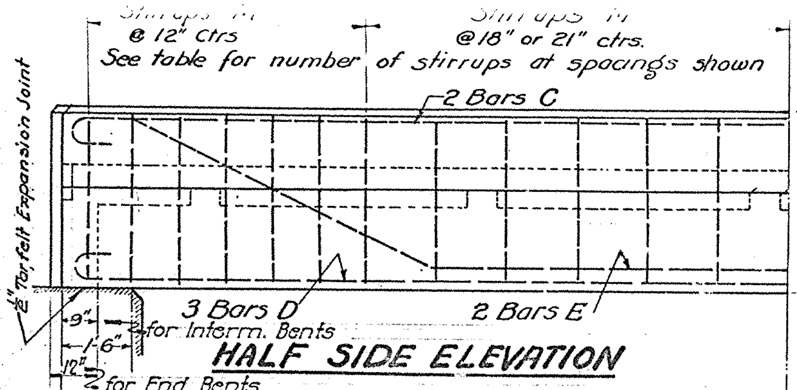
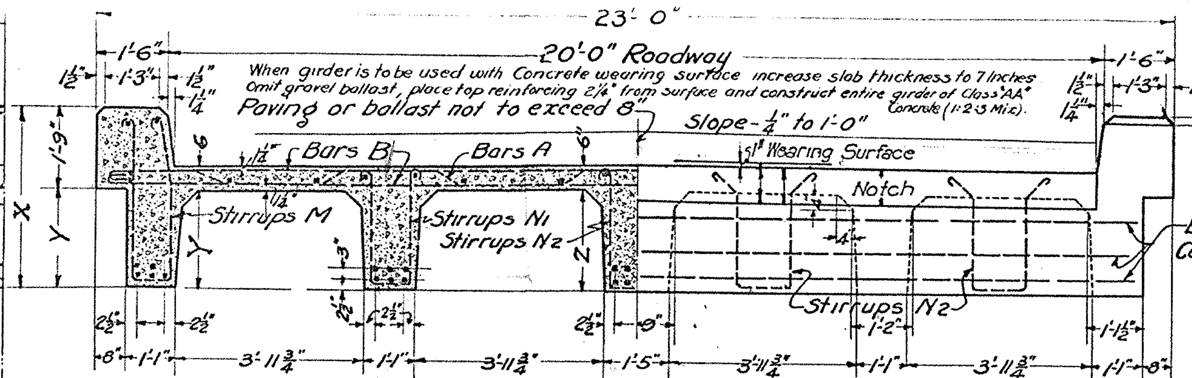
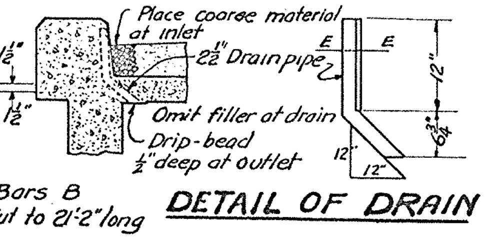


