

REINF.-BACK FACE

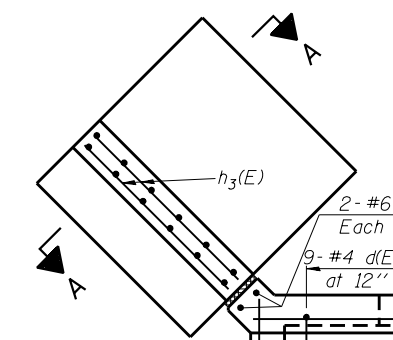
HALF LONG. SECTION

HALF ELEVATION

REINF.-FRONT FACE

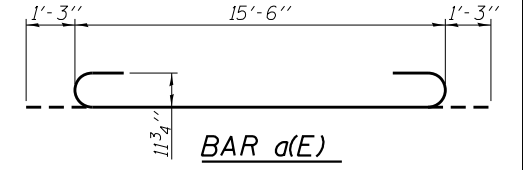
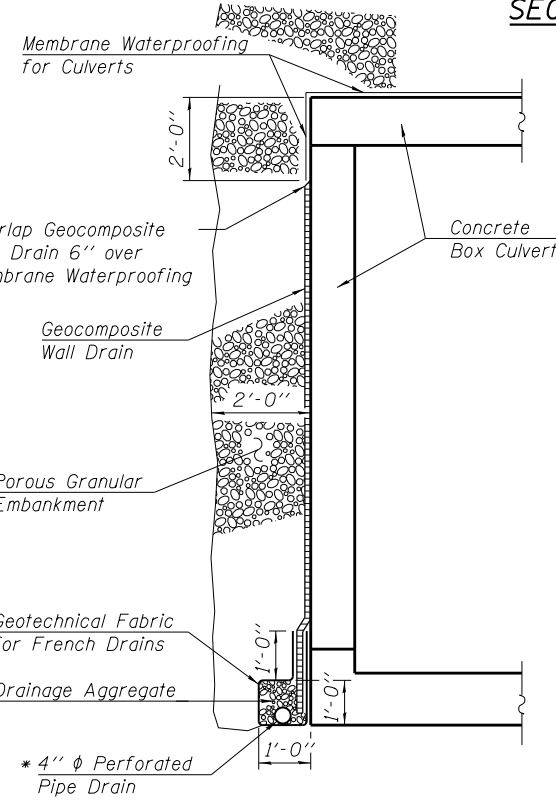
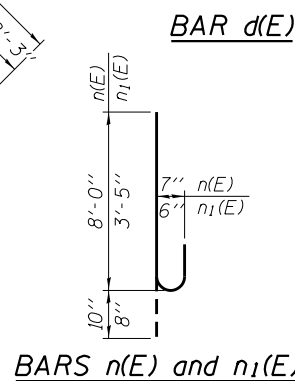
SECTION A-A

