STATE	PROJECT NO.
MISS.	

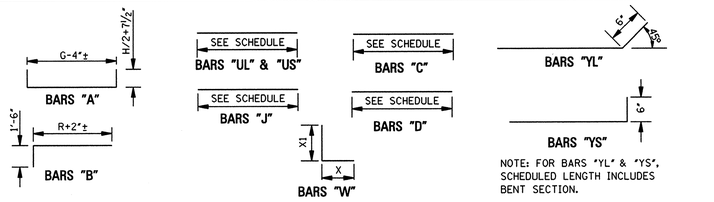
DIMENSIONS AND REINFORCING COMMON TO FLARED HEADWALLS FOR SINGLE, DOUBLE AND TRIPLE LINE PIPE CULVERTS

PIPE DIA	MIN THK "T"	DIMENSIONS C	H	R	S1	S2	U	W
15	2¼	7	2-5	3-10½	4-11¾	5-5¾	6	0-8
18	2½	7	2-9½	4-6	5-10⅝	6-4⅜	6	0-10
24	3	7	3-4½	5-9	7-7⅝	8-1⅝	6	1-0
30	3½	7	3-11½	6-9	9-0½	9-6½	6	1-3
36	4	7½	4-6½	7-10½	10-7⅝	11-1⅝	6	1-5
42	4½	7½	5-1½	8-10½	12-0⅝	12-6⅝	6	1-8
48	5	7½	5-8½	10-0	13-7¾	14-1⅜	6	1-10½
54	5½	8	6-3½	11-0	15-0⅝	15-6⅝	6	2-1
60	6	8	6-10½	12-3	16-9⅞	17-3⅞	6	2-3
66	6½	8	7-7	13-9	18-10⅛	19-5⅜	6½	2-6½
72	7	8	8-2	14-9	20-3⅞	20-10⅞	7	2-9
84	8	8	9-4	16-9	23-0¼	23-8¼	8	3-2
96	9	8	10-5	19-3	26-6⅝	27-2⅝	8	3-6
108	10	8	11-7	21-4	29-5	30-2	9	4-0

PIPE DIA	REINFORCING STEEL US NO	US LGTH	UL NO	UL LGTH	W1 S NO	W1 L NO	W1 SIZE	W1 X	W1 X1	W1 LGTH	W2 S NO	W2 L NO	W2 SIZE	W2 X	W2 X1	W2 LGTH	W3 S NO	W3 L NO	W3 SIZE	W3 X	W3 X1	W3 LGTH
15	2	3-11	2	4-10	2	3	#4	1-1	1-8	2-9	3	3	#4	1-0	1-0	2-0						
18	2	4-6	2	5-8	2	3	#4	1-3	2-0	3-3	3	4	#4	1-0	1-0	2-0						
24	2	5-9	2	7-6	2	3	#4	1-8	2-7	4-3	3	4	#4	1-4	1-7	2-11	2	1	#4	1-0	1-2	2-2
30	2	6-9	2	8-11	2	3	#4	2-1	3-2	5-3	3	4	#4	1-7	2-2	3-9	3	3	#4	1-0	1-5	2-5
36	2	7-11	2	10-6	2	3	#5	2-5	3-9	6-2	3	4	#4	2-0	2-9	4-9	3	4	#4	1-2	1-9	2-11
42	2	8-11	2	11-11	2	3	#5	2-11	4-4	7-3	3	4	#4	2-3	3-4	5-7	3	5	#4	1-7	2-4	3-11
48	2	10-0	2	13-6	2	3	#5	3-1	4-10	7-11	3	4	#5	2-8	3-10	6-6	3	5	#4	1-10	2-10	4-8
54	2	11-0	2	14-11	2	3	#5	3-6	5-4	8-10	3	4	#5	3-0	4-4	7-4	3	5	#4	2-3	3-4	5-7
60	2	12-3	2	16-8	2	3	#5	3-10	5-11	9-9	3	4	#5	3-3	4-11	8-2	3	5	#5	2-6	3-11	6-5
66	2	13-9	2	18-9	2	3	#6	4-3	6-8	10-11	3	4	#5	3-8	5-8	9-4	3	5	#5	3-2	4-8	7-10
72	2	14-9	2	20-1	2	3	#6	4-9	7-5	12-2	3	4	#6	4-2	6-5	10-7	3	5	#5	3-6	5-5	8-11
84	2	16-9	2	22-10	2	3	#6	5-5	8-7	14-0	3	4	#6	5-2	7-7	12-9	3	5	#6	4-6	6-7	11-1
96	2	19-3	2	26-5	2	3	#7	5-7	9-6	15-1	3	4	#7	5-7	8-6	14-1	3	5	#6	5-0	7-6	12-6
108	2	21-4	2	29-3	3	4	#7	6-5	10-9	17-2	4	5	#7	6-5	9-9	16-2	3	5	#7	5-10	8-9	14-7

