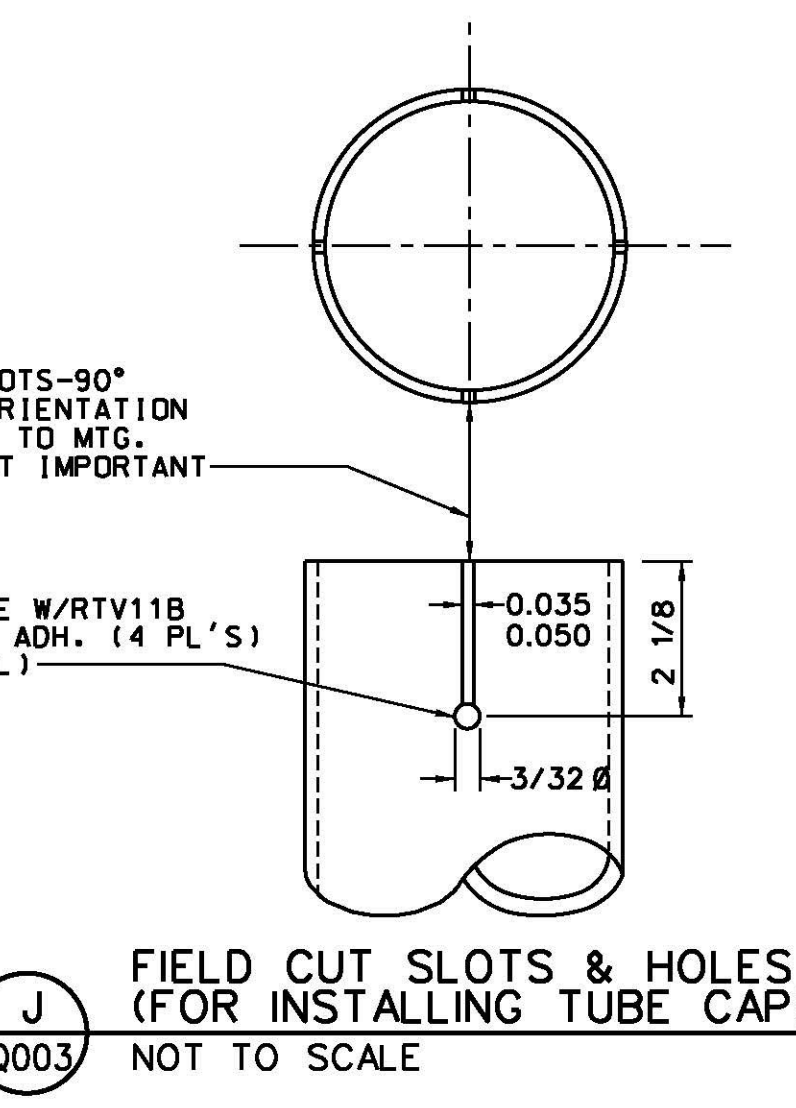
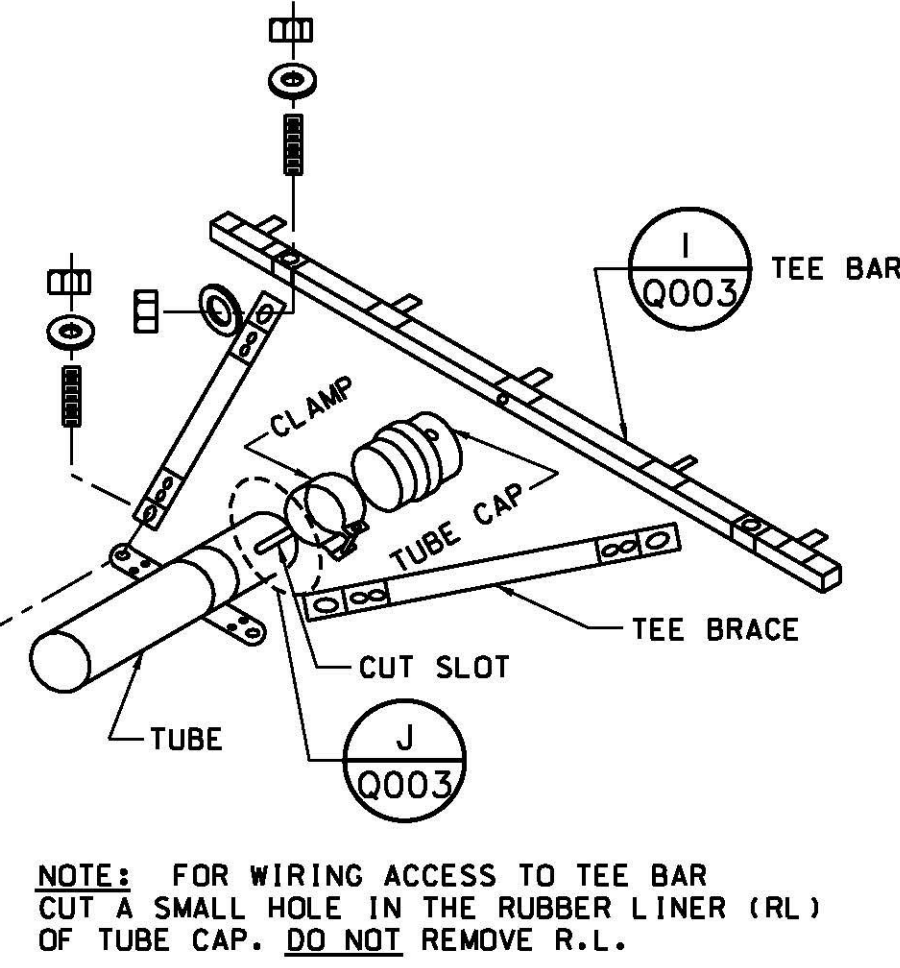
