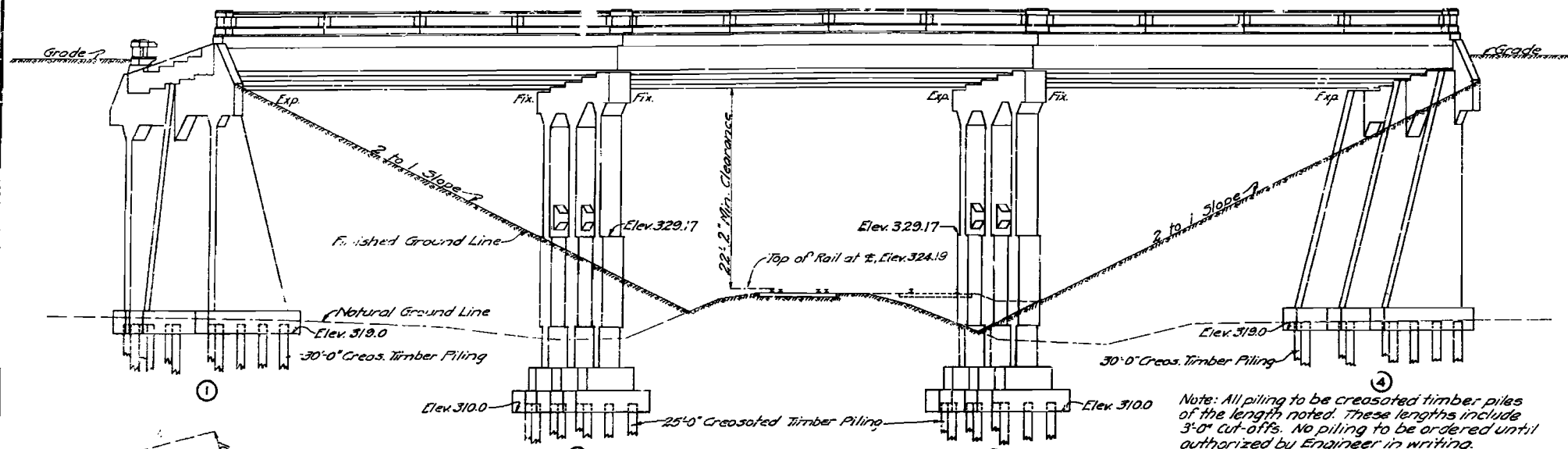


# MISSOURI STATE HIGHWAY DEPARTMENT

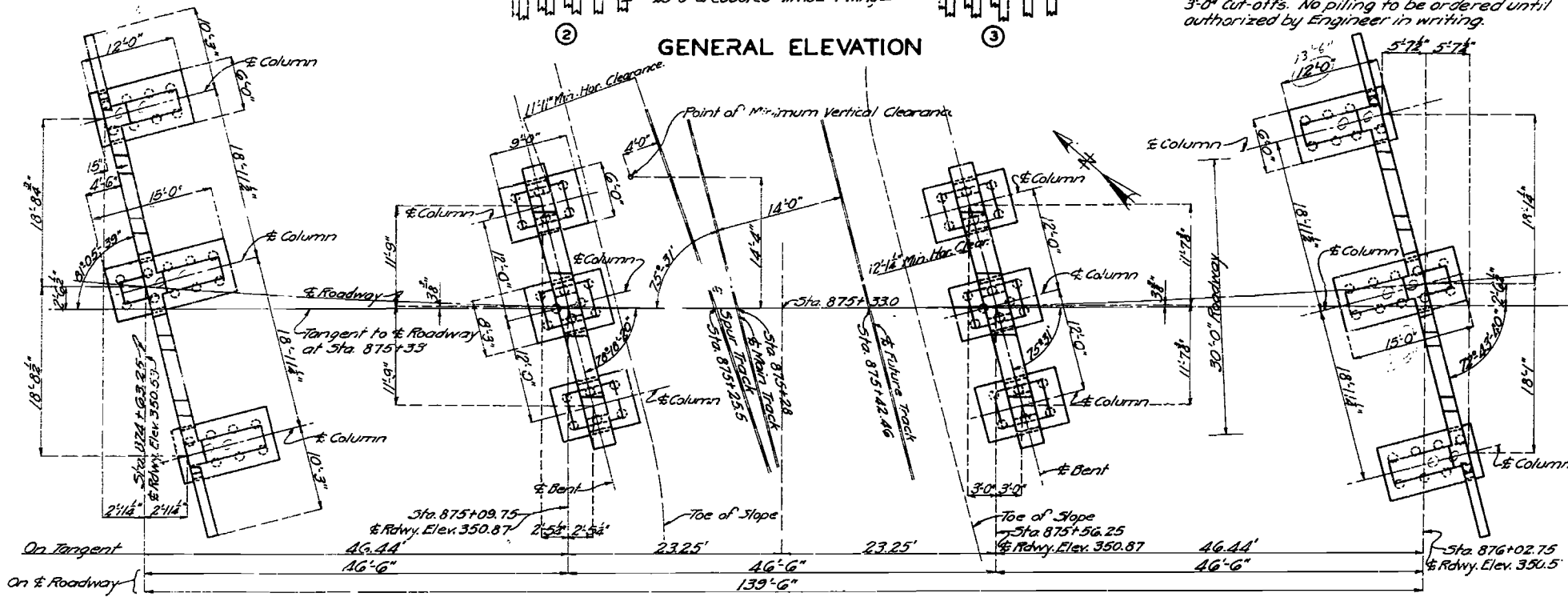
3-44' Concrete Deck Girder Spans

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	179B (U.S. 60)	19		



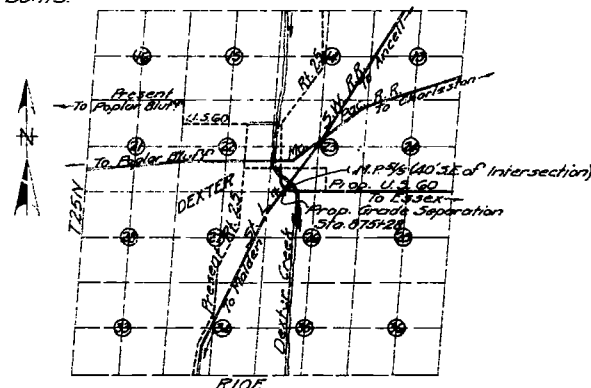
GENERAL ELEVATION

Note: All piling to be creosoted timber piles of the length noted. These lengths include 3'-0" cut-offs. No piling to be ordered until authorized by Engineer in writing.



PLAN

Note: Curve formulae based on 100' Chords can not be used in locating bents.



LOCATION SKETCH

Drawn Jan. 1933 by I.B.  
Traced Jan. 1933 by C.A.F.  
Checked Jan. 1933 by C.F.K. & H.D.

ESTIMATED QUANTITIES			
ITEM	SUPERSTR.	SUBSTR.	TOTAL
Bridge Excavation, Class I Cu. Yds.		250	250
Concrete 1:2:3 mix, Class "A" Cu. Yds.	13.8		13.8
Concrete 1:2:4 mix, Class "B" Cu. Yds.		269.8	269.8
Concrete 1:2:3 mix, Class "X" Cu. Yds.	259.2		259.2
Reinforcing Steel Lbs.	69,820	18,330	88,150
Creosoted Timber Piles Lin. Ft.		2284	2284
Creos. Timber Pile Cut-offs Lin. Ft.		276	276
Phosphor Bronze Brq. Pls. (Flange) (8"x20") 15 Sets of 5 Plates each.			

Note: All bridge excavation to be paid for as Class I Bridge Excavation.

Note: This drawing is not to scale. Follow dimensions.

