

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.

APPROVED FOR PUBLICATION

CITY OF TACOMA
DEPARTMENT OF PUBLIC WORKS

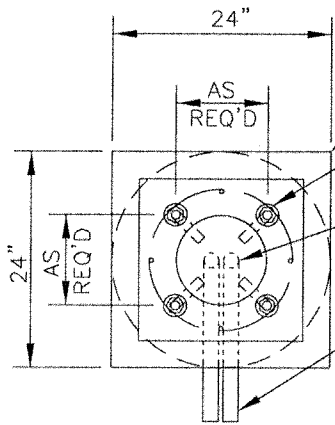
CITY ENGINEER

2/11/03

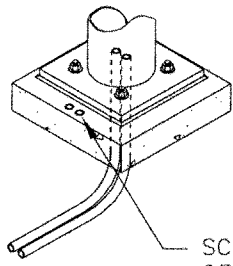
DATE 2/4/03

STREETLIGHT
LUMINAIRE ON WOOD POLE
TYPICAL INSTALLATION

STANDARD PLAN NO. SL-01

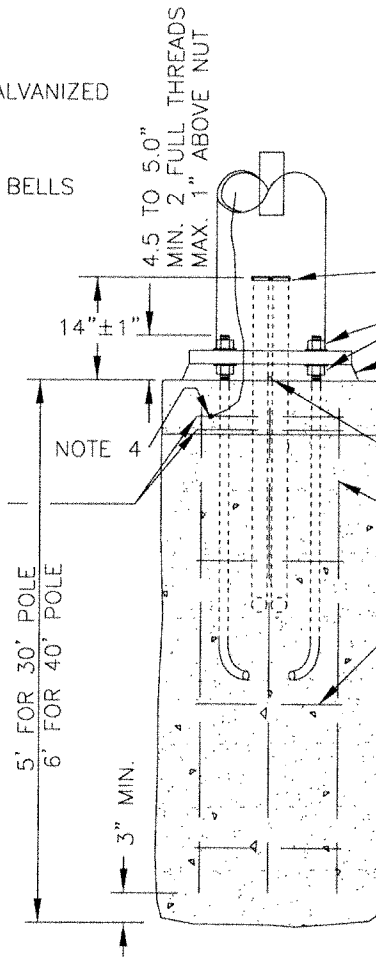


- TOOL FINISH TOP AND EDGES
- 4EA ANCHOR BOLTS
MINIMUM TOP 8" OF BOLT SHALL BE GALVANIZED (AASHTO M111)
- CONDUIT SHALL BE CENTERED ON POLE W/CLEARANCE FOR COUPLINGS/PULLING BELLS
- THERE SHALL BE A MINIMUM OF TWO CONDUITS IN EACH FOUNDATION. CONDUIT SHALL HAVE 18" RADIUS AND BE ORIENTED TO MINIMIZE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

