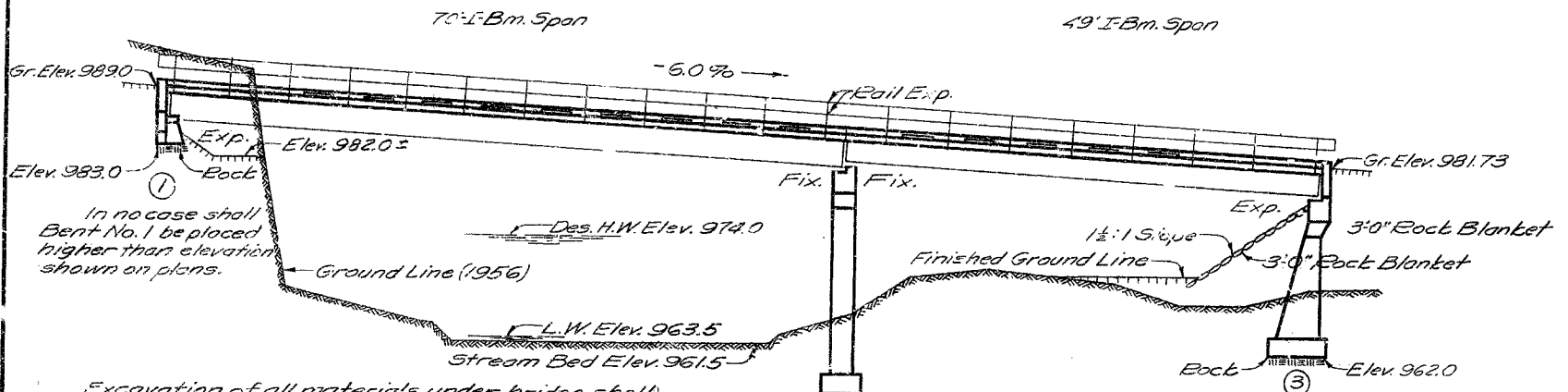


MISSOURI STATE HIGHWAY DEPARTMENT

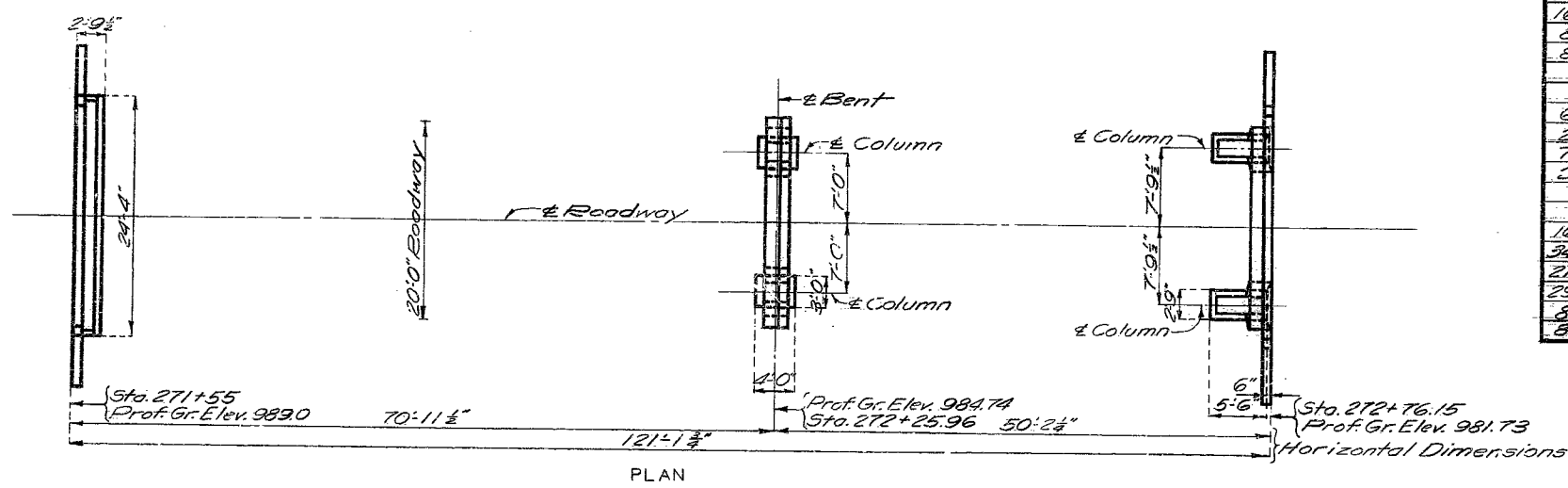
| FED. ROAD DIST. NO. | ST. TE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|--------|--------------------|-------------|-----------|--------------|
| 5 | MO. | 5-394(10) (SK) | 19 | 28 | |



In no case shall Bent No. 1 be placed higher than elevation shown on plans.

Excavation of all materials under bridge shall be made to Elev. 982.0± and not less than 4'-0\"/>

All loose, shelly or disintegrated rock shall be removed and the footings placed on hard, solid, undisturbed rock. If soft rock or shale is encountered, the footings shall be carried at least 18\"/>



