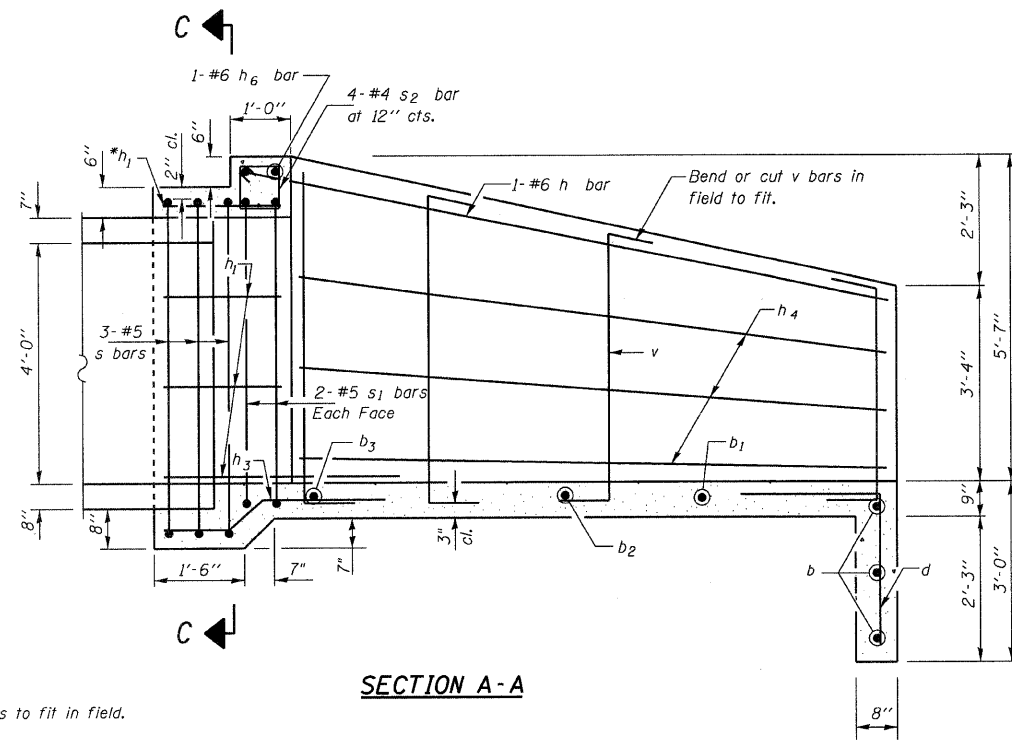
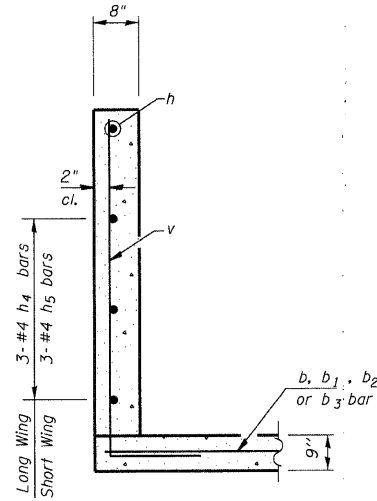