APPROVED FOR PUBLICATION

CITY OF TACOMA
DEPARTMENT OF PUBLIC WORKS

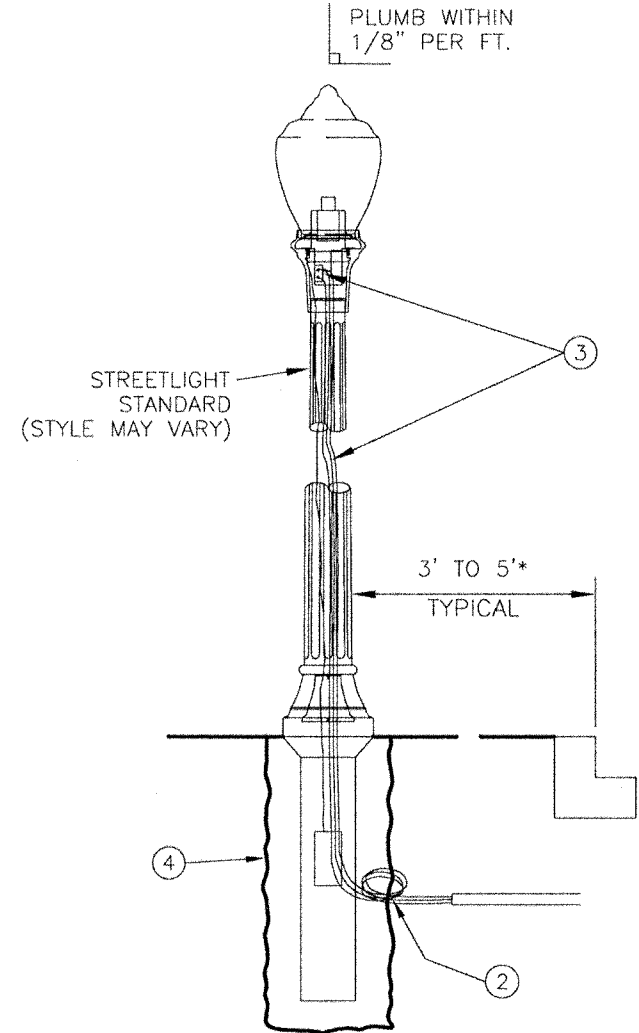
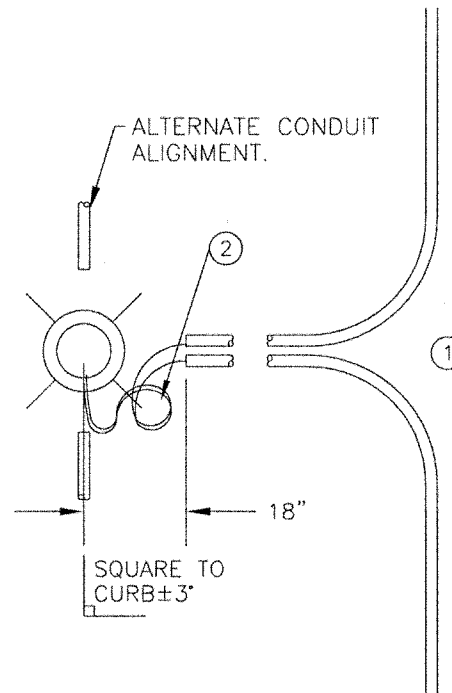
[Signature]
CITY ENGINEER

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 ± 3 DEGREES.



