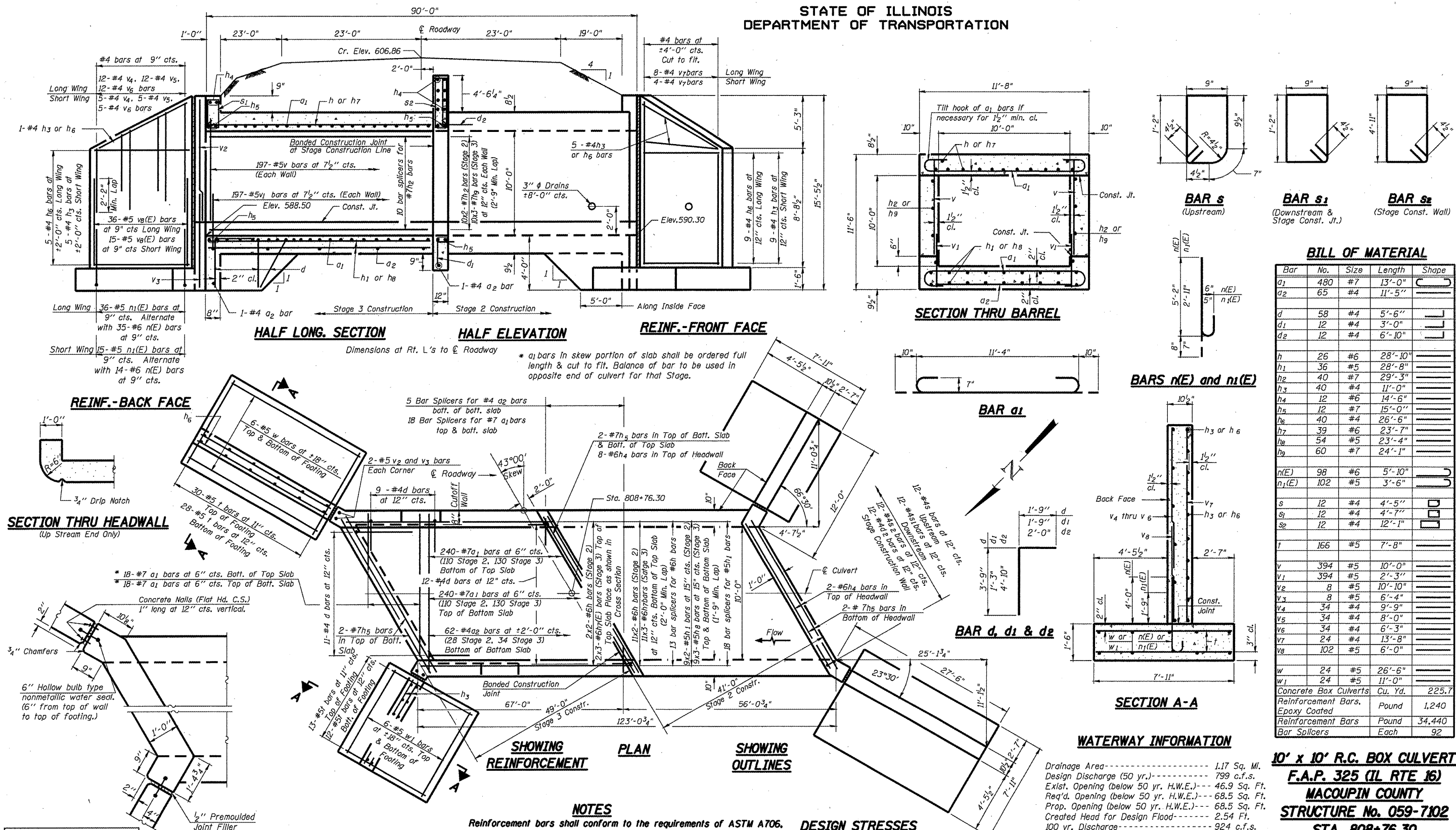


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a1	480	#7	13'-0"	
a2	65	#4	11'-5"	
d	58	#4	5'-6"	
d1	12	#4	3'-0"	
d2	12	#4	6'-10"	
h	26	#6	28'-10"	
h1	36	#5	28'-8"	
h2	40	#7	29'-3"	
h3	40	#4	11'-0"	
h4	12	#6	14'-6"	
h5	12	#7	15'-0"	
h6	40	#4	26'-6"	
h7	39	#6	23'-7"	
h8	54	#5	23'-4"	
h9	60	#7	24'-1"	
n(E)	98	#6	5'-10"	
n1(E)	102	#5	3'-6"	
s	12	#4	4'-5"	
s1	12	#4	4'-7"	
s2	12	#4	12'-1"	
t	166	#5	7'-8"	
v	394	#5	10'-0"	
v1	394	#5	2'-3"	
v2	8	#5	10'-10"	
v3	8	#5	6'-4"	
v4	34	#4	9'-9"	
v5	34	#4	8'-0"	
v6	34	#4	6'-3"	
v7	24	#4	13'-8"	
v8	102	#5	6'-0"	
w	24	#5	26'-6"	
w1	24	#5	11'-0"	
Concrete Box Culverts			Cu. Yd.	225.7
Reinforcement Bars			Pound	1,240
Epoxy Coated				
Reinforcement Bars			Pound	34,440
Bar Splicers			Each	92

**WATERWAY INFORMATION**

Drainage Area----- 1.17 Sq. Mi.  
Design Discharge (50 yr.)----- 799 c.f.s.  
Exlst. Opening (below 50 yr. H.W.E.)-- 46.9 Sq. Ft.  
Req'd. Opening (below 50 yr. H.W.E.)-- 68.5 Sq. Ft.  
Prop. Opening (below 50 yr. H.W.E.)-- 68.5 Sq. Ft.  
Created Head for Design Flood----- 2.54 Ft.  
100 yr. Discharge----- 924 c.f.s.  
Created Head 100 yr. Flood----- 3.14 Ft.  
100 yr. H.W.E.----- 595.29

**10' x 10' R.C. BOX CULVERT**  
**F.A.P. 325 (IL RTE 16)**  
**MACOUPIN COUNTY**  
**STRUCTURE No. 059-7102**  
**STA. 808+76.30**

**NOTES**  
Reinforcement bars shall conform to the requirements of ASTM A706, Grade 60.  
Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.  
Reinforcement bars designated (E) shall be epoxy coated.  
All construction joints shall be bonded.

**DESIGN STRESSES**

fy = 60,000 psi  
f'c = 3,500 psi  
Max. Soil Pressure under footing = 3,148 psf

**LOADING HS 20-44 & ALT.**

SHEET NO. 1	F.A.P. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
OF 5 SHEETS	325	114 (B-1)	MACOUPIN	57	39
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
CONTRACT NO. 72646					

DESIGNED	SCD
CHECKED	DRB
DRAWN	THW
CHECKED	SCD

**CORNER DETAIL**

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