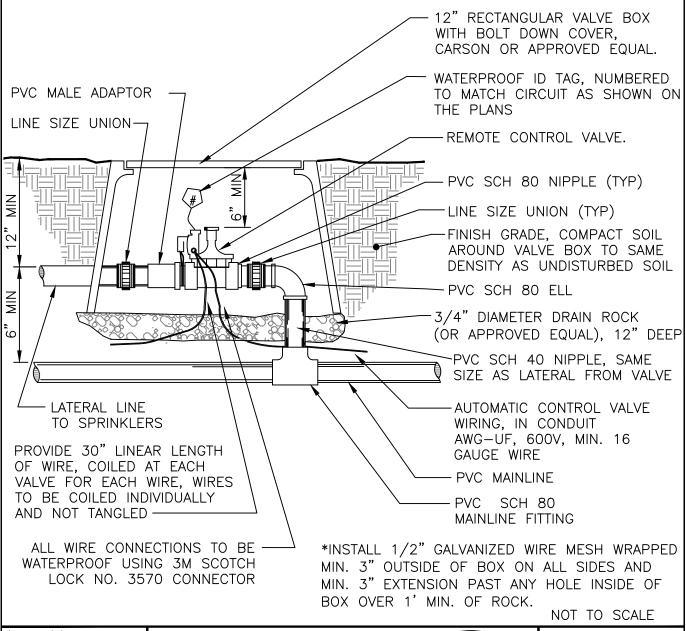
DRINKING FOUNTAIN



STANDARD DETAIL

Date: **JULY 2024**Drawing No:

- 1. All wire shall be installed per local codes.
- 2. One valve for each valve box only.
- 3. Valve boxes to be located in shrub areas and grouped together (not in turf).
- 4. For irrigation, all pipes, tags and valve boxes are to be purple color (Pantone 512) with language shown on standard detail No. RW-2.
- 7. Brand box lid with appropriate designation. Branding shall correspond with tag. Heat stamp station number shown on the plans onto the lid of the valve box and it shall be 2". All boxes shall be bolted down.





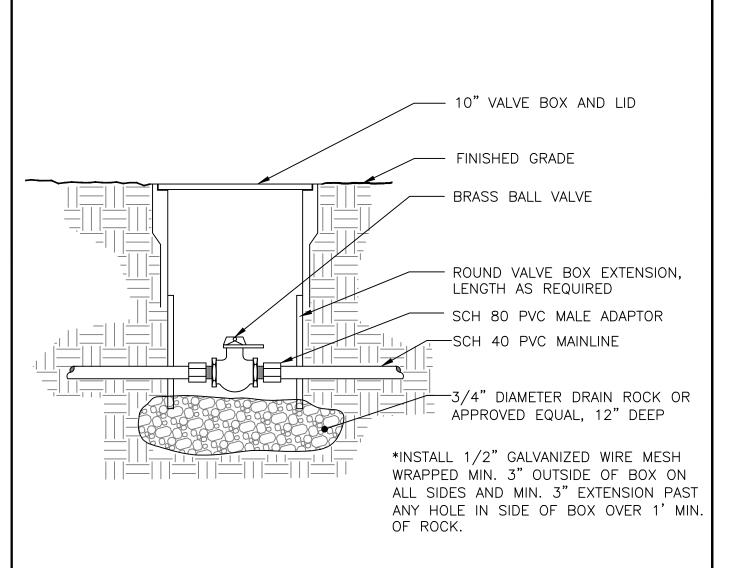
CITY OF LATHROP
DEPARTMENT OF PUBLIC WORKS

CONTROL VALVE



STANDARD DETAIL

Date: **JULY 2024**Drawing No:



- 1. For irrigation, all pipes, tags, valve boxes and lids are to be purple color and marked as shown on Standard Detail RW—2.
- 2. Brand box lid with appropriate designation. Branding shall correspond with tag. All boxes shall be bolt down.

NOT TO SCALE



CITY OF LATHROP DEPARTMENT OF PUBLIC WORKS

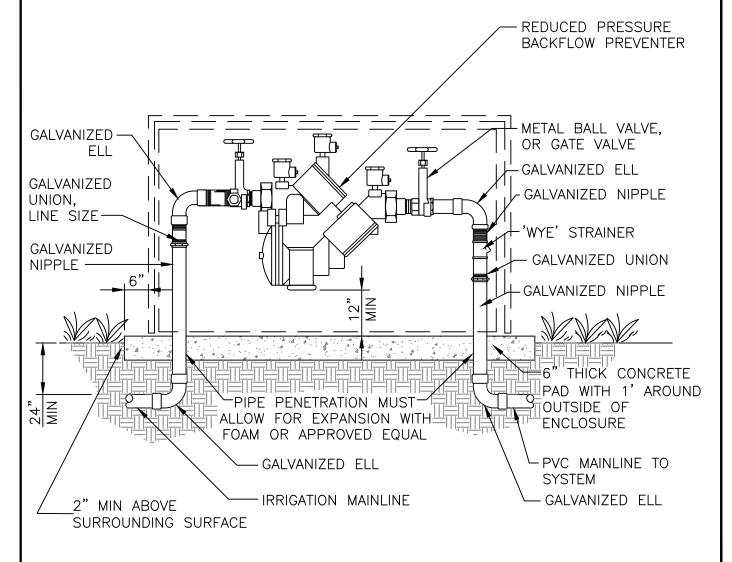
GATE VALVE



STANDARD DETAIL

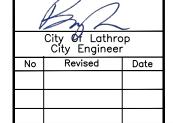
Date: **JULY 2024**Drawing No:

- 1. All galvanized pipe below finish grade to receive two wraps of 10 Mil tape.
- 2. Backflow preventer to be located in shrub area and screened from view with shrubs.
- 3. For irrigation, all pipes, tags and valve boxes are to be purple color and shall have language shown on Standard Detail No. RW-2.
- 4. All assemblies must be tested by a certified backflow prevention tester and reports shall be sent to backflows@ci.lathrop.ca.us
- 5. Enclosure shall be sized to adequately enclose the preventer.
- 6. Enclosure shall be powder coated pantone 512 for recycled water and blue for potable water and green for landscape
- 7. Any lines less than 2" diameter will need polar barrier blanket



USE FEBCO 825Y REDUCED PRESSURE BACKFLOW.

