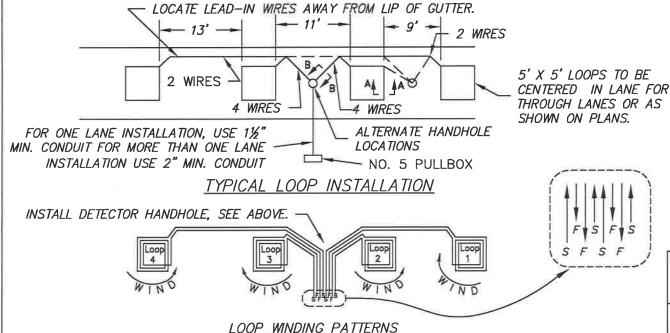
### LOOP INSTALLATION PROCEDURE

- 1. TEST EACH LOOP CIRCUIT AT CONTROLLER CABINET (OR, IF THESE ARE NOT INSTALLED, TEST AT TERMINATION PULL BOX) BEFORE FILLING SLOTS. PERFORM A RESISTANCE TEST BETWEEN EACH CIRCUIT AND GROUND. INSULATION RESISTANCE SHALL NOT BE LESS THAN 100 MEGA OHMS. TEST EACH LOOP CIRCUIT FOR CONTINUITY. LOOP CIRCUIT RESISTANCE SHALL NOT EXCEED 0.5 OHMS PLUS 0.35 OHMS PER 100 FEET OF LEAD-IN CABLE.
- 2. DISTANCE BETWEEN SIDE OF LOOP AND LEAD-IN SAW CUT SHALL BE 1' MINIMUM.
- 3. WIDTH OF SAW CUTS SHALL BE 1/8" TO 3/16 " WIDER THAN THICKNESS OF THE CONDUCTOR.
- 4. DEPTH OF SAW CUTS SHALL BE SUCH THAT THE MINIMUM SEALANT COVER SHALL BE 1/2" WITH AN ADDITIONAL 1/8" TO 1/4" GAP BETWEEN TOP OF SEALANT AND SURFACE OF
- 5. LOOPS AND LEAD-IN CUTS SHALL BE LOCATED A MINIMUM OF 2 FEET FROM THE NEAREST EDGE OF MANHOLE COVER AND VALVE BOXES.
- 6. LOOP INSTALLATION 250' OR MORE FROM STOP BAR SHALL HAVE 4 TURNS.
- 7. SEE STATE STANDARD DRAWING ES 5A FOR ADDITIONAL DETAILS.



CONDUCTOR IDENTIFICATION SHALL INCLUDE THE FOLLOWING: 1. SENSOR NUMBER AND PHASE 2. LOOP NUMBER 3. START (S) OR FINISH (F)

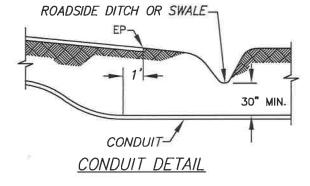
3. STOP BAR LOOPS REQUIRE 4 TURNS INSTEAD OF 3 AND A SEPARATE DLC.

4. MODIFIED TYPE D LOOP REQUIRE 3 TURNS ONLY. SEE DWG. SL-02 FOR LOCATION.

2. SEE DWG. LS-02 FOR PLACEMENT OF LOOPS.

5/8" MIN: DEPTH AS REQUIRED APPROVED SEALANT FILL 3 TURNS COPPER WIRE NO. 12 AWG (INSULATION AS SECTION A-A SPECIFIED) 4 TURNS FOR STOP BAR LOOPS 5/16" -1/8" TO 1/4" 5/8" MIN. DEPTH AS APPROVED SEALANT REQUIRED FILL LEAD-IN WIRES FOR LOOPS. (USE 2 WIRES FOR EACH LOOP) TWO LEADS PER LOOP SECTION B-E

-1/8" TO 1/4"

