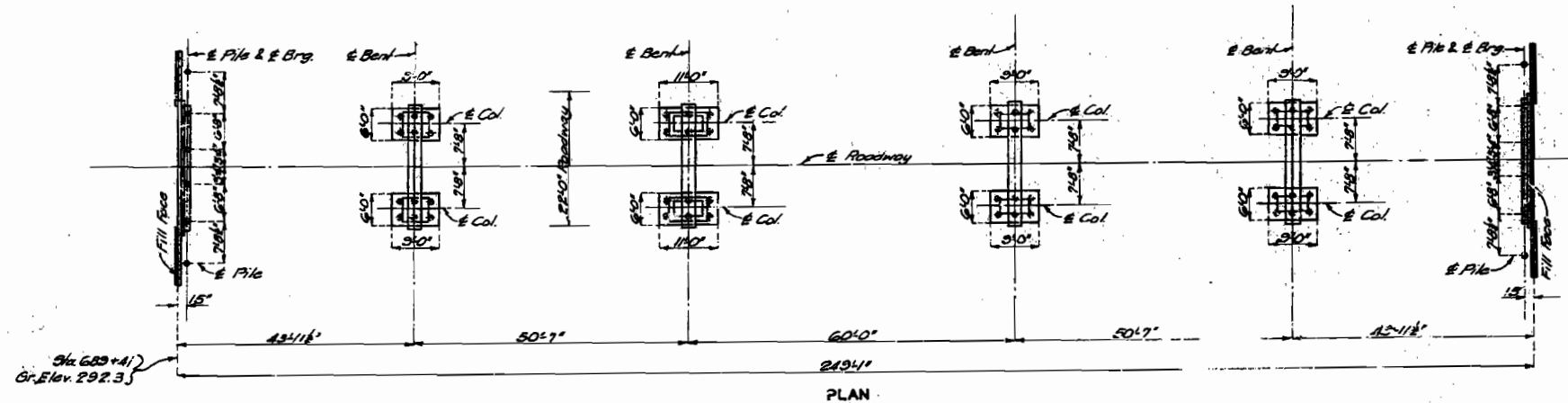
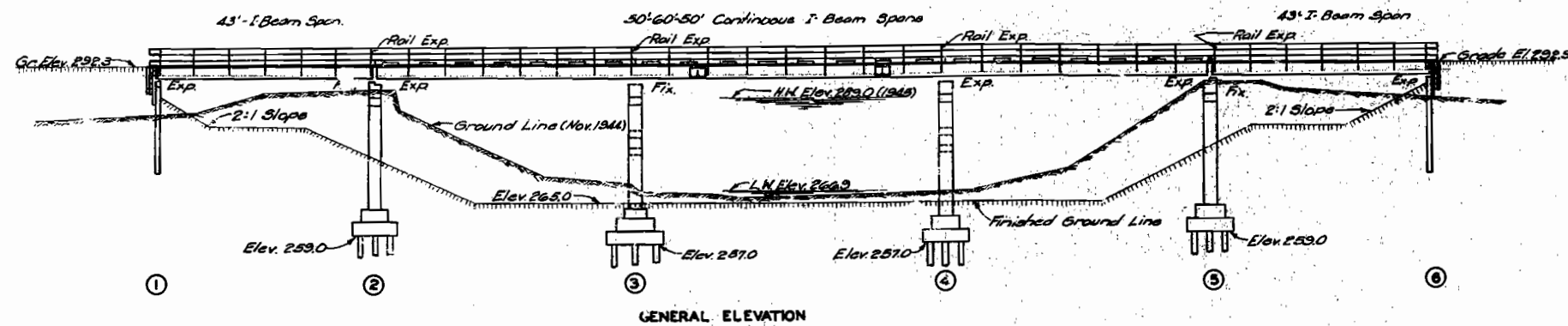


# MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO. 3-752(8)	19		



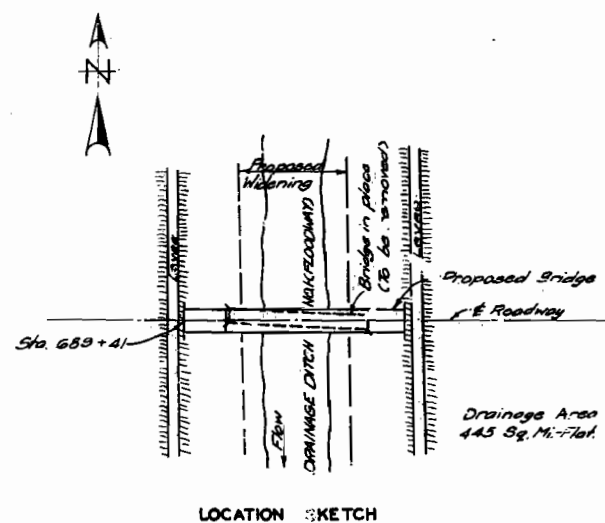
Note: Piling for and bents to be cross member.  
Piling for intermediate bents plain timber.  
Estimated Quantities shown on plans are based on the following lengths: End bents, 4 @ 13'-0", 8 @ 35'-0". Intermediate bents, 4 @ 30'-0". These indicated lengths are approximate only. Proper lengths to give required bearing and for penetration will be authorized by the Engineer. See Special Provisions.  
Three timber test piles shall be driven; one near Bent No. 1, one near Bent No. 3 and one near Bent No. 5.

DATA FOR PILE DRIVING		
Bent No.	1 & 6	2, 3, 4 & 5
Plan Capacity Per Pile	20.0 Ton	20.0 Ton
Computed Capacity Req'd. per Pile	17.2 Ton	20.0 Ton
Min. Penetration (Pile Tip Elev.)	260.0	220.0

Note: All wing piles shall be driven to full penetration of lengths given on plans. Piles other than wing piles shall be driven to not less than specified "Plan" capacities, and to the minimum penetrations noted; unless the pile lengths authorized and furnished fail to give "Plan" capacities in which cases not less than the "Computed" capacities shall be obtained.

## GENERAL NOTES:

Design Specifications A.A.S.H.O.-1344.  
Loading H-15 A.A.S.H.O.  
Structural Steel Stress 18,000  $\psi$ .  
Reinforcing Steel Stress 18,000  $\psi$ .  
Creosoted Timber Stress 1,600  $\psi$ .  
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 of Section 30-15 A(1) of the standard specifications for Primed Material for Filler.  
Qualifications of all welding operators and electricians will be required in accordance with specifications except that proper certification of electricians qualified after 1934 will be acceptable.  
Paint: Shop, sash, 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. Payment for cleaning and painting such surfaces will be included in unit price bid for fabricated structural steel.  
Rivets 3"  $\phi$ , holes 3"  $\phi$ , except as noted. Field connections shall be riveted except as noted.  
All timber shall be creosoted and shall be 1,600  $\psi$  Douglas Fir of the West Coast Region or either Longleaf or Shortleaf 1,600  $\psi$  Southern Yellow Pine.  
All timber shall be standard sawn except as noted in timber bill for pile caps.  
All timber shall be cut to billed lengths and shapes and shall be stored as shown before trucking. All backing plant are billed 6' long and are to be rescut and fitted in field.



ESTIMATED QUANTITIES			
Item	Subtotal	Success	Total
Class 1 Excavation for Structures	Cu Yds. 300		300
Class 2 Excavation for Structures	Cu Yds. 343		343
Class "B" Concrete	Cu Yds. 1364	1984	2738
Fabricated Structural Steel (State furnished)	Lbs. 143,360		143,360
Gray Iron Alloy Castings (State furnished)	Lbs. 1,720		1,720
Reinforcing Steel	Lbs. 12,520	85,010	97,530
Timber Piles In Place	Lin. Ft. 1,296		1,296
Timber Pile Cut-offs	Lin. Ft. 144		144
Creosoted Timber Piles In Place	Lin. Ft. 304		304
Creosoted Timber Pile Cut-offs	Lin. Ft. 36		36
Timber Test Piles	Lin. Ft. 183		183
Creosoted Timber	L.B.M. 2,110		2,110

Note: Excavation for bridge made above Elev. 269.0 will be paid for as Class 1 Excavation for Structures.  
Excavation for bridge made below Elev. 269.0 will be paid for as Class 2 Excavation for Structures.

B.M. #19 Elev. 271.35 N.I.P. 30" Cottonwood 28' Lt. Sta. 683+08.

## BRIDGE OVER DRAINAGE DITCH NO. 1 (FLOODWAY)

STATE ROAD FROM PARMA TO LILBOURN  
ABOUT 1.5 MILES WEST OF CATRON  
PROJECT NO. 3-752 (8) (SD) STA. 689+41  
NEW MADRID COUNTY

SUBMITTED BY J.W. Enns DATE 10/11/1947  
APPROVED BY C.W. Brown DATE 10/11/1947

STD-C110 B3  
L-224

Designed June 1947 by R.L.M.  
Drawn June 1947 by R.E.S.  
Traced June 1947 by J.N.N.  
Checked August 1947 by C.T.R.

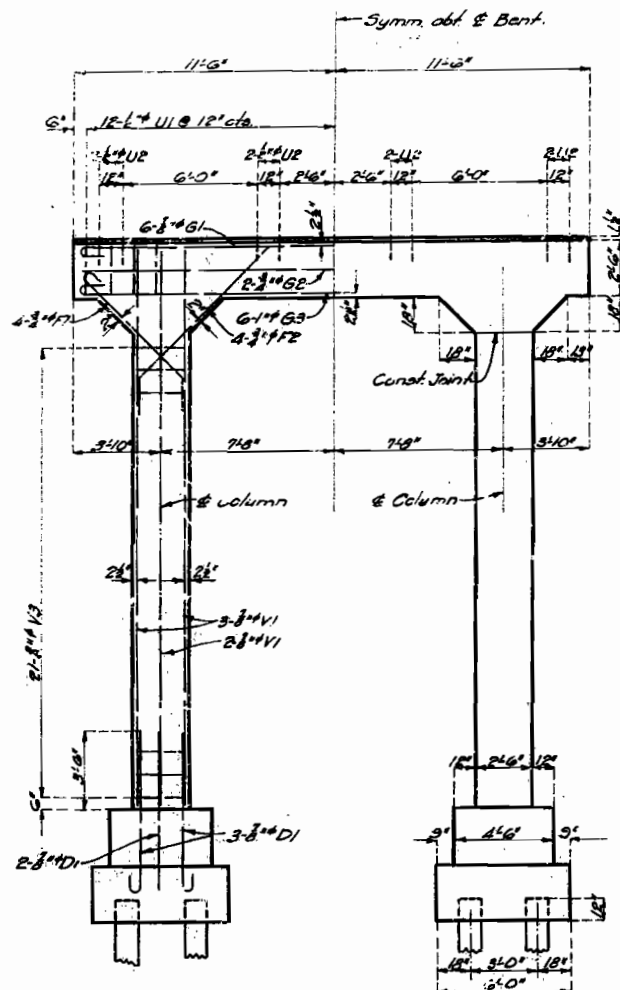
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 1 of 5.

