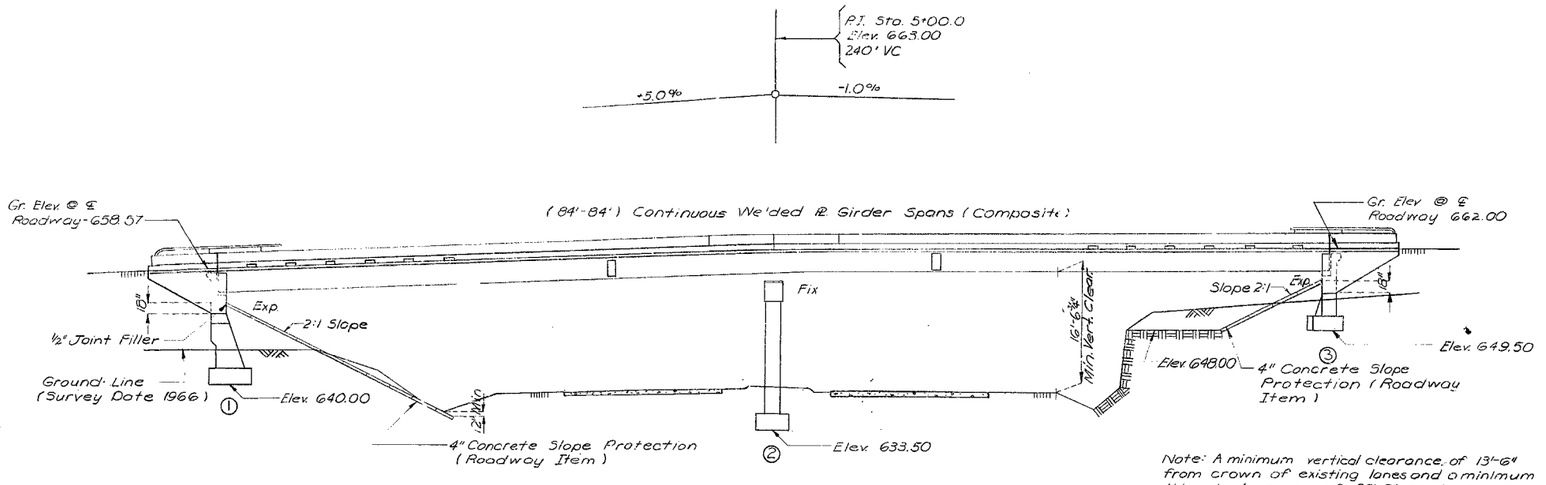
FOR INFORMATION ONLY

A2089, Sht. 1

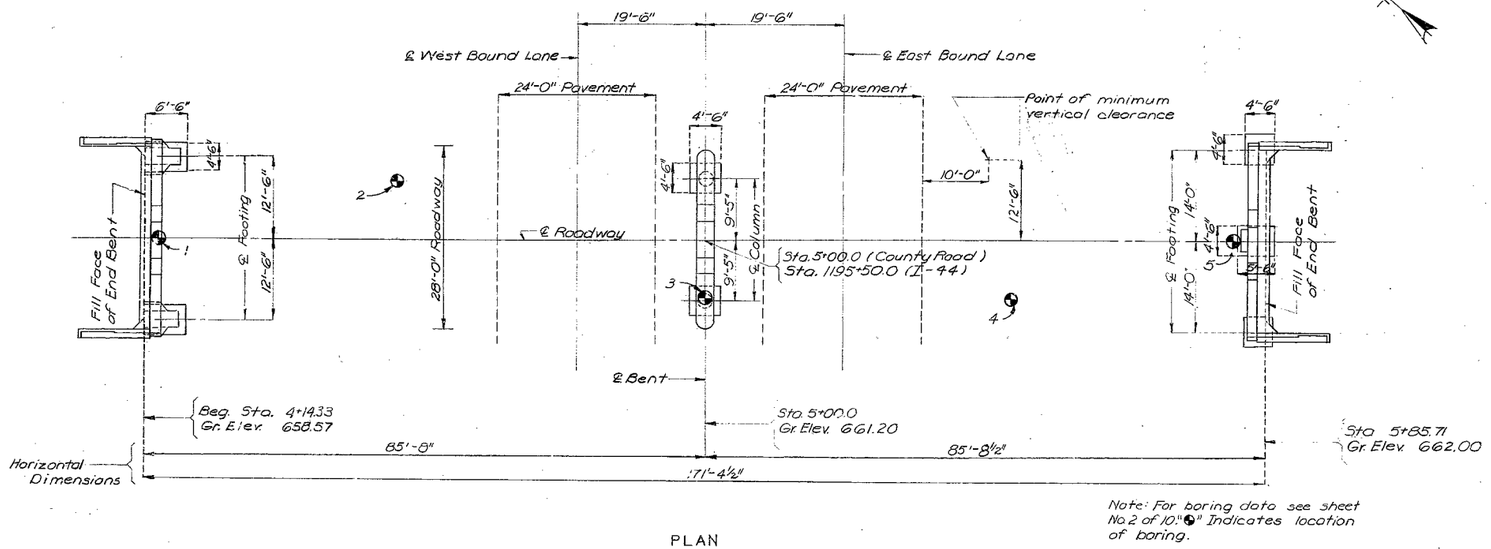
MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		15	52	



ELEVATION

Note: A minimum vertical clearance of 13'-6" from crown of existing lanes and a minimum lateral clearance of 28'-0" centered on existing lanes shall be maintained during construction.



PLAN

Note: For boring data see sheet No. 2 of 10. ⊕ Indicates location of boring.

GENERAL NOTES:

Design Specifications: A.A.S.H.O. - 1969

Design Loading:
H 15-44 15 #/sq. ft. Future Wearing Surface
Earth 120# Equivalent Fluid Pressure 30#
Fatigue Stress: Case II

Design Unit Stresses:
Class B Concrete (substructure) f_c = 1,200 psi
Class B1 Concrete (superstructure) f_c = 1,600 psi
Reinforcing Steel f_s = 20,000 psi
Structural Steel f_s = 20,000 psi

Fabricated Steel:
Field connections, High Strength Bolts ¾"ϕ, holes 13/16"ϕ except as noted.

Paint:
Shop, one coat red lead, in accordance with Std. Spec. 712.12 and 1045.4 or 1045.5; Surfaces of shear connectors and girder flange plates in contact with concrete shall not be painted.
Field, two coats by contractor, first coat brown, second coat aluminum in accordance with Std. Spec. 712.12.

FOOTING DATA			
BENT NO.	1	2	3
Foundation Material	Dolomite		
Des. Brg. Tons/Sq. Ft.	6.9	10.4	6.8

ESTIMATED QUANTITIES				
ITEM		SUBSTR.	SUPERSTR.	TOTAL
Class 1 Excavation	Cu. Yd.	75		75
Class B Concrete	Cu. Yd.	69.9		69.9
Class B1 Concrete	Cu. Yd.		151.0	151.0
Reinforcing Steel	Lb.	10,510	40,810	51,320
Painting (2 Coats)	Ton		50.5	50.5
Fabricated Structural Carbon Steel	Lb.		101,250	101,250
Bridge Rail (one tube)	Lin. Ft.		37.9	37.9

Note: All concrete and reinforcement in end posts, parapets and curbs is included with superstructure quantities.

B. M. No. 3 - Elev. 634.75 - 120.'A-1' ⊡ on S.E. corner of pipe headwall, 54' Rt. of Sta. 1191+20 (USGS Datum)

BRIDGE: COUNTY ROAD UNDERPASS

STATE ROAD FROM ST. CLAIR NORTHEAST TO ROUTE 50

ABOUT 8.0 MILES N.E. OF ST. CLAIR

PROJECT NO. I-44-3(28) (RTE. I-44) **STA.** 1195+50.0

FRANKLIN **COUNTY**

SUBMITTED BY W. D. Cosner BRIDGE ENGINEER DATE 10-13-71

APPROVED BY Robert N. Austin CHIEF ENGINEER DATE 10-13-71

STD. 611.60
STD. 706.30
A-2089

304

DESIGNED April 1969 BY Giriyappa
DETAILED May 1969 BY Bates
CHECKED May 1969 BY Goser

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

Sheet No. 1 of 10.

SEE FINAL PLANS

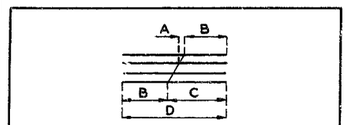
MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	55	

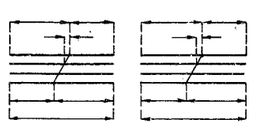
COMPLETE BILL OF REINFORCING STEEL.

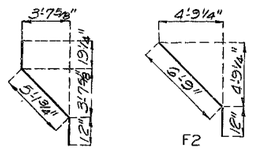
NO.	SIZE	LENGTH	MARK	LOCATION
End Bent No. 1				
20	#6	3'-0"	D1	Footing
10	#6	6'-9"	F1	Beam
8	#6	7'-9"	F2	Column
8	#6	7'-9"	F3	"
3	#6	32'-3"	F'	Beam
8	#10	30'-3"	H2	"
2	#11	30'-3"	H3	"
4	#6	30'-3"	H4	"
4	#4	30'-3"	H5	Backwall
4	#7	10'-9"	H6	Wing
4	#6	10'-3"	H7	"
4	#6	8'-6"	H8	"
4	#6	5'-6"	H9	Beam
4	#6	3'-9"	H10	"
4	#6	13'-0"	T1	Wing
4	#6	8'-0"	T2	Apron
4	#6	8'-0"	T3	Wing
31	#4	10'-9"	U1	Beam
8	#4	3'-3"	U2	"
8	#4	5'-3"	U3	Apron
8	#3	12'-9"	U4	Column
6	#3	12'-3"	U5	"
56	#5	4'-9"	V1	Backwall
20	#4	10'-0"	V2	Wing
4	#4	8'-0"	V3	"
4	#4	4'-9"	V4	Apron
12	#6	11'-0"	V5	Column
8	#6	11'-9"	V6	"
8	#6	9'-9"	V7	"
4	#4	8'-0"	V8	"
8	#2	15'-1"	W1	A.B. Well
Intermediate Bent No. 2				
18	#8	4'-0"	D2	Footing
4	#11	28'-3"	H11	Beam
2	#6	24'-9"	H12	"
8	#11	24'-9"	H13	"
8	#7	8'-9"	H14	"
4	#11	13'-3"	H15	"
34	#3	8'-0"	P1	Column
13	#5	11'-9"	U6	Beam
58	#6	10'-6"	U7	"
18	#8	19'-0"	V9	Column
8	#2	15'-1"	W1	A.B. Well
End Bent No. 3				
10	#6	6'-9"	F1	Beam
4	#7	10'-9"	H6	Wing
4	#6	30'-5"	H7	Beam
4	#4	30'-9"	H5	Backwall
2	#11	10'-6"	H16	Beam
4	#8	30'-5"	H17	"
4	#8	32'-5"	H18	"
30	#2	7'-0"	H19	Footing
4	#6	9'-6"	H20	Wing
4	#6	7'-9"	H21	"
4	#6	4'-6"	H22	Beam
4	#6	8'-9"	H23	"
4	#6	10'-3"	H24	Wing
4	#6	8'-0"	T2	Apron
4	#6	13'-3"	T4	Wing
4	#6	7'-3"	T5	"

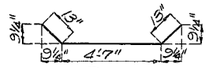
BENDING SKETCHES & CUTTING DIAGRAMS

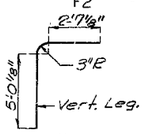


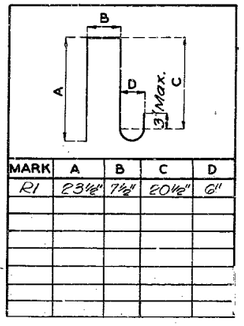
REMARKS	A	B	C	D
4-U4-Cut 8	4"	5'-10⅛"	6'-10½"	12'-9"
3-U5-Cut 6	4"	5'-9⅛"	6'-5½"	12'-3"
4-U11-Cut 4	3"	5'-3"	6'-0"	11'-3"
10-V8-Cut 20	7⅞"	2'-3⅜"	7'-8⅝"	10'-0"
10-V11-Cut 20	6⅛"	2'-3⅜"	7'-2⅛"	9'-6"



