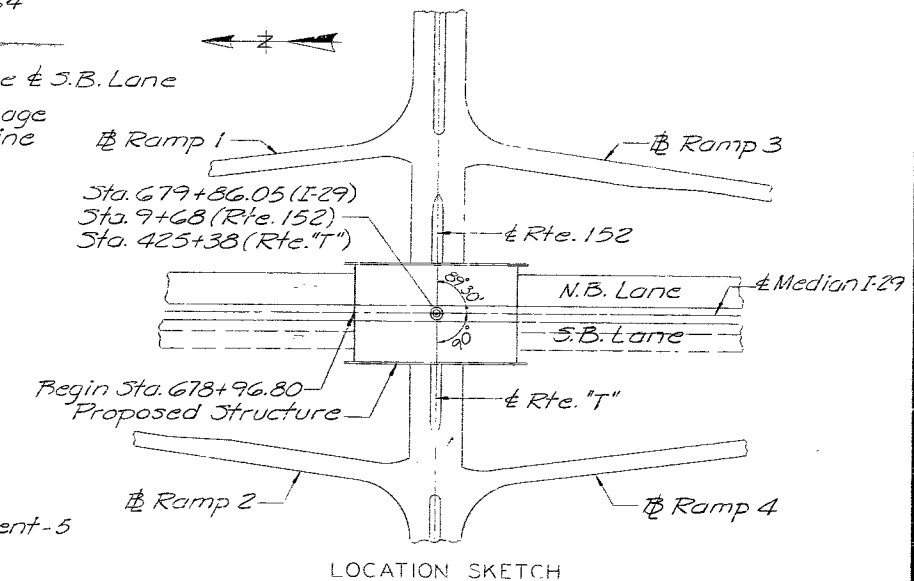
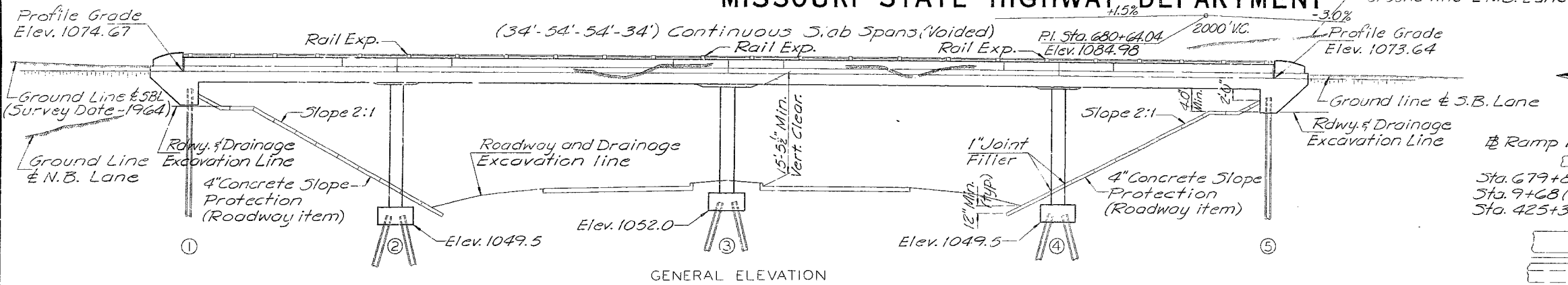


MISSOURI STATE HIGHWAY DEPARTMENT

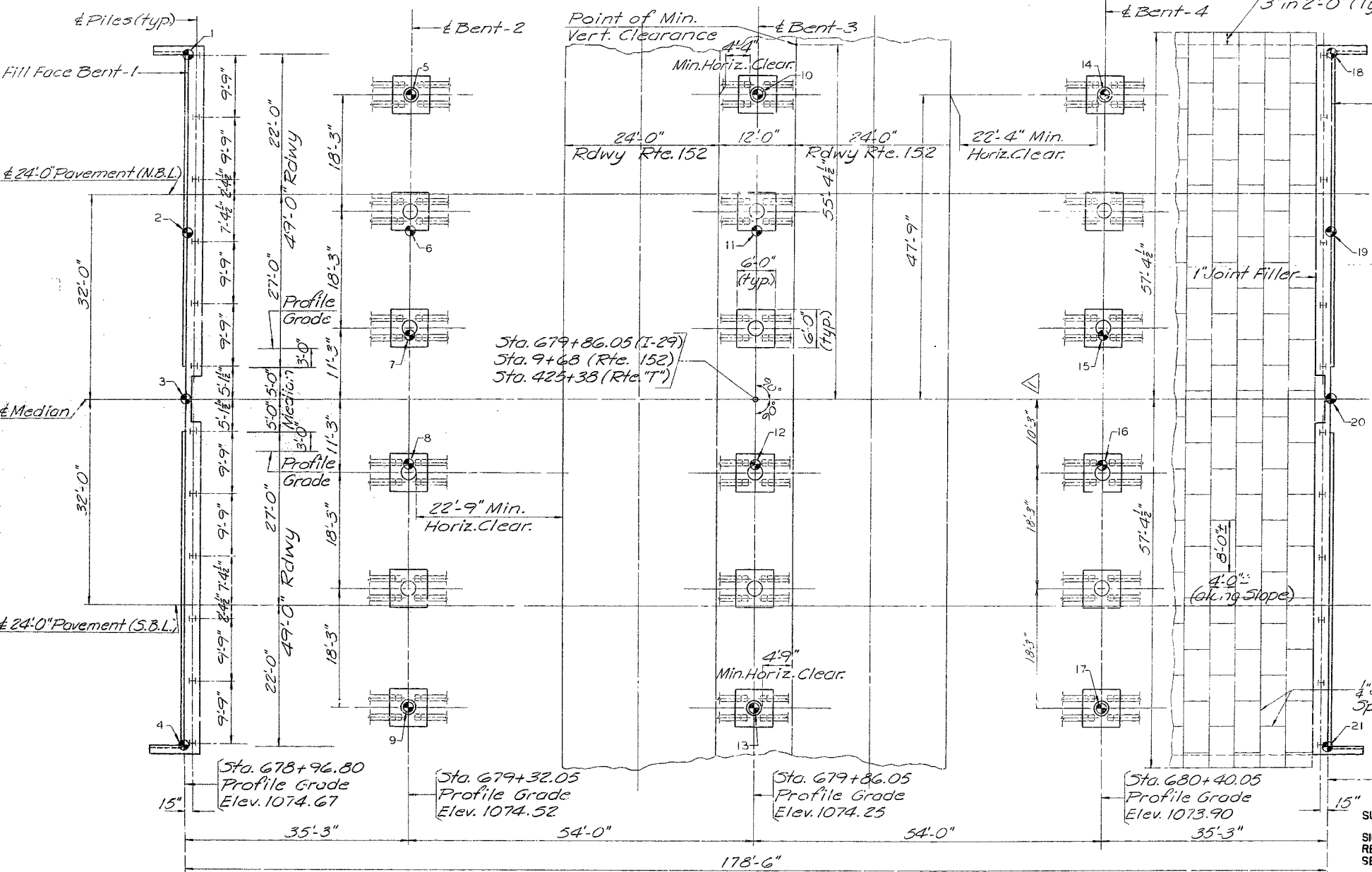
FED. ROAD DIST. NO.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	124	



GENERAL NOTES
 Design Specifications:
 A.A.S.H.O. - 1965
 Design Loading:
 HS 20-44
 15' x 19' Future Wearing Surface.
 Modified 24,000# Tandem Axle.
 Earth 120# Equivalent Fluid Pressure.
 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
 Steel Pile (A.S.T.M. A36-66) $f_b = 9,000$ psi
 Superstructure deck to be surface sealed.

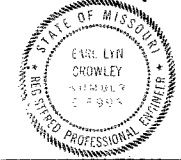
ITEM	SUBSTR.	SUPERSTR.	TOTAL
Class I Excavation for Structures	Cu. Yd. 360	—	360
Steel Piles in Place (10")	Lin. Ft. 3664	—	3664
Class B Concrete	Cu. Yd. 720	—	720
Class B1 Concrete	Cu. Yd. —	1223.7	1223.7
Reinforcing Steel	Lb. 2070	329,760	331,830
Bridge Rail (Single Tube Type)	Lin. Ft. —	336	336

Note: All concrete and reinforcement above footings in Intermediate Bents is included in superstructure quantities.



Note: All concrete and reinforcement above footings in Intermediate Bents is included in superstructure quantities.
 B.M. - Elev. 1042.51 - "Cut on ctr. W. Hdwl Culv. 80" Rt. of $\frac{1}{2}$ at Sta. 647+39.0
BRIDGE OVER ROUTE 152 AND ROUTE T
 STATE ROAD INTERSTATE ROUTE 29
 ABOUT 5.5 MILES NORTH OF PARKVILLE
 PROJECT NO. I-29-1 (12) (RTE 29) STA. 678+96.80
 PLATTE COUNTY

SUBMITTED BY E. LYN CROWLEY
 SIGNATURE *E. Lyn Crowley*
 REGISTERED PROFESSIONAL ENGINEER
 SERIAL NUMBER / E-5993



SUBMITTED BY *W.A. Combs* DATE Feb. 13, 1968
 APPROVED BY *M. J. Spitzer* DATE Feb. 13, 1968

CROWLEY, WADE, MILSTEAD, INC.
 ENGINEERS - ARCHITECTS
 INDEPENDENCE, MISSOURI
 Designed J.E. RIES, N.W.M.E.Y. 3/67 Checked P. Toland 4/67
 Detailed B.F. FOSTER 3/67 Checked J.E. RIES, N.W.M.E.Y. 4/67
 Quantities B.F. FOSTER 4/67 Checked M.H. B... 3/67

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

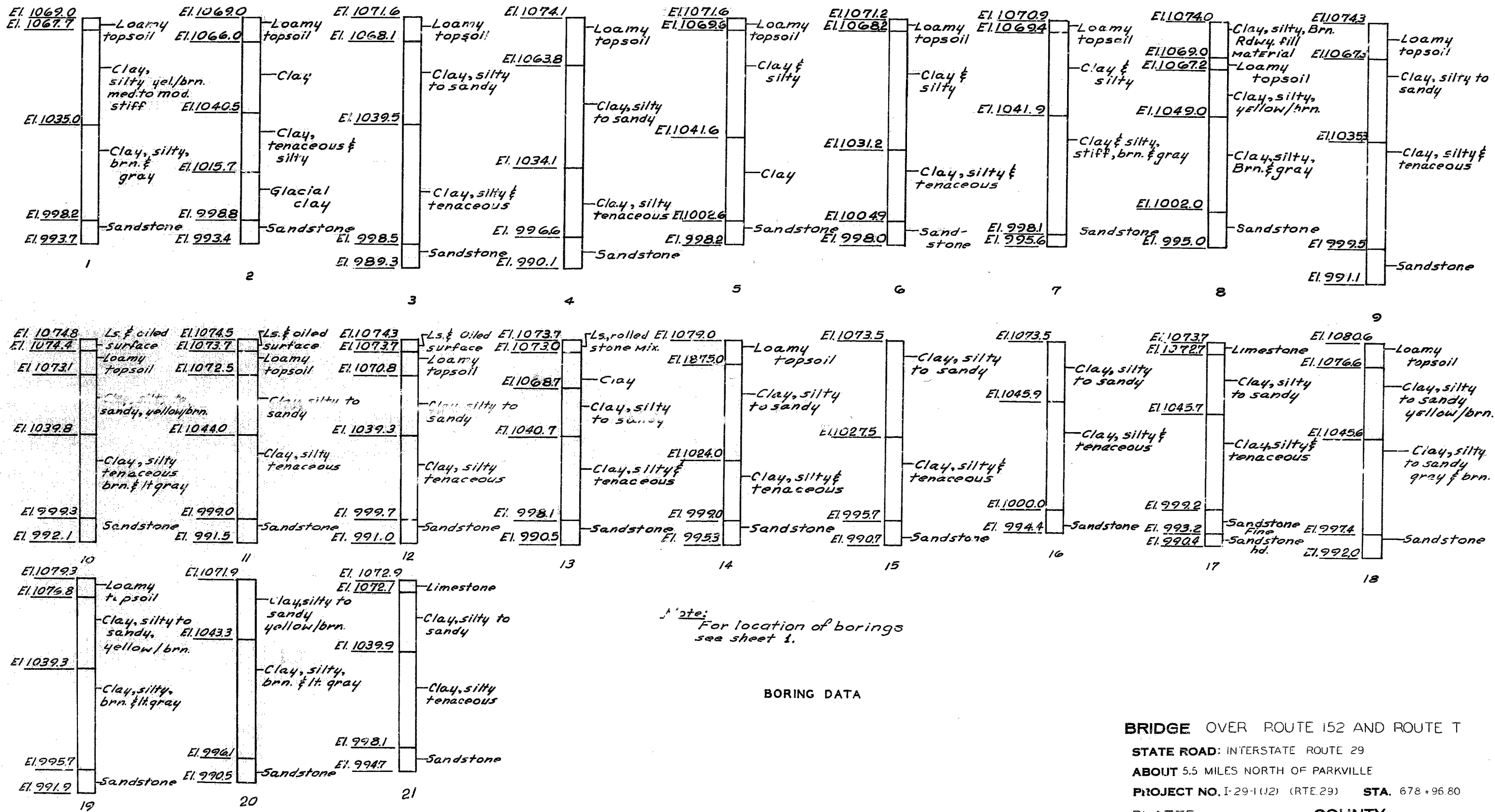
Note: For Boring Data see sheet 2 of 9.
 * Indicates location of boring.
 For Pile Data see sheet 3.

522

STD. 540
 A-1747

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	125	



Note: For location of borings see sheet 1.

BORING DATA

BRIDGE OVER ROUTE 152 AND ROUTE T
 STATE ROAD: INTERSTATE ROUTE 29
 ABOUT 5.5 MILES NORTH OF PARKVILLE
 PROJECT NO. I-29-1(12) (RTE 29) STA. 678+96.80
 PLATTE COUNTY

523

DETAILED MARCH 1967 BY H.L.W.
 CHECKED MARCH 1967 BY B.F.F.

