Electric
Underground Distribution
Specifications

Revision No. 9 May 2004

Table of Contents

Part I

Electric Underground Distribution Specifications

Table of Contents (continued)

Table of Contents (continued)

Table of Contents (continued)

Part II

Metering Specifications

NOTE:

1. Except as noted, PVC, Type DB 120 (ASTM F 512 and NEMA TC–8, gray in color) conduit (minimum) will be used for conduit installations.

2. Except as noted, primary and secondary conduit elbows shall have a 36 in. radius.

3. Except as noted, service conduit elbows shall have a 24 in. radius.

4. Grounding per 314 1007 shall be installed at each primary junction box, transformer pad site, riser pole, switch pad location and each location otherwise noted on plans.

5. A 3/16" polypropylene pull rope must be installed in all conduits. The open end of all conduits must be protected in such a manner that it prohibits dirt or debris from entering.

6. Backfill shall be done such that conduit riser(s) will be disturbed as little as possible from their intended location.

7. Backfill shall be made with clean soil, free of rocks and other material that may damage conduit(s). City of Lodi, Electric Utility Department, shall maintain the right of refusal for the use of native backfill around conduit(s).

8. When native backfill cannot be used for backfill, the developer shall backfill around conduit(s) with clean sand to a minimum of 3 in. above the level of the conduit(s).

9. All trenches shall be backfilled and compacted per city specifications.

10. It is the developer's responsibility to install the remaining service conduit from the service stub at the back of the PUE to the service equipment (including excavation, backfill and compaction).

11. All conduit shall be proved in a manner acceptable to the Electric Utility Department. Conduit shall be free of dirt, rocks or other obstructions which could prevent, hinder or harm the installation of electric cable.

12. Electrical substructures (vaults, conduit, grounding, etc.) to be inspected by the Electric Utility Department for proper installation prior to backfill of any excavation. Call (209) 333–6817 to schedule substructure inspection. The developer shall notify the Electric Utility Department 48 hours in advance of any substructure installation scheduled outside of the normal workday (Monday through Friday). Developer shall pay all overtime premiums associated with inspections outside of the normal workday.

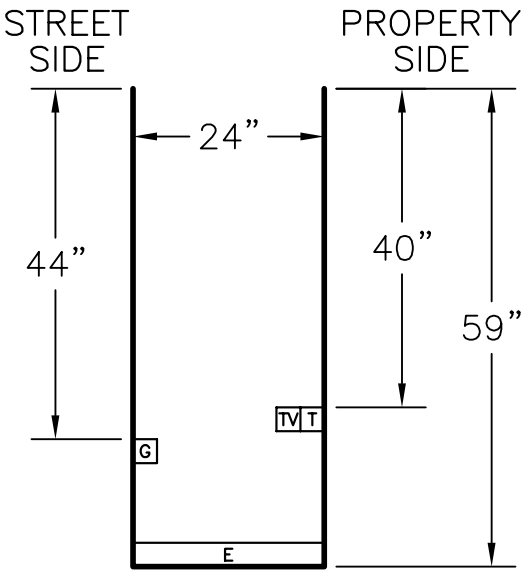
Drawing name: M:\DATA\CAD\Standards\UG\0311\2001.dwg Plotted: Jun.02,2004 - 1:59pm

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

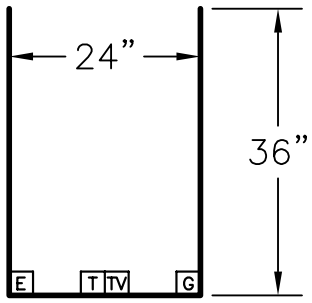
CONSTRUCTION STANDARD

UNDERGROUND INSTALLATION GENERAL NOTES

22OCT99	BA	DJC	AMS		SHEET 1 OF 1	311 2001
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 5	

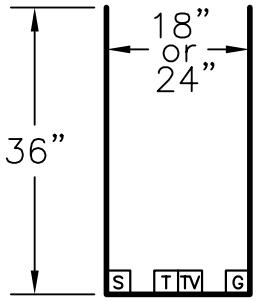


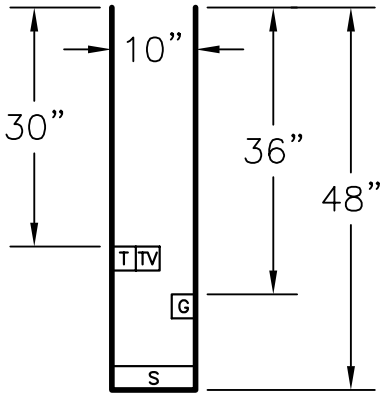
MAIN TRENCH

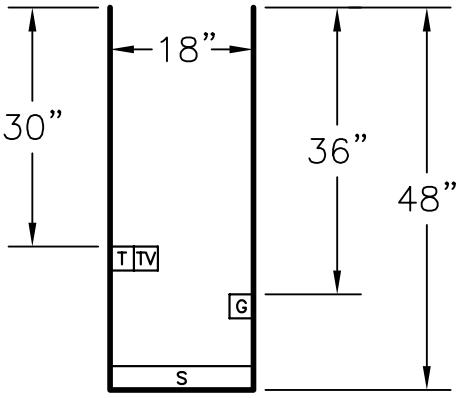


SECONDARY TRENCH

STREET CROSSING







SERVICE TRENCHES

LEGEND:

T TELEPHONE
TV CABLE TV
G GAS
S ELECTRIC SERVICE(S)
E ELECTRIC PRIMARY OR SECONDARY

Drawing name: M:\DATA\CAD\Standards\UG\0311\2002-1.dwg Plotted: Jun 02,2004 - 2:00pm

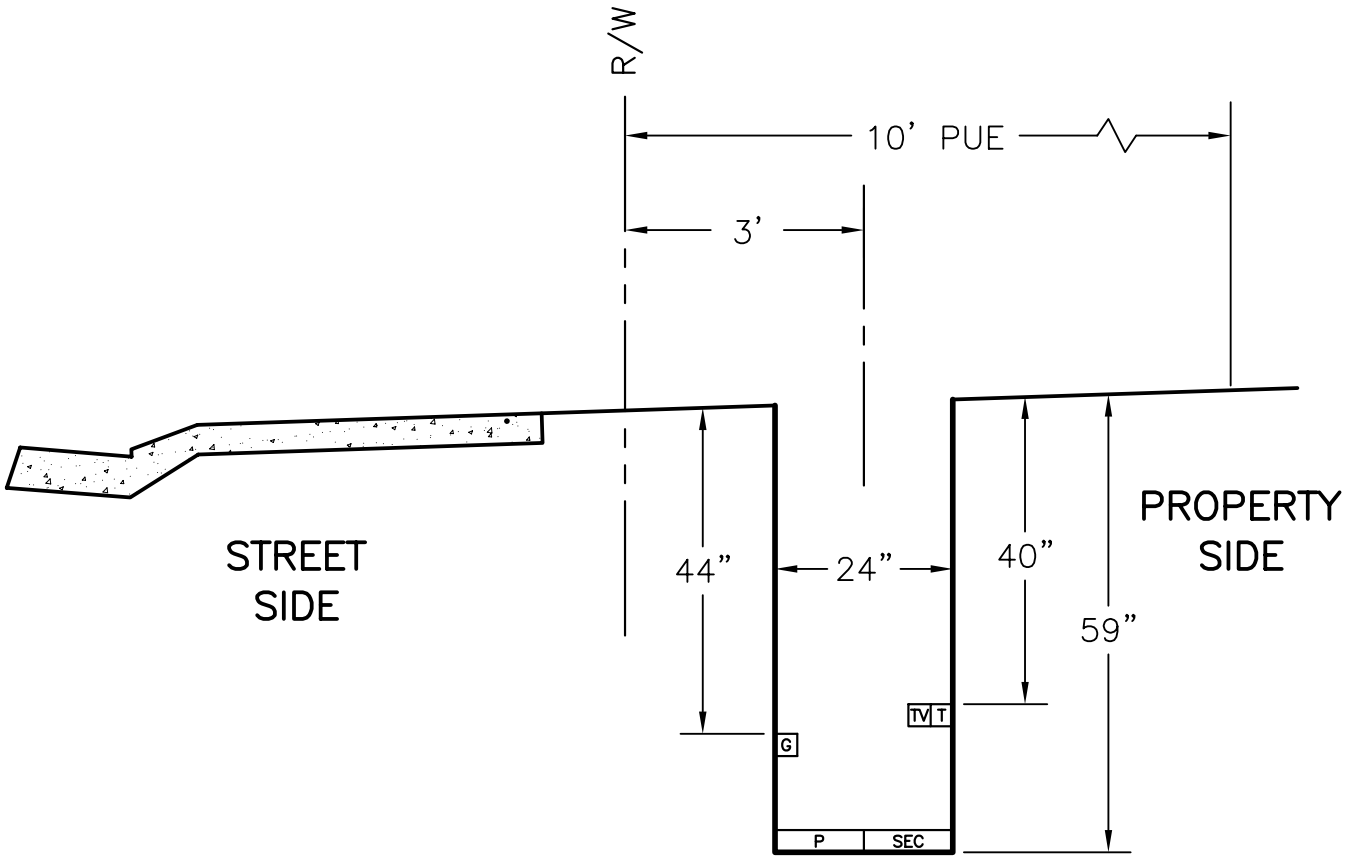
CITY OF LODI

ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

JOINT TRENCH CONFIGURATIONS AND OCCUPANCY GUIDE

30AUG96	BA	DJC	AMS		SHEET 1 OF 3	311 2002
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 6	



JOINT TRENCH

LEGEND:

P	PRIMARY CONDUITS
SEC	SECONDARY CONDUITS
G	GAS
T	TELEPHONE
TV	CABLE TV

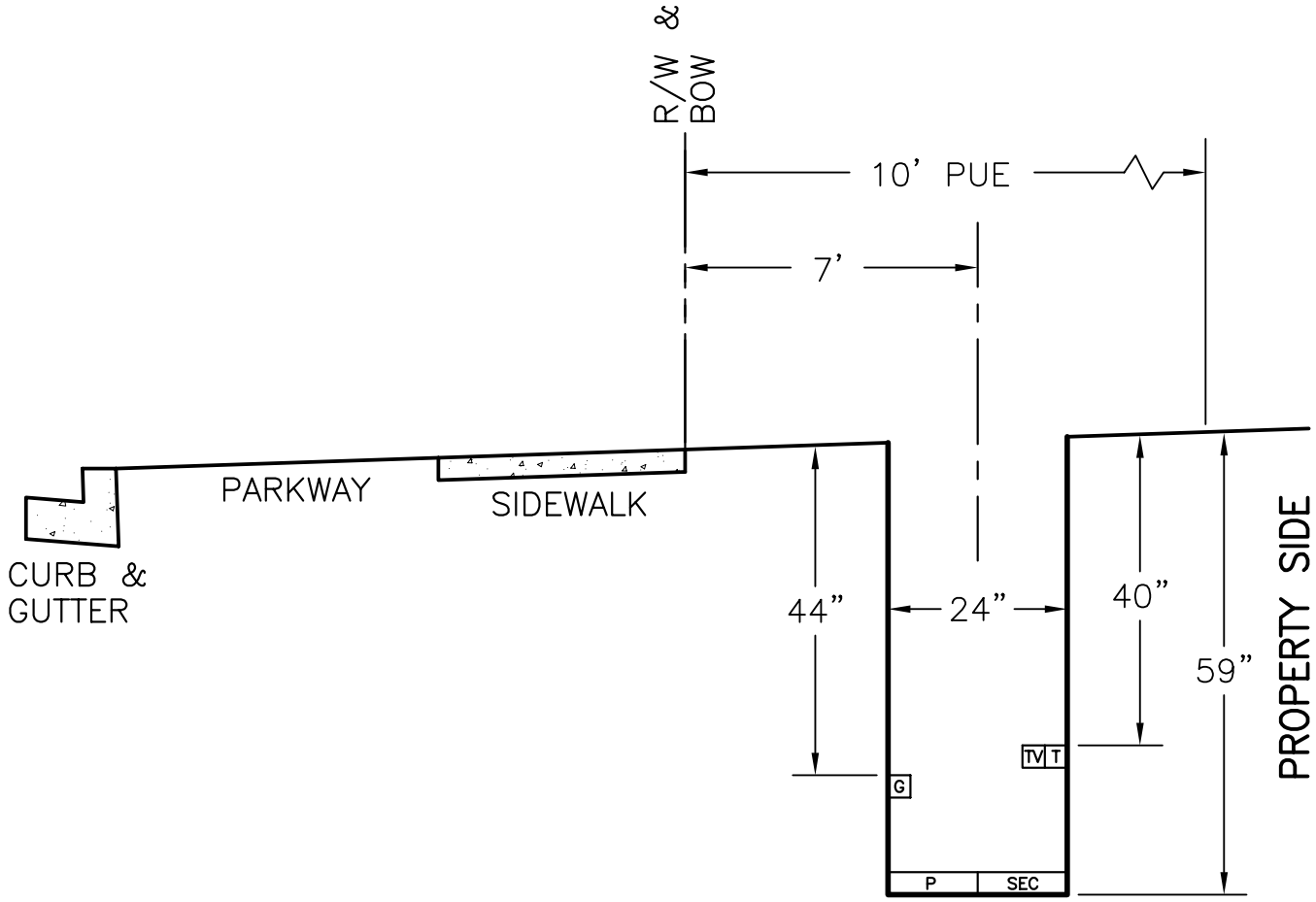
Drawing name: M:\DATA\CAD\Standards\UG\0311\2002-2.dwg Plotted: Jun 02,2004 - 2:00pm

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

JOINT TRENCH CONFIGURATIONS AND OCCUPANCY GUIDE

30AUG96	BA	DJC	AMS		SHEET 2 OF 3	311 2002
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 1	



JOINT TRENCH

LEGEND:

P	PRIMARY CONDUITS
SEC	SECONDARY CONDUITS
G	GAS
T	TELEPHONE
TV	CABLE TV

Drawing name: M:\DATA\CAD\Standards\UG\0311\2002-3.dwg Plotted: Jun 02,2004 - 2:01pm

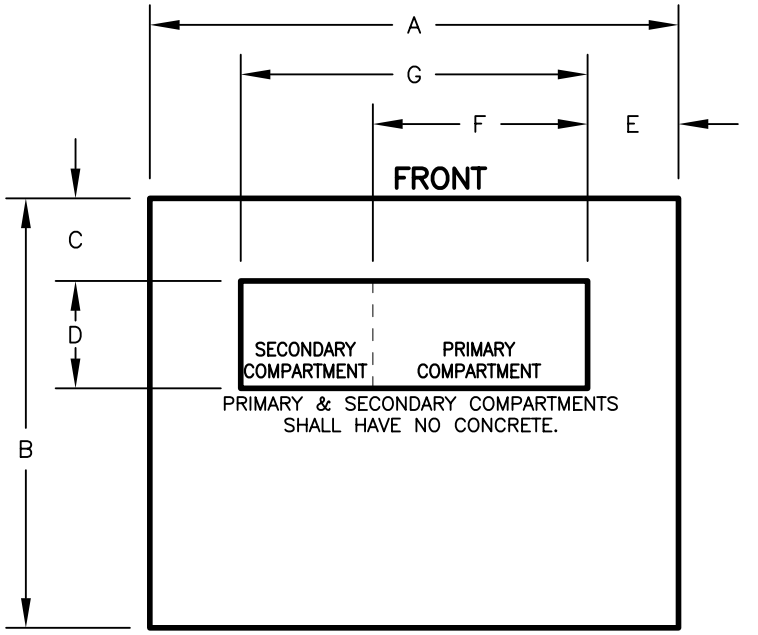
CITY OF LODI

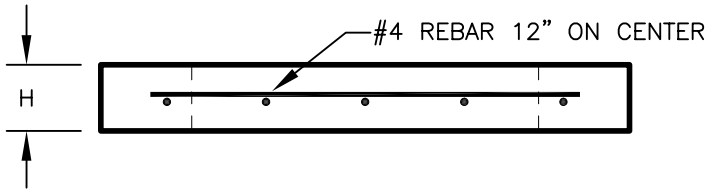
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

JOINT TRENCH CONFIGURATIONS AND OCCUPANCY GUIDE – SIDEWALK WITH PARKWAY

29MAY01	RT	DJC	AMS		SHEET 3 OF 3	311 2002
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 1	





TRANSFORMER PAD DETAIL

TRANSFORMER PAD DIMENSIONS IN INCHES

TABLE 1		
DIMENSION	PAD NUMBER	PAD NUMBER
A		
B		
C		
D		
E		
F		
G		
H		
FACE FRONT		

N=North, S=South
E=East, W=West

NOTES:

1. TRANSFORMER PAD(S) TO BE INSPECTED BY ELECTRIC UTILITY DEPARTMENT, PRIOR TO POURING. CALL (209) 333–6817 TO SCHEDULE THE TRANSFORMER PAD INSPECTION.
2. TRANSFORMER PAD(S) TO BE COMPACTED TO 90% COMPACTION. ALL BACKFILL AT TRANSFORMER PAD SITE(S) TO BE 1 ft. LIFTS. CITY OF LODI, PUBLIC WORKS DEPARTMENT, TO PROVIDE COMPACTION TESTS. CONTACT ELECTRIC UTILITY DEPARTMENT AT (209) 333–6817 FOR COORDINATION OF COMPACTION TESTING.
3. PAD GRADE(S) TO BE EQUAL TO OR ABOVE ADJACENT CURBING OR PAD(S) TO BE 3 in. ABOVE ADJACENT PAVEMENT.
4. FACE TRANSFORMER PAD(S) AS NOTED.
5. SCREENING AROUND TRANSFORMER(S) MUST BE APPROVED BY THE ELECTRIC UTILITY DEPARTMENT IN WRITING.
6. 8 ft. OF CLEAR WORKING SPACE MUST BE MAINTAINED IN FRONT OF THE TRANSFORMER(S).
7. TRANSFORMER PAD(S) TO BE LEVEL.
8. SPRINKLER SYSTEM IN VICINITY OF ELECTRICAL EQUIPMENT TO CONSIST OF BUBBLE TYPE ONLY, i.e. NO WATER SPRAY ON ELECTRICAL EQUIPMENT.
9. CONCRETE: PORTLAND CEMENT CONCRETE SHALL BE CLASS "B" CONFORMING TO SECTION 90 OF THE STATE OF CALIFORNIA, STANDARD SPECIFICATIONS WITH A MINIMUM COMPRESSIVE STRENGTH OF 2500 psi AT 28 DAYS.
10. UNLESS OTHERWISE NOTED, CENTER SECONDARY CONDUIT(S) IN THE SECONDARY COMPARTMENT.
11. CENTER PRIMARY CONDUIT IN PRIMARY COMPARTMENT.
12. CONDUITS AT TRANSFORMER PAD(S) ARE TO BE STUBBED 2 in. ABOVE PAD LEVEL.
13. SEE TABLE 1 FOR TRANSFORMER PAD DIMENSIONS.

Drawing name: M:\DATA\CAD\Standards\UG\0311\2005.dwg Plotted: Jun 02,2004 - 2:02pm

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

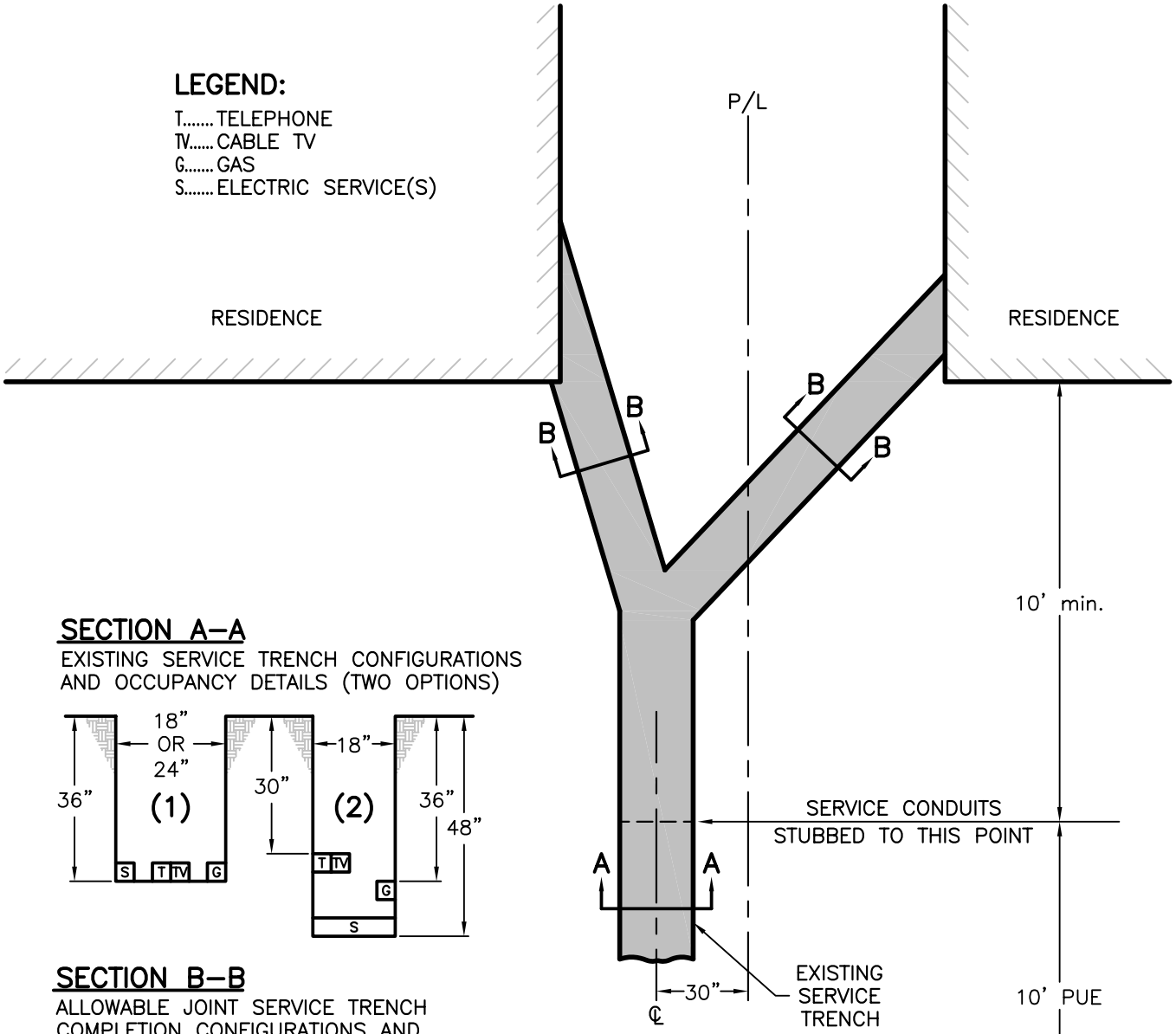
CONSTRUCTION STANDARD

CONCRETE PAD FOR 3 PHASE 12kV PADMOUNTED TRANSFORMER

20NOV03	CW	AS	AMS		SHEET 1 OF 1	311 2005
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 2	

LEGEND:

T..... TELEPHONE
TV..... CABLE TV
G..... GAS
S..... ELECTRIC SERVICE(S)

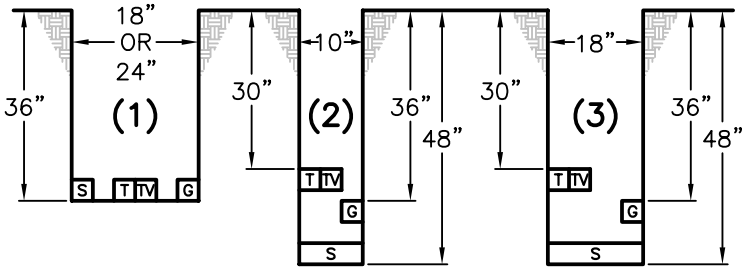


SECTION A–A

EXISTING SERVICE TRENCH CONFIGURATIONS AND OCCUPANCY DETAILS (TWO OPTIONS)

SECTION B–B

ALLOWABLE JOINT SERVICE TRENCH COMPLETION CONFIGURATIONS AND OCCUPANCY DETAILS (THREE OPTIONS)



Drawing name: M:\DATA\CAD\Standards\UG\0311\2006-1.dwg Plotted: Jun 02,2004 - 2:02pm

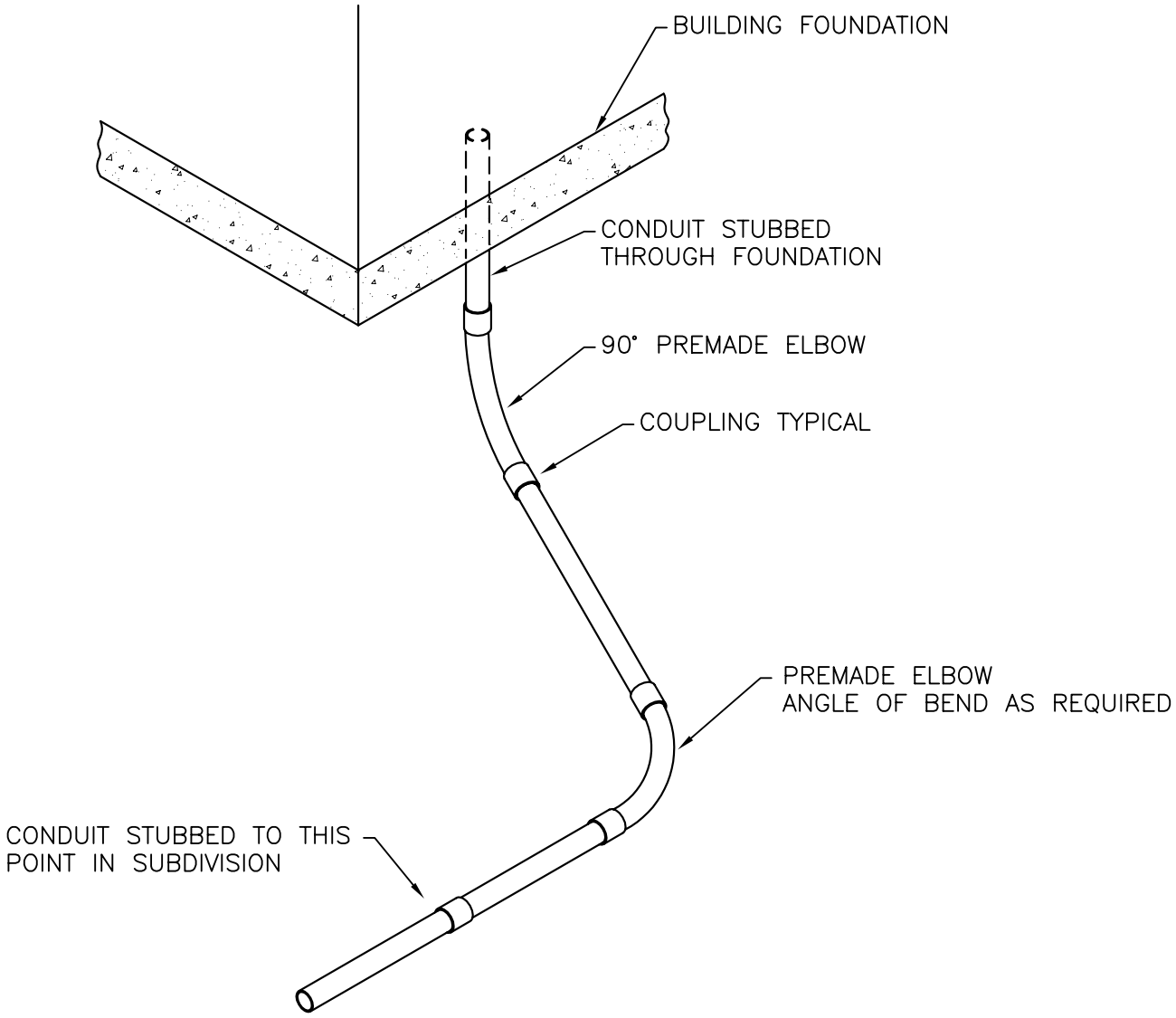
CITY OF LODI

ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

JOINT TRENCH COMPLETION CONFIGURATIONS AND OCCUPANCY DETAILS

22OCT99	BA	DJC	AMS		SHEET 1 OF 2	311 2006
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 6	



NOTES:

1. ALL SERVICE CONDUIT TO BE 2 in. CONDUIT UNLESS OTHERWISE NOTED ON PLANS.
2. CONDUIT, INCLUDING PREMADE ELBOWS, SHALL BE PVC, TYPE DB–120 (ASTM F 512 AND NEMA TC–8, GRAY IN COLOR) MINIMUM. ALL EXPOSED CONDUIT(S), INCLUDING 90° ELBOWS, TO BE MINIMUM PVC SCHEDULE 40. ALL ELBOWS FOR SERVICE COMPLETION TO HAVE A MINIMUM 24 in. RADIUS.
3. CONDUIT TO BE INSTALLED AT DEPTHS SHOWN IN DETAILS, SHEET 1 OF 2, UNLESS OTHERWISE NOTED ON PLANS.
4. MAXIMUM DEFLECTION OF A 20 ft. SECTION OF CONDUIT SHALL BE 5 in. UNLESS PREMADE BENDS ARE USED.

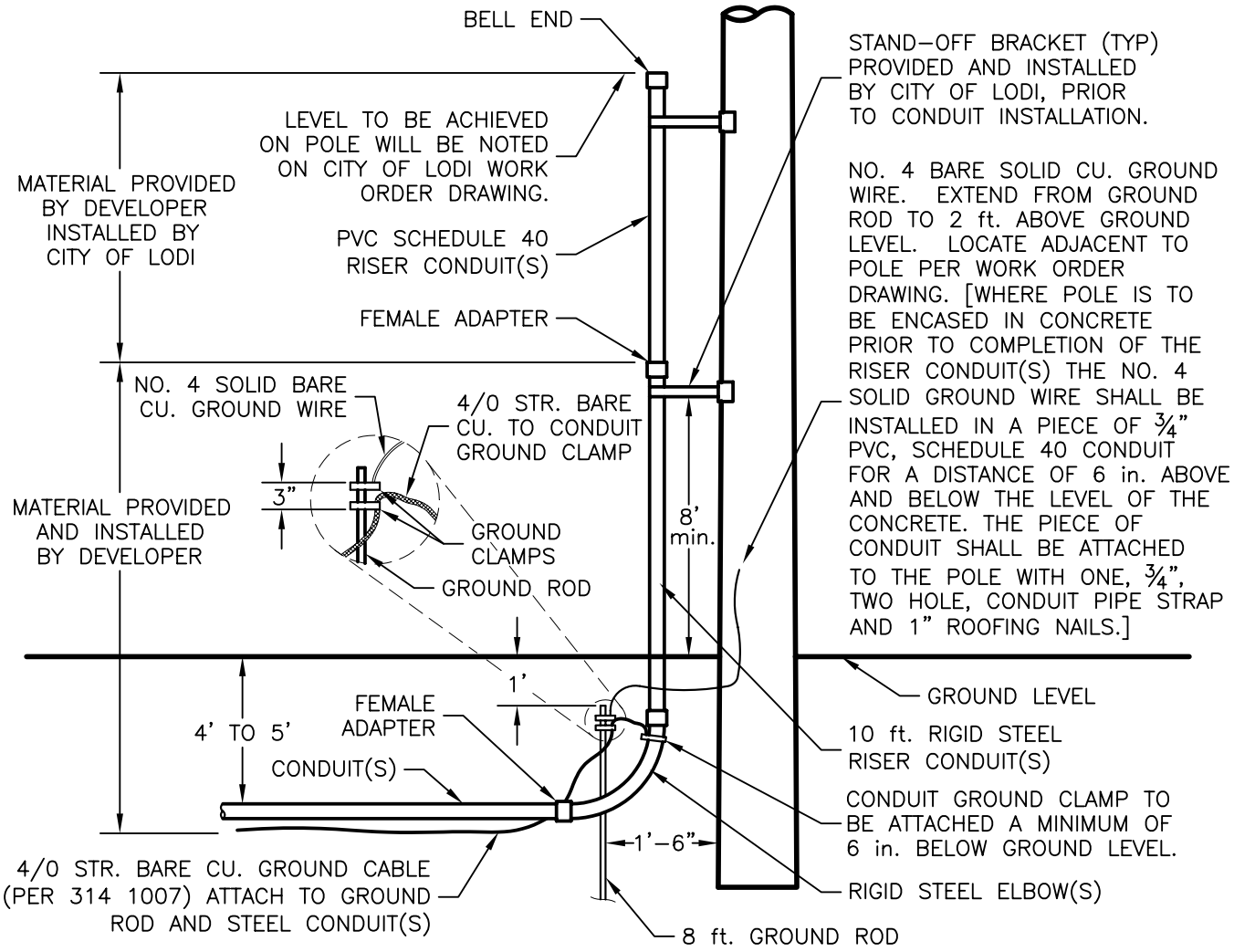
Drawing name: M:\DATA\CAD\Standards\UG\0311\2006-2.dwg Plotted: Jun 02,2004 - 2:03pm

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

JOINT TRENCH COMPLETION CONFIGURATIONS AND OCCUPANCY DETAILS

22OCT99	BA	DJC	AMS		SHEET 2 OF 2	311 2006
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 2	



NOTE:

1. DEVELOPER TO PROVIDE RISER CONDUIT(S) AND ASSOCIATED EQUIPMENT TO REACH LEVEL ON POLE AS NOTED ON WORK ORDER. 90° ELBOW(S) AT POLE AND FIRST TEN FEET UP POLE TO BE RIGID STEEL CONDUIT(S) WITH THE REMAINDER UP THE POLE TO BE PVC SCHEDULE 40 (GRAY IN COLOR).
2. CONDUIT(S) AT THE POLE TO BE ATTACHED TO STAND–OFF BRACKETS WHICH WILL BE FURNISHED AND INSTALLED BY THE CITY OF LODI, ELECTRIC UTILITY DEPARTMENT.
3. ALL 90° RISER ELBOW(S) TO HAVE 36 in. RADIUS (OR AS SPECIFIED).
4. DEVELOPER TO INSTALL CONDUIT(S) UP TO AND INCLUDING RIGID STEEL RISER SECTION(S). CITY OF LODI, ELECTRIC UTILITY DEPARTMENT SHALL COMPLETE RISER CONDUIT(S) INSTALLATION FROM THE RIGID STEEL RISER SECTION(S) TO THE REQUIRED LEVEL ON POLE (MATERIAL TO BE PROVIDED BY DEVELOPER).
5. DEVELOPER TO PROVIDE SUFFICIENT PULL LINE IN EACH CONDUIT TO REACH THE REQUIRED LEVEL ON THE POLE.
6. LOCATION, SIZE AND NUMBER OF RISER CONDUIT(S) AT POLE SHALL BE PER CITY OF LODI SPECIFICATIONS AND WORK ORDER DRAWINGS.

