

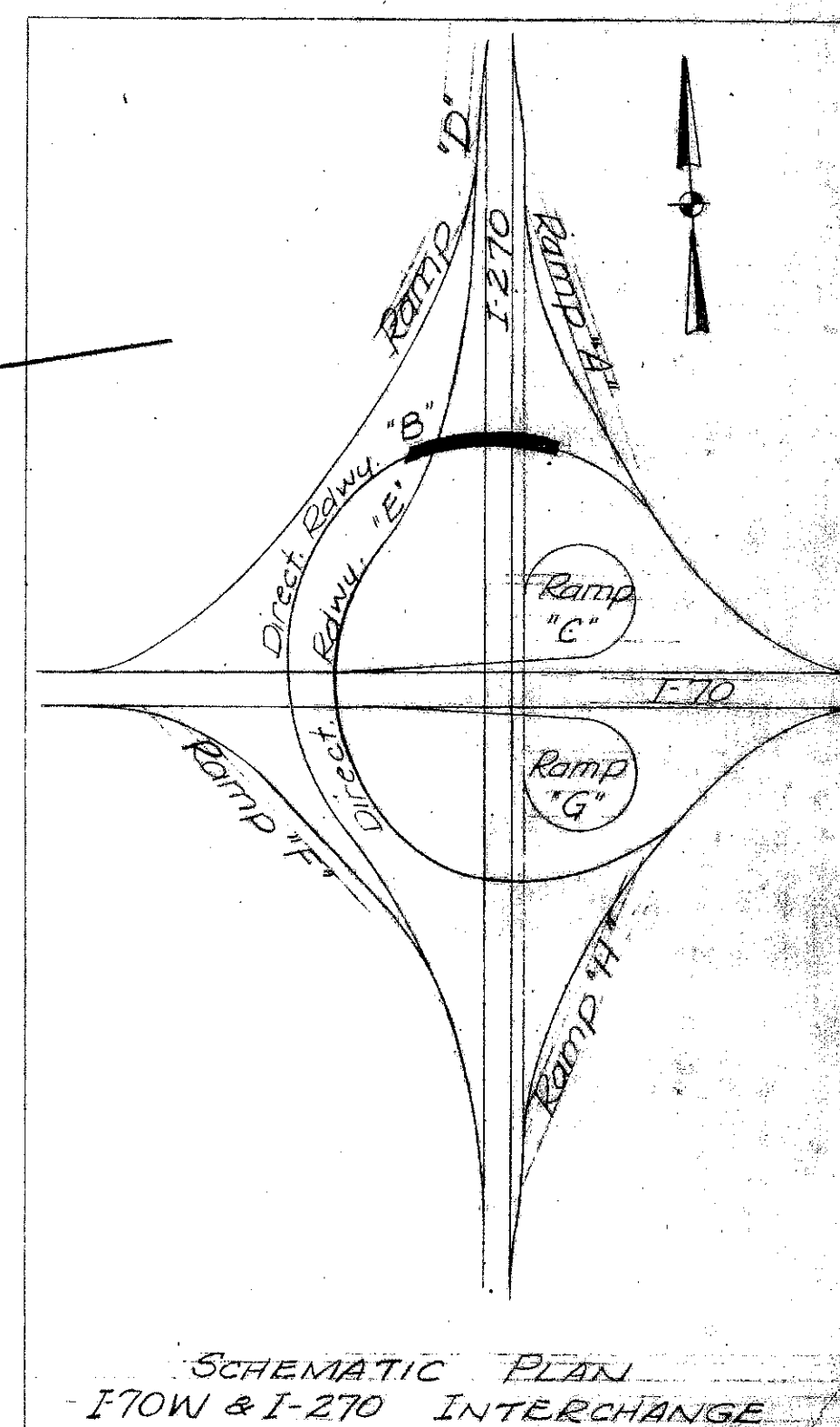
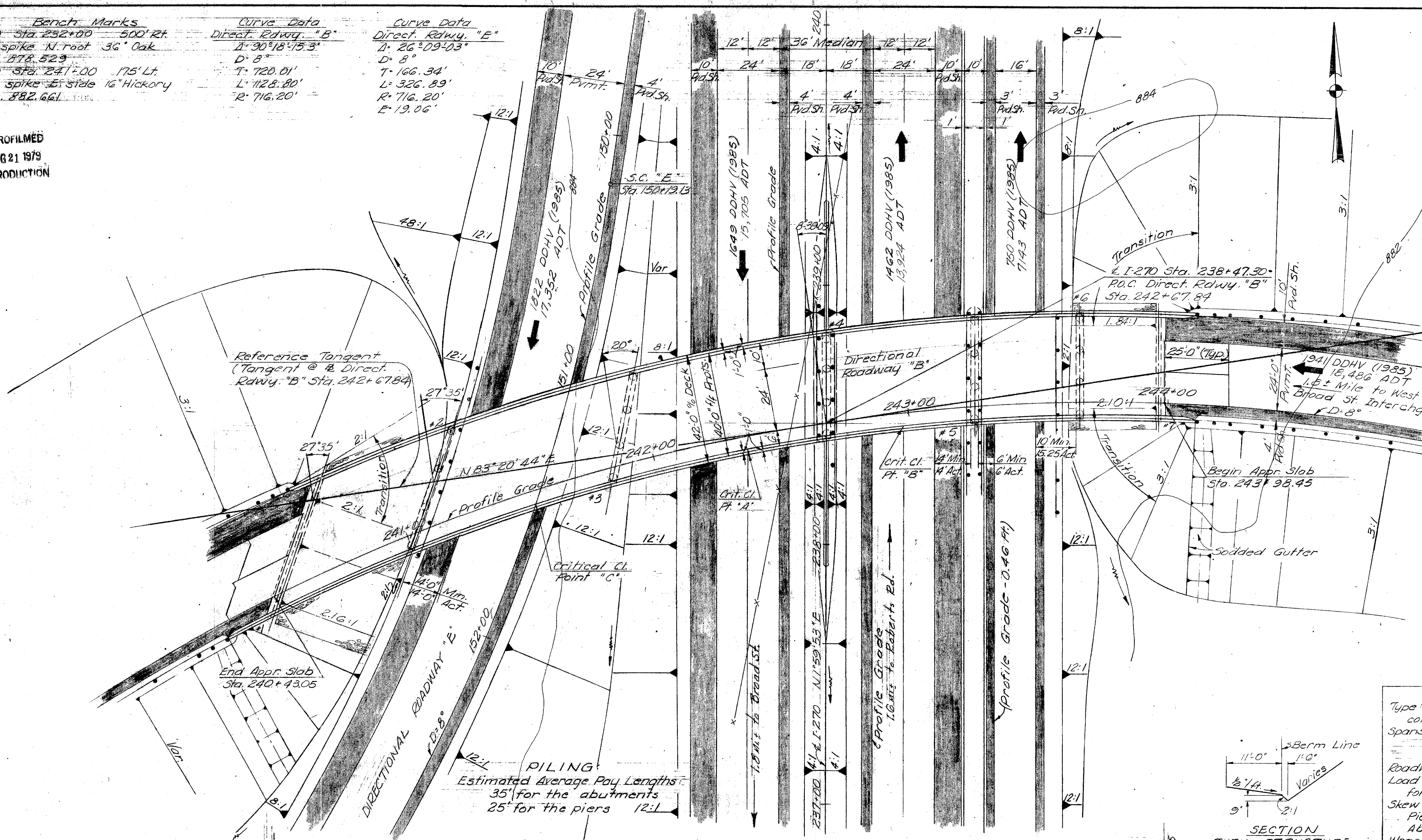
Bench Marks
 I-270 Sta. 232+00 500' Rt.
 RR spike N. root 36' Oak
 Elev. 878.529
 I-270 Sta. 241+00 175' Lt.
 RR spike E. side 16' Hickory
 Elev. 882.661

Curve Data
 Direct. Rdwy. "B"
 L: 90°18'15.3"
 D: 8°
 T: 720.01'
 L: 1128.80'
 R: 716.20'

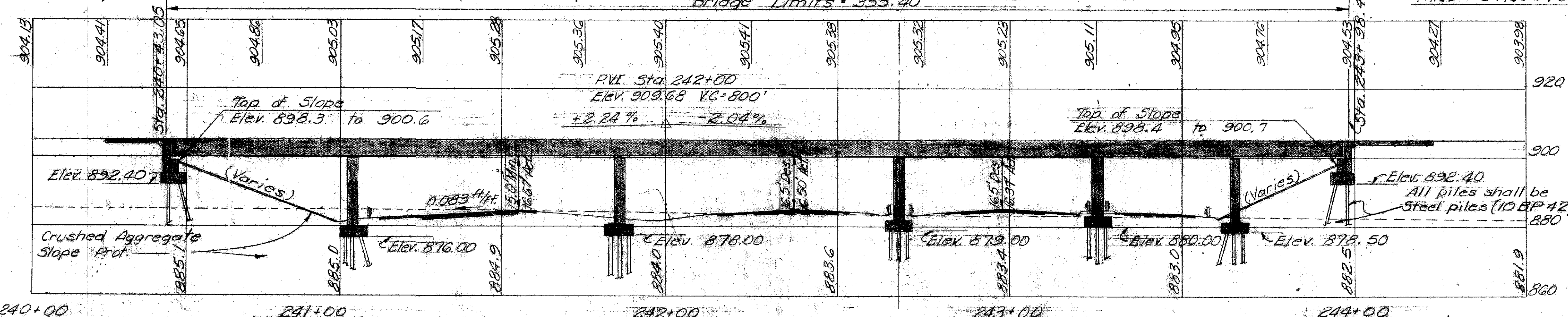
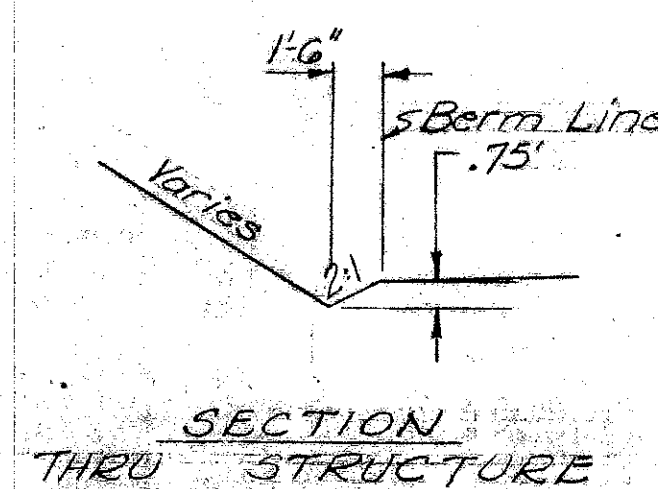
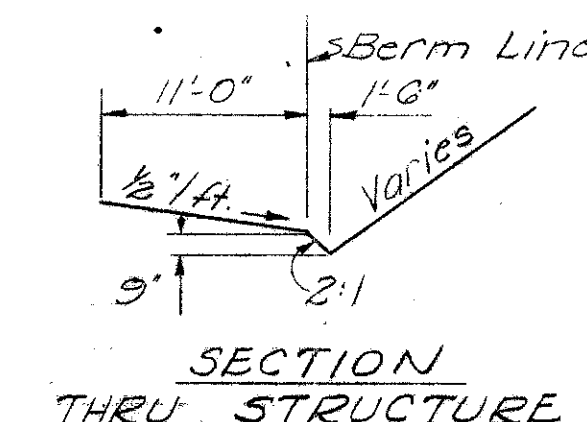
Curve Data
 Direct. Rdwy. "E"
 L: 26°09'03"
 D: 8°
 T: 166.34'
 L: 326.89'
 R: 716.20'
 E: 19.06'

MICROFILMED
 AUG 21 1979
 REPRODUCTION

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	FRANKLIN COUNTY FRA-270-0.000 S & W



PROPOSED STRUCTURE
 Type: 6 span cont. steel beam with reinf. conc. deck and substructure.
 Spans: 47.61', 72.25', 80.44', 58.16', 40.71', 30.55' (measured along Reference Tangent).
 Roadway: 40'0" FF Parapets
 Load Frequency: CF-2000 (57) Adequate for AASHTO alternate loading.
 Skew: Rear Abut. & Pier #1, 27°35' LIE. Pier #2, 20° - Pier #3, 4°5' & Fwd. Abut., 8°39'09' (all from Ref. Tangent).
 Wearing Surface: 1" mono. concrete.
 Approach Slab: AS-1-54 (25' long).
 Superelevation: .083 %/ft.



DE LEUW, CATHAR & BRILL										
CONSULTING ENGINEERS										
NEW YORK, N.Y.			•	COLUMBUS, OHIO			•	BUFFALO, N.Y.		
SITE PLAN										
BRIDGE No. FRA-270-0018 AT										
DIRECTIONAL ROADWAY "B" OVER										
I-270 & DIRECTIONAL ROADWAY "E"										
FRANKLIN COUNTY					COLUMBUS OUTERFIELD					
					STA. 238+47.36					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISION				
J.C.N.	Y.N.		V.K.	J.C.N.	4/94					

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 CONSULTING ENGINEERS
 NEW YORK, N.Y. • COLUMBUS, OHIO • BUFFALO, N.Y.
SITE PLAN
 BRIDGE No. FRA-270-0018 N
 DIRECTIONAL ROADWAY "B" OVER
 I-270 & DIRECTIONAL ROADWAY "E"
 FRANKLIN COUNTY
 COLUMBUS OUTERBELT
 STA. 238+47.30

MICROFILMED
AUG 21 1979
REPRODUCTION

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

FRANKLIN COUNTY FRA-270-0.0005%N

GENERAL NOTES

REFERENCE shall be made to General Notes Sht. N° 387.

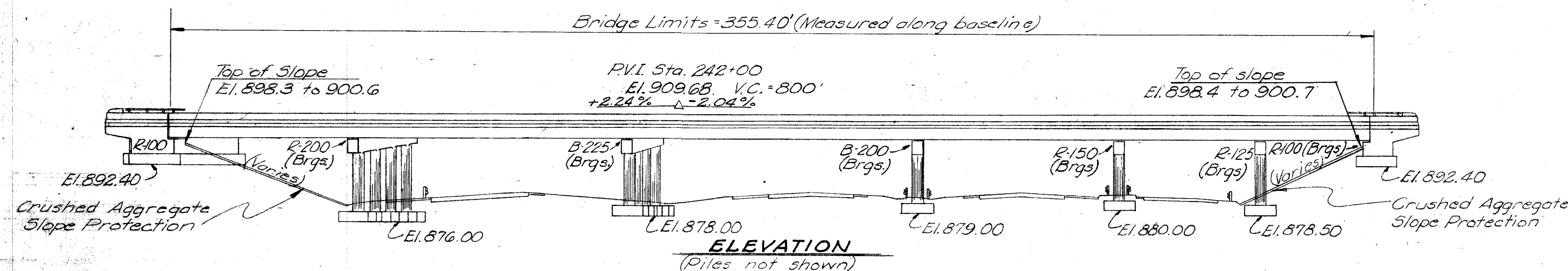
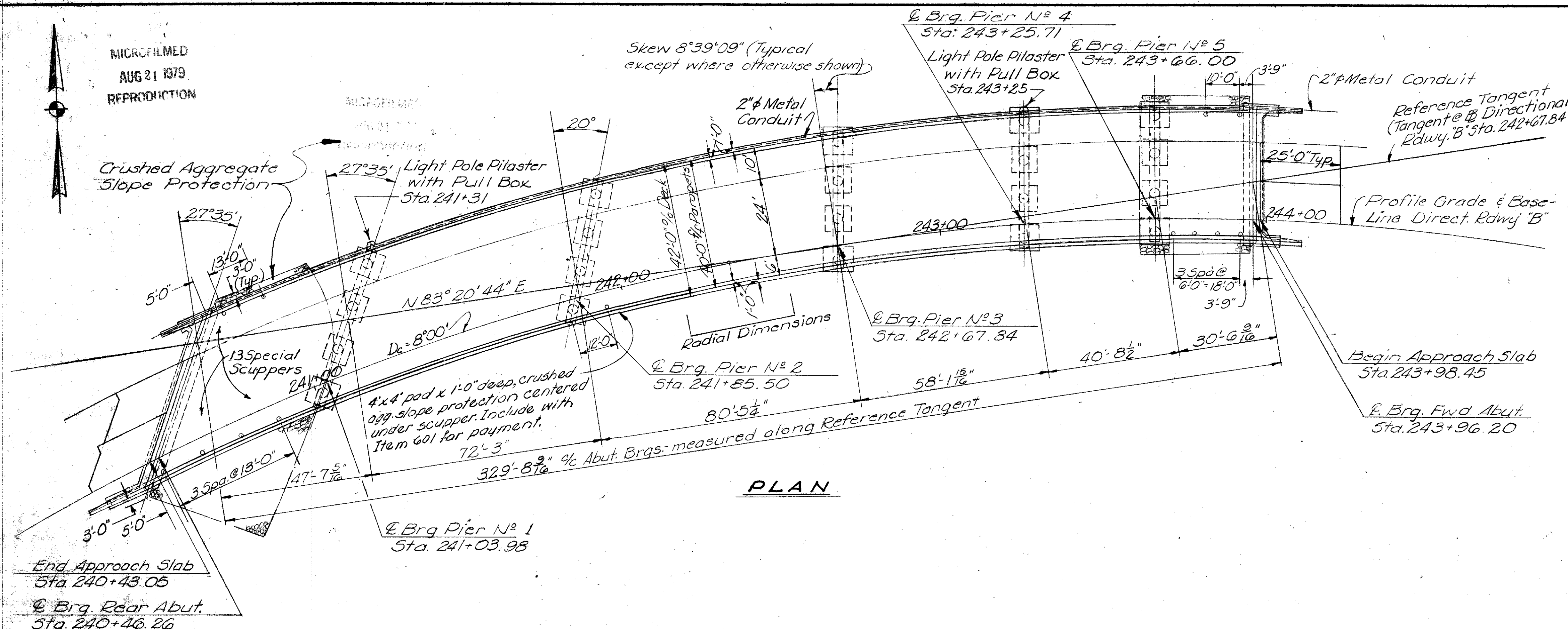
LIGHTING: For Bridge Lighting Details see Lighting Drawings Sht. N° 474 and 475.

