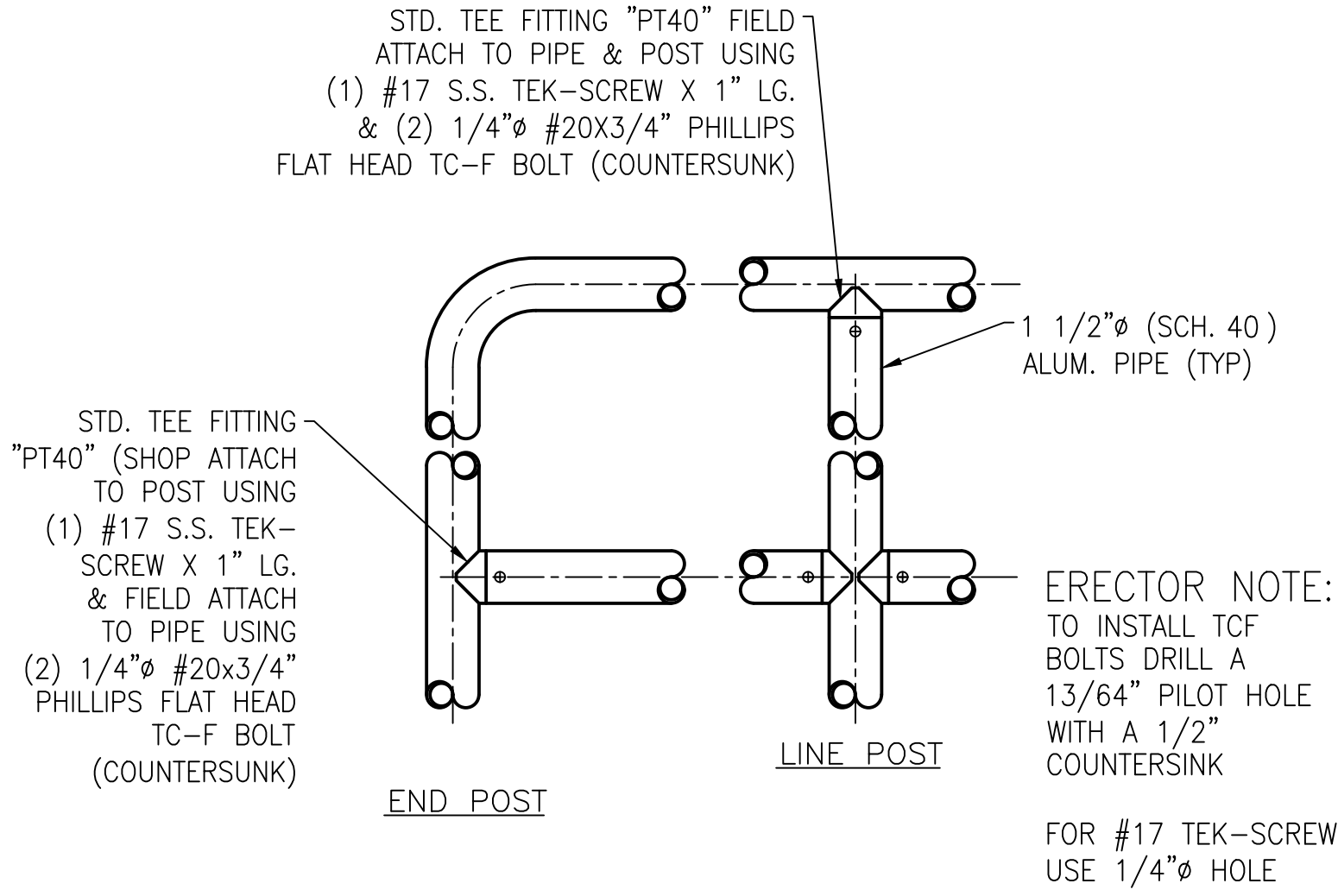


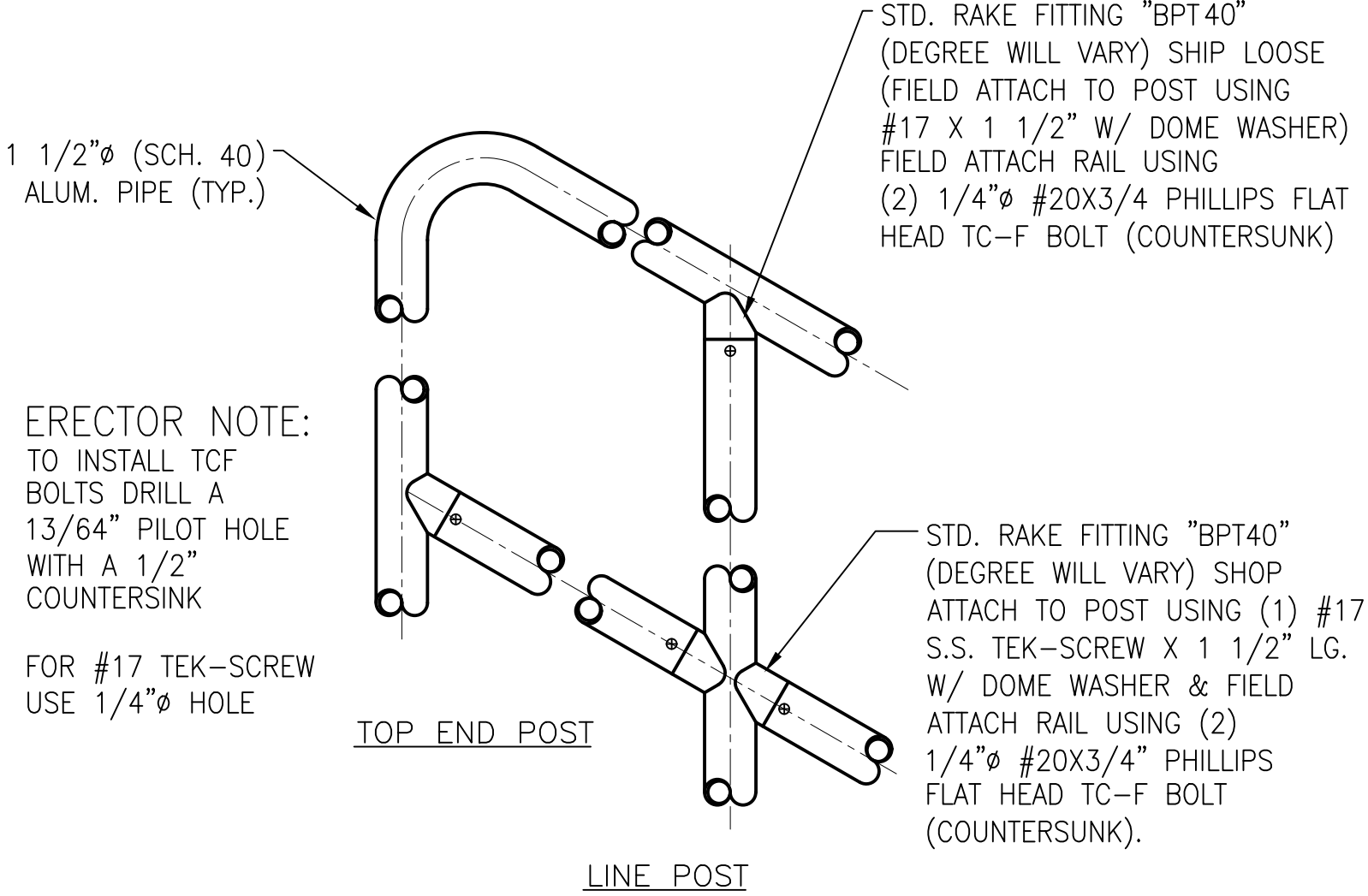
GENERAL NOTES

- ALL RAIL IS TO BE OF MECHANICAL CONSTRUCTION U.N.O.
- ALL RAILS ARE TO BE FABRICATED FROM 1 1/2"Ø (SCH. 40) ALUMINUM PIPE (6005A-T61 ALLOY) (U.N.O.)
- ALL POSTS ARE TO BE FABRICATED FROM 1 1/2"Ø (SCH. 40) ALUMINUM PIPE (6005A-T61 ALLOY) (U.N.O.)
- ALL EXTRUDED COMPONENTS ARE 6005A-T61 ALLOY, CAST COMPONENTS ARE 535 ALLOY
- ALL FASTENERS (SELF TAPPING SCREWS, MACHINE BOLTS, ADHESIVE ANCHORS, ETC.) TO BE 304 STAINLESS STEEL
- ALL RAILING SURFACES IN CONTACT WITH CONCRETE OR DISSIMILAR METALS SHALL RECEIVE ONE 1/16" THICK NEOPRENE GASKET (SHIPPED LOOSE FOR FIELD ATTACHMENT)
- ALL BOLTS, NUTS AND FLAT WASHERS USED TO MOUNT RAILINGS TO FLOORS, WALLS, STEEL, ETC. ARE BY PTP ENGINEERED RAILINGS
- ALL KICK PLATES ("FKP" OR "SKP") SHALL BE SHIPPED LOOSE IN 24'-0" LG. STOCK LENGTHS OR SMALLER FOR FIELD CUTTING & DRILLING AS NEEDED
- ALL POSTS ARE TO BE FURNISHED CUT TO LENGTH WITH FITTINGS & MOUNTING PLATES ATTACHED OR SHIPPED LOOSE PER THEIR SPECIFIC DETAILS
- PIPE FOR STRAIGHT RAIL IS FURNISHED IN UP TO 24'-0" STOCK LENGTHS FOR CUTTING & DRILLING AS NEEDED
- PIPE FOR CURVED RAIL IS FURNISHED SUB-ASSEMBLED IN 21'-0" (MAX). ROLLED LENGTHS FOR FIELD CUTTING & DRILLING AS NEEDED
** ALL RADII MUST BE VERIFIED PRIOR TO FABRICATION **
- ALL CURVED RAIL SHALL BE FABRICATED USING CURVED TOP AND INTERMEDIATE RAILS
- PIPE FOR SINGLE LINE RAIL IS FURNISHED & SHIPPED SUB-ASSEMBLED.
- BENDS WITH A 3" C/L RADIUS ARE FURNISHED AS NEEDED & MUST BE FIELD CUT FOR FIELD CONDITIONS
- ALL RAIL WHEN PROPERLY INSTALLED SHALL MEET OR EXCEED OSHA REQUIREMENTS.
- MAX. POST SPACING TO BE 6'-0" C/C
- ALL RAIL IS TO BE FINISHED IN ACCORDANCE WITH THE ALUMINUM ASSOCIATION'S DESIGNATION M10C22A41 OR M12C22A41
- PIPE FOR CANTILEVER RAILING WILL SHIP LOOSE IN UP TO 24'-0" STOCK LENGTHS FOR FIELD CUTTING AND DRILLING AS NEEDED
- ENSURE ALL FIELD CUTS AND FIELD DRILLED HOLES ARE CLEANED UP, FREE OF SHARP EDGES AND BURRS.
- CONCRETE ANCHOR TYPE IS HILTI HIT-RE 500 V3 ADHESIVE ANCHORS. CONCRETE STRENGTH IS ASSUMED TO BE 4000 PSI, NORMAL WEIGHT CRACKED CONCRETE.
- ALL DIMENSIONS SHOWN THROUGHOUT THIS SET ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BEFORE FABRICATION AND INSTALLATION

%% = SEE ERECTION DRAWINGS FOR PART NUMBER

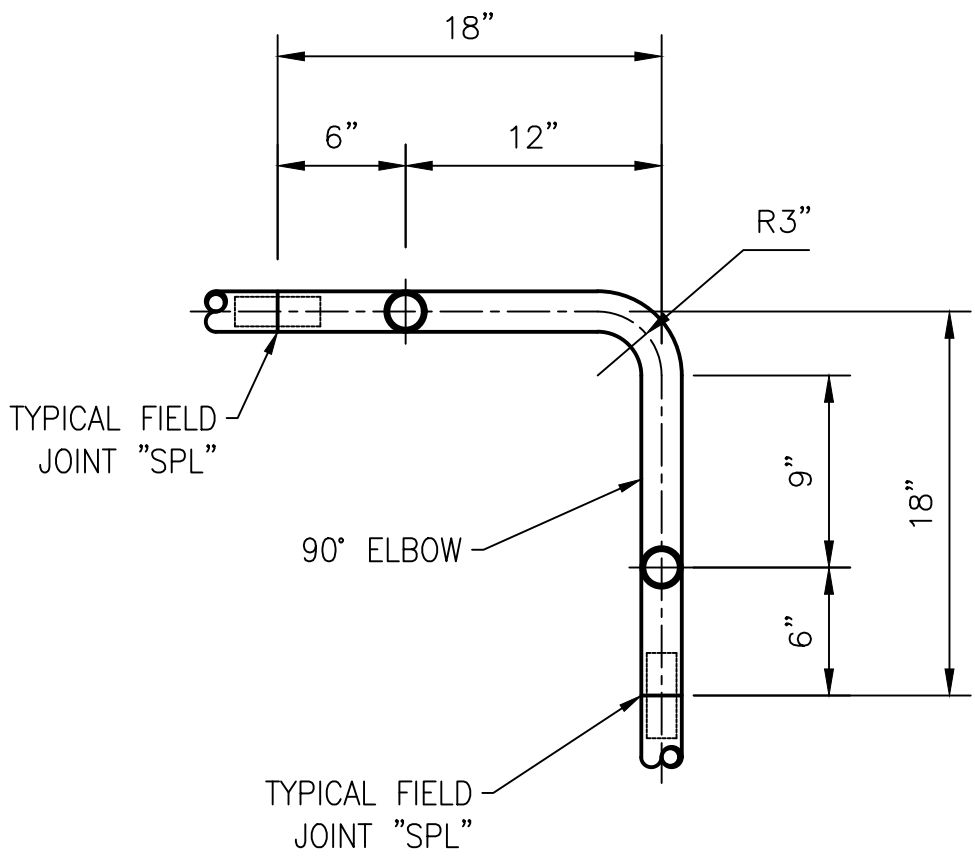
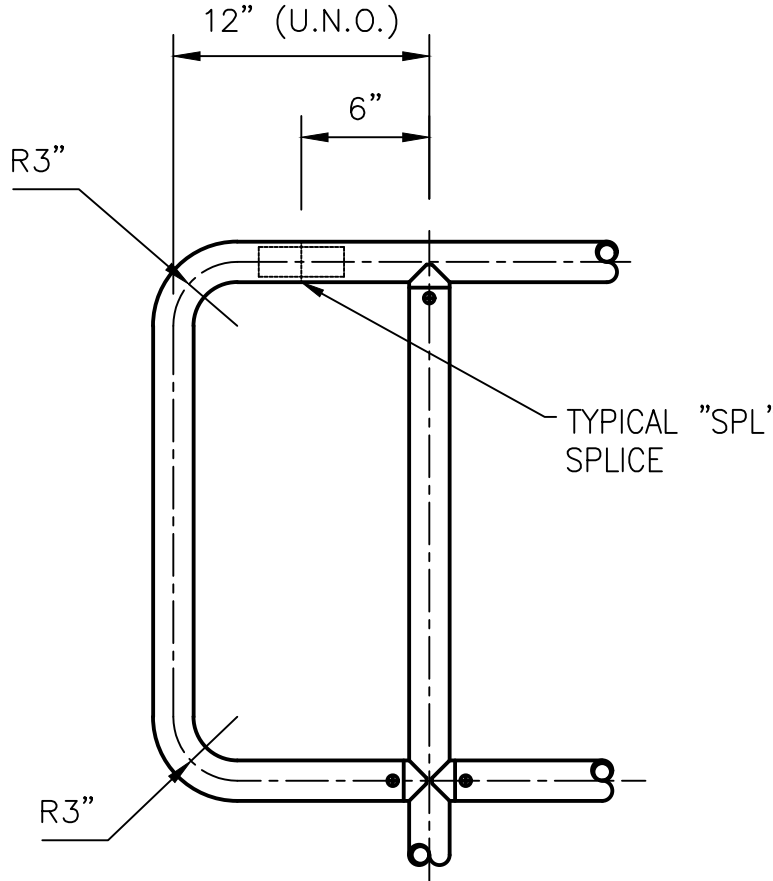