NOT TO SCALE



Approved by:

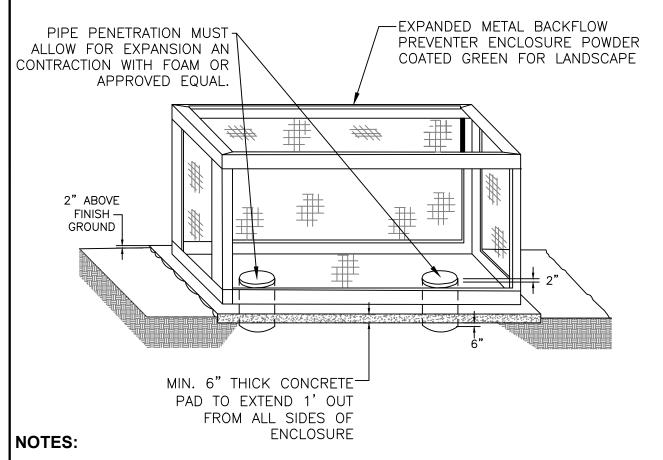
CITY OF LATHROP DEPARTMENT OF PUBLIC WORKS

BACKFLOW PREVENTER



STANDARD DETAIL

Date: **JULY 2024**Drawing No:



- 1. On slopes: pads shall be of sufficient thickness to extend 3" below the lowest point of the finish grade.
- 2. Embed corner hold—down assemblies in concrete equipment pad per manufacturer's specifications.
- 3. Size enclosure to provide a minimum of 6" clearance between backflow device and enclosure.
- 5. Enclosure shall be sized to adequately enclose the preventer.

City of Lathrop
City Engineer

No Revised Date

Approved by:

CITY OF LATHROP DEPARTMENT OF PUBLIC WORKS

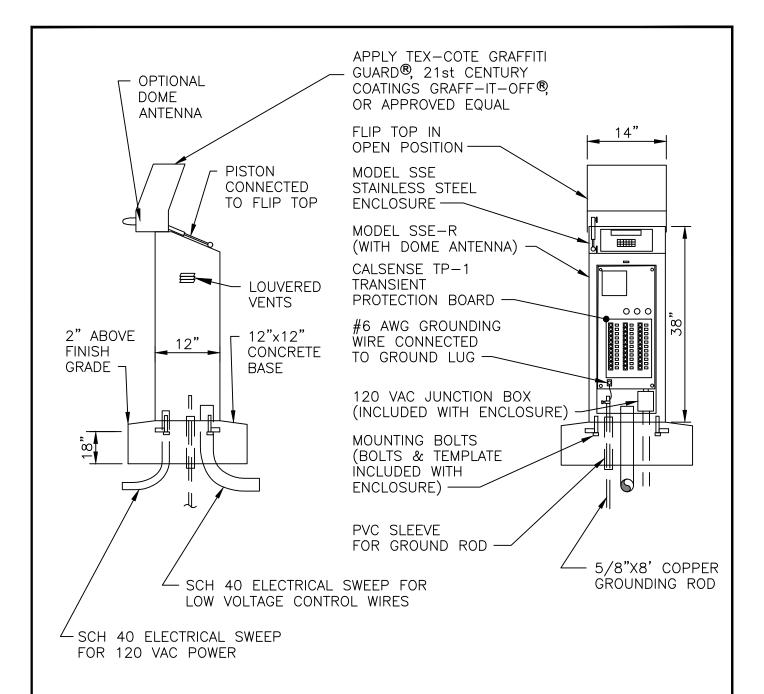
BACKFLOW PREVENTER

ENCLOSURE



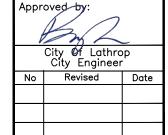
STANDARD DETAIL

Date: **JULY 2024**Drawing No:



- 1. Calcense Controller CS3000 panel mounted flush on face of enclosure at a 25° angle for easy access and viewing.
- 2. Provide GFI outlet with switch.
- 3. Shall be certified prior to acceptance.
- 4. Use 2-wire RCA interconnect cable system.
- 5. 95% Compaction for sub-grade.

NOT TO SCALE



CITY OF LATHROP DEPARTMENT OF PUBLIC WORKS

PEDESTAL CONTROLLER



STANDARD DETAIL

Date: **JULY 2024**Drawing No:

CS3000 CONTROLLER SPECIFICATIONS

POWER

INPUT REQUIREMENT: 120VAC SINGLE PHASE, 1AMP STATION OUTPUTS: 24VAC, 2.0AMPS MAX (SHORT PROTECTED)

·

PHYSICAL

HEIGHT: 16.25" WIDTH: 14.50" DEPTH: 7.25"

MATERIAL: 16 GAUGE, STAINLESS STEEL

COMMUNICATION OPTIONS

CS3-GR 3.5G CELLULAR MODEM
CS3-EN 100 MBPS ETHERNET DEVICE
CS3-WEN 802.11B/G WIRELESS ETHERNET (WI-FI) DEVICE
CS3-SR SPREAD SPECTRUM RADIO
CS3-M-KIT WIRE-LINKABLE TO SHARE COMMUNICATION WITH MULTIPLE CONTROLLERS

OTHER OPTIONS

CS3-2W-OPT INTERFACE FOR 2-WIRE
CS3-FL FLOWSENSE™ SOFTWARE TO OPERATE MULTIPLE
CONTROLLERS SHARING FLOW
CS3-W-KIT WEATHER INTERFACE FOR ET GAGE, TIPPING RAIN
BUCKET, AND WIND GAGE
CS3-8ST-KIT 8-STATION CARD PLUS TERMINAL
CS3-L-KIT INTERFACE FOR FOUR LIGHT CIRCUITS

NOT TO SCALE

City of Lathrop
City Engineer

No Revised Date

Approved by:

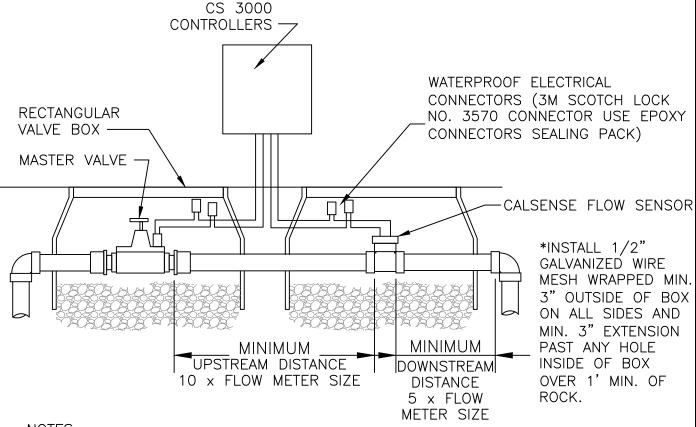
CITY OF LATHROP
DEPARTMENT OF PUBLIC WORKS
CS3000
CONTROLLER
SPECIFICATIONS



STANDARD DETAIL

Date: **JULY 2024**Drawing No:

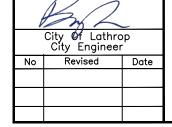
PIPE S	SIZING CHART	
F.M.	UPSTREAM	DOWNSTREAM
SIZE	LENGTH	LENGTH
1"	10"	5"
1.25"	12.5"	6.25"
1.5"	15"	7.5"
2"	20"	10"
3"	30"	15"



Approved by:

- See L-10 for controller installation.
- 2. For irrigation, all pipes, tags and valve boxes are to be purple color with language shown on standard detail No. RW-2.
- 3. Use 2—wire RCA option system interconnect cable.
- 4. Brand box lid with appropriate designation. Branding shall correspond with tag. All boxes shall be bolt down.

