

MICROFILMED
JUN 24 1997

STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

MOT-675-0.00

MOT-LYONS ROAD EXTENSION

MIAMI & WASHINGTON TOWNSHIPS

MONTGOMERY COUNTY

I-675-8(14)41
M-IN26(3)

FHWA REGION	STATE	PROJECT
5	OHIO	I-675-8(14)41 M-IN26(3)

1
581

MONTGOMERY COUNTY
MOT-675-0.00
MOT-LYONS ROAD EXTENSION

LIMITED ACCESS

APR 16 1990

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

1979 SPECIFICATIONS

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

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

CONVENTIONAL SIGNS

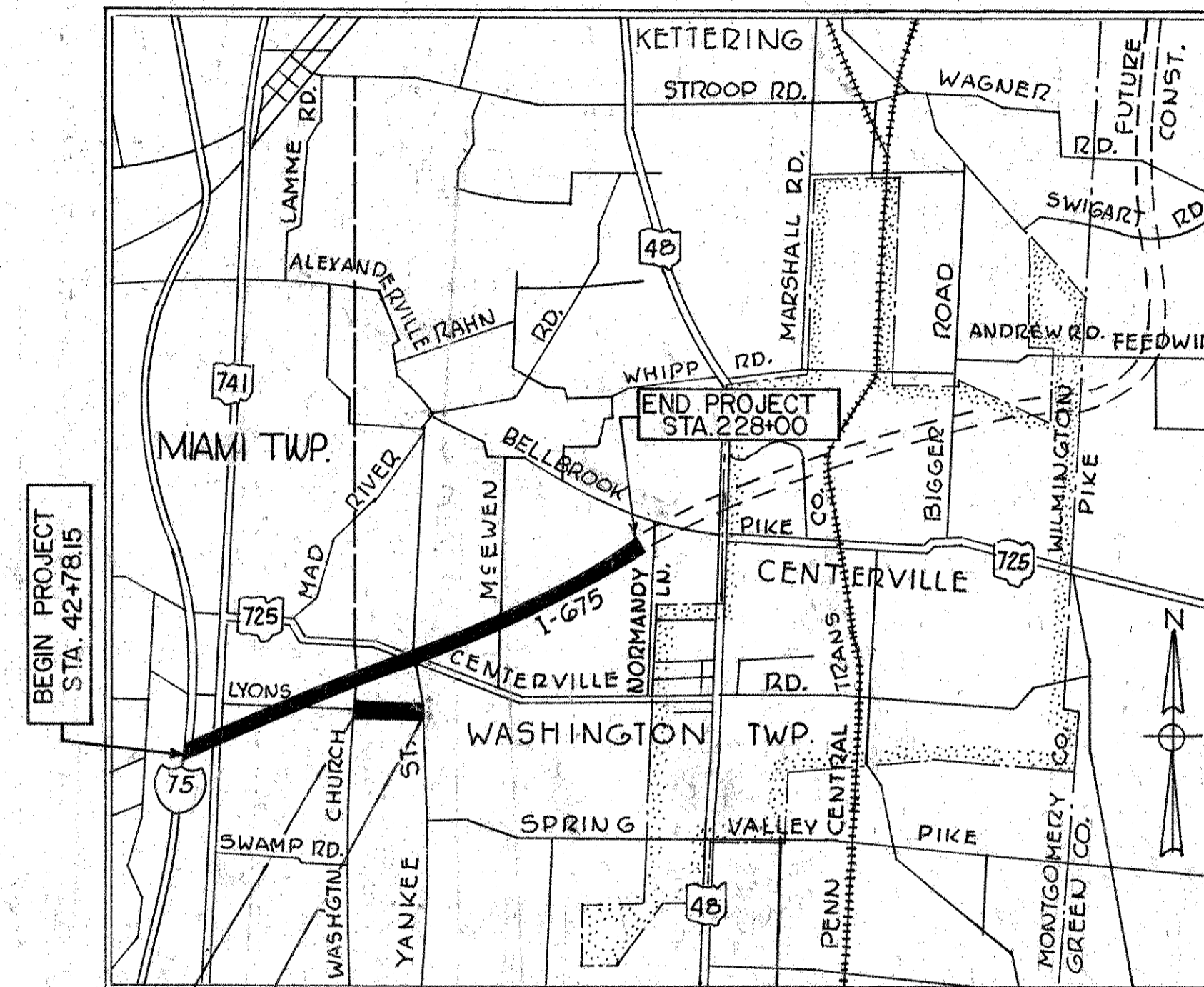
RIGHT-OF-WAY WITH LIMITED ACCESS	LA R/W
RIGHT-OF-WAY W/O LIMITED ACCESS	RW
CENTER LINE	
COUNTY LINE	
TOWNSHIP LINE	
SECTION LINE	
CORPORATION LINE	
PROPERTY LINE	
POLE LINE	
FENCE LINE	
GUARD RAIL	
DRAIN PIPE	
TREE, (EXISTING)	
EXISTING UTILITY POLE	
EXISTING UTILITY POLE (TO BE REMOVED BY OTHERS)	
PROPOSED UTILITY POLE, (BY OTHERS)	
EXISTING RIGHT-OF-WAY	

INDEX OF SHEETS

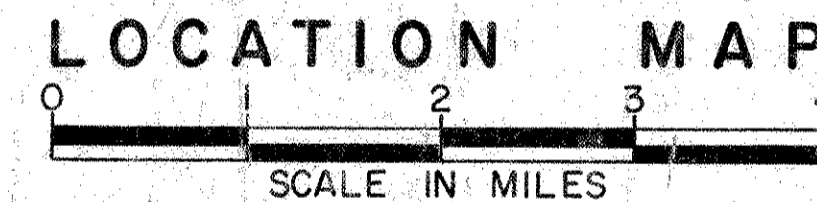
TITLE SHEET	2-5
SCHEMATIC LAYOUT PLAN AND DESIGN DESTINATION	6-17
TYPICAL SECTIONS	18, 18A, 18B, 18C, 18D
MISCELLANEOUS DETAILS	19
LINE DATA AND SUPERELEVATION TABLES	20-22, 22A, 22B
GENERAL NOTES	23-27, 26A
GENERAL SUMMARY AND SUB-SUMMARY	28-33
PAVEMENT CALCULATIONS	34-53, 48A, 53A
PLAN AND PROFILE - MAINLINE	54-91, 91A
CROSS SECTIONS - MAINLINE	92-161, 92A
I-75 INTERCHANGE - RAMPS "S, U, V & Y", PLAN, PROFILE AND CROSS SECTIONS	94A, 94B, 94C, 101A, 101B, 101C, 129A, 136A, 136B, 161A
S.R. 741	162
LYONS ROAD	163-169
LYONS ROAD EXTENSION	170-174, 172A
S.R. 725 INTERCHANGE - RAMPS "J, K, L, M & N", PLAN, PROFILE AND CROSS SECTIONS	175-244
WASHINGTON CHURCH CUL-DE-SAC	245
YANKEE STREET CUL-DE-SAC	246
MÆWEN ROAD	247-253
HOLES CREEK CHANNEL RELOCATIONS	258-266
CULVERT, UNDERDRAIN AND MISCELLANEOUS DRAINAGE DETAILS	267-289, 276A
TRAFFIC CONTROL	296-336, 335A
LIGHTING	343-376, 344A, 356A, 356B
STRUCTURES OVER 20 FEET SPAN	381-536, 524A, 528A, 534A, 536A
RIGHT-OF-WAY AND FENCE PLAN	537-573
SANITARY SEWERS AND WATER MAINS	574-581, 576A, 578A, 579A, 579B
PLAN SHEETS NOT USED	
254-257, 270-295, 297, 298, 316-332, 337-342, 377-380	

LINE DATA	I-675-8(14)41	M-IN26(3)
BEGIN PROJECT	42+78.15	5+10.50
END PROJECT	228+00.00	25+30.03
NET LENGTH OF PROJECT	18,521.85 LIN. FT. OR 3.507 MILES	2019.53 LIN. FT. OR 0.382 MILES
ADD FOR APPROACHES (SHEET NO 19)	26,853.69 LIN. FT. OR 5.085 MILES	12.09 LIN. FT. OR 0.002 MILES
NET LENGTH OF WORK	45,375.54 LIN. FT. OR 8.593 MILES	2031.62 LIN. FT. OR 0.384 MILES
TOTAL LENGTH OF WORK = 47,401.16 LIN. FT. OR 8.978 MILES		
TOTAL LENGTH OF PROJECT = 20,541.38 LIN. FT. OR 3.890 MILES		

PLANS PREPARED BY
A. M. KINNEY, INC.
CINCINNATI, OHIO

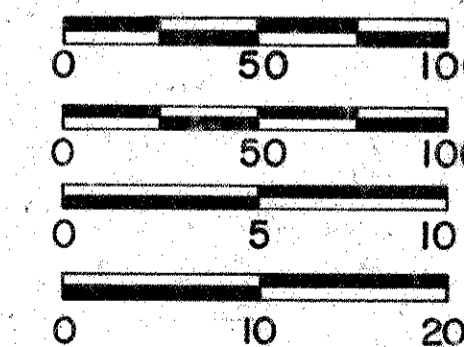


BEGIN PROJECT STA. 42+78.15
END PROJECT STA. 25+30.03



PORTION TO BE IMPROVED
STATE ROADS
OTHER ROADS
FUTURE CONSTRUCTION

SCALE



SUPPLEMENTAL SPECIFICATIONS

	847	4-3-76
	857	12-19-78
814	1-1-69	858
836	3-12-75	859
		927
839	11-25-70	957
		958
843	10-23-75	959
848	3-4-80	1001
		956
		6-26-78

Approved William W. Bragdon
Date 12-3-79 District Deputy Director of Transportation

Approved Robert B. Pfeiffer
Date 10-20-81 Engineer, Bureau of Bridges and Structural Design

Approved Howard E. Nolan
Date 12-21-81 Chief Engineer, Planning and Design

Approved Dwight A. Wain
Date 12-21-81 Director, Department of Transportation

Approved _____
Date _____ Montgomery County Engineer

MONTGOMERY COUNTY MOT-675-0.00	
FILE NO.	DATE OF LETTING _____ 19__
CONTRACT NO. _____	

Supplemental Prints of Standard Construction Drawings

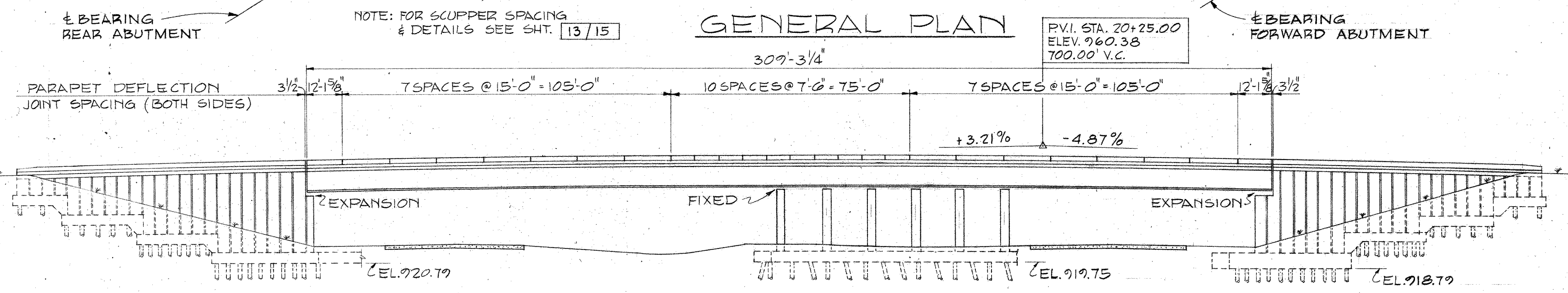
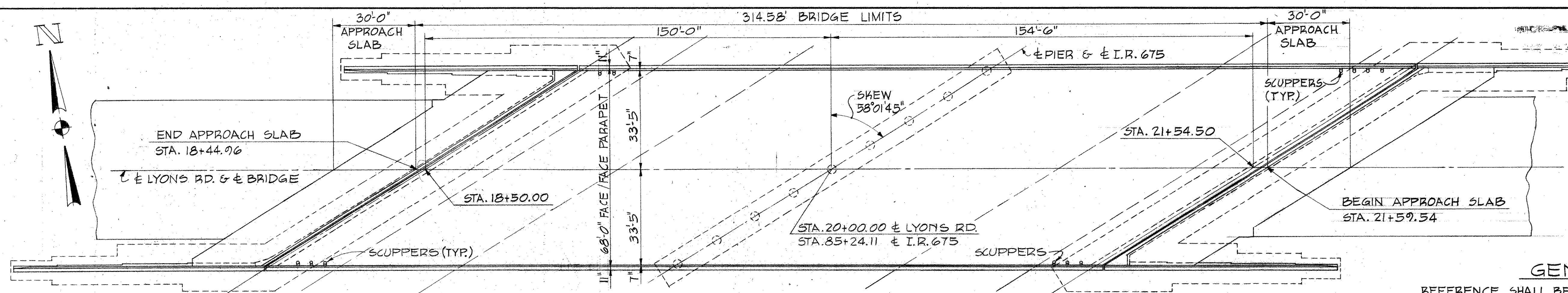
HL-1	9-6-73	HL-10	6-1-79	BR-5	7-16-81	CB-2-3&24	5-1-79	GR-1	12-6-76	MC-1	6-13-69	MH-1	6-12-75	TC-7.65	3-1-79	TC-31.21	3-6-79	TC-51.11	4-3-79	TC-83.20	4-17-79
HL-2	7-27-73	HL-11	6-1-79	BR-6	6-1-65	LA-1	6-1-79	HW-4A	4-1-80	MC-3	6-1-73	MH-3	6-12-75	TC-12.30	6-10-81	TC-32.10	3-8-79	TC-52.10	4-3-79	TC-84.20	4-17-79
HL-3	7-27-73	HL-12	4-6-73	BP-7	12-6-76			GR-2B	12-6-76	MC-4	7-26-76	MH-5	6-12-75	TC-16.20	3-1-79	TC-32.11	3-21-79	TC-52.20	4-3-79	TC-85.20	4-18-79
HL-4	1-21-76	HL-15	1-21-76	BR-9	12-6-76	F-1	5-1-76	GR-3	12-6-76	MC-5	6-12-75	TC-11.10	3-1-79	TC-18.24	4-25-79	TC-41.10	3-26-79	TC-61.10	3-29-79	TC-85.10	10-5-77
HL-5	9-6-73	HL-16	4-6-73	BP-10	1-3-75	F-3	5-1-76	GR-4	12-6-76	MC-7	10-15-76	AS-1-72	6-30-72	TC-18.26	5-31-79	TC-41.20	3-26-79	TC-71.10	4-9-79	TC-41.40	6-18-78
HL-6	3-22-77	BP-1	6-1-65	CB-2-A-B	5-1-79	F-4	5-1-76	GR-4A	7-26-76	MC-8	6-12-75	DBR-2-73	4-10-73	TC-21.10	5-24-79	TC-41.50	3-26-79	TC-72.20	10-26-81	CS-2-73	4-10-73
HL-7	1-21-76	BR-2	12-6-76	CB-4	5-1-79	F-5	5-1-76	GR-5	1-1-71	MC-9	11-1-77	BR-1-67	10-15-71	TC-21.20	5-31-79	TC-42.10	8-19-77	TC-81.10	4-10-79	CPA-2-73	4-10-73
HL-8	1-21-76	BR-3	12-6-76	CB-5	5-1-79	F-6	5-1-76	GR-6	1-1-71	MC-10	5-1-76	RB-1-55	2-2-59	TC-22.10	3-1-79	TC-42.20	3-26-79	TC-82.10	4-11-79	CPA-2-73	4-10-73
HL-9	3-22-77	BR-4	7-16-81	CB-6	5-1-79	GR-2C	12-6-76	HW-4B	4-1-80	MC-11	8-1-78	SD-1-69	6-12-69	TC-22.20	3-1-79	TC-51.10	3-30-79	TC-83.10	4-13-79	TC-41.41	8-2-79

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION

APPROVED: _____
DIVISION ADMINISTRATOR _____ DATE _____

MONTGOMERY COUNTY
MOT-675-0.00

MICROFILMED
OCT 8 1985



GENERAL PLAN

ELEVATION

GENERAL NOTES:

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS:
AS-1-72 DATED 6-30-72
BR-1-67 REVISED 10-15-71
SD-1-69 DATED 6-12-69
AB-1-55 REVISED 2-2-59
AND TO SUPPLEMENTAL SPECIFICATIONS:
836 DATED 3-12-75

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1977, AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA:
DESIGN LOADING - HS 20-44 CASE II AND THE ALTERNATE MILITARY LOADING
CONCRETE CLASS S - UNIT STRESS 1,200 P.S.I. FOR SUPERSTRUCTURE
CLASS C - UNIT STRESS 1,333 P.S.I. FOR SUBSTRUCTURE
STRUCTURAL STEEL - ASTM A588 - UNIT STRESS 27,000 P.S.I.

REINFORCING STEEL - ASTM A615, A616 OR A617 - UNIT STRESS 23,000 P.S.I.
SPIRAL REINFORCEMENT MAY BE PLAIN BARS
ASTM A82 OR A615.

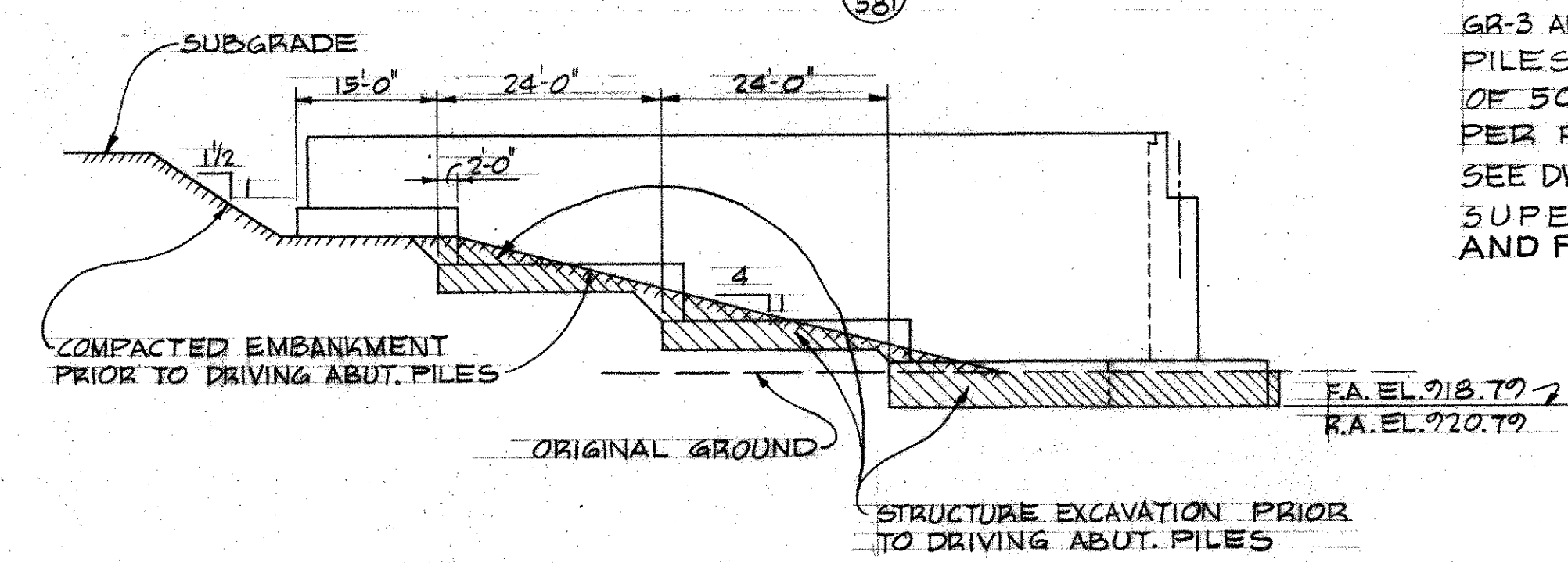
MONOLITHIC WEARING SURFACE THICKNESS IS ASSUMED TO BE 1".
DECK PROTECTIVE METHOD - EPOXY COATED REINFORCING STEEL, TOP MAT ONLY.
EMBANKMENT CONSTRUCTION: BEFORE ANY PORTIONS OF THE ABUTMENTS ARE CONSTRUCTED, THE APPROACH EMBANKMENTS SHALL BE CONSTRUCTED UP TO THE LEVEL OF THE SUBGRADE FOR A MINIMUM DISTANCE OF 200 FEET BACK OF THE ABUTMENTS. THE EMBANKMENT SHALL BE PLACED AS SHOWN ON THE DIAGRAM ON THIS SHEET. BEFORE THE BACKWALL IS CONSTRUCTED, THE EMBANKMENT SHALL BE CONSTRUCTED UP TO THE LEVEL OF THE SUBGRADE WITH A 1:1 SLOPE FROM THE BRIDGE SEAT TO THE SUBGRADE.

ATTACHMENT OF GUARDRAIL TO CONCRETE PARAPETS:
CONCRETE INSERT ANCHOR ASSEMBLIES PER STANDARD CONSTRUCTION DWGS. GR-3 AND GR-1 SHALL BE PLACED DURING PARAPET CONSTRUCTION. PILES SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 50 TONS PER PILE FOR THE ABUTMENTS AND 49 TONS PER PILE FOR THE PIERS.
SEE DWG. (530) FOR RESTRICTIONS APPLYING TO CLASS S CONCRETE, SUPERSTRUCTURE, USING SHRINKAGE COMPENSATING CEMENT, 701.08. AND FOR CONCRETE PILE ALTERNATE NOTE.

