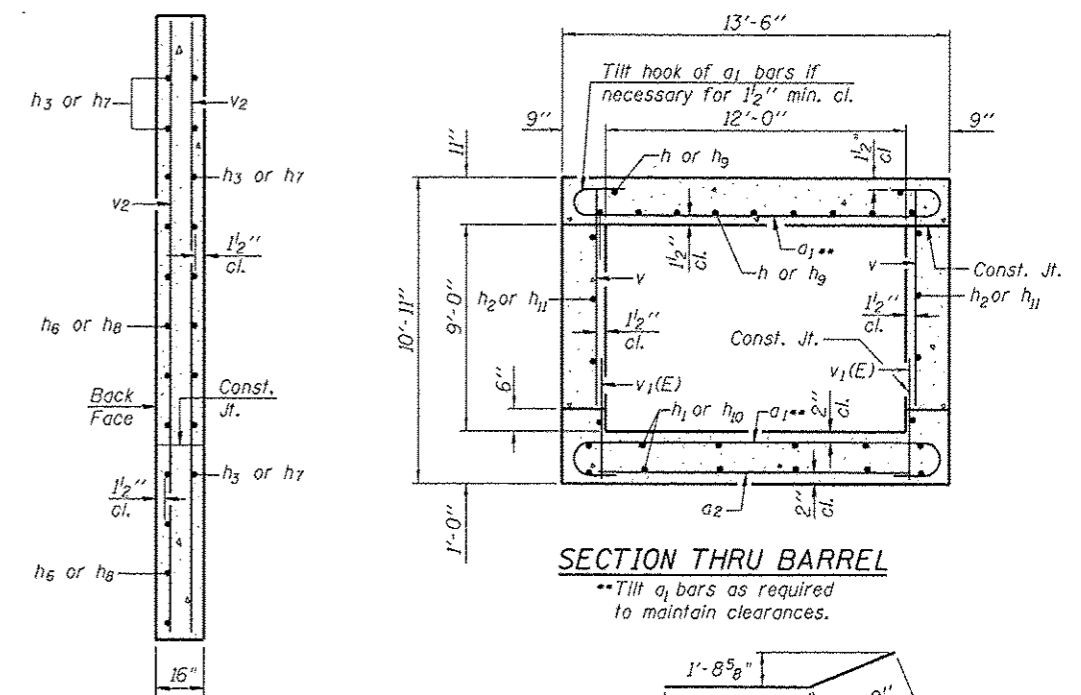
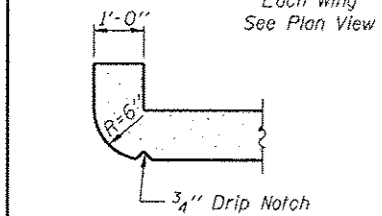


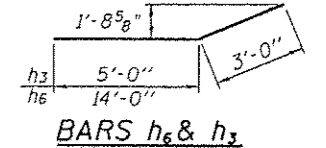
HALF LONG. SECTION HALF ELEVATION REINF.-FRONT FACE
 Dimensions at Rt. L's to ϕ Roadway



SECTION THRU BARREL
 **Tilt a1 bars as required to maintain clearances.



SECTION THRU HEADWALL
 (Up Stream End Only)



