

**NOTES:**

1. WIRE SHALL BE MINIMUM #10 AWG COPPER 2 CONDUCTOR. CONNECT TO 240 VOLT, NO NEUTRAL OR GROUND CONNECTION. USE COMPRESSION CONNECTORS APPROVED BY ENGINEER.
2. LUMINAIRES SHALL BE LEVELED AFTER INSTALLATION. SOCKET POSITION SHALL BE ADJUSTED TO ANOTHER POSITION IF REQUESTED BY THE ENGINEER BEFORE INSTALLATION.
3. ALL HARDWARE SHALL BE HOT DIP GALVANIZED LINE HARDWARE.
4. ALL WORK ON UTILITY POLES TO BE PERFORMED BY QUALIFIED LINEMEN.

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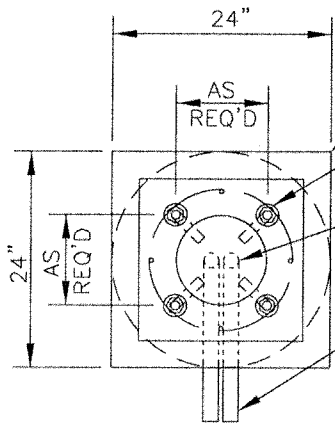
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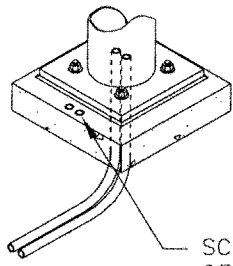
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STREETLIGHT  
LUMINAIRE ON WOOD POLE  
TYPICAL INSTALLATION

STANDARD PLAN NO. SL-01

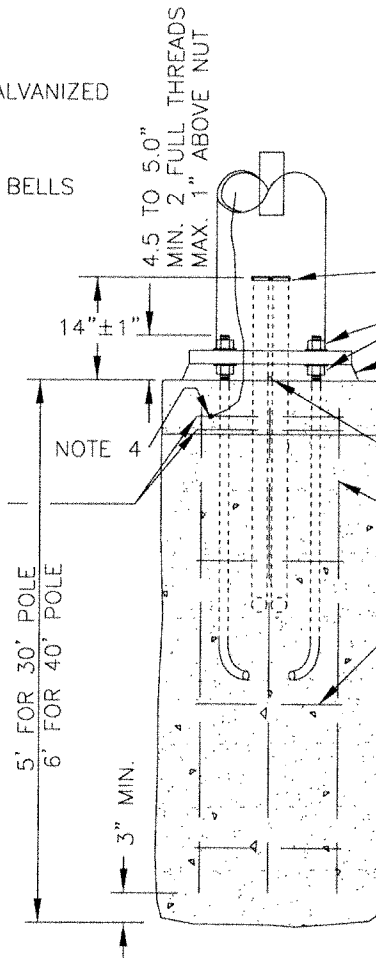


- TOOL FINISH TOP AND EDGES
- 4EA ANCHOR BOLTS  
MINIMUM TOP 8" OF BOLT SHALL BE GALVANIZED (AASHTO M111)
- CONDUIT SHALL BE CENTERED ON POLE W/CLEARANCE FOR COUPLINGS/PULLING BELLS
- THERE SHALL BE A MINIMUM OF TWO CONDUITS IN EACH FOUNDATION. CONDUIT SHALL HAVE 18" RADIUS AND BE ORIENTED TO MINIMIZE CONDUIT BENDS.



SCRIBE A CIRCLE WITH END OF CONDUIT ABOVE EACH CONDUIT ENTERING THE FOUNDATION.

(2) HOOPS WITHIN 5" OF TOP



DESIGN BASED ON INSTALLATION IN MINIMUM 3000 PSF SOIL WITH SINGLE LUMINAIRE ON 10 FOOT ARM. INSTALLATIONS NOT MEETING THESE PARAMETERS ARE SUBJECT TO ENGINEERING REVIEW.

- PULLING BELLS
- GALVANIZED HEX NUTS & WASHERS
- GROUT
- TOP OF FOUNDATION TO BE SET TO SIDEWALK GRADE UNLESS OTHERWISE SPECIFIED.
- TOP 6" OF FOUNDATION SHALL BE FORMED SQUARE
- 1/2" WEEP HOLE ON LOWEST SIDE
- 4 #4 VERTICAL REBARS
- #4 REBAR HOOPS 8" O.C. (QTY AS REQ'D)

**NOTES:**

1. FOUNDATIONS SHALL BE INSTALLED IN 24" AUGERED HOLE IN UNDISTURBED MATERIAL. WHERE PRE-CAST BASES ARE USED, THE INSTALLATION SHALL BE REVIEWED AND APPROVED BY THE ENGINEER. ENTIRE HOLE SHALL BE BACKFILLED WITH CDF OR OTHER COMPACTIBLE MATERIAL APPROVED BY THE ENGINEER.
2. CALL FOR UTILITY LOCATION BEFORE DIGGING (1-800-424-5555)
3. ALL STEEL TO HAVE 3" MINIMUM CONCRETE COVER. HOOPS SHALL HAVE 135° HOOKS. ANCHOR BOLTS MAY BE SECURED TO HOOPS.
4. BOND CAGE TO GROUND LUG.

