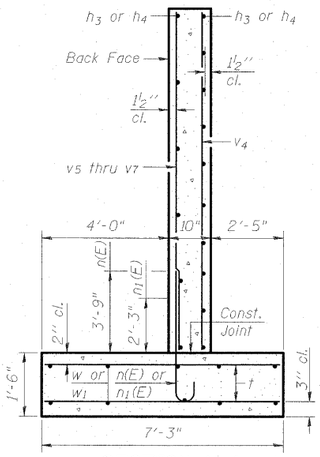
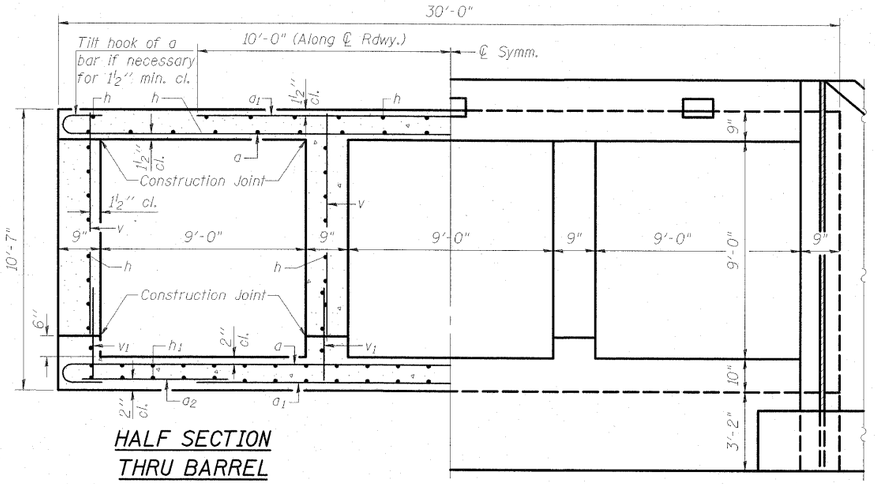
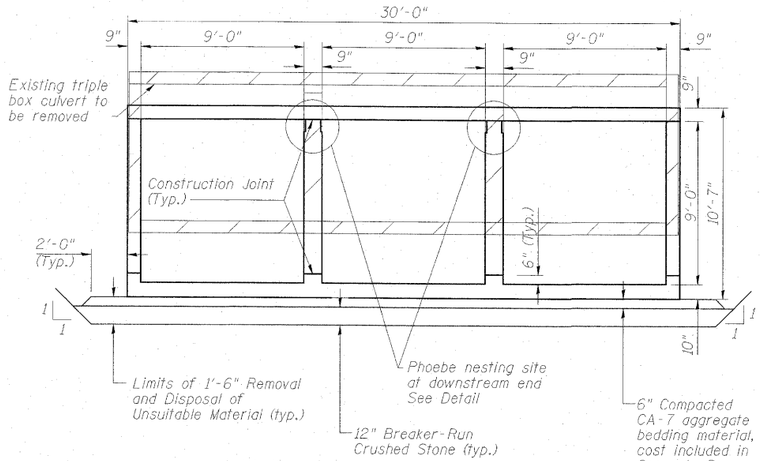


SECTION A-A



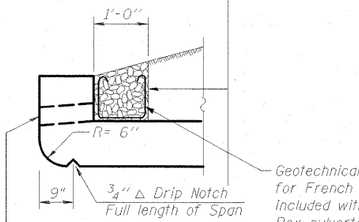
HALF SECTION THRU BARREL

HALF END ELEVATION

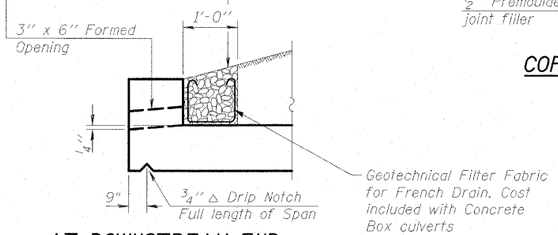


SECTION THRU BARREL
(Showing bedding material)

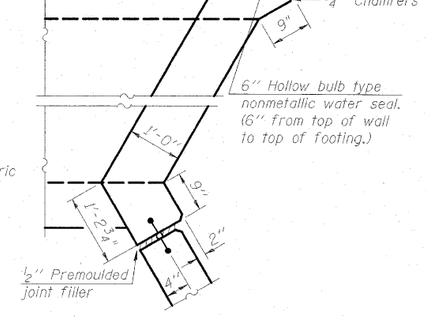
Coarse aggregate full length of both headwalls. To be placed by Grading Contractor. Cost included with Concrete Box Culverts.



