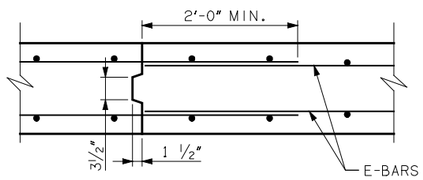
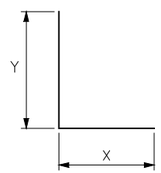
SECTION DIMENSIONS						REINFORCING STEEL																																				SECTION DIMENSIONS	
						A1-BARS				A2-BARS				A3-BARS				B1-BARS						B2-BARS						C1-BARS				C2-BARS				E1-BARS AT 12" MAX.			E2-BARS AT 12" MAX.				
S	H	T	U	W	Z	SIZE	SPA	LENGTH	WEIGHT PER FT.	SIZE	SPA	LENGTH	WEIGHT PER FT.	SIZE	SPA	LENGTH	WEIGHT PER FT.	SIZE	SPA	"X"	"Y"	LENGTH	WEIGHT PER FT.	SIZE	SPA	"X"	"Y"	LENGTH	WEIGHT PER FT.	SIZE	SPA	LENGTH	WEIGHT PER FT.	SIZE	SPA	LENGTH	WEIGHT PER FT.	NO.	SIZE	WEIGHT PER FT.	NO.	SIZE	WEIGHT PER FT.	S	H
8'	3'	11"	12"	10"	10"	#6	9"	27'-0"	108.1	#6	6"	14'-0"	84.1	#4	12"	8'-6"	22.7	#5	9"	1'-9"	2'-5"	4'-2"	11.6	#5	9"	1'-9"	3'-9"	5'-6"	15.3	#4	12"	2'-1"	8.4	#4	12"	3'-9"	19.0	128	#4	85.5	24	#4	16.0	8'	3'
8'	4'	11"	12"	10"	10"	#6	9"	27'-0"	108.1	#6	6"	14'-1"	84.6	#4	12"	8'-6"	22.7	#5	9"	1'-9"	2'-5"	4'-2"	11.6	#5	9"	1'-9"	4'-9"	6'-6"	18.1	#4	12"	2'-1"	8.4	#4	12"	4'-9"	19.0	128	#4	85.5	32	#4	21.4	8'	4'
8'	5'	11"	12"	10"	10"	#6	9"	27'-0"	108.1	#6	6"	14'-2"	85.1	#4	12"	8'-6"	22.7	#5	9"	1'-9"	2'-5"	4'-2"	11.6	#5	9"	1'-9"	5'-9"	7'-6"	20.9	#4	12"	2'-1"	8.4	#4	12"	5'-9"	23.0	128	#4	85.5	40	#4	26.7	8'	5'
8'	6'	12"	13"	12"	12"	#6	9"	27'-8"	110.8	#6	6"	14'-2"	85.1	#4	12"	8'-9"	23.4	#5	9"	1'-10"	2'-6"	4'-4'	12.1	#5	9"	1'-10"	6'-10"	8'-8"	24.1	#4	12"	2'-2"	8.7	#4	12"	6'-10"	27.4	128	#4	85.5	48	#4	32.1	8'	6'
8'	7'	12"	13"	12"	12"	#6	9"	27'-8"	110.8	#6	6"	14'-2"	85.1	#4	12"	8'-9"	23.4	#5	9"	1'-11"	2'-6"	4'-5"	12.3	#5	9"	1'-11"	7'-10"	9'-9"	27.1	#4	12"	2'-2"	8.7	#4	12"	7'-10"	31.4	128	#4	85.5	56	#4	37.4	8'	7'
8'	8'	12"	13"	12"	12"	#6	9"	27'-8"	110.8	#6	6"	14'-2"	85.1	#4	12"	8'-9"	23.4	#6	9"	2'-2"	2'-10"	5'-0"	20.0	#6	9"	2'-2"	8'-10"	11'-0"	44.1	#4	12"	2'-2"	8.7	#4	12"	8'-10"	35.4	128	#4	85.5	64	#4	42.8	8'	8'

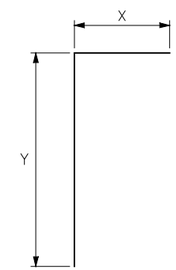
REVISIONS	
DESCRIPTION	DATE
REVISED B1 & ADDED A3	



TRANSV. CONSTR. JOINT



B1-BAR



B2-BAR

BAR BEND DIAGRAMS

NOTE: ALL "X" DIMENSIONS ARE HORIZONTAL IN BARREL SECTION.
ALL "Y" DIMENSIONS ARE VERTICAL IN BARREL SECTION.

