CONVENTIONAL SIGNS AND SYMBOLS

Centerline — 100+ Sta Indication — ℄
Baseline — ℄
State Line
County Line
Township Line
Section Line
Corporation Line
Property Line — ℘
Right of Way — R/W — Proposed
Right of Way — R/W — Existing
Limited Access — L/A
Fence (Exist.) —x—x— (Prop.) —x—x—
Railroad — or —
Utility Poles — Telephone — Power — Light
Gas Line — 4" G
Water Line — 4" W — FH
Sanitary Sewer — M.H. — 8"San
Storm Sewer (Ex) — C.B. — M.H. — 12"S
Storm Sewer (Prop.) — 12" — CB — MH
Roadway Ditch (Prop.) — Paved Gutter — Sodded — Seeded
Flow Arrow — Exist Flow — Prop. Flow
Curb & Gutter — Existing — Proposed
Construction Limits
Underground Electric — UE
Underground Telephone — UT
Overhead Utilities — OE Electric — OT Telephone
Trees & Shrubs — To be removed — Signs
Guard Rail — Exist — Prop.

Point of Intersection — P.I.
Curve Points — PC or P.T.
Dumped Rock
Top of Ground
Building

Streams
Intermittent
Creek
River

Slopes
Cut
Fill

Culverts

Bridges

Soil Boring Location ◓ B1

INDEX OF SHEETS

LINE DATA

	TOTAL	CENTERVILLE	KETTERING	M-IN30 (2)	I-675-8 (22)49
BEGIN PROJECT	0+17.50	0+17.50		0+17.50 to 26+28	26+28 to 47+00
END PROJECT	52+78	52+78		47+00 to 52+78	
ADDITIONS and/or DEDUCTIONS	—	—			
LENGTH OF PROJECT	5260.50 L.F. or 0.996 Mi.	5260.50 L.F. or 0.996 Mi.		3188.50 L.F. or 0.604 Mi.	2072.00 L.F. or 0.392 Mi.
ADD FOR WORK S.R. 725 STA. 95+85 to STA. 108+50	1265 Ft. or 0.240 Mi.	1265 Ft. or 0.240 Mi.	—		
ADD FOR WORK on BIGGER ROAD STA. 52+78 to STA. 65+00	1222.00 L.F. or 0.231 Mi.	164.93 L.F. or 0.031 Mi. 52+78 to 54+42.93	1057.07 L.F. or 0.200 Mi. 54+42.93 to 65+00		
LENGTH OF WORK	7747.50 Ft. or 1.467 Mi.	6690.43 Ft. or 1.267 Mi.	1057.07 L.F. or 0.200 Mi.		

File No.

Contract No. _____

Date of Letting _____

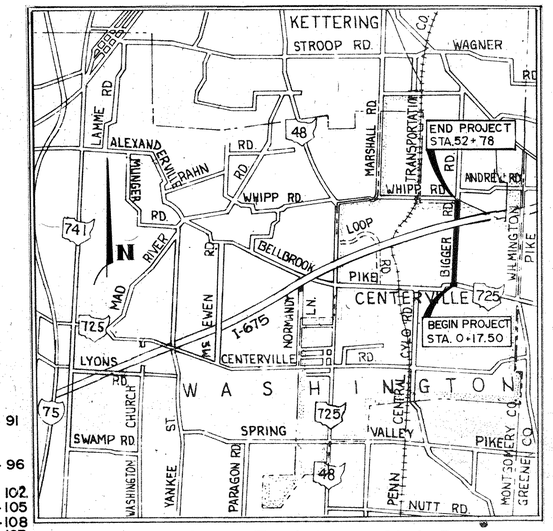
Plans prepared by

SHAW, WEISS & DE NAPLES
PROFESSIONAL CORPORATION
Consulting Engineers
14 W. FIRST ST., DAYTON, OHIO 45402 PH. (513) 443-0181

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

MOT-BIGGER ROAD
MOT-675-6.00

CITY OF KETTERING
CITY OF CENTERVILLE
MONTGOMERY COUNTY



LOCATION MAP

0 1 2 3 4
Scale in miles

Portion to be improved

SCALES

Plan — 0 20 40
Profile: Horizontal — 0 20 40
Vertical — 0 5 10
Sections: Horizontal — 0 5 10
Vertical — 0 5 10

DESIGN DESIGNATION

Current ADT 1983 = 13182
Design Year ADT 2003 = 16637
DHV = 9.9 %
D = 54.8 %
T = 2.5 %
V = 40 MPH

NOTE:
MOT-BIGGER ROAD SHOWN THROUGHOUT THE PLANS SHALL BE CONSIDERED TO READ MOT-BIGGER ROAD MOT-675-6.00

FHWA REGION	STATE	PROJECT
5	OHIO	M-1N30(2) I-675-8(22)49

1 / 136

MOT - BIGGER ROAD - PART 2
MOT - 675 - 6.00

FOR PART 1 SEE MOT-675-3.51; MOT-725-19.74

1983 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 except as noted on maintenance of traffic sheet.
Provisions for the maintenance and the safety of traffic will be as set forth on the plans and estimates.

Approved _____ City Manager, City of Centerville
Date 12/28/83

Approved _____ City Manager, City of Kettering
Date 12/27/83

Approved _____ District Deputy Director of Transportation
Date 12-30-83

Approved _____ Engineer, Bureau of Bridges and Structural Design
Date 2-22-84

Approved _____ Chief Engineer, Planning and Design
Date 5-14-84

Approved _____ Director, Department of Transportation
Date 5-14-84

STANDARD CONSTRUCTION DRAWINGS SEE PART 1

Nº	Date	Nº	Date	Nº	Date	Nº	Date	Nº	Date
BP-1	6-1-65	GR-1	2-5-82	MC-1	6-13-69	TC-21.20	5-31-79	AS-1-81	11-27-81
BP-3	12-6-76	GR-2B	2-5-82			TC-41.20	3-26-79	TS-EXJ-2-81	9-1-81
BP-4	7-16-81	GR-3	2-5-82	MC-4	7-26-76	TC-41.40	6-18-79	SD-1-69	6-12-69
BP-5	7-16-81	GR-4	2-5-82	MC-5	6-12-75	TC-41.41	8-2-79	RB-1-55	2-2-59
BP-7	12-6-76	GR-4A	2-5-82	MC-6	6-1-65	TC-42.20	3-26-79	FB-1-82	5-10-82
BP-12	7-7-81					TC-52.10	4-3-79		
BP-6	6-1-65			MC-11	8-1-78	TC-52.20	4-3-79		
BP-2	12-6-76			MC-8	6-12-75	TC-71.10	4-9-79		
CB-2-2-A&B	5-1-79					TC-81.10	4-10-79		
CB-3	5-1-79			HL-7	1-21-76				
CB-3A	5-1-79			HL-5	9-6-73	TC-83.10	4-13-79		
CB-5	5-1-79			HL-3	7-27-73	TC-83.20	4-17-79		
CB-2-3 & 2-45	1-79			HL-4	1-21-76	TC-84.20	4-17-79		
HW-4B	4-1-80	MH-5	6-12-75			TC-85.20	4-18-79		
		MH-1	6-12-75	LA-1	6-1-79				
HW-4A	4-1-80	MH-3	6-12-75	LA-2	6-1-79				
		MH-2	6-12-75						

SUPPLEMENTAL SPECIFICATIONS SEE PART 1

Nº	Date	Nº	Date	Nº	Date
824	10-8-82	939	6-28-82		
836	3-12-75				
803	5-27-83	861	9-9-83		
849	10-19-81	961	9-9-83		

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

Approved

_____ Division Administrator

_____ Date

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

109
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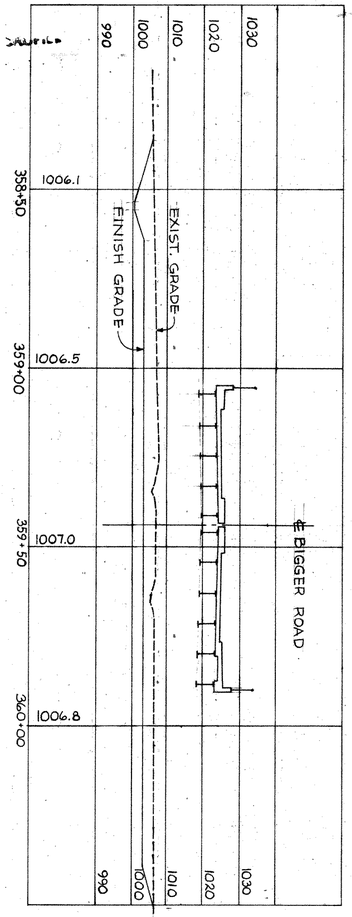
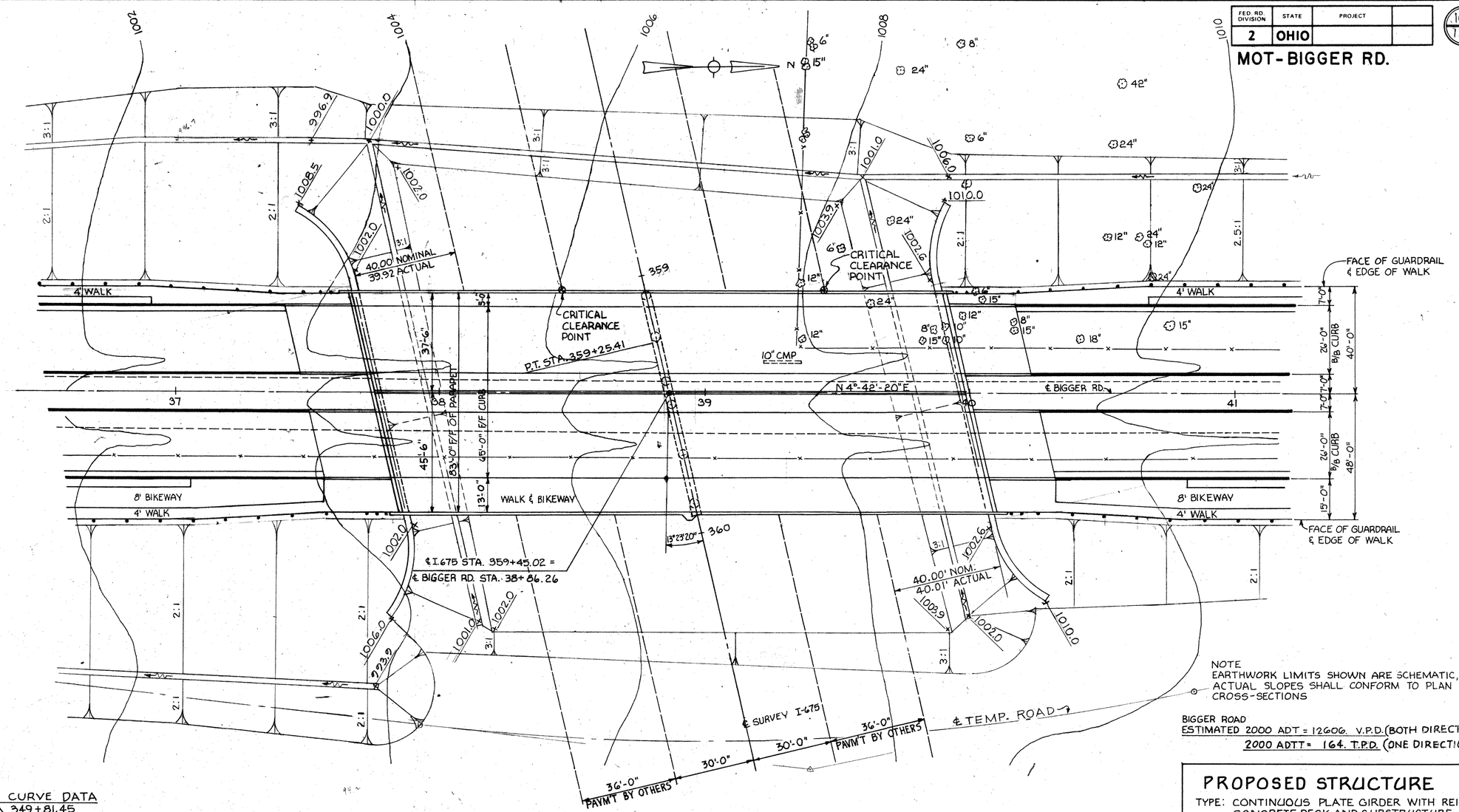
MOT-BIGGER RD.



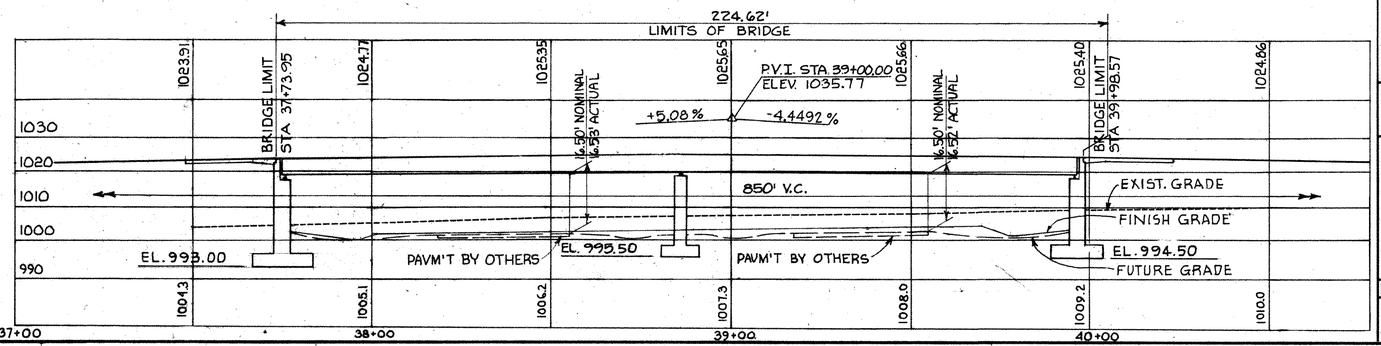


NOTE
EARTHWORK LIMITS SHOWN ARE SCHEMATIC, ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS-SECTIONS

BIGGER ROAD
ESTIMATED 2000 ADT = 12606. V.P.D.(BOTH DIRECTIONS)
2000 ADTT = 164. T.P.D. (ONE DIRECTION)

I-675 CURVE DATA

P.I. STA 349+81.45
Δ = 8°-49'-40"
D_c = 0°-28'
R = 12,277.67'
T = 947.71'
L = 1891.67'
E = 36.52'



PROPOSED STRUCTURE

TYPE: CONTINUOUS PLATE GIRDER WITH REINF CONCRETE DECK AND SUBSTRUCTURE
SPANS: 110'-110'
ROADWAY: 83'-0" F/F PARAPET
LOADING: HS 20-44 (CASE II) AND ALTERNATE MILITARY LOADING
SKEW: 13°-23'-20" R.F.
ALIGNMENT: TANGENT
WEARING SURFACE-MONOLITHIC CONCRETE
APPROACH SLAB AS-1-81 (25' LONG)

1/15

A. M. KINNEY, INC.
CINCINNATI, OHIO

SITE PLAN

BRIDGE NO. MOT-679-0600
PROPOSED I-675 UNDER
BIGGER ROAD

SEC MOT-679-9.72 STA. 359+45.02

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEW
L. GRAFF & ASSOC.	J.R.M.	R.P.D.	R.P.D.	J.C.D.	J.C.D. 9-3-82