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

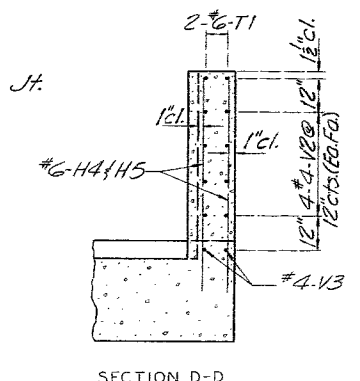
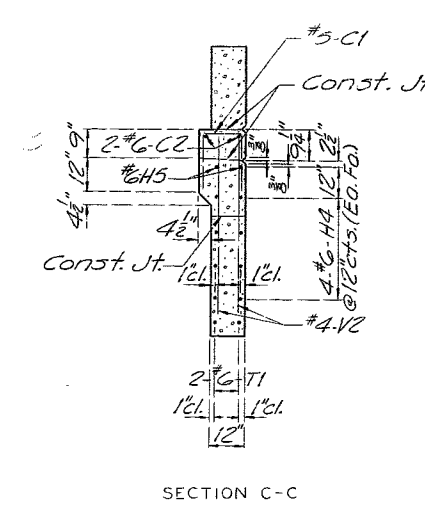
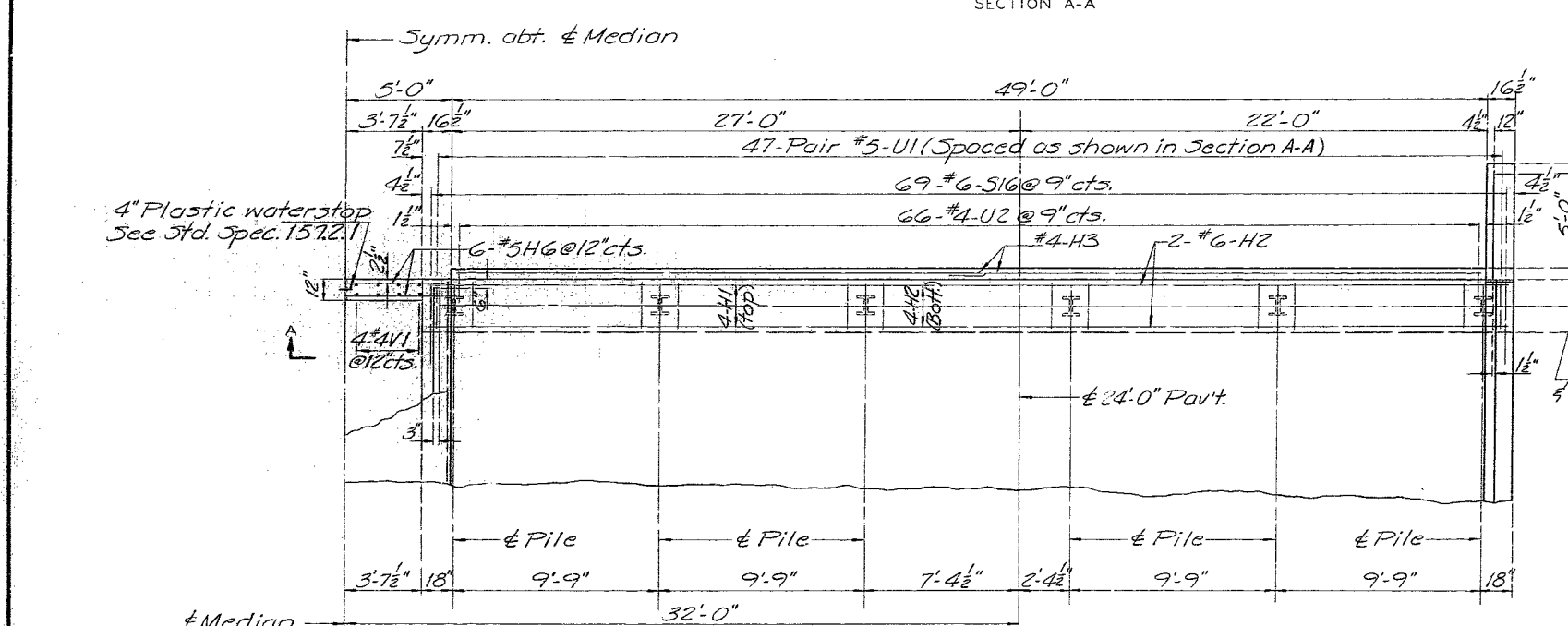
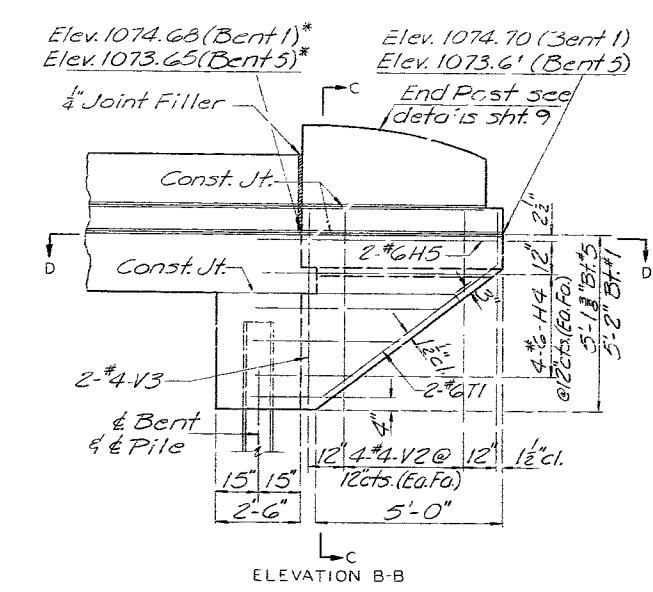
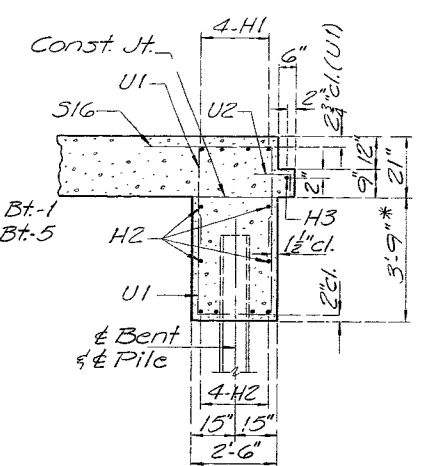
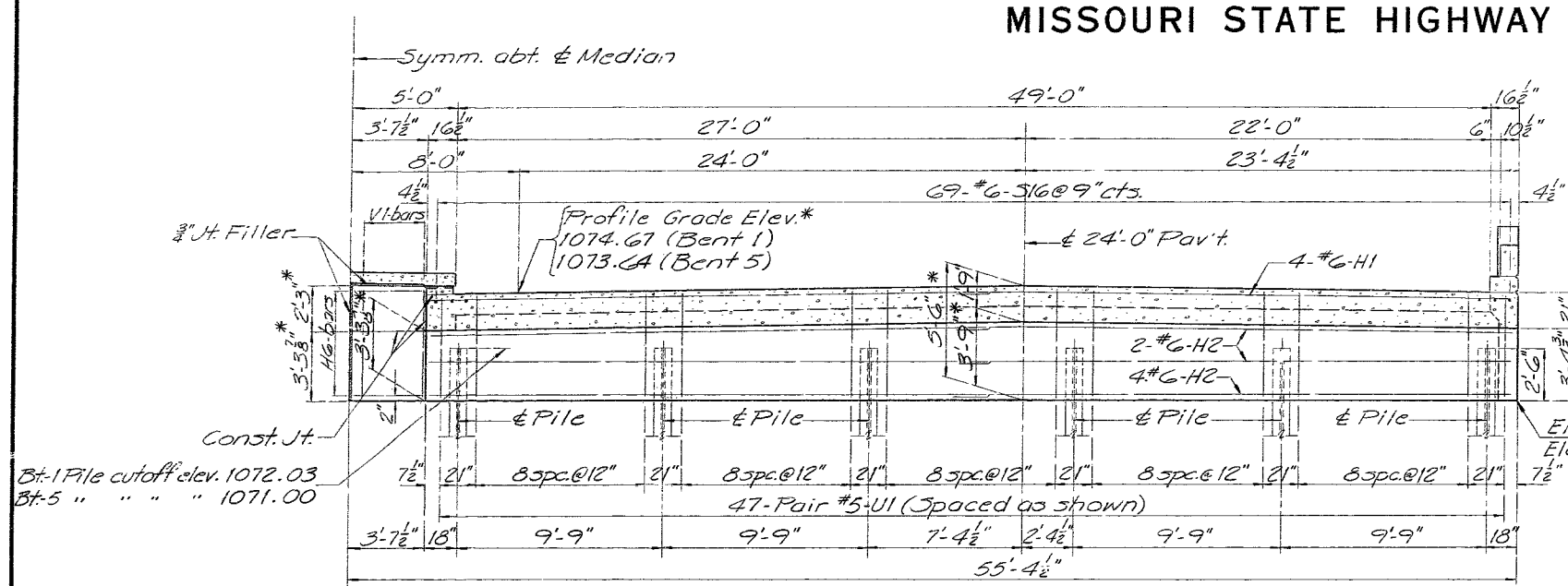
Sheet No. 2 of 9.

A-1747

MISSOURI STATE HIGHWAY DEPARTMENT

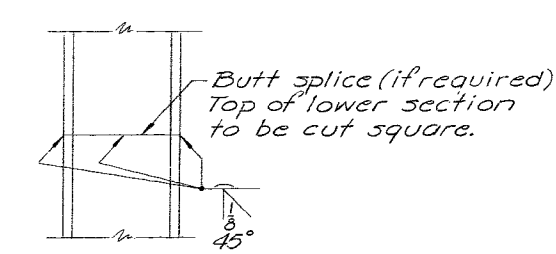
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	17	

Note: Dimensions and elevations marked * are taken at fill face.



DETAILS OF END BENTS 1 & 5

Notes: Fill at End Bents shall not be carried above bottom of beam and wings until adjacent superstructure span is in place.
 The construction joint between the beam and the bottom surface of the slab is parallel to the top surface of the roadway slab.
 For Timber Header details see sheet 7.
 For End Post and curb details see sheet 9.
 For Median details see sheet 8.



BRIDGE OVER ROUTE 152 AND ROUTE T
STATE ROAD: INTERSTATE ROUTE 29
ABOUT 5.5 MILES NORTH OF PARKVILLE
PROJECT NO. I-29-1 (12) (RTE 29) **STA.** 678 +96.80
PLATTE COUNTY

525
 DETAILED MARCH 1967 BY DFF
 CHECKED MARCH 1967 BY JER

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

Sheet No. 4 of 9.

A-1747

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	128	

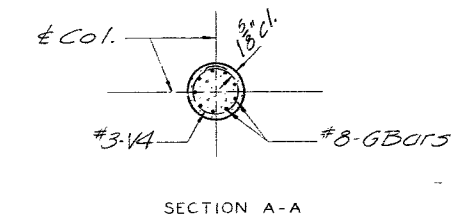
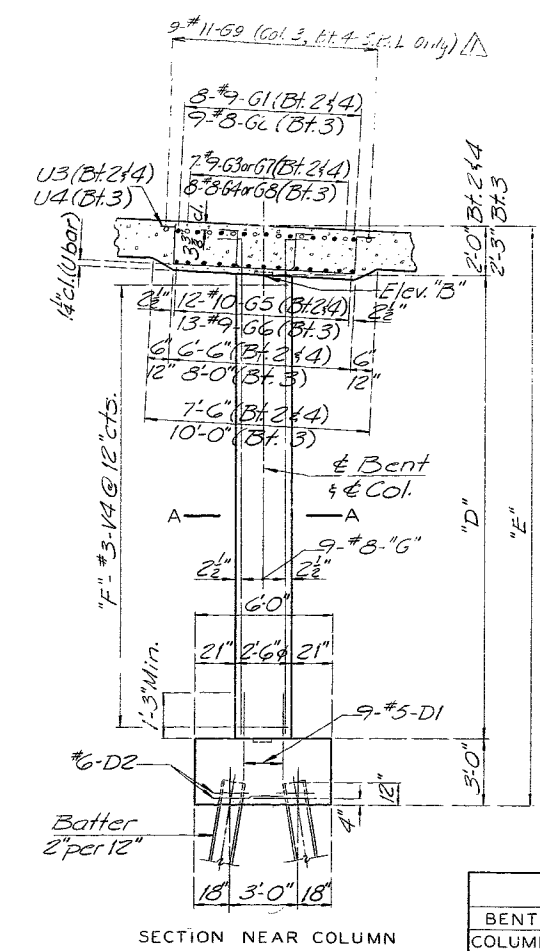
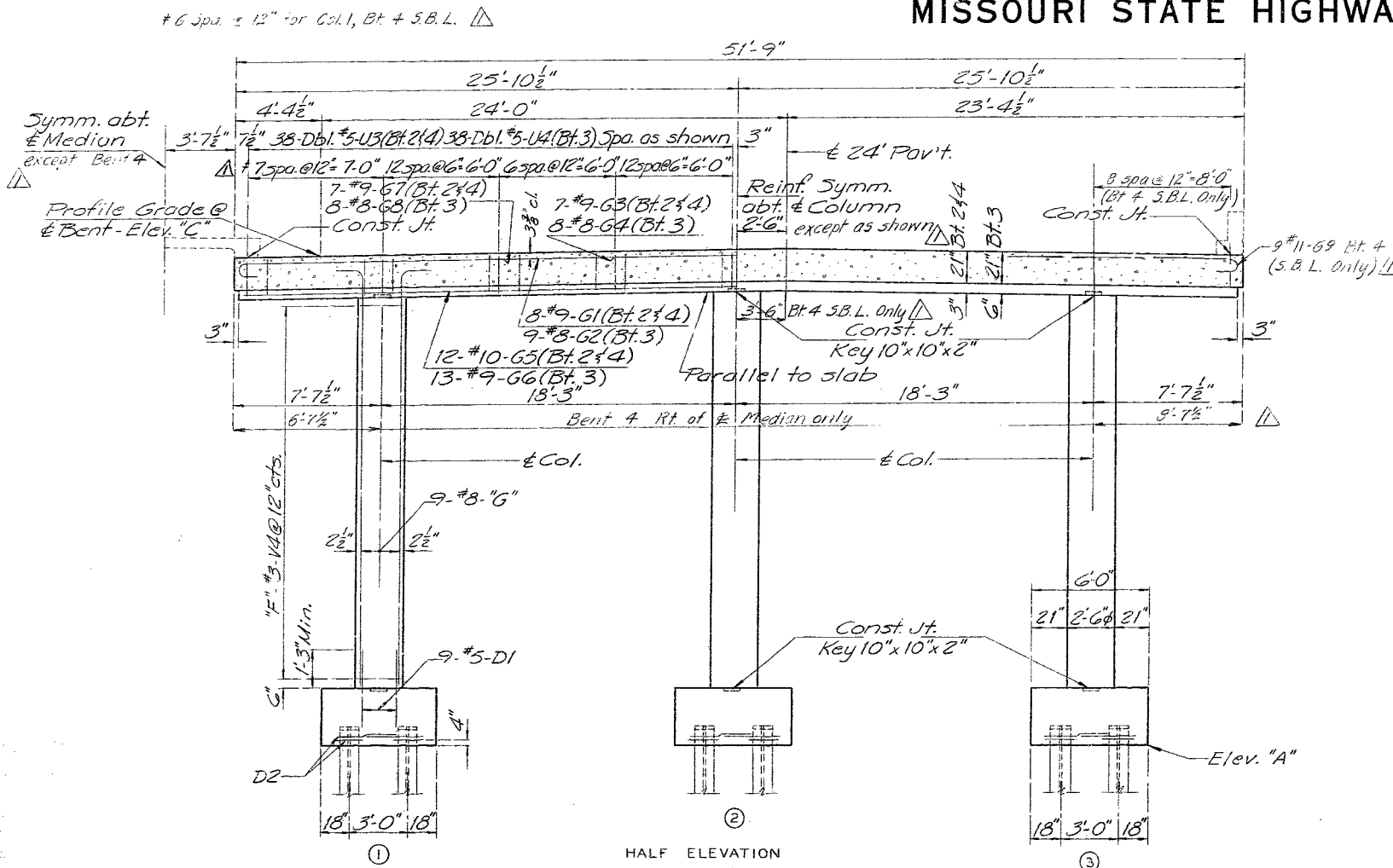