NOT TO SCALE



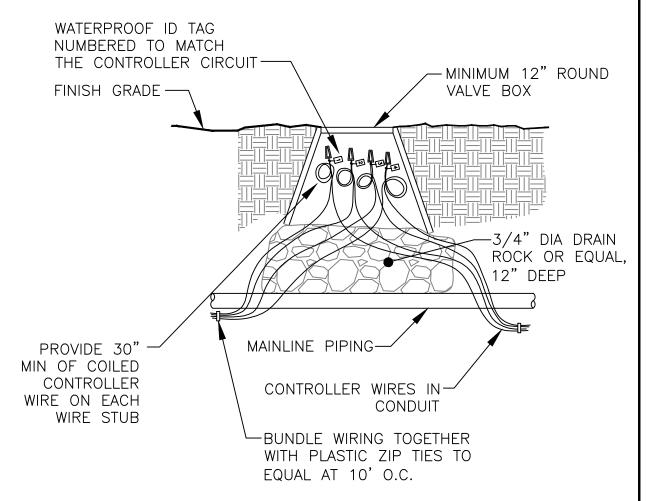
CITY OF LATHROP
DEPARTMENT OF PUBLIC WORKS

MASTER VALVE AND FLOW SENSORS



STANDARD DETAIL

Date: **JULY 2024**Drawing No:



*INSTALL 1/2" GALVANIZED WIRE MESH WRAPPED MIN. 3" OUTSIDE OF BOX ON ALL SIDES AND MIN. 3" EXTENSION PAST ANY HOLE IN SIDE OF BOX OVER 1' MIN. OF ROCK.

NOTE:

- 1. For irrigation, all pipes, tags and valve boxes are to be purple color with language shown on Standard Detail RW-2.
- 2. 2 wire system requires 3M epoxy connections.
- 3. Brand box lid with appropriate designation. Branding shall correspond with tag. All boxes shall be bolt down.

NOT TO SCALE



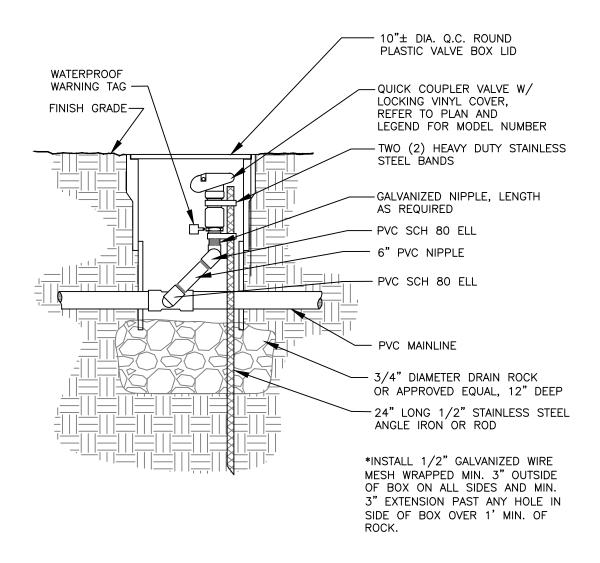
CITY OF LATHROP DEPARTMENT OF PUBLIC WORKS

CONTROL WIRE SPLICE



STANDARD DETAIL

Date: **JULY 2024**Drawing No:



- 1. All Nipples and Joints to be Schedule 80 PVC.
- 2. For recycled water irrigation, only quick couplers that differ from potable water quick couplers shall be allowed.
- 3. For irrigation, all pipes, tags and valve boxes are to be purple color with language shown on Standard Detail No. RW-2.
- 4. Brand box lid with appropriate designation. Branding shall correspond with tag.

NOT TO SCALE



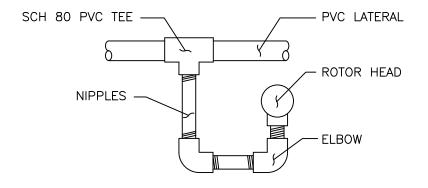
CITY OF LATHROP DEPARTMENT OF PUBLIC WORKS

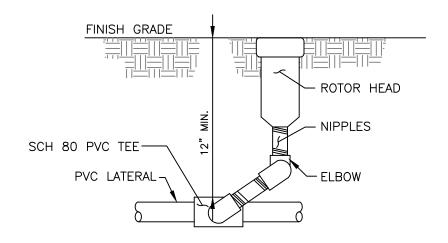
QUICK COUPLER



STANDARD DETAIL

Date: **JULY 2024**Drawing No:





TRIPLE SWING JOINT WITH ROTOR

NOTE:

- 1. All Nipples and Joints to be Schedule 80 PVC.
- 2. Use Pre-manufactured swing joints, SCH 80 PVC or approved equal.
- 3. Hunter I Series Sprinklers or approved equal.

NOT TO SCALE

City of Lathrop
City Engineer

No Revised Date

Approved by:

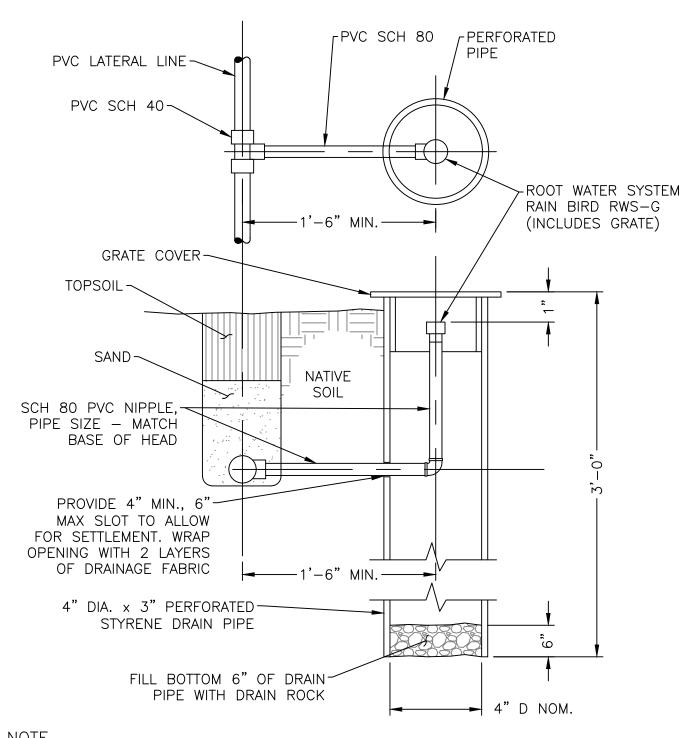
CITY OF LATHROP DEPARTMENT OF PUBLIC WORKS

