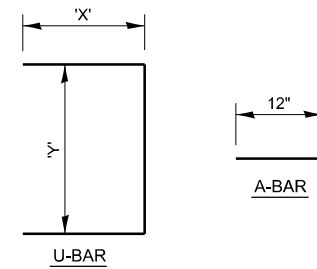


EXPANSION BOLTS SHALL CONSIST OF SELF DRILLING EXPANSION SHIELDS AND 3/4" DIA HOOKED BOLTS. HOOKED BOLTS SHALL EXTEND A MINIMUM OF 9" INTO NEW CONCRETE. BOLTS SHALL BE DRILLED IN THE CENTER OF THE EXISTING BOX CULVERT BARREL WALLS. MINIMUM CERTIFIED PROOF LOAD = 4,080 LBS.



LOCATION	EXISTING CULVERT SIZE FT x FT	PIPE DIMENSION DIA IN	PIPE AREA SQ FT	EXTENSION COLLAR		A-BAR			U-BAR			QUANTITIES ARE FOR ONE SIDE ONLY							
				WIDTH IN	HEIGHT IN	305 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)

540-11

MODEL: det 3 041116
FILE: \\miller\paw\benley.com\PI\DOT\Documents\DOT Offices\Dir\dr. 3\Projects\Carry Detail\03 Detail Rev\03 51 STRUCTURES.dgn

USER NAME = Anthony.Grunstad	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100,000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 9/27/23	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.			ILLINOIS	FED. AID PROJECT