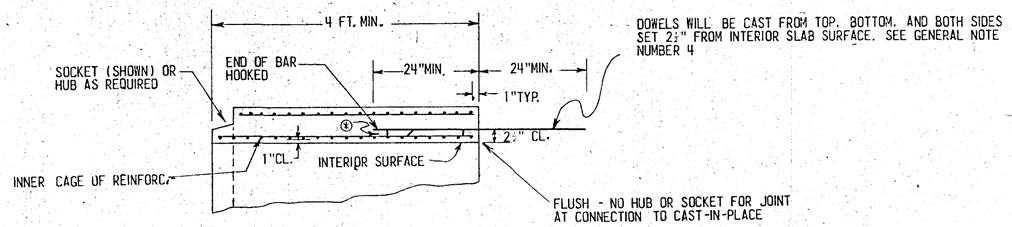
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	TSAP 193 (9)	81	135

DESIGN No. 1 — FOR FILL HEIGHTS TO 10 FEET

CLEAR SPAN	CLEAR HEIGHT	T (MIN.)	WIRE FABRIC DIMENSIONS: INNER CAGE REINF. FLAT SHEET LENGTH	INNER CAGE REINF. BENT SHEET DIMENSIONS	OUTER CAGE REINF. FLAT SHEET LENGTH	OUTER CAGE REINF. BENT SHEET DIMENSIONS	INNER CAGE REINFORCING: CERCUMFERENTIAL STEEL AREA SQ. IN./FEET	INNER CAGE REINFORCING: WIRE FABRIC STYLE	OUTER CAGE REINFORCING: CERCUMFERENTIAL STEEL AREA SQ. IN./FEET	OUTER CAGE REINFORCING: WIRE FABRIC STYLE	QUANTITIES PER LIN. FOOT OF BARREL *: CU. YDS. CONCRETE	QUANTITIES PER LIN. FOOT OF BARREL *: LBS. STEEL	SEE GEN. NOTE NO. 11
4'	4'	6"	9' 6"	32"-50"-32"	10' 6"	35"-56"-35"	0.30	2X6 W 5.0/W 2.0 (118)	0.18	2X6 W3.0/W 2 (77)	0.3518	38.78	
	6'	7"	11' 6"	44"-50"-44"	13' 0"	36"-84"-36"	0.36	2X6 W 6.0/ W2.5 (144)	0.33	2X6 W5.5/ W 2.5 (134)	0.5075	61.46	
5'	4'	6"	10' 6"	32"-62"-32"	12' 0"	43"-58"-43"	0.33	2X6 W 5.5 /W2.5 (134)	0.24	2X6 W 4.0 /2.0 (98)	0.3888	51.66	
	5'	6"	11' 6"	38"-62"-38"	13' 0"	43"-70"-43"	0.36	2X6 W 6.0/W2.5 (144)	0.21	2X6 W 3.5/ W 2.0 (88)	0.4258	56.00	
	6'	7"	12' 6"	44"-62"-44"	14' 0"	43"-82" 43"	0.39	2X6 W 6.5/W3.0 (158)	0.27	2X6 W 4.5/W2.0 (109)	0.5507	69.79	
6'	3'	7"	10' 6"	26"-74"-26"	12' 0"	48"-48"-48"	0.33	2X6 W5.5/W 2.5 (134)	0.33	2X6 W 5.5/W2.5 (134)	0.4643	60.30	
	4'	7"	11' 6"	32"-74"-32"	13' 0"	48"-60"-48"	0.36	2X6 W6.0/W2.5 (144)	0.33	2X6 W 5.5/W2.5 (134)	0.5075	61.46	
	5'	7"	12' 6"	38"-74"-38"	14' 0"	48"-72"-48"	0.39	2X6 W6.5/W3.0 (158)	0.27	2X6 W4.5/W2.0 (109)	0.5507	69.79	
	6'	7"	13' 6"	44"-74"-44"	15' 0"	48"-84"-48"	0.42	2X6 W7.0/W3.0 (169)	0.24	2X6 W4.0/W2.0 (98)	0.5938	75.09	
7'	4'	8"	12' 6"	32"-86"-32"	14' 6"	56"-62"-56"	0.36	2X6 W6.0/W3.0 (144)	0.36	2X6 W6.0/W2.5 (144)	0.6423	75.26	
	5'	8"	13' 6"	38"-86"-38"	15' 6"	56"-74"-56"	0.39	2X6 W6.5/W3.0 (158)	0.33	2X6 W5.5/W2.5 (134)	0.6923	84.20	
	6'	8"	14' 6"	44"-86"-44"	16' 6"	56"-86"-56"	0.42	2X6 W7.0/W3.0 (169)	0.30	2X6 W5.0/W2.0 (119)	0.7410	88.28	
	7'	8"	15' 6"	50"-86"-50"	17' 6"	56"-98"-56"	0.45	2X6 W7.5/W3.0 (179)	0.27	2X6 W4.5/W2.0 (109)	0.79033	93.64	