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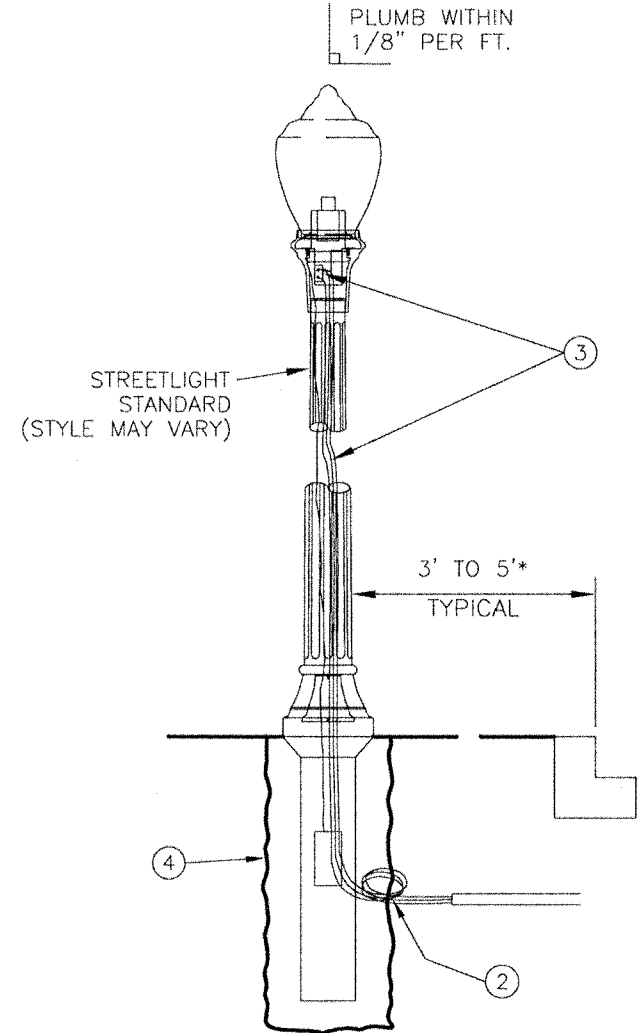
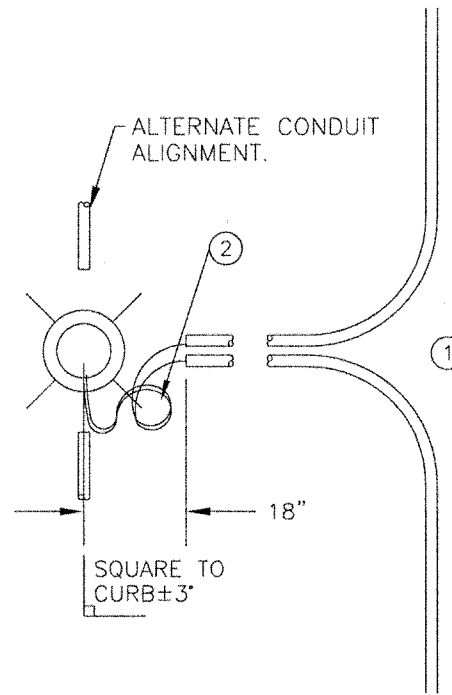
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CITY ENGINEER

3/10/03  
DATE 2/4/03

STREETLIGHT  
FOUNDATION  
30' & 40'  
STANDARD PLAN NO. SL-02

**NOTES:**

- ① INTERCEPT EXISTING CONDUIT, WHERE APPLICABLE, AND ROUTE TOWARD LIGHT STANDARD. TERMINATE CONDUIT(S) APPROXIMATELY 12" FROM BASE OF STANDARD. SEAL END OF CONDUITS WITH TAPE.
- ② COIL THREE FEET OF WIRE AT END OF CONDUIT BEFORE ENTERING BASE OF STANDARD.
- ③ ROUTE WIRE UP TO TERMINAL BLOCK WITHOUT SPLICING.
- ④ MINIMUM AUGER SIZE IS 12". BACKFILL WITH CRUSHED SURFACING TOP COURSE. TAMP IN 6 INCH LIFTS.
- ⑤ SQUARE POLE TO CURB  $\pm 3$  DEGREES.