Concrete and reinforcing steel for the pilasters are included in the bridge quantities.

PROCEDURE: The embankment shall be placed and compacted up to the finished spill-thru slope and to the level of the subgrade for a distance of 200 feet back of the abutments, after which both end piers may be constructed and the abutment excavations may be made and piles driven.

EXCAVATION QUANTITY includes the removal of fill material required for construction of the abutments and pier #5.

PILES shall be driven to a minimum bearing capacity of 35 tons per pile for the abutments and the piers.

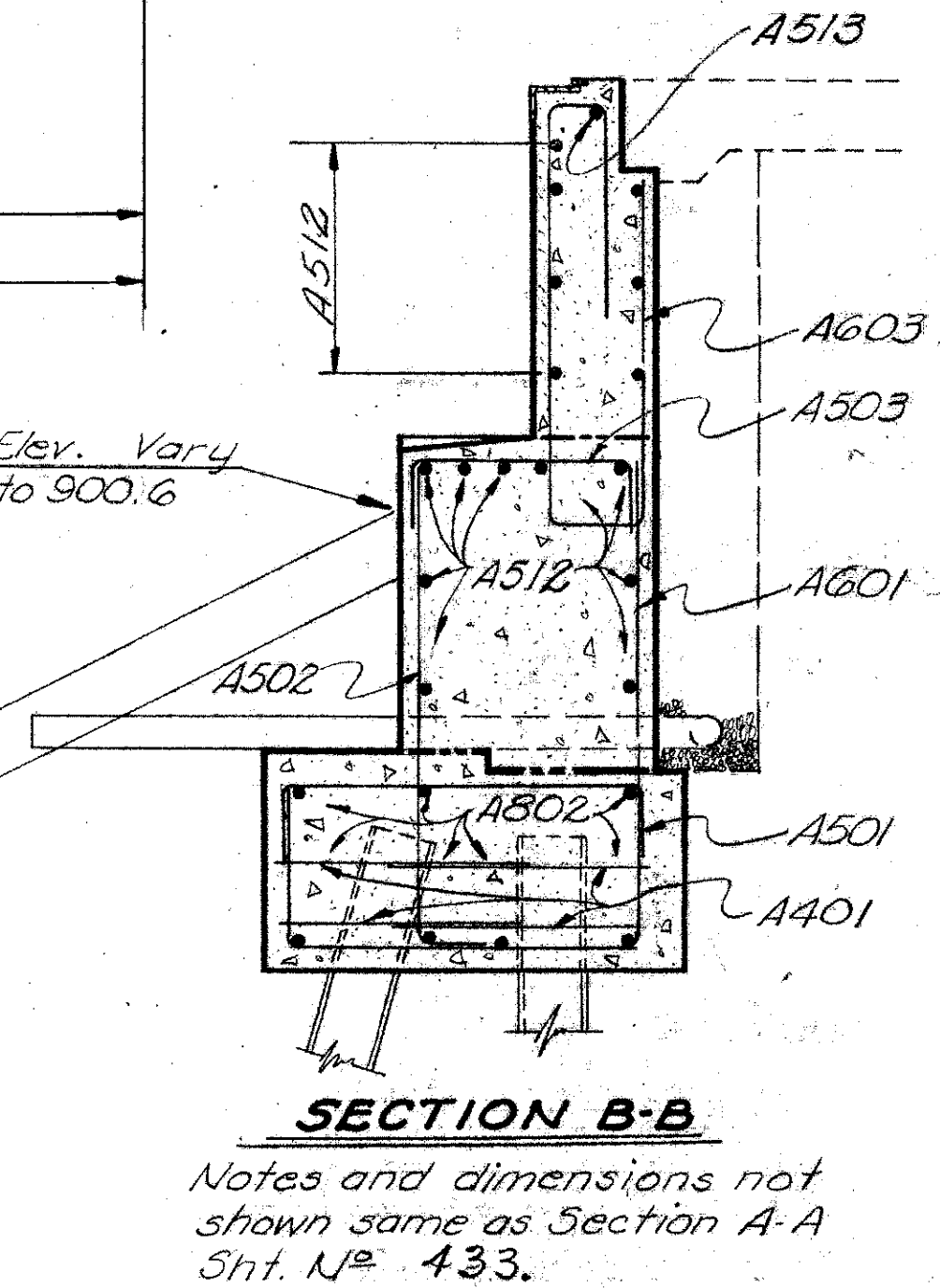
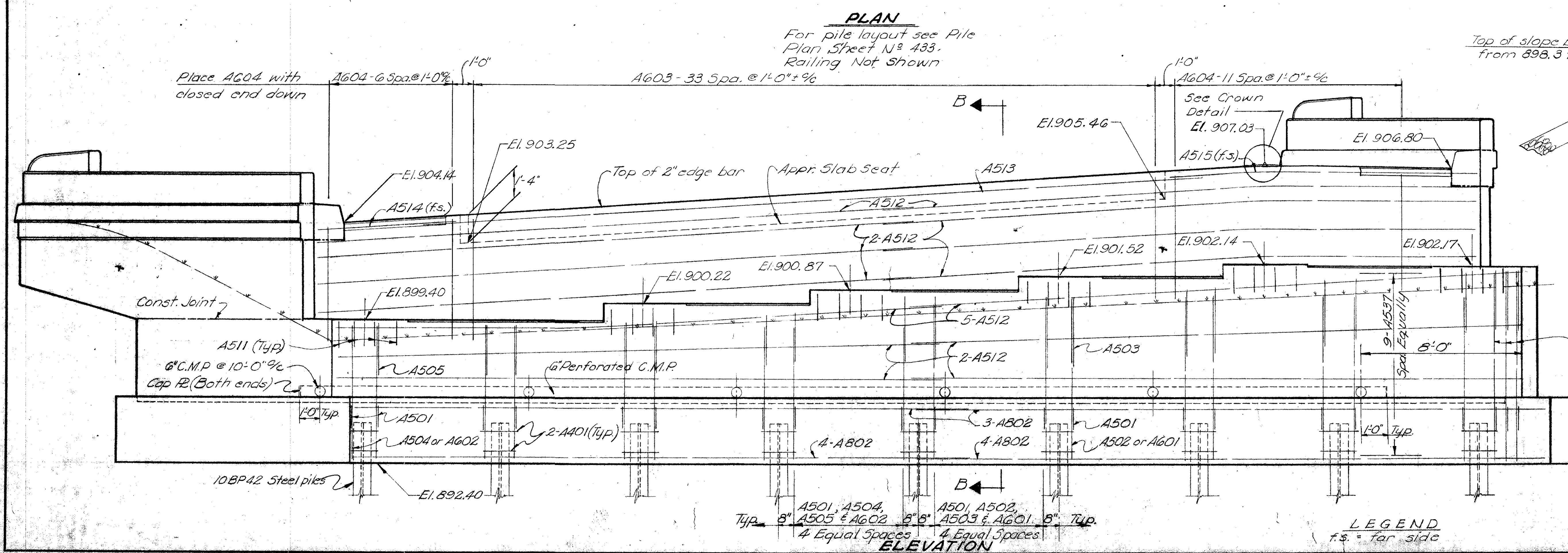
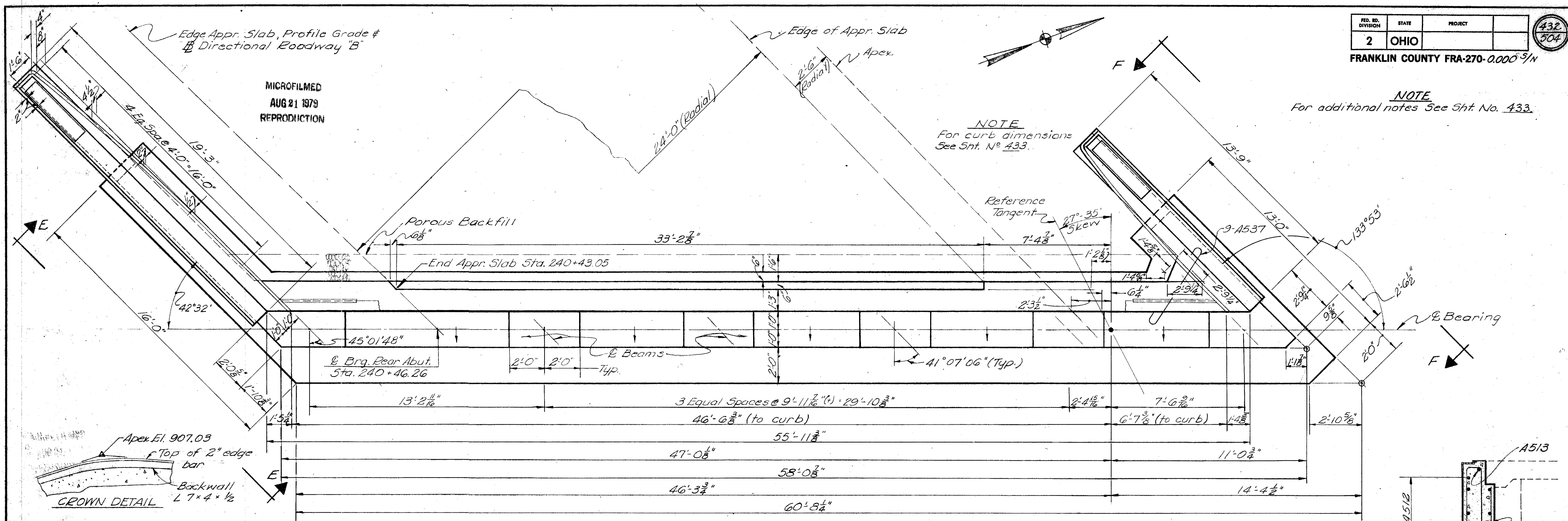


ESTIMATED QUANTITIES

Normal Participation - Municipal.																			
Item	Total	Unit	Description	Abuts.	Piers	Superstr.	Gen'l			Item	Total	Unit	Description	Abuts.	Piers	Superstr.	Gen'l		
503	656	Cu.Yds.	Unclassified excavation	368	288					518	86	Lin.Ft.	6" perforated helical CMP, including specials, 707.06	86					
505	Lump	Sum	First test pile				Lump			518	107	Lin.Ft.	6" non-perforated, helical CMP, 707.06	107					
507	3650	Lin.Ft.	Steel piles, 10BP42	1050	2600					518	13	Each	Scuppers including supports			13			
509	193819	Lbs.	Reinforcing steel	14,882	45,103	139,834				518	29	Cu.Yds.	Porous backfill	29					
511	462	Cu.Yds.	Class "C" concrete, superstructure			462													
511	179	Cu.Yds.	Class "C" concrete, piers above footings		179					601	569	Sq.Yds.	Crushed aggregate slope protection				569		
511	213	Cu.Yds.	Class "E" concrete, abutments	213															
511	147	Cu.Yds.	Class "E" concrete, pier footings		147								See sheet 473 for Lighting Summary						
513	477,500	Lbs.	Structural steel			477,500				808	462	Units	Water-reducing, set retarding admixture			462			
832	477,500	Lbs.	Field painting of structural steel			477,500				825	1849	Sq.Yds.	Concrete surface treatment				1849		
										828	91	Lin.Ft.	Joint sealer	91					
517	749.22	Lin.Ft.	Railing (type 1)	59.17		690.05													

DESIGNED		DRAWN		TRACED		CHECKED		REVIEWED		DATE		REVISED	
V.K.		J.M.		J.M.		T.R.		J.M.					

NOTE
For additional notes See Sht. No. 433.

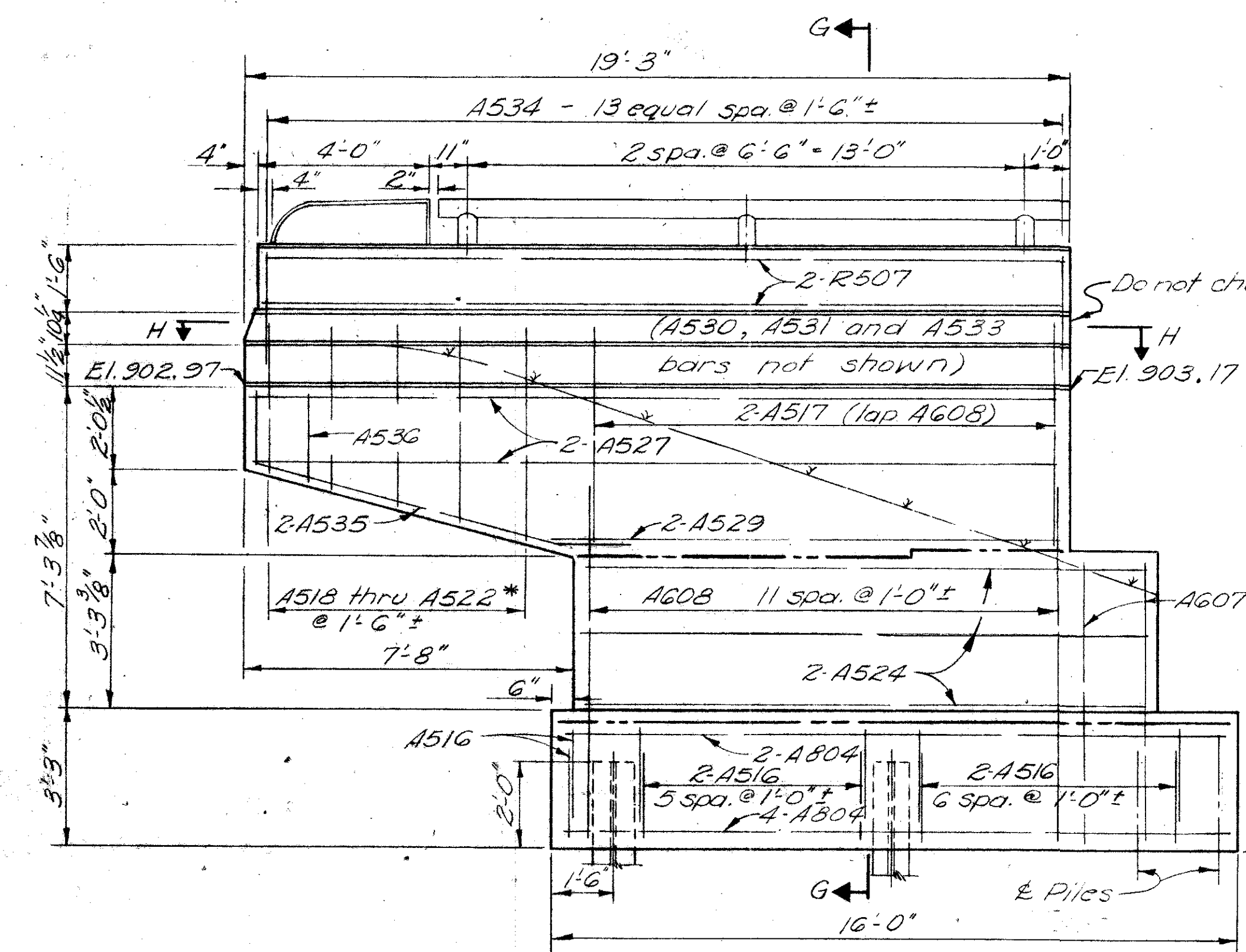
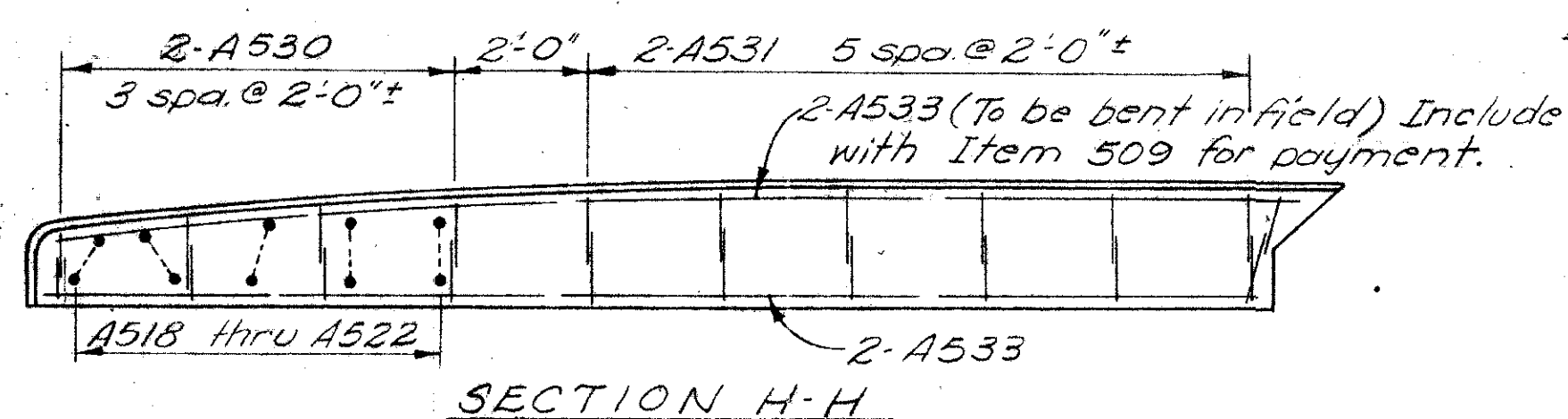