TYPICAL LEVEL RAIL CONNECTIONS

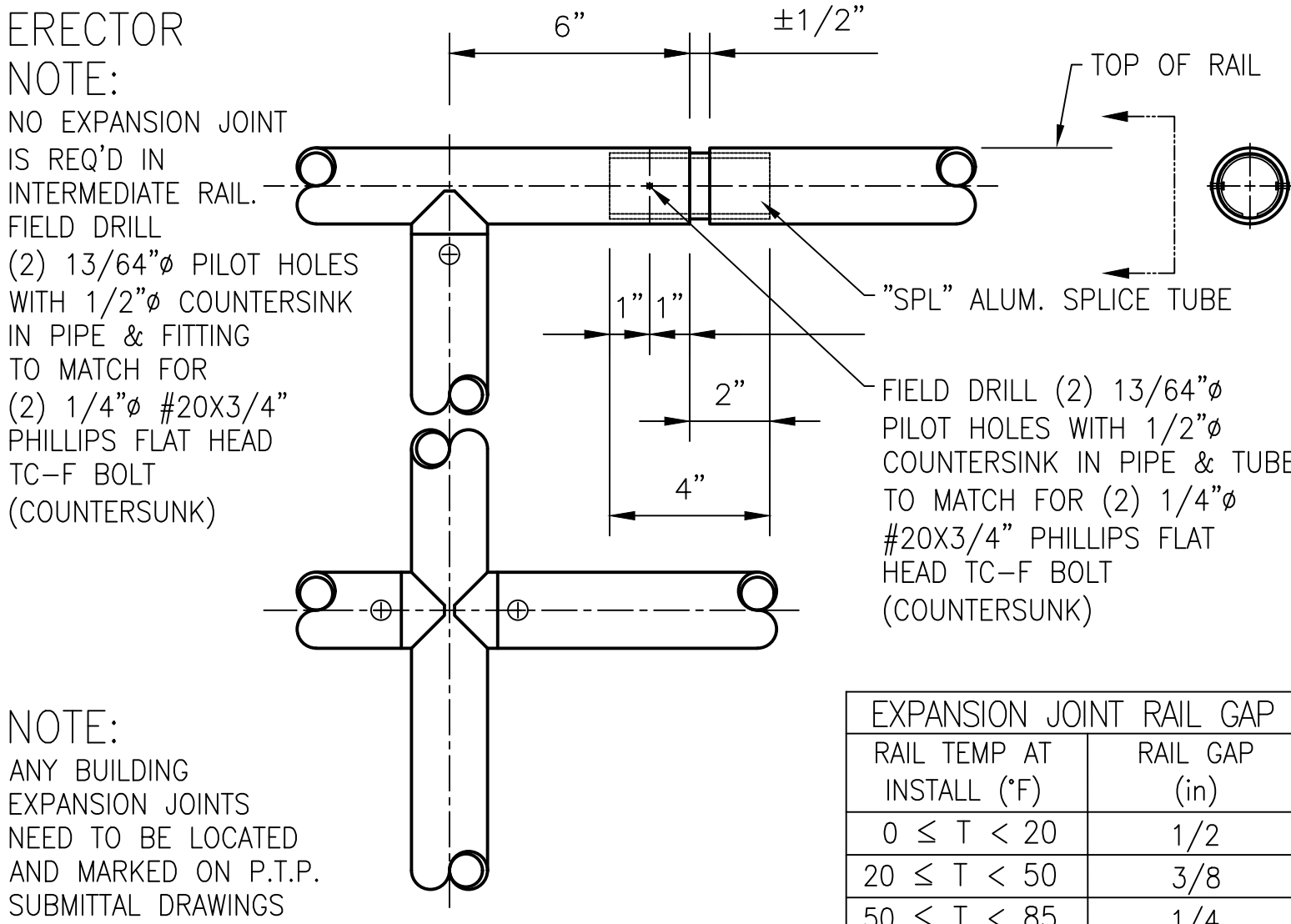


TYPICAL SLOPED RAIL CONNECTIONS

LEVEL P-END SUB-ASSEMBLE

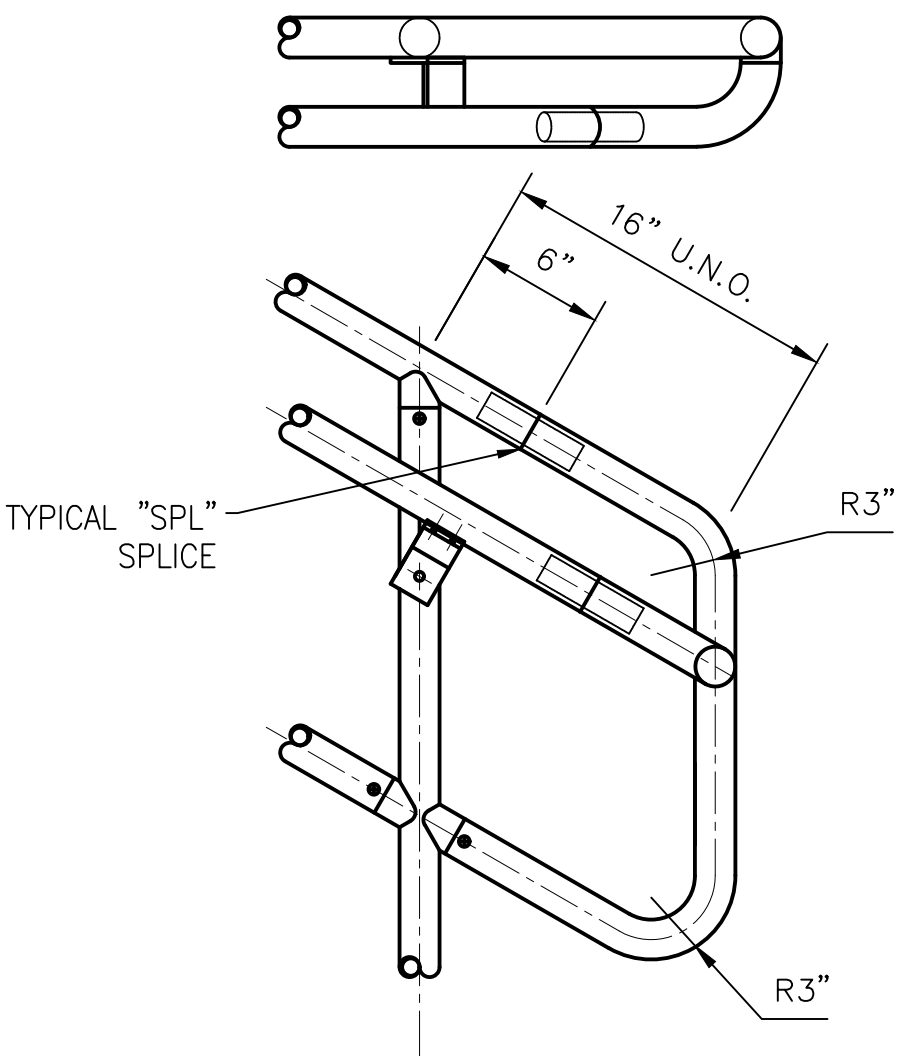
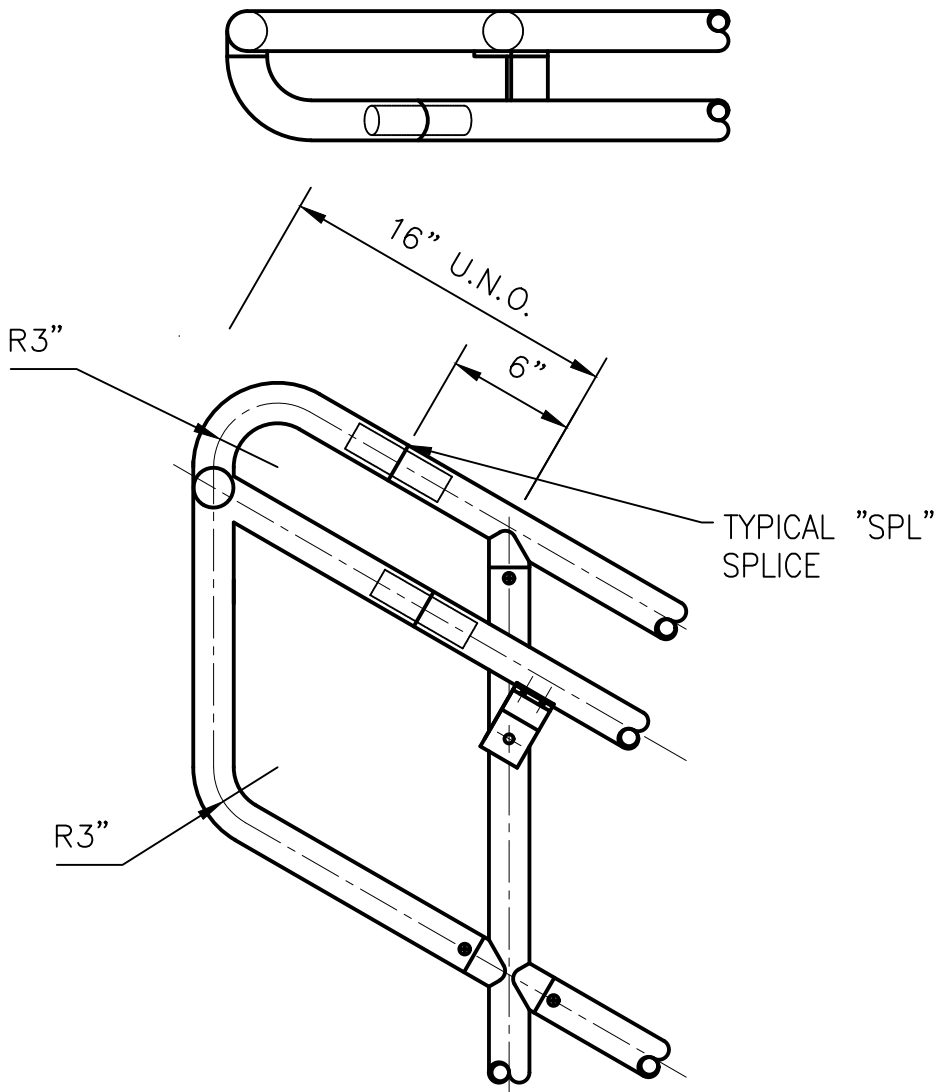


TYPICAL CORNER SUB-ASSEMBLE

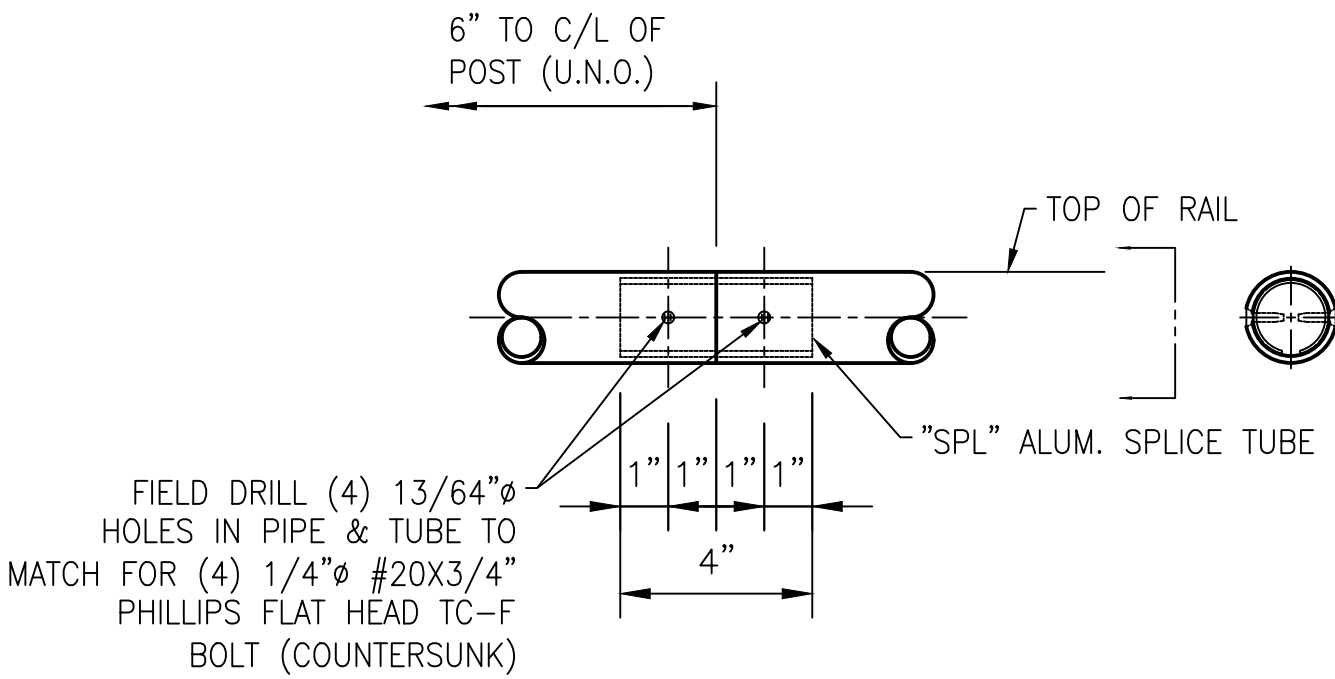


TYPICAL EXPANSION JOINT
(LOCATED AT BUILDING EXPANSION JOINT & AT 24'-0" MAX. O/C)