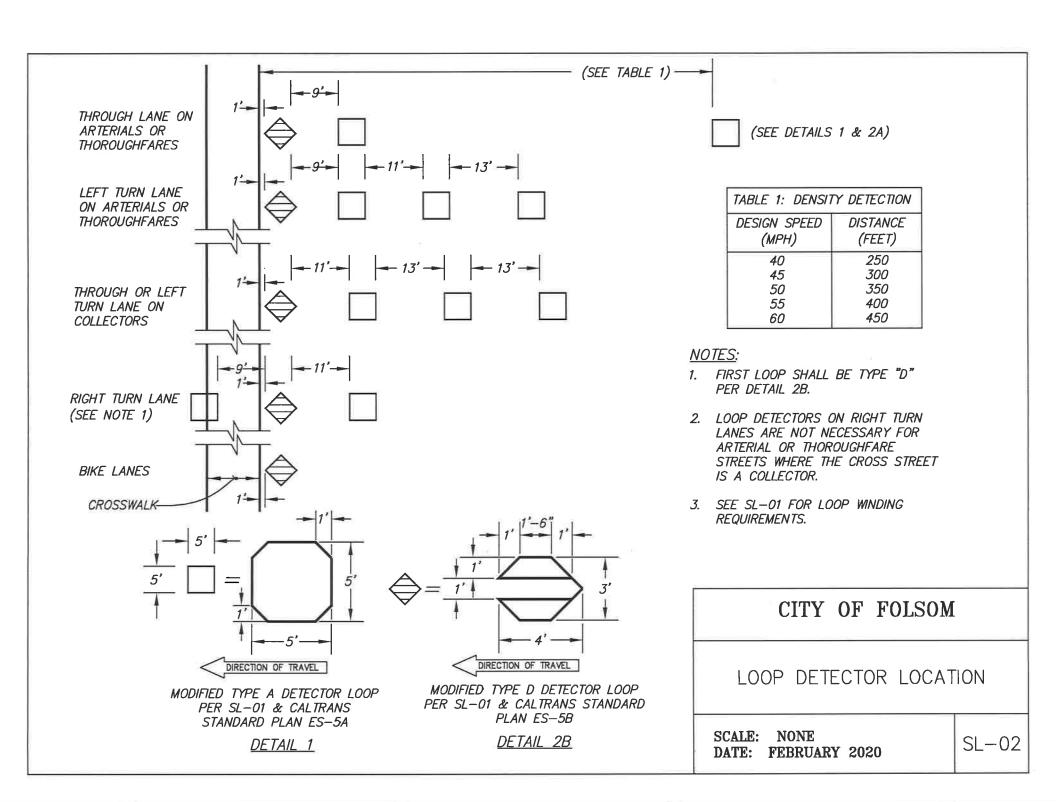


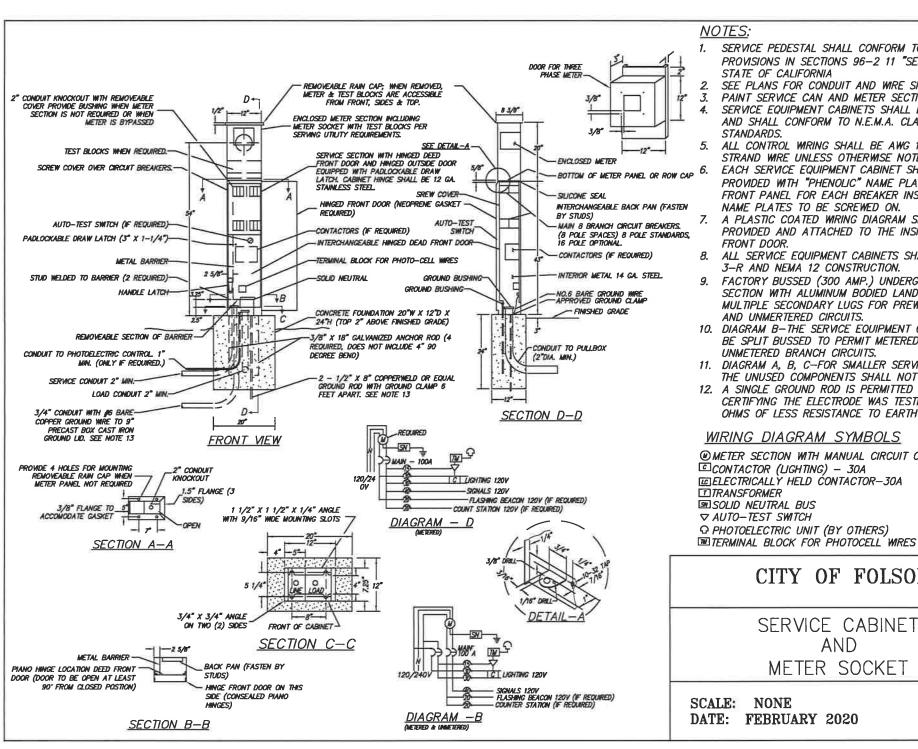
# CITY OF FOLSOM

LOOP DETECTORS

SCALE: NONE

DATE: FEBRUARY 2020





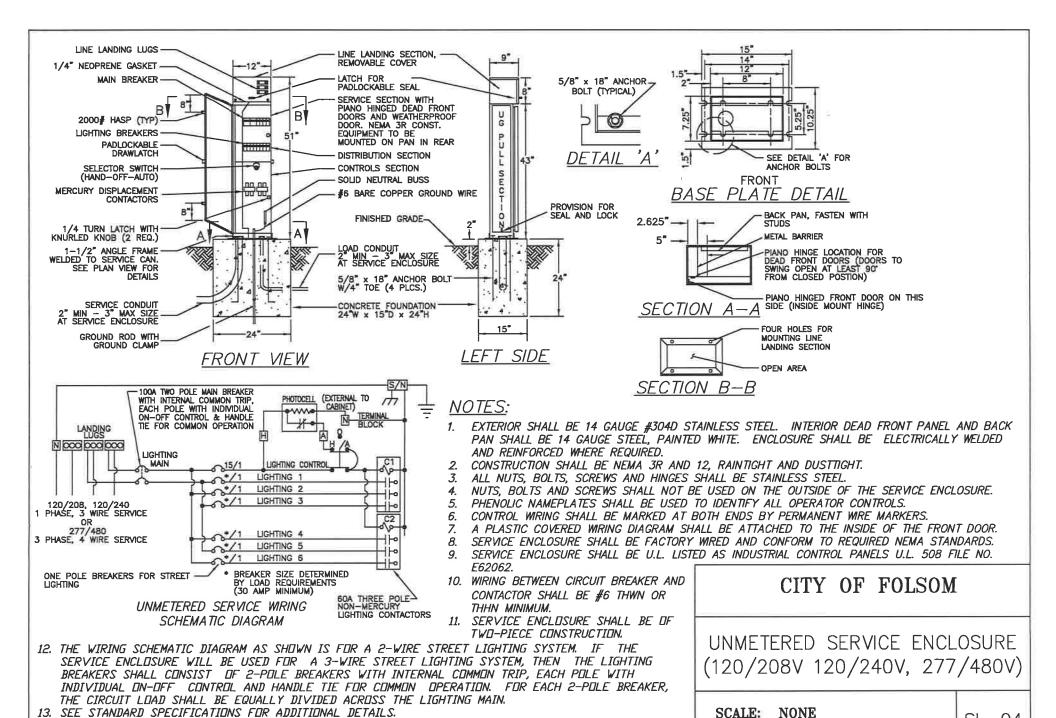
- SERVICE PEDESTAL SHALL CONFORM TO THE PROVISIONS IN SECTIONS 96-2 11 "SERVICE" OF THE
- SEE PLANS FOR CONDUIT AND WIRE SIZE
- PAINT SERVICE CAN AND METER SECTION.
- SERVICE EQUIPMENT CABINETS SHALL BE PRE-WIRED AND SHALL CONFORM TO N.E.M.A. CLASS II C
- ALL CONTROL WIRING SHALL BE AWG 14 PED TW 19 STRAND WIRE UNLESS OTHERWISE NOTED.
- EACH SERVICE EQUIPMENT CABINET SHALL BE PROVIDED WITH "PHENOLIC" NAME PLATE ON THE DEAD FRONT PANEL FOR EACH BREAKER INSTALLED. ALL NAME PLATES TO BE SCREWED ON.
- A PLASTIC COATED WIRING DIAGRAM SHALL BE PROVIDED AND ATTACHED TO THE INSIDE OF THE
- 8. ALL SERVICE EQUIPMENT CABINETS SHALL BE NEMA 3-R AND NEMA 12 CONSTRUCTION.
- FACTORY BUSSED (300 AMP.) UNDERGROUND PULL SECTION WITH ALUMINUM BODIED LANDING LUGS WITH MULTIPLE SECONDARY LUGS FOR PREWIRED METERED AND UNMERTERED CIRCUITS.
- 10. DIAGRAM B-THE SERVICE EQUIPMENT CABINET SHALL BE SPLIT BUSSED TO PERMIT METERED AND UNMETERED BRANCH CIRCUITS.
- 11. DIAGRAM A, B, C-FOR SMALLER SERVICE THAN SHOWN. THE UNUSED COMPONENTS SHALL NOT BE REQUIRED
- 12. A SINGLE GROUND ROD IS PERMITTED WHERE A LETTER CERTIFYING THE ELECTRODE WAS TESTED TO HAVE 25 OHMS OF LESS RESISTANCE TO EARTH CEC250.53

