

DATE	ROJ. NO.	SHEET NO.
MO		164

GENERAL NOTES:

DESIGN SPECIFICATIONS:
A.A.S.H.T.O.-1992
LOAD FACTOR DESIGN
SEISMIC PERFORMANCE CATEGORY A.

DESIGN LOADING:
HS20-44
MODIFIED 24,000# TANDEM AXLE
35#/SQ.FT. FUTURE WEARING SURFACE
EARTH 120#/CU.FT., EQUIV. FLUID PRESSURE 45#/CU.FT.
FATIGUE STRESS - CASE II

DESIGN UNIT STRESSES:
CLASS B CONCRETE (SUBSTRUCTURE) $f'c = 3,000$ PSI.
CLASS B1 CONCRETE (CURB & PLANTER WALL, & SIDEWALK PLANTER WALL, $f'c = 4,000$ PSI)
CLASS B2 CONCRETE (SUPERSTRUCTURE, EXCEPT CURB & PLANTER WALL, & SIDEWALK PLANTER WALL) $f'c = 4,000$ PSI.
REINFORCING STEEL (GRADE 60) $fy = 60,000$ PSI.
STRUCTURAL CARBON STEEL $fy = 36,000$ PSI.
STRUCTURAL CARBON STEEL TUBING (A.S.T.M. A-500) GRADE B $fy = 46,000$ PSI.
STRUCTURAL CARBON STEEL (A.S.T.M. A572) GRADE 50 $fy = 50,000$ PSI.
STEEL PILE $fy = 9,000$ PSI.
FOR PRECAST STRESSED PANEL STRESSES, SEE SHEET NO. 60.
NOTE: ALL STEEL SHALL BE A-36 EXCEPT AS NOTED.

FABRICATED STEEL CONNECTION:
FIELD CONNECTIONS, HIGH STRENGTH BOLTS $\frac{3}{4}$ " Ø, HOLES $\frac{1}{8}$ " Ø.
EXCEPT AS NOTED.
HIGH STRENGTH BOLTS, NUTS AND WASHERS SHALL BE SAMPLED FOR QUALITY IN ACCORDANCE WITH STANDARD SPECIFICATION 106 AND FIELD SECTION (FS-712.)

JOINT FILLER:
ALL JOINT FILLER SHALL MEET THE REQUIREMENTS OF STD. SPEC. 1057.2.4, EXCEPT AS NOTED.

REINFORCING STEEL:
MINIMUM CLEARANCE TO REINFORCING STEEL SHALL BE $1\frac{1}{2}$ " UNLESS OTHERWISE SHOWN.
ALL REINFORCING BARS IN THE TOPS OF THE TOPS OF THE SUBSTRUCTURE BEAMS OR CAPS SHALL BE SPACED TO CLEAR ANCHOR BOLTS FOR BEARINGS BY AT LEAST $\frac{1}{2}$ ".

LAMINATED NEOPRENE BEARING:
BEARINGS SHALL BE 60 DUROMETER NEOPRENE PADS.
THE NEOPRENE PAD SHALL BE BONDED TO THE BEARING SEAT WITH AN EPOXY ADHESIVE AS APPROVED BY THE BEARING MANUFACTURER FOR BONDING NEOPRENE TO CONCRETE.

PAINT:
PAINT SYSTEM F BY THE CONTRACTOR IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

NOTICE AND DISCLAIMER REGARDING BORING LOG DATA:
THE LOCATIONS OF ALL SUBSURFACE BORINGS FOR THIS STRUCTURE ARE SHOWN ON THE BRIDGE PLAN SHEET NO. 2 FOR THIS STRUCTURE. BORING DATA FOR THE NUMBERED LOCATIONS IS SHOWN ON SHEET NO. 4. THE BORING DATA FOR ALL LOCATIONS INDICATED, AS WELL AS ANY OTHER BORING LOGS OR OTHER FACTUAL RECORDS OF SUBSURFACE DATA AND INVESTIGATIONS PERFORMED BY THE DEPARTMENT FOR THE DESIGN OF THE PROJECT, ARE AVAILABLE FROM THE DISTRICT MATERIALS ENGINEER UPON WRITTEN REQUEST AS OUTLINED IN THE PROJECT SPECIAL PROVISIONS. NO GREATER SIGNIFICANCE OR WEIGHT SHOULD BE GIVEN TO THE BORING DATA DEPICTED ON THE PLAN SHEETS THAN TO SUBSURFACE DATA AVAILABLE FROM THE DISTRICT OR ELSEWHERE.

THE COMMISSION DOES NOT REPRESENT OR WARRANT THAT ANY SUCH BORING DATA ACCURATELY DEPICTS THE CONDITIONS TO BE ENCOUNTERED IN CONSTRUCTING THIS PROJECT. A CONTRACTOR ASSUMES ALL RISKS IT MAY ENCOUNTER IN BASING ITS BID PRICES, TIME OR SCHEDULE OF PERFORMANCE ON THE BORING DATA DEPICTED HERE OR THOSE AVAILABLE FROM THE DISTRICT, OR ON ANY OTHER DOCUMENTATION NOT EXPRESSLY WARRANTED, WHICH THE CONTRACTOR MAY OBTAIN FROM THE COMMISSION.

ABUTMENT NO. / BENT NO.	1	2
FOUNDATION MATERIAL	SHALE	SHALE
DESIGN BEARING	TONS/SQ. FT. 3.4	4.6

ABUTMENT NO.	ABUTMENT NO. 1				ABUTMENT NO. 3			
	RETAINING WALLS FOOTINGS				RETAINING WALLS FOOTINGS			
PILE TYPE AND SIZE	HP12x53				HP12x53			
LOCATION	FROM STA. 5+78.82 TO STA. 5+69.76	FROM STA. 5+69.73 TO STA. 5+59.48	FROM STA. 5+59.48 TO STA. 5+49.15	FROM STA. 7+98.02 TO STA. 7+97.98	FROM STA. 7+98.04 TO STA. 8+22.04	FROM STA. 8+22.04 TO STA. 8+37.15		
NUMBER	58	6	6	50	34	16	6	8
APPROXIMATE LENGTH	FT. 11	28	29	32	33	11	12	17
DESIGN BEARING	TONS 68	27	27	21	21	66	66	65
HAMMER ENERGY REQUIRED	FT.-LBS. 15,300	7,000	7,000	7,000	7,000	14,850	14,850	14,625

NOTE: MINIMUM ENERGY REQUIREMENT OF HAMMER IS BASED ON PLAN LENGTH AND DESIGN BEARING VALUE OF PILES.
ALL PILES SHALL BE DRIVEN TO PRACTICAL REFUSAL.
PRE-BORE FOR PILES AT ABUTMENTS NO. 1 & 3 TO ELEVATIONS 953.0 & 952.0, RESPECTIVELY.

ITEM	SUBSTR.	SUPERSTR.	TOTAL
CLASS 1 EXCAVATION	CU. YD. 4.170		4.170
STRUCTURAL STEEL PILES (12 IN.)	LIN. FT. 3,576		3,576
PRE-BORE FOR PILING	LIN. FT. 2,798		2,798
CLASS B CONCRETE (SUBSTRUCTURE)	CU. YD. 2,368.2		2,368.2
SLAB ON STEEL **	SO. YD. 2.009	2.009	2.009
SIDEWALK (BRIDGES)	SO. FT. 3,895	3,895	3,895
RAISED MEDIAN	SO. FT. 760	760	760
CURB AND PLANTER WALL	LIN. FT. 380	380	380
SIDEWALK PLANTER WALL	LIN. FT. 380	380	380
PARAPET WALLS ABOVE RETAINING WALLS AND WINDOW WALLS	LIN. FT. 302	302	302
LAMINATED NEOPRENE BEARING PADS (STEEL STRUCTURES)	EACH 42	42	42
PREFORMER COMPRESSION EXP.-JT. SEAL (3 IN.)	LIN. FT. 227	227	227
REINFORCING STEEL (BRIDGES)	LBS. 270,170		270,170
REINFORCING STEEL (EPOXY COATED)	LBS. 6,940		6,940
FABRICATED STRUCTURAL CARBON STEEL (PLATE GIRDERS)	LBS. 273,920	273,920	273,920
FABRICATED STRUCTURAL CARBON STEEL LOW ALLOY STEEL (PLATE GIRDERS)(A-572)	LBS. 288,970	288,970	288,970
ORNAMENTAL PAINTING	LUMP SUM 1		1
VERTICAL DRAIN AT ABUTMENTS	EACH 2		2
TUBE HANDRAIL ON ABUTMENT PARAPET WALLS	LIN. FT. 286		286
PRECAST CONCRETE LIGHT POST	EACH 14		14
MASONRY PROTECTION SYSTEM	LUMP SUM 1		1
GRAFFITI PROTECTION SYSTEM	LUMP SUM 1		1
ORNAMENTAL PEDESTRIAN FENCE	LIN. FT. 351		351
UNI-STONE PAVERS ON RAISED MEDIAN	SO. FT. 511		511
PRECAST CAP ON END POST	EACH 4		4
LIGHT FIXTURES	EACH 14		14
CONDUIT SYSTEM ON STRUCTURE	LUMP SUM 1		1
STONE FACADE ON INTERMEDIATE BENT	SO. FT. 2,312		2,312
STONE FACADE ON ABUTMENTS AND ABUTMENT RETAINING WALLS	SO. FT. 7,042		7,042
STONE VENEER	SO. FT. 2,253	2,253	2,253
PRECAST CAP ON PLANTER WALL	LIN. FT. 194		194
PRECAST CAP ON ABUTMENT PARAPET WALLS	LIN. FT. 290		290
PLANTER FILL	CU. YD. 108		108

** SEE SPECIAL PROVISIONS

PAYMENT FOR CURB AND PLANTER WALL AND SIDEWALK PLANTER WALL SHALL INCLUDE EPOXY COATED REINFORCING STEEL, PLANTER DRAIN SYSTEM WITH GROUT FILL, WATERPROOFING AND CONCRETE COMPLETE-IN-PLACE, PER LIN. FT.

COST OF ALL REINFORCING STEEL AND CONCRETE COMPLETE-IN-PLACE IN THE END POSTS & PARAPET WALLS ABOVE CONSTRUCTION JOINT SHALL BE INCLUDED IN THE UNIT PRICE FOR PARAPET WALLS ABOVE RETAINING WALLS AND WINDOW WALLS.

CONCRETE ABOVE UPPER CONSTRUCTION JOINT IN BACKWALL AT ABUTMENTS NO. 1 AND NO. 3 IS INCLUDED WITH CLASS B (SUBSTRUCTURE) QUANTITIES.

ALL CONCRETE AND REINFORCING STEEL IN THE SIDEWALK INCLUDING SIDEWALK BENEATH SIDEWALK PLANTER WALL ARE INCLUDED IN THE SUPERSTRUCTURE QUANTITIES FOR SIDEWALK (BRIDGES).

ALL REINFORCEMENT IN THE ABUTMENTS IS INCLUDED IN THE SUBSTRUCTURE QUANTITIES.

DOVELLS, METAL EXPANSION CAPS, EXPANSION JOINT MATERIAL AND CALK REQUIRED FOR THE WALL EXPANSION JOINTS SHALL BE INCLUDED IN THE PRICE OF THE BID ITEM CLASS B CONCRETE (SUBSTRUCTURE) C.Y.

THE ESTIMATED QUANTITY FOR ORNAMENTAL PEDESTRIAN FENCE IS BASED ON THE HORIZONTAL DISTANCE FROM FACE TO FACE OF THE PRECAST CONCRETE LIGHT POSTS.

WHEN THE PRECAST CONCRETE CAP IS BID BY LINEAR FEET, THE CONTRACT UNIT PRICE SHALL INCLUDE THE COST OF ALL CONCRETE, REINFORCEMENT, AND STAINLESS STEEL DOVELLS COMPLETE-IN-PLACE.

ITEMS TO BE GALVANIZED SHALL BE GALVANIZED IN ACCORDANCE WITH A.S.T.M. A123 AND A.S.T.M. A153 (SEE SPECIAL PROVISIONS).

STEEL PLATES IN RAISED MEDIAN ARE INCLUDED IN THE PRICE BID FOR UNI-STONE PAVERS ON RAISED MEDIAN.

PAYMENT FOR THE STONE VENEER AND DOVETAIL ANCHOR SLOTS, COMPLETE-IN-PLACE, FOR THE PARAPET WALLS ABOVE RETAINING WALLS AND WINDOW WALLS, SIDEWALK PLANTER WALLS, CURB AND PLANTER WALLS AND ORNAMENTAL END POST SHALL BE INCLUDED IN THE ESTIMATED QUANTITIES FOR STONE VENEER PER SQ. FT.

ESTIMATED QUANTITIES FOR SLAB ON STEEL

ITEM	LBS.	ITEM	LBS.
REINFORCING STEEL (EPOXY COATED)	94,070	**	
CONCRETE	CJ. YDS. 378.4		

NOTE: THE TABLE OF ESTIMATED QUANTITIES FOR THE SLAB ON STEEL REPRESENTS THE QUANTITIES USED BY THE STATE IN PREPARING THE COST ESTIMATE FOR CONCRETE SLABS. VARIATIONS MAY BE ENCOUNTERED IN THESE ESTIMATED QUANTITIES, BUT THESE VARIATIONS CANNOT BE USED FOR AN ADJUSTMENT IN THE CONTRACT UNIT PRICE PER SQUARE YARD OF SLAB ON STEEL.

SEE SPECIAL PROVISIONS FOR METHOD OF FORMING SLAB.

** DOES NOT INCLUDE REINFORCING BARS USED AS BAR SUPPORTS.

THE PRESTRESSED PANEL QUANTITIES ARE NOT INCLUDED IN THE TABLE OF ESTIMATED QUANTITIES FOR SLAB ON STEEL.



DETAILED JAN. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 3 OF 81.

JACKSON COUNTY

A-5181

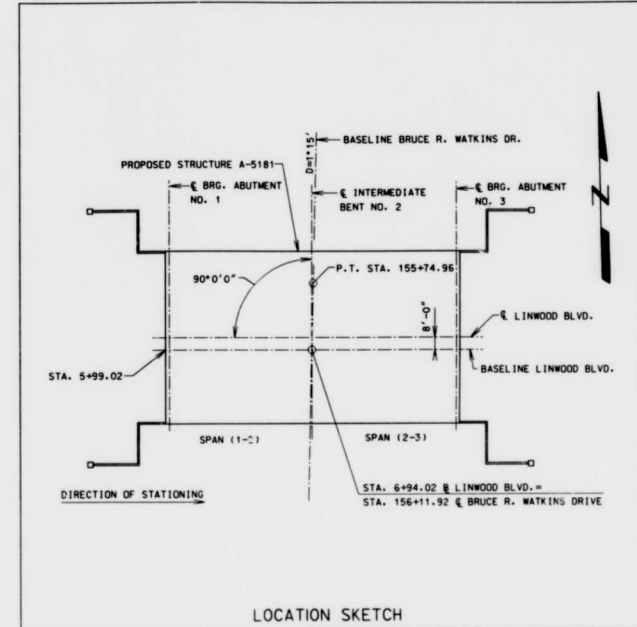
FOR INFORMATION ONLY

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

A51811, Sht. 3

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SEC./SUR. 21/22 TWP. 42N		RGE. 27W

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- 18 DETAILS ABUTMENT NO. 1 RIGHT RETAINING WALL (STA. 5+80.65)
- 19 DETAILS ABUTMENT NO. 1 RIGHT RETAINING WALL (STA. 5+69.73 TO STA. 5+78.82)
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- 36 DETAILS ABUTMENT NO. 3 LEFT RETAINING WALL (STA. 7+98.04 TO STA. 8+05.65)
- 37 DETAILS ABUTMENT NO. 3 LEFT RETAINING WALL (STA. 8+05.65)
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- 42 DETAILS ABUTMENT NO. 3 RIGHT RETAINING WALL (STA. 8+05.65)
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- 79 BILL OF REINFORCING STEEL
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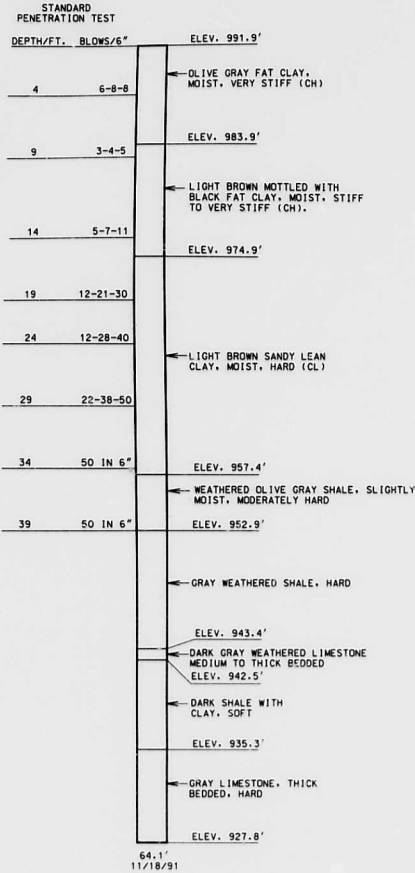


B.M. # 282 ELEV. 972.95
 "X" IN TOP FLANGE BOLT (ENE), FH ON
 W. SIDE EUCLID. MIDWAY BETWEEN 31 ST
 AND LINWOOD
 STA. 152+32 123' LT.

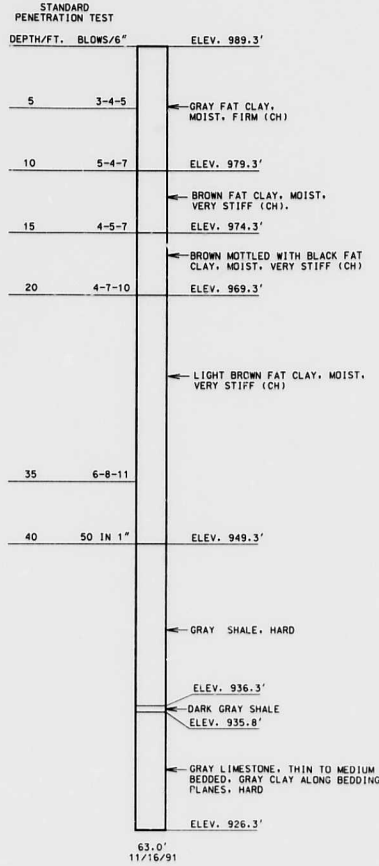
LINWOOD BLVD. OVER RELOCATED ROUTE 71
 BRUCE R. WATKINS DR.
 STATE ROAD FROM 31ST. STREET TO SPOPE PARKWAY
 IN KANSAS CITY
 PROJECT NO. STA. 156+11.92
 JOB NO. J4U001B RTE. 71

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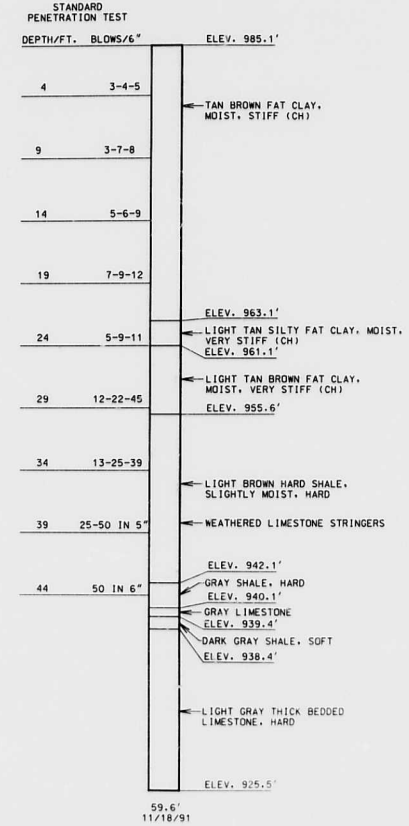
B81-5
STA. 155+57
124' RT @ BRW DRIVE



B81-4
STA. 156+70
2' LT @ BRW DRIVE



B81-1
STA. 155+62
108' LT @ BRW DRIVE

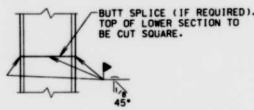


BORING DATA

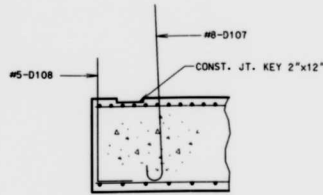
NOTE: FOR LOCATION OF BORINGS, SEE SHEET NO. 2. BORING DATA FOR ALL LOCATIONS IS AVAILABLE UPON REQUEST FROM THE DISTRICT OFFICE.



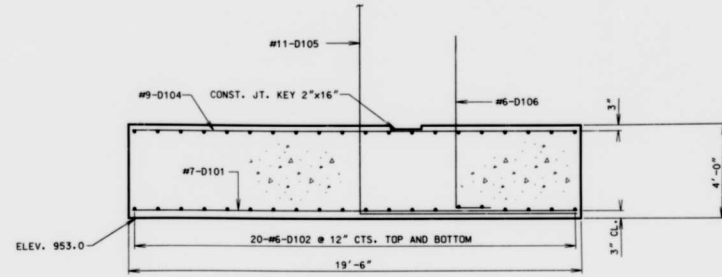
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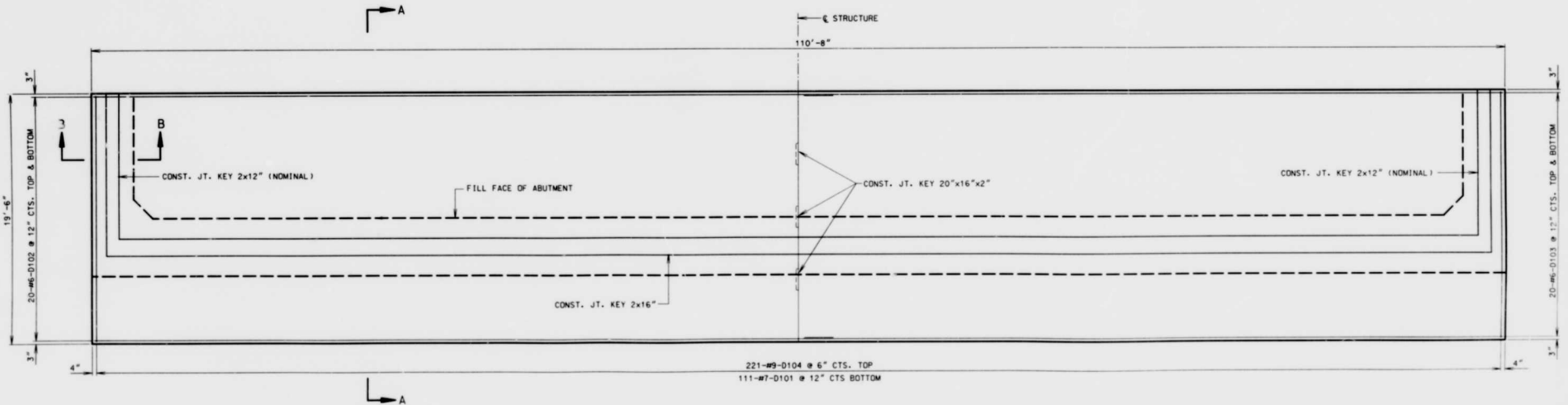
DETAIL OF STEEL PILE SPLICE



PART SECTION B-B



SECTION A-A



PLAN OF FOOTING AT ABUTMENT NO. 1

SUBSTRUCTURE QUANTITY TABLE FOR ABUTMENT NO. 1			
ABUTMENT		RETAINING WALLS	
ITEM	QUANTITY	ITEM	QUANTITY
CLASS 1 EXCAVATION	CU. YDS. 1.327	CLASS 1 EXCAVATION	CU. YDS. 1.224
CLASS B CONCRETE (SUBSTRUCTURE)	CU. YDS. 770.3	PRE-BORE FOR PILING	LIN. FT. 786
REINFORCING STEEL (BRIDGES)	LBS. 99,590	STRUCTURAL STEEL PILE (12")	LIN. FT. 1,370
REINFORCING STEEL (EPOXY COATED)	LBS. 3,470	CLASS B CONCRETE (SUBSTRUCTURE)	CU. YDS. 431.6
		REINFORCING STEEL (BRIDGES)	LBS. 47,390



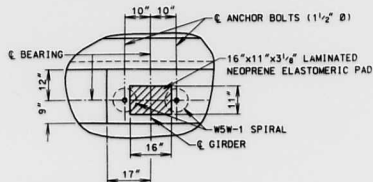
DETAILED MAR. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

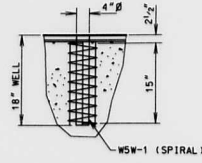
SHEET NO. 5 OF 81.

NOTE: FOR DETAILS OF ELEVATION A-A, SEE SHEET NO. 9.
 FOR DETAILS OF ELEVATION B-B, SEE SHEET NO. 10.
 FOR DETAILS OF STONE FACADE, SEE SHEET NO. 21, 22 & 23.
 FOR DETAILS OF LAMINATED NEOPRENE BEARING PADS, SEE SHEET NO. 54.
 FOR DETAILS OF STEEL PILE SPLICE, SEE SHEET NO. 5.
 TOP OF BACKWALL AND EXPANSION DEVICE FOR ABUTMENT NO. 1 & 3.
 SHALL CONFORM TO THE CROWN OF ROADWAY SLAB. BACKWALL ABOVE UPPER
 CONSTRUCTION JOINTS SHALL NOT BE POURED UNTIL THE SUPERSTRUCTURE SLAB
 HAS BEEN POURED IN THE ADJACENT SPAN.
 FOR DETAILS OF PARAPET WALLS, SEE SHEET NO. 68, 69 & 72.

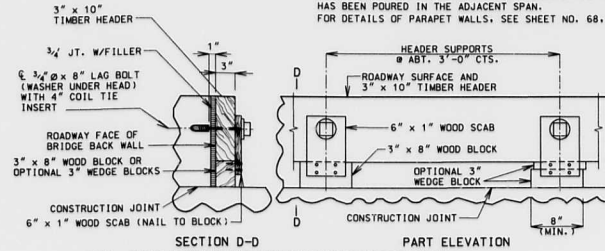
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DETAIL "A"

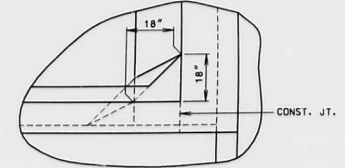


DETAIL OF ANCHOR BOLT WELLS

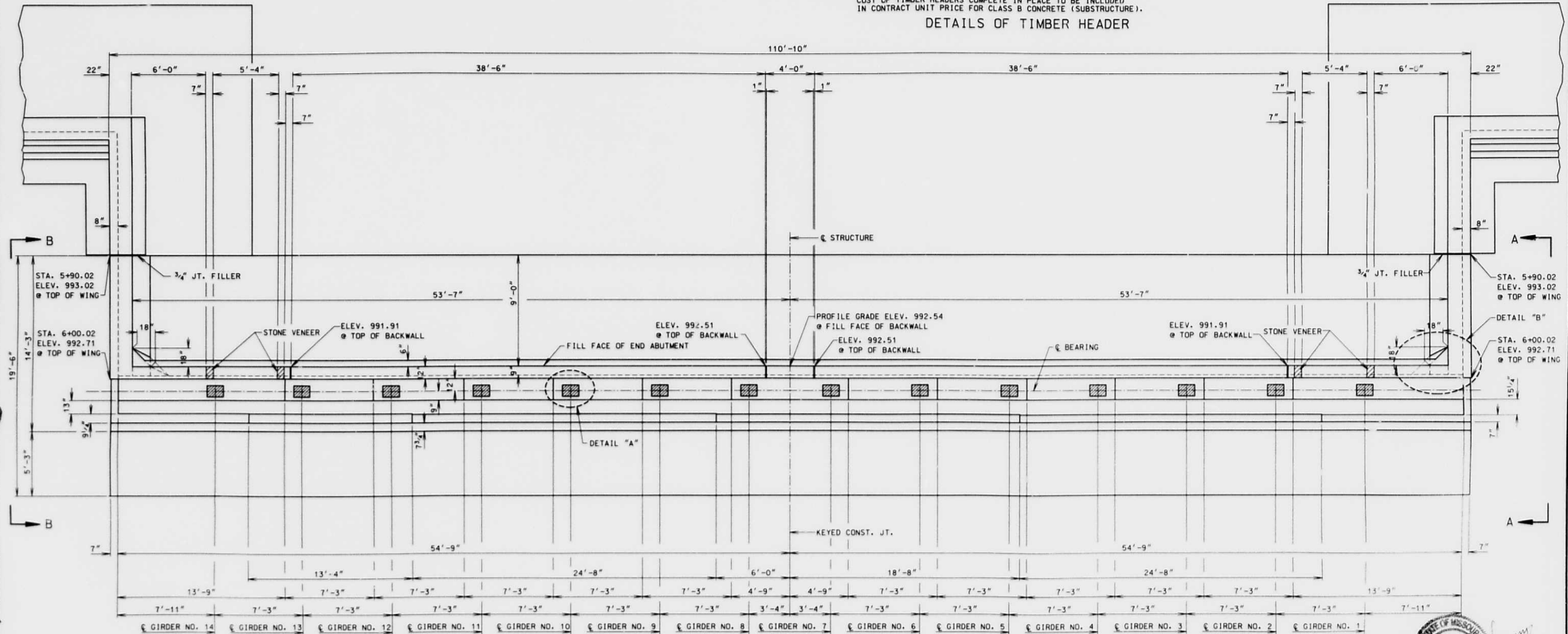


NOTE: REMOVE TIMBER HEADER WHEN CONCRETE PAVEMENT IS PLACED.
 COST OF TIMBER HEADERS COMPLETE IN PLACE TO BE INCLUDED
 IN CONTRACT UNIT PRICE FOR CLASS B CONCRETE (SUBSTRUCTURE).

DETAILS OF TIMBER HEADER



DETAIL "B"



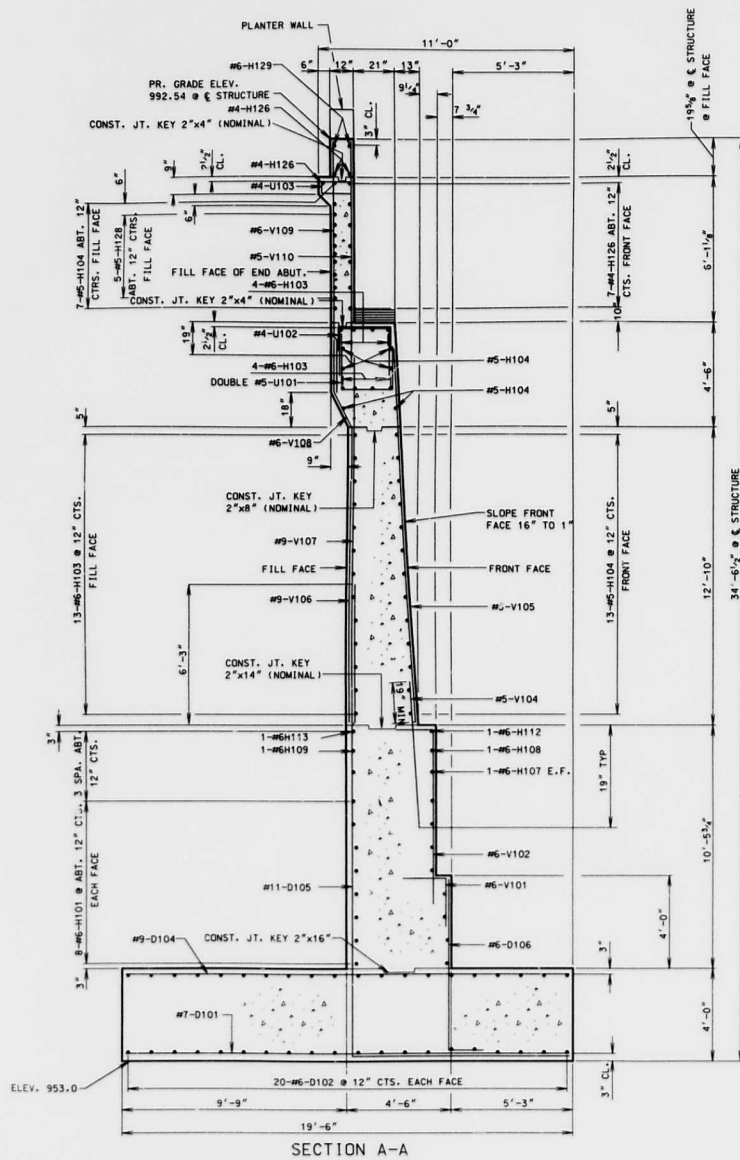
PLAN

DETAILS OF ABUTMENT NO. 1

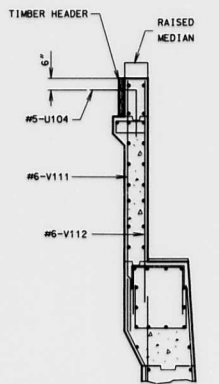


NOTE: FOR LOCATION OF SECTION A-A, B-B AND C-C SEE SHEET NO. 7
FOR TIMBER HEADER DETAILS SEE SHEET NO. 6

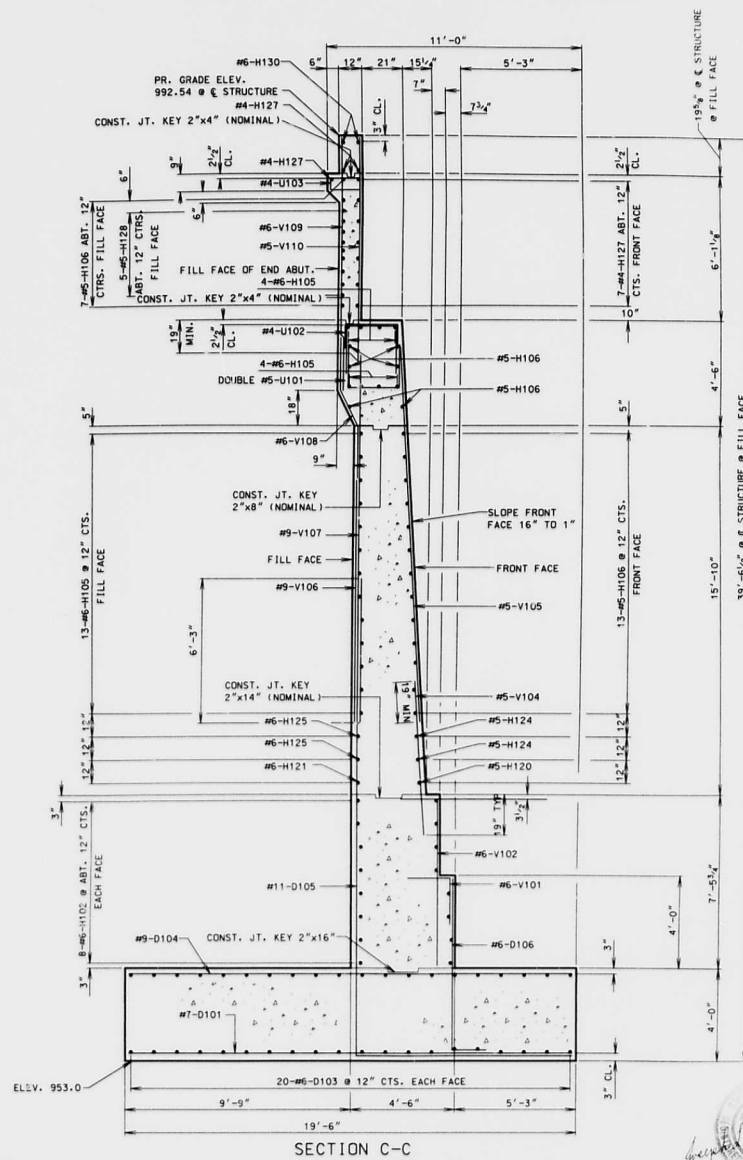
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SECTION A-A



PART SECTION B-B



SECTION C-C

DETAILS OF ABUTMENT NO. 1



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NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

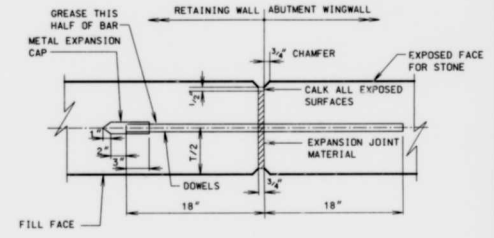
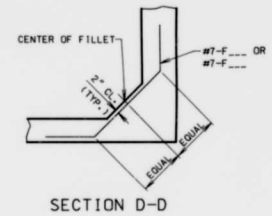
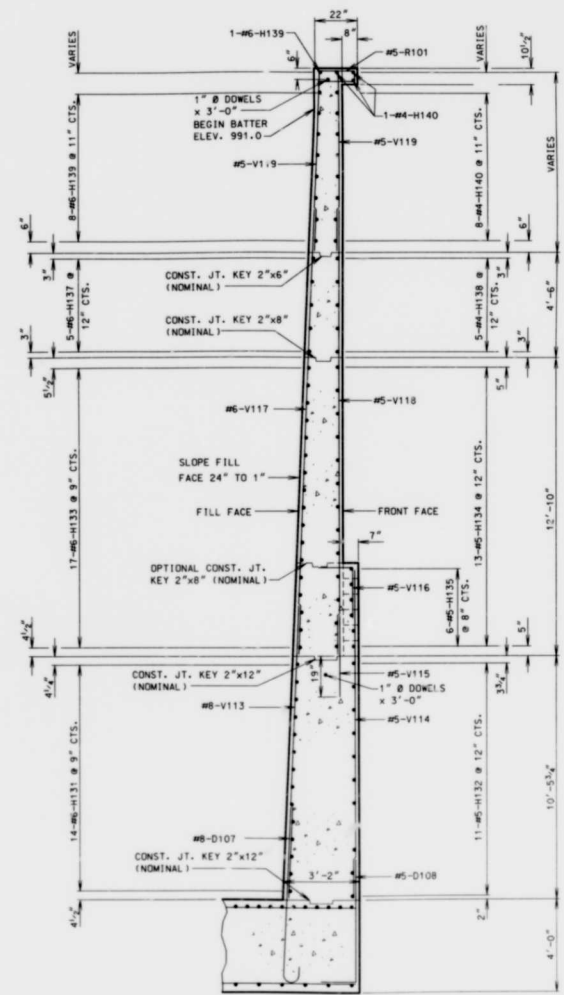
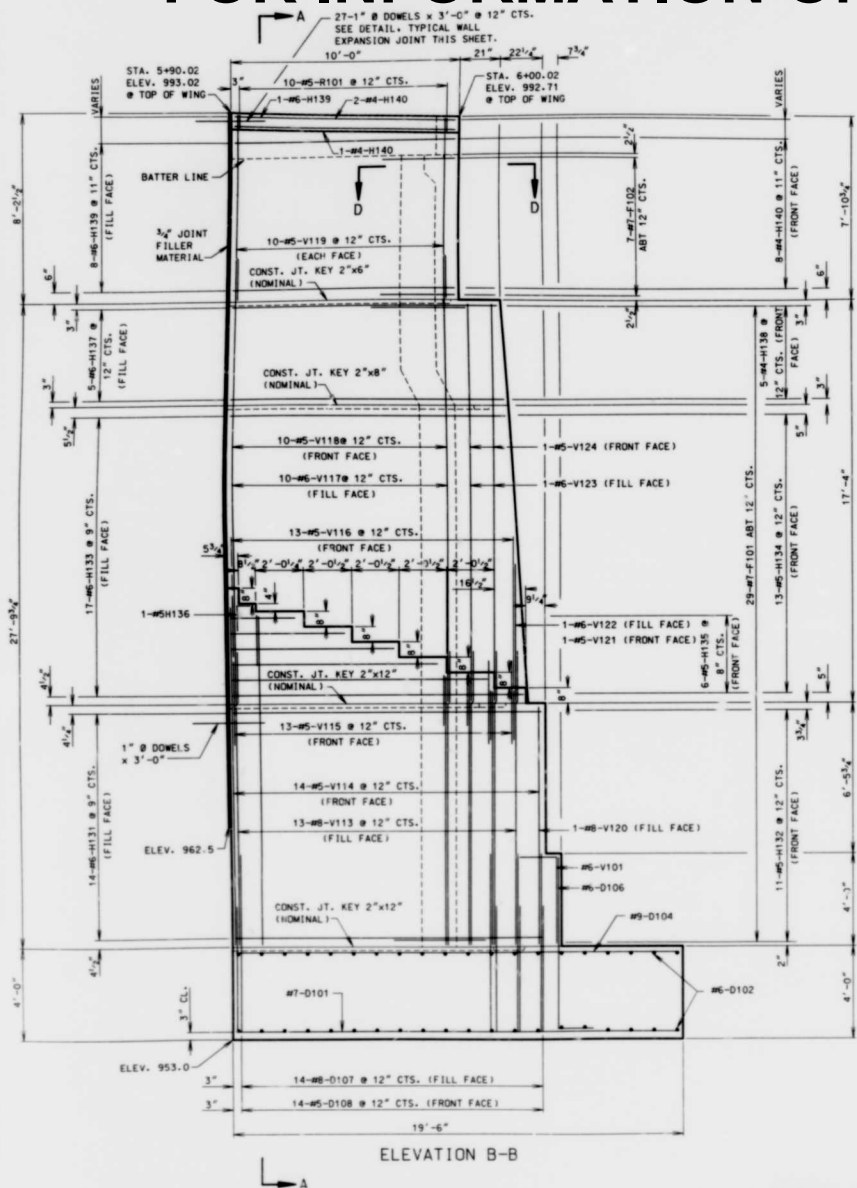
SHEET NO. 8 OF 81.

JACKSON

COUNTY

A-5181

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- NOTES:
1. PROVIDE 1" \emptyset DOWELS (GALV.) \emptyset 12" CTS. ACROSS JOINT
 2. WALL REINFORCING STEEL SHALL NOT BE EXTENDED ACROSS JOINT.
 3. DOWELS SHALL BE SMOOTH, GALVANIZED BARS WITH EXPANSION HALF GREASED.

DETAILS ABUTMENT NO. 1 RIGHT WINGWALL

NOTE: FOR DETAILS AND REINFORCEMENT OF PARAPET WALLS SEE SHEET NO'S. 69 & 72.

DETAILED MAR. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

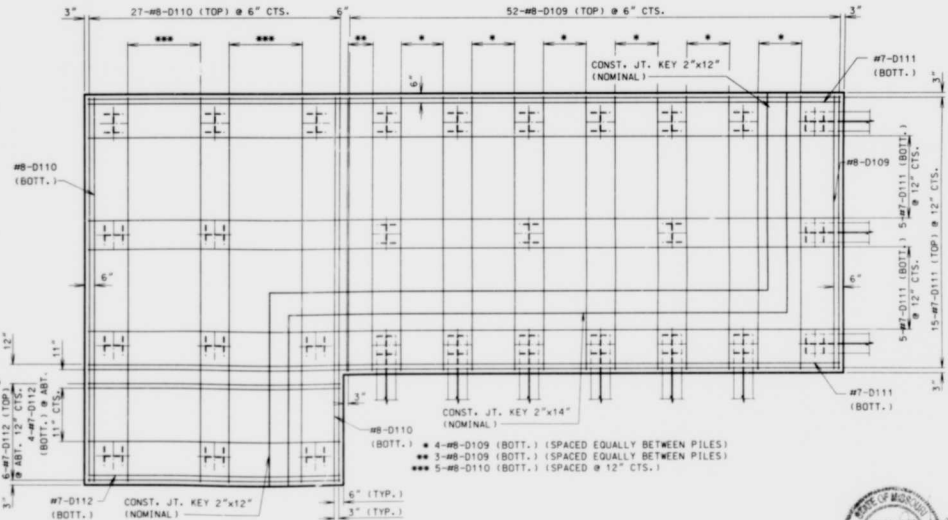
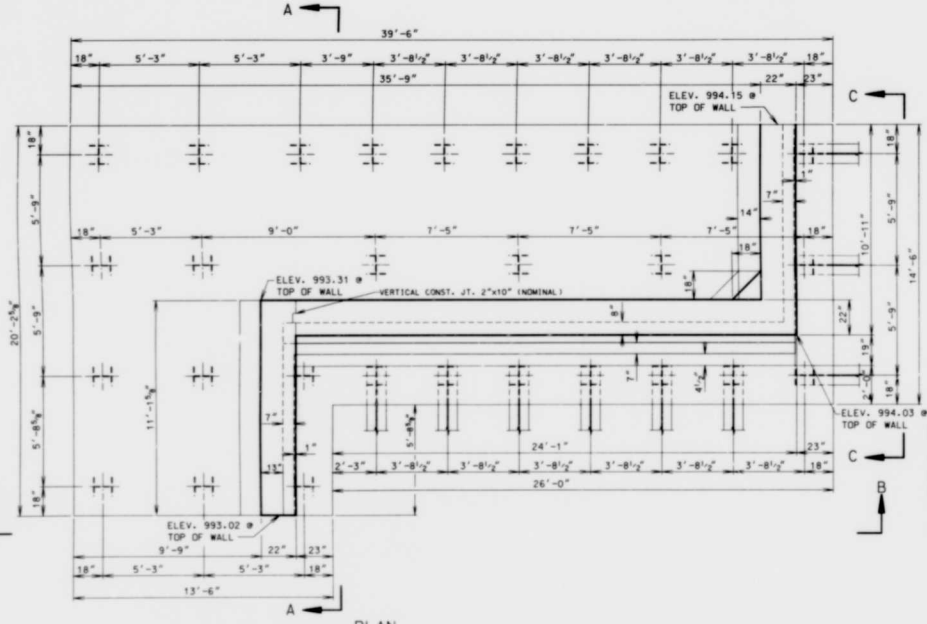
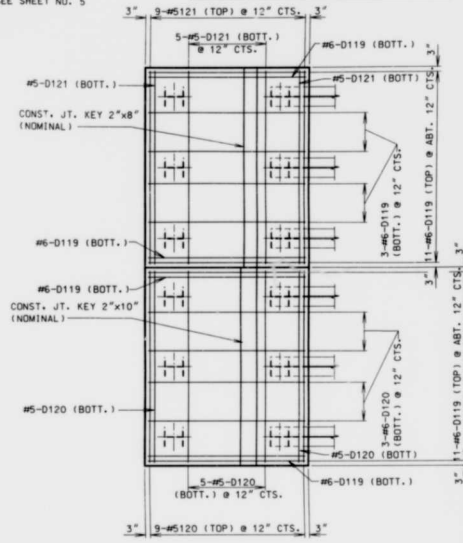
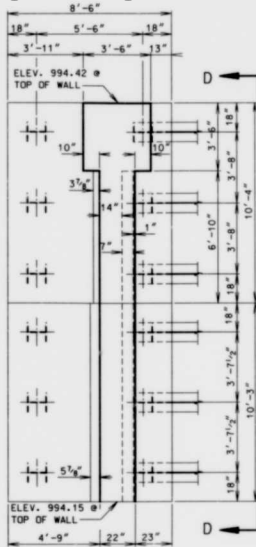
SHEET NO. 10 OF 81.

JACKSON COUNTY A-5181

1821 20101

NOTE: FOR DETAILS OF ELEVATION A-A, SEE SHEET NO. 12
 FOR DETAILS OF ELEVATION B-B, SEE SHEET NO. 13
 FOR DETAILS OF ELEVATION C-C, SEE SHEET NO. 14
 FOR DETAILS OF ELEVATION D-D, SEE SHEET NO. 15
 FOR DETAILS OF STEEL PILE SPLICE, SEE SHEET NO. 5

PROJECT NO.	172
SHEET NO.	11



DETAIL OF FOOTING SHOWING REINFORCEMENT

DETAILS OF ABUTMENT NO. 1 LEFT RETAINING WALL FOOTING

DETAILED MAR. 1995
 CHECKED MAR. 1995

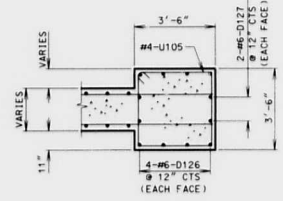
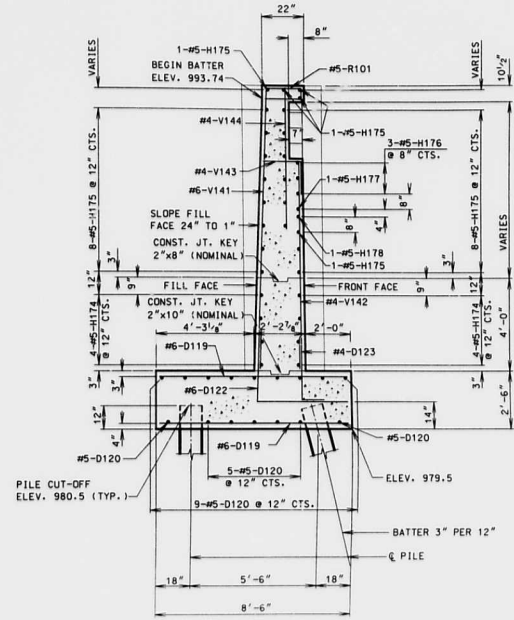
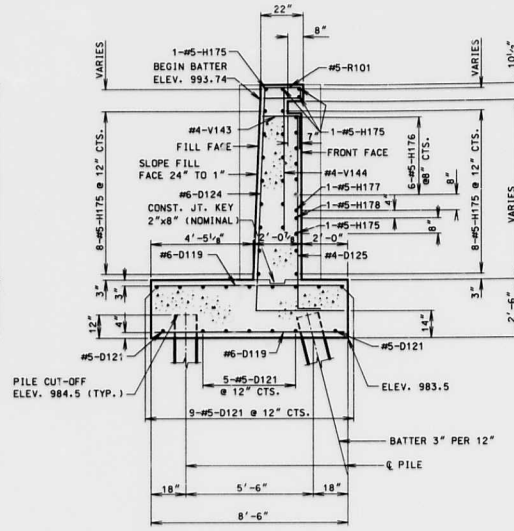
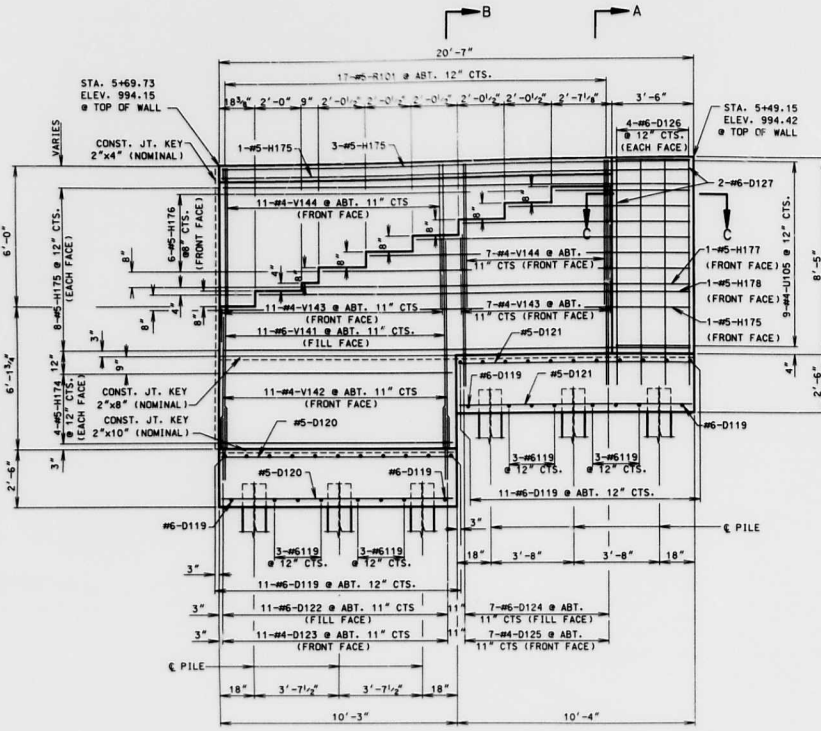
NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 11 OF 81.

JACKSON COUNTY A-5181



1821 24 to 1



DETAILS ABUTMENT NO. 1 LEFT RETAINING WALL (STA. 5+49.15 TO STA. 5+69.73)

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 15 OF 81.

JACKSON COUNTY A-5181

Joseph P. Richman

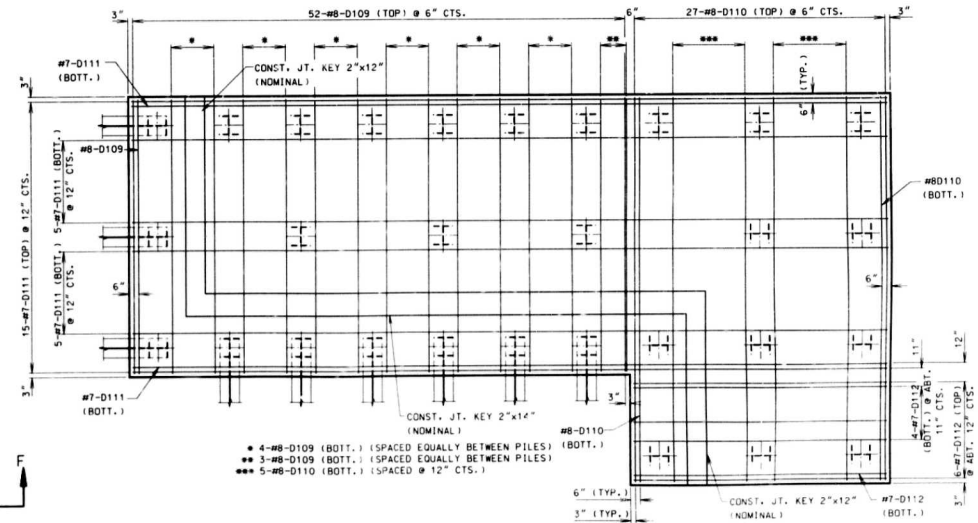
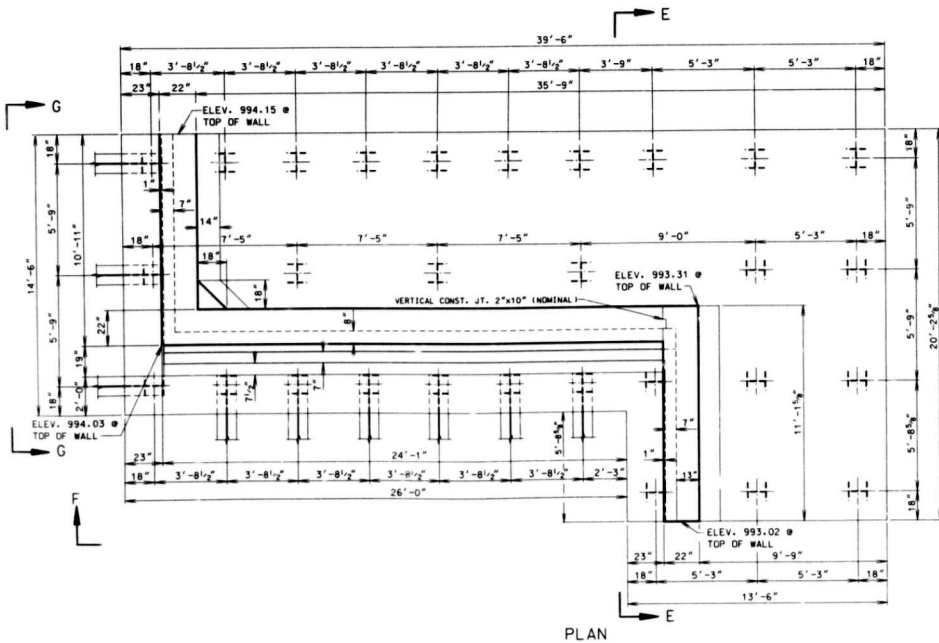
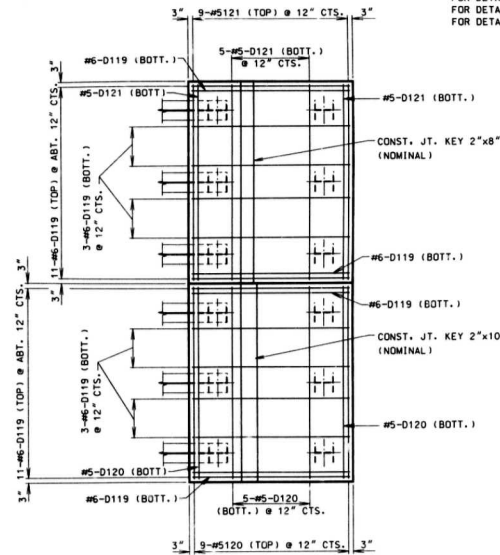
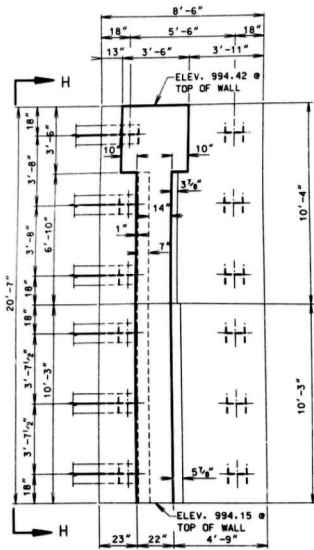
NOTE: FOR DETAILS AND REINFORCEMENT OF PARAPET WALL SEE SHEET NO'S. 68 & 72.