ESTIMATED QUANTITIES

I-675-8 (22) 49 — I-FUNDS

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	PIERS	ABUTS.	GENERAL		
503	390	CU. YD.	ROCK EXCAVATION		36	354			
503	1937	CU. YD.	UNCLASSIFIED EXCAVATION		203	1,734			
509	259,372	LB.	REINFORCING STEEL, GRADE 60	60,833	40,969	157,570			
824	93,778	LB.	EPOXY COATED REINFORCING STEEL, GRADE 60	93,778					
511	774	CU. YD.	CLASS S CONCRETE, SUPERSTRUCTURE *S.P.N.	774					
511	74	CU. YD.	CLASS C CONCRETE, PIER CAP & COLUMNS		74				
511	831	CU. YD.	CLASS C CONCRETE, ABUTS. ABOVE FOOTINGS			831			
511	854	CU. YD.	CLASS C CONCRETE, FOOTINGS		71	783			
512	53	SQ. YD.	TYPE B WATERPROOFING			53			
513	3,894	EACH	WELDED STUD SHEAR CONNECTORS, S.P.N.	3894					
513	613,000	LB.	STRUCTURAL STEEL (AISC CATEGORY III) A588, S.P.N.	613,000					
516	435	SQ. FT.	1" PREFORMED EXPANSION JOINT FILLER			435			
518	455	CU. YD.	POROUS BACKFILL			455			
518	116	LIN. FT.	6" NON-PERFORATED HELICAL CORRUGATED STEEL PIPE INCLUDING SPECIALS, 707.01			116			
518	314	LIN. FT.	6" PERFORATED, HELICAL CORRUGATED STEEL PIPE 707.01			314			
518	6	EACH	SCUPPERS, INCLUDING SUPPORTS	6					
518	162	LIN. FT.	4" STD. PIPE DRAIN, HOT-DIP GALVANIZED STEEL			162			
601	6	SQ. YD.	CRUSHED AGGREGATE SLOPE PROTECTION				6		
516	175	LIN. FT.	ELASTOMERIC COMPRESSION SEALS FOR STRUCTURAL STEEL JOINTS, 5" WIDTH	175					
SPECIAL	5,227	SQ. FT	PROTECTION OF CONCRETE SURFACES		2,260	2,967			
SPECIAL	441.25	LIN. FT.	FENCE, TYPE CL, AS PER PLAN	441.25					

* USING SHRINKAGE COMPENSATING CEMENT, 701.08
S.P.N.: SEE PROPOSAL NOTE

GENERAL NOTES:

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS:
AS-1-81 DATED 11-27-81 FB-1-82 DATED 5-10-82
TS-EXJ-281 DATED 9-1-81
SD-1-69 DATED 6-12-69
RB-1-55 REVISED 2-2-59
AND TO SUPPLEMENTAL SPECIFICATIONS:
836 DATED 3-12-75 824 DATED 10-8-82
849 DATED 10-19-81

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1977, INCLUDING THE 1978, 1979, 1980, 1981, AND 1982 INTERIM SPECIFICATIONS AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA:
DESIGN LOADING – HS 20-44 CASE II AND THE ALTERNATE MILITARY LOADING
CONCRETE CLASS S – COMPRESSIVE STRENGTH 4500 PSI FOR SUPERSTRUCTURE
CLASS C – COMPRESSIVE STRENGTH 4000 PSI FOR SUBSTRUCTURE
STRUCTURAL STEEL – ASTM A588- YIELD STRENGTH 50,000 PSI.
REINFORCING STEEL – ASTM A615, A616 OR A617 GRADE 60, MINIMUM YIELD STRENGTH 60,000 PSI
SPIRAL REINFORCEMENT MAY BE PLAIN BARS ASTM A82 OR A615

MONOLITHIC WEARING SURFACE THICKNESS IS ASSUMED TO BE 1"

DECK PROTECTION METHOD- EPOXY COATED REINFORCING STEEL, TOP MAT ONLY

ATTACHMENT OF GUARDRAIL TO CONCRETE PARAPETS: CONCRETE INSERT ANCHOR ASSEMBLIES PER STANDARD CONSTRUCTION DRAWINGS GR-3 AND GR-1 SHALL BE PLACED DURING PARAPET CONSTRUCTION.

UTILITY LINES: 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.

EMBANKMENT CONSTRUCTION: THE APPROACH EMBANKMENT SHALL BE CONSTRUCTED ON A 1.5 TO 1 SLOPE FROM THE HEEL OF THE ABUTMENT FOOTING TO THE SUBGRADE ELEVATION FOR A MINIMUM DISTANCE OF 200 FEET BACK OF THE FOOTING BEFORE ANY PORTIONS OF THE ABUTMENT ARE CONSTRUCTED. BEFORE THE BACKWALL IS CONSTRUCTED, THE EMBANKMENT SHALL BE PLACED UP TO THE LEVEL OF THE SUBGRADE WITH A 1:1 SLOPE FROM THE BRIDGE SEAT. PAYMENT FOR BACKFILL AND NEW EMBANKMENT, 503.10, REQUIRED IN EXCESS OF 503, 518 AND 203 QUANTITIES SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 203 EMBANKMENT.

FOUNDATION BEARING PRESSURE: FOOTINGS ARE DESIGNED FOR A MAXIMUM BEARING PRESSURE OF 5.0 TONS PER SQ.FT FOR THE PIERS AND 3.7 TONS PER SQ. FT FOR THE ABUTMENTS.

FOOTINGS SHALL EXTEND A MINIMUM OF 6 INCHES INTO THE LIMESTONE BEDROCK OR TO THE ELEVATION SHOWN, WHICHEVER IS LOWER.

ITEM SPECIAL - FENCE, TYPE CL, AS PER PLAN: INCLUDED IN THIS ITEM IS THE FURNISHING OF ALL MATERIALS, LABOR EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE FENCING. CHAIN-LINK FENCE SHALL CONFORM TO THE CONSTRUCTION AND MATERIALS SPECIFICATION 710.03. FENCE POSTS AND RAILS SHALL BE OF NOMINAL INSIDE DIAMETER, STANDARD WEIGHT AND WALL THICKNESS PIPE, SCHEDULE 40. SPRING LOADED TOP RAIL EXPANSION SLEEVES SHALL BE PROVIDED AT APPROXIMATELY 100 FOOT INTERVALS IN ALL HORIZONTAL RAILS MORE THAN 4 FEET ABOVE THE POST BASES. STRETCHER BARS AND MISCELLANEOUS HARDWARE SHALL BE THAT OF THE CHAIN-LINK FENCE INDUSTRY STANDARD. BASE PLATES AND MISCELLANEOUS BRACKETS FOR STEEL POSTS MAY BE OF ANY COMMERCIALLY WELDABLE STEEL HAVING A YIELD STRENGTH OF NOT LESS THAN 33,000 P.S.I. TENSION BANDS SHALL BE A MINIMUM OF 12 GAUGE STEEL BY 7/8 INCHES WIDE ASSEMBLED WITH 5/16 INCH DIAMETER BY 1 1/4 INCH GALVANIZED OR CADMIUM PLATED BOLTS. ONE TENSION BAND SHALL BE REQUIRED FOR EACH FOOT OF FABRIC HEIGHT. FIELD WELDING SHALL NOT BE PERMITTED.

FOR ADDITIONAL NOTES, SEE SHEET 13/15

2/15

A. M. KINNEY, INC.
CINCINNATI, OHIO

GENERAL NOTES & ESTIMATED QUANTITIES

BRIDGE NO. MOT-675-0600
PROPOSED I-675 UNDER BIGGER ROAD
MONTGOMERY CO. STA. 359+45.02

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
T.M.B.	J.E.B.	JEB	JIK	JCO	9-3-82	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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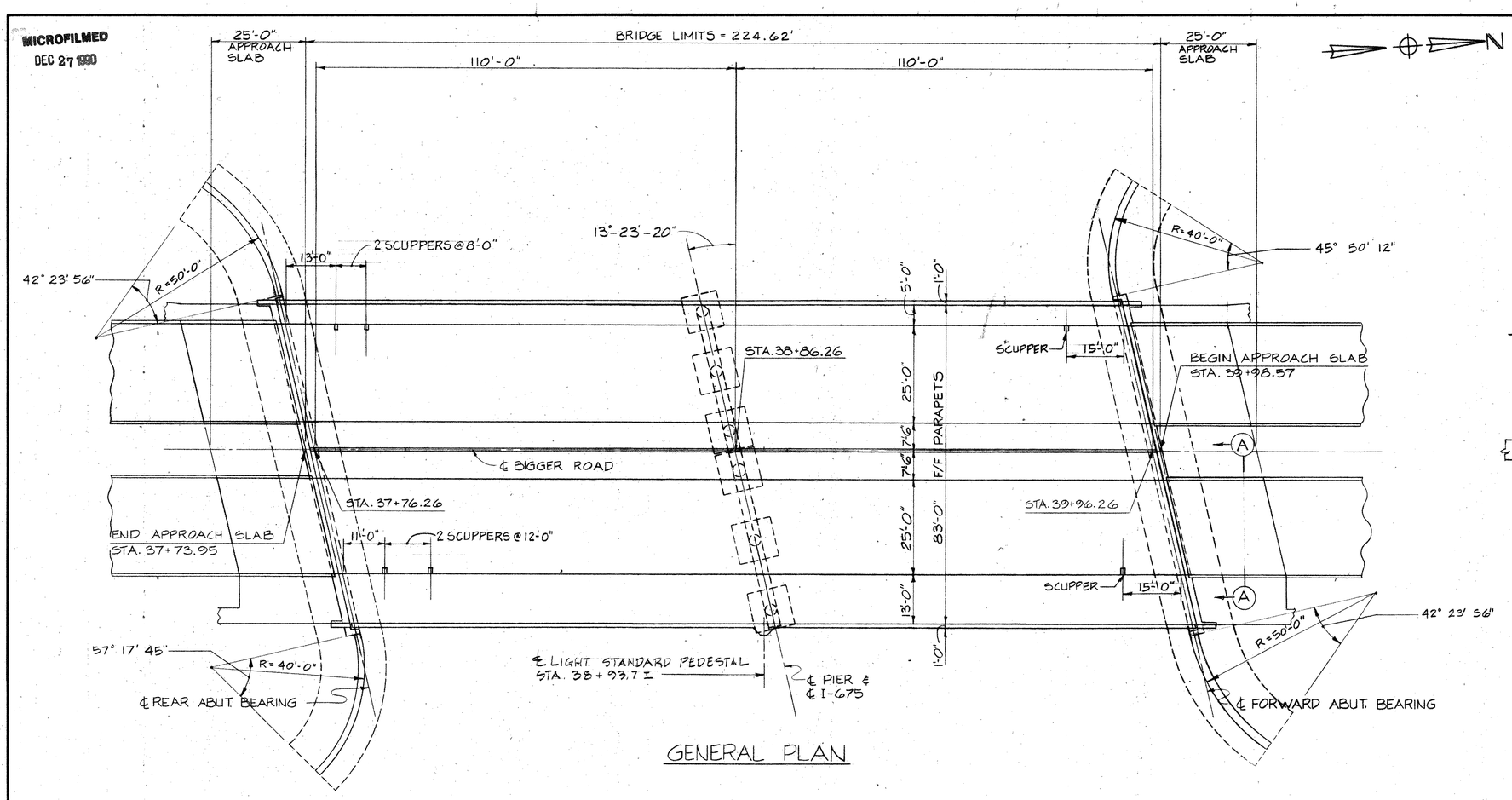
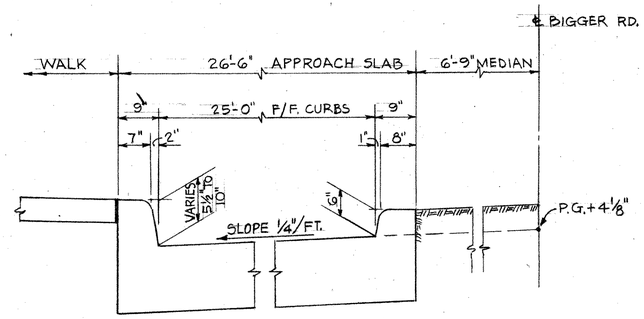
MOT-BIGGER RD.

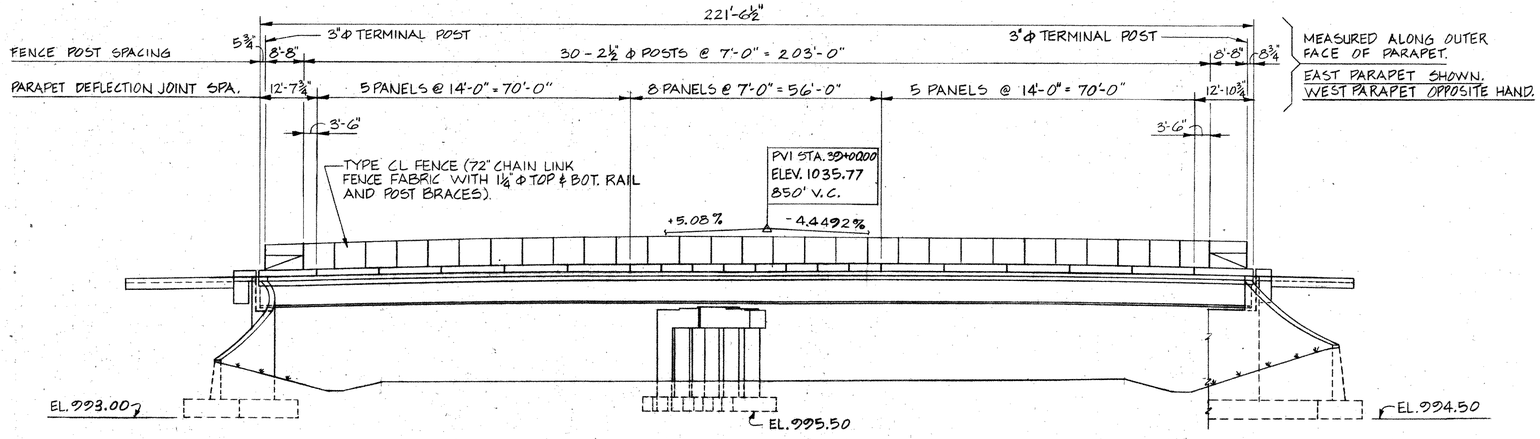


GENERAL PLAN



SECTION A-A

NOTE: INCLUDE MONOLITHIC CURBS WITH APPROACH SLABS FOR PAYMENT.



