

Dec. 16, 1958

STATE OF IOWA
 STATE HIGHWAY COMMISSION
 DESIGN FOR
 PRE-STRESSED CONCRETE BEAM BRIDGES
 AND CULVERT
 SECONDARY ROAD SYSTEM PROJ. 5-1096 (I)
 CRAWFORD COUNTY
 AUGUST 1958.

MILEAGE SUMMARIES:

DESIGN 2958 = 131'-9 1/4" = 0.0250 MILES
 DESIGN 3058 = 57'-8 3/8" = 0.01093 MILES
 DESIGN 2658 = 27'-0" = 0.00511 MILES

SPECIFICATIONS:

Design: A.A.S.H.O. Series of 1957. and U.S.A.R.R. Criteria for Prestressed Concrete Bridges, 1955. Construction: Standard Specifications of the Iowa State Highway Commission, Series of 1956, plus current Special Provisions Applicable.

IN LETTING OF DEC. 16, 1958

DESIGN-2958 BOYER TWP. CRAWFORD COUNTY SEC. 12 STA. 261+80.0 OVER LOCAL CREEK 130'x20' PRESTRESSED CONCRETE BEAM BRIDGE				
DESCRIPTION	ABUT'S	PIERS	SUPERSTRUCT.	TOTAL
CONCRETE CLASS "A"	33.40 c.y.	13.40 c.y.	68.90 c.y.	115.70 c.y.
REIN. STEEL	2520 lbs.	1560 lbs.	14,320 lbs.	18,400 lbs.
STRUCT. STEEL			2,489 lbs.	2,489 lbs.
TREATED PILING	14 @ 65' = 910 l.f.			14 @ 65' = 910 l.f.
PRECAST CONC. PILING		10 @ 52' = 520 l.f.		10 @ 52' = 520 l.f.
PRESTRESSED CONC. BEAMS			15 @ 42'-6"	15 @ 42'-6"
HANDRAIL			260 l.f.	260 l.f.
EXCAVATION CLASS "20"	68 c.y.			68 c.y.
" CLASS "10"	1680 c.y.			1680 c.y.
REMOVAL OF OLD STRUCTURE				LUMP SUM

