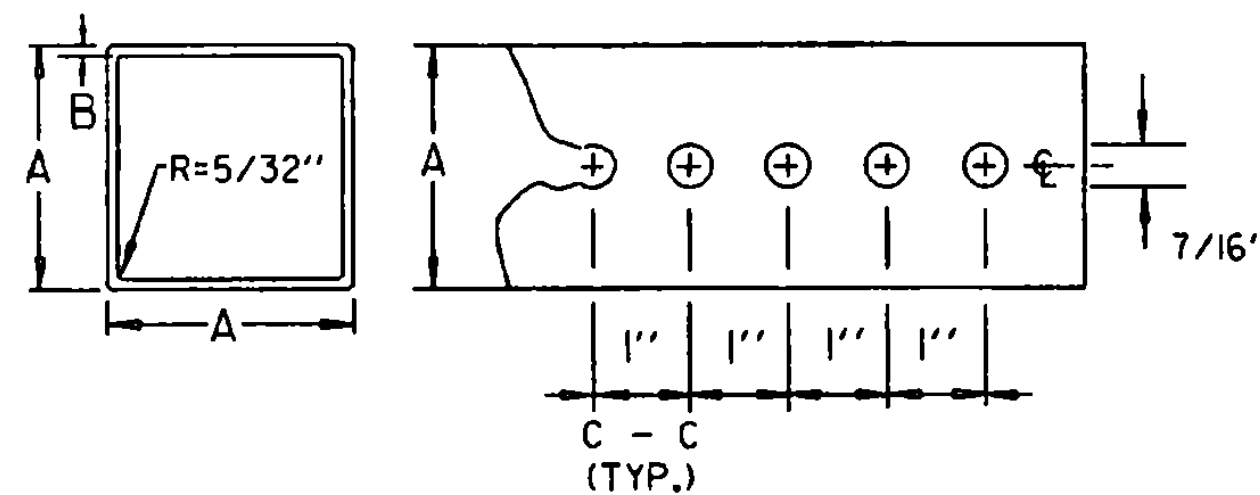


GUARDRAIL DEFLECTION CHART
(PER AASHTO - ROADSIDE DESIGN GUIDE - 1988)

TYPE	GR POST SPACING	DEFLECTION
THREE CABLE W/STEEL POSTS	16' - 0"	12'
W/WOODEN POSTS	12' - 6"	12'
W-BEAM W/WEAK POST	12' - 6"	7'
W/STRONG POST	6' - 3"	3'
BOX BEAM	6' - 0"	5'
THRIE BEAM W/WEAK POST	12' - 6"	4'
W/STRONG POST	6' - 3"	2'
LONG-SPAN NESTED W-BEAM GUARDRAIL W/STEEL POSTS	12' - 6" 18' - 9"	3.1' 3.2'

THIS CHART LISTS THE THEORETICAL DEFLECTION DISTANCE UPON IMPACT OF VARIOUS GUARDRAIL WITH DIFFERENT TYPES AND SPACING OF POSTS.



NOTE :

THE POSTS SHALL BE CAREFULLY FORMED OF STEEL WITH A MINIMUM YIELD OF 55,000 PSI, INTO A SIZE AND SHAPE WITH CORNERS INDUCTION WELDED IN SUCH A MANNER THAT NEITHER FLASH NOR WELD SHALL INTERFERE WITH THE TELESCOPING PROPERTIES, NOR DAMAGE THE GALVANIZING.

• THE WALL THICKNESS TOLERANCES SHALL BE +.005 AND -.010 FOR THE 12 GAUGE.