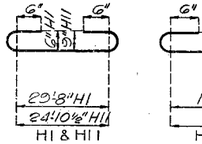


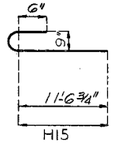


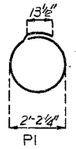


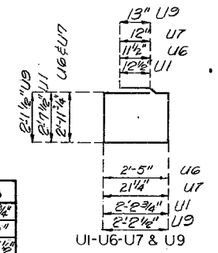


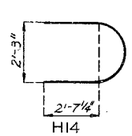
MARK	A	B	C	D
R1	23⅛"	7⅛"	20⅛"	6"

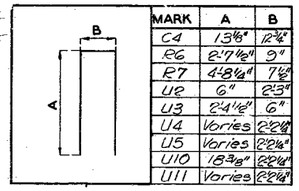




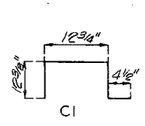


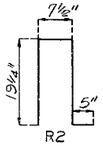


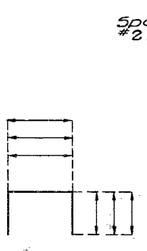


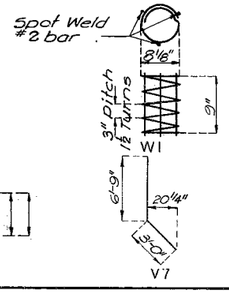


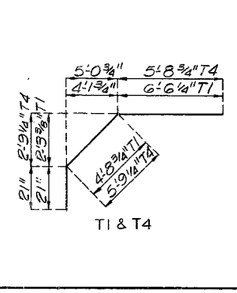
MARK	A	B
C4	13⅛"	12⅛"
R6	2'-7½"	9"
R7	4'-8¼"	7½"
U2	6"	2'-3"
U3	2'-4½"	6"
U4	Varies	2'-2⅛"
U5	Varies	2'-2⅛"
U10	18'-3⅛"	2'-2⅛"
U11	Varies	2'-2⅛"



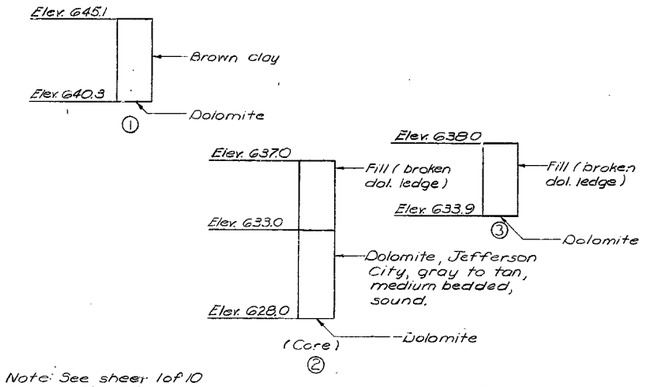






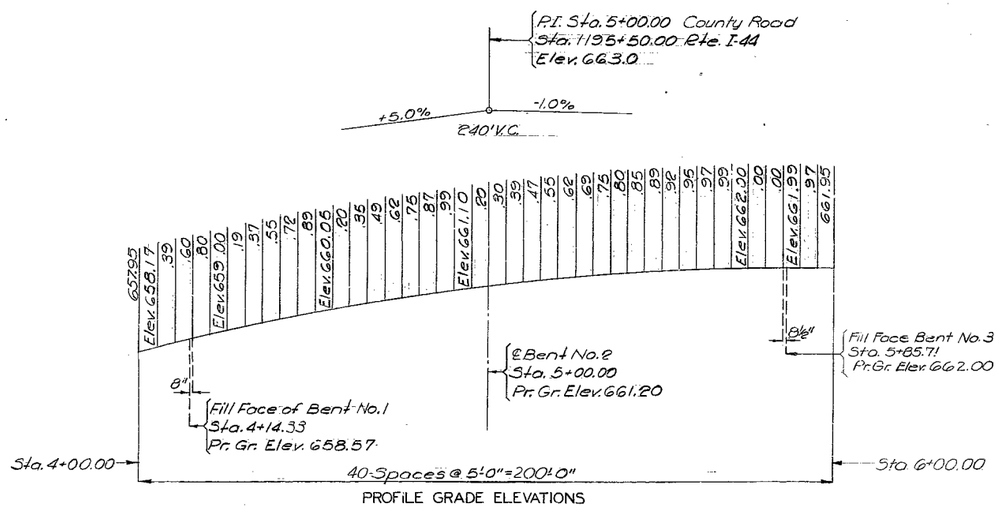


NO.	SIZE	LENGTH	MARK	LOCATION
End Bent No. 3 (Cont.)				
8	#4	5'-3"	U2	Beam
31	#4	3'-9"	U9	"
16	#3	5'-3"	U10	Column
4	#3	11'-3"	U11	"
8	#4	5'-3"	U3	Apron
4	#4	4'-9"	V4	Apron
56	#5	4'-3"	V10	Backwall
20	#4	9'-6"	V11	Wing
4	#4	7'-0"	V12	"
8	#2	15'-1"	W1	A.B. Well
Superstructure				
340	#5	3'-6"	C1	Curb
16	#6	43'-3"	C2	"
8	#6	10'-9"	C3	"
48	#5	3'-3"	C4	"
360	#5	5'-3"	P1	Parapet
24	#5	4'-3	P2	"
32	#5	38'-0"	P3	"
16	#5	9'-9"	P4	"
16	#5	6'-9"	P5	"
36	#5	6'-0"	P6	End Post
16	#5	10'-0"	P7	" "
740	#5	30'-6"	S1	Slab
108	#5	58'-0"	S2	"
155	#4	36'-3"	S3	"
30	#4	16'-0"	S4	"
8	#5	27'-9"	S5	"



Note: See sheet 1 of 10 for location of borings.

BORING DATA



PROFILE GRADE ELEVATIONS

FRANKLIN **COUNTY**

305

STD. 90.3	JUNE 1961
REVISED	NOV. 1967

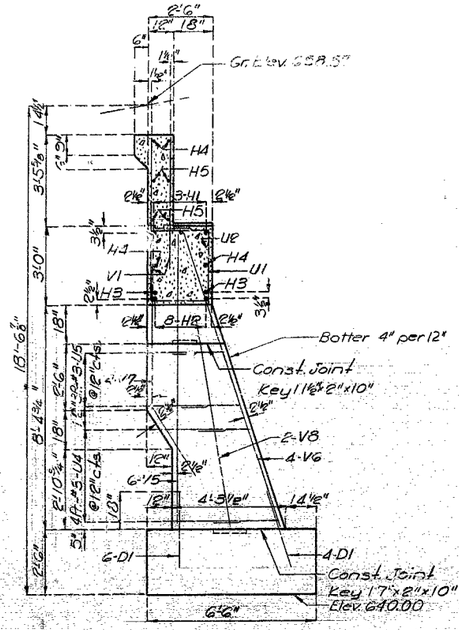
DETAILED May 1969 BY Bates & Morlock

CHECKED May 1969 BY Goser

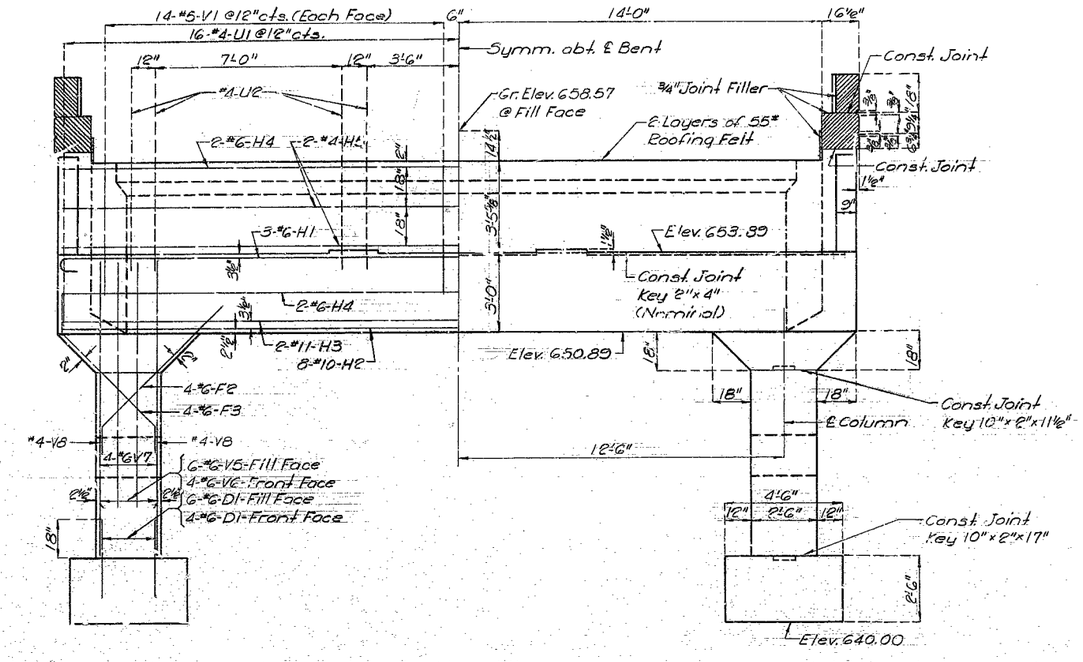
Note: This drawing is not to scale. Follow dimensions.

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	5A	

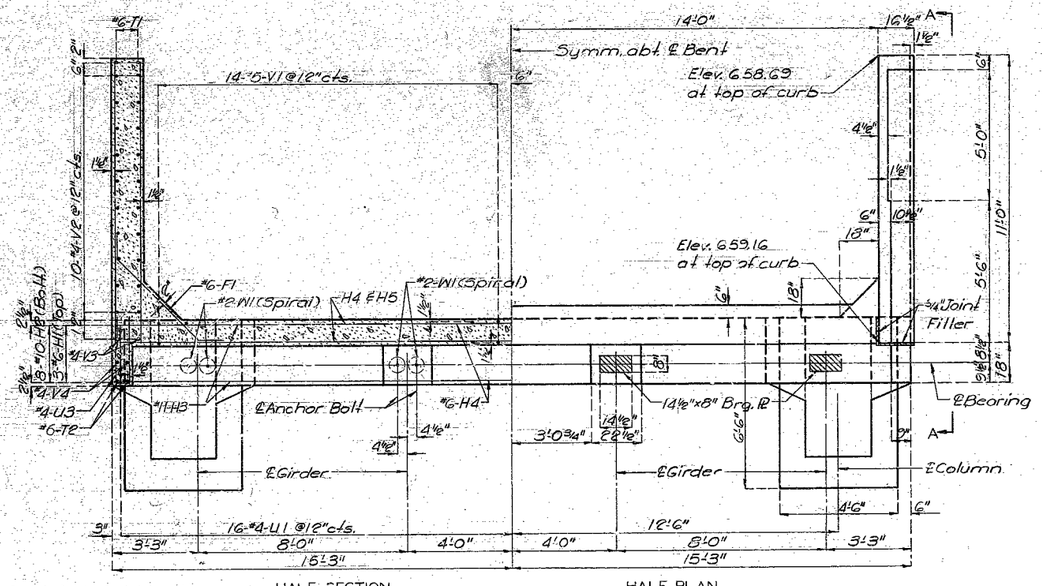


SECTION AT ℄

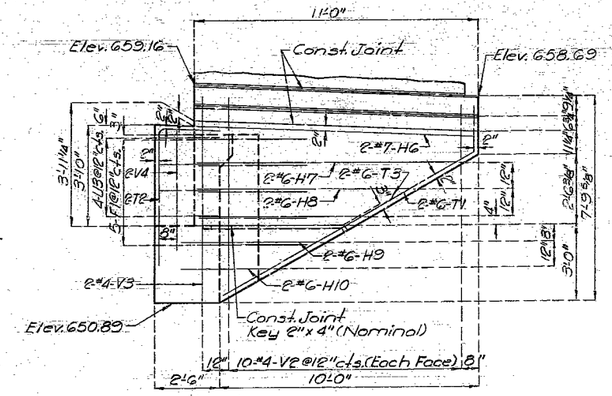


ELEVATION

Note: See Handrail sheet for reinforcement of end post, parapet and curbs.