\* OR AS DETERMINED BY ENGINEER

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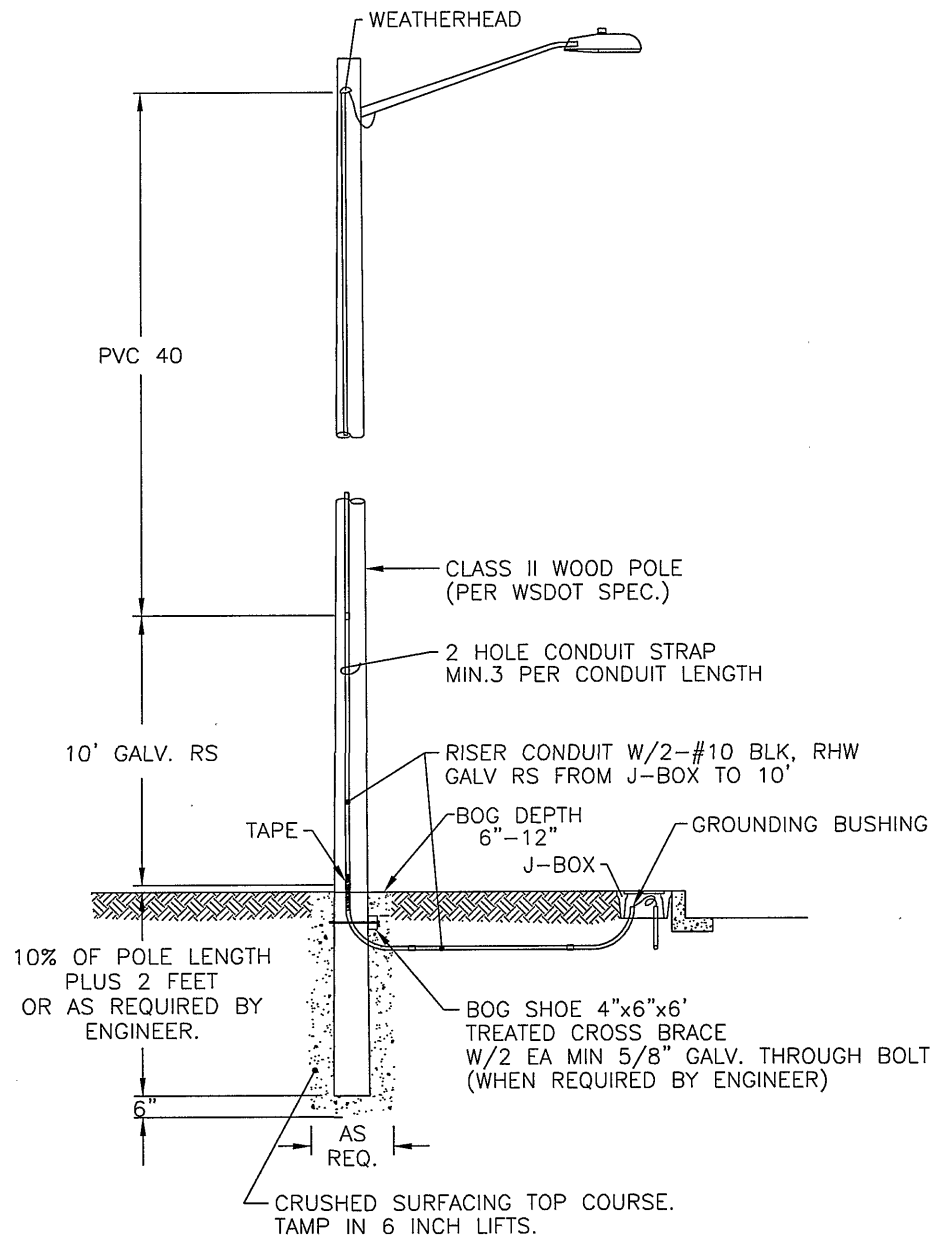
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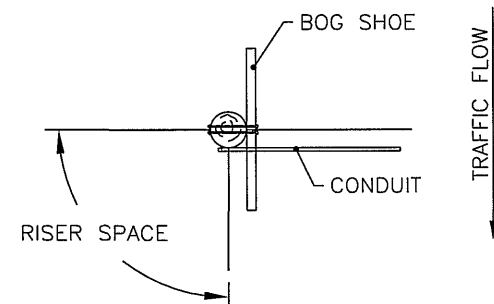
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STREETLIGHT  
STANDARD EMBEDDED TYPE  
INSTALLATION DETAIL-TYPICAL

STANDARD PLAN NO. SL-03



THIS INSTALLATION IS FOR WOOD POLES WITH ONLY STREETLIGHTING INSTALLED ON THE POLE. DO NOT USE ON TACOMA POWER UTILITY POLES.



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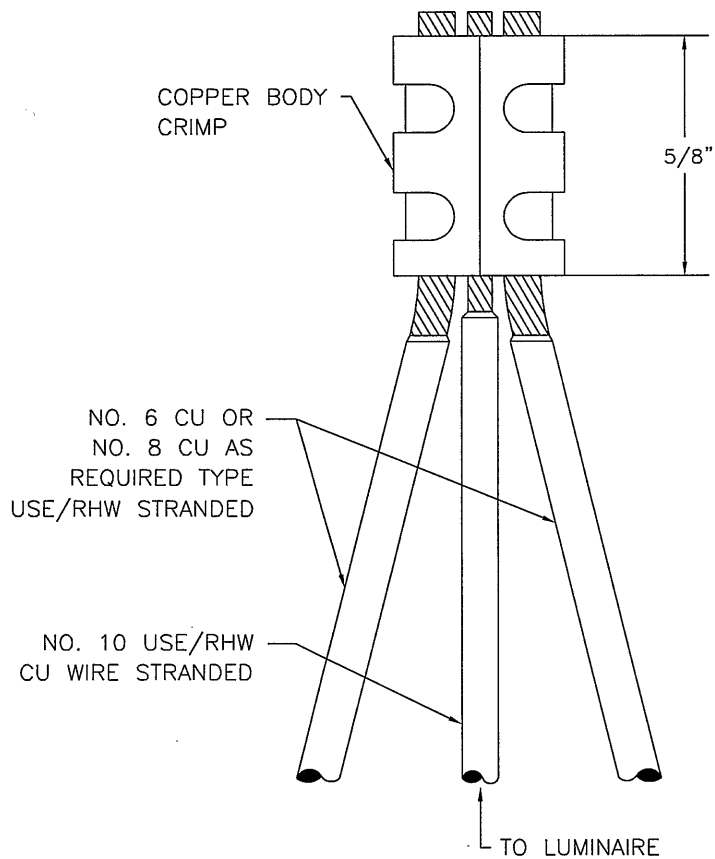
STREETLIGHT  
ON TIMBER POLE TYPICAL  
INSTALLATION W/UNDERGROUND FEED

