

DRAWING LOCATION: \\DOT\SOA\AKA\GOV\SHARED\VA\TSE\PROJECTS\02-REGIONAL DETAILS\CHV3D\FTP-MASTARS\2021\FORMAT\12-LIGHTING-STANDARD-1.DWG

DATE: 3/27/2024 11:31 AM

TIME: 11:31 AM

SCALE: 1" = 1'-0"

DESIGNED BY: ZJH

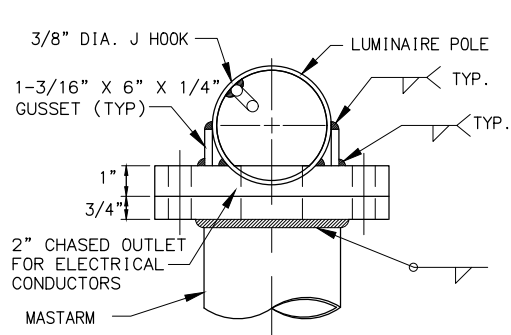
CHECKED BY: RDR

DRAFTED BY: MF

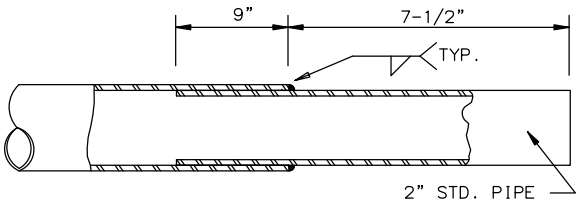
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	XXXXXXXX/XXXXXXXXXX	20XX	H##	HXX

NOTES:

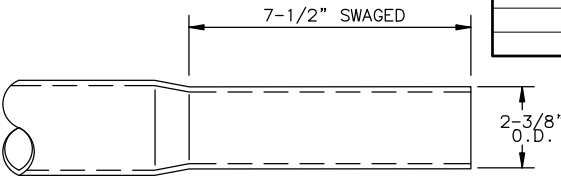
- DESIGN AND FABRICATE ALL SHAFTS TO SUPPORT A MASTARM 22 FEET LONG WITH LUMINAIRE. ASSUME EACH LUMINAIRE WEIGHS 55 POUNDS AND HAS AN EFFECTIVE PROJECTED AREA OF 1.2 SQUARE FEET. WITH THIS DEAD LOAD, LIMIT THE ANGULAR ROTATION TO THE POLE TOP 1°40'0" MAXIMUM.
- WELD SIZE TO BE DETERMINED BY THE MANUFACTURER.
- MOUNTING HEIGHT, IF SPECIFIED IN THE PLANS, REFERS TO THE HEIGHT OF LUMINAIRE ABOVE THE ROADWAY. ADJUST EACH POLE'S SHAFT LENGTH TO MAINTAIN THIS DIFFERENCE IN ELEVATION WHENEVER SLOPE AND/OR OFFSET VARIES.
- MINIMUM OUTSIDE DIAMETER AT THE TOP OF POLE EQUALS 3'-7/8". POLE DIAMETER SHALL TAPER UNIFORMLY FROM THE TOP OF THE POLE TO THE BASE PLATE, WITH A MAXIMUM TAPER RATE OF 0.14" PER FOOT.
- APPLY AN ANTI-SEIZING COMPOUND TO ALL THREADED SURFACES, INCLUDING THOSE IN THE ANCHOR PLATE AND ON THE COUPLINGS.
- MASTARM RISE MAY VARY ±6" FROM THE VALUES LISTED IN THE TABLE.
- LOCATE THE HANDHOLE AT 90 DEGREES TO THE MASTARM ON THE SIDE OF POLE DOWNSTREAM FROM TRAFFIC FLOW.
- FURNISH ALL POLES WITH A J-HOOK TO SUPPORT THE ILLUMINATION TAP CONDUCTORS. FURNISH ALL MASTARM POLES WITH A REMOVABLE RAIN TIGHT CAP.
- MOUNT LIGHTING STANDARDS UPON TRANSPO MODEL NO. 5100 FRANGIBLE COUPLINGS AND TRANSPO TYPE B FEMALE ANCHORS, OR APPROVED EQUAL.
- INSTALL ALL COMPONENTS OF THE BREAKAWAY SUPPORT SYSTEM IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 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.
- A JUNCTION BOX IS REQUIRED AT EACH NEW ELECTROLIER. INSTALL THE JUNCTION BOX IMMEDIATELY BEHIND THE FOUNDATION APPROXIMATELY 7' FROM POLE UNLESS OTHERWISE SPECIFIED IN THE PLANS.



