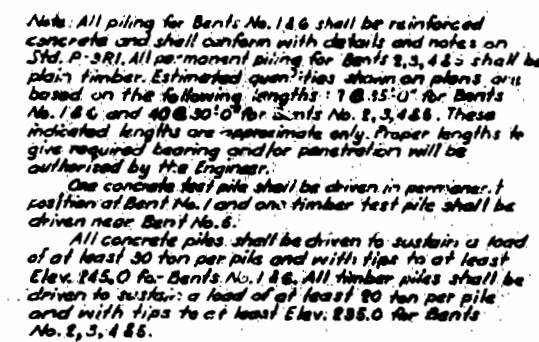


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO	5-100-107	19		



Note: Excavation, of all existing materials under bridge shall be made to not less than 3'-0" below bottom of steel and not less than 4'-0" outside of curb lines. Payment for this excavation within the limits of excavation for structure will be made at unit contract price for Roadway Excavation.



Design Specifications A.A. H.Q. 1949
Loading H15-44
Structural Steel Stress 18,000 psi
Reinforcing Steel Stress 18,000 psi
Class "B" Concrete Stress 1,000 psi
All concrete shall be Class "B".
Where joint filler is specified on plans it shall conform with the requirements for Premoulded Material for Filler as given in Section 38-19A(1)h of the Standard Specifications.
Paint: Shape, none. Field, coated surfaces of bolted field connections, one coat of red lead and surfaces inaccessible after erection three coats of red lead. No other paint to be applied by the Contractor. Red lead required to be furnished by the Contractor. Payment for cleaning and painting such surfaces will be included in unit price bid for structural steel.
Rivets 3/4" Holes 1/2" except in handrail where rivets shall be 5/8" holes 3/4". Field connections shall be riveted except as noted in the handrail details, or if the Contractor desires to eliminate all field riveting on this project, he may substitute 3/4" turned bolts for connections of diaphragms and handrail brackets to beams, and for connections of handrail post to handrail brackets. Buffer head bolts will be required for field connections of 6" Ship Channel handrail. See Special Provisions. Heads and nuts of turned bolts shall be American Standard Heavy.

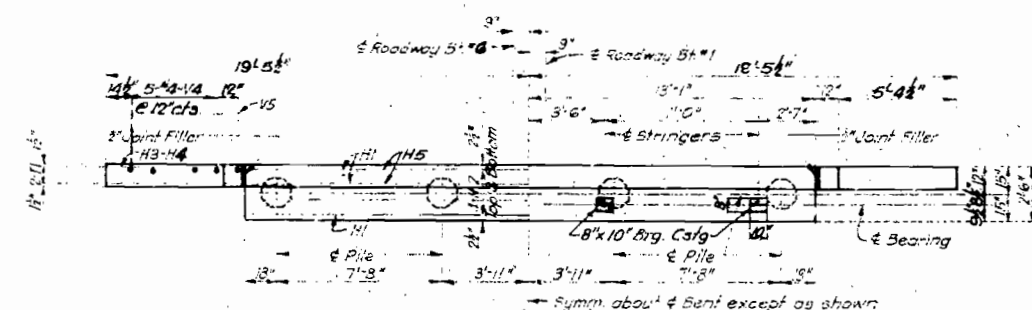
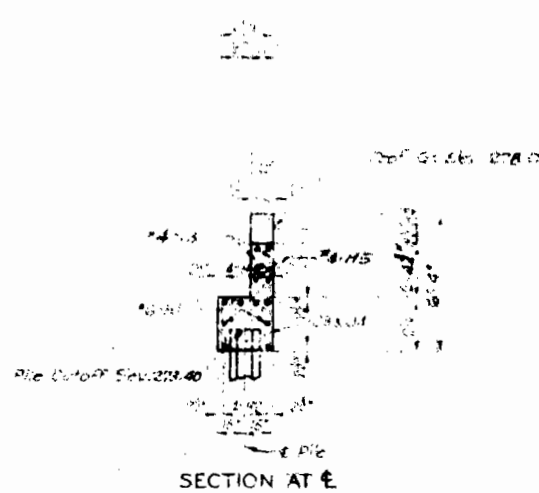
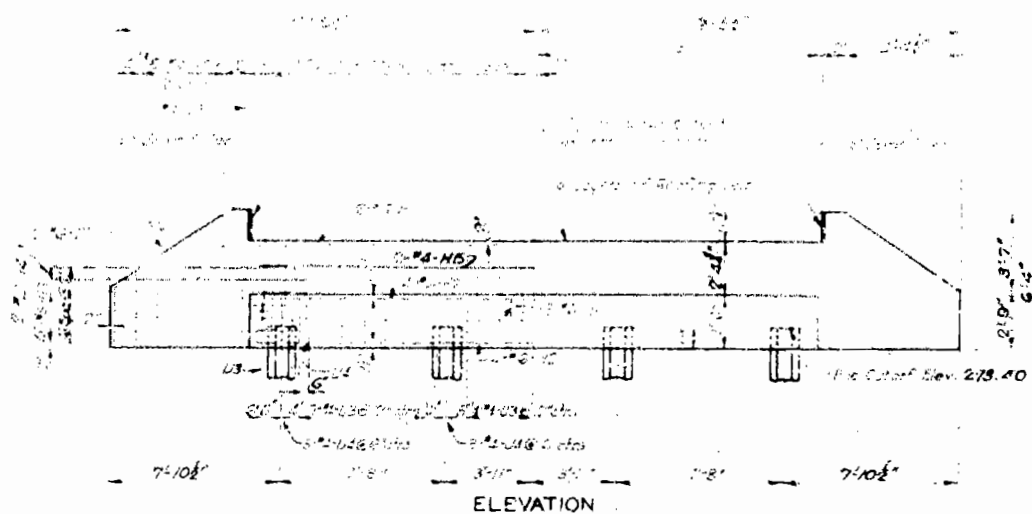
Note: All bridge excavation made above Elev. 260.0 will be paid for as Class 1 Excavation for Structures.
All bridge excavation made below Elev. 260.0 will be paid for as Class 2 Excavation for Structures.
B.M. Elev. 276 + 27 N.I.S.S. & Sycamore 110' Lt. Sta. 329 + 50.