UTILITY LINES: ALL EXPENSE INVOLVED IN RELOCATING THE AFFECTED UTILITY LINES SHALL BE BORNE BY THE OWNERS. THE CONTRACTOR AND OWNERS ARE REQUESTED TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WOULD BE HELD TO A MINIMUM.

THE JACKING HOLES AS CALLED FOR ON STANDARD DRAWING AS-1-72 WILL NOT BE REQUIRED FOR THIS STRUCTURE. ALSO, THE COVER ON THE TOP REINFORCING STEEL IN THE APPROACH SLAB SHALL BE 3" INSTEAD OF 2"

HEADED STUD SHEAR CONNECTORS, MATERIAL AND INSTALLATION SHALL BE AS PER AWS D1.1 FOR NOTE ON FIELD PAINTING OF STRUCTURAL STEEL AND FOR NOTES ON PROTECTION OF CONCRETE SURFACES SEE DWG. (530) (581)



EMBANKMENT AND EXCAVATION DETAILS AT ABUTMENTS

ESTIMATED QUANTITIES							
ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	PIERS	ABUTS.	GENERAL
503	2234	CU.YD.	UNCLASSIFIED EXCAVATION		620	1,614	
505	LUMP	SUM	TEST PILE				LUMP
506	LUMP	SUM	PILE TEST LOAD				LUMP
506	2	EACH	SUBSEQUENT PILE TEST LOAD				2
507	21790	LIN. FT.	12" CAST-IN-PLACE REINFORCED CONCRETE PILES		2,210	19,580	
509	461,038	LB.	REINFORCING STEEL	99,920	90,404	270,714	
SPECIAL	97,741	LB.	EPOXY COATED REINFORCING STEEL (SEE PROPOSAL NOTE)	97,741			
511	712	CU.YD.	CLASS S CONCRETE, SUPERSTRUCTURE **	712			
511	69	CU.YD.	CLASS C CONCRETE, PIER COLUMNS	69			
511	1,438	CU.YD.	CLASS C CONCRETE, ABUTMENT WALLS			1,438	
511	1,478	CU.YD.	CLASS C CONCRETE, FOOTINGS		287	1,478	
512	93	SQ.YD.	TYPE "B" WATERPROOFING			93	
* 514	LUMP	SUM	FIELD PAINTING OF STRUCTURAL STEEL SYSTEM A AS PER PLAN	LUMP			
513	1,061,200	LB.	STRUCTURAL STEEL (AISC CATEGORY III), AS PER PLAN*	1,061,200			*ASTM A588
513	3,132	EACH	WELDED STUD SHEAR CONNECTORS	3,132			
SPECIAL	7,270	SQ.FT.	PROTECTION OF CONCRETE SURFACES		1,854	5,416	
516	446	SQ.FT.	1" PREFORMED EXPANSION JOINT FILLER			446	
518	771	CU.YD.	POROUS BACKFILL			771	
518	544	LIN. FT.	6" PERFORATED, HELICAL CORRUGATED STEEL PIPE, 707.01			544	
518	195	LIN. FT.	6" NON-PERFORATED HELICAL CORRUGATED STEEL PIPE INCLUDING SPECIALS, 707.01			195	
518	154	LIN. FT.	4" STD. PIPE DRAIN, HOT-DIP GALVANIZED STEEL			154	
518	117	LIN. FT.	6" STD. PIPE HORIZONTAL CONDUCTORS, GALVANIZED STEEL, INCLUDING SPECIALS	117			
518	78	LIN. FT.	6" STD. PIPE DOWNSPOUT, GALVANIZED STEEL, INCLUDING SPECIALS			78	
518	12	EACH	SCUPPERS INCLUDING SUPPORTS	12			
Special	Lump	Sum	Review of Shop Drawings, major structure design (See Proposal Note)				Lump
601	23	SQ.YD.	CRUSHED AGGREGATE SLOPE PROTECTION			23	
601	3	CU.YD.	DUMPED ROCK FILL, TYPE B			3	
523	3	HR.	DYNAMIC PILE TESTS				3

* INCLUDES 5,100 LBS. FOR CONDUIT SUPPORTS TO BE PAID FOR BY DAYTON POWER AND LIGHT CO.
** USING SHRINKAGE COMPENSATING CEMENT, 701.08

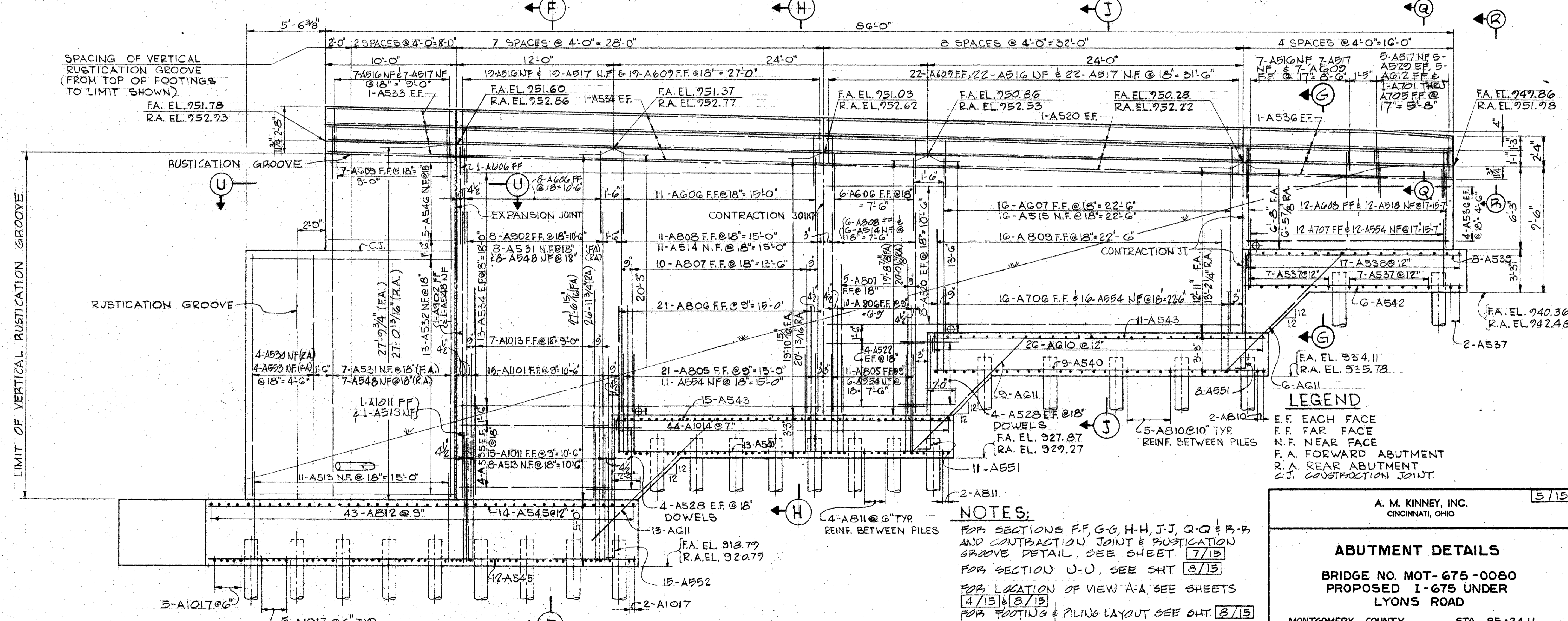
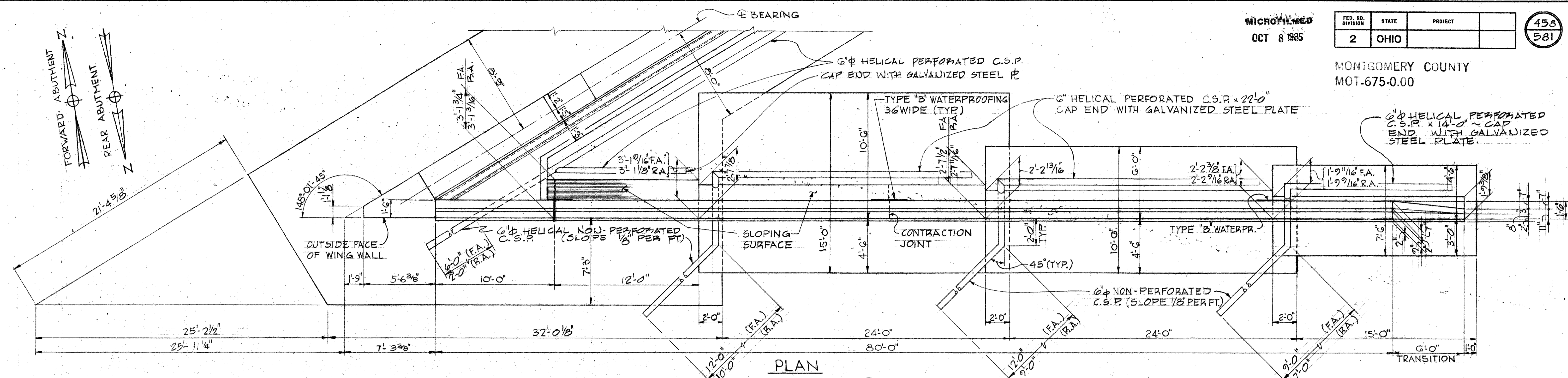
A. M. KINNEY, INC. CINCINNATI, OHIO					
GENERAL PLAN & ESTIMATED QUANTITIES					
BRIDGE NO. MOT-675-0080 PROPOSED I-675 UNDER LYONS ROAD					
MONTGOMERY COUNTY			STA. 85+24.11		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE REVISED
C.T.S.	W.S.	W.S.	J.I.K.	J.C.O.	9-21-79

MICROFILMED
OCT 8 1985

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

458
581

MONTGOMERY COUNTY
MOT-675-0.00



A. M. KINNEY, INC.
CINCINNATI, OHIO

5/15

ABUTMENT DETAILS

BRIDGE NO. MOT-675-0080
PROPOSED I-675 UNDER
LYONS ROAD

MONTGOMERY COUNTY STA. 85+24.11

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.T.	J.T.	J.T.	J.I.K.	J.C.	9-21-79	