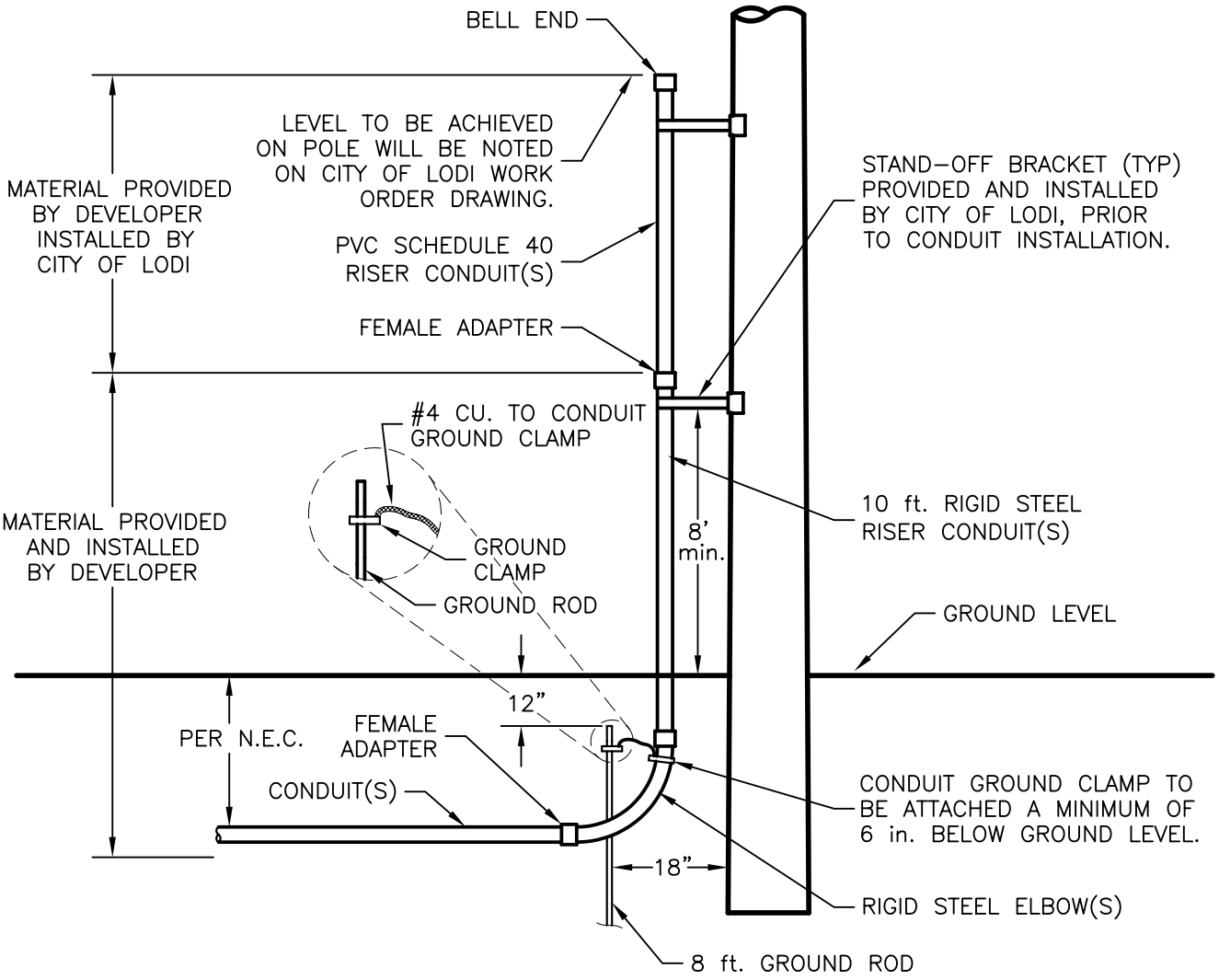
Drawing name: M:\DATA\CAD\Standards\UG\0311\2007.dwg Plotted: Jun 02,2004 - 2:04pm

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

PRIMARY RISER CONDUIT(S) INSTALLATION GENERAL INFORMATION DETAIL

21OCT99	BA	DJC	AMS		SHEET 1 OF 1	311 2007
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 7	



NOTE:

1. DEVELOPER TO PROVIDE RISER CONDUIT(S) AND ASSOCIATED EQUIPMENT TO REACH LEVEL ON POLE SO NOTED ON WORK ORDER. 90° ELBOW(S) AT POLE AND FIRST TEN FEET UP POLE TO BE RIGID STEEL CONDUIT(S) WITH THE REMAINDER UP THE POLE TO BE PVC SCHEDULE 40 (GRAY IN COLOR).
2. CONDUIT(S) AT THE POLE TO BE ATTACHED TO STAND-OFF BRACKETS WHICH WILL BE FURNISHED AND INSTALLED BY THE CITY OF LODI, ELECTRIC UTILITY DEPARTMENT.
3. ALL 90° RISER ELBOW(S) TO HAVE 24 in. RADIUS (OR AS SPECIFIED).
4. DEVELOPER TO INSTALL CONDUIT(S) UP TO AND INCLUDING RIGID STEEL RISER SECTION(S). CITY OF LODI, ELECTRIC UTILITY DEPARTMENT SHALL COMPLETE RISER CONDUIT(S) INSTALLATION FROM THE RIGID STEEL RISER SECTION(S) TO THE REQUIRED LEVEL ON POLE (MATERIAL TO BE PROVIDED BY DEVELOPER).
5. DEVELOPER TO PROVIDE SUFFICIENT PULL LINE IN EACH CONDUIT TO REACH THE REQUIRED LEVEL ON THE POLE.
6. LOCATION, SIZE AND NUMBER OF RISER CONDUIT(S) AT POLE SHALL BE PER CITY OF LODI SPECIFICATIONS AND WORK ORDER DRAWINGS.

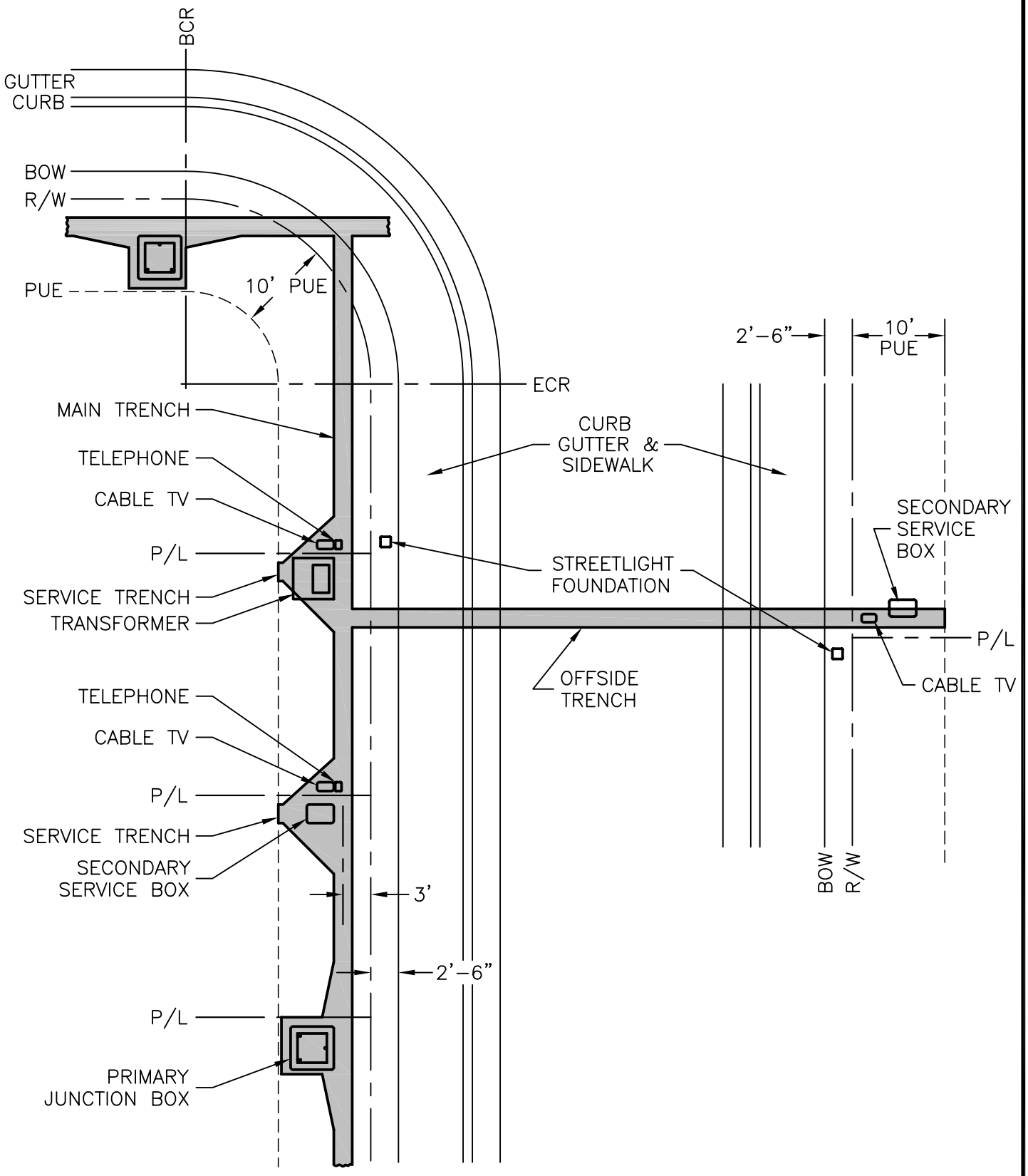
Drawing name: M:\DATA\CAD\Standards\UG\0311\2008.dwg Plotted: Jun 02,2004 - 2:04pm

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

SECONDARY OR SERVICE RISER CONDUIT(S) INSTALLATION GENERAL INFORMATION DETAIL

13NOV01	RT	AMS	AMS		SHEET 1 OF 1	311 2008
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 3	



Drawing name: M:\DATA\CAD\Standards\UG\0311\2101.dwg Plotted: Jun 02,2004 - 2:05pm

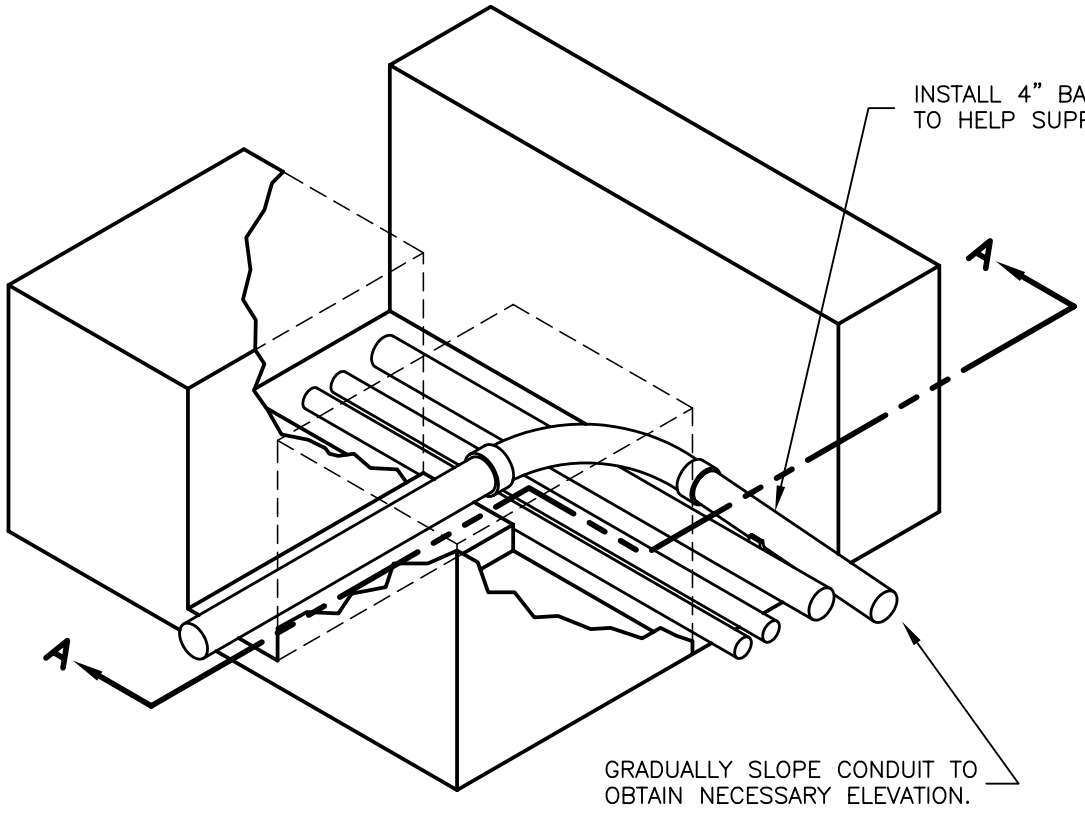
CITY OF LODI

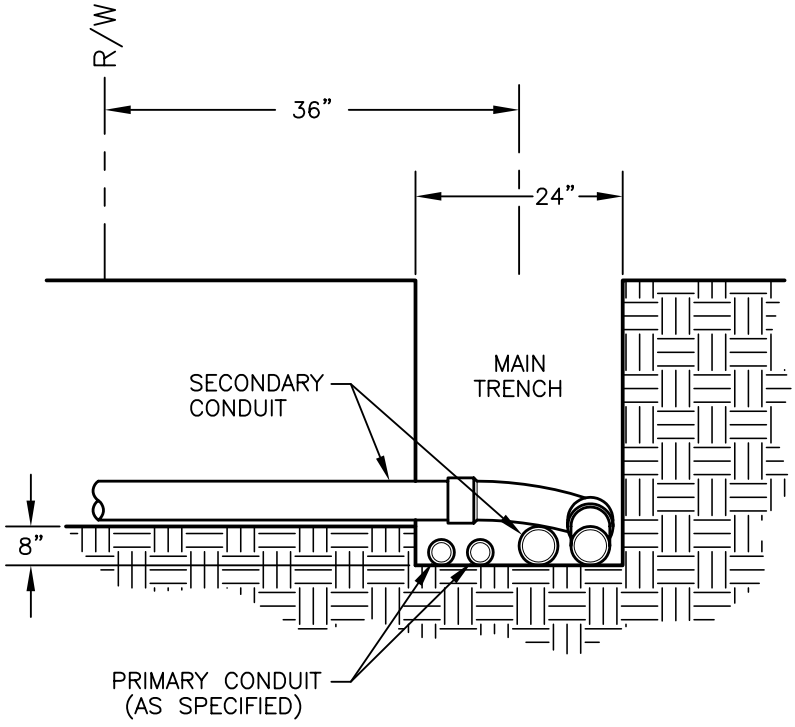
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

TYPICAL TRENCH DETAIL

20AUG96	BA	DJC	AMS		SHEET 1 OF 1	311 2101
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 3	





SECTION A–A

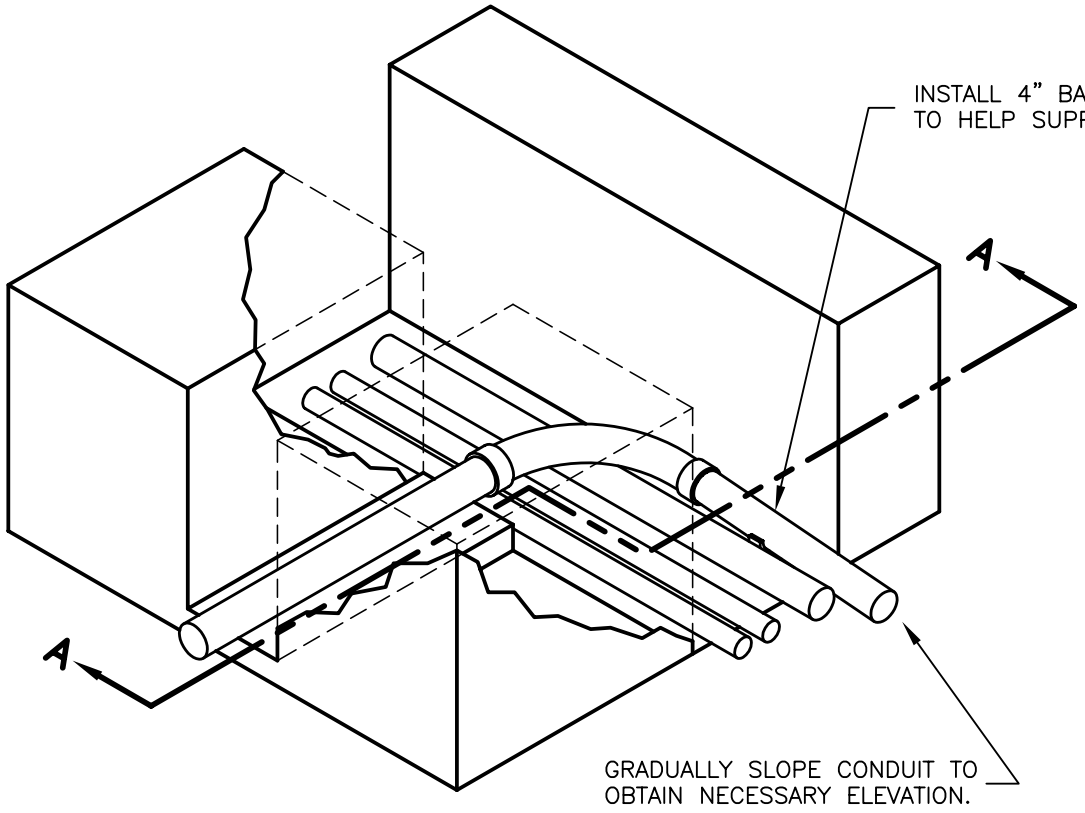
Drawing name: M:\DATA\CAD\Standards\UG\0311\2103-1.dwg Plotted: Jun 02,2004 - 2:05pm

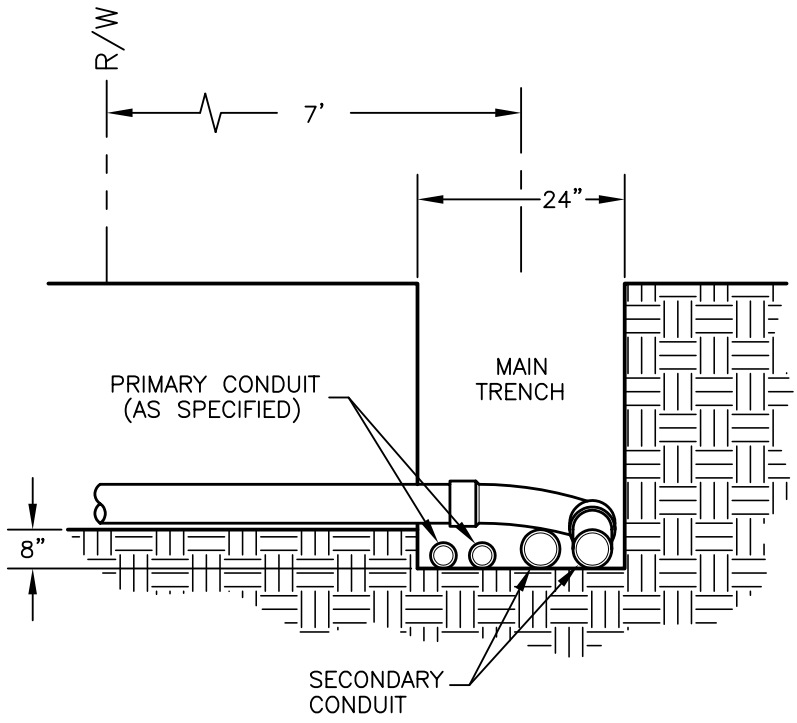
CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

SECONDARY CONDUIT INSTALLATION (FOR OFF–SIDE TAKE–OFF)

30AUG96	BA	BA	AMS		SHEET 1 OF 2	311 2103
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 3	





SECTION A–A

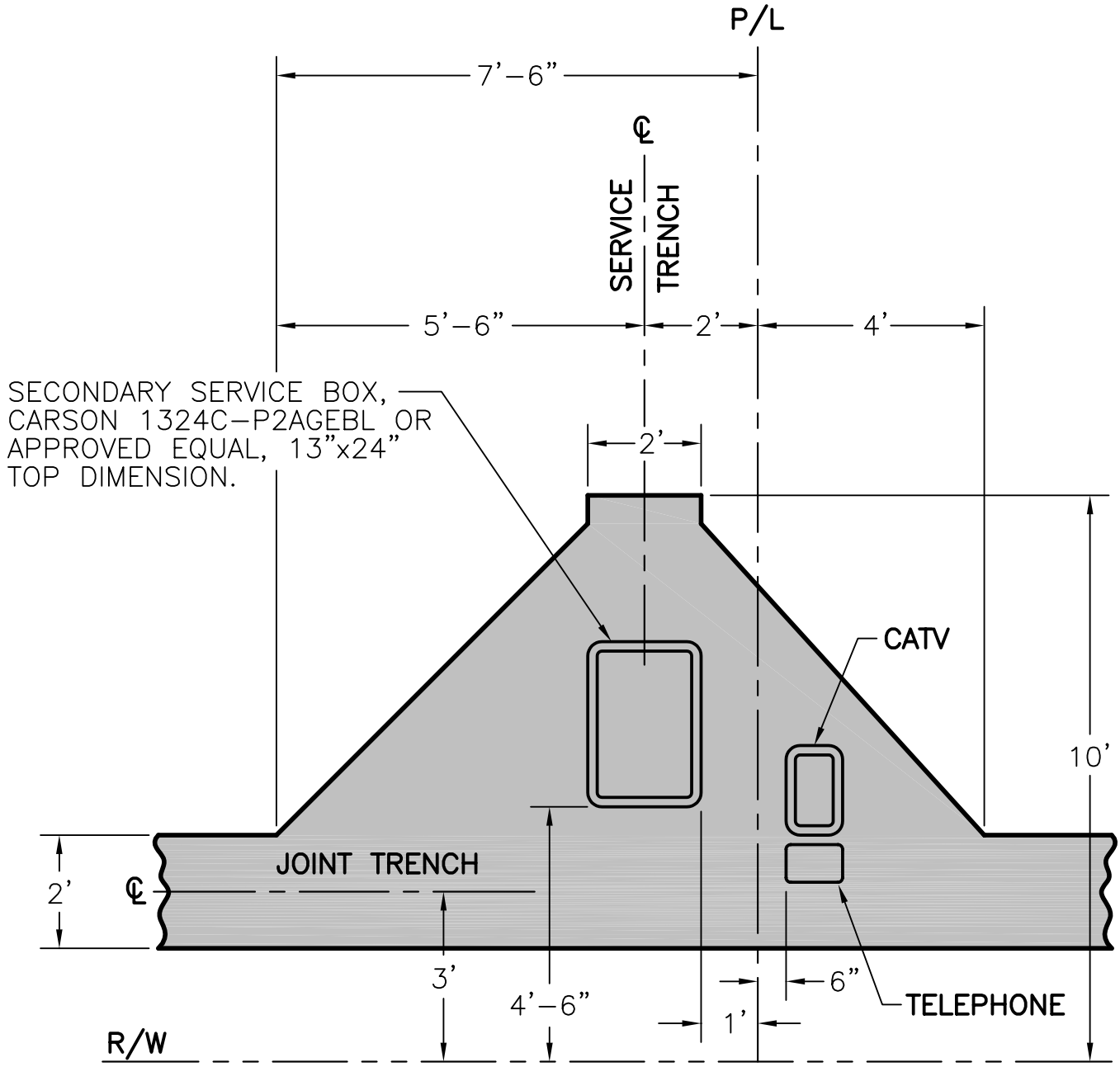
Drawing name: M:\DATA\CAD\Standards\UG\0311\2103-2.dwg Plotted: Jun 02,2004 - 2:06pm

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

SECONDARY CONDUIT INSTALLATION (SIDEWALK WITH PARKWAY)

29MAY01	RT	DJC	AMS		SHEET 2 OF 2	311 2103
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 2	



Drawing name: M:\DATA\CAD\Standards\UG\0311\2104-1.dwg Plotted: Jun 02,2004 - 2:07pm

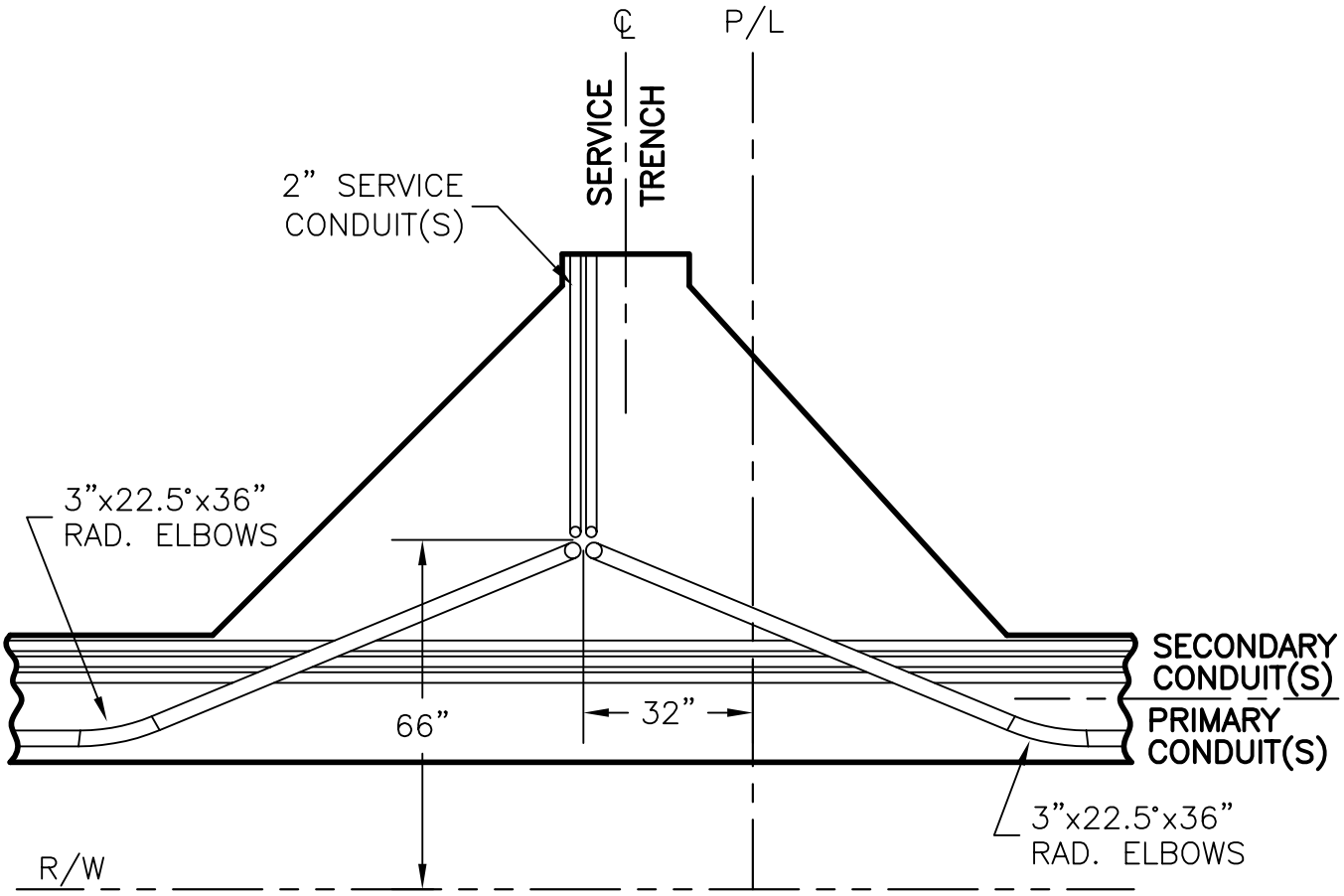
CITY OF LODI

ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

SERVICE TRENCH DETAIL, SECONDARY SERVICE BOX, (MAIN TRENCH SIDE)

30AUG96	BA	DJC	AMS		SHEET 1 OF 3	311 2104
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 3	



NOTE:

1. ALL 90° SECONDARY CONDUIT ELBOWS TO HAVE A 36 in. RADIUS
2. ALL 90° SERVICE CONDUIT ELBOWS TO HAVE A 24 in. RADIUS
3. ALL CONDUIT ENDS TO BE CAPPED WITH ALLIANCE PLASTIC CONDUIT CAPS [RRC–2(2"), RRC–3(3")] OR APPROVED EQUAL.

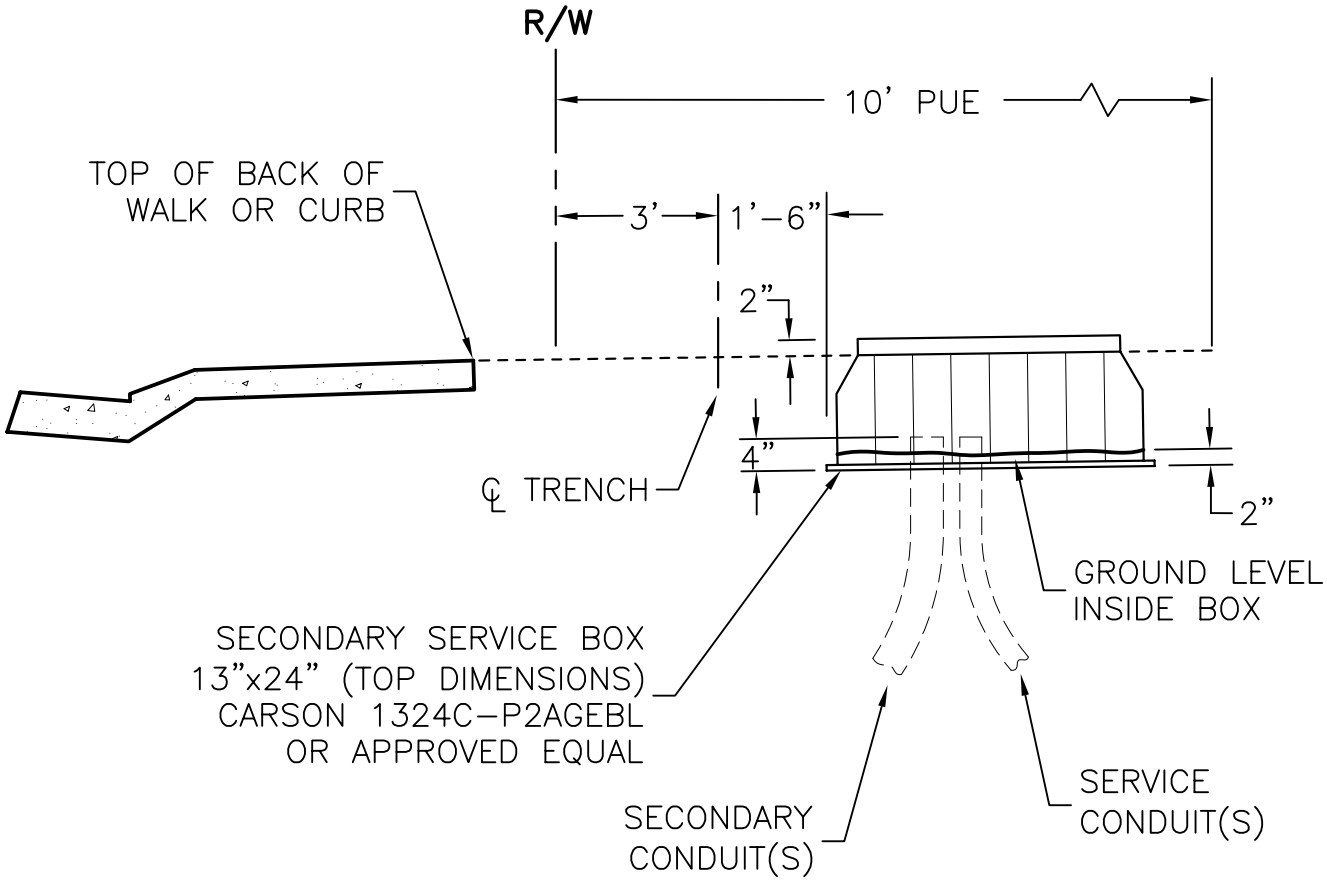
Drawing name: M:\DATA\CAD\Standards\UG\0311\2104-2.dwg Plotted: Jun 02,2004 - 2:07pm

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

SECONDARY SERVICE BOX CONDUIT DETAIL (MAIN TRENCH SIDE)

10JUN97	BA	DJC	AMS		SHEET 2 OF 3	311 2104
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 4	



NOTE:

1. SECONDARY SERVICE BOX GRADE, FROM FRONT TO BACK, SHALL BE 2 in. ABOVE A LINE EXTENDING FROM THE TOP OF BACK OF CURB OR SIDEWALK TO THE FINAL GRADE AT THE BACK OF THE PUE (SEE DRAWING) AND SHALL BE LEVEL SIDE TO SIDE.

