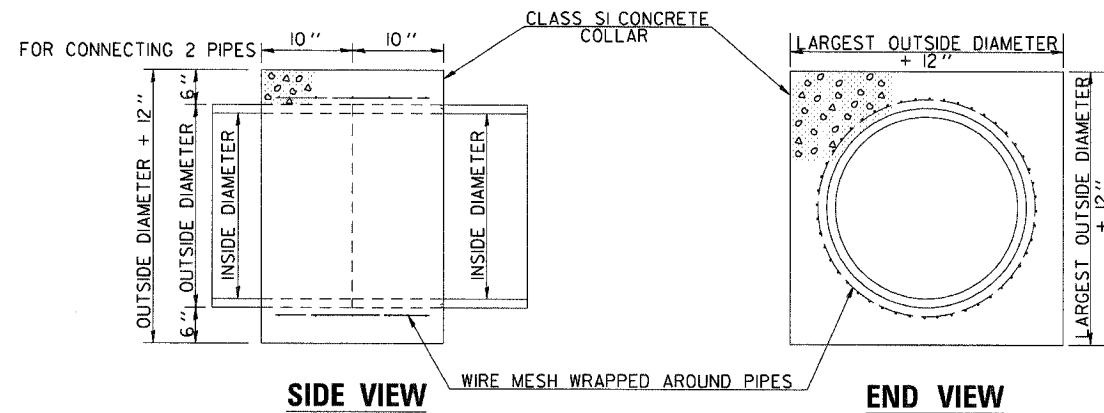


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075-05-RS	SANGAMON	72	31

CONTRACT NO. 93439

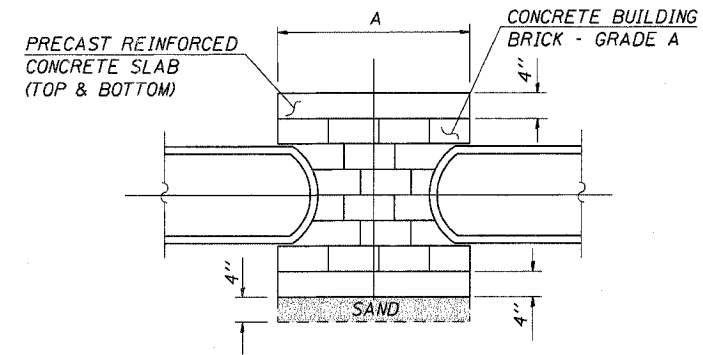


### DETAIL OF CONCRETE COLLARS

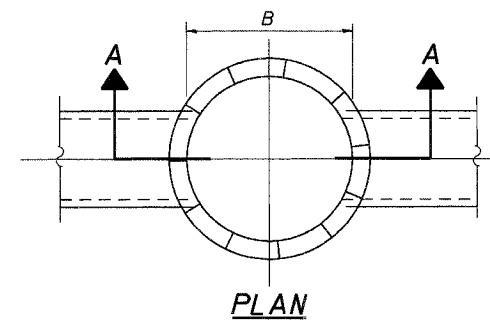
QUANTITIES FOR METAL PIPES		QUANTITIES FOR CONCRETE PIPES	
INSIDE DIAMETER OF PIPE	ESTIMATED CLASS SI CONCRETE REQUIRED (20" WIDTH)	INSIDE DIAMETER OF PIPE	ESTIMATED CLASS SI CONCRETE REQUIRED (20" WIDTH)
(in)	(yd <sup>3</sup> )	(in)	(yd <sup>3</sup> )
4	0.12	4	0.14
6	0.14	6	0.16
8	0.16	8	0.19
10	0.19	10	0.22
12	0.21	12	0.25
15	0.25	15	0.30
18	0.29	18	0.35
24	0.38	24	0.45
30	0.47	30	0.57
36	0.59	36	0.69
42	0.69	42	0.83
48	0.81	48	0.97
54	0.93	54	1.12
60	1.05	60	1.28

### GENERAL NOTES

- CLASS SI CONCRETE SHALL BE USED THROUGHOUT.
- 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).
- THE WIRE MESH SHALL WEIGH NOT LESS THAN 54#/100 SQ. FT.
- 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.
- CONCRETE COLLARS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE, EACH, FOR CONCRETE COLLARS INCLUDING ALL MATERIAL AND LABOR SPECIFIED TO COMPLETE THE WORK IN PLACE.
- FOR PIPE SIZES 10" AND LARGER, CONCRETE COLLARS SHALL BE REQUIRED. FOR PIPE SIZES SMALLER THAN 10", THE PROPOSED DRAINAGE PIPES MAY BE CONNECTED TO EXISTING PIPES USING PREFABRICATED, COMMERCIALY AVAILABLE COUPLERS OR CONCRETE COLLARS. COUPLERS SHALL CONSIST OF A CASING PIPE WITH FLEXIBLE TUBING BANDS AT EACH END. THE CASING PIPE SHALL COMPLETELY COVER THE JOINT AREA AND TUBING SHALL BE DRAWN TIGHT AROUND EACH PIPE WITH CORROSION AND RUST PROOF BANDS OR HOSE CLAMPS. COUPLERS WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.



### SECTION A-A



### PLAN

### JUNCTION BOX, SPECIAL

TABLE FOR DIMENSIONS

J. BOX	A	B
24"	3'-0"	2'-0"
36"	4'-0"	3'-0"
48"	5'-0"	4'-0"

24" DIAMETER JUNCTION BOX FOR USE WITH STORM SEWERS HAVING INSIDE DIAMETERS OF 6" THROUGH 12".  
 36" DIAMETER JUNCTION BOX FOR USE WITH STORM SEWERS HAVING INSIDE DIAMETERS OF 15" THROUGH 18".  
 48" DIAMETER JUNCTION BOX FOR USE WITH STORM SEWERS HAVING INSIDE DIAMETER OF 21" AND 24".

THE PRECAST CONCRETE SLAB SHALL BE CONSTRUCTED OF CLASS PC CONCRETE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 504 OF THE STANDARD SPECIFICATIONS.

THIS WORK WILL BE PAID FOR AT THE CONTRACT BID PRICE EACH FOR JUNCTION BOX SPECIAL OF THE DIAMETER SPECIFIED.

### CONCRETE COLLAR & JUNCTION BOX DETAILS

FAS 621 (CH 10)  
 SECTION 05-00075-05-RS  
 SANGAMON COUNTY

CUMMINS ENGINEERING CORPORATION  
 JOB #: 2171  
 FILE: 2171COLLAR  
 DATE: 5/3/07

LOCATIONS 2, 4, 6, 8, 9, 10 & 13