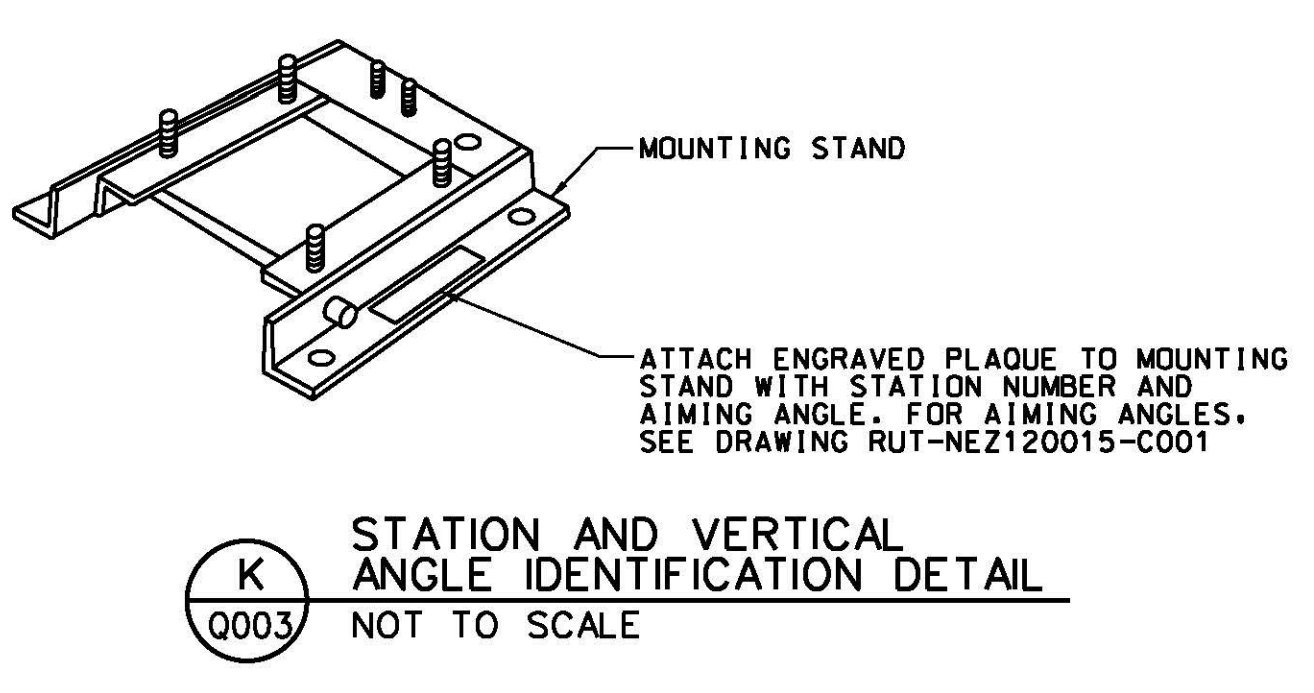
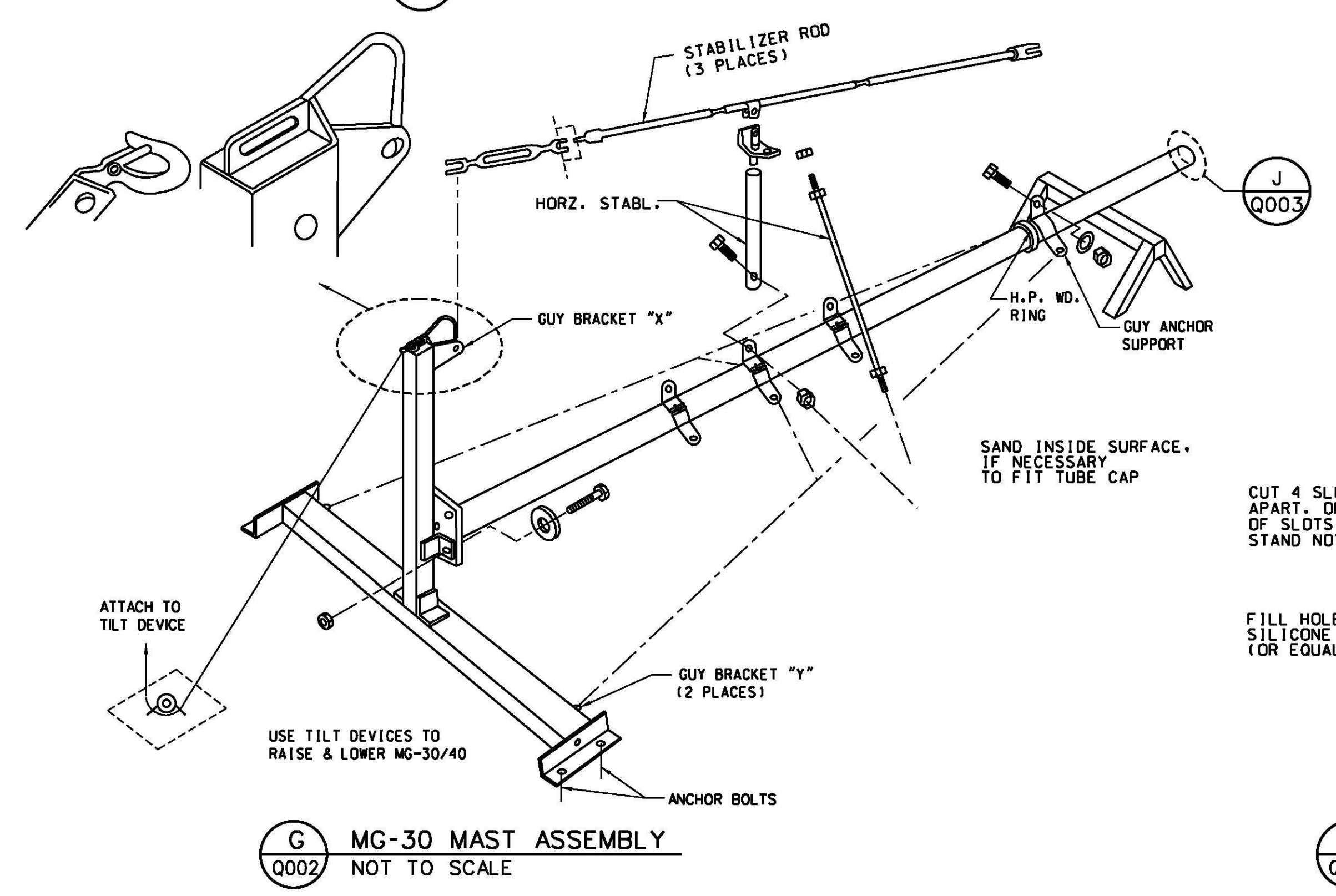
