

STATE OF OHIO
DEPARTMENT OF HIGHWAYS

I-1105(17)

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1105(17)	247

MICROFILMED
DEC 24 1986

No PID
C No. 570530

ASD-I-8.44
MONTGOMERY & PERRY TOWNSHIPS
ASHLAND COUNTY

LIMITED ACCESS

This improvement is especially designed for through traffic and has been declared a limited access highway or freeway by action of the Director of Highways in accordance with the provisions of Section 5511.02 of the Revised Code of Ohio.

ASHLAND COUNTY
ASD -I-8.44

494

CONVENTIONAL SIGNS

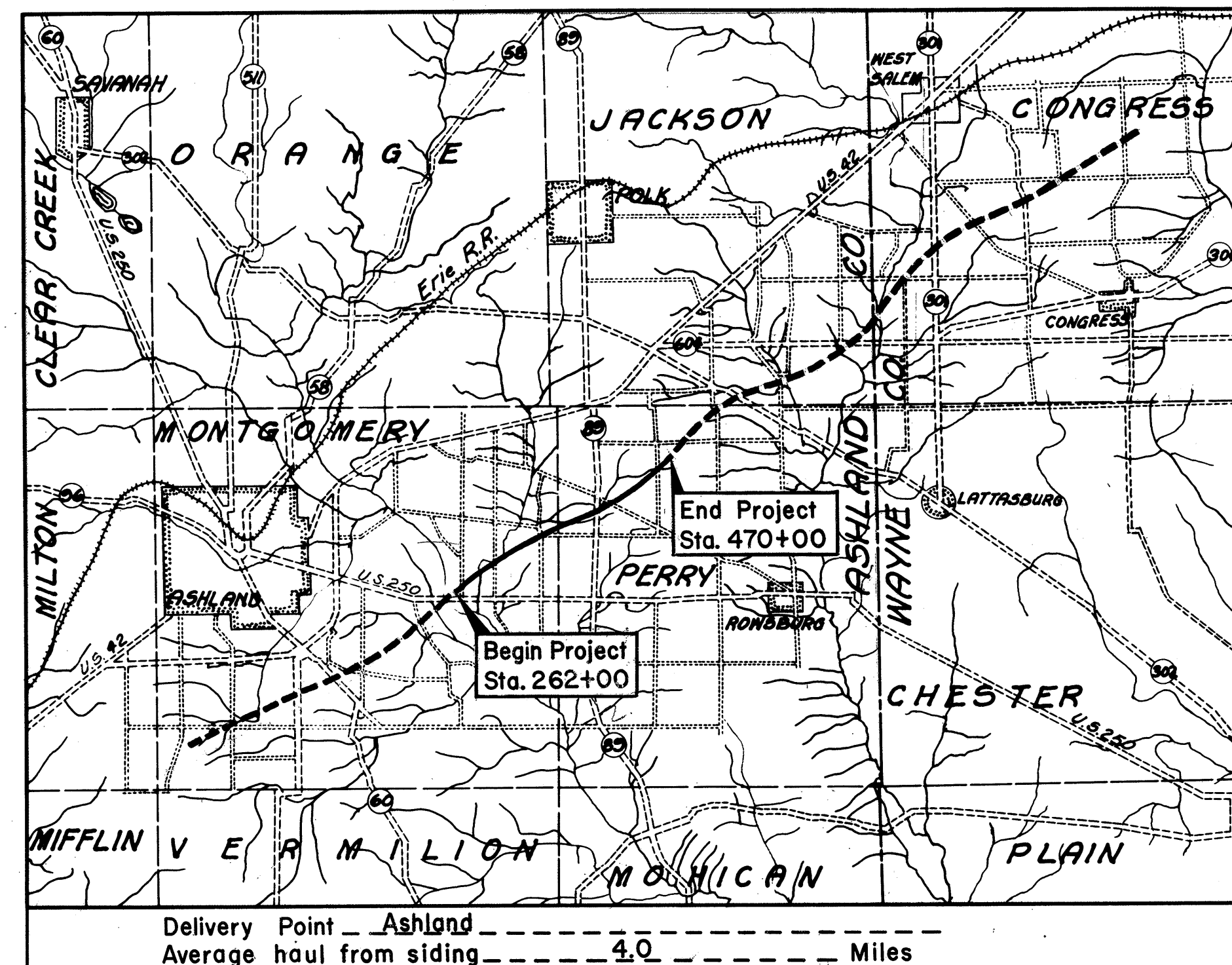
State Line	
County Line	
Township Line	
Section Line	
Center Line	
Corporation Line	
Fence Line	
Guard Rail (existing)	
Guard Rail (proposed)	
Steam Railroad	
Power Poles	
Telephone Poles	
Trees (existing)	

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LINE DATA

Begin Project	Sta. 262+00	
End Project	Sta. 470+00	
Net Length of Project	20,800.00	Lin. Ft. or 3.939 Miles
Net Length of Work	20,980.00	Lin. Ft.
Add for Approaches (See Sheet No. 8)	13,459.32	Lin. Ft.
Total Length of Work	34,439.32	Lin. Ft. or 6.523 Miles



LOCATION MAP

SCALE OF MILES



Portion to be Improved
Portion Under Separate Contract
State Roads
Other Roads

SCALE

Plan _____ 1"=100'
Profile: Horizontal _____ 1"=100'
Profile: Vertical _____ 1"=10'

REVISED SHEETS

ORIGINAL SHEET NO.	REVISED SHEET NO.	REVISION DATE
181	181 A	11-13-57
182	182 A	11-13-57
183	183 A	11-13-57
226	226 A	11-13-57
Sheet No. 179 Revised		11-13-57
Sheet No. 180 Revised		11-13-57
Sheet No. 185 Revised		11-13-57
Sheet No. 226 Revised		11-13-57

Supplemental Specifications

E-101	1-1-57
B-119	REV. 8-11-57
5	6-8-55
18	REV. 2-6-57
S-114	REV. 8-1-57
I-127	8-2-57

The standard specifications of the State of Ohio, Department of Highways, including changes and supplemental specifications listed in the proposal shall govern this improvement.

The right of way for this improvement will be provided by the State of Ohio.

I hereby approve these plans and declare that the making of this improvement will not require the closing of the highway to traffic and that provisions for the maintenance and safety of traffic will be as set forth on the plans and estimates.

Approved R. J. Mahoney
Date 9-17-57 Chief Engineer, Interstate Projects

Approved R. H. Mahoney
Date 9-17-57 Deputy Director, Planning & Programming

Approved R. H. Mahoney
Date 9-17-57 Deputy Director, Design & Construction

Approved _____
Date _____ First Assistant Director

Approved George J. Shumyer
Date 9-17-57 Acting Director of Highways

Sheet Numbers: 10, 11, 12, 14, 17, 26, 27, 28, 29, 30, 31, 34, 35, 157, 180, 182A, 183, 185, 226, 226A, 226B, 226C, 226D, 226E, 226F, 226G, 226H, 226I, 226J, 226K, 226L, 226M, 226N, 226O, 226P, 226Q, 226R, 226S, 226T, 226U, 226V, 226W, 226X, 226Y, 226Z, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

Sheet Numbers: 17, 17, 183 B

Sheet Numbers: 182A, 185 Revised 6-11-58
Sh. 184, Rev. Revised 7-5-58.

Added R/W parcels 82-10C
and 82-10X to Sheet 243
R.E.C. 11-17-59



DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED

DIVISION ENGINEER

DATE

Approved R. E. Schmitt
Date 9/2/57 Engineer of Traffic

File No. ASHLAND COUNTY ASD-I-8.44
Date of Letting 19
Contract No. _____

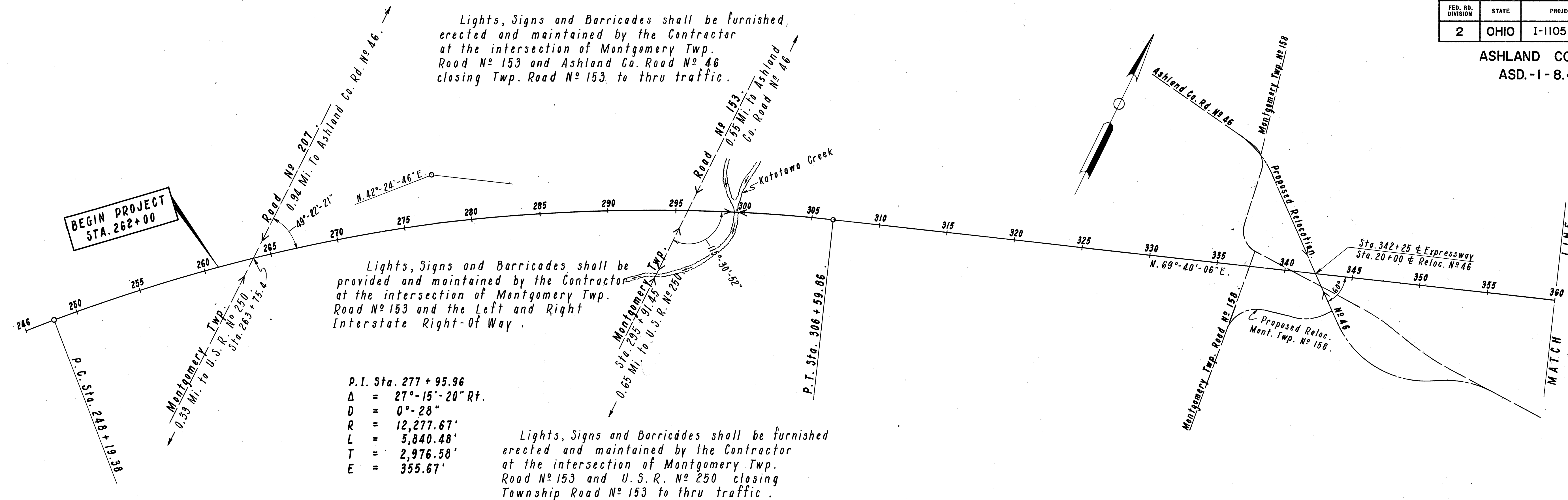
Supplemental Prints of Standard Construction Drawings							
BT-507071E NO. 1	10-147	I-8 M.H. NO. 2	5-152	HW-A&B	7-15-57	AR-1-57	4-9-57
BT-71R	3-2-53	I-14G	1-22-52	HW-C	7-15-57		
DR-1	1-3-55	I-15 NO. 1	8-1-55	S-27 PC. 3	2-20-45		
F-1	4-1-57	I-15 NO. 2-A	7-2-56	S-27 PC. 4	1-4-54		
G-707	6-1-56	I-15 NO. 2-B	6-1-57	T-35	1-2-56		
I-1,2,3,4,5	2-20-45	L-1	4-1-50	T. J.	5-1-56		
I-8 C.B. 2-2-A&B	8-1-56	L-3	4-1-50	AS-1-54	12-1-54		
I-8 C.B. NO. 4	6-1-57	L-3-A	4-1-50	CSB-2-56 Sheet 2	12-3-56		
I-8 C.B. NO. 5	6-1-57	L.J. NO. 1	7-1-55	CSB-2-56 Sheet 3	12-3-56		
I-8 M.H. NO. 1	5-1-52	R.I.-1	1-3-55	R.B.-1-55	3-1-55		

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DEC 24 1986

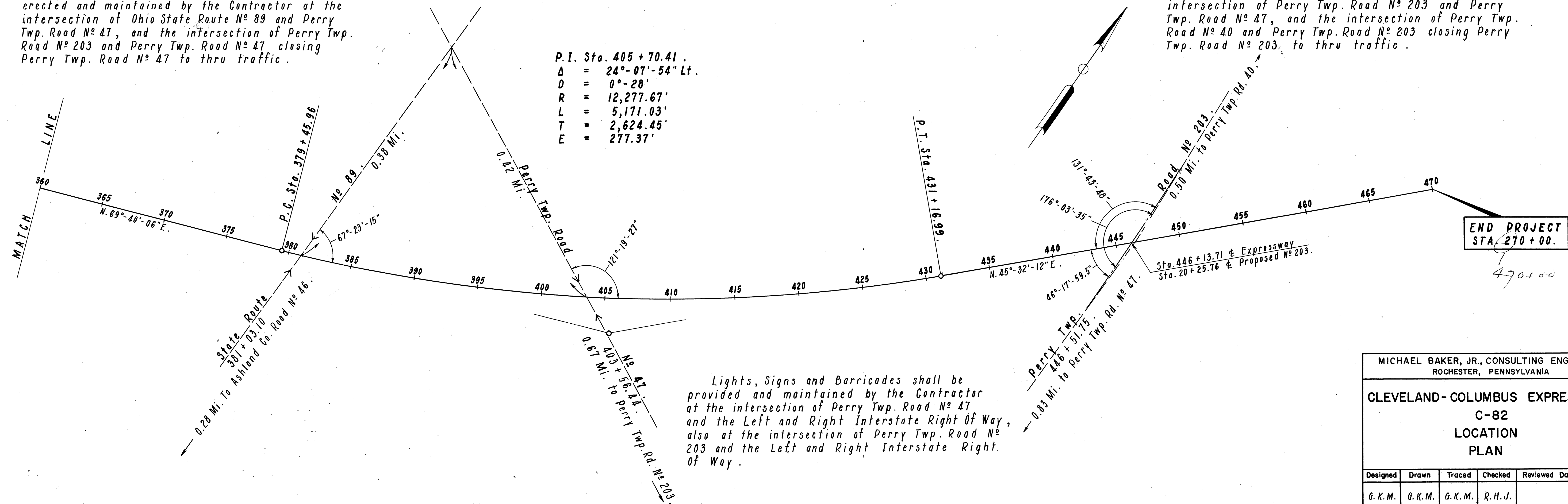
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	1-1105 (17)

2
247

ASHLAND COUNTY
ASD.-I-8.44



Lights, Signs and Barricades shall be furnished, erected and maintained by the Contractor at the intersection of Ohio State Route No 89 and Perry Twp. Road No 47, and the intersection of Perry Twp. Road No 203 and Perry Twp. Road No 47 closing Perry Twp. Road No 47 to thru traffic.