HALF SIDE ELEVATION

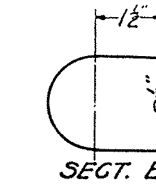


HALF SECTION AA

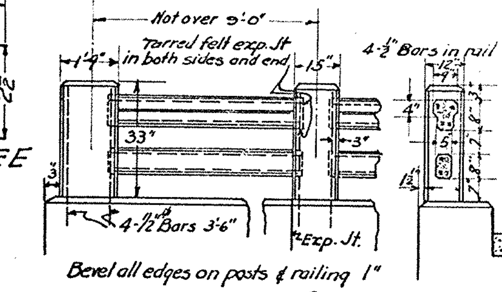
HALF END ELEVATION



DETAIL OF DRAIN



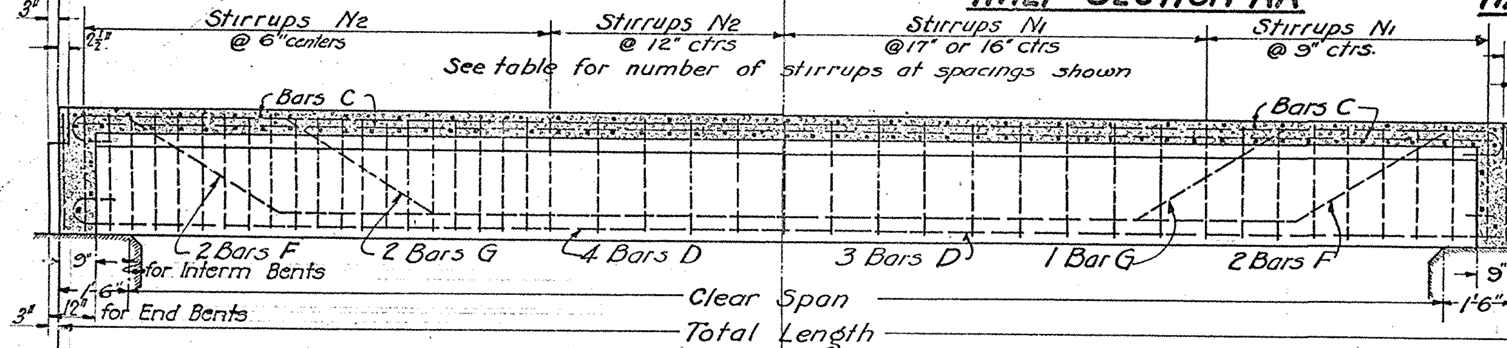
SECT. EE



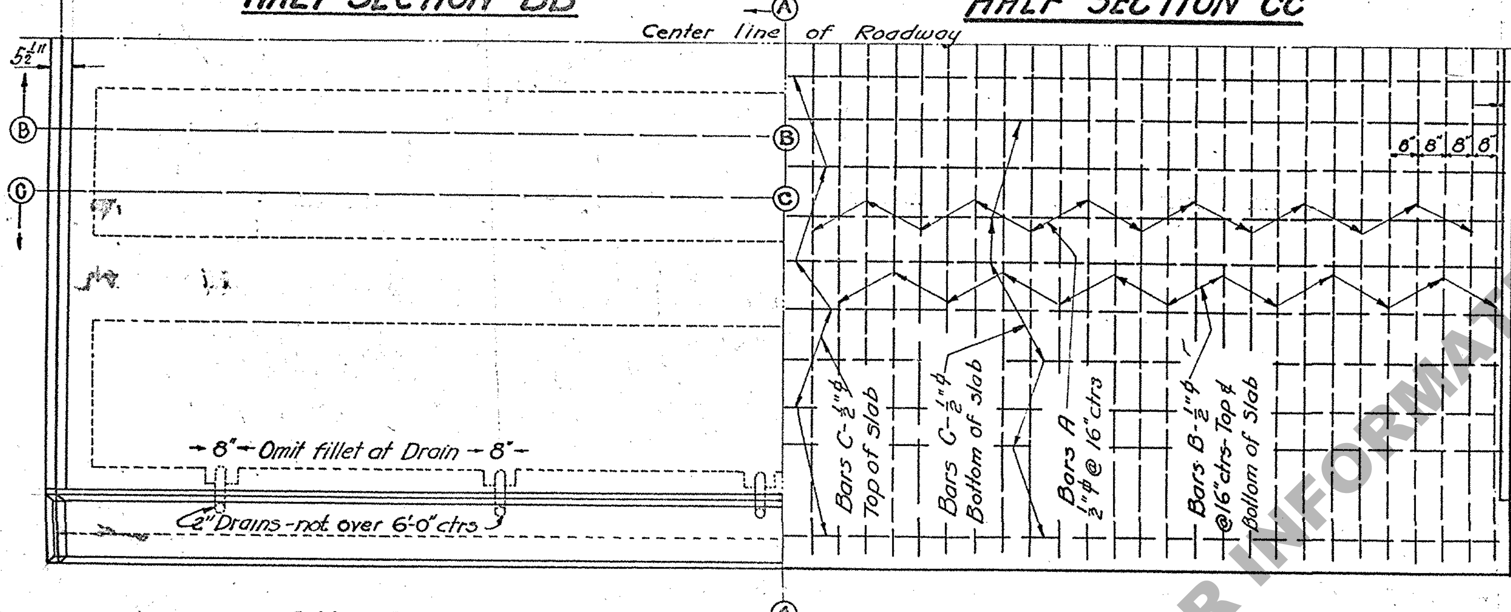
Bevel all edges on posts & railing 1"