STANDARD PLAN NO. SL-04

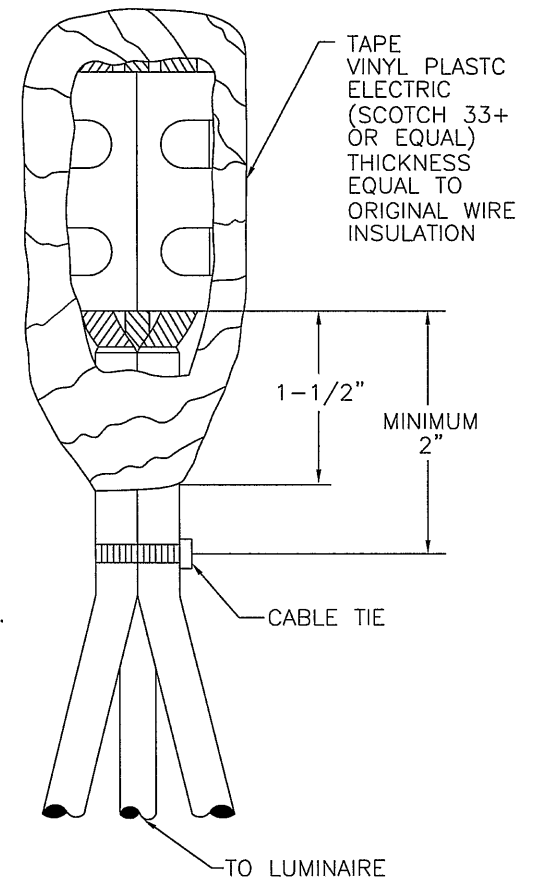
**STREETLIGHTING TAP**  
FOR USE IN BASE OF STANDARDS

**TAPING INSTRUCTIONS**

1. MAKE SPLICE AS SHOWN IN FIGURE A
2. APPLY TAPE AS SHOWN IN FIGURE A  
APPLY TAPE AND "SCOTHKOTE" MOISTURE RESISTANT ELECTRICAL COATING OVER ENTIRE SPLICE AREA.
3. ATTACH CABLE TIE A MINIMUM OF 2" FROM THE PRESSURE CONNECTOR AS SHOWN IN FIGURE B.
4. APPLY SECOND COAT OF VARNISH.



**FIGURE A**



**FIGURE B**

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**STREETLIGHT**  
**SPLICE FOR**  
**HANDHOLES**

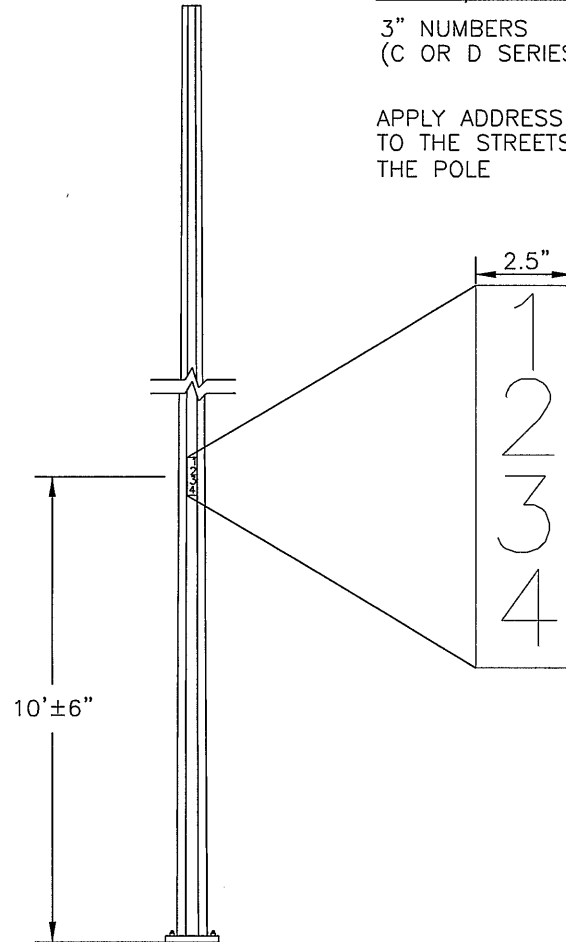
**STANDARD PLAN NO. SL-05**

WOOD POLES:  
2" NUMBERS  
NAIL ON ALUMINUM NUMBERS

METAL/CONCRETE/FIBERGLASS POLES

3" NUMBERS  
(C OR D SERIES)