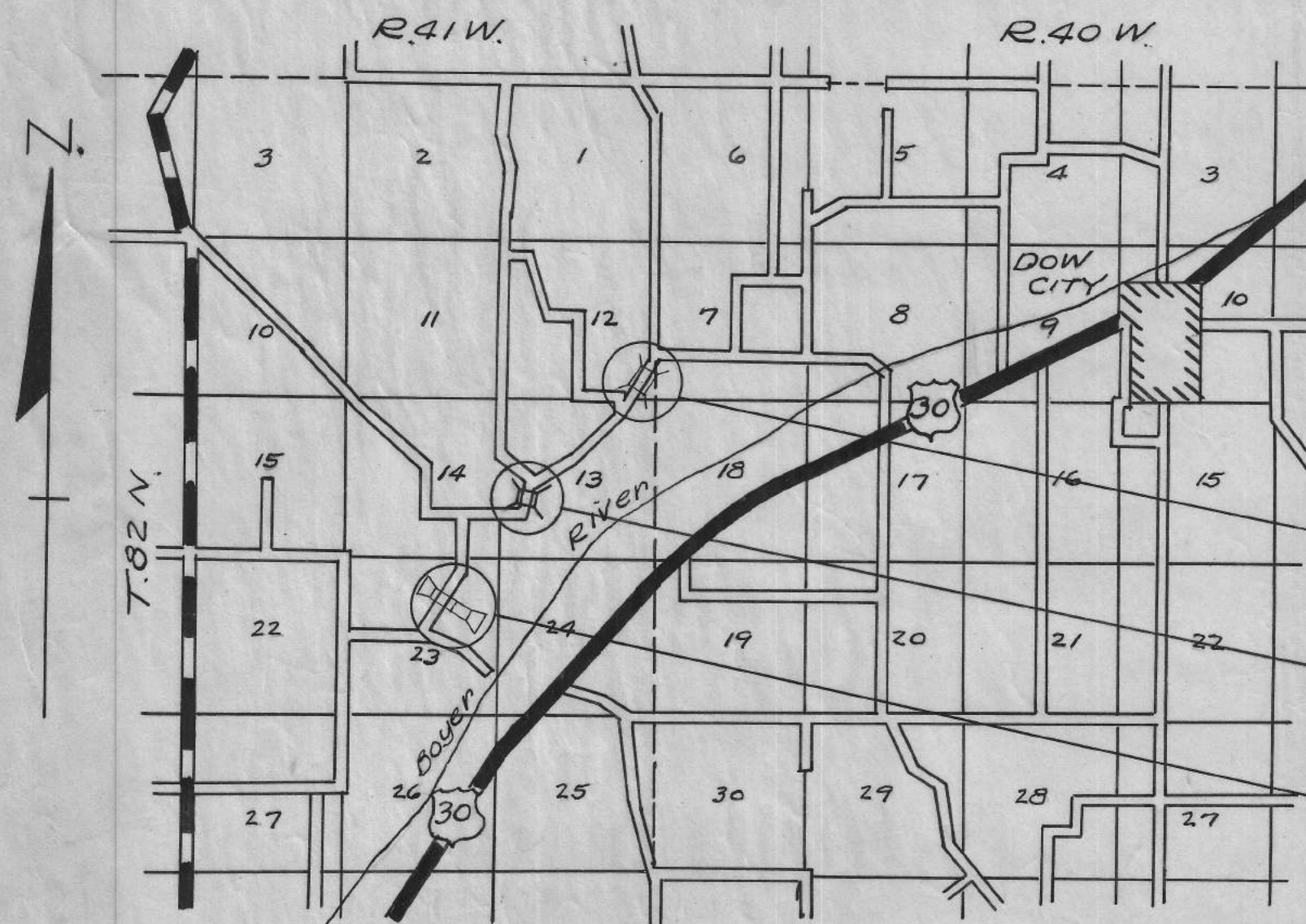
IN LETTING OF DEC. 16, 1958

DESIGN-3058 BOYER TWP. CRAWFORD COUNTY SEC. 13, STA. 198+40.5 OVER LOCAL CREEK 55'x20' PRESTRESSED CONCRETE BEAM BRIDGE			
DESCRIPTION	ABUTMENTS	SUPERSTRUCT.	TOTAL
CONCRETE CLASS "A"	18.60 C.Y.	32.40 C.Y.	51.00 C.Y.
REIN. STEEL	1770 LBS.	6576 LBS.	8346 LBS.
STRUCT. STEEL	4041 "	1078 "	5119 "
PRE-STRESSED CONC. BEAMS		5 @ 55'-0" (Q)	5 @ 55'-0" (Q)
HANDRAIL		130'-0" TYPE "B" L.F.	130'-0" TYPE "B" L.F.
WOOD RAIL POSTS 8'x6'		4	4
TREATED WOOD PILING	6 @ 30' * 6 @ 45' = 330' L.F. 6 @ 40' 10 @ 30' = 540' L.F.		Bearing Piles = 570' L.F. Wing " = 540' L.F.
TREATED LUMBER	6730 F.B.M.		6730 F.B.M.
GALVANIZED HARDWARE	136 LBS.	32 LBS.	168 LBS.
EXCAVATION Class #20	461 C.Y.		461 C.Y.
" Class #10	236 C.Y.		236 C.Y.
" Class #21	15 C.Y.		15
REMOVAL OF OLD STRUCTURE			LUMP SUM.

IN LETTING OF DEC. 16, 1958

DESIGN - 2658 BOYER TWP. CRAWFORD COUNTY SEC. 23, STA. 141+88.0 OVER LOCAL CREEK 12'x10' REINFORCED CONC. BOX WITH TWIN OPENINGS				
FILL	CONCRETE	REIN. STEEL	EXCAVATION	REMOVAL OF OLD STRUCTURE
3'	255.30 c.y.	28,355 lbs.	1766 c.y.	LUMP SUM

* (Creosoted Bearing Piling Oversize, Min. Butt. diam. - 14")



LOCATION MAP
1" = 1-MILE

NOTE: Bridge Sign Assemblies will be furnished & placed by Crawford County to conform with S. & T. Instruction No. 11, revised March-1, 1956.

