

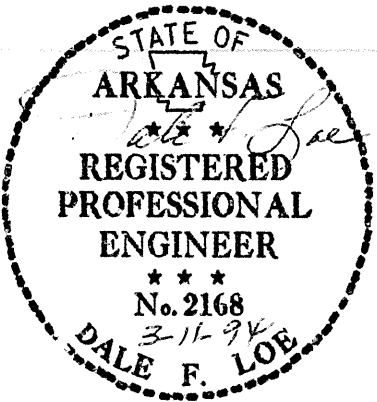
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3-11-94	3-11-94			6	ARK.			
				JOB NO.		004985	16	84
				① 6557, 6558, 6559 QUANTITIES				34128

SCHEDULE OF BRIDGE QUANTITIES FOR JOB NO. 004985

BRIDGE NO.	CODE NO.	NAME	PLATE TITLE	UNIT OF STRUCTURE	ITEM NO.	205	205	205	603	801	802	SP & 802	803	SS & 804	812	816	816
					ITEM	REMOVAL OF EXISTING BRIDGE STRUCTURE (SITE NO. 1)	REMOVAL OF EXISTING BRIDGE STRUCTURE (SITE NO. 2)	REMOVAL OF EXISTING BRIDGE STRUCTURE (SITE NO. 3)	TEMPORARY BRIDGE STRUCTURE (20' ROADWAY WIDTH)	UNCLASSIFIED EXCAVATION FOR STRUCTURES-BRIDGE	CLASS S CONCRETE-BRIDGE	CLASS S(AE) CONCRETE-BRIDGE	BOILED LINSEED OIL	REINFORCING STEEL-BRIDGE (GRADE 60)	BRIDGE NAME PLATE (TYPE C)	FILTER BLANKET	DUMPED RIPRAP
					UNIT	LUMP SUM	LUMP SUM	LUMP SUM	LIN. FT.	CU. YD.	CU. YD.	CU. YD.	GAL.	LB.	EACH	SQ. YD.	CU. YD.
6557	X020	VACHE GRASSE CREEK															
			END BENT NOS. 1 & 4					182	47.23			6934	1	285	143		
			INT. BENT NOS. 2 & 3					105	38.27			6711					
			THREE 35' R.C. SLAB SPANS							303.40	9.2	32095					
			TOTAL FOR BRIDGE NO. 6557	1.0				287	85.50	303.40	9.2	45740	1	285	143		
6558	X020	VACHE GRASSE CREEK															
			END BENT NOS. 1 & 5					160	40.20			6012	1	177	88		
			INT. BENT NOS. 2 THRU 4					100	52.10			9297					
			FOUR 30' R.C. SLAB SPANS							275.90	10.4	35591					
			TOTAL FOR BRIDGE NO. 6558		1.0		62	260	92.30	275.90	10.4	50900	1	177	88		
6559	X021	FLAT ROCK CREEK															
			END BENT NOS. 1 & 5					245	51.30			6948	1	304	152		
			INT. BENT NOS. 2 THRU 4					152	66.60			10333					
			FOUR 35' R.C. DECK GIRDER SPANS							277.70	12.3	56779					
			TOTAL FOR BRIDGE NO. 6559			1.0	75	397	117.90	277.70	12.3	74060	1	304	152		
TOTALS FOR JOB NO. 004985					1.0	1.0	1.0	137	944	295.70	857.00	31.9	170700	3	766	383	

John Sage
DESIGN SECTION SUPERVISOR

△ Revised excavation quantities 3-11-94.KMG



SCHEDULE OF BRIDGE QUANTITIES
GREENWOOD - HWY. 22 BRS. & APPRS.
SEBASTIAN COUNTY
ROUTE 96 SEC. 2
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: RLW DATE: 3-31-93
CHECKED BY: JAC & JLB DATE: 3-11-94 SCALE: NONE
DESIGNED BY: DATE:
BRIDGE NO. 6557, 6558, 6559 DRAWING NO. 34128

For R/W Data, see Rdwy. Plans

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		004985	22	84
				6557	LAYOUT			34129

GENERAL NOTES

BENCH MARK: Chiseled Square on S.W. Abutment 47' Right of C.L. Survey Sta. 79+18.00. Elev. 485.83.

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction, 1993 edition, with applicable supplemental specifications and special provisions.

DESIGN SPECIFICATIONS: AASHTO Standard Specifications for Highway Bridges, 1992 with current interim specifications.

LIVE LOADINGS: HS20 METHOD OF DESIGN: Load Factor
SEISMIC PERFORMANCE CATEGORY: A

MATERIALS AND STRENGTHS:
Superstructure Concrete (see span drws.) $f'c = 4,000$ psi
Substructure Concrete (Class S) $f'c = 3,500$ psi
Reinforcing Steel (A615 or A617, GR. 60) $fy = 60,000$ psi

FOOTINGS: Footings shall be set a minimum of 1'-6" into material designated as medium hard shale on the boring legend. Foundations for footings shall be prepared in accordance with section 801.04 of the standard specifications. Rock excavations shall be made to neat lines of the concrete footings. Care shall be exercised to avoid shattering of rock faces by excessive blasting. Concrete in footings shall be poured directly against excavated surfaces of rock.

BRIDGE DECK: The concrete bridge deck shall be given a tine finish as specified for final finishing in subsection 802.20 for Class 5 Bridge Roadway Surface Finish.

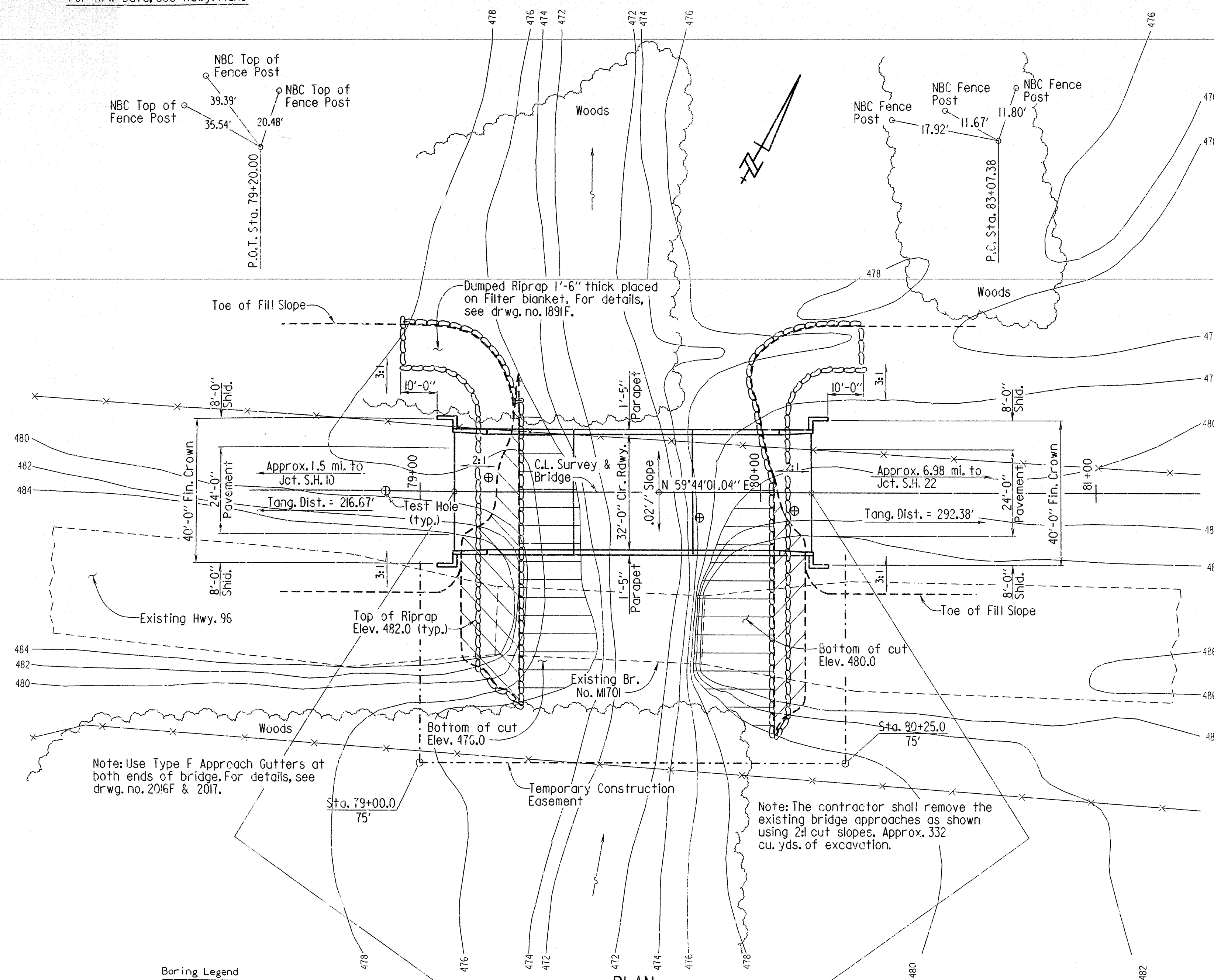
BOILED LINSEED OIL: Boiled linseed oil treatment shall be applied to the roadway surface and to the face and top of the concrete parapet rail.

DETAIL DRAWINGS: DRAWING NO.

End Bents	34130
Int. Bents	34131
35' R.C. Slab Spans	34132 & 34133
Type C Bridge Name Plate	2389A
Embankment Construction	1888A
Dumped Riprap and Filter Blanket	1891F
Computing Excavation for Structures	1891F
Type F Approach Gutters	2016F & 2017

EXISTING BRIDGE: Existing bridge No. M1701 (log mile 1.50) is 22' wide and 62' long and consists of a steel superstructure supported by a rubble masonry substructure. The existing bridge is located approximately 35 feet upstream from the proposed new bridge.

REMOVAL AND SALVAGE: After the new bridge is opened to traffic, the existing bridge (M1701) shall be removed in accordance with section 205 of the Standard Specifications. All material from the existing bridge shall become the property of the contractor.



Boring Legend
A-Wet, very soft, brown sandy, silty clay with sandstone fragments
B-Medium hard, gray weathered shale
C-Medium hard, dark gray shale with some weathered shale seams
D-Medium hard, dark gray shale
E-Moist, soft, brown sandy, silty clay with sandstone fragments
F-Medium hard, gray and brown weathered shale
G-Wet, very loose, brown clayey sand
H-Medium hard, dark gray shale with some highly weathered shale seams

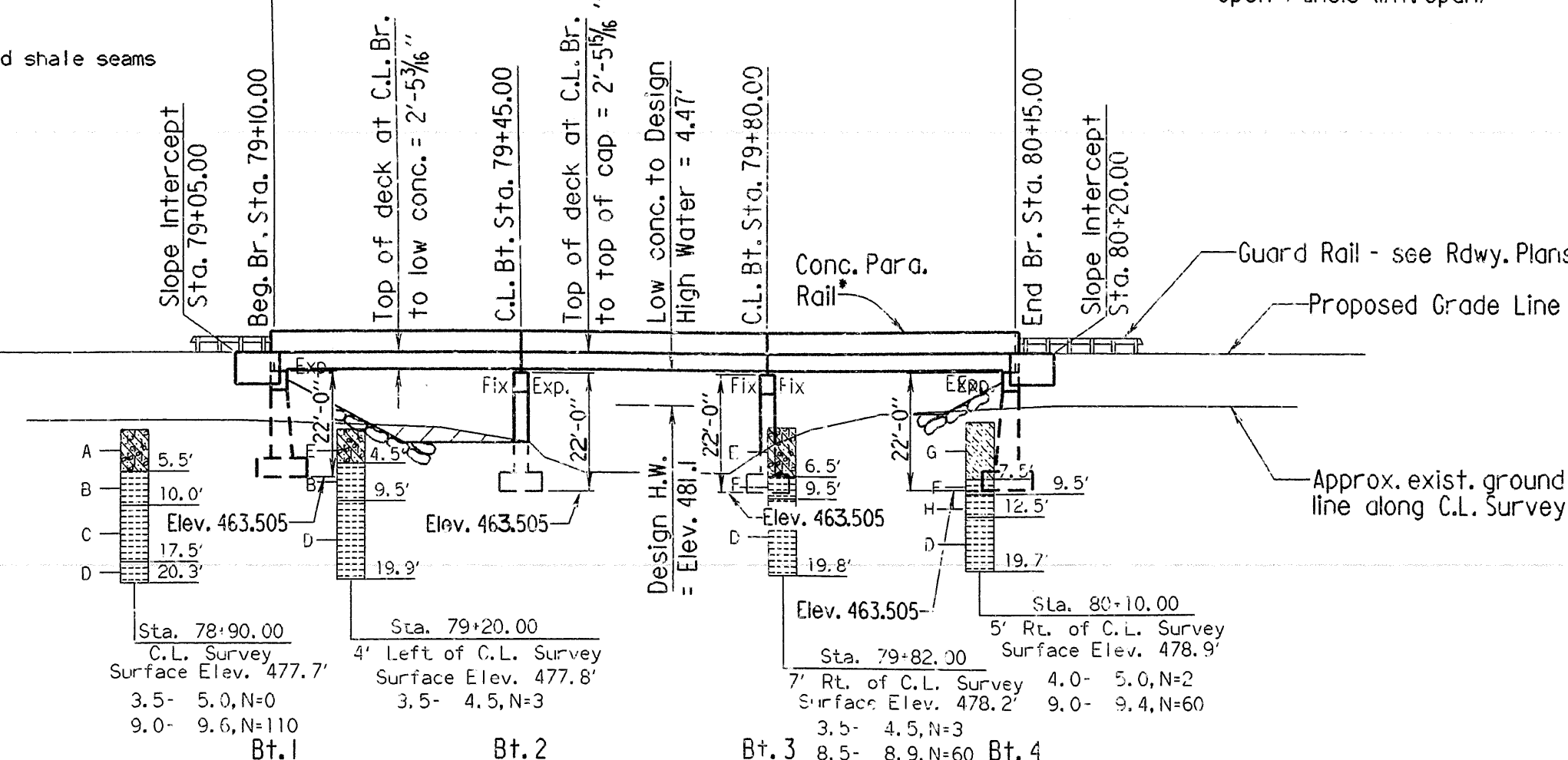
PLAN

Total Length of Bridge = 105'-0"
(Three 35' R.C. Slab Spans)

Level Grade

C.L. Deck Elev. 488.0

* Closed Panels (End Spans)
Open Panels (Int. Span)



ELEVATION

HYDRAULIC DATA

Drainage Area = 6.5 sq. mi.

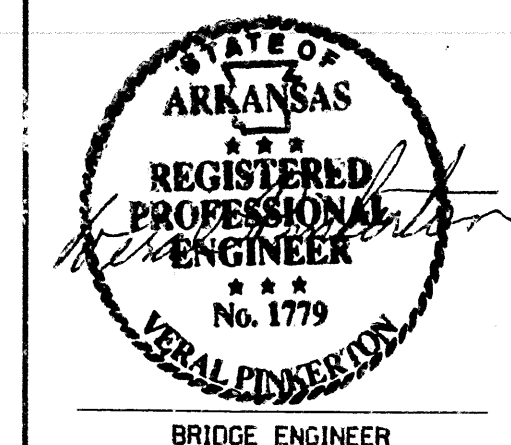
FLOOD DESCRIPTION	FREQUENCY YEARS	DISCHARGE CFS	NATURAL WATER SURFACE ELEV.* FEET	WATER SURFACE ELEV. WITH BACKWATER FEET
			FEET	FEET
DESIGN	50	4690	481.1	483.8
BASE	100	5720	481.5	485.2
OVERTOPPING	400	8610	482.6	487.8
EXTREME	500	9100	482.8	

Remarks

* Historical Highwater Elev. = 483.4

* Low Bridge Member Elev. = 485.5

* Unconstricted water surface elev. at proposed bridge location.

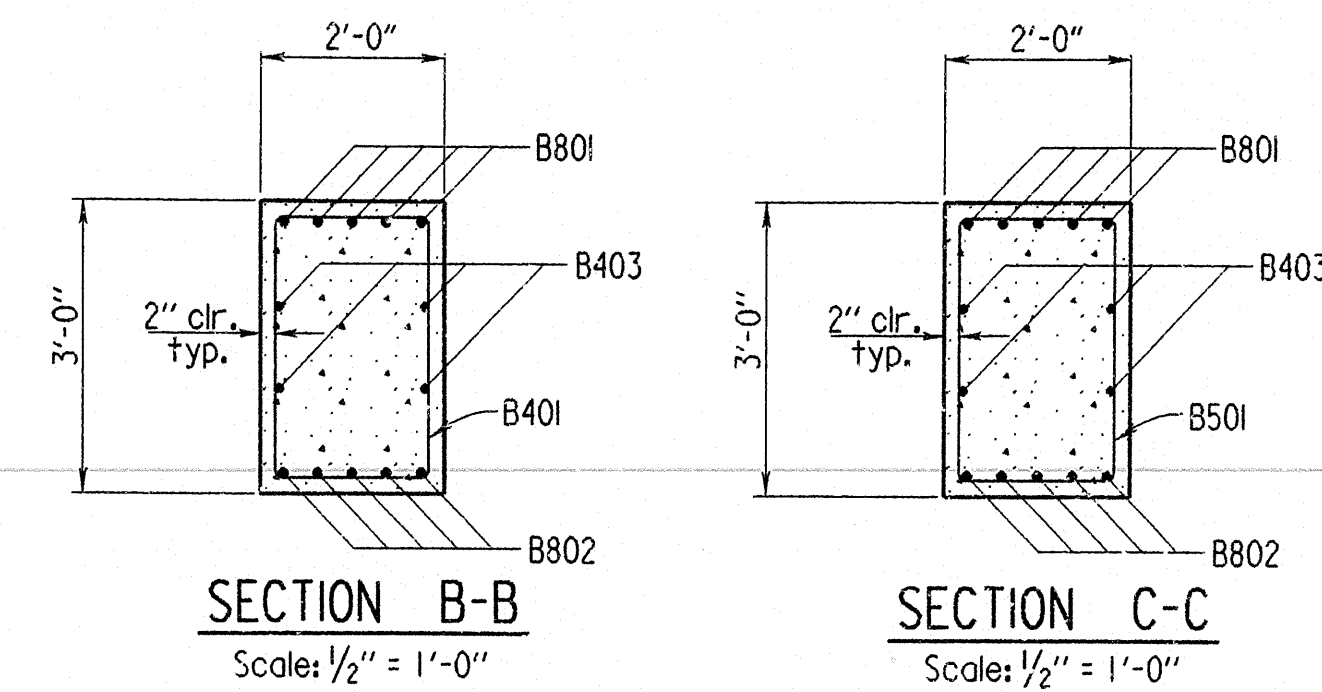


LAYOUT OF BRIDGE
(LOG MILE 1.50)
GREENWOOD - HWY. 22 BRS. & APPRS.
SEBASTIAN COUNTY

ROUTE 96 SEC. 2
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: KMG DATE: 17 Aug 92
CHECKED BY: R/W DATE: 23 Jun 93
DESIGNED BY: R/W DATE: 8-92
BRIDGE NO. 6557 DRAWING NO. 34129

