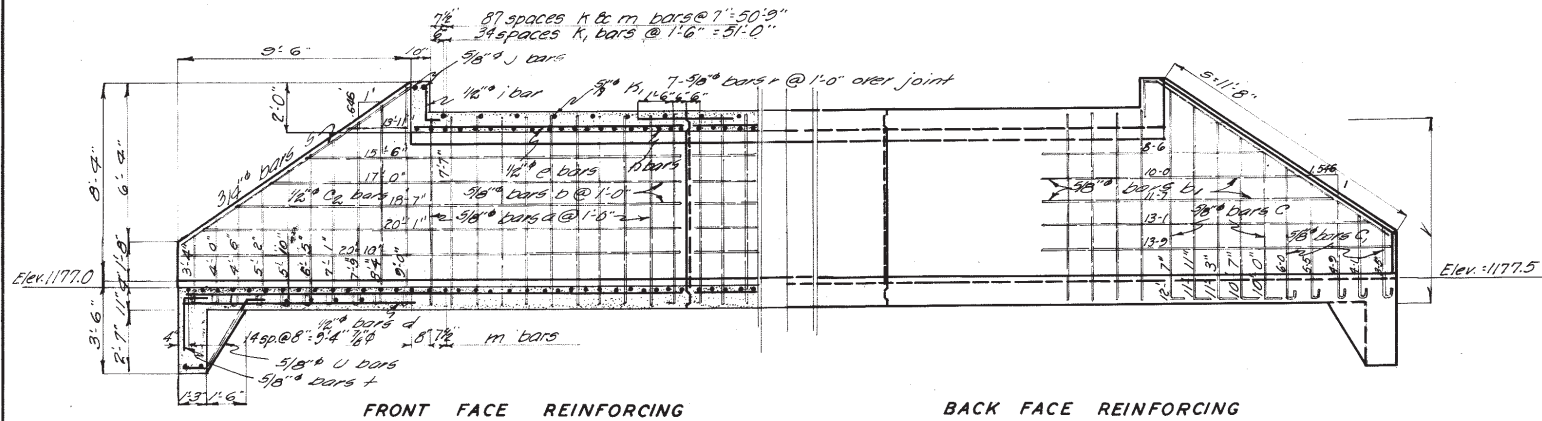
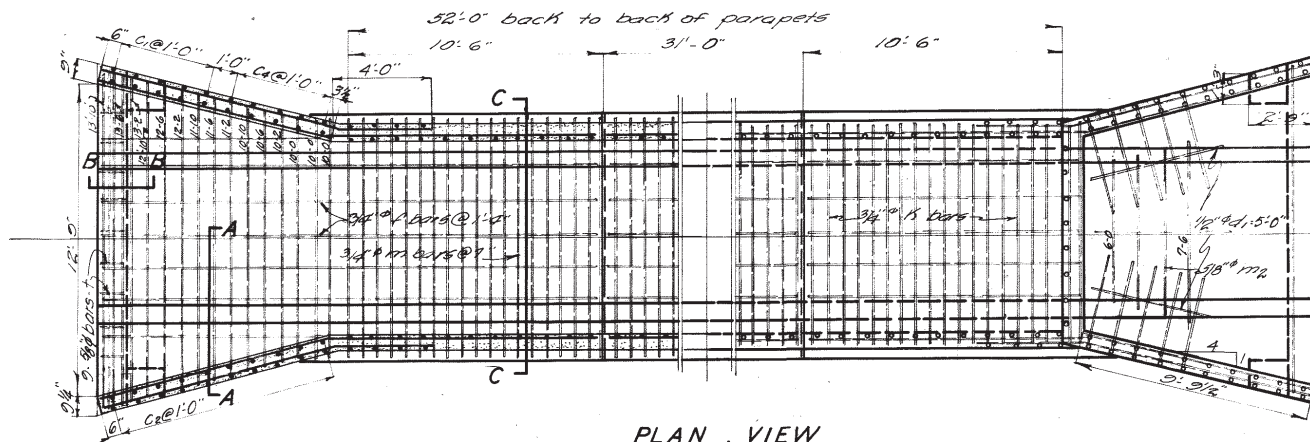


