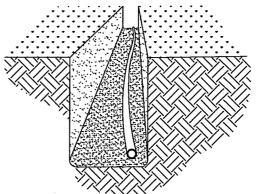


W WATER SUPPLY LINE

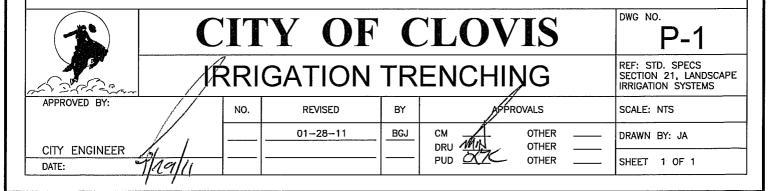
S SPRINKLER LINE

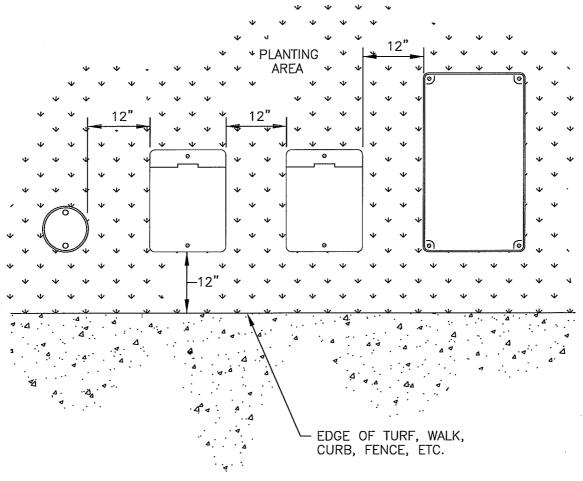
E ELECTRICAL WIRING, INCLUDES LOW VOLTAGE AND/OR 120 V. SERVICE

SNAKE PIPE A MINIMUM OF 1' PER 100' OF PIPE TO ALLOW EXPANSION AND CONTRACTION

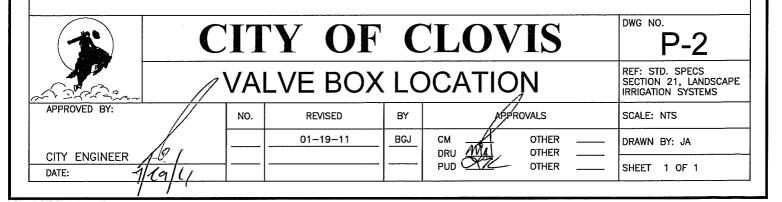


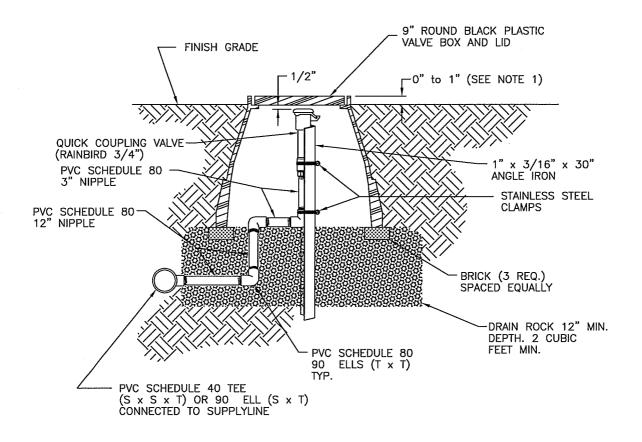
- SAND BEDDING/APPROVED BACKFILL REQUIRED TO 6" ABOVE MAINLINE PIPE. REMAINDER MAY BE FILLED WITH RECOMPACTED EXCAVATED FILL DIRT FREE OF UNSUITABLE MATERIAL, ROCKS, AND HARDPAN.
- 2. SPRINKLER LINE COVER, "D" MAINLINES, D=24" MINIMUM MAINLINE WITH SLEEVE UNDER PAVEMENT, D=24" NON-PRESSURE ROTARY POP-UP LATERALS, D=18" NON-PRESSURE POP-UP SPRAY HEAD LINES, D=12"
- 3. WATER SUPPLY AND SPRINKLER LINES SHALL BE INSTALLED IN GALVANIZED IRON SLEEVING UNDER PAVEMENT OR HARDSCAPE. SLEEVES TO BE 2" GREATER I.D.
- 4. 120 V ELECTRICAL WIRING SHALL BE IN PVC SCHEDULE 40 TYPE II. LOW VOLTAGE WIRING (24 V) SHALL BE IN CONDUIT UNDER PAVEMENT OR HARDSCAPE, OR DIRECT BURIAL IN UNPAVED AREAS.





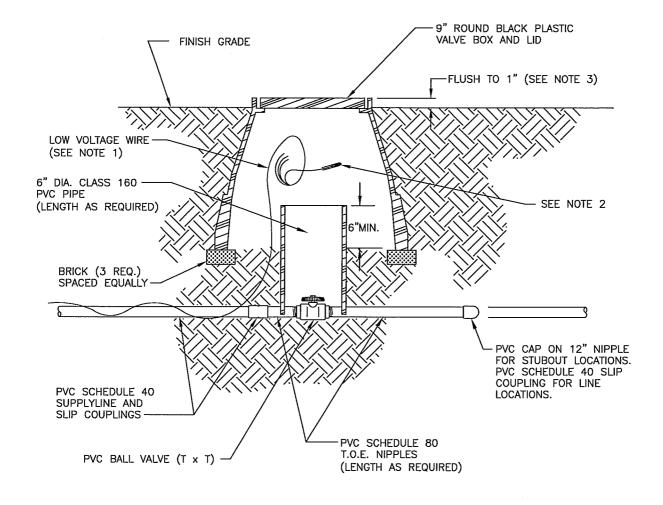
- 1. MAINTAIN 12" SEPARATION BETWEEN BOXES, AND FROM CONCRETE IMPROVEMENTS. BOXES TO BE PARALLEL TO EACH OTHER AND PERPENDICULAR TO CONCRETE IMPROVEMENTS.
- 2. WHEREVER POSSIBLE, BOXES SHOULD BE LOCATED IN GROUND COVER OR SHRUB AREAS RATHER THAN TURF AREAS.
- 3. TOP OF BOXES TO BE SET 1" ABOVE GROUND IN GROUND COVER AND SHRUB AREAS, OR EVEN WITH GROUND LEVEL IN TURF AREAS.
- 4. VALVES, ETC. TO BE CENTERED INSIDE BOXES TO FACILITATE SERVICING.
- 5. AVOID HEAVILY COMPACTING SOIL AROUND BOXES TO PREVENT COLLAPSING OR DEFORMING SIDES OF THE BOXES.



