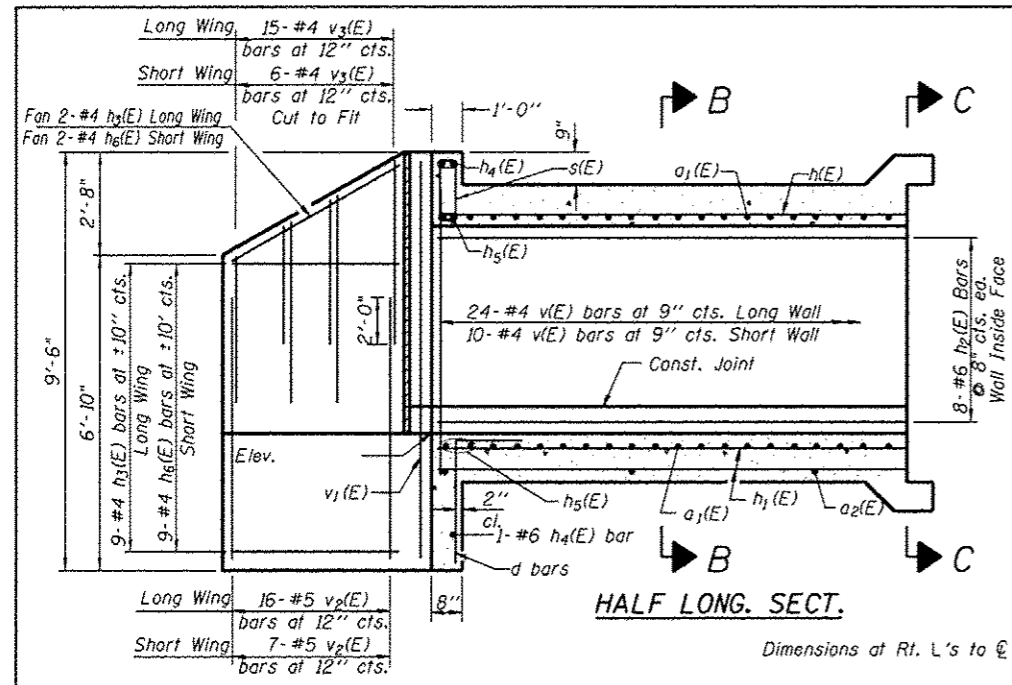
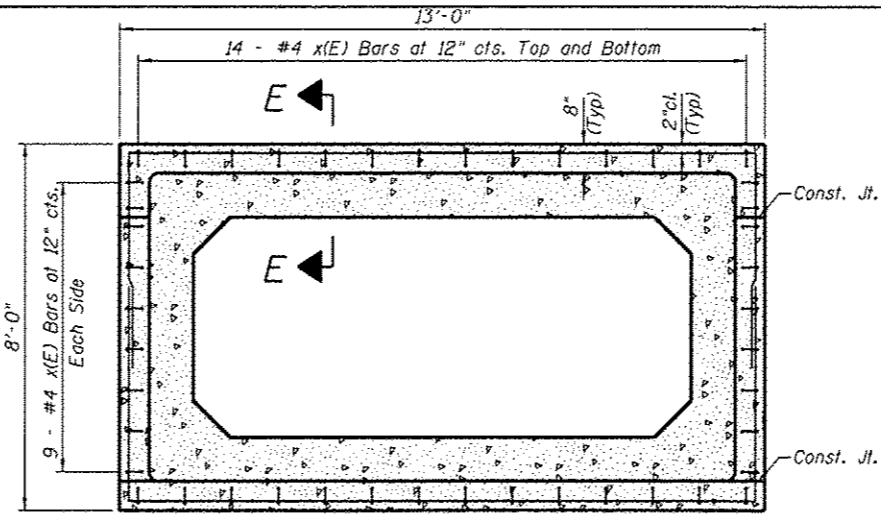


BOX CULVERT DETAILS
US 20 /IL RTE 84
F.A.P. RTE 301 SECTION 29T-2
JO DAVIESS COUNTY
STA. 876 + 47

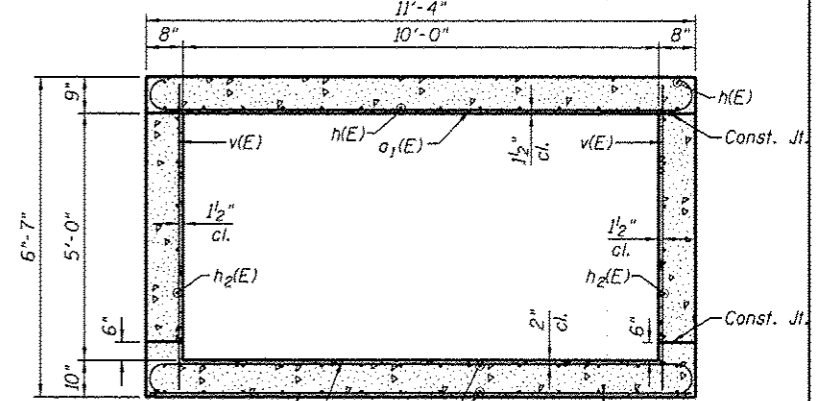


HALF LONG. SECT.