TOP VIEW



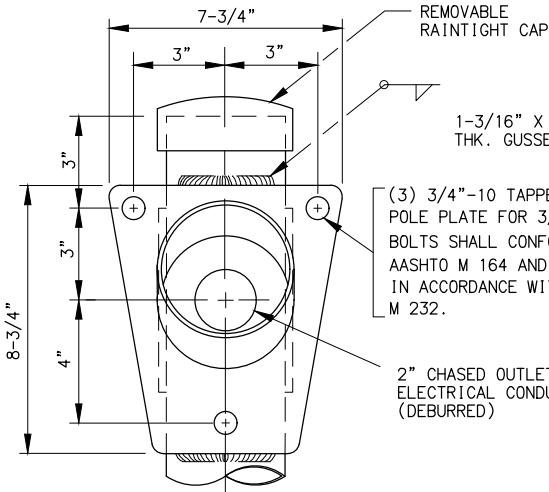
TENON



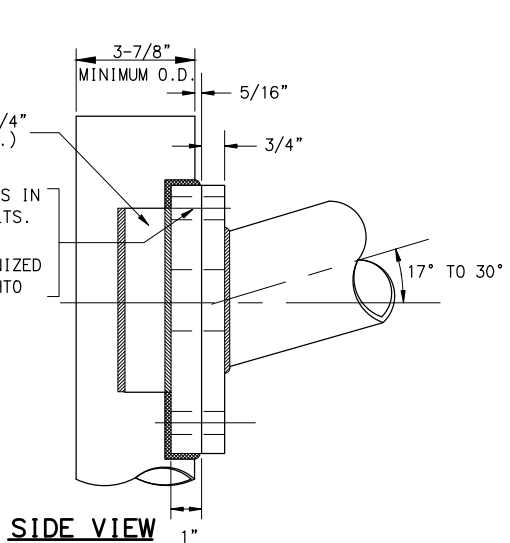
OPTIONAL SWAGED TENON

END OF MASTARM DETAIL

NTS

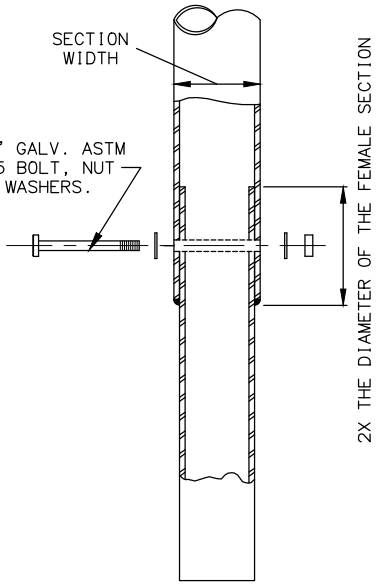


FRONT VIEW

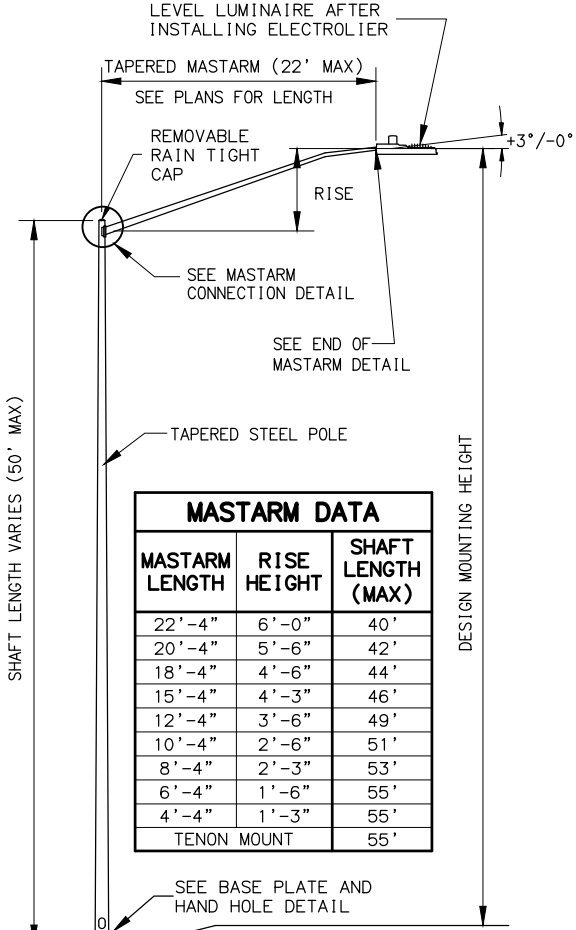


SIDE VIEW

MASTARM CONNECTION DETAIL

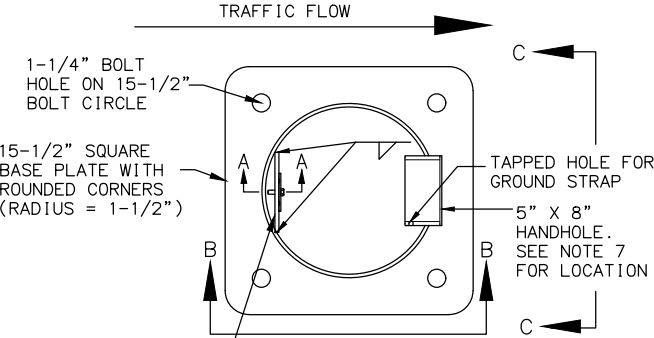


POLE CONNECTION DETAIL

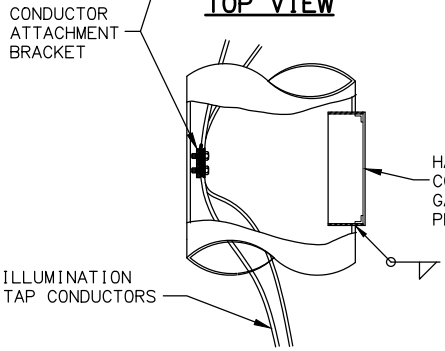


ELECTROLIER ELEVATION

MASTARM TYPE

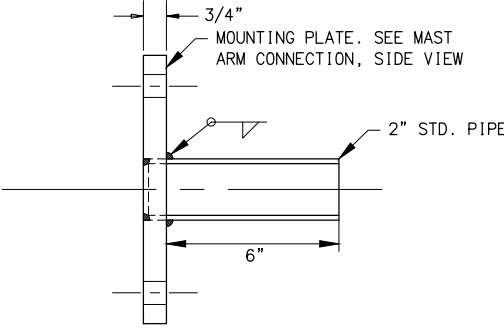