APPLY ADDRESS NUMBERS  
TO THE STREETSIDE OF  
THE POLE



COLORS:

CONCRETE POLES:

BACKGROUND: LIGHT BEIGE  
FOREGROUND: DARK BROWN

UNPAINTED ALUMINUM  
OR GALVANIZED POLES:

BACKGROUND: NONE  
FOREGROUND: BLACK

IF THERE ARE EXISTING  
NUMBERS ON POLE  
PAINT OVER OR REMOVE OLD NUMBERS

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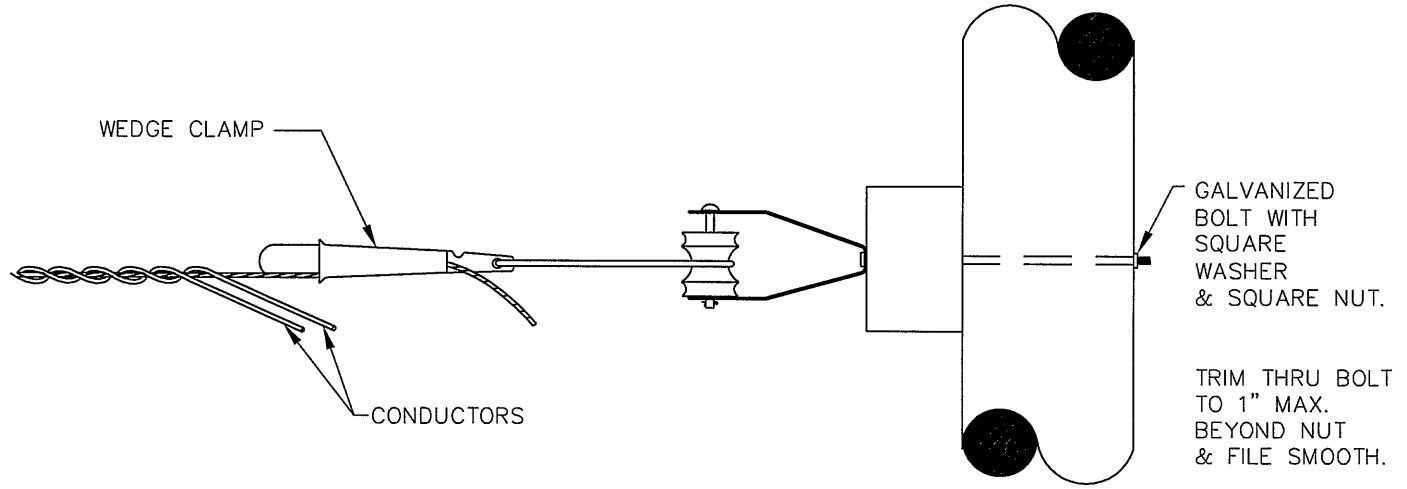
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STREETLIGHT  
POLE ADDRESSES  
TYPICAL DETAIL  
STANDARD PLAN NO. SL-06



MAXIMUM TENSION = 100 POUNDS  
 TYPICAL  
 MAXIMUM SPAN LENGTHS

TRIPLEX SIZE \ SAG	1/0	#2	#4	#6
2.5 FEET	65	85	105	125
5 FEET	95	120	150	180
7.5 FEET	115	150	180	220

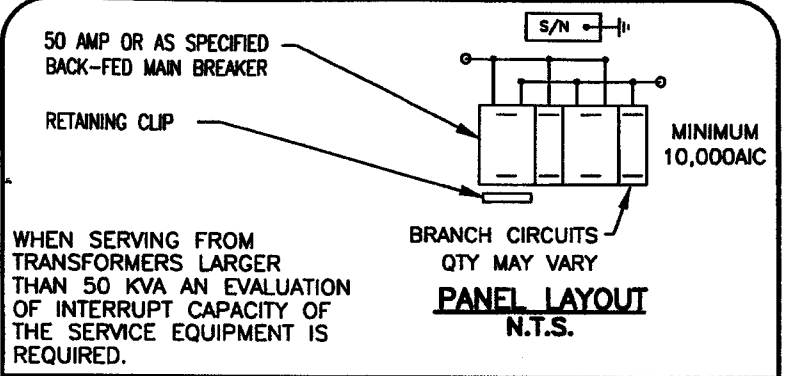
**WOOD POLE**

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**STREETLIGHT  
 OVERHEAD TRIPLEX SPANS  
 TYPICAL INSTALLATION**  
 STANDARD PLAN NO. SL-07



