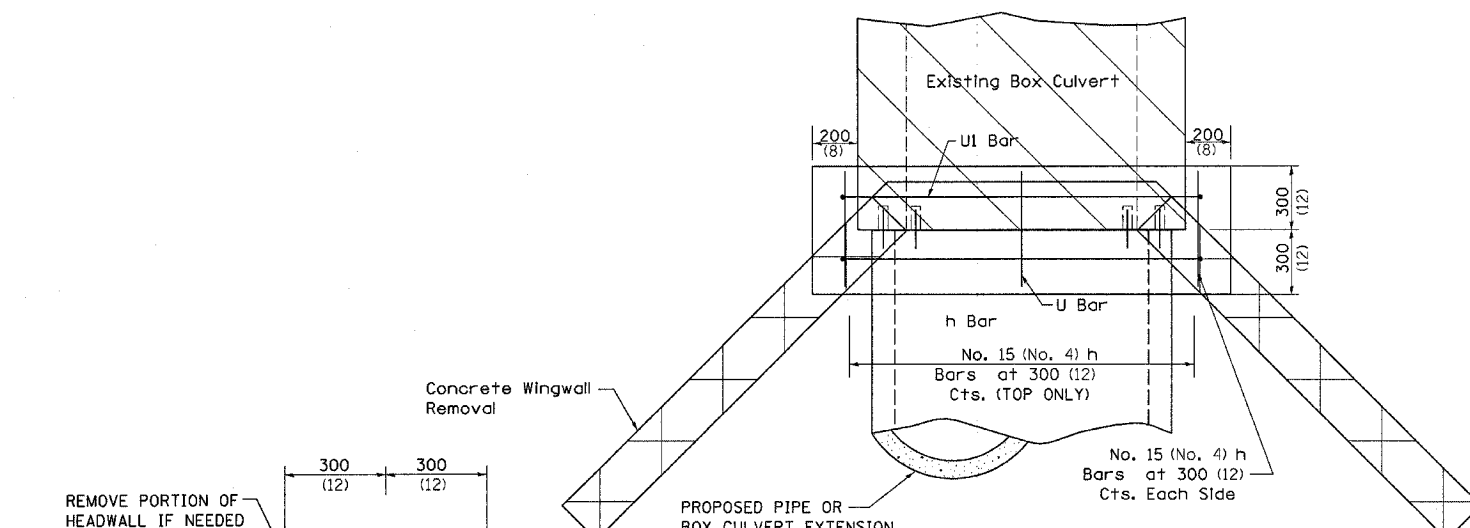
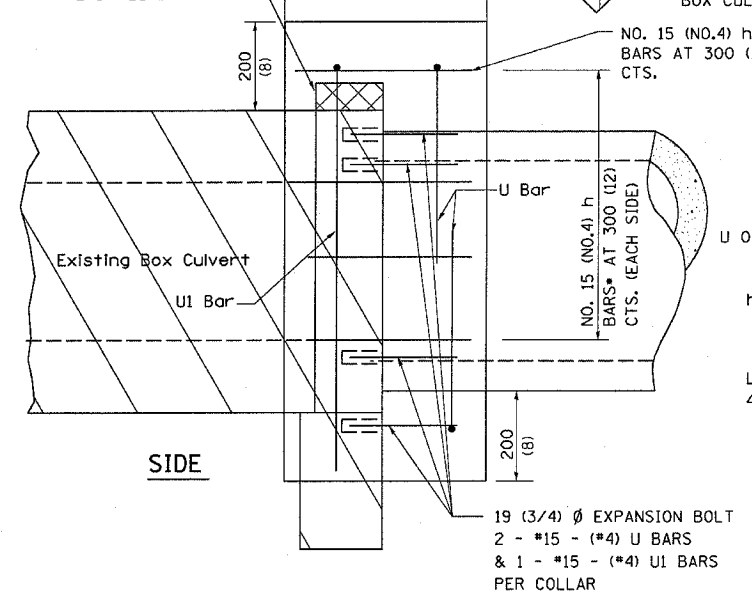


