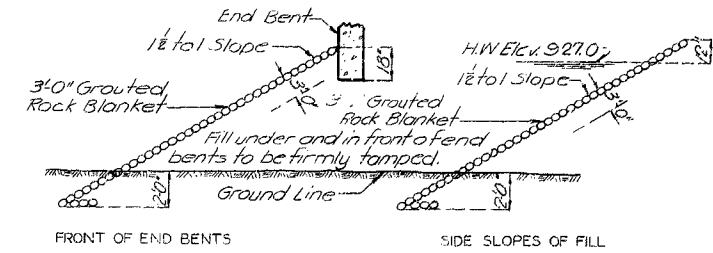


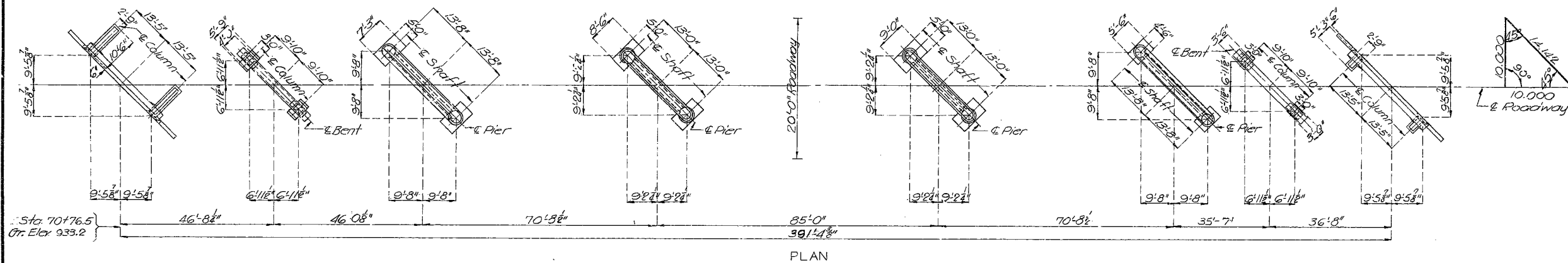
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	5-348(3) (257)	19	12	



Note: 3'-0" Grouted Rock Blanket shall be placed on fills at ends of bridge as shown in sketches. See Road Plans for Quantities.

The bottom of 3'-0" Grouted Rock Blanket shall be placed 2'-0" below natural ground line or to rock at Beni No. 8.

ROCK BLANKET SKETCHES



PLAN

Design specifications A.A.S.H.O.-1953.
Loading H10-44
Structural Steel Stress: 18,000 #/sq"
Reinforcing Steel Stress: 18,000 #/sq"
Concrete, Class "B" Stress: 1000 #/sq"

All Concrete shall be Class "B"
Rivets "A" notes "B" except where otherwise noted.
Field connections shall be riveted or if the Contractor desires he may use high tensile steel bolts with carburized washers in the expansion device and beam splices and American Standard, Regular Machine bolts for other field connections in place of rivets except for connections noted in handrail details.
If high tensile steel bolts are used they shall be placed in such a manner that the nuts will always be in the least exposed position.
Where Joint filler is specified on the plans it shall conform with the requirements for Premoulded Material for filler as given in section 59-22 D of the Standard Specifications.
Qualifications of welding operators will be required.
Paint: Shop primer; Field contact surfaces of all field connections except where high tensile bolts are used, one coat of red lead, and surfaces inaccessible after erection three coats of red lead.
No other paint to be applied by Contractor. Red lead required shall be furnished by Contractor. Payment for cleaning and painting such surfaces will be included in unit price bid for Fabricated Structural Steel.

ESTIMATED QUANTITIES				
ITEMS		SUBSTR	SUPERSTR	TOTAL
Class 1 Excavation for Structures	Cu.Yds.	120		120
Class 2 Excavation for Structures	Cu.Yds.	301		301
Class "B" Concrete	Cu.Yds.	313.2	190.0	503.2
Reinforcing Steel	Lbs.	25270	37310	62580
* Fabricated Structural Steel	Lbs.		203500	203500
Gray Iron Alloy Castings	Lbs.		1710	1710
Steel Castings	Lbs.		5210	5210

Note: Excavation for bridge made above
Elev 909.0 will be paid for as Class 1
Excavation for Structures.
Excavation for bridge made below
Elev 909.0 will be paid for as Class 2
Excavation for Structures.
* Final pay weight for Fabricated
Structural Steel will be based on using
field rivets except for bolted connections
specified for handrail.

B.M. #8 Elev 918.36 Chiseled 7 center concrete post N.E.
corner present bridge 50' Rt. Sta. 74+48.

STATE ROAD FROM ROUTE 88 EAST & NORTH TO ROUTE SK
ABOUT 13.0 MILES S.E. OF LANAGAN
PROJECT NO. S-348 (3) (ST) STA. 70+76.5

SUBMITTED BY J. A. Williams DATE 8-23-1956
BRIDGE ENGINEER
APPROVED BY Ray M. Whitten DATE 8-23-1956
CHIEF ENGINEER

FINISHED

STD CHOR4
P-973

LOCATION SKETCH

Drawn MAY 1956 by W.G.S
Checked July 1956 by C.S.A

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

Sheet No. 1 of 10.

SEE FINAL PLANS BROWN LINES

123

368

Assembled April 1956 by G.W.P. & O.J.S.
Checked July 1956 by C.S.P.

Sheet No. 2 of 10

P-973

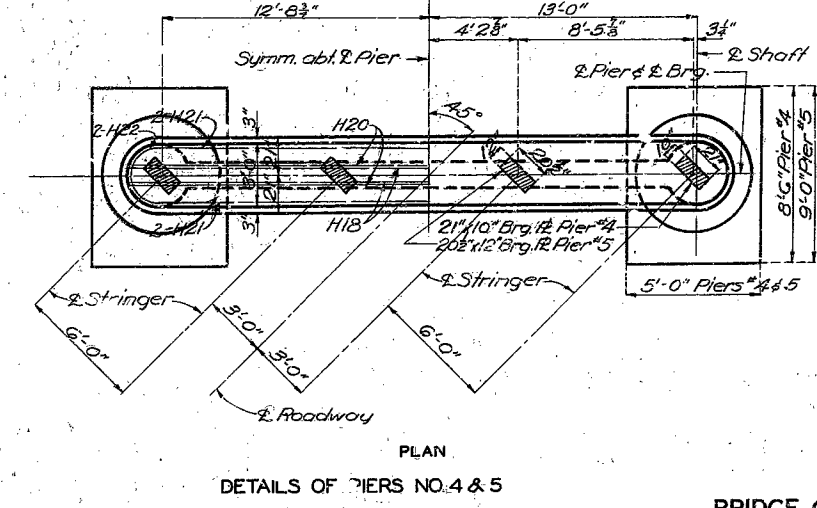
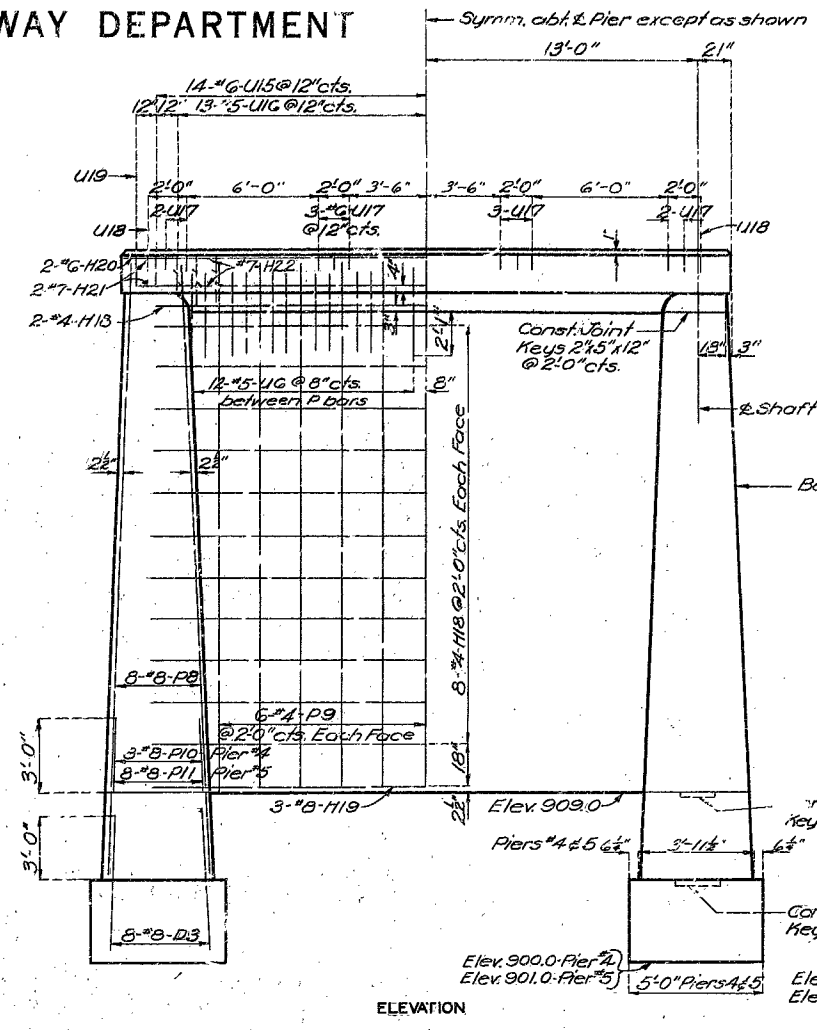
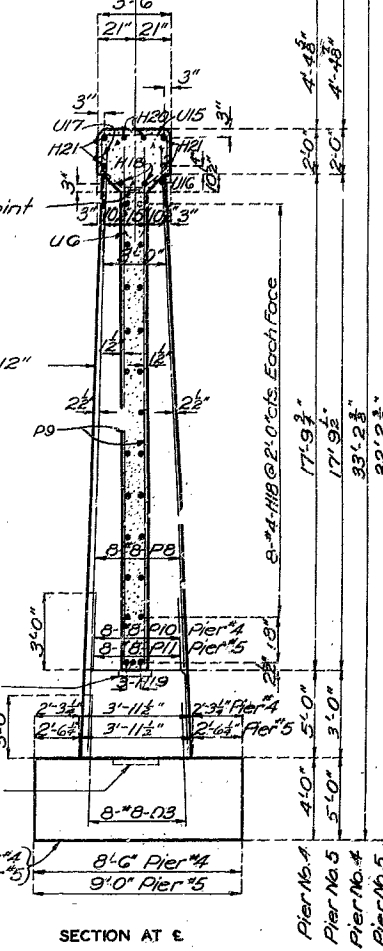
P-973

2 Col. End & 2 Col. Int. 20 or 22 Hg.
Square & Skewed H/O.

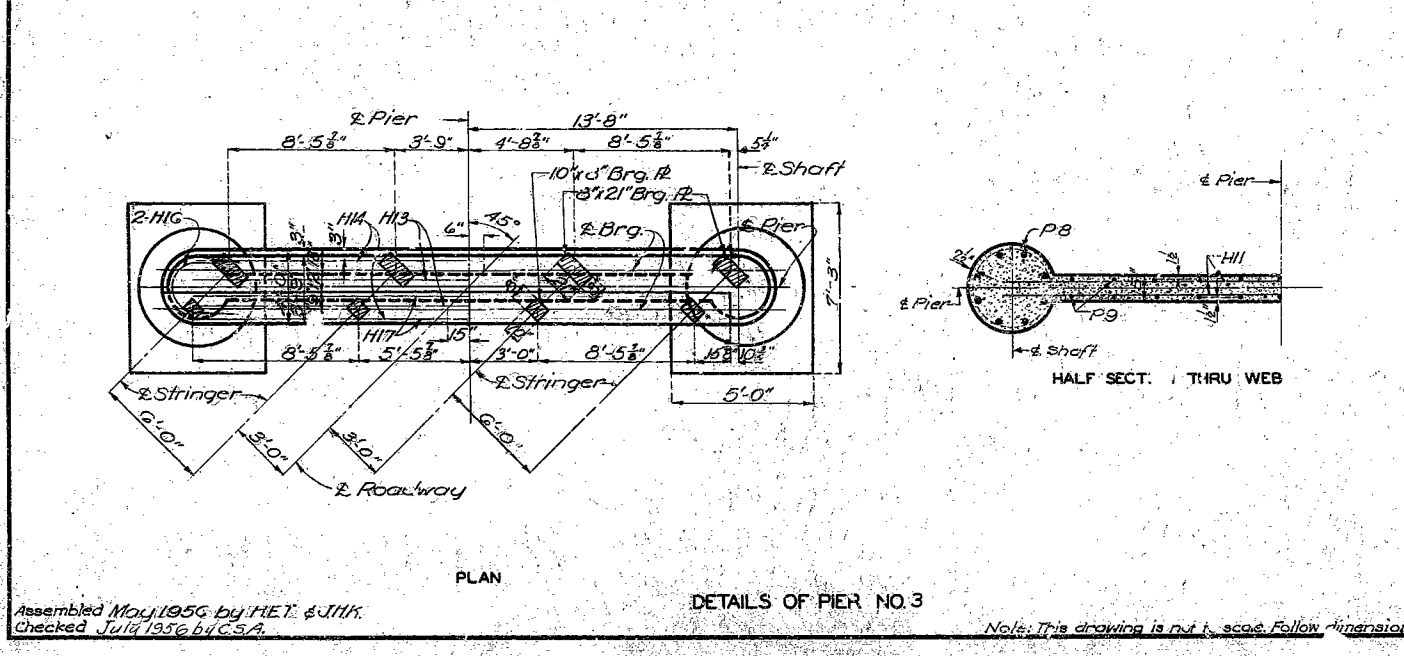
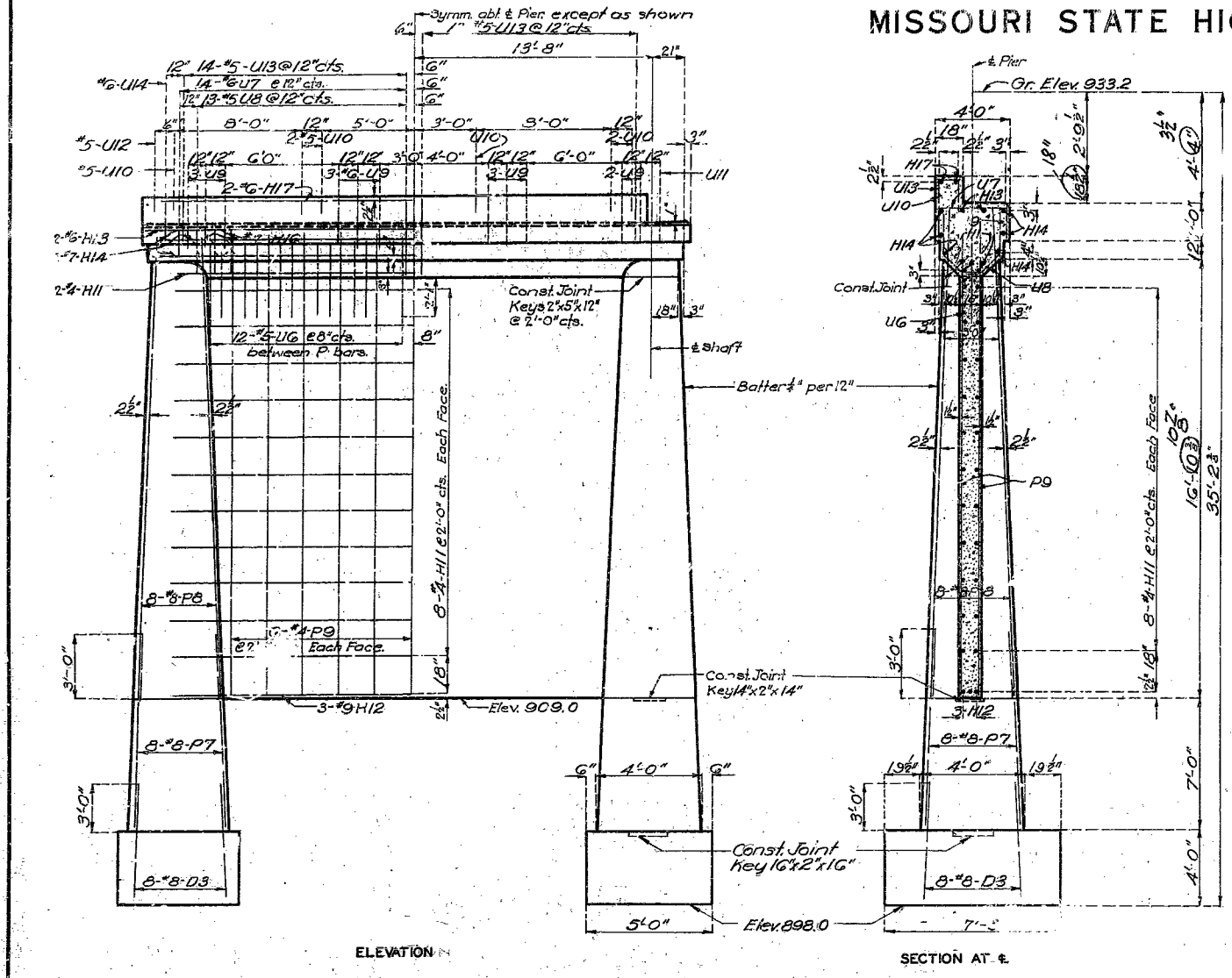
MISSOURI STATE HIGHWAY DEPARTMENT