TOP RAKE P-END SUB-ASSEMBLE

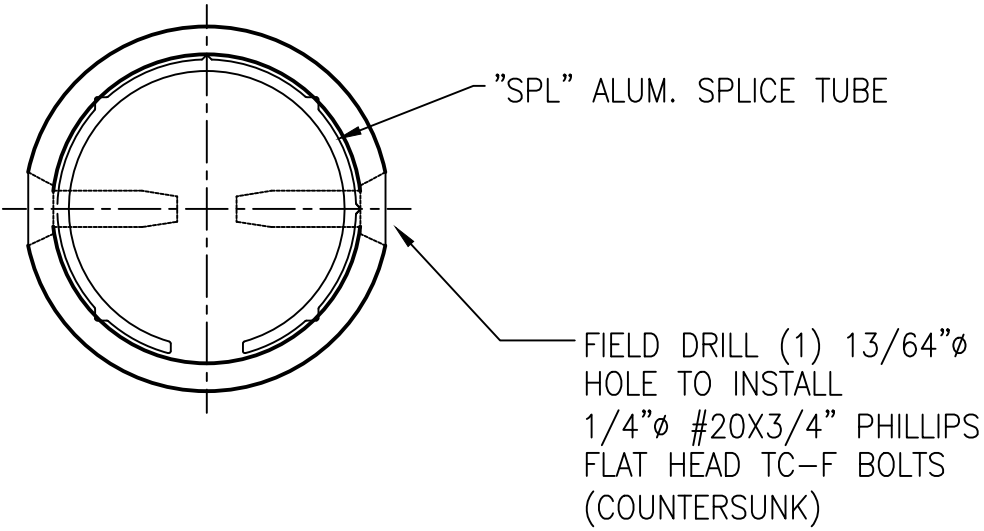


BOTTOM RAKE P-END SUB ASSEMBLE




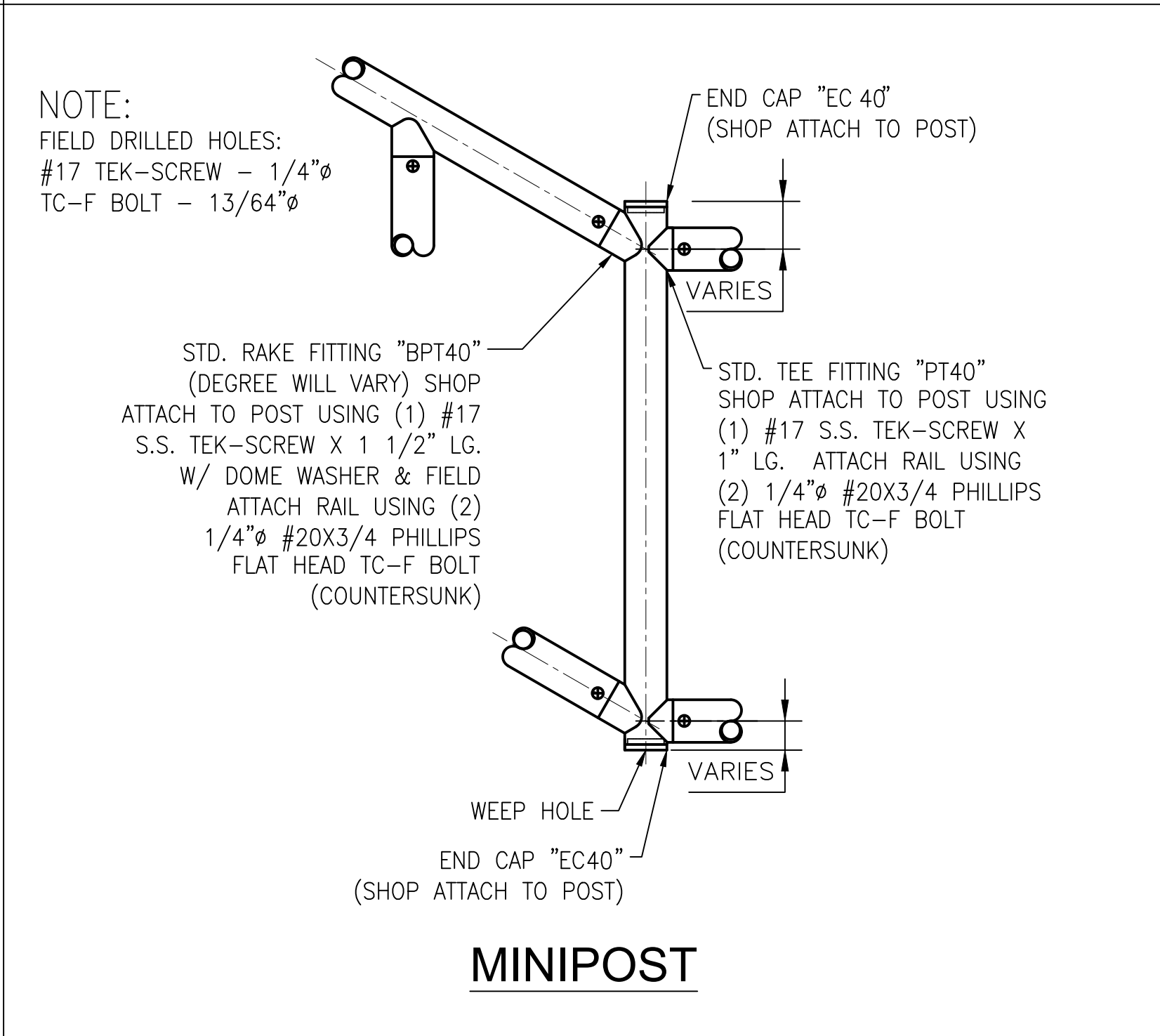
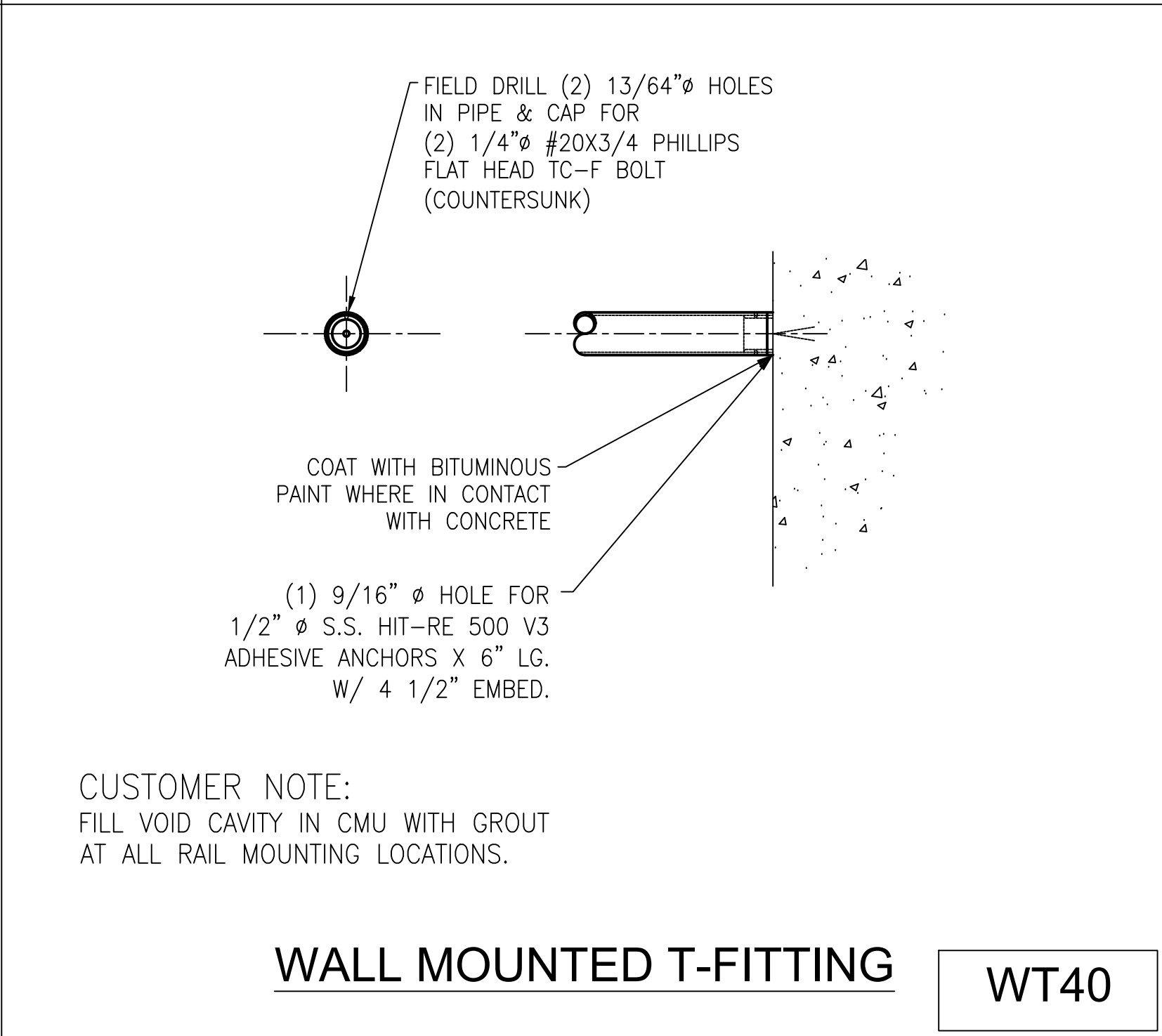
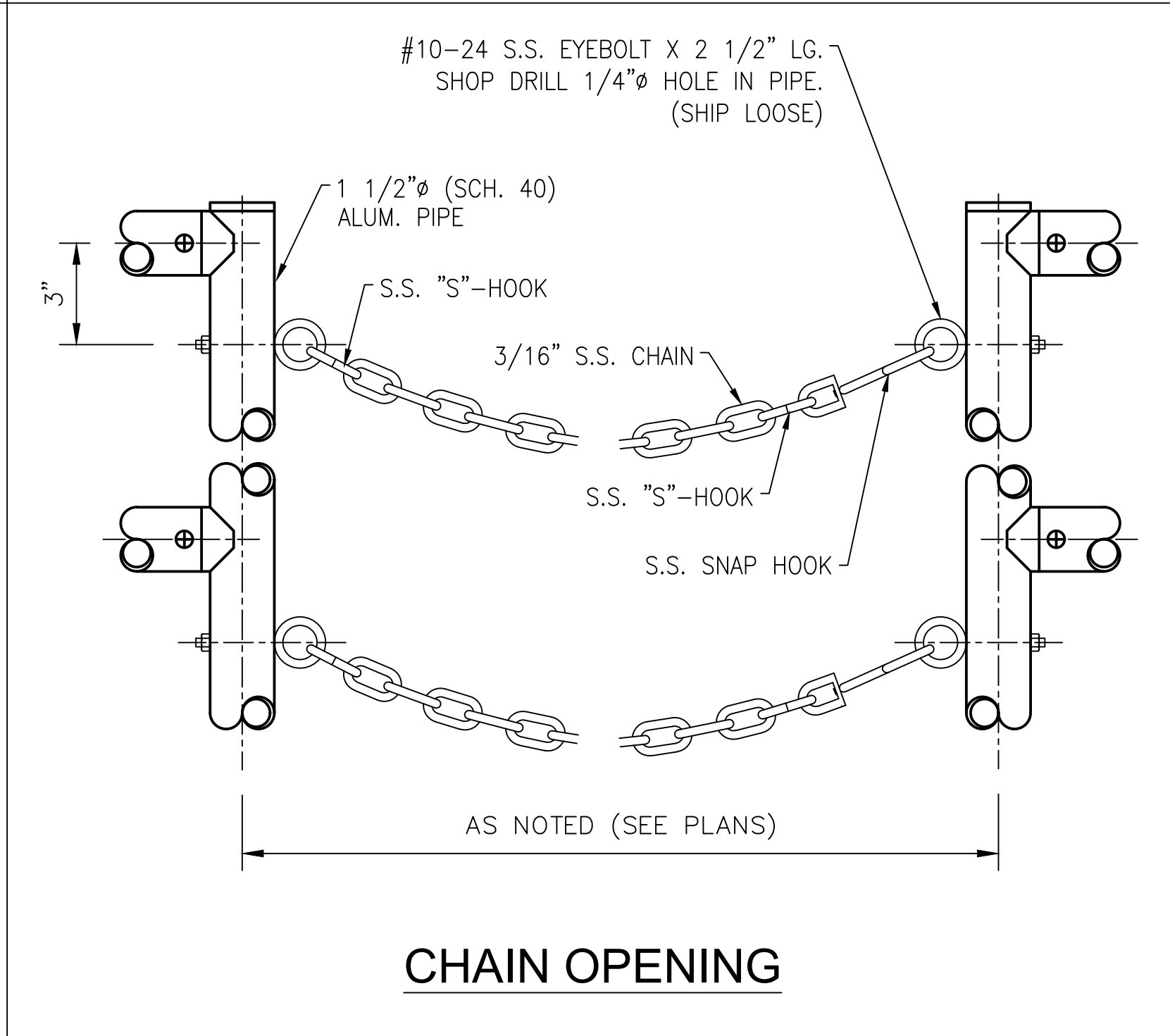
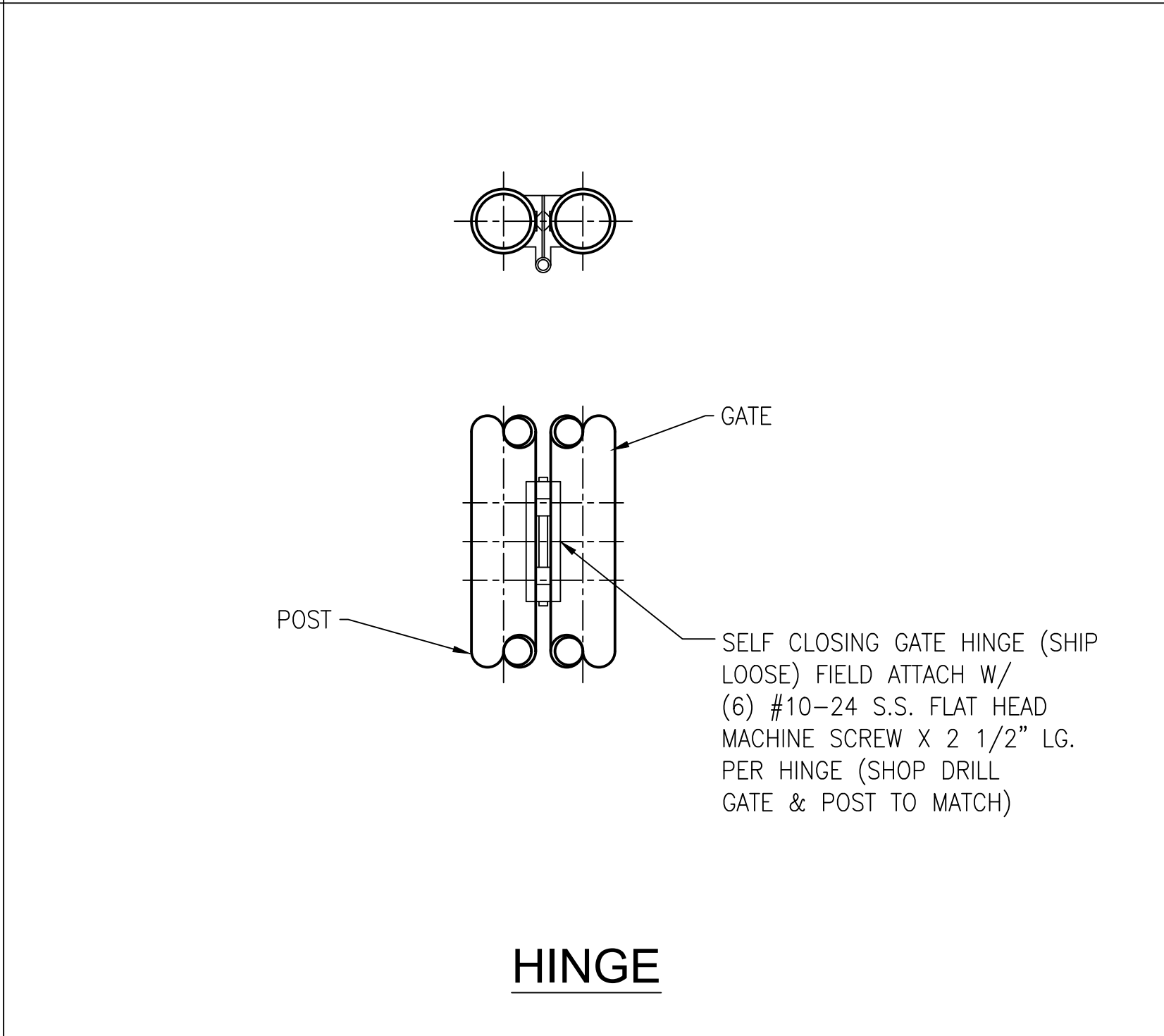
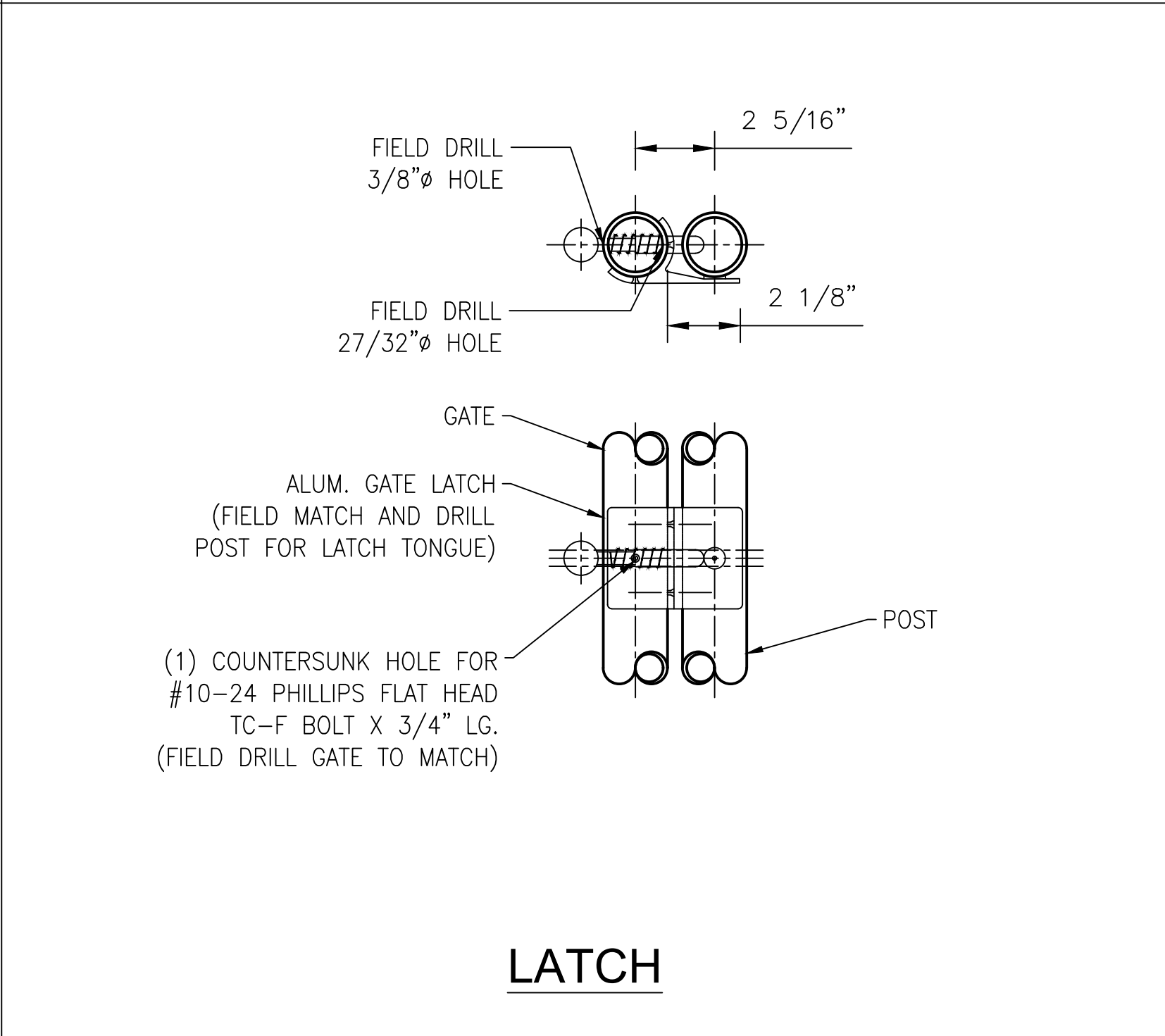
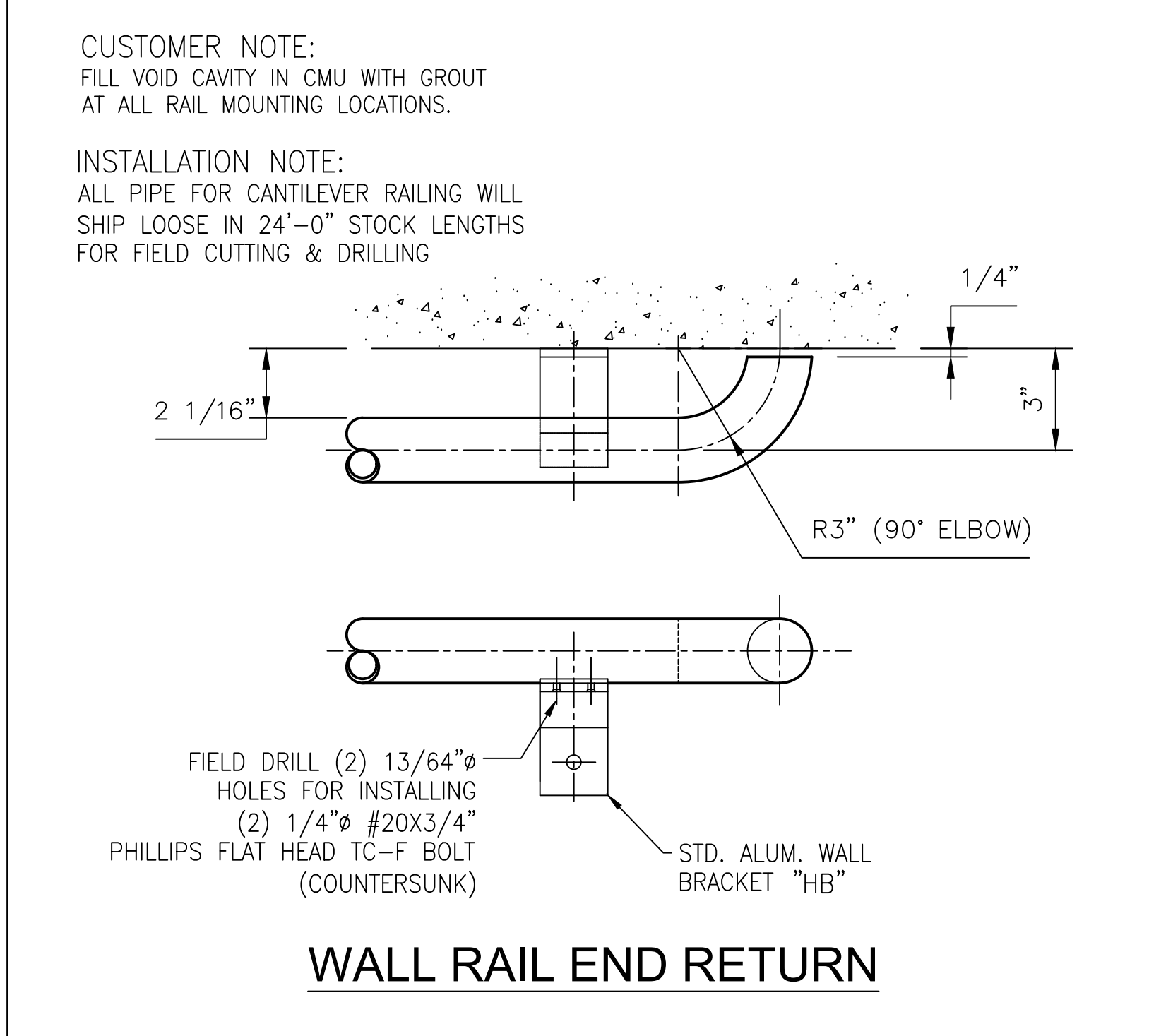
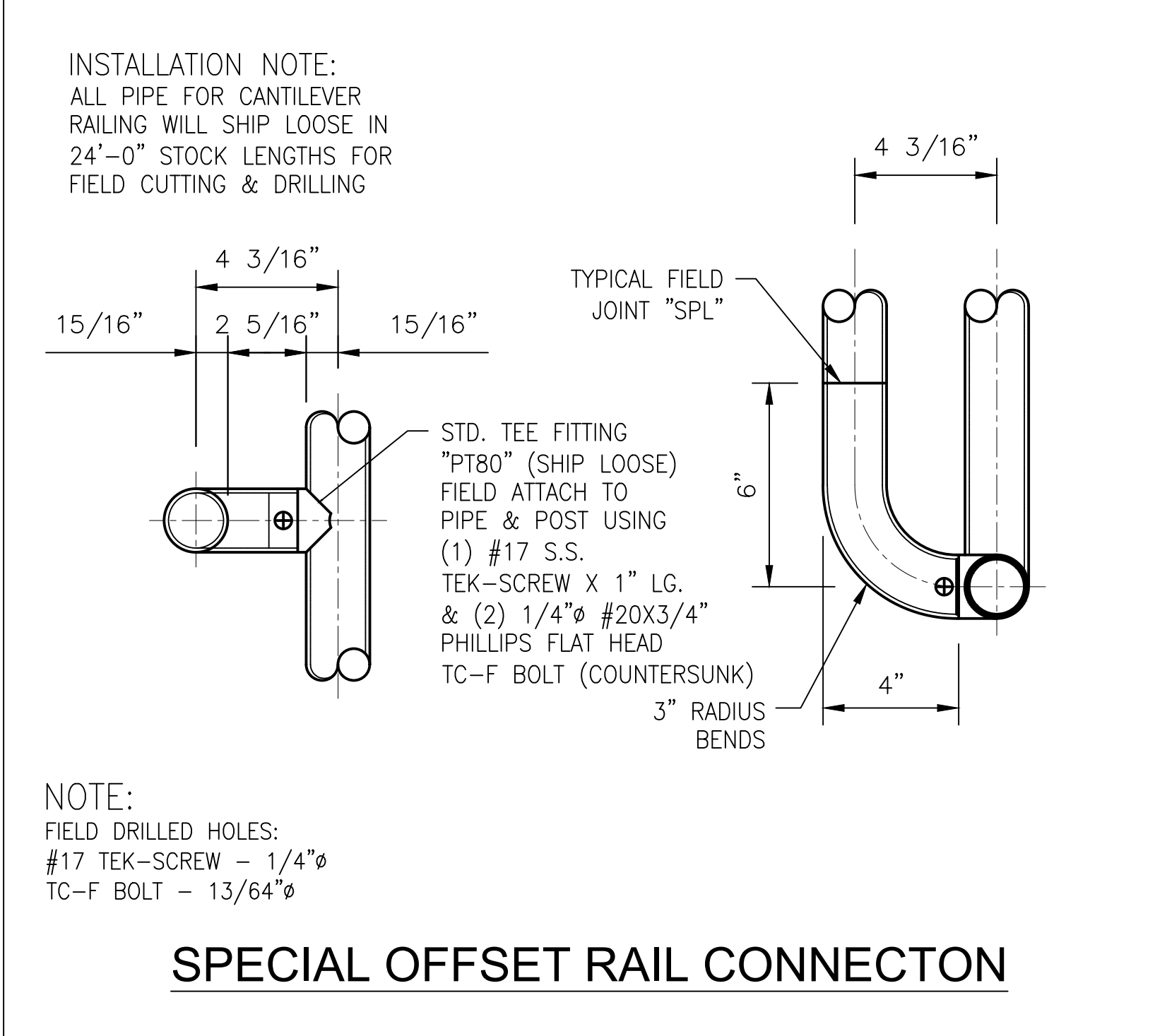
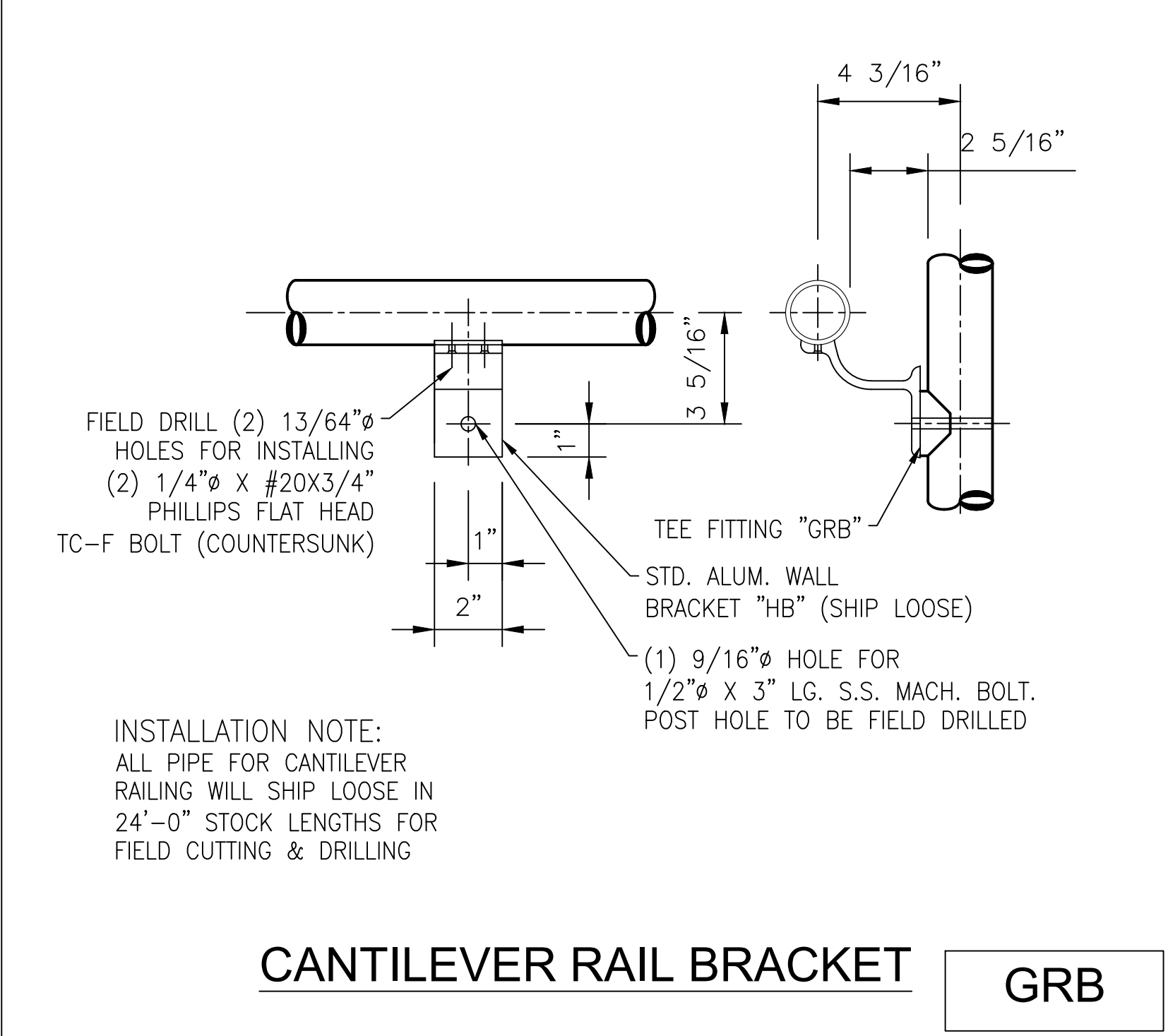
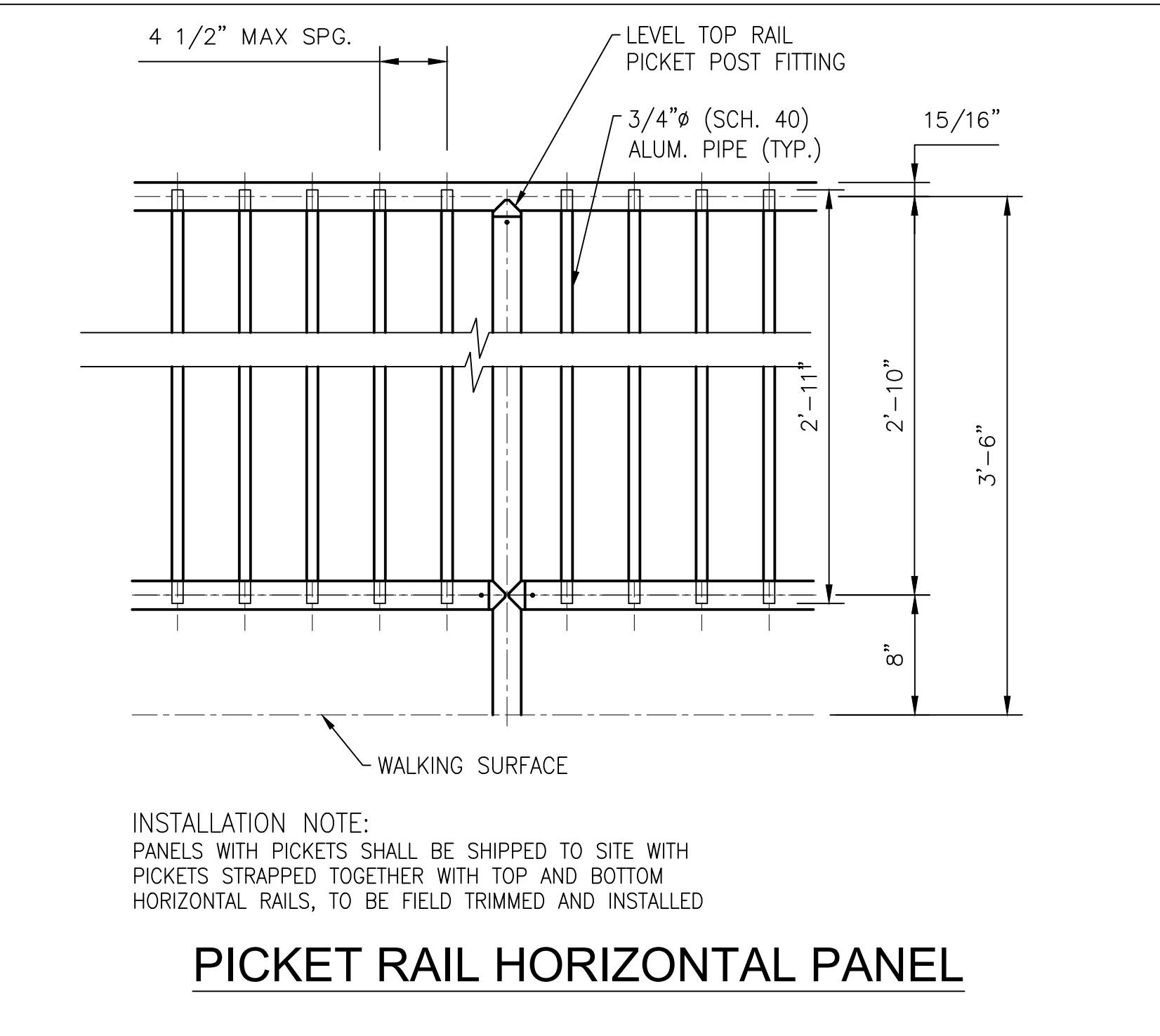
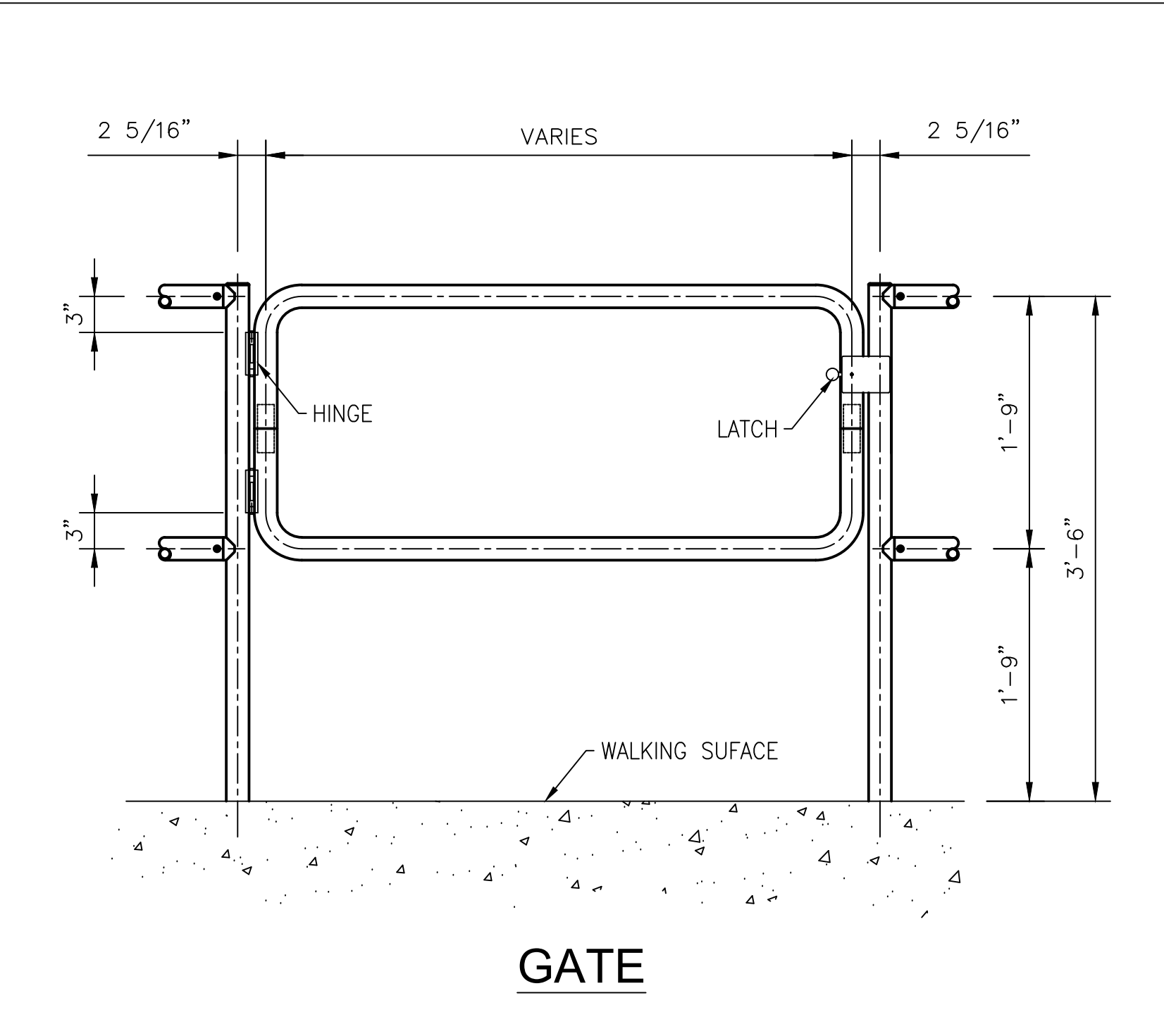
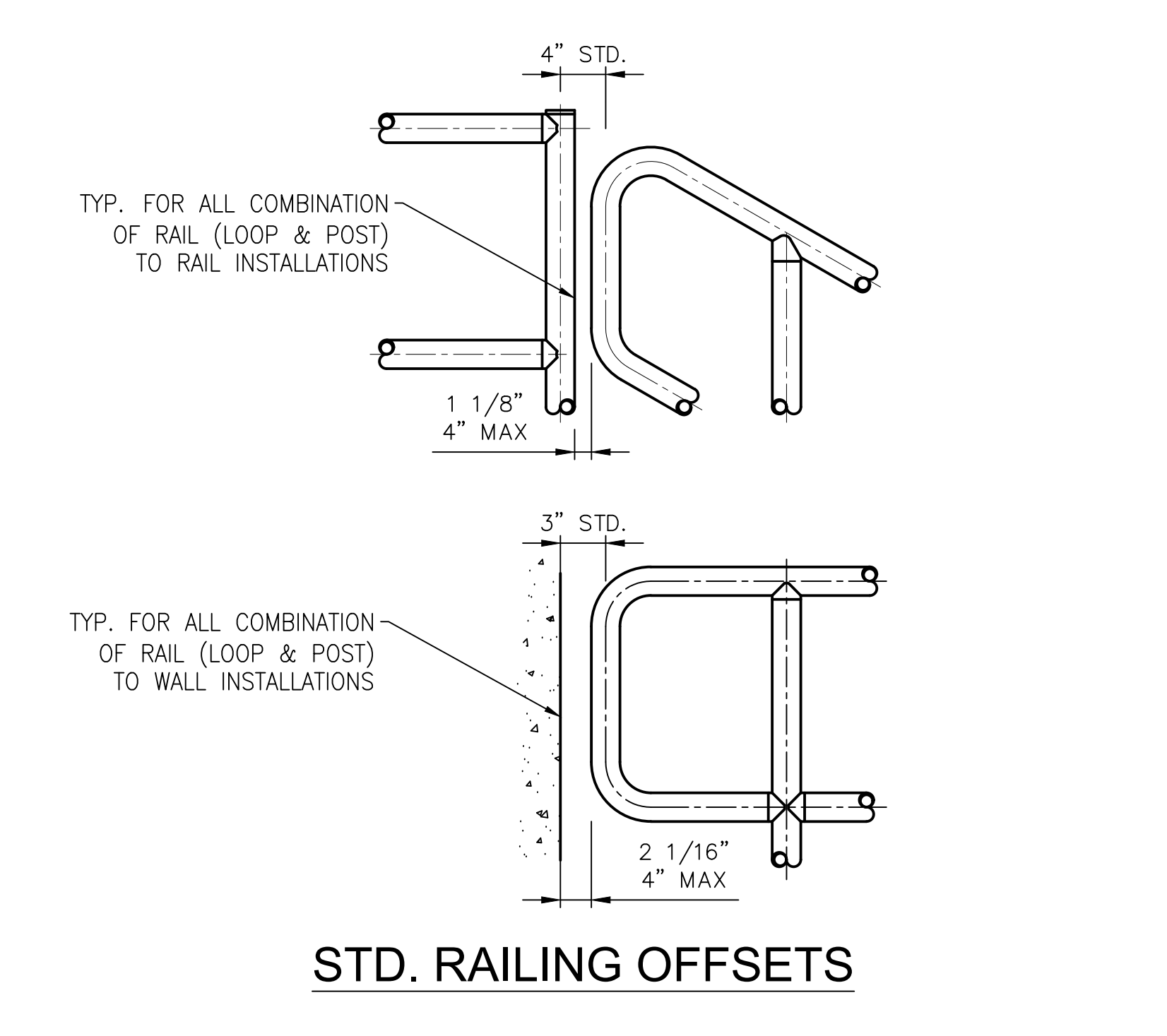
ERECTOR NOTE: FIELD JOINT AT INTERMEDIATE RAIL IS LOCATED IN THE FITTING. FIELD DRILL (2) 13/64"Ø HOLES IN PIPE AND FITTING TO MATCH FOR (2) 1/4"Ø #20X3/4" PHILLIPS FLAT HEAD TC-F BOLT (COUNTERSUNK)