BILL OF REINFORCING STEEL- SUPERSTRUCTURE									
No.	Size	Length	Mark	Location	No.	Size	Length	Mark	Location
16	3/4"	13'-0"	R1	Rail	6	1/2"	49'-0"	B9	Girder
144	3/4"	3'-9"	R2	"	6	1/2"	49'-0"	B10	"
84	3/4"	7'-6"	R3	Subpost	6	1/2"	42'-3"	B12	"
32	3/4"	3'-9"	R4	Post	30	1/2"	48'-3"	B13	"
1326	1/2"	18"	R5	Baluster	15	1/2"	48'-9"	B14	"
8	3/4"	13'-3"	R6	Rail	18	1/2"	49'-6"	B15	"
8	3/4"	2'-3"	R7	Post	9	1/2"	50'-0"	B16	"
16	3/4"	10'-6"	R8	Rail	12	1/2"	49'-6"	B17	"
8	3/4"	11'-0"	R9	"	6	1/2"	50'-0"	B18	"
16	3/4"	10'-9"	R10	"	12	1/2"	41'-3"	B19	"
8	3/4"	12'-6"	R11	"	6	1/2"	41'-9"	B20	"
8	3/4"	10'-3"	R12	"	4	3/4"	5'-0"	Slab	
16	3/4"	10'-6"	R13	"	10	3/4"	7'-6"	Web	
12	3/4"	25'-9"	C1	Curb	16	3/4"	5'-6"	W5	
6	3/4"	23'-9"	C2	"					
12	3/4"	25'-0"	C3	"					
6	3/4"	24'-3"	C4	"					
88	3/4"	34'-3"	Slab						
87	3/4"	35'-0"	53						
24	3/4"	26'-3"	54						
24	3/4"	7'-0"	55						
48	3/4"	6'-0"	56						
60	3/4"	24'-3"	57						
12	3/4"	44'-3"	58						
12	3/4"	40'-0"	59						
18	3/4"	40'-6"	510						
18	3/4"	36'-0"	511						
8	3/4"	6'-0"	512						
40	3/4"	7'-3"	513						
12	3/4"	30'-9"	W1	Web					
12	3/4"	29'-9"	W2						
12	3/4"	29'-9"	W3						
837	3/4"	8'-3"	B1	Girder					
12	3/4"	23'-3"	B2						
12	3/4"	23'-9"	B3						
36	3/4"	23'-6"	B4						
15	1/2"	47'-9"	B5						
17	1/2"	49'-3"	B6						
9	1/2"	49'-0"	B7						
9	1/2"	50'-6"	B8						

Note: Above Bill of Reinforcing Steel is not complete. See Sheet No. 4 for Bill of Reinforcing Steel for Substructure.  
Dimensions given are along E of bars and are for computed lengths.  
Reinforcing bars 1" or over in diameter, which are bent to an angle greater than 90° shall be of structural grade.

## GENERAL NOTES:

Concrete in handrail to be 1:2:3 mix, Class "A". Concrete in slab, curbs and girders to be 1:2:3 1/2 mix, Class "X". All other concrete to be 1:2:4 mix, Class "B".  
Exposed edges to be beveled 1/4" where no other bevel is noted.  
Flare slab shall be constructed full width at one operation. No longitudinal construction joints will be permitted. Transverse construction joint may be used near middle of span.  
Where rubber compound is specified on plans for use in partition and expansion joints, the pre-moulded joint shall be securely stitched to one face of concrete with copper wire.  
Two name plates type "A" as shown on Std. 5918R to be furnished and placed by contractor. Cost of name plates to be included in price bid for other items.  
Only sufficient camber to be used in construction to insure against settlement below lines given as finished grade. No permanent camber required in individual spans.  
Bridge excavation in accordance with Section I of Standard Specifications 1356 and April 1, 1930.  
Piling to be driven to sustain a load of 20 ton per pile for bents 2 & 3 and 30 ton per pile for bents 1 & 4.  
Falsework for span over existing railroad tracks shall be constructed with a minimum vertical clearance of 20'-0" and a minimum lateral clearance of 8'-6" from centerline of tracks.  
Bar supports and spacers will be required for reinforcing steel in superstructure. See Std. C-10R and Special Provisions.  
All concrete shall be proportioned by the weight proportioning method. See Special Provisions.

Elev. 323.11. N.I.R. 14" Maple 50' Rt. Sta. 870+00.

