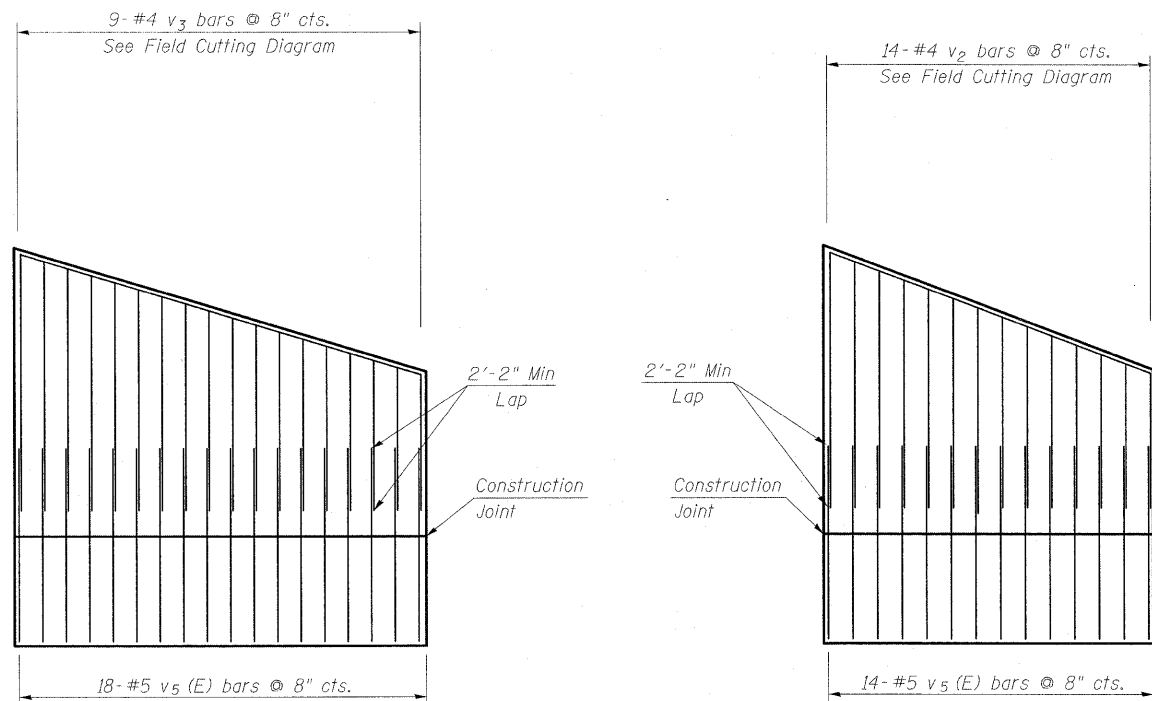
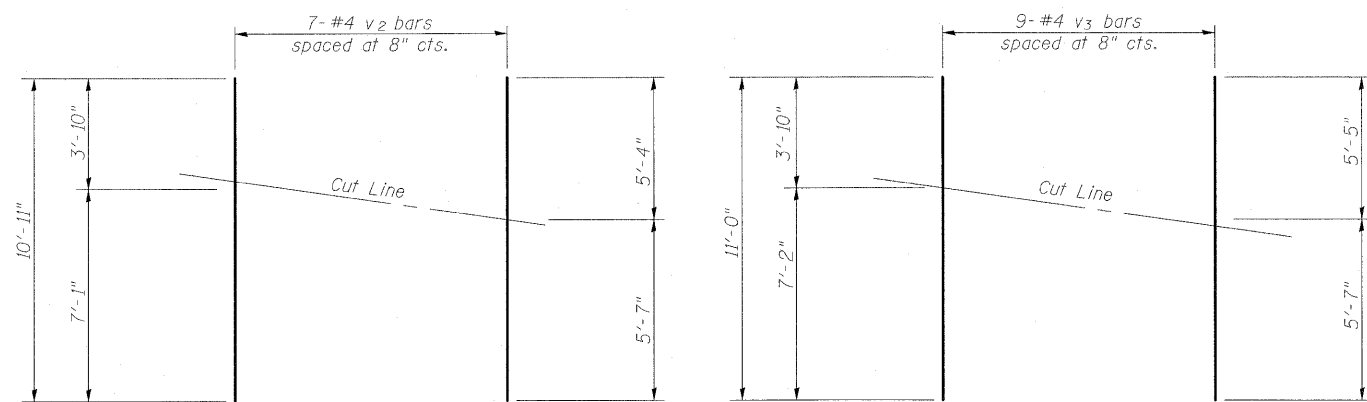