STATE ROAD FROM GIDEON EAST
ABOUT 5.05 MILES E. OF GIDEON
PROJECT NO. S-456(5) (SC) STA. 389+54

1-10-52
SUBMITTED BY J. W. Enelow DATE 4/3/1952
APPROVED BY Ray M. Whittier DATE 4/3/1952

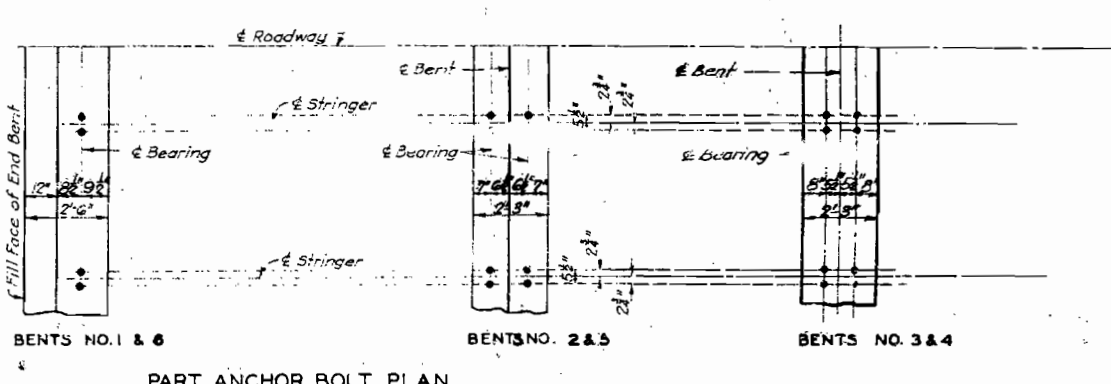
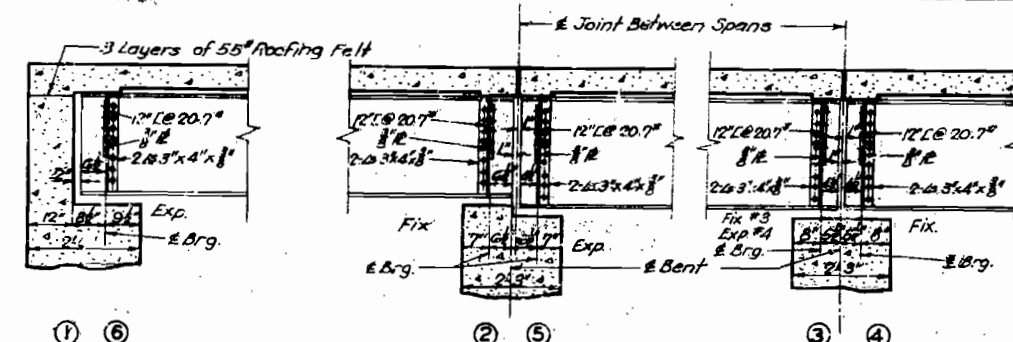
STD. P-3R!
STDC-110R3
L-454