### WIRING DIAGRAM SYMBOLS

- **WIMETER SECTION WITH MANUAL CIRCUIT CLOSING DEVICE**
- IEIELECTRICALLY HELD CONTACTOR-30A

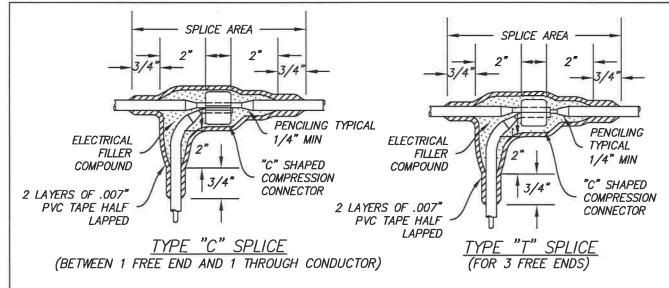
### CITY OF FOLSOM

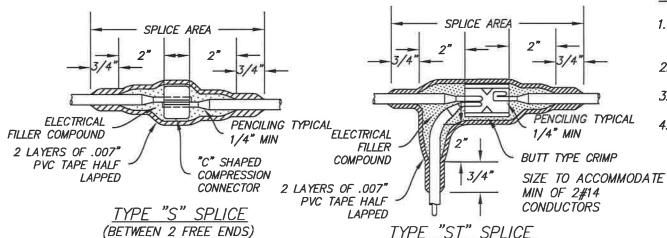
SERVICE CABINET METER SOCKET



SL-04

FEBRUARY 2020





(BETWEEN 1 FREE END AND 1 THROUGH CONDUCTOR)

INSULATING METHOD

LOW VOLTAGE CIRCUITS (0-600 VOLTS)

METHOD "B"

- 1. COMPLETELY COVER THE SPLICE AREA WITH ELECTRICAL INSULATING COATING AND ALLOW TO DRY.
- 2. APPLY 2 LAYERS OF ELECTRICAL INSULATING PAD WITH MINIMUM THICKNESS OF 4MM EACH LAYER OR 2 LAYERS, HALF LAPPED, SYNTHETIC OIL RESISTANT, SELF FUSING RUBBER TAPE.
- 3. APPLY 3 LAYERS HALF LAPPED POLYVINYL CHLORIDE TAPE.
- 4. COVER ENTIRE SPLICE WITH ELECTRICAL INSULATING COATING AND ALLOW TO DRY.

### HIGH VOLTAGE CIRCUITS (OVER 600 VOLTS)

- 1. COMPLETELY COVER THE SPLICE AREA WITH ELECTRICAL INSULATING COATING AND ALLOW TO DRY.
- 2. APPLY HIGH VOLTAGE TAPE TO A MINIMUM THICKNESS EQUAL TO ORIGINAL INSULATION.
- 3. APPLY 3 LAYERS HALF LAPPED POLYVINYL CHLORIDE TAPE.
- 4. COVER ENTIRE SPLICE WITH ELECTRICAL INSULATING COATING AND ALLOW TO DRY.

### NOTES

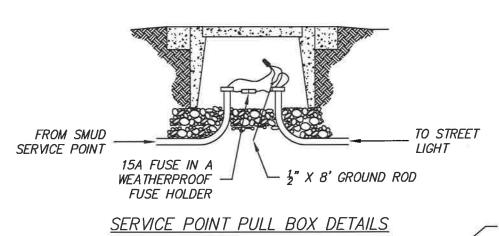
- 1. ALL DIMENSIONS ARE NOMINAL AND MINIMAL.
- 2. RUBBER TAPES SHALL BE ROLLED AFTER APPLICATION.
- 3. WHEN PVC TAPE IS USED AS FINAL LAYER, PAINT FINISHED SPLICE WITH ELECTRICAL INSULATING COATING.
- 4. PRESSURE SLEEVE TYPE CONNECTORS MAY BE USED FOR TYPE "S" AND "T" SPLICES.