	Conc.	Steel
One end Post	0.18 Cu. Yd.	10.0 Lbs
One Intermediate post	0.13 " "	10.0 "
Railing per lin. ft	0.045 "	13.5 lbs

DETAIL OF RAILING



HALF SECTION BB



HALF SECTION CC

QUARTER PLAN

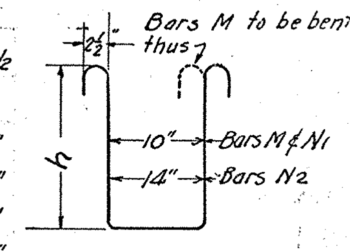
QUARTER PLAN
Showing Slab Reinforcement

BILL OF STEEL

Clear Span Feet	Bars A - 1/2"φ Slab Reinf. No	Bars A Length	Bars B - 1/2"φ Slab Reinf No.	Bars B Length	Bars G - 1/2"φ Spacing Bar No.	Bars G Length	Bars D Ext. & Int. Bm. Reinf. No.	Bars D Size	Bars D Length	Bars E Exterior Bm Reinf No.	Bars E Size	Bars E Length	Bars F Interior Bm Reinf No	Bars F Size	Bars F Length	Bars G Interior Bm Reinf No.	Bars G Size	Bars G Length	Bars M - 1/2"φ Stirrup-Ext Bm No.	Bars M Length	Bars N - 1/2"φ Stirrup-Int. Bm. No.	Bars N Length
28	23	24'-0"	52	23'-4"	26	30'-6"	16	1 1/8"φ	32'-4"	4	1 1/8"φ	33'-6"	6	1 1/8"φ	33'-3"	4	1 1/8"φ	33'-3"	50	8'-2"	70 59	6'-0" 6'-6"
30	24	24'-0"	56	23'-4"	26	32'-6"	16	1 1/8"φ	34'-4"	4	1 1/8"φ	35'-8"	6	1 1/8"φ	35'-6"	4	1 1/8"φ	35'-6"	52	8'-8"	74 61	6'-6" 7'-0"
32	26	24'-0"	58	23'-4"	26	34'-6"	16	1 1/8"φ	36'-4"	4	1 1/8"φ	37'-9"	6	1 1/8"φ	37'-8"	4	1 1/8"φ	37'-8"	54	9'-2"	78 63	7'-0" 7'-6"
34	27	24'-0"	62	23'-4"	26	36'-6"	16	1 1/4"φ	38'-6"	4	1 1/4"φ	40'-0"	6	1 1/4"φ	39'-9"	4	1 1/4"φ	39'-9"	60	9'-2"	80 65	7'-0" 7'-6"
36	29	24'-0"	64	23'-4"	26	38'-6"	16	1 1/4"φ	40'-6"	4	1 1/4"φ	42'-0"	6	1 1/4"φ	42'-0"	4	1 1/4"φ	42'-0"	62	9'-8"	82 67	7'-6" 8'-0"
38	30	24'-0"	68	23'-4"	26	40'-6"	16	1 1/4"φ	42'-6"	4	1 1/4"φ	44'-2"	6	1 1/4"φ	44'-2"	4	1 1/4"φ	44'-2"	66	10'-2"	86 70	8'-0" 8'-6"
40	32	24'-0"	70	23'-4"	26	42'-6"	16	1 1/4"φ	44'-6"	4	1 1/4"φ	46'-3"	6	1 1/4"φ	46'-4"	4	1 1/4"φ	46'-4"	68	10'-8"	90 73	8'-6" 9'-0"

