

SIGNAL MAST ARM DATA											
E PROJECTED LENGTH	F MIN	H	MIN OD AT POLE	THICKNESS	I BOLT CIRCLE	HS CAP SCREWS	J PLATE SIZE	K MAST ARM PL THICKNESS	L POLE PL THICKNESS	θ	X MAX
30'-0"	12'-0"	22'-6"	10 ¼"	0.2391"	13 ½"	1 ½" DIA-6NC-5 ¼", GR. A490 HSB	1'-3"	2"	2 ¼"	3'	10'-6"

POLE DATA						BASE PLATE DATA				CIDH PILE FOUNDATION		
POLE TYPE	WIND VELOCITY (MPH)	A HEIGHT	MIN OD		THICKNESS	C	BC= BOLT CIRCLE	THICKNESS	ANCHOR BOLT SIZE	DIAMETER	DEPTH	REINFORCED
			BASE	TOP								
24-4-100	115	30'-0"	16"	11 ¾"	0.3125"	23"	21"	3"	2 ½" DIA x 72"	3'-6"	16'-0"	YES

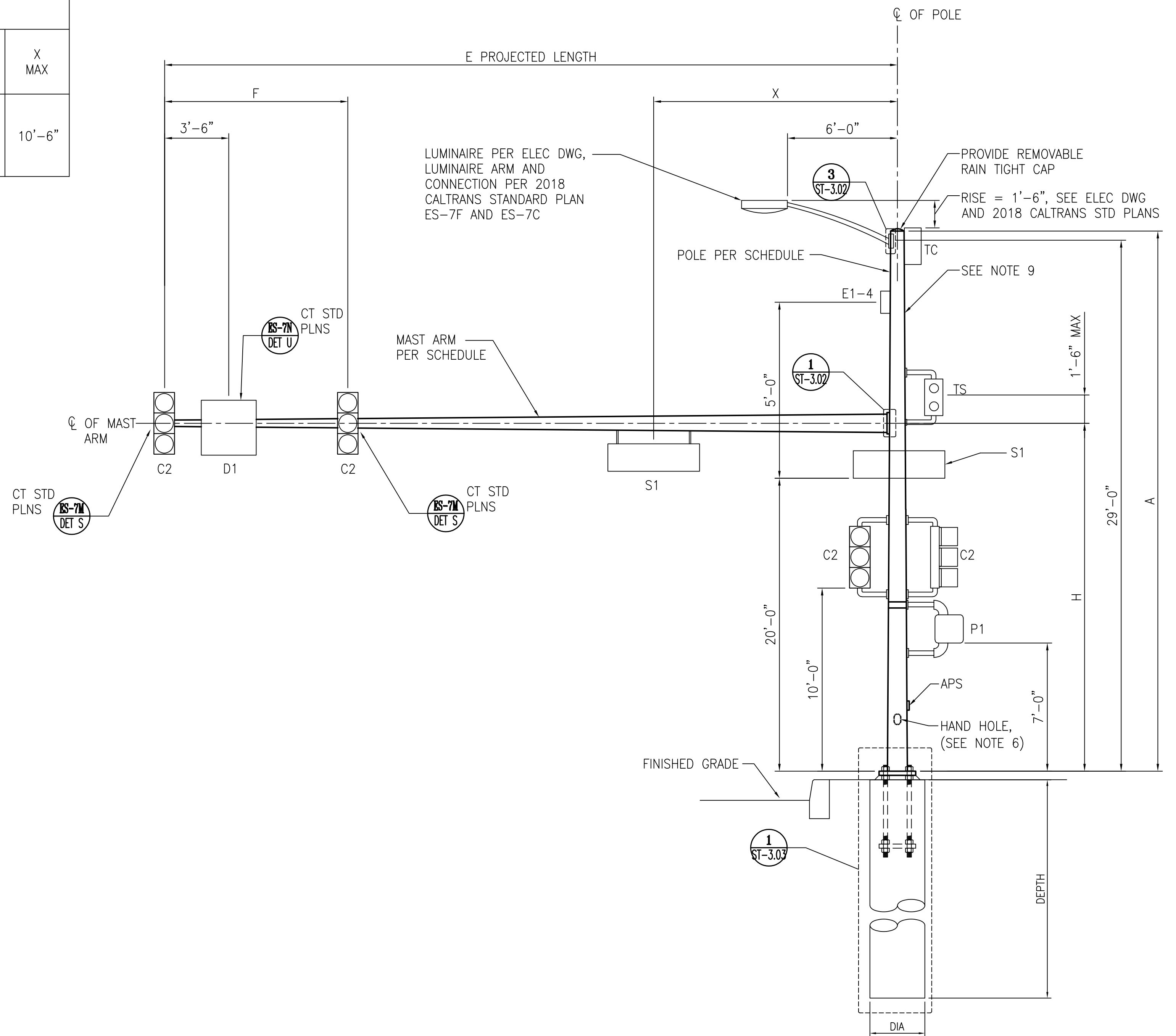
* FOR INFORMATION NOT SHOWN, REFERENCE THE 2018 CALTRANS STANDARD PLAN ES-7F, DATED MAY 31, 2018.

