STATE PROJECT	PARISH	SHEET NO.

BILL OF REINFORCING STEEL FOR 44'-0" CULVERT

BARREL REINFORCEMENT

OPENINGS CLEAR SPAN FEET	OPENINGS CLEAR HEIGHT FEET	BARS A SIZE	BARS A NO.	BARS A LENGTH FT.-IN.	BARS A SPAC. IN.	BARS A1 SIZE	BARS A1 NO.	BARS A1 SHORT FT.-IN.	BARS A1 VAR. IN.	BARS A1 LONG FT.-IN.	BARS A1 SPAC. IN.	BARS B SIZE	BARS B NO.	BARS B LENGTH FT.-IN.	BARS B SPAC. IN.	BARS B1 SIZE	BARS B1 NO.	BARS B1 SHORT FT.-IN.	BARS B1 VAR. IN.	BARS B1 LONG FT.-IN.	BARS B1 SPAC. IN.	#4 BARS C NO.	#4 BARS C LENGTH FT.-IN.	BARS D & D1 SIZE	BARS D & D1 NO.	BARS D & D1 LENGTH D FT.-IN.	BARS D & D1 LENGTH D1 FT.-IN.	BARS D & D1 SPAC. IN.
12	8																											
	9																											
	10																											
	11																											
	12	#7	32	15-3½	5½	#7	14	3-10	20 Bars	14-1	5½	#8	78	15-10½	6½	#8	12	4-1	24 Bars	14-2	6½	50	①#7-2	#6	116	3-7	12-5	9½

WINGS AND CURB REINFORCEMENT

OPENINGS CLEAR SPAN FEET	OPENINGS CLEAR HEIGHT FEET	BARS E & E1 SIZE E	BARS E & E1 SIZE E1	BARS E & E1 NO.	BARS E & E1 LENGTH E FT.-IN.	BARS E & E1 LENGTH E1 FT.-IN.	BARS E & E1 SPAC. IN.	#4 BARS F NO.	#4 BARS F LENGTH FT.-IN.	#4 BARS F1 NO.	#4 BARS F1 LENGTH FT.-IN.	#4 BARS F2 NO.	#4 BARS F2 LENGTH FT.-IN.	#4 BARS F3 NO.	#4 BARS F3 LENGTH FT.-IN.	#4 BARS J NO.	#4 BARS J LENGTH FT.-IN.	#4 BARS J1 NO.	#4 BARS J1 LENGTH FT.-IN.	#6 BARS M NO.	#6 BARS M LENGTH FT.-IN.	#6 BARS M1 NO.	#6 BARS M1 LENGTH FT.-IN.	#4 BARS N NO.	#4 BARS N LENGTH FT.-IN.	BARS O SIZE	BARS O NO.	BARS O LENGTH FT.-IN.	BARS O SPAC. IN.	#4 BARS P NO.	#4 BARS P LENGTH FT.-IN.	#4 BARS P1 NO.	#4 BARS P1 LENGTH FT.-IN.	#4 BARS P2 NO.	#4 BARS P2 LENGTH FT.-IN.	#4 BARS P3 NO.	#4 BARS P3 LENGTH FT.-IN.	#6 BARS X NO.	#6 BARS X LENGTH FT.-IN.
12	8																																						
	9																																						
	10																																						
	11																																						
	12	#7	#6	150	7-7	13-5	8½	2	27-11	24	3-2	2	28-11	24	3-5	28	24-4	28	25-1	4	16-11	6	14-1	30	5-3	#6	114	6-11	11	10	25-11	8	27-4	10	26-6	8	29-3	52	2-0

① Includes 1'-6" Lap Splice.