STEEL BENDING TABLE

Clear Span Feet	Bars D f	Bars E a	Bars E b	Bars E c	Bars E d	Bars E e	Bars F a	Bars F b	Bars F c	Bars F d	Bars F e	Bars G a	Bars G b	Bars G c	Bars G d	Bars G e	Bars M h	Bars N1 h	Bars N2 h
28	30'-6"	1'-3"	6'-6"	15'-0"	2'-10"	7'-1 1/8"	1'-3"	3'-3"	21'-6"	1'-9"	3'-8 1/4"	4'-6"	3'-3"	15'-0"	1'-9"	3'-8 1/4"	3'-3"	2'-2"	2'-3"
30	32'-6"	1'-3"	7'-0"	16'-0"	3'-1"	7'-7 3/4"	1'-3"	3'-6"	23'-0"	2'-0"	4'-0 3/8"	4'-9"	3'-6"	16'-0"	2'-0"	4'-0 3/8"	3'-6"	2'-5"	2'-6"
32	34'-6"	1'-3"	7'-6"	17'-0"	3'-4"	8'-2 1/2"	1'-3"	3'-9"	24'-6"	2'-3"	4'-4 1/2"	5'-0"	3'-9"	17'-0"	2'-3"	4'-4 1/2"	3'-9"	2'-8"	2'-9"
34	36'-6"	1'-3"	8'-0"	18'-0"	3'-4"	8'-8"	1'-3"	4'-0"	26'-0"	2'-3"	4'-7 1/8"	5'-3"	4'-0"	18'-0"	2'-3"	4'-7 1/8"	3'-9"	2'-8"	2'-9"
36	38'-6"	1'-3"	8'-6"	19'-0"	3'-7"	9'-2 5/8"	1'-3"	4'-3"	27'-6"	2'-6"	4'-11 1/8"	5'-6"	4'-3"	19'-0"	2'-6"	4'-11 1/8"	4'-0"	2'-11"	3'-0"
38	40'-6"	1'-3"	9'-0"	20'-0"	3'-10"	9'-9 3/8"	1'-3"	4'-6"	29'-0"	2'-9"	5'-3 1/4"	5'-9"	4'-6"	20'-0"	2'-9"	5'-3 1/4"	4'-3"	3'-2"	3'-3"
40	42'-6"	1'-3"	9'-6"	21'-0"	4'-1"	10'-4 1/8"	1'-3"	4'-9"	30'-6"	3'-0"	5'-7 3/8"	6'-0"	4'-9"	21'-0"	3'-0"	5'-7 3/8"	4'-6"	3'-5"	3'-6"