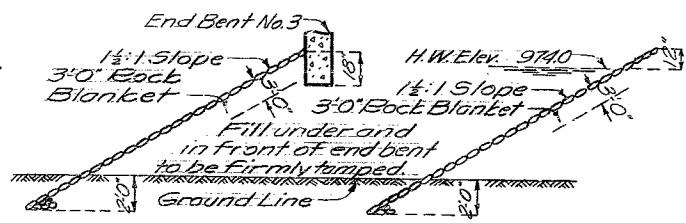
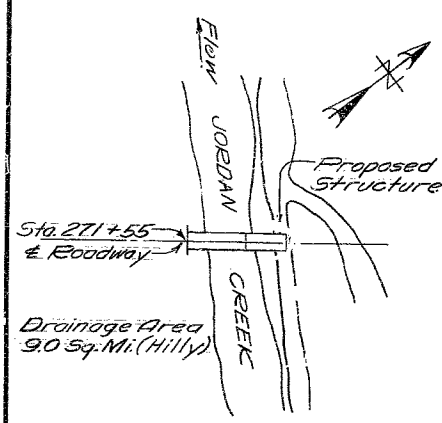
| COMPLETE BILL OF REINFORCING STEEL | | | | | | | | | |
|------------------------------------|------|--------|------|------------------|-------------------------------------|--|--|--|--|
| No. | Mark | Length | Size | Location | Bending Sketches & Cutting Diagrams | | | | |
| End Bent No. 1 | | | | | End Bent No. 3 | | | | |
| 1 | H1 | 7'-0" | #6 | Wing | 12 #6 4'-0" D2 Footing | | | | |
| 2 | H2 | 6'-3" | #6 | Wing | 6 #6 7'-0" F3 Col. Hch. | | | | |
| 3 | H3 | 24'-3" | #6 | Blk wall | 6 #6 7'-0" F4 " | | | | |
| 4 | H4 | 24'-3" | #4 | Wing | 4 #6 22'-0" H8 Beam | | | | |
| 5 | H5 | 5'-3" | #6 | Wing | 2 #6 20'-0" H9 " | | | | |
| 6 | H6 | 24'-0" | #6 | Beam | 2 #6 22'-3" H11 Blk wall | | | | |
| Int. Bent No. 2 | | | | | 8 #5 9'-0" H12 Wing | | | | |
| 7 | U1 | 5'-6" | #4 | Beam | 3 #5 15'-9" H13 " | | | | |
| 8 | U2 | 3'-0" | #4 | " | 2 #4 22'-3" H14 Blk wall | | | | |
| 9 | V1 | 5'-0" | #4 | Blk wall | 4 #6 11'-0" T3 Wire | | | | |
| 10 | V2 | 8'-6" | #4 | Wing | 21 #4 1'-3" U6 Beam | | | | |
| 11 | V3 | 6'-3" | #4 | " | 8 #4 3'-0" U7 " | | | | |
| 12 | V4 | 2'-6" | #4 | Beam | 22 #5 4'-3" V5 Blk wall | | | | |
| Int. Bent No. 2 | | | | | 5 #4 8'-3" V6 Wing | | | | |
| 13 | T1 | 9'-6" | #6 | Wing | 2 #4 5'-9" V7 " | | | | |
| 14 | T2 | 9'-3" | #6 | " | 8 #6 14'-6" V8 Column | | | | |
| 15 | F1 | 19'-9" | #2 | Anchor Bolt Wall | 6 #6 14'-9" V9 " | | | | |
| 16 | F2 | 7'-9" | #4 | " | 22 #3 10'-3" V10 " | | | | |
| Int. Bent No. 2 | | | | | 4 #4 15'-6" V11 " | | | | |
| 17 | D1 | 4'-0" | #6 | Column | Superstructure | | | | |
| 18 | F1 | 7'-6" | #4 | Col. Hch. | 17 #4 2'-9" C1 Curb | | | | |
| 19 | F2 | 7'-9" | #4 | " | 12 #6 36'-6" C2 " | | | | |
| Int. Bent No. 2 | | | | | 12 #6 26'-0" C3 " | | | | |
| 20 | G1 | 22'-9" | #7 | Beam | 48 #4 22'-0" S1 Slab | | | | |
| 21 | G2 | 20'-9" | #6 | " | 96 #4 24'-9" S2 " | | | | |
| 22 | G3 | 20'-9" | #7 | " | 60 #4 25'-9" S3 " | | | | |
| 23 | G4 | 20'-9" | #4 | Emch. | | | | | |
| Int. Bent No. 2 | | | | | | | | | |
| 24 | D1 | 20'-9" | #6 | Column | | | | | |
| 25 | D2 | 8'-9" | #3 | " | | | | | |
| 26 | U3 | 9'-3" | #4 | Beam | | | | | |
| 27 | U4 | 2'-6" | #4 | Emch. | | | | | |
| 28 | U5 | 3'-9" | #4 | Beam | | | | | |
| 29 | F3 | 19'-9" | #2 | Anchor Bolt Wall | | | | | |

| ESTIMATED QUANTITIES | | | |
|----------------------------------|---------------|-----------|--------|
| Item | Substr. | Superstr. | Total |
| Class 1 Excavation for Structure | Cu. Yds. 90 | | 90 |
| Class 2 Excavation for Structure | Cu. Yds. 29 | | 29 |
| Class B Concrete | Cu. Yds. 33.7 | 59.2 | 92.9 |
| Fabricated Structural Steel | Lbs. 66,800 | | 66,800 |
| Gray Iron Alloy Castings | Lbs. 1260 | | 1260 |
| Reinforcing Steel | Lbs. 4310 | 14,465 | 18,775 |

Excavation for bridge made above Elev. 964.5 will be paid for as Class 1 Excavation for Structures.

Excavation for bridge made below Elev. 964.5 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 hand-rail.



FRONT OF END BENT SIDE SLOPES OF FILL

Note: 3'-0" Rock Blanket shall be placed on fill at End Bent No. 3 as shown in sketches. See Road Plans for Quantities.

GENERAL NOTES:

Design Specifications: A.A.S.H.O.-1953

Loading: H10-44

Structural Steel Stress: 18,000 #/sq. in.

Reinforcing Steel Stress: 20,000 #/sq. in.

Concrete, Class B Stress: 1,200 #/sq. in.

All concrete shall be Class B.

Rivets 3/4"; holes 1/2" except in handrail, where rivets shall be 5/8"; holes 3/4".

Field connections shall be riveted except as noted in handrail details or, if the Contractor desires to eliminate all field riveting on this project, he may use machine bolts except for the 3/4" rivet head bolts specified for handrail. Heads and nuts of machine bolts shall be American Standard Regular.

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 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.

Where joint filler is specified on the plans it shall conform with the requirements for Premoulded Material for Filler as given in Section 59-22D of the Standard Specifications.

Permits must be obtained for all truck loads over legal length. Items of material which cannot be transported by truck with overall length less than 75'-0" must be shipped by rail to the specified shipping point.

Drawn Jan. 1957 by W.E.S.

Checked Jan. 1957 by C.S.A.