NOTES:

1. OUTSIDE DIAMETER, WALL THICKNESS, AND CORRESPONDING SECTION PROPERTIES OF POLES AND MAST ARMS ARE MINIMUMS. UNLESS OTHERWISE SPECIFIED, ALTERNATIVE SECTIONS SHALL REQUIRE APPROVAL BY THE ENGINEER.
2. SIGNAL MAST ARMS SHALL BE ROUND TAPERED STEEL TUBES, MAXIMUM TAPER 0.143-INCH PER FOOT.
3. WIND LOADING (3 SECOND): 115 MPH.
4. UNIT STRESSES (STRUCTURAL STEEL):
 - a. $F_y = 55,000$ psi (TAPERED STEEL TUBE AND ANCHOR BOLTS)
 - b. $F_y = 50,000$ psi (UNLESS OTHERWISE NOTED)
5. UNIT STRESSES (REINFORCED CONCRETE):
 - a. $f'_c = 4,000$ psi (AT 28 DAYS)
 - b. $F_y = 60,000$ psi
6. HAND HOLE SHALL BE LOCATED ON THE DOWNSTREAM SIDE OF TRAFFIC.
7. LUMINAIRE MAST ARMS SHALL BE ROUND, TAPERED STEEL TUBES, TAPER OF 0.1375" TO 0.143" PER FOOT WITH AN END SECTION OF $2\frac{3}{8}$ " OD FOR MOUNTING HARDWARE. EXTENSIONS OF 2 NPS STANDARD PIPE AND 7" LONG MAY BE USED AT THE OPTION OF THE MANUFACTURER.
8. FOR POLE LOCATIONS AND MOUNTING HEIGHT OF TRAFFIC MAST ARMS, SEE TRAFFIC SIGNAL PLANS (ET SHEETS).
9. ALTERNATIVE SECTION SHOWN IN THE CALTRANS STANDARD PLANS FOR THE POLE BETWEEN MAST ARM AND LUMINAIRE ARM IS NOT ALLOWED.
10. SPLICING OF POLE/ MAST ARM IF REQUIRED, WILL BE PER DETAIL 4/ST-3.02, SEE DETAIL FOR LOCATION AND CLEARANCE REQUIREMENTS.
11. HOT-DIP GALVANIZE ALL STEEL MEMBERS AND COMPONENTS.
12. ALL WELDING SHALL REQUIRE MT AND UT TESTING, SEE GENERAL NOTES FOR MORE INFO AND OTHER SPECIAL INSPECTION AND TESTING REQUIREMENTS.
13. REFERENCES TO CALTRANS STANDARD PLANS AND THE REVISED CALTRANS STANDARD PLANS ARE TO THE 2018 EDITION.

LUMINAIRE MAST ARM DATA		
PROJECTED LENGTH	MIN OD AT POLE	THICKNESS
6'-0"	3 ¼"	0.1196"

EQUIPMENT DATA (FOR INFORMATION ONLY)			
ITEM	DESCRIPTION	SIZE (INCHES)	WEIGHT (LBS)
C2	SIGNAL	40.5 x 13.5 x 7	65
D1	SIGN	36 x 36	10.1
E1	GPS UNIT	6 x 6.5	1.8
E2	WIFI	4.47 x 14.57	10
E3	ACCESS POINT	6.25 x 6.25	3.3
E4	REPEATER	6.3 x 6.3	2.6
P1	PED SIGNAL	18.8 x 18.5 x 9.1	65
S1	SIGN	60 x 18	8.4
TC	TRAFFIC CAMERA	11 x 24	10
TS	TROLLEY SIGNAL	12 x 24	25






ELEVATION
SCALE: N.T.S.

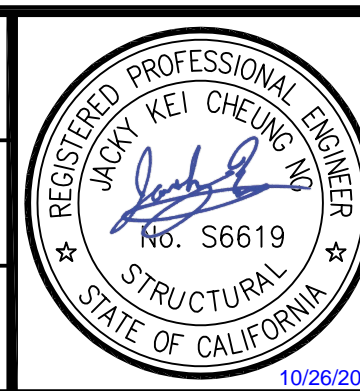
NO.	DATE	DESCRIPTION	BY	APP.
TABLE OF REVISIONS				
THIS DRAWING WAS LAST MODIFIED: 10/26/21 11:17, BY: VYU				

REFERENCE INFORMATION & FILE NO. OF SURVEYS



BUREAU OF ENGINEERING
CITY & COUNTY OF SAN FRANCISCO
SAN FRANCISCO PUBLIC WORKS
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Acting Bureau Mgr:	IQBAL DHAPA 



SCALE:
AS SHOWN
SHEET OF SHEETS
171 OF 210

MISSION ST AND GENEVA AVE
IMPROVEMENT PROJECT

TRAFFIC MAST ARM POLE
AT INTERSECTION OF
MISSION ST & GENEVA AVE

SOURCING ID NO.	0000005626
DRAWING NO.	ST-3.01
FILE NO.	120,737
REV. NO.	0