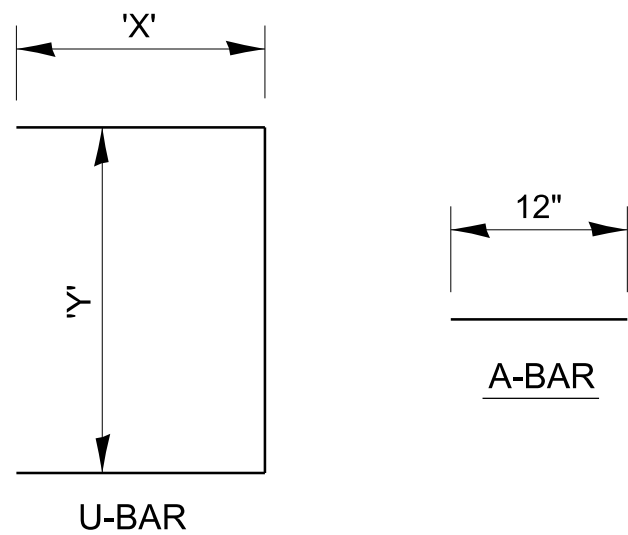


EXPANSION BOLTS SHALL CONSIST OF SELF DRILLING EXPANSION SHIELDS AND 3/4" DIA HOOKED BOLTS. HOOKED BOLTS SHALL EXTEND A MINIMUM OF 9" INTO NEW CONCRETE. BOLTS SHALL BE DRILLED IN THE CENTER OF THE EXISTING BOX CULVERT BARREL WALLS. MINIMUM CERTIFIED PROOF LOAD = 4,080 LBS.



LOCATION	EXISTING CULVERT SIZE FT x FT	PIPE DIMENSION DIA IN	PIPE AREA SQ FT	EXTENSION COLLAR		A-BAR 305 IN	U-BAR		QUANTITIES ARE FOR ONE SIDE ONLY		
				WIDTH IN	HEIGHT IN		'X' IN	'Y' IN	CLASS SI CONC COLLAR CU YD	REINFORCEMENT BARS POUND	3/4" DIA EXPANSION BOLTS EACH

# COLLAR DETAIL (CMP EXTENSION OF BOX CULVERT)