

BAR LIST - DECK SLAB											
			SPAN TYPE								
			ABUTMENT TO ABUTMENT			ABUTMENT TO FIXED PIER			ABUTMENT TO EXPANSION PIER		
MARK	SIZE	FORM	NUMBER	LENGTH	VARIANCE	NUMBER	LENGTH	VARIANCE	NUMBER	LENGTH	VARIANCE
A1	#4	BNT.	FOR SL < 35: 0	34'-10"	-	FOR SL < 35: 0	34'-10"	-	FOR SL < 35: 0	34'-10"	-
			FOR SL ≥ 35: SL - 35			FOR SL ≥ 35: SL - 35			FOR SL ≥ 35: SL - 35		
A2	#4	BNT.	FOR SL < 35: (2 x SL) - 35	34'-10"	-	FOR SL < 35: (2 x SL) - 35	34'-10"	-	FOR SL < 35: (2 x SL) - 35	34'-10"	-
			FOR SL ≥ 35: 34			FOR SL ≥ 35: 34			FOR SL ≥ 35: 34		
A3	#4	BNT.	56	21'-3" AVG.	9'-7" TO 32'-11"	56	21'-3" AVG.	9'-7" TO 32'-11"	56	21'-3" AVG.	9'-7" TO 32'-11"
A4	#5	BNT.	34	5'-9" AVG.	2'-3" TO 9'-3"	34	5'-9" AVG.	2'-3" TO 9'-3"	34	5'-9" AVG.	2'-3" TO 9'-3"
AC	#5	BNT.	(4 x SL) - 14	10'-1"	-	(4 x SL) - 14	10'-1"	-	(4 x SL) - 14	10'-1"	-
AD1	#5	BNT.	8	38'-8"	-	6	38'-8"	-	5	38'-8"	-
B1	#5	STR.	FOR SL < 35: 0	33'-10"	-	FOR SL < 35: 0	33'-10"	-	FOR SL < 35: 0	33'-10"	-
			FOR SL ≥ 35: SL - 35			FOR SL ≥ 35: SL - 35			FOR SL ≥ 35: SL - 35		
B2	#5	STR.	FOR SL < 35: (2 x SL) - 35	33'-10"	-	FOR SL < 35: (2 x SL) - 35	33'-10"	-	FOR SL < 35: (2 x SL) - 35	33'-10"	-
			FOR SL ≥ 35: 34			FOR SL ≥ 35: 34			FOR SL ≥ 35: 34		
B3	#5	STR.	72	17'-4" AVG.	2'-2" TO 32'-6"	72	17'-4" AVG.	2'-2" TO 32'-6"	72	17'-4" AVG.	2'-2" TO 32'-6"
EB1	#5	STR.	40	SPAN LENGTH - 2"	-	40	SPAN LENGTH - 1"	③	40	SPAN LENGTH - 3"	-
EB2	#5	STR.	78	8'-10"	-	78	8'-10"	-	78	8'-10"	-
ET1	#4	STR.	40	SPAN LENGTH - 2"	-	40	SPAN LENGTH - 1"	③	40	SPAN LENGTH - 3"	-
ET2	#4	STR.	-	-	-	39	8'-10"	-	39	8'-10"	-
SR1	#5	BNT.	36 x IP + 7.5 x EP	3'-10"	-	36 x IP + 7.5 x EP	3'-10"	-	36 x IP + 7.5 x EP	3'-10"	-
UD1	#4	BNT.	78	11'-2"	-	39	11'-2"	-	39	11'-2"	-