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

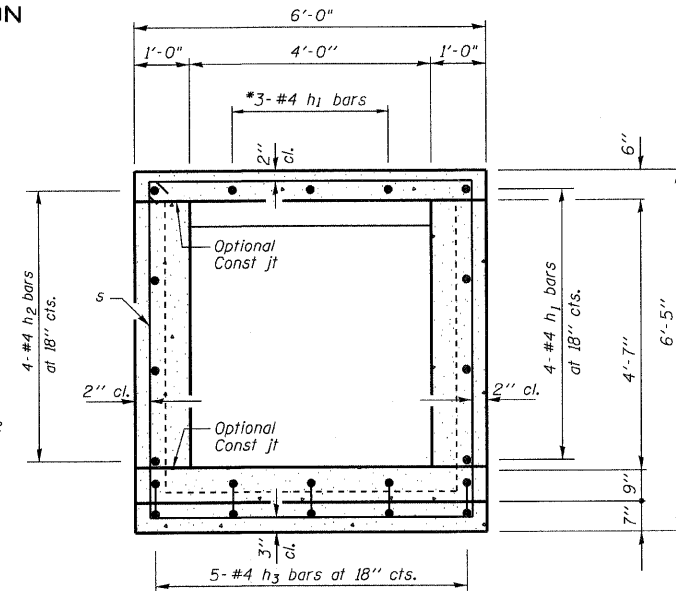


SECTION A-A

*Cut h_1 bars to fit in field.



SECTION B-B



SECTION C-C

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
b	3	#4	14'-10"	—
b ₁	1	#4	11'-11"	—
b ₂	1	#4	8'-11"	—
b ₃	1	#4	5'-11"	—
d	10	#4	5'-4"	└
h	1	#6	19'-5"	—
h ₁	7	#4	2'-1"	—
h ₂	4	#4	1'-10"	—
h ₃	5	#4	4'-4"	—
h ₄	3	#4	7'-4"	—
h ₅	3	#4	7'-0"	—
h ₆	1	#6	4'-0"	—
s	3	#5	24'-3"	┌
s ₁	4	#5	16'-5"	┌
s ₂	4	#4	3'-5"	┌
v	14	#4	8'-11"	└

Concrete Box Culverts Cu. Yd. 5.5
Reinforcement Bars Pound 420
Box Culvert End Section Culvert No. 3 Each 1
* For Information Only

MIN BAR LAP
#5 bar = 1'-8"

DESIGN SPECIFICATIONS

2002 AASHTO
17th Edition

LOADING HS20-44

Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES

FIELD UNITS

$f'c = 3,500$ psi
 $f_y = 60,000$ psi (Reinf.)

GENERAL NOTES

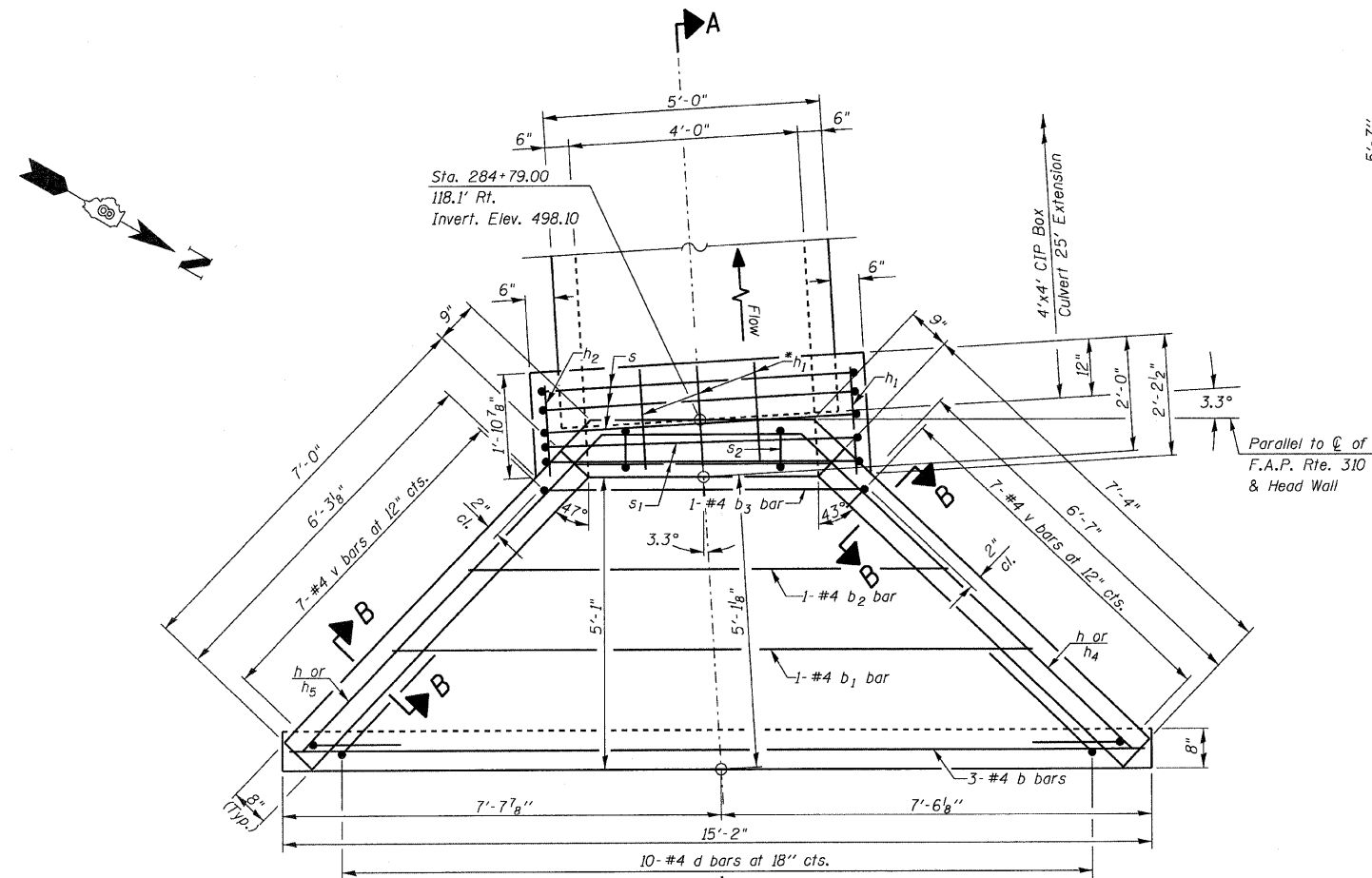
Reinforcement Bars shall conform to the requirements of ASTM A706 Gr 60 (LL Modified) See Special Provisions.