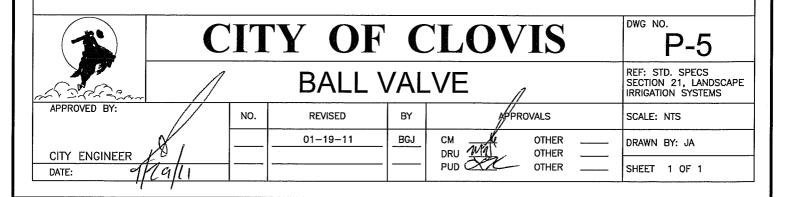


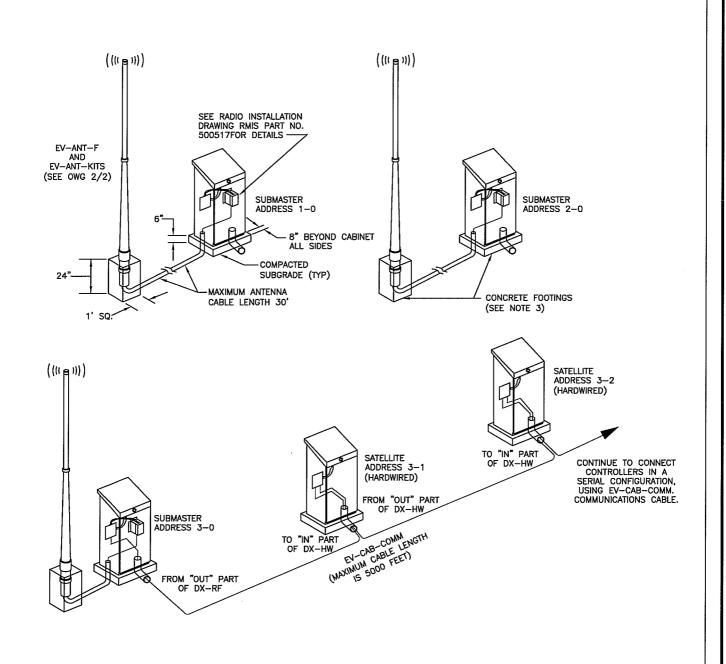
1. SET TOP OF BOX EVEN WITH FINISH GROUND LEVEL IN TURF AREAS, 1" ABOVE GROUND LEVEL IN GROUND COVER AND SHRUB AREAS.

1	C	P-4						
	Q	REF: STD. SPECS SECTION 21, LANDSCAPE IRRIGATION SYSTEMS						
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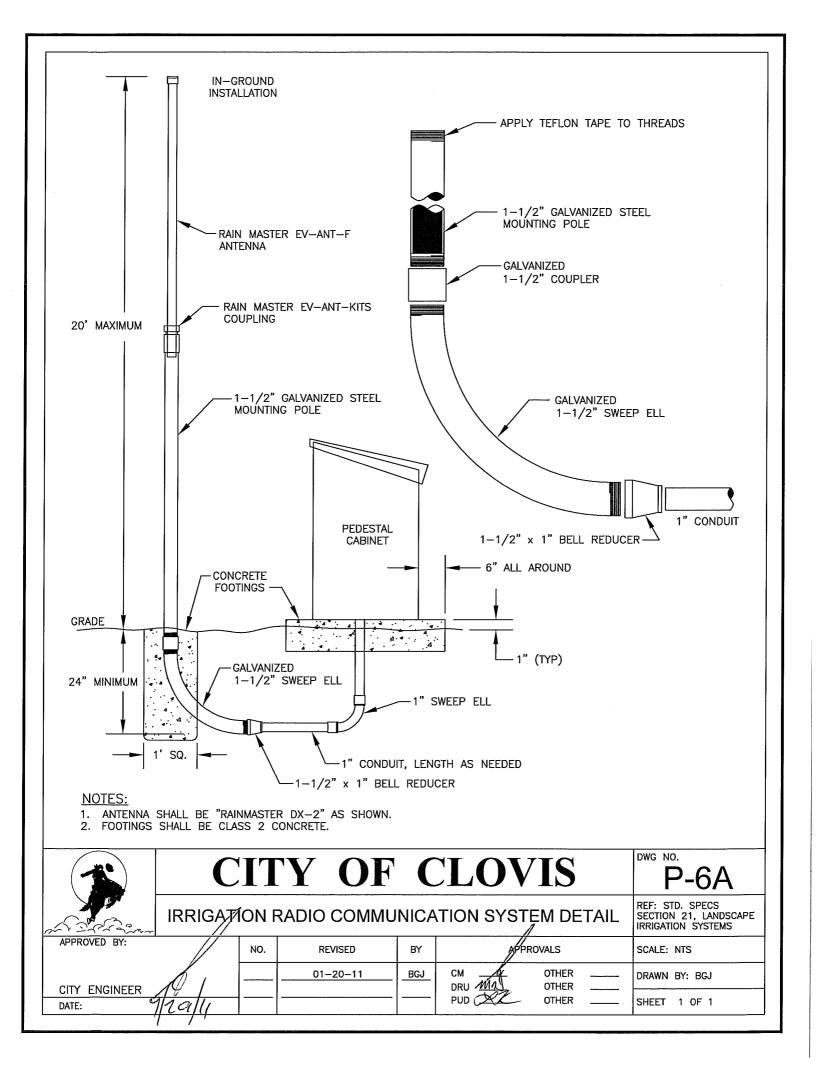
- IN STUBOUT LOCATIONS, A MINIMUM OF 36" OF EXCESS LOW VOLTAGE WIRE TO BE COILED AND STORED FOR FUTURE USE.
- 2. IN STUBOUT LOCATONS, THE COMMON WIRE SHALL BE TERMINATED WITH A WATERPROOF INSULATING CONNECTOR. SEE STANDARD DRAWING FOR WIRE CONNECTOR.
- 3. SET TOP OF BOX EVEN WITH FINISH GROUND LEVEL IN TURF AREAS, 1" ABOVE GROUND LEVEL IN GROUND COVER AND SHRUB AREAS.

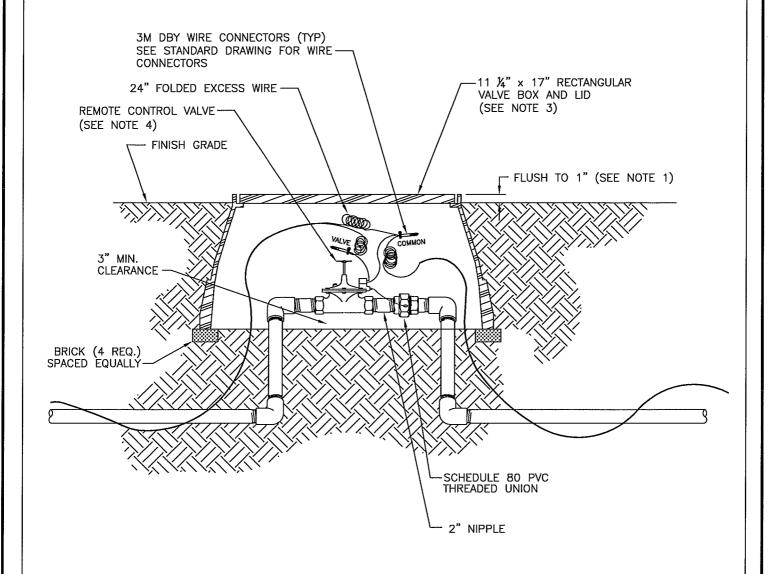




- RADIO COMMUNICATIONS SYSTEM SHALL BE "RAINMASTER DX-2."
 LOCATION AND INSTALLATION SHALL BE AS SHOWN ON THE PROJECT PLANS AND PER MANUFACTURER'S RECOMMENDATIONS.
- 3. FOOTINGS FOR RADIO PEDESTAL AND ANTENNA SHALL BE CL 2 CONCRETE.