ELEVATION

A. M. KINNEY, INC.
CINCINNATI, OHIO

3/15

GENERAL PLAN

BRIDGE NO. MOT-675-0600
PROPOSED I-675 UNDER
BIGGER ROAD

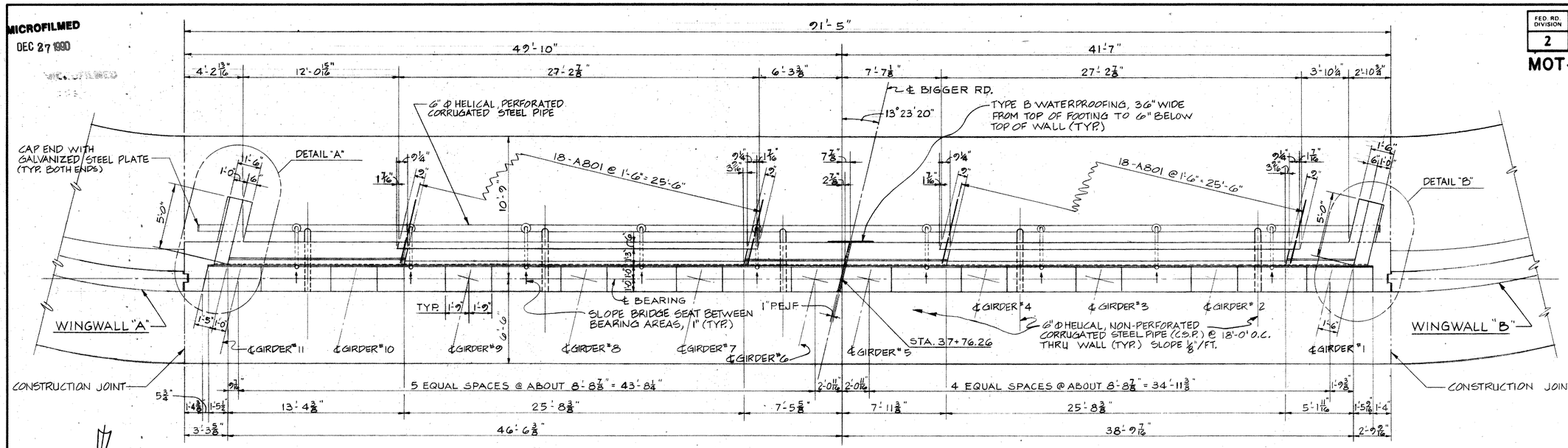
MONTGOMERY CO. STA. 359+45.02

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.E.B.	J.E.B.	J.E.B.	J.I.K.	J.C.O.	9-3-82	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

112
136

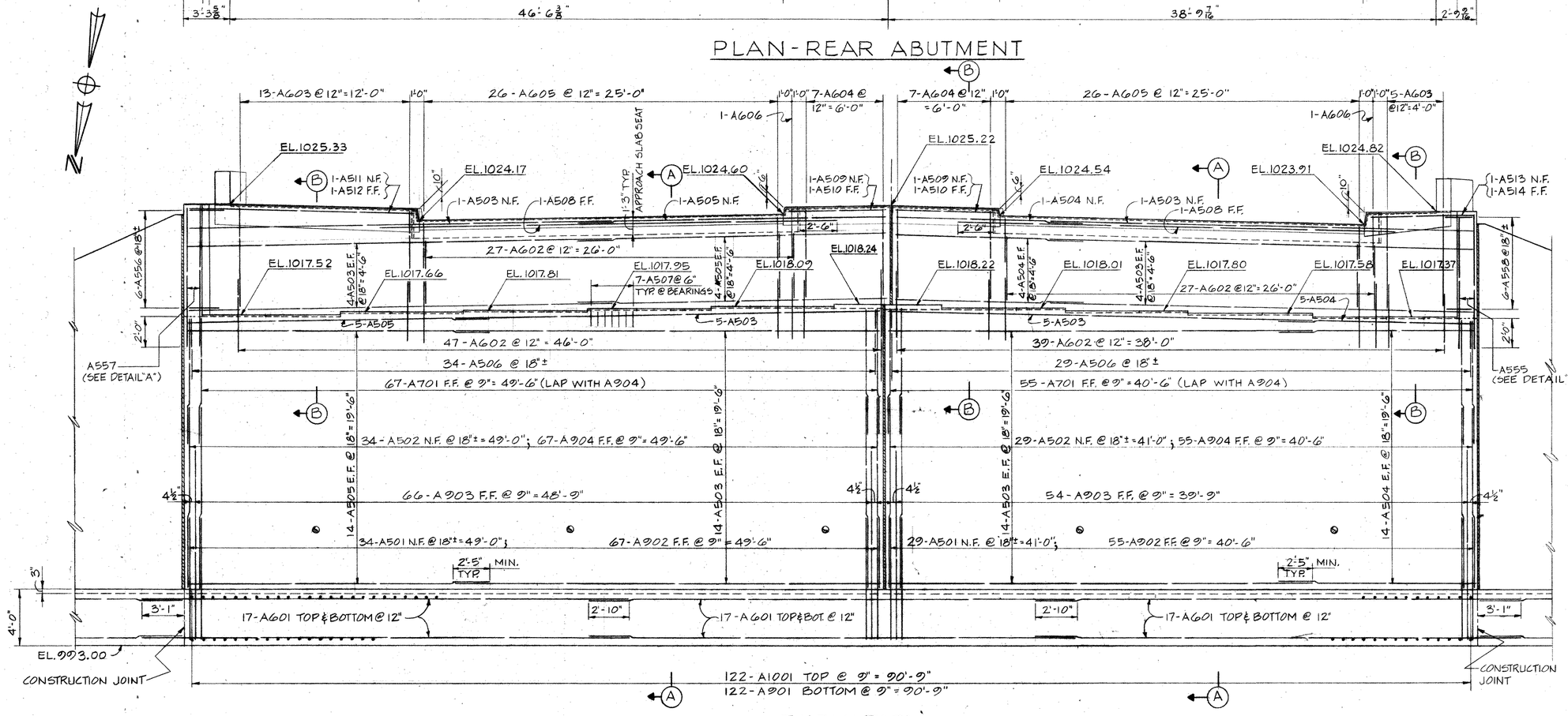
MOT-BIGGER RD.



PLAN-REAR ABUTMENT

LEGEND

N.F. = NEAR FACE
F.F. = FAR FACE
E.F. = EACH FACE
P.E.J.F. = PREFORMED EXPANSION JOINT FILLER



ELEVATION

NOTES

POROUS BACKFILL, 2 FT. THICK SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE AND LATERALLY TO THE ENDS OF THE WINGWALLS.

BACKWALL CONCRETE: IN ADDITION TO THE PROVISIONS OF 511.08, BACKWALL CONCRETE ABOVE THE BRIDGE SEAT OR BACKWALL CONCRETE ABOVE THE OPTIONAL CONSTRUCTION JOINT AT THE APPROACH SLAB SEAT SHALL NOT BE PLACED UNTIL AFTER THE DECK CONCRETE IN THE SPAN ADJACENT TO THE ABUTMENT HAS BEEN PLACED.

VERTICAL RUSTICATION GROOVES SHALL BE PLACED 4'-0" C/C IN FRONT FACE OF ABUTMENT WALL AND WINGWALLS.
SEE SHEET 8/15 FOR DETAIL OF RUSTICATION GROOVE.

FOR DETAILS OF WINGWALLS "A" & "B", SEE SHEET 5/15.

FOR SECTIONS A-A & B-B AND DETAILS "A" & "B", SEE SHEET 8/15.

A. M. KINNEY, INC.
CINCINNATI, OHIO

4/15

REAR ABUTMENT DETAILS

BRIDGE NO. MOT-675-0600
PROPOSED I-675 UNDER BIGGER ROAD
MONTGOMERY CO. **STA. 359+45.02**

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
S.R.B.	J.E.B.	J.E.B.	J.I.K.	J.C.O.	9-3-82	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

MOT-BIGGER RD.

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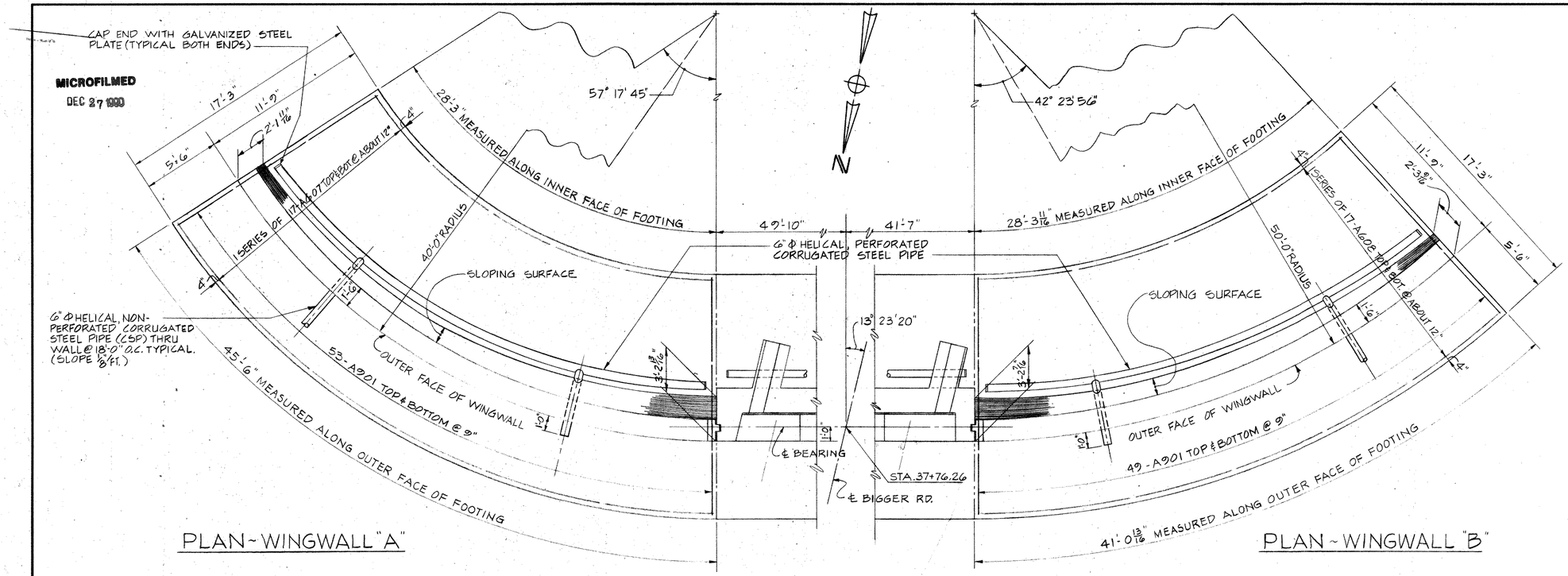
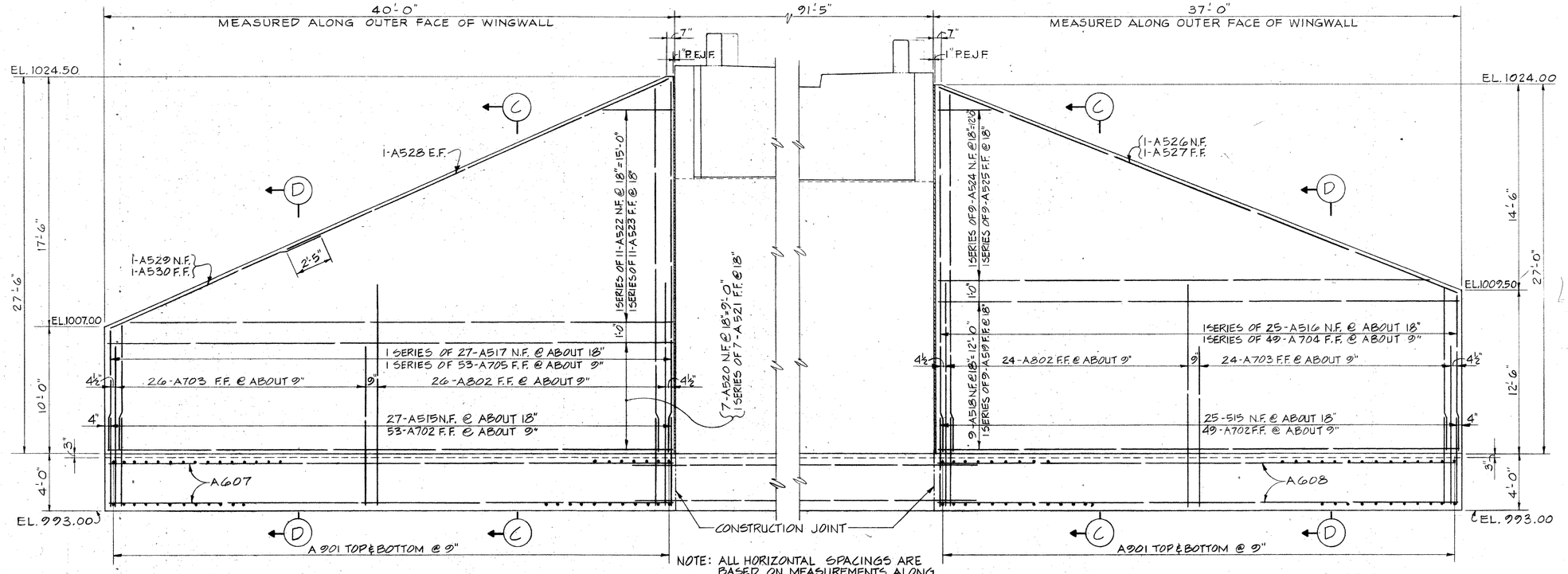


PLAN ~ WINGWALL "A"

PLAN ~ WINGWALL "B"



NOTE: ALL HORIZONTAL SPACINGS ARE BASED ON MEASUREMENTS ALONG OUTER FACE OF WINGWALL.

ELEVATION ~ WINGWALL "A"

ELEVATION ~ WINGWALL "B"

NOTES

FOR SECTIONS C-C & D-D AND RUSTICATION GROOVE DETAILS, SEE SHT. 3/15.

FOR ADDITIONAL NOTES, SEE SHT. 4/15.

LEGEND

N.F. = NEAR FACE
F.F. = FAR FACE
E.F. = EACH FACE
P.E.J.F. = PREFORMED EXPANSION JOINT FILLER

A. M. KINNEY, INC.
CINCINNATI, OHIO

5/15

REAR ABUTMENT DETAILS

BRIDGE NO. MOT-675-0600
PROPOSED I-675 UNDER
BIGGER ROAD

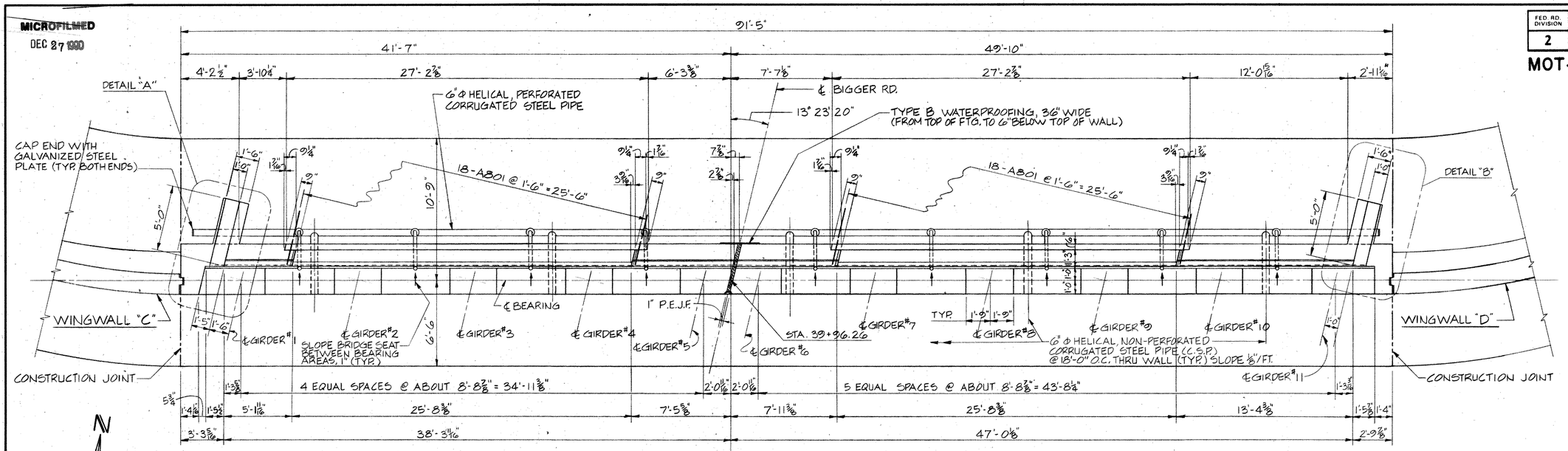
MONTGOMERY CO. STA. 359+45.02

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
S.R.B.	J.E.B.	J.E.B.	J.I.K.	J.C.O.	9-3-82	

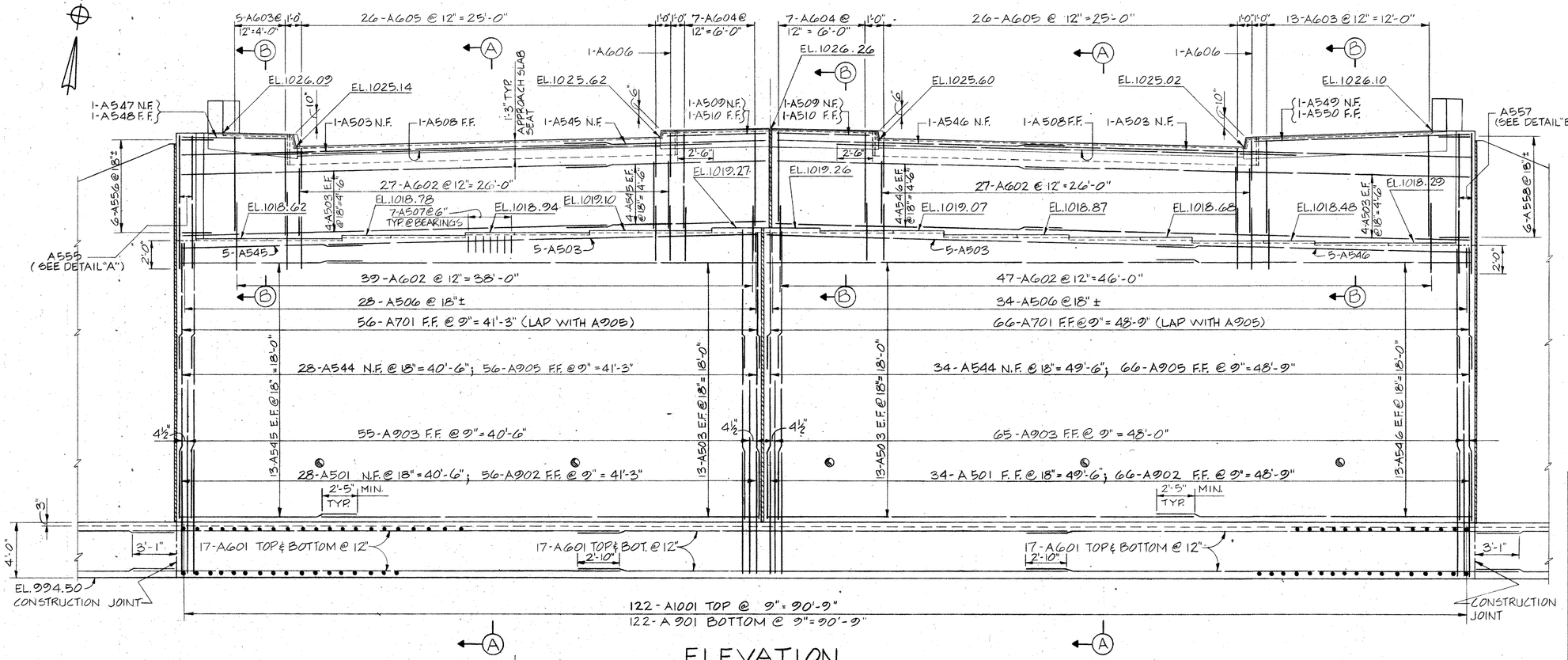
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

114
136

MOT-BIGGER RD.



PLAN - FORWARD ABUTMENT



ELEVATION

LEGEND

N.F. = NEAR FACE
F.F. = FAR FACE
E.F. = EACH FACE
P.E.J.F. = PREFORMED EXPANSION JOINT FILLER

NOTES

FOR DETAILS OF WINGWALLS "C" & "D", SEE SHEET 7/15.

FOR SECTIONS A-A & B-B, AND DETAILS "A" & "B", SEE SHEET 8/15.

FOR ADDITIONAL NOTES, SEE SHEET 4/15

6/15

A. M. KINNEY, INC.
CINCINNATI, OHIO

FORWARD ABUTMENT DETAILS

BRIDGE NO. MOT-675-0600
PROPOSED I-675 UNDER BIGGER ROAD

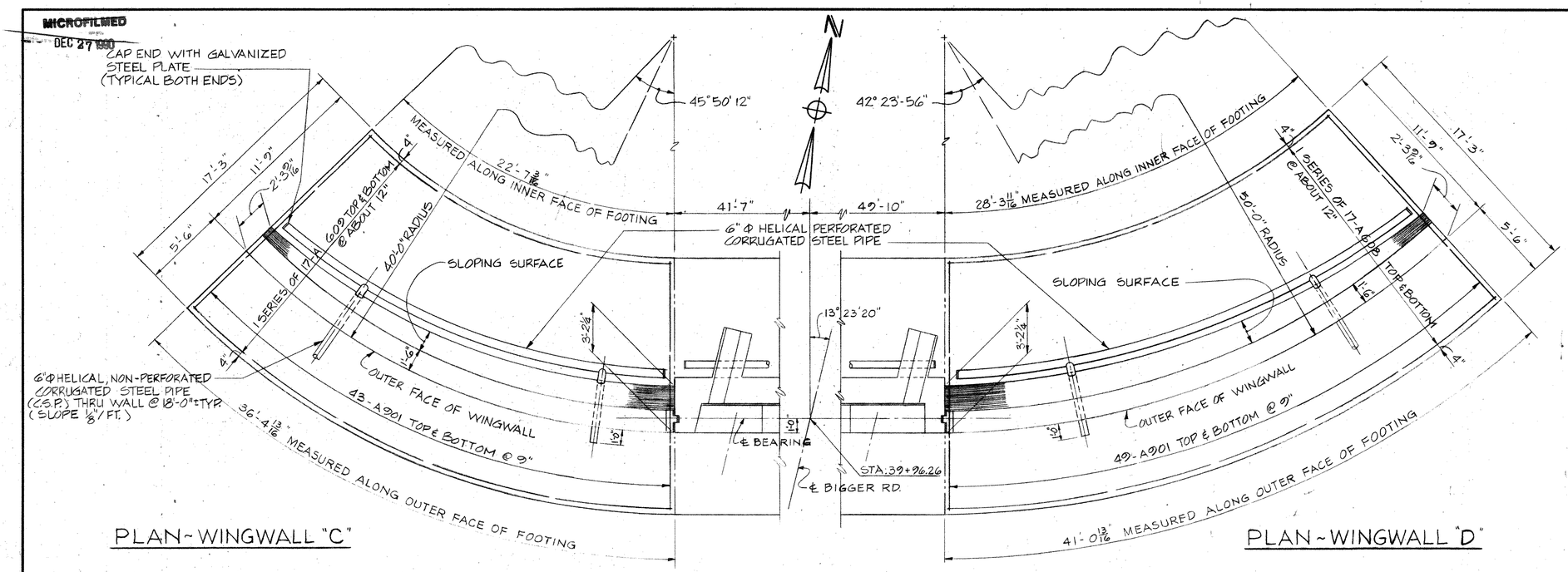
MONTGOMERY CO. STA. 359+45.02

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
S.R.B.	J.E.B.	J.E.B.	J.I.K.	J.C.O.	9-3-82	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

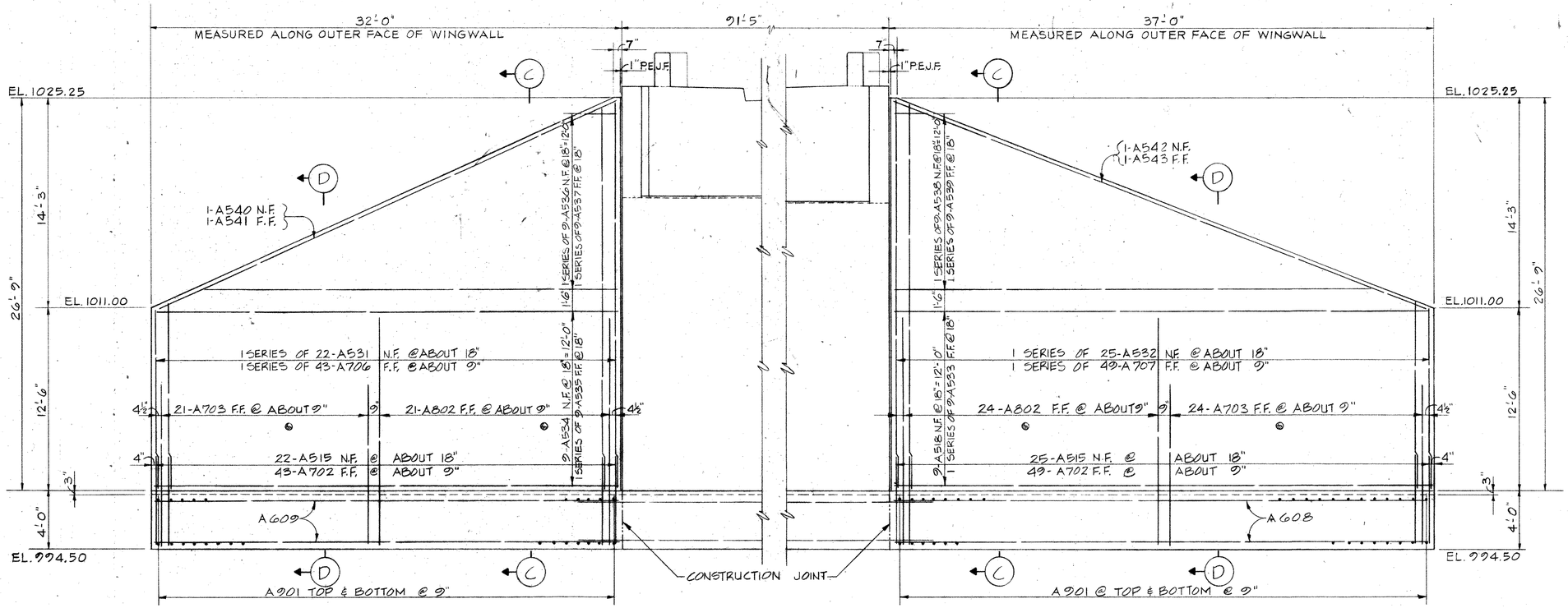
MOT-BIGGER RD.

115
136



PLAN ~ WINGWALL "C"

PLAN ~ WINGWALL "D"



ELEVATION - WINGWALL "C"

ELEVATION ~ WINGWALL "D"

NOTES

FOR SECTIONS C-C & D-D AND RUSTICATION GROOVE DETAILS, SEE SHT. 8/15.

FOR ADDITIONAL NOTES, SEE SHT. 4/15.

LEGEND

N.F. = NEAR FACE
F.F. = FAR FACE
E.F. = EACH FACE
P.E.J.F. = PREFORMED EXPANSION JOINT FILLER

7/15

A. M. KINNEY, INC.
CINCINNATI, OHIO

FORWARD ABUTMENT DETAILS

BRIDGE NO. MOT-675-0600
PROPOSED I-675 UNDER BIGGER ROAD

MONTGOMERY CO. STA. 359+45.02

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
S.R.B.	J.E.B.	J.E.B.	J.I.K.	J.C.O.	9-3-82	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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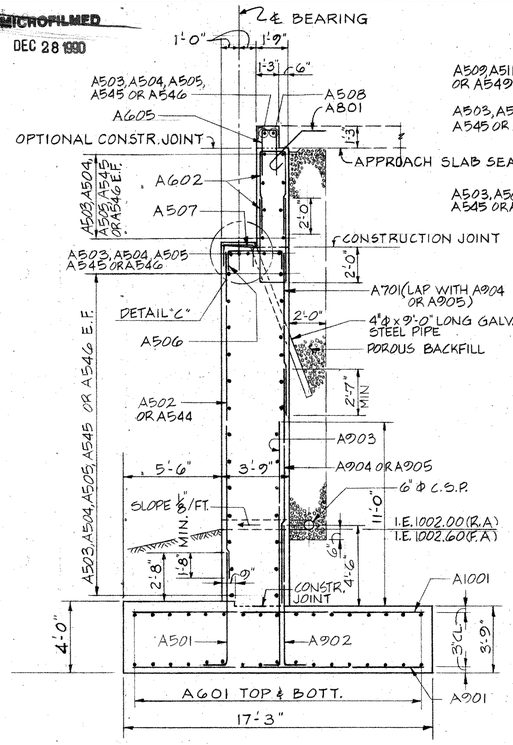
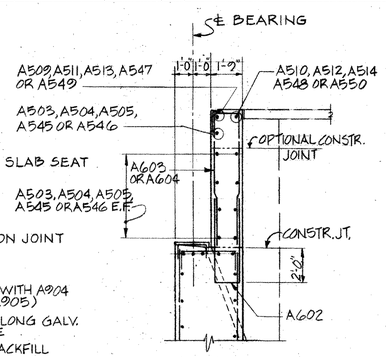
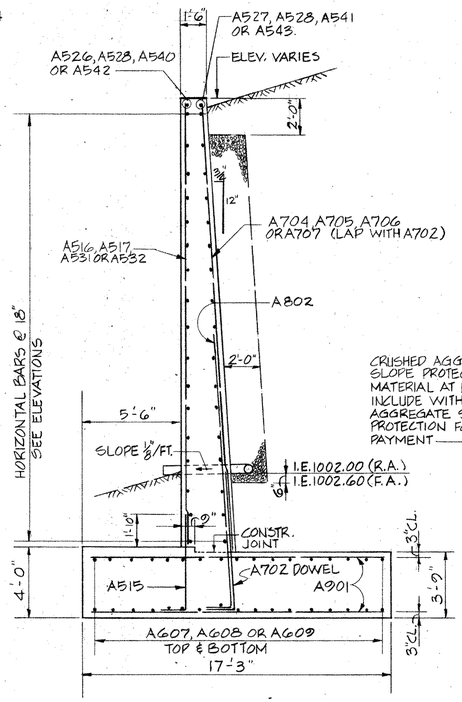
MOT-BIGGER RD.



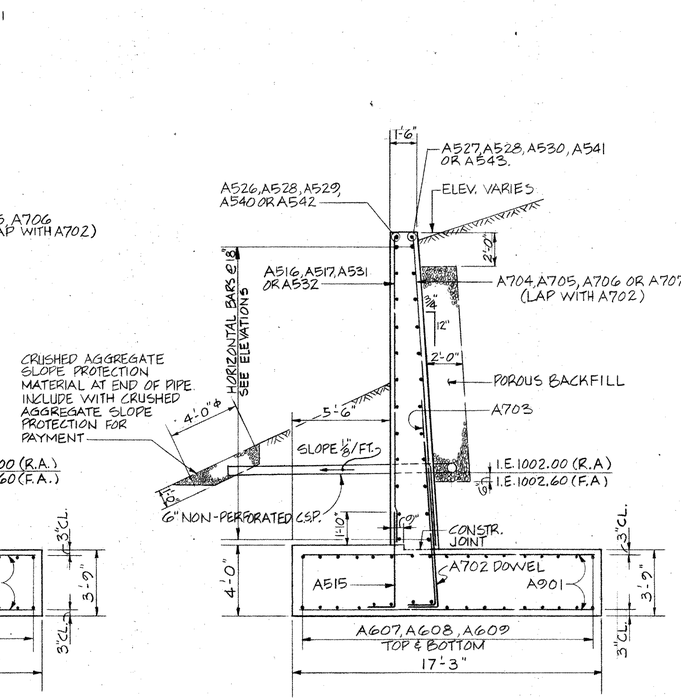
SECTION A-A



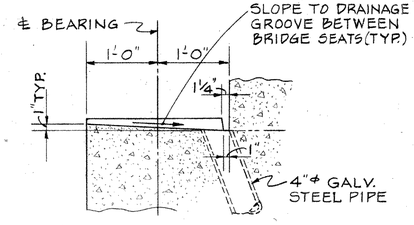
SECTION B-B



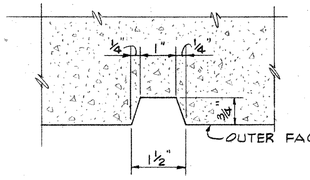
SECTION C-C



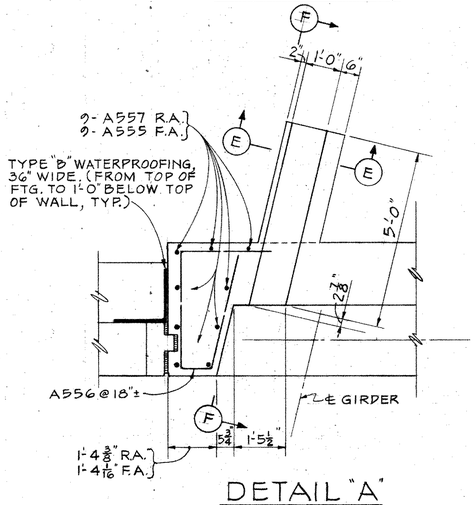
SECTION D-D



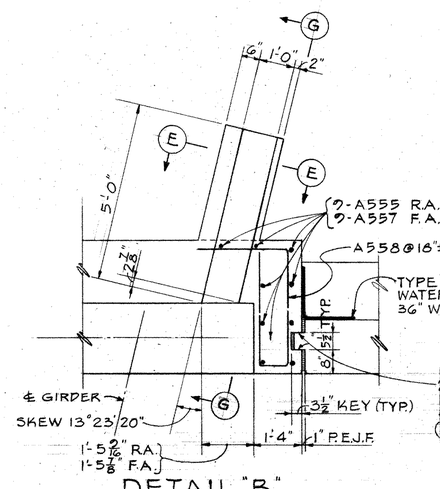
DETAIL "C"



