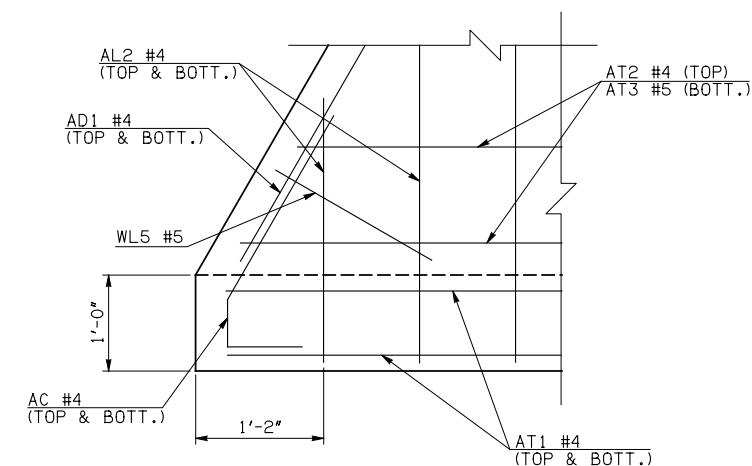
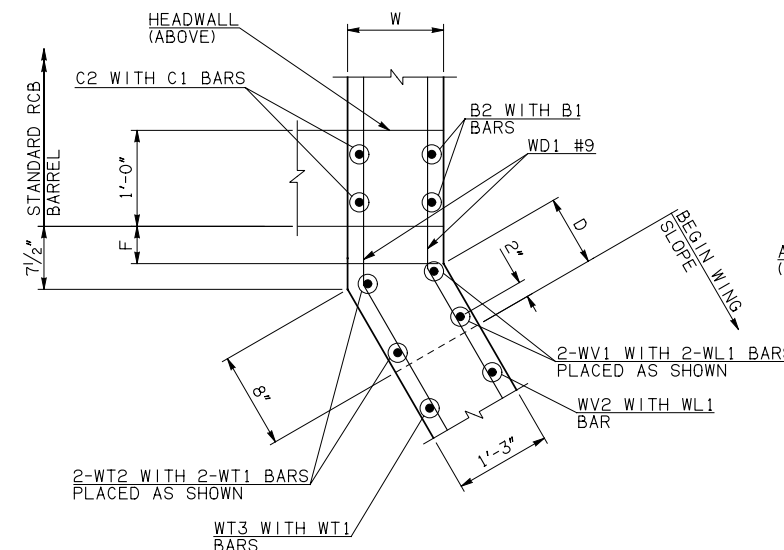
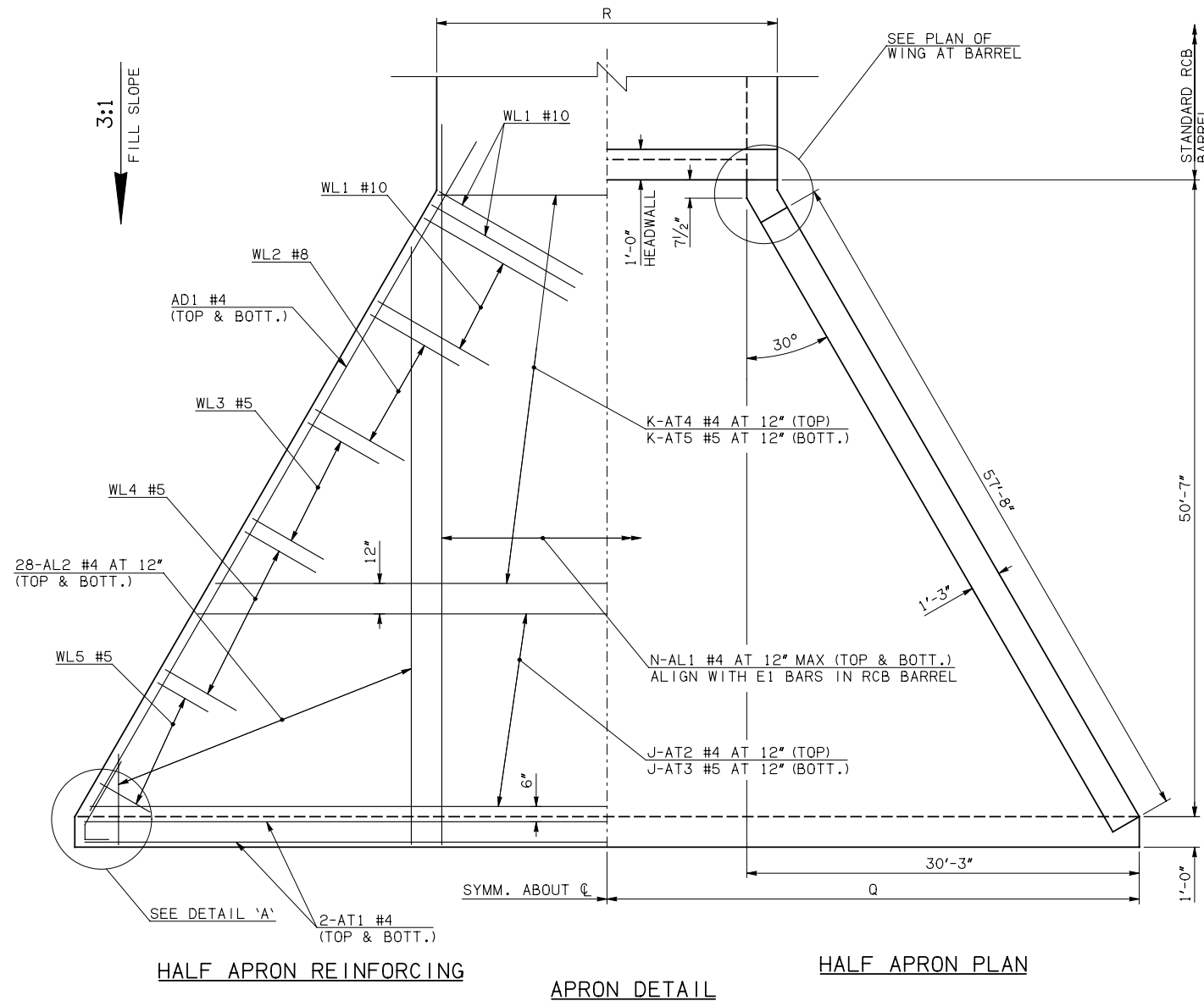
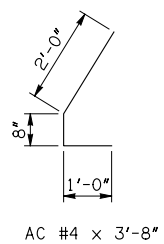