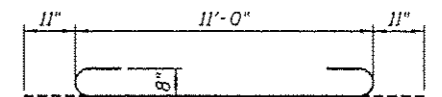
Dimensions at Rt. L's to \emptyset Roadway



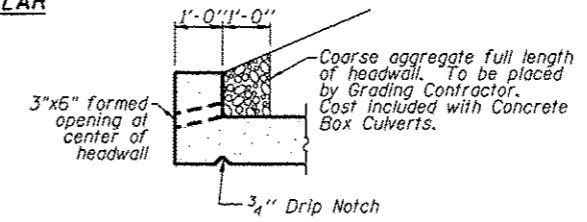
SECTION C-C
TYPICAL SECTION THRU PRECAST TO CAST-IN-PLACE CONNECTION COLLAR
 (Typical For Both End Sections)



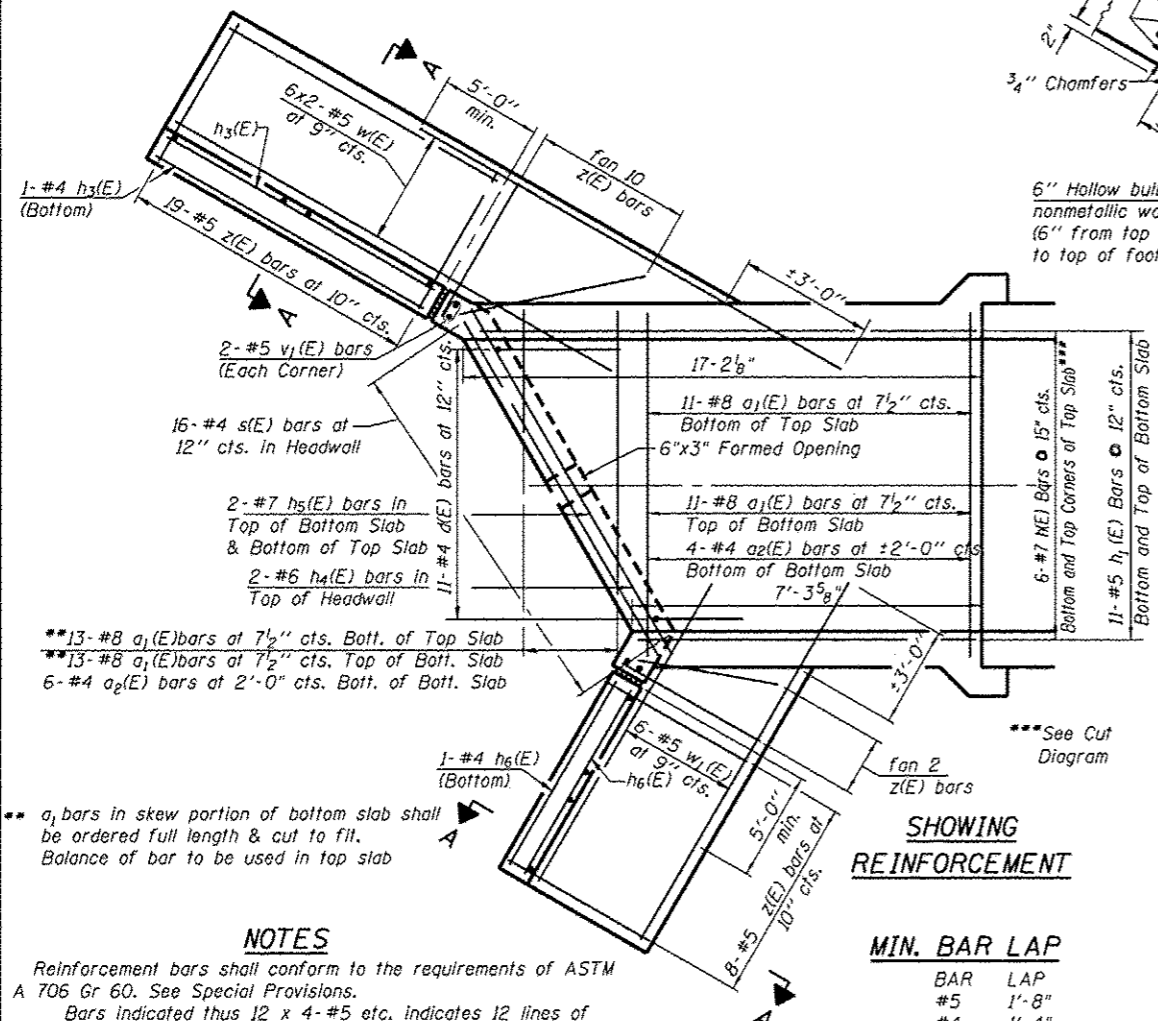
SECTION B-B
TYPICAL SECTION THRU SOUTH CAST-IN-PLACE END SECTION



BAR a1(E)