TYPICAL FIELD JOINT
(LOCATED AS NEEDED FOR STRUCTURAL STABILITY)



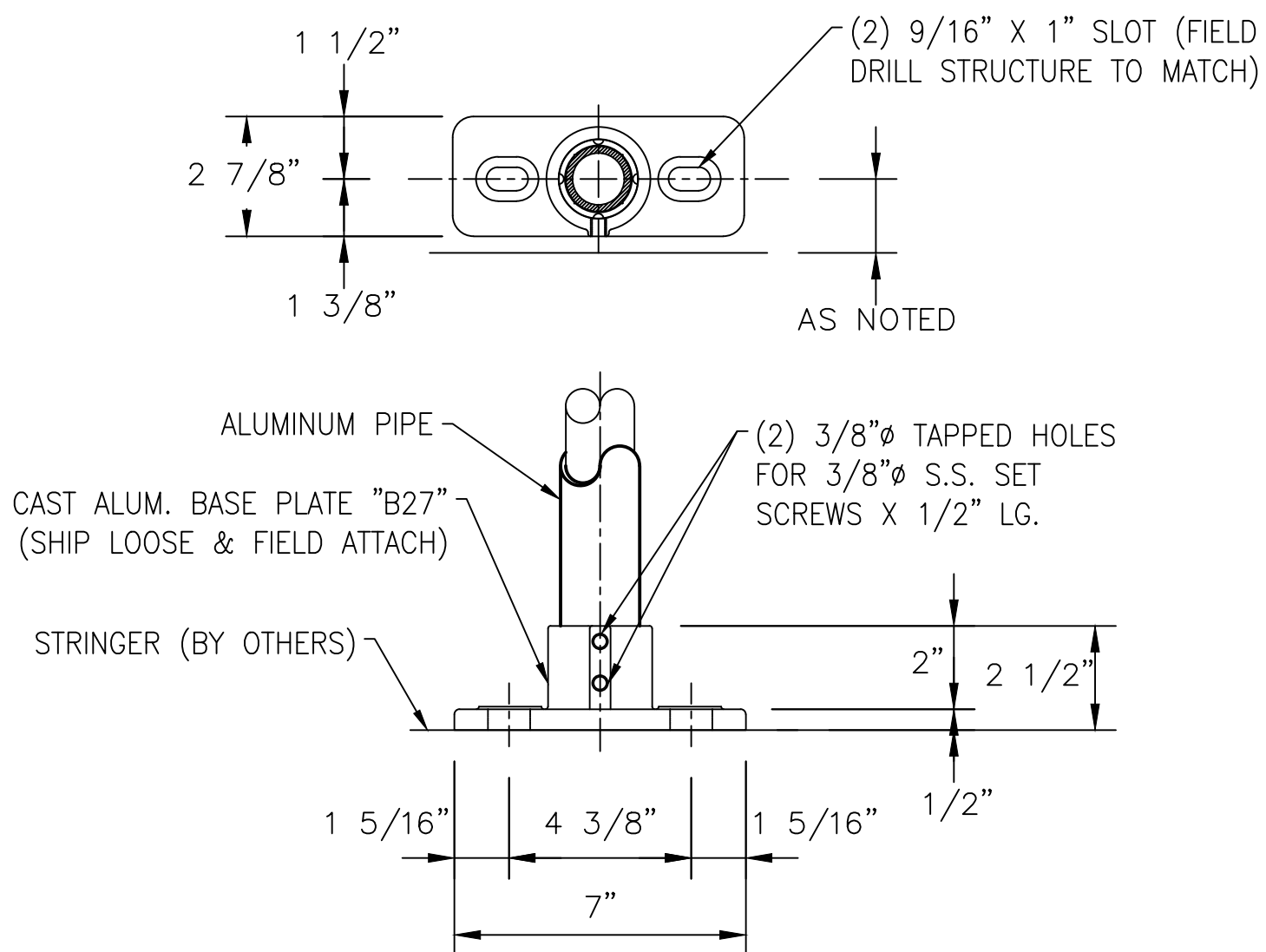
EXPANSION JOINT & FIELD SPLICE

1	SUBMITTAL	9/19/2017
REV	DESCRIPTION	DATE
 3000 YOUNGFIELD ST. SUITE 275 WHEAT RIDGE, CO 80215 Ph: (720)508-3819 FAX: (720)409-3843		NOTICE TO CONTRACTOR AND ERECTOR: BACK CHARGES FOR CORRECTIVE WORK OR REPLACEMENT MATERIALS WILL NOT BE ACCEPTED UNLESS AUTHORIZED BY PEAK TO PEAK ENGINEERED RAILINGS, INC. BEFORE SUCH COSTS ARE INCURRED
STANDARD DETAILS		
CITY, ST ALUMINUM HANDRAIL - TCF SYSTEM - SUB-ASSEMBLED		
DESIGNER	DESIGNER	CUSTOMER
CUSTOMER JOB #	XXXX-XX	PRINT DATE
3/13/2020	ISSUE DATE	3/13/2020
SCALE	NTS	CONTRACT NO
XXX-XXX	DRAWING NO.	SD-1



REV	DESCRIPTION	DATE
 3000 YOUNGFIELD ST. SUITE 275 WHEAT RIDGE, CO 80215 Ph. (720)508-3819 FAX (720)409-3843		NOTICE TO CONTRACTOR AND ERECTOR: BACK CHARGES FOR CORRECTIVE WORK OR REPLACEMENT MATERIALS WILL NOT BE ACCEPTED UNLESS AUTHORIZED BY PEAK TO PEAK ENGINEERED RAILINGS, INC. BEFORE SUCH COSTS ARE INCURRED
STANDARD DETAILS CITY, ST ALUMINUM HANDRAIL - TCF SYSTEM - SUB-ASSEMBLED		
DESIGNER	DESIGNER	CUSTOMER
CUSTOMER JOB #	XXXX-XX	PRINT DATE
3/13/2020	ISSUE DATE	3/13/2020
SCALE	NTS	CONTRACT NO
XXX-XXX	DRAWING NO.	SD-2