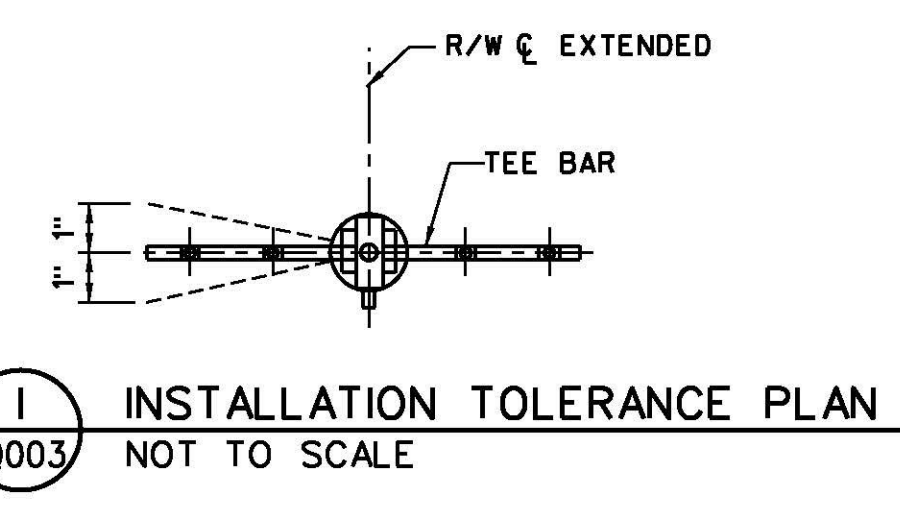
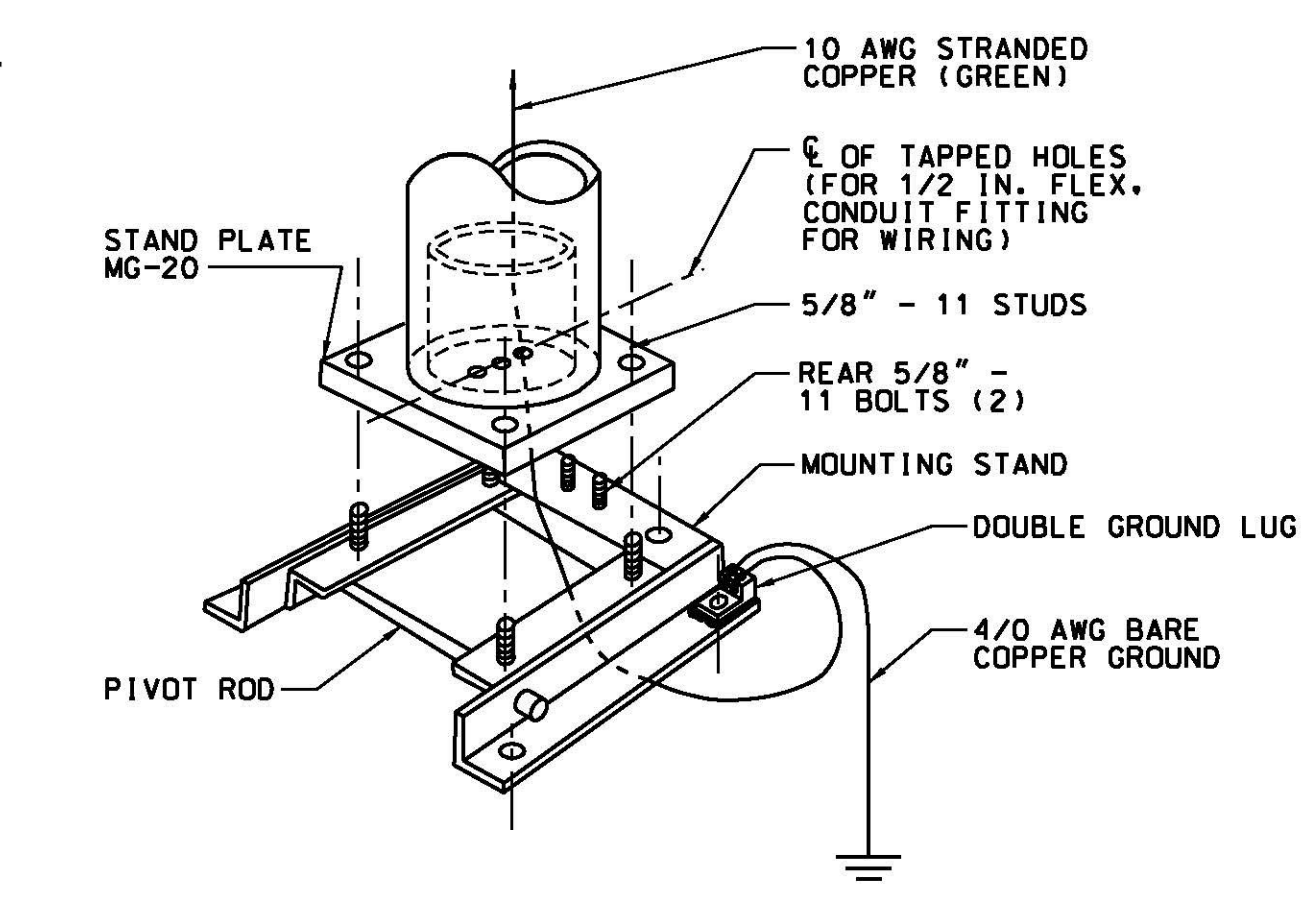