PROJ. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	348(3)	19	14	

PIER	Gr. Elev.	Gr. Elev.	Gr. Elev.	Gr. Elev.	Gr. Elev.
2	933.2	933.2	933.2	933.2	933.2



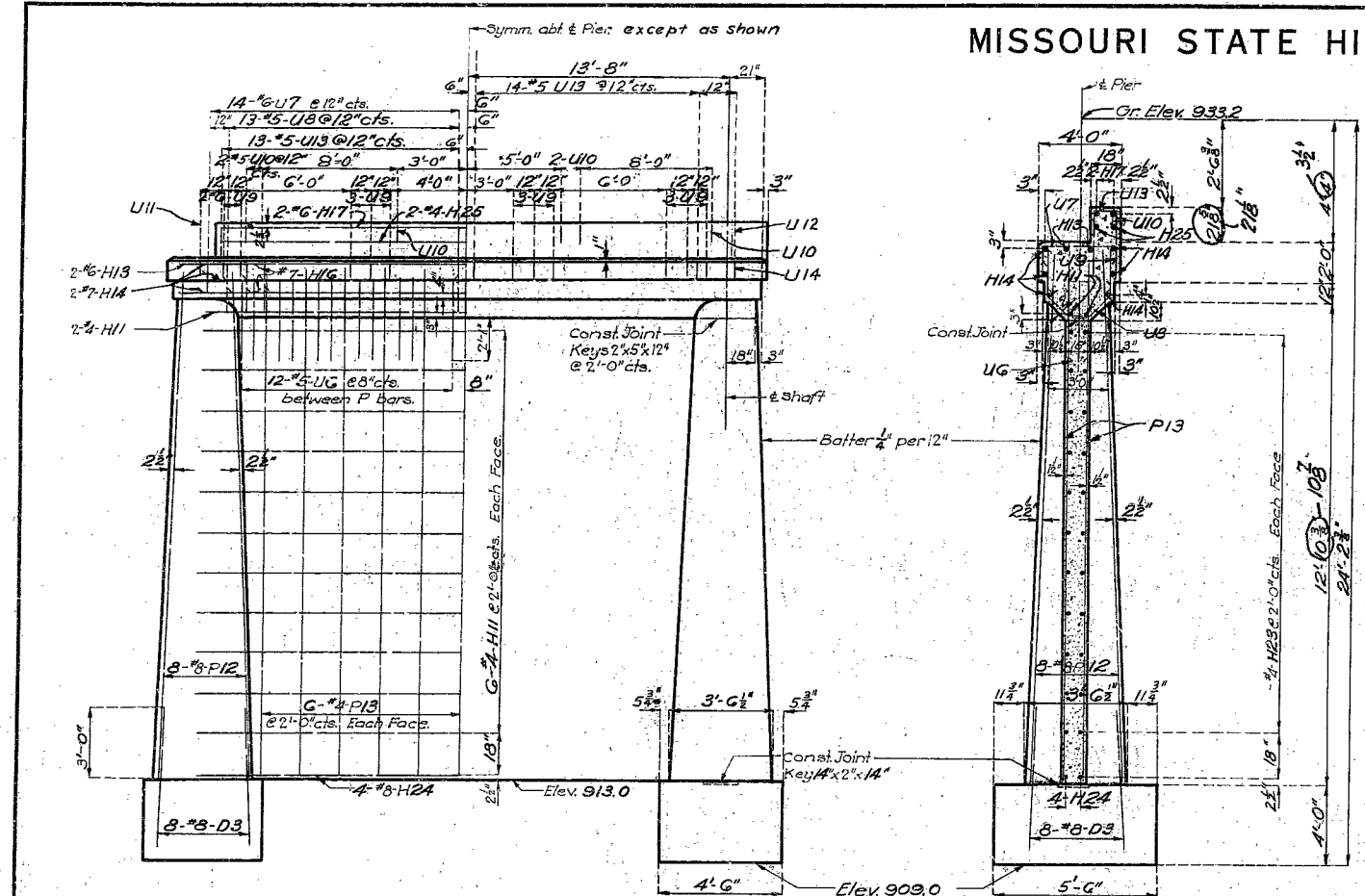
BRIDGE OVER LITTLE SUGAR CREEK
STATE ROAD FNC ROUTE 88 EAST & NORTH TO ROUTE 5K
ABOUT 13.0 MILES S.E. OF LANAGAN
PROJECT NO. S-348(3) (ST) STA. 70+76.5
FINISHED ME DONALD COUNTY FINISHED
Rev 4-8-57
P-973



Assembled May 1956 by HET & JHK
Checked July 1956 by C.S.A.
Note: This drawing is not to scale. Follow dimensions.
Sheet No. 3 of 3
SEE FINAL PLANS BROWN LINES

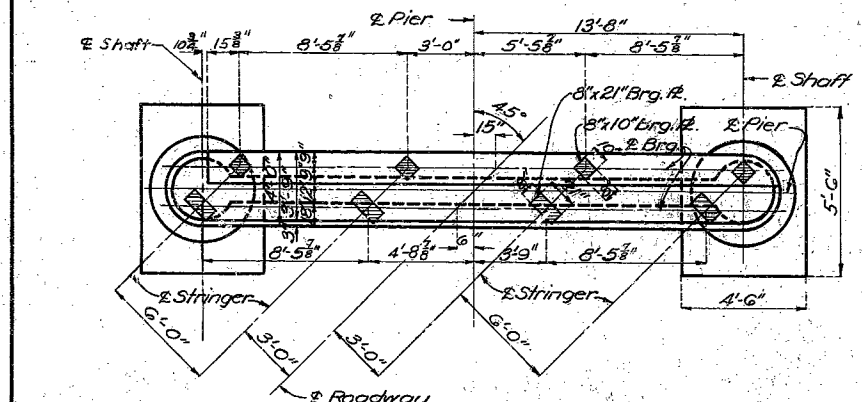
MISSOURI STATE HIGHWAY DEPARTMENT

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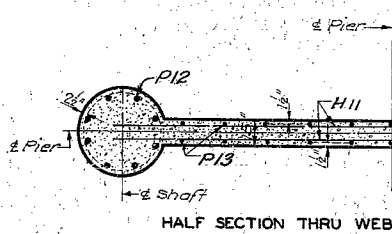


ELEVATION

SECTION AT E.



PLAN



HALF SECTION THRU WEB

COMPLETE BILL OF REINFORCING STEEL									
No.	Size	Length	Mark	Location	Bending Sketches & Cutting Diagrams				
Superstructure					Pier No. 3 & No. 6 (Continued)				
1134	#4	22'-0"	S1	Slab	22 #6 4'-9" U9 Cap				
64	#4	23'-9"	S2	"	12 #5 2'-3" U10 Brq. Hch.				
84	#4	23'-0"	S3	"	2 #6 4'-6" U11 Cap				
288	#4	23'-6"	S4	"	2 #5 2'-3" U12 Brq. Hch.				
8	#4	31'-3"	S5	"	54 #5 7'-6" U13 "				
64	#4	23'-0"	S6	"	2 #6 4'-6" U14 Cap				
64	#4	18'-0"	S7	"	2 #4 26'-9" U15 Haunch #6				
64	#4	18'-9"	S8	"					
56	#4	16'-0"	S9	"					
256	#4	29'-9"	S10	"					
12	#6	18'-6"	C8	Curb					
562	#5	2'-9"	C1	"					
6	#5	24'-3"	C2	"					
6	#5	23'-9"	C3	"					
12	#6	23'-6"	C4	"					
6	#6	19'-9"	C5	"					
56	#6	25'-0"	C6	"					
18	#6	29'-9"	C7	"					
6	#5	18'-6"	C9	"					
End Bent No. 1									
16	#6	4'-0"	D1	Footling					
2	#6	31'-9"	H1	Backwall					
3	#7	33'-3"	H2	Beam					
2	#6	31'-3"	H3	"					
6	#11	31'-3"	H4	"					
10	#5	11'-0"	H5	Wing					
3	#6	17'-6"	H6	"					
2	#4	32'-9"	H7	Backwall					
4	#6	19'-3"	T1	Wing					
6	#6	7'-0"	F1	Col. Haunch					
6	#6	7'-0"	F2	"					
31	#4	10'-0"	U1	Backwall					
8	#4	3'-3"	L2	Beam					
6	#4	8'-3"	V1	Wing					
64	#4	4'-3"	V2	Backwall					
56	#3	15'-9"	V3	Column					
10	#6	31'-0"	V4	"					
6	#6	32'-0"	V5	"					
18	#4	28'-6"	V6	"					
4	#4	5'-9"	V13	Wing					
Bent No. 2									
16	#6	5'-6"	D2	Footling					
16	#6	7'-9"	F3	Col. Haunch					
12	#8	8'-3"	F4	Beam Haunch					
6	#8	30'-9"	G1	Beam					
2	#6	28'-9"	G2	"					
6	#8	28'-9"	G3	"					
6	#8	21'-3"	G4	Tie Beam					
16	#6	29'-0"	P1	Column					
52	#3	8'-3"	P2	"					
29	#4	9'-9"	U3	Beam					
12	#4	3'-6"	U4	"					
15	#4	8'-3"	U5	Tie Beam					
Pier No. 3 & No. 6									
32	#8	6'-0"	D3	Footling					
32	#4	27'-6"	H11	Web Pier #6					
3	#9	27'-6"	H12	" Pier #3					
4	#6	30'-6"	H13	Cap					
12	#7	27'-3"	H14	"					
8	#7	10'-6"	H16	Cap					
4	#6	26'-9"	H17	Brq. Haunch					
4	#8	27'-6"	H24	Web Pier #6					
16	#8	9'-9"	P7	Shaft Pier #3					
16	#8	19'-3"	P8	" "					
22	#2	19'-6"	P9	Web "					
16	#8	16'-3"	P12	Shaft Pier #6					
22	#4	13'-6"	P13	Web "					
48	#5	9'-3"	U6	"					
56	#6	7'-0"	U7	Cap					
52	#5	8'-9"	U8	Cap					

BRIDGE OVER LITTLE SUGAR CREEK

STATE ROAD FROM ROUTE 88 EAST & NORTH TO ROUTE SK
ABOUT 13.0 MILES S.E. OF LANAGAN
PROJECT NO. S-348(3) (ST) STA. 70+76.5
MS DONALD COUNTY

Assembled May 1956 by HET & JHK
Checked July 1956 by C.S.A.

DETAILS OF PIER NO. 6

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

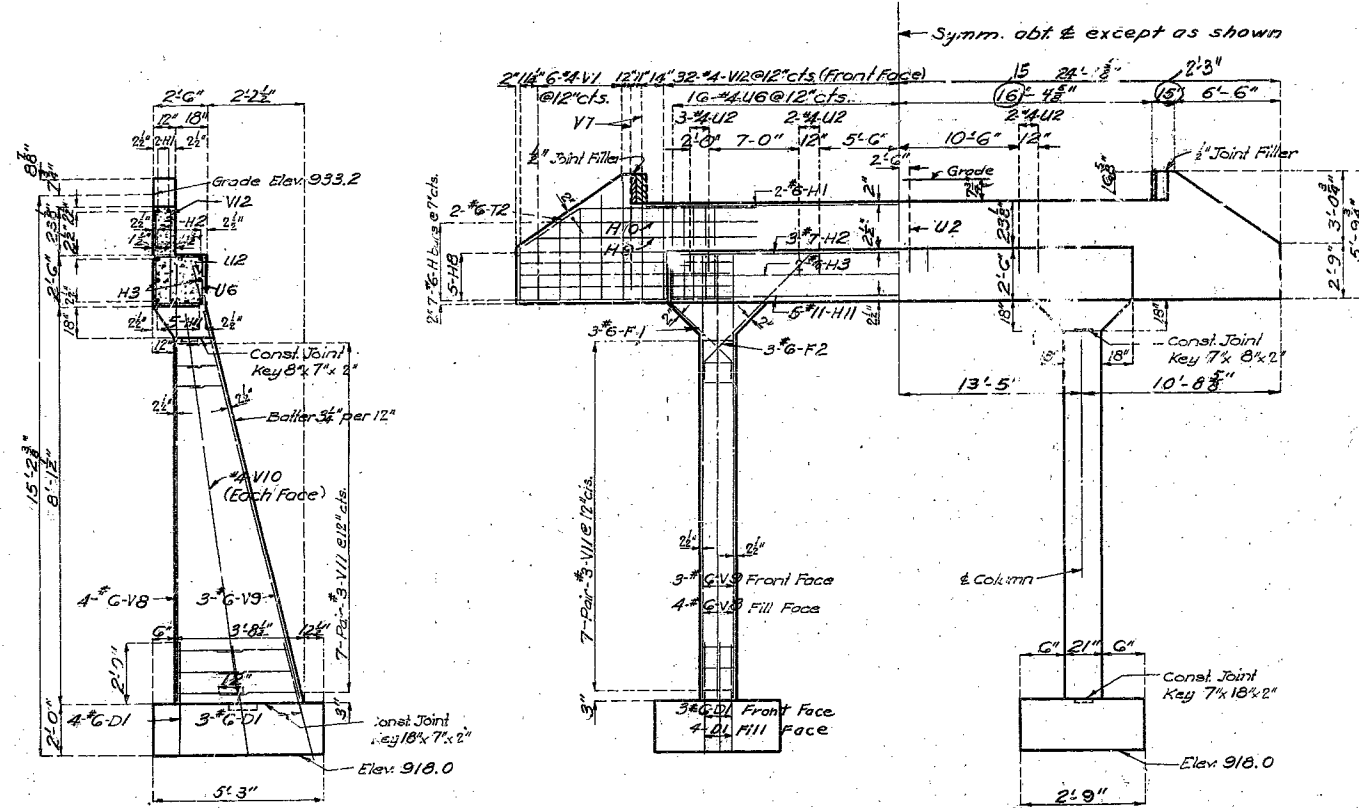
Sheet No. 4 of 10. FINISHED
SEE FINAL PLANS BROWN LINES