DETAILED MAR. 1995
CHECKED MAR. 1995

1821 20 to 1

NOTE: FOR DETAILS OF ELEVATION E-E, SEE SHEET NO. 17
 FOR DETAILS OF ELEVATION F-F, SEE SHEET NO. 18
 FOR DETAILS OF ELEVATION G-G, SEE SHEET NO. 19
 FOR DETAILS OF ELEVATION H-H, SEE SHEET NO. 20
 FOR DETAILS OF STEEL PILE SPlice, SEE SHEET NO. 5

STATE	PROJ. NO.	SHEET NO.
MO.		177



DETAIL OF FOOTING SHOWING REINFORCEMENT

DETAILS OF ABUTMENT NO. 1 RIGHT RETAINING WALL FOOTING

DETAILED MAR. 1995
 CHECKED MAR. 1995

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 16 OF 81.

JACKSON COUNTY

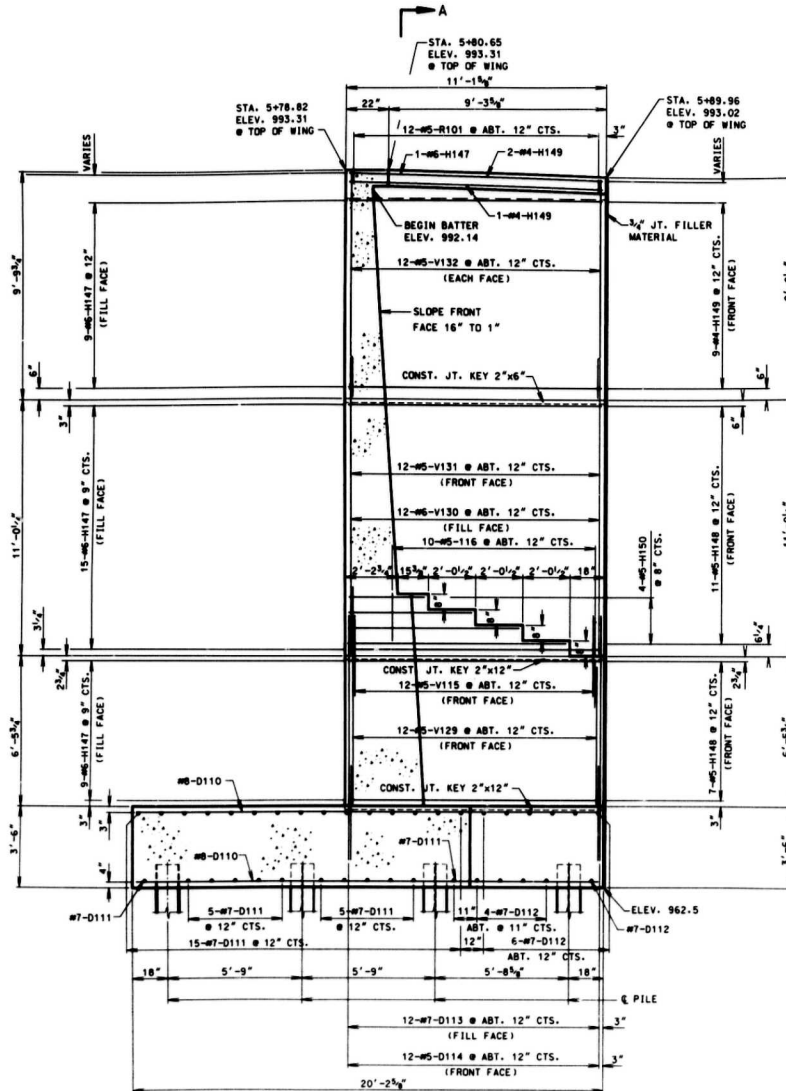
A-5181



1821

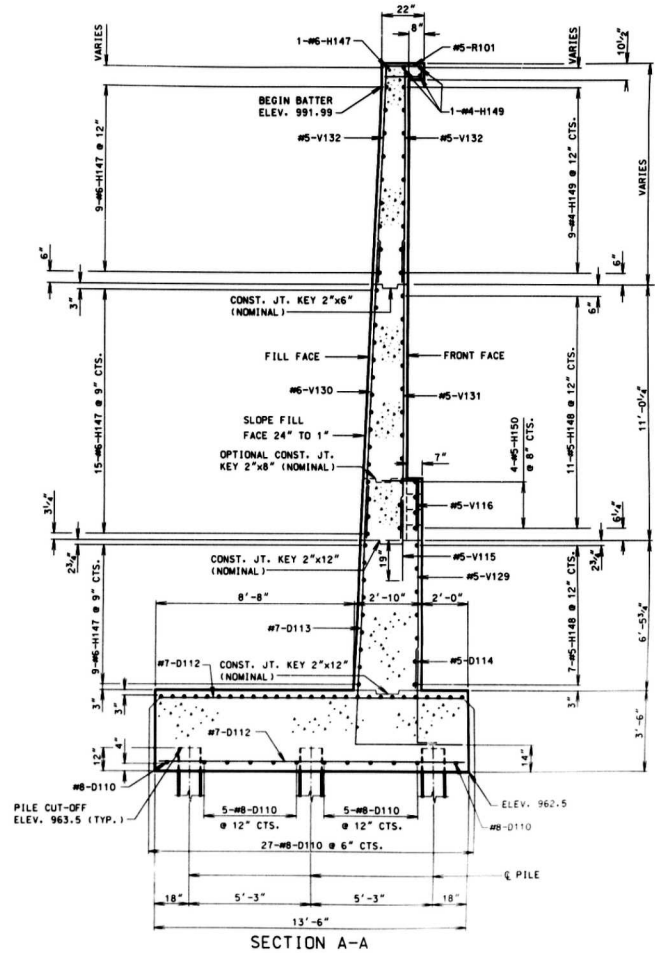
NOTE: FOR LOCATION OF ELEVATION E-E, SEE SHEET NO. 16

STATE	PROJ. NO.	SHEET NO.
MD.		17B



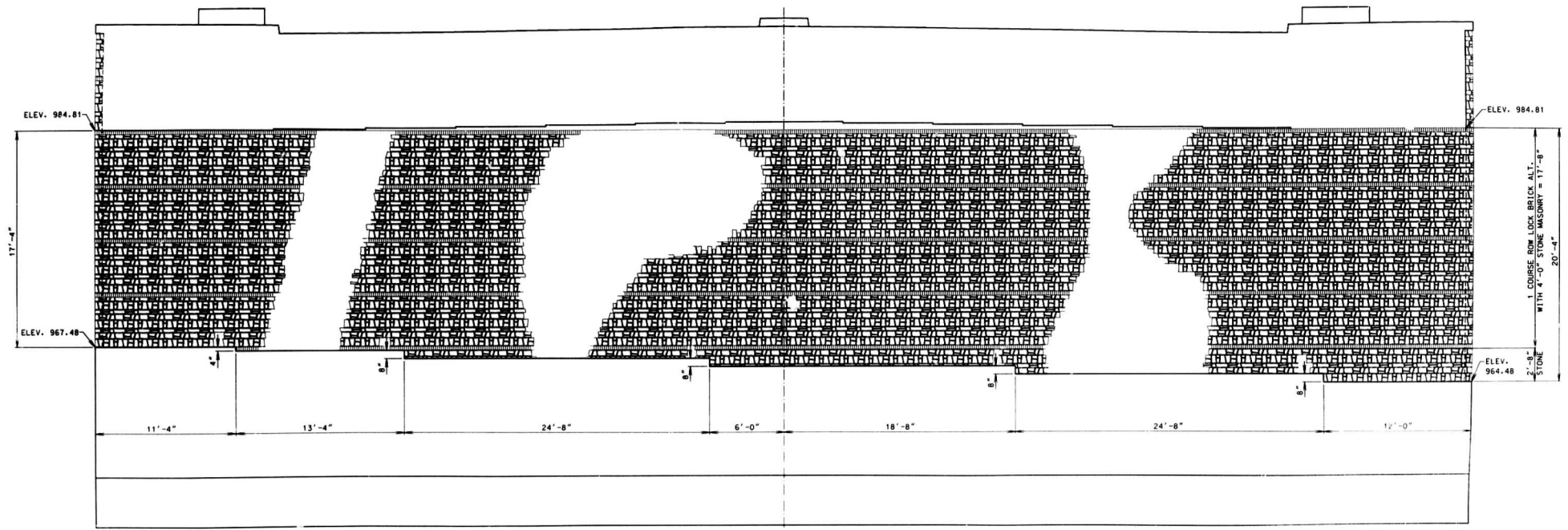
ELEVATION E-E

DETAILS ABUTMENT NO. 1 RIGHT RETAINING WALL (STA. 5+78.82 TO STA. 5+89.96)



SECTION A-A

NOTE: FOR DETAILS AND REINFORCEMENT OF PARAPET WALLS SEE SHEET NO.'S 69 & 72.



ELEVATION SHOWING STONE FACADE AND BRICKING DETAILS



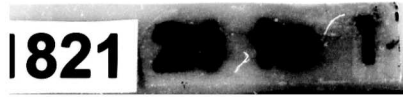
NOTE: SEE SPECIAL PROVISIONS FOR CONSTRUCTION OF STONE FACADE.

DETAILS OF STONE FACADE AT ABUTMENT NO. 1

DETAILED MAR. 1995
CHECKED MAR. 1995

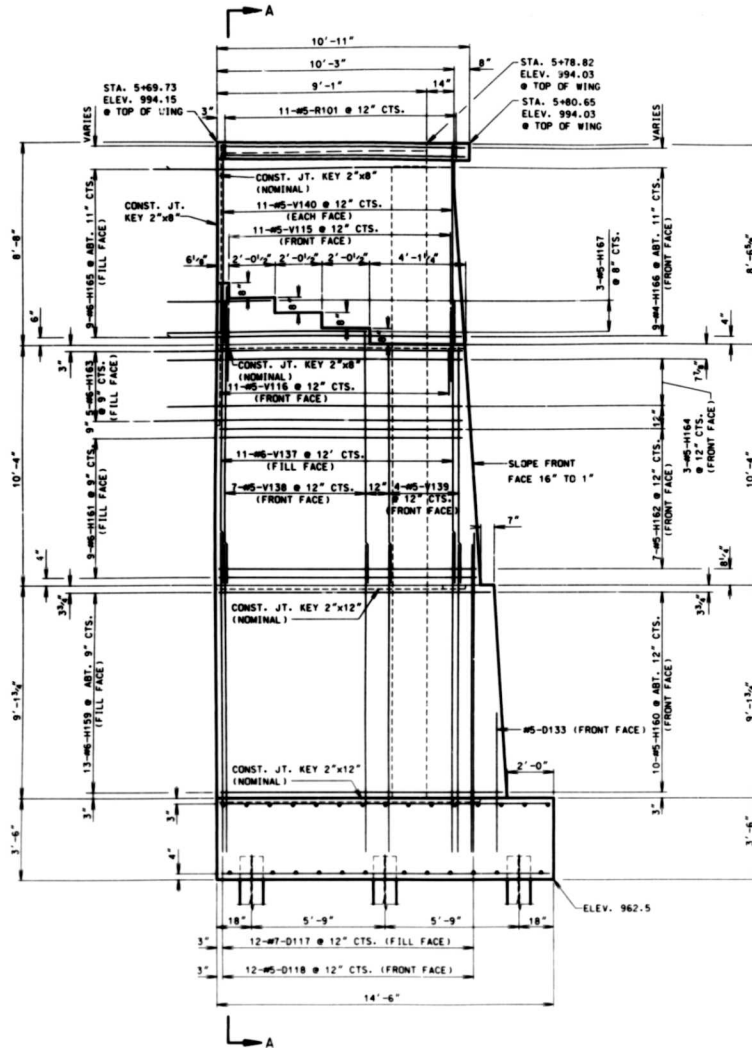
NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 21 OF 81.

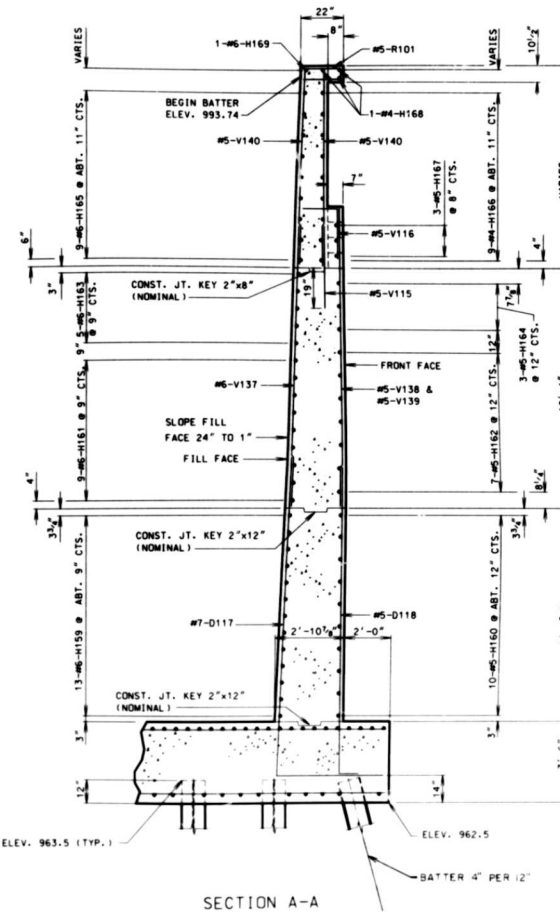


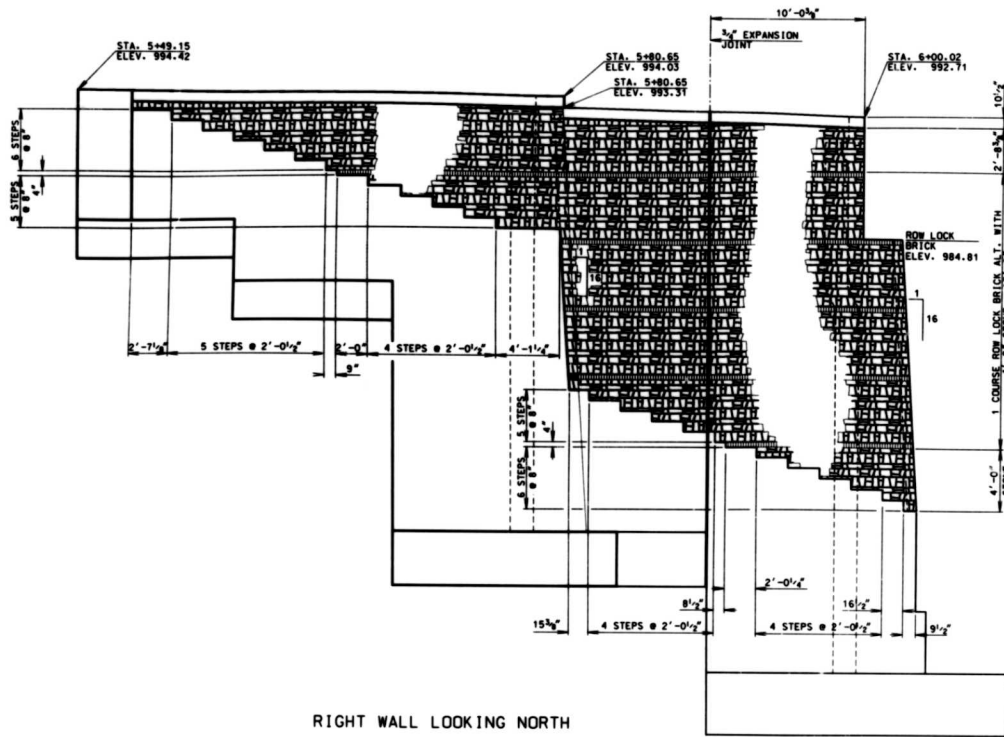
NOTE: FOR LOCATION OF ELEVATION G-G, SEE SHEET NO. 16
FOR REINFORCING IN FOOTING. SEE SHEET NO. 18

STATE	PROJ. NO.	SHEET NO.
MD.		180

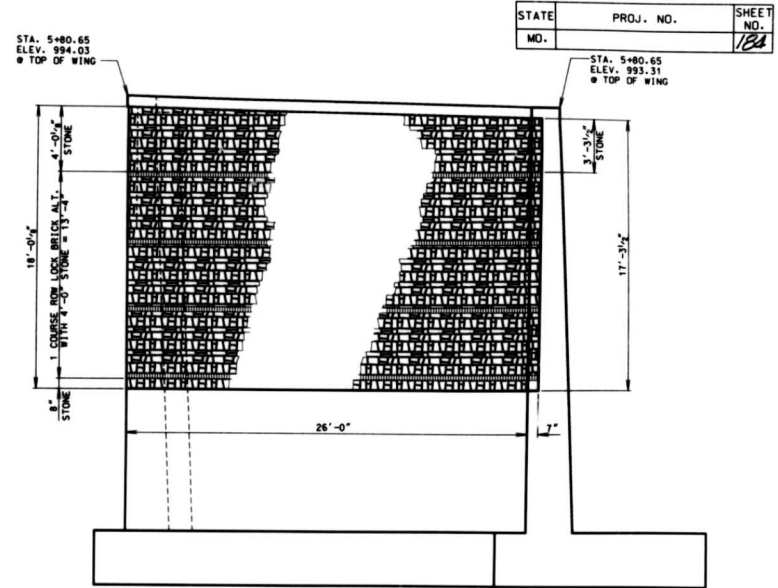


ELEVATION G-G





RIGHT WALL LOOKING NORTH



RIGHT WALL LOOKING WEST

STATE	PROJ. NO.	SHEET NO.
MD.		18A

NOTE: SEE SPECIAL PROVISIONS FOR CONSTRUCTION OF STONE FACADE.

DETAILS OF STONE FACADE AT RIGHT WALL OF ABUTMENT NO. 1



DETAILED MAR. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

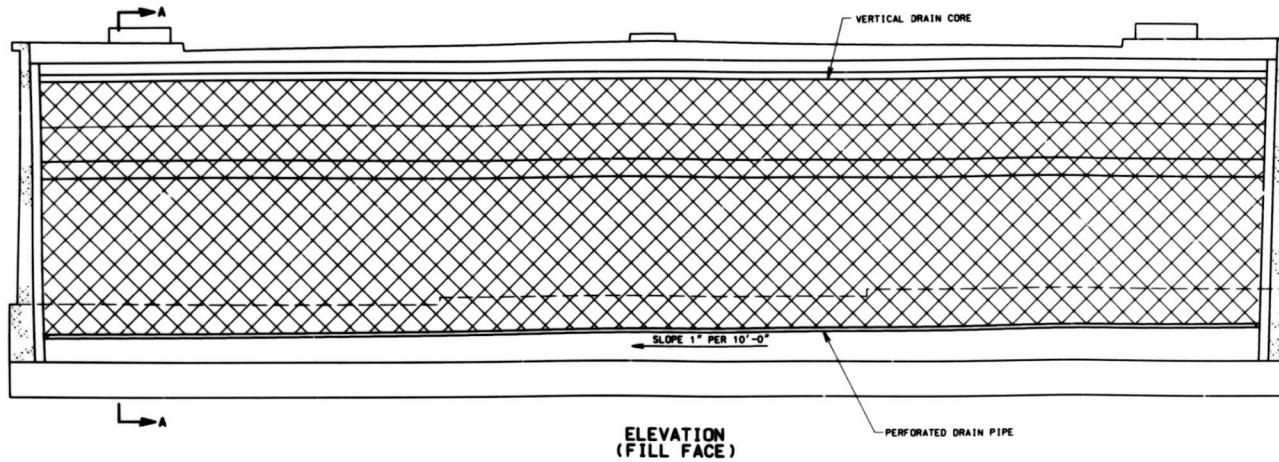
SHEET NO. 23 OF 81.

JACKSON

COUNTY

A-5181

STATE	PROJ. NO.	SHEET NO.
MO.		185



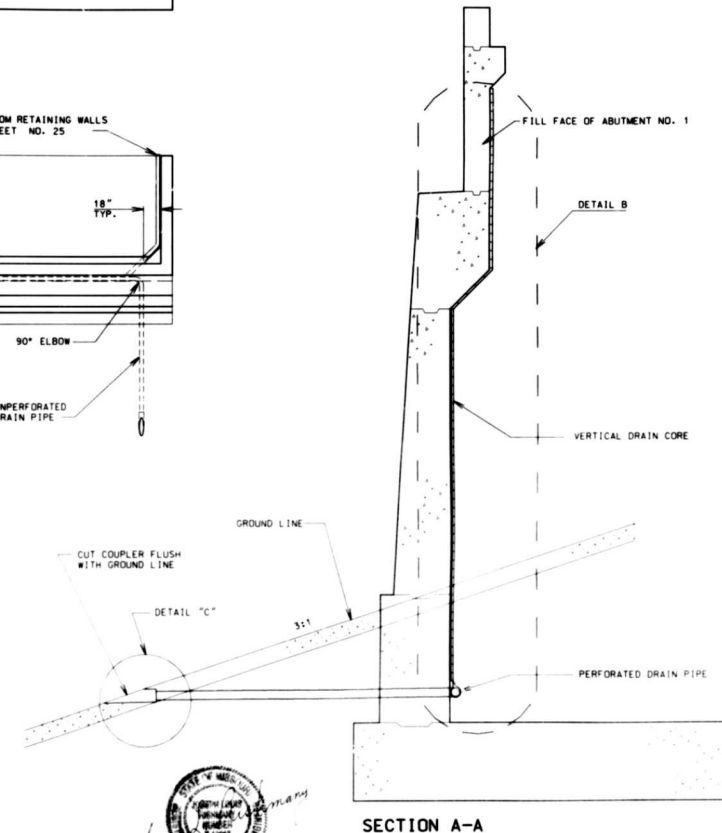
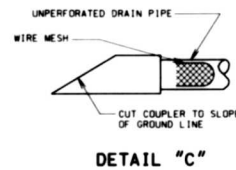
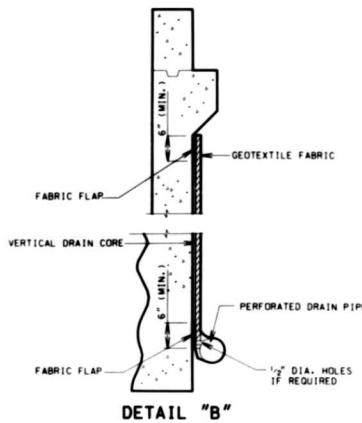
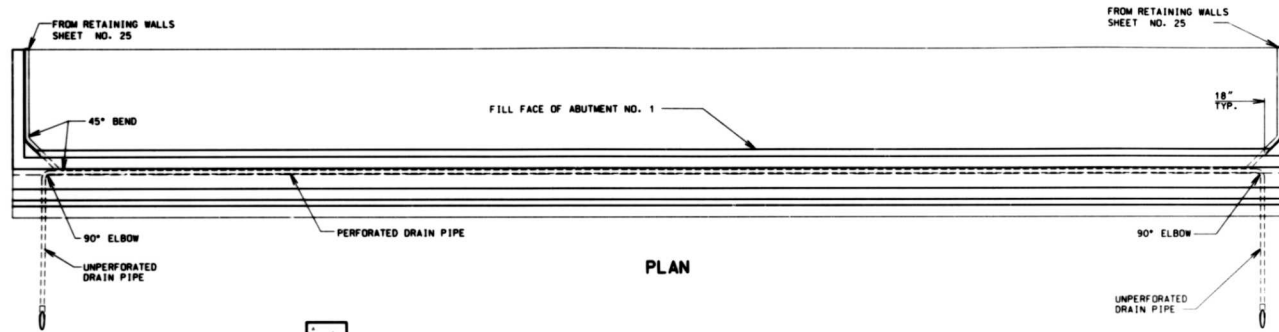
GENERAL NOTES:

DRAIN PIPE MAY BE EITHER 6" DIAMETER CORRUGATED METALLIC-COATED STEEL PIPE UNDERDRAIN, 4" DIAMETER CORRUGATED POLYVINYL CHLORIDE (PVC) DRAIN PIPE, OR 4" DIAMETER CORRUGATED POLYETHYLENE (PE) DRAIN PIPE.

PLACE DRAIN PIPE AT FILL FACE OF ABUTMENT AND SLOPE TO LOWEST GRADE OF GROUND LINE. ALSO MISSING THE ABUTMENT FOOTING OF ABUTMENT BY 1-1/2". (SEE ELEVATION AT ABUTMENT.)

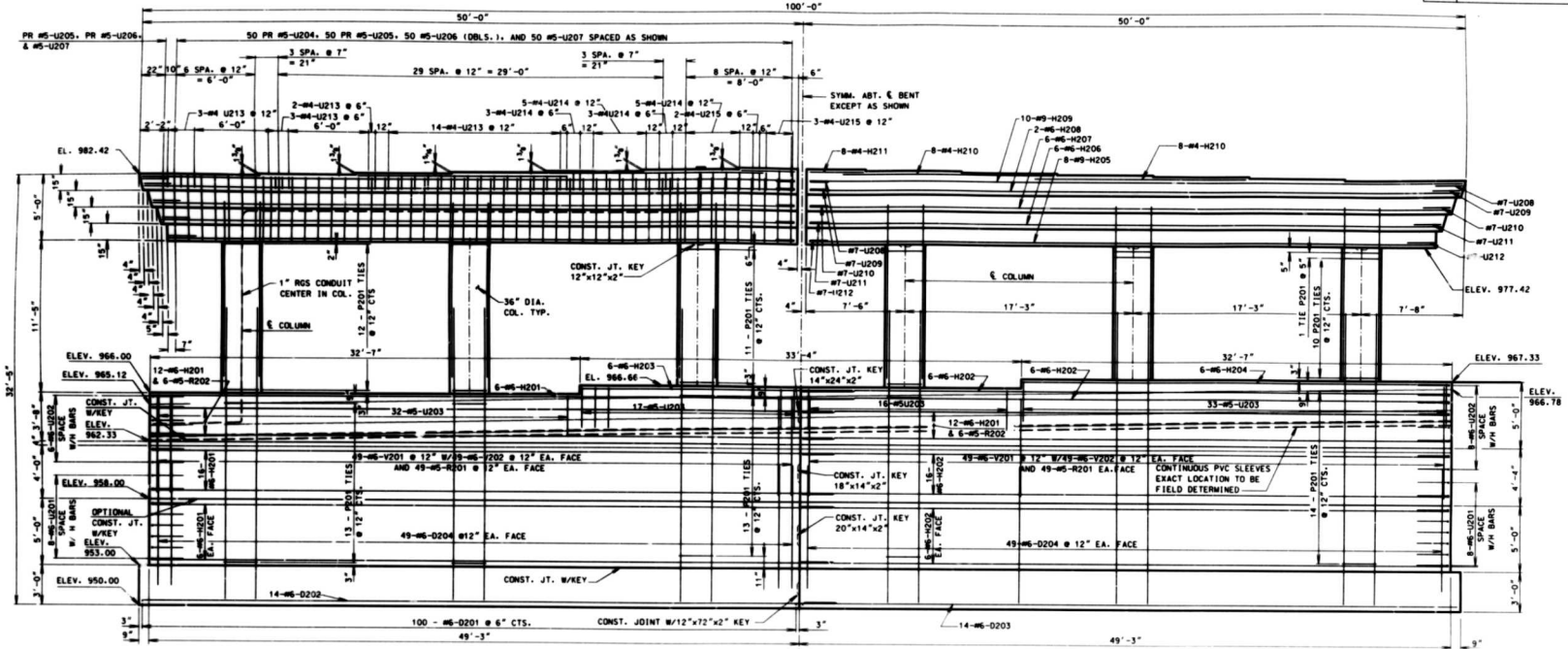
PERFORATED PIPE SHALL BE PLACED AT FILL FACE SIDE AT THE BOTTOM OF ABUTMENT AND PLAIN PIPE SHALL BE USED WHERE THE VERTICAL DRAIN ENDS TO THE EXIT AT GROUND LINE.

SHIFT REINFORCING BARS IN WALL TO MISS THE DRAIN PIPE IF NECESSARY.

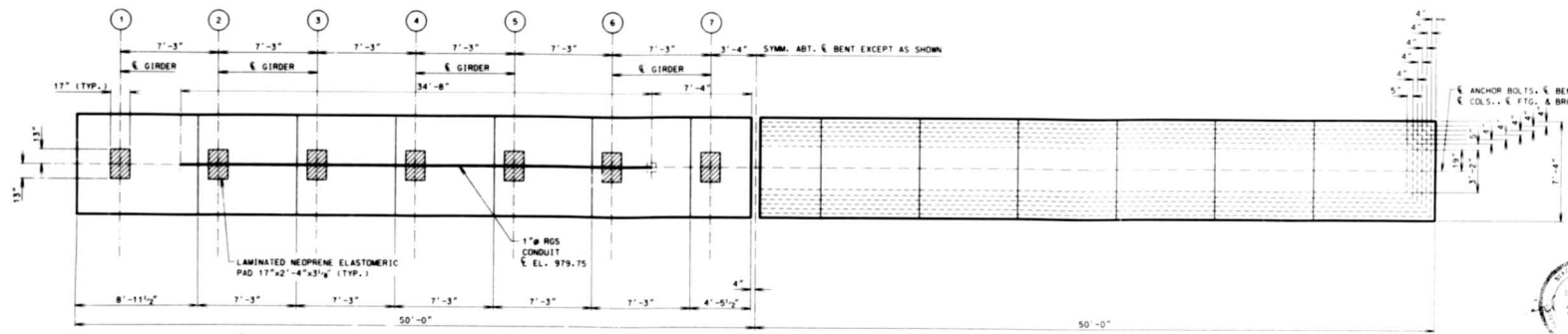


VERTICAL DRAIN AT BACKWALL OF ABUTMENT NO. 1

SECTION A-A



ELEVATION



PLAN OF BEAM SHOWING BEARINGS

PLAN OF BEAM

DETAILS OF INTERMEDIATE BENT NO. 2

DETAILED MAR. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 26 OF 81.

JACKSON

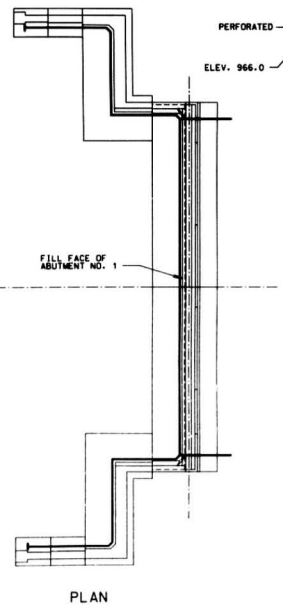
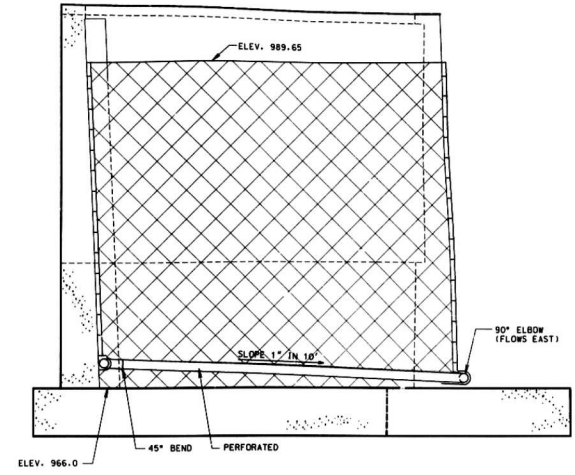
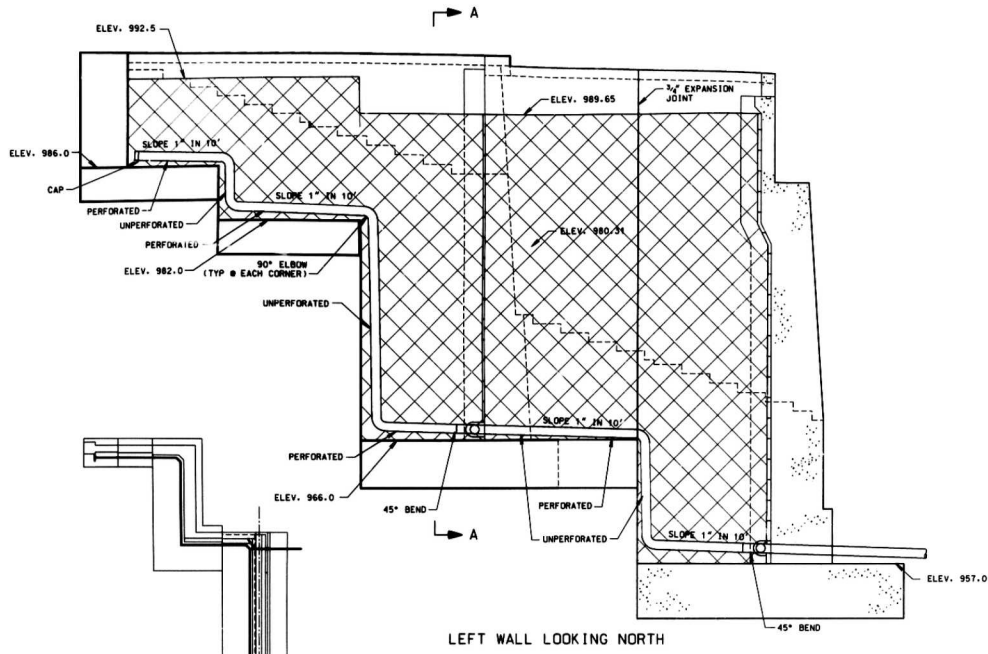
COUNTY

A-5181

277 236

1821

STATE	PROJ. NO.	SHEET NO.
MO.		186



VERT. DRAIN CORE W/ GEOTEXTILE FABRIC AS SHOWN ON SH. NO. 24 (INSTALLED ON LINWOOD BLVD. FILL SIDE)

DETAILS OF VERTICAL DRAIN AT LEFT WINGWALL AND RETAINING WALLS OF ABUTMENT NO. 1*

NOTE * RIGHT WALL SIMILAR BUT OPPOSITE HAND

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 25 OF 81

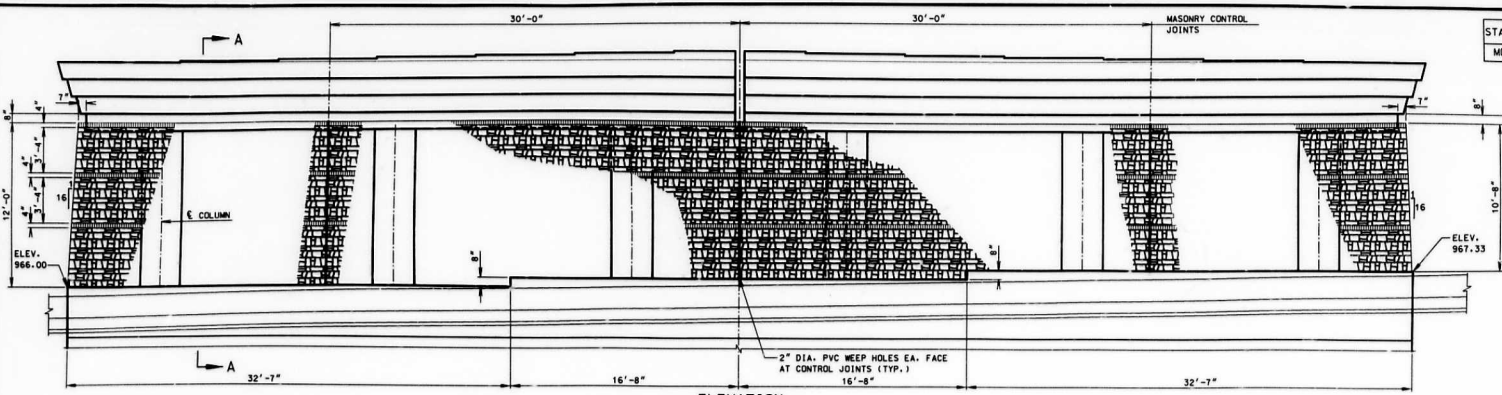
JACKSON COUNTY A-5181



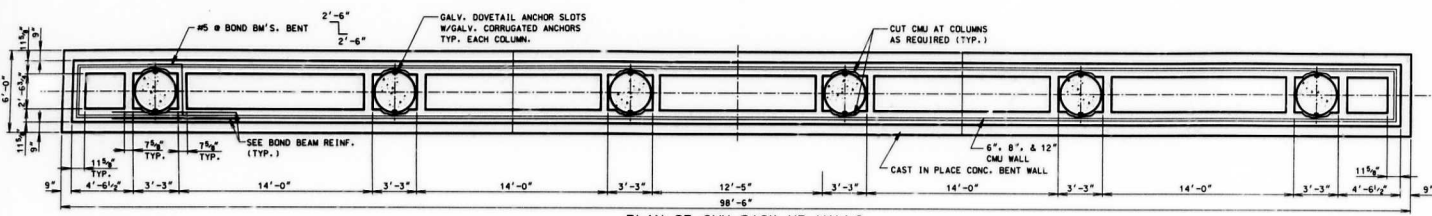
555
2/25

1821

STATE	PROJ. N.O.	SHEET NO.
MD.		189



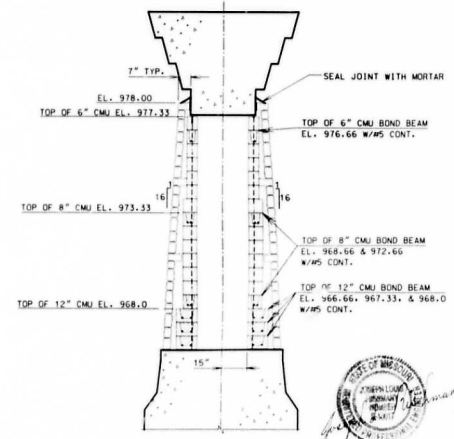
ELEVATION



PLAN OF CMU BACK UP WALLS

NOTE:

- PROVIDE WEEP HOLES AT LEDGE NOT TO EXCEED 16" D.C.
- SECURE STONE FACADE TO CMU BACKING WITH FLEXIBLE ANCHORS SPACED AT NOT MORE THAN 16" D.C. VERTICALLY AND 2'-0" D.C. HORIZONTALLY.
- ANCHORS SHALL BE DOWELTAIL ANCHORS AT COLUMNS AND ANCHOR STRAPS AT CMU BACK UP WALL. (SEE SPECIAL PROVISIONS.)
- PROVIDE TWO PIECE ANCHORS WHICH PERMIT VERTICAL AND HORIZONTAL MOVEMENT BUT PROVIDE LATERAL RESTRAINT OF MASONRY.
- TIES SHALL BE CORRUGATED STRAPS NOT LESS THAN 12 GAGE OR TRIANGULAR WIRE TIES NOT LESS THAN 3/8" DIAMETER AS DETERMINED BY THE ENGINEER. LENGTH OF TIES SHALL BE AS REQUIRED FOR EMBEDMENT IN WYTHES OF MASONRY.
- BLOCK LEDGE FOR SUPPORT OF CMU AND STONE SHALL BE STEPPED.
- PROVIDE EXPANSION, CONTROL AND ISOLATION JOINTS TO ACCOMMODATE MOVEMENT IN MASONRY WORK. (SEE SPECIAL PROVISIONS)
- PROVIDE SEALER AND ANTI-GRAFFITI COATING ON ALL STONE AND MORTAR. (SEE SPECIAL PROVISIONS)
- CMU = CONCRETE MASONRY UNIT



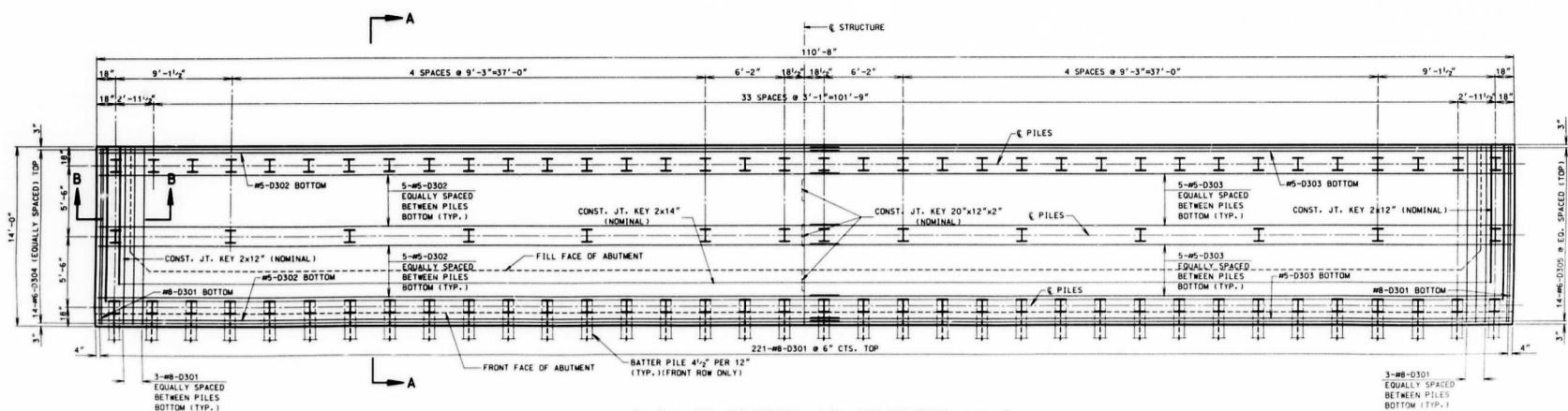
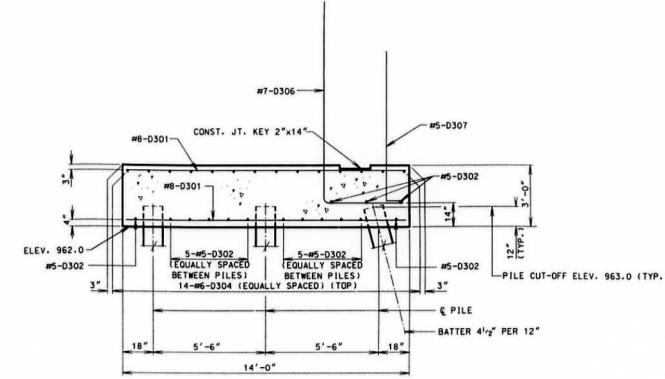
SECTION A-A

DETAILS OF STONE FACADE AT INTERMEDIATE BENT NO. 2



244 258

STATE	PROJ. NO.	SHEET NO.
MO.		170



215 518

PLAN OF FOOTING AT ABUTMENT NO. 3

SUBSTRUCTURE QUANTITY TABLE FOR ABUTMENT NO. 3			
ABUTMENT		RETAINING WALLS	
ITEM	QUANTITY	ITEM	QUANTITY
CLASS 1 EXCAVATION	CU. YDS. 582	CLASS 1 EXCAVATION	CU. YDS. 665
PRE-BORE FOR PILING	LIN. FT. 885	PRE-BORE FOR PILING	LIN. FT. 1,127
STRUCTURAL STEEL PILE (12")	LIN. FT. 358	STRUCTURAL STEEL PILE (12")	LIN. FT. 1,848
CLASS B CONCRETE (SUBSTRUCTURE)	CU. YDS. 407.1	CLASS B CONCRETE (SUBSTRUCTURE)	CU. YDS. 292.5
REINFORCING STEEL (BRIDGES)	LBS. 43,710	REINFORCING STEEL (BRIDGES)	LBS. 28,400
REINFORCING STEEL (EPOXY COATED)	LBS. 3,470		



DETAILED MAR. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

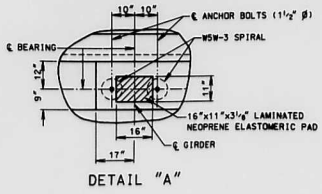
SHEET NO. 29 OF 81.

JACKSON COUNTY A-5181

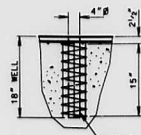
1821 20 11

STATE	PROJ. NO.	SHEET NO.
MO.		191

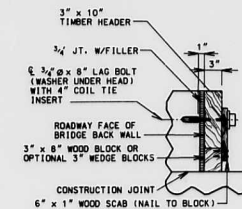
NOTE: FOR DETAILS OF ELEVATION A-A, SEE SHEET NO. 32.
 FOR DETAILS OF ELEVATION B-B, SEE SHEET NO. 33.
 FOR DETAILS OF STONE FACADE, SEE SHEET NO. 21, 22 & 23.
 FOR DETAILS OF LAMINATED NEOPRENE BEARING PADS, SEE SHEET NO. 54.
 FOR DETAILS OF STEEL PILE SPLICE, SEE SHEET NO. 29.
 TOP OF BACKWALL AND EXPANSION DEVICE FOR ABUTMENT NO. 1 & 3.
 SHALL CONFORM TO THE CROWN OF ROADWAY SLAB, BACKWALL ABOVE UPPER
 CONSTRUCTION JOINTS SHALL NOT BE POURED UNTIL THE SUPERSTRUCTURE SLAB
 HAS BEEN POURED IN THE ADJACENT SPAN.
 FOR DETAILS OF PARAPET WALLS, SEE SHEET NO. 70, 71 & 72.



DETAIL "A"



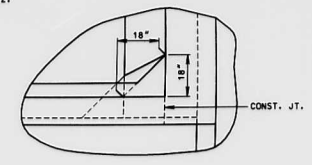
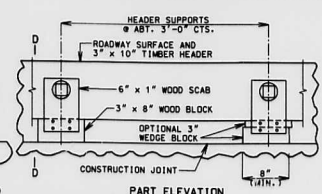
DETAIL OF ANCHOR BOLT WELLS



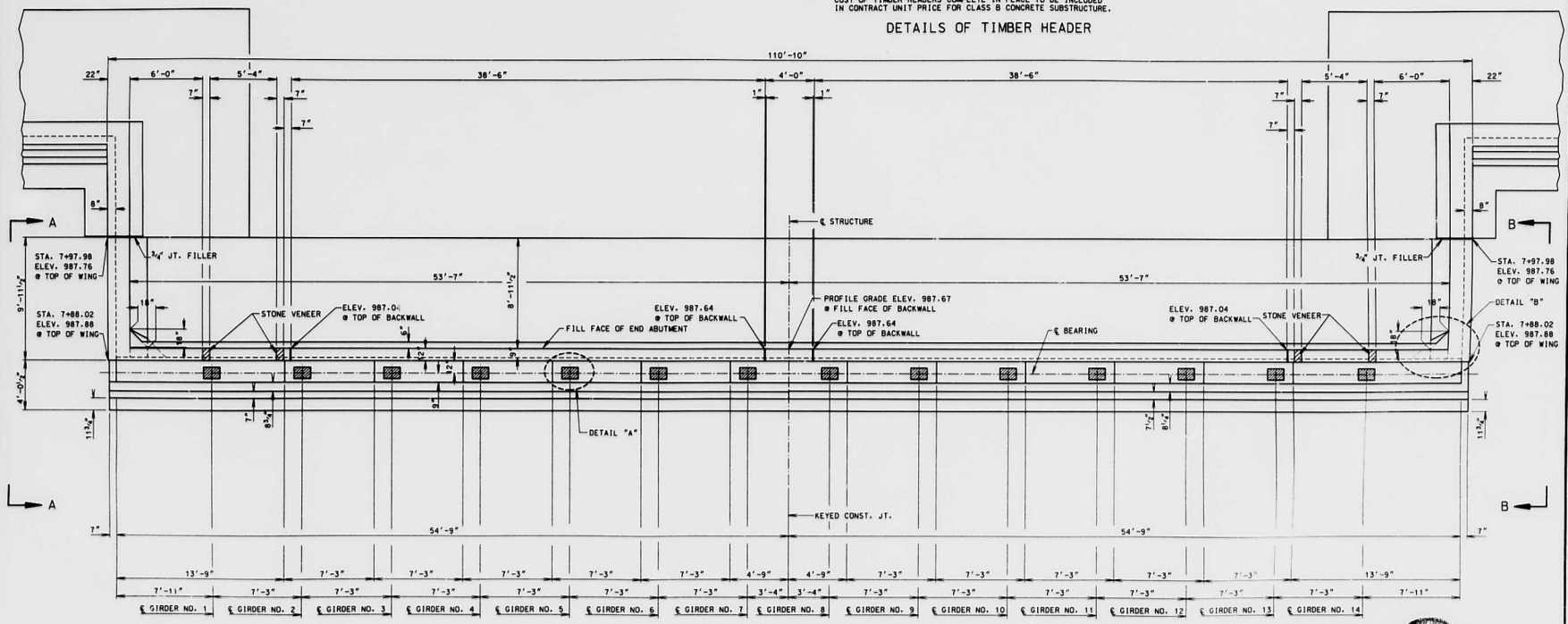
SECTION D-D PART ELEVATION

NOTE: REMOVE TIMBER HEADERS WHEN CONCRETE PAVEMENT IS PLACED.
 COST OF TIMBER HEADERS COMPLETE IN PLACE TO BE INCLUDED
 IN CONTRACT UNIT PRICE FOR CLASS B CONCRETE SUBSTRUCTURE.

DETAILS OF TIMBER HEADER



DETAIL "B"



PLAN

DETAILS OF ABUTMENT NO. 3



DETAILED MAR. 1995
 CHECKED MAR. 1995

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

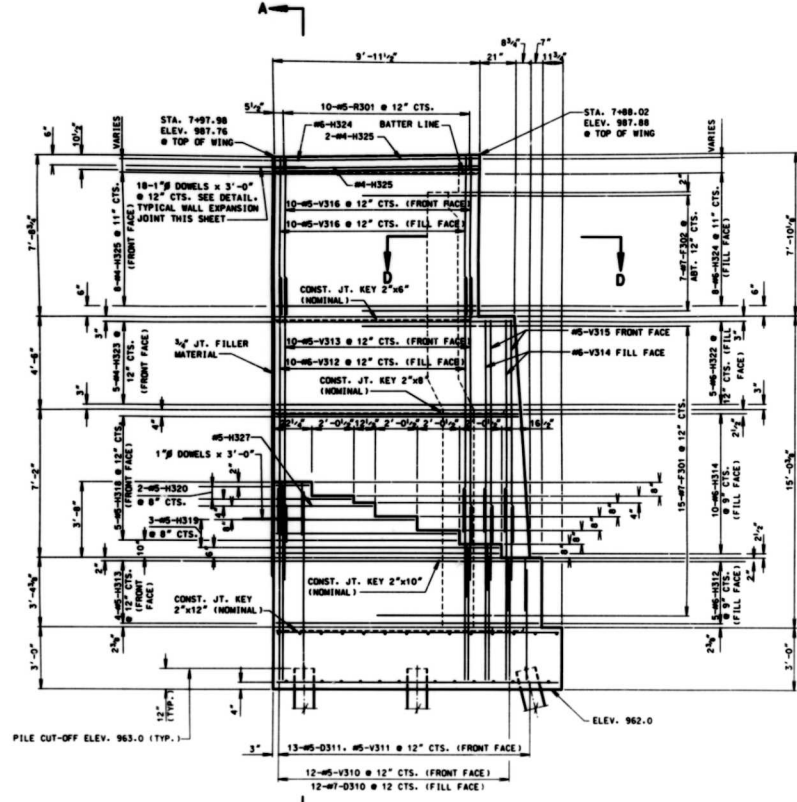
SHEET NO. 30 OF 81.

JACKSON COUNTY

A-5181

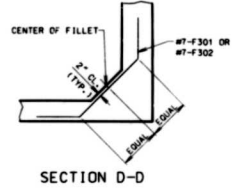
NOTE: FOR LOCATION OF ELEVATION A-A
SEE SHEET NO. 30.

STATE	PROJ. NO.	SHEET NO.
		174

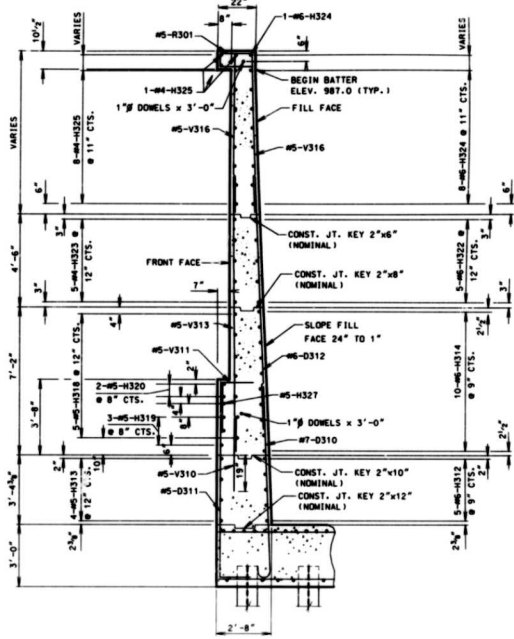


ELEVATION A-A

FOR DETAILS AND REINFORCEMENT OF PARAPET WALLS
SEE SHEET NO'S. 70 & 72.

