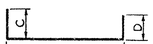
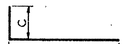
FED ROAD DIV. NO.	STATE	FED AID PROJ. NO.	STATE AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	GA.				733	839

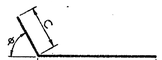
TYPE 1



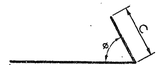
TYPE 2



TYPE 3



TYPE 4

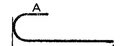


TYPE 5

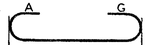
TYPE 6

TYPE 7

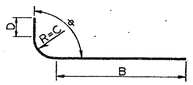
TYPE 8



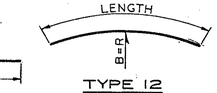
TYPE 9



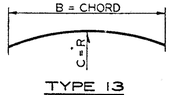
TYPE 10



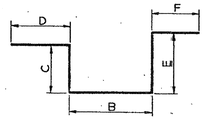
TYPE 11



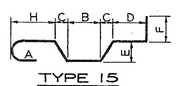
TYPE 12



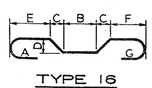
TYPE 13



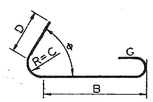
TYPE 14



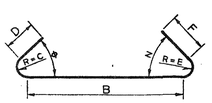
TYPE 15



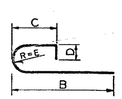
TYPE 16



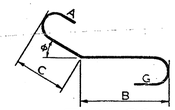
TYPE 17



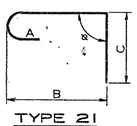
TYPE 18



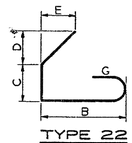
TYPE 19



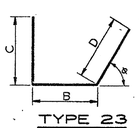
TYPE 20



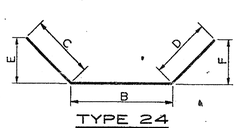
TYPE 21



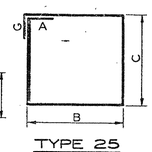
TYPE 22



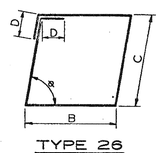
TYPE 23



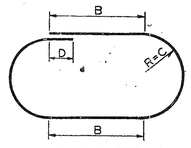
TYPE 24



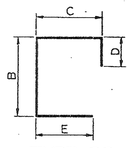
TYPE 25



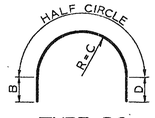
TYPE 26



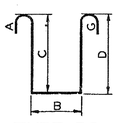
TYPE 27