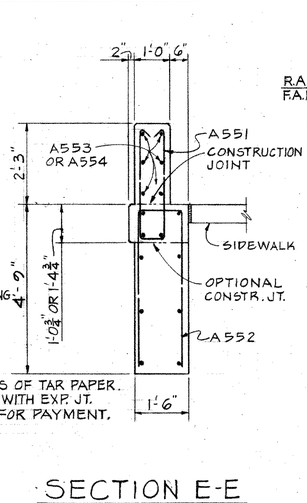
RUSTICATION GROOVE DETAIL



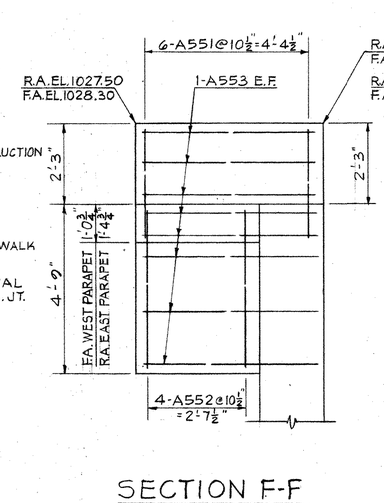
DETAIL "A"



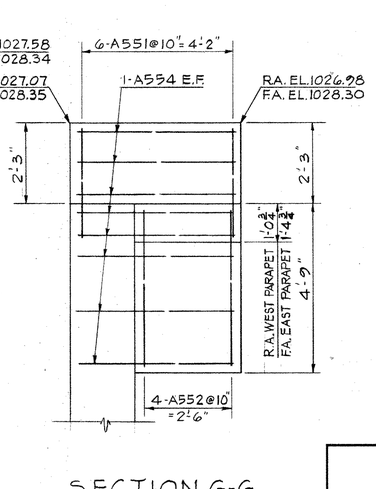
DETAIL "B"



SECTION E-E



SECTION F-F



SECTION G-G

NOTES

FOR LOCATIONS OF SECTIONS A-A & B-B, AND DETAILS "A" & "B", SEE SHEETS 4/15 AND 6/15.

FOR LOCATIONS OF SECTIONS C-C & D-D, SEE SHEETS 5/15 AND 7/15

LEGEND

N.F. = NEAR FACE
F.F. = FAR FACE
E.F. = EACH FACE
R.A. = REAR ABUTMENT
F.A. = FORWARD ABUTMENT
P.E.J.F. = PREFORMED EXPANSION JOINT FILLER

A. M. KINNEY, INC.
CINCINNATI, OHIO

8/15

ABUTMENT DETAILS

BRIDGE NO. MOT-675-0600
PROPOSED I-675 UNDER BIGGER ROAD

MONTGOMERY CO. STA. 359+45.02

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
S.R.B.	J.E.B.	J.E.B	J.I.K.	J.C.O	9-3-82	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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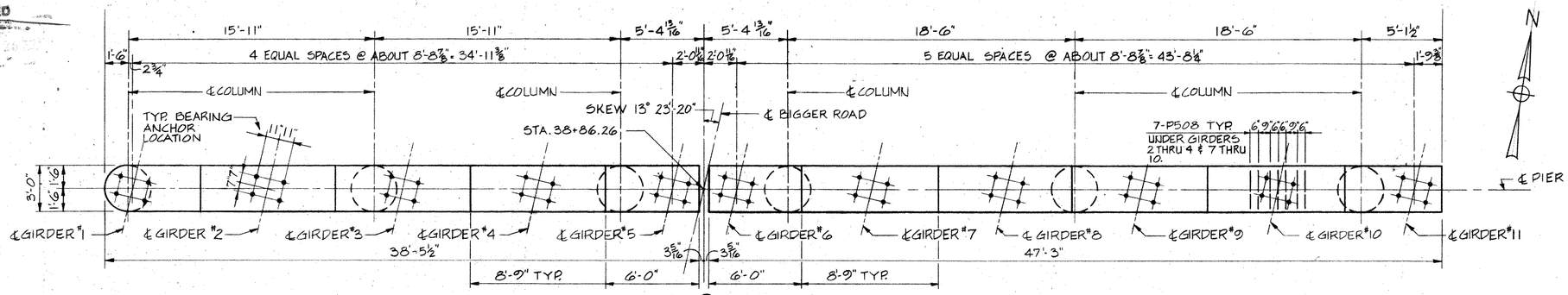
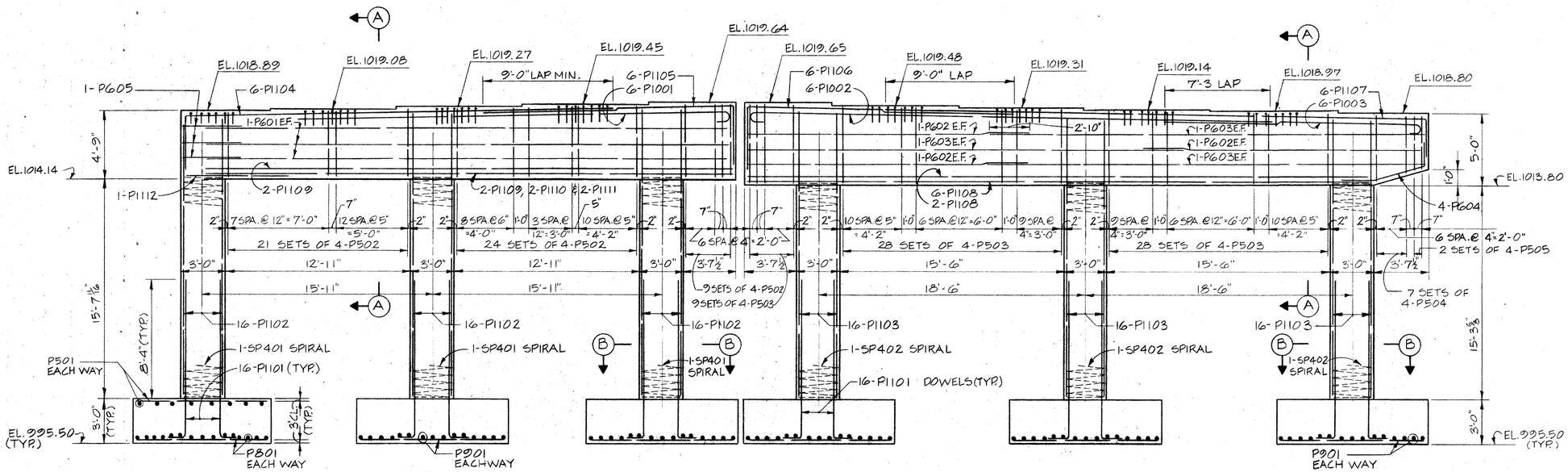
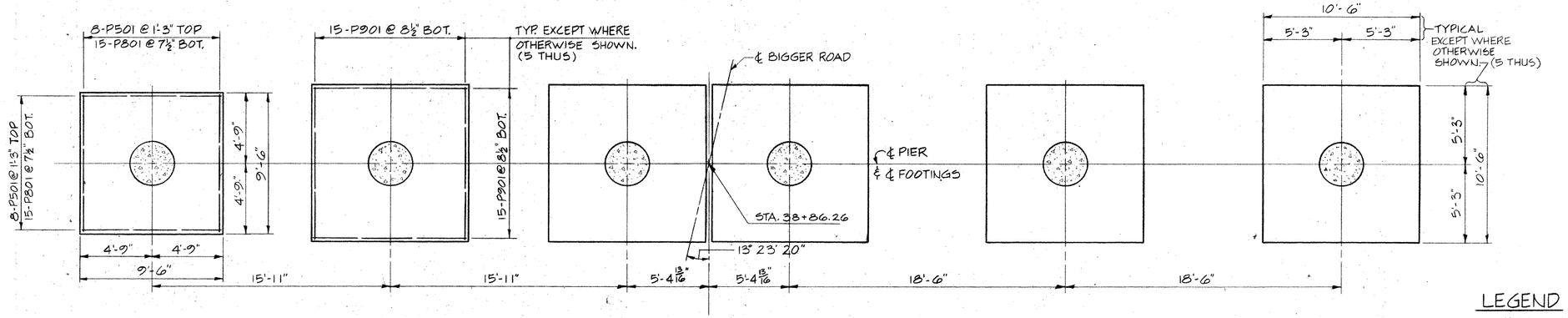
MOT-BIGGER RD.



CAP PLAN

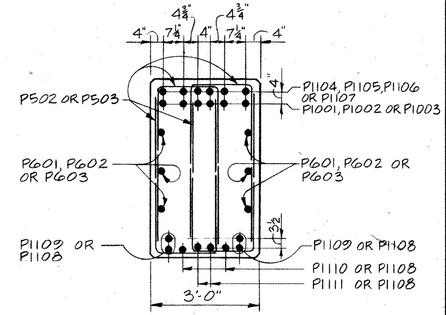


ELEVATION

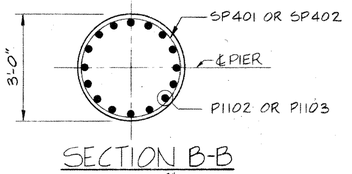


FOOTING PLAN

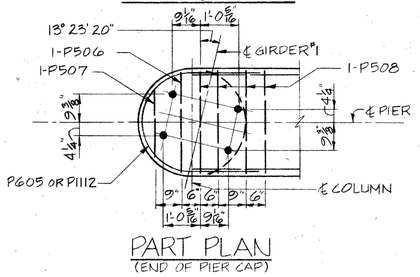
LEGEND
E.F. = EACH FACE



SECTION A-A



SECTION B-B



PART PLAN
(END OF PIER CAP)

NOTES:

BRIDGE SEAT REINFORCING: REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT SHALL BE ACCURATELY PLACED TO AVOID INTERFERENCE WITH 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-675-0600
PROPOSED I-675 UNDER
BIGGER ROAD

MONTGOMERY CO. STA. 359+45.02

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
S.R.B.	J.E.B.	J.E.B	J.I.K.	JCO	9-3-82	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

MOT-BIGGER RD.

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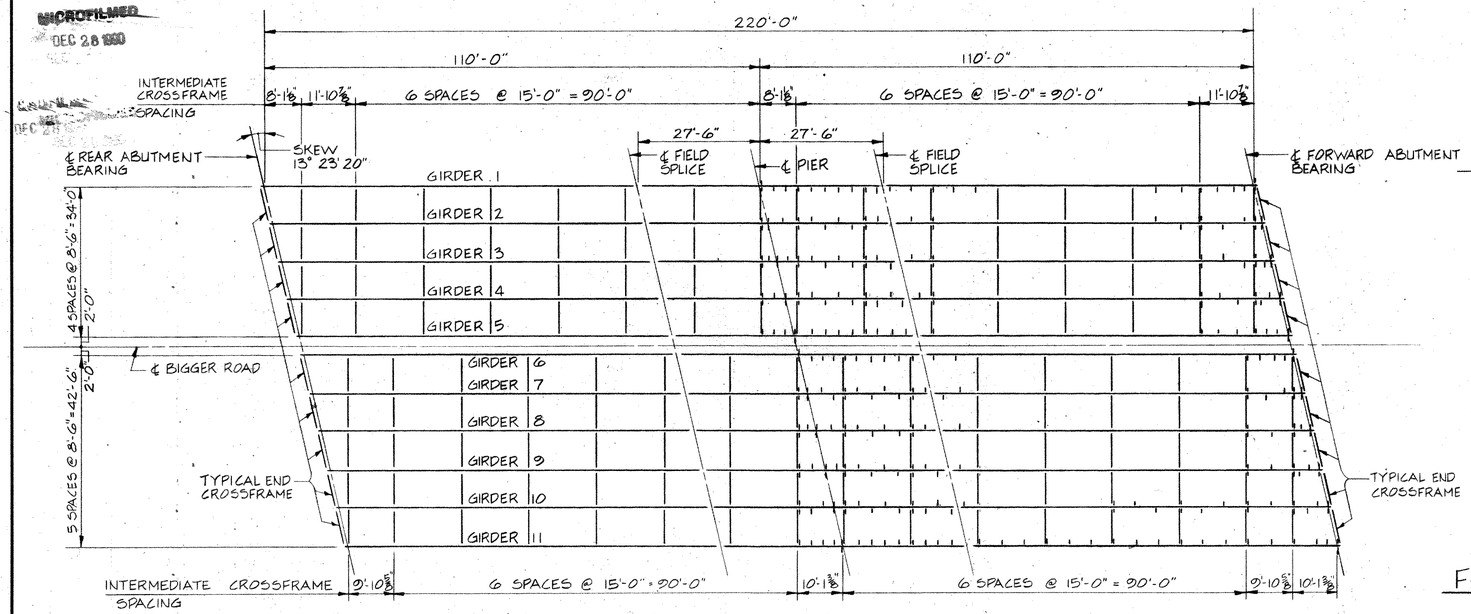
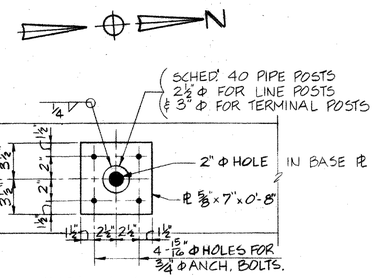
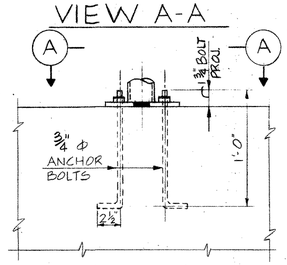


STEEL FRAMING PLAN

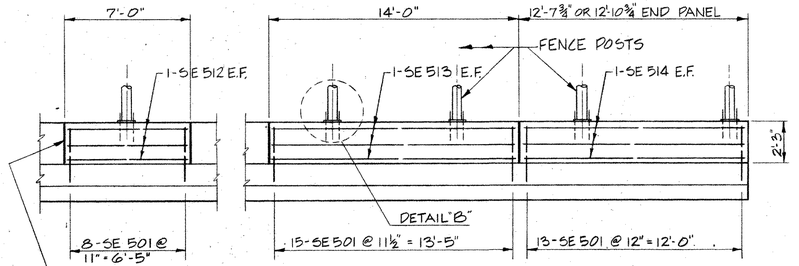


VIEW A-A



DETAIL "B"

FENCE POST BASE PLATE DETAILS



⅛" PREFORMED EXPANSION JOINT FILLER, MAY BE EITHER GRAY SPONGE RUBBER OR GRAY CELLULAR POLYVINYL CHLORIDE (PVC) SPONGE. INCLUDE WITH SUPERSTRUCTURE CONCRETE FOR PAYMENT.

TYPICAL PARAPET PANEL DETAILS

(FOR LOCATION OF PANELS, SEE GENERAL PLAN SH. 3/14)

NOTES

ALL STRUCTURAL STEEL TO BE ASTM A588, WITHOUT PAINT, EXCEPT WHERE OTHERWISE SHOWN OR NOTED.

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

BEARINGS: IN LIEU OF A588 STEEL, A36 STEEL, GALVANIZED, SHALL BE FURNISHED FOR BEARINGS, EXCEPT FOR UPPER PLATE ELEMENT OF BEARINGS. THIS A36 STEEL SHALL BE INCLUDED WITH A588 STEEL QUANTITY FOR PAYMENT.