TOP VIEW

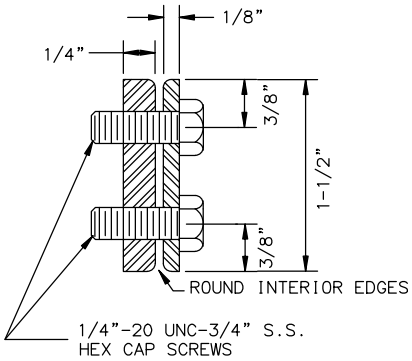


SIDE VIEW

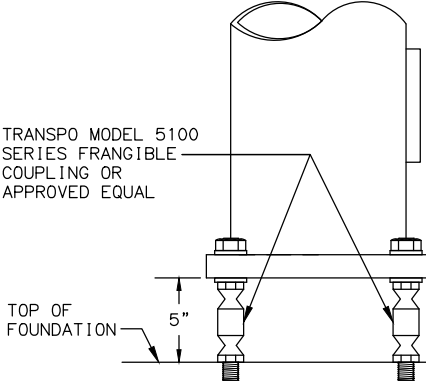
BASE PLATE AND HAND HOLE DETAIL



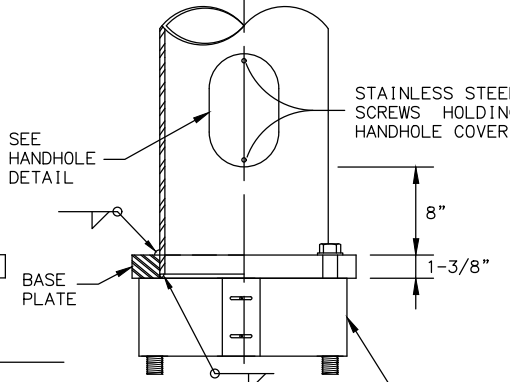
TENON MOUNT DETAIL



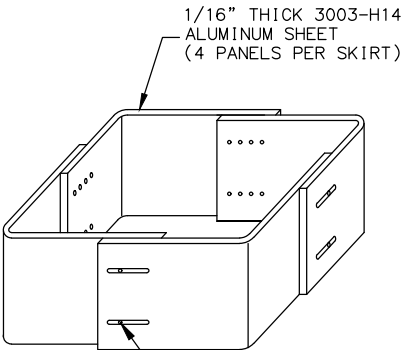
SECTION A-A



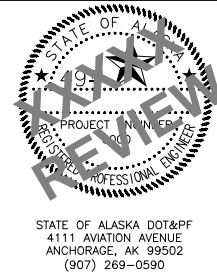
VIEW B-B



VIEW C-C



SKIRT DETAIL



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PROJECT TITLE
PROJECT TITLE

LIGHTING STANDARD 1 DETAILS