HALF SECTION HALF PLAN



ELEVATION A-A

Note: All reinforcing bars in tops of substructure beams or caps shall be spaced to clear anchor bolts for bearings by at least 12".

DETAILS OF END BENT NO. 1

FRANKLIN **COUNTY**

A-2089

306

DETAILED APE 1969 BY MORLOCK

CHECKED May 1969 BY Goser

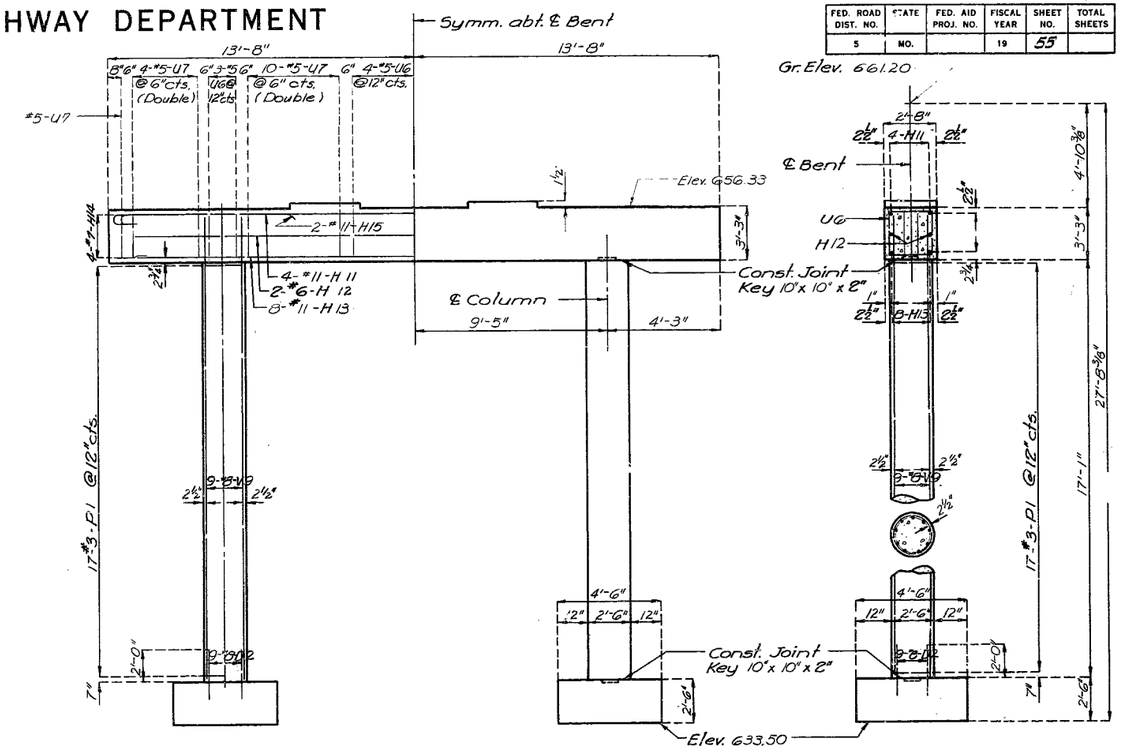
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 3 of 10.

SEE FINAL PLANS

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	55	



ELEVATION

SECTION AT ℄

PLAN

DETAILS OF INTERMEDIATE BENT NO. 2

307

No. 19.1	Revised
Mar. 1964	Jan. 1965

DETAILED Apr. 1969 BY Bates
CHECKED May 1969 BY Goser

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

Sheet No. 4 of 10.

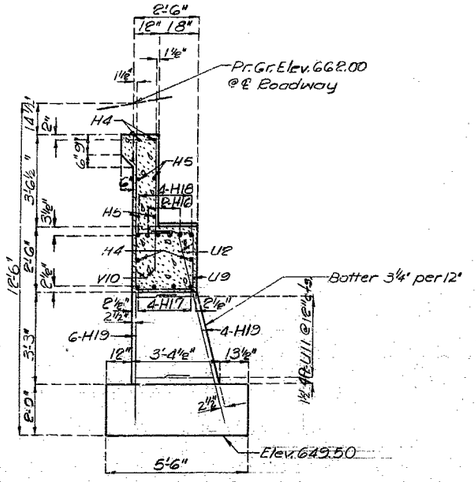
FRANKLIN COUNTY

A-2089

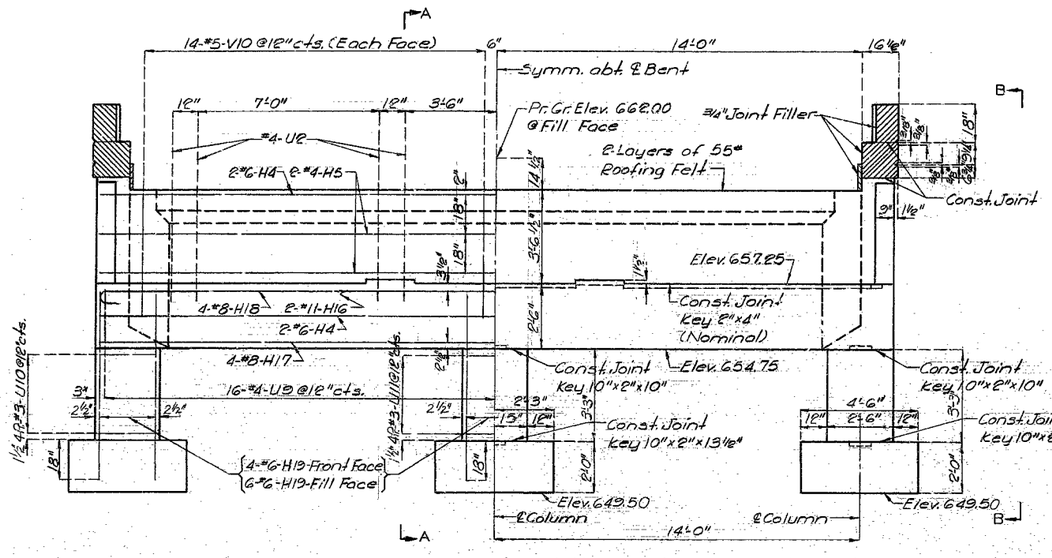
SEE FINAL PLANS

MISSOURI STATE HIGHWAY DEPARTMENT

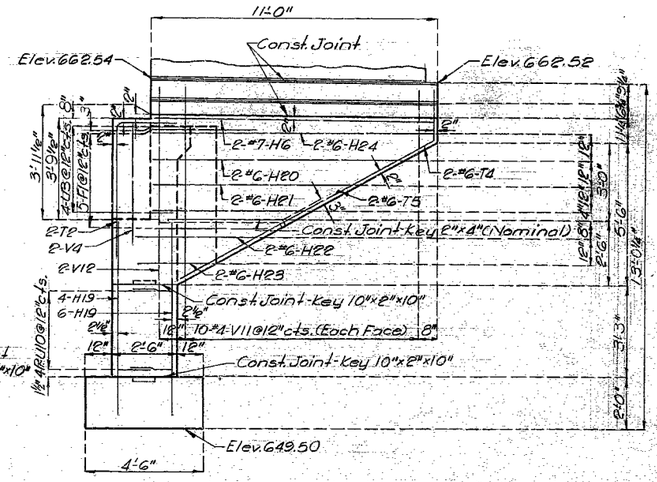
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	56	



SECTION A-A

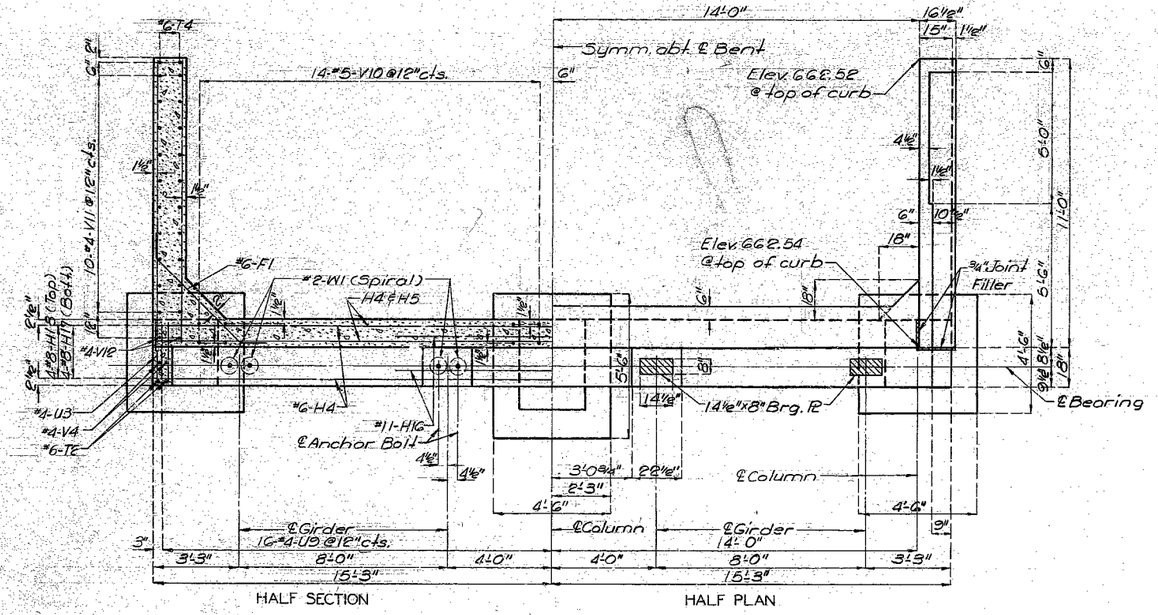


ELEVATION



ELEVATION B-B

Note: See Handrail sheet for reinforcement of end post, parapets and curbs.



HALF SECTION HALF PLAN

DETAILS OF END BENT NO. 3

Note: All reinforcing bars in tops of substructure beams or caps shall be spaced to clear anchor bolts for bearings by at least ½".

308

DETAILED MAY 1969 BY MOELOCK

CHECKED May 1969 BY Goser

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

Sheet No. 5 of 10.

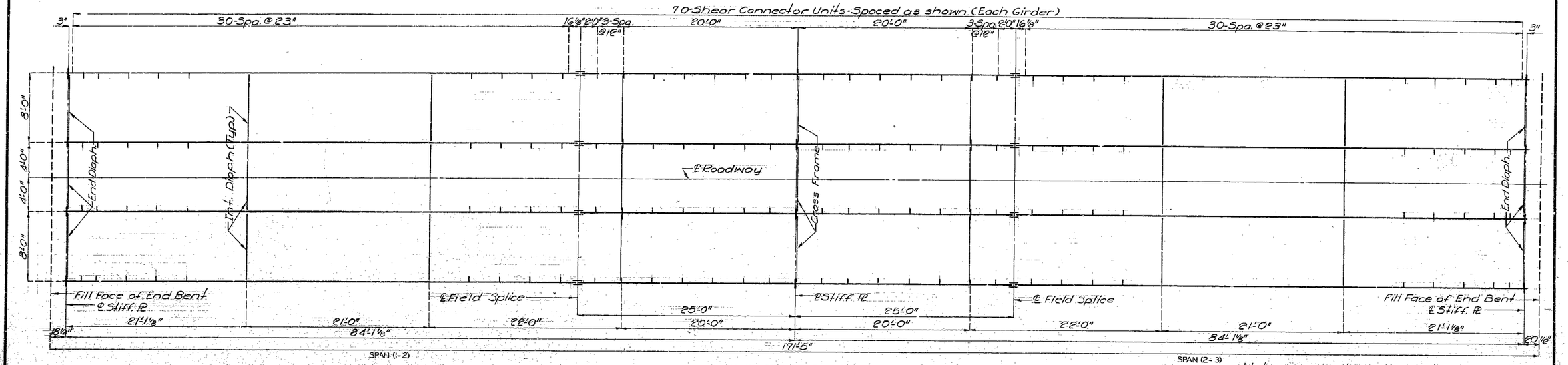
FRANKLIN **COUNTY**

A-2089

SEE FINAL PLANS

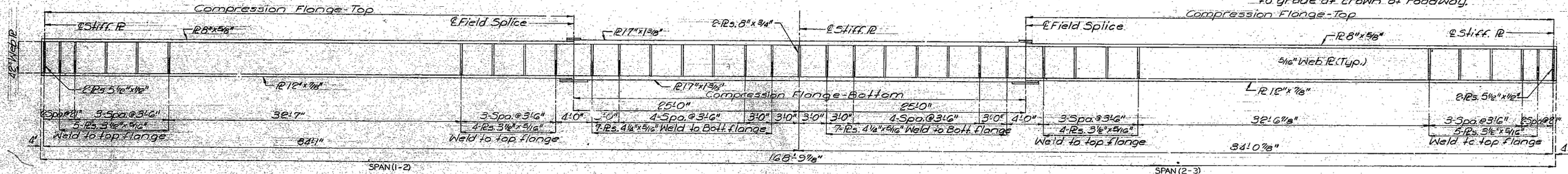
MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	57	



PLAN OF STRUCTURAL STEEL

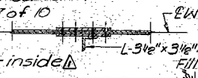
Note: Longitudinal dimensions shown on Plan of Structural Steel are taken parallel to grade of crown of roadway.