MICHAEL BAKER, JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

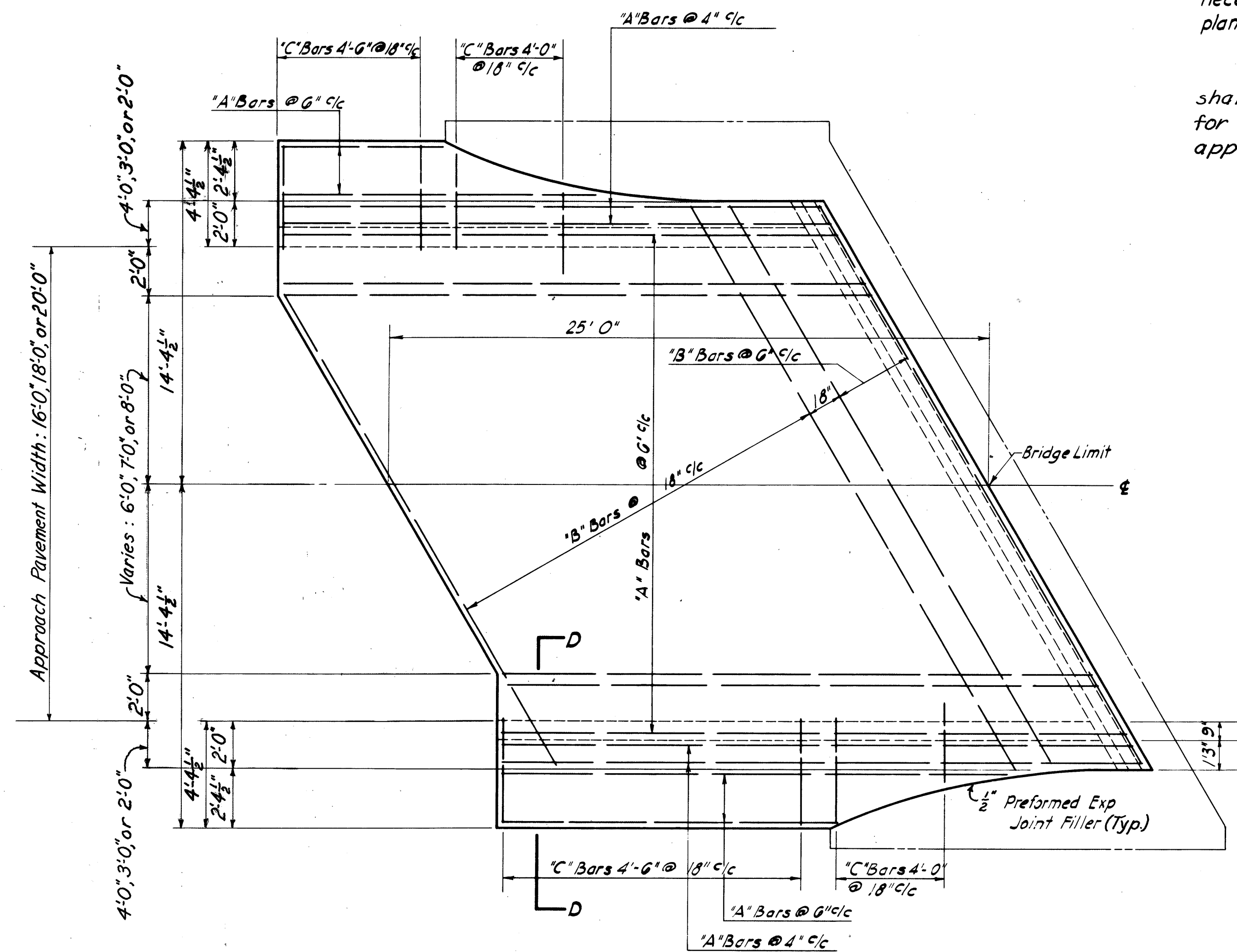
CLEVELAND-COLUMBUS EXPRESSWAY
C-82
LOCATION
PLAN

Designed	Drawn	Traced	Checked	Reviewed Date	Revised
G. K. M.	G. K. M.	G. K. M.	R. H. J.		

ASHLAND COUNTY
ASD -1-8.44

NOTE: Refer to Standard Drawing AS-1-54 (dated 7-1-54, revised 12-1-54) for typical sections and details of approach slabs. Standards to be modified as necessary to accommodate reinforcing plan as shown. Concrete to be Class 'C'.

Preformed Exp. joint filler shall be included in the price bid for Item I-7 reinforced concrete approach slabs.

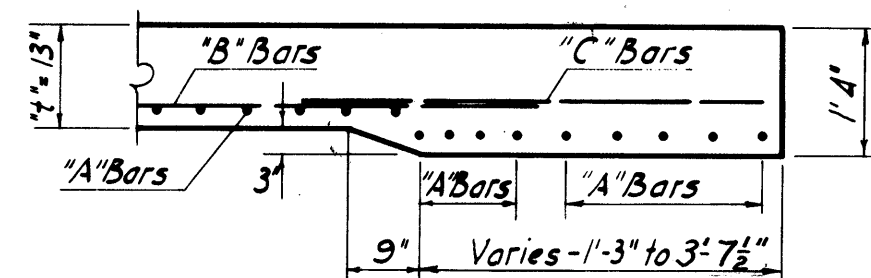


APPROACH SLAB DETAIL

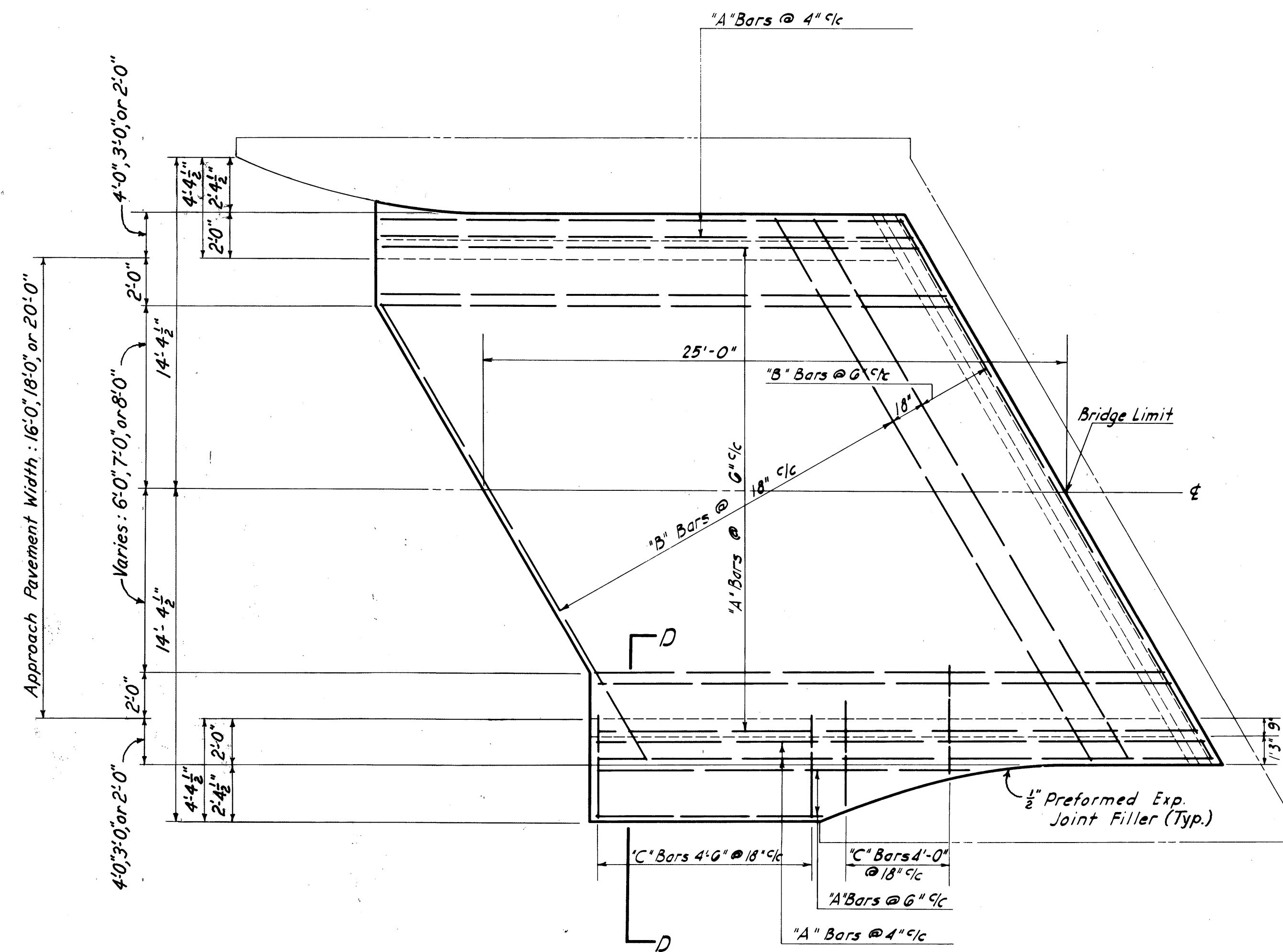
NOTE:

"A" Bars - #8
"B" Bars - #5
"C" Bars - #5

"C" Bars shall be placed normal to the center line of roadway



SECTION 'DD'



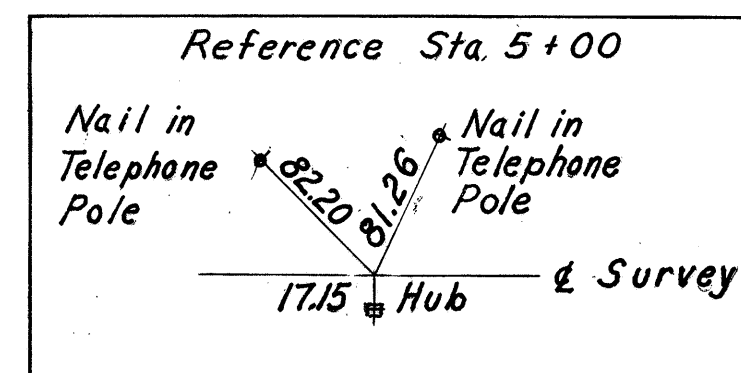
APPROACH SLAB DETAIL

MICHAEL BAKER, JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

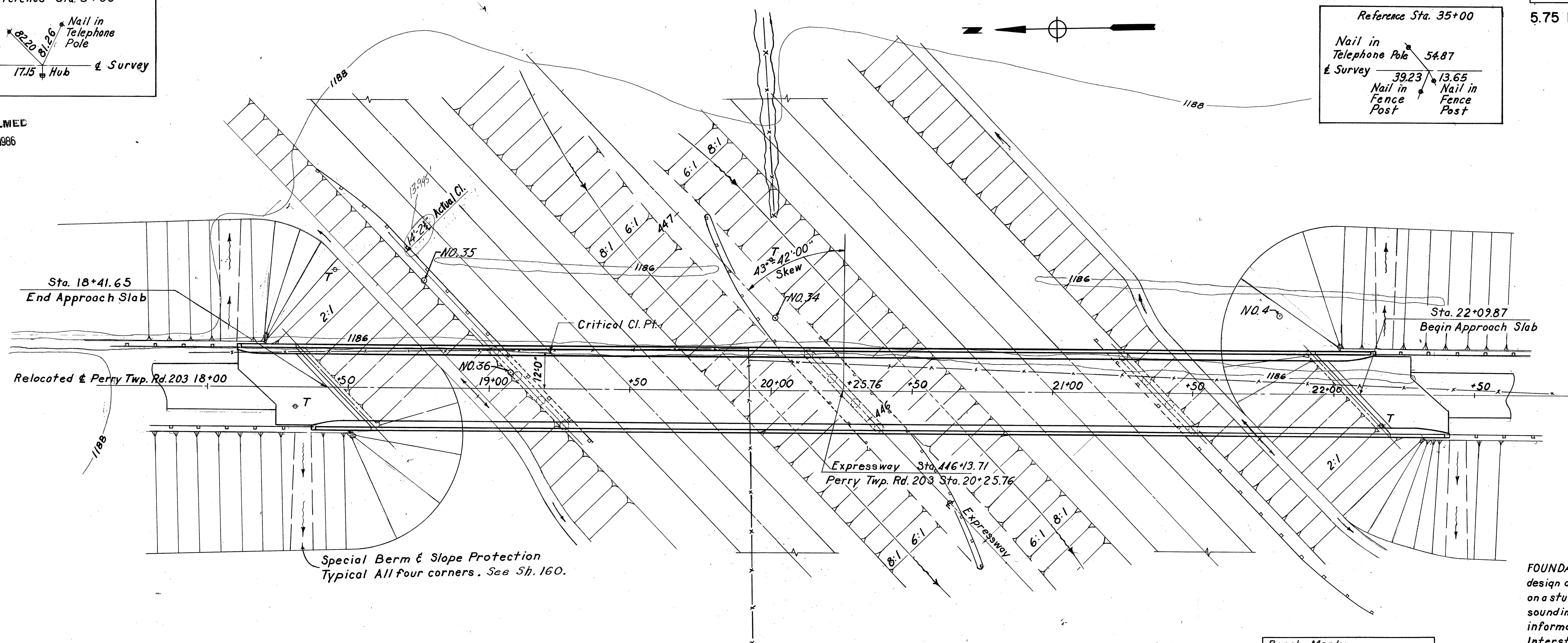
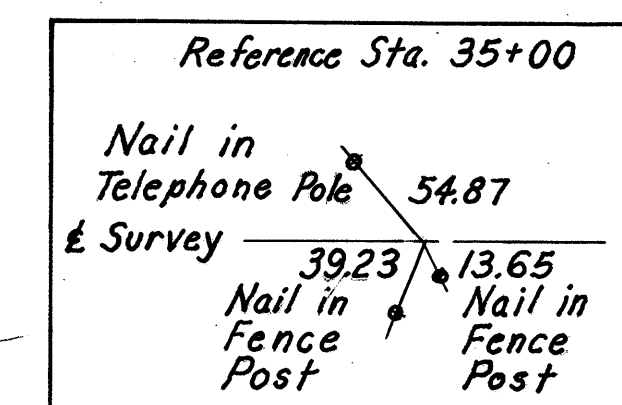
CLEVELAND-COLUMBUS EXPRESSWAY
C-82
TYPICAL APPROACH SLAB DETAILS
FOR CROSS ROAD BRIDGES

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
H.C.	R.N.	R.N.	H.M.			