PIPE DIA	W4 S NO	W4 L NO	W4 SIZE	W4 X	W4 X1	W4 LGTH	W5 S NO	W5 L NO	W5 SIZE	W5 X	W5 X1	W5 LGTH	W6 S NO	W6 L NO	W6 SIZE	W6 X	W6 X1	W6 LGTH	W7 S NO	W7 L NO	W7 SIZE	W7 X	W7 X1	W7 LGTH	W8 S NO	W8 L NO	W8 SIZE	W8 X	W8 X1	W8 LGTH
15																														
18																														
24																														
30																														
36	3	4	#4	1-1	1-7	2-8																								
42	3	4	#4	1-2	1-10	3-0	2	1	#4	1-2	1-9	2-11	1	1	#4	1-1	1-7	2-8												
48	3	4	#4	1-3	2-0	3-3	3	2	#4	1-2	1-10	3-0	2	1	#4	1-2	1-10	3-0												
54	3	4	#5	2-0	2-8	3-11	3	3	#4	1-3	2-0	3-3	3	2	#4	1-3	2-0	3-3												
60	3	4	#5	2-3	3-4	5-7	4	4	#4	1-7	2-4	3-11																		
66	3	4	#5	2-6	3-11	6-5	4	4	#4	1-10	2-11	4-9	1	2	#4	1-8	2-5	4-1												
72	3	4	#5	3-3	4-11	8-2	3	5	#5	2-8	3-10	6-6	3	5	#4	1-10	2-10	4-8	3	2	#4	1-8	2-5	4-1						
84	3	4	#5	3-8	5-8	9-4	3	5	#5	3-2	4-8	7-10	4	4	#5	2-7	3-8	6-3	2	4	#4	1-10	2-8	4-6						
96	3	4	#5	4-2	6-5	10-7	3	5	#5	3-6	5-5	8-11	4	4	#5	2-10	4-5	7-3	2	4	#4	2-0	3-5	5-5	1	1	#4	1-9	3-0	4-9
108	3	4	#5	4-5	7-2	11-9	3	5	#6	4-6	6-7	11-1	4	4	#5	3-9	5-7	9-4	2	4	#5	3-2	4-7	7-9	2	4	#5	2-6	3-7	6-1
													2	3	#5	5-2	7-9	12-11	3	5	#5	4-6	6-9	11-3	2	4	#5	3-10	5-9	9-7

PIPE DIA	YS1 NO	YS1 LGTH	YS2 NO	YS2 LGTH	YS3 NO	YS3 LGTH	YS4 NO	YS4 LGTH	YS5 NO	YS5 LGTH	YS6 NO	YS6 LGTH	YS7 NO	YS7 LGTH	YS8 NO	YS8 LGTH	YL1 NO	YL1 LGTH	YL2 NO	YL2 LGTH	YL3 NO	YL3 LGTH	YL4 NO	YL4 LGTH	YL5 NO	YL5 LGTH	YL6 NO	YL6 LGTH	YL7 NO	YL7 LGTH	YL8 NO	YL8 LGTH
15	1	2-3	1	4-6													1	3-7	1	6-10												
18	1	2-3	1	5-2													1	3-7	1	6-10												
24	1	2-3	1	5-3	1	6-5											1	3-7	1	7-7	1	8-7										
30	1	2-3	1	5-3	1	7-5											1	3-7	1	7-7	1	10-0										
36	1	2-3	1	5-3	1	8-3	1	8-6									1	3-7	1	7-7	2	11-8										
42	1	2-3	1	5-3	1	8-3	1	9-6									1	3-7	1	7-7	1	12-7	1	13-1								
48	1	2-3	1	5-3	1	8-3	1	10-8									1	3-7	1	7-7	1	12-7	2	14-8								
54	1	2-3	1	5-3	1	8-3	2	11-8									1	3-7	1	7-7	1	12-7	2	16-1								
60	1	2-3	1	5-3	1	8-3	1	12-3	2	12-11							1	3-7	1	7-7	1	12-7	1	16-7	2	17-10						
66	1	2-3	1	5-3	1	8-3	1	12-3	3	14-5							1	3-7	1	7-7	1	12-7	1	16-7	3	19-11						
72	1	2-4	1	5-4	1	8-4	1	12-4	1	15-4	2	16-6					1	3-8	1	7-8	1	12-8	1	16-8	1	20-8	2	21-4				
84	1	2-5	1	5-5	1	8-5	1	12-5	1	15-5	1	17-11	2	18-6			1	3-9	1	7-9	1	12-9	1	16-9	1	20-9	3	24-2				
96	1	2-5	1	5-5	1	8-5	1	12-5	1	15-5	1	17-11	3	20-0			1	3-9	1	7-9	1	12-9	1	16-9	1	20-9	1	24-9	3	27-9		
108	1	2-6	1	5-6	1	8-6	1	12-6	1	15-6	1	18-0	1	21-9	3	22-2	1	4-1	1	7-10	1	12-10	1	16-10	1	20-7	1	25-7	1	29-4	3	31-8