## BRIDGE OVER ST. L. & S.W. RAILROAD

STATE ROAD THRU DEXTER

ABOUT 0.5 MILE SOUTH OF DEXTER

PROJ. NO. N.R.M.179B (U.S. 60) STA. 874 + 63.25

STODDARD COUNTY

SUBMITTED BY: M.R. Lark, DATE: 9/29/33  
APPROVED BY: T.H. Cutler, DATE: 9/29/33

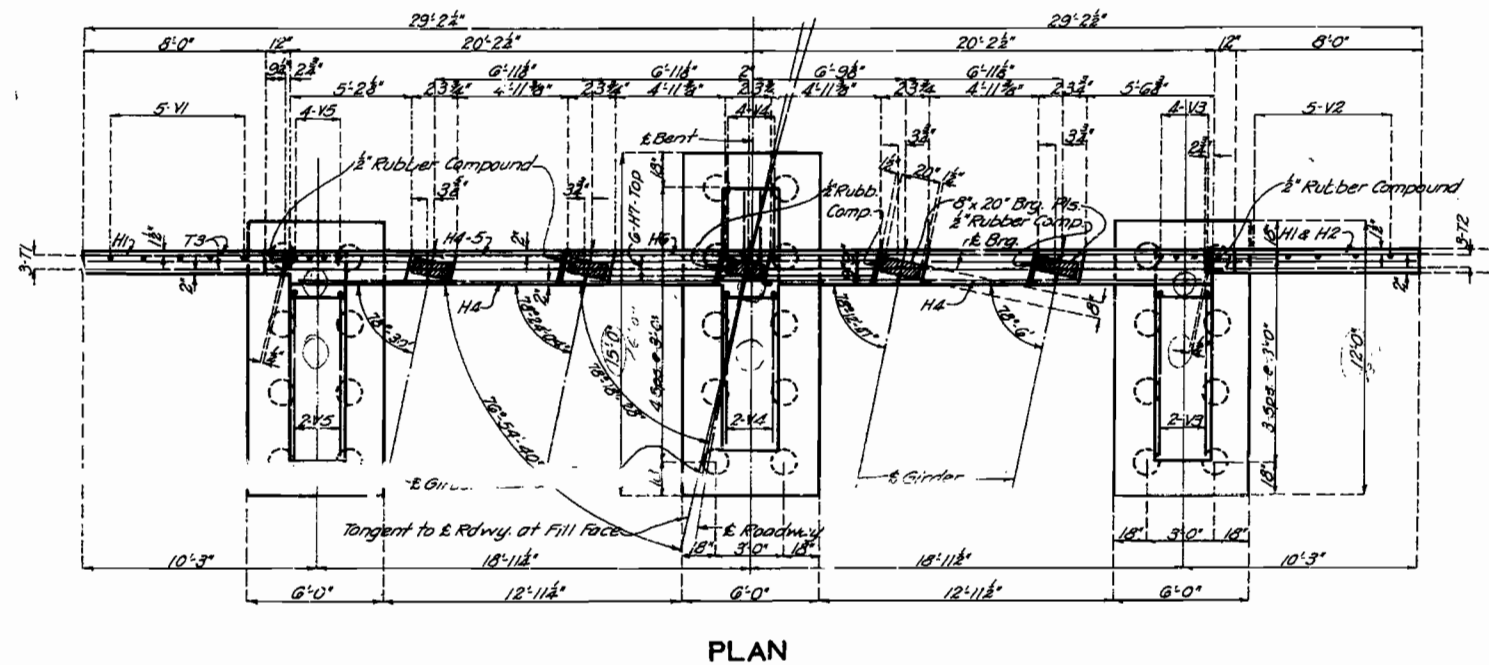
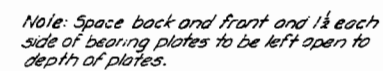
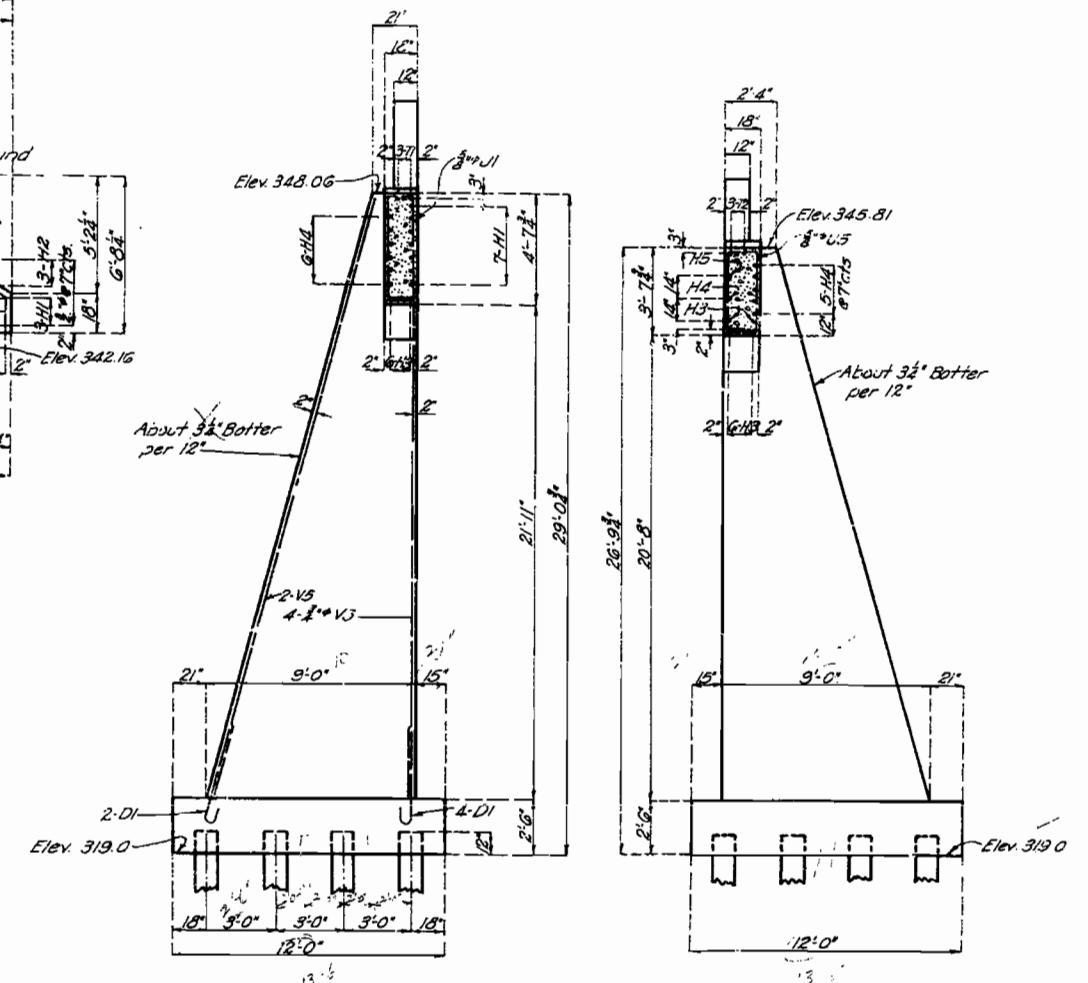
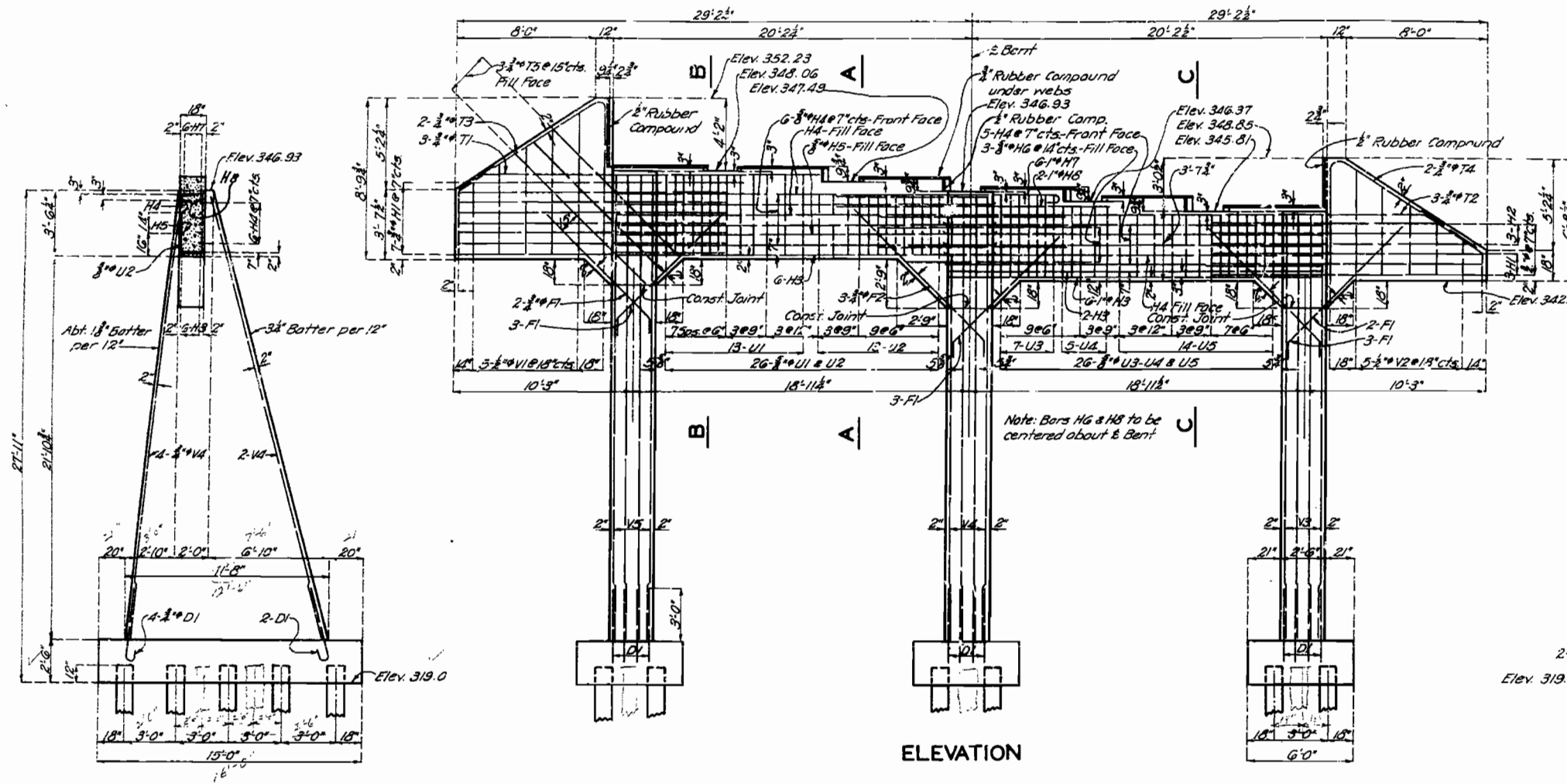
STD. C-110R  
STD. S918R  
K-32

Sheet No. 1 of 6.

F.A.

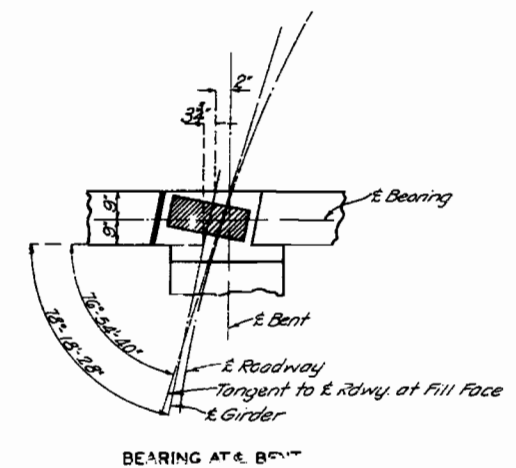
## MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	N.R.M. 1798 (U.S. 60)	19		



### DETAILS OF END BENT NO. 1

Note: This drawing is not to scale.  
Follow dimensions.



