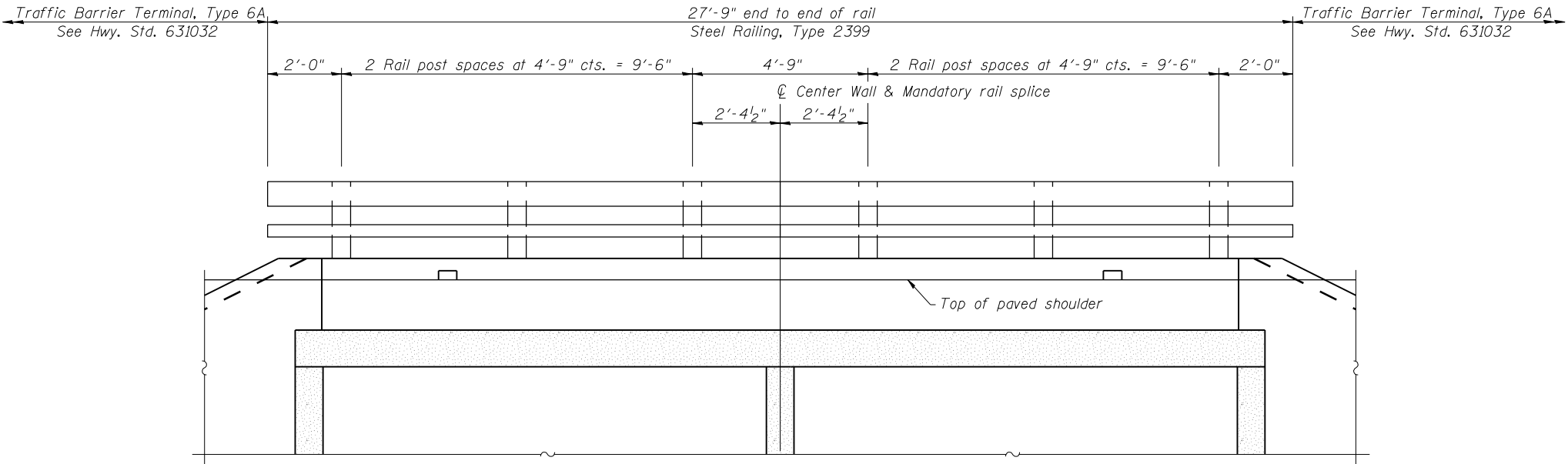
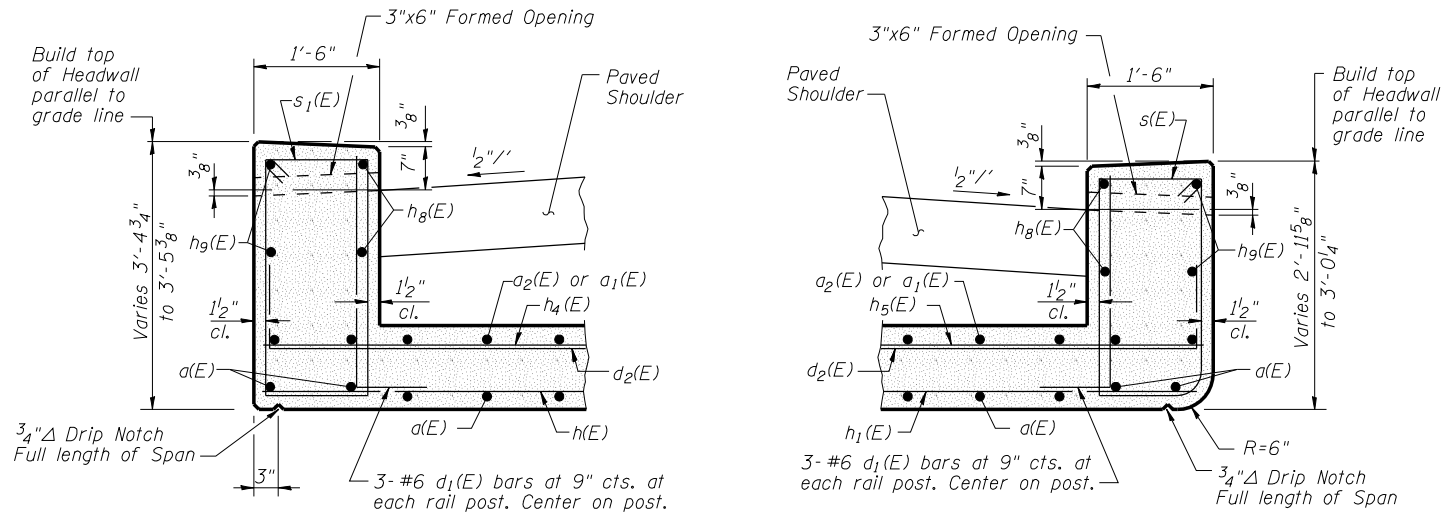