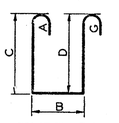
TYPE 28



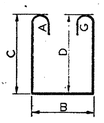
TYPE 29



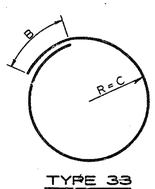
TYPE 30



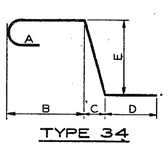
TYPE 31



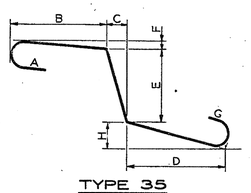
TYPE 32



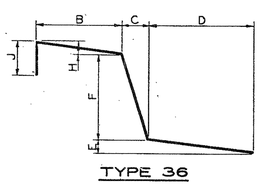
TYPE 33



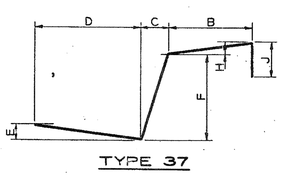
TYPE 34



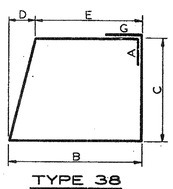
TYPE 35



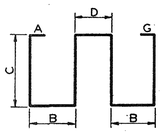
TYPE 36



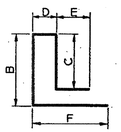
TYPE 37



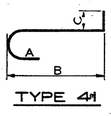
TYPE 38



TYPE 39

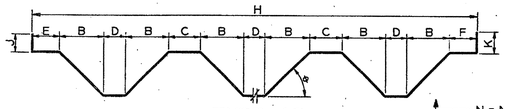


TYPE 40

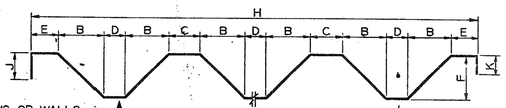


TYPE 41

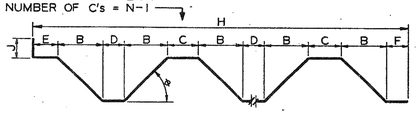
N = NUMBER OF BEAMS OR WALLS
NUMBER OF D's = N-1
NUMBER OF B's = 2N-1
NUMBER OF C's = N-1



TYPE 42.



TYPE 43



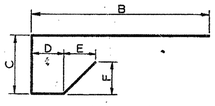
TYPE 44

C = PITCH
B = OVERALL HEIGHT
θ = 40 - SPIRAL IS MADE OF GRADE 40 BILLET STEEL DEFORMED BARS - A.S.T.M. DESIGNATION A-615.
θ = 60 - SPIRAL IS MADE OF COLD DRAWN STEEL WIRE - A.S.T.M. DESIGNATION A-82.

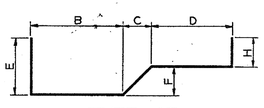
SPLICES MAY BE ACCOMPLISHED BY LAPPING AND WELDING 1½ TURNS. PROVIDE "N" = TOTAL NUMBER OF CLOSED TURNS AT TOP AND BOTTOM OF COLUMNS. COST OF CHANNEL SPACERS AND SPLICES SHALL BE INCLUDED IN PRICE BID FOR REINFORCEMENT STEEL.

TYPE 45

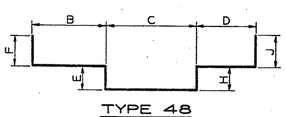
N = NUMBER OF BEAMS OR WALLS
NUMBER OF D's = N-1
NUMBER OF B's = 2(N-1)
NUMBER OF C's = N-2