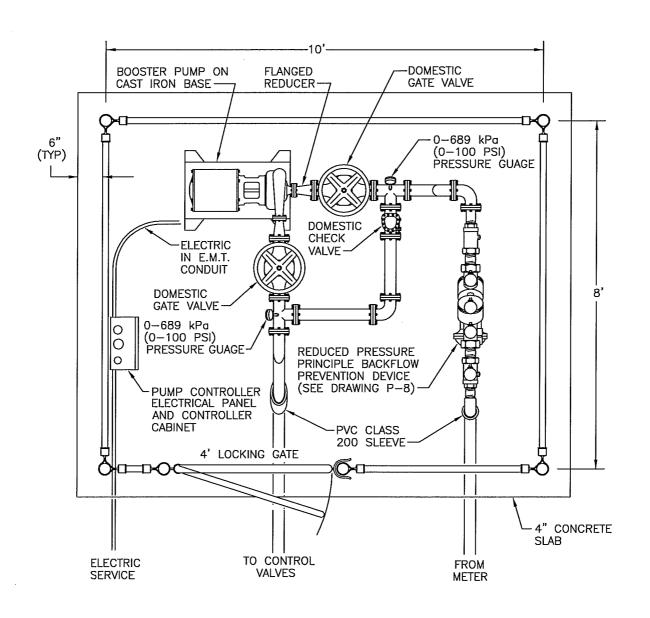
1	C	P-6					
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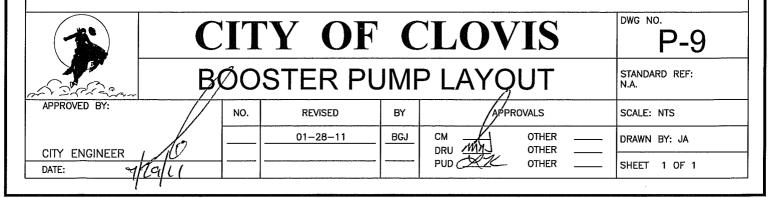


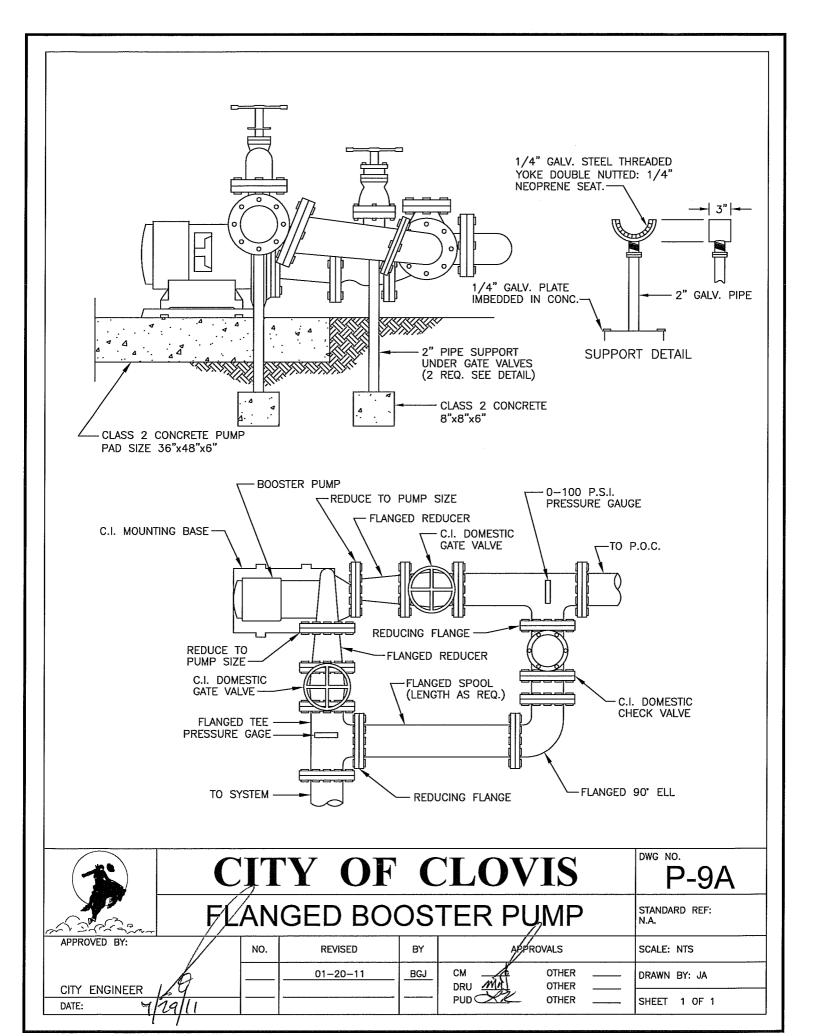
- 1. SET TOP OF BOX EVEN WITH FINISH GROUND LEVEL IN TURF AREAS; 1" ABOVE GROUND LEVEL IN GROUND COVER AND SHRUB AREAS.
- 2. ALL PIPING AND FITTINGS SHALL CONFORM TO STD. SPEC. SECTION 21.5 "MATERIALS".
- VALVE BOX SHALL BE CHRISTY FIBERLYTE, 11 1/4" X 17".
 REMOTE CONTROL VALVE SHALL BE IRRITROL SERIES 100 OR 102.
- CONTROL WIRING SHALL BE DIRECT BURIAL AWG-UF TYPE; "HOT" WIRE NOT SMALLER THAN AWG NO. 14; COMMON WIRE NOT SMALLER THAN AWG NO. 12.