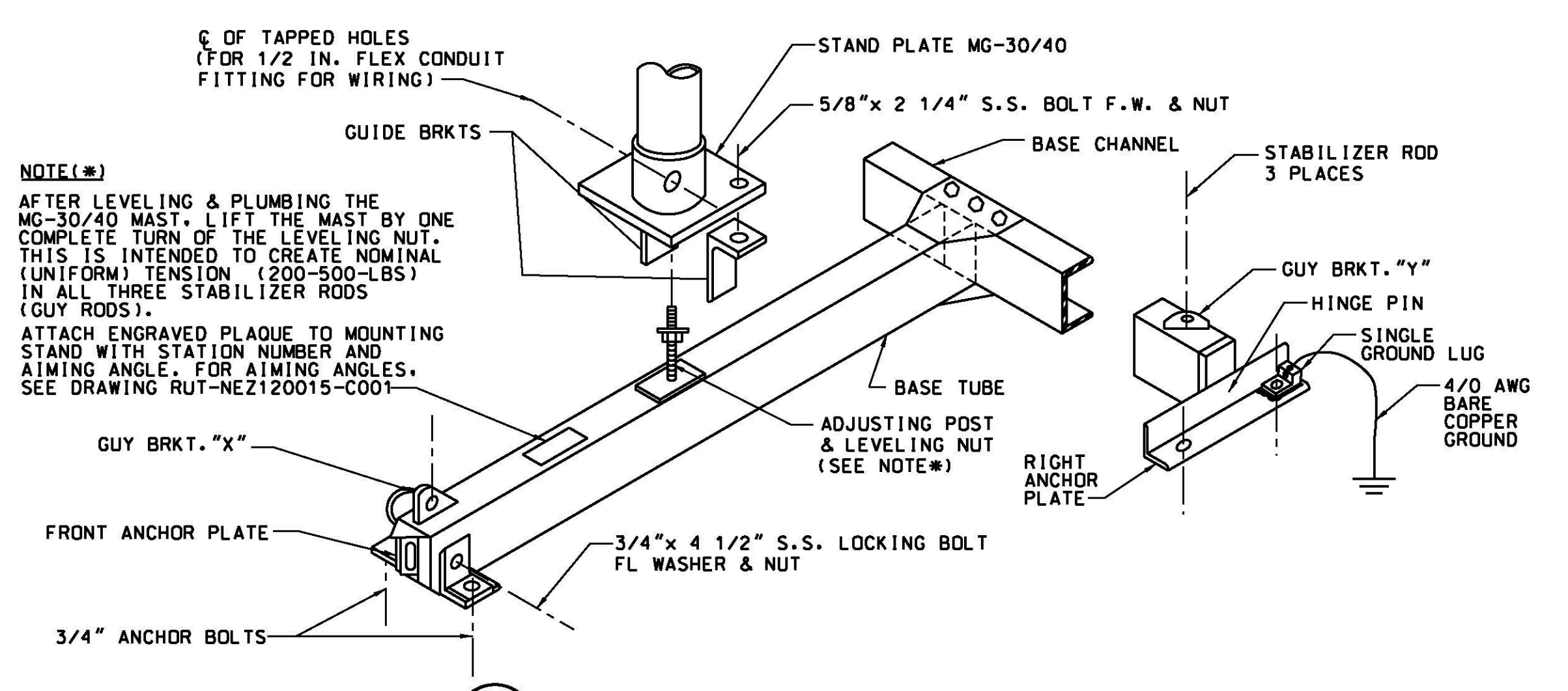