TABLE OF VARIABLES

BENT	2			3			4		
COLUMN	1	2	3	1	2	3	1	2	3
ELEV "A"	1049.5			1052.0			1049.5		
ELEV "B"	1072.57	1072.86	1072.65	1072.05	1072.33	1072.12	1071.95	1072.24	1072.03
ELEV "C"	1074.52			1074.25			1073.90		
"D"	20'-0 3/8"	20'-4 3/8"	20'-1 3/8"	17'-0 1/2"	17'-4"	17'-1 1/2"	19'-5 3/8"	19'-8 3/8"	19'-6 3/8"
"E"	25'-0 3/8"	25'-4 3/8"	25'-1 3/8"	22'-3 1/2"	22'-7"	22'-4 1/2"	24'-5 1/2"	24'-8 3/8"	24'-0 3/8"
"F"	20	20	20	17	17	17	19	20	19
"G"	V5	V6	V5	V7	V8	V7	V9	V10	V9

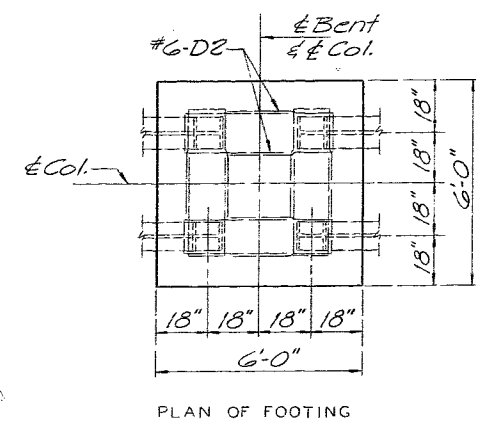
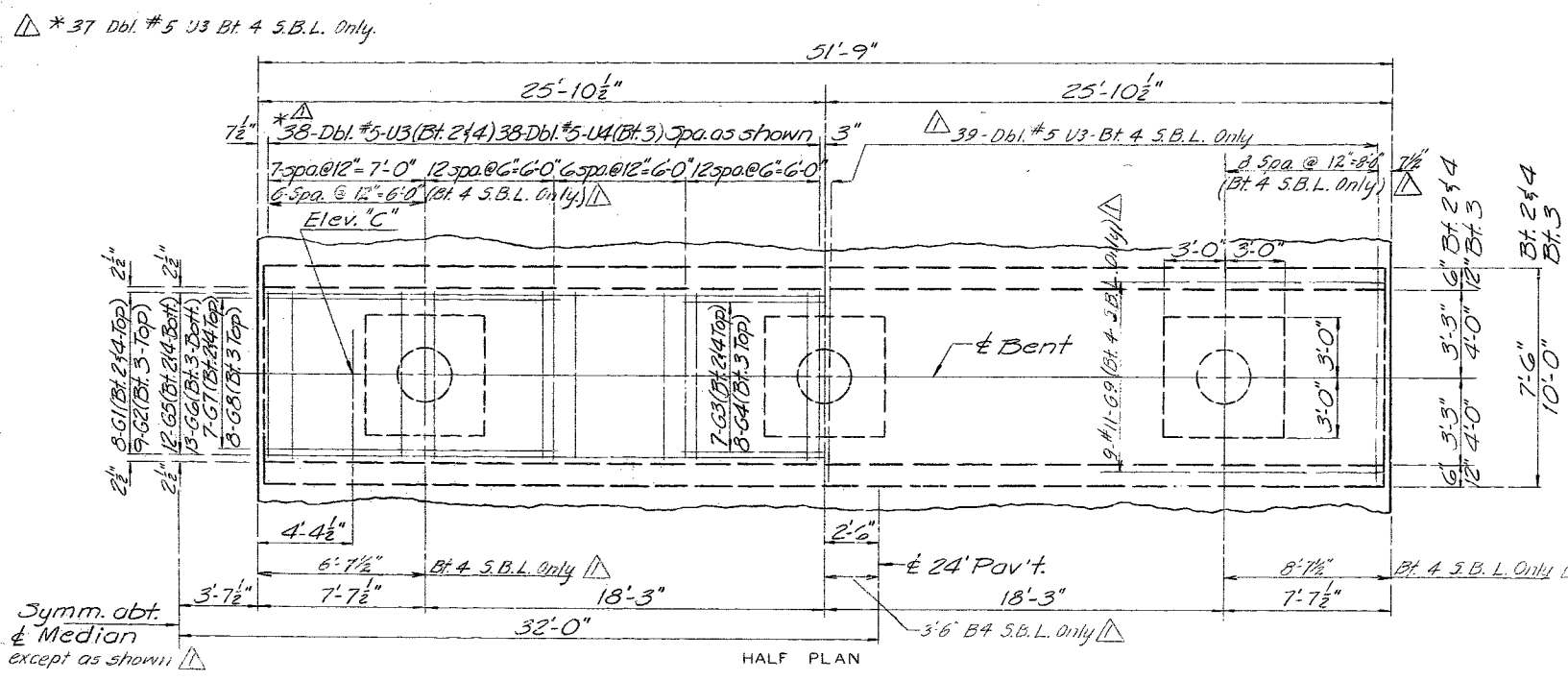


TABLE OF VARIABLES (continued)

BENT	4 S.B.L. ONLY		
COLUMN	1	2	3
ELEV "B"	1071.93	1072.22	1072.05
"D"	19'-5 3/8"	19'-8 3/8"	19'-6 3/8"
"E"	24'-5 1/2"	24'-8 3/8"	24'-0 3/8"

Note: Other variables same as shown above for Bent 4.

DETAILS OF INTERMEDIATE BENTS 2, 3 & 4

BRIDGE OVER ROUTE 152 AND ROUTE T
 STATE ROAD: INTERSTATE ROUTE 29
 ABOUT 5.5 MILES NORTH OF PARKVILLE
 PROJECT NO. I-29-1(12) (RTE.29) STA. 678+96.80
 PLATTE COUNTY

DETAILED MARCH 1967 BY BF
 CHECKED MARCH 1967 BY JER

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

Rev. 7-31-70
 Sheet No. 5 of 9.

A-1747

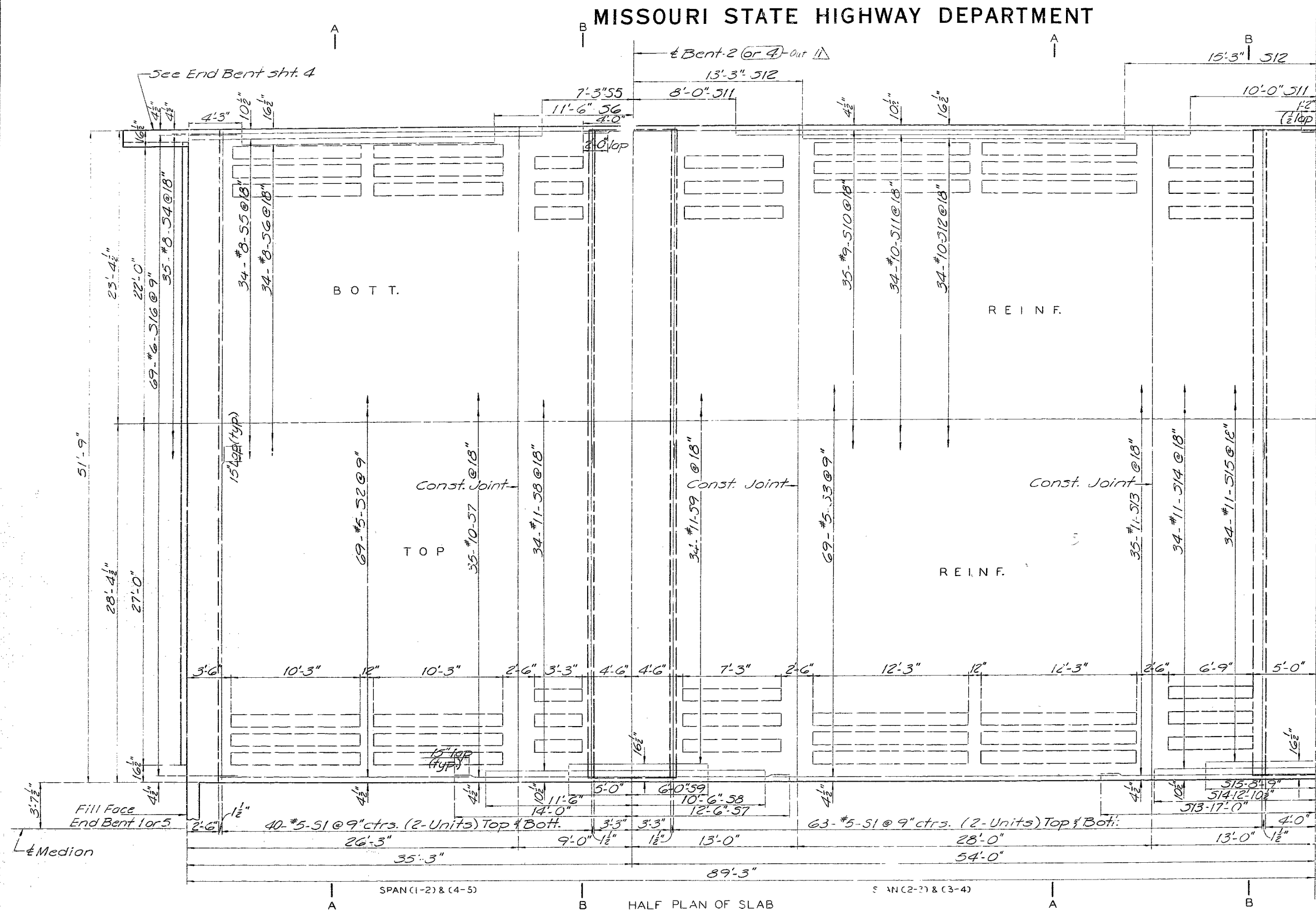
526

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	1-7	

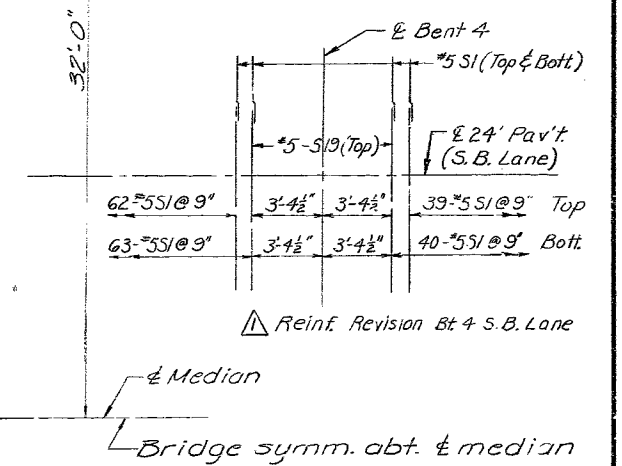
Symm. abt. & Bridge except as shown in Bent-3

Note: The contractor shall use an approved oscillating screed type, self-propelled mechanical finishing machine and shall pour and satisfactorily finish the roadway slab at a rate of not less than 55 cubic yards per hour. He shall observe the transverse construction joints shown on plans unless he can demonstrate to the satisfaction of the engineer that he is equipped to pour and satisfactorily finish the roadway slab at a rate which will permit a continuous pouring through some or all of these joints. Finishing machine load will not be permitted on concrete less than 48 hours old.



& 24' Pav't.

Note: See sheet 7 of 9 for Construction Joint Key details.



