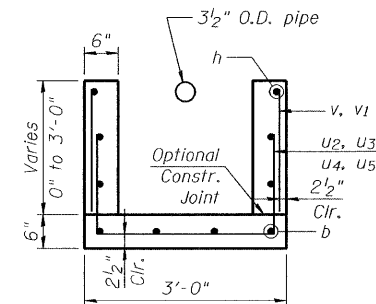
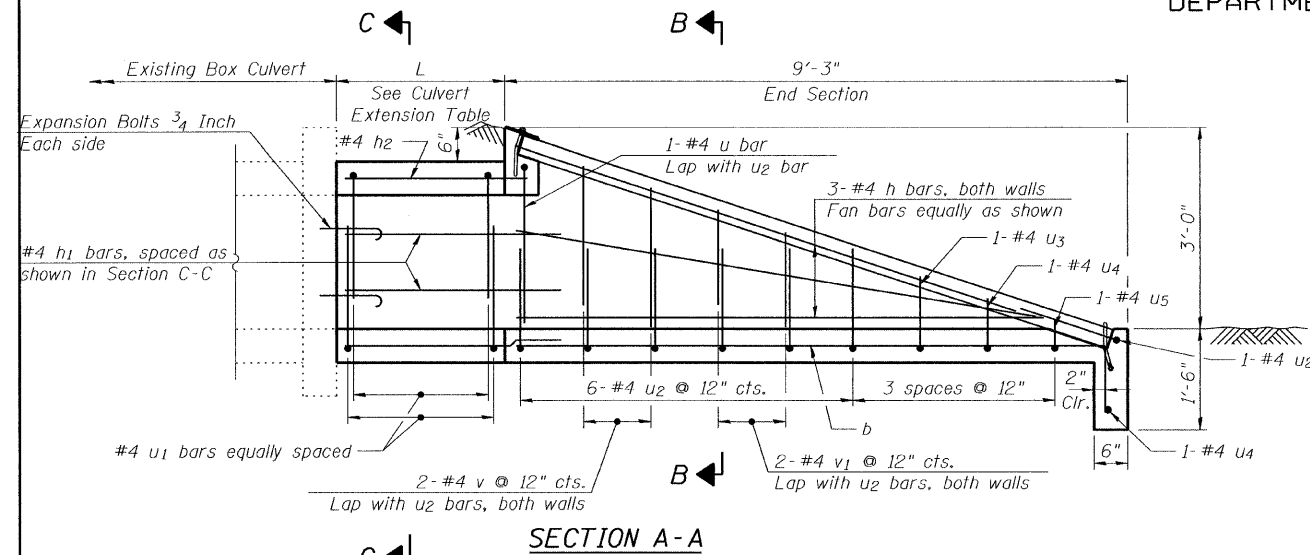


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**DIMENSIONS AND QUANTITIES  
CULVERT EXTENSION**

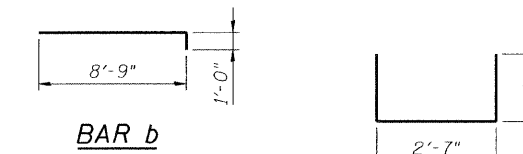


SECTION B-B

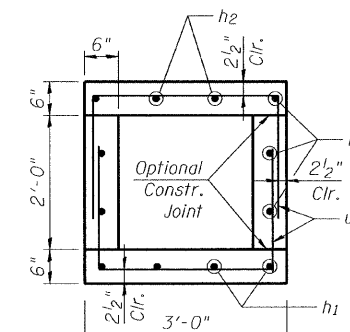
Location	Dimension 'L'	Reinforcement Bars - No. 4						Concrete Structures Cu. Yds.	Reinf. Bars lbs	Expansion Bolts 3/4 Inch Each
		h1		h2		u1				
1L	2'-0"	10	2'-8"	2	2'-2"	6	6'-3"	0.4	46	4
1R	2'-0"	10	2'-8"	2	2'-2"	6	6'-3"	0.4	46	4
2L	4'-4"	10	5'-0"	2	4'-6"	10	6'-3"	0.8	82	4
2R	4'-4"	10	5'-0"	2	4'-6"	10	6'-3"	0.8	82	4
3L	4'-2"	10	4'-10"	2	4'-4"	10	6'-3"	0.8	80	4
3R	4'-2"	10	4'-10"	2	4'-4"	10	6'-3"	0.8	80	4
6L	2'-1"	10	2'-9"	2	2'-3"	6	6'-3"	0.4	47	4
6R	2'-1"	10	2'-9"	2	2'-3"	6	6'-3"	0.4	47	4
7L	3'-1"	10	3'-9"	2	3'-3"	8	6'-3"	0.6	63	4
7R	3'-1"	10	3'-9"	2	3'-3"	8	6'-3"	0.6	63	4