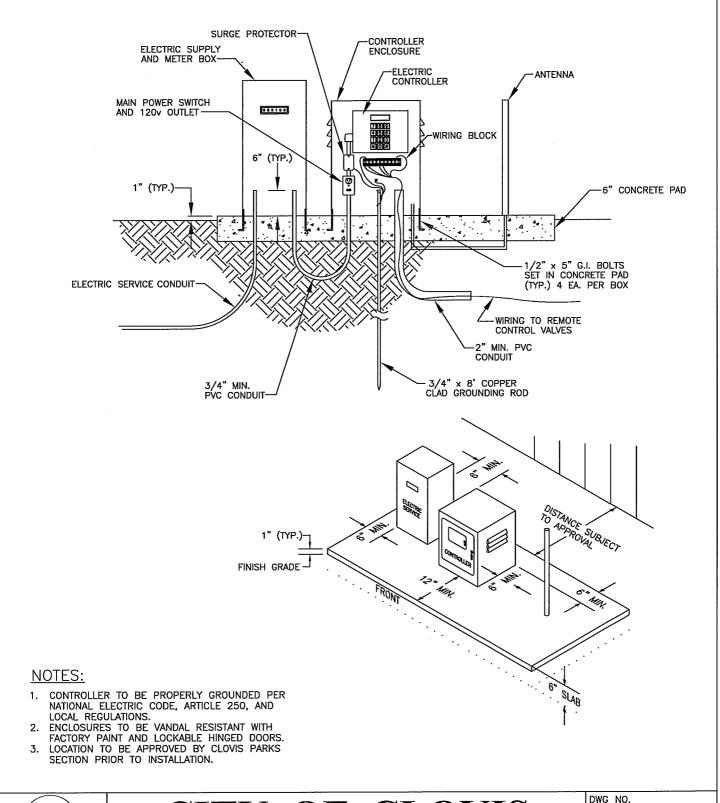
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	I BRIVIOTE CONTROL VALVE I							STANDARD REF: N.A.	
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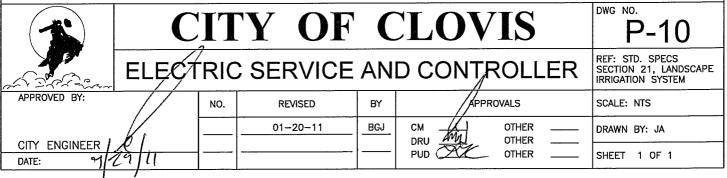


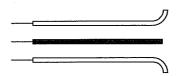
- 1. HARDWARE SIZES (SERVICE SIZE) TO BE DETERMINED BY ENGINEER. ALL HARDWARE DOWNSTREAM OF BACKFLOW PREVENTER TO HAVE FLANGED CONNECTIONS.
- 2. DOMESTIC GATE VALVES TO BE SUPPORTED ON 2" PIPE SUPPORTS MOUNTED W/FLANGES ON CONCRETE PAD. ADDITIONAL SUPPORTS MAY BE REQUIRED ON LARGE SERVICES.
- 3. ENCLOSURE TO CONSIST OF CHAINLINK FENCE WITH DECORATIVE VERTICAL SLATS AND LOCKING GATE. SEE DRAWINGS ST-34, ST-34A.
- 4. ABOVE GROUND PIPE AND FITTINGS TO BE WRAPPED AND TIED WITH INSULATION AND BURLAP.



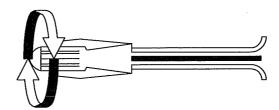




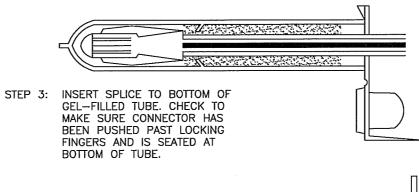


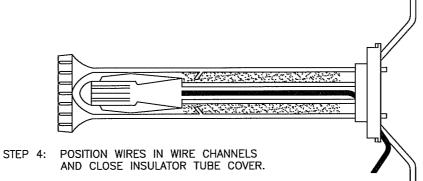


STEP 1: STRIP WIRES 1/2" FROM ENDS.



STEP 2: APPLY SCOTCHLOK Y SPRING CONNECTOR IN A CLOCKWISE DIRECTION.

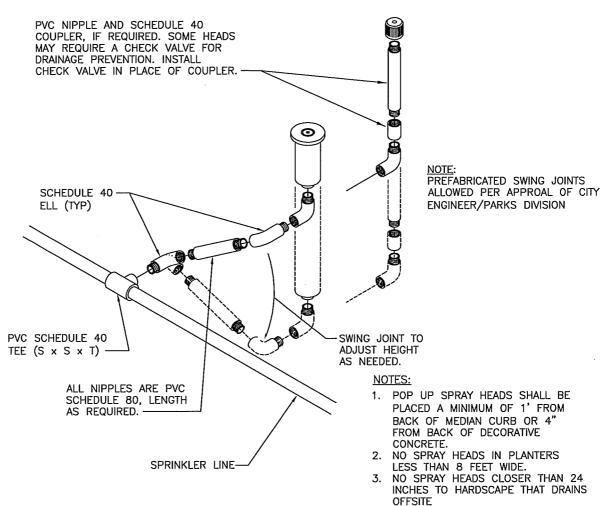


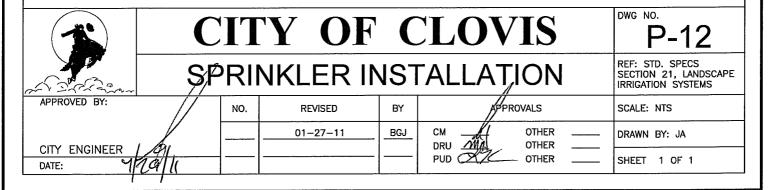


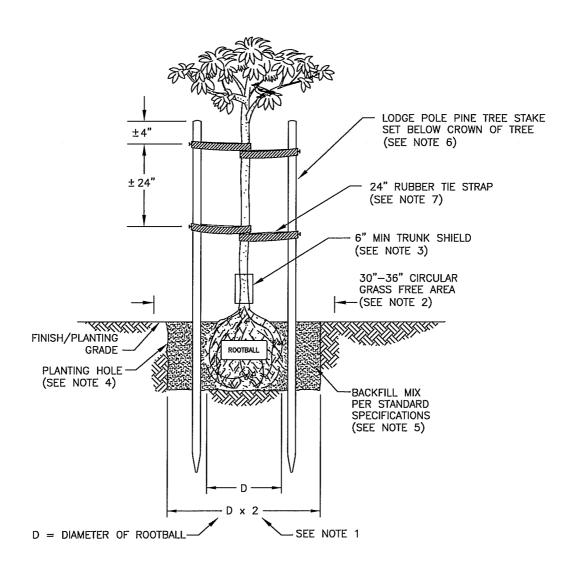
NOTE: MAXIMUM WIRE SIZES PER CONNECTOR ARE 3 - #14'S OR 2 - #12'S.