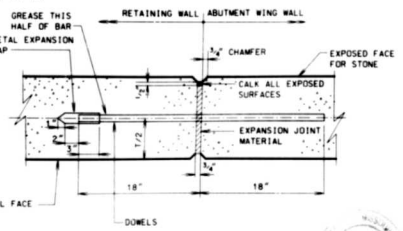


SECTION D-D



SECTION A-A

- NOTES:
1. PROVIDE 1" Ø DOWELS (DALV.) @ 12" CTS. ACROSS JOINT.
 2. WALL REINFORCING STEEL SHALL NOT BE EXTENDED ACROSS JOINT.
 3. DOWELS SHALL BE SMOOTH, GALVANIZED BARS WITH EXPANSION HALF GREASED.



TYPICAL WALL EXPANSION JOINT DETAIL

DETAILS ABUTMENT NO. 3 LEFT WINGWALL

DETAILED MAR. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 33 OF 81.

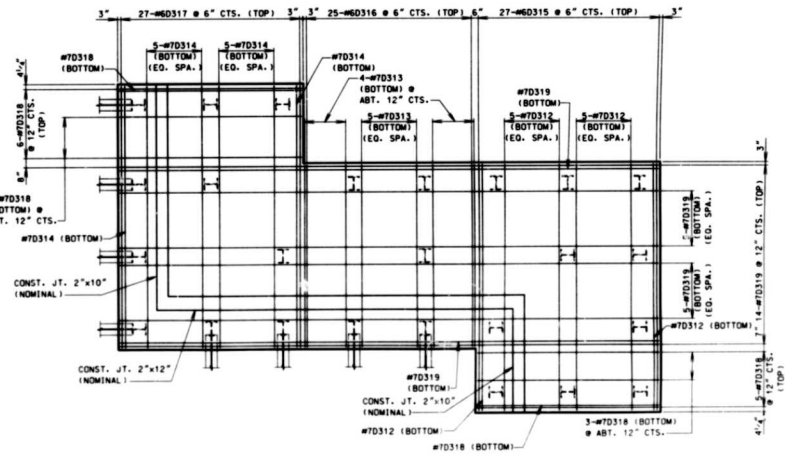
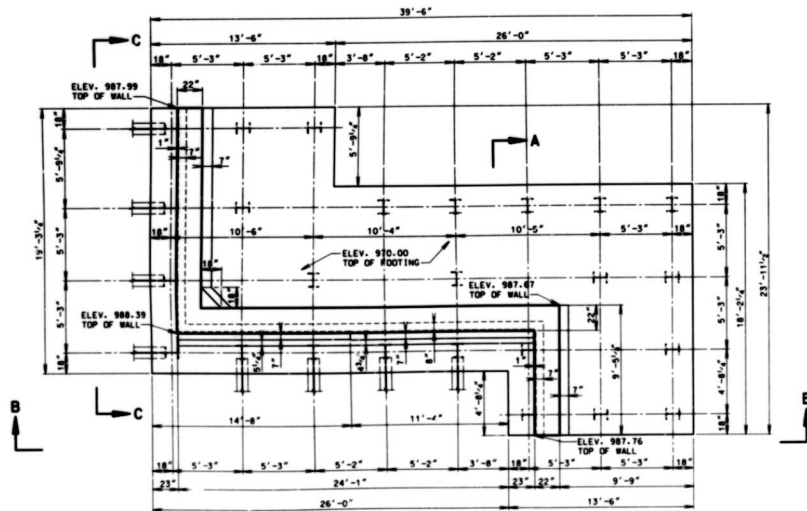
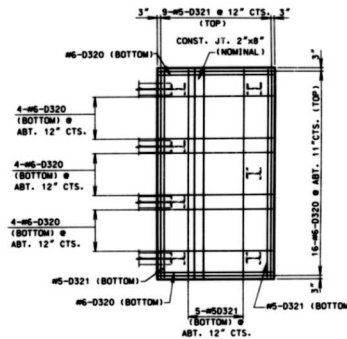
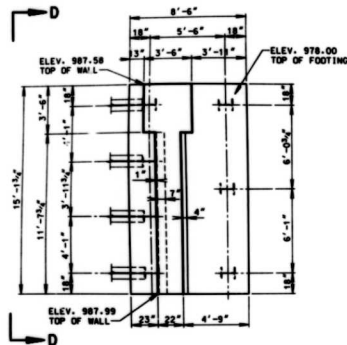
JACKSON COUNTY A-5181

279 263

1821

NOTE: FOR DETAILS OF ELEVATION A-A, SEE SHEET NO. 36
 FOR DETAILS OF ELEVATION B-B, SEE SHEET NO. 37
 FOR DETAILS OF ELEVATION C-C, SEE SHEET NO. 38
 FOR DETAILS OF ELEVATION D-D, SEE SHEET NO. 39
 FOR DETAILS OF STEEL PILE SPLICE, SEE SHEET NO. 29

STATE	PROJ. NO.	SHEET NO.
MO.		146



DETAIL OF FOOTING SHOWING REINFORCEMENT

PLAN

DETAILS ABUTMENT NO. 3 LEFT RETAINING WALL FOOTING

201 265
 DETAILED MAR. 1995
 CHECKED MAR. 1995

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 35 OF 81.

JACKSON

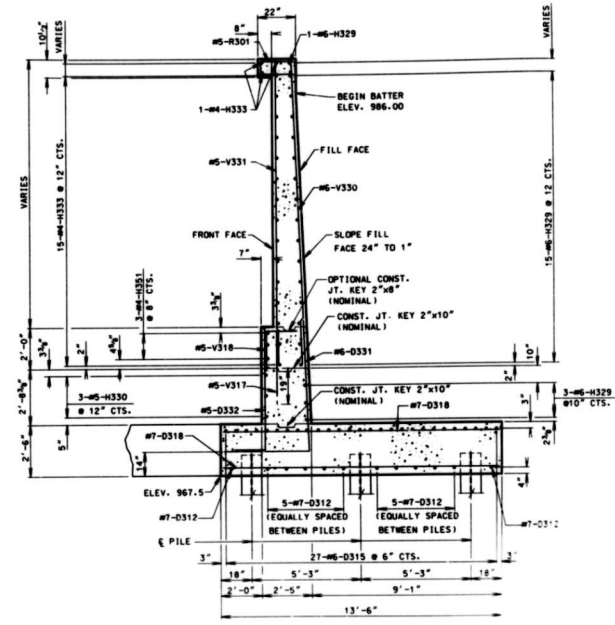
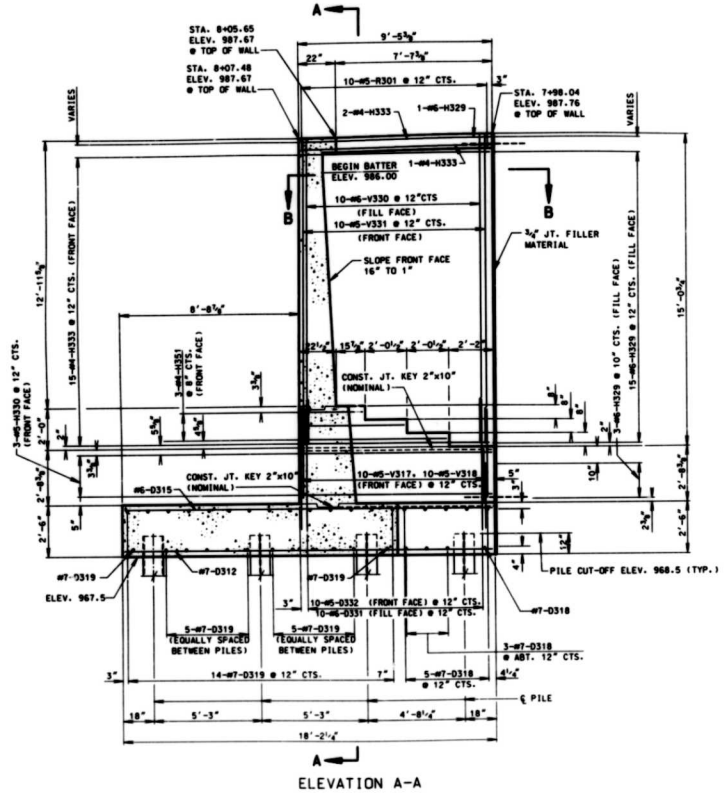
COUNTY

A-5181



NOTE: FOR LOCATION OF ELEVATION A-A
SEE SHEET NO. 35.

STATE	PROJ. NO.	SHEET NO.
MD.		177



ELEVATION A-A

SECTION A-A

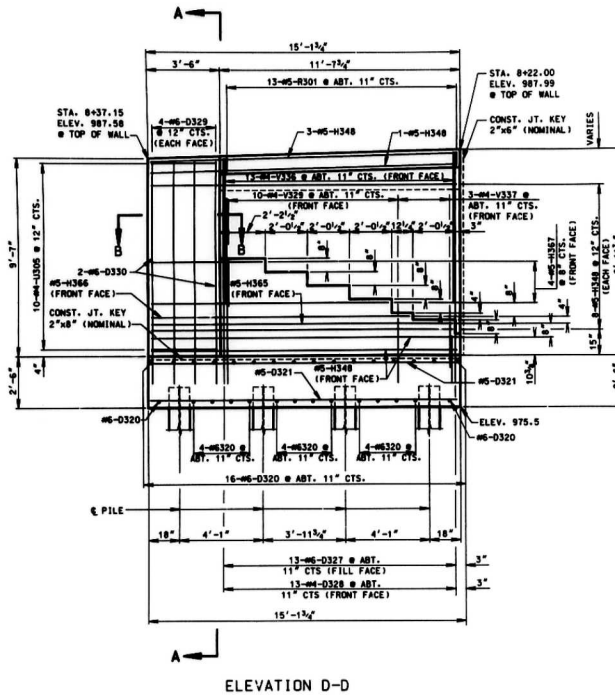
DETAILS ABUTMENT NO. 3 LEFT RETAINING WALL (STA. 7+98.04 TO STA. 8+05.65)

NOTE: FOR DETAILS AND REINFORCEMENT OF PARAPET WALLS
SEE SHEET NO'S. 70 & 72.

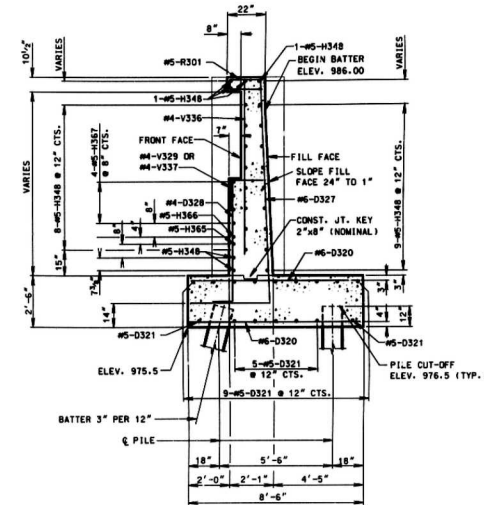
266

NOTE: FOR LOCATION OF ELEVATION D-D
SEE SHEET NO. 35.

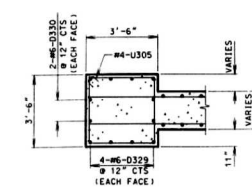
STATE	PRJ. NO.	SHEET NO.
MD.		220



ELEVATION D-D



SECTION A-A



SECTION B-B

NOTE: FOR DETAILS AND REINFORCEMENT OF PARAPET WALLS
SEE SHEET NO'S. 70 & 72.

DETAILS ABUTMENT NO. 3 LEFT RETAINING WALL (STA. 8+22.00 TO STA. 8+37.15)

DETAILED MAR. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 39 OF 81.

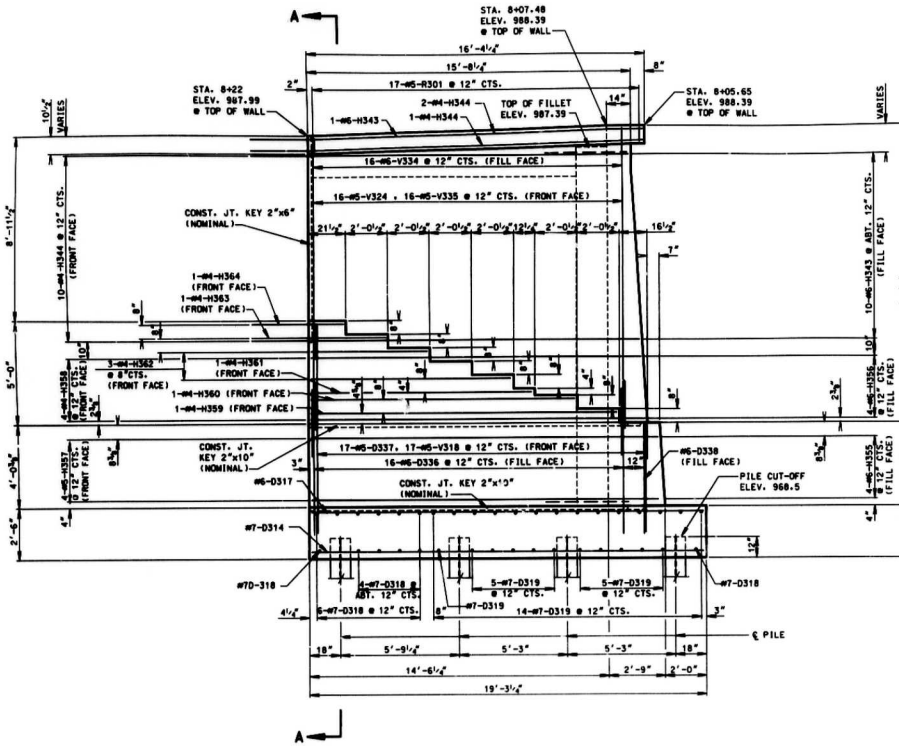
JACKSON

COUNTY

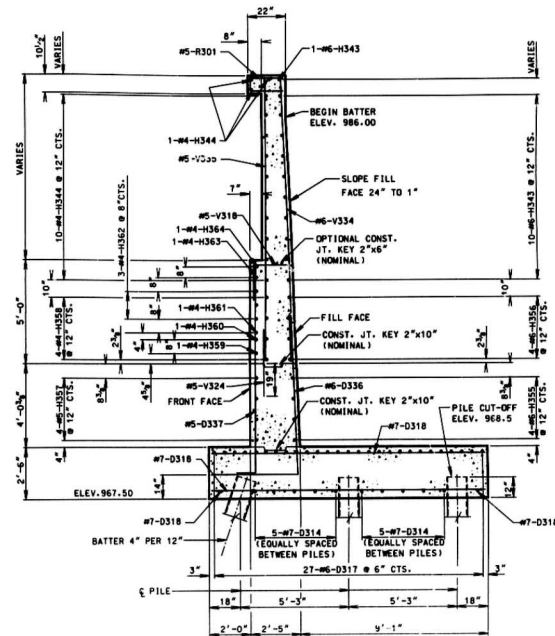
A-5181

NOTE: LOCATION OF ELEVATION C-C
SEE SHEET NO. 35.

STATE	PROJ. NO.	SHEET NO.
MD.		199



ELEVATION C-C



SECTION A-A

DETAILS ABUTMENT NO. 3 LEFT RETAINING WALL (STA. 8+05.65 TO STA. 8+22.00)

NOTE: FOR DETAILS AND REINFORCEMENT OF PARAPET WALLS
SEE SHEET NO'S. 70 & 72.

Joseph P. Richman

2024 568

DETAILED MAR. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 38 OF 81.

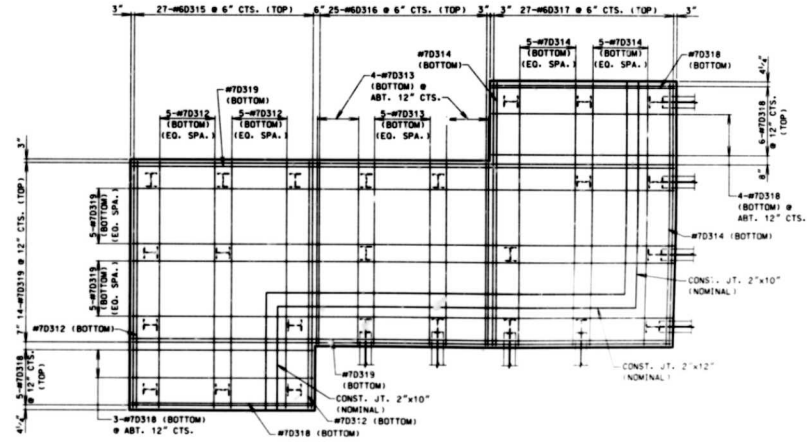
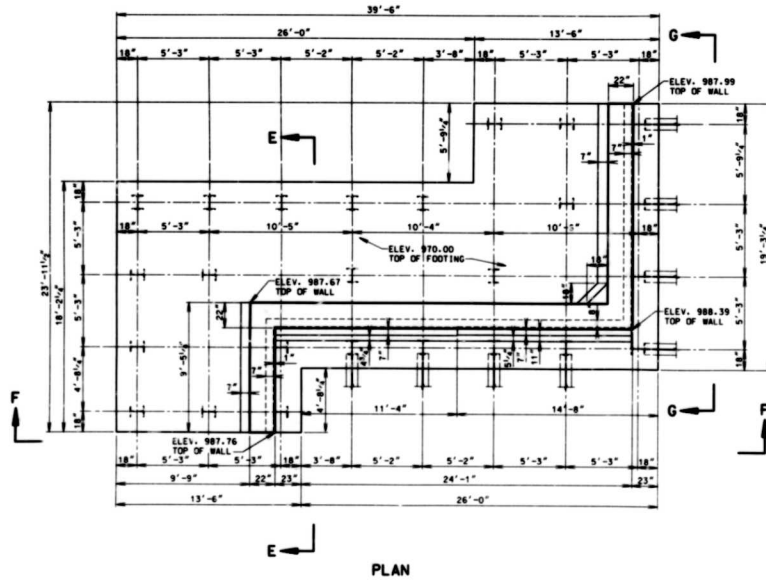
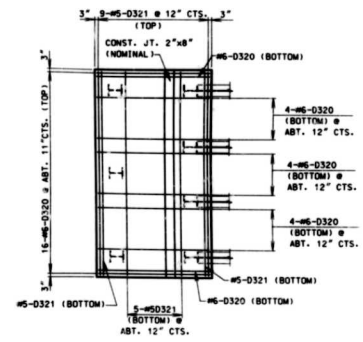
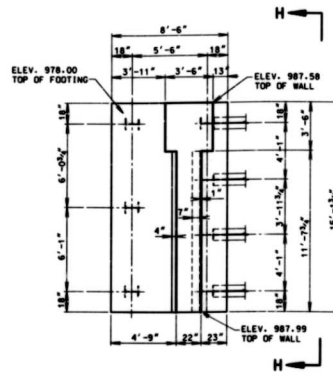
JACKSON COUNTY

A-5181

1821

NOTE: FOR DETAILS OF ELEVATION E-E, SEE SHEET NO. 41
 FOR DETAILS OF ELEVATION F-F, SEE SHEET NO. 42
 FOR DETAILS OF ELEVATION G-G, SEE SHEET NO. 43
 FOR DETAILS OF ELEVATION H-H, SEE SHEET NO. 44
 FOR DETAILS OF STEEL PILE SPLICE, SEE SHEET NO. 29

STATE	PROJ. NO.	SHEET NO.
MD.		201



DETAIL OF FOOTING SHOWING REINFORCEMENT

DETAILS ABUTMENT NO. 3 RIGHT RETAINING WALL FOOTING

2026 270

DETAILED MAR. 1995
 CHECKED MAR. 1995

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

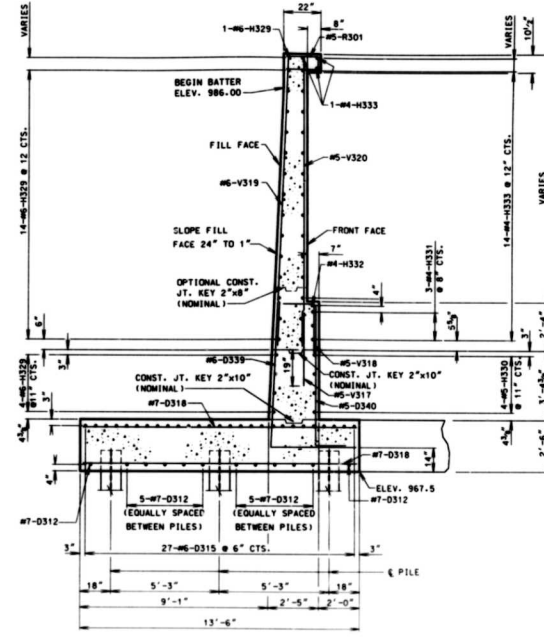
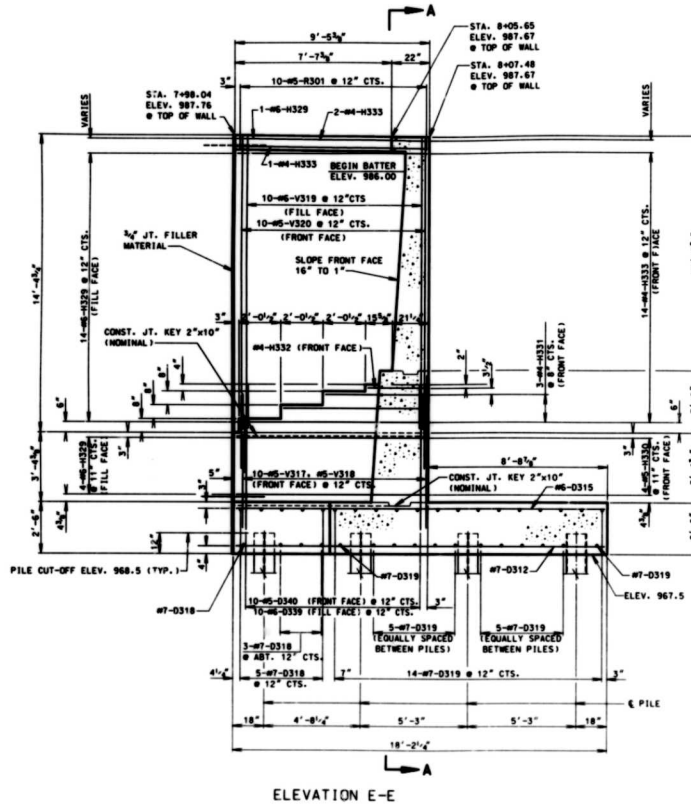
SHEET NO. 40 OF 81.

JACKSON COUNTY A-5181

1821

NOTE: FOR LOCATION OF ELEVATION E-E, SEE SHEET NO. 40.

STATE	PROJ. NO.	SHEET NO.
MD.		202



SECTION A-A

NOTE: FOR DETAILS AND REINFORCEMENT OF PARAPET WALL, SEE SHEET NO'S. 71 & 72.

DETAILS ABUTMENT NO. 3 RIGHT RETAINING WALL (STA. 7+98.04 TO STA. 8+05.65)

DETAILED MAR. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 41 OF 81.

JACKSON

COUNTY

A-5181

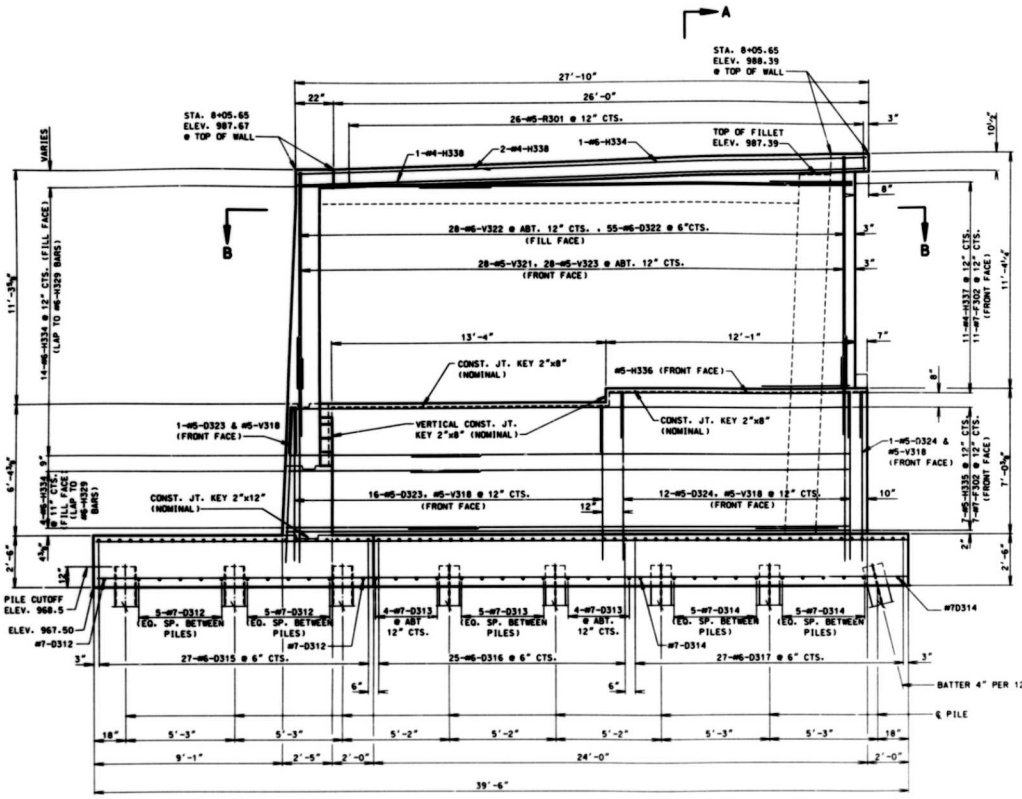
1821

277 271

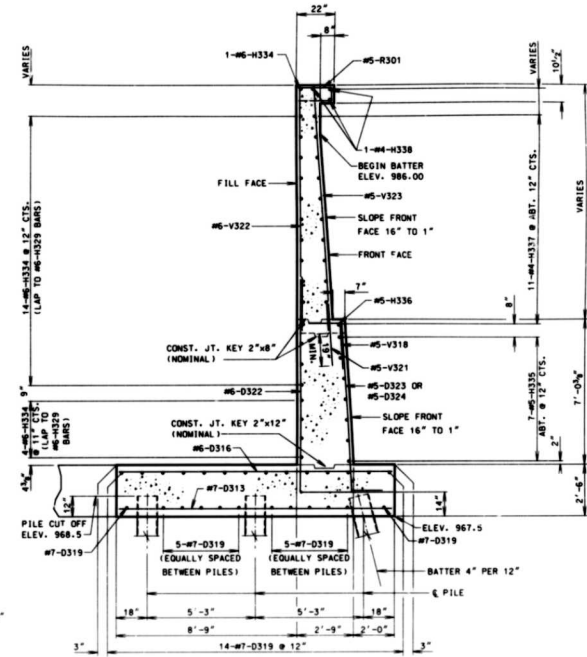


NOTE: FOR LOCATION OF ELEVATION F-F.
SEE SHEET NO. 40.

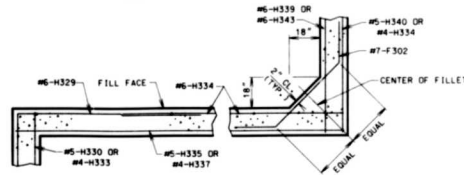
STATE	PROJ. NO.	SHEET NO.
MO.		203



ELEVATION F-F



SECTION A-A



SECTION B-B

FOR DETAILS AND REINFORCEMENT OF PARAPET WALL
SEE SHEET NO'S. 71 & 72.

DETAILS ABUTMENT NO. 3 RIGHT RETAINING WALL (STA. 8+05.65)

DETAILED MAR. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 42 OF 81.

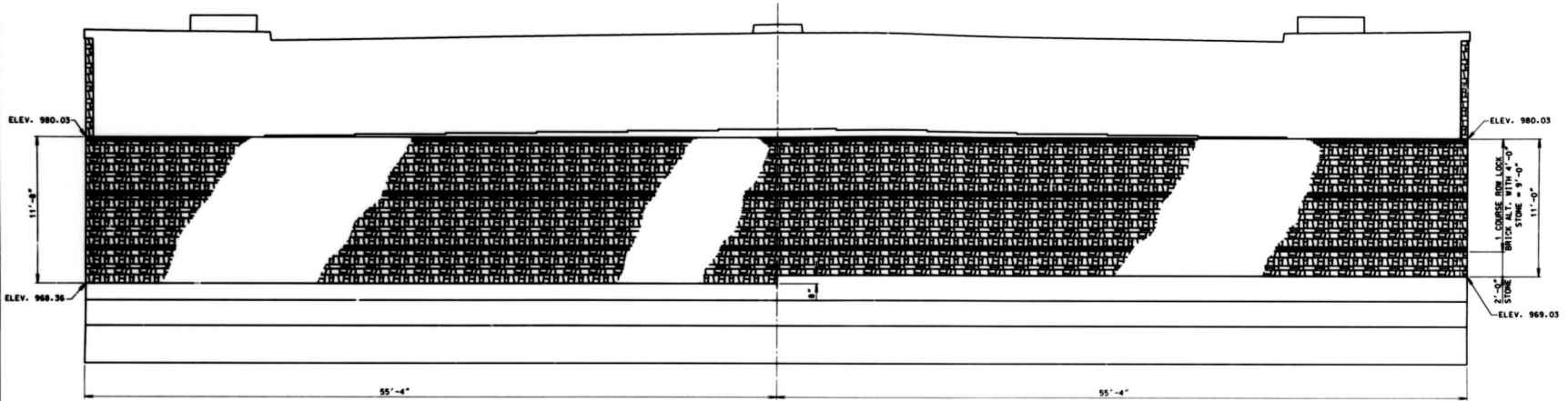
JACKSON

COUNTY

A-5181

1821

STATE	PROJ. NO.	SHEET NO.
MO.		200



NOTE: SEE SPECIAL PROVISIONS FOR THE CONSTRUCTION OF THE STONE FACADE.

ELEVATION SHOWING STONE FACADE AND BRICKING DETAILS

DETAILS OF STONE FACADE AT ABUTMENT NO. 3



DETAILED MAR. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

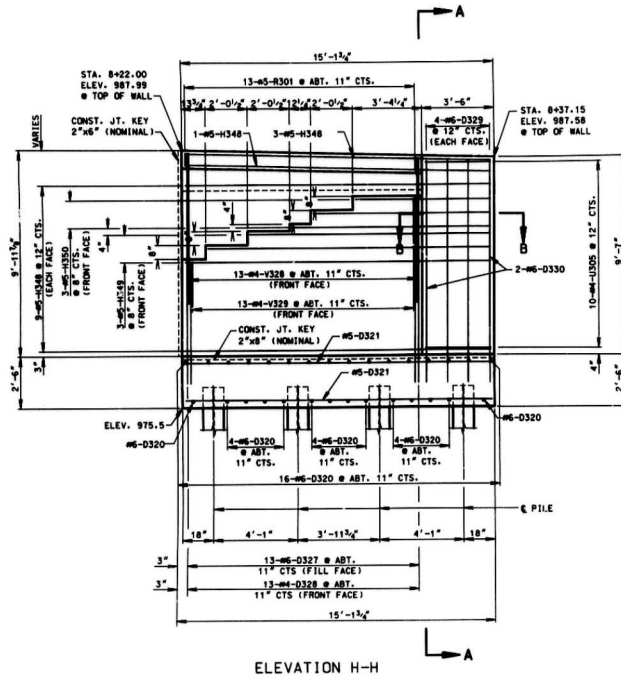
SHEET NO. 43 OF 81.

JACKSON COUNTY A-5181

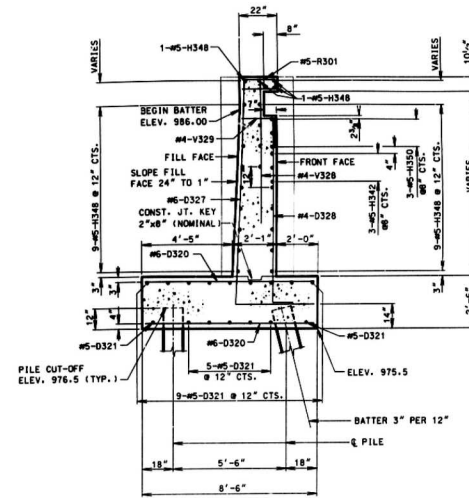
1821

NOTE: FOR LOCATION OF ELEVATION H-H, SEE SHEET NO. 40.

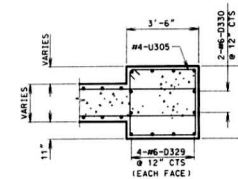
STATE	PROJ. NO.	SHEET NO.
MO.		205



ELEVATION H-H



SECTION A-A



SECTION B-B

NOTE: FOR DETAILS AND REINFORCEMENT OF PARAPET WALL SEE SHEET NO'S. 71 & 72.

DETAILS ABUTMENT NO. 3 RIGHT RETAINING WALL (STA. 8+22.00 TO STA. 8+37.15)

DETAILED MAR. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 44 OF 81.

JACKSON

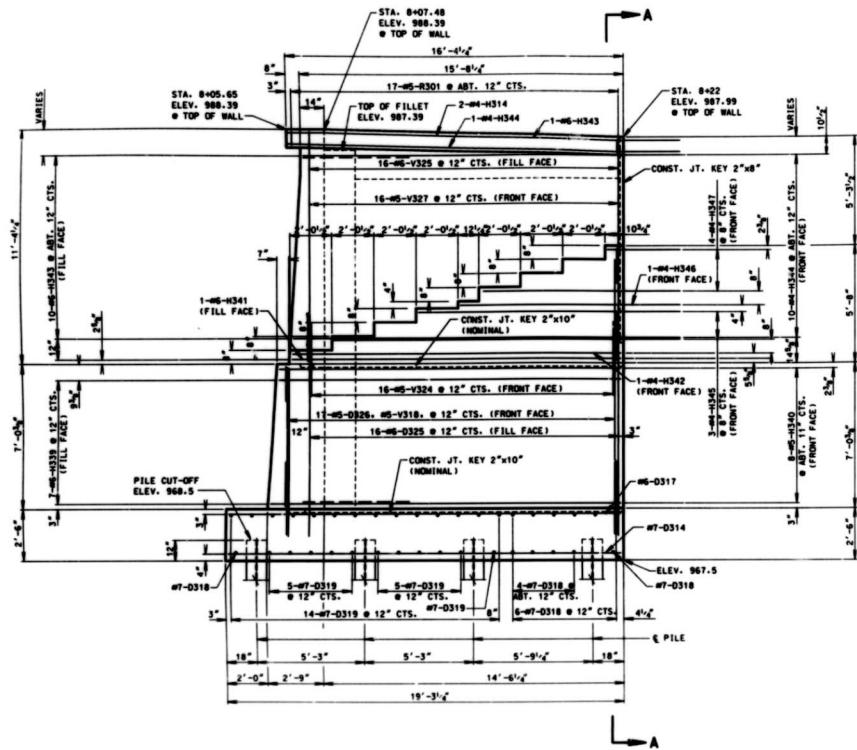
COUNTY

A-5181

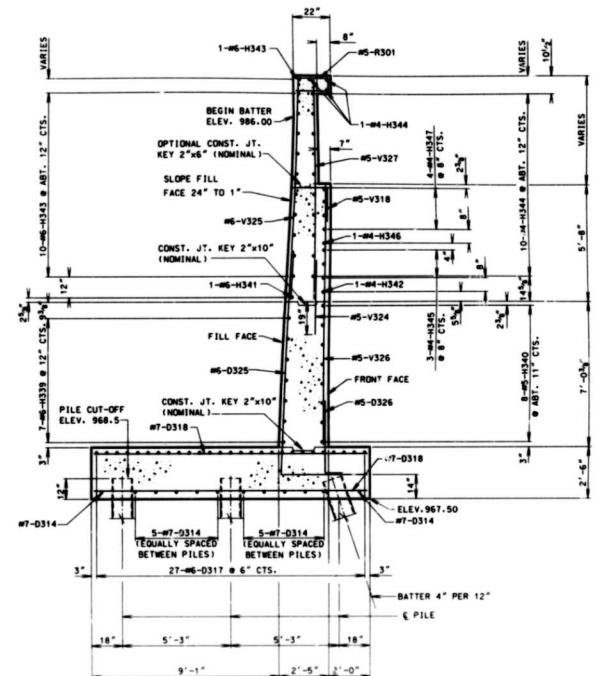
Joseph P. Richman
Professional Engineer
No. 1000

NOTE: FOR LOCATION OF ELEVATION G-G, SEE SHEET NO. 40.

STATE	PROJ. NO.	SHEET NO.
MO.		22



ELEVATION G-G



SECTION A-A

DETAILS ABUTMENT NO. 3 RIGHT RETAINING WALL (STA. 8+05.65 TO STA. 8+22.00)

NOTE: CD DETAILS AND REINFORCEMENT OF PARAPET WALL SEE SHEET NO'S 71 & 72.

Joseph L. Richardson

709 673

DETAILED MAR. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 43 OF 81.

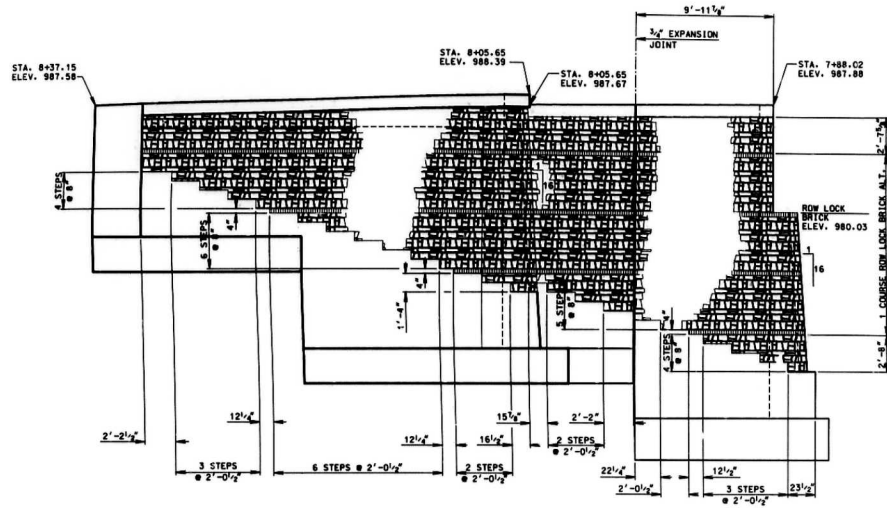
JACKSON

COUNTY

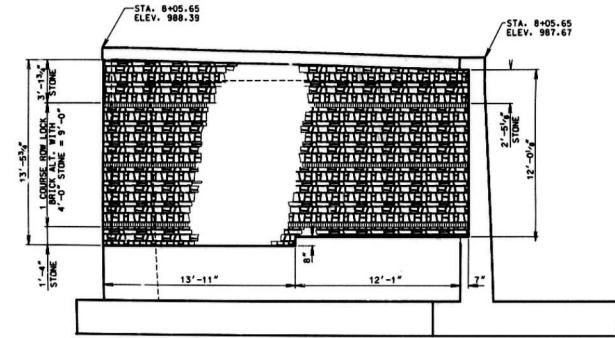
A-5181

1821

STATE	PROJ. NO.	SHEET NO.
MO.		46



LEFT WALL LOOKING SOUTH



LEFT WALL LOOKING EAST

NOTE: SEE SPECIAL PROVISIONS FOR THE CONSTRUCTION OF THE STONE FACADE.

DETAILS OF STONE FACADE AT LEFT WALL OF ABUTMENT NO. 3



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NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 46 OF 81

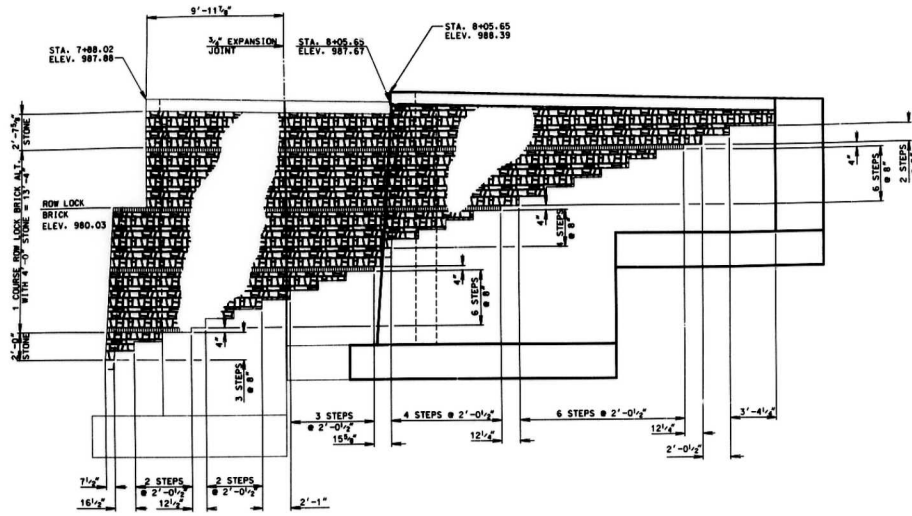
JACKSON

COUNTY

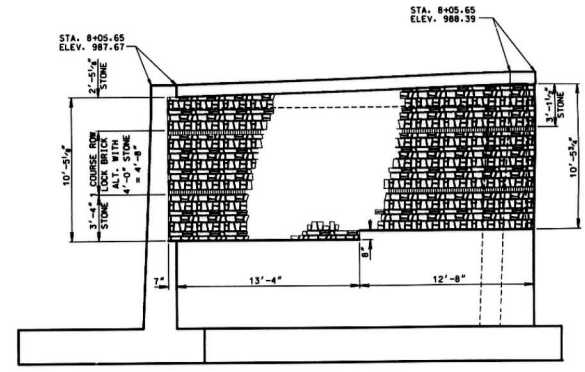
A-5181

1821

STATE	PROJ. NO.	SHEET NO.
MD.		228



RIGHT WALL LOOKING NORTH



RIGHT WALL LOOKING EAST

DETAILS OF STONE FACADE AT RIGHT WALL OF ABUTMENT NO. 3

NOTE: SEE SPECIAL PROVISIONS FOR CONSTRUCTION OF STONE FACADE.



DETAILED MAR. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 47 OF 81

JACKSON

COUNTY

A-5181

833 577

1821

STATE	PROJ. NO.	SHEET NO.
MO.		277

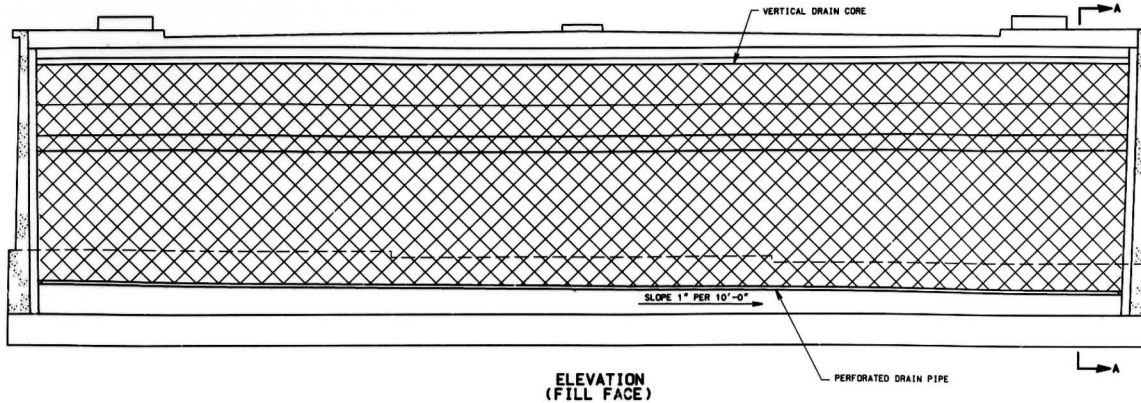
GENERAL NOTES:

DRAIN PIPE MAY BE EITHER 6" DIAMETER CORRUGATED METALLIC-COATED STEEL PIPE UNDERDRAIN, 4" DIAMETER CORRUGATED POLYVINYL CHLORIDE (PVC) DRAIN PIPE, OR 4" DIAMETER CORRUGATED POLYETHYLENE (PE) DRAIN PIPE.

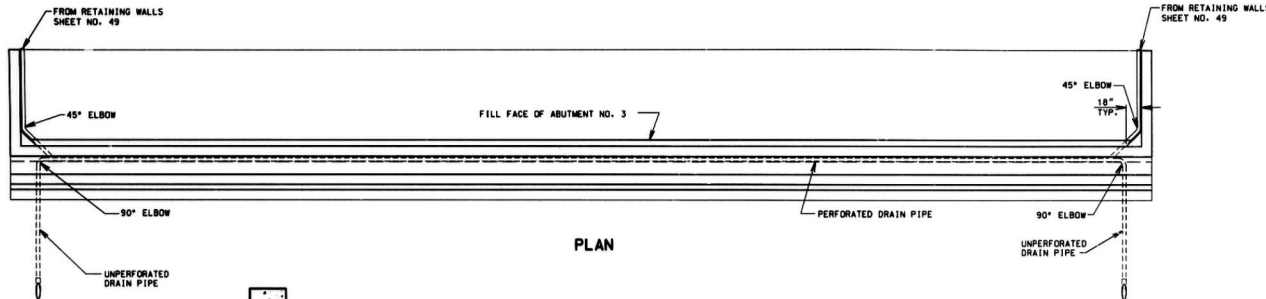
PLACE DRAIN PIPE AT FILL FACE OF ABUTMENT AND SLOPE TO LOWEST GRADE OF GROUND LINE. ALSO MISSING THE ABUTMENT FOOTING OF ABUTMENT BY 1'-1/2" (SEE ELEVATION AT ABUTMENT.)

PERFORATED PIPE SHALL BE PLACED AT FILL FACE SIDE AT THE BOTTOM OF ABUTMENT AND PLAIN PIPE SHALL BE USED WHERE THE VERTICAL DRAIN ENDS TO THE EXIT AT GROUND LINE.

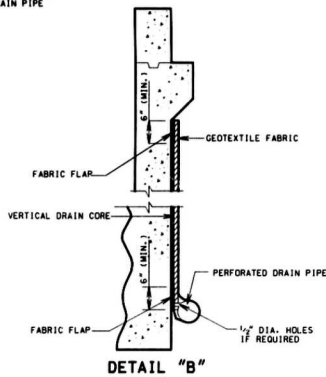
SHIFT REINFORCING BARS IN WALL TO MISS THE DRAIN PIPE IF NECESSARY.



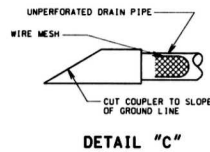
ELEVATION (FILL FACE)



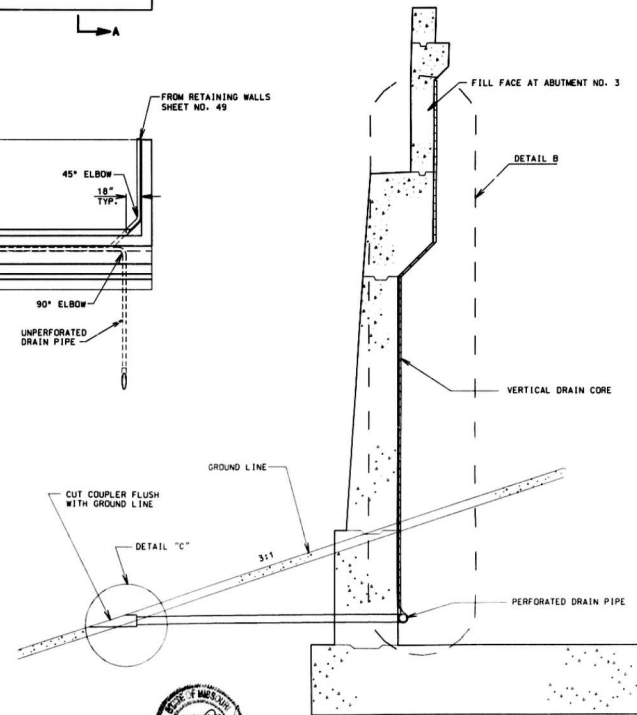
PLAN



DETAIL "B"



DETAIL "C"



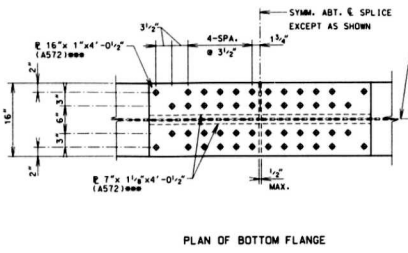
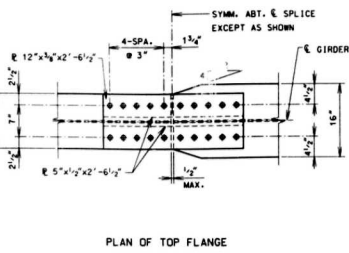
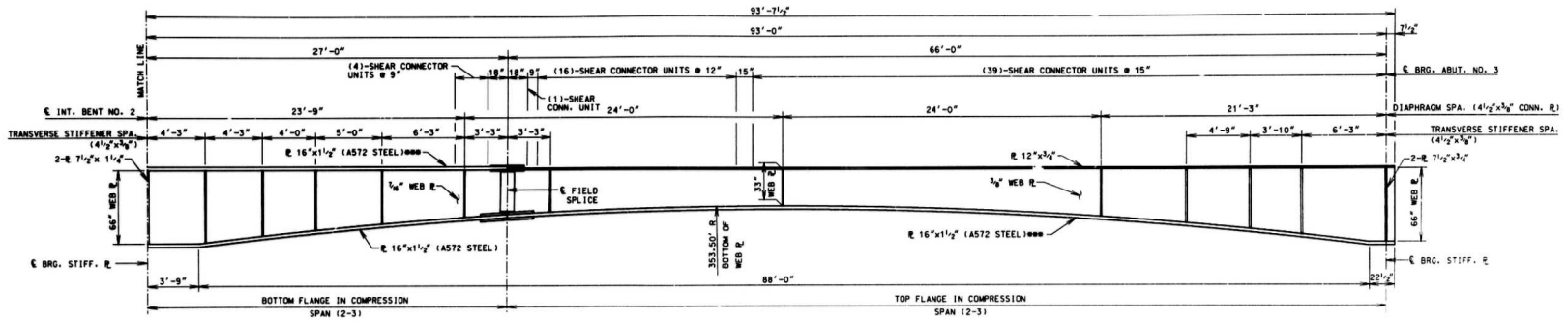
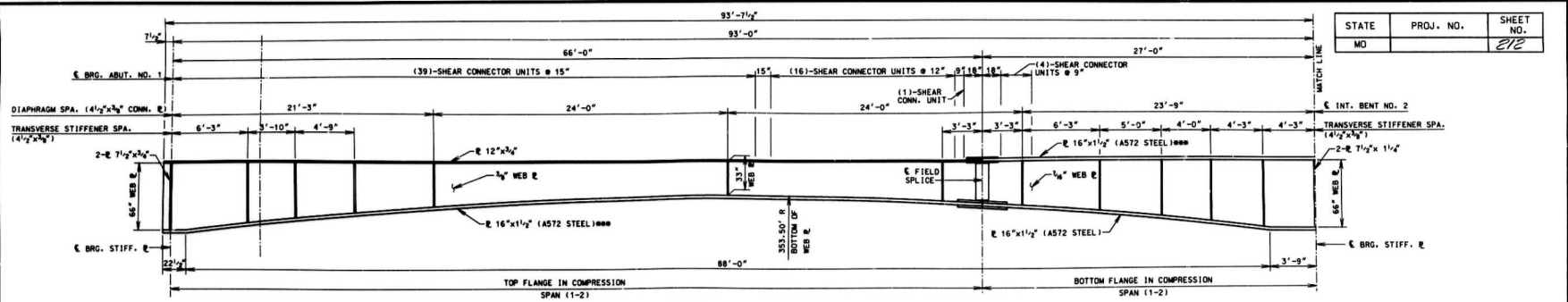
SECTION A-A

VERTICAL DRAIN AT BACKWALL ABUTMENT NO. 3

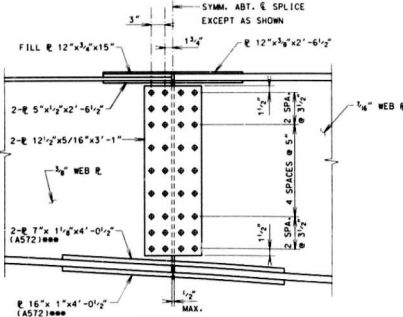


277 278

STATE	PROJ. NO.	SHEET NO.
MO		272



DETAILS OF FIELD SPLICE



NOTE: USE 1/2" Ø HIGH STRENGTH BOLTS WITH 1/4" Ø REAMED HOLES.

NOTE: GIRDER DIMENSIONS ARE MEASURED HORIZONTALLY ALONG GIRDER CENTER LINES. CORRECT FLANGE & WEB PLATE LENGTHS TO ACCOUNT FOR GRADE, CAMBER & SHRINKAGE DUE TO WELDING. FABRICATED STRUCTURAL STEEL SHALL BE A36, EXCEPT AS NOTED. TRANSVERSE WEB STIFFENERS SHALL BE PLACED AS SHOWN IN "PLAN OF STRUCTURAL STEEL" ON SHEET NO. 50. PLATE GIRDERS SHALL BE FABRICATED TO CONFORM WITH "CAMBER DIAGRAM" SHOWN ON SHEET NO. 59. CONTRACTOR TO REFER TO SHEET NO. 50 FOR LOCATION OF INTERMEDIATE STIFFENERS FOR INTERMEDIATE DIAPHRAGMS. FOR SHEAR CONNECTOR DETAILS, SEE SHEET NO. 59.