**BAR DIMENSIONS**

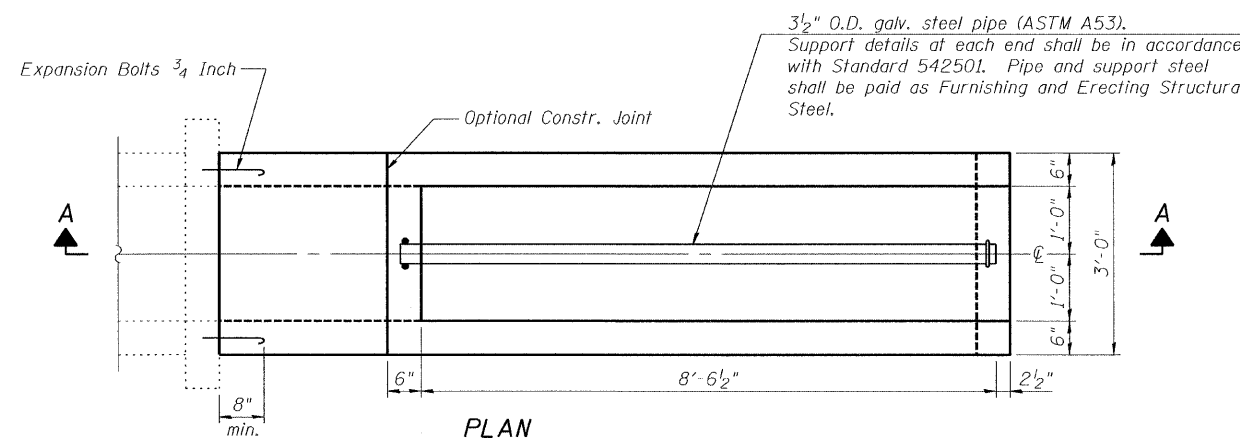
Bar	A
u	2'-4"
u1	1'-10"
u2	1'-6"
u3	1'-1"
u4	0'-9"
u5	0'-5"



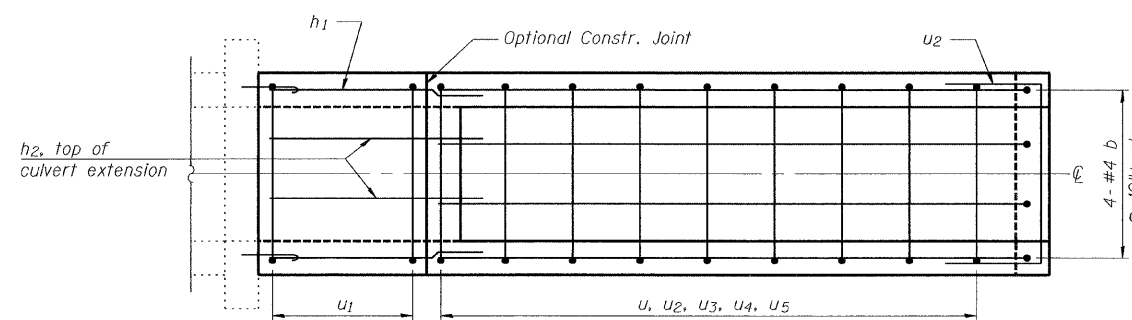
BAR b



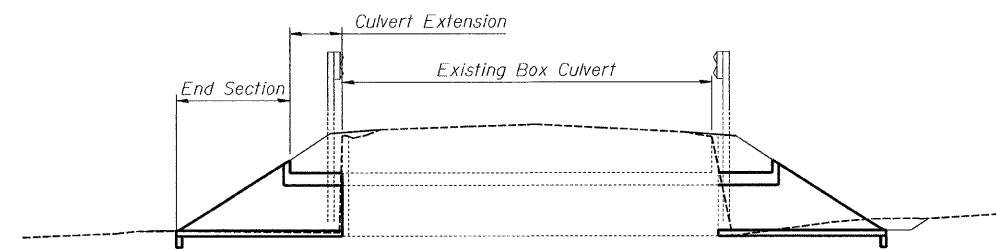
SECTION C-C



PLAN



PLAN OF REINFORCEMENT



TYPICAL CROSS SECTION

**MATERIAL REQUIRED FOR ONE END SECTION**

Bar	No.	Size	Length	Shape
b	4	#4	9'-9"	┌
h	6	#4	7'-10"	—
u	1	#4	7'-3"	┌
u2	7	#4	5'-7"	┌
u3	1	#4	4'-9"	┌
u4	2	#4	4'-1"	┌
u5	1	#4	3'-5"	┌
v	4	#4	2'-1"	—
v1	4	#4	1'-5"	—
Concrete Structures			Cu. Yd.	1.2
Furnishing And Erecting Structural Steel			Pound	76
Reinforcement Bars			Pound	109

**NOTES**

- The Culvert Extension and End Section 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.
- Expansion Bolts 3/4 Inch shall consist of approved Expansion Anchors, and 3/4" φ Hook Bolts which conform to Section 1006.09. These Bolts shall extend at least 8" into the new concrete.
- The cost of removal and disposal of any existing timber headwalls and any excavation required to construct the culvert extensions and end sections shall be included in Concrete Structures.

**CULVERT EXTENSION AND END SECTION**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	2009-092GRR	WILL	18	12
* VARIOUS		CONTRACT NO. 60145		
ILLINOIS FED. AID PROJECT				

H:\jobs\2009\200903023-09\CAD\Structural\dgn\08\080145-shft-culvert-extension-end-section.dgn 11/30/2009

GRAEF	11-6-2009
DESIGNED	E.E.J.
CHECKED	J.A.Z.
DRAWN	E.E.J.
CHECKED	J.A.Z.