DE LEUW, CATHAR & BRILL CONSULTING ENGINEERS NEW YORK, N.Y. • COLUMBUS, OHIO • BUFFALO, N.Y.					
REAR ABUTMENT DETAILS BRIDGE N° FRA-270-0018 N DIRECTIONAL ROADWAY 'B' OVER I-270 & DIRECTIONAL ROADWAY 'E' FRANKLIN COUNTY COLUMBUS OUTERBELT STA. 235+47.90					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
V.K.	J.M.K.	J.M.K.	T.R.O.	B.G.W.	3-7-66

LEGEND
f.s. = far side

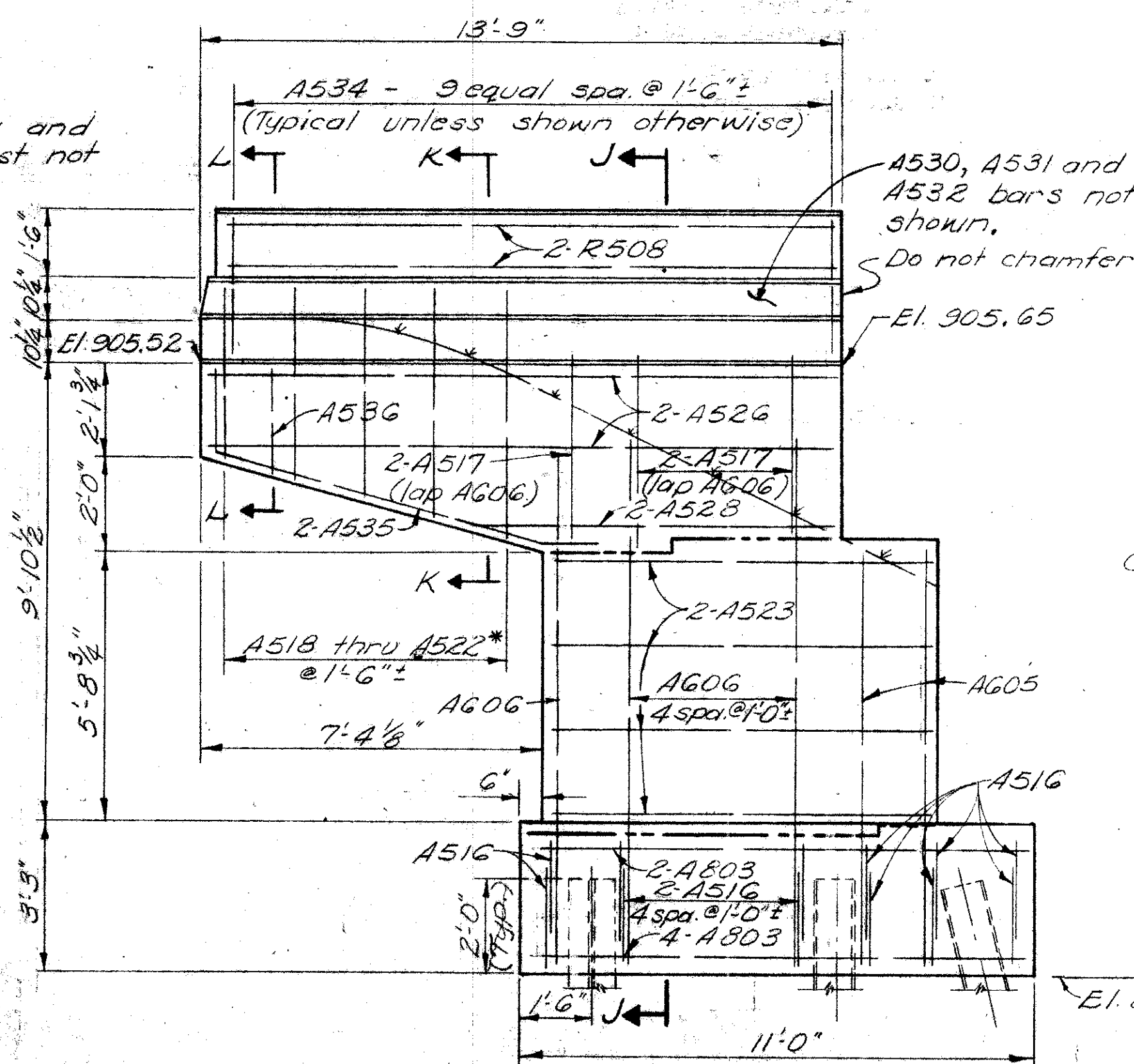
MICROFILMED
AUG 21 1979
REPRODUCTION

NOTE: Details which are common to more than one view are marked "typical" unless shown otherwise.
* Special care shall be taken in placing these bars so that they will clear the face of curb by 2" minimum.

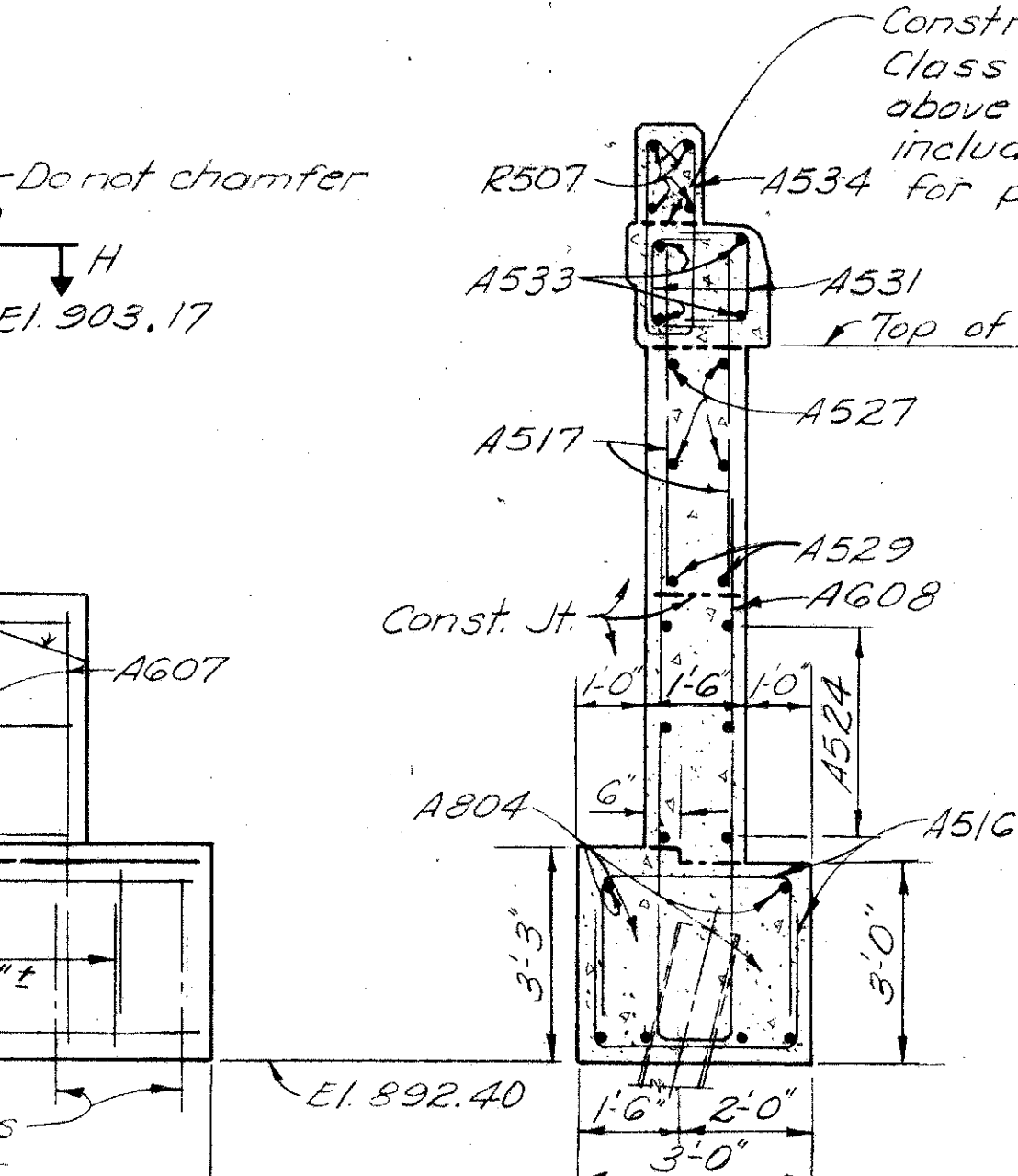


VIEW E-E

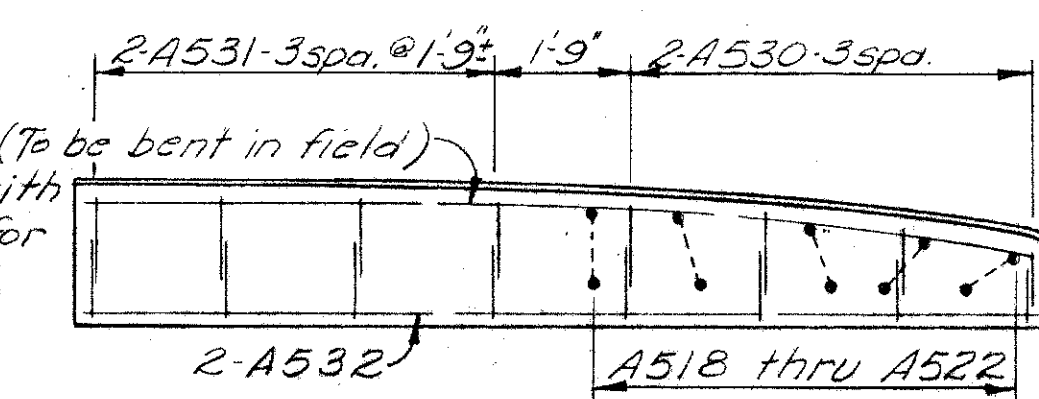
Railing and end post not shown.