8'	4'	8"	13' 6"	32"-98"-32"	15' 6"	62"-62"-62"	0.42	2X6 W7.0/W3.0 (169)	0.45	2X6 W7.5/W3.0 (179)	0.6915	101.12	
	5'	8"	14' 6"	38"-98"-38"	16' 6"	62"-74"-62"	0.45	2X6 W7.5/W3.0 (179)	0.39	2X6 W6.5/W3.0 (158)	0.7410	104.05	
	6'	8"	15' 6"	44"-98"-44"	17' 6"	62"-86"-62"	0.48	2X6 W8.0/W3.5 (193)	0.36	2X6 W6.0/W2.5 (144)	0.7903	110.23	
	7'	8"	16' 6"	50"-98"-50"	18' 6"	62"-98"-62"	0.51	2X6 W8.5/W3.5 (204)	0.33	2X6 W5.5/W2.5 (134)	0.8398	116.90	
	8'	8"	17' 6"	56"-98"-56"	19' 6"	62"-110"-62"	0.54	2X6 W9.0/W4.0 (218)	0.33	2X6 W5.5/W2.5 (134)	0.8893	128.56	
9'	4'	9"	14' 6"	32"-110"-32"	17' 0"	70"-64"-70"	0.45	2X6 W7.5/W3.0 (179)	0.48	2X6 W7.5/W3.0 (193)	0.8472	117.53	
	5'	9"	15' 6"	38"-110"-38"	18' 0"	70"-76"-70"	0.45	2X6 W7.5/W3.0 (179)	0.45	2X6 W7.5/W3.0 (179)	0.9028	119.94	
	6'	9"	16' 6"	44"-110"-44"	19' 0"	70"-88"-70"	0.48	2X6 W8.0/W3.5 (193)	0.42	2X6 W7.0/W3.0 (169)	0.9580	127.92	
	7'	9"	17' 6"	50"-110"-50"	20' 0"	70"-100"-70"	0.54	2X6 W9.0/W4.0 (218)	0.39	2X6 W6.5/W3.0 (158)	1.0140	139.50	
	8'	9"	18' 6"	56"-110"-56"	21' 0"	70"-112"-70"	0.54	2X6 W9.0/W4.0 (218)	0.36	2X6 W6.0/W2.5 (144)	1.069	136.78	
	9'	9"	19' 6"	62"-110"-62"	22' 0"	70"-124"-70"	0.57	2X6 W9.0/W4.0 (228)	0.33	2X6 W5.5/W2.5 (134)	1.125	147.88	
	10'	10'	20' 6"	68"-110"-68"	23' 0"	70"-136"-70"	0.60	2X6 W10.0/W4.0 (239)	0.36	2X6 W6.0/W2.5 (144)	1.327	164.24	
10'	4'	10"	15' 6"	32"-122"-32"	18' 0"	75"-66"-75"	0.48	2X6 W8.0/W3.5 (193)	0.51	2X6 W8.5/W3.5 (204)	1.018	133.27	
	5'	10"	16' 6"	38"-122"-38"	19' 0"	75"-78"-75"	0.48	2X6 W8.0/W3.5 (193)	0.48	2X6 W8.0/W3.5 (193)	1.080	137.04	
	6'	10"	17' 6"	44"-122"-44"	20' 0"	75"-90"-75"	0.51	2X6 W8.5/W3.5 (204)	0.45	2X6 W7.5/W3.0 (179)	1.142	143.00	
	7'	10"	18' 6"	50"-122"-50"	21' 0"	75"-102"-75"	0.54	2X6 W9.0/W4.0 (218)	0.42	2X6 W7.0/W3.0 (169)	1.188	151.64	
	8'	10"	19' 6"	56"-122"-56"	22' 0"	75"-114"-75"	0.57	2X6 W9.5/W4.0 (228)	0.39	2X6 W6.5/W3.0 (158)	1.265	158.44	
	9'	10"	20' 6"	62"-122"-62"	23' 0"	75"-126"-75"	0.60	2X6 W10.0/W4.0 (239)	0.36	2X6 W6.0/W2.5 (144)	1.327	164.24	
	10'	10"	21' 6"	68"-122"-68"	24' 0"	75"-138"-75"	0.63	2X6 W10.5/W4.0 (253)	0.36	2X6 W6.0/W2.5 (144)	1.389	177.92	