Reinf. Revision Bt 4 S.B. Lane

& Median
Bridge symm. abt. & median

SPAN (1-2) & (4-5) HALF PLAN OF SLAB

BRIDGE OVER ROUTE 152 AND ROUTE T

STATE ROAD: INTERSTATE ROUTE 29
 ABOUT 5.5 MILES NORTH OF PARKVILLE
 PROJECT NO. I-29-1 (12) (RTE 29) STA. 678+96.80
 PLATTE COUNTY

Note: For additional reinforcing bars (S17 and S18) under curb at Interior Bents 2, 3 and 4 see sheet 7.

Note: For Sections A-A and B-B see sheet 7.
 For Curb reinforcing see sheet 9.
 For Median reinforcing see sheet 8.

DETAILED MARCH 1967 BY BFF
 CHECKED MARCH 1967 BY JER

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

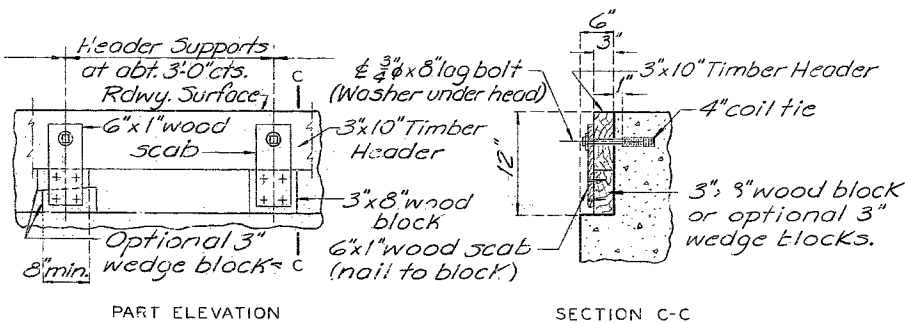
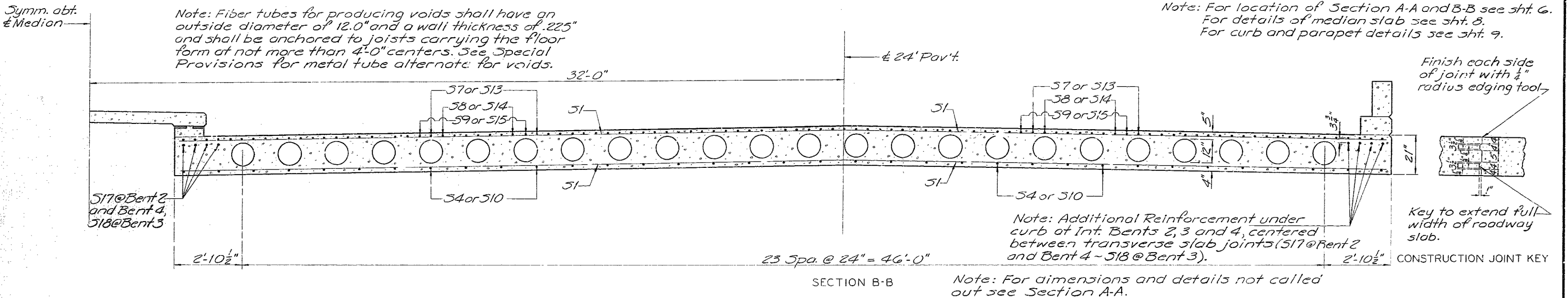
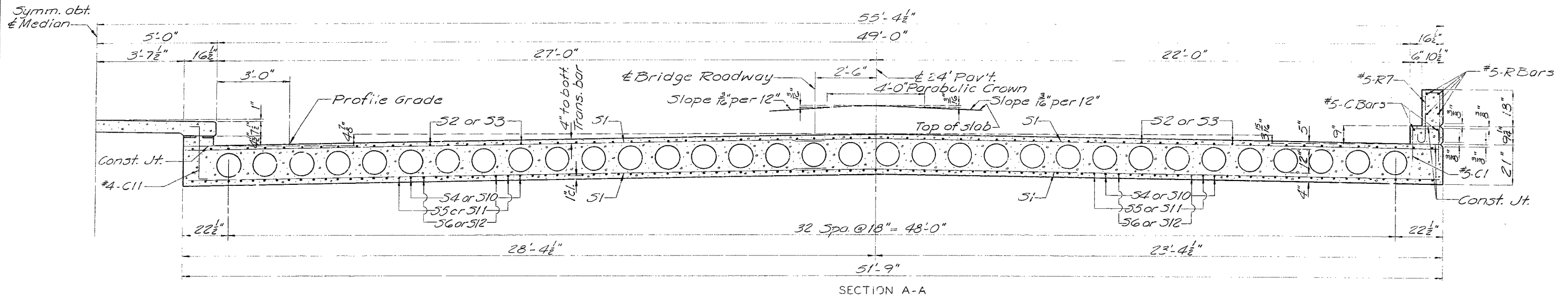
-Rev. 7-31-70 Sheet No. 6 of 9.

A-1747

527

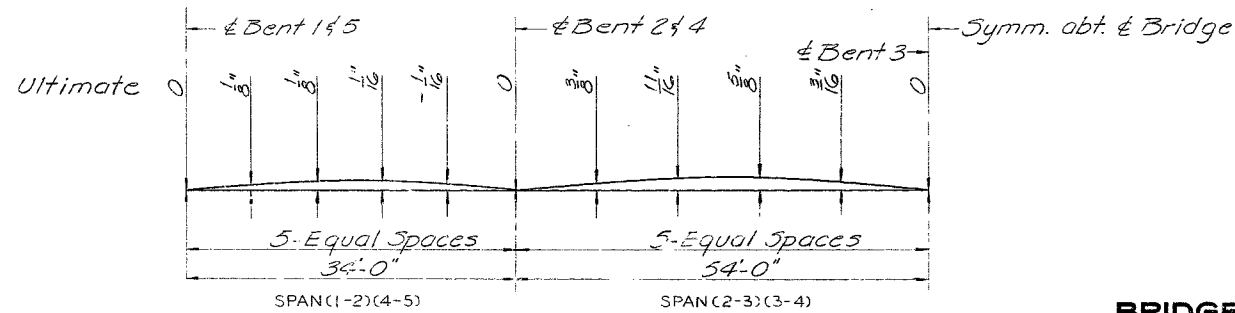
MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	130	



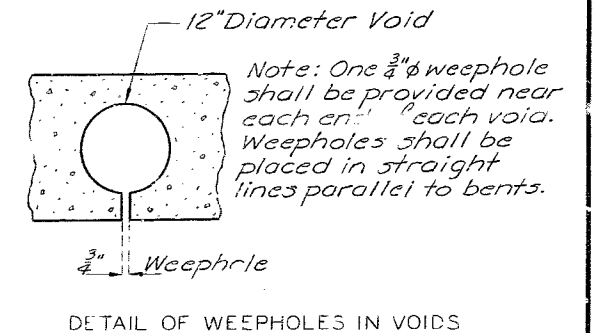
Note: Cost of timber header is complete in place to be included in price bid for concrete.

DETAILS OF TIMBER HEADER



Note: The contractor shall camber forms to allow for ultimate dead load deflection.

THEORETICAL CAMBER DIAGRAM

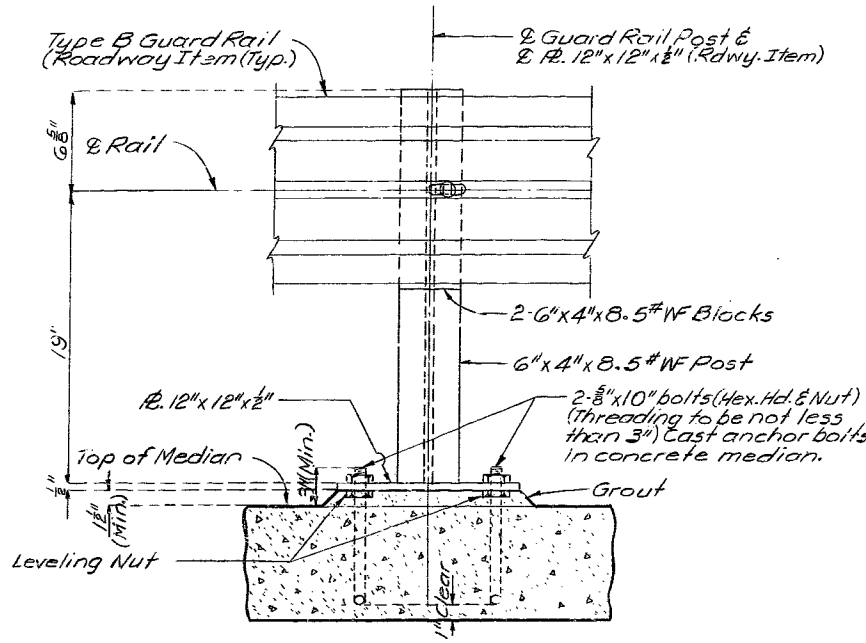


BRIDGE OVER ROUTE 152 AND ROUTE T

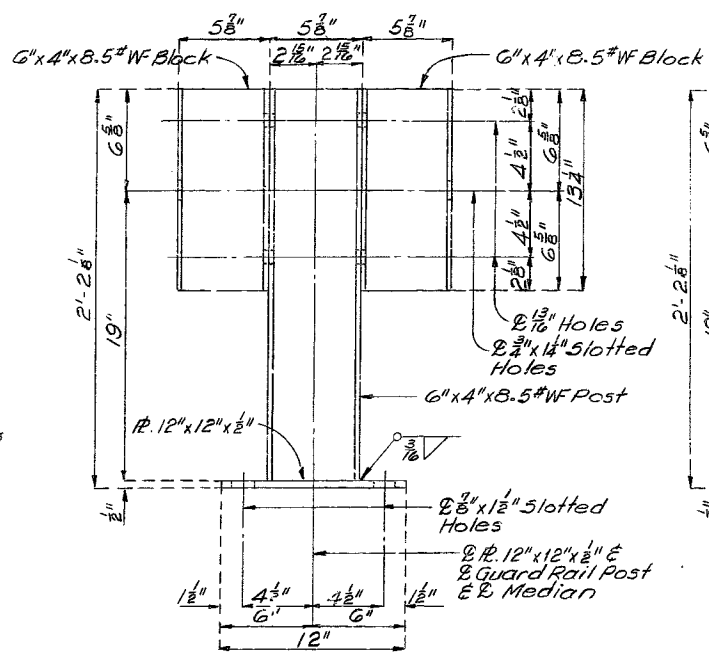
STATE ROAD: INTERSTATE ROUTE 29
 ABOUT 5.5 MILES NORTH OF PARKVILLE
 PROJECT NO. I-29-1 (12) (RTE 29) STA. 678+96.80
 PLATTE COUNTY

MISSOURI STATE HIGHWAY DEPARTMENT

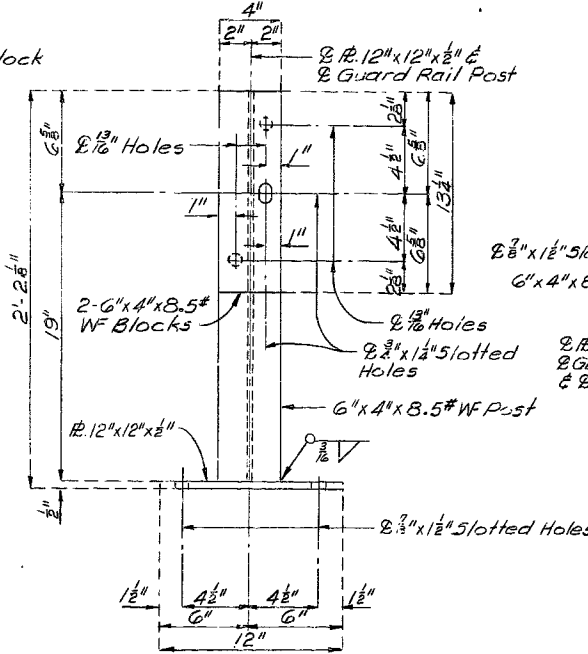
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5	MO.		19	13	