2. SECONDARY SERVICE BOX LOCATIONS TO BE SPOTTED PER CITY OF LODI DRAWINGS, STANDARDS AND SPECIFICATIONS. STAKING WILL BE PROVIDED BY DEVELOPER.

3. HYDRO HAMMER IS NOT TO BE USED AROUND SUBSTRUCTURES.

Drawing name: M:\DATA\CAD\Standards\UG\0311\2104-3.dwg Plotted: Jun 02,2004 - 2:08pm

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

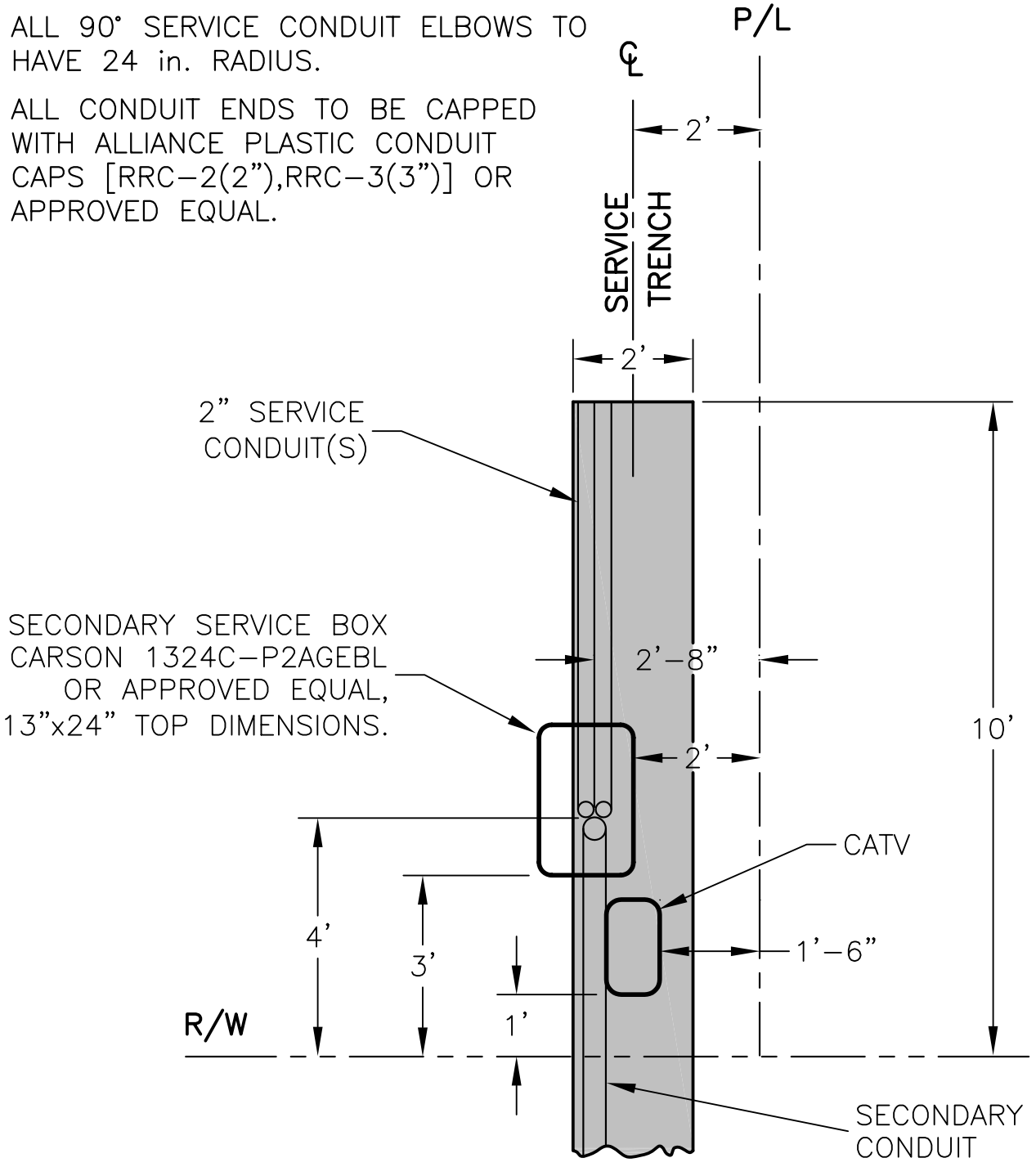
CONSTRUCTION STANDARD

SECONDARY SERVICE BOX INSTALLATION DETAIL (MAIN TRENCH SIDE)

21OCT99	BA	DJC	AMS		SHEET 3 OF 3	311 2104
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 4	

NOTE:

1. ALL 90° SECONDARY CONDUIT ELBOWS TO HAVE 36 in. RADIUS.
2. ALL 90° SERVICE CONDUIT ELBOWS TO HAVE 24 in. RADIUS.
3. ALL CONDUIT ENDS TO BE CAPPED WITH ALLIANCE PLASTIC CONDUIT CAPS [RRC–2(2"),RRC–3(3")] OR APPROVED EQUAL.



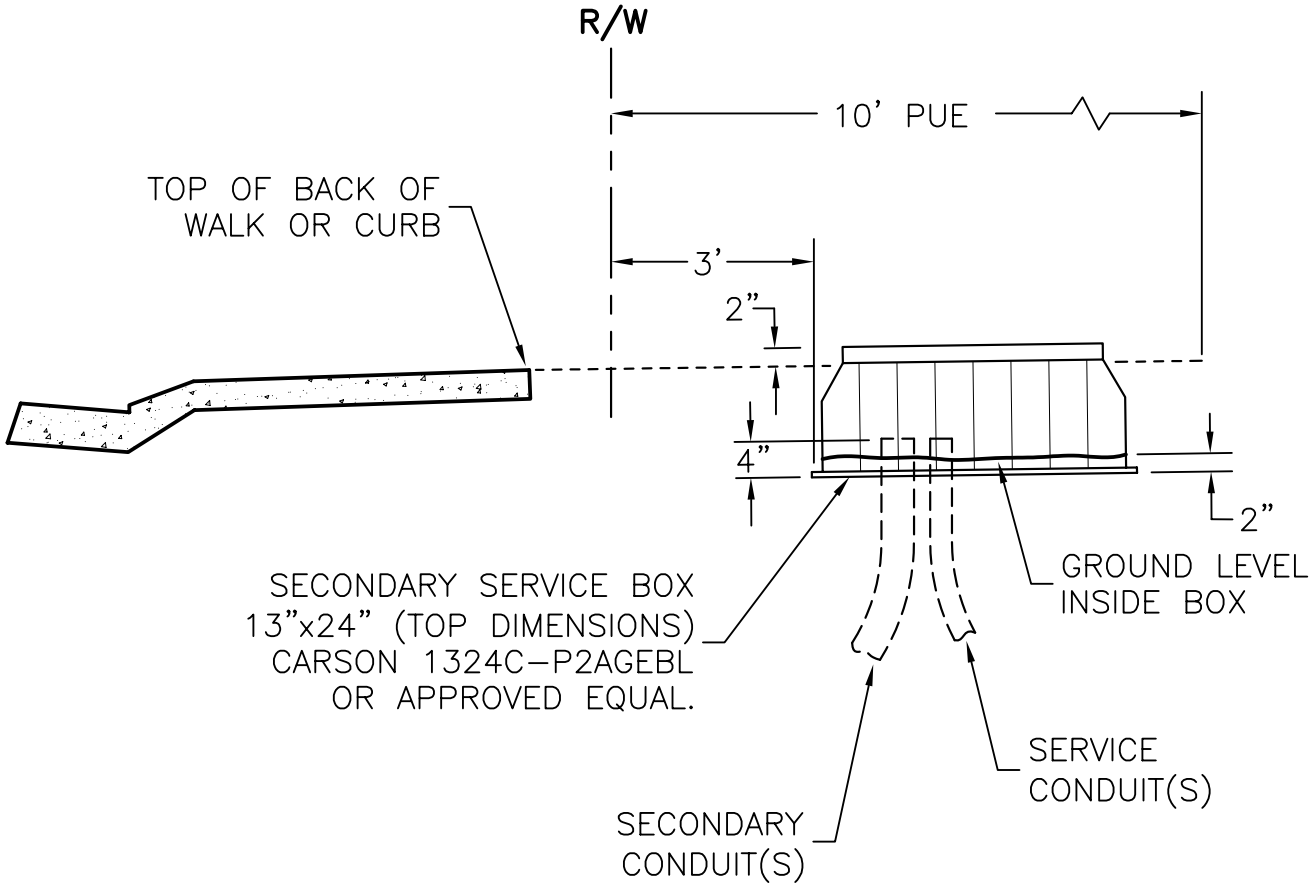
Drawing name: M:\DATA\CAD\Standards\UG\0311\2105-1.dwg Plotted: Jun 02,2004 - 2:08pm

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

SERVICE TRENCH DETAIL (OFF–SIDE)

10JUN97	BA	DJC	AMS		SHEET 1 OF 2	311 2105
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 5	



NOTE:

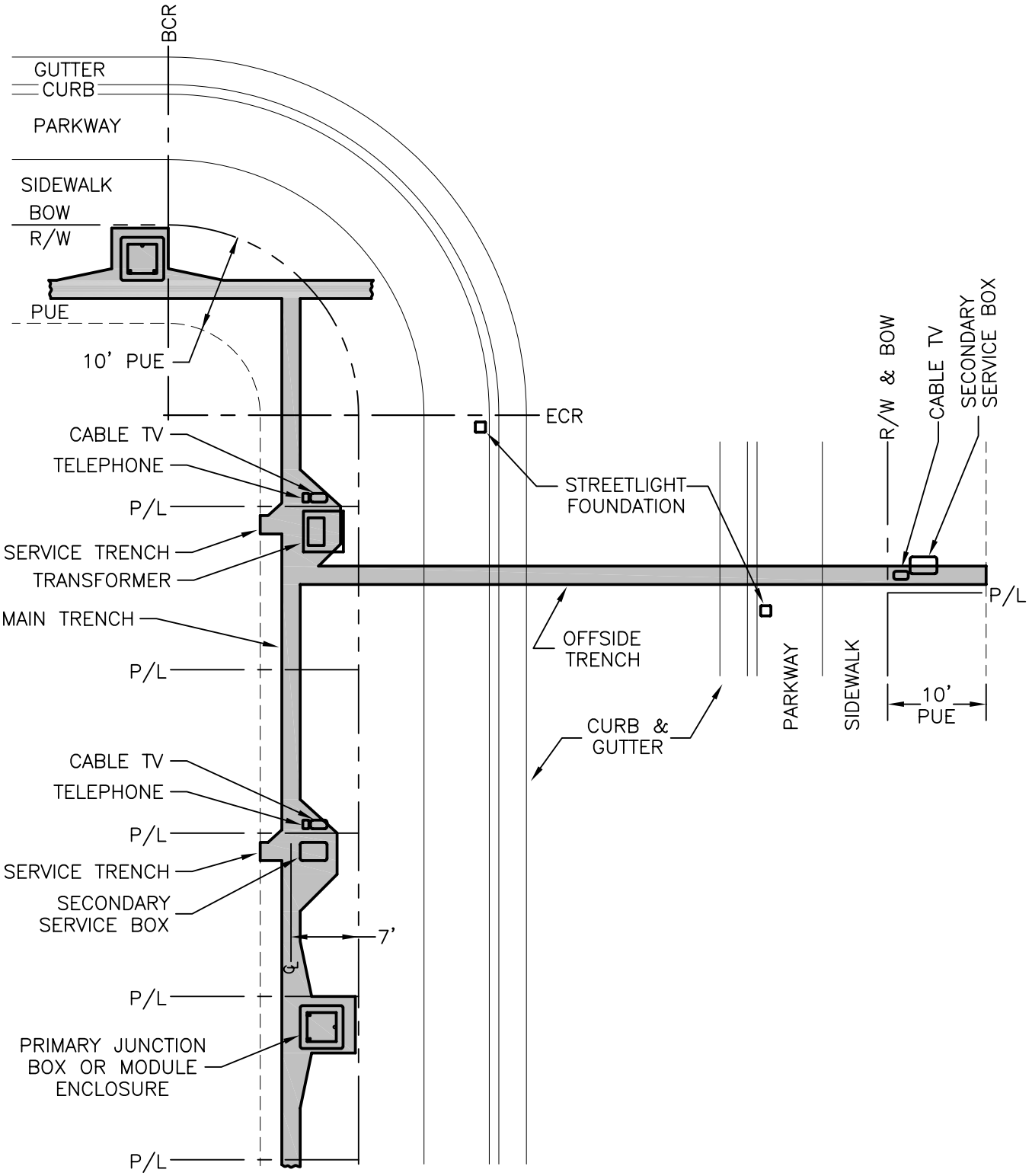
1. SECONDARY SERVICE BOX GRADE, FROM FRONT TO BACK, SHALL BE 2 in. ABOVE A LINE EXTENDING FROM THE TOP OF BACK OF CURB OR SIDEWALK TO THE FINAL GRADE AT THE BACK OF THE PUE (SEE DRAWING) AND SHALL BE LEVEL SIDE TO SIDE.

2. SECONDARY SERVICE BOX LOCATIONS TO BE SPOTTED PER CITY OF LODI DRAWINGS, STANDARDS AND SPECIFICATIONS. STAKING WILL BE PROVIDED BY DEVELOPER.

3. HYDRO HAMMER IS NOT TO BE USED AROUND SUBSTRUCTURES.

Drawing name: M:\DATA\CAD\Standards\UG\0311\2105-2.dwg Plotted: Jun 02,2004 - 2:09pm

CITY OF LODI ELECTRIC UTILITY DEPARTMENT	CONSTRUCTION STANDARD SECONDARY SERVICE BOX INSTALLATION DETAIL (OFF-SIDE)					
21OCT99	BA	DJC	AMS		SHEET 2 OF 2	311 2105
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 4	



Drawing name: M:\DATA\CAD\Standards\UG\0311\2501.dwg Plotted: Jun 02,2004 - 2:10pm

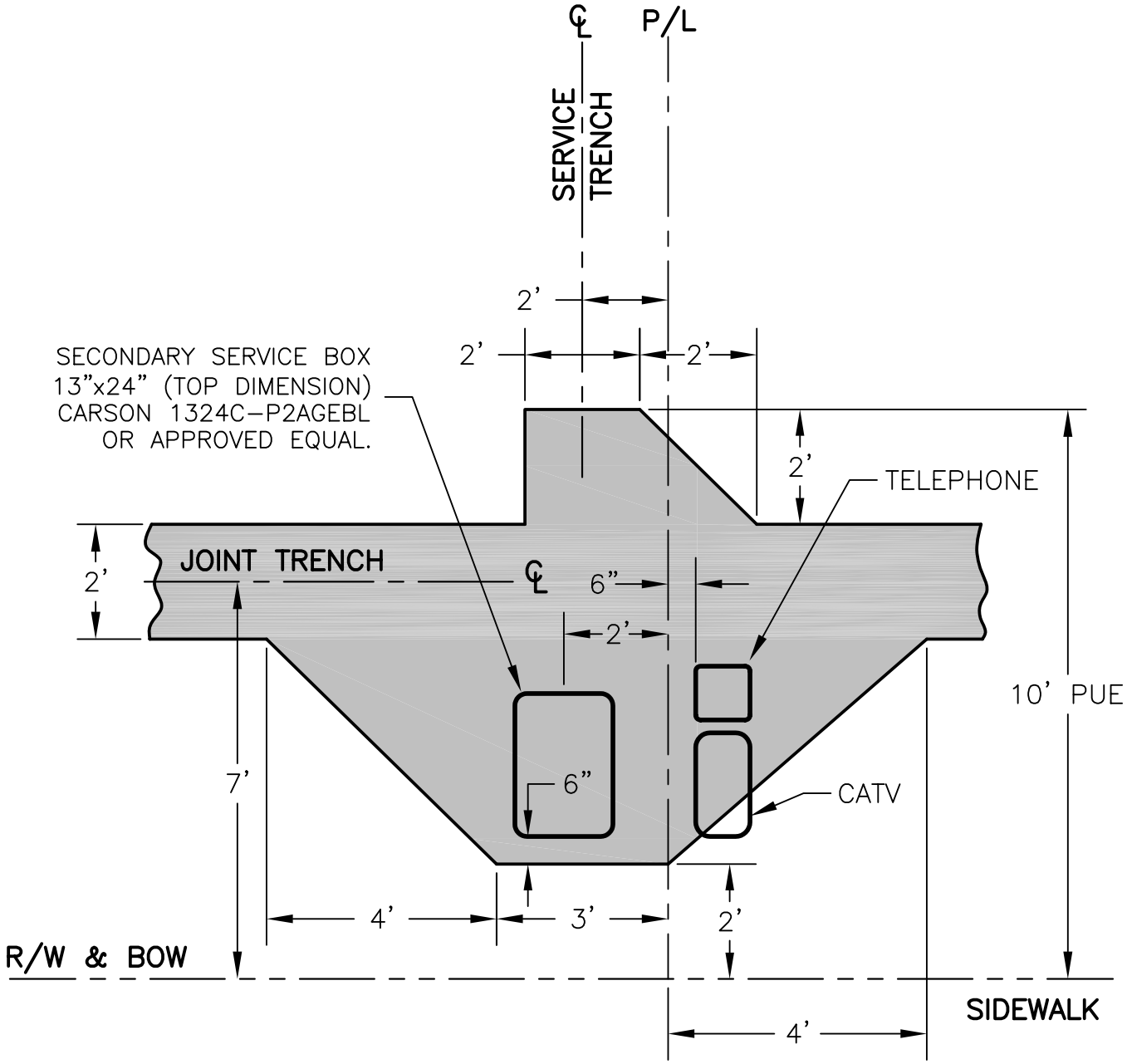
CITY OF LODI

ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

TYPICAL TRENCH DETAIL SIDEWALK WITH PARKWAY

31MAY01	CW	DJC	AMS		SHEET 1 OF 1	311 2501
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 1	



Drawing name: M:\DATA\CAD\Standards\UG\0311\2504-1.dwg Plotted: Jun 02,2004 - 2:10pm

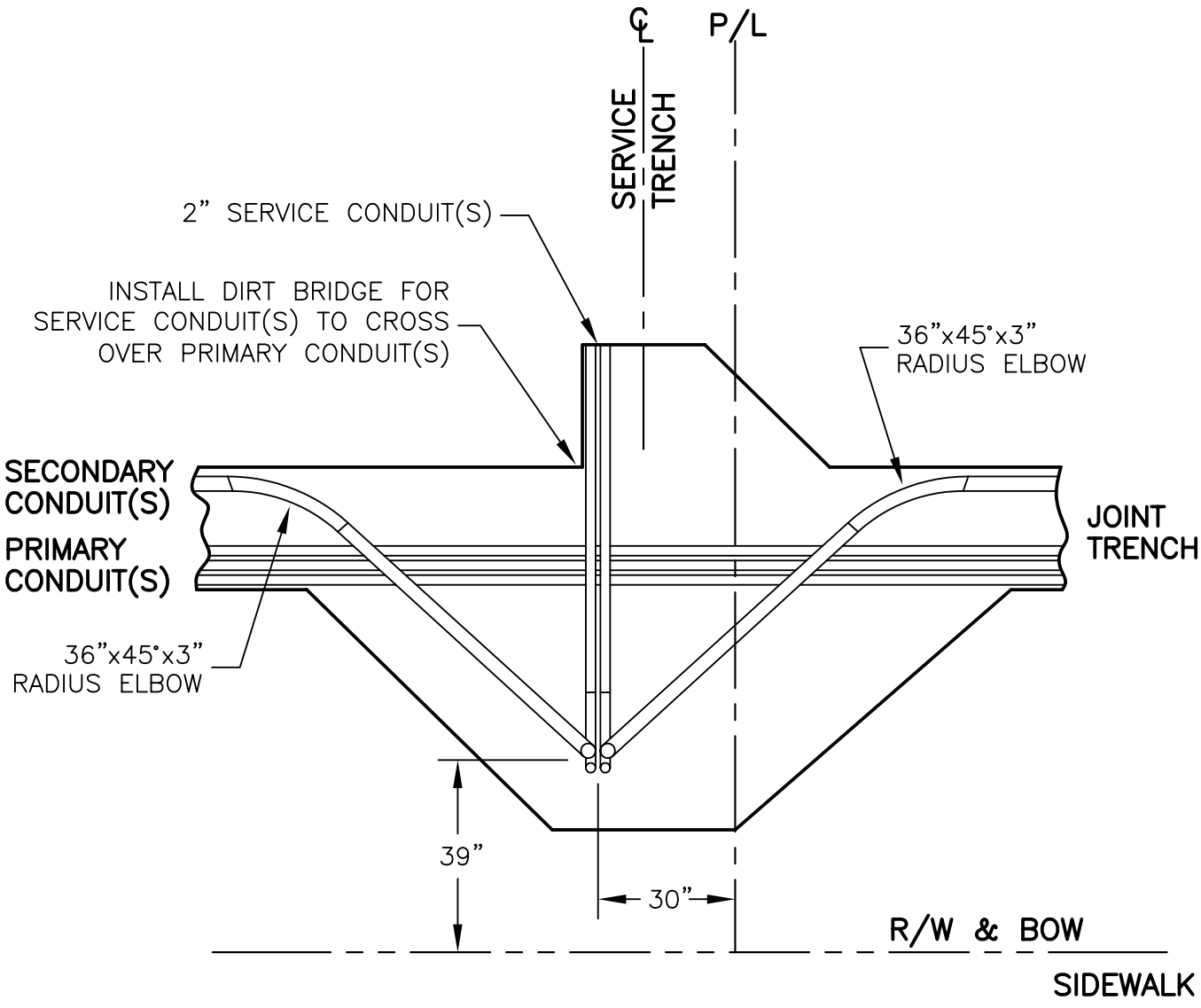
CITY OF LODI

ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

SERVICE TRENCH DETAIL, SECONDARY SERVICE BOX (MAIN TRENCH SIDE) SIDEWALK WITH PARKWAY

29MAY01	RT	DJC	AMS		SHEET 1 OF 3	311 2504
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 1	

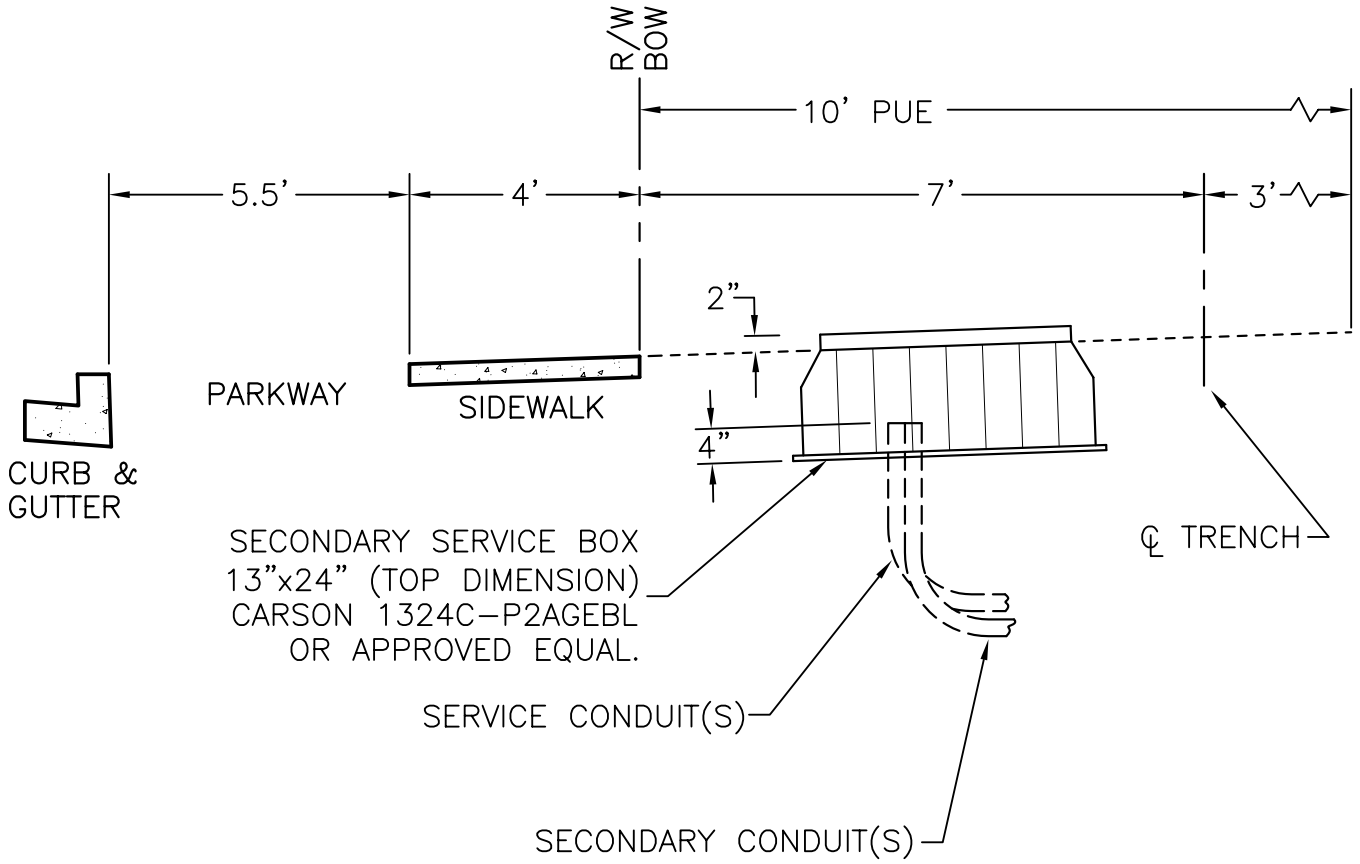


NOTE:

1. ALL 90° SECONDARY CONDUIT ELBOWS TO HAVE A 36 in. RADIUS.
2. ALL 90° SERVICE CONDUIT ELBOWS TO HAVE A MINIMUM 24 in. RADIUS.
3. ALL CONDUIT ENDS TO BE CAPPED WITH ALLIANCE PLASTIC CONDUIT CAPS (RRC–2(2"), RRC–3(3")) OR APPROVED EQUAL.

Drawing name: M:\DATA\CAD\Standards\UG\0311\2504-2.dwg Plotted: Jun 02,2004 - 2:11pm

CITY OF LODI ELECTRIC UTILITY DEPARTMENT				CONSTRUCTION STANDARD SERVICE TRENCH DETAIL, SECONDARY SERVICE BOX (MAIN TRENCH SIDE) SIDEWALK WITH PARKWAY		
29MAY01	RT	DJC	AMS		SHEET 2 OF 3	311 2504
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 2	



NOTE:

1. SECONDARY SERVICE BOX GRADE, FROM FRONT TO BACK, SHALL BE 2 in. ABOVE A LINE EXTENDING FROM THE TOP OF BACK OF SIDEWALK TO THE FINAL GRADE AT BACK OF THE PUE (SEE DRAWING) AND SHALL BE LEVEL SIDE TO SIDE.

2. SECONDARY SERVICE BOX LOCATIONS TO BE SPOTTED PER CITY OF LODI DRAWINGS, STANDARDS AND SPECIFICATIONS. STAKING WILL BE PROVIDED BY DEVELOPER.

3. HYDRO HAMMER IS NOT TO BE USED AROUND SUBSTRUCTURES.

Drawing name: M:\DATA\CAD\Standards\UG\0311\2504-3.dwg Plotted: Jun 02,2004 - 2:11pm

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

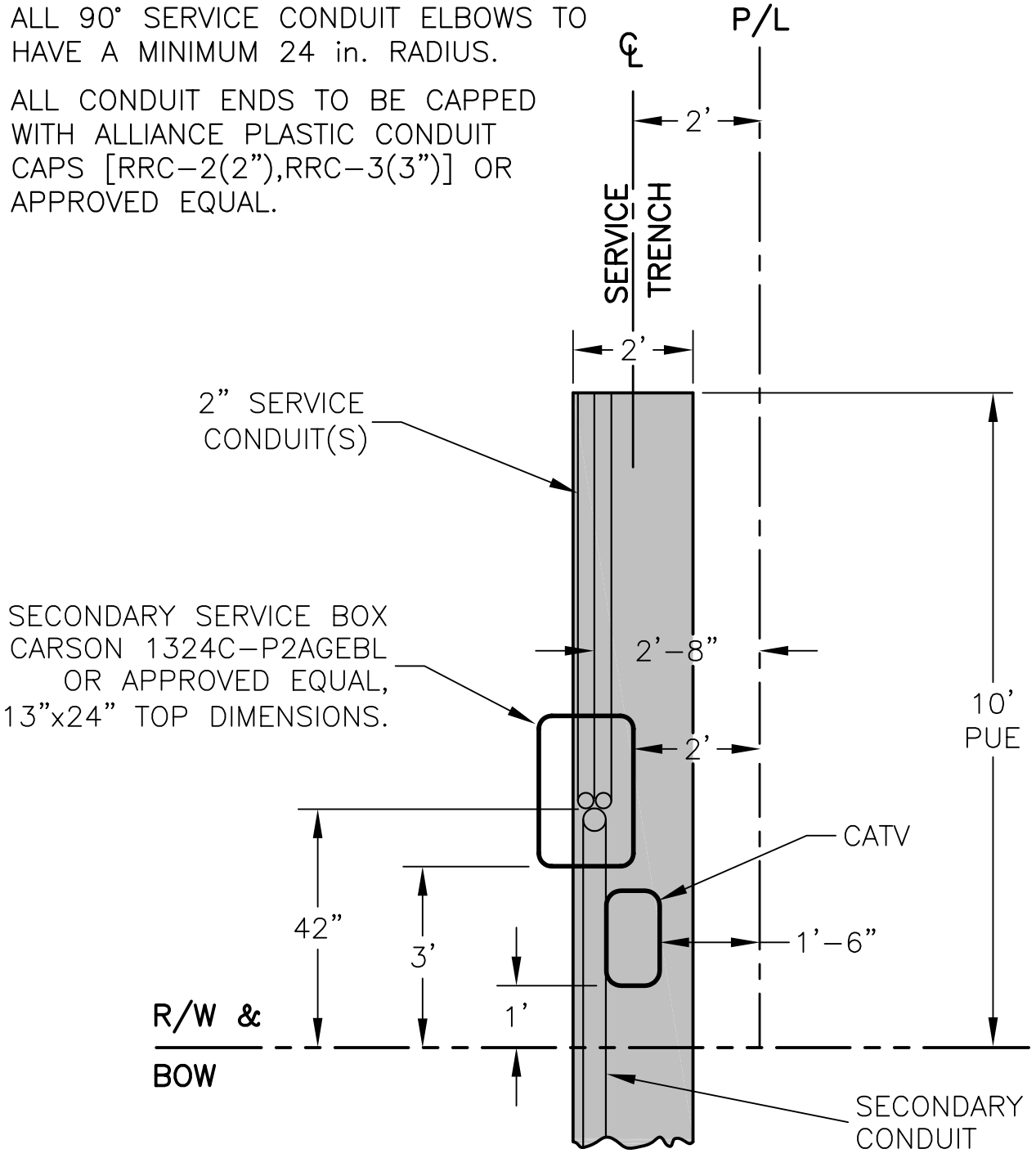
CONSTRUCTION STANDARD

SERVICE TRENCH DETAIL, SECONDARY SERVICE BOX (MAIN TRENCH SIDE) SIDEWALK WITH PARKWAY

29MAY01	RT	DJC	AMS		SHEET 3 OF 3	311 2504
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 3	

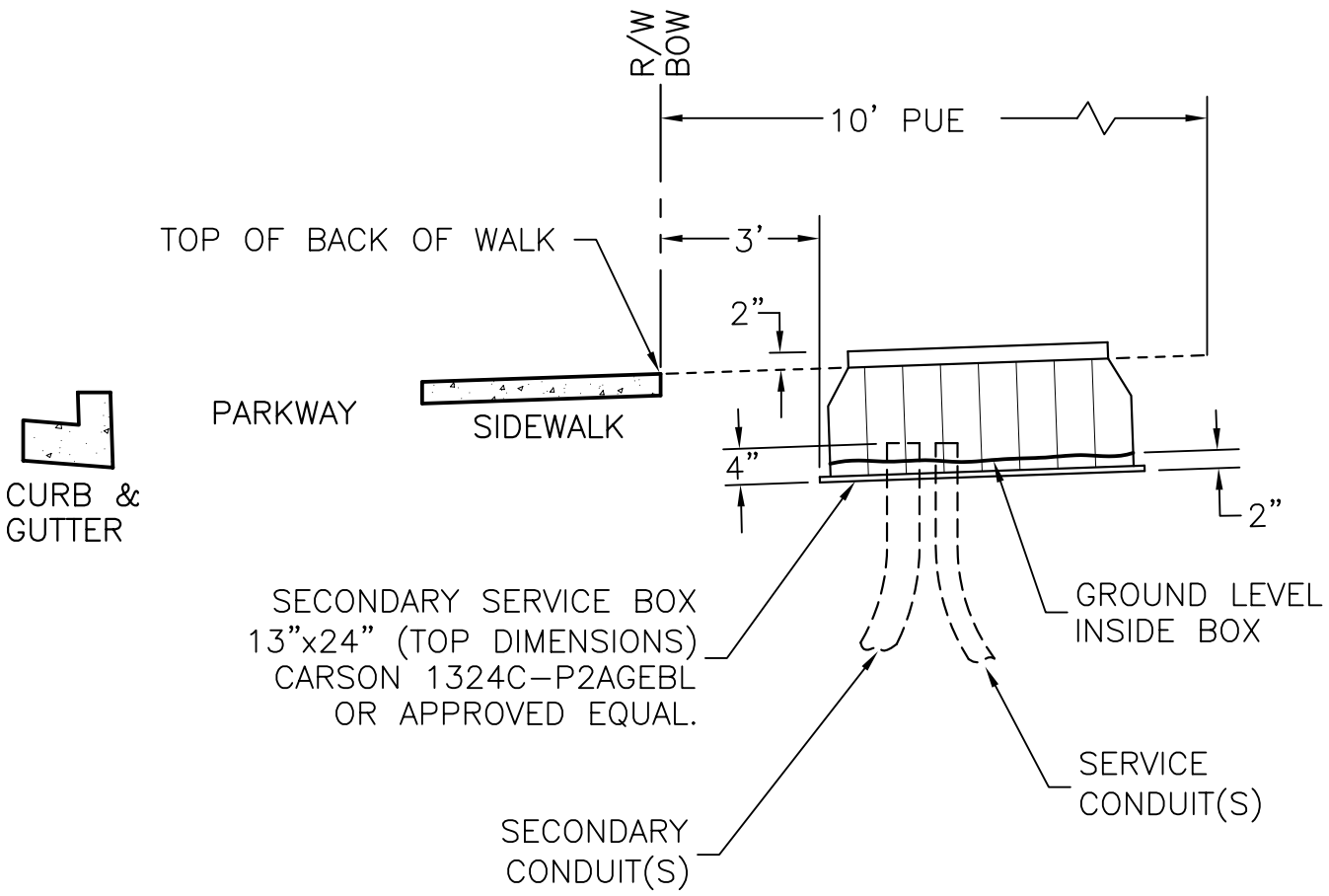
NOTE:

1. ALL 90° SECONDARY CONDUIT ELBOWS TO HAVE 36 in. RADIUS.
2. ALL 90° SERVICE CONDUIT ELBOWS TO HAVE A MINIMUM 24 in. RADIUS.
3. ALL CONDUIT ENDS TO BE CAPPED WITH ALLIANCE PLASTIC CONDUIT CAPS [RRC–2(2"),RRC–3(3")] OR APPROVED EQUAL.