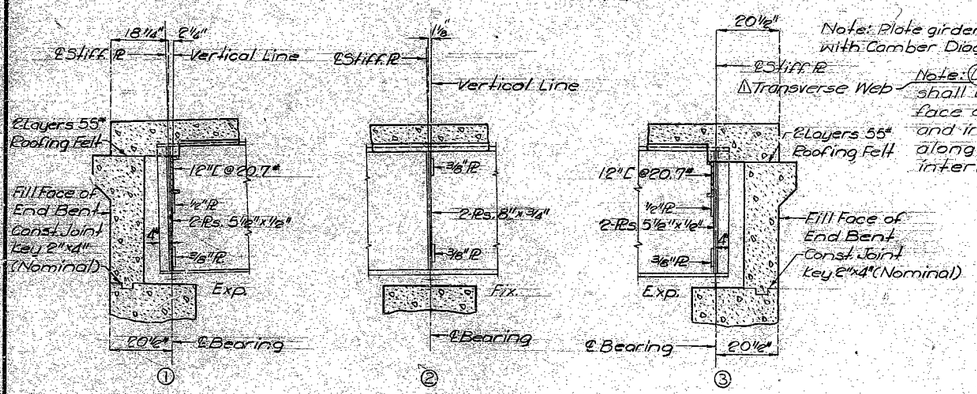
ELEVATION OF GIRDER

Note: Plate girders shall be fabricated to conform with Camber Diagram shown on sheet 7 of 10

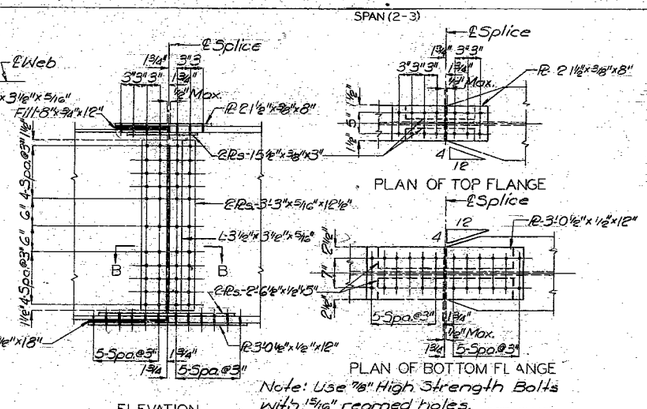
Note: Longitudinal stiffeners shall be used on outside face of exterior girders and in successive alignment along either side of interior girders.



SECTION B-B



PART LONGITUDINAL SECTION



ELEVATION

PLAN OF TOP FLANGE

PLAN OF BOTTOM FLANGE

Note: Use 7/8" High Strength Bolts with 15/16" reamed holes.

Place the angle on inside of exterior girder, and either side of interior girder.

DETAIL OF FIELD SPLICE

Note: Longitudinal dimensions shown on Elevation of Girder are taken parallel to grade at bottom of top flange.

Additional 3 1/2"x 5/16" Stiffener plates shall be added as required for Intermediate Diaphragms. See Plan of Structural Steel.

309

DETAILED APR. 1969 BY MOELOCK

CHECKED May 1969 BY Goser

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

△ Revised Jan. 21, 1972

Sheet No. 6 of 10.

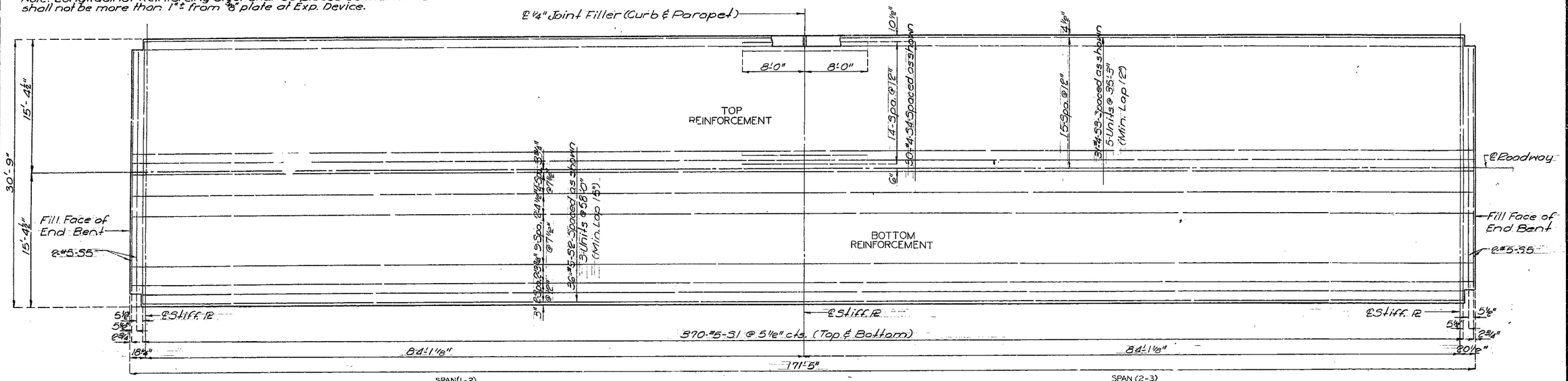
FRANKLIN **COUNTY**

A-2089

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	58	

Note: Longitudinal Reinforcing steel shall be placed so that ends shall not be more than 1"± from 3/8" plate at Exp. Device.



PLAN OF SLAB SHOWING REINFORCEMENT

Note: Longitudinal dimensions shown are taken parallel to grade at crown of roadway.

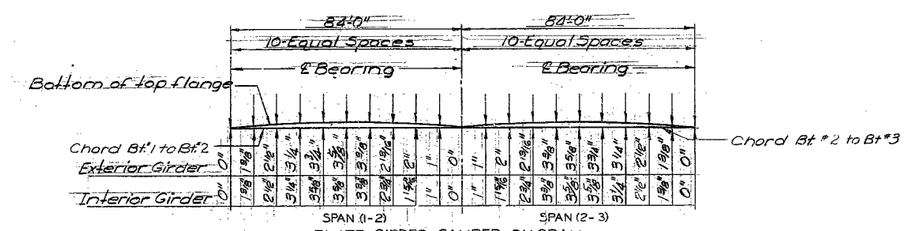
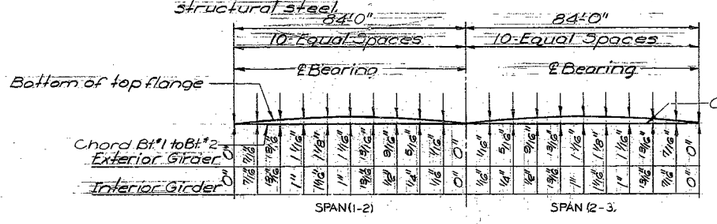


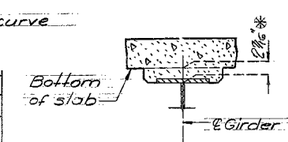
PLATE GIRDER CAMBER DIAGRAM

Note: Camber includes allowance for vertical curve and dead load deflection for concrete slab and structural steel.



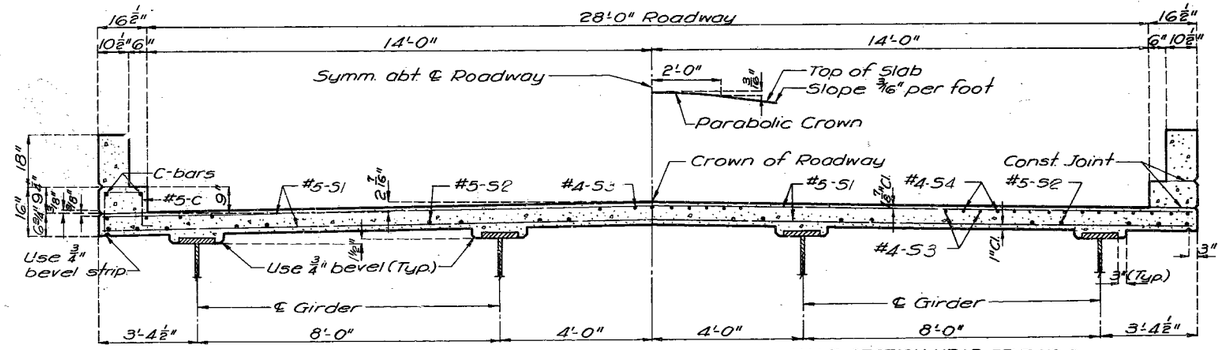
DEAD LOAD DEFLECTION

Note: 15 % of dead load deflection due to weight of structural steel.



* Dimension may vary if girder camber after erection differs from plan camber by more than the % of D.L. deflection due to weight of structural steel. No payment will be made for additional forming or concrete required for variable haunching.

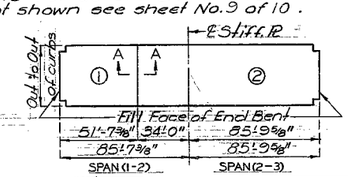
THEORETICAL SLAB HAUNCH

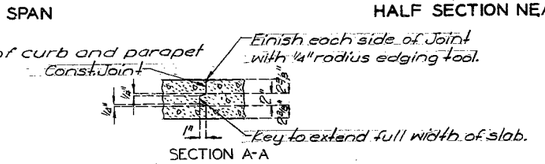


HALF SECTION NEAR ℄ SPAN

HALF SECTION NEAR BENT NO. 2

Note: For details and reinforcement of curb and parapet not shown see sheet No. 9 of 10.





SECTION A-A

	SEQUENCE OF POURS	
	Direction	
Basic Sequence	1	2
	End to 2	1 to End
Alternate "A" Pours	1+2	
	End to End	

SLAB POURING SEQUENCE

Note: The contractor shall pour and satisfactorily finish the slab pours at a rate of not less than 38 cubic yards per hour unless he elects to use an approved retarder to retard the set of the concrete to 2.5 hours in which case he may reduce his pouring and finishing rate to not less than 25 cubic yards per hour.

FRANKLIN COUNTY

310

STD. 42.28.4 AUG. 1967 REVISED

DETAILED APR. 1969 BY MORLOCK
CHECKED May 1969 BY Goser

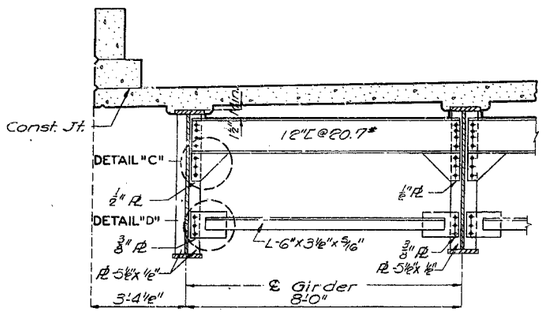
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 7 of 10.

