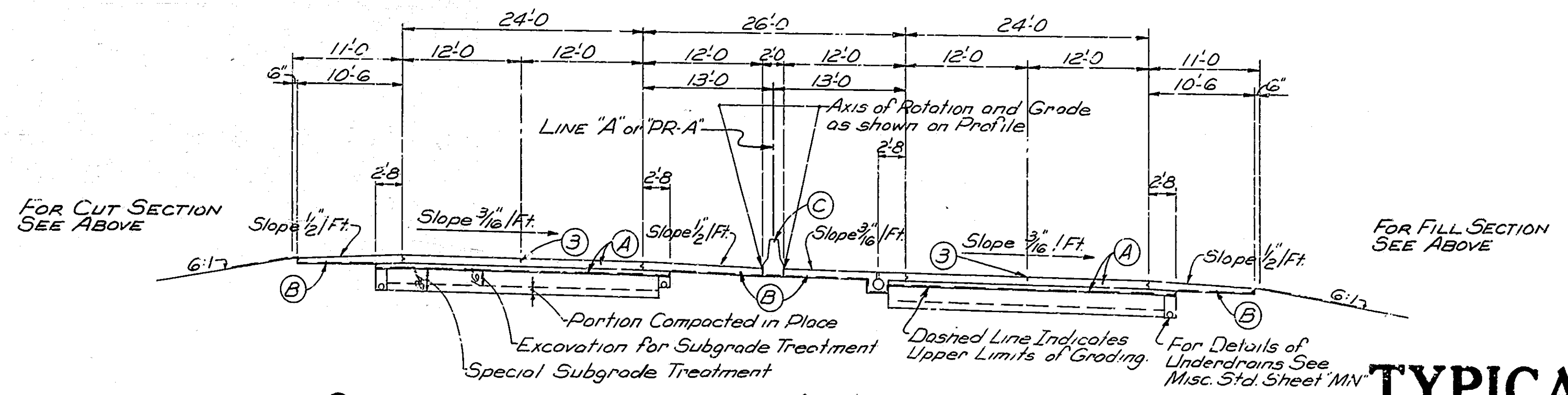
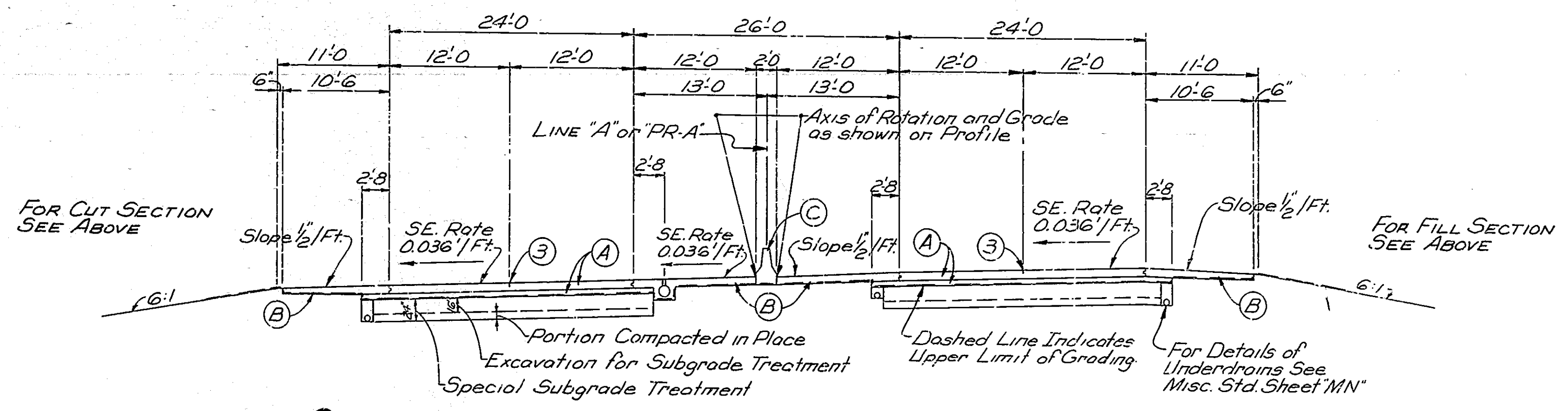
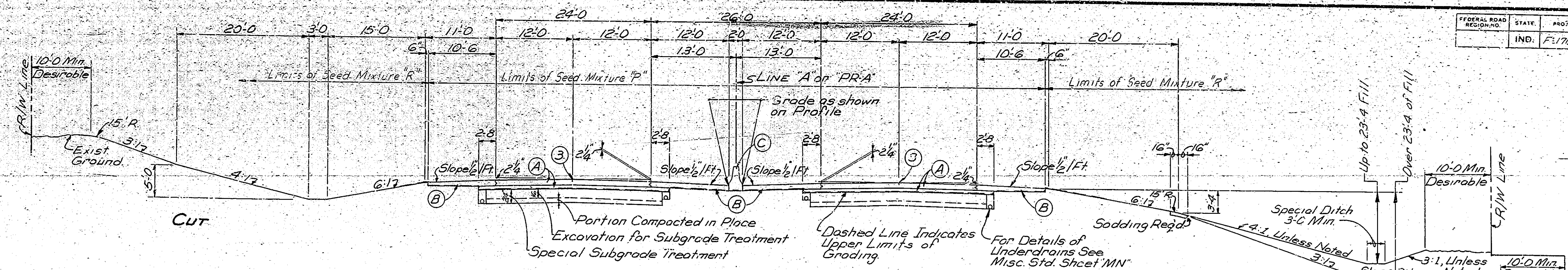


FEDERAL ROAD DISTRICT NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
IND.	FL	170-11	1984	7	24

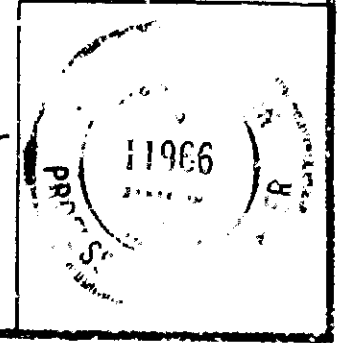


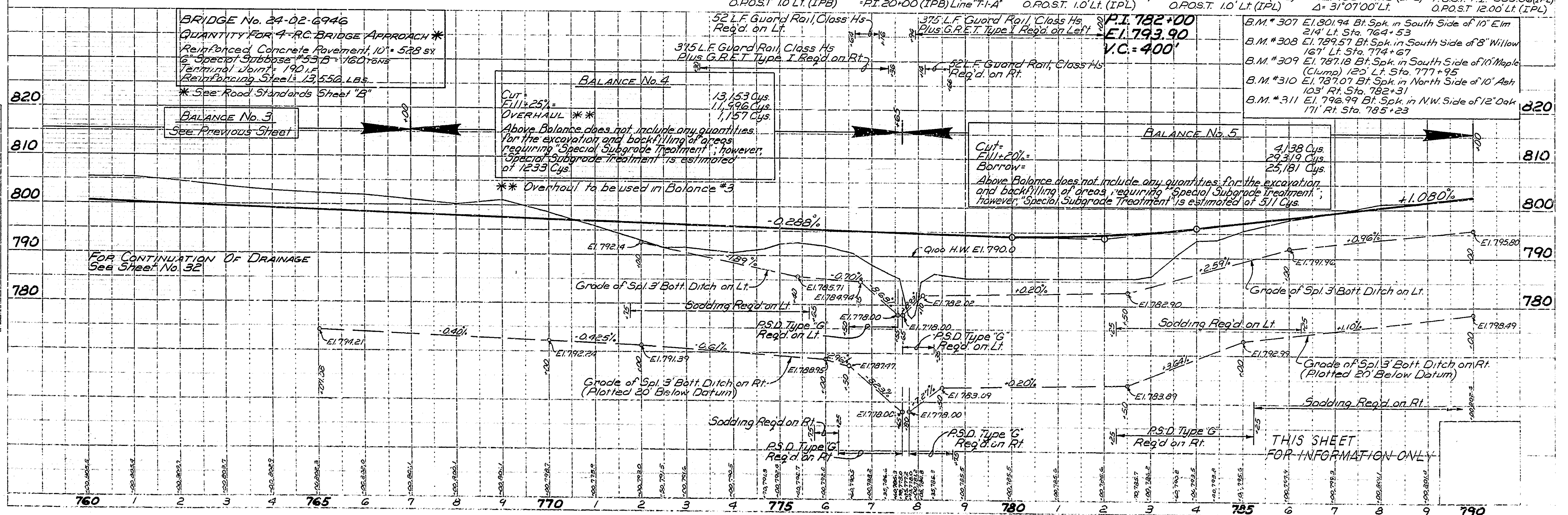
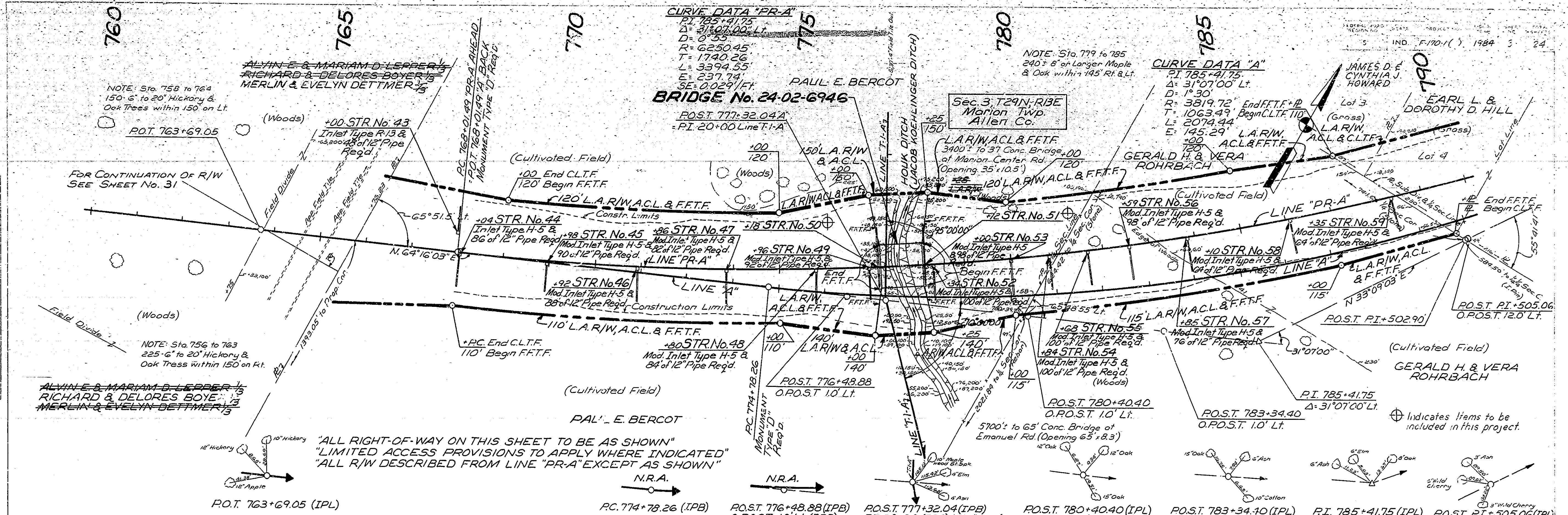
- LEGEND**
- (A) 10" Plain Concrete OVER 6" Special Subbase #53 B
 - (B) Plain Concrete Shoulder
 - (C) Concrete Median Barrier
 - (3) Longitudinal Joint

TYPICAL CROSS SECTIONS

SCALE: 1/8" = 1'-0"

RECOMMENDED FOR APPROVAL





PLAN
 NOTE BOOK: MICHIGAN CHIEFE
 No. 62857, B. CIVIL ENGINEER

PROFILE
 NOTE BOOK: CHIEF ENGINEER
 No. 10702, MICHIGAN CHIEFE

NOTE: Sta. 758 to 764
 150' 6" to 20' Hickory &
 Oak Trees within 150' on Lt.