	C	P-11					
Charles Com	3M	REF: STD. SPECS SECTION 21, LANDSCAPE IRRIGATION SYSTEMS					
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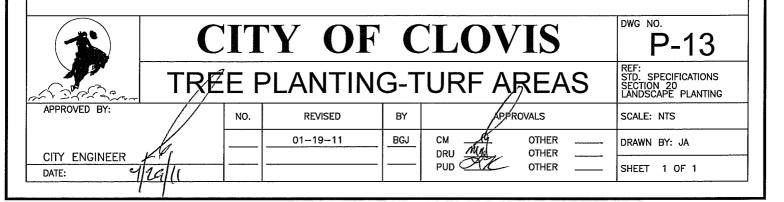
SPRINKLER HEAD CLEARANCES											
			CLEARANCE FROM								
	HEIGHT ABOVE GROUND	BACK OF MEDIAN CURBS OR DECORATIVE CONCRETE	SIDEWALK, CURB, OR HEADERS	BUILDINGS	FENCES	HARDSCAPE ETC. IN TURF AREAS					
EMITTER	2" ± ½"										
BUBBLER	2" ± ½"										
ROTOR POP-UP	1/2"	12"	2" ± ½"								
12" ROTOR POP-UP	1/2"	6"-12"	2"-6"	12"	6"						
12" POP-UP SPRAY	1/2"	12" ± 1"	6" ± ½"	12" ± 1"	12" ± 1"						
4" POP-UP SPRAY	1/2"	12" ± 1"	2" ± ½"	12" ± 1"	12" ± 1"	2" ± ½"					
6" POP-UP SPRAY	1/2"	12" ± 1"	6" ± ½"	12" ± 1"	12" ± 1"	12" ± 1"					

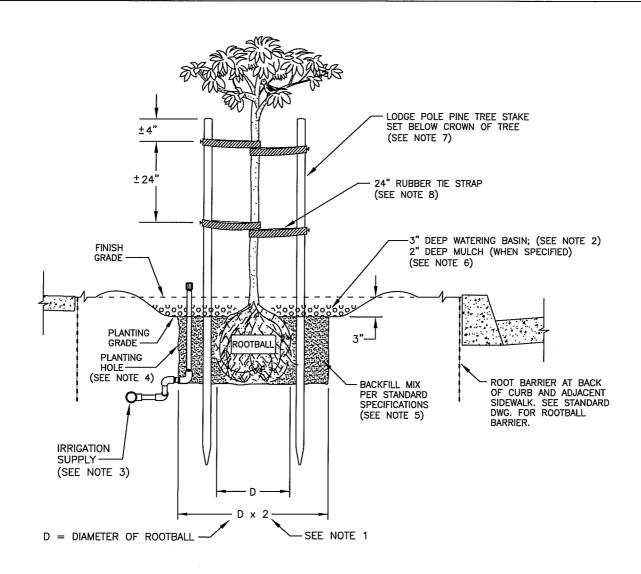






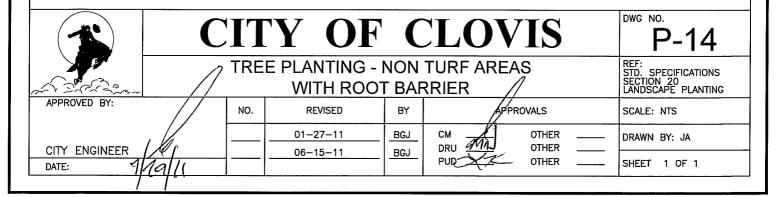
- DIG PLANTING HOLE TWICE THE DIAMETER OF THE ROOTBALL. IF IMPERVIOUS MATERIAL IS ENCOUNTERED, AUGER 12" DIAMETER DRAINAGE HOLE PER STANDARD SPECIFICATIONS.
- 2. PROVIDE 30"-36" DIAMETER CIRCULAR GRASS FREE AREA, CENTERED ON TREE.
- 3. PROVIDE 6" HIGH (MIN) TRUNK SHIELD.
- 4. SET TREE WITH TOP OF ROOTBALL APPROXIMATELY 1" ABOVE PLANTING GRADE. IF NECESSARY, ADJUST BOTTOM OF HOLE WITH BACKFILL MIX TO RAISE ROOTBALL. SCORE SIDES OF ROOTBALL APPROXIMATELY 1" DEEP TO PREVENT CIRCLING ROOTS.
- 5. FILL PLANTING HOLE TO PLANTING GRADE WITH BACKFILL MIX AS SPECIFIED, COMPACT LIGHTLY.
- 6. FOR DECIDUOUS TREES, DRIVE 2 TREE STAKES, 1 SOUTHWEST AND 1 NORTHEAST OF TREE. STAKES SHOULD BE 12" FROM TREE AND SET WITH TOP BELOW CROWN OF TREE. FOR CONIFERS, DRIVE STAKE NORTHWEST OF TREE.
- 7. SUPPORT TREE USING RUBBER TIE STRAPS NAILED TO TREE STAKES.

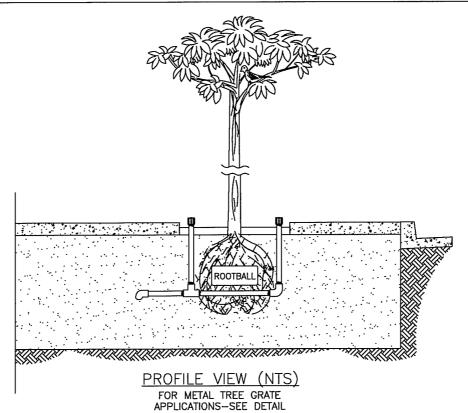


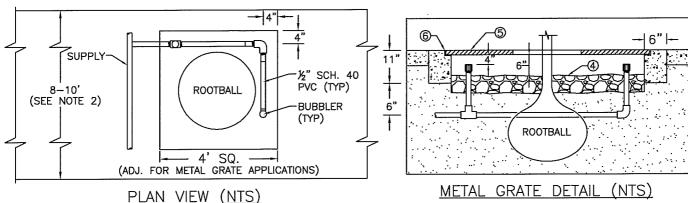


- DIG PLANTING HOLE TWICE THE DIAMETER OF THE ROOTBALL. IF IMPERVIOUS MATERIAL IS ENCOUNTERED, AUGER 12" DIAMETER DRAINAGE HOLE PER STANDARD SPECIFICATIONS.
- FORM A 3" DEEP CIRCULAR BASIN AROUND TREE.
- 3. INSTALL IRRIGATION FACILITIES AS SPECIFIED.
- 4. SET TREE WITH TOP OF ROOTBALL APPROXIMATELY 1" ABOVE PLANTING GRADE. IF NECESSARY, ADJUST BOTTOM OF HOLE WITH BACKFILL MIX TO RAISE ROOTBALL. SCORE SIDES OF ROOTBALL APPROXIMATELY 1" DEEP TO PREVENT CIRCLING ROOTS.

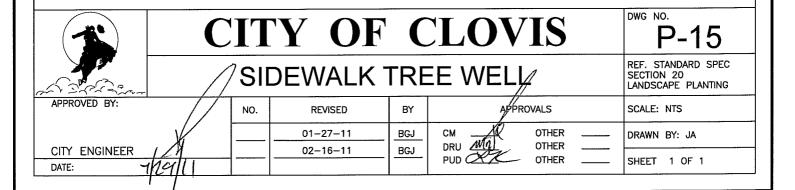
 5. FILL PLANTING HOLE TO PLANTING GRADE WITH BACKFILL MIX AS SPECIFIED, COMPACTING
- LIGHTLY.
- 6. COVER WITH 2" OF MULCH WHEN SPECIFIED.
- 7. FOR DECIDUOUS TREES, DRIVE 2 TREE STAKES, 1 SOUTHWEST AND 1 NORTHEAST OF TREE. STAKES SHOULD BE 12" FROM TREE AND SET WITH TOP BELOW CROWN OF TREE. FOR CONIFERS, DRIVE 1 STAKE NORTHWEST OF TREE.
- 8. SUPPORT TREE USING RUBBER TIE STRAPS NAILED TO TREE STAKES.