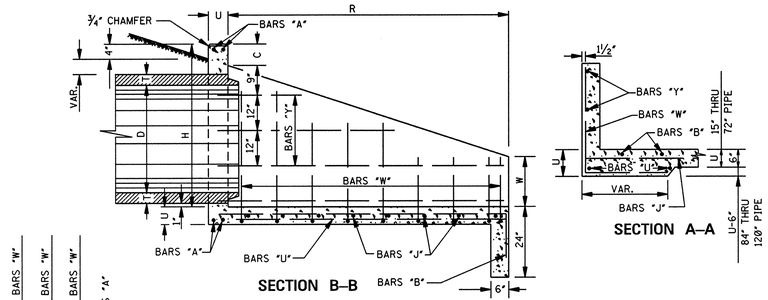
NOTE: FOR BARS "YL" & "YS", SCHEDULED LENGTH INCLUDES BENT SECTION.

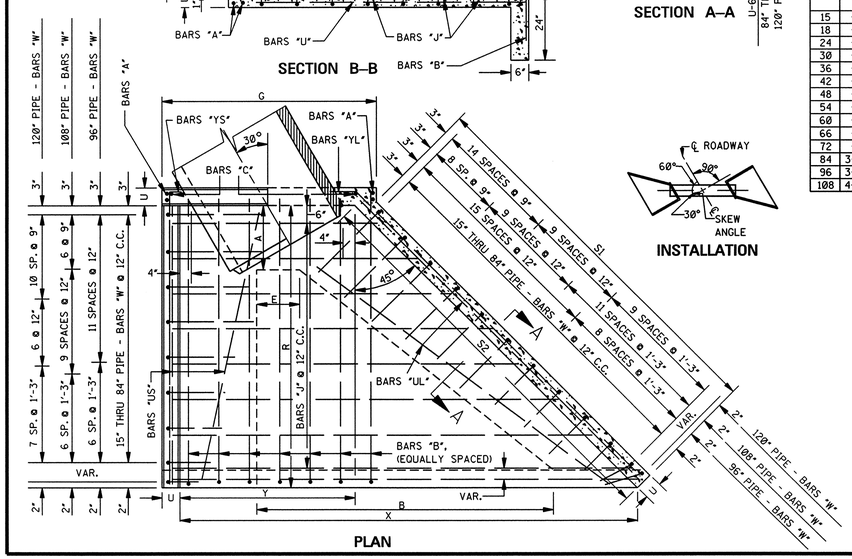
BAR BENDING DETAILS

NOTE: WHENEVER THE COMPUTED LENGTH OF BAR EXCEEDS 30', THE SCHEDULED LENGTH INCLUDES A 12" LAP.
ALL BARS ARE #4 EXCEPT BARS "W". SEE SCHEDULE FOR SIZE OF BARS "W". IN BAR DESIGNATIONS (e.g. "YS" & "YL"), S DENOTES SHORT WING AND L DENOTES LONG WING.