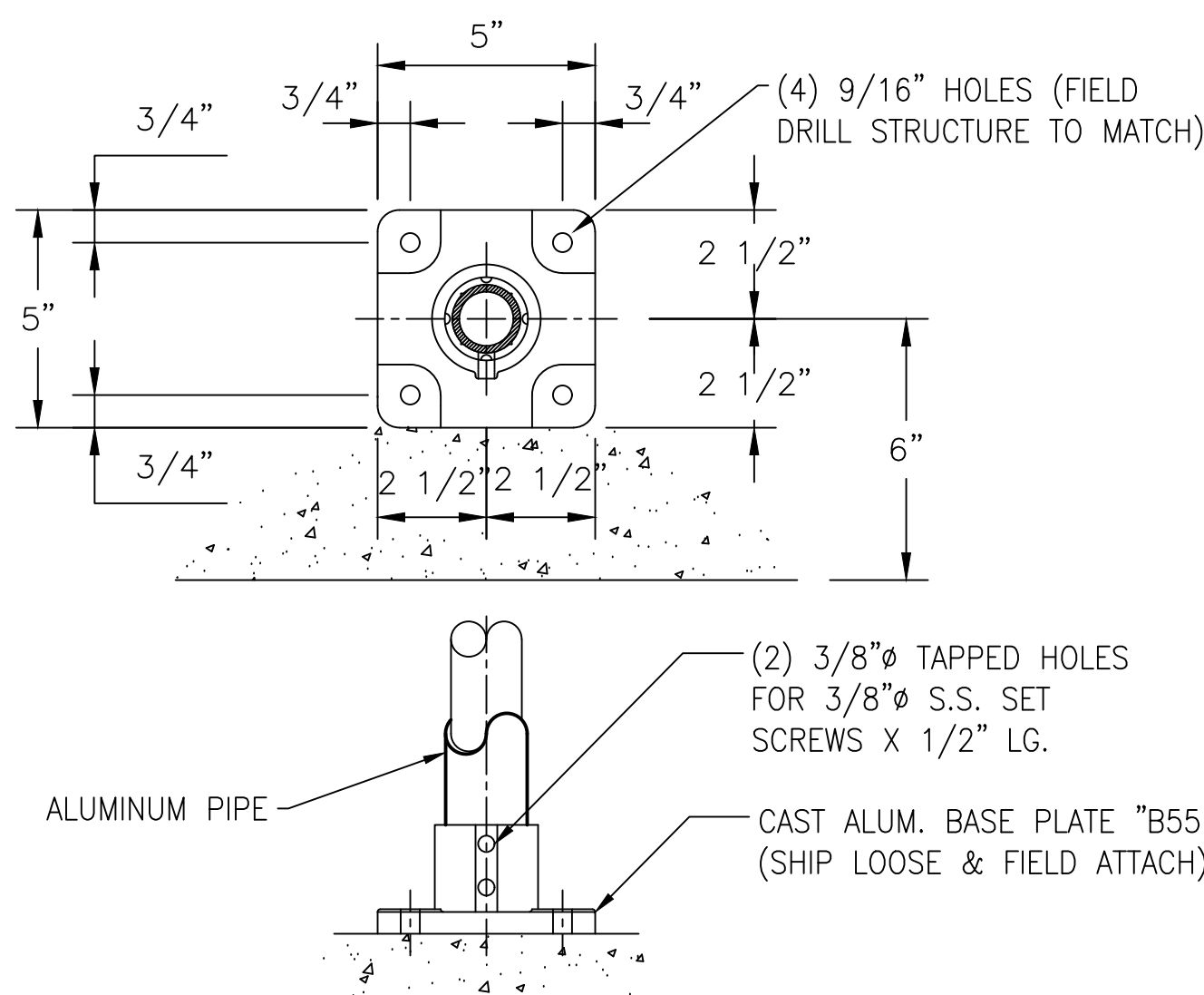
MOUNTING CONDITIONS				
MATERIAL	FASTENER TYPE	FASTENER DIAMETER	FASTENER LENGTH	MINIMUM EMBED DEPTH
STEEL	S.S. MACHINE BOLT	1/2"	2"	N/A
CONCRETE	N/A	-	-	-



LEVEL STL. LINE POST

B27

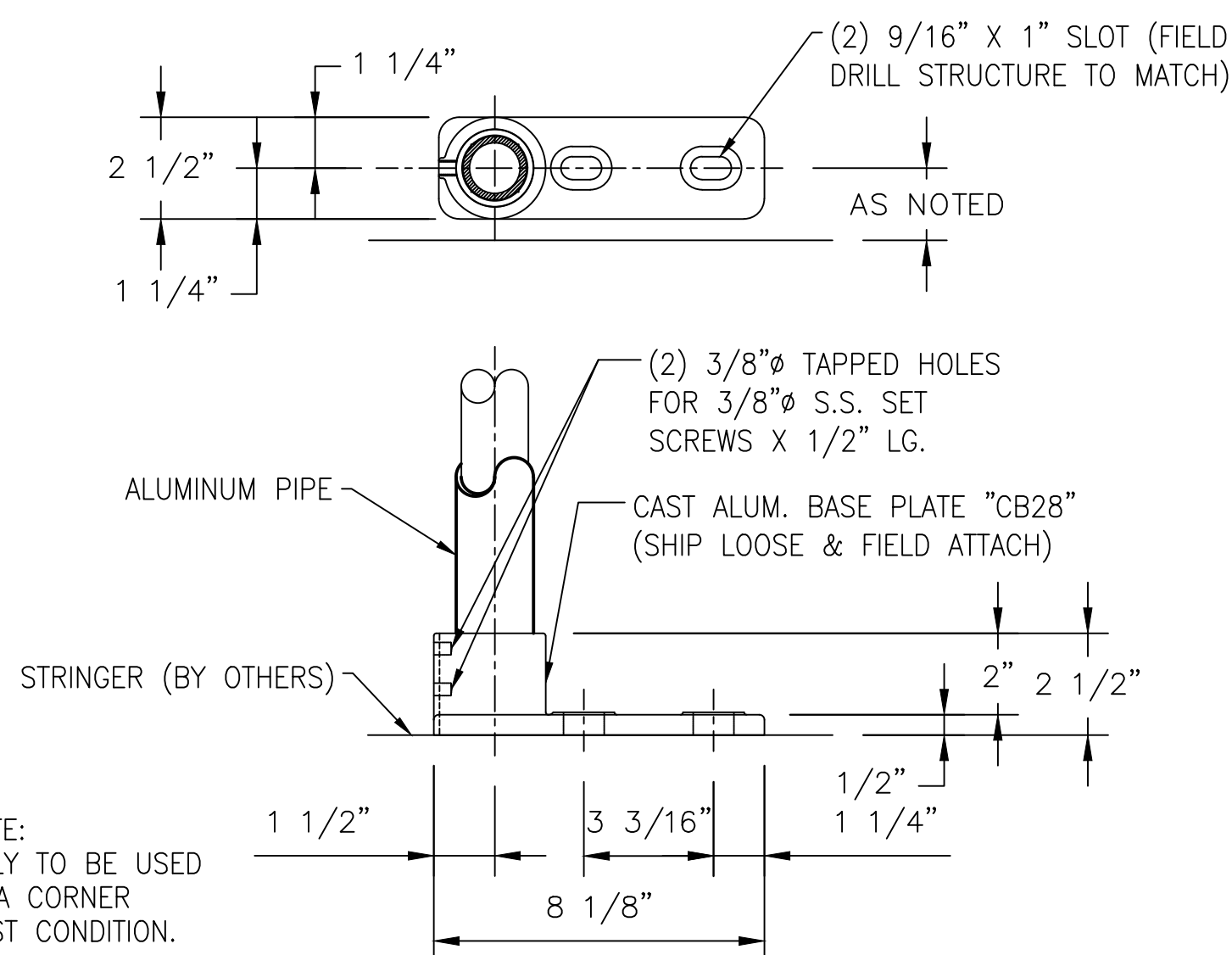
MOUNTING CONDITIONS				
MATERIAL	FASTENER TYPE	FASTENER DIAMETER	FASTENER LENGTH	MINIMUM EMBED DEPTH
STEEL	S.S. MECHANICAL BOLT	1/2"	2"	N/A
CONCRETE	S.S. ADHESIVE ANCHORS	1/2"	6"	4 1/2"



LEVEL CONC. LINE POST

B55

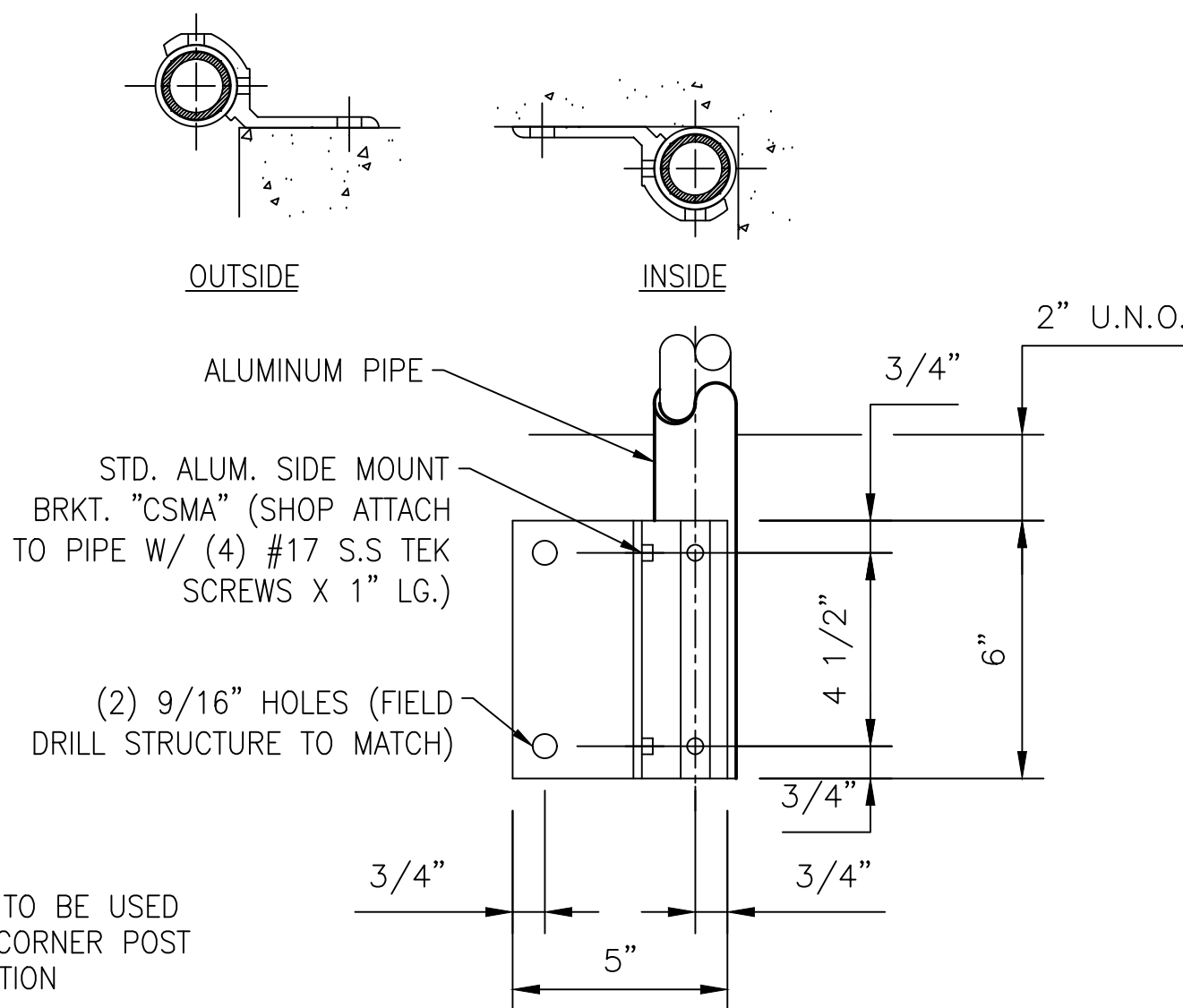
MOUNTING CONDITIONS				
MATERIAL	FASTENER TYPE	FASTENER DIAMETER	FASTENER LENGTH	MINIMUM EMBED DEPTH
STEEL	S.S. MACHINE BOLT	1/2"	2"	N/A
CONCRETE	S.S. ADHESIVE ANCHORS	1/2"	6"	4 1/2"



LEVEL CORNER POST

CB28

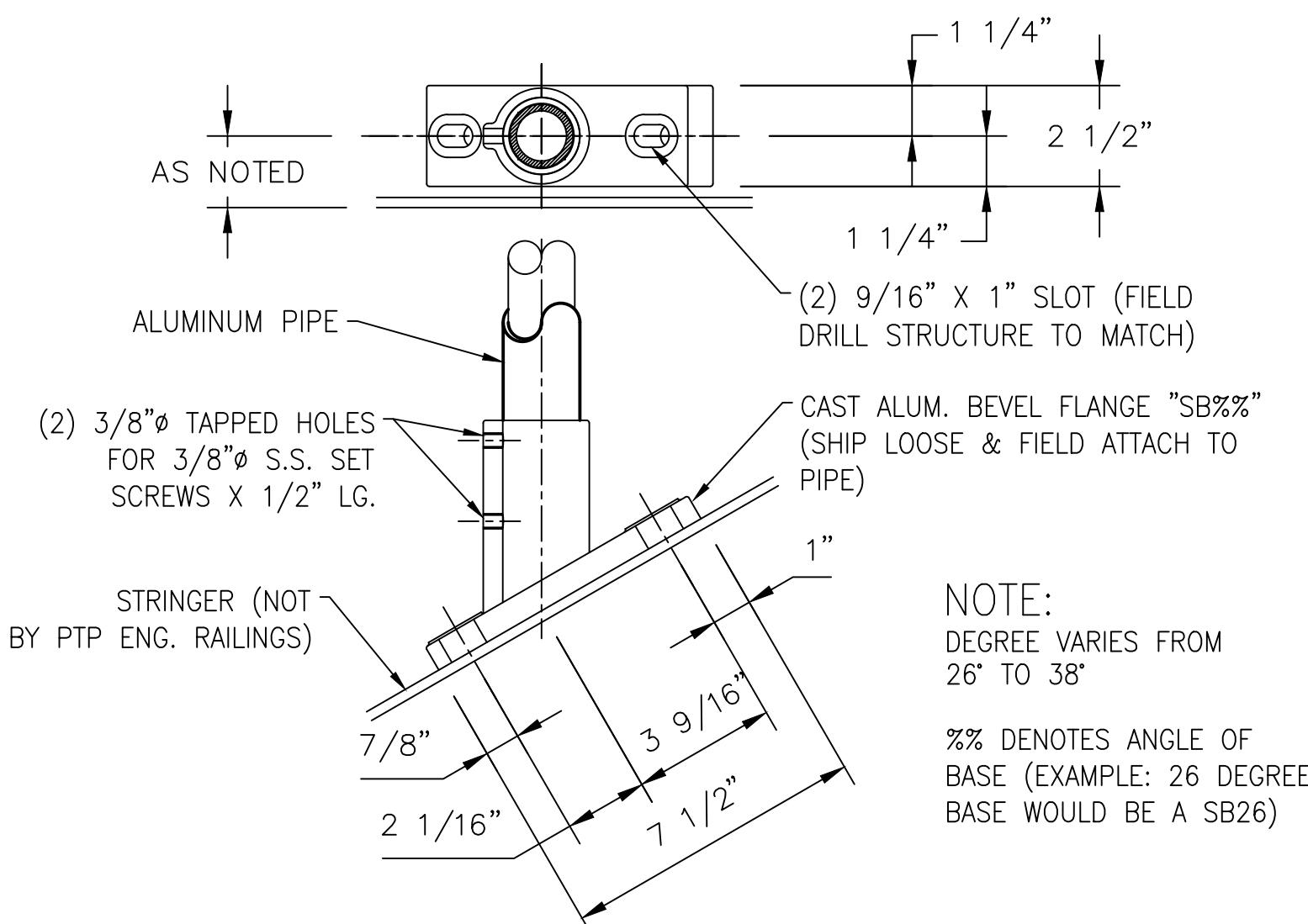
MOUNTING CONDITIONS				
MATERIAL	FASTENER TYPE	FASTENER DIAMETER	FASTENER LENGTH	MINIMUM EMBED DEPTH
STEEL	S.S. MACHINE BOLT	1/2"	2"	N/A
CONCRETE	S.S. ADHESIVE ANCHORS	1/2"	6"	4 1/2"



CONC. CORNER SIDE MOUNT

CSMA

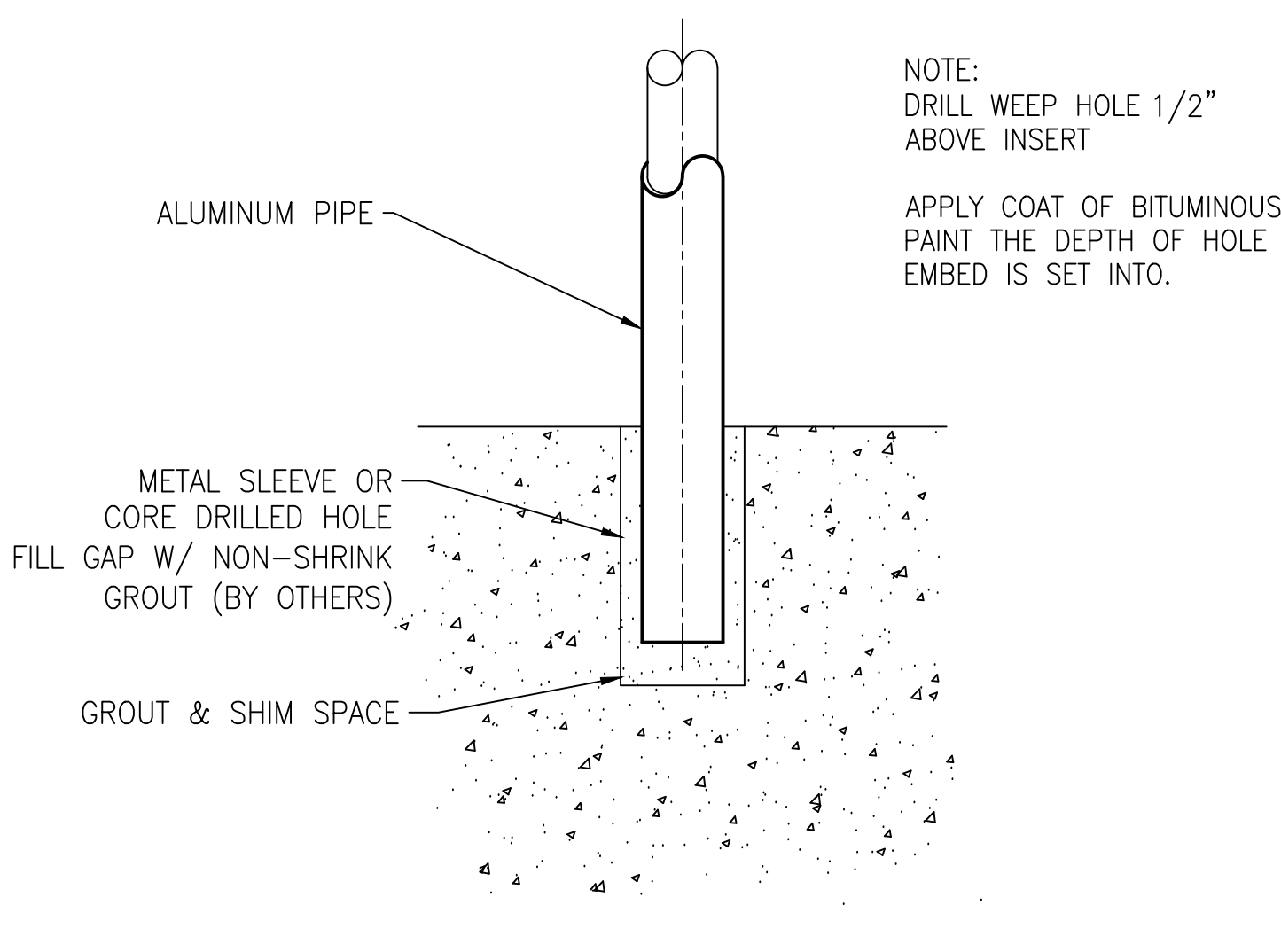
MOUNTING CONDITIONS				
MATERIAL	FASTENER TYPE	FASTENER DIAMETER	FASTENER LENGTH	MINIMUM EMBED DEPTH
STEEL	S.S. MACHINE BOLT	1/2"	2 1/2"	N/A
CONCRETE	N/A	-	-	-