Drawing name: M:\DATA\CAD\Standards\UG\0311\2505-1.dwg Plotted: Jun 02,2004 - 2:12pm

CITY OF LODI ELECTRIC UTILITY DEPARTMENT				CONSTRUCTION STANDARD SERVICE TRENCH DETAIL (OFF–SIDE) SIDEWALK WITH PARKWAY		
29MAY01	RT	DJC	AMS		SHEET 1 OF 2	311 2505
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 1	



NOTE:

1. SECONDARY SERVICE BOX GRADE, FROM FRONT TO BACK, SHALL BE 2 in. ABOVE A FINAL LINE EXTENDING FROM THE TOP OF BACK OF WALK TO THE FINAL GRADE AT BACK OF THE PUE (SEE DRAWING) AND SHALL BE LEVEL SIDE TO SIDE.

2. SECONDARY SERVICE BOX LOCATIONS TO BE SPOTTED PER CITY OF LODI DRAWINGS, STANDARDS AND SPECIFICATIONS. STAKING WILL BE PROVIDED BY DEVELOPER.

3. HYDRO HAMMER IS NOT TO BE USED AROUND SUBSTRUCTURES.

Drawing name: M:\DATA\CAD\Standards\UG\0311\2505-2.dwg Plotted: Jun 02,2004 - 2:13pm

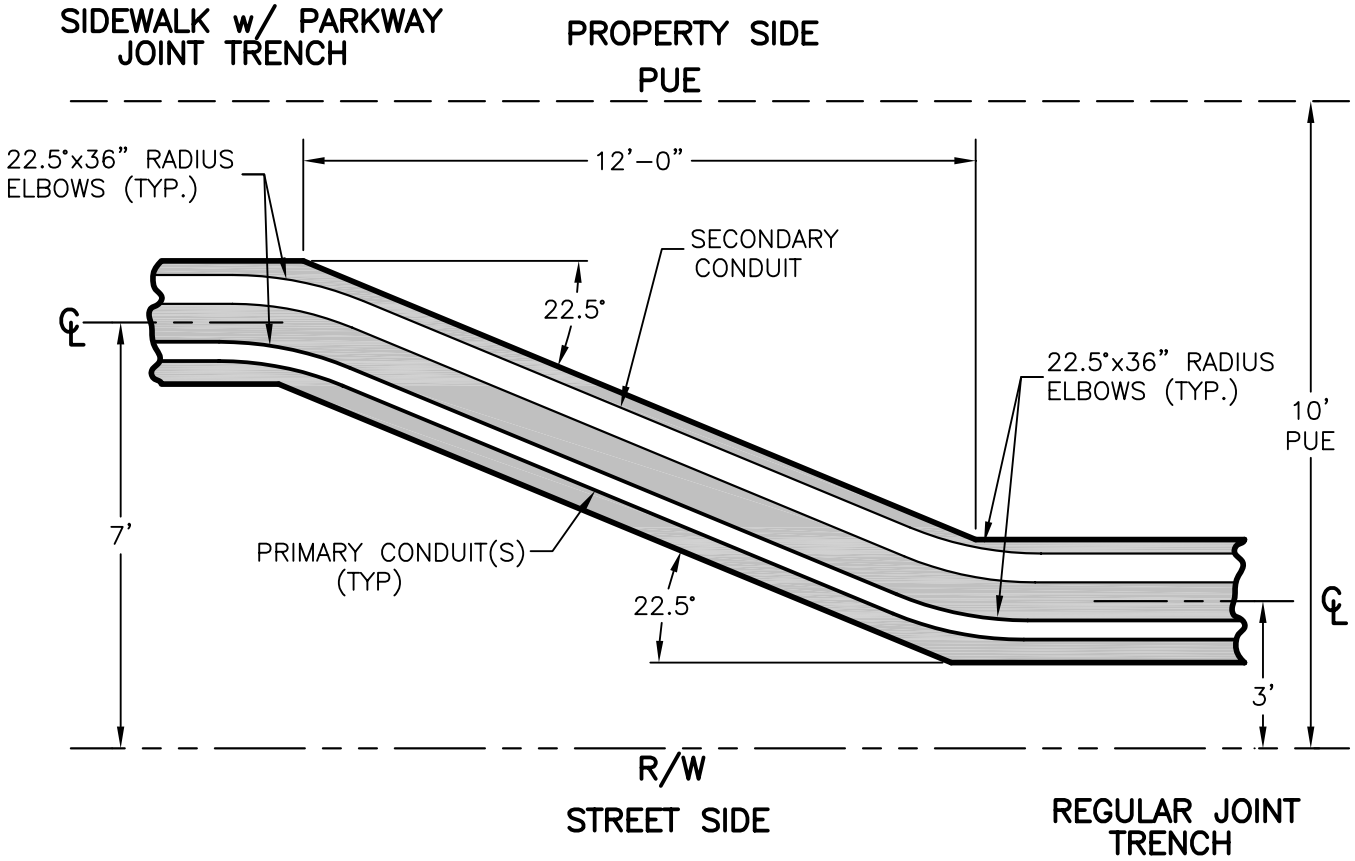
CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

SERVICE TRENCH DETAIL (OFF-SIDE) SIDEWALK WITH PARKWAY

29MAY01	RT	DJC	AMS		SHEET 2 OF 2	311 2505
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 2	

SIDEWALK w/ PARKWAY JOINT TRENCH



REGULAR JOINT TRENCH

NOTE:

1. PRIMARY AND SECONDARY CONDUITS CHANGE RELATIVE POSITIONS IN TRENCH WHEN CHANGING FROM REGULAR JOINT TRENCH TO SIDEWALK WITH PARKWAY JOINT TRENCH.
2. SINGLE CONDUIT SHOWN FOR CLARITY ONLY.

Drawing name: M:\DATA\CAD\Standards\UG\0311\2506.dwg Plotted: Jun 02,2004 - 2:13pm

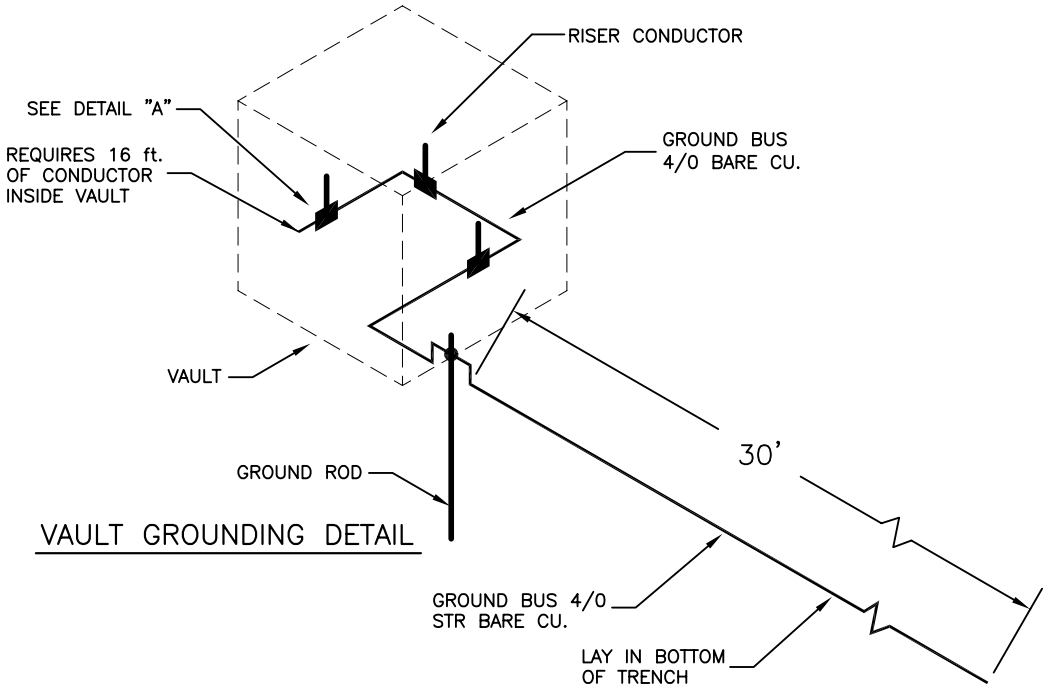
CITY OF LODI

ELECTRIC UTILITY DEPARTMENT

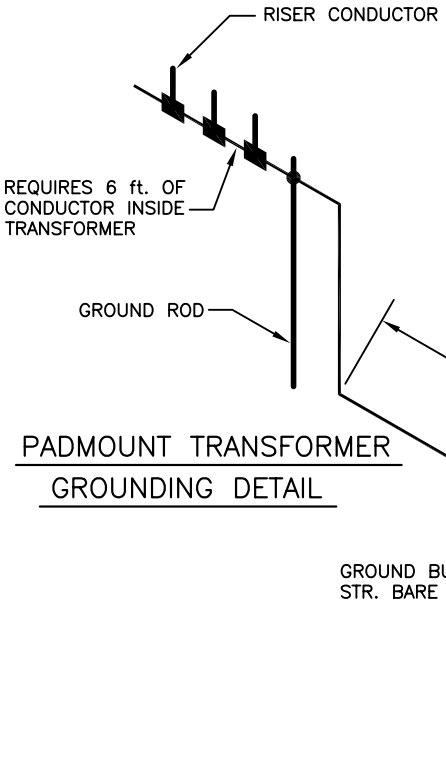
CONSTRUCTION STANDARD

TRENCH TRANSITION – REGULAR JOINT TRENCH TO SIDEWALK WITH PARKWAY JOINT TRENCH

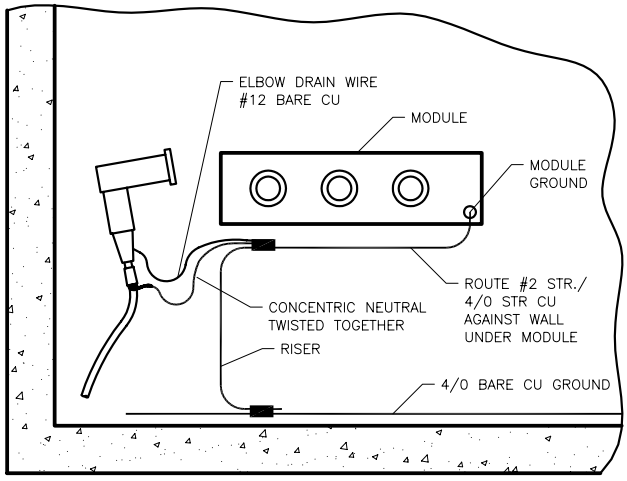
01JUN01	CW	DJC	AMS		SHEET 1 OF 1	311 2506
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 2	



VAULT GROUNDING DETAIL



PADMOUNT TRANSFORMER GROUNDING DETAIL



DETAIL "A"

LEGEND:

- COPPER CRIMPIT
- GROUND ROD CLAMP

Drawing name: M:\DATA\CAD\Standards\UG\0314\1007-1.dwg Plotted: Jun 02,2004 - 2:14pm

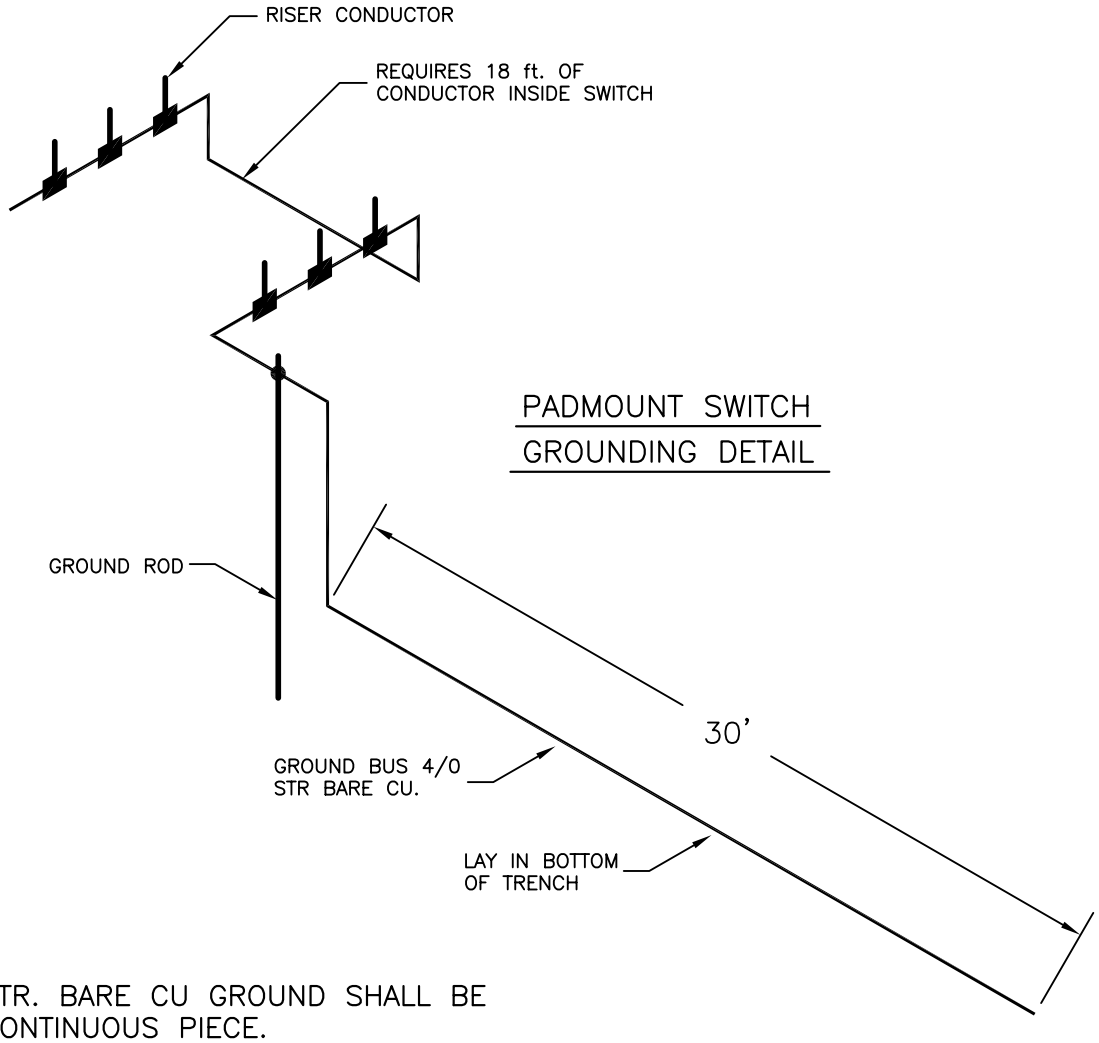
CITY OF LODI

ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

VAULT AND PADMOUNT EQUIPMENT GROUNDING

02APR98	TF	DJC	AMS		SHEET 1 OF 2	314 1007
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 3	



NOTES:

1. 4/0 STR. BARE CU GROUND SHALL BE ONE CONTINUOUS PIECE.
2. GROUND BUS SHALL BE INSTALLED AT THE BOTTOM OF THE TRENCH.
3. LAY 4/0 STR CU GROUND BUS IN BOTTOM OF VAULT PERIMETER AS SHOWN, SEE SHEET 1.
4. RISER CONDUCTOR SIZE TO BE:
   a. 4/0 STR BARE CU FOR PRIMARY CABLE LARGER THAN 2/0.
   b. #2 STR BARE CU FOR PRIMARY CABLE 2/0 AND SMALLER.
5. 4/0 STR BARE CU RISER CONDUCTOR TO BE TAPPED WITH #2 STR BARE CU TO GROUND THE 600 AMP MODULES.
6. GROUND BUS AND GROUND ROD INSTALLED AT TRANSFORMER SITES TO RISE IN THE SECONDARY PULL SECTION.
7. GROUND BUS AND GROUND ROD INSTALLED AT SWITCH SITES SHALL RISE IN THE PRIMARY PULL SECTION AT ONE SIDE OF THE SWITCH AND THEN THE GROUND BUS SHALL CONTINUE TO THE PRIMARY PULL SECTION AT THE OPPOSITE SIDE OF THE SWITCH.

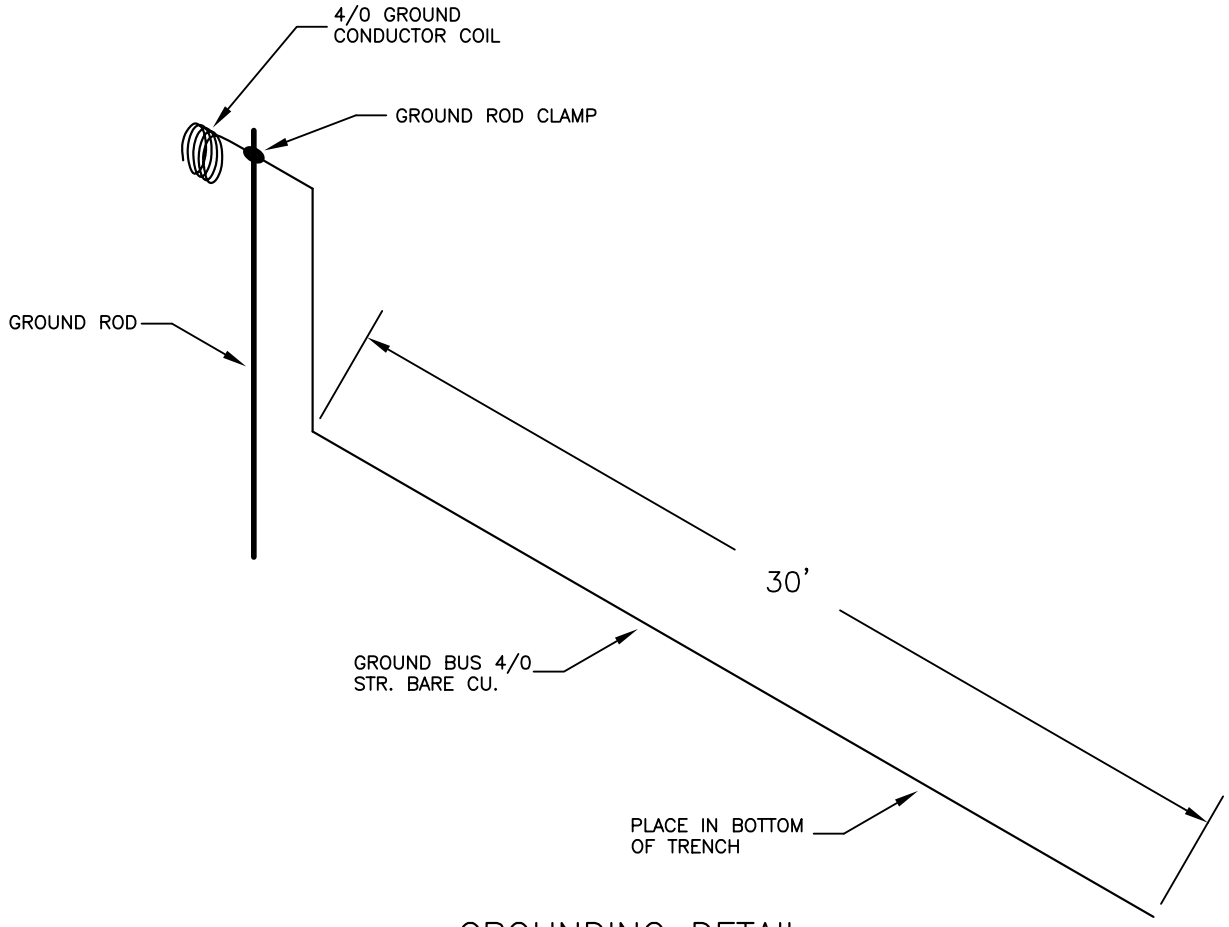
Drawing name: M:\DATA\CAD\Standards\UG\0314\1007-2.dwg Plotted: Jun 02,2004 - 2:15pm

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

VAULT AND PADMOUNT EQUIPMENT GROUNDING

02APR98	TF	DJC	AMS		SHEET 2 OF 2	314 1007
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 2	



GROUNDING DETAIL

NOTE:

1. A COIL OF GROUND CONDUCTOR SHALL BE LEFT BEYOND THE GROUND ROD CLAMP ATTACHMENT. THE LENGTH OF GROUND CONDUCTOR NEEDED AT EACH TYPE OF EQUIPMENT LOCATION IS AS FOLLOWS:

MODULE ENCLOSURE	– 6 ft.
TRANSFORMER	– 6 ft.
VAULT	– 16 ft.
SWITCH	– 18 ft.

2. WHERE GROUND BUS IS TO BE INSTALLED AT PRIMARY VAULT LOCATIONS, THE GROUND ROD SHALL BE DRIVEN OUTSIDE OF THE PRIMARY VAULT. THE COIL OF GROUND CONDUCTOR SHALL BE PLACED INSIDE THE VAULT THROUGH A SEALED OPENING IN THE VAULT (SIDE).

3. THE GROUND ROD SHALL BE GALVANIZED STEEL OR COPPER CLAD STEEL NOT LESS THAN 5/8" IN DIAMETER AND 8 ft. IN LENGTH.

4. A GROUND ROD CLAMP SHALL BE USED TO CONNECT THE GROUND CONDUCTOR TO THE GROUND ROD. THE GROUND ROD CLAMP SHALL BE A 3/4", #8– 1/0 STR COPPER CLAMP, JOSLYN CAT. NO. J8493AB OR APPROVED EQUAL.

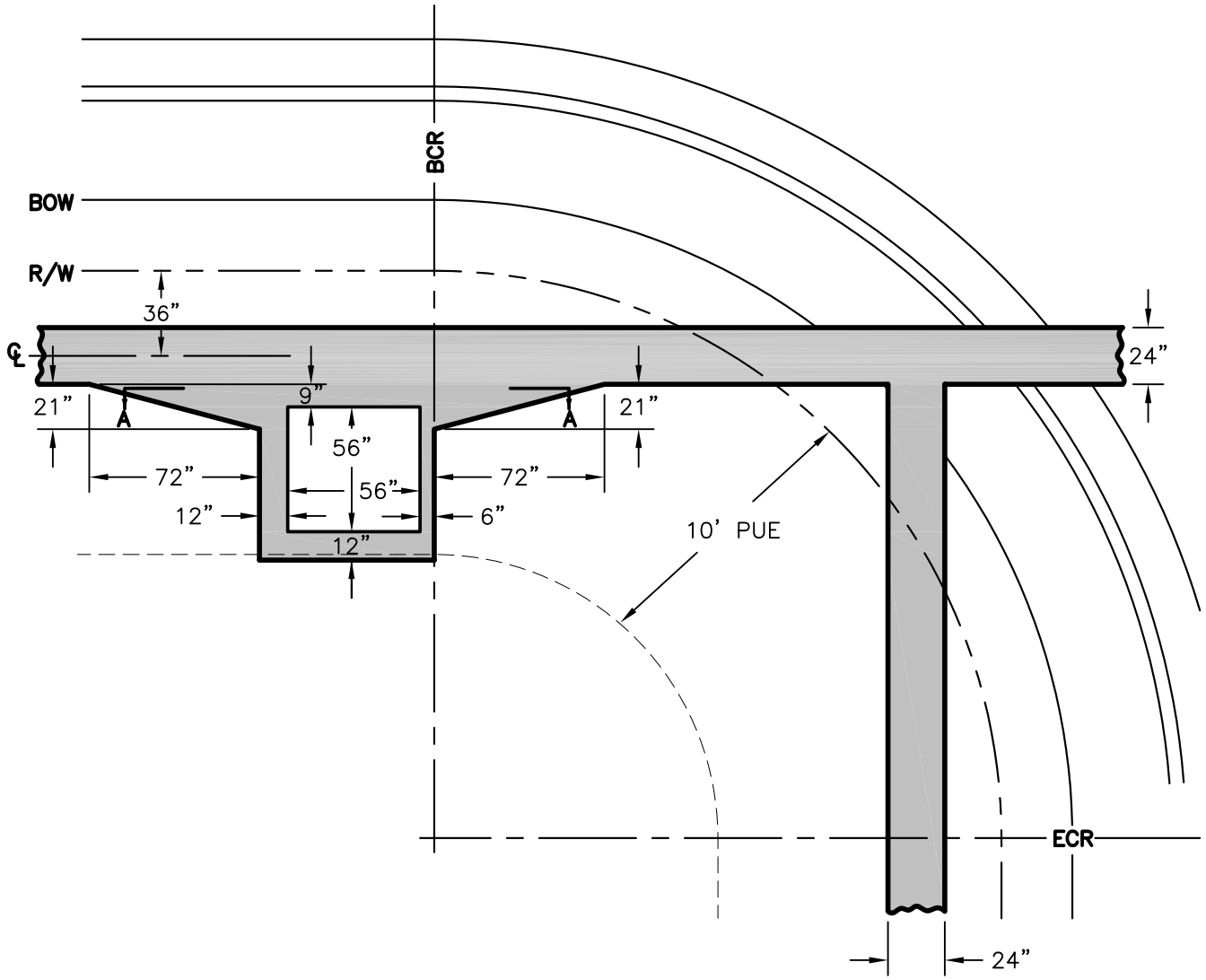
Drawing name: M:\DATA\CAD\Standards\UG\0314\1008.dwg Plotted: Jun 02,2004 - 2:15pm

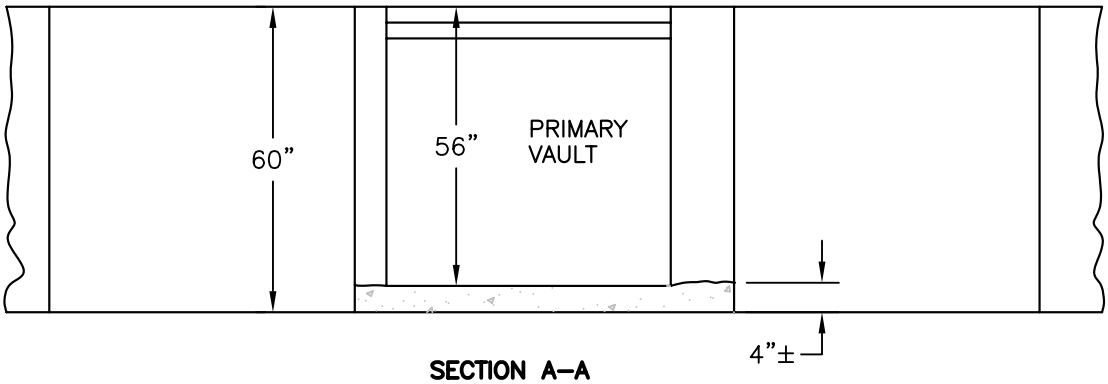
CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

PADMOUNT EQUIPMENT GROUNDING

16APR02	CW	AMS	AMS		SHEET 1 OF 1	314 1008
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 1	





SECTION A–A

Drawing name: M:\DATA\CAD\Standards\UG\0317\2422.dwg Plotted: Jun 02,2004 - 2:16pm

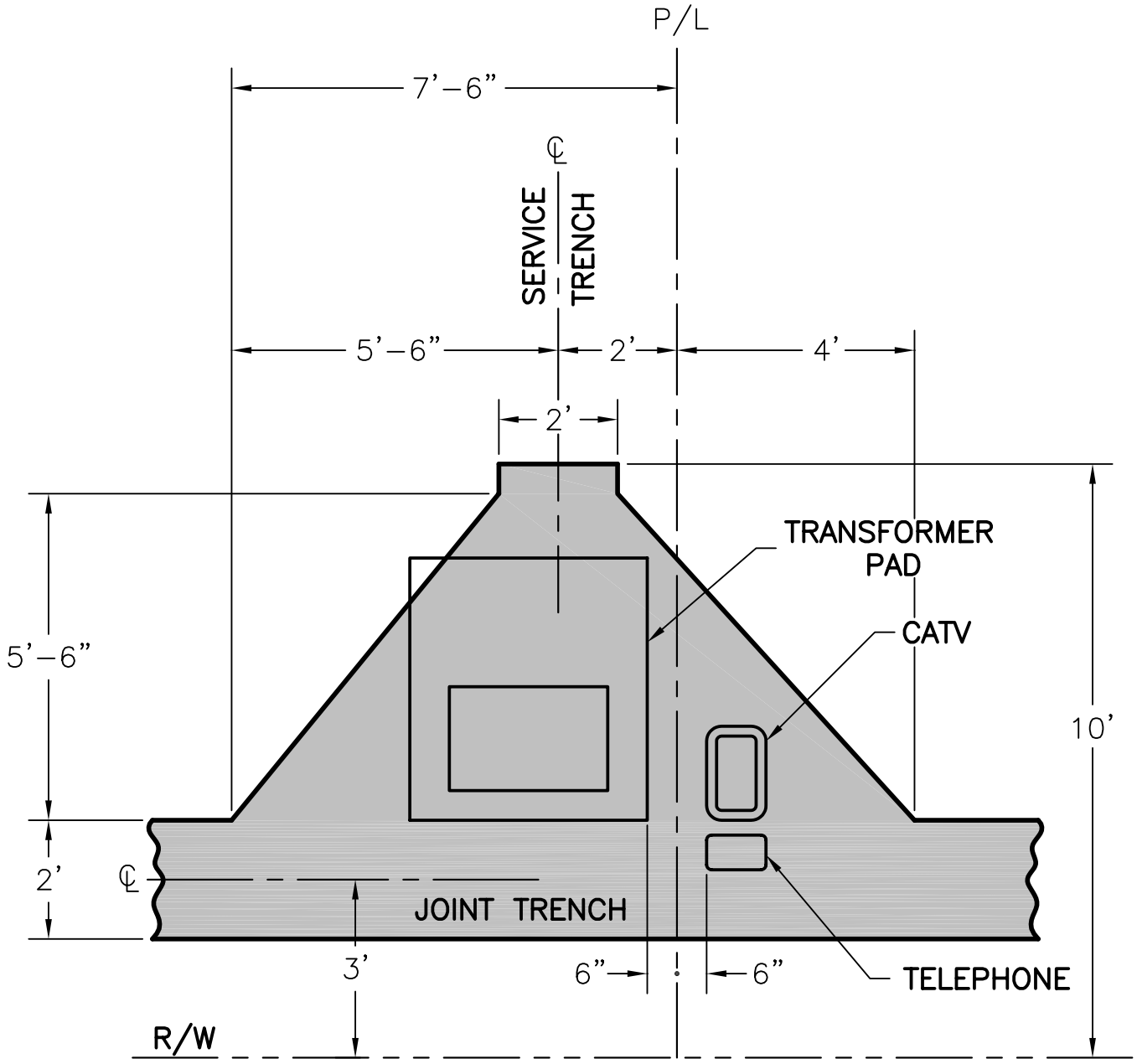
CITY OF LODI

ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

PRIMARY VAULT WITH RISER CORNER LOCATION INSTALLATION DETAIL

23JUN97	BA	DJC	AMS		SHEET 1 OF 1	317 2422
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 4	



Drawing name: M:\DATA\CAD\Standards\UG\0317\2426-1.dwg Plotted: Jun 02,2004 - 2:16pm