FOR CONTINUATION OF R/W
 SEE SHEET No. 31

NOTE: Sta. 756 to 763
 225' 6" to 20' Hickory &
 Oak Trees within 150' on Rt.

ALVINE E. & MARIAM D. LEPPER
 RICHARD & DELORES BOYER
 MERLIN & EVELYN DETTMER

"ALL RIGHT-OF-WAY ON THIS SHEET TO BE AS SHOWN"
 "LIMITED ACCESS PROVISIONS TO APPLY WHERE INDICATED"
 "ALL R/W DESCRIBED FROM LINE "PR-A" EXCEPT AS SHOWN"
 N.R.A.

NOTE: Sta. 779 to 785
 240' 8" or Longer Maple
 & Oak within 145' Rt. & Lt.

CURVE DATA "A"
 P.I. 785+41.75
 $\Delta = 31^{\circ}07'00''$ Lt.
 $D = 1^{\circ}30'$
 $R = 3819.72'$ End F.F.T.F. + 12'
 $T = 1063.49'$ Begin CLT.F. 110'
 $L = 2074.44'$
 $E = 145.29'$ L.A.R.W. A.C.L. & F.F.T.F.
 120' A.C.L. & F.F.T.F.

CURVE DATA "PR-A"
 P.I. 775+41.75
 $\Delta = 31^{\circ}07'00''$ Lt.
 $D = 1^{\circ}30'$
 $R = 3819.72'$ End F.F.T.F. + 12'
 $T = 1063.49'$ Begin CLT.F. 110'
 $L = 2074.44'$
 $E = 145.29'$ L.A.R.W. A.C.L. & F.F.T.F.
 120' A.C.L. & F.F.T.F.

BRIDGE No. 24-02-6946
 POST 777+32.04
 P.I. 20+00 Line "A"

CURVE DATA "A"
 P.I. 785+41.75
 $\Delta = 31^{\circ}07'00''$ Lt.
 $D = 1^{\circ}30'$
 $R = 3819.72'$ End F.F.T.F. + 12'
 $T = 1063.49'$ Begin CLT.F. 110'
 $L = 2074.44'$
 $E = 145.29'$ L.A.R.W. A.C.L. & F.F.T.F.
 120' A.C.L. & F.F.T.F.

JAMES D. & CYNTHIA J. HOWARD
 EARL L. & DOROTHY D. HILL

Lot 3 (Grass)
 Lot 4 (Grass)

LINE "PR-A"
 LINE "A"

POST P.I. +505.06
 O.P.O.S.T. 12.00 Lt.

POST P.I. +502.90
 O.P.O.S.T. 12.00 Lt.

POST P.I. +505.06
 O.P.O.S.T. 12.00 Lt.

POST P.I. +502.90
 O.P.O.S.T. 12.00 Lt.

POST P.I. +505.06
 O.P.O.S.T. 12.00 Lt.

POST P.I. +502.90
 O.P.O.S.T. 12.00 Lt.

POST P.I. +505.06
 O.P.O.S.T. 12.00 Lt.

POST P.I. +502.90
 O.P.O.S.T. 12.00 Lt.

POST P.I. +505.06
 O.P.O.S.T. 12.00 Lt.

POST P.I. +502.90
 O.P.O.S.T. 12.00 Lt.

POST P.I. +505.06
 O.P.O.S.T. 12.00 Lt.

POST P.I. +502.90
 O.P.O.S.T. 12.00 Lt.

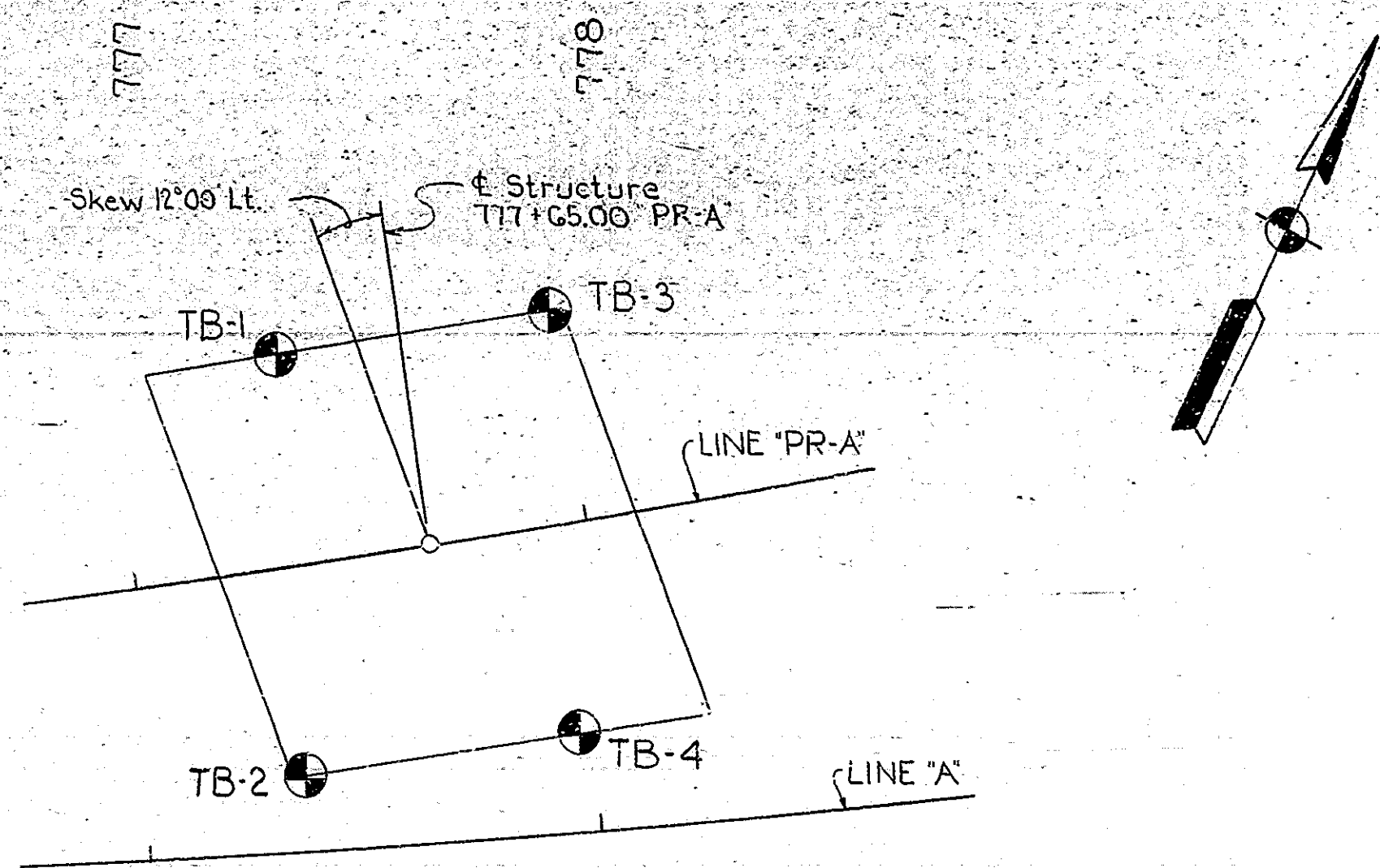
POST P.I. +505.06
 O.P.O.S.T. 12.00 Lt.

POST P.I. +502.90
 O.P.O.S.T. 12.00 Lt.

POST P.I. +505.06
 O.P.O.S.T. 12.00 Lt.

POST P.I. +502.90
 O.P.O.S.T. 12.00 Lt.

THIS SHEET
 FOR INFORMATION ONLY



PLAN
Scale: 1"=30'

BORING N ^o	TB-1					TB-2					TB-3					TB-4					
STATION	777+10					777+50					777+73					778+13					
OFFSET	45' Lt. 'PR-A'					45' Rt. 'PR-A'					45' Lt. 'PR-A'					45' Rt. 'PR-A'					
GROUND EL.	787.8					785.2					782.4					786.0					
DESCRIPTION	SAMPLE EL.	N ^o	N	Rec. %	DESCRIPTION	SAMPLE EL.	N ^o	N	Rec. %	DESCRIPTION	SAMPLE EL.	N ^o	N	Rec. %	DESCRIPTION	SAMPLE EL.	N ^o	N	Rec. %		
780	GROUND EL.	787.8				GROUND EL.	785.2				GROUND EL.	782.4			GROUND EL.	786.0					
	Brown Moist Stiff to Very Stiff SILTY CLAY	785.3	155	4-5-8	100		782.7	155	4-8-8	100	Brown Dry SILTY CLAY LOAM	781.8			Brown Dry SILTY CLAY LOAM	785.4					
		782.3	255	5-7-11	100		780.2	255	6-9-11	100		779.9	155	10-13-16		100	783.5	155	7-7-9	100	
770	Brown Slightly Moist Hard SILTY CLAY LOAM	780.3	355	14-17-25	80	Brown Moist Very Stiff to Hard SILTY CLAY LOAM	777.8	455	9-19-20	80	Brown to Gray Moist Very Stiff to Hard SILTY CLAY LOAM	777.7	355	9-16-27	80	Brown to Gray Moist Very Stiff to Hard SILTY CLAY	779.0	255			
		773.8					776.2					775.2	455	8-18-24	100		777.5	355	18-25-28	80	776.0
	772.8	555	10-15-11	100		770.2	555	8-10-14	90		773.4	2PT			Brown to Gray Moist Very Stiff to Hard SILTY CLAY	774.0					
	767.8	655	20-23-30	100		765.2	655	18-22-27	100		773.4	455	6-13-12	90		771.0	555	8-15-20	100		
760	Gray Moist Very Stiff to Hard SILTY CLAY LOAM with Sand Seams	764.3	755	50/0	0	Gray Moist Very Stiff to Hard SILTY CLAY LOAM	761.6	755	50/1		Gray Slightly Moist Very Stiff to Hard SILTY CLAY LOAM	767.4	555	8-8-18	100	Gray Slightly Moist Hard SILTY CLAY LOAM with Sand Seams	767.0	655	50/5	80	
		759.2	855	50/1	100		756.2	855	30-47-50	100		763.5	655	50/4	100		761.0	755	24-34-40	100	
750	Boring Terminated @ 28.6'					Gray Slightly Moist Very Dense Fine SAND	752.2	855	30-47-50	100	Boring Terminated @ 50'	758.5	755	50/4	80	Boring Terminated @ 30'					
							752.4	855	28-50-50	100		752.4	855	28-50-50	100						
740	Boring Terminated @ 38.8'					Gray Slightly Moist Very Stiff to Hard SILTY CLAY LOAM	748.5	955	50/4	80	Boring Terminated @ 38.8'	743.6	1055	50/3	80						