VIEW C-C

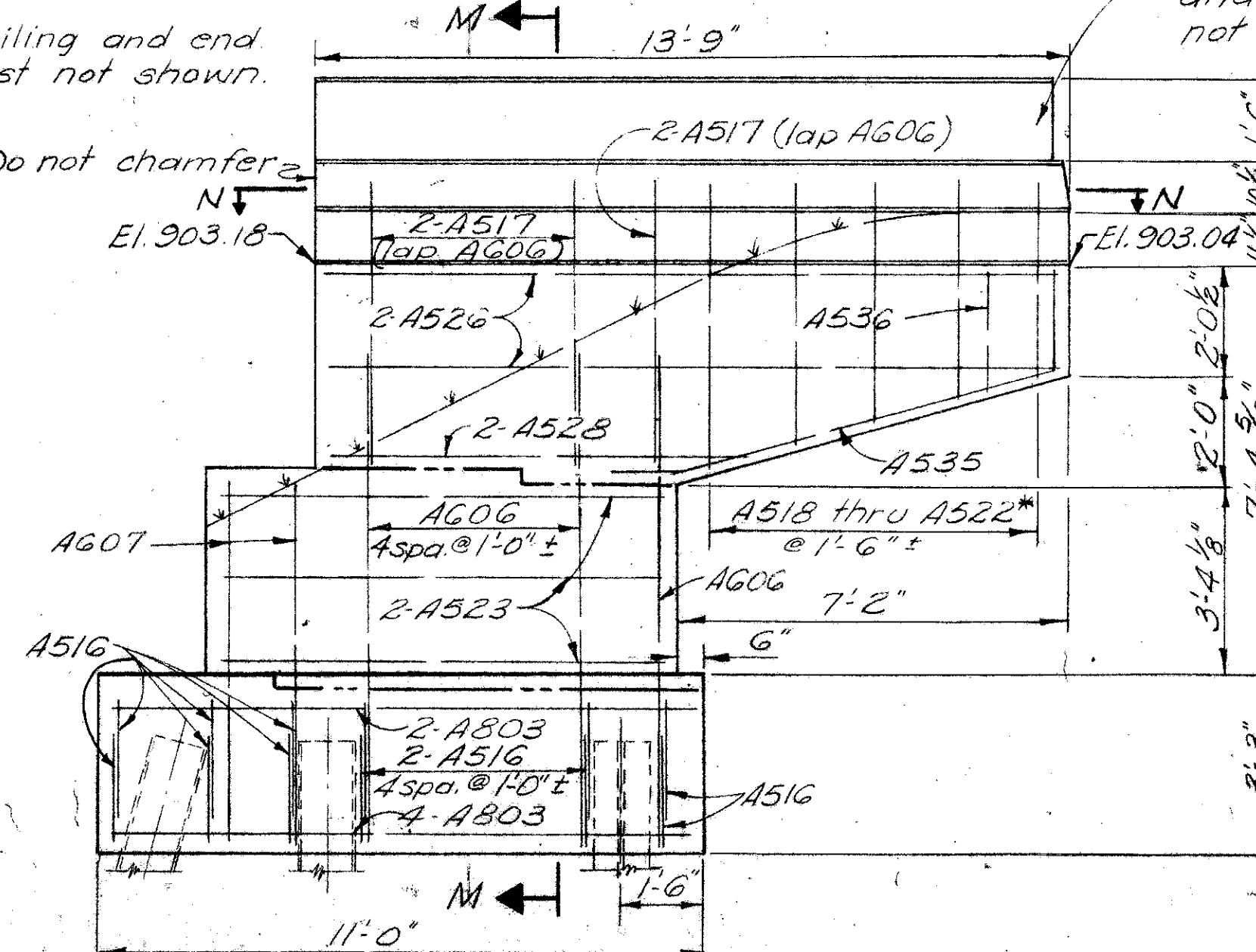


SECTION G-G

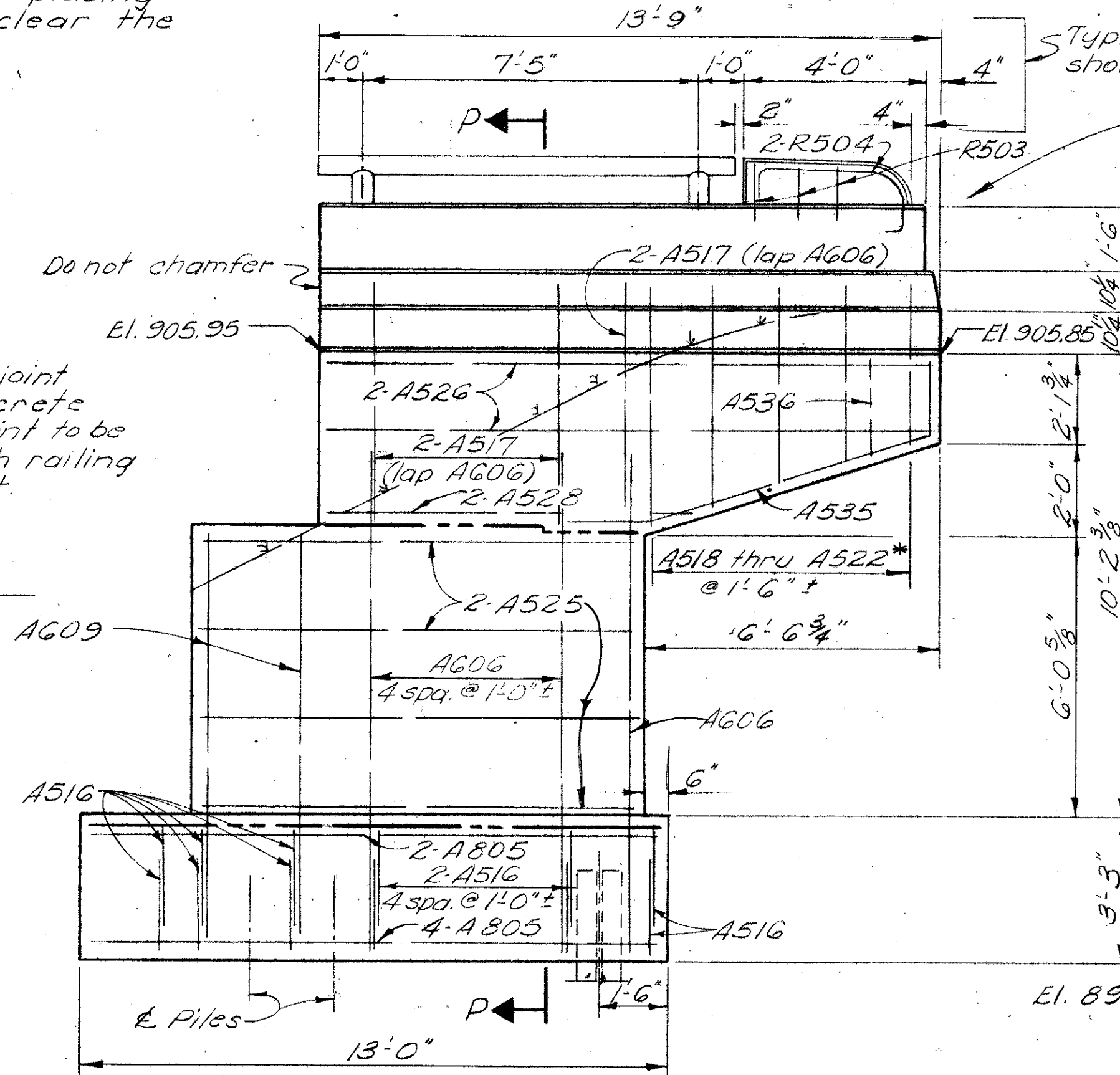


SECTION N-N

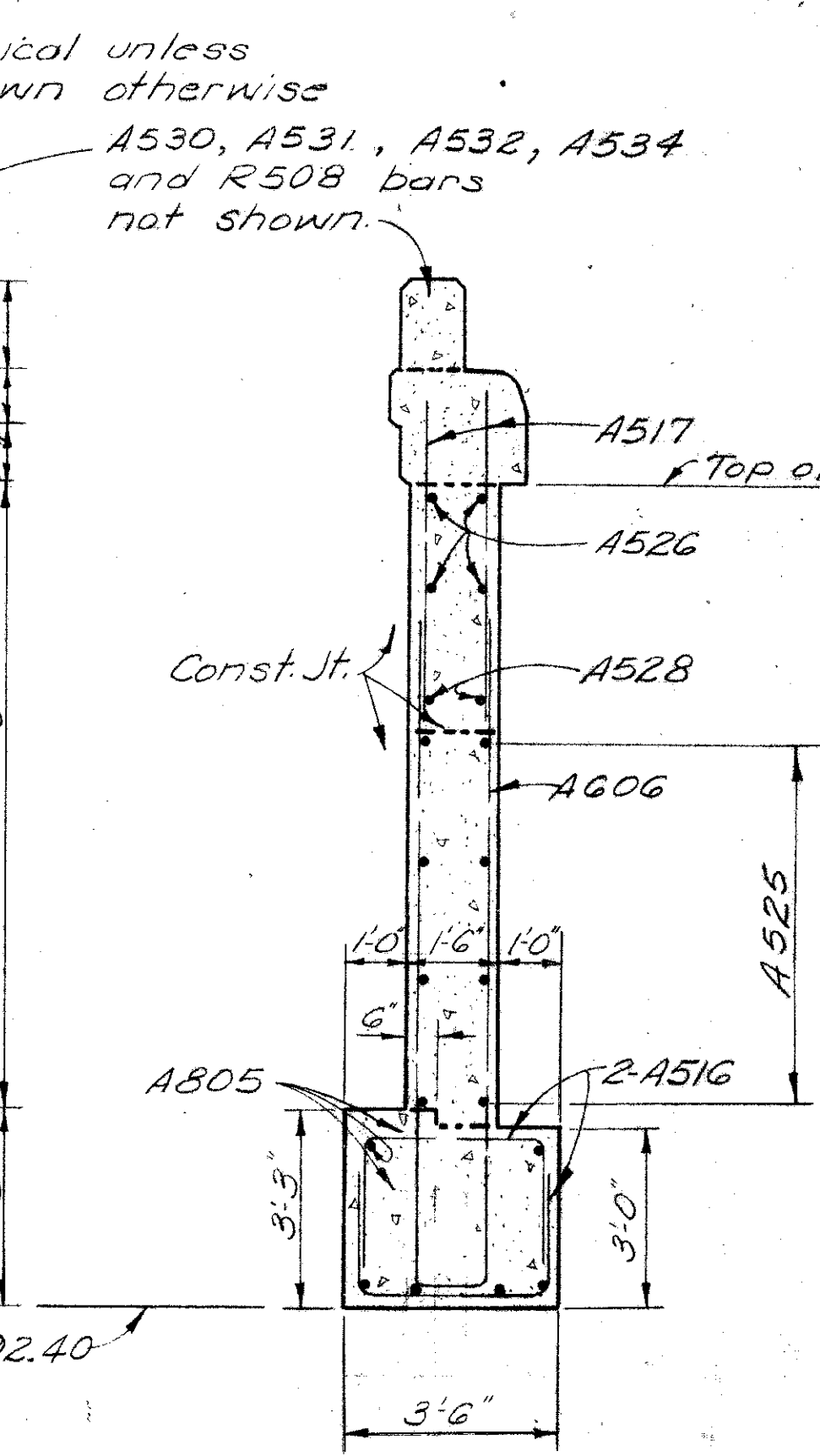
Railing and end post not shown.



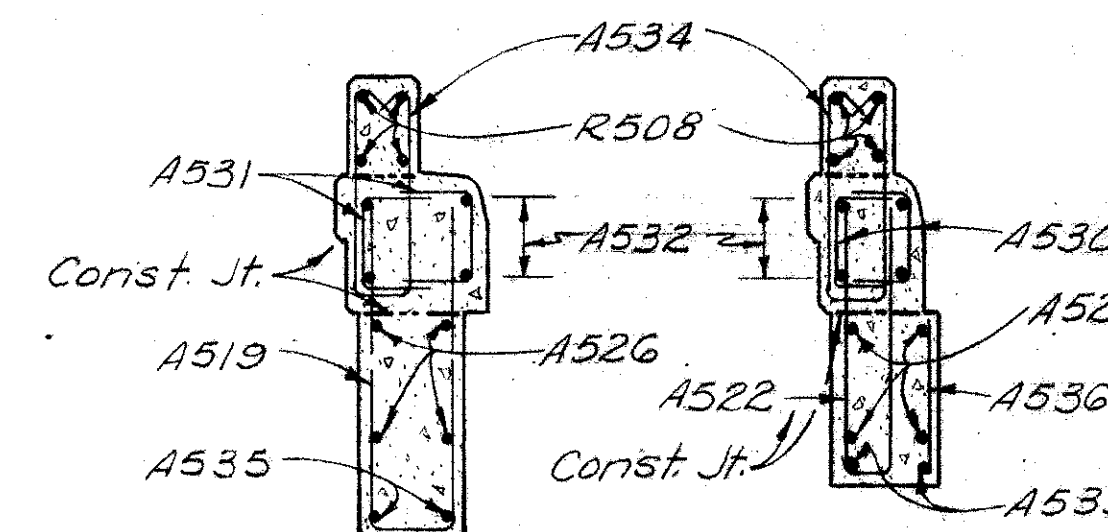
VIEW D-D



VIEW F-F



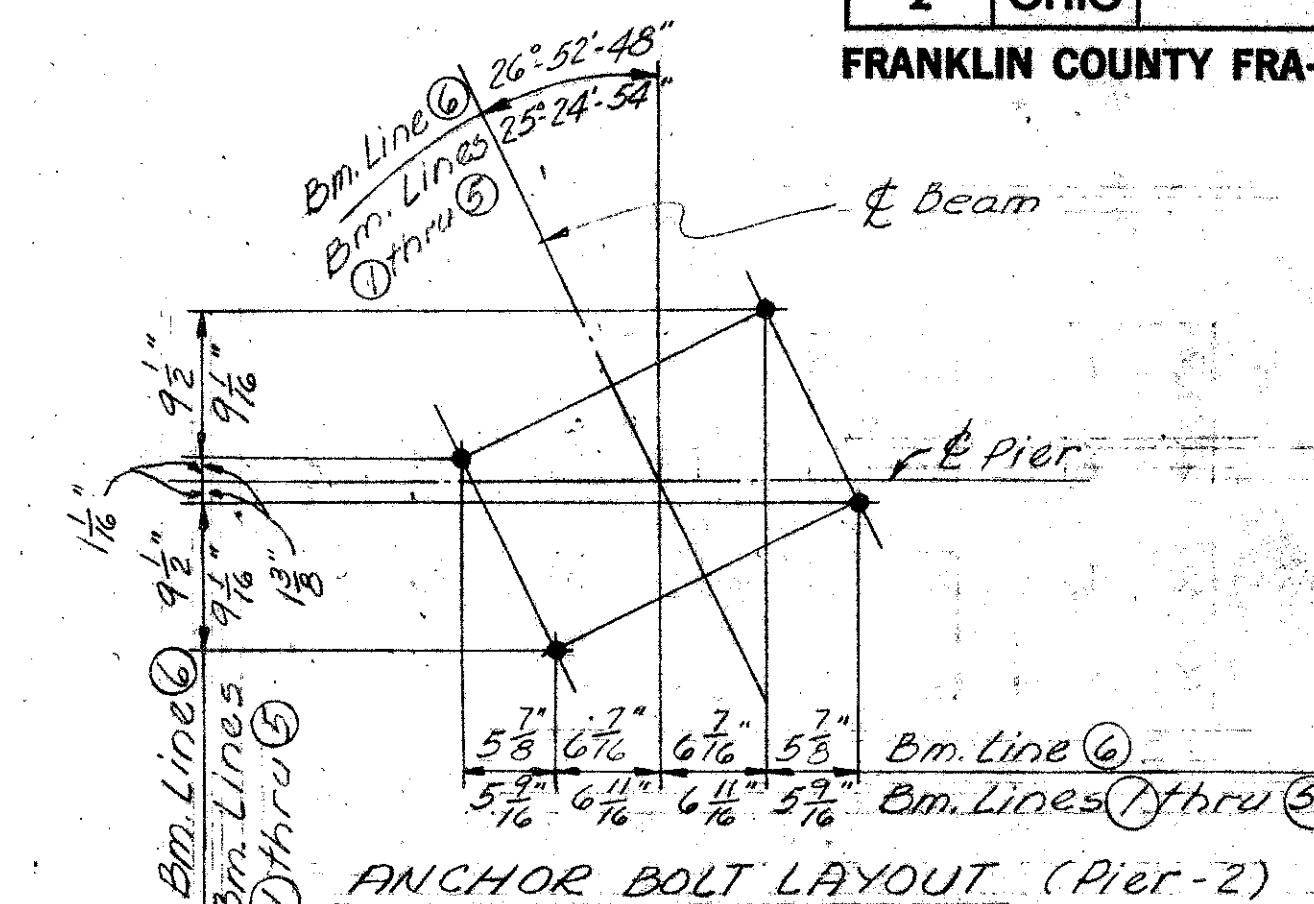
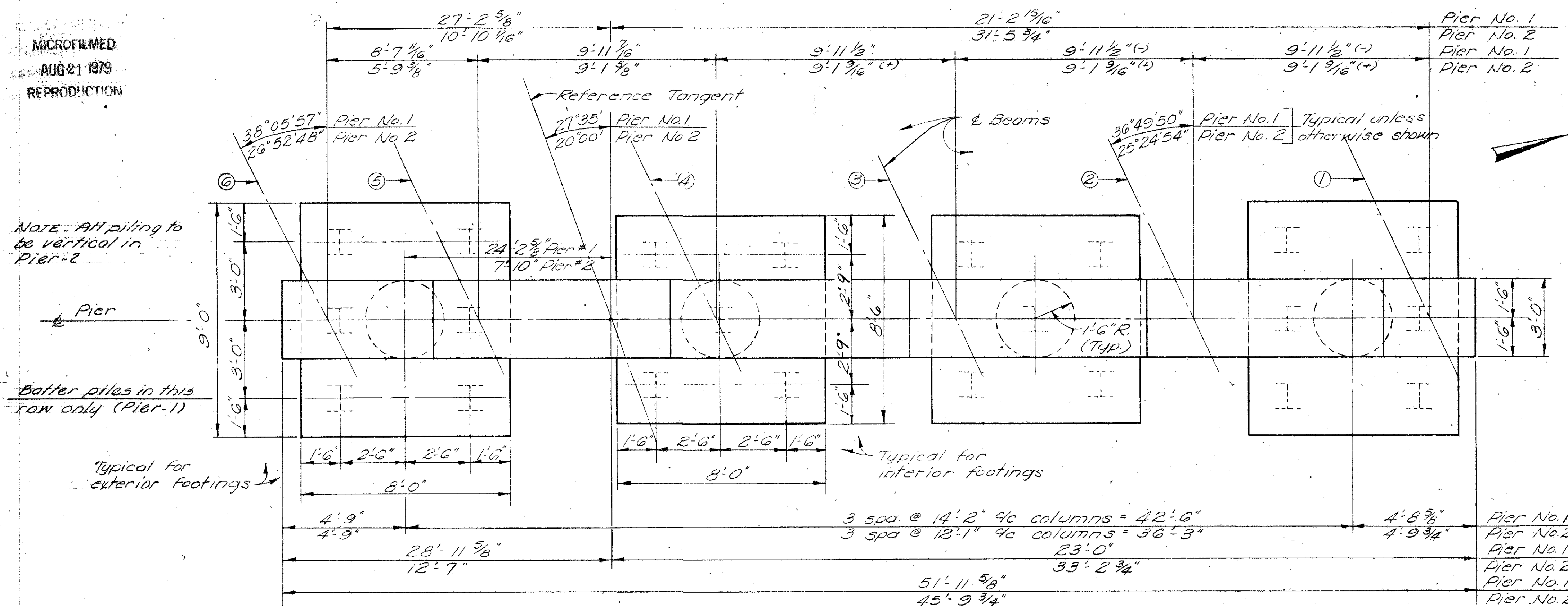
SECTION P-P
(Pile not shown)



SECTION K-K SECTION L-L
Typical arrangement of reinforcing bars at the end of curb.

DELEW, CATHY & BRILL					
CONSULTING ENGINEERS					
NEW YORK, N.Y. • COLUMBUS, OHIO • BUFFALO, N.Y.					
WINGWALL DETAILS					
BRIDGE No. FRA-270-0018 N					
DIRECTIONAL ROADWAY "B" OVER					
I-270 & DIRECTIONAL ROADWAY "E"					
FRANKLIN COUNTY COLUMBUS OUTERBELT					
STA. 238+47.30					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
V.K.	V.N.		TRO	AGV	3-7-96

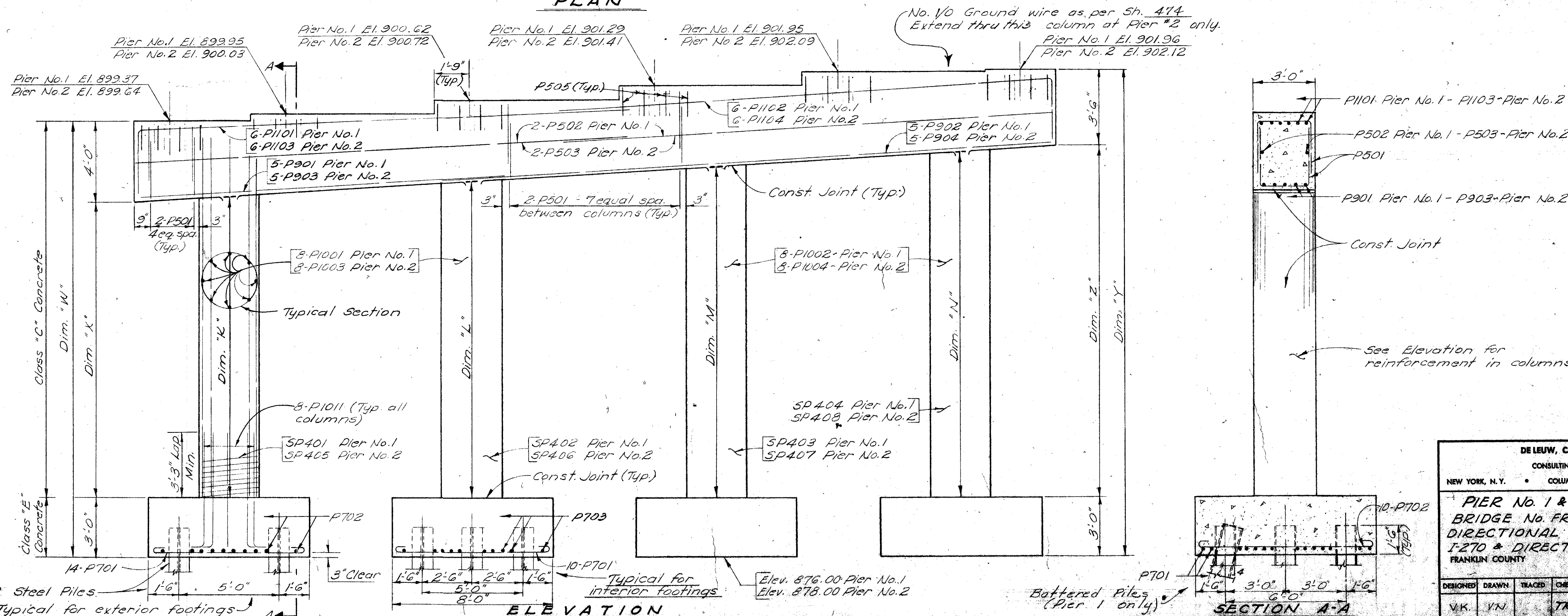
MICROFILMED
AUG 21 1979
REPRODUCTION



Location	Dimension							
	K	L	M	N	W	X	Y	Z
Pier No. 1	16'-7 7/8"	17'-5 7/8"	16'-4"	19'-2 1/8"	23'-4 1/2"	16'-4 1/2"	25'-11 1/2"	19'-5 1/2"
Pier No. 2	14'-11 3/8"	15'-8 7/8"	16'-6 1/4"	17'-3 5/8"	21'-7 7/8"	14'-7 5/8"	24'-1 1/2"	17'-7 1/2"