337 281

DETAILED MAR. 1995
 CHECKED MAR. 1995

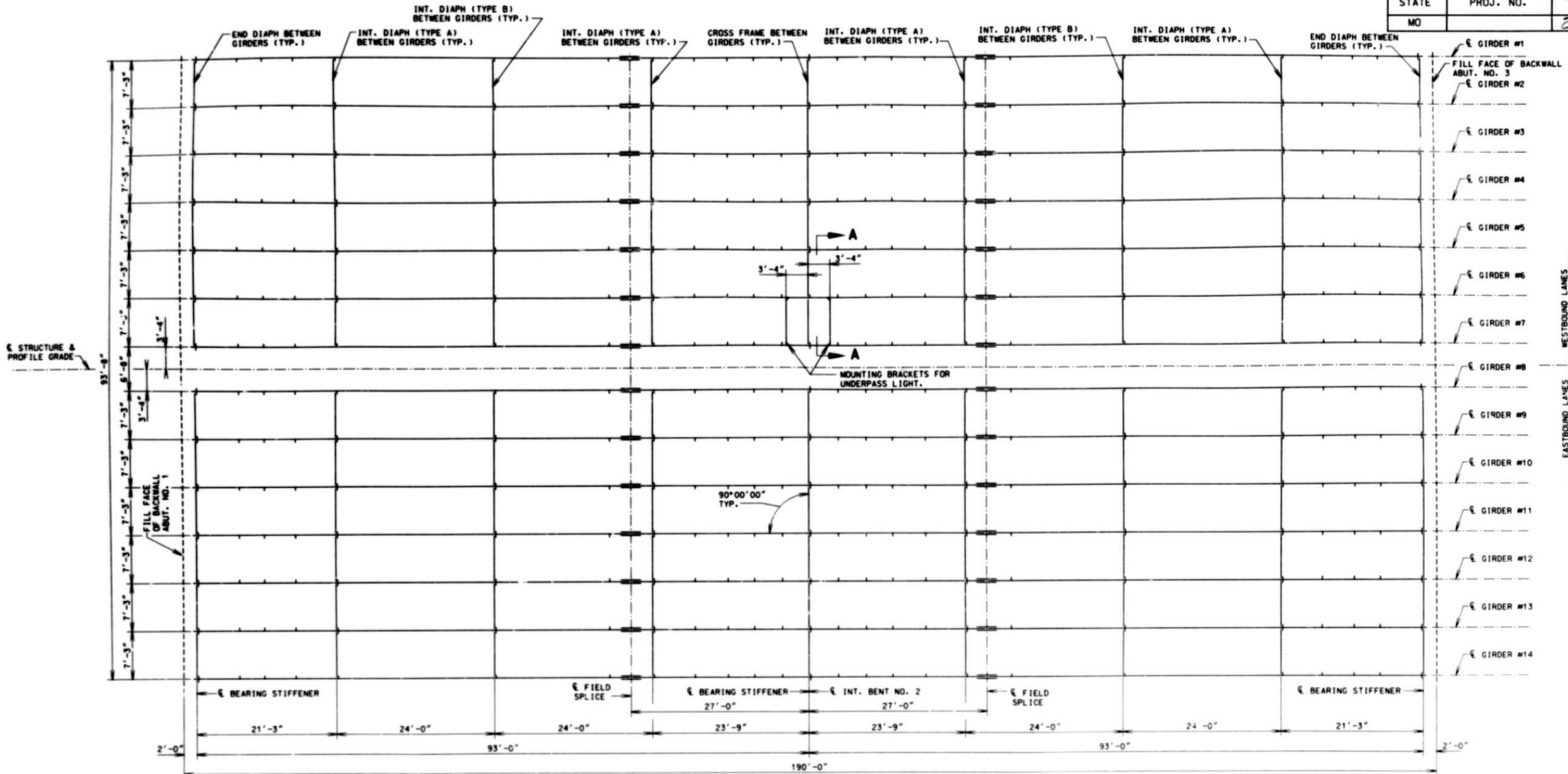
NOTE: THIS DRAWING NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 51 OF 81.

JACKSON COUNTY A-5181

1821

STATE	PROJ. NO.	SHEET NO.
MO		27



SPAN (1-2)

PLAN OF STRUCTURAL STEEL

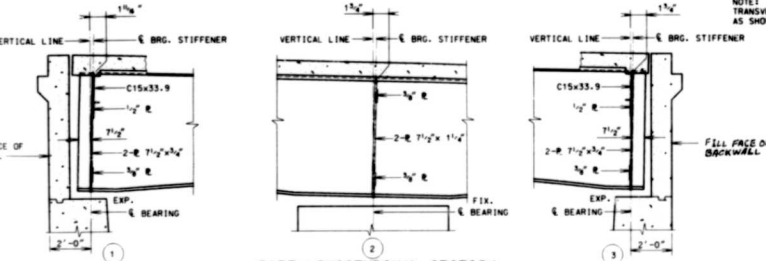
SPAN (2-3)

NOTE:
TRANSVERSE WEB STIFFENERS SHALL BE LOCATED AS SHOWN IN PLAN OF STRUCTURAL STEEL.

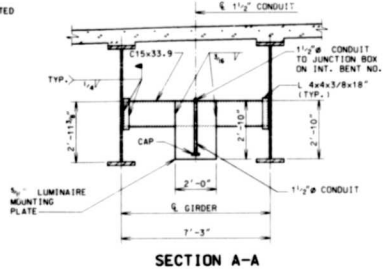
NOTE:
INTERMEDIATE WEB STIFFENER PLATE & DIAPHRAGM SPACINGS MAY VARY FROM PLAN DIMENSIONS BY A MAXIMUM OF 3" FOR DIAPHRAGM TO CONNECT TO THE INTERMEDIATE WEB STIFFENER PLATE.

LONGITUDINAL DIMENSIONS ARE MEASURED HORIZONTALLY ALONG GIRDER CENTER LINES.

- NOTES:
- FABRICATED STRUCTURAL STEEL FOR DIAPHRAGMS SHALL BE A-36.
 - SHOP DRAWINGS WILL NOT BE REQUIRED FOR STEEL INTERMEDIATE DIAPHRAGMS AND CONNECTIONS.
 - PAYMENT FOR LUMINAIRE DIAPHRAGMS AND MOUNTING PLATE SHALL BE INCLUDED IN TO THE PAY ITEM "CONDUIT SYSTEM-ON STRUCTURE".



PART LONGITUDINAL SECTION



SECTION A-A

DETAILED MAR. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 50 OF 81.

JACKSON COUNTY

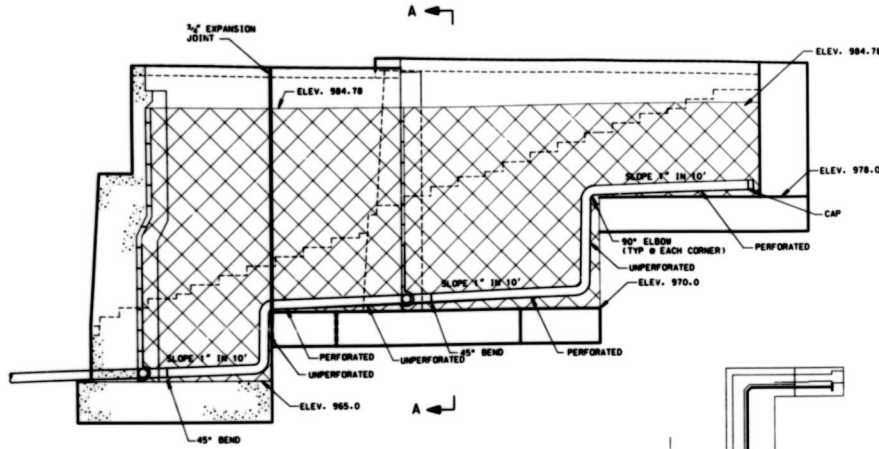
A-5181



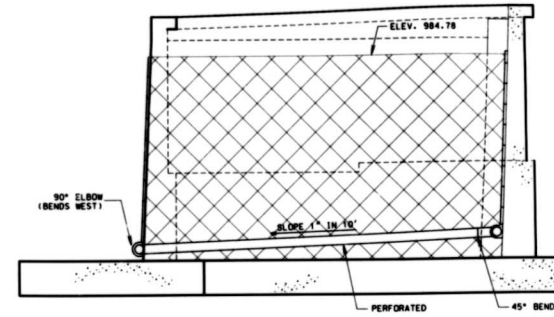
236 780

1821

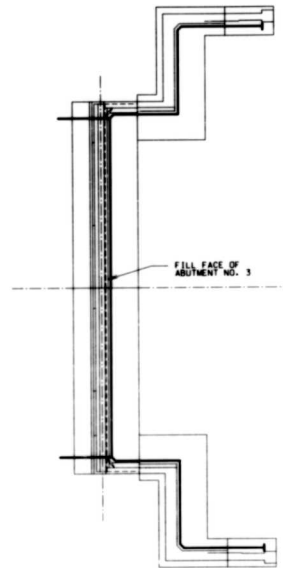
STATE	PROJ. NO.	SHEET NO.
MO.		510



LEFT WALL LOOKING NORTH



LEFT WALL LOOKING WEST SECTION A-A



PLAN

VERT. DRAIN CORE W/ GEOTEXTILE FABRIC AS SHOWN ON SH. NO. 46 (INSTALLED ON LINWOOD BLVD. FILL SIDE)

DETAILS OF VERTICAL DRAIN AT LEFT WINGWALL AND RETAINING WALLS OF ABUTMENT NO. 3*
NOTE * RIGHT WALL SIMILAR BUT OPPOSITE HAND

518-279
235
552
DETAILED APR. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 49 OF 81.

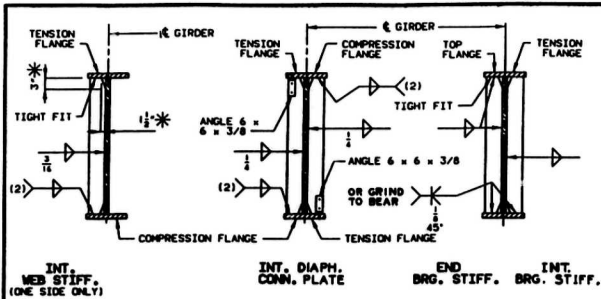
JACKSON

COUNTY

A-5181

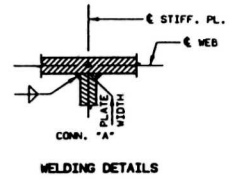
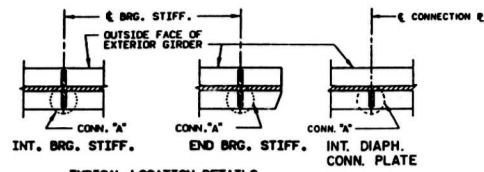


STATE	PROJ. NO.	SHEET NO.
MO.		52



(2) WELD TO COMPRESSION FLANGE AS LOCATED ON ELEVATION OF GIRDER.
 * TYPICAL FOR ALL INT. WEB STIFF., INT. DIAPH. CONN. PL. AND BRG. STIFF..

WELDING DETAILS



WELDING DETAILS

Joseph T. Pichonny

778 588
 WELD DET. 2/03.42, STL. "A"
 REVISED
 MAY 1991

DETAILED MAR. 1995
 CHECKED MAR. 1995

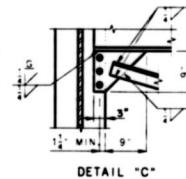
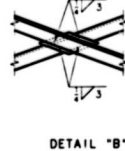
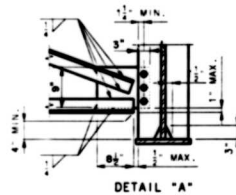
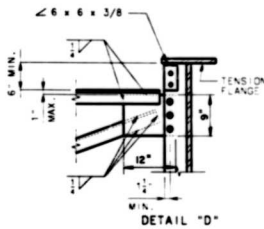
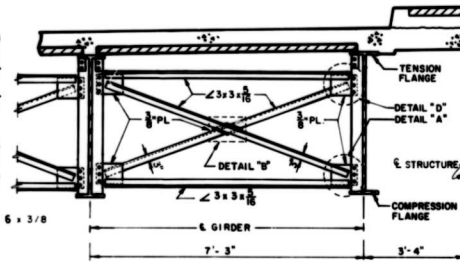
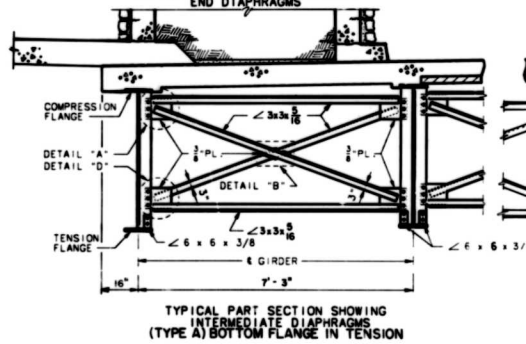
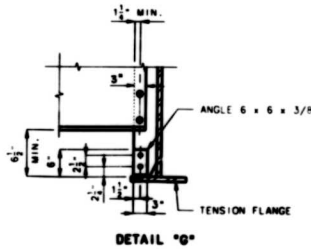
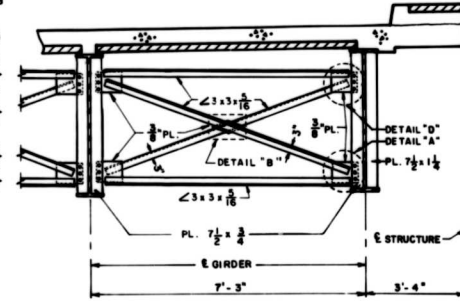
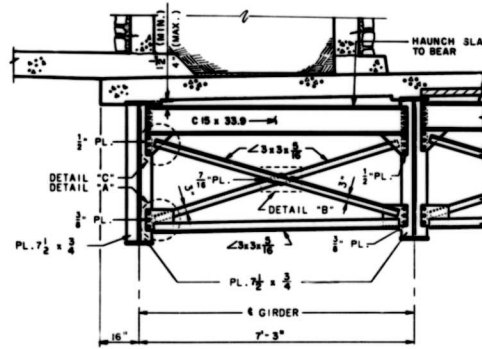
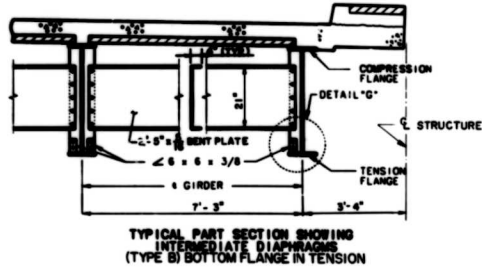
NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 52 OF 81

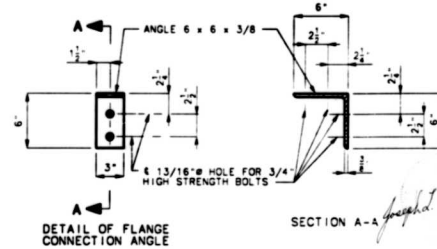
JACKSON COUNTY

A-5181

STATE	PROJ. NO.	SHEET NO.
MO.		53



NOTE: THE TWO 3/4" H.S. BOLTS THAT CONNECT THE 6 x 6 x 3/8 ANGLE TO THE TOP FLANGE SHALL BE PLACED SO THE NUT IS ON THE INSIDE OF FLANGE TOWARD THE WEB.



CROSS FRAME AND DIAPHRAGM DETAILS

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 53 OF 61

JACKSON COUNTY

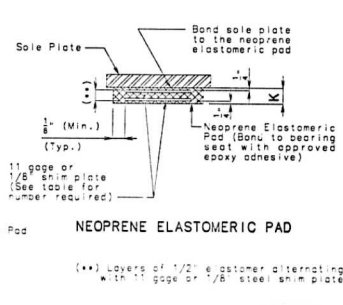
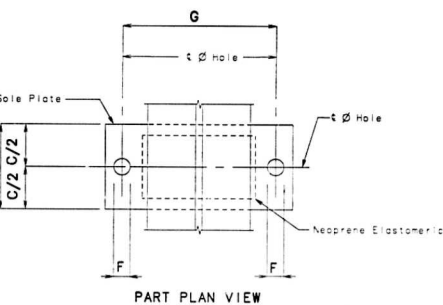
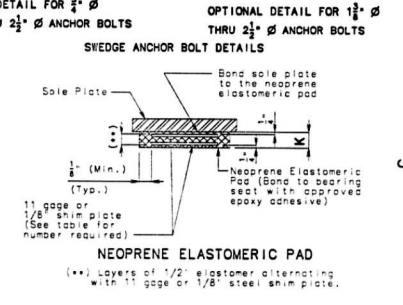
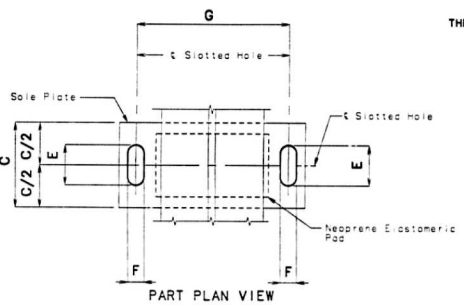
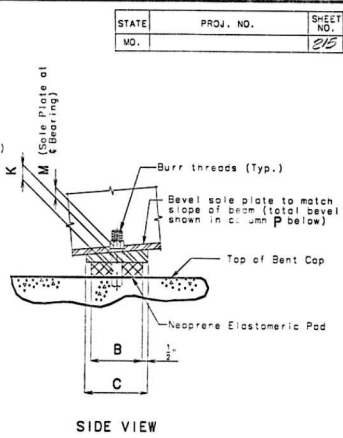
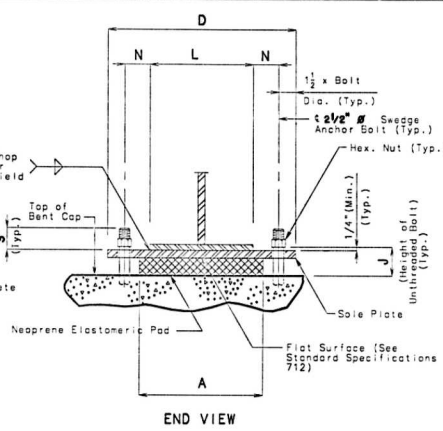
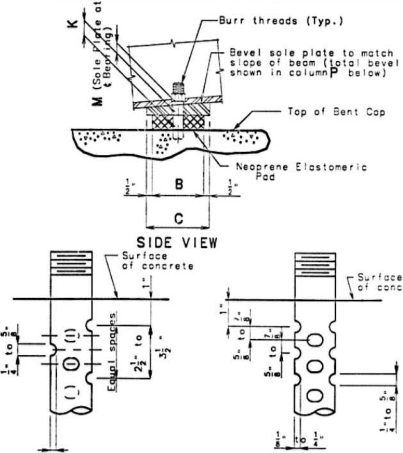
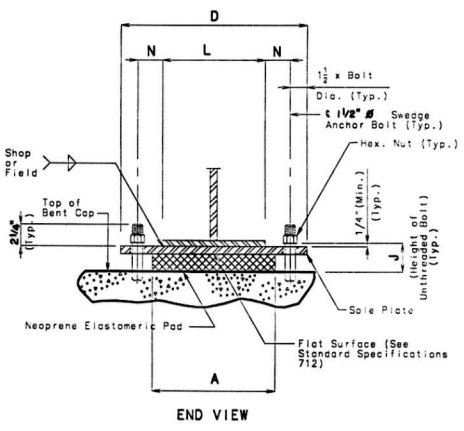
A-5181

222 703

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 REVISED
 SEPT. 1992

DETAILED MAR. 1995
 CHECKED MAR. 1995

STATE	PROJ. NO.	SHEET NO.
MD.		215



- 1 1/2" GIRDERS 1, 7, 8 & 14
- *** 2" GIRDERS 2, 3, 5, 6, 9, 10, 12 & 13
- 1 3/4" GIRDERS 4 & 11

GENERAL NOTES:

Anchor bolts to be cast in concrete with 2" dia. galvanized A307 steel swaged to fit and shall extend 18" into the concrete with 2" dia. galvanized A503-C1, C2, C3, C4, C5 heavy hexagon nuts. Actual manufacturer's certification mill test reports (chemical and mechanical) shall be provided. (Swaging shall be 1" less than the extension into the concrete.)

All structural steel for the sole plate, anchor bolts and the heavy hexagon nuts shall be painted with 2 coats (5 mils min.) of epoxy zinc rich paint to be touched up after assembly.

The neoprene elastomeric pads shall be 60 diameter.

The sole plate shall be furnished with the bearing and field or shop welded to the girders.

Structural steel for the sole plate shall be A-36.

Payment for the sole plate, anchor bolts and heavy hexagon nuts shall be included in the cost of the bearing assembly. See Special Provisions.

The accepted quantity of the elastomeric bearing assemblies, complete in-place, will be paid for at the contract unit price for laminated neoprene bearing pads (Steel Structures), each.

- 2 1/2" GIRDERS 1, 7, 8, & 14
- *** 2 3/4" GIRDERS 2, 3, 5, 6, 9, 10, 12 & 13
- 2 3/8" GIRDERS 4 & 11

Joseph L. Robinson

Note: The location of the anchor bolts in relation to the slotted hole in the sole plate shall correspond with the temperature at the time of erection. All C/P's in the slotted holes should center on the anchor bolts.

ABUT. NO.	EXPANSION BEARINGS													NO. OF BEARINGS	NO. OF BOLTS
	A	B	C	D	E	F	G	J	K	L	M	N	P		
1	16	11	12	2'-1"	4"	***	20"	5 1/2"	3 3/4"	16"	2"	2"	3/16"	5	14
3	16	11	12	2'-1"	4"	***	20"	5 1/2"	3 3/4"	16"	2"	2"	3/16"	5	14
														TOTAL BEARINGS	28

(*) The required shim plate shall be placed between layers of elastomer and milled together to form an integral unit.

BEAR.	FIXED BEARINGS													NO. OF BEARINGS	NO. OF BOLTS
	A	B	C	D	F	G	J	K	L	M	N	P			
2	17"	2'-4"	2'-5"	2'-5"	***	21 1/4"	6"	3 3/4"	16"	2 1/2"	2 3/4"	3/4"	5"	14	
														TOTAL BEARINGS	14

(*) The required shim plate shall be placed between layers of elastomer and milled together to form an integral unit.

DETAILS OF LAMINATED NEOPRENE BEARINGS (STEEL STRUCTURES)

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 54 OF 81

JACKSON COUNTY

A-5181

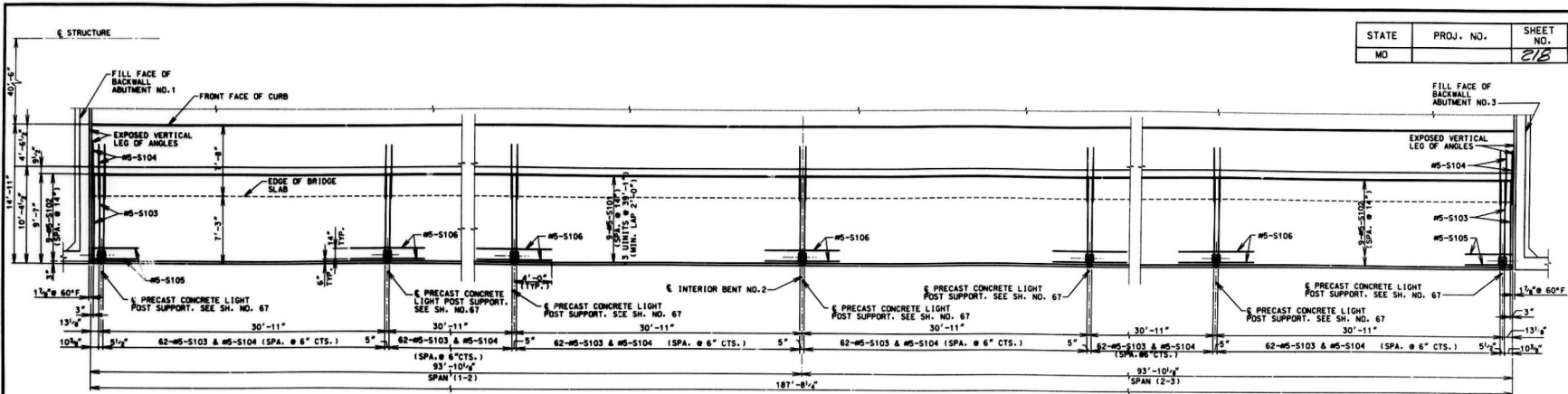
BRG LAM 240 2194

BRG LAM BRC3.31, SIL. A
LAMINATED BRG. REVISED JUNE 1993
JAN. 1990

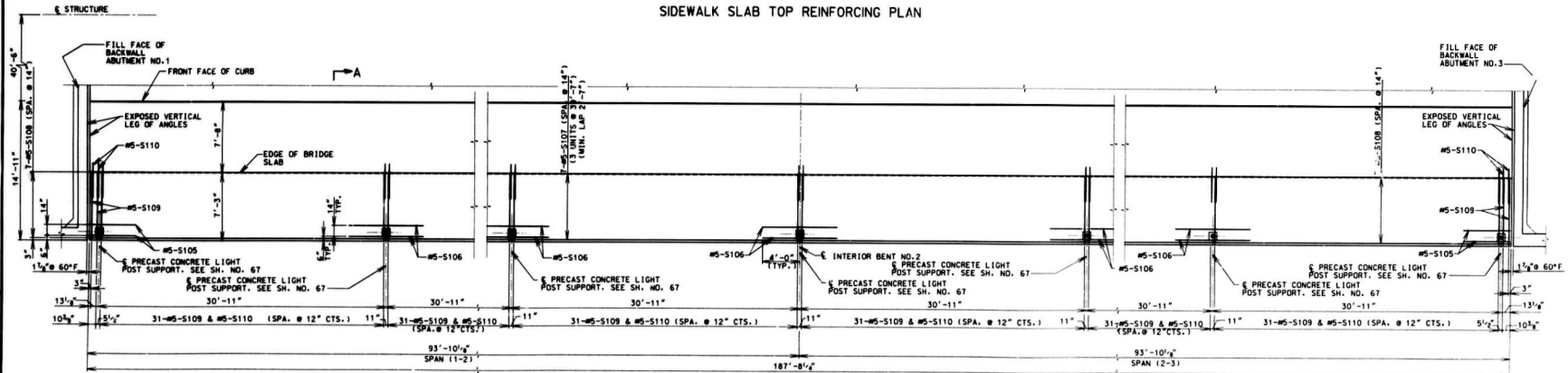
DETAILED MAR. 1995
CHECKED MAR. 1995

24 to 1

STATE	PROJ. NO.	SHEET NO.
MD		278

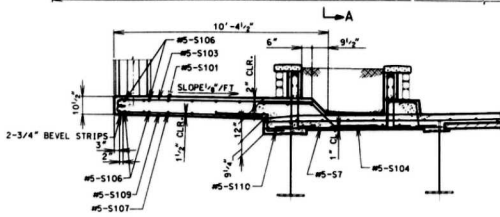


SIDEWALK SLAB TOP REINFORCING PLAN



SIDEWALK SLAB BOTTOM REINFORCING PLAN

SIDEWALK SLAB REINFORCING DETAILS



ELEVATION A-A

NOTE: DIMENSIONS SHOWN ARE HORIZONTAL.
 LONGITUDINAL REINFORCING STEEL SHALL BE PLACED SO THAT ENDS SHALL NOT BE MORE THAN 1" +/- FROM VERTICAL FACE OF EXPOSED ANGLE.
 FOR DETAILS AND REINFORCING OF CURB AND PLANTER WALL AND SIDEWALK PLANTER WALL. SEE SH. NO. 63
 FOR DETAILS AND LOCATION OF PLANTER DRAINS. SEE SH. NO. 63
 FOR DETAILS OF PRECAST CONCRETE LIGHT POST SUPPORT. SEE SH. NO'S. 65 AND 67
 FOR DETAILS OF CONDUIT FOR LIGHTING. SEE SH. NO. 73



DETAILED MAR. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING NOT TO SCALE. FOLLOW DIMENSIONS.

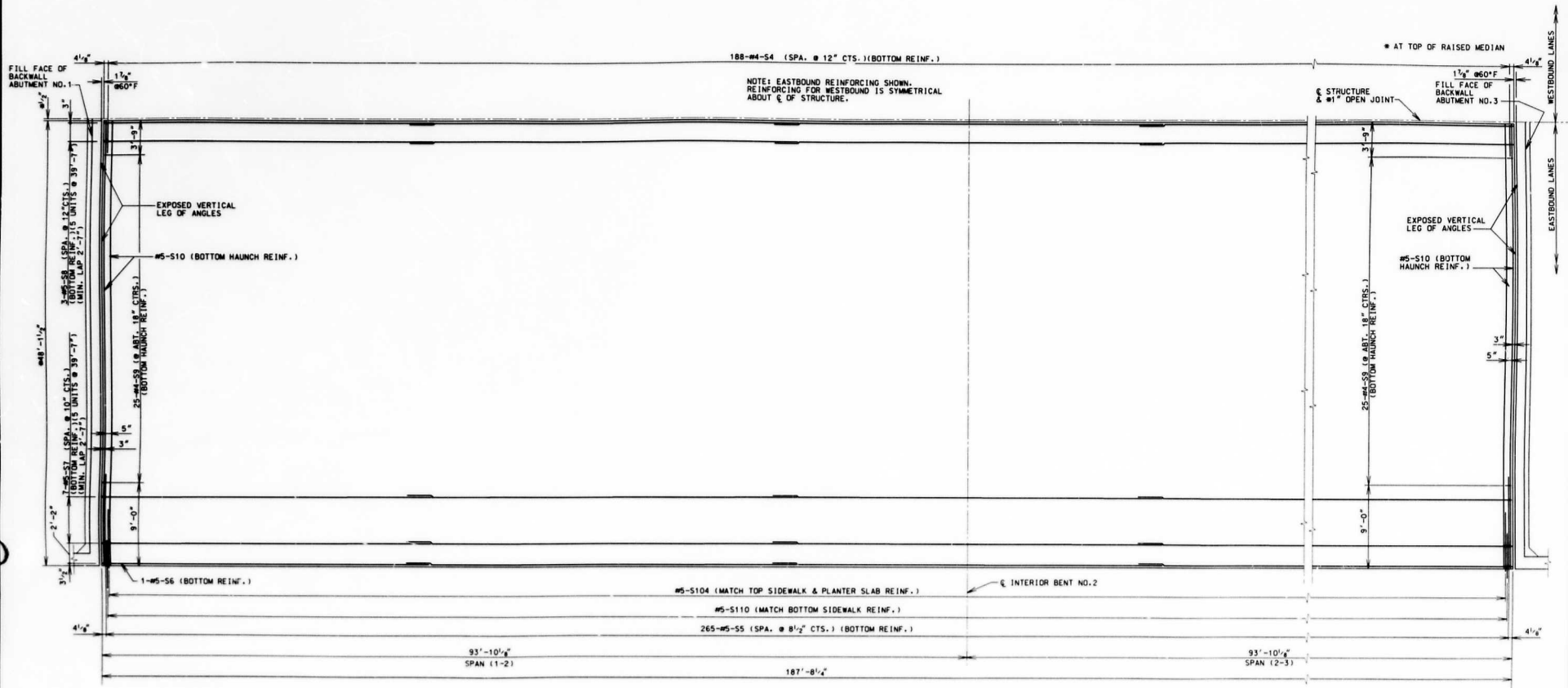
SHEET NO. 57 OF 81

JACKSON COUNTY

A-5181

1821

STATE	PROJ. NO.	SHEET NO.
		217



NOTE: EASTBOUND REINFORCING SHOWN. REINFORCING FOR WESTBOUND IS SYMMETRICAL ABOUT \bar{C} OF STRUCTURE.

NOTE: DIMENSIONS SHOWN ARE HORIZONTAL.

LONGITUDINAL REINFORCING STEEL SHALL BE PLACED SO THAT ENDS SHALL NOT BE MORE THAN 1" FROM VERTICAL FACE OF EXPOSED ANGLE.

FOR DETAILS AND REINFORCING OF RAISED MEDIAN SEE SH. NO. 64

FOR DETAILS AND REINFORCING OF CURB AND PLANTER WALL AND SIDEWALK PLANTER WALL, SEE SH. NO. 63

FOR DETAILS AND LOCATION OF PLANTER DRAINS, SEE SH. NO. 63

FOR DETAILS AND LOCATION OF PRECAST CONCRETE LIGHT POST, SEE SH. NO'S. 57-65, AND 67

FOR DETAILS OF PRESTRESSED PANELS SEE SH. NO. 60

FOR THEORETICAL SLAB HAUNCHING DIAGRAM SEE SH. NO. 59

Joseph P. Richman
 PROFESSIONAL ENGINEER
 No. 12345

EASTBOUND SLAB BOTTOM REINFORCING PLAN

DETAILED MAR. 1995
 CHECKED MAR. 1995

NOTE: THIS DRAWING NOT TO SCALE. FOLLOW DIMENSIONS.

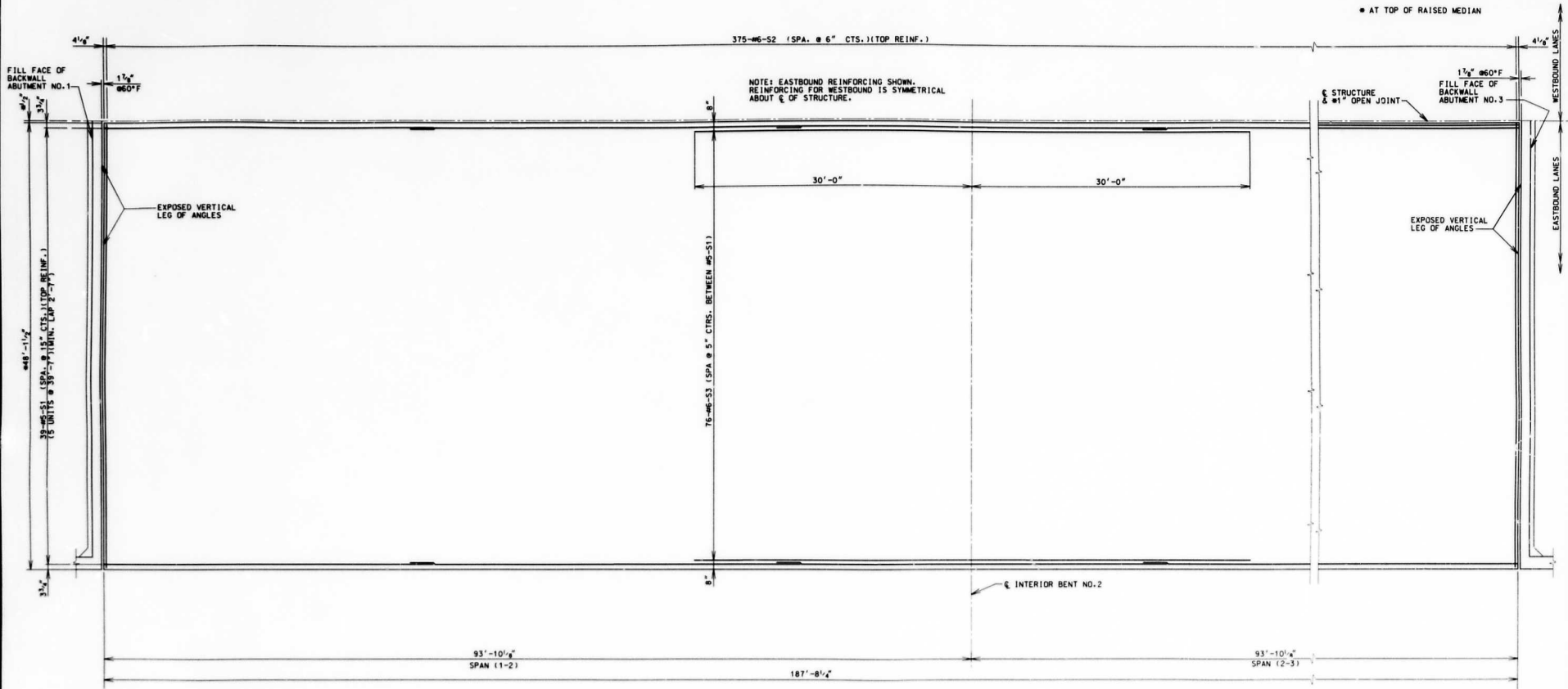
SHEET NO. 56 OF 81

JACKSON COUNTY

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1821

STATE	PROJ. NO.	SHEET NO.
MO		210



EASTBOUND SLAB TOP REINFORCING PLAN

NOTE: DIMENSIONS SHOWN ARE HORIZONTAL.

LONGITUDINAL REINFORCING STEEL SHALL BE PLACED SO THAT ENDS SHALL NOT BE MORE THAN 1" +/- FROM VERTICAL FACE OF EXPOSED ANGLE.

FOR DETAILS AND REINFORCING OF RAISED MEDIAN SEE SH. NO. 64

FOR DETAILS AND REINFORCING OF CURB AND PLANTER WALL AND SIDEWALK PLANTER WALL, SEE SH. NO. 63

FOR DETAILS AND LOCATION OF PLANTER DRAINS, SEE SH. NO. 63

FOR DETAILS AND LOCATION OF PRECAST CONCRETE LIGHT POST, SEE SH. NO'S. 57, 65, AND 67

FOR DETAILS OF PRESTRESSED PANELS SEE SH. NO. 60

FOR THEORETICAL SLAB HAUNCHING DIAGRAM SEE SH. NO. 59



DETAILED MAR. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING NOT TO SCALE. FOLLOW DIMENSIONS.

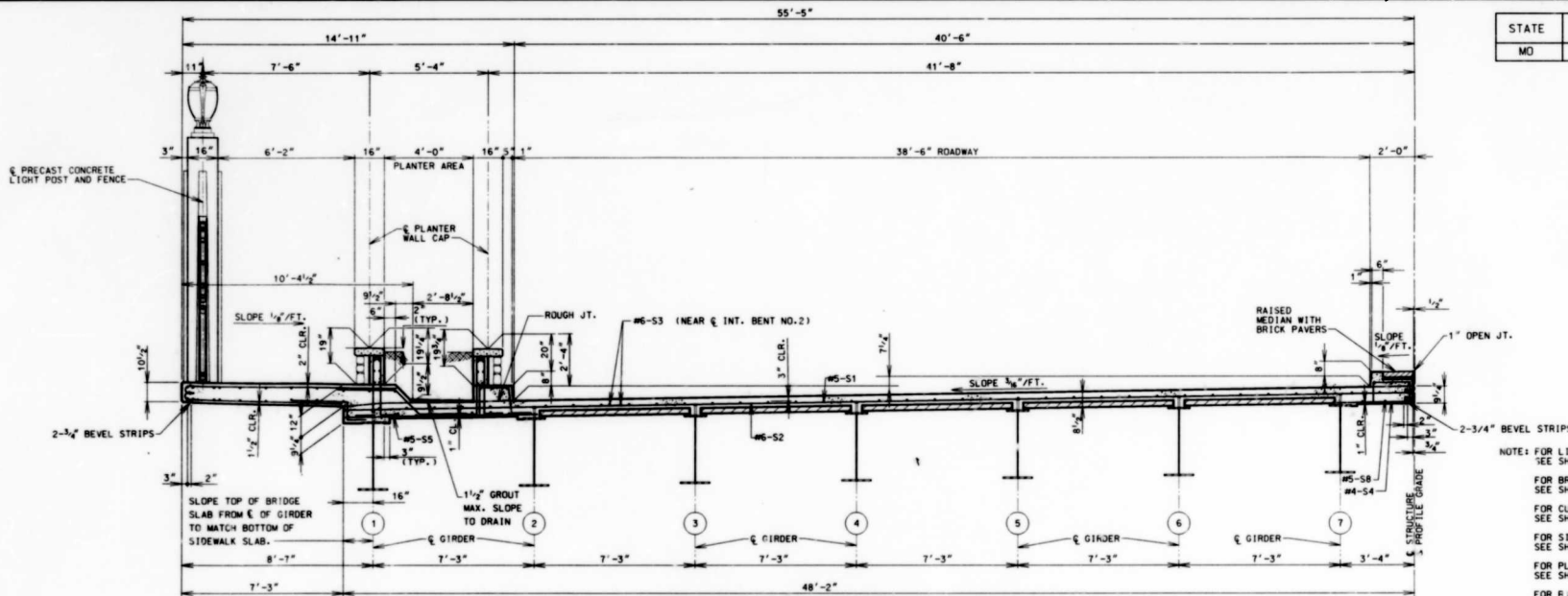
SHEET NO. 55 OF 81.

JACKSON COUNTY

A-5181

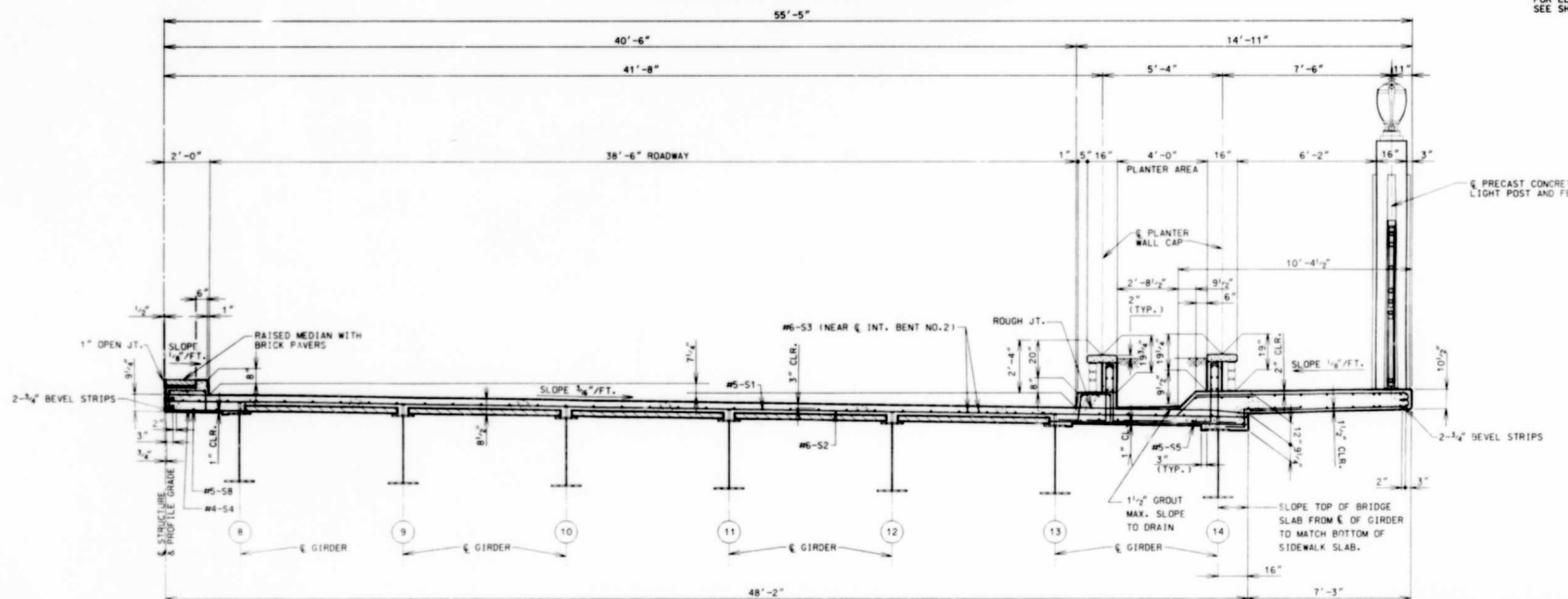
588
297

STATE	PROJ. NO.	SHEET NO.
MD		219



WESTBOUND SLAB SECTION NEAR & SPAN

- NOTE: FOR LIGHT POST DETAILS SEE SH. NO. 67
 FOR BRIDGE FENCE DETAIL SEE SH. NO'S. 65 AND 66
 FOR CURB AND PLANTER WALL SEE SH. NO. 63
 FOR SIDEWALK PLANTER WALL SEE SH. NO. 63
 FOR PLANTER DRAIN DETAILS SEE SH. NO. 63
 FOR F-I SEED MEDIAN DETAILS SEE SH. NO. 64
 FOR ELECTRICAL CONDUIT DETAILS SEE SH. NO. 73



EASTBOUND SLAB SECTION NEAR & SPAN

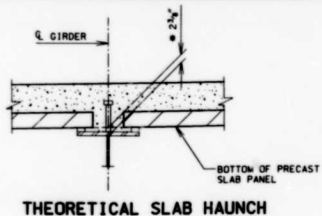
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SHEET NO. 58 OF 81.

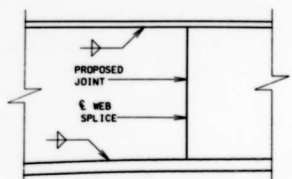
JACKSON COUNTY

A-5181

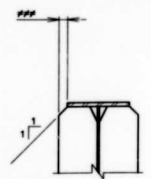
STATE	PROJ. NO.	SHEET NO.
MO.		220



THEORETICAL SLAB HAUNCH

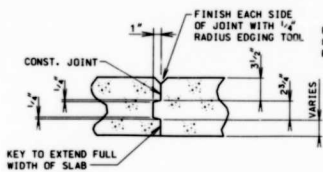


SHOP WEB SPLICE

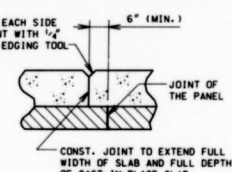


DETAIL OF BEVEL PLATE FOR BEARING STIFFENERS

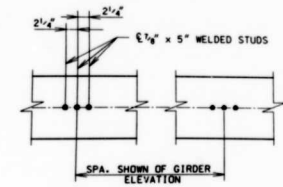
WHEN DIMENSION EXCEEDS 1/2" BEVEL STIFFENER PLATE.



TYPICAL C.I.P. CONSTRUCTION JOINT



TYPICAL PRESTRESSED PANEL CONSTRUCTION JOINT



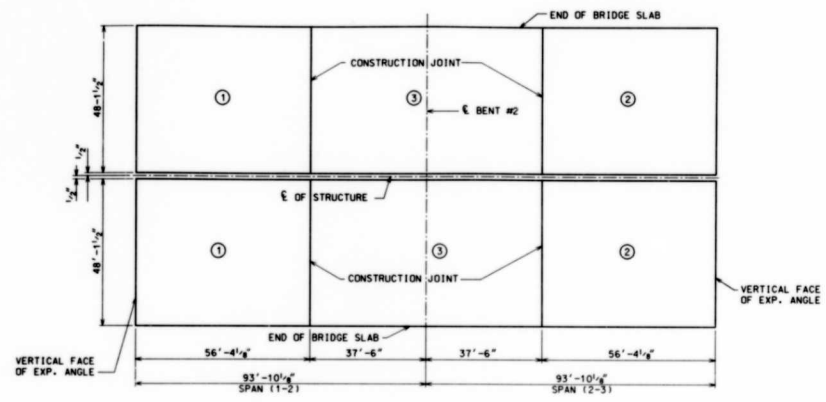
PLAN OF STUD CONN. ON 12" FLANGE WITH PRECAST DECK PANELS

NOTE: DIMENSION MAY VARY IF GIRDER CAMBER AFTER ERECTION DIFFERS FROM PLAN CAMBER BY MORE THAN THE 1/2% OF D.L. DEFLECTION DUE TO WEIGHT OF STRUCTURAL STEEL. NO PAYMENT WILL BE MADE FOR ADDITIONAL FORMING OR CONCRETE REQUIRED FOR VARIATION IN HAUNCHING.

BASIC SEQUENCE	SEQUENCE OF POURS			MIN. RATE OF POUR CU. YDS./HR.	
	DIRECTION			WITH RETARDER	NO RETARDER
	1	2	3		
	EITHER DIRECTION			25	25
ALTERNATE POURS TO THE BASIC SEQUENCE ARE SUBJECT TO THE APPROVAL OF THE ENGINEER IN ACCORDANCE WITH SECTION 703.3.12.4 OF MISSOURI STANDARD SPECIFICATIONS.					
ALTERNATE "A" POURS	1	3 + 2		50	50
	END TO 3 1 TO END				
ALTERNATE "B" POURS	1 + 3 + 2			50	50
	END TO END				

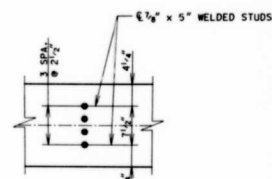
NOTES:
 1. THE CONTRACTOR SHALL POUR AND SATISFACTORILY FINISH THE SLAB POURS AT THE RATE GIVEN. RETARDER, IF USED, SHALL BE AN APPROVED TYPE AND RETARD THE SET OF THE CONCRETE TO 2.5 HOURS.
 2. IF THE PRECAST PANEL OPTION IS USED, THE VALUES SHOWN FOR THE MINIMUM RATE OF POUR MAY BE REDUCED BY 25%. HOWEVER, IN NO CASE SHALL THE MINIMUM RATE OF POUR BE LESS THAN 25 CU. YDS./HOUR.

SLAB POURING SEQUENCE

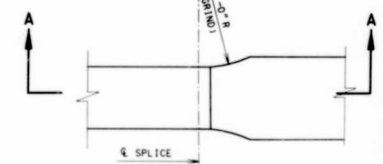


SLAB POURING SEQUENCE

NOTE: WEIGHT OF 4,610 LBS. OF SHEAR CONNECTORS IS INCLUDED IN THE WEIGHT OF FABRICATED STRUCTURAL CARBON STEEL (A36). WEIGHT OF 440 LBS. OF SHEAR CONNECTORS IS INCLUDED IN THE WEIGHT OF FABRICATED STRUCTURAL LOW ALLOY STEEL (A572). SHEAR CONNECTORS SHALL MEET THE REQUIREMENTS OF STD. SPEC. 1037.



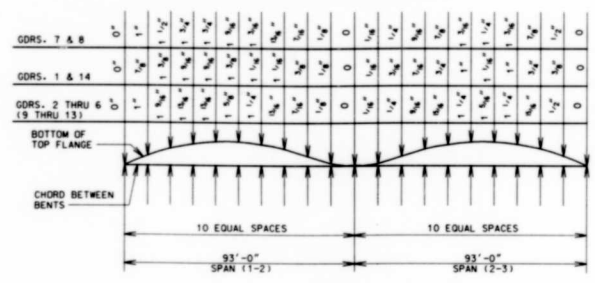
PLAN OF STUD CONN. ON 16" FLANGE



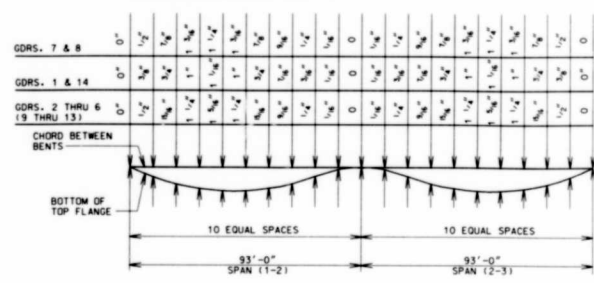
2'-0" TRANSITION RADIUS PLAN

NOTE: CAMBER INCLUDES ALLOWANCE FOR VERTICAL CURVE AND FOR DEAD LOAD DEFLECTION DUE TO CONCRETE SLAB, BARRIER CURB, PLANTER SLAB, PLANTER WALLS, SIDEWALK AND STRUCTURAL STEEL. LONGITUDINAL DIMENSIONS ARE MEASURED HORIZONTALLY.

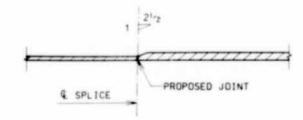
NOTE: 19% OF DEAD LOAD DEFLECTION IS DUE TO THE WEIGHT OF STRUCTURAL STEEL. LONGITUDINAL DIMENSIONS ARE MEASURED HORIZONTALLY.



CAMBER DIAGRAM



DEAD LOAD DEFLECTION



SECTION A-A WELDED SHOP FLANGE SPLICE

DETAILED MAR. 1995
 CHECKED MAR. 1995

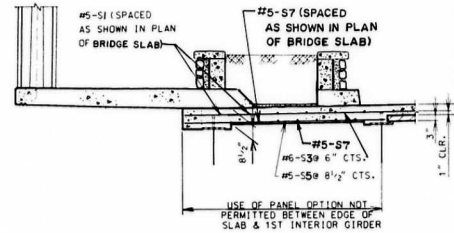
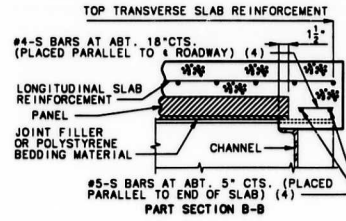
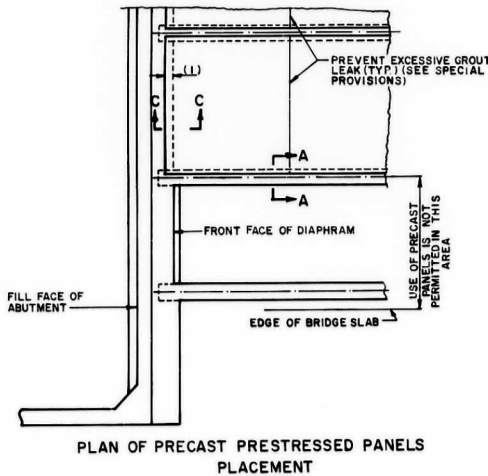
NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 59 OF 81.

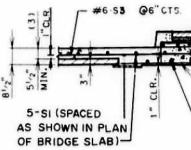


STATE	PROJ. NO.	SHEET NO.
MO.		60

Joseph S. Rishman



SECTION THRU CANTILEVER AT EXTERIOR GIRDER BAY



SECTION THRU CANTILEVER AT INTERIOR GIRDER BOX

NOTE:

USE SLAB HAUNCHING DIAGRAM ON SHEET NO. 57 FOR DETERMINING THICKNESS OF JOINT FILLER OR POLYSTYRENE BEDDING MATERIAL WITHIN THE LIMITS NOTED BELOW.

GENERAL NOTES:

PRESTRESSED PANELS:
CONCRETE FOR PRESTRESSED PANELS SHALL BE CLASS AT WITH F'c = 5,000 PSI. F'ci = 3,500 PSI.
THE TOP SURFACE OF ALL PANELS SHALL RECEIVE A SCORED FINISH WITH A DEPTH OF SCORING OF 1/8" INCH PERPENDICULAR TO THE PRESTRESSING STRANDS IN THE PANELS (SEE SPECIAL PROVISIONS).

PRESTRESSING TENDONS SHALL BE HIGH-TENSILE STRENGTH UNCOATED SEVEN WIRE (7) LOW-RELAXATION STRANDS FOR PRESTRESSED CONCRETE CONFORMING TO AASHTO M203, EXCEPT THAT NOMINAL DIAMETER OF STRAND = 3/8" INCH AND NOMINAL AREA = 0.085 SQ. IN. AND MINIMUM ULTIMATE STRENGTH = 21,200 LBS. (250 KSI). LARGER STRANDS MAY BE USED WITH THE SAME SPACING AND INITIAL TENSION.

INITIAL PRESTRESSING FORCE = 14.8 KIPS/STRAND.
THE METHOD AND SEQUENCE OF RELEASING THE STRANDS SHALL BE SHOWN ON THE SHOP DRAWINGS.