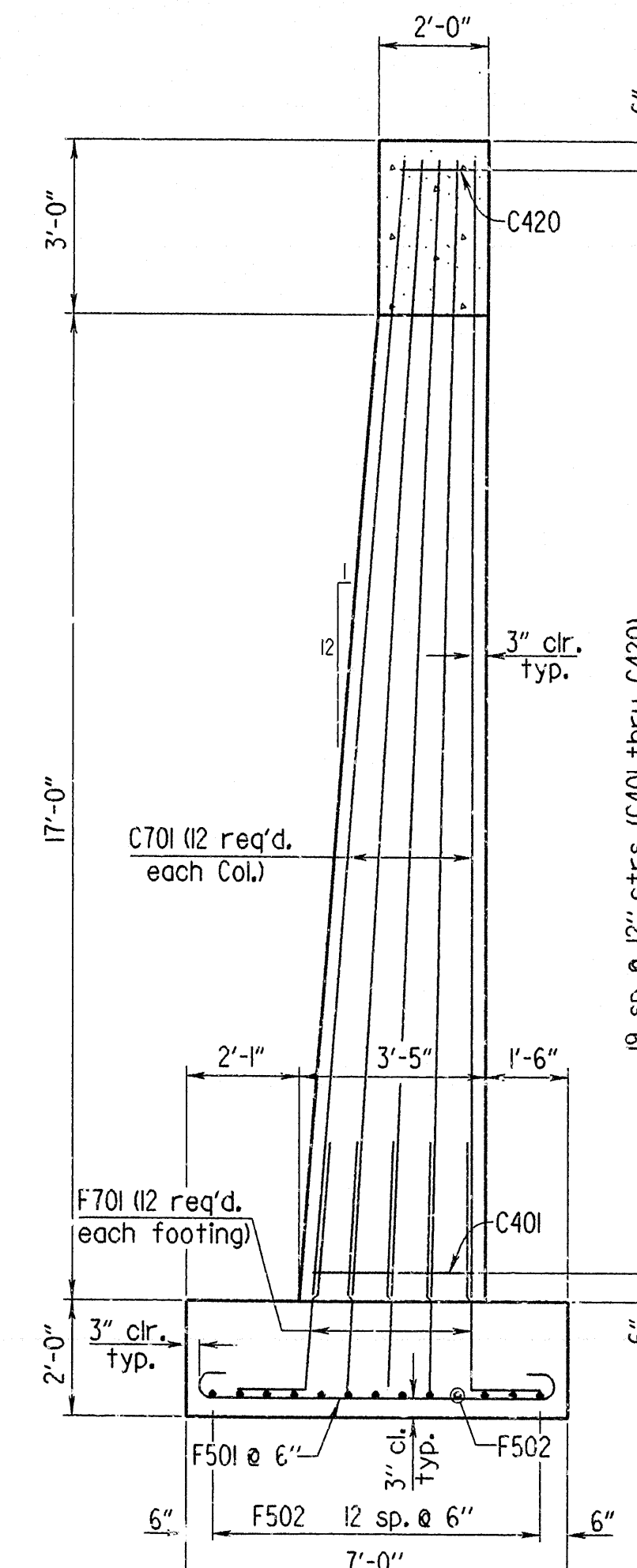
① 6557 BENT DTLS. 34130



SECTION B-B
Scale: $\frac{1}{2}'' = 1'-0''$

SECTION C-C
Scale: $\frac{1}{2}'' = 1'-0''$

PLAN
Scale: $\frac{3}{8}'' = 1'-0''$



SECTION A-A
Scale: $\frac{3}{8}'' = 1'-0''$

SECTION D-D
Scale: $\frac{1}{2}'' = 1'-0''$

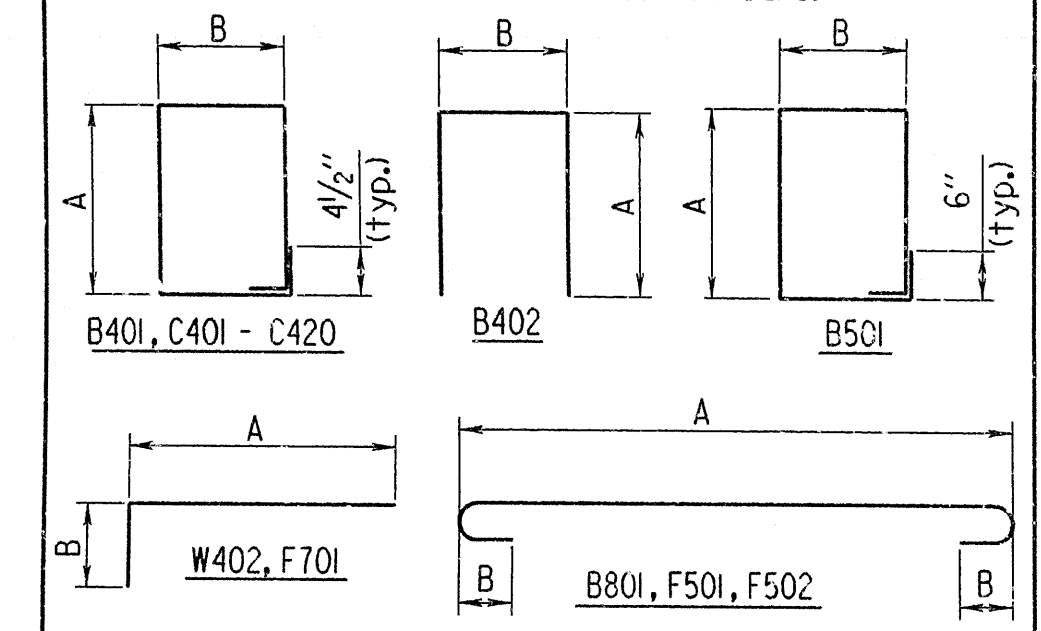
TYPICAL KEYWAY DETAIL
No Scale

BAR LIST (EACH BENT)

MARK	NO. REQ'D.	LENGTH	'A'	'B'	P.D.
B401	35	9'-0"	2'-8"	1'-8"	2"
B402	6	6'-10"	2'-8"	1'-8"	2"
B403	4	35'-2"			Str.
B501	12	9'-2"	2'-8"	1'-8"	2½"
B801	5	37'-0"	35'-2"	8"	6"
B802	5	35'-2"			Str.
W401	36	4'-2"			Str.
W402	24	6'-4"	5'-5"	1'-0"	3"
W403	12	2'-8"			Str.
W404	12	4'-3"			Str.
C401 - C420	2 of each	Var. 9'-5" to 6'-3"	Var. 2'-11½" to 1'-6½"	1'-7"	2"
C701	24	19'-8"			Str.
F501	22	7'-8"	6'-6"	5"	3¾"
F502	26	6'-8"	5'-6"	5"	3¾"
F701	24	5'-6"	4'-6"	1'-2"	5¼"

BENDING DIAGRAMS

Dimensions are out to out of bars.



END BENT NOTES

All concrete shall be Class "S" with a minimum 28 day compressive strength $f'c = 3,500$ psi. Concrete shall be poured in the dry and all exposed corners to be chamfered $3/4"$ unless otherwise noted.

All reinforcing steel shall conform to ASTM A615 or A617, Grade 60 (yield strength = 60,000 psi.).

For additional information see layout.

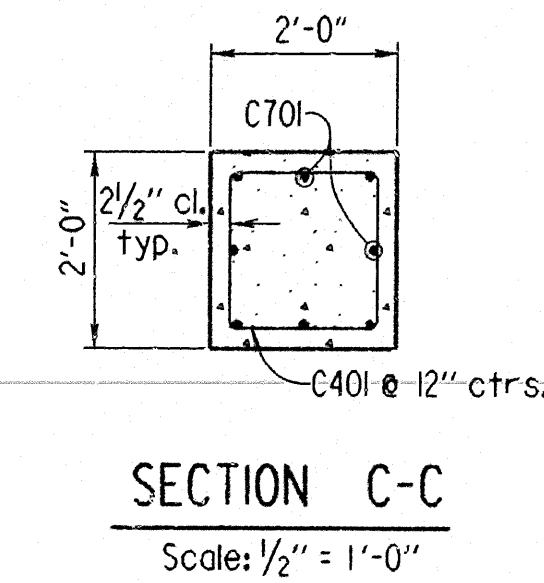
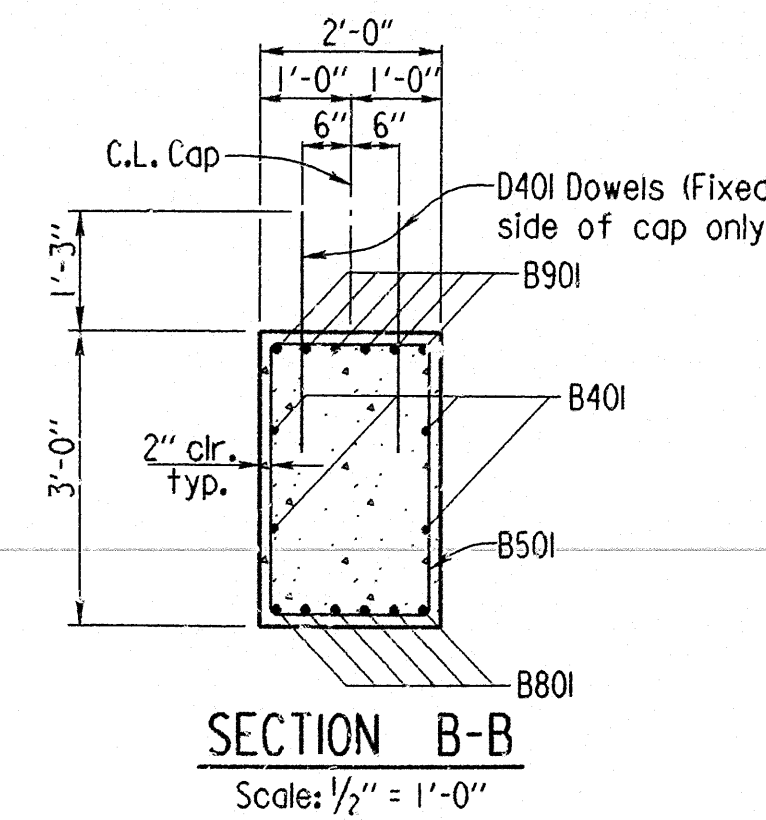
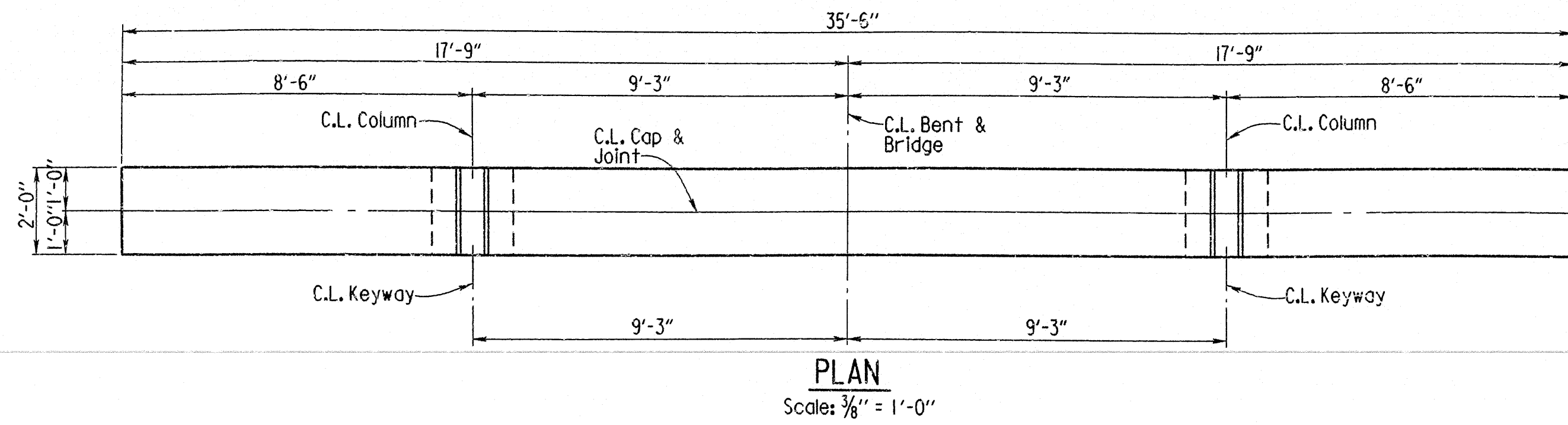
DETAILS OF
END BENT NOS. 1 AND 4

ROUTE 96 SEC. 2
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: KMG DATE: 30 Nov 92
 CHECKED BY: RAW DATE: 12 Apr 93 SCALE: As Shown
 DESIGNED BY: JB DATE: SEPT 92
 BRIDGE NO. 6557 DRAWING NO. 34130

B4985X1.B1

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		004985	24	84
				6557		BENT DTLS.		34131

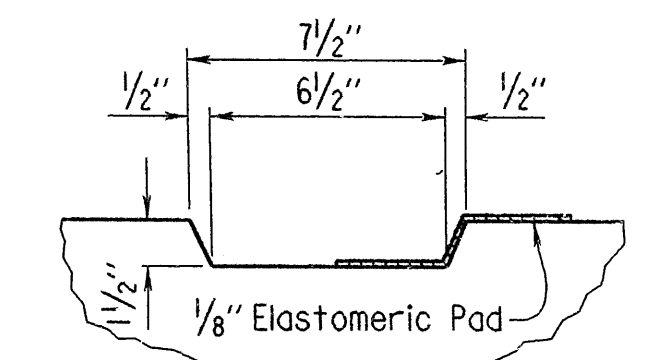
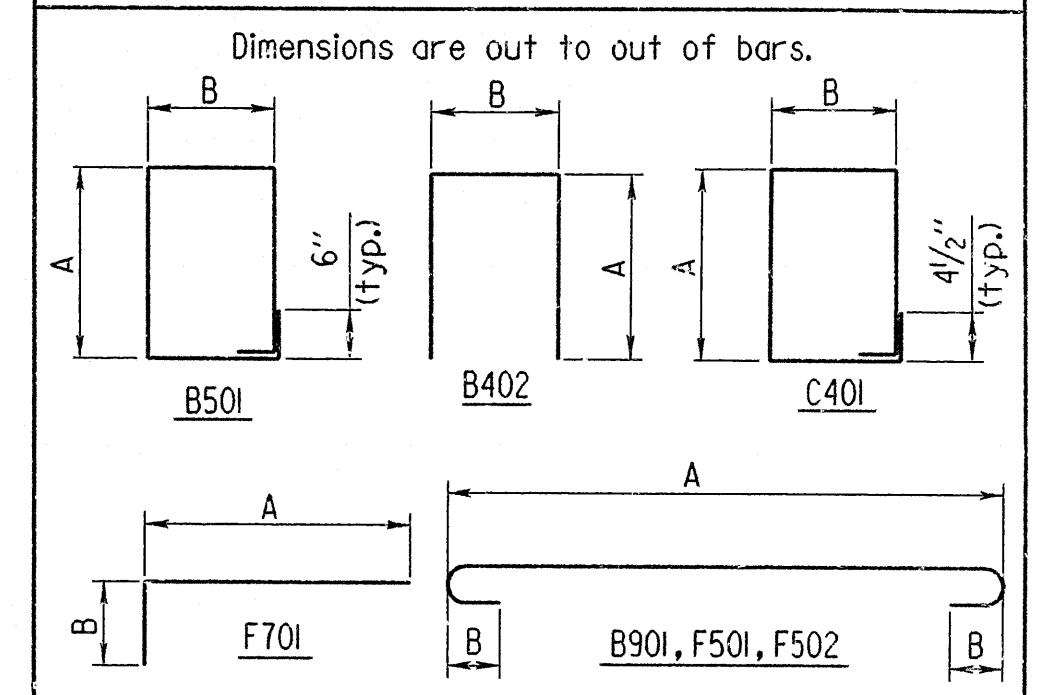


* 22 Req'd. for Fix-Exp. Bent
44 Req'd. for Fix-Fix Bent

BAR LIST (EACH BENT)

MARK	NO. REQ'D.	LENGTH	'A'	'B'	P.D.
B40I	4	35'-2"			Str.
B402	6	6'-10"	2'-8"	1'-8"	2"
B50I	51	9'-2"	2'-8"	1'-8"	2 1/2"
B80I	6	35'-2"			Str.
B90I	6	37'-8"	35'-2"	10"	9"
D40I	*	2'-6"			Str.
C40I	40	6'-8"	1'-7"	1'-7"	2"
C70I	16	19'-8"			Str.
F50I	22	7'-8"	6'-6"	5"	3 3/4"
F502	26	6'-8"	5'-6"	5"	3 3/4"
F70I	16	5'-6"	4'-6"	1'-2"	5 1/4"

BENDING DIAGRAMS



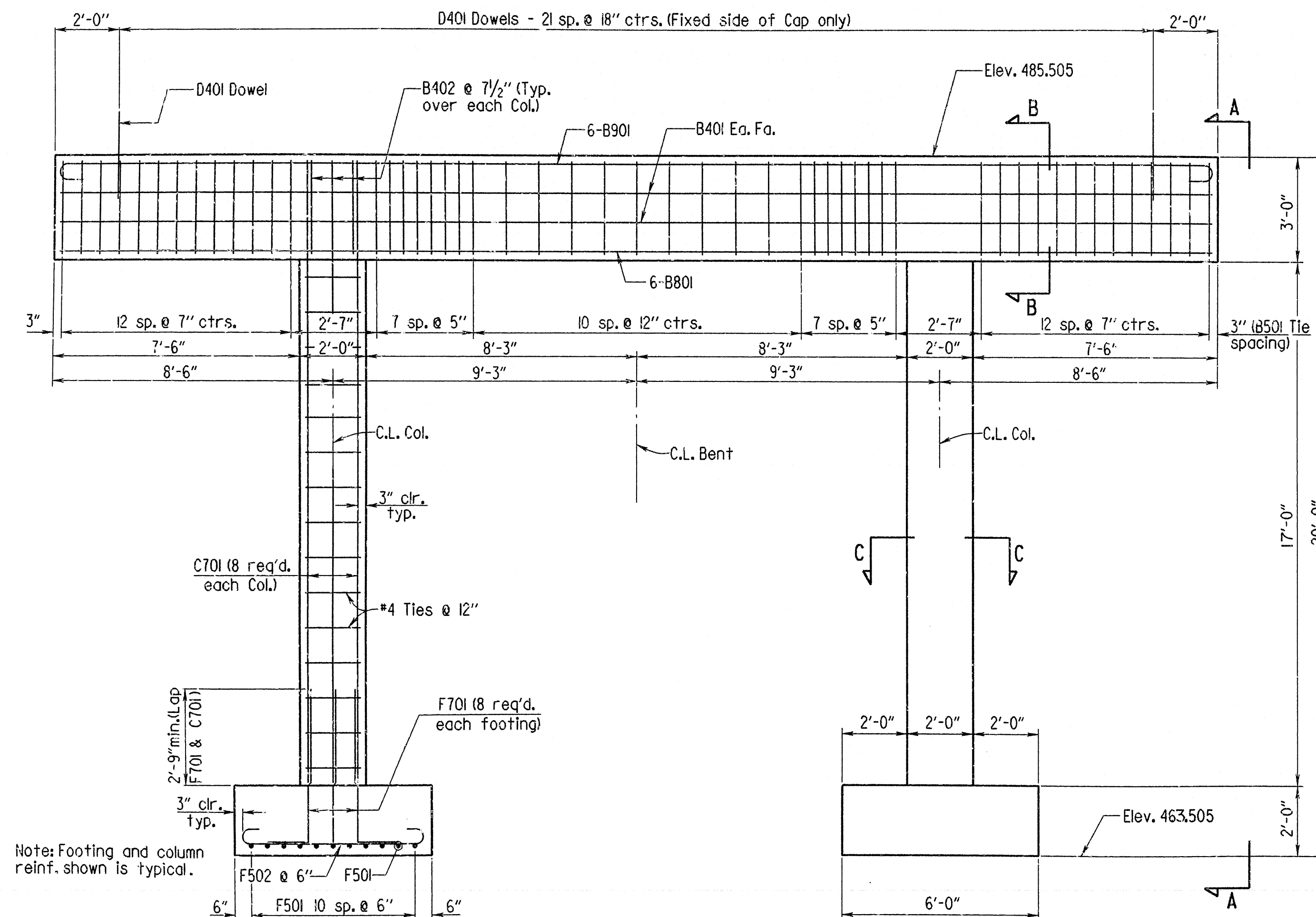
TYPICAL KEYWAY DETAIL
No Scale

Note:
1/8" Elastomeric Pad to be in full contact with Bent Cap surfaces when placing superstructure concrete.

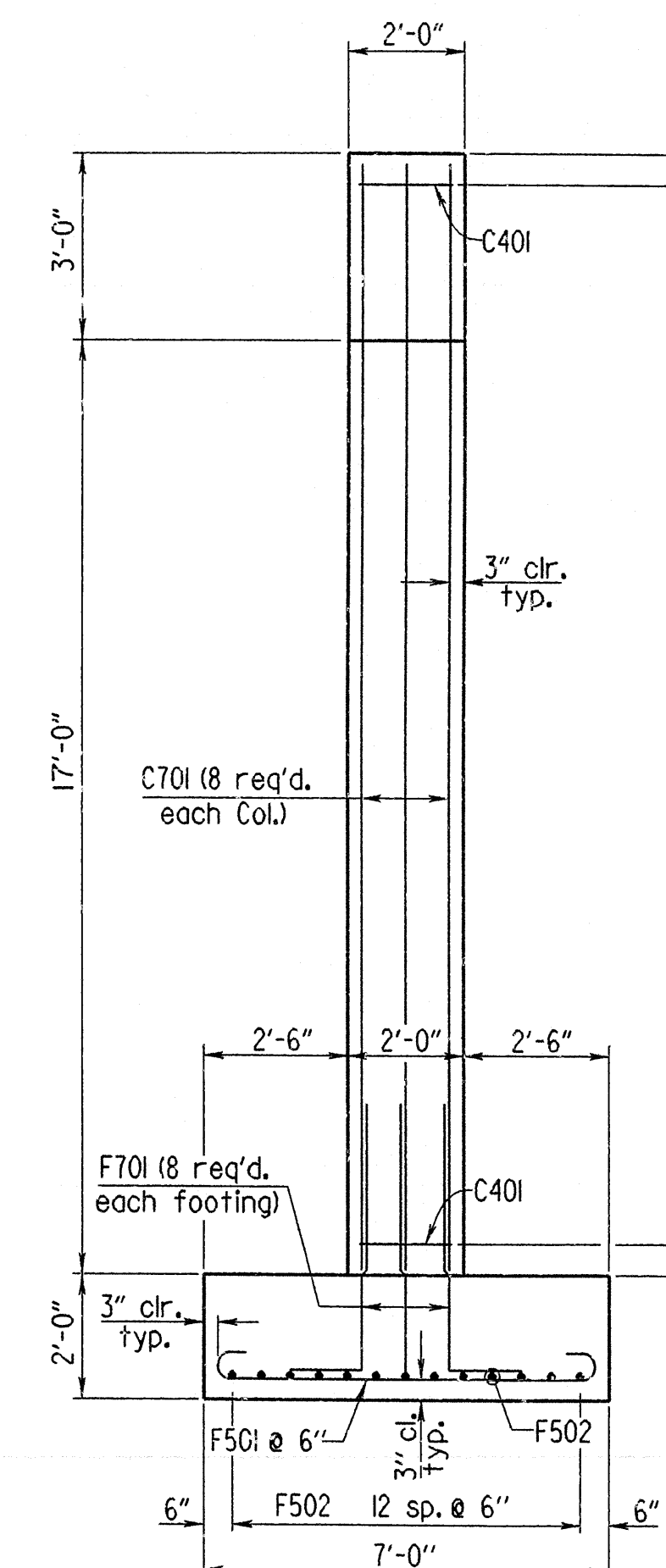
All concrete shall be Class "S" with a minimum 28 day compressive strength $f'_c = 3,500$ psi. Concrete shall be poured in the dry and all exposed corners to be chamfered 3/4" unless otherwise noted.

