LOCATION SPANS SHOWN BY LENGTH UNLESS NOTED. ALL ELSE SHOWN BY REFERENCE NUMBER.	NUMBER OF LOCATIONS	MARK	LENGTH	REQ'D.	TYPE	A FT. IN.	B FT. IN.	C FT. IN.	D FT. IN.	E FT. IN.	F FT. IN.	G FT. IN.	H FT. IN.	N NUMBER OR DEGREES	θ DEGREES
		401	14-2		1										
①		402	6-2		3	2-2	4-0								
		403	3-0		1										
		404	8-2		1										
		405	8-4		1										
		406	14-8		1										
		407	8-8		1										
		408	8-10		1										
		409	9-2		1										
		410	17-2		50	3-11	0-4	2-10	0-4	1-0	1-4	1-4	14-0	3	
		411	14-0		1										
		412	5-0		3	1-4	3-8								
		413	5-0		1										
		414	6-0		1										
		415	17-8		50	3-8	0-6	2-10	0-6	1-0	1-4	1-4	14-2	3	
		416	6-4		1										
		417	18-6		50	3-1	0-8	3-0	0-8	1-3	1-6	1-6	14-4	3	
		418	6-2		3	2-4	3-10								
		419	6-8		1										
		420	18-8		50	3-4	0-8½	3-0	0-8½	1-0	1-6	1-6	14-6	3	
		421	6-9		1										
		422	7-0		1										
		423	6-6		3	2-6	4-0								
		424	7-3		1										
		425	20-2		1										
		426	10-7		1										
		427	20-7		1										
		428	11-1		1										
		429	20-10		1										
		430	11-7		1										
		431	11-11		1										
		432	12-3		1										
		433	5-9		3	1-10	3-11								
		434	9-4½		1										
		435	6-2		3	2-1	4-1								
		436	9-10		1										
		437	10-3		1										
		438	10-7		1										
		439	10-10½		1										
		440	10-4½		1										
		441	10-10		1										
		442	11-3		1										
		443	11-7		1										
		444	14-9		50	3-5	0-3	2-4	0-3	0-10	1-3	1-3	11-10	3	
		445	11-10		1										
		446	4-5		3	1-8	2-9								
		447	4-2		1										
		448	5-10		1										
		449	15-10		50	3-4	0-3½	2-5	0-3½	0-9½	1-9	1-9	11-10	3	
		450	4-3		3	1-7	2-8								
		451	5-11		1										
		452	16-4½		50	3-3¼	0-4¾	2-4	0-4¾	0-8½	1-11	1-11	11-10½	3	
		453	4-3		3	1-7	2-8								
		454	6-1½		1										
		455	4-2		3	1-7	2-7								
		456	6-3½		1										
		457	4-5		3	1-8	2-9								
		458	6-5		1										
		459	6-6		3	2-5	4-1								
		460	7-3		1										
		461	20-1		50	4-8	0-4	3-4	0-4	1-0	1-9	1-9	16-0		
		462	16-0		1										
		463	5-4		3	1-10	3-6								
		464	4-11		1										
		465	5-10		3	2-0	3-10								
		466	6-7½		1										
		467	5-7		3	1-7	4-0								
		468	6-10½		1										
		469	20-11		50	4-1¼	0-10¾	2-11	0-10¾	10	1-6	1-6	16-4½		
		470	5-9		3	1-8	4-1								
		471	7-1½		1										
		472	6-4		3	2-2	4-2								

LOCATION SPANS SHOWN BY LENGTH UNLESS NOTED. ALL ELSE SHOWN BY REFERENCE NUMBER.	NUMBER OF LOCATIONS	MARK	LENGTH	REQ'D.	TYPE	A FT. IN.	B FT. IN.	C FT. IN.	D FT. IN.	E FT. IN.	F FT. IN.	G FT. IN.	H FT. IN.	N NUMBER OR DEGREES	θ DEGREES
		501	19-2		50	3-9	0-6	3-6	0-6	0-7	2-1	2-1	14-2		
①		502	6-3		3	2-2	4-1								
①		503	6-10		3	2-7	4-3								
		504	18-10		50	3-6	0-9	2-6	0-9	1-1	1-6	1-6	14-8		
①		505	7-6		3	3-0	4-6								
		506	19-0		50	3-4	0-5	4-2	0-5	0-10	2-1	2-1	14-2		
		507	14-4		1										
		508	5-0		1										
		509	14-6		1										
		510	20-2		50	3-10	0-10	2-8	0-10	0-6	2-1	2-1	14-8	3	
		511	14-8		1										
		512	22-2		50	3-3	0-11½	3-0	0-11½	0-8	3-0	3-0	14-8	3	
		513	24-10		50	6-10	0-7½	2-0	0-7½	1-0	1-10	1-10	20-2	3	
①		514	8-3		3	3-0	5-3								
①		515	8-6		3	3-0	5-6								
①		516	9-1		3	3-4	5-9								
		517	28-4		50	5-8	1-3½	2-0	1-3½	1-4	2-6	2-6	21-2	3	
		518	21-2		1										
		519	27-11		50	5-5	1-5½	2-0	1-5½	1-5	2-0	2-0	21-6	3	
		520	27-2		50	6-5½	0-6¼	4-8	0-6¼	1-2	2-2	2-2	22-0	3	
		521	7-0		3	2-6	4-6								
		522	6-9		3	2-4	4-5								
		523	7-1		3	2-6	4-7								
		524	27-6½		50	6-3¾	0-6¼	4-8	0-6¼	1-4	2-4	2-4	22-0½	3	
①		525	7-7		3	2-6	5-1								
①		526	7-9		3	2-5	5-4								
		527	11-10		1										
		528	4-10		1										
		529	16-6		50	3-2¼	0-5¾	2-4	0-5¾	0-8	1-10½	1-10½	11-11½	3	
		530	17-1		50	3-2	0-6½	2-3	0-6½	0-8½	2-0	2-0	12-2	3	
		531	14-10½		1										
		532	20-6		50	4-8	0-6	3-2	0-6	0-9	1-10	1-10	16-0		
		533	5-4		1										
		534	21-2		50	4-4½	0-7¾	3-3	0-7¾	0-9	2-0	2-0	16-1		
		535	16-1		1										
		537	21-6		50	4-3¾	0-9¼	3-0	0-9¼	0-9	2-0	2-0	16-2½		
		538	28-8		50	6-7¾	0-6½	4-7½	0-6½	0-11¾	2-10	2-10	22-0½		
		539	22-0½		1										
		540	6-0		1										
		541	22-2½		1										
		542	16-1¾		50	3-2⅝	0-8	2-1	0-8	0-7⅛	1-4	1-4	12-4½	3	
		543	12-4½		1										
②		496	6-6		3	2-0	4-6								
②		497	8-6		1										

