STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

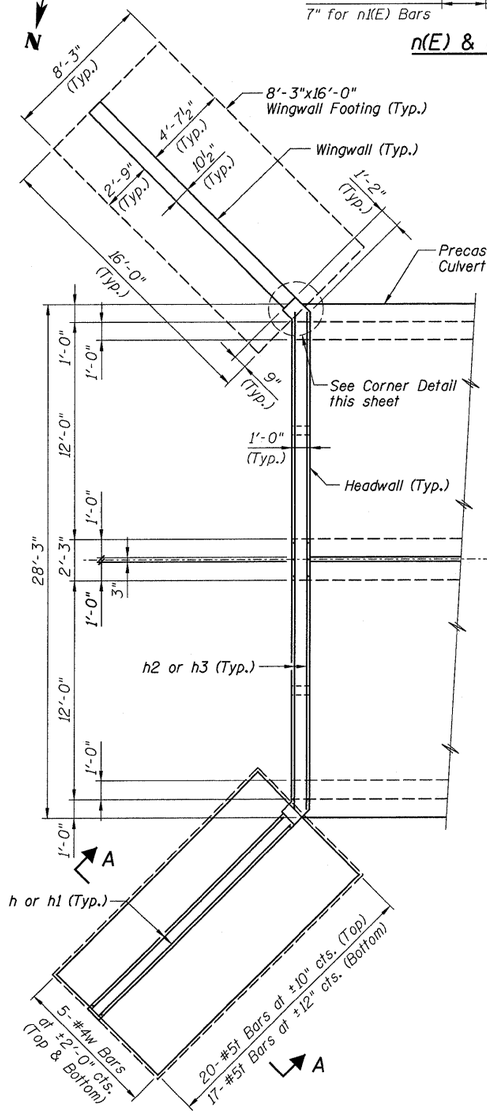
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 798	*	FORD	92	37
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT-	

SHEET NO. S2
S4 SHEETS

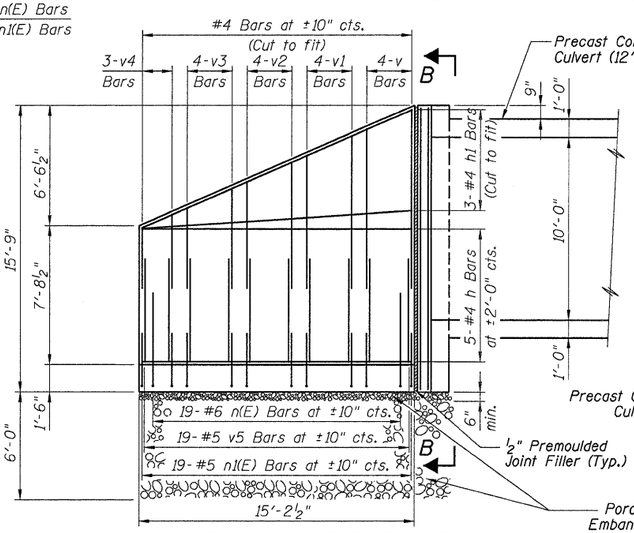
* 107-BR, 108-BR, 108-BR-1 Contract # 66698

n(E) & n1(E) BARS

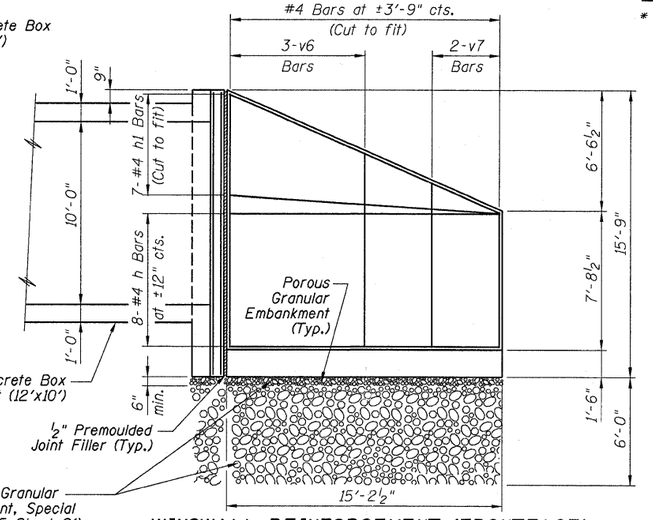
8" for n(E) Bars
7" for n1(E) Bars
5'-2" for n(E) Bars
2'-11" for n1(E) Bars