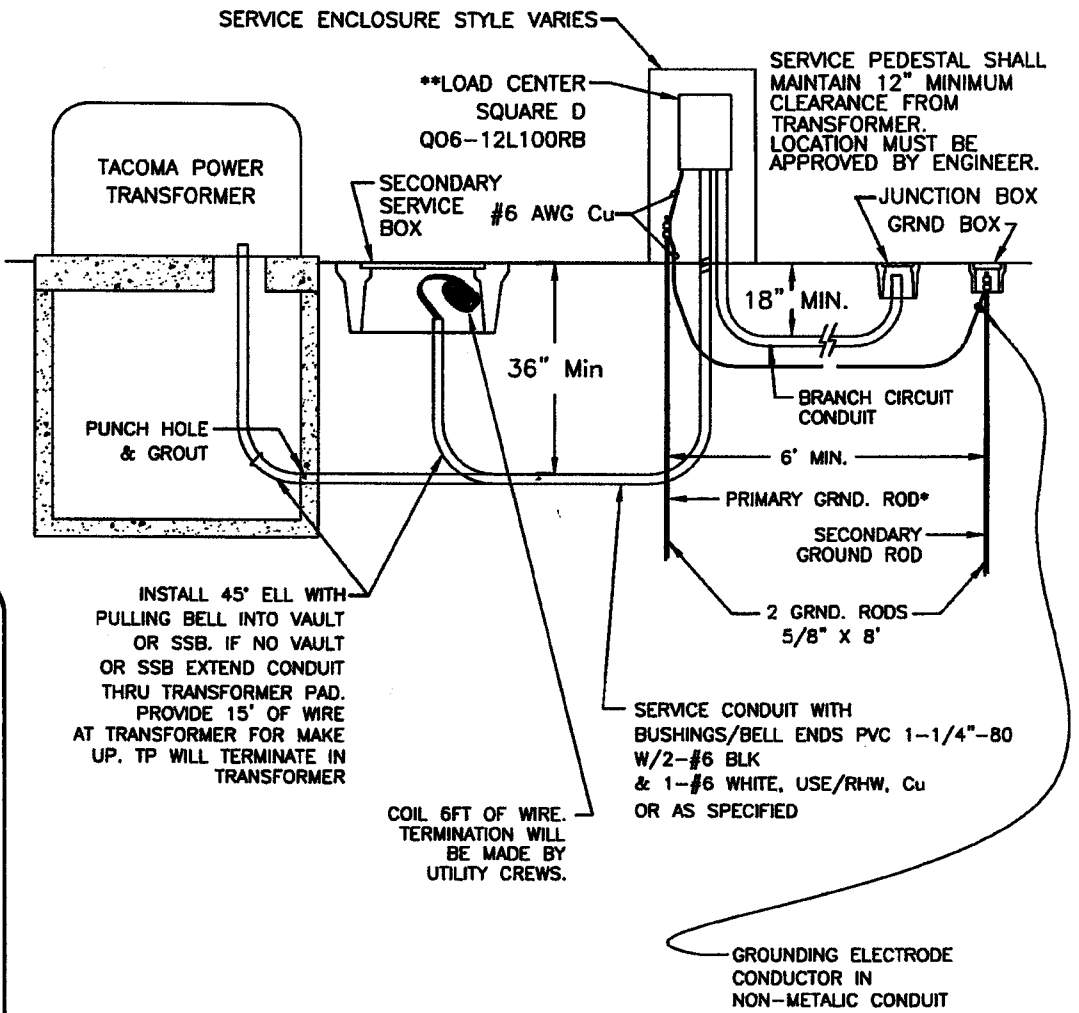
WHEN SERVING FROM TRANSFORMERS LARGER THAN 50 KVA AN EVALUATION OF INTERRUPT CAPACITY OF THE SERVICE EQUIPMENT IS REQUIRED.

SIZE OF BRANCH CIRCUIT CONDUCTOR	MAXIMUM BREAKER SIZE *
#8 AWG COPPER	30AMP
#6 AWG COPPER	40AMP

\* SIZE BASED ON ENSURING BREAKER WILL TRIP ON FAULTS AT END OF LONG CIRCUITS.

**PROCEDURE:**

- OBTAIN ELECTRICAL PERMIT FROM TACOMA POWER FOR EACH ELECTRICAL SERVICE.
- COMPLETE SERVICE PANEL INSTALLATION EXCEPT FOR ENTERING TRANSFORMER VAULT OR PAD. FOR SSB INSTALLATIONS, INSTALL CONDUIT AND WIRE INTO SSB.
- PREFERRED PRACTICE IS TO OBTAIN SERVICE FROM SSB. CONTACT TACOMA POWER BEFORE SERVICING STREETLIGHTS FROM TRANSFORMER.
- ARRANGE FOR ELECTRICAL INSPECTION AND CUT-IN BY TACOMA POWER (502-8277).
- AFTER TACOMA POWER ACCEPTANCE OF SERVICE PANEL CONTACT THE UNDERGROUND RESIDENTIAL DISTRIBUTION (URD) OFFICE (502-8232) TO ARRANGE FOR CONDUIT AND CONDUCTOR ENTRANCE INTO TRANSFORMERS.
- PRIMARY GROUND ROD MAY BE LOCATED OUTSIDE OF SERVICE ENCLOSURE IN GROUND ROD BOX.
- DO NOT PENETRATE OUTER WALL OF ENCLOSURE WHEN MOUNTING EQUIPMENT HARDWARE.



INSTALL 45° ELL WITH PULLING BELL INTO VAULT OR SSB. IF NO VAULT OR SSB EXTEND CONDUIT THRU TRANSFORMER PAD. PROVIDE 15' OF WIRE AT TRANSFORMER FOR MAKE UP. TP WILL TERMINATE IN TRANSFORMER

COIL 6FT OF WIRE. TERMINATION WILL BE MADE BY UTILITY CREWS.