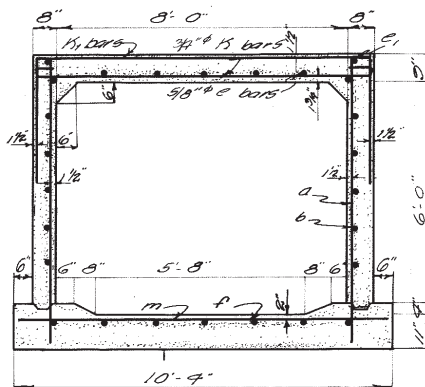
BENCH MARK No. 23 Sta. 238 + 40 (+) on E. Hdw. of 6'x8'x26.1' R.C.B. Culk 9' Lt. Elev. = 1184.99



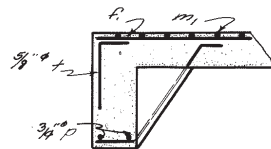
LONGITUDINAL SECTION



PLAN VIEW
SCALE 1/4" = 1'-0"

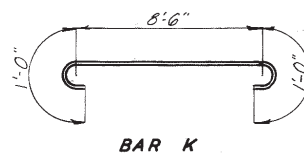


SECTION C-C
SCALE 3/8" = 1'-0"

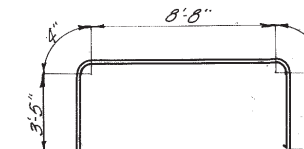


SECTION B-B
SCALE 3/8" = 1'-0"

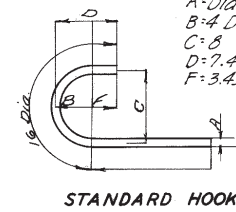
SECTION A-A
SCALE 3/8" = 1'-0"