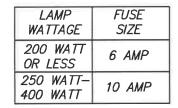
## CITY OF FOLSOM

STANDARD SPLICING

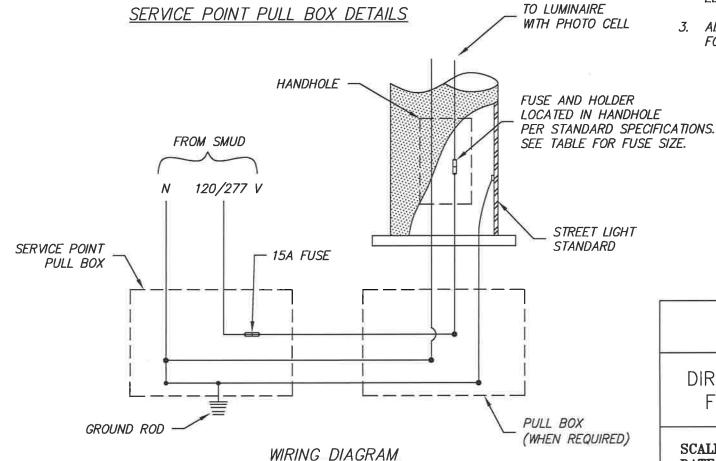
SCALE: NONE

DATE: FEBRUARY 2020





- 1. FUSE SHALL BE A MIDGET FERRULE TYPE. RATED AT 600 VOLTS.
- 2. ATTACH GROUND CONDUCTOR TO THE ELECTROLIER.
- 3. ALL PULL BOXES SHALL HAVE PROVISIONS FOR LOCKING.



# CITY OF FOLSOM

DIRECT SERVICE INSTALLATION FOR STREET LIGHT POWER

SCALE: NONE

DATE: FEBRUARY 2020

	REINFORCED CONCRETE BOX				COMP	REINFORCED CONCRETE OR COMPOSITE COVER					
PULL BOX No.	MIN.** THICKNESS	MIN. DEPTH BOX AND EXTENSION	LO	wo	MIN. ** THICKNESS	MIN. DEPTH BOX & EXTENSION	L***	W***	R	EDGE THICKNESS	EDGE TAPER
3-1/2	1**	NO EXTENSION	20"	14"	5/16"	NO EXTENSION	15-3"	10-17"	1-13"	1-3**	1/8"
5	1"	22"	28"	18"	5/16"	20"	23-1"	13-3"	1-1"	2"	1/8"
5A	1"	22"	25-1,"	15-3"	5/16"	20"	20-5"	10-1"	1-17"	2"	1/8"
6	1-1/2"	24"	36"	23"	3/8"	20"	30-5"	17-5"	1-14	2"	1/8"

- IN UNIMPROVED AREAS AND PLANTERS. THE TOP OF PULL BOXES SHALL BE PLACED 0.10 FOOT ABOVE THE SURROUNDING GRADE OR, WHEN ADJACENT TO A CURB, FLUSH WITH THE TOP OF THE CURB. THE SURROUNDING GRADE SHALL BE RAMPED UP TO MATCH THE TOP OF THE CONCRETE COLLAR. UNLESS ORTHERWISE NOTED, AND WHERE PRACTICAL, PULL BOXES SHOWN IN THE VICINITY OF CURBS SHALL BE PLACED ADJACENT TO THE BACK OF CURB, AND PULL BOXES SHOWN ADJACENT TO STANDARDS SHALL BE PLACED ON THE SIDE OF THE FOUNDATION FACING AWAY FROM TRAFFIC.
- IN SIDEWALK AREAS, THE TOP OF PULL BOXES SHALL BE FLUSH WITH THE SIDEWALK GRADE.
- 3. PLACEMENT OF PULL BOXES IN AREAS SUBJECT TO VEHICULAR TRAFFIC LOADS (INCLUDES TRAFFIC LANES, BIKE LANES, SHOULDERS, AND DRIVEWAYS) SHALL BE AVOIDED WHENEVER POSSIBLE, IF UNAVOIDABLE, THEN A TRAFFIC RATED PULL BOX WITH STEEL TRAFFIC COVER SHALL BE USED. SEE STANDARD DETAIL SL-08.
- PULL BOXES SHALL NOT BE PLACED WITHIN THE BOUNDARIES OF SIDEWALK RAMPS.
- PULL BOXES SHOULD NOT BE PLACED WITHIN PLANTER AREAS WHENEVER POSSIBLE.
- PULL BOX COVERS SHALL BE MARKED AS FOLLOWS:
  - "TRAFFIC SIGNAL" TRAFFIC SIGNAL CIRCUITS WITH OR WITHOUT STREET LIGHTING CIRCUITS.
  - "STREET LIGHTING" STREET LIGHTING CIRCUITS WHERE NO VOLTAGE IS ABOVE 600V.
  - "STREET LIGHTING—HIGH VOLTAGE" STREET LIGHTING CIRCUITS WHERE VOLTAGE IS COLLAR TO BE ABOVE 600V. USED IN UNIMPROVED
  - "SERVICE" SERVICE CIRCUITS BETWEEN SERVICE POINT AND SERVICE DISCONNECT.
  - "SPRINKLER CONTROL" SPRINKLER CONTROL CIRCUITS, 50 VOLTS OR LESS.
  - "IRRGATION" CIRCUITS TO IRRIGATION CONTROLER, 120 VOLTS OR MORE.
  - "RAMP METER" RAMP METER CIRCUITS.
  - "COUNT STATION" COUNT AND/OR SPEED MONITOR CIRCUITS.
  - "COMMUNICATION" COMMUNICATION CIRCUITS.
  - "TELEPHONE" TELEPHONE SERVICE.
  - "TOS COMMUNICATIONS" TOS COMMUNICATIONS TRUNK LINE. 11)
  - "TOS POWER" TOS POWER.
  - "TDC POWER" TELEPHONE DEMARCATION CABINET POWER.
- COVERS SHALL FIT FLUSH WITH THE TOP OF PULL BOXES. THERE SHALL BE 1 MAXIMUM CLEARANCE ALL AROUND BETWEEN COVERS AND PULL BOX OPENINGS.
- ALL COVERS AND BOXES SHALL BE INTERCHANGEABLE WITH CALIFORNIA STANDARD MALE AND FEMALE GAUGES. WHEN INTERCHANGED WITH A STANDARD MALE OR FEMALE GAUGE. THE TOP SURFACES SHALL BE FLUSH WITHIN 1/8 INCH.
- 9. ALL COVERS AND BOXES SHALL BE INTERCHANGEABLE WITH CALIFORNIA STANDARD MALE AND FEMALE GAUGES. WHEN INTERCHANGED WITH A STANDARD MALE OR FEMALE GAUGE, THE TOP SURFACES SHALL BE FLUSH WITHIN 1/8 INCH.
- 10. STACKING OF PULL BOXES IS PERMITTED (TWO PULL BOXES MAXIMUM).
- 11. STEEL REINFORCING SHALL BE AS REGULARLY USED IN THE STANDARD PRODUCTS OF THE RESPECTIVE MANUFACTURER.