PROJECT # 5-1096 (I)
DESIGN # 2958

PROJECT # 5-1096 (I) 127070
DESIGN # 3058

PROJECT # 5-1096 (I) 369115
DESIGN # 2658

APPROVED

BOARD OF SUPERVISORS DATE

APPROVED

CHIEF ENGINEER DATE
IOWA HIGHWAY COMMISSION

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS.

RECOMMENDED FOR APPROVAL

DISTRICT ENGINEER DATE

APPROVED

DIVISION ENGINEER DATE

II
Offl. done 1/21/58

4717 DEC. 16/58

File 20102 (12263 of 3) Sheet 1 of 6

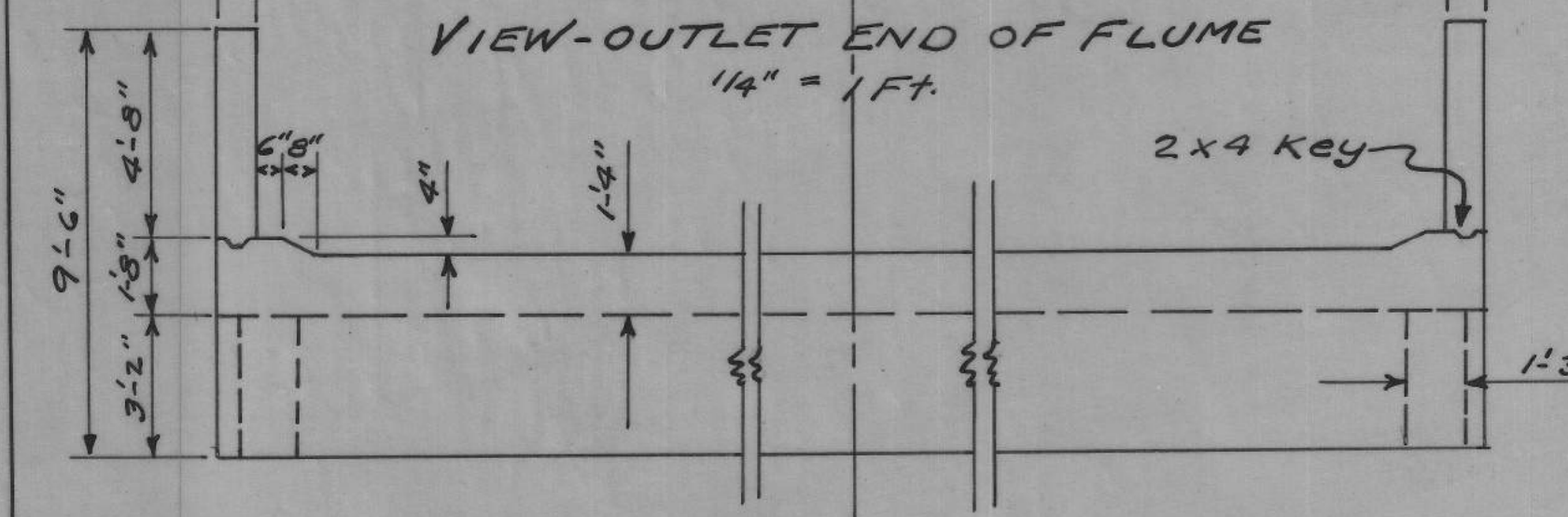
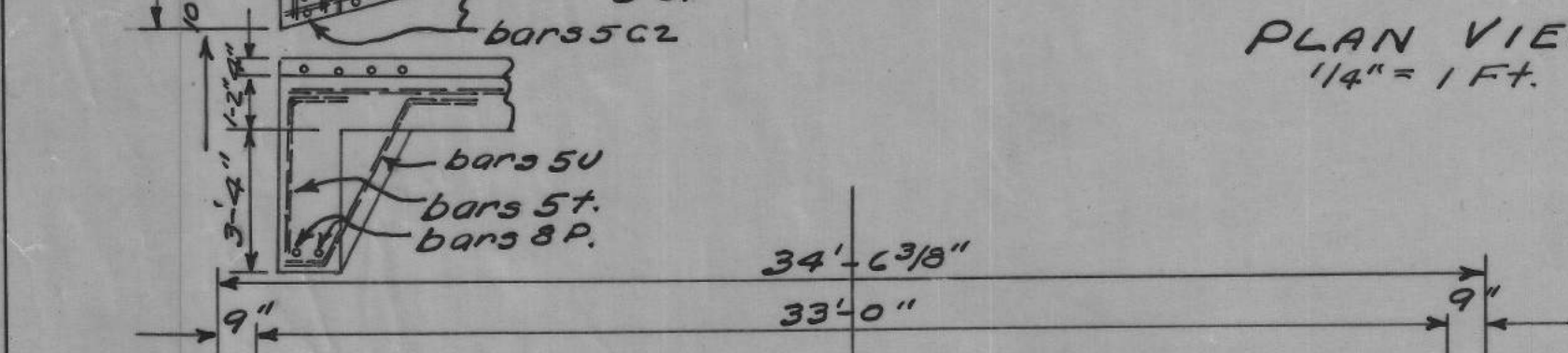
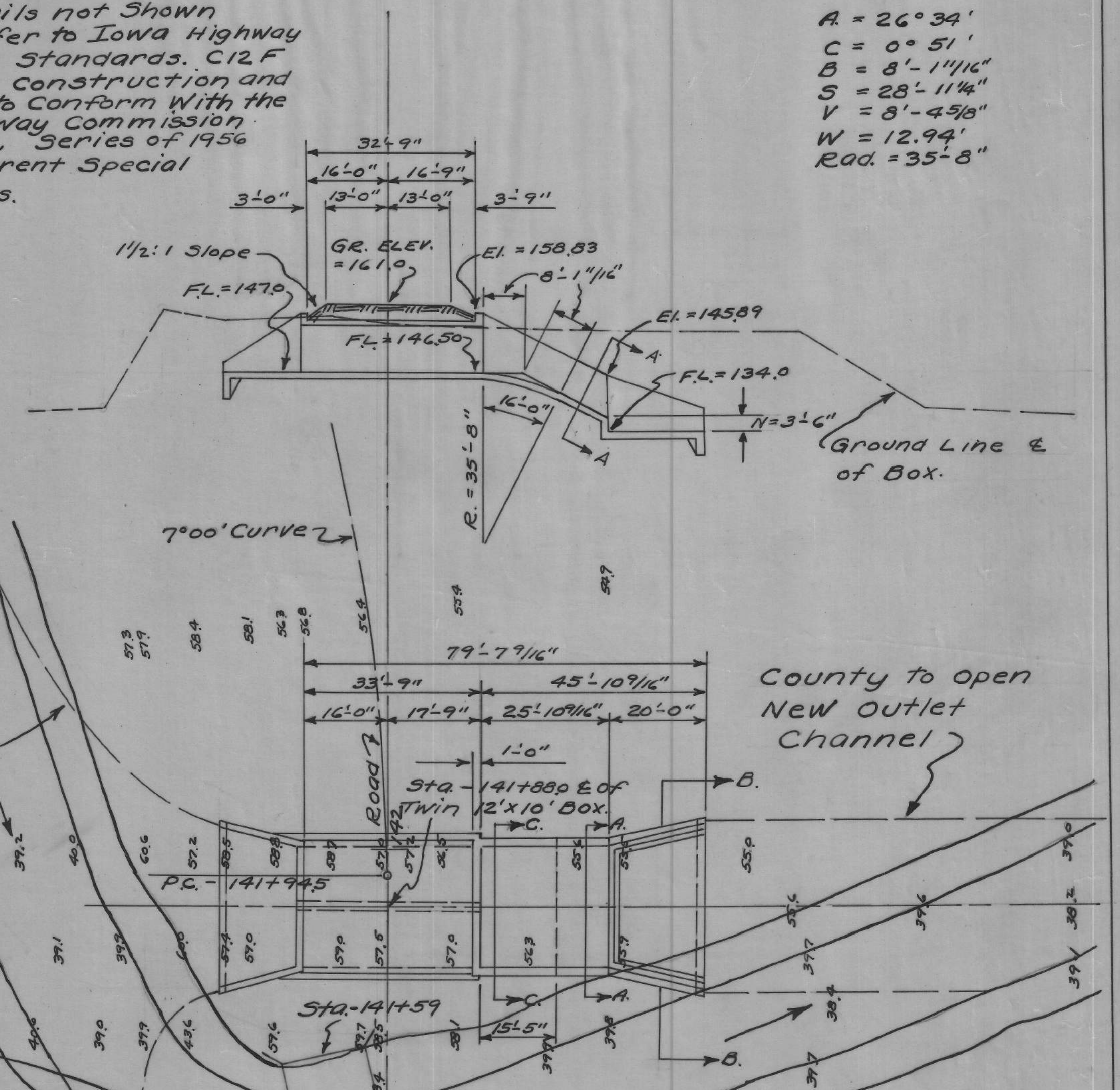
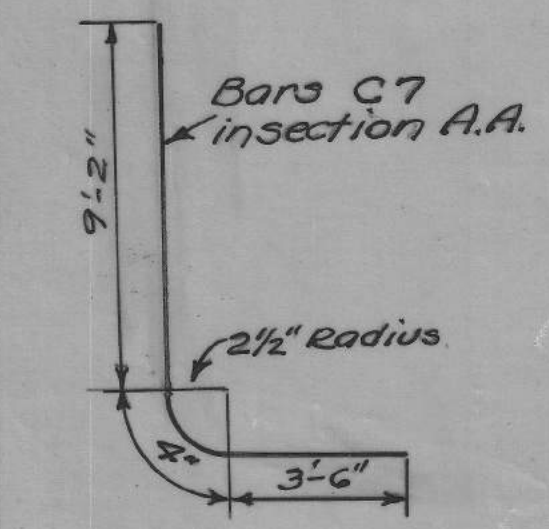
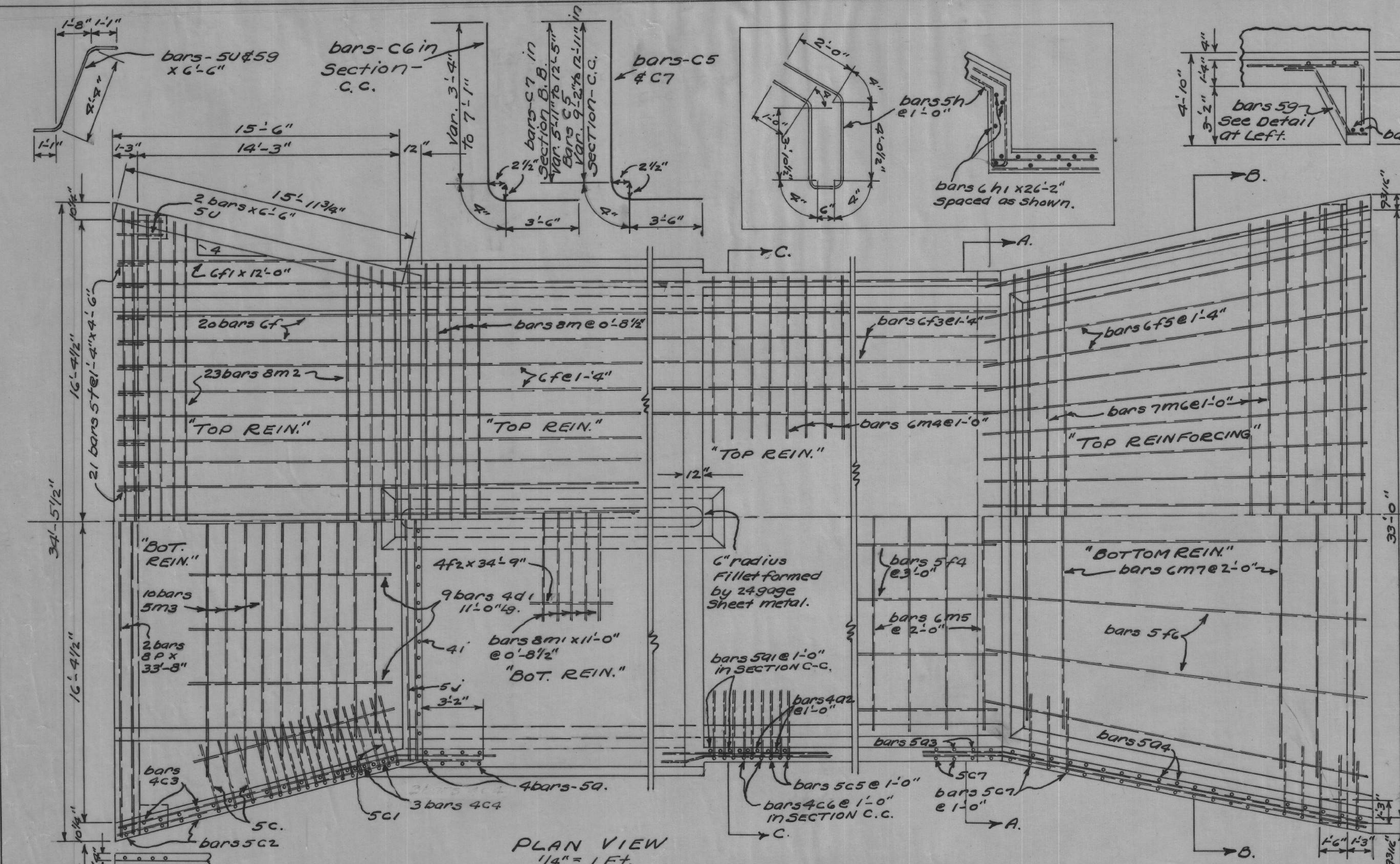
CRAWFORD COUNTY