All reinforcing steel shall conform to ASTM A615 or A617, Grade 60 (yield strength = 60,000 psi.).

For additional information see layout.

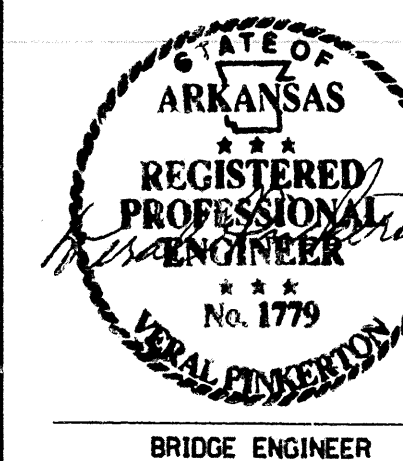


ELEVATION
Scale: 3/8" = 1'-0"



VIEW A-A
Scale: 3/8" = 1'-0"

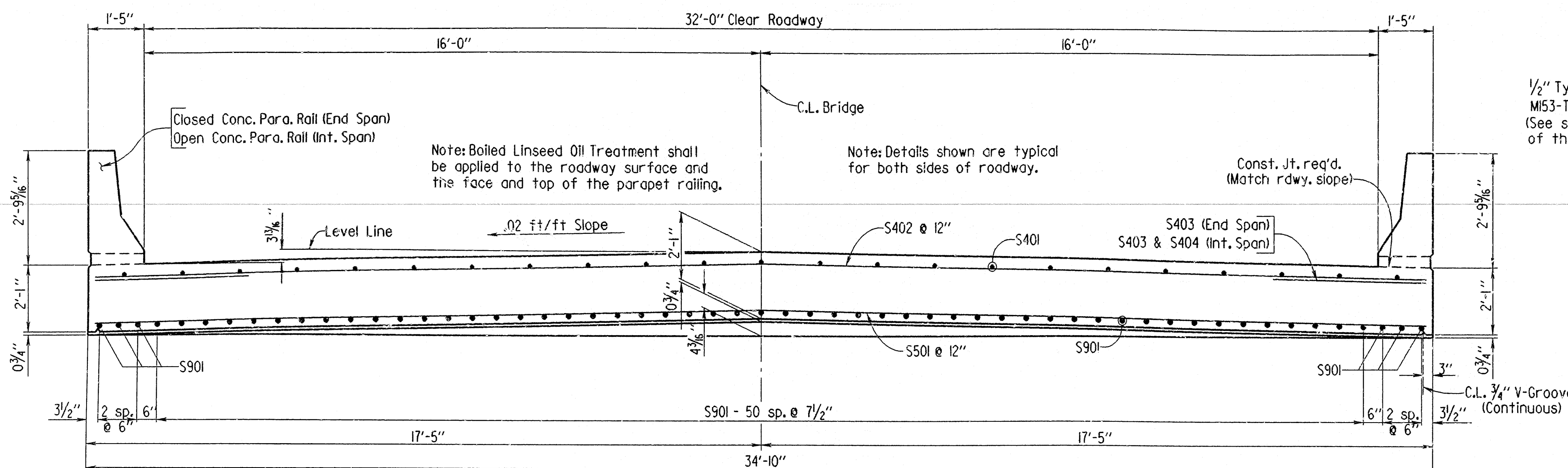
DETAILS OF INT. BENT NOS. 2 AND 3



ROUTE 96 SEC. 2
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

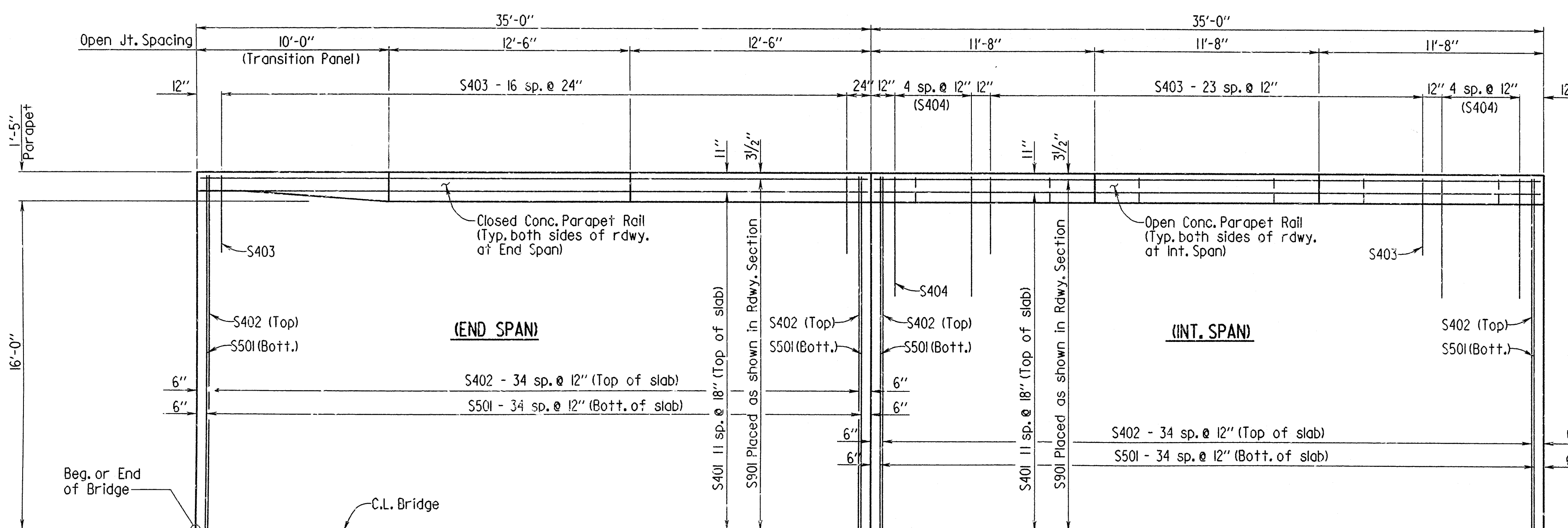
DRAWN BY: KMG DATE: 19 Jan 93
CHECKED BY: RJW DATE: 12 Apr 93
DESIGNED BY: JLB DATE: Sept. 92
BRIDGE NO. 6557 DRAWING NO. 34131

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		004985	25	84
				6557		SPAN DTLS.		34132



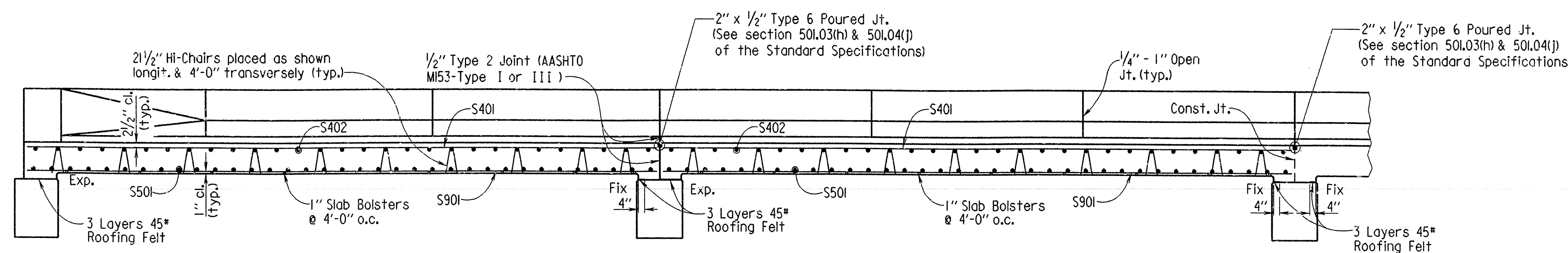
TYPICAL SECTION THRU ROADWAY

Scale: 1/2" = 1'-0"



HALF REINFORCING PLAN

Scale: 1/4" = 1'-0"



LONGITUDINAL SECTION ALONG C.L. BRIDGE

Scale: 1/4" = 1'-0"

1/2" Type 2 Joint (AASHTO M53-Type I or III)
(See section 501.03(h) & 501.04(j) of the Standard Specifications)

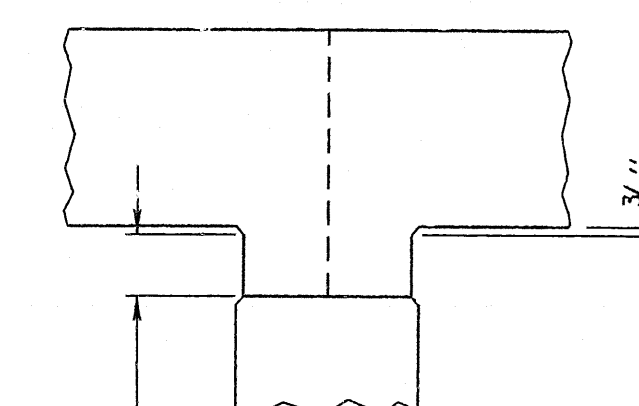
2" x 1/2" Type 6 Poured Jt.
(See section 501.03(h) & 501.04(j) of the Standard Specifications)

1/2" Rounding (typ.)

Note: All joints to be cleaned by sand blasting or other approved methods before pouring joint. Joint details shown are for expansion joints. Fixed joints are same except eliminate 1/2" Type 2 Joint.

TYPICAL SECTION THRU JOINT

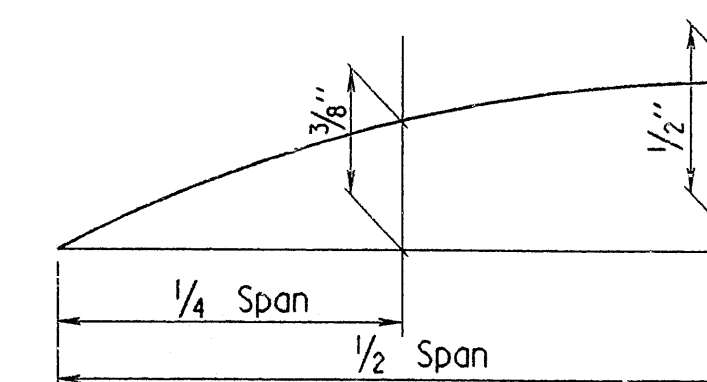
No Scale



Varies from 0" at edge of Bridge to 4 3/8" at C.L. Bridge (At C.L. Joint)

RISER DETAIL

No Scale



DEAD LOAD CAMBER DIAGRAM

No Scale

BAR LIST (PER SPAN)

MARK	NUMBER REQUIRED		LENGTH	P.D.
	END	INT.		
S401	23	23	34'-8"	Str.
S402	35	35	34'-6"	Str.
S403	34	48	3'-4"	Str.
S404	0	20	5'-0"	Str.
S501	35	35	34'-6"	Str.
S901	57	57	34'-8"	Str.
R401	8	0	8'-2"	2" *
R402	16	0	4'-4"	2" *
R403	8	0	8'-2"	2" *
R404	12	0	9'-8"	2" *
R405	52	60	6'-4"	2" *
R406	52	60	8'-2"	2" *
R407	0	42	5'-10"	2" *
R408	0	42	3'-2"	2" *
R409	24	0	12'-2"	Str.
R410	0	24	11'-4"	Str.
R601	14	0	9'-2"	4 1/2" *
R602	6	0	4'-10"	Str.
R603	0	30	11'-4"	Str.

*For Bending Diagrams, see drwg. no. 34133.

General Notes

All concrete to be Class (SAC). Exposed corners to be chamfered 3/4" unless otherwise noted.

Bar supports for reinforcing steel will not be paid for directly, but will be considered subsidiary to the item "Reinforcing Steel".

Roofing Felt, Bituminous Felt, Preformed Joint, Structural Steel, and Type 6 Poured Synthetic Polymer Joints shall be measured and paid for as "Class (SAC) Concrete".

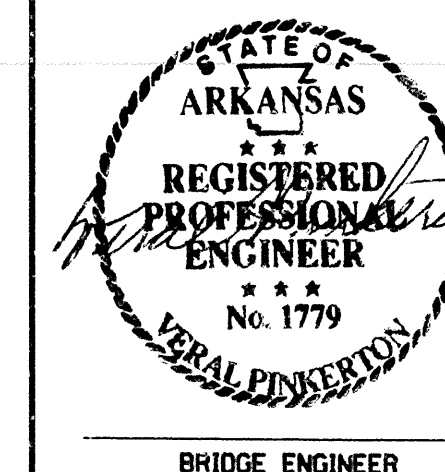
Design Live Load: HS 20-44

Load Distribution to Slab: Dead Load - 358 psf; Live Load: 0.66 Wheels/Ft. of width plus 30% Impact.

**Includes 22 psf Future Wearing Surface.

For additional information, see Layout.

SLIP FORMING: An approved method of slip forming may be used. The contractor may submit her proposal and methods, prepared by a professional engineer, to the bridge engineer for approval. Approval must be obtained before slip forming work is begun. Payment will be based on plan quantities. Vertical joints and drainage slots may not be eliminated.



