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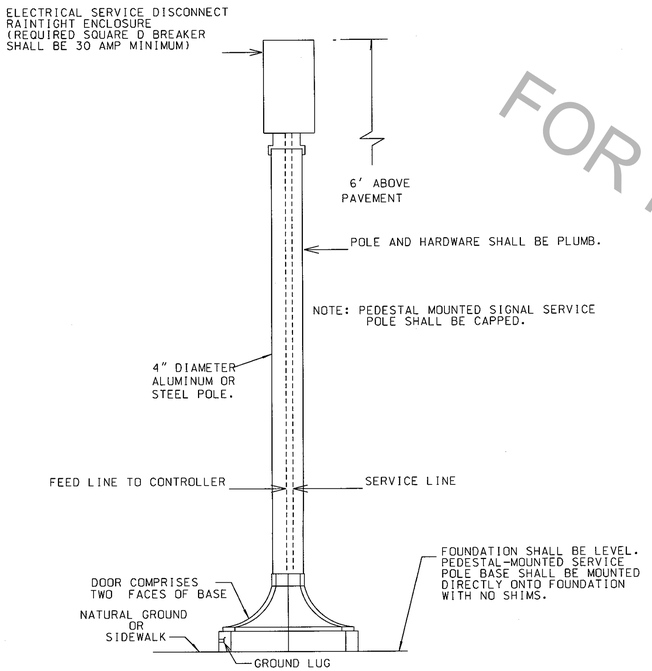
PEDESTAL-MOUNTED SIGNAL SERVICE POLE INSTALLATION

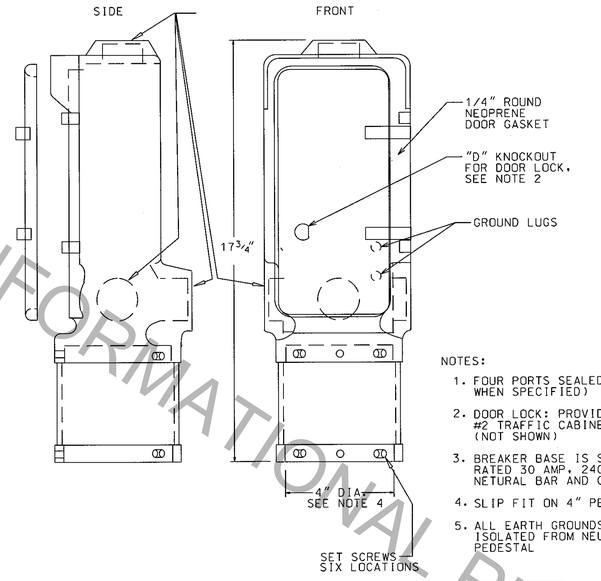


(FOR FOUNDATION USE STANDARD DETAIL FOR SIGNAL PEDESTAL FOUNDATION)

NOTES:

1. UNDERGROUND CONDUIT SHALL BE INSTALLED IN A STRAIGHT LINE FROM START TO FINISH. ANY DEVIATION FROM A STRAIGHT LINE WILL REQUIRE PRIOR APPROVAL BY THE PROJECT ENGINEER.
2. THE CONTRACTOR SHALL NOT RECEIVE DIRECT PAY FOR VERTICAL RUN AT THE START AND FINISH POINTS AS WELL AS ADDITIONAL CONDUIT DUE TO A DEVIATION FROM A STRAIGHT LINE INSTALLATION.
3. ALL CONCRETE SHALL BE "CLASS A" IN ACCORDANCE WITH SECT. 901 OF THE STD. SPEC'S.
4. ALL SERVICE POLES SHALL BE GROUNDED WITH #6 AWG BARE SOLID GROUNDING WIRE.
5. INSTALL NEW GROUND ROD. CONNECT GROUND ROD TO SIGNAL PEDESTAL BY NEW GROUND WIRE.
6. SERVICE SHALL BE120/240 V. AC AND WIRED WITH THHN-THWN OR XHHW #6 AWG. TWO BLACKS, AND ONE WHITE NEUTRAL, 3 CONDUCTOR, CONCENTRIC CABLE SHALL BE INSTALLED WHERE SERVICE WILL ATTACH TO OR ENTER STEEL SIGNAL POLE.
7. SERVICE CONDUCTORS SHALL BE RUN IN A SEPARATE CONDUIT TO CONTROLLER BASE.
8. ALL EXPOSED METAL SHALL BE PAINTED AS PER LADOTD STANDARD SPECIFICATIONS.

ELECTRICAL SERVICE DISCONNECT RAINTIGHT ENCLOSURE FOR PEDESTAL MOUNTED SIGNAL SERVICE POLE



NOTES:

1. FOUR PORTS SEALED. (1½" FPT WHEN SPECIFIED)
2. DOOR LOCK: PROVIDE MATCHED #2 TRAFFIC CABINET KEY. (NOT SHOWN)
3. BREAKER BASE IS SQUARE D RATED 30 AMP, 240 VAC WITH NETURAL BAR AND GROUND LUG.
4. SLIP FIT ON 4" PEDESTAL POLE.
5. ALL EARTH GROUNDS SHALL BE ISOLATED FROM NEUTRAL BUS AT PEDESTAL

WIRING FOR FLASHING BEACON

HEADS SHALL BE WIRED FOR A SIMULTANEOUS FLASH FOR EACH APPROACH.