5.75 MI. ± EAST OF ASHLAND
ASHLAND COUNTY
ASD-I-8.44



MICROFILMED
DEC 29 1986



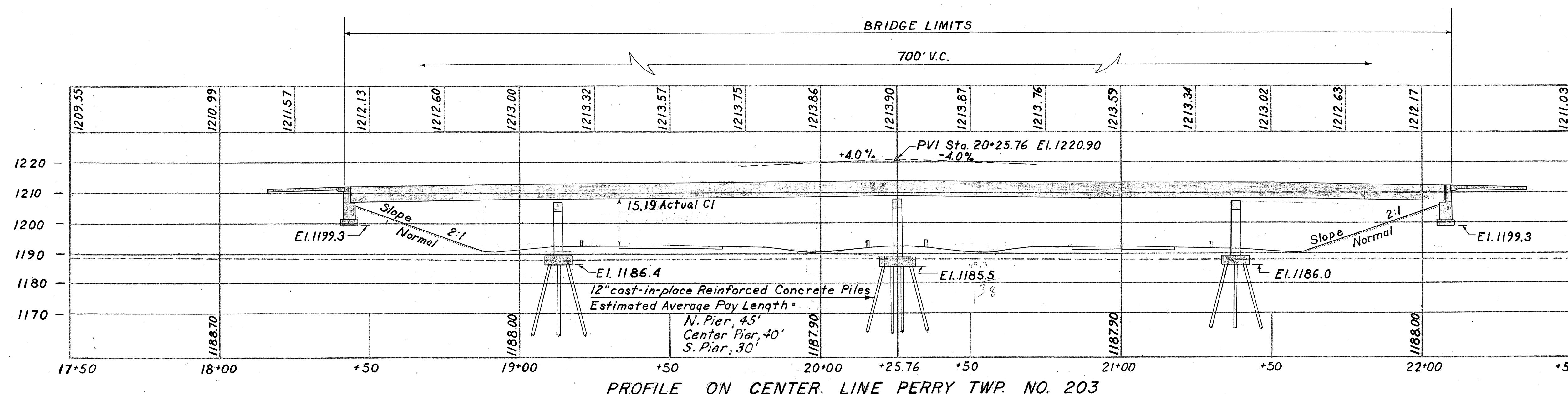
Special Berm & Slope Protection
Typical All four corners. See Sh. 160.

Bench Mark:
Log bolt in root of 40' Maple,
250' Lt. Sta. 444+66
Elevation 1187.37

FOUNDATION SOUNDINGS: Foundation design and foundation quantities are based on a study of borings and soil-sampling soundings made at the site. This sounding information may be inspected in the Interstate Projects office and in the Division office, but the State does not guarantee the accuracy thereof.

Perry Twp. Rd. 203 A.D.T. 120 (1975)

Preliminary Design
6-12-57 Y.G.



PROPOSED STRUCTURE

TYPE: Continuous steel girders with reinforced concrete deck and substructure.
SPANS: 68.0'-113.0'-113.0'-68.0' c.c. Brgs.
ROADWAY: 24'-0" 2'-0" Safety curbs
LOAD FREQ: C.F. = 30 (51)
SKEW: 43°42'00" R.F.
WEARING SURFACE: 1/2" Mono. Concrete
APPROACH SLAB: Special Design (25' long)
ALIGNMENT: Tangent

MICHAEL BAKER, JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

SITE PLAN

BRIDGE No. ASD-I-1191
UNDER PERRY TWP. RD. 203

ASHLAND CO. STA. 446+13.71

PRESENT	TOPOGRAPHY	PROPOSED	WORK
Surveyed	Drawn	Designed	Drawn
			Checked
			L.D.M.
			J.F.G.
			Reviewed
			BOL

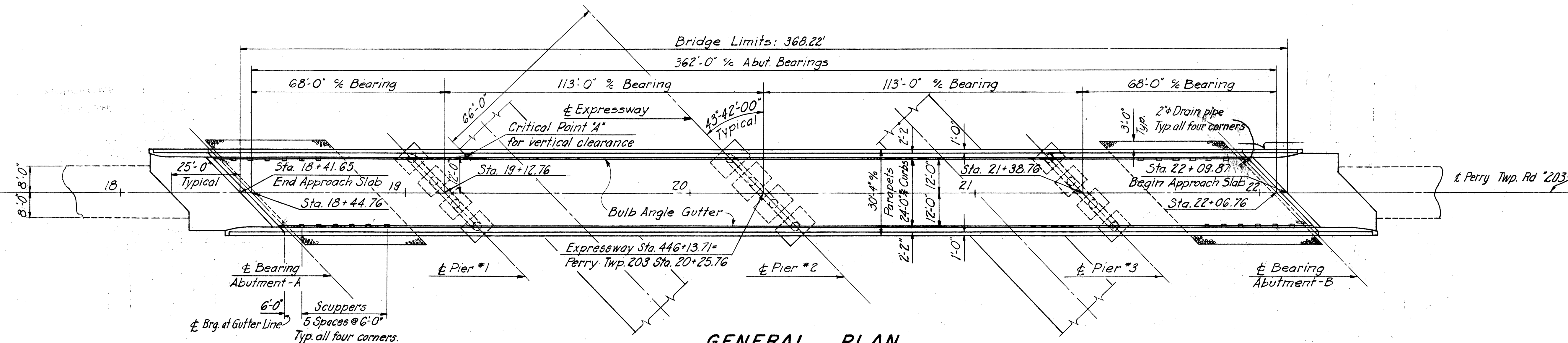
MICROFILMED
DEC 29 1986

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1105 (17)	

223

223
247

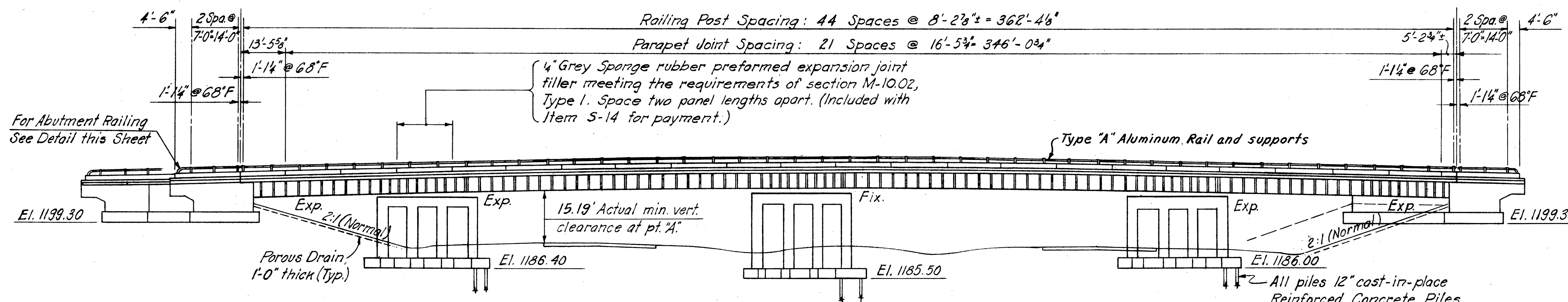
ASHLAND COUNTY
ASD - I-8.44



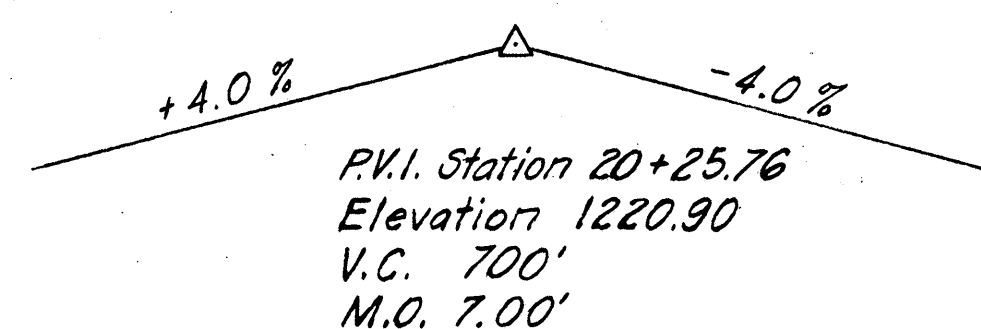
GENERAL PLAN

GENERAL NOTES

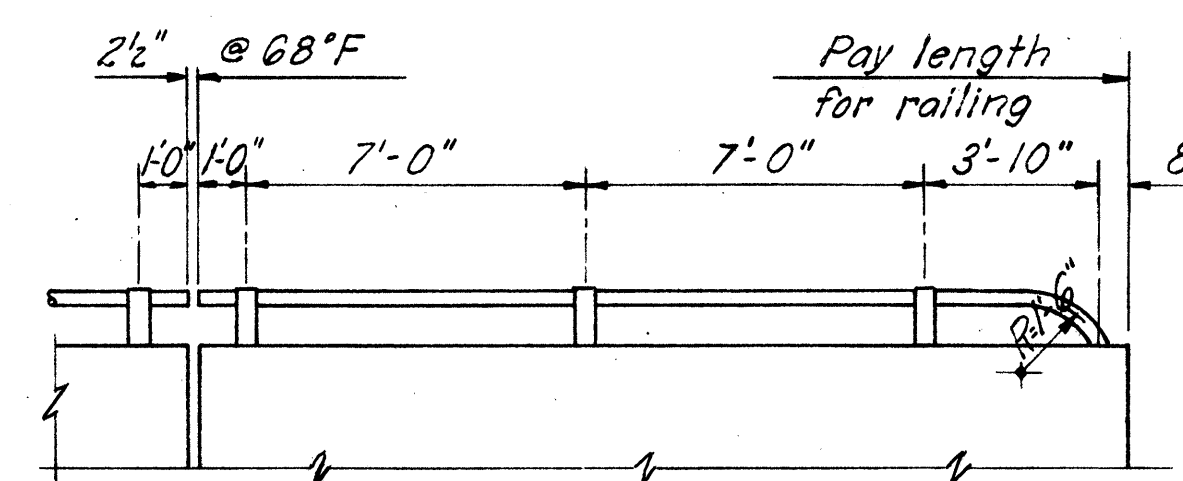
- Design Specifications: This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways dated 10-1-51, together with revisions thereof dated 7-15-52, 4-1-54 and 2-1-55.
- Loading: C.F. = 30(51).
- Reference shall be made to Standard Drawings CSB-2-56, Sheets 2 & 3 of 6, dated 12-3-56, RB-1-55 dated 3-1-55, AR-1-57 dated 4-9-57, and to Supplemental Specifications S-114 revised 8-1-57.
- Porous drain material as shown on General Plan, shall be provided at each end of bridge. The material shall be placed one foot thick.
- Welding of Structural Steel shall be Class "A". Any welds shown as field welds may, at the option of the contractor, be made in the shop.
- Piles shall be driven to a minimum bearing capacity of 40 tons for the piers.
- Excavation Quantity includes the removal of fill material between surface of proposed embankment and bottom of abutment. abutments shall be made with material meeting
- Embankments to be placed to subgrade elevation for a distance of approximately 200 feet beyond the bridge limits as early as practical in the construction procedure and before work is begun on Abutments or Piers 1 and 3. Abutments should be placed as late as practical, with a minimum time lapse of 30 days between completion of the embankment and starting of work on the abutments.