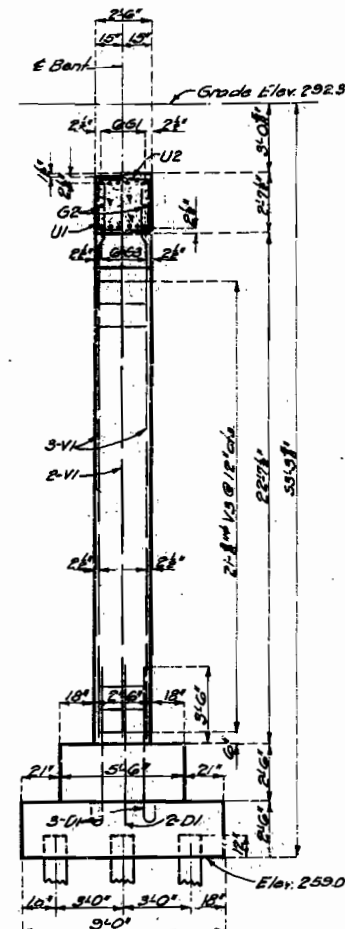


# MISSOURI STATE HIGHWAY DEPARTMENT

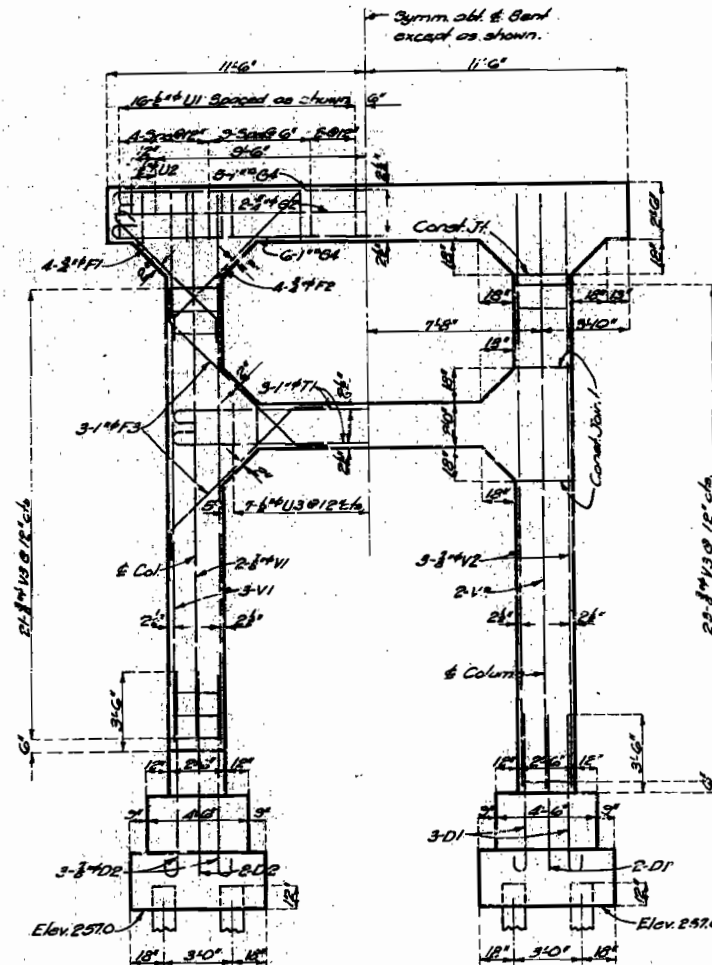
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	5-72(6)SD	19		



ELEVATION



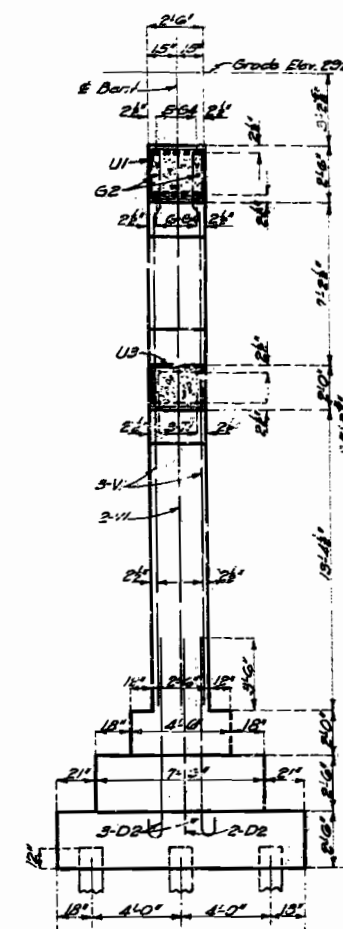
SECTION AT E



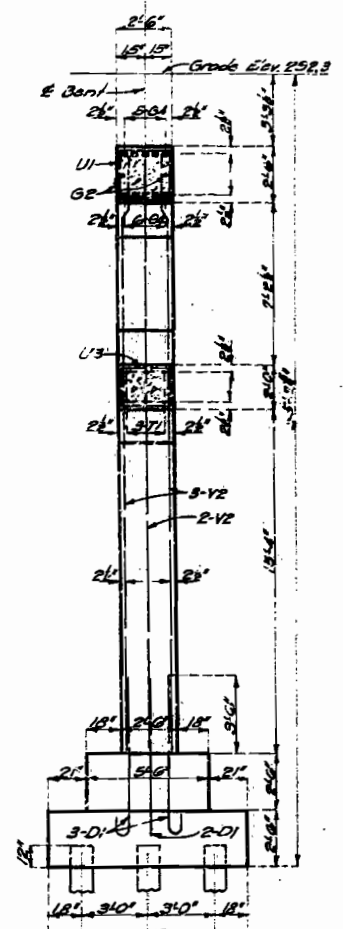
FOR BENT NO. 3

FOR BENT NO. 4

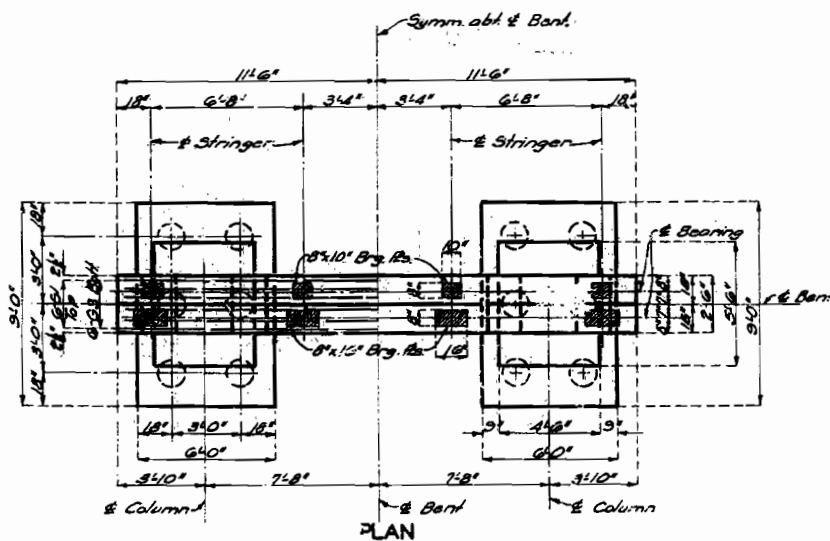
ELEVATION



SECTION AT E FOR BENT NO. 3

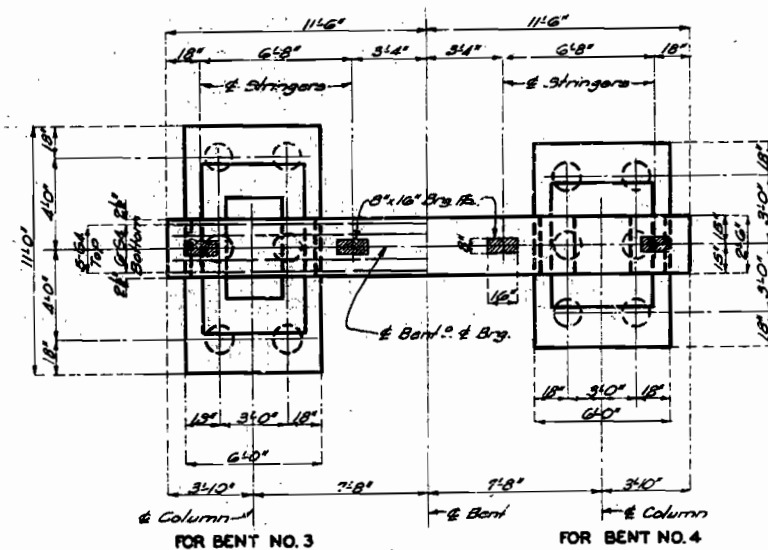


SECTION AT E BENT NO. 4



PLAN

DETAILS OF INTERMEDIATE BENTS NO. 2 & 5.



FOR BENT NO. 3

FOR BENT NO. 4

PLAN

DETAILS OF INTERMEDIATE BENTS NO. 3 & 4.

## BRIDGE OVER DRAINAGE DITCH NO. 1 (FLOODWAY)

STATE ROAD FROM FARMA TO LILBOURN

ABOUT 1.5 MILES WEST OF CATRON

PROJECT NO. 5-752 (6) (SD) ST. 438+41

NEW MADRID COUNTY

Designed May 1947 by R.L.M.  
Drawn May 1947 by R.L.M.  
Traced June 1947 by J.N.N.  
Checked August 1947 by G.S.R.

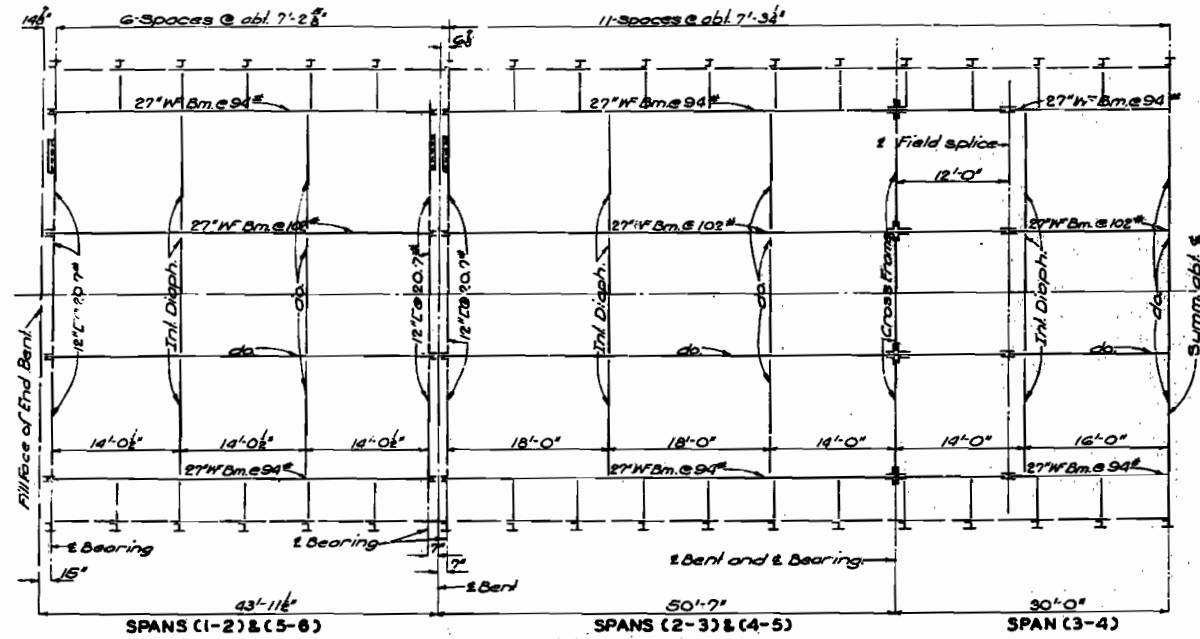
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 3 of 3

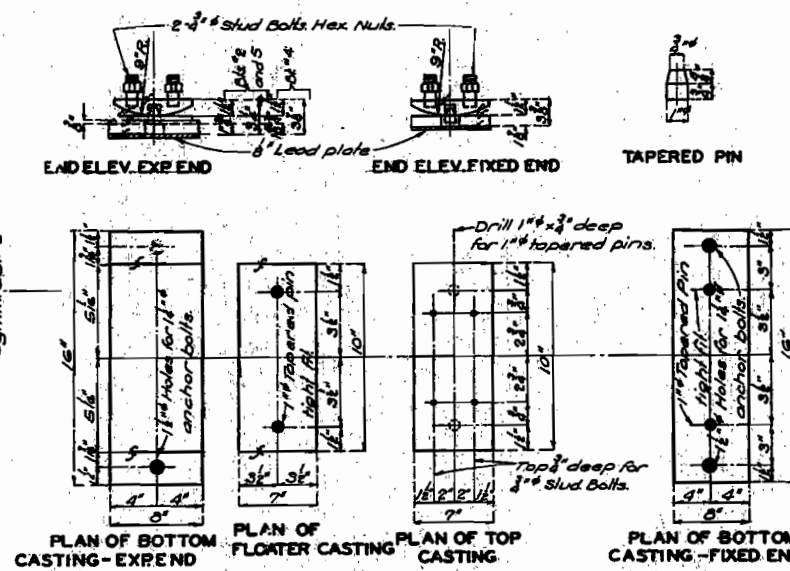
L-224

# MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	5-752 (6) (SD)	19		

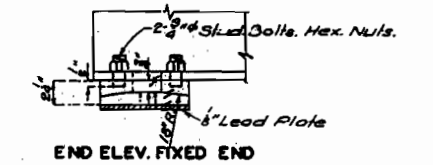


HALF PLAN OF STRUCTURAL STEEL



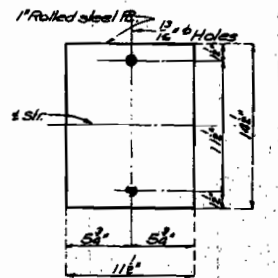
DETAILS OF BEARING CASTINGS FOR CONTINUOUS SPANS

Required: 12 Sets of Expansion castings.  
4 Sets of Fixed castings.