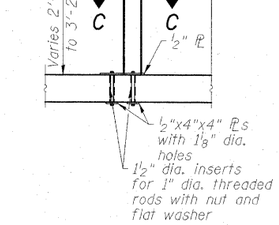
AT UPSTREAM END



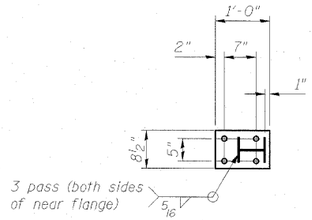
AT DOWNSTREAM END DRAIN DETAIL



CORNER DETAIL



GUARDRAIL CONNECTION DETAIL

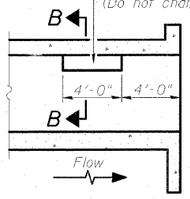


SECTION C-C

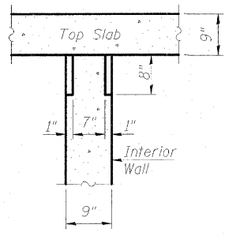
GUARDRAIL ATTACHMENT DETAILS

Note:
The cost of inserts, plates and threaded rods including washers and nuts is included in the cost of Concrete Box Culverts. The location of each connection will be determined in the field.

Notch formed by rough finished board attached to and removed with form work, each interior wall. (Do not chamfer).

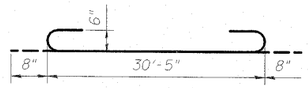


LONGITUDINAL SECTION

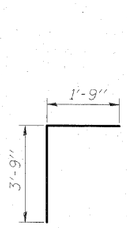


SECTION B-B

PHOEBE NESTING SITE DETAILS
(Downstream End Only)

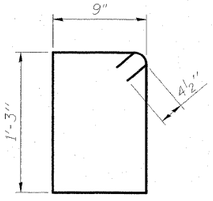


BAR a

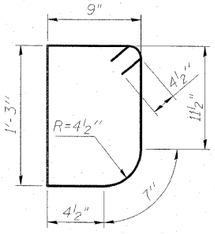


BAR d

BARS n(E) and n1(E)



BAR s



BAR s1

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	146	#6	31'-9"	
a1	152	#6	20'-0"	
a2	76	#4	6'-8"	
d	90	#4	5'-6"	
h	132	#6	28'-5"	
h1	96	#5	28'-5"	
h2	26	#6	30'-0"	
h3	40	#4	11'-10"	
h4	40	#4	14'-10"	
n(E)	60	#6	5'-7"	
n1(E)	56	#5	4'-0"	
s	29	#4	4'-9"	
s1	29	#4	4'-8"	
t	154	#4	6'-11"	
v	392	#4	9'-1"	
v1	392	#4	2'-4"	
v2	8	#5	9'-8"	
v3	8	#5	5'-10"	
v4	16	#4	12'-2"	
v5	22	#5	8'-2"	
v6	20	#5	9'-8"	
v7	18	#5	11'-1"	
w	20	#5	14'-10"	
w1	20	#5	11'-10"	
Concrete Box Culverts		Cu. Yd.	209.4	
Reinforcement Bars, Epoxy Coated		Pound	740	
Reinforcement Bars		Pound	27860	
Bar Splicers		Each	114	

CULVERT DETAILS
IL ROUTE 82 OVER ELKS BRANCH
STATION 1350+29.74
STRUCTURE NO 037-2027

COOMBE–BLOXDORF P.C.
Engineers / Land Surveyors
Springfield, Illinois
Design Firm License No. 184-002703

PROJECT NO.	08047
SCALE	
DATE	/ /
DESIGN BY	
DRAWN BY	CFC
CHECKED BY	

SHEET NO. 5
8 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	129BR	HENRY	42	22
		CONTRACT NO. 64A04		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PLOT DATE = 7/29/2009
FILE NAME = Y:\ED\DOT\829-03.64A04\CAD\BSP SN 037-2027\037202T-64A04-cu-Cu001.dgn
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USER NAME = HAS