BARS h6 & h3

DESIGN STRESSES

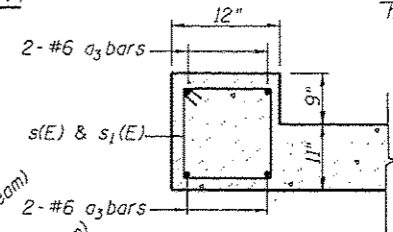
$f_y = 60,000$ psi
 $f'_c = 3,500$ psi

LOADING HL-93

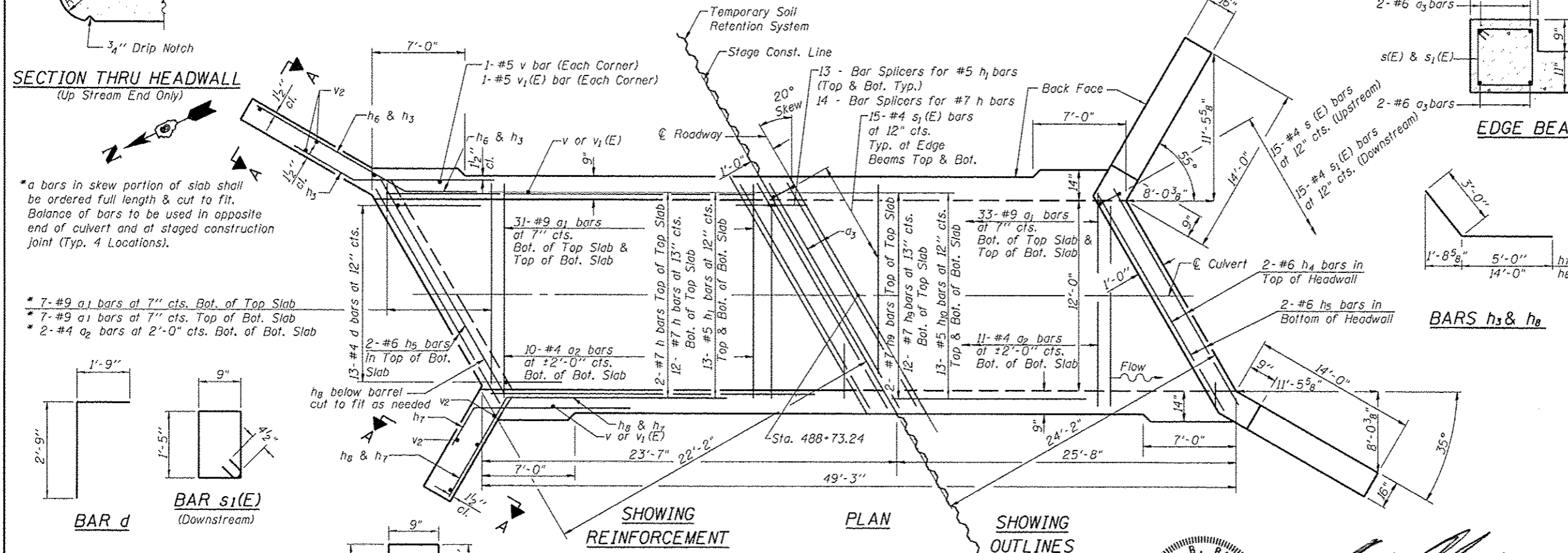
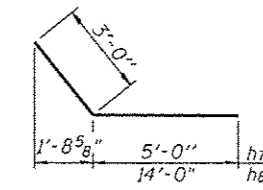
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1	156	#9	15'-8"	□
a2	25	#4	12'-6"	□
a3	16	#6	14'-1"	□
a4	2	#4	14'-10"	□
d	26	#4	4'-6"	□
h	14	#7	23'-4"	□
h1	26	#5	23'-4"	□
h2	18	#6	23'-4"	□
h3	54	#7	8'-0"	□
h4	4	#6	13'-6"	□
h5	8	#6	14'-0"	□
h6	30	#7	17'-0"	□
h7	56	#7	8'-0"	□
h8	28	#7	17'-0"	□
h9	14	#7	25'-5"	□
h10	26	#5	25'-5"	□
h11	18	#6	25'-5"	□
s(E)	15	#4	4'-11"	□
s1(E)	75	#4	5'-1"	□
v	176	#5	9'-3"	□
v1(E)	176	#5	2'-7"	□
v2	16	#4	13'-5"	□
Concrete Box Culverts	Cu. Yd.		111.3	
Reinforcement Bars, Epoxy Coated	Pound		780	
Reinforcement Bars	Pound		18,900	
Bar Splicers	Each		58	

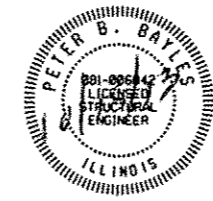
EDGE BEAM



BARS h3 & h8



NOTES
 Reinforcement bars designated (E) shall be epoxy coated.
 A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.



Peter B. Bayles
 Peter B. Bayles, P.E., S.E.
 Structural Engineer License No. 081-006042
 Expiration Date: 11/30/2014

BLANK, WESSELINK, COOK & ASSOCIATES DECATUR, ILLINOIS ENGINEERS - CONSULTANTS DESIGN FIRM NO. 184000894

FILE NAME *	USER NAME *	DESIGNED	PBB	REVISED	-
		CHECKED	PBB	REVISED	-
		DRAWN	CGF	REVISED	-
		CHECKED	PBB	REVISED	-

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PROPOSED 12 x 9 BOX CULVERT, STRUCTURE NO. 054-7069
 ILLINOIS ROUTE 10
 SHEET NO. 1 OF 5 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
117		LOGAN	218	50
1026-1/102CR 1020R-2/PS-5			CONTRACT NO. 72B82	
ILLINOIS FED. AID PROJECT				