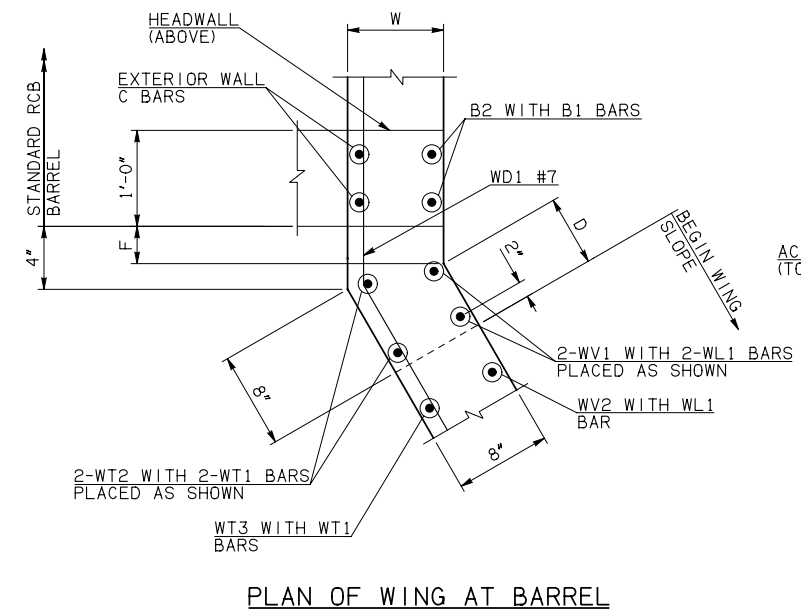
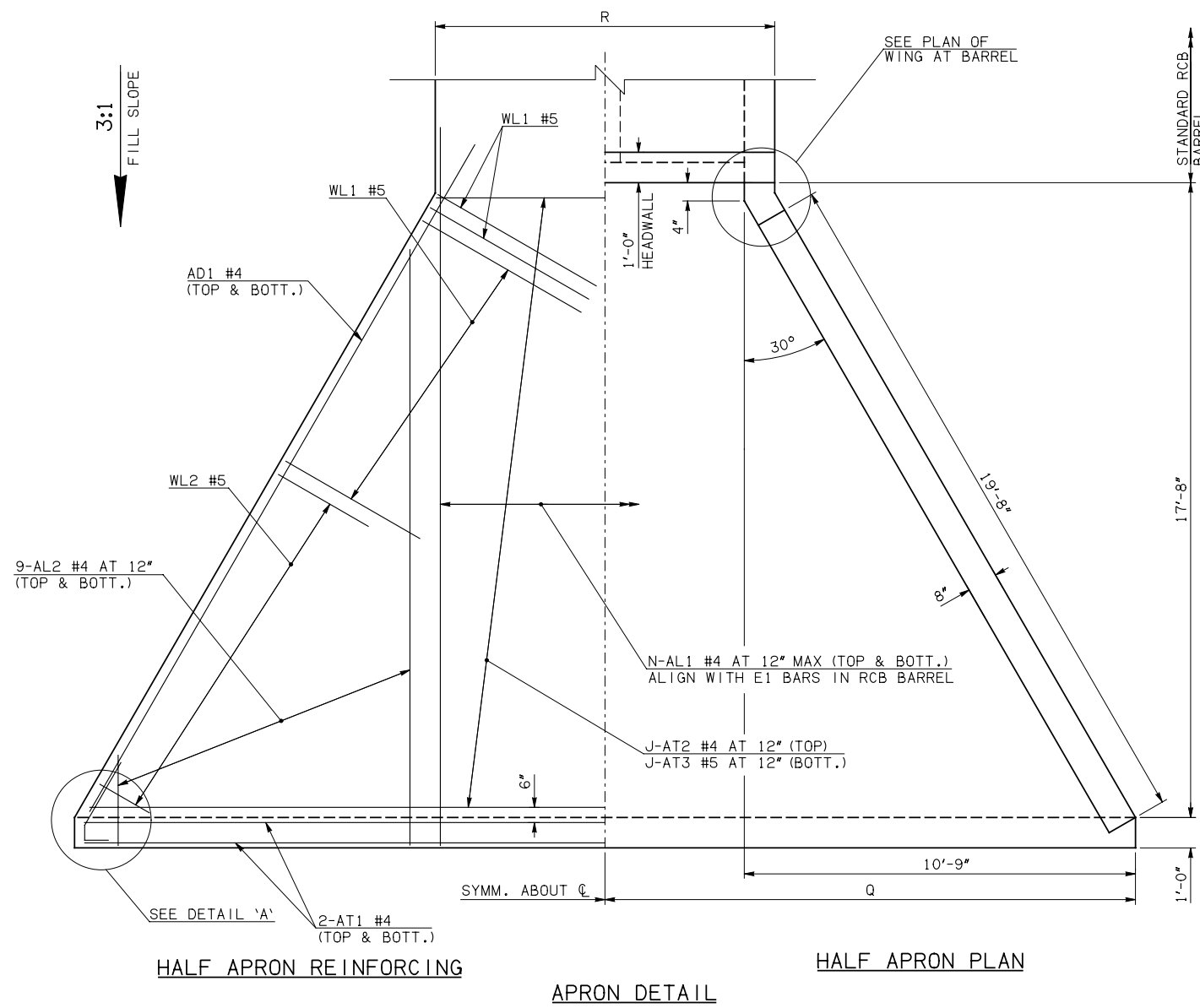
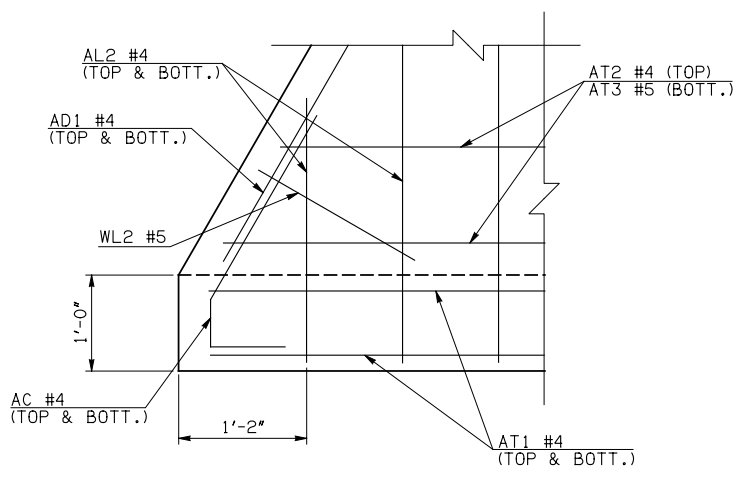