BRIDGE OVER ST. L. &amp; S.W. R.R.

STATE ROAD THRU DEXTER

ABOUT 0.5 MILE SOUTH OF DEXTER

PROJ. NO. N.R.M.179B (U.S. 60) STA. 874+63.25

STODDARD

COUNTY

F.A.

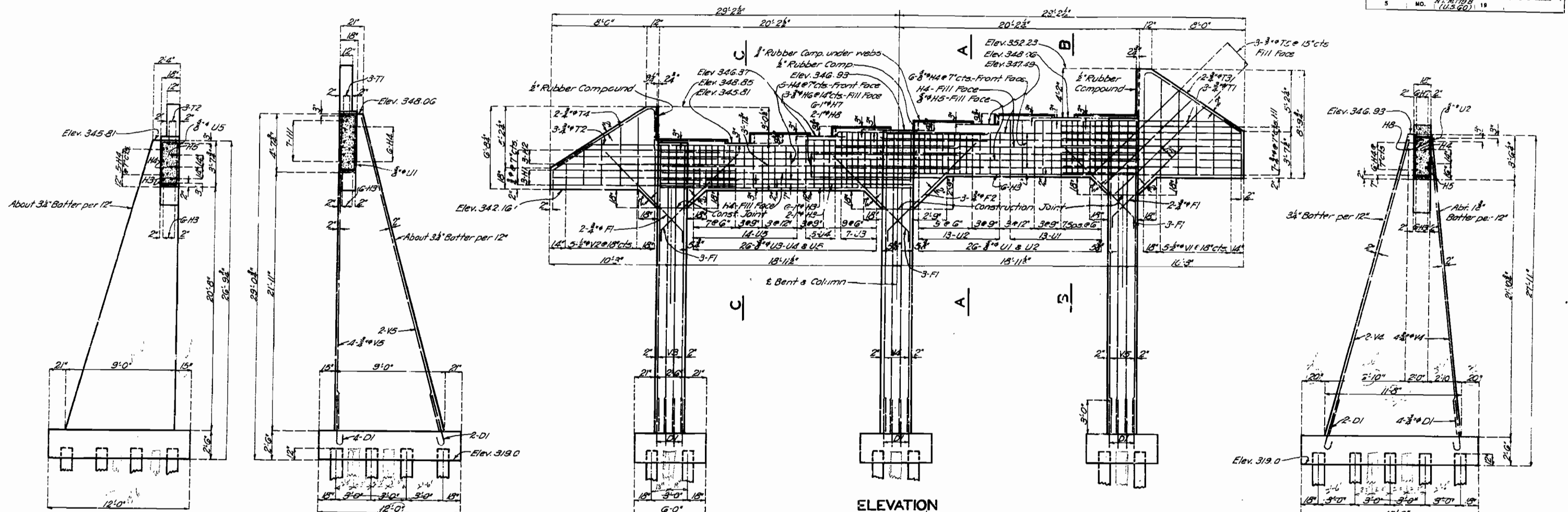
K-32

Drawn May 1933 by I.B.  
Traced May 1933 by G.W.  
Checked June 1933 by H.D.

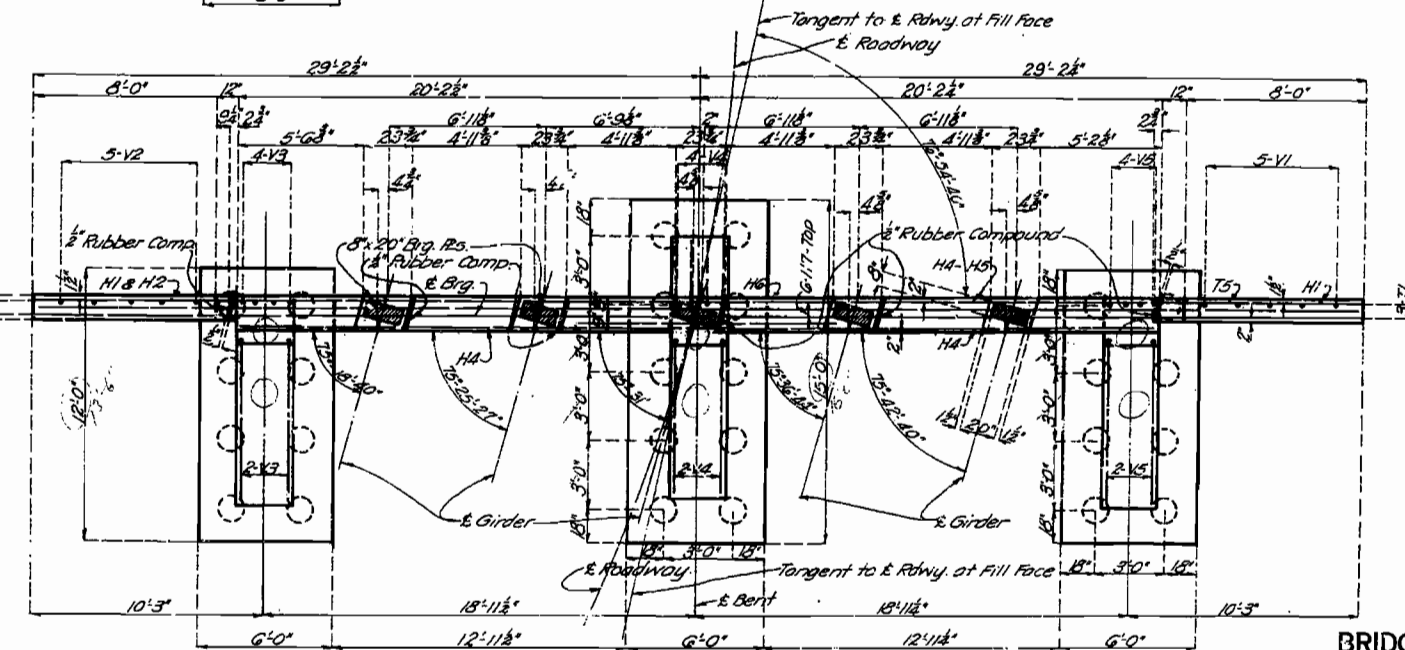
Sheet No 2 of 6.

# MISSOURI STATE HIGHWAY DEPARTMENT

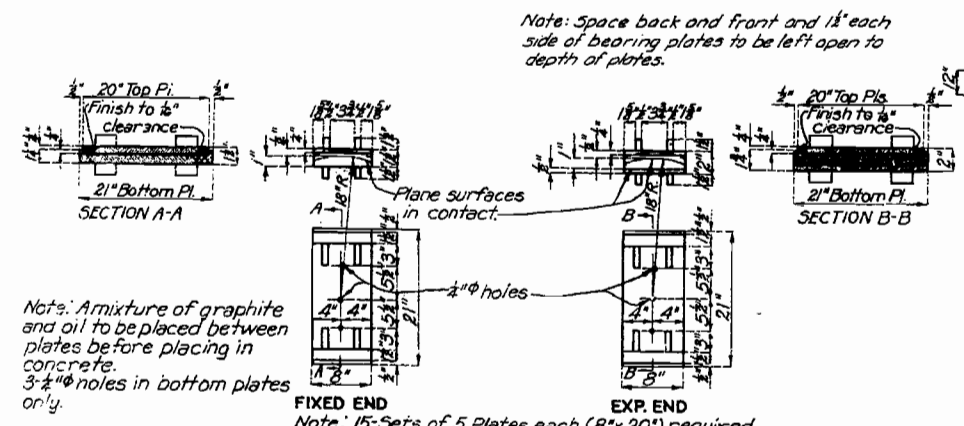
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	N.R.M.179B (U.S. 60)	19		



ELEVATION



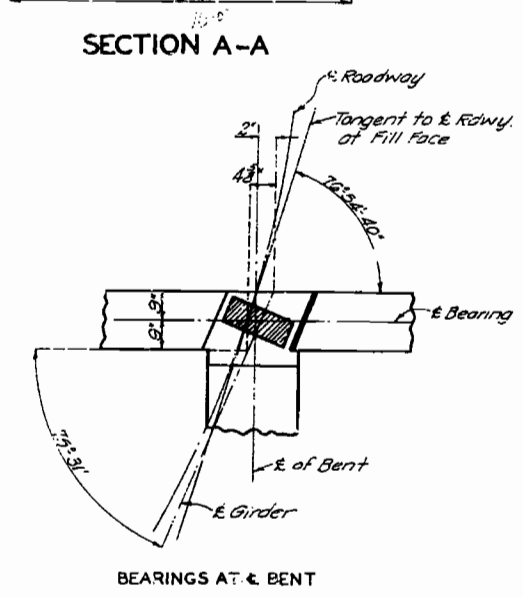
PLAN



DETAILS OF PHOSPHOR BRONZE BEARING PLATES

DETAILS OF END BENT NO. 4

Note: This drawing is not to scale. Follow dimensions.