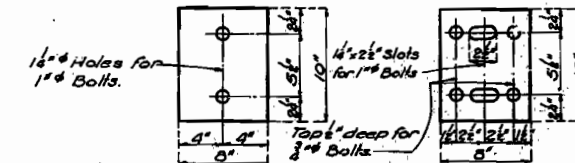
END ELEV. FIXED END

Note: 1/4" x 2 1/2" Slots to extend thru sliding segment and bottom flange of beam.



DETAIL OF BEARING PLATES FOR END BENTS

Note: All bearing plates shall be straightened to plane surface.

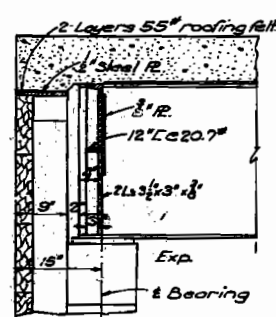


DETAILS OF BEARING PLATES

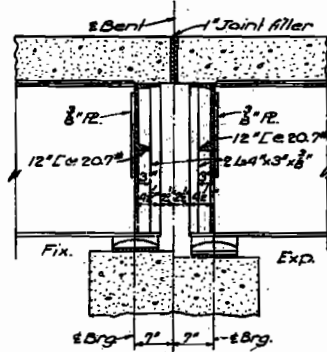
Required: 8 Sets of 2 plates each.

DETAILS OF BEARING PLATES

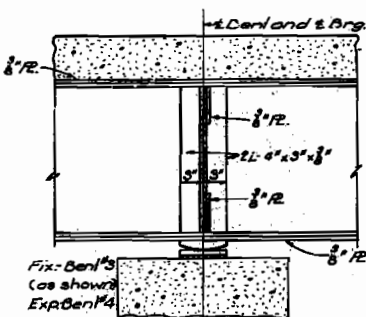
Note: Bearing castings shall be either cast steel or gray iron alloy. Finish all surfaces marked X. All finished surfaces shall be coated with white lead and tallow. See Specifications for field coating. Stud bolts and nuts and tapered pins shall be paid for as structural steel. Anchor bolts for 8" x 10" castings shall be 1" x 3" swaged bolts, no heads or nuts and are to extend 10" into concrete. Top ends of anchor bolts shall be above the top of the castings but not higher than 1" below top surface of bottom flange of beam. Anchor bolts for 8" x 16" castings shall be 1 1/2" x 3" swaged bolts, Hex nuts and shall extend 12" into concrete. Cost of lead plates shall be included in price bid for other items.



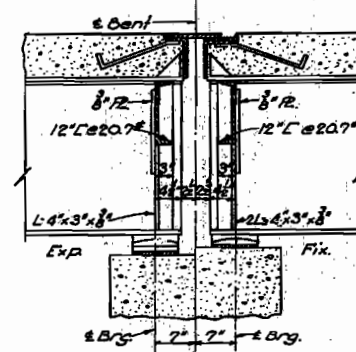
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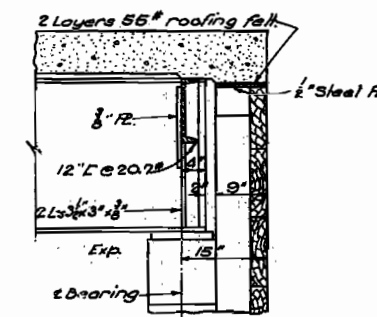
2



3 & 4

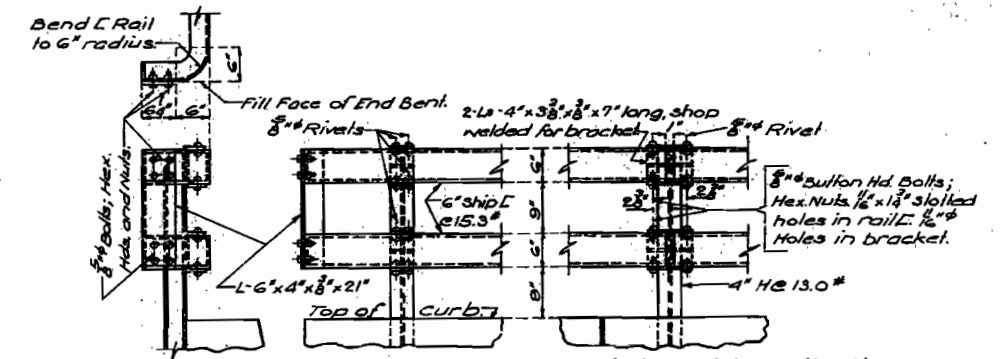


5



6

Note: All stiff angles to be ground to bear top and bottom.  
PART LONGITUDINAL SECTION



END VIEW

RAIL AT END BENTS

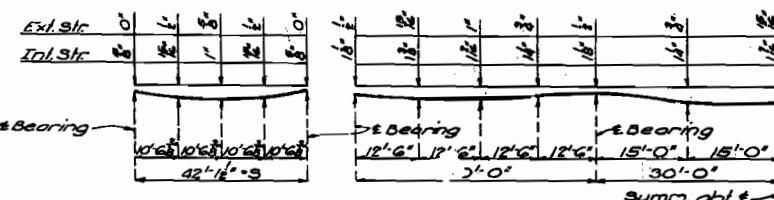
RAIL EXPANSION JOINT

DETAILS OF RAIL

## BRIDGE OVER DRAINAGE DITCH NO. 1 (FLOODWAY)

STATE ROAD FROM PARMA TO LILBOURN  
ABOUT 1.5 MILES WEST OF CATRON  
PROJECT NO. 5-752 (6) (SD) STA. 689+41

NEW MADRID COUNTY



APPROACH SPANS

CONTINUOUS SPANS

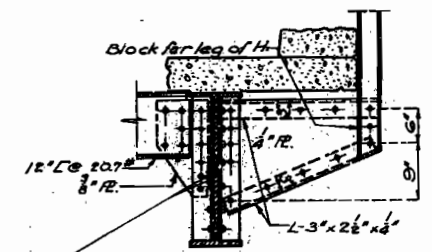
Note: Slab shall be built parallel to grade and to a uniform thickness of 6". Dead load deflection and crown shall be taken care of by haunching to stringers by the amounts shown above. This additional concrete is included in Estimated quantities.

SLAB HAUNCHING DIAGRAMS



Note: Use bevel as shown for exposed faces of all joints consisting of joint filler except of top surface of roadway slab. Use edging tool with 3" radius at top surface of roadway slab each side of joints and fill flush with joint seal as shown.

DETAILS OF BEVEL FOR FILLED JOINTS



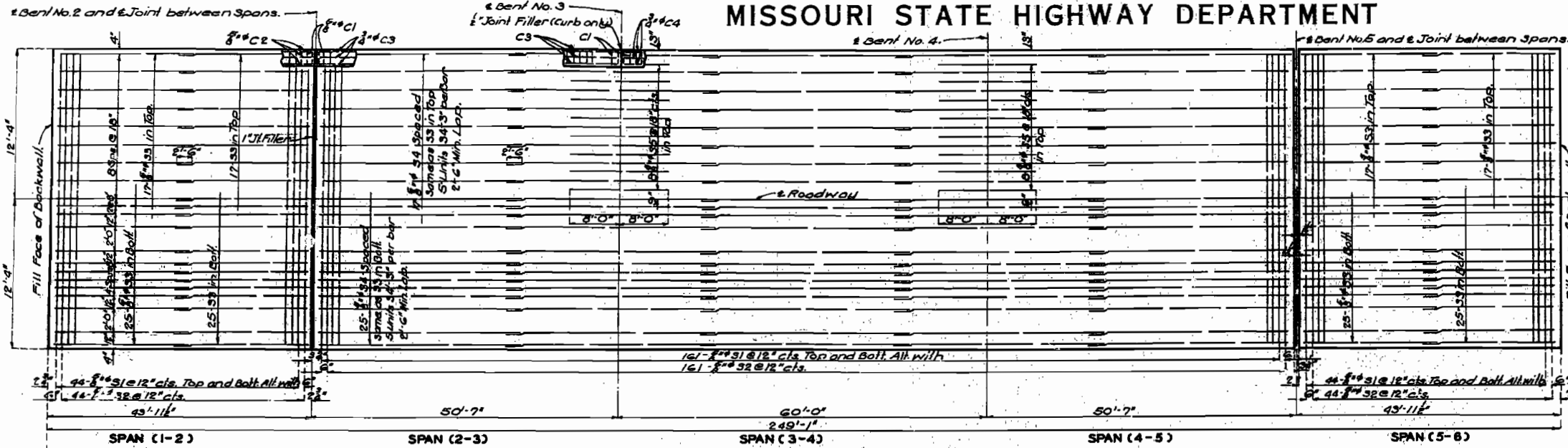
Block for leg of H.  
12" I 20.7"  
1/2" steel  
4" HE 13.0"  
3" stiff angle ground to bear top and bottom or welded to top and bottom flanges of beam with 8" continuous filler weld along both sides and edge of O.S. leg.