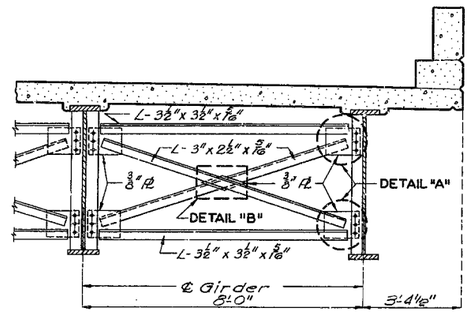
A-2089

MISSOURI STATE HIGHWAY DEPARTMENT

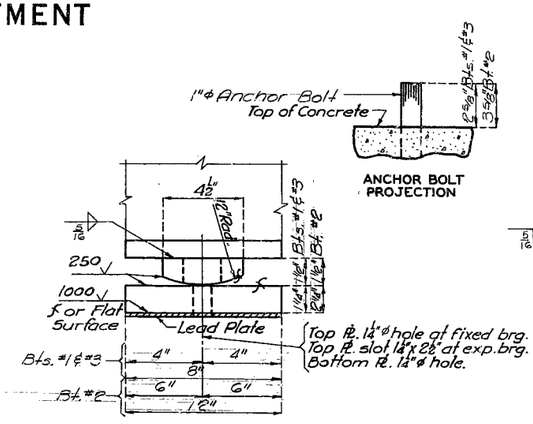
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	54	

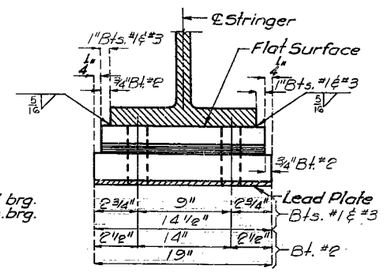


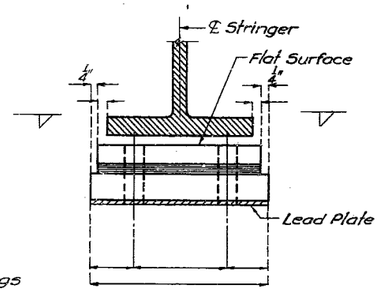
TYP. PART SECTION SHOWING END DIAPHRAGMS

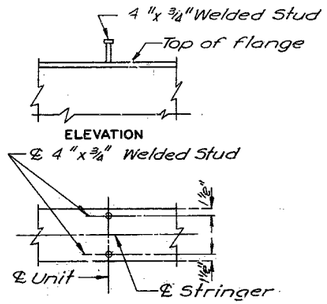


TYP. PART SECTION SHOWING INT. DIAPHRAGMS





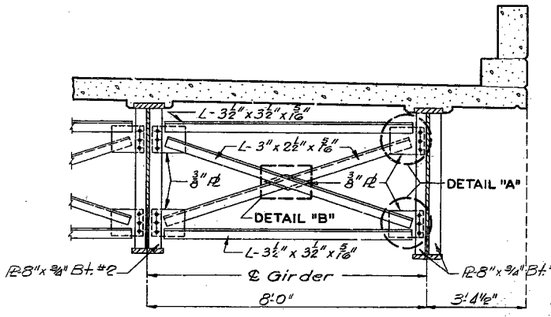




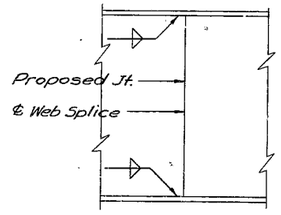
PLAN OF STUD CONN

Note: Weight of 344 lbs. of shear connectors is included in weight of fabricated Structural Carbon Steel.

DETAILS OF SHEAR CONNECTORS



TYP. PART SECTION SHOWING CROSS FRAMES



SHOP WEB SPLICE

Note: Shop welded web splices may be fabricated by the contractor when detailed on the shop drawings and approved by the engineer. No additional payment will be made for optional shop welded web splices.

Required: 4 -Fixed Bearings
8 -Expansion Bearings

TYPE "C" BEARINGS
(Estimated Weight 1215 #)

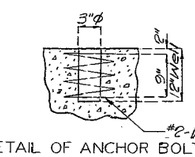
NOTES: TYPE "C" BEARINGS

Lead plates under bearings shall be approximately ⅛" thickness and weigh 8 #/sq. ft. Cost of lead plates shall be included in price bid for other items.

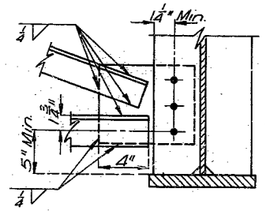
"Estimated weight" does not include weight of anchor bolts.

Anchor Bolts for Type "C" Bearings shall be 1"ϕ swedged bolts with no heads or nuts and shall extend 10" into concrete. Top of Anchor Bolts shall be set approximately ¼" below top of bearing.

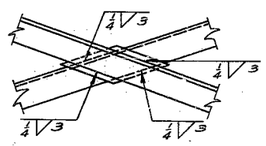
"f" indicates machine finish surface.



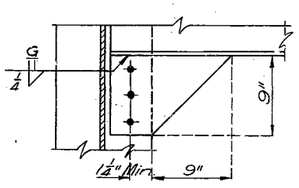
DETAIL OF ANCHOR BOLT WELL



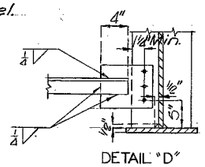
DETAIL "A"



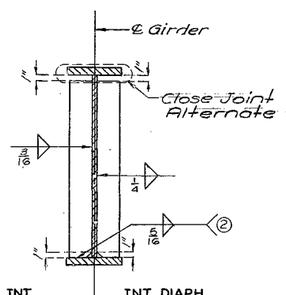
DETAIL "B"



DETAIL "C"



DETAIL "D"



② Weld to compression flange as located on Elevation of Girder. Weld may be omitted on interior girders when Int. Diaph. Conn. Pl. is required on both sides.

WELDING DETAILS

311

SPS

REVISED

STD.

DETAILED APR. 1969 BY MORLOCK

CHECKED May 1969 BY Goser

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

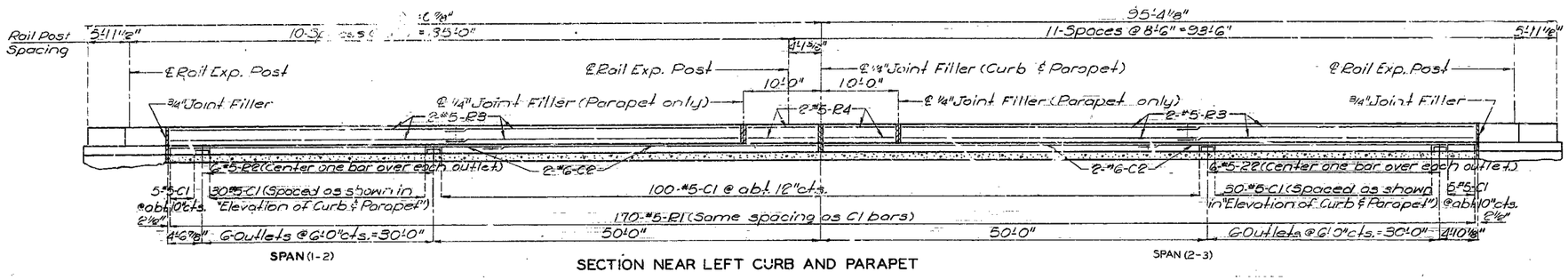
Sheet No. 8 of 10.

FRANKLIN **COUNTY**

A-2089

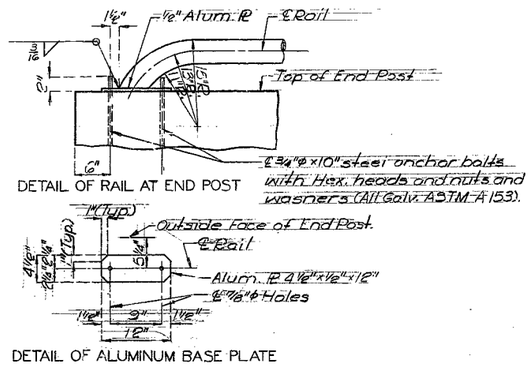
MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	60	

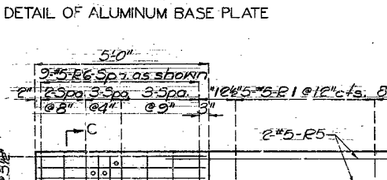


SECTION NEAR LEFT CURB AND PARAPET

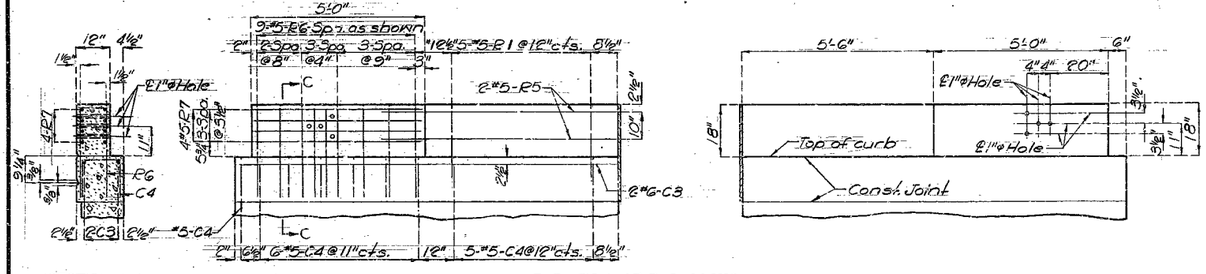
Note: Longitudinal dimensions shown are taken parallel to grade at top of parapet.



DETAIL OF RAIL AT END POST

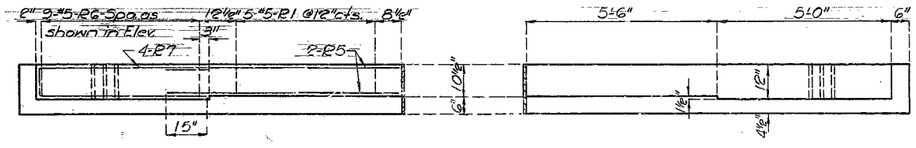


DETAIL OF ALUMINUM BASE PLATE

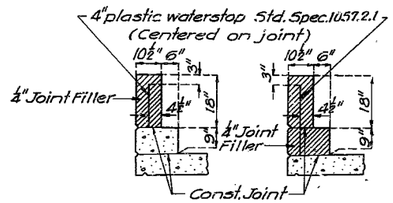


SECTION C-C

ELEVATION OF END POSTS

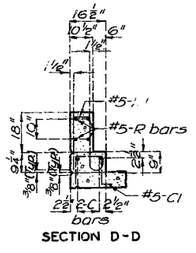


PLAN OF END POSTS

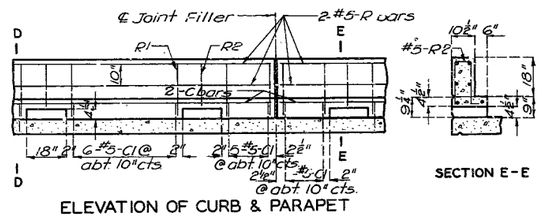


Note: Plastic waterstop shall be placed in all parapet and curb filled joints except at end bents.
Cost of plastic waterstop complete in place to be included in unit price bid for concrete.

DETAILS OF PLASTIC WATERSTOP



Note: When curb outlets are omitted space #5-C1 bars at abt. 12" cts.



ELEVATION OF CURB & PARAPET

Note: For horizontal curb and parapet bars use a minimum lap of 15" for #5 and 18" for #6.

3112

SPS

REVISED

STD.

DETAILED APP. 1969 BY MORLOCK

CHECKED May 1969 BY Goser

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

Sheet No. 9 of 10.

FRANKLIN **COUNTY**

A-2089

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	61	

GENERAL BRIDGE RAIL NOTES:

All bridge rail posts shall be set normal to grade.

Aluminum tube bridge rail shall be bent to conform to vertical and horizontal alignment of parapet.

Aluminum washer shims between top of parapet and post base may be used for adjusting bridge rail alignment. Maximum thickness of shims to be 8". Where more tilting of post is required for proper alignment, concrete bearing areas shall be ground down.

All parts of bridge rail, except anchor bolts, nuts, washers, and set screws are to be of aluminum material.

All fillets ¼" except as noted.