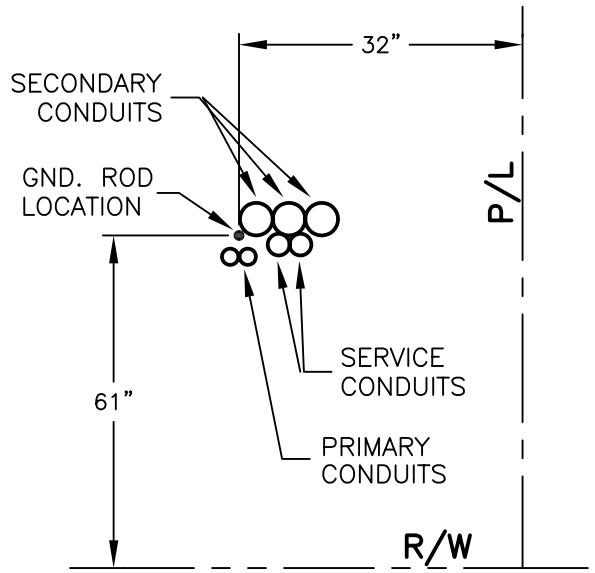
CITY OF LODI

ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

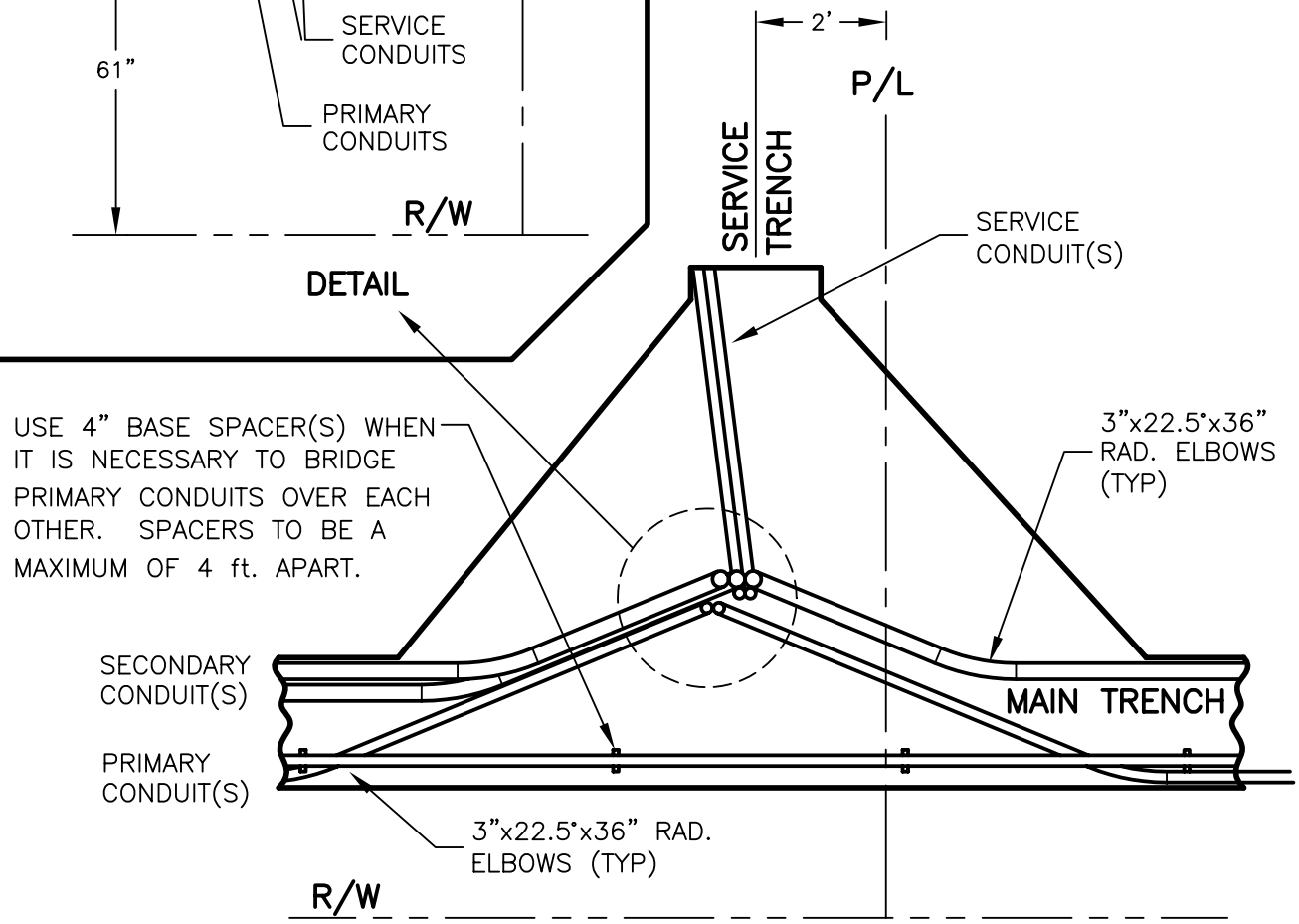
TRANSFORMER LOCATION AND TRENCH DETAIL (MAIN TRENCH SIDE)

29AUG96	BA	DJC	AMS		SHEET 1 OF 5	317 2426
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 3	



NOTE:

ADJUST PRIMARY CONDUIT DISTANCE TO R/W IN ACCORDANCE WITH LAY OF SECONDARY CONDUIT(S).



DETAIL

NOTE:

1. ALL 90° PRIMARY AND SECONDARY CONDUIT ELBOWS SHALL HAVE 36 in. RADIUS.
2. ALL 90° SERVICE CONDUIT ELBOWS SHALL HAVE 24 in. RADIUS.
3. ALL CONDUIT ENDS TO BE CAPPED WITH ALLIANCE PLASTIC CONDUIT CAPS [RRC-2(2"),RRC-3(3")] OR APPROVED EQUAL.
4. INSTALL TRANSFORMER GROUND PER 314 1007. PROVIDE A GROUND WIRE TAIL ABOVE GROUND LEVEL A MINIMUM OF 4 ft. LONG.

Drawing name: M:\DATA\CAD\Standards\UG\0317\2426-2.dwg Plotted: Jun 02,2004 - 2:17pm

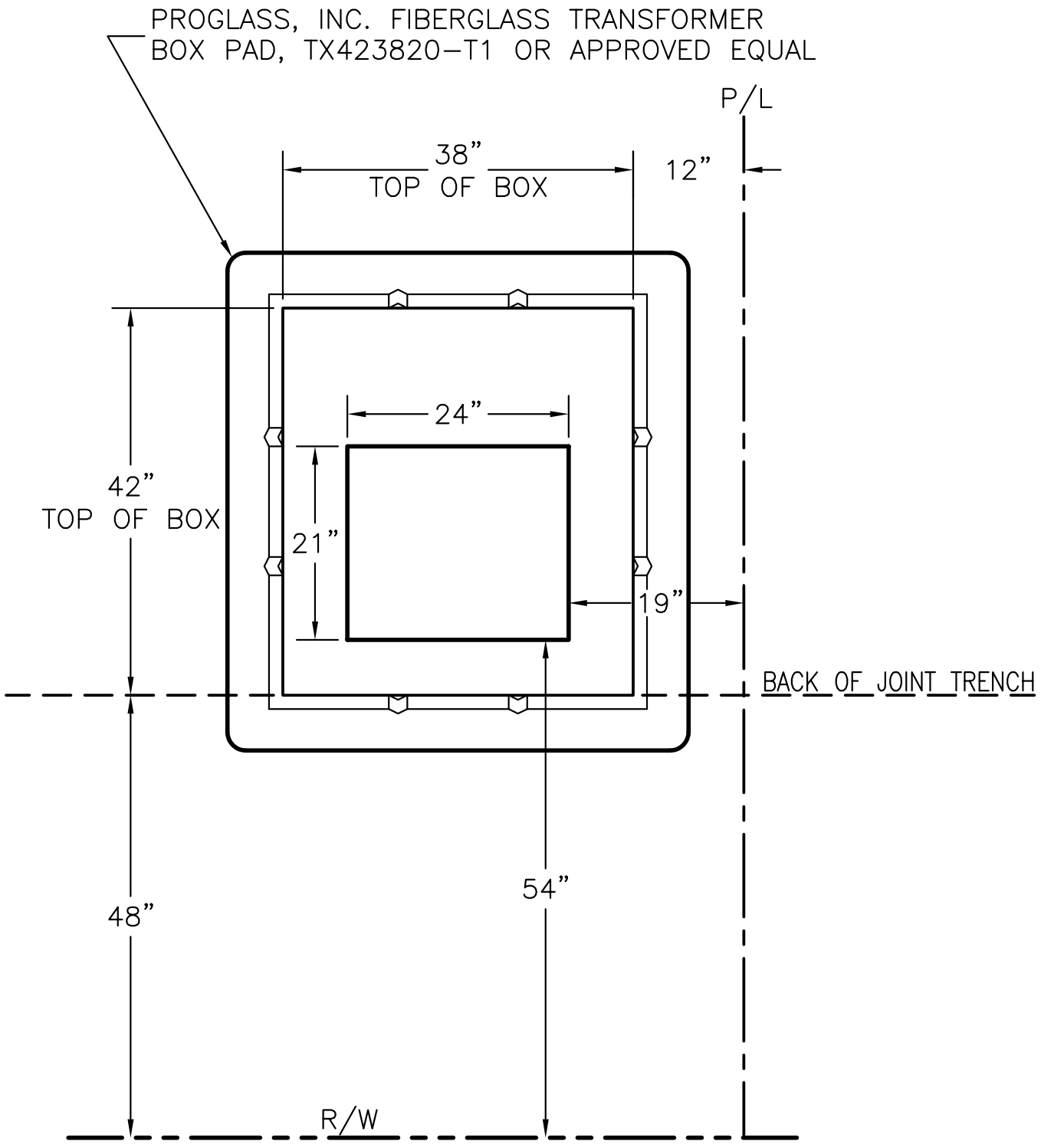
CITY OF LODI

ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

TRANSFORMER LOCATION AND CONDUIT (MAIN TRENCH SIDE)

21OCT99	BA	DJC	AMS		SHEET 2 OF 5	317 2426
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 7	



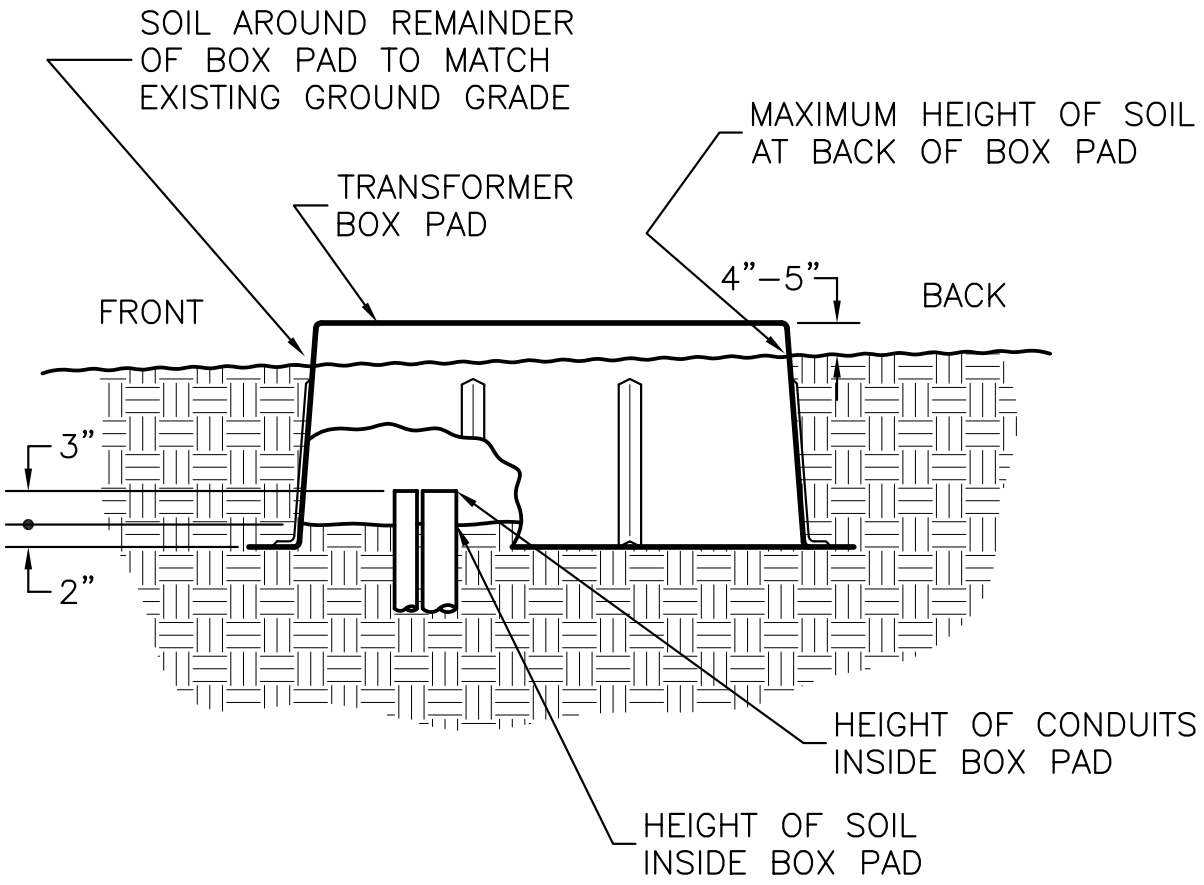
Drawing name: M:\DATA\CAD\Standards\UG\0317\2426-3.dwg Plotted: Jun 02,2004 - 2:18pm

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

FIBERGLASS TRANSFORMER BOX PAD CONDUIT AND BOX PAD LOCATION

22AUG96	BA	DJC	AMS		SHEET 3 OF 5	317 2426
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 2	



NOTES:

1. TRANSFORMER BOX PAD SHALL BE LEVEL.
2. TRANSFORMER BOX PAD SITE TO BE COMPACTED TO 90% COMPACTION (HYDRO–HAMMER IS NOT TO BE USED AROUND BOX PAD).

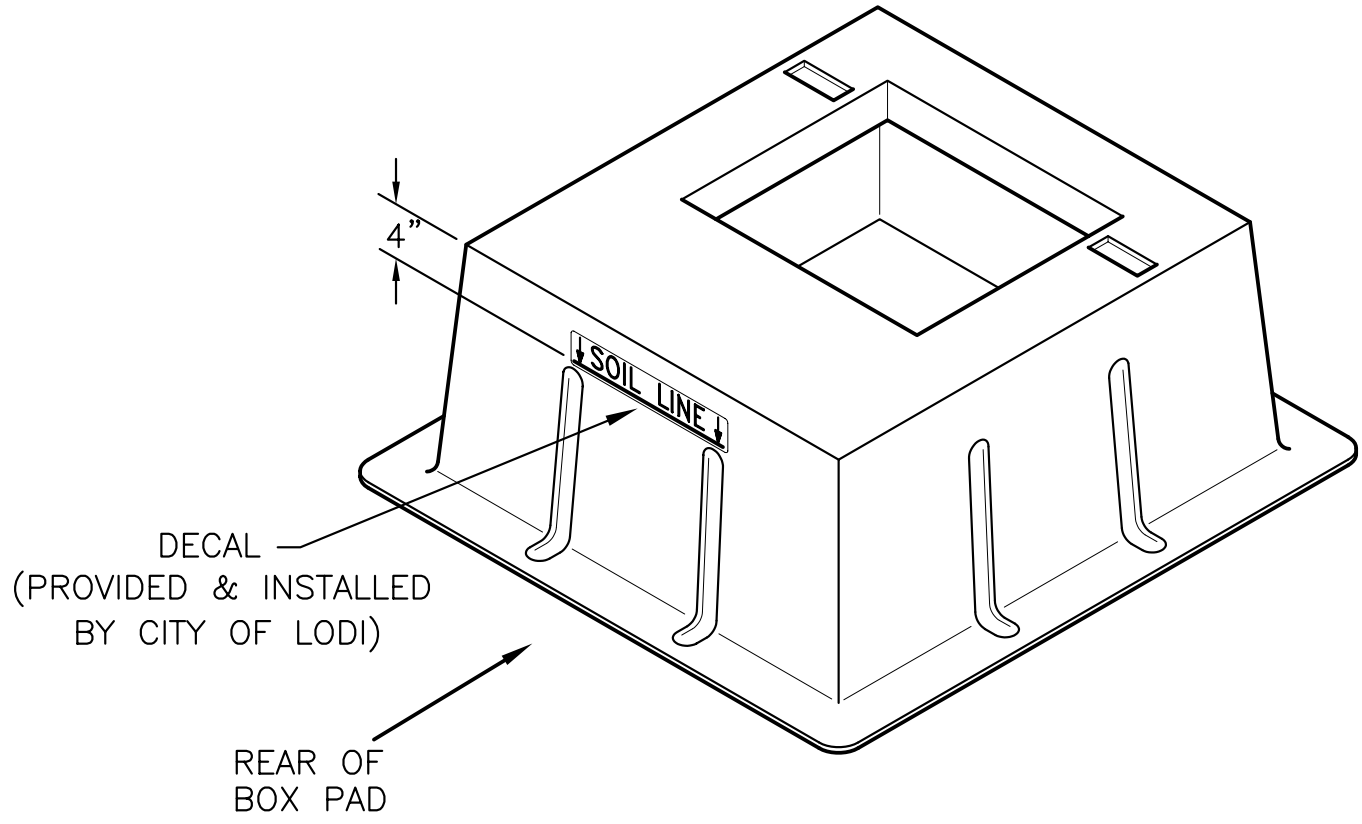
Drawing name: M:\DATA\CAD\Standards\UG\0317\2426-4.dwg Plotted: Jun 02,2004 - 2:18pm

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

FIBERGLASS TRANSFORMER BOX PAD CONDUIT AND BOX PAD INSTALLATION DETAIL

21OCT99	BA	DJC	AMS		SHEET 4 OF 5	317 2426
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 3	



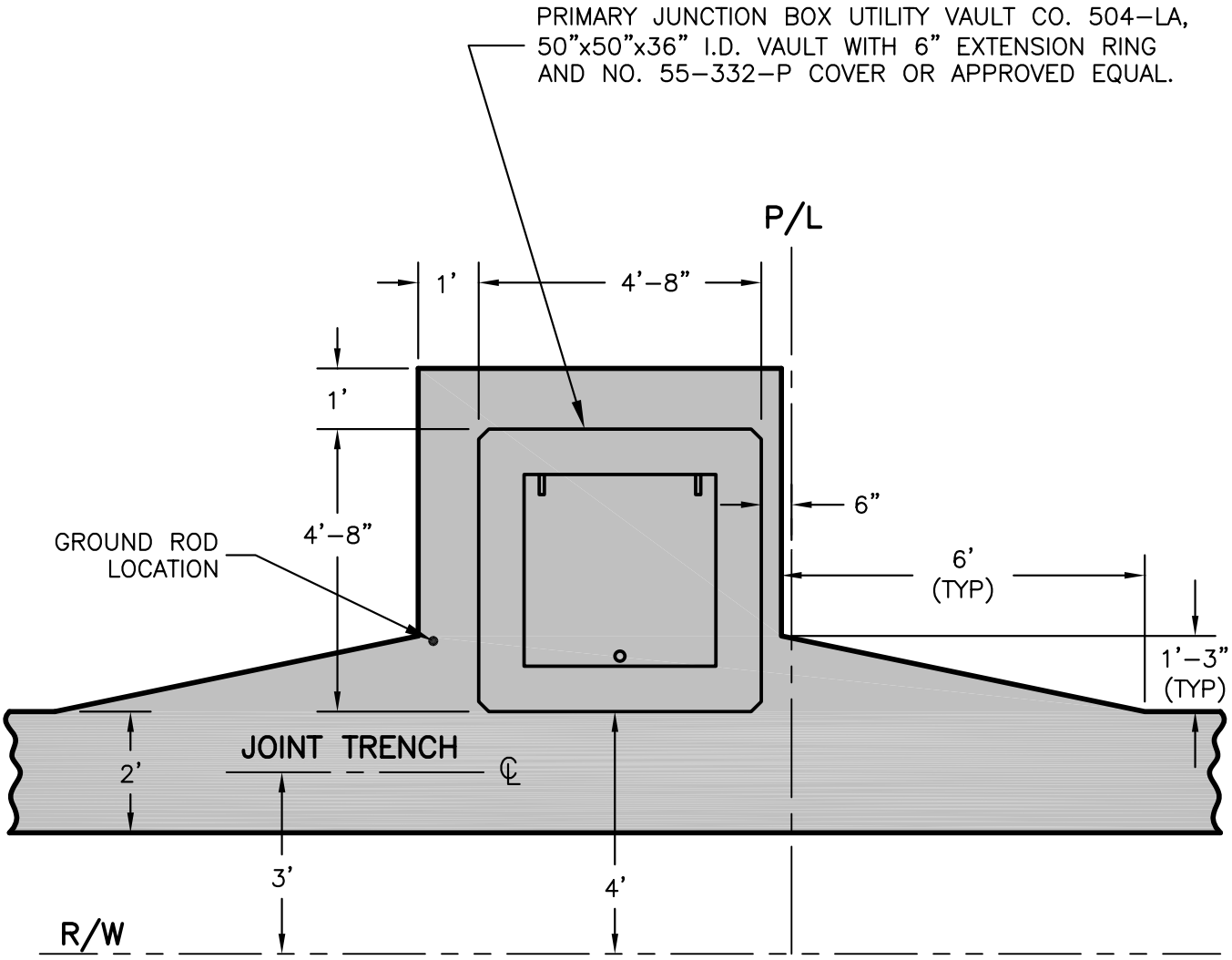
Drawing name: M:\DATA\CAD\Standards\UG\0317\2426-5.dwg Plotted: Jun 02,2004 - 2:19pm

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

TRANSFORMER BOX PAD MARKING DETAIL

21OCT99	BA	AMS	AMS		SHEET 5 OF 5	317 2426
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 2	

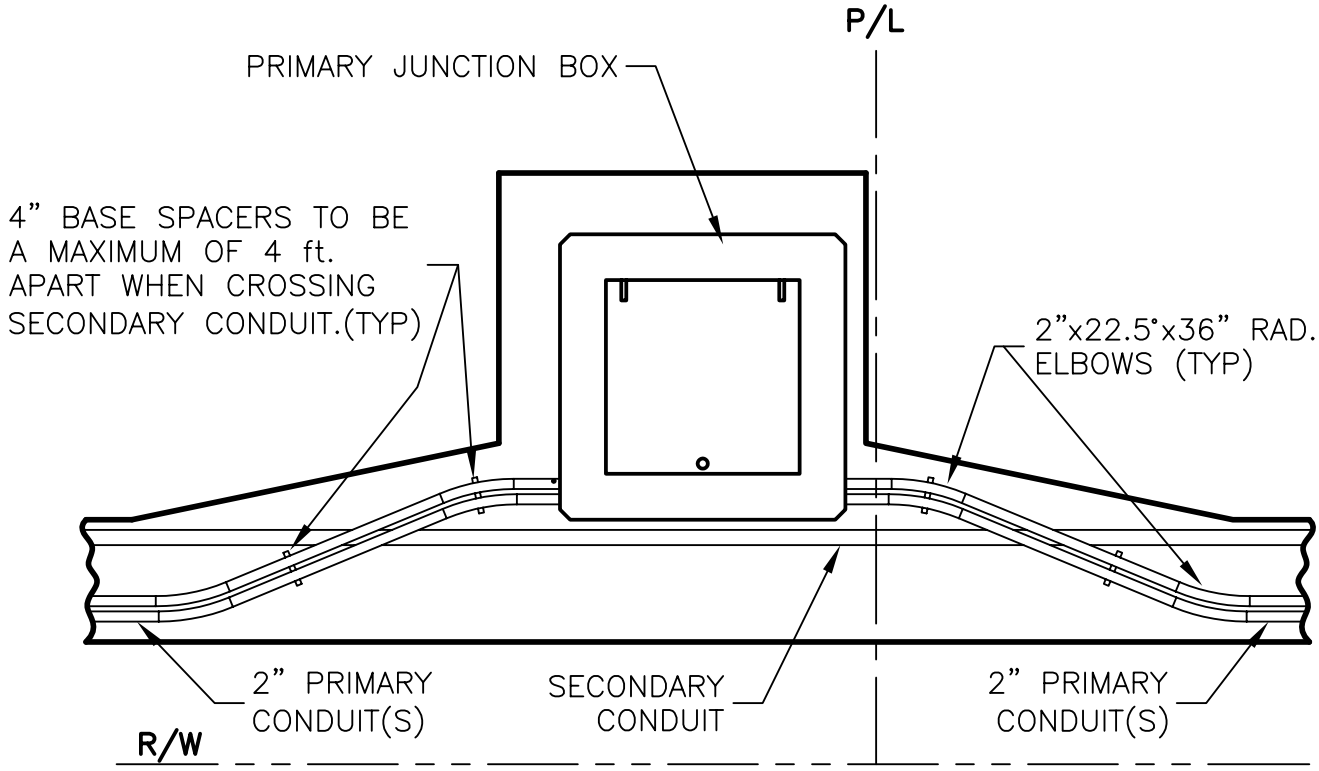


NOTE:

1. INSTALL VAULT GROUND PER 314 1007.

Drawing name: M:\DATA\CAD\Standards\UG\0317\2427-1.dwg Plotted: Jun 02,2004 - 2:19pm

CITY OF LODI ELECTRIC UTILITY DEPARTMENT				CONSTRUCTION STANDARD PRIMARY JUNCTION BOX, MAIN TRENCH DETAIL (LOCATED ON PROPERTY LINE)		
22OCT99	BA	DJC	AMS		SHEET 1 OF 4	317 2427
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 3	



NOTE:

1. CONDUIT(S) SHALL ENTER THE PRIMARY JUNCTION BOX 90° TO THE OUTSIDE WALL OF THE BOX.

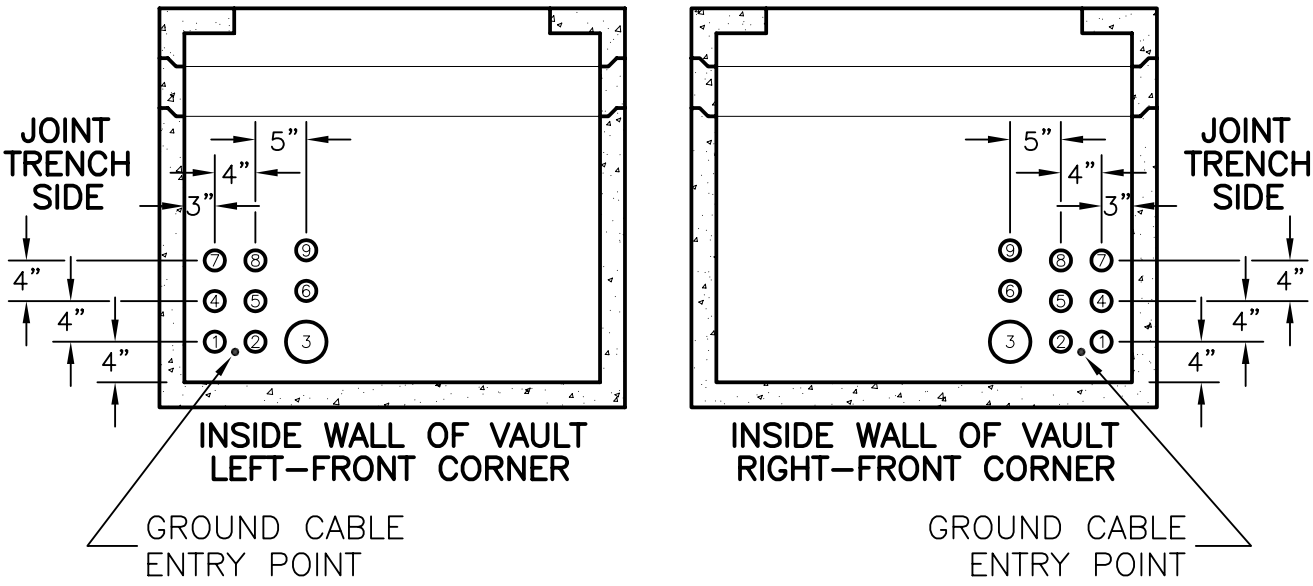
Drawing name: M:\DATA\CAD\Standards\UG\0317\2427-2.dwg Plotted: Jun 02,2004 - 2:20pm

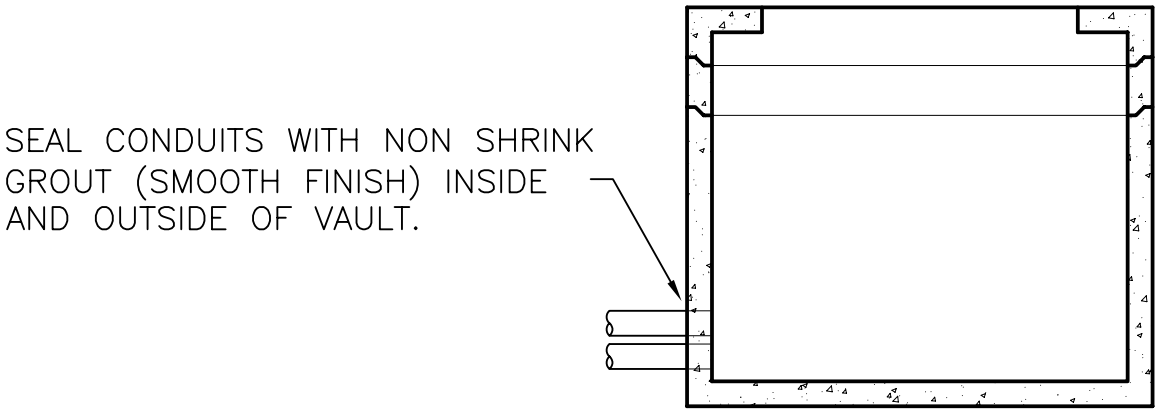
CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

PRIMARY JUNCTION BOX, CONDUIT INSTALLATION DETAIL

29AUG96	BA	DJC	AMS		SHEET 2 OF 4	317 2427
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 2	





NOTE:

1. USE CONDUIT LOCATIONS IN NUMERICAL ORDER (DEPENDING ON NUMBER OF CONDUITS REQUIRED).
2. CONDUITS SHALL ENTER VAULT IN CORNER CLOSEST TO THE JOINT TRENCH.

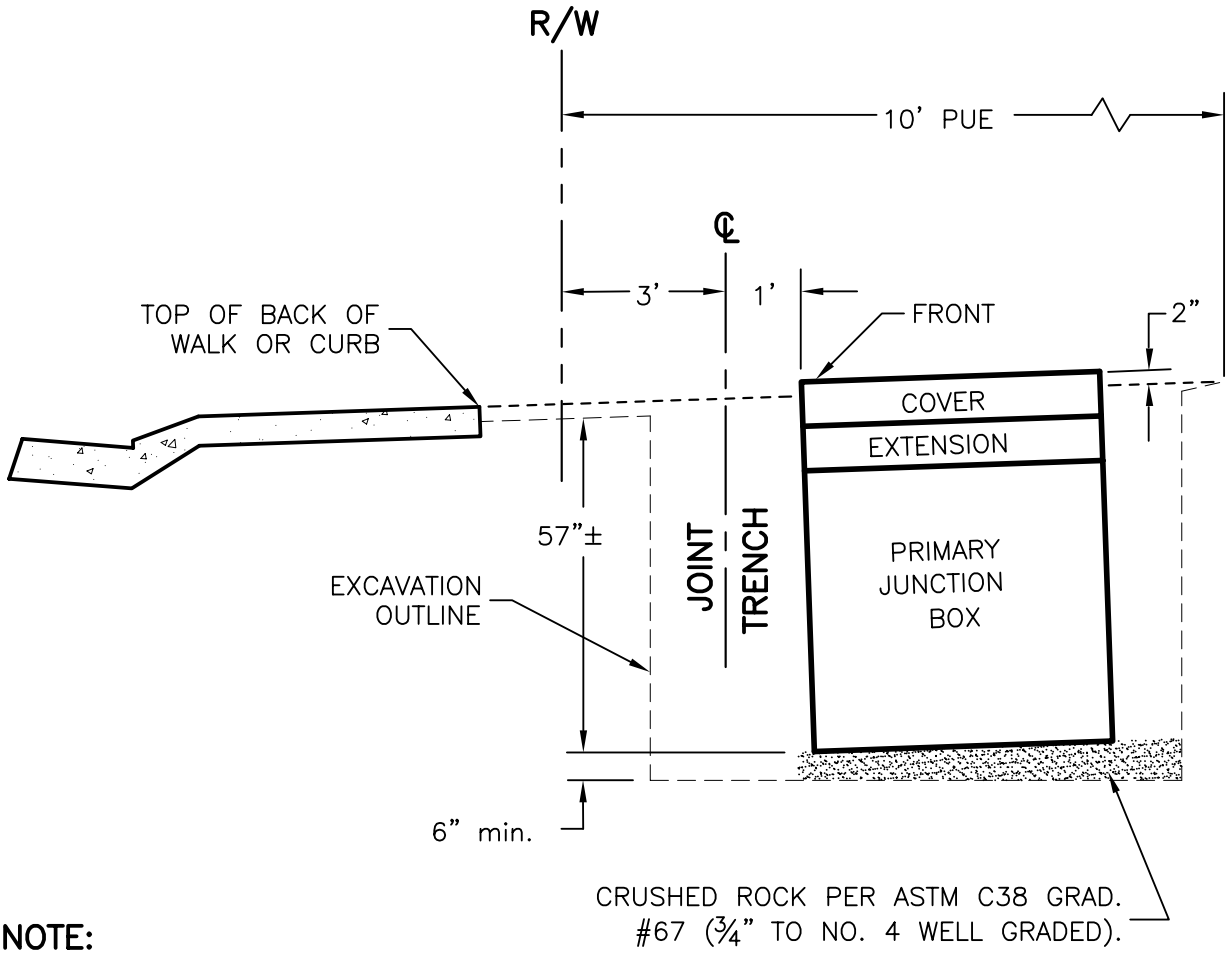
Drawing name: M:\DATA\CAD\Standards\UG\0317\2427-3.dwg Plotted: Jun 02,2004 - 2:21pm

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

PRIMARY JUNCTION BOX, CONDUIT INSTALLATION DETAIL

03SEP96	BA	DJC	AMS		SHEET 3 OF 4	317 2427
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 3	



NOTE:

1. PRIMARY JUNCTION BOX, EXTENSION AND COVER SHALL BE PER CITY OF LODI SPECIFICATION.
2. PRIMARY JUNCTION BOX GRADE, FROM FRONT TO BACK, SHALL BE 2 in. ABOVE A LINE EXTENDING FROM THE TOP OF BACK OF CURB OR SIDEWALK TO THE FINAL GRADE AT THE BACK OF THE PUE (SEE DRAWING) AND SHALL BE LEVEL SIDE TO SIDE.
3. BOTTOM OF PRIMARY JUNCTION BOX EXCAVATION TO BE COMPACTED TO 90% COMPACTION PRIOR TO INSTALLATION OF DRAIN ROCK AND BOX. CITY OF LODI, PUBLIC WORKS DEPARTMENT, TO PROVIDE COMPACTION TESTS. CONTACT ELECTRIC UTILITY DEPARTMENT AT (209) 333–6817 FOR COORDINATION OF COMPACTION TESTING.
4. ALL VAULTS TO BE SPOTTED PER CITY OF LODI DRAWINGS, STANDARDS AND SPECIFICATIONS. STAKING WILL BE PROVIDED BY DEVELOPER.
5. HYDRO HAMMER IS NOT TO BE USED AROUND SUBSTRUCTURES. CITY OF LODI INSPECTOR TO APPROVE EACH VAULT PRIOR TO DEVELOPER COMPLETING PROJECT.
6. COVER TO BE SET FOR LID TO OPEN FROM THE FRONT (STREET SIDE).
7. ASPHALTIC VAULT SEALANT TO BE INSTALLED BETWEEN THE JUNCTION BOX COVER AND THE EXTENSION RING AND BETWEEN THE EXTENSION RING AND THE JUNCTION BOX.
8. INSTALL GROUND IN JUNCTION BOX PER 314 1007. GROUND WIRE TAIL IN VAULT SHALL BE A MINIMUM OF 16 ft. LONG.