BOX CULVERT REQUIREMENTS:

MINIMUM FILL HEIGHT FROM TOP OF CULVERT TO BOTTOM OF BASE WITHIN TRAVELWAY SHALL BE 12 INCHES.

MAXIMUM POUR LENGTH SHALL NOT EXCEED 30 FEET ALONG THE LENGTH OF THE CULVERT.

TRANSVERSE CONSTRUCTION JOINTS SHALL BE PLACED IN THE BARREL, NORMAL TO THE CENTERLINE OF CULVERT, AT THE OUTSIDE SHOULDER BREAK POINTS. LONGITUDINAL BARREL REINFORCING STEEL SHALL NOT BE CONTINUOUS THROUGH THESE JOINTS, PROVIDED THAT THE JOINTS ARE MORE THAN 15 FEET FROM THE BARREL ENDS.
WHEN TRANSVERSE CONSTRUCTION JOINTS OCCUR WITHIN 15 FEET OF THE BARREL ENDS OR WITHIN THE LIMITS OF THE PAVEMENT, THE LONGITUDINAL BARREL REINFORCING SHALL THEN BE CONTINOUS THROUGH SUCH JOINTS. THE MINIMUM LENGTH OF LAP SPLICE FOR LONGITUDINAL REINFORCING SHALL BE 24 INCHES.

TRANSVERSE CONSTRUCTION JOINTS PLACED AT ANY OTHER LOCATION NOT SPECIFIED ABOVE SHALL BE FORMED WITH NO LONGITUDINAL REINFORCING STEEL PASSING THROUGH THE JOINTS.

BAR SCHEDULE SHEET NO.

STATE	PROJECT NUMBER	SHEET No.	TOTAL SHEETS
GA.			

LOCATION	NUMBER OF LOCATIONS	MARK	LENGTH	REQ'D.	TYPE	A FT. IN.	B FT. IN.	C	D	E	F	G	H	N	Φ
		473	7-4		1										
		474	6-0		3	1-9	4-3								
		475	7-6		1										
		476	6-2		3	1-10	4-4								
		477	7-8½		1										
		478	6-3		3	2-0	4-3								
		479	7-5		1										
		480	6-3		3	1-9	4-6								
		481	7-11		1										
		482	6-3		3	1-9	4-6								
		483	8-4		1										
		484	6-9		3	1-10	4-11								
		485	8-8½		1										
		486	6-11		3	1-10	5-1								
		487	9-0½		1										
		488	7-10		3	2-10	5-0								
		489	11-4		1										
		490	7-9		3	2-8	5-1								
		491	11-7½		1										
		492	8-1		3	2-11	5-2								
		493	11-11		1										
		494	4-10		3	2-0	2-10								
		495	6-8		1										

FOR DETAILS OF BAR TYPES SEE SHEET NO. 1.

BY	REVISIONS	DATE
R.J.S.	REDESIGN DBL 5X5	4-14-69
E.F.L.	BAR 412	7-3-69
S.L.W.	BAR 494, 495, 542, 543	2-11-76
RJS ①	LENGTH OF C BARS	3-22-84
RJS ②	ADD 496 & 497 ADD REQUIREMENT NOTE	6-7-90 11-26-01

GEORGIA
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION-BRIDGE DESIGN

BAR REINFORCEMENT DETAILS
SHEET 2 OF 3
SPECIAL DESIGN DOUBLE BOX CULVERTS 6-7, 6-5, 9-9, 10-8, 10-9, 5-5, 7-5, 10-6

NO SCALE — MAY 1961

DESIGNED R.B.D. — TRACED — REVIEWED R.K.J.
DRAWN R.B.D. — CHECKED — APPROVED

(10)

DIETZGEN NO. 137 EXCELSIOR