GENERAL NOTES:

1. SPECIFICATIONS: MISSISSIPPI DEPARTMENT OF TRANSPORTATION, LATEST EDITION.
2. ALL CONCRETE SHALL BE CLASS "B".
3. ALL EXPOSED EDGES SHALL BE CHAMFERED ¾".
4. EXPOSED CONCRETE SURFACES SHALL BE FINISHED IN ACCORDANCE WITH THE APPLICABLE SECTION OF THE MDOT SPECIFICATIONS.
5. ALL LENGTHS AND QUANTITIES IN THE TABLES HEREON ARE BASED ON CONCRETE PIPE.
6. QUANTITIES SHOWN SHALL BE THE BASIS FOR FINAL PAYMENT UNLESS AUTHORIZED MODIFICATIONS ARE MADE.





PLAN

INSTALLATION

DIMENSIONS AND REINFORCING FOR FLARED HEADWALL FOR SINGLE LINE PIPE CULVERT

PIPE DIA	DIMENSIONS A	B	E	G	X	Y	Z	A NO	A LGTH	B NO	B LGTH	C NO	C LGTH	D NO	D LGTH	J1 NO	J1 LGTH	J2 NO	J2 LGTH	J3 NO	J3 LGTH	J4 NO	J4 LGTH	J5 NO	J5 LGTH	J6 NO	J6 LGTH	J7 NO	J7 LGTH	J8 NO	J8 LGTH	J9 NO	J9 LGTH	J10 NO	J10 LGTH	J11 NO	J11 LGTH	J12 NO	J12 LGTH	J13 NO	J13 LGTH	J14 NO	J14 LGTH	J15 NO	J15 LGTH	J16 NO	J16 LGTH	J17 NO	J17 LGTH	J18 NO	J18 LGTH	J19 NO	J19 LGTH	J20 NO	J20 LGTH	J21 NO	J21 LGTH	J22 NO	J22 LGTH	PAY QTY 1-HEADWALL CONC CU YDS	STEEL LBS
15	-	-	-	3-8½	6-4½	2-6	-	4	7-0	5	5-6	2	2-8	2	1-10	1	3-10	1	4-10	1	5-10	1	6-10																																										0.97	97
18	-	-	-	4-0	7-3⅜	2-9⅜	-	4	7-8	5	6-2	2	3-0	2	2-0	1	4-2	1	5-2	1	6-2	1	7-2	1	7-9																																								1.23	114
24	-	-	-	4-8	9-2½	3-5½	-	4	8-11	6	7-5	2	3-7	2	2-3	1	4-10	1	5-10	1	6-10	1	7-10	1	8-10	1	9-9																																						1.80	163
30	-	-	-	5-4⅝	10-11⅛	4-2⅛	-	4	10-3	7	8-5	2	4-2	2	2-6	1	5-7	1	6-7	1	7-7	1	8-7	1	9-7	1	10-7	1	11-5																																				2.40	205
36	-	-	-	6-0⅛	12-8⅛	4-9⅝	-	4	11-5	7	9-6	2	4-9	2	2-9	1	6-2	1	7-2	1	8-2	1	9-2	1	10-2	1	11-2	1	12-2	1	13-2																																		3.10	253