* OR AS DETERMINED BY ENGINEER

CITY OF TACOMA
DEPARTMENT OF PUBLIC WORKS

APPROVED FOR PUBLICATION

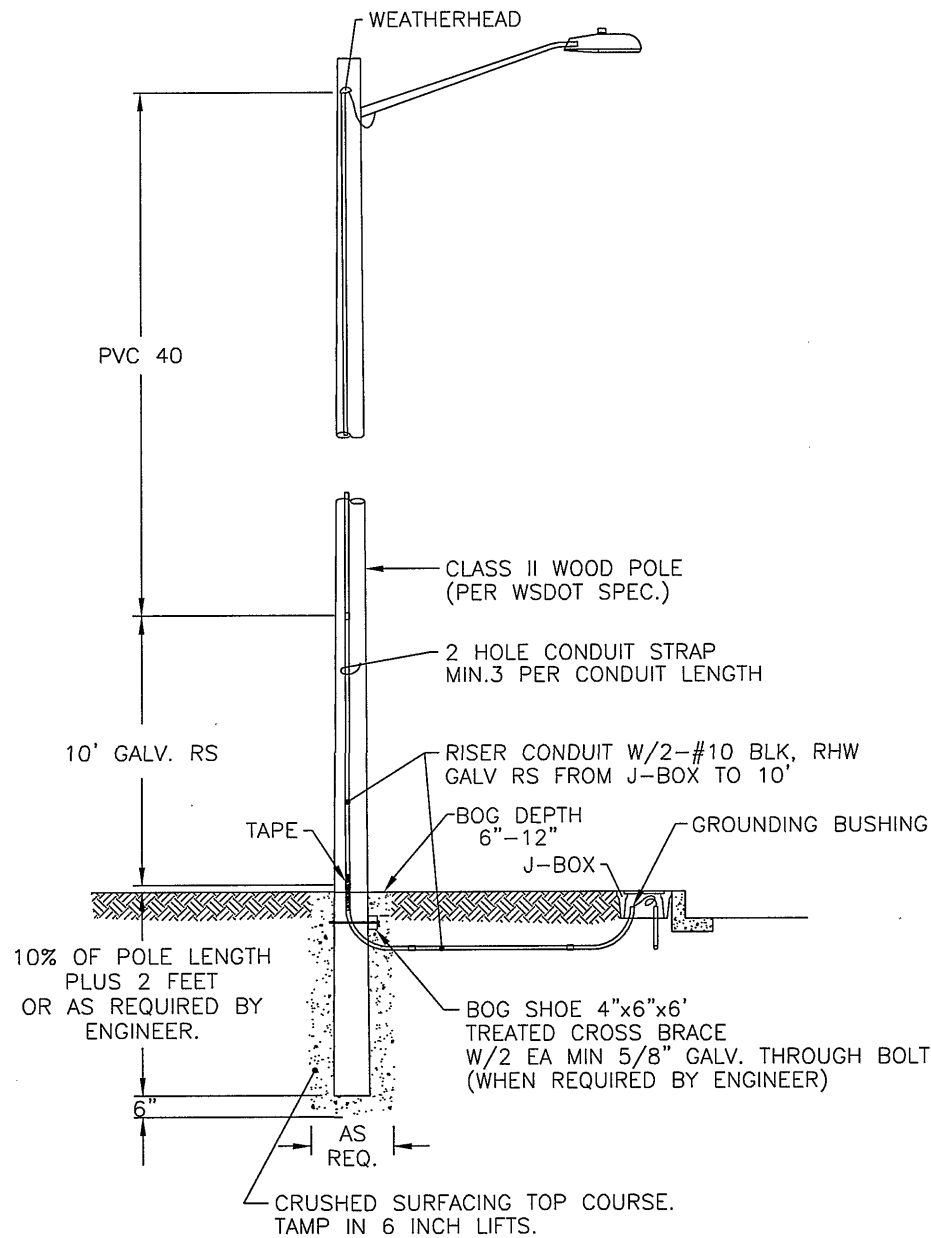
[Signature]
CITY ENGINEER

3/10/03

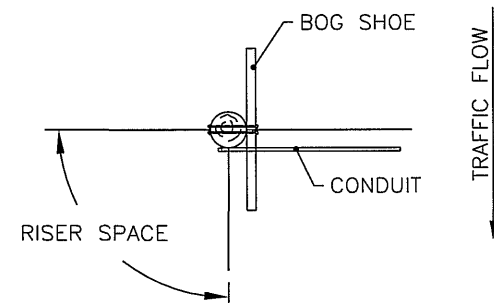
DATE 2/4/03

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.



CITY OF TACOMA
DEPARTMENT OF PUBLIC WORKS

APPROVED FOR PUBLICATION

CITY ENGINEER

DATE 2/4/03

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.