FINISHED
Rev. 4-8-57

P-973

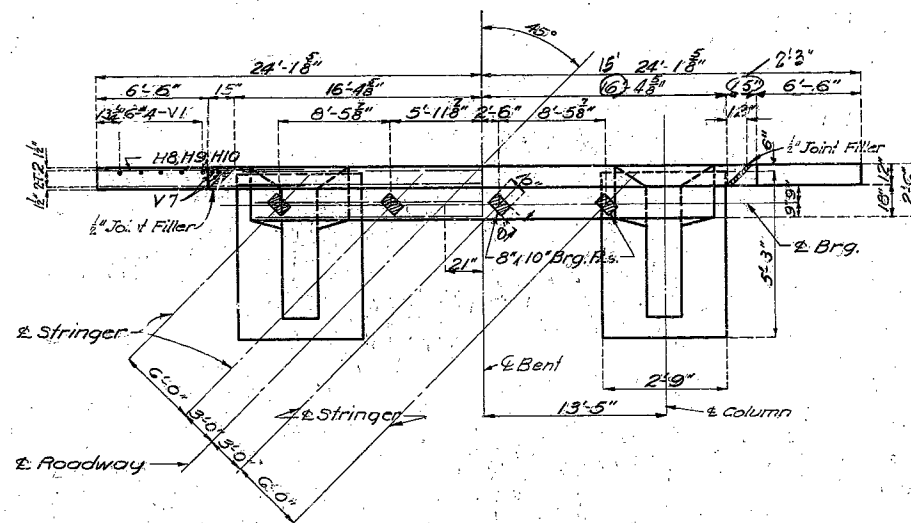
MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	3-348(3)	19	6	



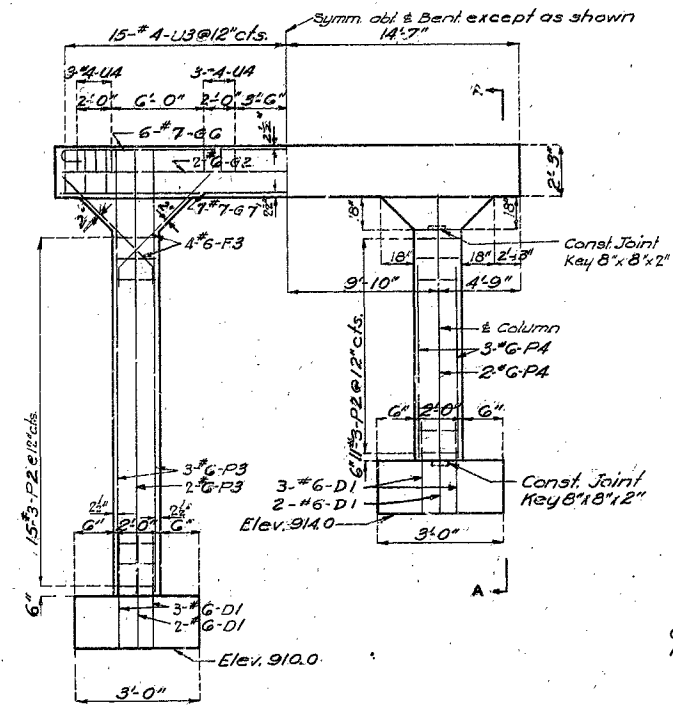
SECTION

ELEVATION

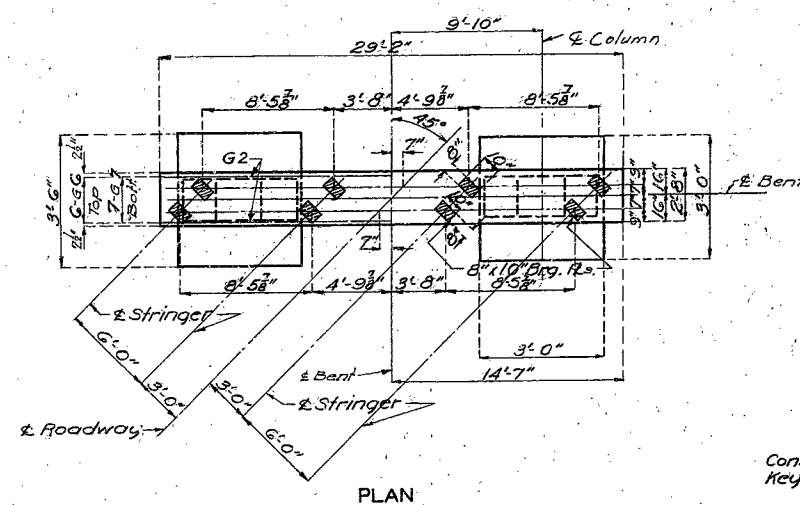


PLAN

DETAILS OF END BENT NO. 8

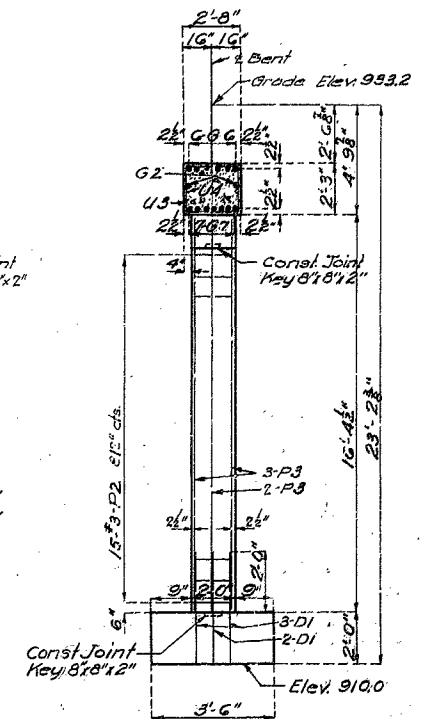


ELEVATION



PLAN

DETAILS OF INT. BENT NO. 7



SECTION A-A

BRIDGE OVER LITTLE SUGAR CREEK

STATE ROAD FROM ROUTE 88 EAST & NORTH TO ROUTE 5K
ABOUT 13.0 MILES S. E. OF LANAGAN
PROJECT NO. S-348(3) (ST) STA. 70+76.5

MC DONALD COUNTY

FINISHED

FINISHED

P-973

Assembled May 1956 by G.W.P. & J.H.K.
Checked July 1956 by C.S.A.

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

Sheet No. 3 of 10.

Rev. 3-21-57

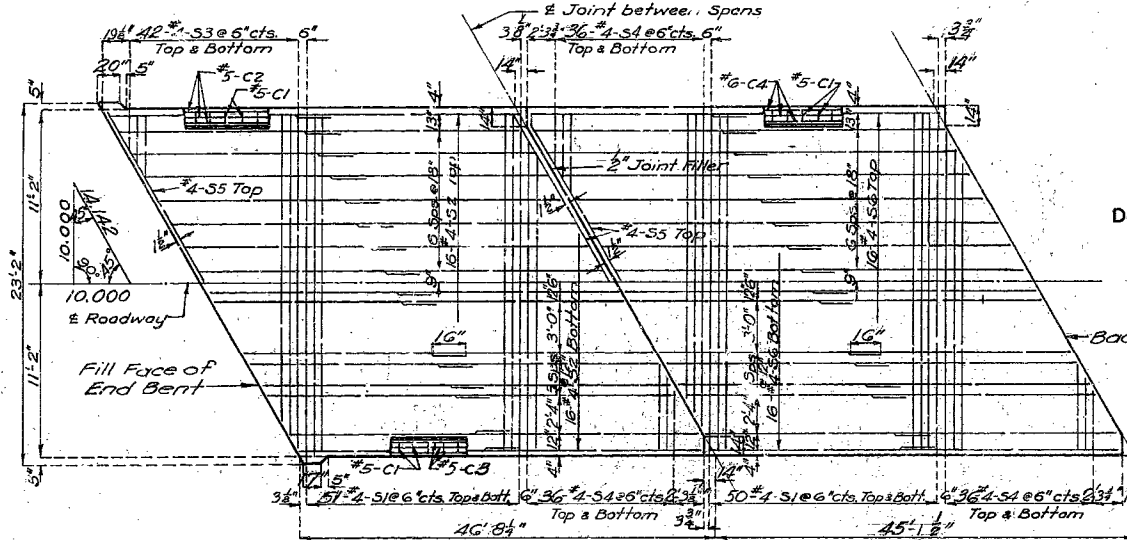
SEE FINAL PLANS BROWN-LINES

2 Col. End & 2 Col. Int. 20' or 22' Square & Skewed H10

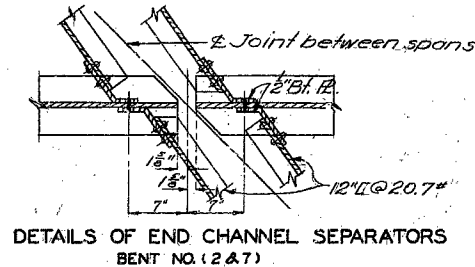
MISSOURI STATE HIGHWAY DEPARTMENT

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5	MO.	5-348(3)	19	17	

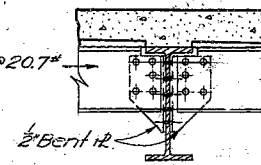
Note: Space dowel bars C1 at approximately 12" centers in curbs between outlets and at ends.



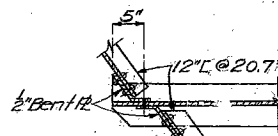
PLAN OF SLAB SHOWING REINFORCEMENT



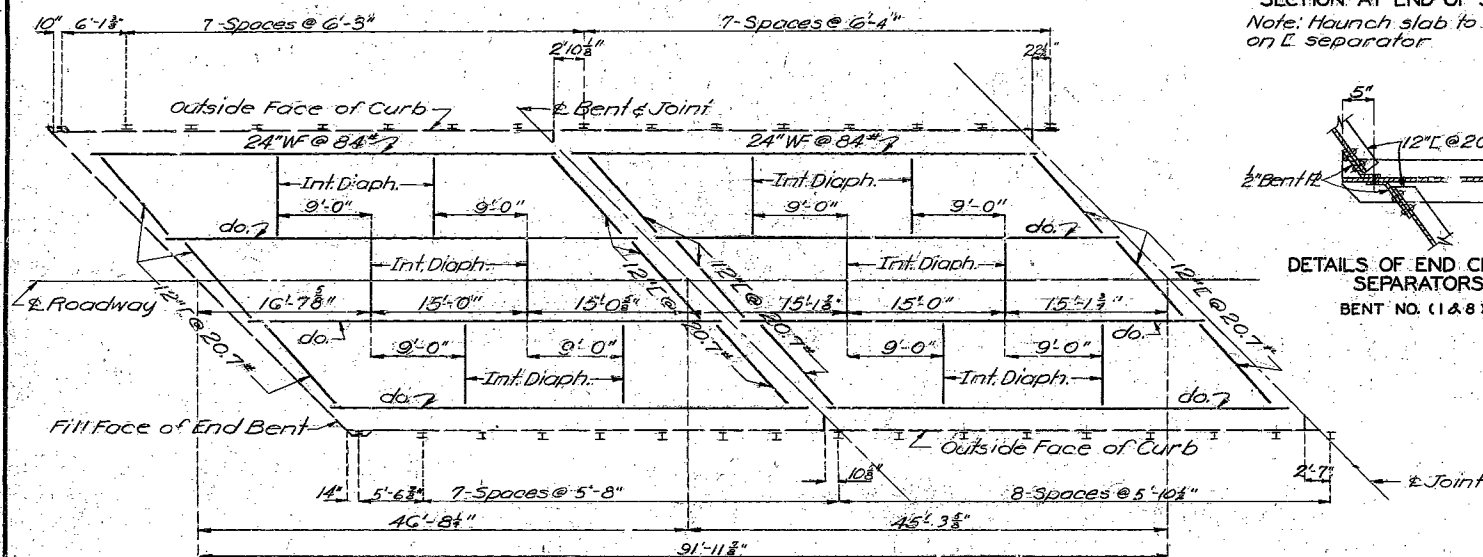
DETAILS OF END CHANNEL SEPARATORS BENT NO. (2 & 7)



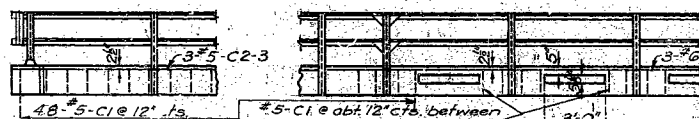
SECTION AT END OF SPANS 1 & 8
Note: Haunch slab to bear on L separator



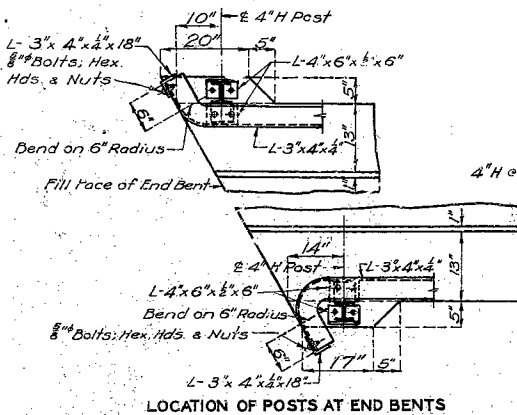
DETAILS OF END CHANNEL SEPARATORS BENT NO. (1 & 8)



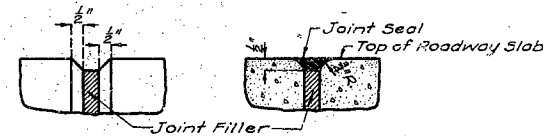
PLAN OF STRUCTURAL STEEL



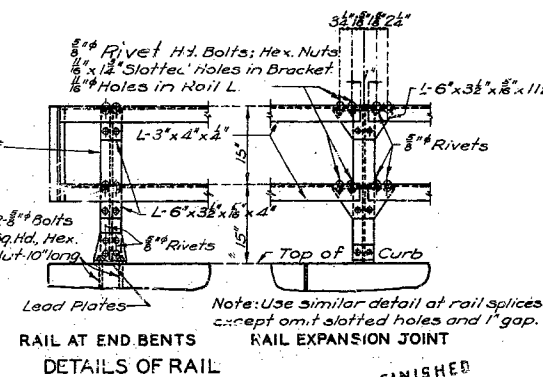
TYPICAL CURB DETAILS
Note: Top of curbs under end posts shall be finished to a smooth surface parallel to grade. Not less than one nor more than four soft lead plates of 16" thickness shall be used under angles of each end rail post for aligning rail to correct elevation. Plates shall be 8" x 6" and shall be punched 8" on same gauge as the angles. No gouging permitted. Cost of lead plates to be included in price bid for other items.



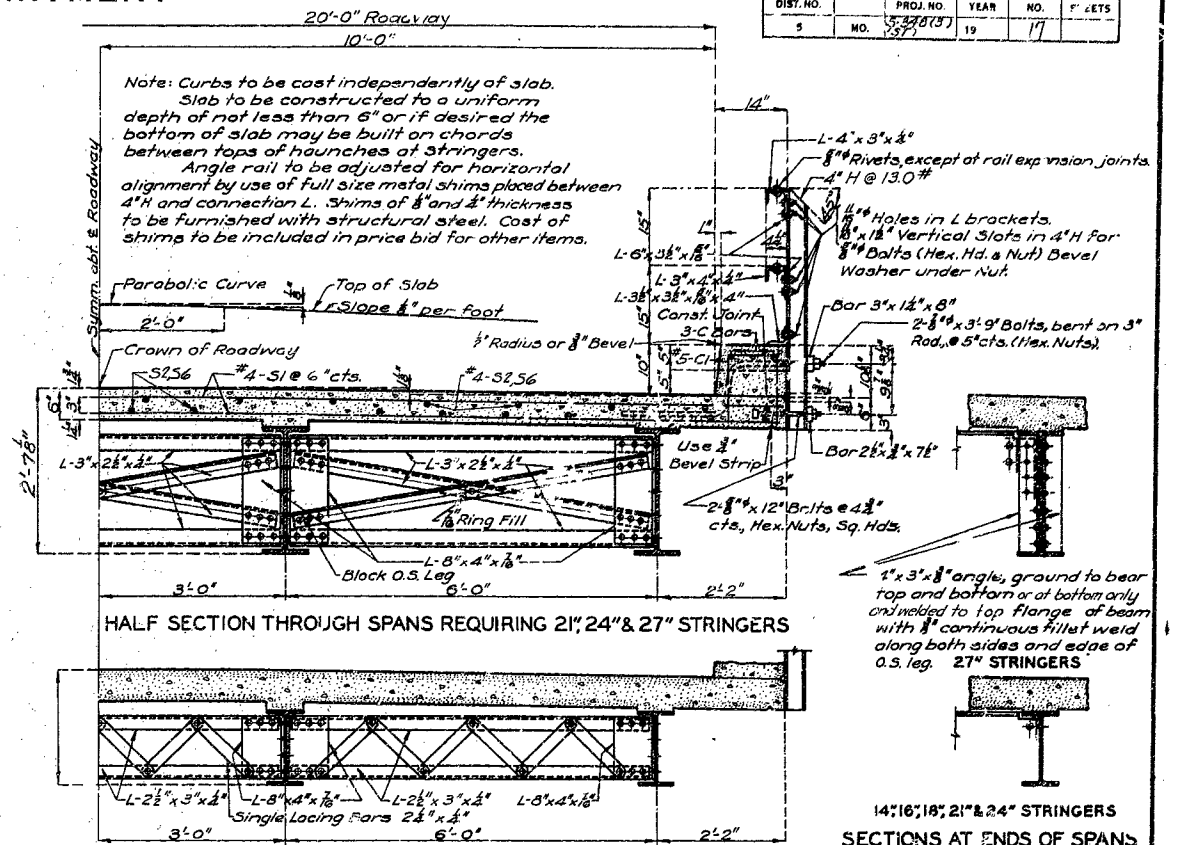
LOCATION OF POSTS AT END BENTS



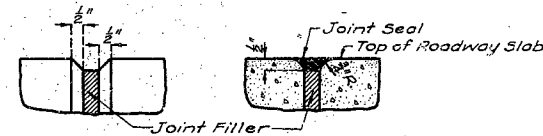
DETAILS OF BEVEL FOR FILLED JOINTS
Note: Use bevel as shown for exposed faces of all filled joints except at top surface of roadway slab. Use edging tool with 1/2" radius at top surface of roadway slab each side of joint and fill flush with joint seal as shown.