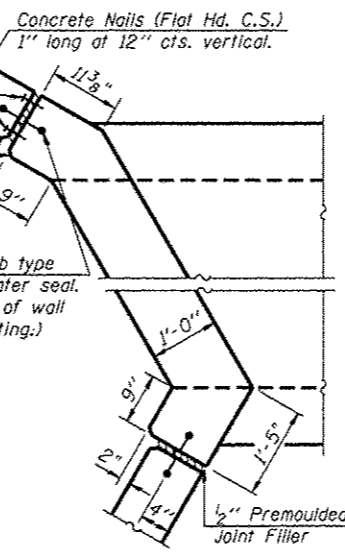
SECTION THRU HEADWALL
 (Down Stream End Only)



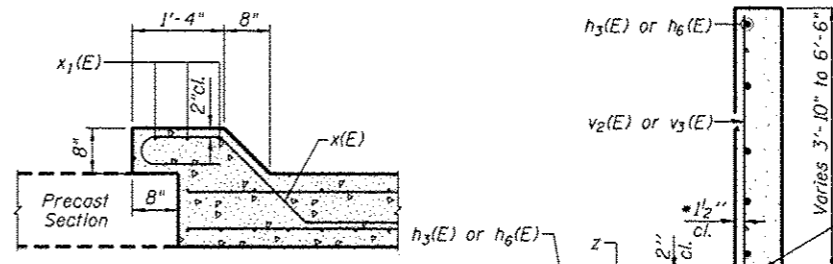
SHOWING REINFORCEMENT

MIN. BAR LAP

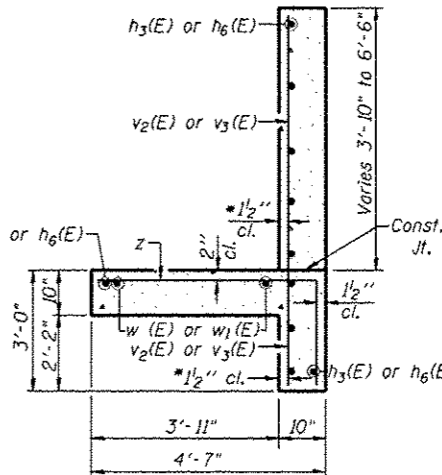
BAR	LAP
#5	1'-8"
#4	1'-4"



CORNER DETAIL



SECTION E-E
TYPICAL SECTION THRU PRECAST TO CAST-IN-PLACE CONNECTION COLLAR
 (Typical For Both End Sections)



SECTION A-A

* v bars shall not be placed more than 1/2" cl. from back face of wingwall.

DESIGN STRESSES

$f_y = 60,000 \text{ psi}$
 $f'_c = 3,500 \text{ psi}$
 Max. Soil Pressure under footing = 2400 psf

BILL OF MATERIAL DOWNSTREAM END

Bar	No.	Size	Length	Shape
a1(E)	35	#8	12'-10"	U
a2(E)	10	#4	11'-0"	—
d(E)	11	#4	4'-6"	—
h(E)	6	#7	23'-9"	—
h1(E)	11	#5	23'-9"	—
h2(E)	8	#6	23'-9"	—
h3(E)	12	#4	14'-9"	—
h4(E)	3	#6	15'-0"	—
h5(E)	4	#7	15'-8"	—
h6(E)	12	#4	5'-9"	—
s(E)	16	#4	4'-9"	□
v(E)	34	#4	6'-3"	—
v1(E)	4	#5	9'-2"	—
v2(E)	23	#5	6'-8"	—
v3(E)	21	#4	4'-7"	—
x(E)	46	#4	6'-3"	—
x1(E)	6	#4	22'-4"	—
w(E)	12	#5	19'-0"	—
w1(E)	6	#5	11'-0"	—
z(E)	39	#5	7'-0"	—
Concrete Box Culverts		Cu. Yd.	23.2	
Reinforcement Bars, Epoxy Coated		Pound	3850	

SSB-L-L 7-1-10



USER NAME - Janine Shaw	DESIGNED - SB	REVISED -
WES JOB # - 2120114	DRAWN - BEH	REVISED -
PLOT SCALE - 1/8" = 1'-0"	CHECKED - DB	REVISED -
PLOT DATE - 12/7/2012	DATE - 12/07/2012	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BOX CULVERT DETAILS STA. 876 + 47
 DOWNSTREAM END STR. NO. 043-1113
 SHEET 5 OF 7 SHEETS STA. 876+47

F.A.P. RTE. 301	SECTION 29T-2	COUNTY JO DAVIESS	TOTAL SHEETS 52	SHEET NO. 25
CONTRACT NO. 64H17			ILLINOIS FED. AID PROJECT	