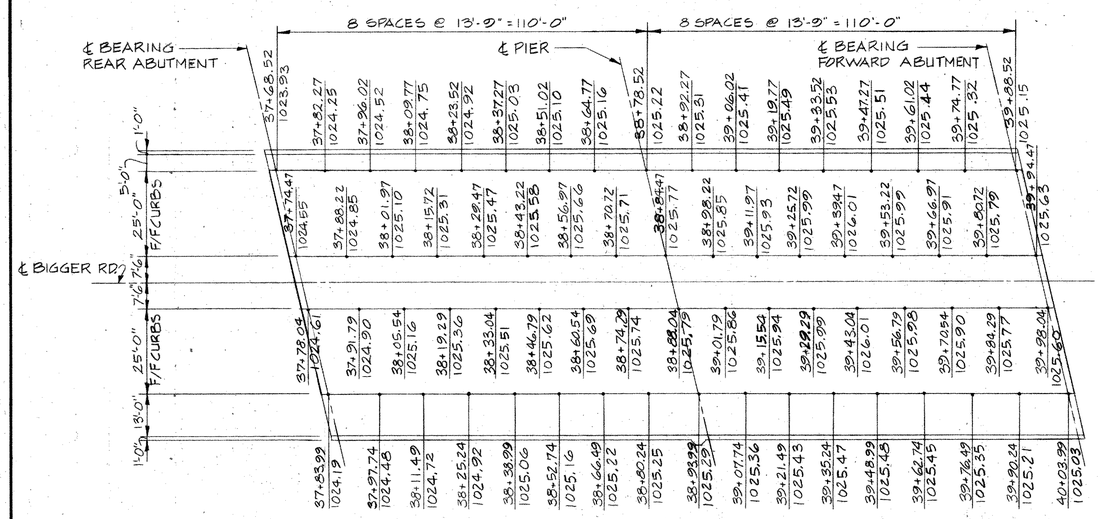
ROCKERS AT REAR AND FORWARD ABUTMENTS SHALL BE R-150. SEE STD. DWG. RB-1-55 FOR DETAILS.

FOR FIXED BEARINGS F-400 AT THE PIER, SEE DETAILS ON SHT. 11/15 AND STD. DWG. FB-1-82.

FOR DETAILS OF END DAM, END CROSSFRAME AND COMPRESSION SEAL EXPANSION JOINTS AT ABUTMENTS, SEE TENTATIVE STANDARD DWG. TS-EXJ-2-81.

HIGH STRENGTH BOLTS SHALL BE ⅞" DIAMETER A325, TYPE 3, UNLESS OTHERWISE NOTED.

End Dam Materials: A588 or A36, with System B field paint on exposed steel surfaces. Field paint shall consist of two prime coats and one finish coat.



SUPERSTRUCTURE CONCRETE PLACEMENT ELEVATIONS

THE TOP OF CONCRETE ELEVATIONS SHOWN ABOVE SHALL GOVERN THE PLACING OF FORMS OR SCREEDS PRIOR TO PLACING THE DECK CONCRETE. ALLOWANCE HAS BEEN MADE FOR THE DEFLECTION DUE TO THE WEIGHT OF CONCRETE.

LEGEND

E.F. = EACH FACE

10/15

A. M. KINNEY, INC.
CINCINNATI, OHIO

SUPERSTRUCTURE DETAILS

BRIDGE NO. MOT-675-0600
PROPOSED I-675 UNDER BIGGER ROAD

MONTGOMERY CO. STA. 359+45.02

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
S.R.B.	J.E.B.	J.E.B.	J.I.K.	J.C.O.	9-3-82	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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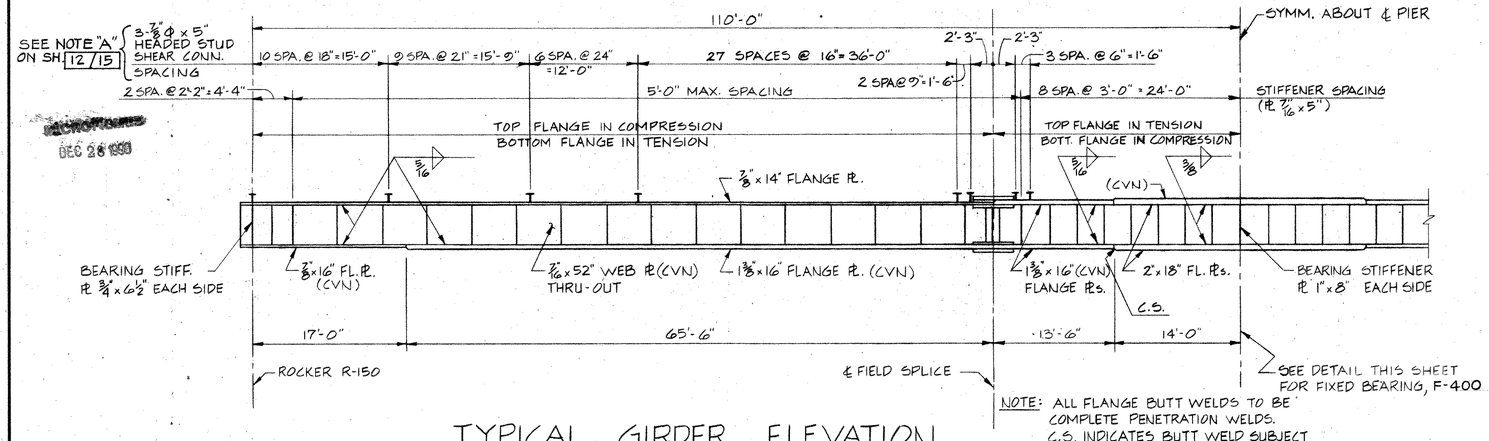
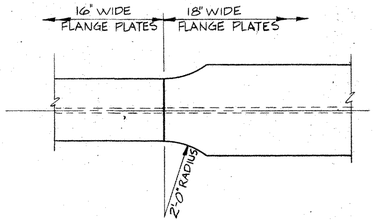
MOT-BIGGER RD.

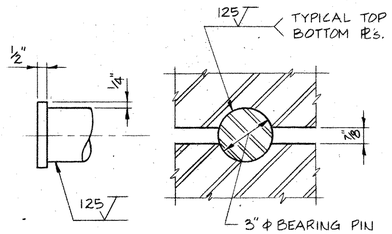


NOTE: ALL FLANGE BUTT WELDS TO BE COMPLETE PENETRATION WELDS.
C.S. INDICATES BUTT WELD SUBJECT TO COMPRESSIVE STRESS ONLY.

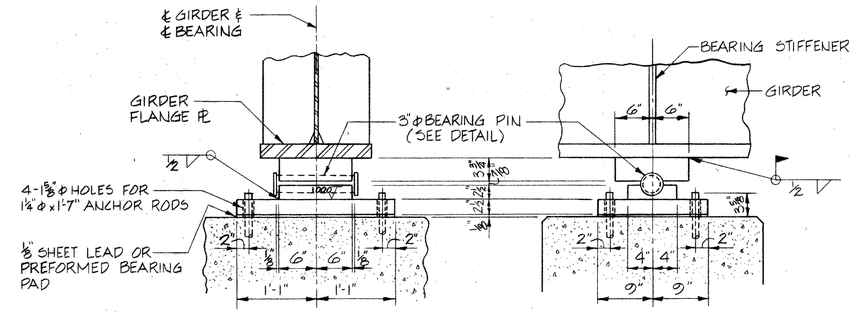
TYPICAL GIRDER ELEVATION



DETAIL AT ABUTTING ENDS OF 16" AND 18" FLANGE PLATES

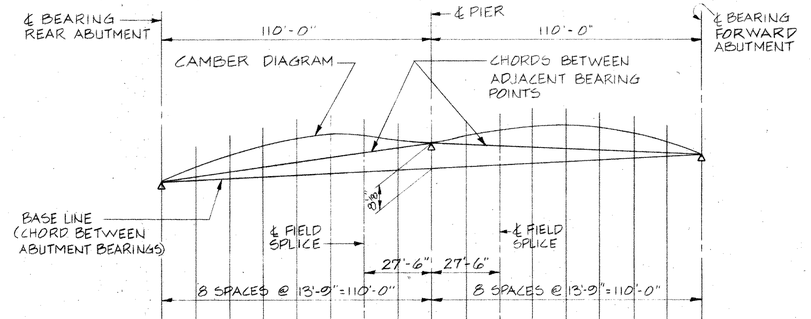


BEARING PIN DETAIL



FIXED BEARING DETAIL AT PIER (F-400)

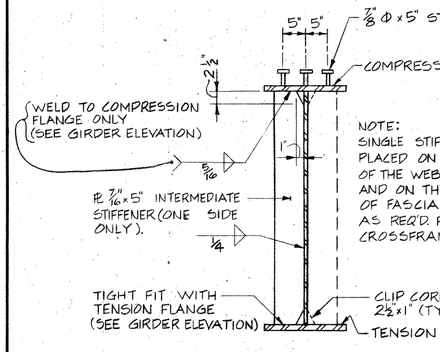
(SEE STD. DWG. FB-1-82)



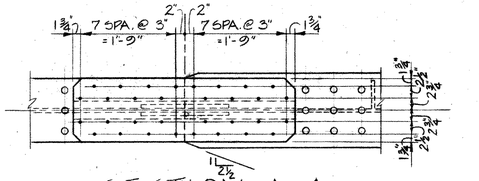
DEFLECTION DUE TO WEIGHT OF STEEL		0	1/4"	7/16"	1/2"	1/2"	7/16"	1/4"	1/16"	0	1/16"	1/4"	7/16"	1/2"	1/2"	7/16"	1/4"	0
DEFLECTION DUE TO REMAINING DEAD LOAD	GIRDER 1	0	1"	1 13/16"	2 3/16"	2 1/8"	1 11/16"	1"	5/16"	0	5/16"	1"	1 11/16"	2 1/8"	2 3/16"	1 13/16"	1"	0
	GIRDER 2	0	15/16"	1 11/16"	2 1/16"	2"	1 9/16"	15/16"	5/16"	0	5/16"	15/16"	1 9/16"	2"	2 1/16"	1 11/16"	15/16"	0
	GIRDER 3,9,10,&11	0	7/8"	1 5/16"	1 7/8"	1 1/2"	7/8"	1/4"	0	1/4"	7/8"	1 1/2"	1 7/8"	1 15/16"	1 9/16"	7/8"	0
	GIRDER 4,6,7 & 8	0	13/16"	1 7/16"	1 13/16"	1 3/8"	1 3/8"	13/16"	1/4"	0	1/4"	13/16"	1 3/8"	1 3/4"	1 13/16"	1 7/16"	13/16"	0
	GIRDER 5	0	3/4"	1 3/8"	1 5/8"	2 1/16"	1 1/4"	3/4"	1/4"	0	1/4"	3/4"	1 1/4"	1 5/8"	1 5/8"	1 3/8"	3/4"	0
ADJUSTMENT REQUIRED FOR VERTICAL CURVE		0	7/8"	1 1/2"	1 7/8"	2"	1 3/8"	1 1/2"	7/8"	0	7/8"	1 1/2"	1 7/8"	2"	1 3/8"	1 1/2"	7/8"	0
REQUIRED SHOP CAMBER	GIRDER 1	0	2 1/8"	3 3/4"	4 9/16"	4 5/8"	4"	2 3/4"	1 1/4"	0	1 1/4"	2 3/4"	4"	4 5/8"	4 9/16"	3 3/4"	2 1/8"	0
	GIRDER 2	0	2 1/16"	3 5/8"	4 7/16"	4 1/2"	3 7/8"	2 11/16"	1 1/4"	0	1 1/4"	2 11/16"	3 7/8"	4 1/2"	4 7/16"	3 5/8"	2 1/16"	0
	GIRDER 3,9,10,&11	0	2"	3 1/2"	4 5/16"	4 3/8"	3 13/16"	2 5/8"	1 3/16"	0	1 3/16"	2 5/8"	3 13/16"	4 3/8"	4 5/16"	3 1/2"	2"	0
	GIRDER 4,6,7 & 8	0	1 15/16"	3 3/8"	4 3/16"	4 1/4"	3 11/16"	2 9/16"	3/16"	0	1 1/16"	2 9/16"	3 11/16"	4 1/4"	4 3/16"	3 3/8"	1 15/16"	0
	GIRDER 5	0	1 7/8"	3 5/16"	4"	4 1/16"	3 9/16"	2 1/2"	1 3/16"	0	1 3/16"	2 1/2"	3 9/16"	4 1/16"	4"	3 5/16"	1 7/8"	0

GIRDER DEFLECTION AND CAMBER

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



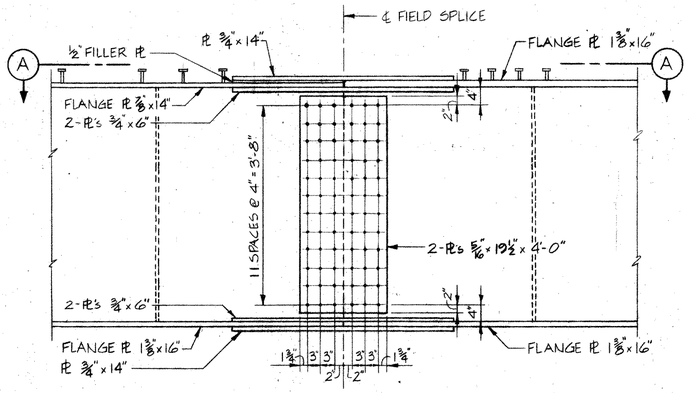
TYPICAL GIRDER SECTION AT ABUTMENTS & PIER



SECTION A-A

NOTE:
SINGLE STIFFENERS SHALL BE PLACED ON ALTERNATE SIDES OF THE WEB OF INTERIOR GIRDERS AND ON THE INSIDE OF THE WEB OF FASCIA GIRDERS. ADD STIFFENERS AS REQ'D. FOR THE ATTACHMENT OF CROSSFRAMES.

TYPICAL GIRDER SECTION AT INTERMEDIATE STIFFENERS



TYPICAL FIELD SPLICE

(ALL FASTENERS 7/8" Φ HIGH STRENGTH BOLTS, A325, TYPE 3)
ALL SPLICE PLATES ARE (CVN), EXCEPT FOR FILLS.

A. M. KINNEY, INC.
CINCINNATI, OHIO

11/15

SUPERSTRUCTURE DETAILS

BRIDGE NO. MOT-675-0600
PROPOSED I-675 UNDER BIGGER ROAD
MONTGOMERY CO. STA. 359+45.02

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
S.R.B.	J.E.B.	J.E.B.	J.I.K.	J.C.O.	9-3-82	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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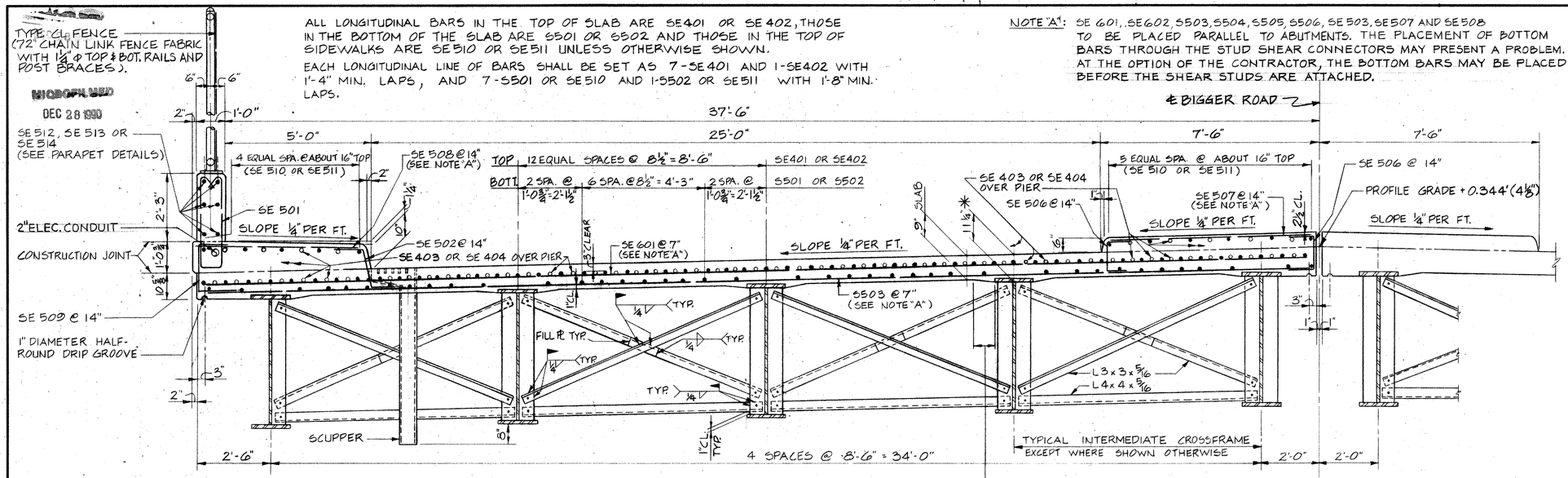
MOT-BIGGER RD.

ALL LONGITUDINAL BARS IN THE TOP OF SLAB ARE SE401 OR SE402, THOSE IN THE BOTTOM OF THE SLAB ARE S501 OR S502 AND THOSE IN THE TOP OF SIDEWALKS ARE SE510 OR SE511 UNLESS OTHERWISE SHOWN.

EACH LONGITUDINAL LINE OF BARS SHALL BE SET AS 7-SE401 AND 1-SE402 WITH 1'-4" MIN. LAPS, AND 7-S501 OR SE510 AND 1-S502 OR SE511 WITH 1'-8" MIN. LAPS.

NOTE "A": SE601, SE602, S503, S504, S505, S506, SE503, SE507 AND SE508 TO BE PLACED PARALLEL TO ABUTMENTS. THE PLACEMENT OF BOTTOM BARS THROUGH THE STUD SHEAR CONNECTORS MAY PRESENT A PROBLEM. AT THE OPTION OF THE CONTRACTOR, THE BOTTOM BARS MAY BE PLACED BEFORE THE SHEAR STUDS ARE ATTACHED.



*THIS IS THE DESIGN DIMENSION. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED UPON THIS DIMENSION, EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP FLANGE OF THE GIRDER MAY NOT HAVE THE EXACT CAMBER OR CONFORMATION REQUIRED TO PLACE IT PARALLEL TO THE FINISHED GRADE. DEDUCTION SHALL BE MADE FOR VOLUME OF ENCASED STEEL PLATES AS PER 511.18.

A TYPICAL HAUNCH WIDTH OF 9" SHALL BE USED FOR COMPUTING THE QUANTITY OF CONCRETE. HOWEVER THE HAUNCH WIDTH MAY VARY BETWEEN 6" AND 12" PROVIDED THAT THE SLOPE SHALL BE NOT MORE THAN 1:4 FOR A HAUNCH LESS THAN 9" IN WIDTH.

TYPICAL TRANSVERSE SECTION (LEFT HALF)

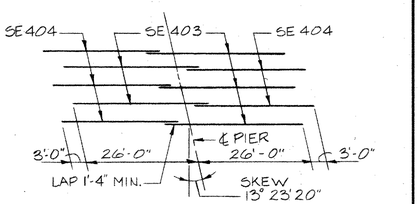
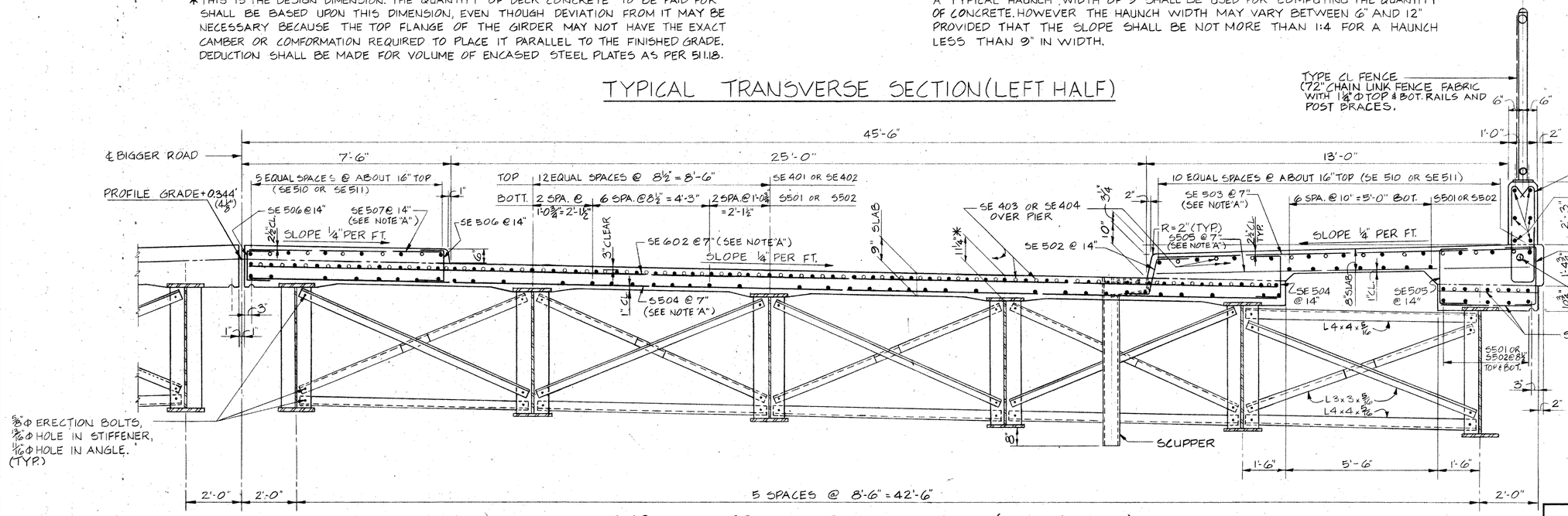
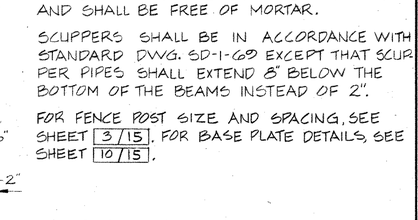


DIAGRAM SHOWING STAGGER OF SE403 & SE404 BARS OVER PIER



TYPICAL TRANSVERSE SECTION (RIGHT HALF)



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.

SCUPPERS SHALL BE IN ACCORDANCE WITH STANDARD DWG. SD-1-60 EXCEPT THAT SCUPPER PIPES SHALL EXTEND 8" BELOW THE BOTTOM OF THE BEAMS INSTEAD OF 2".

FOR FENCE POST SIZE AND SPACING, SEE SHEET 3/15. FOR BASE PLATE DETAILS, SEE SHEET 10/15.

A. M. KINNEY, INC.
CINCINNATI, OHIO

12/15

SUPERSTRUCTURE DETAILS

BRIDGE NO. MOT-675-0600
PROPOSED I-675 UNDER BIGGER ROAD
MONTGOMERY CO. **STA. 359+45.02**

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
S.R.B.	J.E.B.	J.E.B.	J.I.K.	J.C.O.	9-3-82	

DEC 28 1990

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

MOT-BIGGER RD.

121
136

GENERAL NOTES

PROTECTION OF CONCRETE SURFACES

ALL SURFACES OF THE PIERS ABOVE GROUND LINE AND VISIBLE SURFACES OF THE ABUTMENTS WHICH WILL BE EXPOSED TO RUST-LADEN WATER FROM CORROSION RESISTANT STEEL DURING INITIAL WEATHERING SHALL RECEIVE A CLEAR VINYL RESIN COATING TO PROTECT AGAINST ABSORPTIVE STAINING. THE COATING SHALL BE APPLIED AFTER THE CONCRETE HAS RECEIVED A FINAL SURFACE FINISH INCLUDING ANY GROUT CLEANING OR RUBBING AND BEFORE THE ERECTION OF THE STRUCTURAL STEEL. WATERPROOF MEMBRANE CURING COMPOUND AND CONCRETE CURING AND PROTECTIVE MEMBRANE, SUPPLEMENTAL SPECIFICATION 836 SHALL NOT BE USED ON THE SURFACES COATED WITH CLEAR PROTECTIVE COATING. SUCH SURFACES SHALL BE WATER CURED OR, AT THE CONTRACTOR'S OPTION, TWO FULL COATS OF CLEAR PROTECTIVE COATING, EACH APPROXIMATELY 1-1/3 MILS DRY FILM THICKNESS, MAY BE APPLIED TO ACT AS A COMBINATION CURING COMPOUND AND ANTI-STAINING AGENT.

THE AGENT SHALL BE APPLIED BY BRUSH OR ROLLER, OR BY SPRAYING, SO THAT THE SURFACE OF THE CONCRETE IS COMPLETELY AND UNIFORMLY COATED AT THE RATE OF ONE GALLON PER 200 SQUARE FT. THIS RATE OF APPLICATION WILL PROVIDE A DRY FILM THICKNESS OF 1-1/3 MILS. IF RUNNING OR SAGGING OCCURS, THE MATERIAL SHALL BE APPLIED IN TWO OR MORE COATS OF APPROXIMATELY EQUAL THICKNESS. NOT LESS THAN 10 MINUTES SHALL ELAPSE BETWEEN APPLICATIONS. WHEN APPLIED BY SPRAYING, THE COATING MATERIAL MAY BE THINNED WITH NOT MORE THAN 10 PERCENT TOLUENE.

THE COMPOSITION OF THE CLEAR PROTECTIVE COATING SHALL BE AS FOLLOWS:

	PERCENT BY WEIGHT
VINYL RESIN*	25.0 MIN.
METHYL ETHYL KETONE SOLVENT	37.0 MIN.
TOLUENE SOLVENT	37.0 MIN.

*THE RESIN SHALL BE A VINYL CHLORIDE-ACETATE COPOLYMER CONTAINING 86 PERCENT VINYL CHLORIDE AND 14 PERCENT VINYL ACETATE. THE VISCOSITY OF A 22 PERCENT BY WEIGHT SOLUTION OF RESIN IN A SOLVENT, CONSISTING OF EQUAL PARTS OF METHYL ISOBUTYL KETONE AND TOLUENE, SHALL BE 250-500 CENTIPOISES AT 77F. THE RESIN SHALL BE UNION CARBIDE'S VYHH GRADE, OR APPROVED EQUAL.

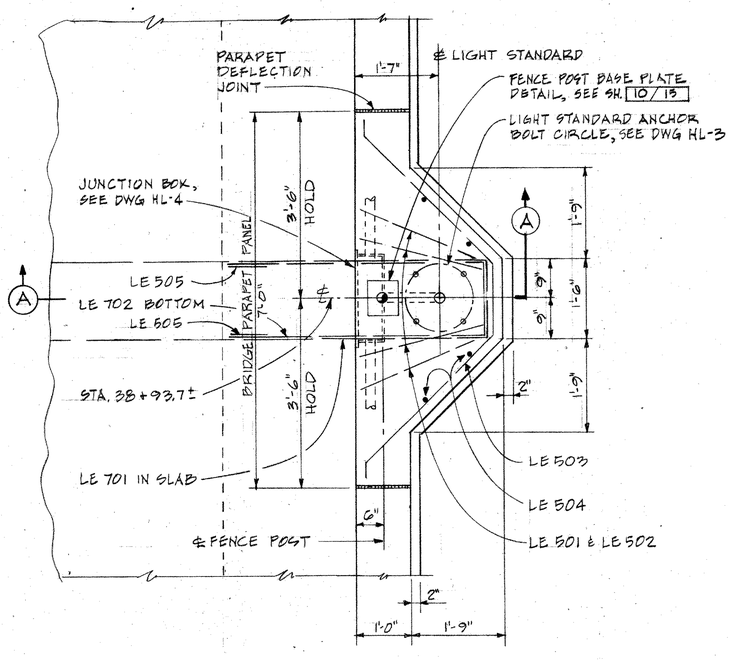
COATING PROPERTIES:	WEIGHT PER GALLON AT 77F, LB.	7.6 MIN.
	CONSISTENCY, VISCOSITY AT 77F, K.U.	60-70
	COLOR	CLEAR & COLORLESS
	DRYING TIME, HR.	1/2 MAX.

THE COST OF THIS APPLICATION SHALL BE IN THE UNIT PRICE BID FOR ITEM SPECIAL, SQ. FT. PROTECTION OF CONCRETE SURFACES.

CLASS S CONCRETE, SUPERSTRUCTURE, USING SHRINKAGE COMPENSATING CEMENT, 701.08

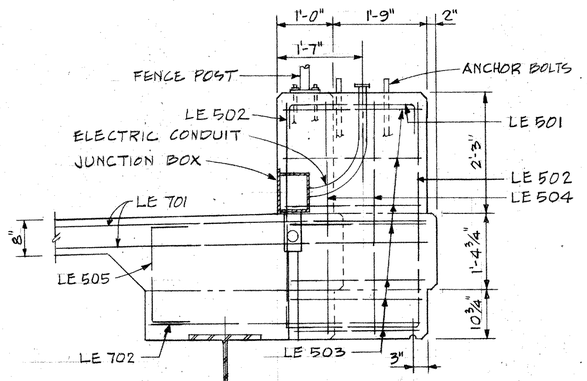
THE FOLLOWING RESTRICTIONS SHALL APPLY.

1. CEMENT SHALL BE EXPANSIVE HYDRAULIC CEMENT, ASTM C845, TYPE K.
2. THE MAXIMUM WATER/CEMENT RATIO GIVEN FOR CLASS S CONCRETE IN 499.03 SHALL BE REVISED FROM 0.44 TO 0.50.
3. MAXIMUM SLUMP AT THE TIME AND PLACE OF CONCRETE PLACEMENT SHALL BE 6 INCHES.
4. CHEMICAL ADMIXTURES, WHEN REQUIRED BY 511.06, SHALL BE LIMITED TO 705.12 TYPE D.
5. MAXIMUM AMBIENT TEMPERATURE AT TIME OF PLACEMENT OF CONCRETE SHALL BE 80F.
6. MEMBRANE CURING PER SS836 WILL NOT BE PERMITTED FOR ANY CONCRETE PLACED BETWEEN SEPTEMBER 1 AND MARCH 31. SUCH CONCRETE SHALL BE CURED BY METHOD (a) WATER CURING.
7. IF REQUIRED BY THE ENGINEER, THE SURFACE OF THE CONCRETE SHALL BE GIVEN A FOG SPRAY OF WATER. THIS MAY BE REQUIRED PRIOR TO EITHER WATER CURING OR MEMBRANE CURING IF WEATHER CONDITIONS DICTATE. EQUIPMENT SHALL BE ON HAND.



PLAN

LIGHT STANDARD PEDESTAL



SECTION A-A

FOR ADDITIONAL DIMENSIONS & DETAILS SEE STANDARD LIGHTING DWG. HL-4.

A. M. KINNEY, INC.
CINCINNATI, OHIO

13/15

GENERAL NOTES & DETAILS

BRIDGE NO. MOT-675-0600
PROPOSED I-675 UNDER
BIGGER ROAD

MONTGOMERY CO. STA. 359+45.02

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.E.T.	R.E.T.	R.E.T.	J.I.K.	J.C.O.	9-3-82	

DEC 28 1982

STEEL LIST

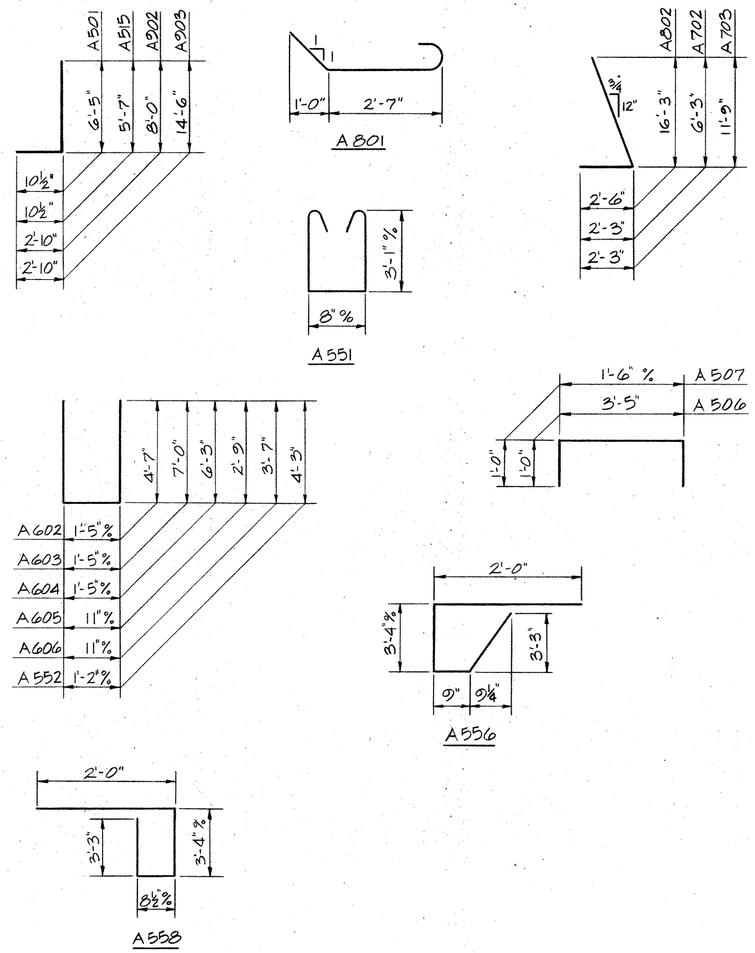
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

122/136

MOT-BIGGER RD.

MARK	NO.	LENGTH	WEIGHT	SHP.	REAR ABUT.	FWD. ABUT.
ABUTMENTS						
A1001	244	16'-9"	17,586	S	122	122
A901	632	16'-9"	35,992	S	326	306
A902	244	10'- 7"	8,780	B	122	122
A903	240	17'- 1"	13,940	B	120	120
A904	122	14'- 10"	6,153	S	122	—
A905	122	14'- 3"	5,911	S	—	122
A801	72	4'-11"	945	B	36	36
A802	95	18'-7"	4,714	B	50	45
A701	244	9'- 0"	4,489	S	122	122
A702	194	8'- 4"	3,305	B	102	92
A703	95	13'- 10"	2686	B	50	45
A704	49	"D"	1,970	S	49	—
A705	53	"F"	2022	S	53	—
A706	43	"Q"	1,718	S	—	43
A707	49	"S"	1,957	S	—	49
A601	204	34'-5"	10,546	S	102	102
A602	280	10'- 3"	4,311	B	140	140
A603	36	15'- 1"	816	B	18	18
A604	28	13'- 7"	571	B	14	14
A605	104	6'- 1"	950	B	52	52
A606	4	7'- 9"	47	B	2	2
A607	34	"A"	1,858	S*	34	—
A608	68	"B"	3,490	S*	34	34
A609	34	"N"	1,479	S*	—	34
A501	125	7'- 2"	934	B	63	62
A502	63	20'- 0"	1,314	S	63	—
A503	164	30'- 0"	5132	S	84	80
A504	42	13'- 10"	606	S	42	—
A505	42	22'- 6"	986	S	42	—
A506	125	5'- 2"	674	B	63	62
A507	154	3'- 3"	522	B	77	77
A508	4	32'- 2"	134	S	2	2
A509	4	7'- 2"	30	S	2	2
A510	4	6'- 5"	27	S	2	2
A511	1	16'- 2"	17	S	1	—
A512	1	15'- 10"	17	S	1	—
A513	1	7'- 4"	8	S	1	—
A514	1	6'- 4"	7	S	1	—
A515	99	6'- 4"	654	B	52	47
A516	25	"C"	506	S	25	—
A517	27	"E"	519	S	27	—
A518	18	36'- 3"	681	S*	9	9

BENDING DIAGRAM



* CURVE IN FIELD AS NECESSARY. INCLUDE WITH REINFORCING STEEL FOR PAYMENT.

MARK	NO.	LENGTH	WEIGHT	SHP.	REAR ABUT.	FWD. ABUT.
ABUTMENTS						
A519	9	"G"	328	S*	9	—
A520	7	39'-3"	287	S*	7	—
A521	7	"H"	273	S*	7	—
A522	11	"J"	250	S*	11	—
A523	11	"K"	240	S*	11	—
A524	9	"L"	181	S*	9	—
A525	9	"M"	176	S*	9	—
A526	1	38'-10"	41	S*	1	—
A527	1	38'- 1"	40	S*	1	—
A528	2	30'-0"	63	S*	2	—
A529	1	15'- 2"	16	S*	1	—
A530	1	14'-0"	15	S*	1	—
A531	22	"P"	443	S	—	22
A532	25	"R"	503	S	—	25
A533	9	"T"	328	S*	—	9
A534	9	31'- 4"	294	S*	—	9
A535	9	"U"	282	S*	—	9
A536	9	"V"	144	S*	—	9
A537	9	"W"	138	S*	—	9
A538	9	"X"	167	S*	—	9
A539	9	"Y"	161	S*	—	9
A540	1	34'- 1"	36	S*	—	1
A541	1	33'- 3"	35	S*	—	1
A542	1	38'- 9"	40	S*	—	1
A543	1	38'- 0"	40	S*	—	1
A544	62	19'- 5"	1,256	S	—	62
A545	40	14'- 3"	595	S	—	40
A546	40	22'- 1"	921	S	—	40
A547	1	7'- 11"	8	S	—	1
A548	1	7'- 7"	8	S	—	1
A549	1	15'- 7"	16	S	—	1
A550	1	14'- 7"	15	S	—	1
A551	24	7'- 5"	186	B	12	12
A552	16	9'- 5"	157	B	8	8
A553	32	4'- 8"	156	S	16	16
A554	32	4'- 5"	147	S	16	16
A555	18	9'- 3"	174	S	9	9
A556	12	9'- 1"	114	B	6	6
A557	18	9'- 7"	180	S	9	9
A558	12	8'- 11"	112	B	6	6

"A" = 2 SERIES OF 17-A607, VARIES FROM 28'-1" TO 44'-8" BY 1'-0½" INCREMENTS
"B" = 4 " " 17-A608, " " 28'-0" " 40'-4" " 0¼" "
"C" = 1 " " 25-A516, " " 12'-2" " 26'-8" " 7¼" "
"D" = 1 " " 49-A704, " " 12'-5" " 26'-11" " 3⅜" "
"E" = 1 " " 27-A517, " " 9'-8" " 27'-2" " 8" ±
"F" = 1 " " 53-A705, " " 9'-11" " 27'-5" " 4" ±
"G" = 1 " " 9-A519, " " 34'-7" " 35'-3" " 1" "
"H" = 1 " " 7-A521, " " 37'-1" " 37'-9" " 1⅜" ±
"J" = 1 " " 11-A522, " " 5'-0" " 38'-6" " 3'-4" ±
"K" = 1 " " 11-A523, " " 4'-10" " 37'-0" " 3'-2⅜" ±
"L" = 1 " " 9-A524, " " 4'-3" " 34'-3" " 3'-9" "
"M" = 1 " " 9-A525, " " 4'-2" " 33'-4" " 3'-7⅜" "
"N" = 2 " " 17-A609, " " 22'-4" " 35'-7" " 10" ±
"P" = 1 " " 22-A531, " " 12'-2" " 26'-5" " 8⅝" ±
"Q" = 1 " " 43-A706, " " 12'-5" " 26'-8" " 4½" ±
"R" = 1 " " 25-A532, " " 12'-2" " 26'-5" " 7⅜" "
"S" = 1 " " 49-A707, " " 12'-5" " 26'-8" " 3⅝" "
"T" = 1 " " 9-A533, " " 34'-8" " 35'-3" " ⅞" "
"U" = 1 " " 9-A535, " " 29'-7" " 30'-6" " 1⅜" "
"V" = 1 " " 9-A536, " " 2'-2" " 28'-5" " 3'-3⅜" "
"W" = 1 " " 9-A537, " " 2'-0" " 27'-4" " 3'-2" "
"X" = 1 " " 9-A538, " " 2'-6" " 33'-0" " 3'-9⅜" "
"Y" = 1 " " 9-A539, " " 2'-4" " 32'-0" " 3'-8½" "

NOTES

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.

A. M. KINNEY, INC.
CINCINNATI, OHIO

14/15

REINFORCING STEEL LIST

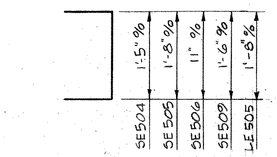
BRIDGE NO. MOT-675-0600
PROPOSED I-675 UNDER BIGGER ROAD
MONTGOMERY CO. STA. 359+45.02

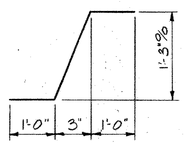
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.E.T.	R.E.T.	R.E.T.	J.I.K.	J.C.O.	9-3-82	

STEEL LIST

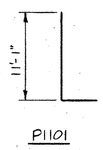
MARK	NO.	LENGTH	WEIGHT	SHP.	LT. STR.	RT. STR.
SUPERSTRUCTURE						
SE601	379	38'-1"	22,249	S	379	—
SE602	379	38'-1"	21,679	S	—	379
SE501	480	7'-5"	3,713	B	240	240
SE502	380	3'-0"	1,189	B	190	190
SE503	379	13'-11"	5,501	S	—	379
SE504	190	2'-11"	578	B	—	190
SE505	380	3'-2"	1,255	B	—	380
SE506	760	2'-5"	1,916	B	380	380
SE507	380	7'-1"	2,807	S	190	190
SE508	190	5'-8"	1,123	S	190	—
SE509	190	3'-0"	595	B	190	—
SE510	196	30'-0"	6,133	S	77	119
SE511	28	23'-0"	672	S	11	17
SE512	96	6'-6"	651	S	48	48
SE513	120	13'-6"	1,690	S	60	60
SE514	24	12'-2"	305	S	12	12
SE401	749	30'-0"	15,010	S	378	371
SE402	107	20'-6"	1,465	S	54	53
SE403	133	30'-0"	2,665	S	62	71
SE404	133	26'-4"	2,340	S	62	71
S501	679	30'-0"	21,246	S	280	399
S502	97	23'-0"	2,327	S	40	57
S503	379	39'-1"	15,450	S	379	—
S504	379	38'-1"	15,054	S	—	379
S505	379	13'-11"	5,501	S	—	379
S506	380	3'-2"	1,255	S	—	380
LIGHTING						
LE701	2	18'-6"	76	B	—	2
LE702	1	10'-8"	22	B	—	1
LE501	4	4'-1"	17	B	—	4
LE502	4	10'-1"	42	B	—	4
LE503	7	8'-4"	61	B	—	7
LE504	4	4'-0"	17	S	—	4
LE505	2	3'-2"	7	B	—	2

BENDING DIAGRAM

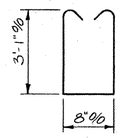




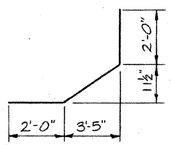
SE 502



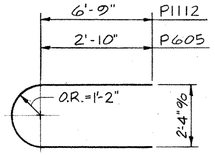
P1101

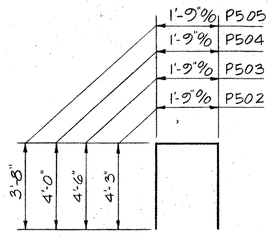


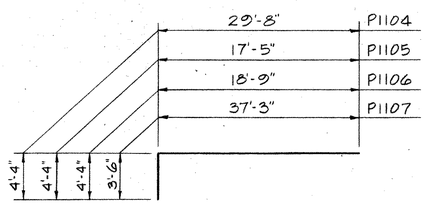
SE 501

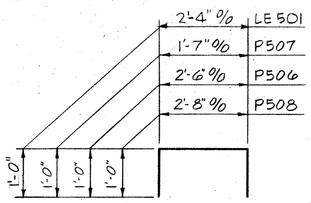


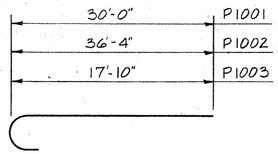
P604

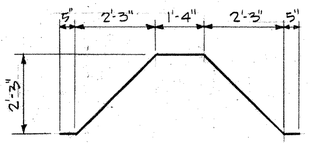




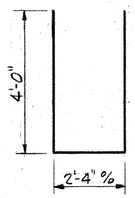




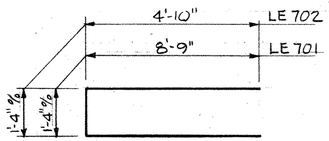




LE 503



LE 502



MARK	NO.	LENGTH	WEIGHT	SHP.	LT. PIER	RT. PIER
PIER						
P1101	96	12'-9"	6,503	B	48	48
P1102	48	20'-0"	5,100	S	48	—
P1103	48	19'-11"	5,079	S	—	48
P1104	6	33'-8"	1,073	B	6	—
P1105	6	21'-5"	683	B	6	—
P1106	6	22'-9"	725	B	—	6
P1107	6	40'-5"	1,288	B	—	6
P1108	8	43'-2"	1,835	S	—	8
P1109	4	37'-5"	795	S	4	—
P1110	2	37'-9"	401	S	2	—
P1111	2	37'-11"	403	S	2	—
P1112	1	17'-0"	90	B	1	—
P1001	6	31'-5"	811	B	6	—
P1002	6	37'-9"	975	B	—	6
P1003	6	19'-3"	497	B	—	6
P 901	150	10'-0"	5,100	S	60	90
P 801	30	9'-0"	721	S	30	—
P 601	6	36'-9"	331	S	6	—
P 602	6	19'-9"	178	S	—	6
P 603	6	30'-0"	270	S	—	6
P 604	4	7'-5"	45	B	—	4
P 605	3	9'-3"	42	B	3	—
P 501	16	9'-0"	150	S	16	—
P 502	216	10'-0"	2,253	B	216	—
P 503	260	10'-6"	2,847	B	—	260
P 504	28	9'-6"	277	B	—	28
P 505	8	8'-10"	74	B	—	8
P 506	1	4'-3"	4	B	1	—
P 507	1	3'-4"	3	B	1	—
P 508	53	4'-5"	244	B	25	28

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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MOT-BIGGER RD.

SPIRAL REINFORCING LIST

MARK	NO.	CORE DIA. % SPIRAL	LENGTH	PITCH	NO. OF TURNS	WEIGHT	LT. PIER	RT. PIER
SP401	3	32"	15'-9½"	3½"	57	1,097	3	—
SP402	3	32"	15'-5½"	3½"	56	1,075	—	3

SPIRAL REINFORCING BARS

THE "LENGTH" SHOWN IN THE STEEL LIST FOR THE SPIRAL BARS IS THE DISTANCE FROM THE TOP OF THE FOOTING TO THE LEVEL OF THE LOWEST HORIZONTAL REINFORCEMENT IN THE PIER CAP.

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 MINIMUM SECTION MODULUS OF .030 IN.^{3} 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.

NOTES

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.

EPOXY COATED BARS ARE INDICATED BY THE PREFIX "SE" OR "LE"

15/15

A. M. KINNEY, INC.
CINCINNATI, OHIO

REINFORCING STEEL LIST

BRIDGE NO. MOT-675-0600
PROPOSED I-675 UNDER BIGGER ROAD
MONTGOMERY CO. STA. 359+45.02

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.E.T.	R.E.T.	R.E.T.	J.I.K.	J.C.O.	9-3-82	