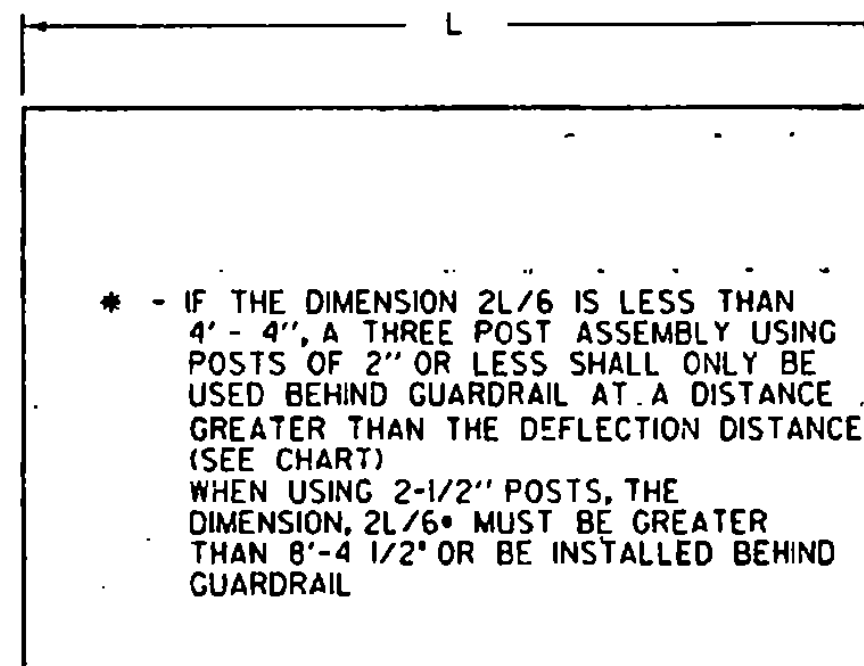
DIMENSION DETAILS AND POST SELECTION CHART

POST SELECTION CHART								
SIGN AREA (FT ²) X H (FT) ≤ SV (SELECTION VALUE)								
POST SIZE	DIMENSIONS			SECTION MODULUS	ONE POST Sv	TWO POST Sv	THREE POST Sv	NUMBER PERMITTED IN 8' PATH
LBS/FT.	A	B	GAUGE	IN ³				
2.30	1-3/4"	.105	12	0.265	73	146	219	TWO
2.65	2"	.105	12	0.372	102	204	306	TWO
3.35	2-1/2"	.105	12	0.642	177	354	531	ONE

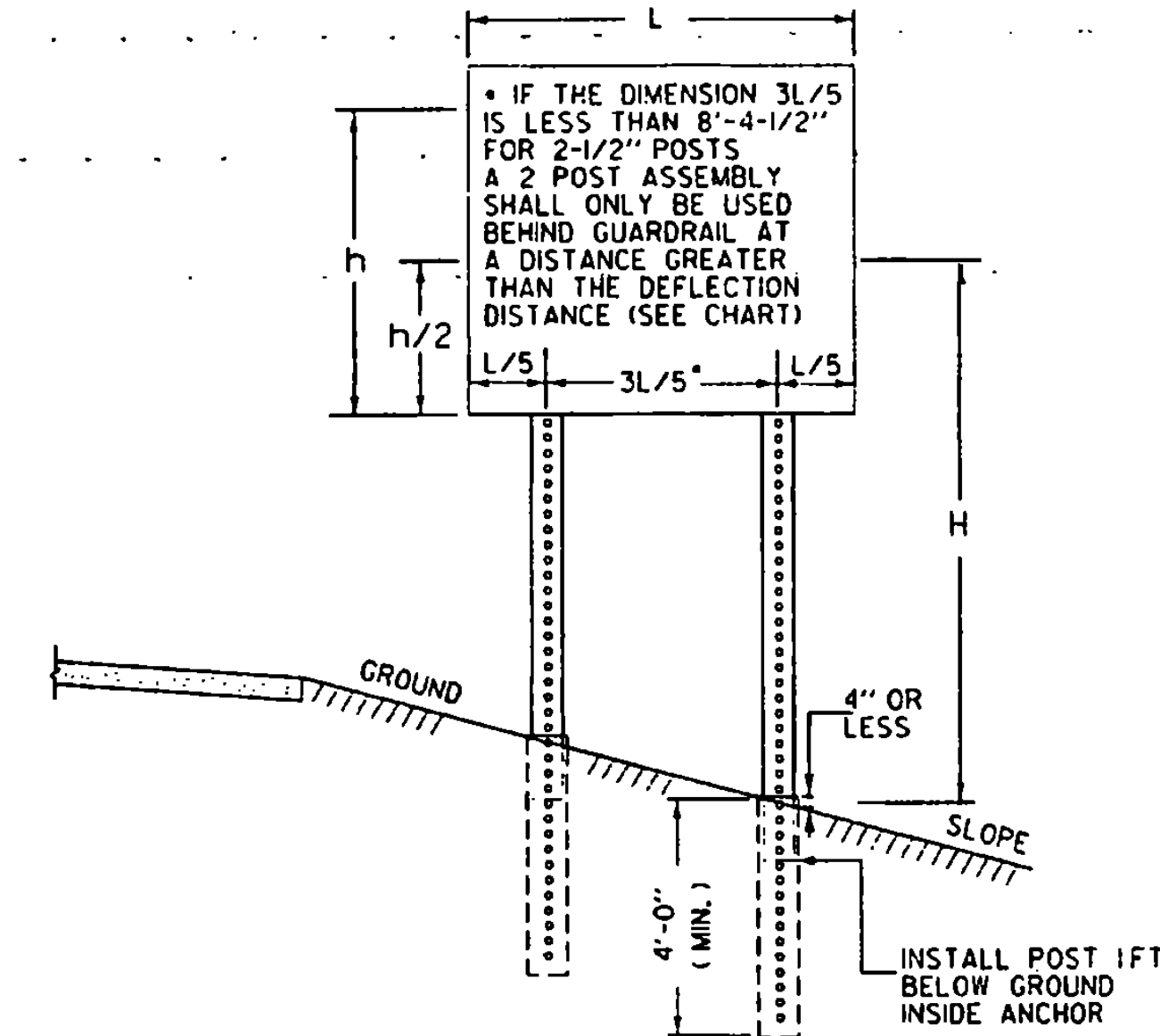
DESIGN CRITERIA:

WIND SPEED = 60 MPH (10 -YEAR MEAN RECURRENCE INTERVAL)
WIND PRESSURE = 14 PSF
STEEL MINIMUM YIELD = 55,000 PSI
ALLOWABLE STRESS = (1.4) 0.60 FY

DATUM	
VERTICAL	N/A
HORIZONTAL	N/A



MULTI-POST INSTALLATIONS



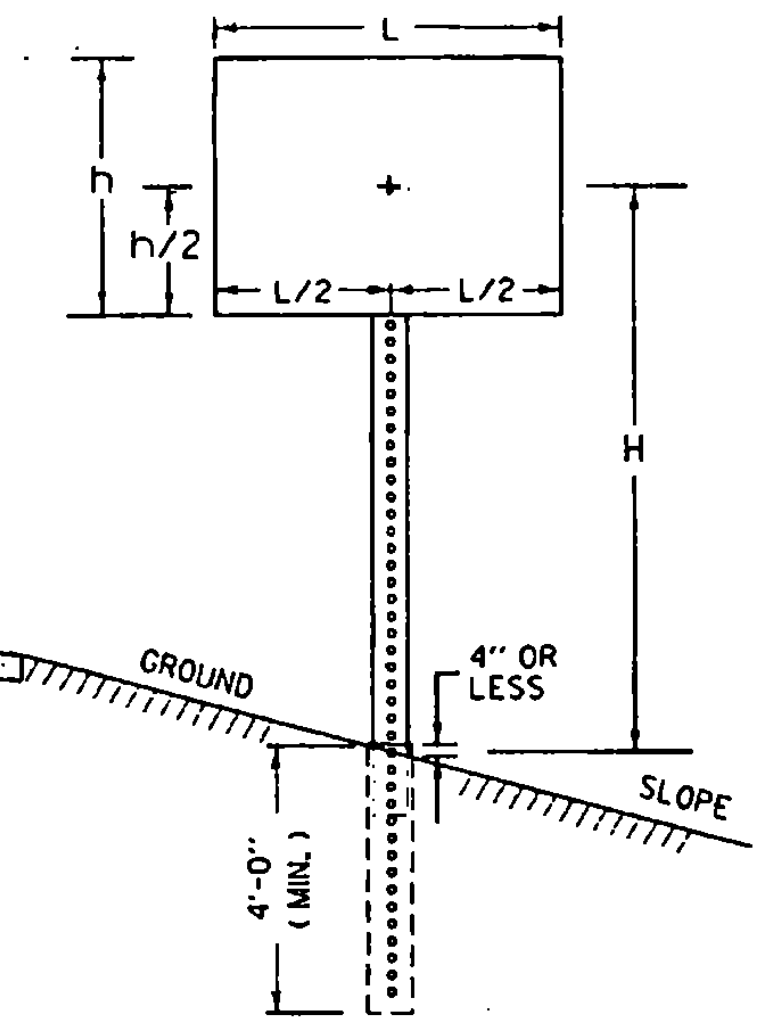
POST SPACING DETAILS

GENERAL NOTES

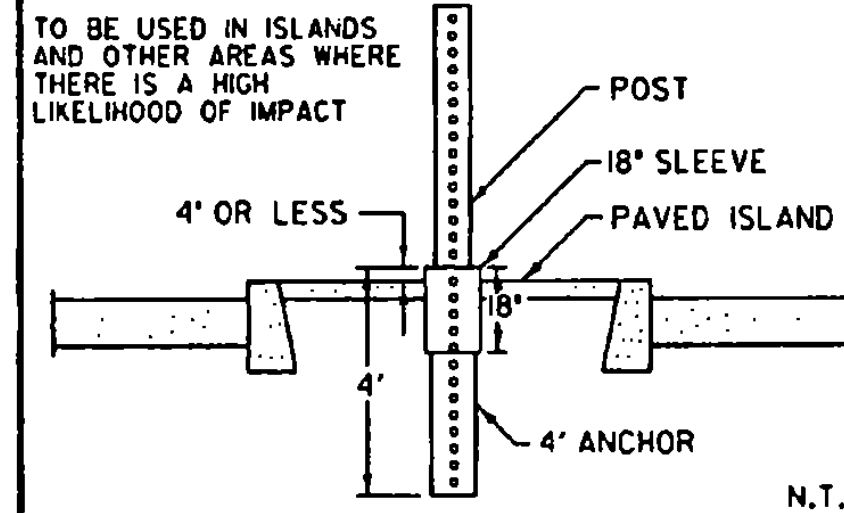
CONSTRUCTION METHODS - POSTS MAY BE DRIVEN OR SET IN A DUG HOLE AND BACKFILLED. IF DRIVEN, A DRIVING CAP SHALL BE USED. THE DUG