SERVICE CONDUIT WITH BUSHINGS/BELL ENDS PVC 1-1/4"-80 W/2-#6 BLK & 1-#6 WHITE, USE/RHW, Cu OR AS SPECIFIED

GROUNDING ELECTRODE CONDUCTOR IN NON-METALLIC CONDUIT

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*[Signature]*  
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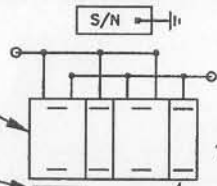
8/31/07  
DATE

STREETLIGHT  
SERVICE DETAIL  
UNDERGROUND TYPE A  
STANDARD PLAN NO. SL-08



50 AMP OR AS SPECIFIED  
BACK-FED MAIN BREAKER

RETAINING CLIP



MINIMUM  
10,000AIC

WHEN SERVING FROM  
TRANSFORMERS LARGER  
THAN 50 KVA AN EVALUATION  
OF INTERRUPT CAPACITY OF  
THE SERVICE EQUIPMENT IS  
REQUIRED.

BRANCH CIRCUITS  
QTY MAY VARY

**PANEL LAYOUT**  
N.T.S.

SIZE OF BRANCH CIRCUIT CONDUCTOR	MAXIMUM BREAKER SIZE *
#8 AWG COPPER	30AMP
#6 AWG COPPER	40AMP

\* SIZE BASED ON ENSURING BREAKER WILL TRIP  
ON FAULTS AT END OF LONG CIRCUITS.

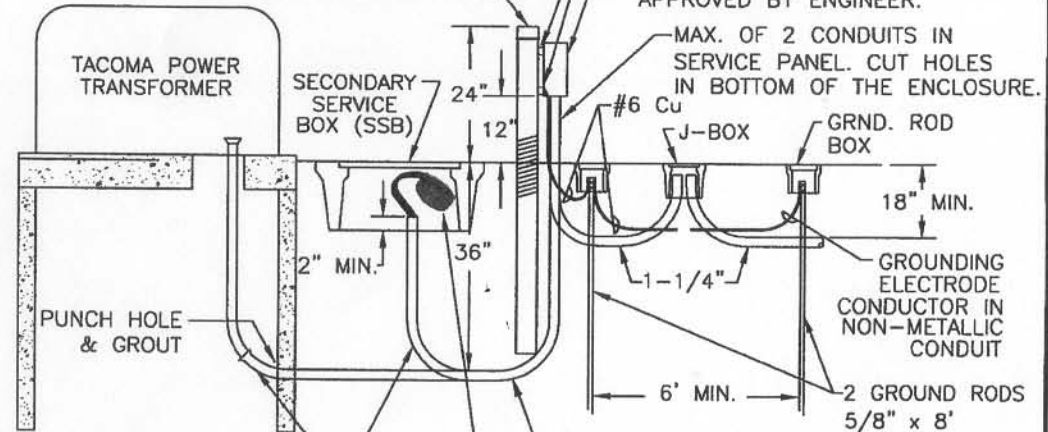
**PROCEDURE:**

1. OBTAIN ELECTRICAL PERMIT FROM TACOMA POWER FOR EACH ELECTRICAL SERVICE.
2. COMPLETE SERVICE PANEL INSTALLATION EXCEPT FOR ENTERING TRANSFORMER VAULT OR PAD. FOR SSB INSTALLATIONS, INSTALL CONDUIT AND WIRE INTO SSB.
3. PREFERRED PRACTICE IS TO OBTAIN SERVICE FROM SSB. CONTACT TACOMA POWER BEFORE SERVICING STREETLIGHTS FROM TRANSFORMER.
4. ARRANGE FOR ELECTRICAL INSPECTION AND CUT-IN BY TP (502-8277).
5. AFTER TP ACCEPTANCE OF SERVICE PANEL CONTACT THE UNDERGROUND RESIDENTIAL DISTRIBUTION (URD) OFFICE (502-8232) TO ARRANGE FOR CONDUIT AND CONDUCTOR ENTRANCE INTO TRANSFORMERS.

\*\*6. DO NOT PENETRATE OUTER WALL OF ENCLOSURE  
WHEN MOUNTING EQUIPMENT HARDWARE.

ELECTRICAL MOUNTING CHANNEL  
3" GALV. PIPE FILLED WITH CONCRETE  
(MOUNDED TOP) OR PROVIDE GALVANIZED  
PIPE CAP. COLD GALVANIZE ANY  
NON-GALVANIZED EDGES.

SQUARE D QO2-4RB W/40Amp  
2 POLE BREAKER. SERVICE  
PEDESTAL SHALL MAINTAIN 12" MIN.  
CLEARANCE FROM TRANSFORMER  
AT P.L. LOCATION MUST BE  
APPROVED BY ENGINEER.



INSTALL 45° ELL WITH  
PULLING BELL INTO VAULT  
OR SSB, IF NO VAULT OR  
SSB EXTEND CONDUIT THRU  
TRANSFORMER PAD. PROVIDE  
15' OF WIRE AT TRANSFORMER  
FOR MAKE UP. TP WILL  
TERMINATE IN TRANSFORMER

COIL 6FT OF  
WIRE TERMINATION  
WILL BE MADE BY  
UTILITY CREWS.