MISSOURI STATE HIGHWAY DEPARTMENT



DETAILS OF END BENTS NO. 1 & 6

COMPLETE BILL OF REINFORCING STEEL									
No.	Bar	Length	Weight	Quantity	Remarks	No.	Bar	Length	Weight
1	6	25' 9"	4.2	1	Beam	23	3	8' 9"	0.1
2	6	27' 9"	4.2	1	Beam	24	3	8' 9"	0.1
3	6	6' 9"	1.2	1	Beam	25	3	8' 9"	0.1
4	6	9' 0"	1.2	1	Beam	26	3	8' 9"	0.1
5	6	26' 3"	4.2	1	Beam	27	3	8' 9"	0.1
6	6	12' 0"	1.2	1	Beam	28	3	8' 9"	0.1
7	6	9' 9"	1.2	1	Beam	29	3	8' 9"	0.1
8	6	3' 9"	0.3	1	Beam	30	3	8' 9"	0.1
9	6	4' 6"	0.3	1	Beam	31	3	8' 9"	0.1
10	6	9' 0"	1.2	1	Beam	32	3	8' 9"	0.1
11	6	6' 0"	1.2	1	Beam	33	3	8' 9"	0.1
12	6	7' 3"	1.2	1	Beam	34	3	8' 9"	0.1
13	6	8' 6"	1.2	1	Beam	35	3	8' 9"	0.1
14	6	9' 0"	1.2	1	Beam	36	3	8' 9"	0.1
15	6	9' 0"	1.2	1	Beam	37	3	8' 9"	0.1
16	6	9' 0"	1.2	1	Beam	38	3	8' 9"	0.1
17	6	9' 0"	1.2	1	Beam	39	3	8' 9"	0.1
18	6	9' 0"	1.2	1	Beam	40	3	8' 9"	0.1
19	6	9' 0"	1.2	1	Beam	41	3	8' 9"	0.1
20	6	9' 0"	1.2	1	Beam	42	3	8' 9"	0.1
21	6	9' 0"	1.2	1	Beam	43	3	8' 9"	0.1
22	6	9' 0"	1.2	1	Beam	44	3	8' 9"	0.1
23	3	8' 9"	0.1	1	Beam	45	3	8' 9"	0.1
24	3	8' 9"	0.1	1	Beam	46	3	8' 9"	0.1
25	3	8' 9"	0.1	1	Beam	47	3	8' 9"	0.1
26	3	8' 9"	0.1	1	Beam	48	3	8' 9"	0.1
27	3	8' 9"	0.1	1	Beam	49	3	8' 9"	0.1
28	3	8' 9"	0.1	1	Beam	50	3	8' 9"	0.1
29	3	8' 9"	0.1	1	Beam	51	3	8' 9"	0.1
30	3	8' 9"	0.1	1	Beam	52	3	8' 9"	0.1
31	3	8' 9"	0.1	1	Beam	53	3	8' 9"	0.1
32	3	8' 9"	0.1	1	Beam	54	3	8' 9"	0.1
33	3	8' 9"	0.1	1	Beam	55	3	8' 9"	0.1
34	3	8' 9"	0.1	1	Beam	56	3	8' 9"	0.1
35	3	8' 9"	0.1	1	Beam	57	3	8' 9"	0.1
36	3	8' 9"	0.1	1	Beam	58	3	8' 9"	0.1
37	3	8' 9"	0.1	1	Beam	59	3	8' 9"	0.1
38	3	8' 9"	0.1	1	Beam	60	3	8' 9"	0.1
39	3	8' 9"	0.1	1	Beam	61	3	8' 9"	0.1
40	3	8' 9"	0.1	1	Beam	62	3	8' 9"	0.1
41	3	8' 9"	0.1	1	Beam	63	3	8' 9"	0.1
42	3	8' 9"	0.1	1	Beam	64	3	8' 9"	0.1
43	3	8' 9"	0.1	1	Beam	65	3	8' 9"	0.1
44	3	8' 9"	0.1	1	Beam	66	3	8' 9"	0.1
45	3	8' 9"	0.1	1	Beam	67	3	8' 9"	0.1
46	3	8' 9"	0.1	1	Beam	68	3	8' 9"	0.1
47	3	8' 9"	0.1	1	Beam	69	3	8' 9"	0.1
48	3	8' 9"	0.1	1	Beam	70	3	8' 9"	0.1
49	3	8' 9"	0.1	1	Beam	71	3	8' 9"	0.1
50	3	8' 9"	0.1	1	Beam	72	3	8' 9"	0.1
51	3	8' 9"	0.1	1	Beam	73	3	8' 9"	0.1
52	3	8' 9"	0.1	1	Beam	74	3	8' 9"	0.1
53	3	8' 9"	0.1	1	Beam	75	3	8' 9"	0.1
54	3	8' 9"	0.1	1	Beam	76	3	8' 9"	0.1
55	3	8' 9"	0.1	1	Beam	77	3	8' 9"	0.1
56	3	8' 9"	0.1	1	Beam	78	3	8' 9"	0.1
57	3	8' 9"	0.1	1	Beam	79	3	8' 9"	0.1
58	3	8' 9"	0.1	1	Beam	80	3	8' 9"	0.1
59	3	8' 9"	0.1	1	Beam	81	3	8' 9"	0.1
60	3	8' 9"	0.1	1	Beam	82	3	8' 9"	0.1
61	3	8' 9"	0.1	1	Beam	83	3	8' 9"	0.1
62	3	8' 9"	0.1	1	Beam	84	3	8' 9"	0.1
63	3	8' 9"	0.1	1	Beam	85	3	8' 9"	0.1
64	3	8' 9"	0.1	1	Beam	86	3	8' 9"	0.1
65	3	8' 9"	0.1	1	Beam	87	3	8' 9"	0.1
66	3	8' 9"	0.1	1	Beam	88	3	8' 9"	0.1
67	3	8' 9"	0.1	1	Beam	89	3	8' 9"	0.1
68	3	8' 9"	0.1	1	Beam	90	3	8' 9"	0.1
69	3	8' 9"	0.1	1	Beam	91	3	8' 9"	0.1
70	3	8' 9"	0.1	1	Beam	92	3	8' 9"	0.1
71	3	8' 9"	0.1	1	Beam	93	3	8' 9"	0.1
72	3	8' 9"	0.1	1	Beam	94	3	8' 9"	0.1
73	3	8' 9"	0.1	1	Beam	95	3	8' 9"	0.1
74	3	8' 9"	0.1	1	Beam	96	3	8' 9"	0.1
75	3	8' 9"	0.1	1	Beam	97	3	8' 9"	0.1
76	3	8' 9"	0.1	1	Beam	98	3	8' 9"	0.1
77	3	8' 9"	0.1	1	Beam	99	3	8' 9"	0.1
78	3	8' 9"	0.1	1	Beam	100	3	8' 9"	0.1



BRIDGE OVER DRAINAGE DITCH NO.1
STATE ROAD FROM GIDEON EAST
ABOUT 5.05 MILES E. OF GIDEON
PROJECT NO. S-456 (5) (SC) STA. 389 + 54
NEW MADRID COUNTY

Drawn Mar. 1952 By D.B.
Traced Mar. 1952 By M.E.L.
Checked Mar. 1952 By A.A.B.