SUITABLE ANCHORAGE DEVICES FOR LIFTING PANELS MAY BE CAST IN PANELS PROVIDED THEY ARE SHOWN ON THE SHOP DRAWINGS AND APPROVED BY THE ENGINEER. PANEL LENGTHS SHALL BE DETERMINED BY THE CONTRACTOR AND SHOWN ON THE SHOP DRAWINGS.

WHEN SQUARE END PANELS ARE USED AT SKewed BENTS, IT IS REQUIRED THAT THE SKewed PORTION BE CAST FULL DEPTH. NO SEPARATE PAYMENT WILL BE MADE FOR THE ADDITIONAL CONCRETE AND REINFORCING REQUIRED.

MINIMUM JOINT FILLER OR POLYSTYRENE BEDDING MATERIAL THICKNESS SHALL BE 3/4" INCH, EXCEPT OVER SPlice PLATES WHERE MINIMUM THICKNESS SHALL BE 1/4" INCH. WHEN JOINT FILLER OR POLYSTYRENE BEDDING MATERIAL IS LESS THAN 1/2" INCH THICK OVER A SPlice PLATE, MAKE THE WIDTH OF MATERIAL AT THE SPlice THE SAME WIDTH AS PANEL ON SPlice PLATE. THICKER MATERIAL MAY BE USED ON BOTH SIDES OF THE GIRDER TO REDUCE CAST-IN-PLACE CONCRETE THICKNESS, WITHIN TOLERANCES. NO MORE THAN 2 INCHES TOTAL THICKNESS OF JOINT FILLER OR POLYSTYRENE BEDDING MATERIAL SHALL BE USED.

THE SAME THICKNESS OF JOINT FILLER MATERIAL SHALL BE USED UNDER ANY ONE EDGE OF ANY PANEL EXCEPT AT SPlices AND THE MAXIMUM CHANGE IN THICKNESS BETWEEN ADJACENT PANELS SHALL BE 1/4" INCH TO CORRECT FOR VARIATIONS FROM GIRDER CAMBER DIAGRAM. THE POLYSTYRENE BEDDING MATERIAL MAY BE CUT TO MATCH HAUNCH HEIGHT ABOVE TOP OF FLANGE.

SUPPORT FROM DIAPHRAGM FORMS IS REQUIRED UNDER THE OPTIONAL SKewed END UNTIL CAST-IN-PLACE CONCRETE HAS REACHED 3,000 PSI COMPRESSIVE STRENGTH.

REINFORCING STEEL:

ALL DIMENSIONS ARE OUT TO OUT.
MINIMUM CLEARANCE TO REINFORCING STEEL SHALL BE 1-1/2" INCH, UNLESS OTHERWISE SHOWN.

HOOKS AND BENDS SHALL BE IN ACCORDANCE WITH THE C.R.S.-1 MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES, STIRRUP AND TIE DIMENSIONS.

ACTUAL LENGTHS ARE MEASURED ALONG CENTERLINE OF BAR TO THE NEAREST INCH. THE PRESTRESSED PANEL QUANTITIES ARE NOT INCLUDED IN THE TABLE OF ESTIMATED QUANTITIES FOR ALTERNATE SLABS.

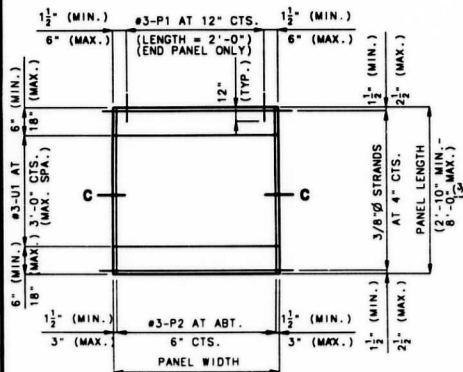
IF U1 BARS INTERFERE WITH PLACEMENT OF SLAB STEEL, U1 LOOPS MAY BE BENT OVER, AS NECESSARY, TO CLEAR SLAB STEEL.

WELDED WIRE FABRIC OR WELDED DEFORMED BAR MATS PROVIDING A MINIMUM AREA OF REINFORCING PERPENDICULAR TO STRANDS OF 0.22 SQ. IN. PER FT. WITH SPACING PARALLEL TO STRANDS SUFFICIENT TO INSURE PROPER HANDLING, MAY BE USED IN LIEU OF THE #3-P2 BARS SHOWN. WIRE OR BAR DIAMETER SHALL NOT BE LARGER THAN 0.375 INCHES. THE ABOVE ALTERNATIVE REINFORCEMENT CRITERIA MAY BE USED IN LIEU OF THE #3-P3 BARS, WHEN REQUIRED, AND PLACED OVER A WIDTH NOT LESS THAN 2FT.

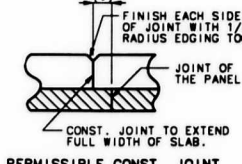
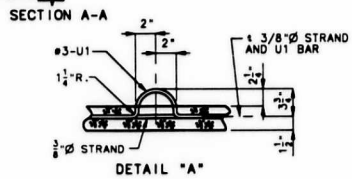
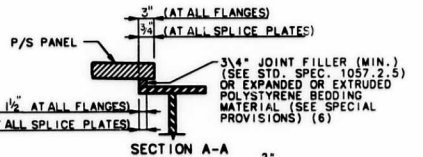
THE REINFORCING STEEL SHALL BE TIED SECURELY TO THE 3/8" B STRANDS WITH THE FOLLOWING MAXIMUM SPACING IN EACH DIRECTION:
#3-P2 BARS AT 18" INCHES
WELDED WIRE FABRIC OR WELDED DEFORMED BAR MATS AT 24 INCHES.

TIE THE #3-U1 BARS TO THE #3-P2 BARS, TO THE WELDED WIRE FABRIC OR THE WELDED DEFORMED BAR MATS AT ABOUT 36" INCH CENTERS.

ALL REINFORCEMENT OTHER THAN PRESTRESSING STRANDS SHALL BE EPOXY COATED.



PLAN OF PRECAST PRESTRESSED PANEL



PERMISSIBLE CONST. JOINT

(4) ADJUST THE PERMISSIBLE CONSTRUCTION JOINT TO A CLEARANCE OF 6 INCHES MINIMUM FROM THE JOINTS OF THE PANELS. U1 BARS MAY BE ORIENTED AT RIGHT ANGLES TO LOCATION AND SPACING SHOWN. U1 BARS SHALL BE PLACED BETWEEN P1 BARS.

NOTES:

- (1) END PANELS TO BE DIMENSIONED 1-1/2 INCHES FROM THE INSIDE FACE OF DIAPHRAGM.
- (2) S-BARS SHOWN ARE BOTTOM STEEL IN SLAB BETWEEN PANELS AND USED WITH SQUARED END PANELS ONLY.
COST OF S-BARS SHALL BE INCLUDED IN PRICE BID FOR SLAB PER SQUARE YARD.
S-BARS ARE NOT LISTED IN BILL OF REINFORCING.
- (3) ADJUSTMENT IN THE SLAB THICKNESS, JOINT FILLER OR POLYSTYRENE BEDDING MATERIAL THICKNESS, OR GRADE, WILL BE NECESSARY IF THE GIRDER CAMBER AFTER ERECTION DIFFERS FROM PLAN CAMBER BY MORE THAN THE 2" OF DEAD LOAD DEFLECTION DUE TO THE WEIGHT OF STRUCTURAL STEEL. NO PAYMENT WILL BE MADE FOR ADDITIONAL LABOR OR MATERIALS FOR THE ADJUSTMENT.
- (4) S-BARS SHOWN ARE USED WITH SKewed END PANELS, OR SQUARE END PANELS OF SQUARE STRUCTURES ONLY. THE #3 S-BARS SHALL EXTEND THE WIDTH OF SLAB (21 INCHES LAP IF NECESSARY) OR TO WITHIN 3 INCHES OF EXPANSION DEVICE ASSEMBLIES.
- (5) ANY STRAND 2'-0" OR SHORTER SHALL HAVE A #4 REINFORCING BAR ON EACH SIDE OF IT CENTERED BETWEEN STRANDS. STRANDS 2'-0" OR SHORTER MAY THEN BE DEBONDED AT THE FABRICATORS OPTION.
- (6) ALL PANEL SUPPORT PADS SHALL BE GLUED TO THE GIRDER. WHEN SUPPORT THICKNESS EXCEEDS 1-1/2", THE PADS SHALL BE GLUED TOP AND BOTTOM. THE GLUE USED SHALL BE THE TYPE RECOMMENDED BY THE PANEL SUPPORT PADS MANUFACTURER.
- (7) USE #3-P3 BARS IF PANEL IS SKewed 45° OR GREATER.

DETAILS OF PRECAST PRESTRESSED PANELS

DETAILED MAR. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 60 OF 81

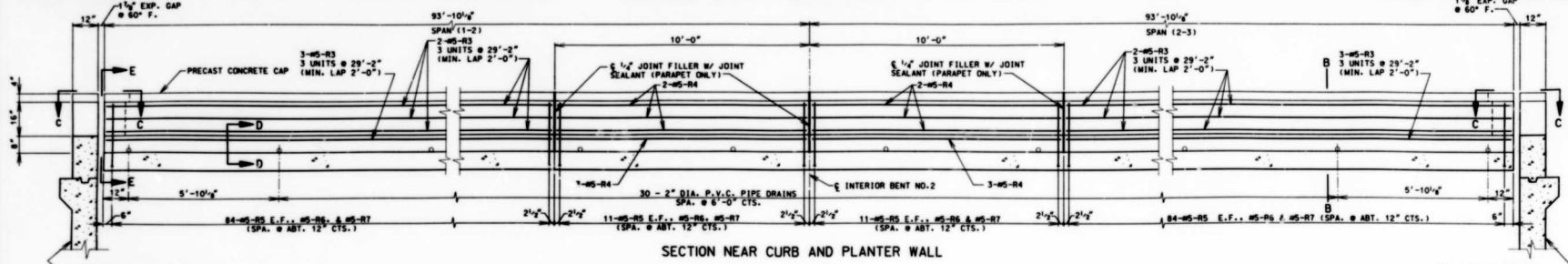
NOTE: STONE VENEER SHALL BE SECURED TO CONCRETE BACKING BY USE OF FLEXIBLE ANCHOR. SEE SPECIAL PROVISION FOR TYPE, SIZE AND SPACING. SEE SPECIAL PROVISIONS FOR EXP. CONTROL JOINT IN PRECAST CONCRETE CAP AND STONE VENEER.

NOTE: DIMENSIONS SHOWN ARE HORIZONTAL DIMENSIONS ALONG CURB LINE. SEE SPECIAL PROVISIONS FOR THE CONSTRUCTION OF STONE VENEER AND PRECAST CONCRETE CAP.

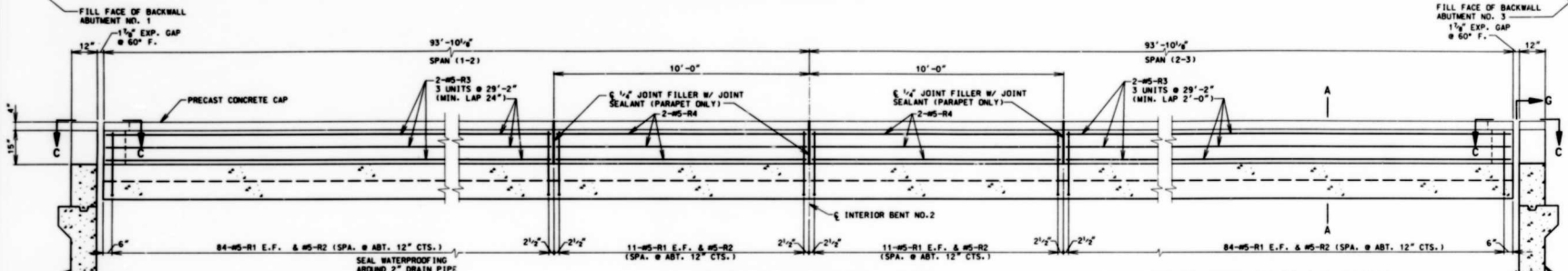
NOTE: TOP OF PLANTER WALLS SHALL BE BUILT PARALLEL TO GRADE WITH JOINT FILLER PLACED NORMAL TO GRADE. ALL EXPOSED EDGES OF CURB SHALL HAVE EITHER A 1/2" RADIUS OR A 3/8" BEVEL, UNLESS OTHERWISE NOTED. THE CONTRACT UNIT PRICE SHALL INCLUDE THE COST OF ALL EPOXY COATED REINFORCING STEEL. PLANTER DRAIN SYSTEM WITH GROUT FILL, WATERPROOFING AND CONCRETE COMPLETE-IN-PLACE, PER LIN FT. CONCRETE IN THE CURB AND PLANTER WALLS SHALL BE CLASS B1.

NOTE: PLANTER WALL FOR WESTBOUND SHOW PLANTER WALLS FOR EASTBOUND ARE SYMMETRICAL ABOUT C OF STRUCTURE.

STATE	PROJ. NO.	SHEET NO.
MO		224



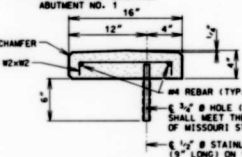
SECTION NEAR CURB AND PLANTER WALL



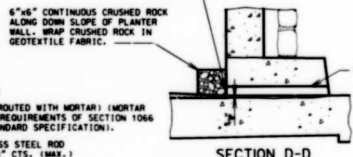
SECTION NEAR SIDEWALK PLANTER WALL

NOTE: 1. WATERPROOFING SHALL BE APPLIED TO ALL INTERIOR WALLS AND BASE SLAB OF PLANTER (SEE SPECIAL PROVISIONS)

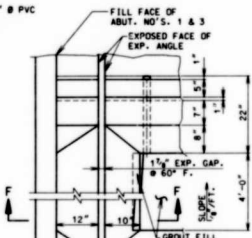
NOTE: USE A MINIMUM LAP OF 2'-0\"/>



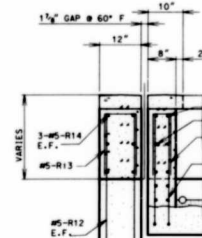
TYPICAL SECTION THRU PRECAST CAP



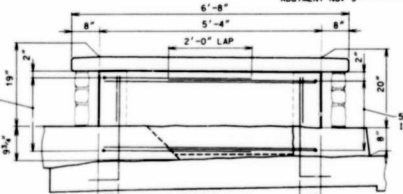
SECTION D-D



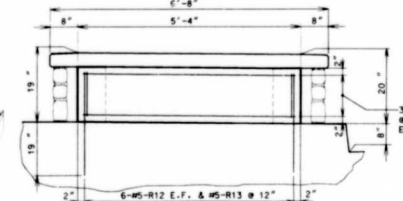
SECTION C-C



SECTION F-F



SECTION E-E



SECTION G-G

DETAILED MAR. 1995 SECTION A-A
CHECKED MAR. 1995

CURB AND PLANTER WALL AND SIDEWALK PLANTER WALL DETAILS

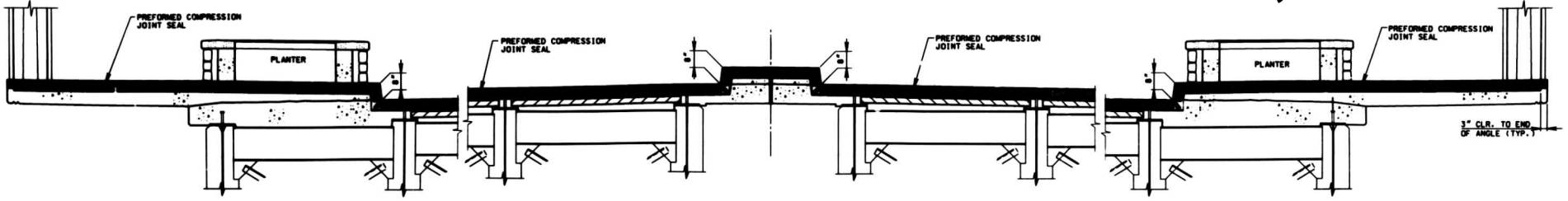
NOTE: THIS DRAWING NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 63 OF 81.

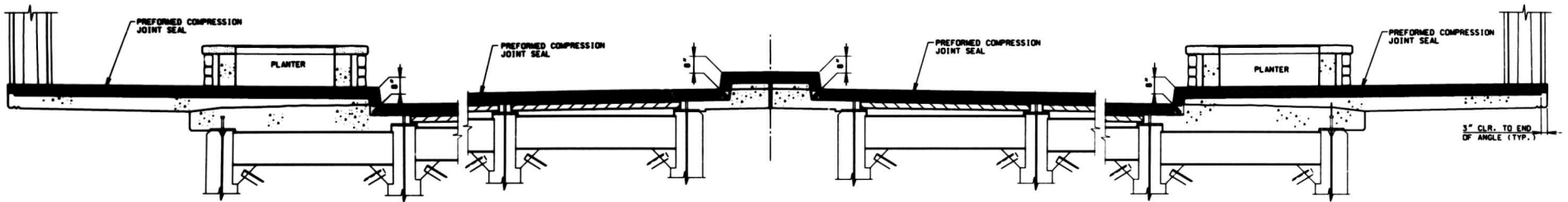
JACKSON COUNTY

A-5181

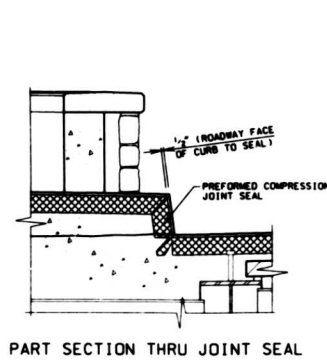
STATE	PROJ. NO.	SHEET NO.
		272



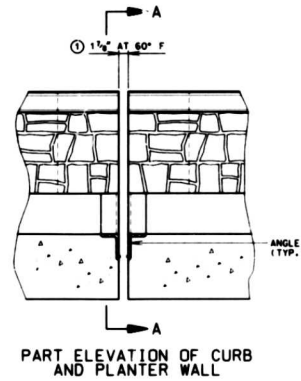
SECTION THRU EXPANSION AT ABUT NO. 1



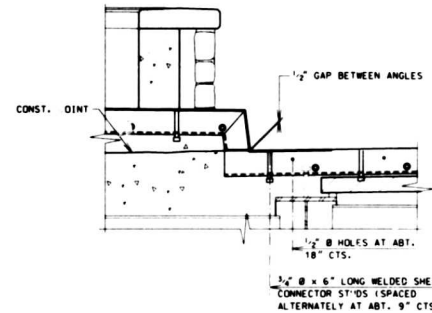
SECTION THRU EXPANSION AT ABUT NO. 3



PART SECTION THRU JOINT SEAL



PART ELEVATION OF CURB AND PLANTER WALL



PART SECTION A-A

1/2" Ø x 6" LONG WELDED SHEAR CONNECTOR ST'S (SPACED ALTERNATELY AT ABT. 9" CTS.)

NOTE: FOR DETAILS NOT SHOWN SEE SHEET NO. 62

PREFORMED COMPRESSION JOINT DETAILS

DETAILED MAR. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING NOT TO SCALE. FOLLOW DIMENSIONS.

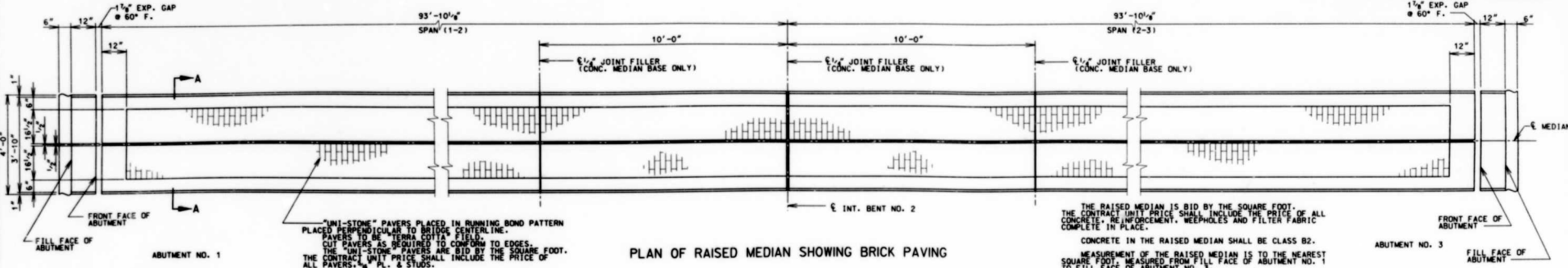
SHEET NO. 61 OF 81

JACKSON COUNTY

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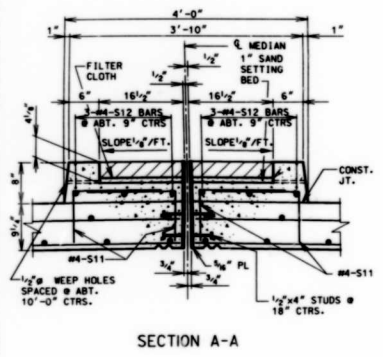
1821

STATE	PROJ. NO.	SHEET NO.
MO		225

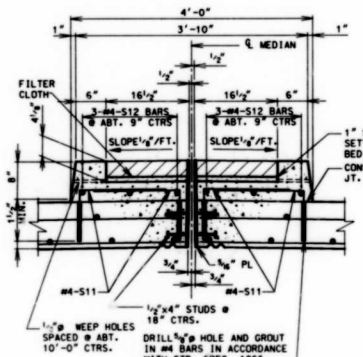


PLAN OF RAISED MEDIAN SHOWING BRICK PAVING

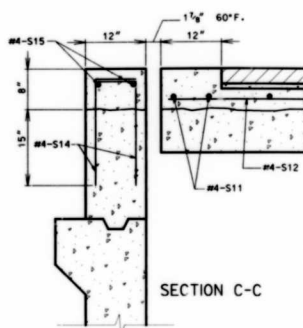
THE RAISED MEDIAN IS BID BY THE SQUARE FOOT. THE CONTRACT UNIT PRICE SHALL INCLUDE THE PRICE OF ALL CONCRETE, REINFORCEMENT, WEEP HOLES AND FILTER FABRIC COMPLETE IN PLACE.
CONCRETE IN THE RAISED MEDIAN SHALL BE CLASS B2. MEASUREMENT OF THE RAISED MEDIAN IS TO THE NEAREST SQUARE FOOT, MEASURED FROM FILL FACE OF ABUTMENT NO. 1 TO FILL FACE OF ABUTMENT NO. 3.



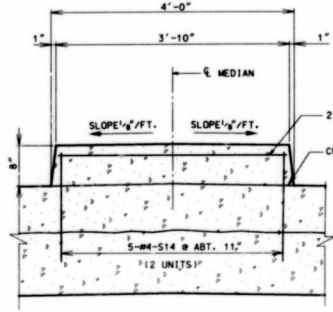
SECTION A-A



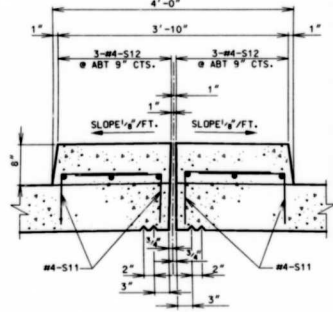
SECTION A-A (OPTIONAL ANCHORING SYSTEM)



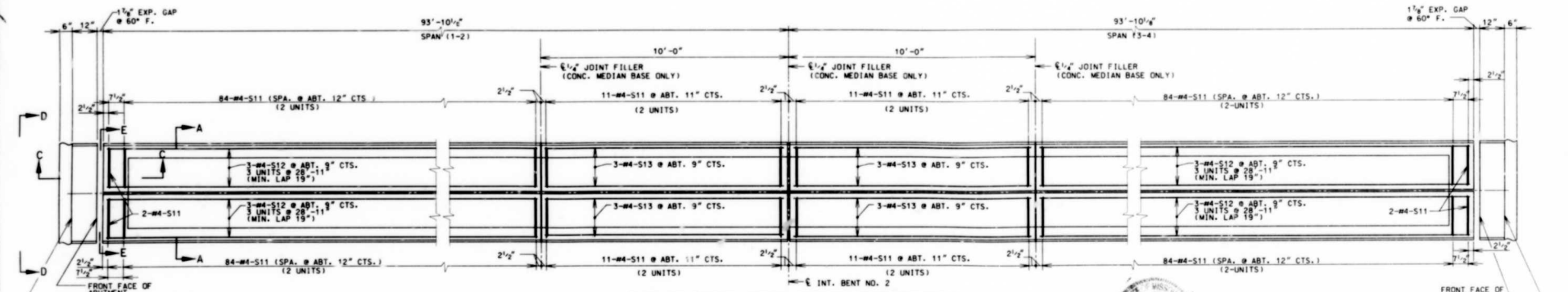
SECTION C-C



SECTION D-D



SECTION E-E



PLAN OF RAISED MEDIAN SHOWING REINFORCEMENT

DETAILS OF RAISED MEDIAN

DETAILED MAR. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING NOT TO SCALE. FOLLOW DIMENSIONS.

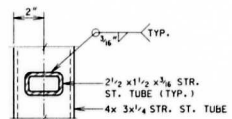
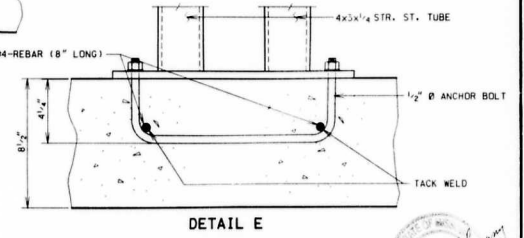
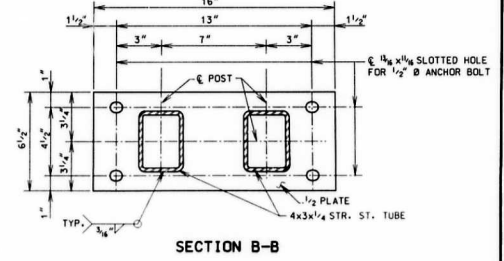
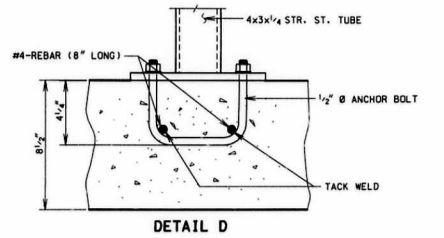
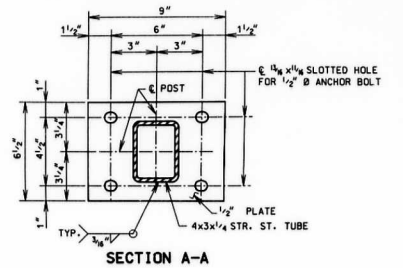
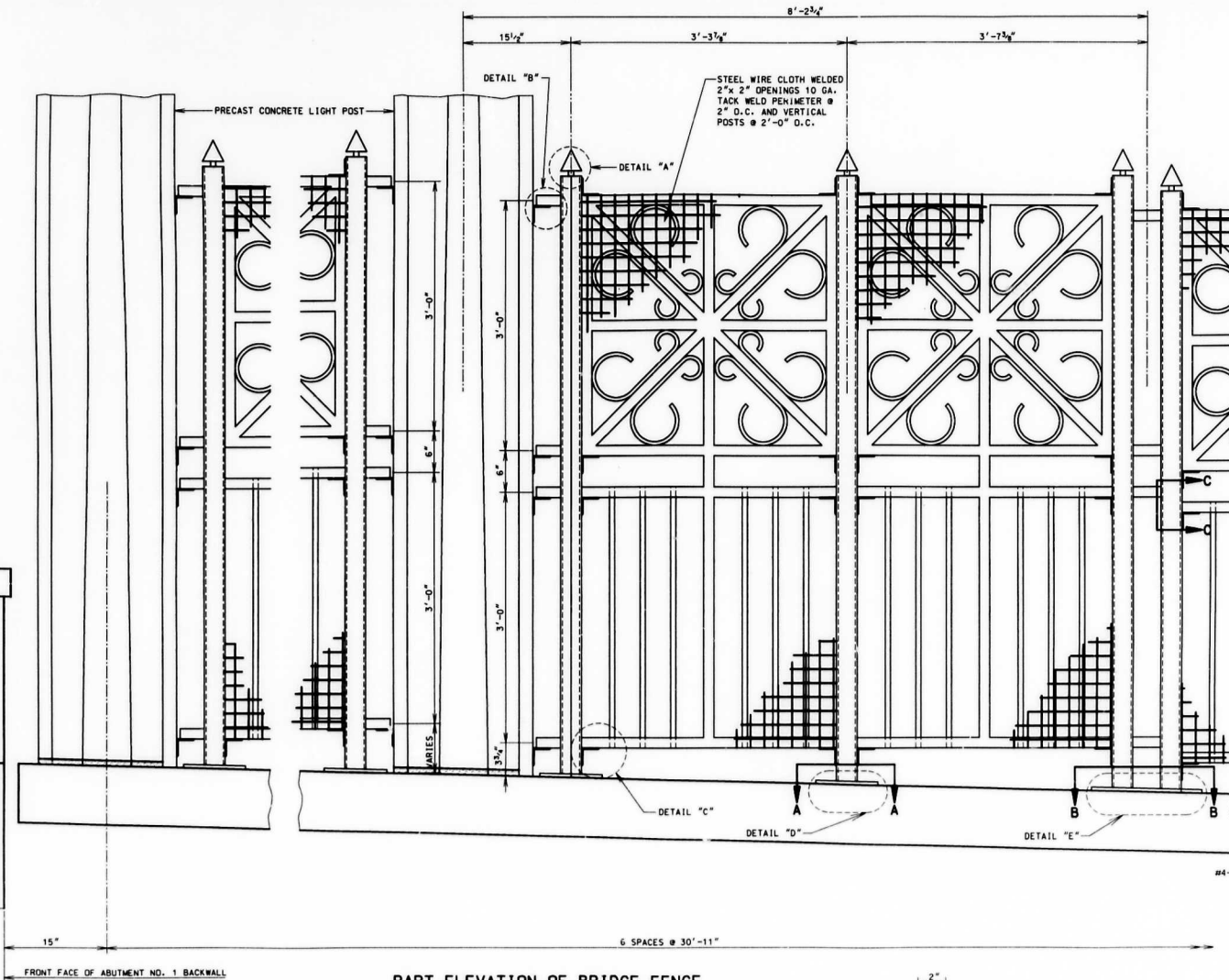
SHEET NO. 64 OF 81.



JACKSON COUNTY

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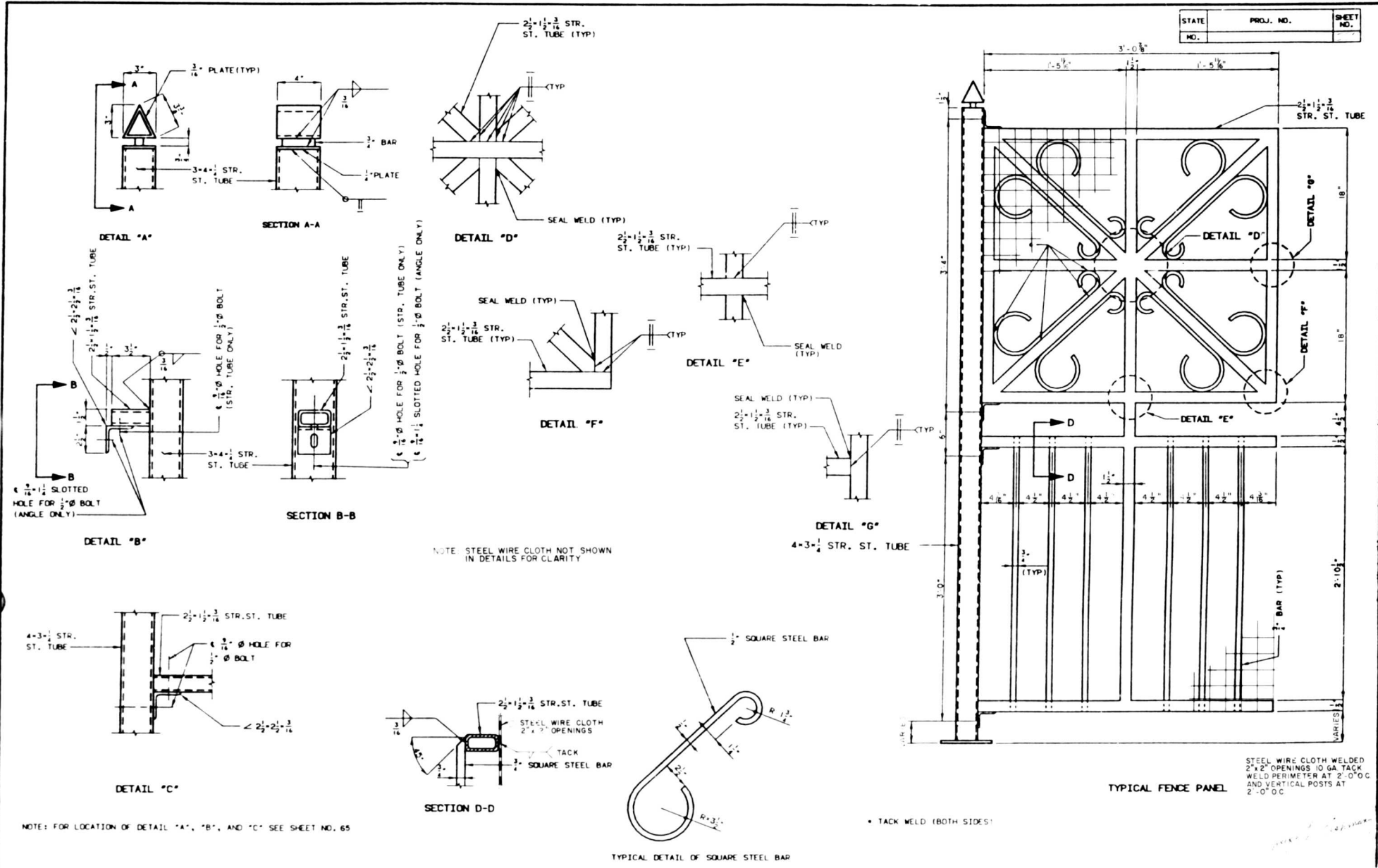


PART ELEVATION OF BRIDGE FENCE
(LOOKING NORTH FROM OUTSIDE OF BRIDGE)

THE ESTIMATED QUANTITY FOR ORNAMENTAL PEDESTRIAN FENCES IS BASED ON THE HORIZONTAL DISTANCE FROM FACE TO FACE OF THE PRECAST CONCRETE LIGHT POSTS.

NOTE: FOR DETAILS OF DETAIL "A", "B", AND "C" SEE SHEET NO. 66
FOR DETAILS OF FENCE NOT SHOWN SEE SHEET NO. 66

STATE	PROJ. NO.	SHEET NO.
MO.		



DETAILED MAR 1995
 CHECKED MAR 1995

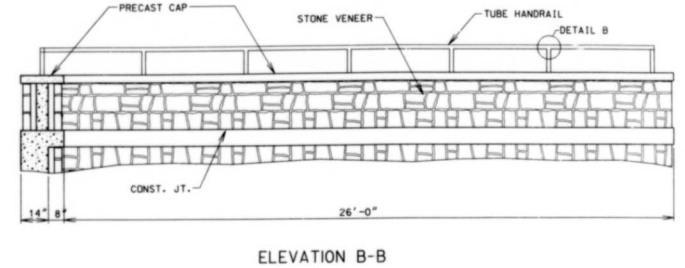
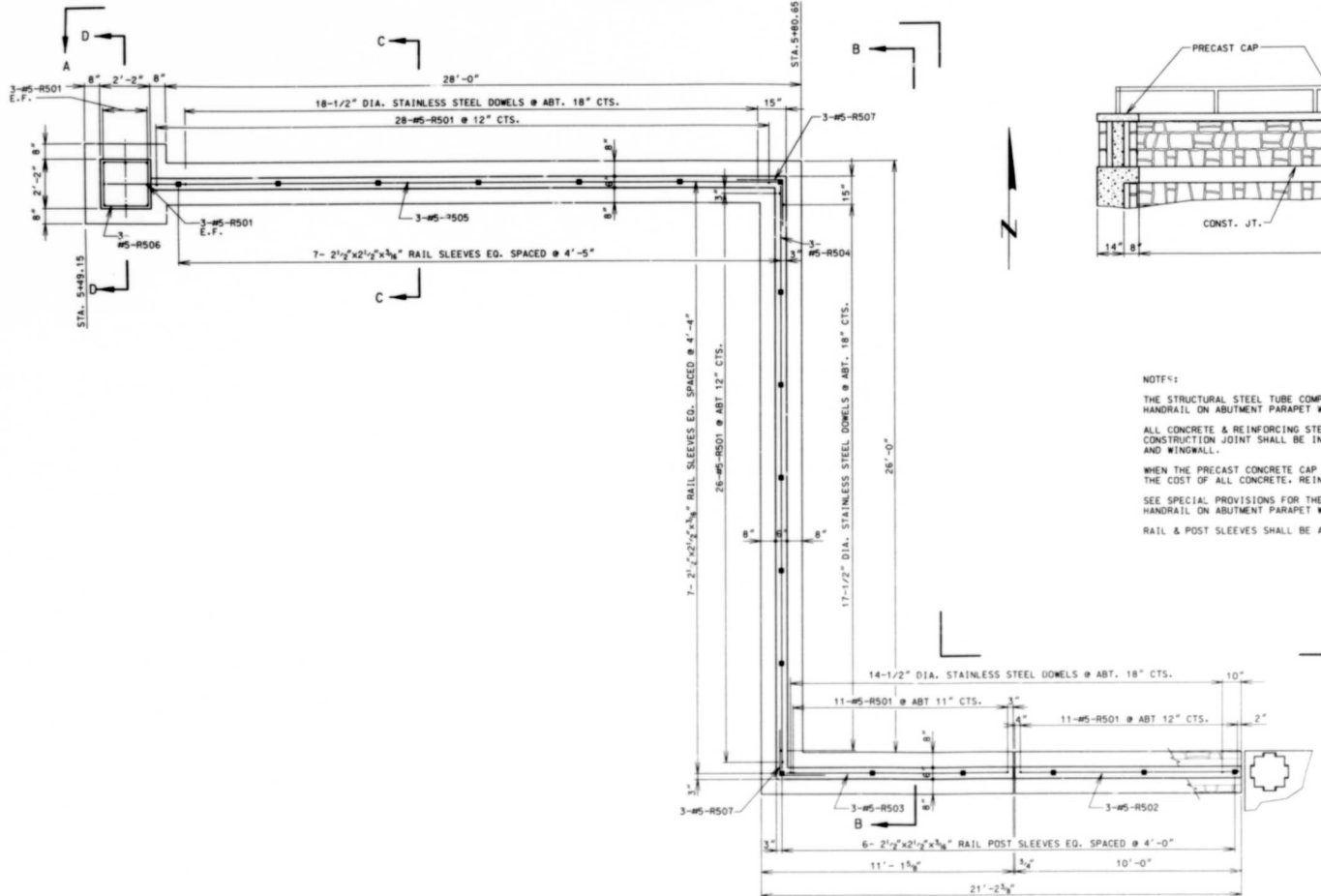
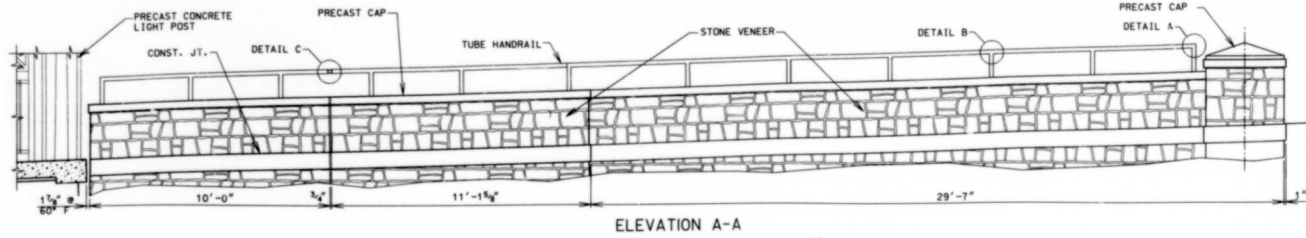
NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

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JACKSON COUNTY

A-5181

STATE	PROJ. NO.	SHEET NO.
MO		229



NOTES:

THE STRUCTURAL STEEL TUBE COMPLETE-IN-PLACE, RAIL & POST SLEEVES SHALL BE PAID FOR AS TUBE HANDRAIL ON ABUTMENT PARAPET WALLS.

ALL CONCRETE & REINFORCING STEEL IN THE END POST & PARAPET WALLS ABOVE CONSTRUCTION JOINT SHALL BE INCLUDED IN THE BID ITEM PARAPET WALLS ABOVE RETAINING WALLS AND WINGWALL.

WHEN THE PRECAST CONCRETE CAP IS BID BY LINEAR FEET, THE CONTRACT UNIT PRICE SHALL INCLUDE THE COST OF ALL CONCRETE, REINFORCEMENT, AND STAINLESS STEEL DOWELS COMPLETE-IN-PLACE.

SEE SPECIAL PROVISIONS FOR THE CONSTRUCTION OF STONE VENEER, PRECAST CAP AND TUBE HANDRAIL ON ABUTMENT PARAPET WALLS.

RAIL & POST SLEEVES SHALL BE A-36 MATERIAL.

NOTE:

FOR DETAILS A, B AND C, SEE SH. 72
 FOR SECTION C-C AND D-D, SEE SH. 72
 FOR PRECAST CONCRETE CAP DETAILS, SEE SH. 72
 FOR END POST CAP DETAILS, SEE SH. 72
 FOR RAIL SETTING DETAILS, SEE SH. 72
 FOR 1/2" DIA. STAINLESS STEEL BAR DETAILS, SEE SH. 72.



PLAN OF PARAPET WALL (BELOW PRECAST CONCRETE CAP)
DETAILS OF ABUTMENT NO. 1 LEFT PARAPET WALLS

DETAILED JAN. 1995
 CHECKED MAR. 1995

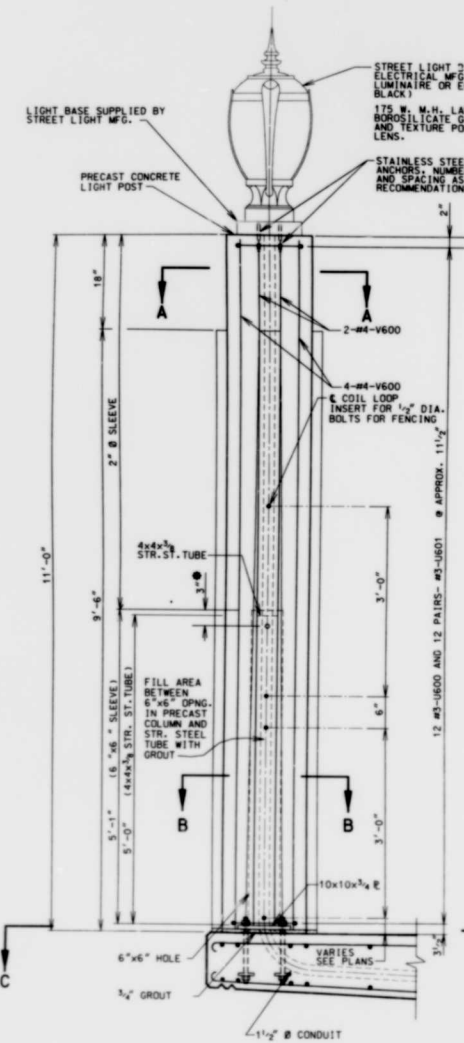
NOTE: THIS DRAWING NOT TO SCALE. FOLLOW DIMENSIONS. SHEET NO. 68 OF 81.

JACKSON COUNTY

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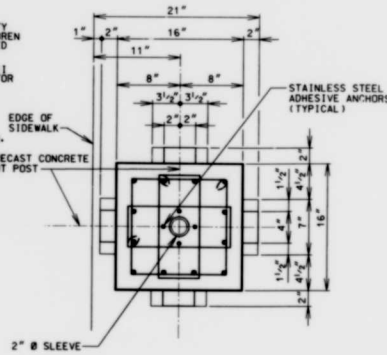
1821 24 to 1

STATE	PROJ. NO.	SHEET NO.
MO		222

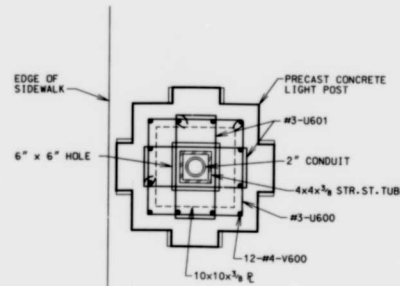


PRECAST CONCRETE LIGHT POST ELEVATION

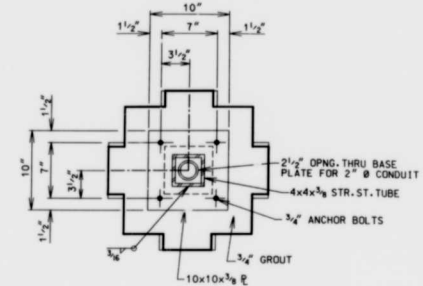
NOTE: PROVIDE 2" Ø HOLE PLUG AFTER GROUT IS APPLIED.



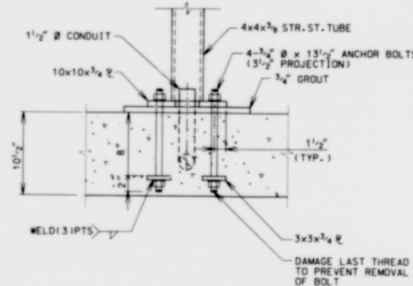
SECTION A-A



SECTION B-B



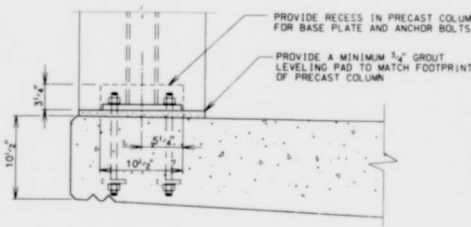
SECTION C-C



PRECAST CONCRETE LIGHT POST DETAILS

NOTE: THIS DRAWING NOT TO SCALE. FOLLOW DIMENSIONS.

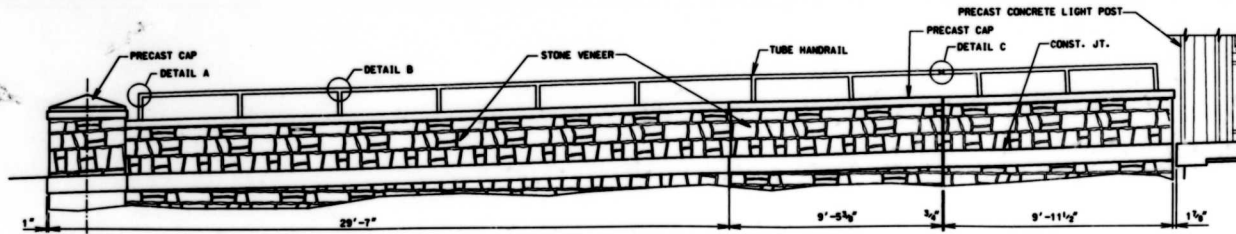
SHEET NO. 67 OF 81



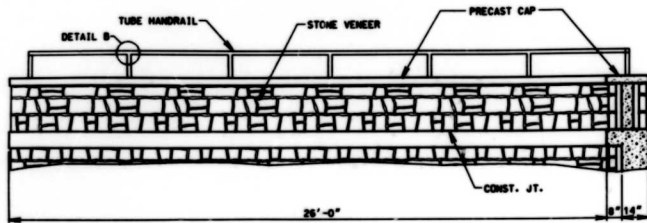
NOTE: ALL 4x4x3/4 STR. ST. TUBES SHALL BE CAST VERTICAL.
NOTE: FOR LOCATION OF ALL PRECAST CONCRETE LIGHT POSTS, SEE SHEET NO. 57 AND SHEET NO. 65.
NOTE: FABRICATION AND INSTALLATION OF POST ANCHOR SYSTEM COMPLETE AND IN PLACE, SHALL BE INCLUDED WITH PRICE BID FOR SLAB ON STEEL GIRDER.



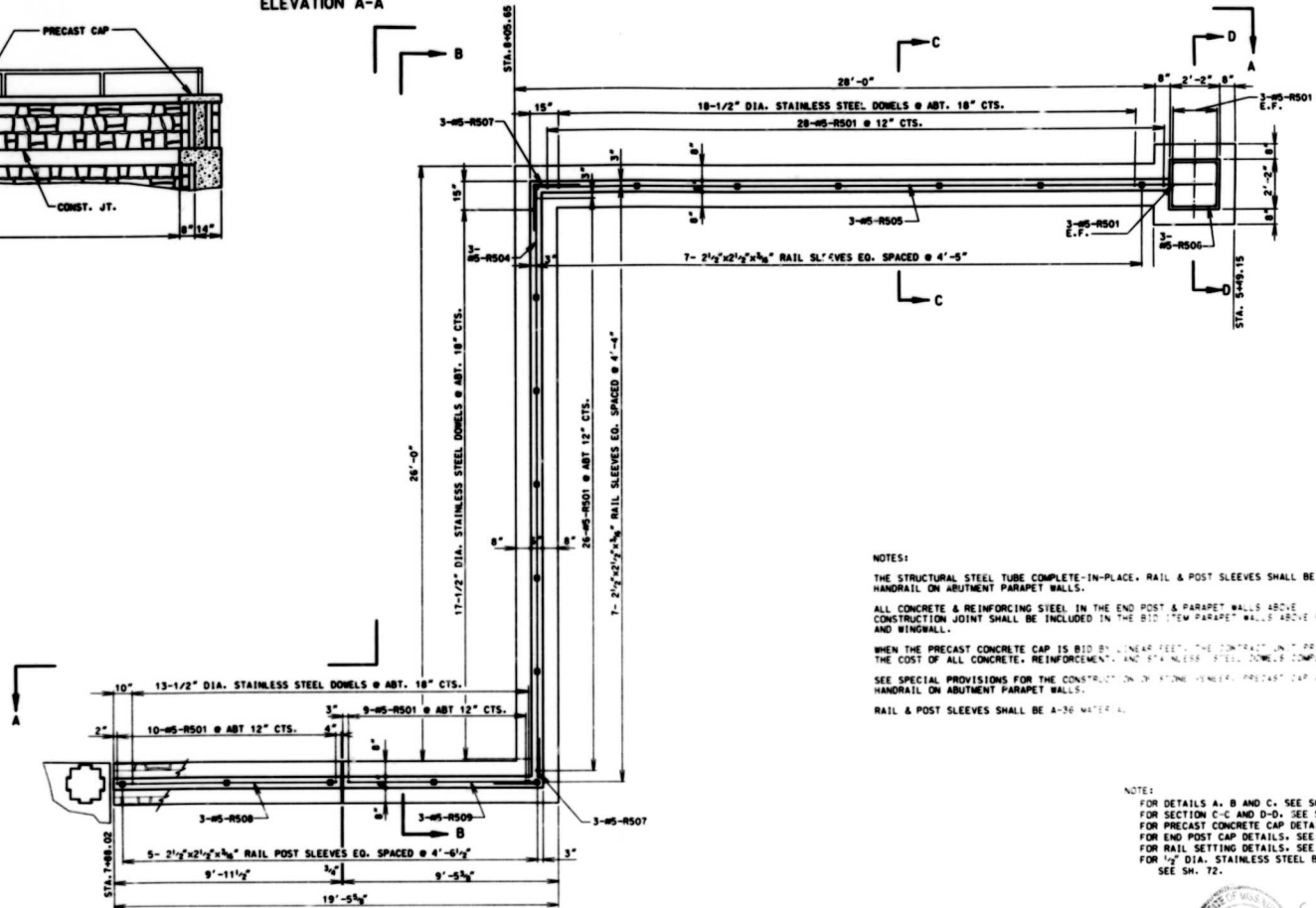
STATE	PROJ. NO.	SHEET NO.
MO		231



ELEVATION A-A



ELEVATION B-B



NOTES:

THE STRUCTURAL STEEL TUBE COMPLETE-IN-PLACE, RAIL & POST SLEEVES SHALL BE PAID FOR AS TUBE HANDRAIL ON ABUTMENT PARAPET WALLS.

ALL CONCRETE & REINFORCING STEEL IN THE END POST & PARAPET WALLS ABOVE RETAINING WALLS AND WINGWALL.

WHEN THE PRECAST CONCRETE CAP IS BID BY LINEAR FEET, THE CONTRACT UNIT PRICE SHALL INCLUDE THE COST OF ALL CONCRETE, REINFORCEMENT, AND STAINLESS STEEL DOWELS COMPLETE-IN-PLACE.

SEE SPECIAL PROVISIONS FOR THE CONSTRUCTION OF STONE VENEER, PRECAST CAP AND TUBE HANDRAIL ON ABUTMENT PARAPET WALLS.

RAIL & POST SLEEVES SHALL BE A-36 W/40K L.

NOTES:

- FOR DETAILS A, B AND C, SEE SH. 72
- FOR SECTION C-C AND D-D, SEE SH. 72
- FOR PRECAST CONCRETE CAP DETAILS, SEE SH. 72
- FOR END POST CAP DETAILS, SEE SH. 72
- FOR RAIL SETTING DETAILS, SEE SH. 72
- FOR 1/2" DIA. STAINLESS STEEL BAR DETAILS, SEE SH. 72.

PLAN OF PARAPET WALL (BELOW PRECAST CONCRETE CAP)
DETAILS OF ABUTMENT NO.3 LEFT PARAPET WALLS

DETAILED FEB. 1995
 CHECKED MAR. 1995

NOTE: THIS DRAWING NOT TO SCALE. FOLLOW DIMENSIONS.