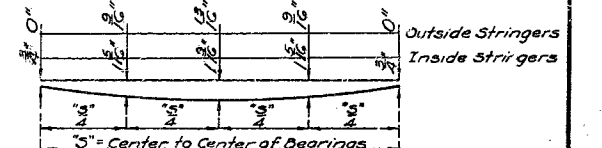
DETAILS OF RAIL
Note: Use similar detail at rail splices except omit slotted holes and 1" gap.



HALF SECTION THROUGH SPANS REQUIRING 21", 24" & 27" STRINGERS
Note: Slab, curb, rail and post details same as shown in section for 24" stringers.



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



SLAB HAUNCHING DIAGRAM
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.

BRIDGE OVER LITTLE SUGAR CREEK
STATE ROAD FROM ROUTE 28 EAST & NORTH TO ROUTE 3K
ABOUT 13.0 MILES S.E. OF LANAGAN
PROJECT NO. S-348(3) (STSTA. 70 + 70.5)
ME DONALD COUNTY
FINISHED

Assembled April 1956 by W.G.S. & J.H.K.
Checked July 1956 by C.S.A.

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

Sheet No. 6 of 10
NO CONSTRUCTION CHANGES

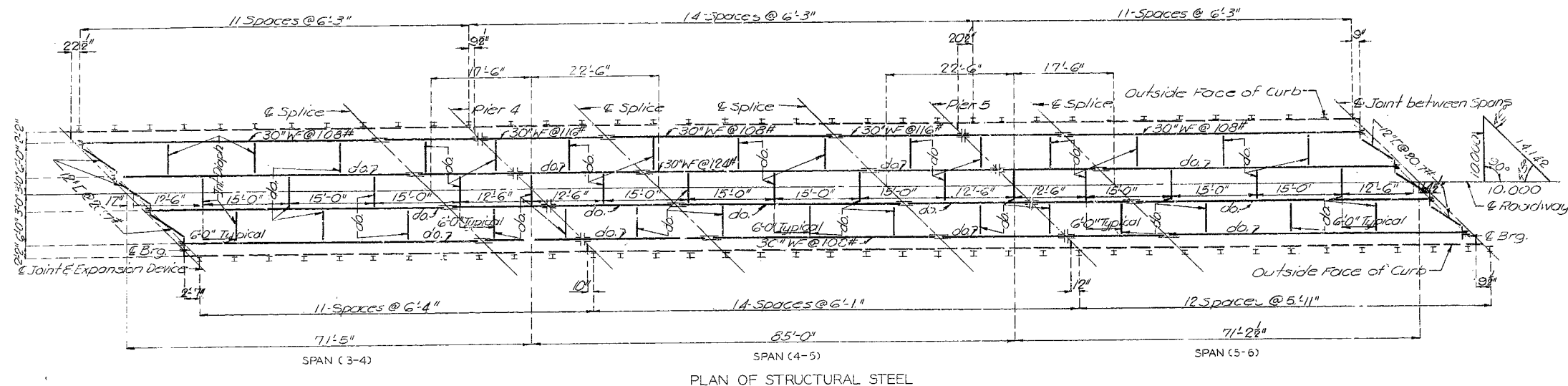
P-973

R. T. 20-H-10
Rev. Feb. 1955

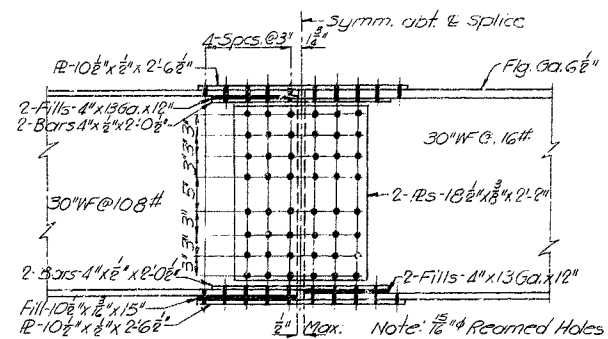
372

MISSOURI STATE HIGHWAY DEPARTMENT

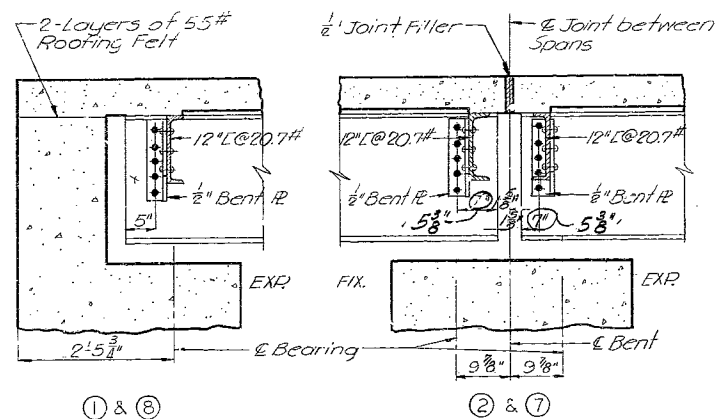
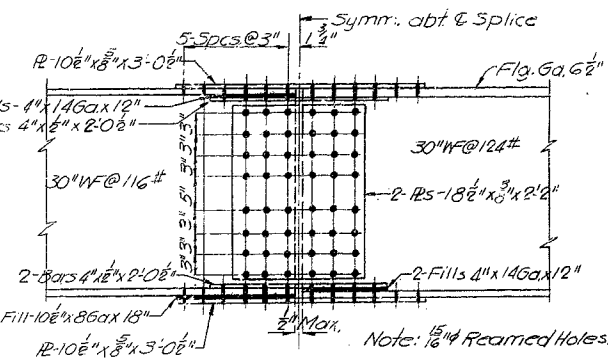
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5	MO.	3-348(3)	19	18	



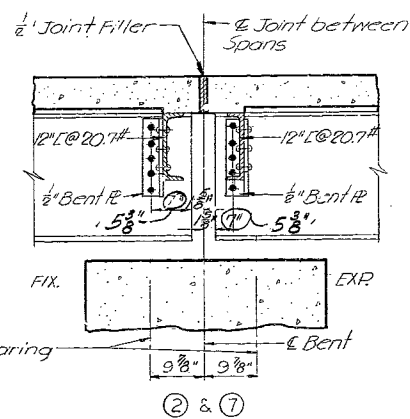
PLAN OF STRUCTURAL STEEL



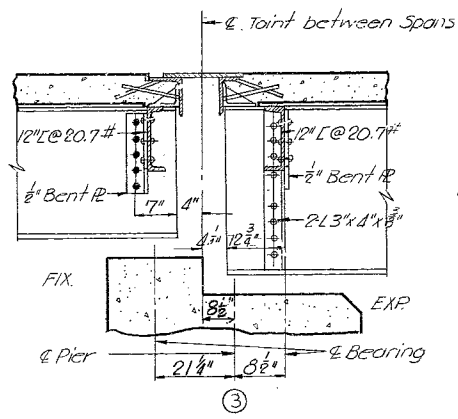
DETAILS OF BEAM SPLICES



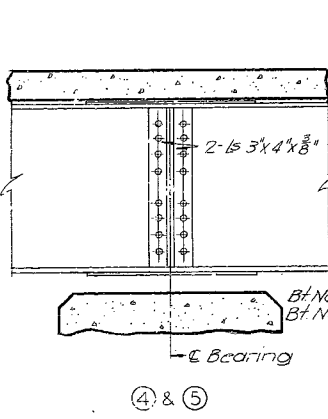
1 & 8



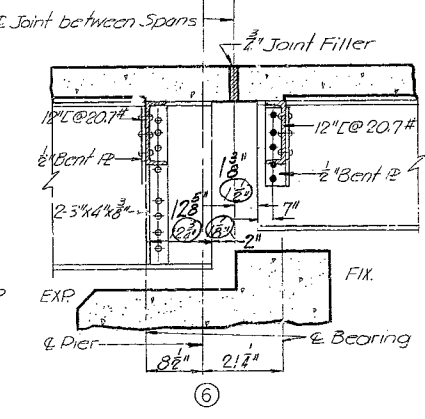
2 & 7



3

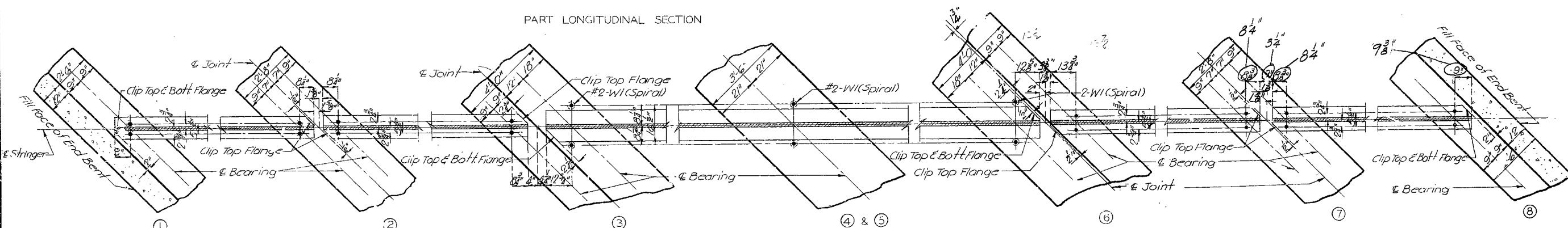


4 & 5



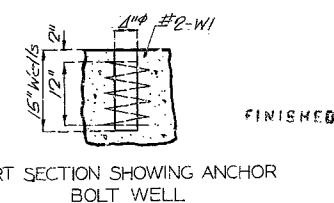
6

PART LONGITUDINAL SECTION



PART ANCHOR BOLT PLAN

Note: Holes for 1/2" anchor bolts shall be formed in substructure by placing and setting with template 2" wells of depth shown. Grout for anchor bolt wells shall contain iron oxide (Embase or an approved equivalent)



PART SECTION SHOWING ANCHOR BOLT WELL

BRIDGE OVER LITTLE SUGAR CREEK
STATE ROAD FROM ROUTE 88 EAST & NORTH TO ROUTE SK
ABOUT 13.0 MILES S.E. OF LANAGAN
PROJECT NO. S-348 (3) STA. 70+76.5
McDONALD COUNTY
FINISHED
Rev. 9-16-57

P-973

Drawn MAY 1956 by W.G.S.
Checked J.C. 1956 by C.S.A.

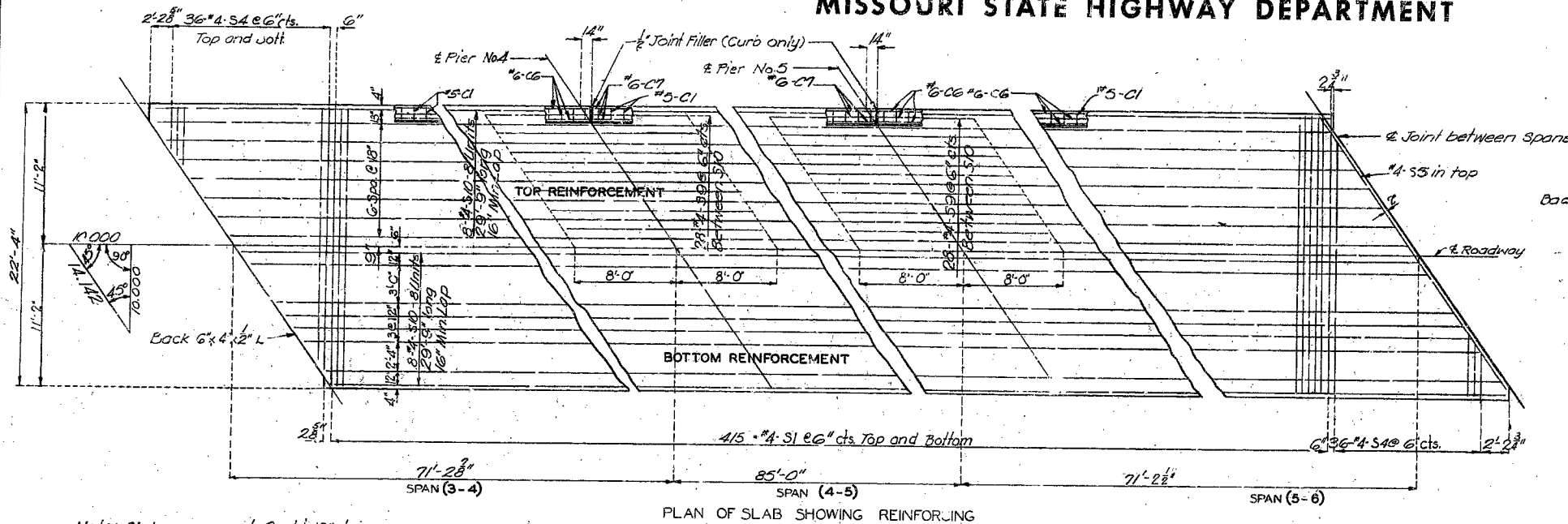
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Sheet No. 7 of 10.
NO CONSTRUCTION CHANGES

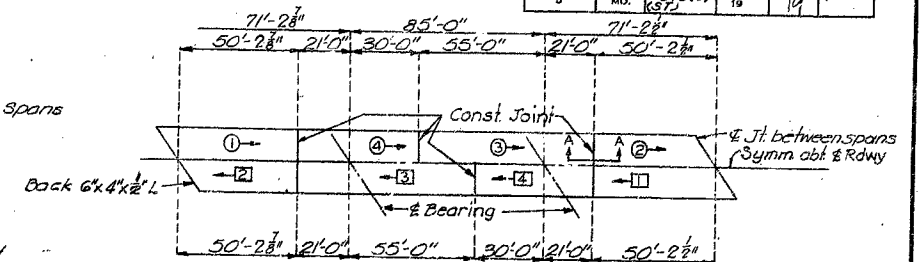
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MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	S-348(3) (ST)	19	19	