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

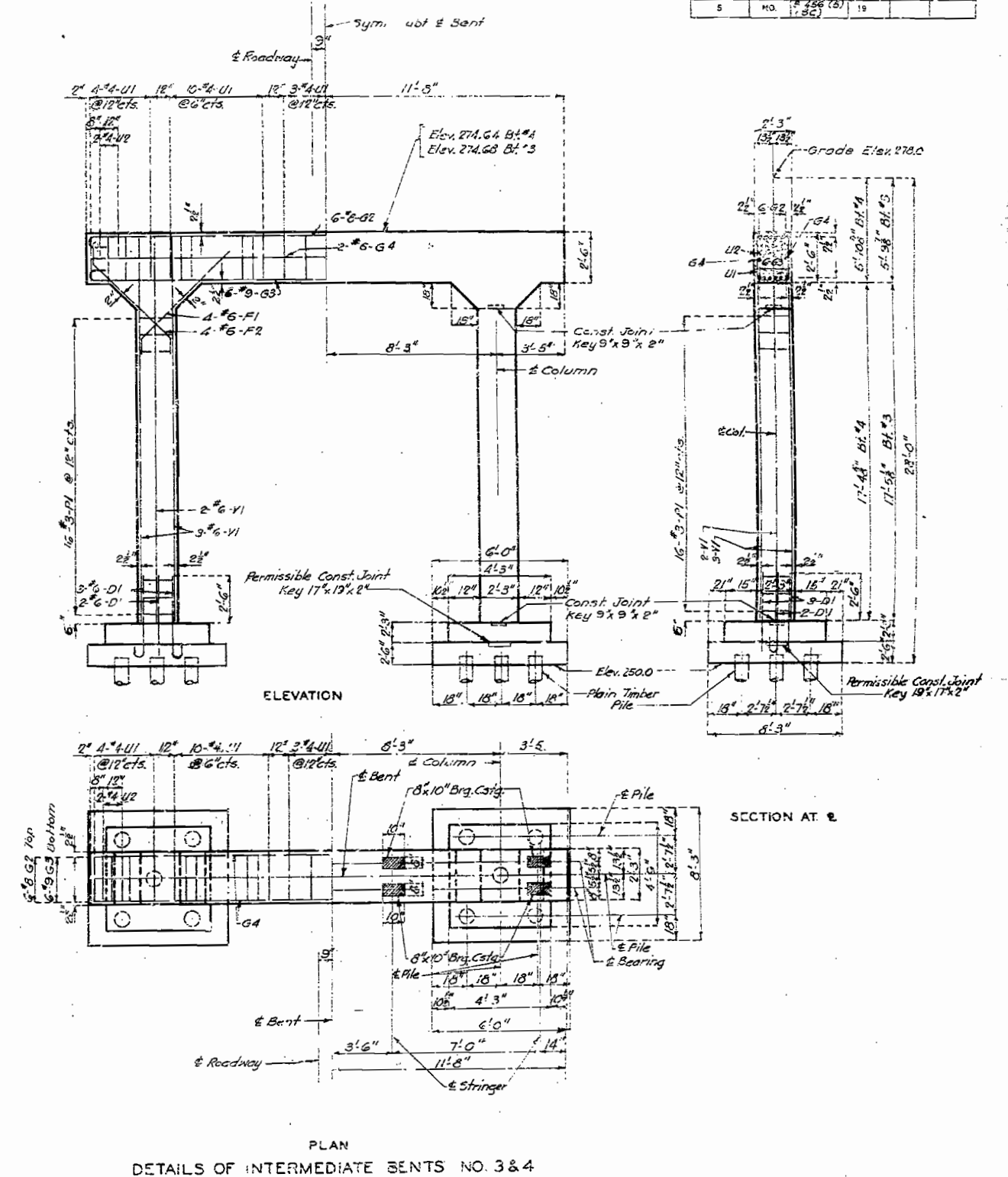
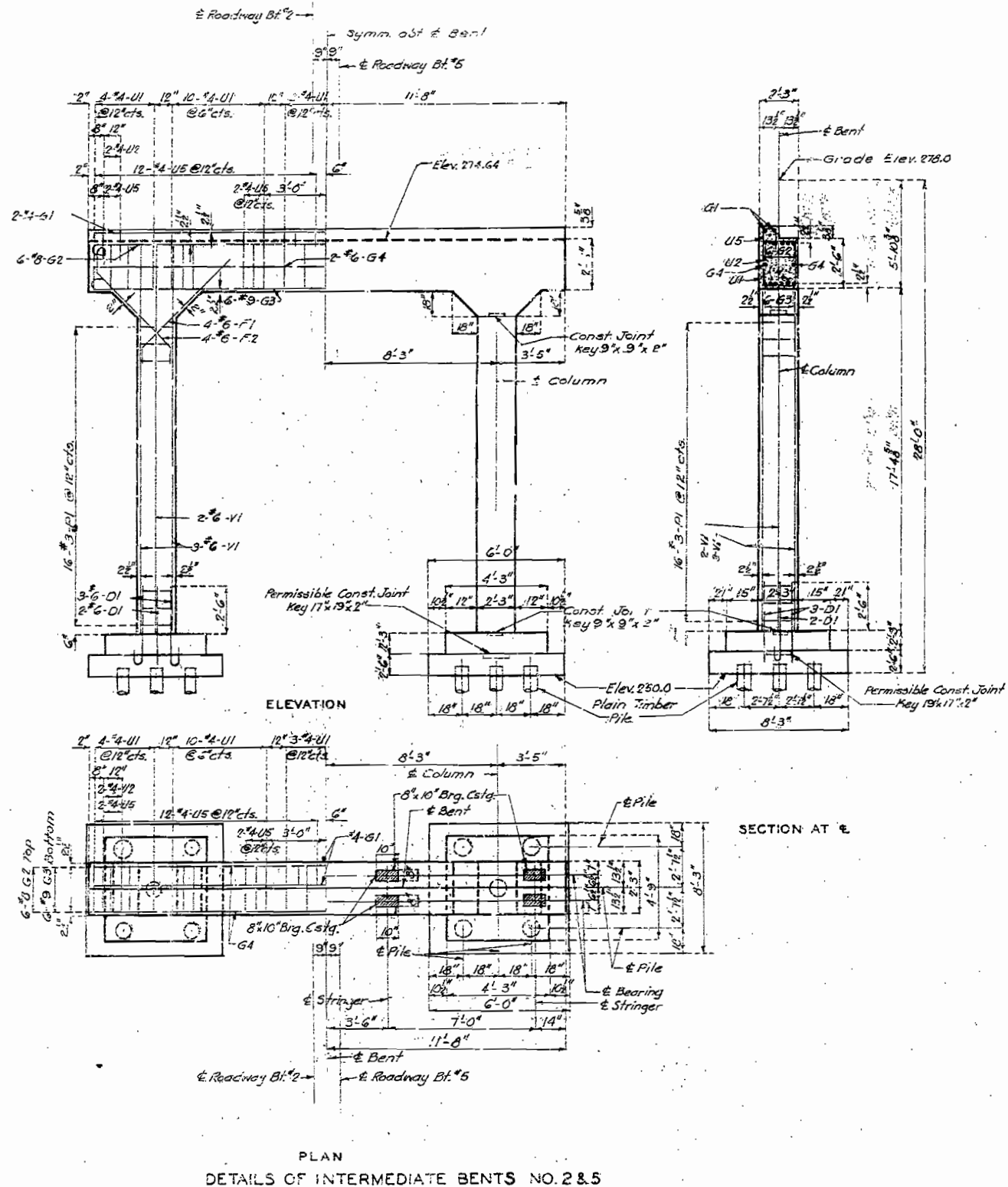
Sheet No. 2 of 5

L-454

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MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. A-D PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	156 (5) (SC)	19		



BRIDGE OVER DRAINAGE DITCH NO. 1

STATE ROAD FROM GIDEON EAST

ABOUT 5.05 MILES E. OF GIDEON

PROJECT NO. S-456 (5) (SC) STA. 369+54

NEW MADRID COUNTY

Assembled Mar. 1952 by D.B. & E.R.G.
Checked Mar. 1952 by A.A.B.