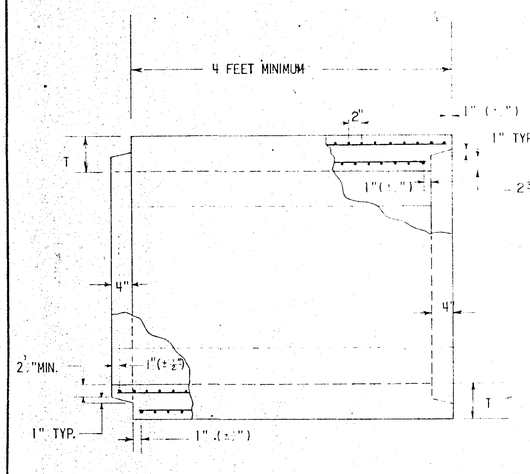


(5) NOTE:
SPACERS MAY BE USED OR BARS BENT TO GIVE 2-1/2"CL. CONNECTION MAY BE MADE TO LONGITUDINALS OF OUTER CAGE REINFORCING PROVIDED THE 2-1/2" CL. TO THE SLAB INTERIOR SURFACE IS OBTAINED. WELDING OF DOWELS TO THE CIRCUMFERENTIAL REINFORCEMENT WILL NOT BE PERMITTED.

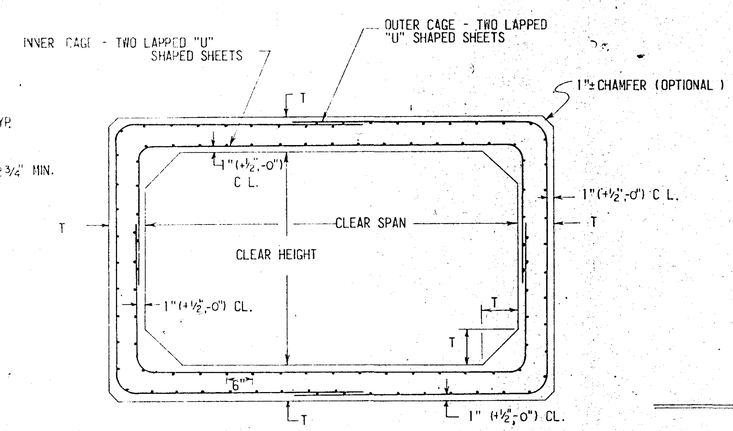
DOWEL JOINT DETAIL
(PLAN OR SIDE VIEW)

GENERAL NOTES:

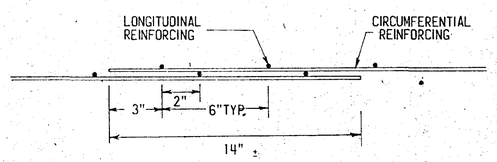
1. PRECAST BOX CULVERT SECTIONS SHOWN HERE WILL BE IN ACCORDANCE WITH AASHTO M-259- EXCEPT WHERE SHOWN OTHERWISE IN THESE DETAILS, TABLES, OR NOTES OR WHERE STATED OTHERWISE IN GEORGIA STANDARD SPECIFICATIONS AND/OR SPECIAL PROVISIONS.
2. CONCRETE WILL HAVE A MINIMUM P.S.I. OF 5000. MINIMUM CLEARANCE FOR REINFORCEMENT WILL BE 1" WITH A MAX. VARATION OF +½", -0". LESS THAN 1" OF COVER WILL BE CAUSE FOR REJECTION.
3. ALL JOINTS BETWEEN PRECAST SECTIONS WILL HAVE HUB AND SOCKET CONNECTION ALL AROUND. HUB INSET WILL BE SLIGHTLY LARGER THAN SOCKET INSERT TO ALLOW FOR THE PLACEMENT OF JOINT FILLER MATERIAL.
4. WHERE PRECAST BOXES ARE TO BE TIED TO CAST-IN-PLACE CONSTRUCTION. THE CONNECTING END OF THE BOX WILL HAVE LONGITUDINAL STEEL EXPOSED FROM JOINT FOR A MINIMUM LENGTH OF 2'0". MINIMUM CROSS SECTIONAL AREA OF EXPOSED LONGITUDINALS WILL BE 0.20 SQ.IN/FT. MAXIMUM SPACING FOR LONGITUDINALS WILL BE 12" C. TO C. LONGITUDINALS WILL BE CAST INTO PRECAST BOX A MINIMUM OF 2'0". REINFORCING WILL EXTEND FROM TOP, BOTTOM AND BOTH SIDES OF PRECAST SECTION AT CONNECTION. THE OPPOSITE END OF PRECAST BOX WILL HAVE HUB OR SOCKET AS REQUIRED. SEE DETAIL SHEET NOS. P-4 AND P-5 & DETAIL ABOVE.
5. LOADING: HS20 AND ANY FILL BETWEEN THE 2 FT. MINIMUM AND THE MAXIMUM SHOWN.
6. THE DIMENSION T WILL BE A MINIMUM, BUT CLEAR SPAN OR CLEAR HEIGHT DIMENSIONS MAY NOT BE REDUCED.
7. PRECAST BOX CULVERT SECTIONS SHOWN ON SHEET NO. P-1 MAY BE USED AS AN ALTERNATE.
8. A MINIMUM COVER OF 2 FT. WILL BE REQUIRED ABOVE THE TOP OF ALL PRECAST BOXES WHICH ARE SUBJECT TO TRAFFIC.
9. ALTERNATE DESIGNS FOR PRECAST BOX CULVERT SECTIONS MAY BE SUBSTITUTED IF DETAILS ARE SUBMITTED TO AND APPROVED BY THE GA. D.O.T. OFFICE OF BRIDGE AND STRUCTURAL DESIGN.
10. * QUANTITIES ARE SHOWN FOR MANUFACTURE'S INFORMATION ONLY. SEE SPECIFICATIONS SEC. 513 FOR BASIS OF PAYMENT.
11. IF FILL HEIGHT IS OVER 10 FT. PRECAST BOXES (DRY CAST) MAY BE USED IF DESIGNS ARE SUBMITTED TO AND APPROVED BY THE GA. D.O.T. OFFICE OF BRIDGE AND STRUCTURAL DESIGN. OTHERWISE SEE SHEET P-1.



PLAN OR SIDE VIEW



SECTIONAL VIEW



TYPICAL LAP

REV.	NOTICE TO DES. & CONFT.	GEN. REV.
8-12-86	4-23-80	6-8-79

Rem. Not To Des. & Confr.

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

(DRY CAST)
PRECAST REINFORCED CONCRETE BOX CULVERT SECTIONS

SIZES 4'X4'; 4'X6'; 5'X4' TO 5'X6'; 6'X3' TO 6'X6'; 7'X4' TO 7'X7'; 8'X4' TO 8'X8'; 9'X4' TO 9'X10'; & 10'X4' TO 10'X10'
NO SCALE 4-3-79

R.M.U.
R.M.U.
R.M.U.

DES. RMU
DWN. RMU
TRA. RMU
CKD. RKC

SUBMITTED
STATE ROAD & AIRPORT DESIGN ENGR.
APPROVED
STATE HIGHWAY ENGINEER

P-2

FORM NO. 11-2