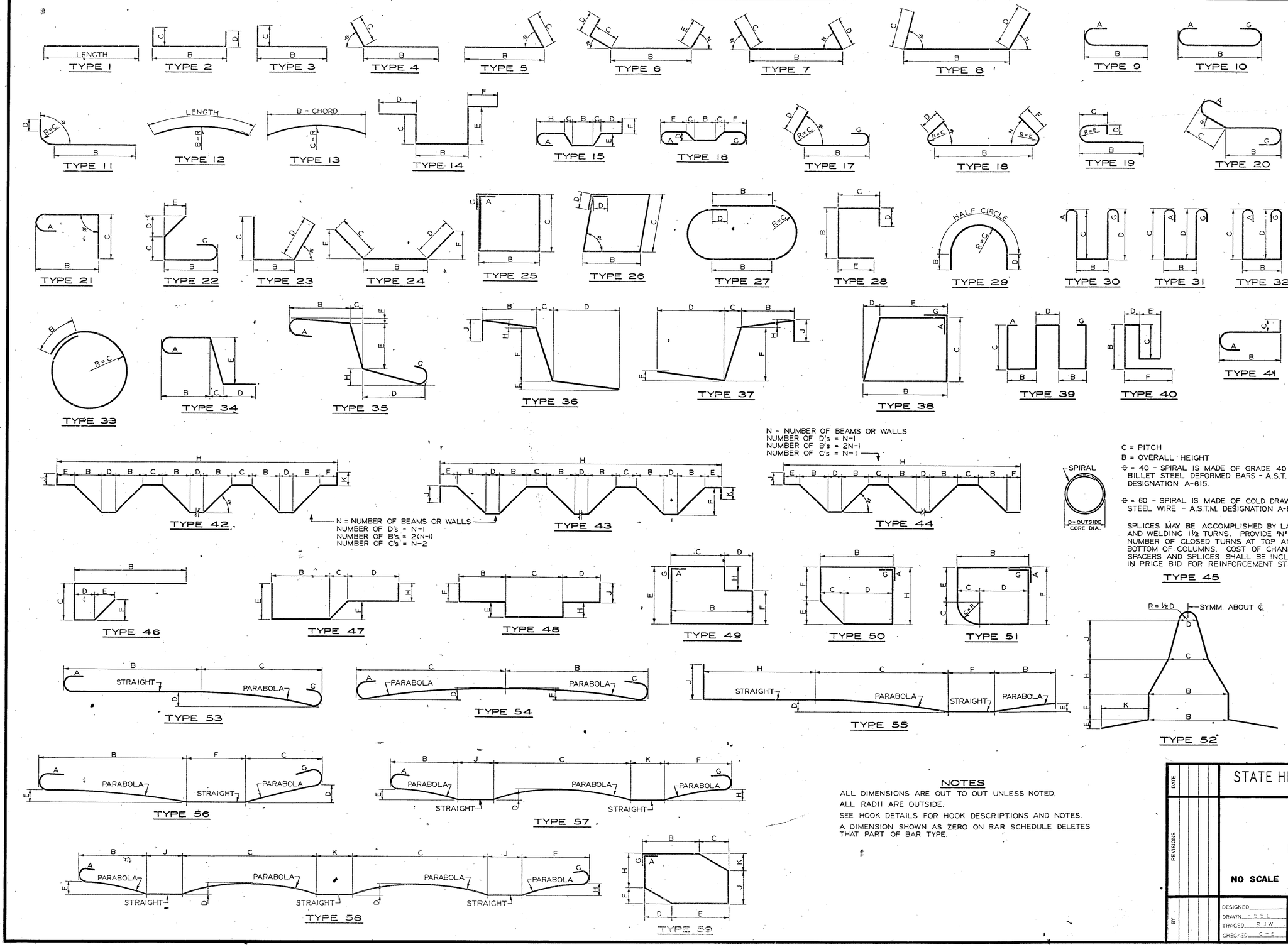
FED ROAD DIV. NO.	STATE	FED AID PROJ. NO.	STATE AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	GA.				776	995



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

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

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.

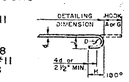
NOTES

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

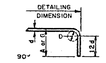


RECOMMENDED 180° END HOOK DIMENSIONS

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	

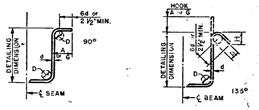
RECOMMENDED 90° END HOOK DIMENSIONS

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.

DATE | REVISIONS | BY

STATE HIGHWAY DEPARTMENT OF GEORGIA
BRIDGE DIVISION

STANDARD
BAR BENDING DETAILS

NO SCALE — AUGUST 1969

DESIGNED
DRAWN S.E.L.
TRACED B.J.N.
CHECKED C.-S.

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

NUMBER 3901