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

Sheet No. 1 of 5

SEE FINAL PLANS BROWN-LINES

SUBMITTED BY J.A. Williams DATE 1-17-1957

APPROVED BY Roy M. Whitton DATE 1-17-1957

BRIDGE OVER JORDAN CREEK

STATE ROAD FROM RTE. 39 EAST TO R.I. SM NEAR EVERTON ABOUT 2.3 MILES W. OF EVERTON

PROJECT NO. S-394(10) (SK) STA. 271+55

DADE COUNTY

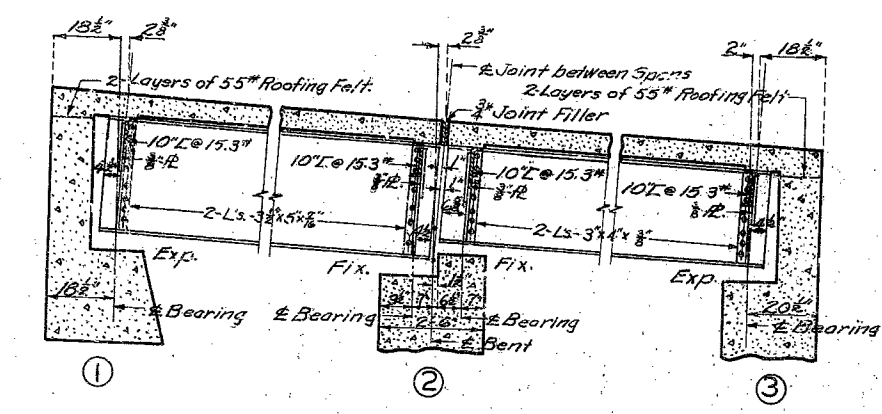
STDC-11054

N-280

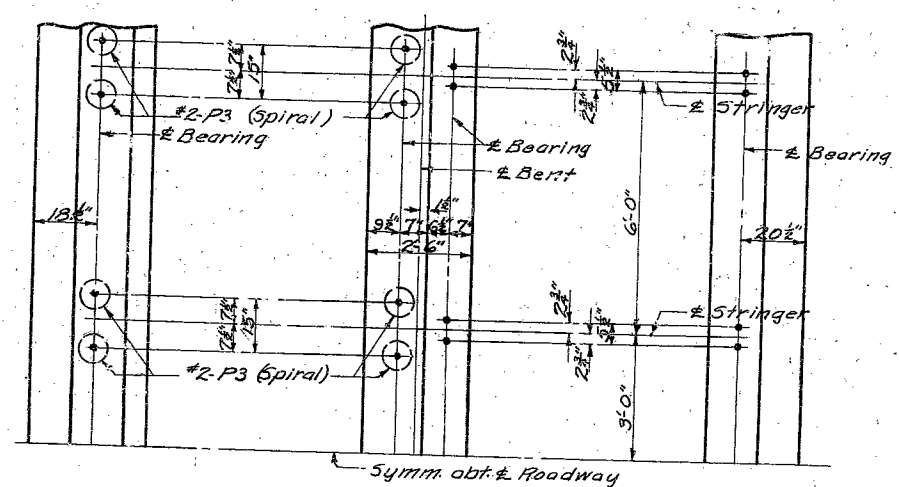


MISSOURI STATE HIGHWAY DEPARTMENT

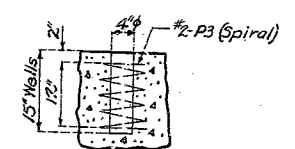
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| 5 | MO | 5-394 (10) | 15 | 31 | |



PART LONGITUDINAL SECTION

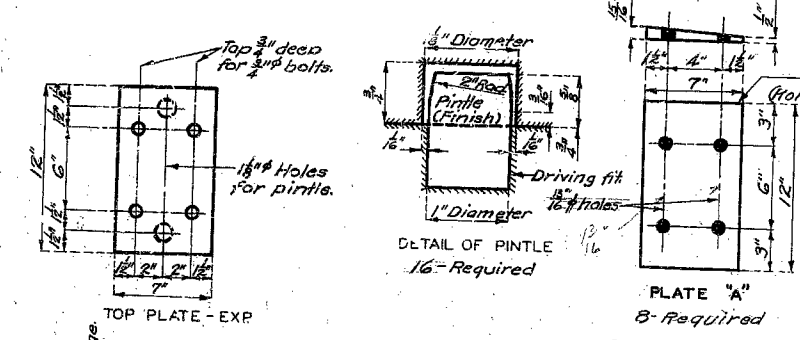


PART ANCHOR BOLT PLAN

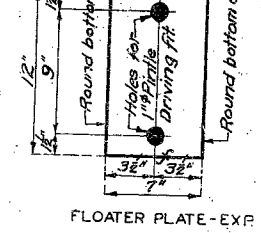


PART SECTION SHOWING ANCHOR BOLT WELL

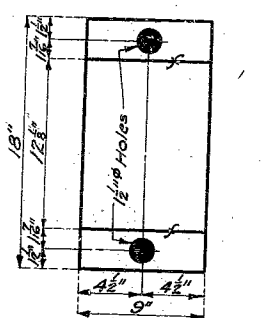
Note: Grout for anchor bolt wells shall contain Iron Oxide (Embeco or approved equivalent).
Note: Holes for all 1/2\"/>