NO SPARE CONDUCTORS REQUIRED
RED - FLASH CIRCUIT #1
BLACK - FLASH CIRCUIT #2
WHITE- AC COMMON
GREEN - CASE GROUND

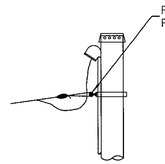
WIRING DETAIL FOR TRAFFIC SIGNAL HEADS & HANGERS

	INDICATIONS	TERMINAL BLOCK	2-6 CONDUCTOR CABLES		1-10 CONDUCTOR CABLE
HEAD 1	GREEN	1	GREEN	CABLE 1	GREEN
	AMBER	2	YELLOW	CABLE 1	YELLOW
	RED	3	RED	CABLE 1	RED
HEAD 2	GREEN	4	GREEN	CABLE 2	G/BLACK
	AMBER	5	YELLOW	CABLE 2	Y/BLACK
	RED	6	RED	CABLE 2	R/BLACK
	COMMON	7	WHITE	CABLE 1 & 2	WHITE
	GREEN ARROW	8	BLACK	CABLE 1	BLACK
	AMBER ARROW	9	BLACK	CABLE 2	W/ BLACK
		10			
		11			
	CASE GROUND	12	BLUE	CABLE 1 & 2	BLUE

NOTE: EIGHTEEN CIRCUIT DISCONNECT HANGERS SHALL BE SIMILARLY WIRED WITH SOLID INDICATIONS WIRED FIRST FOLLOWED BY ARROW INDICATIONS. ON SPAN MOUNTED SIGNAL INSTALLATIONS, ALL BULBS SHALL BE INDIVIDUALLY WIRED FROM CONTROLLER. ALL CABLES SHALL BE CONTINUOS RUN WITHOUT SPLICES EXCEPT AS SHOWN FOR MAST ARM INSTALLATIONS AT DISCONNECT HANGERS SHOWN ON PLANS OR WHERE JUNCTIONS ARE SHOWN ON THE PLANS. ALL WIRES SHALL BE TERMINATED IN HANGER. CONDUCTORS THAT ARE UNUSED IN SIGNAL THAT DO NOT HAVE INDICATIONS SHOWN ABOVE SHALL BE SPARE CONDUCTORS AND SHALL NOT BE USED. THE HARNESS FROM THE SIGNAL TERMINAL BLOCK SHALL BE WIRED IN ACCORDANCE TO THE ABOVE TABLE, UNUSED CONDUCTORS SHALL BE BONELESS IN HEAD WITH ENDS TAPED TO PREVENT GROUNDING TO CASES.

OVERHEAD SERVICE TO CONTROLLER

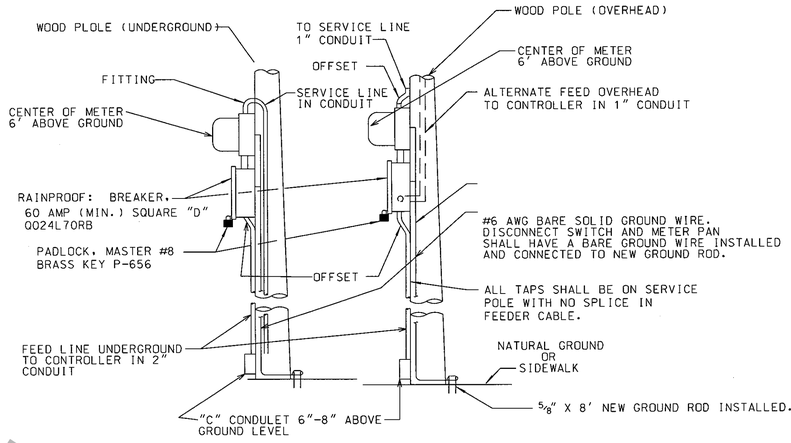
(AS CALLED FOR IN THE PLANS OR APPROVED BY PROJECT ENGINEER)



NOTE: SERVICE CLAMPS FOR CONCENTRIC CABLE. NO MESSENGER CABLE REQUIRED.

TYPICAL ELECTRICAL SERVICE

(BREAKER SIZED ACCORDING TO THE LOAD WITH MINIMUM BREAKER SIZE OF 60 AMP)



NOTES:

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5. SERVICE CONDUCTORS SHALL BE RUN IN A SEPARATE CONDUIT TO CONTROLLER BASE.
6. CONDUIT STRAPS SHALL BE 2 HOLE, HEAVY DUTY AND SHALL BE INSTALLED BEGINNING AT FITTING OFFSET OR COUPLING, SPACED AT 5' INTERVALS MAXIMUM ON EACH SIDE OF CONDULETS AND ADJACENT TO CABINET. ¼" x 3" HDG LAG SCREWS SHALL BE USED ON STRAPS.
7. ALL EQUIPMENT SHALL BE ATTACHED TO POLE WITH HDG LAG SCREWS.
8. AN ELECTRICAL SERVICE SHALL NEVER BE BUILT ON A MAST ARM OR STRAIN POLE.

STATE OF LOUISIANA
LEI Q. WANG
License No. 33365
PROFESSIONAL ENGINEER
4/12/2017

FOR INFORMATIONAL PURPOSES ONLY

SHEET NUMBER

PARISH	FEDERAL PROJECT	STATE PROJECT
DESIGNED S. MCCARROLL CHECKED D. LORIO	DETAILED S. MCCARROLL CHECKED L. WANG	DATE 04/12/2017 SHEET 11 OF 14

NO.	DATE	REVISION DESCRIPTION	BY

TRAFFIC SIGNAL STANDARD DETAILS
ELECTRICAL SERVICE AND WIRING DETAILS
TSD-10

DOTD DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

TRAFFIC ENGINEERING