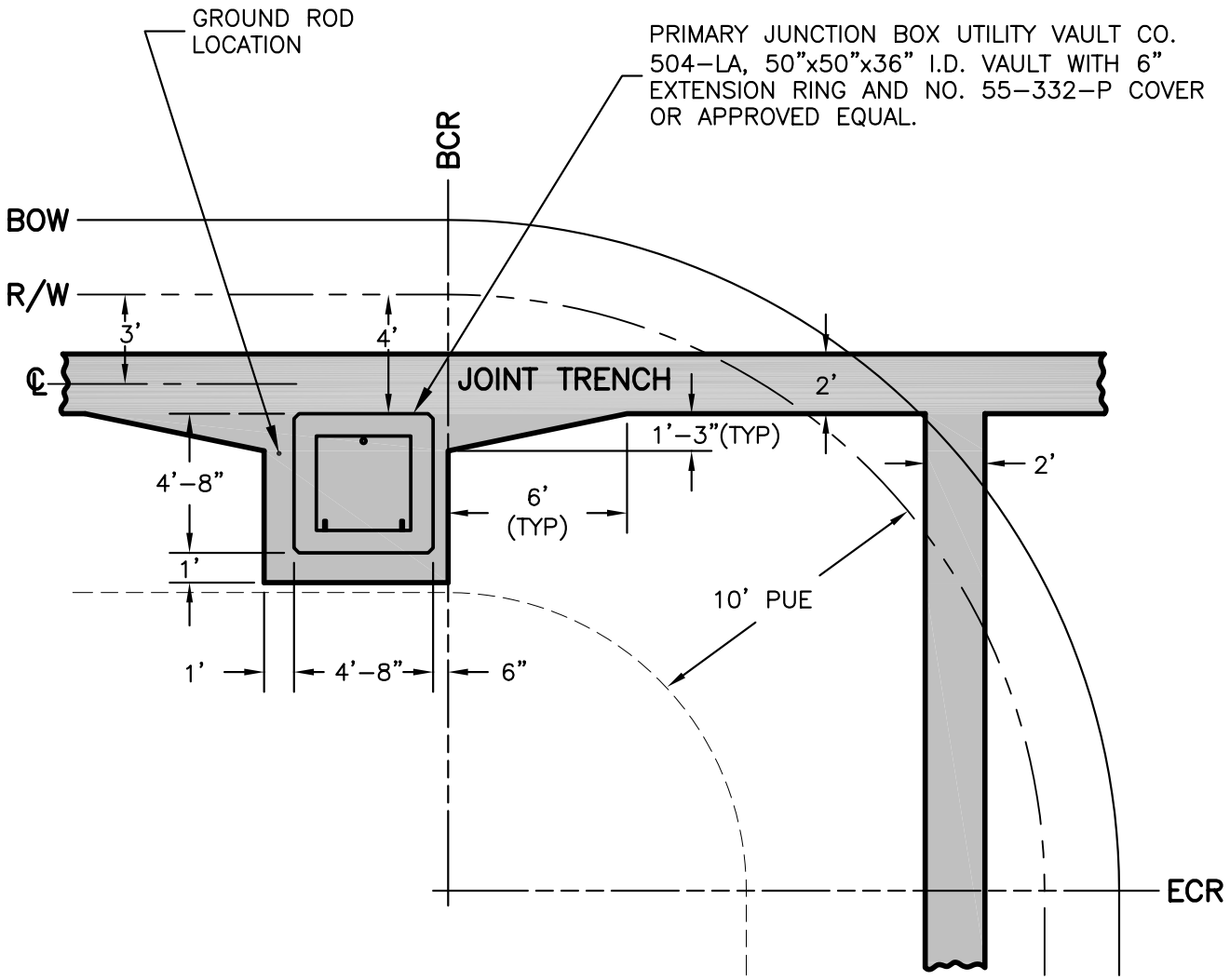
Drawing name: M:\DATA\CAD\Standards\UG\0317\2427-4.dwg Plotted: Jun 02,2004 - 2:21pm

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

PRIMARY JUNCTION BOX INSTALLATION DETAIL

21OCT99	BA	DJC	AMS		SHEET 4 OF 4	317 2427
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 5	



NOTE:

1. INSTALL VAULT GROUND PER 314 1007.
2. SEE 317 2427 SHEETS 2, 3 & 4 FOR JUNCTION BOX AND CONDUIT INSTALLATION.

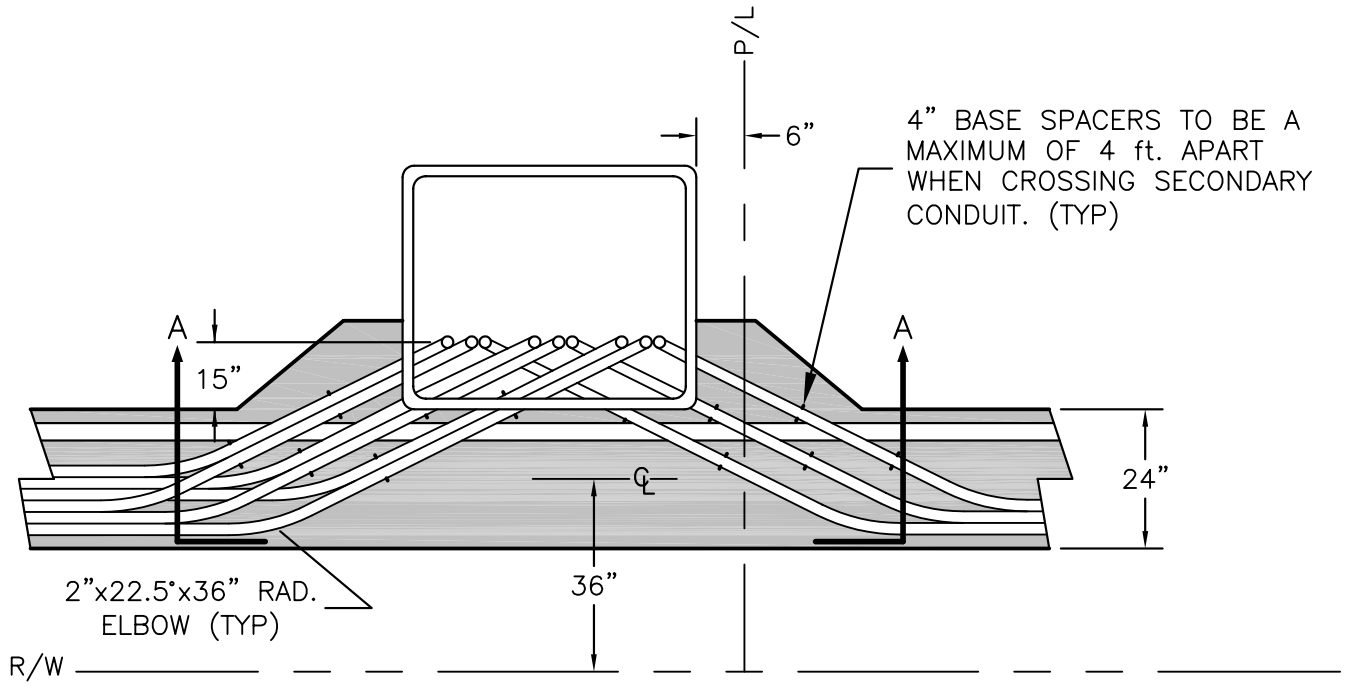
Drawing name: M:\DATA\CAD\Standards\UG\0317\2428.dwg Plotted: Jun 02,2004 - 2:22pm

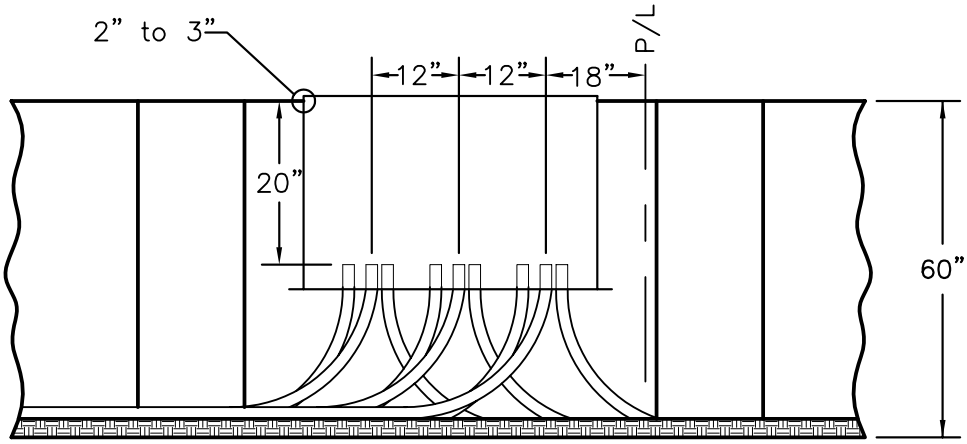
CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

PRIMARY JUNCTION BOX CORNER LOCATION DETAIL

21OCT99	BA	DJC	AMS		SHEET 1 OF 1	317 2428
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 6	





SECTION A–A

1. WHERE MODULE ENCLOSURE IS INSTALLED IN A PLANTER AREA IT SHALL BE SET FLUSH AND LEVEL WITH ADJACENT CURBING UNLESS OTHERWISE NOTED ON PLANS.

2. WHERE MODULE ENCLOSURE IS INSTALLED IN A LANDSCAPED AREA IT SHALL BE INSTALLED LEVEL AND 2 in. ABOVE ADJACENT GROUND LEVEL UNLESS OTHERWISE NOTED ON PLANS.

3. INSTALL GROUND WIRE AND ASSOCIATED EQUIPMENT AT MODULE ENCLOSURE PER 314 1007. GROUND WIRE TAIL IN MODULE ENCLOSURE SHALL BE A MINIMUM OF 6 ft. LONG.

4. ALL CONDUIT ENDS TO BE CAPPED WITH ALLIANCE PLASTIC CONDUIT CAPS [RRC–2(2"),RRC–4(4")] OR APPROVED EQUAL.

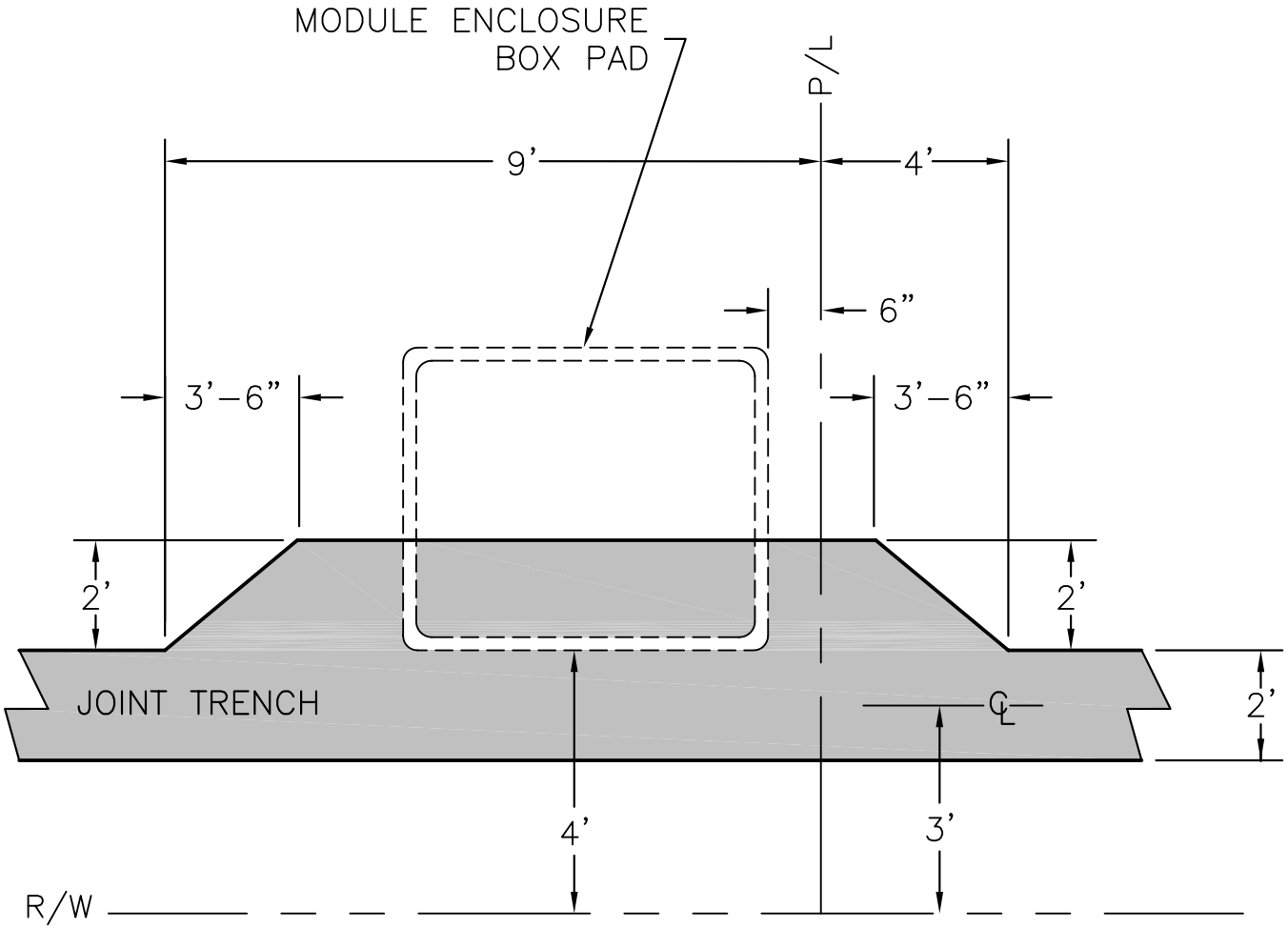
Drawing name: M:\DATA\CAD\Standards\UG\0317\2429_1.dwg Plotted: Jun 02,2004 - 2:23pm

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

MODULE ENCLOSURE INSTALLATION DETAIL

01APR99	TF	JVJ	AMS		SHEET 1 OF 2	317 2429
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 4	



Drawing name: M:\DATA\CAD\Standards\UG\0317\2429_2.dwg Plotted: Jun 02,2004 - 2:23pm

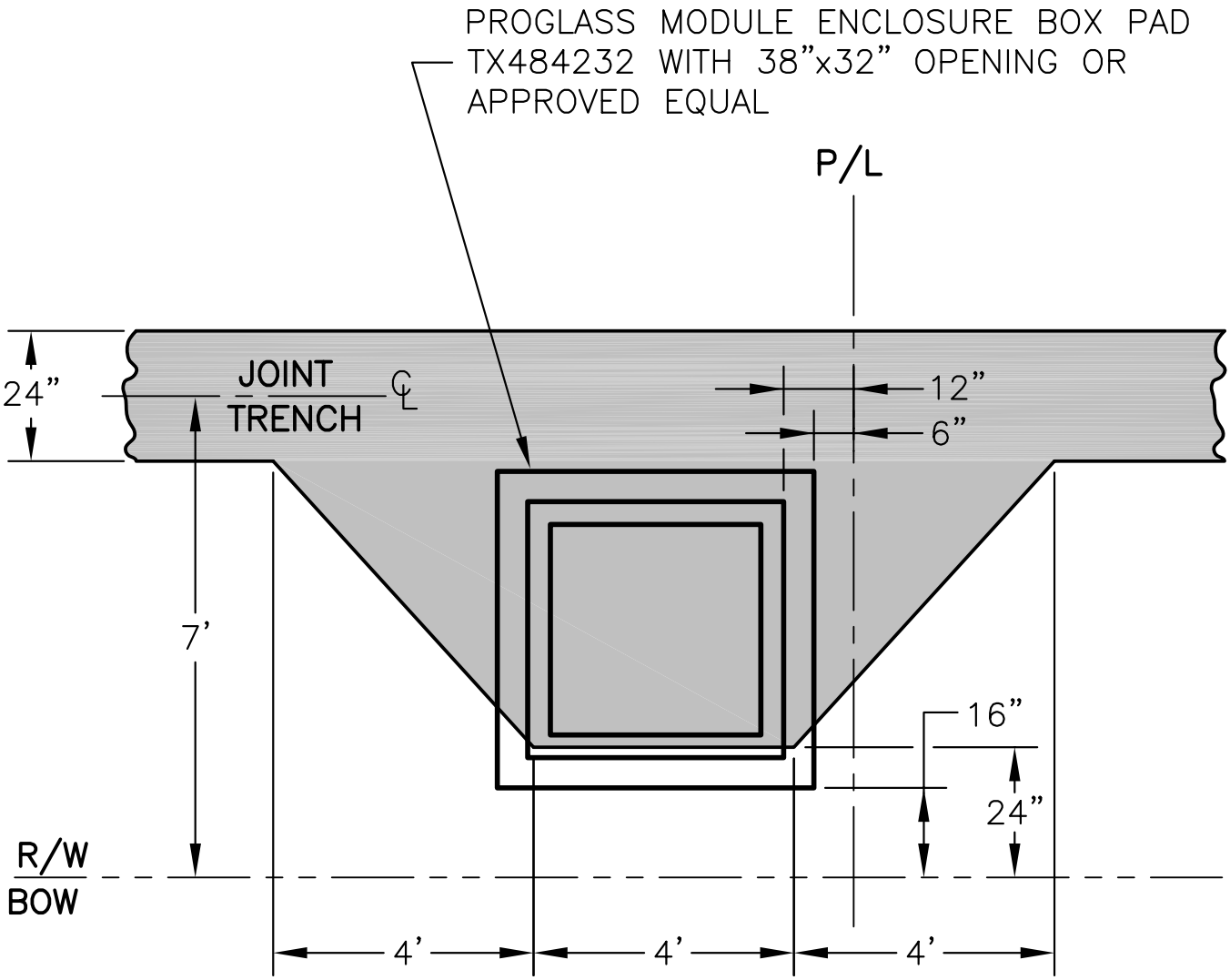
CITY OF LODI

ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

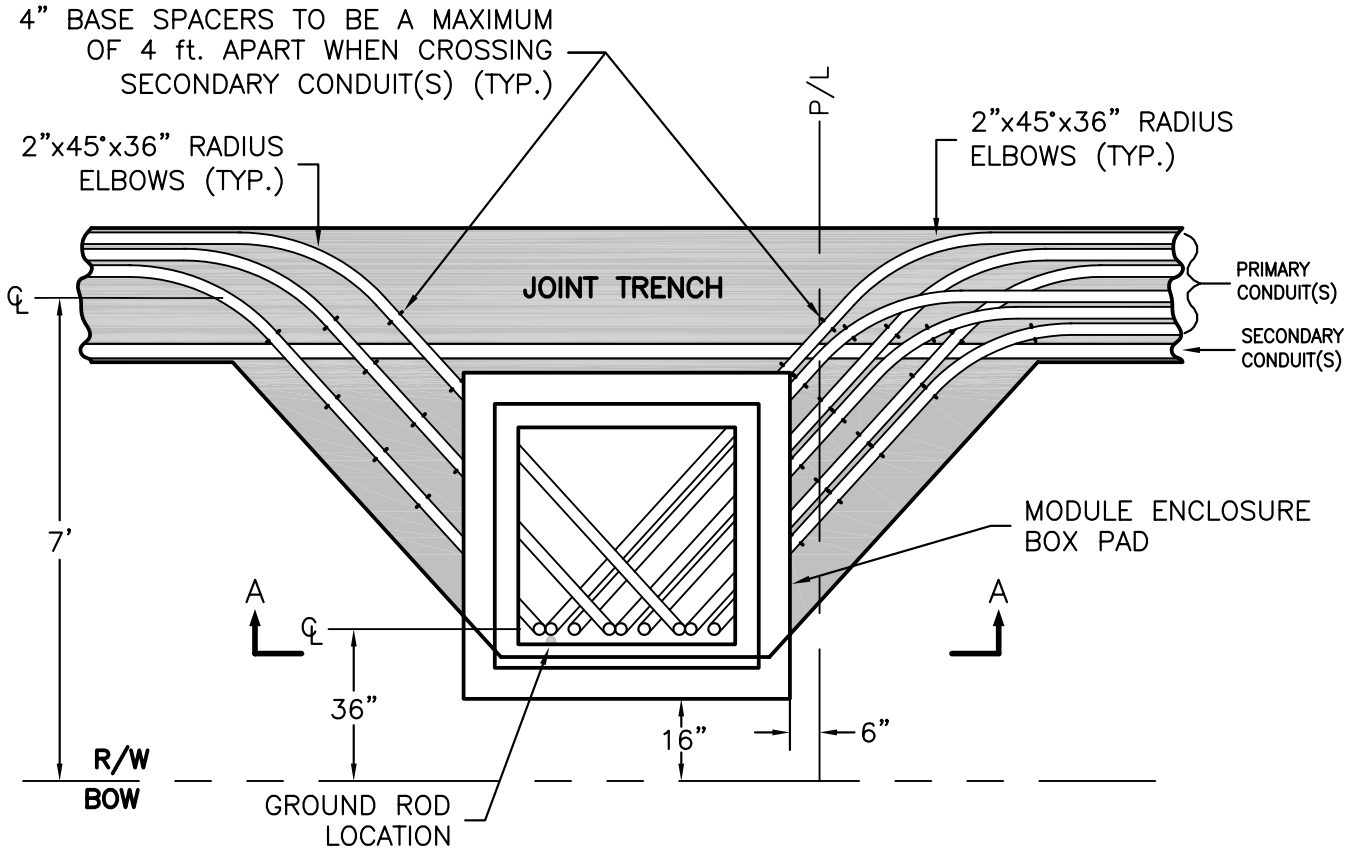
MODULE ENCLOSURE TRENCH DETAIL

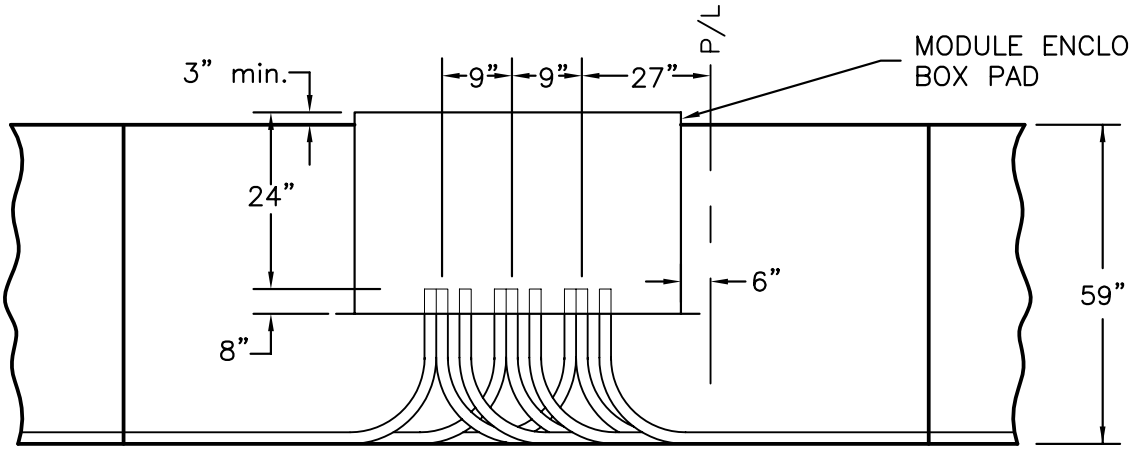
01APR99	TF	JVJ	AMS		SHEET 2 OF 2	317 2429
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 2	



Drawing name: M:\DATA\CAD\Standards\UG\0317\2430-1.dwg Plotted: Jun 02,2004 - 2:24pm

CITY OF LODI ELECTRIC UTILITY DEPARTMENT				CONSTRUCTION STANDARD MODULE ENCLOSURE TRENCH DETAIL SIDEWALK WITH PARKWAY		
11JUN01	CW	DJC	AMS		SHEET 1 OF 2	317 2430
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 1	





SECTION A–A

1. WHERE MODULE ENCLOSURE IS INSTALLED IN A LANDSCAPED AREA IT SHALL BE INSTALLED LEVEL AND 3 in. MINIMUM ABOVE ADJACENT GROUND LEVEL UNLESS OTHERWISE NOTED ON PLANS.

2. INSTALL GROUND WIRE AND ASSOCIATED EQUIPMENT AT MODULE ENCLOSURE PER ELECTRICAL CONSTRUCTION STANDARD 314 1007. GROUND WIRE TAIL IN MODULE ENCLOSURE SHALL BE A MINIMUM OF 6 ft. LONG.

3. ALL EMPTY CONDUIT ENDS TO BE CAPPED WITH ALLIANCE PLASTIC CONDUIT CAPS RRC–2 (2"), RRC–4 (4") OR APPROVED EQUAL.

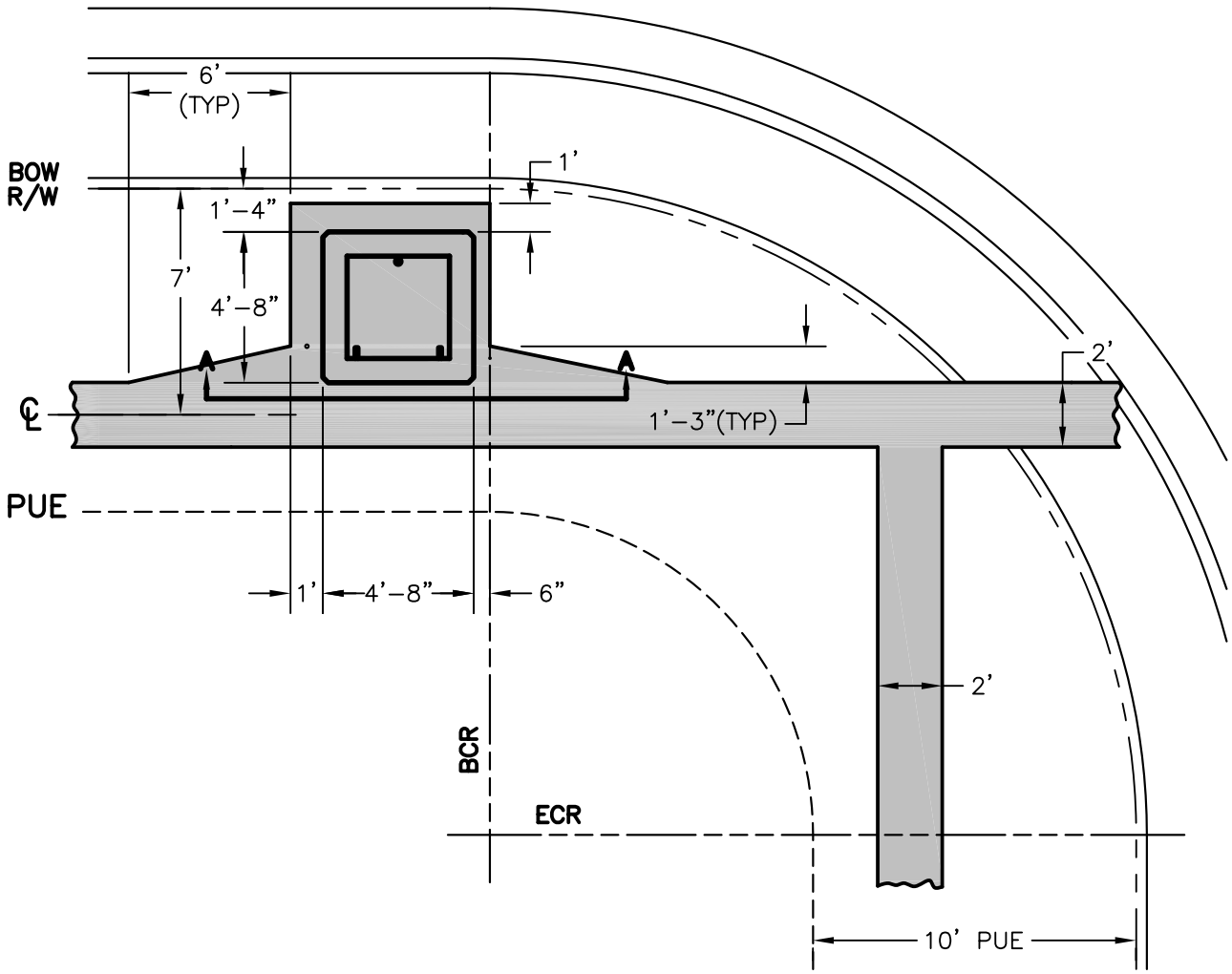
Drawing name: M:\DATA\CAD\Standards\UG\0317\2430-2.dwg Plotted: Jun 02,2004 - 2:25pm

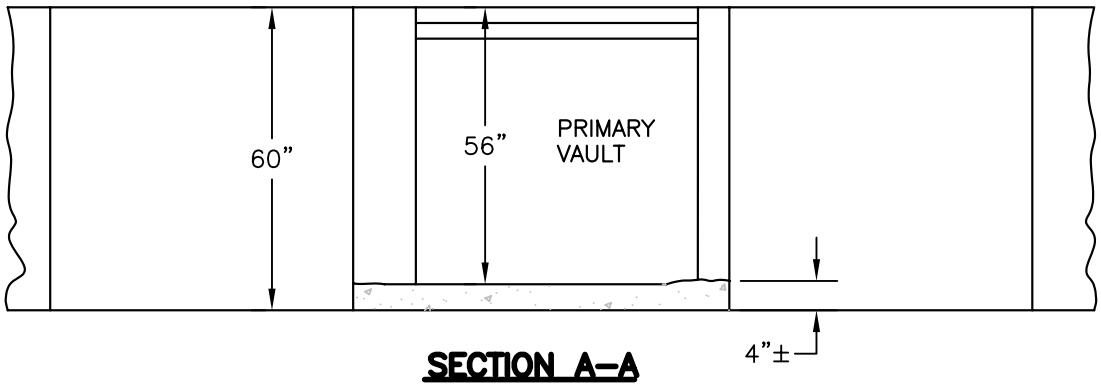
CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

MODULE ENCLOSURE TRENCH DETAIL SIDEWALK WITH PARKWAY

31MAY01	CW	DJC	AMS		SHEET 2 OF 2	317 2430
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 3	