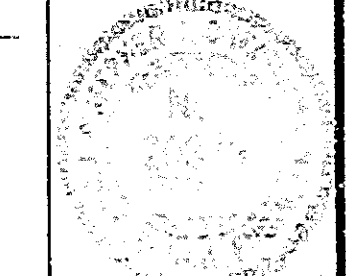
N- Indicates the number of blows to drive a 2" O.D. Split Spoon Sampler 1/2 inches by means of a 140lb. weight falling 30 inches

SOIL BORINGS
INDIANA DEPARTMENT OF HIGHWAYS

SCALE: As Noted DATE: June 21, 1984

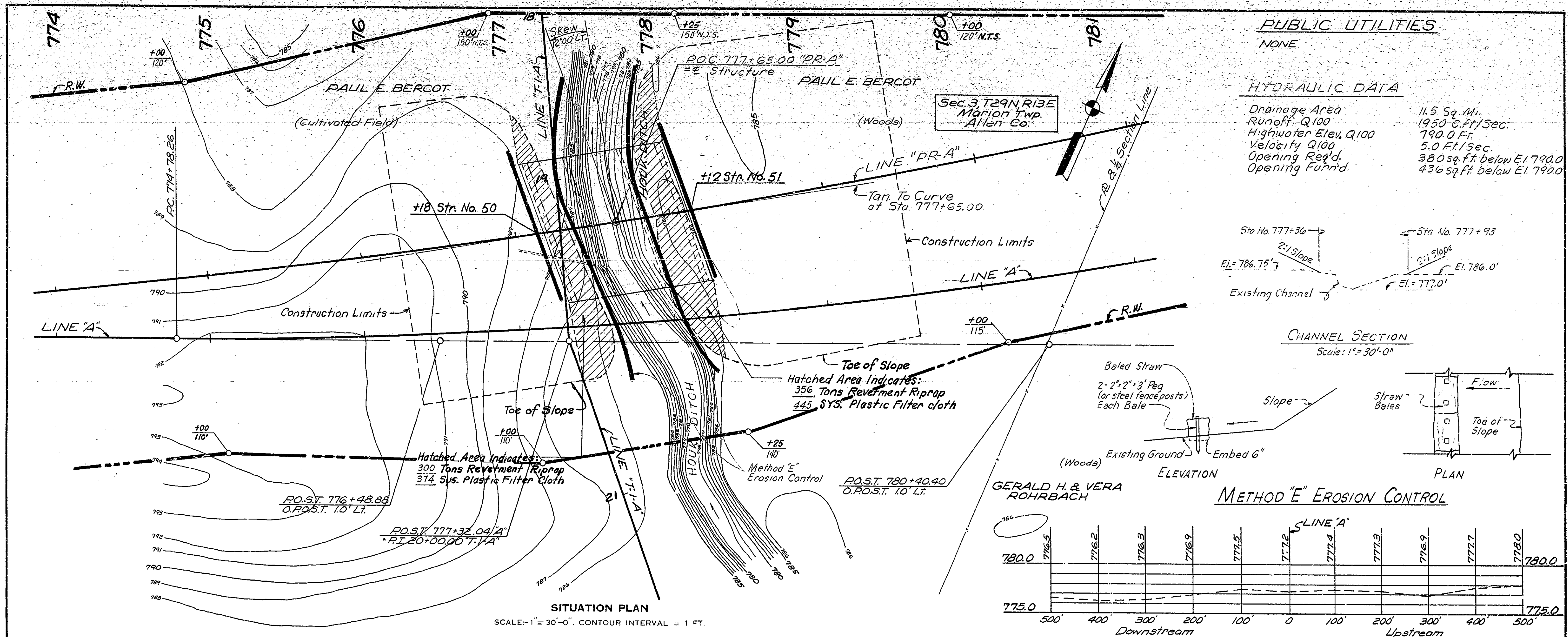
SUBMITTED FOR APPROVAL: *Stephen J. Christian*

DRAWING: OF SHEET: 4 OF 24
PROJECT: F-170-1()
CONTRACT NO. B-17120
BRIDGE FILE: 24-02-6946



BRIDGING 2413P

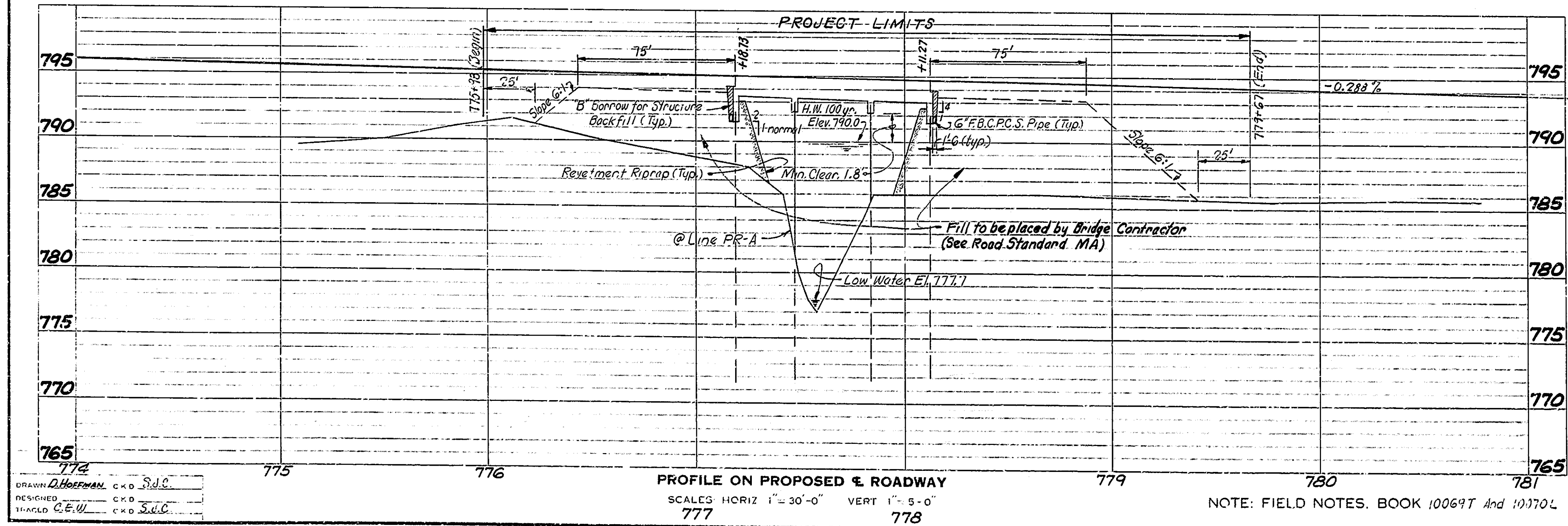
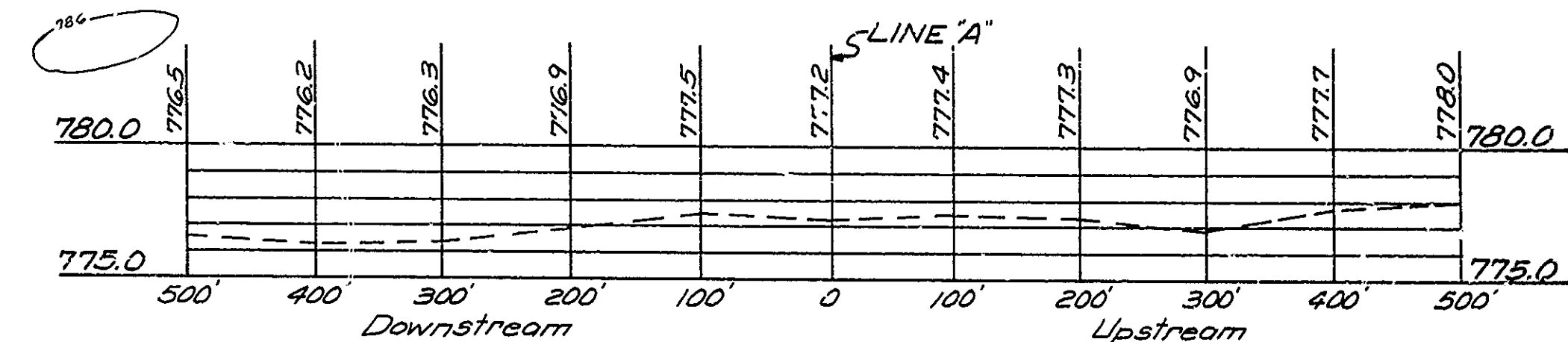
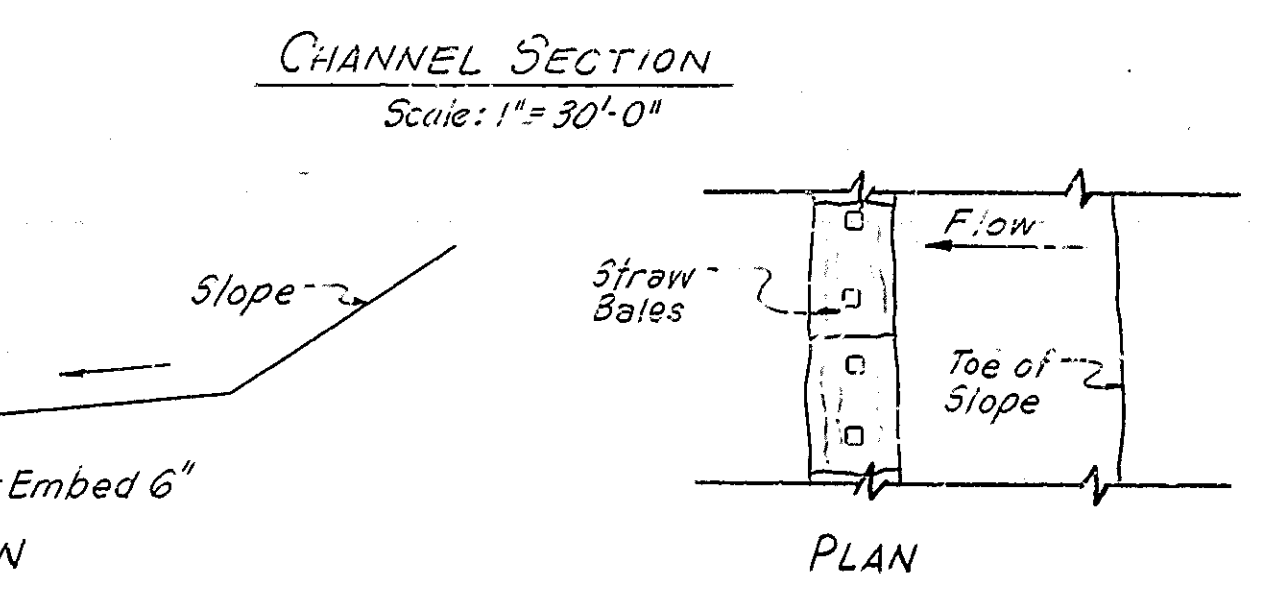
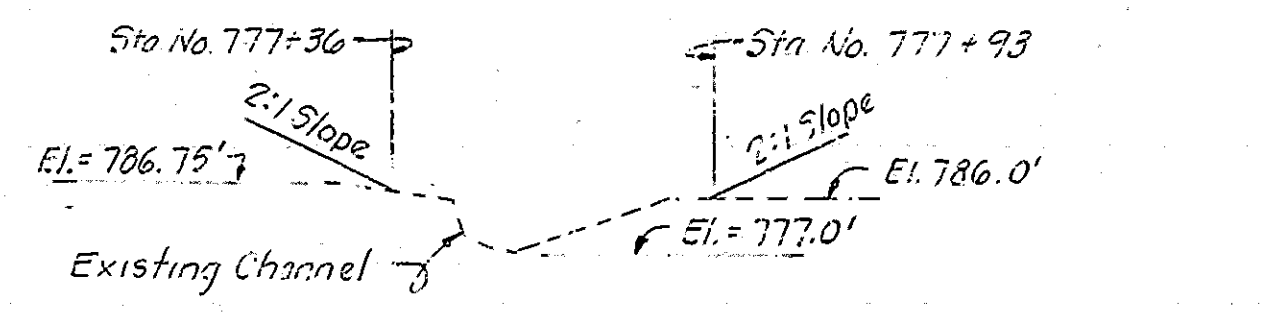
DESIGNED: C.K.D.
DRAWN: S.S. S.D.C.
TRACED: C.K.D.