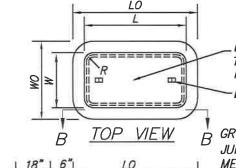
\*\* EXCLUDING CONDUIT WEB

CONCRETE

AREAS AND

**PLANTERS** 

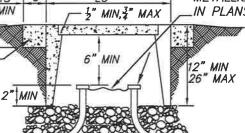
\*\*\* TOP DIMENSION



LETTERS TO BE 1" MIN. TO 3" MAX. HIGH. SEE NOTE 6.

-LIFT HOLES (2 REQ.)

GROUND BUSHINGS & BONDING JUMPER. REQ'D WHEN USE OF METALLIC CONDUIT IS SPECIFIED IN PLANS OR IN THE PROVISIONS.



PLACE 6" LAYER OF CLEAN CRUSHED ROCK BELOW PULL BOX BEFORE INSTALLATION OF CONDUCTORS.

SECTION B-B

CITY OF FOLSOM

STANDARD PULLBOX

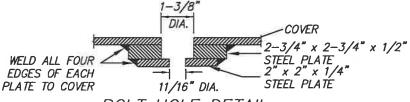
SCALE: NONE

DATE: FEBRUARY 2020

- STEEL COVER SHALL HAVE EMBOSSED NON-SKID PATTERN.
- STEEL REINFORCING SHALL BE AS REGULARLY USED IN THE STANDARD PRODUCTS OF THE RESPECTIVE MANUFACTURER.
- 3. PULL BOX COVERS SHALL BE MARKED AS DESCRIBED IN NOTE 6 ON STANDARD DRAWING 5-34. MARKING SHALL BE APPLIED TO EACH COVER PRIOR TO GALVANIZING BY BEAD WELDING THE LETTERS ON THE COVERS. THE LETTERS SHALL BE RAISED AT LEAST 3/32 INCH.
- 4. BONDING JUMPER FOR COVER SHALL BE A MIN. OF 36" LONG. WHEN NON-METALLIC CONDUIT IS USED, THE BONDING JUMPER FOR THE COVER SHALL BE SPLICED TO THE BOND WIRE IN THE CONDUITS. WHEN THE USE OF METALLIC CONDUIT IS SPECIFIED ON THE PLANS OR IN THE SPECIAL PROVISIONS, THE BONDING JUMPER FOR THE COVER SHALL BE CONNECTED TO THE CONDUIT GROUND BUSHING. AND THE CONDUITS SHALL BE BONDED TOGETHER WITH GROUND BUSHINGS AND A BONDING JUMPER.
- CONDUITS SHALL ENTER AT BOTTOM OF PULL BOX AS SHOWN IN THE DRAWING.

	REINFORCED CONCRETE BOX								
PULL BOX No.	MIN.** THICKNESS	MIN. DEPTH BOX AND EXTENSION	LO	WO	L	W			
3-1/2	1"	NO EXTENSION	20"	14"	15-12"±	10"±			
5	1"	22*	28"	18"	23"±	13-1/2"±			
5A	1"	22*	25-1"	15-3"	21"±	10-1/2"±			

\*\* EXCLUDING CONDUIT WEB



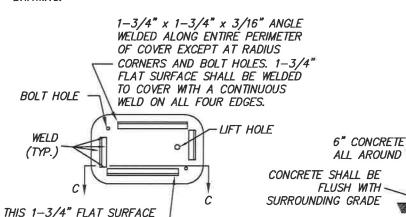
BOLT HOLE DETAIL

-2" MIN.

CLEAN CRUSHED

ROCK

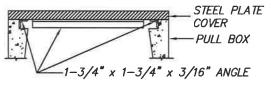
SECTION B-B



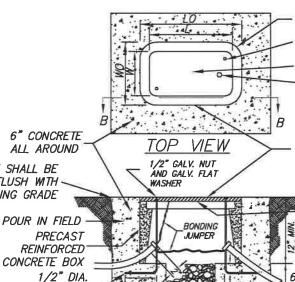
OF PULL BOX OPENING (TYP.)

TO BE AGAINST INSIDE EDGE -

PLAN VIEW (BOTTOM OF COVER)



SECTION C-C (COVER DETAIL)



3" MIN. ALL AROUND

POUR IN FIELD

**GALVANIZED** 

THREADED ROD

COVER SHALL COVER ENTIRE TOP OF BOX BOLT HOLES SHALL MATCH STANDARD STUD BOLTS. SEE BOLT HOLE DETAIL.

LETTERS TO BE 1" MIN. TO 3" MAX. HIGH. SEE NOTE 3 1/2" DIA. LIFT HOLE

1/4" STEEL PLATE COVER, GALVANIZED AFTER FABRICATION AND SET FLUSH WITH CONCRETE.