ELEVATION



CURVE DATA

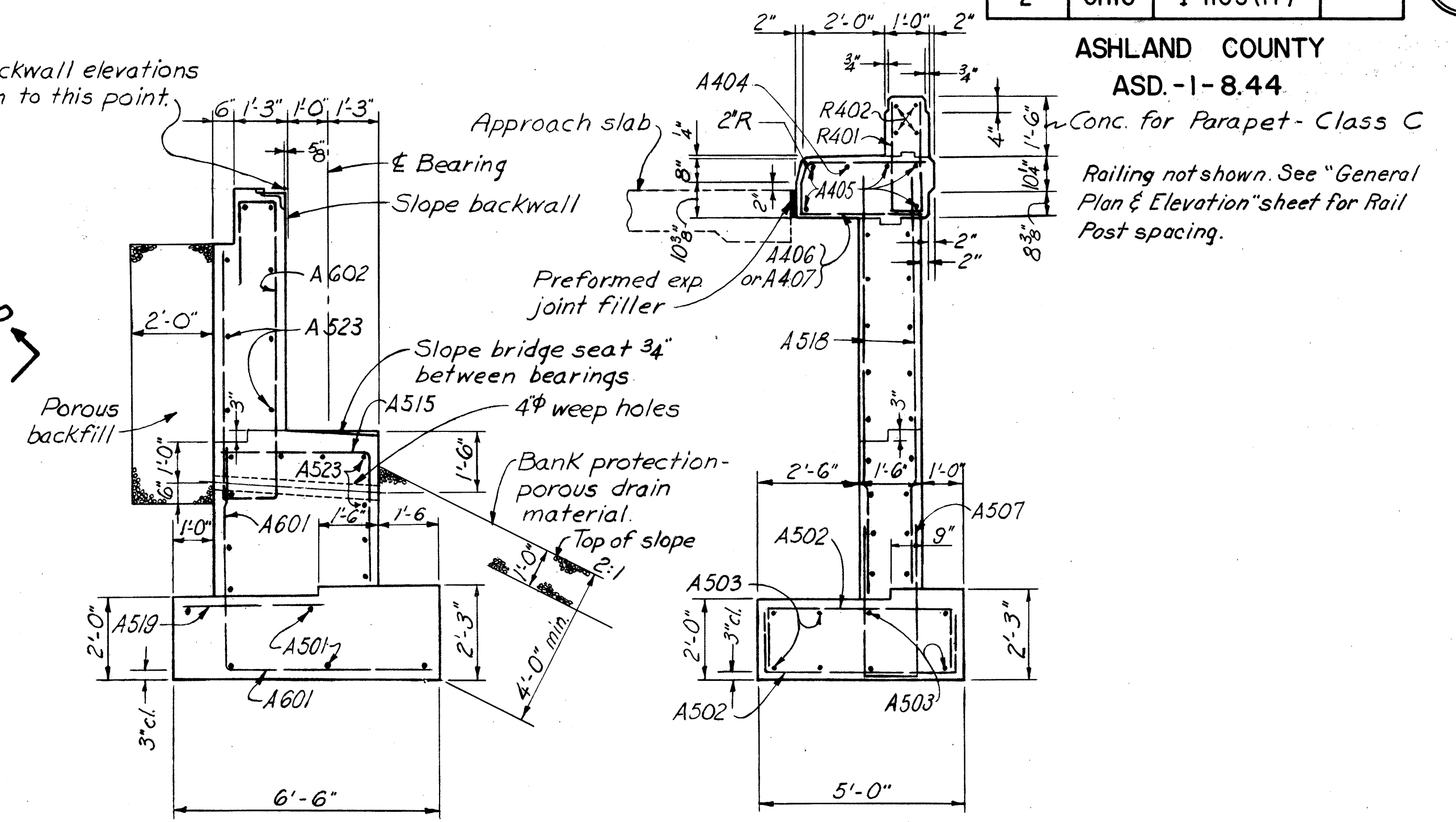
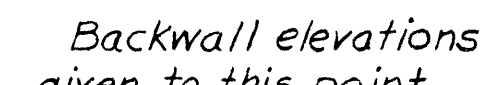


ABUTMENT RAILING DETAIL

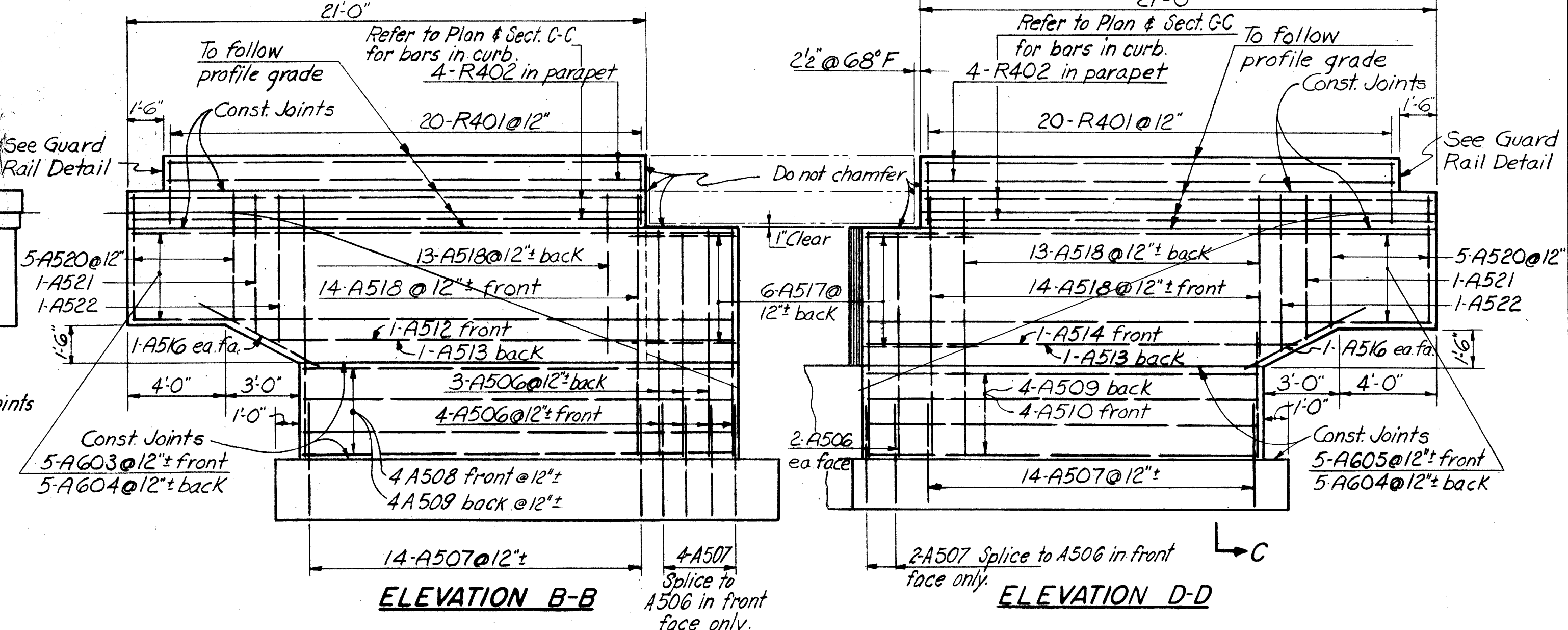
MICHAEL BAKER, JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

GENERAL PLAN & ELEVATION
BRIDGE NO. ASD - I - 1191
UNDER PERRY TWP. 203

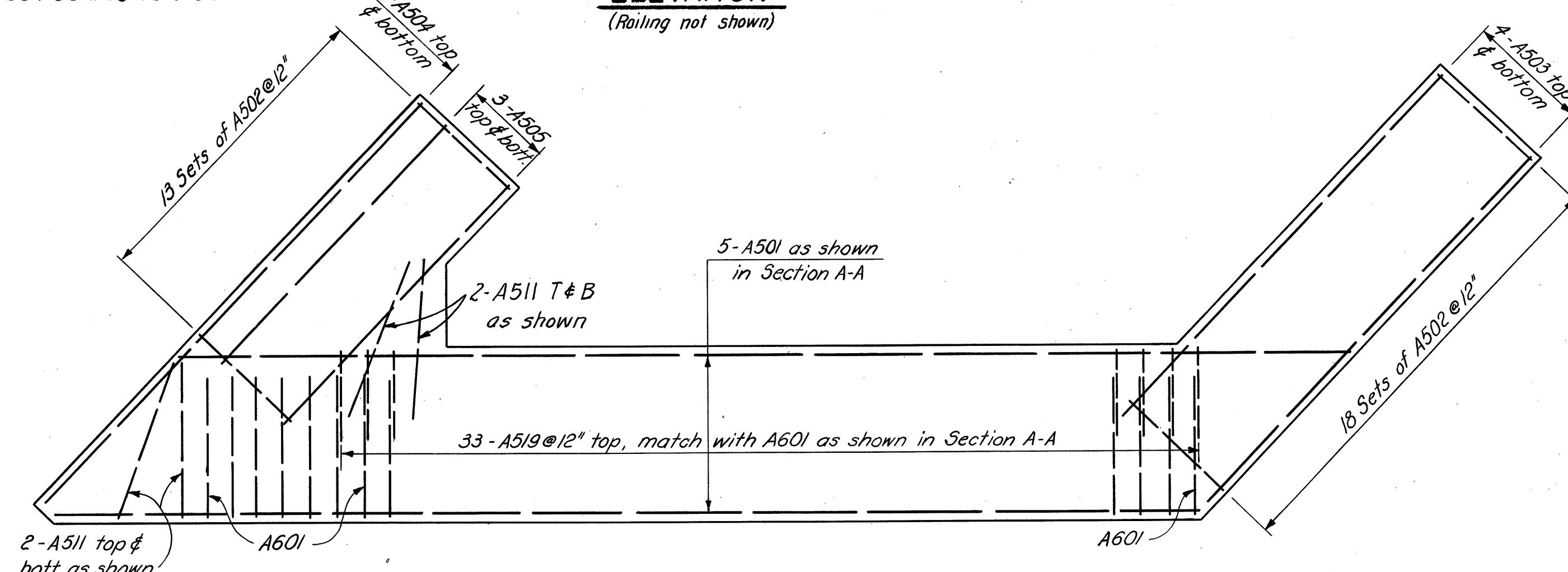
Designed	Drawn	Traced	Checked	Reviewed-Date	Revised
H.M.C.	E.J.E.	E.J.E.	W.T.H.	B.O.L. 7.23.57	



SECTION C-C



ELEVATION D-D



FOOTING PLAN

- Porous backfill 2 feet thick to be placed in back of Abutments.
- Clearance of reinforcing steel from face of concrete shall be 2" unless otherwise shown.
- Concrete above bridge seat construction joint shall not be placed until after the steelwork is erected, but before placing the deck slab.
- Steel end finish shall be used as a template for the top of the backwall.
- Procedure: The embankment shall be placed and compacted to Subgrade elevation, after which excavation shall be made for the abutment.
- All abutment concrete shall be Class "E", except for Railing Parapet which shall be Class "C".
- Design foundation pressure is 2 Tons per sq. ft.
- See Sheet "Superstructure Details" for guard rail details.

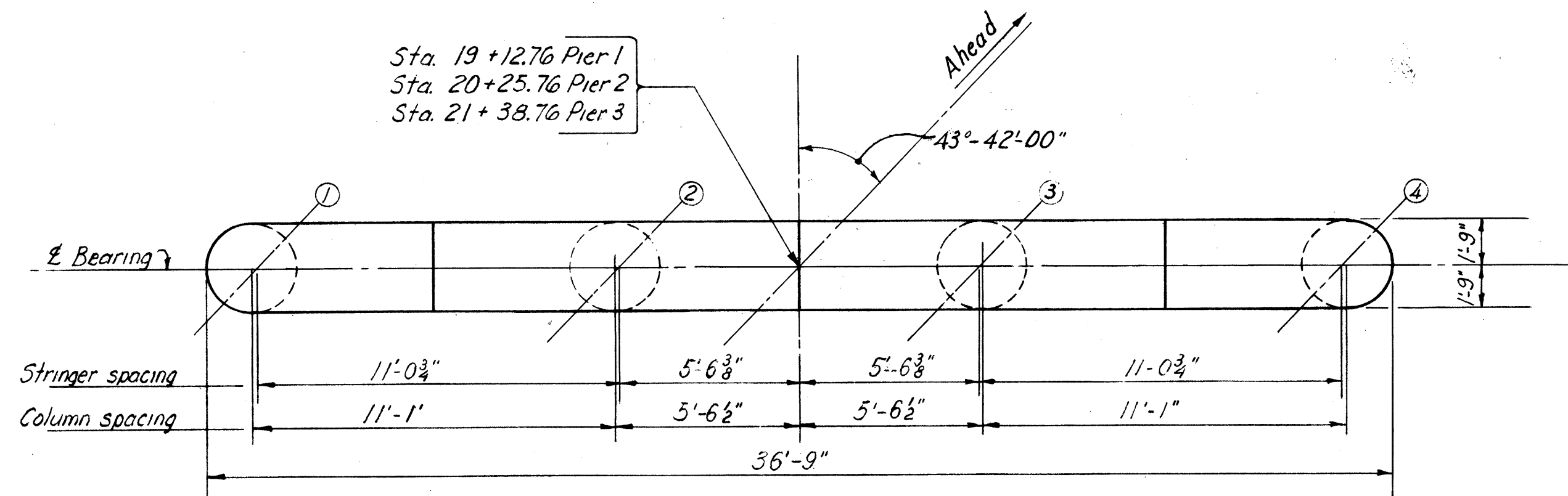
ABUTMENT DETAILS
BRIDGE NO. ASD - 1 - 1191
UNDER PERRY TWP. 203

Designed	Drawn	Traced	Checked	Reviewed-Date	Revised
RBS	Rur	Rur	HMC	B.O.L. 7.23.57	

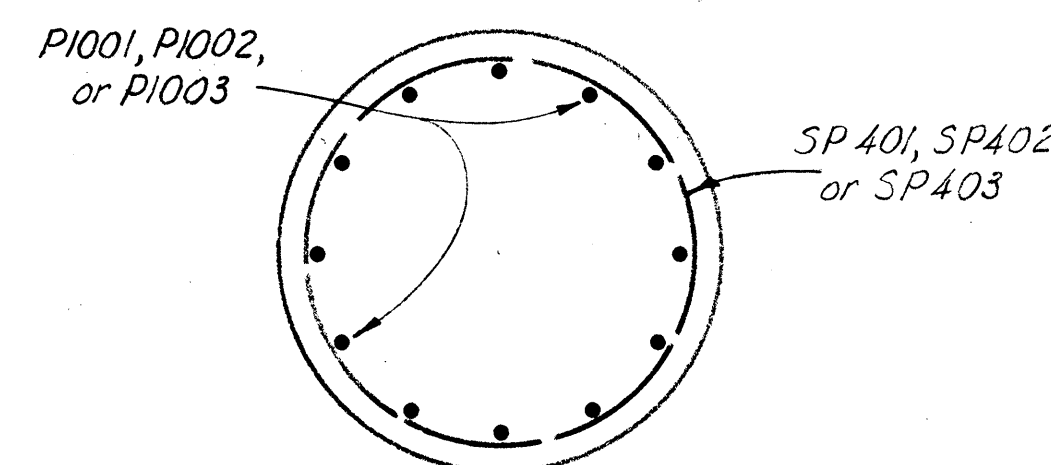
ASHLAND COUNTY
ASD - 1-8.44

NOTES

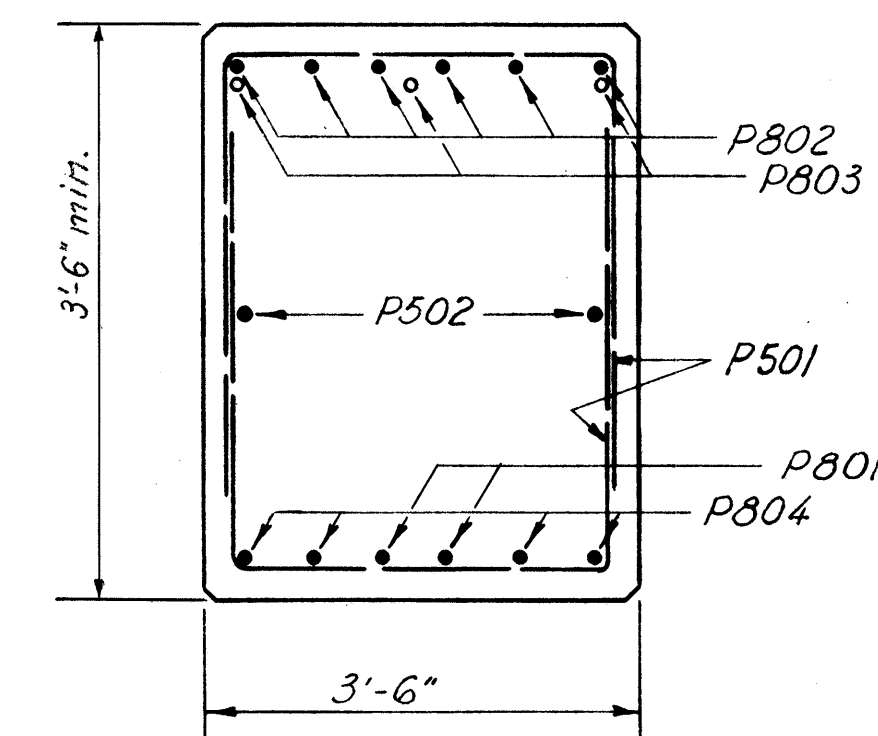
- Clearance of Reinforcing Steel from face of concrete shall be 2" unless otherwise shown.
- Special care shall be taken in placing reinforcing steel in the bridge seat so that it will not interfere with the drilling of anchor bolt holes.