DESCRIPTION	REVISIONS	DATE

WINGWALL DIMENSIONS			
SPAN	W	D	F
16'	16"	2"	5/4"
18'	15"	4"	3/2"
20'	15"	4"	3/2"



APRON VARIABLES					
SPAN	DIM. R	DIM. Q	QTY. J	QTY. K	QTY. N
16'	18'-8"	38'-3"	14	37	20
18'	20'-6"	39'-3"	16	35	22
20'	22'-6"	40'-3"	18	33	24



WINGWALL BAR LIST					
ONE WINGWALL SHOWN; TWO REQUIRED					
MARK	SIZE	QTY.	FORM	LENGTH	REMARKS
WD1	#9	32	BNT	8'-4"	
WH1	#4	2	STR	58'-2"	
② WH2	#4	32	STR	29'-5 1/2" AVG.	3'-6" TO 55'-5"
WH3	#5	2	STR	59'-9"	
WL1	#10	16	BNT	21'-1"	
WL2	#8	28	BNT	17'-6"	
WL3	#5	24	BNT	11'-8"	
WL4	#5	14	BNT	5'-3"	
WL5	#5	11	BNT	4'-11" AVG.	3'-6" TO 6'-4"
WT1	#4	47	STR	3'-6"	
WT2	#4	2	STR	17'-0"	
WT3	#4	47	STR	10'-2 1/2" AVG.	3'-7" TO 16'-10"
WT4	#4	11	STR	2'-11" AVG.	1'-6" TO 4'-4"
WV1	#8	2	STR	17'-0"	
WV2	#8	14	STR	15'-11" AVG.	15'-0" TO 16'-10"
WV3	#6	28	STR	12'-10 1/2" AVG.	10'-11" TO 14'-10"
WV4	#5	26	STR	7'-2" AVG.	3'-7" TO 10'-9"
U1	#4	1	BNT	3'-9"	