RAKE STL. LINE POST

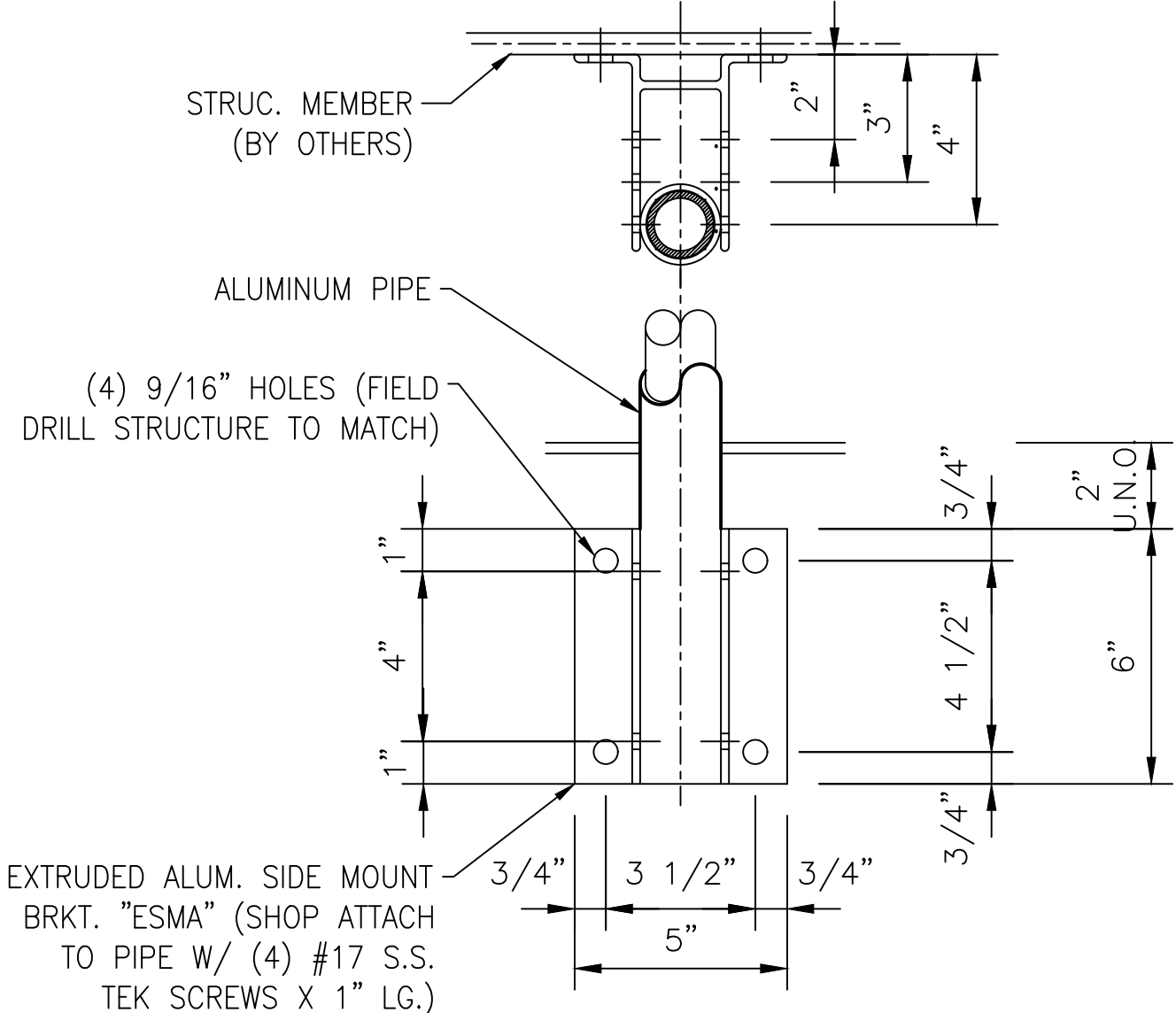
SB%%

MOUNTING CONDITIONS				
MATERIAL	FASTENER TYPE	FASTENER DIAMETER	FASTENER LENGTH	MINIMUM EMBED DEPTH
STEEL	N/A	-	-	-
CONCRETE	N/A	-	-	-



EMBED POST

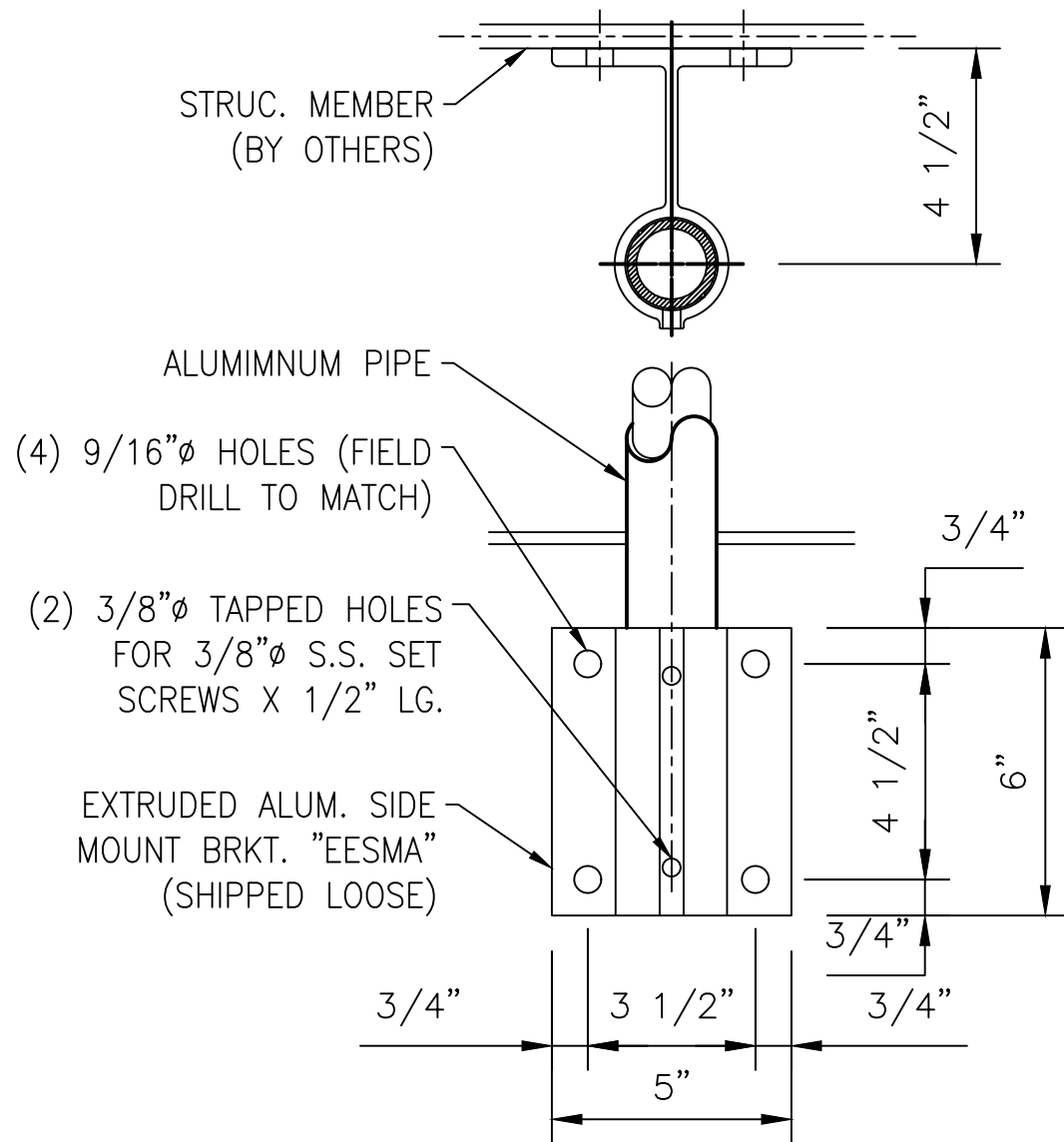
MOUNTING CONDITIONS				
MATERIAL	FASTENER TYPE	FASTENER DIAMETER	FASTENER LENGTH	MINIMUM EMBED DEPTH
STEEL	S.S. MACHINE BOLT	1/2"	2"	N/A
CONCRETE	S.S. ADHESIVE ANCHORS	1/2"	6"	4 1/2"



SIDE MOUNT 4-HOLE

ESMA

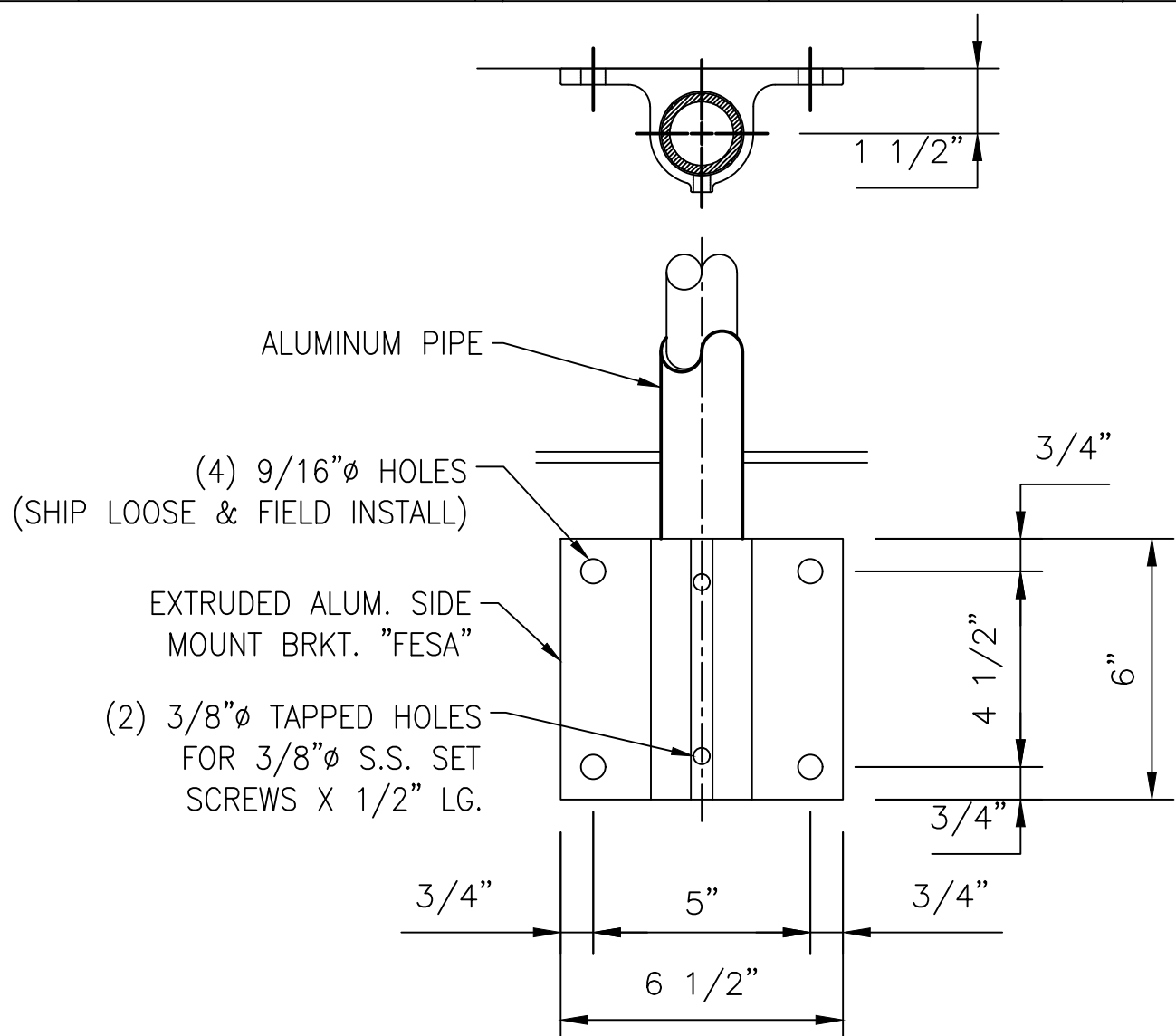
MOUNTING CONDITIONS				
MATERIAL	FASTENER TYPE	FASTENER DIAMETER	FASTENER LENGTH	MINIMUM EMBED DEPTH
STEEL	S.S. MACHINE BOLT	1/2"	2"	N/A
CONCRETE	S.S. ADHESIVE ANCHORS	1/2"	6"	4 1/2"



SIDE MOUNT 4-HOLE

EESMA

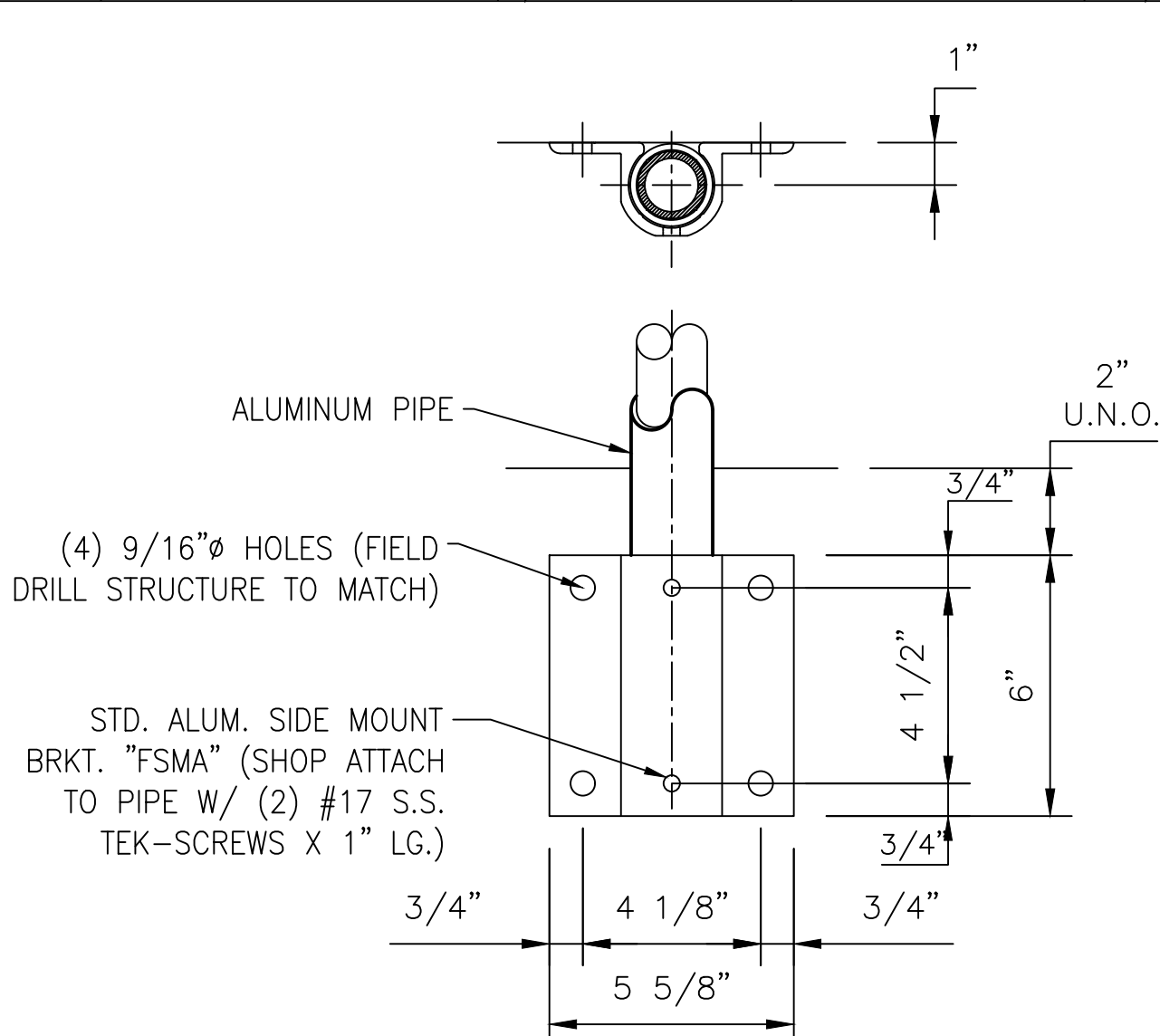
MOUNTING CONDITIONS				
MATERIAL	FASTENER TYPE	FASTENER DIAMETER	FASTENER LENGTH	MINIMUM EMBED DEPTH
STEEL	S.S. MACHINE BOLT	1/2"	2"	N/A
CONCRETE	S.S. ADHESIVE ANCHOR	1/2"	6"	4 1/2"



FLUSHED ENCLOSED SIDE


FESA

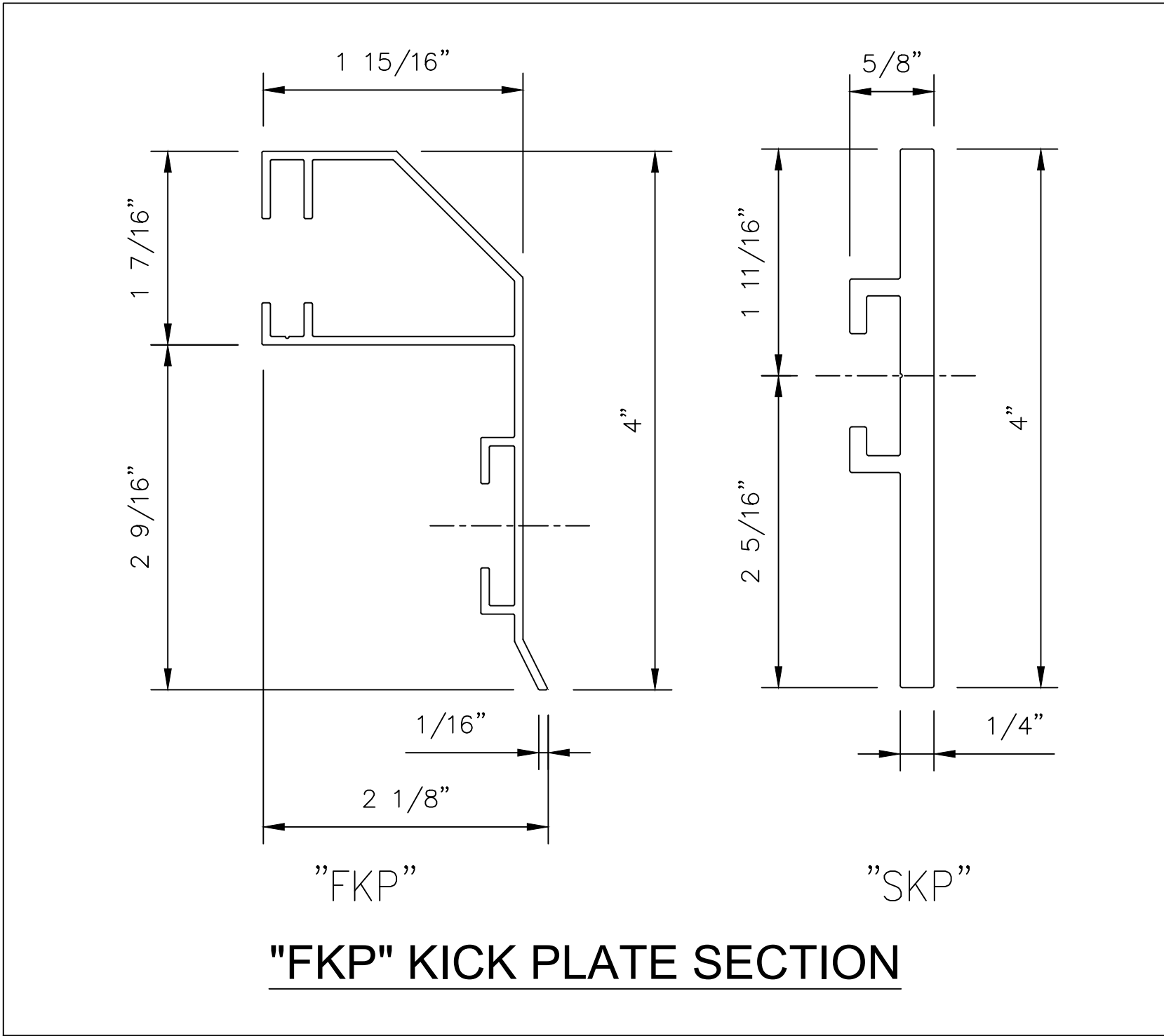
MOUNTING CONDITIONS				
MATERIAL	FASTENER TYPE	FASTENER DIAMETER	FASTENER LENGTH	MINIMUM EMBED DEPTH
STEEL	S.S. MACHINE BOLT	1/2"	2"	N/A
CONCRETE	S.S. ADHESIVE ANCHOR	1/2"	6"	4 1/2"