SERVICE CONDUIT WITH  
BUSHINGS/BELL ENDS  
1-1/4" PVC-80  
W/2-#6 BLK  
& 1-#6 W, USE/RHW, Cu  
OR AS SPECIFIED

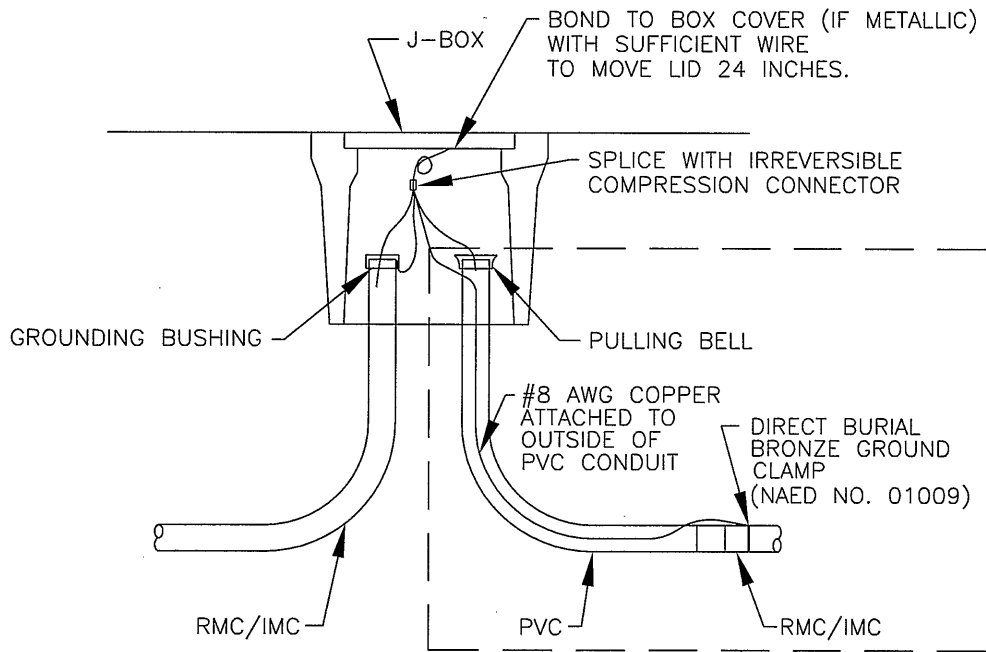
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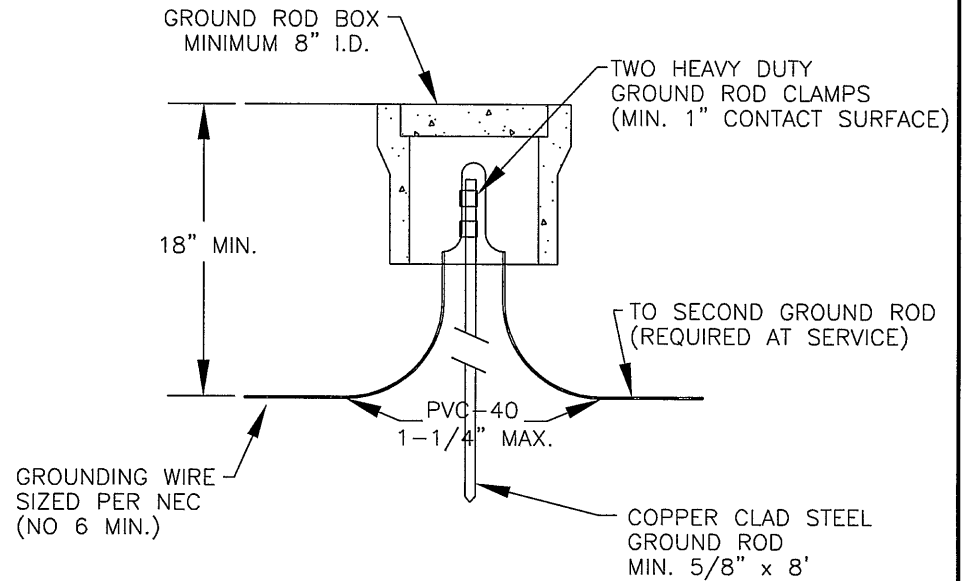
5/31/07  
DATE

STREETLIGHT  
SERVICE DETAIL  
UNDERGROUND TYPE B  
STANDARD PLAN NO. SL-09



**CONDUIT GROUNDING**

USE WHERE STEEL CONDUIT DOES NOT EXTEND TO JUNCTION BOX OR OTHER TERMINATION POINT.



**GROUND ROD INSTALLATION**

**NOTES:**

1. ALL STREETLIGHT CONDUITS SHALL INCLUDE AN EQUIPMENT GROUNDING CONDUCTOR.
2. METALLIC CONDUIT SHALL BE BONDED AT BOTH ENDS TO THE EQUIPMENT GROUNDING CONDUCTOR.
3. EQUIPMENT GROUNDING CONDUCTORS SHALL BE STRANDED INSULATED COPPER.

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STREETLIGHT

GROUNDING DETAIL

STANDARD PLAN NO. SL-10