CONCRETE COLLARS FOR PIPE OR BOX CULVERT EXTENSIONS

CONTRACT NO. 64583				
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	34X-BR	DEKALB	90	71
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			



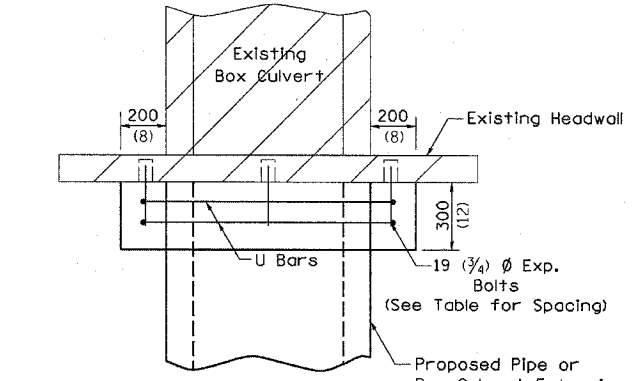
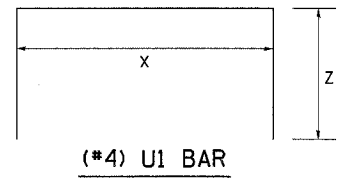
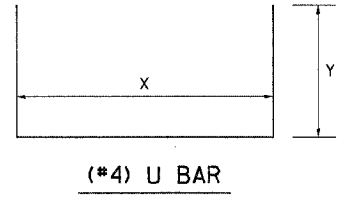
PLAN OF CULVERT WITH ANGLED WING WALLS



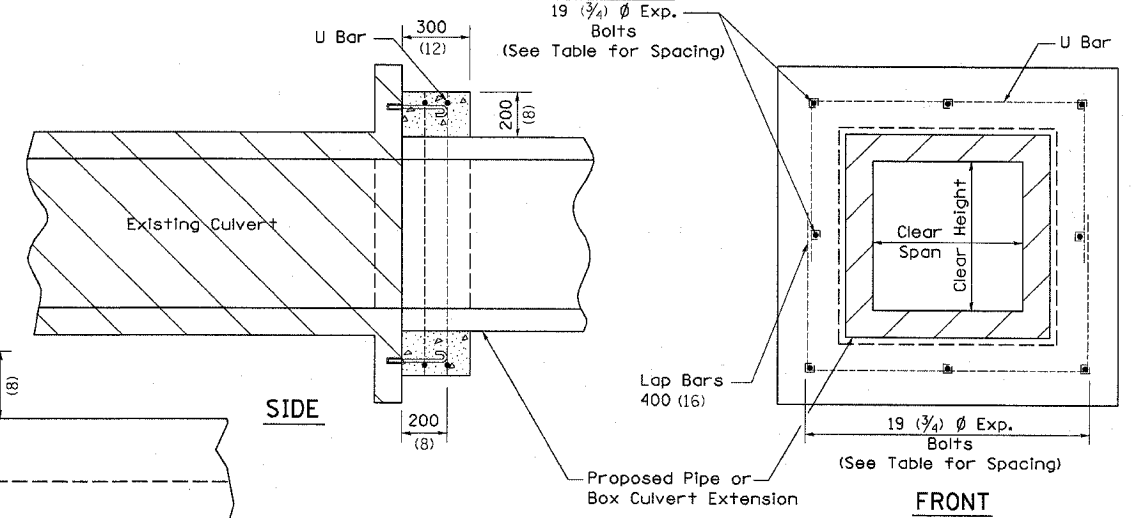
PLACEMENT DETAILS FOR EXPANSION BOLTS

H OR S	NUMBER OF EXPANSION BOLTS REQUIRED PER SIDE			
	EXTENSIONS < 4.57m (15')		EXTENSIONS > 4.57m (15')	
	NUMBER	SPACING	NUMBER	SPACING
600 (24)	*		*	
750 (30)	2	450 (18)	2	450 (18)
900 (36)	2	600 (24)	2	600 (24)
1200 (48)	3	450 (18)	3	450 (18)
1500 (60)	4	400 (16)	3	600 (24)
1800 (72)	5	375 (15)	4	500 (20)
2100 (84)	5	450 (18)	4	600 (24)
2400 (96)	6	375 (15)	5	525 (21)
2700 (108)	6	475 (19)	5	600 (24)
3000 (120)	7	450 (18)	6	525 (21)
3300 (132)	8	425 (17)	6	600 (24)
3600 (144)	8	475 (19)	7	550 (22)

* MINIMUM ONE PER SIDE

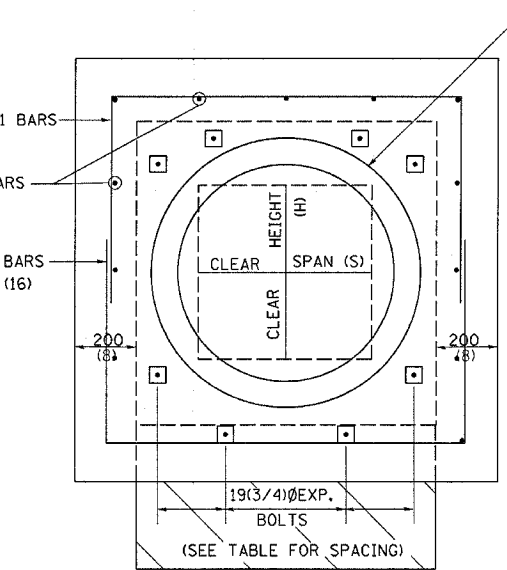


PLAN OF CULVERT WITH STRAIGHT HEADWALL

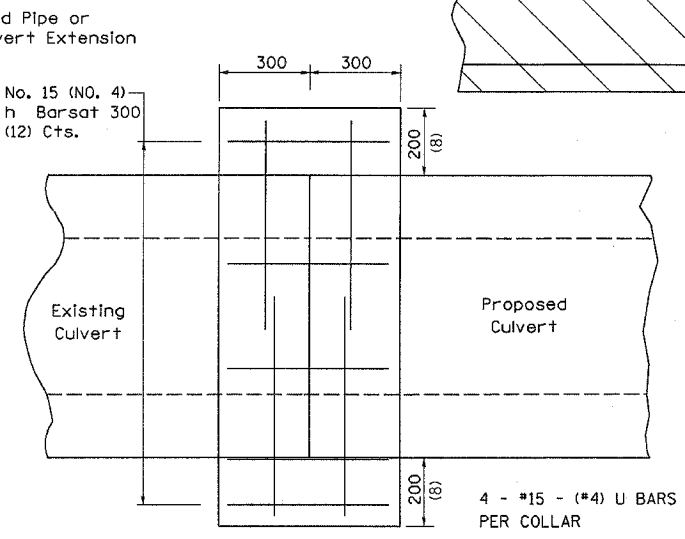


SIDE

FRONT



FRONT



CULVERT CONNECTION WITHOUT EXISTING HEADWALL

Bill of Materials

STATION	NUMBER OF COLLARS AT LOCATION	DIAMETER OF STORM SEWER (INCHES)	DIMENSIONS		h Bar No.	U Bar		EXPANSION BOLTS No.	CONCRETE COLLAR Cu. Yd.	REINF. BARS Lb.
			X	Y		No.	Length			
134+75, LT	2	18	2'-7"	2'-0"	12	4	6'-7"	0	0.6	30
135+33.30, LT	2	18	2'-7"	2'-0"	12	4	6'-7"	0	0.6	30
136+15.70, LT	2	18	2'-7"	2'-0"	12	4	6'-7"	0	0.6	30
136+43.9, RT	1	18	2'-7"	2'-0"	12	4	6'-7"	0	0.6	30
137+20, LT	2	30	3'-9"	2'-7"	16	4	8'-11"	0	0.9	40
138+00, LT	2	30	3'-9"	2'-7"	16	4	8'-11"	0	0.9	40
138+70, LT	2	30	3'-9"	2'-7"	16	4	8'-11"	0	0.9	40
139+99.15, RT	1	12	2'-0"	1'-8"	8	4	5'-4"	0	0.4	22
142+15.04, RT	1	12	2'-0"	1'-8"	8	4	5'-4"	0	0.4	22
All h Bars 450 (18) Long					TOTALS FOR 15 COLLARS		0	10.4	494	

General Notes

Concrete Collars shall be constructed of Class SI Concrete in accordance with Section 503 of the Standard Specifications
 Reinforcement bars shall conform to Section 508 of the Standard Specifications.

The concrete will be paid for at the contract unit price per cubic meter (cubic yard) for CONCRETE COLLAR. Reinforcement will be paid for at the contract unit price per kilogram (pound) for REINFORCEMENT BARS. Expansion Bolts, when required, will be paid for at the contract unit price each for EXPANSION BOLTS of the size indicated, which price shall include furnishing, drilling holes, and installing the expansion bolts complete in place. These bolts shall extend at least 200 (8) inches into the new concrete.

REVISIONS	
NAME	DATE
IDOT REVIEW	10/25/06
IDOT REVISIONS	2/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
DETAILS
 FAP RTE 567 (IL RTE 38)
 SECTION 34X-BR
 DEKALB COUNTY

SCALE: VERT. DATE 10/12/05
 HORIZ. DATE 10/12/05

DRAWN BY SUTHEARD
 CHECKED BY BOTT

COMPUTER FILE NO. D10800SPL
 PROJECT 05198
 10/25/06-05J

GREENE & BRADFORD, INC.
 CONSULTING ENGINEERS
 1010 N. WASHINGTON ST., SUITE 100
 DEKALB, ILLINOIS 62521
 PROFESSIONAL ENGINEERING CORPORATION
 03170-004, 03170-007, 03170-008, 03170-009, 03170-010, 03170-011, 03170-012, 03170-013, 03170-014, 03170-015, 03170-016, 03170-017, 03170-018, 03170-019, 03170-020, 03170-021, 03170-022, 03170-023, 03170-024, 03170-025, 03170-026, 03170-027, 03170-028, 03170-029, 03170-030, 03170-031, 03170-032, 03170-033, 03170-034, 03170-035, 03170-036, 03170-037, 03170-038, 03170-039, 03170-040, 03170-041, 03170-042, 03170-043, 03170-044, 03170-045, 03170-046, 03170-047, 03170-048, 03170-049, 03170-050, 03170-051, 03170-052, 03170-053, 03170-054, 03170-055, 03170-056, 03170-057, 03170-058, 03170-059, 03170-060, 03170-061, 03170-062, 03170-063, 03170-064, 03170-065, 03170-066, 03170-067, 03170-068, 03170-069, 03170-070, 03170-071, 03170-072, 03170-073, 03170-074, 03170-075, 03170-076, 03170-077, 03170-078, 03170-079, 03170-080, 03170-081, 03170-082, 03170-083, 03170-084, 03170-085, 03170-086, 03170-087, 03170-088, 03170-089, 03170-090, 03170-091, 03170-092, 03170-093, 03170-094, 03170-095, 03170-096, 03170-097, 03170-098, 03170-099, 03170-100

PLOT DATE = 2/2/2007
 FILE NAME = *FILEL*
 PLOT SCALE = *SCALE*
 REFERENCE = *REF*
 OPERATOR = *USER*