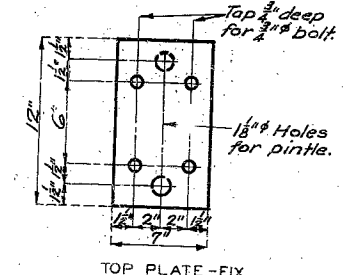
TOP PLATE - EXP



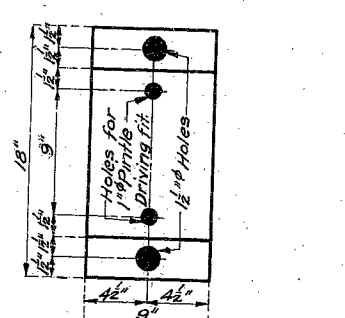
FLOATER PLATE - EXP



BOTTOM PLATE - EXP



TOP PLATE - FIX



BOTTOM PLATE - FIX

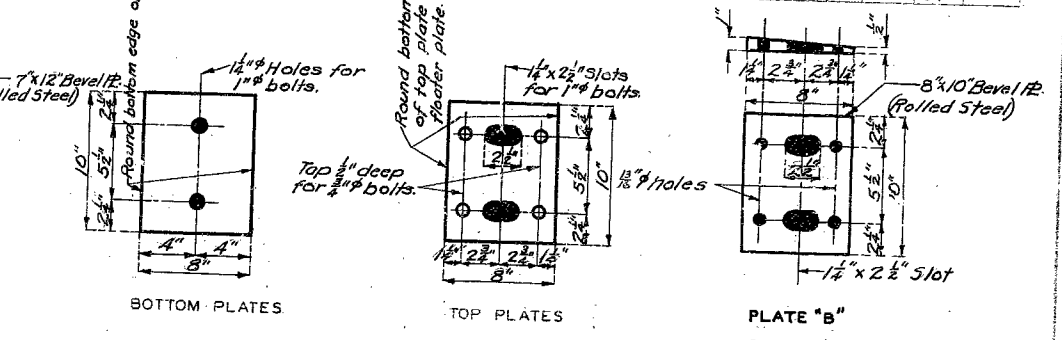
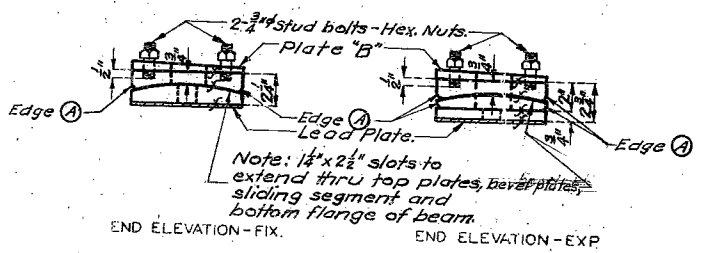


PLATE 'A'
8-Required

PLATE 'B'
8-Required



Required: 4 Sets 8"x10" Each set consists of 5 plates each.

TYPE 'C'

GENERAL NOTES:
Finish all surfaces marked X.

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

Anchor bolts for Type 'B' castings shall be 1 1/2\"/>

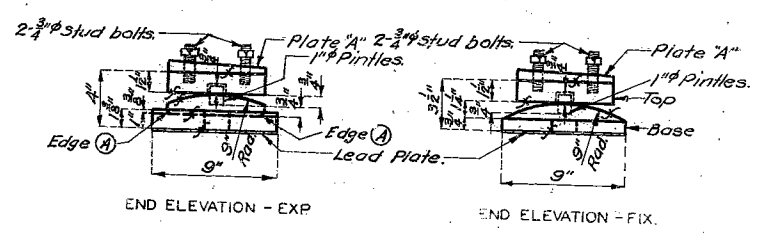
Anchor bolts for Type 'C' castings shall be 1\"/>

Lead plates under bearings shall be approximately 3/8\"/>

Edge (A) to be rounded (1/8\"/>

Bevel plates 'A' and 'B' may be made part of top casting if desired but payment will be made as Fabricated Structural Steel.

All anchor bolts, stud bolts and pintles will be paid for as Structural Steel.



TYPE 'B'
Required: 4 Sets 9"x18"
Each set consists of 5 plates each.

DETAILS OF BEARING CASTINGS

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

BRIDGE OVER JORDAN CREEK

STATE ROAD FROM RTE. 39 EAST TO RTE. 30 NEAR EVERTON
ABOUT 2.3 MILES WEST OF EVERTON
PROJECT NO. 5-394 (10) (SK) STA. 271+55

DADE COUNTY

Assembled Dec. 1956 by W.E.S. & K.R.S.
Checked Jan. 1957 by G.S.A.

Sheet No. 4 of 5.

