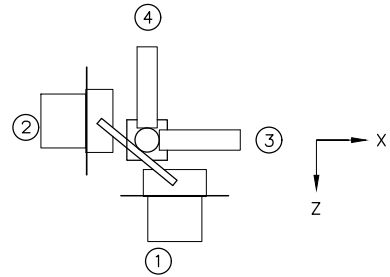


DRAWING LOCATION: \\S01-S04-ALASKA-00A\SHARED\VA\TSC\PROJECTS\02-REGIONAL DETAILS\01-VA\FTP-MASTERS\2021\FORMAT\17-BREAKAWAY SIGNAL POLE.DWG

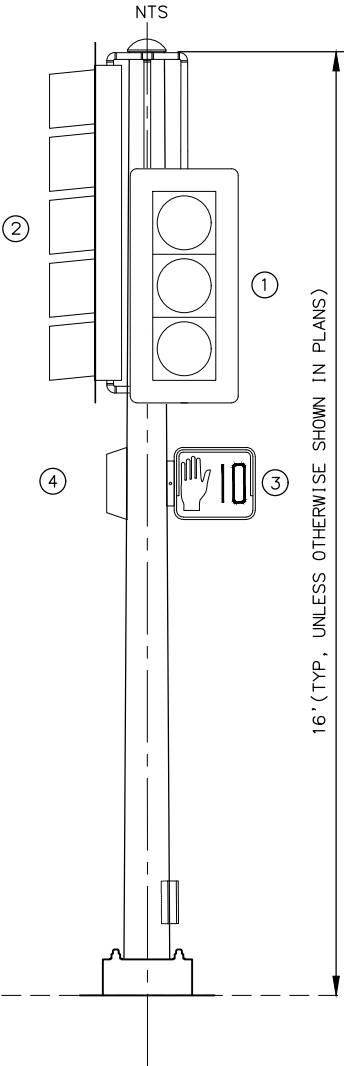
DESIGNED BY: ZJH
CHECKED BY: RDR
DRAFTED BY: MF

SCALE: X" = XX"
DATE: 3/27/2024
TIME: 11:31 AM

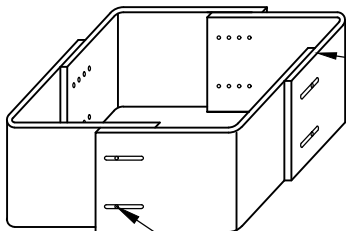
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	XXXXXXXX/XXXXXXXXXXXX	20XX	H##	HXX



PLAN VIEW



ELEVATION VIEW

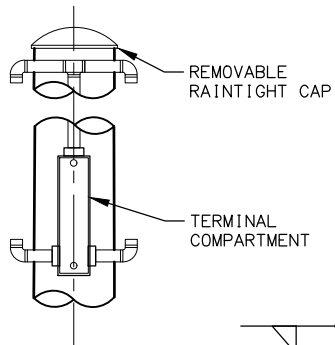


SKIRT DETAIL

NTS

FIXED DESIGN ELEMENTS	
ALL ASSEMBLIES	
LENGTH	16' (TYP, MAY VARY IN PLANS)
FIXED END DIAMETER O.D.	10.0"
TAPER	0.14" /FT
TUBE THICKNESS	7 GA.
HAND-HOLE O.D.	5.63" X 7.31"
BASE PLATE	15.5" X 15.5" X 1.375"
BOLT CIRCLE	15.5"
MATERIAL PROPERTIES	
TUBE	ASTM A572 GR. 55
BASEPLATE	AASHTO M270 F3, GR 50
TOP PLATE	ASTM A36
HANDHOLE REINFORCEMENT	ASTM A53, GR. B
FINISH	AASHTO M111 & M232