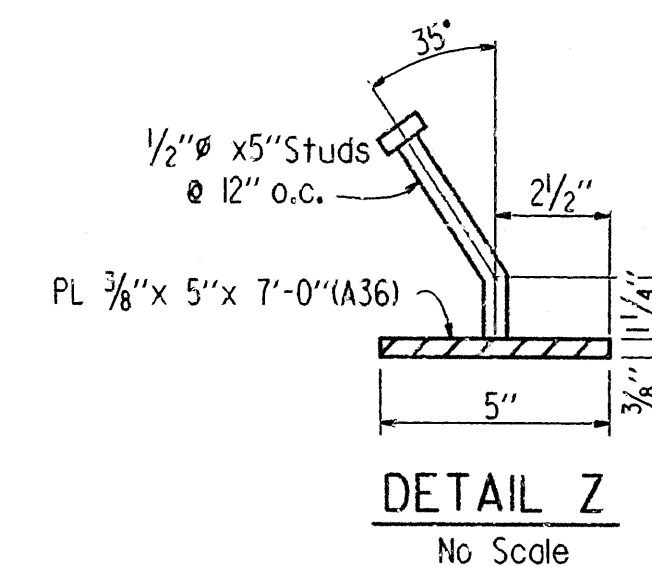
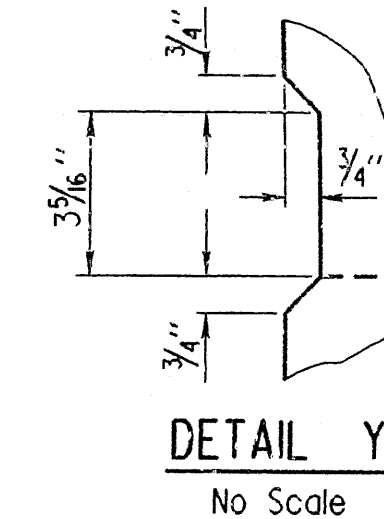
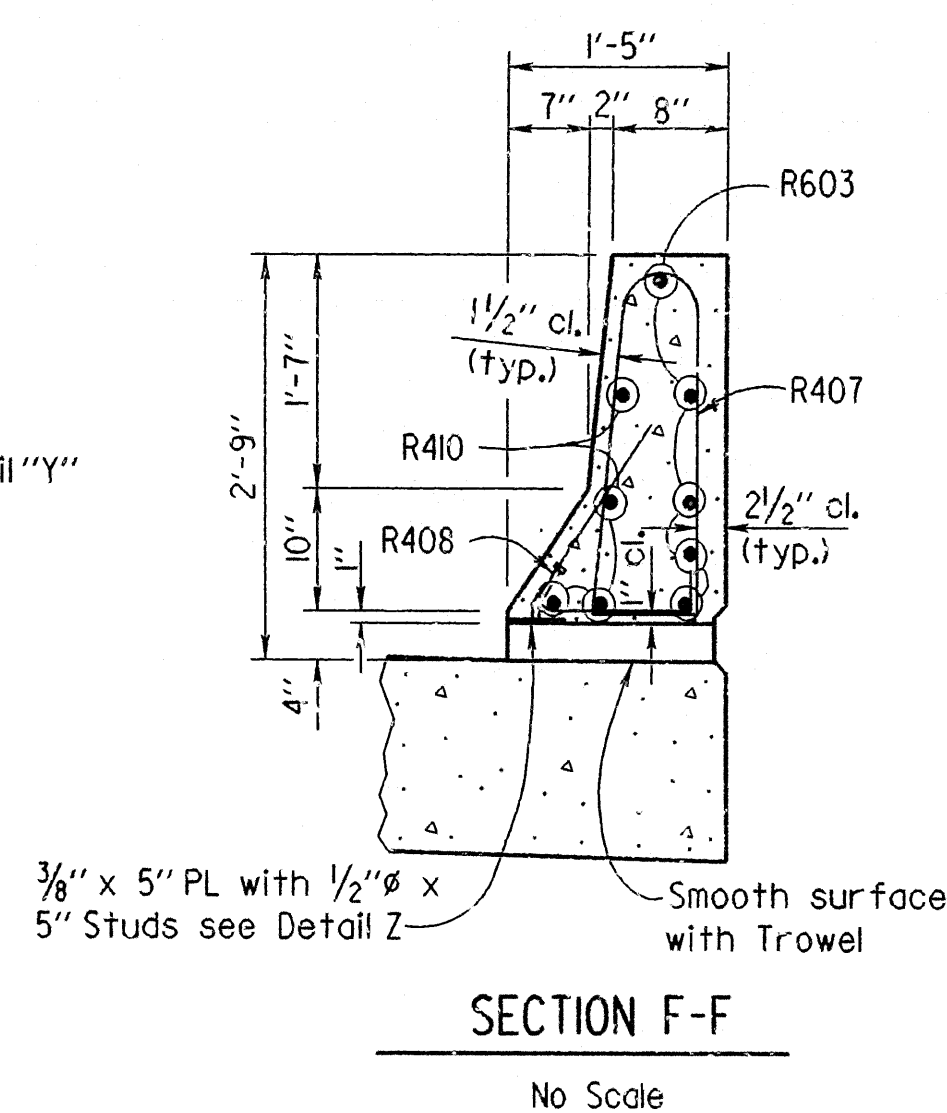
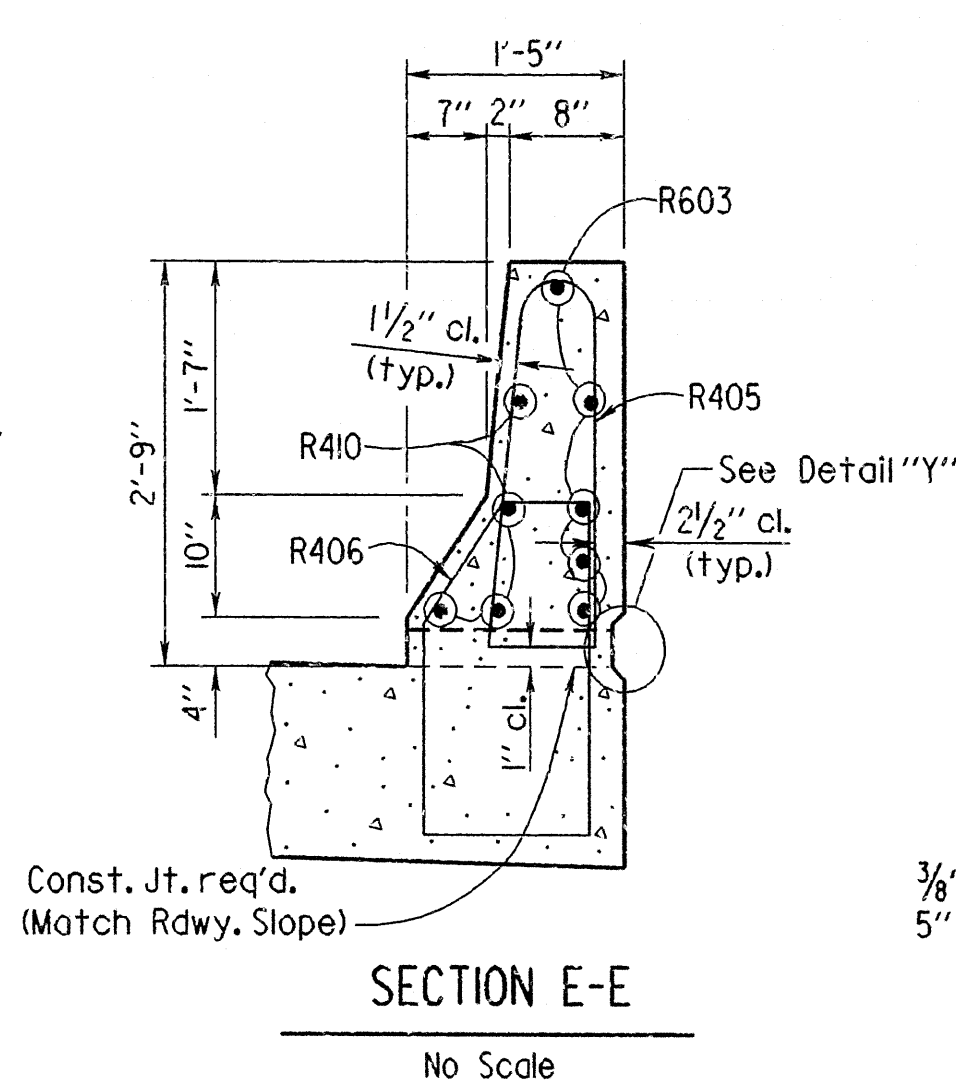
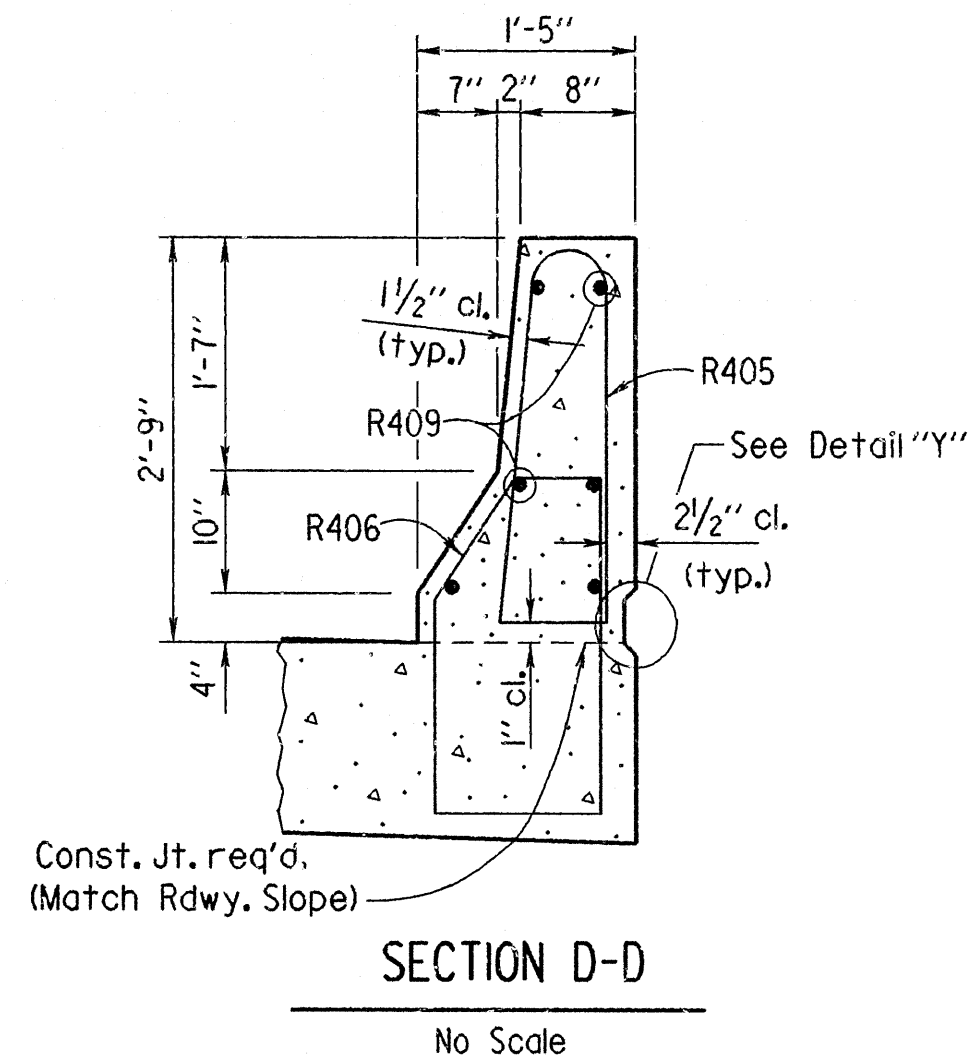
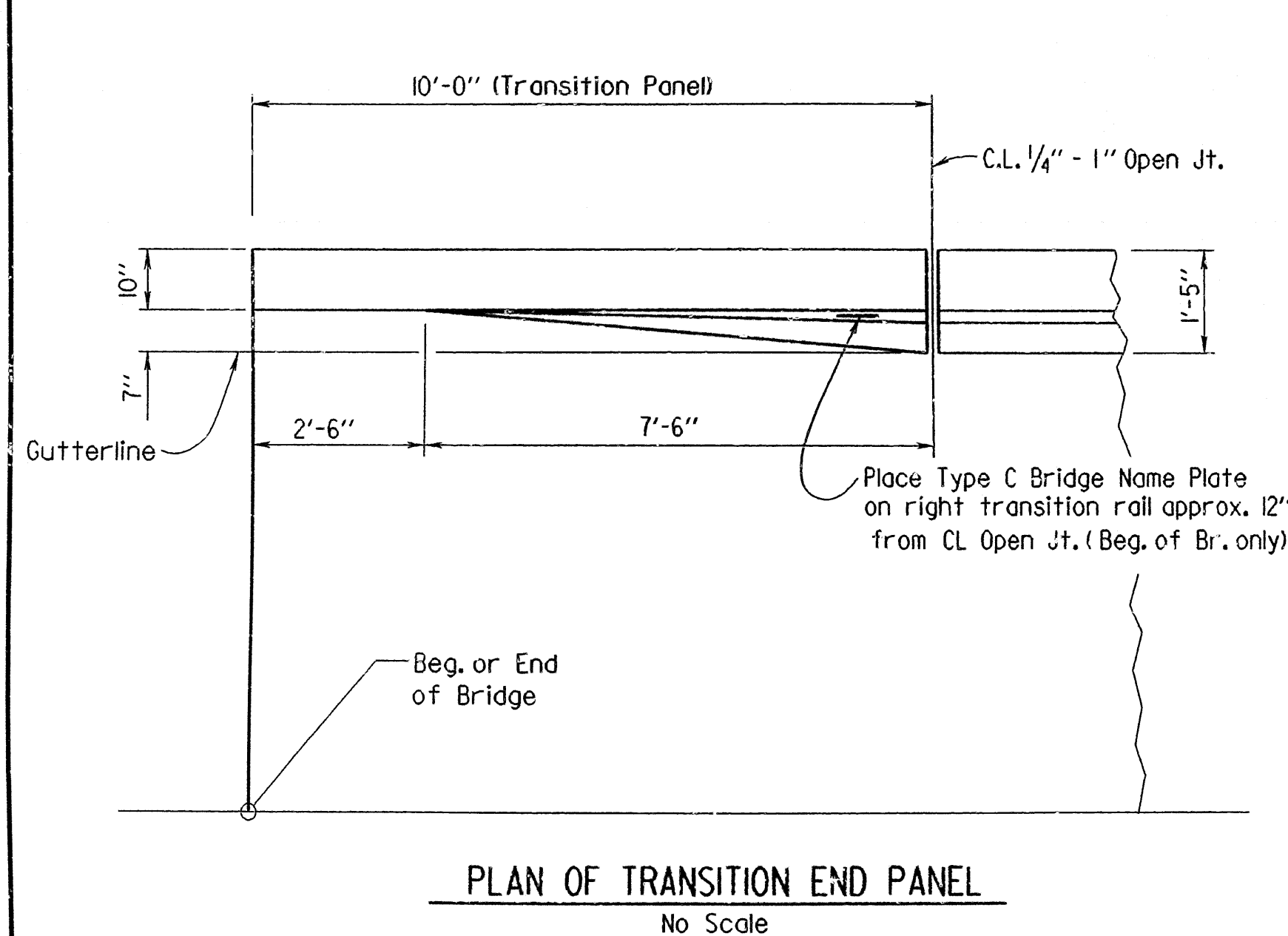
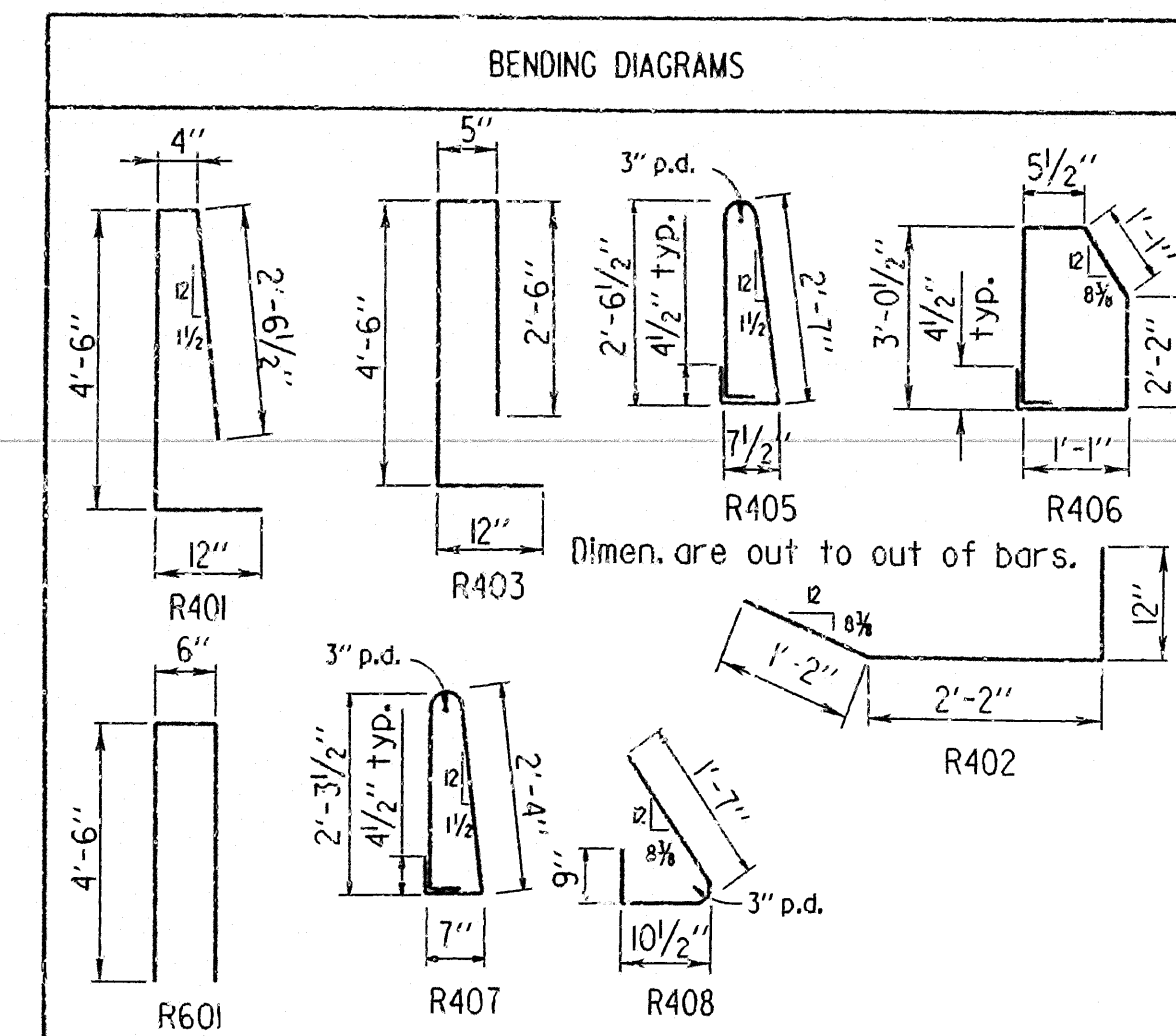
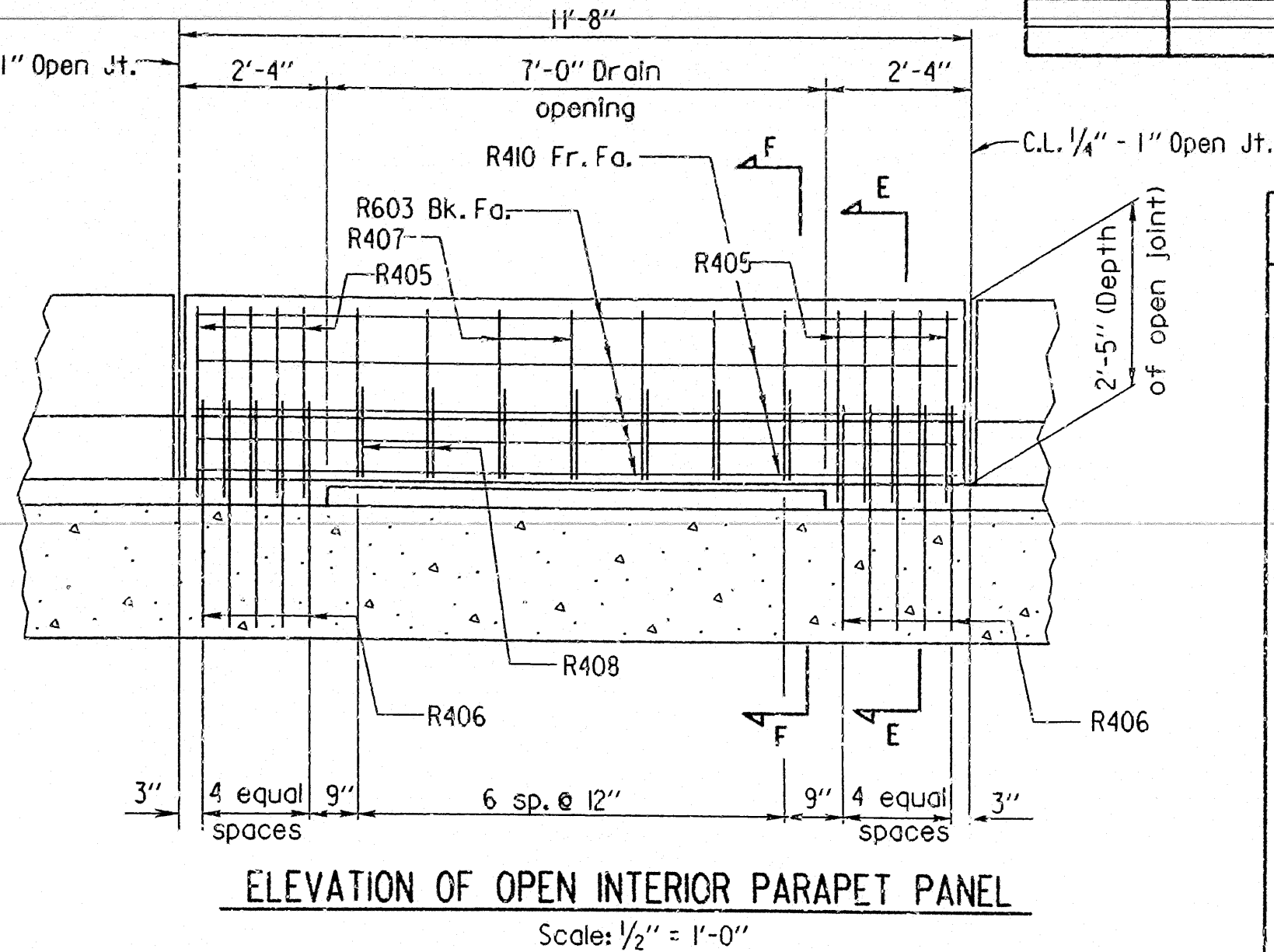
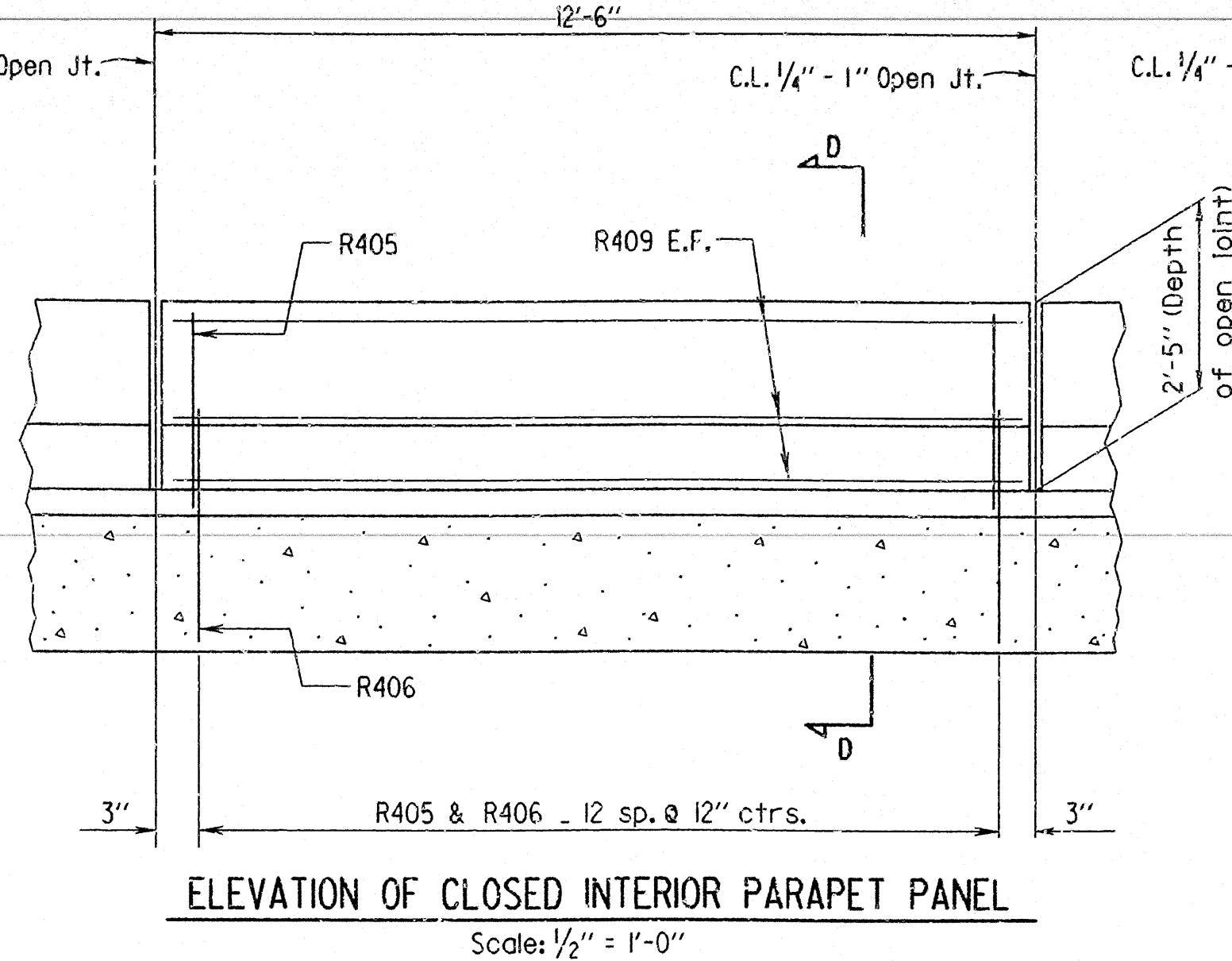
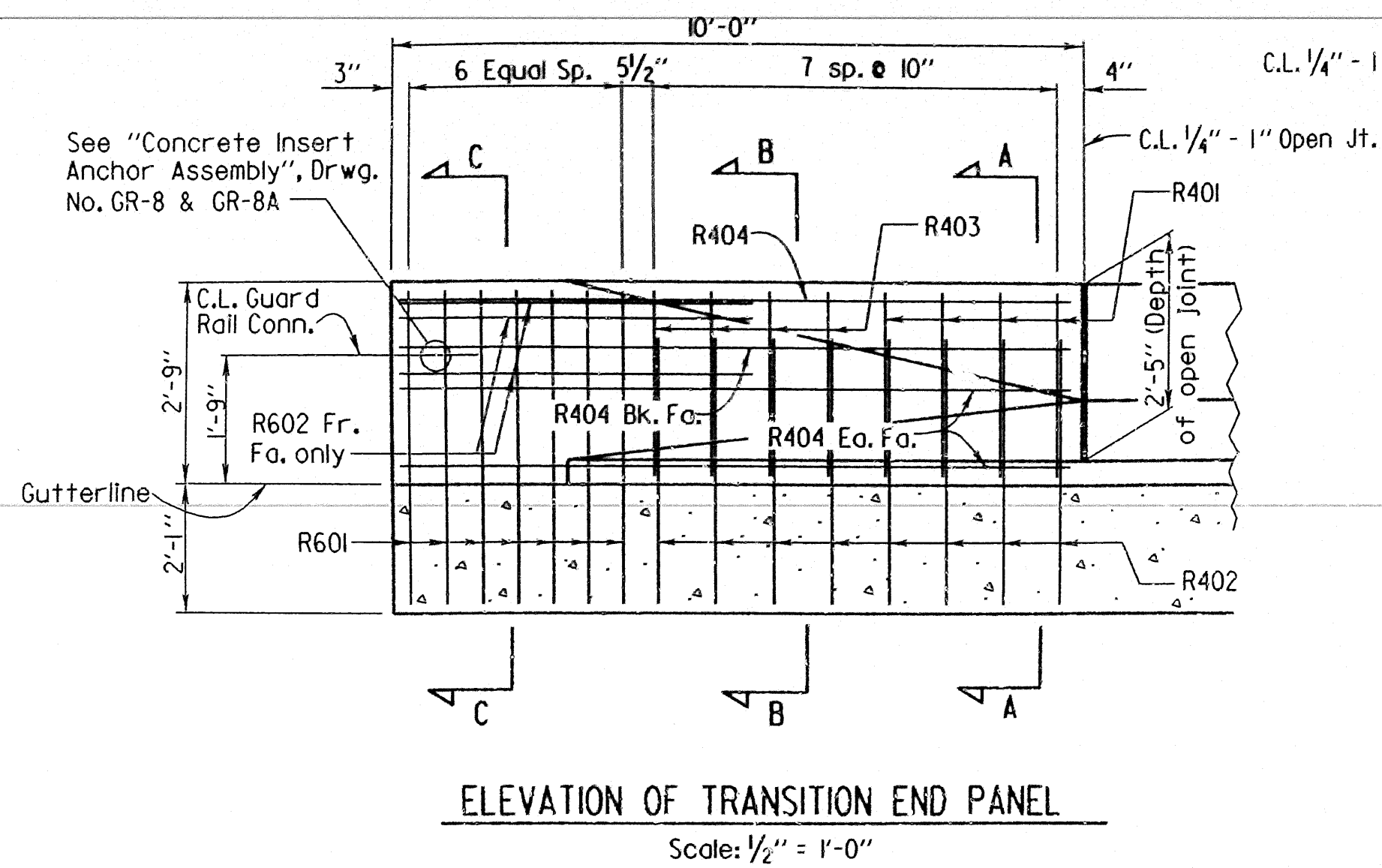
SHEET 1 OF 2
DETAILS OF
35'-0" R.C. SLAB SPANS