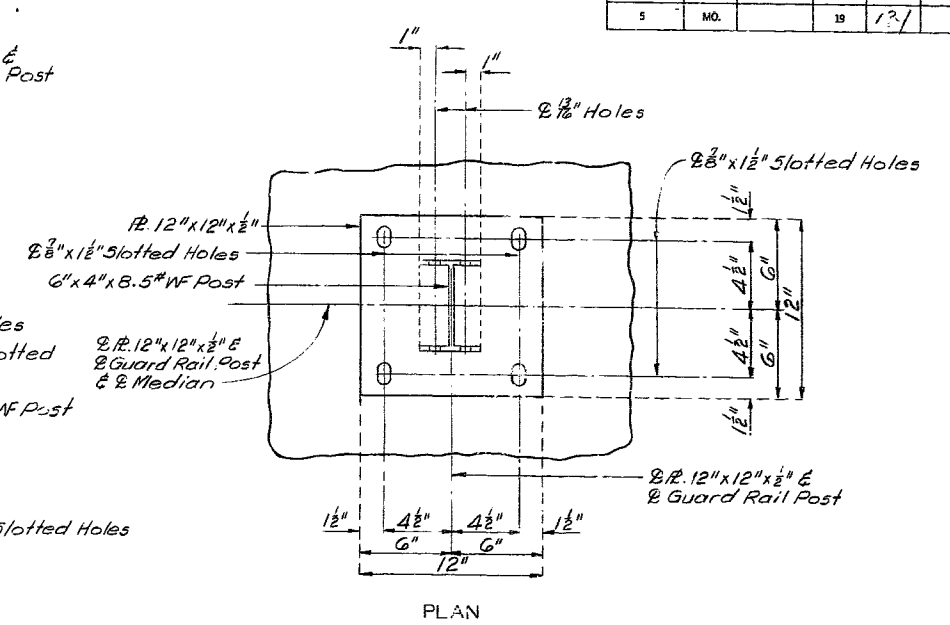
TYPICAL LONGITUDINAL SECTION



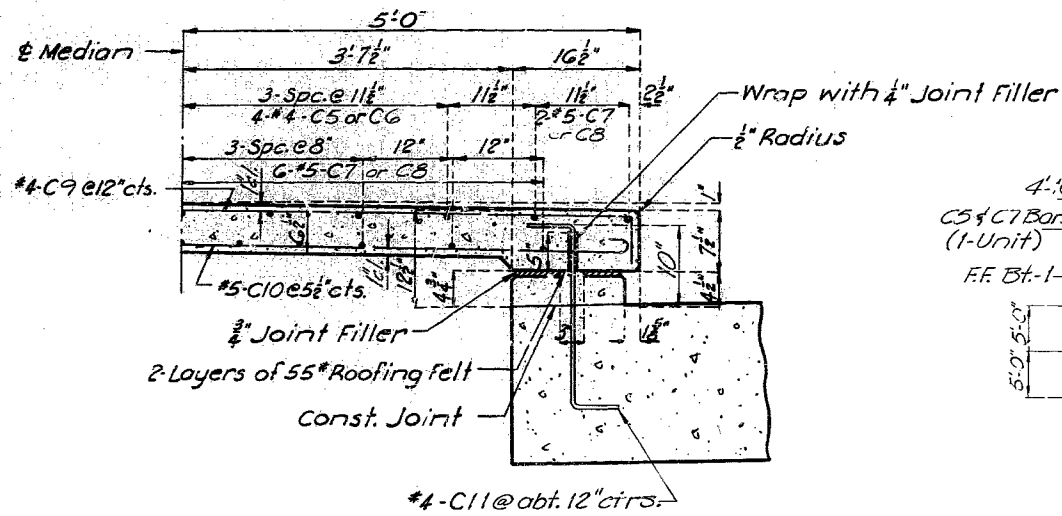
TRANSVERSE ELEVATION



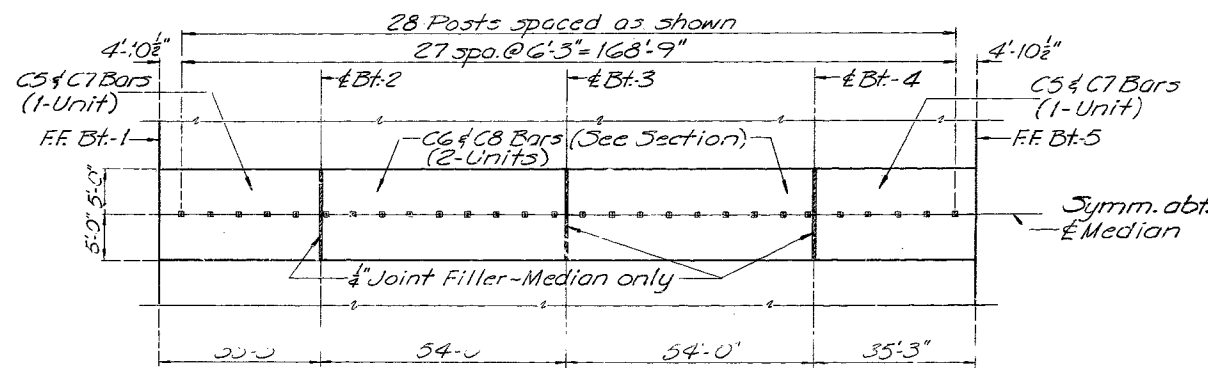
LONGITUDINAL ELEVATION



PLAN



HALF SECTION THRU MEDIAN



PLAN OF MEDIAN SHOWING GUARD RAIL POST SPACING

GENERAL NOTES:

All other details not shown shall comply with Std. B6.00
 Grout shall comply with Std. Specs. 166.1.5.
 Tightening of nuts on bolts connecting rail members and post shall be to the extent that longitudinal movement of the bolt in slotted holes is possible. After tightening in this manner the top of the bolt shall be deformed in such a way as to prevent loss of rut.
 Guard rail posts shall be set normal to grade.
 Cost of furnishing and placing anchor bolts for guard rail shall be included in price bid for other items.
 Type B Guardrail and Post will be furnished and paid for as a Roadway Item.

BRIDGE OVER ROUTE 152 AND ROUTE T
STATE ROAD: INTERSTATE ROUTE 29
ABOUT 5.5 MILES NORTH OF PARKVILLE
PROJECT NO. I-29-1(12) (RTE.29) **STA.** 678+96.80
PLATTE **COUNTY**

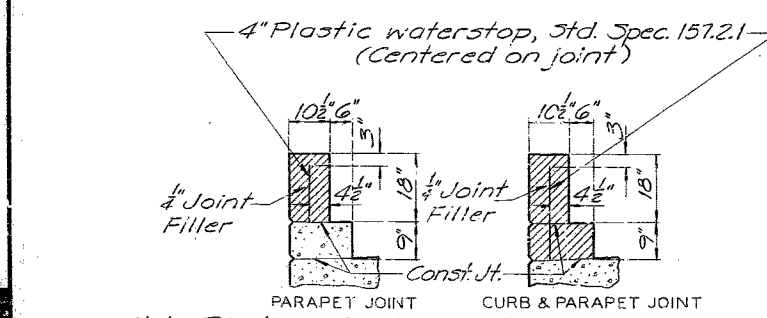
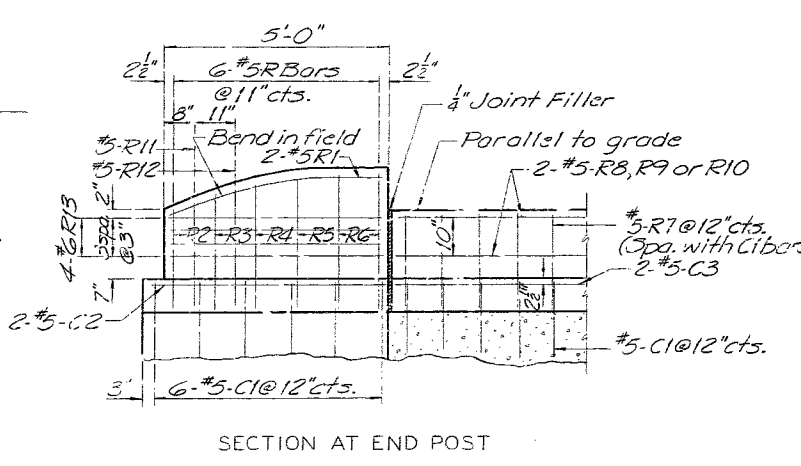
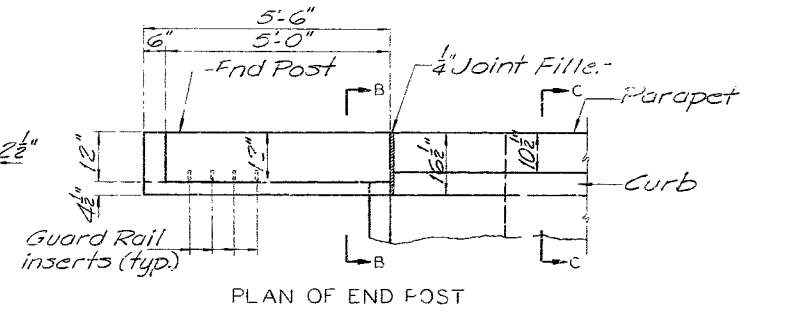
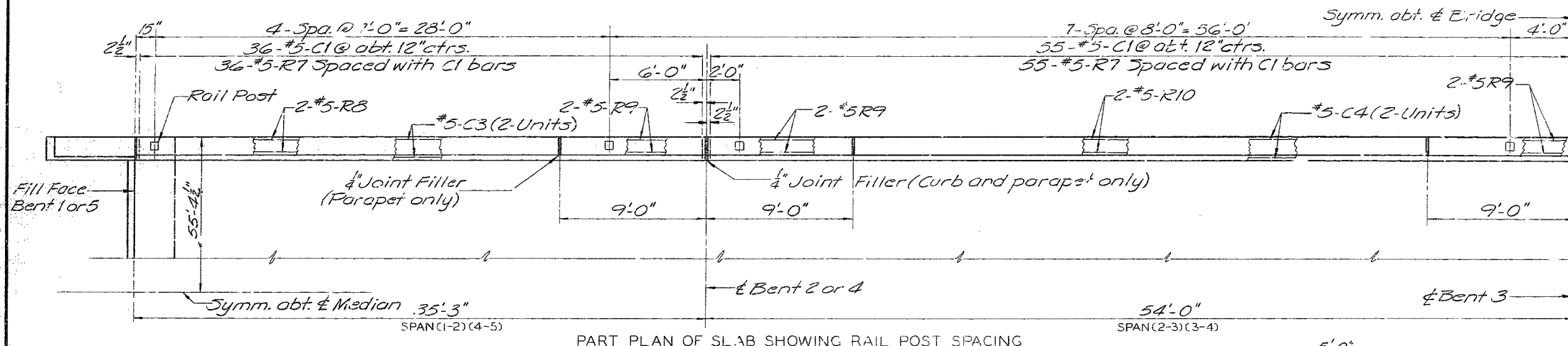
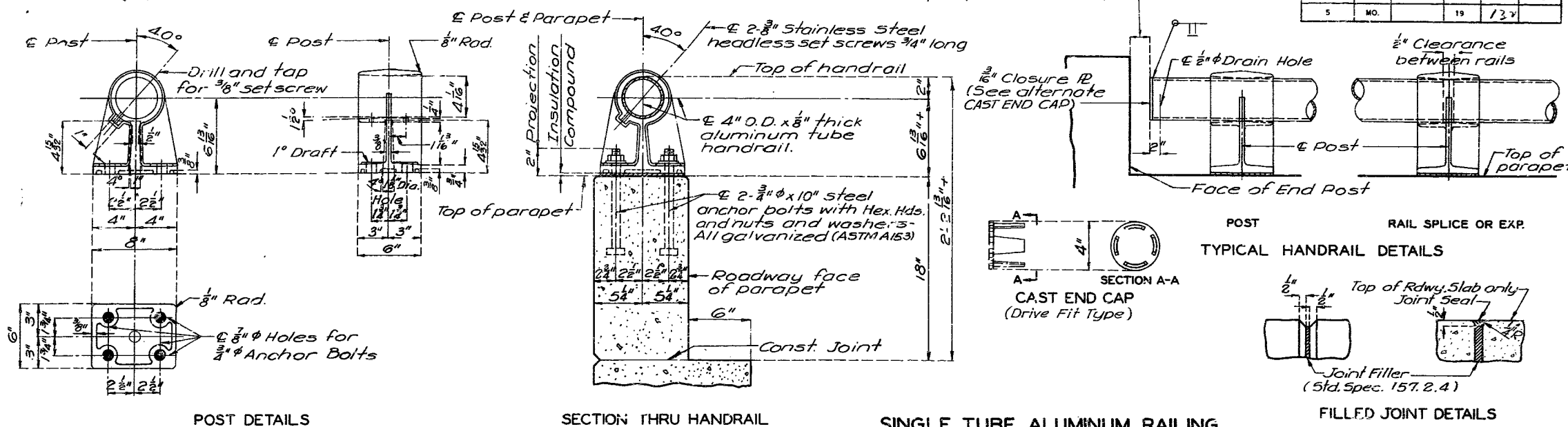
GENERAL HANDRAIL NOTES:

All handrail posts shall be set normal to grade.
 Aluminum tube handrail 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 handrail alignment. Maximum thickness of shims to be 1/8". Where more tilting of post is required for proper alignment, concrete bearing areas shall be ground down.
 All parts of handrail, except anchor bolts, nuts, washers, and set screws are to be of aluminum material.
 The contract unit price per linear foot of "Bridge Rail" shall include furnishing and erecting the handrail complete with anchor bolts, shims and insulating compound.
 All fillets 1/4" except as noted.
 All drafts 3° except as noted.
 Pipe rail to be fabricated in a minimum of 2 panel lengths.
 Omit set screw on side adjacent to filled joint in parapet and curb at all expansion posts.
 Top of curbs and parapets to be built parallel to grade with curb and parapet joints (except at end posts) normal to grade.
 Concrete end posts to be vertical.
 All exposed edges of end posts shall have 1/2" bevel.
 All exposed edges of curbs and parapets shall have 1/2" radius or 3/8" bevel unless otherwise noted.
 If the contractor desires, he may use drive fit cast aluminum end caps in lieu of welded aluminum closure plates.
 Integrally cast test coupons and a coat of clear lacquer specified in Std. Spec. 56.2.4 and 56.3.5 respectively will not be required for these rail posts.