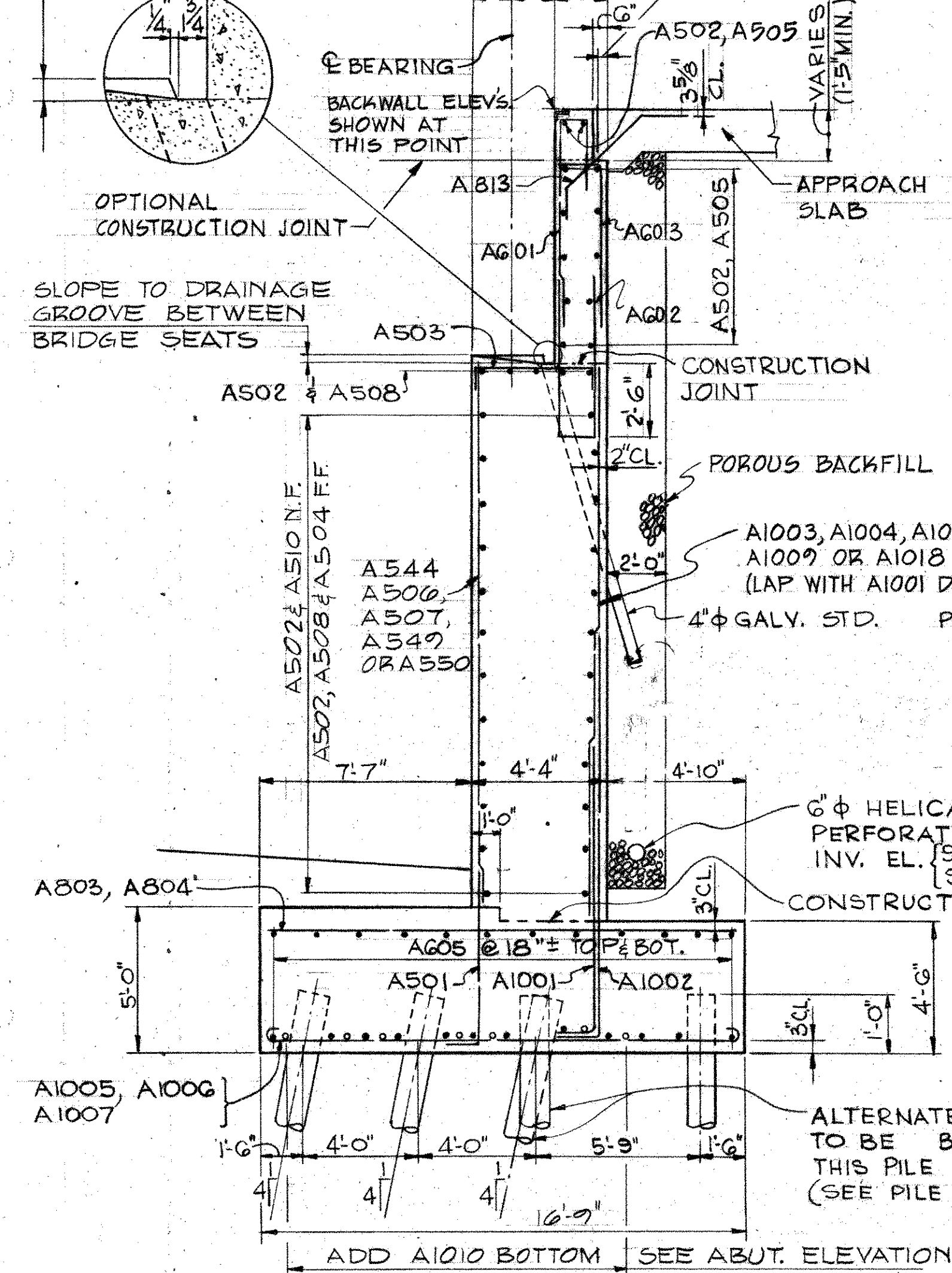
MICROFILMED
OCT 8 1985

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

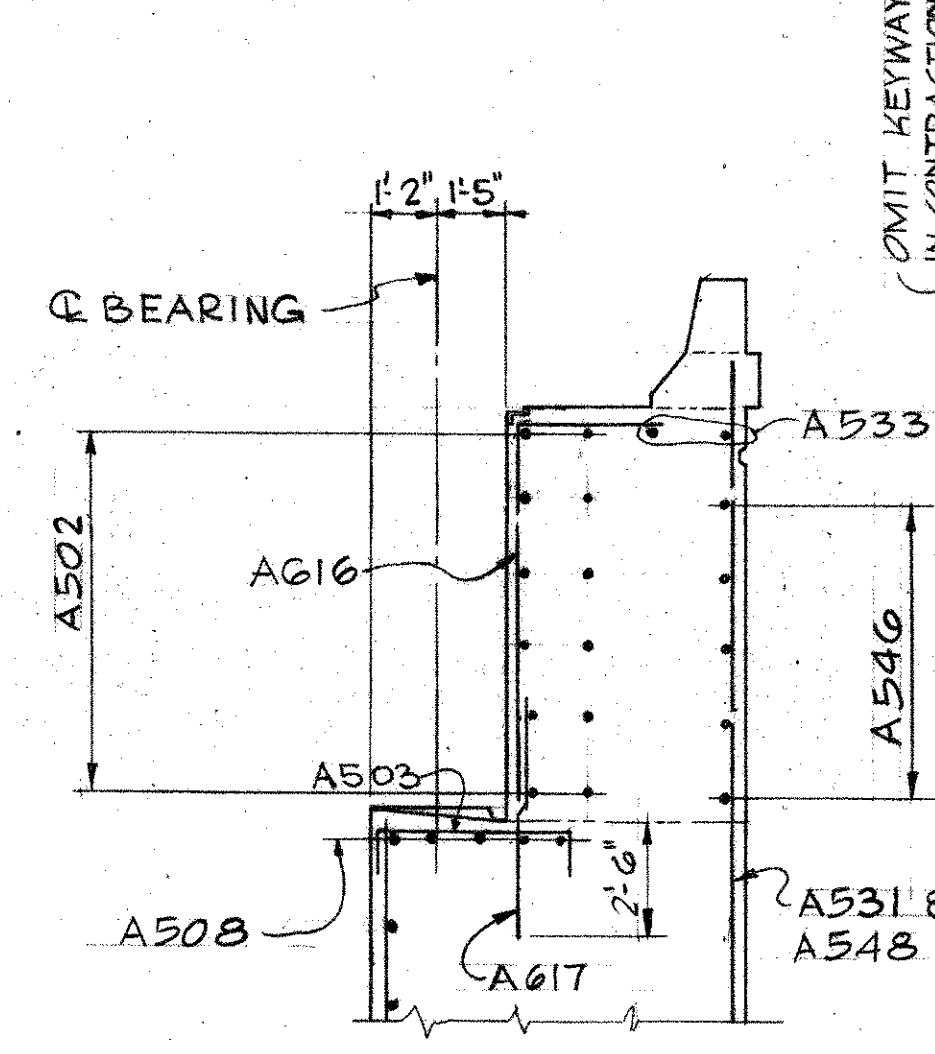
460
581

MONTGOMERY COUNTY
MOT-675-0.00

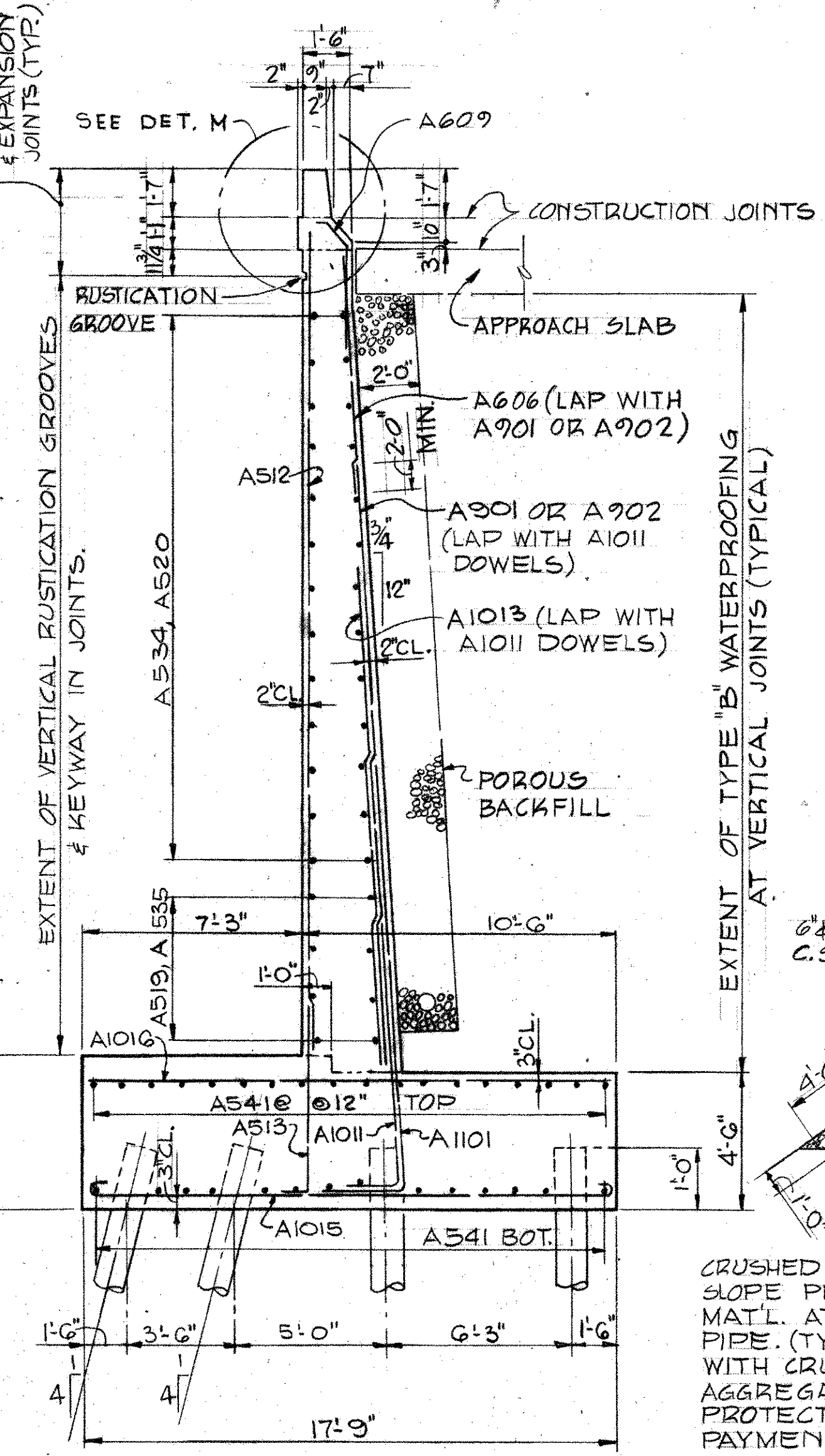
DEPTH OF DRAINAGE GROOVE VARIES (1" MIN. TO 2" MAX.) SLOPE TOWARD DRAIN PIPE



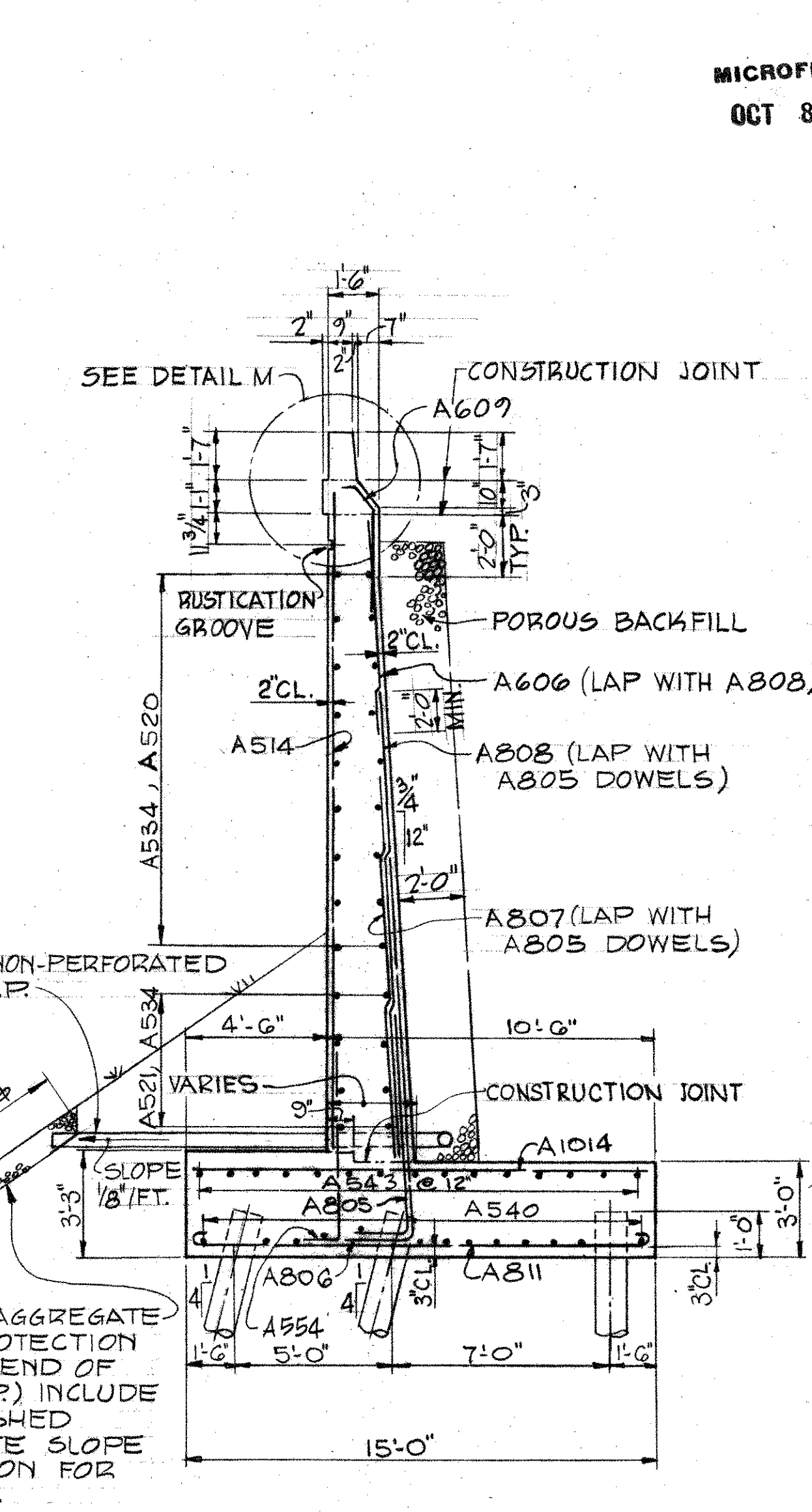
SECTION D-D



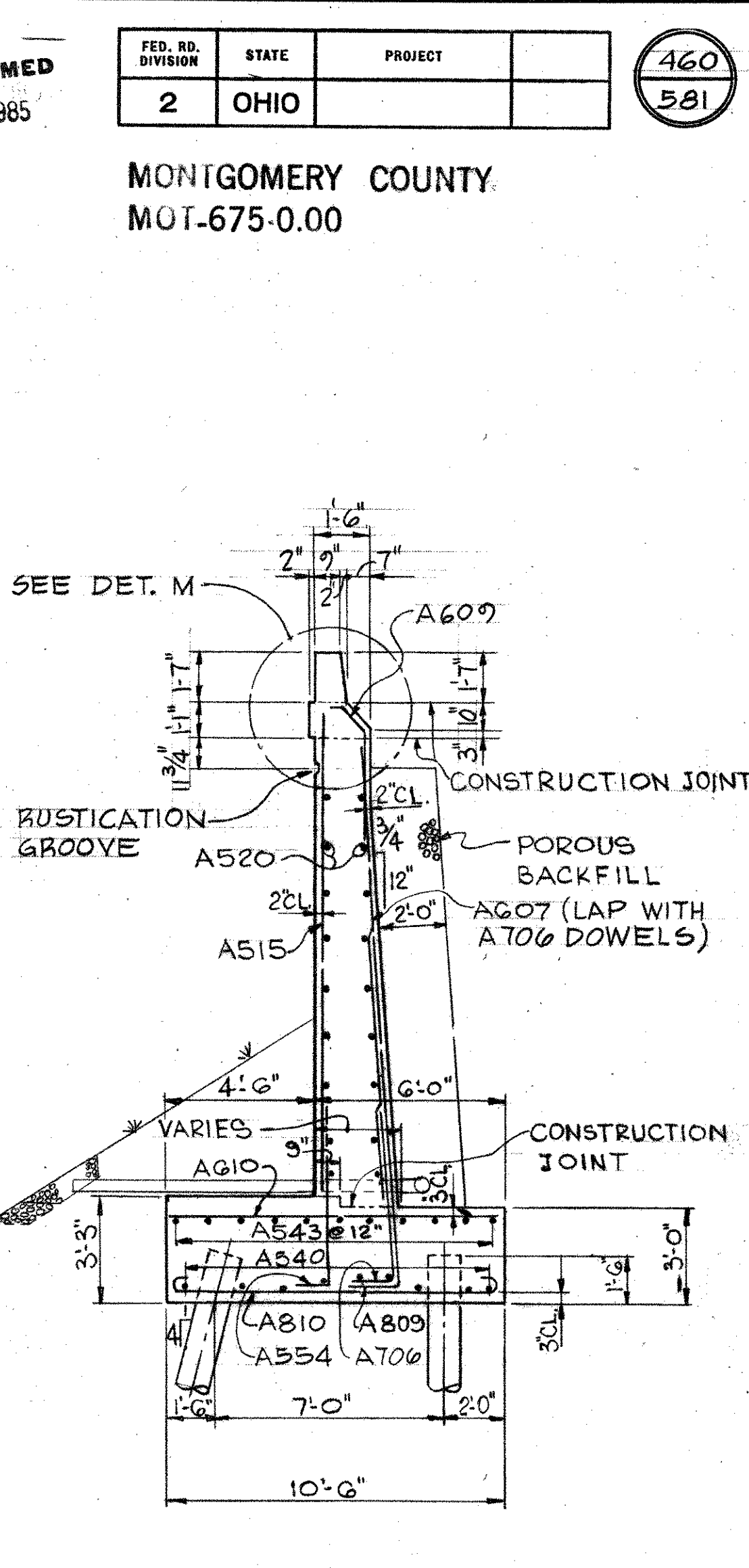
SECTION P-P



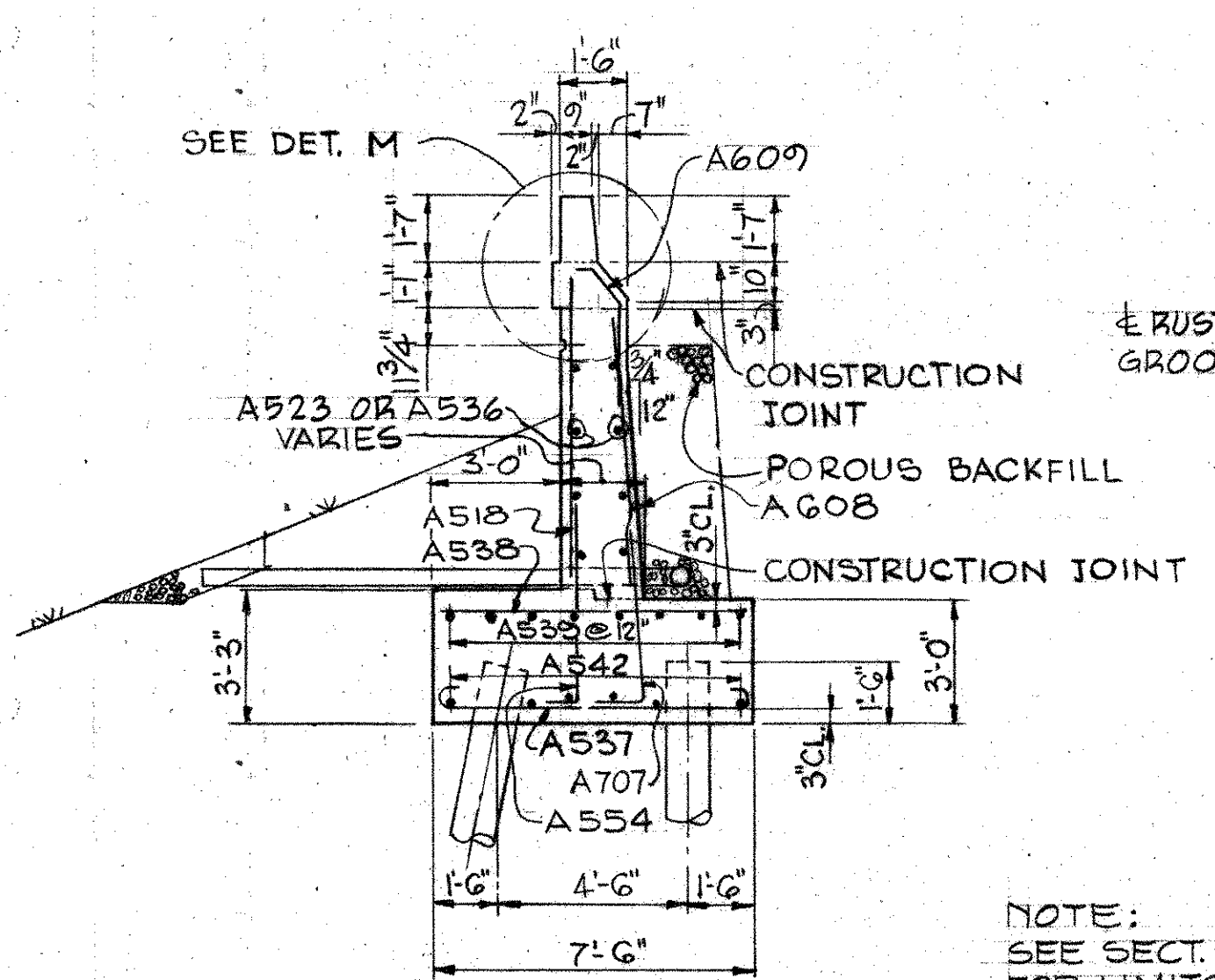
SECTION E-E



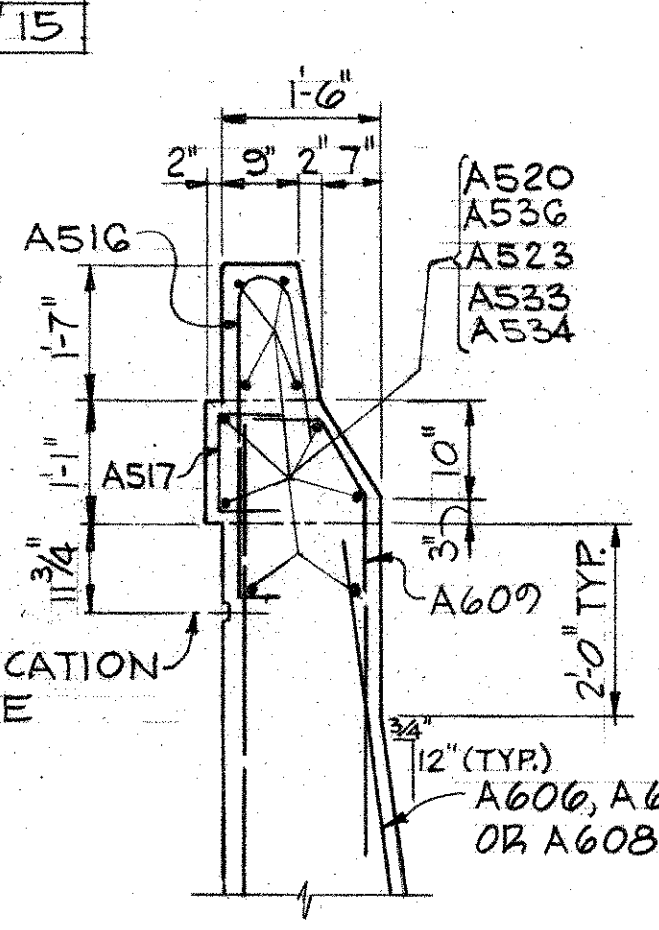
SECTION H-H



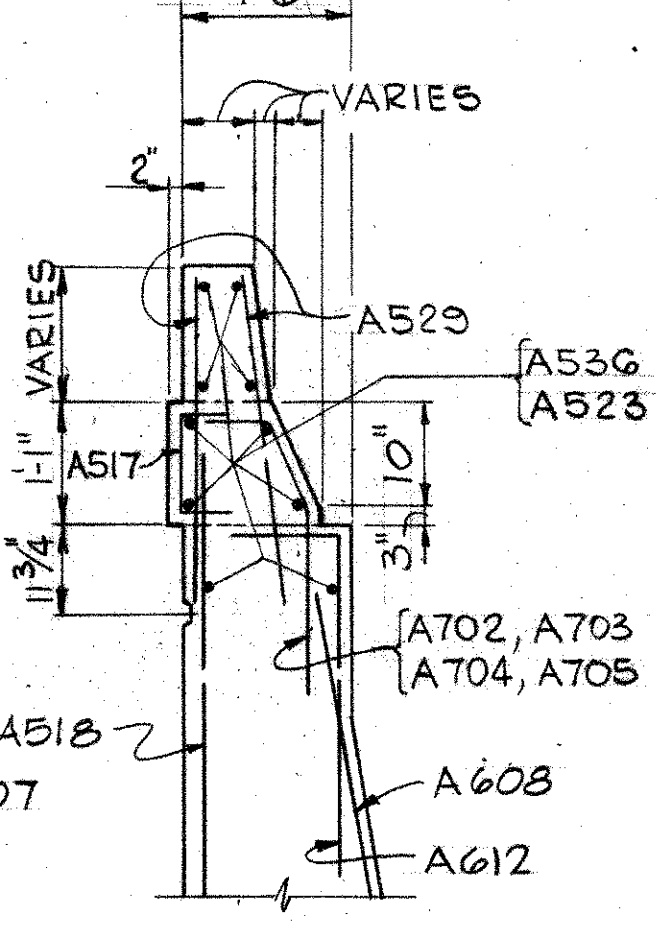
SECTION J-J



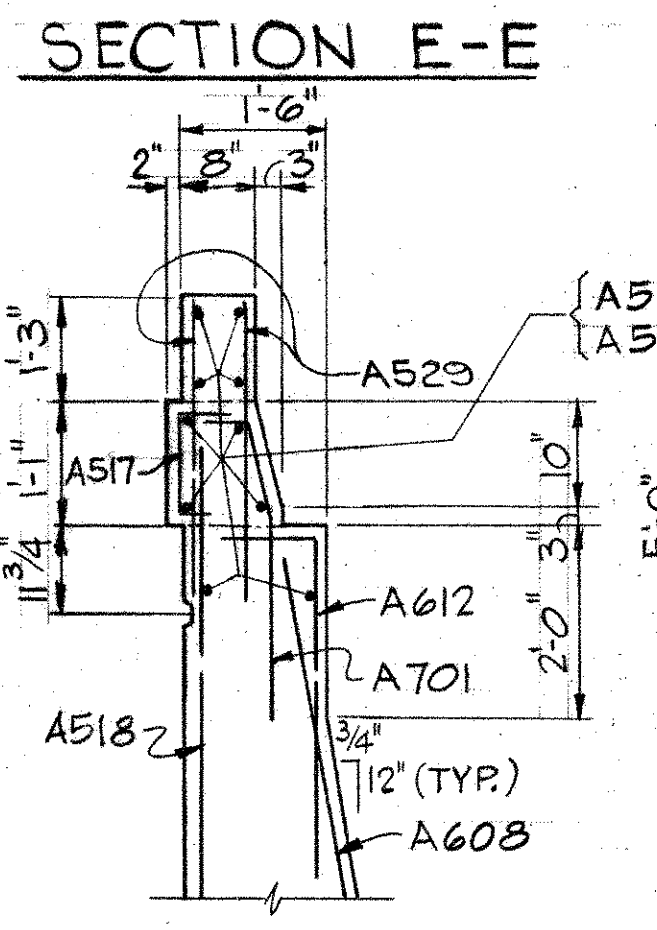
SECTION G-G



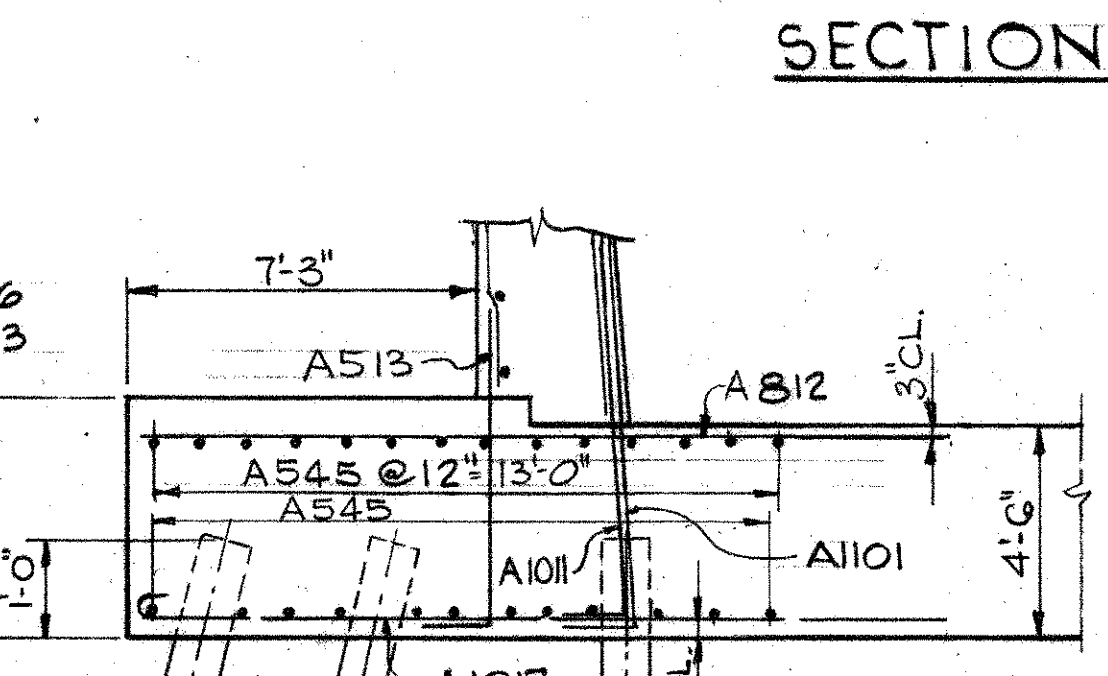
DETAIL M



SECTION Q-Q

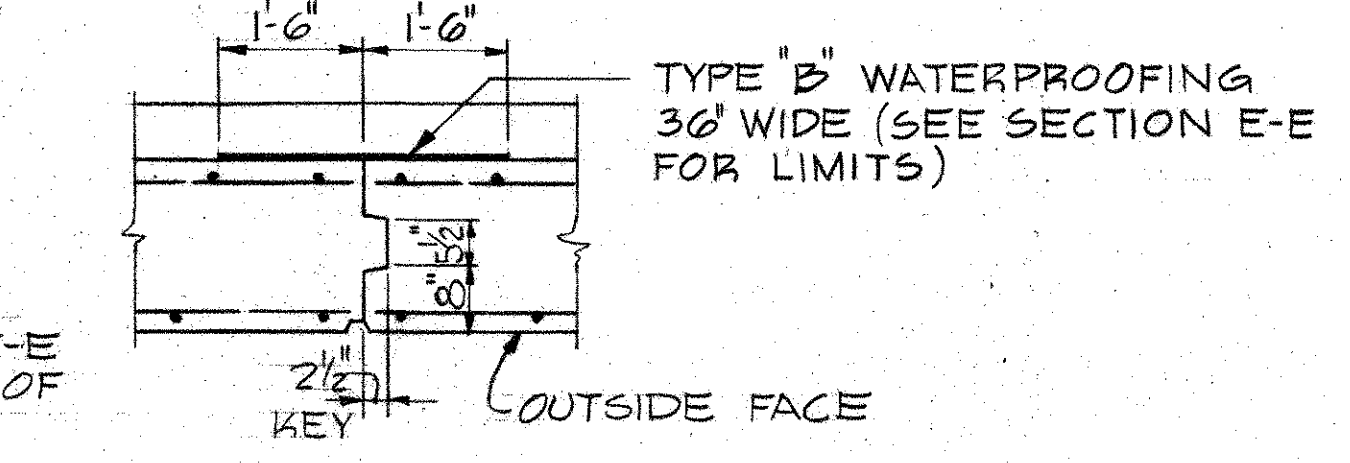


SECTION R-R

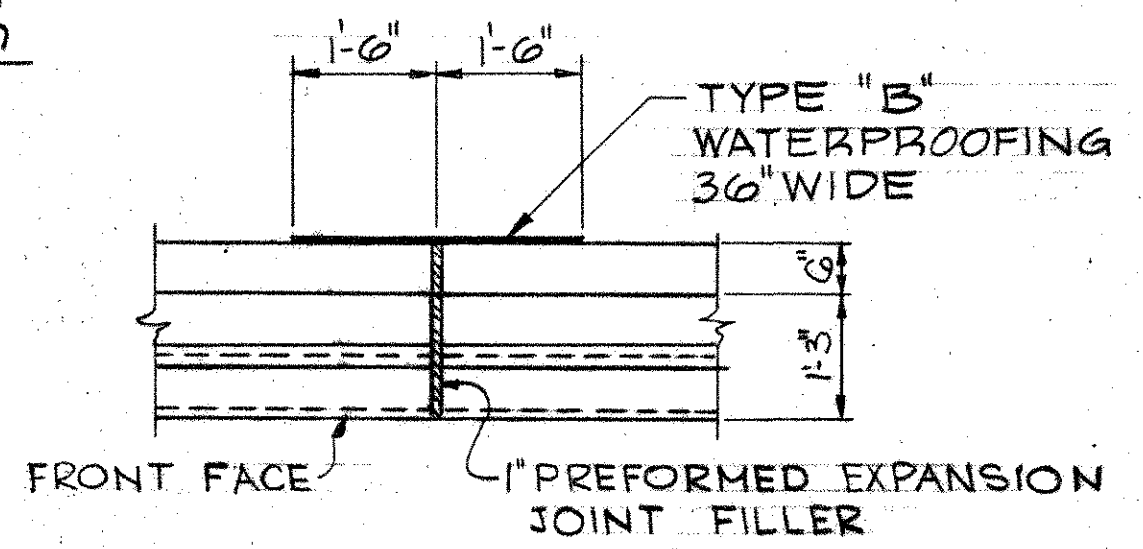


SECTION F-F
(REMAINDER OF SECTION SAME AS SECTION E-E)

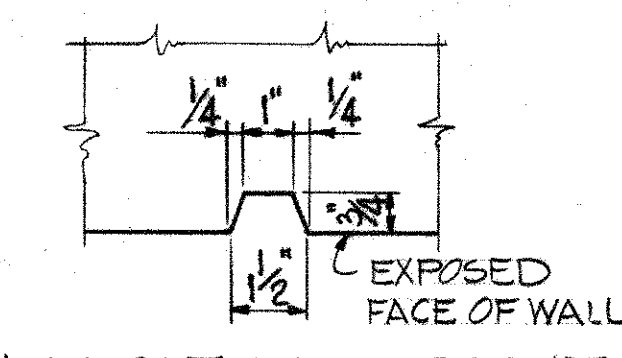
NOTE:
SEE SECT. E-E
FOR LIMITS OF
KEY WAY



CONTRACTION JOINT
DETAIL



DETAIL L



RUSTICATION GROOVE
(FOR LOCATION SEE WING WALLS)
(FOR LIMITS SEE SECTION E-E)

NOTES

- FOR LOCATION OF SECTIONS D-D, P-P & DETAIL L SEE SHT. 3/15
- FOR LOCATION OF SECTIONS G-G, H-H, J-J, Q-Q AND R-R, SEE SHEETS 5/15 & 6/15
- FOR LOCATION OF SECTION F-F, SEE SHT. 5/15
- FOR LOCATION OF SECTION E-E, SEE SHT. 6/15

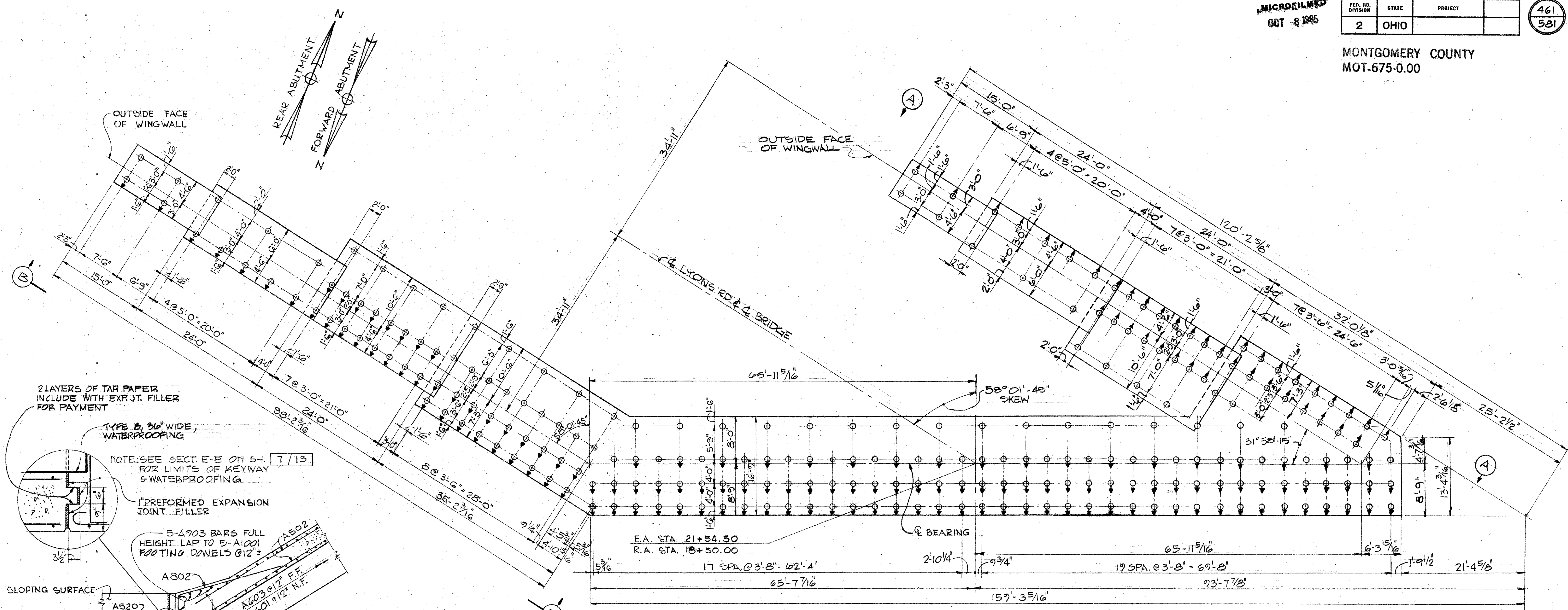
A. M. KINNEY, INC. CINCINNATI, OHIO						
ABUTMENT DETAILS						
BRIDGE NO. MOT-675-0080 PROPOSED I-675 UNDER LYONS ROAD						
MONTGOMERY COUNTY				STA. 85+24.11		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.T.	J.T.	J.T.	J.I.K.	J.C.O.	9-21-79	

MICROFILMED
OCT 8 1985

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

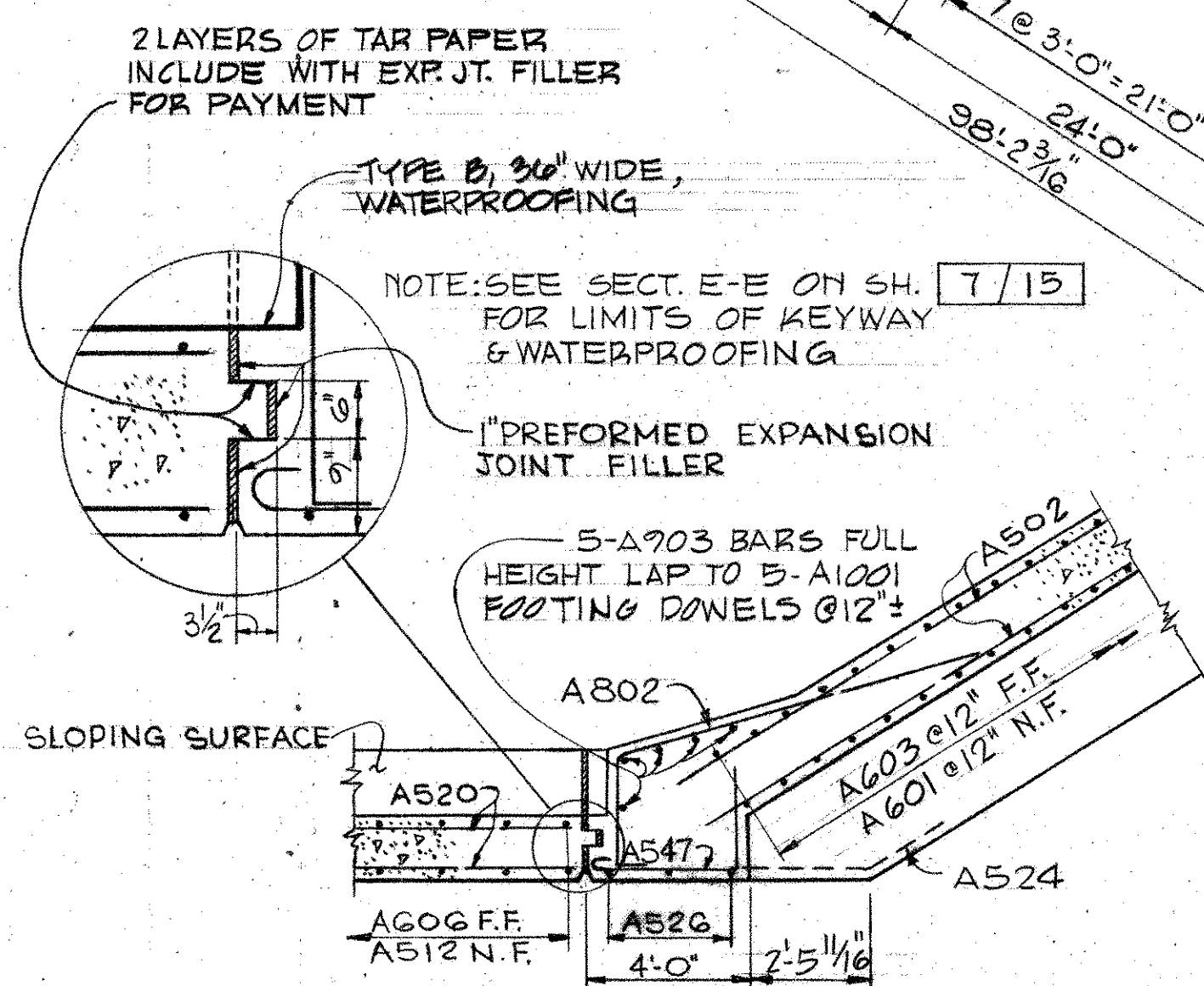
461
581

MONTGOMERY COUNTY
MOT-675-0.00

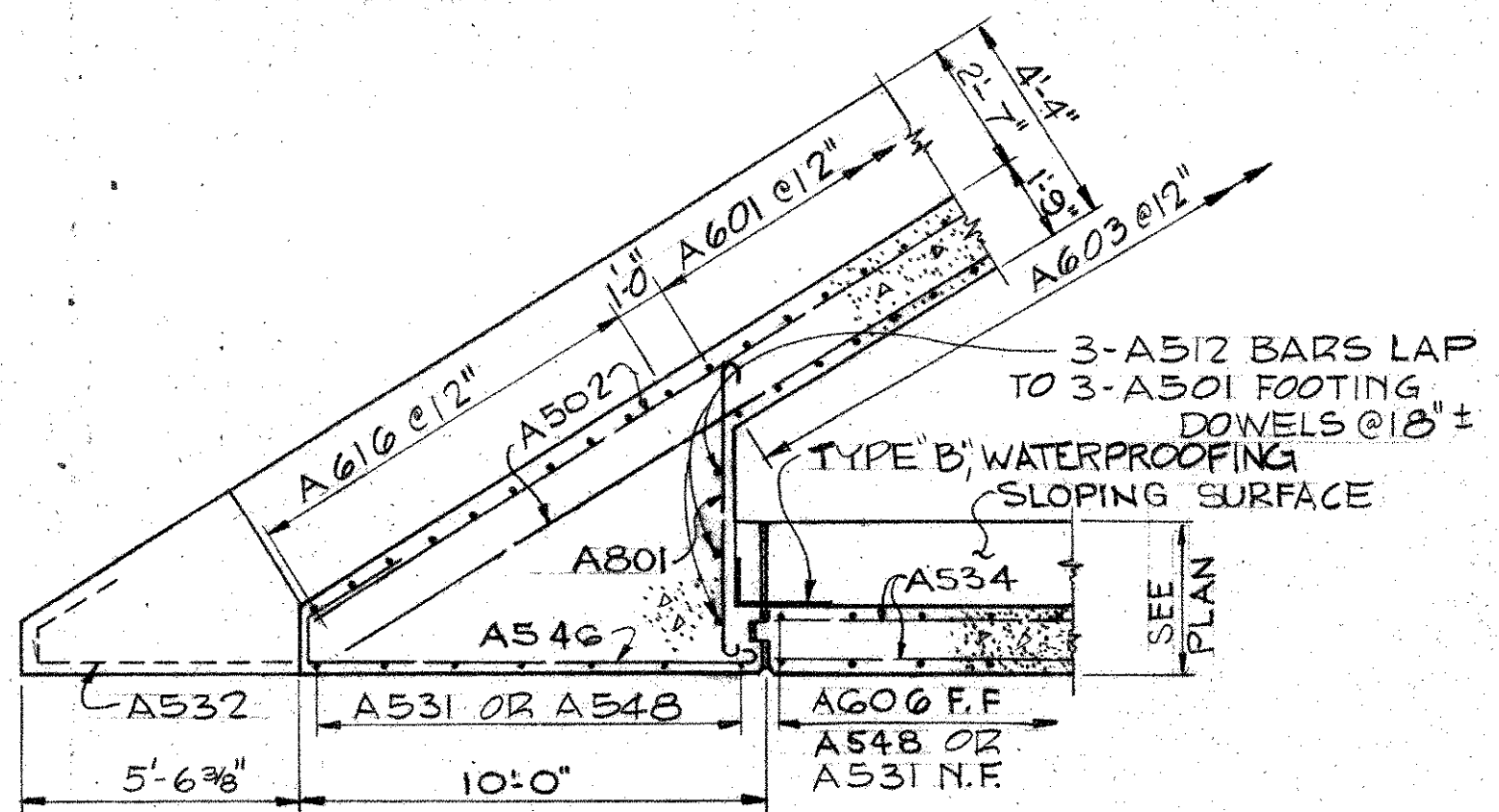


FOOTING & PILE PLAN

FOR LOCATION OF SECTION T-T, SEE SHT. 6/15
 FOR LOCATION OF SECTION U-U, SEE SHT. 5/15
 FOR VIEW A-A, SEE SHT. 5/15
 FOR VIEW B-B, SEE SHT. 6/15



SECTION T-T



SECTION U-U

FOR KEYWAY JOINT FILLER & SEALING STRIP RECESS DIMENSIONS & LIMITS SEE SECTION T-T

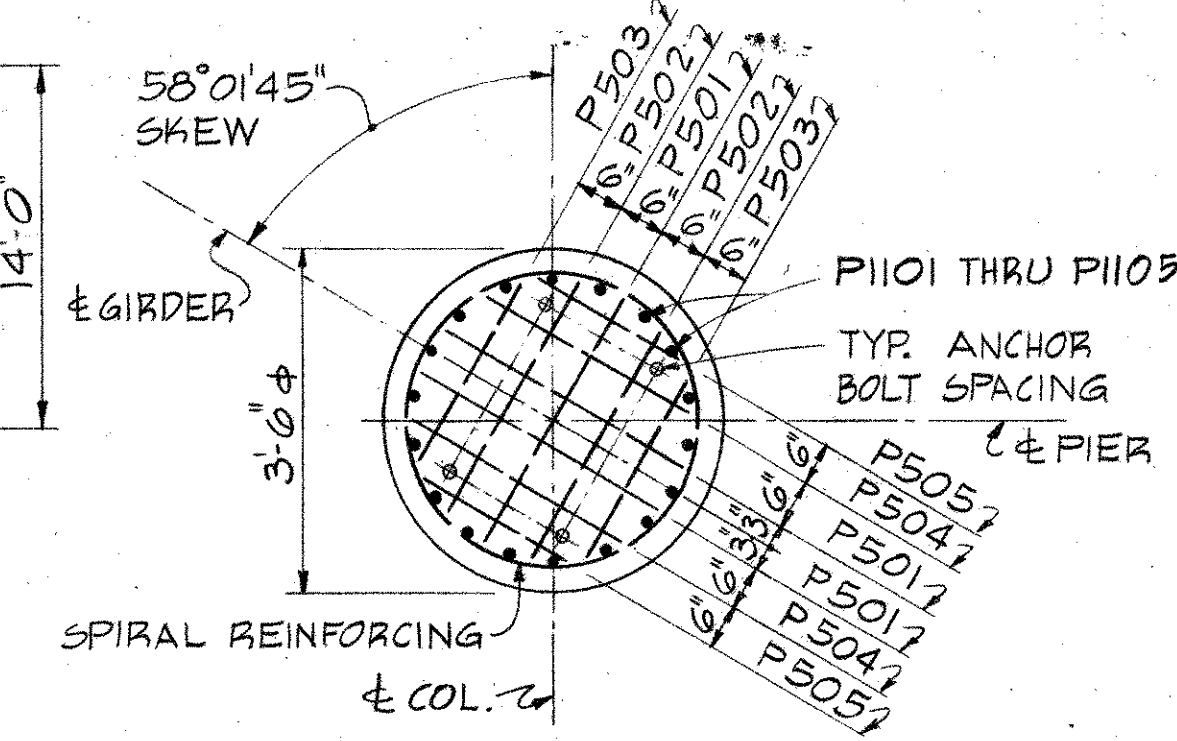
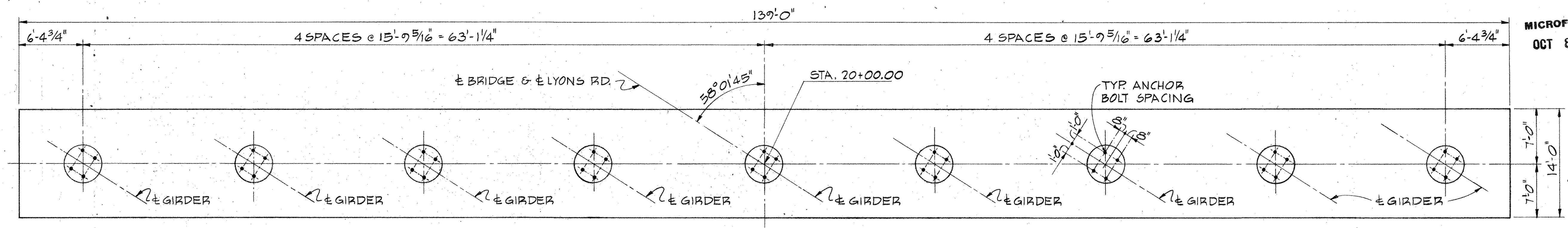
LEGEND:

- O INDICATES VERTICAL PILE.
- Q INDICATES PILE TO BE BATTERED 1:4 IN THE DIRECTION SHOWN.
- F.A. FORWARD ABUTMENT.
- R.A. REAR ABUTMENT.