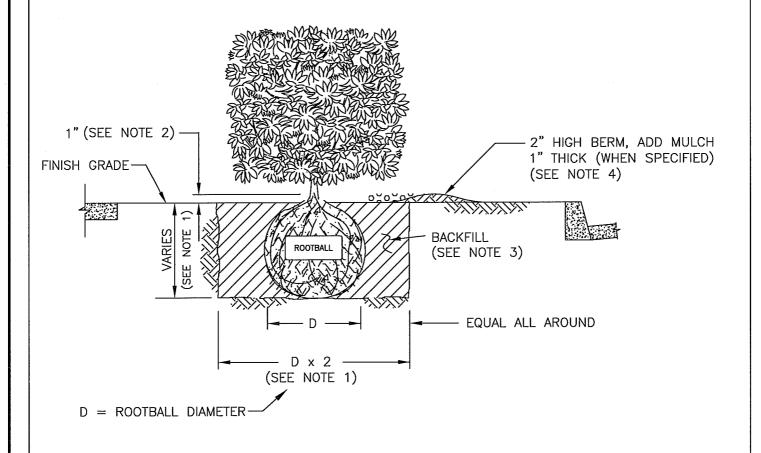




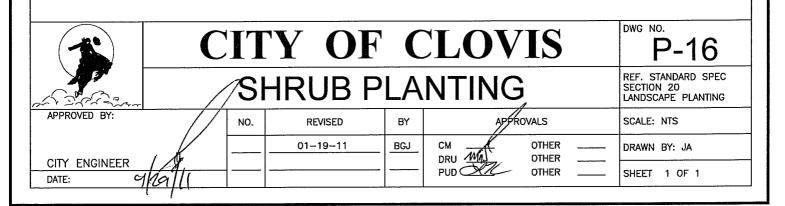


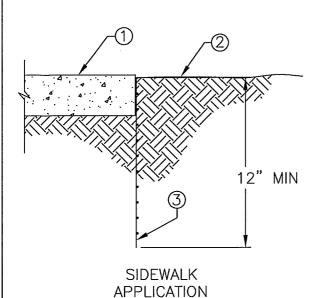
- 1. STRUCTURAL SOIL SHALL BE "ROSENBALM ROCKERY'S" OR APPROVED EQUAL
- 2. THE ACTUAL LENGTH, WIDTH AND DEPTH OF STRUCTURAL SOIL WILL BE DETERMINED BY THE DESIGN ENGINEER.
- 3. FOR NON-GRATE APPLICATIONS COVER S. SOIL WITH 3" THICK BARK MULCH.
- 4. FOR GRATE APPLICATIONS, COVER S. SOIL WITH 3" OF 1" RIVER ROCK.
- 5. METAL GRATE SHALL BE EAST JORDAN IRON WORKS MODEL V-8954, ADA SQUARE SERIES, 48" SQUARE WITH 16" DIAMETER TREE OPENINGS, 2 PIECE STEEL FRAME, OR APPROVED EQUAL. (800-626-4653, http://ejiw.com)
- 6. 1"x6" CLASS 2 CONCRETE FOOTING; NOTCH 11/2" SEAT WITH DEPTH TO PROVIDE FLUSH FIT FOR GRATE. INSTALL FOOTING ALL 4 SIDES.

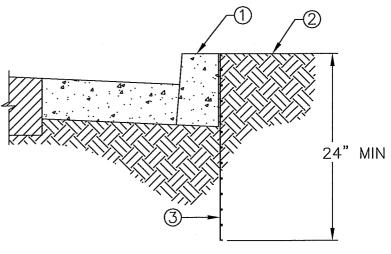




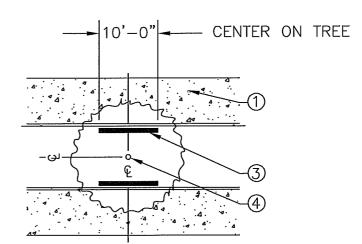
- DIG PLANTING HOLE TWICE THE DIAMETER OF THE ROOTBALL TO DEPTH EQUAL TO PLANNED DEPTH OF ROOTBALL. IF IMPERVIOUS MATERIAL IS ENCOUNTERED, AUGER 12" DIAMETER DRAINAGE HOLE PER STANDARD SPECIFICATIONS.
- 2. SET SHRUB WITH TOP OF ROOTBALL APPROXIMATELY 1" ABOVE FINISH GRADE. IF NECESSARY, ADJUST BOTTOM OF HOLE WITH BACKFILL TO RAISE ROOTBALL. CUT SIDES ROOTBALL TO MIDDLE OF ROOTBALL AT 3 EQUIVALENT LOCATIONS TO PREVENT CIRCLING ROOTS.
- 3. BACKFILL HOLE TO FINISH GRADE WITH NATIVE SOIL REMOVED FROM PLANTING HOLE; REMOVE ROCKS, HARDPAN, DELETERIOUS MATERIAL. COMPACT LIGHTLY.
- 4. WHEN SPECIFIED, COVER WITH 1" THICK MULCH LAYER; KEEP CLEAR OF TRUNK BASE; FORM A BERMED 2" DEEP CIRCULAR BASIN AROUND SHRUB.



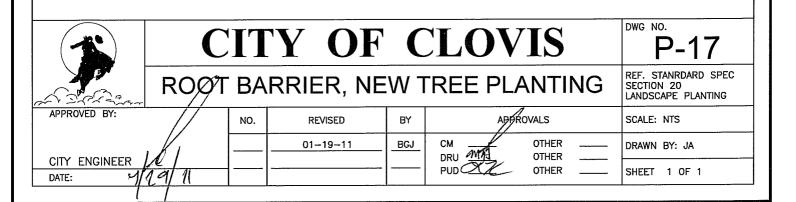




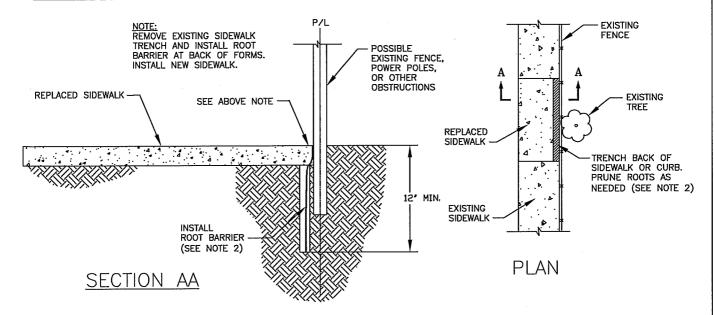
CURB OR CURB AND GUTTER APPLICATION



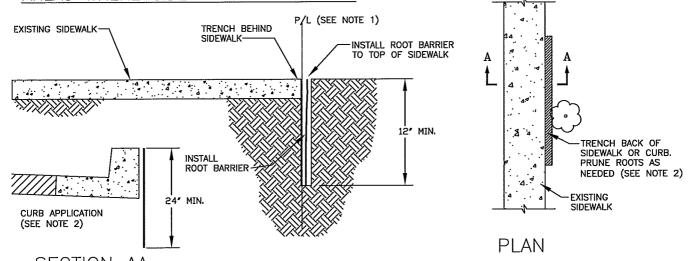
- 1) PROPOSED OR EXISTING CONCRETE CURB OR WALK, (TYP.)
- (2) FINISHED GRADE OF PLANTING AREA
- (3) INSTALL 12" OR 24" (AS SHOWN)
 DEEP ROOT CONTROL BARRIER, CENTER
 BARRIER ON TREE
- (4) PROPOSED TREE.



