



**GENERAL NOTES**

1. CLASS SI CONCRETE SHALL BE USED THROUGHOUT.
2. WHEN CONCRETE COLLARS ARE USED TO CONNECT PIPES OF DIFFERENT OUTSIDE DIAMETERS, THE CONCRETE COLLAR SHALL BE FORMED USING THE LARGEST OUTSIDE DIAMETER (SEE END VIEW).
3. THE WIRE MESH SHALL WEIGH NOT LESS THAN 54#/100 SQ. FT. (2.63 kg/m<sup>2</sup>).
4. WHEN CONCRETE COLLARS ARE CONSTRUCTED ADJACENT TO AN EXISTING CONCRETE STRUCTURE (HEADWALLS, ETC.) EXPANSION BOLTS, SHALL BE USED AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE, EACH, FOR EXPANSION BOLTS OF THE SIZE SPECIFIED IN THE PLANS.
5. CONCRETE COLLARS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE, PER CUBIC YARD (CUBIC METER), FOR CONCRETE COLLARS INCLUDING ALL MATERIAL AND LABOR SPECIFIED TO COMPLETE THE WORK IN PLACE.

QUANTITIES FOR CONCRETE PIPES	
INSIDE DIAMETER OF PIPE	ESTIMATED CLASS SI CONCRETE REQUIRED
INCH (mm)	20" (500 mm) WIDTH CU. YD. (m <sup>3</sup> )
4" (100)	0.14 (0.11)
6" (150)	0.16 (0.12)
8" (200)	0.19 (0.14)
10" (250)	0.22 (0.17)
12" (300)	0.25 (0.19)
15" (375)	0.30 (0.23)
18" (450)	0.35 (0.27)
24" (600)	0.45 (0.35)
30" (750)	0.57 (0.43)
36" (900)	0.69 (0.53)
42" (1050)	0.83 (0.63)
48" (1200)	0.97 (0.74)
54" (1350)	1.12 (0.86)
60" (1500)	1.28 (0.98)

QUANTITIES FOR METAL PIPES	
INSIDE DIAMETER OF PIPE	ESTIMATED CLASS SI CONCRETE REQUIRED
INCH (mm)	20" (500 mm) WIDTH CU. YD. (m <sup>3</sup> )
4" (100)	0.12 (0.09)
6" (150)	0.14 (0.11)
8" (200)	0.16 (0.12)
10" (250)	0.19 (0.14)
12" (300)	0.21 (0.16)
15" (375)	0.25 (0.19)
18" (450)	0.29 (0.22)
24" (600)	0.38 (0.29)
30" (750)	0.47 (0.36)
36" (900)	0.59 (0.45)
42" (1050)	0.69 (0.53)
48" (1200)	0.81 (0.62)
54" (1350)	0.93 (0.71)
60" (1500)	1.05 (0.81)

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

**McDonough-Whitlow, P.C.**  
*Consulting Engineers & Land Surveyors*  
 138 East Wood Street  
 Hillsboro, IL 62049  
 Phone: 217.532.9233  
 Fax: 217.532.6300  
 PROFESSIONAL DESIGN No. 184-002754

**DISTRICT 5 DETAIL NO. 54248510**

FILE NAME = D570967-xxx-DETSHT1.dgn	USER NAME = JLM	DESIGNED - JAH	REVISED -
		DRAWN - JLM	REVISED -
		CHECKED - TMM	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CONCRETE COLLAR**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	MEDIAN CABLE 2012-2	VERMILION	120	43
CONTRACT NO. 70967				
ILLINOIS FED. AID PROJECT				