All exposed edges shall be chamfered $\frac{3}{4}$ " unless otherwise noted.

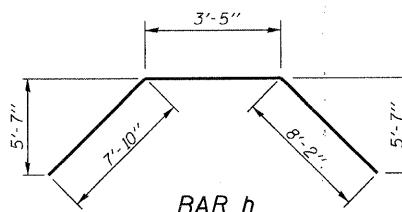
All construction joints shall be bonded.

Plan dimensions and details relative to existing structures have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to ordering materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

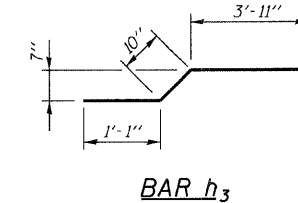
STA 284+79.00 RT
UPSTREAM 4'x4'
END SECTION DETAILS
FAP ROUTE 310 (US 67)
SECTION 60-16-1-1B
MADISON COUNTY



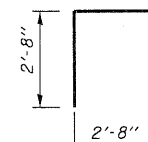
PLAN



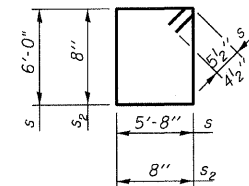
BAR h



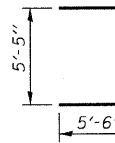
BAR h₃



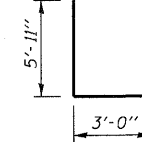
BAR d



BARS s & s₂



BAR s₁



BAR v

DESIGNED -	JMB
CHECKED -	TES
DRAWN -	R KING
CHECKED -	TES

HOMER L.
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& ASSOCIATES, LLP
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CHICAGO (773) 714-0050
ROCKFORD (815) 489-0050
184-001397

SHEET NO. 2 OF 3 SHEETS	F.A.P. RTE. 310	SECTION 60-16-1-1B	COUNTY MADISON	TOTAL SHEETS 481	SHEET NO. 162
	FAP ROUTE 310 (US 67)		CONTRACT NO. 76318		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		