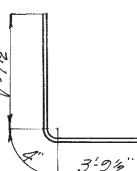
BAR K



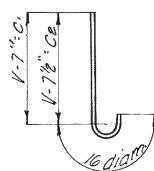
BAR K1



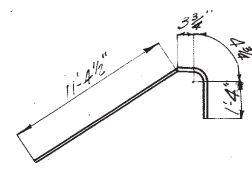
STANDARD HOOK



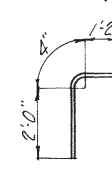
BAR C



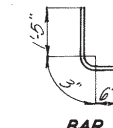
BARS C1, C2



BAR S



BAR T

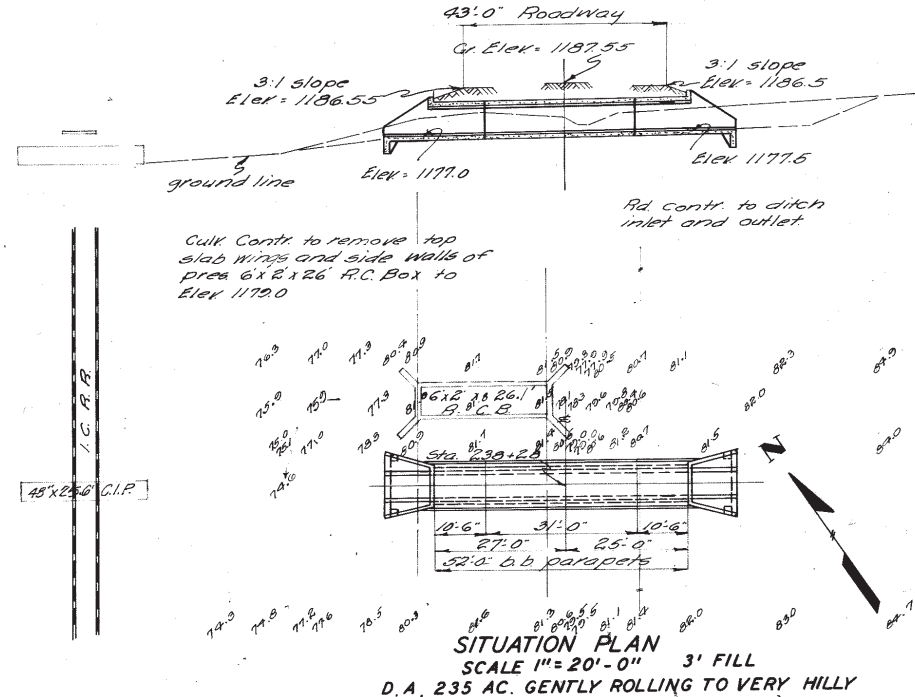


BAR U

General Notes:
Floor of barrel to be finished smooth. Sides of footing are to be formed to insure correct line and grade.
All exposed corners 90° or sharper are to be filleted with a 3/4" dressed bevelled strip.
Metal bar chairs spaced not over 3' centers in either direction are to be used to support the lower layer of the top slab bars.
Standard Specifications, Series 1018 of the Iowa State Highway Commission.

LOCATION
SECTION 11
WILLOW TOWNSHIP
CHEROKEE COUNTY

REINFORCING ESTIMATE & QUANTITIES									
Mark	Location	Shape	Size	No.	Length	Linear Feet			
						1/2"	3/8"	3/4"	1"
a	Walls: Vert.	U	5/8"	122	7'9"		945.5		
b	" Horiz. F.F.	—	5/8"	24	shown		423.7		
b1	" " B.F.	—	5/8"	20		227.7			
b2	" " center	—	5/8"	12	30'8"		368.0		
c	Wings Vert. B.F.	U	5/8"	20	shown		225.3		
c1	" " "	U	5/8"	20	shown		24.7		
c2	" " F.F.	—	5/8"	40		245.7			
d	Floor Ends	—	1/2"	4	10'0"		40.0		
d1	" " "	—	1/2"	6	5'0"		30.0		
e	Slab Long. Ends	—	5/8"	10	11'0"		110.0		
e1	" " "	—	5/8"	4	11'0"		44.0		
e2	" " center	—	5/8"	5	30'8"		153.3		
e3	" " "	—	1/2"	2	30'8"		61.3		
f	Floor-Ends Long.	—	5/8"	14	20'6"		287.0		
f1	" center "	—	5/8"	7	30'8"		214.7		
i	Parapet Vert.	U	5/8"	16	2'2"		34.7		
j	" Horiz.	—	5/8"	4	9'0"		36.0		
k	Slab Trans. bottom	U	5/8"	92	10'6"		968.0		
k1	" " top	—	5/8"	35	16'2"		565.8		
m	Floor Trans.	—	5/8"	90	10'0"		900.0		
m1	" Ends	—	5/8"	30	shown		345.0		
me	" " "	—	5/8"	8			54.0		
p	Curtain Long.	—	5/8"	4	13'6"		54.0		
r	Slab Dowels	—	5/8"	18	4'0"		72.0		
s	Wings Slope	U	5/8"	8	13'5"		107.3		
t	Curtain Vert.	U	5/8"	18	3'6"		63.0		
u	" Buttress	U	5/8"	8	5'8"		45.3		
Length						683.4	3196.6	2877.0	
Weight						456	3292	4321	
Reinforcing Steel Total Weight Lbs.									8069
Concrete Cu. Yds.									70.5
Excavation Class I. Cu. Yds.									156



SITUATION PLAN

SCALE 1" = 20'-0" 3' FILL
D.A. 235 AC. GENTLY ROLLING TO VERY HILLY

DESIGN FOR
8'X6' BOX CULVERT
REINFORCED CONCRETE

STATION 238 + 28

PROJECT F. 744 (U)

CHEROKEE COUNTY

IOWA STATE HIGHWAY COMMISSION

NOVEMBER 1947

SCALES AS NOTED

CHEROKEE COUNTY PROJ. NO. F. 744 DESIGN NO. 2048 FILE 13141