SECTION AT ENDS OF SPANS

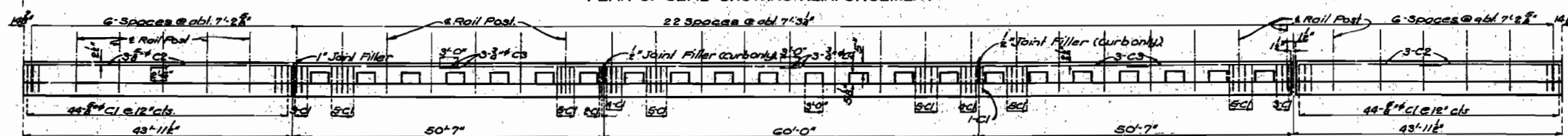


# MISSOURI STATE HIGHWAY DEPARTMENT

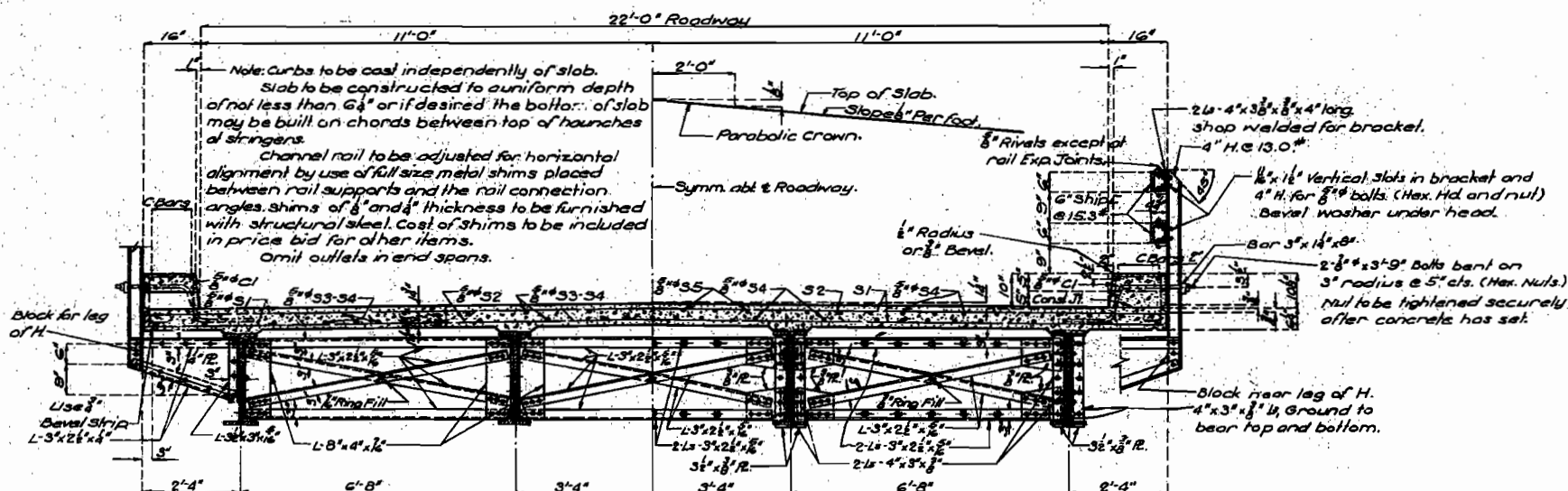
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	S-752 (6) (SD)	19		



PLAN OF SLAB SHOWING REINFORCEMENT

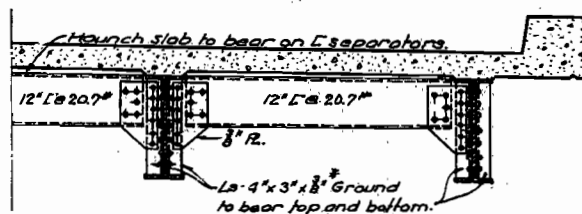


ELEVATION OF CURB



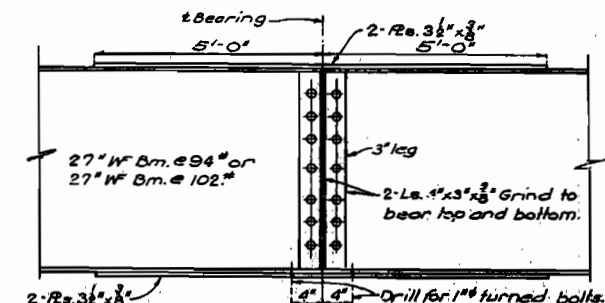
TYPICAL HALF SECTION NEAR INT. DIAPHRAGM

HALF SECTION AT BENTS NO. 3 & 4

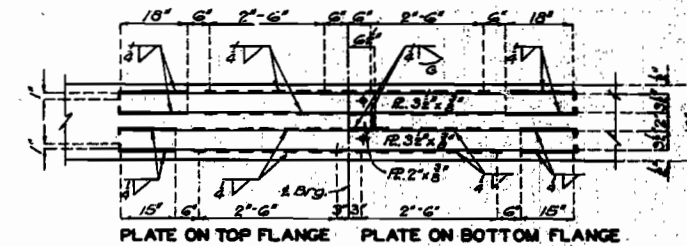


PART SECTION SHOWING END DIAPHRAGM

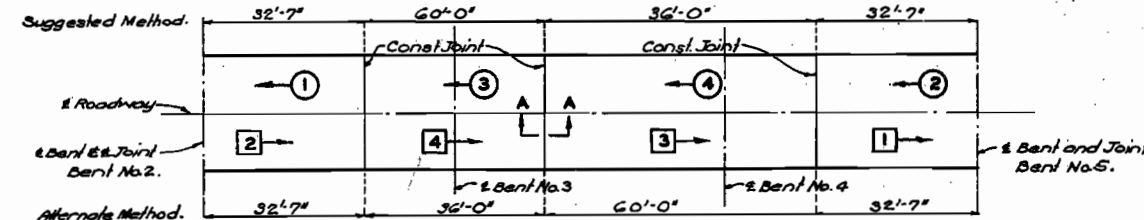
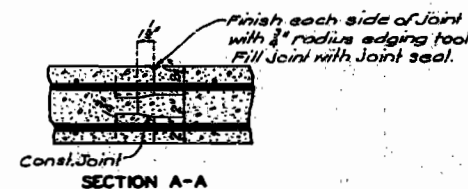
\* Use 6 #5 @ 3' x 8" at end bents.



DETAIL OF STIFFENER ANGLES AT BEARINGS-BENT NO. 3 & 4

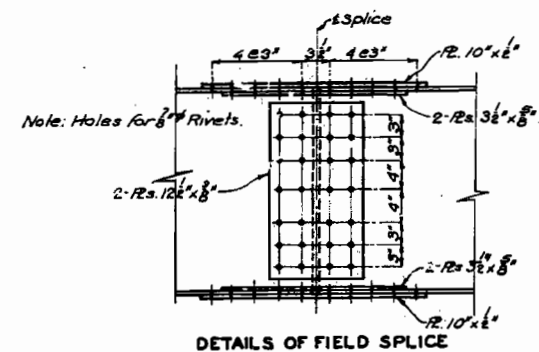


WELDING DETAILS FOR COVER PLATES OVER BENTS NO. 3 & 4



Note: The slab will be poured in sections of the size shown above and in the sequence indicated by the numbers 1, 2, 3, 4 or as an alternate by the numbers 1, 2, 3, 4. The separate pours shall progress in the direction indicated by the arrows. Longitudinal construction joints will not be permitted.

SLAB POURING SEQUENCE FOR CONTINUOUS SPANS



DETAILS OF FIELD SPLICE

## BRIDGE OVER DRAINAGE DITCH NQ(CFLOODWAY)

STATE ROAD FROM P. RMA TO L. BOURN  
ABOUT 1.5 MILES WEST OF CATRON  
PROJECT NO. S-752 (6) (SD) STA. 889+41  
NEW MADRID COUNTY

FINISHED

FINISHED

FINISHED

Designed May 1947 by R.L.M.  
Drawn June 1947 by R.E.S.  
Traced June 1947 by K.R.W.  
Checked Aug. 1947 by C.S.P.

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

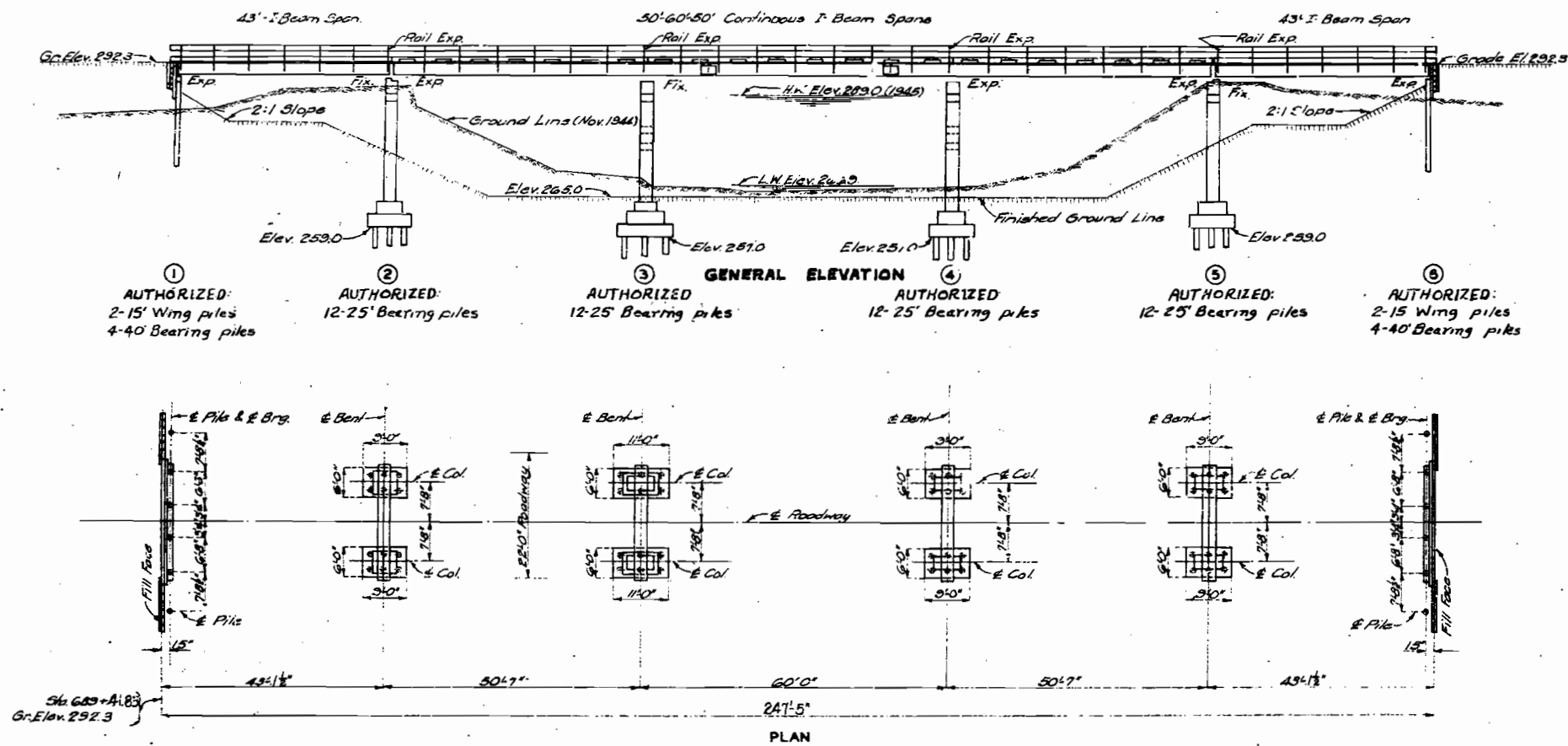
Sheet No. 5 of 5

L-224

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	Mo.	S-752 (6) (SD)	19		

FINAL PLANS



Note: Piling for and bents to be creosoted timber.  
Piling for intermediate bents to be plain timber.  
Estimated Quantities shown on plans are based on the following lengths: End bents, 4 @ 15'-0", 8 @ 35'-0". Intermediate bents, 4 @ 30'-0". These indicated lengths are approximate only. Proper lengths to give required bearing and for penetration will be authorized by the Engineer. See Special Provisions.  
Three timber test piles shall be driven, one near Bent No. 1, one near Bent No. 3 and one near Bent No. 5.

DATA FOR PILE DRIVING		
Bent No.	1 & 6	2, 3, 4 & 5
Plan Capacity Per Pile	20.0 Ton	20.0 Ton
Computed Capacity Per Pile	17.2 Ton	20.0 Ton
Min. Penetration (Pile Tip Elev.)	260.0	240.0

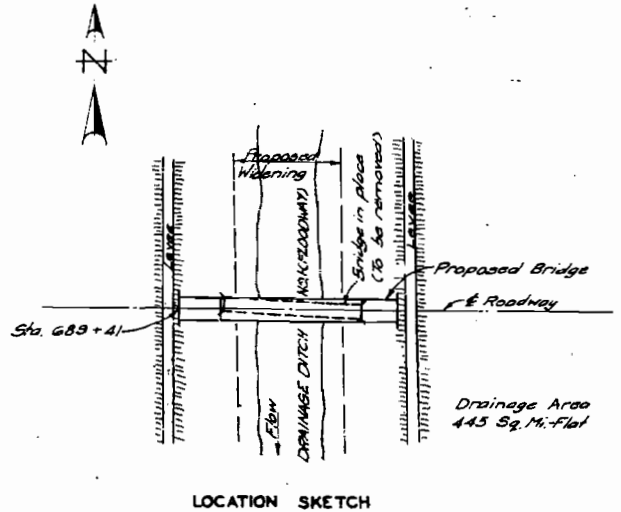
Note: All wing pile shall be driven to full penetration of lengths given on plans. Piles other than wing piles shall be driven to not less than specified "Plan" capacities, and to the minimum penetrations noted, unless the pile lengths authorized and furnished fail to give "Plan" capacities in which cases not less than the "Computed" capacities shall be obtained.