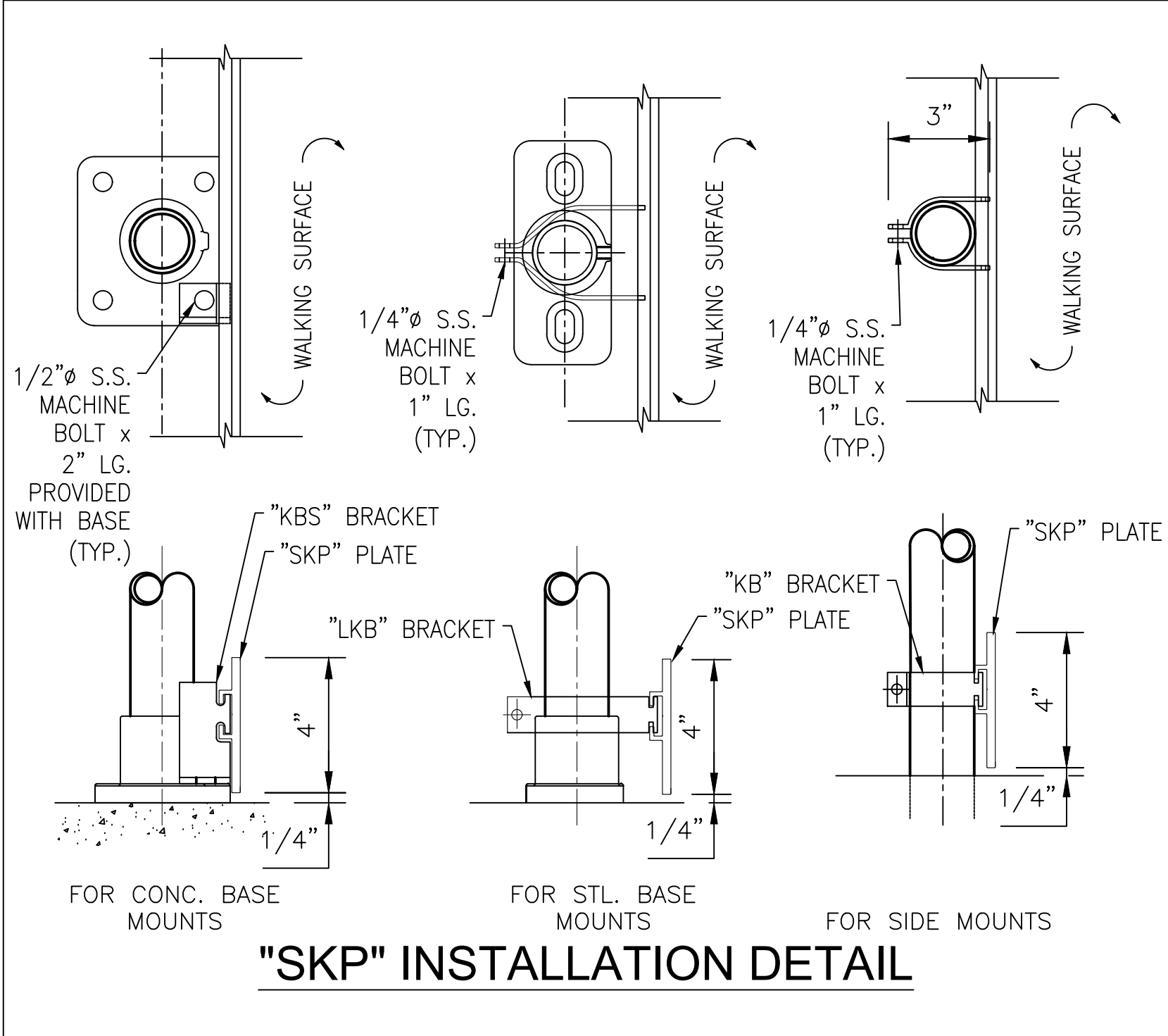
SIDE MOUNT 4-HOLE

FSMA

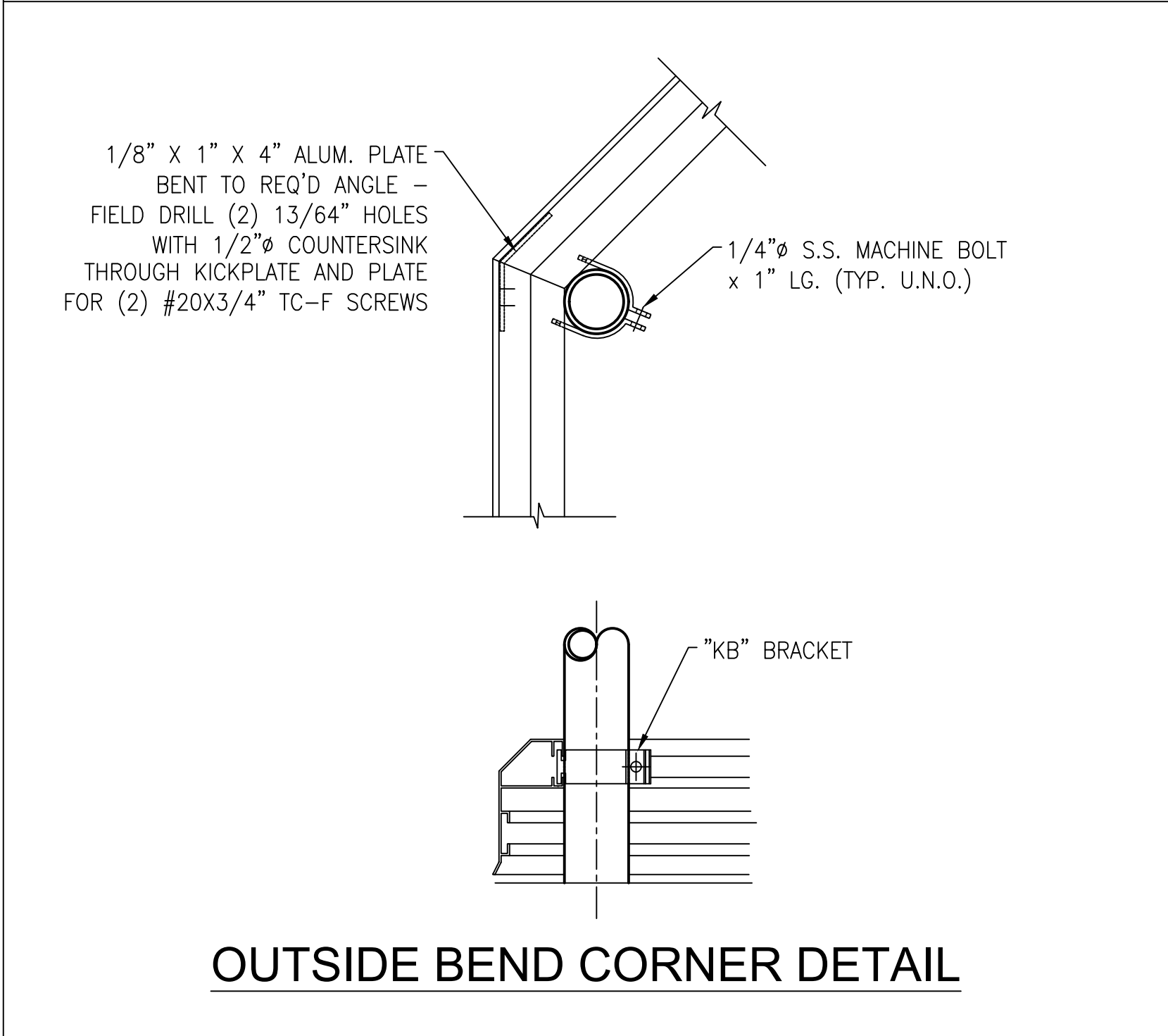
REV DESCRIPTION					DATE	
<div><p>3000 YOUNGFIELD ST. SUITE 275 WHEAT RIDGE, CO 80215 Ph. (720)508-3819 FAX (720)409-3843</p></div>					NOTICE TO CONTRACTOR AND ERECTOR: BACK CHARGES FOR CORRECTIVE WORK OR REPLACEMENT MATERIALS WILL NOT BE ACCEPTED UNLESS AUTHORIZED BY PEAK TO PEAK ENGINEERED RAILINGS, INC. BEFORE SUCH COSTS ARE INCURRED	
STANDARD DETAILS						
CITY, ST						
ALUMINUM HANDRAIL - TCF SYSTEM - SUB-ASSEMBLED						
DESIGNER	DESIGNER	CUSTOMER	CUSTOMER	DWG TITLE		HANDRAIL DETAILS
CUSTOMER JOB #	XXXX-XX	PRINT DATE	3/13/2020	ISSUE DATE	3/13/2020	CONTRACT NO
DETAILED BY		INT	CHECKER	INT	SCALE	NTS
						XXX-XXX
						SD-3