ROTOR SPRINKLERS



STANDARD DETAIL

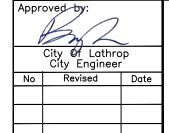
Date: **JULY 2024**Drawing No:



NOTE

1. For irrigation(use recycled water), all pipes, tags and valve boxes are to be purple color (Pantone 512).

NOT TO SCALE



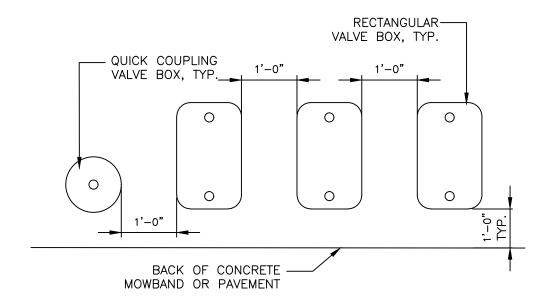
CITY OF LATHROP DEPARTMENT OF PUBLIC WORKS

TREE BUBBLER



STANDARD DETAIL

Date: **JULY 2024** Drawing No:



Notes:

- 1. Center valve box over remote control valve to facilitate servicing valve.
- 2. Set RCV and valve box assembly in groundcover/shrub areas.
- 3. Set boxes parallel to each other and perpendicular to edge of adjacent paving.
- 4. Avoid heavily compacting soil around valve boxes to prevent collapse and deformation of valve boxes.
- 5. Brand box lid with appropriate designation. Branding shall correspond with tag. All boxes shall be bolt down.

NOT TO SCALE

City of Lathrop
City Engineer

No Revised Date

Approved by:

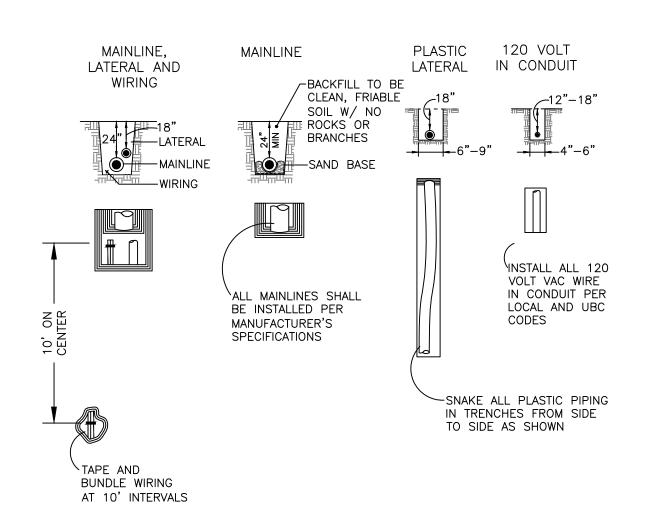
CITY OF LATHROP DEPARTMENT OF PUBLIC WORKS

VALVE BOX LAYOUT



STANDARD DETAIL

Date: **JULY 2024**Drawing No:



City of Lathrop
City Engineer

No Revised Date

Approved by:

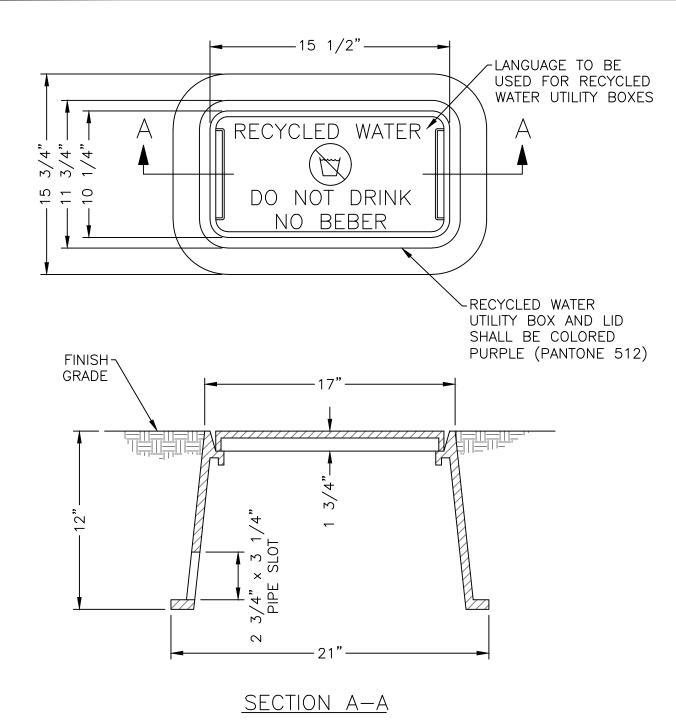
CITY OF LATHROP DEPARTMENT OF PUBLIC WORKS

IRRIGATION
PIPING AND WIRING



STANDARD DETAIL

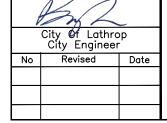
Date: **JULY 2024**Drawing No:



Approved by:

1. Brand box lid with appropriate designation. Branding shall correspond with tag. All boxes shall be bolt down.

NOT TO SCALE



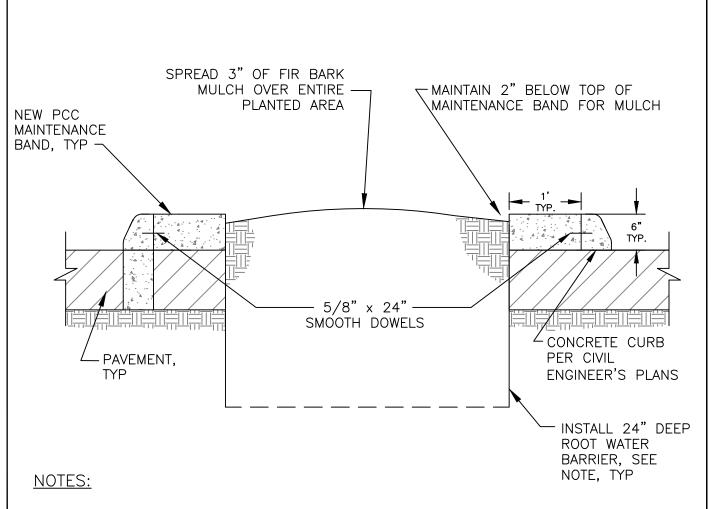
CITY OF LATHROP DEPARTMENT OF PUBLIC WORKS

UTILITY BOX



STANDARD DETAIL

Date: **JULY 2024**Drawing No:



- 1. Water barrier shall be "Deep Root Water Barrier", manufactured by Deep Root Corporation, or approved equal.
- 2. Optional extruded curb and vertical curb as specified in plans.
- 3. All bark must be approved by City Engineer.
- 4. 5'either side of tree trunk within 5' of concrete