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



**LONG WING  
SHOWING REINFORCEMENT**

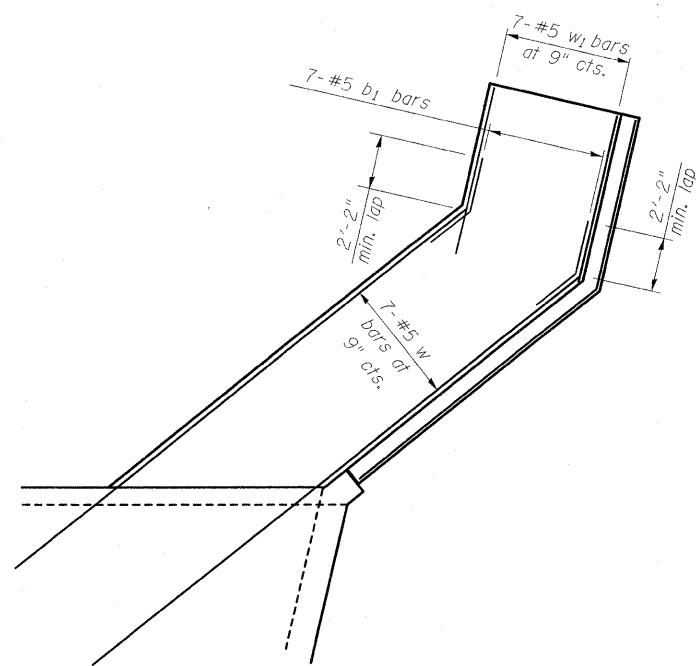
**SHORT WING  
SHOWING REINFORCEMENT**



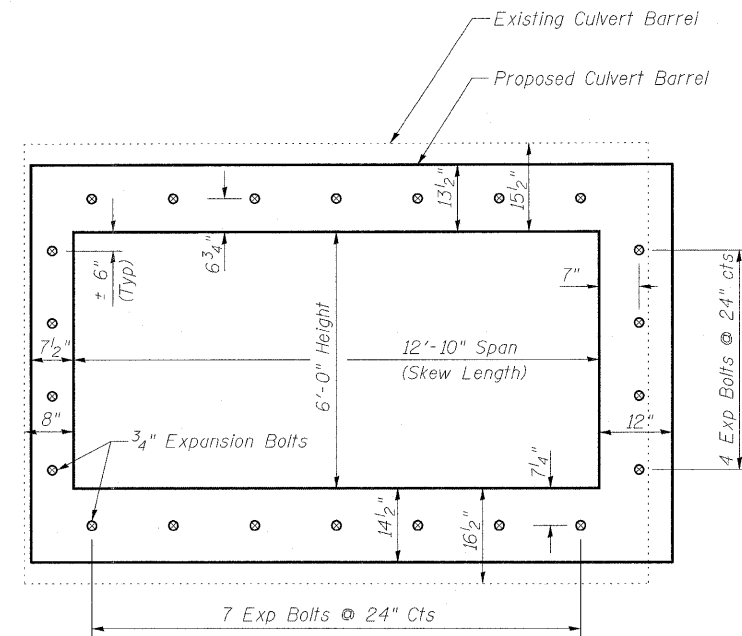
**FIELD CUTTING DIAGRAM  
(v<sub>2</sub> bars)**

**FIELD CUTTING DIAGRAM  
(v<sub>3</sub> bars)**

**FIELD CUTTING AND  
PLACEMENT DIAGRAMS**

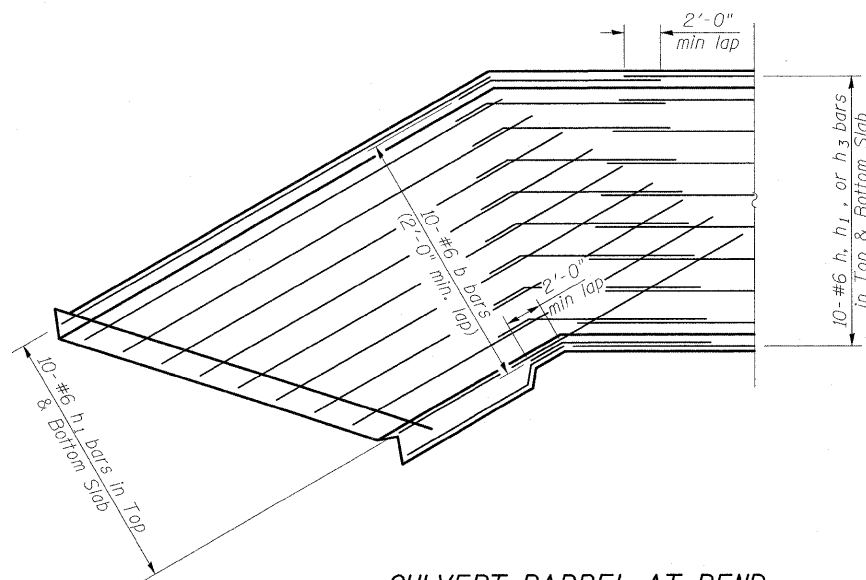


**LONG WING  
SHOWING REINFORCEMENT**



Note - Expansion Bolts shall be 3/4" hooked bolts. Hooked bolts shall extend a minimum of 9" into the new concrete

**EXPANSION BOLT LAYOUT  
(at Face of Culvert)**



**CULVERT BARREL AT BEND  
SHOWING REINFORCEMENT**

DESIGNED	-	BB
CHECKED	-	CJF
DRAWN	-	RCB
CHECKED	-	CJF

Order v<sub>2</sub> & v<sub>3</sub> bars full length. Cut as shown. Use remainder of bar in opposite end of Wing Wall.

Revised Sheet 5/21/10 CJF



**BERNARDIN  
LOCHMUELLER &  
ASSOCIATES, INC.**

3 Oak Drive  
Maryville, IL 62063-5633  
Local (618) 288-4665  
Fax 618-288-4666

SHEET NO. 3 OF 3 SHEETS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57/70	(25-3)R	EFFINGHAM	1416	450
FED. ROAD DIST. NO.			ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 74296					

**BOX CULVERT DETAILS  
LT STA 2046+35.61  
FAI ROUTE 70 WB (RDWY A)**