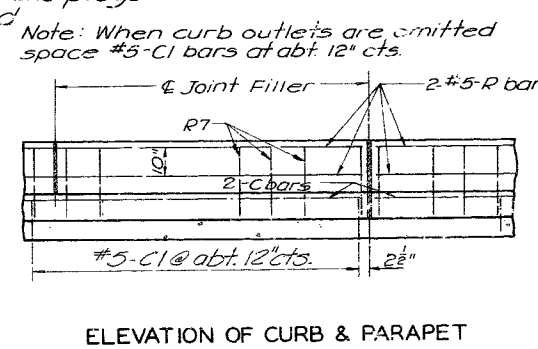
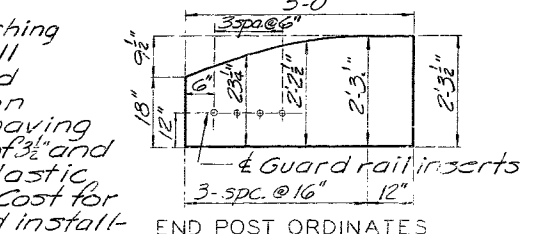
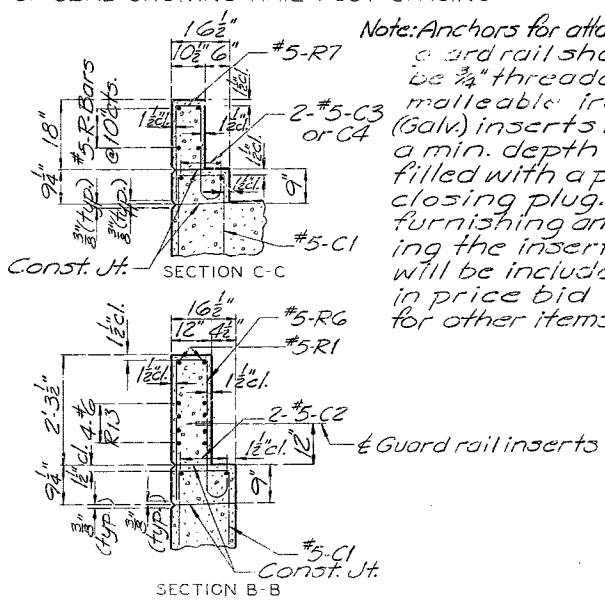
MISSOURI STATE HIGHWAY DEPARTMENT

2" Min. except for Exp. Gap.
 in parapet use 3" @ 60° F

FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	127	



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



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

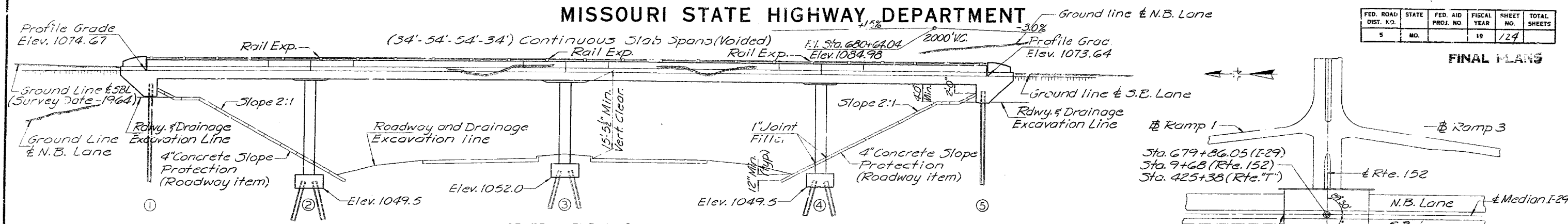
BRIDGE OVER ROUTE 152 AND ROUTE T
STATE ROAD: INTERSTATE ROUTE 29
ABOUT 55 MILES NORTH OF PARKVILLE
PROJECT NO. T-29-1 (12) (RTE 29) STA. 678+96.80
PLATTE COUNTY

530

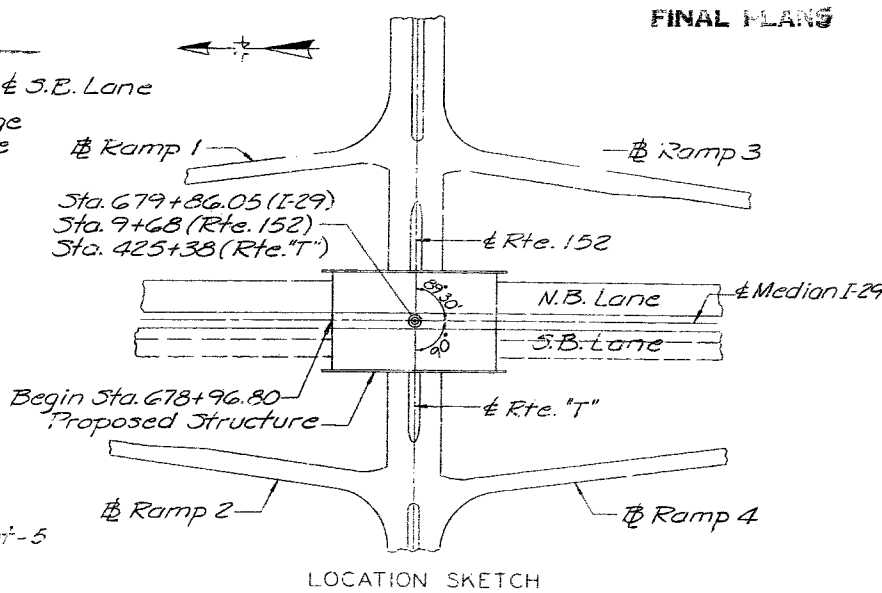
REVISED JAN. 1967
 MAR. 1964
 DETAILED MARCH 1967 BY B.F.
 CHECKED MARCH 1967 BY JER

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	124	

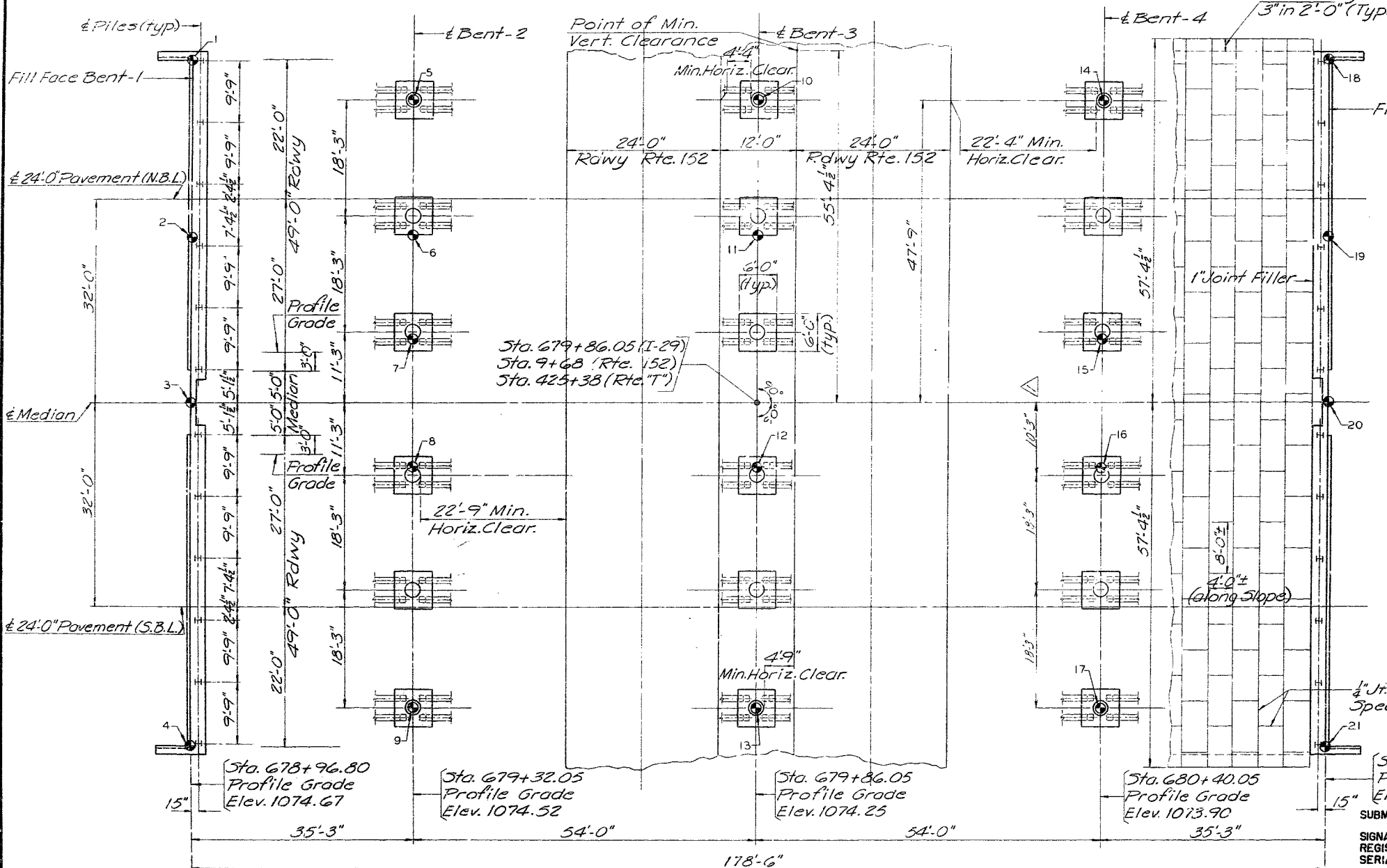


GENERAL ELEVATION



LOCATION SKETCH

GENERAL NOTES
 Design Specifications:
 A.A.S.H.O. - 1965
 Design Loading:
 HS 20-44
 15#/sq.ft. Future Wearing Surface.
 Modified 24,000# Tandem Axle.
 Earth 120# Equivalent Fluid Pressure 30#
 Design Unit Stresses:
 Class B Concrete (Substructure) $f_c = 1200$ psi
 Class B Concrete (Superstructure) $f_c = 1600$ psi
 Reinforcing Steel $f_s = 20,000$ psi
 Steel Pile (A.S.T.M. A36-66) $f_b = 9,000$ psi
 Superstructure deck to be surface sealed.



PLAN

ESTIMATED QUANTITIES			
ITEM	SUBSTR.	SUPERSTR.	TOTAL
Class I Excavation for Structures	Cu. Yd. 479	—	479
Steel Piles in Place (10")	Lin. Ft. 5620	—	5620
Class B Concrete	Cu. Yd. 72.0	—	72.0
Class B Concrete	Cu. Yd. —	1223.7	1223.7
Reinforcing Steel	Lb. 2070	330160	332230
Bridge Rail (Single Tube Type)	Lin. Ft. —	356	356

Note: All concrete and reinforcement above footings in Intermediate Bents is included in superstructure quantities.

B.M. - Elev. 1074.35 Round head bolt in curb SE. Cor. A-1747

BRIDGE OVER ROUTE 152 AND ROUTE T
 STATE ROAD INTERSTATE ROUTE 29
 ABOUT 5.5 MILES NORTH OF PARKVILLE
 PROJECT NO. I-29-1 (12) (RTE 29) STA. 678+96.80
 PLATTE COUNTY

SUBMITTED BY LYN CROWLEY
 SIGNATURE *Lyn Crowley*
 REGISTERED PROFESSIONAL ENGINEER
 SERIAL NUMBER E-5993



SUBMITTED BY *W.D. Conroy* DATE Feb. 13, 1968
 APPROVED BY *M.J. Seiber* DATE Feb. 13, 1968

CROWLEY, WADE, MILSTEAD, INC.
 ENGINEERS - ARCHITECTS
 INDEPENDENCE, MISSOURI
 Designed J.E. KIESENMEYER 3/67 Checked J.E. KIESENMEYER 4/67
 Detailed B.F. FOSTER 3/67 Checked J.E. KIESENMEYER 4/67
 Quantities B.F. FOSTER 4/67 Checked H.H. BARTON 4/67

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

Note: For Boring Data see sheet 2 of 9.
 * Indicates location of boring.
 For Pile Data see sheet 3.

Rev. 7.31.70

Sheet No. 1A of 1

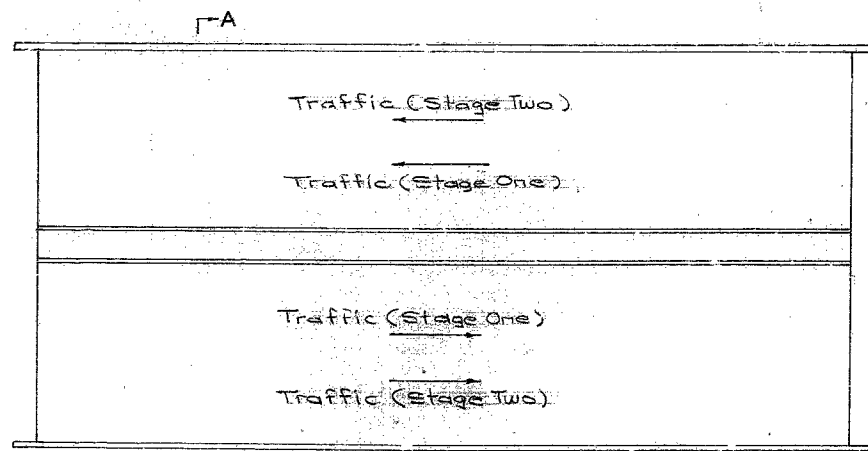
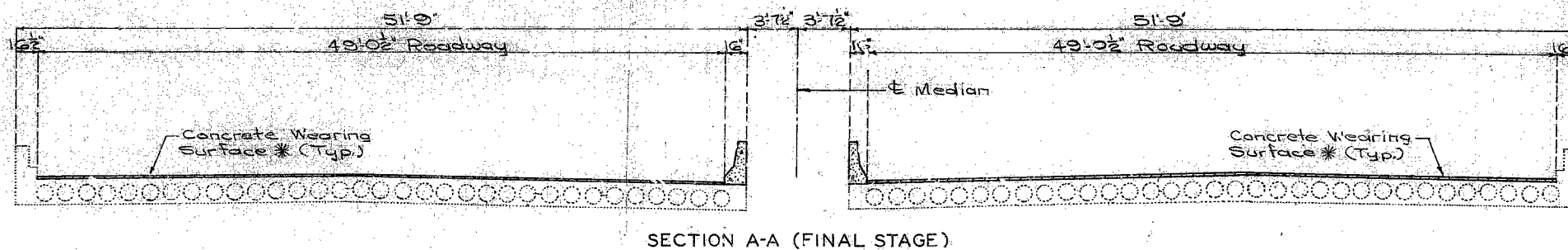
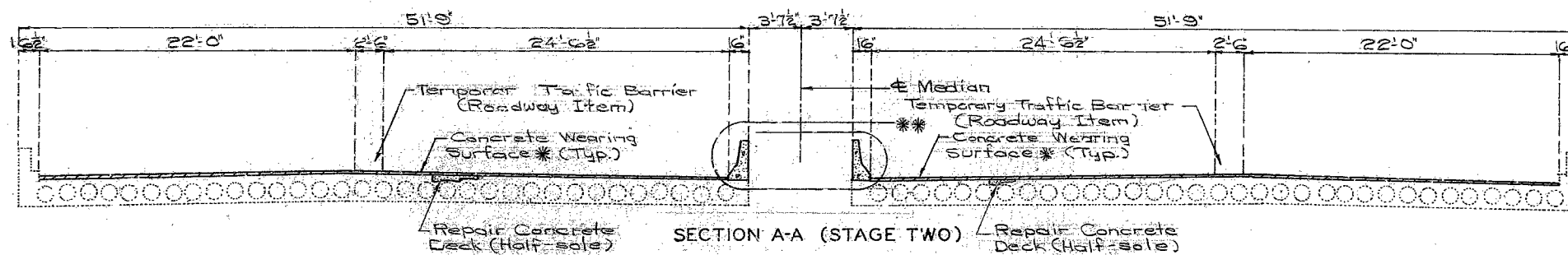
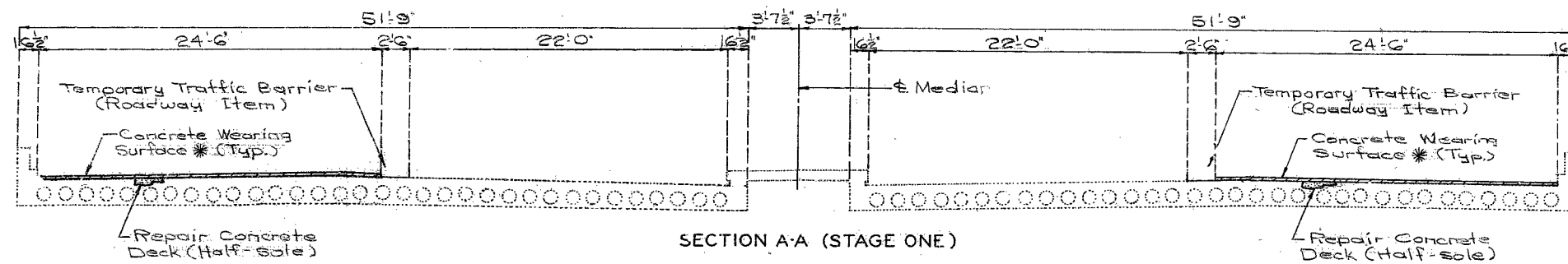
STD. 5400
 A-1747