PUBLIC UTILITIES
NONE

HYDRAULIC DATA

Drainage Area	11.5 Sq. Mi.
Runoff Q100	1950 C.Ft./Sec.
Highwater Elev. Q100	790.0 Ft.
Velocity Q100	5.0 Ft./Sec.
Opening Req'd.	380 sq. ft. below E.I. 790.0
Opening Found.	436 sq. ft. below E.I. 790.0



STREAM PROFILE

P.I. 782.100
EL. 793.90
V.C. = 400'

EARTHWORK SUMMARY

Line "FRA"	
Fill + 25%	9005.0 CYS.
Common Excavation	200.0 CYS.
Borrow	8805.0 CYS.

"B" Borrow for Structure Backfill = 15.4 CYS.

LAYOUT
CONTINUOUS REINFORCED CONCRETE SLAB BRIDGE
3 Spans: 28'-0", 35'-0", 28'-0" 5k. 12'-00" LI. - 28'-45" Clear Roadways
Over Hook Ditch On US. 24

INDIANA STATE HIGHWAY COMMISSION
ALLEN COUNTY

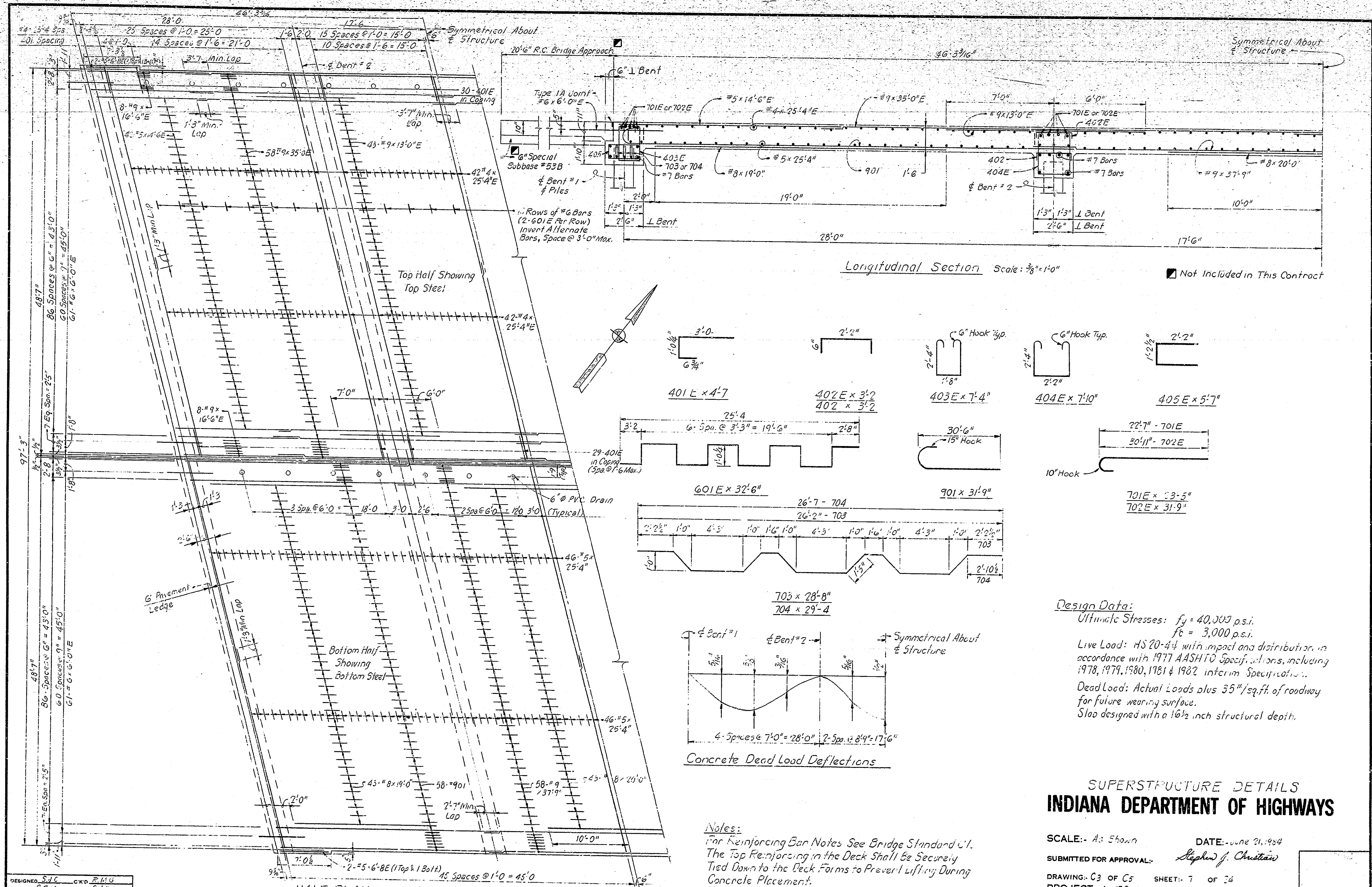
SCALE: AS NOTED DATE: June 21, 1984 1984
SUBMITTED FOR APPROVAL: Stephen J. Christian

DRAWING: C1 OF C3 SHEET: 5 OF 24
PROJECT: F-170-11 STATION: 777-65.0 PRA
BRIDGE CONTRACT NO. B-1712C
BRIDGE FILE: 24-02-6942

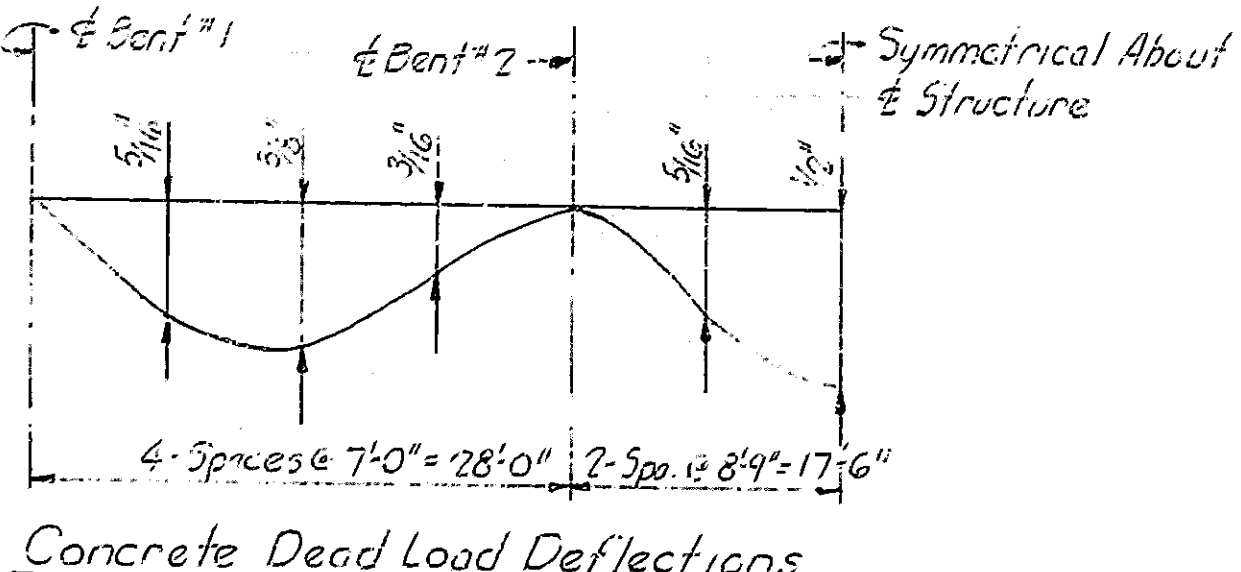
NOTE: FIELD NOTES, BOOK 10069T And 10170L

Revised 12-29-86: Rev Earthwork; Added Erosion Control

DRAWN: D. HOFFMAN C.K.D. S.D.C.
DESIGNED: C.F.D.
IN CHARGE: C.F.W. C.K.D. S.D.C.



Design Data:
 Ultimate Stresses: $f_y = 40,000$ p.s.i.
 $f_c = 3,000$ p.s.i.
 Live Load: HS 20-44 with impact and distribution in accordance with 1977 AASHTO Specifications, including 1978, 1979, 1980, 1981 & 1982 interim Specifications.
 Dead Load: Actual Loads plus 35#/sq.ft. of roadway for future wearing surface.
 Slab designed with a 16 1/2 inch structural depth.