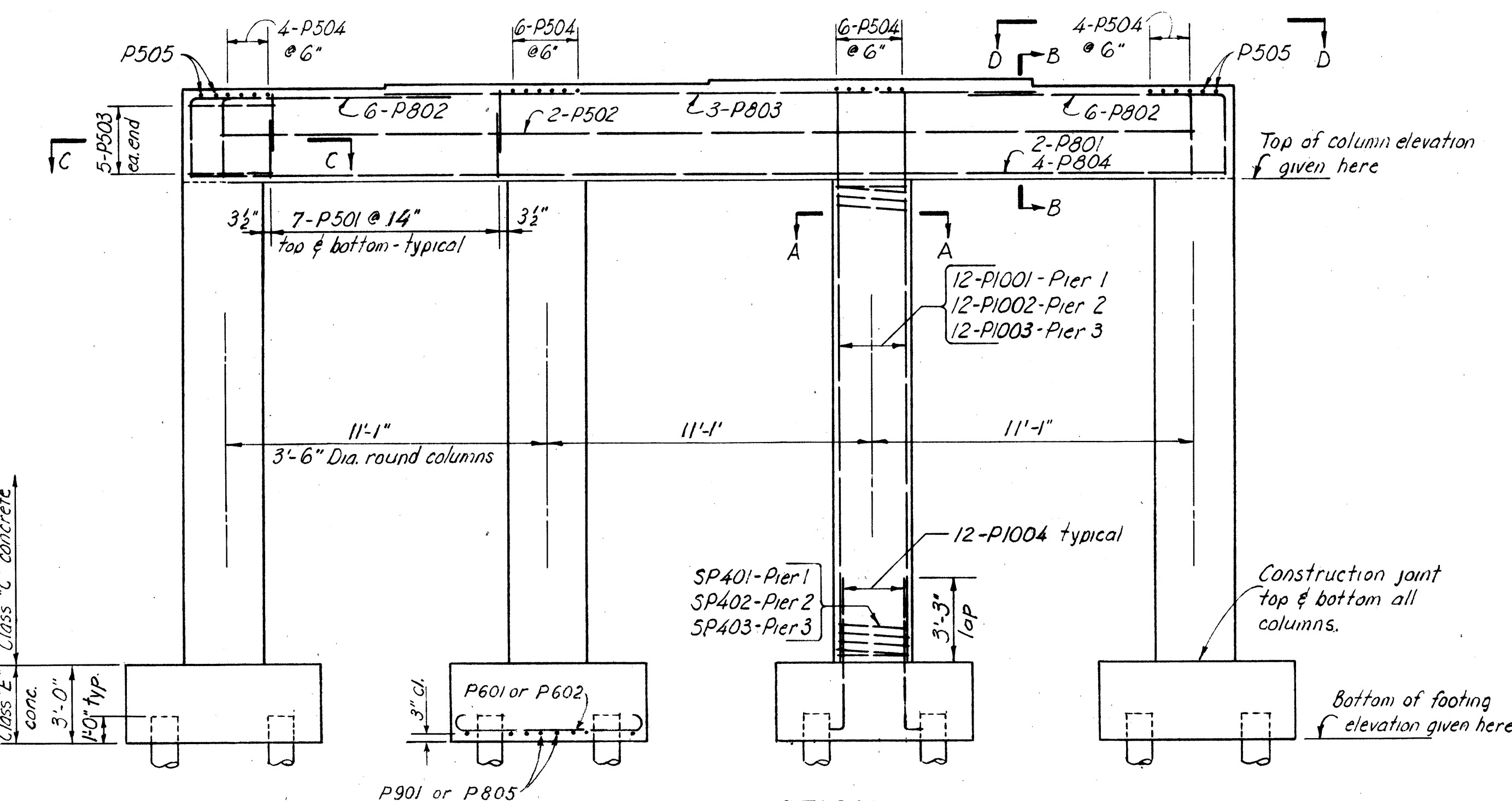
PIER CAP PLAN



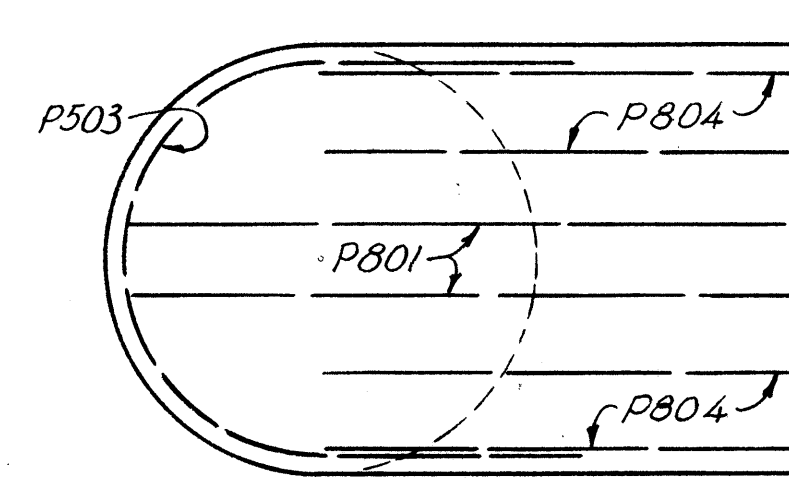
SECTION A-A



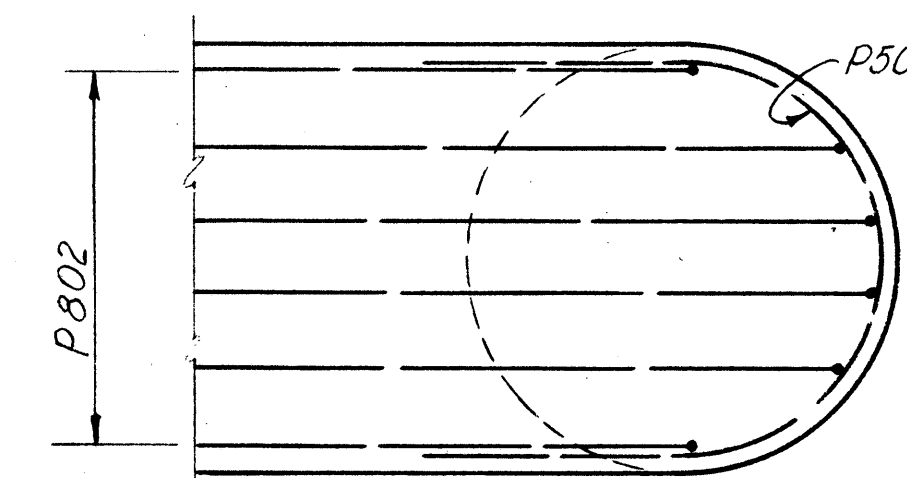
SECTION B-B



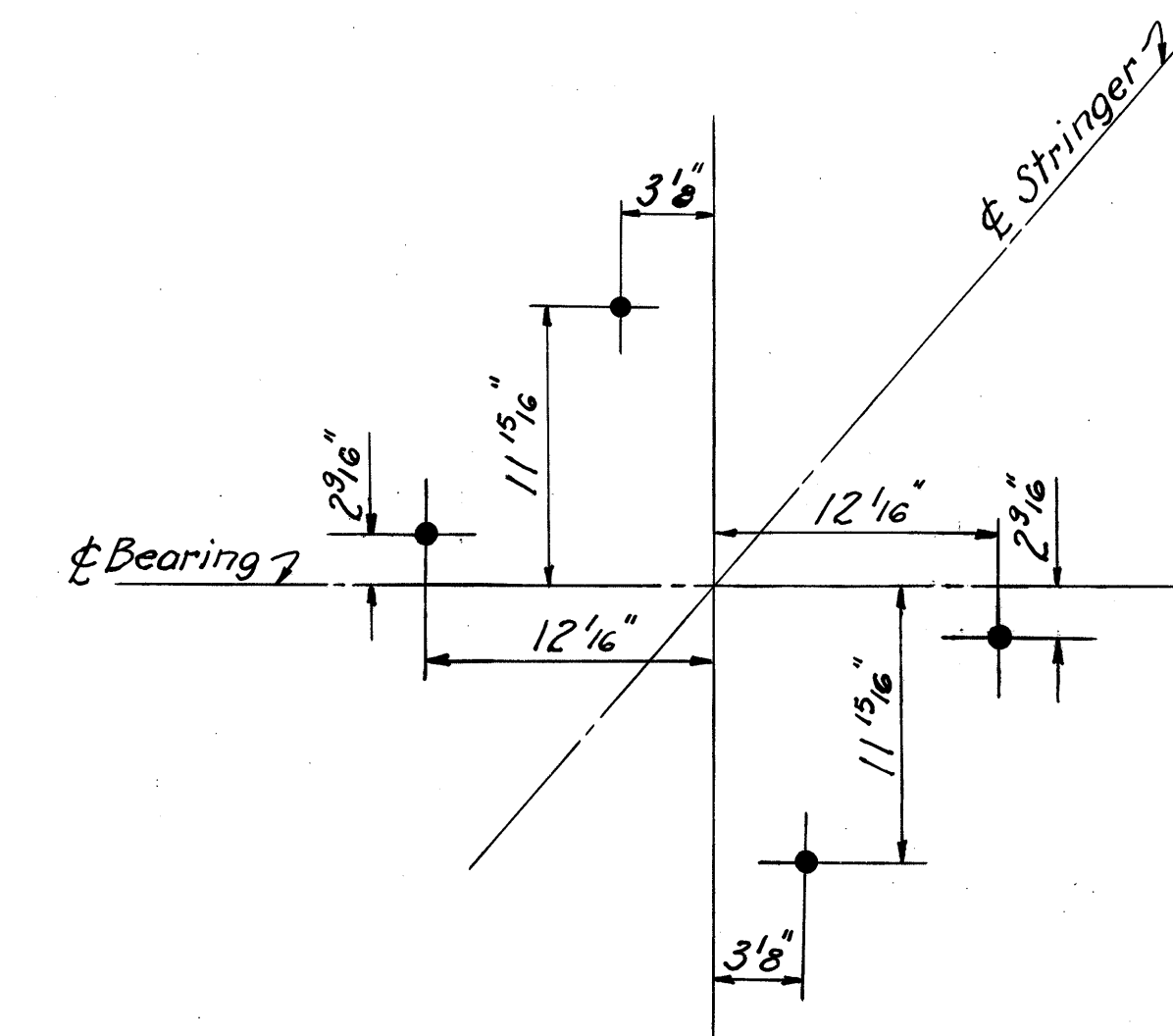
PIER ELEVATION



SECTION C-C



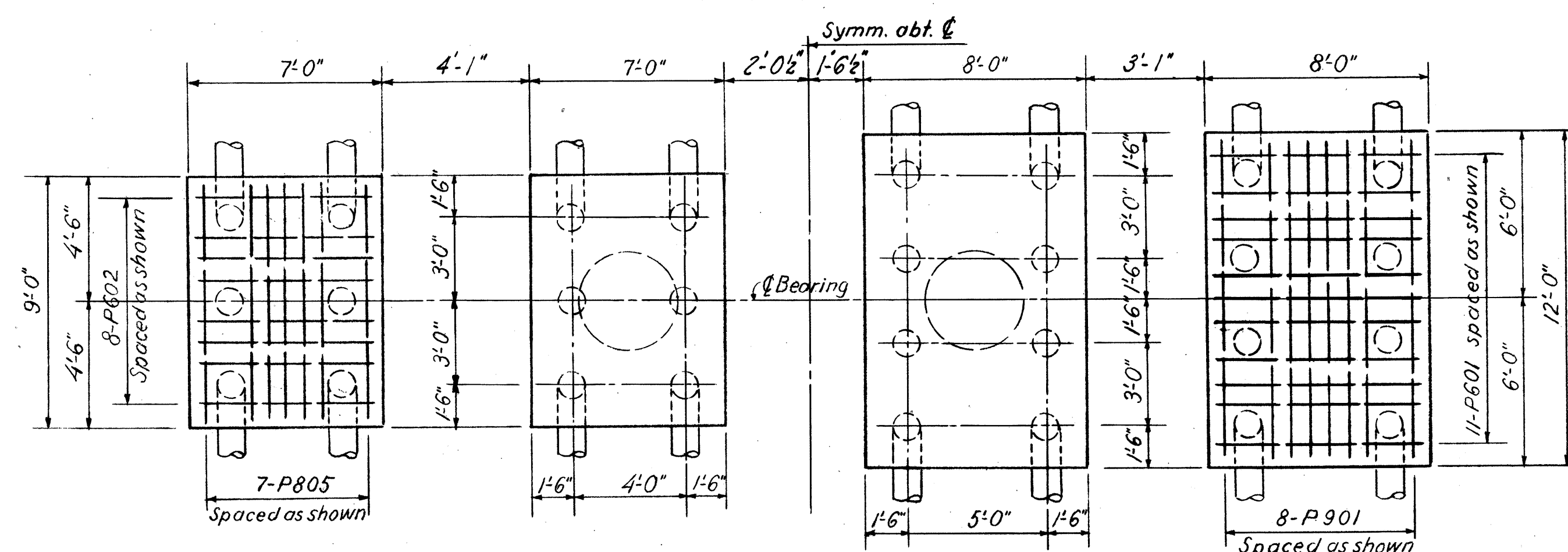
SECTION D-D



**ANCHOR BOLT LAYOUT
PIER 2**

TABLE OF ELEVATIONS

	BEARING AREAS				TOP OF COLUMN	BOTT. OF FOOTING
	1	2	3	4		
Pier 1	1206.18	1206.41	1206.51	1206.48	1202.68	1186.40
Pier 2	1206.95	1207.13	1207.13	1206.95	1203.45	1185.50
Pier 3	1206.48	1206.51	1206.41	1206.18	1202.68	1186.00



PIERS 1 & 3

PIER 2

FOOTING PLAN

All piles to be 12" x cast-in-place concrete piles driven to a safe bearing load of 40 Tons. Batter piles 3" in 12" as shown on Footing Plan.

MICHAEL BAKER, JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

PIERS
BRIDGE NO. ASD - 1-1191
UNDER PERRY TWP. 203

ASHLAND COUNTY STA. 446+13.71

Designed	Drawn	Traced	Checked	Reviewed-Date	Revised
JFG	Rcw	Rcw	C.K.M.	Bo.L. 7.23.57	

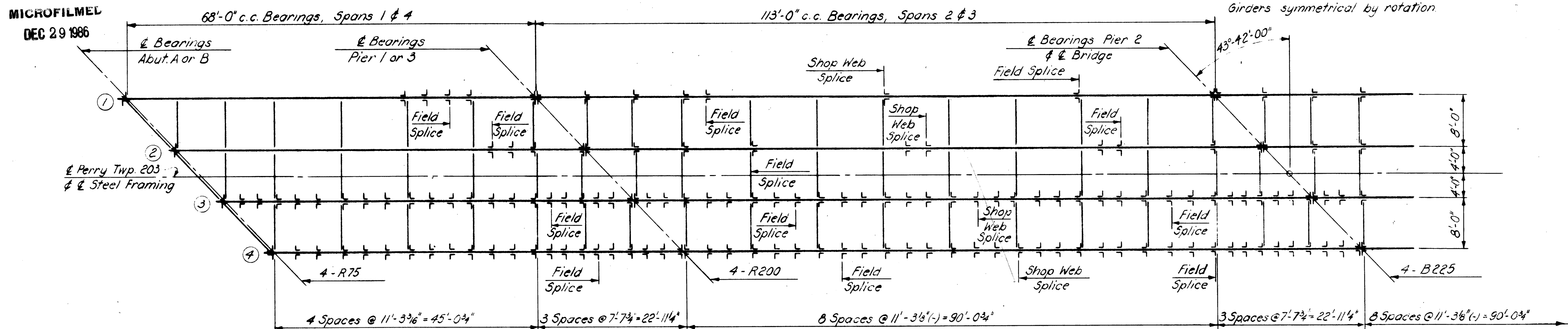
MICROFILMED
DEC 29 1986

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1105 (17)	226A 247

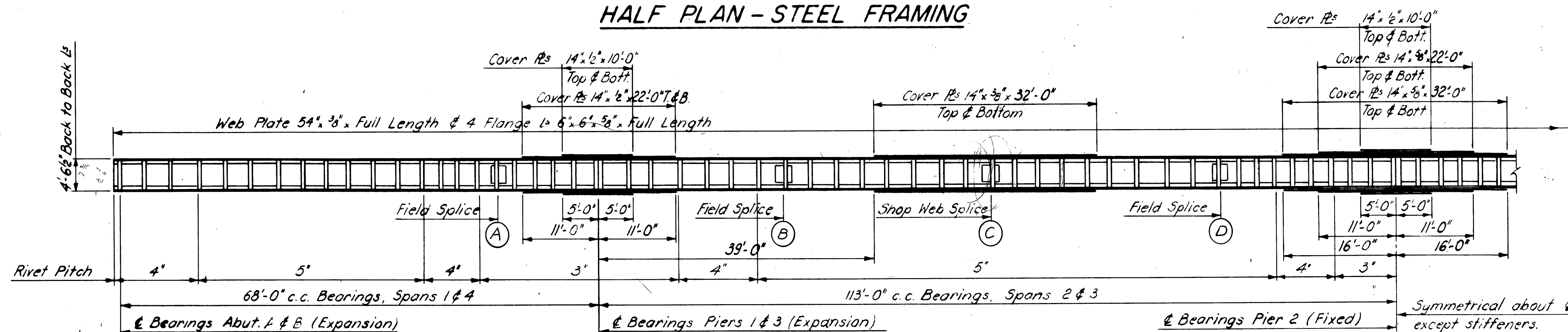
ASHLAND COUNTY
ASD - I - 8.44

NOTES:

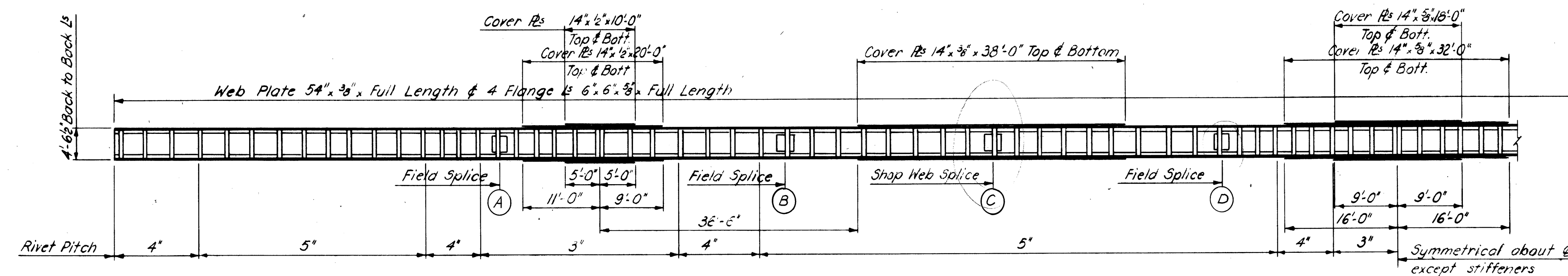
- Abutments and Piers 1 & 3 Bearing Stiffeners are $1\frac{1}{2} \times 3\frac{1}{2} \times \frac{3}{8}$ on Fill Plates.
- Pier 2 Bearing Stiffeners are $1\frac{1}{2} \times 3\frac{1}{2} \times \frac{3}{8}$ on Fill Plates.
- All intermediate stiffeners are $1\frac{1}{2} \times 3\frac{1}{2} \times \frac{3}{8}$ crimped, except at splice points.
- All dimensions shown are horizontal.
- All rivets $\frac{7}{8}"$.
- All intermediate crossframes are $1\frac{1}{2} \times 3\frac{1}{2} \times \frac{3}{8}$.
- All end crossframes are $1\frac{1}{2} \times 4 \times \frac{3}{8}$.
- All Stiffeners shall be normal to Girder.



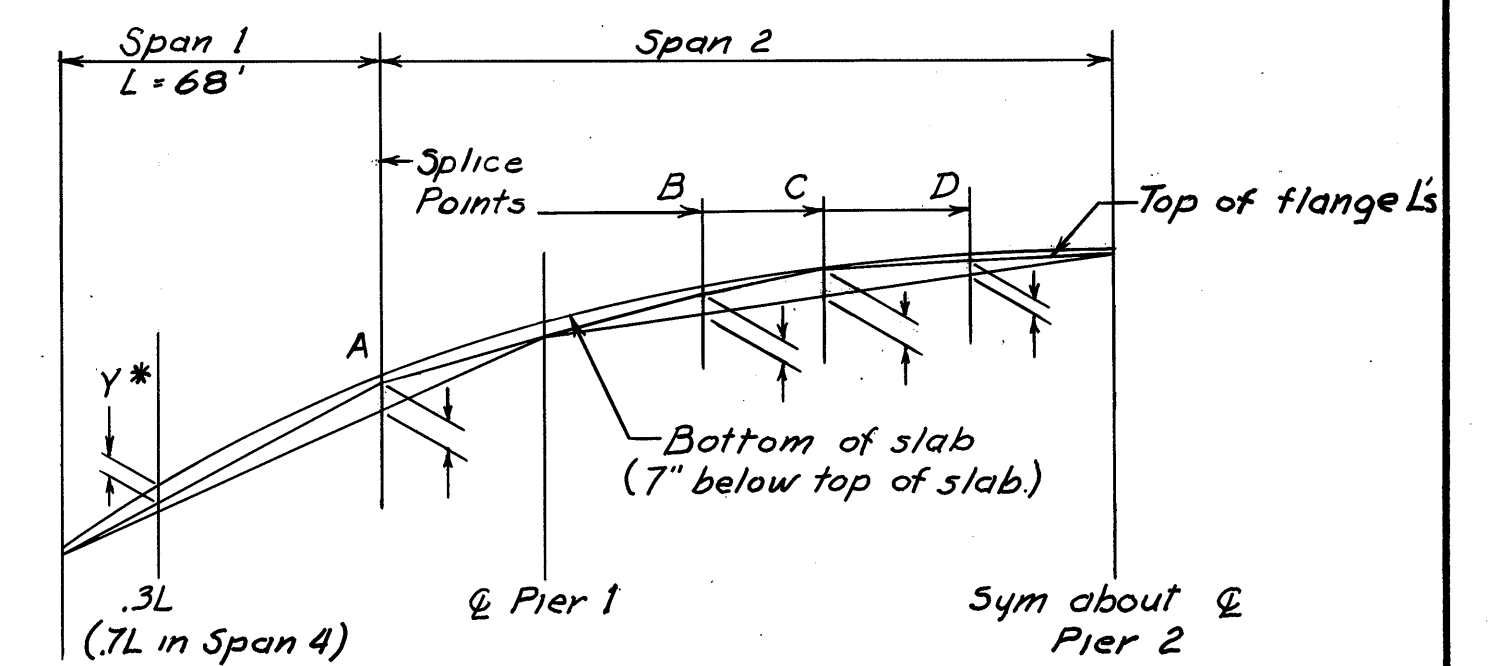
HALF PLAN - STEEL FRAMING



HALF ELEVATION - CURB GIRDERS



HALF ELEVATION - INTERIOR GIRDERS



DEFLECTION AND CAMBER	CURB GIRDER				INTERIOR GIRDER			
	3L	A	B	C	3L	A	B	C
Deflection due to weight of steel	0"	0	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{16}$	0	$\frac{1}{8}$	$\frac{1}{4}$
Deflection due to remaining dead load	$\frac{3}{16}$	$\frac{1}{8}$	$\frac{13}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{8}$	$\frac{3}{8}$	$\frac{5}{8}$
Convexity required for vertical curve	$\frac{1}{8}$	$\frac{11}{16}$	$\frac{13}{16}$	$\frac{2}{16}$	$\frac{1}{8}$	$\frac{11}{16}$	$\frac{13}{16}$	$\frac{2}{16}$
Sum of Deflection of Convexity	$\frac{1}{16}$	$\frac{9}{16}$	$\frac{3}{4}$	$\frac{9}{16}$	$\frac{2}{16}$	$\frac{5}{8}$	$\frac{2}{16}$	$\frac{3}{8}$
Required Camber	$\frac{9}{16}$	$\frac{3}{4}$	$\frac{9}{16}$	$\frac{2}{16}$	$\frac{5}{8}$	$\frac{2}{16}$	$\frac{3}{16}$	$\frac{2}{16}$

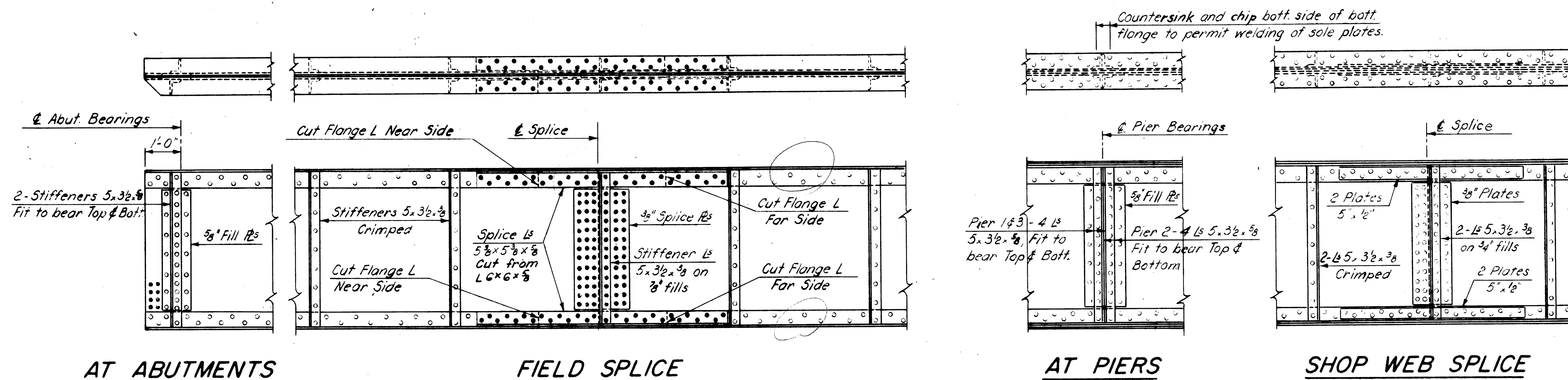
Note: Girders to be cambered at splice points to compensate for D.L. deflections and vertical curvature.

This sheet is to be used for construction and replaces Sheet No. 226 of the original plans.
11-13-57

MICHAEL BAKER, JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

SUPERSTRUCTURE
BRIDGE NO. ASD - I - 1191
UNDER PERRY TWP. 203

ASHLAND COUNTY				STA. 446+13.71	
Designed	Drawn	Traced	Checked	Reviewed-Date	Revised
H.M.G.	J.R.S.	J.R.S.	J.F.G.	B.S.L. 11-13-57	11-13-57

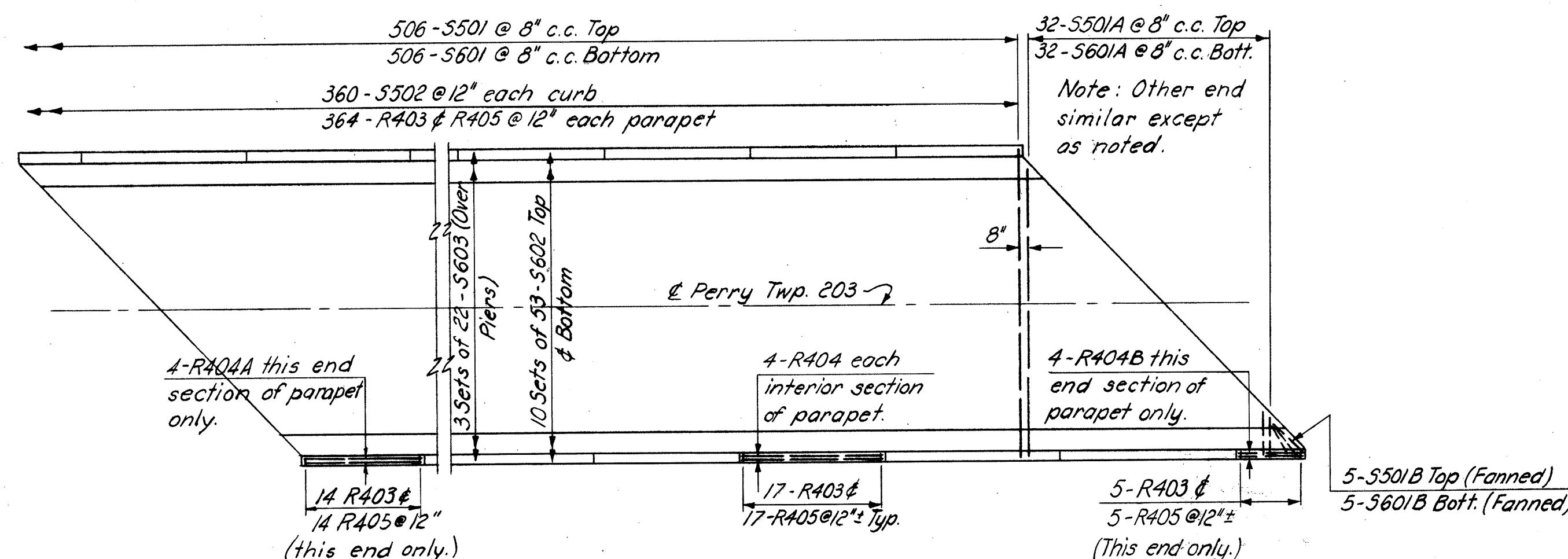


MICROFILMED
DEC 29 1986

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1105(17)	

ASHLAND COUNTY
ASD.-I-8.44

227
247



PART PLAN OF DECK

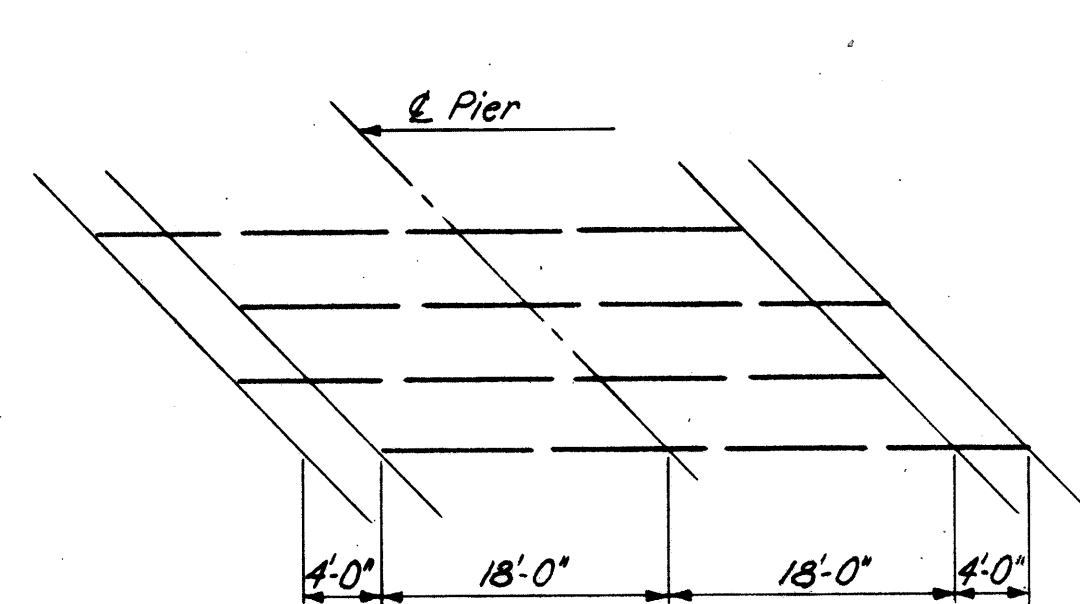
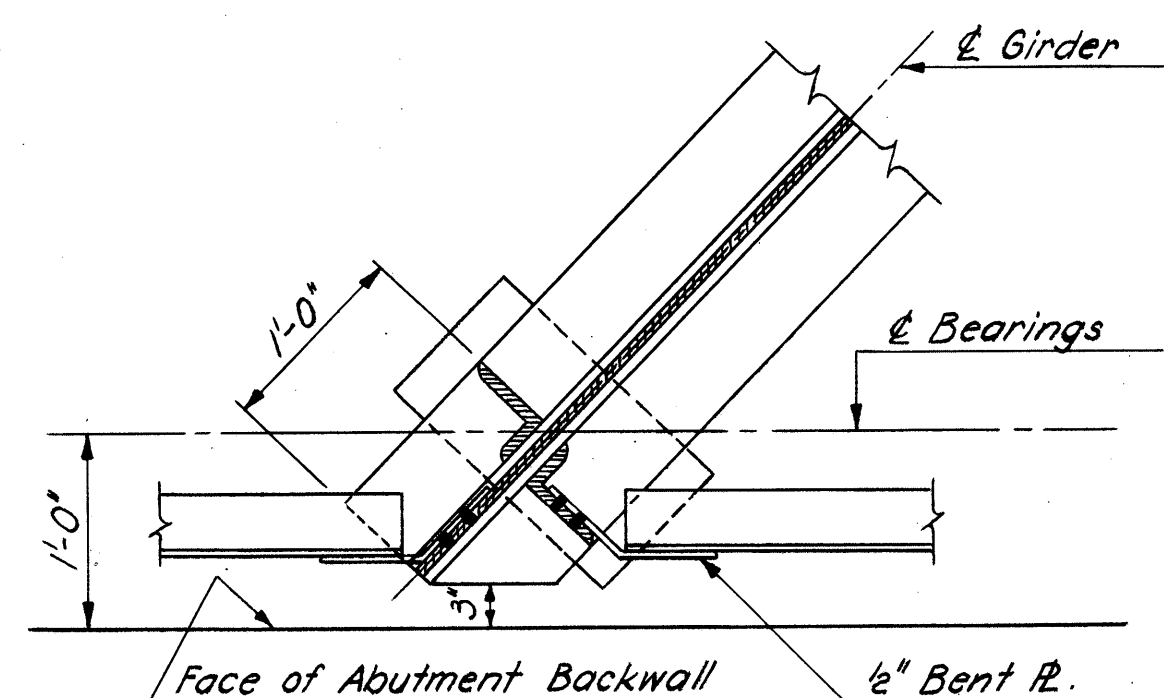
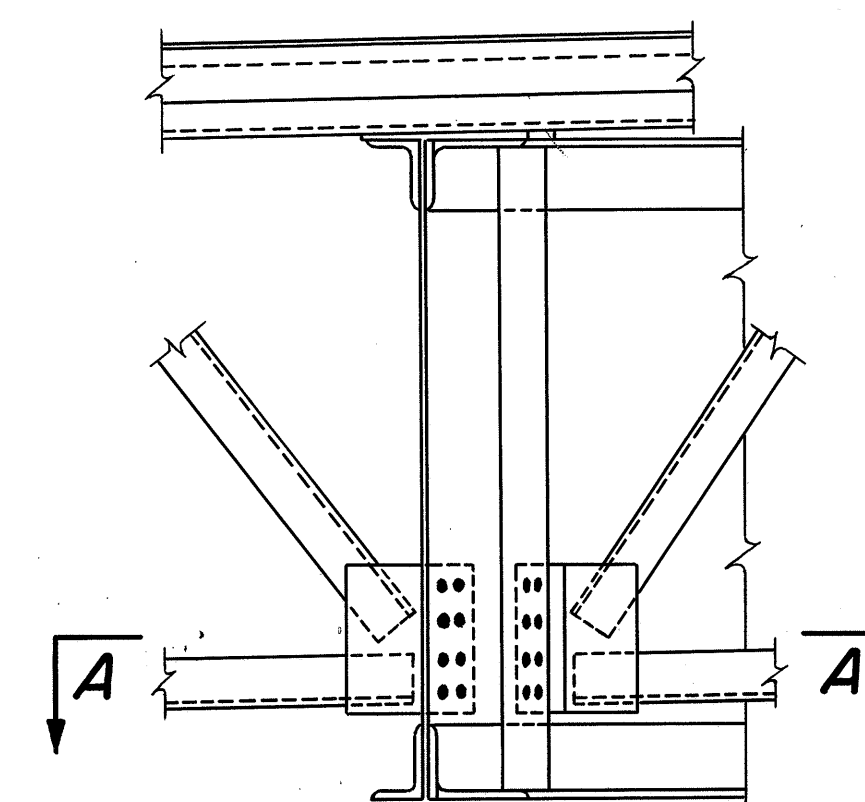