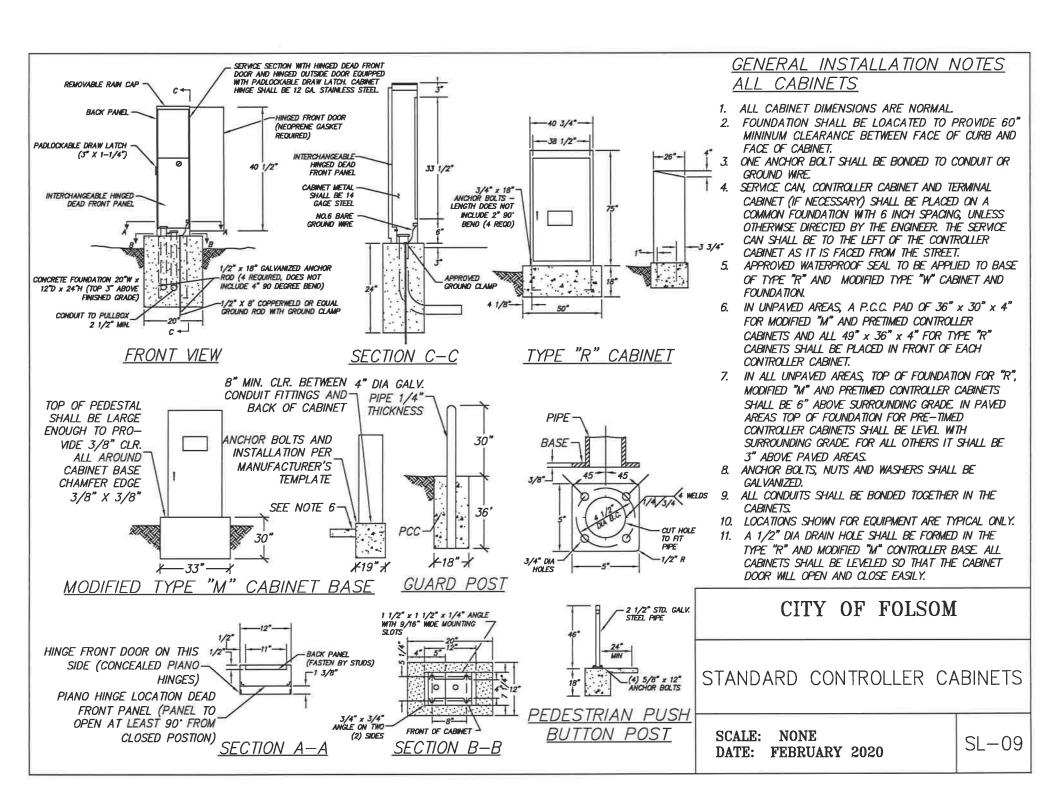
WELD ANGLES TO COVER (4 REQ.). SEE COVER DETAIL.