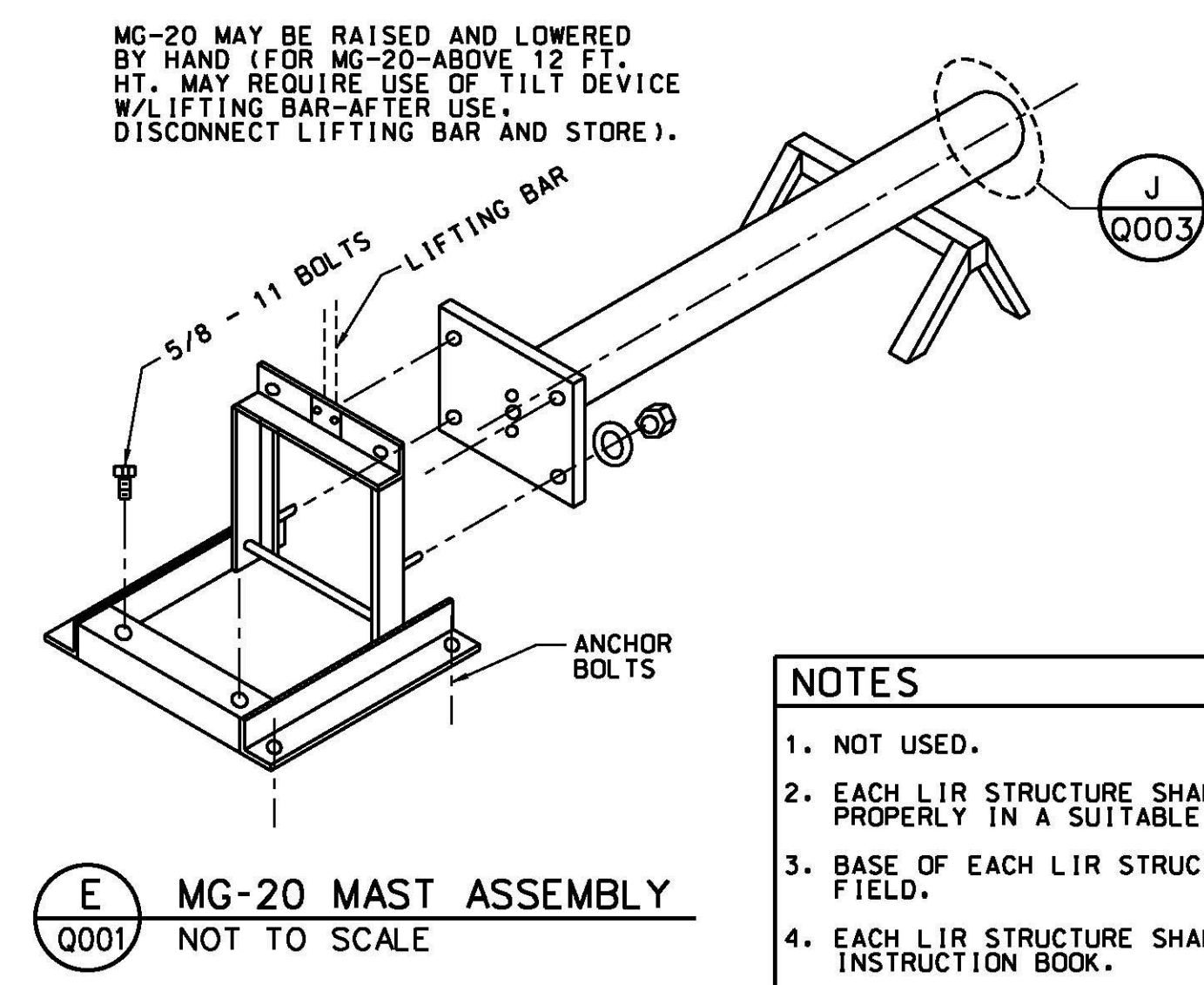
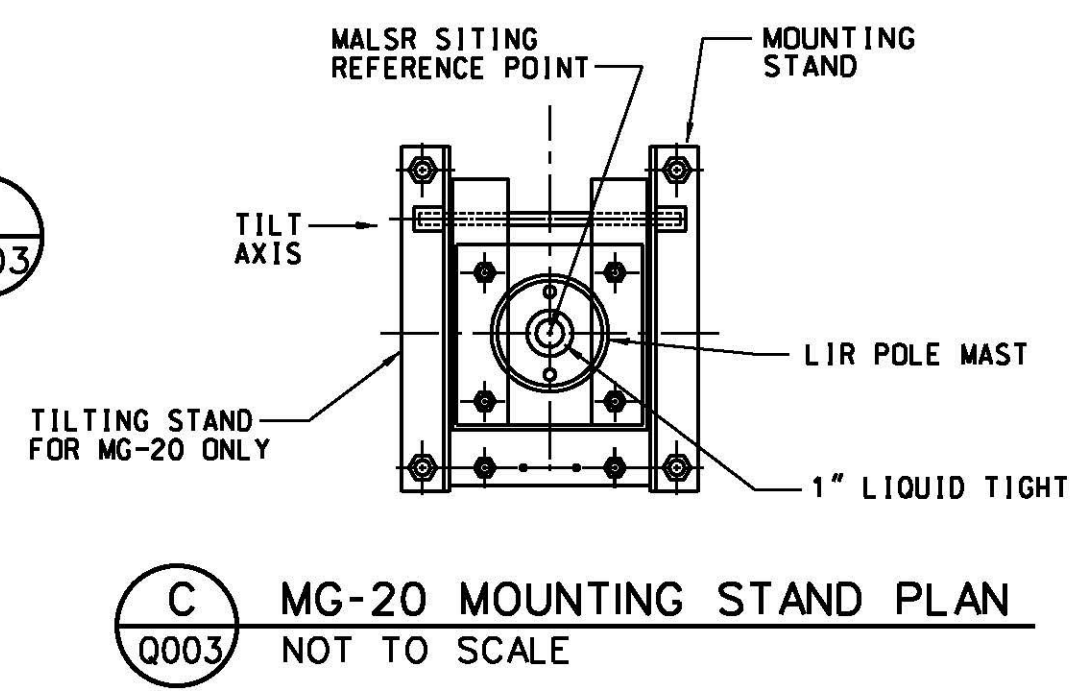