A. M. KINNEY, INC. CINCINNATI, OHIO						
ABUTMENT DETAILS						
BRIDGE NO. MOT-675-0080 PROPOSED I-675 UNDER LYONS ROAD						
MONTGOMERY COUNTY						STA 85+24.11
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.T.	J.T.	J.T.	J.I.K.	J.C.	9-21-79	

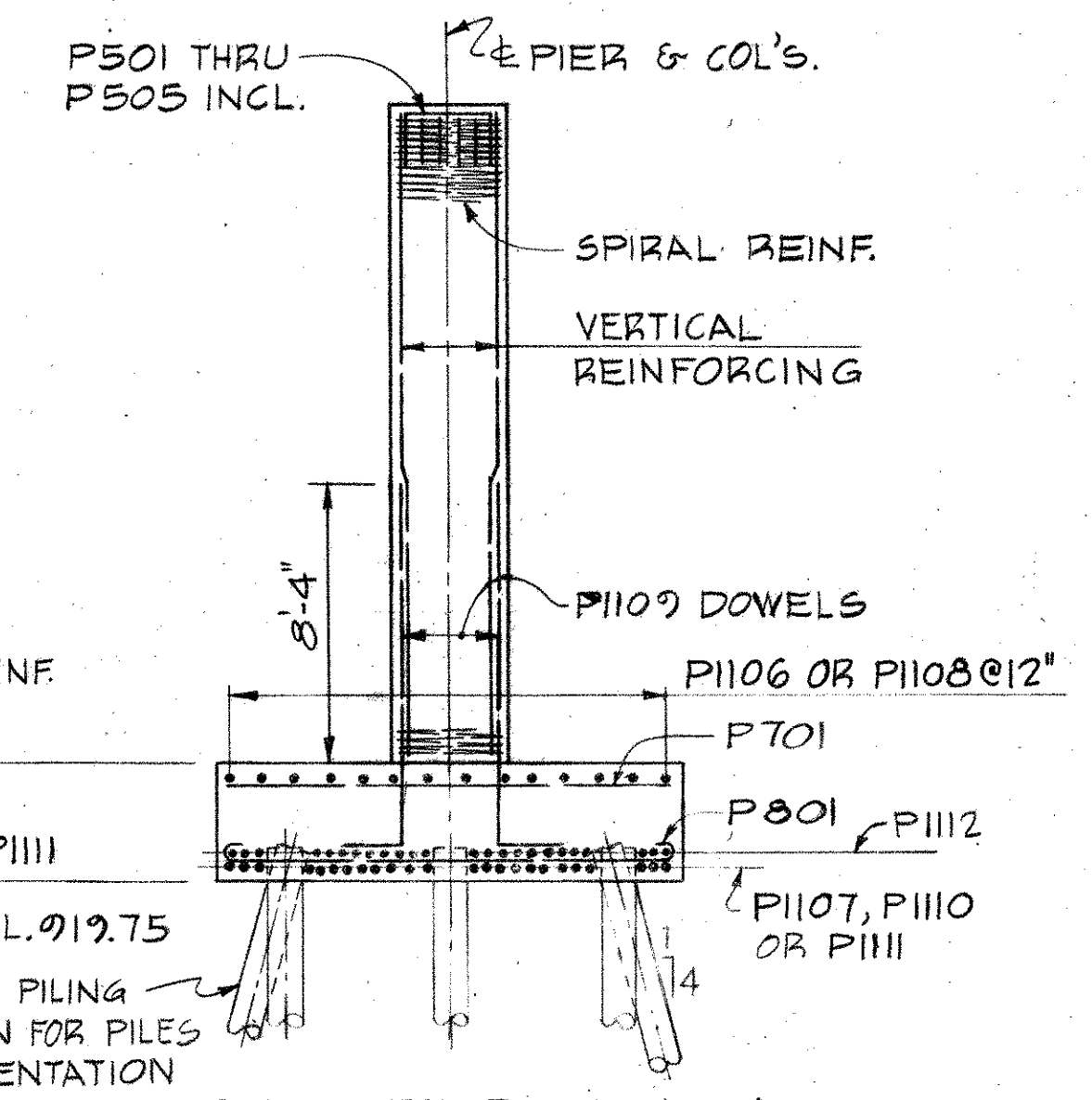
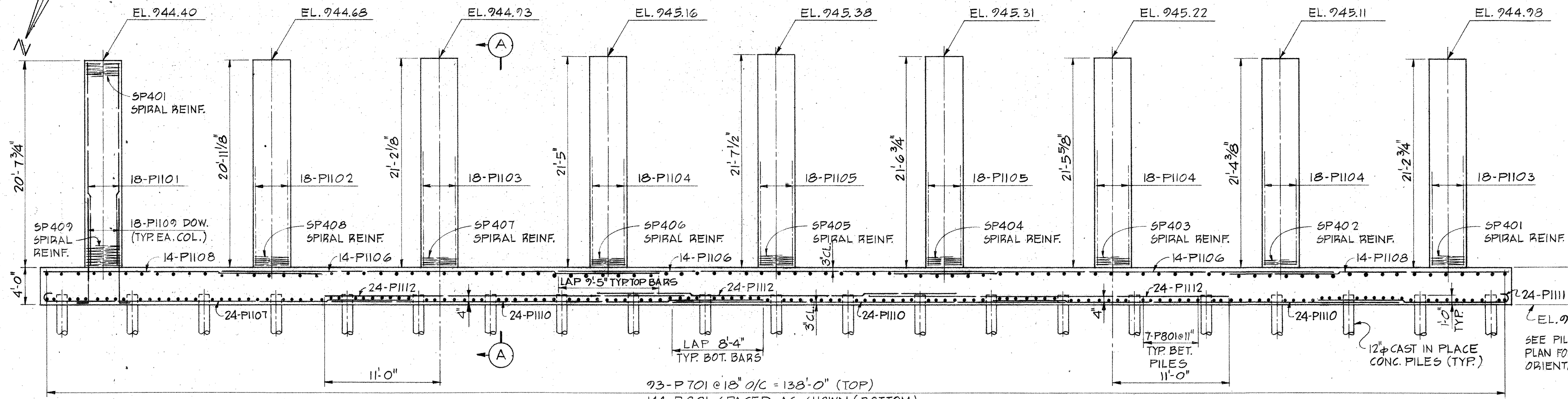
MICROFILMED
OCT 8 1985

MONTGOMERY COUNTY
MOT-675-0.00



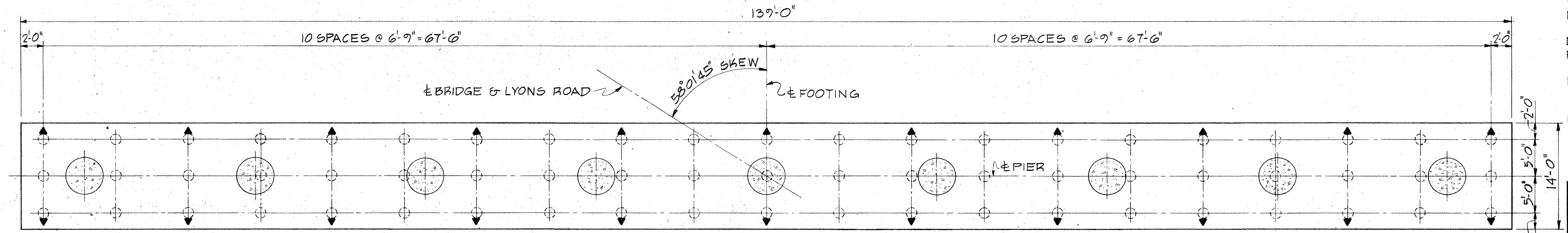
PLAN

TYP. PIER COL. PLAN



ELEVATION

SECTION A-A

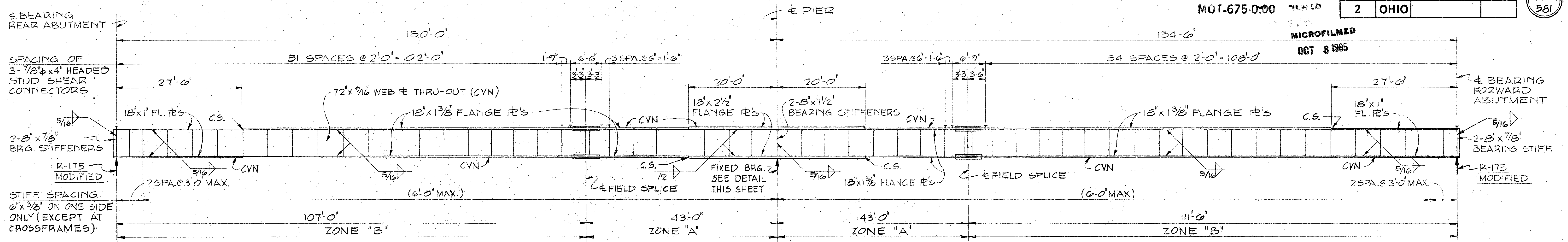


FOOTING & PILE PLAN

LEGEND:
 ○=SYMBOL INDICATES PILES TO BE BATTERED 1:4 IN THE DIRECTION OF THE ARROW
 ○=SYMBOL INDICATES VERTICAL PILES

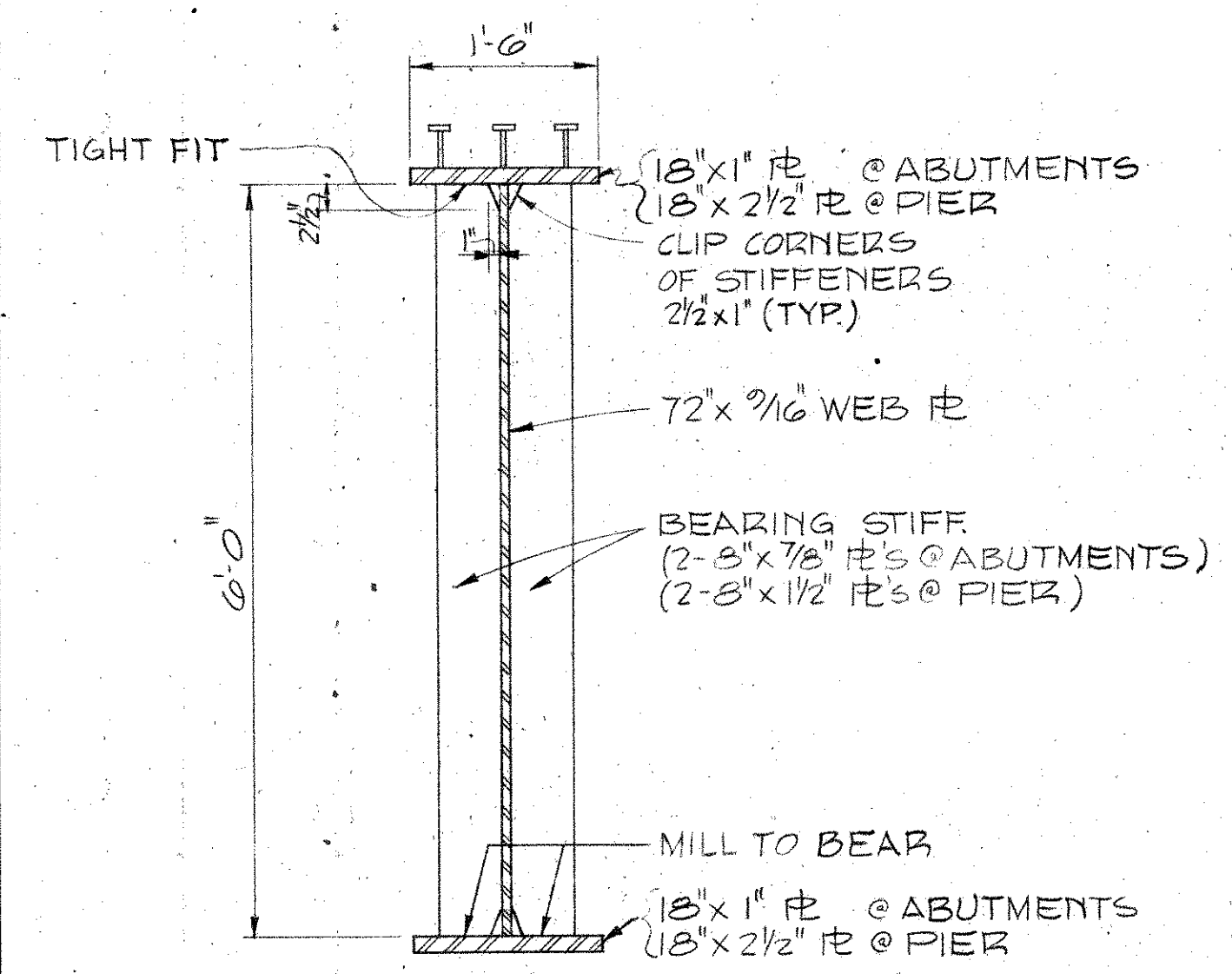
NOTE:
 SPECIAL CARE SHALL BE TAKEN IN PLACING REINFORCING STEEL AT THE TOP OF COLUMNS SO AS TO AVOID INTERFERENCE WITH THE DRILLING OF BEARING ANCHOR HOLES OR THE PRE-SETTING OF BEARING ANCHORS.
 BEARING ANCHORS: AT THE OPTION OF THE CONTRACTOR, BEARING ANCHORS (OR FORMED HOLES) LOCATED AND SUPPORTED BY TEMPLATES, MAY BE CAST IN PLACE.

A. M. KINNEY, INC. CINCINNATI, OHIO						9/15
PIER DETAILS						
BRIDGE NO. MOT-675-0080						
PROPOSED I-675 UNDER LYONS ROAD						
MONTGOMERY COUNTY						STA. 85+24.11
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.T.S.	W.S.	W.S.	J.I.K.	J.C.O.	9-21-79	

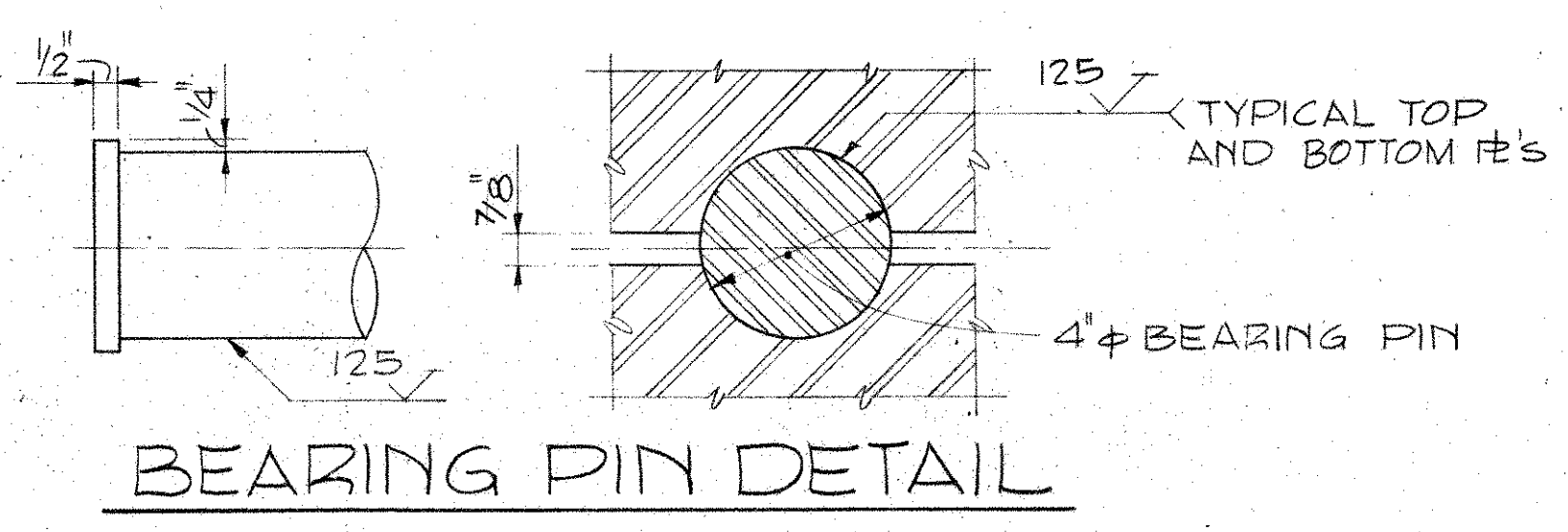


TYPICAL GIRDER ELEVATION

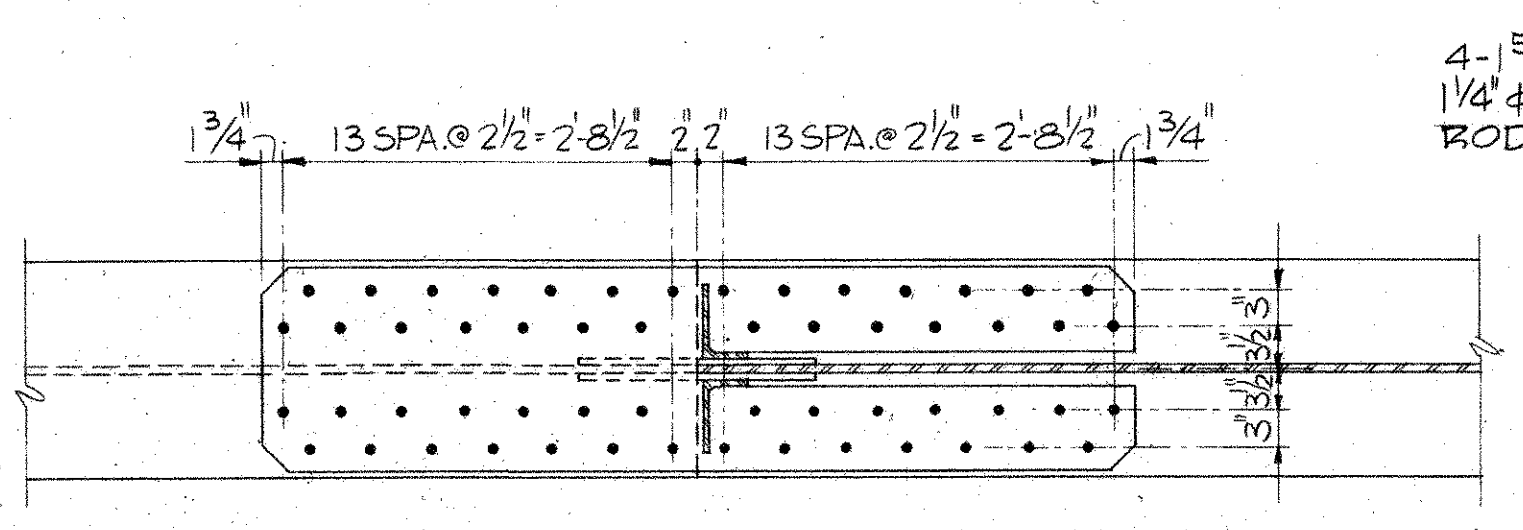
NOTE: "C.S." INDICATES BUTT WELD SUBJECT TO COMPRESSIVE STRESS ONLY.



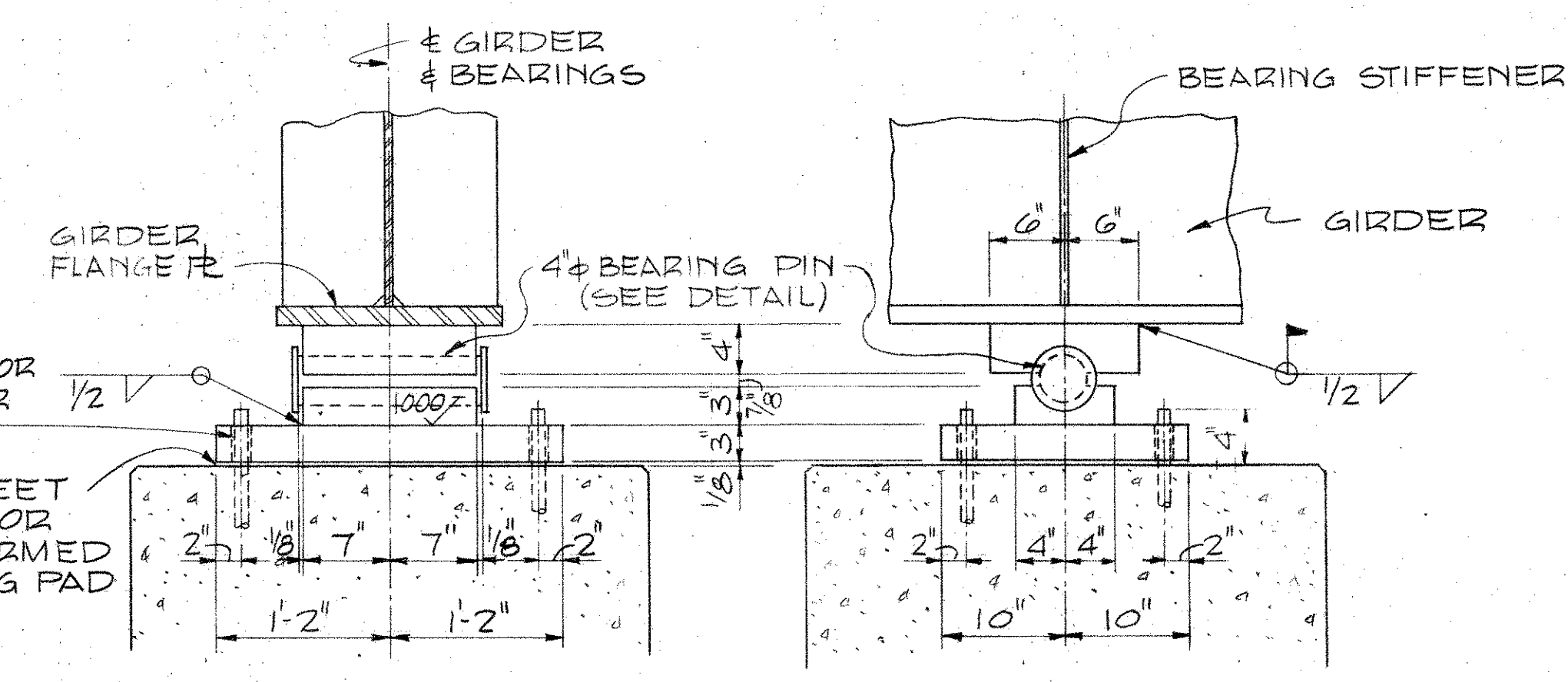
TYPICAL GIRDER SECTION AT ABUTMENTS & PIER



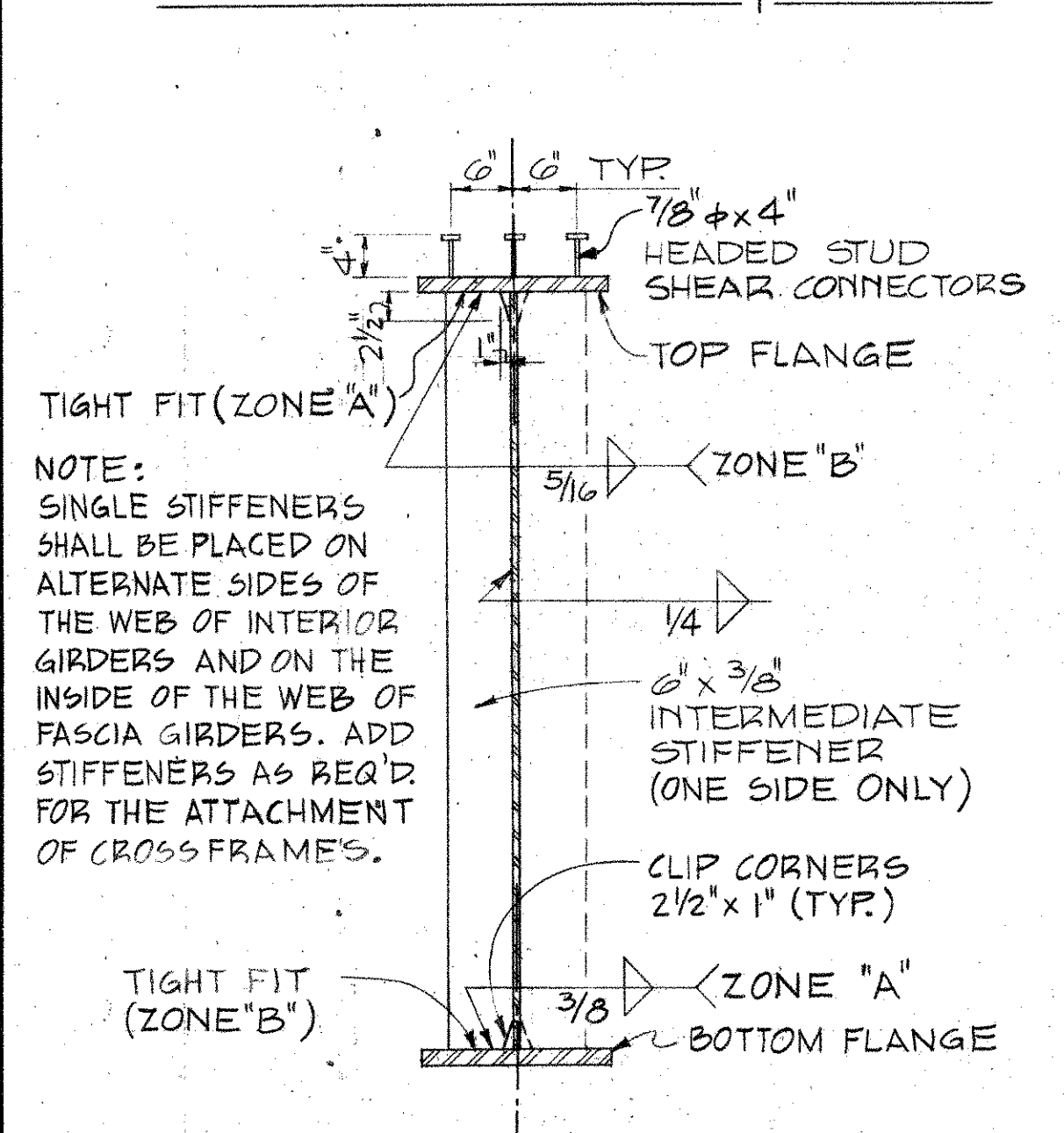
BEARING PIN DETAIL



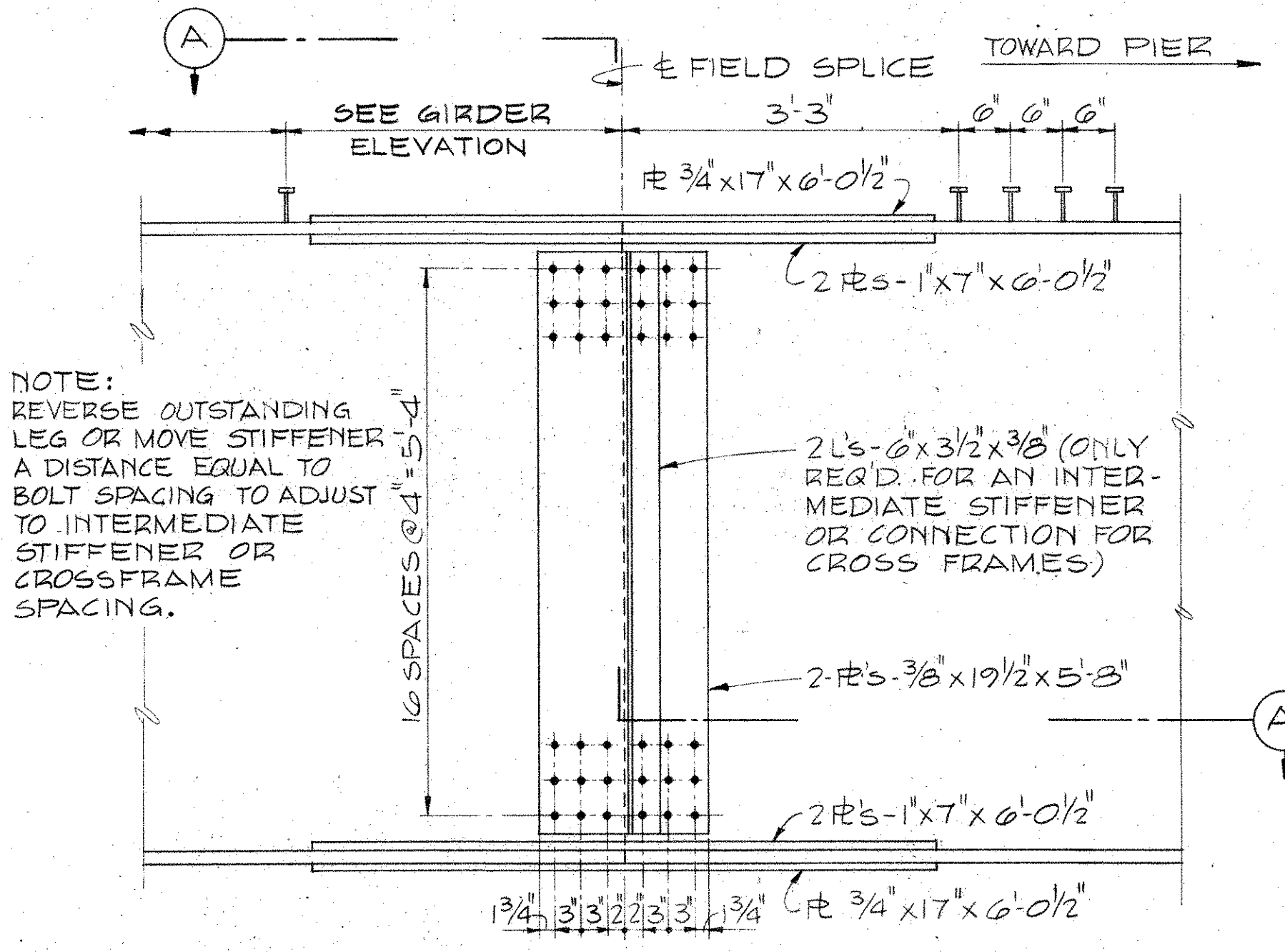
SECTION A-A



FIXED BEARING DETAIL AT PIER

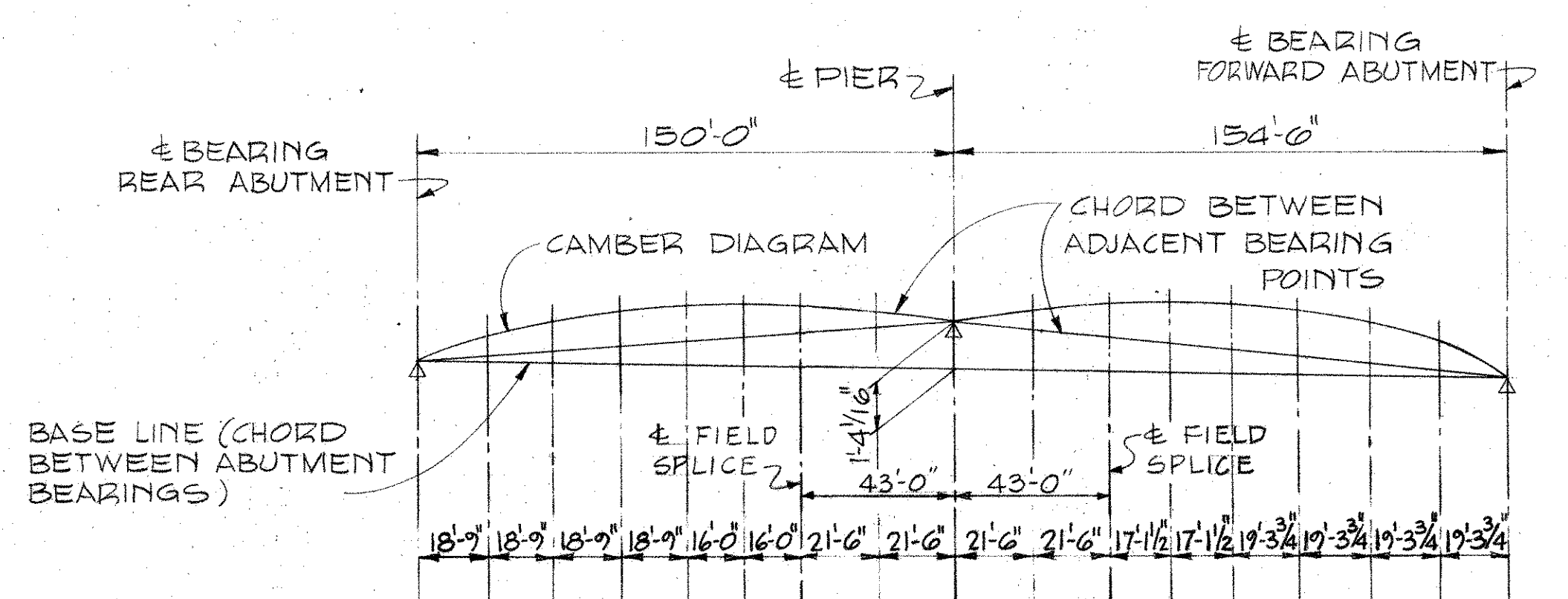


TYPICAL GIRDER SECTION AT INTERMEDIATE STIFFENERS



TYPICAL FIELD SPLICE

(ALL FASTENERS 1" HIGH STRENGTH BOLTS, A325)
ALL SPLICE PLATES ARE CVN.



DEFLECTION DUE TO WEIGHT OF STEEL	0"	5/16"	7/16"	1 1/16"	5/8"	9/16"	3/4"	1/8"	0"	3/16"	7/16"	1 1/16"	1 3/16"	1 3/16"	1 1/16"	3/8"	0"
DEFLECTION DUE TO REMAINING DEAD LOAD	0"	15/16"	1 5/8"	2"	1 5/8"	1 9/16"	1 1/16"	5/16"	0"	1/2"	1 5/16"	2"	2 3/8"	2 7/16"	2"	1 1/8"	0"
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	0"	1 1/16"	2 5/16"	3 5/8"	3 7/8"	3 11/16"	3 3/16"	1 5/16"	0"	2"	3 5/16"	3 5/16"	4 1/8"	3 7/8"	3 1/8"	1 3/16"	0"
REQUIRED SHOP CAMBER	0"	2 5/16"	5/8"	6 5/16"	6 7/16"	5 7/16"	4 5/8"	2 3/8"	0"	2 1/16"	5 1/16"	6 5/8"	7 5/16"	7 1/8"	5 1/16"	3 5/16"	0"

GIRDER DEFLECTION & CAMBER

NOTE: REQUIRED SHOP CAMBER MEASURED TO A CHORD BETWEEN ADJACENT BEARING POINTS

NOTES:
WHERE A SHAPE OR PLATE IS DESIGNATED (CVN) THE MATERIAL SHALL MEET SPECIFIED MINIMUM NOTCH TOUGHNESS REQUIREMENTS.

ROCKERS AT REAR AND FORWARD ABUTMENTS SHALL BE R-175. SEE STD. DWG. RB-1-55 FOR DETAILS. CLIP CORNERS OF MASONRY PLATE TO MAINTAIN 1" MIN. CLEARANCE FROM FACE OF ABUTMENT. SEE SHEET 3/15. FOR FIXED BEARINGS AT THE PIER, SEE DETAILS ON THIS SHEET.

FOR DETAILS OF END CROSS FRAME, END FINISH, SCUPPERS AND GIRDER CUT-OFF AT BACKWALL SEE STANDARD DWG. SD-1-67 SHEET NOS. 1, 2 & 3.

HIGH STRENGTH BOLTS SHALL BE 1" DIAMETER, A325, UNLESS OTHERWISE NOTED.

SEE SHEET 10/15 FOR SPECIAL END CROSS FRAME DETAILS.

FOR DOWNSPOUT AND HORIZONTAL PIPE CONDUCTOR DETAILS, SEE SHEET 13/15. ALL STRUCTURAL STEEL TO BE ASTM A588 WITHOUT PAINT EXCEPT WHERE OTHERWISE SHOWN OR NOTED. END DAMS & BEARINGS: IN LIEU OF A588 STEEL, A36 STEEL, GALVANIZED SHALL BE FURNISHED FOR END DAMS, AND MAY BE FURNISHED FOR BEARINGS, EXCEPT FOR UPPER PLATE ELEMENT OF BEARINGS. THIS A36 STEEL SHALL BE INCLUDED WITH A588 STEEL QUANTITY FOR PAYMENT.

A. M. KINNEY, INC. CINCINNATI, OHIO		11/15
SUPERSTRUCTURE GIRDER DETAILS		
BRIDGE NO. MOT- 675-0080 PROPOSED I-675 UNDER LYONS ROAD		
MONTGOMERY COUNTY		STA. 85+24.11
DESIGNED	DRAWN	TRACED
C.T.S.	W.S.	W.S.
CHECKED	REVIEWED	DATE
J.I.K.	g.c.o.	9-21-79

ALL LONGITUDINAL BARS IN THE TOP OF SLAB ARE SE 401 OR SE 402 AND THOSE IN THE BOTTOM OF THE SLAB AND CURBS ARE S601 OR S602 UNLESS OTHERWISE SHOWN. EACH LONGITUDINAL LINE OF BARS SHALL BE SET AS 10-SE 401 AND 1-SE 402 WITH 1'-4" MIN. LAPS (FOR TOP) AND 10-S601 OR SE 601 AND 1-S602 OR SE 602 WITH 2'-0" MIN. LAPS (FOR BOTTOM AND CURBS)

MICROFILMED
OCT 8 1985

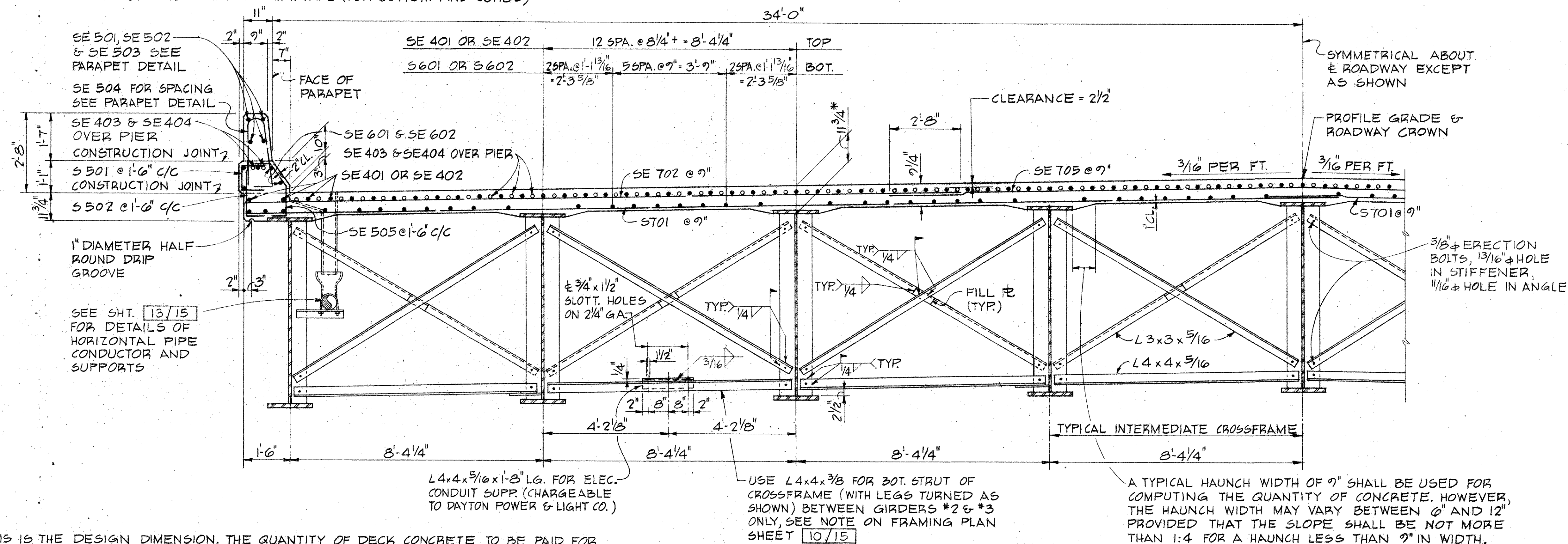
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

465
581

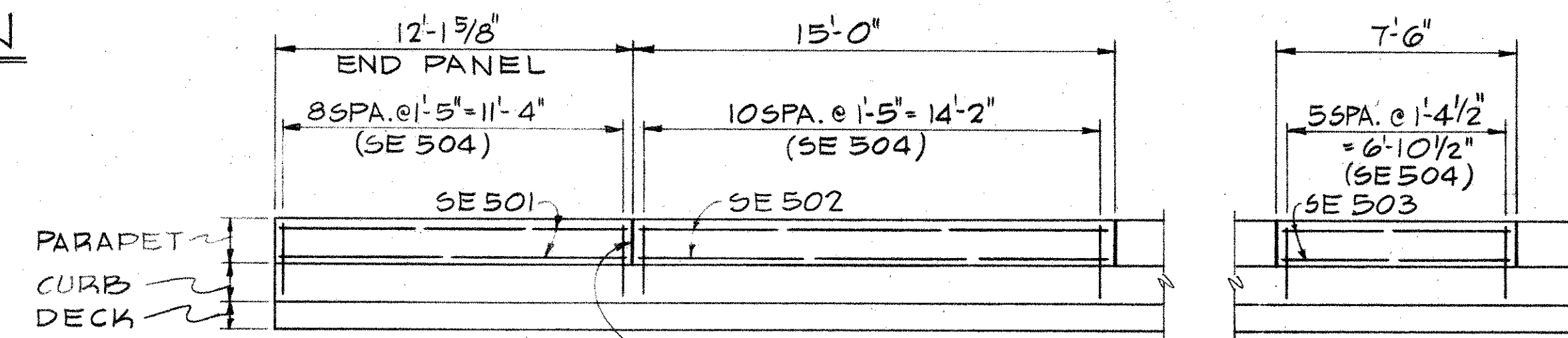
MONTGOMERY COUNTY
MOT-675-0.00

NOTES:

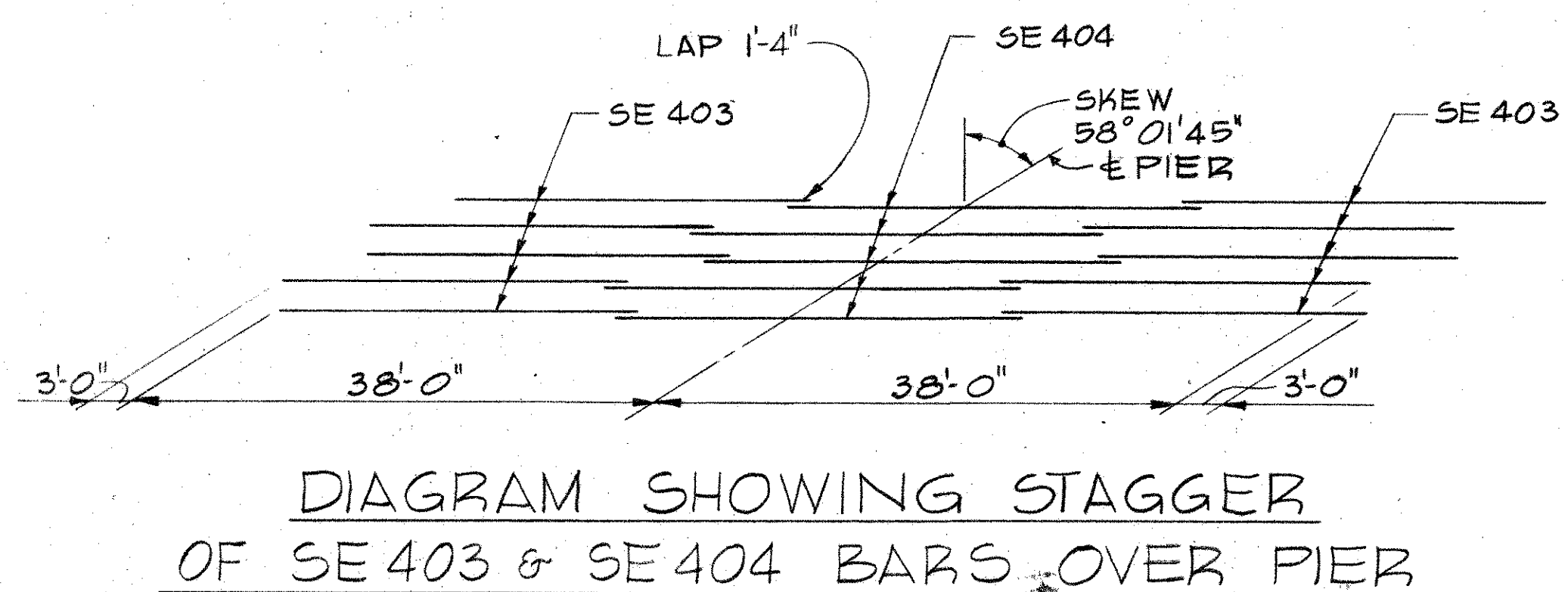
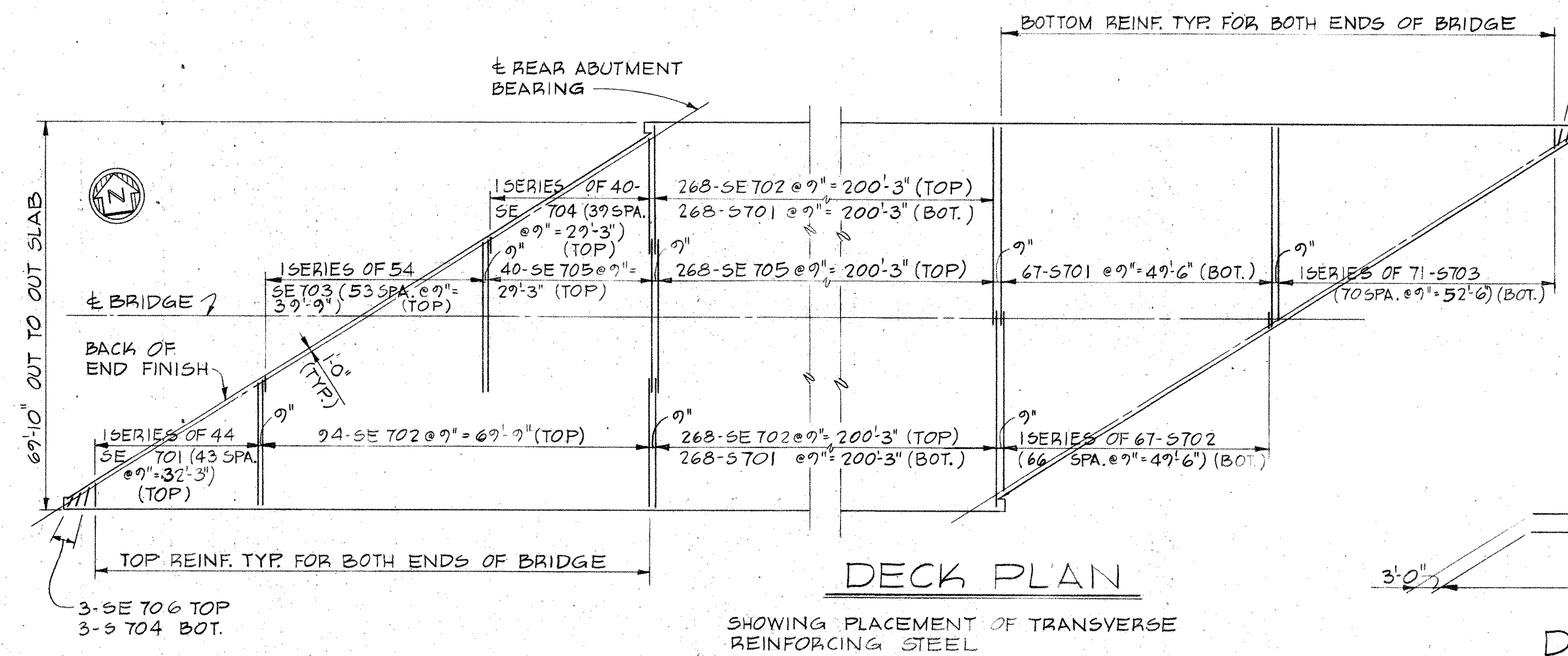
CONCRETE PARAPETS ABOVE UPPER CONSTRUCTION JOINT SHALL BE PLACED IN ALTERNATE SECTIONS BY THE USE OF BULKHEADS. CLOSING SECTIONS SHALL BE PLACED AFTER REMOVAL OF BULKHEADS AND AFTER PLACEMENT OF EXPANSION JOINT FILLER. EXPOSED EDGES OF THE FILLER SHALL BE FLUSH WITH THE SURFACE OF CONCRETE AND SHALL BE FREE OF MORTAR.



HALF TRANSVERSE SECTION



TYPICAL PARAPET PANEL DETAILS
(FOR LOCATION OF PANELS SEE GENERAL PLAN)



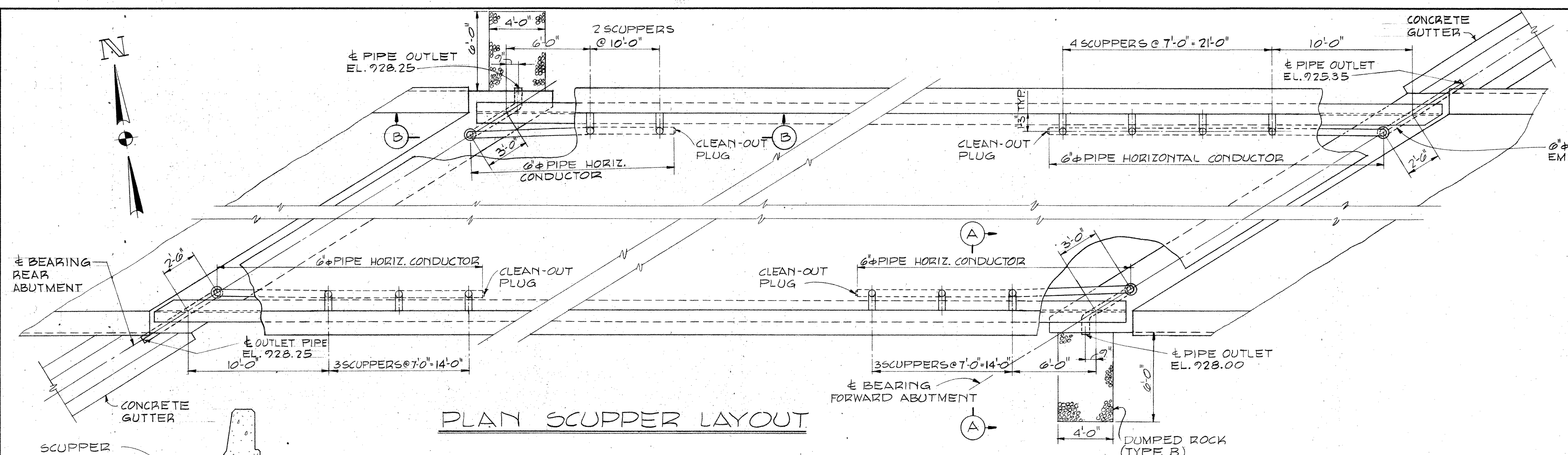
A. M. KINNEY, INC. CINCINNATI, OHIO					
SUPERSTRUCTURE DETAILS TYPICAL SECTION					
BRIDGE NO. MOT-675-0080 PROPOSED I-675 UNDER LYONS ROAD					
MONTGOMERY COUNTY			STA. 85+24.11		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
C.T.S.	W.S.	W.S.	J.I.K.	J.C.O.	9-21-79

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

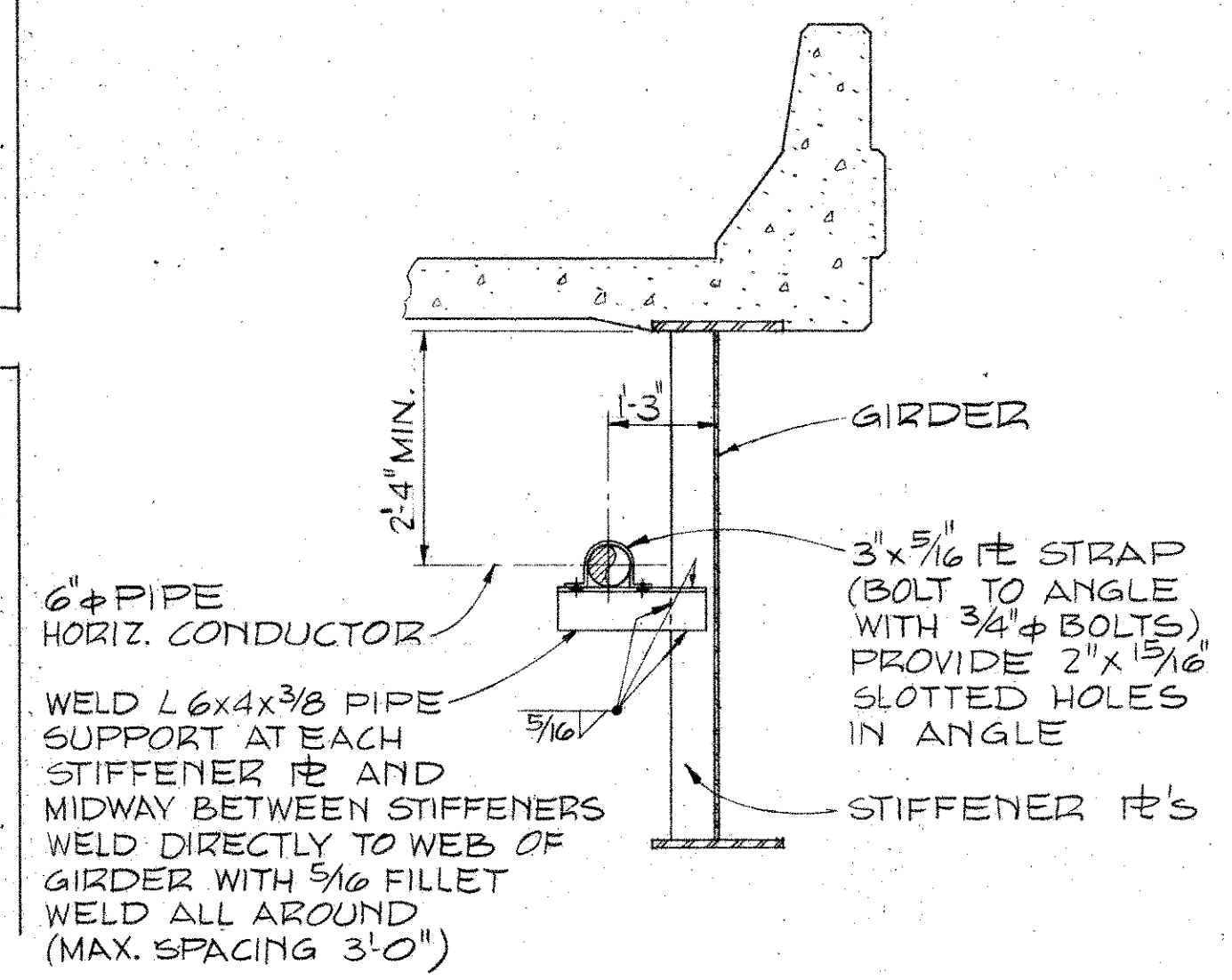
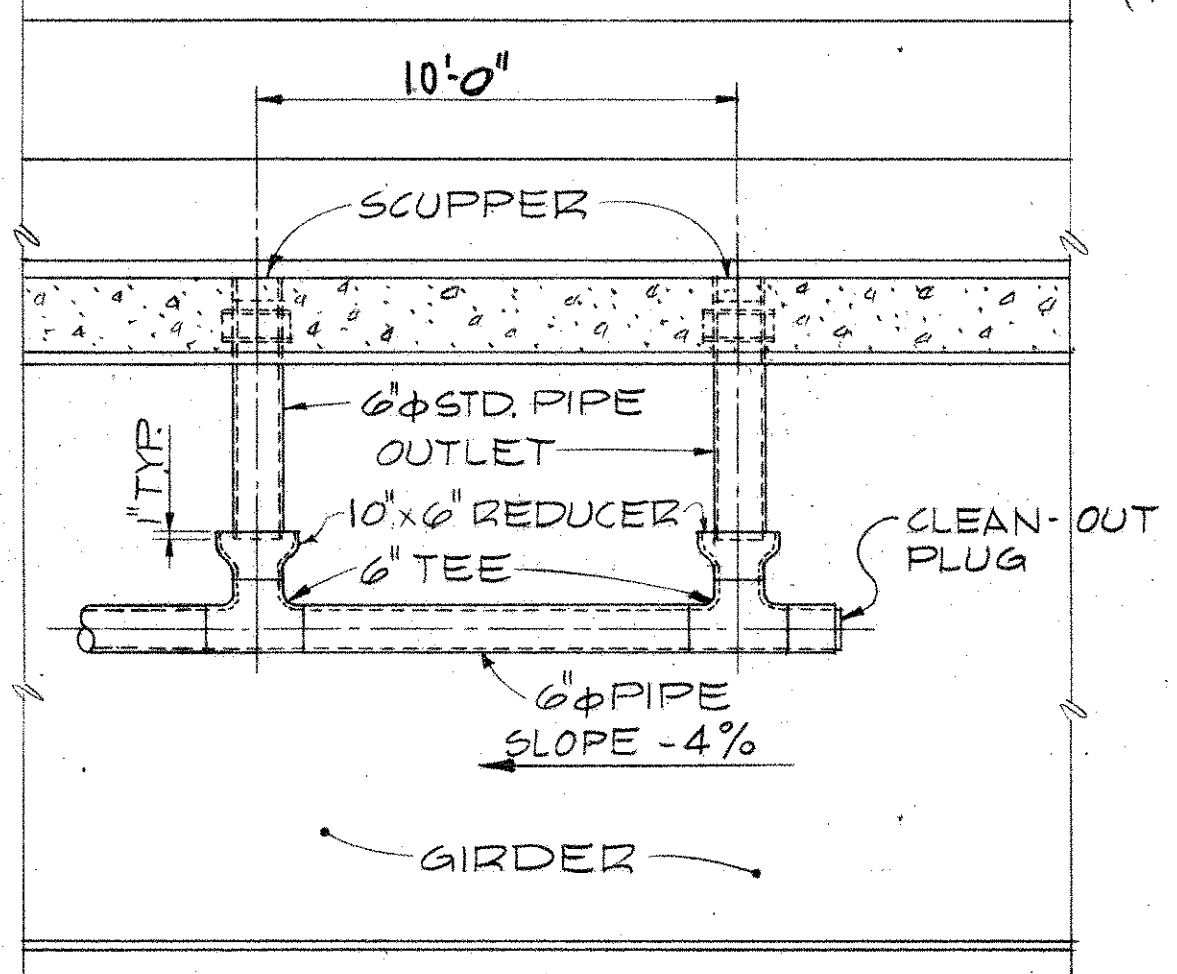
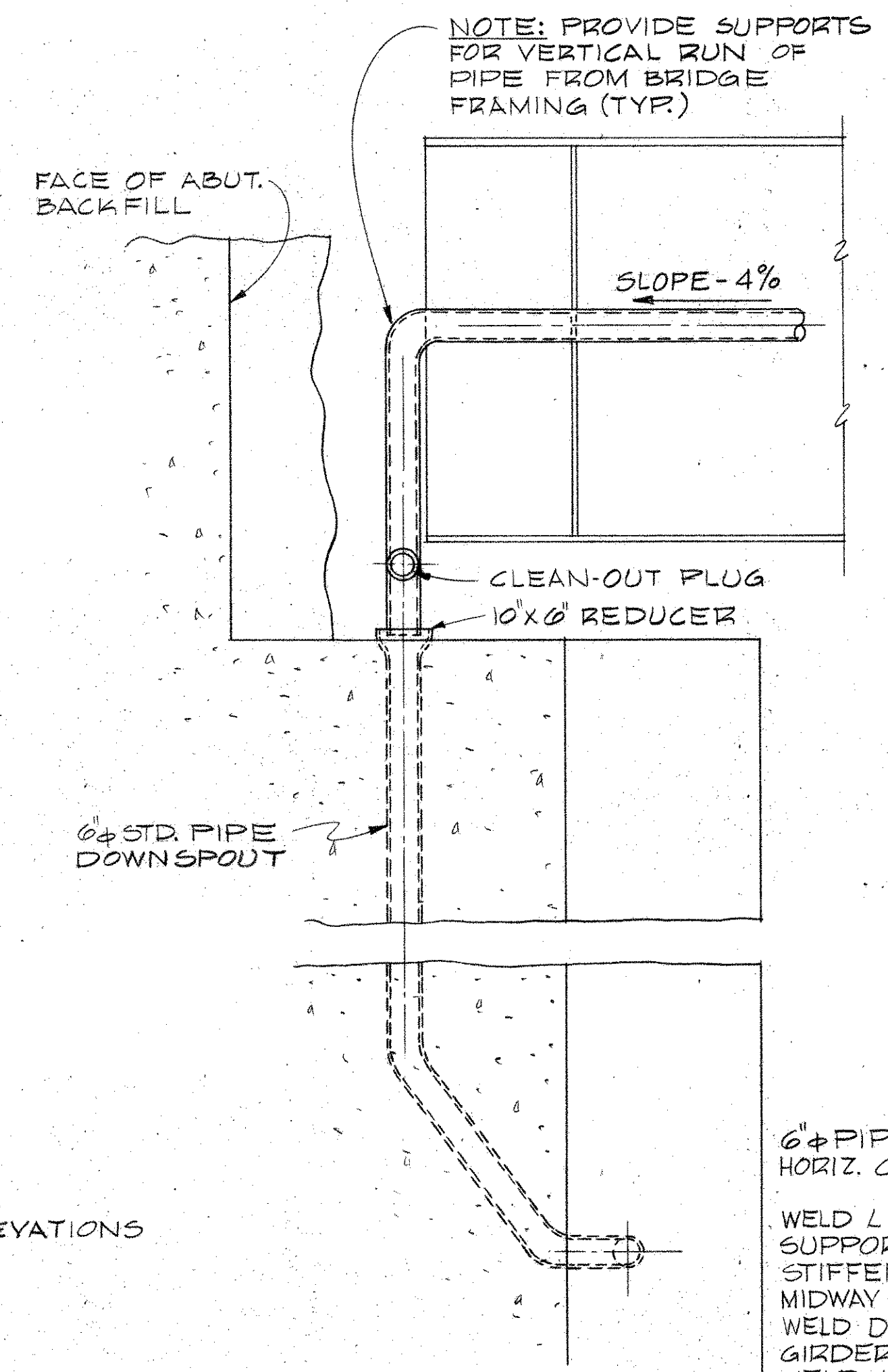
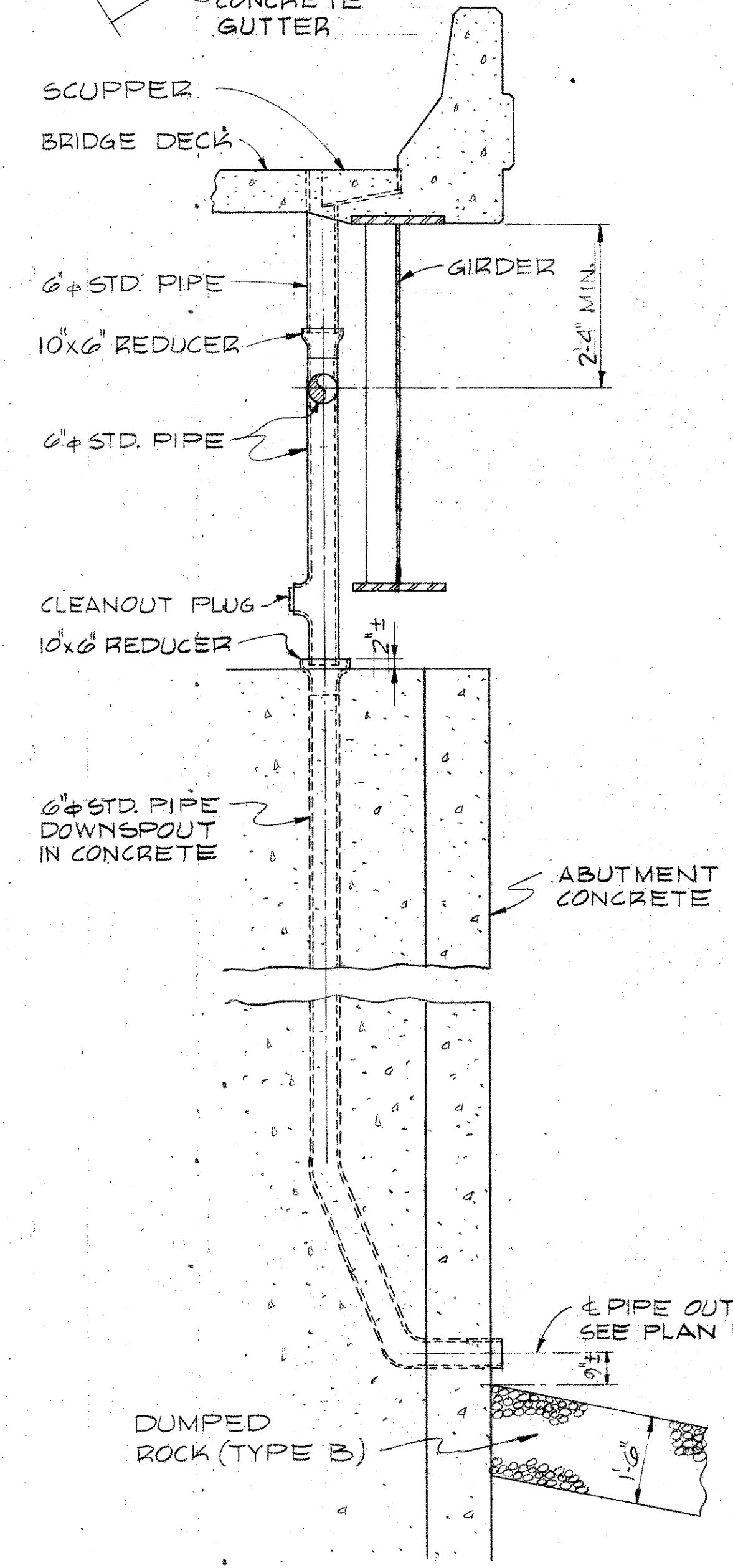
466
581

MONTGOMERY COUNTY
MOT-675-0.00

6" STD. PIPE DOWNSPOUT
EMBEDDED IN CONCRETE (TYP.)