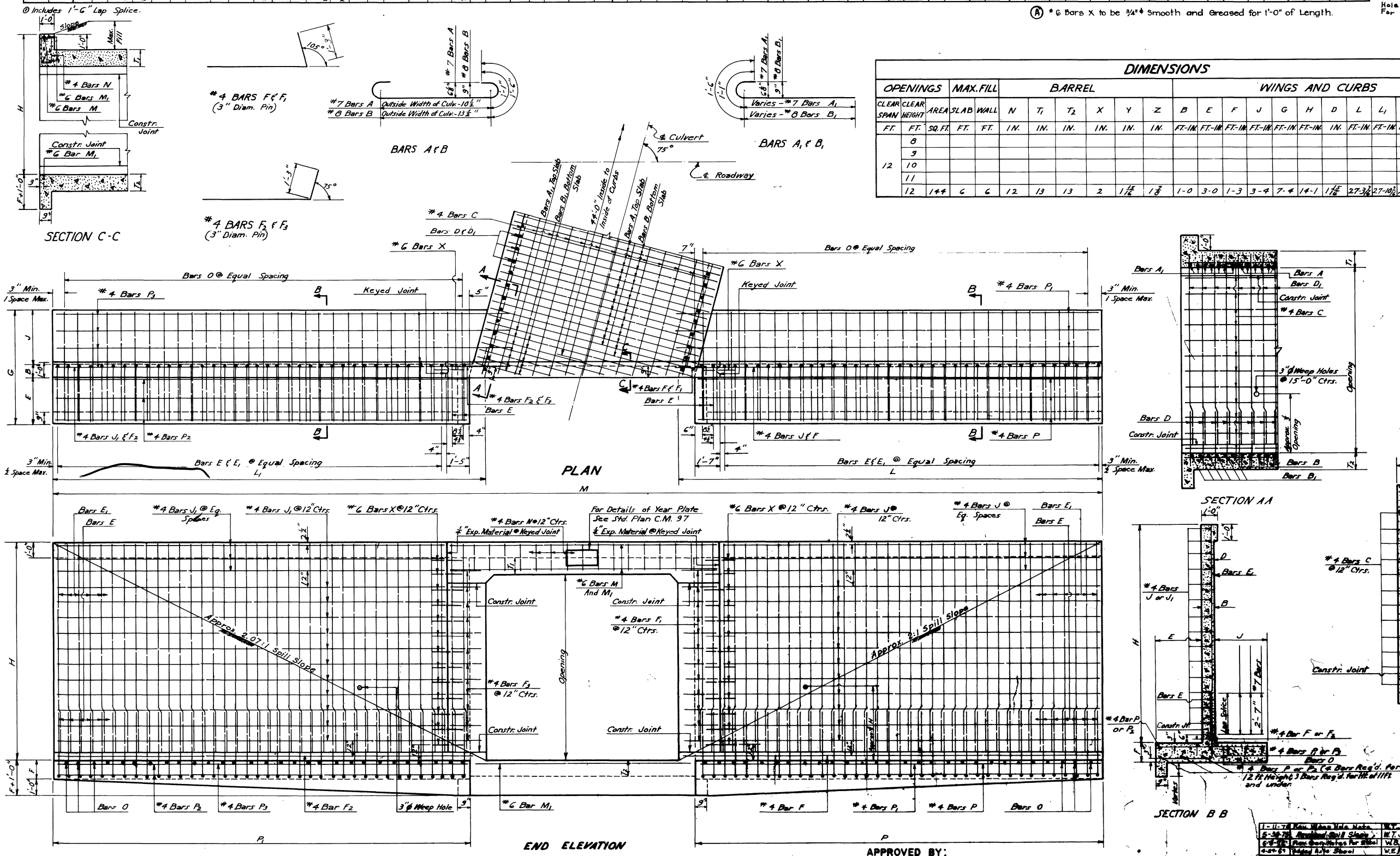
Ⓐ #6 Bars X to be ¾"ϕ Smooth and Greased for 1'-0" of Length.

GENERAL NOTES:

CONSTRUCTION SPECIFICATIONS: Latest Approved La. Dept. of Hwy. Standard Specifications.
DESIGN SPECIFICATIONS: AA.S.H.O. 1961 as amended to Sept. 1961.
LIVE LOAD: H-20, S16-44.
All concrete to be Class "A".
All exposed corners to have ¾" chamfer, unless otherwise noted.
Reinforcement shall be billet steel A.S.T.M. A 615 or Rail-Steel A.S.T.M. A 616 or Axle-Steel A.S.T.M. A 617.
Dimensions relating to reinforcing steel are to bar centers.
A 1'-6" Square of Plastic Filter Cloth (See Qualified Products List) shall be placed in contact with Concrete behind each Weep Hole, in addition to approx. 2 Cu. Ft. of Concrete Sand.
For Detail of Joints, See Std. Plan C.M.-49.

DIMENSIONS / QUANTITIES

OPENINGS CLEAR SPAN FT.	OPENINGS CLEAR HEIGHT FT.	AREA SQ. FT.	MAX. FILL SLAB FT.	MAX. FILL WALL FT.	BARREL N IN.	BARREL T1 IN.	BARREL T2 IN.	BARREL X IN.	BARREL Y IN.	BARREL Z IN.	WINGS AND CURBS B FT.-IN.	E FT.-IN.	F FT.-IN.	J FT.-IN.	G FT.-IN.	H FT.-IN.	D IN.	L FT.-IN.	L1 FT.-IN.	P FT.-IN.	P1 FT.-IN.	M FT.-IN.	QUANTITIES PER LINEAR FOOT OF BARREL STEEL LBS.	CONC. CU. YDS.	44'-0" CULVERT STEEL LBS.	CONC. CU. YDS.	OPENINGS CLEAR SPAN FEET	OPENINGS CLEAR HEIGHT FEET
12	8																											8
	9																											9
	10																										12	10
	11																											11
	12	144	6	6	12	13	13	2	1 15/16	1 7/8	1-0	3-0	1-3	3-4	7-4	14-1	1 15/16	27-3 3/4	27-10 3/4	26-3	26-10	67-6 1/2	240.56	2.0216	19,874	188.42		12



DATE	DESCRIPTION	BY
1-11-78	Rev. Wing Vols. Note	W.T.J.
5-30-75	Revised Spill Slope	W.T.J.
6-8-66	Rev. Gen. Notes for Steel	W.E.M.
4-25-61	Added Axle Steel	W.E.M.
4-9-64	Revised Spill 2' to Depth	W.E.M.

REVISIONS

STANDARD PLAN
REINF. CONCRETE BOX CULVERT
STRAIGHT WINGWALLS 75° CROSSING
2:1 SPILL SLOPE NORMAL TO CHANNEL
12' CLEAR SPAN 8' TO 12' CLEAR HGHT.
DATED Jan. 16, 1962

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS

DESIGNED S.Q. Hulitt DETAILED M.A. Brown TRACED R. Hamilton
CHECKED W.J. Gorski CHECKED S.Q. Hulitt CHECKED W.E. Martin
IN CHARGE OF BRIDGE DESIGN SECTION

CC·S·S·12·RS·75°·2

APPROVED BY:
Original Signed by Chief Engineer
CHIEF ENGINEER DATE

CC·S·S·12·RS·75°·2