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|------|--------|-------|--------------------------|-----------|--------------|
| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET NO. | TOTAL SHEETS |
| | | | | | |

Stanley P. Johnson
REGISTERED CIVIL ENGINEER

July 15, 2016
PLANS APPROVAL DATE

Stanley P. Johnson
No. 05795
Exp. 3-31-18
CIVIL ENGINEER PROFESSIONAL SERVICES
STATE OF CALIFORNIA

NOTE: TO ACCOMPANY PLANS DATED _____
Handhole shall be located on the downstream side of traffic.

| SIGNAL MAST ARM DATA | | | | | | | | | | | | | LUMINAIRE MAST ARM DATA | | | | | |
|----------------------|---------------|-------------------|--------|----------------|-----------|---------------|---------------|--------------|----------------------|------------------|--------|--------|-------------------------|---------|----------------|-----------|-------------------|-------------|
| E PROJECTED LENGTH | F Min SPACING | G MOUNTING HEIGHT | H | Min OD AT POLE | THICKNESS | I BOLT CIRCLE | HS CAP SCREWS | J PLATE SIZE | K MAST ARM THICKNESS | POLE R THICKNESS | θ | X Max | M PROJECTED LENGTH | N RISE | Min OD AT POLE | THICKNESS | P MOUNTING HEIGHT | |
| | | | | | | | | | | | | | | | | | 30'-0" POLE | 35'-0" POLE |
| 25'-0" | 10'-0" | 22'-8"± | | 7 3/8" | 0.2391" | 12" | 1 1/4"-7NC-3" | 1'-3" | 1/4" | 1 1/2" | 23° | 10'-6" | 6'-0" | 2'-0"± | 3/4" | 0.1196" | 31'-6"± | 36'-6"± |
| 30'-0" | 12'-0" | | 8" | 13 1/2" | | 1'-3" | | 1/4" | 1 1/2" | 21° | 10'-6" | 8'-0" | 2'-6"± | 3/2" | 32'-0"± | | 37'-0"± | |
| 35'-0" | 14'-0" | 23'-0"± | 16'-0" | 8 1/8" | | 13 1/2" | | 1'-3" | 1/2" | 1 3/4" | 15° | 13'-0" | 10'-0" | 3'-3"± | 3 3/8" | | 32'-9"± | 37'-9"± |
| 40'-0" | | | | 9 3/8" | | 13 1/2" | | 1'-5" | 1/2" | 1 3/4" | 15° | 13'-0" | 12'-0" | 4'-3"± | 3 3/8" | | 33'-9"± | 38'-9"± |
| 45'-0" | 15'-0" | 23'-8"± | | 10 1/4" | 13 1/2" | 1'-5" | 1/2" | 1 3/4" | 15° | 13'-0" | 15'-0" | 4'-9"± | 4 1/4" | 34'-3"± | 39'-3"± | | | |

| POLE TYPE | LOAD CASE | WIND VELOCITY (mph) | POLE DATA | | | | | | BASE PLATE DATA | | | | LUMINAIRE MAST ARM | SIGNAL MAST ARM | CIDH PILE FOUNDATION | | |
|-----------|-----------|---------------------|-----------|-------------|------------|------------------|---------------------|---------|-----------------|--------|------------------|-----------|--------------------|-----------------|----------------------|--------|-------|
| | | | A HEIGHT | Min OD BASE | Min OD TOP | THICKNESS | ALTERNATIVE SECTION | | | C | BC = BOLT CIRCLE | THICKNESS | | | ANCHOR BOLT SIZE | Dia | DEPTH |
| | | | | | | | B LENGTH | BOTTOM | TOP | | | | | | | | |
| 18-4-100 | 4 | 100 | 17'-0" | 16" | 13 5/8" | 0.2391" OR 0.25" | 10'-0" | 13 3/8" | 11 3/4" | 1'-11" | 1'-9" | 3" | 2 1/4"Ø x 42" | NONE | 25'-0" | 12'-0" | |
| 19-4-100 | | | 30'-0" | 11 3/4" | 10'-0" | | 13 3/8" | 11 3/4" | 6'-15' | | | | | 12'-0" | 30'-0" | | |
| 19A-4-100 | | | 35'-0" | 11" | 15'-0" | | 13 3/8" | 11" | 6'-15' | | | | | 15'-0" | 30'-0" | | |
| 23-4-100 | | | 17'-0" | 13 5/8" | 10'-0" | | 15 5/8" | 13 3/4" | NONE | | | | | NONE | NONE | | |
| 24-4-100 | | | 30'-0" | 11 3/4" | 10'-0" | 15 5/8" | 13 3/4" | 6'-15' | 12'-0" | 35'-0" | | | | | | | |
| 24-4-100 | | | 35'-0" | 11" | 15'-0" | 13 3/8" | 11" | 6'-15' | 15'-0" | 35'-0" | | | | | | | |
| 26-4-100 | | | 30'-0" | 13 3/4" | 10'-0" | 15 5/8" | 13 3/4" | 6'-15' | 12'-0" | 40'-0" | | | | | | | |
| 26A-4-100 | | | 35'-0" | 13" | 15'-0" | 15 5/8" | 13" | 6'-15' | 15'-0" | 45'-0" | | | | | | | |
| 27-4-100 | | | 17'-0" | 15 5/8" | 15'-0" | 15 5/8" | 13" | NONE | NONE | NONE | | | | | | | |

INDICATES MAST ARM LENGTH TO BE USED UNLESS OTHERWISE NOTED ON PLANS.

TYPE 19-4-100, 19A-4-100, 24-4-100, 24A-4-100, 26-4-100, 26A-4-100

ELEVATION B

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**ELECTRICAL SYSTEMS
(SIGNAL AND LIGHTING STANDARD,
CASE 4 SIGNAL MAST ARM LOADING,
WIND VELOCITY=100 MPH AND SIGNAL
MAST ARM LENGTHS 25' TO 45')**

NO SCALE

RSP ES-7F DATED JULY 15, 2016 SUPERSEDES RSP ES-7F DATED OCTOBER 30, 2015 AND RSP ES-7F DATED JULY 19, 2013 AND STANDARD PLAN ES-7F DATED MAY 20, 2011 - PAGE 467 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-7F

2010 REVISED STANDARD PLAN RSP ES-7F