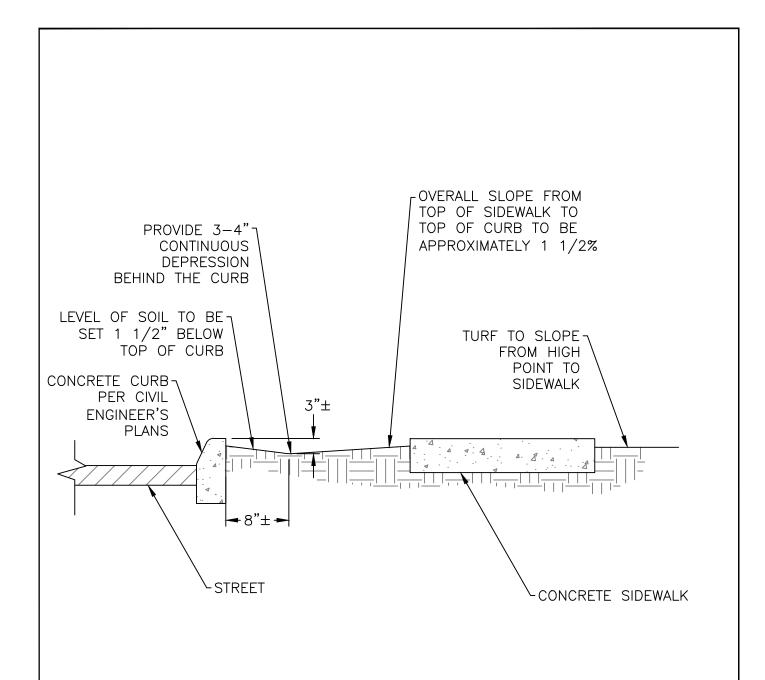
CITY OF LATHROP DEPARTMENT OF PUBLIC WORKS MEDIAN ISLAND MAINTENANCE BAND DETAIL

(FOR EXISTING CURB)



STANDARD DETAIL

Date: **JULY 2024**Drawing No:



City Of Lathrop City Engineer Revised

Approved by:

Date

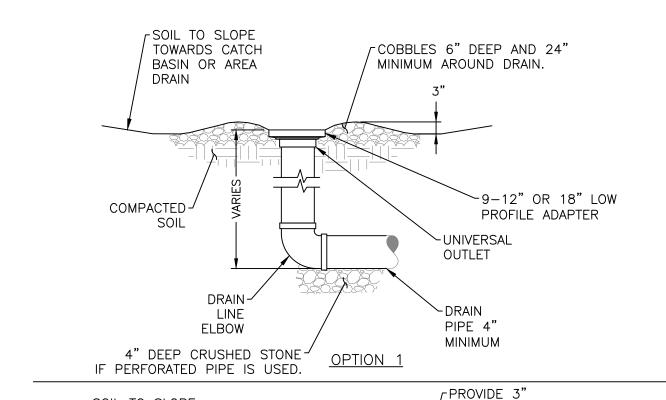
CITY OF LATHROP DEPARTMENT OF PUBLIC WORKS

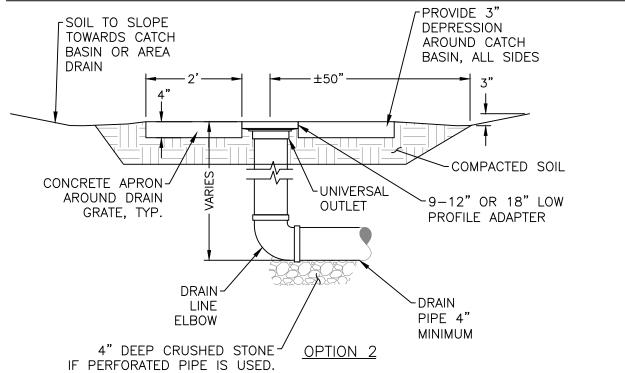
PARKWAY SWALE



STANDARD DETAIL

Date: **JULY 2024** Drawing No:





City of Lathrop
City Engineer

No Revised Date

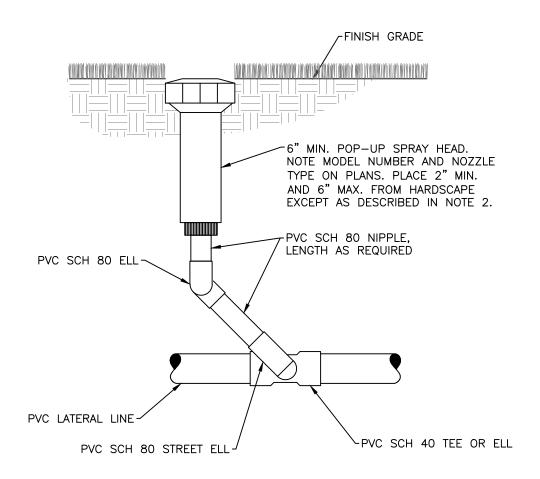
CITY OF LATHROP DEPARTMENT OF PUBLIC WORKS

AREA DRAIN



STANDARD DETAIL

Date: **JULY 2024**Drawing No:



NOTE

Approved by:

- 1. For recycled water irrigation, all pipes and spray heads are to be purple color. Signs shall be posted as shown in RW-2.
- 2. For shrubs, install a 12-inch min, pop-up spray head.
- 3. For turf, install a 8-inch min. gear rotor pop-up spray head.

NOT TO SCALE

City of Lathrop
City Engineer

No Revised Date

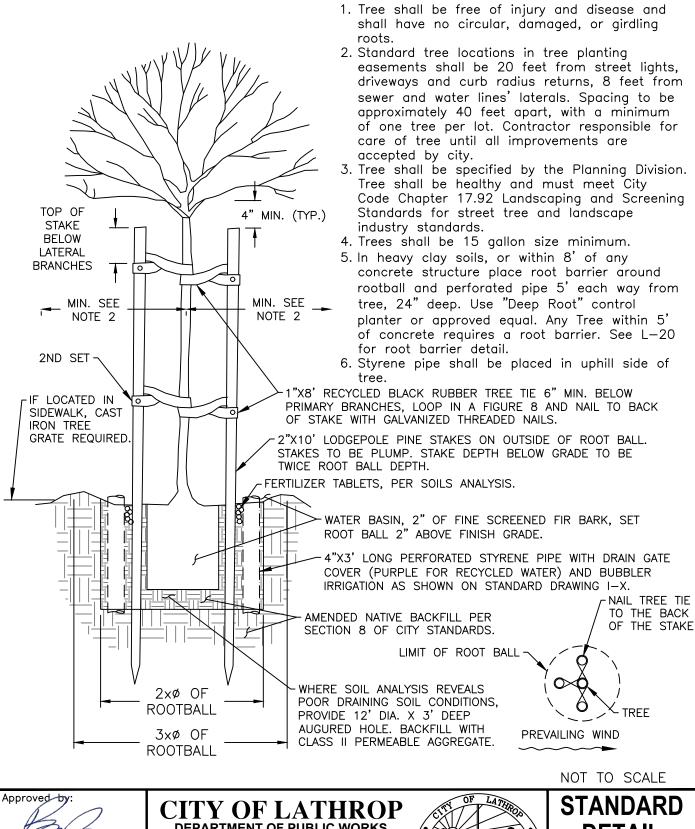
CITY OF LATHROP DEPARTMENT OF PUBLIC WORKS

SHRUB POP-UP SPRAY HEAD



STANDARD DETAIL

Date: **JULY 2024**Drawing No:



City of Lathrop City Engineer Revised Date

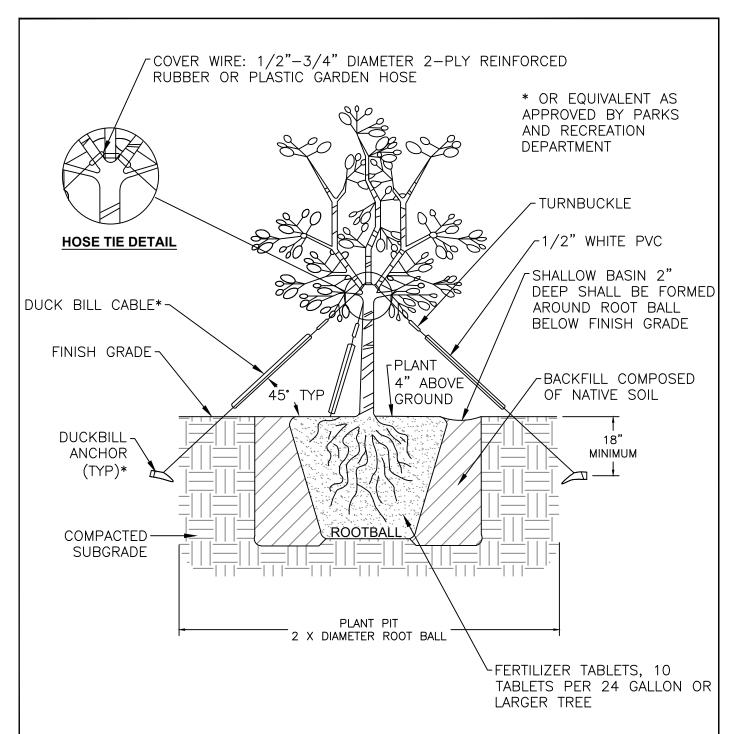
DEPARTMENT OF PUBLIC WORKS

TREE PLANTING



DETAIL

Date: **JULY 2024** Drawing No:



1. All 24" box trees or larger, including multi—trunk specimens, shall be guyed as shown or as directed by City.

2. See L-20 for root barrier detail.

NOT TO SCALE

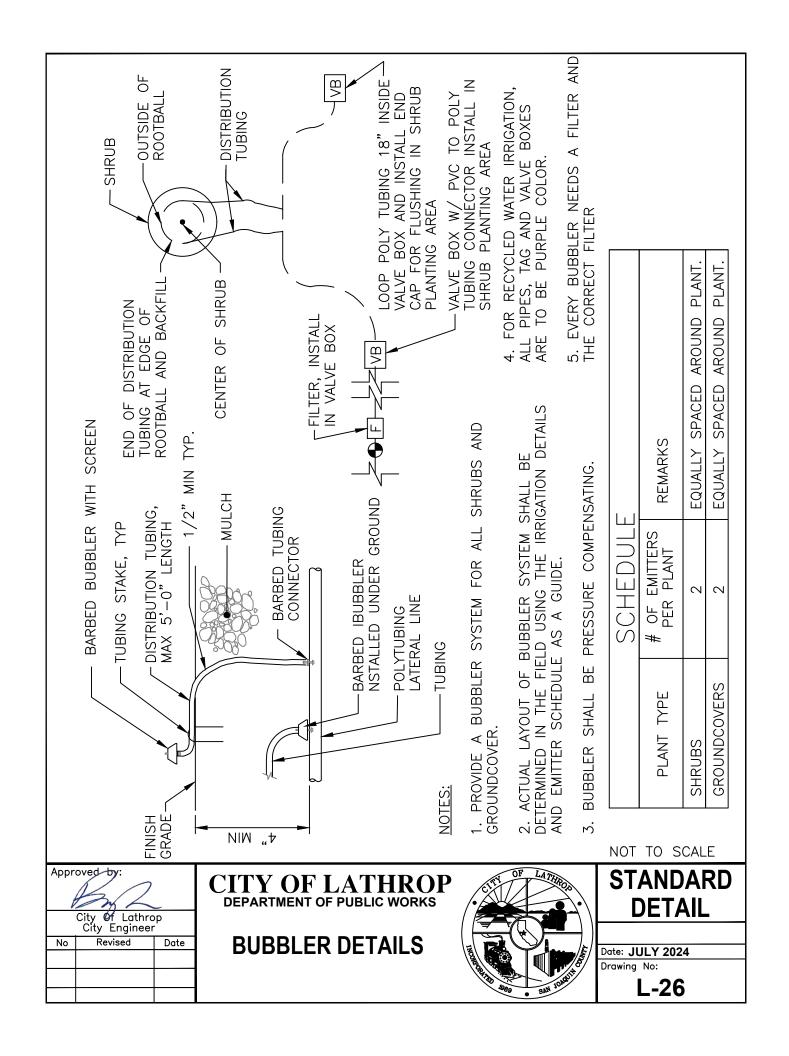


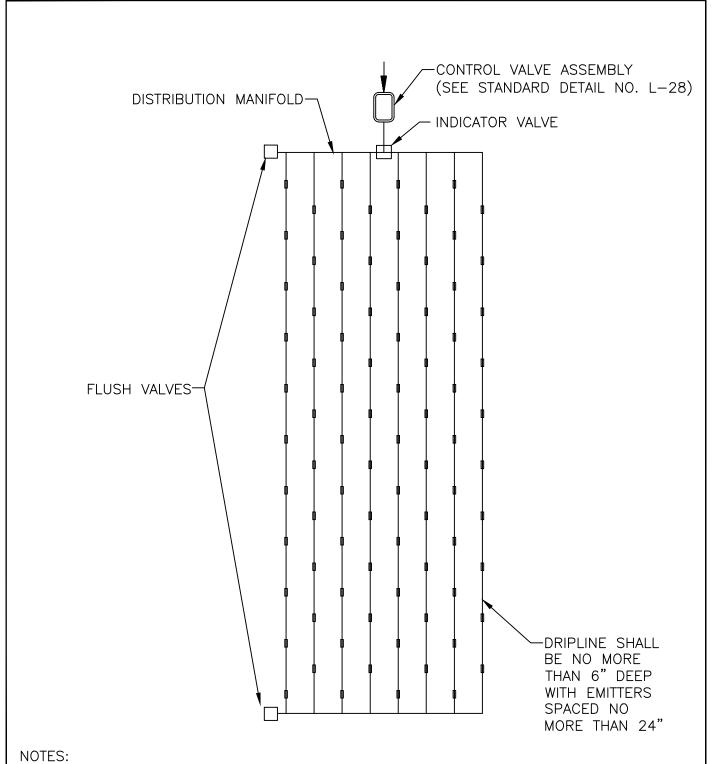
CITY OF LATHROP
DEPARTMENT OF PUBLIC WORKS
TYPICAL TREE
GUYING FOR 24" - 36" BOX