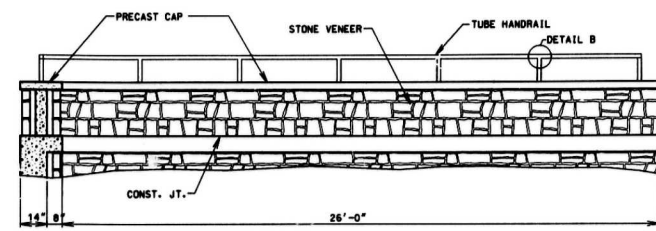
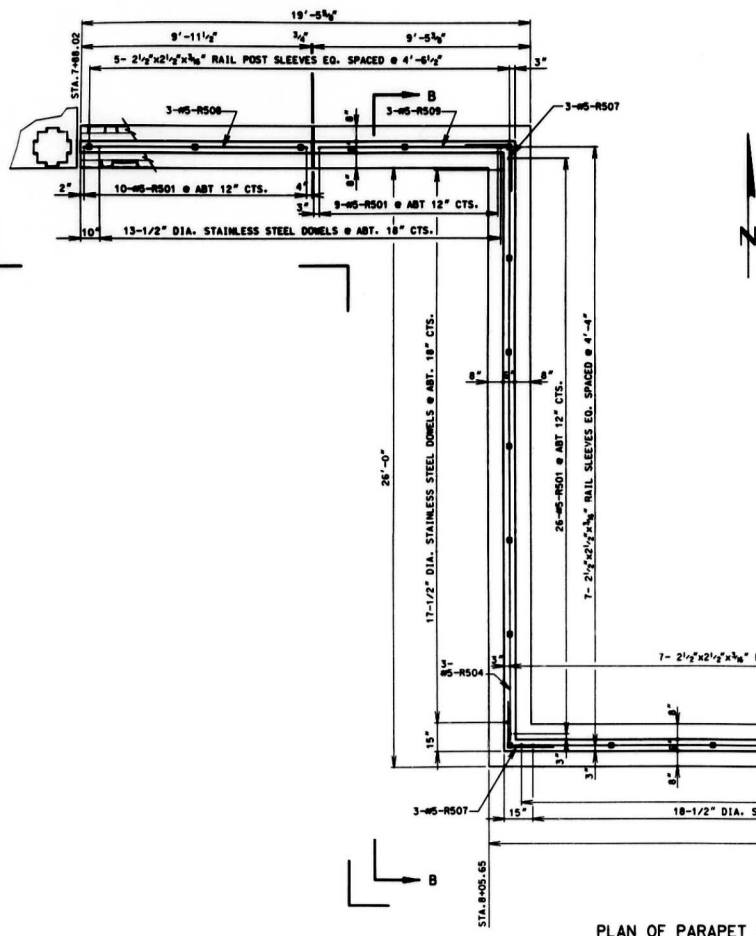
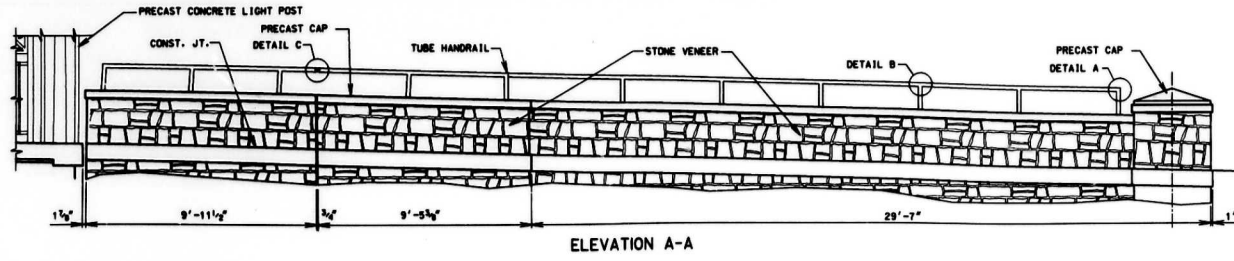
SHEET NO. 70 OF 81.

JACKSON COUNTY



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STATE	PROJ. NO.	SHEET NO.
MO		232



NOTES:

THE STRUCTURAL STEEL TUBE COMPLETE-IN-PLACE, RAIL & POST SLEEVES SHALL BE PAID FOR AS TUBE HANDRAIL ON ABUTMENT PARAPET WALLS.

ALL CONCRETE & REINFORCING STEEL IN THE END POST & PARAPET WALLS ABOVE CONSTRUCTION JOINT SHALL BE INCLUDED IN THE BID ITEM PARAPET WALLS ABOVE RETAINING WALLS AND WINGWALL.

WHEN THE PRECAST CONCRETE CAP IS BID BY LINEAR FEET, THE CONTRACT UNIT PRICE SHALL INCLUDE THE COST OF ALL CONCRETE, REINFORCEMENT, AND STAINLESS STEEL DOWELS COMPLETE-IN-PLACE.

SEE SPECIAL PROVISIONS FOR THE CONSTRUCTION OF STONE VENEER, PRECAST CAP AND TUBE HANDRAIL ON ABUTMENT PARAPET WALLS.

RAIL & POST SLEEVES SHALL BE A-36 MATERIAL.

NOTE:

FOR DETAILS A, B AND C, SEE SH. 72
 FOR SECTION C-C AND D-D, SEE SH. 72
 FOR PRECAST CONCRETE CAP DETAILS, SEE SH. 72
 FOR END POST CAP DETAILS, SEE SH. 72
 FOR RAIL SETTING DETAILS, SEE SH. 72
 FOR 1/2" DIA. STAINLESS STEEL BAR DETAILS, SEE SH. 72.

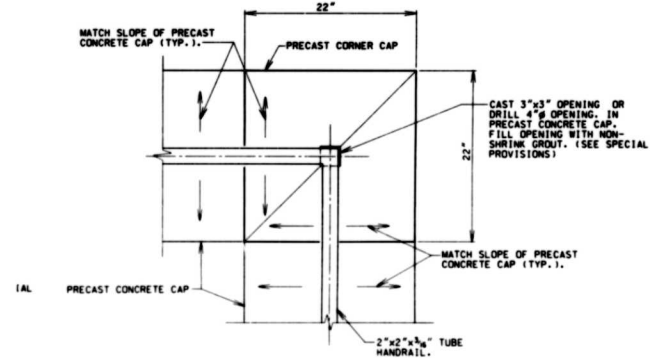
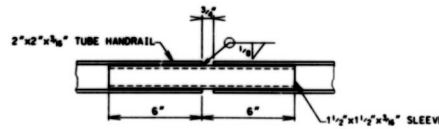
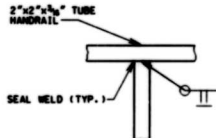
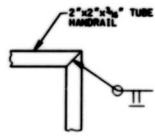
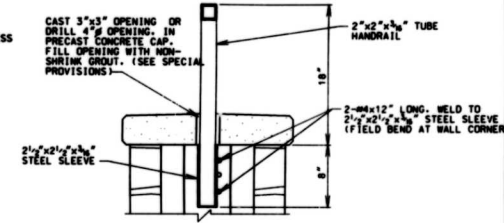
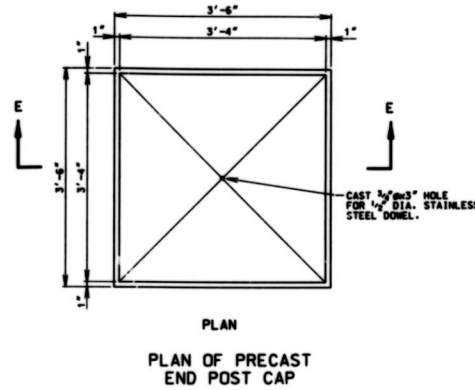
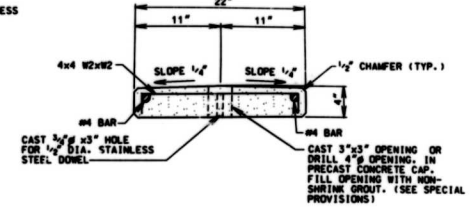
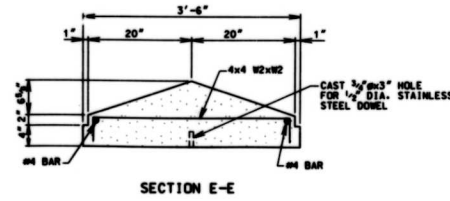
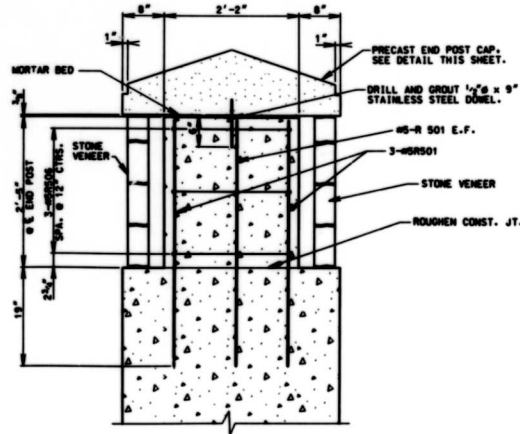
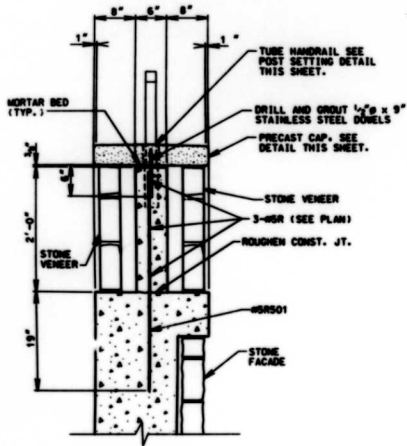


DETAILS OF ABUTMENT NO.3 RIGHT PARAPET WALLS

DETAILED FEB. 1995
 CHECKED MAR. 1995

NOTE: THIS DRAWING NOT TO SCALE. FOLLOW DIMENSIONS. SHEET NO. 71 OF 81.

STATE	PROJ. NO.	SHEET NO.
MD		233



PARAPET WALL DETAILS

DETAILED MAR. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 72 OF 81.

JACKSON COUNTY

A-5181

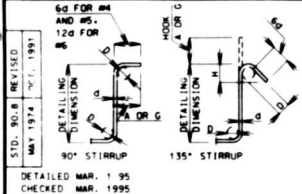
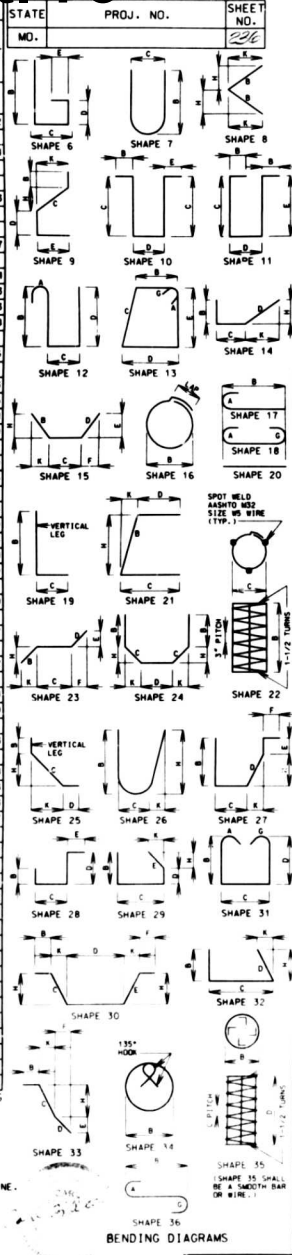


BILL OF REINFORCING STEEL

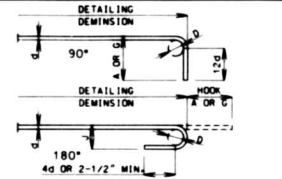
BILL OF REINFORCING STEEL

NO. REQ'D.	MARK NO.	LOCATION	DIMENSIONS								NOMINAL LENGTH	ACTUAL LENGTH	WEIGHT
			B	C	D	E	F	H	K				
			FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.				
SUBSTRUCTURE ABUTMENT NO. 1													
111	7F101	FOOTING									19 2	19 2	4349
40	6D102	FOOTING									58 1	58 1	3490
40	6D103	FOOTING									55 0	55 0	3304
22	9D104	FOOTING									19 2	19 2	14402
218	11D105	FTG. & WALL									29 11	29 7	34264
110	6D106	FTG. & WALL									8 7	8 6	1404
28	8D107	FTG. & WALL									5 6	5 6	710
28	5D108	FTG. & WALL									6 1	6 0	175
58	7F101	FILLET									9 8	9 7	1134
14	7F102	FILLET									8 4	8 3	236
16	6H101	FACE WALL									58 1	58 1	1396
16	6H102	FACE WALL									55 0	55 0	1322
21	6H103	BRG BM & WALL									57 6	57 6	1814
26	5H104	FC & BK WALL									56 11	56 11	1543
21	6H105	BRG BM & WALL									54 5	54 5	1716
26	6H106	BRG BM & WALL									54 5	54 5	2125
2	6H107	FACE WALL									58 1	58 1	174
1	6H108	FACE WALL									49 0	49 0	74
1	6H109	FACE WALL									52 1	52 1	78
1	6H110	FACE WALL									13 0	13 0	14
1	6H111	FACE WALL									16 1	16 1	24
1	6H112	FACE WALL									11 0	11 0	17
1	6H113	FACE WALL									13 11	13 11	21
1	6H114	FACE WALL									32 10	32 10	34
1	6H115	FACE WALL									33 9	33 5	50
1	6H116	FACE WALL									8 2	8 2	9
1	6H117	FACE WALL									8 9	8 9	13
1	6H118	FACE WALL									24 4	24 4	37
1	6H119	FACE WALL									27 3	27 3	41
1	6H120	FACE WALL									11 10	11 10	12
1	6H121	FACE WALL									11 10	11 10	18
1	6H122	FACE WALL									18 4	18 4	28
1	6H123	FACE WALL									21 3	21 3	32
1	6H124	FACE WALL									58 2	58 2	58
1	6H125	FACE WALL									58 2	58 2	83
20	4H126	BACK WALL									29 2	29 2	390
20	4H127	BACK WALL									28 1	28 1	375
10	5H128	BACK WALL									12 0	12 0	125
4	6H129	BACK WALL									15 8	15 7	94
4	6H130	BACK WALL									46 0	46 0	276
24	6H131	WINDWALL									13 3	13 3	478
19	5H132	WINDWALL									13 3	13 3	263
17	6H133	WINDWALL									11 9	11 9	9
		INCREMENT = .500 INCH									12 5	12 5	309
13	5H134	WINDWALL									11 9	11 9	9
		INCREMENT = .688 INCH									12 4	12 5	164
6	5H135	WINDWALL									2 11	2 11	5
		INCREMENT = 22.875 INCH									12 5	12 5	48
1	5H136	WINDWALL									2 5	2 4	2
10	6H137	WINDWALL									11 5	11 5	5
		INCREMENT = .688 INCH									11 8	11 8	173
10	4H138	WALL									11 5	11 5	5
		INCREMENT = .688 INCH									11 7	11 7	77
18	6H139	WINDWALL									9 8	9 8	261

NO. REQ'D.	MARK NO.	LOCATION	DIMENSIONS								NOMINAL LENGTH	ACTUAL LENGTH	WEIGHT
			B	C	D	E	F	H	K				
			FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.				
22	4H140	WINDWALL									9 8	9 8	142
21	6H141	WINDWALL									11 9	11 9	384
		INCREMENT = .500 INCH									12 7	12 7	203
16	5H142	WINDWALL									11 8	11 8	9
		INCREMENT = .688 INCH									12 7	12 7	37
4	5H143	WINDWALL									5 9	5 10	175
		INCREMENT = 24.500 INCH									11 11	11 11	4
1	5H144	WINDWALL									3 9	3 9	3
1	5H145	WINDWALL									3 0	3 3	3
1	5H146	WINDWALL									19 0	12 0	228
8	6H180	BRG. BM.									19 0	19 0	76
20	6H101	WINDWALL									19 0	7 500	1893
220	5U101	BEARING BM.									3 0	2 5	85
30	4U102	BEARING BM.									12 0	2 5	201
106	4U103	APPROACH H.									15 0	6 000	319
78	5U104	BACK WALL									2 0	2 0	620
110	6V101	FACE WALL									23 000	23 000	1515
110	6V102	FACE WALL									7 3	23 000	0
		V103 NOT USED									0	0	708
110	5V104	FACE WALL									6 2	6 2	1950
110	5V105	FACE WALL									17 0	17 0	3856
108	9V106	FACE WALL									10 6	10 6	6171
110	9V107	FACE WALL									16 6	16 6	1170
110	6V108	FACE WALL									2 9	2 9	449
28	6V109	BACK WALL									2 10	7 000	297
		INCREMENT = .125 INCH									10 8	8 25	1252
30	5V110	BACK WALL									2 9	6 000	784
82	6V111	BACK WALL									2 9	10 000	460
		INCREMENT = .1875 INCH									10 5	5 000	183
82	5V112	BACK WALL									9 2	9 2	784
13	6V113	WINDWALL									13 3	13 3	460
14	5V114	WINDWALL									10 4	10 4	356
		INCREMENT = 4.125 INCH									14 9	14 9	133
72	5V115	WINDWALL									3 2	3 2	238
124	5V116	WINDWALL									2 1	2 1	463
10	6V117	WINDWALL									19 6	19 6	293
10	5V118	WINDWALL									18 11	18 11	197
40	5V119	WINDWALL									7 9	7 9	330
		INCREMENT = .500 INCH									8 1	8 1	28
1	6V120	WINDWALL									10 4	10 4	6
1	5V121	WINDWALL									5 6	5 6	6
1	6V122	WINDWALL									5 6	5 6	8
2	6V123	WINDWALL									17 2	17 2	52
2	5V124	WINDWALL									17 2	17 2	36
13	6V125	WINDWALL									10 3	10 3	356
14	5V126	WINDWALL									6 11	6 11	133
		INCREMENT = .340 INCH									11 4	11 4	338
10	6V127	WINDWALL									22 6	22 6	229
10	5V128	WINDWALL									21 11	21 11	110
28	WSB-1	AB WELL									15 000	9.125	3473
		TOTAL (TP)											99577

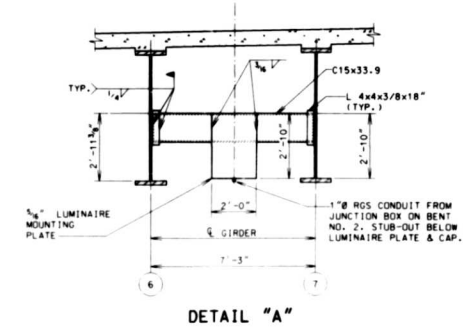
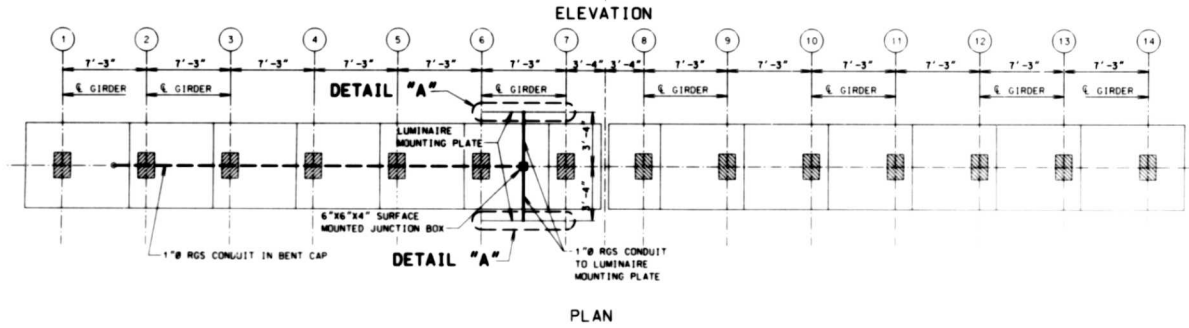
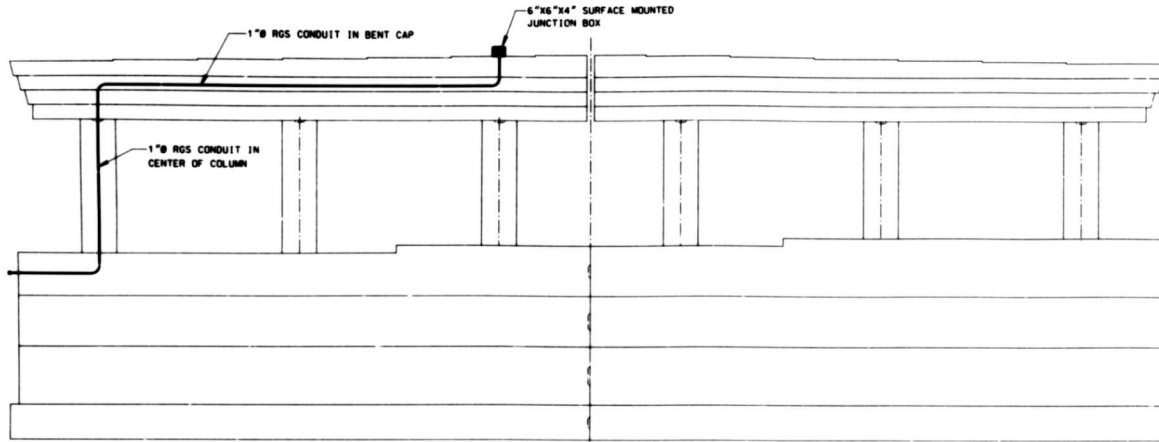


BAR SIZE	D (IN.)	90° HOOK		135° HOOK	
		MIN. A OR S	MIN. B	MIN. A OR S	MIN. B
#5	2"	4-1/2"	4-1/2"	3"	3"
#6	2-1/2"	6"	5-1/2"	3-3/4"	3"
#8	4-1/2"	12"	8"	4-1/2"	3"



BAR SIZE	D (IN.)	ALL GRADES		
		90° HOOK	180° HOOK	90° HOOK
#5	2-1/4"	5"	4"</	

STATE	PROJ. NO.	SHEET NO.
MO.		225



DETAILS OF INTERMEDIATE BENT NO. 2 CONDUIT SYSTEM

DETAILED MAR. 1995
CHECKED MAR. 1995

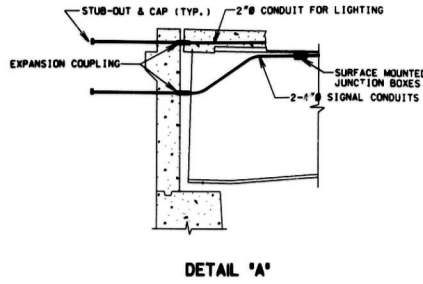
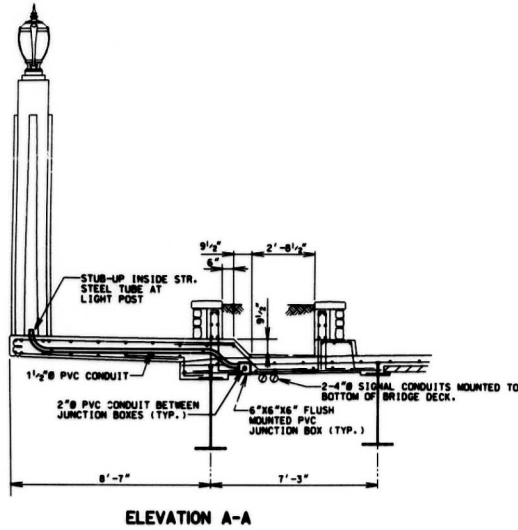
NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 74 OF 81.

Willay, Inc.

1821

STATE	PROJ. NO.	SHEET NO.
MD		234



CONDUIT NOTES:

SIGNAL CONDUITS AND BRIDGE LIGHTING CONDUITS SHALL BE RIGID NONMETALLIC SCHEDULE-40 PVC (POLYVINYL CHLORIDE PLASTIC) WITH 3" MINIMUM COVER IN CONCRETE. CONDUITS FOR UNDERPASS LIGHTING AT BENT NO. 2 SHALL BE RIGID GALVANIZED STEEL. EACH CONDUIT SECTION SHALL BEAR THE UNDERWRITERS' LABORATORIES, INC. (UL) LABEL.

JUNCTION BOXES FOR USE WITH PVC CONDUIT SHALL BE PVC MOLDED AND SURFACE OR RECESSED MOUNTED AS NOTED. EQUAL TO CARLON ELECTRICAL CONSTRUCTION PRODUCTS OR TRAILONE CONDUIT AND CABLE COMPANY, INC. COVERS SHALL BE OF WATERTIGHT CONSTRUCTION. RIGID GALVANIZED CONDUIT RUNS SHALL USE GALVANIZED SCREW COVER BOXES WITH NEOPRENE GASKETED COVER.

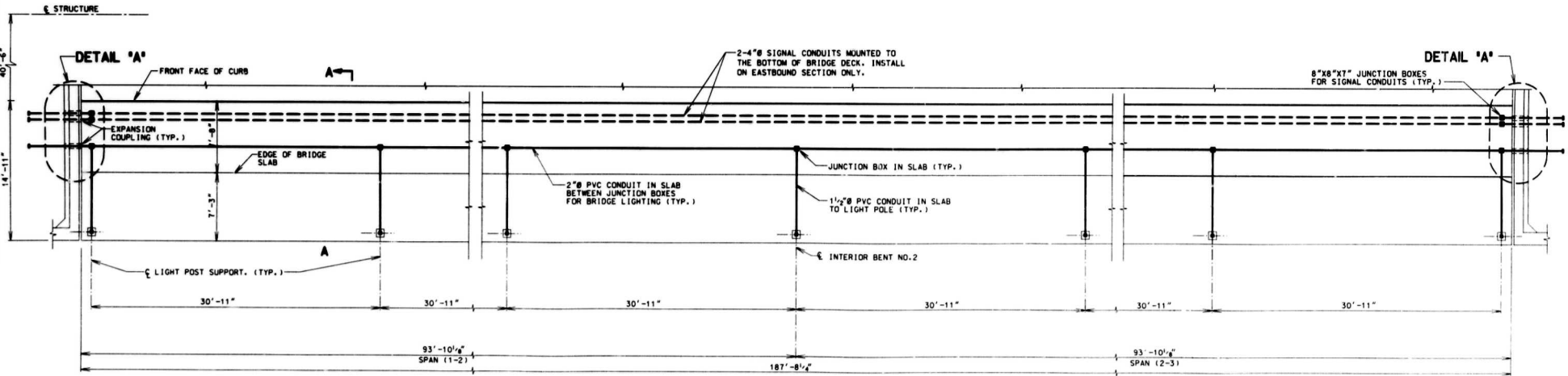
CONDUITS BELOW THE SLAB DECK SHALL BE SECURED AT APPROXIMATELY 5'-0".

WIRING WEEPHOLES SHALL BE PROVIDED AT APPROPRIATE LOCATIONS TO DRAIN ANY MOISTURE IN THE CONDUITS.

PVC EXPANSION FITTINGS SHALL PROVIDE A MINIMUM MOVEMENT IN EITHER DIRECTION OF 2". EXPANSION FITTINGS SHALL BE EQUAL TO CARLON ELECTRICAL PRODUCTS E945 SERIES.

WIRING TO BE FURNISHED AND INSTALLED BY OTHERS.

THE CONDUIT SYSTEM, COMPLETE IN PLACE, SHALL BE PAID FOR AS CONDUIT SYSTEM ON STRUCTURE, PER LUMP SUM.

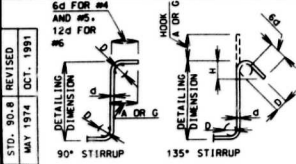


SIDWALK CONDUIT AND LIGHTING DETAILS
TYPICAL FOR EASTBOUND AND WESTBOUND SECTIONS

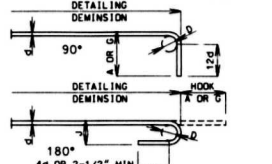
William H. Hagen

BILL OF REINFORCING STEEL

NO.	REV'D.	MARK NO.	LOCATION	EPOXY (E)	SHAPE NO.	DIMENSIONS								NOMINAL LENGTH	ACTUAL LENGTH	WEIGHT						
						B	C	D	E	F	H	K										
						FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.										
ABUTMENT NO. 1 RETAINING WALLS																						
160	BD109		FOOTING		20	X		14	2	14	2			6052								
78	BD110		FOOTING		20	X		19	11	19	11			4148								
54	7D111		FOOTING		20	X		39	2	39	2			4323								
22	7D112		FOOTING		20	X		13	2	13	2			592								
12	7D113		FTG & WALL		21	X		11	7.125	4	6.000		11	7.000								
24	5D114		FTG & WALL		19	X		3	11.000	10.000			5.813	16	15	11	390					
57	5D115		FTG & WALL		19	X		15	3.000	5	1.000			4	9	4	8	117				
29	5D116		FTG & WALL		15	X		11	6.000	10.000			11	5.750	8.610	12	4	12	2	3682		
12	7D117		FTG & WALL		21	X		14	3.125	4	6.000		14	3.000	7.125	13	9	18	7	456		
12	5D118		FTG & WALL		19	X		13	1.000	10.000				13	11	13	10	173				
76	6D119		FOOTING		20	X		8	2	8	2			8	2	8	2	932				
33	5D120		FOOTING		20	X		9	11.000					9	11	9	11	331				
33	5D121		FOOTING		20	X		10	0.000					10	0	10	0	334				
22	6D122		FTG & WALL		21	X		4	2.000	4	0.000		4	2.000	2.000	8	2	8	0	284		
22	4D123		FTG & WALL		19	X		2	7.000	8.000				3	3	3	2	47				
14	7D124		FTG & WALL		21	X		9	6.125	3	9.000		9	6.000	4.750	13	3	13	1	374		
14	5D125		FTG & WALL		19	X	V	2	6.000	8.000				7	2	7	1					
			INCREMENT=					8	3.750	8.000				9	0	8	11	117				
			3.625 INCH																			
16	6D126		STEM WALL		19	X		9	7.000	4	7.000			14	2	14	1	338				
8	6D127		STEM WALL		19	X		9	6.000	12.000				10	6	10	5	125				
12	7D128		STEM WALL		21	X		7	11.063	4	6.000			7	11.000	3.950	12	5	12	3	300	
57	9D129		FTG & WALL		19	X		11	7.000	5	1.000			16	8	16	5	3182				
29	5D130		FTG & WALL		15	X		7	8.000	10.000				7	7.50	6.360	8	5	8	4	252	
12	7D131		FTG & WALL		21	X		10	7.125	4	6.000		10	7.000	5.290	15	1	14	11	366		
12	5D132		FTG & WALL		19	X		9	5.000	10.000				10	3	10	2	127				
2	5D133		FTG & WALL		19	X		6	6.000	10.000				6	10	6	9	14				
54	7F102		FILLET		15	X		2	0.000	4	4.000	2	0.000	17.000	17.000	17.000	17.000	8	4	8	3	911
68	6H147		STEM WALL		6	X		10	10.000	10	10.000			21	8	21	6	2196				
36	6H148		STEM WALL		10	X		10	10.000	10	10.000			10	10	10	10	407				
24	4H149		STEM WALL		20	X		10	10.000	10	10.000			10	10	10	10	174				
4	6H150		STEM WALL		20	X	V	3	2.000	9	3.500			3	2	3	2	26				
			INCREMENT=					24.500	INCH					9	3	9	3					
4	6H151		STEM WALL		20	X	V	4	5.000	10	2.000			10	2	10	2	30				
			INCREMENT=					24.500	INCH					10	2	10	2					
21	6H152		STEM WALL		20	X		20	5.000					20	5	20	5	644				
42	6H153		STEM WALL		20	X	V	27	8.000	27	8.000			27	8	27	8	1230				
			INCREMENT=					28	6.000					28	6	28	6					
			.500 INCH																			
27	6H154		STEM WALL		20	X		20	2.000					20	2	20	2	818				
18	6H155		STEM WALL		20	X		19	8.000					19	8	19	8	532				
14	4H156		STEM WALL		20	X	V	26	10.000	26	10.000			26	10	26	10					
			INCREMENT=					27	1.000					27	1	27	1	252				
			.500 INCH																			
6	4H157		STEM WALL		20	X		27	6.000					27	6	27	6	110				
2	6H158		STEM WALL		20	X		27	6.000					27	6	27	6	83				
13	6H159		STEM WALL		20	X		11	7.000					11	7	11	7	226				
10	6H160		STEM WALL		20	X	V	11	7.000					11	7	11	7					
			INCREMENT=					12	1.750					12	2	12	2	178				
			0.75																			
9	6H161		STEM WALL		20	X		10	7.000					10	7	10	7	143				
7	5H162		STEM WALL		20	X		10	7.000					10	7	10	7					
			INCREMENT=					10	11.500					11	0	11	0	79				
10	6H163		STEM WALL		20	X		13	6.000					13	6	13	6	203				
6	5H164		STEM WALL		20	X		12	11.000					12	11	12	11	81				
18	6H165		STEM WALL		20	X		13	3.000					13	3	13	3	358				



BAR SIZE (IN.)	D (IN.)	90° HOOK	135° HOOK
#4	2-1/4"	4" OR G	4" OR G
#5	2-1/2"	4-1/2"	4-1/2"
#6	4-1/2"	6"	5-1/2"
#8	4-1/2"	12"	8"



BAR SIZE (IN.)	D (IN.)	180° HOOKS	90° HOOKS
#4	2-1/4"	5"	3"
#5	2-1/2"	6"	4"
#6	3-3/4"	7"	5"
#8	4-1/2"	8"	6"
#9	5-1/4"	10"	7"
#10	6"	11"	8"
#11	9-1/2"	15"	11-3/4"
#12	10-3/4"	17"	13-3/4"
#14	18-1/4"	21-3/4"	21-3/4"

TWO ADDITIONAL ARE INCLUDED IN THE BAR BILL FOR TESTING

NOTE: ALL STANDARD HOOKS AND BENDS OTHER THAN 180 DEG. TO BE BENT WITH THE SAME PROCEDURE AS FOR 90 DEG. STD. HOOKS. HOOKS AND BENDS SHALL BE IN ACCORDANCE WITH THE PROCEDURES AS SHOWN ON THIS SHEET.

E = EPOXY COATED REINFORCEMENT.

S = STIRRUP.

X = BAR IS INCLUDED IN SUBSTRUCTURE QUANTITIES.

V = BAR DIMENSIONS VARY IN EQUAL INCREMENTS BETWEEN DIMENSIONS SHOWN ON THIS LINE AND THE FOLLOWING LINE.

NO. E.A. = NUMBER OF BARS OF EACH LENGTH.

NOMINAL LENGTHS ARE BASED ON OUT TO OUT DIMENSIONS SHOWN IN BENDING DIAGRAMS AND ARE LISTED FOR FABRICATORS USE. (NEAREST INCH)

ACTUAL LENGTHS ARE MEASURED ALONG CENTERLINE BAR TO THE NEAREST INCH.

PAYWEIGHTS ARE BASED ON ACTUAL LENGTHS.

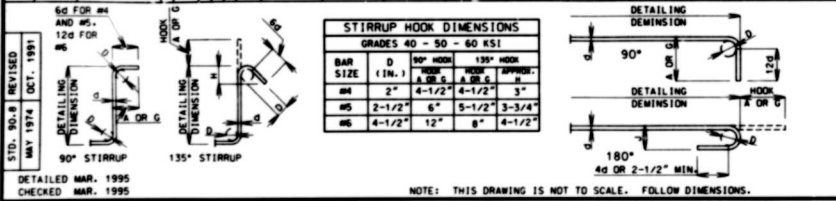
FOUR ANGLE OR CHANNEL SPACERS ARE REQUIRED FOR EACH COLUMN SPIRAL. SPACERS ARE TO BE PLACED ON INSIDE OF SPIRALS. LENGTH AND WEIGHT OF COLUMN SPIRALS DO NOT INCLUDE SPLICES OR SPACERS.

REINFORCING STEEL (GRADE 60) = F_y 60,000 PSI.

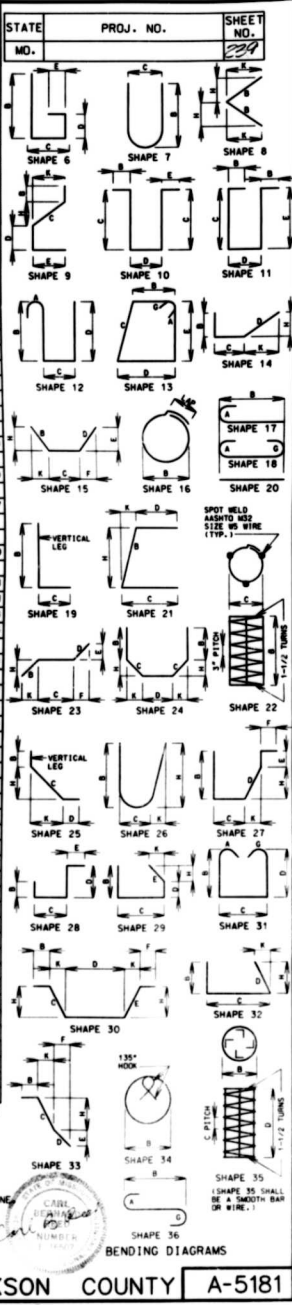
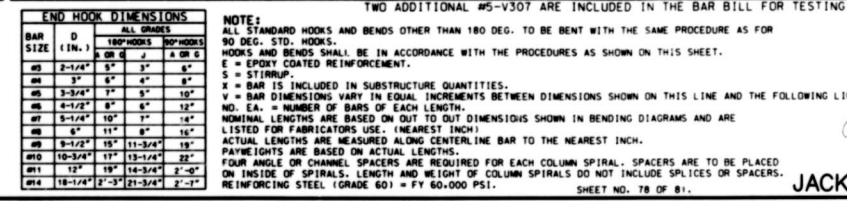
BILL OF REINFORCING STEEL

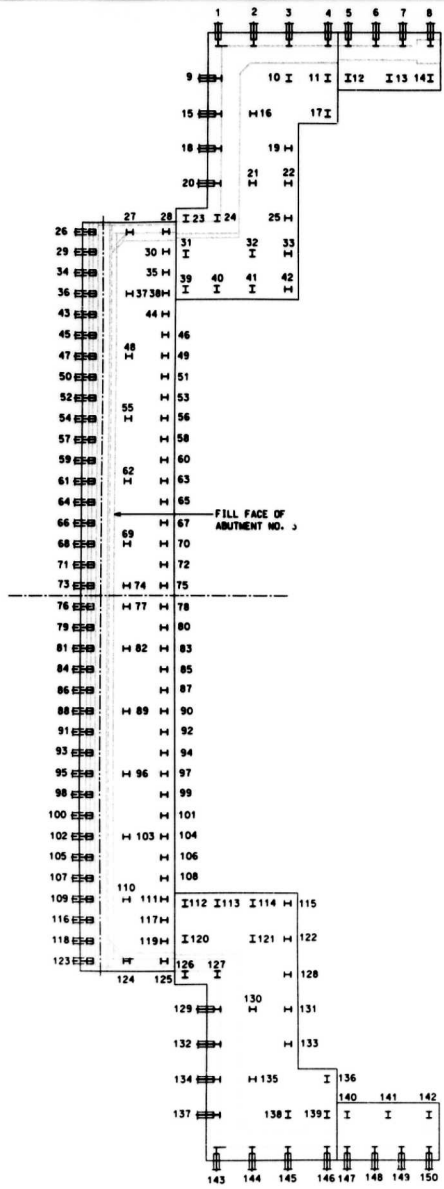
NO.	REV'D.	MARK NO.	LOCATION	EPOXY (E)	SHAPE NO.	DIMENSIONS								NOMINAL LENGTH	ACTUAL LENGTH	WEIGHT	
						B	C	D	E	F	H	K					
						FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.					
ABUTMENT NO. 1 RETAINING WALLS																	
18	4H166		STEM WALL		20	X		12	3.000				12	3	12	3	147
6	5H167		STEM WALL		20	X	V	2	4	6.500			4	7	4	7	
			INCREMENT=					8	7.500				8	7	8	7	41
			24.500 INCH														
6	4H168		STEM WALL		20	X		10	7.000				10	7	10	7	42
2	6H169		STEM WALL		20	X		10	7.000				10	7	10	7	32
8	6H170		STEM WALL		20	X		11	10.000				11	10	11	10	142
6	5H171		STEM WALL		20	X	V	11	10.000				11	10	11	10	
			INCREMENT=					12	1.750				12	2	12	2	75
			.750 INCH														
14	6H172		STEM WALL		20	X		10	7.000				10	7	10	7	223
11	5H173		STEM WALL		20	X	V	10	7.000				10	7	10	7	
			INCREMENT=					11	2.500				11	3	11	3	125
			.750 INCH														
16	5H174		STEM WALL			X		9	11.000				9	11	9	11	165
42	5H175		STEM WALL			X		20	3.000				20	3	20	3	887
12	5H176		STEM WALL		20	X	V	2	5	9.000			5	9	5	9	
		</															

BILL OF REINFORCING STEEL																				
NO. REG'D.	MARK NO. / SIZE MARK	LOCATION	EPOXY (E)	SHAPE NO.	STIRRUP (S)	SUBSTR. (U)	VALVES (V)	DIMENSIONS							NOMINAL LENGTH	ACTUAL LENGTH	WEIGHT			
								B	C	D	E	F	H	K						
								FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.						
ABUTMENT NO. 3																				
112	SV301	FACE WALL		19	N			2	3.000	22.000			4	1	4	0	467			
110	SV302	FACE WALL		20	N			4	8.000				4	9	4	9	535			
218	SV303	FACE WALL		20	N			10	8.000				10	8	10	8	3493			
110	SV304	FACE WALL		20	N			10	8.000				10	8	10	8	1224			
110	SV305	FACE WALL		19	N			2	9.000	20.000	2	9.000				18.000	9.000	7 2 7 1	1170	
28	GV306	BACK WALL	E	20	N			2	10 7.000				10	7	10	7				
		INCREMENT=-.125 INCH											10	8.625						449
30	SV307	BACK WALL	E	20	N			9	6.000				9	6	9	6				297
82	GV308	BACK WALL	E	20	N			2	9 10.000				9	10	9	10				
		INCREMENT=-.1875 INCH											10	6 10 6						1252
82	GV309	BACK WALL	E	20	N			9	2.000				9	2	9	2				784
24	SV310	WINDWALL		20	X			3	4 3 4				3	4	3	4				83
28	SV311	WINDWALL		19	X			3	10 3 9	18.000			3	10	3	9				110
20	GV312	WINDWALL		20	X			14	7 14 7				14	7	14	7				438
20	GV313	WINDWALL		20	X			13	5 13 5				13	5	13	5				280
4	GV314	WINDWALL		20	X			10	10 10 10				10	10	10	10				65
4	GV315	WINDWALL		20	X			10	10 10 10				10	10	10	10				45
40	GV316	WINDWALL		20	X			7	7 7 7				7	7	7	7				316
28	WS-3	AB WELL		22	X			23	0 23 0	15.000	9.125		23	0	23	0				110
													TOTAL (E)				3471			
													TOTAL (F)				43710			



BILL OF REINFORCING STEEL																					
NO. REG'D.	MARK NO. / SIZE MARK	LOCATION	EPOXY (E)	SHAPE NO.	STIRRUP (S)	SUBSTR. (U)	VALVES (V)	DIMENSIONS							NOMINAL LENGTH	ACTUAL LENGTH	WEIGHT				
								B	C	D	E	F	H	K							
								FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.							
ABUTMENT NO. 3 RETAINING WALLS																					
10	SD40	STEM WALL		19	X	V		4	7.000	10.000			4	7	0	0				5 5 5 4	
		INCREMENT=4.000 INCH											7	7	0	0				8 5 8 4	
36	7F302	FILLET		15	X			2	0.000	4 4.000	2 0.000	18.000	18.000	18.000	18.000	18.000	8	4	8	3	607
38	GH329	STEM WALL		19	X			9	2.000	9 2.000			9	2	9	1				518	
7	SH330	STEM WALL		20	X			9	2.000	9 2.000			9	2	9	2				67	
3	GH331	STEM WALL		20	X	V		4	10.000				4	10	4	10				14	
		INCREMENT=24.000 INCH											8	10	8	10					
1	GH332	STEM WALL		20	X			2	10.000				2	10	2	10				2	
35	GH333	STEM WALL		20	X			9	2.000				9	2	9	2				214	
38	GH334	STEM WALL		20	X			21	9.000				21	9	21	9				1241	
7	SH335	STEM WALL		20	X	V		27	10.000				27	10	27	10				204	
		INCREMENT=.500 INCH											28	1	28	1					
1	SH336	STEM WALL		20	X			12	4.000				12	4	12	4				13	
11	GH337	STEM WALL		20	X	V		26	10.000				26	10	26	10				199	
		INCREMENT=.500 INCH											27	3	27	3					
6	GH338	STEM WALL		20	X			27	6.000				27	6	27	6				110	
7	GH339	STEM WALL		20	X	V		16	7.000				16	7	16	7				177	
		INCREMENT=.750 INCH											17	0	17	0					
8	SH340	STEM WALL		20	X	V		16	6.750				16	7	16	7				140	
		INCREMENT=.750 INCH											17	0	17	0					
1	GH341	STEM WALL		20	X			16	0.000				16	0	16	0				24	
1	GH342	STEM WALL		20	X			16	0.000				16	0	16	0				11	
22	GH343	STEM WALL		20	X			19	0.000				19	0	19	0				628	
26	GH344	STEM WALL		20	X			18	0.000				18	0	18	0				313	
3	GH345	STEM WALL		20	X	V		12	0.000				12	0	12	0				28	
		INCREMENT=24.000 INCH											16	0	16	0					
1	GH346	STEM WALL		20	X			10	0.000				10	0	10	0				7	
4	GH347	STEM WALL		20	X	V		3	0.000				3	0	3	0				16	
		INCREMENT=24.000 INCH											9	0	9	0					
44	SH348	STEM WALL		20	X			14	10.000				14	10	14	10				681	
3	SH349	STEM WALL		20	X	V		11	8.000				11	8	11	8				42	
		INCREMENT=19.000 INCH											14	10	14	10					
3	SH350	STEM WALL		20	X	V		6	6.000				6	6	6	6				25	
		INCREMENT=18.000 INCH											9	6	9	6					
3	GH351	STEM WALL		20	X	V		2	10.000				2	10	2	10				10	
		INCREMENT=24.000 INCH											6	10	6	10					
5	SH352	STEM WALL		20	X	V		27	9.000				27	9	27	9				146	
		INCREMENT=.500 INCH											27	11	27	11					
1	SH353	STEM WALL		20	X			13	8.000				13	8	13	8				14	
13	GH354	STEM WALL		20	X	V		26	9.000				26	9	26	9				235	
		INCREMENT=.500 INCH											27	3	27	3					
4	GH355	STEM WALL		20	X	V		16	10.000				16	10	16	10				102	
		INCREMENT=.750 INCH											17	0	17	0					
4	GH356	STEM WALL		20	X	V		15	10.000				15	10	15	10				96	
		INCREMENT=.750 INCH											16	0	16	0					





**PART PLAN SHOWING
PILE NUMBERING FOR RECORDING
'AS BUILT' PILE DATA**

"AS BUILT PILE" DATA				
LOCATION	PILE NO.	LENGTH IN PLACE (FT.)	COMPUTED BEARING (TONS)	REMARKS
ABUTMENT NO. 3	1			
	2			
	3			
	4			
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	10			
	11			
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	77			

NOTE: INDICATE IN REMARK COLUMN:
 A.) PILING WERE DRIVEN TO PRACTICAL REFUSAL.
 B.) PILE BATTER IF OTHER THAN SHOWN ON BENT DETAIL SHEET.
 C.) TYPE OF PILING USED.

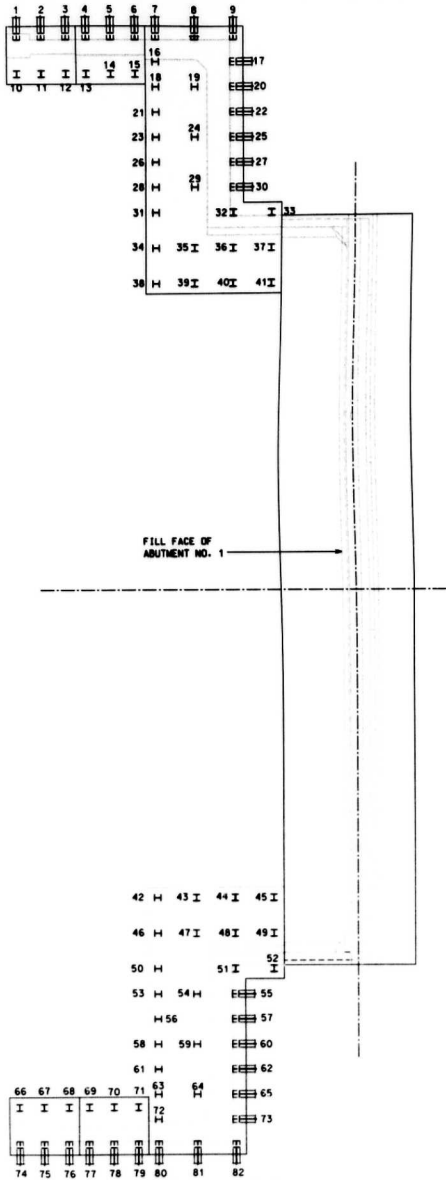
STATE	PROJ. NO.	SHEET NO.
MO.		242

"AS BUILT PILE" DATA				
LOCATION	PILE NO.	LENGTH IN PLACE (FT.)	COMPUTED BEARING (TONS)	REMARKS
	78			
	79			
	80			
	81			
	82			
	83			
	84			
	85			
	86			
	87			
	88			
	89			
	90			
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	148			
	149			
	150			



NOTE: INDICATE IN REMARK COLUMN:
 A.) IF PILING WERE DRIVEN TO PRACTICAL REFUSAL.
 B.) PILE BATTER IF OTHER THAN SHOWN ON BENT DETAIL SHEET.
 C.) TYPE OF PILING USED.

STATE	PROJ. NO.	SHEET NO.
MO.		281



PART PLAN SHOWING
 PILE NUMBERING FOR RECORDING
 "AS BUILT" PILE DATA

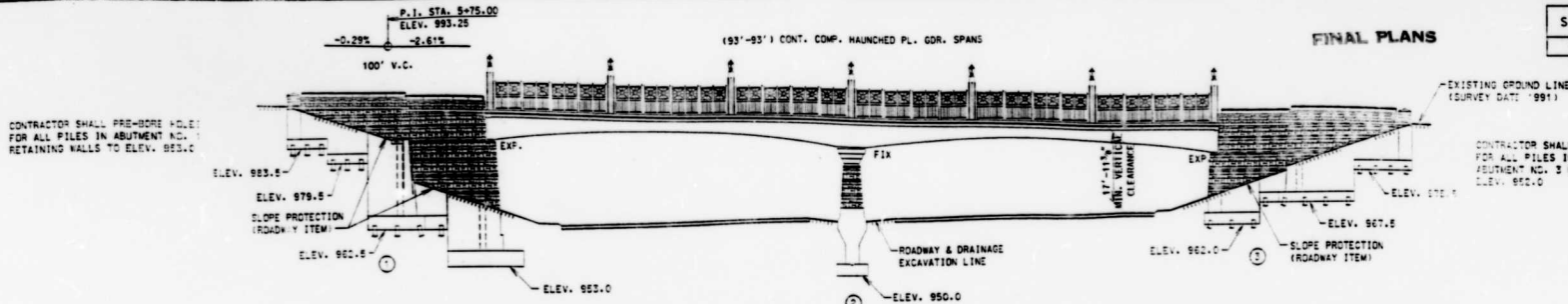
"AS BUILT PILE" DATA				
LOCATION	PILE NO.	LENGTH IN PLACE (FT.)	COMPUTED BEARING (TONS)	REMARKS
ABUTMENT NO. 3	1			
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	3			
	4			
	5			
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	8			
	9			
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	59			

"AS BUILT PILE" DATA				
LOCATION	PILE NO.	LENGTH IN PLACE (FT.)	COMPUTED BEARING (TONS)	REMARKS
	60			
	61			
	62			
	63			
	64			
	65			
	66			
	67			
	68			
	69			
	70			
	71			
	72			
	73			
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	80			
	81			
	82			

NOTE: THIS SHEET TO BE COMPLETED BY MHTD CONSTRUCTION PERSONNEL.



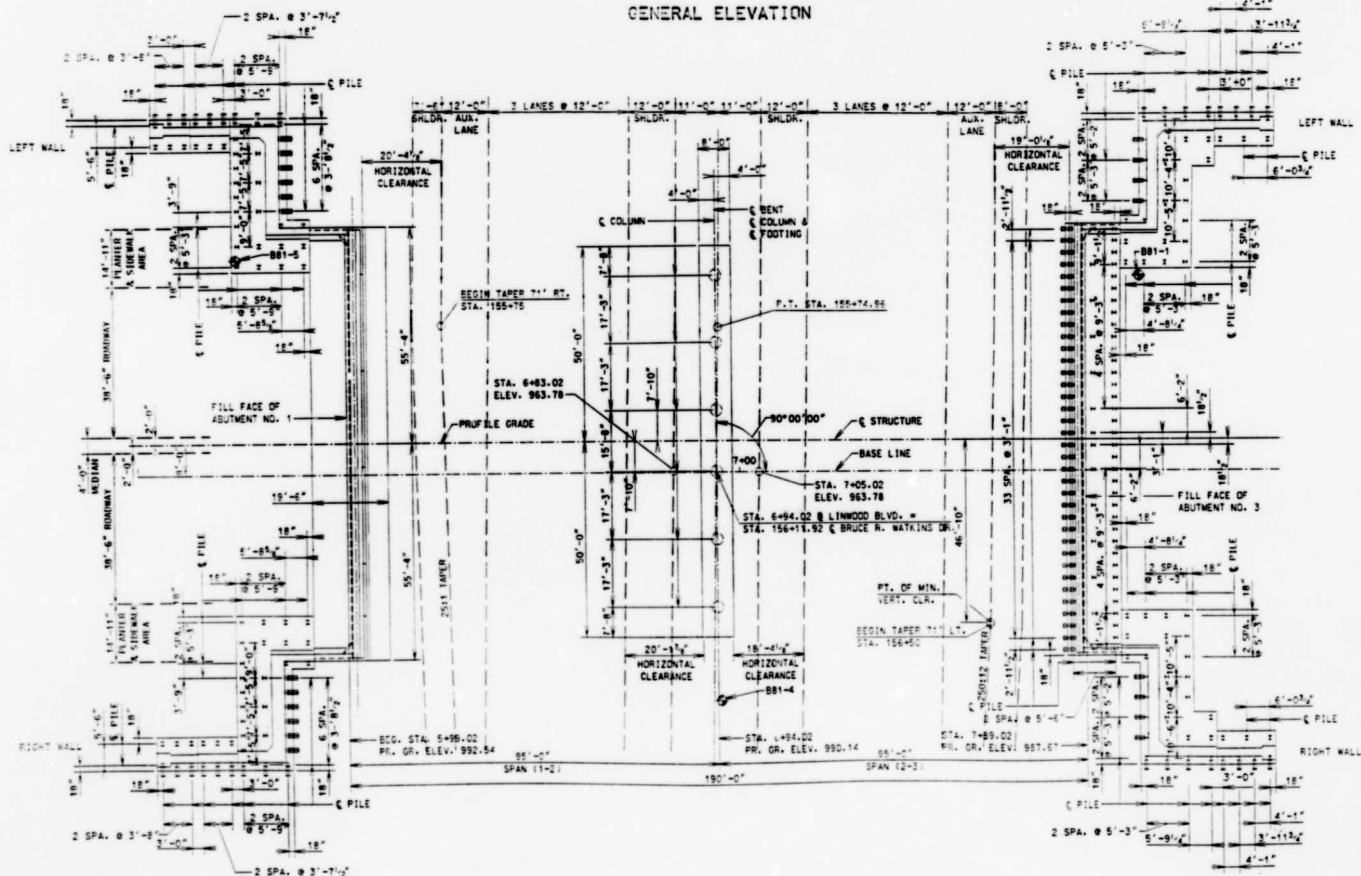
STATE	PROJ. NO.	SHEET NO.
MO	J440011	162



CONTRACTOR SHALL PRE-BORE HOLES FOR ALL PILES IN ABUTMENT NO. 1 RETAINING WALLS TO ELEV. 953.0

CONTRACTOR SHALL PRE-BORE HOLES FOR ALL PILES IN ABUTMENT NO. 3 AND ABUTMENT NO. 3 RETAINING WALLS TO ELEV. 952.0

GENERAL ELEVATION



PLAN

NOTE: * indicates location of borings. FOR BORING DATA SEE SHEET NO. 4. WORK THIS SHEET WITH SHEET NO. 3

FINAL PLANS
 CONTRACTOR SHALL PRE-BORE HOLES FOR ALL PILES IN ABUTMENT NO. 3 AND ABUTMENT NO. 3 RETAINING WALLS TO ELEV. 952.0
 9-13



John A. ...
 PROFESSIONAL ENGINEER

FINAL PLANS

STATE	PROJ. NO.	SHEET NO.
MO	ALM-71-9(73)	83
	J 400 11 66	

GENERAL NOTES:

DESIGN SPECIFICATIONS:
A.A.S.M.T.O. 1995
LOAD FACTOR DESIGN
SEISMIC PERFORMANCE CATEGORY II

DESIGN LOADS:
MSD-44
MODIFIED 24,000# TANDEM AXLE
35W/SG.FT. FUTURE WEARING SURFACE
EARTH 120W/SG.FT. EQUIV. FLUID PRESSURE 4W/SG.FT.
FATIGUE STRESS - CASE II

DESIGN STRESSES:
CLASS B CONCRETE (SUBSTRUCTURE) f'c = 3,000 PSI.
CLASS BY CONCRETE (CURB & PLANTER WALL, & SIDEWALK PLANTER WALL, f'c = 4,000 PSI;
CLASS B2 CONCRETE (SUPERSTRUCTURE - EXCEPT CURB & PLANTER WALL, & SIDEWALK
PLANTER WALL) f'c = 4,000 PSI.
REINFORCING STEEL (GRADE 60) fy = 60,000 PSI.
STRUCTURAL CARBON STEEL fy = 36,000 PSI.
STRUCTURAL CARBON STEEL TUBING (A.S.T.M. A-500) GRADE B fy = 46,000 PSI.
STRUCTURAL CARBON STEEL (A.S.T.M. A572) GRADE 50 fy = 50,000 PSI.
STEEL PIPE fy = 50,000 PSI.
FOR PRECAST/PRESTRESSED PANEL STRESSES, SEE SHEET NO. 60.
NOTE: ALL STEEL SHALL BE A-36 EXCEPT AS NOTED.