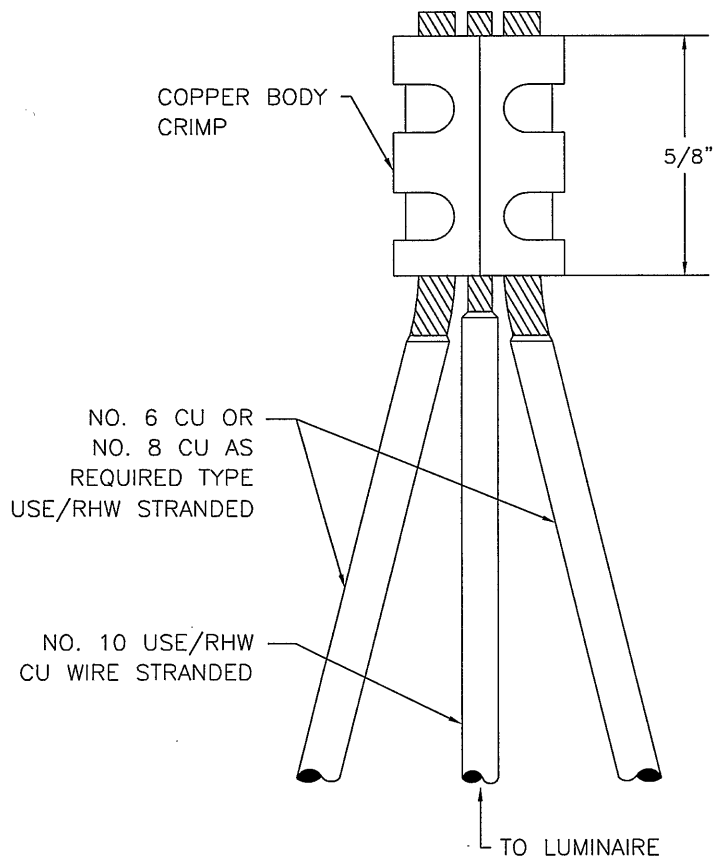


FIGURE A

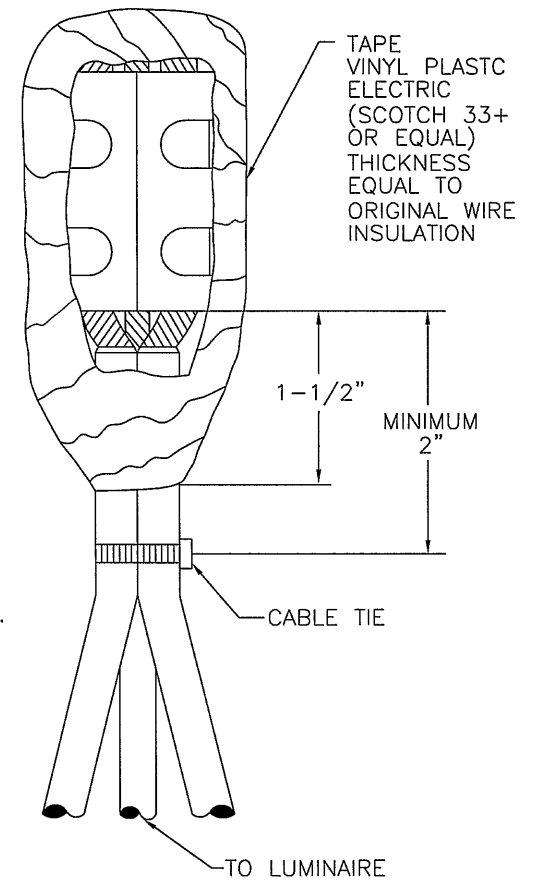


FIGURE B

CITY OF TACOMA
DEPARTMENT OF PUBLIC WORKS

APPROVED FOR PUBLICATION

CITY ENGINEER

2/11/03
DATE 2/4/03

STREETLIGHT
SPLICE FOR
HANDHOLES

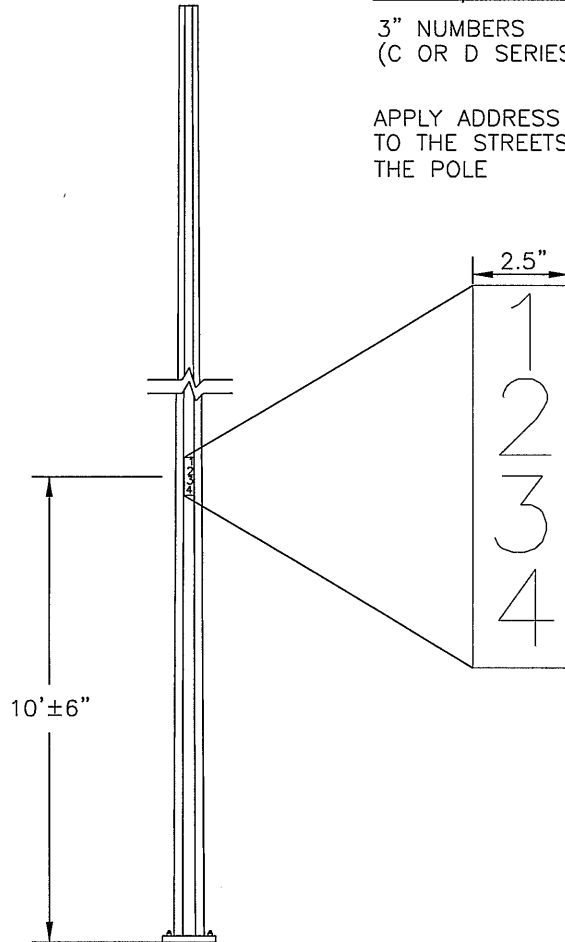
STANDARD PLAN NO. SL-05

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

CITY OF TACOMA
DEPARTMENT OF PUBLIC WORKS