SECTION A-A

BRIDGE OVER ST. L. & S.W. R.R.

STATE ROAD THRU DEXTER  
ABOUT 0.5 MILE SOUTH OF DEXTER  
PROJ. NO. N.R.M.179B (U.S. 60) STA. 874+63.25

STODDARD COUNTY

F.A.

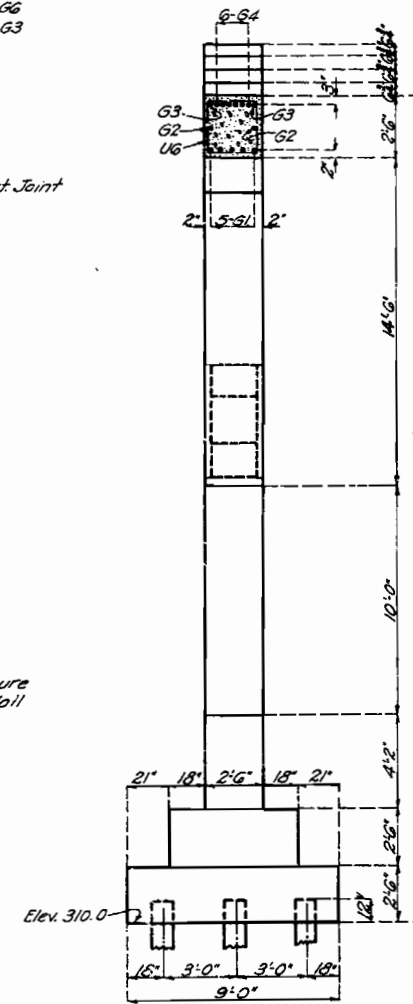
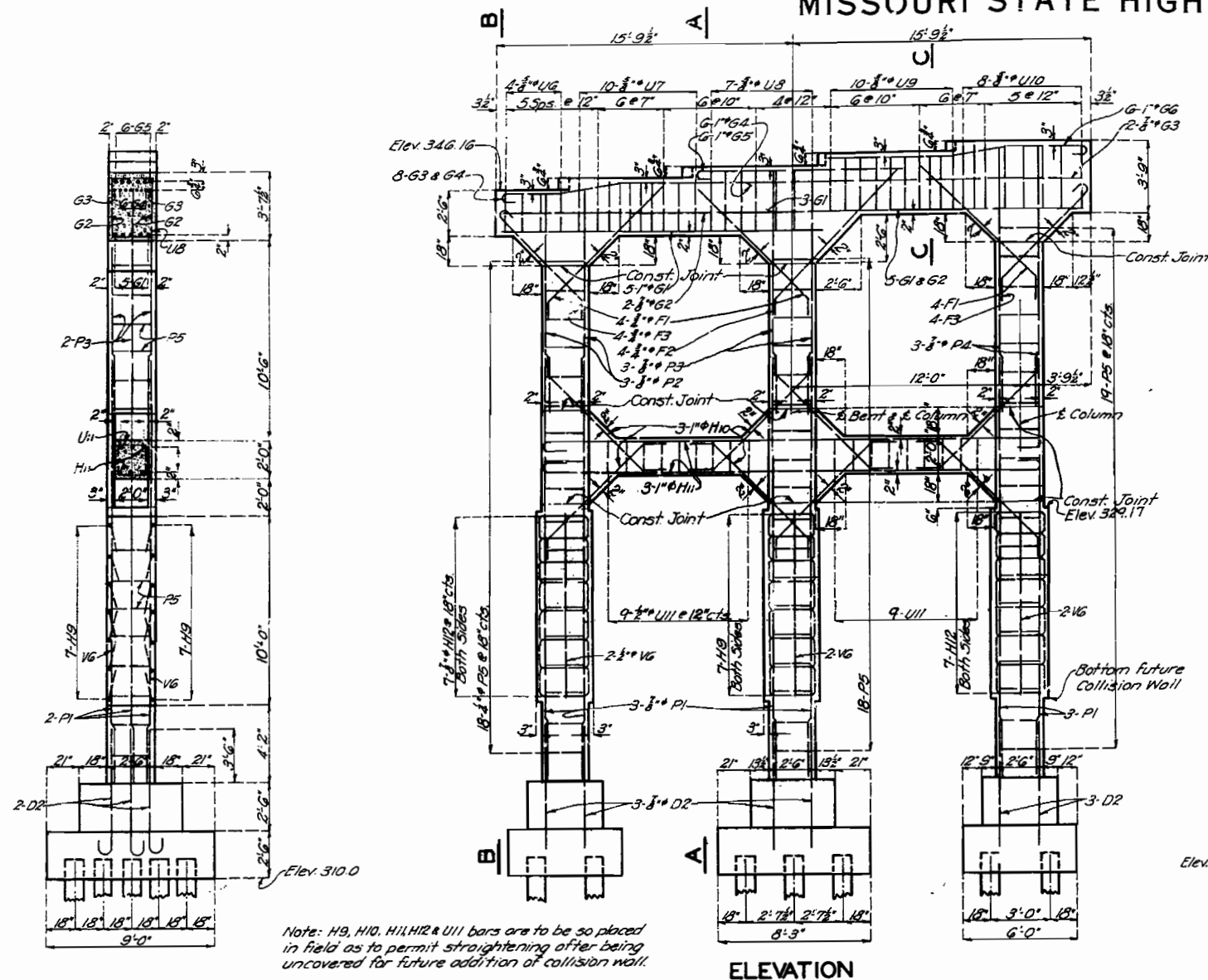
K-32

Drawn May 1933 by I.B.  
Traced May 1933 by G.W.  
Checked June 1933 by H.D.

Sheet No. 3 of 6.

# MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	179B (U.S. 60)	19		

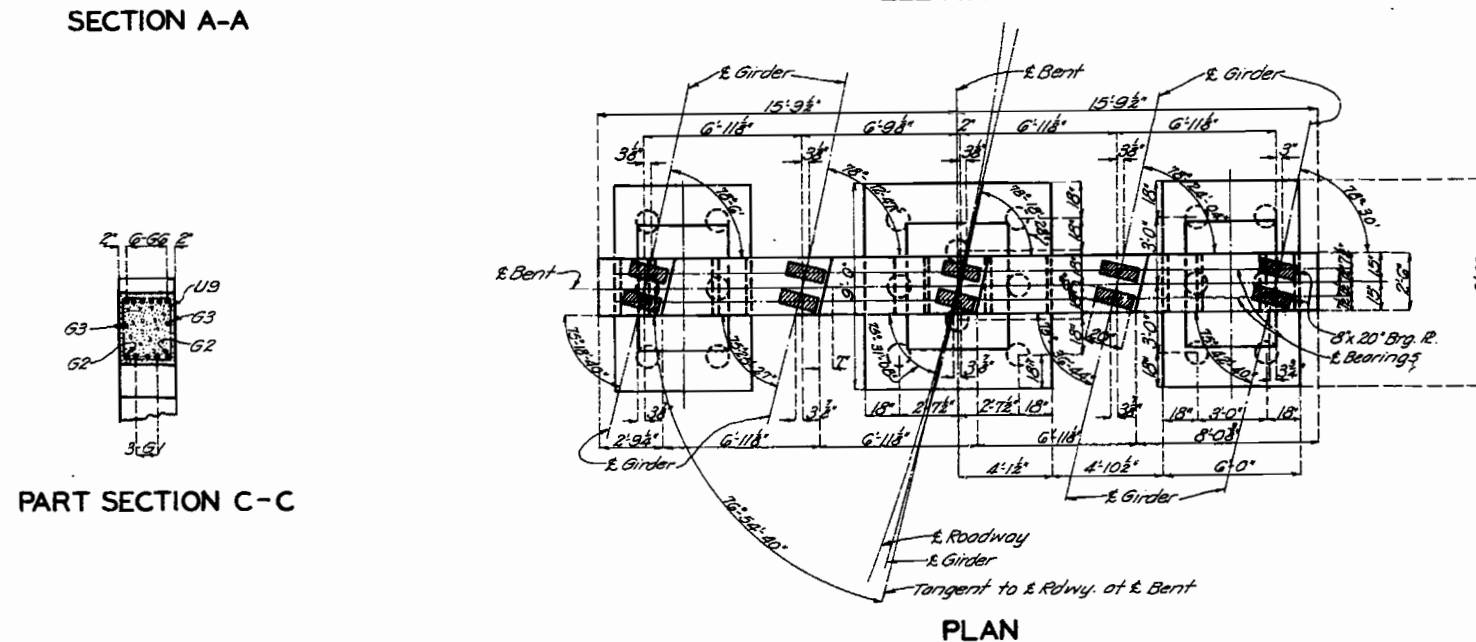


# BILL OF REINFORCING STEEL-SUBSTRUCTURE

No.	Size	Length	Mark	Location
End Bents No. 1 & 4				
36	3"	5'-3"	D1	Footings
26	3"	9'-3"	F1	Haunch
6	3"	11'-0"	F2	"
20	3"	15'-3"	H1	Wing
3	3"	28'-3"	H2	"
28	1"	21'-6"	H3	Beam
28	3"	21'-6"	H4	"
2	3"	40'-0"	H5	"
6	3"	10'-6"	H6	"
12	1"	12'-6"	H7	"
4	1"	14'-0"	H8	"
6	3"	24'-3"	T1	Wing
6	3"	36'-0"	T2	"
4	3"	18'-9"	T3	"
4	3"	16'-6"	T4	"
6	3"	10'-0"	T5	"
5	3"	12'-0"	V1	"
5	3"	7'-9"	V2	"
12	3"	24'-0"	V3	Column
12	3"	25'-0"	V4	"
12	3"	26'-3"	V5	"
26	3"	12'-3"	U1	Beam
26	3"	10'-0"	U2	"
14	3"	12'-6"	U3	"
10	3"	11'-3"	U4	"
28	3"	10'-3"	U5	"

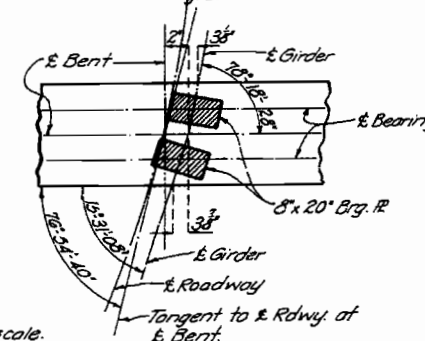
Int. Bents No. 2 & 3				
36	3"	8'-3"	D2	Footings
24	3"	9'-3"	F1	Haunch
8	3"	11'-0"	F2	"
16	3"	8'-9"	F3	"
16	1"	17'-0"	G1	Beam
4	3"	31'-3"	G2	"
4	3"	32'-3"	G3	"
12	1"	14'-6"	G4	"
12	1"	12'-0"	G5	"
12	1"	15'-0"	G6	"
28	3"	8'-0"	H9	Column
48	1"	9'-6"	H10	Tie Beam
12	1"	28'-3"	H11	"
36	3"	25'-3"	P1	Column
12	3"	11'-9"	P2	"
12	3"	12'-3"	P3	"
12	3"	13'-6"	P4	"
110	3"	10'-0"	P5	"
12	3"	9'-9"	V6	Beam
8	3"	10'-0"	V6	"
20	3"	11'-0"	U7	"
14	3"	12'-3"	U8	"
20	3"	11'-3"	U9	"
16	3"	12'-6"	U10	"
36	3"	8'-0"	U11	Tie Beam
56	3"	6'-6"	H12	Column

## Bending Sketches & Cutting Diagrams



Note: Space back and front of bearing plates and space between top of bents and bottom of girder webs to be left open to depth of plates.

Note: Above Bill of Reinforcing Steel is not complete. See Sheet No. 1 for Bill of Reinforcing Steel for Superstructure. Dimensions given are along E of bars and are for computed lengths. Reinforcing bars 3/4" or over in diameter, which are bent to an angle greater than 90°, shall be of structural grade.



Note: This drawing is not to scale. Follow dimensions.

**BRIDGE OVER ST. L. & S.W. R.R.**  
 STATE ROAD THRU DEXTER  
 ABOUT 0.5 MILE SOUTH OF DEXTER  
 PROJ. NO. N.R.M. 179B (U.S. 60) STA. 374 + 63.25  
**STODDARD COUNTY**

Drawn May 1933 by I.B.  
 Traced May 1933 by G.W.  
 Checked June 1933 by H.D.

Sheet No. 4 of 6.