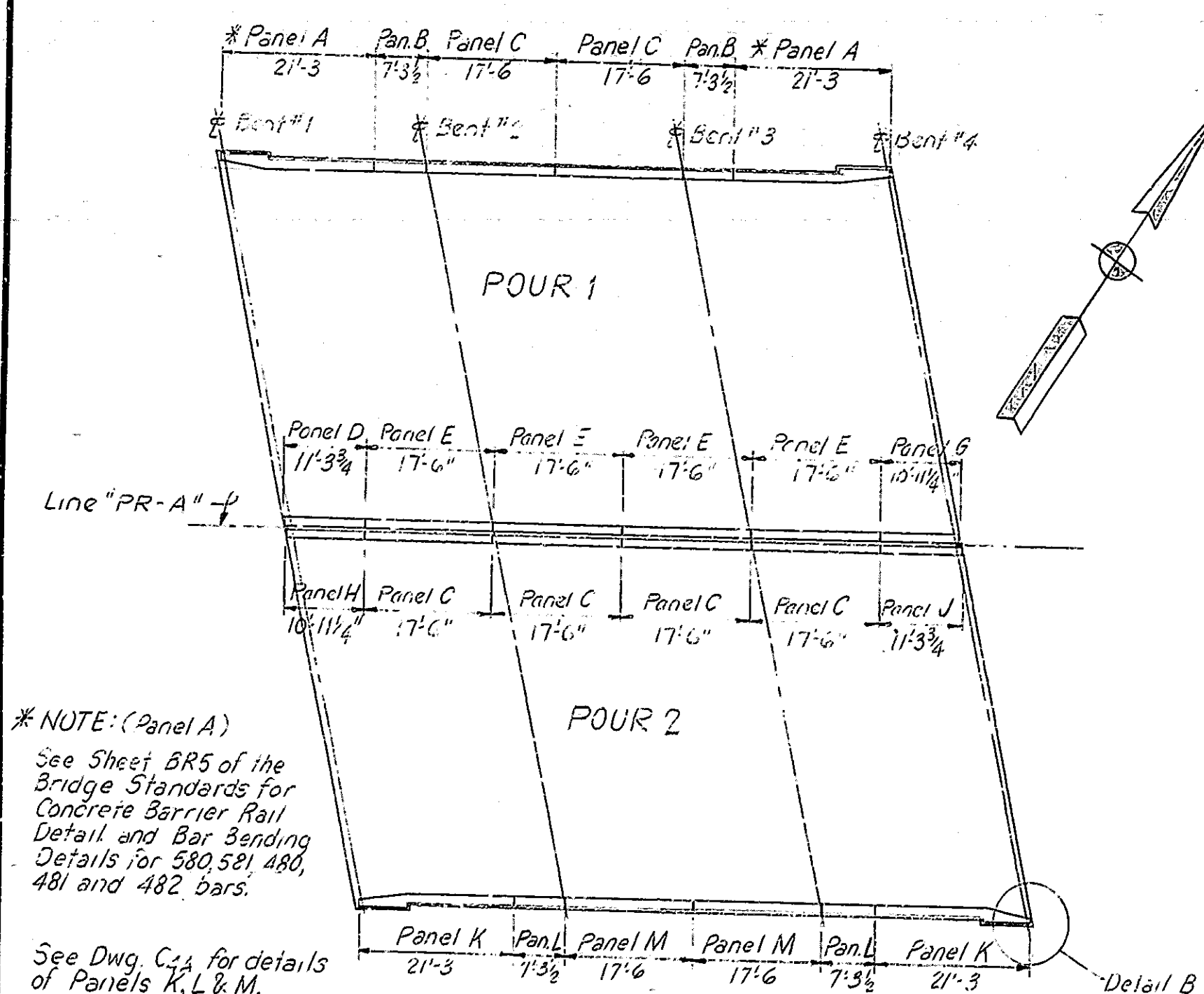
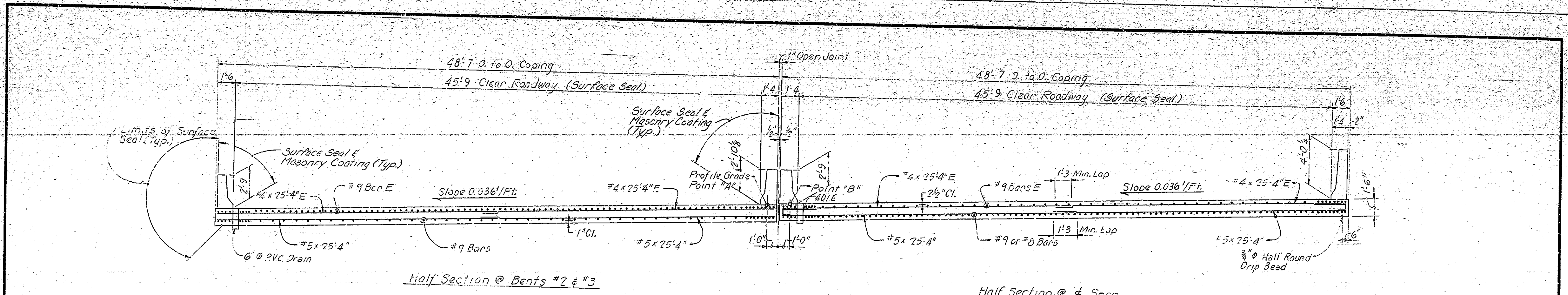


**SUPERSTRUCTURE DETAILS
 INDIANA DEPARTMENT OF HIGHWAYS**

SCALE: As Shown
 DATE: June 21, 1984
 SUBMITTED FOR APPROVAL: Stephen J. Christian
 DRAWING: C3 OF C5 SHEET: 7 OF 24
 PROJECT: F-170-11
 CONTRACT NO. B-17120
 BRIDGE FILE: 24-JL-634b

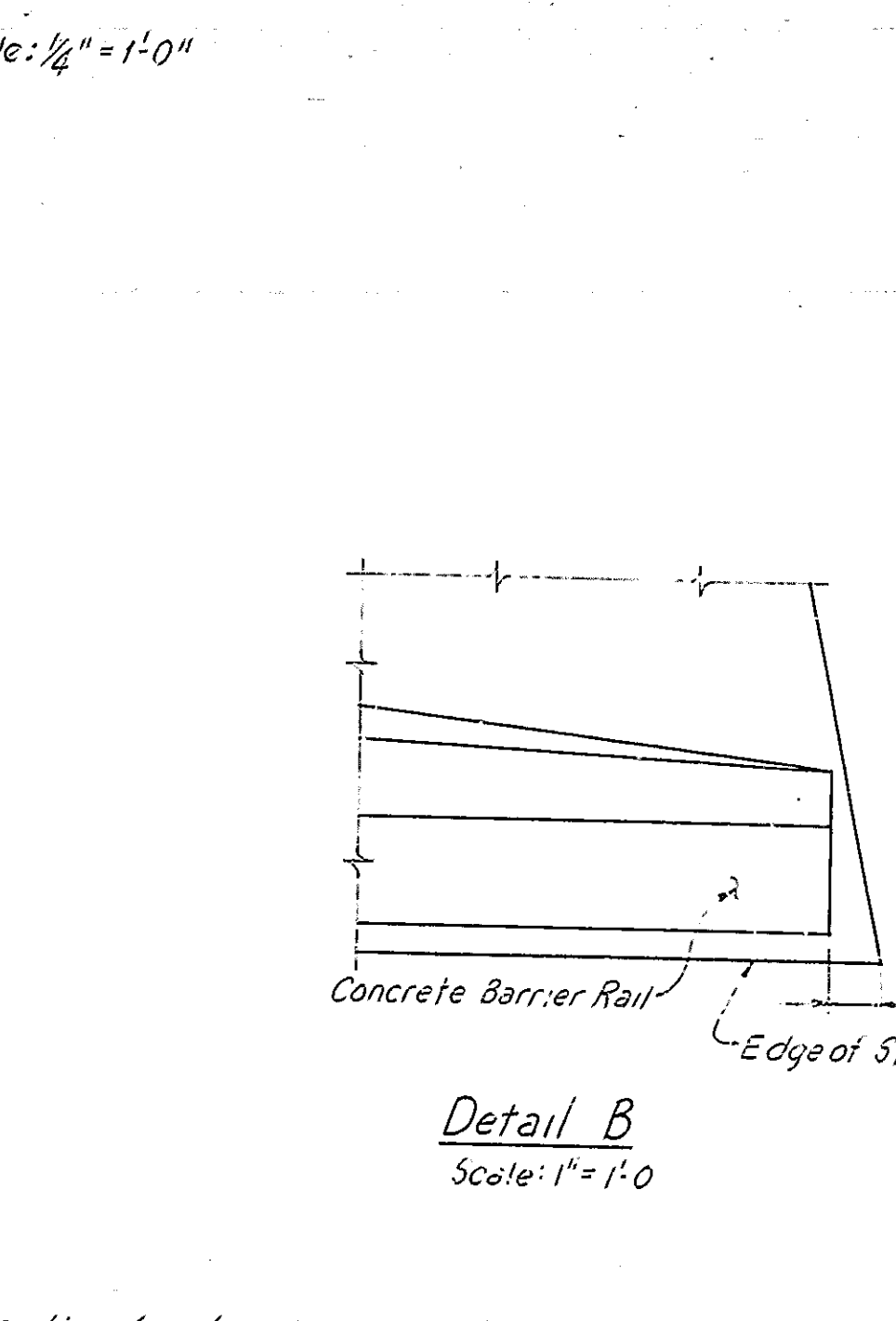
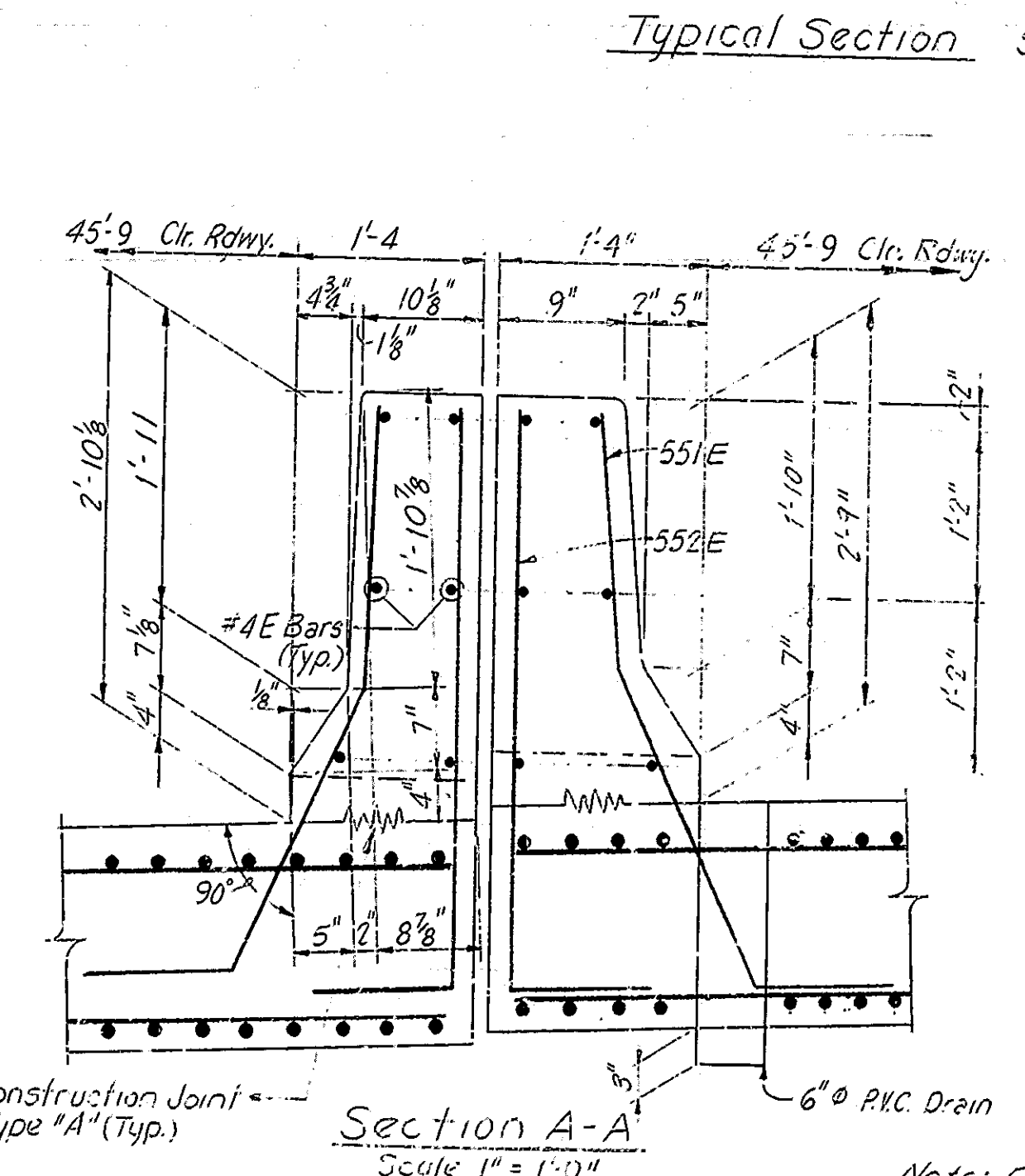
Notes:
 For Reinforcing Bar Notes See Bridge Standard C.I.
 The Top Reinforcing in the Deck Shall Be Securely Tied Down to the Deck Forms to Prevent Lifting During Concrete Placement.
 The designation "E" with a bar size or mark indicates the bar is to be epoxy coated.
 Revised 12-29-80