STANDARD DETAIL

Date: **JULY 2024**Drawing No:





1. Subsurface dripfield layout to be used in special case only with city engineer approval

NOT TO SCALE

City of Lathrop
City Engineer

No Revised Date

Approved by:

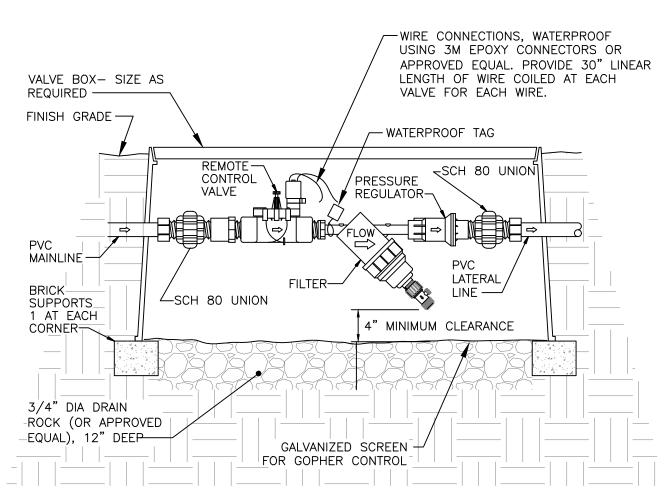
CITY OF LATHROP DEPARTMENT OF PUBLIC WORKS

TYPICAL SUBSURFACE DRIPFIELD LAYOUT



STANDARD DETAIL

Date: **JULY 2024**Drawing No:



*INSTALL 1/2" GALVANIZED WIRE MESH WRAPPED MIN. 3" OUTSIDE OF BOX ON ALL SIDES AND MIN. 3" EXTENSION PAST ANY HOLE IN SIDE OF BOX OVER 1' MIN. OF ROCK.

NOTES:

- 1. See L-6 for control valve installation notes.
- 2. For irrigation, all pipes, tags and valve boxes are to be purple color with language as shown on RW-2.
- 3. Brand box lid with appropriate designation. Branding shall correspond with tag. All boxes shall be bolt down.

Approved by:

City of Lathrop
City Engineer

No Revised Date

CITY OF LATHROP
DEPARTMENT OF PUBLIC WORKS

DETAIL

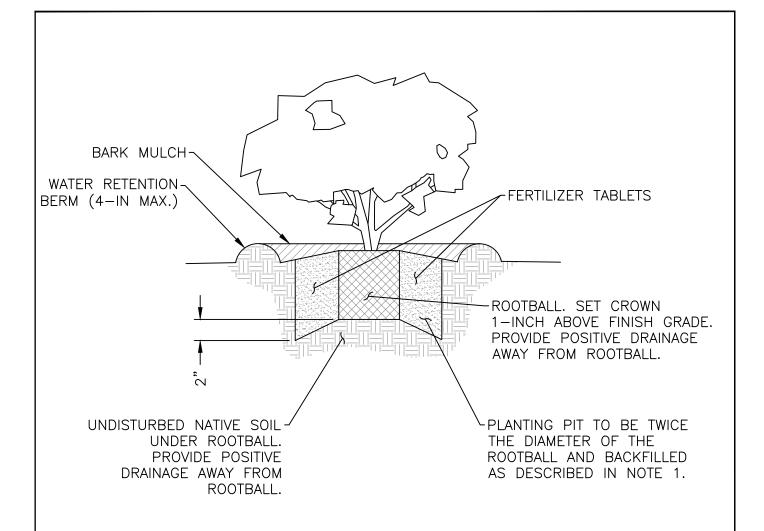
Date: JULY 2024

NOT TO SCALE

L-28

Drawing No:

DRIP IRRIGATION CONT
VALVE ASSEMBLY



NOTE

1. Organic backfill amendment to be nitrogen stabilized fir or redwood bark. install backfill in 6—inch lifts, water to settle.

1 GAL.	2 TABLETS
2 OR 5 GAL.	3 TABLETS
15 GAL.	6 TABLETS
24-IN. BOX OR LARGER	10 TABLETS

FERTILIZER

NOT TO SCALE

City of Lathrop
City Engineer

No Revised Date

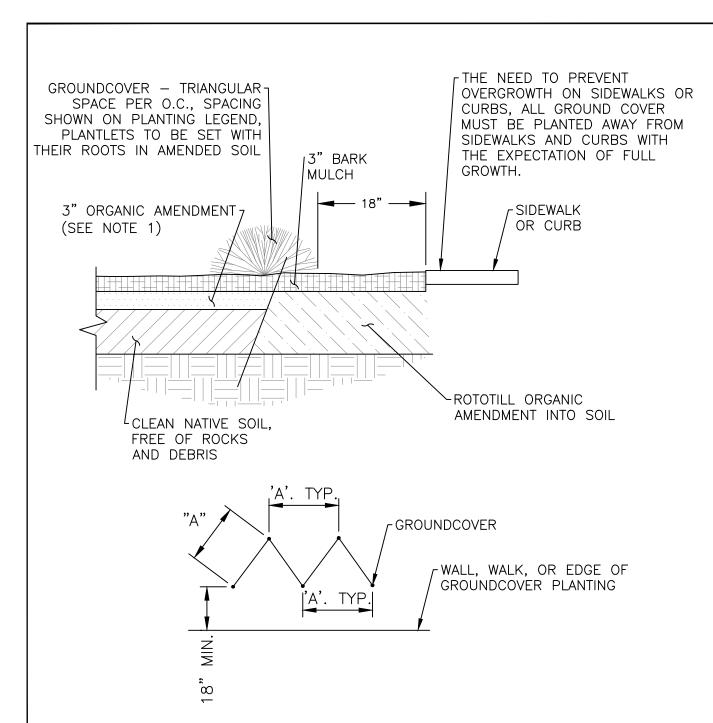
Approved by:

CITY OF LATHROP DEPARTMENT OF PUBLIC WORKS SHRUB PLANTING



STANDARD DETAIL

Date: **JULY 2024**Drawing No:



NOTE

- 1. Organic amendments shall be nitrogen
- 2. Stabilized fir or redwood bark to be used
- 3. Planting dimension 'A', per plant type. Show spacing on planting legend.