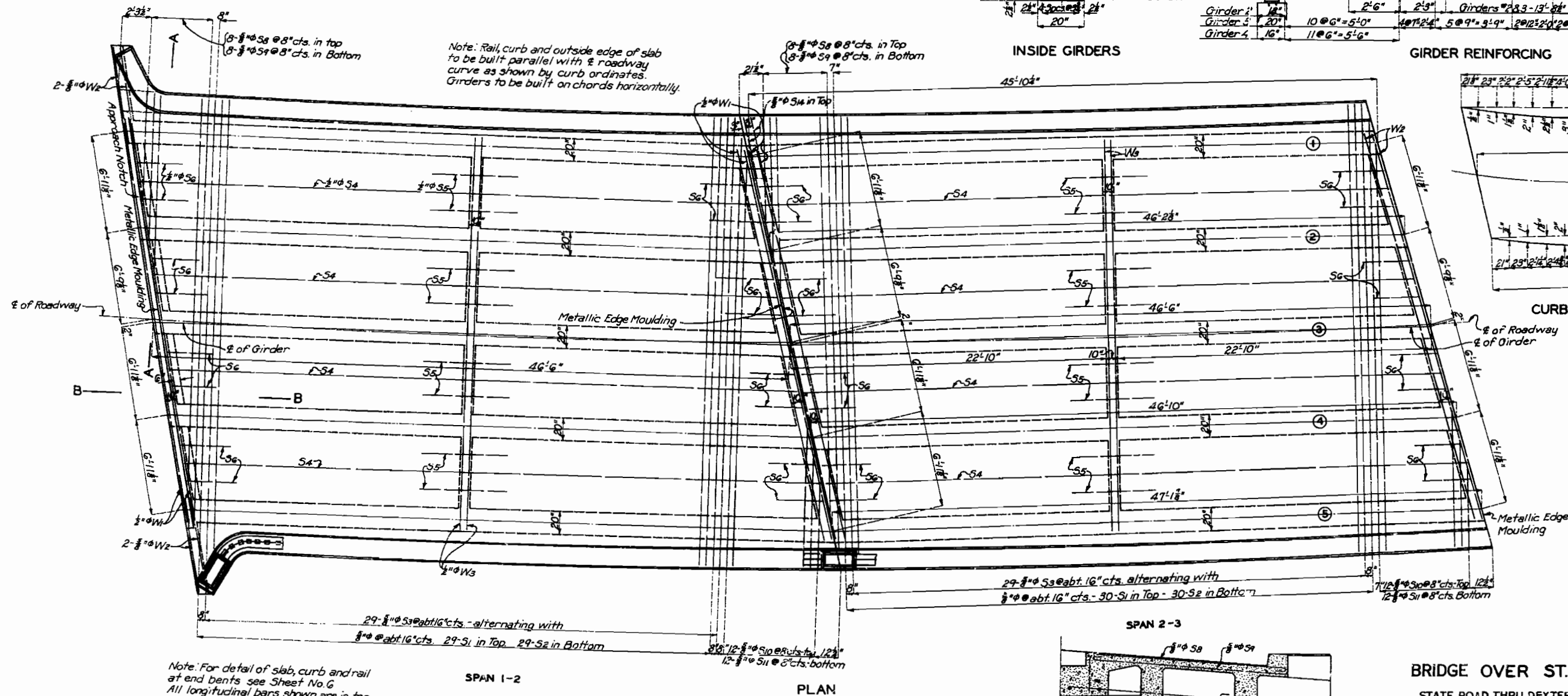
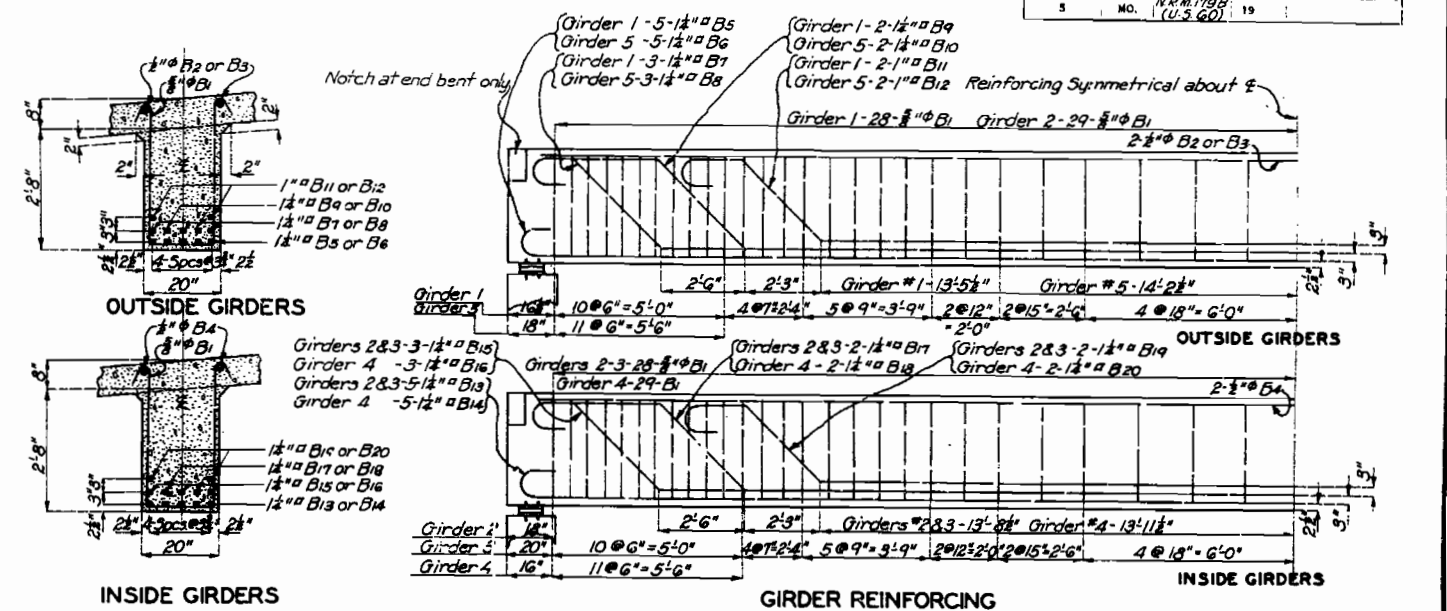
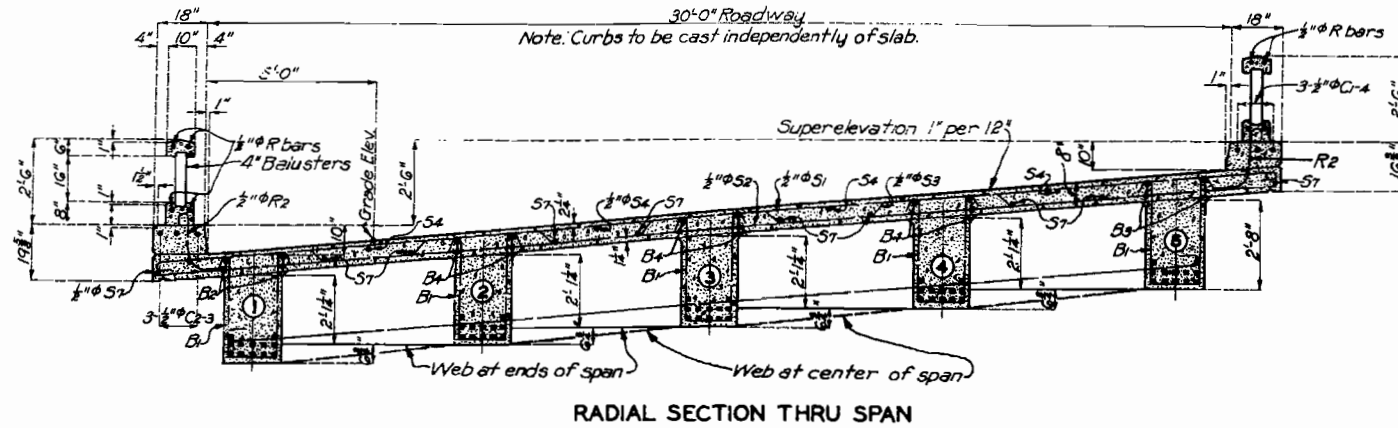
F.A.

K-32



# MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	N.M. 179B (U.S. 60)	19		



Note: For detail of slab, curb and rail at end bents see Sheet No. 6  
All longitudinal bars shown are in top of slab.

Note: This drawing is not to scale. Follow dimensions.

BRIDGE OVER ST. L. & S. W. R. R.  
STATE ROAD THRU DEXTER  
ABOUT 0.5 MILE SOUTH OF DEXTER  
PROJ. NO. N.M. 179B (U.S. 60); STA. 874 + 83.25  
STODDARD COUNTY

Drawn April 1933 By I.B.  
Traced April 1933 By H.W.H.  
Checked June 1933 By H.D.

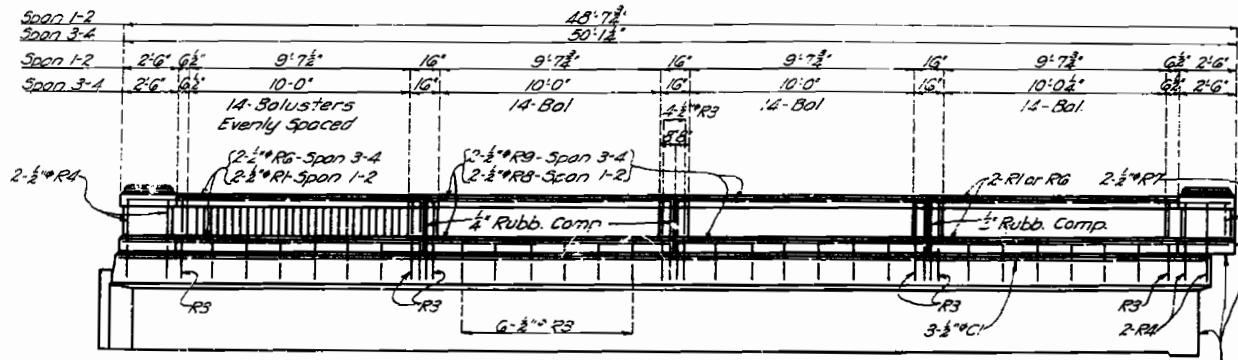
Sheet No. 5 of 6

F.A.