GENERAL NOTES:

Design Specifications A.A.S.H.O. - 1944.  
Loading H-15 A.A.S.H.O.  
Structural Steel Stress 18,000 psi.  
Reinforcing Steel Stress 18,000 psi.  
Creosoted Timber Stress 1,600 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 of Sec. 38-13 A(1) of the standard specifications for Paved Materials for Filler.  
Qualifications of all welding operators and electrodes will be required in accordance with specifications except that a proper certification of electrodes qualified after 1944 will be acceptable.  
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. Payment for cleaning and painting such surfaces will be included in unit price bid for Fabricated Structural Steel.  
Rivets 3/4", holes 1/2", except as noted. Field connections shall be riveted except as noted.  
All timber shall be creosoted and shall be 1600 psi Douglas Fir of the West Coast Region or either Longleaf or Shortleaf 1600 psi Southern Yellow Pine.  
All timber shall be standard sawn except as noted in timber bill for pile caps.  
All timber shall be cut to billed lengths and shapes and shall be bored as shown before treating. All backing plank are billed 6' long and are to be recut and fitted in field.

FINAL QUANTITIES			
Item	Subtotal	Supers	Total
Class 1 Excavation for Structures	Cu. Yds. 309.0		309.0
Class 2 Excavation for Structures	Cu. Yds. 331.5		331.5
Class "B" Concrete	Cu. Yds. 185.4	137.6	323.0
Fabricated Structural Steel (State Furnished)	Lbs. 142,600		142,600
Gray Iron Alloy Castings (State Furnished)	Lbs. 1,790		1,790
Reinforcing Steel	Lbs. 11,712	3,928	15,640
Timber Piles In Place	Lin. Ft. 440		440
Timber Pile Cut-offs	Lin. Ft. 260		260
Creosoted Timber Piles In Place	Lin. Ft. 311		311
Creosoted Timber Pile Cut-offs	Lin. Ft. 69		69
Timber Test Piles	Lin. Ft. 145		145
Creosoted Timber	F.B.M. 2,110		2,110

Note: Excavation for bridge made above Elev. 265.0 will be paid for as Class 1 Excavation for Structures.  
Excavation for bridge made below Elev. 265.0 will be paid for as Class 2 Excavation for Structures.



B.M. #13 Elev. 271.33 N.T.R. 30" Cottonwood 28" Lt. Sta. 693+08.  
**BRIDGE OVER DRAINAGE DITCH NO. 1 (FLOODWAY)**  
STATE ROAD FROM PARMA TO LILBOURN  
ABOUT 1.5 MILES WEST OF CATRON  
PROJECT NO. S-752 (6) (SD) STA. 689+41  
**NEW MADRID COUNTY**

SUBMITTED BY J.W. Enslin DATE 10/1/1947  
APPROVED BY C.W. Brown DATE 10/1/1947  
BRIDGE ENGINEER  
CHIEF ENGINEER

STR-C110 R3  
L-224

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

Sheet No. 1 of 5

FINAL PLANS

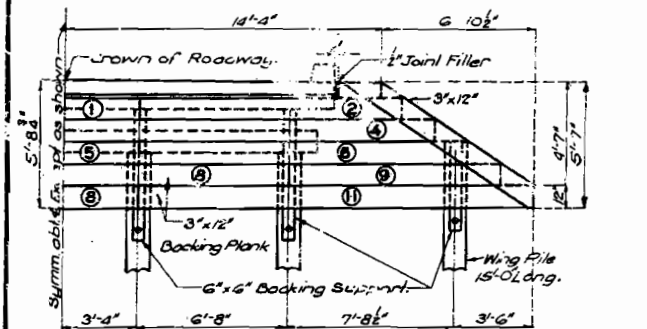
292

Designed June 1947 by R.L.M.  
Drawn June 1947 by R.E.S.  
Traced June 1947 by J.H.N.  
Checked August 1947 by C.S.A.

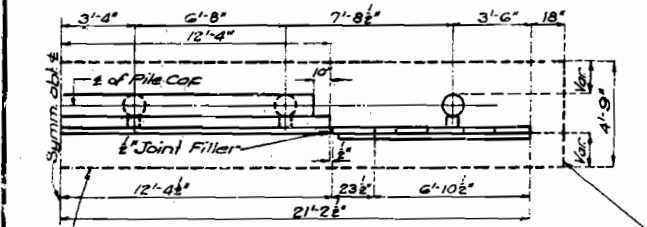
# MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	3-773(2) (4)	19		

## FINAL PLANS



HALF ELEVATION



HALF PLAN

5x12x24" Steel Plate.  
18-8x4" Long Screws  
@ 18" c/c, staggered.

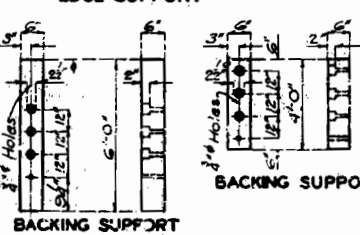
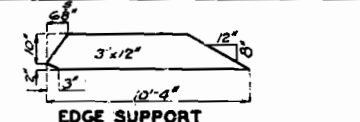
3x12" Backing Plank  
6x6x6x6" Backing Support.

Note: Any irregularity in alignment of piling in end bents to be corrected by facing one surface of the 6x6" backing support so as to place the surfaces of the backing in a true plane and eliminate any strain on the backing. Splice in backing plank to be made 1/2" center of 6" x 6" backing support and to be alternated as shown.

SECTION THRU END BENT NEAR E

TIMBER BILL FOR END BENT				
Piece	No.	Size	Length	Remarks
Backing Plank	1	3"x12"	19'-0"	Cut to length
"	2	3"x12"	12'-5"	"
"	3	3"x12"	13'-11"	"
"	4	3"x12"	20'-6"	"
"	5	3"x12"	22'-0"	"
"	6	3"x12"	12'-5"	"
"	7	3"x12"	17'-11"	"
"	8	3"x12"	13'-10"	"
"	9	3"x12"	10'-2"	"
"	10	3"x12"	11'-9"	"
"	11	3"x12"	8'-4"	"
Shoulder Plank	2	3"x12"	23'	"
Edge Support	2	3"x12"	10'-4"	Cut to length & shape
Backing Support	4	6"x6"	6'-0"	"
"	2	6"x6"	4'-0"	"
Backing Support Cap	1	6"x6"	24'-8"	Cut to length
Pile Cap	1	12"x12"	22'-6"	"

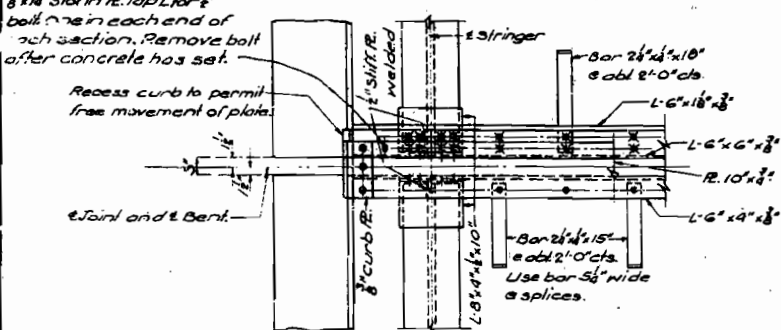
Shaping and Boring Sketches.



PILE CUT-OFF ELEVATION	
Bents No. 1 and No. 6	Cut-off Elev.
Bearing Piles	288.39
Wing Piles	289.57

Note: Pile caps to be classified as Beams and Stringers.  
All other timber to be classified as Joists and Plank.  
\* 325 to exact depth of 112.

DETAILS OF END BENTS NO. 1 & NO. 6



PART PLAN

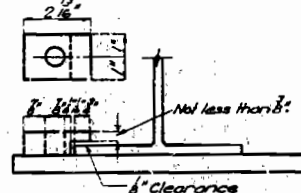
DETAILS OF EXPANSION DEVICE - BENT NO. 5

Expansion device shall be fabricated in three sections to splice of 8"x4" angles on intermediate stringers, and shall be bent to conform to crown of roadway.

PART SECTION

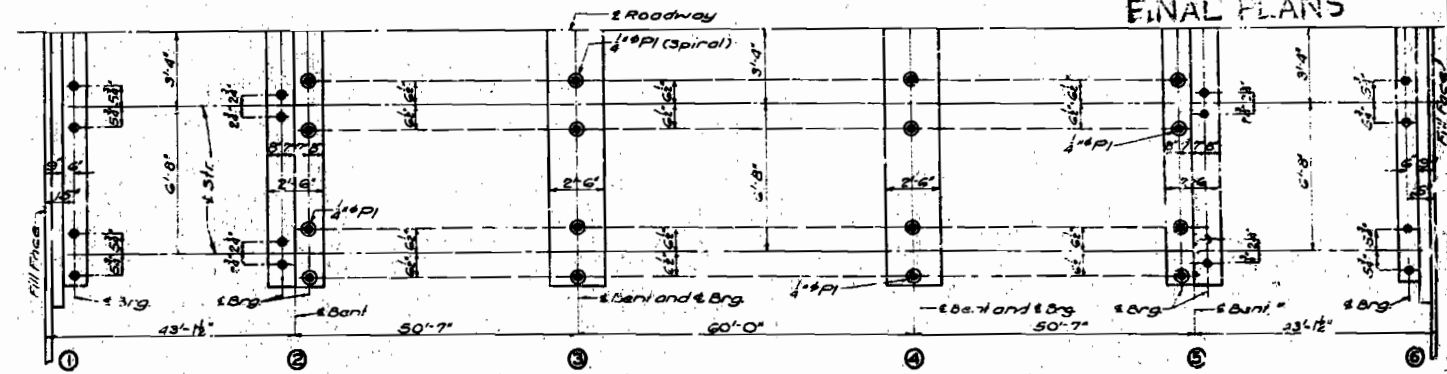


CAP PLATE



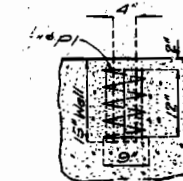
Note: Cast iron clamps used on bearing plates to have 1/2" clearance of flange of beam to allow for expansion. All clamps to have 3/8" bored holes.

DETAILS OF FLANGE CLAMP



HALF ANCHOR BOLT PLAN

Note: Grout for anchor bolts shall be of Iron Wide Cement (Embeco or an approved equivalent).

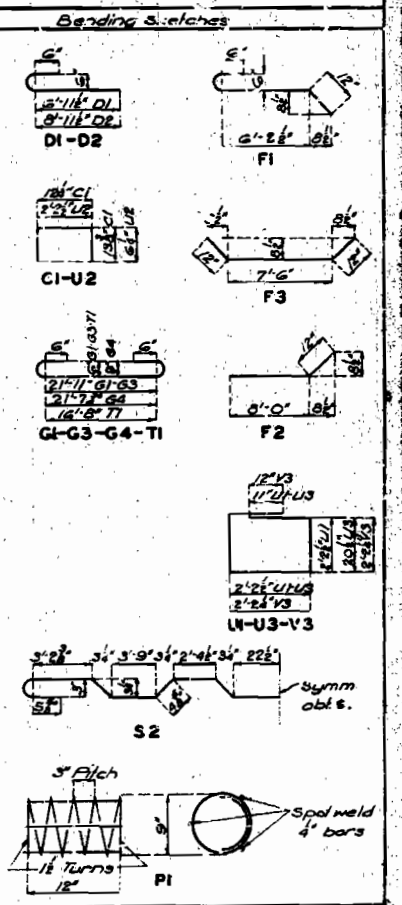


Note: Holes for all 1/2" anchor bolts shall be formed in substructure by placing and setting with template 4"x6" wells of depth shown above.