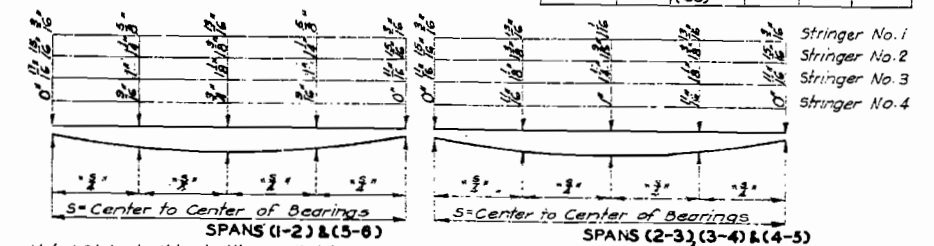
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 3 of 5

L-454

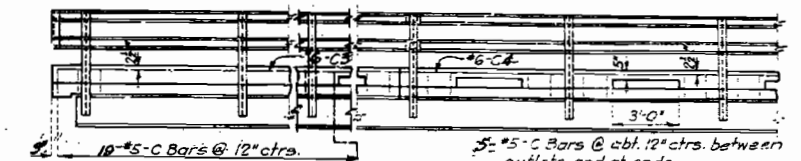
20x30 Con. Int. Square or Skewed

✓ Joint between spans



Note: Slab shall be built parallel to grade and to a minimum thickness of 6". Dead load deflection, vertical curve (if any) crown and any difference in depth of stringers shall be taken care of by haunching to stringers by the amounts shown above. This additional concrete is included in "Estimated Quantities".

SLAB HAUNCHING DIAGRAMS

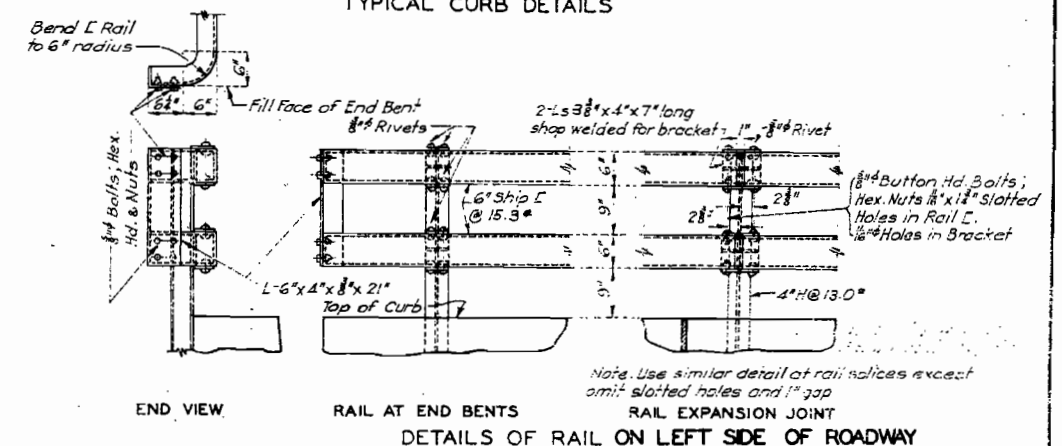


Note: Outlets to be centered between rail posts

END SPANS

INTERMEDIATE SPANS

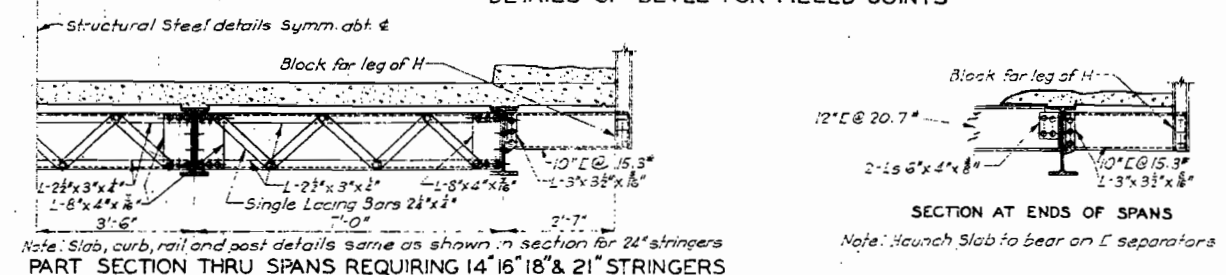
TYPICAL CURB DETAILS



Note: Detail of rail for right side similar except use 3 lines of 6" Es @ 15.3" spaced as shown in "Section thru spans."

Note: Use bevel as shown for exposed faces of all filled joints except at top surface of roadway slab. Use edging tool with $\frac{1}{2}$ " radius at top surface of roadway slab each side of joint and fill flush with joint seat as shown.

DETAILS OF BEVEL FOR FILLED JOINTS



Note: Slab, curb, rail and post details same as shown in section for 24" stringers
PART SECTION THRU SPANS REQUIRING 14" 16" 18" & 21" STRINGERS

SECTION AT ENDS OF SPANS

Note: Haunch Slab to bear on Γ separators

SECTIONS AT ENDS OF SPANS

BRIDGE OVER DRAINAGE DITCH NO. 1

STATE ROAD FROM GIDEON EAST

ABOUT 5.05 MILES E. OF GIDEON

PROJECT NO. S-456 (5) (SC) STA. 389+54

NEW MADRID COUNTY

5110-57

1-454

Drawn Mar 1952 By H.R.B.
Traced March 1952 By J.T.F.-K.R.W.
Checked Mar. 1952 By C.S.A.

