

### BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a <sub>1</sub>	758	#6	8'-0"	
a <sub>2</sub>	107	#4	6'-8"	
a <sub>3</sub>	4	#5	7'-0"	
d	14	#4	4'-6"	
h	105	#5	29'-8"	
h <sub>1</sub>	70	#4	29'-5"	
h <sub>3</sub>	40	#7	8'-0"	
h <sub>4</sub>	4	#6	6'-6"	
h <sub>8</sub>	32	#7	12'-6"	
h <sub>10</sub>	63	#5	22'-2"	
h <sub>11</sub>	42	#4	21'-11"	
v	762	#4	6'-9"	
v <sub>1</sub>	16	#4	9'-8"	
Concrete Box Culverts			Cu. Yd.	114.6
Reinforcement Bars			Pound	21410
Bar Splicers			Each	35

### DESIGN STRESSES

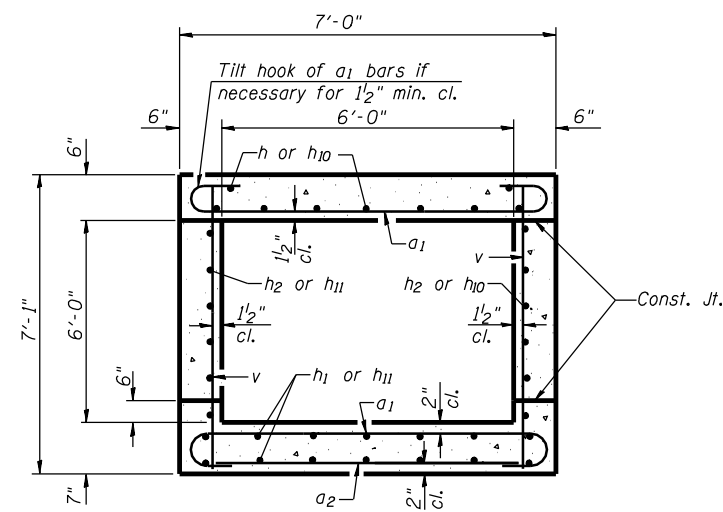
f<sub>y</sub> = 60,000 psi  
f'c = 3,500 psi

### LOADING HS 20-44 & ALT.

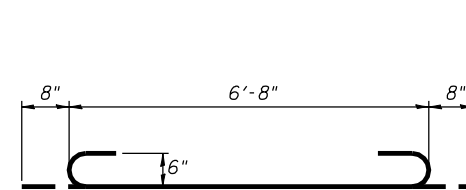
### MIN. BAR LAP

#4 = 1'-4"  
#5 = 1'-8"

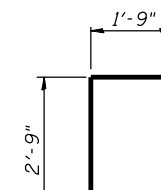
ILLINOIS DEPARTMENT OF TRANSPORTATION	
SHEET TITLE	CULVERT DETAILS AND
PROJECT	FAP 315 (IL 336/US 136) SECTION 34-5 (5B) HANCOCK COUNTY STATION 1209+45
PROJECT NO.	02076
DATE	03/08/06
DESIGNED BY	TFG
CHECKED BY	AJB/MCB
DRAWING NO.	2
COOMBE-BLOXDORF P.C. Engineers/Land Surveyors Springfield, Illinois	
Design Firm License No.	184-002708
OF 3 SHTS	



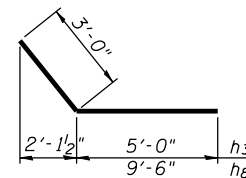
**SECTION THRU BARREL**



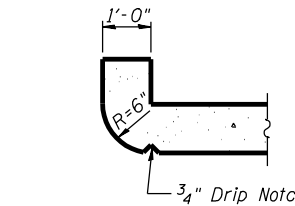
**BAR a<sub>1</sub>**



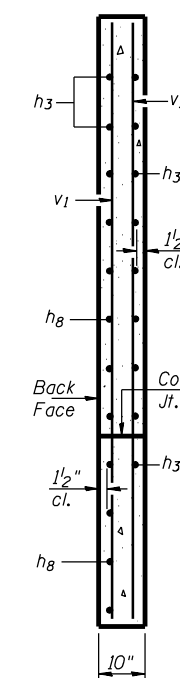
**BAR d**



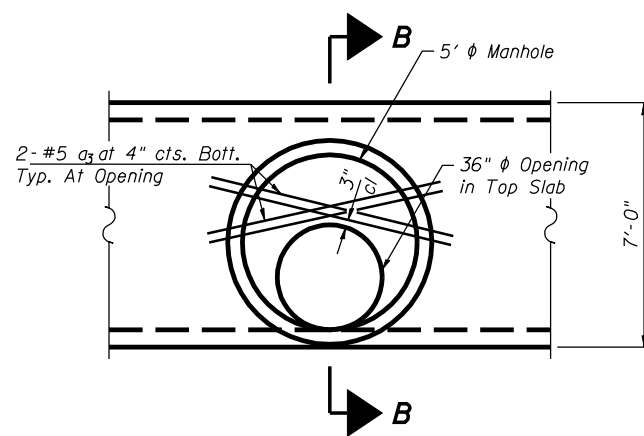
**BARS h<sub>3</sub> & h<sub>8</sub>**



**SECTION THRU HEADWALL**  
(Up Stream End Only)

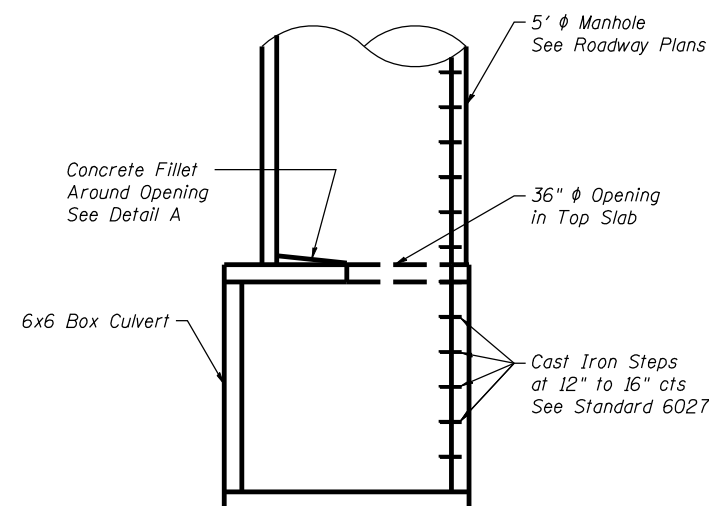


**SECTION A-A**

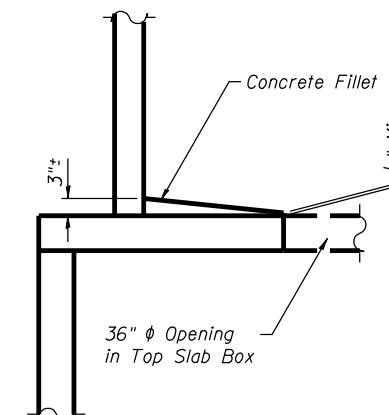


**TOP VIEW OF MANHOLE AT STA. 1209+43.5**

Cut a<sub>1</sub> bars and h bars in Field as Required to Clear Opening in Top Slab



**SECTION B-B**



**DETAIL A**

Note:  
Cost of Concrete Fillet and Cast Iron Steps  
Shall be Included in the Cost of Concrete Box Culverts

PLT DATE = 03/08/06  
FILE NAME = 030806  
PLOT SCALE = 1/8"=1'-0"  
USER NAME = BUSER8