INSIDE ELEVATION OF RAILING

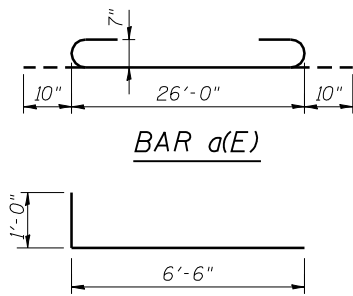
Note:
See sheet 6 of 10 for railing details.



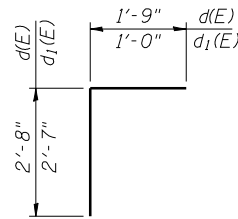
AT DOWNSTREAM END

AT UPSTREAM END

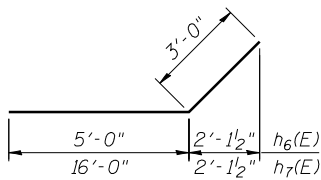
HEADWALL DETAILS



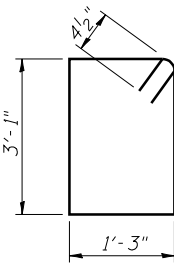
BAR d₂(E)



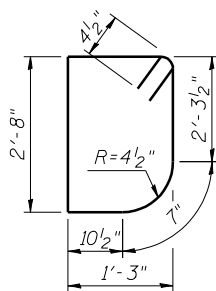
BARS d(E) & d₁(E)



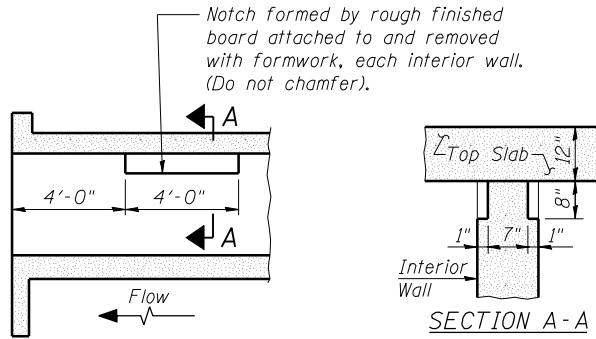
BARS h₆(E) & h₇(E)



BAR s₁(E)



BAR s(E)



LONGITUDINAL SECTION

**PHOEBE NESTING
SITE DETAILS**
(Downstream End Only)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	126	#7	27'-8"	
d ₁ (E)	128	#7	13'-6"	
a ₂ (E)	128	#5	8'-9"	
d(E)	50	#4	4'-5"	
d ₁ (E)	36	#6	3'-7"	
d ₂ (E)	48	#6	7'-6"	
h(E)	34	#6	20'-2"	
h ₁ (E)	34	#6	22'-2"	
h ₂ (E)	93	#5	20'-2"	
h ₃ (E)	93	#5	22'-2"	
h ₄ (E)	27	#4	20'-2"	
h ₅ (E)	27	#4	22'-2"	
h ₆ (E)	92	#8	8'-0"	
h ₇ (E)	68	#8	19'-0"	
h ₈ (E)	4	#6	24'-7"	
h ₉ (E)	4	#6	26'-7"	
h ₁₀ (E)	10	#6	25'-5"	
s(E)	25	#4	8'-5"	
s ₁ (E)	25	#4	9'-5"	
v(E)	169	#5	10'-8"	
v ₁ (E)	16	#4	14'-8"	
Concrete Box Culverts	Cu. Yd.		173.7	
Reinforcement Bars, Epoxy Coated	Pound		28,180	

(Sheet 2 of 2)



USER NAME = RJT
ESCA PROJECT NO. 988.08
PLOT SCALE = 0.2" = 1' / IN.
PLOT DATE = 11/16/2011 10:02:51 AM

DESIGNED - RDP 09/11
CHECKED - JTS 09/11
DRAWN - DWH 11/11
CHECKED - RDP 11/11

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BOX CULVERT DETAILS
STRUCTURE NO. 039-2028**

SHEET NO. 5 OF 10 SHEETS

F.A.P. RTE. 312 SECTION 123B-3 COUNTY JACKSON TOTAL SHEETS 58 SHEET NO. 41
CONTRACT NO. 78197
ILLINOIS FED. AID PROJECT AID