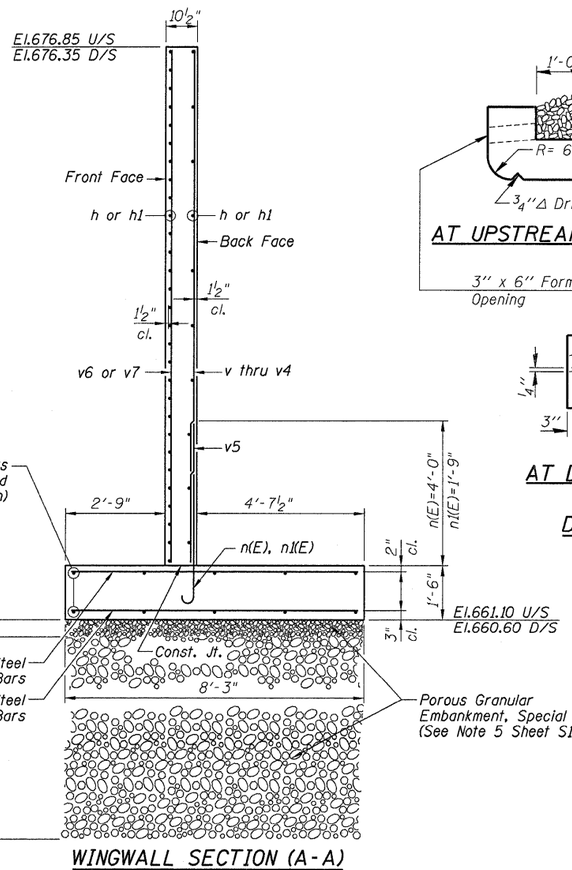
PLAN



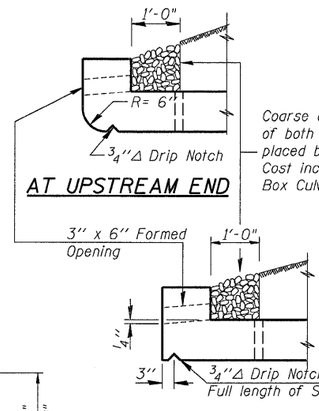
WINGWALL REINFORCEMENT (BACKFACE)



WINGWALL REINFORCEMENT (FRONTFACE)

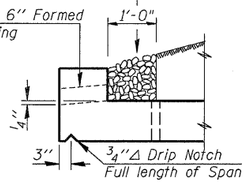


WINGWALL SECTION (A-A)
Allowable Soil Bearing Capacity = 3,200 psf



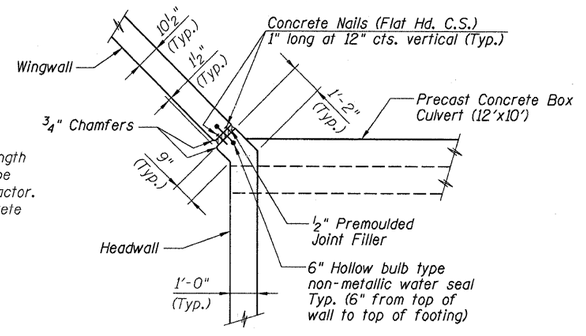
AT UPSTREAM END

Coarse aggregate full length of both headwalls. To be placed by Grading Contractor. Cost included with Concrete Box Culverts.

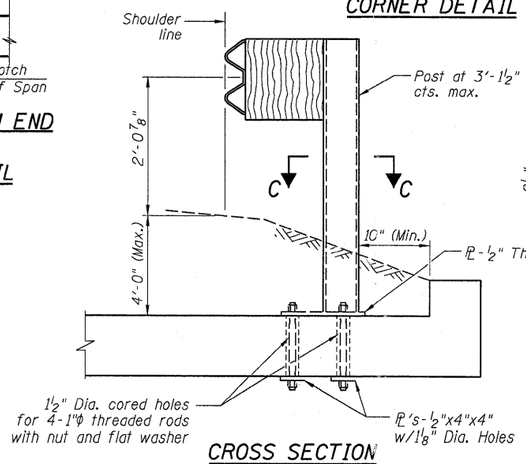


AT DOWNSTREAM END

DRAIN DETAIL

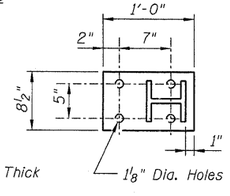


CORNER DETAIL



CROSS SECTION

GUARD RAIL MOUNTED ON TOP SLAB OF BOX CULVERT



SECTION C-C

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d1	16	#4	5'-8"	
d2	16	#4	5'-0"	
h	56	#4	15'-0"	
h1	40	#4	16'-4"	
h2	8	#8	27'-5"	
h3	12	#7	27'-5"	
h4	12	#5	27'-5"	
n(E)	76	#6	5'-10"	
n1(E)	76	#5	3'-6"	
n2(E)	28	#4	6'-0"	
s	56	#4	5'-3"	
s1	32	#4	3'-3"	
s2	16	#4	6'-3"	
t	148	#5	8'-0"	
u	112	#4	5'-9"	
v	16	#4	9'-10"	
v1	16	#4	8'-5"	
v2	16	#4	7'-0"	
v3	16	#4	5'-7"	
v4	12	#4	4'-2"	
v5	76	#5	5'-9"	
v6	12	#4	13'-11"	
v7	8	#4	9'-1"	
v8	12	#4	11'-6"	
v9	8	#4	12'-2"	
v10	8	#4	13'-2"	
w	40	#4	15'-9"	
Concrete Box Culvert			Cu. Yd.	66
Reinforcement Bars, Epoxy Coated			Pound	1,080
Reinforcement Bars			Pound	6,470

Notes:
1. Quantities shown are for four wingwalls and two headwalls.

DESIGNED	GBC/GMK
CHECKED	GBC/SMK/GMK
DRAWN	RR
CHECKED	SMK

200

EXAMINED
ENGINEER OF BRIDGE DESIGN

PASSED
ENGINEER OF BRIDGES AND STRUCTURES

WINGWALL SECTIONS AND DETAILS
ILLINOIS ROUTE 115 OVER DRAINAGE DITCH
F.A.P. ROUTE 798 - SECTION 107-BR
FORD COUNTY
STATION 24+09.00
EXISTING STRUCTURE NO. 027-0039
PROPOSED STRUCTURE NO. 027-2014
Scale: None August 2008