HOLE INSTALLATION SHALL BE USED IN AREAS OF POOR SOIL CONDITIONS OR AS DIRECTED BY THE RESIDENT ENGINEER. BACKFILL SHALL BE COMPACTED AS DIRECTED BY THE RESIDENT ENGINEER.

SIGN CLEARANCES - HORIZONTAL AND VERTICAL SIGN CLEARANCES SHALL BE SHOWN ON THE PLANS OR THE APPROPRIATE STD. SHEETS.

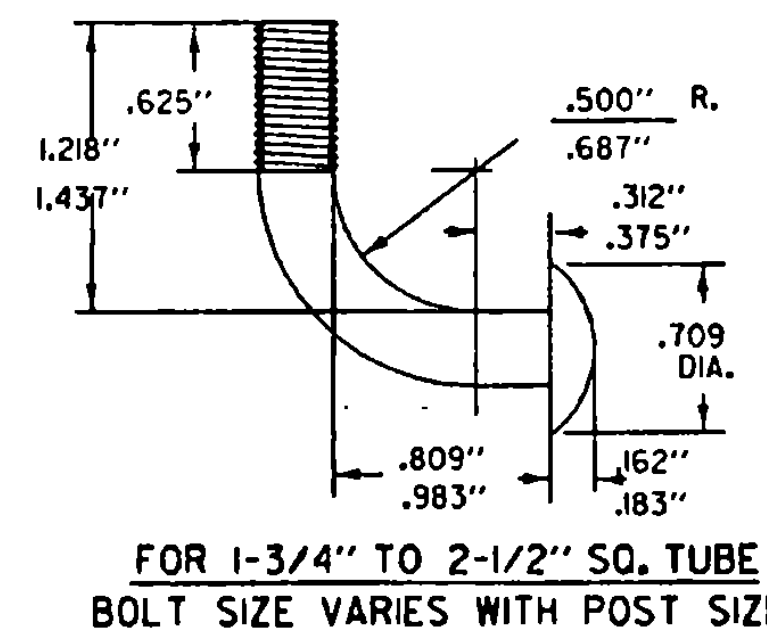
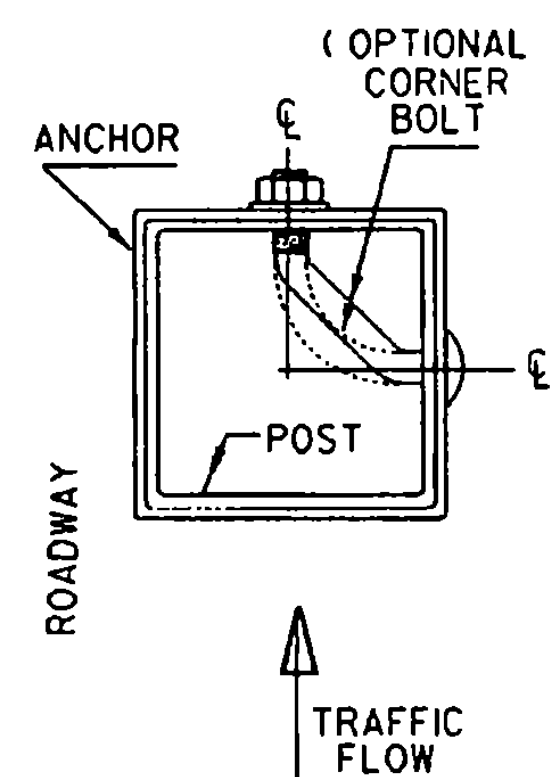
SINGLE POST INSTALLATIONS SHALL BE LIMITED TO A SIGN AREA OF 20 SQ. FT. OR LESS