SECTION THRU BARREL



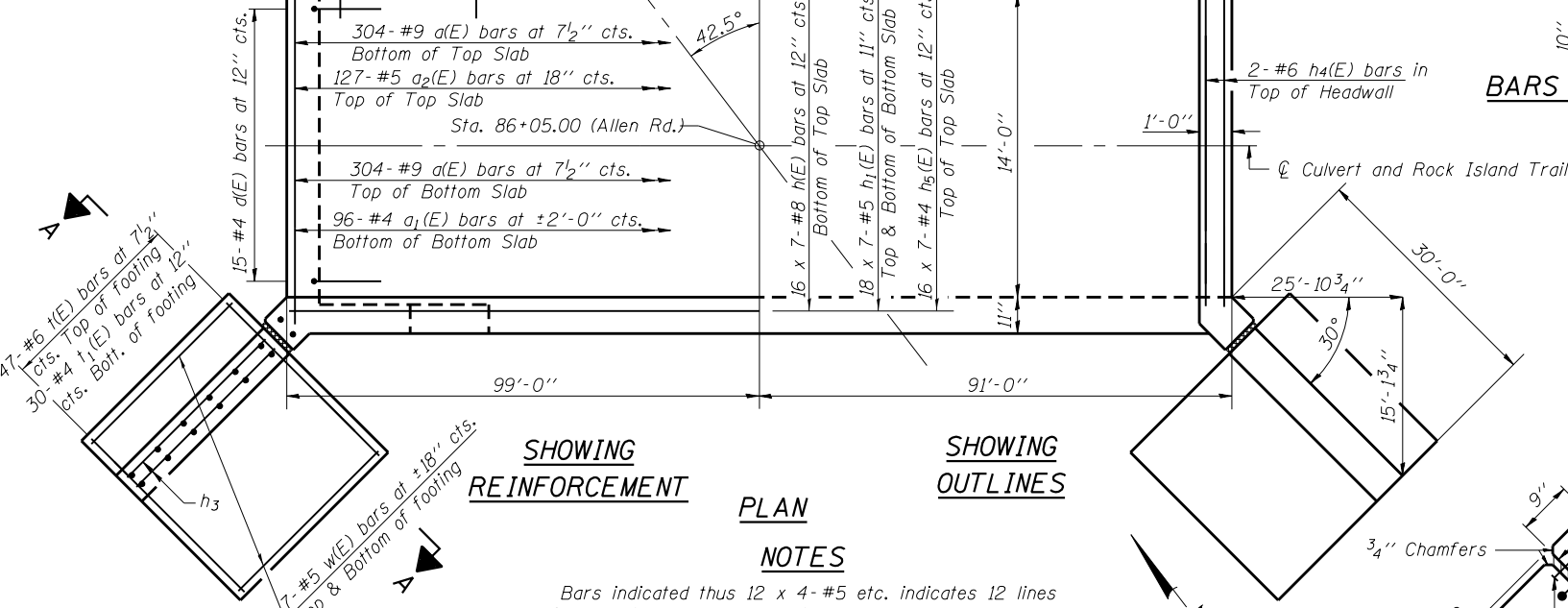
**MIN. BAR LAP**

- #4 bar = 2'-1"
- #5 bar = 2'-7"
- #6 bar = 3'-6"
- #8 bar = 5'-5"



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	608	#9	18'-0"	U
a1(E)	98	#4	15'-6"	U
a2(E)	127	#5	15'-6"	U
d(E)	66	#4	5'-6"	L
h(E)	112	#8	31'-9"	U
h1(E)	252	#5	29'-4"	U
h2(E)	168	#6	34'-7"	U
h3(E)	88	#4	28'-11"	U
h4(E)	4	#6	15'-6"	U
h5(E)	112	#4	28'-11"	U
n(E)	140	#7	8'-10"	U
n1(E)	144	#6	4'-1"	U
t(E)	188	#6	9'-7"	U
t1(E)	120	#4	9'-7"	U
v(E)	608	#6	11'-3"	U
v1(E)	608	#6	4'-5"	U
v2(E)	8	#6	12'-3"	U
v3(E)	8	#6	7'-4"	U
v4(E)	144	#5	7'-5"	U
v5(E)	48	#4	9'-9"	U
v6(E)	48	#4	7'-11"	U
v7(E)	48	#4	6'-1"	U
v8(E)	32	#4	14'-11"	U
w(E)	56	#5	28'-11"	U
Concrete Box Culverts		Cu. Yd.	400.3	
Concrete Structures		Cu. Yd.	120.3	
Reinforcement Bars, Epoxy Coated		Pound	95720	



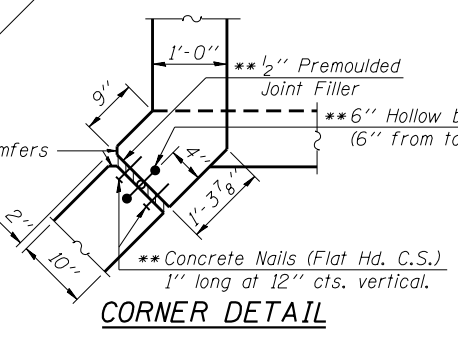
SHOWING REINFORCEMENT

SHOWING OUTLINES

PLAN

NOTES

Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.  
 Reinforcement bars designated (E) shall be epoxy coated.  
 Wingwall and footing concrete shall be paid for as Concrete Structures.  
 See Lighting Plans for fixture locations and details of conduit junction boxes.



CORNER DETAIL

\* Included in the cost of Pipe Underdrains for Structures 4".  
 \*\* Cost included with Concrete Box Culverts.

Note:  
 All drainage system components shall extend to 2'-0" from the end of each wingwall. The pipe drain shall slope to the northwest wingwalls, where an outlet pipe shall extend beyond the end of the wingwall into the drainage inlets. The outlet pipe shall be paid for as Pipe Underdrains for Structures 4".