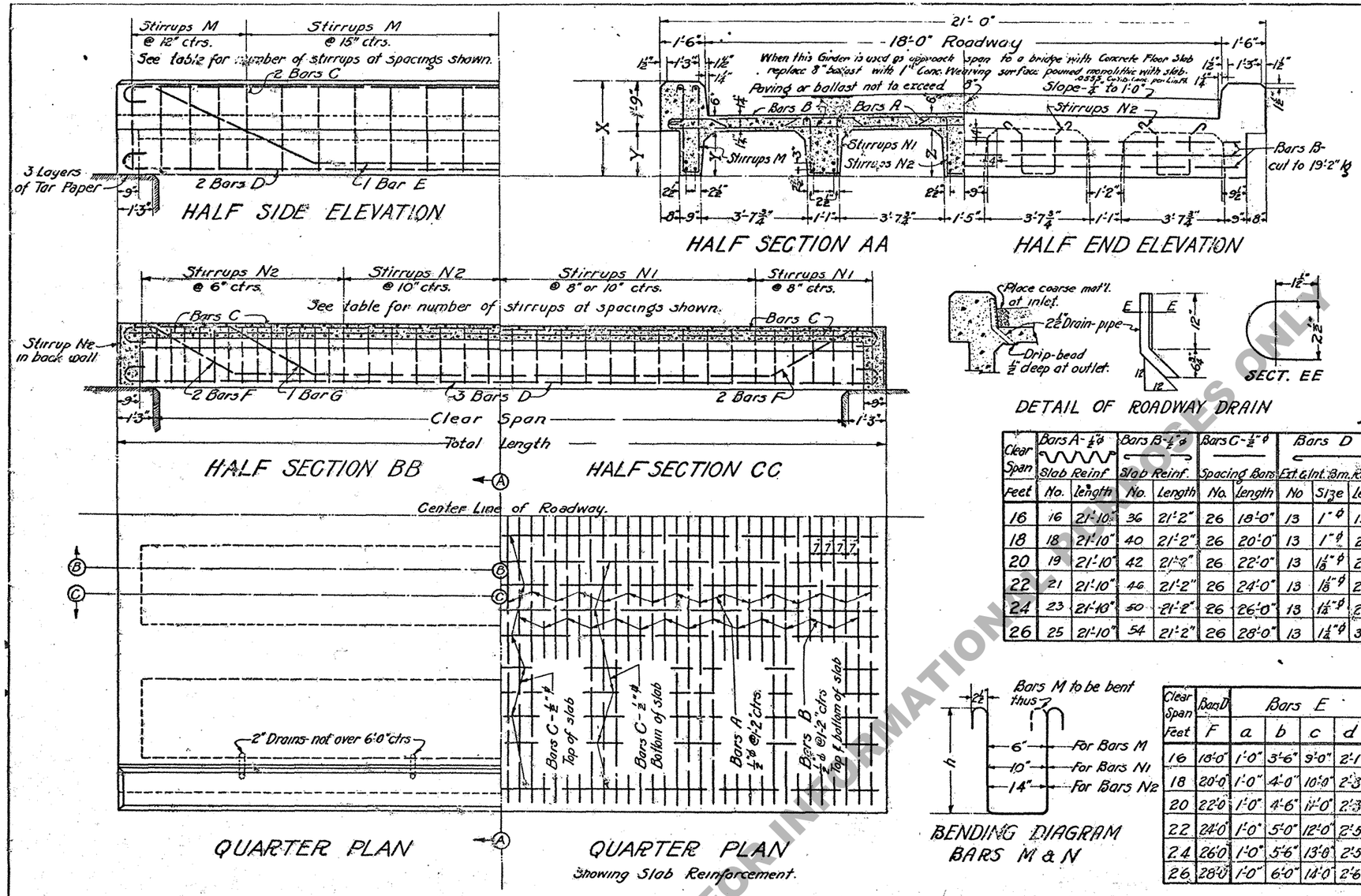
F-P.I.	STATE PROJECT	PARISH	SHEET No.
117(6)	2.04.18	Madison	16