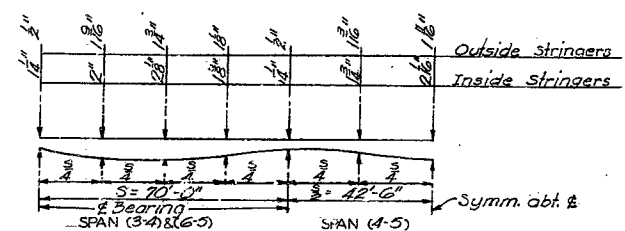
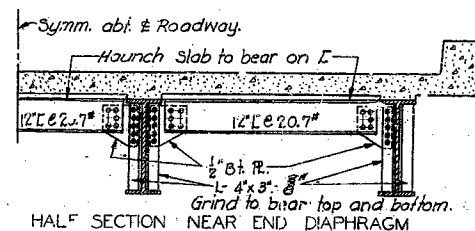
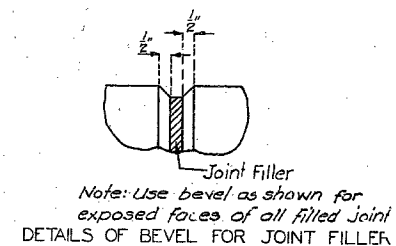
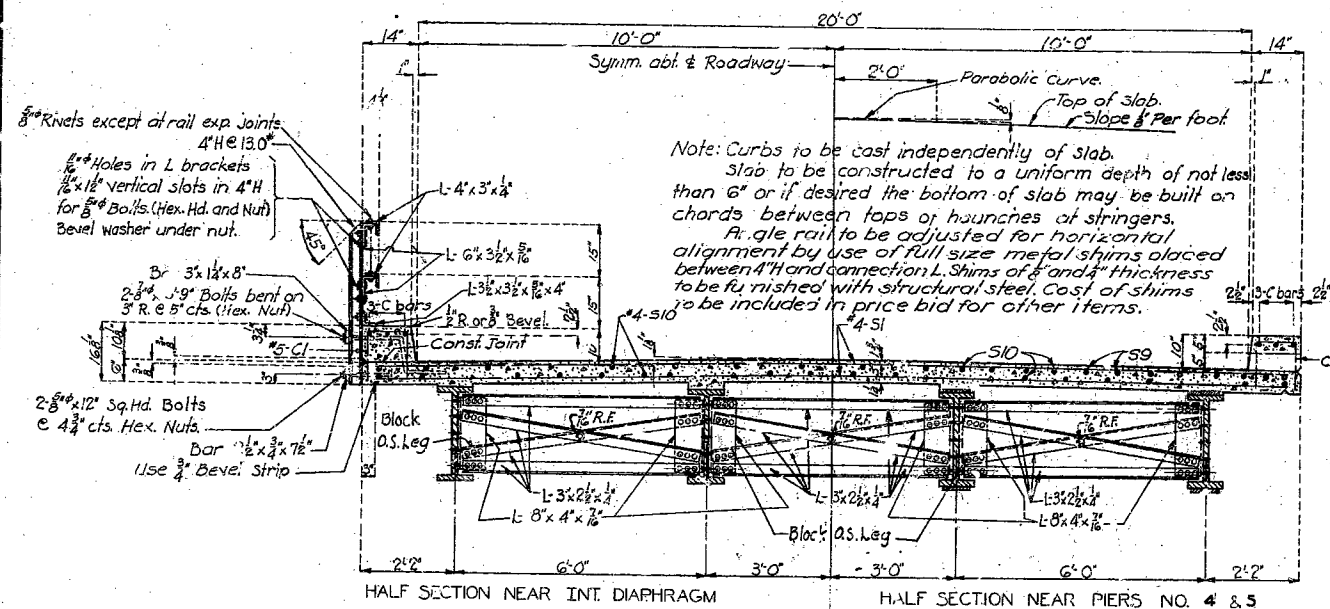
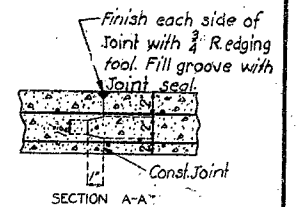


Note: CI bars spaced @ abt. 12" cts. between outlets and at ends.



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

SLAB POURING SEQUENCE



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 the stringers by the amounts shown above. This additional concrete is included in Estimated Quantities.

SLAB HAUNCHING DIAGRAM

BRIDGE OVER LITTLE SUGAR CREEK

STATE ROAD FROM ROUTE 86 EAST & NORTH TO ROUTE SK
ABOUT 13.0 MILES S.E. OF LANAGAN

PROJECT NO S-348(3) (ST) STA. 70+78.5

MCDONALD COUNTY

Drawn May 1956 by W.G.S & J.L.L.
Checked July 1956 by C.S.H.

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

Sheet No. 8 of 10.

FINISHED

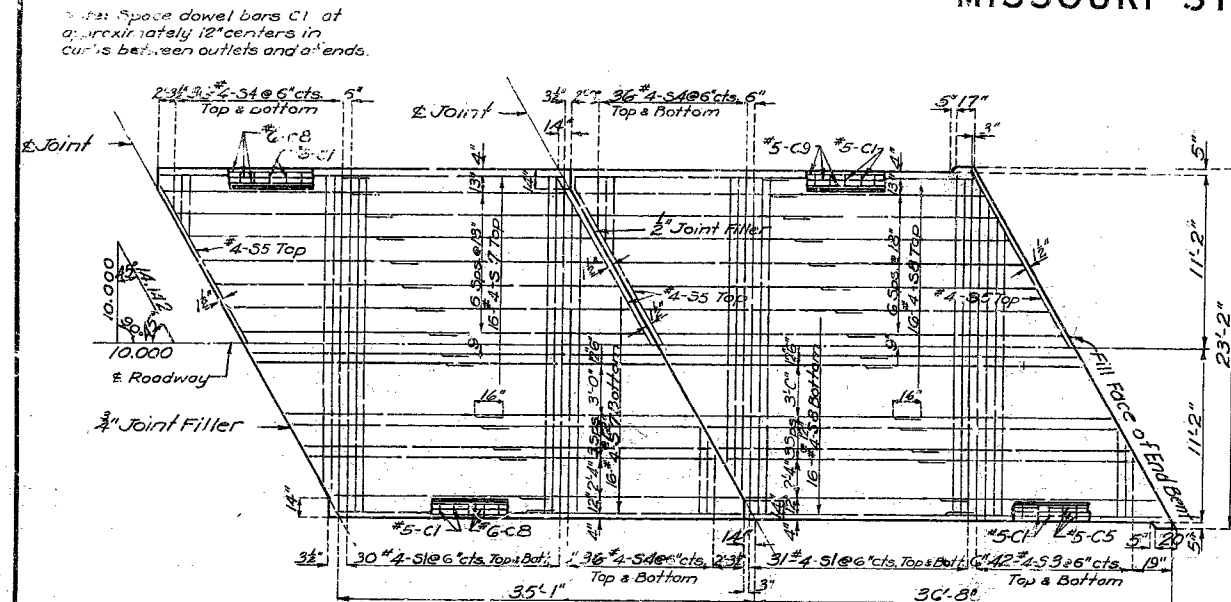
FINISHED

P-973

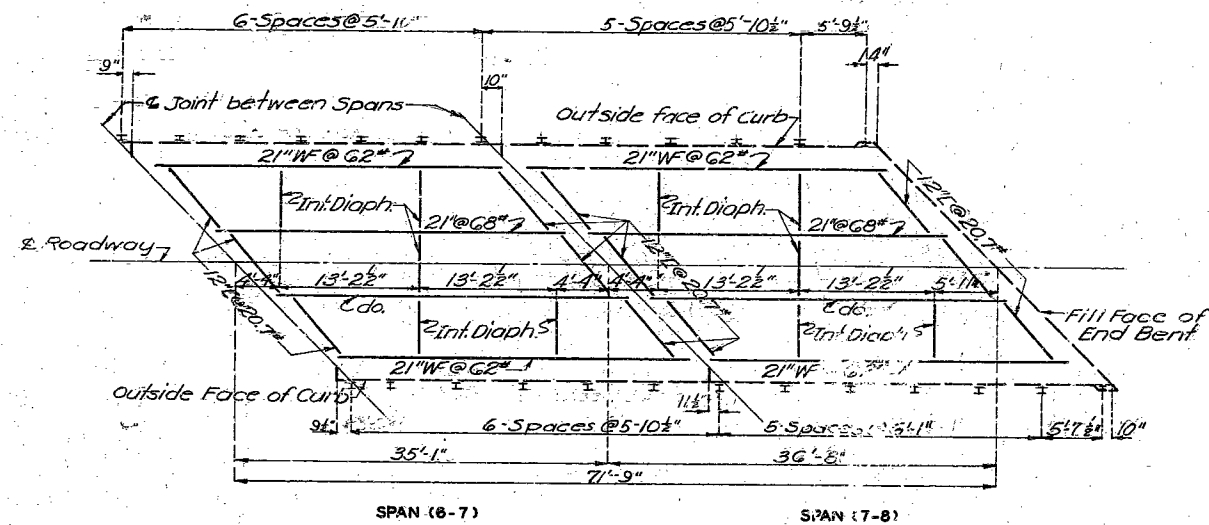
NO CONSTRUCTION CHANGES

MISSOURI STATE HIGHWAY DEPARTMENT

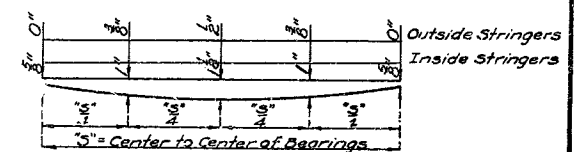
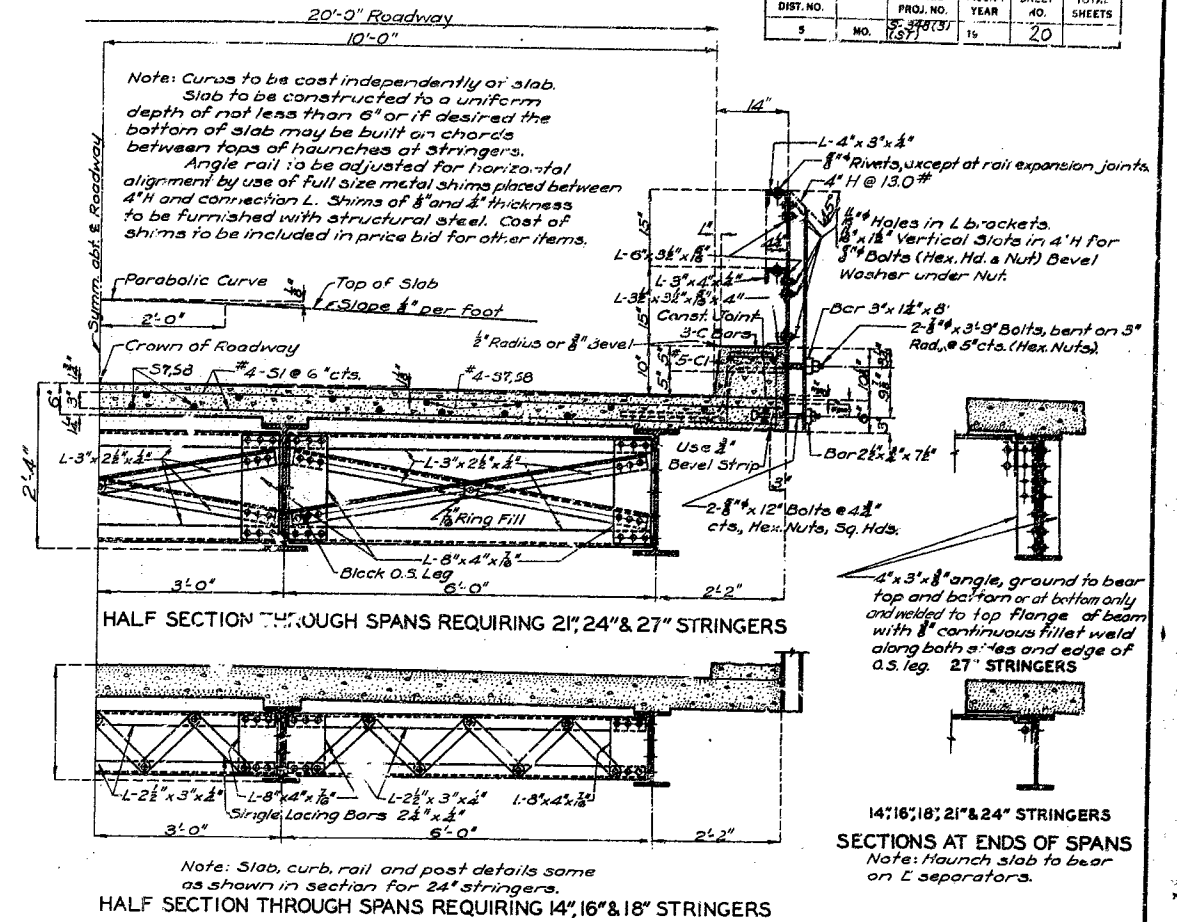
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	5-348(3)	15	20	



PLAN OF SLAB SHOWING REINFORCEMENT



PLAN OF STRUCTURAL STEEL



Note: Slab shall be built parallel to grade and 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 DIAGRAM

BRIDGE OVER LITTLE SUGAR CREEK

STATE ROAD FROM ROUTE 88 EAST & NORTH TO ROUTE 54
ABOUT 13.0 MILES S.E. OF LANAGAN

PROJECT NO. 5-348(3) CST STA. 70 + 78.5

MCDONALD COUNTY

FINISHED

FINISHED

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Sheet No. 9 of 10

NO CONSTRUCTION CHANGES

R. T. 20-H-10
Rev. Feb. 1955

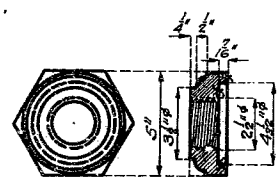
Assembled May 1956 by W.G.S. & J.H.K.
Checked July 1956 by C.S.A.

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

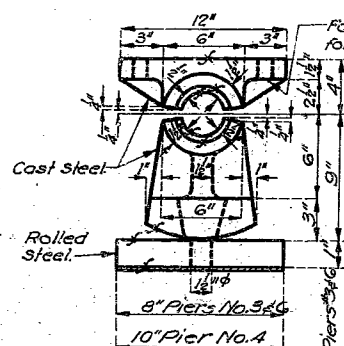
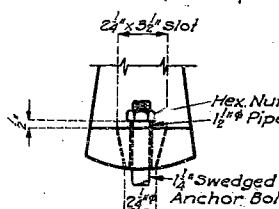
375

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	5-348(3)	19	21	

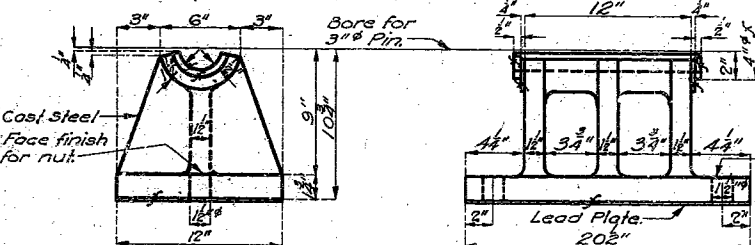


CAST STEEL NUT
32-Required.
1/6-3" Rolled steel pins required.



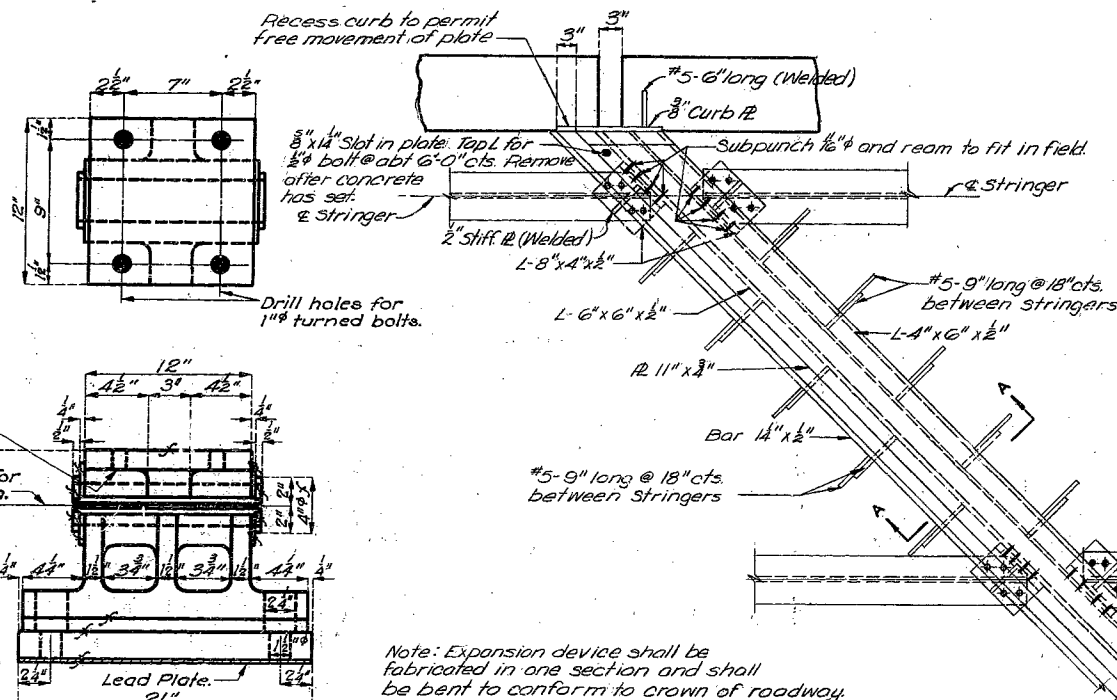
EXPANSION ROCKER
4-Required Pier No. 4
8-Required Piers No. 3 & 5

Note: Cast steel cap same as shown above.