ROUTE 96 SEC. 2
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

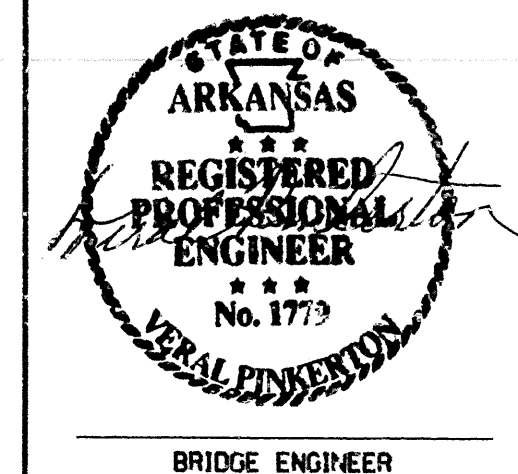
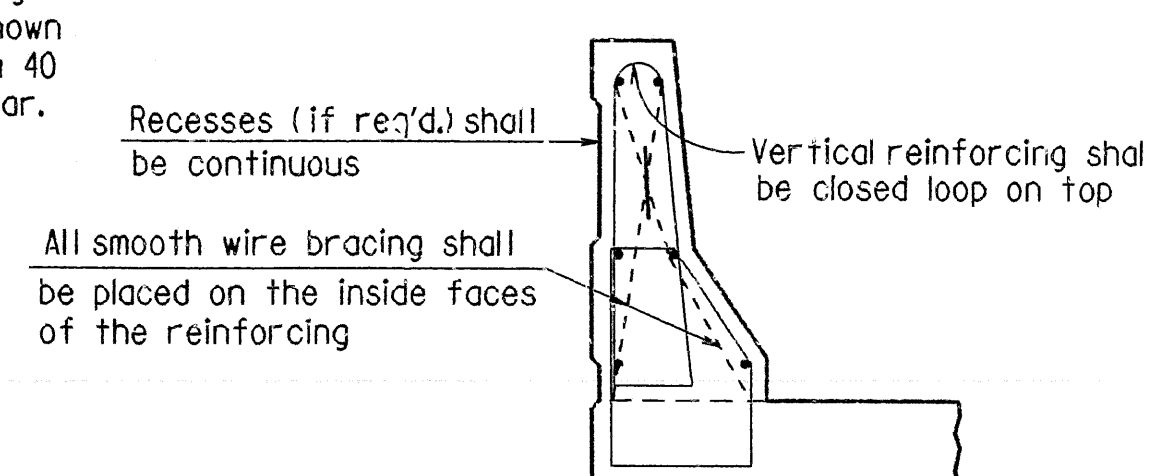
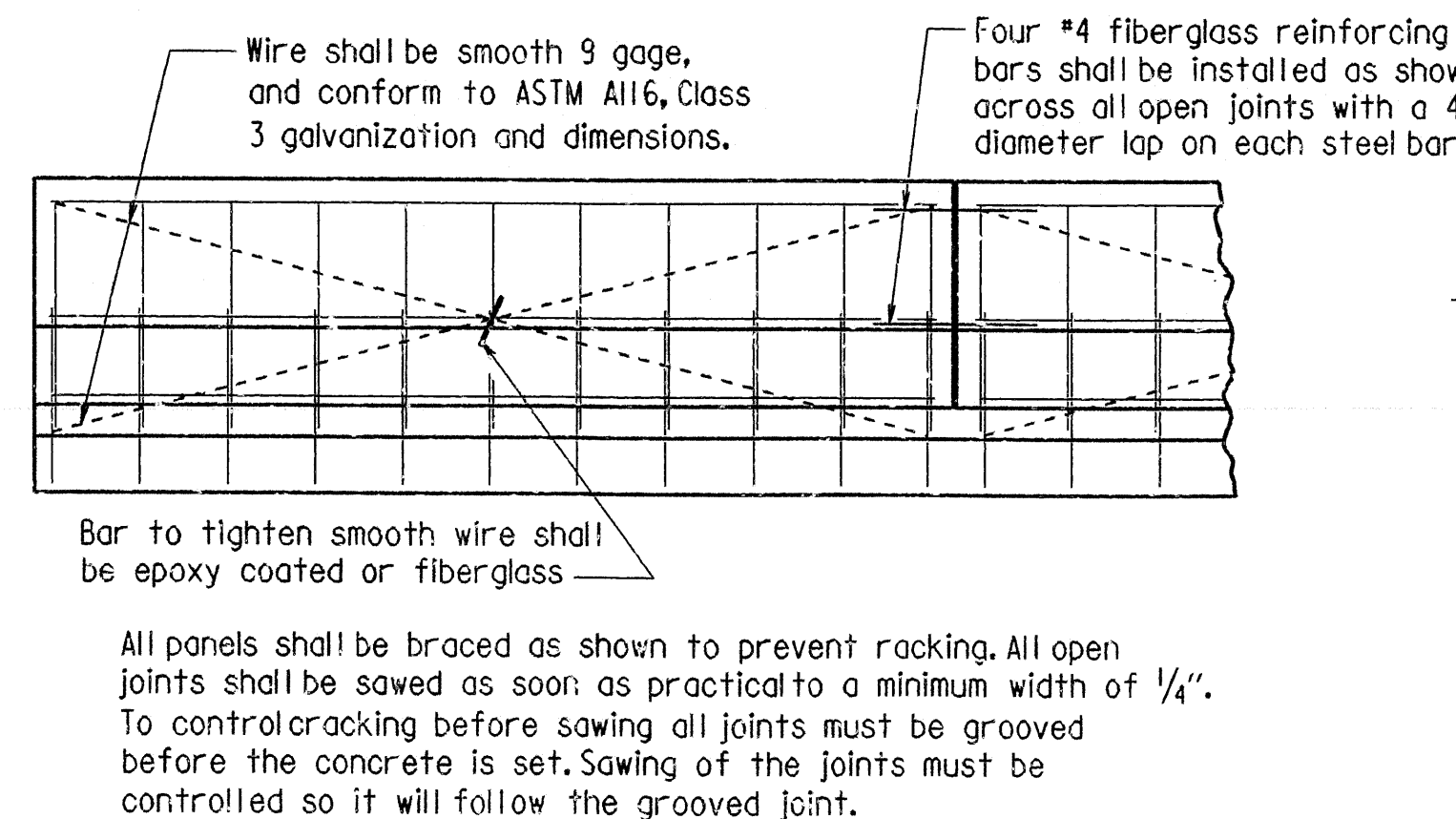
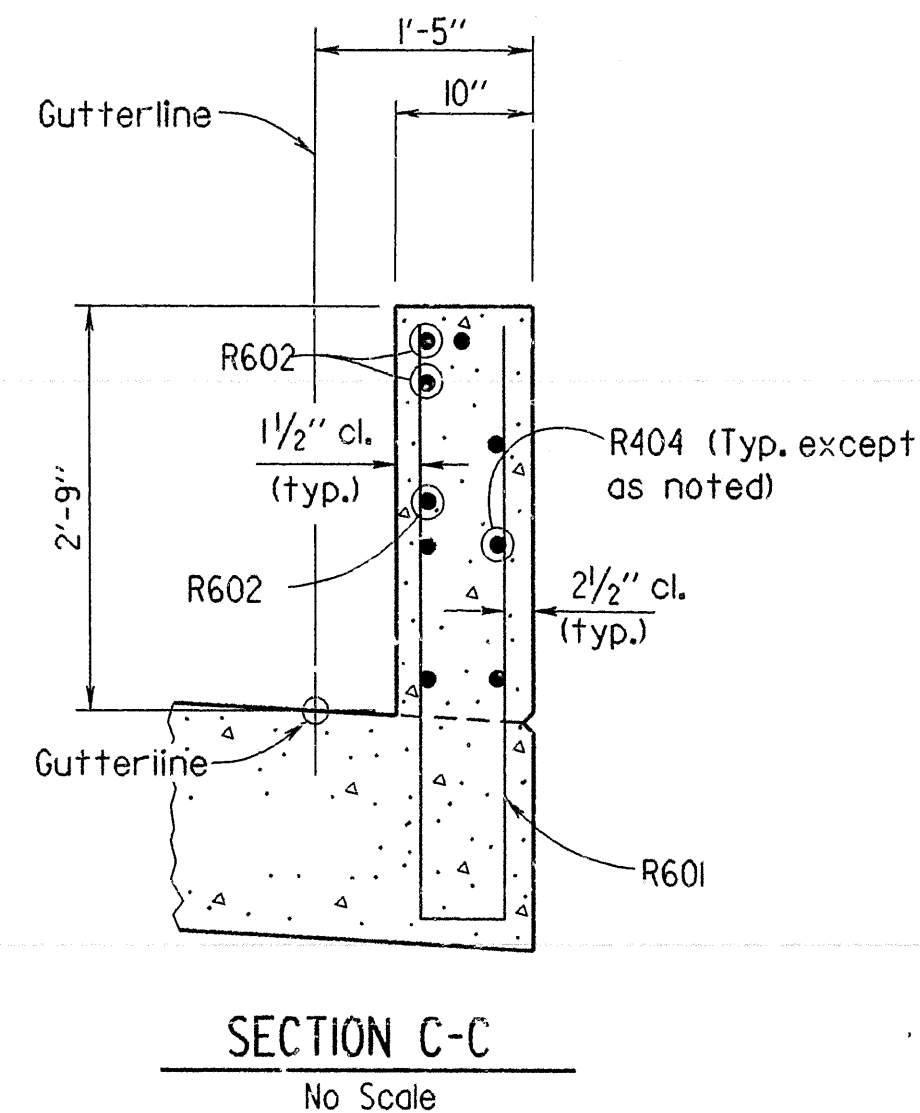
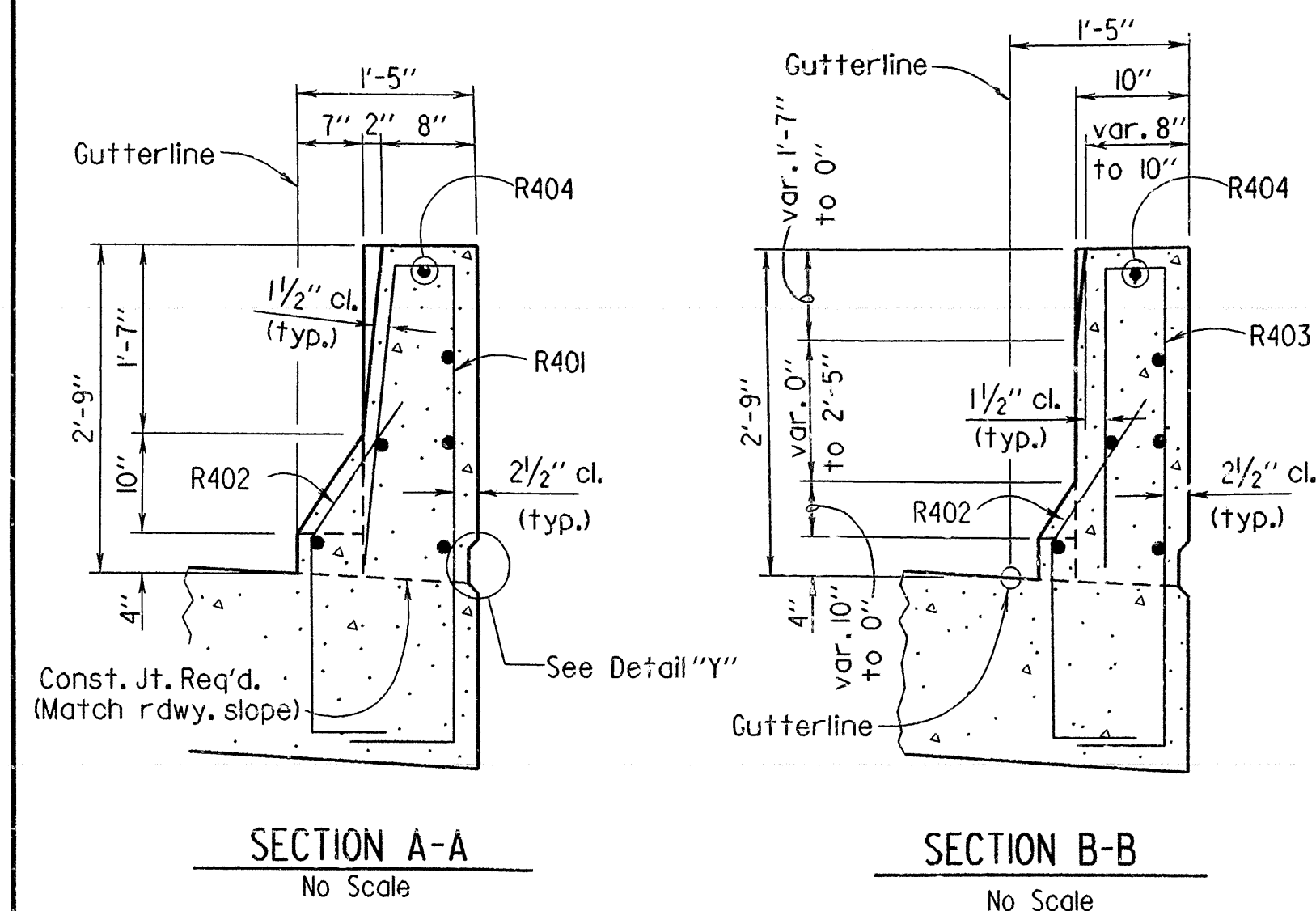
DRAWN BY: KMG DATE: 2 Nov 92
CHECKED BY: D. B. M. DATE: 4-93
DESIGNED BY: D. B. M. DATE: 6-93
BRIDGE NO. 6557 DRAWING NO. 34132

Note: For location of open and closed parapet panels, see Reinforcing Plan.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		004985	26	84
				6557		RAIL DTLS.		34133



Note:
Parapet studs shall be 5" long, granular flux filled, solid fluxed, or equal and automatically end welded to the plate. Studs and plate shall meet the requirements of Section 807. Studs and plates shall be measured and paid for as Class (S)AE Concrete.
The surfaces of the 3/8" plates which will not be in contact with concrete shall be painted in accordance with Section 638, or as approved by the Engineer. Only one prime coat is required where multiple coats are specified. All coats shall be applied in the fabricator's shop. Painting will not be paid for directly, but will be considered subsidiary to Class (S)AE Concrete.



SHEET 2 OF 2
DETAILS OF
35'-0" R.C. SLAB SPANS

ROUTE 96 SEC. 2
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

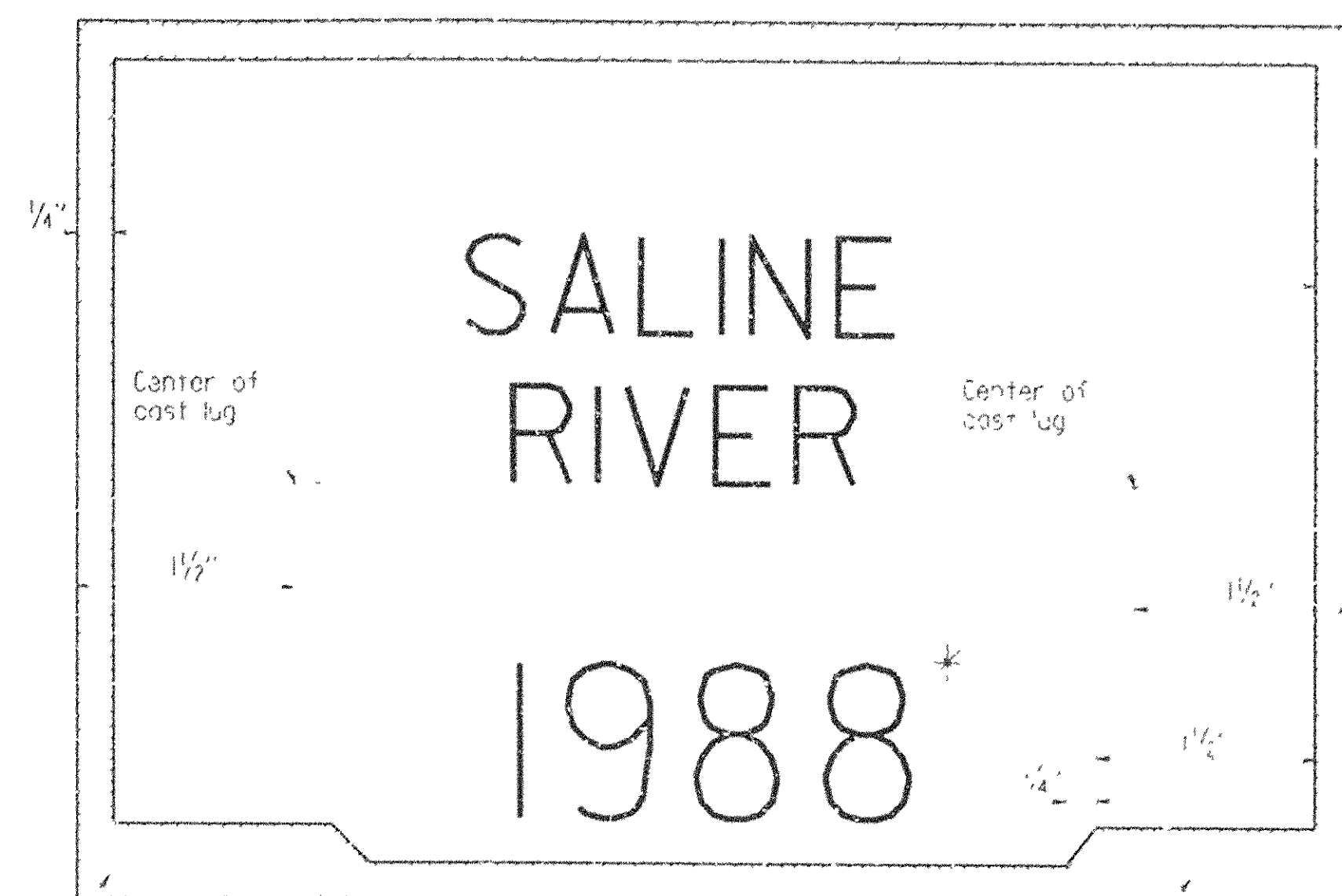
DRAWN BY: KMG DATE: 2 Nov 92
CHECKED BY: JJA DATE: 4-93
DESIGNED BY: JJA DATE: 6-93

BRIDGE NO. 6557 DRAWING NO. 34133

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-89	11-16-91			6	ARK.			
				JOB NO.				