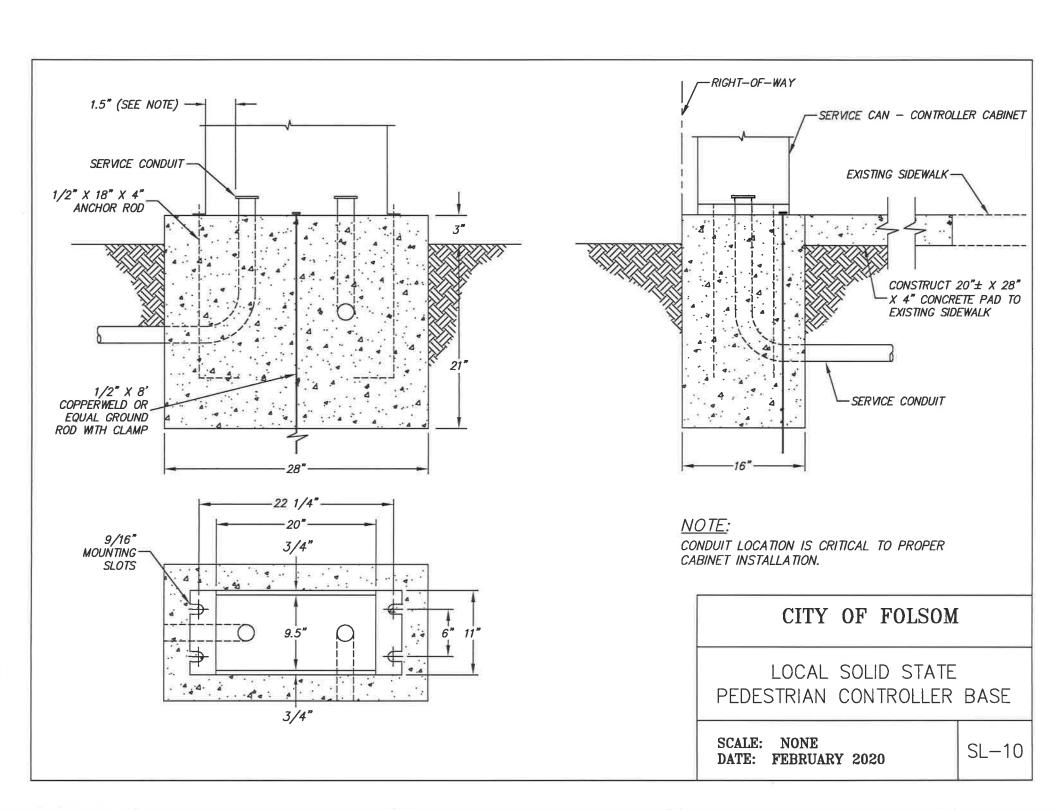
CITY OF FOLSOM

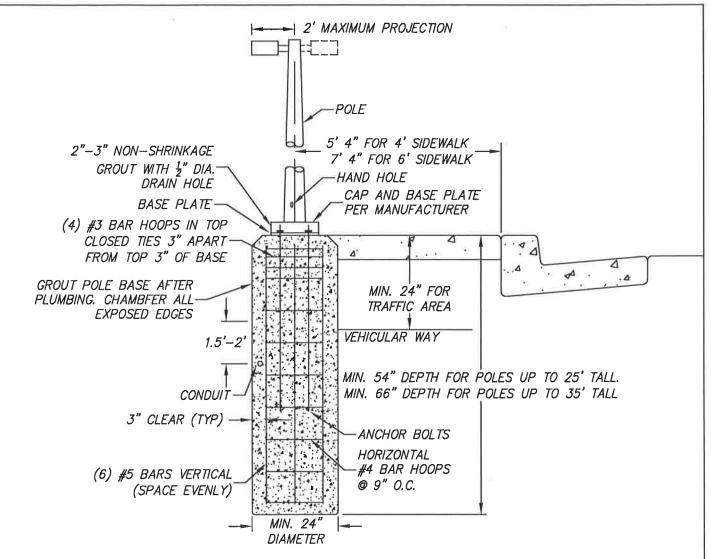
TRAFFIC RATED PULLBOX

SCALE: NONE

DATE: FEBRUARY 2020







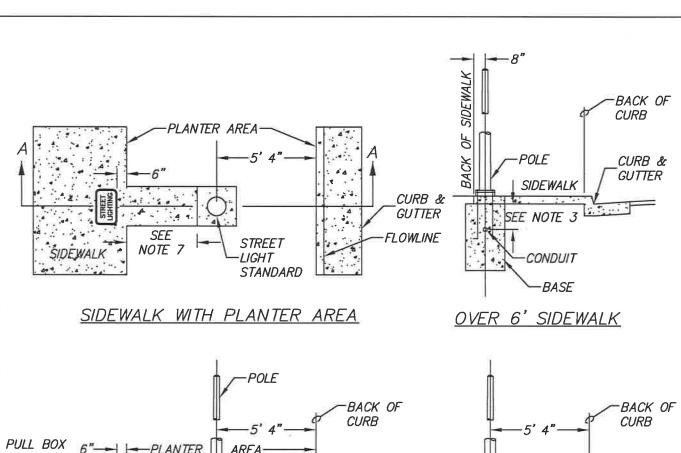
- 1. BASE IS CONFIGURED FOR SINGLE OR DOUBLE LIGHT APPLICATION.
- 2. CONNECT BOND WIRE TO POLE AT HAND HOLE AND RETURN TO SERVICE PANEL.
- 3. ANCHOR BOLTS WITH LARGE WASHERS, NUTS, AND LEVELING NUTS, FURNISHED WITH POLE SHALL BE PER MANUFACTURER'S SPECIFICATIONS. ARCHORS SHALL RESIST A MINIMUM 90MPH WIND (BASED ON 3 SECOND GUST FORMULA) AND EXPOSURE C.
- 4. MINIMUM CONCRETE COMPRESSION STRENGTH SHALL BE 3,500 PSI @ 28 DAYS (SPECIAL INSPECTION REQUIRED).
- 5. STEEL REINFORCING #4 BARS GRADE 40 PER ASTM A615/A & 615M-04.
- 6. STEEL REINFORCING #5 BARS GRADE 60 PER ASTM A615/A & 615M-04.

### CITY OF FOLSOM

BASE DESIGN FOR STREET LIGHT STANDARD

SCALE: NONE

DATE: FEBRUARY 2020



CURB &

**GUTTER** 

-PLANTER

WHEN:

SIDEWALK

**ALTERNATE** 

(SEE NOTE 3)

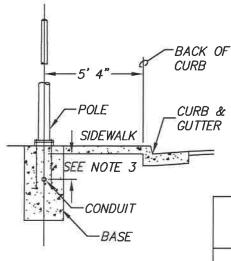
CONDUIT LOCATIONS

**REQUIRED** 

AREA

SECTION A

BASE



4'-6' SIDEWALK

### NOTES:

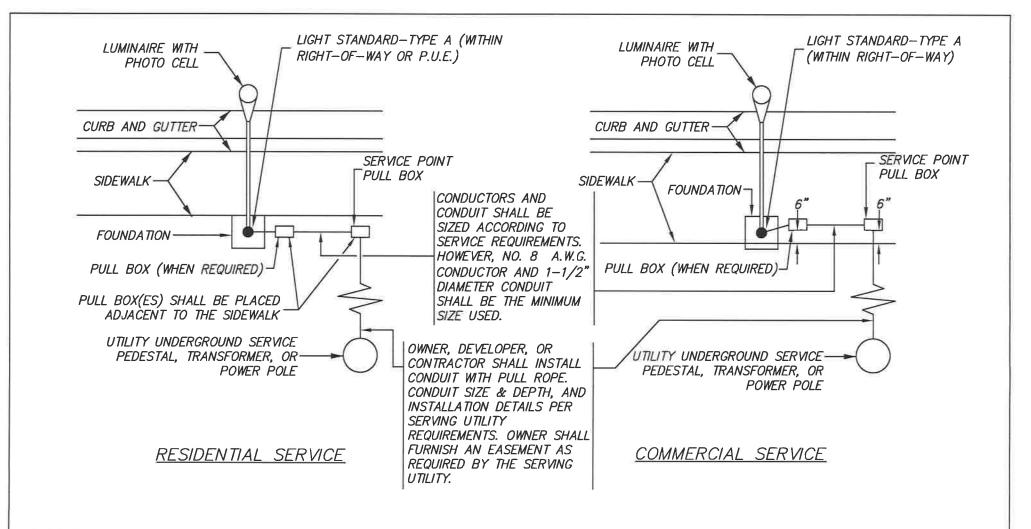
- 1. CONDUIT TRENCH BACKFILL SHALL BE COMPACTED TO 90% RELATIVE COMPACTION.
- 2. LANDSCAPING IN THE AREA OF THE STREET LIGHT STANDARD WILL MATCH BASE ELEVATION AND HAVE A MINIMUM OF 12" OF CLEARANCE FROM THE BASE.
- CONDUITS LOCATED BENEATH THE SIDEWALK MAY BE PLACED AT 9" DEPTH. CONDUITS IN LANDSCAPE STRIP SHALL BE PLACED AT 18" DEPTH AND 6" FROM THE FACE OF THE SIDEWALK.
- 4. IF THE PLANTER AREA IS LESS THAN 6 FEET WIDE. THEN PLACE STREET LIGHT STANDARD SO THAT THE BASE PLATE ALIGNS WITH THE EDGE OF SIDEWALK. TOP OF FOUNDATION TO MATCH SIDEWALK GRADE.
- 5. NO PULL BOXES ARE TO BE PLACED IN THE PLANTER AREA.
- PULL BOXES LOCATED IN A DRIVEWAY OR WITHIN 5 FEET OF A DRIVEWAY SHALL BE TRAFFIC RATED (SEE STANDARD DETAIL SL-08).
- 7. IF DIMENSION IS LESS THAN 2 FEET, PLACE 3-1/2" THICK, 2 FOOT WIDE CONCRETE PAD BETWEEN SIDEWALK AND STREET LIGHT FOUNDATION.