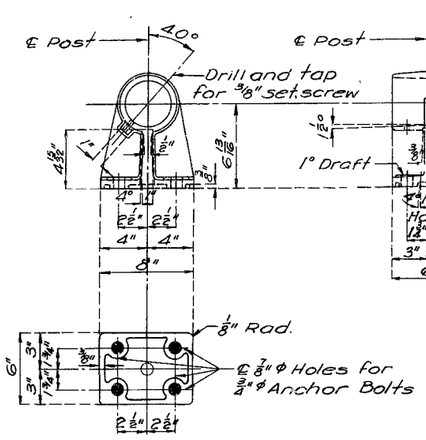
All drafts 3° except as noted.

Omit set screw in side of rail posts adjacent to filled joints in curb and parapet at rail expansion points. Omit set screw in each side of rail post on end bents except where a gap is shown in rail over an expansion device.

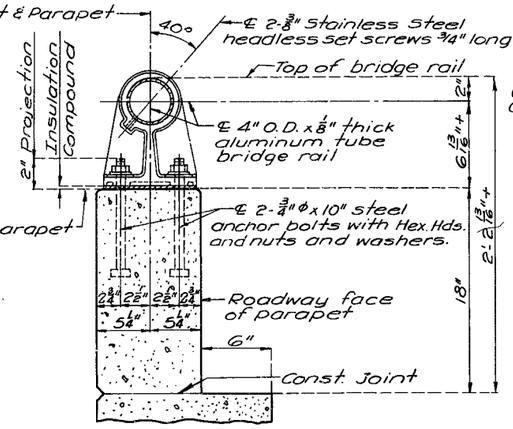
Top of curbs and parapet to be built parallel to grade with curb and parapet joints (except at end bents) normal to grade.

Concrete end posts to be vertical.

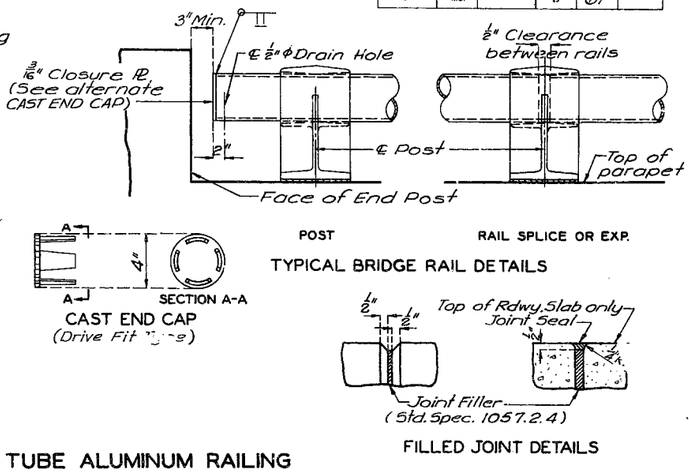
All exposed edges of end posts shall have ½" bevel. All exposed edges of curbs and parapets shall have ½" radius or ⅞" bevel unless otherwise noted.



POST DETAILS

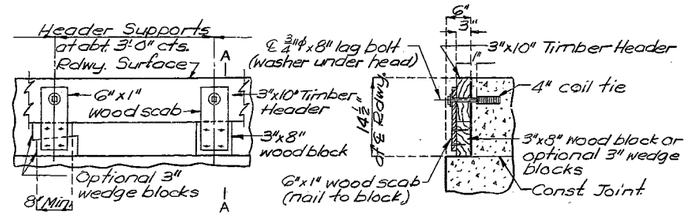


SECTION THRU BRIDGE RAIL



ONE TUBE ALUMINUM RAILING

FILLED JOINT DETAILS



Note: Cost of timber headers complete in place to be included in price bid for concrete.

DETAILS OF TIMBER HEADER

313

STD. 1.5.2	REVISED
MAR. 1964	OCT. 1966

DETAILED May 1969 BY Bates
CHECKED May 1969 BY Goser

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

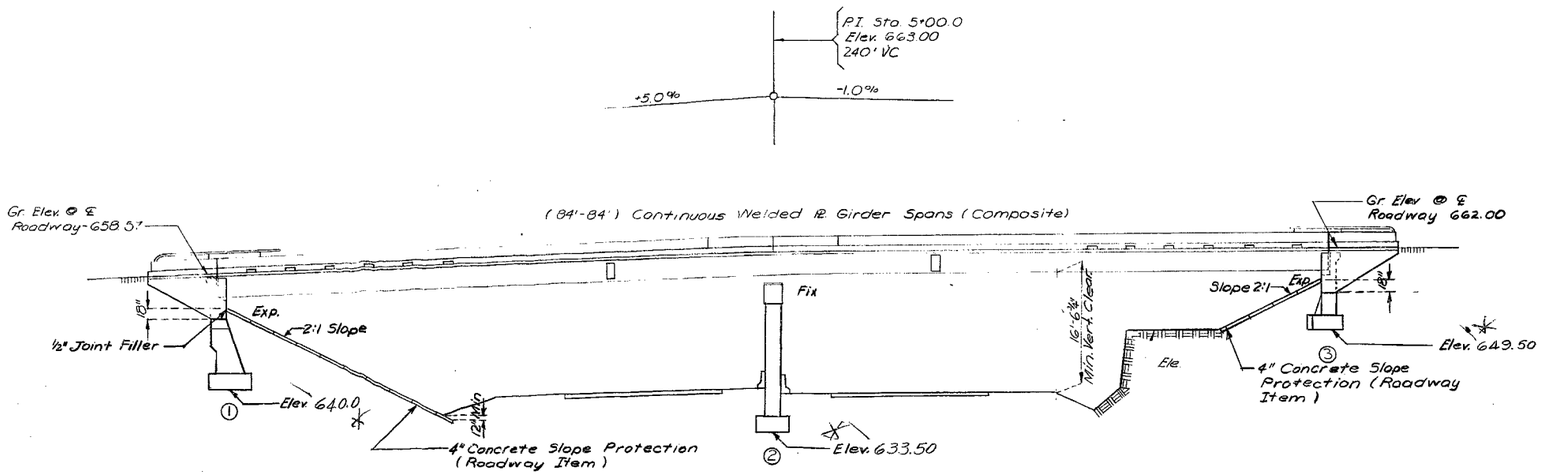
Sheet No. 10 of 10

FRANKLIN **COUNTY**

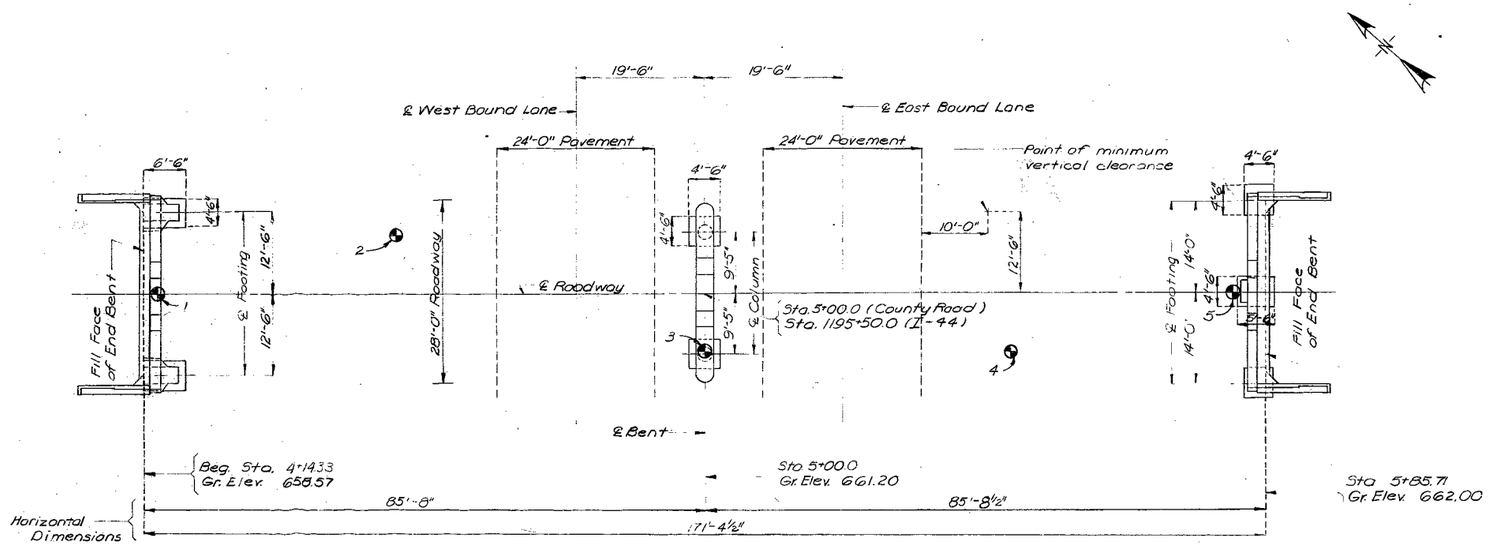
A-2089

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	52	



ELEVATION



Note: For boring data see sheet No. 2 of 10. "●" Indicates location of boring.

PLAN

GENERAL NOTES:

FINAL PLANS

Design Specifications: A.A.S.H.O. - 1969

Design Loading:

H15-44 15#/sq. ft. Future Wearing Surface
Earth 120# Equivalent Fluid Pressure 30#
Fatigue Stress: Case II

Design Unit Stresses:

Class B Concrete (substructure) fc = 1,200 psi
Class B1 Concrete (superstructure) fc = 1,600 psi
Reinforcing Steel fs = 20,000 psi
Structural Steel fs = 20,000 psi

Fabricated Steel:

Field connections, High Strength Bolts ¾"φ, holes 13/16"φ except as noted.

Paint:

Shop, one coat red lead, in accordance with Std. Spec. 712.12 and 1045.4 or 1045.5; Surfaces of shear connectors and girder flange plates in contact with concrete were not painted.
Field, two coats by contractor, first coat brown, second coat aluminum in accordance with Std. Spec. 712.12.

FOOTING DATA			
BENT NO.	1	2	3
Foundation Material	Dolomite		
Des. Brg. Tons/Sq. Ft.	6.9	10.4	6.8

FINAL QUANTITIES				
ITEM		SUBSTR.	SUPERSTR.	TOTAL
Class I Excavation	Cu. Yd.	74.0		74.0
Class B Concrete	Cu. Yd.	69.9		69.9
Class B1 Concrete	Cu. Yd.	151.0		151.0
Reinforcing Steel	Lb.	10,510	40,810	51,320
Painting (2 Coats)	Ton		50.2	50.2
Fabricated Structural Carbon Steel	Lb.		100,790	100,790
Bridge Rail (one tube)	Lin. Ft.		379	379
Test Holes	Lin. Ft.	28.0		28.0

Note: All concrete and reinforcement in end posts, parapets and curbs was included with superstructure quantities.