AREAS WHERE SIDEWALK OR CURB IS BEING REPLACED



AREAS WHERE SIDEWALK IS TO REMAIN

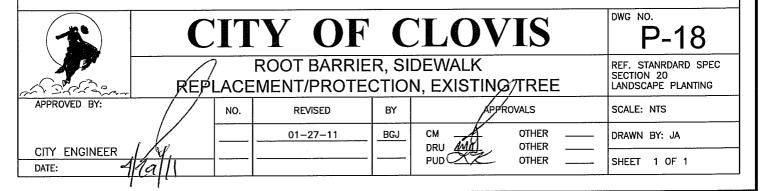


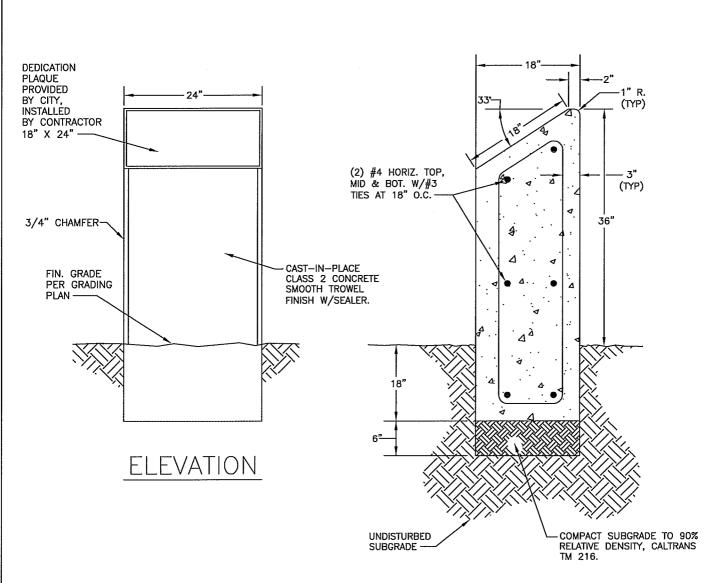
SECTION AA

NOTE:

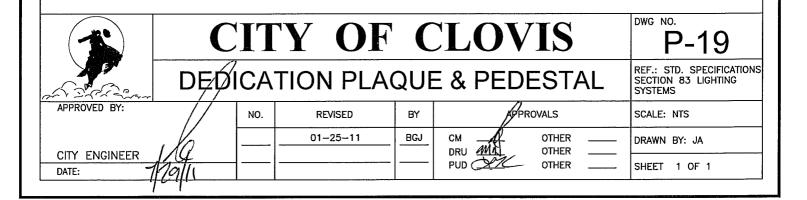
CURB TO BE APPROVED ROOT CONTROL BARRIER INSTALLED PER MANUFACTURER'S SPECIFICATIONS.

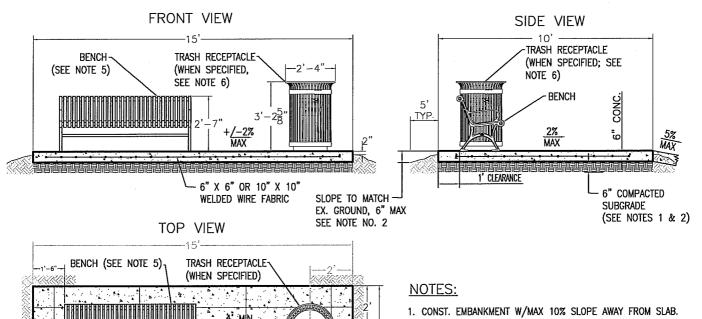
- 1. IF ADJACENT PROPERTY IS PRIVATE, A CONSTRUCTION EASEMENT OR RIGHT OF ENTRY IS REQUIRED.
- 2. LENGTH AND PLACEMENT LOCATION OF BARRIER IS DEPENDENT ON EXTENT OF ROOT INTRUSION. TO BE DETERMINED BY THE ENGINEER.

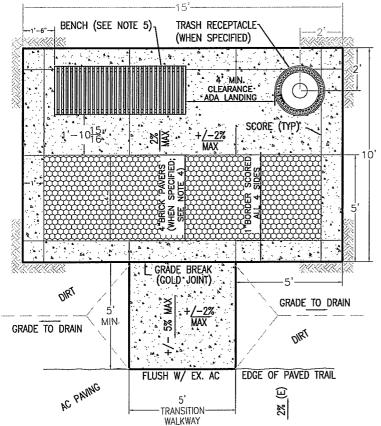




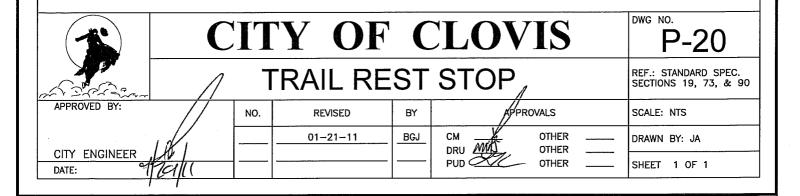
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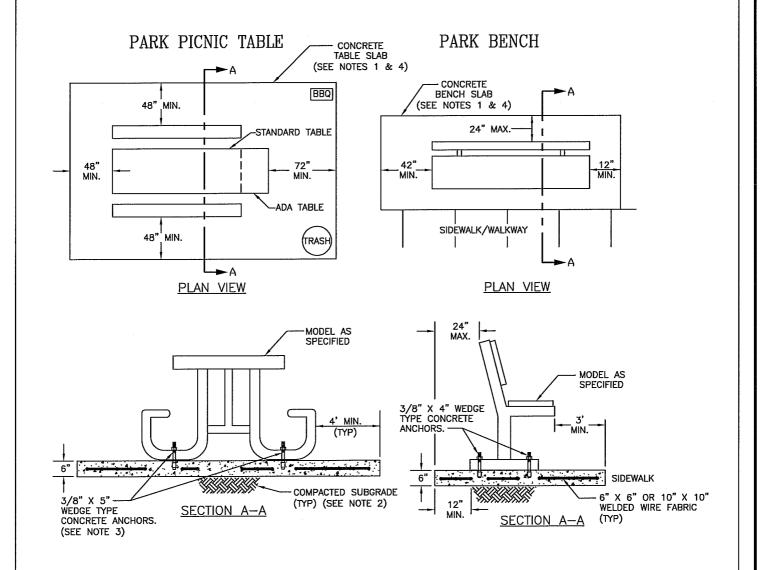