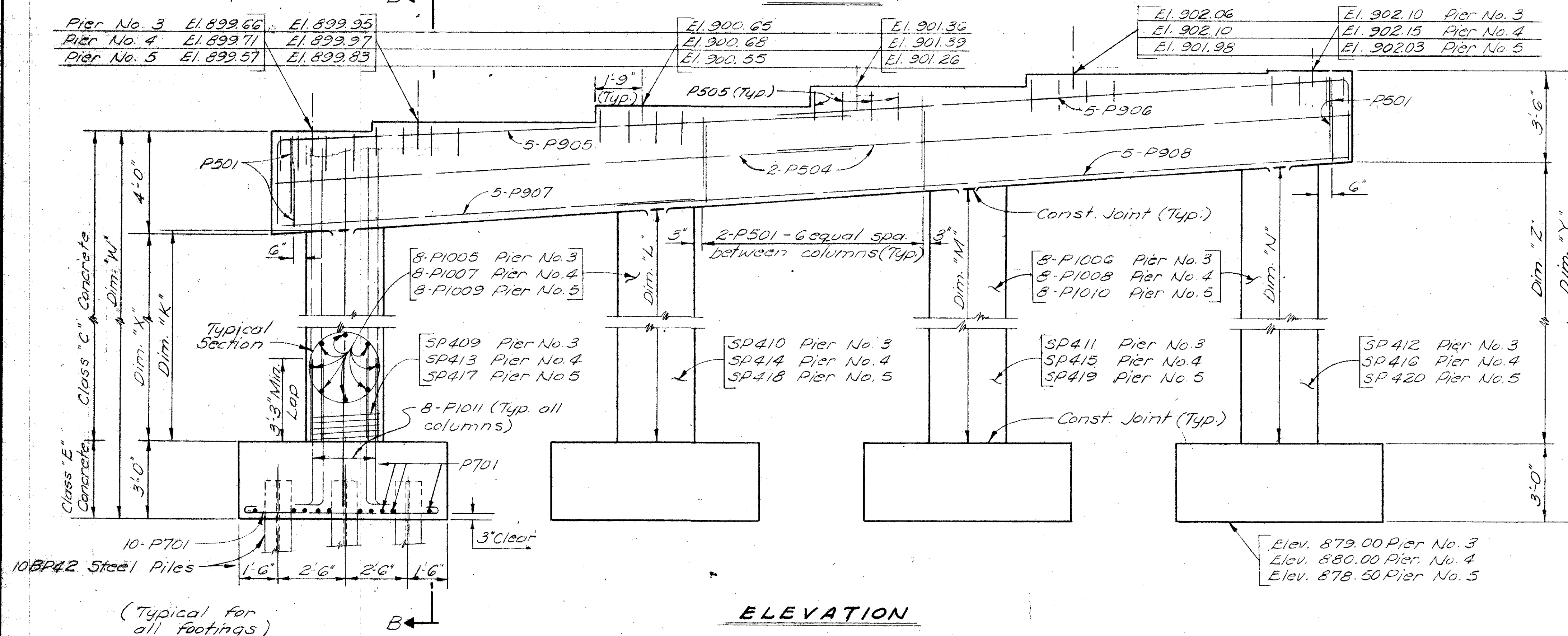
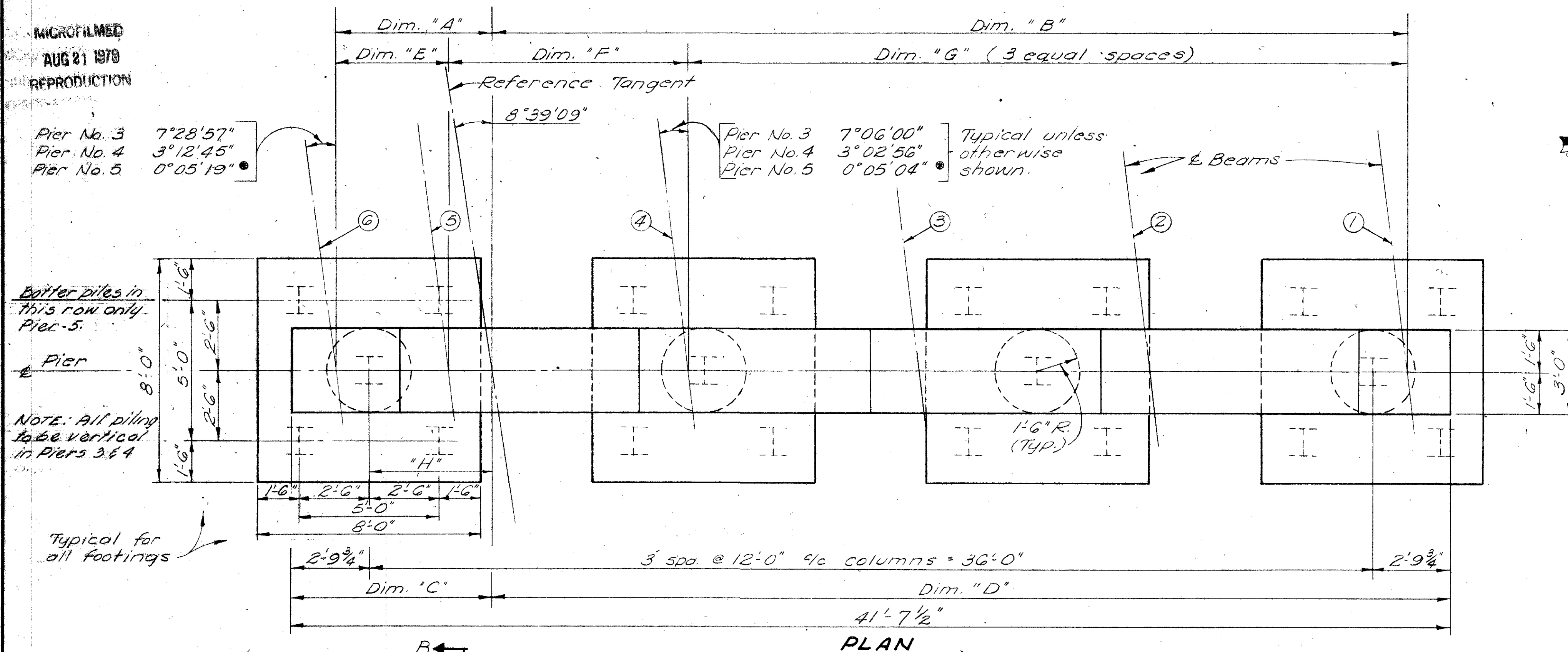
For notes see Sh. No. 436

PLAN



DE LEUW, CATHY & BRILL			
CONSULTING ENGINEERS			
NEW YORK, N.Y.	COLUMBUS, OHIO	BUFFALO, N.Y.	
PIER No. 1 & 2 DETAILS			
BRIDGE No. FRA-270-0018 N			
DIRECTIONAL RDWY "B" OVER			
I-270 & DIRECTIONAL RDWY "E"			
FRANKLIN COUNTY			
COLUMBUS, OHIO			
STA. 238+47.30			
DESIGNED	DRAWN	TRACED	CHECKED
V.K.	V.N.	TRO	

MICROFILMED
AUG 21 1979
REPRODUCTION

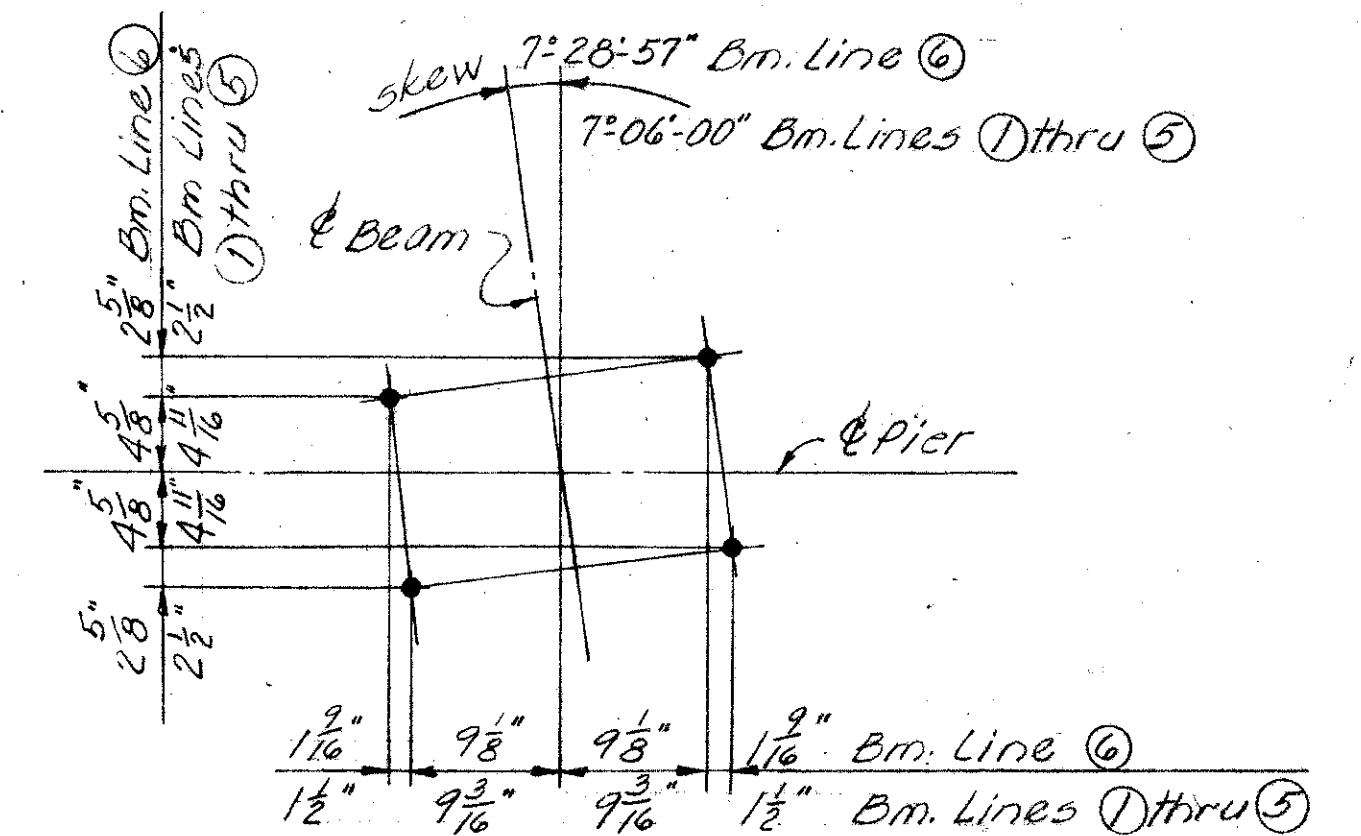


Location	Dimension															
	A	B	C	D	E	F	G	K	L	M	N	W	X	Y	Z	H
Pier No. 3	5'-6 5/8"	32'-10 1/8"	7'-2"	34'-5 1/2"	4'-0 9/16"	8'-7 1/4"	25'-9 9/16"	13'-10 1/4"	14'-8 1/2"	15'-6 5/8"	16'-4 7/8"	20'-8"	13'-8"	23'-1 1/4"	16'-7 1/4"	4'-4 1/4"
Pier No. 4	7'-7 5/8"	30'-5 3/8"	9'-4 3/4"	32'-2 3/4"	3'-8 7/16"	8'-7 3/16"	25'-9 5/8"	12'-10 7/8"	13'-9 1/8"	14'-7 1/4"	15'-5 3/8"	19'-8 1/2"	12'-8 1/2"	22'-1 3/4"	15'-7 3/4"	6'-7"
Pier No. 5	11'-11 3/8"	26'-0 5/8"	13'-9"	27'-10 1/2"	3'-7 3/8"	8'-7 3/16"	25'-9 5/8"	14'-3 1/4"	15'-1 1/2"	15'-11 3/4"	16'-10"	21'-0 7/8"	14'-0 5/8"	23'-6 3/8"	17'-0 3/8"	10'-11 1/4"

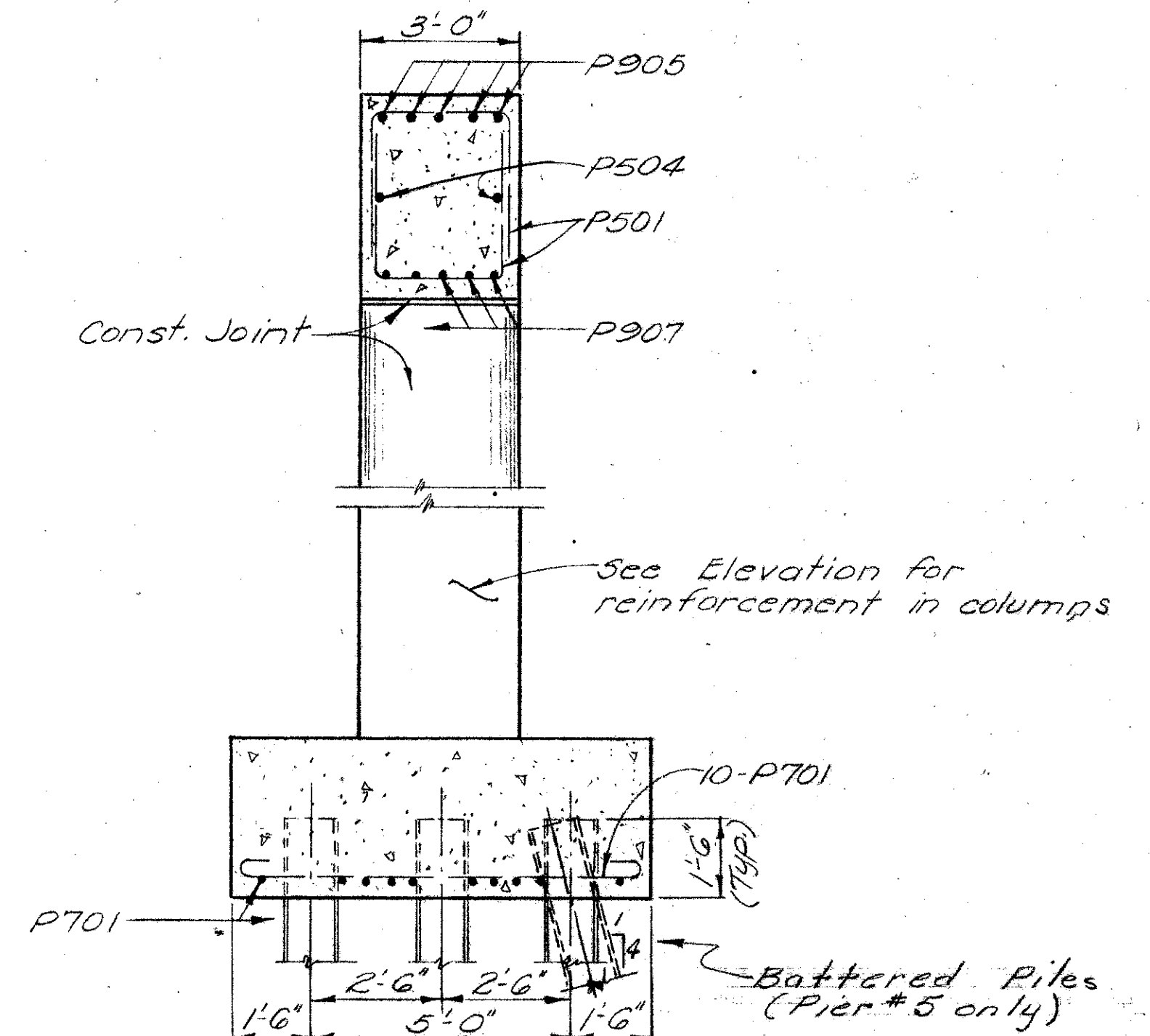
NOTES

BRIDGE SEAT REINFORCEMENT: Special care shall be taken in placing reinforcing steel in the bridge seat so that it will not interfere with the drilling of anchor bolt holes (Piers No. 2 and 3 only).

* In case of Pier #5, the angle is clockwise. (not counter-clockwise as shown).

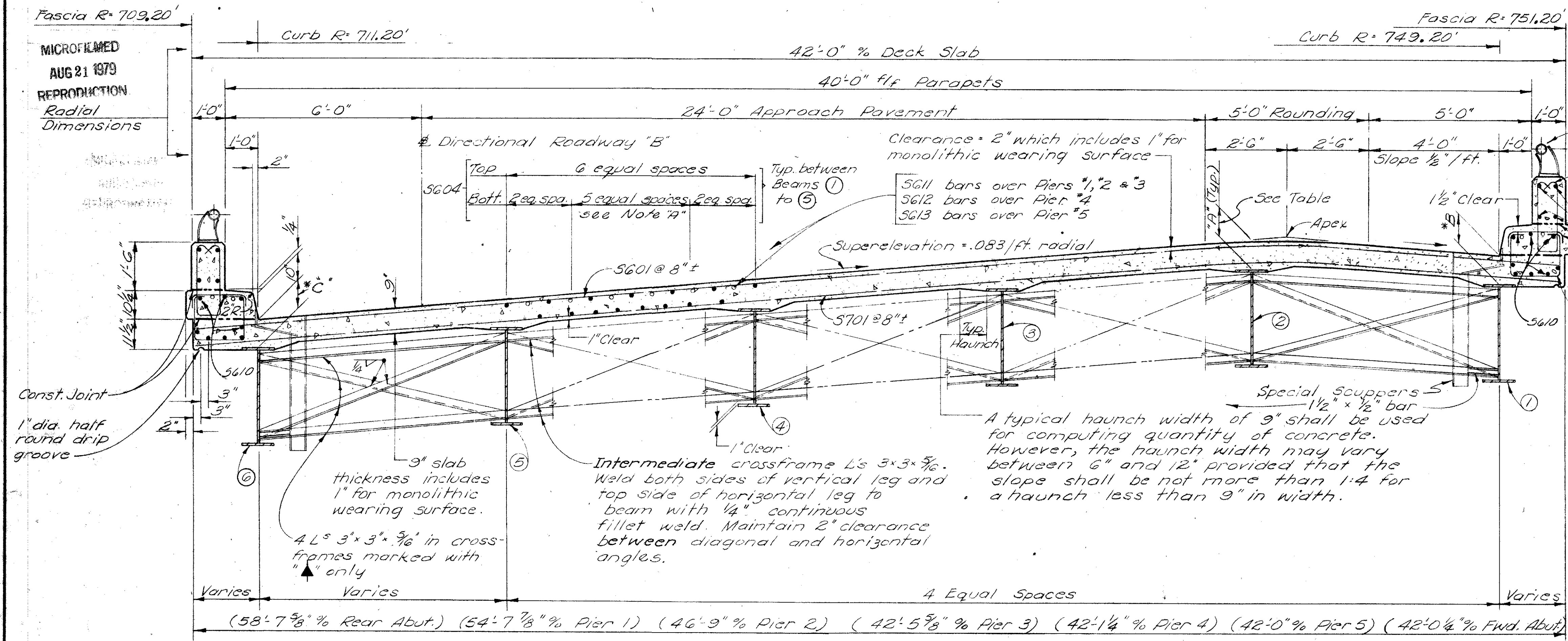


SECTION B-B



DE LEUW, CATHAR & BRILL CONSULTING ENGINEERS NEW YORK, N. Y. • COLUMBUS, OHIO • BUFFALO, N. Y.			
PIER No. 3, 4 & 5 DETAILS BRIDGE No. FRA-270-0018 N DIRECTIONAL ROADWAY "B" OVER I-270 & DIRECTIONAL ROADWAY "E" FRANKLIN COUNTY COLUMBUS OUTERBELT STA. 238+47.30			
DESIGNED	DRAWN	TRACED	CHECKED
Y.K.	Y.N.	TRO	BCV
			3-7-66

MICROFILMED
AUG 21 1979
REPRODUCTION
Radial
Dimensions



See Std. Dwg. BR-1-65 for details of Type I post, railing, parapet and end post.