SECTION THRU SPANS REQUIRING 24" 27" & 30" STRINGERS

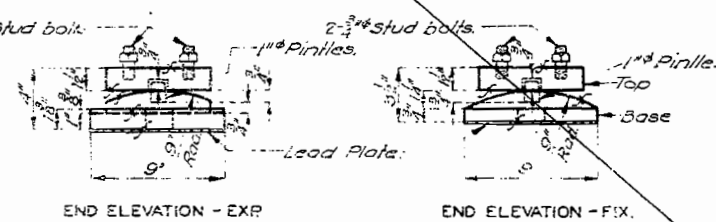
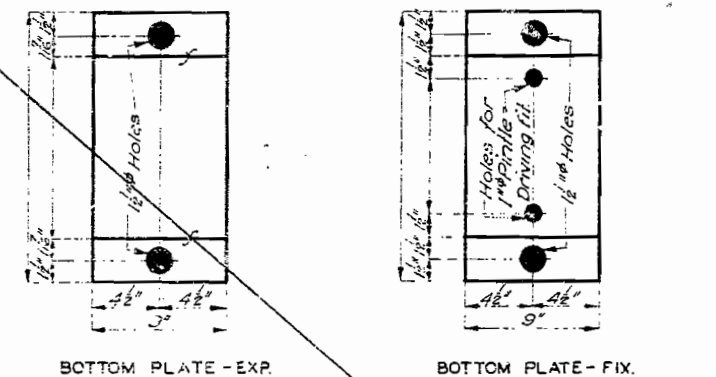
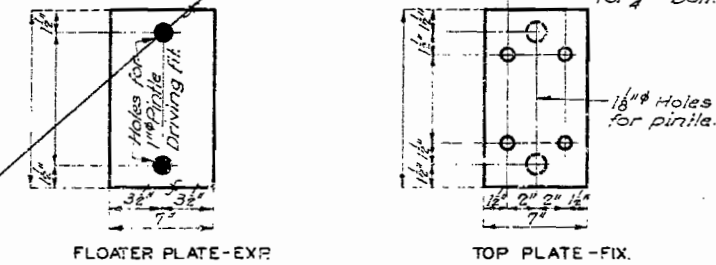
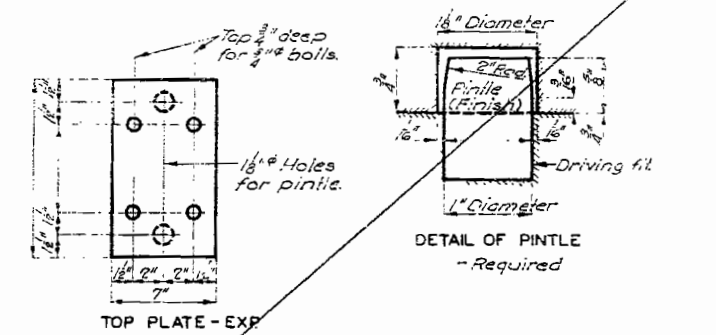
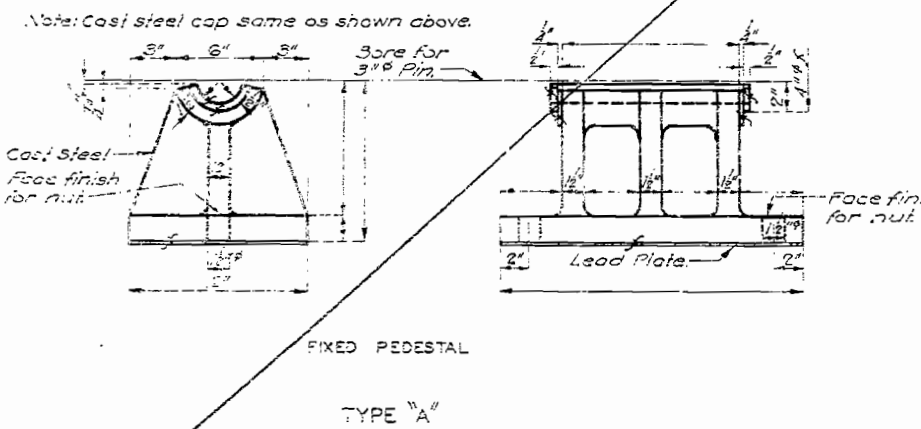
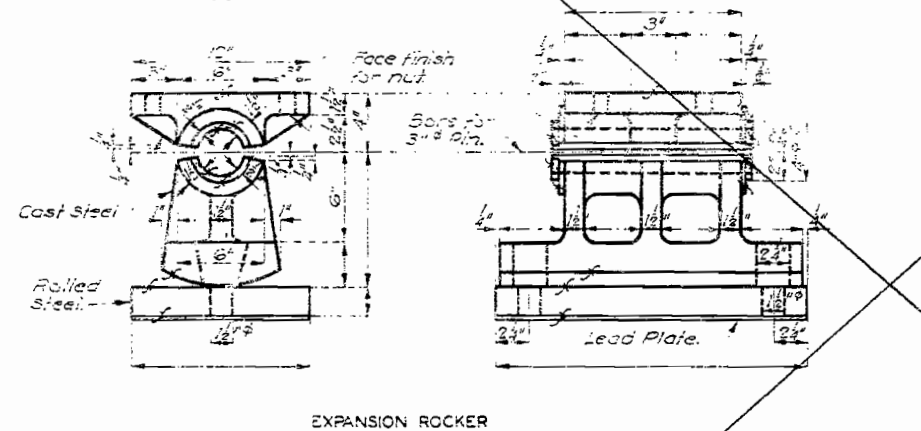
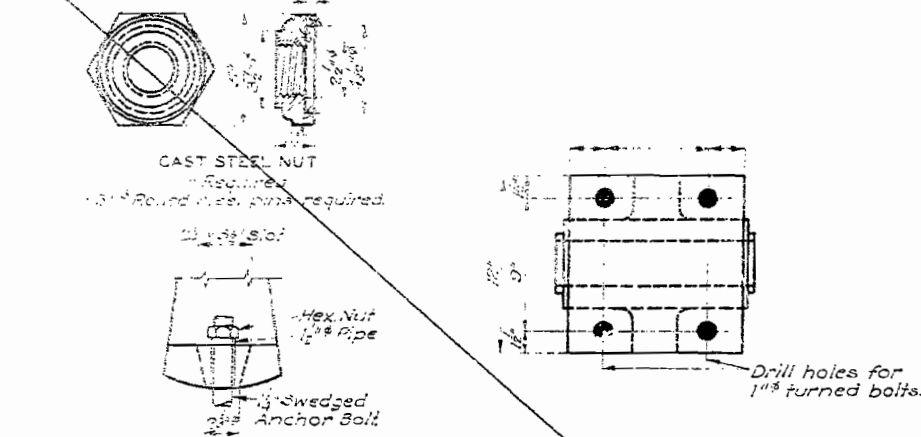
Note: This drawing is not to scale. Follow dimensions.