FINAL PLANS

531

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

STATE	PROJ. NO.	SHEET NO.
MO.		30
SEC. 7	TWP. 51N	PGE. 33W



ESTIMATED QUANTITIES		
ITEM	Lump Sum	TOTAL
Special Work		1
Safety Barrier Curb	Lin. Ft.	357
Repairing Concrete Deck (Half-soleing)	Sq. Ft.	700
Concrete Wearing Surface *	Sq. Yd.	1945

* See Special Provisions for alternate use of concrete wearing surface. Alternate 'A' 1 1/2" (Min.) Latex Modified Concrete. Alternate 'B' 2" (Min.) Low Slump Concrete.

GENERAL NOTES:

Design Specifications: A.A.S.H.T.O. 1977 and Interims thru 1982

Design Unit Stresses:

Class B1 Concrete (Superstructure) $f'_c = 4,000$ psi
Reinforcing Steel (Grade 60) $f_y = 60,000$ psi

Joint Filler:

All joint filler shall meet the requirement of Std. Spec. 1057.24 except as noted.

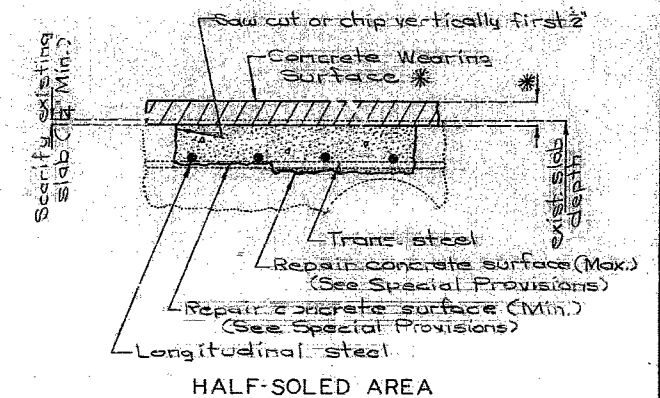
Reinforcing Steel:

Minimum clearance to reinforcing steel shall be 1 1/2" unless otherwise shown.

Outline of old work is indicated by light dashed lines. Heavy lines indicate new work.

Bars bonded in old concrete not removed shall be cleanly stripped and embedded into new concrete where possible. If length is available, old bars shall extend into new concrete at least 40 diameters for smooth bars and 50 diameters for deformed bars.

Falsework over existing lanes shall be constructed with a minimum vertical clearance of 13'-6" from crown of existing lanes and a minimum lateral clearance of 28'-0" centered on existing lanes.



603

DESIGNED Oct. 1984
DETAILED Oct. 1984
CHECKED Nov. 1984

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

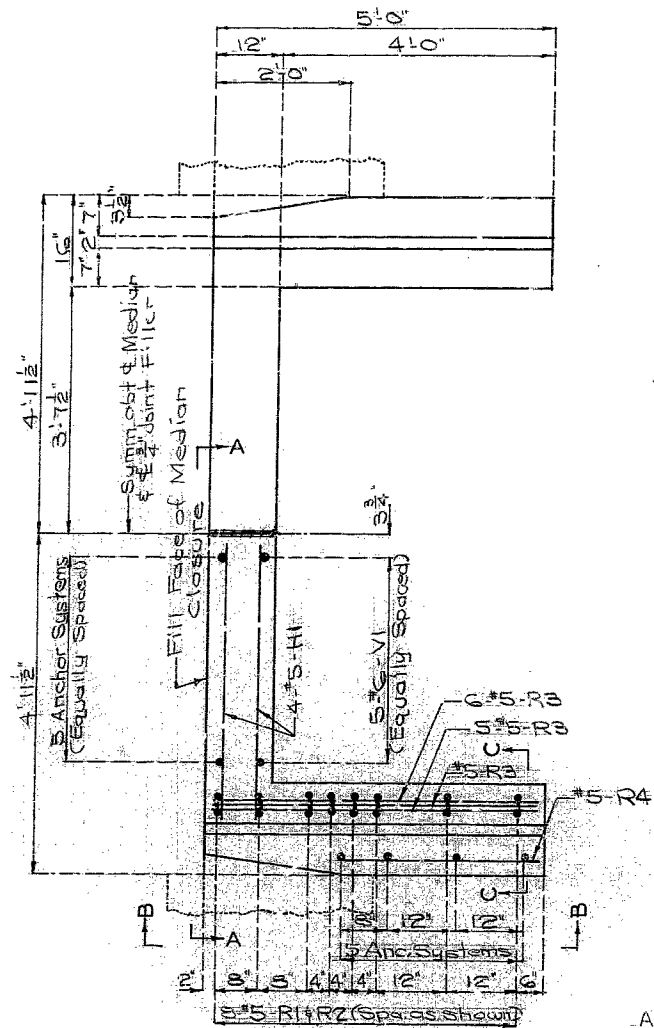
Sheet No. 1 of 4

REPAIRS TO
BRIDGE OVER ROUTE 152 & ROUTE T
STATE ROAD INTERSTATE ROUTE 29
ABOUT 5.5 MILES NORTH OF PARKVILLE
PROJECT NO. IR-29-1(30) STA. 678+96.80±
JOB NO. 4-1029-137C RTE. I-29
PLATTE COUNTY

DATE December 17, 1984

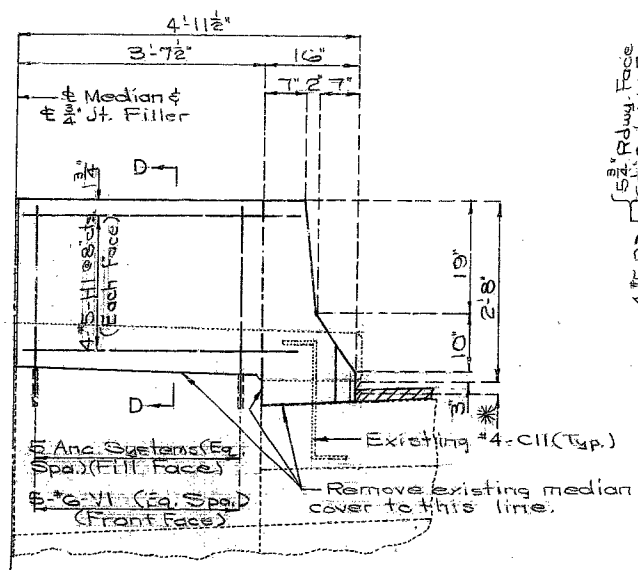
STD.
STD.
A-1747R

STATE	PROJ. NO.	SHEET NO.
MO.		31



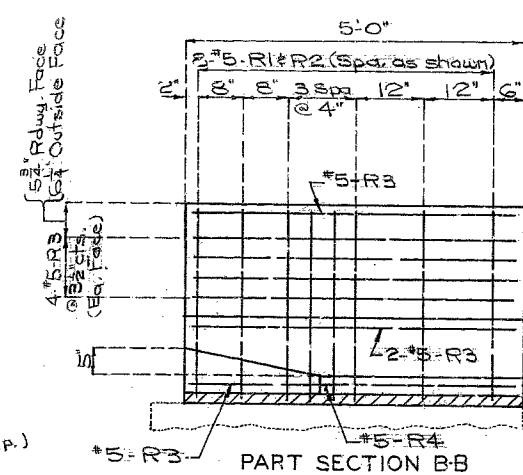
PLAN
Note: Bent #1 shown Bent #5 similar.

Note: Cost of concrete and reinforcement and anchor systems required for Median Closure Wall, complete in place shall be included in unit price bid per linear foot of Safety Barrier Curb.

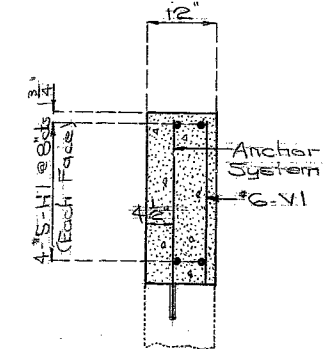


PART SECTION A-A

* 1 1/2" Latex Modified Concrete
2 1/2" Low Slump Concrete



PART SECTION B-B



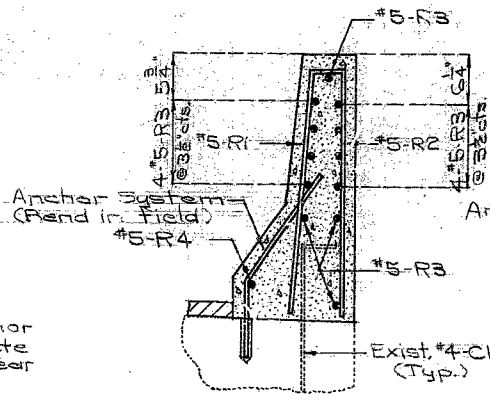
SECTION D-D

Note: The contractor shall use one of the following anchor systems for the barrier curb.

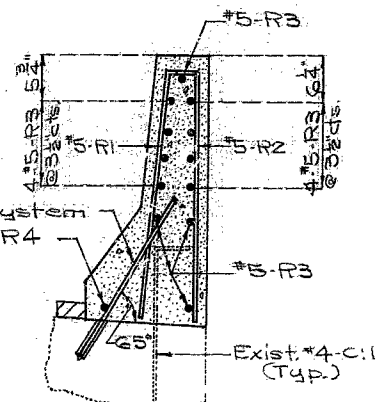
1. Molly Parabond Capsule Anchors
2. Hilti HVA Adhesive Anchors
3. U.S.E. Diamond Capsule Anchors
4. Keligroulin Resin Bonding Anchors

These anchor systems shall be installed according to the manufacturer's specifications except that an epoxy coated #4 or #6 reinforcing bar 2'-0" long shall be substituted for the epoxy coated or galvanized threaded rod stud and if the Keligroulin Resin Bonding Anchor System is used the minimum embedment in old concrete shall be 6".

Cost of furnishing and installing the anchor system complete in place shall be included in the price bid per Lin. Ft. of Barrier Curb.

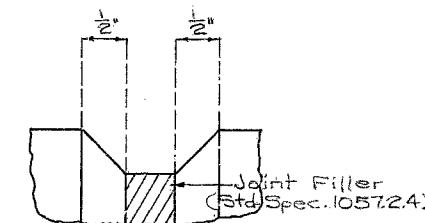


SECTION C-C

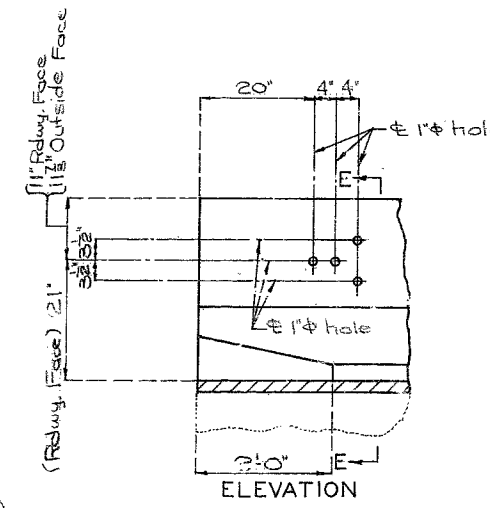


SECTION C-C
(Optional Anchoring System)

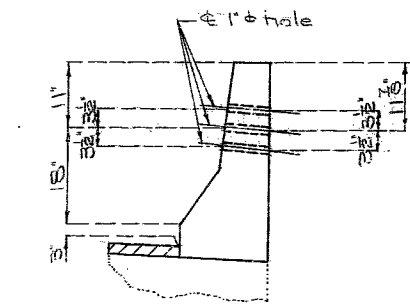
DETAILS OF MEDIAN CLOSURE WALL



FILLED JOINT DETAIL



ELEVATION



SECTION E-E

DETAILS OF GUARD RAIL ATTACHMENT

604

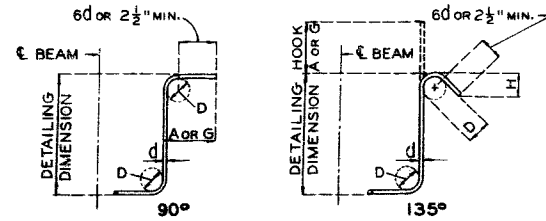
DETAILED Oct. 1984
CHECKED Nov. 1984

Note: T1's drawing is not to scale. Follow dimensions.