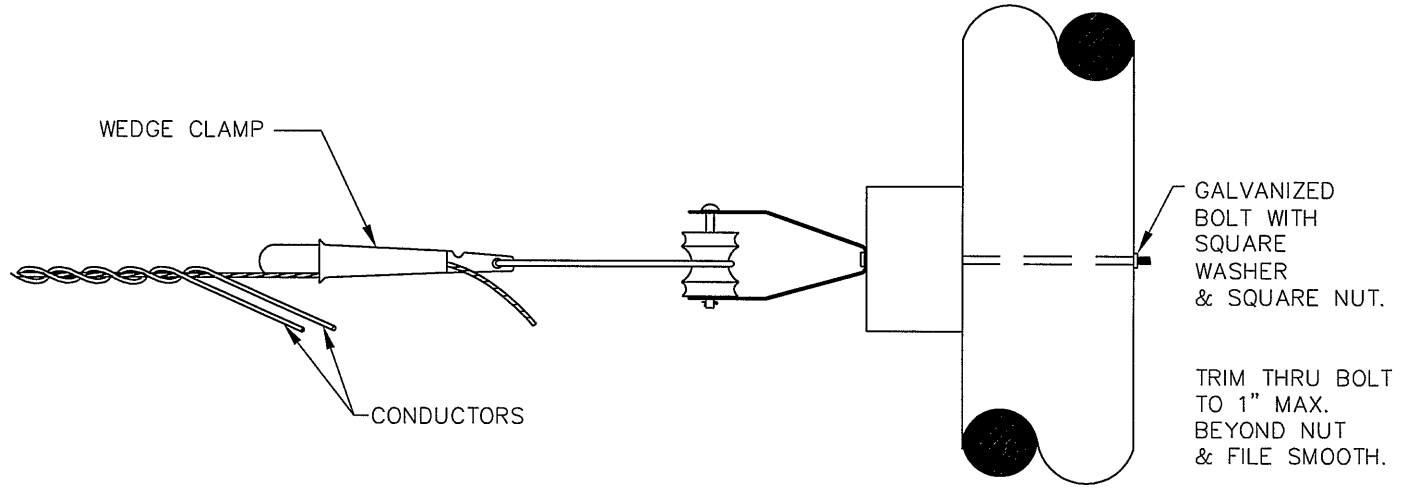
APPROVED FOR PUBLICATION

CITY ENGINEER

2/11/03

DATE 2/4/03

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

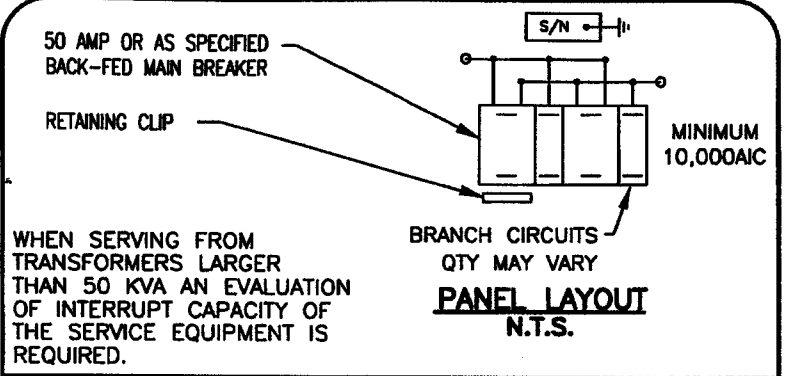
WOOD POLE

**CITY OF TACOMA
 DEPARTMENT OF PUBLIC WORKS**

APPROVED FOR PUBLICATION

CITY ENGINEER  DATE 2/11/03
 DATE 2/4/03

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



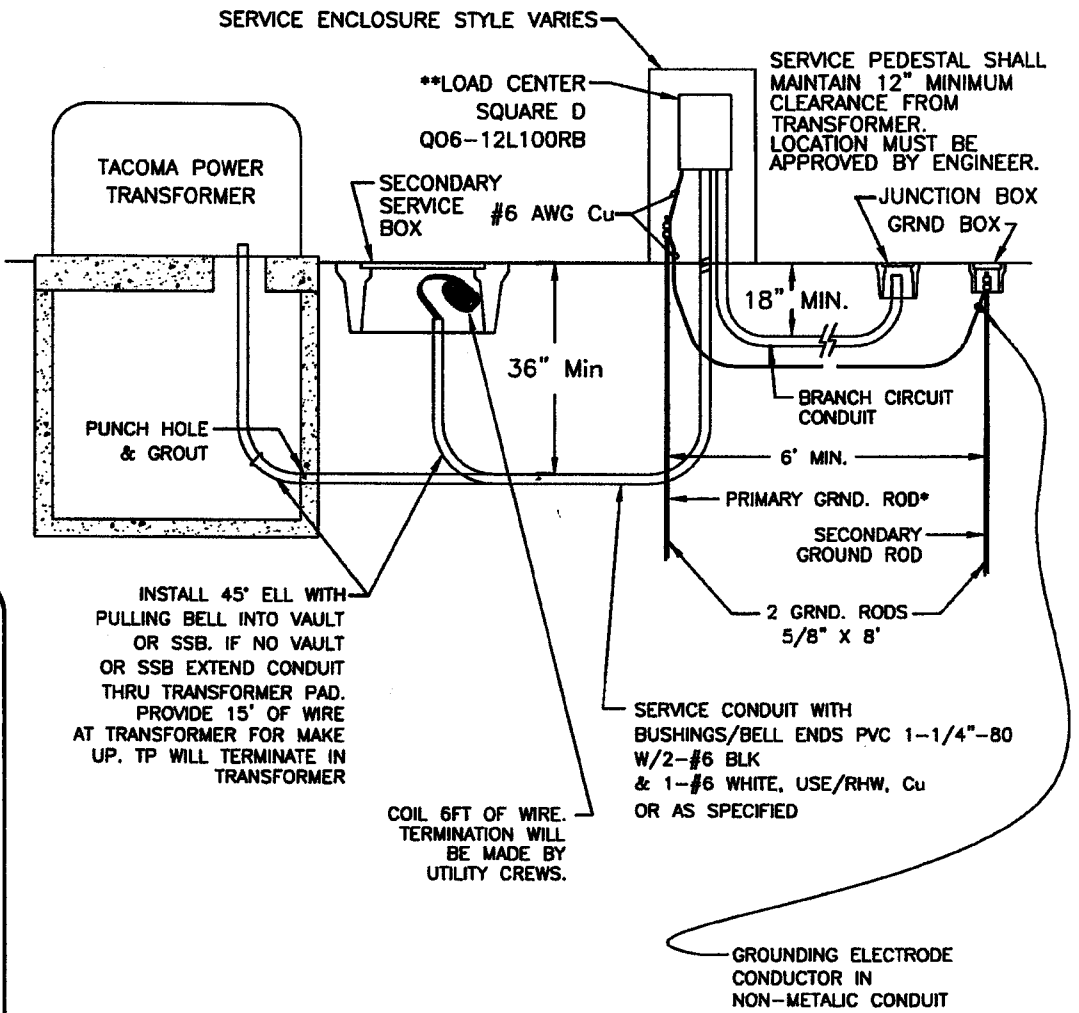