42	-	-	-	6-8¼	14-4¼	5-5¾	-	4	12-8	8	10-6	2	5-4	2	3-0	1	6-10	1	7-10	1	8-10	1	9-10	1	10-10	1	11-10	1	12-10	1	13-10	1	14-10																																3.86	326
48	-	-	-	7-4¼	16-1⅛	6-1⅛	-	4	13-11	9	11-8	2	5-11	2	3-3	1	7-6	1	8-6	1	9-6	1	10-6	1	11-6	1	12-6	1	13-6	1	14-6	1	15-6	1	16-6	1	16-8																												4.77	420
54	-	-	-	8-1½	17-11	6-11	-	4	15-4	9	12-8	2	6-6	2	3-6	1	8-3	1	9-3	1	10-3	1	11-3	1	12-3	1	13-3	1	14-3	1	15-3	1	16-3	1	17-3	1	18-3	1	18-5																										5.71	489
60	-	-	-	8-9⅜	19-10⅛	7-7⅛	-	4	16-7	10	13-11	2	7-1	2	3-9	1	9-0	1	10-0	1	11-0	1	12-0	1	13-0	1	14-0	1	15-0	1	16-0	1	17-0	1	18-0	1	19-0	1	20-0	1	20-4																								6.86	605
66	-	-	-	9-7	22-0¼	8-3¼	-	4	18-1	11	15-5	2	7-10	2	4-3	1	9-9	1	10-9	1	11-9	1	12-9	1	13-9	1	14-9	1	15-9	1	16-9	1	17-9	1	18-9	1	19-9	1	20-9	1	21-9	1	22-7																				9.06	771
72	-	-	-	10-4¼	23-8⅜	8-11⅞	-	4	19-5	11	16-5	2	8-6	2	4-7	1	10-6	1	11-6	1	12-6	1	13-6	1	14-6	1	15-6	1	16-6	1	17-6	1	18-6	1	19-6	1	20-6	1	21-6	1	22-6	1	23-6	1	24-3																		11.17	898
84	3-2	16-9	2-0	11-10¾	27-0½	10-3½	-	4	22-2	13	18-5	2	9-8	2	5-3	1	12-0	1	13-0	1	14-0	1	15-0	1	16-0	1	17-0	1	18-0	1	19-0	1	20-0	1	21-0	1	22-0	1	23-0	1	24-0	1	25-0	1	26-0	1	27-0	1	27-9												15.59	1212
96	3-6	19-3	2-0	13-3	30-10⅞	11-7⅞	-	4	24-7	15	20-11	2	10-9	2	5-9	1	13-5	1	14-5	1	15-5	1	16-5	1	17-5	1	18-5	1	19-5	1	20-5	1	21-5	1	22-5	1	23-5	1	24-5	1	25-5	1	26-5	1	27-5	1	28-5	1	29-5	1	31-5	1	32-5	1	32-7						19.85	1586
108	4-0	21-4	2-0	14-9½	34-3⅞	12-11⅞	-	4	27-4	16	23-0	2	12-0	2	6-4	1	15-0	1	16-0	1	17-0	1	18-0	1	19-0	1	20-0	1	21-0	1	22-0	1	23-0	1	24-0	1	25-0	1	26-0	1	27-0	1	28-0	1	29-0	1	30-0	1	32-0	1	33-0	1	34-0	1	35-0	1	36-0	1	36-1	26.96	2151