- ① 4-SETS OF 28-AL2 BARS REQUIRED
- ② 2-SETS OF 16-WH2 BARS REQUIRED
- ③ INCLUDES 2'-6" LAP

APRON AND HEADWALL BAR LIST												
ONE APRON AND ONE HEADWALL SHOWN												
MARK	SIZE	FORM	16' SPAN				18' SPAN				20' SPAN	
			QTY.	LENGTH	REMARKS	QTY.	LENGTH	REMARKS	QTY.	LENGTH	REMARKS	
AC	#4	BNT	4	3'-8"		4	3'-8"		4	3'-8"		
AD1	#4	STR	4	60'-0"		4	60'-0"		4	60'-0"		
AL1	#4	STR	40	53'-4"		44	53'-4"		48	53'-4"		
① AL2	#4	STR	112	25'-10 1/2" AVG.	2'-6" TO 49'-3"	112	25'-10 1/2" AVG.	2'-6" TO 49'-3"	112	25'-10 1/2" AVG.	2'-6" TO 49'-3"	
③ AT1	#4	STR	4	78'-8"		4	80'-8"		4	82'-8"		
③ AT2	#4	STR	14	70'-7 1/2" AVG.	63'-1" TO 78'-2"	16	71'-6" AVG.	62'-10" TO 80'-2"	18	72'-4" AVG.	62'-6" TO 82'-2"	
③ AT3	#5	STR	14	70'-7 1/2" AVG.	63'-1" TO 78'-2"	16	71'-6" AVG.	62'-10" TO 80'-2"	18	72'-4" AVG.	62'-6" TO 82'-2"	
AT4	#4	STR	37	38'-8 1/2" AVG.	17'-11" TO 59'-6"	35	39'-6 1/2" AVG.	19'-11" TO 59'-2"	33	40'-4 1/2" AVG.	21'-11" TO 58'-10"	
AT5	#5	STR	37	38'-8 1/2" AVG.	17'-11" TO 59'-6"	35	39'-6 1/2" AVG.	19'-11" TO 59'-2"	33	40'-4 1/2" AVG.	21'-11" TO 58'-10"	
CH	#4	STR	4	18'-4"		4	20'-2"		4	22'-2"		
CL1	#4	BNT	20	4'-4"		22	4'-4"		24	4'-4"		
CL2	#4	BNT	20	4'-3"		22	4'-3"		24	4'-3"		

QUANTITIES				
ITEM	UNIT	16' SPAN	18' SPAN	20' SPAN
CLASS AA CONCRETE	CY	171.30	176.40	181.40
REINFORCING STEEL	LB	21770.00	22120.00	22470.00

NOTE: QUANTITIES ABOVE ARE FOR ONE END SECTION, WHICH IS COMPRISED OF ONE HEADWALL, ONE APRON, AND TWO WINGWALLS. INCLUDED IN REINFORCING STEEL PAY ITEM QUANTITY IS THE WEIGHT OF ADDITIONAL RCB BARREL REINFORCING STEEL REQUIRED AS SHOWN.

APPROVED BY BRIDGE ENGINEER *Robert J. Muech* DATE 4/09/09

OKLAHOMA DEPT. OF TRANSPORTATION
BRIDGE STANDARD (ENGLISH)
RCB CULVERTS - END SECTION DETAILS
SINGLE CELL - 15'-0" HEIGHT - 0°
SHEET NO. 1 OF 2

1999 SPECIFICATIONS RCB-E1-H15-0-1 OOE B-592E