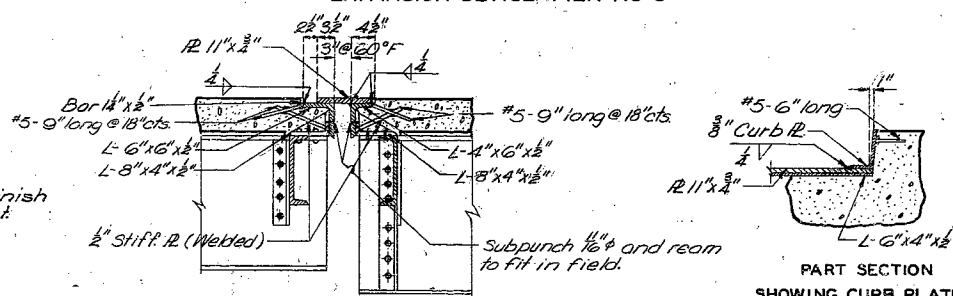
4-FIXED PEDESTAL

TYPE "A"



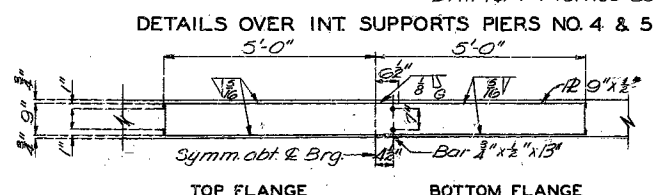
PART PLAN

EXPANSION DEVICE, PIER NO. 3



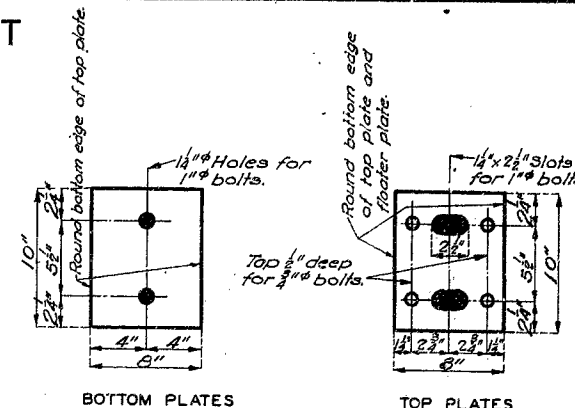
SECTION A-A

PART SECTION SHOWING CURB PLATE



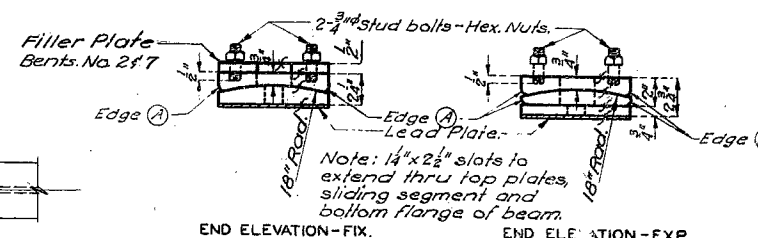
DETAILS OF WELDED PLATES OVER PIERS NO. 4 & 5

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



BOTTOM PLATES

TOP PLATES



END ELEVATION-FIX.

END ELEVATION-EXP.

Required: 16 sets. Each set consists of 5 plates each.
8-8"x10" Fill PLS.

TYPE "C"

GENERAL NOTES:

- Finish all surfaces marked X.
- All fillets for Type "A" castings shall have 3" radius.
- Material for Type "A" castings shall be Cast steel, except as noted. Material for 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, rolled steel and pinholes shall be paid for as structural steel.
- Anchor bolts for Type "A" castings shall be 1" swaged bolts with hex nuts and shall extend 12" into concrete.
- Anchor bolts for Type "C" castings shall be 1" swaged 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 4" below the top surface of the bottom flange of beam.
- Lead plates under bearings shall be approximately 8" thickness and weigh 87.5 lb. Cost of lead plates shall be included in price bid for other items.
- Edge (A) to be rounded. 1/8" to 5/8" Rad.
- Fill p.s. may be made as part of casting if desired but payment will be made as structural steel.

BRIDGE OVER LITTLE SUGAR CREEK

STATE ROAD FROM ROUTE 88 EAST & NORTH TO ROUTE 88
ABOUT 13.0 MILES S.E. OF LANAGAN
PROJECT NO. 5-348(3) (ST) STA. 70 + 78.5

Mc DONALD COUNTY

FINISHED

FINISHED

P-973

Sheet No. 10 of 10.

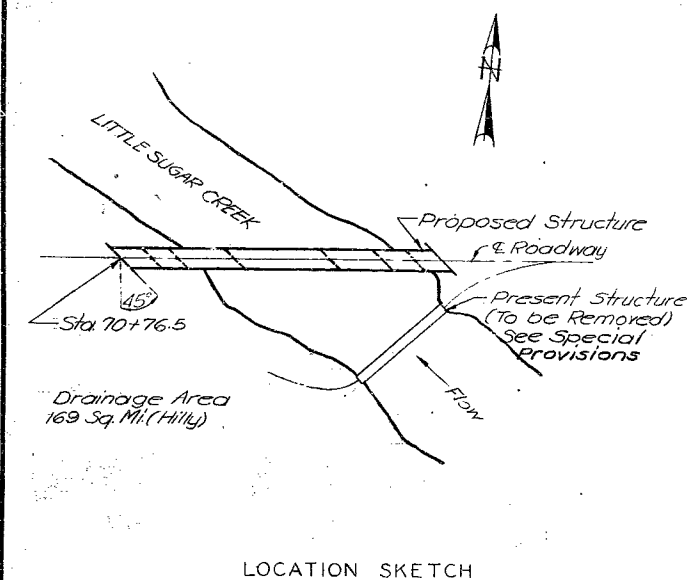
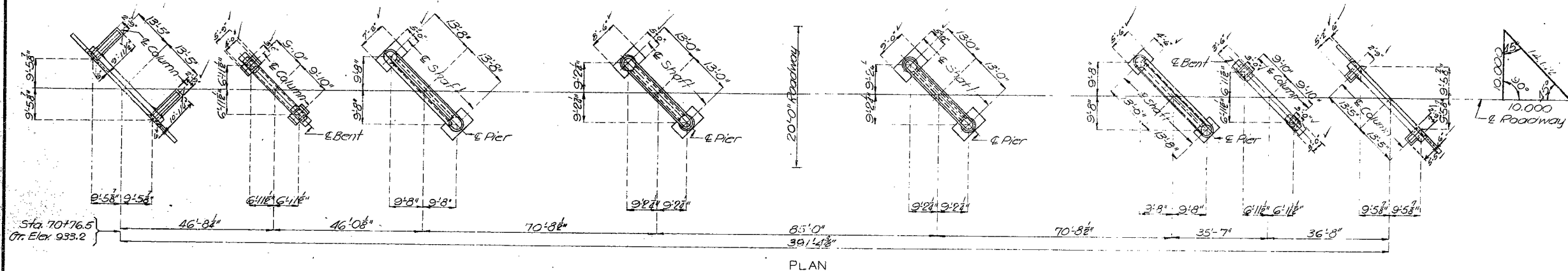
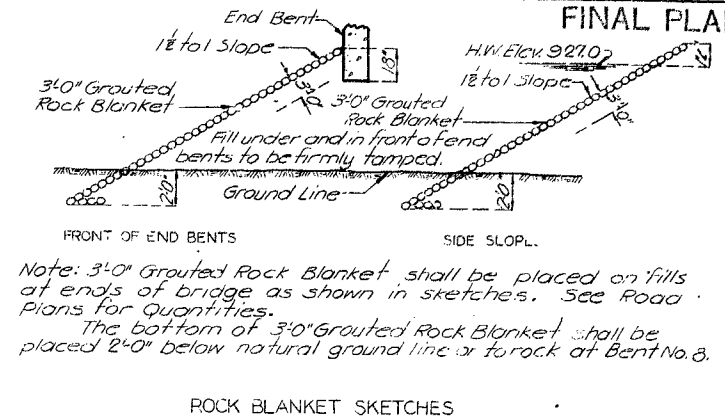
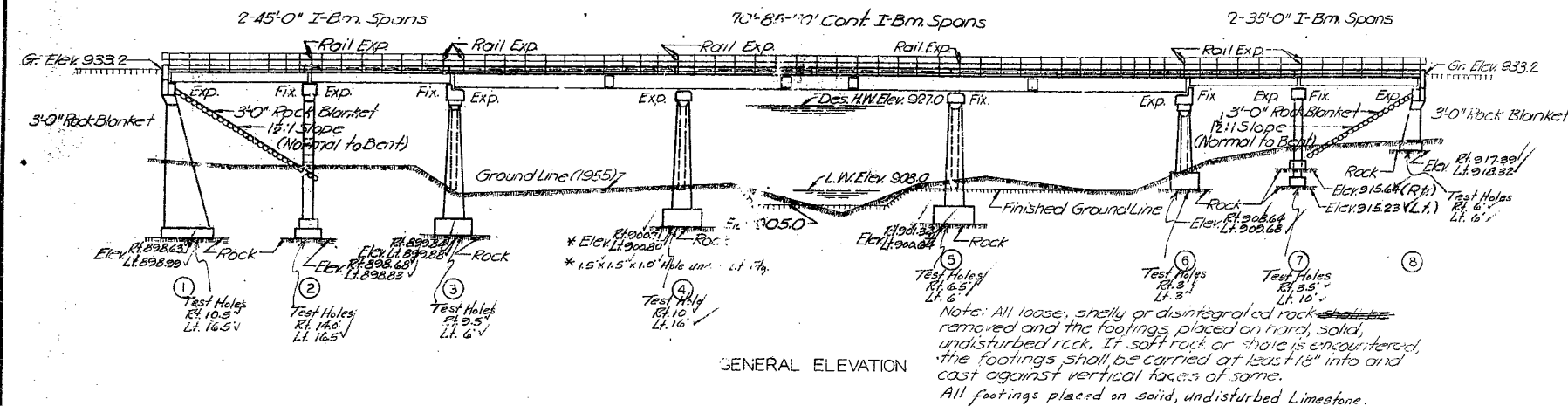
NO CONSTRUCTION CHANGES

Assembled May 1956 by W.G.S. & J.H.K.
Checked July 1956 by C.S.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.	3-348(3)	19	12	



GENERAL NOTES:

Design Specifications A.A.S.H.O.-1953.
Loading H10-44
Structural Steel Stress: 18,000 #/sq.
Reinforcing Steel Stress: 18,000 #/sq.
Concrete, Class "B" Stress: 1000 #/sq.
All concrete shall be Class "B".
Rivets 3/4" holes 1/2" except where otherwise noted.
Field connections shall be riveted or if the Contractor desires he may use high tensile steel bolts with corrugated washers in the expansion device and beam splices and American Standard Regular Machine bolts for other field connections in place of rivets except for connections noted in handrail details.
If high tensile steel bolts are used they shall be placed in such a manner that the nuts will always be in the least exposed position, where joint filler is specified on the plans it shall conform with the requirements for Premoulded Material for filler as given in section 59-22 D of the Standard Specifications.
Qualifications of welding operators will be required.
Paint: Shop none; Field, contact surfaces of bolted field connections, except where high tensile bolts are used, one coat of red lead, and surfaces inaccessible after erection three coats of red lead. No other paint to be applied by Contractor. Red lead required shall be furnished by Contractor. Payment for cleaning and painting such surfaces will be included in unit price bid for Fabricated Structural Steel.

Note: Excavation for bridge made above Elev. 909.0 will be paid for as Class 1 Excavation for structures.
Excavation for bridge made below Elev. 909.0 will be paid for as Class 2 Excavation for structures.
* Fig. 3: pay major for fabricated structural steel will be based on using field rivets except for bolted connections specified for handrail.

FINAL QUANTITIES

ITEMS	SUBSTR.	SUPERSTR.	TOTAL
Class 1 Excavation for Structures	Cu.Yds.	104.5	104.5
Class 2 Excavation for Structures	Cu.Yds.	274.0	274.0
Class "B" Concrete	Cu.Yds.	306.2	306.2
Reinforcing Steel	Lbs.	25390	25390
Fabricated Structural Steel	Lbs.	37810	37810
Gray Iron Alloy Castings	Lbs.	1710	1710
Steel Castings	Lbs.	5210	5210
Class 1 Excavation Below Plan Elev.	Cu.Yds.	1.0	1.0
Class 2 Excavation Below Plan Elev.	Cu.Yds.	2.5	2.5
Test Holes	Lin. Ft.	143	143

BRIDGE OVER LITTLE SUGAR CREEK
STATE ROAD FROM ROUTE 88 EAST & NORTH TO ROUTE SK ABOUT 13.0 MILES S.E. OF LANAGAN
PROJECT NO. S-348(3) (ST) STA. 70+76.5
MEDONALD COUNTY

FINISHED
SUBMITTED BY J. A. Williams DATE 8-23-1956
APPROVED BY R. M. Tolson DATE 8-23-1956
FINISHED

Drawn MAY 1956 by W.G.S.
Checked July 1956 by C.S.A.