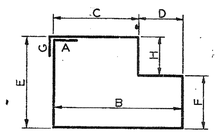
TYPE 46



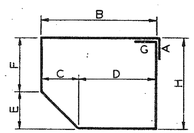
TYPE 47



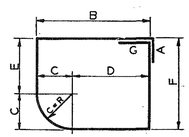
TYPE 48



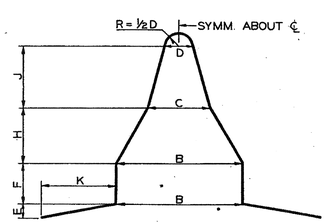
TYPE 49



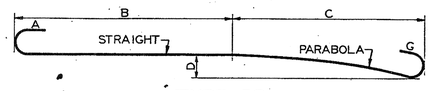
TYPE 50



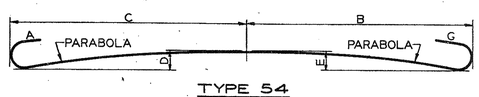
TYPE 51



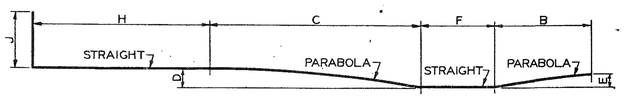
TYPE 52



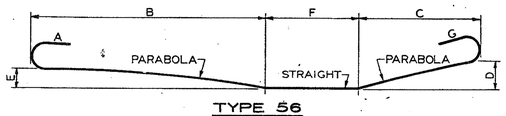
TYPE 53



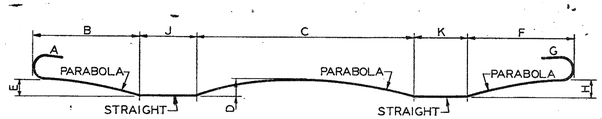
TYPE 54



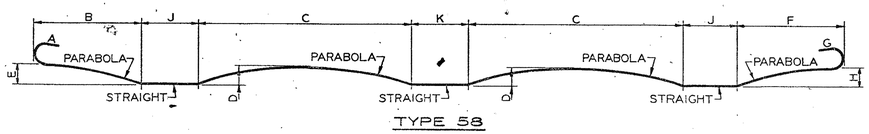
TYPE 55



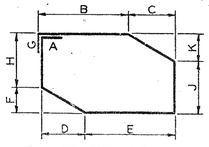
TYPE 56



TYPE 57



TYPE 58



TYPE 59

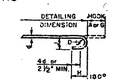
NOTES

ALL DIMENSIONS ARE OUT TO OUT UNLESS NOTED.
ALL RADII ARE OUTSIDE.
SEE HOOK DETAILS FOR HOOK DESCRIPTIONS AND NOTES.
A DIMENSION SHOWN AS ZERO ON BAR SCHEDULE DELETES THAT PART OF BAR TYPE.

HOOK DETAILS

RECOMMENDED 180° HOOKS

GRADE 40 ksi
D = 5d for #3 through #11
D = 10d for #14 and #18
GRADES 50-60-75 ksi
D = 6d for #3 through # 8
D = 8d for #9, #10, and #11
D = 10d for #14 and #18

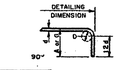


RECOMMENDED 180° END HOOK DIMENSIONS

BAR SIZE	GRADES 50-60-75 ksi		GRADE 40 ksi	
	A or G	J	A or G	J
#3	5	3	5	2¾
#4	6	4	6	3½
#5	7	5	7	4½
#6	8	6	8	5¼
#7	10	7	9	6¼
#8	11	8	10	7
#9	1-3	11¼	1-0	8
#10	1-5	1-0¾	1-1	9
#11	1-7	1-2¼	1-2	10
#14	2-2	1-8½	2-2	1-8½
#18	2-11	2-3	2-11	2-3
STYLE	1		2	

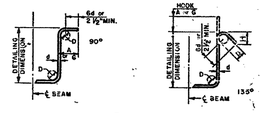
RECOMMENDED 90° END HOOK DIMENSIONS

ALL GRADES
D = 6d for #3 through #8
D = 8d for #9, #10, and #11
D = 10d for #14 and #18



BAR SIZE	HOOK A or G
#3	6
#4	8
#5	10
#6	1-0
#7	1-2
#8	1-4
#9	1-7
#10	1-10
#11	2-0
#14	2-7
#18	3-5
HOOK STYLE 3	

STIRRUP AND TIE HOOK



STIRRUPS
(TIES SIMILAR)

STIRRUP AND TIE HOOK DIMENSIONS
GRADES 40-50-60 ksi

BAR SIZE	D (in.)	90° HOOK		135° HOOK	
		HOOK A or G		HOOK A or G	H Approx.
#3	1½	4		4	2½
#4	2	4½		4½	3
#5	2½	6		5½	3¾
#6	3	6½		6½	4½
STYLE		4		5	

STYLE 6 = NO HOOK

HOOK STYLES DETAILED ON THIS SHEET ARE FOR ILLUSTRATION ONLY. ACTUAL HOOK STYLE FOR ANY PARTICULAR BAR WILL BE SHOWN UNDER A or G HEADING ON BAR SCHEDULE.

AS-BUILT

STATE HIGHWAY DEPARTMENT OF GEORGIA
BRIDGE DIVISION

STANDARD
BAR BENDING DETAILS

NO SCALE — AUGUST 1969

DATE | REVISIONS | BY

DESIGNED
DRAWN E.E.L.
TRACED B.J.W.
CHECKED G.G.S.

SUBMITTED R. L. Chapman Jr. BRIDGE ENGINEER
APPROVED STATE HIGHWAY ENGINEER

NUMBER 3901