NOT TO SCALE



CITY OF LATHROP DEPARTMENT OF PUBLIC WORKS

GROUNDCOVER
PLANTING AND SPACING



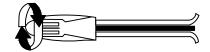
STANDARD DETAIL

Date: **JULY 2024**Drawing No:

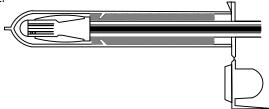
STEP 1: STRIP WIRES 1 FROM ENDS.



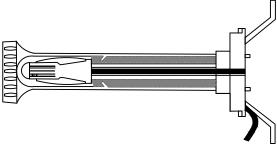
STEP 2: APPLY SCOTCHLOCK OR APPROVED EQUALY SPRING CONNECTOR IN A CLOCKWISE DIRECTION.



STEP 3: INSERT SPLICE TO BOTTOM OF GEL-FILLED TUBE. CHECK TO MAKE SURE CONNECTOR HAS BEEN PUSHED PAST LOCKING FINGERS AND IS SEATED AT BOTTOM OF TUBE.



STEP 4: POSITION WIRES IN WIRE CHANNELS AND CLOSE INSULATOR TUBE COVER.



2 WIRE SYSTEMS MUST USE $3M^{TM}$ SCOTCHCASTTM CONNECTOR SEALING PACKS

NOT TO SCALE

City of Lathrop City Engineer

No Revised Date

Approved by:

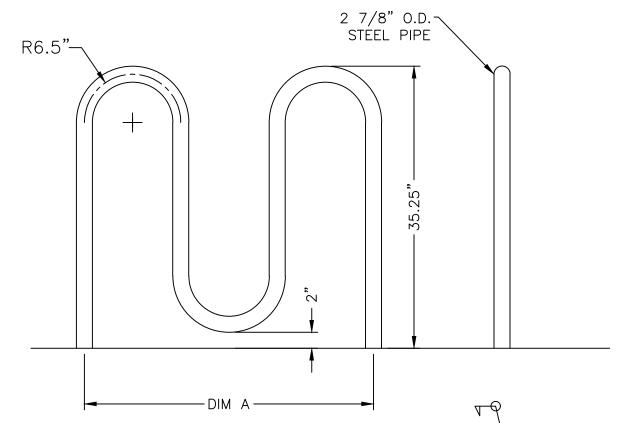
CITY OF LATHROP DEPARTMENT OF PUBLIC WORKS

3M-DBY WIRE CONNECTION FOR NON-2 WIRE SYSTEMS



STANDARD DETAIL

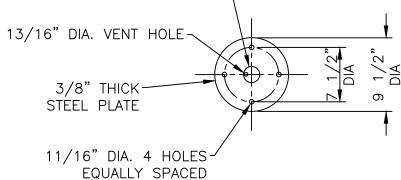
Date: **JULY 2024**Drawing No:



MODEL NO.	PEAKS	DIM "A"
125-20	2	37 1/2" LG
125-30	3	62 1/2" LG
125-40	4	87 1/2" LG
125-50	25	112 1/2" LG

FINISH OPTIONS:

RAL 6012 POWDER COATING

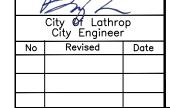


S-2 SURFACE MOUNT

NOTES:

- 1. $1/2-in \times 3 \cdot 3/4-in$ plated expansion anchor bolts provided for option S-2.
- 2. finish material is stainless steel.
- 3. Single inverted "U" rack may be used in appropriate situations.
- 4. Materials can be obtained through Dumor Inc. P.O. Box 142, Mifflintown, PA. 17059—0142, 125 series or approved equal.
- 5. An alternate source and options is bikeparking.com tel. (888) 764-2453, Palmer Group LLC. 1728 Ocean Ave, #132, San Francisco, CA. 94112.

NOT TO SCALE



Approved by:

CITY OF LATHROP DEPARTMENT OF PUBLIC WORKS

STANDARD BIKE RACK



STANDARD DETAIL

L-32

Date: **JULY 2024**Drawing No:

DOGIPOT PET STATION (ITEM #1003-L) (ITEM #1003BLK-L)

- (A) DOGIPOT PET SIGN
 - •H: 18" X W: 11.5"
 - •14 gauge reflective aluminum
 - Weight: 1.35 lbs
 - Forest green on white
- (B) ALUMINUM DOGIPOT JUNIOR BAG DISPENSER
 - •H: 15'5" X W: 9.4" X D: 3.25"
 - 12 gauge powder coated forest green aluminumWeight: 7 lbs

 - 400 bag capacity
 - Two diamond shaped bag dispenser slots
 - Front locking access panel
 - Clearly posted instructions
- (C) STEEL TRASH RECEPTACLE WITH LID

 - H: 23" X 11.5" diameter16 gauge powder coated forest green steel
 - Weight: 14.6 lbs
 - •10 gallon capacity with interior trash line bag retainer bands
 - Attached stainless steel hinged lid
 - •One (1) box 50 count DOGIPOT Smart Liner Trash Bags (ITEM #1404) included (5lbs)
- (D) TELESCOPIC GALVANIZED STEEL MOUNTING POST
 - 2"X2"8'
 - •11 guage galvanized steel
 - Weight: 15 lbs

TOTAL HEIGHT FROM ABOVE GROUND:

SPACE BETWEEN DISPENSER AND SIGN:

SPACE BETWEEN RESCEPTACLE AND DISPENSER:

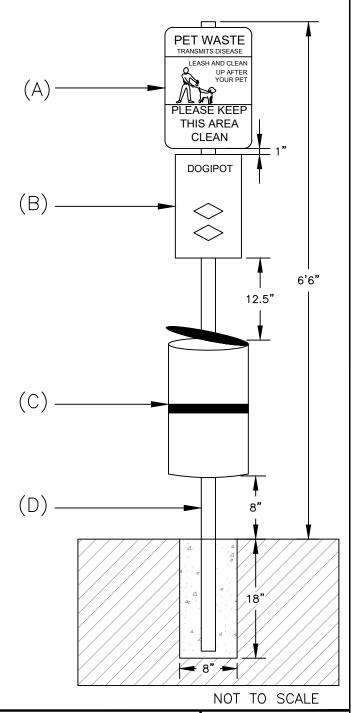
•12.5"

SPACE BETWEEN GROND AND RESCEPTACLE:

•8"

HOLE:

- •D: 18.0"X W: 8.0"
- •FILL with 40 lbs "ready to use" cement



Approved by: City Of Lathrop

City Engineer Revised Date **CITY OF LATHROP DEPARTMENT OF PUBLIC WORKS**

DOGIPOT PET STATION



STANDARD **DETAIL**

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