SECTION DIMENSIONS		QUANTITIES PER FOOT OF BARREL	
S	H	CONC. (C.Y.)	REINF. (LB.)
8'	3'	2.31	366.7
8'	4'	2.43	379.4
8'	5'	2.56	392.0
8'	6'	3.05	409.2
8'	7'	3.20	421.7
8'	8'	3.35	455.8

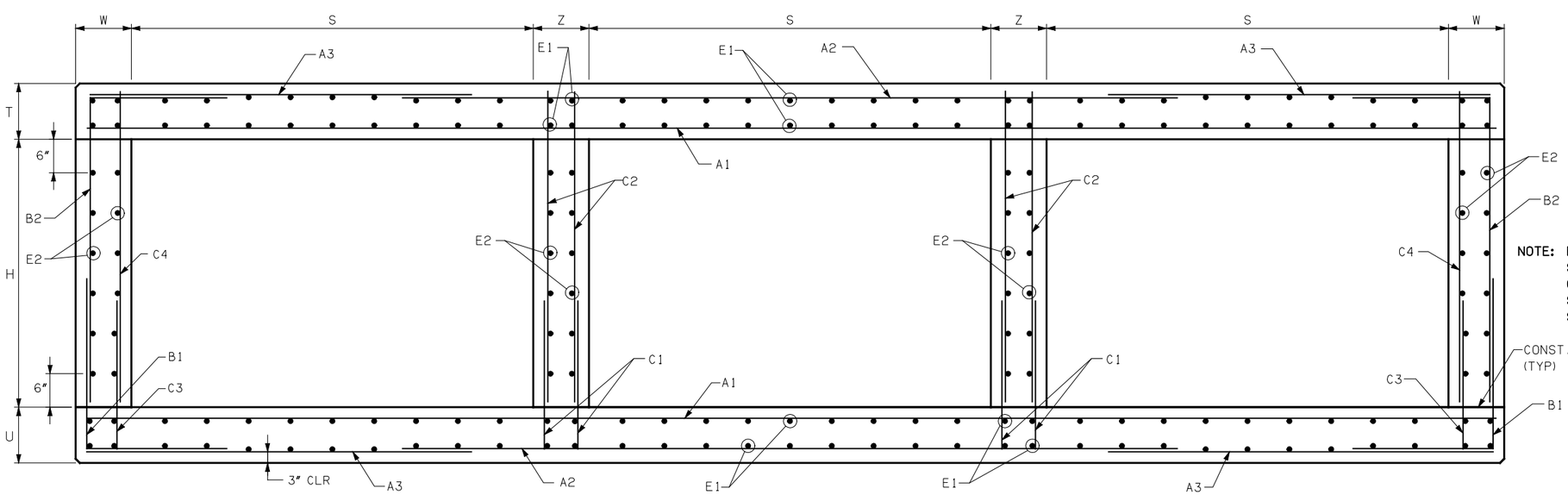
DESIGN DATA:

1. DESIGNED IN ACCORDANCE WITH 1998 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS AND INTERIM SPECIFICATIONS FROM 1999, 2000, 2001 AND 2002.
2. DESIGNED FOR HL-93 LOADING AND ODOT OVERLOAD TRUCK.
3. MATERIALS:
   CONCRETE (CLASS AA) f'c = 4 KSI
   REINFORCING STEEL fy = 60 KSI

GENERAL NOTES:

1. ALL CONSTRUCTION AND MATERIAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE 1999 OKLAHOMA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
2. ALL CONCRETE EDGES SHALL HAVE A 1 1/2" CHAMFER UNLESS OTHERWISE SHOWN OR NOTED. ALL CHAMFER STRIPS SHALL BE SIZED LUMBER.
3. ALL REINFORCING STEEL SHALL HAVE A 2" MINIMUM CLEAR COVER UNLESS OTHERWISE SHOWN.
4. THE QUANTITY FOR REINFORCING STEEL DOES NOT INCLUDE LAP SPLICES OF E1-BARS OR E2-BARS IN THE LENGTH OF THE BARREL OR AT TRANSVERSE CONSTRUCTION JOINTS. THE SPLICE LENGTH FOR E-BARS SHALL BE 24" MINIMUM. THE NUMBER OF SPLICES USED IS TO BE APPROVED BY THE ENGINEER. REINFORCING STEEL FOR SPLICES SHALL NOT BE MEASURED FOR PAYMENT, AND ALL COSTS WILL BE INCLUDED IN THE UNIT BID PRICE FOR REINFORCING STEEL.
5. TRANSVERSE CONSTRUCTION JOINTS SHALL BE PLACED IN ALL CULVERTS 100 FT. OR MORE IN LENGTH. JOINTS SHALL BE SPACED AT 60 FT. MAX.
6. REINFORCING STEEL SHALL BE CONTINUOUS THROUGH THE TRANSVERSE CONSTRUCTION JOINT AND EXTEND A MIN. OF 24" INTO ADJACENT SECTION.

BASIS OF PAYMENT		
ITEM NO.	ITEM	UNIT
509.06 (A)	CLASS AA CONCRETE	C.Y.
511.06 (A)	REINFORCING STEEL	LB.



BARREL SECTION

NOTE: NUMBER AND SPACING OF E-BARS SHOWN MAY NOT BE REPRESENTATIVE OF ACTUAL CULVERT SECTIONS, SEE SCHEDULE ABOVE FOR NUMBER AND SPACING OF E-BARS.

APPROVED BY BRIDGE ENGINEER DATE 3-13-08

OKLAHOMA DEPT. OF TRANSPORTATION
BRIDGE STANDARD (ENGLISH)

RCB CULVERTS - BARREL DETAILS
8'-0" SPAN - TRIPLE CELL
2 FT. TO 12 FT. FILL

1999 SPECIFICATIONS | RCB-C3-8(2-12) | 01E

B-553E