DESIGNED: SJC C.K.D. R.M.G.
 DRAWN: C.E.W. C.K.D. S.U.C.
 TRACED: C.K.D.



* NOTE: (Panel A)
See Sheet BR5 of the Bridge Standards for Concrete Barrier Rail Detail and Bar Bending Details for 580, 521, 480, 481 and 482 bars.

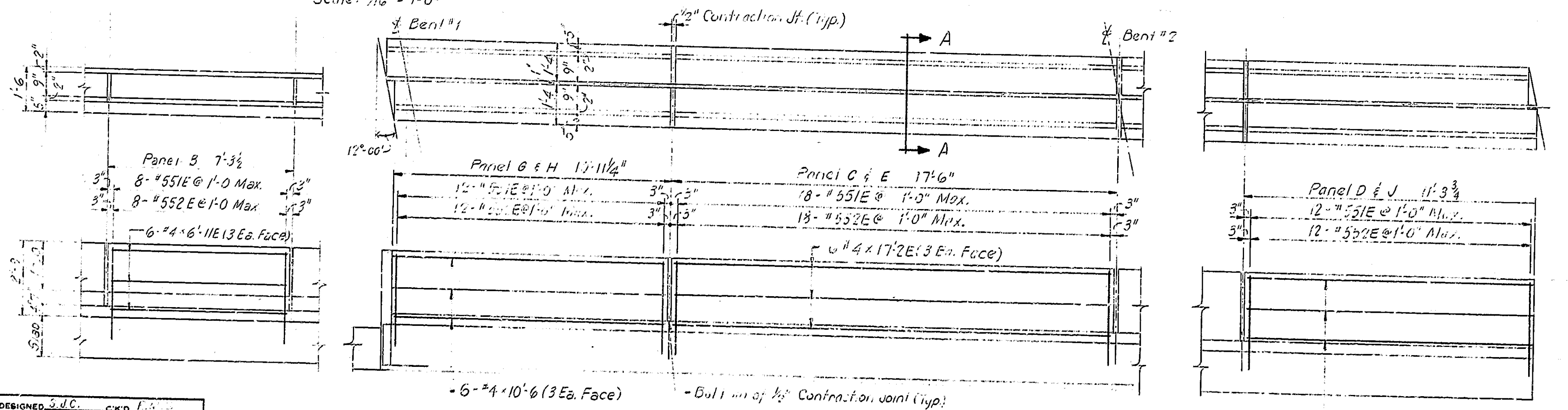
See Dwg. C-4 for details of Panels K, L & M.



Note: Concrete Railing shall be cast vertically at all locations except at the high side in superelevated sections. In those areas it shall be cast perpendicular to the deck surface. See this drawing and Dwg. C-4A for details.

Note: For optional splice in vertical railing reinforcing steel, see Br. Std. C-3.

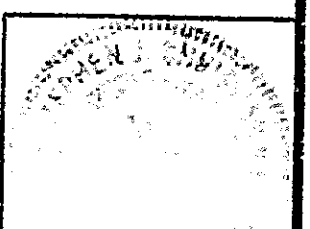
See Bridge Std. C1 for Reinf. Bar Notes.

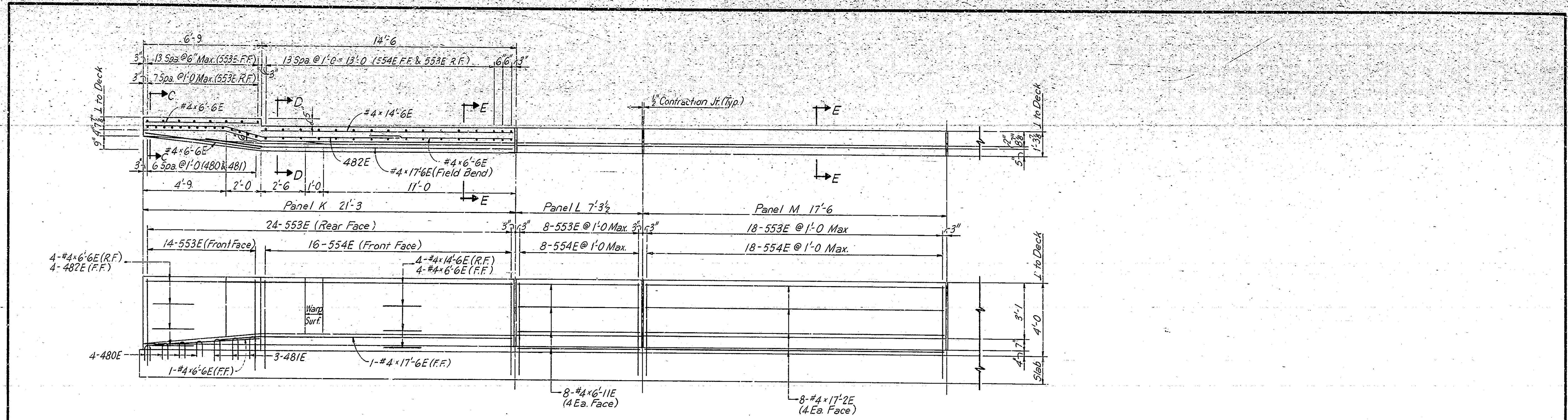


DESIGNED: J.A.C. CKD: J.A.C.
DRAWN: S.E.W. CKD: J.A.C.
TRACED: CKD

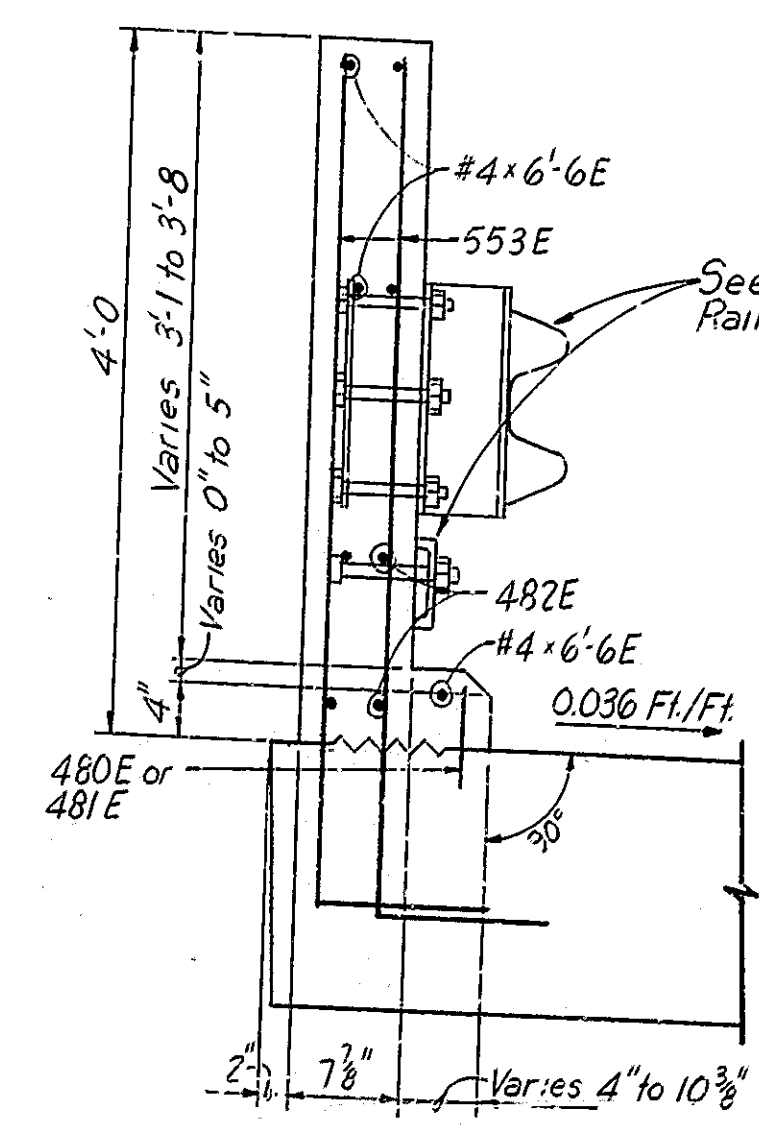
SUPERSTRUCTURE DETAILS
INDIANA DEPARTMENT OF HIGHWAYS

SCALE: As Shown
DATE: June 21, 1954
SUBMITTED FOR APPROVAL: Stephen J. Christman
DRAWING: C-6 OF C-5 SHEET: 8 OF 24
PROJECT: F-170-11
CONTRACT NO. B-17120
BRIDGE FILE: 24-02-6946