DESCRIPTION	REVISIONS	DATE

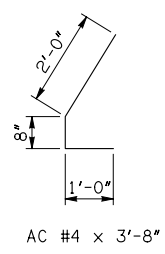
WINGWALL DIMENSIONS			
SPAN	W	D	F
4'	10"	1 3/4"	5/4"
5'	10"	1 3/4"	5/4"
6'	10"	1 3/4"	5/4"
8'	10"	1 3/4"	5/4"
10'	10"	1 3/4"	5/4"



APRON VARIABLES				
SPAN	DIM. R	DIM. Q	QTY. J	QTY. N
4'	10'-6"	15'-2"	18	14
5'	12'-6"	16'-2"	18	16
6'	14'-6"	17'-2"	18	18
8'	18'-6"	19'-2"	18	22
10'	22'-6"	21'-2"	18	26



WINGWALL BAR LIST					
ONE WINGWALL SHOWN; TWO REQUIRED					
MARK	SIZE	QTY.	FORM	LENGTH	REMARKS
WD1	#7	5	BNT	8'-4"	
WH1	#4	2	STR	20'-2"	
WH2	#4	10	STR	10'-5 1/2" AVG.	3'-6" TO 17'-5"
WH3	#5	2	STR	20'-3"	
WL1	#5	13	BNT	6'-1"	
WL2	#5	11	BNT	4'-5" AVG.	3'-0" TO 5'-10"
WT1	#4	11	STR	2'-10"	
WT2	#4	2	STR	6'-0"	
WT3	#4	9	STR	4'-8 1/2" AVG.	3'-7" TO 5'-10"
WT4	#4	11	STR	2'-5" AVG.	1'-0" TO 3'-10"
WV1	#5	2	STR	6'-0"	
WV2	#5	9	STR	4'-8 1/2" AVG.	3'-7" TO 5'-10"
U1	#4	1	BNT	2'-2"	



- ① 4-SETS OF 9-AL2 BARS REQUIRED
- ② 2-SETS OF 5-WH2 BARS REQUIRED

APRON AND HEADWALL BAR LIST																	
ONE APRON AND ONE HEADWALL SHOWN																	
MARK	SIZE	FORM	4' SPAN			5' SPAN			6' SPAN			8' SPAN			10' SPAN		
			QTY.	LENGTH	REMARKS	QTY.	LENGTH	REMARKS	QTY.	LENGTH	REMARKS	QTY.	LENGTH	REMARKS	QTY.	LENGTH	REMARKS
AC	#4	BNT	4	3'-8"		4	3'-8"		4	3'-8"		4	3'-8"		4	3'-8"	
AD1	#4	STR	4	22'-2"		4	22'-2"		4	22'-2"		4	22'-2"		4	22'-2"	
AL1	#4	STR	28	20'-5"		32	20'-5"		36	20'-5"		44	20'-5"		52	20'-5"	
AL2	#4	STR	36	9'-5" AVG.	2'-6" TO 16'-4"	36	9'-5" AVG.	2'-6" TO 16'-4"	36	9'-5" AVG.	2'-6" TO 16'-4"	36	9'-5" AVG.	2'-6" TO 16'-4"	36	9'-5" AVG.	2'-6" TO 16'-4"
AT1	#4	STR	4	30'-0"		4	32'-0"		4	34'-0"		4	38'-0"		4	42'-0"	
AT2	#4	STR	18	19'-8" AVG.	9'-10" TO 29'-6"	18	21'-8" AVG.	11'-10" TO 31'-6"	18	23'-8" AVG.	13'-10" TO 33'-6"	18	27'-8" AVG.	17'-10" TO 37'-6"	18	31'-8" AVG.	21'-10" TO 41'-6"
AT3	#5	STR	18	19'-8" AVG.	9'-10" TO 29'-6"	18	21'-8" AVG.	11'-10" TO 31'-6"	18	23'-8" AVG.	13'-10" TO 33'-6"	18	27'-8" AVG.	17'-10" TO 37'-6"	18	31'-8" AVG.	21'-10" TO 41'-6"
CH	#4	STR	4	10'-2"		4	12'-2"		4	14'-2"		4	18'-2"		4	22'-2"	
CL1	#4	BNT	14	4'-4"		16	4'-4"		18	4'-4"		22	4'-4"		26	4'-4"	
CL2	#4	BNT	14	4'-3"		16	4'-3"		18	4'-3"		22	4'-3"		26	4'-3"	

QUANTITIES						
ITEM	UNIT	4' SPAN	5' SPAN	6' SPAN	8' SPAN	10' SPAN
CLASS AA CONCRETE	CY	16.00	17.20	18.50	20.90	23.40
REINFORCING STEEL	LB	2530.00	2660.00	2790.00	3080.00	3370.00

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. Nisch* DATE 4/09/09

**OKLAHOMA DEPT. OF TRANSPORTATION**  
**BRIDGE STANDARD (ENGLISH)**  
 RCB CULVERTS - END SECTION DETAILS  
 DOUBLE CELL - 4'-0" HEIGHT - 0°  
 SHEET NO. 1 OF 2

1999 SPECIFICATIONS RCB-E2-H4-0-1 OOE B-602E