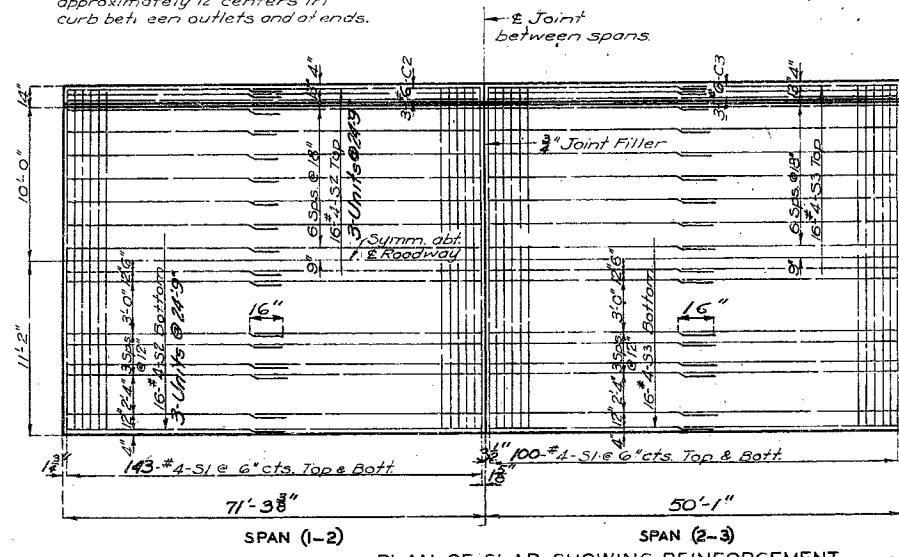
NO CONSTRUCTION CHANGES

N-280

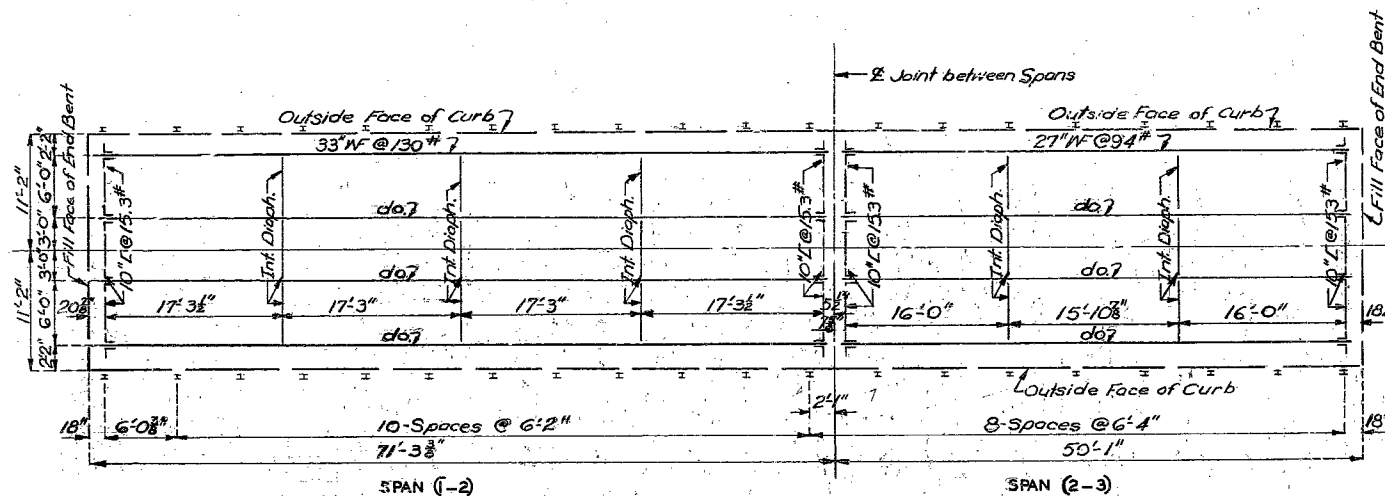
MISSOURI STATE HIGHWAY DEPARTMENT

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| 5 | MO. | 5-394 (10) | 19 | 32 | |

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

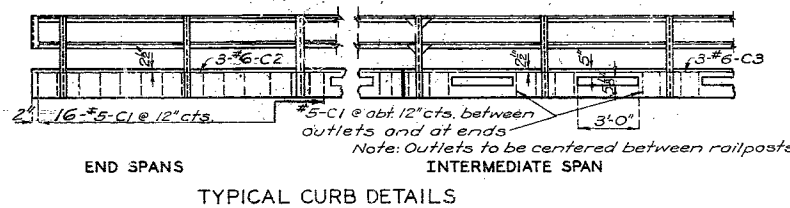


Note: Dimensions parallel to grade at $\frac{1}{2}$ Roadway
Note: 4x3x $\frac{1}{2}$ " Stiffener L for 49' Span.
5x3x $\frac{1}{2}$ " " " " 70' Span.