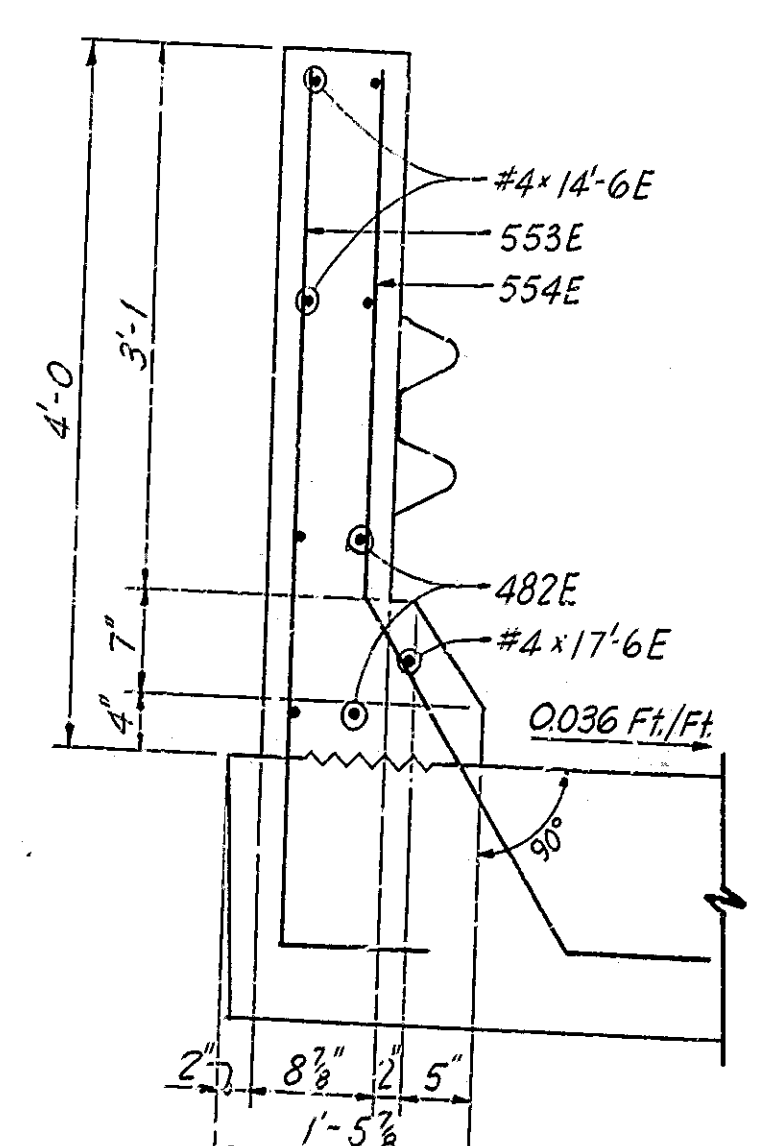




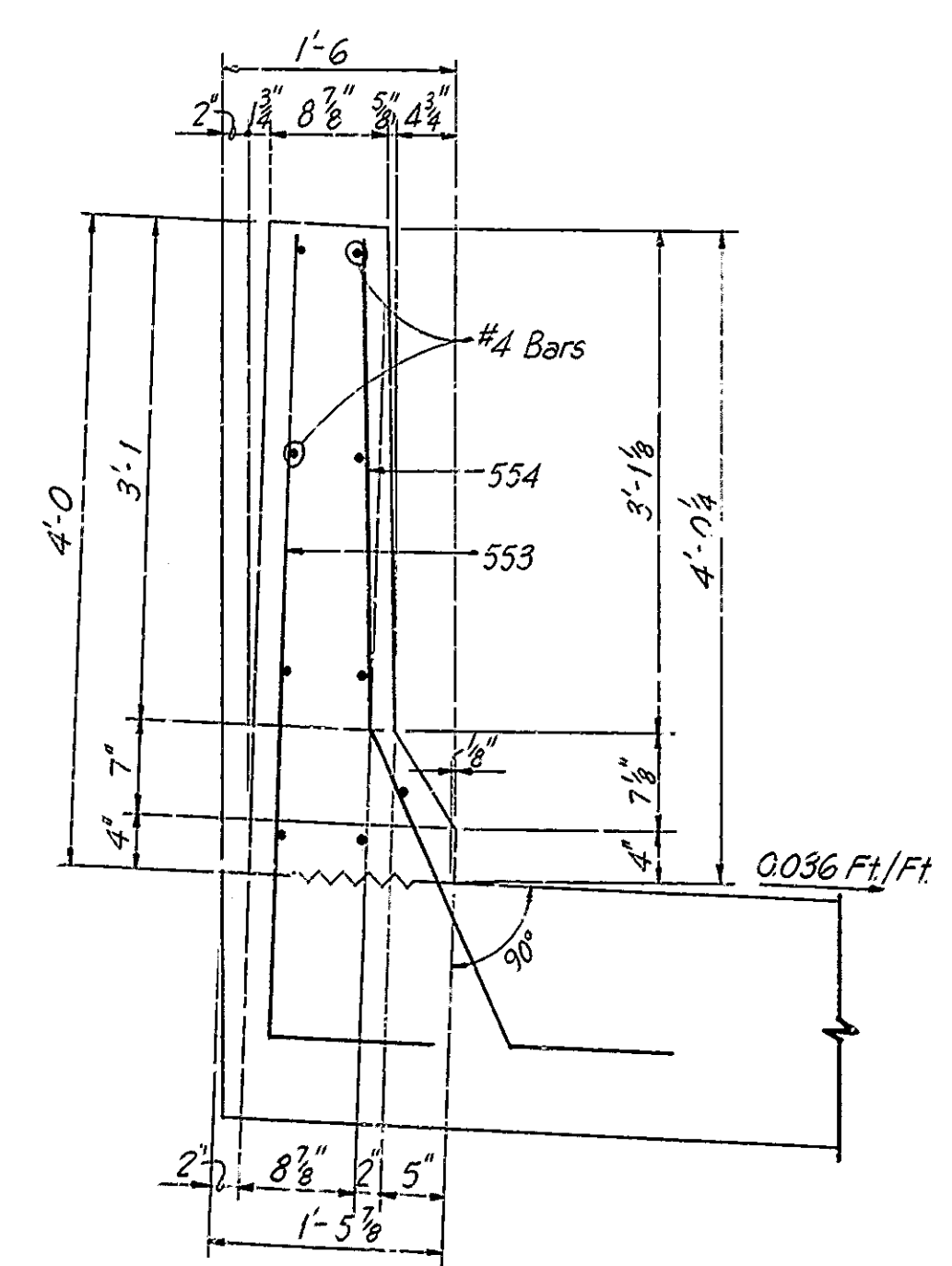
PLAN AND ELEVATION OF CONCRETE BARRIER RAIL
Scale: 3/8" = 1'-0"



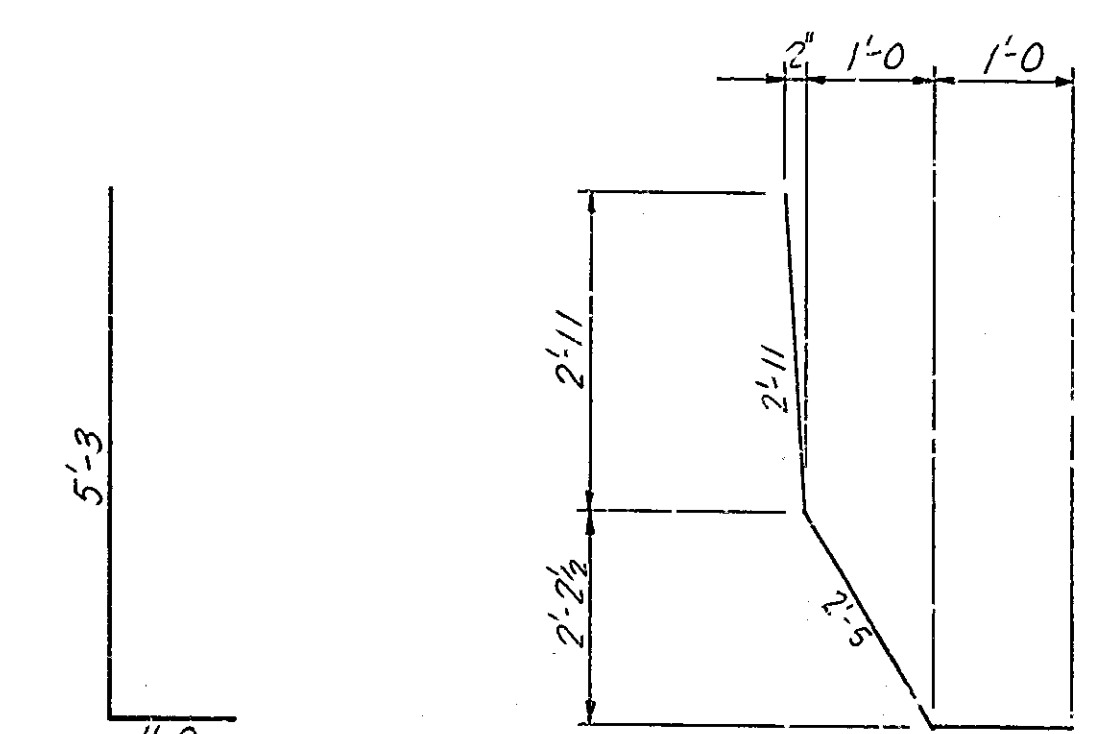
SECTION C-C
Scale: 1" = 1'-0"



SECTION D-D
Scale: 1" = 1'-0"



SECTION E-E
Scale: 1" = 1'-0"



See Bridge Std. C1 for Reinf. Bar Notes.