TWO PIECE ANCHOR DETAIL

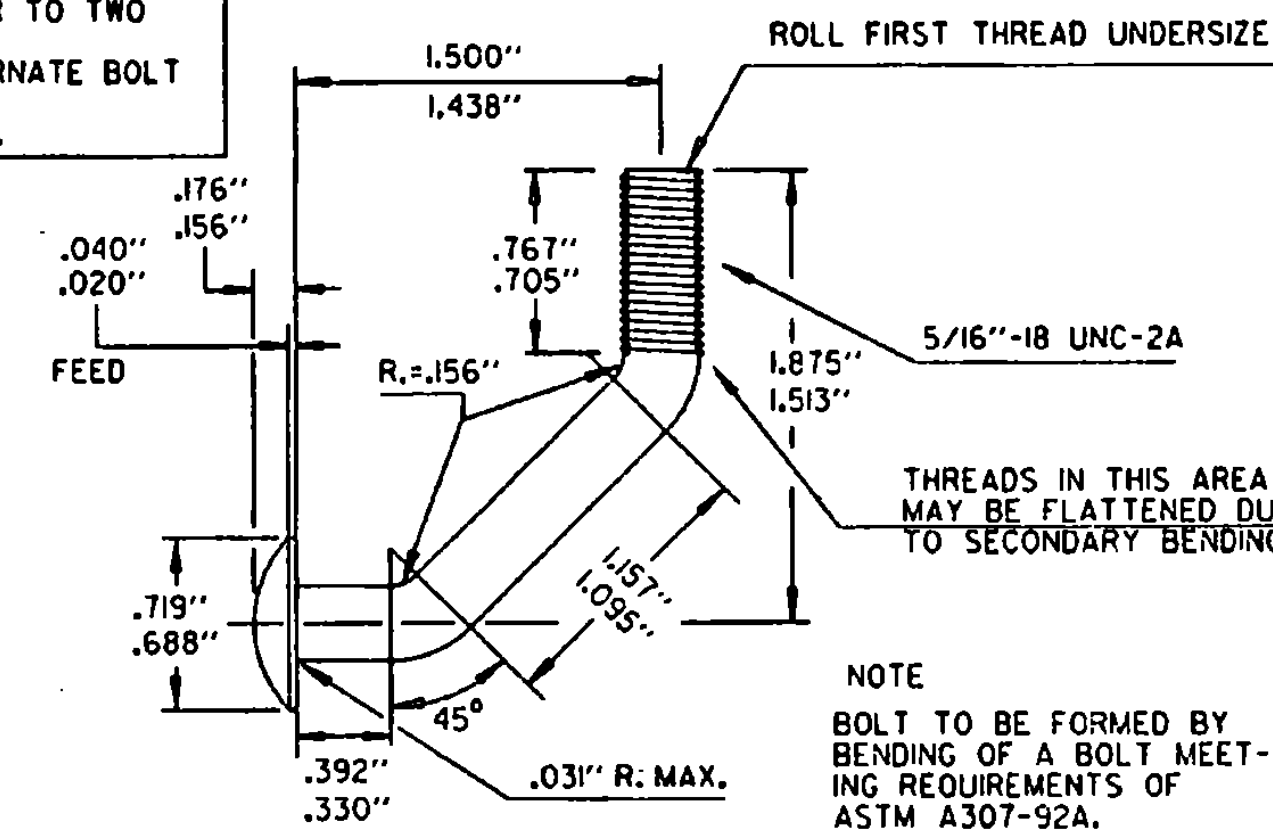


TOP VIEW OF ANCHOR, POST AND BOLT

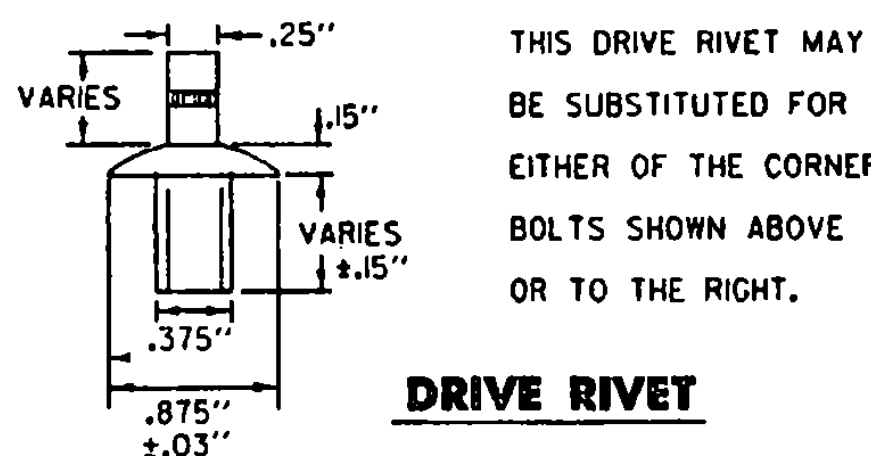


OPTIONAL CORNER BOLT DETAILS

DOUBLE DIMENSIONS REFER TO TWO ALTERNATE BOLT SIZES.

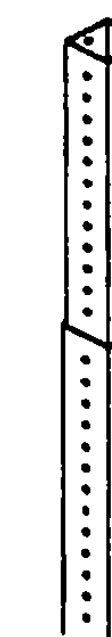


• DIMENSIONS VARY AS NEEDED FOR POST SIZE USED



DRIVE RIVET

CONNECTION DETAIL



POST IS TO BE INSERTED INTO ANCHOR ONE FOOT BELOW GROUND LEVEL. ANCHOR IS TO BE 4'-0" MINIMUM LENGTH WITH NO MORE THAN 4" ABOVE GROUND. ANCHOR IS ONE SIZE (1/4") GREATER THAN THE POST AND ALL ANCHORS ARE TO BE 12 GAGE EXCEPT ANCHORS FOR 2-1/2" POSTS ARE TO BE 7 GAGE. CONNECTION IS TO BE MADE USING THE BOLT PROVIDED WITH THE SIGN SYSTEM (SEE DETAILS LEFT), AT THE TOP HOLE IN THE ANCHOR (APPROXIMATELY 3-1/2" ABOVE GROUND). THREE INCH ANCHORS WHICH DO NOT HAVE HOLES ON 1" CENTERS WILL REQUIRE DRILLING OF 7/16" HOLES FOR CONNECTIONS.

(SEE DETAIL LEFT FOR BOLT PLACEMENT)

SQUARE STEEL SIGN POST DETAIL SHEET

SURVEYED BY	DATE
DRAWN BY	DATE
SQUAD LEADER	
DESIGN FILE NO.	
IPARM FILE	DATE PLOTTED
PROJ. NAME DISTRICT 6	
PROJ. NO. STPG-SIGN (604)	
SHEET 3A OF 57 SHEETS	