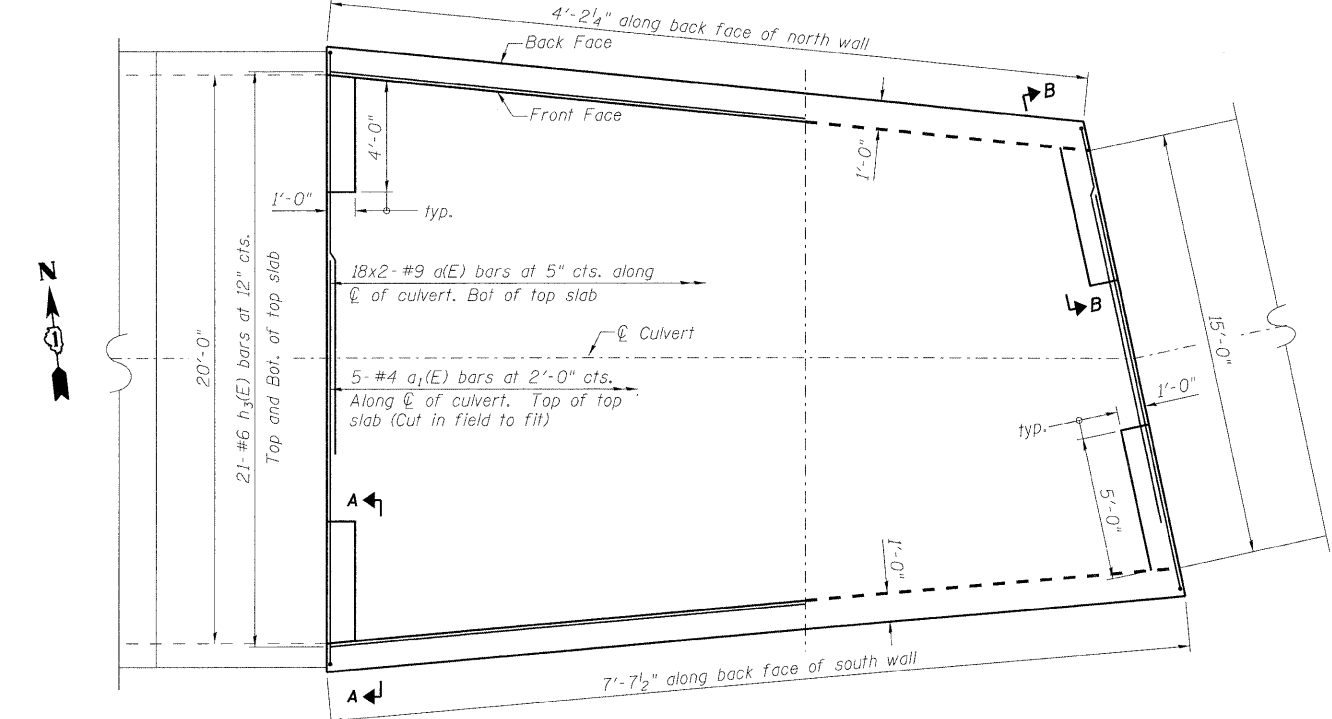


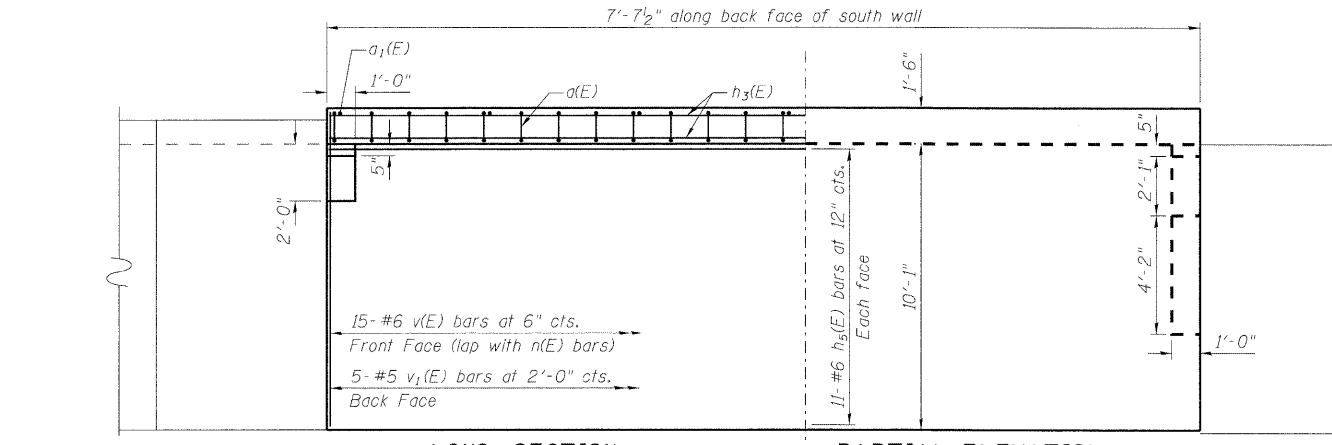
LONG. SECTION PARTIAL ELEVATION

NORTH CULVERT WALL



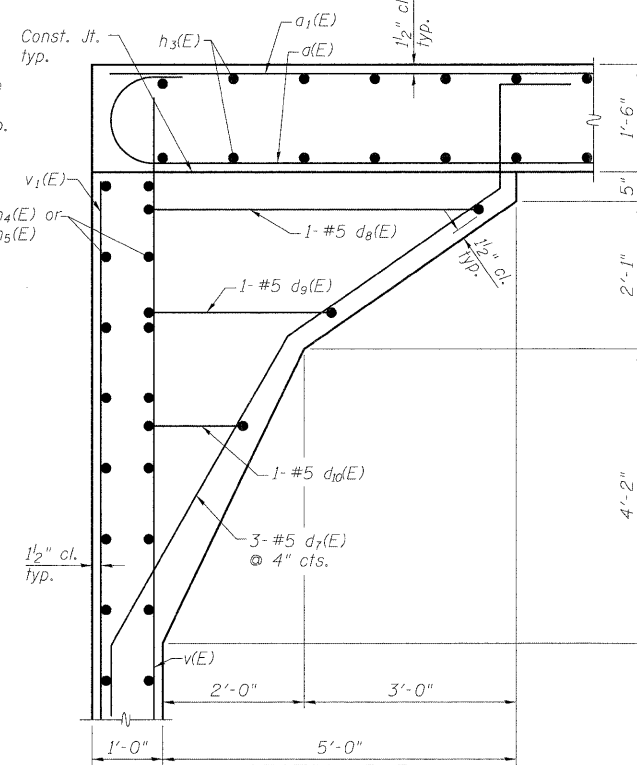
SHOWING REINFORCEMENT SHOWING OUTLINES

PLAN



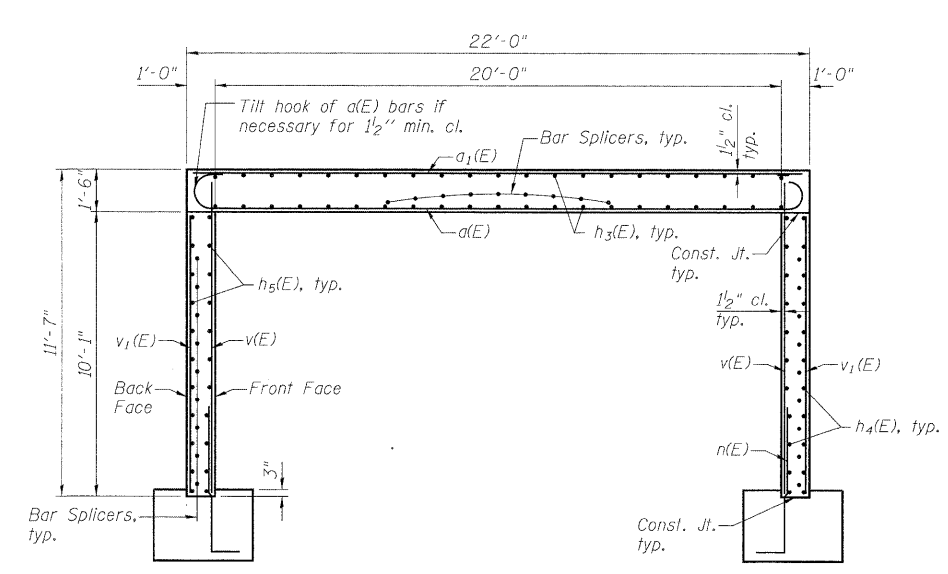
LONG. SECTION PARTIAL ELEVATION

SOUTH CULVERT WALL



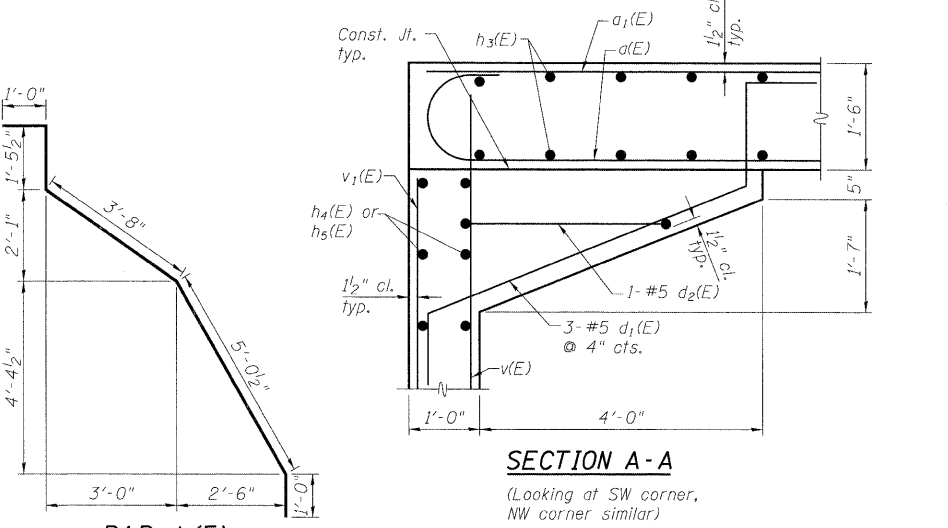
SECTION B-B

(Looking at NE corner, SE corner similar)



SECTION THRU C.I.P. 3-SIDED CULVERT

(Looking West)



SECTION A-A

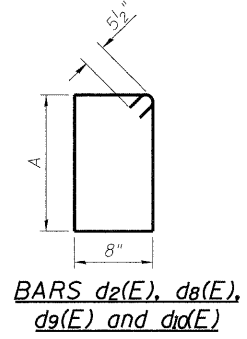
(Looking at SW corner, NW corner similar)

NOTES

See sht S3 of S11 for C.I.P. footing details and reinforcement, including bar n(E).