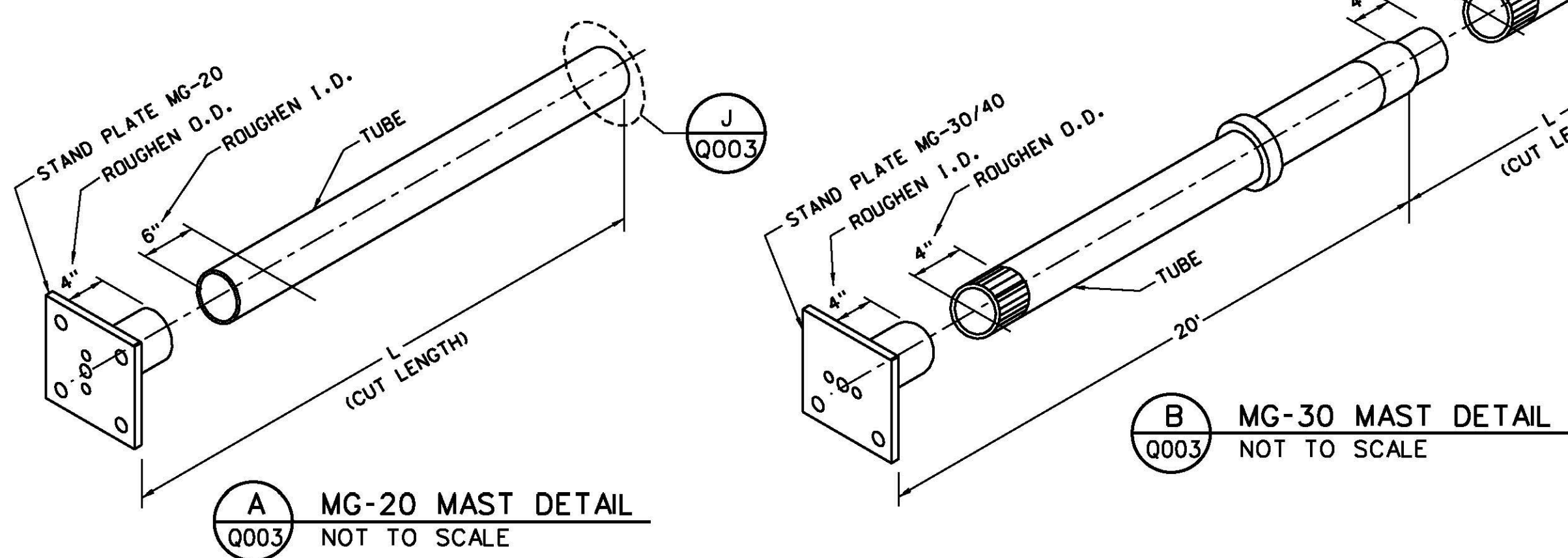


CAUTION 1. MAINTAIN MSDS ON SITE AT ALL TIMES.