MICROFILMED
OCT 8 1985



NOTES

SCUPPERS SHALL BE IN ACCORDANCE WITH STD. DWG. SD-1-69, EXCEPT THE LENGTH OF VERTICAL 6" PIPE IS NOT IN ACCORDANCE WITH THE STANDARD.

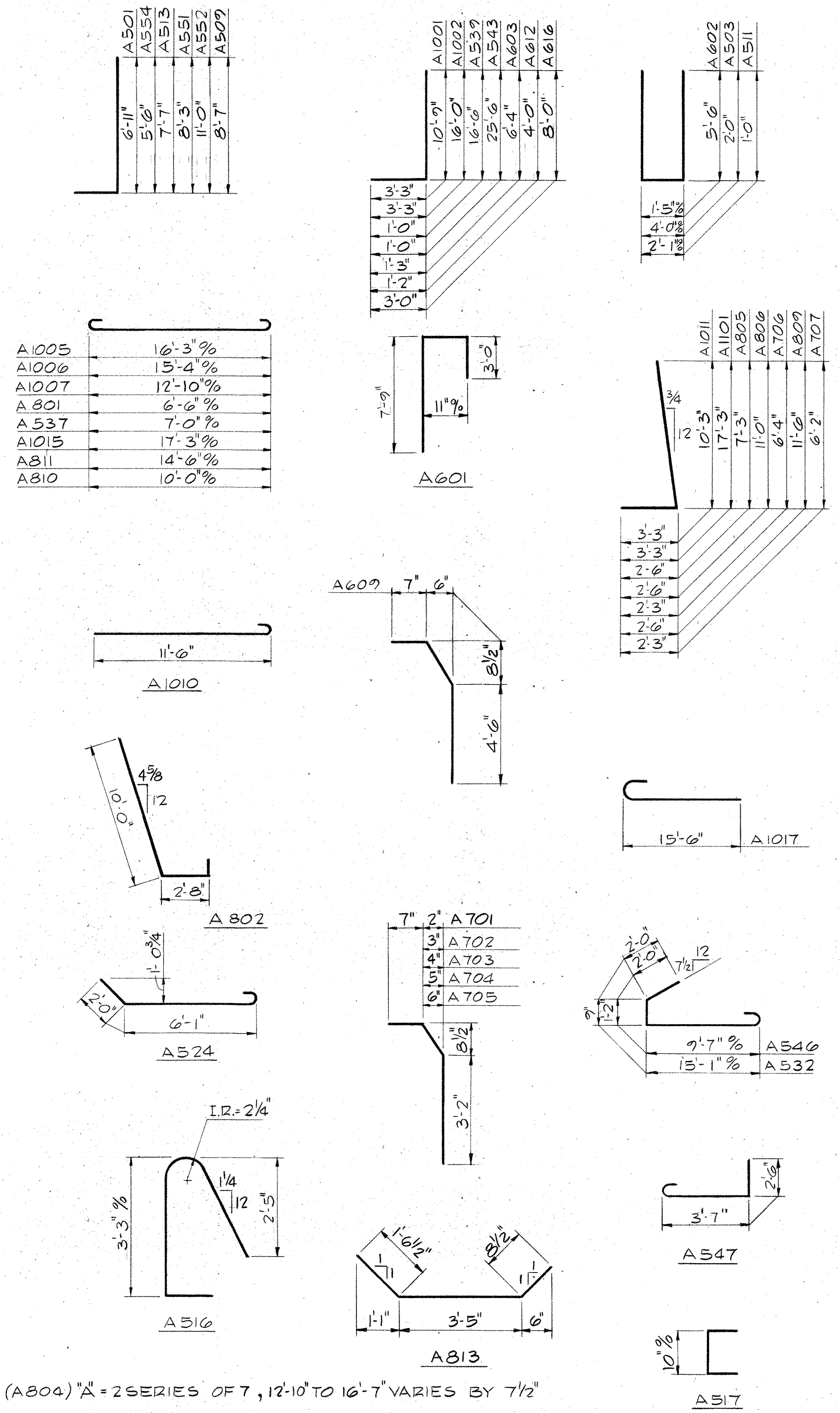
6" PIPE HORIZONTAL CONDUCTORS & DOWNSPOUTS SHALL BE GALVANIZED STEEL PIPE. JOINT CONNECTIONS SHALL BE MADE BY WELDING OR BY THE USE OF A CLAMP-TYPE COUPLING WITH A RING GASKET. IF WELDED, THE GALVANIZING SHALL BE DONE AFTER THE WELDED JOINTS HAVE BEEN COMPLETED. STRAPS SHALL BE OF THE SAME MATERIAL AS THE PIPE. BOLTS SHALL BE GALVANIZED AS SPECIFIED IN ASTM A-153.

A. M. KINNEY, INC. CINCINNATI, OHIO						13/15
SCUPPER & DOWNSPOUT DETAILS						
BRIDGE NO. MOT-675-0080 PROPOSED I-675 UNDER LYONS ROAD						
MONTGOMERY COUNTY						STA. 85+24.11
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.I.K.	W.S.	W.S.	G.T.S.	JCO.	9-21-79	

STEEL LIST

BENDING DIAGRAM

MARK	NO.	LENGTH	WEIGHT	SHP	REAR		FWD	
ABUTMENTS								
A1001	256	13'-8"	15,055	B	128	128		
A1002	244	18'-11"	19,861	B	122	122		
A1003	61	19'-0"	4,987	S	-	61		
A1004	61	18'-8"	4,900	S	61	-		
A1005	360	19'-1"	29,562	B	180	180		
A1006	10	18'-2"	782	B	5	5		
A1007	4	15'-8"	270	B	2	2		
A1008	31	17'-0"	2,268	S	-	31		
A1009	31	17'-4"	2,312	S	31	-		
A1010	14	12'-11"	778	B	7	7		
A1011	96	13'-2"	5,439	B	48	48		
A1012		NOT USED						
A1013	46	19'-0"	3,761	S	23	23		
A1014	176	14'-6"	10,981	S	88	88		
A1015	94	20'-1"	8,123	B	47	47		
A1016	94	17'-3"	6,977	S	47	47		
A1017	94	16'-11"	6,843	B	47	47		
A1018	62	18'-0"	4,802	S	31	31		
A1101	92	20'-2"	9,857	B	46	46		
A901	32	21'-0"	2,285	S	16	16		
A902	18	23'-6"	1,438	S	9	9		
A903	10	25'-0"	850	S	5	5		
A801	36	8'-4"	801	B	18	18		
A802	34	13'-8"	1,240	B	17	17		
A803	262	16'-3"	11,368	S	131	131		
A804	14	"A"	550	S	7	7		
A805	128	9'-7"	3,275	B	64	64		
A806	124	13'-4"	4,414	B	62	62		
A807	60	12'-6"	2,003	S	30	30		
A808	68	15'-11"	2,890	S	34	34		
A809	64	13'-10"	2,364	B	32	32		
A810	108	11'-10"	3,412	B	54	54		
A811	136	16'-4"	5,931	B	68	68		
A812	86	15'-9"	3,617	S	43	43		
A813	92	5'-7"	1,372	B	46	46		
A701	4	4'-5"	36	B	2	2		
A702	4	4'-5"	36	B	2	2		
A703	4	4'-5"	36	B	2	2		
A704	4	4'-6"	37	B	2	2		
A705	4	4'-6"	37	B	2	2		
A706	66	8'-5"	1,135	B	33	33		
A707	48	8'-3"	809	B	24	24		
A601	234	11'-4"	3,983	B	117	117		
A602	234	12'-1"	4,247	B	117	117		
A603	234	7'-5"	2,607	B	117	117		
A604	48	25'-6"	1,833	S	24	24		
A605	192	30'-0"	8,651	S	96	96		
A606	118	6'-7"	1,167	S	59	59		
A607	66	12'-9"	1,264	S	33	33		
A608	48	6'-1"	439	S	24	24		
A609	230	5'-10"	2,015	B	115	115		
A610	104	10'-0"	1,562	S	52	52		
A611	112	11'-7"	1,949	S	56	56		
A612	20	5'-0"	150	B	10	10		
A613	8	6'-0"	72	S	4	4		
A614	8	7'-0"	84	S	4	4		
A615	16	4'-0"	96	S	8	8		
A616	20	10'-10"	325	B	10	10		
A617	20	5'-0"	150	S	10	10		



(A804) A = 2 SERIES OF 7, 12'-10" TO 16'-7" VARIES BY 7/2"

MARK	NO.	LENGTH	WEIGHT	SHP	REAR		FWD	
ABUTMENTS								
A501	182	7'-8"	1,455	B	91	91		
A502	314	30'-0"	9,825	S	157	157		
A503	166	7'-9"	1,342	B	83	83		
A504	26	28'-0"	759	S	13	13		
A505	24	19'-6"	488	S	12	12		
A506	49	18'-9"	958	S	-	49		
A507	49	18'-5"	941	S	49	-		
A508	34	19'-0"	674	S	17	17		
A509	30	9'-4"	272	B	15	15		
A510	24	15'-0"	376	S	12	12		
A511	126	3'-10"	504	B	63	63		
A512	38	25'-6"	1,011	S	19	19		
A513	82	8'-4"	713	B	41	41		
A514	68	20'-4"	1,442	S	34	34		
A515	66	13'-7"	935	S	33	33		
A516	228	6'-7"	1,566	B	114	114		
A517	248	2'-4"	604	B	124	124		
A518	48	7'-0"	350	S	24	24		
A519	16	23'-8"	395	S	8	8		
A520	172	31'-8"	5,681	S	86	86		
A521	16	15'-8"	261	S	8	8		
A522	32	7'-8"	256	S	16	16		
A523	36	23'-8"	889	S*	18	18		
A524	24	8'-7"	215	B	12	12		
A525	20	3'-8"	76	S	10	10		
A526	6	26'-0"	163	S	3	3		
A527	4	17'-0"	71	S	2	2		
A528	80	4'-0"	334	S	40	40		
A529	40	3'-0"	125	S	20	20		
A530	4	18'-6"	77	S	4	-		
A531	15	28'-1"	439	S	-	15		
A532	26	18'-2"	493	B	13	13		
A533	20	9'-8"	202	S	10	10		
A534	72	27'-8"	2,078	S	36	36		
A535	16	11'-8"	195	S	8	8		
A536	36	15'-8"	888	S*	18	18		
A537	64	8'-2"	545	B	32	32		
A538	68	7'-0"	496	S	34	34		
A539	32	17'-4"	579	B	16	16		
A540	88	25'-6"	2,340	S	44	44		
A541	64	35'-0"	2,336	S	32	32		
A542	24	16'-6"	413	S	12	12		
A543	104	26'-4"	2,856	B	52	52		
A544	42	17'-10"	781	S	21	21		
A545	52	31'-8"	1,717	S	26	26		
A546	10	13'-1"	136	B	5	5		
A547	10	6'-6"	68	B	5	5		
A548	17	27'-6"	488	S	16	16		
A549	21	16'-10"	369	S	-	21		
A550	21	17'-2"	376	S	21	-		
A551	76	9'-0"	713	B	38	38		
A552	30	11'-9"	368	B	15	15		
A553	4	19'-4"	81	S	-	4		
A554	182	6'-3"	1,186	B	91	91		

* BEND IN FIELD WHERE NECESSARY, INCLUDE WITH REINFORCING STEEL FOR PAYMENT

MONTGOMERY COUNTY, MO. 675 000

MICROFILMED OCT 8 1985

A. M. KINNEY, INC. CINCINNATI, OHIO

14 / 15

REINFORCING STEEL LIST ABUTMENTS

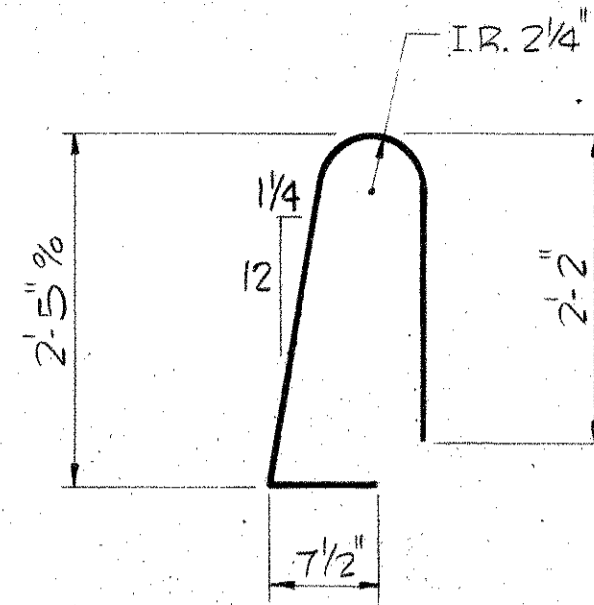
BRIDGE NO. MOT-675-0080
PROPOSED I-675 UNDER LYONS ROAD

MONTGOMERY COUNTY STA. 85+24.11

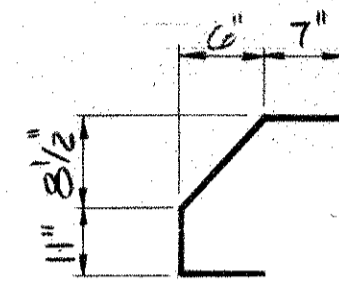
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.T.	W.S.	W.S.	J.I.K.	J.C.O.	9-21-79	

STEEL LIST
BENDING DIAGRAM

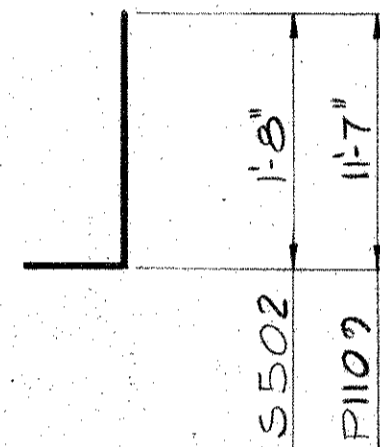
MARK	NO.	LENGTH	WEIGHT	SHP
SUPERSTRUCTURE				
S701	670	36'-1"	49,415	S
S702	134	"D"	5,193	S
S703	142	"E"	5,781	S
S704	6	3'-0"	37	S
S601	760	30'-0"	34,246	S
S602	76	28'-0"	3,196	S
S501	414	2'-4"	1,008	B
S502	414	2'-5"	1,044	B
SE701	88	"A"	2,443	S
SE702	724	23'-6"	34,777	S
SE703	108	"B"	3,514	S
SE704	80	"C"	2,064	S
SE705	348	27'-10"	19,798	S
SE706	6	3'-0"	37	S
SE601	40	30'-0"	1,802	S
SE602	4	28'-0"	168	S
SE501	16	11'-10"	198	S
SE502	112	14'-8"	1,713	S
SE503	80	7'-2"	598	S
SE504	464	5'-4"	2,581	B
SE505	414	3'-1"	1,331	B
SE401	990	30'-0"	19,840	S
SE402	99	21'-6"	1,422	S
SE403	200	25'-10"	3,451	S
SE404	100	30'-0"	2,004	S



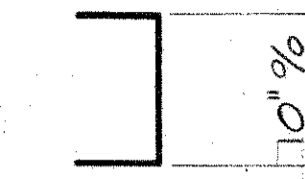
SE504



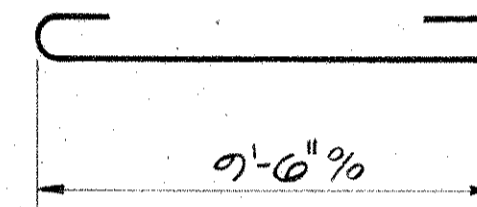
SE505



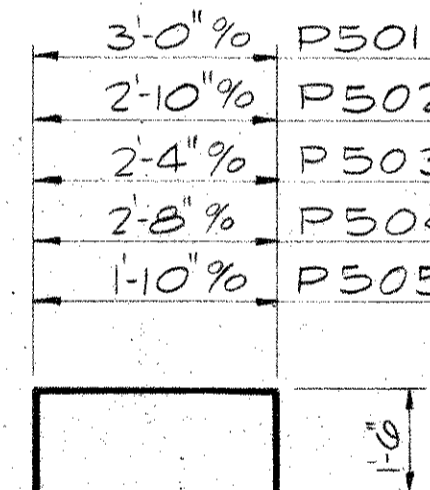
S502
P1107



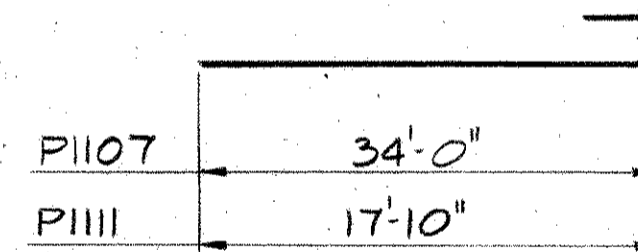
S501



P801



P501
P502
P503
P504
P505



P1107
P1111

(SE701) "A" = 2 SERIES OF 44 VARIES FROM 3'-6" TO 23'-8" BY 5 5/8" INCREMENTS
 (SE703) "B" = 2 SERIES OF 54 VARIES FROM 3'-6" TO 28'-4" BY 5 5/8" INCREMENTS
 (SE704) "C" = 2 SERIES OF 40 VARIES FROM 3'-6" TO 21'-9" BY 5 5/8" INCREMENTS
 (S702) "D" = 2 SERIES OF 67 VARIES FROM 3'-6" TO 34'-5" BY 5 5/8" INCREMENTS
 (S703) "E" = 2 SERIES OF 71 VARIES FROM 3'-6" TO 36'-4" BY 5 5/8" INCREMENTS

MARK	NO.	LENGTH	WEIGHT	SHP
PIERS				
P1101	18	20'-5"	1,953	S
P1102	18	20'-8"	1,976	S
P1103	36	20'-11"	4,001	S
P1104	54	21'-2"	6,073	S
P1105	36	21'-4"	4,080	S
P1106	42	41'-0"	9,149	S
P1107	24	35'-7"	4,537	B
P1108	28	26'-8"	3,967	S
P1109	162	13'-3"	11,404	B
P1110	72	40'-0"	15,301	S
P1111	24	19'-5"	2,476	B
P1112	72	34'-0"	13,006	S
P801	144	11'-4"	4,357	B
P701	93	9'-6"	1,806	S
P501	27	5'-9"	162	B
P502	18	5'-7"	105	B
P503	18	5'-1"	95	B
P504	18	5'-5"	102	B
P505	18	4'-7"	86	B

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

468
581

MONTGOMERY COUNTY
MOT-675-0.00

SPIRAL REINFORCING LIST

MARK	NO.	CORE DIA.	LENGTH	PITCH	NO. OF TURNS	WEIGHT
SP401	1	38"	21'-0 1/2"	3"	87	639
SP402	1	38"	21'-2"	3"	88	643
SP403	1	38"	21'-3 1/2"	3"	88	647
SP404	1	38"	21'-4 1/2"	3"	89	649
SP405	1	38"	21'-5 1/2"	3"	89	651
SP406	1	38"	21'-4"	3"	87	648
SP407	1	38"	21'-0"	3"	87	638
SP408	1	38"	20'-9"	3"	86	631
SP409	1	38"	20'-5 1/2"	3"	85	622

MICROFILMED
OCT 8 1985

SPIRAL REINFORCING BARS

THE "LENGTH" SHOWN IN THE STEEL LIST FOR THE SPIRAL BARS IS THE DISTANCE FROM THE TOP OF THE FOOTING TO TOP OF COLUMN (-2 1/2)

THE "NUMBER 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.

1-1/2 CLOSED COILS SHALL BE PROVIDED AT THE ENDS OF EACH SPIRAL UNIT.

FOUR STEEL ANGLES, HAVING A MIN. SECTION MODULUS OF .030 IN³ AND WEIGHING APPROX. 0.80 LB 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 0.80 LB. PER LIN. FT. WILL BE PAID FOR AS REINFORCING STEEL AND IS INCLUDED IN THE TABULATED QUANTITY OF SPIRAL BARS.

REINFORCING STEEL SAMPLES:

REFER TO CMS SECTIONS 106.03, 700, 709.01 THROUGH 709.05 AND 709.08. SUFFICIENT ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED FOR SAMPLING. RANDOM SAMPLES SHALL BE REPLACED IN THE STRUCTURES BY THE ADDITIONAL STEEL, SPLICED IN ACCORDANCE WITH 509.08.

ALL BARS WITH PREFIX "SE" INDICATES EPOXY COATED BARS.

A. M. KINNEY, INC.
CINCINNATI, OHIO

15/15

**REINFORCING STEEL LIST
SUPERSTRUCTURE + PIERS**

BRIDGE NO. MOT-675-0080
PROPOSED I-675 UNDER
LYONS ROAD

MONTGOMERY COUNTY STA. 85+24.11

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.T.	W.S.	W.S.	J.I.K.	JCO.	9-21-79	