L-4"x3"x $\frac{3}{8}$ ", ground to bear top and bottom or welded to top & bottom flanges of beam with $\frac{3}{8}$ " continuous fillet weld along both sides and
27" & 30" STRINGERS

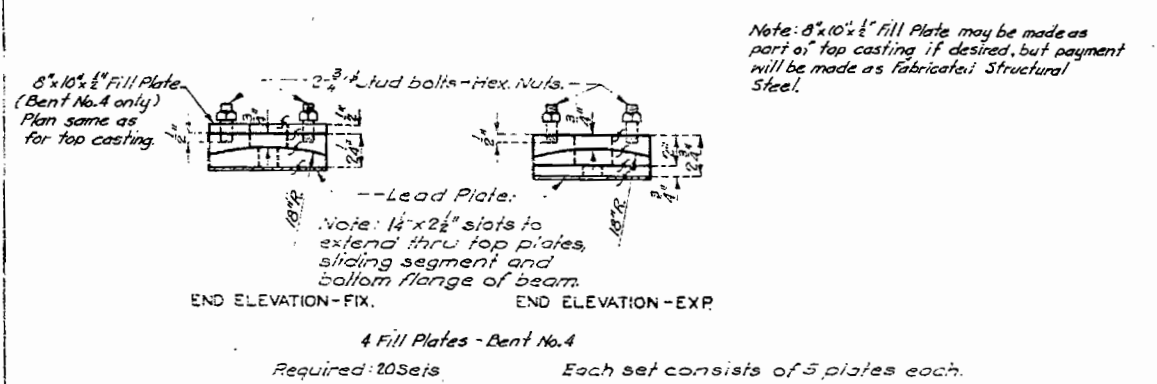
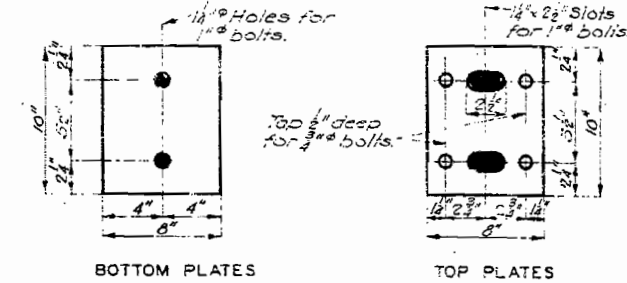
Sheet No 4 of 5.

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO	5-456 (5)	1952	19	



TYPE "B"



TYPE "C"

GENERAL NOTES:

Finish all surfaces marked F.

All fillets for Type "A" castings shall have 3/4" radius.

Material for Type "A" castings shall be Cast steel.

except as noted. Material for Type "B" and Type "C" castings shall be either gray iron alloy or cast steel but payment will be made as Gray Iron Alloy.

All pins, bolts, nuts, pipe sleeves, roller steel and pintles shall be paid for as Structural Steel.

Anchor bolts for Type "A" and Type "B" castings shall be 1/2" swedged bolts with Hex. nuts and shall extend 12" into concrete.

Anchor bolts for Type "C" castings shall be 1/2" swedged bolts, no heads or nuts and shall extend 10" into concrete. Top ends of anchor bolts shall be above the top of castings but not higher than 3/4" below the top surface of the bottom flange of beam.

Lead Plates under bearings shall be approximately 3/4" thickness and weigh 6" Sq. Ft. Cost of lead plates shall be included in price bid for other items.