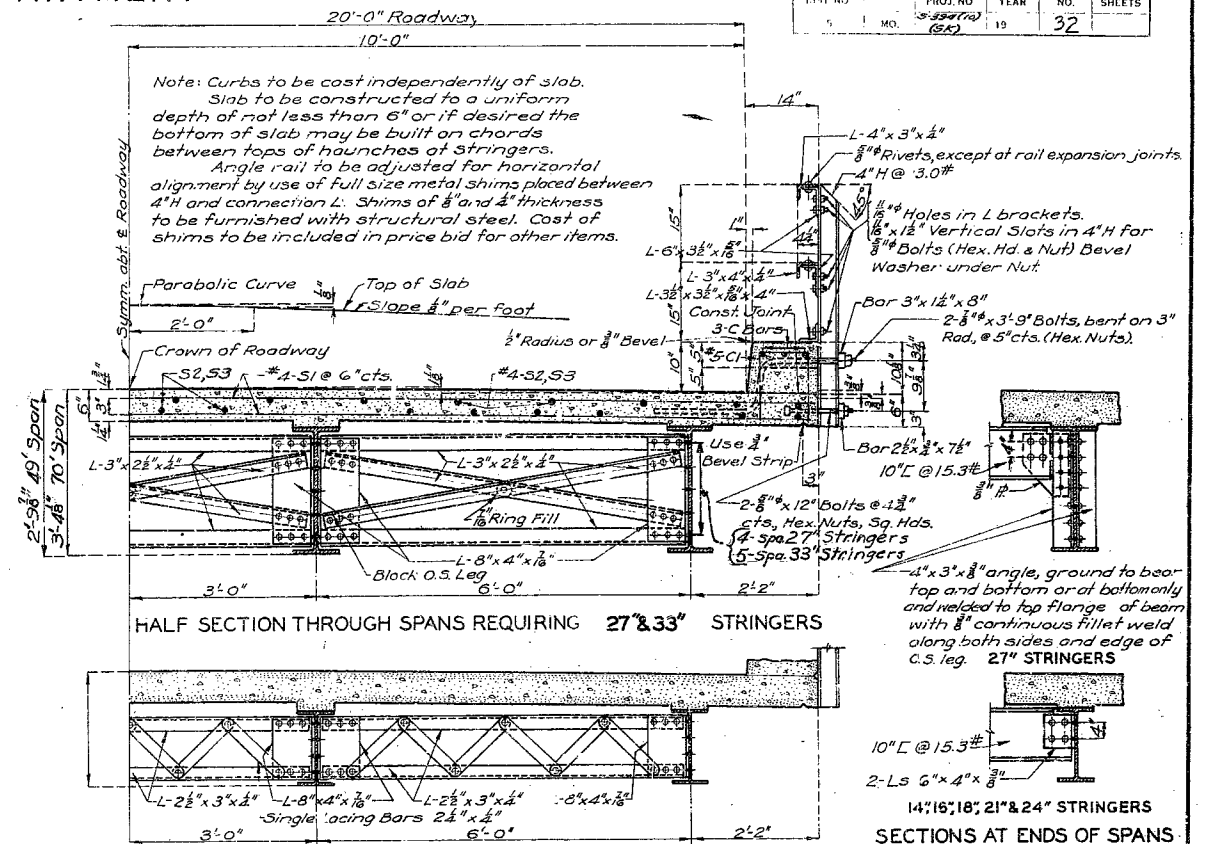
PLAN OF STRUCTURAL STEEL

Note: Dimensions are parallel to grade at $\frac{1}{2}$ Roadway

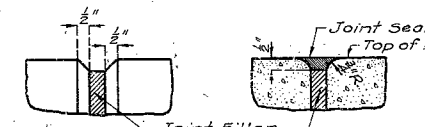


END SPANS

INTERMEDIATE SPAN



HALF SECTION THROUGH SPANS REQUIRING 14", 16" & 18" STRINGERS

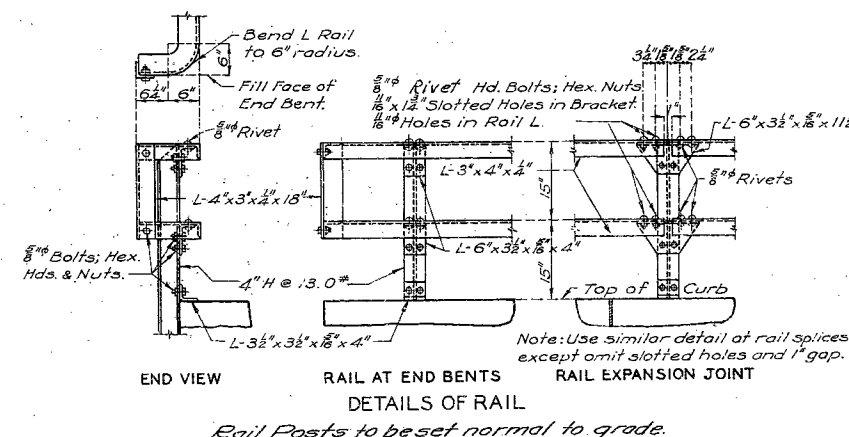


Note: Use bevel as shown for exposed faces of all filled joints except at top surface of roadway slab. Use edging tool with $\frac{3}{4}$ " radius at top surface of roadway slab each side of joint and fill flush with joint seal as shown.

DETAILS OF BEVEL FOR FILLED JOINTS

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

SLAB HAUNCHING DIAGRAM



END VIEW

RAIL AT END BENTS

RAIL EXPANSION JOINT

Rail Posts to be set normal to grade.

BRIDGE OVER JORDAN CREEK

STATE ROAD FROM ROUTE 39 EAST TO RTE. 5M NEAR EVERTON
ABOUT 2.3 MILES WEST OF EVERTON
PROJECT NO. S-394 (10) (SK) STA 271+55

DADE

COUNTY

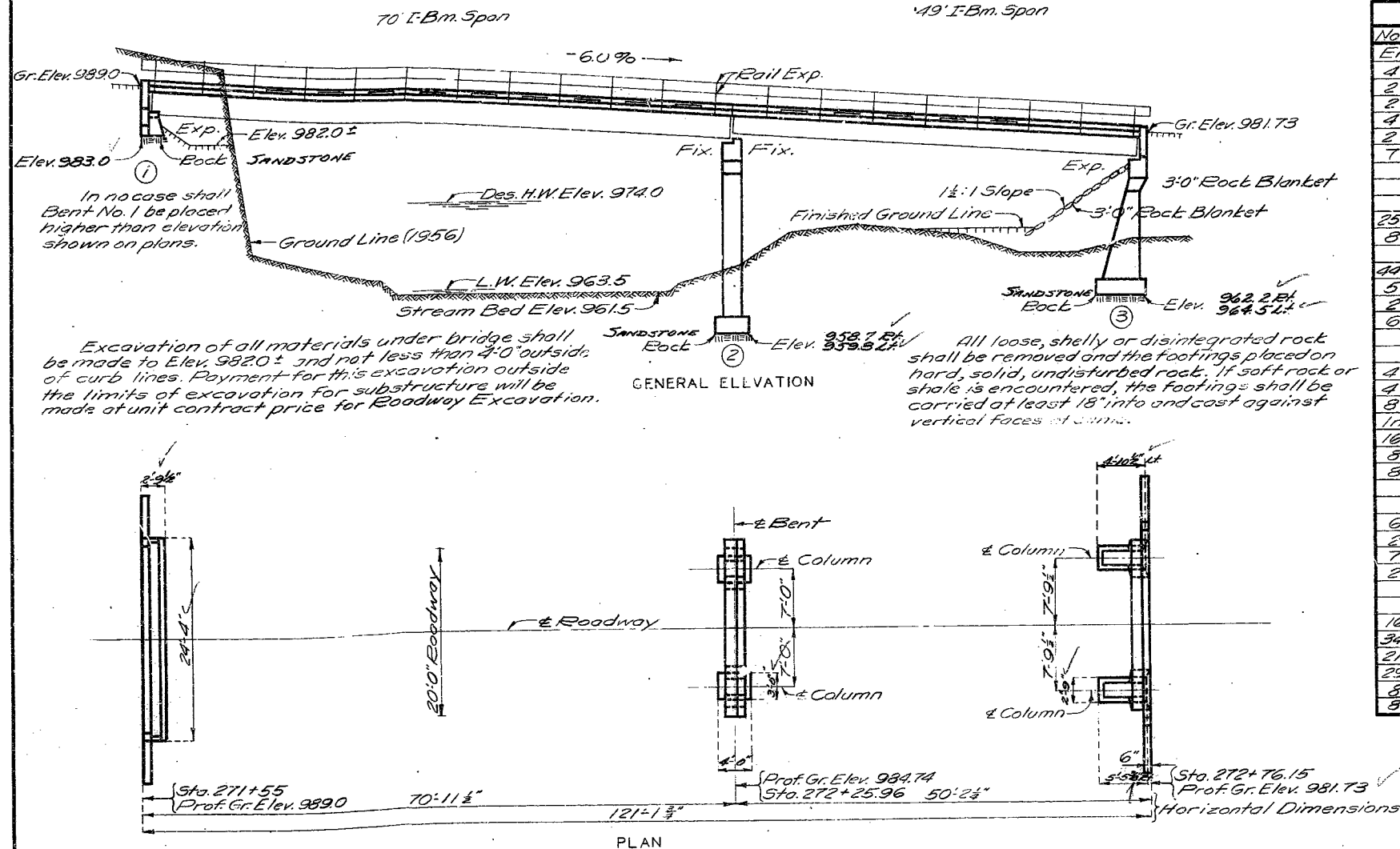
Sheet No. 5 of 5

NO CONSTRUCTION CHANGES

Sq. 20-H10
Rev. Feb. 1955

MISSOURI STATE HIGHWAY DEPARTMENT

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| 5 | MO. | 5-394(10) (SK) | 19 | 26 | |