SECTION A–A

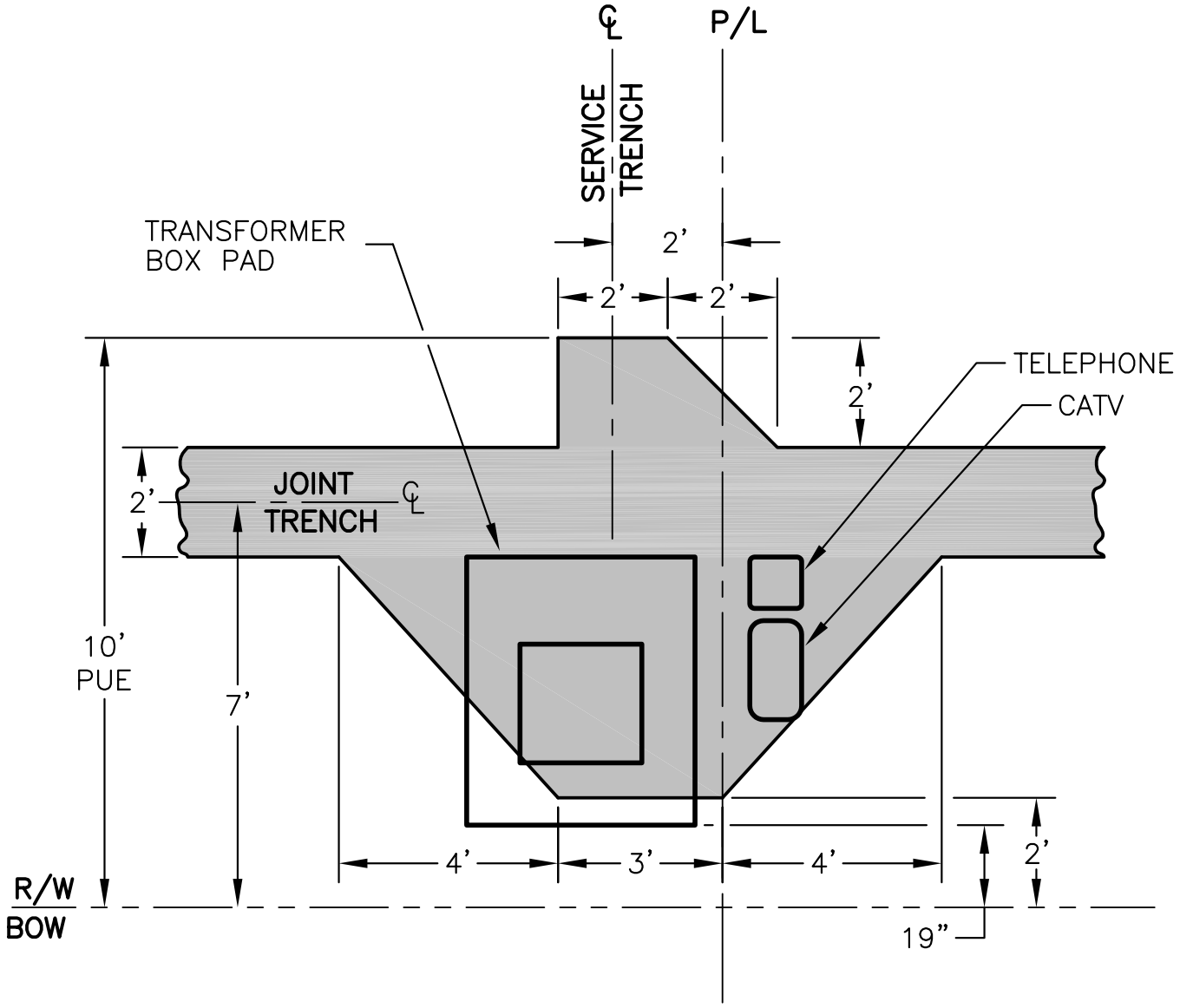
Drawing name: M:\DATA\CAD\Standards\UG\0317\2522.dwg Plotted: Jun 02,2004 - 2:25pm

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

PRIMARY VAULT WITH RISER CORNER LOCATION INSTALLATION DETAIL

23JUN97	BA	DJC	AMS		SHEET 1 OF 1	317 2522
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 4	



NOTE:

TRANSFORMER BOX PAD:
PROGLASS, INC. FIBERGLASS TRANSFORMER BOX PAD, TX423820–T1 OR APPROVED EQUAL

Drawing name: M:\DATA\CAD\Standards\UG\0317\2526-1.dwg Plotted: Jun 02,2004 - 2:26pm

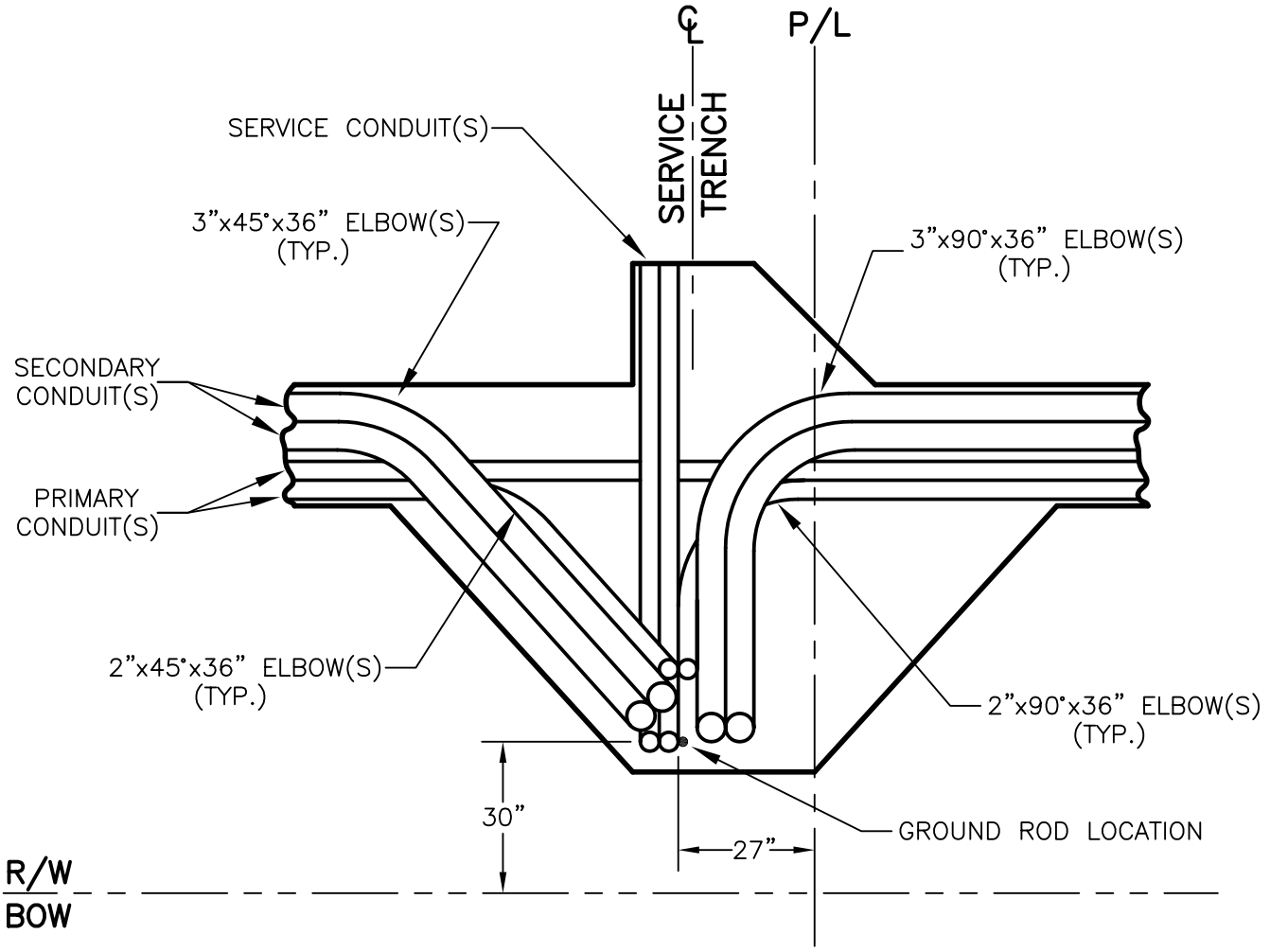
CITY OF LODI

ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

SERVICE TRENCH, TRANSFORMER LOCATION (MAIN TRENCH SIDE) SIDEWALK WITH PARKWAY

29MAY01	CW	DJC	AMS		SHEET 1 OF 3	317 2526
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 1	



NOTE:

1. USE 4" BASE SPACERS WHEN IT IS NECESSARY TO BRIDGE CONDUITS OVER EACH OTHER. SPACERS TO BE A MAXIMUM OF 4 ft. APART.
2. ALL 90° PRIMARY AND SECONDARY CONDUIT ELBOWS SHALL HAVE A 36 in. RADIUS.
3. ALL 90° SERVICE CONDUIT ELBOWS SHALL HAVE A MINIMUM 24 in. RADIUS.
4. ALL CONDUIT ENDS TO BE CAPPED WITH ALLIANCE PLASTIC CONDUIT CAPS (RRC–2(2"). RRC–3 (3") OR APPROVED EQUAL.
5. INSTALL TRANSFORMER GROUND PER ELECTRICAL CONSTRUCTION STANDARD 314 1007. PROVIDE A GROUND WIRE TAIL ABOVE GROUND LEVEL A MINIMUM OF 6 ft. LONG.

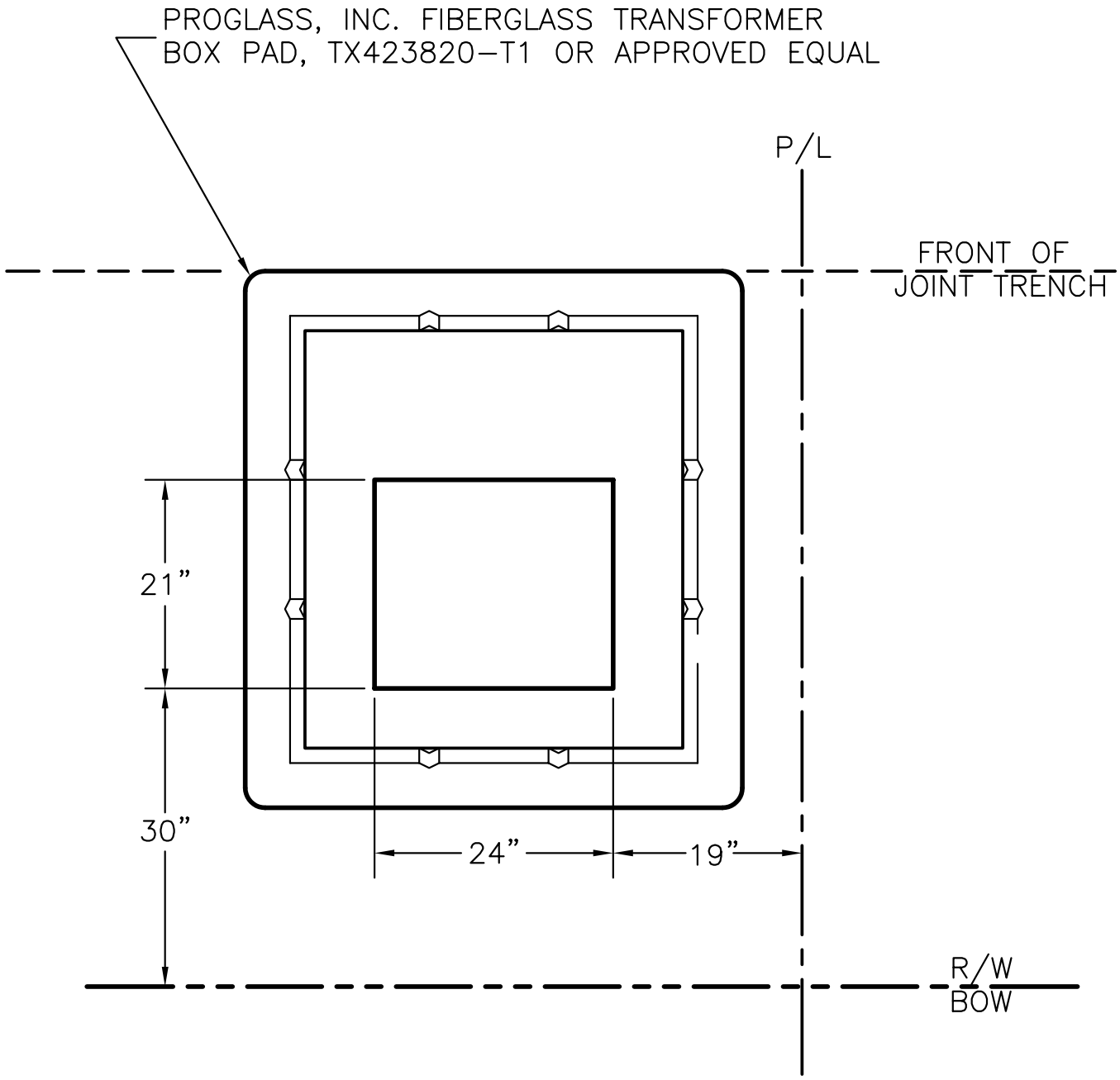
Drawing name: M:\DATA\CAD\Standards\UG\0317\2526-2.dwg Plotted: Jun 02,2004 - 2:26pm

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

SERVICE TRENCH, TRANSFORMER LOCATION (MAIN TRENCH SIDE) SIDEWALK WITH PARKWAY

29MAY01	CW	DJC	AMS		SHEET 2 OF 3	317 2526
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 3	



Drawing name: M:\DATA\CAD\Standards\UG\0317\2526-3.dwg Plotted: Jun 02,2004 - 2:27pm

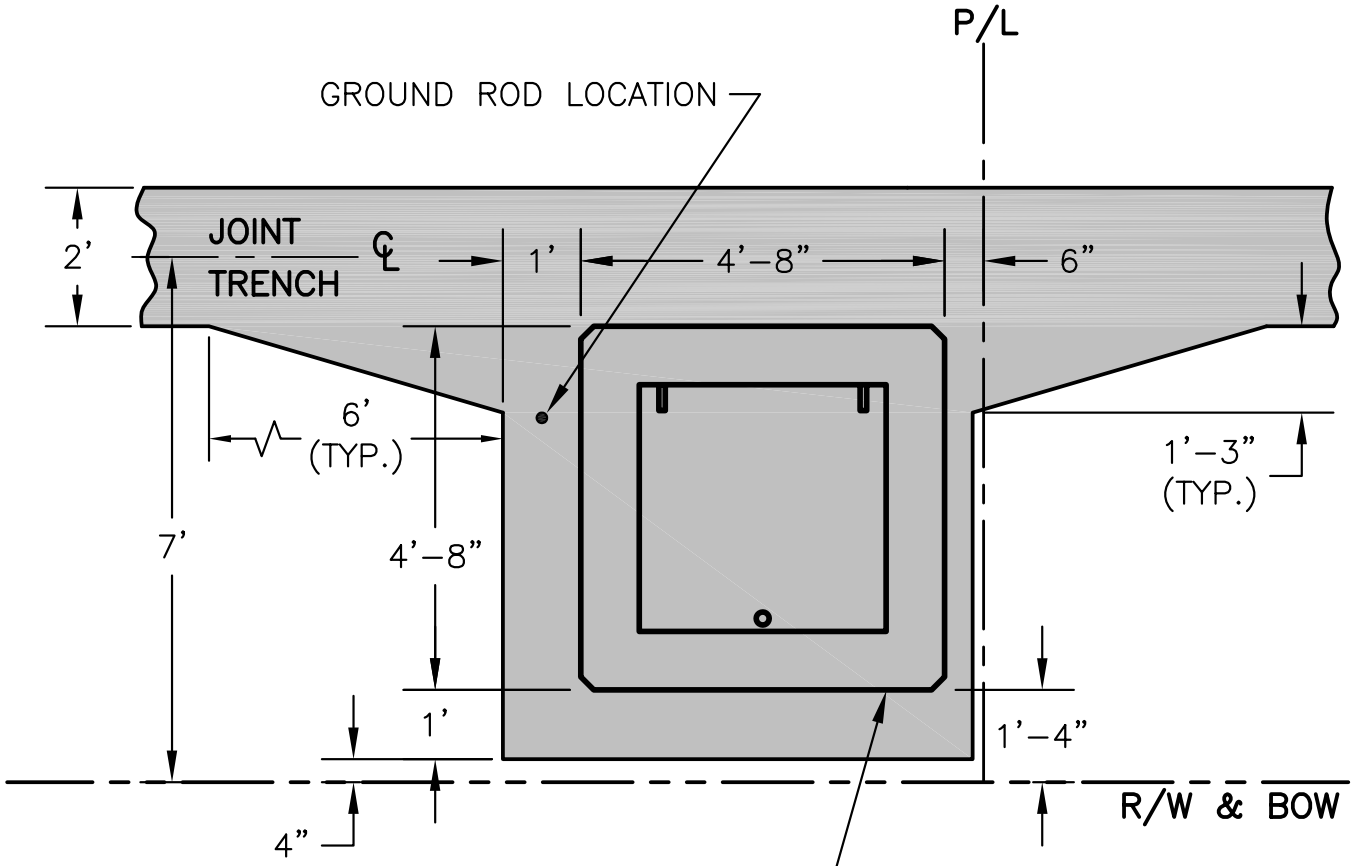
CITY OF LODI

ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

FIBERGLASS TRANSFORMER BOX PAD, CONDUIT AND BOX PAD LOCATION – SIDEWALK WITH PARKWAY

29MAY01	CW	DJC	AMS		SHEET 3 OF 3	317 2526
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 1	



PRIMARY JUNCTION BOX. UTILITY VAULT CO. LODI 504–LA, 50"x50"x36" I.D. VAULT WITH 6 in. EXTENSION RING AND NO. 55–332–P COVER OR APPROVED EQUAL.

NOTE:

1. INSTALL VAULT GROUND PER ELECTRICAL CONSTRUCTION STANDARD 314 1007.

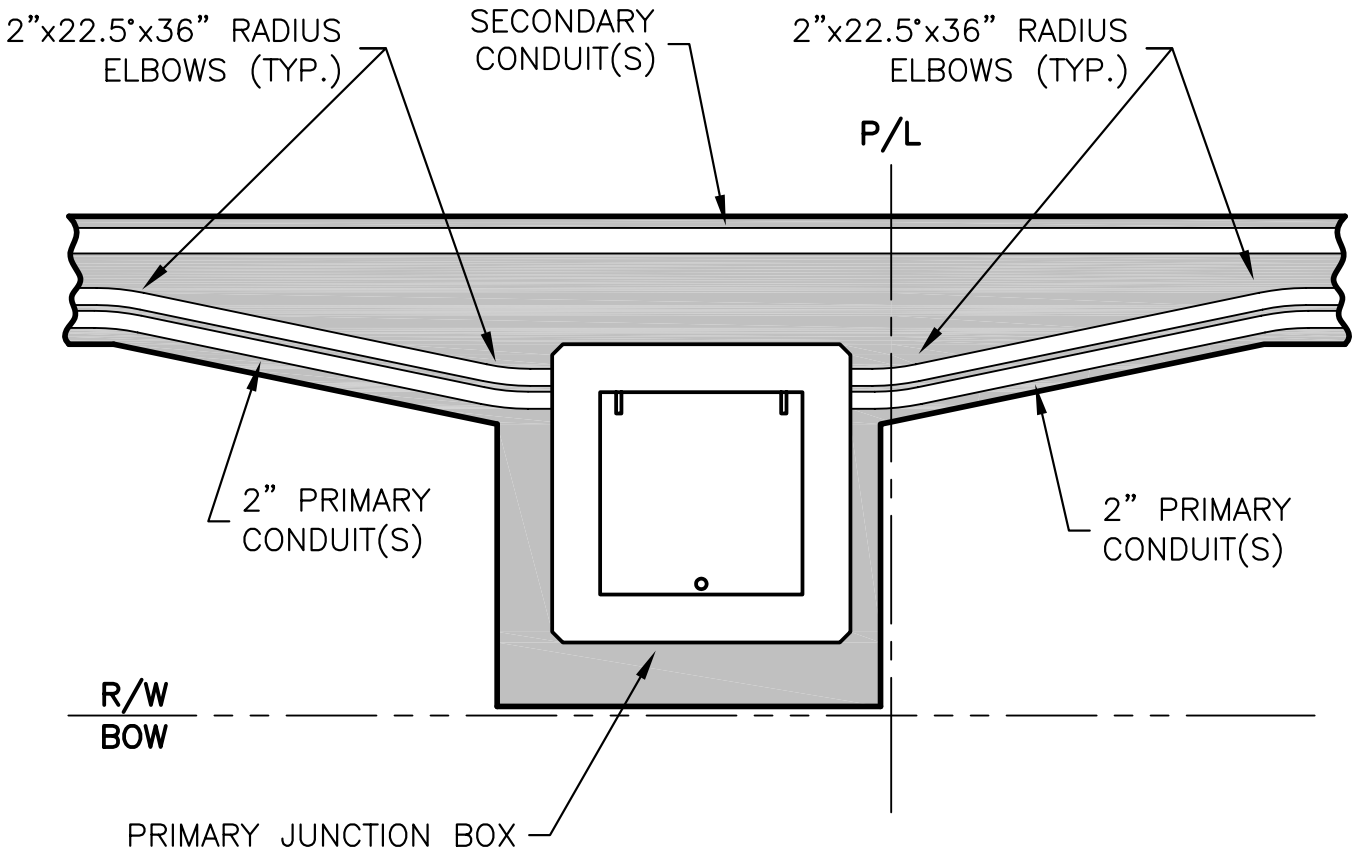
Drawing name: M:\DATA\CAD\Standards\UG\0317\2527-1.dwg Plotted: Jun 02,2004 - 2:28pm

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

PRIMARY JUNCTION BOX, MAIN TRENCH DETAIL SIDEWALK WITH PARKWAY

29MAY01	RT	DJC	AMS		SHEET 1 OF 3	317 2527
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 1	



NOTE:

1. CONDUIT(S) SHALL ENTER THE PRIMARY JUNCTION BOX 90° TO THE OUTSIDE WALL OF THE BOX.

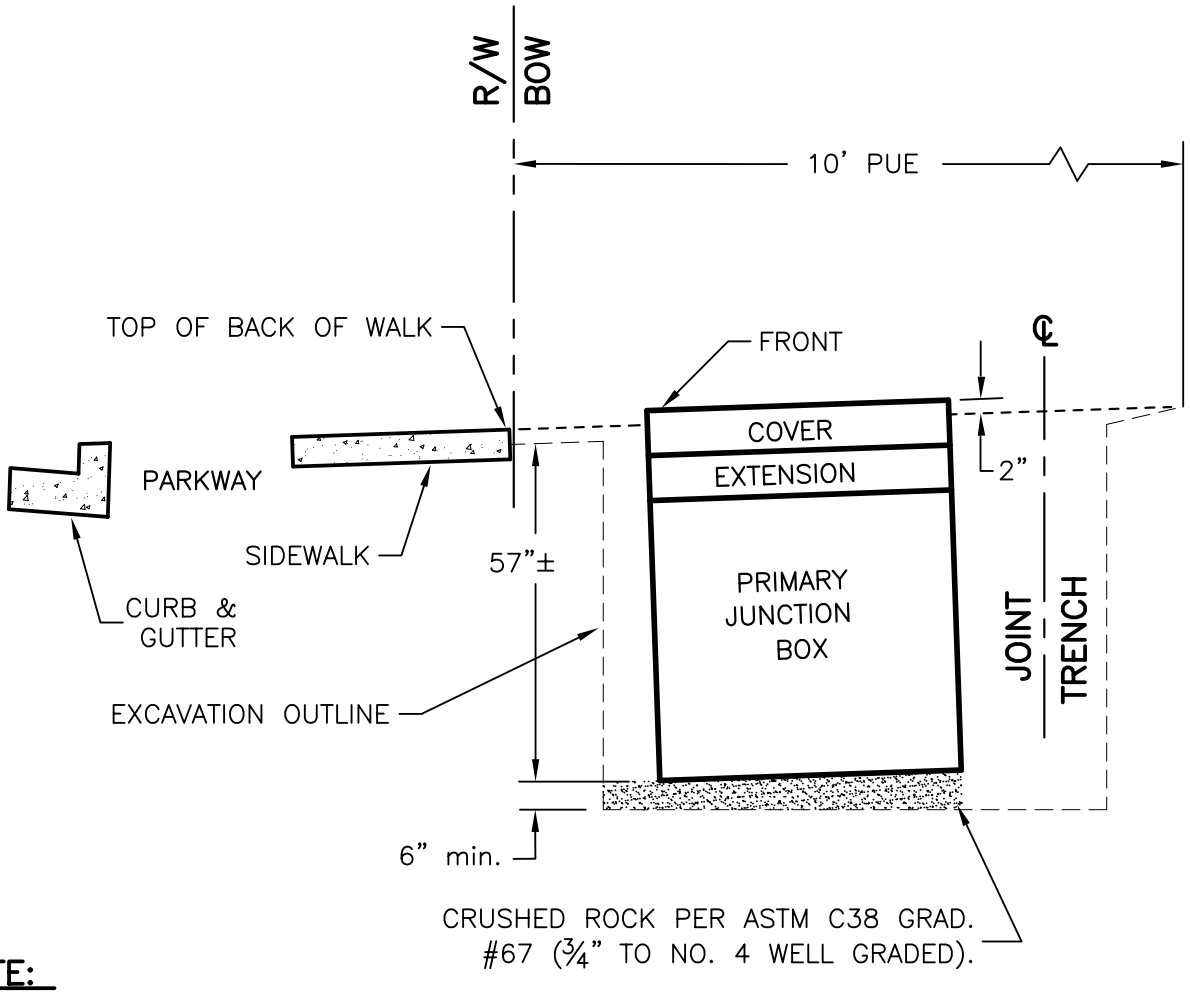
Drawing name: M:\DATA\CAD\Standards\UG\0317\2527-2.dwg Plotted: Jun 02,2004 - 2:28pm

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

PRIMARY JUNCTION BOX, MAIN TRENCH DETAIL SIDEWALK WITH PARKWAY

04JUN01	CW	DJC	AMS		SHEET 2 OF 3	317 2527
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 2	



NOTE:

1. PRIMARY JUNCTION BOX, EXTENSION AND COVER SHALL BE PER CITY OF LODI SPECIFICATION.
2. PRIMARY JUNCTION BOX GRADE, FROM FRONT TO BACK, SHALL BE 2 in. ABOVE A LINE EXTENDING FROM THE TOP OF BACK OF SIDEWALK TO THE FINAL GRADE AT THE BACK OF THE PUE (SEE DRAWING) AND SHALL BE LEVEL SIDE TO SIDE.
3. BOTTOM OF PRIMARY JUNCTION BOX EXCAVATION TO BE COMPACTED TO 90% COMPACTION PRIOR TO INSTALLATION OF DRAIN ROCK AND BOX. CITY OF LODI, PUBLIC WORKS DEPARTMENT, TO PROVIDE COMPACTION TESTS. CONTACT ELECTRIC UTILITY DEPARTMENT AT (209) 333–6817 FOR COORDINATION OF COMPACTION TESTING.
4. ALL PRIMARY JUNCTION BOXES TO BE SPOTTED PER CITY OF LODI DRAWINGS, STANDARDS AND SPECIFICATIONS. STAKING WILL BE PROVIDED BY DEVELOPER.
5. HYDRO HAMMER IS NOT TO BE USED AROUND SUBSTRUCTURES. CITY OF LODI INSPECTOR TO APPROVE EACH PRIMARY JUNCTION BOX PRIOR TO DEVELOPER COMPLETING PROJECT.
6. COVER TO BE SET FOR LID TO OPEN FROM THE FRONT (STREET SIDE).
7. ASPHALTIC PRIMARY JUNCTION BOX SEALANT TO BE INSTALLED BETWEEN THE JUNCTION BOX COVER AND THE EXTENSION RING AND BETWEEN THE EXTENSION RING AND THE JUNCTION BOX.
8. INSTALL GROUND IN JUNCTION BOX PER 314 1007. GROUND WIRE TAIL IN VAULT SHALL BE A MINIMUM OF 16 ft. LONG.

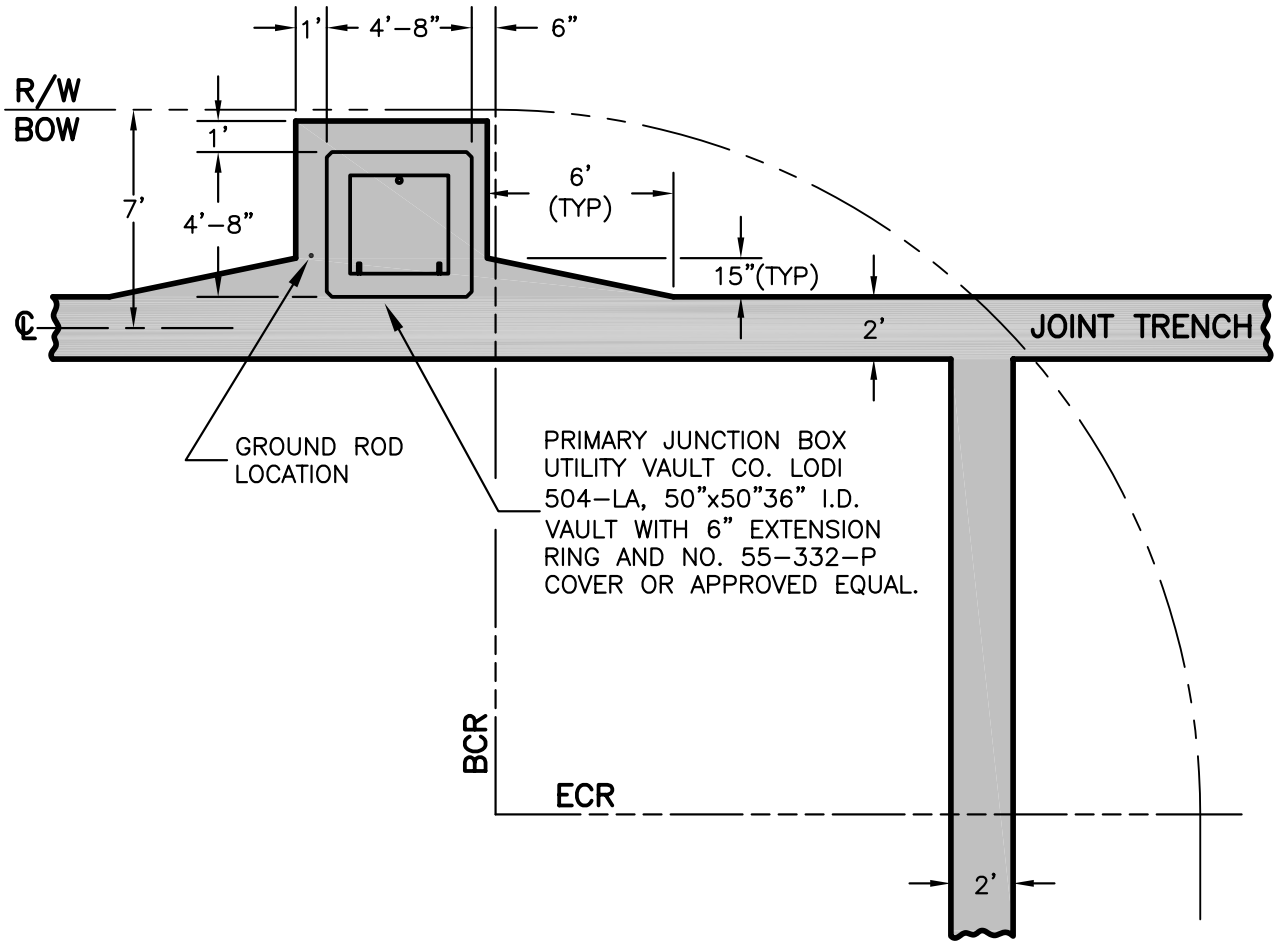
Drawing name: M:\DATA\CAD\Standards\UG\0317\2527-3.dwg Plotted: Jun 02,2004 - 2:29pm

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

PRIMARY JUNCTION BOX, MAIN TRENCH DETAIL SIDEWALK WITH PARKWAY

04JUN01	CW	DJC	AMS		SHEET 3 OF 3	317 2527
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 3	



NOTE:

1. INSTALL VAULT GROUND PER ELECTRICAL CONSTRUCTION STANDARD 314 1007.

Drawing name: M:\DATA\CAD\Standards\UG\0317\2528.dwg Plotted: Jun 02,2004 - 2:30pm

CITY OF LODI

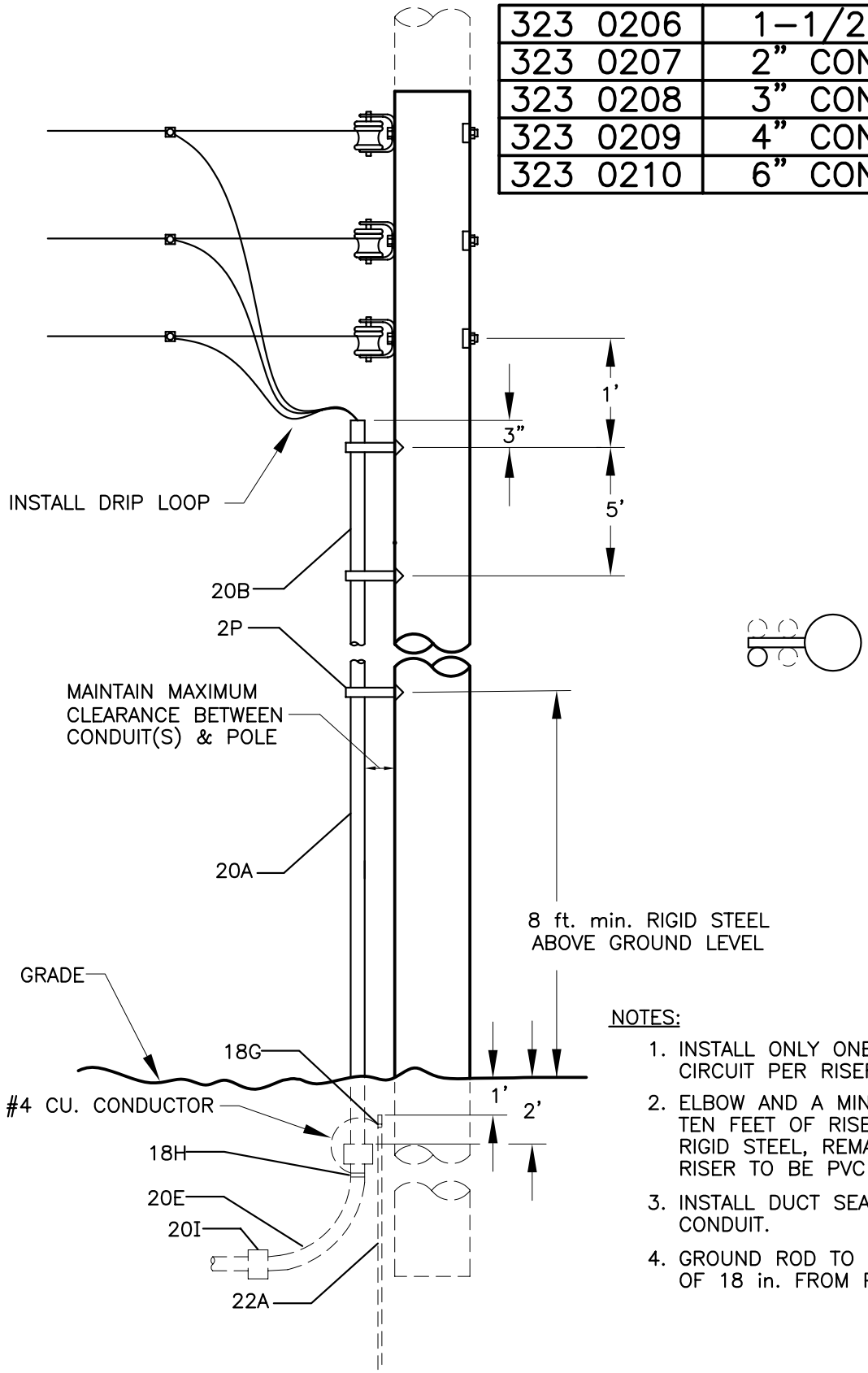
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

PRIMARY JUNCTION BOX CORNER LOCATION DETAIL – SIDEWALK WITH PARKWAY

30MAY01	CW	DJC	AMS		SHEET 1 OF 1	317 2528
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 1	

323 0206	1–1/2" CONDUIT
323 0207	2" CONDUIT
323 0208	3" CONDUIT
323 0209	4" CONDUIT
323 0210	6" CONDUIT



NOTES:

1. INSTALL ONLY ONE SECONDARY CIRCUIT PER RISER CONDUIT.
2. ELBOW AND A MINIMUM FIRST TEN FEET OF RISER TO BE RIGID STEEL, REMAINDER OF RISER TO BE PVC SCHEDULE 40.
3. INSTALL DUCT SEAL AT TOP OF CONDUIT.
4. GROUND ROD TO BE A MINIMUM OF 18 in. FROM POLE.

