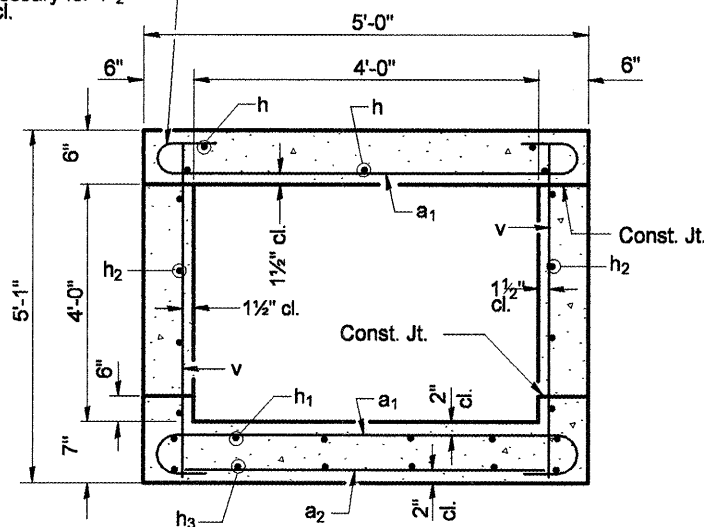
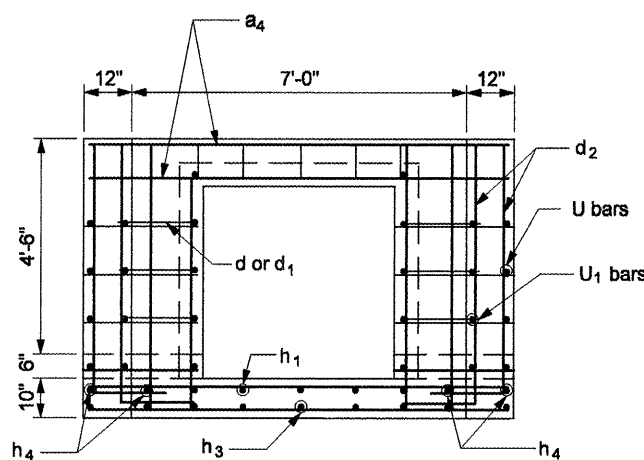


Tilt hook of a<sub>1</sub> bars

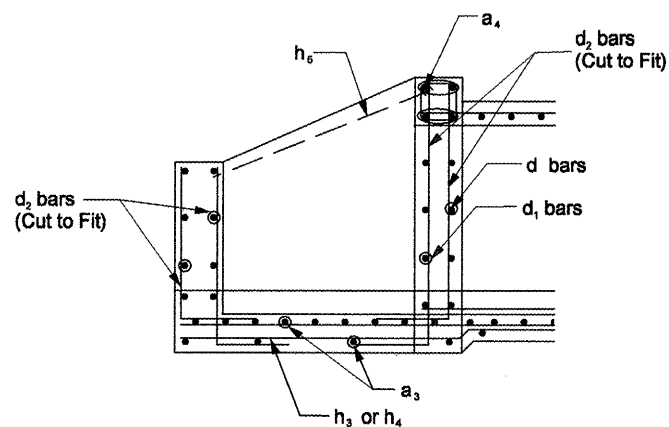
if necessary for 1½" min. cl.



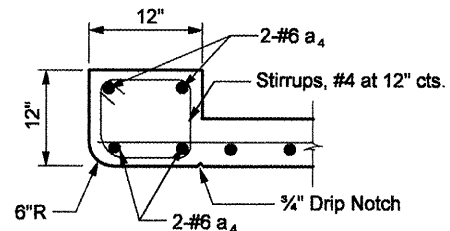
SECTION THRU BARREL



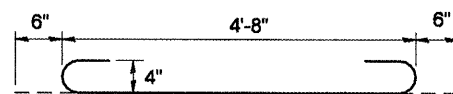
SECTION A-A



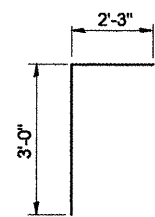
SECTION B-B



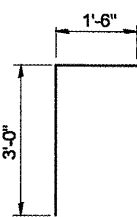
SECTION THRU HEADWALL



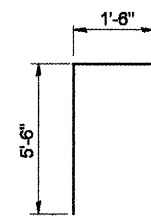
BAR a



BAR d



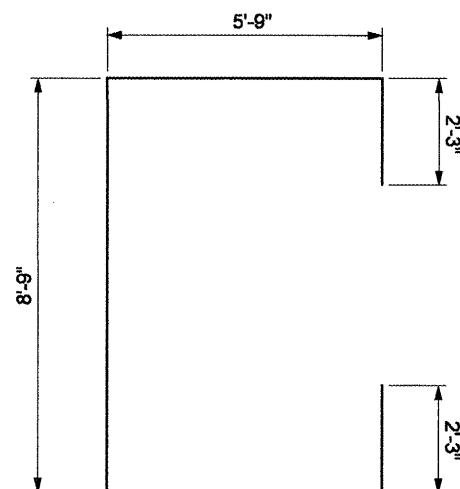
BAR d<sub>1</sub>



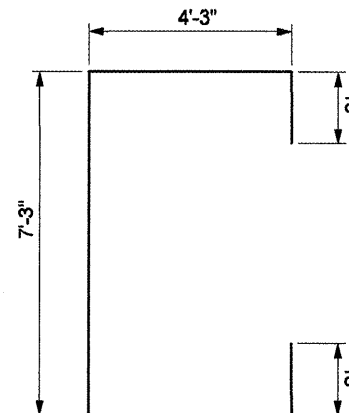
BAR d<sub>2</sub>



BAR h<sub>4</sub>



BARS U



BARS U<sub>1</sub>

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a <sub>1</sub>	51	#4	5'-8"	
a <sub>2</sub>	9	#4	4'-4"	
a <sub>3</sub>	12	#4	8'-8"	
a <sub>4</sub>	4	#6	8'-8"	
a <sub>5</sub>	6	#6	6'-0"	
d	8	#4	5'-3"	
d <sub>1</sub>	8	#4	4'-6"	
d <sub>2</sub>	62	#4	7'-0"	
h	7	#5	15'-6 ¾"	
h <sub>1</sub>	5	#4	21'-2"	
h <sub>2</sub>	10	#5	16'-7"	
h <sub>3</sub>	5	#4	20'-11"	
h <sub>4</sub>	4	#4	4'-9"	
h <sub>5</sub>	2	#4	4'-11"	
S	12	#4	3'-9"	
U	4	#4	24'-10"	
U <sub>1</sub>	4	#4	18'-9"	
V	46	#4	4'-9"	
3/4" Anchor Bolts			Each	12
Concrete Box Culverts			Cu. Yd.	10
Reinforcement Bars			Pound	1,476.00

**DESIGN STRESSES**

f<sub>y</sub> = 60,000 psi  
f<sub>c</sub> = 3,500 psi

FILE NAME =	USER NAME = crespole	DESIGNED -	REVISED -
cr\projects\us2411en\culvert detail.dgn		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CULVERT EXTENSION DETAILS**

SCALE: \_\_\_\_\_ SHEET NO. \_\_\_\_\_ OF \_\_\_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	(137.102) BS-4101BS-3	FULTON	56	27
CONTRACT NO. 68331				
FED. ROAD DIST. NO. 4 ILLINOIS FED. AID PROJECT				