DIMENSIONS & QUANTITIES

Clear Span Feet	Total L'gth Ft. In.	Dimensions X	Y	Z	Stirrup Spacing Exterior Bm Stirrups M	Interior Bm Stirrups N1	Interior Bm Stirrups N2	Quantities Concrete Cu. Yds.	Steel Pounds
16	18'-6"	2'-10"	1'-1"	1'-3"	3 Spcs @ 12" 9 " " 15" 3 " " 12"	26 Spcs @ 8"	10 Spcs. @ 6" 9 " " 10" 10 " " 6"	1.52 3 posts 15.3*	220 3160
18	20'-6"	3'-0"	1'-3"	1'-5"	4 " " 12" 9 " " 15" 4 " " 12"	29 " " 8"	11 " " 6" 10 " " 10" 11 " " 6"	1.61 3 posts 17.7*	250 3520
20	22'-6"	3'-0"	1'-3"	1'-5"	4 " " 12" 10 " " 15" 4 " " 12"	32 " " 8"	11 " " 6" 12 " " 10" 11 " " 6"	1.70 3 posts 19.3*	280 4330
22	24'-6"	3'-2"	1'-5"	1'-7"	4 " " 12" 12 " " 15" 4 " " 12"	6 " " 8" 18 " " 10" 6 " " 8"	12 " " 6" 13 " " 10" 12 " " 6"	2.02 4 posts 21.8*	320 4690
24	26'-6"	3'-2"	1'-5"	1'-7"	4 " " 12" 14 " " 15" 4 " " 12"	6 " " 8" 21 " " 10" 6 " " 8"	14 " " 6" 13 " " 10" 14 " " 6"	2.11 4 posts 23.6*	350 5710
26	28'-6"	3'-3"	1'-6"	1'-8"	4 " " 12" 15 " " 15" 4 " " 12"	6 " " 8" 22 " " 10" 6 " " 8"	15 " " 6" 15 " " 10" 15 " " 6"	2.20 4 posts 25.7*	380 6140

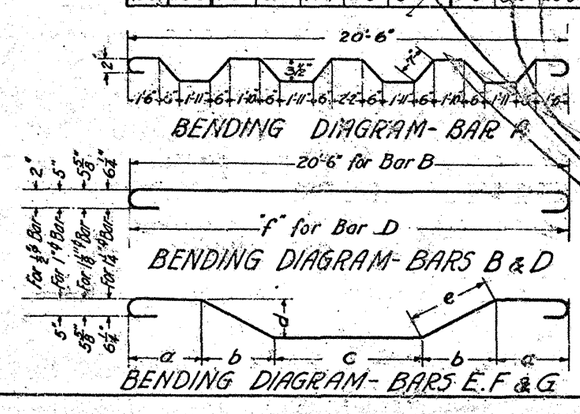
Note * Quantities exclusive of posts and railing. Small figures give quantities in posts and railing for one panel complete