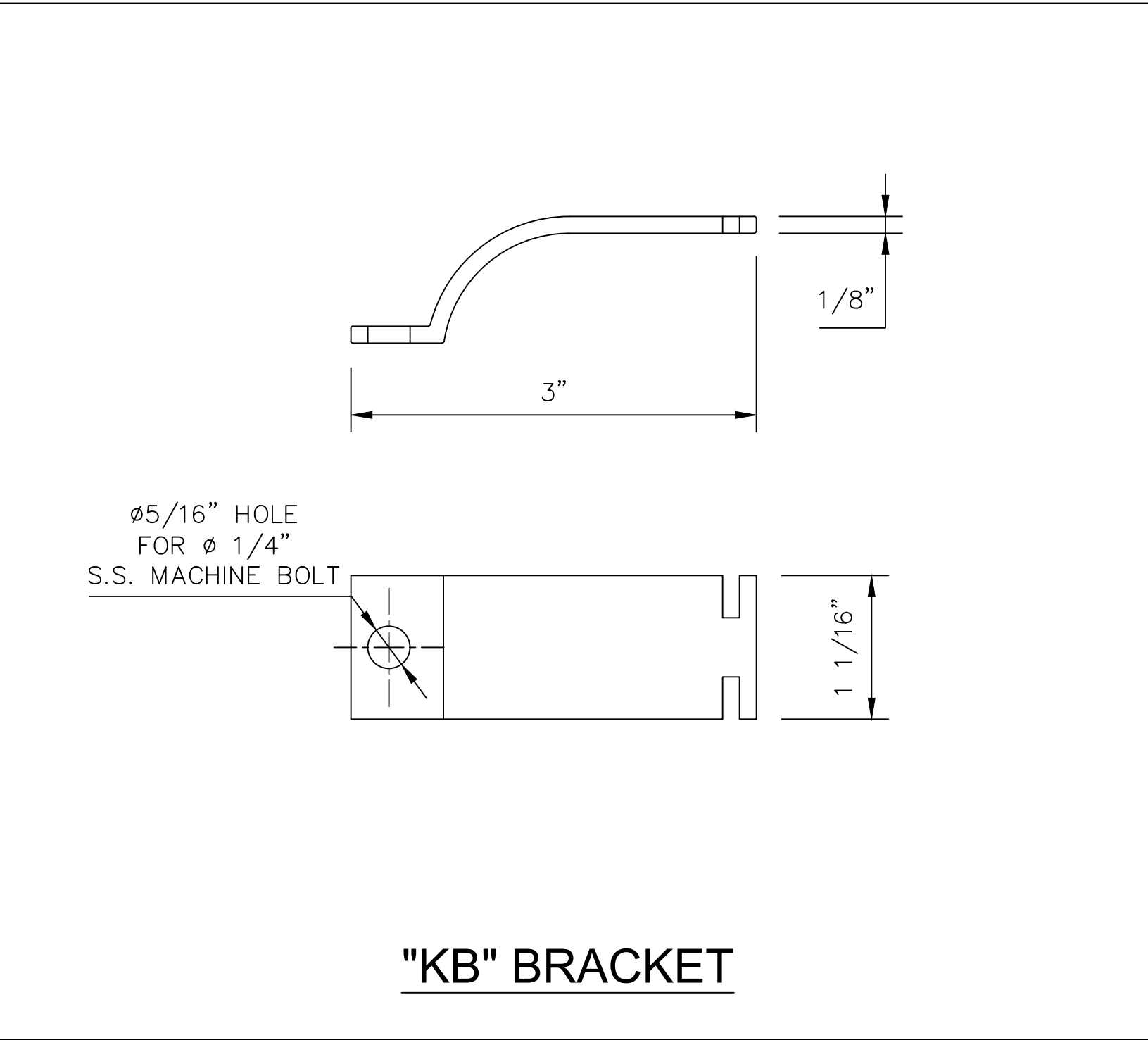
"FKP" KICK PLATE SECTION



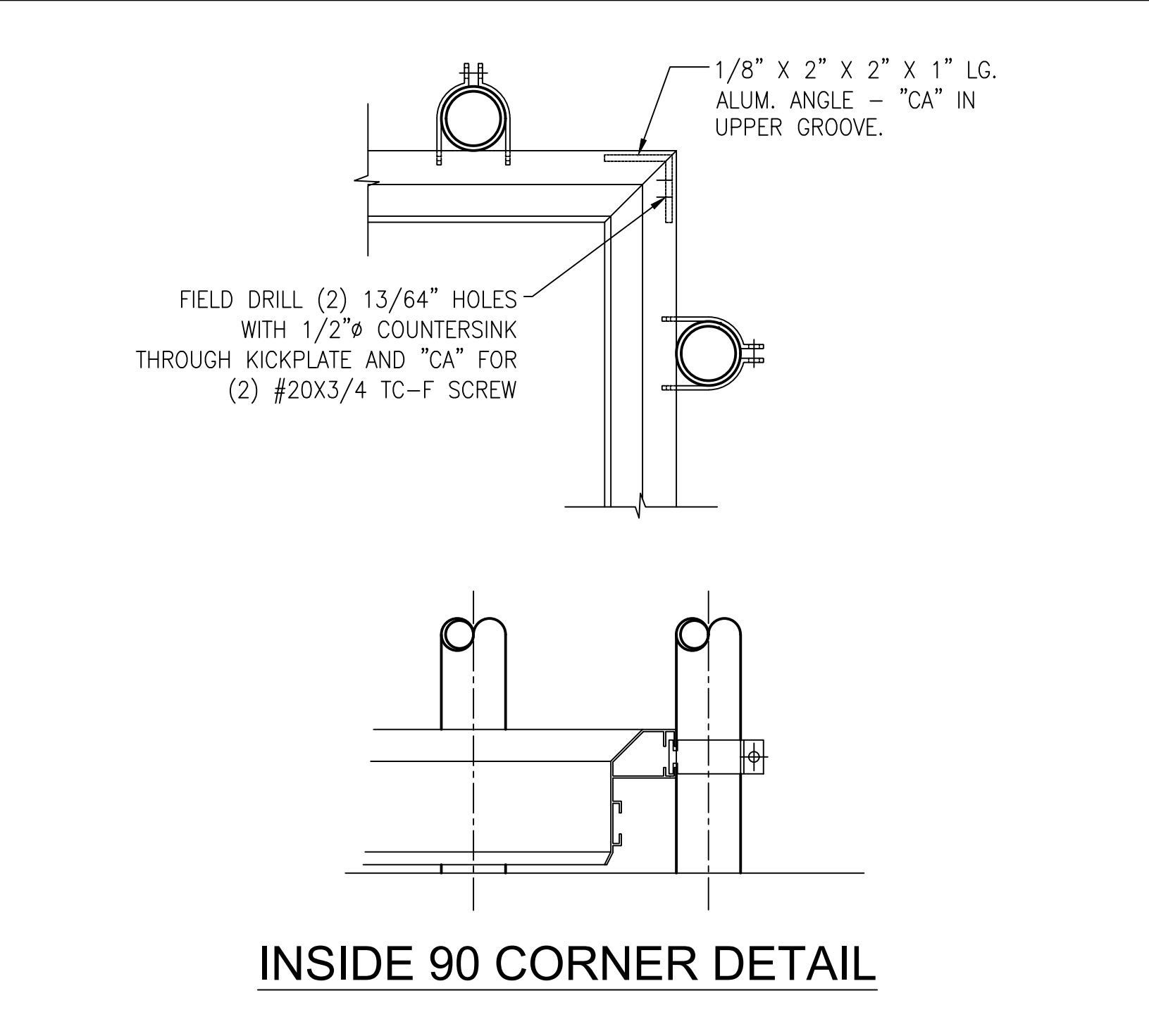
"SKP" INSTALLATION DETAIL



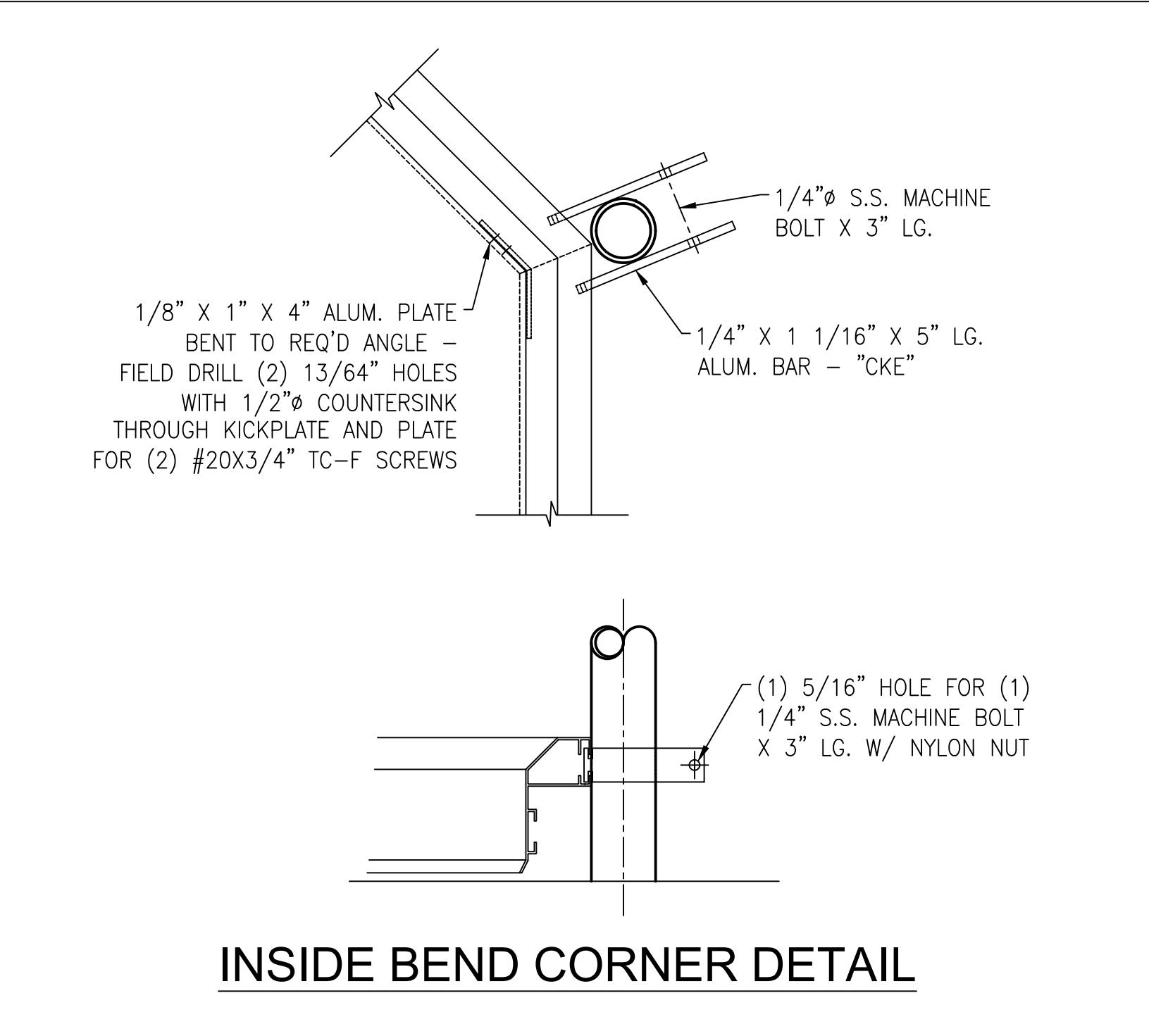
OUTSIDE BEND CORNER DETAIL



"KB" BRACKET



INSIDE 90 CORNER DETAIL



INSIDE BEND CORNER DETAIL

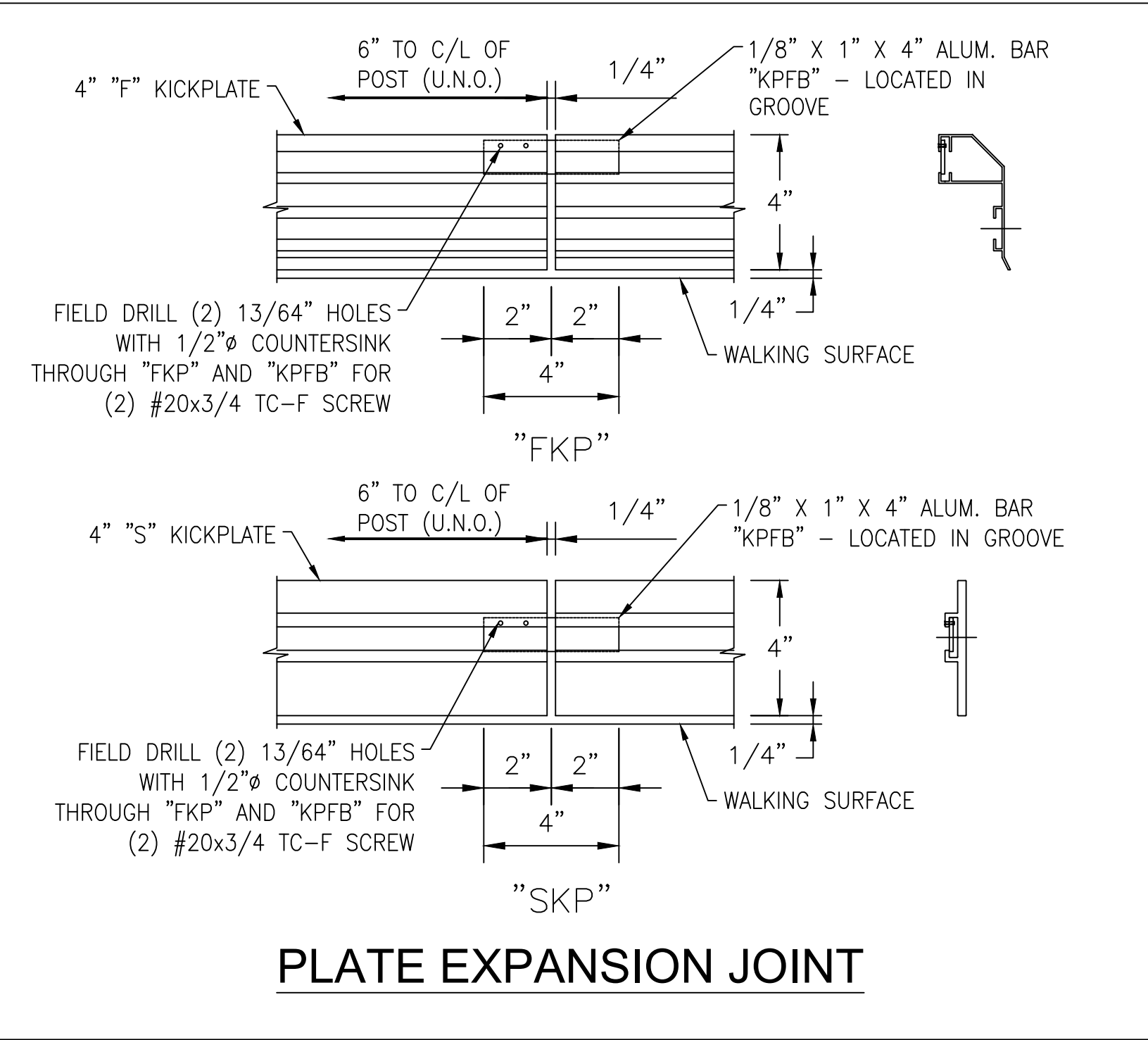
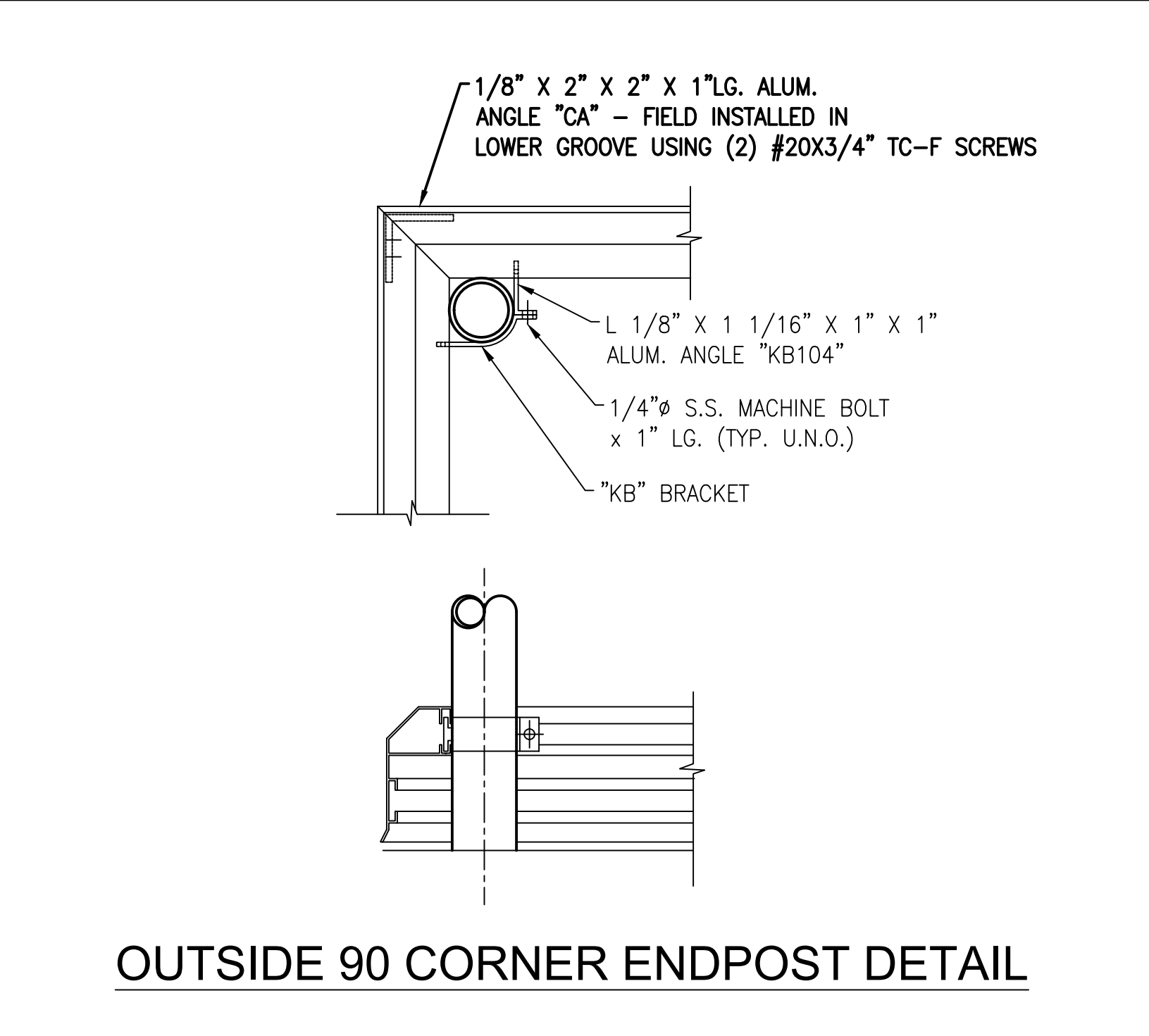
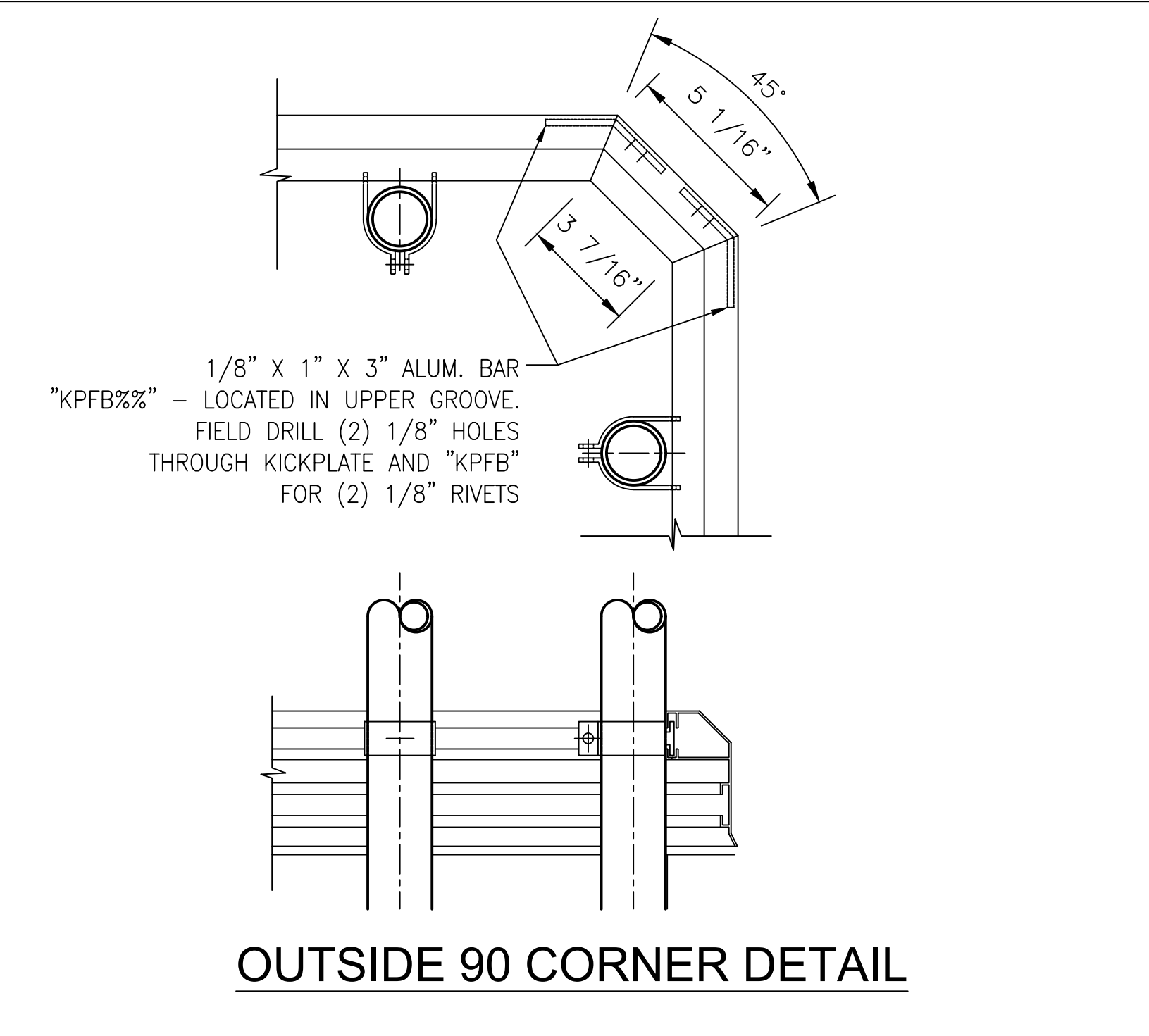


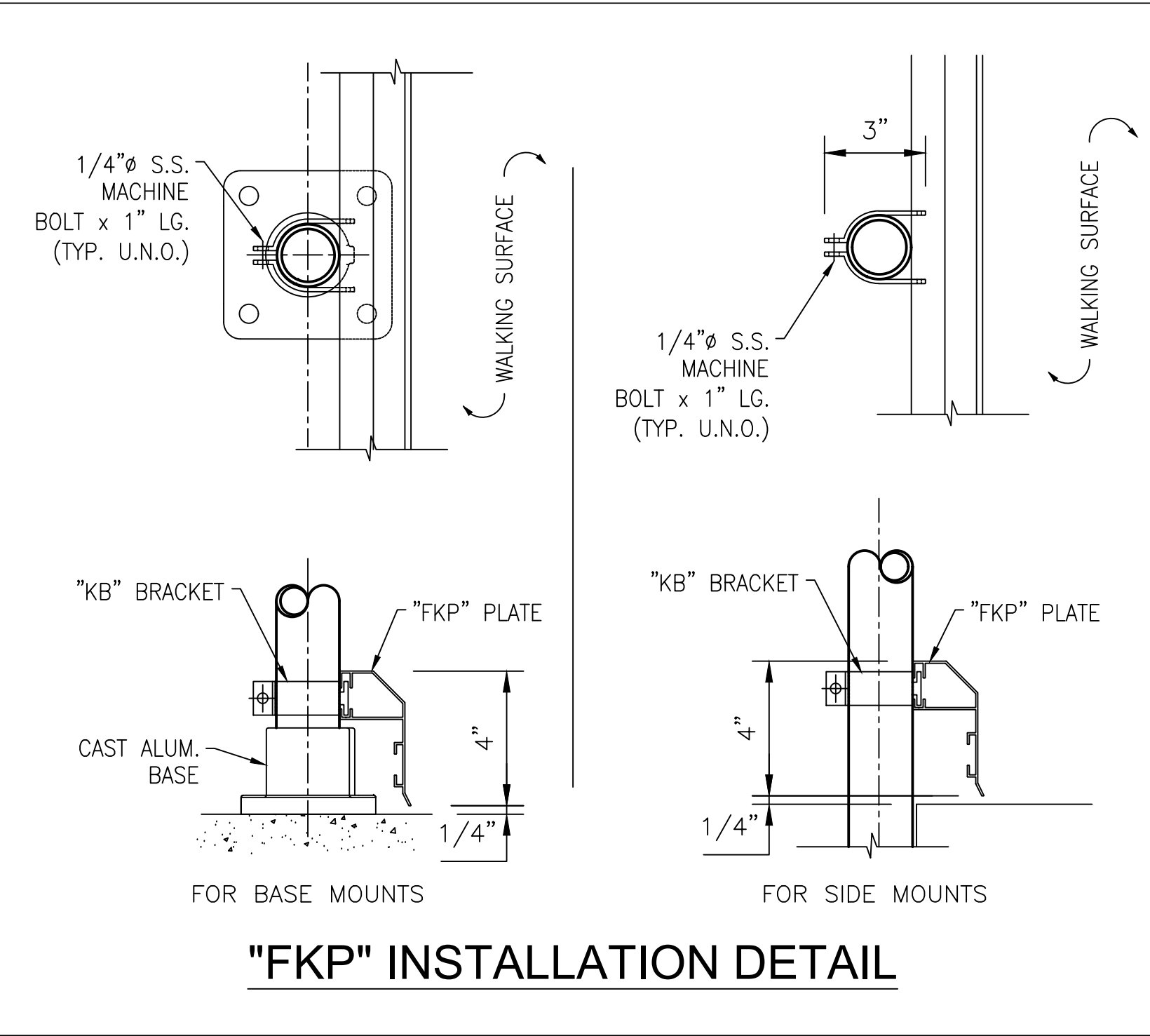
PLATE EXPANSION JOINT



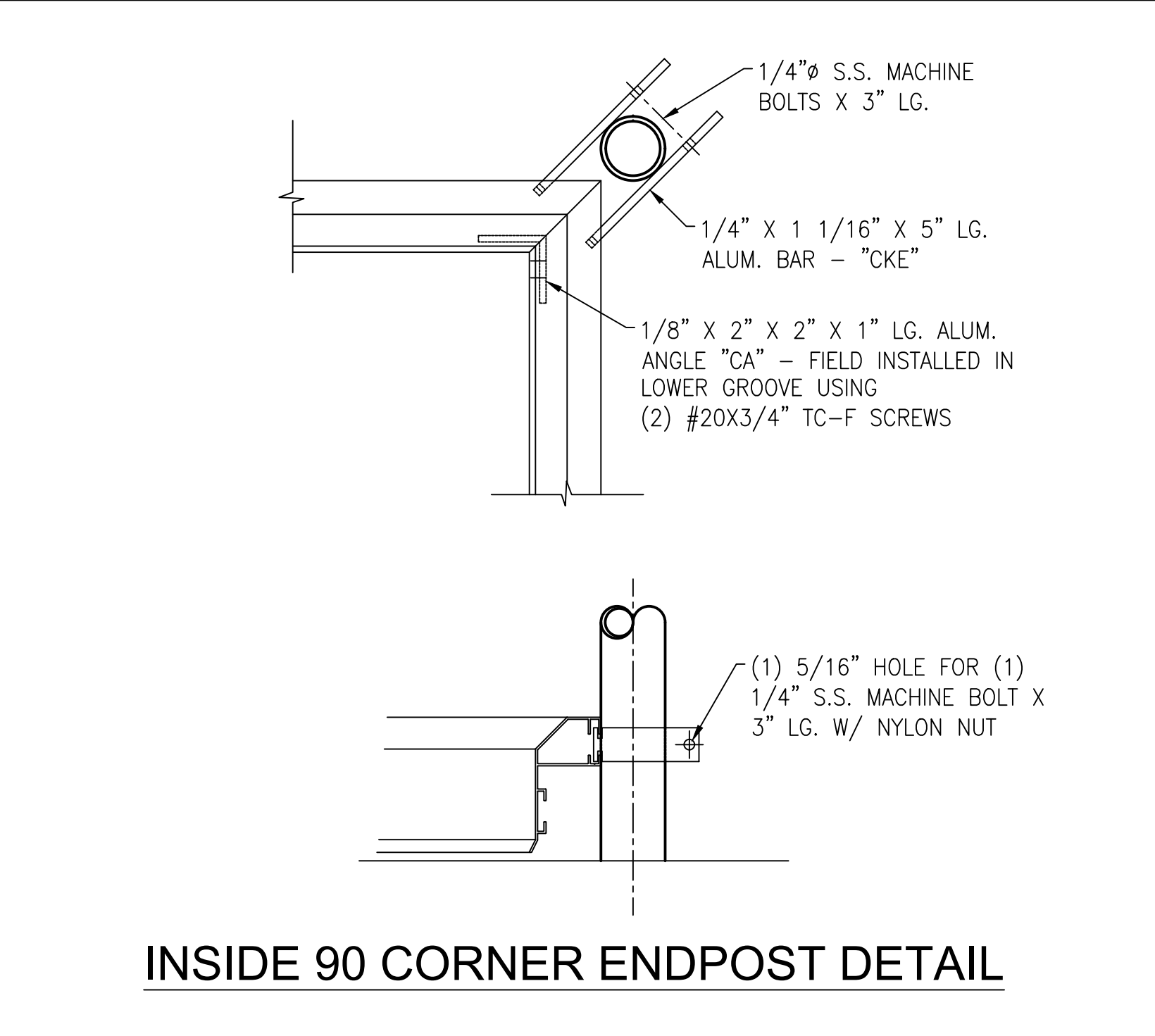
OUTSIDE 90 CORNER ENDPOST DETAIL



OUTSIDE 90 CORNER DETAIL



"FKP" INSTALLATION DETAIL



INSIDE 90 CORNER ENDPOST DETAIL

TYPICAL NOTES:


1.) ALL KICK PLATE SHALL BE:

- a) 4" EXTRUDED ALUMINUM "FKP" OR "SKP" PLATE.
- b) SHIPPED LOOSE IN 24'-0" STOCK LENGTHS
FOR FIELD CUTTING AND DRILLING AS REQ'D.
- c) FIELD ATTACHED TO POSTS.

2.) INSTALL USING 1/4"Ø S.S. BOLT (U.N.O.)

ERECTOR NOTE:

TO INSTALL TCF BOLTS – DRILL A 13/64" PILOT HOLE
WITH A 1/2" COUNTERSINK AND TIGHTEN TO FIT.

REV	DESCRIPTION	DATE
	 3000 YOUNGFIELD ST. SUITE 275 WHEAT RIDGE, CO 80215 Ph. (720)508-3819 FAX (720)409-3843	NOTICE TO CONTRACTOR AND ERECTOR: BACK CHARGES FOR CORRECTIVE WORK OR REPLACEMENT MATERIALS WILL NOT BE ACCEPTED UNLESS AUTHORIZED BY PEAK TO PEAK ENGINEERED RAILINGS, INC. BEFORE SUCH COSTS ARE INCURRED

STANDARD DETAILS

CITY, ST

ALUMINUM HANDRAIL - TCF SYSTEM - SUB-ASSEMBLED

DESIGNER	DESIGNER	CUSTOMER	CUSTOMER	DWG TITLE	KICKPLATE DETAILS
CUSTOMER JOB #	XXXX-XX	PRINT DATE	3/13/2020	ISSUE DATE	3/13/2020
DETAILED BY	INT	CHECKER	INT	SCALE	NTS
				CONTRACT NO	XXX-XXX
				DRAWING NO.	KP-1