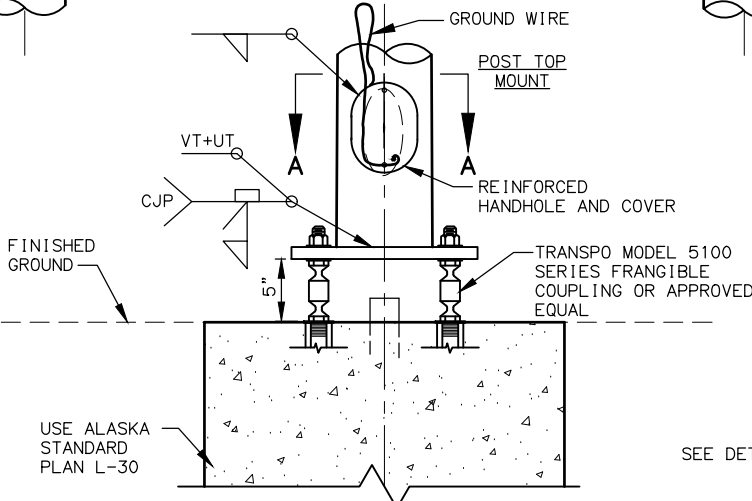
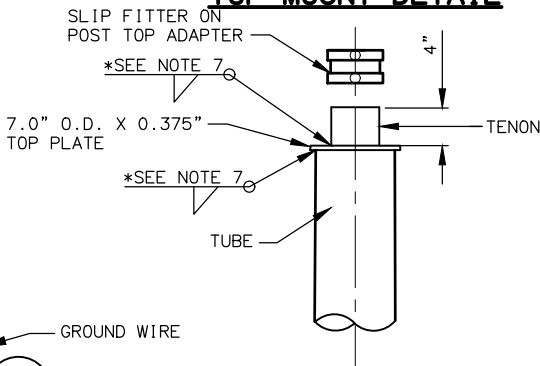
SIDE MOUNT DETAIL



POLE DESIGN LOADING

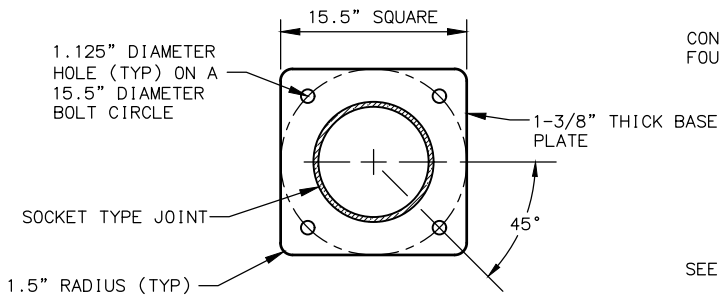
LOAD COMPONENT	EFFECTIVE AREA SQ. FT.	WEIGHT LBS.
1 = SIGNAL	7	60
2 = SIGNAL	11	100
3 = PED HEAD	2.5	25
4 = PED HEAD	2.5	25

TOP MOUNT DETAIL



SIGNAL POST AND BASE

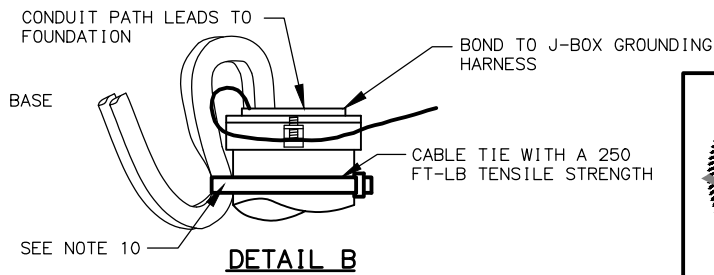
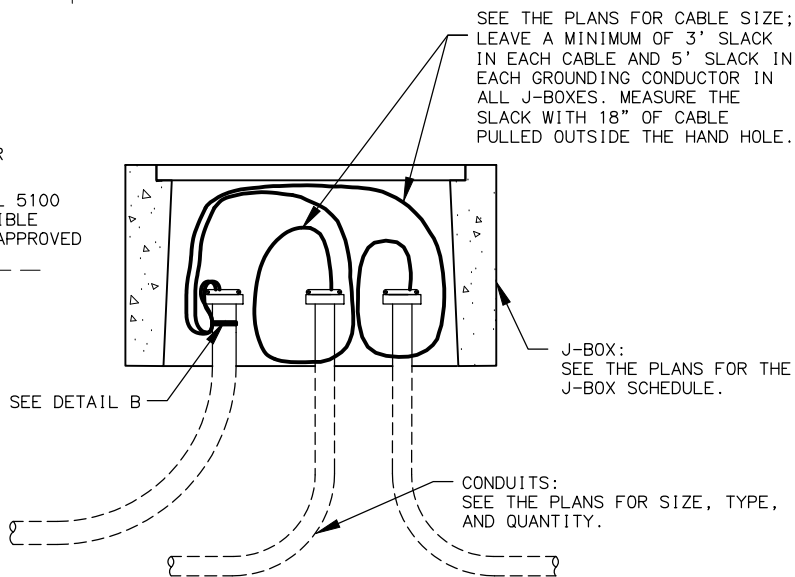
NTS