Drawing name: M:\DATA\CAD\Standards\UG\0323\0206.dwg Plotted: Jun 02,2004 - 2:30pm

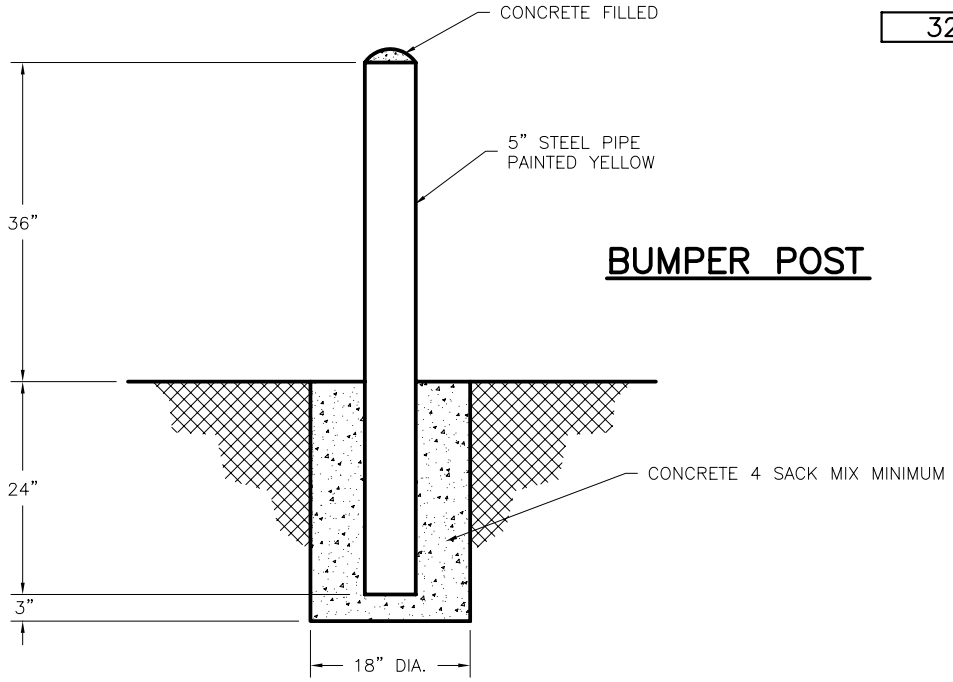
CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

SECONDARY OR SERVICE RISER(S) RIGID STEEL TO P.V.C. ON STAND–OFF BRACKETS

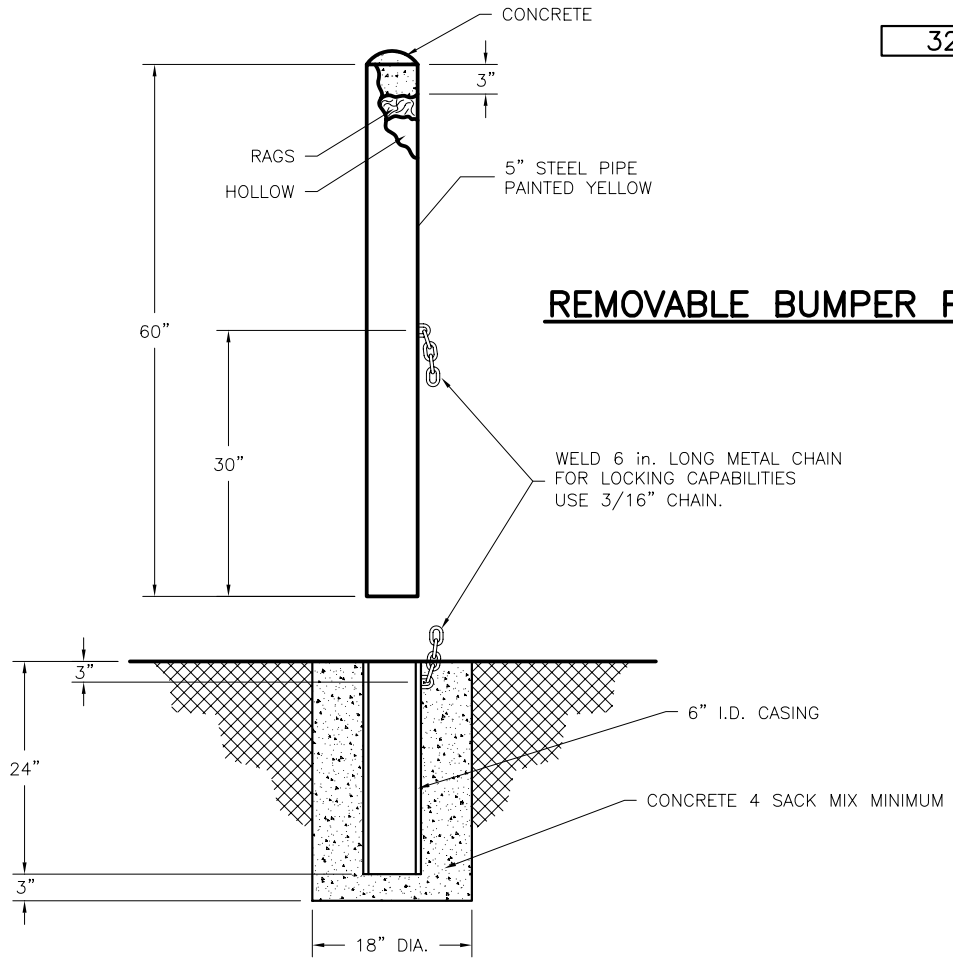
21OCT99	TF	AMS/DJC	AMS		SHEET 1 OF 1	
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 4	

326 1502



BUMPER POST

326 1503



REMOVABLE BUMPER POST

Drawing name: M:\DATA\CAD\Standards\UG\0326\1502-3.dwg Plotted: Jun 02,2004 - 2:31pm

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

BUMPER POST DETAILS

18MAR97	BA	DJC	AMS		SHEET 1 OF 1
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 3

SINGLE PHASE SECONDARY

VOLTAGE	PHASE	COLOR
120 VOLT 2 WIRE	HOT LEG	RED
	NEUTRAL	WHITE
120/240 VOLT 120/208 VOLT 3 WIRE	HOT LEG	RED
	HOT LEG	BLACK
	NEUTRAL	WHITE

THREE PHASE SECONDARY

VOLTAGE	PHASE	COLOR
240/120 VOLT 4 WIRE	HOT LEG	RED
	HOT LEG (HIGH LEG)	ORANGE
	HOT LEG	BLUE
	NEUTRAL	WHITE
208Y/120 VOLT 4 WIRE	HOT LEG	RED
	HOT LEG	BLACK
	HOT LEG	BLUE
	NEUTRAL	WHITE
480Y/277 VOLT 4 WIRE	HOT LEG	BROWN
	HOT LEG	ORANGE
	HOT LEG	YELLOW
	NEUTRAL	GRAY

UNDERGROUND PRIMARY

VOLTAGE	PHASE	COLOR
ALL VOLTAGES	A	RED
	B	BLACK
	C	BLUE

Drawing name: M:\DATA\CAD\Standards\UG\0326\2401.dwg Plotted: Jun 02,2004 - 2:32pm

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

CONDUCTOR COLOR CODE

20MAR96	BA	DJC	DJC		SHEET 1 OF 1	326 2401
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 1	

PANEL SIZE	NUMBER OF SERVICE CIRCUITS	NUMBER OF CONDUCTORS	CONDUCTOR SIZE (AWG OR KCMIL)	AMPS PER CIRCUIT	NUMBER OF CONDUITS	SIZE OF CONDUITS
100	1 1	3 3	#4 CU #2 AL	100 103	1 1	2" 2"
150	1 1	3 3	1/0 CU 2/0 AL	175 156	1 1	2" 2"
200	1 1	3 3	2/0 CU 4/0 AL	200 205	1 1	2" 2"
225	1 1	3 3	4/0 CU 350 AL	263 276	1 1	4" 4"
400	1 1	3 3	500 CU 750 AL	427 425	1 1	4" 4"

NOTES:

1. SERVICE CONDUIT INSTALLED BY DEVELOPER PER CITY OF LODI, ELECTRIC UTILITY DEPARTMENT SPECIFICATIONS.
2. SERVICE CONDUCTORS INSTALLED BY CITY OF LODI, ELECTRIC UTILITY DEPARTMENT.

Drawing name: M:\DATA\CAD\Standards\Spec\0906\1003.dwg Plotted: Jun 02,2004 - 2:32pm

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

UNDERGROUND SINGLE PHASE SERVICE CONDUCTOR AND RISER CONDUIT SCHEDULE

28MAY97	BA	DJC	AMS		SHEET 1 OF 1	906 1003
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 2	

PANEL SIZE	NUMBER OF SERVICE CIRCUITS	NUMBER OF CONDUCTORS (PER CIRCUIT)	CONDUCTOR SIZE (AWG OR KCMIL)	AMPS PER CIRCUIT	NUMBER OF CONDUITS	SIZE OF CONDUITS
100	1	4	#2 CU	132	1	2"
	1	4	#2 AL	103	1	2"
200	1	4	2/0 CU	200	1	2"
	1	4	4/0 AL	205	1	2"
400	1	4	500 CU	427	1	4"
	1	4	750 AL	425	1	4"
600	2	4	350 CU	317	2	4"
	2	4	500 AL	304	2	4"
800	3	4	350 CU	283	3	4"
	3	4	500 AL	270	3	4"
1000	4	4	350 CU	265	4	4"
	4	4	500 AL	252	4	4"
1200	4	4	500 CU	318	4	4"
	4	4	750 AL	311	4	4"
1600	6	4	500 CU	273	6	4"
	6	4	750 AL	265	6	4"
2000	8	4	500 CU	235	8	4"
	8	4	750 AL	228	8	4"

NOTES:

1. SERVICE CONDUIT INSTALLED BY DEVELOPER PER CITY OF LODI, ELECTRIC UTILITY DEPARTMENT SPECIFICATIONS.
2. SERVICE CONDUCTORS INSTALLED BY CITY OF LODI, ELECTRIC UTILITY DEPARTMENT.

Drawing name: M:\DATA\CAD\Standards\Spec\0906\1004.dwg Plotted: Jun 02,2004 - 2:33pm

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

UNDERGROUND THREE PHASE SERVICE CONDUCTOR AND RISER CONDUIT SCHEDULE

28MAY97	BA	AMS	AMS		SHEET 1 OF 1	906 1004
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 4	

EQUIPMENT SPECIFICATIONS

CONCRETE VAULT ASSEMBLY (LODI 504–LA)

GENERAL:

This specification and the attached drawing are for accessory layout and not intended to include all aspects of the vault design. Vault, lid and riser sections are to seal without grouting. Vault assembly to meet requirements of latest revisions of AASHTO and ASTM standards.

COVER ASSEMBLY:

Cover to be as specified on work order drawing(s).

ACCESSORY RING:

Accessory ring to be as specified on work order drawing(s).

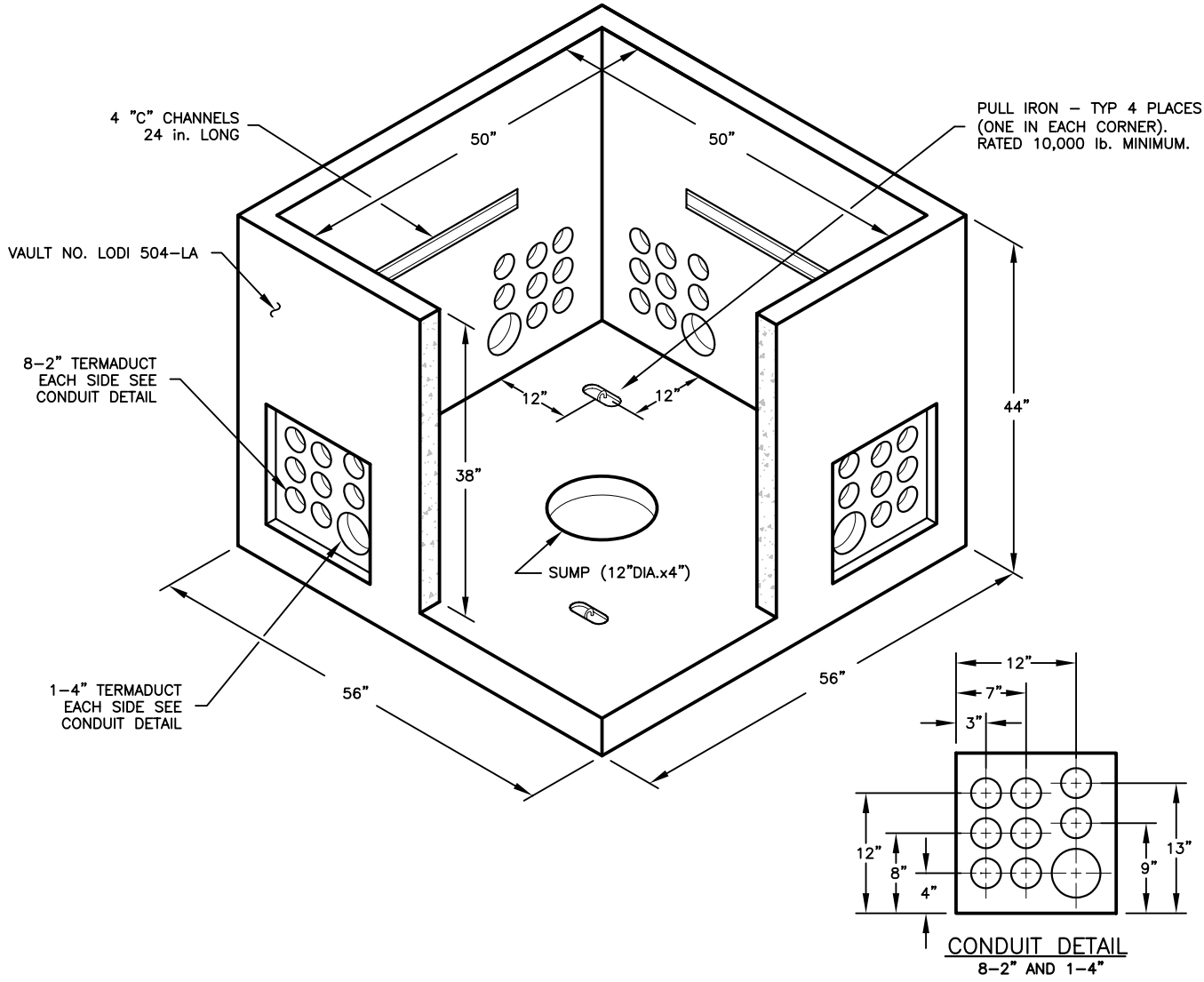
VAULT:

Overall outside dimensions shall be within ±2 in. of dimensions shown on the attached drawing unless otherwise approved by the Electric Utility Department.

Vault to be equipped with accessories as shown on the attached drawing.

Drawing name: M:\DATA\CAD\Standards\Spec\0922\5679-1.dwg Plotted: Jun 02,2004 - 2:33pm

CITY OF LODI ELECTRIC UTILITY DEPARTMENT				CONSTRUCTION STANDARD CONCRETE VAULT ASSEMBLY LODI 504–LA		
21OCT99	BA	AMS	AMS		SHEET 1 OF 2	922 5679
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 2	



Drawing name: M:\DATA\CAD\Standards\Spec\0922\5679-2.dwg Plotted: Jun 02,2004 - 2:34pm

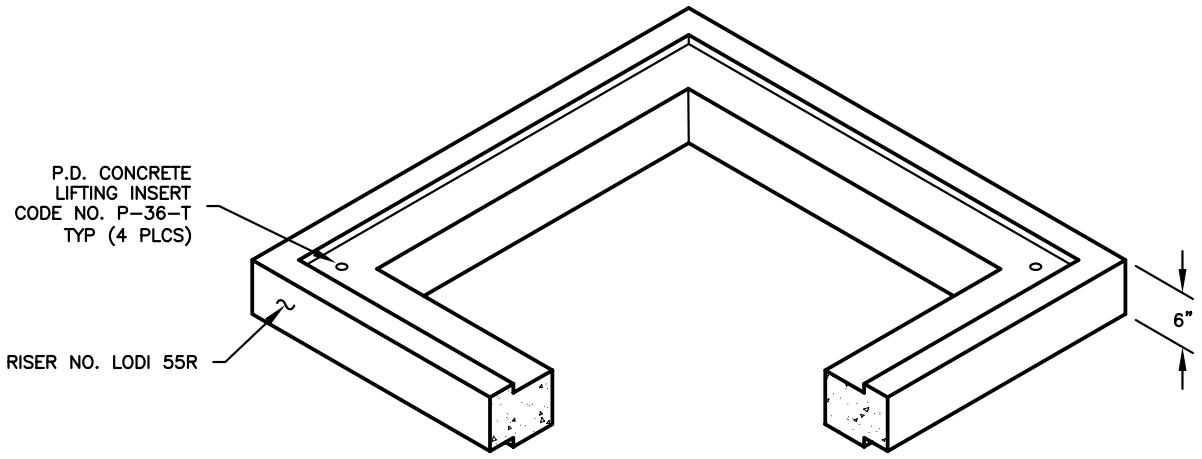
CITY OF LODI

ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

PRIMARY VAULT
LODI 504–LA

21OCT99	BA		AMS		SHEET 2 OF 2	922 5679
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 3	



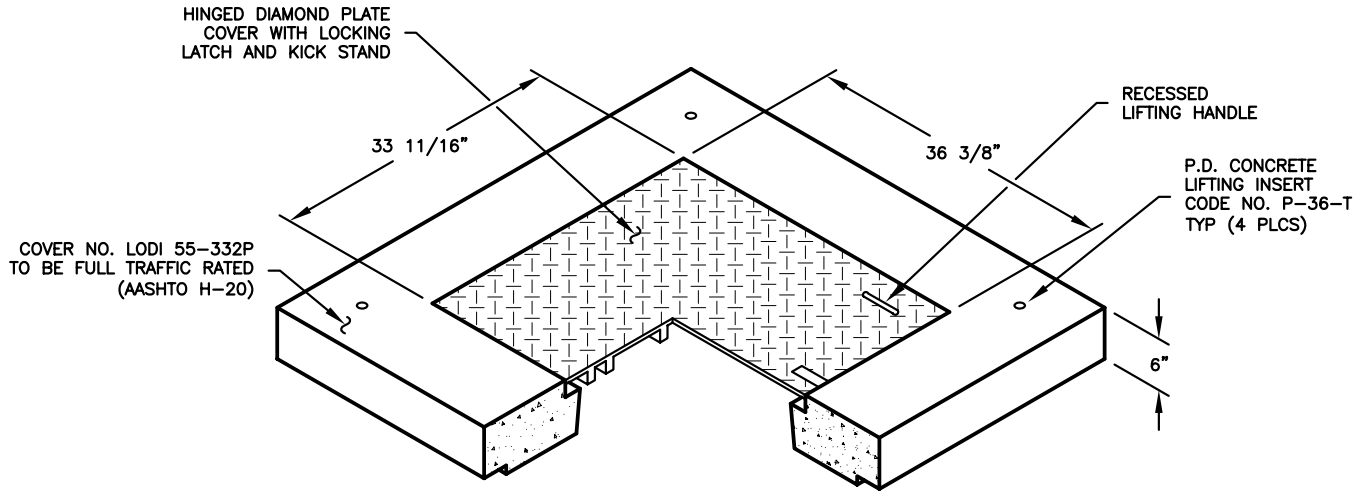
Drawing name: M:\DATA\CAD\Standards\Spec\0922\5680.dwg Plotted: Jun 02,2004 - 2:35pm

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

PRIMARY VAULT – ACCESSORY RING
LODI 504-LA

21OCT99	TF	DJC	AMS		SHEET 1 OF 1	922 5680
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 1	



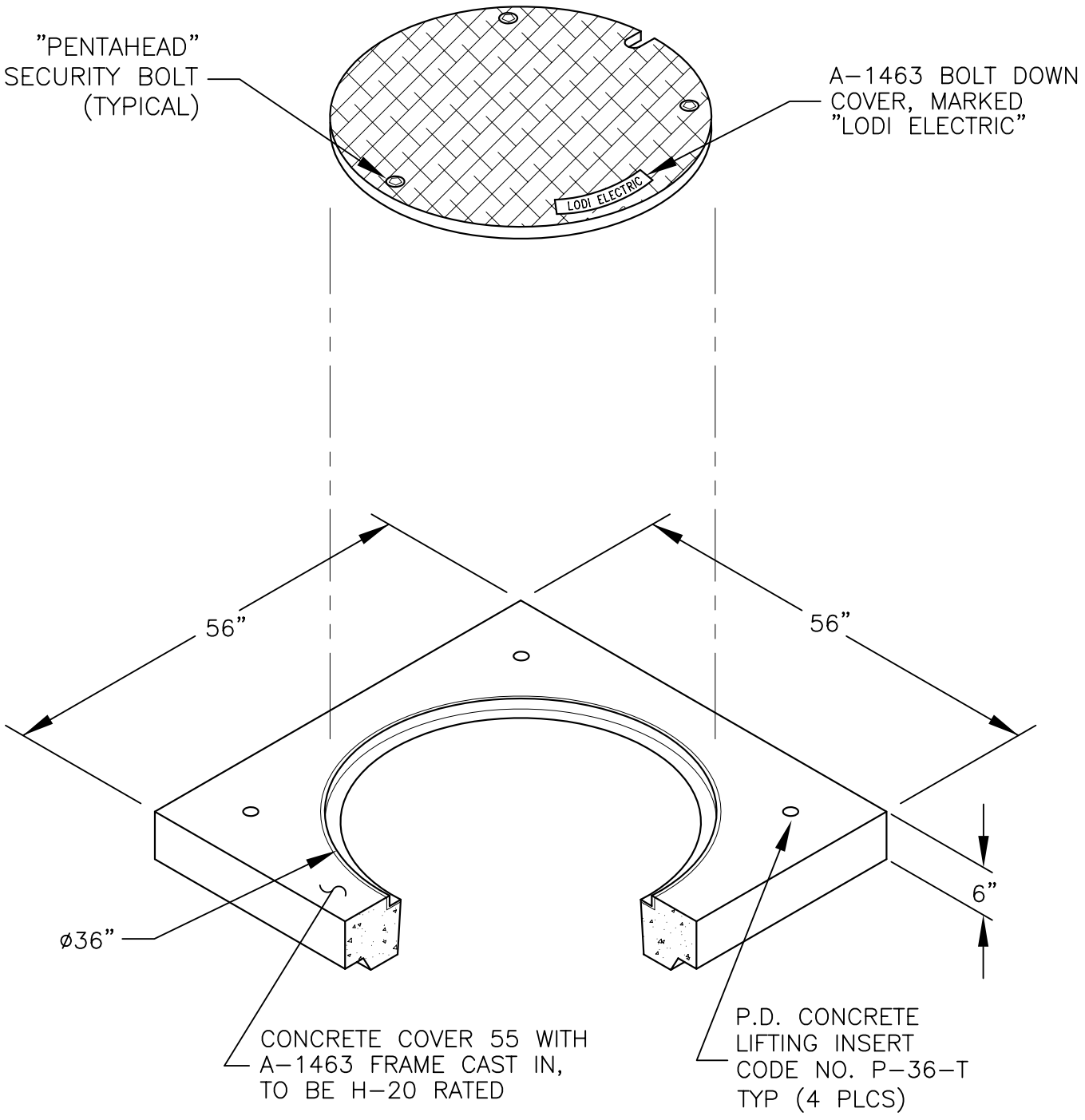
Notes:

Lid assembly to be constructed and supplied with the following:

- One piece design, hinged on one side
- Open 180 degrees and be equipped with latching mechanism (Kick Stand) to hold the lid securely in place at slightly over 90 degrees.
- Galvanized steel, diamond plate or Allgrip material
- Full traffic (AASHTO H-20) rated
- Minimum opening 33"x36"
- P.D. Concrete Lifting Inserts, Code No. P-36-T
- Pentahead Bolt

Drawing name: M:\DATA\CAD\Standards\Spec\0922\5681.dwg Plotted: Jun 02,2004 - 2:35pm

CITY OF LODI ELECTRIC UTILITY DEPARTMENT				CONSTRUCTION STANDARD HINGED VAULT COVER LODI 504-LA		
21OCT99	BA		AMS		SHEET 1 OF 1	922 5681
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 3	



Drawing name: M:\DATA\CAD\Standards\Spec\0922\5682.dwg Plotted: Jun 02,2004 - 2:36pm

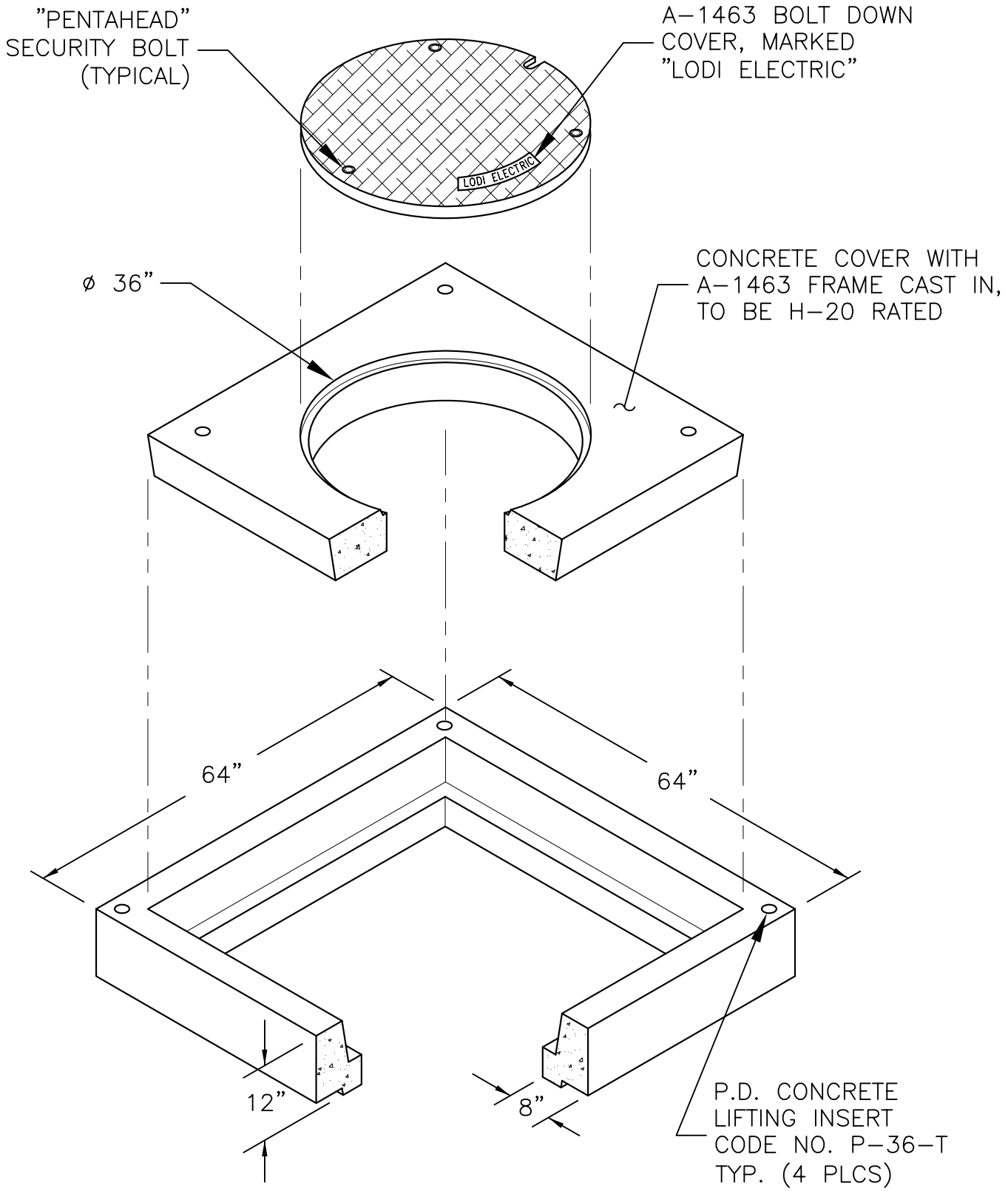
CITY OF LODI

ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

H–20 504 VAULT COVER

21OCT99	BA		AMS		SHEET 1 OF 1	922 5682
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 1	



Drawing name: M:\DATA\CAD\Standards\Spec\0922\5683.dwg Plotted: Jun 02,2004 - 2:37pm

CITY OF LODI

ELECTRIC UTILITY DEPARTMENT

CONSTRUCTION STANDARD

H–20 504 VAULT COVER

DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	SHEET / REVISION	
21OCT99	BA		AMS		SHEET 1 OF 1	922 5683
					REVISION 2	

Conduit Requirements for Communication with Electric Metering Equipment.

On commercial and industrial electric service installations the developer/contractor/owner shall provide one (1) conduit from the electric meter location, for use by the City to establish communication with the metering installation, to the telephone demarcation point (telephone board) under any of the below listed conditions:

- Commercial and industrial services rated greater than 200 amperes. The conduit shall originate at the metering section of the switchboard or service panel.
- Commercial and industrial services rated greater than 200 amperes and with the meter installed at a different location than the switchboard or service panel (remote meter). The conduit shall originate at the meter location.
- Multi metered commercial and industrial services having the meters located at one location within the premise either on a switchboard; on individual panels served from a wire raceway ("hot gutter"); on panels connected together with conduits or on panels ganged together. The conduit shall originate in the switchboard; "hot gutter" or in any one of the meter panels if connected with conduits or ganged together, respectively.
- Multi metered commercial and industrial services having the meters located in switchboards at different locations throughout the premise. One conduit shall originate at each switchboard.

Note: All of the above conduits shall terminate at the telephone demarcation point (telephone board).

The conduit shall be installed in accordance with NEC requirements.

The conduit shall be 3/4" EMT or PVC Schedule 40, minimum.

Each conduit shall be labeled at the telephone board indicating its point of origin.

Each conduit shall have a pull–string installed.

For any questions regarding the above, please contact the Electric Utility Department, Metering Division at (209) 333–6813.

Drawing name: M:\DATA\CAD\Standards\Metering\401\0105.dwg Plotted: Jun 02,2004 - 2:37pm

CITY OF LODI ELECTRIC UTILITY DEPARTMENT				CONSTRUCTION STANDARD CONDUIT REQUIREMENTS FOR COMMUNICATION WITH ELECTRIC METERING EQUIPMENT		
30APR02	CW	HH	AMS		SHEET 1 OF 1	401 0105
DATE	DRAWN	DESIGNED	CHECKED	APPROVAL	REVISION 1	