① NAME PLATES 2389A

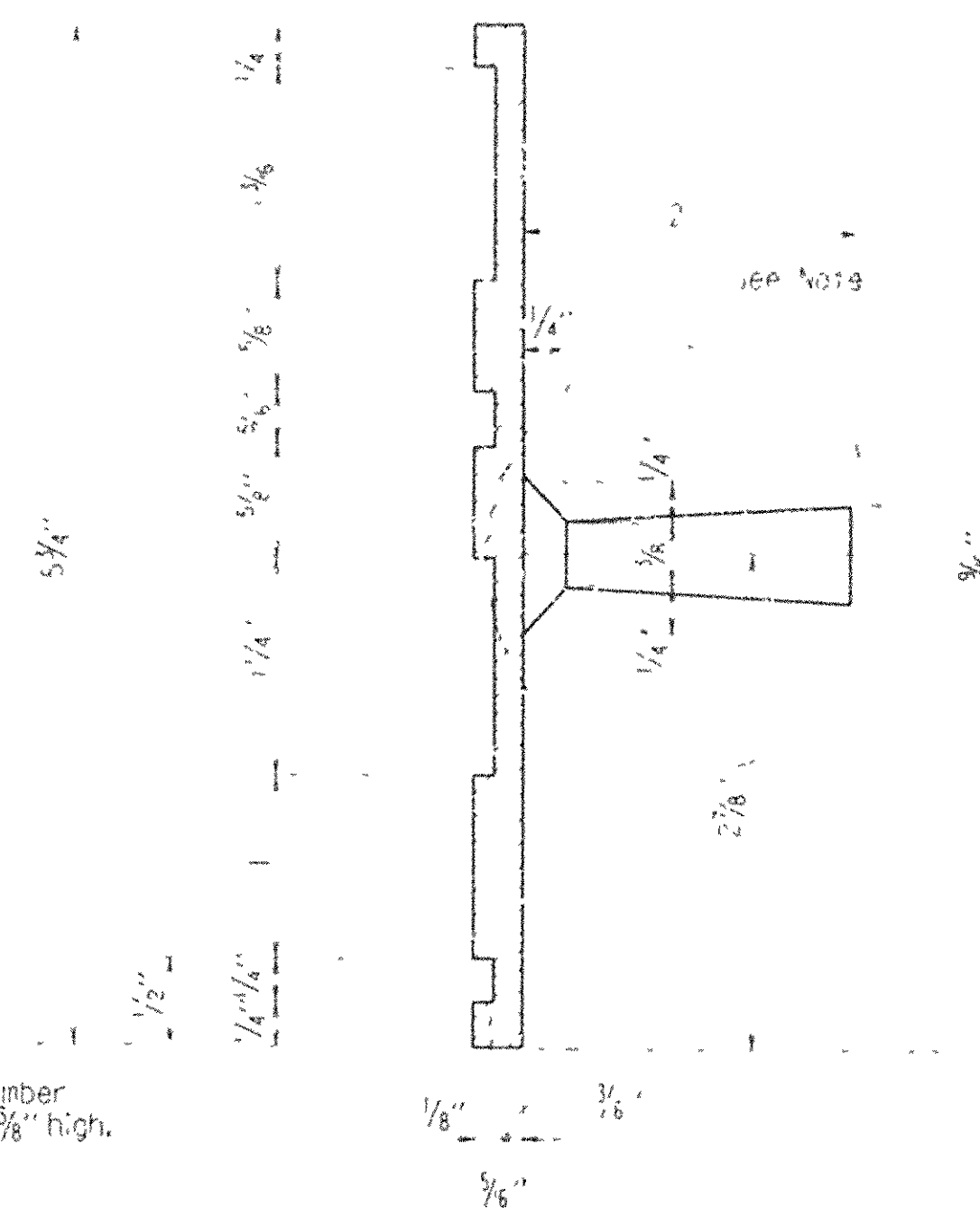
7" Minimum to 9" Maximum
(Length to be determined by the lettering required)



Stamp the design loading
here with letters and numerals
3/8" high. Example: HS 20

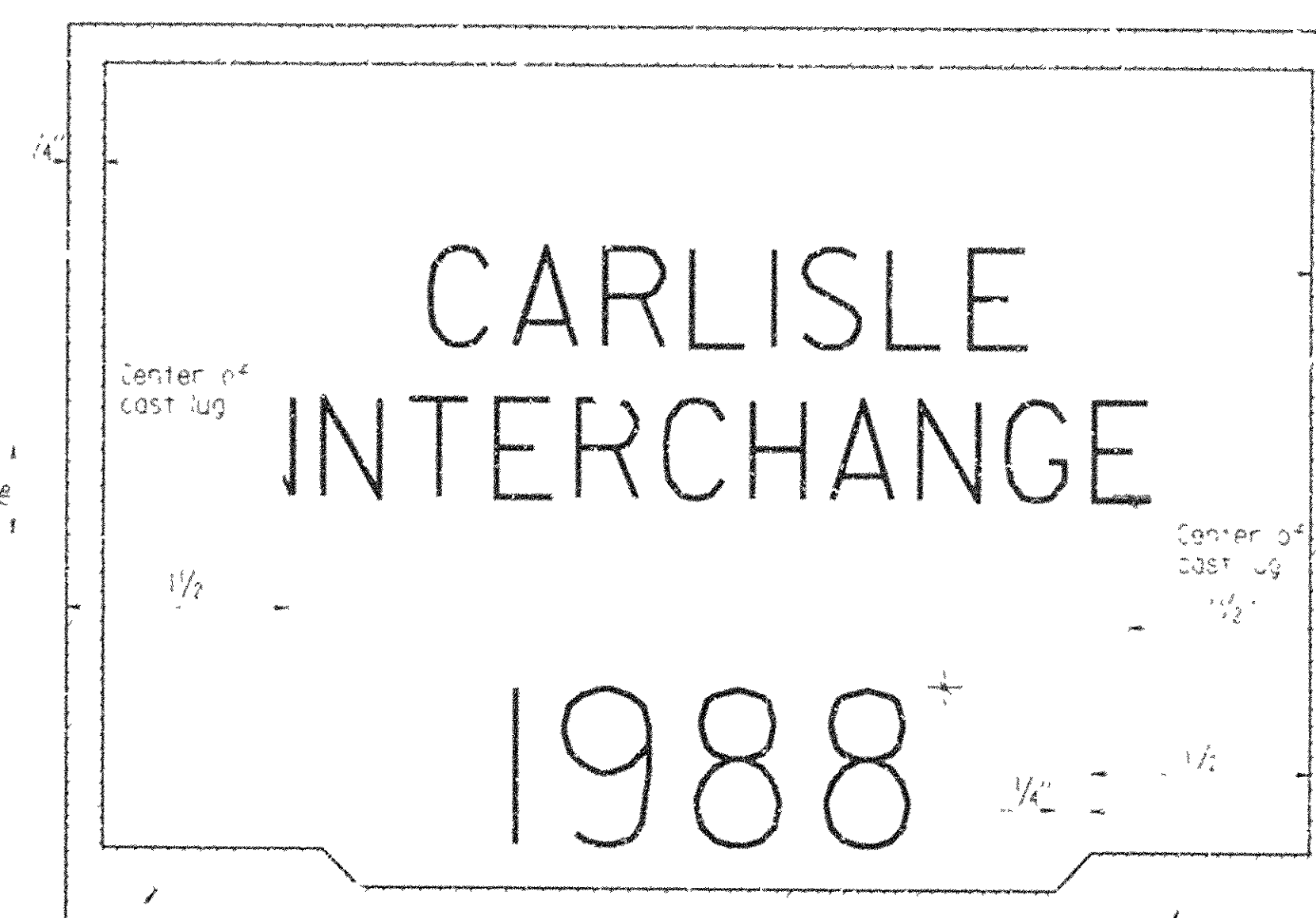
Stamp the bridge number
here with numerals 3/8" high.
Example: 6275

TYPICAL BRIDGE NAME PLATE-STYLE 1-FULL SIZE
STREAM CROSSINGS



Note: Alternate attachments may be used
provided such attachments are submitted
and approved secured before fabrication
is begun.

7" Minimum to 9" Maximum
(Length to be determined by the lettering required)



Stamp the design loading
here with letters and numerals
3/8" high. Example: HS 20

Stamp the bridge number
here with numerals 3/8" high.
Example: 6275

TYPICAL BRIDGE NAME PLATE-STYLE 3-FULL SIZE
GRADE SEPARATION STRUCTURES

GENERAL NOTES

1. Name plates are to be either cast aluminum or bronze and shall meet the material requirements as specified in section 61 of the standard specifications.

2. Body of plate shall be 3/8" thick and shall include two tapering slots 3/8" to 1/2" x 1/4" long. The border and all lettering shall be raised 1/4" above the face of plate and ends be polished.

3. All lettering shall be polished, square cut and not tapered.

4. The number of plates required and the location and name on the route for each bridge shall be as designated on the plans.

5. Specifications: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction, Current Edition, with applicable Supplemental Specifications and Special Provisions.

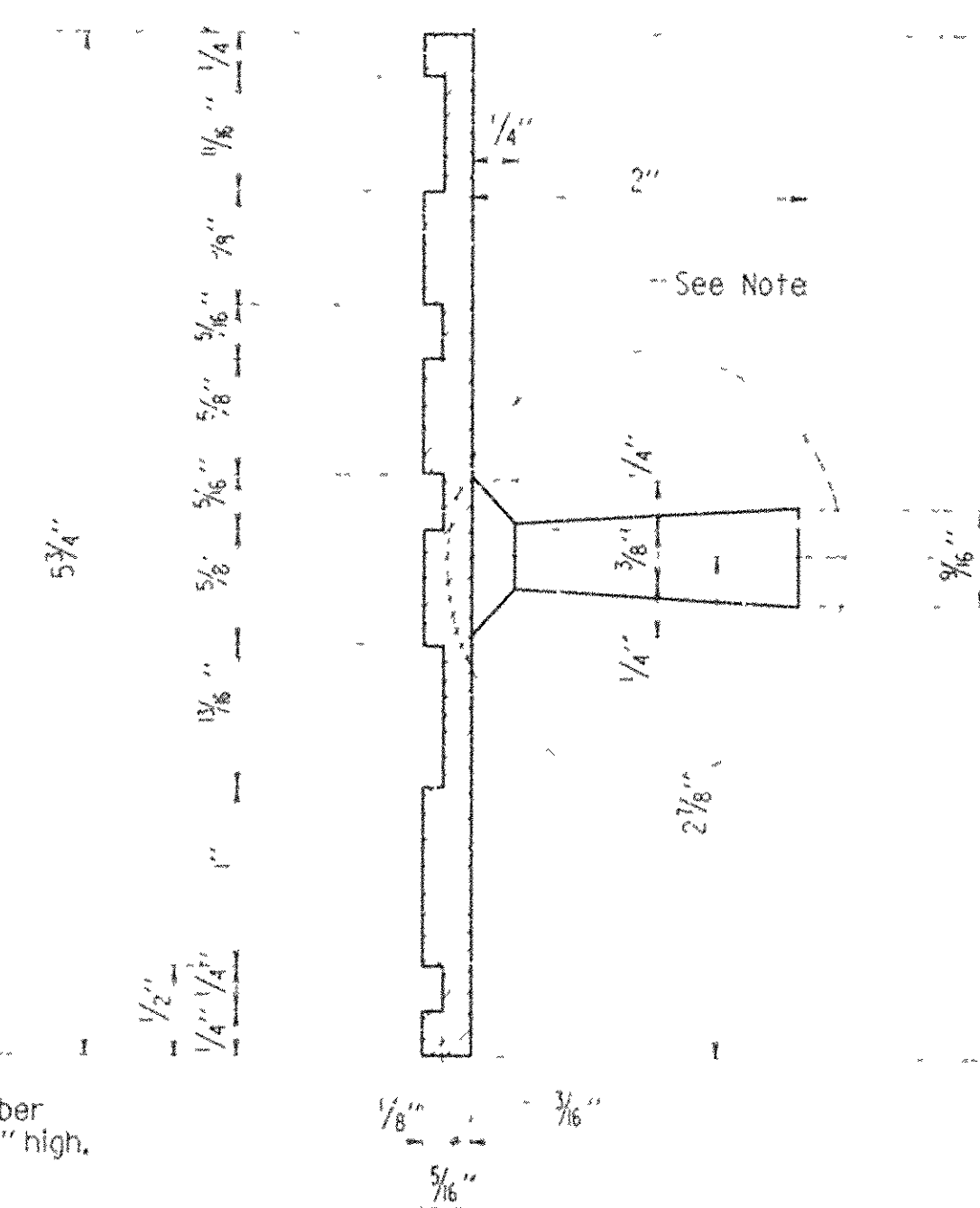
7" Minimum to 9" Maximum
(Length to be determined by the lettering required)



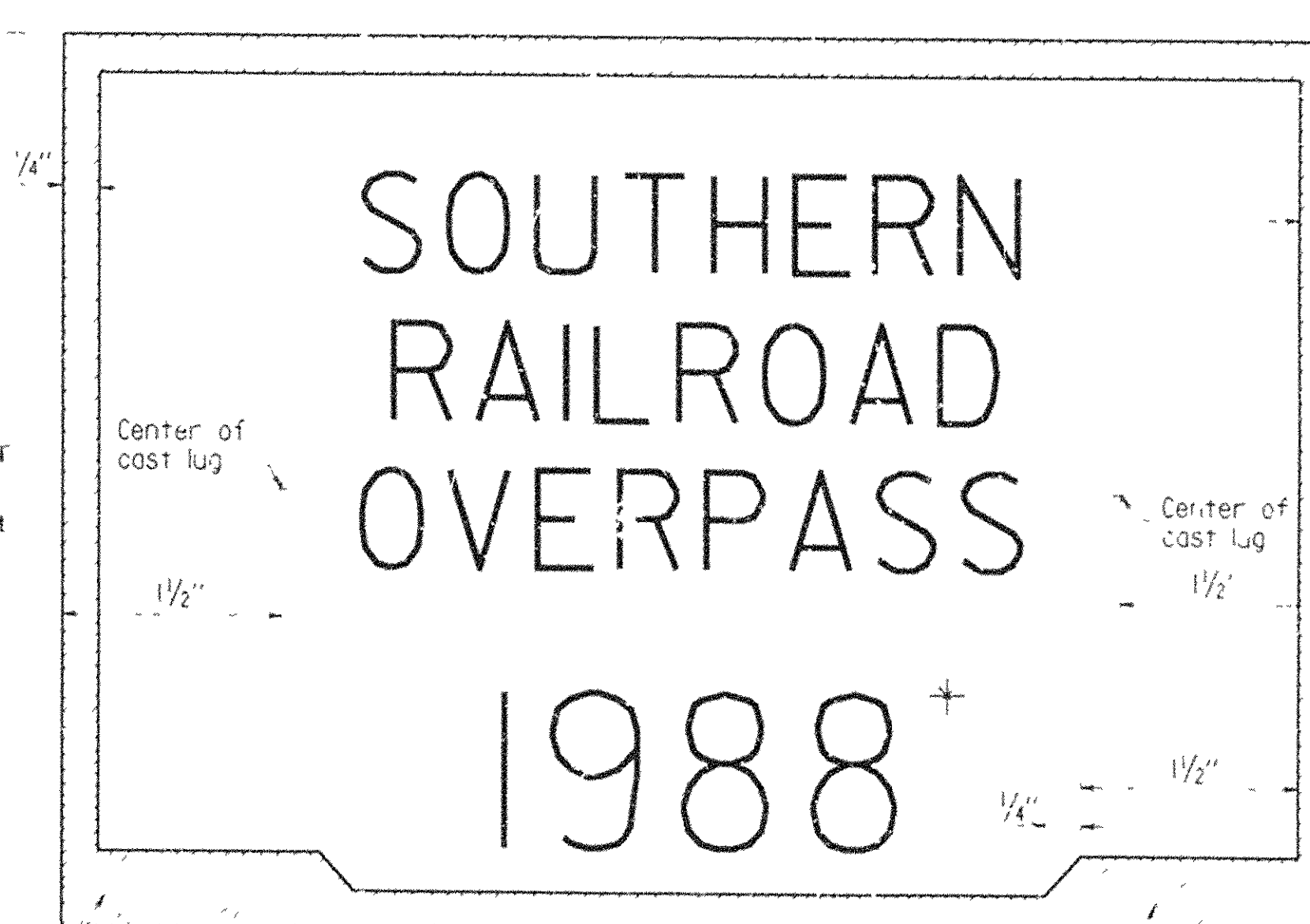
Stamp the design loading
here with letters and numerals
3/8" high. Example: HS 20

Stamp the bridge number
here with numerals 3/8" high.
Example: 6275

TYPICAL BRIDGE NAME PLATE-STYLE 2-FULL SIZE
STREAM CROSSINGS



7" Minimum to 9" Maximum
(Length to be determined by the lettering required)



Stamp the design loading
here with letters and numerals
3/8" high. Example: HS 20

Stamp the bridge number
here with numerals 3/8" high.
Example: 6275

TYPICAL BRIDGE NAME PLATE-STYLE 4-FULL SIZE
GRADE SEPARATION STRUCTURES

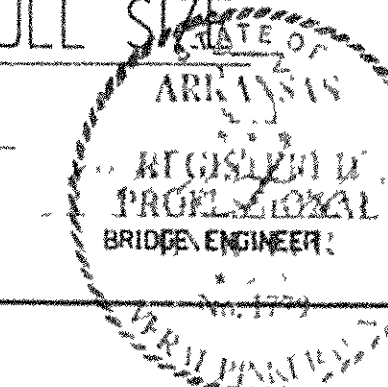
* Year in which contract is awarded.

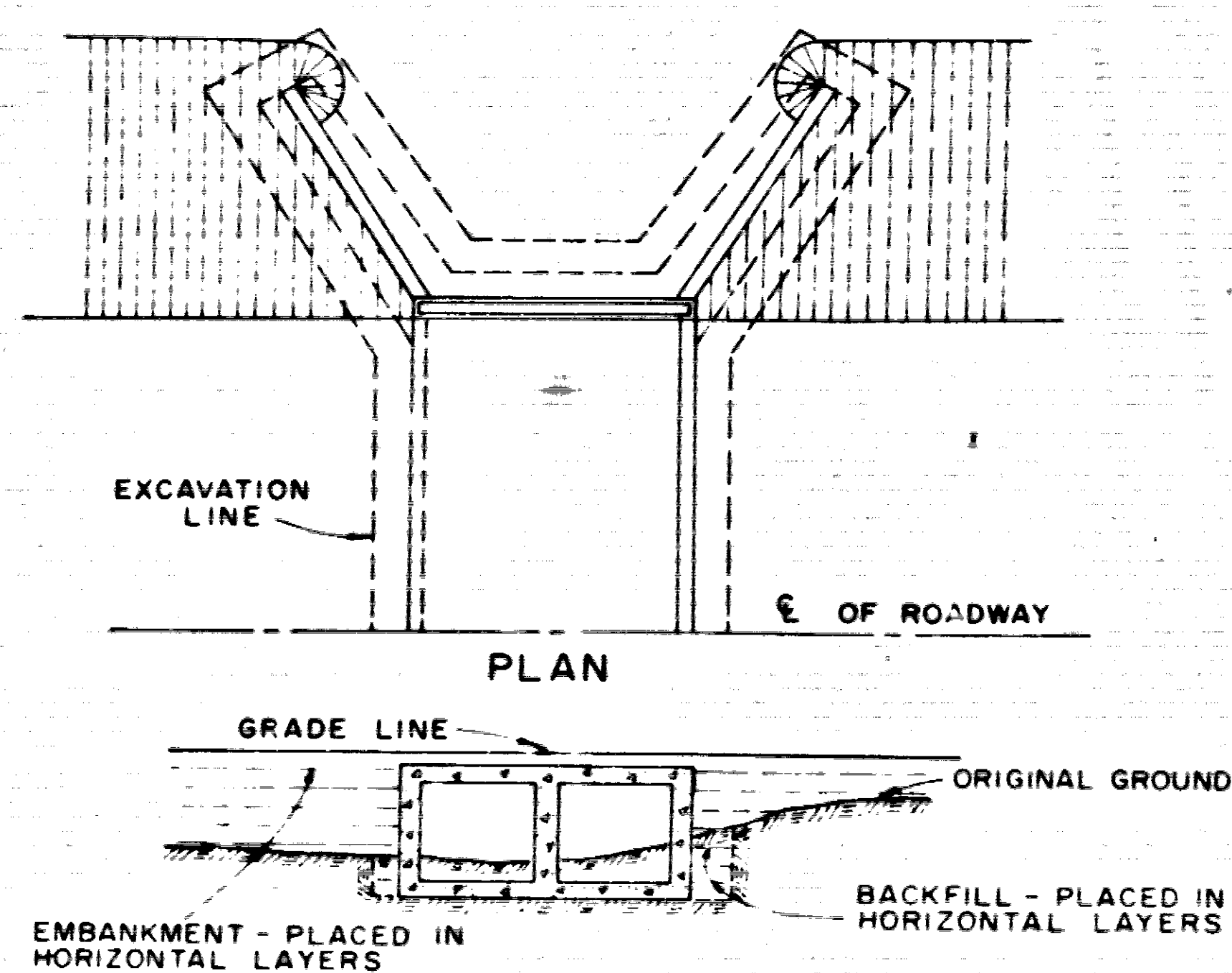
- △ Revised notes, 11-16-89, LM
- △ Rev. General Notes, 11-2-90, W.M.G.
- △ Rev. General Notes 11-11-92, CR/Hart