WHEN SERVING FROM TRANSFORMERS LARGER THAN 50 KVA AN EVALUATION OF INTERRUPT CAPACITY OF THE SERVICE EQUIPMENT IS REQUIRED.

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.



CITY OF TACOMA
DEPARTMENT OF PUBLIC WORKS

APPROVED FOR PUBLICATION

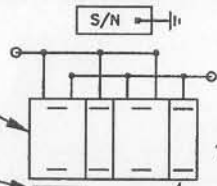
[Signature]
CITY ENGINEER

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.

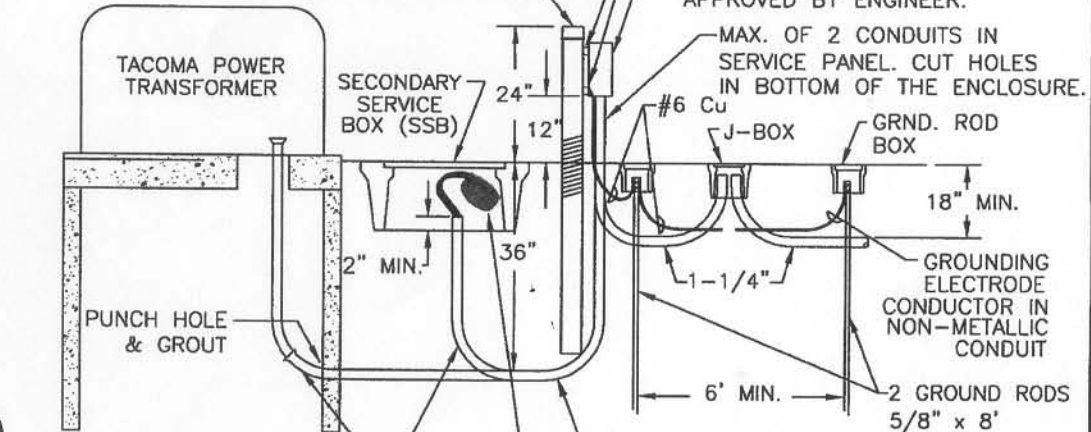
PROCEDURE:

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

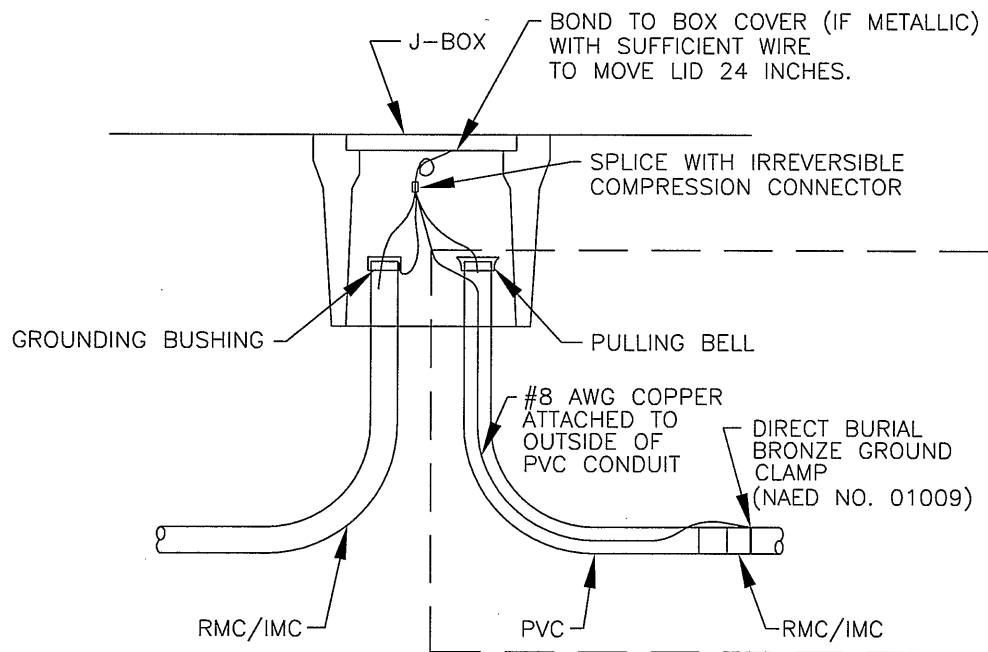
APPROVED FOR PUBLICATION

CITY OF TACOMA
DEPARTMENT OF PUBLIC WORKS


CITY ENGINEER

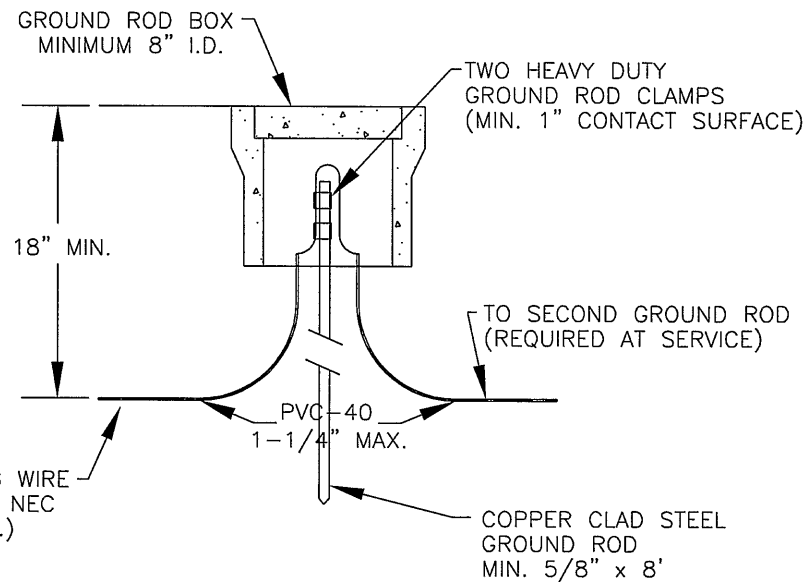
5/31/07
DATE

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.

CITY OF TACOMA
DEPARTMENT OF PUBLIC WORKS

APPROVED FOR PUBLICATION

CITY ENGINEER

DATE 2/4/03

STREETLIGHT

GROUNDING DETAIL

STANDARD PLAN NO. SL-10