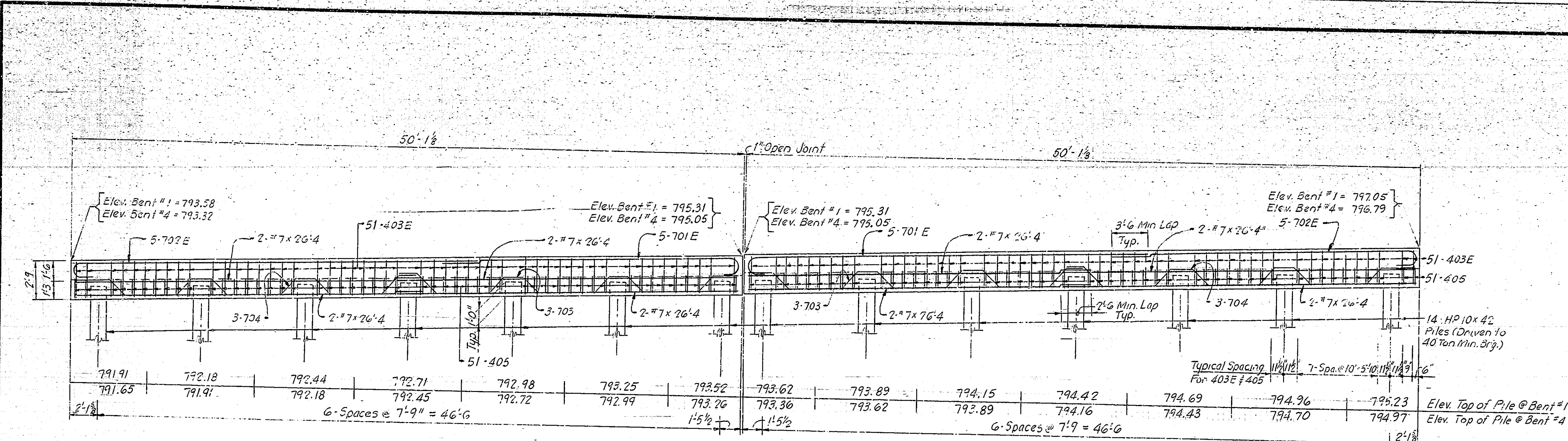
SUPERSTRUCTURE DETAILS
INDIANA DEPARTMENT OF HIGHWAYS

SCALE: - AS NOTED DATE: 19

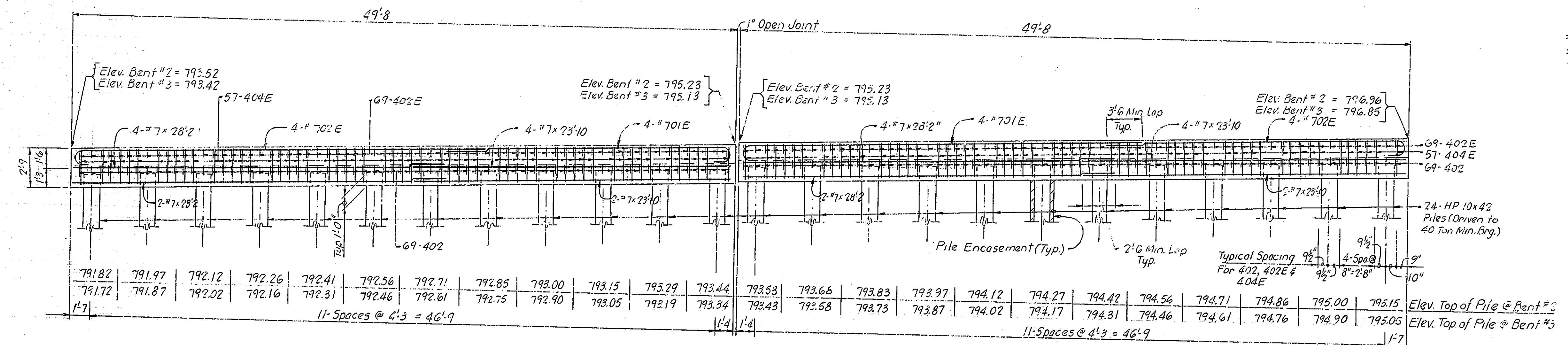
DESIGNED	C.K.D.
DRAWN	C.K.D.
TRACED	C.K.D.

SF-22317

DRAWING: C_{8A} OF C₅ SHEET: 8A OF 24
PROJECT: F-170-11
BRIDGE CONTRACT NO. B-17120
BRIDGE FILE: 74-02-6946



Elevation Bent #1 or #4



Elevation Bent #2 or #3

BILL OF MATERIALS SUPERSTRUCTURE			
EPOXY COATED REINF. STEEL			
Size or MARK	Number of Bars	Length (Ft.)	Weight (Lbs.)
#9E	232	35'0"	
#9E	64	16'6"	
#9E	172	13'0"	
Total No. 9			38,801
#701E	36	23'5"	
#702E	36	31'9"	
Total No. 7			4,059
#601E	104	32'6"	
#6E	244	6'0"	
Total #6			3,276
#551E	244	5'2"	
#552E	244	5'0"	
#553E	128	6'3"	
#554E	84	6'4"	
#580E	76	3'9"	
#581E	32	3'11"	
#5E	168	12'3"	
#5E	4	6'11"	
#5E	4	6'8"	
Total No. 5			7,002
#401E	236	4'7"	
#402E	276	3'2"	
#403E	204	7'4"	
#404E	228	7'10"	
#480E	16	7'9"	
#481E	12	2'5"	
#482E	14	16'7"	
#4E	336	25'4"	
#4E	4	17'6"	
#4E	76	17'2"	
#4E	14	14'6"	
#4E	12	10'10"	
#4E	12	10'6"	
#4E	28	6'11"	
#4E	32	6'6"	
Total No. 4			16,371
Total Epoxy Coated Reinf			68,009
REINFORCING STEEL			
#901	232	37'9"	
#9	116	37'9"	
Total No. 9			32,433
#8	86	20'0"	
#8	172	19'0"	
Total No. 8			13,318
#703	12	20'8"	
#704	12	25'4"	
#7	24	28'4"	
#7	32	26'4"	
#7	24	23'10"	
Total No. 7			5,690
#5	368	23'4"	
Total No. 5			9,723
#402	276	3'2"	
#403	204	5'7"	
Total No. 4			343
Total Reinforcing Steel			70,015

* See Bridge Std. BRS for Bar Bending Detail.

BILL OF MATERIALS SUPERSTRUCTURE CONCRETE	
POUR #1	274.3 CY
POUR #2	274.3 CY
Total Class "C" Conc. in Superstr	548.6 CY
Total Class "C" Conc. in Parlt. mg	401 CY
MISCELLANEOUS	
Surface Seal (11000 SF Est. Quant)	L. Sum Item
Steel H Piles 10x42	2546 L.F.
Pile Encasement Concrete	792 L.F.

SUPERSTRUCTURE DETAILS
INDIANA DEPARTMENT OF HIGHWAYS

SCALE: 1/4" = 1'-0" DATE: Nov. 21, 1984

SUBMITTED FOR APPROVAL: Stephen J. Christian

DRAWING: C3 OF 5 SHEET: 9 OF 24
PROJECT: F-170-11
CONTRACT NO. B-17120
BRIDGE FILE: 24-02-6946

DESIGNED: S.D.C. CHK: R.M.G.
DRAWN: S.E.W. CHK: S.D.C.
TRACED: CKD

Revised 12-29-86: Rev. Elev's due to Superlevation Change.
Bill of Mat'ls to reflect add'n of BRS...

ITEM	CONCRETE												STRUCTURE												QUANTITIES											
	CLASS C SUPERSTR	CLASS A SUBSTR	CLASS B ABOVE FTG	CLASS B IN FTG	CONCRETE RAILING CLASS C				REINF STEEL TOTAL	STRUCT STEEL ***	SPWY. COATED REINF STEEL	ANCHOR PLATES MK-AP	FILES				CAST IRON DRAIN-PIPE	CAST IRON GRATES, BASINS, & FITTINGS	RAILING TYPE SA OR C1	EXP. JOINT TYPE	EXP. JOINT CLASS	CONC. STR. MEMBERS		BRIDGE DECK SURFACE	SURFACE CEMENT	FINISHING AND CURING	BLASTING AND CLEANING	MASONRY COATING								
	CU. YDS.	CU. YDS.	CU. YDS.	CU. YDS.	CU. YDS.	LIN. FT.	LBS.	LBS.	LBS.	EACH	NO.	LIN. FT.	NO.	LIN. FT.	NO.	LIN. FT.	NO.	LIN. FT.	NO.	LIN. FT.	NO.	LIN. FT.	SQ. FT.	LIN. FT.	SQ. YDS.	SQ. FT.	SQ. YD.	SQ. YD.	SQ. FT.							
	548.6				40.1	70,015			68,009					48	792	76	2546																			
TOTALS	548.6				40.1	70,015		68,009					48	792	76	2546																				

STRUCT. NO.	LOCATION	SIZE	APPROACH DESCRIPTION		STRUCTURES			REMARKS
			KIND	LENGTH LIN. FT.	CONCR. CL. A IN STRS. CU. YDS.	REINF STEEL LBS.	PIPE END SEC. EACH	
50	777+18	6"	Pipe 0.052" F.B.C. Perf. C.S.	122				Plug Right End, Drain to Left Delineator Post Required.
51	778+12	6"	Pipe 0.052" F.B.C. Perf. C.S.	122				Plug Right End, Drain to Left Delineator Post Required.
TOTALS								Total of Reinforcing Steel Carried to 'Structure Quantities'

LT OR RT	STATION TO STATION	PAVED SIDE DITCH & SODDING SUMMARY												
		PAVED SIDE DITCH (LIN. FT.)						SODDING (SQ. YD.)						
		TYPE	PAY LENGTH	NO. OF LUGS	PAY LENGTH	CUT OFF WALLS	PAY LENGTH	TOTAL PAY LENGTH	FOR PSD	FOR DITCHES	SHOULDERS	OTHER	TOTAL SOD	
LT.	777+00 To 777+08(Cone)												40	40
RT.	777+14 To 777+27(Cone)												36	36
LT.	778+04 To 778+17(Cone)												46	46
RT.	778+30 To 778+38(Cone)												49	49
													171	

APPROACH TABLE																
LOCATION LT/RT	STATION	DESCRIPTION	WIDTH FT.	RADII FT.	GRADE %	LENGTH FT.	JUST BELOW B.W.	EXCAVATION(CY) CUT	FILL	BITUM SURFACE #/SQ.YD.	TONS	BITUM. BINDER #/SQ.YD.	TONS	BITUM. BASE #/SQ.YD.	TONS	COMP AGG. BASE Depth(in) TONS

REVISIONS	
DATE	ITEM
12-29-86	Conc. Class C in Superstr., Conc. Pnl Class C, Reinf. STI, E.C. Reinf. STI, Surface Seal Rev.; Railing Type SA or C1 Deleted
7-9-87	Masonry Coating Added

NOTES:
 Weight of Spirals includes weight of 1/2 extra turns top and bottom.
 Spacers and 1/2 turns at laps included in cost of Spiral.
 *** The weight of structural steel is approximate only, and it shall be the Contractor's responsibility to determine the weight on which he bases his bid.
 For Test Bar Samples See Bridge Standard C1.

SUMMARIZED C.E.W. C.K.D. S.V.C.
 TRACED C.K.D.

BRIDGE SUMMARY
INDIANA DEPARTMENT OF HIGHWAYS

DATE June 21, 1984

Stephen L. Chastain

SHEET 10 OF 24

PROJECT: F-170-11)
 CONTRACT NO: B-17120