- ① SL = NUMBER OF FEET IN SPAN LENGTH. EXAMPLE: FOR SPAN LENGTH = 31'-8", SL = 31.
- ② THE LENGTHS SHOWN DO NOT INCLUDE LAP SPLICES. THE LENGTH OF ALL REQUIRED LAP SPLICES SHALL BE ADDED TO THE LENGTHS SHOWN. THE MINIMUM LAP SPLICE LENGTH FOR #5 REINFORCING STEEL BARS SHALL BE 2'-6"; AND THE MINIMUM LAP SPLICE LENGTH FOR #4 REINFORCING STEEL BARS SHALL BE 1'-8". THE LAP SPLICES SHALL BE STAGGERED.
- ③ THE LONGITUDINAL REINFORCING STEEL SHALL BE CONTINUOUS THRU ALL CONSTRUCTION JOINTS AT FIXED PIERS. TO DETERMINE THE ACTUAL REINFORCING STEEL BAR LENGTH, COMBINE THE LENGTHS SHOWN FOR ALL SPAN TYPES OCCURRING BETWEEN AN ABUTMENT AND EXPANSION PIER OR BETWEEN TWO EXPANSION PIERS CONTAINED WITHIN THE BRIDGE INCLUDING ALL REQUIRED LAP SPLICE LENGTHS. NO LAP SPLICE SHALL BE PLACED WITHIN 10'-0" OF THE CENTERLINE OF FIXED PIERS.
- ④ NUMBER INCLUDES TWO SETS OF 28 BARS.
- ⑤ NUMBER INCLUDES TWO SETS OF 17 BARS.
- ⑥ NUMBER INCLUDES TWO SETS OF 36 BARS.
- ⑦ CALCULATION IN TABLE SHALL BE ROUNDED UP TO THE NEAREST NUMBER OF BARS.

IP = NUMBER OF INTERIOR POSTS IN CONCRETE TRAFFIC RAIL (TR3) CALCULATED AS FOLLOWS:

FOR ABUTMENT TO EXPANSION PIER OR FIXED PIER TO EXPANSION PIER:
IP = INTEGER AMOUNT OF (SPAN LENGTH - 15.375)/10

FOR EXPANSION PIER TO EXPANSION PIER:
IP = INTEGER AMOUNT OF (SPAN LENGTH - 15.75)/10

FOR ALL OTHER CASES:
IP = INTEGER AMOUNT OF (SPAN LENGTH - 15)/10

EP = TOTAL LENGTH OF END POSTS IN CONCRETE TRAFFIC RAIL (TR3) CALCULATED AS FOLLOWS:

FOR ABUTMENT TO EXPANSION PIER OR FIXED PIER TO EXPANSION PIER:
EP = SPAN LENGTH - 5.375 - (10 x IP)

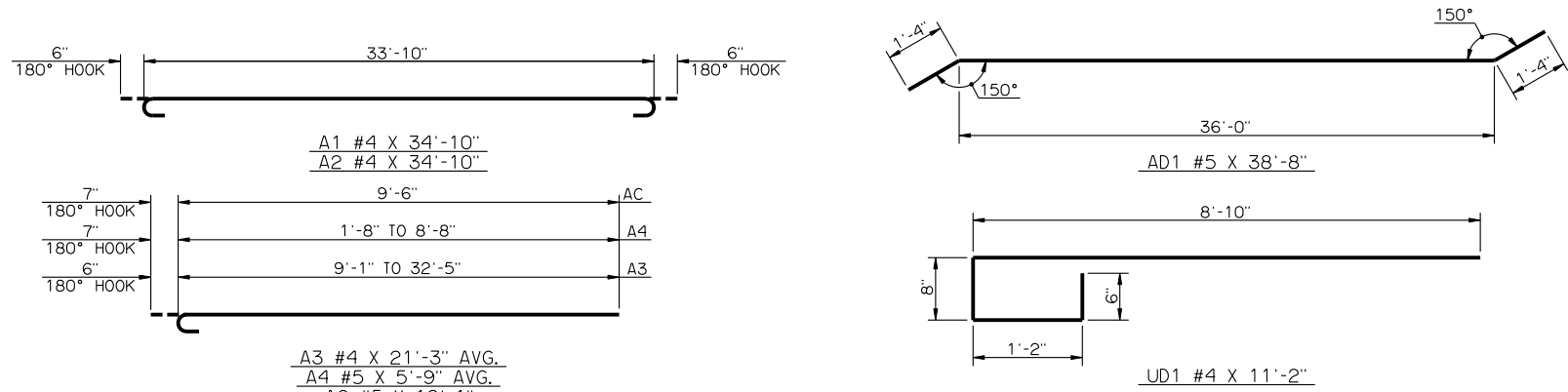
FOR EXPANSION PIER TO EXPANSION PIER:
EP = SPAN LENGTH - 5.75 - (10 x IP)

FOR ALL OTHER CASES:
EP = SPAN LENGTH - 5 - (10 x IP)

EXAMPLE: FOR FIXED PIER TO EXPANSION PIER WITH SPAN LENGTH = 80'-4"
IP = (80.34 - 15.375)/10 = 6
EP = 80.34 - 5.375 - (10 x 6) = 14.97

FOR ADDITIONAL DETAILS AND INFORMATION, SEE BRIDGE STANDARD TR3-2. SR1 BARS SHALL NOT BE EPOXY COATED AS INDICATED ON THE BRIDGE STANDARD.

