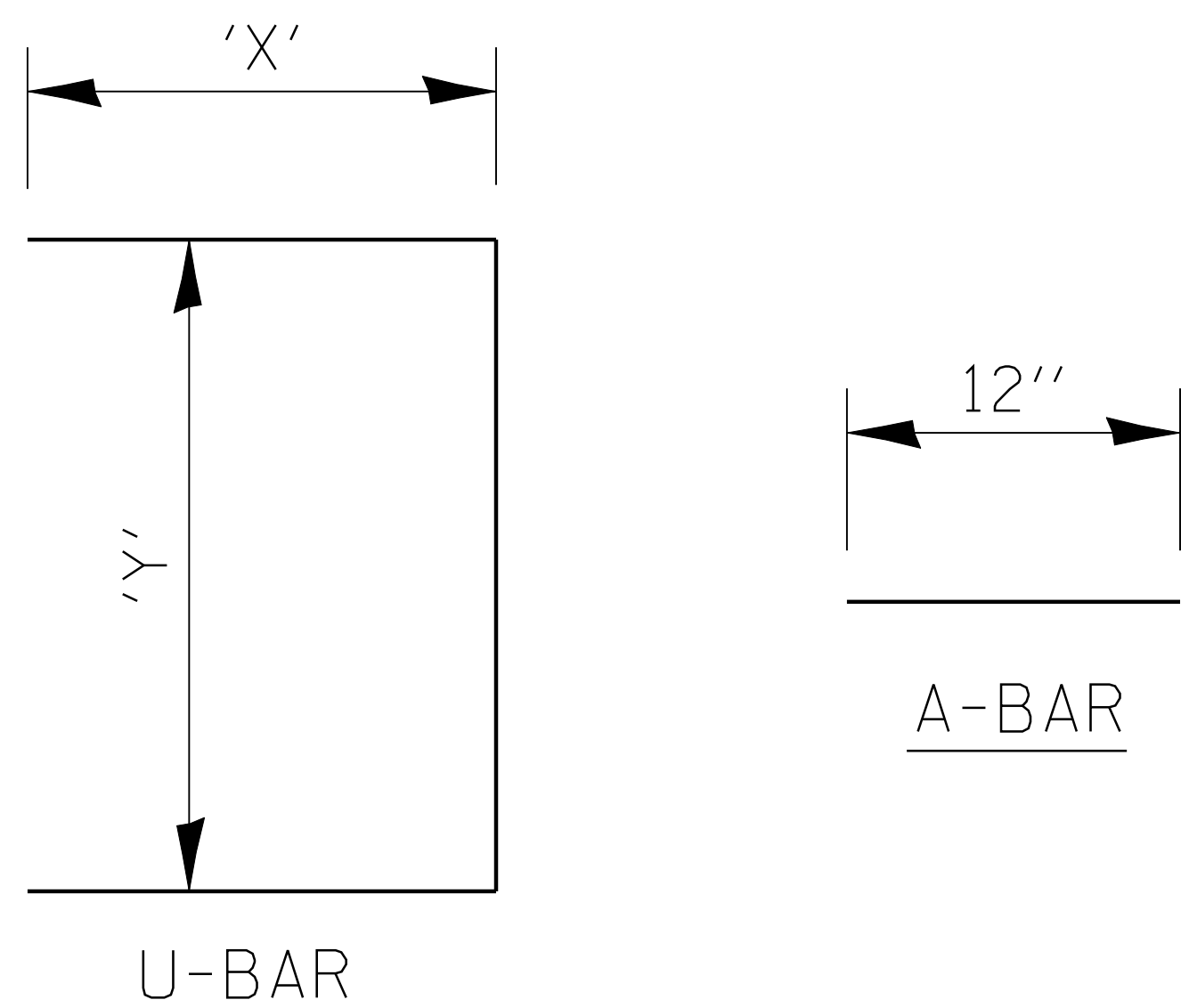


EXPANSION BOLTS SHALL CONSIST OF SELF DRILLING EXPANSION SHIELDS AND $\frac{3}{4}$ " DIA. HOOKED BOLTS. HOOKED BOLTS SHALL EXTEND A MINIMUM OF 9" INTO NEW CONCRETE. BOLTS SHALL BE DRILLED IN THE CENTER OF THE EXISTING BOX CULVERT BARREL WALLS. MINIMUM CERTIFIED PROOF LOAD = 4,080 LBS.



LOCATION	EXISTING CULVERT SIZE FT. × FT.	PIPE DIMENSION DIA. IN.	PIPE AREA SQ. FT.	EXTENSION COLLAR		A-BAR 305 IN.	U-BAR		CLASS SI CONC. COLLAR CU. YD.	REINFORCEMENT BARS POUND	$\frac{3}{4}$ " DIA. EXPANSION BOLTS EACH
				WIDTH	HEIGHT		'X'	'Y'			
				IN.	IN.		IN.	IN.			

COLLAR DETAIL (CMP EXTENSION OF BOX CULVERT)