DETAILS OF STANDARD
TYPE C BRIDGE NAME PLATES

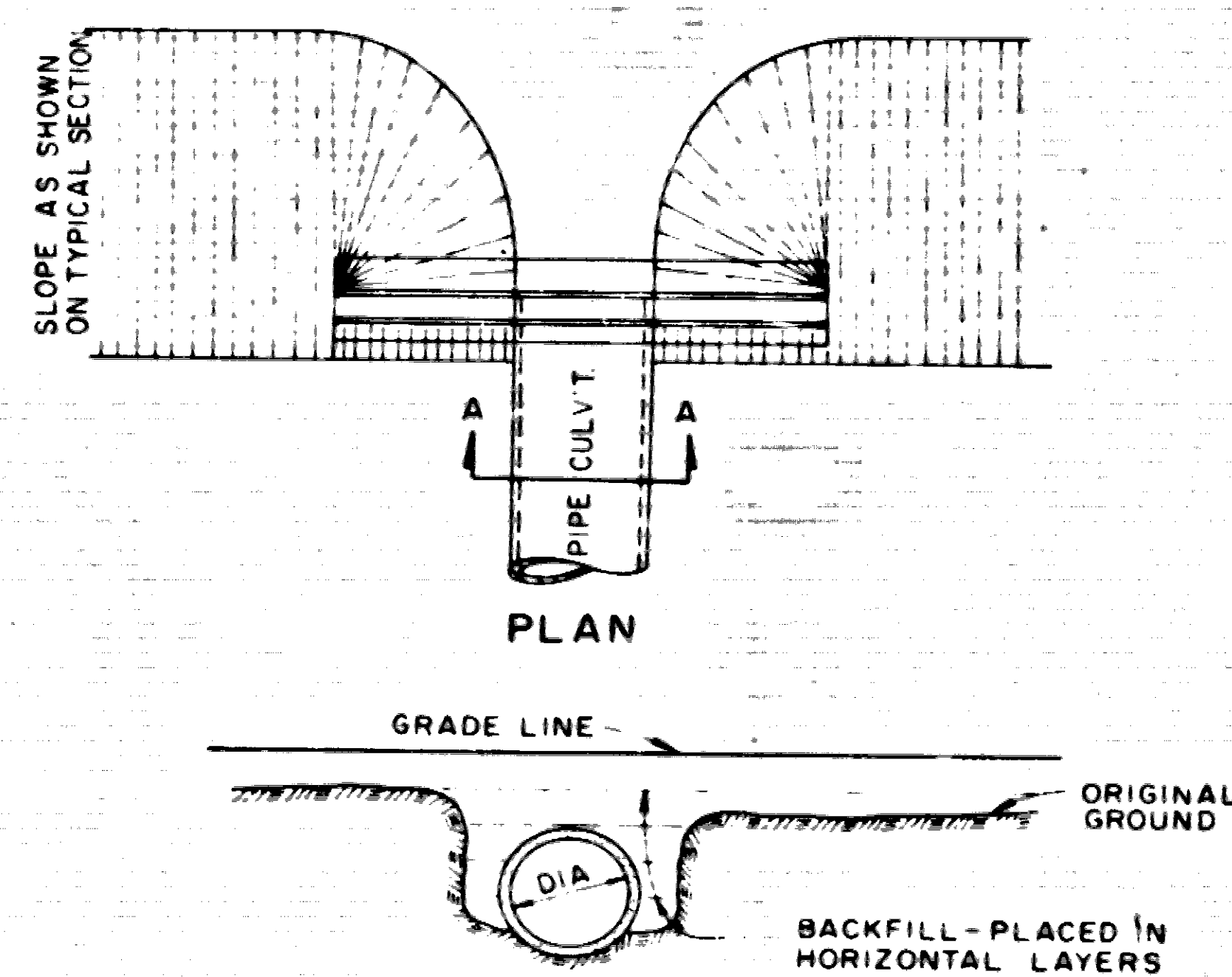
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: LDF DATE: 6-16-88
CHECKED BY: CPB DATE: 6-16-88
DESIGNED BY: DATE:
BRIDGE NO. SCALE: FULL SIZE
DRAWING NO. 2389A

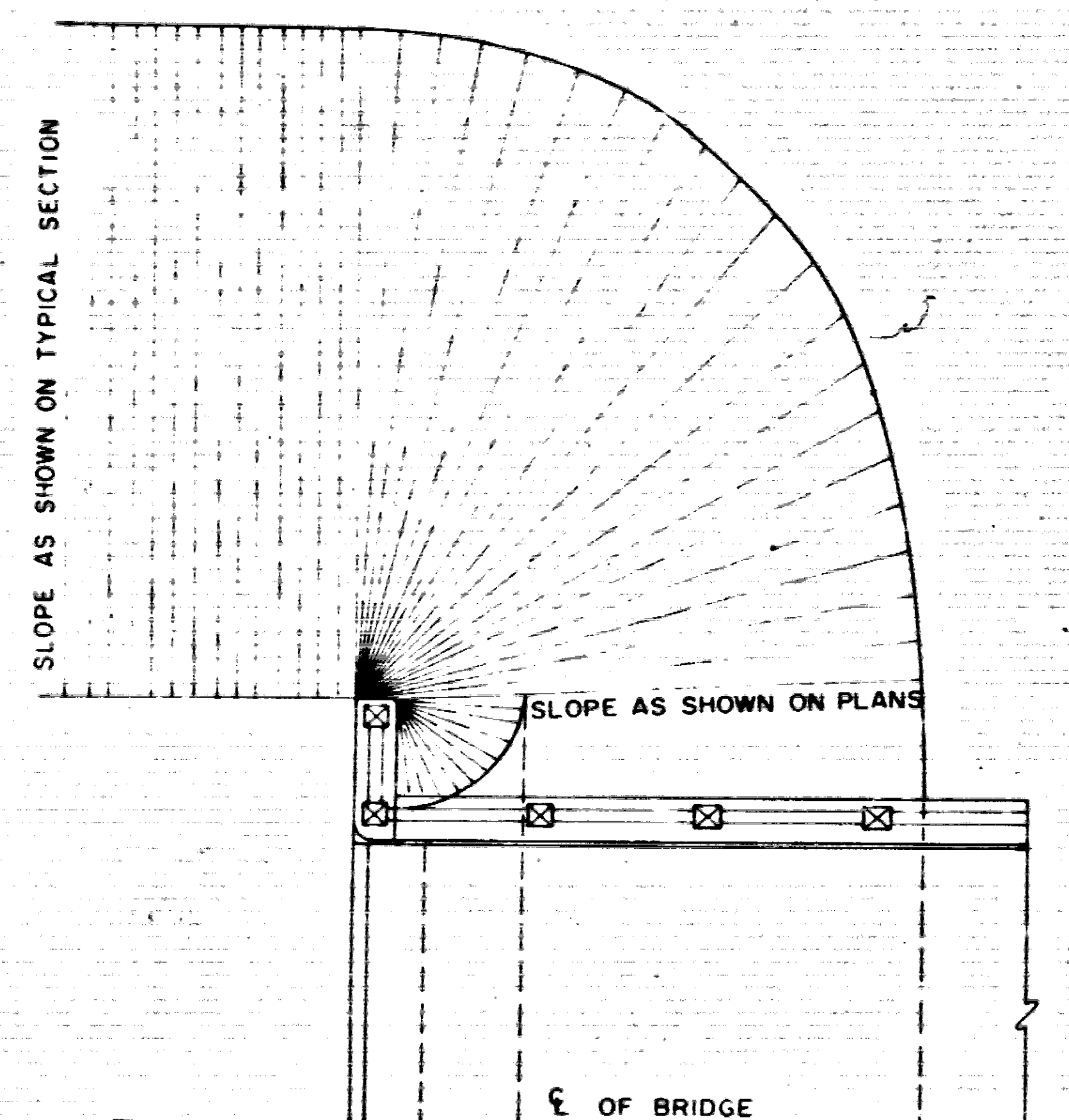




LONGITUDINAL SECTION
BOX CULVERT

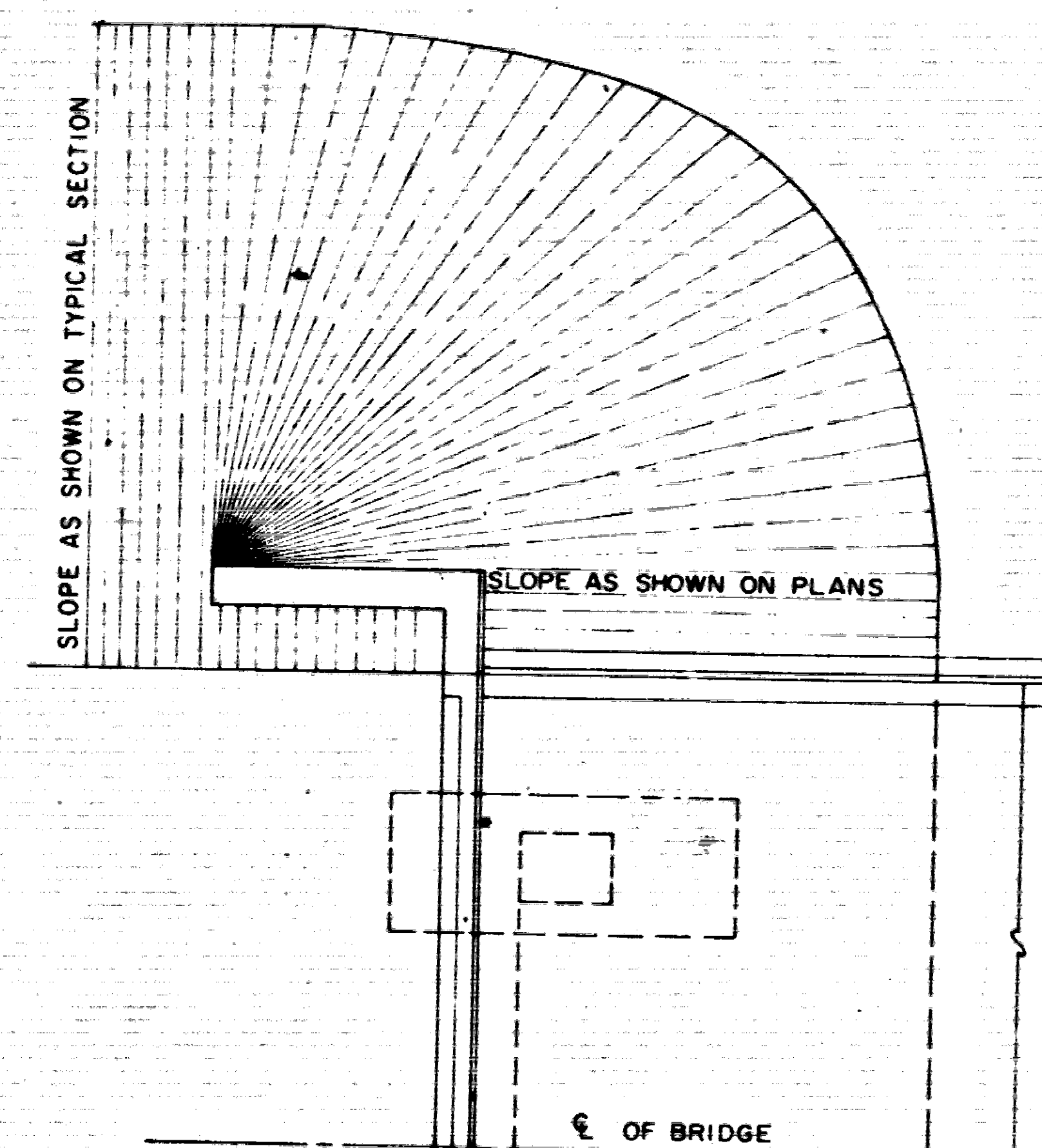


SECTION A-A
PIPE CULVERT



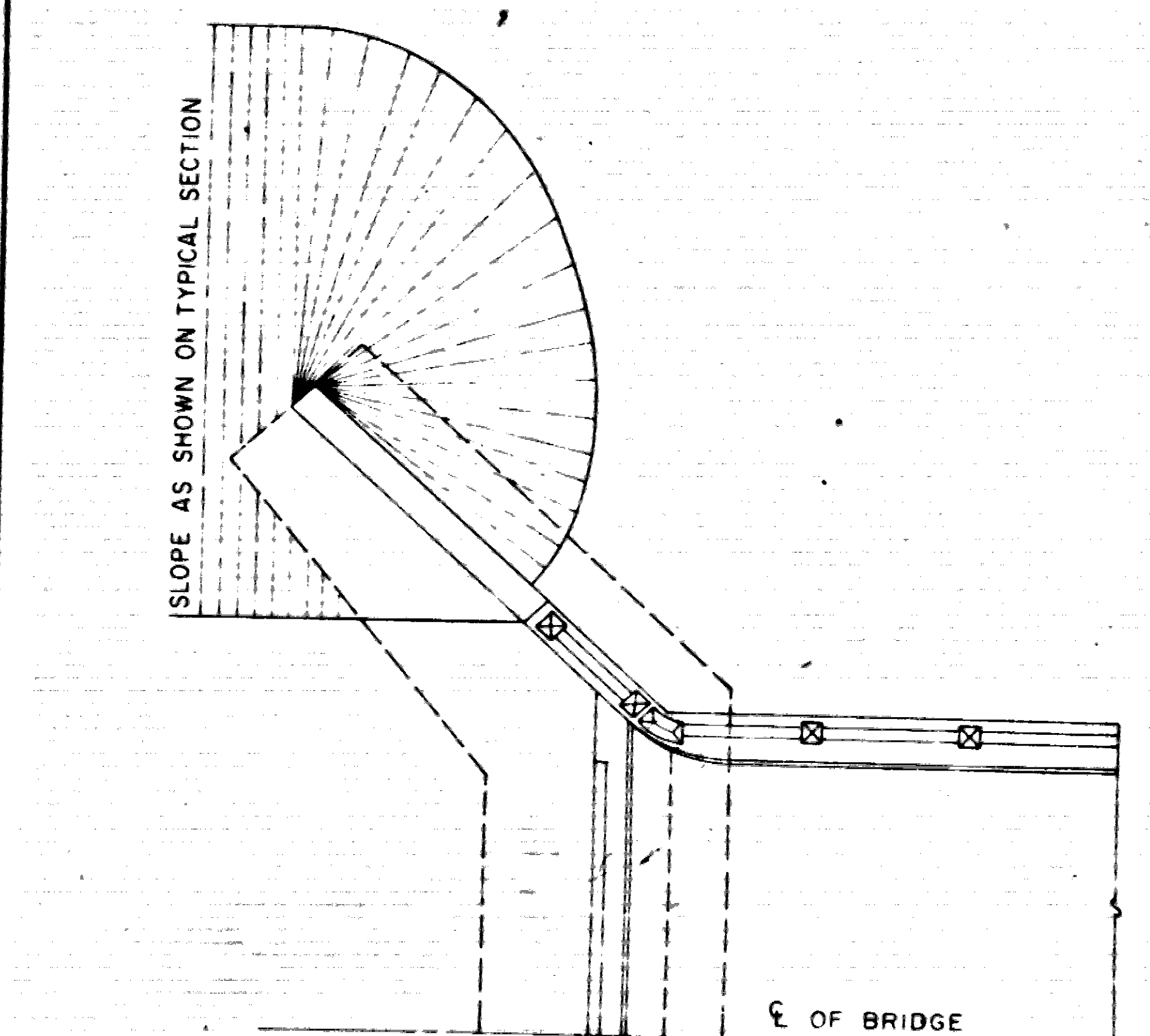
OPEN END ABUTMENT

CONSTRUCTION OF THE BRIDGE END EMBANKMENT
THE BRIDGE END EMBANKMENT SHALL BE DEFINED AS NOT LESS THAN 20 FEET OF EMBANKMENT ADJACENT TO THE END OF THE BRIDGE TOGETHER WITH THE SIDE SLOPES AND SLOPES UNDER THE BRIDGE END AND AROUND THE END OF WINGWALLS.
REFER TO SUB-SECTIONS 202.08 AND 202.09 OF THE SPECIFICATIONS FOR CONSTRUCTION REQUIREMENTS.



SEMI-STUB ABUTMENT AND
TURN BACK WING PILE BENT

BACKFILLING EXCAVATION
IN SO FAR AS PRACTICABLE, ABUTMENT EXCAVATIONS SHALL BE CUT TO THE SIZE SHOWN ON THE PLANS WITH ALLOWANCE OF 3 FEET ON ALL SIDES.
OVERSIZED AND FLARED CUTS TO AVOID THE USE OF SHEETING SHALL NOT BE PERMITTED.
BACKFILL AROUND THE WALL OR COLUMNS SHALL BE COMPACTED IN ACCORDANCE WITH SUB-SECTION 801.08 OF THE SPECIFICATIONS.