BAR LIST - DECK SLAB											
			SPAN TYPE								
			FIXED PIER TO FIXED PIER			FIXED PIER TO EXPANSION PIER			EXPANSION PIER TO EXPANSION PIER		
MARK	SIZE	FORM	NUMBER	LENGTH	VARIANCE	NUMBER	LENGTH	VARIANCE	NUMBER	LENGTH	VARIANCE
A1	#4	BNT.	FOR SL < 35: 0	34'-10"	-	FOR SL < 35: 0	34'-10"	-	FOR SL < 35: 0	34'-10"	-
			FOR SL ≥ 35: SL - 35			FOR SL ≥ 35: SL - 35			FOR SL ≥ 35: SL - 35		
A2	#4	BNT.	FOR SL < 35: (2 x SL) - 35	34'-10"	-	FOR SL < 35: (2 x SL) - 35	34'-10"	-	FOR SL < 35: (2 x SL) - 35	34'-10"	-
			FOR SL ≥ 35: 34			FOR SL ≥ 35: 34			FOR SL ≥ 35: 34		
A3	#4	BNT.	56	21'-3" AVG.	9'-7" TO 32'-11"	56	21'-3" AVG.	9'-7" TO 32'-11"	56	21'-3" AVG.	9'-7" TO 32'-11"
A4	#5	BNT.	34	5'-9" AVG.	2'-3" TO 9'-3"	34	5'-9" AVG.	2'-3" TO 9'-3"	34	5'-9" AVG.	2'-3" TO 9'-3"
AC	#5	BNT.	(4 x SL) - 14	10'-1"	-	(4 x SL) - 14	10'-1"	-	(4 x SL) - 14	10'-1"	-
AD1	#5	BNT.	4	38'-8"	-	3	38'-8"	-	2	38'-8"	-
B1	#5	STR.	FOR SL < 35: 0	33'-10"	-	FOR SL < 35: 0	33'-10"	-	FOR SL < 35: 0	33'-10"	-
			FOR SL ≥ 35: SL - 35			FOR SL ≥ 35: SL - 35			FOR SL ≥ 35: SL - 35		
B2	#5	STR.	FOR SL < 35: (2 x SL) - 35	33'-10"	-	FOR SL < 35: (2 x SL) - 35	33'-10"	-	FOR SL < 35: (2 x SL) - 35	33'-10"	-
			FOR SL ≥ 35: 34			FOR SL ≥ 35: 34			FOR SL ≥ 35: 34		
B3	#5	STR.	72	17'-4" AVG.	2'-2" TO 32'-6"	72	17'-4" AVG.	2'-2" TO 32'-6"	72	17'-4" AVG.	2'-2" TO 32'-6"
EB1	#5	STR.	40	SPAN LENGTH	③	40	SPAN LENGTH - 2"	③	40	SPAN LENGTH - 4"	-
EB2	#5	STR.	78	8'-10"	-	78	8'-10"	-	78	8'-10"	-
ET1	#4	STR.	40	SPAN LENGTH	③	40	SPAN LENGTH - 2"	③	40	SPAN LENGTH - 4"	-
ET2	#4	STR.	78	8'-10"	-	78	8'-10"	-	78	8'-10"	-
SR1	#5	BNT.	36 x IP + 7.5 x EP	3'-10"	-	36 x IP + 7.5 x EP	3'-10"	-	36 x IP + 7.5 x EP	3'-10"	-
UD1	#4	BNT.	-	-	-	-	-	-	-	-	-



DETAILS OF BENT REINFORCING STEEL

APPROVED BY BRIDGE ENGINEER *Robert J. Dusch* DATE 9-9-2011
 OKLAHOMA DEPARTMENT OF TRANSPORTATION
 COUNTY BRIDGE STANDARD (ENGLISH)

DECK SLAB BAR LIST

32' CLEAR ROADWAY - CONVENTIONAL - SKEWED 30°

2009 SPECIFICATIONS CB32-C-SK30-DKSLB-BLIST 01E CB-613E