DIAGRAM SHOWING
STAGGER OF S603 BARS



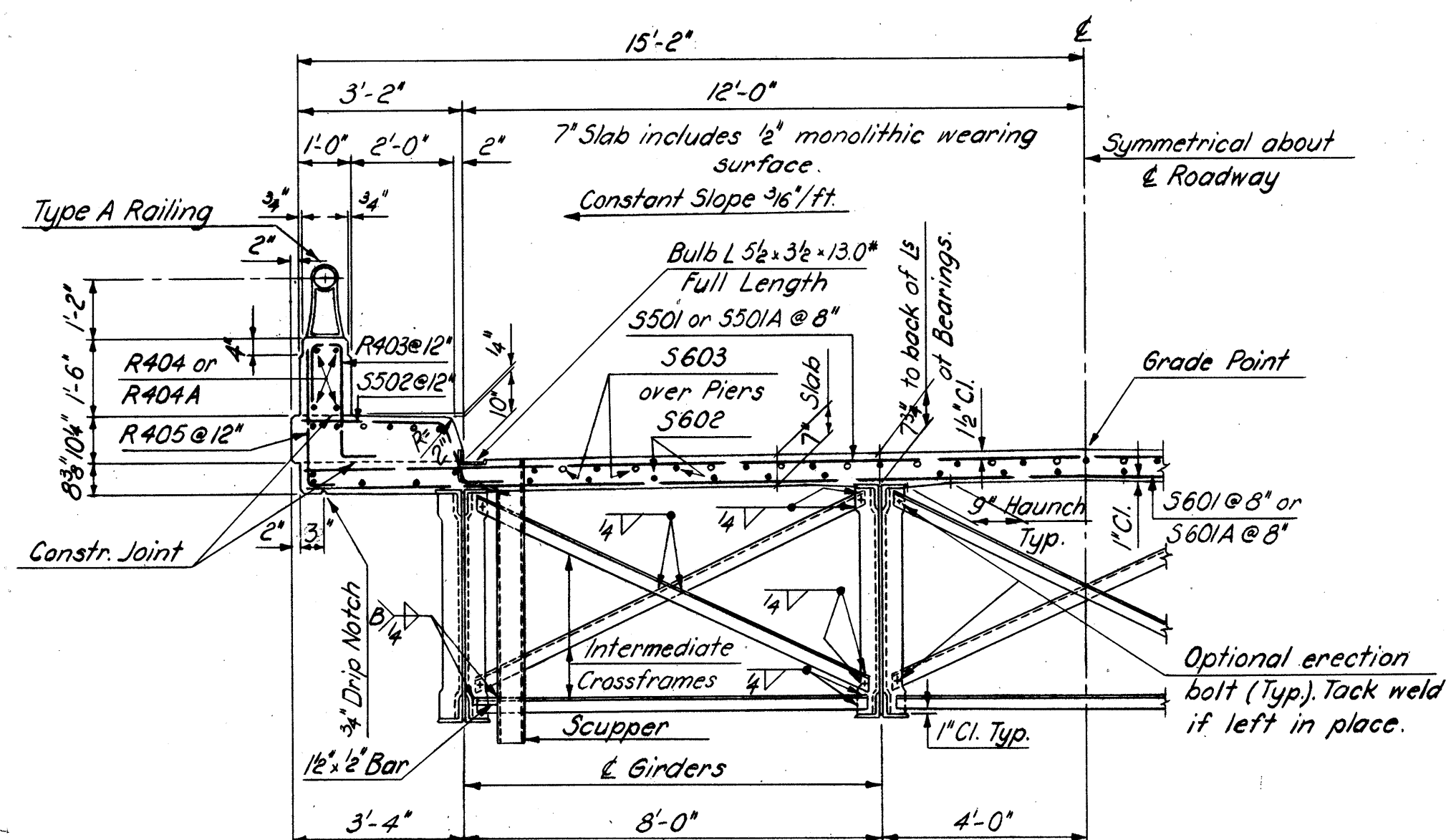
SECTION A-A



PART ELEVATION OF END FINISH

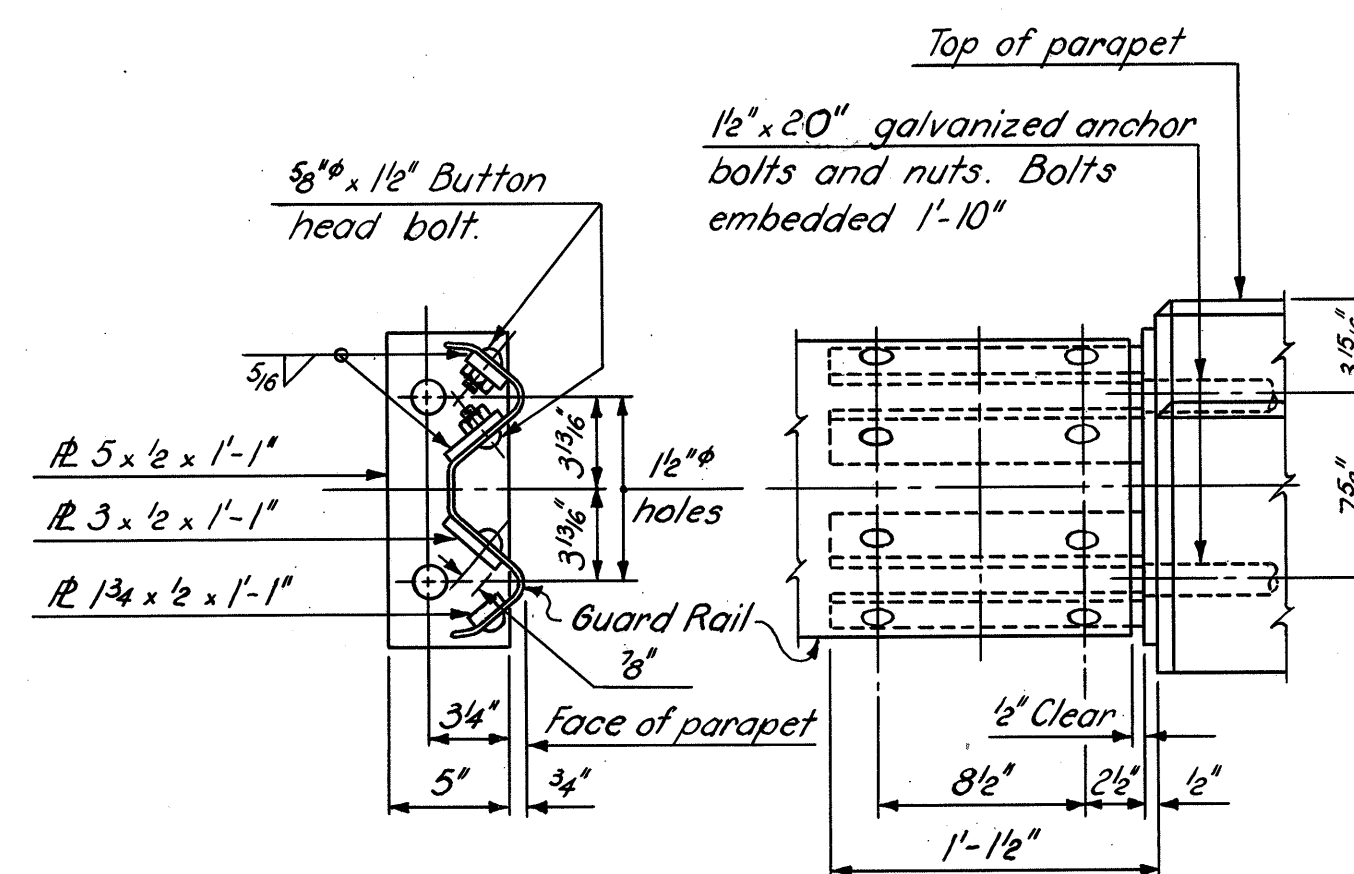
NOTES

- Refer to standard drawing CSB-2-56, sheets 2 & 3 of 6, dated 12-3-56, for details of End Finish, Gutters, Scuppers, Curb R&S & Pipe Drains, and end cross frames.
- Refer to standard drawing RB-1-55 for details of Rockers and Bolsters.
- Refer to standard drawing AR-1-57 for Aluminum Railing (Type A) and Concrete Parapet details.
- Concrete and reinforcing steel above parapet construction joints included with railing for payment.
- Concrete shall be Class "C".
- See General Plan for spacing of scuppers and railing.
- In order to facilitate water curing of the concrete of the deck slab, the placing of concrete shall progress up grade. The slab may be placed in sections between transverse construction joints which are normal to the centerline of bridge and are located near the center of any span.



TYPICAL HALF SECTION

NOTE: Guard Rail end connection assembly shall be galvanized after welding.



GUARD RAIL DETAIL

Guard rail end connection to be included in cost of Bridge Railing.

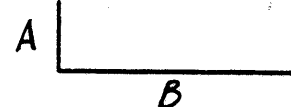
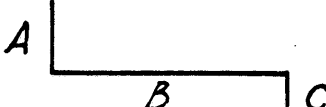
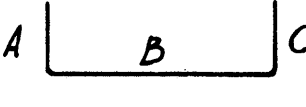
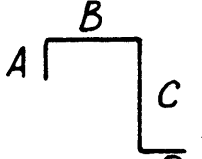
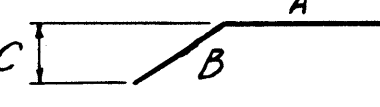
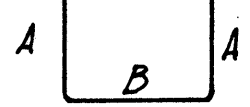
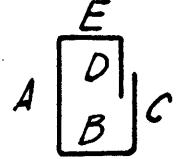
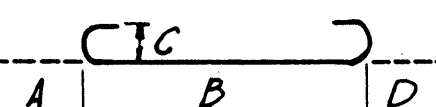
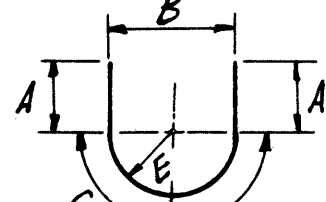
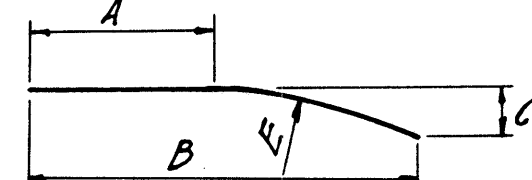
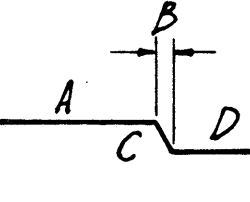
MICHAEL BAKER, JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

SUPERSTRUCTURE DETAILS
BRIDGE NO. ASD - I - 1191
UNDER PERRY TWP. 203

ASHLAND COUNTY STA. 446+13.71

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
W.T.H.	J.R.S.	J.R.S.	H.M.C.	B.O.L.	7.23.57	

ASHLAND COUNTY
ASD - I - 8.44

REINFORCING STEEL BAR SCHEDULE														
Bending diagram types - All dimensions are out to out														
<div><div> Type ①</div><div> Type ②</div><div> Type ③</div><div> Type ④</div><div> Type ⑤</div><div> Type ⑥</div><div> Type ⑦</div><div> Type ⑧</div><div> Type ⑨</div><div> Type ⑩</div><div> Type ⑪</div></div>														
PIERS														
MARK	TOTAL	SIZE	LENGTH	TYPE	A	B	C	D	E	WEIGHT				
P501	126	5	7'-10"	6	2'-4"	3'-2"				1029 #				
P502	6	5	33'-3"	Str.						208				
P503	30	5	8'-8"	9	1'-10"	3'-2"	5'-0"		1'-7"	271				
P504	60	5	6'-2"	6	1'-6"	3'-2"				385				
P505	12	5	2'-6"	Str.						31				
P601	44	6	8'-10"	8	8"	7'-6"	6"	8"		584				
P602	64	6	7'-10"	8	8"	6'-6"	6"	8"		753				
P801	6	8	36'-3"	Str.						581				
P802	36	8	12'-11"	1	3'-3"	9'-8"				1242				
P803	9	8	22'-0"	Str.						529				
P804	12	8	33'-3"	Str.						1065				
P805	56	8	10'-8"	8	1'-1"	8'-6"	10"	1'-1"		1595				
P901	32	9	14'-0"	8	1'-3"	11'-6"	11'-4"	1'-3"		1523				
P1001	48	10	16'-6"	Str.						3408				
P1002	48	10	18'-2"	Str.						3753				
P1003	48	10	16'-11"	Str.						3494				
P1004	144	10	7'-0"	1	1'-0"	6'-0"				4337				

SPIRAL NOTES

The "length" shown in the steel list for the spiral bars is the distance from the top of the footing to the bottom of the cap.

The "No. of Turns" shown in the steel list for the spiral bars 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 S-4.

1/2 closed coils shall be provided at the ends of each spiral unit.

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 lbs. per lin. ft., will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.

ESTIMATED QUANTITIES									
ITEM	TOTAL	UNIT	DESCRIPTION	SUPERSTR.	ABUTS.	PIERS	GENERAL		
E-2	397	Cu.Yd.	Unclassified Excavation		317	80			
S-1	327	Cu.Yd.	Class "C" Concrete, Superstructure	327					
S-1	111	Cu.Yd.	Class "C" Concrete, Pier Caps & Columns			111			
S-1	133	Cu.Yd.	Class "E" Concrete, Abutments above Footings		133				
S-1	160	Cu.Yd.	Class "E" Concrete, Footings		63	97			
S-4	120,370	Lbs.	Reinforcing Steel	79,410	12,560	28,400			
S-7	402,300	Lbs.	Structural Steel	402,300					
S-8	402,300	Lbs.	Field Painting of Structural Steel	402,300					
S-14	808	Lin.Ft.	Railing (Aluminum Rail & Supports, Concrete Parapet and Guard Rail Connectors)				808		
S-16	Lump Sum		First Test Pile				Lump		
S-18	3320	Lin.Ft.	12" cast-in-place Reinforced Concrete Piles			3320			
S-29	35	Cu.Yd.	Porous Backfill		35				
S-29	133	Cu.Yd.	Porous Drain on Embankment Slopes				133		

REPLACEMENT BARS					
MARK	No.	SIZE	LENGTH	TYPE	WEIGHT
RE 401	1	4	5'-3"	Str.	
RE 501	2	5	5'-7"	Str.	
RE 601	4	6	5'-11"	Str.	
RE 801	1	8	6'-6"	Str.	
RE 901	1	9	6'-10"	Str.	
RE 1001	1	10	7'-3"	Str.	

REPLACEMENT BARS

If reinforcing bars are fabricated from stock which has previously been tested and approved by the Ohio Hwy. Testing Laboratory, test sample as provided in section S-4.02 need not be furnished and replacement bars will not be required.

BAR SIZE

Bar size is indicated in the bar mark. The first digit where three digits are used and the first two where four are used, indicates the bar size number. For example, A401 is a no. 4 bar and A1114 is a no. 11 size bar.

MICHAEL BAKER, JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

REINFORCING STEEL LIST
& ESTIMATED QUANTITIES
BRIDGE NO. ASD - I - 1191
UNDER PERRY TWP. 203

ASHLAND COUNTY STA. 446+13.71

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
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