DETAILS OF BEARING CASTINGS

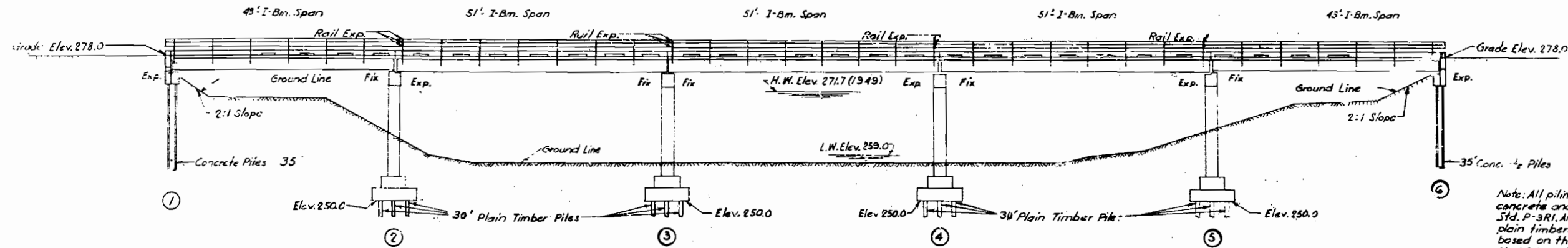
BRIDGE OVER DRAINAGE DITCH NO. 1

STATE ROAD FROM GIDEON EAST
ABOUT 5.05 MILES E. OF GIDEON
PROJECT NO. S-456 (5) (SC) STA. 389 + 54
NEW MADRID COUNTY

L-454

MISSOURI STATE HIGHWAY DEPARTMENT

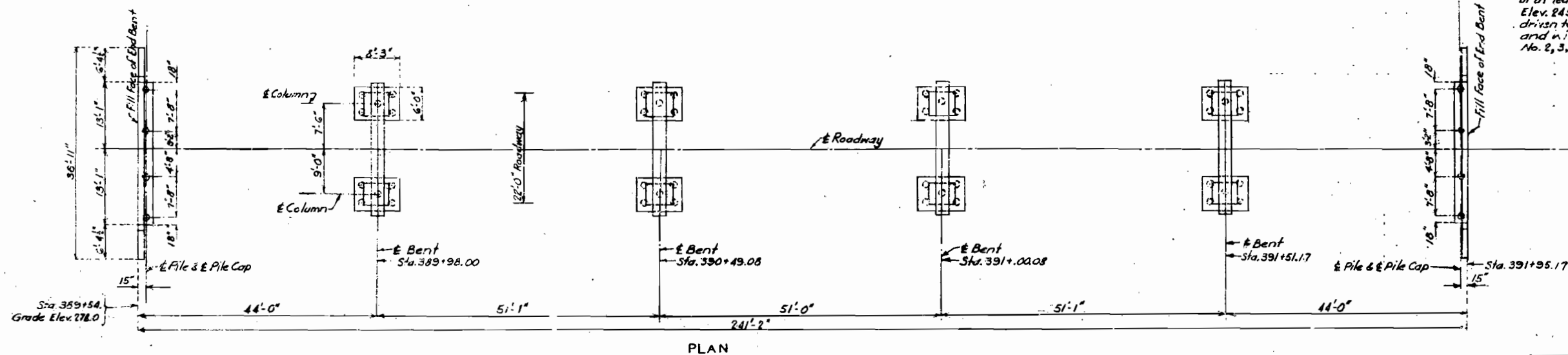
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	5-456(5) (SC)	19		



GENERAL ELEVATION

Note: All piling for Bents No. 1 & 6 shall be reinforced concrete and shall conform with details and notes on Std. P-3R1. All permanent piling for Bents 2, 3, 4 & 5 shall be plain timber. Actual quantities shown on plans are based on the following lengths: 8 @ 35'-0" for Bents No. 1 & 6 and 40 @ 30'-0" for Bents No. 2, 3, 4 & 5.

All concrete piles shall be driven to sustain a load of at least 30 ton per pile and with tips to at least Elev. 245.0 for Bents No. 1 & 6. All timber piles shall be driven to sustain a load of at least 20 ton per pile and with tips to at least Elev. 235.0 for Bents No. 2, 3, 4 & 5.



PLAN

FINAL QUANTITIES

Item	Substr.	Superstr.	Total
Class 1 Excavation for Structures	Cu.Yds. 148.5		148.5
Class 2 Excavation for Structures	Cu.Yds. 285.0		285.0
Class B Concrete	Cu.Yds. 119.2	149.9	269.1
Reinforcing Steel	Lbs. 10950		39970
Fabricated Structural Steel	Lbs.		150640
Gray Iron Alloy Castings	Lbs.		2140
Plain Timber Piles in place	Lin. Ft. 1195		1195
Plain Timber Pile Cut-Offs	Lin. Ft. 5		5
Concrete Piles in place	Lin. Ft. 264		264
Concrete Pile Cut-Offs	Lin. Ft. 16		16

Note: All bridge excavation made above Elev. 260.0 will be paid for as Class 1 Excavation for Structure.
All bridge excavation made below Elev. 260.0 will be paid for as Class 2 Excavation for Structures.
B.M. Elev. 276+27 N.I.S.S. 8" Sycamore 110' Lt. Sta. 389+50.

BRIDGE OVER DRAINAGE DITCH NO. 1

STATE ROAD FROM GIDEON EAST
ABOUT 5.05 MILES E. OF GIDEON
PROJECT NO. 5-456(5) (SC) STA. 389+54

NEW MADRID COUNTY

SUBMITTED BY: T. W. Enslin DATE: 4/3/1952

APPROVED BY: Ray M. Whitten DATE: 4/3/1952

FINISHED

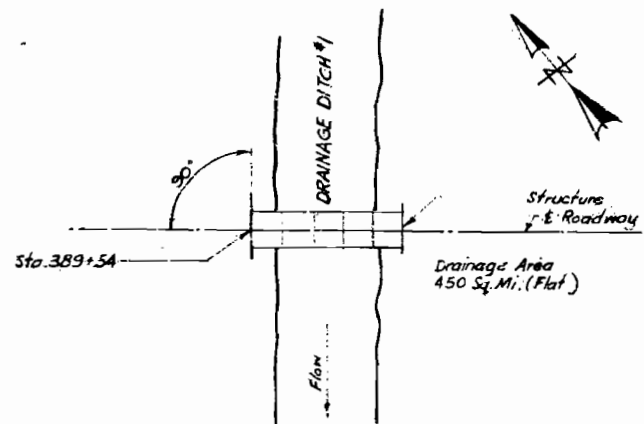
STD. P-3R1

STDC-10R3

L 454

GENERAL NOTES:

Design Specifications A.A.S.H.O. 1949
Loading H15-44
Structural Steel Stress 18,000 psi
Reinforcing Steel Stress 18,000 psi
Class "B" Concrete Stress 4,000 psi
All concrete shall be Class "B".
Where joint filler is specified on plans it shall conform with the requirements for Premoulded Material for Filler as given in Section 38-19 A(1) of the Standard Specifications.
Paint: Shop, none; field, contact surfaces of bolted field connections, one coat of red lead and surfaces inaccessible after erection three coats of red lead. No other paint to be applied by the Contractor. Red lead required to be furnished by the Contractor. Payment for cleaning and painting such surfaces will be included in unit price bid for structural steel.
Rivets: 3/4" Holes 3/4" except in handrail where rivets shall be 5/8" holes 1/2". Field connections shall be riveted except as noted in the handrail details, or if the Contractor desires to eliminate all field riveting on this project, he may substitute 3/4" turned b.lts for connections of diaphragms and handrail brackets to beams, and for connections of handrail post to handrail brackets. Button head b.lts will be required for field connections of 6" Ship Channel handrail. See special Provisions. Heads and nuts of turned bolts shall be American Standard Heavy.



LOCATION SKETCH

Drawn Mar. 1952 by B.R.G.
Checked Mar. 1952 by A.A.B.

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

Sheet No. 1A of 1.