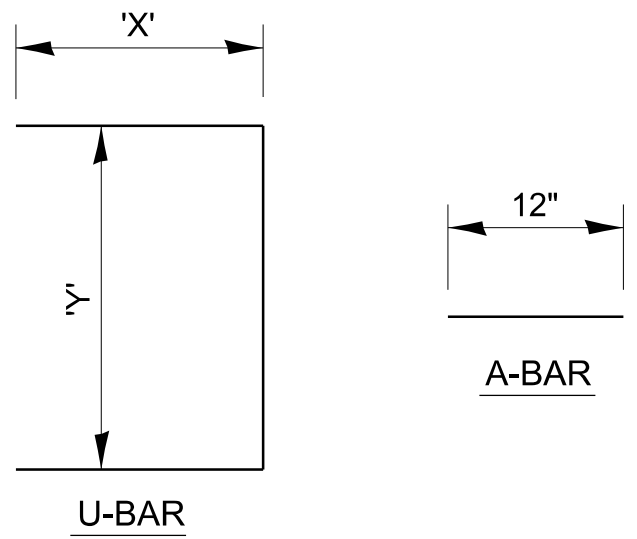


EXPANSION BOLTS SHALL CONSIST OF SELF DRILLING EXPANSION SHIELDS AND 3/4" DIA HOOKED BOLTS. HOOKED BOLTS SHALL EXTEND A MINIMUM OF 9" INTO NEW CONCRETE. BOLTS SHALL BE DRILLED IN THE CENTER OF THE EXISTING BOX CULVERT BARREL WALLS. MINIMUM CERTIFIED PROOF LOAD = 4,080 LBS.



LOCATION	EXISTING CULVERT SIZE FT x FT	PIPE DIMENSION			PIPE AREA SQ FT	EXTENSION COLLAR		A-BAR 380 IN	U-BAR		QUANTITIES ARE FOR ONE SIDE ONLY			
		SPAN	RISE	EQUIV		WIDTH	HEIGHT		'X'	'Y'	CLASS SI CONC COLLAR	REINFORCEMENT BARS	3/4" DIA EXPANSION BOLTS	
		IN	IN	IN		IN	IN		IN	IN	IN	CU YD	POUND	EACH

# COLLAR DETAIL (A.D.E. CMP EXTENSION OF BOX CULVERT)