 Bars indicated thus 18 x 2-#9 etc. indicates 18 lines of bars with 2 lengths per line.
 The Contractor shall vary the cross section of the CIP sections accordingly to match the cross sections of the Corrugated Steel Arch Liner and Three Sided Precast Concrete Structures. The Contractor shall provide revised concrete dimensions and rebar details to the Engineer for review prior to ordering the reinforcement. This work associated with varying the cross section of the CIP sections shall not be paid for separately, but shall be included in the cost of the Concrete Box Culverts.

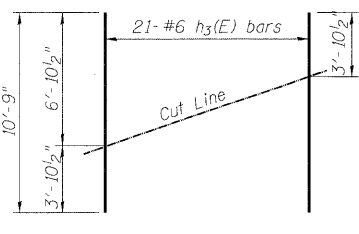
MINIMUM BAR LAPS

#9 = 6'-10"



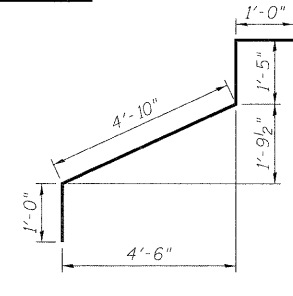
BARS d2(E), d8(E), d9(E) and d10(E)

Bar	A
d2(E)	2'-10"
d8(E)	4'-8"
d9(E)	2'-7"
d10(E)	1'-4"

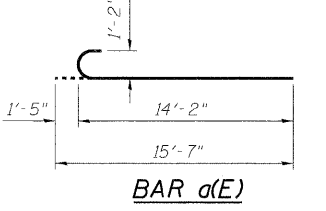


FIELD CUTTING DIAGRAM

Order h3(E) bars full length. Cut as shown and use remainder of bars in opposite face.



BAR d1(E)



BAR a(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape	
a(E)	36	#9	15'-7"		
a1(E)	5	#4	21'-6"		
d1(E)	6	#5	6'-5"		
d2(E)	2	#5	7'-11"		
d7(E)	6	#5	12'-2"		
d8(E)	2	#5	11'-7"		
d9(E)	2	#5	7'-5"		
d10(E)	2	#5	4'-11"		
h3(E)	21	#6	10'-9"		
h4(E)	22	#6	3'-8"		
h5(E)	22	#6	7'-1"		
v(E)	24	#6	11'-3"		
v1(E)	8	#5	9'-9"		
Concrete Box Culverts				Cu. Yd.	11.6
Reinforcement Bars, Epoxy Coated				Pound	3340