S503

R501 End parapet panels - North side
R505 End parapet panels - South side
R502 Intermediate parapet panels - North side
R506 Intermediate parapet panels - South side

Included with railing for payment

Class "C" concrete for parapets above this Const. Joint is included with railing for payment.

S502 @ 1'-6" 9/16" ±
S501 @ 1'-6" 9/16" ±

NOTES

* This is the nominal dimension over & bearings. The estimated quantity of deck concrete to be paid for shall be based on this dimension, even though deviation from it is necessary because the top flange of the beam may not have the exact camber or confirmation required to place it parallel to the finished surface.

For details of	See
Deck and Beam Layout	Sheet No. 438
Crossframes and moment plates	Sheet No. 439
Bolted Beam Splice and Scupper Details	Sheet No. 441
Deck Elevations and Camber Diagram	Sheet No. 442
Railing Details	Sheet No. 441
Rockers and Bolsters	Std. Dwg. RB-1-55
Curb Plate, Welding of Moment Plates and other superstructure details	Std. Dwg. SD-1-65 Sh. No. 1 thru 3

The 1/2" bevel fill plate (shown in Detail "D" Std. Dwg. SD-1-65 Sh. No. 1) shall be 2 1/4" thick at & of beam.

Note "A" Longitudinal reinforcing bars in the bottom of the slab shall be placed during construction so that not less than two-thirds of the bars will be in the middle half of the slab span and not more than one-sixth of the bars in each of the end quarters of the span.

S611 bars over Pier #1, #2 & #3
S612 bars over Pier #4
S613 bars over Pier #5

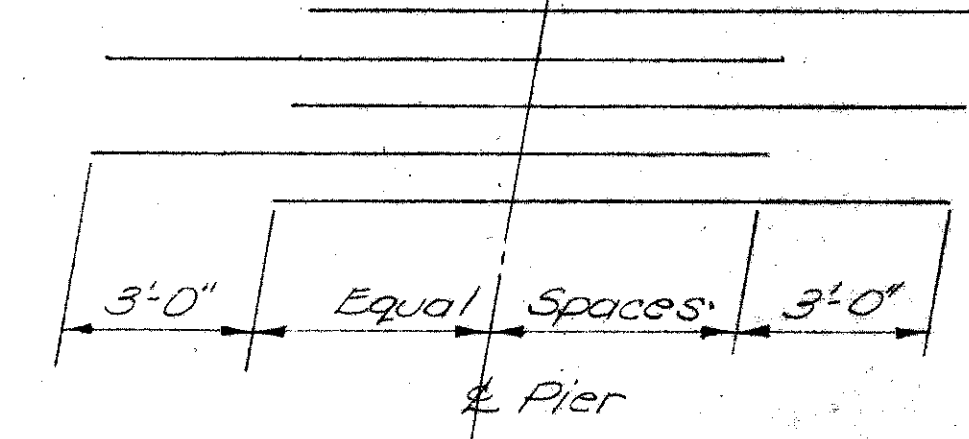


DIAGRAM SHOWING STAGGER OF BARS OVER PIERS

Location	Dim. "A"	Dim. "B"	Dim. "C"
& Bearings	10 3/4"	9"	10 1/4"
Rear Abut.	10 3/4"	9"	10 1/4"
Pier #1	10 3/4"	9"	10 1/4"
Pier #2	10 3/4"	9"	10 1/4"
Pier #3	10 3/4"	9"	10 1/4"
Pier #4	10 3/4"	9"	10 1/4"
Pier #5	10 3/4"	9"	10 1/4"
Fwd. Abut.	10 3/4"	9"	10 1/4"

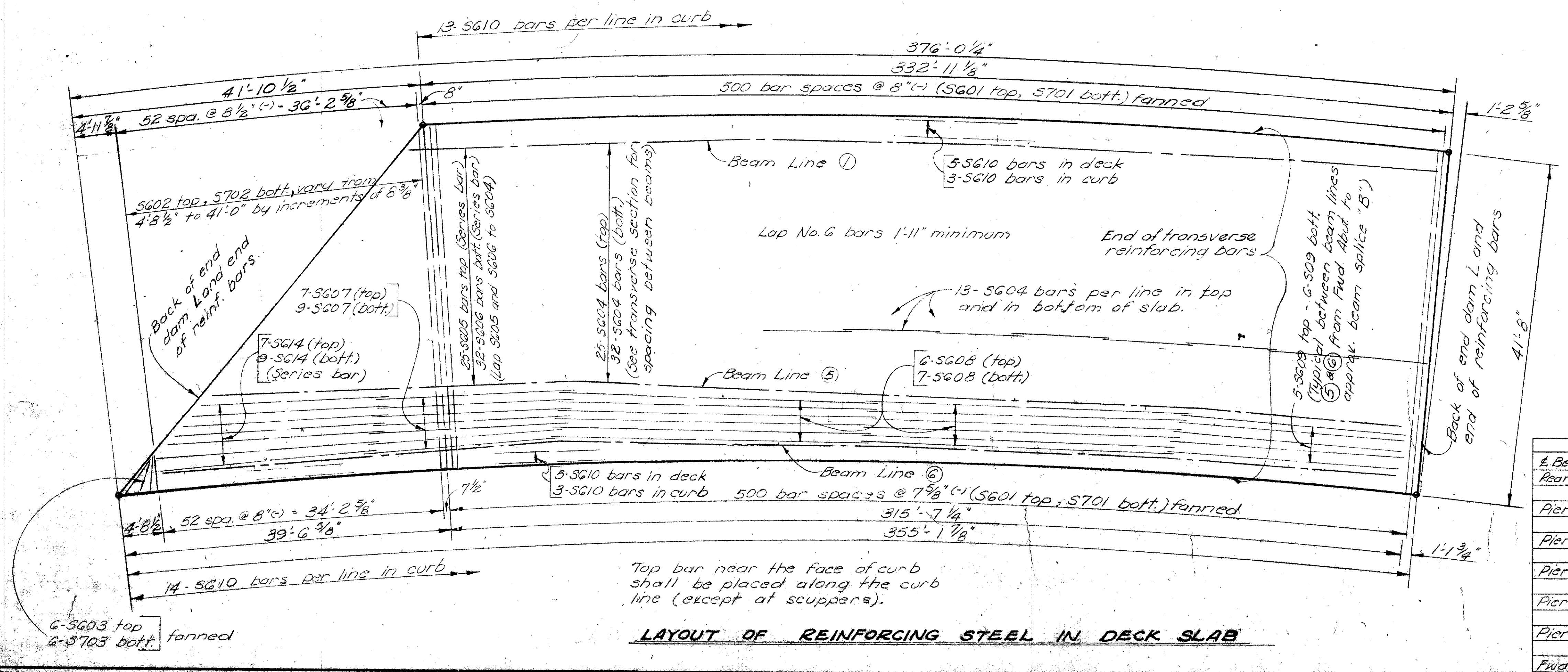
DE LEUW, CATHIER & BRILL
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SUPERSTRUCTURE DETAILS
BRIDGE No. FRA-270-0018 N
DIRECTIONAL ROADWAY "B" OVER
F270 & DIRECTIONAL ROADWAY "E"
FRANKLIN COUNTY

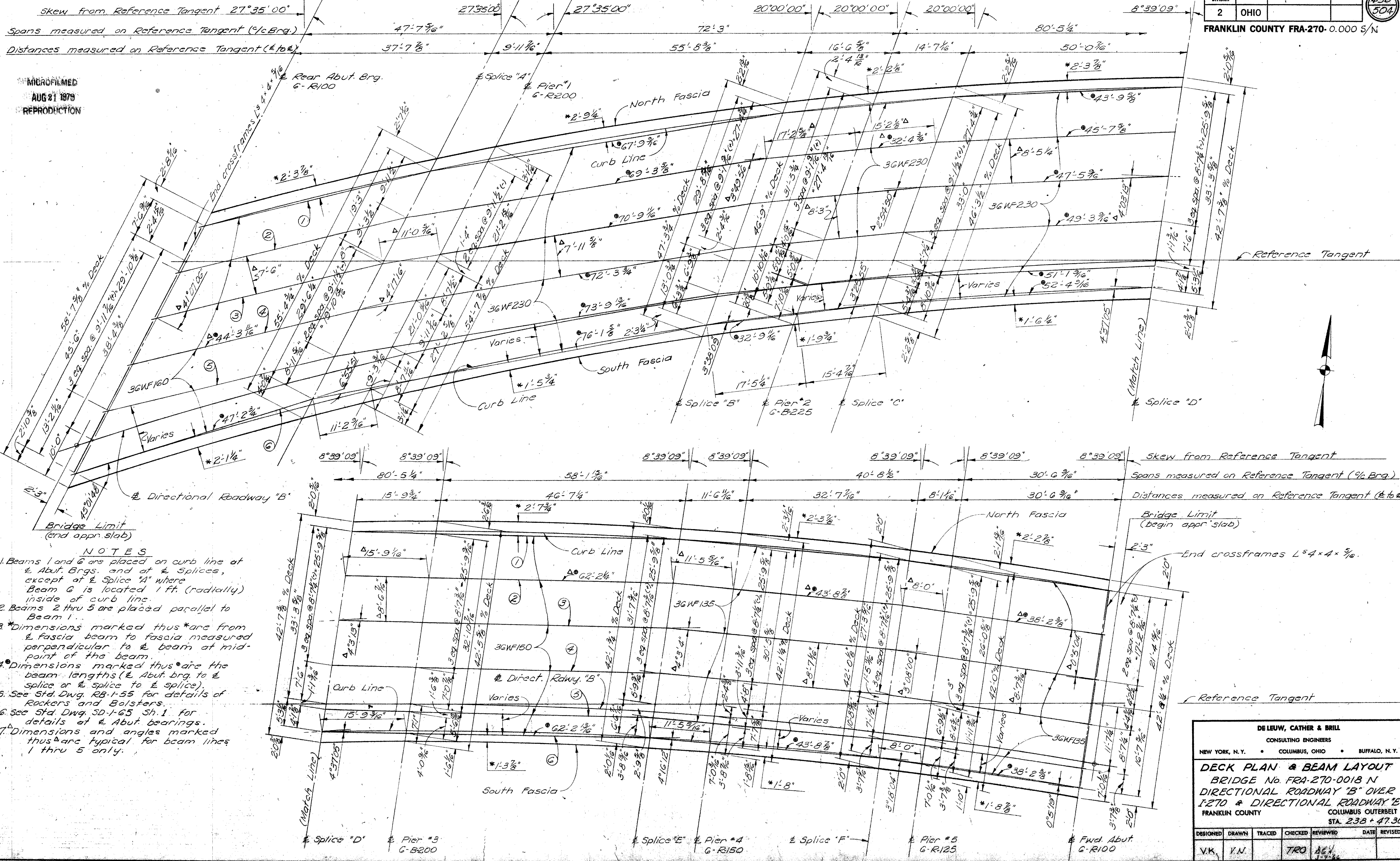
COLUMBUS OUTERBELT
STA. 235+47.30

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.K.	V.N.		TRO	10/1/66		

TYPICAL TRANSVERSE DECK SECTION (Looking West)



LAYOUT OF REINFORCING STEEL IN DECK SLAB



DE LEUW, CATHY & BRILL						
CONSULTING ENGINEERS						
NEW YORK, N. Y.		•	COLUMBUS, OHIO		•	BUFFALO, N. Y.
DECK PLAN & BEAM LAYOUT						
BRIDGE No. FRA-270-0018 N						
DIRECTIONAL ROADWAY "B" OVER						
I-270 & DIRECTIONAL ROADWAY "E"						
FRANKLIN COUNTY			COLUMBUS OUTERBELT			
STA. 238 + 47.30						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.K.	V.N.		TRO	AC	4-7-86	

SKETCH

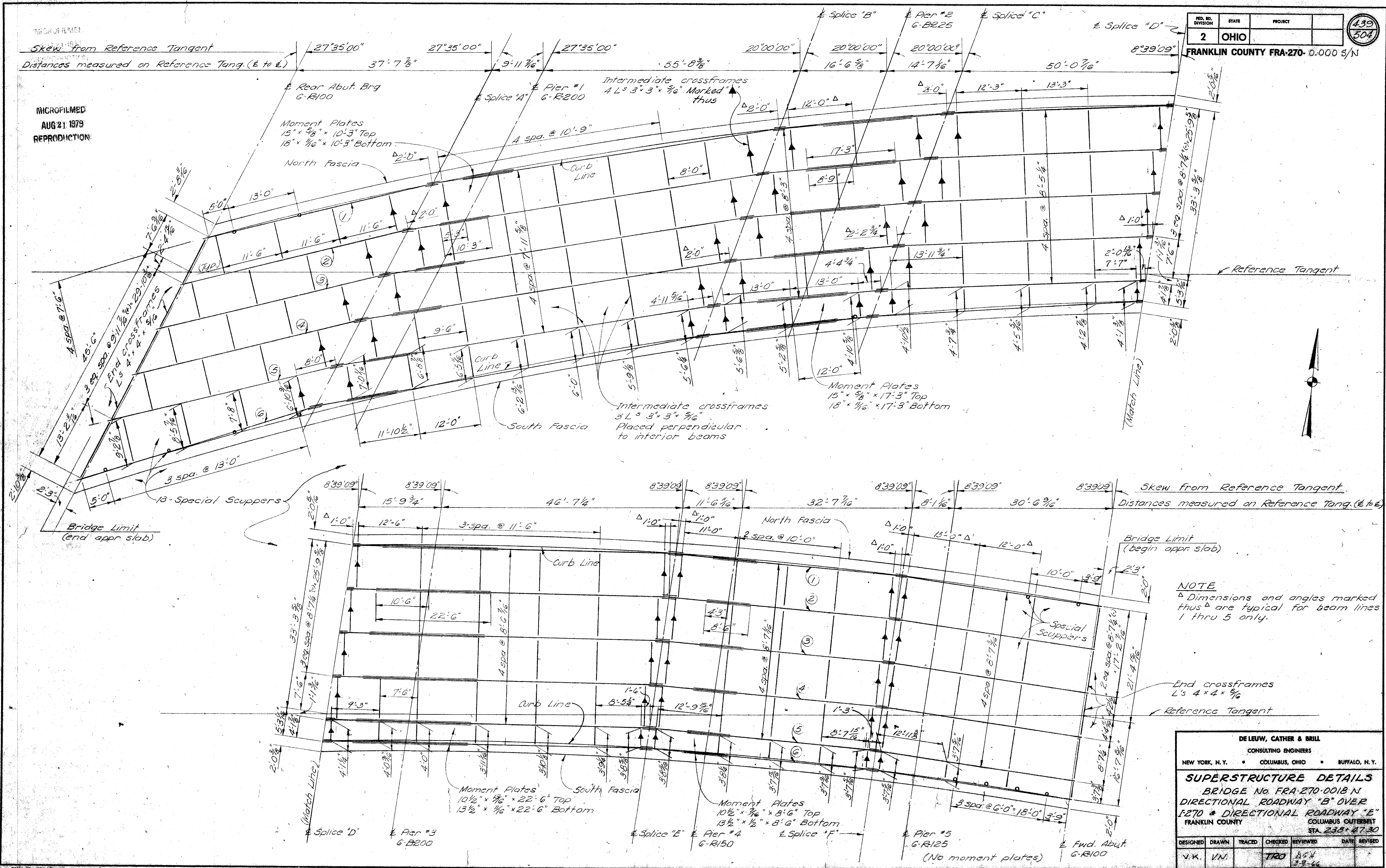
Skew from Reference Tangent
Distances measured on Reference Tang. (E to E)

MICROFILMED
AUG 21 1979
REPRODUCTION

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

FRANKLIN COUNTY FRA-270-0.000 S/N

439
504



NOTE
Dimensions and angles marked thus are typical for beam lines 1 thru 5 only.

DE LEUW, CATHAR & BRILL					
CONSULTING ENGINEERS					
NEW YORK, N.Y.	COLUMBUS, OHIO	BUFFALO, N.Y.			
SUPERSTRUCTURE DETAILS					
BRIDGE No. FRA-270-0018 N					
DIRECTIONAL ROADWAY "B" OVER					
I-270 & DIRECTIONAL ROADWAY "E"					
FRANKLIN COUNTY COLUMBUS OUTERBELT					
STA 238+47.30					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
V.K.	V.N.		TRO	8/24	3-7-66

REINFORCING STEEL LIST

Mark	No.	Length	Weight	Shp	Bending Diagrams	Mark	No.	Length	Weight	Shp	Bending Diagrams	Mark	No.	Length	Weight	Shp	Bending Diagrams	
ABUTMENT						PIER (Cont.)						RAILING						
A801	14	23'-0"	360	S		P1004	16	19'-8"	1354	S		R501	8	10'-9"		S		
A802	14	31'-6"	1177	S		P1005	16	17'-1"	1176	S		R502	92	13'-2"		S		
A803	12	10'-8"	342	S		P1006	16	18'-8"	1285	S		R503	12	4'-2"		B		
A804	6	15'-8"	251	S		P1007	16	16'-1"	1107	S		R504	8	5'-4"		B		
A805	6	12'-8"	203	S		P1008	16	17'-9"	1222	S		R505	8	11'-2"		B		
A601	35	15'-6"	315	B		P1009	16	17'-6"	1205	S		R506	96	13'-6"		B		
A602	36	14'-3"	771	B		P1010	16	19'-2"	1320	S		R507	4	18'-7"		S		
A603	58	16'-4"	1423	B		P1011	160	7'-1"	4877	B		R508	12	13'-1"		S		
A604	35	14'-1"	740	B		P901	5	20'-4"	346	S		LIGHTING PILASTER						
A605	2	18'-8"	56	B		P902	5	34'-6"	587	S		L601	6	8'-9"	79	B		
A606	12	23'-4"	421	B		P903	5	18'-3"	310	S		L602	6	11'-5"	103	B		
A607	4	14'-0"	84	B		P904	5	30'-5"	517	S		L603	12	2'-9"	50	S		
A608	18	18'-2"	491	B		P905	15	25'-2"	1284	B		REPLACEMENT BARS						
A609	2	19'-2"	58	B		P906	15	25'-0"	1275	B		RE1001	1	8'-7"		S		
A501	74	7'-8"	592	B		P907	15	16'-8"	829	S		RE1000	1	8'-3"		S		
A502	38	8'-4"	330	B		P908	15	28'-3"	1441	S		RE900	1	7'-10"		S		
A503	38	8'-8"	343	B		P701	336	9'-4"	6410	B		RE800	1	7'-6"		S		
A504	36	7'-1"	266	B		P702	40	10'-4"	845	B		RE700	3	7'-3"		S		
A505	35	9'-4"	341	B		P703	40	9'-10"	804	B		RE600	5	6'-11"		S		
A506	6	9'-4"	58	B		P501	274	7'-9"	2215	B		RE500	1	6'-7"		S		
A507	32	22'-0"	734	S		P502	4	27'-1"	113	S		RE400	1	6'-3"		S		
A508	1	27'-0"	28	S		P503	4	23'-9"	99	S		RE401	1	6'-3"		B		
A509	1	6'-6"	7	S		P504	12	21'-8"	271	S		SPIRAL BARS						
A510	1	10'-6"	11	S		P505	120	4'-7"	574	B		SP401	1	32"	16'-8"	45	47	304
A511	48	6'-4"	317	B		SUPERSTRUCTURE						SP402	1	32"	17'-6"	45	50	324
A512	32	29'-9"	943	S		S701	501	41'-8"	42,669	S		SP403	1	32"	18'-4"	45	52	337
A513	1	36'-9"	38	S		S702	series of 53	4'-8 1/2"	2,476	S		SP404	1	32"	19'-2"	45	54	350
A514	1	9'-6"	10	S		S703	6	4'-6"	55	S		SP405	1	32"	14'-11"	45	43	278
A515	1	14'-6"	15	S		S601	501	41'-8"	31,354	S		SP406	1	32"	15'-9"	45	45	291
A516	82	7'-3"	620	B		S602	series of 53	4'-8 1/2"	1,819	S		SP407	1	32"	16'-6"	45	47	304
A517	60	5'-4"	334	S		S603	6	4'-6"	41	S		SP408	1	32"	17'-4"	45	49	317
A518	4	7'-5"	31	B		S604	741	26'-6"	29,494	S		SP409	1	32"	13'-10"	45	40	258
A519	4	8'-5"	35	B		S605	series of 25	17'-0"	892	S		SP410	1	32"	14'-8"	45	42	271
A520	4	9'-5"	39	B		S606	series of 32	17'-7"	1,156	S		SP411	1	32"	15'-7"	45	45	291
A521	4	10'-5"	43	B		S607	16	24'-7"	1,591	S		SP412	1	32"	16'-5"	45	47	304
A522	4	11'-5"	48	B		S608	26	39'-1"	1,526	S		SP413	1	32"	12'-11"	45	37	239
A523	14	8'-1"	118	S		S609	88	30'-8"	4,033	S		SP414	1	32"	13'-9"	45	40	258
A524	6	13'-3"	83	S		S610	216	27'-5"	8,895	S		SP415	1	32"	14'-7"	45	42	271
A525	8	9'-7"	80	S		S611	100	32'-0"	4,806	S		SP416	1	32"	15'-5"	45	44	284
A526	12	13'-5"	168	S		S612	33	24'-0"	1,190	S		SP417	1	32"	14'-3"	45	41	265
A527	4	18'-11"	79	S		S613	33	20'-0"	991	S		SP418	1	32"	15'-2"	45	43	278
A528	6	7'-9"	48	S		S614	series of 3	24'-2"	645	S		SP419	1	32"	16'-0"	45	46	298
A529	2	12'-0"	25	S		S501	506	5'-1"	2683	B		SP420	1	32"	16'-10"	45	48	311
A530	32	2'-9"	92	B		S502	506	2'-6"	1319	B		SPIRAL REINFORCING BARS: The "length" shown in the steel list for the spiral bars is the distance to the nearest inch from the top of footing to the bottom of the pier cap.						
A531	36	3'-7"	135	B		S503	506	5'-7"	2947	B		The "No. of turns" shown is the "length" divided by the pitch, plus 3 turns (total number of closed coils), expressed as the nearest whole number. Spiral reinforcing bars shall not have deformations but shall in other respects conform to Item 509. If closed coils shall be provided at the ends of each spiral unit.						
A532	12	13'-3"	166	S		* Vary by 8 3/8" increments					Four steel channel, tee or angle spacers, weighing approximately 0.68 lbs. per lin. ft. of spacer, shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers, based on 0.68 lb. per lin. ft., will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.							
A533	4	18'-9"	78	S		* Vary by 5" increments					BAR SIZE: The bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size number. For example A700 is a No 7 size bar and A1014 is a No 10 size.							
A534	44	5'-7"	256	B														
A535	8	10'-2"	85	B														
A536	4	2'-1"	9	S														
A537	25	6'-2"	161	B														
PIER																		
P1101	6	31'-0"	988	B														
P1102	6	30'-9"	980	B														
P1103	6	27'-6"	877	B														
P1104	6	27'-3"	869	B														
P1001	16	19'-10"	1365	S														
P1002	16	21'-6"	1480	S														
P1003	16	18'-1"	1245	S														

DELEUW, CATHAR & BRILL CONSULTING ENGINEERS NEW YORK, N.Y. COLUMBUS, OHIO BUFFALO, N.Y.					
REINFORCING STEEL LIST BRIDGE NO. FRA-270-0018N DIRECTIONAL ROADWAY "B" OVER I-270 & DIRECTIONAL ROADWAY "E" FRANKLIN COUNTY COLUMBUS OUTERBELT STA. 238 + 47.30					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
V.K.	BOB		TRO	MY	

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NOTES

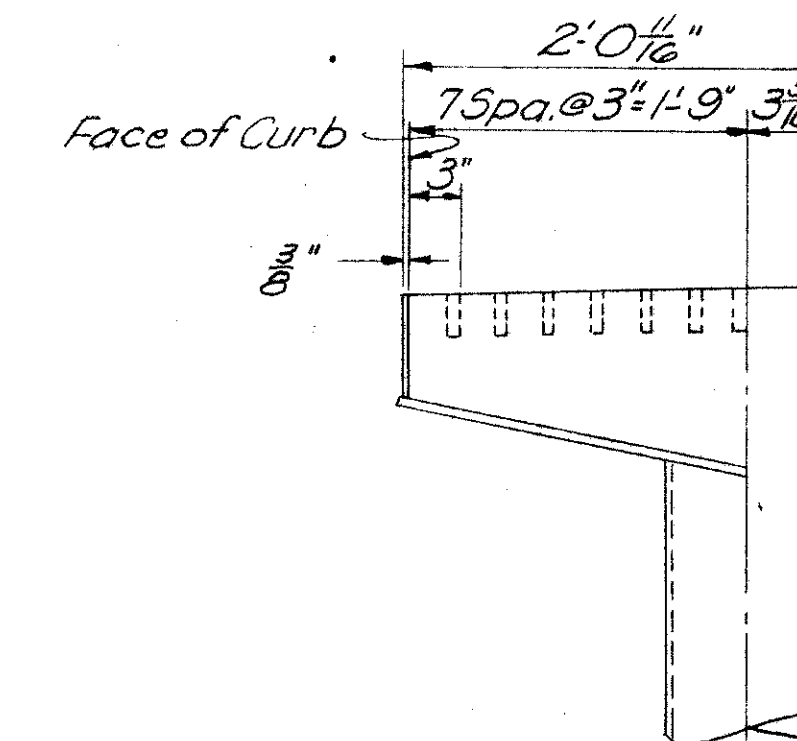
* For pertinent angles see "Deck Plan & Beam Layout" Sh. No. 438.

For details of Splice "B", "C" and "F" see Std. Dwg. SD-1-65.

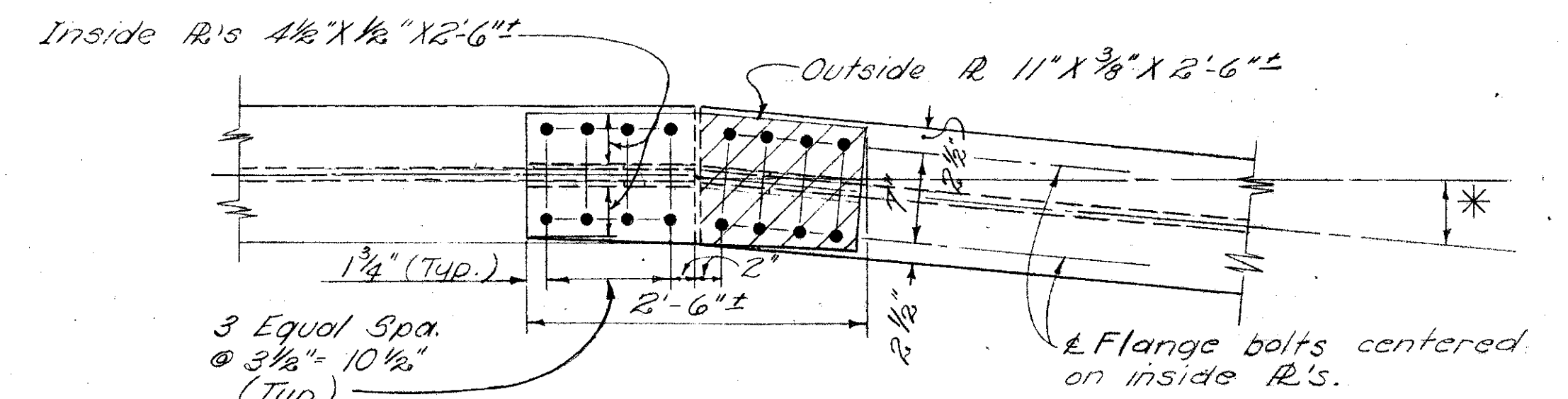
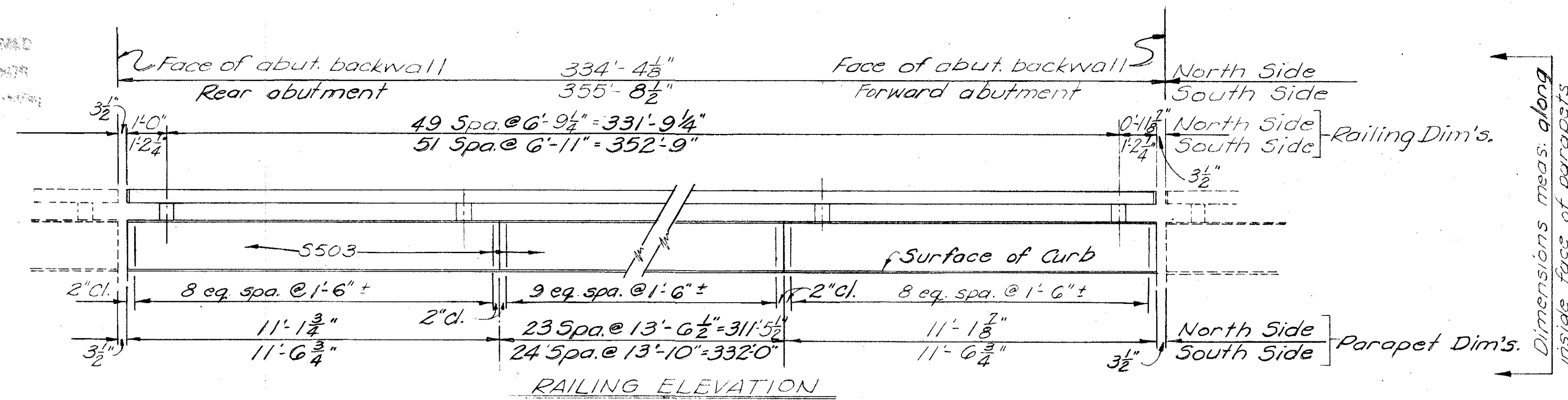
For additional notes and details not shown see Std. Dwg. SD-1-65.

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

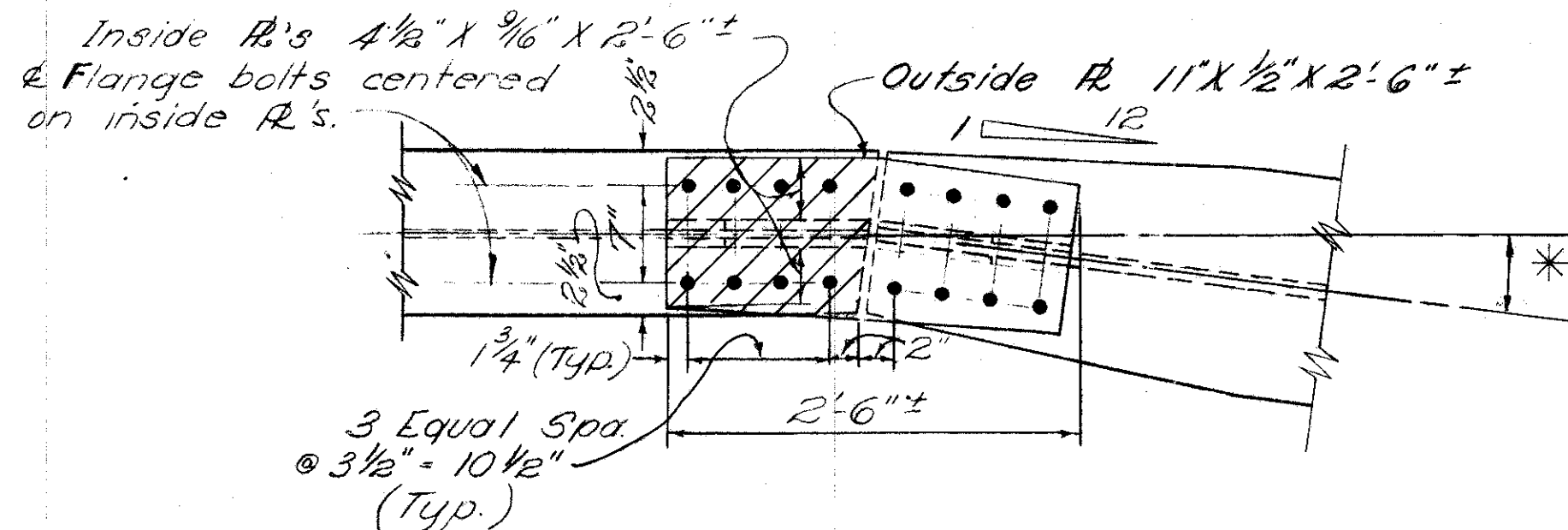
FRANKLIN COUNTY FRA-270-0.000 3/4



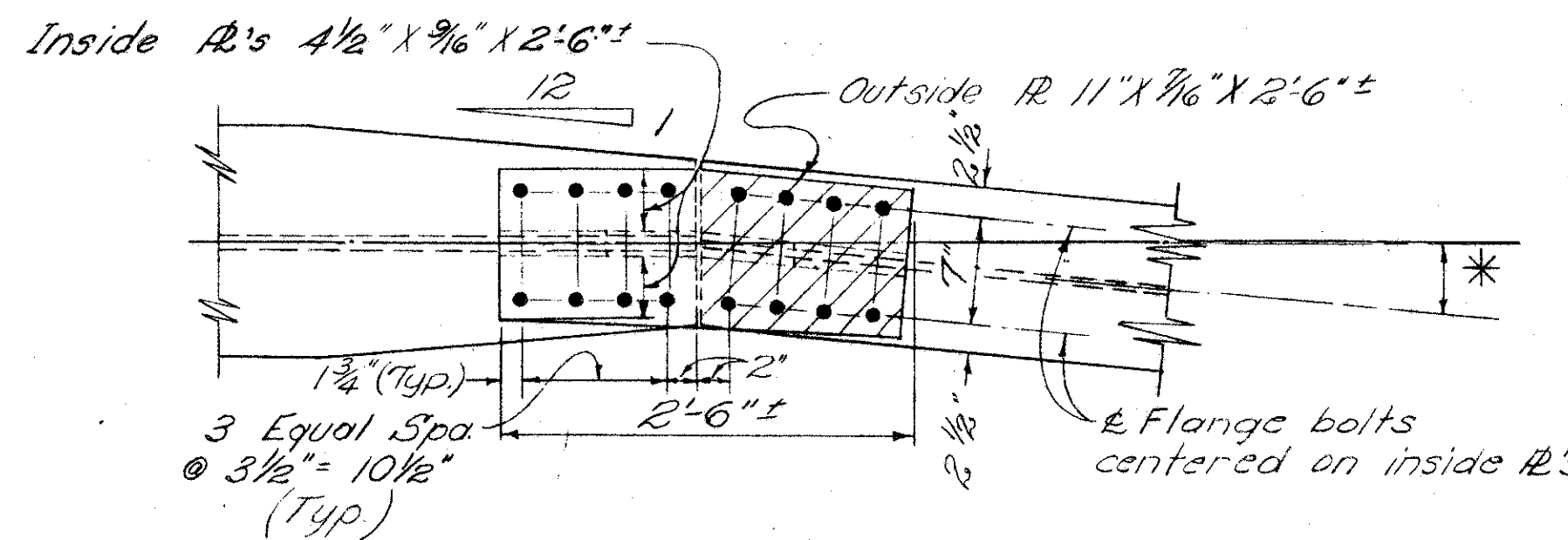
SPECIAL SCUPPER DETAIL
For additional details not shown, see Std. Dwg. SD-1-65 Sh. No. 2



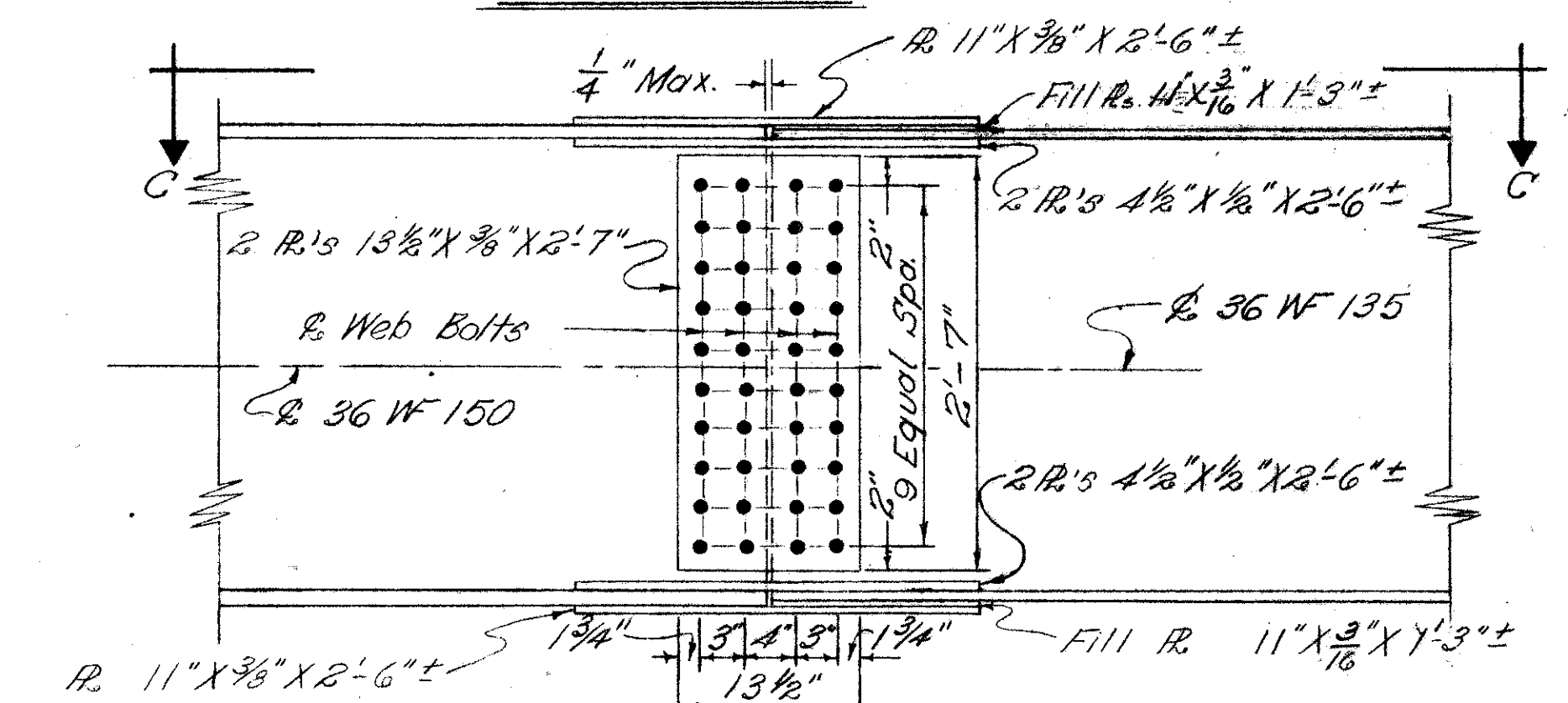
VIEW C-C



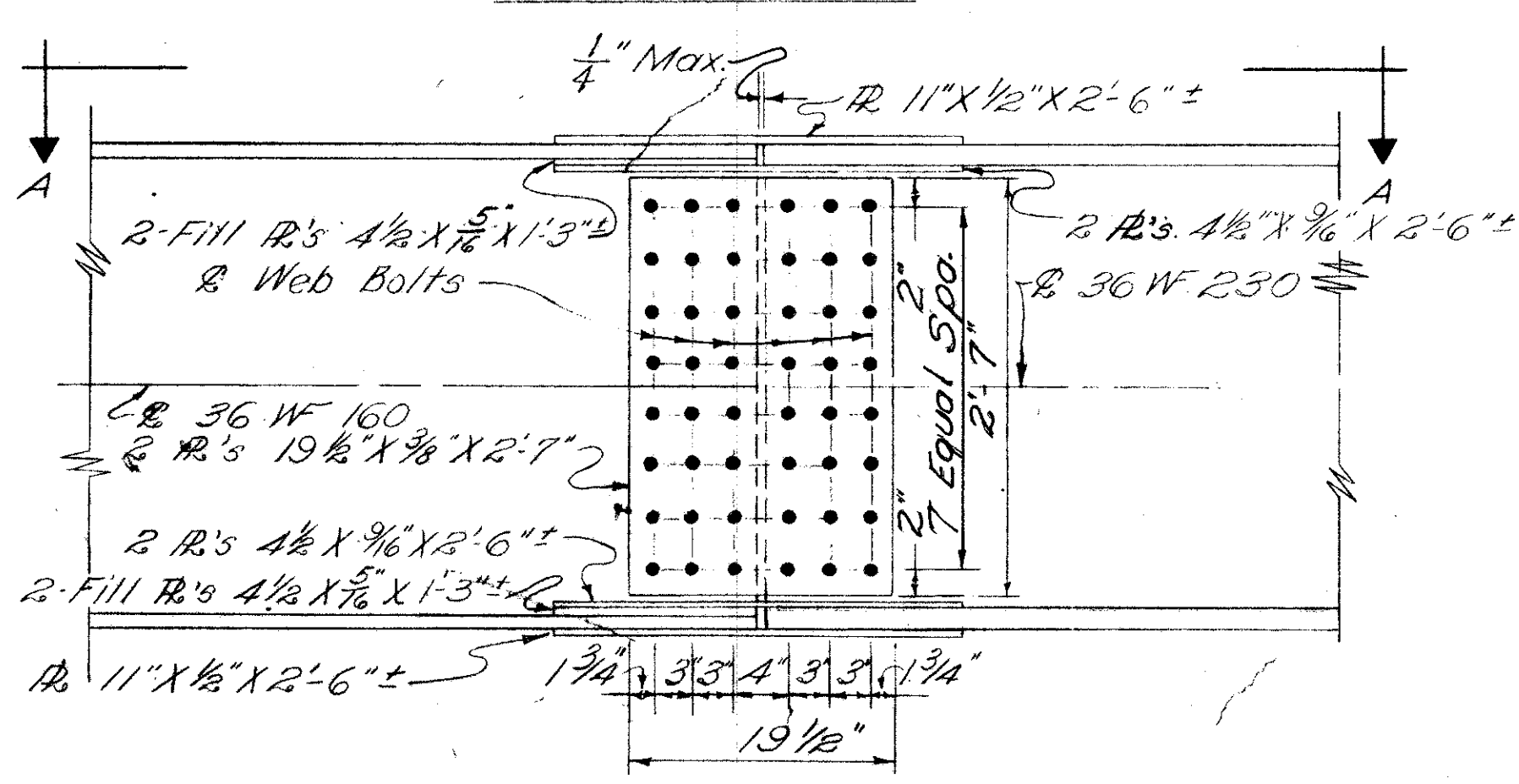
VIEW A-A



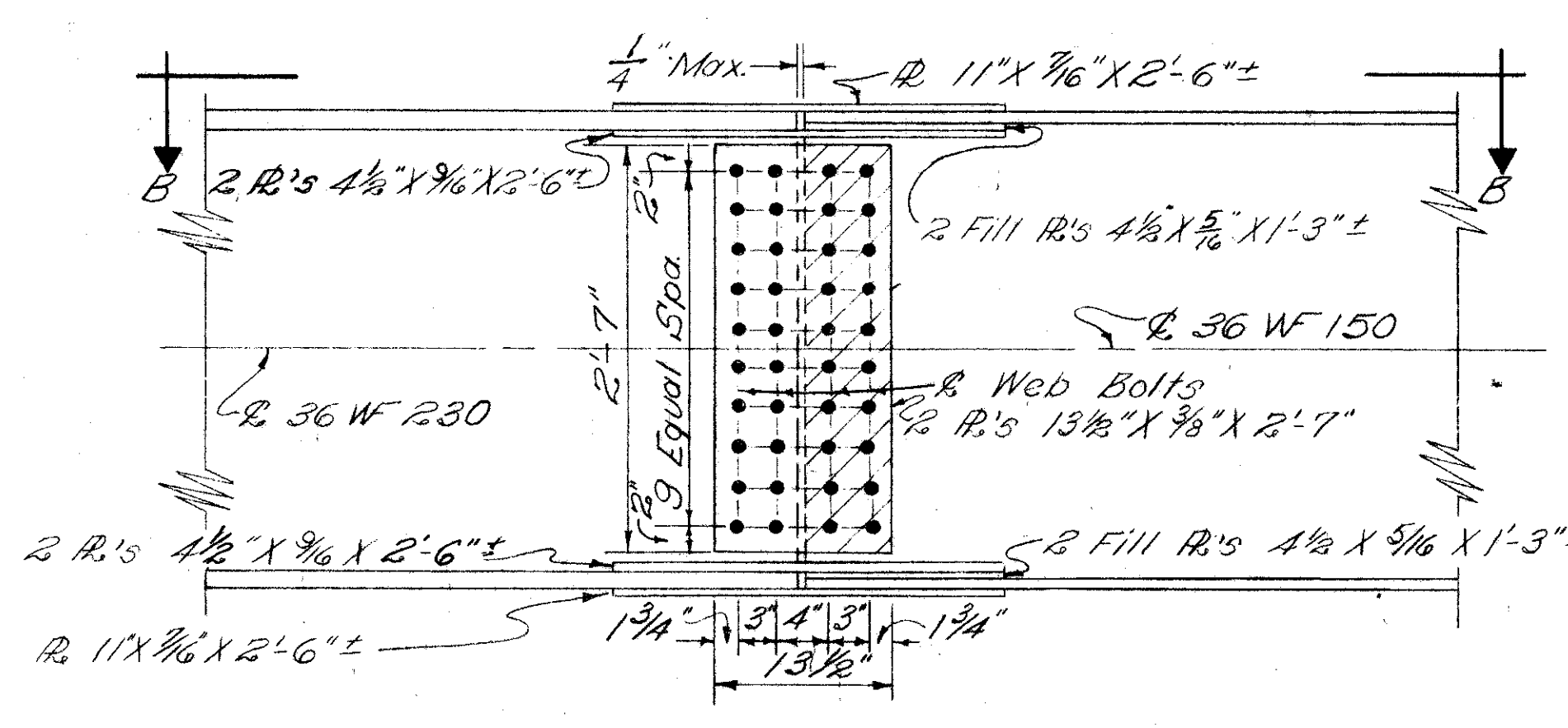
VIEW B-B



SPlice "E" DETAIL



SPlice "A" DETAIL



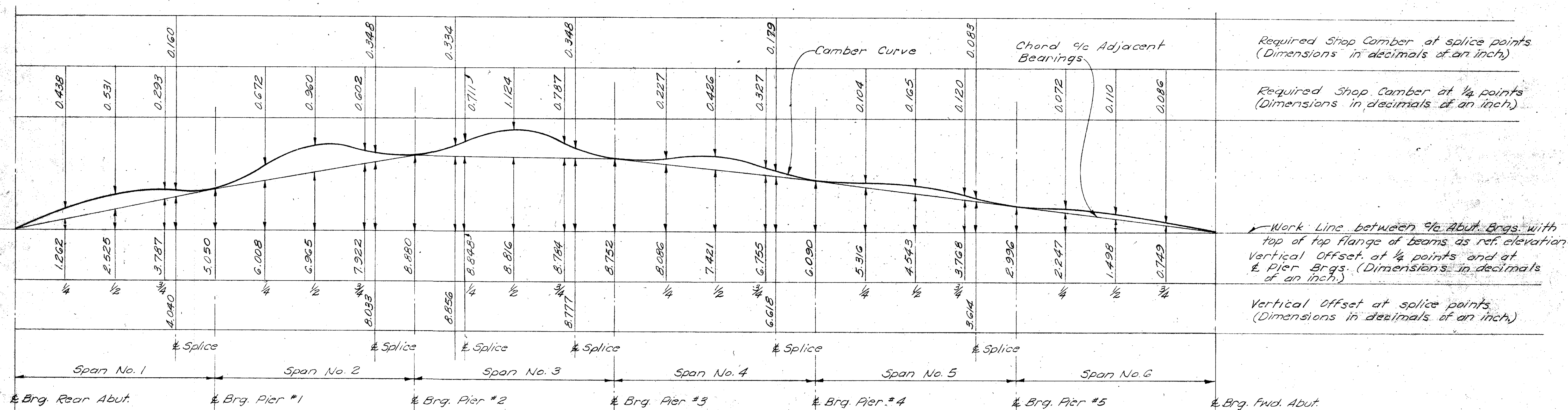
SPlice "D" DETAIL

DELUW, CATHY & BRILL					
CONSULTING ENGINEERS					
NEW YORK, N.Y.	COLUMBUS, OHIO	BUFFALO, N.Y.			
SUPERSTRUCTURE DETAILS					
BRIDGE No. FRA-270-0018 N					
DIRECTIONAL ROADWAY "B" OVER					
I-270 & DIRECTIONAL ROADWAY "E"					
FRANKLIN COUNTY COLUMBUS OUTERBELT					
STA. 238+47.30					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
V.K.	T.L.T.	T.L.T.	TRO	A.L.T.	11/7/79

DEFLECTION AND CAMBER TABLE (Dimensions In Decimals of an Inch)

Span Number	No. 1				No. 2				No. 3				No. 4				No. 5				No. 6			
Location of Point	1/4	1/2	3/4	Splice	1/4	1/2	3/4	Splice	Splice	1/4	1/2	3/4	Splice	1/4	1/2	3/4	Splice	1/4	1/2	3/4	Splice	1/4	1/2	3/4
Deflection Due to Weight of Steel	.040	.045	.017	.001	.048	.074	.036	.002	.003	.051	.095	.063	.004	.004	.024	.019	.001	.001	.006	.004	.000	.003	.006	.005
Deflection Due to Remaining Dead Load	.216	.243	.094	.004	.258	.398	.200	.010	.014	.275	.515	.339	.019	.020	.132	.105	.006	.007	.031	.020	.001	.015	.032	.027
Adjustment Required for Vertical Curve	.182	.243	.182	.155	.366	.488	.366	.336	.317	.385	.514	.385	.325	.203	.270	.203	.172	.096	.128	.096	.082	.054	.072	.054
Required Shop Camber	.438	.531	.293	.160	.672	.960	.602	.348	.334	.711	1.124	.787	.348	.227	.426	.327	.179	.104	.165	.120	.083	.072	.110	.086

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CAMBER DIAGRAM

NOTE: The elevations shown are those required before the concrete is placed. Proper allowance has been made for dead load deflections caused by the weight of concrete.

DECK ELEVATIONS (Roadway Surface Elevation at Face of Curb)

Side	Station	240+77.5	240+91	241+04	241+17	241+30.4	241+4.8	241+66	241+83	242+01.1	242+19	242+37	242+55	242+72.6	242+87	243+00	243+14	243+28.0	243+47	243+66.4	243+81	243+95.3
North Side	Deck Elev.	906.81	906.93	907.02	907.08	907.14	907.23	907.31	907.33	907.34	907.37	907.38	907.34	907.27	907.22	907.18	907.11	907.03	906.91	906.77	906.64	906.51
South Side	Station	240+41.2	240+56	240+71	240+85	240+99.9	241+21	241+42	241+62	241+82.9	242+04	242+25	242+46	242+67.0	242+81	242+96	243+11	243+25.3	243+46	243+65.9	243+81	243+96.3
	Deck Elev.	904.15	904.30	904.43	904.52	904.62	904.76	904.87	904.92	904.96	905.01	905.03	905.00	904.93	904.89	904.84	904.77	904.69	904.56	904.41	904.29	904.15

DE LEUW, CATHAR & BRILL			
CONSULTING ENGINEERS			
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V.K.	V.N.	TRO	11/1/79