B.M. #21-A "□" on Curb, N.W. Corner of Bridge A-2089, Sta. 1195+50
Elev. = 658.75' (USGS Datum)

BRIDGE: COUNTY ROAD UNDERPASS

STATE ROAD FROM ST. CLAIR NORTHEAST TO ROUTE 50

ABOUT 8.0 MILES N.E. OF ST. CLAIR

PROJECT NO. I-44-3(28) (RTE. I-44) **STA.** 1195+50.0

FRANKLIN **COUNTY**

FINAL PLANS

SUBMITTED BY W. J. Carney BRIDGE ENGINEER DATE 10-13-71

APPROVED BY Robert N. Austin CHIEF ENGINEER DATE 10-13-71

STD. 611.60
STD. 706.30
A-2089

DESIGNED APRL 1969 BY Giriyappa
DETAILED May 1969 BY Bates
CHECKED May 1969 BY Goser

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

Sheet No. 1A of 4

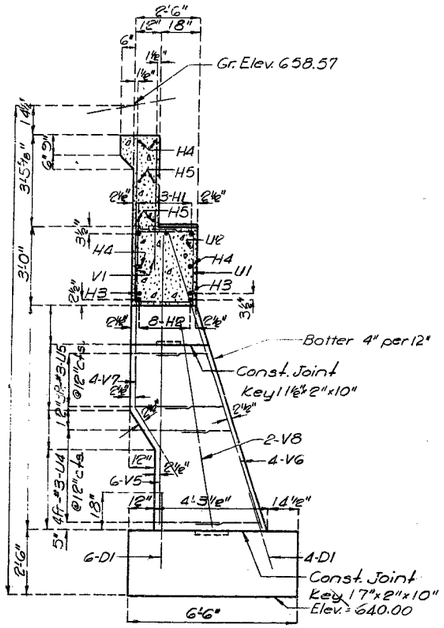
FINAL PLANS

314

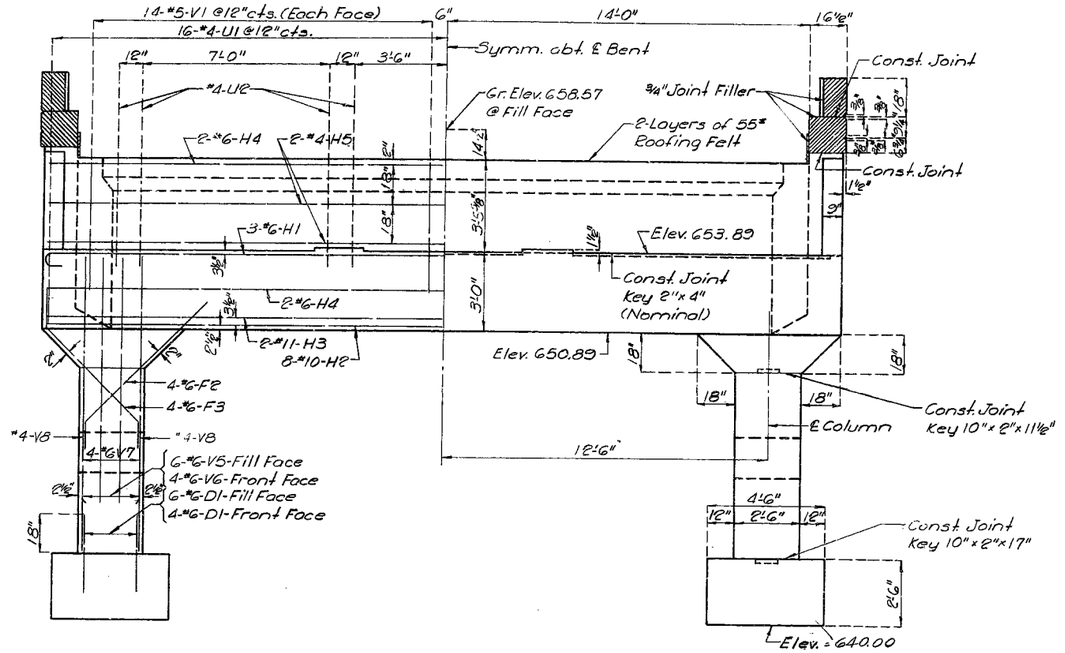
MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	54	

FINAL PLANS

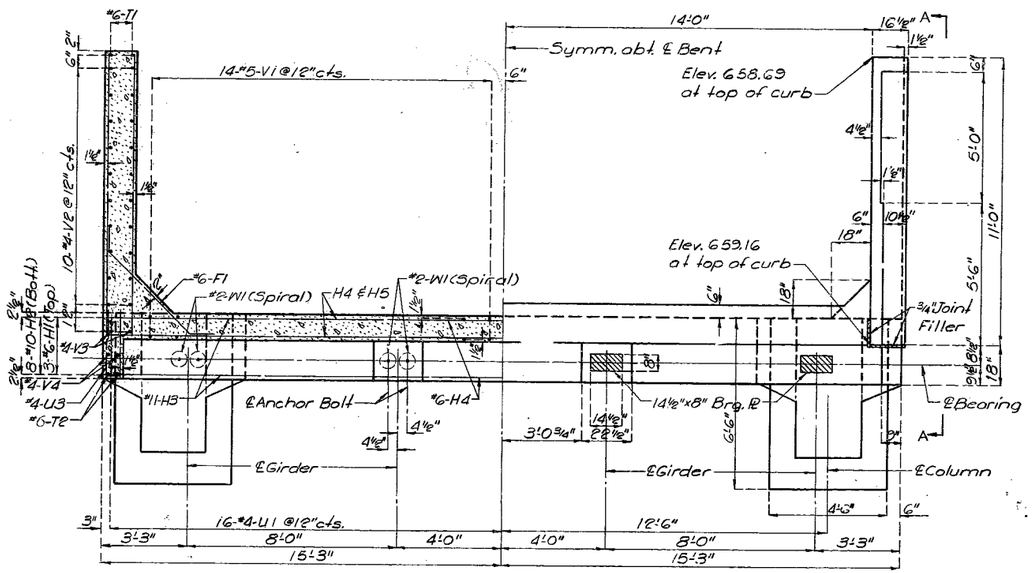


SECTION AT ℄

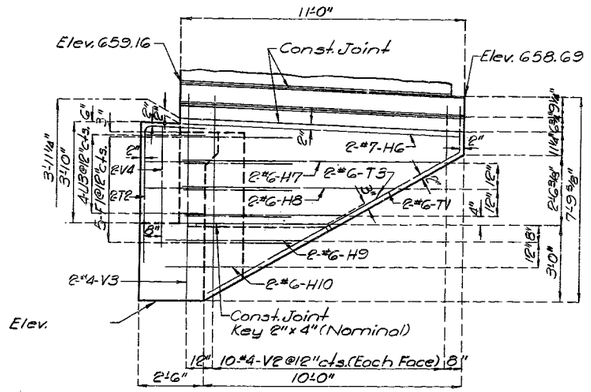


ELEVATION

Note: See Handrail sheet for reinforcement of end post, parapet and curbs.



HALF SECTION HALF PLAN



ELEVATION A-A

Note: All reinforcing bars in tops of substructure beams or caps were spaced to clear anchor bolts for bearings by at least 1/2".

DETAILS OF END BENT NO. 1

3/15

DETAILED APE 1969 BY MDELOCK
CHECKED May 1969 BY Goser

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

Sheet No. 3A of 4 Sheets

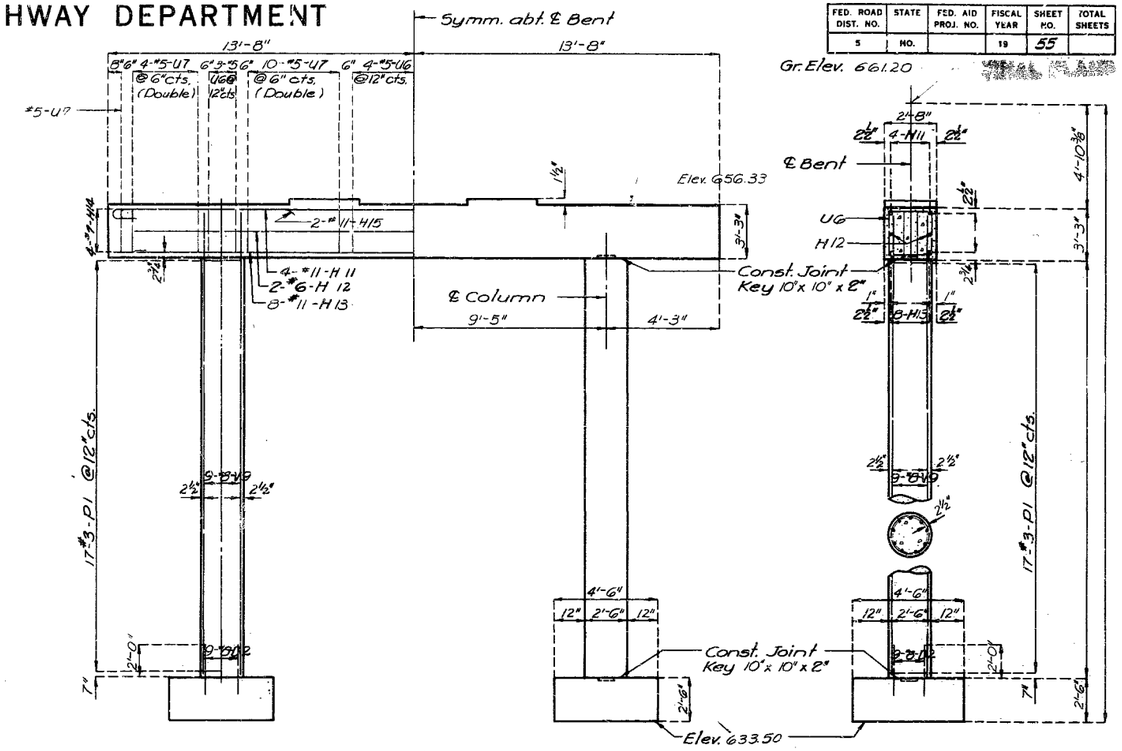
FRANKLIN COUNTY FINAL PLANS

A-2089

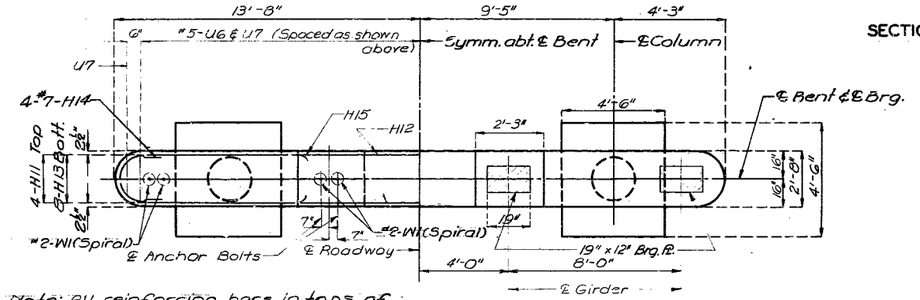
FINAL PLANS

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	55	



ELEVATION



SECTION AT ℄

Note: All reinforcing bars in tops of substructure beams or caps were spaced to clear anchor bolts for bearings by at least ½".

PLAN

DETAILS OF INTERMEDIATE BENT NO. 2

FRANKLIN COUNTY

FINAL PLANS

A-2089

No.	Revised	By
19.1	Jan. 1965	
Mar. 1964		

DETAILED Apr. 1969 BY Bates

CHECKED May 1969 BY Goser

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

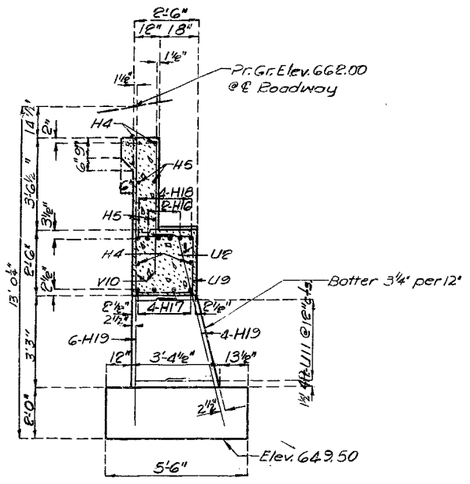
Sheet No. 4A of 4

FINAL PLANS

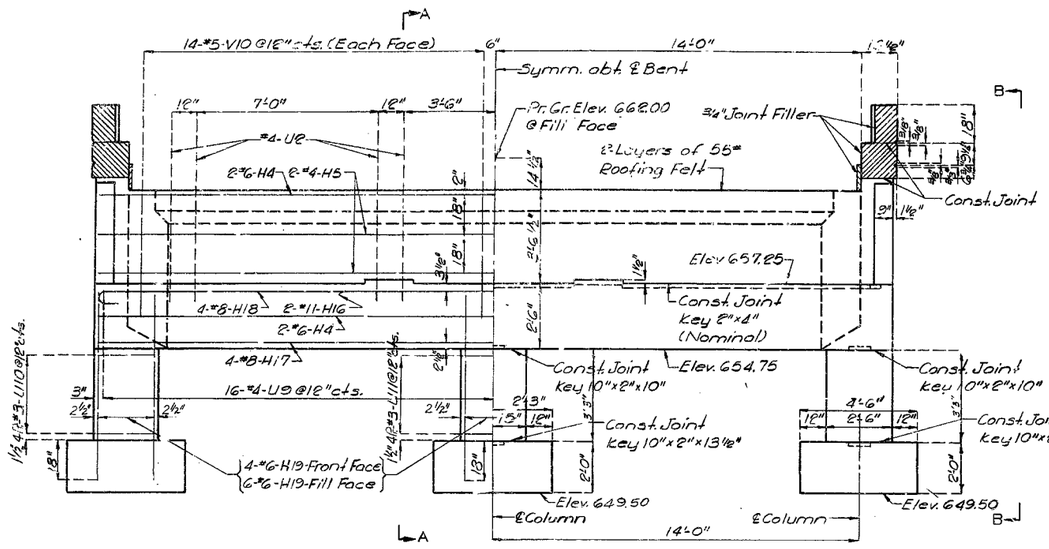
3/6

MISSOURI STATE HIGHWAY DEPARTMENT

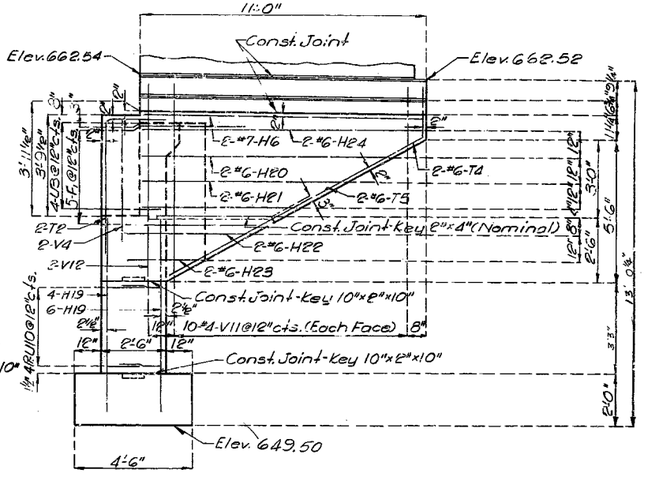
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	56	