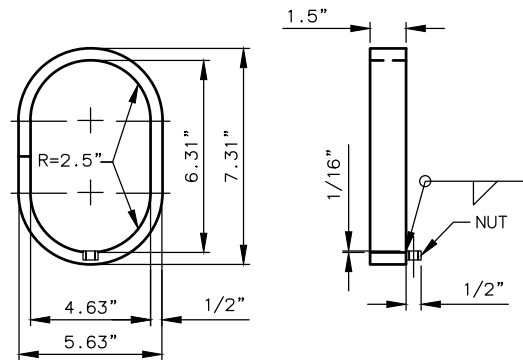
VIEW A-A

PLAN VIEW OF BASE PLATE

NTS



DETAIL B

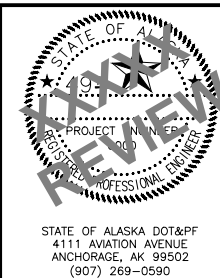


HANDHOLE DETAIL

NTS

NOTES:

- DESIGN POLE ASSEMBLIES TO THE 2001 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRE AND TRAFFIC SIGNALS, THE ALASKA STANDARD SPECIFICATIONS, STANDARD MODIFICATIONS, SPECIAL PROVISIONS AND THESE PLANS. DESIGN FOR A BASIC WIND SPEED OF 100 MPH, FATIGUE CATEGORY II.
- POLES SHALL BE DESIGNED AND FABRICATED TO INCORPORATE ALL FIXED DESIGN ELEMENTS.
- DESIGN AND FABRICATE TUBES FROM ONE PIECE OF TAPERED STEEL.
- STEEL GREATER THAN 1/2" THICK SHALL CONFORM TO AASHTO M270 AND SHALL MEET THE FRACTURE CRITICAL CHARTY V-NOTCH IMPACT TEST REQUIREMENTS FOR ZONE 3.
- FABRICATE THE SKIRT FROM FOUR PIECES OF 1/16" THICK 3003 H-14 ALUMINUM SHEET. BEND EACH PLATE TO PROVIDE CORNERS WITH A 3/4" RADIUS. ASSEMBLE THE SKIRT WITH #10 X 3/8" SELF TAPPING STAINLESS SCREWS OR POP RIVETS. THE ASSEMBLED SKIRT MEASURES ABOUT 12-3/4" SQUARE.
- THE DEPARTMENT WILL REJECT DAMAGED OR DEFECTIVE POLES FOR ANY OF THE FOLLOWING, INCLUDING BUT NOT LIMITED TO;
A. VARIANCES FROM APPROVED SHOP DRAWINGS.
B. VARIANCES FROM FIXED DESIGN ELEMENTS.
C. OUT OF ROUND. SECTIONS ARE OUT OF ROUND WHEN THE DIAMETERS OF ROUND MEMBERS EXCEED 2 PERCENT OF THE DIMENSION SPECIFIED ON THE SHOP DRAWINGS.
D. BOWED WITH SWEEPS EXCEEDING 0.75" INCH THROUGHOUT THE LENGTH OF THE POLE, MASTARM, OR SEGMENT.
E. DAMAGED OR DENTED FINISHES.
- WELD SIZE TO BE DETERMINED BY MANUFACTURER.
- PROVIDE PERMANENT TAGS PER SECTION 740 TABLE 740-1 OF THE SPECIFICATIONS.
- THIS DRAWING IS INTENDED FOR POLE DESIGN PURPOSES ONLY. ASSEMBLY CONFIGURATIONS ARE FOR LOADING PURPOSES AND MAY DIFFER FROM THOSE SHOWN IN PLANS. POLES HAVE NOT BEEN EVALUATED FOR LOADING CONDITIONS MORE SEVERE THAN THOSE SHOWN AND WILL REQUIRE INDIVIDUAL ANALYSIS WHEN ENCOUNTERED.
- BENDS MUST BE MADE SO AS NOT TO DAMAGE THE CABLE. DO NOT BEND BEYOND THE CABLE'S MINIMUM BEND RADIUS. USE 3.5" MINIMUM BEND RADIUS FOR 3C8 & 3C6 TYPE TC NON-SHEATHED CABLES.



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PROJECT TITLE
PROJECT TITLE

BREAKAWAY TRAFFIC SIGNAL
POLE DETAILS