FABRICATED STEEL CONNECTION:
FIELD CONNECTIONS: HIGH STRENGTH BOLTS 7/8" DIA. HOLES 7/8" DIA.
EXCEPT AS NOTED.
HIGH STRENGTH BOLTS, NUTS AND WASHERS SHALL BE SAMPLED FOR
QUALITY IN ACCORDANCE WITH STANDARD SPECIFICATION 106 AND
FIELD SECTION (F5-F12).

JOINT FILLER:
ALL JOINT FILLER SHALL MEET THE REQUIREMENTS OF
STD. SP. 2, 10ST-12, EXCEPT AS NOTED.

REINFORCING STEEL:
MINIMUM CLEARANCE TO REINFORCING STEEL SHALL BE 1 1/2", UNLESS
OTHERWISE SHOWN.
ALL REINFORCING BARS IN THE TOPS OF THE SUBSTRUCTURE
BEAMS OR CAPS SHALL BE SPACED TO CLEAR ANCHOR BOLTS FOR BEARINGS
BY AT LEAST 1/2".

LAMINATED NEOPRENE BEARING:
BEARINGS SHALL BE 60 DIAMETER NEOPRENE PADS.
THE NEOPRENE PAD SHALL BE BONDED TO THE BEARING BEAT WITH AN EPOXY
ADHESIVE AS APPROVED BY THE BEARING MANUFACTURER FOR BONDING
NEOPRENE TO CONCRETE.

PAINT:
PAINT SYSTEM F BY THE CONTRACTOR IN ACCORDANCE WITH THE SPECIAL
PROVISIONS.

NOTICE AND DISCLAIMER REGARDING BORING LOG DATA:
THE LOCATIONS OF ALL SUBSURFACE BORINGS FOR THIS STRUCTURE ARE SHOWN ON
THE BRIDGE PLAN SHEET NO. 2 FOR THIS STRUCTURE. BORING DATA FOR THE NUMERICAL
LOCATIONS IS SHOWN ON SHEET NO. 4. THE BORING DATA FOR ALL LOCATIONS
INDICATED, AS WELL AS ANY OTHER BORING LOGS OR OTHER FACTUAL RECORDS OF
SUBSURFACE DATA AND INVESTIGATIONS PERFORMED BY THE DEPARTMENT FOR THE
REGION OF THE PROJECT, ARE AVAILABLE FROM THE DISTRICT MATERIALS ENGINEER.
ANY WRITTEN REQUEST AS OUTLINED IN THE PROJECT SPECIAL PROVISIONS. NO
GREATER SIGNIFICANCE OR WEIGHT SHOULD BE GIVEN TO THE BORING DATA DEPICTED
ON THE PLAN SHEETS THAN TO SUBSURFACE DATA AVAILABLE FROM THE DISTRICT OR
ELSEWHERE.

THE COMMISSION DOES NOT REPRESENT OR WARRANT THAT ANY SUCH BORING DATA
ACCURATELY DEPICTS THE CONDITIONS TO BE ENCOUNTERED IN CONSTRUCTING THIS
PROJECT. A CONTRACTOR ASSUMES ALL RISKS IT MAY ENCOUNTER IN BASING ITS BID
PRICES, TIME OR SCHEDULE OF PERFORMANCE ON THE BORING DATA DEPICTED HERE OR
THOSE AVAILABLE FROM THE DISTRICT, OR ON ANY OTHER DOCUMENTATION NOT EXPRESSLY
WARRANTED, WHICH THE CONTRACTOR MAY OBTAIN FROM THE COMMISSION.

FOOTING DATA			
FOUNDATION NO. / BEAT NO.			
FOUNDATION MATERIAL	SHALE	SHALE	
DESIGN BEARING	TONS/SG. FT.	3.4	4.6

ABUTMENT NO.	ABUTMENT NO. 1				ABUTMENT NO. 3			
	RETAINING WALLS FOOTINGS				RETAINING WALLS FOOTINGS			
	HPI2X6S				HPI2X6S			
LOCATION	FROM STA. 5+76.82	FROM STA. 5+89.73	FROM STA. 5+89.48	FROM STA. 7+98.00	FROM STA. 7+98.00	FROM STA. 7+98.04	FROM STA. 8+22	FROM STA. 8+22
	TO STA. 5+89.76	TO STA. 5+89.48	TO STA. 5+49.15	TO STA. 7+97.98	TO STA. 8+22	TO STA. 8+22	TO STA. 8+37.15	TO STA. 8+37.15
NUMBER	58	6	6	6	50	36	34	16
APPROXIMATE LENGTH	FT.	13	28	29	32	33	16	18
DESIGN BEARING	TONS	68	27	27	21	21	46	65
HAMMER ENERGY REQUIREMENT	FT.-LBS.	16,300	7,000	7,000	7,000	7,000	14,850	14,850
							14,825	14,825
							7,000	7,000

FINAL QUANTITIES			
ITEM	SUBSTR.	SUPERSTR.	TOTAL
CLASS 1 EXCAVATION	CU.YD.	4.177	4.170
STRUCTURAL STEEL PILES (12 IN.)	LN.FT.	6,722	6,722
PRE-BORE FOR PILING	LN.FT.	2,793	2,793
CLASS B CONCRETE (SUBSTRUCTURE)	CU.YD.	2,368.2	2,368.2
SLAB ON STEEL **	SG.FT.	2,009	2,009
SIDEWALK (BRIDGES)	SG.FT.	3,896	3,896
RAISED MEDIAN	SG.FT.	380	380
CURB AND PLANTER WALL	LN.FT.	380	380
SIDEWALK PLANTER WALL	LN.FT.	380	380
PARAPET WALLS ABOVE RETAINING WALLS AND WINDOW WALLS	LN.FT.	302	302
LAMINATED NEOPRENE BEARING PADS (STEEL STRUCTURES)	EACH	42	42
PREFORMED COMPRESSION EXP. JT. SEAL (3 IN.)	LN.FT.	227	227
REINFORCING STEEL (BRIDGES)	LBS.	271,090	271,090
REINFORCING STEEL (EPOXY COATED)	LBS.	6,940	6,940
FABRICATED STRUCTURAL CARBON STEEL (PLATE GIRDERS)	LBS.	273,920	273,920
FABRICATED STRUCTURAL CARBON STEEL LOW ALLOY STEEL (PLATE GIRDERS)(A-572)	LBS.	286,970	286,970
ORNAMENTAL PAINTING	LUMP SUM		
VERTICAL DRAIN AT ABUTMENTS	EACH	2	2
TUBE HANDRAIL ON ABUTMENT PARAPET WALLS	LN.FT.	286	286
PRECAST CONCRETE LIGHT POST	EACH	14	14
MASONRY PROTECTION SYSTEM	LUMP SUM		
GRAFFITI PROTECTION SYSTEM	LUMP SUM		
ORNAMENTAL PEDESTRIAN FENCE	LN. FT.	351	351
UNI-STONE PAVERS ON RAISED MEDIAN	SG.FT.	511	511
PRECAST CAP ON END POST	EACH	4	4
LIGHT FIXTURES	EACH	14	14
CONDUIT SYSTEM ON STRUCTURE	LUMP SUM		
STONE FACADE ON INTERMEDIATE BEAT	SG.FT.	2,312	2,312
STONE FACADE ON ABUTMENTS AND ABUTMENT RETAINING WALLS	SG.FT.	7,042	7,042
STONE VENEER	SG.FT.	2,253	2,253
PRECAST CAP ON PLANTER WALL	LN. FT.	794	794
PRECAST CAP ON ABUTMENT PARAPET WALLS	LN. FT.	290	290
PLANTER FILL	CU. YD.	108	108
TYPE HOLES	4.5"		
VER. DRAIN OUTLET PIPE	4.5"		

** SEE SPECIAL PROVISIONS

PAYMENT FOR CURB AND PLANTER WALL AND SIDEWALK PLANTER WALL SHALL INCLUDE EPOXY COATED REINFORCING
STEEL, PLANTER DRAIN SYSTEM WITH GROUT FILL, WATERPROOFING AND CONCRETE COMPLETE-IN-PLACE, PER
LN. FT.

COST OF ALL REINFORCING STEEL AND CONCRETE COMPLETE-IN-PLACE IN THE END POSTS
& PARAPET WALLS ABOVE CONSTRUCTION JOINT SHALL BE INCLUDED IN THE UNIT PRICE FOR PARAPET WALLS
ABOVE RETAINING WALLS AND WINDOW WALLS.

CONCRETE ABOVE UPPER CONSTRUCTION JOINT IN BACKWALL AT ABUTMENTS NO. 1 AND NO. 3 IS INCLUDED
WITH CLASS B (SUBSTRUCTURE) QUANTITIES.

ALL CONCRETE AND REINFORCING STEEL IN THE SIDEWALK INCLUDING SIDEWALK BENEATH SIDEWALK PLANTER WALL
ARE INCLUDED IN THE SUPERSTRUCTURE QUANTITIES FOR SIDEWALK (BRIDGES).

ALL REINFORCEMENT IN THE ABUTMENTS IS INCLUDED IN THE SUBSTRUCTURE QUANTITIES.

DOWELS, METAL EXPANSION CAPS, EXPANSION JOINT MATERIAL AND CALK REQUIRED FOR THE WALL
EXPANSION JOINTS SHALL BE INCLUDED IN THE PRICE OF THE BID ITEM CLASS B CONCRETE (SUBSTRUCTURE)
C-1.

THE ESTIMATED QUANTITY FOR ORNAMENTAL PEDESTRIAN FENCE IS BASED ON THE HORIZONTAL DISTANCE
FROM FACE TO FACE OF THE PRECAST CONCRETE LIGHT POSTS.

WHEN THE PRECAST CONCRETE CAP IS BID BY LINEAR FEET, THE CONTRACT UNIT PRICE SHALL INCLUDE THE
COST OF ALL CONCRETE, REINFORCEMENT, AND STAINLESS STEEL DOWELS COMPLETE-IN-PLACE.

ITEMS TO BE GALVANIZED SHALL BE GALVANIZED IN ACCORDANCE WITH A.S.T.M. A123 AND A.S.T.M. A153
(SEE SPECIAL PROVISIONS).

STEEL PLATES IN RAISED MEDIAN ARE INCLUDED IN THE PRICE BID FOR UNI-STONE PAVERS
ON RAISED MEDIAN.

PAYMENT FOR THE STONE VENEER AND DOWEL/ANCHOR SLOTS, COMPLETE-IN-PLACE, FOR THE PARAPET
WALLS ABOVE RETAINING WALLS AND WINDOW WALLS, SIDEWALK PLANTER WALLS, CURB AND PLANTER WALLS AND
ORNAMENTAL END POST SHALL BE INCLUDED IN THE ESTIMATED QUANTITIES FOR STONE VENEER PER SG. FT.

ESTIMATED QUANTITIES FOR SLAB ON STEEL

ITEM	UNIT	QTY
REINFORCING STEEL (EPOXY COATED)	LBS.	94,070
CONCRETE	CU. YDS.	378.4

NOTE: THE TABLE OF ESTIMATED QUANTITIES FOR THE SLAB ON STEEL
REPRESENTS THE QUANTITIES USED BY THE STATE IN PREPARING THE COST
ESTIMATE FOR CONCRETE SLABS. VARIATIONS MAY BE ENCOUNTERED IN THESE
ESTIMATED QUANTITIES, BUT THESE VARIATIONS CANNOT BE USED FOR
AN ADJUSTMENT IN THE CONTRACT UNIT PRICE PER SQUARE YARD OF
SLAB ON STEEL.

SEE SPECIAL PROVISIONS FOR METHOD OF FORMING SLAB.

** DOES NOT INCLUDE REINFORCING BARS USED AS BAR SUPPORTS.

THE PRESTRESSED PANEL QUANTITIES ARE NOT INCLUDED IN THE TABLE OF
ESTIMATED QUANTITIES FOR SLAB ON STEEL.

APPROVED FOR THE DISTRICT
DISTRICT MATERIALS ENGINEER
JAN 1995

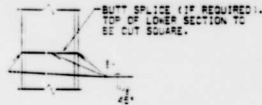


FINAL PLANS

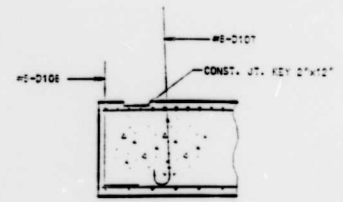
STATE	PROJ. NO.	SHEET NO.
	J4400110b	162

FINAL PLANS

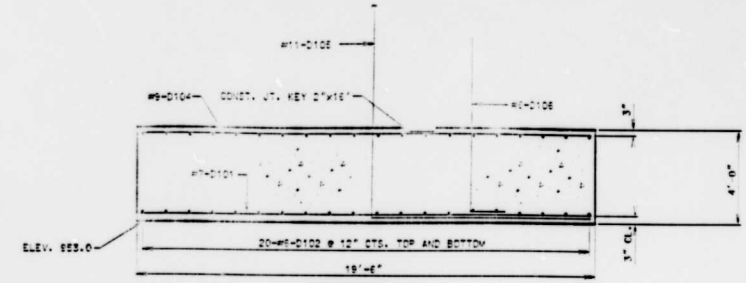
FOR ANY WORK BEING PERFORMED UNDER THIS CONTRACT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES AND AGENCIES.



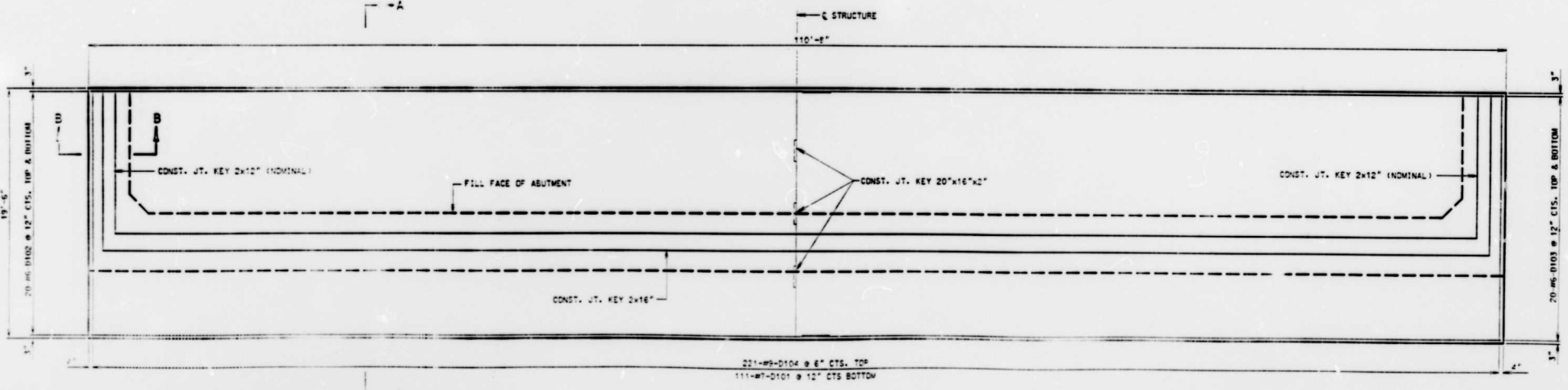
DETAIL OF STEEL PILE SPLICE



PART SECTION B-B



SECTION A-A



PLAN OF FOOTING AT ABUTMENT NO. 1

SUBSTRUCTURE QUANTITY TABLE FOR ABUTMENT NO. 1			
ABUTMENT		RETAINING WALLS	
ITEM	QUANTITY	ITEM	QUANTITY
CLASS 1 EXCAVATION	CU. YDS. 1,327	CLASS 1 EXCAVATION	CU. YDS. 1,224
CLASS B CONCRETE (SUBSTRUCTURE)	CU. YDS. 770.3	PRE-BORE FOR PILING	LN. FT. 786
REINFORCING STEEL (BRIDGES)	LBS. 99,580	STRUCTURAL STEEL PILE (12\"/>	
REINFORCING STEEL (EPOXY COATED)	LBS. 3,470	CLASS B CONCRETE (SUBSTRUCTURE)	CU. YDS. 431.6
		REINFORCING STEEL (BRIDGES)	LBS. 47,390

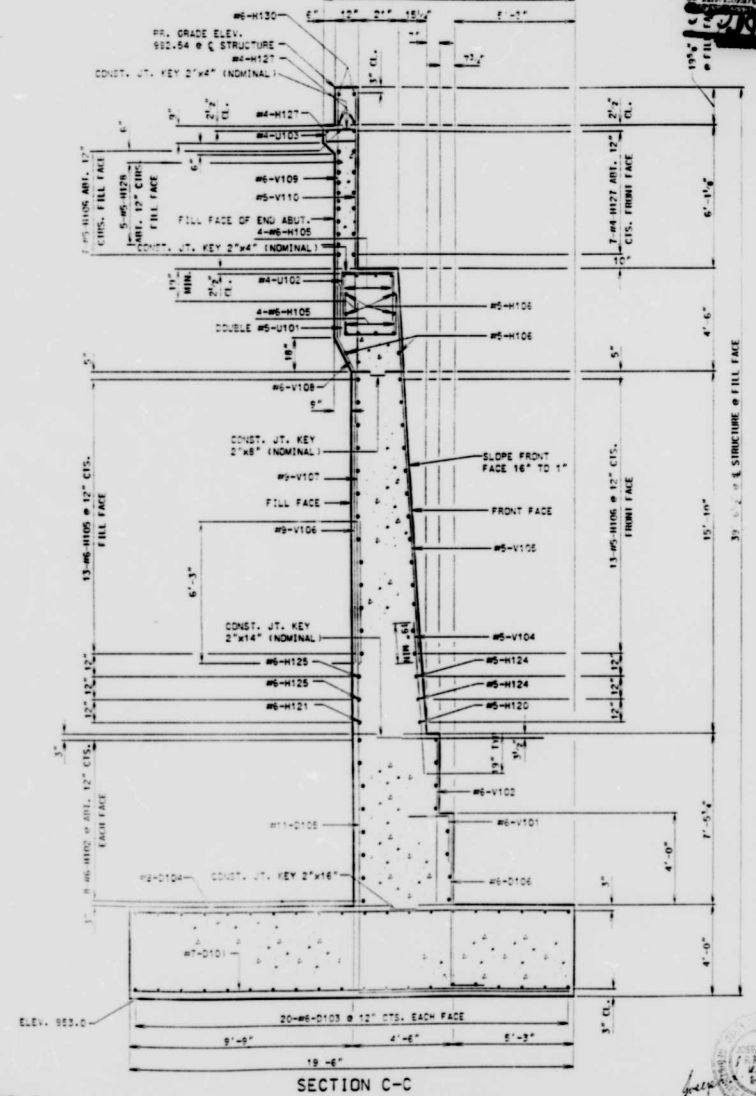
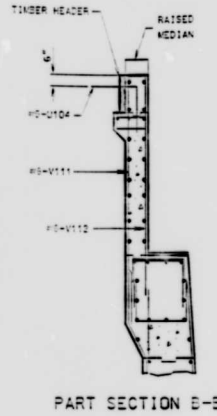
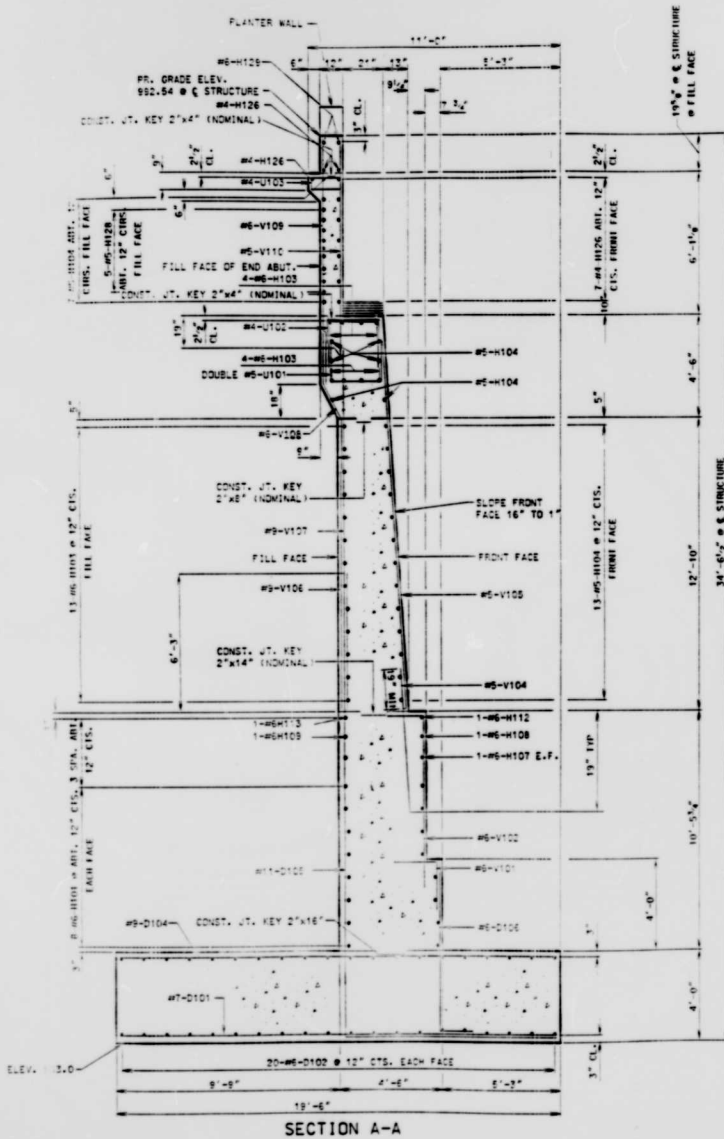


NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

NOTE: FOR LOCATION OF SECTION A-A, B-B AND C-C SEE SHEET NO. 7
FOR TIMBER HEADER DETAILS SEE SHEET NO. 6

STATE	PROJ. NO.	SHEET NO.
MO.	J4000116	129

FINAL PLANS



DETAILS OF ABUTMENT NO. 1

DETAILED MAR. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 8 OF 81.

JACKSON

COUNTY

A-5181

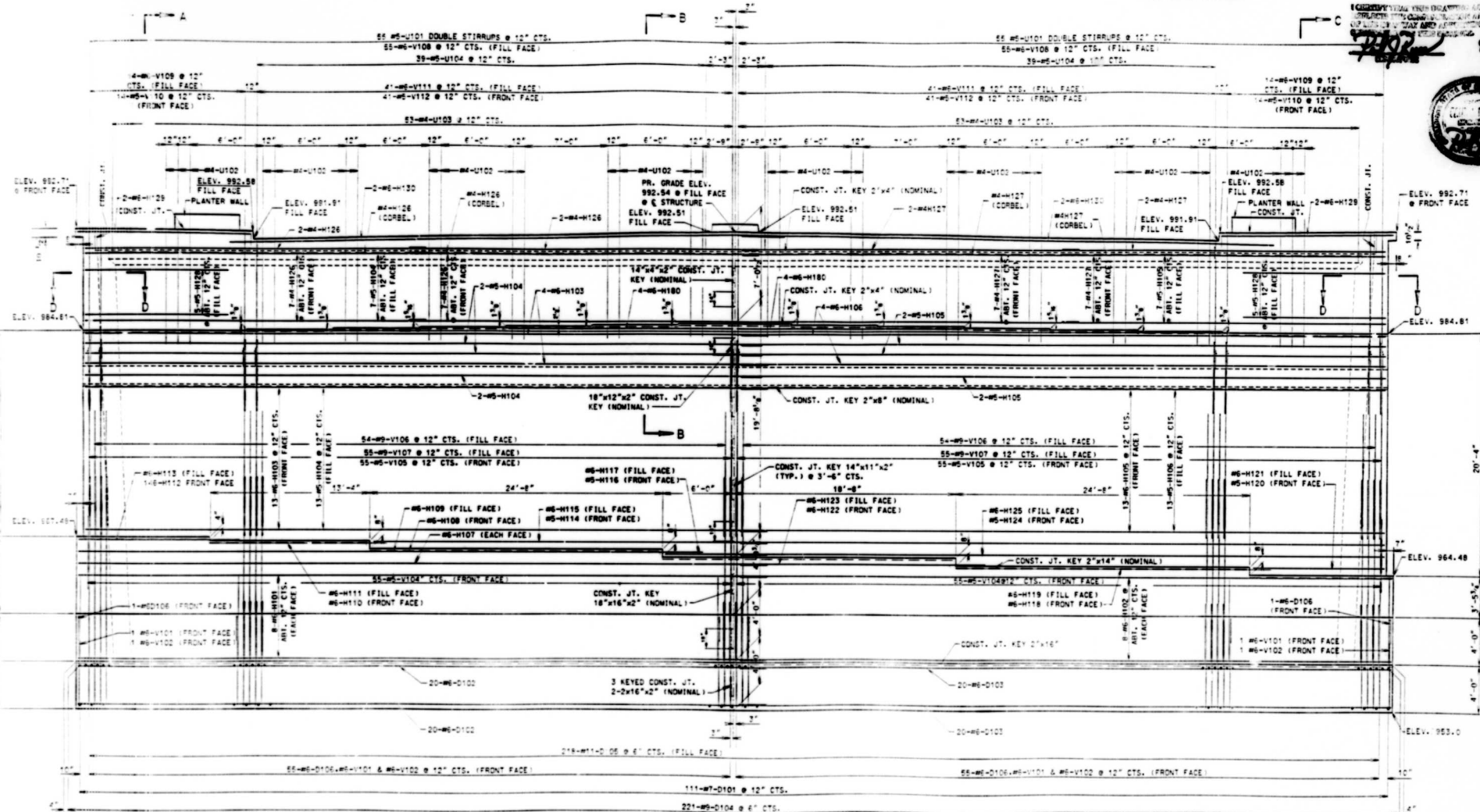


NOTE: FOR DETAILS AND REINFORCEMENT OF FOOTING SEE SHEET NO. 5
 FOR DETAILS OF SECTION A-A SEE SHEET NO. 6
 FOR DETAILS OF SECTION B-B SEE SHEET NO. 6
 FOR DETAILS OF SECTION C-C SEE SHEET NO. 6
 FOR DETAILS OF SECTION D-D SEE SHEET NO. 6

STATE	PROJ. NO.	SHEET NO.
MD.	J400110B	16B

FINAL PLANS

FINAL PLANS



ELEVATION DETAILS OF ABUTMENT NO. 1

DETAILED MAR. 1995
 CHECKED MAR. 1995

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

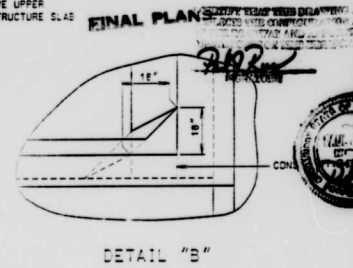
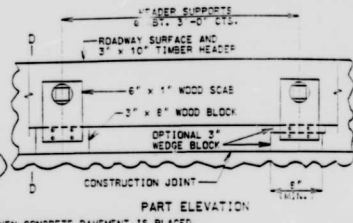
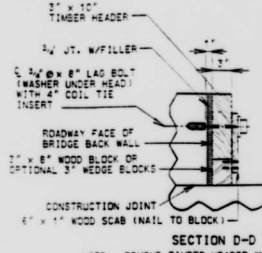
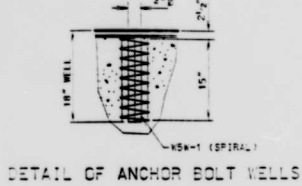
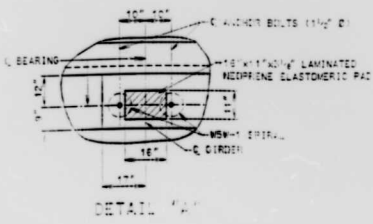
SHEET NO. 7 OF 81.

JACKSON COUNTY A-5181



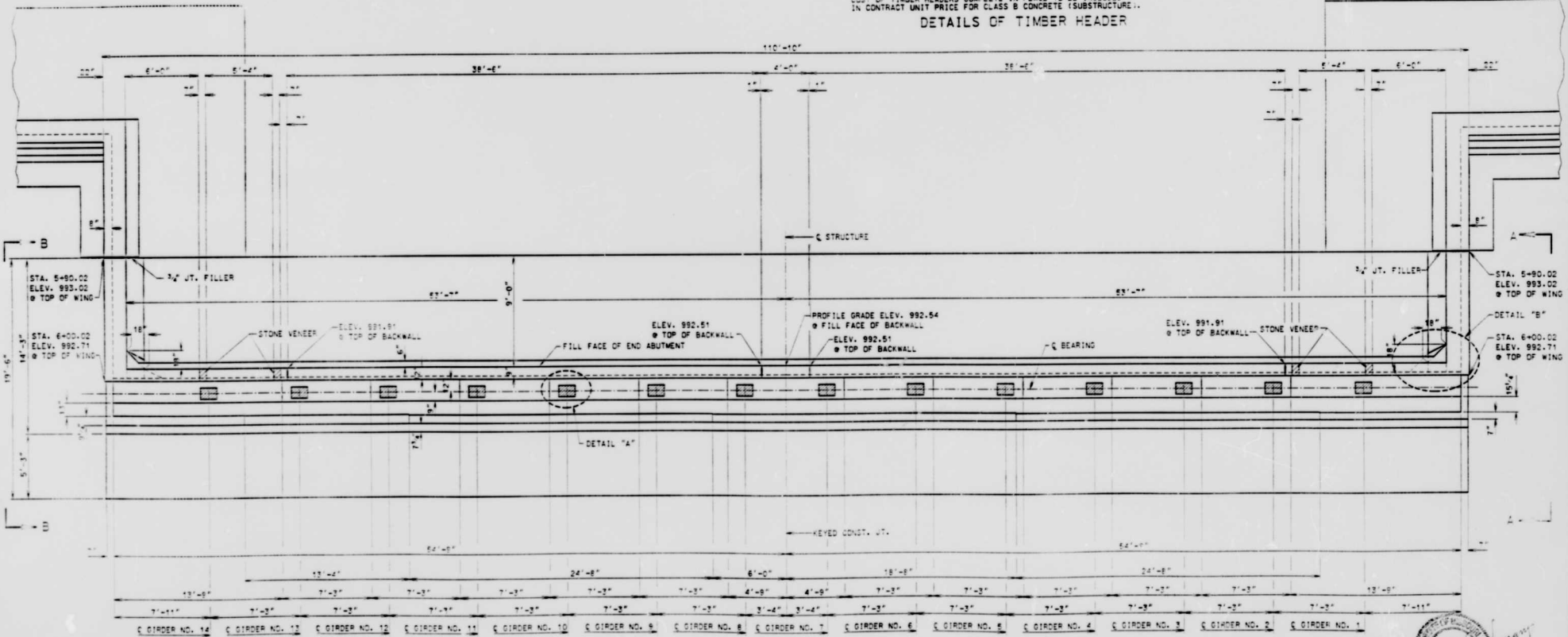
NOTE: FOR DETAILS OF ELEVATION A-A. SEE SHEET NO. 9.
 FOR DETAILS OF ELEVATION B-B. SEE SHEET NO. 10.
 FOR DETAILS OF STONE FACADE. SEE SHEET NO. 21, 22 & 23.
 FOR DETAILS OF LAMINATED NEOPRENE BEARING PADS. SEE SHEET NO. 54.
 FOR DETAILS OF STEEL PILE SPLICE. SEE SHEET NO. 5.
 TOP OF BACKWALL AND EXPANSION DEVICE FOR ABUTMENT NO. 1 & 3.
 SHALL CONFORM TO THE CROWN OF ROADWAY SLAB. BACKWALL ABOVE UPPER
 CONSTRUCTION JOINTS SHALL NOT BE POURED UNTIL THE SUPERSTRUCTURE SLAB
 HAS BEEN POURED IN THE ADJACENT SPAN.
 FOR DETAILS OF PARAPET WALLS. SEE SHEET NO. 66, 69 & 70.

STATE	PROJ. NO.	SHEET NO.
MD.	J4400110	167



NOTE: REMOVE TIMBER HEADER WHEN CONCRETE PAVEMENT IS PLACED.
 COST OF TIMBER HEADERS COMPLETE IN PLACE TO BE INCLUDED
 IN CONTRACT UNIT PRICE FOR CLASS B CONCRETE (SUBSTRUCTURE).

DETAILS OF TIMBER HEADER



PLAN
 DETAILS OF ABUTMENT NO. 1

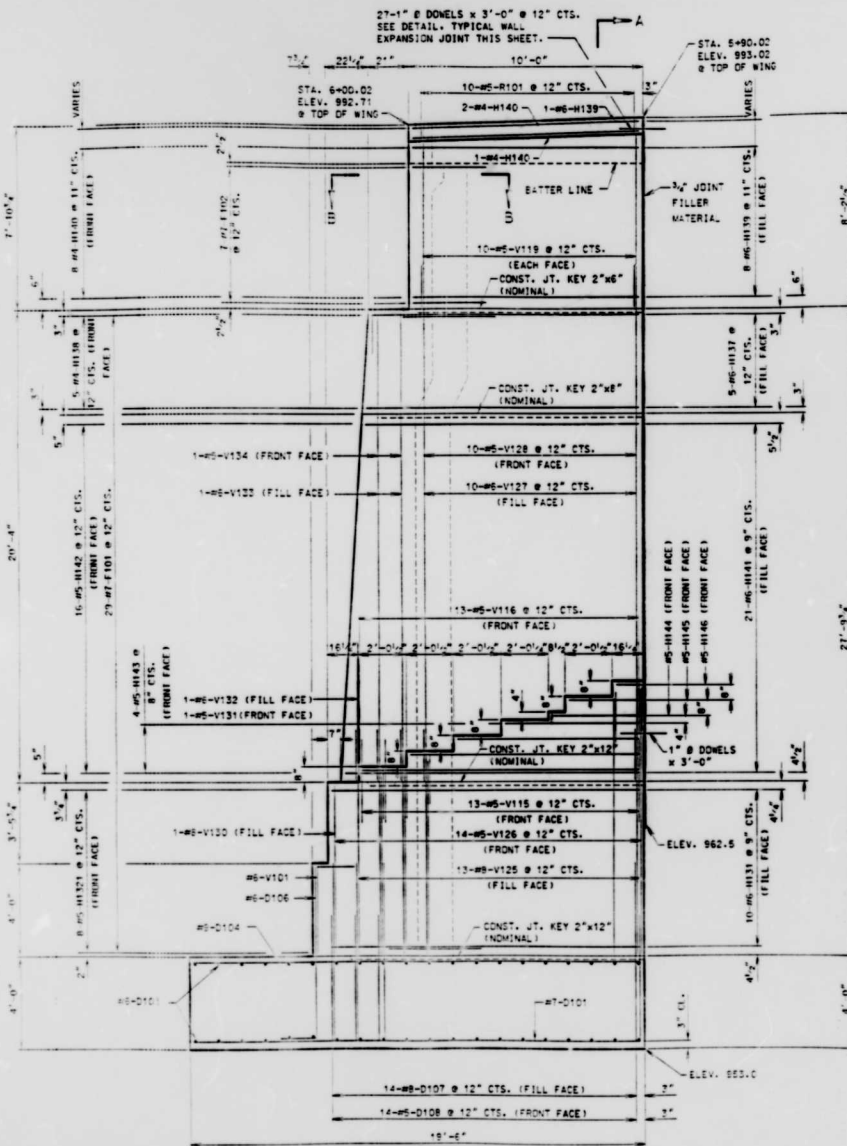


NOTE: FOR LOCATION OF ELEVATION A-A SEE SHEET NO. 8

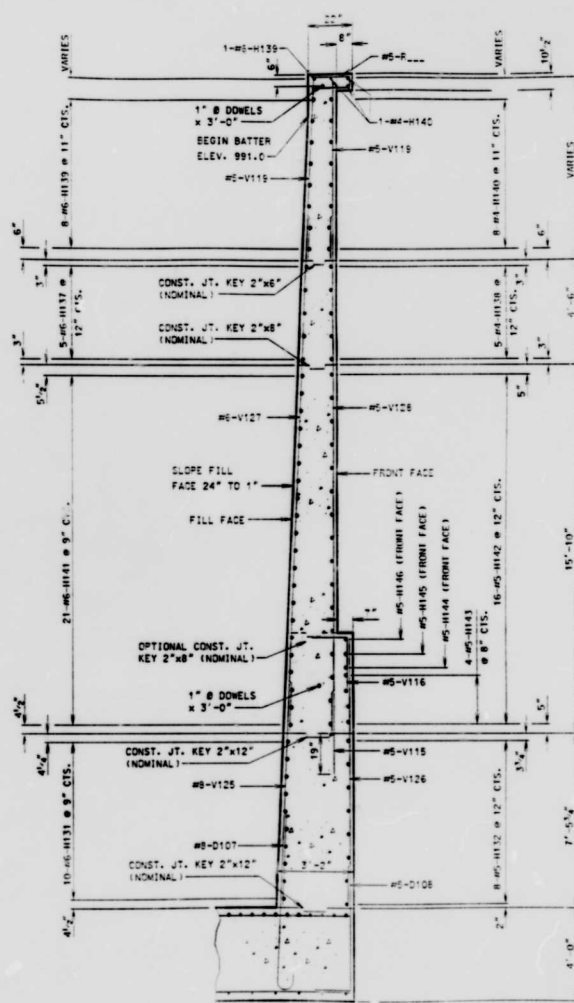
FINAL PLANS

STATE	PROJ. NO.	SHEET NO.
MD.	J4400110B	170

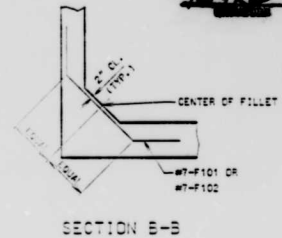
REVISIONS
 9-22-01
 1. VERIFY THAT THIS DRAWING REPRESENTS THE CURRENT AND LATEST SET OF REVISIONS TO THE ORIGINAL DRAWING.



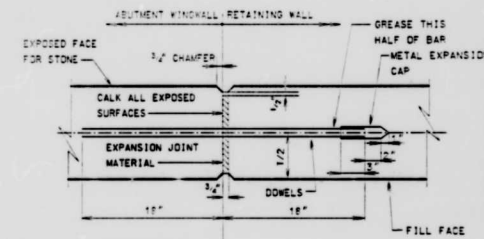
ELEVATION A-A



SECTION A-A



SECTION B-B



- NOTES:
1. PROVIDE 1" Ø DOWELS (GALV.) @ 12" CTS. ACROSS JOINT
 2. WALL REINFORCING STEEL SHALL NOT BE EXTENDED ACROSS JOINT.
 3. DOWELS SHALL BE SMOOTH GALVANIZED BARS WITH EXPANSION HALF GREASED.

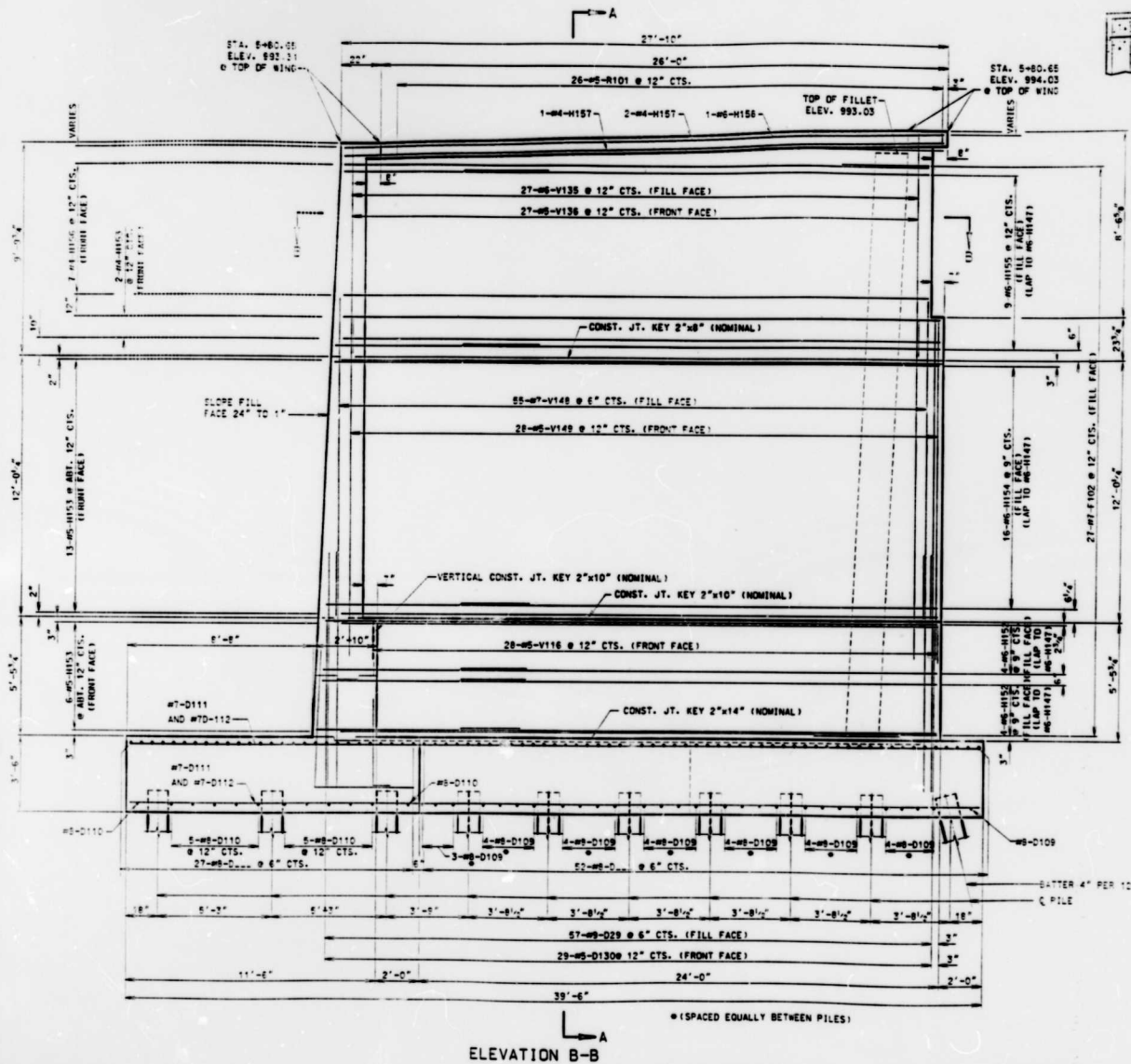
TYPICAL WALL EXPANSION JOINT DETAIL

DETAILS ABUTMENT NO. 1 LEFT WINGWALL

NOTE: FOR DETAILS AND REINFORCEMENT OF PARAPET WALLS SEE SHEET NO'S. 66 & 72.

NOTE: FOR LOCATION OF ELEVATION B-B, SEE SHEET NO. 11

STATE	PROJ. NO.	SHEET NO.
MD.	J 4 140 & 116	174

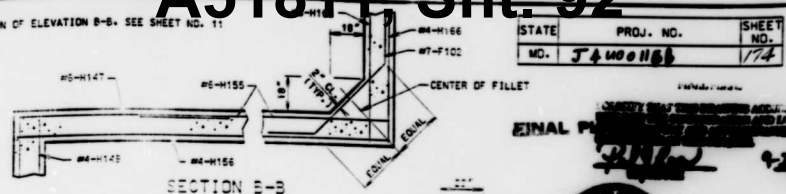


ELEVATION B-B

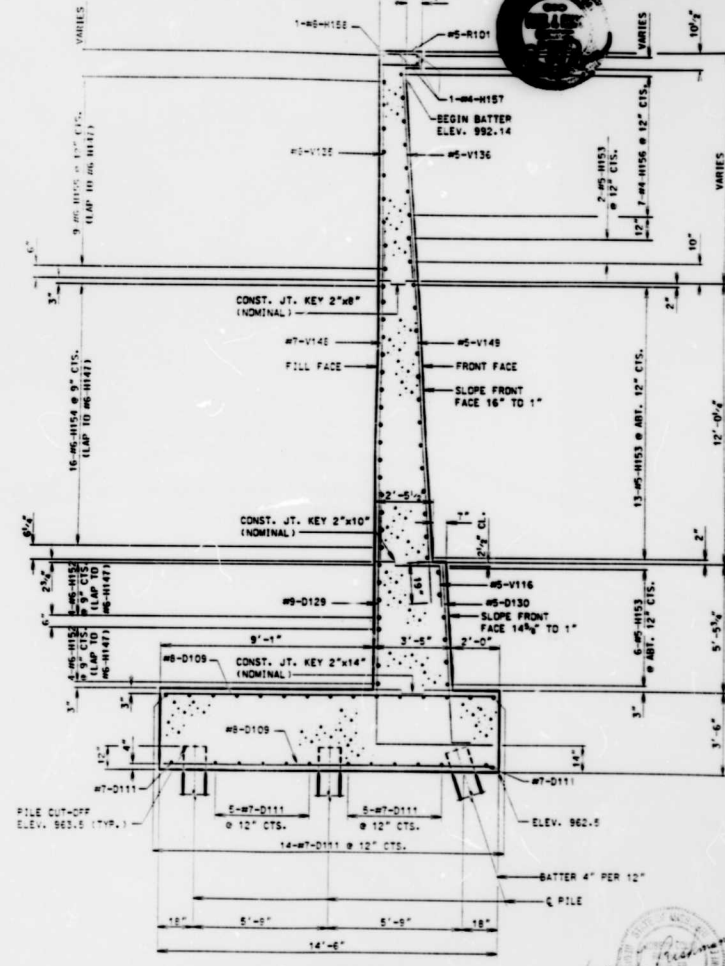
DETAILS ABUTMENT NO. 1 LEFT RETAINING WALL (STA. 5+80.65)

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 13 OF 81.



SECTION B-B



SECTION A-A

NOTE: FOR DETAILS AND REINFORCEMENT OF PARAPET WALL SEE SHEET NO'S. 68 & 72.

JACKSON COUNTY

JACKSON COUNTY

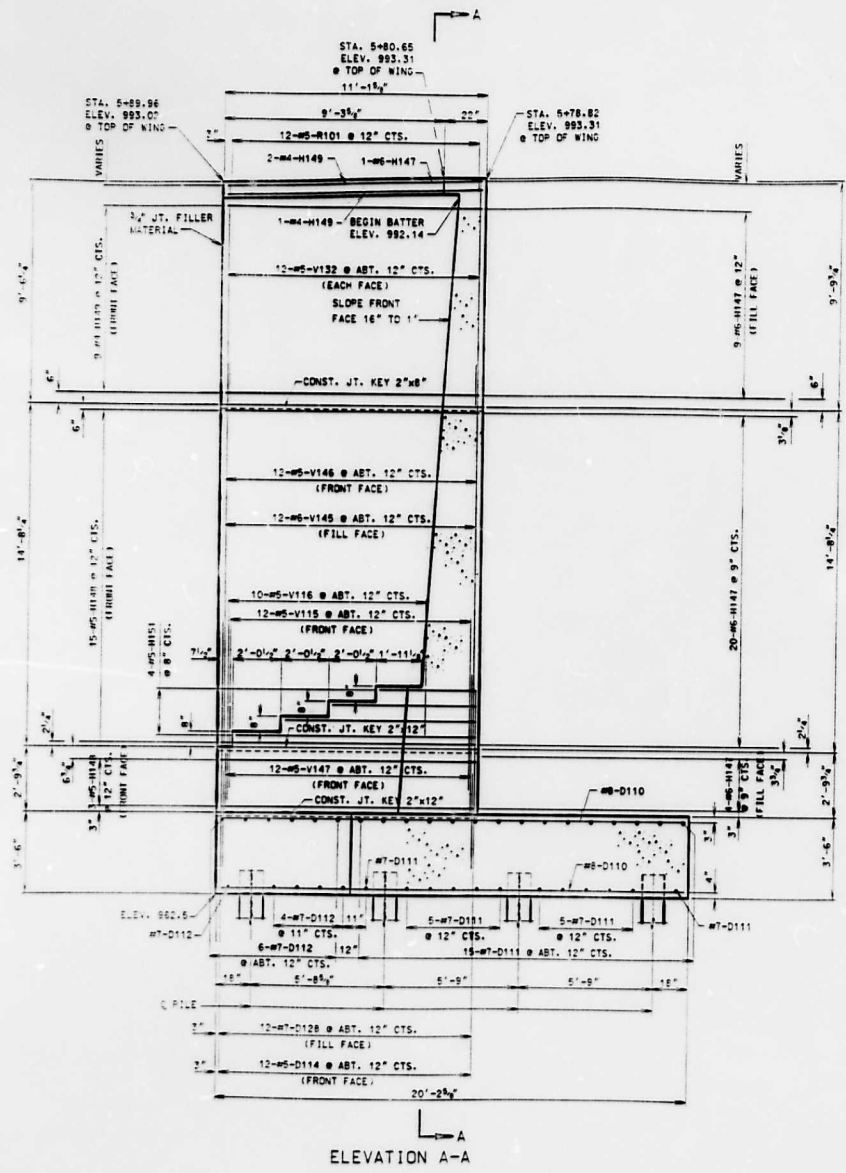
A-5181

DETAILED MAR. 1995
CHECKED MAR. 1995

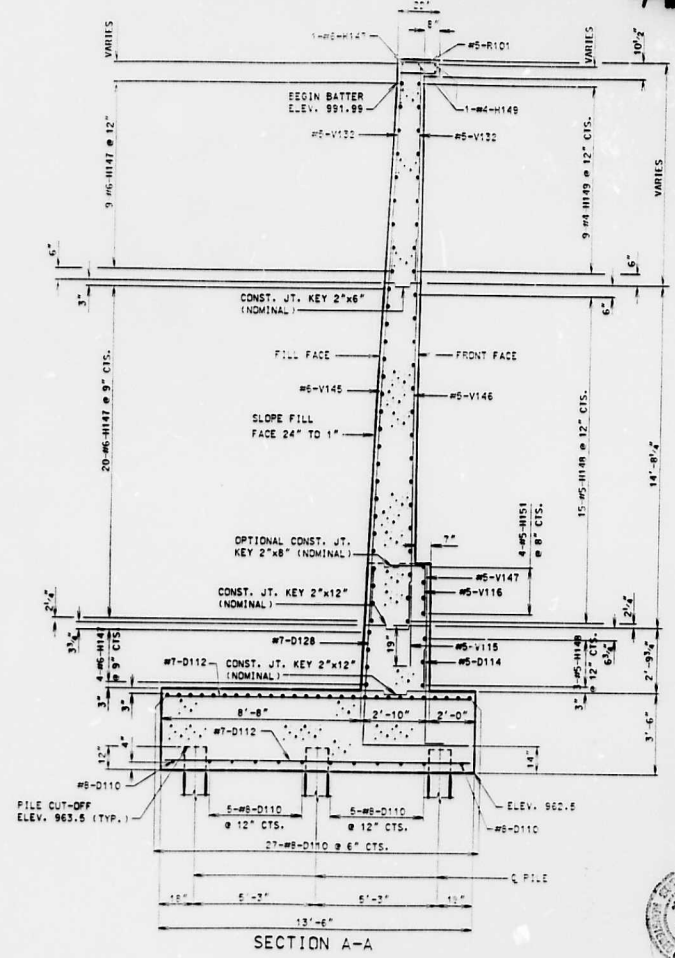
NOTE: FOR LOCATION OF ELEVATION A-A, SEE SHEET NO. 11

STATE	PROJ. NO.	SHEET NO.
MO.	J44001106	173

FINAL PLANS



ELEVATION A-A



SECTION A-A

NOTE: FOR DETAILS AND REINFORCEMENT OF PARAPET WALL SEE SHEET NO'S. 68 & 72.