DESIGNS 2658, 2958 & 3058 PROJ. 5-1096 (I)

B.M. #14, x on top of Steel pile cap N.W. Cor. bridge Sta-141+50, El.=158.25

GENERAL NOTE:
For Details not Shown hereon refer to Iowa Highway Commission Standards, C12F & CFP. All construction and materials to conform with the Iowa Highway Commission Standards, Series of 1956 With all current Special provisions.

A = 26'-3 3/4"
C = 0'-5 1/2"
B = 8'-1 1/16"
S = 28'-1 1/4"
V = 8'-4 5/8"
W = 12'-9 1/4"
Rad. = 35'-8"



REINFORCING ESTIMATE

MARK	LOCATION	SHAPE	SIZE	SPAC.	NO.	LENGTH	LS.	WGT.
HEADWALL SECTION								
C	Walls Vert. back	5	1-0"	22	12	310	378	398
C1	" " "	"	"	"	10	26	138	834
C2	" " "	"	"	"	70	47	1022	138
C3	" " front	4	"	"	32	173	47	1022
C4	" " "	"	"	"	6	24	47	1022
D	Floor ends	"	"	"	2	114	21	47
D1	" " "	4	1-4"	20	10	66	66	1065
D2	" " "	"	"	"	2	12	36	3610
E	Parapet Vert	4	1-0"	25	18	28	28	1134
F	" Horiz	5	"	"	2	26	55	856
G	Floor ends Trans	8	0-8"	23	18	182	182	1238
M3	" " "	5	1-0"	10	10	263	263	1021
P	curtain Wall	8	"	"	2	34	177	425
S	Wing Slope	6	"	"	4	20	125	425
S1	" " "	6	"	"	2	20	63	396
T	curtain Wall	7	1-4"	21	4	99	5	191
U	" " "	5	8"	4	6	27	27	229
V	Walls Vert. back	5	1-0"	8	13	103	103	372
b1	Wings Hor.	4	"	"	18	172	172	112
b2	" " front	5	"	"	20	218	218	298
C5	" " "	"	"	"	2	12	46	46
C6	" " "	"	"	"	2	12	46	175
D	" " "	"	"	"	2	12	46	21
D1	" " "	"	"	"	2	12	46	17
* Add 20 dia. for Splice								
TOTAL 28,355								

QUANTITIES - FILL = 3 FT.

CONCRETE	255.30 C.Y.
REIN. STEEL	28,355 LBS.
EXCAVATION CL #20	1,766 C.Y.
REMOVAL OF OLD STRUCTURE	LUMP SUM.

Location:
Section-23
BOYER TWP.
T.32 N. R.41 W.

DESIGN FOR
12' x 10' R.C. BOX, TWIN OPENINGS, FLUME OUTLET
STA-141+88.0 PROJECT No. S-1096(1)
CRAWFORD COUNTY, IOWA.
Sheet # 2 of 6

369115