## CITY OF FOLSOM

BASE LOCATION FOR STREET LIGHT STANDARD

SCALE: NONE

DATE: FEBRUARY 2020



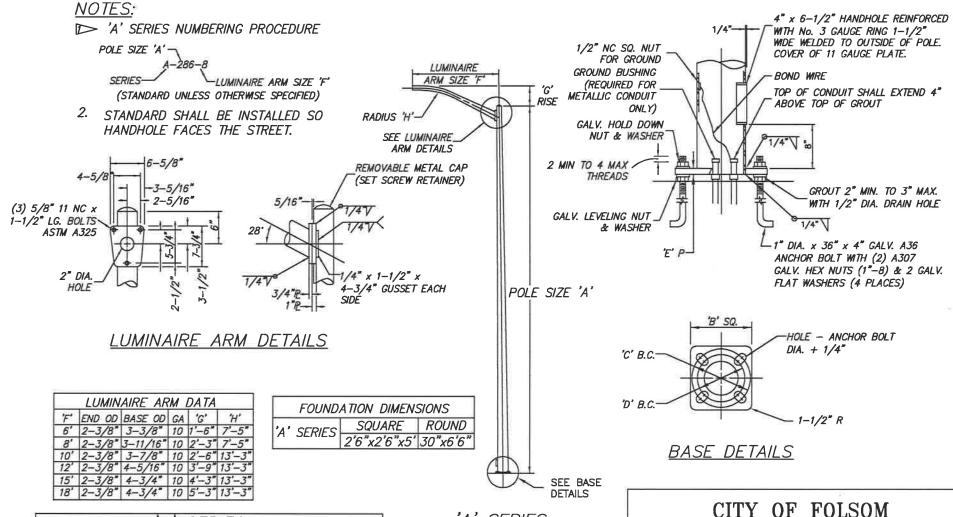
- 1. ALL CITY OWNED FACILITIES SHALL BE WITHIN RIGHT-OF-WAY OR PUBLIC UTILITY EASEMENT.
- 2. SEE STANDARDS SL-04 AND SL-06 FOR WIRING DIAGRAM.
- 3. SEE STANDARDS SL-07 AND SL-08 FOR PULL BOX DETAILS.
- 4. SEE STANDARDS SL-11, SL-12, SL-14, AND SL-15, FOR STREET LIGHT DETAILS.
- 5. THE SERVING UTILITY WILL INSTALL AND MAINTAIN CONDUCTORS FROM THEIR UNDERGROUND SERVICE PEDESTAL, TRANSFORMER, OR POWER POLE TO THE SERVICE POINT PULL BOX.

# CITY OF FOLSOM

DIRECT SERVICE
INSTALLATION TO
STREET LIGHT STANDARD

SCALE: NONE

DATE: FEBRUARY 2020



BASE PLATE DATA

TOP OD BASE OD GA 'B' 'C' 'D' 'E'

A-250-'F' 25'-0"3-7/8"7-5/16" 10 12"1-1/2" 11" 1" 1" 1"x36"x4" A-266-'F' 26'-6"3-7/8" 7-1/2" 10 12"11-1/2" 11" 1" 1"x36"x4"

A-286-'F' 28'-6"3-7/8" 7-3/4" 10 | 12" | 1-1/2" | 11" | 1" | 1"x36"x4" A-300-'F' 30'-0"3-7/8" | 8" | 10 | 12" | 1-1/2" | 11" | 1" | 1"x36"x4"

POLE DATA

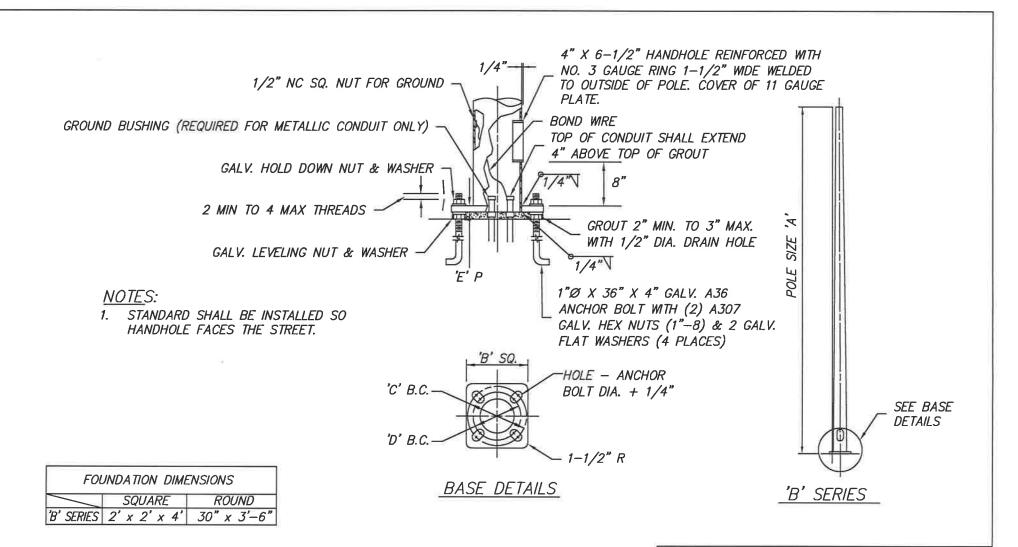
ID No. ID

'A' SERIES CITY OF I

TYPE 'A"
STREET LIGHT
STANDARD

SCALE: NONE

DATE: FEBRUARY 2020



'B' SERIES									
	PC	TA		BAS	SE PLAT	ANCHOR			
'A '	TOP OD	BASI MIN	E OD MAX	GAUGE	<i>'B</i> *	'C'	'D'	Έ'	ANCHOR BOLTS
20'	2 %"	5.61"	5.85"	10	10"	9 1/2"	9"	1"	1"x36"x4"

# CITY OF FOLSOM

TYPE 'B' STREET LIGHT STANDARD

SCALE: NONE

DATE: FEBRUARY 2020