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

Sheet No. 1A of 5

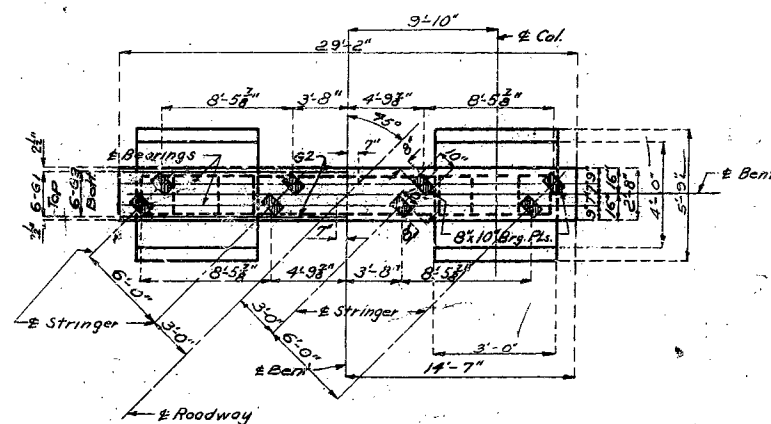
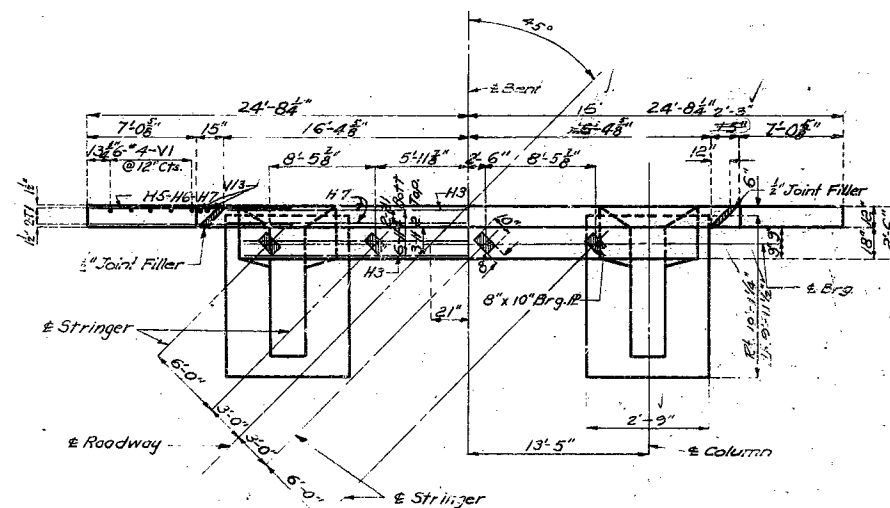
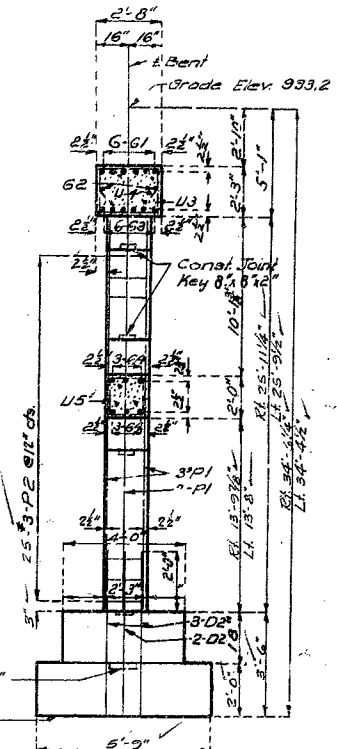
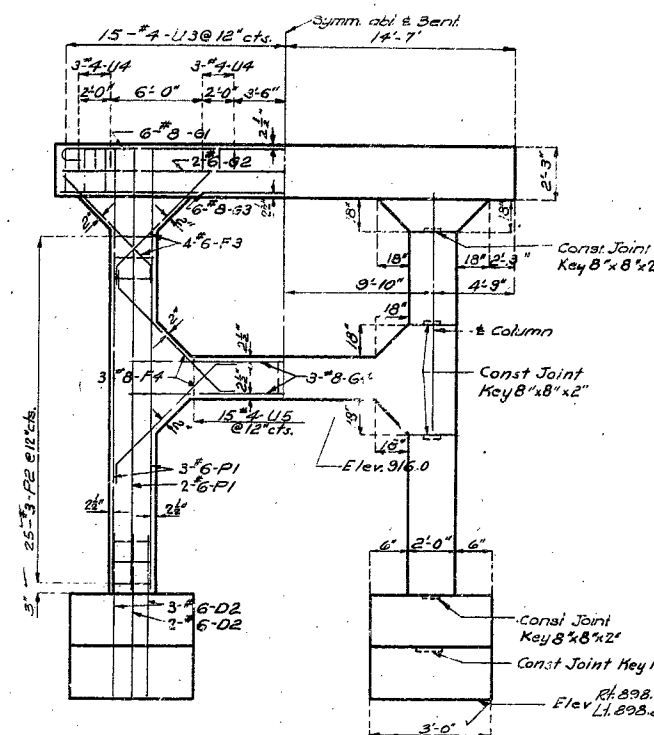
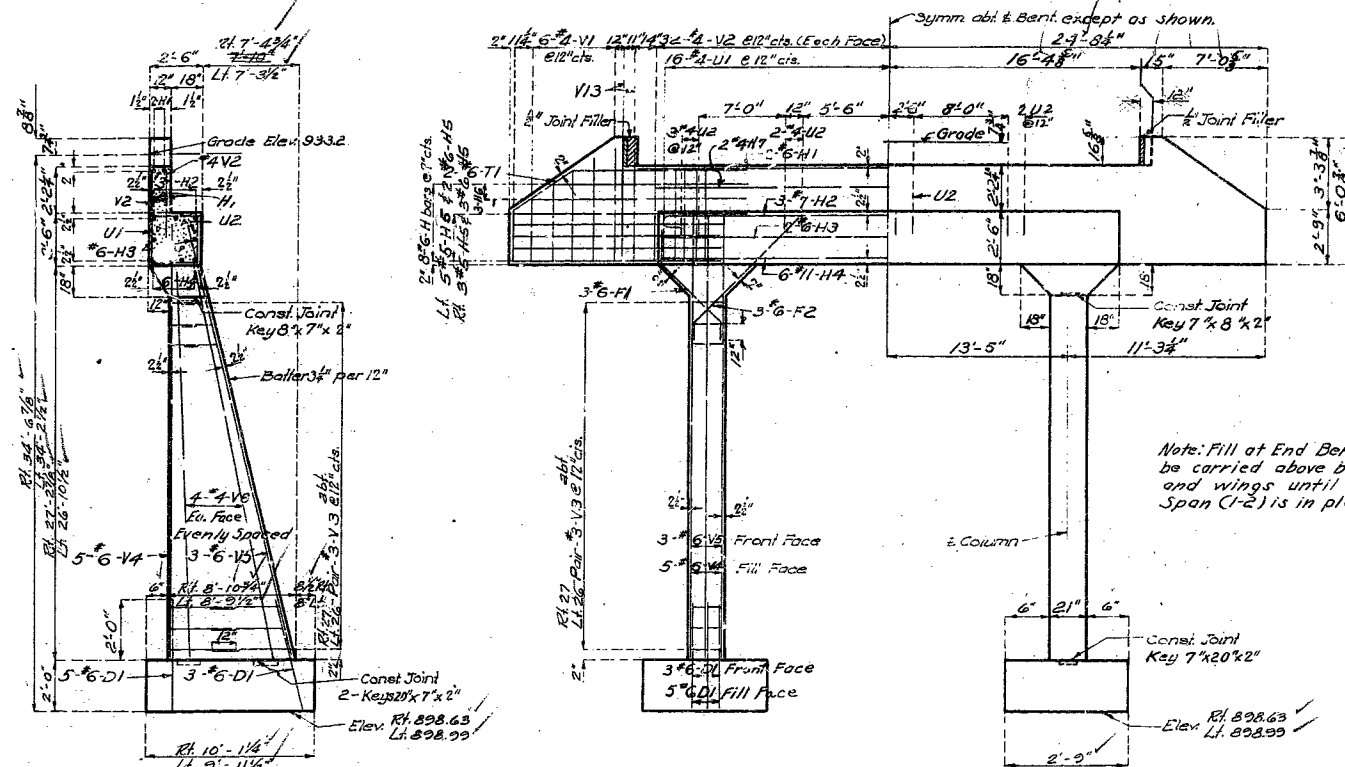
FINAL PLANS

STD-CIOR4
P-973

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	5-348(3)	19	13	

FINAL PLANS



BRIDGE OVER LITTLE SUGAR CREEK

STATE ROAD FROM ROUTE 88 EAST & NORTH TO ROUTE 88
ABOUT 13.0 MILES S.E. OF LANAGAN
PROJECT NO. 5-348(3) (ST) STA. 70+78.5

FINISHED McDONALD COUNTY FINISHED

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FINAL PLANS

Assembled April 1956 by G.W.P. & O.J.S.
checked July 1956 by C.S.A.

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

Sheet No. 21 of 5

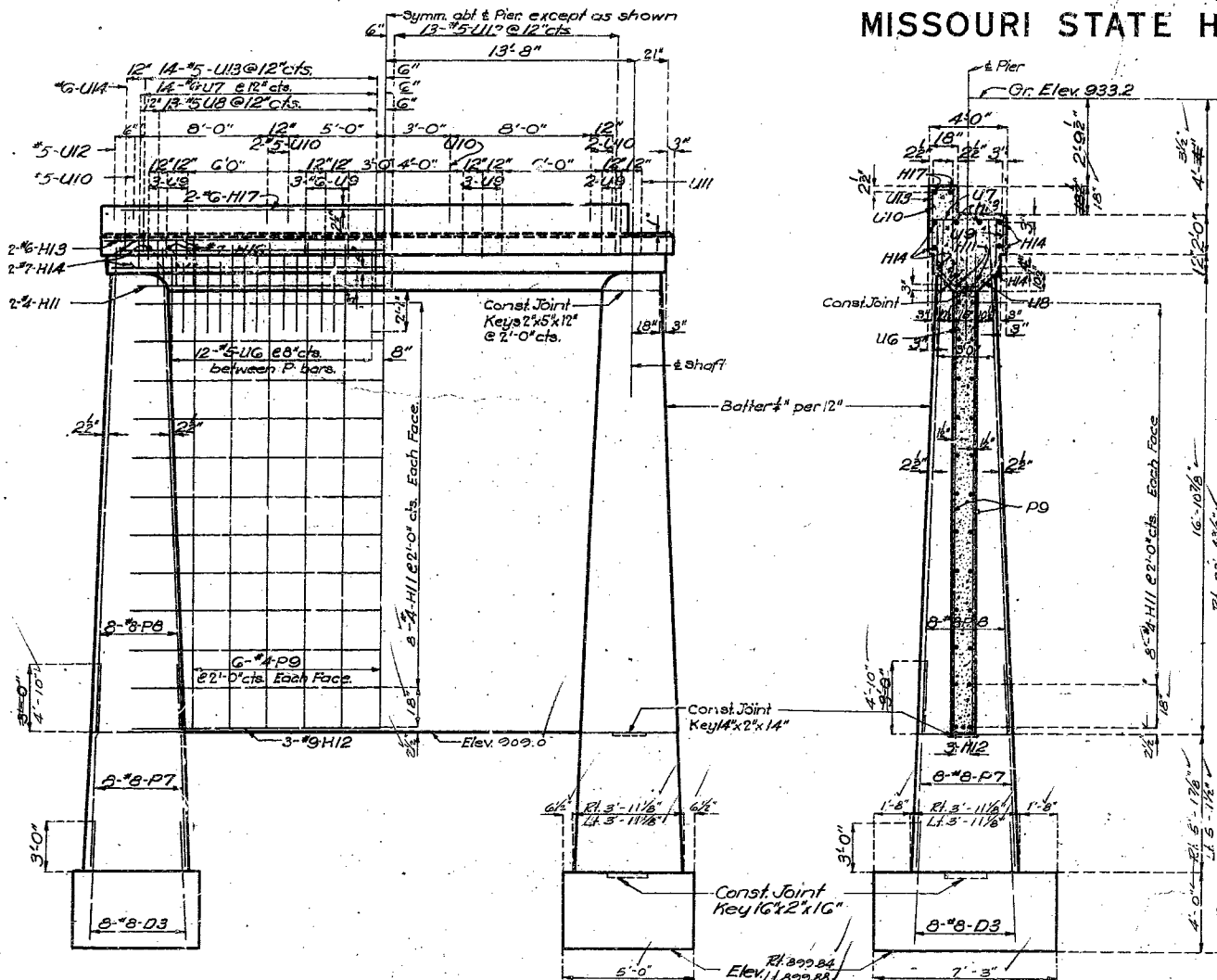
2 Col. End & 2 Col. Int. 20' on 20' Squares & Skewed

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MISSOURI STATE HIGHWAY DEPARTMENT

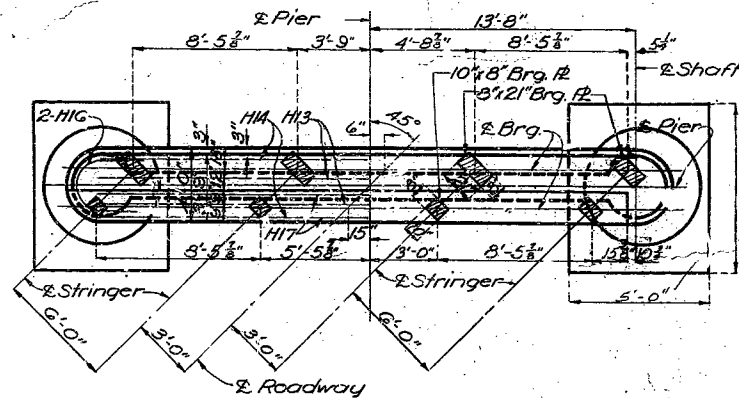
DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	3-348(3)	19	14	

FINAL PLANS



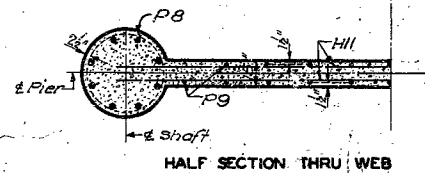
ELEVATION

SECTION AT E

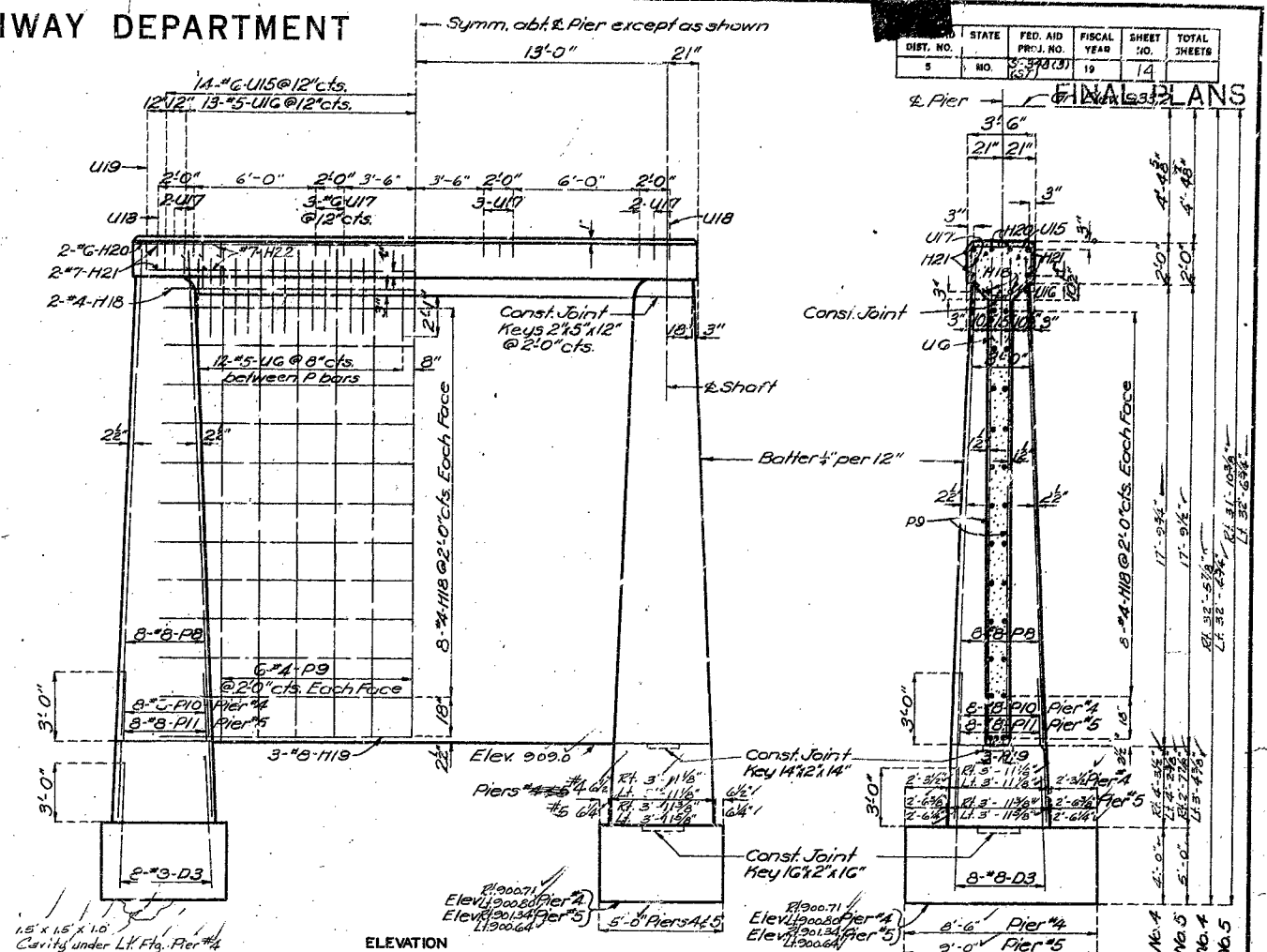


PLAN

DETAILS OF PIER NO. 3

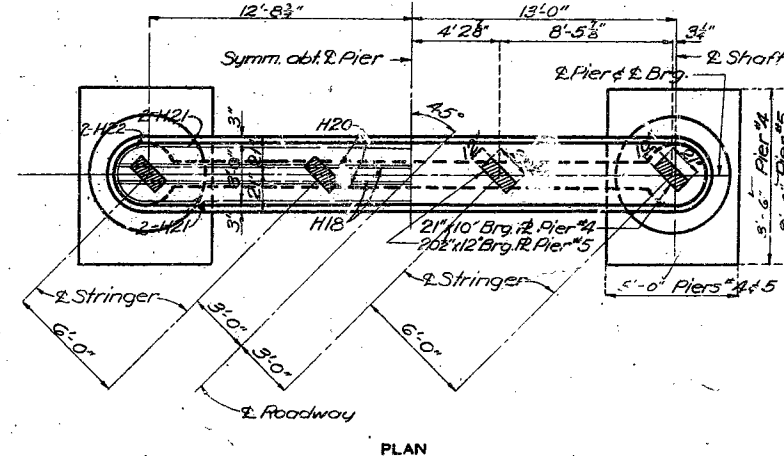


HALF SECTION THRU WEB



ELEVATION

SECTION AT E



PLAN

DETAILS OF PIERS NO. 4 & 5

BRIDGE OVER LITTLE SUGAR CREEK

STATE ROAD FROM ROUTE 88 EAST & NORTH TO ROUTE SK
ABOUT 13.0 MILES S.E. OF LANAGAN
PROJECT NO. S-348(3) (ST) STA. 70+76.5

ME DONALD COUNTY

FINISHED

P-973

FINAL PLANS

2 Shaft Pier

Assembled May 1956 by HET. & JMK.
Checked July 1956 by GSA.