PART SECTION SHOWING ANCHOR

COMPLETE BILL OF REINFORCING STEEL

No.	Size	Length	Max. Location	Bending Sketches
Superstructure				
400	1/2"	3'-3"	C1	Surf
24	1/2"	23'-3"	C2	"
24	1/2"	26'-9"	C3	"
12	1/2"	21'-6"	C4	"
494	1/2"	24'-3"	S1	Slab
244	1/2"	26'-6"	S2	"
168	1/2"	23'-0"	S3	"
210	1/2"	34'-5"	S4	"
32	1/2"	16'-0"	S5	"
End Bents No. 2, 3, 4, and 5				
48	1/2"	8'-3"	D1	Footg. Bents
16	1/2"	10'-3"	D2	"
32	1/2"	8'-6"	F1	Haunch
32	1/2"	8'-0"	F2	"
24	1/2"	8'-6"	F3	"
12	1/2"	24'-6"	G1	Beam
8	1/2"	22'-9"	G2	"
12	1/2"	24'-6"	G3	"
22	1/2"	25'-0"	G4	"
32	1/2"	19'-9"	P1	Anchor Bents
12	1/2"	19'-3"	T1	Tie Beam
110	1/2"	9'-9"	U1	Beam
24	1/2"	3'-3"	U2	"
24	1/2"	8'-9"	U3	Tie Beam
48	1/2"	24'-9"	V1	Column
16	1/2"	26'-9"	V2	Col. Bents
172	1/2"	9'-9"	V3	Column



BRIDGE OVER DRAINAGE DITCH NO. 1 (FLOODWAY)

STATE ROAD FROM PARMA TO LILBOURN  
ABOUT 1.5 MILES WEST OF CATRON  
PROJECT NO. S-752 (6) (SD) STA. 689+41  
NEW MADRID COUNTY

Designed May 1947 by R.L.M.  
Drawn June 1947 by R.E.S.  
Traced June 1947 by R.W.  
Checked Aug. 1947 by C.S.B.

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

Sheet No. 2A of 5

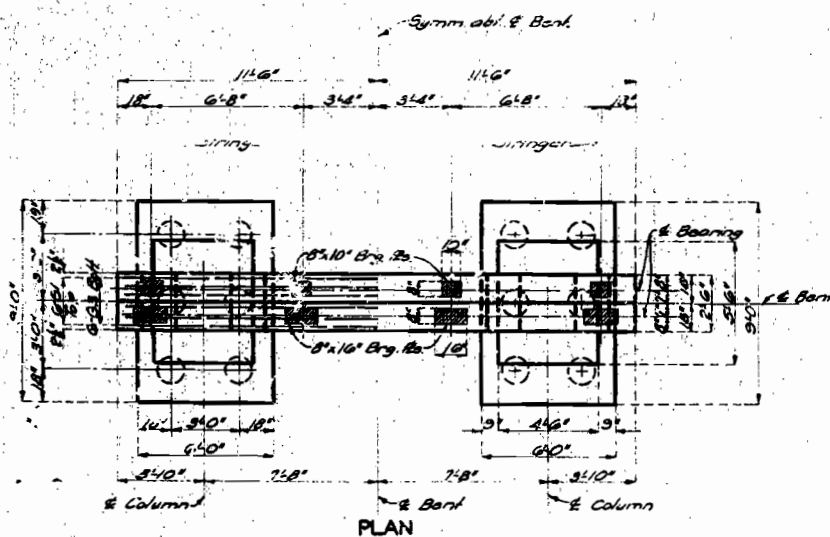
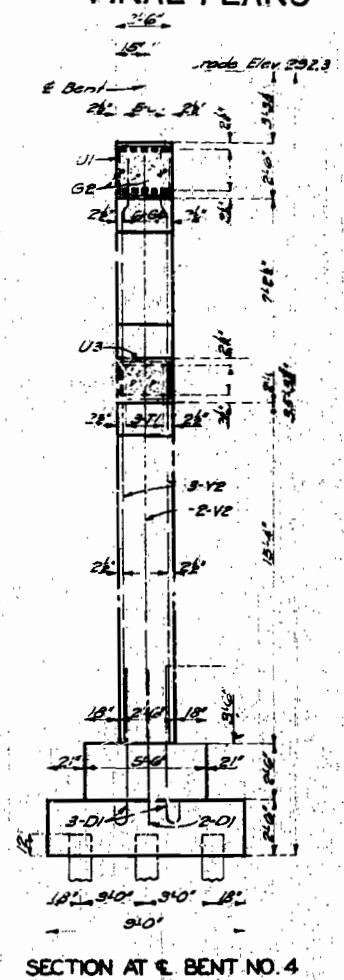
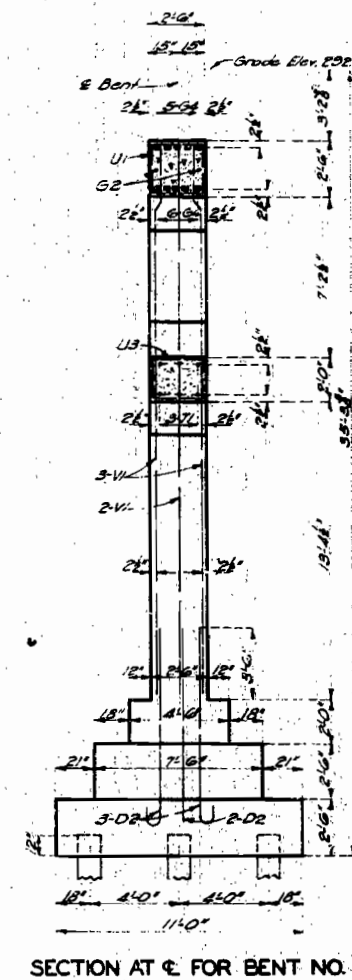
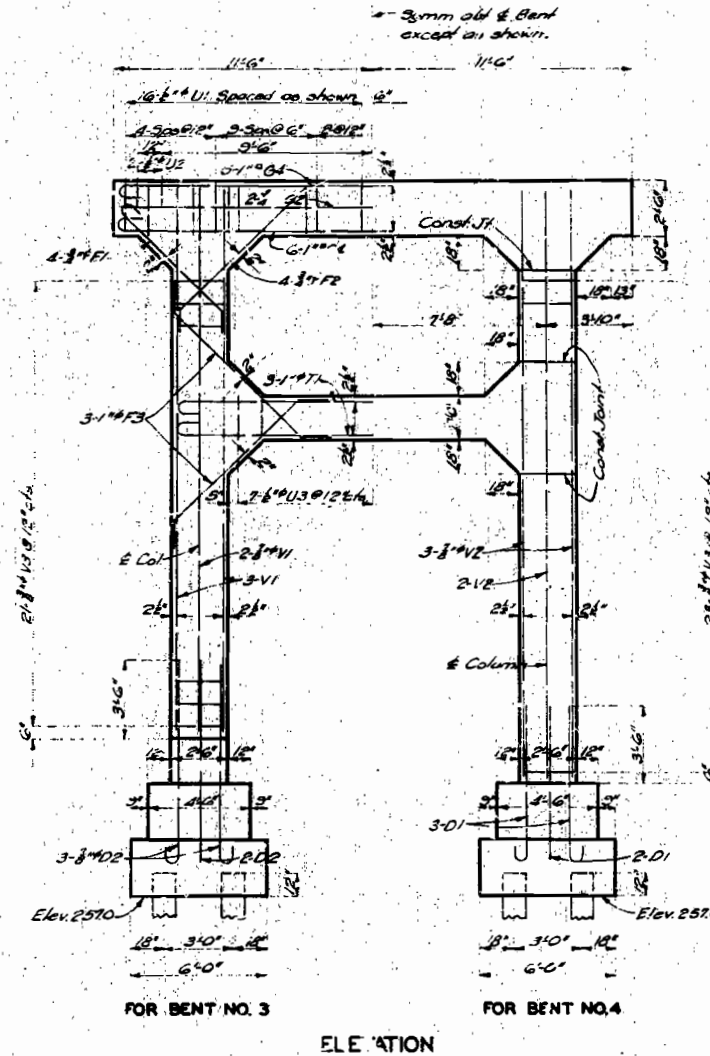
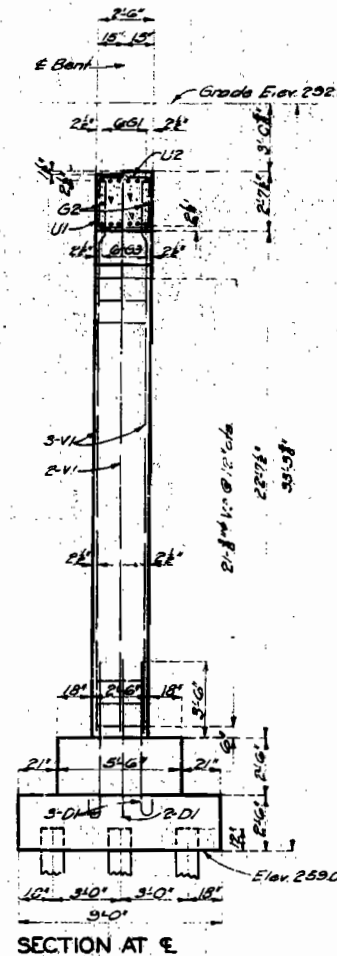
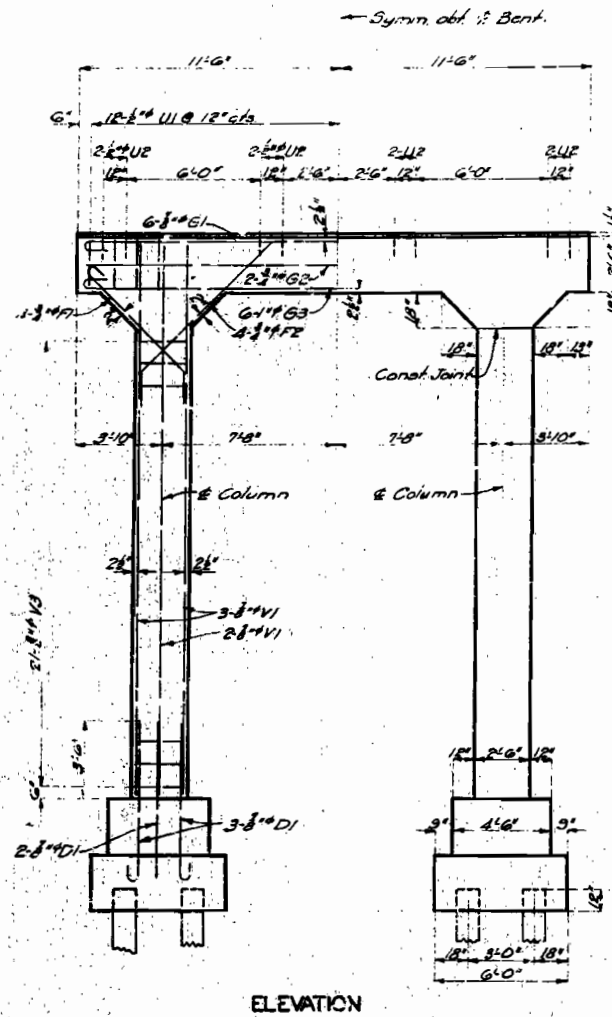
1-224

FINAL PLANS

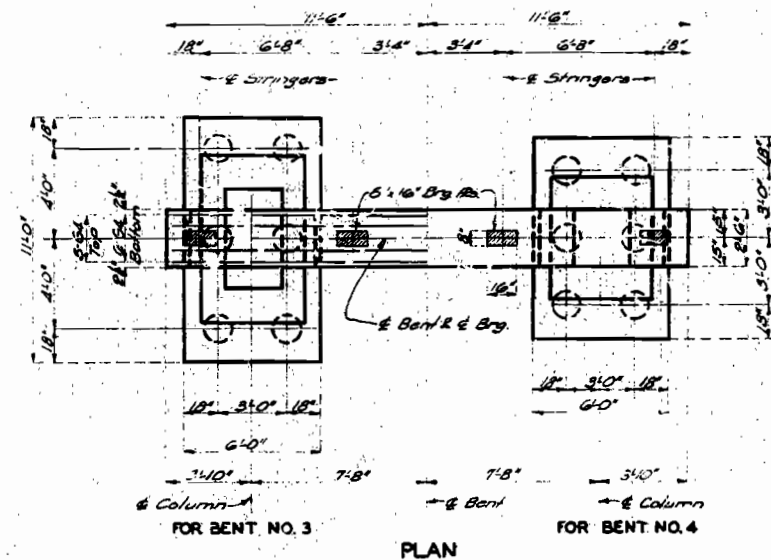
# MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	5-752(6)(SD)	19		

## FINAL PLANS



DETAILS OF INTERMEDIATE BENTS NO. 2 & 5.