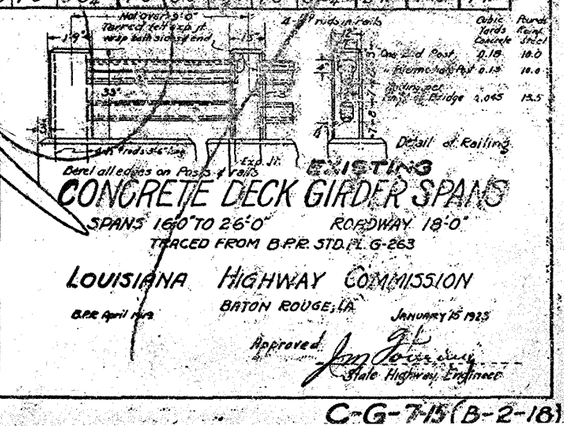
BILL OF STEEL

Clear Span Feet	Bars A-½"ϕ Slab Reinf. No.	Length	Bars B-½"ϕ Slab Reinf. No.	Length	Bars C-½"ϕ Spacing Bars No.	Length	Bars D Ext. & Int. Bm. Reinf. No	Size	Length	Bars E Exterior Bm. Reinf. No.	Size	Length	Bars F Interior Bm. Reinf. No.	Size	Length	Bars G Interior Bm. Reinf. No	Size	Length	Bars M-½"ϕ Stirrup-Ext. Bm No.	Length	Bars N-½"ϕ Stirrup-Int. Bm No.	Length
16	16	21'-10"	36	21'-2"	26	18'-0"	13	1"ϕ	19'-8"	2	1"ϕ	20'-10"	6	1"ϕ	20'-3"	1	1"ϕ	20'-3"	32	6'-4"	54 38	4'-6" 5'-0"
18	18	21'-10"	40	21'-2"	26	20'-0"	13	1"ϕ	21'-8"	2	1"ϕ	22'-10"	6	1"ϕ	22'-3"	1	1"ϕ	22'-3"	36	6'-8"	60 41	4'-10" 5'-4"
20	19	21'-10"	42	21'-2"	26	22'-0"	13	1⅛"ϕ	23'-10"	2	1⅛"ϕ	25'-0"	6	1⅛"ϕ	24'-6"	1	1⅛"ϕ	24'-6"	38	6'-8"	66 43	4'-10" 5'-4"
22	21	21'-10"	46	21'-2"	26	24'-0"	13	1⅛"ϕ	25'-10"	2	1⅛"ϕ	27'-0"	6	1⅛"ϕ	26'-6"	1	1⅛"ϕ	26'-6"	42	7'-0"	62 46	5'-2" 5'-8"
24	23	21'-10"	50	21'-2"	26	26'-0"	13	1¼"ϕ	28'-0"	2	1¼"ϕ	29'-0"	6	1¼"ϕ	28'-8"	1	1¼"ϕ	28'-8"	46	7'-0"	68 50	5'-2" 5'-8"
26	25	21'-10"	54	21'-2"	26	28'-0"	13	1¼"ϕ	30'-0"	2	1¼"ϕ	31'-0"	6	1¼"ϕ	30'-8"	1	1¼"ϕ	30'-8"	48	7'-2"	72 54	5'-4" 5'-10"

STEEL BENDING TABLE

Clear Span Feet	Bars D F	Bars E a	b	c	d	e	Bars F a	b	c	d	e	Bars G a	b	c	d	e	Bars M h	Bars N1 h	Bars N2 h
16	18'-0"	1'-0"	3'-6"	9'-0"	2'-1"	4'-0⅞"	1'-0"	1'-9"	12'-6"	1'-0"	2'-0⅞"	2'-9"	1'-9"	9'-0"	1'-0"	2'-0⅞"	2'-6"	1'-5"	1'-6"
18	20'-0"	1'-0"	4'-0"	10'-0"	2'-3"	4'-7⅛"	1'-0"	2'-0"	14'-0"	1'-2"	2'-3¾"	3'-0"	2'-0"	10'-0"	1'-2"	2'-3¾"	2'-8"	1'-7"	1'-8"
20	22'-0"	1'-0"	4'-6"	11'-0"	2'-3"	5'-0⅝"	1'-0"	2'-3"	15'-6"	1'-2"	2'-6⅝"	3'-3"	2'-3"	11'-0"	1'-2"	2'-6⅝"	2'-8"	1'-7"	1'-8"
22	24'-0"	1'-0"	5'-0"	12'-0"	2'-5"	5'-6⅝"	1'-0"	2'-6"	17'-0"	1'-4"	2'-10"	3'-6"	2'-6"	12'-0"	1'-4"	2'-10"	2'-10"	1'-9"	1'-10"
24	26'-0"	1'-0"	5'-6"	13'-0"	2'-5"	6'-0⅝"	1'-0"	2'-9"	18'-6"	1'-4"	3'-0⅝"	3'-9"	2'-9"	13'-0"	1'-4"	3'-0⅝"	2'-10"	1'-9"	1'-10"
26	28'-0"	1'-0"	6'-0"	14'-0"	2'-6"	6'-6"	1'-0"	3'-0"	20'-0"	1'-5"	3'-3¾"	4'-0"	3'-0"	14'-0"	1'-5"	3'-3¾"	2'-11"	1'-10"	1'-11"





GENERAL NOTES & DESIGN DATA

Specifications — B.P.R. 1918
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 " " "
This table is based on the net area of bars as follows:
½"ϕ = 0.1963 sq. in. ½"ϕ = 2.25 sq. in. 1"ϕ = 1.00 sq. in.
⅛"ϕ = 1.2656 " 1¼"ϕ = 1.5625 "

Concrete Mixture — Concrete to be "A" mix when used with gravel paving; Class "AA" mix when used with concrete wearing surface
Maximum size of aggregate - 1½".
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:
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 No. G-211.
Curbs, slab and beam-stems must be poured at the same time, allowing no time for initial set to take place between them.

FOR INFORMATION PURPOSES ONLY

C-G-7-15 (B-2-18)