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

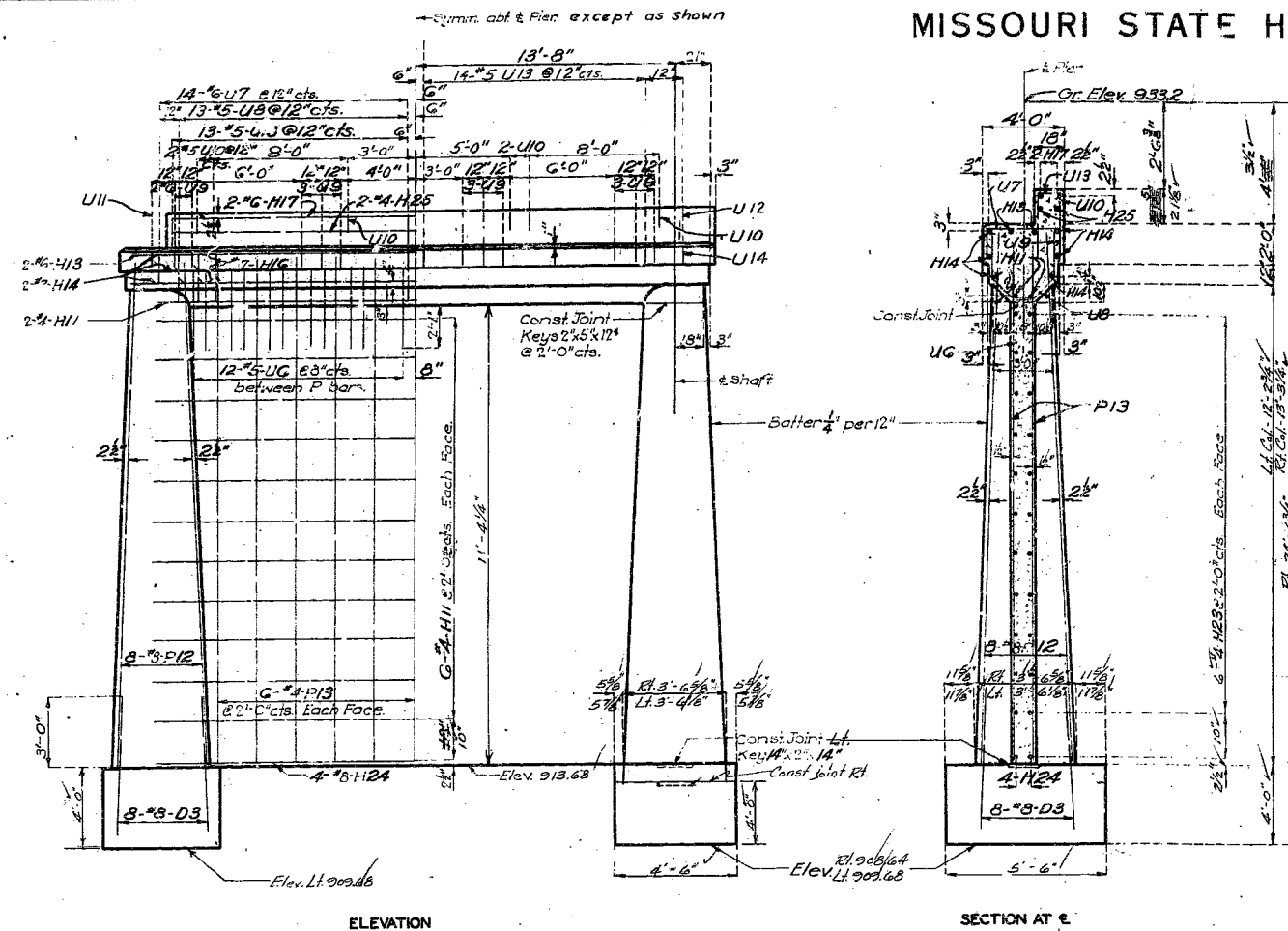
Sheet No. 3 of 3

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MISSOURI STATE HIGHWAY DEPARTMENT

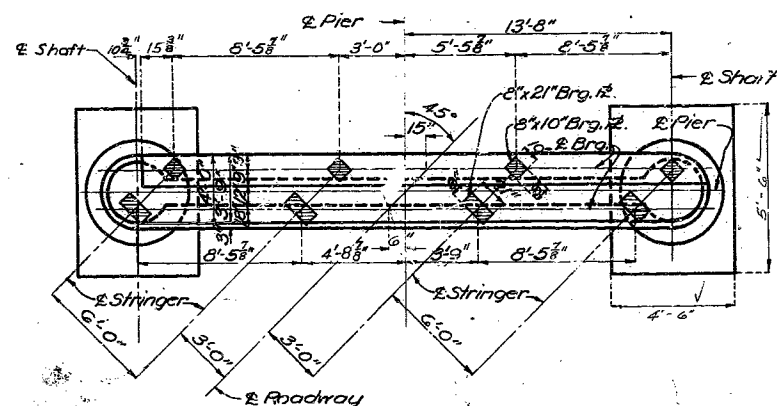
F.D. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	5-378(3)	19	15	

FINAL PLANS



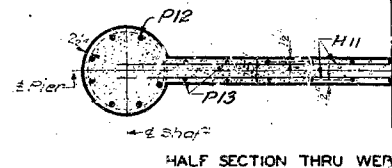
ELEVATION

SECTION AT E



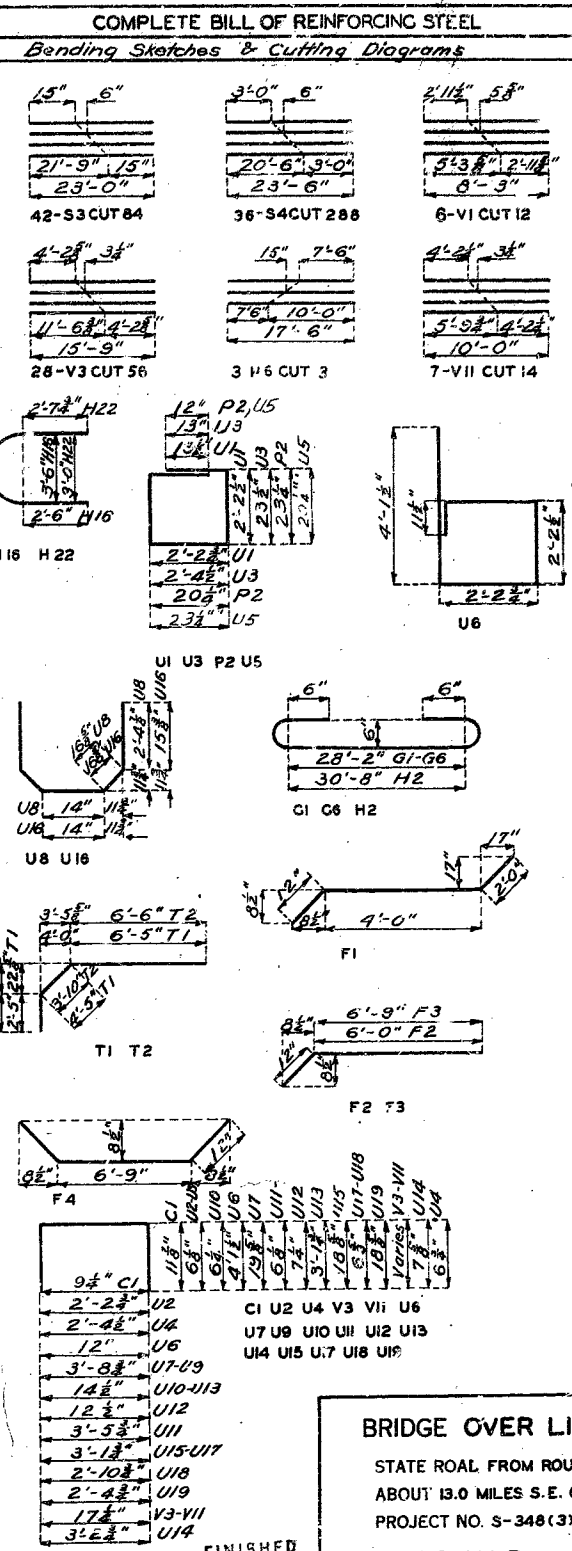
PLAN

DETAILS OF PIER NO 6



HALF SECTION THRU WEIR

No.	Size	Length	Mark	Location
Superstructure				
113	#4	22'-0"	S1	Slab
64	#4	23'-9"	S2	"
84	#4	23'-0"	S3	"
288	#4	23'-6"	S4	"
8	#4	31'-3"	S5	"
64	#4	23'-0"	S6	"
64	#4	18'-0"	S7	"
64	#4	18'-9"	S8	"
56	#4	16'-0"	S9	"
256	#4	29'-9"	S10	"
12	#6	18'-6"	C8	Curb
562	#5	2'-3"	C1	"
6	#5	24'-3"	C2	"
6	#5	23'-9"	C3	"
12	#6	23'-6"	C4	"
6	#6	19'-9"	C5	"
3	#6	25'-0"	C6	"
18	#6	29'-9"	C7	"
6	#5	18'-6"	C8	"
End Bent No. 1				
16	#6	4'-0"	F1	Footling
2	#6	31'-9"	H1	Backwall
3	#7	33'-3"	H2	Beam
2	#6	31'-3"	H3	"
6	#7	31'-3"	H4	"
10	#5	11'-0"	H5	Wing
3	#6	17'-6"	H6	"
2	#4	32'-	H7	Backwall
4	#6	13'-3"	F1	Wing
6	#6	7'-0"	F1	Col. Haunch
6	#6	7'-0"	F2	"
31	#4	10'-0"	U1	Backwall
8	#4	3'-3"	U2	Beam
6	#4	8'-3"	V1	Wing
64	#4	4'-3"	V2	Backwall
56	#3	15'-9"	V3	Column
10	#6	31'-0"	V4	"
6	#6	32'-0"	V5	"
16	#4	28'-6"	V6	"
4	#4	5'-9"	V13	Wing
5	#6	11'-0"	H-5	"
Bent No. 2				
16	#6	5'-6"	D2	Footling
16	#6	7'-9"	F3	Col. Haunch
12	#8	8'-3"	F4	Beam Haunch
6	#8	30'-9"	G1	Beam
2	#6	28'-9"	G2	"
6	#8	28'-9"	G3	"
6	#8	21'-3"	G4	Tie Beam
16	#6	29'-0"	P1	Column
52	#3	8'-3"	P2	"
29	#4	9'-9"	U3	Beam
12	#4	3'-6"	U4	"
15	#4	8'-3"	U5	Tie Beam
Pier No. 3 & No. 6				
32	#8	6'-0"	D3	Footling
32	#4	27'-6"	H1	Web 12'-
3	#9	27'-6"	H12	" Pier #3
4	#6	30'-6"	H13	Cap
12	#7	27'-5"	H14	"
8	#7	10'-6"	H16	Cap
4	#6	26'-9"	H17	Brq. Haunch
4	#8	27'-6"	H24	Web Pier #6
16	#8	9'-9"	P7	Shaft Pier #3
16	#8	19'-3"	P8	" "
22	#4	19'-6"	P9	Web " "
16	#8	15'-3"	P12	Shaft Pier #6
22	#4	15'-6"	P13	Web " "
48	#5	9'-3"	U6	"
56	#6	7'-0"	U7	C7P
52	#5	8'-3"	U8	Cap



No.	Size	Length	Mark	Location
Superstructure				
22	#6	4'-9"	U9	Cap
12	#5	2'-9"	U10	Brq. Hch.
2	#6	4'-6"	U11	Cap
2	#5	2'-3"	U12	Brq. Hch.
54	#5	7'-6"	U13	" "
2	#6	4'-6"	U14	Cap
2	#4	26'-8"	H25	Haunch " 6
Pier No. 4 & No. 5				
32	#8	6'-0"	D3	Footling
8	#7	10'-0"	H22	Cap
36	#4	26'-0"	H18	Web
6	#8	27'-9"	H19	"
4	#6	29'-0"	H20	Cap
8	#7	26'-0"	H21	"
32	#8	19'-3"	P8	Shaft
44	#4	19'-6"	P9	Web
16	#8	8'-0"	P10	Shaft #4
16	#8	6'-0"	P11	" #5
48	#5	9'-3"	U6	Web
4	#6	6'-3"	U15	cap
50	#5	6'-6"	U16	"
20	#6	4'-9"	U17	"
4	#6	4'-0"	U18	"
4	#6	5'-6"	U19	"
Bent No. 7				
16	#6	4'-0"	D1	Footling
16	#6	7'-9"	F3	Col. Haunch
2	#6	28'-9"	G2	Beam
6	#7	30'-9"	G6	"
6	#7	28'-9"	G7	"
8	#6	18'-9"	P3	Column
8	#6	14'-3"	P4	"
26	#3	7'-9"	P2	"
29	#4	9'-9"	U3	Beam
12	#4	3'-6"	U4	"
End Bent No. 8				
14	#6	4'-0"	D1	Footling
2	#6	32'-9"	H1	Backwall
3	#7	33'-3"	H2	Beam
2	#6	31'-3"	H3	"
10	#6	10'-5"	H8	Wing
2	#6	9'-9"	H9	"
2	#6	8'-6"	H10	"
5	#11	31'-5"	H11	Beam
6	#6	7'-0"	F1	Haunch
6	#6	7'-0"	F2	Col. Haunch
8	#4	3'-3"	U2	Beam
31	#4	11'-9"	U6	"
6	#4	8'-3"	V1	Wing
8	#6	10'-3"	V8	Column
6	#6	10'-6"	V9	"
4	#4	8'-0"	V10	"
14	#3	10'-0"	V11	"
32	#4	4'-	V12	Backwall
4	#6	12'-9"	T2	Wing
4	#4	5'-6"	V7	"

BRIDGE OVER LITTLE SUGAR CREEK
 STATE ROAD FROM ROUTE 88 EAST & NORTH TO ROUTE SK
 ABOUT 13.0 MILES S.E. OF LANAGAN
 PROJECT NO. S-348(3) (ST) STA. 70+78.5
MC DONALD COUNTY
 FINISHED

P-973

FINAL PLANS

2-Shaft Pier

Assembled May 1956 by HET. & J.H.K.
 Checked July 1956 by C.S.A.

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

Sheet No. 4A of 5

