



GENERAL NOTES

1. The collar shall be constructed entirely of CLASS SI CONCRETE and in accordance with the applicable portions of section 503 of the Standard Specifications. REINFORCEMENT BARS shall conform to section 508.
2. Expansion bolts shall consist of approved expansions anchors, and M20 (3/4'') hook bolts which conform to Section 1006.09. These bolts shall extend at least 200(8'') into the new concrete.

\* Dimensions for ASTM C789.

#4 U BAR  
FOUR REQUIRED  
PER COLLAR

DIMENSIONS

EXISTING BOX		A	B	T *	EACH COLLAR				
W mm (ft)	H mm (ft)				CL SI m <sup>3</sup> (CU YD)	REINFORCEMENT X	BARS Y	EXPANSION BOLTS NO.	
600(2)	600(2)	1.22m (4'-0'')	1.22m (4'-0'')	100(4'')	0.21(0.27)	1.02m (3'-4'')	660(26'')	16(21)	8
900(3)	600(2)	1.52m (5'-0'')	1.22m (4'-0'')	100(4'')	0.24(0.32)	1.32m (4'-4'')	660(26'')	18(23)	8
900(3)	750(2.5)	1.52m (5'-0'')	1.37m (4'-6'')	100(4'')	0.26(0.34)	1.32m (4'-4'')	737(29'')	19(25)	8
900(3)	900(3)	1.52m (5'-0'')	1.52m (5'-0'')	100(4'')	0.28(0.36)	1.32m (4'-4'')	813(32'')	20(26)	8
900(3)	1200(4)	1.57m (5'-2'')	1.88m (6'-2'')	125(5'')	0.31(0.41)	1.37m (4'-6'')	991(39'')	22(29)	10
1200(4)	900(3)	1.88m (6'-2'')	1.57m (5'-2'')	125(5'')	0.31(0.41)	1.68m (5'-6'')	838(33'')	22(29)	10
1200(4)	1200(4)	1.88m (6'-2'')	1.88m (6'-2'')	125(5'')	0.34(0.45)	1.68m (5'-6'')	991(39'')	25(32)	12
1200(4)	1500(5)	1.93m (6'-4'')	2.24m (7'-4'')	150(6'')	0.39(0.51)	1.73m (5'-8'')	1.17m (3'-10'')	28(36)	14
1500(5)	1200(4)	2.24m (7'-4'')	1.93m (6'-4'')	150(6'')	0.39(0.51)	2.03m (6'-8'')	1.02m (3'-4'')	28(36)	14
1500(5)	1500(5)	2.24m (7'-4'')	2.24m (7'-4'')	150(6'')	0.42(0.55)	2.03m (6'-8'')	1.17m (3'-10'')	29(38)	16
1500(5)	1800(6)	2.29m (7'-6'')	2.59m (8'-6'')	175(7'')	0.46(0.60)	2.08m (6'-10'')	1.35m (4'-5'')	32(42)	16
1800(6)	1200(4)	2.59m (8'-6'')	1.98m (6'-6'')	175(7'')	0.43(0.56)	2.39m (7'-10'')	1.04m (3'-5'')	30(39)	14
1800(6)	1500(5)	2.59m (8'-6'')	2.29m (7'-6'')	175(7'')	0.46(0.60)	2.39m (7'-10'')	1.19m (3'-11'')	32(42)	16
1800(6)	1800(6)	2.59m (8'-6'')	2.59m (8'-6'')	175(7'')	0.49(0.64)	2.39m (7'-10'')	1.35m (4'-5'')	35(45)	16
1800(6)	2400(8)	2.64m (8'-8'')	3.25m (10'-8'')	200(8'')	0.57(0.74)	2.44m (8'-0'')	1.68m (5'-6'')	39(51)	18
2400(8)	2400(8)	3.25m (10'-8'')	3.25m (10'-8'')	200(8'')	0.63(0.82)	3.05m (10'-0'')	1.68m (5'-6'')	43(56)	20

All dimensions are in millimeters (inches) unless otherwise noted.

QUANTITIES

CALC. BY: \_\_\_\_\_ DATE: \_\_\_\_\_

CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION

DATE	REVISIONS	BY
1-1-97	RENUM. J-12.01, METRICS, NEW REVISION BOX, REVISED TITLE BOX, ADDED QUANTITY CALCULATION BOX.	T.P.

ILLINOIS DEPARTMENT OF TRANSPORTATION  
DISTRICT CADD STANDARD

COLLAR FOR  
BOX CULVERT  
EXTENSIONS

CADD STANDARD 540001-04  
SCALE: NOT DRAWN TO SCALE  
DATE \*\*DATE\*\*

DRAWN BY CADD  
CHECKED BY