DIMENSIONS AND REINFORCING FOR FLARED HEADWALL FOR DOUBLE LINE PIPE CULVERT

PIPE DIA	DIMENSIONS A	B	E	G	X	Y	Z	A NO	A LGTH	B NO	B LGTH	C NO	C LGTH	D NO	D LGTH	J1 NO	J1 LGTH	J2 NO	J2 LGTH	J3 NO	J3 LGTH	J4 NO	J4 LGTH	J5 NO	J5 LGTH	J6 NO	J6 LGTH	J7 NO	J7 LGTH	J8 NO	J8 LGTH	J9 NO	J9 LGTH	J10 NO	J10 LGTH	J11 NO	J11 LGTH	J12 NO	J12 LGTH	J13 NO	J13 LGTH	J14 NO	J14 LGTH	J15 NO	J15 LGTH	J16 NO	J16 LGTH	J17 NO	J17 LGTH	J18 NO	J18 LGTH	J19 NO	J19 LGTH	J20 NO	J20 LGTH	J21 NO	J21 LGTH	J22 NO	J22 LGTH	PAY QTY 1-HEADWALL CONC CU YDS	STEEL LBS
15	-	-	-	6-8¼	9-4¼	5-5¾	1-0	4	10-0	8	5-6	3	2-8	4	1-10	1	6-10	1	7-10	1	8-10	1	9-10																																										1.39	128
18	-	-	-	7-3¼	10-6⅜	6-0⅜	1-0	4	11-0	8	6-2	3	3-0	4	2-0	1	7-5	1	8-5	1	9-5	1	10-5	1	11-1																																								1.74	151
24	-	-	-	8-7⅞	13-1⅞	7-4⅞	1-0	4	12-11	10	7-5	3	3-7	4	2-3	1	8-9	1	9-9	1	10-9	1	11-9	1	12-9	1	13-8																																						2.51	215
30	-	-	-	10-4⅛	15-10⅝	9-1⅝	1-3	4	15-3	11	8-5	4	4-2	4	2-6	1	10-6	1	11-6	1	12-6	1	13-6	1	14-6	1	15-6	1	16-5																																				3.41	273
36	-	-	-	11-10½	18-6½	10-8	1-6	4	17-4	13	9-6	4	4-9	4	2-9	1	12-0	1	13-0	1	14-0	1	15-0	1	16-0	1	17-0	1	18-0	1	19-0																																		4.45	348
42	-	-	-	13-6¼	21-2¼	12-3¾	1-9	4	19-6	15	10-6	4	5-4	4	3-0	1	13-8	1	14-8	1	15-8	1	16-8	1	17-8	1	18-8	1	19-8	1	20-8	1	21-8																																5.60	446
48	-	-	-	15-1¾	23-11⅞	13-11⅞	2-0	4	21-9	16	11-8	4	5-11	4	3-3	1	15-4	1	16-4	1	17-4	1	18-4	1	19-4	1	20-4	1	21-4	1	22-4	1	23-4	1	24-4	1	24-6																												6.95	565
54	-	-	-	16-11¾	26-9¼	15-9¼	2-3	4	24-2	18	12-8	5	6-6	4	3-6	1	17-2	1	18-2	1	19-2	1	20-2	1	21-2	1	22-2	1	23-2	1	24-2	1	25-2	1	26-2	1	27-2	1	27-3																										8.38	677
60	-	-	-	18-7⅜	29-7⅛	17-4⅛	2-6	4	26-5	20	13-11	5	7-1	4	3-9	1	18-9	1	19-9	1	20-9	1	21-9	1	22-9	1	23-9	1	24-9	1	25-9	1	26-9	1	27-9	1	28-9	1	29-9	1	31-2																								10.09	828
66	-	-	-	20-4¼	32-9⅝	19-0⅝	2-9	4	28-10	21	15-5	5	7-10	4	4-3	1	20-6	1	21-6	1	22-6	1	23-6	1	24-6	1	25-6	1	26-6	1	27-6	1	28-6	1	29-6	1	31-6	1	32-6	1	33-6	1	34-4																						13.29	1017
72	-	-	-	22-1⅛	35-5¼	20-8¼	3-0	4	32-2	23	16-5	6	8-6	4	4-7	1	22-3	1	23-3	1	24-3	1	25-3	1	26-3	1	27-3	1	28-3	1	29-3	1	31-3	1	32-3	1	33-3	1	34-3	1	35-3	1	36-3	1	36-11																				16.43	1215
84	3-2	30-5	15-8	25-6¾	40-8½	23-11½	3-6	4	36-10	27	18-5	6	9-8	4	5-3	1	25-9	1	26-9	1	27-9	1	28-9	1	29-9	1	31-9	1	32-9	1	33-9	1	34-9	1	35-9	1	36-9	1	37-9	1	38-9	1	39-9	1	40-9	1	41-9	1	42-4														22.31	1620
96	3-6	34-10	17-7	28-10	46-5⅝	27-2⅝	4-0	4	41-2	30	20-11	7	10-9	4	5-9	1	29-0	1	30-0	1	32-0	1	33-0	1	34-0	1	35-0	1	36-0	1	37-0	1	38-0	1	39-0	1	40-0	1	41-0	1	42-0	1	43-0	1	44-0	1	45-0	1	46-0	1	47-0	1	48-0	1	48-2						28.43	2101
108	4-0	38-10	19-6	32-3⅝	51-10	30-6	4-6	4	45-10	34	23-0	7	12-0	4	6-4	1	33-6	1	34-6	1	35-6	1	36-6	1	37-6	1	38-6	1	39-6	1	40-6	1	41-6	1	42-6	1	43-6	1	44-6	1	45-6	1	46-6	1	47-6	1	48-6	1	49-6	1	50-6	1	51-6	1	52-6	1	53-6	1	53-7	38.17	2794

DIMENSIONS AND REINFORCING FOR FLARED HEADWALL FOR TRIPLE LINE PIPE CULVERT

| PIPE DIA | DIMENSIONS A | B | E | G | X | Y | Z | A NO | A LGTH | B NO | B LGTH | C NO | C LGTH | D NO | D LGTH | J1 NO | J1 LGTH | J2 NO | J2 LGTH | J3 NO | J3 LGTH | J4 NO | J4 LGTH | J5 NO | J5 LGTH | J6 NO | J6 LGTH | J7 NO | J7 LGTH | J8 NO | J8 LGTH | J9 NO | J9 LGTH | J10 NO | J10