CAUTION 2. BOND STRENGTH IS SENSITIVE TO SURFACE PREPARATION TEMPERATURE & CURE TIME. INCREASE TEMP. CAN REDUCE CURE TIME. FOLLOW MANUFACTURERS RECOMMENDATIONS.
CAUTION 3. STABILIZER RODS @ 6 IN. I.D. (LIR) TUBES: HANDLE WITH CARE. CHEMLOCK 304 MANUFACTURED BY: HUGHSON CHEMICALS, LORD CORP., ERIE, PENN.

Record Drawings
 Work completed in general conformance with contract plans.



NOTE(*)
 AFTER LEVELING & PLUMBING THE MG-30/40 MAST, LIFT THE MAST BY ONE COMPLETE TURN OF THE LEVELING NUT. THIS IS INTENDED TO CREATE NOMINAL (UNIFORM) TENSION (200-500-LBS) IN ALL THREE STABILIZER RODS (GUY RODS).
 ATTACH ENGRAVED PLAQUE TO MOUNTING STAND WITH STATION NUMBER AND AIMING ANGLE. FOR AIMING ANGLES, SEE DRAWING RUT-NEZ120015-C001

- NOTES**
1. NOT USED.
 2. EACH LIR STRUCTURE SHALL BE CUT ACCURATELY, AND BONDED & CURED PROPERLY IN A SUITABLE WORK ROOM.
 3. BASE OF EACH LIR STRUCTURE SHALL BE GROUNDED ELECTRICALLY IN THE FIELD.
 4. EACH LIR STRUCTURE SHALL BE MAINTAINED PER MANUFACTURER'S INSTRUCTION BOOK.

- ASSEMBLY INSTRUCTIONS**
1. FOR EACH LIR STRUCTURE MG-20 AND MG-30, DETERMINE REQUIRED TUBE LENGTH L TO ACHIEVE THE TOWER HEIGHTS AND LIGHT FIXTURE ELEVATIONS AS SHOWN ON DRAWING RUT-NEZ120015-Q001 AND Q002. FIELD VERIFY ELEVATION OF EACH FOUNDATION.
 2. CUTTING & BONDING INSTRUCTIONS: SEE DETAILS A & B. CUT TUBE LENGTHS FROM ITEM 2 USING A TABLE SAW WITH A DIAMOND OR CARBIDE ABRASIVE BLADE. ALL SAW CUTS SHALL BE AT RT. ANGLE TO TUBE AXIS. DEBURR SAW CUT EDGES WITH A FILE. FOR BONDING, ROUGHEN SURFACES TO BE BONDED, AS SHOWN IN DETAILS A & B USING EMERY CLOTH. CLEAN ROUGHENED SURFACES THOROUGHLY WITH A SOLVENT (TRICHLOROETHYLENE OR ACETONE). MIX EQUAL PARTS OF CHEMLOCK 304-1 EPOXY RESIN & 304-2 HARDENER. STIR THOROUGHLY BUT AVOID AIR INCLUSION. FOR EACH JOINT TO BE BONDED, SPREAD A LIGHT COAT OF MIXED ADHESIVE ON BOTH THE SURFACES TO BE BONDED. FOR MG-20: SLOWLY SLIDE TUBE ONTO STAND PLATE WHILE ROTATING IT TO EXCLUDE AIR. CURE 48 HOURS AT ROOM TEMPERATURE ABOVE 65 DEG F.
 FOR MG-30: BOND THE TWO TUBES TOGETHER FIRST. BY SLOWLY SLIDING ONE TUBE INTO THE OTHER WHILE ROTATING IT. CURE FOR 48 HOURS AT ROOM TEMP. ABOVE 65 DEG F. NEXT, BOND THE SPLICED TUBE TO THE STAND PLATE AS FOR MG-20, EXCEPT THE SPLICED TUBE IS SLOWLY SLID INTO THE STAND PLATE. FOR REFERENCE PURPOSE THE TUBES BONDED TO THE STAND PLATE ARE CALLED MASTS (E.G. MG-20 MAST, MG-30 MAST).