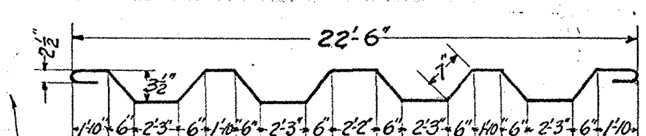
BENDING DIAGRAM
BARS M & N

DIMENSIONS & QUANTITIES

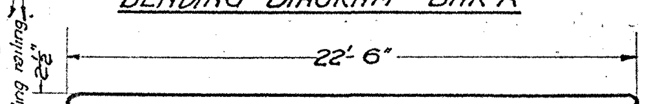
Clear Span Feet	Total Length Ft. In.	X	Y	Z	Exterior Beam Stirrups M	Interior Beam Stirrups N1	Interior Beam Stirrups N2	Concrete Cu. Yds.	Steel Lbs
28	31'-0"	3'-7"	1'-10"	2'-0"	6 Spcs @ 12" 12 " " 18" 6 " " 12"	8 Spcs @ 9" 18 " " 12" 8 " " 9"	20 Spcs @ 6" 10 " " 12" 20 " " 6"	32.8 Add .5 for End Span	7440
30	33'-0"	3'-10"	2'-1"	2'-3"	6 " " 12" 13 " " 18" 6 " " 12"	8 " " 9" 20 " " 12" 8 " " 9"	20 " " 6" 12 " " 12" 20 " " 6"	36.9 Add .6 for End Span	7980
32	35'-0"	4'-1"	2'-4"	2'-6"	6 " " 12" 14 " " 18" 6 " " 12"	8 " " 9" 22 " " 12" 8 " " 9"	20 " " 6" 14 " " 12" 20 " " 6"	41.2 Add .7 for End Span	8500
34	37'-0"	4'-1"	2'-4"	2'-6"	10 " " 12" 9 " " 21" 10 " " 12"	14 " " 9" 11 " " 16" 14 " " 9"	20 " " 6" 16 " " 12" 20 " " 6"	43.5 Add .7 for End Span	10180
36	39'-0"	4'-4"	2'-7"	2'-9"	10 " " 12" 10 " " 21" 10 " " 12"	14 " " 9" 12 " " 16" 14 " " 9"	20 " " 6" 18 " " 12" 20 " " 6"	47.9 Add .8 for End Span	10770
38	41'-0"	4'-7"	2'-10"	3'-0"	11 " " 12" 10 " " 21" 11 " " 12"	14 " " 9" 14 " " 16" 14 " " 9"	21 " " 6" 19 " " 12" 21 " " 6"	52.8 Add .9 for End Span	11420
40	43'-0"	4'-10"	3'-1"	3'-3"	11 " " 12" 11 " " 21" 11 " " 12"	15 " " 9" 14 " " 16" 15 " " 9"	22 " " 6" 20 " " 12" 22 " " 6"	57.8 Add 1.0 for End Span	12030

Not including railing

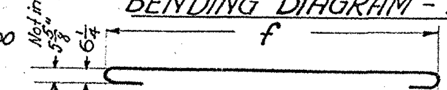
NOTE:- When girder is to be used with Concrete wearing surface add .0615 Cu. Yds. Conc. per lin. ft. of bridge to quantities shown in table.



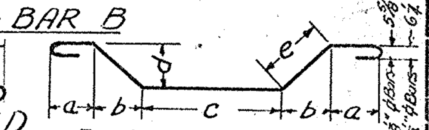
BENDING DIAGRAM - BAR A



BENDING DIAGRAM - BAR B



BENDING DIAGRAM-BAR D



BENDING DIAGRAM
BARS E, F & G

GENERAL NOTES & DESIGN DATA

Specifications :-	Louisiana Hwy. Comm. Sept. 1925
Concentrated Load	Typical 15 ton truck
Impact Allowance	30 per cent
Paving or ballast	Not to exceed 80 lbs per Sq. ft.
Steel in tension	16000 " " Sq. In.
Concrete in compression	650 " " "
Reinforced concrete in shear	110 " " "

The table is based on the net area of bars as follows:
1/2"φ = 0.25 Sq. in. · 1 1/8"φ = 1.2656 Sq. In. – 1 1/4"φ = 1.5625 Sq. in.

Concrete to be of the following Mixture { 1:2:4 Mix. when used with gravel paving. 1:2:3 Mix. when used with Concrete wearing Surface }
Maximum size of aggregate – 1 1/2"
All reinforcing steel shall be deformed bars (Square twisted bars not to be considered as deformed)
All dimensions relating to reinforcement are to centers of bars.
Where splicing of reinforcement is necessary bars are to be lapped 40 diameters.
All exposed corners (except as indicated) to be chamfered thus: 3/4" 3/4"
Railings designed to suit local conditions to be placed on Curbs where necessary, and provision made therefore when pouring Curb. For types of railing see Drawing № G-211
Curbs, slab and beam-stems must be poured at same time allowing no time for initial set to take place between them.

CONCRETE DECK GIRDER SPANS

SPANS 28'0" TO 40'-0" ROADWAY 20'-0"
TRACED FROM U.S.B.P.R STAND. G-266 of March 1920

Louisiana Highway Commission
Baton Rouge La
June 1923
Approved [signature]
State Highway Engineer
Revised Sept. 1929
Revised: Sept. 1926

C-G-12 (B-2-53)

FOR INFORMATIONAL PURPOSES ONLY