SECTION A-A

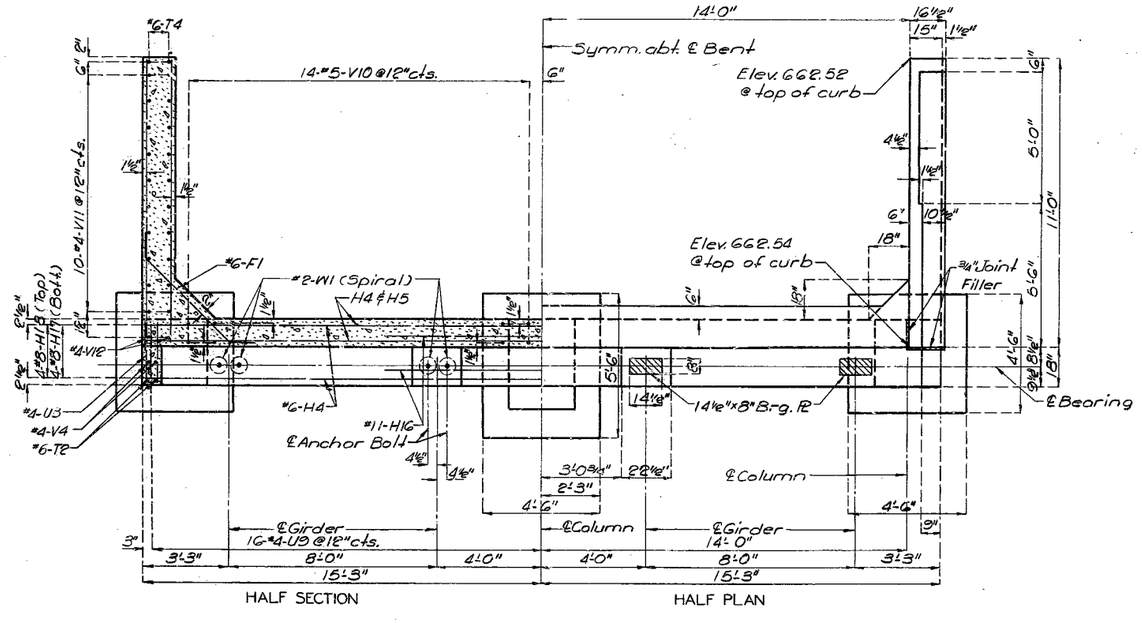


ELEVATION



ELEVATION B-B

Note: See Handrail sheet for reinforcement of end post, parapets and curbs.



DETAILS OF END BENT NO. 3

Note: All reinforcing bars in tops of substructure beams or caps were spaced to clear anchor bolts for bearings by at least ½".

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DETAILED MAY 1969 BY MORLOCK
CHECKED May 1969 BY Goser

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

Sheet No. 54 of 4

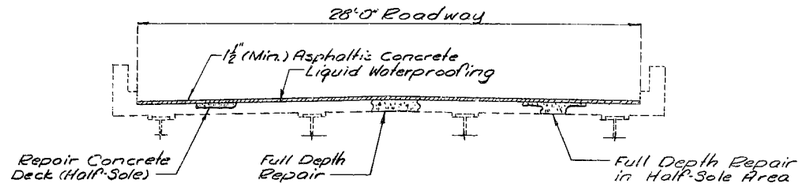
FINAL PLANS

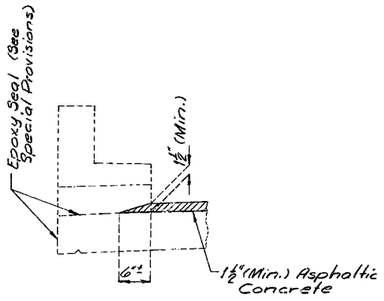
FRANKLIN COUNTY FINAL PLANS

A-2089

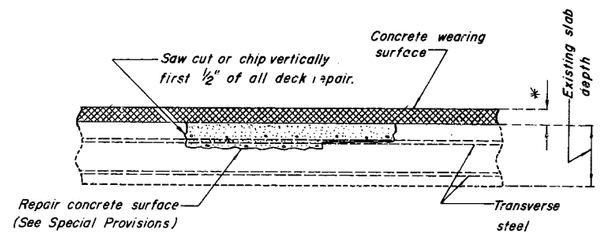
MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

STATE	PROJ. NO.	SHEET NO.
MO		7
SEC./SUR 33	TWP. 43N RGE 1E	

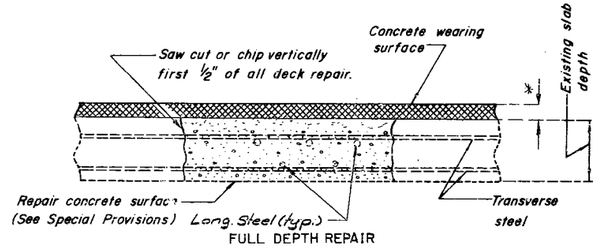




PART SECTION THRU
CURB SHOWING OUTLET



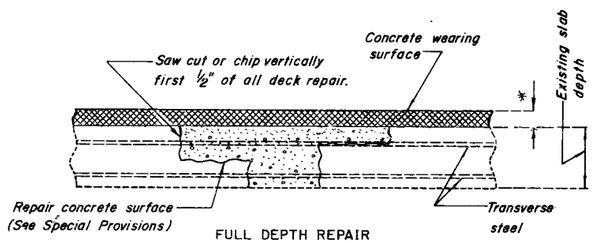
HALF-SOLED AREA



FULL DEPTH REPAIR

ESTIMATED QUANTITIES		
ITEM		TOTAL
Full Depth Repair	Sq. Ft.	48
Repairing Concrete Deck (Half-Soling)	Sq. Ft.	144
Asphalt Cement (Asphaltic Concrete)(60-70 or AC20)	Ton	2.2
Mineral Aggregate (Asphaltic Concrete)(Type A Mix)	Ton	42
Bridge Deck Waterproofing (Liquid)	Sq. Yd.	533

Note: Handle one lane of traffic on structure during construction (See Road Plans).
Light dashed lines indicate old work. Heavy lines indicate new work.



FULL DEPTH REPAIR
HALF-SOLED AREA

*Apply Waterproofing membrane and 1½" (min.) Type A asphaltic concrete overlay.

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REPAIRS TO
BRIDGE: COUNTY ROAD UNDERPASS

STATE ROAD FROM ST. CLAIR NORTHEAST TO ROUTE 50

ABOUT 8.0 MILES N.E. OF ST. CLAIR

PROJECT NO. **STA.** 1195+50.00

JOB NO. 6-1044-417 **RTE.** I-44

FRANKLIN **COUNTY**

DATE JAN. 17, 1985

STD.
STD.
A-2089 R

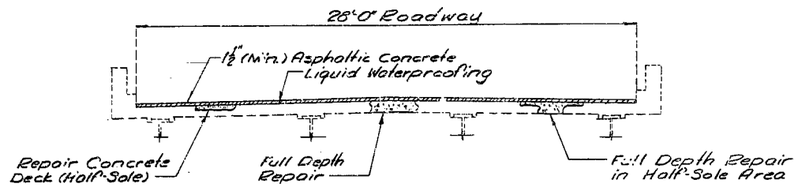
DESIGNED Dec. 19 84
DETAILED Dec. 19 84
CHECKED Jan 19 85

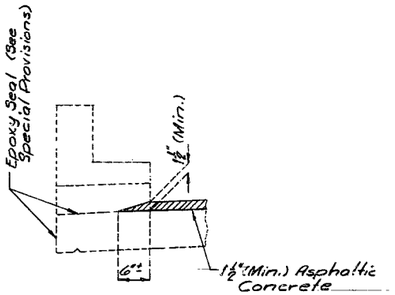
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 1 of 1.

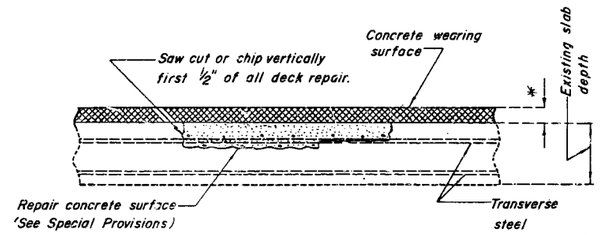
MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

STATE	PROJ NO	SHEET NO
MO		7
SEC./SUR 33	TWP 43N RGE 1E	

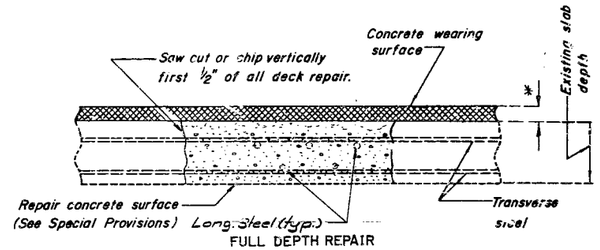




PART SECTION THRU
CURB SHOWING OUTLET



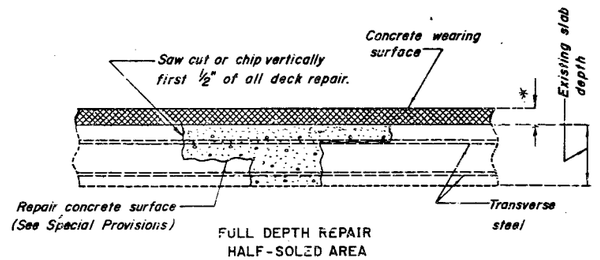
HALF-SOLED AREA



FULL DEPTH REPAIR

ESTIMATED QUANTITIES		
ITEM		TOTAL
Full Depth Repair	Sq. Ft.	0
Repairing Concrete Deck (Half-Soling)	Sq. Ft.	0
Asphalt Cement (Asphaltic Concrete)(60-70 or AC20)	Ton	2.9
Mineral Aggregate (Asphaltic Concrete)(Type A Mix)	Ton	57
Bridge Deck Waterproofing (Liquid)	Sq. Yd.	533

Note: Handle one lane of traffic on structure during construction (See Road Plans).
Light dashed lines indicate old work. Heavy lines indicate new work.



FULL DEPTH REPAIR
HALF-SOLED AREA

*Apply Waterproofing membrane and 1½ (min.) Type A asphaltic concrete overlay.

REPAIRS TO
BRIDGE: COUNTY ROAD UNDERPASS

STATE ROAD FROM ST. CLAIR NORTHEAST TO ROUTE 50

ABOUT 8.0 MILES N.E. OF ST. CLAIR

PROJECT NO. STA. 1195+50.00

JOB NO. 6-1044-417 RTE. I-44

FRANKLIN **COUNTY**

DATE JAN. 17, 1985

STD.	
STD.	
A-2089 R	

DESIGNED Dec. 19 84
DETAILED Dec. 19 84
CHECKED Jan 19 85

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

Sheet No. 1A of 1.

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