COMPLETE BILL OF REINFORCING STEEL

FINAL PLANS

No. Mark Length Size Location

End Bent No. 1

| | | | | |
|---|----|--------|----|----------|
| 4 | H1 | 7'-0" | #6 | Wing |
| 2 | H2 | 6'-3" | #6 | " |
| 2 | H3 | 24'-3" | #6 | Bl. wall |
| 4 | H4 | 24'-3" | #4 | " |
| 2 | H5 | 5'-3" | #6 | Wing |
| 7 | H6 | 24'-0" | #6 | Beam |

25 U1 5'-6" #4 Beam

8 U2 3'-0" #4 "

44 V1 5'-0" #4 Bl. wall

5 V2 8'-6" #4 Wing

2 V3 6'-3" #4 "

6 V4 2'-6" #4 Beam

4 T1 9'-6" #6 Wing

4 T2 9'-3" #6 "

8 P3 19'-9" #2 Anchor Bolt Wall

Int. Bent No. 2

16 D1 4'-0" #6 Column

8 F1 7'-6" #6 Col. Hch.

8 F2 7'-9" #6 "

6 G1 22'-9" #7 Beam

2 G2 20'-9" #6 "

7 G3 20'-9" #7 "

2 G4 20'-9" #4 Br. Hch.

16 P1 20'-9" #6 Column

34 P2 8'-9" #3 "

21 U3 9'-3" #4 Beam

29 U4 2'-6" #4 Br. Hch.

8 U5 3'-9" #4 Beam

8 P3 10'-9" #2 Anchor Bolt Wall

Bending Sketches & Cutting Diagrams

No. Size Length Mark Location

End Bent No. 3

| | | | | |
|----|----|-------|----|-----------|
| 14 | #6 | 4'-0" | D2 | Footing |
| 6 | #6 | 7'-0" | F3 | Col. Hch. |
| 6 | #6 | 7'-0" | F4 | " |

4 #6 22'-0" H8 Beam

2 #6 20'-0" H9 "

5 #7 20'-0" H10 "

2 #6 22'-3" H11 Bl. wall

8 #5 9'-0" H12 Wing

3 #5 15'-9" H13 "

2 #4 22'-3" H14 Bl. wall

4 #6 11'-0" T3 Wing

21 #4 11'-3" U6 Beam

8 #4 3'-0" U7 "

22 #5 4'-3" V5 Bl. wall

5 #4 8'-3" V6 Wing

2 #4 5'-9" V7 "

8 #6 14'-6" V8 Column

6 #6 14'-9" V9 "

22 #5 10'-3" V10 "

4 #4 12'-6" V11 "

Superstructure

17 #5 2'-9" C1 Curb

12 #6 36'-6" C2 "

12 #6 26'-0" C3 "

486 #4 22'-0" S1 Slab

96 #4 24'-9" S2 "

64 #4 25'-9" S3 "

| FINAL QUANTITIES | | | |
|----------------------------------|----------|-----------|-------|
| Item | Substr. | Superstr. | Total |
| Class 1 Excavation for Structure | Cu. Yds. | 90.5 | 90.5 |
| Class 2 Excavation for Structure | Cu. Yds. | 20.5 | 20.5 |
| Class "B" Concrete | Cu. Yds. | 31.4 | 59.2 |
| Fabricated Structural Steel | Lbs. | 66680 | 66680 |
| Gray Iron Alloy Castings | Lbs. | 1260 | 1260 |
| Reinforcing Steel | Lbs. | 4310 | 15770 |
| Test Holes | Lin. Ft. | 26 | 26 |

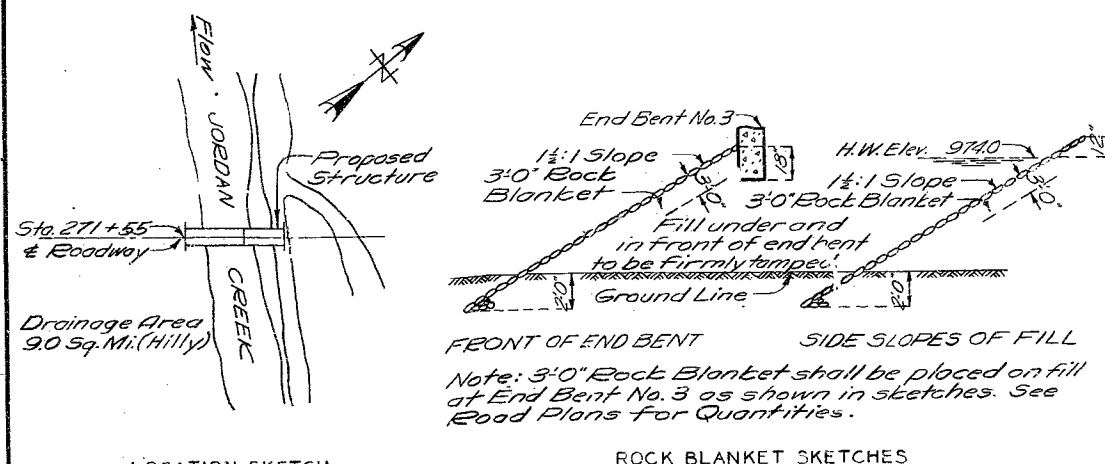
Excavation for bridge made above Elev. 964.5 will be paid for as Class 1 Excavation for Structures.
Excavation for bridge made below Elev. 964.5 will be paid for as Class 2 Excavation for Structures.
* Final pay weight for Fabricated Structural Steel will be based on using field rivets except for bolted connections specified for handrail.

~~At Elev. 996.74 Spill: 42 nuts in wet foot 10' east of Sta. 271+55 B.M. Elev. 982.47 X in Ch. Lt. S&B, N.E. End of Bridge Sta. 272+76~~

BRIDGE OVER JORDAN CREEK
STATE ROAD FROM RTE. 39 EAST TO RTE. 5M NEAR EVERTON
ABOUT 2.3 MILES W. OF EVERTON
PROJECT NO. 5-394(10) (SK) STA. 271+55
DADE COUNTY

SUBMITTED BY: J. A. Williams DATE 1-17-1957
APPROVED BY: Roy M. Whitton DATE 1-17-1957
STDC-HOR4
N-280

GENERAL NOTES:
Design Specifications: A.A.S.H.O.-1953
Loading: H10-44
Structural Steel Stress: 18,000 #/sq.
Reinforcing Steel Stress: 20,000 #/sq.
Concrete, Class "B" Stress: 1,200 #/sq.
All concrete shall be Class "B".
Rivets 3/4"; holes 1/2" except in handrail, where rivets shall be 5/8"; holes 1/2".
Field connections shall be riveted except as noted in handrail details or, if the Contractor desires to eliminate all field riveting on this project, he may use machine bolts except for the 3/4" rivet head bolts specified for handrail. Heads and nuts of machine bolts shall be American Standard Regular.
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 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.
Where joint filler is specified on the plans it shall conform with the requirements for Premoulded Material for Filler as given in Section 59-22D of the Standard Specifications.
Permits must be obtained for all truck loads over legal length. Items of material which cannot be transported by truck with overall length less than 75'-0" must be shipped by rail to the specified shipping point.