Sheet No. 2 of 4

PLATTE COUNTY

A-17474R



STIRRUP HOOK DIMENSIONS				
GRADES 40-50-60 KSI				
BAR SIZE	D (IN.)	90° HOOK		135° HOOK
		HOOK A OR G	HOOK A OR G	APPROX. H
#3	1-1/2"	4"	4"	2-1/2"
#4	2"	4-1/2"	4-1/2"	3"
#5	2-1/2"	6"	5-1/2"	3-3/4"
#6	4-1/2"	8"	7"	4-1/2"

NOTE: UNLESS OTHERWISE NOTED DIAMETER "D" IS THE SAME FOR ALL BENDS AND HOOKS ON A BAR.

BAR SIZE	180° HOOKS				90° HOOKS	
	GRADE 40		GRADE 60		ALL GRADES	
	G A OR G	J	A OR G	J	A OR G	J
#3	5"	2-3/4"	5"	3"	6"	8"
#4	6"	3-1/2"	6"	4"	8"	8"
#5	7"	4-1/2"	7"	5"	10"	12"
#6	8"	5-1/4"	8"	6"	12"	14"
#7	9"	6-1/4"	10"	7"	14"	16"
#8	10"	7"	11"	8"	16"	19"
#9	12"	8"	15"	11-1/4"	19"	22"
#10	13"	9"	17"	12-3/4"	22"	26"
#11	14"	10"	19"	14-1/4"	21-0"	26"
#14	21-2"	20-1/2"	21-2"	20-1/2"	21-7"	26"

SIZE OF 180° HOOKS (GRADE 40 KSI)
 D = 5d FOR #3 THRU #11
 D = 10d FOR #14 AND #18

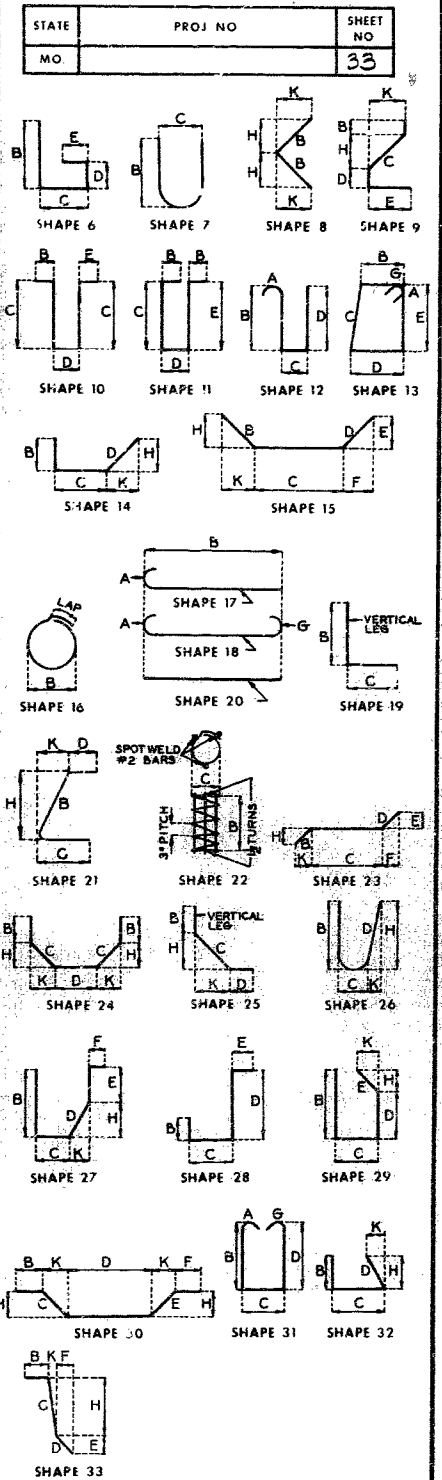
SIZE OF 90° HOOKS (ALL GRADES) AND 180° HOOKS (GRADE 60 KSI)
 D = 6d FOR #3 THRU #8
 D = 8d FOR #9, #10 AND #11
 D = 10d FOR #14 AND #18

NOTES:

- ALL STANDARD HOOKS AND BENDS OTHER THAN 180 DEG. TO BE BENT WITH SAME PROCEDURE AS FOR 90 DEG. STD. HOOKS.
- HOOKS AND BENDS SHALL BE IN ACCORDANCE WITH THE PROCEDURES AS SHOWN ON THIS SHEET.
- E - EPOXY COATED REINFORCEMENT.
- S - STIRRUP.
- X - BAR IS INCLUDED IN SUBSTRUCTURE QUANTITIES.
- Y - BAR DIMENSIONS VARY IN EQUAL INCREMENTS BETWEEN DIMENSIONS SHOWN ON THIS LINE AND THE FOLLOWING LINE.
- NO. EACH - NUMBER OF BARS OF EACH LENGTH.
- NOMINAL LENGTHS - ARE BASED ON OUT-TO-OUT DIMENSIONS SHOWN IN BENDING DIAGRAMS AND ARE LISTED FOR FABRICATORS USE. (NEAREST INCH)
- ACTUAL LENGTHS - ARE MEASURED ALONG CENTERLINE BAR TO THE NEAREST INCH.
- PAYWEIGHTS ARE BASED ON ACTUAL LENGTHS.

COMPLETE BILL OF REINFORCING STEEL

NO. REQD.	MARK NO.	LOCATION	EPOXY (E)	SHAPE NO.	STIRRUP (S)	SUBSTR. (V)	VARIES (V)	NO. EACH	DIMENSIONS										NOMINAL LENGTH FT. IN.	ACTUAL LENGTH FT. IN.	WEIGHT LBS.	
									B	C	D	E	F	H	K							
32	5H1	MEDIAN CLOSURE	E	20					3	11.000								3	11	3	11	131
384	5R1	BARRIER CURB	E	15					2	7.625	3.500							2	11	2	10	1135
384	5R2	BARRIER CURB	E	19					2	7.500	3.500							2	11	2	10	1135
48	5R3	BARRIER CURB	E	20					4	9.000								4	9	4	9	238
4	5R4	BARRIER CURB	E	20					2	10.000								2	10	2	10	12
28	5R5	BARRIER CURB	E	20					30	0.000								30	0	30	0	876
56	5R6	BARRIER CURB	E	20					9	9.000								9	9	9	9	549
28	5R7	BARRIER CURB	E	20					33	9.000								33	9	33	9	986
20	6V1	MEDIAN CLOSURE	E	20					2	6.000								2	6	2	6	75



BENDING DIAGRAMS

Note: Two (2) additional RG are included in bar bill for testing.

SOLD

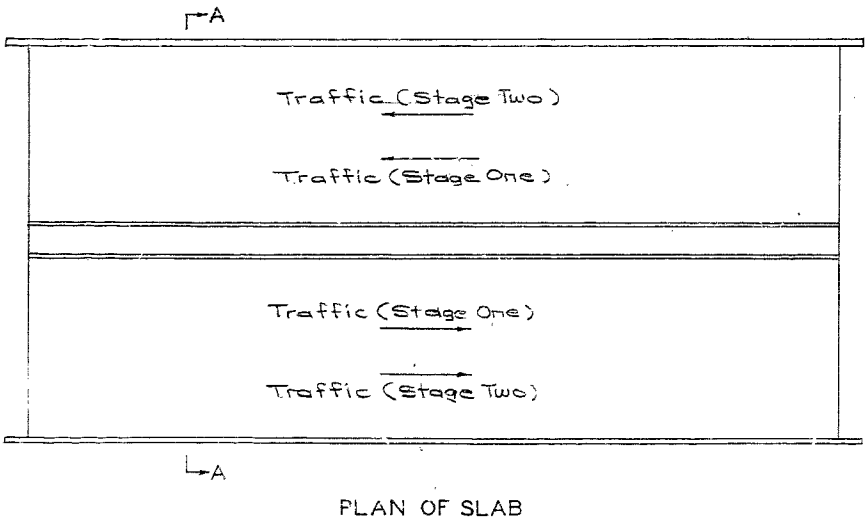
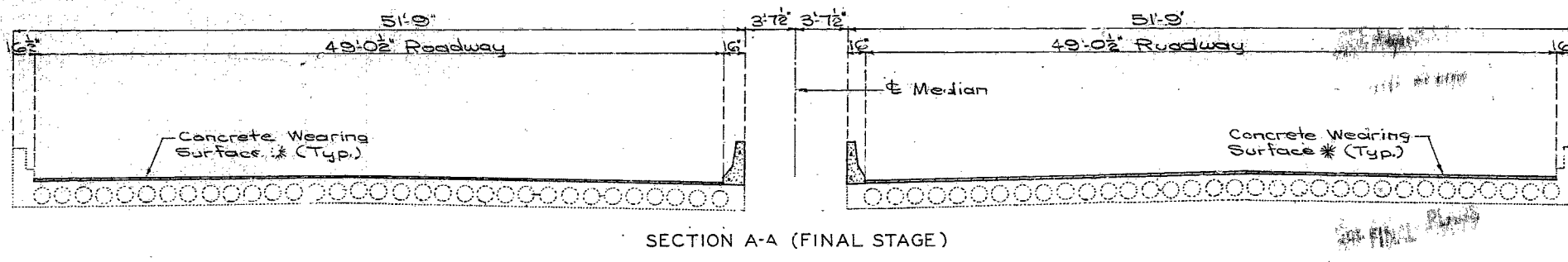
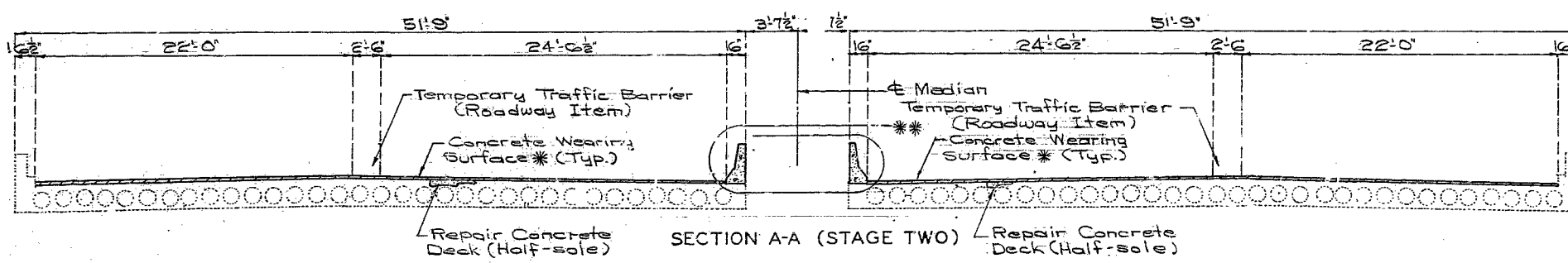
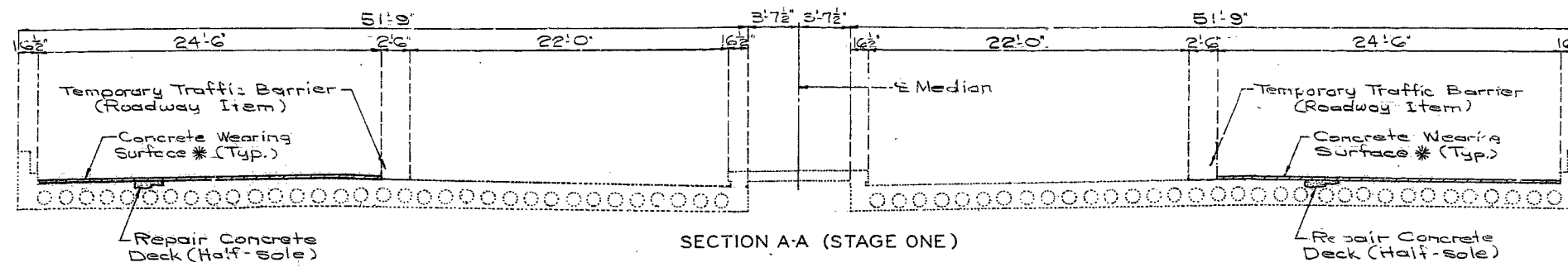
STD. 90.6.5 REVISED
 MAY 1974
 DETAILED Nov. 1984
 CHECKED Nov. 1984

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

Sheet No. 4 of 4

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

STATE	PROJ. NO.	SHEET NO.
MO.		30
SEC. 7	TWP. 51N	RGE. 23W

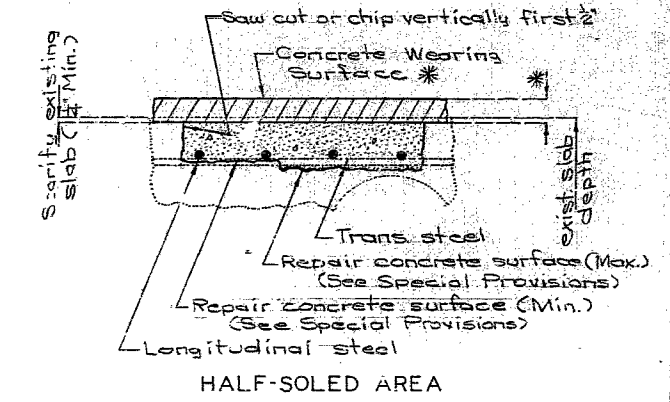


FINAL QUANTITIES		
ITEM		TOTAL
Special Work	Lump Sum	1
Safety Barrier Curb	Lin. Ft.	357
Repairing Concrete Deck (Half-sole)	Sq. Ft.	213
Concrete Wearing Surface *(Att. B)	Sq. Yd.	1945

* See Special Provisions for alternate use of concrete wearing surface. Alternate A-1 (Min.) Low Slump Concrete. Alternate B-2 (Min.) Low Slump Concrete.

FINAL PLANS

GENERAL NOTES:
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REPAIRS TO
 BRIDGE OVER ROUTE 152 & ROUTE T
 STATE ROAD INTERSTATE ROUTE 29
 ABOUT 5.5 MILES NORTH OF PARKVILLE
 PROJECT NO. IR-29-1330, STA. 678+96.80±
 JOB NO. 4-1029-137C, RTE. I-29
 PLATTE COUNTY

STD.
STD.
A-1747R

DESIGNED Oct. 1984
 DETAILED Oct. 1984
 CHECKED Nov. 1984

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

Sheet No. 1A of 4

DATE December 17, 1984