DETAILS OF INTERMEDIATE BENTS NO. 3 & 4.

## BRIDGE OVER DRAINAGE DITCH NO. 1 (FLOODWAY)

STATE ROAD FROM PARMA TO LILBOURN  
ABOUT 1.5 MILES WEST OF CATRON  
PROJECT NO. 5-752 (6) (SD) STA. 689+41

NEW MADRID COUNTY

FINISHED

FINISHED

FINISHED

Designed May 1947 by R.L.M.  
Drawn May 1947 by R.L.M.  
Traced June 1947 by J.N.I.  
Checked August 1947 by G.S.R.

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

Sheet No. 3/4 of 5

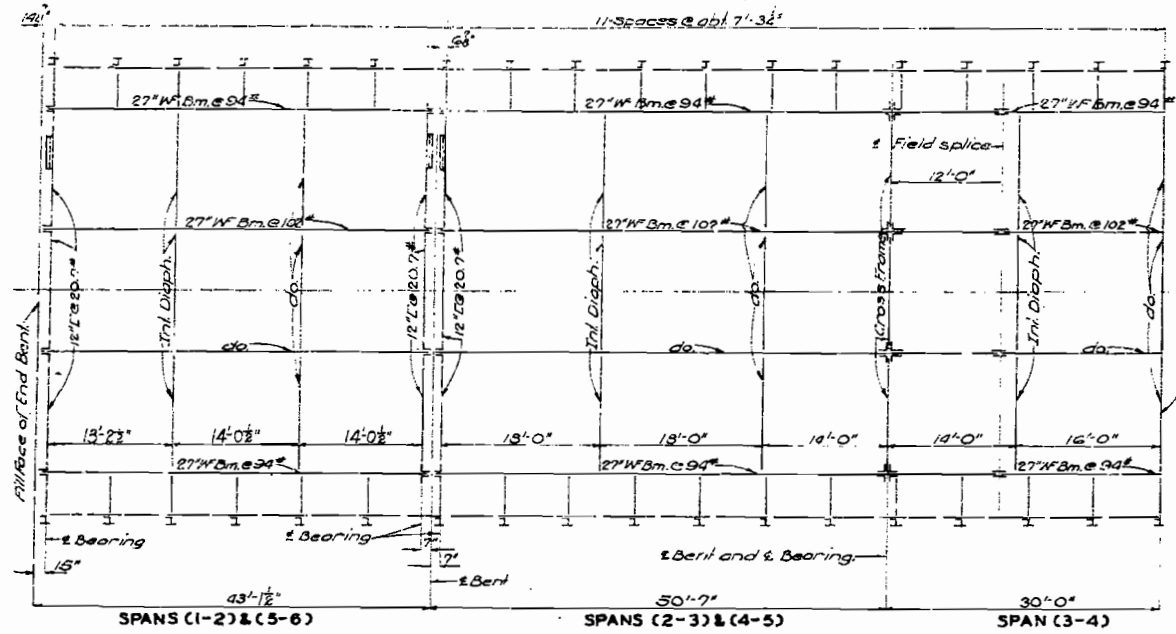
FINAL PLANS

L-224

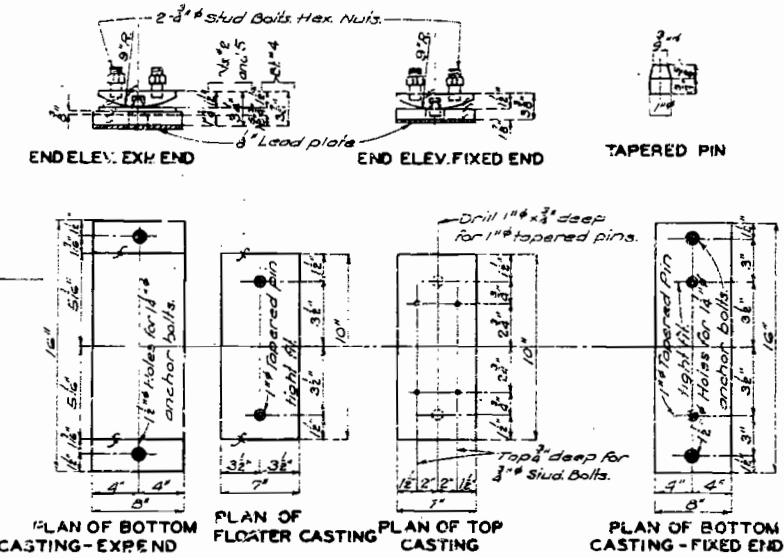


# MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	5-752 (6) (SD)	19		

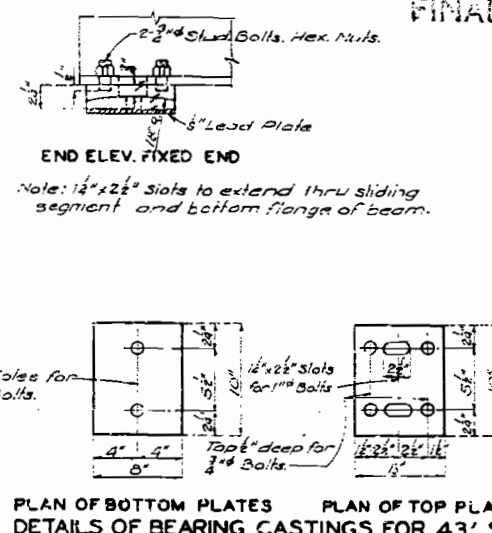


HALF PLAN OF STRUCTURAL STEEL



DETAILS OF BEARING CASTINGS FOR CONTINUOUS SPANS

Required: 12-Sets of Expansion castings.  
4-Sets of Fixed castings.

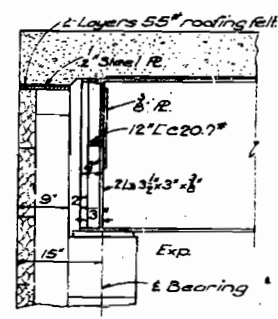


DETAILS OF BEARING CASTINGS FOR 43' SPANS

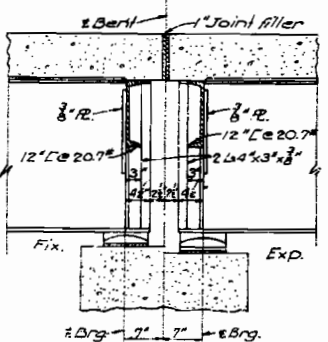
Required: 8-Sets of 2 plates each.

DETAILS OF BEARING PLATES

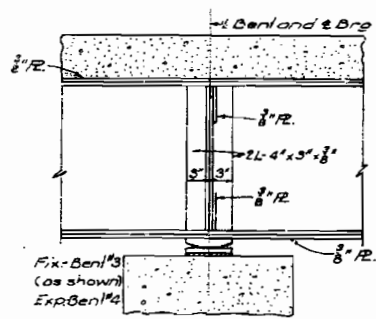
Note: Bearing castings shall be either cast steel or gray iron alloy. Finish all surfaces marked F.  
All finished surfaces shall be coated with white lead and tallow. See Specifications for field coating.  
Slud bolts and nuts and tapered pins shall be paid for as structural steel.  
Anchor bolts for 8"x10" castings shall be 1" swedged bolts, no heads or nuts and are to extend 10" into concrete. Top ends of anchor bolts shall be above the top of the castings but not higher than 4" above top surface of bottom flange of beam.  
Anchor bolts for 8"x16" castings shall be 1 1/2" swedged bolts, Hex. nuts and shall extend 12" into concrete.  
Cost of lead plate shall be included in price bid for other items.



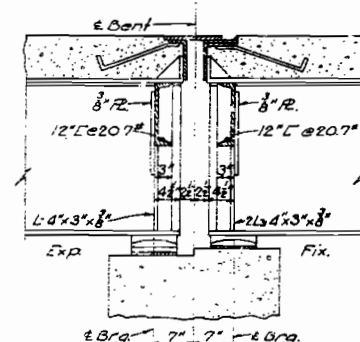
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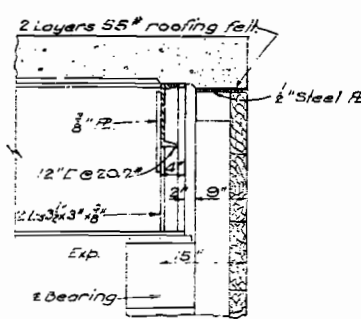
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3 & 4

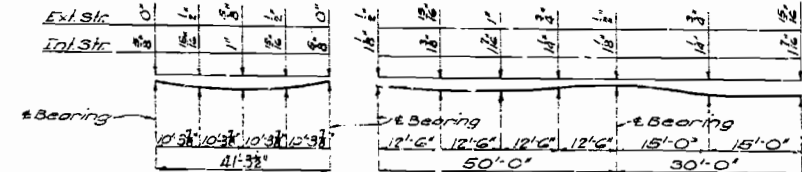


5



6

Note: All stiff angles ground to bear top and bottom.  
PART LONGITUDINAL SECTION

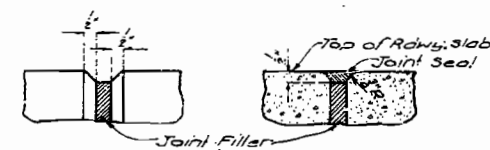


APPROACH SPANS

CONTINUOUS SPANS

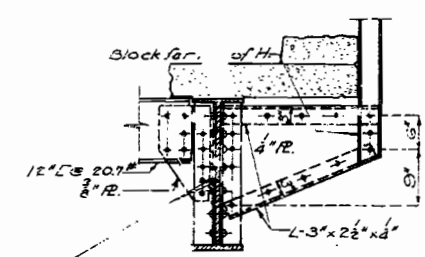
Note: Slab shall be built parallel to grade and to a uniform thickness of 6 1/2". Dead load deflection and crown shall be taken care of by haunching to stringers by the amounts shown above. This additional concrete is included in estimated quantities.

SLAB HAUNCHING DIAGRAMS



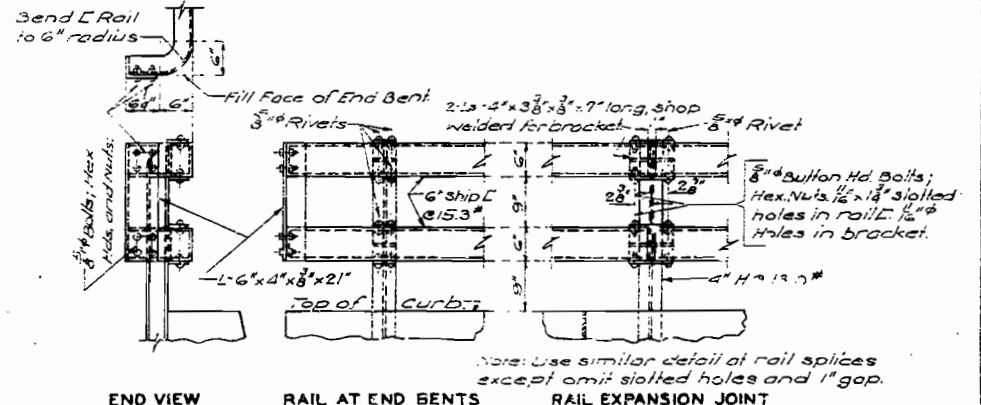
Note: Use bevel as shown for exposed faces of all joints consisting of joint filler except at top surface of roadway slab. Use edging tool with 3" radius at top surface of roadway slab each side of joints and fill flush with joint seal as shown.

DETAILS OF BEVEL FOR FILLED JOINTS



Stiff angle, ground to bear top and bottom or welded to top and bottom flanges of beam with 3" continuous fillet weld along both sides and edge of 0.3. leg.

SECTION AT ENDS OF SPANS



END VIEW

RAIL AT END BENTS

RAIL EXPANSION JOINT

DETAILS OF RAIL

BRIDGE OVER DRAINAGE DITCH NO. 1 (FLOODWAY)

STATE ROAD FROM PARMA TO LILSBURN

ABOUT 1.5 MILES WEST OF CATRON

PROJECT NO. 5-752 (6) (SD) STA. 685+41

NEW MADRID

COUNTY

FINISHED

FINISHED

Fig. 3-20

Designed May 15 1947 by R.L.W.  
Drawn June 1947 by P.E.S.  
Traced June 1947 by K.R.W.  
Checked Aug. 1947 by C.S.A.

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

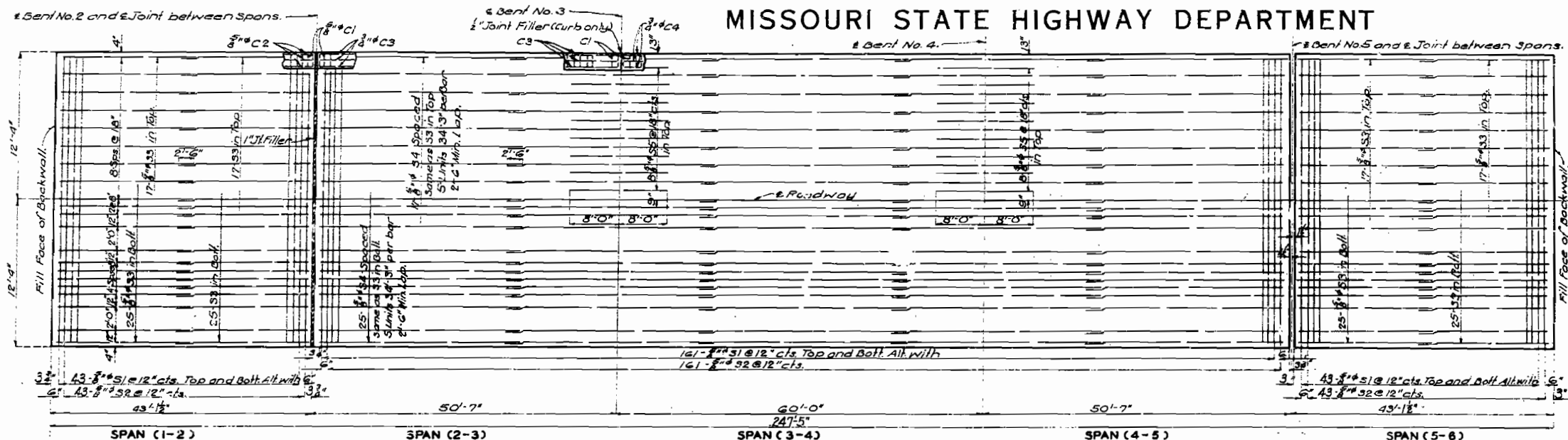
Sheet No. 4 of 5

L-224

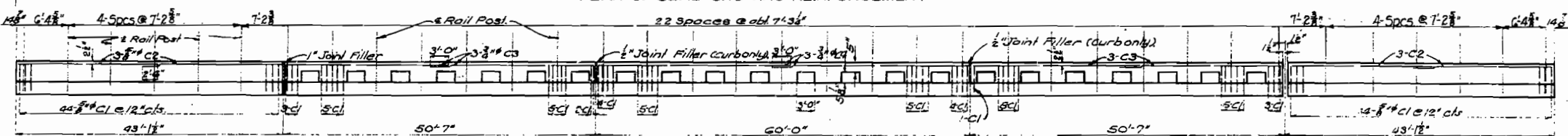
FINAL PLANS

# MISSOURI STATE HIGHWAY DEPARTMENT

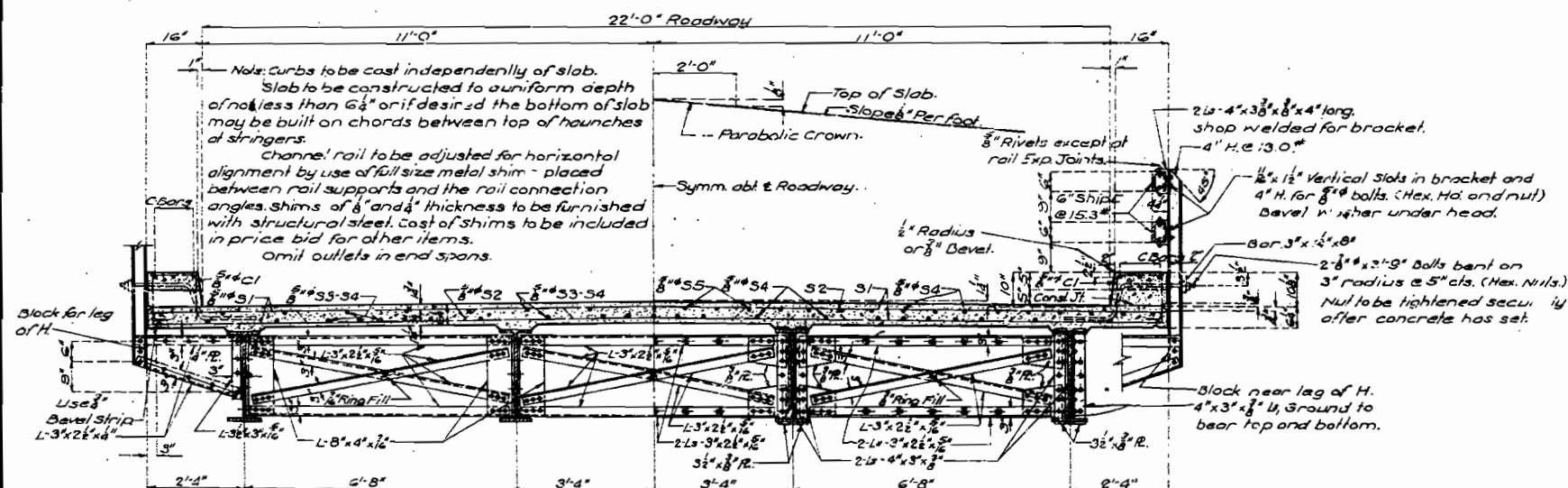
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	S-752 (6) (SD)	19		



PLAN OF SLAB SHOWING REINFORCEMENT

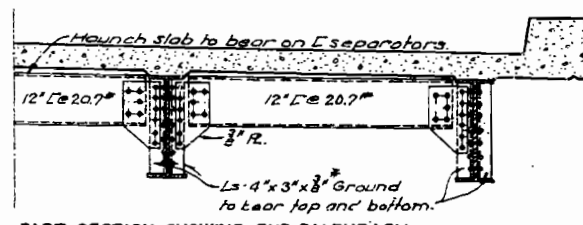


ELEVATION OF CURB



TYPICAL HALF SECTION NEAR INT. DIAPHRAGM

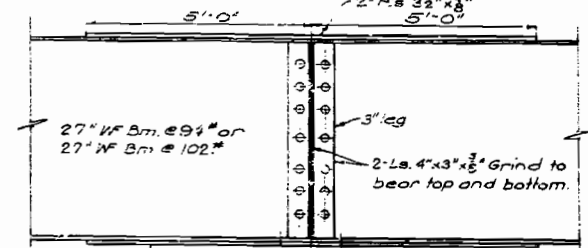
HALF SECTION AT BENTS NO. 3 & 4



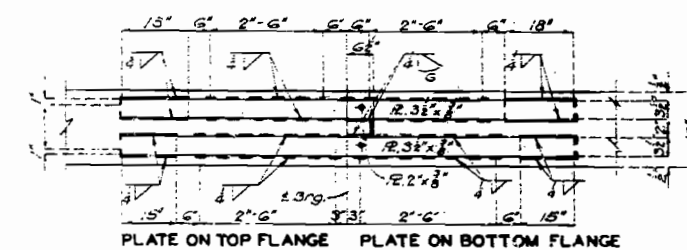
PART SECTION SHOWING END DIAPHRAGM

\* Use 1/2" x 3" x 1/2" at end bents.

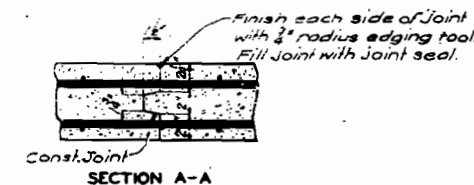
## FINAL PLANS



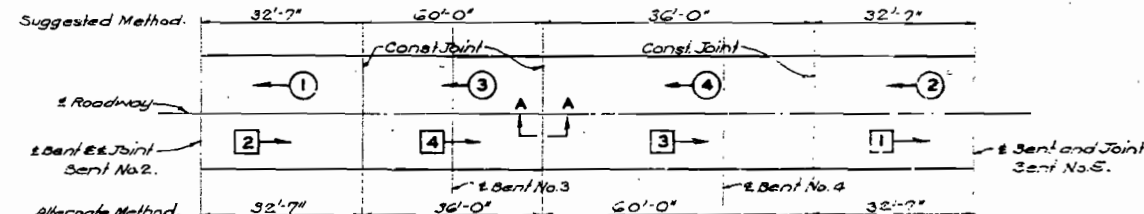
DETAIL OF STIFFENER ANGLES AT BEARINGS-BENT NO. 3 & 4



WELDING DETAILS FOR COVER PLATES OVER BENTS NO. 3 & 4

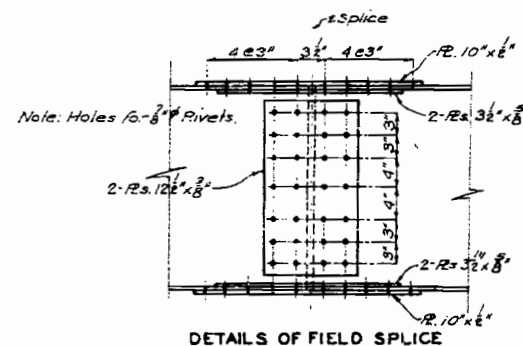


SECTION A-A



Note: The slab will be poured in sections of the size shown above and in the sequence indicated by the numbers 1, 2, 3, 4 or as alternate by the numbers 1, 2, 3, 4. The separate pours shall progress in the direction indicated by the arrows. Longitudinal construction joints will not be permitted.

SLAB POURING SEQUENCE FOR CONTINUOUS SPANS



DETAILS OF FIELD SPLICE

## BRIDGE OVER DRAINAGE DITCH (N. OF FLOODWAY)

STATE ROAD FROM PARMA TO LILBOURN  
ABOUT 1.3 MILES WEST OF CATRON  
PROJECT NO. S-752 (6) (SD) STA. 689+41

NEW MADRID COUNTY

FINISHED

FINISHED

FINISHED

L-224

Designed May 1947 by R.L.H.  
Drawn June 1947 by R.E.S.  
Traced June 1947 by K.R.W.  
checked Aug. 1947 by C.S.A.

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

Sheet No. 5A of 5

FINAL PLANS