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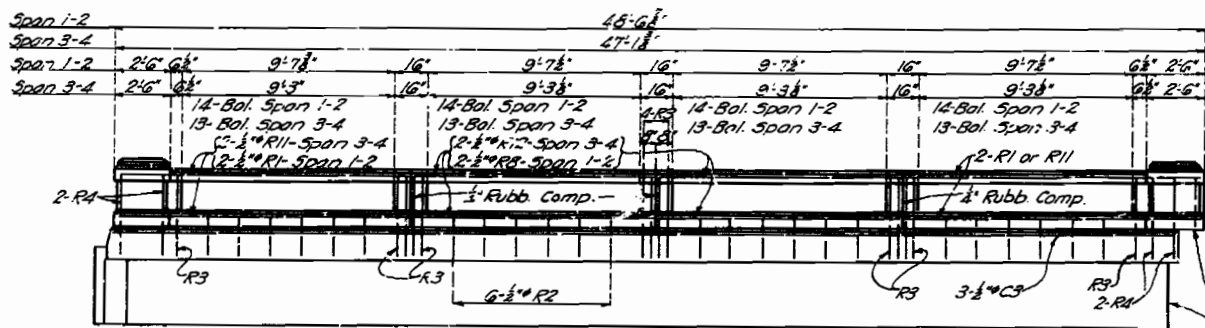
# MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	NRM.179B (U.S. 60)	19		

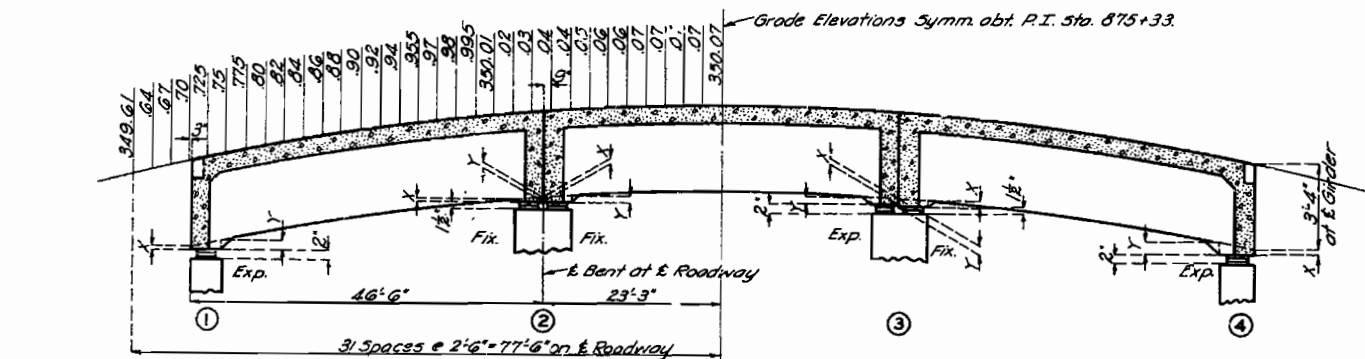


Note: Dimensions are given along & Rail.

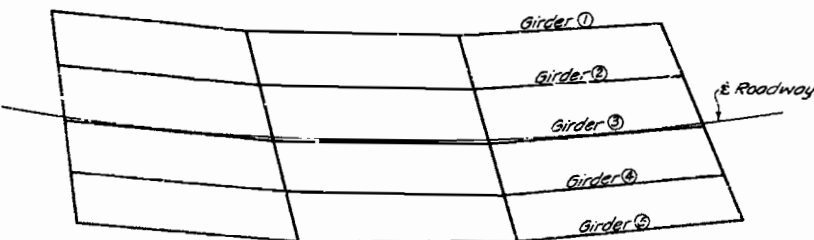
ELEVATION OF OUTSIDE RAIL



ELEVATION OF INSIDE RAIL

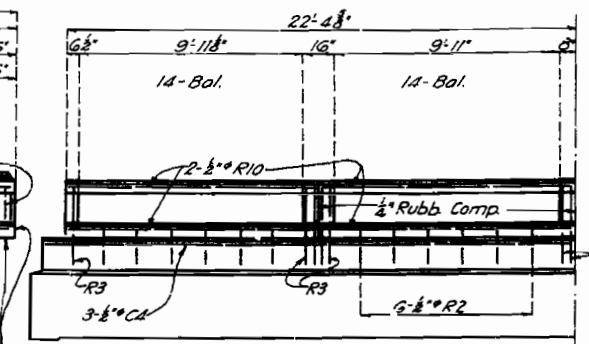


GRADE ELEVATIONS & GIRDER HAUNCHES

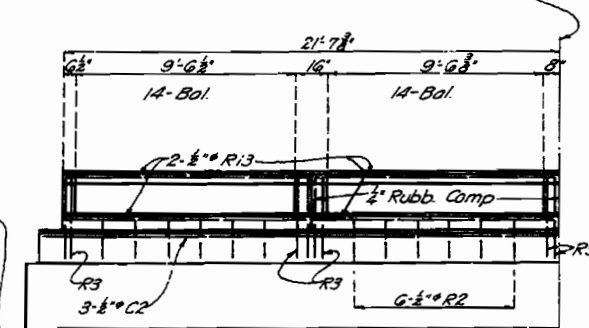


Bent No.	GIRDER HAUNCH DIMENSIONS															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Girder 1	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'
Girder 2	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'
Girder 3	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'
Girder 4	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'
Girder 5	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'	1'

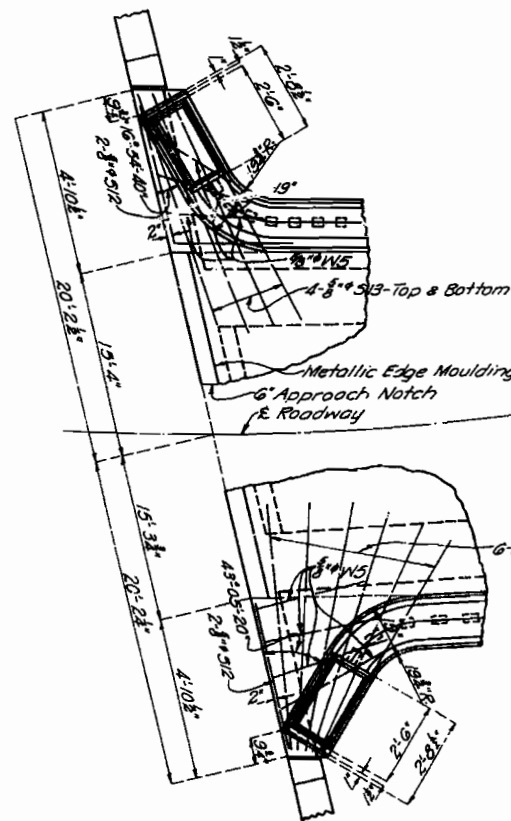
Note: Grade elevations given above are top of slab elevations 10'-0" inside of & Rdwy.  
Rail, top of posts, curbs, slab and bottom of slab and girders to be built parallel to grade. Posts, subposts and balusters to be vertical.  
All bearings to be horizontal.  
A mixture of graphite and oil to be placed between bearing plates before placing in concrete.



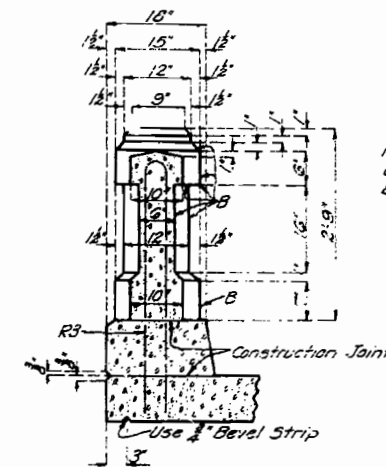
ELEVATION OF OUTSIDE RAIL



ELEVATION OF INSIDE RAIL



RAIL AT END BENTS



SECTION THRU RAIL AT SUBPOST