 3. ASSEMBLY INSTRUCTIONS: IMPORTANT: ALL LIR STRUCTURES ARE TO BE ASSEMBLED IN HORIZONTAL POSITION (DETAILS E & G). ELECTRICAL WORK NOT SHOWN HERE. MG-20: USE MOUNTING STAND ASSEMBLY SHOWN IN DETAIL D. SET MOUNTING STAND ON ANCHOR BOLTS, SHIM TO LEVEL. FASTEN WITH (4) 3/4" NUTS. REMOVE (2) 5/8" BOLTS AT REAR OF MOUNTING STAND ASSEMBLY & PIVOT INNER SECTION UP TO VERTICAL POSITION. PLACE STAND PLATE (BOTTOM OF MAST) OVER (4) 5/8" STUDS IN MOUNTING STAND AND FASTEN WITH HEX NUTS. NOTE POSITION OF TAPPED HOLES IN STAND PLATE. FOR ATTACHING TEE-ASSEMBLY, REFER TO DETAIL H. MG-30: USE MOUNTING FRAME ASSEMBLY SHOWN IN DETAIL F. INSERT HINGE PINS WHICH ARE ATTACHED TO BASE CHANNEL, INTO LEFT & RIGHT ANCHOR PLATES. PLACE FRONT ANCHOR PLATE & LEFT & RIGHT ANCHOR PLATES OVER 3/4" ANCHOR BOLTS. CONNECT BASE TUBE TO BASE CHANNEL. MAKE SURE MOUNTING FRAME ASSEMBLY SWINGS FREELY ON HINGE PINS. SHIM TO LEVEL & TIGHTEN ANCHOR BOLTS WITH 3/4" NUTS. RAISE MOUNTING FRAME ARM TO ABSOLUTE VERTICAL. CHECK WITH LEVEL. ATTACH THE GUY ANCHOR SUPPORT ABOVE THE HOOP WOUND RING. ATTACH STABILIZER RODS TO 3 GUY ANCHOR ENDS (DETAIL G). BOLT 2 GUIDE BRACKETS (DETAIL F) TO BOTTOM OF MAST STAND PLATE WITH 2 5/8" x 2 1/4" S.S. BOLTS & NUTS. DO NOT TIGHTEN. NOTE POSITION OF TAPPED HOLES IN STAND PLATE. SET STAND PLATE OVER ADJUSTING POST. POST GOES INTO HOLE IN CENTER OF STAND PLATE. ADJUST NUT FOR PROPER HEIGHT. SUPPORT UPPER END OF MAST SO IT IS APPROXIMATELY PARALLEL WITH GROUND. CLAMP GUIDE BRACKETS TO BASE TUBE AND TIGHTEN WITH 5/8" BOLTS. FASTEN TURNBUCKLES (ATTACHED TO STABILIZER RODS) TO GUY BRACKETS "X" & "Y" TIGHTEN TURNBUCKLE AT GUY BRACKET "X" UNTIL MAST IS EXACTLY PERPENDICULAR TO MOUNTING FRAME. TIGHTEN OTHER TWO TURNBUCKLES AT GUY BRACKETS "Y". ATTACH HORIZONTAL STABILIZER ASSEMBLY FOR ATTACHING TEE-ASSEMBLY REFER TO DETAIL H.
 4. RAISE EACH LIR STRUCTURE TO VERTICAL POSITION, AND VERIFY THAT EACH BASE AND MAST IS LEVEL AND PLUMB. WITH MG-30 LIR STRUCTURE BASE & MAST IN THE LEVEL & PLUMB POSITION, VERIFY THAT ALL THREE STABILIZER RODS (GUY RODS) ARE SNUG TIGHT. NEXT, ATTACH TEE-ASSEMBLY (REFER TO DETAIL H).

REV	APPROVED DATE	DESCRIPTION	DATE	REV	REDLINE DATE	APPROVED
05/20/2013	CONSTRUCTION, WR *12507 (DG)	992395	10/02/2012			

DEPARTMENT OF TRANSPORTATION
 FEDERAL AVIATION ADMINISTRATION
 ATO - TECHNICAL OPERATIONS EASTERN SERVICE AREA

MALS R
 RUNWAY 19
 LOW IMPACT RESISTANT (LIR) STRUCTURES
 ASSEMBLY AND MOUNTING DETAILS

RUTLAND	RUTLAND - SOUTHERN VERMONT REGIONAL AIRPORT	VT
DESIGNED	DLW	ISSUED BY
DRAWN	DLW	ENGINEERING SERVICES
CHECKED	DLW	NAVAIDS
PROJECT ENGINEER	MGR: CONSTRUCTION - CENTER C	DATE
		05/20/2013
		992395
		RUT-NEZ120015-Q003

PROJECT RECORD DRAWINGS
 THIS DRAWING PRODUCED ON NEW ENGLAND REGION MICROSTATION SYSTEM

10/14/2013 10:30:16 AM Plotted by: Linda CTR LoPa

ISSUED FOR: CONSTRUCTION