DETAILS ABUTMENT NO. 1 LEFT RETAINING WALL (STA. 5+78.82 TO STA. 5+89.96)

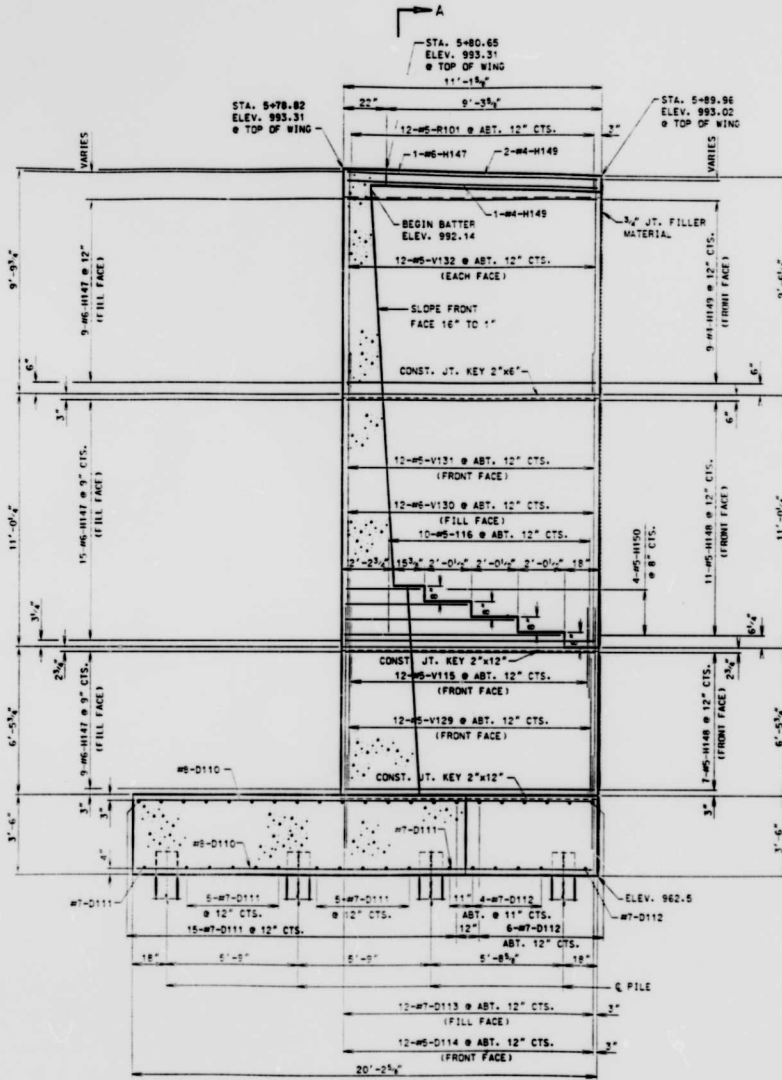
NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 12 OF 81.

JACKSON COUNTY A-5181

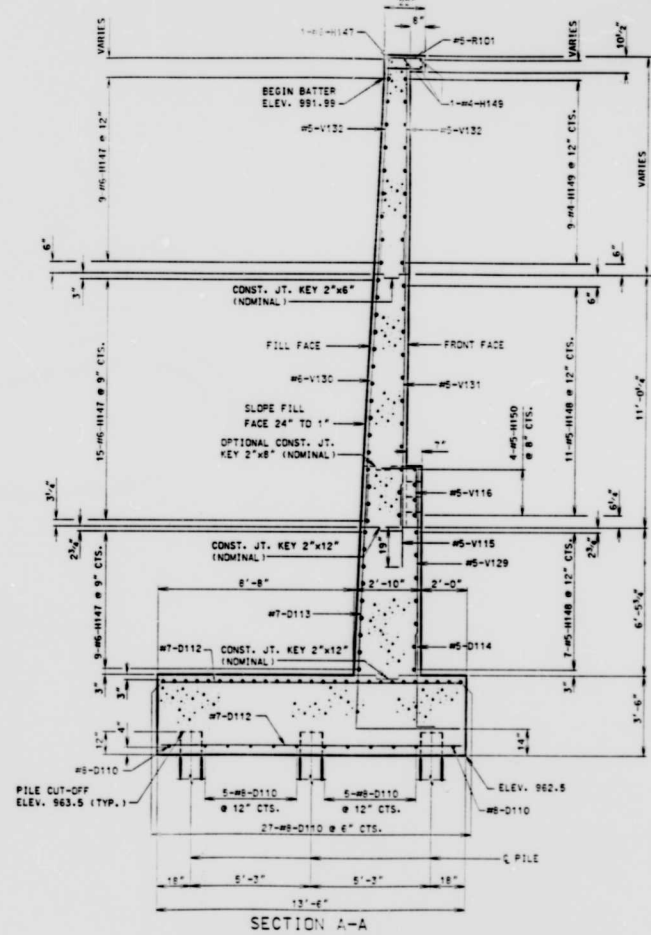
NOTE: FOR LOCATION OF ELEVATION E-E, SEE SHEET NO. 16
FINAL PLANS

STATE	PROJ. NO.	SHEET NO.
MD.	J7 400116B	96



ELEVATION E-E

DETAILS ABUTMENT NO. 1 RIGHT RETAINING WALL (STA. 5+78.82 TO STA. 5+89.96)

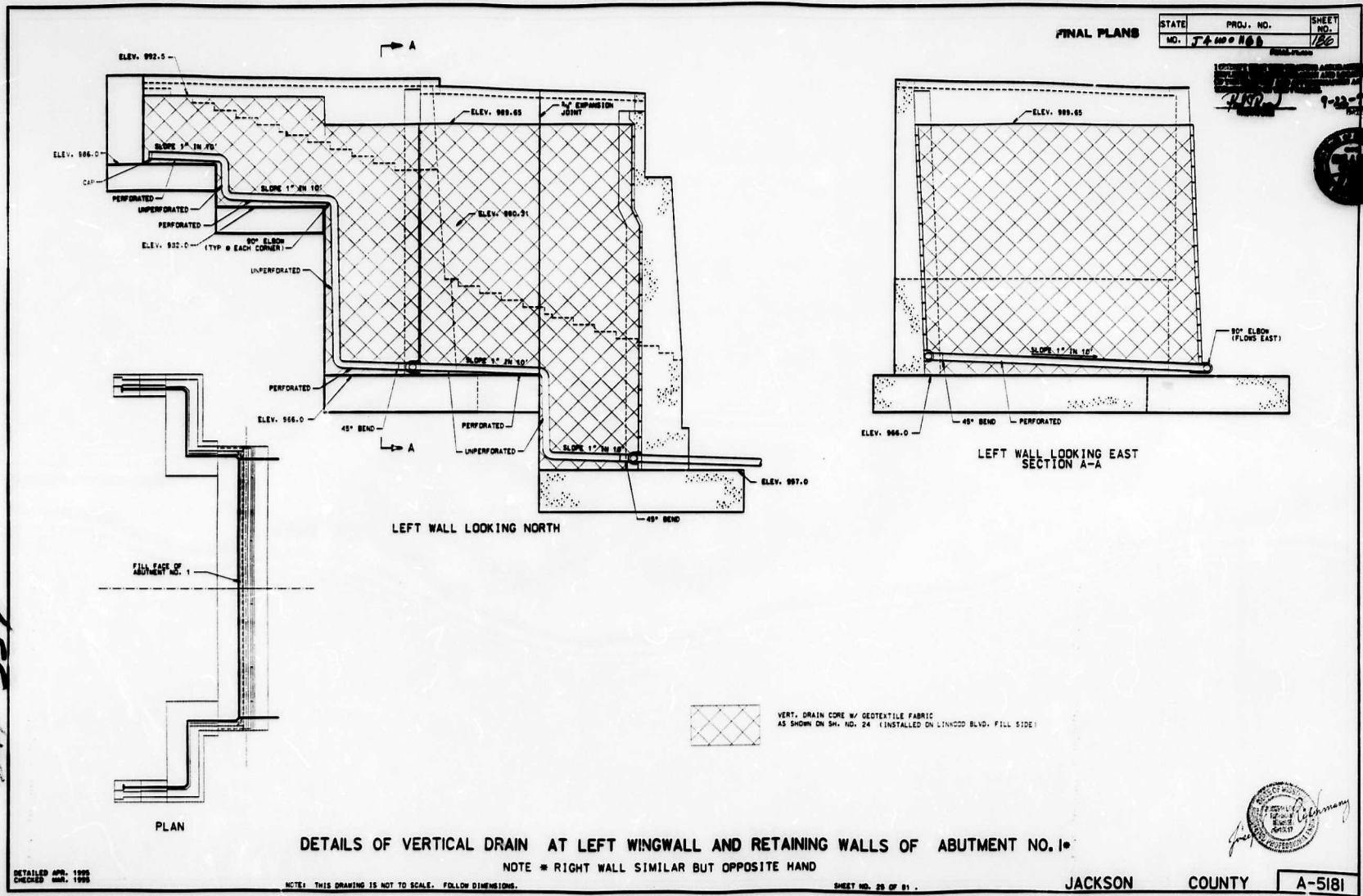


SECTION A-A

NOTE: FOR DETAILS AND REINFORCEMENT OF PARAPET WALLS SEE SHEET NO'S. 69 & 72.

FINAL PLANS

STATE	PROJ. NO.	SHEET NO.
MO. 1440066		180



24 334



DETAILS OF VERTICAL DRAIN AT LEFT WINGWALL AND RETAINING WALLS OF ABUTMENT NO. 1

NOTE * RIGHT WALL SIMILAR BUT OPPOSITE HAND

DETAILED APR. 1999
CHECKED MAR. 1999

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 29 OF 31

JACKSON

COUNTY

A-5181

24 to 1

FINAL PLANS

STATE	PROJ. NO.	SHEET NO.
MO.	J4400165	155

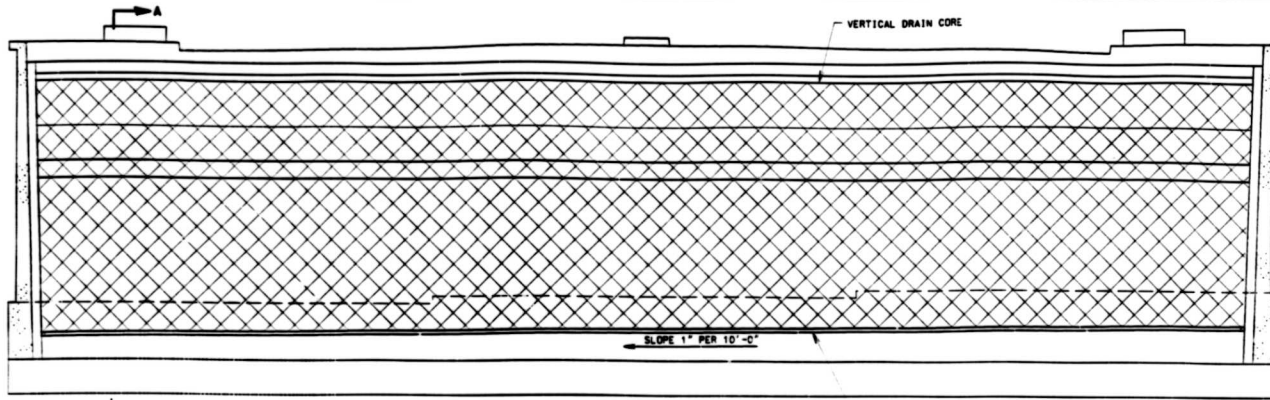
GENERAL NOTES:

DRAIN PIPE MAY BE EITHER 6" DIAMETER CORRUGATED METALLIC-COATED STEEL PIPE UNDERDRAIN, 4" DIAMETER CORRUGATED POLYVINYL CHLORIDE (PVC) DRAIN PIPE, OR 4" DIAMETER CORRUGATED POLYETHYLENE (PE) DRAIN PIPE.

PLACE DRAIN PIPE AT FILL FACE OF ABUTMENT AND SLOPE TO LOWEST GRADE OF GROUND LINE, ALSO MISSING THE ABUTMENT FOOTING OF ABUTMENT BY 1'-1/2". (SEE ELEVATION AT ABUTMENT.)

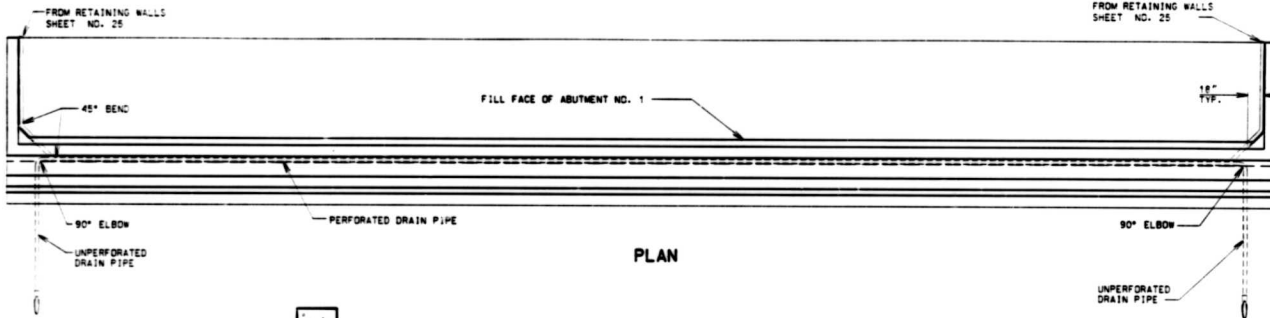
PERFORATED PIPE SHALL BE PLACED AT FILL FACE SIDE AT THE BOTTOM OF ABUTMENT AND PLAIN PIPE SHALL BE USED WHERE THE VERTICAL DRAIN ENDS TO THE EXIT AT GROUND LINE.

SHIFT REINFORCING BARS IN WALL TO MISS THE DRAIN PIPE IF NECESSARY.

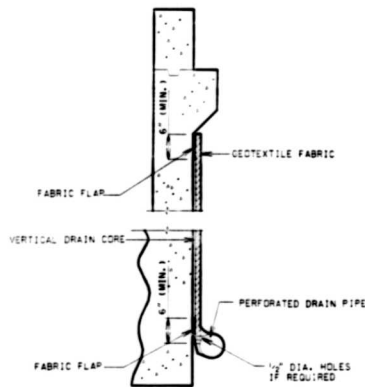


ELEVATION (FILL FACE)

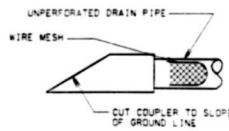
PERFORATED DRAIN PIPE



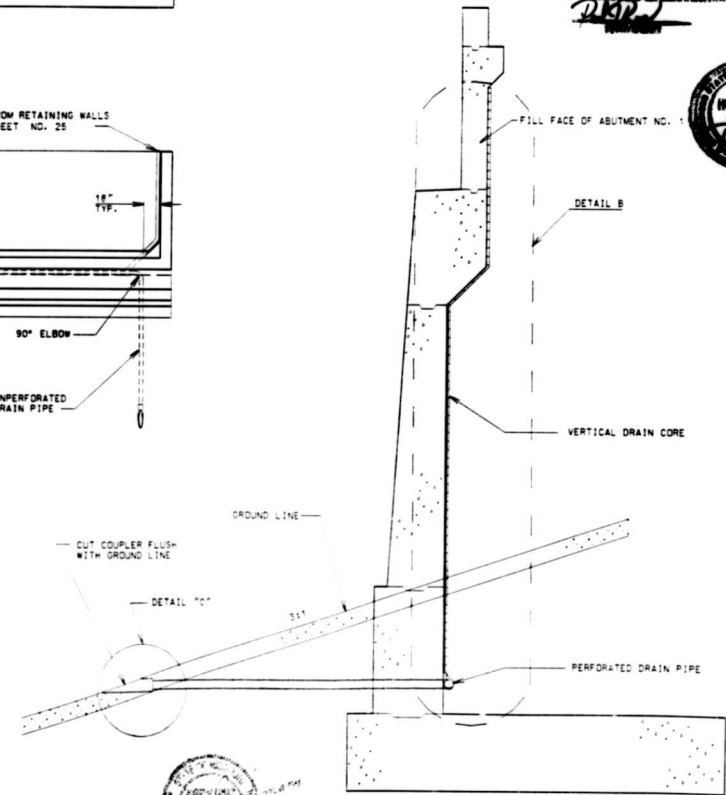
PLAN



DETAIL "B"



DETAIL "C"



SECTION A-A

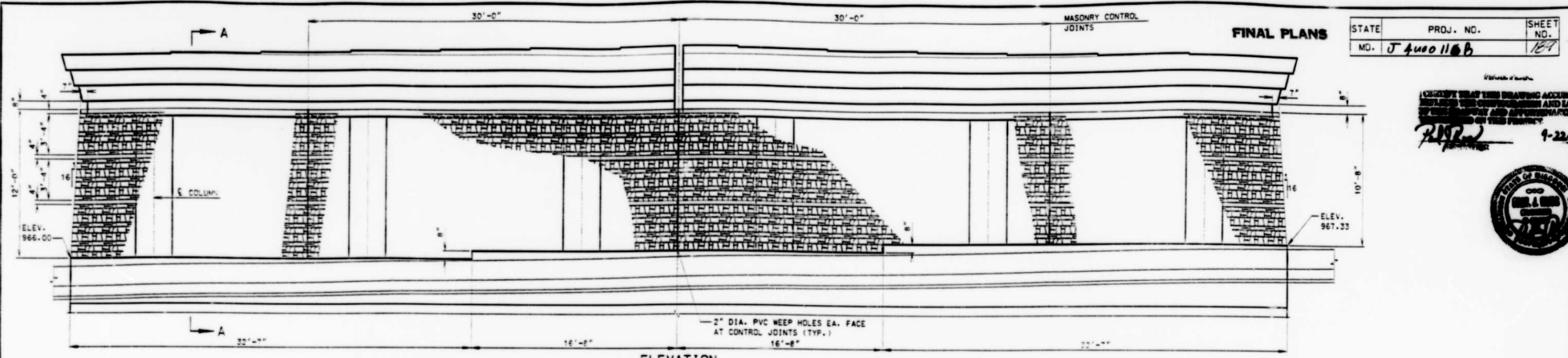
VERTICAL DRAIN AT BACKWALL OF ABUTMENT NO. 1

DETAILED MAR. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 24 OF 81.

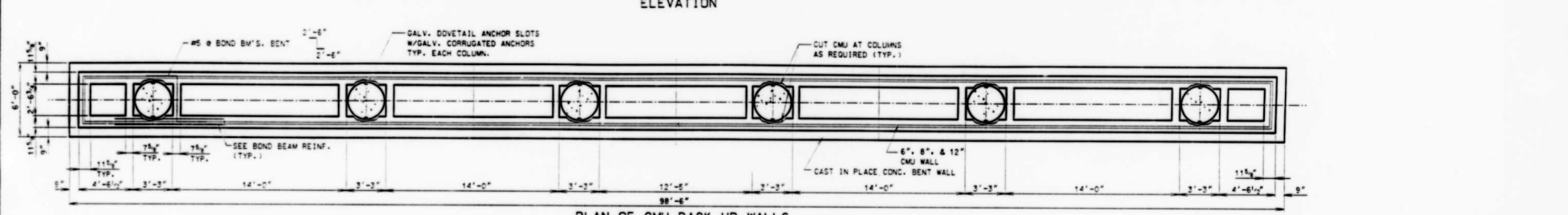
JACKSON COUNTY A-5181



STATE	PROJ. NO.	SHEET NO.
MD.	J 400110B	101

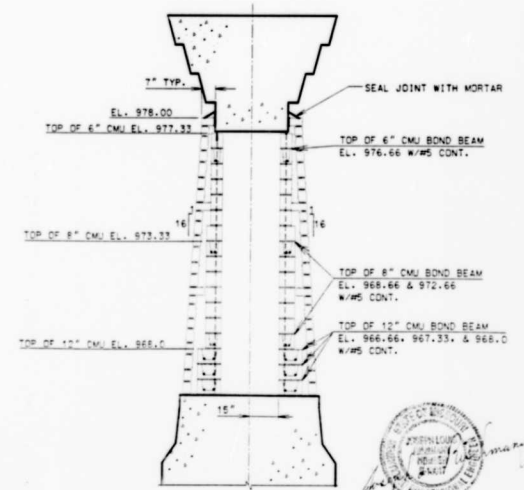
VERIFY THAT THIS DRAWING ACCURATELY REFLECTS THE FIELD SURVEY AND LOCAL CONDITIONS AND APPROVED FOR THE PROJECT BY THE PROPERTY OWNER.

R. J. ... 4-22-95



PLAN OF CMU BACK UP WALLS

NOTE 1:
 PROVIDE WEEP HOLES AT LEDGE NOT TO EXCEED 16" O.C.
 SECURE STONE FACADE TO CMU BACKING WITH FLEXIBLE ANCHORS SPACED AT NOT MORE THAN 16" O.C. VERTICALLY AND 2'-0" O.C. HORIZONTALLY.
 ANCHORS SHALL BE DOVETAIL ANCHORS AT COLUMNS AND ANCHOR STRAPS AT CMU BACK UP WALL. (SEE SPECIAL PROVISIONS.)
 PROVIDE TWO PIECE ANCHORS WHICH PERMIT VERTICAL AND HORIZONTAL MOVEMENT BUT PROVIDE LATERAL RESTRAINT OF MASONRY.
 TIES SHALL BE CORRUGATED STRAPS NOT LESS THAN 12 GAUGE OR TRIANGULAR WIRE TIES NOT LESS THAN 3/4" DIAMETER AS DETERMINED BY THE ENGINEER. LENGTH OF TIES SHALL BE AS REQUIRED FOR EMBEDMENT IN WYTHES OF MASONRY.
 BLOCK LEDGE FOR SUPPORT OF CMU AND STONE SHALL BE STEPPED.
 PROVIDE EXPANSION, CONTROL AND ISOLATION JOINTS TO ACCOMMODATE MOVEMENT IN MASONRY WORK. (SEE SPECIAL PROVISIONS.)
 PROVIDE SEALER AND ANTI-GRAFFITI COATING ON ALL STONE AND MORTAR. (SEE SPECIAL PROVISIONS.)
 CMU = CONCRETE MASONRY UNIT



SECTION A-A



DETAILS OF STONE FACADE AT INTERMEDIATE BENT NO. 2

DETAILED MAR. 1995
 CHECKED MAR. 1995

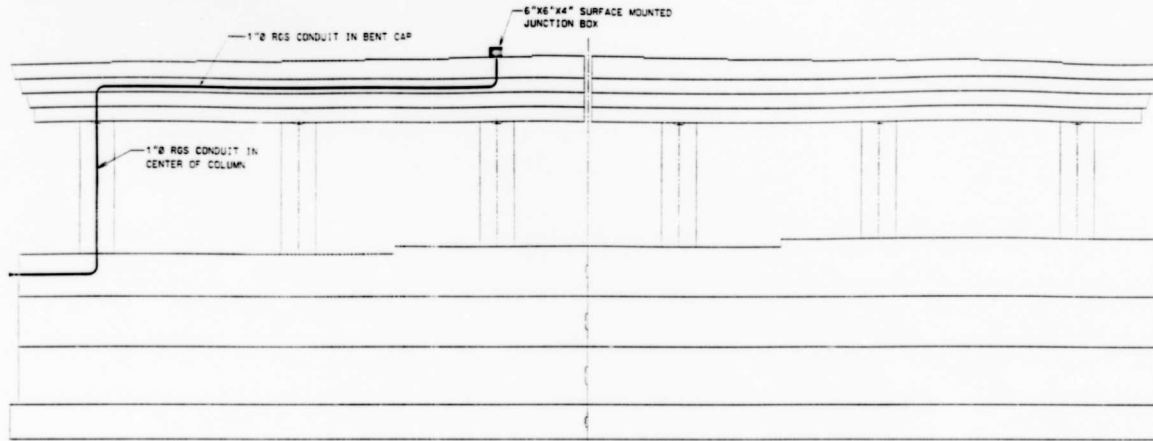
NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 28 OF 81.

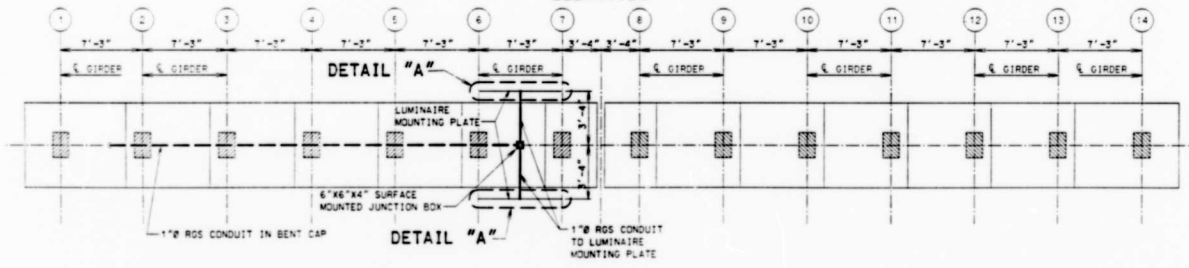
FINAL PLANS

STATE	PROJ. NO.	SHEET NO.
MO. J-400	NO. 0	SEE

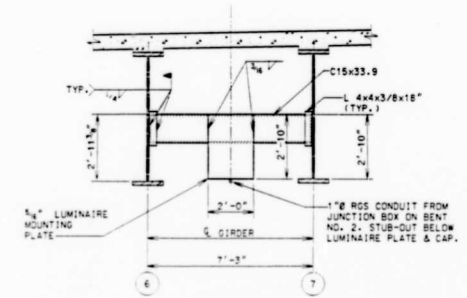
9-22-95
J. J. [Signature]



ELEVATION



PLAN



DETAIL "A"

DETAILS OF INTERMEDIATE BENT NO. 2 CONDUIT SYSTEM

DETAILED MAR. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 74 OF 81.

JACKSON

COUNTY

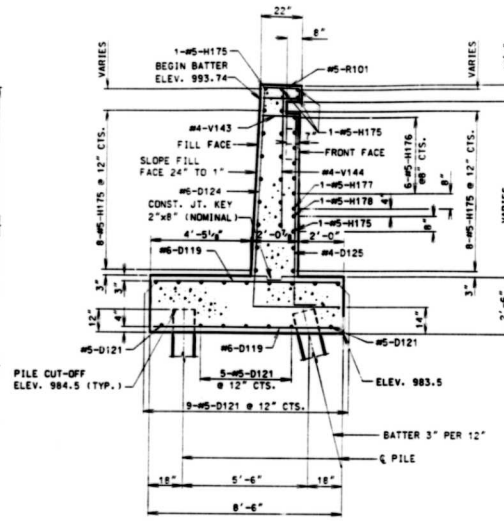
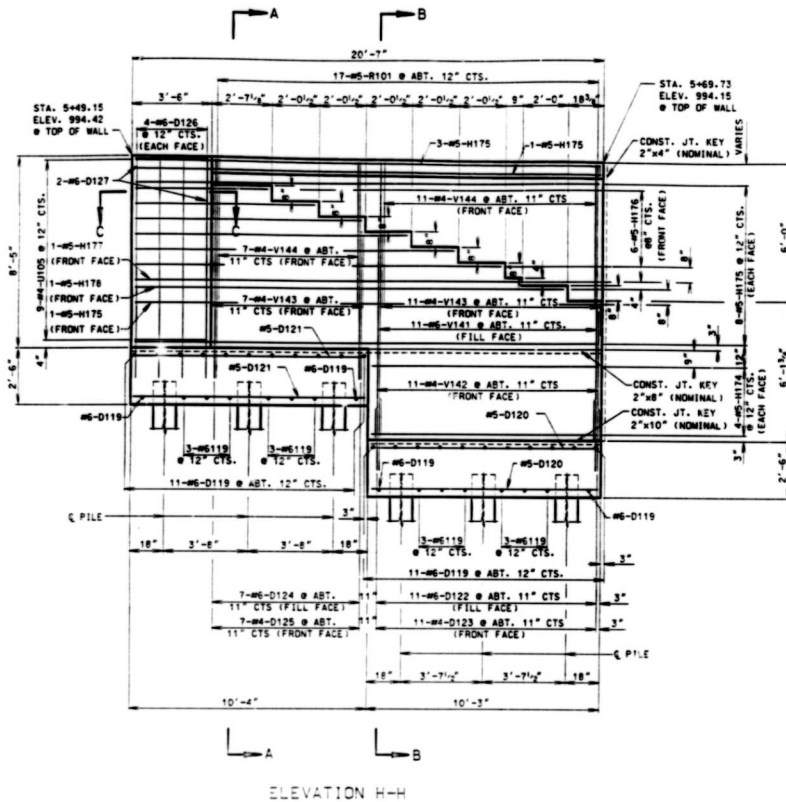


A-5181

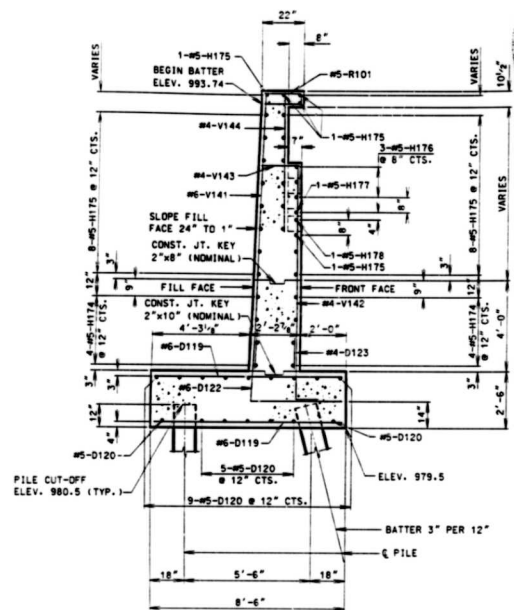
NOTE: FOR LOCATION OF ELEVATION H-H, SEE SHEET NO. 16

STATE	PROJ. NO.	SHEET NO.
MO. J4400168		101

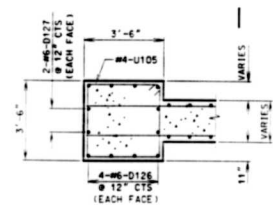
2192
9-22-97



SECTION A-A



SECTION B-B



SECTION C-C

DETAILS ABUTMENT NO. 1 RIGHT RETAINING WALL (STA. 5+49.15 TO STA. 5+69.73)

NOTE: FOR DETAILS AND REINFORCEMENT OF PARAPET WALLS SEE SHEET NO'S. 69 & 72.

DETAILED MAR. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

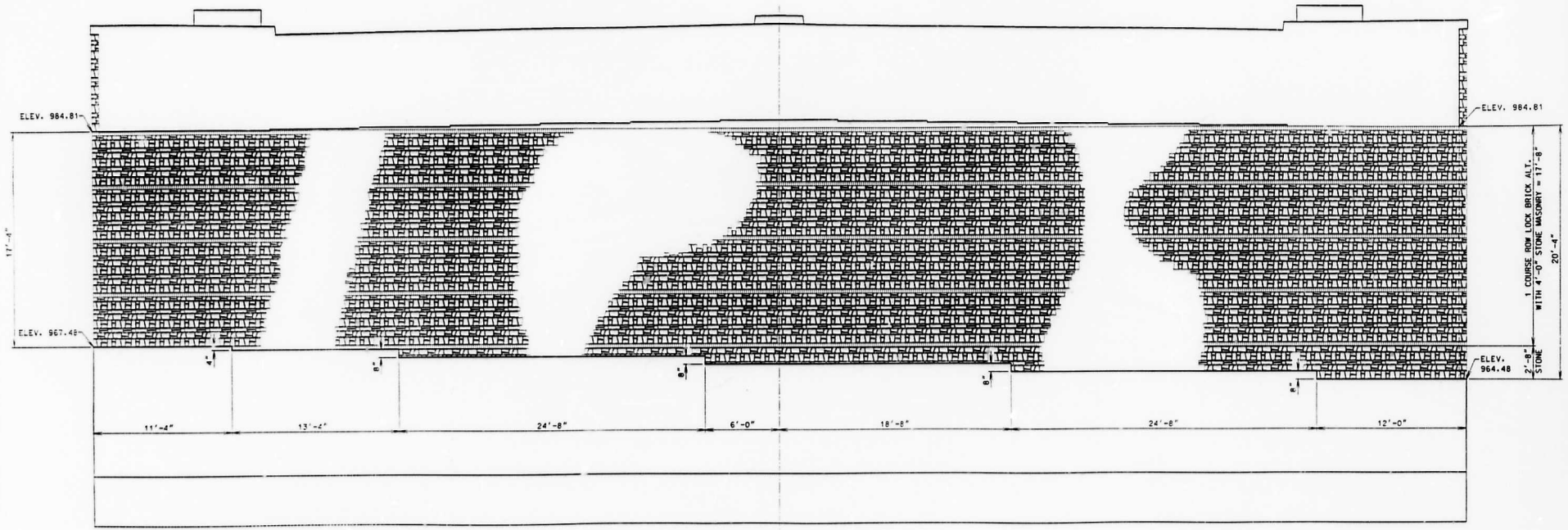
SHEET NO. 20 OF 81.

JACKSON COUNTY A-5181

FINAL PLANS

STATE	PROJ. NO.	SHEET NO.
MO. JA-400110B		182

PLSR 9/20/97



ELEVATION SHOWING STONE FACADE AND BRICKING DETAILS



NOTE: SEE SPECIAL PROVISIONS FOR CONSTRUCTION OF STONE FACADE.

DETAILS OF STONE FACADE AT ABUTMENT NO. 1

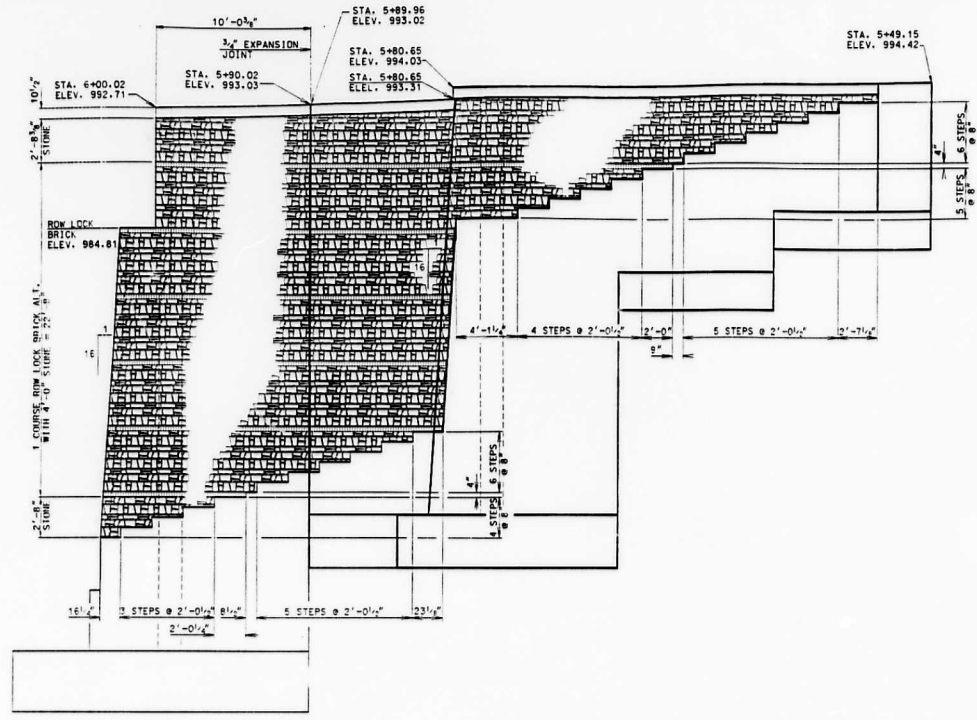
DETAILED MAR. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

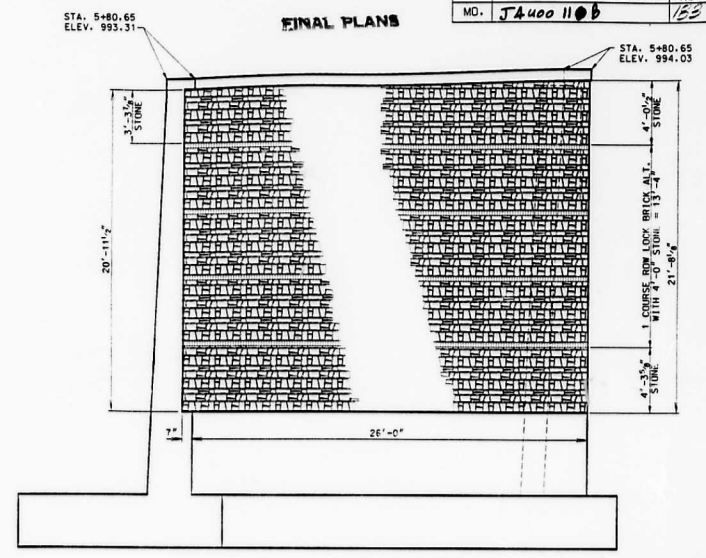
SHEET NO. 21 OF 81.

STATE	PROJ. NO.	SHEET NO.
MD.	J4400 110B	107

FINAL PLANS



LEFT WALL LOOKING SOUTH



LEFT WALL LOOKING WEST

ALL MATERIAL SHALL BE REBUILT AND REFINISHED TO MATCH EXISTING AND TO BE IDENTICAL TO THE ORIGINAL AND APPROVED BY THE ENGINEER.
 2/10/21 9-2-21



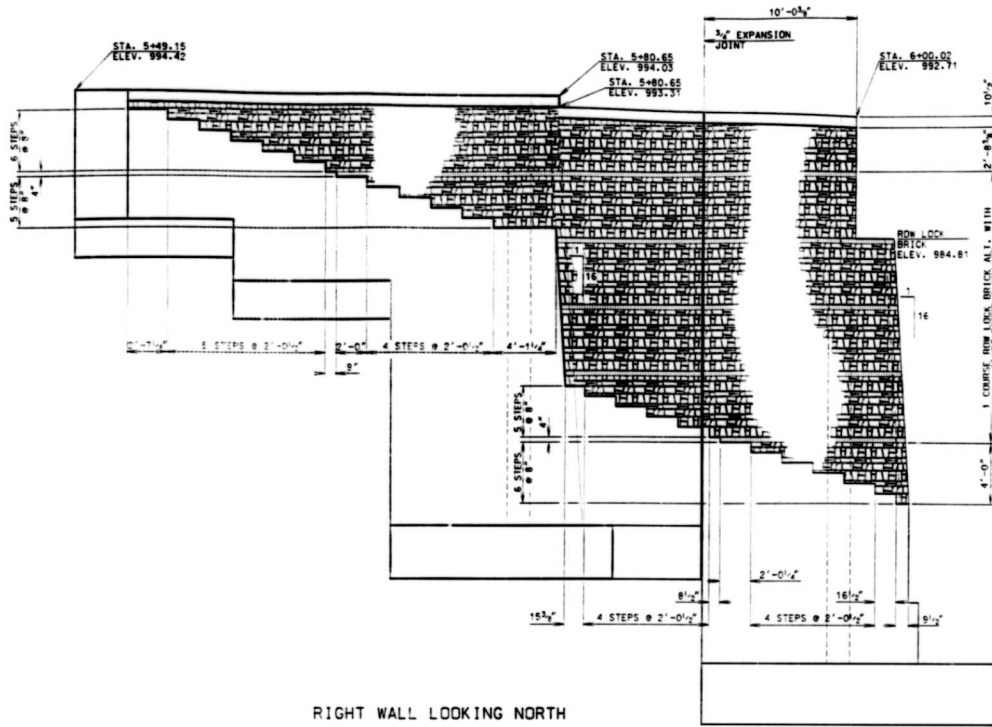
NOTE: SEE SPECIAL PROVISIONS FOR CONSTRUCTION OF STONE FACADE.

DETAILS OF STONE FACADE AT LEFT WALL OF ABUTMENT NO. 1

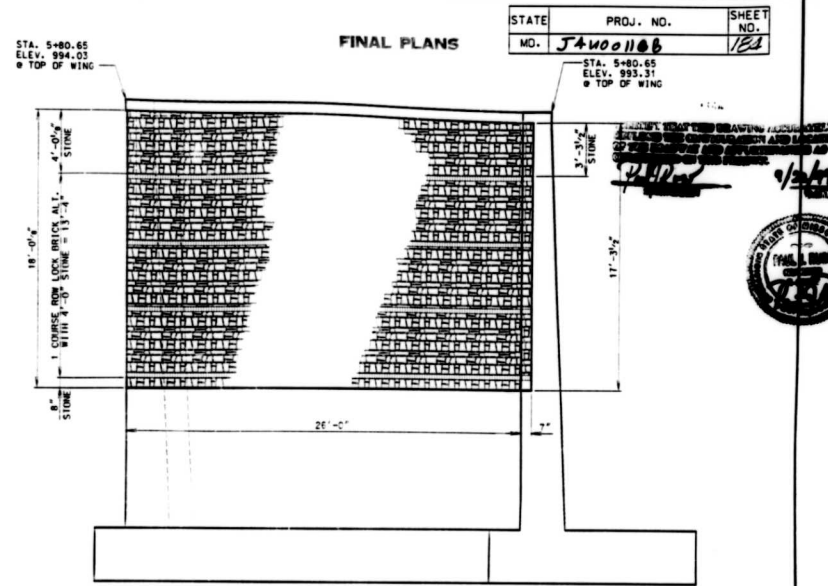
DETAILED MAR. 1995
 CHECKED MAR. 1995

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 22 OF 81.



RIGHT WALL LOOKING NORTH



RIGHT WALL LOOKING WEST

STATE	PROJ. NO.	SHEET NO.
MD.	J44001108	108

DETAILS OF STONE FACADE AT RIGHT WALL OF ABUTMENT NO. 1

NOTE: SEE SPECIAL PROVISIONS FOR CONSTRUCTION OF STONE FACADE.



DETAILED MAR. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 23 OF 81.

JACKSON

COUNTY

A-5181

FOR INFORMATION ONLY

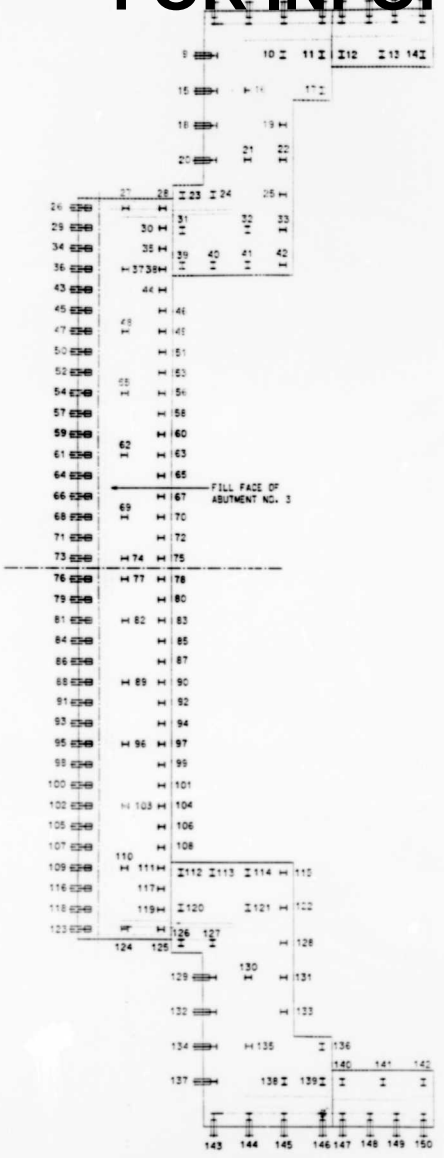
A51811 Sht. 109

"AS BUILT PILE" DATA

LOCATION	PILE NO.	LENGTH IN PLACE (FT.)	COMPUTED BEARING (TONS)	REMARKS	
ABUTMENT NO. 3	1	25'-3"	131	NOTE: ALL PILING HP 12 X 53	
	2	22'-9"	112		
	3	21'-0"	131		
	4	22'-10"	131		
	5	29'-6"	114		
	6	29'-2"	114		
	7	29'-6"	114		
	8	29'-4"	114		
	9	21'-9"	131		
	10	21'-3"	129		VERT.
	11	20'-0"	129		VERT.
	12	29'-8"	131		VERT.
	13	29'-7"	131		VERT.
	14	29'-2"	131		VERT.
	15	22'-5"	131		VERT.
	16	21'-1"	139		VERT.
	17	20'-7"	129		VERT.
	18	22'-4"	129		VERT.
	19	21'-7"	129		VERT.
	20	22'-1"	129		VERT.
	21	21'-2"	129		VERT.
	22	21'-5"	129		VERT.
	23	20'-8"	129		VERT.
	24	21'-7"	200		VERT.
	25	22'-7"	129		VERT.
	26	17'-3"	114		VERT.
	27	16'-5"	131		VERT.
	28	16'-2"	131		VERT.
	29	16'-2"	114		VERT.
	30	16'-5"	131		VERT.
	31	24'-8"	200		VERT.
	32	22'-4"	200		VERT.
	33	22'-4"	129		VERT.
	34	17'-5"	108		VERT.
	35	17'-4"	136		VERT.
	36	17'-4"	114		VERT.
	37	16'-1"	131		VERT.
	38	17'-8"	131		VERT.
	39	22'-3"	129		VERT.
	40	25'-3"	200		VERT.
	41	21'-8"	129		VERT.
	42	21'-0"	150		VERT.
	43	17'-1"	114		VERT.
	44	17'-1"	118		VERT.
	45	17'-3"	108		VERT.
	46	16'-8"	131		VERT.
	47	17'-0"	108		VERT.
	48	17'-1"	131		VERT.
	49	16'-5"	131		VERT.
	50	16'-5"	114		VERT.
	51	16'-3"	118		VERT.
	52	17'-0"	108		VERT.
	53	16'-3"	131		VERT.
	54	16'-7"	108		VERT.
	55	16'-0"	138		VERT.
	56	15'-10"	131		VERT.
	57	17'-0"	114		VERT.
	58	16'-0"	131		VERT.
	59	16'-9"	114		VERT.
	60	17'-4"	131		VERT.
	61	16'-7"	108		VERT.
	62	15'-1"	131		VERT.
	63	16'-2"	131		VERT.
	64	17'-1"	108		VERT.
	65	16'-2"	131		VERT.
	66	17'-0"	114		VERT.
	67	16'-2"	131		VERT.
	68	17'-6"	108		VERT.
	69	16'-3"	138		VERT.
	70	16'-2"	131		VERT.
	71	17'-2"	108		VERT.
	72	17'-0"	131		VERT.
	73	17'-4"	114		VERT.
	74	16'-6"	131		VERT.
	75	16'-0"	131		VERT.
	76	17'-6"	114		VERT.
	77	15'-11"	138		VERT.

"AS BUILT PILE" DATA

LOCATION	PILE NO.	LENGTH IN PLACE (FT.)	COMPUTED BEARING (TONS)	REMARKS
	78	15'-11"	131	VERT.
	79	17'-4"	114	VERT.
	80	17'-3"	131	VERT.
	81	17'-9"	108	VERT.
	82	16'-4"	131	VERT.
	83	16'-5"	131	VERT.
	84	17'-5"	114	VERT.
	85	16'-3"	131	VERT.
	86	18'-5"	114	VERT.
	87	16'-4"	131	VERT.
	88	18'-9"	108	VERT.
	89	16'-7"	131	VERT.
	90	16'-7"	131	VERT.
	91	19'-4"	114	VERT.
	92	17'-7"	131	VERT.
	93	19'-0"	108	VERT.
	94	17'-5"	131	VERT.
	95	18'-5"	114	VERT.
	96	17'-10"	131	VERT.
	97	17'-9"	131	VERT.
	98	17'-6"	114	VERT.
	99	18'-3"	131	VERT.
	100	15'-10"	108	VERT.
	101	18'-9"	131	VERT.
	102	17'-5"	108	VERT.
	103	17'-10"	131	VERT.
	104	18'-3"	131	VERT.
	105	18'-0"	114	VERT.
	106	18'-6"	131	VERT.
	107	17'-7"	108	VERT.
	108	17'-9"	131	VERT.
	109	17'-2"	114	VERT.
	110	17'-7"	131	VERT.
	111	17'-10"	131	VERT.
	112	22'-11"	129	VERT.
	113	23'-0"	131	VERT.
	114	23'-5"	129	VERT.
	115	22'-5"	139	VERT.
	116	17'-5"	114	VERT.
	117	17'-2"	131	VERT.
	118	17'-3"	114	VERT.
	119	17'-3"	131	VERT.
	120	22'-3"	139	VERT.
	121	22'-9"	129	VERT.
	122	23'-7"	129	VERT.
	123	18'-8"	114	VERT.
	124	17'-1"	138	VERT.
	125	17'-6"	131	VERT.
	126	23'-0"	129	VERT.
	127	22'-2"	129	VERT.
	128	22'-2"	129	VERT.
	129	23'-8"	131	VERT.
	130	22'-5"	129	VERT.
	131	22'-2"	139	VERT.
	132	23'-11"	131	VERT.
	133	22'-0"	129	VERT.
	134	23'-9"	131	VERT.
	135	22'-11"	129	VERT.
	136	22'-4"	129	VERT.
	137	23'-9"	131	VERT.
	138	22'-6"	150	VERT.
	139	22'-7"	129	VERT.
	140	31'-1"	131	VERT.
	141	30'-4"	131	VERT.
	142	29'-7"	131	VERT.
	143	24'-11"	131	VERT.
	144	23'-6"	131	VERT.
	145	24'-1"	131	VERT.
	146	23'-11"	131	VERT.
	147	29'-8"	102	VERT.
	148	30'-8"	102	VERT.
	149	31'-4"	102	VERT.
	150	29'-3"	102	VERT.



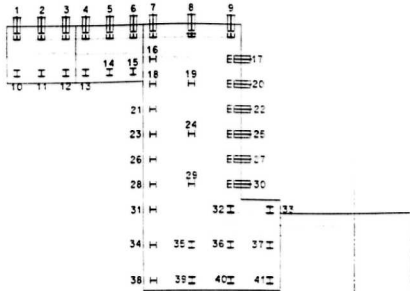
PART PLAN SHOWING PILE NUMBERING FOR RECORDING "AS BUILT" PILE DATA

DETAILED JAN. 1995 CHECKED MAR. 1995 NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS. NOTE: THIS SHEET TO BE COMPLETED BY MHTD CONSTRUCTION PERSONNEL. SHEET NO. 81 OF 81 . JACKSON COUNTY A-5181

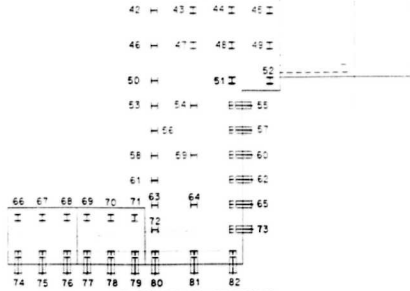
24 to 1

FOR INFORMATION ONLY

A51811, Sht. 110



FILL FACE OF
ABUTMENT NO. 1



PART PLAN SHOWING
PILE NUMBERING FOR RECORDING
"AS BUILT" PILE DATA

NOTE: INDICATE IN REMARK COLUMN:
A.) IF PILING WERE DRIVEN TO PRACTICAL REFUSAL;
B.) PILE BATTER IF OTHER THAN SHOWN ON BENT DETAIL SHEET.
C.) TYPE OF PILING USED.
Note: All Piling were driven to practical refusal

STATE	PROJ. NO.	SHEET NO.
MO. KAH-71-672A	J4 W0 0 NB	31

FINAL PLANS

"AS BUILT PILE" DATA				
LOCATION	PILE NO.	LENGTH IN PLACE (FT.)	COMPUTED BEARING (TONS)	REMARKS
ABUTMENT NO. 1	1	33'-0"	108	NOTE: ALL PILING HP 12X53
	2	33'-5"	108	
	3	33'-11"	108	
	4	29'-8"	108	
	5	29'-6"	102	
	6	29'-6"	102	
	7	13'-9"	114	
	8	13'-11"	114	
	9	14'-4"	114	
	10	33'-4"	131	VERT.
	11	33'-8"	131	VERT.
	12	33'-2"	131	VERT.
	13	30'-6"	131	VERT.
	14	32'-0"	131	VERT.
	15	30'-5"	131	VERT.
	16	13'-5"	131	VERT.
	17	13'-7"	114	
	18	13'-8"	131	VERT.
	19	13'-9"	131	VERT.
	20	13'-4"	114	
	21	13'-0"	131	VERT.
	22	14'-1"	114	
	23	13'-0"	131	VERT.
	24	13'-1"	131	VERT.
	25	13'-11"	114	
	26	13'-5"	131	VERT.
	27	13'-8"	114	
	28	13'-4"	131	VERT.
	29	13'-0"	131	VERT.
	30	14'-1"	114	
	31	13'-5"	138	VERT.
	32	12'-10"	138	VERT.
	33	12'-8"	131	VERT.
	34	13'-3"	131	VERT.
	35	13'-1"	131	VERT.
	36	13'-5"	138	VERT.
	37	10'-11"	131	VERT.
	38	14'-4"	131	VERT.
	39	13'-6"	138	VERT.
	40	13'-7"	138	VERT.
	41	13'-0"	138	VERT.
	42	13'-6"	138	VERT.
	43	14'-2"	131	VERT.
	44	14'-2"	138	VERT.
	45	14'-3"	131	VERT.
	46	14'-3"	131	VERT.
	47	13'-10"	131	VERT.
	48	13'-9"	131	VERT.
	49	14'-5"	138	VERT.
	50	12'-9"	131	VERT.
	51	13'-9"	131	VERT.
	52	13'-10"	131	VERT.
	53	13'-9"	131	VERT.
	54	13'-6"	131	VERT.
	55	13'-10"	114	
	56	13'-9"	138	VERT.
	57	13'-11"	108	
	58	13'-5"	131	VERT.
	59	13'-6"	138	VERT.

"AS BUILT PILE" DATA				
LOCATION	PILE NO.	LENGTH IN PLACE (FT.)	COMPUTED BEARING (TONS)	REMARKS
	60	13'-4"	114	
	61	13'-9"	131	VERT.
	62	13'-11"	114	
	63	13'-6"	131	VERT.
	64	13'-8"	131	VERT.
	65	13'-9"	114	
	66	33'-9"	131	VERT.
	67	33'-10"	131	VERT.
	68	34'-7"	131	VERT.
	69	30'-5"	131	VERT.
	70	30'-7"	131	VERT.
	71	30'-1"	131	VERT.
	72	13'-6"	138	VERT.
	73	13'-8"	102	
	74	33'-0"	108	
	75	33'-0"	102	
	76	34'-5"	102	
	77	30'-5"	102	
	78	29'-6"	108	
	79	30'-4"	108	
	80	13'-4"	114	
	81	14'-2"	108	
	82	14'-5"	114	

NOTE: THIS SHEET TO BE COMPLETED BY MHD CONSTRUCTION PERSONNEL.



Handwritten signature and date: 12/15/1998

DETAILED JAN. 1995
CHECKED MAR. 1995

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 80 OF 81

JACKSON COUNTY A-5181