Drawn Jan. 1957 by W.E.S.
Checked Jan. 1957 by C.S.A.
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 1A of 3.

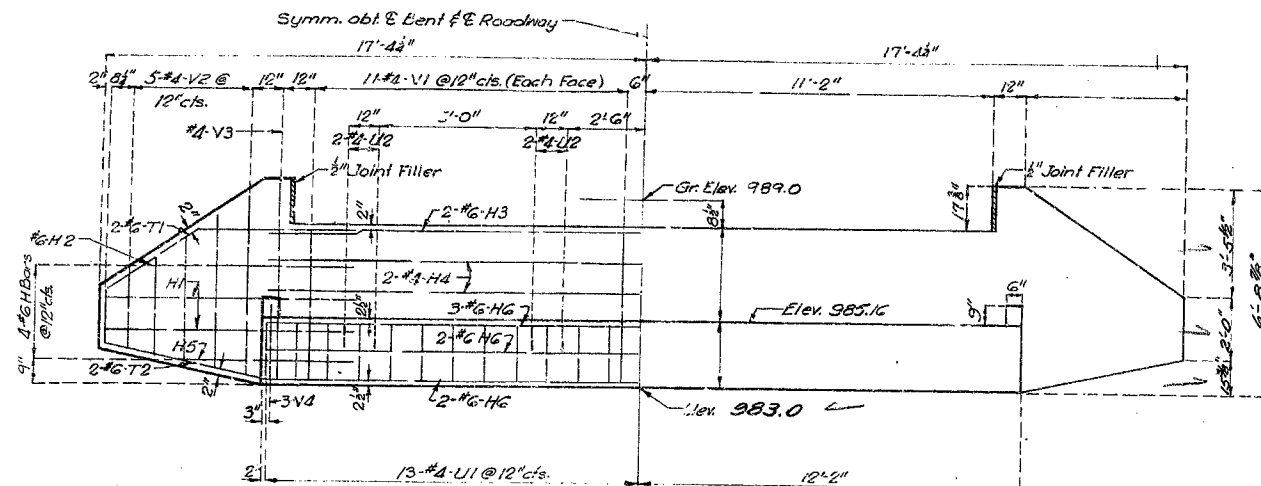
FINAL PLANS

FINISHED

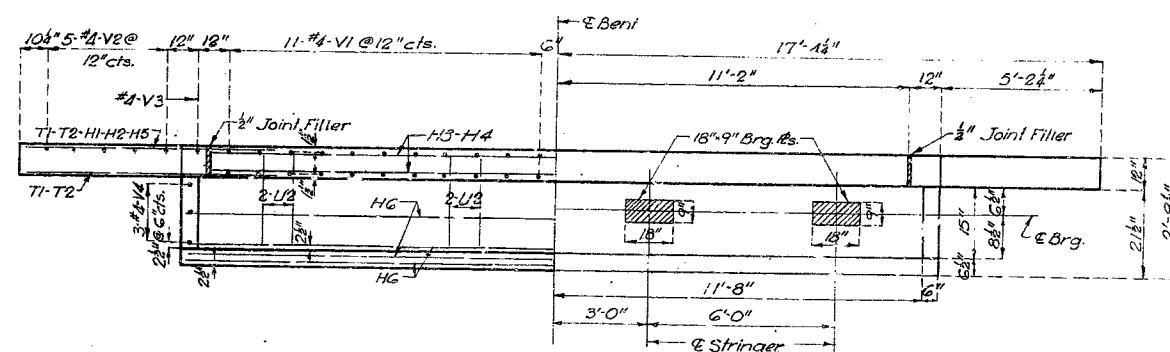
MISSOURI STATE HIGHWAY DEPARTMENT

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| 5 | MO. | S-394(10) (SK) | 19 | 29 | |

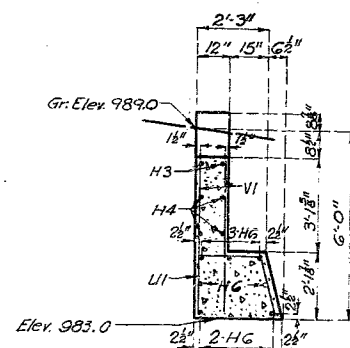
FINAL PLANS



ELEVATION



PLAN



SECTION AT C

Note: Fill at End Bent No. 1 shall not be carried above bottom of beam and wings until superstructure Span (1-2) is in place.

DETAILS OF END BENT NO. 1

BRIDGE OVER JORDAN CREEK

STATE ROAD FROM RTE. 39 EAST TO RTE. 50 NEAR EVERTON
ABOUT 2.3 MILES W. OF EVERTON
PROJECT NO. S-394 (10) (SK) STA. 271+55

DADE

COUNTY

Drawn Dec. 1956 by S.W.S.
Checked Jan. 1957 by C.S.A.

Note: This drawing is not to scale. Follow dimensions

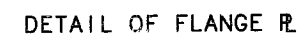
Sheet No. 2A of 3.

FINAL PLANS

N-280

| | | | | | |
|---------|-----------|-----|-----|-----|-----------|
| STATE | PRCJ. NO. | | | | SHEET NO. |
| MO. | J750567 | | | | 5 |
| SEC/SUR | 13 | TWP | 30N | RGE | 26W |

The temporary supports must be capable of safely supporting a service load of approximately ** tons per stringer.
(Factor of safety not included) (See Special Provisions).

[illegible]

N02801

DATE 4/20/94