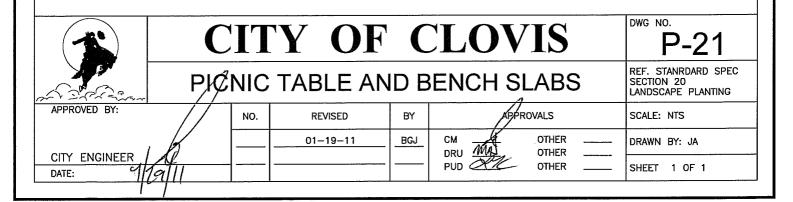


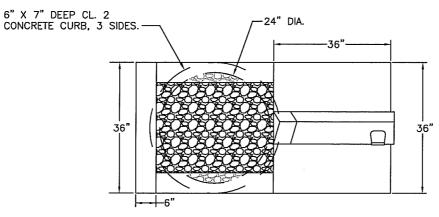
- COMPACT SUBGRADE TO 90% REL. COMPACTION PER CALTRANS T.M. 216.
- CONCRETE SHALL BE CLASS 2, MEDIUM SWEAT FINISH. APPLY 1/8" WIDE X 1/2" DEEP SCORE LINES AS SHOWN.
- 4. WHEN SPECIFIED TO BE INSTALLED IN LIEU OF COMPLETE CONC. SLABS, BRICK PAVERS SHALL BE UNI-DECOR OR APPROVED EQUAL W/ BASKET WEAVE PATTERN.
- 5. BENCH SHALL BE 6-FT., VICTOR STANLEY, INC., CLASSIC SERIES CR-96, OR APPROVED EQUAL, MOUNTED TO SLAB PERMANENTLY USING METHODS APPROVED BY THE MANUFACTURER OR THE ENGINEER.
- 6. WHEN SPECIFIED TO BE INSTALLED, 36-GAL. TRASH RECEPTACLE SHALL BE VICTOR STANLEY, INC. IRONSITES SERIES S-42 OR APPROVED EQUAL. RECEPTACLE TO BE PERMANENTLY AFFIXED TO CONC. SLAB IN AN APPROVED MANNER.



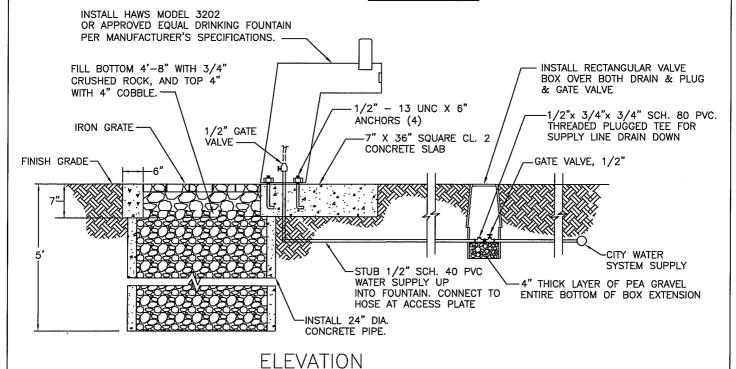


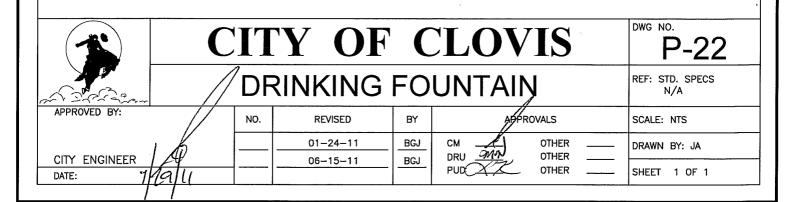
- 1. CONCRETE SLABS TO BE CLASS 2, MEDIUM SWEAT FINISH.
- 2. COMPACT SUBGRADE TO 90% REL. COMPACTION PER CALTRANS T.M. 216.
- 3. ANCHORS MAY VARY ACCORDING TO BENCH AND TABLE MODELS.
- 4. OVERALL EXTERIOR DIMENSIONS OF SLABS WILL VARY AT EACH INSTALLATION.

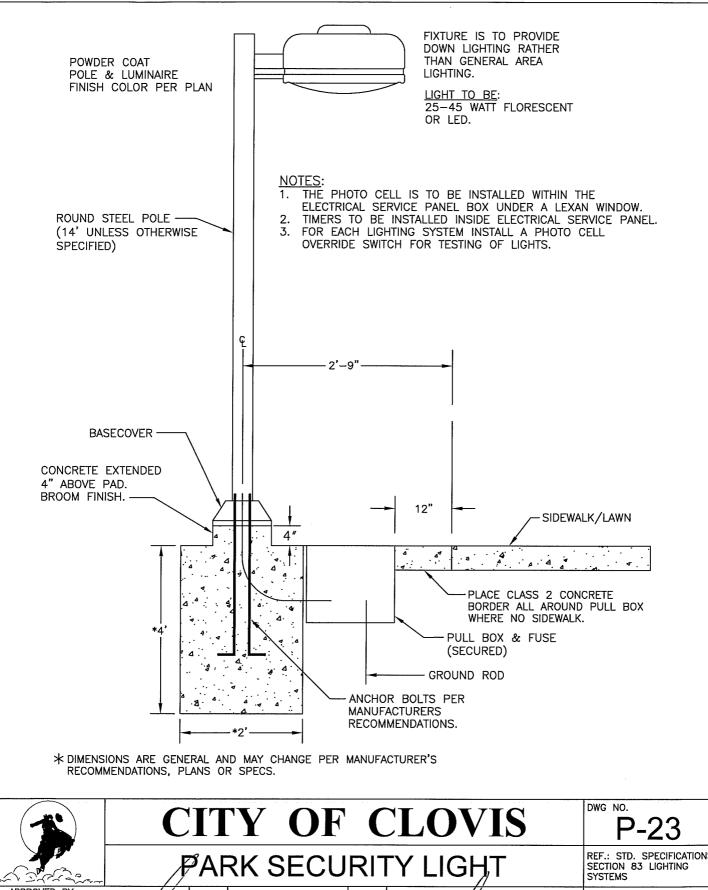




PLAN VIEW







REF.: STD. SPECIFICATIONS APPROVED BY: REVISED PROVALS SCALE: NTS BGJ 01-24-11 CM OTHER DRAWN BY: JA DRU MA OTHER CITY ENGINEER BGJ 02-16-11 PUD 💎 OTHER SHEET 1 OF 1 DATE: