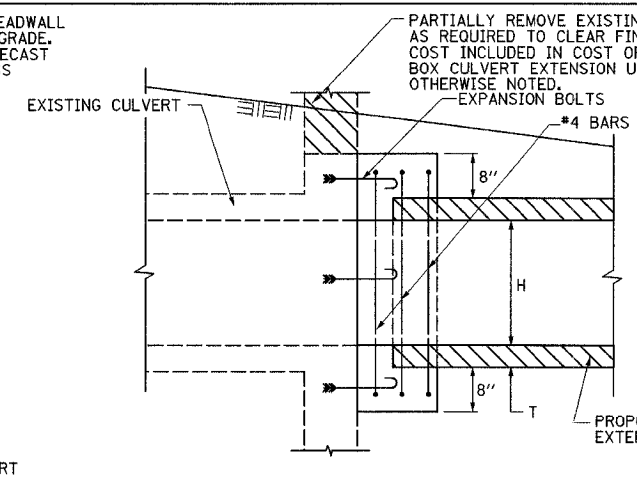
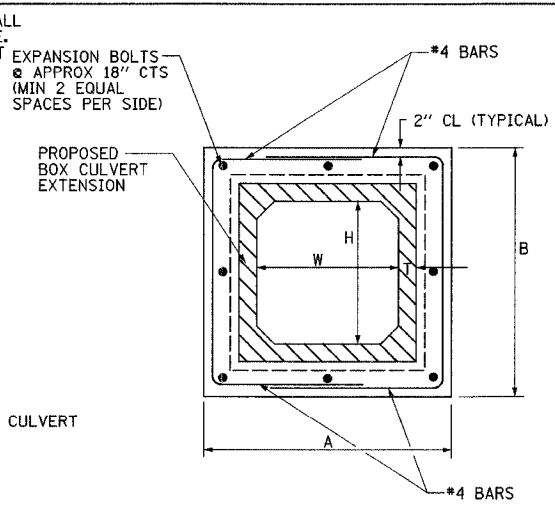


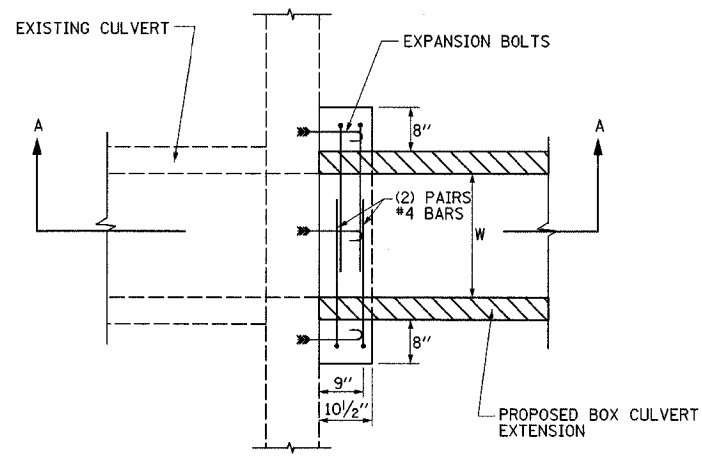
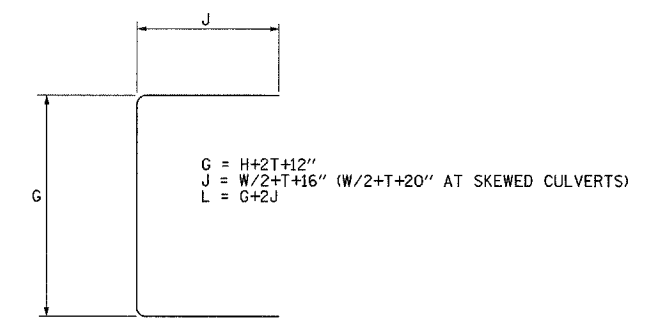
SECTION A-A



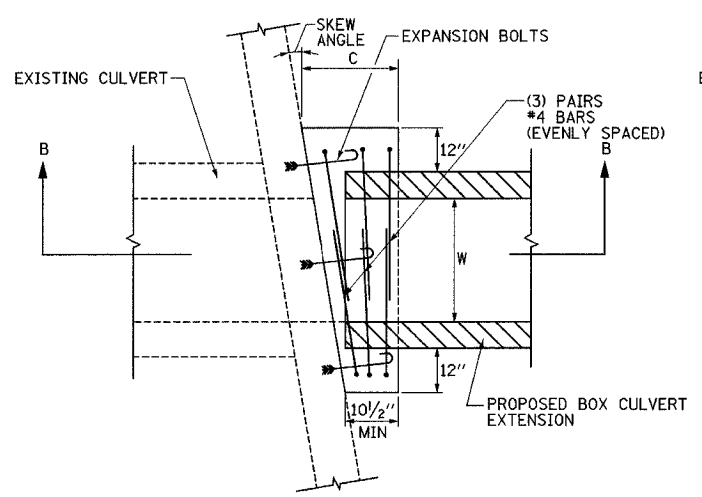
SECTION B-B



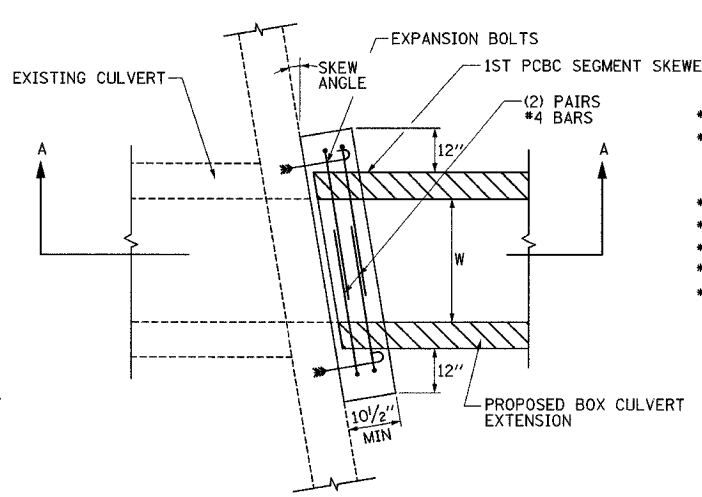
END VIEW



PLAN VIEW
(RIGHT ANGLE CULVERT)



PLAN VIEW
PCBC WITH SQUARE END FOR:
W<3' (ANY SKEW ANGLE)
W=4' WITH SKEW ANGLE <30°
W=6' WITH SKEW ANGLE <20°
W=8' WITH SKEW ANGLE <15°



PLAN VIEW
PCBC WITH FIRST SEGMENT SKEWED FOR:
W=4' WITH SKEW ANGLE >30°
W=6' WITH SKEW ANGLE >20°
W=8' WITH SKEW ANGLE >15°

NOTE: EXPANSION BOLTS SHALL CONSIST OF SELF-DRILLING EXPANSION SHIELDS AND HOOKED BOLTS, HOOKED BOLTS SHALL EXTEND A MINIMUM OF 9" INTO THE NEW CONCRETE.

SIDE	STATION	CULVERT SIZE	EXTENSION LENGTH	CULVERT NO.	DESIGN FILL HEIGHT	BOX CULVERT END SECTION	SKEW ANGLE	DIMENSIONS						REINFORCEMENT BARS				EXPANSION BOLTS 3/4"	CONCRETE COLLAR #4 BARS	
								A	B	C	W	H	T	G	J	L	NUMBER BARS			LB
LT	162+82.39	PCBC 2'x2'	16	1	3	1	-	48	48	-	24	24	4	44	32	108	4	24	8	0.3
LT	174+03.33	PCBC 2'x2'	21	2	17	1	-	56	48	-	24	24	4	44	32	108	4	24	8	0.3
LT	174+81.81	PCBC 3'x3'	26	3	14	1	-	60	60	-	36	36	4	56	38	132	4	29	8	0.4
RT	174+81.81	PCBC 3'x3'	7	3	14	-	-	60	60	-	36	36	4	56	38	132	4	29	8	0.4
LT	178+03.29	PCBC 2'x2'	16	4	6	1	-	48	48	-	24	24	4	44	32	108	4	24	8	0.3
RT	178+03.29	PCBC 2'x2'	20	4	6	1	-	48	48	-	24	24	4	44	32	108	4	24	8	0.3
LT	181+71.80	PCBC 8'x6'	12	5	5	1	30°	136	104	-	96	72	8	100	76	252	4	56	18	1.0
RT	181+71.80	PCBC 8'x6'	14	5	5	1	30°	136	104	-	96	72	8	100	76	252	4	56	18	1.0
LT	203+98.97	PCBC 3'x2'	8	6	<2	1	-	60	48	-	36	24	4	44	38	120	4	27	8	0.3
RT	203+98.97	PCBC 3'x2'	9	6	<2	1	-	60	48	-	36	24	4	44	38	120	4	27	8	0.3
LT	215+77.29	PCBC 3'x2'	6	7	<2	1	-	60	48	-	36	24	4	44	38	120	4	27	8	0.3
RT	215+77.29	PCBC 3'x2'	10	7	<2	1	-	60	48	-	36	24	4	44	38	120	4	27	8	0.3
LT	287+41.18	PCBC 4'x2'	8	8	<2	1	-	74	50	-	48	24	5	46	45	136	4	30	8	0.4
RT	287+41.18	PCBC 4'x2'	9	8	<2	1	-	74	50	-	48	24	5	46	45	136	4	30	8	0.4
LT	313+50.00	PCBC 6'x3'	69	9	2	1	23°	110	66	-	72	36	7	62	63	188	4	42	12	0.7
RT	313+75.00	PCBC 4'x3'	43	10	3	1	13°	82	62	29	48	36	5	58	49	156	6	52	10	1.0
LT	391+26.76	PCBC 2'x2'	16	11	2	1	-	48	48	-	24	24	4	44	32	108	4	24	8	0.3
RT	391+26.76	PCBC 2'x2'	13	11	2	1	-	48	48	-	24	24	4	44	32	108	4	24	8	0.3
LT	554+20.38	PCBC 8'x2'	5	13	<2	1	45°	136	56	-	96	24	8	52	76	204	4	45	14	0.7
RT	554+20.38	PCBC 8'x2'	5	13	2	1	45°	136	56	-	96	24	8	52	76	204	4	45	14	0.7
LT	609+33.42	PCBC 2'x2'	8	14	2	1	26°	56	48	38	24	24	4	44	36	116	6	39	8	0.5
RT	609+33.42	PCBC 2'x2'	12	14	2	1	26°	56	48	38	24	24	4	44	36	116	6	39	8	0.5
LT	682+90.23	PCBC 3'x2'	9	15	2	1	29°	68	48	38	36	24	4	44	42	128	6	43	8	1.1
RT	689+49.10	PCBC 4'x2'	6	16	<2	1	-	74	50	-	48	24	5	46	45	136	4	30	8	0.4
TOTALS:																817	230	12.2		

*THE COST OF CONCRETE COLLAR FOR PRECAST BOX CULVERT EXTENSION IS TO BE INCLUDED IN THE COST OF BOX CULVERT EXTENSION.

**SKEWED CULVERT

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

CONCRETE BOX CULVERT EXTENSION DETAILS

DATE 9/01

DRAWN BY MLO
CHECKED BY SJK