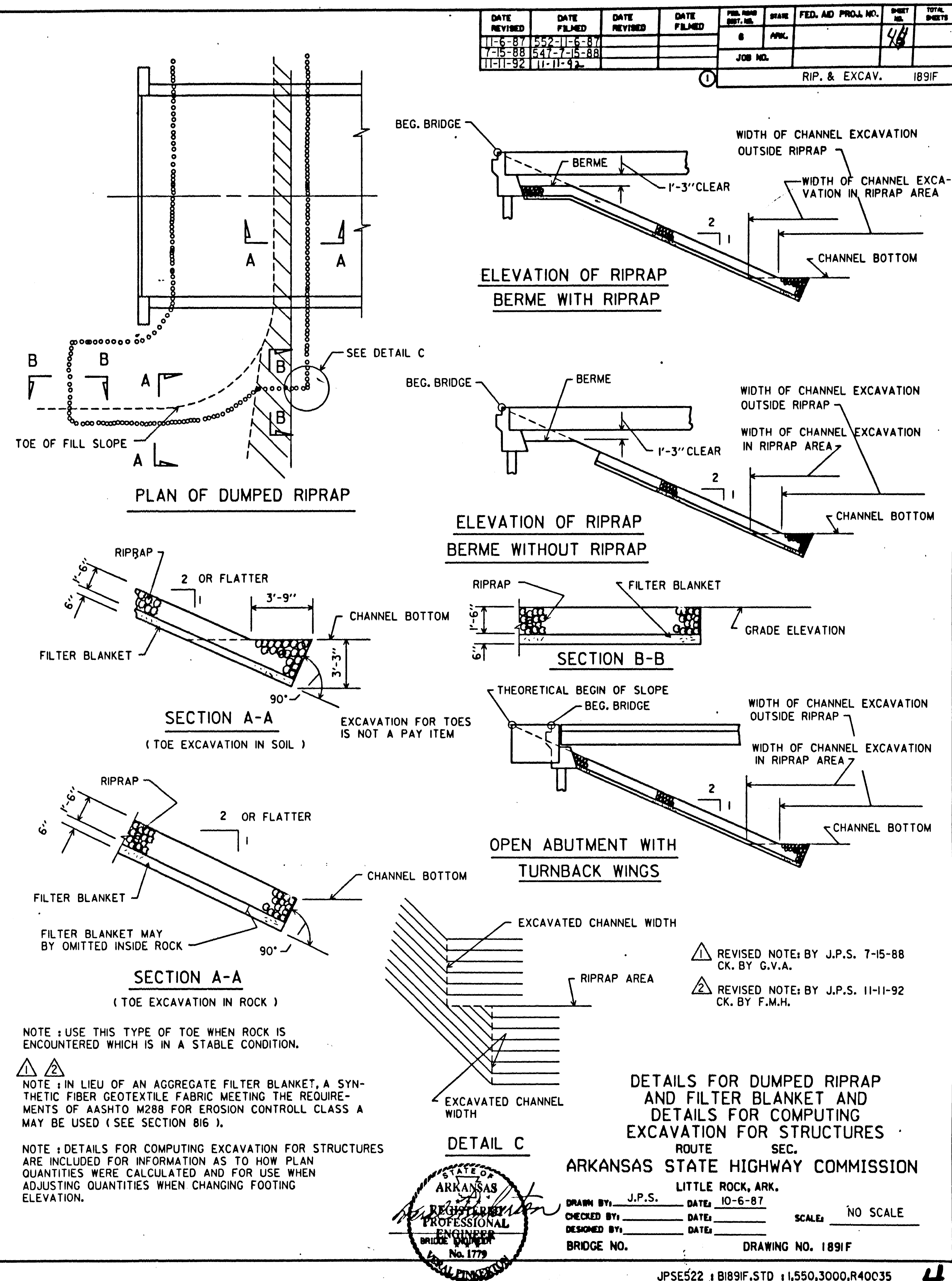
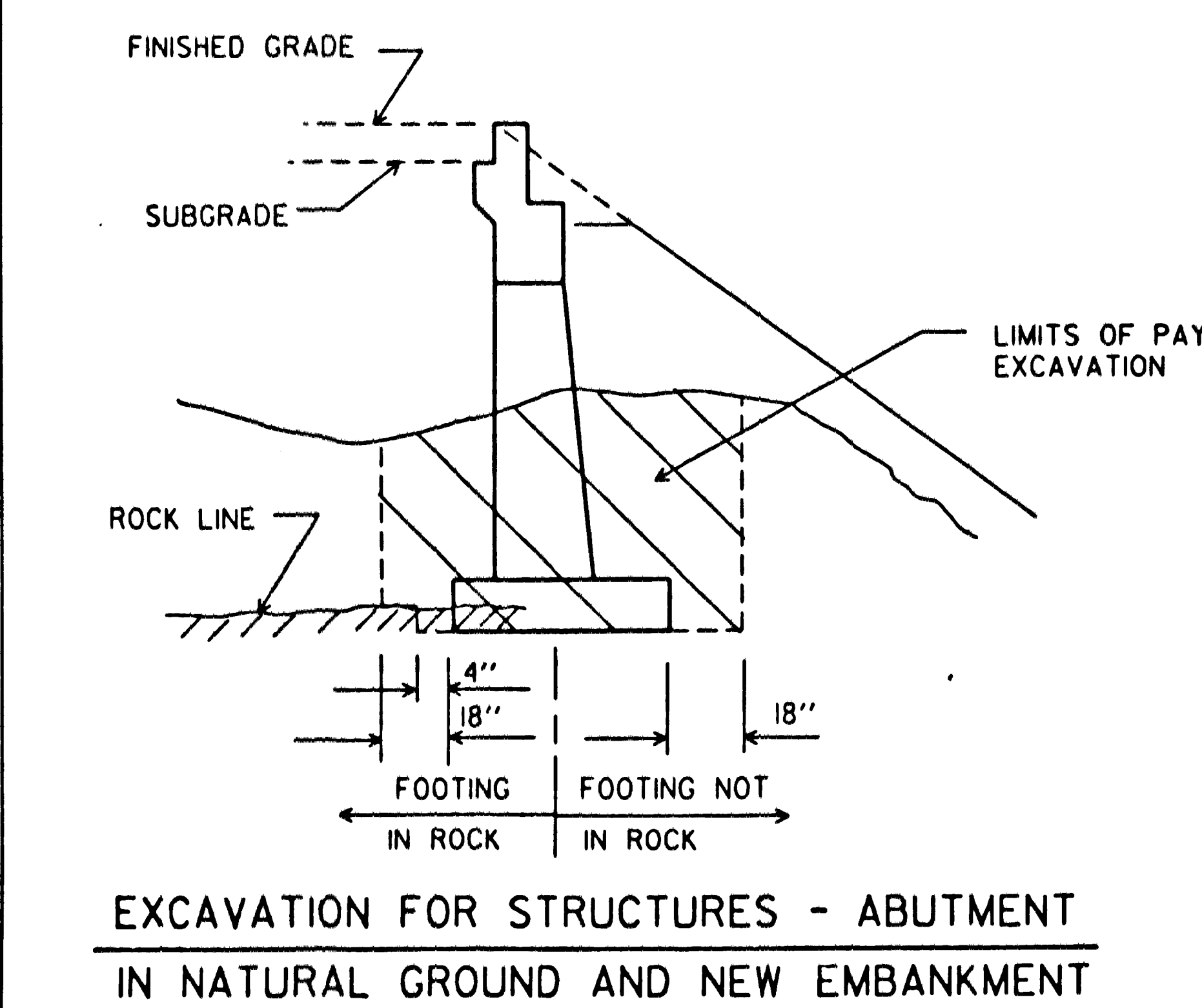
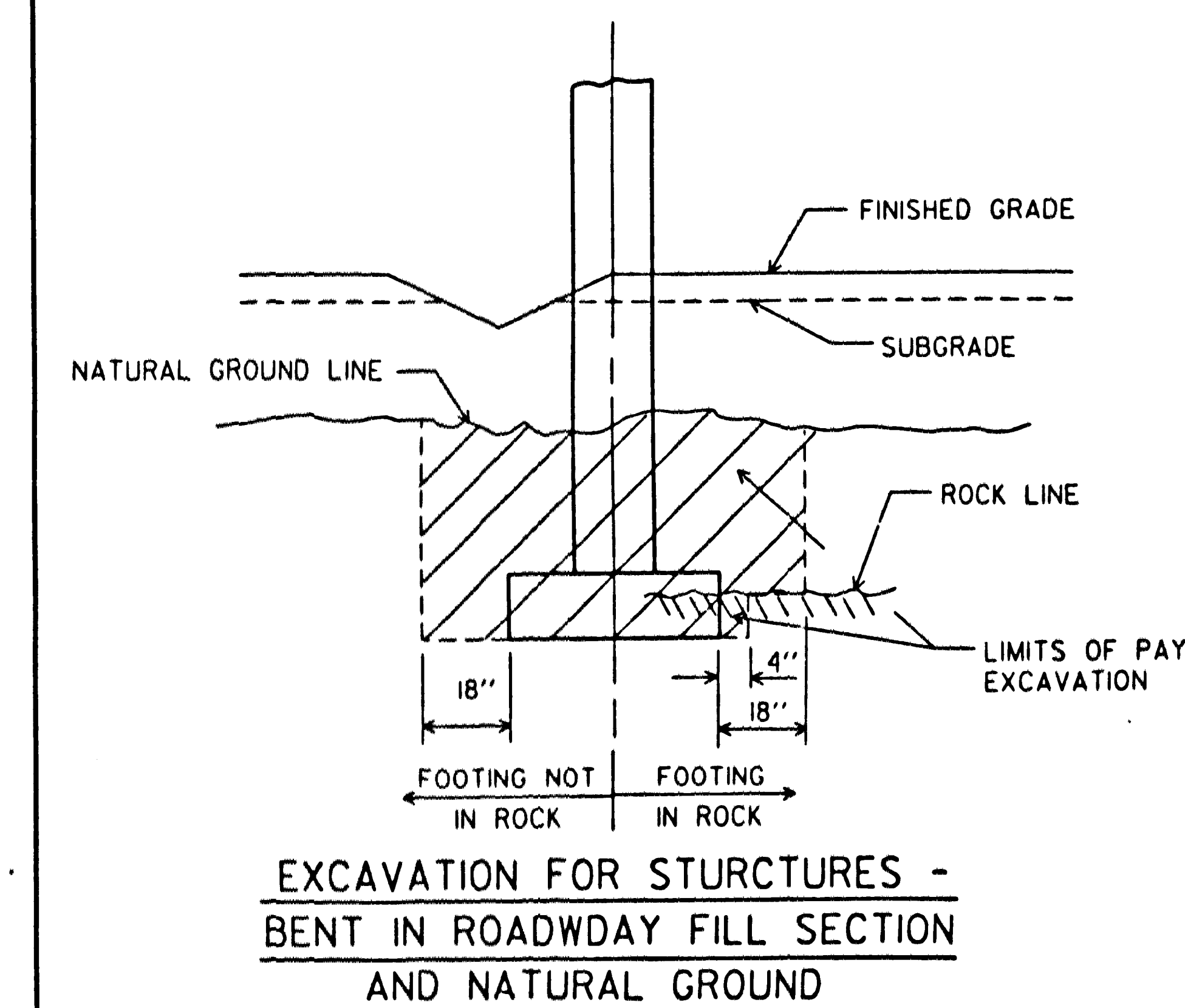
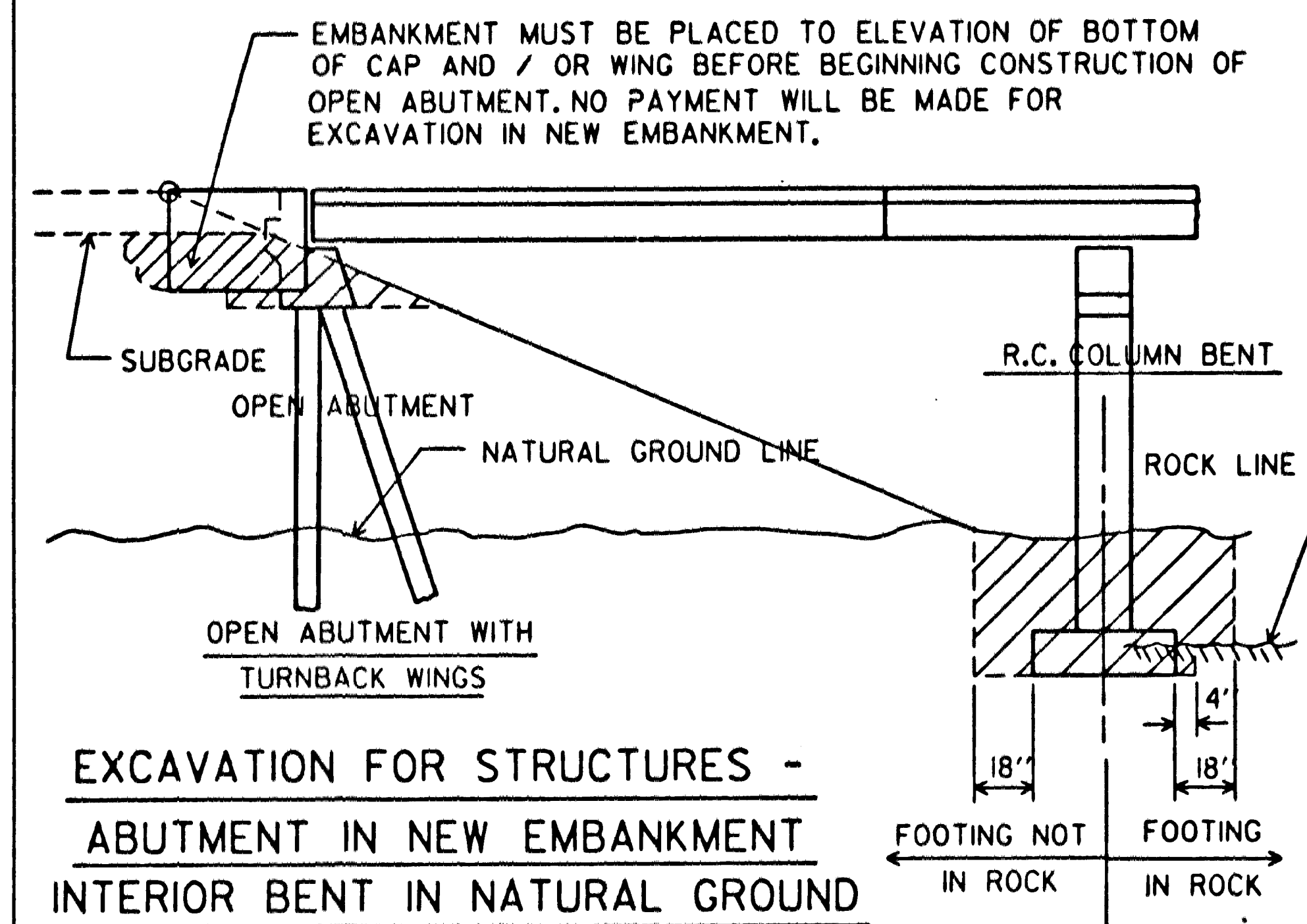
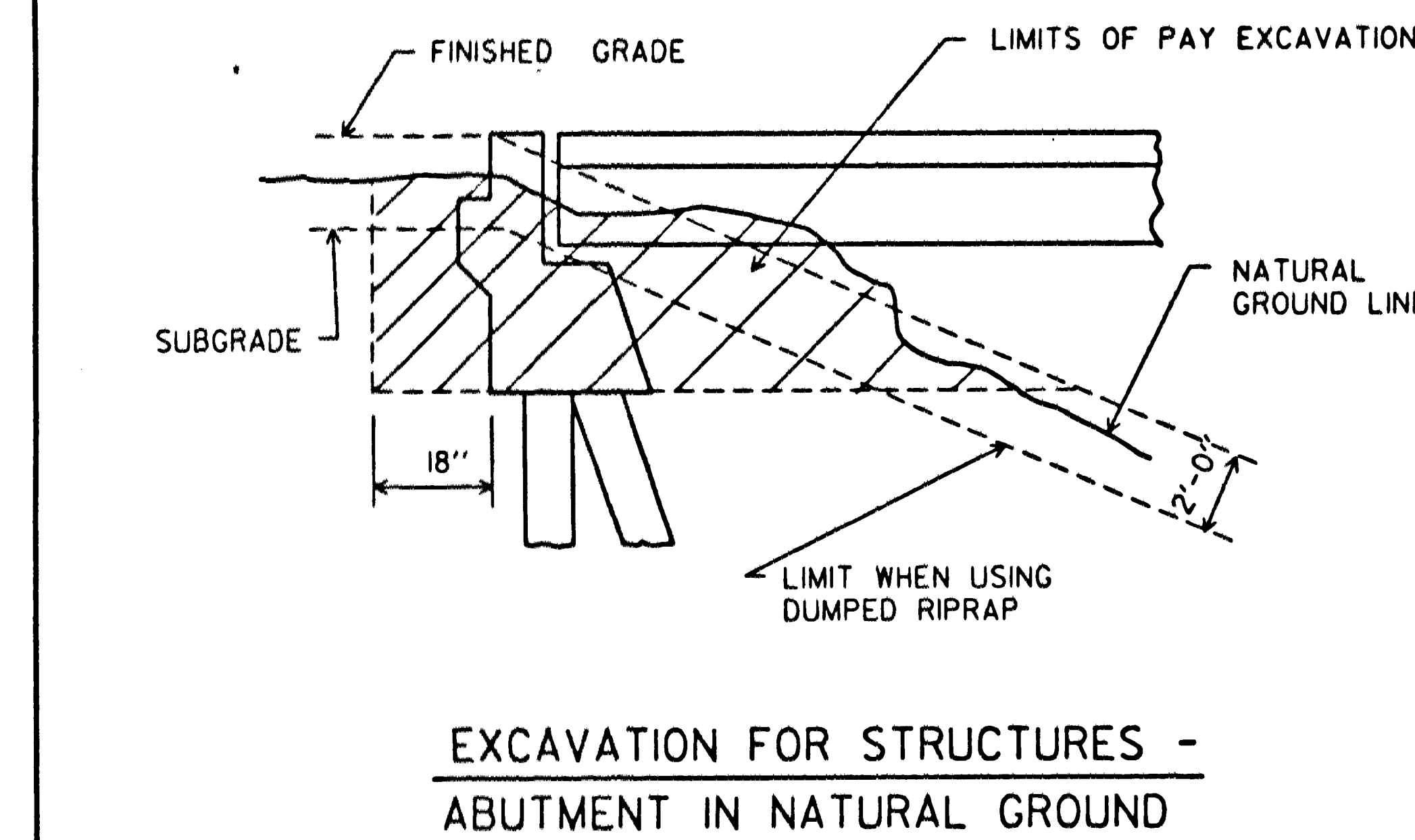
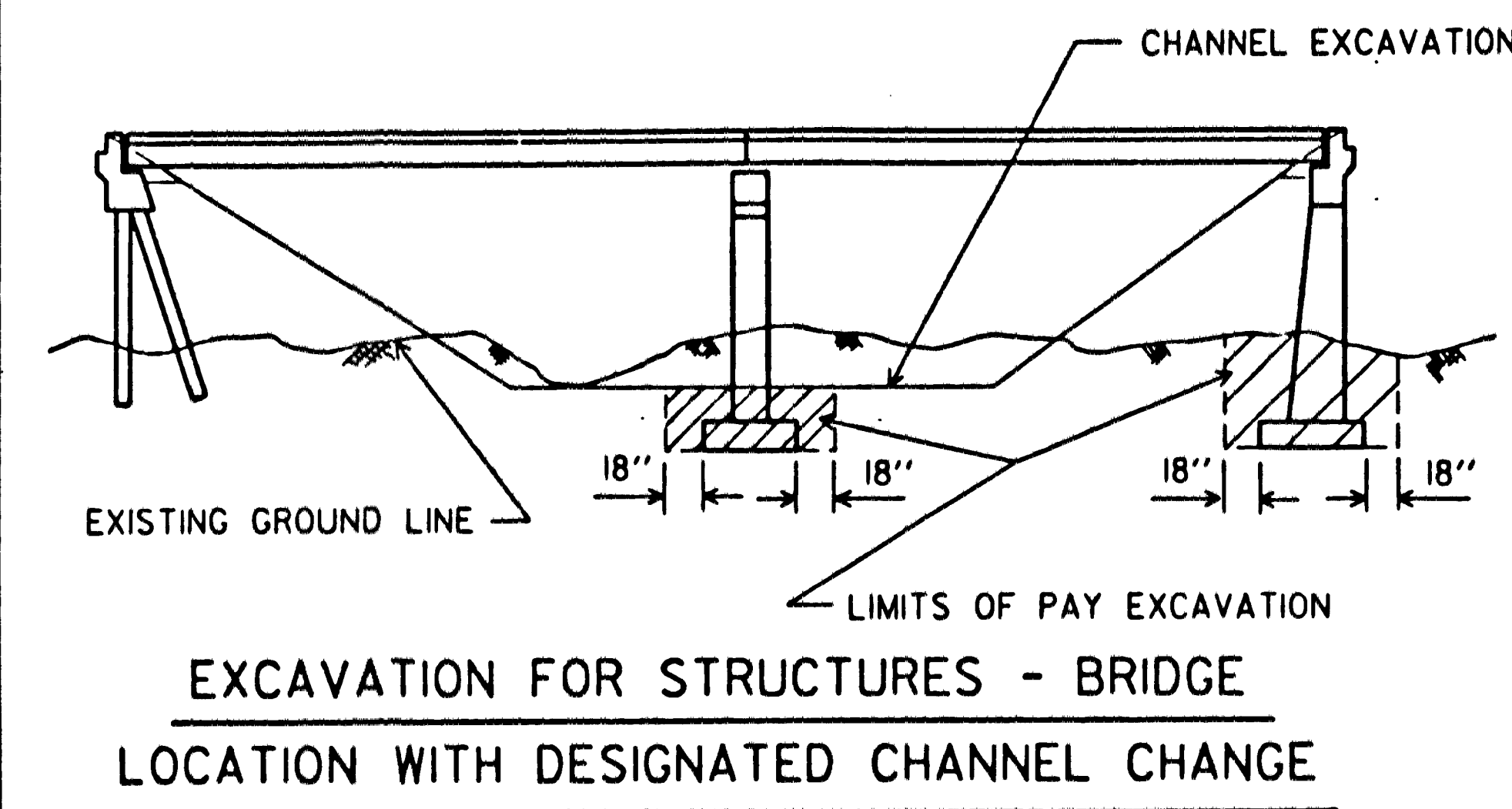
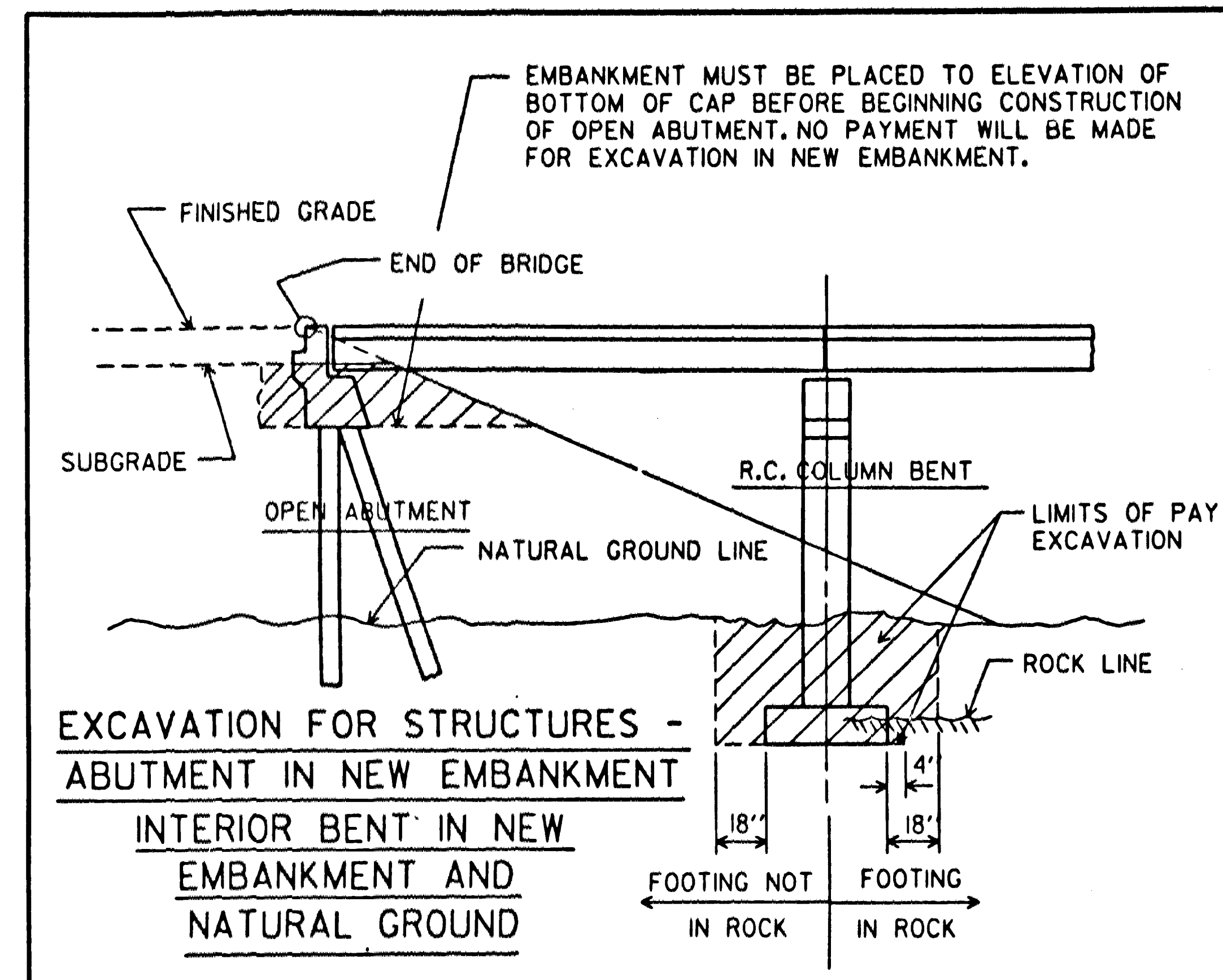


WINGWALL ABUTMENT

GENERAL NOTE
BACKFILL AND EMBANKMENT ADJACENT TO STRUCTURES TO BE CONSTRUCTED IN 4 INCH HORIZONTAL LAYERS (LOOSE MEASURE) AND COMPACTED TO THE SATISFACTION OF THE ENGINEER BY USE OF MECHANICAL EQUIPMENT.

10-2-72	REVISED & REDRAWN	520-10-2-72
DATE	REVISION	DATE FILMED

ARKANSAS STATE HIGHWAY COMMISSION
EMBANKMENT CONSTRUCTION AT
BRIDGE ENDS AND
BACKFILL FOR STRUCTURES
STANDARD DRAWING
1888A



REVISED
OCT 24 1955

